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JULY & AUGUST 1932

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UNITED STATES PATENT OFFICE

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[Decisions of the United States Court of Customs and Patent Appeals are indicated by a star (*).]

ERRATA

O. G. July 12, 1932, vol. 420, page 391, strike out "1,866,963. Ornamented Headlamp. Edward C. Albright," and insert instead *1,866,893. Ornamented Headlamp. Edward C. Albright.*

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LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. P. W. Paper Company, Inc., Albany, N. Y. Toilet paper. Serial No. 306,081; July 5. Class 37.

All-Steel-Equip Company, Aurora, Ill. Wardrobe, lockers, cabinets, etc. Serial No. 319,682; July 5. Class 32.

American District Telegraph Company, Jersey City, N. J. Automatic fire alarm devices and parts thereof. Serial No. 327,209; July 5. Class 21.

Anderson, Grover C., Gateway, Mont. Fire extinguishing bombs and grenades. Serial No. 326,732; July 5. Class 23.

Aspralgin Laboratories. (See Henderson, Thomas J.)

Associated Merchandising Corporation, The, New York, N. Y. Girls' coats and dresses. Serial No. 327,087; July 5. Class 39.

Atlantic Romper Co. Inc., Linden, N. J. Boys' wash suits, sun suits, play suits, and rompers. Serial No. 326,200; July 5. Class 39.

"Automatic" Sprinkler Corporation of America, Cleveland, Ohio. Releasing devices, valves, vents, etc. Serial No. 314,356; July 5. Class 13.

Bantick, Murray M., Boston, Mass. Preparation for headache and indigestion. Serial No. 320,775; July 5. Class 6.

Barned Products Company, New Brunswick, N. J. Vanilla extract. Serial No. 322,678; July 5. Class 46.

Bass, G. H., & Co., Wilton, Me. Boots, shoes, slippers, etc. Serial No. 311,124; July 5. Class 39.

Battery Hi-Ball Sales Company. (See Nelson, Herbert L.)

Beaufont Company, Inc., The, Richmond, Va. Maltless beverages, and syrups, extracts, and concentrates used in making the same. Serial No. 327,422; July 5. Class 45.

Beauty Appliance Corporation, Racine, Wis. Electrical massage device. Serial No. 326,885; July 5. Class 44.

Beauty Appliance Corporation, Racine, Wis. Electric hair clippers. Serial No. 326,886; July 5. Class 23.

Becker, Henry, & Son, Inc., Roseland, N. J. Milk bottle covers. Serial No. 326,848; July 5. Class 50.

Berriman Bros. Inc., Tampa, Fla. Cigars. Serial No. 327,334; July 5. Class 17.

Blakey's Boot Protectors Limited, Leeds, England. Boot protectors, studs, and nails. Serial No. 325,741; July 5. Class 13.

Blatchford Calf Meal Company, Waukegan, Ill. Mash or meal for poultry. Serial No. 310,274; July 5. Class 46.

Blodgett, Leo S., New York, N. Y. Medicinal and inspection lamp instruments. Serial No. 327,302; July 5. Class 44.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 327,497; July 5. Class 42.

Booth, Walter, Shoe Co., Milwaukee, Wis. Boots, shoes, and oxfords. Serial No. 322,681; July 5. Class 39.

Brown, Boveri & Cie., Baden, Switzerland. Circulating water pumps, and exhaust gas turbines. Serial No. 326,804; July 5. Class 23.

Brown Shoe Company, Inc., St. Louis, Mo. Shoes. Serial No. 325,512; July 5. Class 39.

Byer, Inc., The House of, Cambridge, Mass. Hosiery. Serial No. 327,183; July 5. Class 39.

Capitol Game and Novelty Company, The, St. Paul, Minn. Table board game. Serial No. 321,706; July 5. Class 22.

Central Railway Signal Company, Inc., Newton, Mass. Emergency road flares. Serial No. 326,578; July 5. Class 9.

"Chenier, Andre". (See Viviny Perfumers, Inc.)

Childs Company, New York, N. Y. Pepper relish, mince meat, plum pudding, etc. Serial No. 312,173; July 5. Class 46.

Clark, Elliott B., Weldon, N. C. Sanitary coverings. Serial No. 326,517; July 5. Class 50.

Clemetsen Company, The, Chicago, Ill. Desks, tables, filing cabinets. Serial No. 323,077; July 5. Class 32.

Cohn, Morris, doing business as Crystal Chemical Company, Belleville, N. J. Soap. Serial No. 297,297; July 5. Class 4.

Crystal Chemical Company. (See Cohn, Morris.)

Defiance Spark Plugs, Inc., Toledo, Ohio. Electric light bulbs. Serial No. 326,893; July 5. Class 21.

De Long Hook and Eye Company, The, Philadelphia, Pa. Safety pins. Serial No. 326,205; July 5. Class 40.

Dickinson Fuel Company, Charleston, W. Va. Coal. Serial No. 327,501; July 5. Class 1.

Diversey Manufacturing Company, Chicago, Ill. Dish washing and cleansing powder. Serial No. 314,489; July 5. Class 4.

Doran, W. J., doing business as Norda Manufacturing Company, St. Louis, Mo. Cleansing and polishing preparation. Serial No. 325,285; July 5. Class 4.

Eade, George, Limited, London, England. Medicines. Serial No. 322,770; July 5. Class 6.

Eastman Kodak Company, Rochester, N. Y. Artificial silk thread and yarn. Serial No. 327,428; July 5. Class 43.

Exhibit Supply Company, The. (See Meyer, John F.)

Fawcett, Harry, doing business as Grocers Co-Operative Baking Co., Minneapolis, Minn. Bread. Serial No. 327,247; July 5. Class 46.

Felder Bros., New York, N. Y. Toy pistol holsters and cartridge belts. Serial No. 327,353; July 5. Class 22.

Fernandes, Palicio y Compañia, S. en C., Habana, Cuba. Cigars. Serial No. 327,354; July 5. Class 17.

Fink Shoe Co. Inc., Brooklyn, N. Y. Shoes. Serial Nos. 326,745–6; July 5. Class 39.

Fischman Soda Fountain Supply Co., Philadelphia, Pa. Crushed fruit and concentrated fruit syrups. Serial No. 326,139; July 5. Class 46.

Fisher, Norman A., doing business as Fisher Products Co., Detroit, Mich. Varnishes and paints, and paint enamels. Serial No. 326,624; July 5. Class 16.

Fitzgerald Mfg. Company, The, Torrington, Conn. Electric food and beverage mixers. Serial No. 327,188; July 5. Class 21.

Fitzgerald Mfg. Company, The, Torrington, Conn. Electric food mixer and juice extractor. Serial No. 327,189; July 5. Class 21.

Fleischl, Emil, & Son, New York, N. Y. Butter. Serial No. 327,093; July 5. Class 46.

French-Wolf Paint Products Corporation, Bristol, Pa. Paints, paint enamels, varnishes, etc. Serial No. 327,008; July 5. Class 16.

Frigid Products Corp., Brooklyn, N. Y. Ice cream. Serial No. 327,393; July 5. Class 46.

Garat & Company, Whiterock, Nev. Horses. Serial No. 327,463; July 5. Class 1.

General Laboratories, Inc., Chicago, Ill. Ink surfacer. Serial No. 326,901; July 5. Class 11.

General Water Heater Corporation, Los Angeles, Calif. Electric refrigerators. Serial No. 327,356; July 5. Class 31.

Godman, H. C., Company, The, Columbus, Ohio. Shoes. Serial No. 321,874; July 5. Class 39.

Goldblatt Bros., Inc., Chicago, Ill. Radio tubes. Serial No. 327,250; July 5. Class 21.

Golden Bear Coffee Company, Ltd., Los Angeles, Calif. Coffee. Serial No. 326,801; July 5. Class 46.

Great Western Cordage, Inc., Orange, Calif. Rope lines and twines. Serial No. 327,140; July 5. Class 7.

Griswoldville Manufacturing Company, Griswoldville, Mass. Surgical gauze, bandages, hospital sponges, etc. Serial No. 327,142; July 5. Class 44.

Griswoldville Manufacturing Company, Griswoldville, Mass. Surgical gauze, bandages, hospital sponges, etc. Serial No. 327,144; July 5. Class 44.

Grocers Co-Operative Baking Co. (See Fawcett, Harry.)

Grosche, Frederick W., Baltimore, Md. Storage batteries. Serial No. 326,324; July 5. Class 21.

Hale Food Company, Dayton, Ohio. Laxative preparation. Serial No. 319,752; July 5. Class 6.

Hamilton, Brown Shoe Company, St. Louis, Mo. Shoes. Serial No. 320,926; July 5. Class 39.

Harestol Co. (See Hertzberg, Harry.)

Harrow-Taylor Butter Company, Kansas City, Mo. Mayonnaise dressing. Serial No. 327,357; July 5. Class 46.

Hawkins, Paul, doing business as Paul Hawkins Co., Los Angeles, Calif. Frozen confections. Serial No. 326,637; July 5. Class 46.

Hawkins, Paul, doing business as Paul Hawkins Company, Los Angeles, Calif. Frozen confections. Serial No. 326,858; July 5. Class 46.

Henderson, Thomas J., doing business as Aspralgin Laboratories, Los Angeles, Calif. Preparation for headaches, neuralgia, etc. Serial No. 326,940; July 5. Class 6.

Hensley, Amos M., doing business as Miraglo Products Co., Cleveland, Ohio. Liquid compound. Serial No. 327,397; July 5. Class 4.

Herberts Machinery Co., Ltd., Los Angeles, Calif. Wood working machines. Serial No. 326,679; July 5. Class 23.

Hertzberg, Harry, doing business as Harestol Co., Brooklyn, N. Y. Preparation for the hair. Serial No. 326,941; July 5. Class 6.

Hillyard Chemical Company, St. Joseph, Mo. Liquid wood floor preservative. Serial No. 324,514; July 5. Class 16.

Hohnecker's Dairy, North Bergen, N. J. Milk, cream, butter, etc. Serial No. 326,969; July 5. Class 46.

Hy'ne Co., The, Chicago, Ill. Salve. Serial No. 325,581; July 5. Class 6.

Independent Sales Company. (See Nette, Herman E.)

K & L Manufacturing Company, Salt Lake City, Utah. Nut candy bars. Serial No. 326,219; July 5. Class 46.

Kabo Corset Company, Chicago, Ill. Foundation garments, girdles, step-ins, etc. Serial No. 326,480; July 5. Class 39.

Kasper, Marie A., Miami, Fla. Sleeping jackets. Serial No. 327,056; July 5. Class 39.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Kelsey-Hayes Wheel Corporation, Detroit, Mich. Brake drums. Serial No. 327,360; July 5. Class 19.
Kent Manufacturing Co., Clifton, Pa., and New York, N. Y. Woolens and worsteds. Serial No. 327,511; July 5. Class 42.
Keyston Bros., San Francisco, Calif. Simulant toy equipment. Serial No. 326,981; July 5. Class 22.
Kleane Chemical Co., New York, N. Y. Preparation for use as a temporary tooth cavity filler and toothache relief. Serial No. 326,863; July 5. Class 6.
Knipe, James L., Washington, D. C. Medical kit. Serial No. 326,686; July 5. Class 44.
Kops Brothers, Inc., New York, N. Y. Girdles, brassières, etc. Serial No. 317,810; July 5. Class 39.
Kotex Company, Chicago, Ill. Paper towels. Serial No. 327,098; July 5. Class 37.
Krexit Company, The. (See Massey, Raymond E.)
Kristiansen, Alfred, doing business as Kristy Laboratories, Stanley, Wis. Gargle. Serial No. 326,824; July 5. Class 6.
Kristy Laboratories. (See Kristiansen, Alfred.)
Kunkel, Louis B., St. Louis, Mo. Shoe polish. Serial No. 326,592; July 5. Class 4.
La Sylvia Paint and Varnish Works. (See Resnik, Samuel.)
Lebow Brothers, Baltimore, Md. Suits, overcoats, and top coats. Serial No. 324,613; July 5. Class 39.
Lee, Guy, Leather Company, Philadelphia, Pa. Leather. Serial No. 326,217; July 5. Class 1.
Levi-Ottenheimer Company, Baltimore, Md. Pajamas for girls and women; gympasium, sports, and play suits for boys and girls. Serial No. 327,062; July 5. Class 39.
Lock, James, & Co. Ltd., London, England. Hats. Serial No. 322,590; July 5. Class 39.
Los Angeles Soap Company, Los Angeles, Calif. Toilet soap. Serial No. 325,875; July 5. Class 4.
Luck, Hazel M., doing business as Lady Hazel M. Luck, Washington, D. C. Ointment, creams, tonic, etc. Serial No. 326,944; July 5. Class 6.
Mallars & Company, doing business as Mandco, Chicago, Ill. Olive oil. Serial No. 325,232; July 5. Class 46.
Mandco. (See Mallars & Company.)
Mantell, Herman, New York, N. Y. Hosiery. Serial No. 327,319; July 5. Class 39.
Massey, Raymond E., doing business as The Krexit Company, Richardson Park, Del. Medicinal preparation. Serial No. 326,688; July 5. Class 6.
Mattatuck Manufacturing Company, The, Waterbury, Conn. Nails, jack chain, eyelets, etc. Serial No. 308,211; July 5. Class 13.
Mead Johnson & Company, Evansville, Ind. Food product. Serial No. 326,867; July 5. Class 46.
Melville Shoe Corporation, New York, N. Y. Shoes. Serial No. 326,292; July 5. Class 39.
Meyer, John F., doing business as The Exhibit Supply Company, Chicago, Ill. Ball projecting amusement machines. Serial Nos. 327,101–4; July 5. Class 22.
Meyers, Isadore, Philadelphia, Pa. Trousers and pants. Serial Nos. 320,986–7; July 5. Class 39.
Miraglo Products Co. (See Hensley, Amos M.)
Morgan, Arthur W., Yonkers, N. Y. Golf balls. Serial Nos. 327,519–20; July 5. Class 22.
Naumkeag Steam Cotton Company, Salem, Mass. Shirts, pajamas, nurses' uniforms. Serial No. 326,717; July 5. Class 39.
Nelson, Herbert L., doing business as Battery Hi-Ball Sales Company, Boston, Mass. Secondary batteries. Serial No. 326,843; July 5. Class 21.
Nette, Herman E., doing business as Independent Sales Company, Arlington Heights, Ill. Cigars. Serial No. 322,802; July 5. Class 17.
Norda Manufacturing Company. (See Doran, W. J.)
Ohio State Stove Corporation, The, Columbus, Ohio. Ranges. Serial No. 327,405; July 5. Class 34.
Oilrite Corporation, Red Bank, N. J. Lubricating oils and greases. Serial No. 327,009; July 5. Class 15.
Oldmill Paper Products Corp., Brooklyn, N. Y. Paper baking cups, dishes, etc. Serial No. 326,299; July 5. Class 2.
Outboard Motors Corporation, Milwaukee, Wis. Lawn mowers. Serial No. 326,690; July 5. Class 23.
Outboard Motors Corporation, Milwaukee, Wis. Internal combustion motors. Serial No. 326,691; July 5. Class 23.
P. M. C. Manufacturing Corp., Kingston, N. Y. Kitchen utensils. Serial No. 321,732; July 5. Class 23.
Paramount Press, The. (See Stickler, Charles F.)
Payne-Cowan Company, Dallas, Tex. Ladies' underwear. Serial No. 325,598; July 5. Class 39.
Pearson, Chester L., doing business as Per-Plex Puzzle Co., Boston, Mass. Jig saw puzzles. Serial No. 327,197; July 5. Class 22.
Penn Rose Hosiery Mills, Philadelphia, Pa. Hosiery. Serial No. 327,321; July 5. Class 39.
Peoples Drug Stores, Inc., Washington, D. C., doing business as Vano Company, New York, N. Y. Sanitary napkins. Serial No. 327,410; July 5. Class 44.
Per-Plex Puzzle Co. (See Pearson, Chester L.)
Philadelphia Magnesia Co., Philadelphia, Pa. Citrate of magnesia. Serial No. 327,108; July 5. Class 6.
Philadelphia Seed Company, The, Philadelphia, Pa. Grass seed. Serial No. 327,412; July 5. Class 1.
Pioneer Chemical Works, Inc., Chicago, Ill. Portable fire extinguishers. Serial No. 326,495; July 5. Class 23.
Plotsky, Louis, Kansas City, Mo. Child's tailored overall garment. Serial No. 325,799; July 5. Class 39.
Power Wagon Publishing Company, Chicago, Ill. Periodical. Serial No. 327,168; July 5. Class 38.
Prescott, J. L., Company, Passaic, N. J. Polish. Serial No. 327,200; July 5. Class 4.
Priess, Louis A., Minneapolis, Minn. Combination key cases and flashlights. Serial No. 322,831; July 5. Class 3.
Randall, C. Ray, & Co., North Attleboro, Mass. Necklaces, bracelets, earrings, etc. Serial No. 325,879; July 5. Class 28.
Red & White Corporation, Buffalo, N. Y. Soap. Serial No. 327,475; July 5. Class 4.
Renton Company, Ltd., The, Pasadena, Calif. Laxative preparation. Serial No. 322,487; July 5. Class 6.
Resnik, Samuel, doing business as La Sylvia Paint and Varnish Works, Brooklyn, N. Y. Paints and paint enamels. Serial No. 326,831; July 5. Class 16.
Rhodes, L. K., Little Rock, Ark. Metal polish. Serial No. 326,873; July 5. Class 4.
Rogers Feet Company, New York, N. Y. Underwear. Serial No. 327,260; July 5. Class 39.
Rosenberg, Louis F., Providence, R. I. Golf balls. Serial No. 326,647; July 5. Class 22.
Roto- und Debego-Werke Aktiengesellschaft, Konigslutter, Germany. Multigraphing machines and parts thereof, stamping rollers, copying presses, etc. Serial No. 318,253; July 5. Class 23.
Salant & Salant, Inc., New York, N. Y. Shirts. Serial No. 327,029; July 5. Class 39.
Sales, G. M., Co., Fort Wayne, Ind. Hosiery. Serial No. 327,248; July 5. Class 39.
Santa Clara Valley Fruit Exchange, San Jose, Calif. Fresh cherries. Serial No. 326,844; July 5. Class 46.
Saxon Paper Products Inc., New York, N. Y. Paper. Serial No. 327,481; July 5. Class 37.
Schenley Products Company, Inc., New York, N. Y. Whiskey. Serial No. 327,117; July 5. Class 49.
Schenley Products Company, New York, N. Y. Whiskey. Serial No. 327,482; July 5. Class 49.
Sheinker, W., & Son, Inc., New York, N. Y. Maltless flavoring extracts. Serial No. 326,195; July 5. Class 45.
Shortwave & Television Corporation, Boston, Mass. Radio receiving sets, kits for radio receiving sets and parts of such sets, etc. Serial No. 319,949; July 5. Class 21.
Skin Culture Laboratories, Inc., New York, N. Y. Skin lotion. Serial No. 326,915; July 5. Class 6.
Smith, Margaret H., Philadelphia, Pa. Ointment. Serial No. 326,694; July 5. Class 6.
Societe Anonyme des Caves & des Producteurs Reunis de Roquefort, Roquefort, France. Cheese. Serial No. 315,937; July 5. Class 46.
Societe Genevoise d'Instruments de Physique, Geneva, Switzerland. Machines, lathes and tools; machinery shafting and parts thereof. Serial No. 318,998; July 5. Class 23.
Standard Bottling Co., The, Denver, Colo. Maltless beverages, and syrups, extracts, and concentrates used in making the same. Serial No. 327,418; July 5. Class 45.
Stevens, John A., Broadstairs, England. Electric lamps. Serial No. 324,196; July 5. Class 21.
Stickler, Charles F., doing business as The Paramount Press, Fort Wayne, Ind. Publication. Serial No. 327,263; July 5. Class 38.
Stobie, Frank G., doing business as Stobie Photo Copy Company, St. Louis, Mo. Photographic reproductions of imprinted matter, drawings, etc. Serial No. 324,630; July 5. Class 38.
Stork Infant Wear. (See Weiss, David.)
Straw Hat Corporation of America, New York, N. Y. Straw hats and hat bodies. Serial No. 324,726; July 5. Class 39.
Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radio receiving sets and/or mechanism for electrically reproducing and amplifying sound recorded upon phonograph records, etc. Serial No. 325,763; July 5. Class 21.
Supreme Products Company, Columbus, Ohio. Malt syrup. Serial No. 325,487; July 5. Class 46.
Toplitz, Louis C., New York, N. Y. Hosiery. Serial No. 327,073; July 5. Class 39.
Trumbull Electric Manufacturing Company, The, Plainville, Conn. Electrical power distribution switch boards, panel boards, safety switches, etc. Serial Nos. 323,372–3; July 5. Class 21.
Twin City Textile Mills, Incorporated, St. Paul, Minn. Jute and shoddy piece goods and wiping cloth for cleaning machinery parts. Serial No. 323,771; July 5. Class 42.
United Packing Company, Fresno, Calif. Fresh grapes, deciduous and citrus fruits, etc. Serial No. 326,724; July 5. Class 46.
Vano Company. (See Peoples Drug Stores, Inc.)

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Veldown Company, Inc., New York, N. Y. Cleansing tissue. Serial No. 327,489; July 5. Class 37.
Vencelao di Secondo, Vergani, Cremona, Italy. Sweet cakes. Serial No. 276,016; July 5. Class 46.
Viviny Perfumers, Inc., doing business as "Andre Chenier," West Haven, Conn. Astringents, creams, rouges, etc. Serial No. 326,698; July 5. Class 6.
Waltham Chemical Co., Waltham, Mass. Insect exterminating spray, discs, etc. Serial No. 326,171; July 5. Class 6.
Warwick Club Ginger Ale Co., Inc., The, West Warwick, R. I. Gingerale. Serial No. 327,491; July 5. Class 45.
Weiss, David, doing business as Stork Infant Wear, New York, N. Y. Textile diapers. Serial No. 326,878; July 5. Class 42.
White, Morris, Inc., New York, N. Y. Hand bags. Serial No. 300,698; July 5. Class 3.
Wilder, Burley H., doing business as Wilder Photo Copy Co., Buffalo, N. Y. Printed matter, etc. Serial No. 326,566; July 5. Class 38.
Wilkes-Barre Lace Manufacturing Company, Wilkes-Barre, Pa. Textile material. Serial No. 327,458; July 5. Class 42.
Wilkinson, Gaddis & Company, Newark, N. J. Ammonia, borax, camphor, etc. Serial No. 326,620; July 5. Class 6
Willys-Overalnd Company, The, Toledo, Ohio. Automobiles. Serial Nos. 325,246–7; July 5. Class 19.
Wolf, Jacques, & Co., Passaic, N. J. Chemical preparation. Serial No. 326,700; July 5. Class 6.
Wortendyke Manufacturing Co., Richmond, Va. Toilet paper, paper towels, paper napkins. Serial No. 323,879; July 5. Class 37.
Wright, Wm. E., & Sons Co., Orange, N. J. Bias fold tapes. Serial No. 326,996; July 5. Class 40.
Zeiss Ikon Aktiengesellschaft, Dresden, Germany. Photographic apparatus. Serial No. 325,889; July 5. Class 26.

LIST OF REGISTRANTS OF TRADE-MARKS

Adgene Incorporated, Paterson, N. J. Food preparation. 295,657; July 5; Serial No. 317,768; published Apr. 19, 1932. Class 46.
Advance Die Set Corporation, Chicago, Ill. Die sets. 295,555; July 5; Serial No. 312,328; published Apr. 26, 1932. Class 23.
Agfa Ansco Corporation, Binghamton, N. Y. Photographic film. 295,508; July 5; Serial No. 324,643; published Apr. 19, 1932. Class 26.
Ahrens Publishing Company, Inc., New York, N. Y. Publication. 295,577; July 5; Serial No. 322,672; published Apr. 19, 1932. Class 38.
Air-Way Electric Appliance Corporation, Toledo, Ohio. Thermostatic valves and traps. 295,612; July 5; Serial No. 300,318; published Apr. 26, 1932. Class 26.
Algemeene Kunstzijde Unie N. V., Arnhem, Netherlands. Braid made of cellulose. 295,436; July 5; Serial No. 318,900; published Apr. 19, 1932. Class 40.
Amana Society, Amana and Homstead, Iowa. Woolen blankets, flannels, woolen suitings. 295,658; July 5; Serial No. 319,760; published Apr. 19, 1932. Class 42.
American Hardware Corporation, The, New Britain, Conn. Locks and latches. 295,693; July 5. Class 25.
Ansehl, Benjamin, doing business as The Benjamin Ansehl Company, University City, Mo. Preparation for dressing the hair. 295,608; July 5; Serial No. 325,815; published Apr. 26, 1932. Class 6.
Armstrong Cork Company, Lancaster, Pa. Metal bottle and jar closures. 295,607; July 5; Serial No. 325,281; published Apr. 26, 1932. Class 50.
Asiatic Petroleum Company, The, London, England, assignor to Shell Oil Company, San Francisco, Calif. Dry cleaning solvents. 295,441; July 5; Serial No. 321,581; published Apr. 26, 1932. Class 4.
Askin Brothers Company, Baltimore, Md. Hosiery, underwear, sweater coats, etc. 295,507; July 5; Serial No. 324,640; published Apr. 26, 1932. Class 39.
Associated Laboratories, Inc., doing business as The Neogen Company, New York, N. Y. Laxative preparation. 295,522; July 5; Serial No. 324,770; published Apr. 26, 1932. Class 6.
Atlas Supply Company, Newark, N. J. Caps for automobile gasoline tanks, windshield wipers, etc. 295,537; July 5; Serial No. 324,943; published Apr. 26, 1932. Class 19.
Atlas Supply Company, Newark, N. J. Golf balls. 295,538; July 5; Serial No. 324,945; published Apr. 12, 1932. Class 22.
Atlas Supply Company, Newark, N. J. Oil filters. 295,539; July 5; Serial No. 324,946; published Apr. 19, 1932. Class 23.
Atlas Supply Company, Newark, N. J. Hose, brake linings, and fan belts. 295,540; July 5; Serial No. 324,948; published Apr. 19, 1932. Class 35.
Atlas Supply Company, Newark, N. J. Automobile goggles. 295,541; July 5; Serial No. 324,949; published Apr. 19, 1932. Class 26.
"Automatic" Sprinkler Corporation of America, Cleveland, Ohio. Automatic sprinkler systems for fire protection, and parts thereof. 295,556; July 5; Serial No. 312,594; published Apr. 26, 1932. Class 13.
Babbitt Brothers Trading Company, Flagstaff, Ariz. Bacons, hams, and lard. 295,559; July 5; Serial No. 313,881; published Jan. 19, 1932. Class 46.
Barger, Paul, doing business as Barger & Co., Greenfield, Mass. Wicks for oil burners. 295,509; July 5; Serial No. 324,647; published Apr. 19, 1932. Class 34.
Barnes & Jones, Boston, Mass. Plumbing and steam fitting valves and traps. 295,523; July 5; Serial No. 324,772; published Apr. 26, 1932. Class 18.
Beach Soap Company, Lawrence, Mass. Detergents. 295,530; July 5; Serial No. 324,836; published Apr. 19, 1932. Class 4.

Beckwith, Mary P., Garrison, N. Y. Vases, jardinières, crockery, and pottery. 295,657; July 5; Serial No. 324,693; published Apr. 26, 1932. Class 30.
Berry, Dodge Co. (See Wood, Thomas, Co., assignor.)
Bethlehem Steel Company, Bethlehem, Pa. Steel sheets having a small copper content. 295,663; July 5; Serial No. 322,157; published Apr. 26, 1932. Class 14.
Bethlehem Textiles Company, Bethlehem, Pa. Children's vests, bloomers, pajamas, etc. 295,469; July 5; Serial No. 324,146; published Apr. 26, 1932. Class 39.
Blanchard, Raymond C., North Attleboro, Mass. Radio receiving sets and parts thereof, radio loudspeakers, etc. 295,682; July 5. Class 21.
Bloomer Bros. Company, Newark, N. Y. Ice cream pails of cardboard. 295,531; July 5; Serial No. 324,838; published Apr. 26, 1932. Class 2.
Bloomingdale Bros., Inc., New York, N. Y. Razor blades. 295,542; July 5; Serial No. 324,952; published Apr. 19, 1932. Class 23.
Bon de Mist Company. (See Mortimer, David.)
Bowers, Edward C., and Charles L. Feldman, receivers for Wickwire Spencer Steel Company, New York, N. Y. Mechanical conveyor belts. 295,510; July 5; Serial No. 324,651; published Apr. 19, 1932. Class 23.
Brown, Albert, Rochester, N. Y. Fish lines. 295,601; July 5; Serial No. 325,184; published Apr. 19, 1932. Class 22.
Browning, King & Co., New York, N. Y. Men's suits. 295,505; July 5; Serial No. 324,582; published Apr. 19, 1932. Class 39.
Bruckmann Co., The, Cincinnati, Ohio. Malt beverage. 295,629; July 5; Serial No. 322,684; published Feb. 23, 1932. Class 48.
Bruni, Joseph, doing business as Nassau Coca Cola Bottling Co., Fernandina, Fla. Beverages. 295,544; July 5; Serial No. 324,983; published Apr. 19, 1932. Class 45.
Bulova Watch Company, Inc., New York, N. Y. Watches. 295,591; July 5; Serial No. 325,059; published Apr. 26, 1932. Class 27.
Carson Pirie Scott & Co., Chicago, Ill. Sheets, pillow cases, sheetings, tubings, and cotton piece goods. 295,665; July 5; Serial No. 323,025; published Apr. 19, 1932. Class 42.
Caulk, L. D., Company, The, Milford, Del. Medicament dispensing tubes. 295,511; July 5; Serial No. 324,655; published Apr. 19, 1932. Class 44.
Caulk, L. D., Company, The, Milford, Del. Medicament injecting tubes. 295,512; July 5; Serial No. 324,656; published Apr. 19, 1932. Class 44.
Celanese Corporation of America, New York, N. Y. Fabrics. 295,648; July 5; Serial No. 324,876; published Apr. 19, 1932. Class 42.
Celanese Corporation of America, New York, N. Y. Fabrics. 295,649–50; July 5; Serial Nos. 324,878–9; published Apr. 19, 1932. Class 42.
Central Fibre Products Company, Incorporated, Chicago, Ill. Egg case fillers. 295,691; July 5. Class 2.
Chain Store Root Beer Co., Inc., Rochester, N. Y. Root beer syrup. 295,475; July 5; Serial No. 324,242; published Apr. 12, 1932. Class 45.
Chattanooga Medicine Company, The, Chattanooga, Tenn. Liver medicine. 295,452; July 5; Serial No. 323,125; published Apr. 26, 1932. Class 6.
Cherokee Medical Co. (See Kent, Don C.)
Chicago Pneumatic Tool Company, New York, N. Y. Machinery and tools and parts theerof. 295,560; July 5; Serial No. 314,484; published Aug. 18, 1931. Class 23.
Chicky Mfg. Company, The, Grand Rapids, Mich. Candy bars. 295,682; July 5; Serial No. 323,030; published Apr. 19, 1932. Class 46.
Chicopee Manufacturing Corporation, New Brunswick, N. J. Unwaxed fabrics. 295,653; July 5; Serial No. 324,986; published Apr. 19, 1932. Class 42.

Chicopee Manufacturing Corporation, New Brunswick, N. J. Wax coated or impregnated fabric. 295,654; July 5; Serial No. 324,987; published Apr. 26, 1932. Class 50.
Clayton Magazines, Inc., The, New York, N. Y. Periodical. 295,633; July 5; Serial No. 323,189; published Apr. 19, 1932. Class 38.
Clover Mills Company, Clover, S. C. Yarn. 295,605; July 5; Serial No. 325,252; published Apr. 26, 1932. Class 43.

Coe Laboratories, Inc., Chicago, Ill. Dentures. 295,468; July 5; Serial No. 324,123; published Apr. 26, 1932. Class 44.
Coe, Montelle G., Redmond, Oreg. Potatoes. 295,624; July 5; Serial No. 321,134; published Apr. 26, 1932. Class 46.
Colnomatic Corporation, Buffalo, N. Y. Game apparatus. 295,486; July 5; Serial No. 324,429; published Apr. 19, 1932. Class 22.
Col-O-Ray Products Co. (See Helfrich, John W.)
Continental Silk Company, Inc., New York, N. Y. Silk piece goods. 295,660; July 5; Serial No. 323,886; published Apr. 19, 1932. Class 42.

Country Gentleman Products Co. (See Stoneman, William H.)
Dean Rubber Manufacturing Company, North Kansas City, Mo. Prophylactic rubber articles. 295,495; July 5; Serial No. 324,507; published Apr. 26, 1932. Class 44.
Deane, Albert L., doing business as Rancho Perdido, Foley, Ala. Sweet potatoes. 295,622; July 5; Serial No. 320,253; published Apr. 12, 1932. Class 46.
Decker, Alfred, & Cohn, Inc., Chicago, Ill. Clothing. 295,461; July 5; Serial No. 323,858; published Apr. 19, 1932. Class 39.
Defiance Spark Plugs, Inc., Toledo, Ohio. Spark plug wrench sets. 295,525; July 5; Serial No. 324,784; published Apr. 19, 1932. Class 23.

Delmel Linen Mesh System Company, The, San Francisco, Calif. Shirts, drawers, corset-covers, and corsets. 88,740; renewed Oct. 22, 1932.
Delmel Linen-Mesh System Company, The, San Francisco, Calif. Cotton and linen mesh cloth. 89,013; renewed Nov. 5, 1932.
Deltah Electric Corporation, New York, N. Y. Electric clocks and cases and movements therefor. 295,592; July 5; Serial No. 325,063; published Apr. 26, 1932. Class 27.
Dental Specialty Company, The, Denver, Colo. Dental demonstrating models, dental bands and mandrels, dental X-ray film, mounts, etc. 295,447; July 5; Serial No. 322,688; published Apr. 19, 1932. Class 44.
Derma-Helth Co. (See Mason, Walter E.)
Diana Manufacturing Company, Green Bay, Wis. Sanitary pads. 295,439; July 5; Serial No. 321,099; published Apr. 26, 1932. Class 44.
Doehler Die Casting Co., New York, N. Y. Castings of brass alloy. 295,664; July 5; Serial No. 322,630; published Apr. 19, 1932. Class 14.
Domestic Industries, Inc., Mansfield, Ohio. Refrigerating apparatus. 295,586; July 5; Serial No. 325,037; published Apr. 19, 1932. Class 31.
Dorr Company, Inc., The, New York, N. Y. Apparatus for the treatment of solids suspended in liquids and more particularly for the classification of suspended solids, etc. 295,571; July 5; Serial No. 319,477; published Apr. 26, 1932. Class 23.

Dorr Company, Inc., The, New York, N. Y. Apparatus for the treatment of solids suspended in liquids. 295,572; July 5; Serial No. 319,928; published Apr. 19, 1932. Class 23.
Draper Hat Corporation, New York, N. Y. Ladies' hats. 295,679; July 5. Class 39.
Drewrys Dry Ginger Ale, Canada, Limited, Winnipeg, Manitoba, Canada. Ginger ale. 295,454; July 5; Serial No. 323,572; published Apr. 19, 1932. Class 45.
Duart Manufacturing Company, Ltd., San Francisco, Calif. Shampoo preparation. 295,465; July 5; Serial No. 324,034; published Apr. 26, 1932. Class 6.
Dudley Lock Corporation, Chicago, Ill. Locks. 295,545–6; July 5; Serial Nos. 324,991–2; published Apr. 26, 1932. Class 25.

Duofold Health Underwear Company, Mohawk, N. Y. Men's and boys' underwear. 295,487; July 5; Serial No. 324,433; published Apr. 26, 1932. Class 39.
Du Pont, E. I., de Nemours and Company, Wilmington, Del. Military smokeless powder. 295,517–18; July 5; Serial Nos. 324,735–6; published Apr. 12, 1932. Class 9.

Duriron Company, Inc., The, Dayton, Ohio. Castings of ferrous alloys, etc. 295,561; July 5; Serial No. 314,842; published Apr. 19, 1932. Class 14.
Eastman, Scott & Company, Atlanta, Ga. Refrigeration apparatus and parts thereof. 295,602; July 5; Serial No. 325,138; published Apr. 19, 1932. Class 31.
Electric Mfg. Co., The, San Francisco, Calif. Electric hair dryers. 295,543; July 5; Serial No. 324,957; published Apr. 26, 1932. Class 44.
Elgin National Watch Company, Chicago and Elgin, Ill. Watches and watch cases. 295,651; July 5; Serial No. 324,883; published Apr. 26, 1932. Class 27.
Emerson & Stevens Mfg. Co. Inc., Oakland, Me. Axes. 295,484; July 5; Serial No. 324,374; published Apr. 19. Class 23.

Emerson & Stevens Mfg. Co. Inc., Oakland, Me. Scythes. 295,500; July 5; Serial No. 324,552; published Apr. 19, 1932. Class 23.
Eskimo Pie Corporation, New York, and Brooklyn, N. Y. Ice cream confections. 295,637; July 5; Serial No. 323,488; published Apr. 19, 1932. Class 46.
Evr-Klean Seat Pad Company, St. Louis, Mo. Tailored seat covers, seat pads, tailored chair covers, etc., 295,470; July 5; Serial No. 324,162; published Apr. 26, 1932. Class 32.
Evr-Klean Seat Pad Company, St. Louis, Mo. Tailored seat covers, seat pads, tailored chair covers, etc. 295,644; July 5; Serial No. 324,158; published Apr. 26, 1932. Class 32.
Evr-Klean Seat Pad Company, St. Louis, Mo. Tailored seat covers, seat pads, tailored chair covers, etc. 295,645; July 5; Serial No. 324,160; published Apr. 26, 1932. Class 32.
Feldman, Charles L. (See Bowers, Edward C., and Feldman, receivers.)
Feldman, Jacob, doing business as Sal-Trag Laboratories, Portland, Oreg. Medicinal preparation. 295,433; July 5; Serial No. 317,867; published Apr. 26, 1932. Class 6.
Forest City Foundries Company, The, Cleveland, Ohio. Repair and replacement parts for heating, ventilating, and air-conditioning structures. 295,446; July 5; Serial No. 322,508; published Apr. 26, 1932. Class 34.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 295,683; July 5. Class 42.
Fortune Tobacco Company, The, New York, N. Y. Cigars and cigarettes. 295,670; July 5; Serial No. 324,090; published Apr. 26, 1932. Class 17.
Fricke, Frederick H., St. Louis, Mo. Preparation for the treatment of coughs and colds, cold tablets, and laxative tablets. 295,501; July 5; Serial No. 324,554; published Apr. 12, 1932. Class 6.
Friedland, I. J., Atlanta, Ga. Prophylactic rubber articles. 295,455; July 5; Serial No. 323,655; published Apr. 19, 1932. Class 44.
Garment Specialty Company, Inc., New York, N. Y. Ladies' dresses. 295,460; July 5; Serial No. 323,848; published Apr. 26, 1932. Class 39.
General Frozen Products, Inc., Fort Worth, Tex. Frozen confections. 295,489; July 5; Serial No. 324,463; published Apr. 19, 1932. Class 46.
Geuting, A. H., Company, Philadelphia, Pa. Boots and shoes. 295,639; July 5; Serial No. 323,658; published Apr. 26, 1932. Class 39.
Gliby Wire Company, Newark, N. J. Wire mesh and cloth. 295,442; July 5; Serial No. 321,757; published Apr. 19, 1932. Class 13.
Godchaux Sugars, Inc., New Orleans, La. Sugar. 295,631; July 5; Serial No. 323,004; published Apr. 19, 1932. Class 46.
Goldblatt Bros. Inc., Chicago, Ill. Textile pillow cases, bed sheets, and bed sheeting. 295,646; July 5; Serial No. 324,709; published Apr. 26, 1932. Class 42.
Golden Nuggets Sweets Ltd., San Francisco, Calif. Candy. 295,619; July 5; Serial No. 318,857; published Apr. 26, 1932. Class 46.
Gotham Silk Hosiery Company, Inc., New York, N. Y. Hosiery. 295,547; July 5; Serial No. 304,994; published Apr. 19, 1932. Class 39.
Goudre Laboratories. (See Spielberg, J. M., and A. Goodstein.)
Haft, Morris W., & Brothers, Inc., New York, N. Y. Woolen piece goods and woolen suitings and coatings. 295,674; July 5; Serial No. 324,558; published Apr. 26, 1932. Class 42.
Haloid Company, The, Rochester, N. Y. Sensitized photographic paper. 295,548; July 5; Serial No. 324,996; published Apr. 19, 1932. Class 26.
Haloid Company, The, Rochester, N. Y. Sensitized photographic paper. 295,549; July 5; Serial No. 324,997; published Apr. 26, 1932. Class 26.
Harry, John C., doing business as The Pyodin Hygienic Laboratories, El Paso, Tex. Iodine compound for treatment of gastric ulcers, etc. 295,550; July 5; Serial No. 324,999; published Apr. 26, 1932. Class 6.
Harvey, Eric W., Portland, Oreg. Malt beverage. 295,474; July 5; Serial No. 324,222; published Apr. 26, 1932. Class 48.
Hawley and Jones, Philadelphia, Pa. Cleansing preparation. 295,515; July 5; Serial No. 324,710; published Apr. 19, 1932. Class 4.
Hazeltine, Ashley G., Woodsville, N. H. Game. 295,453; July 5; Serial No. 323,492; published Apr. 19, 1932. Class 22.
Hazzard, R. P., Co., Gardiner, Me. Shoes. 295,687; July 5. Class 39.
Health Developing Apparatus Co., Inc., New York, N. Y. Athletic appliances. 295,610; July 5; Serial No. 325,429; published Apr. 26, 1932. Class 22.
Helfrich, John W., doing business as Col-O-Ray Products Co., Los Angeles, Calif. Powdered Egyptian henna and other vegetable products used as a hair tint. 295,502; July 5; Serial No. 324,559; published Apr. 19, 1932. Class 6.
Henry & Close Co., Boston, Mass. Fresh fish fillets. 295,640; July 5; Serial No. 323,748; published Apr. 19, 1932. Class 46.
Hering, Ardo, doing business as Nuproducts Co., New York, N. Y. Type cleaner. 295,476; July 5; Serial No. 324,255; published Apr. 19, 1932. Class 4.

Hewitt-Gutta Percha Rubber Corporation, Buffalo, N. Y. Hose, belting, and packing. 295,611; July 5; Serial No. 295,168; published Apr. 19, 1932. Class 35.
Hinze Ambrosia, Inc. (See Pearce, Louis H.)
Hiss, John M., Columbus, Ohio. Book. 295,551; July 5; Serial No. 309,476; published Apr. 19, 1932. Class 38.
Hodshon-Berg, Incorporated, Norwalk, Conn., and New York, N. Y. Hats for women. 295,496; July 5; Serial No. 324,518; published Apr. 19, 1932. Class 39.
Hollywood Candy Co. (See Martoccio, F. A. Company.)
Holman Soap Company, Chicago, Ill. Toilet soap. 295,490; July 5; Serial No. 324,465; published Apr. 19, 1932. Class 4.
Howes, S., Company, The, assignor to S. Howes Co., Inc., Silver Creek, N. Y. Cutlery, machinery, and tools, and parts thereof. 86,594; renewed May 21, 1932.
Huyler's Wholesale Division, Inc., assignor to Huyler's, New York, N. Y. Candies. 295,613; July 5; Serial No. 300,945; published Apr. 26, 1932. Class 46.
International Equipment Company, Boston, Mass. Centrifuges, centrifugal separators, and centrifuge accessories and equipment. 295,576; July 5; Serial No. 322,641; published Apr. 26, 1932. Class 26.
International Paper Company, New York, N. Y. Paper. 295,488; July 5; Serial No. 324,438; published Apr. 19, 1932. Class 37.
International Silver Company, Meriden, Conn. Toy figure. 295,519; July 5; Serial No. 324,744; published Apr. 12, 1932. Class 22.
Interstate Shade Cloth Co., Hoboken, N. J. Shade cloth. 295,655; July 5; Serial No. 325,003; published Apr. 19, 1932. Class 42.
J. & P. Coats (R. I.) Inc., Pawtucket, R. I. Threads and yarns. 295,659; July 5; Serial No. 320,352; published Apr. 26, 1932. Class 43.
Jansen, Hans V., doing business as Jansen Soap & Chemical Company, San Francisco, Calif. Antiseptic bath compound. 295,440; July 5; Serial No. 321,341; published Apr. 19, 1932. Class 6.
Jaques, John, & Son Limited, London, England. Game. 87,543; renewed July 23, 1932.
Johns-Manville Corporation, New York, N. Y. Machinery packings. 295,563; July 5; Serial No. 315,493; published Apr. 19, 1932. Class 35.
Johnson Suture Corporation, Chicago, Ill. Gut strings for rackets. 295,617; July 5; Serial No. 308,890; published Apr. 26, 1932. Class 22.
Kasser, Gizella, Philadelphia, Pa. Malt syrup. 295,638; July 5; Serial No. 323,621; published Apr. 19, 1932. Class 46.
Kayser, Julius, & Co., New York, N. Y. Underwear. 295,593; July 5; Serial No. 325,069; published Apr. 19, 1932. Class 39.
Keehn Brothers, Chicago, Ill. Shoes; 295,689; July 5. Class 39.
Kelley-Koett Manufacturing Company, The, Covington, Ky. X-ray apparatus, parts, and appurtenances. 295,554; July 5; Serial No. 311,739; published Apr. 19, 1932. Class 44.
Kent, Don C., doing business as Cherokee Medical Co., Cherokee, Iowa. Preparation for the treatment of ringworm. 295,609; July 5; Serial No. 325,368; published Apr. 26, 1932. Class 6.
Kersten, Jacob, Kalamazoo, Mich. Baby jumpers. 295,597; July 5; Serial No. 325,100; published Apr. 19, 1932. Class 22.
Kilgen, Geo., & Son, Incorporated, St. Louis, Mo. Organs and parts of organs. 295,688; July 5. Class 36.
Kitchen Katch-All Corporation, The, Greenwich, Ohio. Trays for holding baby toilet articles, etc. 295,553; July 5; Serial No. 310,681; published Apr. 26, 1932. Class 13.
Kleinert, I. B., Rubber Company, New York, N. Y. Bands and banding. 295,477; July 5; Serial No. 324,260; published Apr. 19, 1932. Class 40.
Kling, Kenneth L., New York, N. Y. Comic strips. 295,573; July 5; Serial No. 320,936; published Apr. 19, 1932. Class 38.
Kneale, Inc., New York, N. Y. Hats for women. 295,471; July 5; Serial No. 324,173; published Apr. 19, 1932. Class 39.
Knothe Brothers Company, Inc., New York, N. Y. Pajamas and night clothes. 295,690; July 5. Class 39.
Kodascope Editing and Titling Service, Inc., New York, N. Y. Picture film. 295,643; July 5; Serial No. 324,043; published Apr. 26, 1932. Class 26.
Kooperativa Förbundet Förening u. p. a., Stockholm, Sweden. Linoleum and oiled floor covering. 295,445; July 5; Serial No. 322,134; published Apr. 12, 1932. Class 20.
Kosloff, I., & Sons, Inc., New York, N. Y. Candy. 295,562; July 5; Serial No. 314,914; published Apr. 19, 1932. Class 46.
Kotoff, Peter M., St. Louis, Mo. Hair tonic. 295,459; Jul. 5; Serial No. 323,945; published Apr. 12, 1932. Class 6.
Krafelt Corporation of America, Wilmington, Del. Absorbent sheet material. 295,660; July 5; Serial No. 320,729; published Apr. 19, 1932. Class 50.
Krause, Chas. A., Milling Co., Milwaukee, Wis. Paint and wall cleaner. 295,472; July 5; Serial No. 324,174; published Apr. 19, 1932. Class 4.
Kresge Department Store Corporation, Newark, N. J. Suits, shoes, dresses, etc. 295,524; July 5; Serial No. 324,792; published Apr. 19, 1932. Class 39.

Kresge Department Store Corporation, Newark, N. J. Suits, shoes, dresses, etc. 295,526; July 5; Serial No. 324,793; published Apr. 19, 1932. Class 39.
Kress, S. H., & Co., New York, N. Y. Wave setters. 295,557; July 5; Serial No. 312,712; published Apr. 12, 1932. Class 40.
Kress, S. H., & Co., New York, N. Y. Razor blades. 295,564; July 5; Serial No. 315,617; published Apr. 26, 1932. Class 23.
Landquist, Austin W., New York, N. Y. Concentrated food product. 295,581; July 5; Serial No. 324,749; published Apr. 19, 1932. Class 46.
Lehigh Packing Co. Inc. Allentown, Pa. Fresh domestic rabbit meat. 295,623; July 5; Serial No. 320,363; published Apr. 26, 1932. Class 46.
Levy, M. S., & Sons Incorporated, Baltimore, Md. Men's hats. 295,676; July 5. Class 39.
Levy, Maurice, New York, N. Y. Perfumes and toilet water. 295,463; July 5; Serial No. 324,004; published Apr. 12, 1932. Class 6.
Lippincott, George A., Philadelphia, Pa. Buttons. 295,466; July 5; Serial No. 324,072; published Apr. 26, 1932. Class 40.
Lowe, Joe, Corporation, Brooklyn, N. Y. Syrups, extracts, and concentrates. 295,534; July 5; Serial No. 324,893; published Apr. 19, 1932. Class 45.
Lowe, Joe, Corporation, Brooklyn, N. Y. Magazine. 295,535; July 5; Serial No. 324,899; published Apr. 19, 1932. Class 38.
Lubrication Corporation, The, South Bend, Ind. Lubricant fittings or nipples, couplers, and nozzles, etc. 295,578; July 5; Serial No. 322,827; published Apr. 26, 1932. Class 23.
Macy, R. H., & Co., Inc., New York, N. Y. Undervests, bloomers, chemises, etc. 295,680; July 5.
Magyar Ruggyantaárugyár Részvénytársaság, Budapest, Hungary. Toy animals and dolls. 295,443; July 5; Serial No. 322,004; published Apr. 19, 1932. Class 22.
Maltbie, Birt L., New York, N. Y., assignor to Maltbie Chemical Company, Newark, N. J. Pepsin compound. 88,726; renewed Aug. 5, 1932.
Marathon Razor Blade Co. Inc., Irvington, N. J. Safety razor blades. 295,497; July 5; Serial No. 324,537; published Apr. 19, 1932. Class 23.
Marietta Manufacturing Company, The, Union Trust Company of Indianapolis, receiver, Indianapolis, Ind. Glass table and counter tops, scale plates, and shelves. 295,667; July 5; Serial No. 323,625; published Apr. 19, 1932. Class 33.
Marine Chemicals Company, Ltd., South San Francisco and San Francisco, Calif. Antacid laxative. 295,566–7; July 5; Serial Nos. 316,701–2; published Apr. 12, 1932. Class 6.
Marks, Charles A., Elkhart, Ind. Battery terminals. 295,684; July 5.
Marshall Asbestos Corporation, Troy, N. Y. Brake lining. 295,568–70; July 5; Serial Nos. 318,838–9; published Apr. 26, 1932. Class 35.
Martin, C. (Clarence), Tacoma, Wash. Bassinettes, playpens, etc. 295,574; July 5; Serial No. 321,114; published Apr. 26, 1932. Class 32.
Martoccio, F. A., Company, doing business as Hollywood Candy Co., Minneapolis, Minn. Candy bars. 295,618; July 5; Serial No. 317,848; published Apr. 26, 1932. Class 46.
Masland Manufacturing Corporation, Philadelphia, Pa. Fibrous fabric. 295,686; July 5. Class 50.
Mason, Walter E., doing business as Derma-Helth Co., Omaha, Nebr. Skin ointment. 295,513; July 5; Serial No. 324,669; published Apr. 12, 1932. Class 6.
Maydole, David, Tool Corporation, Norwich, N. Y. Hand hammers. 295,485; July 5; Serial No. 324,414; published Apr. 26, 1932. Class 23.
Mead, Paul M. & Mrs. Paul M., Blackwell, Okla. Medicinal compound. 295,464; July 5; Serial No. 324,005; published Apr. 12, 1932. Class 6.
Merchant & Evans Company, Philadelphia, Pa. Fire extinguishers. 295,614; July 5; Serial No. 304,505; published Apr. 26, 1932. Class 23.
Merit Hosiery Company, Inc., New York, N. Y. Hosiery. 295,594; July 5; Serial No. 325,071; published Apr. 26, 1932. Class 39.
Metzger and Bernard Inc., New York, N. Y. Suits, dresses, cloaks for misses. 295,514; July 5; Serial No. 324,680; published Apr. 19, 1932. Class 39.
Mills, Frank L., Chicago, Ill. Animal beds. 295,678; July 5. Class 3.
Mission Creameries, Inc., Los Angeles, Calif. Ice creams. 295,625; July 5; Serial No. 321,573; published Apr. 19, 1932. Class 46.
Monticello Drug Company, Jacksonville, Fla. Remedies for certain diseases. 88,916; renewed Oct. 29, 1932.
Mortimer, David, doing business as Bon de Mist Company, Boston, Mass. Inhaling and rubbing cream. 295,498; July 5; Serial No. 324,539; published Apr. 12, 1932. Class 6.
Naamlooze Vennootschap Droste's Cacao-En Chocoladefabrieken, Haarlem, Netherlands. Cocoa and chocolate. 295,552; July 5; Serial No. 309,740; published Apr. 26, 1932. Class 46.
Nassau Coca Cola Bottling Co. (See Bruni, Joseph.)
National Electric Products Corporation, New York, N. Y., assignor to Phelps Dodge Copper Products Corporation, Condenser tubes and ferrules. 295,565; July 5; Serial No. 316,498; published Apr. 19, 1932. Class 13.

National Soda Straw Co., Chicago, Ill. Soda straws. 295,672; July 5; Serial No. 324,622; published Apr. 19, 1932. Class 50.
Neithold, Carl (Aktiengesellschaft, Frankfort-on-the-Main, Germany. Magnifying glasses. 295,575; July 5; Serial No. 321,129; published Apr. 26, 1932. Class 26.
Nelson Bead Company, New York, N. Y. Cigar and cigarette lighters. 295,647; July 5; Serial No. 324,754; published Apr. 19, 1932. Class 8.
Neogen Company, The. (See Associated Laboratories, Inc.)
New England Cereal Co., assignor, by mesne assignments, to Trix Food Products, Inc., South Norwalk, Conn. Food compound. 86,610; renewed May 21, 1932.
New Idea Spreader Company, The, Coldwater, Ohio. Internal combustion engines. 295,587; July 5; Serial No. 325,045; published Apr. 19, 1932. Class 23.
New York Pattern Company, Inc., The, New York, N. Y. Paper patterns. 295,582; July 5; Serial No. 325,013; published Apr. 26, 1932. Class 26.
Nodiz Drug Company. (See Shank, John A.)
North Metal & Chemical Company, Inc., York, Pa. Antiseptic, disinfectant, and deodorant. 295,606; July 5; Serial No. 325,267; published Apr. 26, 1932. Class 6.
Noveltex, Inc., New York, N. Y. Cotton piece goods. 295,656; July 5; Serial No. 325,014; published Apr. 26, 1932. Class 42.
Nuproducts Co. (See Hering, Ardo.)
Odor-Go Corporation, Wilmington, Del., and Baltimore, Md. Deodorant for garbage containers. 295,444; July 5; Serial No. 322,059; published Mar. 1, 1932. Class 6.
Olds & Whipple, Inc., Hartford, Conn. Food for plants, vegetables, etc. 295,652; July 5; Serial No. 324,901; published Apr. 19, 1932. Class 10.
Paine Drug Company, The, Rochester, N. Y. Medicinal preparation. 295,604; July 5; Serial No. 325,182; published Apr. 26, 1932. Class 6.
Parfumerie St. Denis, New York, N. Y. Astringents, astringent cerates, bleach creams, etc. 295,516; July 5; Serial No. 324,720; published Apr. 26, 1932. Class 6.
Parlante, Frank, New York, N. Y. Shoes. 295,628; July 5; Serial No. 322,671; published Apr. 26, 1932. Class 39.
Pearce, Louis H., Buffalo, to Hinze Ambrosia, Inc., New York, N. Y., successor. Toilet waters and perfumes. 39,193; renewed Nov. 4, 1932.
Pearson, Ernest M., Chicago, Ill. Fountain pen ink. 295,666; July 5; Serial No. 323,250; published Apr. 19, 1932. Class 11.
Petrolagar Laboratories, Inc., Chicago, Ill. Food drink. 295,520; July 5; Serial No. 324,758; published Apr. 19, 1932. Class 46.
Phelps Dodge Copper Products Corporation. (See National Electric Products Corporation, assignor.)
Philippe, Louis, New York, N. Y. Compact miniature first aid kit. 295,482; July 5; Serial No. 324,357; published Apr. 19, 1932. Class 44.
Phillips, M., & Sons, assignor, by mesne assignments, to Phillips-Jones Corporation, New York, N. Y. Clothing. 87,363; renewed July 9, 1932.
Phoenix Hosiery Company, Milwaukee, Wis. Hosiery. 295,677; July 5. Class 39.
Polefsky, Jacob S., New York, N. Y. Maltless beverages, flavoring extracts an syrups therefor. 295,685; July 5. Class 45.
Private Brands, Inc., New York, N. Y. Mayonnaise, salad dressing, etc. 295,635; July 5; Serial No. 323,307; published Apr. 12, 1932. Class 46.
Prym, William, of America, Inc., New York and Long Island City, N. Y. Pins, needles, snap fasteners, etc. 295,532; July 5; Serial No. 324,852; published Apr. 19, 1932. Class 40.
Prym, William, of America, Inc., New York and Long Island City, N. Y. Pins, safety pins, needles, snap fasteners, etc. 295,626; July 5; Serial No. 322,208; published Apr. 26, 1932. Class 40.
Pyodin Hygienic Laboratories, The. (See Harry, John C.)
Queen City Chemical Co., Buffalo, N. Y. Effervescing solution of magnesia, and more particularly a purgative and laxative. 295,456; July 5; Serial No. 323,715; published Apr. 19, 1932. Class 6.
Radio Circular Co. Inc., New York, N. Y. Safety razor blades. 295,478; July 5; Serial No. 324,297; published Apr. 19, 1932. Class 23.
Radon Company, Inc., New York, N. Y. Radium emanation apparatus. 295,558; July 5; Serial No. 312,926; published Apr. 19, 1932. Class 44.
Rancho Perdido. (See Deane, Albert L.)
Rath, Emil, Frankfort-on-the-Main, Germany. Guttapercha and India-rubber nipples. 87,805; renewed Aug. 8, 1932.
Reed, Austin, Ltd., London, England. Collars. 88,788; renewed Oct. 22, 1932.
Regal Shoe Company, assignee of Regal Shoe Company, Inc., Boston, assignor, by mesne assignments, to Regal Shoe Company, Whitman, Mass. Boots and shoes. 85,003; renewed Jan. 16, 1932.
Regal Shoe Company, Portland, Me., and Boston, Mass., assignors to Regal Shoe Company, Whitman, Mass. Arch-supports for the foot. 85,494; renewed Feb. 20, 1932.
Ric-Wil Company, The, Cleveland, Ohio. Metallic fluid-conducting tile, metallic sewer and drain pipe, etc. 295,437; July 5; Serial No. 320,274; published Apr. 26, 1932. Class 13.
Rochelle Asparagus Company, Rochelle, Ill. Canned asparagus. 295,580; July 5; Serial No. 324,571; published Apr. 26, 1932. Class 46.
Rome Brass Radiator Corporation, New York, assignor to Rome Radiation Company, Inc., Rome, N. Y. Radiators. 295,616; July 5; Serial No. 307,509; published Apr. 19, 1932. Class 34.
Rosenthal, Dr. John M., Fort Wayne, Ind. Medicinal preparation for the treatment of teeth. 295,467; July 5; Serial No. 324,116; published Apr. 12, 1932. Class 6.
Rossie Velvet Company, Mystic, Conn. Velvets. 295,583–4; July 5; Serial Nos. 325,017–18; published Apr. 19, 1932. Class 42.
St. Clair, Labert, Rye, N. Y. Metal dispensing tubes. 295,451; July 5; Serial No. 323,015; published Apr. 19, 1932. Class 2.
Sal-Trag Laboratories. (See Feldman, Jacob.)
Sameco Company, Inc., Brockton, Mass. Pyroxylin menu covers. 295,438; July 5; Serial No. 320,448; published Apr. 19, 1932. Class 2.
Sanford Mills, Sanford, Me. Woven pile carpet. 295,661; July 5; Serial No. 321,619; published Apr. 26, 1932. Class 42.
Santé Institute, Ltd., Los Angeles, Calif. Therapeutic radiant sources. 295,473; July 5; Serial No. 324,194; published Apr. 26, 1932. Class 44.
Sarrazin, Jules J., assignor to Jane H. Sarrazin, executrix of the estate of Jules J. Sarrazin, deceased, New Orleans, La. Tooth-powders, tooth-polishes, gum-tonics, and mouth-washes. 88,505; renewed Oct. 1, 1932.
Saunders Coal Company, Inc., Rochester, N. Y. Safety razor blade hone. 295,434; July 5; Serial No. 318,256; published Apr. 26, 1932. Class 4.
Scovill Manufacturing Company, Waterbury, Conn. Shower bath, lavatory, and bath fixtures, faucets, etc. 295,503; July 5; Serial No. 324,572; published Apr. 19, 1932. Class 13.
Sears, Roebuck and Co., Chicago, Ill. Men's heavy rubbers. 295,462; July 5; Serial No. 323,910; published Apr. 19, 1932. Class 39.
Sears, Roebuck and Co., Chicago, Ill. Mechanical refrigerators. 295,588; July 5; Serial No. 325,048; published Apr. 19, 1932. Class 31.
Selby Shoe Company, The, Portsmouth, Ohio. Shoes. 295,491–2; July 5; Serial Nos. 324,489–90; published Apr. 19, 1932. Class 39.
Shank, John A., doing business as Nodiz Drug Company, Chicago, Ill. Prophylactics. 295,457; July 5; Serial No. 323,793; published Apr. 19, 1932. Class 6.
Shell Oil Company. (See Asiatic Petroleum Company, The, assignor.)
Singer, Sari R., New York, N. Y. Coats, rain coats, etc. 295,598; July 5; Serial No. 325,119; published Apr. 26, 1932. Class 39.
Société À Responsabilité Limitée Mado, Paris, France. Ladies' hats. 295,636; July 5; Serial No. 323,469; published Apr. 19, 1932. Class 39.
Southern Mills Corporation, Oxford, Ala. Rope, yarns, twines, cord, and lines. 88,794; renewed Oct. 22, 1932.
Spencer, Isidor, Chicago, Ill. Men's clothing. 295,627; July 5; Serial No. 322,275; published Apr. 19, 1932. Class 39.
Spielberg, Joseph M., and Abraham Goodstein, doing business as Goudre Laboratories, Brooklyn, N. Y. Antiseptic preparation. 295,448; July 5; Serial No. 322,911; published Apr. 12, 1932. Class 6.
Spielberg, Joseph M., and Abraham Goodstein, doing business as Goudre Laboratories, Brooklyn, N. Y. Tampons. 295,449–50; July 5; Serial Nos. 322,912–13; published Apr. 26, 1932. Class 44.
Standard Brands Incorporated, New York, N. Y. Coffee. 295,579; July 5; Serial No. 324,491; published Apr. 19, 1932. Class 46.
Standard Brands Incorporated, New York, N. Y. Baking powder. 295,615; July 5; Serial No. 306,020; published Apr. 12, 1932. Class 6
Stanley Works, The, New Britain, Conn. Strap and T hinges. 295,521; July 5; Serial No. 324,765; published Apr. 26, 1932. Class 13.
Steel Laboratories Inc., Cleveland, Ohio. Counter irritant. 295,435; July 5; Serial No. 318,854; published Nov. 3, 1931. Class 6.
Steiner, Ida A., Topeka, Kans. Hat racks and hall boys. 295,568; July 5; Serial No. 318,573; published Apr. 26, 1932. Class 32.
Stetson Shirt Co. Inc., New York, N. Y. Dress shirts 295,493; July 5; Serial No. 324,492; published Apr. 26, 1932. Class 39.
Stirn, F. & A., Corporation, New York, N. Y. Women's and children's felt hats and felt hat bodies. 295,479; July 5; Serial No. 324,299; published Apr. 19, 1932. Class 39.
Stoneman, William H., doing business as Country Gentleman Products Co., Albany, N. Y. Paint brushes. 295,675; July 5; Serial No. 324,542; published Apr. 26, 1932. Class 29.
Superior Metal Products Company, St. Paul, Minn. Milk and cream coolers and ice cream cans for use in refrigerators. 295,692; July 5. Class 31.
Surgical Dressings, Inc., Boston, Mass. Surgical bandages, surgical wrappings, and tourniquets. 295,480; July 5; Serial No. 324,325; published Apr. 26, 1932. Class 44.

Sweets Company of America, Inc., New York, N. Y. Confectionery. 295,641; July 5; Serial No. 323,795; published Apr. 26, 1932. Class 46.
Swift and Company, Chicago, Ill. Packing house products. 38,896; renewed June 3, 1932.
Taylor Manufacturing Corporation, The, Milwaukee, Wis. Machinery and machine parts. 295,504; July 5; Serial No. 324,574; published Apr. 26, 1932. Class 23.
Thibodeaux, John, Port Arthur, Tex. Hair tonic. 295,458; July 5; Serial No. 323,835; published Apr. 12, 1932. Class 6.
Timme, E. F., & Son, New York, N. Y. Pile fabrics. 295,585; July 5; Serial No. 325,025; published Apr. 19, 1932. Class 42.
Titmas Co., Inc., New Orleans, La. Industrial oil burners. 295,595; July 5; Serial No. 326,080; published Apr. 26, 1932. Class 34.
Triangle Nut Co., Kansas City, Mo. Nuts. 295,620; July 5; Serial No. 319,224; published Apr. 26, 1932. Class 46.
Triple "XXX" Company, Galveston, Tex. Syrup, concentrate, and flavor. 295,599; July 5; Serial No. 325,125; published Apr. 19, 1932. Class 45.
Trix Food Products, Inc. (See New England Cereal Co., assignor.)
Underwood Elliott Fisher Company, New York, N. Y. Inkribbons and coated transfer sheets. 295,673; July 5; Serial No. 324,575; published Apr. 19, 1932. Class 11.
Union Special Machine Company, Chicago, Ill. Sewing machines. 295,527; July 5; Serial No. 324,806; published Apr. 26, 1932. Class 23.
Union Trust Company of Indianapolis, receiver. (See Marietta Manufacturing Company.)
United States Playing Card Company, The, East Norwood, Cincinnati, Ohio. Playing cards. 295,528; July 5; Serial No. 324,808; published Apr. 26, 1932. Class 22.
United Vacuum Appliance Corp., Connersville, Ind. Rug and carpet washing machines. 295,529; July 5; Serial No. 324,833; published Apr. 26, 1932. Class 24.
Unsinger Cutlery Co., Inc., The, Newark, N. J. Safety razor blades. 295,589–90; July 5; Serial Nos. 325,051–2; published Apr. 19, 1932. Class 23.
Valentine & Company, New York, N. Y. Paint enamels, varnish stains, lacquers, etc. 295,506; July 5; Serial No. 324,635; published Apr. 12, 1932. Class 16.
Vanity Brassiere Company, Inc., New York, N. Y. Corsets, brassières, and girdles. 295,499; July 5; Serial No. 324,545; published Apr. 19, 1932. Class 39.
Vanity Fair Silk Mills, Reading, Pa. Underwear and hosiery. 295,494; July 5; Serial No. 324,497; published Apr. 19, 1932. Class 39.
Van Raalte Company, New York, N. Y. Pajamas. 295,603; July 5; Serial No. 325,156; published Apr. 19, 1932. Class 39.
Voight, Wm. A., Toledo, Ohio. Denture material. 295,681; July 5. Class 44.
Wagner Manufacturing Company, The, Sidney, Ohio. Base metal steak platter. 295,483; July 5; Serial No. 324,361; published Apr. 19, 1932. Class 13.
Walker Products Company, Indianapolis, Ind. Noodles. 295,630; July 5; Serial No. 322,904; published Apr. 19, 1932. Class 46.
Wanamaker, John, Philadelphia, Philadelphia, Pa. Hair tonics. 295,536; July 5; Serial No. 324,917; published Apr. 26, 1932. Class 6.
Washington Neckwear Co., Inc., New York, N. Y. Neckties and Windsor ties. 295,634; July 5; Serial No. 323,261; published Apr. 26, 1932. Class 39.
Watson, Olive S., Alfred, N. Y. Candles. 295,642; July 5; Serial No. 323,923; published Apr. 19, 1932. Class 46.
West Coast Oyster Farms, Ltd., San Francisco, Calif. Fresh oysters. 295,600; July 5; Serial No. 325,129; published Apr. 26, 1932. Class 46.
Whitman, Philip G., Inc., New York, N. Y. Imitation leather fabric. 295,662; July 5; Serial No. 322,009; published Apr. 19, 1932. Class 50.
Wickwire Spencer Steel Company. (See Bowers, Edward C., and Charles L. Feldman, receivers.)
Wilsdorf, Hans, Geneva, Switzerland. Watches and parts thereof. 295,668; July 5; Serial No. 323,760; published Apr. 26, 1932. Class 27.
Wonder Health Springs, Inc., Detroit, Mich. Natural spring water. 295,533; July 5; Serial No. 324,864; published Apr. 26, 1932. Class 45.
Wood, Thomas, Co., assignor to Berry, Dodge Co., Boston, Mass. Blended coffee. 89,171; renewed Nov. 12, 1932.
Yes Pure Food Products Company, Riverside, Calif. Candy. 295,596; July 5; Serial No. 325,082; published Apr. 19, 1932. Class 46.
York Cone Company, York, Pa. Chocolate covered candy bar. 295,621; July 5; Serial No. 319,958; published Apr. 26, 1932. Class 26.
Zotos, Inc., now by change of name Zotos Corporation, New York, N. Y. Hair waving pads. 295,481; July 5; Serial No. 324,330; published Apr. 26, 1932. Class 44.

LIST OF REGISTRANTS OF LABELS

Bauer, Melber J., Cincinnati, Ohio. Frigies—The Original Frozen Bon-Bon. For Frozen Bon-Bons. 40,889; July 5.
Bunte Brothers, Chicago, Ill. Bunte Chocolates. For Chocolates. 40,890; July 5.
Grocers' Home Owned Stores, Inc., Denver, Colo. Home Owned Stores White Bread. For Bread. 40,891; July 5.
Helms Bakeries, Ltd., Los Angeles, Calif. Helms Cabin Cookies. For Cookies. 40,892; July 5.
Kalamazoo Label Company, Kalamazoo, Mich. Kleen Maid. For Cake. 40,893; July 5.
Kalamazoo Label Company, Kalamazoo, Mich. A Superior Product. For Cake. 40,894; July 5.
Krenrich-Britten Co., New York, N. Y. Red Seal. For Butter. 40,895; July 5.
Krenrich-Britten Co., New York, N. Y. Royal Scarlet. For Butter. 40,896; July 5.
Lincoln Coffee and Spice Mills, Lincoln, Nebr. Quick Set Gelatin Dessert. For Gelatin. 40,897; July 5.
Midway Chemical Company, Chicago, Ill. 3 "Shakes" Weed Killer. For a Preparation for Killing Weeds. 40,898; July 5.
Miller, W. D., El Paso, Tex. Frsh Frut Orange Drink. For Orange Drink. 40,899; July 5.
Reid, Murdoch & Co., Chicago, Ill. Mallowettes. For Candy. 40,900; July 5.
Royal Laboratories, Inc., Newark, N. J. A Royal Product. For Medicinal Products. 40,901; July 5.
Royal Laboratories, Inc., Newark, N. J. Thymodine. For Antiseptic Cream. 40,902; July 5.
Russell Box Company, Medford, Mass. Bostonian. For Eggs. 40,903; July 5.
Sterling Products Company, Milwaukee, Wis. Pale Dry Ginger Ale. For Ginger Ale. 40,904; July 5.
Tobacco By-Products & Chemical Corporation, Louisville, Ky. "Black Leaf 40" Nicotine Sulphate. For Nicotine Sulphate. 40,905–9; July 5.

LIST OF REGISTRANTS OF PRINTS

Burton, Leonard V. A., jr., doing business as Munchee Nuts Company, Minneapolis, Minn. Munchee-Nuts. For Nuts. 13,771; July 5.
Munchee Nuts Company. (See Burton, Leonard V. A., jr.)

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 2

Case fillers, Egg. Central Fibre Products Company. 295,691; July 5.
Covers, Pyroxylin menu. Sameco Company. 295,438; July 5; Serial No. 320,448; published Apr. 19, 1932.
Pails of cardboard. Bloomer Bros. Company. 295,531; July 5; Serial No. 324,838; published Apr. 26, 1932.
Tubes, Metal dispensing. L. St. Clair. 295,451; July 5; Serial No. 323,015; published Apr. 19, 1932.

CLASS 3

Animal beds. F. L. Mills. 295,678; July 5.

CLASS 4

Cleaner, Paint and wall. Chas. A. Krause Milling Co. 295,472; July 5; Serial No. 324,174; published Apr. 19, 1932.
Cleaner, Type. A. Hering. 295,476; July 5; Serial No. 324,255; published Apr. 19, 1932.
Cleansing preparation. Hawley and Jones. 295,515; July 5; Serial No. 324,710; published Apr. 19, 1932.
Detergents. Beach Soap Company. 295,530; July 5; Serial No. 324,836; published Apr. 19, 1932.
Hone, Safety razor blade. Saunders Coal Company. 295,434; July 5; Serial No. 318,256; published Apr. 26, 1932.

Soap, Toilet. Holman Soap Company. 295,490; July 5; Serial No. 324,465; published Apr. 19, 1932.
Solvents, Dry cleaning. Asiatic Petroleum Company. 295,441; July 5; Serial No. 321,581; published Apr. 26, 1932.

CLASS 6

Antiseptic, disinfectant, and deodorant. North Metal & Chemical Company. 295,606; July 5; Serial No. 325,267; published Apr. 26, 1932.
Antiseptic preparation. Joseph M. Spielberg and Abraham Goodstein. 295,448; July 5; Serial No. 322,911; published Apr. 12, 1932.
Astringents, astringent cerates, bleach creams, etc. Parfumerie St. Denis. 295,516; July 5; Serial No. 324,720; published Apr. 26, 1932.
Baking powder. Standard Brands Incorporated. 295,615; July 5; Serial No. 306,020; published Apr. 12, 1932.
Compound, Antiseptic bath. Jansen Soap & Chemical Company. 295,440; July 5; Serial No. 321,341; published Apr. 19, 1932.
Cream, Inhaling and rubbing. D. Mortimer. 295,498; July 5; Serial No. 324,539; published Apr. 12, 1932.
Deodorant for garbage containers. Odor-Go Corporation. 295,444; July 5; Serial No. 322,059; published Mar. 1, 1932.
Hair tonic. P. M. Kotoff. 295,459; July 5; Serial No. 323,945; published Apr. 12, 1932.
Hair tonic. J. Thibodeaux. 295,458; July 5; Serial No. 323,835; published Apr. 12, 1932.
Hair tonics. John Wanamaker Philadelphia. 295,536; July 5; Serial No. 324,917; published Apr. 26, 1932.
Henna and other vegetable products used as a hair tint, Powdered Egyptian. J. W. Helfrich. 295,502; July 5; Serial No. 324,559; published Apr. 19, 1932.
Iodine compound. J. C. Harry. 295,550; July 5; Serial No. 324,999; published Apr. 26, 1932.
Irritant, Counter. Steel Laboratories Inc. 295,435; July 5; Serial No. 318,854; published Nov. 3, 1931.
Laxative, Antacid. Marine Chemicals Company. 295,566–7; July 5; Serial Nos. 316,701–2; published Apr. 12, 1932.
Laxative preparation. Associated Laboratories, Inc. 295,522; July 5; Serial No. 324,770; published Apr. 26, 1932.
Medicinal compound. Paul M. & Mrs. Paul M. Mead. 295,464; July 5; Serial No. 324,005; published Apr. 12, 1932.
Medicinal preparation. J. Feldman. 295,433; July 5; Serial No. 317,867; published Apr. 26, 1932.
Medicinal preparation. Paine Drug Company. 295,604; July 5; Serial No. 325,182; published Apr. 26, 1932.
Medicinal preparation for the treatment of teeth. Dr. J. M. Rosenthal. 295,467; July 5; Serial No. 324,116; published Apr. 12, 1932.
Medicine, Liver. Chattanooga Medicine Company. 295,452; July 5; Serial No. 323,125; published Apr. 26, 1932.
Ointment, Skin. W. E. Mason. 295,513; July 5; Serial No. 324,669; published Apr. 12, 1932.
Pepsin compound. B. L. Maltbie. 38,726; renewed Aug. 5, 1932.
Perfumes and toilet water. M. Levy. 295,463; July 5; Serial No. 324,004; published Apr. 12, 1932.
Preparation for dressing the hair. B. Anschl. 295,608; July 5; Serial No. 325,313; published Apr. 26, 1932.
Preparation for the treatment of coughs and colds, cold tablets, and laxative tablets. F. H. Fricke. 295,501; July 5; Serial No. 324,554; published Apr. 12, 1932.
Preparation for the treatment of ringworm. D. C. Kent. 295,609; July 5; Serial No. 325,368; published Apr. 26, 1932.
Prophylactics. J. A. Shank. 295,457; July 5; Serial No. 323,793; published Apr. 19, 1932.
Remedies for certain diseases. Monticello Drug Company. 88,916; renewed Oct. 29, 1932.
Shampoo preparation. Duart Manufacturing Company. 295,465; July 5; Serial No. 324,034; published Apr. 26, 1932.
Solution of magnesia, and more particularly a purgative and laxative, Effervescing. Queen City Chemical Co. 295,456; July 5; Serial No. 323,715; published Apr. 19, 1932.
Toilet waters and perfumes. L. H. Pearce. 39,103; renewed Nov. 4, 1932.
Tooth-powders, tooth-polishes, Gum-tonics, and mouth-washes. J. J. Sarrazin. 88,595; renewed Oct. 1, 1932.

CLASS 7

Rope, yarns, twines, cord, and lines. Southern Mills Corporation. 88,794; renewed Oct. 22, 1932.

CLASS 8

Lighters, cigar and cigarette. Nelson Bead Company. 295,647; July 5; Serial No. 324,754; published Apr. 19, 1932.

CLASS 9

Powder, Military smokeless. E. I. du Pont de Nemours and Company. 295,517–18; July 5; Serial Nos. 324,735–6; published Apr. 12, 1932.

CLASS 10

Food for plants, vegetables, etc. Olds & Whipple, Inc. 295,652; July 5; Serial No. 324,901; published Apr. 19, 1932.

CLASS 11

Ink, Fountain pen. E. M. Pearson. 295,666; July 5; Serial No. 323,250; published Apr. 19, 1932.
Ink-ribbons and coated transfer sheets. Underwood Elliot Fisher Company. 295,673; July 5; Serial No. 324,575; published Apr. 19, 1932.

CLASS 13

Hinges, Strap and T. Stanley Works, The. 295,521; July 5; Serial No. 324,765; published Apr. 26, 1932.
Platter, Base metal steak. Wagner Manufacturing Company. 295,483; July 5; Serial No. 324,361; published Apr. 19, 1932.
Shower bath, lavatory and bath fixtures, faucets, etc. Scovill Manufacturing Company. 295,503; July 5; Serial No. 324,572; published Apr. 19, 1932.
Sprinkler systems for fire protection and parts thereof, Automatic. "Automatic" Sprinkler Corporation of America. 295,556; July 5; Serial No. 312,594; published Apr. 26, 1932.
Tile, sewer and drain pipe, etc. Ric-Wil Company. 295,437; July 5; Serial No. 320,274; published Apr. 26, 1932.
Trays for holding baby toilet articles, etc. Kitchen Katch-All Corporation. 295,553; July 5; Serial No. 310,681; published Apr. 26, 1932.
Tubes and ferrules, Condenser. National Electric Products Corporation. 295,565; July 5; Serial No. 316,498; published Apr. 19, 1932.
Valves and traps, Plumbing and steam fitting. Barnes & Jones. 295,523 July 5; Serial No. 324,772; published Apr. 26, 1932.
Wire mesh and cloth. Gilby Wire Company. 295,442; July 5; Serial No. 321,757; published Apr. 19, 1932.

CLASS 14

Castings of brass alloy. Doehler Die Casting Co. 295,664; July 5; Serial No. 322,630; published Apr. 19, 1932.
Castings of ferrous alloys, etc. Duriron Company. 295,561; July 5; Serial No. 314,842; published Apr. 19, 1932.
Steel sheets. Bethlehem Steel Company. 295,663; July 5; Serial No. 322,157; published Apr. 26, 1932.

CLASS 16

Paint enamels, varnish stains, lacquers, etc. Valentine & Company. 295,506; July 5; Serial No. 324,635; published Apr. 12, 1932.

CLASS 17

Cigars and cigarettes. Fortune Tobacco Company. 295,670; July 5; Serial No. 324,090; published Apr. 26, 1932.

CLASS 19

Caps for automobile gasoline tanks, windshield wipers, etc. Atlas Supply Company. 295,537; July 5; Serial No. 324,943; published Apr. 26, 1932.

CLASS 20

Linoleum and oiled floor covering. Kooperativa Förbundet Förening u. p. a. 295,445; July 5; Serial No. 322,134; published Apr. 12, 1932.

CLASS 21

Battery terminals. C. A. Marks. 295,684; July 5.
Radio receiving sets and parts thereof, radio loudspeakers, etc. R. C. Blanchard. 295,682; July 5.

CLASS 22

Cards, Playing. United States Playing Card Company. 295,528; July 5; Serial No. 324,808; published Apr. 26, 1932.
Fish lines. A. Brown. 295,601; July 5; Serial No. 325,134; published Apr. 19, 1932.
Game. A. G. Hazeltine. 295,453; July 5; Serial No. 323,492; published Apr. 19, 1932.
Game. John Jaques & Son Limited. 87,543; renewed July 23, 1932.
Game apparatus. Coinomatic Corporation. 295,486; July 5; Serial No. 324,429; published Apr. 19, 1932.
Golf balls. Atlas Supply Company. 295,538; July 5; Serial No. 324,945; published Apr. 12, 1932.
Jumpers, Baby. J. Kersten. 295,597; July 5; Serial No. 325,100; published Apr. 19, 1932.
Rackets, Gut strings for. Johnson Suture Corporation. 295,617; July 5; Serial No. 308,890; published Apr. 26, 1932.
Rowing machines. Health Developing Apparatus Co. 295,610; July 5; Serial No. 325,429; published Apr. 26, 1932.
Toy animals and dolls. Magyar Ruggyantaárugyár Részvénytársaság. 294,4[illegible]3; July 5; Serial No. 322,004; published Apr. 19, 1932.
Toy figure. International Silver Company. 295,519; July 5; Serial No. 324,744; published Apr. 12, 1932.

CLASS 23

Apparatus for the treatment of solids. Dorr Company. 295,571; July 5; Serial No. 319,477; published Apr. 26, 1932.
Apparatus for the treatment of solids suspended in liquids. Door Company. 295,572; July 5; Serial No. 319,928; published Apr. 19, 1932.
Axes. Emerson & Stevens Mfg. Co. Inc. 295,484; July 5; Serial No. 324,374; published Apr. 19, 1932.
Conveyer belts, Mechanical. Edward C. Bowers and Charles L. Feldman. 295,510; July 5; Serial No. 324,651; published Apr. 19, 1932.
Cutlery, machinery, and tools, and parts thereof. S. Howes Company. 86,594; renewed May 21, 1932.
Die sets. Advance Die Set Corporation. 295,555; July 5; Serial No. 312,328; published Apr. 26, 1932.
Engines, Internal combustion. New Idea Spreader Company. 295,587; July 5; Serial No. 325,045; published Apr. 19, 1932.
Filters, Oil. Atlas Supply Company. 295,539; July 5; Serial No. 324,946; published Apr. 19, 1932.
Fire extinguishers. Merchant & Evans Company. 295,614; July 5; Serial No. 304,505; published Apr. 26, 1932.
Fittings or nipples, swivels, Lubricant. Lubrication Corporation. 295,578; July 5; Serial No. 322,827; published Apr. 26, 1932.
Hammers, Hand. David Maydole Tool Corporation. 295,485; July 5; Serial No. 324,414; published Apr. 26, 1932.
Machinery and machine parts. Taylor Manufacturing Corp. 295,504; July 5; Serial No. 324,574; published Apr. 26, 1932.
Machinery and tools and parts thereof. Chicago Pneumatic Tool Company. 295,560; July 5; Serial No. 314,484; published Aug. 18, 1931.
Razor blades. Bloomingdale Bros. 295,542; July 5; Serial No. 324,952; published Apr. 19, 1932.
Razor blades. S. H. Kress & Co. 295,564; July 5; Serial No. 315,617; published Apr. 26, 1932.
Razor blades, Safety. Marathon Razor Blade Co. Inc. 295,497; July 5; Serial No. 324,537; published Apr. 19, 1932.
Razor blades, Safety. Radio Circular Co. Inc. 295,478; July 5; Serial No. 324,297; published Apr. 19, 1932.
Razor blades, Safety. Unsinger Cutlery Co. 295,589–90; July 5; Serial Nos. 325,051–2; published Apr. 19, 1932.
Scythes. Emerson & Stevens Mfg. Co. Inc. 295,500; July 5; Serial No. 324,552; published Apr. 19, 1932.
Sewing machines. Union Special Machine Company. 295,527; July 5; Serial No. 324,806; published Apr. 26, 1932.
Wrench sets, Spark plug. Defiance Spark Plugs, Inc. 295,525; July 5; Serial No. 324,784; published Apr. 19, 1932.

CLASS 24

Washing machines, Rug and carpet. United Vacuum Appliance Corp. 295,529; July 5; Serial No. 324,833; published Apr. 26, 1932.

CLASS 25

Locks. Dudley Lock Corporation. 295,545–6; July 5; Serial Nos. 324,991–2; published Apr. 26, 1932.
Locks and latches. American Hardware Corporation. 295,693; July 5.

CLASS 26

Centrifuges, centrifuge separators, and centrifuge accessories and equipment. International Equipment Company. 295,576; July 5; Serial No. 322,641; published Apr. 26, 1932.
Film, Motion picture. Kodascope Editing and Titling Service, Inc. 295,643; July 5; Serial No. 324,043; published Apr. 26, 1932.
Film, Photographic. Agfa Ansco Corporation. 295,508; July 5; Serial No. 324,643; published Apr. 19, 1932.
Glasses, Magnifying. Carl Neithold Aktiengesellschaft. 295,575; July 5; Serial No. 321,129; published Apr. 26, 1932.
Goggles, Automobile. Atlas Supply Company. 295,541; July 5; Serial No. 324,949; published Apr. 19, 1932.
Patterns, Paper. New York Pattern Company. 295,582; July 5; Serial No. 325,013; published Apr. 26, 1932.
Photographic paper, Sensitized. Haloid Company. 295,548; July 5; Serial No. 324,996; published Apr. 19, 1932.
Photographic paper, Sensitized. Haloid Company. 295,549; July 5; Serial No. 324,997; published Apr. 26, 1932.
Thermostatic valves and traps. Air-Way Electric Appliance Corporation. 295,612; July 5; Serial No. 300,318; published Apr. 26, 1932.

CLASS 27

Clocks and cases and movements therefor, Electric. Deltah Electric Corporation. 295,592; July 5; Serial No. 325,063; published Apr. 26, 1932.
Watches. Bulova Watch Company. 295,591; July 5; Serial No. 325,059; published Apr. 26, 1932.
Watches and parts thereof. H. Wilsdorf. 295,668; July 5; Serial No. 323,760; published Apr. 26, 1932.
Watches and watch cases. Elgin National Watch Company. 295,651; July 5; Serial No. 324,883; published Apr. 26, 1932.

CLASS 29

Brushes, Paint. W. H. Stoneman. 295,675; July 5; Serial No. 324,542; published Apr. 26, 1932.

CLASS 30

Vases, Jardinieres, crockery, and pottery. M. P. Beckwith. 295,671; July 5; Serial No. 324,693; published Apr. 26, 1932.

CLASS 31

Coolers and ice cream cans for use in refrigerators, Milk and cream. Superior Metal Products Company. 295,692; July 5.
Refrigerating apparatus. Domestic Industries, Inc. 295,586; July 5; Serial No. 325,037; published Apr. 19, 1932.
Refrigeration apparatus and parts thereof. Eastman, Scott & Company. 295,602; July 5; Serial No. 325,138; published Apr. 19, 1932.
Refrigerators, Mechanical. Sears, Roebuck and Co. 295,588; July 5; Serial No. 325,048; published Apr. 19, 1932.

CLASS 32

Bassinettes, play-pens, etc. C. Martin. 295,574; July 5; Serial No. 321,114; published Apr. 26, 1932.
Racks and hall boys, Hat. I. A. Steiner. 295,568; July 5; Serial No. 318,573; published Apr. 26, 1932.
Seat covers, seat pads, tailored chair covers, etc., Tailored. Evr-Klean Seat Pad Company. 295,470; July 5; Serial No. 324,162; published Apr. 26, 1932.
Seat covers, seat pads, tailored chair covers, etc., Tailored. Evr-Klean Seat Pad Company. 295,644; July 5; Serial No. 324,158; published Apr. 26, 1932.
Seat covers, seat pads, tailored chair covers, etc., Tailored. Evr-Klean Seat Pad Company. 295,645; July 5; Serial No. 324,160; published Apr. 26, 1932.

CLASS 33

Glass table and counter tops, scale plates, and shelves. Marietta Manufacturing Company. 295,667; July 5; Serial No. 323,625; published Apr. 19, 1932.

CLASS 34

Burners, Industrial oil. Titmas Co. 295,595; July 5; Serial No. 325,080; published Apr. 26, 1932.
Radiators. Rome Brass Radiator Corporation. 295,616; July 5; Serial No. 307,509; published Apr. 19, 1932.
Repair and replacement parts for heating, ventilating, and air-conditioning structures. Forest City Foundries Company. 295,446; July 5; Serial No. 322,508; published Apr. 26, 1932.
Wicks for oil burners. P. Barger. 295,509; July 5; Serial No. 324,647; published Apr. 19, 1932.

CLASS 35

Hose, belting, and packing. Hewitt-Gutta Percha Rubber Corporation. 295,611; July 5; Serial No. 295,168; published Apr. 19, 1932.
Hose, brake linings, and fan belts. Atlas Supply Company. 295,540; July 5; Serial No. 324,948; published Apr. 19, 1932.
Lining, Brake. Marshall Asbestos Corporation. 295,569–70; July 5; Serial Nos. 318,838–9; published Apr. 26, 1932.
Packings, Machinery. Johns-Manville Corporation. 295,563; July 5; Serial No. 315,493; published Apr. 19, 1932.

CLASS 36

Organs and parts of organs. Geo. Kilgen & Son, Incorporated. 295,688; July 5.

CLASS 37

Paper. International Paper Company. 295,488; July 5; Serial No. 324,438; published Apr. 19, 1932.

CLASS 38

Book. J. M. Hiss. 295,551; July 5; Serial No. 309,476; published Apr. 19, 1932.
Comic strips. K. L. Kling. 295,573; July 5; Serial No. 320,936; published Apr. 19, 1932.
Magazine. Joe Lowe Corporation. 295,535; July 5; Serial No. 324,899; published Apr. 19, 1932.
Periodical. Clayton Magazine, Inc. 295,633; July 5; Serial No. 323,189; published Apr. 19, 1932.
Publication. Ahrens Publishing Company. 295,577; July 5; Serial No. 322,672; published Apr. 19, 1932.

CLASS 39

Boots and shoes. A. H. Genting Company. 295,639; July 5; Serial No. 323,658; published Apr. 26, 1932.
Boots and shoes. Regal Shoe Company. 85,003; renewed Jan. 16, 1932.
Clothing. Alfred Decker & Cohn, Inc. 295,461; July 5; Serial No. 323,858; published Apr. 19, 1932.
Clothing. M. Phillips & Sons. 87,363; renewed July 9, 1932.

Clothing, Men's. I. Spencer. 295,627; July 5; Serial No. 322,275; published Apr. 19, 1932.
Coats, rain coats, and bathing suits. S. R. Singer. 295,598; July 5; Serial No. 325,119; published Apr. 26, 1932.
Collars. Austin Reed Ltd. 88,788; renewed Oct. 22, 1932.
Corsets, brassières, and girdles. Vanity Brassiere Company. 295,499; July 5; Serial No. 324,545; published Apr. 19, 1932.
Dresses. Garment Specialty Company. 295,460; July 5; Serial No. 323,848; published Apr. 26, 1932.
Hats and felt hat bodies. F. & A. Stirn Corporation. 295,479; July 5; Serial No. 324,299; published Apr. 19, 1932.
Hats for women. Hodshon-Berg, Incorporated. 295,496; July 5; Serial No. 324,518; published Apr. 19, 1932.
Hats for women. Kneale, Inc. 295,471; July 5; Serial No. 324,173; published Apr. 19, 1932.
Hats, Ladies'. Draper Hat Corporation. 295,679; July 5.
Hats, Ladies'. Société À Responsabilité Limitée Mado. 295,636; July 5; Serial No. 323,469; published Apr. 19, 1932.
Hats, Men's. M. S. Levy & Sons Incorporated. 295,676; July 5.
Hosiery. Gotham Silk Hosiery Company. 295,547; July 5; Serial No. 324,994; published Apr. 19, 1932.
Hosiery. Merit Hosiery Company. 295,594; July 5; Serial No. 325,071; published Apr. 26, 1932.
Hosiery. Phoenix Hosiery Company. 295,677; July 5.
Hosiery, underwear, sweater coats, etc. Askin Brothers Company. 295,507; July 5; Serial No. 324,040; published Apr. 26, 1932.
Neckties and Windsor ties. Washington Neckwear Co. 295,634; July 5; Serial No. 323,261; published Apr. 26, 1932.
Pajamas. Van Raalte Company. 295,603; July 5; Serial No. 325,156; published Apr. 19, 1932.
Pajamas and night clothes. Knothe Brothers Company. 295,690; July 5.
Rubbers, Men's heavy. Sears, Roebuck and Co. 295,462; July 5; Serial No. 323,910; published Apr. 19, 1932.
Shirts, drawers, corset-covers, and corsets. Deimel Linen-Mesh System Company. 88,740; renewed Oct. 22, 1932.
Shirts, Dress. Stetson Shirt Co. 295,493; July 5; Serial No. 324,492; published Apr. 26, 1932.
Shoes. R. P. Hazzard Co. 295,687; July 5.
Shoes. Keehn Brothers. 295,689; July 5.
Shoes. F. Parlante. 295,628; July 5; Serial No. 322,671; published Apr. 26, 1932.
Shoes. Selby Shoe Company. 295,491–2; July 5; Serial Nos. 324,489–90; published Apr. 19, 1932.
Suits, dresses, cloaks for misses. Metzger and Bernard Inc. 295,514; July 5; Serial No. 324,680; published Apr. 19, 1932.
Suits, Men's. Browning, King & Co. 295,505; July 5; Serial No. 324,582; published Apr. 19, 1932.
Suits, shoes, dresses, etc. Kresge Department Store Corporation. 295,524; July 5; Serial No. 324,792; published Apr. 19, 1932.
Suits, shoes, dresses, etc. Kresge Department Store Corporation. 295,526; July 5; Serial No. 324,793; published Apr. 19, 1932.
Undervests, bloomers, chemises, etc. R. H. Macy & Co. 295,680; July 5.
Underwear. Duofold Health Underwear Company. 295,487; July 5; Serial No. 324,433; published Apr. 26, 1932.
Underwear. Julius Kayser & Co. 295,593; July 5; Serial No. 325,069; published Apr. 19, 1932.
Underwear and hosiery. Vanity Fair Silk Mills. 295,494; July 5; Serial No. 324,497; published Apr. 19, 1932.
Vests, bloomers, pajamas, etc., Children's. Bethlehem Textiles Company. 295,469; July 5; Serial No. 324,146; published Apr. 26, 1932.

CLASS 40

Bands and banding. I. B. Kleinert Rubber Company. 295,477; July 5; Serial No. 324,260; published Apr. 19, 1932.
Braid made of cellulose. Algemeene Kunstzijde Unie N. V. 295,436; July 5; Serial No. 318,900; published Apr. 19, 1932.
Buttons. G. A. Lippincott. 295,466; July 5; Serial No. 324,072; published Apr. 26, 1932.
Pins, needles, snap fasteners, etc. William Prym of America, Inc. 295,532; July 5; Serial No. 324,852; published Apr. 19, 1932.
Pins, safety pins, needles, snap fasteners, etc. William Prym of America, Inc. 295,626; July 5; Serial No. 322,268; published Apr. 26, 1932.
Wave setters. S. H. Kress & Co. 295,557; July 5; Serial No. 312,712; published Apr. 12, 1932.

CLASS 42

Carpet, Woven pile. Sanford Mills. 295,661; July 5; Serial No. 321,619; published Apr. 26, 1932.
Cloth, Shade. Interstate Shade Cloth Co. 295,655; July 5; Serial No. 325,003; published Apr. 19, 1932.
Cotton and linen mesh cloth. Deimel Linen-Mesh System Company. 89,013; renewed Nov. 5, 1932.
Cotton piece goods. Noveltex, Inc. 295,656; July 5; Serial No. 325,014; published Apr. 26, 1932.
Fabrics. Celanese Corporation of America. 295,648; July 5; Serial No. 324,876; published Apr. 19, 1932.
Fabrics. Celanese Corporation of America. 295,649–50; July 5; Serial Nos. 324,878–9; published Apr. 19, 1932.
Fabrics, Unwaxed. Chicopee Manufacturing Corporation. 295,653; July 5; Serial No. 324,986; published Apr. 19, 1932.
Pile fabrics. E. F. Timme & Son. 295,585; July 5; Serial No. 325,025; published Apr. 19, 1932.
Sheets, pillow cases, sheetings, tubings, and cotton piece goods. Carson Pirie Scott & Co. 295,665; July 5; Serial No. 323,025; published Apr. 19, 1932.
Silk piece goods. Continental Silk Company. 295,669; July 5; Serial No. 323,886; published Apr. 19, 1932.
Textile Pillow cases, bed sheets, and bed sheeting. Goldblatt Bros. Inc. 295,646; July 5; Serial No. 324,709; published Apr. 26, 1932.
Velvets. Roesle Velvet Company. 295,583–4; July 5; Serial Nos. 325,017–18; published Apr. 19, 1932.
Woolen blankets, flannels, woolen suitings. Amana Society. 295,658; July 5; Serial No. 319,760; published Apr. 19, 1932.
Woolen piece goods. Forstmann & Huffmann Company. 295,683; July 5.
Woolen piece goods and woolen suitings and coatings. Morris W. Haft & Brothers, Inc. 295,674; July 5; Serial No. 324,558; published Apr. 26, 1932.

CLASS 43

Threads and yarns. J. & P. Coats (R. I.) Inc. 295,659; July 5; Serial No. 320,352; published Apr. 26, 1932.
Yarn. Clover Mills Company. 295,605; July 5; Serial No. 325,252; published Apr. 26, 1932.

CLASS 44

Arch-supports for the foot. Regal Shoe Company. 85,494; renewed Feb. 20, 1932.
Bandages, wrappings, and tourniquets, Surgical. Surgical Dressings, Inc. 295,480; July 5; Serial No. 324,325; published Apr. 26, 1932.
Dental demonstrating models, dental bands and mandrels, dental X-ray film mounts, etc. Dental Specialty Company. 295,447; July 5; Serial No. 322,688; published Apr. 19, 1932.
Denture material. W. A. Voight. 295,681; July 5.
Dentures. Coe Laboratories, Inc. 295,468; July 5; Serial No. 324,128; published Apr. 26, 1932.
First Aid kit, Compact miniature. L. Philippe. 295,482; July 5; Serial No. 324,357; published Apr. 19, 1932.
Hair dryers, Electric. Electric Mfg. Co. 295,543; July 5; Serial No. 324,957; published Apr. 26, 1932.
Hair waving pads. Zotos, Inc. 295,481; July 5; Serial No. 324,330; published Apr. 26, 1932.
Medicament dispensing tubes. L. D. Caulk Company. 295,511; July 5; Serial No. 324,655; published Apr. 19, 1932.
Medicament injecting tubes. L. D. Caulk Company. 295,512; July 5; Serial No. 324,656; published Apr. 19, 1932.
Nipples, Gutta-percha and India-rubber. E. Rath. 87,805; renewed Aug. 6, 1932.
Prophylactic rubber articles. Dean Rubber Manufacturing Company. 295,495; July 5; Serial No. 324,507; published Apr. 26, 1932.
Prophylactic rubber articles. I. J. Friedland. 295,455; July 5; Serial No. 323,655; published Apr. 19, 1932.
Radium emanation apparatus. Radon Company. 295,558; July 5; Serial No. 312,926; published Apr. 19, 1932.
Sanitary pads. Diana Manufacturing Company. 295,439; July 5; Serial No. 321,099; published Apr. 26, 1932.
Tampons. Joseph M. Spielberg and Abraham Goodstein. 295,449–50; July 5; Serial Nos. 322,912–13; published Apr. 26, 1932.
Therapeutic radiant sources. Santé Institute, Ltd. 295,473; July 5; Serial No. 324,194; published Apr. 26, 1932.
X-ray apparatus, parts, and appurtenances. Kelley-Koett Manufacturing Company. 295,554; July 5; Serial No. 311,739; published Apr. 19, 1932.

CLASS 45

Beer syrup, Root. Chain Store Root Beer Co. 295,475; July 5; Serial No. 324,242; published Apr. 12, 1932.
Beverages. J. Bruni. 295,544; July 5; Serial No. 324,983; published Apr. 19, 1932.
Beverages, flavoring extracts and syrups therefor. J. S. Polefsky. 295,685; July 5.
Ginger ale. Drewrys Dry Ginger Ale, Canada, Limited. 295,454; July 5; Serial No. 323,572; published Apr. 19, 1932.
Syrup, concentrate, and flavor. Triple "XXX" Company. 295,599; July 5; Serial No. 325,125; published Apr. 19, 1932.
Syrups, extracts, and concentrates. Joe Lowe Corporation. 295,534; July 5; Serial No. 324,893; published Apr. 19, 1932.
Water, Natural spring. Wonder Health Springs, Inc. 295,533; July 5; Serial No. 324,864; published Apr. 26, 1932.

CLASS 46

Bacons, hams, and lard. Babbitt Brothers Trading Company. 295,559; July 5; Serial No. 313,881; published Jan. 19, 1932.

Candies. Huyler's Wholesale Division, Inc. 295,613; July 5; Serial No. 300,945; published Apr. 26, 1932.
Candies. O. S. Watson. 295,642; July 5; Serial No. 323,923; published Apr. 19, 1932.
Candy. Golden Nuggets Sweets Ltd. 295,619; July 5; Serial No. 318,357; published Apr. 26, 1932.
Candy. I. Kosloff & Sons, Inc. 295,562; July 5; Serial No. 314,914; published Apr. 19, 1932.
Candy. Yes Pure Food Products Company. 295,596; July 5; Serial No. 325,082; published Apr. 19, 1932.
Candy bars. Chicky Mfg. Company. 295,632; July 5; Serial No. 323,030; published Apr. 19, 1932.
Candy bars. F. A. Martoio Company. 295,618; July 5; Serial No. 317,848; published Apr. 26, 1932.
Candy bars, Chocolate covered. York Cone Company. 295,621; July 5; Serial No. 319,958; published Apr. 26, 1932.
Canned asparagus. Rochelle Asparagus Company. 295,580; July 5; Serial No. 324,571; published Apr. 26, 1932.
Cocoa and chocolate. Naamlooze Vennootschap Droste's Cacao- En Chocolatefabrieken. 295,552; July 5; Serial No. 309,740; published Apr. 26, 1932.
Coffee. Standard Brands Incorporated. 295,579; July 5; Serial No. 324,491; published Apr. 19, 1932.
Coffee, Blended. Thomas Wood Co. 89,171; renewed Nov. 12, 1932.
Confectionery. Sweets Company of America, Inc. 295,641; July 5; Serial No. 323,795; published Apr. 26, 1932.
Confections, Frozen. General Frozen Products, Inc. 295,489; July 5; Serial No. 324,463; published Apr. 19, 1932.
Fish fillets, Fresh. Henry & Close Co. 295,640; July 5; Serial No. 323,748; published Apr. 19, 1932.
Food compound. New England Cereal Co. 86,610; renewed May 21, 1932.
Food drink. Petrolagar Laboratories, Inc. 295,520; July 5; Serial No. 324,758; published Apr. 19, 1932.
Food preparation. Adgene Incorporated. 295,657; July 5; Serial No. 317,753; published Apr. 19, 1932.
Food product, Concentrated. A. W. Landquist. 295,581; July 5; Serial No. 324,749; published Apr. 19, 1932.
Ice cream confections. Eskimo Pie Corporation. 295,637; July 5; Serial No. 323,488; published Apr. 19, 1932.
Ice creams. Mission Creameries, Inc. 295,625; July 5; Serial No. 321,573; published Apr. 19, 1932.
Mayonnaise, salad dressing, etc. Private Brands, Inc. 295,635; July 5; Serial No. 323,307; published Apr. 12, 1932.
Meat, Fresh domestic rabbit. Lehigh Packing Co. Inc. 295,623; July 5; Serial No. 320,363; published Apr. 26, 1932.
Noodles. Walker Products Company. 295,630; July 5; Serial No. 322,904; published Apr. 19, 1932.
Nuts. Triangle Nut Co. 295,620; July 5; Serial No. 319,224; published Apr. 26, 1932.
Oysters, Fresh. West Coast Oyster Farms, Ltd. 295,600; July 5; Serial No. 325,129; published Apr. 26, 1932.
Packing house products. Swift and Company. 88,396; renewed June 3, 1932.
Potatoes. M. G. Coe. 295,624; July 5; Serial No. 321,134; published Apr. 26, 1932.
Potatoes, Sweet. A. L. Deane. 295,622; July 5; Serial No. 320,253; published Apr. 12, 1932.
Sugar. Godchaux Sugars, Inc. 295,631; July 5; Serial No. 323,004; published Apr. 19, 1932.
Syrup, Malt. G. Kasser. 295,638; July 5; Serial No. 323,621; published Apr. 19, 1932.

CLASS 48

Malt beverage. Bruckmann Co. 295,629; July 5; Serial No. 322,684; published Feb. 23, 1932.
Malt beverage. E. W. Harvey. 295,474; July 5; Serial No. 324,222; published Apr. 26, 1932.

CLASS 50

Closures, Metal bottle and jar. Armstrong Cork Company. 295,607; July 5; Serial No. 325,281; published Apr. 26, 1932.
Fibrous fabric. Masland Manufacturing Corporation. 295,686; July 5.
Leather fabric, Imitation. Philip G. Whitman, Inc. 295,662; July 5; Serial No. 322,009; published Apr. 19, 1932.
Sheet material, Absorbent. Krafelt Corporation of America. 295,660; July 5; Serial No. 320,729; published Apr. 19, 1932.
Straws, Soda. National Soda Straw Co. 295,672; July 5; Serial No. 324,622; published Apr. 19, 1932.
Wax coated or impregnated fabric. Chicopee Manufacturing Corporation. 295,654; July 5; Serial No. 324,987; published Apr. 26, 1932.

LIST OF LABELS

A Royal Product. For Medicinal Products. Royal Laboratories, Inc. 40,901; July 5.
A Superior Product. For Cake. Kalamazoo Label Company. 40,894; July 5.
"Black Leaf 40" Nicotine Sulphate. For Nicotine Sulphate. Tobacco By-Products & Chemical Corporation. 40,905–9; July 5.
Bostonian. For Eggs. Russell Box Company. 40,903; July 5.
Bunte Chocolates. For Chocolates. Bunte Brothers. 40,890; July 5.
Frigies—The Original Frozen Bon-Bon. For Frozen Bon-Bons. M. J. Bauer. 40,889; July 5.
Frsh Frut Orange Drink. For Orange Drink. W. D. Miller. 40,899; July 5.
Helms Cabin Cookies. Helms Bakeries, Ltd. 40,892; July 5.
Home Owned Stores White Bread. For Bread. Grocers' Home Owned Stores, Inc. 40,891; July 5.
Kleen Maid. For Cake. Kalamazoo Label Company. 40,893; July 5.
Mallowettes. For Candy. Reid, Murdoch & Co. 40,900; July 5.
Pale Dry Ginger Ale. For Ginger Ale. Sterling Products Company. 40,904; July 5.
Quick Set Gelatin Dessert. For Gelatin. Lincoln Coffee and Spice Mills. 40,897; July 5.
Red Seal. For Butter. Krenrich-Britten Co. 40,895; July 5.
Royal Scarlet. For Butter. Krenrich-Britten Co. 40,896; July 5.
3 "Shakes" Weed Killer. For a Preparation for Killing Weeds. Midway Chemical Company. 40,898; July 5.
Thymodine. For Antiseptic Cream. Royal Laboratories, Inc. 40,902; July 5.

LIST OF PRINTS

Munchee-Nuts. For Nuts. L. V. A. Burton, jr. 13,771; July 5.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 5TH DAY OF JULY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbott, Adrian O., jr., Grosse Pointe Park, Mich. Valve operating assembly. 1,865,998; July 5.

Abegg, Walter A., Los Angeles, assignor to Wieman Kammerer Wright Co., Incorporated, Hollydale, Calif. Making connections between machine parts. 1,865,808; July 5.

Abel, Frank J., Massapequa, assignor to H. Hyman, Brooklyn, N. Y. Clock case. Des. 87,288; July 5.

Abel, Frank J., Massapequa, assignor to H. Hyman, Brooklyn, N. Y. Clock case. Des. 87,289; July 5.

Abel, Frank J., Massapequa, assignor to H. Hyman, Brooklyn, N. Y. Clock case. Des. 87,290; July 5.

Abel, Frank J., Massapequa, assignor to H. Hyman, Brooklyn, N. Y. Clock case. Des. 87,291; July 5.

Abel, Frank J., Massapequa, assignor to H. Hyman, Brooklyn, N. Y. Clock case. Des. 87,292; July 5.

Abel, Frank J., Massapequa, assignor to H. Hyman, Brooklyn, N. Y. Clock case. Des. 87,293; July 5.

Abel, Frank J., Massapequa, assignor to H. Hyman, Brooklyn, N. Y. Clock case. Des. 87,294; July 5.

Abel, Frank J., Massapequa, assignor to H. Hyman, Brooklyn, N. Y. Clock case. Des. 87,295; July 5.

Abel, Frank J., Massapequa, assignor to H. Hyman, Brooklyn, N. Y. Clock case. Des. 87,299; July 5.

Aberle, William J., Pasadena, Calif. Sod-cutting tool. 1,866,073; July 5.

Abrahamson, Oscar E. J., Buffalo, N. Y. Obtaining colloidal clays from ordinary surface clays. 1,865,496; July 5.

Abranathy, Anthony, assignor of one-half to A. Grigal, Philadelphia, Pa. Strop. 1,866,384; July 5.

Adam, Walter, Berlin-Oberschenweide, Germany, assignor to General Electric Company. Electrical switch gear. 1,866,336; July 5.

Adams, Frank E., Blooming Prairie, Minn. Attachment for automobiles. 1,866,444; July 5.

Adelson, Samuel L., assignor to General Zeolite Company, Chicago, Ill. Flow control. 1,866,284; July 5.

Akers, Earl C., Detroit, Mich. Switch device for direction-signal systems. 1,865,809; July 5.

Akron Standard Mold Company, The. (See Bostwick, Henry C., assignor.)

Aktiebolaget Atlas Diesel. (See Thege, Edvin O. P., assignor.)

Aktiengesellschaft Brown Boveri & Cie. (See Gaudenzi, A., and Kobel, assignors.)

Albach, Frank, assignor to Fred Medart Manufacturing Company, St. Louis, Mo. Playground equipment. 1,865,810; July 5.

Albertine, Herman, Rutherford, N. J., assignor to Rogers Products Company, Inc. Spray apparatus. 1,866,285; July 5.

Albright, Robert E. (See Wurster, Amsy L., assignor.)

Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to General Electric Company. System for producing high frequency oscillations. 1,866,337; July 5.

Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to General Electric Company. Picture transmission apparatus. 1,866,338; July 5.

Allen, Charles H., and E. T. Robbeloth, assignors to Packers Specialty Company, Pittsburgh, Pa. Sausage twisting machine. 1,866,497; July 5.

Allen, Joseph W., Dayton, Ohio. Electrical thermometer. 1,865,999; July 5.

Allen, Walter S., Flushing, assignor to General Chemical Company, New York, N. Y. Apparatus for the manufacture of sulphuric acid. 1,865,607; July 5.

Allyn, Lewis B., Westfield, Mass., assignor to Vitamin Food Co. Inc., New York, N. Y. Evaporation of sea water. 1,865,451; July 5.

Alonzo, Peter A., Guadalajara, Mexico. Gauge for ascertaining the lift of compressor air valves. 1,866,000; July 5.

Aluminum Company of America. (See Wagner, Glenn H., assignor.)

Amelotte, Joseph, Lynn, Mass. Sanitary toothbrush holder. 1,866,001; July 5.

American Brake Materials Corporation. (See Blume, William A., assignor.)

American Buckle Company, The. (See Hodge, Robert J., assignor.)

American Can Company. (See Butler, William F., assignor.)

American Circular Loom Company. (See Lutz, George A., assignor.)

American Cyanamid Company. (See Christmann, Ludwig J., assignor.)

American Fabrics Company, The. (See Page, Samuel H., assignor.)

American Laundry Machinery Company, The. (See Perry, Emanuel J., assignor.)

American Lurgi Corporation. (See Bailleul, Gustav, assignor.)

American Optical Company. (See Hill, Harry W., assignor.)

American Optical Company. (See Splaine, Edward M., assignor.)

American Optical Company. (See Tillyer, Edgar D., assignor.)

American Ozone Company. (See Daily, James M., assignor.)

American Potash & Chemical Corporation. (See Chesny, Heinz H., assignor.)

American Radiator & Standard Sanitary Corporation. (See Bennett, I. T., and Reynolds, assignors.)

American Radiator & Standard Sanitary Corporation. (See Reynolds, Frank C., assignor.)

American Telephone and Telegraph Company. (See Kline, William H., assignor.)

American Telephone and Telegraph Company. (See Singer, Fred J., assignor.)

American Telephone and Telegraph Company. (See Welch, Paul V., assignor.)

Amsler, Walter O., Toledo, Ohio, assignor to Simplex Engineering Company, Washington, Pa. Glass drawing. 1,865,811; July 5.

Anaconda Sales Company. (See Levy, Solomon, assignor.)

Anchor Cap & Closure Corporation. (See Podel, Abraham, assignor.)

Anderau, Walter. (See Straub, F., and Anderau.)

Andersen, Earl B., Salinas, Calif. Ventable primable spark plug. 1,866,385; July 5.

Anderson, Carl G., Bellwood, Ill. Road maintenance machine. 1,865,812; July 5.

Anderson, Emil, Briarcliff Manor, N. Y. Transmission. 1,866,002; July 5.

Anderson, Oscar M., and F. W. Juengst, assignors to Landers, Frary & Clark, New Britain, Conn. Electric toaster. Des. 87,297; July 5.

Anderson, Oscar M., and F. W. Juengst, assignors to Landers, Frary & Clark, New Britain, Conn. Coffee maker. Des. 87,298; July 5.

Andrewes, Humfrey. (See Coursey, P. R., and Andrewes.)

Andrews, Champe S., Chattanooga, Tenn., assignor to Box Blank Corporation, New York, N. Y. Hinged box. 1,865,608; July 5.

Angelbeck, Frieda, St. Louis, Mo. Bucket. 1,866,074; July 5.

Animated Roboquin Display Company, The. (See Connor, James G., assignor.)

Antz, George, Brooklyn, N. Y. Nonslip attachment for shoe heels. 1,866,386; July 5.

Apple, Vincent G., Dayton, Ohio. Geared motor. 1,866,339; July 5.

Appleyard, Kenelm C., Birtley, C. W. H. Holmes, Low Fell, and I. L. Bramwell, assignors to The Birtley Iron Company, Limited, Birtley, England. Separation of dry materials. 1,866,186; July 5.

Arenz, John A., Mount Vernon, N. Y., assignor to International Screw Company, Wilmington, Del. Machine for cutting double thread single point screws. 1,866,286; July 5.

Armacost, Wilbur H., assignor to The Superheater Company, New York, N. Y. Superheater boiler. 1,866,387; July 5.

Armacost, Wilbur H., assignor to The Superheater Company, New York, N. Y. Heat exchange. 1,866,388; July 5.

Armstrong, Levi B., Chicago, Ill., assignor to The Lundie Engineering Corporation, New York, N. Y. Tie-plate. 1,865,452; July 5.

Arrow-Hart & Hegeman Electric Co. (See Guett, Monroe, assignor.)

Artzt, Maurice, Scotia, and R. Serrell, Schenectady, N. Y., assignor to General Electric Company. Synchronizing apparatus. 1,866,340; July 5.

Aruga, Giuseppe, Turin, Italy. Rotary engine. 1,865,666; July 5.

Ashbaugh, John H. (See Nycum, H. C., and Ashbaugh.)

Ashworth, Fred, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Welt tempering mechanism. 1,866,003; July 5.

Askenasy, Paul, Karlsruhe, Germany, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Production of acetylene. 1,865,422; July 5.

Associated Electrical Industries Limited. (See Hinchcliffe, W., and Scott, assignors.)

Associated Manufacturers Corporation of America. (See Edwards, James M., assignor.)
Astley, Albert E., Des Moines, Iowa. Attachment for paint cans or the like. 1,865,736; July 5.
Atlas Conveyor Company. (See Weygandt, L. G., and Reed, assignors.)
Atlas Powder Company. (See Swenehart, John, assignor.)
Atwood, Francis C., Newtonville, Mass., assignor by mesne assignments, to Technicolor, Inc., New York, N. Y. Hardening gelatine films and surfaces and resulting product. 1,865,497; July 5.
Atwood, George D., Brooklyn, N. Y. Spool and making same. 1,865,423; July 5.
Atwood Machine Company, The. (See Rowe, Irving R., assignor.)
Austin, Harry M., Chestnut Hill, assignor to Charles Blum. Philadelphia, Pa. Moving sign. 1,865,498; July 5.
Automatic Centrifugal Company. (See Herr, Homer A., assignor.)
Automatic Food Machinery Corporation. (See Starks, Charles W., assignor.)
Automatic Transmission Company. (See Lyman, Kenneth E., assignor.)
Aylsworth, Selden B., assignor to The Union Switch & Signal Company, Swissvale, Pa. Transformer relay. 1,866,147; July 5.
Babcock, Earl, Chicago, Ill., assignor to The Hoover Company, North Canton, Ohio. Method of and apparatus for producing continuous refrigeration. 1,865,813; July 5.
Bahls, Otto, Long Island City, N. Y. Refrigerating device. 1,866,389; July 5.
Bailleul, Gustav, Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y. Activation of carbonaceous material. 1,865,667; July 5.
Bakelite Corporation. (See Groff, Frazier, assignor.)
Baker-Raulang Company, The. (See Stahl, Edward J., assignor.)
Bakers Service Bureau, Inc. (See Hines, John E., assignor.)
Ball, Charles F. (See Shafer, S., jr., and Ball.)
Ballard, Joseph W., assignor to Griswoldville Manufacturing Company, Griswoldville, Mass. Reenforced paper. 1,866,513; July 5.
Ballard, Roscoe F. (See Warner, A. W., and Ballard.)
Baltzley, Louis E., Glen Ridge, N. J. Binder clip. 1,865,453; July 5.
Bankers Thrift Corporation. (See Kusel, Abraham J., assignor.)
Bannan, George, Harrison, Nebr. Pipe clamp or dog. 1,866,075; July 5.
Banta, Len A., Clearfield, Pa. Building wall. 1,865,424; July 5.
Barbour, John E., Paterson, N. J., assignor to National Net & Twine Co. Inc., Boston, Mass. Delivering and winding strands, etc. 1,866,148; July 5.
Barels, James, Chicago, Ill. Carburetor regulating mechanism. 1,866,076; July 5.
Barger, George K. (See Croft, L. F., and Barger.)
Baron, Charles S., Tiffin, Ohio. Closure for containers. 1,865,737; July 5.
Baron, Louis, New York, N. Y. Ice box. Des. 87,299; July 5.
Barrows, Donald S., Rochester, assignor to The Gould Coupler Company, New York, N. Y. Cushioning mechanism. 1,866,341; July 5.
Barrows, Grace A., administratrix. (See Barrows, R. Y., and Curtis.)
Barrows, Robert Y., deceased, Rutherford, by G. A. Barrows, East Orange, N. J., administratrix, and H. P. Curtis, Jardine, Mont. Phonograph. 1,865,550; July 5.
Bartlett Hayward Company, The. (See Santos, John R. L., assignor.)
Bartling, Friedrich, Hugling, Germany. Apparatus for separating flowing mediums. 1,865,425; July 5.
Bassick Company, The. (See Moore, R. G., and Claud-Mantle, assignors.)
Bassow, S. H., et al. (See Dobbins, Timothy C., assignor.)
Bates, Arthur, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Splitting machine. 1,866,245; July 5.
Batsel, Max C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Radio receiving system. 1,865,426; July 5.
Baum, Frank G., Cassel, Calif. Cooling electric apparatus. 1,865,499; July 5.
Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Blowing device for rock drills. 1,865,609; July 5.
Beamer, Jennie J., trustee. (See Beamer, Joseph W., assignor.)
Beamer, Joseph W., Chicago, Ill., assignor to Jennie J. Beamer, trustee. Muffler. 1,866,004; July 5.
Beaty, James T., Charlotte, N. C. Cotton conveyer. 1,866,005; July 5.
Beecher, Eugene L., East Cleveland, assignor to The Gabriel Company, Cleveland, Ohio. Shock absorber. 1,865,668; July 5.
Beekley, John S., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del. Producing hydrogen. 1,866,246; July 5.
Begovich y Garcia, Juan, Santa Julia, Mexico City, Mexico. Phonograph. 1,866,405; July 5.
Bell Telephone Laboratories, Incorporated. (See Elmer, Lloyd A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gray, Frank, assignor.)
Bell Telephone Laboratories, Incorporated. (See King, G. V., and Bonomi, assignors.)
Bell Telephone Laboratories, Incorporated. (See Lutomirski, Karel, assignor.)
Bell Telephone Laboratories, Incorporated. (See Stoller, Hugh M., assignor.)
Bell Telephone Laboratories, Incorporated. (See Stoller, H. M., and Morton, assignors.)
Belluzzo, Giuseppe, Rome Italy. Reversing steam turbine with variable velocity. 1,865,551; July 5.
Bemis, Albert F., Newton, assignor to Bemis Industries Inc., Boston, Mass. Wall construction. 1,865,500; July 5.
Bemis Industries Inc. (See Bemis, Albert F., assignor.)
Bendix Brake Company. (See Dodge, A. Y., and Taylor, assignors.)
Bendix Brake Company. (See La Brie, Ludger E., assignor.)
Bendix Brake Company. (See Norton, Raymond J., assignor.)
Bendix Brake Company. (See Sanford, Roy S., assignor.)
Bendix Brake Company. (See Whitworth, Stanley, assignor.)
Bennett, Frank. (See Hallowell, H. T., and Bennett.)
Bennett, Irving T., Brooklyn, and Frank C. Reynolds, New York, N. Y., assignors, by mesne assignments, to American Radiator & Standard Sanitary Corporation. Radiator. 1,865,427; July 5.
Benoit, Leon, Chicago, Ill. Egg carton. 1,865,454; July 5.
Bergamo, Joseph. (See White, Frank B., assignor.)
Berger, Henry L., Abbeville, La. Calculating machine attachment. 1,865,553; July 5.
Bergman, Henry J., Peoria, Ill. Mower guard and knife. 1,865,738; July 5.
Bergmann, Reinhard, West Allis, assignor to Harnischfeger Corporation, Milwaukee, Wis. Container hoist. 1,865,739; July 5.
Bergstrand, Frank O., Worcester, Mass. Coasting attachment for shoes. 1,866,006; July 5.
Berry, Benjamin F., assignor to Berry Machine Company, St. Louis, Mo. Starting and stopping device. 1,865,814; July 5.
Berry, George P., assignor to General Motors Research Corporation, Detroit, Mich. Vacuum brake operating mechanism. 1,865,815; July 5.
Berry, George P., assignor to General Motors Research Corporation, Detroit, Mich. Friction servo brake. 1,865,816; July 5.
Berry, George P., assignor to General Motors Research Corporation, Detroit, Mich. Vacuum brake. 1,865,817; July 5.
Berry Machine Company. (See Berry, Benjamin F., assignor.)
Berryman, Marsden L., deceased, Joliet, Ill., George Walters, administrator. Bubble cap for oil distilling apparatus. 1,865,818; July 5.
Best, Frank E., Inc. (See Best, Frank E., assignor.)
Best, Frank E., Wilmington, Del., assignor to Frank E. Best, Inc., Seattle, Wash. Lock. 1,866,342; July 5.
Bethenod, Joseph, Paris, France. Electric piano harp. 1,865,428; July 5.
Beulwitz, Frederick H., Milwaukee, Wis., assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Indexing device. 1,865,552; July 5.
Bevans, Earl C., Monticello, Mo. Emasculator. 1,865,429; July 5.
Bickerstaff, Samuel N., assignor to The Henderson-Ames Company, Kalamazoo, Mich. Buckle. 1,865,501; July 5.
Biggs, George A., assignor to The James Leffel & Company, Springfield, Ohio. Hydraulic turbine. 1,865,502; July 5.
Biggs, George A., assignor to The James Leffel & Company, Springfield, Ohio. Hydraulic turbine. 1,865,503; July 5.
Bilderback, Henry S., Elk City, Okla., and I. B. McCullough, Ballinger, Tex. Conveyer bearing. 1,866,077; July 5.
Binus, David J., assignor to The Weber Dental Manufacturing Company, Canton, Ohio. Roller guide. 1,866,149; July 5.
Bird, John C., assignor to Union Steam Pump Company, Battle Creek, Mich. Rotary pump. 1,865,504; July 5.
Birtley Iron Company, The. (See Appleyard, K. C., Holmes, and Bramwell, assignors.)
Bissell, Carl H., assignor to Crouse-Hands Company, Syracuse, N. Y. Automatic emergency selective switch. 1,866,007; July 5.
Bittner, John W., West Forest Hills, L. I., assignor to Intertype Corporation, Brooklyn, N. Y. Line casting machine. 1,866,445; July 5.
Blackshere, Lewis D., Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,865,819; July 5.
Blair, George W. (See Futter, C. J., and Blair.)

Blair, James C., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for the manufacture of glass. 1,865,820; July 5.
Blair, Robert S., Stamford, Conn. Art and apparatus for indelible marking. 1,865,610; July 5.
Blanding, Robert L., Providence, R. I. Water heater. 1,866,078; July 5.
Blaw-Knox Company. (See Venable, William M., assignor.)
Blayney, Wilson L., assignor to Marshall Field & Company, Chicago, Ill. Scarf and making the same. 1,865,821; July 5.
Blondin, Joseph, Los Angeles, Calif. Thermoneerostat. 1,866,079; July 5.
Bloomer Bros. Company. (See Inman, Harry A., assignor.)
Blum, Charles. (See Austin, Harry M., assignor.)
Blume, William A., Detroit, Mich., assignor to American Brake Materials Corporation, New York, N. Y. Friction elements and making. 1,866,287; July 5.
Boardman, Harry C., assignor to Chicago Bridge & Iron Company, Chicago, Ill. Tank. 1,865,522; July 5.
Boda, Joseph E., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Plow elevating mechanism. 1,865,451; July 5.
Bodine, Alfred V., assignor to Dictaphone Corporation, Bridgeport, Conn. Phonograph and the like. 1,866,288; July 5.
Boecking, Ewald. (See Frappier, L. S., and Boecking.)
Boecking, Ewald. (See Kindelmann, A., and Boecking.)
Boegehold, Alfred L., assignor to General Motors Research Corporation, Detroit, Mich. Composite brake shoe. 1,865,823; July 5.
Boehm, Albert Frank, Lake Villa, Ill. Fish lure. 1,866,289; July 5.
Boeing Airplane Company. (See Monteith, C. N., Minshall, and Sanders, assignors.)
Boban, James H. (See Boyce, Charles, assignor.)
Bolens, Harry W., Port Washington, Wis. Chair iron. 1,866,498; July 5.
Bonelli, George A., Kingman, Ariz. Pneumatic spring. 1,865,740; July 5.
Bonomi, Felix A. (See King, G. V., and Bonomi.)
Bonsch, Rodolphe F., Paris, France. Rotary printing machine. 1,865,611; July 5.
Books, Otho L., Kansas City, Mo. Folding hanger for traveling cases. 1,866,150; July 5.
Boon, Guthrie B., Austin, Tex., assignor to R. R. Stolley, Inc. Clarification system for dry-cleaning solvents. 1,866,187; July 5.
Borkent, Roelof H., The Hague, Netherlands. Current transformer. 1,865,430; July 5.
Bornkessel, Brunt, E. Breitling, K. A. Lehmann, and A. Varren, Essen, assignors to Fried-Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Cash register. 1,865,883; July 5.
Bossert, Edward, East Cleveland, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Vehicle wheel. 1,865,432; July 5.
Bostwick, Henry C., Kenmore, assignor to The Akron Standard Mold Company, Akron, Ohio. Method and apparatus for splicing unvulcanized inner tubes. 1,865,669; July 5.
Bostwick, Henry C., assignor to The Akron Standard Mold Co., Akron, Ohio. Segmental drum. 1,866,390; July 5.
Bostwick, Henry C., assignor to The Akron Standard Mold Co., Akron, Ohio. Hinged forming drum. 1,866,391; July 5.
Bouchard, Elisée, St. Pascal, Quebec, Canada. Combination pipe and tapping means. 1,866,446; July 5.
Bouton, Edgar. (See Kinnaird, L. J., and Bouton.)
Bouvier, Harold K., and F. Wells, La Grange, assignors to Temple Corporation, Chicago, Ill. Sound emitting device. 1,866,188; July 5.
Bowman, Clifton, Hampton, Va. Valve grinder. 1,866,447; July 5.
Box Blank Corporation. (See Andrews, Champe S., assignor.)
Boyajian, Aram, Pittsfield, Mass., assignor to General Electric Company. Electric valve circuits. 1,866,343; July 5.
Boyce, Charles, assignor of one-half to J. H. Bohan, Minneapolis, Minn. Leak stop. 1,865,670; July 5.
Boyd, Trumn O., et al. (See Ross, Warren A., assignor.)
Bradbury, Carrie L., executrix. (See Bradbury, Frank C.)
Bradbury, Frank C., deceased, by Carrie Landon Bradbury, executrix, Riverside, Ill., assignor to Crane Co., Chicago, Ill. Water jacketed smoke hood. 1,866,290; July 5.
Bradford, Winslow P., Buffalo, N. Y. Valve. 1,865,824; July 5.
Bradley-Fitch Company. (See Bradley, Wilson, assignor.)
Bradley, Wilson, Deerwood, assignor to Bradley-Fitch Company, Minneapolis, Minn. Balling fine grained material for sintering. 1,865,564; July 5.
Brady, Thomas, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Closure operating mechanism. 1,866,392; July 5.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Vacuum brake system for automotive vehicles. 1,865,505; July 5.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Bramwell, Ivor L. (See Appleyard, K. C., Holmes, and Bramwell.)
Braund, John J., Washington, D. C. Producing relief maps. 1,866,448; July 5.
Breen, Henry, Oakland, assignor of one-half to A. St. J. Williamson, Berkeley, Calif. Weeding pick. 1,865,671; July 5.
Breitling, Ernst, et al. (See Bornkessel, B., Breitling, Lehmann, and Varren.)
Bridgeport Brass Company. (See Turner, Charles E., assignor.)
Bried, Julien A., Oakland, Calif. Tile floor. 1,865,825; July 5.
British Electrical and Allied Industries Research Association. (See Wedmore, Edmund B., assignor.)
Broadhurst, Jean, assignor of one-half to Stanley J. Stanley, New York, N. Y. Stopper and making the same. 1,865,884; July 5.
Brockstedt, Theophile E., San Francisco, Calif. Radio signal apparatus and method. 1,865,826; July 5.
Brooks, Roger, Washington, D. C. Steering apparatus. 1,866,393; July 5.
Brophy, Arthur, Santa Cruz, Calif. Hook for doors. 1,866,247; July 5.
Brosius, Edgar E., Pittsburgh, Pa. Tuyère structure and changing the same. 1,866,080; July 5.
Brown, Franklin, White House, N. J., assignor to General Health Corporation, Philadelphia, Pa. Paper cup. 1,865,555; July 5.
Brown, John L., Verona, Pa., assignor to Westinghouse Electric & Manufacturing Company. Terminal box for motors. 1,866,344; July 5.
Brown, Mary A., Nashville, Tenn. Book support. 1,866,394; July 5.
Brown, Robert P., assignor of one-third to R. H. Bublitz and one-third to H. W. Bublitz, Milwaukee, Wis. Garment support. 1,866,081; July 5.
Bryant, C. L., Corporation. (See Bryant, Charles L., assignor.)
Bryant, Charles L., assignor to C. L. Bryant Corporation, Cleveland, Ohio. Control device. 1,865,672; July 5.
Bryant, Emory A., Washington, D. C. Fracture appliance. 1,865,827; July 5.
Bryant, Howard D., and W. H. Sped, Bluefield, Va. Order and message hoop. 1,866,189; July 5.
Bryson, Tandy A., Troy, N. Y., assignor, by mesne assignments, to Tolhurst Machine Works, Inc. Driving mechanism. 1,866,291; July 5.
Bublitz, Harry W., et al. (See Brown, Robert P., assignor.)
Buckett, Stanley G. (See Prentice, A. L., Buckett, and Dibble.)
Buckley, John P., Washington, D. C. Aeronautical instructing device. 1,865,828; July 5.
Budd, Edward G., Manufacturing Company. (See Tarbox, John P., assignor.)
Budd, Edward G., Manufacturing Company. (See Trautvetter, George, assignor.)
Buehler, Harry, jr. (See Chattillion, August J., assignor.)
Buehler, Leon, jr., and C. J. Romberg, assignors to Frick Company, Waynesboro, Pa. Bleeder for air headers. 1,866,449; July 5.
Buffalo Forge Company. (See Cheyney, Charles C., assignor.)
Buffalo Forge Company. (See Criqui, A. A., and Thornton, assignors.)
Builders Iron Foundry. (See Huxford, G. T., and Stratton, assignors.)
Burgess Battery Company. (See Zook, John S., assignor.)
Burke, George W., jr., Dayton, Ohio. Fire extinguishing apparatus. 1,866,008; July 5.
Burnett, Charley, Washington C. H., Ohio. Farm stock drinking tank. 1,865,829; July 5.
Burnham, Arnold W., Providence, R. I., assignor to Fire Control Inc., Malden, Mass. Fire extinguisher. 1,866,151; July 5.
Burnley, Robert C., Louisville, Ky. Combined reading table and writing desk. 1,866,450; July 5.
Burris, Harry. (See Martin, Joseph J., assignor.)
Burson Knitting Company. (See Parker, William S., assignor.)
Bustillos, Manuel, Santiago, Cuba. Portable see-saw. 1,865,612; July 5.
Butler Manufacturing Company. (See Norquist, Victor C., assignor.)
Butler, William F., Hillside, N. J., assignor to American Can Company, New York, N. Y. Compound lining machine. 1,865,830; July 5.
Byhre, Jacob, Chicago, Ill. Motar hawk. 1,865,885; July 5.
Caldwell, Harold B., Mt. Vernon, N. Y., assignor to Swenson Evaporator Company, Harvey, Ill. Vacuum cooler. 1,865,614; July 5.
Callsen, Albert, Stuttgart, Germany, assignor to Westinghouse Electric & Manufacturing Company. Current transformer with primary parallel resistance and flux leakage path. 1,866,345; July 5.
Cameron, Charles E., jr., East Orange, assignor to Lauter-Humana Co., Newark, N. J. Piano action. 1,866,152; July 5.
Campbell, A. S., Company. (See Campbell, Alphonso S., assignor.)

Campbell, Alphonso S., Winchester, assignor to A. S. Campbell Company, East Boston, Mass. Hanging doors in automobile bodies. 1,865,673; July 5.
Campbell, George E., assignor to The Wheeland Company, Chattanooga, Tenn. Portable band-saw mill. 1,866,395; July 5.
Canada Malting Company. (See Dax, Peter J., assignor.)
Cannard, William H. (See Kowalewski, Frank M., assignor.)
Capital City Electric Company. (See McCann, Clyde D., assignor.)
Carden, William M., Birmingham, Ala. Collapsible pontoon for flying machines. 1,866,451; July 5.
Cardwell Westinghouse Company. (See Tucker, Herbert E., assignor.)
Carlson, Anthony E., Los Angeles, Calif. Expansion drill bit. 1,866,082; July 5.
Carlson, Ralph G., assignor to Crane Co., Chicago, Ill. Union bonnet valve. 1,866,292; July 5.
Carney, Rose E., Chicago, Ill. Binder and indicating device therefor. 1,865,741; July 5.
Carter, Donald M., et al. (See Ross, Warren A., assignor.)
Carter, John M., Orlando, Fla. Joint or connecter for roofing sheets. 1,865,674; July 5.
Case J. I., Company. (See Boda, Joseph E., assignor.)
Case, J. I., Company. (See Traphagen, Harry R., assignor.)
Castella, Raymond, and J. Nantua, Lausaane, Switzerland. Permanent waving hair and apparatus therefor. 1,866,396; July 5.
Cataudella, Alfred S., Bridgeport, Conn. Brake band adjusting means. 1,866,248; July 5.
Cavanaugh, James W., Meshoppen, Pa. Windshield heater. 1,865,675; July 5.
Cave, Edward U., Lancaster, assignor of 75 per cent to J. E. McKinnon, Columbus, Ohio. Cigar handling machinery. 1,865,831; July 5.
Celanese Corporation of America. (See Dreyfus, C., and Platt, assignors.)
Chain Belt Company. (See Shafer, S. jr., and Ball, assignors.)
Chance, Albert B. (See Taylor, Herbert M., assignor.)
Chancellor, John W., Bowie, Tex. Deep well pumping apparatus. 1,865,676; July 5.
Chandler, Henry T., New York, N. Y. Valve follower. 1,866,293; July 5.
Chaplin, Merle P. (See Hart, J. M., and Chaplin.)
Chapman, Ralph W., assignor to Old Town Company, Old Town, Me. Absorbent plate or dish. 1,865,742; July 5.
Chapman, William C., Chicago, Ill. Tie-back for drapes, curtains, and the like. Des. 87,300; July 5.
Chase Companies, Incorporated, The. (See Recker, A. C., and Nichols, assignors.)
Chase, Curtis D., Alston, Mass., assignor to Chase Holding Corporation. Tank car heater. 1,865,556; July 5.
Chase Holding Corporation. (See Chase, Curtis D., assignor.)
Chatain, Henri G., assignor to Hammermill Paper Company, Erie, Pa. Paper shake apparatus and method. 1,865,613; July 5.
Chattillion, August J., St. Louis, Mo., assignor of one-half to H. Buehler, jr., Clayton, Miss. Method of and machine for manufacturing laminated products. 1,865,455; July 5.
Chesny, Heinz H., Los Angeles, Calif. Forming sodium bicarbonate. 1,865,833; July 5.
Chesny, Heinz H., Los Angeles, assignor to American Potash & Chemical Corporation, Trona, Calif. Precipitating sodium bicarbonate from solutions in form of coarse crystals. 1,865,832; July 5.
Cheswright, Leonard K. (See Sifton, C., and Cheswright.)
Chevrolet, Charles L. (See Chevrolet, Louis, and C. L.)
Chevrolet, Louis and C. L., Indianapolis, Ind., assignors, by mesne assignments, to The Glenn L. Martin Co., Baltimore, Md. Fuel pump. 1,866,083; July 5.
Cheyney, Charles C., assignor to Buffalo Forge Company, Buffalo, N. Y. Sound deadener. 1,865,677; July 5.
Chicago Bridge & Iron Company. (See Boardman, Harry C., assignor.)
Chicago Forging & Manufacturing Co. (See Mears, N. A., and Hynes, assignors.)
Chicago Foundry Company. (See Wells, Clayton F., assignor.)
Chicago Pneumatic Tool Company. (See Reed, Clarence E., assignor.)
Chilton, Ralph H., Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich. Freezing tray. 1,865,456; July 5.
Chott, Edward L., Chicago, Ill. Mercury dispenser. 1,866,294; July 5.
Christman, John M., assignor to Packard Motor Car Company, Detroit, Mich. Striping instrument. 1,866,295; July 5.
Christmann, Ludwig J., Jersey City, N. J., assignor to American Cyanamid Company, New York, N. Y. Method and apparatus for measuring froth. 1,866,296; July 5.
Cincinnati Milling Machine Company, The. (See Beulwitz, Frederick H., assignor.)
Cipko, Joseph, New York, N. Y. Wire ring rolling machine. 1,866,249; July 5.
Claridge, Samuel J., Portland, Oreg. Electrically heated handle for vehicles and other purposes. 1,865,834; July 5.
Clark, Frank M., Pittsfield, Mass., assignor to General Electric Company. Drying treatment. 1,866,340; July 5.
Clark, Le Grand L., Brooklyn, assignor to T. W. & C. B. Sheridan Company, New York, N. Y. Bookmaking apparatus. 1,865,557; July 5.
Clark, Rolland R., and R. A. Fontaine, New Haven, Conn. Holding device. 1,865,558; July 5.
Clark, William T., Milwaukee, Wis. Safety feeding device for clothes wringers. 1,866,084; July 5.
Claud-Mantle, Arthur. (See Moore, R. G., and Claud-Mantle.)
Claypoole, Albert, Findlay, Ohio. Shower bath attachment. 1,866,009; July 5.
Clerc, Reinhard. (See Schoeller, W., Jordan, and Clerc.)
Cleveland Welding Company, The. (See Kranz, Harry W., assignor.)
Clewley, Lula J., Burlington, Vt. Hospital device or appliance. 1,866,397; July 5.
Clifford Manufacturing Co. (See Clifford, Walter B., assignor.)
Clifford, Walter B., Cambridge, assignor to Clifford Manufacturing Co., Boston, Mass. Apparatus for production of bellows tubing. 1,865,678; July 5.
Clingingsmith, James P., and A. J. Smith, Nocona, Tex. Automatic Valve. 1,865,886; July 5.
Coahran, Jesse M., Smethport, Pa. Method of and apparatus for continuously recovering and concentrating chemicals. 1,865,887; July 5.
Coates, John F., Miami, Fla. Picture and frame construction. 1,865,888; July 5.
Cody, James M., and J. E. Rhodes, Seattle, Wash. Combined clock and burglar alarm. 1,865,743; July 5.
Cogswell, Alexander G., Chipping Sodbury, England. Apparatus for folding paper, inserting it in envelopes, tucking in the flap or sealing the envelope, and stamping them. 1,866,452; July 5.
Cogswell. Alexander G., Chipping Sodbury, England. Sheet feeding mechanism. 1,866,453; July 5.
Cohen, Louis L., Highland Park, assignor to Equipment Specialties Company, Chicago, Ill. Refrigerator car. 1,866,085; July 5.
Colby, Clarence H., Spokane, Wash. Display card holder. 1,865,835; July 5.
Coleman, Edwin D., Barron, Wis. Method of and apparatus for the extraction of vegetable oils. 1,865,615; July 5.
Collier, Roy C., Sioux City, Iowa, assignor, by mesne assignments, to The Gabriel Karl-Keen Company. Combination automobile trunk and luggage carrier. 1,866,010; July 5.
Colpe, Lorne H., San Francisco, Calif. Mouthpiece for cigarettes. 1,865,679; July 5.
Comer, William T., assignor to Crystal Carbonic Laboratory, Atlanta, Ga. Carbonating cylinder and system for use of solid CO_2. 1,866,192; July 5.
Communication Patents, Inc. (See Nicolson, Alexander McL., assignor.)
Condit Electrical Manufacturing Corporation. (See Greenwood, Talma T., assignor.)
Condit Electrical Manufacturing Corporation. (See Macneil, Frederick H., assignor.)
Condit Electrical Manufacturing Corporation. (See Woods, Morris B., assignor.)
Cone, Carroll, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for producing sheet glass. 1,865,836; July 5.
Connor, James G., Kansas City, Kans., assignor to The Animated Roboquin Display Company. Mechanical figure. 1,865,837; July 5.
Consolidated Aircraft Corporation. (See Fleet, Reuben H., assignor.)
Consolidated Car-Heating Company. (See Hynes, Lee P., assignor.)
Continental Aircraft Engine Company. (See Snyder, Oscar L., assignor.)
Continental Can Company. (See Punte, William F., assignor.)
Cook, Everett J., assignor to The Dura Company, Toledo, Ohio. Latch. 1,866,011; July 5.
Cooper, Joseph. (See Webber, J. and Cooper.)
Coquille, Emile H., Paris, assignor to Societe Anonyme des Usines Chausson, Asnieres, Seine, France. Trunk and wheel carrier. 1,866,013; July 5.
Corcoran-Brown Lamp Company, The. (See Mappes, William L., assignor.)
Cordray, Thornton L., Cleveland, Ohio. Automobile signaling device. 1,865,506; July 5.
Cornelius Aircraft Corporation. (See Cornelius, George F., assignor.)
Cornelius, George W., San Leandro, assignor to Cornelius Aircraft Corporation, Limited, Los Angeles, Calif. Airplane. 1,865,744; July 5.
Cornell, Noyce L. (See Reid, F. G., and Cornell.)
Cosgrove, Caroline, administratrix. (See Cosgrove, John W., deceased.)
Cosgrove, John W., deceased; C. E. Cosgrove, administratrix, Medford, Mass., assignor to United Shoe Machinery Corporation. Paterson, N. J. Abrading machine. 1,866,012; July 5.
Cotton, Walter H., assignor to Union Draft Gear Company, Chicago, Ill. Draft gear. 1,865,838; July 5.
Coursey, Philip R., Richmond, and H. Andrewes, London, England, assignors to Dubilier Condenser Corporation, New York, N. Y. Rectifying device. 1,865,616; July 5.

Coutant, Jay G., New York, N. Y. Purification of furnace or other gases. 1,866,193; July 5.
Crabbe, Lindsay T., Chicago, Ill., assignor to Phoenix-Hermetic Company, Brooklyn, N. Y. Jar closure. 1,866,194; July 5.
Craig, Arthur B., Bethesda, Md. Device for the transmission of mechanical power. 1,865,839; July 5.
Craig, John F. N., Broxbourne, England. Cooling of rotary engines. 1,866,398; July 5.
Crane Co. (See Bradbury, Frank C., assignor.)
Crane Co. (See Carlson, Ralph G., assignor.)
Crangle, George C., Butte, Mont. Screening mechanism. 1,865,745; July 5.
Crea, James H. (See Siegrist, Jacob C., assignor.)
Creery, Roy V., German Township, St. Joseph County, Ind. Key retainer. 1,866,086; July 5.
Creuzsé, Pierre, assignor to Société d'Etudes Scientifiques et Industrielles, Paris, France. Radio valves employing gallium. 1,866,195; July 5.
Criqui, Albert A., and E. T. Thornton, assignors to Buffalo Forge Company, Buffalo, N. Y. Gas purifier or scrubber. 1,866,196; July 5.
Crocker, Arthur T., Erie, Pa., assignor to General Electric Company. Control device. 1,866,347; July 5.
Croft, Lawrence F., and G. K. Barger, Seattle, Wash. Radio transformer. 1,865,840; July 5.
Crouse-Hinds Company. (See Bissell, Carl H., assignor.)
Crowell, Erd V., Los Angeles, Calif. Tubing anchor. 1,866,087; July 5.
Crowell, William J., jr., Wyncote, Pa. Method and apparatus for effecting automatic adjustments of thermostatically controlled heaters. 1,865,507; July 5.
Cruz, Hector A., Buenos Aires, Argentina. Metallic spring tire. 1,865,457; July 5.
Crystal Carbonic Laboratory. (See Comer, William T., assignor.)
Cummins, Clessie L., assignor to Oil Engine Development Company, Columbus, Ind. Oil engine. 1,865,841; July 5.
Cunningham, Harry G., Los Angeles, Calif. Film race for cameras. 1,866,014; July 5.
Cunningham, William G., Atlanta, Ga. Vehicle washing apparatus. 1,866,197; July 5.
Curran, Thomas A., New York, assignor to H. J. Sheeran, New Rochelle, N. Y. Liquid fuel burner. 1,865,889; July 5.
Curtis, Frank W., Wauwatosa, assignor to Kearney & Trecker Corporation, West Allis, Wis. Metal cutting tool. 1,865,617; July 5.
Curtis, Harold P. (See Barrows, B. Y., and Curtis.)
Curtiss, Nathan A., Ridgewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Forming cables. 1,866,250; July 5.
Cutter, Arthur L., Maplewood, Mo. Cloth laying machine. 1,866,088; July 5.
Dahlman, Dudley. (See Dahlman, Helen and D.)
Dahlman, Helen and D., Brooklyn, N. Y. Bridge set accessory. 1,865,618; July 5.
Daily, James M., assignor to American Ozone Company, Chicago, Ill. Apparatus for purifying water with ozone. 1,865,433; July 5.
Dämmrich, Walter. Grassmere, N. Y. Egg opener. 1,865,619; July 5.
Davey, Walter L., Melbourne, Victoria, Australia. Water heating and cooking device for automobiles. 1,866,015; July 5.
Davidson, William D., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Sheave assembly. 1,865,842; July 5.
Davis & Furber Machine Company. (See Rockwell, S. F., and Owen, assignors.)
Davis, Harold G., Denver, Colo. Hose reel and protector. 1,866,251; July 5.
Davis, R. B., Company. (See Hirsch, L., and Harris, assignors.)
Dawson, Leo H., Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Method and apparatus for determining the direction of the electric axes of crystal quartz. 1,866,454; July 5.
Dax, Peter J., Montreal, Quebec, assignor to Canada Malting Company, Limited, Montreal, Canada. Malting rice. 1,865,680; July 5.
Day, J. H., Company, The. (See Kirchhoff, William G., assignor.)
Day, William H., Clinton, Conn., assignor to Remington Rand Inc., Buffalo, N. Y. Index or file. 1,866,089; July 5.
Dazey, Allen, Loma Linda, Calif. Dispensing device for tooth-paste. 1,866,190; July 5.
De Baufre, William L., New York, N. Y. Continuous process for producing high heating value gas. 1,866,399; July 5.
De Coursey, William, St. Louis, Mo. Apparatus for pulverizing materials. 1,866,297; July 5.
Deere & Company. (See Jackson, John L., assignor.)
Deere & Company. (See Paul, Talbert W., assignor.)
Deere & Company. (See Strandlund, Carl G., assignor.)
De Forest, Lee, New York, N. Y. Sound reproducing device. 1,866,090; July 5.
Degnan, Matthew W., Kansas City, Kans. High pressure valve. 1,865,458; July 5.
Deibel, Cyril O., Lakewood, Ohio. Dry cell and seal therefor. 1,866,016; July 5.
Delaney, Myron E. (See Hanson, E. R., and Delaney.)
Delco-Light Company. (See Lee, Ralph L., assignor.)
Delco Products Corporation. (See Elsey, George W., assignor.)
Delco Products Corporation. (See Riedel, Walter W., assignor.)
Delco-Remy Corporation. (See Emmert, Rodger J., assignor.)
Demers, Honore, Manchester, N. H. Loom stop mechanism. 1,865,620; July 5.
De Montgrand, Léon, Marseille, France. Mechanical coupling. 1,865,559; July 5.
Dennis, William J., Chicago, Ill. Metal weatherstrip. 1,865,746; July 5.
De Stubner, Emile C., Rochester, N. Y. Pigments and making same. 1,866,017; July 5.
Detroit Harvester Company. (See Horste, Joseph E., assignor.)
Detroit Lubricator Company. (See Duffield, George B., assignor.)
Deutsche, Schiff- und Maschinenbau Aktiengesellschaft. (See Schmieske, Carl, assignor.)
De Vout, Anson W., and R. W. Regensburger, assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Chill roll. 1,866,509; July 5.
De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Shoe form. 1,866,018; July 5.
Dibble, Clyde C. (See Prentice, A. L., Buckett, and Dibble.)
Dictaphone Corporation. (See Bodine, Alfred V., assignor.)
Didinger, George H., Philadelphia, Pa., assignor, by mesne assignments, to Sherwell Controls, Inc., New York, N. Y. Dispensing system for gasoline and the like. 1,866,298; July 5.
Distel, Richard. (See Huber, L., and Distel.)
Dobbins, Timothy C., assignor of one-half to S. H. Bassow, and one-fourth to E. Messina, Denver, Colo. Battery terminal. 1,865,681; July 5.
Dodd, Gerald D., Oaklyn, N. J. Apparatus for treating liquids. 1,866,091; July 5.
Dodge, Adiel Y., South Bend, Ind. Brake. 1,866,252; July 5.
Dodge, Adiel Y., South Bend, Ind., and C. H. Taylor, Detroit, Mich., assignors to Bendix Brake Company, South Bend, Ind. Brake. 1,865,508; July 5.
Dodge Manufacturing Company Limited. (See Hertfelder, Henry, assignor.)
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Slide buckle. 1,865,509; July 5.
Donkin, Edwin. (See West, F. B., Pidcock, and Donkin.)
Donohue, James J., Jersey City, N. J., assignor of one-half to J. E. Hays, New York, N. Y. Gas shut-off system and apparatus. 1,866,253; July 5.
Dordan, Andrew, and E. Johnson, Minneapolis, Minn. Home altar. Des. 87,301; July 5.
Dorey, George B., Evanston, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill. Car door. 1,865,747; July 5.
D'Orsay, Maurice B. (See Marchese, J., and D'Orsay.)
Dorsey, William H., New Brighton, assignor, by mesne assignments, to Prosperity Company, Inc., Syracuse, N. Y. Pocket and cuff cleaner. 1,865,510; July 5.
Doushkess, William N., Easton, Pa., assignor, by mesne assignments, to Milton C. Johnson Company, New York, N. Y. Safety paper. 1,866,400; July 5.
Dow Chemical Company, The. (See Griswold, Thomas, jr., assignor.)
Dow Chemical Company, The. (See Strosacker, C. J., and Stephenson, assignors.)
Dow Chemical Company, The. (See Strosacker, C. J., Kennedy, and Pelton, assignors.)
Dragon, Hippolyte, San Francisco, Calif. Pie wrapping machine. 1,865,748; July 5.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for producing sheet glass. 1,865,843; July 5.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for sheet glass manufacture. 1,865,890; July 5.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass annealing leer. 1,865,891; July 5.
Draper Corporation. (See Lindsjo, Verner, assignor.)
Dreyfus, Camille, New York, N. Y., and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Partial saponification of cellulose ester material. 1,866,153; July 5.
Dubilier Condenser Corporation. (See Coursey, P. R., and Andrewes, assignors.)
Dubilier Condenser Corporation. (See Nyman, Alexander, assignor.)
Duffield, George B., assignor to Detroit Lubricator Company, Detroit, Mich. Pop valve. 1,865,560; July 5.
Dull, Raymond W., Chicago, Ill., and E. Geertz, Indianapolis, Ind., assignors to Link-Belt Company, Chicago, Ill. Four point contact chain. 1,865,844; July 5.
Dunlap, Harry B. (See Gill, Samuel A., assignor.)
Dunlap, Zac D. (See Gill, Samuel A., assignor.)
Dunlop Rubber Company Limited. (See Macbeth, Colin, assignor.)
Dunlop Tire and Rubber Corporation. (See Reid, F. G., and Cornell, assignors.)
Dunlop Tire and Rubber Corporation of America. (See Penfold, Albert E., assignor.)

Dunne, James P., Buffalo, N. Y. Adjustable electric sign frame. 1,865,892; July 5.
Du Pont, E. I., de Nemours & Co. (See Beekley, John S., assignor.)
Du Pont, E. I., de Nemours & Company. (See Howell, Edward T., assignor.)
Du Pont, E. I., de Nemours & Company. (See Larson, Alfred T., assignor.)
Dura Company, The. (See Cook, Everett J., assignor.)
Dura Company, The. (See Miller, Dorr, assignor.)
During, William J., assignor to Precision Castings Company, Inc., Syracuse, N. Y. Die-casting machine. 1,866,191; July 5.
Duwe, Friedrich, Mains-Kastel, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Nuremberg, Germany. Actuating device for lever-drawbridges. 1,865,621; July 5.
Dye, Glen M., Minneapolis, Minn. Photographic print treating method and apparatus. 1,865,682; July 5.
Dyer, Rex H., Independence, Mo. Pipe making machine. 1,865,845; July 5.
Dziedzic, Nicholas J., assignor to Swift and Company, Chicago, Ill. Meat press. 1,866,510; July 5.
Earnshaw, David P. (See Grimditch, W. H., and Earnshaw.)
Eaton, Frederick M., Palo Alto, assignor to Rosenberg Bros. & Co., San Francisco, Calif. Fruit pressing machine. 1,865,846; July 5.
Eberhard, Ernst, Oerlikon, near Zurich, Switzerland. Device for rinsing and applying a suction action to washing. 1,866,198; July 5.
Ebert, Fritz, Oberndorf-on-the-Neckar, Germany. Device in sack sewing machines for separating the warp between the sacks. 1,865,893; July 5.
Eckright, George B., Los Angeles, Calif. Cabinet for packing china and glassware. 1,866,455; July 5.
Eclipse Petrol Economiser System Company, The. (See Godward, Ernest R., assignor.)
Edison, Thomas A., Incorporated. (See Payne, P. D. and Iversen, assignors.)
Edmands, Alberta F., New York, N. Y. Bath mat. 1,865,459; July 5.
Edson Manufacturing Corporation. (See Rymes, Christopher E., assignor.)
Edstrom, Karl A., Denver, Colo. Stereoscope. 1,865,683; July 5.
Edwards, Airah B., Chicago, Ill. Stenographic typewriting machine. 1,865,622; July 5.
Edwards, Earl W., Chicago, Ill. Airway sign. 1,866,190; July 5.
Edwards, James McC., Cedar Heights, assignor to Associated Manufacturers Corporation of America, Waterloo, Iowa. Lubricating means for centrifugal liquid separator mechanism. 1,866,092; July 5.
Egan Cotton Mills. (See Pledger, Martin L., assignor.)
Eggert, Lewis, Toledo, Ohio. Automatic clamping mechanism for molds. 1,865,434; July 5.
Eggert, Lewis, Toledo, Ohio. Oil compensator for mold strippers. 1,865,435; July 5.
Ehrlich, Albert H., St. Joseph, Mo. Show case. 1,866,401; July 5.
Eichhorn, Ernst, Schmolln, assignor of one-half to Reinhold Thieme, Schmolln, Thuringia, Germany. Freewheel gear. 1,866,254; July 5.
Eidsmore, Merton, Astoria, N. Y. Water evacuating device. 1,865,623; July 5.
Ellersgaard, Asger, Chicago, Ill., assignor to Link-Belt Company. Clutch operating mechanism. 1,866,093; July 5.
Einbeck, Friedrich, assignor to the Firm Aug. Klönne, Dortmund, Germany. Ladder device for ascending gas containers. 1,865,684; July 5.
Electrolux Corporation. (See Ell, Lars, assignor.)
Elko Chemical Company. (See Hand, Carl N., assignor.)
Ell, Lars, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation. Vacuum cleaner. 1,866,154; July 5.
Ellerby, Alfred, Los Angeles, Calif. Windshield-wiper holder. 1,866,402; July 5.
Ellis, George D., & Sons, Incorporated. (See Taylor, Herbert K., assignor.)
Elmer, Lloyd A., West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Phonograph recorder and reproducer arms. 1,866,403; July 5.
Elsey, George W., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,865,460; July 5.
Elwell, Jay H., assignor to Sol D. Golby, Chicago, Ill. Machine for feeding and collecting sheets of paper or the like. 1,865,750; July 5.
Elwell Parker Electric Company, The. (See Parker, Waveard D., assignor.)
Emerson Electric Manufacturing Co. (See Persons, Laurence M., assignor.)
Emmert, Rodger J., assignor to Delco-Remy Corporation, Dayton, Ohio. Armature winding machine. 1,865,461; July 5.
Empire Box Corporation. (See Klein, Stanley J., assignor.)
Emsco Derrick & Equipment Company. (See Davidson, William D., assignor.)
Ennis, George H., assignor of one-half to R. V. Funk, Long Beach, Calif. Locating the point of entry of water into oil wells. 1,865,847; July 5.
Enterprise Railway Equipment Company. (See Dorey, George B., assignor.)
Equipment Specialties Company. (See Cohen, Louis L., assignor.)
Ericson, George R., Alexandria, Va. Aircraft accessory. 1,866,299; July 5.
Eshbaugh, Jesse E., Flint, Mich. Audible air speed annunciator. 1,866,019; July 5.
Etnyre, E. D., & Company, Inc. (See Etnyre, George M., assignor.)
Etnyre, George M., assignor to E. D. Etnyre & Company, Inc., Oregon, Ill. Pipe connection. 1,865,462; July 5.
Euler, Johannes. (See Stein, R., Euler, and Puff.)
Ewbank, Geno E., Dalhart, Tex. Maize header. 1,866,020; July 5.
Fafnir Bearing Company, The. (See Melcher, Lee W., assignor.)
Fafnir Bearing Company, The. (See Smith, John W., assignor.)
Fancher, Howard M., assignor to The Rochester Folding Box Co., Rochester, N. Y. Toy fireplace. 1,866,155; July 5.
Fay, J. A., & Egan Company, The. (See Petskeyes, Charles H., assignor.)
Federmann, Wolfgang. (See Schröter, F., and Federmann.)
Feir, Samuel, Brooklyn, N. Y. Stabilising supporting device for bodies on water. 1,866,200; July 5.
Felten & Guilleaume Carlswerk Actien-Gesellschaft. (See Thiel, Viktor, assignor.)
Ferguson, John R., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Lamp coating. 1,865,436; July 5.
Ferris, Walter, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis. Milling machine. 1,866,348; July 5.
Fey, Edmund C., San Francisco, Calif. Finger striking amusement device. 1,866,021; July 5.
Fichandler, Carl, New York, N. Y. Coupling device. 1,866,456; July 5.
Fidelity Trust Company. (See Hart, J. M., and Chaplin, assignors.)
Findeisen, Paul, Berlin, Germany. Four-stroke internal combustion engine. 1,866,022; July 5.
Fire Control Inc. (See Burnham, Arnold W., assignor.)
Fisher, Adial E., assignor of one-half to G. D. Merritt, Haven, Kans. Snowplow. 1,866,094; July 5.
Fisk, Ernest T., Sydney, New South Wales, Australia. Sound suppressing ventilator fitting for windows. 1,866,201; July 5.
Fisk Rubber Company, The. (See Taylor, Edward C., assignor.)
Fisk Rubber Company, The. (See Wikle, George F., assignor.)
Fitz Power, Richard, Hampstead, London, assignor to Morland & Impey Limited, Northfield, Birmingham, England. Visible index and the like. 1,866,421; July 5.
Fleet, Reuben H., Aberdeen, Wash., assignor to Consolidated Aircraft Corporation, Buffalo, N. Y. Aircraft. 1,865,749; July 5.
Flintkote Corporation, The. (See Kirschbraun, Lester, assignor.)
Flood, Bernard A. (See White, W. A., and Flood.)
Floyd, William C., assignor one-third to D. A. Simpson, Hawkinsville, Ga. Auto gun. 1866,202; July 5.
Fluga Aktien-Gesellschaft. (See Heylandt, Christian W. P., assignor.)
Flynn, Benjamin H., Amarillo, Tex. Tamper or spader. 1,865,685; July 5.
Foley, Edward J., assignor to Western Electric Company, Incorporated, New York, N. Y. Cutting tool. 1,866,095; July 5.
Foley, John R., New York, N. Y. Bucket or can silencer. 1,866,457; July 5.
Folliet, Alexandre, and N. Sainderichin, Paris, France. Agglomeration of finely-divided ferruginous ores, concentrates, and the like. 1,866,203; July 5.
Fontaine, Raymond A. (See Clark, R. R., and Fontaine.)
Foran Boiler Company. (See Mills, William A., assignor.)
Forbes, Edward P., Dorchester, assignor of one-eighth to W. H. McKenney and one-eighth to A. R. McKenney, Taunton, Mass. Sheet metal lock. 1,866,156; July 5.
Ford, Clinton E., Winsted, Conn. Luminous device for dial telephones. 1,866,157; July 5.
Frank, Manuel boy, Stapleton, N. Y. Paper clip. 1,866,458; July 5.
Franklin Railway Supply Company. (See Vincent, Harry S., assignor.)
Frappier, Louis S., and E. Boecking, Brooklyn, assignors to International Projector Corporation, New York, N. Y. Adjustable support for projection machine. 1,866,096; July 5.
Fraser, Frank, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for forming and annealing sheet glass. 1,865,894; July 5.
Fredenburgh, Mark N., East Orange, N. J., assignor to Westinghouse Lamp Company. Electron emission material. 1,865,437; July 5.
Frelin, Fritjof, Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Fuel pump. 1,865,624; July 5.

French, Louis O., Milwaukee, Wis. Internal combustion engine. 1,866,300; July 5.
French, Reginald D., Glen Ellyn, assignor to General Outdoor Advertising Co., Inc., Chicago, Ill. Advertising display device. 1,865,848; July 5.
Frick Company. (See Buehler, L., jr., and Romberg, assignors.)
Frick Company. (See Zumbro, Frank R., assignor.)
Friden, Carl M. F., Oakland, assignor to Marchant Calculating Machine Company, Emeryville, Calif. Calculating machine. 1865,751; July 5.
Friden, Carl M. F., Oakland, assignor to Marchant Calculating Machine Company, Emeryville, Calif. Calculating machine. 1,866,023; July 5.
Fried. Krupp Aktiengesellschaft. (See Bornkessel, B., Breitling, Lehmann, and Varren, assignors.)
Friedemann, William, Cincinnati, Ohio. Safety device for stokers. 1,865,438; July 5.
Friedmann, Alex. (See Hajek, Otto, assignor.)
Frigidaire Corporation. (See Gaugler, Richard S., assignor.)
Frigidaire Corporation. (See Keilholtz, Lester S., assignor.)
Frigidaire Corporation. (See King, Jesse G., assignor.)
Frigidaire Corporation. (See Smith, Harry F., assignor.)
Frisch, Martin, New York, N. Y., and E. Lundgren, Frederick, Md., assignors to International Combustion Engineering Corporation, New York, N. Y. Finely divided fuel burning furnace. 1,866,404; July 5.
Frost Research Laboratory, Inc. (See Frost, Robinson V., assignor.)
Frost, Robinson V., Norristown, Pa., assignor to Frost Research Laboratory, Inc. Radiator. 1,865,511; July 5.
Frosted Wool Process Company. (See Greenleaf, Robert M., assignor.)
Fruehauf Trailer Company. (See Reid, Frederick, M., assignor.)
Fry, Benjamin L., St. Louis, Mo. Vending machine. 1,865,895; July 5.
Fuerst, Edwin W., Toledo, Ohio, assignor to The Parker Pen Company, Janesville, Wis. Bottle or similar container. Des. 87,302; July 5.
Funk, Robert V. (See Ennis, George H., assignor.)
Furgason, Claude E., assignor to Reo Motor Car Company, Lansing, Mich. Hydraulic throttle actuator. 1,865,561; July 5.
Futter, Charles J., and G. W. Blair, assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Rubber sole construction. 1,865,625; July 5.
Gábor, Dionys, Berlin-Wilmersdorf, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Vacuum tube. 1,865,752; July 5.
Gabriel Company, The. (See Beecher, Eugene L., assignor.)
Gabriel Kari-Keen Company, The. (See Collier, Roy C., assignor.)
Gaetje, John H., Glenview, and A. E. Santschi, Chicago, Ill., assignors to Western Electric Company, Inc., New York, N. Y. Electrical heating device. 1,866,097; July 5.
Gaige, Crosby. (See Lichter, Ira J., assignor.)
Gailey, Florence L., Los Angeles, Calif. Exercising device. 1,866,024; July 5.
Gaidiner, Arthur W., assignor to General Motors Research Corporation, Detroit, Mich. Combustion chamber for internal combustion engines. 1,865,849; July 5.
Gardner, Prince A., jr., University City, Mo. Bill fold. 1,865,826; July 5.
Garvey, Edward S., Clayton, Mo. Fountain brush. 1,865,850; July 5.
Gaudenzi, Arthur, Baden, and E. Kobel, Ennetbaden, assignors to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Electric current rectifier construction. 1,865,512; July 5.
Gaugler, Richard S., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,865,513; July 5.
Gebhard, Louis A., Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Transmitting system. 1,866,459; July 5.
Geertz, Eric. (See Dull, R. W., and Geertz.)
Geiger, Elward F., Binghamton, N. Y. Liquid flow-controlling device. 1,865,851; July 5.
Geller, Leon W., assignor to Will & Baumer Candle Company, Inc., Syracuse, N. Y. Molding of beeswax candles and the product thereof. 1,866,025; July 5.
Gem Doughnut Machine Company. (See Schoel, Fred L., assignor.)
General Chemical Company. (See Allen, Walter S., assignor.)
General Electric Company. (See Adam, Walter, assignor.)
General Electric Company. (See Alexanderson, Ernst F. W., assignor.)
General Electric Company. (See Artzt, M., and Serrell, assignors.)
General Electric Company. (See Boyajian, Aram, assignor.)
General Electric Company. (See Clark, Frank M., assignor.)
General Electric Company. (See Crocker, Arthur T., assignor.)
General Electric Company. (See Green, Harold V., assignor.)
General Electric Company. (See Hollnagel, H. P., and Winckler, assignors.)
General Electric Company. (See Kingdon, K. H., and Tonks.)
General Electric Company. (See Kuehni, Hans P., assignor.)
General Electric Company. (See Lieberum, George W., assignor.)
General Electric Company. (See Nerad, Anthony J., assignor.)
General Electric Company. (See Prince, David C., assignor.)
General Electric Company. (See Rohlfs, Harry C., assignor.)
General Electric Company. (See Stevens, Harry M., assignor.)
General Electric Company. (See Stewart, Clyde E., assignor.)
General Electric Company. (See Watts, Noble H., assignor.)
General Electric Company. (See Woods, William J., assignor.)
General Electric X-ray Corporation. (See Wantz, Julius B., assignor.)
General Health Corporation. (See Brown, Franklin, assignor.)
General Industries Company, The. (See Lee, Claire M., assignor.)
General Laboratories, Inc. (See Keenan, John A., assignor.)
General Motors Corporation. (See Chilton, Ralph H., assignor.)
General Motors Research Corporation. (See Berry, George P., assignor.)
General Motors Research Corporation. (See Boegehold, Alfred L., assignor.)
General Motors Research Corporation. (See Gardiner, Arthur W., assignor.)
General Motors Research Corporation. (See Mougey, H., and Short, assignors.)
General Outdoor Advertising Co. (See French, Reginald D., assignor.)
General Register Corporation. (See Heisel, R. H., and Pierson, assignors.)
General Steel Castings Corporation. (See Howard, K. S., and Hallquist, assignors.)
General Steel Castings Corporation. (See Wintemberg, Adelbert C., assignor.)
General Zeolite Company. (See Adelson, Samuel L., assignor.)
General Zeolite Company. (See Green, Walter H., assignor.)
General Zeolite Company. (See Hughes, Walter J., assignor.)
Gerken, Heinrich, Wandsbek, Germany. Pump. 1,866,026; July 5.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Multiple hydraulic press for molding inlite battery boxes. 1,865,464; July 5.
Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Filler device. 1,865,465; July 5.
Gibbons, Winifred L., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 87,303; July 5.
Gibbons, Winifred L., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 87,304; July 5.
Gilchrist, William A., Chicago, Ill. Furnace. 1,865,753; July 5.
Gill, Samuel A., assignor of one-half to Z. D. Dunlap and H. B. Dunlap, Ames, Iowa. Cornstalk fiber composition. 1,866,204; July 5.
Gill, Thomas, Jersey, Calif. Asparagus trimmer. 1,866,027; July 5.
Gillen, Daniel A. (See Seymour, F. W., and Gillen, assignors.)
Gillet, René, Montrouge, France. Rear suspension of motor cycles. 1,865,896; July 5.
Gilligan, George H., assignor to U. S. Ring Traveler Company, Providence, R. I. Twisting machine. 1,865,897; July 5.
Gilson, Hoyt M., Ocheltree, Kans. Combined thresher-spreader. 1,865,686; July 5.
Gilson, Robert M., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical regulating apparatus. 1,865,562; July 5.
Glasier, Harold H., Los Angeles, Calif. Rim gear drive tractor. 1,865,898; July 5.
Glenn, Ethel F., and R. H. Herring, San Antonio, Tex. Table pad for glasses. 1,866,460; July 5.
Glow Electric Company, The. (See Wagner, Albert G., assignor.)
Godsey, Frank W., jr., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. Automatic train control. 1,866,099; July 5.
Godward, Ernest R., New York, N. Y., assignor to The Eclipse Petrol Economiser System Company, Limited, Christchurch, New Zealand. Carburation system. 1,865,514; July 5.
Godward, Ernest R., New York, N. Y., assignor to The Eclipse Petrol Economiser System Company, Limited, Christchurch, New Zealand. Vaporizer. 1,865,515; July 5.
Gohmann Bros. and Kahler Company. (See Gohmann, Charles L., assignor.)

Gohmann, Charles L., assignor to Gohmann Bros. and Kahler Company, New Albany, Ind. Combination adjustable floor plate and stove support. 1,865,899; July 5.
Goldberg, Maximilian M., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Lever set lever operated cash register. 1,865,627; July 5.
Goldhagen, Eli. (See Goldbagen, Harry, assignor.)
Goldhagen, Harry, assignor of one-half to E. Goldhagen, New York, N. Y. Flue water heater. 1,865,852; July 5.
Golby, Sol D. (See Elwell, Jay H., assignor.)
Goodlin, Fred C., assignor to Packard Motor Car Company, Detroit, Mich. Machine and method for forming cores. 1,866,301; July 5.
Goodwin, Ernest G., Pelham, N. Y. Side bearing. 1,865,900; July 5.
Goodwin, Harley E., Hartford, Conn. Game. 1,866,158; July 5.
Goolsbee, Charles C., Houston, Tex. Apparatus for applying hard facing material to fish-tail bits. 1,866,028; July 5.
Goschnick, Catherine K., Port Huron, Mich. Freight car seal. 1,866,461; July 5.
Gossling, Bernard A. (See Gossling, Frank J. and B. A.)
Gossling, Frank J., St. Bernard, and B. A. Gossling, Norwood, Ohio. Window shade operating device. 1,865,466; July 5.
Gould Coupler Company, The. (See Barrows, Donald S.)
Grabowski, Antoni, Prosser, Wash. Cow tail holder. 1,866,029; July 5.
Graf, Wilhelm, Berlin, Germany. Locating the fault in the case of multiconductor cables damaged by short-circuiting. 1,865,687; July 5.
Graham, Harry C., Coraopolis Heights, Pa. Rail joint. 1,866,159; July 5.
Graham, Matthew P., Detroit, Mich., assignor to Thompson Products, Inc., Cleveland, Ohio. Tie rod end. 1,866,098; July 5.
Granville, Bernard, New York, N. Y., assignor to Granville Holding Corporation. Apparatus for drilling. 1,865,853; July 5.
Granville Holding Corporation. (See Granville, Bernard, assignor.)
Graseby, Robert C., Westminster, London, England. Electric switch. 1,866,406; July 5.
Gray, Frank, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Glow discharge lamp. 1,865,516; July 5.
Gray Processes Corporation, The. (See Gray, Thomas T., assignor.)
Gray Processes Corporation, The. (See Mandelbaum, Malvin R., assignor.)
Gray, Thomas T., Elizabeth, assignor to The Gray Processes Corporation, Newark, N. J. Refining hydrocarbons. 1,865,467; July 5.
Green, Harold V., Wilmette, Ill., assignor to General Electric Company. Adjustable speed induction motor. 1,866,349; July 5.
Green, Walter H., assignor, by mesne assignments, to General Zeolite Company, Chicago, Ill. Apparatus and method for preparing and proportioning dosing mixtures. Re18,510; July 5.
Green, Walter H., assignor, by mesne assignments, to General Zeolite Company, Chicago, Ill. Mixing apparatus. 1,866,030; July 5.
Green, Walter H., assignor to General Zeolite Company, Chicago, Ill. Liquid treatment. 1,866,031; July 5.
Green, Walter H., assignor to General Zeolite Company, Chicago, Ill. Boiler control apparatus. 1,866,302; July 5.
Greenleaf, Robert M., Los Angeles, Calif., assignor to Frosted Wool Process Company. Cleaning wool. 1,866,205; July 5.
Greenman, Le Roy E., Kalkaska, Mich. Bottle capper. 1,866,255; July 5.
Greenwald, Harold A., assignor to T. C. Whitehead, Detroit, Mich. Humidifier. 1,865,563; July 5.
Greenwood, Talma T., East Templeton, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Thermal relay. 1,866,032; July 5.
Greist Manufacturing Company, The. (See La Vigne, G. J., and Greist, assignors.)
Greist, Walter C. (See La Vigne, G. J., and Greist.)
Grentz, Adolph T., Philadelphia, Pa. Safety attachment for gas burners. 1,865,901; July 5.
Grigal, Anthony. (See Abranathy, Anthony, assignor.)
Grimditch, William H., Glenside, and D. P. Earnshaw, assignors to Philadelphia Storage Battery Company, Philadelphia, Pa. Radioreceiver control. 1,866,462; July 5.
Grison, Joseph B., et al. (See Pennington, Harold C., assignor.)
Griswold, Thomas, jr., assignor to The Dow Chemical Company, Midland, Mich. Gasket joint. 1,866,160; July 5.
Griswoldville Manufacturing Company. (See Ballard, Joseph W., assignor.)
Groff, Frazier, Verona, N. J., assignor to Bakelite Corporation, New York, N. Y. Coating composition. 1,865,628; July 5.
Grosser, Carl A., Killarney, Boggabri, New South Wales, Australia. Aeroplane. 1,866,161; July 5.
Grossman, Mollie. (See Grossman, Morris, assignor.)
Grossman, Morris, assignor to M. Grossman, New York, N. Y. Combination necktie and handkerchief display folder. 1,866,463; July 5.
Grunow, Arthur C. (See Laucus, J., and Grunow.)
Grunwald, Albert C., River Forest, assignor to Precision Metal Workers, Chicago, Ill. Ash receptacle. 1,865,902; July 5.
Guett, Monroe, assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Securing means for electrical connecters. 1,866,407; July 5.
Gustin, Daniel S., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Lamp base. 1,865,468; July 5.
Guth, Edwin F., Webster Groves, Mo. Lighting fixture. 1,865,469; July 5.
Hach, Clarence A., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Coating apparatus. 1,866,100; July 5.
Hach, Clarence A., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for shaping saw teeth. 1,866,102; July 5.
Hach, Clarence A., Oak Park, and C. I. Hoag, Chicago, Ill., assignors to Western Electric Company, incorporated, New York, N. Y. Apparatus for shaping saw teeth. 1,866,101; July 5.
Hajek, Otto, assignor to A. Friedmann, Vienna, Austria. Driving mechanism of lubricating pumps. 1,866,206; July 5.
Hakim, Joseph C., Hoboken, N. J. Producing multi-color printing rolls. 1,866,103; July 5.
Hall, Agnes H., Oakland, Calif. Combination vanity case. 1,866,162; July 5.
Hallowell, Howard T., and F. Bennett, assignors to Standard Pressed Steel Co., Jenkintown, Pa. Drawer support for workbenches. 1,866,464; July 5.
Hallquist, Einar G. (See Howard, K. S., and Hallquist.)
Halowax Corporation. (See Hanson, E. R., and Delaney, assignors.)
Halsey, Fred H., Texarkana, Ark. Building unit. 1,865,903; July 5.
Hammermill Paper Company. (See Chatain, Henri G., assignor.)
Hammon, George L., assignor to National Welding Equipment Company, Incorporated, San Francisco, Calif. Gas burner shield. 1,865,904; July 5.
Hammon, George L., assignor to National Welding Equipment Company, Incorporated, San Francisco, Calif. Heating torch. 1,865,905; July 5.
Hammond, George F. (See Taple, Joseph F., assignor.)
Hand, Carl N., assignor to Elko Chemical Company, Nitro, W. Va. Manufacture of anhydrous sodium sulphite. 1,865,754; July 5.
Handy, Harry L. (See Heim, C. E., and Handy.)
Hannaford, Frederick C., Morgan City, La. Package container. 1,865,688; July 5.
Hanrahan, Mary. (See Marshall, F. C., assignor, and Newport.)
Hansen, Albert M., and J. L. Jones, Portland, Oreg. Support for golf bags. 1,865,689; July 5.
Hansen, Axel S., Minneapolis, Minn. Air drying and purifying apparatus. 1,866,207; July 5.
Hansen, Herman, New York, N. Y., assignor to Francis Keil & Son, Inc. Key cutting apparatus. 1,866,033; July 5.
Hansen, Herman, New York, N. Y., assignor to Francis Keil & Son, Inc. Key cutting apparatus. 1,866,034; July 5.
Hanses, William A., assignor to Rand McNally Company, Chicago, Ill. Display sheet rack. 1,866,208; July 5.
Hanson, Ernest R., Bloomfield, and M. E. Delaney, East Orange, N. J., assignors to Halowax Corporation, New York, N. Y. Sealing composition. 1,865,629; July 5.
Hanson, John G., Kenmore, N. Y. Gear shift. 1,865,690; July 5.
Hanson-Van Winkle-Munning Company. (See Hogaboom, G. B., and King, assignors.)
Hardgrave, Oliver L., Van Buren, Ark. Sponge cutting anchor. 1,865,564; July 5.
Harford, John K., Clarkston, Wash. Water sprinkler. 1,865,906; July 5.
Harnischfeger Corporation. (See Bergmann, Reinhard, assignor.)
Harnischfeger Corporation. (See Lexa, George J., assignor.)
Harrington, Fredrick, and H. Harrington, St. Cloud, Minn. Fish lure. 1,866,465; July 5.
Harrington, Hiram. (See Harrington, Fredrick, and H.)
Harris, Ford W. (See Turner, Charles L., assignor.)
Harriss, Edwin A. (See Hirsch, L., and Harriss.)
Hart, John M., New York, N. Y., and M. P. Chaplin, Waterville, assignors, by mesne assignments, to Fidelity Trust Company, Portland, Me. Container. 1,866,035; July 5.
Hart, John M., New York, N. Y., and M. P. Chaplin, Waterville, assignors, by mesne assignments, to Fidelity Trust Company, trustee, Portland, Me. Food pack. 1,866,408; July 5.
Hartford-Empire Company. (See Mulholland, V., and Honiss, assignors.)
Hartman, William W., and R. A. Steps, Los Angeles, Calif. Sanitary food package. 1,866,036; July 5.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,865,630; July 5.
Hassensall, Louis W., Toledo, Ohio. Cabinet cooler. 1,866,466; July 5.

Hawks, Joseph W., assignor to The Williams Bakery, Inc., Scranton, Pa. Cake. Des. 87,305; July 5.
Hays, John E. (See Donohue, James J., assignor.)
Hazel-Atlas Glass Co. (See Miller, William J., assignor.)
Heim, Clarence E., and H. L. Handy, Sherman, Tex. Grave digging machine. 1,866,037; July 5.
Heim, Warren M., assignor to Oliver Iron and Steel Corporation, Pittsburgh, Pa. Insulator bracket. 1,866,104; July 5.
Hein, Paul, Berlin-Baumschulenweg, Germany. Shank piece for shoes. 1,866,209; July 5.
Heineman, Warren F., Shorewood, assignor to A. O. Smith Corporation, Milwaukee, Wis. Flash welding tubular articles. 1,866,256; July 5.
Heineman, Warren F., Shorewood, assignor to A. O. Smith Corporation, Milwaukee, Wis. Electrically welding tubular articles. 1,866,257; July 5.
Heinrich, Richard, Berlin-Sudende, Germany, assignor to Westinghouse Electric & Manufacturing Company. Gas purification. 1,865,907; July 5.
Heisenfeldt, John, Wauwatosa, and H. Walst, Milwaukee, Wis. Lubricant tester. 1,866,105; July 5.
Heitner, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,865,631; July 5.
Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,865,632; July 5.
Helsel, Reuben H., Long Island City, and H. L. Pierson, Brooklyn, N. Y., assignors to General Register Corporation, Brooklyn, N. Y. Operating mechanism for punches and similar devices. 1,865,755; July 5.
Henderson-Ames Company, The. (See Bickerstaff, Samuel N., assignor.)
Henderson, Nelson H., Syracuse, N. Y. Mixing faucet. 1,865,517; July 5.
Hengst, Walter, Chemnitz, Germany. Control button for thread bobbins. 1,865,908; July 5.
Henry, Charles P., assignor to J. N. Henry, Providence, R. I. Tie back for curtains. 1,865,756; July 5.
Henry, James A., and J. H. Yancey, Sturgis, Mich. Register. 1,865,518; July 5.
Henry, James N. (See Henry, Charles P., assignor.)
Herlihy, Theodore E., Los Angeles, Calif., assignor, by mesne assignments, to The Lubrication Corporation, South Bend, Ind. Lubricant dispensing apparatus. 1,866,106; July 5.
Hernon, Lon, Chicago, Ill. Brush comb. 1,866,210; July 5.
Herr, Homer A., Philadelphia, Pa., assignor to Automatic Centrifugal Company. Continuous automatic centrifugal machine. 1,866,499; July 5.
Herring, Ruth H. (See Glenn, E. F. and Herring.)
Hertfelder, Henry, assignor to Dodge Manufacturing Company Limited, Toronto, Ontario, Canada. Wood rim pulley. 1,866,303; July 5.
Heylandt, Christian W P., Berlin-Sudende, Germany, assignor to Fluga Aktien-Gesellschaft, St. Moritz, Switzerland. Apparatus for preparing pressure gases. 1,866,514; July 5.
Heylandt, Christian W. P., Lankwitz, Germany, assignor to Fluga Aktien-Gesellschaft, St. Moritz, Switzerland. Method and apparatus for use in storing and transporting liquefied gases. 1,866,515; July 5.
Heylandt, Christian W. P., Berlin-Lankwitz, Germany, assignor to Fluga Aktiengesellschaft, St Moritz, Switzerland. Conserving liquefied gases. 1,866,516; July 5.
Heylandt, Christian W. P., Berlin-Lankwitz, Germany, assignor to Fluga Aktiengesellschaft, St. Moritz, Switzerland. Transportation or pressure vessel for gases. 1,866,517; July 5.
Hiering, William C., assignor to J. E. Mergott Co., Newark, N. J. Attachment for holding cigarette cases. 1,866,107; July 5.
Hill, Harry W., assignor to American Optical Company, Southbridge, Mass. Lens. 1,865,691. July 5.
Hill, Roger M., Washington, D. C. Electrophonic sound reproduction. 1,865,565; July 5.
Hinchcliffe, William, Higher Bebington, and J. Scott, Bootle, England, assignors to Associated Electrical Industries Limited. Marine engine and ship's propelling machinery. 1,865,909; July 5.
Hines, John E., Swampscott, Mass., assignor to Bakers Service Bureau, Inc., New York, N. Y. Display carton. 1,866,211; July 5.
Hirsch, Leonard, Lyndhurst, and E. A. Harris, Orange, assignors to R. B. Davis Company, Hoboken, N. J. Can closure. 1,866,467; July 5.
Hirsch, Leonard, Lyndhurst, and E. A. Harriss, Orange, assignors to R. B. Davis Company, Hoboken, N. J. Can closure. 1,866,468; July 5.
Hirsch, Leonard, Lyndhurst, and E. A. Harriss, Orange, assignors to R. B. Davis Company, Hoboken, N. J. Forming can closures. 1,866,469; July 5.
Hoag, Charles I. (See Hach, C. A., and Hoag.)
Hobbs, Howard F., Paradise, South Australia, Australia. Automatically variable transmission gear particularly for motor vehicles. 1,865,910; July 5.
Hodge, James G., East Orange, N. J., assignor to The Simplex Piston Ring Company of America, Incorporated, Cleveland, Ohio. Piston packing. 1,865,566; July 5.
Hodge, Robert J., assignor to The American Buckle Company, West Haven, Conn. Loop buckle. 1,865,854; July 5.
Hodgkins, Edward F., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Buffing machine. 1,865,855; July 5.
Hoffer, Le Roy H., assignor to Metropolitan Engineering Company, Brooklyn, N. Y. Welding apparatus. 1,865,519; July 5.
Hogaboom, George B., New Britain, Conn., and W. R. King, Newark, assignors to Hanson-Van Winkle-Munning Company, Matawan, N. J. Electrolytic bright dip for iron and steel. 1,865,470; July 5.
Holden, Otto, Toronto, Ontario, assignor to William Kennedy & Sons, Limited, Owen Sound, Ontario, Canada. Stop log fitting. 1,866,350; July 5.
Hollister, Atwater W. (See Wilber, F. S., and Hollister.)
Hollnagel, Herbert P., Swampscott, and G. A. F. Winckler, Worcester, Mass., assignors to General Electric Company. Rectification of alternating currents. 1,866,351; July 5.
Holmes, Colin W. H. (See Appleyard, K. C., Holmes, and Bramwell.)
Holmes, Henry H., and R. H. Robinson, assignors to Wildt and Company Limited, Leicester, England. Thread-trapper and reverse-plating mechanism for knitting machines. 1,866,108; July 5.
Honer, Henry, Palms Station, Calif. Stove. 1,865,911; July 5.
Honiss, William T. (See Mulholland, V., and Honiss.)
Honsowetz, Isabelle, Coeur d'Alene, Idaho. Hanger. 1,865,757; July 5.
Hood, Charles E., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Controlling mechanism for shoe machines. 1,865,856; July 5.
Hooker Electrochemical Company. (See Stuart, Kenneth E., assignor.)
Hoover Company, The. (See Babcock, Earl, assignor.)
Hoover Company, The. (See Hudson, Willis F., assignor.)
Hoover Company, The. (See Lowry, Millard F., assignor.)
Horn, William, Marietta, Ohio. Oil well agitator. 1,865,912; July 5.
Horste, Joseph E., assignor to Detroit Harvester Company, Detroit, Mich. Drilling machine. 1,865,567; July 5.
Horton, Elsie H., assignor to A. C. Paul, Minneapolis, Minn. Display or decoration device. 1,865,758; July 5.
Hosking, Richard T., Wilmette, assignor, by mesne assignments, to Shakeproof Lock Washer Company, Incorporated, Chicago, Ill. Lock washer. 1,866,304; July 5.
Howard, Karl S., St. Louis, Mo., and E. G. Hallquist, Edwardsville, assignors, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Railway vehicle structure. 1,865,520; July 5.
Howell, Edward T., Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. Caustic fusion of benzanthrone compounds. 1,866,500; July 5.
Howell, Edward T., Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. Producing oxidized dibenzanthrone. 1,866,501; July 5.
Hoyt, Harold C., Thomaston, Conn. Loud speaker. 1,866,163; July 5.
Huber, Ludwig, and R. Distel, Detroit, Mich. Carburetor. 1,865,471; July 5.
Hudson, Willis F., Riverside, Ill., assignor to The Hoover Company. Suction cleaner agitator. 1,865,857; July 5.
Huetten, Peter E. (See Witke, A., Huetten, Rosemann, Molling, and Martell.)
Hughes, Joseph H., Los Angeles, Calif. Portable saw support. 1,865,759; July 5.
Hughes, Leonard W., Oakland, and W. H. von Hacht, San Francisco, Calif. Deodorizing apparatus; 1,866,164; July 5.
Hughes, Walter J., assignor to General Zeolite Company, Chicago, Ill. Steam purifier discharge apparatus. 1,866,305; July 5.
Hume, Edward S., Perth, Western Australia, Australia. Apparatus for the manufacture or lining of pipes by centrifugal action. 1,865,692; July 5.
Hund, August, Bethesda, Md. Piezo electric crystal system. 1,865,858; July 5.
Hunt, Charles W. (See Wadsten, S., and Hunt.)
Hunton, William G., Great Missenden, England. Instrument for viewing designs in multiple. 1,866,306; July 5.
Hussmann-Ligonier Company. (See Jostedt, Theodore A., assignor.)
Hutchings, Le Roi E., assignor to Remington Rand Inc., Buffalo, N. Y. Visible index. 1,866,352; July 5.
Hutchings, Le Roi E., Tonawanda, assignor to Remington Rand Inc., Buffalo, N. Y. Indexed correspondence file. 1,866,353; July 5.
Hutchins Car Roofing Company. (See Wilson, Alfred R., assignor.)
Huxford, George T., and F. E. Stratton, assignors to Builders Iron Foundry, Providence, R. I. Grinding machine. 1,866,212; July 5.
Hyman, Henry. (See Abel, Frank J., assignor.)
Hyman, Henry. (See Muldoon, Bernard F., assignor.)
Hynes, Dibrell P. (See Mears, N. A., and Hynes.)
Hynes, Lee P. assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y. Door engine. 1,865,913; July 5.
I. G. Farbenindustrie Aktiengesellschaft. (See Winkler, Kurt, assignor.)

Imperial Chemical Industries Limited. (See Wood, J., and Reynolds, assignors.)
Industrial Gloves Corporation. (See Millard, Irwin W., assignor.)
Industrial Patents Corporation. (See DeVout, A. W., and Regensburger, assignors.)
Industrial Patents Corporation. (See McKee, H. H., and Walter, assignors.)
Industrial Patents Corporation. (See Smith, Cecil C., assignor.)
Industrial Research Company. (See Joffé, Abraham, assignor.)
Ingersoll-Rand Company. (See Bayles, Lewis C., assignor.)
Ingersoll-Rand Company. (See Frelin, Fritjof, assignor.)
Ingersoll-Rand Company. (See Lear, Earl B., assignor.)
Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)
Inman, Harry A., assignor to Bloomer Bros. Company, Newark, N. Y. Container for fragile articles. 1,866,354; July 5.
Insolo Holding Company. (See Skolnik, Max, assignor.)
International Combustion Engineering Corporation. (See Frisch, M., and Lundgren, assignors.)
International Combustion Engineering Corporation. (See Jackson, George P., assignor.)
International Projector Corporation. (See Frappier, L. S., and Boecking, assignors.)
International Projector Corporation. (See Kindelmann, A., and Boecking, assignors.)
International Screw Company. (See Arenz, John A., assignor.)
Intertype Corporation. (See Bittner, John W., assignor.)
Iowa Fiber Box Company. (See Witte, James G., assignor.)
Isothermas Corporation of America. (See Peyinghaus, Walter, assignor.)
Iversen, Morton. (See Payne, P. D., and Iversen.)
Iverson, Cato, assignor to National Rubber Machinery Company, Akron, Ohio. Nozzle. 1,866,502; July 5.
Jackson, Clarence E., and S. J. Ryan, Houston, Tex. Cementing wells. 1,866,522; July 5.
Jackson, George P., Flushing, assignor to International Combustion Engineering Corporation, New York, N. Y. Steam generating installation. 1,866,307; July 5.
Jackson, John L., Chicago, assignor to Deere & Company, Moline, Ill. Motor cultivator. 1,865,521; July 5.
Jackson, Louisa, Toronto, Ontario, Canada. Heating range. 1,866,109; July 5.
Jackson, Michael, Chicago, Ill. Musical instrument. 1,865,522; July 5.
Jacobs, Reed E., Alameda, assignor of one-third to G. Q. Stewart, San Francisco, Calif. Airplane. 1,865,859; July 5.
Jaden, Fred I., Hastings, Nebr. Gun for applying liquid to dandelions. 1,865,914; July 5.
Janney, John. (See Moore, William J., assignor.)
Jason, Hellmuth, Coto Menas, Seron, Spain. Coupling for wire ropes. 1,866,470; July 5.
Jenkins, Robert, sr., Baltimore, Md. Shade supporting bracket. 1,866,308; July 5.
Jensen, John A. G. (See Madsen, N. P., and Jensen.)
Jeppson, George N., and T. Larsson, assignors to Norton Company, Worcester, Mass. Segmental abrasive wheel. 1,865,523; July 5.
Jimison, Charles T. (See Ward, William W., assignor.)
Jimmerson, Eva W., New York, N. Y. Attachment for hospital beds. 1,866,258; July 5.
Joffé, Abraham, Leningrad, Union of Socialist Soviet Republics, assignor to Industrial Research Company, Cambridge, Mass. Forming on the surface of a dielectric a thin layer in which the potential fall is concentrated. 1,865,695; July 5.
Johannson, Johan W., Bankeryd, Sweden. Match package. 1,865,694; July 5.
Johannson, Karl A., Tidaholm, Sweden. Manufacturing match box shells. 1,865,695; July 5.
Johnson, Alfred F., Somerville, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Slide fastener socket member. 1,866,355; July 5.
Johnson, Alvin O., Chicago, Ill., assignor to The Meyercord Company. Forming decorated metal objects. 1,866,110; July 5.
Johnson, Charles B. (See MacLean, A. D., and Johnson.)
Johnson, Clarence G., Hartford City, Ind. Movable molding for doors and the like. 1,865,568; July 5.
Johnson, Colvin L., assignor, by mesne assignments, to Frank C. Webb, St. Louis, Mo. Lever locking mechanism. 1,866,309; July 5.
Johnson, Elmina. (See Dordan, A., and Johnson.)
Johnson, F. W., et al. (See Johnson, George F., assignor.)
Johnson, George F., Logansport, assignor of one-half to F. K. Johnson and T. Russell, De Soto Parish, La. Method and device for cementing oil wells. 1,866,038; July 5.
Johnson, Malcolm S., assignor to Transerv Corporation, Chicago, Ill. Brake slack adjuster. 1,865,760; July 5.
Johnson, Milton C., Company. (See Doushkess, William N., assignor.)
Johnston, William A., Los Angeles, Calif., assignor of one-half to S. E. Purdy, Chicago, Ill. Combined soft collar stiffener and tie support. 1,865,915; July 5.
Jolley, Thomas M., Oskaloosa, Iowa. Vise. 1,865,916; July 5.
Jones, Homer V., Bloomington, Ind. Saw tooth. 1,866,356; July 5.
Jones, Jesse L. (See Hansen, A. M., and Jones.)
Jones & Lamson Machine Company. (See Lovely, John E., assignor.)
Jones, Winfield S., Brea, Calif. Steering wheel handle. 1,866,111; July 5.
Jordan, Hans. (See Schoeller, W., Jordan, and Clerc.)
Jordhoy, Hans C., North Plainfield, N. J., assignor to Wood Newspaper Corporation, New York, N. Y. Adjustable folding cylinder. 1,865,696; July 5.
Jostedt, Theodore A., assignor, by mesne assignments, to Hussmann-Ligonier Company, St. Louis, Mo. Showcase refrigerator. 1,865,761; July 5.
Judah, Mansfield D., Long Beach, Calif. Oven implement. 1,866,039; July 5.
Judd, H. L., Company. (See Toelle, Walter H., assignor.)
Judd, Irving H., Detroit, assignor to Whitehead & Kales Company, River Rouge, Mich. Transporting vehicles and the like. 1,865,569; July 5.
Juengst, Fred W. (See Anderson, O. M., and Juengst.)
Junkers, Hugo, Dessau, Germany. Impeller and making same. 1,865,918; July 5.
Kaiser, Clifford A., Chicago, Ill. Metal coiling. 1,866,310; July 5.
Kaiser Wilhelm Institut für Eisenforschung. (See Luyken, Walter, assignor.)
Kaiser-Wilhelm Institute für Eisenforschung. (See Naeser, Gerhard, assignor.)
Kaltenbach, Robert W., Cleveland Heights, Ohio. Crane. 1,865,762; July 5.
Kaltenbach, Robert W., Cleveland Heights, Ohio. Platen lock for car dumpers. 1,865,763; July 5.
Karfiol, Edward, Brooklyn, N. Y. Shelf-paper. Des. 87,306; July 5.
Karfiol, Edward, New York, N. Y. Doily. Des. 87,307; July 5.
Karrer, Enoch, Akron, Ohio. Electric switch. 1,865,697; July 5.
Kaselitz, Oscar, and W. Katz, Berlin, Germany. Recovery of nitrogen oxides. 1,865,917; July 5.
Katz, Walter. (See Kaselitz, O., and Katz.)
Kearney, Edward J., Wauwatosa, assignor to Kearney & Trecker Corporation, West Allis, Wis. Machine tool. 1,866,259; July 5.
Kearney & Trecker Corporation. (See Curtis, Frank W., assignor.)
Kearney & Trecker Corporation. (See Kearney, Edward J., assignor.)
Keenan, John A., assignor to General Laboratories, Inc., Madison, Wis. Container stopper. 1,865,764; July 5.
Keil, Francis, & Son, Inc. (See Hansen, Herman, assignor.)
Keilholtz, Lester S., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,866,040; July 5.
Keiper, Edwin H., Philadelphia, Pa., assignor to Pennsylvania Crusher Company, New York, N. Y. Renewable teeth or segments for crusher rolls. 1,865,860; July 5.
Kelley, Will G., Winnetka, Ill. Brace. 1,865,765; July 5.
Kellogg, Homer G., assignor to Motor Products Corporation, Detroit, Mich. Manufacturing radiator shells. 1,865,570; July 5.
Kelly, Thomas D., London, England. Treating fermented materials. 1,866,409; July 5.
Kennedy, Chester C. (See Strosacker, C. J., Kennedy, and Pelton.)
Kennedy, William & Sons, Limited. (See Holden, Otto, assignor.)
Kerrick, William O. (See Rickey, Loren W., assignor.)
Kerrigan, John, Swissvale, and A. Roth, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company. Control device. 1,866,357; July 5.
Ketcham, Alonzo R., Detroit, Mich. Molding for running boards and the like. 1,865,766; July 5.
Ketterling, Adolph J., Zeeland, N. Dak. Grain door for box cars. 1,866,041; July 5.
Kidder, Elwin H., assignor to Link-Belt Company, Chicago, Ill. Grain deflector. 1,865,633; July 5.
Kiehn, Otto F., New York, N. Y. Textile winding machine. 1,866,471; July 5.
Kimball, James N. Detroit, Mich. Control for reversible engines. 1,865,861; July 5.
Kindelmann, Albert, Floral Park, and E. Boecking, Brooklyn, assignors to International Projector Corporation, New York, N. Y. Sprocket fastening. 1,866,112; July 5.
King, C. G., & Co. (See Gibbons, Winifred L., assignor.)
King, Gerald V., Springfield, N. J., and F. A. Bonomi, St. Albans, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,866,260; July 5.
King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,866,042; July 5.
King, Walter L., Indianapolis, Ind. Time controlled switch. 1,865,919; July 5.
King, Willis R. (See Hogaboom, G. B., and King.)
Kingdon, Kenneth H., Schenectady, and L. Tonks, Scotia, N. Y., assignors to General Electric Company. Electrode support. 1,866,358; July 5.
Kinnard, Luther J., and E. M. Bouton, Chicago, Ill., assignors to Westinghouse Electric and Manufacturing Company. Elevator control system. 1,866,359; July 5.
Kirchhoff, William G., assignor to The J. H. Day Company, Cincinnati, Ohio. Dough working device. 1,866,213; July 5.

Kirchner, Martin, Berlin-Lankwitz, Germany, assignor to United Chromium, Incorporated, New York, N. Y. Electroplating equipment. 1,865,767; July 5.
Kirk, Edward C., St. Albans, W. Va., assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Attachable welding terminal. 1,865,719; July 5.
Kirkwood, Robert G. (See Thompson, W. H., and Kirkwood.)
Kirschbraun, Lester, Leonia, N. J. Method of and apparatus for producing bituminous emulsions. 1,866,503; July 5.
Kirschbraun, Lester, Leonia, N. J. Cooling molten bitumen. 1,866,504; July 5.
Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Building material and making same. 1,865,634; July 5.
Klein, Stanley J., assignor to Empire Box Corporation, Chicago, Ill. Box. 1,865,635; July 5.
Klem, Per, Oslo, Norway. Treating mechanical wood pulp. 1,865,768; July 5.
Klemperer, Wolfganag, Akron, Ohio, assignor to the Firm of Carl Zeiss, Jena, Germany. Hydrostatic load factor indicator for aircraft. 1,865,698; July 5.
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Kline, William H., Philadelphia, Pa., assignor to American Telephone and Telegraph Company. Eliminating interference in grounded telegraph systems. 1,865,571; July 5.
Klönne, Aug., the Firm. (See Einbeck, Friedrich, assignor.)
Klonne, Aug., the Firm. (See Schurmann, Friedrich, assignor.)
Knepley, Harry F., Napoleon, Ohio. Neverslip horseshoe holder. 1,865,862; July 5.
Knippelmeir, William, Minco, Okla. Animal trap. 1,865,920; July 5.
Knowles, Albert E., Heswall, England. Electrolytic apparatus. 1,866,472; July 5.
Kobel, Ernst. (See Gaudenzi, A., and Kobel.)
Kohl, Paul W., Rock, Wis. Chicken feeder. 1,865,921; July 5.
Kolisch, Paul. (See Phinney, Edward D., assignor.)
Königsberger, Erich, Breslau, Germany. Headrest for telephones. 1,866,043; July 5.
Koons, Morris B., assignor of one-half to E. Stainbrook, Youngstown, Ohio. Spark plug tester. 1,866,113; July 5.
Kootz, Arthur C., Milwaukee, Wis. Mop. 1,866,114; July 5.
Kootz, Arthur C., Milwaukee, Wis. Mop. 1,866,505; July 5.
Koppers Company, The. (See Sperr, Frederick W., jr.)
Kowalewski, Frank M., assignor of one-half to W. H. Cannard, Green Bay, Wis. Paper napkin. 1,865,922; July 5.
Kraemer, August F., Providence, R. I., assignor to Louis Stern Company. Extensible buckle. 1,866,165; July 5.
Kraft, Charles H., Kansas City, Mo. Blackboard. 1,865,863; July 5.
Kranz, Harry W., Lakewood, assignor to The Cleveland Welding Company, Cleveland, Ohio. Mechanism for forming latch pivots. 1,866,360; July 5.
Kratz, Edouard M., Chicago, Ill., assignor to Marsene Products Co. Transparent sheet material. 1,866,410; July 5.
Krawitz, Nathan, Philadelphia, Pa. Display device. 1,865,923; July 5.
Krebs, Adolf, Jamaica Plain, Mass. Welding. 1,866,044; July 5.
Kritzer, Richard W., assignor to Peerless Ice Machine Company, Chicago, Ill. Cooling evaporator. 1,865,924; July 5.
Kuehni, Hans P., Schenectady, N. Y., assignor to General Electric Company. Driving unit for loud-speakers. 1,866,361; July 5.
Kummerer, Cyril M., Allentown, Pa. Gasoline vaporizer. 1,866,473; July 5.
Kunde, John E., Los Angeles, Calif. Electrical door operating mechanism. 1,865,925; July 5.
Krowski, Alfred G. F., Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine carrying case. 1,865,636; July 5.
Kurz, Otto, assignor to C. Steidinger, St. Georgen/Schwarzwald, Germany. Speed governor for gramophones. 1,866,045; July 5.
Kusel, Abraham J., assignor to Bankers Thrift Corporation, Chicago, Ill. Coin bank. 1,865,864; July 5.
La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake adjusting device. 1,865,524; July 5.
La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Braking system. 1,865,525; July 5.
La Brie, Ludger E., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,865,572; July 5.
Lafayette Company, Inc., The. (See Stubbs, Herbert R., assignor.)
Lafleur, Sinai, Detroit, Mich. Hydraulic shock absorber. 1,865,865; July 5.
Laing, Arthur J., Dearborn, Mich. Junction box. 1,865,926; July 5.
Lambert, Gustaf B., Stockholm, Sweden. Measuring device for workholders. 1,865,927; July 5.
Lamstein, Irving, Brooklyn, N. Y. Test tube heating apparatus. 1,865,472; July 5.
Landers, Frary, & Clark. (See Anderson, O. M., and Juengst, assignors.)
Lanier, Edward H., Miami, Fla. Aeroplane. 1,866,214; July 5.
Lans, Fred, Borego, Calif. Automatic water control. 1,865,769; July 5.
Larson, Alfred T., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del. Producing hydrogen. 1,865,770; July 5.
Larson, Otto C., Brooklyn, N. Y. Converting a sled into a wheeled vehicle. 1,866,115; July 5.
Larsson, Knut, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Telephone system. 1,865,699; July 5.
Larsson, Thure. (See Jeppson, G. N., and Larsson.)
Laucus, John, and A. C. Grunow; said Grunow assignor to Henry P. Wray, Chicago, Ill. Indicating signal device 1,866,411; July 5.
Lauter-Humana Co. (See Cameron, Charles E., jr., assignor.)
LaVigne, George J., and W. C. Greist, assignors to The Greist Manufacturing Company, New Haven, Conn. Portable lamp. 1,865,928; July 5.
Lawaczeck Gesellschaft mit beschrankter Haftung. (See Niederreither, Hans, assignor.)
Lawlor, Simeon C., Chicago, Ill. Window pole. 1,865,526; July 5.
Leahy, Frank E., Pittsburgh, Pa., assignor to Republic Flow Meters Co., Chicago, Ill. Control mechanism for gas producers. 1,865,929; July 5.
Lear, Earl B., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Steel retainer. 1,865,637; July 5.
Lee, Alvin J. (See Moran, J. L., and Lee.)
Lee, Benjamin F., Spray, N. C. Electron tube amplification system. 1,865,573; July 5.
Lee, Benjamin F., Spray, N. C. Electron tube amplification system. 1,865,574; July 5.
Lee, Claire M., assignor to The General Industries Company, Elyria, Ohio. 1,865,473; July 5.
Lee, Leffman H., Bellevue, Pa. Fastening device. 1,865,866; July 5.
Lee, Ralph L., assignor to Delco-Light Company, Dayton, Ohio. Domestic appliance. 1,865,867; July 5.
Leffel, James, & Company, The. (See Bigga, George A., assignor.)
Leffel, James, and Company, The. (See Swindler, Harry M., assignor.)
Lehmann, Karl A. (See Bornkessel, B., Breitling, Lehmann, and Varren.)
Leidel, William, Elmhurst, N. Y. Toilet accessory. 1,866,116; July 5.
Leiman Bros. Inc. (See Leiman, George W., assignor.)
Leiman, George W., assignor to Leiman Bros. Inc., Newark, N. J. Hydrocarbon burner. 1,866,311; July 5.
Lemieux, Archibald R., Worcester, Mass. Double end bearing. 1,866,046; July 5.
Levy, Solomon, Rutherford, N. J., assignor to Anaconda Sales Company, New York, N. Y. Metal-clad tile. 1,865,771; July 5.
Lexa, George J., assignor to Harnischfeger Corporation, Milwaukee, Wis. Contact finger assembly for electric controllers. 1,865,638; July 5.
Liacos, Stavros J., Brooklyn, N. Y. Television. 1,866,413; July 5.
Libbey-Owens-Ford Glass Company. (See Blackshere, Lewis D., assignor.)
Libbey-Owens-Ford Glass Company. (See Blair, James C., assignor.)
Libbey-Owens-Ford Glass Company. (See Cone, Carroll, assignor.)
Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)
Libbey-Owens-Ford Glass Company. (See Fraser, Frank, assignor.)
Liberty Lace and Netting Works. (See Moosherr, John, assignor.)
Litchter, Irn J., Teaneck, N. J., assignor of one-half to Crosby Gaige, New York, N. Y. Humidor. 1,865,700; July 5.
Lieber, Carl M., Oklahoma City, Okla. Instantaneous automatic water heater. 1,866,215; July 5.
Lieberum, George W., Stratford, Conn., assignor to General Electric Company. Attachment plug cap. 1,866,362; July 5.
Lieberum, George W., Stratford, Conn., assignor to General Electric Company. Attachment plug cap. 1,866,363; July 5.
Liffander, Johan Oscar, Stockholm, Sweden, assignor to Pulvis Aktiengesellschaft, Glarus, Switzerland. Signaling device for clutching or the like. 1,866,166; July 5.
Lindsjo, Verner, assignor to Draper Corporation, Hopedale, Mass. Canter fork stop motion for looms. 1,865,930; July 5.
Line-O-Graph Company. (See Page, Marshall H., assignor.)
Link-Belt Company. (See Dull, R. W., and Geertz, assignors.)
Link-Belt Company. (See Elledsgaard, Asger, assignor.)
Link-Belt Company. (See Kidder, Elwin H., assignor.)
Link-Belt Company. (See Sayers, Albert J., assignor.)
Link-Belt Company. (See Waechter, F. F., and Snyder, assignors.)
Lippstadt, Isabel G., (See Lippstadt, Sigmund, assignor.)

Lippstadt, Sigmund, New York, assignor to Isabel G. Lippstadt, New York, N. Y. Key holder. 1,866,216; July 5.
Liquidometer Corporation. (See Reeves, Donald H., assignor.)
Litle, Alva G., Denver, Colo. Display device. Des. 87,323; July 5.
Litle, Alva G., Denver, Colo. Display device. Des. 87,324; July 5.
Lloyd, Chester H., Richmond, Va. Awning hinge. 1,866,474; July 5.
Locke, Arthur A., assignor to Wolverine Tube Company, Detroit, Mich. Apparatus for manufacturing integral finned tubing. 1,865,575; July 5.
Lockhart, George R., Providence, assignor to Manville Jenckes Company, Pawtucket, R. I. Manufacture of rayon. 1,865,701; July 5.
Loetscher, Emil C., Dubuque, Iowa. Making door panels of fibrous materials. 1,866,312; July 5.
Logan, Henry H., Chicago, Ill. Confection display device. 1,866,117; July 5.
Lohman, Harry C., Brooklyn, N. Y., assignor of one-half to A. Samuels, Morristown, N. J. Bottle stopper. 1,866,313; July 5.
Lolley, William H., Buffalo, N. Y. Shock absorber. 1,866,167; July 5.
Longfellow, Anna C., Larchmont, N. Y. Needle threader. 1,865,931; July 5.
Lorand, Eugene J., assignor to The Pennsylvania State College, State College, Pa. Making a concentrated coffee product. 1,866,414; July 5.
Lorand, Eugene J., assignor to The Pennsylvania State College, State College, Pa. Concentrated coffee product and preparing it. 1,866,415; July 5.
Loughmiller, William E., Flushing, N. Y. Hair cutter. 1,866,475; July 5.
Lovely, John E., assignor to Jones & Lamson Machine Company, Springfield, Vt. Machine tool. 1,865,527; July 5.
Lovely, John E., assignor to Jones & Lamson Machine Company, Springfield, Vt. Machine tool. 1,865,528; July 5.
Lowry, Millard F., North Canton, Ohio, assignor to The Hoover Company. Suction cleaner. 1,866,118; July 5.
Lowy, Samuel, New York, N. Y. Partition. 1,865,868; July 5.
Lubrication Corporation, The. (See Herlihy, Theodore E., assignor.)
Lucas, John A., Monessen, Pa. Aeroplane swing. 1,866,047; July 5.
Luginbuhl, Elias, Norwood, Ohio. Mortising machine and support therefor. 1,865,576; July 5.
Lundgren, Eric. (See Frisch, M., and Lundgren.)
Lundie Engineering Corporation, The. (See Armstrong, Levi B., assignor.)
Lutomirski, Karel, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signal transmission system. 1,866,261; July 5.
Lutz, George A., Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del. Welding. 1,865,529; July 5.
Lutz, George A., Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del. Lap welding. 1,865,530; July 5.
Lutz, George A., Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del. Lap-welding. 1,865,531; July 5.
Lutz, George A., Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del. Welding machine. 1,865,532; July 5.
Lutzke, William F., assignor to Union Steel Products Company, Albion, Mich. Receptacle. 1,865,533; July 5.
Luyken, Walter, assignor to Kaiser Wilhelm Institut für Eisenforschung, Dusseldorf, Germany. Magnetic treatment of iron ores. 1,865,869; July 5.
Lyman, Kenneth E., Assignor to Automatic Transmission Company, Rockford, Ill. Automatic clutch. 1,865,772; July 5.
Macbeth, Colin, Birmingham, assignor to Dunlop Rubber Company Limited, London, England. Tension device for golf ball winding machines. 1,865,577; July 5.
Macbeth, Colin, Birmingham, assignor to Dunlop Rubber Company Limited, London, England. Diameter-stop and thread-break stop mechanism. 1,865,578; July 5.
MacDonald, Chester R., Monroe, Mich., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Manufacturing composition roofing. 1,865,579; July 5.
MacDonald, John S., Long Island City, N. Y. Apparatus for and method of forming a tunnel. 1,866,416; July 5.
MacIndoe, John F., East Falls, Pa. Pressure coupling for lubrication. 1,865,932; July 5.
Mackert, Anton, Frankfort-on-the-Main, Germany. Purification of aqueous liquids and particularly of waste water from factories. 1,866,417; July 5.
MacLean, Allen D., and C. B. Johnson, assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Liquid seal device for regulators. 1,865,870; July 5.
Macnell, Frederick, H., Boston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch and inclosing structure therefor. 1,866,364; July 5.
Macnell, Frederick H., Boston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch gear and switch and door locking mechanism. 1,866,365; July 5.
Madden, Frank A., Los Angeles, Calif. Beverage dispenser. 1,865,773; July 5.
Madsen, Niels P., and J. A. G. Jensen, Chicago, assignors of one-third to Louis Platter, Oak Park, Ill. Window construction. 1,865,774; July 5.
Magill-Weinsheimer Company. (See Spiel, Robert E., assignor.)
Malcolm, Robert, et al. (See Moran, J. L., and Lee, assignors.)
Malcolm, Theodore, New York, N. Y. Pencil or similar article. Des. 87,308; July 5.
Mandel, Arthur C., New York, N. Y. Safety control for gasoline dispensing systems. 1,866,262; July 5.
Mandelbaum, Malvin R., Elizabeth, assignor to The Gray Processes Corporation, Newark, N. J. Refining hydrocarbons. 1,865,474; July 5.
Manrodt, Henry, Newark, N. J. Rotary valve combustion engine. 1,866,119; July 5.
Manville Jenckes Company. (See Lockhart, George R., assignor.)
Mappes, William L., assignor to The Corcoran-Brown Lamp Company, Cincinnati, Ohio. Lamp socket holding device. 1,865,933; July 5.
Marchant Calculating Machine Company. (See Friden, Carl M. F., assignor.)
Marchese, John, Portland, and M. B. D'Orsay, Aloha, Oregon, assignors, by mesne assignments, to Tire Savers Corporation, Ltd., San Jose, Calif. Pressure indicator. 1,865,871; July 5.
Marcus, Samuel, assignor, by mesne assignments, to Margon Corporation, New York, N. Y. Movable eye set for dolls. 1,865,475; July 5.
Margon Corporation. (See Marcus, Samuel, assignor.)
Marine, Field R., Gary, Ind. Protective device. 1,866,048; July 5.
Marsene Products Co. (See Kratz, Edouard M., assignor.)
Marsh, Hallan N., Los Angeles, Calif. Load balancing crank. 1,866,049; July 5.
Marsh, Harry V., Chicago, Ill. Can display easel. 1,865,534; July 5.
Marsh, Harry V., Chicago, Ill. Easel. 1,865,934; July 5.
Marshall Field & Company. (See Blayney, Wilson L., assignor.)
Marshall, Fred C., and J. L. Newport, Said Marshall assignor to M. Hanrahan, Pasadena, Calif. Cord anchoring device. 1,865,935; July 5.
Martell, Charles F. (See Witke, A., Huetten, Rosemann, Molling, and Martell.)
Martin, Glenn L., Co., The. (See Chevrolet, Louis, and C. L., assignors.)
Martin, Joseph J., assignor of one-half to H. Burris, New Castle, Ind. Clutch construction. 1,865,936; July 5.
Martin, William A., Brooklyn, N. Y. Hydraulic wheel. 1,866,476; July 5.
Martocello, Joseph A., sr., Philadelphia, Pa. Water distributor for condensers of ice manufacturing systems. 1,865,775; July 5.
Maschinenfabrik Augsburg-Nurnberg A. G. (See Duwe, Friedrich, assignor.)
Maschinenfabrik Augsburg-Nurnberg A. G. (See Wilhelm, Ottmar, assignor.)
Massey-Harris Company. (See Verity, William J., assignor.)
Mattingly, Harold W., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Light cell control. 1,865,937; July 5.
May Hosiery Mills. (See Smith, William L., jr., assignor.)
Mayer, Charles, Paris, France. Piston pump for medical purposes. 1,866,217; July 5.
McBee Binder Company. (See Rutkoskie, George A., assignor.)
McCabe, Charles J., Long Beach, and I. Schoenholz, Cedarhurst, N. Y. Hand-bag. 1,865,938; July 5.
McCann, Clyde D., assignor to Capital City Electric Company, Des Moines, Iowa. Combination light fixture and mirror. Des. 87,309; July 5.
McCargar, Joseph R. (See Richardson, Bayard E., assignor.)
McCullough, Campbell R., Anniston, Ala., assignor to Swann Research, Inc. Production of diphenyl monosulphonic acid. 1,865,776; July 5.
McCullough, Ida B. (See Bilderback, H. S., and McCullough.)
McKee, Arthur G., Cleveland, Ohio. Bell rod swivel support. 1,865,476; July 5.
McKee, Harry H., and C. T. Walter, assignors, by mesene assignments, to Industrial Patents Corporation. Chicago, Ill. Display and vending method and device. 1,866,511; July 5.
McKenney, Alma R. (See Forbes, Edward P., assignor.)
McKenney, William H. (See Forbes, Edward P., assignor.)
McKinnon, James E. (See Cave, Edward U., assignor.)
McManaman, Patrick J., Cleveland, Ohio. Automobile signal. 1,865,777; July 5.
McMillan Book Company. (See McMillan, John L., assignor.)
McMillan, John L., assignor to McMillan Book Company, Syracuse, N. Y. Loose-leaf binder. 1,866,050; July 5.
McMillan, John W. (See Ring, Eugene, assignor.)
McPhee, William F., Chicago, Ill. Boiler construction. 1,865,939; July 5.
McWane Cast Iron Pipe Company. (See McWane, James R., assignor.)

McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Method of and apparatus for assembling pipe joint elements. 1,866,051; July 5.
McWilliams, William W., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Tool for handling clamping members. 1,866,120; July 5.
Meany, Robert E., assignor to Wm. Wrigley Jr. Company, Chicago, Ill. Confection package. 1,865,535; July 5.
Mears, Morton A., and D. P. Hynes, assignors to Chicago Forging & Manufacturing Co., Chicago, Ill. Hood latch. 1,865,778; July 5.
Medart, Fred, Manufacturing Company. (See Albach, Frank, assignor.)
Meehan, Paul A., Cleveland, Ohio, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa. Sheet annealing furnace. 1,866,121; July 5.
Meerwein, Hans, and H. Morschel, Konigsberg, assignors to the Firm Schering-Kahlbaum A. G., Berlin, Germany. Production of acetone. 1,865,940; July 5.
Meffert, Hermann. (See Pink, Leonhard, assignor.)
Melcher, Lee W., West De Pere, Wis., assignor to The Fafnir Bearing Company, New Britain, Conn. Car axle bearing. 1,866,263; July 5.
Melcher, Lee W., De Pere, Wis., assignor to The Fafnir Bearing Company, New Britain, Conn. Car truck. 1,866,264; July 5.
Meidahl, Horace S., Charleston, W. Va. Vanity dresser. 1,866,314; July 5.
Meller, John. (See Royle, J. S., and Mellor.)
Mergott, J. E., Co. (See Hiering, William C., assignor.)
Merrill, Patterson D., assignor to M. B. Skinner Co., South Bend, Ind. Making a cutter. 1,866,315; July 5.
Merrill, Samuel I., Los Angeles, and W. D. Merrill, Sierra Madre, Calif. Door locking mechanism for banks and the like. 1,865,779; July 5.
Merrill, Wallace D. (See Merrill, Samuel I. and W. D.)
Merritt, George D. (See Fisher, Adlai E., assignor.)
Mesinger, Frederick, Mount Vernon, N. Y. Saddle. 1,865,872; July 5.
Messer, William E., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Manufacture of mercapto benzothiazole. 1,865,477; July 5.
Messina, Eugene, et al. (See Dobbins, Timothy C., assignor.)
Metheny, Sologney B. (See Murphy, M. F., and Metheny.)
Metlox Corporation. (See Prouty, Theodore C., assignor.)
Metropolitan Engineering Company. (See Hoffer, Le Roy H., assignor.)
Metzner, Albert W. (See Sherman, J. Q., and Metzner.)
Meyercord Company, The. (See Johnson, Alvin O., assignor.)
Michel, René, Argenteuil, France. Rolling mill. 1,865,941; July 5.
Michelin, André J., Paris, assignor to Michelin et Cie., Clermont-Ferrand, France. Pneumatic tire valve. 1,865,580; July 5.
Michelin et Cie. (See Michelin, André J., assignor.)
Michigan Steel Corporation. (See Steele, John H., assignor.)
Miles, Donald H. (See Paxson, Willard M., assignor.)
Millard, Irwin W., assignor to Industrial Gloves Corporation, Chicago, Ill. Armored foot and ankle protector. 1,865,702; July 5.
Miller, Dorr, Detroit, Mich., assignor to The Dura Company, Toledo, Ohio. Combined door latch and kick out assembly. 1,865,581; July 5.
Miller, Frank J., Hollywood, Calif. Pump. 1,865,873; July 5.
Miller, George, assignor to Miller Wholesale Drug Company, Cleveland, Ohio. Nebulizer. 1,865,942; July 5.
Miller, H. H., Industries Company, The. (See Miller, Morris E., assignor.)
Miller, Morris E., assignor to The H. H. Miller Industries Company, Canton, Ohio. Equipment for freezing and packing materials. 1,866,316; July 5.
Miller, Samuel C., Louisville, Ky. Cigarette and cigarette package. 1,865,943; July 5.
Miller Wholesale Drug Company. (See Miller, George, assignor.)
Miller, William J., Swissvale, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Apparatus for forming articles of glass. 1,866,506; July 5.
Mills, William A., Port Chester, N. Y., assignor to Foran Boiler Company, Inc. Steam generator or boiler. 1,865,944; July 5.
Milwaukee Stamping Company. (See Otten, Benjamin A., assignor.)
Miner, Arlow W., Sioux City, Iowa. Container. 1,866,317; July 5.
Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)
Miner, W. H., Inc. (See Heitner, William A., assignor.)
Minshall, Robert J. (See Monteith, C. N., Minshall, and Sanders.)
Mishawaka Rubber and Woolen Manufacturing Company. (See Futter, C. J., and Blair, assignors.)
Mitchell, James G., Belfast, Northern Ireland. Spring hinge. 1,866,218; July 5.
Mitchell, Mark D., Independence, Kans. Torpedo for shooting oil wells. 1,865,874; July 5.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heat exchange unit. 1,865,536; July 5.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heating device. 1,866,122; July 5.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Molling, John P. (See Witke, A., Huetten, Rosemann, Molling, and Martell.)
Monarch Oil Well Air Drill Co. Ltd. (See Yungling, Paul, assignor.)
Monforts, A. (See Monforts, J., and Wirtz, assignors.)
Monforts, Joseph, and F. Wirtz, assignors to A. Monforts, Munchen-Gladbach, Germany. Cloth doubling machine. 1,865,945; July 5.
Mono Containers Limited. (See Royle, J. S., and Mellor, assignors.)
Monteith, Charles N., R. J. Minshall, and J. C. Sanders, assignors to Boeing Airplane Company, Seattle, Wash. Airplane. Des. 87,310; July 5.
Moore, Chester J., Chicago, Ill. Driving and steering mechanism for wheeled toys. 1,866,477; July 5.
Moore, Raymond G., and A. Claud-Mantle, assignors to The Bassick Company, Bridgeport, Conn. Anti-rattle dovetail for doors. 1,865,875; July 5.
Moore, Raymond G., and A. Claud-Mantle, assignors to The Bassick Company, Bridgeport, Conn. Antirattle dovetail for doors. 1,865,876; July 5.
Moore, William J., Washington, D. C., assignor of one-half to J. Janney, Leesburg, Va. Handle for automobile doors and the like. Des. 87,311; July 5.
Moosherr, John, assignor to Liberty Lace and Netting Works, New York, N. Y. Lace. Des. 87,312; July 5.
Moran, John L., and A. J. Lee, Spokane, Wash., assignors of one-fourth to R. Malcom, Chicago, Ill., and one-fourth to F. E. P. Wilder, Spokane, Wash. Pneumatic tool retaining means. 1,865,439; July 5.
Morgan, Bee. (See Pope, J. H., and Morgan.)
Morland & Impey Limited. (See Fitz Power, Richard, assignor.)
Morrison, Montford, Chicago, Ill., assignor, bye mesne assignments, to Westinghouse Lamp Company. X-ray tube. 1,865,440; July 5.
Morschel, Heinrich. (See Meerwein, H., and Morschel.)
Morse, Frank L., Ithaca, N. Y. Radio control device. 1,865,537; July 5.
Mortensen, Frantz, Helsingfors, Finland. End or bottom bearing for quick revolving shafts or spindles. 1,866,478; July 5.
Morton, Charles R., et al. (See Pennington, Harold C., assignor.)
Morton, Edmund R. (See Stoller, H. M., and Morton.)
Morton, Rolla A., Long Beach, Calif. Traction truck for vehicles. 1,865,463; July 5.
Moss, H. P., Detroit, Mich. Combined radiator guard, bumper support and tow book for trucks. 1,866,265; July 5.
Most, Lucifer J., Kearny, N. J., assignor of one-half to R. W. Wilson, New York county, N. Y. Container. 1,865,639; July 5.
Motor Products Corporation. (See Kellogg, Homer G., assignor.)
Mougey, Harry, and C. R. Short, assignors to General Motors Research Corporation, Detroit, Mich. Cooling device. 1,865,877; July 5.
Mountz, Ray C., Altoona, Pa. Four wheel brake mechanism. 1,866,479; July 5.
Mountz, Ray C., Altoona, Pa. Four wheel brake mechanism. 1,866,480; July 5.
Mueller, Emil L., Rutherford, N. J. Quick-change electroholder for printing machines. 1,865,478; July 5.
Mueller, Emil L., Rutherford, N. J. Safety device for printing presses and the like. 1,865,479; July 5.
Muhlenbruch, Fred, Bronx, N. Y. Sprocket chain. 1,866,318; July 5.
Muldoon, Bernard F., Mountainview, N. J., assignor to H. Hyman, Brooklyn, N. Y. Combined clock case and support therefor. Des. 87,313; July 5.
Mulholland, Vergil, and W. T. Honiss, West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Heat regulator for leers. 1,866,366; July 5.
Murphy, Murdick F., and C. B. Metheny, assignors to Sterling Photo Manufacturing Co., Beaver Falls, Pa. Film-developing tank. 1,866,521; July 5.
Mutscheller, Arthur, New York, assignor to Wappler Electric Company, Inc., Long Island City, N. Y. Methods of and apparatus for controlling the direction of X-rays. 1,865,441; July 5.
Naamlooze Vennootschap International Octroolbureau. (See Schoonenberg, Pancras, assignor.)
Naamlooze Vennootschap Noury & Van der Iande's Handelmaatschappij. (See van der Lee, Gerritt, assignor.)
Naeser, Gerhard, assignor to Kaiser-Wilhelm Institute für Eisenforschung, Dusseldorf, Germany. Measuring the temperatures of incandescent bodies. 1,865,878; July 5.
Naimaster, Frederick, London, England. Mouthpiece for tobacco pipes, cigar or cigarette holders, or other articles to be held by the teeth. 1,865,780; July 5.
Najarian, Garabed, New Haven, Conn. Wire drawing machine. 1,865,781; July 5.
Nantua, Jean. (See Castella, R., and Nantua.)
Nardini, Anthony M., Philadelphia, Pa. Rail bond. 1,865,717; July 5.
National Cash Register Company, The. (See Goldberg, Maximilian M., assignor.)

National Cash Register Company, The. (See Shipley, Bernis M., assignor.)
National Folding Box Company. (See Reichel, Ferdinand, assignor.)
National Malleable and Steel Castings Company. (See Bossert, Edward, assignor.)
National Net & Twine Co. Ins. (See Barbour, John E., assignor.)
National Rubber Machinery Company. (See Iverson, Cato, assignor.)
National Welding Equipment Company. (See Hammon, George L., assignor.)
Naugatuck Chemical Company, The. (See Messer, William E., assignor.)
Neidich, Samuel A., Edgewater Park, N. J. Forming tubes of celluloid and the like. 1,866,168; July 5.
Neighbors, Charles C., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Magnetic material, making the same, and articles made therefrom. 1,866,123; July 5.
Nein, William C., and T. W. Varley, New York, N. Y. Alternating current motor. 1,866,507; July 5.
Nerad, Anthony J. Schenectardy, N. Y., assignor to General Electric Company. Apparatus for heat removal by mercury. 1,866,367; July 5.
Nettel, Jiří, Prague, Czechoslovakia. Hydraulic change-speed mechanism. 1,866,266; July 5.
Neugass, Miriam N., New York, N. Y. Statuette or similar article. Des. 87,314; July 5.
Neuhold, Walter, Berlin, Germany. Cable impregnating apparatus. 1,866,418; July 5.
Newhouse, Walter F., Benton Harbor, Mich. Feed dog. 1,865,879; July 5.
Newport, John L. (See Marshall, F. C., and Newport.)
Nichols, Malcolm P. (See Recker, A. C., and Nichols.)
Nicolson, Alexander M., assignor to Communication Patents, Inc., New York, N. Y. Stereovision. 1,866,169; July 5.
Nicolson, Alexander M., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Production of oscillations from piezo electric crystals. 1,866,267; July 5.
Niedereither, Hans, Munich, assignor to Lawaczeck Gesellschaft mit beschrankter Haftung, Berlin, Germany. Decomposer, particularly for the electrolysis of water under pressure. 1,865,946; July 5.
Nielsen, Jens P. T., Lake Benton, Minn. Method of and machine for causing fecundation of plants. 1,866,219; July 5.
Norquist, Victor C., assignor to Butler Manufacturing Company, Kansas City, Mo. Closure for tank apertures. 1,865,538; July 5.
Norton Company. (See Jeppson, G. N., and Larsson, assignors.)
Norton, Mary C., Corona, N. Y. Catamenial appliance. 1,866,220; July 5.
Norton, Raymond J., Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,866,419; July 5.
Norton, Raymond J., Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind. Brake drum. 1,866,420; July 5.
Norton, Raymond J., Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind. Brake operator. 1,866,481; July 5.
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Machine for forming perforated blanks. 1,865,947; July 5.
Nusbaum, Earl H., Fort Wayne, Ind. Ice box candy rack. 1,865,582; July 5.
Nutt, William F., Newburgh, N. Y. Deodorant and cleansing powder. 1,865,948; July 5.
Nycum, Homer C. Wilkinsburg, and J. H. Ashbaugh, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company. Regulator system. 1,865,949; July 5.
Nyman, Alexander, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,865,640; July 5.
Oberlin, Max, Darmstadt, Germany. Production of normal levorotatory 1-(para-aminophenyl)-2-methylamino-propanol-1. 1,865,880; July 5.
Oertli, Josua, Berlin-Charlottenburg, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Conveying apparatus, particularly for electroplating. 1,866,124; July 5.
O'Hara, Charles T., and W. A. Quirt, Bellingham, Wash.; said O'Hara assignor to said Quirt. Fishing-rod reel. 1,866,052; July 5.
Ohio Brass Company, The. (See Kirk, Edward C., assignor.)
Ohio Brass Company, The. (See Perl, Leo C., assignor.)
Ohio Brass Company, The. (See Pipes, Pliny P., assignor.)
Oil Engine Development Company. (See Cummons, Clessie L., assignor.)
Oilgear Company, The. (See Ferris, Walter, assignor.)
Old Town Company. (See Chapman, Ralph W., assignor.)
Oldenburg, Alfred, Berlin, Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Electric tool. 1,866,368; July 5.
Oliver Iron and Steel Corporation. (See Heim, Warren M., assignor.)
Olsen, Lawrence S., Chicago, Ill. Marine propelling and steering mechanism. 1,866,482; July 5.
Olson, William G. B., Kansas City, Kans. Hydrocarbon burner mechanism. 1,865,782; July 5.
O'Neill, Walter I., New York, N. Y. Advertising apparatus. 1,866,170; July 5.
Onken, Heinrich, Oldenburg, Germany. Circuit testing instrument. 1,865,583; July 5.
Orr, Alfred B., Belleville, Ill. Liquid clarifier. 1,865,480; July 5.
Orthmann, August C., assignor to C. P. Vogel, Milwaukee, Wis. Leather and making the same. 1,865,783; July 5.
Otis Elevator Company. (See Brady, Thomas, assignor.)
Otten, Benjamin A., Wauwatosa, Wis., assignor to Milwaukee Stamping Company, Milwaukee, Wis. Bag frame. 1,866,483; July 5.
Ottinger, Nathan, New York, N. Y. Combined bill fold and coin purse. 1,865,881; July 5.
Owen, Henry A. (See Rockwell, S. F., and Owen.)
Owens, Freeman H., New York, N. Y. Sliding sound film records. 1,866,268; July 5.
Owens-Illinois Glass Company. (See Soubier, Leonard D., assignor.)
Owens, Raymond B. (See Worrall, R. H., and Owens.)
Packard Motor Car Company. (See Christman, John M., assignor.)
Packard Motor Car Company. (See Goodlin, Fred C., assignor.)
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Packers Specialty Company. (See Allen, C. H., and Robbeloth, assignors.)
Page, Marshall H., assignor to Line-O-Graph Company, Kansas City, Mo. Advertising device. Re18,512; July 5.
Page, Samuel H., Stratford, assignor to The American Fabrics Company, Bridgeport, Conn. Lace. Des. 87,315; July 5.
Page, Samuel H., Stratford, assignor to The American Fabrics Company, Bridgeport, Conn. Lace. Des. 87,316; July 5.
Paisseau, Jean, Paris, France. Process for the manufacture of pearl essence. 1,865,703; July 5.
Palmer, Bruce, U. S. Army, Fort Riley, Kans. Armored vehicle. 1,865,882; July 5.
Parker Pen Company, The. (See Fuerst, Edwin W., assignor.)
Parker, Waveard D., Bay Village, assignor to The Elwell Parker Electric Company, Cleveland, Ohio. Industrial truck. 1,866,784; July 5.
Parker, William S., assignor to Burson Knitting Company, Rockford, Ill. Dust puff. 1,865,785; July 5.
Parrott, Warley L., East Orange, N. J., assignor to Westinghouse Lamp Company. Manufacturing noninductive helical filaments. 1,865,442; July 5.
Patent and Licensing Corporation, The. (See MacDonald, Chester R., assignor.)
Patterson, James O., Lower Merion Township, Montgomery County, Pa. Implement for loosening bottle stoppers. 1,866,125; July 5.
Paul, Amasa C. (See Horton, Elsie H., assignor.)
Paul, Talbert W., assignor to Deere & Company, Moline, Ill. Draft device for mowers. 1,865,786; July 5.
Pavone, Peter D. B., Bridgeport, Conn. Sand screen. 1,866,171; July 5.
Paxson, Willard M., Dowagiac, assignor of one-half to D. H. Miles, Cassopolis, Mich. Rake cleaner. 1,866,269; July 5.
Payne, Paul D., Irvington, and M. Iversen, Brooklyn, N. Y., assignors to T. A. Edison, Incorporated, West Orange, N. J. Apparatus for use in the production of storage battery electrode elements. 1,866,172; July 5.
Payson, Aurin E., and M. P. Wetmore, Norwich, Conn. Heat-insulating receptacle. 1,866,126; July 5.
Peabody Engineering Corporation. (See Warner, Samuel T., assignor.)
Peck, Gordon V., Bloomfield, N. J. Mechanical movement. 1,865,704; July 5.
Peckham, Charles F., deceased, Providence, R. I.; Isabelle R. Peckham, executrix. Differential valve. 1,866,319; July 5.
Peckham, Isabelle R., executrix. (See Peckham, Charles F.)
Peerless Ice Machine Company. (See Kritzer, Richard W., assignor.)
Peltier Glass Company, The. (See Peltier, Sellers H., assignor.)
Peltier, Sellers H., assignor to The Peltier Glass Company, Ottawa, Ill. Device for making vitreous like objects. 1,865,787; July 5.
Pelton, Earl L. (See Strosacker, C. J., Kennedy, and Pelton.)
Pencil Mechanism Corporation. (See Woelm, Alfred, assignor.)
Penfold, Albert E., Birmingham, Ala., assignor to Dunlop Tire and Rubber Corporation of America, Buffalo, N. Y. Tennis ball and the like. 1,865,481; July 5.
Pennington, Harold C., East Orange, N. J., assignor to J. B. Grison, New York, N. Y., and C. R. Morton, Summit, N. J. Electric steam radiator. 1,866,221; July 5.
Pennsylvania Crusher Company. (See Keiper, Edwin H., assignor.)
Pennsylvania State College, The. (See Lorand, Eugene J., assignor.)
Penny, J. C., Company. (See Wieland, George G., assignor.)
Perl, Leo C., assignor to The Ohio Brass Company, Mansfield, Ohio. Rail bond. 1,865,718; July 5.

Perry, Emanuel J., New Bedford, Mass., assignor, by mesne assignments, to The American Laundry Machinery Company, Norwood, Ohio. Control system and mechanism. 1,865,584; July 5.
Perry, John E., Youngstown, Ohio, and G. Ramsey, Brooklyn, N. Y. Method and apparatus for continuous casting of steel billets. 1,865,443; July 5.
Perry, Kenneth M., Montreal, Quebec, assignor to G. C. Riley, Montreal, Canada. Rock drill. 1,865,585; July 5.
Perser Corporation, The. (See Sas, Elmer, assignor.)
Persons, Laurence M., Chicago, Ill. Damper control for heating furnaces. 1,865,641; July 5.
Persons, Laurence M., assignor to Emerson Electric Manufacturing Co., St. Louis, Mo. Fan. 1,866,127; July 5.
Peshette, James L., Peru, N. Y. Tire spreading machine. 1,866,518; July 5.
Petroff, Grigori, Moscow, Union of Socialist Soviet Republics. Treating products obtained from plastic masses. 1,865,586; July 5.
Petskeyes, Charles H., assignor to The J. A. Fay & Egan Company, Cincinnati, Ohio. Coupling for sander drum shafts. 1,865,950; July 5.
Peyinghaus, Walter, Egge, Germany, assignor to Isothermas Corporation of America, New York, N. Y. Oil check ring for journal boxes. 1,865,951; July 5.
Pfeiffer, Conrad L., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Clutch. 1,866,128; July 5.
Pfiffner, Emil Fribourg, Switzerland, assignor, by mesne assignments, to Radio Patents Corporation, New York, N. Y. Line protecting and message transmitting system. 1,865,952; July 5.
Philadelphia Storage Battery Company. (See Grimditch, W. H., and Earnshaw, assignors.)
Phinney, Edward D., Mount Vernon, assignor of one-half to Paul Kolisch, New York, N. Y. Translating sound. 1,865,705; July 5.
Phoenix-Hermetic Company. (See Crabbe, Lindsay T., assignor.)
Pidcock, Kevin J. (See West, F. B., Pidcock, and Donkin.)
Pierson, Hilding L. (See Heisel, R. H., and Pierson.)
Pietzsch, Richard H., Philadelphia, Pa. Microtome. 1,865,539; July 5.
Pink, Leonhard, Berlin, assignor to H. Meffert, Hamburg, Germany. Quinine preparation. 1,865,953; July 5.
Pipes, Pliny P., assignor to The Ohio Brass Company, Mansfield, Ohio. Electrical connecter. 1,865,720; July 5.
Pipes, Pliny P., assignor to The Ohio Brass Company, Mansfield, Ohio. Rail bond and method of bonding. 1,865,721; July 5.
Pipes, Pliny P., assignor to The Ohio Brass Company, Mansfield, Ohio. Rail bond. 1,865,722; July 5.
Pipes, Pliny P., assignor to The Ohio Brass Company, Mansfield, Ohio. Rail bond. 1,865,723; July 5.
Pittsburg Boiler and Machine Company, The. (See Waterman, Clifford W., assignor.)
Pittsburgh Equitable Meter Company. (See MacLean, A. D., and Johnson, assignors.)
Platt, Herbert. (See Dreyfus, C., and Platt.)
Platter, Louis. (See Madsen, N. P., and Jensen, assignors.)
Pledger, Martin L., assignor to Exan Cotton Mills, Atlanta, Ga. Knitting needle. 1,866,222; July 5.
Pneu-Hydro Road Machinery Company. (See Price Harvey E., assignor.)
Podel, Abraham, assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y. Package assembling machine. 1,866,369; July 5.
Pope, John H., and R. Morgan, Acworth, Ga. Thin place detector. 1,866,063; July 5.
Pottern, George, Springfield, Mass. Hygienic collar strip container for attachment to barbers' chairs. 1,866,370; July 5.
Powers, Herman, Bayonne, N. J. Printing furniture. 1,866,223; July 5.
Powers Regulator Company, The. (See Snediker, Morton O., assignor.)
Powers, Thomas F., Torrance, Calif. Preheating furnace. 1,865,954; July 5.
Precision Castings Company. (See During, William J., assignor.)
Precision Metal Workers. (See Grunwald, Albert C., assignor.)
Prentice, Allan L., Cleveland Heights, and S. G. Buckett, East Cleveland, Ohio, and C. C. Dibble, Indianapolis, Ind. Apparatus for surfacing railway journal box wedges. 1,865,955; July 5.
Price, Harvey E., assignor to Pneu-Hydro Road Machinery Company, Cadillac, Mich. Road scraper. 1,865,587; July 5.
Priem, Harry E., Dunmore, Pa. Wedge clamp. 1,866,484; July 5.
Priest, Harry R., Londonville, Ohio. Dispensing receptacle. 1,865,956; July 5.
Priest, Harry R., Loudonville, Ohio. Suction-cup for artificial teeth. 1,865,957; July 5
Prince, David C., Schenectady, N. Y., assignor to General Electric Company. Circuit interrupting system. 1,866,371; July 5.
Prinz, Josef, Dinslaken, Germany. Boiler for hot water and low pressure steam-heating. 1,865,958; July 5.
Pritchett, Allen M., Pacific, Mo. Fireless brooder. 1,866,054; July 5.
Prosperity Company. (See Dorsey, William H., assignor.)
Prouty, Theodore C., Hermosa Beach, assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif. Roofing. 1,865,959; July 5.
Provincial Incandescent Fittings Company Limited. (See Webber, J., and Cooper, assignors.)
Puff, Walter. (See Stein, R., Euler, and Puff.)
Pulvis Aktiengesellschaft. (See Liffander, Johan A., assignor.)
Punte, William F., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Display packer's container. 1,866,224; July 5.
Purdy, Sparrow E. (See Johnston, William A., assignor.)
Quirt, William A. (See O'Hara, C. T., and Quirt.)
Radio Corporation of America. (See Wolff, Irving, assignor.)
Radio Patents Corporation. (See Pfiffner, Emil, assignor.)
Raftis, Lillian B., executrix. (See Raftis, Richard W., assignor.)
Raftis, Richard W., deceased; L. B. Raftis, executrix, assignor to L. B. Raftis, Chicago, Ill. Wall. 1,866,129; July 5.
Ralph, Laura J., administratrix. (See Ralph, Nate.)
Ralph, Nate, deceased, Winona, Minn.; L. J. Ralph, administratrix of said Nate Ralph. Electric switch device. 1,866,422; July 5.
Ramsey, George. (See Perry, J. E., and Ramsey.)
Rand McNally & Company. (See Hanses, William A., assignor.)
Ratsiczak, Thomas F., Troy, Ohio. Washing machine. 1,866,519; July 5.
Raule, Clifford T., Brookline, Pa. Multiple groove grinder. 1,865,642; July 5.
Raus, Anton J., Cleveland, Ohio. Garment former. 1,866,173; July 5.
Raves, Edward, assignor to Raves Manufacturing Co., Ltd., Los Angeles, Calif. Advertising sign. 1,865,725; July 5.
Raves Manufacturing Co. (See Raves, Edward, assignor.)
Raymond Concrete Pile Company. (See Upson, Maxwell M., assignor.)
Raymond Concrete Pile Company. (See Upson, M. M., and Watt, assignors.)
Raymond Concrete Pile Company. (See Watt, Elihu D., assignor.)
Raymond Concrete Pile Company. (See Watt, E. D., and Whiteley, assignors.)
Raymond, Gwynne, Kansas City, Mo. Conveyer system. 1,865,788; July 5.
Recker, Adolph C., Oakville, and M. P. Nichols, New Haven, assignors to The Chase Companies, Incorporated, Waterbury, Conn. Producing radiator units. 1,865,444; July 5.
Reed, Clarence E., Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Earth boring drill. 1,865,706; July 5.
Reed, Percival K. (See Weygandt, L. G., and Reed.)
Reel, Gordon, New York, N. Y. Aeroplane. 1,865,789; July 5.
Reeves, Donald H., Dayton, Ohio, assignor, by mesne assignments, to Liquidometer Corporation, Long Island City, N. Y. Liquid level gauge. Re18,514; July 5.
Regelson, Rubin, New York, N. Y. Plant box. 1,865,960; July 5.
Regensburger, Richard W. (See De Vout, A. W., and Regensburger, assignors.)
Reichel, Ferdinand, assignor to National Folding Box Company, New Haven, Conn. Dispensing carton. 1,866,130; July 5.
Reid, Allan E., Allston, assignor to Reid Piston Company, Brookline, Mass. Piston and connecting rod. 1,866,057; July 5.
Reid, Frederick G., and N. L. Cornell, assignors to Dunlap Tire and Rubber Corporation, Buffalo, N. Y. Motor driven tread stitcher. 1,865,540; July 5.
Reid, Frederick M., assignor to Fruehauf Trailer Company, Detroit, Mich. Tank vehicle frame construction. 1,866,055; July 5.
Reid Piston Company. (See Reid, Allan E., assignor.)
Reimann, Albert, Ludwigshafen-on-the-Rhine, Germany. Production of a di-sodium phosphate with two molecules of water of crystallization. 1,865,588; July 5.
Rekar, Jay J., Los Angeles, Calif. Portable-standard transformer for orificial applicators. Des. 87,317; July 5.
Remington Rand Inc. (See Day, William H., assignor.)
Remington Rand Inc. (See Hutchings, Le Roi E., assignor.)
Remington Rand Inc. (See Sibley, Edward W., assignor.)
Remy, Earl T., Crestline, assignor to Voisard, Incorporated, Shiloh, Ohio. Ventilator. 1,865,961; July 5.
Reo Motor Car Company. (See Furgason, Claude E., assignor.)
Republic Flow Meters Co. (See Leahy, Frank E., assignor.)
Reynolds, Frank C. (See Bennett, I. T., and Reynolds.)
Reynolds, Frank C., New York, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation. Radiator. 1,865,962; July 5.
Reynolds, Harold F. (See Wood, J., and Reynolds.)
Reynolds, Mary C., Seattle, Wash. Baby pants. 1,865,541; July 5.

Reynolds Spring Company. (See Wisner, Abram C., assignor.)
Rhodes, John E. (See Cody, J. M., and Rhodes.)
Richards, Willard F., De Pew, assignor to The Symington Company, New York, N. Y. Side frame with equalizing journal boxes. 1,865,589; July 5.
Richardson, Bayard E., assignor of three-fourth to J. R. McCaragar, Grand Rapids, Mich. Desk construction. 1,866,174; July 5.
Richter, Wolfgang D., Philadelphia, assignor to Wildman Mfg. Co., Norristown, Pa. Full fashioned knitting machine. 1,865,707; July 5.
Rickey, Loren W., assignor of one-half to W. O. Kerrick, Santa Cruz, Calif. Curtain drying frame. 1,866,056; July 5.
Riedel, Walter W., assignor to Delco Products Corporation, Dayton, Ohio. Hydraulic shock absorber. 1,865,482; July 5.
Riedel, Walter W., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,865,483; July 5.
Riley, George C. (See Perry, Kenneth M., assignor.)
Ring, Eugene, New York, N. Y., assignor of one-half to J. W. McMillan, Marshfield, Mass. Indentification device. 1,865,643; July 5.
Ritchey, Andrew M., San Antonio, Tex. Train order signal. 1,866,485; July 5.
Ritossa, Giovanni, Newport News, Va. Top spinning holder. 1,866,486; July 5.
Ritter, F., & Sohn, the Firm. (See Ritter, Franz, jr., assignor.)
Ritter, Franz, jr., Pasing-Munich, assignor to the Firm F. Ritter & Sohn, Pasing-Munich, Bavaria, Germany. Device for squeezing segmental fruit slices. 1,866,587; July 5.
Roberts, Arthur, and J. Shelton, East St. Louis, Ill. Sign. 1,865,963; July 5.
Roberts, Lewis E., Flint, Mich. Fresh flower door badge. 1,866,423; July 5.
Robinson, Robert H. (See Holmes, H. H., and Robinson.)
Rochester Folding Box Co. (See Fancher, Howard M., assignor.)
Rockwell, Edward A., Chicago, Ill. Power unit. 1,865,644; July 5.
Rockwell, Samuel F., North Andover, and H. A. Owen, Foxboro, assignors to Davis & Furber Machine Company, North Andover, Mass. Spinning frame. 1,866,058; July 5.
Roebuck, Alfred L., Winchendon, Mass. Ice cream freezer. 1,865,724; July 5.
Rogers, George H., jr., Oak Park, Ill. Collapsible support for baby swings. 1,866,175; July 5.
Rogers Products Company. (See Albertine, Herman, assignor.)
Rohlfs, Harry C., Schenectady, N. Y., assignor to General Electric Company. Cellulose resin product and its preparation. 1,866,372; July 5.
Rohrbach, Adolf, Berlin-Wilmersdorf, Germany, assignor to Rohrbach Patents Corporation. Monoplane. 1,865,964; July 5.
Rohrbach Patents Corporation. (See Rohrbach, Adolf, assignor.)
Romberg, Conrad J. (See Buehler, L., jr., and Romberg.)
Rooney, Marion, Emeryville, Calif. Cigarette holder. Des. 87,318; July 5.
Roos, Wendel V., New York, N. Y. Opening and closing device for collapsible tubes. 1,865,484; July 5.
Rose, John J. (See Shoemaker, F. G., and Rose.)
Rosemann, Otto. (See Witke, A., Huetten, Rosemann, Molling, and Martell.)
Rosenberg Bros. & Co. (See Eaton, Frederick M., assignor.)
Rosendahl, Charles E., Washington, D. C. Mooring mast. 1,865,790; July 5.
Roskin, Israel, New York, N. Y. Finger ring. 1,866,320; July 5.
Ross, Albert S., Dallas, assignor to O. R. Seagraves, Houston Tex. Article handling device. 1,866,321; July 5.
Ross, Warren A., assignor of one-fourth to T. O. Boyd, Long Beach, Calif., and one-fourth to D. M. Carter, Chicago, Ill. Drill controlling apparatus. 1,866,131; July 5.
Roth, Albert. (See Kerrigan, J. and Roth)
Rowe, Irving R., assignor to The Atwood Machine Company, Stonington, Conn. Spinning and twisting machine. 1,866,322; July 5.
Rowe, John C., Caulfield, Victoria, Australia. Lawn edge trimming machine. 1,866,225; July 5.
Royle, John S., Binfield, and J. Meller, Feltham, assignors to Mono Containers Limited, London, England. Liquid-tight carton and closing same. 1,866,488; July 5.
Rubber Service Laboratories Company, The. (See Sibley, Robert L., assignor.)
Ruiz, Charles, Brooklyn, N. Y. Time controlled device. 1,865,965; July 5.
Rusling Wood Inc. (See Staats, Harry B., assignor.)
Russell, Louis J., Richmond Hill, N. Y. Package for displaying merchandise. 1,866,323; July 5.
Russell, Thomas, et al. (See Johnson, George F., assignor.)
Russo, Domenico, Jersey City, N. J. Automatically turning headlight for vehicles. 1,866,324; July 5.
Rutkoskie, George A., assignor to The McBee Binder Company, Athens, Ohio. Heat control for wax carboning presses. 1,865,445; July 5.
Ryan, Stephen J. (See Jackson, C. E., and Ryan.)
Rymes, Christopher E., Lexington, assignor to Edson Manufacturing Corporation, Boston, Mass. Steering gear. 1,865,966; July 5.
S. and D. Engineering Company. (See Sawtelle, Charles A., assignor.)
Sacerdote, Guido M., Bayside, N. Y. Sheet holder and bookmark. 1,865,590; July 5.
Safety Car Heating & Lighting Company, The. (See Godsey, Frank W., assignor.)
Safety Car Heating & Lighting Company, The. (See Von Ohlsen, Louis H., assignor.)
Sage, Herbert R., Los Angeles, Calif. Plant protector. 1,866,059; July 5.
Sainderichin, Nicolas. (See Folliet, A., and Sainderichin.)
Salenius, Elise S. (See Salenius, Erik G. N., assignor.)
Salenius, Erik G. N., assignor to E. Sam. Salenius, Stockholm, Sweden. Separating or churning. 1,866,489; July 5.
Samuels, Albert. (See Lohman, Harry C., assignor.)
Sanders, John C. (See Monteith, C. N., Minshall, and Sanders.)
Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Retarding mechanism. 1,865,591; July 5.
Santos, John R. L., assignor to The Bartlett Hayward Company, Baltimore, Md. Gas holder. 1,865,791; July 5.
Santos, John R. L., assignor to The Bartlett Hayward Company, Baltimore, Md. Gas holder. 1,865,792; July 5.
Santschi, Arthur E. (See Gaetje, J. H., and Santschi.)
Sargent, Grafton F., Fitchburg, Mass. Spinning toy. 1,866,226; July 5.
Sas, Elmer, assignor to The Perser Corporation, New York, N. Y. Protect corners of frangible material. 1,865,485; July 5.
Sawtelle, Charles A., assignor to S. and D. Engineering Company, Detroit, Mich. Piston. 1,865,793; July 5.
"Saya" Gesellschaft zur Herstellung von Hellmich. (See Wehsarg, Richard, assignor.)
Sayers, Albert J. assignor to the Link-Belt Company, Chicago, Ill. Method of and apparatus for providing compressed air for the operation of wash boxes. 1,865,726; July 5.
Scharf, John A., Richwood, Ohio. Merry-go-round. 1,866,490; July 5.
Schering-Kahlbaum A. G. (See Meerwein H., and Morschel.)
Schering-Kahlbaum A.-G. (See Schoeller, W., Jordan, and Clerc.)
Schettler, Gustav A., Leeds, England, assignor to The Turner Tanning Machinery Company, Portland, Me. Machine for and method of operating on hides, skins, leather, and other similar pieces of work. 1,865,542; July 5.
Schilb, Theodore W. (See Warning, W. G., and Schilb.)
Schlafman, Clifford J., Washington, D. C. Radiator. 1,865,794; July 5.
Schlundt, Herman, Columbia, Mo., assignor to United States Radium Corporation, New York, N. Y. Luminous compound and producing luminous objects therewith. 1,866,132; July 5.
Schmerler, Joseph J., Bronx, N. Y. Combined opener and closure for paper milk containers. 1,865,543; July 5.
Schmid, Francis C., United States Navy. Self-indicating refillable electric cartridge fuse. 1,866,491; July 5.
Schmidt, Wilhelm Paul, San Francisco, Calif. Suspensory. 1,866,060; July 5.
Schmidt, William J., Chicago, Ill. Table. 1,866,176; July 5.
Schmieske, Carl, assignor to Deutsche Schiff- und Maschinenbau Aktiengesellschaft, Bremen, Germany. Emptying device for liquid couplings. 1,866,424; July 5.
Schneer, Louis, Waterbury, Conn. Cap for paste tubes. 1,866,177; July 5.
Schneider, Matthew G. (See Slocum, Benjamin A., assignor.)
Schnitter, Sylvester B., Maracaibo, Venezuela. Flow check. 1,865,795; July 5.
Schoel, Fred L., Waterloo, Iowa, assignor to Gem Doughnut Machine Company, Inc., Waterloo, Iowa. Doughnut forming machine. 1,866,061; July 5.
Schoeller, Walter, Berlin-Charlottenburg, H. Jordan, Berlin, Steglitz, and R. Clerc, assignors to Schering-Kahlbaum A.-G., Berlin, Germany. Production of thymol. 1,865,544; July 5.
Schoenholz, Irving. (See McCabe, C. J., and Schoenholz.)
Schoonenberg, Pancras, assignor to Naamlooze Vennootschap International Octrooibureau, Eindhoven, Netherlands. Machine for manufacturing hollow glass bodies. 1,865,967; July 5.
Schoonmaker, William H., Montclair, N. J. Clutch mechanism. 1,866,270; July 5.
Schrader's, A., Son, Incorporated. (See Wahl, John, assignor.)
Schroder, George T., New York, N. Y. Bottle holder and carrier. 1,865,645; July 5.
Schröter, Fritz, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Receiving waves of an order of one meter and one decimeter. 1,866,271; July 5.

Schröter, Fritz, and W. Federmann, assignors to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H Berlin, Germany. Intensity control. 1,865,646; July 5.
Schuppe Walther, Berlin, Germany. Production of monopotassium phosphate. 1,865,968; July 5.
Schuricht, Alfons G., and G. T. Wright, Alton, assignors to Western Cartridge Company, East Alton, Ill. Making shot. 1,865,727; July 5.
Schürmann, Friedrich, assignor to the Firm Aug. Klonne, Dortmund, Germany. Sealing means for fluid storing containers. 1,865,969; July 5.
Schweiter, Walter, Horgen, near Zurich, Switzerland. Cop winding machine. 1,865,970; July 5.
Scott, James. (See Hinchcliffe, W., and Scott.)
Seagraves, O. R. (See Ross, Albert S., assignor.)
Sears, Edward, Deer Lodge, Mont. Weighing device. 1,865,446; July 5.
Seeley, George A., Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y. Cable forming apparatus. 1,866,272; July 5.
Segal, Hyman R., assignor, by mesne assignments, to Segal Safety Razor Corporation, New York, N. Y. Razor and blade. 1,865,971; July 5.
Segal, Hyman R., New York, N. Y. Window shade. 1,865,972; July 5.
Segal Safety Razor Corporation. (See Segal, Hyman R., assignor.)
Selfarth, Frederick G., Chicago, Ill. Roller bearing. 1,865,796; July 5.
Serrell, Robert. (See Artzt, M., and Serrell, assignors.)
Seymour, Frederick W., and D. A. Gillen, Flushing, N. Y. Combined valve and air cushion. 1,865,486; July 5.
Shafer, Samuel, jr., and C. F. Ball, assignors to Chain Belt Company, Milwaukee, Wis. Batch meter. 1,865,592; July 5.
Shakeproof Lock Washer Company. (See Hosking, Richard T., assignor.)
Shaughnessy, Frank R., Troy, Ohio. Planetary stirring machine. 1,866,227; July 5.
Shaw, Harry J., Toledo, Ohio. Concrete mixer. Des. 18,511; July 5.
Shedd, Hugh E., Minneapolis, Minn. Calendar. 1,866,425; July 5.
Sheeran, Hugh J. (See Curran, Thomas A., assignor.)
Shelton, Jack. (See Roberts, A., and Shelton.)
Sheridan, T. W., & C. B., Company. (See Clark, Le Grand L., assignor.)
Sherman, John Q., and A. W. Metzner, Dayton, Ohio; said Metzner assignor to said Sherman. Duplicating material. 1,865,708; July 5.
Sherwell Controls, Inc. (See Didinger, George H., assignor.)
Shields, Curtis W., New York, N. Y. Food cooker. 1,865,973; July 5.
Shimer, William H., Berkeley, assignor to Standard Oil Company of California, San Francisco, Calif. Treating metallic halide residue. 1,865,797; July 5.
Shipley, Bernis M., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,865,647; July 5.
Shoe Form Co. (See De Witt, William J., assignor.)
Shoemaker, Fred G., and J. J. Rose, Dayton, Ohio. Electrical circuit interrupter. 1,866,492; July 5.
Short, Charles R. (See Mougey, H., and Short.)
Sibley, Edward W., Kenmore, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Attachment for addressing machines. 1,865,974; July 5.
Sibley, Robert L., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Vulcanization of rubber. 1,865,728; July 5.
Siegrist, Jacob C., West View, Pa., assignor to James H. Crea, Buffalo, N. Y. Combination wrench. 1,866,426; July 5.
Siemens & Halske, Aktiengesellschaft. (See Gabor, Dionys, assignor.)
Siemens & Halske Aktiengesellschaft. (See Oertli, Josua, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Stockert, Josef, assignor.)
Siemer, John H., Parker, S. Dak. Stove. 1,866,427; July 5.
Sifton, Clifford, Toronto, and L. K. Cheswright, Swansea, Ontario, Canada. Transmission mechanism. 1,865,648; July 5.
Silverman, Evelyn, Brooklyn, N. Y. Sanitary comb. 1,865,975; July 5.
Simmons Company. (See Witke, A., Huetten, Rosemann, Molling, and Martell, assignors.)
Simmons Company. (See Zeyen, Adam, assignor.)
Simon, Daniel, jr., Upton, Mass. Inflated swimming suit. 1,866,062; July 5.
Simon, Fred L., Baltimore, Md. Educational device. 1,866,133; July 5.
Simplex Engineering Company. (See Amsler, Walter O., assignor.)
Simplex Piston Ring Company of America, The. (See Hodge, James G., assignor.)
Simpson, D. A. (See Floyd, William C., assignor.)
Singer, Fred J., Rockville Center, N. Y., assignor to American Telephone and Telegraph Company. Eliminating interference in grounded telegraph systems. 1,865,593; July 5.
Sinner, Emil, Milwaukee, Wis. Combination padlock. 1,866,273; July 5.
Skinner, M. B., Co. (See Merrill, Patterson D., assignor.)
Skolnik, Max, Chicago, Ill., assignor to Insolo Holding Company. Method and apparatus for manufacturing products from fibrous material. 1,865,649; July 5.
Sky Specialties Corporation. (See Stover, Frank B., assignor.)
Sloan, Theodore H., Charleroi, Pa. Game apparatus. 1,866,063; July 5.
Slocum, Benjamin A., assignor to M. G. Schneider, Binghamton, N. Y. Protective garment. 1,865,709; July 5.
Small, Arthur E., assignor to Union Metal Products Company, Chicago, Ill. Car coupler operating device. 1,865,729; July 5.
Smith, A. O., Corporation. (See Heineman, Warren F., assignor.)
Smith, Arthur J. (See Clingingsmith, J. J., and Smith.)
Smith, Barnett J., San Antonio, Texas. Garment pocket construction. 1,866,428; July 5.
Smith, Cecil C., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Meat holding method. 1,866,508; July 5.
Smith, Frank R., Cleveland, Ohio. Roller skate. 1,866,134; July 5.
Smith, Harry F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,866,373; July 5.
Smith, John F., Dublin, Ga. Rat trap. 1,866,228; July 5.
Smith, John W., assignor to The Fafnir Bearing Company, New Britain, Conn. Chuck. 1,866,374; July 5.
Smith, William L., jr., assignor to May Hosiery Mills, Nashville, Tenn. Knitting machine. 1,865,710; July 5.
Smithe, F. L., Machine Co. (See Novick, Abraham, assignor.)
Smith's Sons Company, John E. (See Van Hooydonk, Adrian C., assignor.)
Snediker, Morton O., assignor to The Powers Regulator Company, Chicago, Ill. Heating and ventilating apparatus. 1,866,178; July 5.
Snyder, Louis F. (See Waechter, F. F., and Snyder.)
Snyder, Oscar L., Marysville, Mich., assignor, by mesne assignments, to Continental Aircraft Engine Company. Engine. 1,865,594; July 5.
Societe Anonyme des Usines Chausson. (See Coquille, Emile H., assignor.)
Société d'Etudes Scientifiques et Industrielles. (See Creuzé, Pierre, assignor.)
Society of Chemical Industry in Basle. (See Askenasy, Paul, assignor.)
Society of Chemical Industry in Basle, The Firm. (See Straub, F., and Anderau, assignors.)
Somers, Louis C., Los Angeles, Calif. Chlorinator. 1,865,976; July 5.
Sonnefeld, August, assignor to the Firm Carl Zeiss, Jena, Germany. Optical system. 1,865,977; July 5.
Sosinski, Paul P., assignor to The Union Switch & Signal Company, Swissvale, Pa. System of power supply. 1,866,179; July 5.
Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass forming machine. 1,865,730; July 5.
Spangler, William N., Philadelphia, Pa. Apparatus for charging storage batteries. 1,865,595; July 5.
Speed, Walter H. (See Bryant, H. D., and Speed.)
Sperr, Frederick W., jr., assignor to The Koppers Company, Pittsburgh, Pa. Aeration and gas purification process. 1,866,229; July 5.
Spiel, Robert E., assignor to Magill-Weinsheimer Company, Chicago, Ill. Display device. 1,866,135; July 5.
Spinks, Raleigh J., Chicago, Ill. Window wiper. 1,866,375; July 5.
Splaine, Edward M., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. 1,865,711; July 5.
Staats, Harry B., Mount Kisco, assignor to Rusling Wood, Inc., New York, N. Y. Advertising display carton. 1,866,493; July 5.
Stabili, Gioacchino, Morrisville, Pa. Combined telephone receiver and transmitter set. 1,866,429; July 5.
Stahl, Edward J., assignor to The Baker-Raulang Company, Cleveland, Ohio. Vehicle. 1,865,798; July 5.
Stainbrook, Eddie. (See Koons, Morris B., assignor.)
Standard Oil Company of California. (See Shiffler, Willion H., assignor.)
Standard Oil Company, The. (See Wagoner, Earl B., assignor.)
Standard Pressed Steel Co. (See Hallowell, H. T., and Bennett, assignors.)
Standard Stoker Company, The. (See Turner, Edwin A., assignor.)
Stanley, Stanley J. (See Broadhurst, Jean, assignor.)
Starks, Charles W., assignor to Automatic Food Machinery Corporation, Boise, Idaho. Conveyer. 1,865,596; July 5.
Steele, John H., Wyandotte, Mich., assignor to Michican Steel Corporation. Treating steel sheets. 1,866,376; July 5.
Steidinger, Christian. (See Kurz, Otto, assignor.)
Stein, Richard, Cassel, J. Euler, Cassel-Wilhelmshohe, and W. Puff, Cassel, Germany, assignors to The Superheater Company, New York, N. Y. Superheater. 1,866,325; July 5.

Stephenson, Wilbur T. (See Strosacker, C. J., and Stephenson.)
Steps, Robert A. (See Hartman, W. W., and Steps.)
Sterling Photo Manufacturing Co. (See Murphy, M. F., and Metheny, assignors.)
Stern, Louis, Company. (See Kraemer, August F., assignor.)
Stevens, Harry M., Schenectady, N. Y., assignor to General Electric Company. Casing for electrical devices. 1,866,326; July 5.
Stewart, Clyde E., Drexel Hill, Pa., assignor to General Electric Company. Indicating system. 1,866,327; July 5.
Stewart, Granville Q. (See Jacobs, Reed E., assignor.)
Stewart-Warner Corporation. (See Tice, Percival S., assignor.)
Stockert, Josef, Schwelm, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Coffee-mill with electric driving device. 1,865,731; July 5.
Stoller, Hugh M., Mountain Lake, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Resilient support. 1,866,274; July 5.
Stoller, Hugh M., Mountain Lake, N. J., and E. R. Morton, Brooklyn, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Speed regulator. 1,866,275; July 5.
Stolley, R. R., Inc. (See Boon, Guthrie, assignor.)
Stover, Frank B., assignor to Sky Specialties Corporation, Detroit, Mich. Pressure regulator. 1,866,377; July 5.
Stowe, Charles J., Oakland, Calif. Enamel remover. 1,865,799; July 5.
Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Cultivator. 1,865,800; July 5.
Stratford, Charles W., Oakland, Calif. Hot oil pump. 1,866,064; July 5.
Stratton, Frank E. (See Huxford, G. T., and Stratton.)
Straub, Fritz, and W. Anderau, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Dyestuffs containing metals and making same. 1,865,978; July 5.
Strober, Ludwig, Munich, Germany. Lock nut. 1,866,067; July 5.
Strong, Chester F., Miami, Fla. Power generating system. 1,866,494; July 5.
Strosacker, Charles J., and W. T. Stephenson, assignors to The Dow Chemical Company, Midland, Mich. Continuous method of making alkali-metal acetates. 1,866,328; July 5.
Strosacker, Charles J., C. C. Kennedy, and E. L. Pelton, assignors to The Dow Chemical Company, Midland, Mich. Preparing acetates. 1,866,329; July 5.
Strosacker, Charles J., C. C. Kennedy, and E. L. Pelton, assignors to The Dow Chemical Company, Midland, Mich. Making alkali-metal acetates. 1,866,430; July 5.
Stuart, Kenneth E., Niagara Falls, assignor to Hooker Electrochemical Company, New York, N. Y. Electrolytic cell. 1,866,005; July 5.
Stubbs, Herbert R., assignor to The Lafayette Company, Inc., Baltimore, Md. Container. 1,866,230; July 5.
Stuebing, William, jr., Cincinnati, Ohio, assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Lifting truck. 1,865,712; July 5.
Superheater Company, The. (See Armacost, Wilbur H., assignor.)
Superheater Company, The. (See Stein, R., Euler, and Puff, assignors.)
Superior Type Company, The. (See Swift, Justin R., assignor.)
Swallow, Joseph, Berwyn, assignor to Temple Corporation, Chicago, Ill. Sound emitting device. 1,866,231; July 5.
Swann Research, Inc. (See McCullough, Campbell R., assignor.)
Swann Research, Inc. (See Warning, W. G., and Schlib, assignors.)
Swenehart, John, assignor to Atlas Powder Company, Wilmington, Del. Blasting assembly. 1,865,447; July 5.
Swenson Evaporator Company. (See Caldwell, Harold B., assignor.)
Swift and Company. (See Dziedzic, Nicholas J., assignor.)
Swift, Justin R., assignor to The Superior Type Company, Chicago, Ill. Drawing kit. 1,866,180; July 5.
Swindell-Dressler Corporation. (See Meehan, Paul A., assignor.)
Swindler, Harry M., Dayton, assignor to The James Leffel and Company, Springfield, Ohio. Stoker air control. 1,866,431; July 5.
Switzeny, Paul, Vienna, Austria. Stapling device. 1,865,597; July 5.
Sykes, Wilfred, Chicago, Ill. Rolling mill. 1,866,232; July 5.
Symington Company, The. (See Richards, Willard F., assignor.)
Tabor, Herman S., Chicago, Ill. Font of type or a similar article. Des. 87,319; July 5.
Taple, Joseph F., assignor of one-half to G. F. Hammond, Santa Barbara, Calif. Treatment of ore. 1,865,979; July 5.
Tarbox, John P., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Vehicle body structure. 1,865,487; July 5.
Tarrant, Robert, Chicago, Ill. Door stop and alarm. 1,866,233; July 5.
Tarte, Whitefield R., Bellingham, Wash. Oscillative automobile bumper. 1,865,801; July 5.
Taylor, Cecil H. (See Dodge, A. Y., and Taylor.)
Taylor, Edward C., Longmeadow, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Bead closing mechanism for tire wrapping machines. 1,865,650; July 5.
Taylor, Herbert K., Elkins Park, assignor to George D. Ellis and Sons, Incorporated, Philadelphia, Pa. Insect trap. 1,865,713; July 5.
Taylor, Herbert M., Toronto, Ontario, Canada, assignor to A. B. Chance, Centralia, Mo. Earth anchor. 1,865,546; July 5.
Technicolor, Inc. (See Atwood, Francis C., assignor.)
Telefonaktiebolaget L. M. Erisson. (See Larsson, Knut, assignor.)
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Schröter, Fritz, assignor.)
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Schröter, F., and Federmann, assignors.)
Temple Corporation. (See Bouvier, H. K., and Wells, assignors.)
Temple Corporation. (See Swallow, Joseph, assignor.)
Thacker, Lawrence C., Smithfield, Va. Peanut digger. 1,866,276; July 5.
Thau, Walter E., New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,865,980; July 5.
Thege, Edvin O. P., assignor to Aktiebolaget Atlas Diesel, Stockholm, Sweden. Starting and reversing device for multi-cylinder internal combustion engines. 1,866,234; July 5.
Thiel, Viktor, assignor to Feltan & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Junction sleeve or the like for deep sea cables. 1,866,235; July 5.
Thieme, Reinhold. (See Eichhorn, Ernest, assignor.)
Thomas, Albert N., Wichita, Kans. Hydraulic clutch. 1,866,068; July 5.
Thomas, Henry, London, England, assignor to U. S. Slicing Machine Company, La Porte, Ind. Substance clamp for slicing machines. 1,866,236; July 5.
Thompson Products Inc., (See Graham, Matthew P., assignor.)
Thompson, William J., and R. G. Kirkwood, Auckland, New Zealand. Liquid soap dispenser. 1,866,237; July 5.
Thomson, David R., Paterson, N. J. Cloth board. 1,866,330; July 5.
Thorens, Firm, Hermann, S. A., (See Weissenburger, Adolf, assignor.)
Thornton, Roger T. (See Criqui, A. A., and Thornton.)
Tice, Percival S., assignor to Stewart-Warner Corporation. Chicago, Ill. Carburetor. 1,865,488; July 5.
Tice, Percival S., assignor to Stewart-Warner Corporation. Chicago, Ill. Electromagnetic fuel pump. 1,866,136; July 5.
Tice, Percival S., assignor to Stewart-Warner Corporation. Chicago, Ill. Electromagnetic fuel pump. 1,866,137; July 5.
Tillyer, Edgar D., assignor to American Optical Company, Southbridge, Mass. Ophthalmic lens. 1,865,714; July 5.
Tillyer, Edgar D., assignor to American Optical Company, Southbridge, Mass. Ophthalmic lens. 1,865,715; July 5.
Tire Savers Corporation, Ltd. (See Marchese, J., and D'Orsay, assignors.)
Todd, William, Leominster, Mass. Ball and socket joint. 1,866,512; July 5.
Todd, William, Leominster, Mass. Ball and socket joint. 1,866,520; July 5.
Toelle, Walter H., Wallingford, Conn., assignor to H. L. Judd Company, Inc., New York, N. Y. Bracket for curtain rods. 1,866,331; July 5.
Toews, Peter J., Minneapolis, Minn. Doughnut former. 1,866,332; July 5.
Tolhurst Machine Works, Inc. (See Bryson, Tandy A., assignor.)
Tonks, Lowl. (See Kingdon, K. H., and Tonks.)
Towner, Harold G., New Haven, Conn. Explosive shell and a fuse therefor. 1,865,802; July 5.
Townsend, Samuel P., Bloomfield, N. J. Mower. 1,866,238; July 5.
Trane, Reuben N., La Crosse, Wis. Air conditioning unit. 1,865,981; July 5.
Transerv Corporation. (See Johnson, Malcolm S., assignor.)
Traphagen, Harry R., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Mounting for cultivator shovels and the like. 1,865,651; July 5.
Trautvetter, George, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Vehicle body wall construction. 1,866,277; July 5.
Truscon Steel Company. (See White, Herbert E., assignor.)
Tucker, Herbert E., Chicago, Ill., assignor to Cardwell Westinghouse Company Draft gear. 1,865,803; July 5.

Tuggle, Robert G., Peterstown, W. Va. Circuit controller. 1,866,378; July 5.
Tunnel and Mine Machinery Company. (See Warner, A. W., and Ballard, assignors.)
Turner, Charles E., Waterbury, assignor to Bridgeport Brass Company, Bridgeport, Conn. Filler cap. 1,865,489; July 5.
Turner, Charles L., assignor of one-half to F. W. Harris, Los Angeles, Calif. Vessel capping machine. 1,865,804; July 5.
Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Stoker Construction. 1,866,181; July 5.
Turner Tanning Machinery Company, The. (See Schettler, Gustav A., assignor.)
Umberto, Onorati, Toledo, Ohio. Apparatus for lifting and turning vehicles. 1,865,805; July 5.
Underwood Elliott Fisher Company. (See Helmond, William F., assignor.)
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)
Union Draft Gear Company. (See Cotton, Walter H., assignor.)
Union Metal Products Company. (See Small, Arthur E., assignor.)
Union Steam Pump Company. (See Bird, John C., assignor.)
Union Steel Products Company. (See Lutske, William F., assignor.)
Union Switch & Signal Company, The. (See Aylsworth, Selden B., assignor.)
Union Switch & Signal Company, The. (See Gilson, Robert M., assignor.)
Union Switch & Signal Company, The. (See Sosinski, Paul P., assignor.)
Union Switch & Signal Company, The. (See Williamson, Arba G., assignor.)
Union Switch & Signal Company, The. (See Zierdt, Conrad H., assignor.)
United-Carr Fastener Corporation. (See Johnson, Alfred F., assignor.)
United Chromium, Incorporated. (See Kirchner, Martin, assignor.)
United Shoe Machinery Corporation. (See Ashworth, Fred, assignor.)
United Shoe Machinery Corporation. (See Bates, Arthur, assignor.)
United Shoe Machinery Corporation. (See Cosgrove, John W., assignor.)
United Shoe Machinery Corporation. (See Hodgkins, Edward, F., assignor.)
United Shoe Machinery Corporation. (See Hood, Charles E., assignor.)
United States Radium Corporation. (See Schlundt, Herman, assignor.)
U. S. Ring Traveler Company. (See Gilligan, George H., assignor.)
U. S. Slicing Machine Company. (See Thomas, Henry, assignor.)
U. S. Slicing Machine Company. (See Van Berkel, Cornelius F. M., assignor.)
Upson, Maxwell M., Englewood, N. J., assignor to Raymond Concrete Pile Company, New York, N. Y. Method and apparatus for placing concrete in piles. 1,865,652; July 5.
Upson, Maxwell M., Englewood, N. J., and E. D. Watt, La Grange, Ill., assignors to Raymond Concrete Pile Company, New York, N. Y. Apparatus and method for driving pile shells. 1,865,653; July 5.
Urban, Thomas J., West Pittston, Pa. Airplane and mounting therefor. 1,866,432; July 5.
Valentine, Percy W., Natick, Mass. Stitchdown shoemaking machine. 1,866,182; July 5.
Van Akkeren, Antonius J. J., The Hague, Netherlands. Tone tubes with acoustic actions for sound-recording and sound-reproducing apparatus. 1,866,239; July 5.
Van Berkel, Cornelius F. M., Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind. Guide bar for slicing machines. 1,866,240; July 5.
Vandercook, David D. (See Vandercook, Edward O., R. O., F. R., and D. D.)
Vandercook, Edward O., R. O., F. R., and D. D., assignors to Vandercook & Sons, Chicago, Ill. Chase for printing presses. 1,866,379; July 5.
Vandercook, Fred R. (See Vandercook, Edward O., R. D., F. R., and D. D.)
Vandercook, Robert O. (See Vandercook, Edward O., R. O., F. R., and D. D.)
Vandercook & Sons. (See Vandercook, Edward O., R. O., F. R., and D. D., assignors.)
Van der Lee, Gerrit, Deventer, Netherlands, assignor to Naamloose Vennootschap Noury & Van der Lande's Handelmaatschappij, Deventer, The Netherlands. Enhancing the action of per compounds which are decomposed by catalases upon animal or vegetable products. 1,866,412; July 5.
Van Doorn, Anthonius M., Bilthoven, Netherlands. Analytical filter. 1,865,982; July 5.
Van Hooydonk, Adrian C., assignor to John E. Smith's Sons Company, Buffalo, N. Y. Food chopping machine. 1,865,545; July 5.
Varley, Thomas W. (See Nein, W. C., and Varley.)
Varren, Alexander. (See Bornkessel, B., Breitling, Lebmann, and Varren.)
Venable, William M., Pittsburgh, assignor to Blaw-Knox Company, Blawnox, Pa. Portable mixer. 1,866,138; July 5.
Verity, William J., Brantford, assignor to Massey-Harris Company, Limited, Toronto, Ontario, Canada. Rear wheel construction for plows. 1,865,598; July 5.
Victor, Benjamin J., Oak Park, assignor to Victor Manufacturing & Gasket Company, Chicago, Ill. Safety attachment for punch presses. 1,865,806; July 5.
Victor Manufacturing & Gasket Company. (See Victor, Benjamin J., assignor.)
Vincent, Harry S., Ridgewood, N. J., assignor to Franklin Railway Supply Company, New York, N. Y. Locomotive valve mechanism. 1,865,547; July 5.
Vineberg, Joseph H., Montreal West, Quebec, Canada. Garment hanging and packaging device. 1,866,241; July 5.
Vitamin Food Co. Inc. (See Allyn, Lewis B., assignor.)
Vogel, Charles P. (See Orthmann, August C., assignor.)
Volsard, Incorporated. (See Remy, Earl T., assignor.)
Von Hacht, William H. (See Hughes, L. W., and von Hacht.)
Von Ohlsen, Louis H., New Haven, Conn., assignor to Safety Car Heating & Lighting Company. Automatic train control. 1,866,139; July 5.
Wadsten, Sten, Bloomfield, and C. W. Hunt, Wyoming, N. J., assignors to Westinghouse Lamp Company., Producing uniform length filaments. 1,865,490; July 5.
Waechter, Ferdinand E., and L. F. Snyder, Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill. Loader. 1,865,654; July 5.
Wagner, Albert G., assignor to The Glow Electric Company, Cincinnati, Ohio. Lawn mower. 1,866,380; July 5.
Wagner, Glenn H., Belleville, Ill., assignor to Aluminum Company of America, Pittsburgh, Pa. Making concrete articles and the like. 1,865,732; July 5.
Wagoner, Earl B., Lakewood, assignor to The Standard Oil Company, Cleveland, Ohio. Building. Des. 87,320; July 5.
Wahl, John, Rosedale, assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y. Pressure gauge. 1,866,140; July 5.
Waldinger, Nils H., Jonkoping, Sweden. Match. 1,865,716; July 5.
Walker Body Company. (See Wells, George W., assignor.)
Wallace, Benjamin F., Brooklyn, N. Y. Compound for use in casting metals. 1,866,278; July 5.
Walsh, Arthur E., Chicago, Ill. Hair waver. 1,865,655; July 5.
Walsh, Harry. (See Heisenfeldt, J., and Walsh.)
Walter, Charles T. (See McKee, H. H., and Walter.)
Walters, George, administrator. (See Berryman, Marsden L.)
Wantz, Julius B., Oak Park, assignor to General Electric X-Ray Corporation, Chicago, Ill. X-ray apparatus. 1,866,141; July 5.
Wappler Electric Company. (See Mutscheller, Arthur, assignor.)
Ward, Abraham, San Francisco, Calif. Surgical and dental pack compositions and method of applying the same. 1,866,433; July 5.
Ward, Clarence F., Birmingham, Ala. Pipe laying apparatus. 1,866,381; July 5.
Ward, William W., assignor of one-half to C. T. Jimison, Barboursville, W. Va. Ballast cutting shoe for railway tracks. 1,865,807; July 5.
Wardwell, Joseph B., Stamford, Conn. Shipping case. 1,866,183; July 5.
Warner, Arthur W., Media, and R. F. Ballard, Chester, assignors to Tunnel and Mine Machinery Company, Philadelphia, Pa. Forming tunnel walls and unit for use therein. 1,866,242; July 5.
Warner, Samuel T., assignor to Peabody Engineering Corporation, New York, N. Y. Fuel burning apparatus. 1,865,983; July 5.
Warning, William G., and T. W. Schlib, St. Louis, Mo., assignors to Swann Research, Inc. Tri-calcium phosphate and aluminum phosphate composition salt filler. 1,865,733; July 5.
Warrick, Charles F., Detroit, assignor to Whitehead & Kales Company, River Rouge, Mich. Humidifier assembly. 1,865,599; July 5.
Waterman, Clifford W., assignor to The Pittsburg Boiler and Machine Company, Pittsburg, Kans. Combined picking table and refuse conveyer. 1,865,984; July 5.
Waters, Daniel V., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for handling material. 1,866,142; July 5.
Watkins, Frederick A., Chicago, Ill. Memorandum pad holder. 1,866,279; July 5.
Watson, F. H., Company, The. (See Watson, Frank H., assignor.)
Watson, Frank H., Jonesboro, Ark., assignor to The F. H. Watson Company, Little Rock, Ark. Pneumatic inner tube and valve. Re18,513; July 5.
Watson, Thomas S., Milwaukee, Wis. Washing machine drive. 1,865,656; July 5.
Watt, Elihu D. (See Upson, M. M., and Watt.)
Watt, Elihu D., La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y. Pile forming apparatus. 1,865,658; July 5.
Watt, Elihu D., La Grange, Ill., and B. Whiteley, assignors to Raymond Concrete Pile Company, New York, N. Y. Composite pile joint. 1,865,657; July 5.

Watts, Noble H., Bridgeport, Conn., assignor to General Electric Company. Ironer. Des. 87,321; July 5.
Weaver, Edward G., Butte, Mont. Safety razor. 1,866,434; July 5.
Webb, Frank C. (See Johnson, Colvin L., assignor.)
Webber, Joseph, Manchester, and J. Cooper, Market Drayton, assignors to Provincial Incandescent Fittings Company Limited, Manchester, England. Milliampere and voltage meter. 1,866,243; July 5.
Weber Dental Manufacturing Company. (See Binus, David J., assignor.)
Wedmore, Edmund B., assignor to The British Electrical and Allied Industries Research Association, London, England. Electric circuit breaker. 1,866,495; July 5.
Wehsarg, Richard, Eschau, assignor to "Saya" Gesellschaft zur Herstellung Von Heilmich, Munich, Germany. Increasing the digestibility and pharmacological action of animal milk. 1,866,184; July 5.
Weinheimer, Carl M., Buffalo, N. Y. Refrigerator. 1,866,435; July 5.
Weissenburger, Adolf, Evillard, assignor to the Firm Hermann Thorens, S. A., Ste. Croix, Switzerland. Pyrophoric lighter. 1,865,859; July 5.
Welch, Edward J., New York, N. Y. Finishing strip for automobiles and the like. 1,865,660; July 5.
Welch, Paul V., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Multiswitch coupling. 1,865,600; July 5.
Wells, Clayton F., assignor to Chicago Foundry Company, Chicago, Ill. Cupola reservoir 1,865,491; July 5.
Wells, Freeland. (See Bouvier, H. K., and Wells.)
Wells, George W., assignor of one-half to Walker Body Company, Amesbury, Mass. Combined door holder and buffer. 1,865,661; July 5.
Wernberg, Niels E., Copenhagen, Denmark. Bristle removing machine for hog carcasses. 1,865,492; July 5.
West, Frederick B., K. J. Pidcock, and E. Donkin, Kyogle, Australia. Vacuum responsive device. 1,866,068; July 5.
Western Cartridge Company. (See Schuricht, A. G., and Wright, assignors.)
Western Electric Company. (See Curtiss, Nathan A., assignor.)
Western Electric Company. (See Foley, Edward J., assignor.)
Western Electric Company. (See Gaetje, J. H., and Santschi, assignors.)
Western Electric Company. (See Hach, Clarence A., assignor.)
Western Electric Company. (See Hach, C. A., and Hoag.)
Western Electric Company. (See McWilliams, William W., assignor.)
Western Electric Company. (See Neighbors, Charles C., assignor.)
Western Electric Company. (See Pfeiffer, Conrad L., assignor.)
Western Electric Company. (See Seeley, George A., assignor.)
Western Electric Company. (See Waters, Daniel V., assignor.)
Westinghouse Electric & Manufacturing Company. (See Batsel, Max C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Brown, John L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Callsen, Albert, assignor.)
Westinghouse Electric & Manufacturing Company. (See Heinrich, Richard, assignor.)
Westinghouse Electric and Manufacturing Company. (See Kerrigan, J., and Roth, assignors.)
Westinghouse Electric and Manufacturing Company. See Kinnard, L. J., and Bouton, assignors.)
Westinghouse Electric & Manufacturing Company. (See Mattingly, Harold W., assignor.)
Westinghouse Electric and Manufacturing Company. (See Nyeum, H. C., and Ashbaugh, assignors.)
Westinghouse Electric & Manufacturing Company. (See Oldenburg, Alfred, assignor.)
Westinghouse Electric & Manufacturing Company. (See Thau, Walter E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Whitaker, Charles C., assignor.)
Westinghouse Lamp Company. (See Ferguson, John E., assignor.)
Westinghouse Lamp Company. (See Fredenburgh, Mark N., assignor.)
Westinghouse Lamp Company. (See Gustin, Daniel S., assignor.)
Westinghouse Lamp Company. (See Morrison, Montford, assignor.)
Westinghouse Lamp Company. (See Parrott, Warley L., assignor.)
Westinghouse Lamp Company. (See Wadsten, S., and Hunt, assignors.)
Westinghouse Lamp Company. (See Wuertz, John L., assignor.)
Weston, Edward F., assignor to Weston Electrical Instrument Corporation, Newark, N. J. Electrical relay and the like. 1,866,436; July 5.
Weston Electrical Instrument Corporation. (See Weston, Edward F., assignor.)
Wetmore, Miner P. (See Payson, A. E., and Wetmore.)
Weygandt, Leslie G., Wyncote, and P. K. Reed, Llanerch, assignors to Atlas Conveyor Company, Philadelphia, Pa. Ash hopper gate. 1,865,662; July 5.
Wheeler, William L., Los Angeles, Calif. Surf board attachment. 1,865,985; July 5.
Wheland Company, The. (See Campbell, George E., assignor.)
White, Curtis H., Spokane, Wash. Submarine safety vessel. 1,865,663; July 5.
White, Frank B., Ocean Park, assignor to Joseph Bergamo, Santa Monica, Calif. Brake lever construction. 1,866,244; July 5.
White, Herbert E., assignor to Truscon Steel Company, Youngstown, Ohio. Electrode mounting for welding machines. 1,866,382; July 5.
White, Mabel, Spokane, Wash. Vegetable cutting device. 1,865,986; July 5.
White, Wallace A., and B. A. Flood, Richmond, Va. Mounting for water meters. 1,866,437; July 5.
Whitehead & Kales Company. (See Judd, Irving H., assignor.)
Whitehead & Kales Company. (See Warrick, Charles F., assignor.)
Whitehead, Thomas C. (See Greenwald, Harold A., assignor.)
Whiteley, Edmond. (See Watt, E. D., and Whiteley.)
Whitfield-Johnson Motor Company. (See Whitfield, Joseph E., assignor.)
Whitfield, Joseph E., assignor to Whitfield-Johnson Motor Company, Pittsburgh, Pa. Internal combustion engine. 1,865,493; July 5.
Whittaker, Charles C., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Air filter. 1,865,987; July 5.
Whitworth, Stanley, assignor to Bendix Brake Company, South Bend, Ind. Brake shoe. 1,865,548; July 5.
Widdell, Henry E., Cleveland, Ohio. Refining crude oil. 1,865,494; July 5.
Wiedeck, Max. Berlin, Germany. Apparatus for target practice. 1,865,988; July 5.
Wieland, George G., Brooklyn, assignor to J. C. Penny Company, Inc., New York, N. Y. Store furniture. 1,865,734; July 5.
Wieman Kammerer Wright Co. (See Abegg, Walter A., assignor.)
Wikle, George F., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Bead setting ring. 1,865,601; July 5.
Wilber, Floyd S., and A. W. Hollister, Kingston, N. Y. Garden hose supporter. 1,865,989; July 5.
Wilcox, Charlie N., McCook, Nebr. Oil can. 1,865,990; July 5.
Wilcoxon, Frank, Yonkers, N. Y. Colloidal metal products and making same. 1,866,069; July 5.
Wilder, Francis E. P., et al. (See Moran, J. L., and Lee, assignors.)
Wildman Mfg. Co. (See Richter, Wolfgang D., assignor.)
Wildt and Company Limited. (See Holmes, H. H., and Robinson, assignors.)
Wilhelm, Ottmar, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany. Rotary printing machine. 1,865,602; July 5.
Will & Baumer Candle Company. (See Geller, Leon W., assignor.)
Willey, William E., Champaign, Ill. Permanent golf tee. 1,866,143; July 5.
Williams Bakery, Inc., The. (See Hawks, Joseph W., assignor.)
Williams Oil-O-Matic Heating Corporation. (See Williams, Walter W., assignor.)
Williams, Walter W., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Making mixed oil gas and producer gas. 1,865,664; July 5.
Williamson, Albert S. (See Breen, Henry, assignor.)
Williamson, Arba G., Carnegie, assignor to The Union Switch & Signal Company, Swissvale, Pa. Train control system. 1,866,070; July 5.
Williamson, Arba G., Carnegie, assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa. Track circuit system. 1,866,144; July 5.
Williamson, Charles, Perth Amboy, N. J. Submarine apparatus. 1,866,438; July 5.
Willinder, Nils O., Jamserum, Sweden. Date indicating or registering apparatus. 1,866,071; July 5.
Wilson, Alfred E., London, England. Making composite tubular members. 1,866,145; July 5.
Wilson, Alfred R., assignor to Hutchins Car Roofing Company, Detroit, Mich. Car roof. 1,865,549; July 5.
Wilson, Ralph W. (See Most, Lucifer J., assignor.)
Winckler, Gunnar A. F. (See Holinagel, H. P., and Winckler.)
Winkler, Kurt, Frankenthal/Pfalz, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Centrifugal multistage mixing apparatus. 1,865,991; July 5.
Wintemberg, Adelbert C., Drexel Hill, Pa., assignor to General Steel Castings Corporation, Granite City, Ill. Railway vehicle underframe. 1,865,448; July 5.
Wire Novelty Manufacturing Company, The. (See Domkee, John H., assignor.)
Wired Radio, Inc. (See Dawson, Leo H., assignor.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wired Radio, Inc. (See Nicholson, Alexander M., assignor.)

Wired Radio, Inc. (See Owens, R. B., and Worrall, assignors.)
Wirtz, Franz. (See Monforts, J., and Wirtz.)
Wisner, Abram C., assignor to Reynolds Spring Company, Jackson, Mich. Hydraulic press. 1,866,383; July 5.
Witke, Albert, P. E. Huetten, O. Rosemann, J. P. Molling, and C. F. Martell, Kenosha, Wis., assignors to Simmons Company, New York, N. Y. Sheet metal furniture. 1,865,603; July 5.
Witte, James G., assignor to Iowa Fiber Box Company, Keokuk, Iowa. Paper container. 1,866,496; July 5.
Woelm, Alfred, Berlin, Germany, assignor to Pencil Mechanism Corporation, New York, N. Y. Mechanical lead pencil. 1,865,992; July 5.
Woelm, Alfred, Berlin, Germany, assignor, by mesne assignments, to Pencil Mechanism Corporation. Magazine lead pencil. 1,866,072; July 5.
Wolff, Irving, New York, N. Y., assignor to Radio Corporation of America. Sound reproducer. 1,865,735; July 5.
Wolverine Tube Company. (See Locke, Arthur A., assignor.)
Wood, Bernard A., Charlottesville, Va. Envelope feeding device. 1,865,495; July 5.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Web roll supporting device for triplex web presses. 1,865,665; July 5.
Wood, James, Saltcoats, and H. F. Reynolds, Ardrossan, Scotland, assignors to Imperial Chemical Industries Limited. Dividing cords of plastic or gelatinous material into lengths. 1,866,439; July 5.
Wood, Morris B., Somerville, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Inclosed electric switch. 1,866,333; July 5.
Wood Newspaper Corporation. (See Jordhoy, Hans C., assignor.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Woodall Industries, Incorporated. (See Zinser, Paul R., assignor.)
Woodroffe, Percy E., Detroit, Mich. Headlight dimmer. 1,866,440; July 5.
Woods, William J., Schenectady, N. Y., assignor to General Electric Company. Quick release hydraulic operator. 1,866,334; July 5.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,866,280; July 5.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,866,281; July 5.
Worrall, Robert H., and R. B. Owens, Washington, D. C., assignors, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Universal crystal controlled calibrator. 1,866,441; July 5.
Worthington, Charles C., Dunfield, N. J. Lawn mower. 1,865,998; July 5.
Wray, Henry P. (See Laucus, J., and Grunow, assignors.)
Wright, George T. (See Schuricht, A. G., and Wright.)
Wright, George W., Lewiston, Idaho. Unitary rotary valve. 1,865,994; July 5.
Wrigley Jr., Company, Wm. (See Meany, Robert E., assignor.)
Wuertz, John L., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Thermionically inactive electrode. 1,865,449; July 5.
Wuest, Walter R., Louisville, Ky. Windlass. 1,866,282; July 5.
Wurster, Amsy L., Haddon Heights, N. J., assignor of one-half to Robert E. Albright, Philadelphia, Pa. Cravat holder. 1,865,995; July 5.
Wynne, Hoke S., Eastman, Ga. Advertising egg tester. 1,866,442; July 5.
Yale & Towne Manufacturing Company, The. (See Stuebing, William, jr., assignor.)
Yancey, John H. (See Henry, J. A., and Yancey.)
Yarnall, David R., assignor to Yarnall-Waring Company, Philadelphia, Pa. Control for valve turning and other operations. 1,865,604; July 5.
Yarnall-Waring Company. (See Yarnall, David R., assignor.)
Yarnell, Oran, Decatur, Ill. Automobile signal. 1,866,185; July 5.
Young, Archer E., Pittsburgh, Pa. Measuring apparatus. 1,865,996; July 5.
Young, Fred M., Racine, Wis. Humidifying apparatus for space heaters. 1,865,605; July 5.
Yungling, Paul, Los Angeles, Calif., assignor to Monarch Oil Well Air Drill Co. Ltd., Reno, Nev. Pneumatic well drill. 1,866,335; July 5.
Yurkovitch, Anton, Pittsburgh, Pa. Door reenforcement. 1,866,146; July 5.
Zeiss, Carl, Firm of. (See Klemperer, Wolfgang, assignor.)
Zeiss, Carl, the Firm. (See Sonnefold, August, assignor.)
Zeyen, Adam, Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Folding couch. 1,865,606; July 5.
Zierdt, Conrad H., Rosedale, Penn Township, assignor to The Union Switch & Signal Company, Swissvale, Pa. Rectifier. 1,865,450; July 5.
Zinecker, Arthur, Chicago, Ill. Automatic gear shifting device. 1,865,997; July 5.
Zinser, Paul R., Chicago, Ill., assignor, by mesne assignments, to Woodall Industries, Incorporated, Detroit, Mich. Electroplating nonconductive materials. 1,866,283; July 5.
Zook, John S., assignor to Burgess Battery Company, Madison, Wis. Hand lantern. Des. 87,322; July 5.
Zumbro, Frank R., assignor to Frick Company, Waynesboro, Pa. Scrubbing and absorbing apparatus. 1,866,443; July 5.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 5TH DAY OF JULY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrading machine. J. W. Cosgrove. 1,866,012; July 5.
Abrasive wheel, Segmental. G. N. Jeppson and T. Larsson. 1,865,523; July 5.
Acetates, Making alkali-metal. C. J. Strosacker, C. C. Kennedy, and E. L. Pelton. 1,866,430; July 5.
Acetates, Preparing. C. J. Strosacker, C. C. Kennedy, and E. L. Pelton. 1,866,329; July 5.
Acetone, Production of. H. Meerwin and H. Morschel. 1,865,940; July 5.
Acetylene, Production of. P. Askenasy. 1,865,422; July 5.
Acid, Apparatus for the manufacture of sulphuric. W. S. Allen. 1,865,607; July 5.
Acid, Production of diphenyl monosulphonic. C. R. McCullough. 1,865,776; July 5.
Actuating device for lever-draw-bridges. F. Duwe. 1,865,621; July 5.
Addressing machines, Attachment for. E. W. Sibley. 1,865,974; July 5.
Advertising apparatus. W. I. O'Neill. 1,866,170; July 5.
Advertising device. M. H. Page. Re18,512; July 5.
Advertising display device. R. D. French. 1,865,848; July 5.
Aeration and gas purification process. F. W. Sperr, jr. 1,866,229; July 5.
Aeronautical instructing device. J. P. Buckley. 1,865,828; July 5.
Aeroplane. C. A. Grosser. 1,866,161; July 5.
Aeroplane. E. H. Lanier. 1,866,214; July 5.
Aeroplane. G. Reel. 1,865,789; July 5.
Agitator, Oil well. W. Horn. 1,865,912; July 5.
Agitator, Suction cleaner. W. F. Hudson. 1,865,857; July 5.
Air conditioning unit. R. N. Trane. 1,865,981; July 5.
Aircraft. R. H. Fleet. 1,865,749; July 5.
Aircraft accessories. G. R. Ericson. 1,866,299; July 5.
Air drying and purifying apparatus. A. S. Hensen. 1,866,207; July 5.
Air for the operation of wash boxes, Method of and apparatus for providing compressed. A. J. Sayers. 1,865,726; July 5.
Airplane. G. W. Cornelius. 1,865,744; July 5.
Airplane. R. E. Jacobs. 1,865,859; July 5.
Airplane. C. N. Monteith, R. J. Minshall, and J. C. Sanders. Des. 87,310; July 5.
Airplane and mounting therefor. T. J. Urban. 1,866,432; July 5.
Alkali-metal acetates, Continuous method of making. C. J. Strosacker and W. T. Stephenson. 1,866,328; July 5.
Altar, Home. A. Dordan and E. Johnson. Des. 87,301; July 5.
Amusement device, Finger striking. E. C. Fey. 1,866,021; July 5.
Anchor, Earth., H. M. Taylor. 1,865,546; July 5.
Anchor, Sponge cutting. O. L. Hardgrave, 1,865,564; July 5.
Anchor, Tubing. E. V. Crowell. 1,866,087; July 5.
Animal trap. W. Knippelmeir. 1,865,920; July 5.
Annunciator. Audible air speed. J. E. Eshbaugh. 1,866,019; July 5.
Antirattle dovetail for doors. R. G. Moore and A. Claud-Mantle. 1,865,875–6; July 5.
Armature winding machine. R. J. Emmert. 1,865,461; July 5.
Article handling device. A. S. Ross. 1,866,321; July 5.
Ash hopper gate. L. G. Weygandt and P. K. Reed. 1,865,662; July 5.
Asparagus trimmer. T. Gill. 1,866,027; July 5.
Autogun. W. C. Floyd. 1,866,202; July 5.
Automobile attachment. F. E. Adams. 1,866,444; July 5.
Automobile signal. P. J. McManaman. 1,865,777; July 5.
Automobile signal. O. Yarnell. 1,866,185; July 5.
Axes of crystal quartz, Method and apparatus for determining the direction of the electric. L. H. Dawson. 1,866,454; July 5.
Bag: *See*—
Hand bag.
Bag frame. B. A. Otten. 1,866,483; July 5.
Ball and socket joint. W. Todd. 1,866,512; July 5.
Ball and socket joint. W. Todd. 1,866,520; July 5.
Ball and the like, Tennis. A. E. Penfold. 1,865,481; July 5.
Ballast cutting shoe for railway tracks. W. W. Ward. 1,865,807; July 5.
Bank, Coin. A. J. Kusel. 1,865,864; July 5.
Batch meter. S. Shafer, jr., and C. F. Ball. 1,865,592; July 5.
Bath attachment, Shower. A. Claypoole. 1,866,009; July 5.
Bath mat. A. F. Edmands. 1,865,459; July 5.
Batteries, Apparatus for charging storage. W. N. Spangler. 1,865,595; July 5.
Battery electrode elements, Apparatus for use in the production of storage. P. D. Payne and M. Iversen. 1,866,172; July 5.
Battery terminal. T. C. Dobbins. 1,865,681; July 5.
Bead closing mechanism for tire wrapping machines. E. C. Taylor. 1,865,650; July 5.
Bead setting ring. G. F. Wikle. 1,865,601; July 5.
Bearing, Car axle. L. W. Melcher. 1,866,263; July 5.
Bearing, Conveyer. H. S. Bliderback and I. B. McCullough. 1,866,077; July 5.
Bearing, Double end. A. R. Lemieux. 1,866,046; July 5.
Bearing for quick revolving shafts or spindles, End or bottom. F. Mortensen. 1,866,478; July 5.
Bearing, Roller. F. G. Selfarth. 1,865,796; July 5.
Bearing, Side. E. G. Goodwin. 1,865,900; July 5.
Beds, Attachment for hospital. E. W. Jimmerson. 1,866,258; July 5.
Benzanthrone compounds, Caustic fusion of. E. T. Howell. 1,866,500; July 5.
Bill fold. P. A. Gardner, jr. 1,865,626; July 5.
Bill fold and coin purse, Combined. N. Ottinger. 1,865,881; July 5.
Binder and indicating device therefor. R. E. Carney. 1,865,741; July 5.
Binder clip. L. E. Baltzley. 1,865,453; July 5.
Binder, Loose-leaf. J. L. McMillan. 1,866,050; July 5.
Bit: *See*—
Drill bit.
Bitumen, Cooling molten. L. Kirschbaum. 1,866,504; July 5.
Bituminous emulsions, Method of and apparatus for producing. L. Kirschbaum. 1,866,503; July 5.
Blackboard. C. H. Kraft. 1,865,863; July 5.
Blasting assemblies. J. Swenehart. 1,865,447; July 5.
Bleeder for air headers. L. Buehler, jr., and C. J. Romberg. 1,866,449; July 5.
Blowing device for rock drills. L. C. Bayles. 1,865,609; July 5.
Board: *See*—
Cloth board.
Boiler: *See*—
Superheater boiler.
Boiler construction. W. F. McPhee. 1,865,939; July 5.
Boiler control apparatus. W. H. Green. 1,866,302; July 5.
Boiler for hot water and low pressure steam heating. J. Prinz. 1,865,958; July 5.
Bookmaking apparatus. L. L. Clark. 1,865,557; July 5.
Bottle capper. L. E. Greenman. 1,866,255; July 5.
Bottle or similar container. E. W. Fuerst. Des. 87,302; July 5.
Bottle stopper. H. C. Lohman. 1,866,313; July 5.
Box: *See*—
Hinged box. Plant box.
Junction box.
Box. S. J. Klein. 1,865,635; July 5.
Box for motors, Terminal. J. L. Brown. 1,866,344; July 5.
Brace. W. G. Kelley. 1,865,765; July 5.
Bracket: *See*—
Insulator bracket. Supporting bracket.
Bracket for curtain rods. W. H. Toelle. 1,866,331; July 5.
Brake: *See*—
Friction servo brake. Vacuum brake.
Hand brake.
Brake. A. Y. Dodge. 1,866,252; July 5.
Brake. A. Y. Dodge and C. H. Taylor. 1,865,508; July 5.
Brake. L. E. La Brie. 1,865,572; July 5.
Brake. R. J. Norton. 1,866,419; July 5.
Brake adjusting device. L. E. La Brie. 1,865,524; July 5.
Brake band adjusting means. A. S. Cataudella. 1,866,248; July 5.
Brake drum. R. J. Norton. 1,866,420; July 5.
Brake lever construction. F. B. White. 1,866,244; July 5.
Brake mechanism, Four wheel. R. C. Mountz. 1,866,479–80; July 5.
Brake operating mechanism, Vacuum. G. P. Berry. 1,865,815; July 5.
Brake, Operator. R. J. Norton. 1,866,481; July 5.
Brake shoe. S. Whitworth. 1,865,548; July 5.
Brake shoe, Composite. A. L. Boegehold. 1,865,823; July 5.
Brake slack adjuster. M. S. Johnson. 1,865,760; July 5.

Brake system for automotive vehicle, Vacuum. C. S. Bragg and V. W. Kliesrath. 1,865,505; July 5.
Braking system. L. E. La Brie. 1,865,525; July 5.
Bridge set accessory. H. Dahlman and D. Dahlman. 1,865,618; July 5.
Bristle removing machine for hog carcasses. N. E. Wernberg. 1,865,492; July 5.
Brooder, Fireless. A. M. Pritchett. 1,866,054; July 5.
Brush comb. L. Hernon. 1,866,210; July 5.
Brush, Fountain. E. S. Garvey. 1,865,850; July 5.
Bubble cap for oil distilling apparatus. M. L. Berryman. 1,865,818; July 5.
Bucket. F. Angelbeck. 1,866,074; July 5.
Buckle. S. N. Bickestaff. 1,865,501; July 5.
Buckle, Extensible. A. F. Kramer. 1,866,165; July 5.
Buckle, Loop. R. J. Hodge. 1,865,854; July 5.
Buckle, Shoe. W. L. Gibbons. Des. 87,303–4; July 5.
Buckle, Slide. J. H. Domkee. 1,865,509; July 5.
Buffing machine. E. F. Hodgkins. 1,865,855; July 5.
Building. E. B. Wagoner. Des. 87,320; July 5.
Building material and making same. L. Kirschbraun. 1,865,634; July 5.
Building unit. F. H. Halsey. 1,865,903; July 5.
Bumper, Oscillative automobile. W. R. Tarte. 1,865,801; July 5.
Burner: *See*—
Fuel burner. Hydrocarbon burner.
Burner mechanism, Hydrocarbon. W. G. B. Olson. 1,865,782; July 5.
Cabinet cooler. L. W. Hassensall. 1,866,466; July 5.
Cabinet for packing china and glassware. G. B. Eckright. 1,866,455; July 5.
Cable forming apparatus. G. A. Seeley. 1,866,272; July 5.
Cable impregnating apparatus. W. Neuhold. 1,866,418; July 5.
Cables damaged by short circuiting, Locating the fault in the case of multi-conductor. W. Graf. 1,865,687; July 5.
Cables, Forming. N. Curtiss. 1,866,250; July 5.
Cables, Junction sleeves or the like for deep sea. V. Thiel. 1,866,235; July 5.
Cake. J. W. Hawks. Des. 87,305; July 5.
Calculating machine. C. M. F. F iden. 1,865,751; July 5.
Calculating machine. C. M. F. Friden. 1,866,023; July 5.
Calculating machine attachment. H. L. Berger. 1,865,553; July 5.
Calendar. H. E. Shedd. 1,866,425; July 5.
Calibrator, Universal crystal controlled. R. H. Worrall. 1,866,441; July 5.
Can: *See*—
Oil can.
Can closure. L. Hirsch. 1,866,467–8; July 5.
Can closures, Forming. L. Hirsch. 1,866,469; July 5.
Cans or the like, Attachment for paint. A. E. Astley. 1,865,730; July 5.
Candles and the product thereof, Molding of beeswax. L. W. Geller. 1,866,025; July 5.
Cap for paste tubes. L. Schneer. 1,866,177; July 5.
Car coupler operating device. A. E. Small. 1,865,729; July 5.
Car, Refrigerator. L. L. Cohen. 1,866,085; July 5.
Carbonaceous material, Activation of. G. Bailleul. 1,865,067; July 5.
Carburation system. E. R. Godward. 1,865,514; July 5.
Carburetor. L. Huber and R. Distel. 1,865,471; July 5.
Carburetor. P. S. Tice. 1,865,488; July 5.
Carburetor regulating mechanism. J. Barels. 1,866,076; July 5.
Carrier: *See*—
Trunk and luggage carrier. Trunk and wheel carrier.
Carton, Advertising display. H. B. Staats. 1,866,493; July 5.
Carton and closing same, Liquid-tight. J. S. Royle and J. Mellor. 1,866,488; July 5.
Carton, Dispensing. F. Reichel. 1,866,130; July 5.
Carton, Display. J. E. Hines. 1,866,211; July 5.
Carton, Egg. L. Benoit. 1,865,454; July 5.
Case: *See*—
Shipping case. Vanity case.
Show case.
Case and support therefor, Combined clock. B. F. Muldoon. Des. 87,313; July 5.
Cash register. B. Bornkessel, E. Breitling, K. A. Lehmann, and A. Varren. 1,865,883; July 5.
Cash register. B. M. Shipley. 1,865,647; July 5.
Cash register, Lever set lever operated. M. M. Goldberg. 1,865,627; July 5.
Casing for electrical devices. H. M. Stevens. 1,866,326; July 5.
Catamenial appliance. M. C. Norton. 1,866,220; July 5.
Cell and seal therefor, Dry. C. O. Deibel. 1,866,016; July 5.
Cellulose ester material, Partial saponification of. C. Dreyfus and H. Platt. 1,866,153; July 5.
Cellulose resin product and its preparation. H. C. Rohlfs. 1,866,372; July 5.
Centrifugal machine, Continuous automatic. H. A. Herr. 1,866,499; July 5.
Chain, Four point contact. R. W. Dull and E. Geertz. 1,865,844; July 5.
Chain Sprocket. F. Muhlenbruch. 1,866,318; July 5.
Chair iron. H. W. Bolens. 1,866,498; July 5.
Chase for printing presses. E. O., R. O., F. R., and D. D. Vandercook. 1,866,379; July 5.
Chemicals, Method of and apparatus for continuously recovering and concentrating. J. M. Coahran. 1,865,887; July 5.
Chill roll. A. W. De Vout and R. W. Regensburger. 1,866,509; July 5.
Chlorinator. L. C. Somers. 1,865,976; July 5.
Chuck. J. W. Smith. 1,866,374; July 5.
Cigar handling machinery. E. U. Cave. 1,865,831; July 5.
Cigarette and cigarette package. S. C. Miller. 1,865,943; July 5.
Cigarette cases, Attachment for holding. W. C. Hiering. 1,866,107; July 5.
Circuit breaker, Electric. E. B. Wedmore. 1,866,495; July 5.
Circuit controller. R. G. Tuggle. 1,866,378; July 5.
Circuit interrupter, Electrical. F. G. Shoemaker and J. J. Rose. 1,866,492; July 5.
Circuit interrupting system. D. C. Prince. 1,866,371; July 5.
Circuit system, Track. A. G. Williamson. 1,866,144; July 5.
Circuit testing instrument. H. Onken. 1,865,583; July 5.
Clamp: *See*—
Wedge clamp.
Clamp for slicing machines, Substance. H. Thomas. 1,866,236; July 5.
Clamp or dog, Pipe. G. Bannan. 1,866,075; July 5.
Clamping mechanism for molds, Automatic. L. Eggert. 1,865,434; July 5.
Clarification system for dry cleaning solvents. G. Boon. 1,866,187; July 5.
Clays from ordinary surface clays, Obtaining colloidal. O. E. J. Abrahamson. 1,865,496; July 5.
Cleaner: *See*—
Pocket and cuff cleaner. Suction cleaner.
Rake cleaner. Vacuum cleaner.
Clip: *See*—
Binder clip. Paper clip.
Clock and burgler alarm, Combined. J. M. Cody and J. E. Rhodes. 1,865,743; July 5.
Clock case. F. J. Abel. Des. 87,288–96; July 5.
Closure for containers. C. S. Baron. 1,865,737; July 5.
Closure for tank apertures. V. C. Norquist. 1,865,538; July 5.
Closure operating mechanism. T. Brady. 1,866,392; July 5.
Cloth board. D. R. Thomson. 1,866,330; July 5.
Cloth doubling machine. J. Monforts and F. Wirtz. 1,865,945; July 5.
Cloth laying machine. A. L. Cutter. 1,866,088; July 5.
Clutch. C. L. Pfeiffer. 1,866,128; July 5.
Clutch, Automatic. K. E. Lyman. 1,865,772; July 5.
Clutch construction. J. J. Martin. 1,865,936; July 5.
Clutch, Hydraulic. A. N. Thomas. 1,866,066; July 5.
Clutch operating mechanism. A. Ellersgaard. 1,866,093; July 5.
Clutch mechanism. W. H. Schoonmaker. 1,866,270; July 5.
Coating apparatus. C. A. Hach. 1,866,100; July 5.
Coating composition. F. Groff. 1,865,628; July 5.
Coating, Lamp. J. E. Ferguson. 1,865,436; July 5.
Coffee maker. O. M. Anderson. Des. 87,298; July 5.
Coffee-mill with electric driving device. J. Stockert. 1,865,731; July 5.
Coffee product and preparing it, Concentrated. E. J. Lorand. 1,866,415; July 5.
Coffee product, Making a concentrated. E. J. Lorand. 1,866,414; July 5.
Coiling, Metal. C. A. Kaiser. 1,866,310; July 5.
Collar stiffener and tie support, Combined soft. W. A. Johnston. 1,865,915; July 5.
Comb: *See*—
Brush comb. Sanitary comb.
Combination wrench. J. C. Siegrist. 1,866,426; July 5.
Combustion chamber for internal combustion engines. A. W. Gardiner. 1,865,849; July 5.
Compensator for mold strippers, Oil. L. Eggert. 1,865,435; July 5.
Compound for use in casting metals. B. F. Wallace. 1,866,278; July 5.
Concrete articles and the like, Making. G. H. Wagner. 1,865,732; July 5.
Concrete in piles, Method and apparatus for placing. M. M. Upson. 1,865,652; July 5.
Concrete mixture. H. J. Shaw. Re18,511; July 5.
Condenser, Electrical. A. Nyman. 1,865,640; July 5.
Confection display device. H. H. Logan. 1,866,117; July 5.
Confection package. R. E. Meany. 1,865,535; July 5.
Connecter, Electrical. P. P. Pipes. 1,865,720; July 5.
Connection, Pipe. G. M. Etnyre. 1,865,462; July 5.
Connections between machine parts, Making. W. A. Abegg. 1,865,808; July 5.
Contact finger assembly for electric controllers. G. J. Lexa. 1,865,638; July 5.
Container. J. M. Hart and M. P. Chaplin. 1,866,035; July 5.
Container. A. W. Miner. 1,866,317; July 5.
Container. L. J. Most. 1,865,639; July 5.
Container. H. R. Stubbs. 1,866,230; July 5.

Container, Display packer's. W. F. Punte. 1,866,224; July 5.
Container for attachment to barbers' chairs, Hygienic collar strip. G. Pottern. 1,866,370; July 5.
Container for fragile articles. H. A. Inman. 1,866,354; July 5.
Container, Package. F. C. Hannaford. 1,865,688; July 5.
Container, Paper. J. G. Witte. 1,866,496; July 5.
Container stopper. J. A. Keenan. 1,865,764; July 5.
Control button for thread bobbins. W. Hengst. 1,865,908; July 5.
Control device. C. L. Bryant. 1,865,672; July 5.
Control device. A. T. Crocker. 1,866,347; July 5.
Control device. J. Kerrigan and A. Roth. 1,866,357; July 5.
Control for reversible engines. J. N. Kimball. 1,865,861; July 5.
Control for valve turning and other operations. D. R. Yarnall. 1,865,604; July 5.
Control mechanism for gas producers. F. E. Leahy. 1,865,929; July 5.
Control system. W. E. Thau. 1,865,980; July 5.
Control system and mechanism. E. J. Perry. 1,865,584; July 5.
Controlling mechanism for shoe machines. C. E. Hood. 1,865,856; July 5.
Conveyer. C. W. Starks. 1,865,596; July 5.
Conveyer, Cotton. J. T. Beaty. 1,866,005; July 5.
Conveyer system. G. Raymond. 1,865,788; July 5.
Conveying apparatus, particularly for electroplating. J. Oertli. 1,866,124; July 5.
Cooker, Food. C. W. Shields. 1,865,973; July 5.
Cooler: *See*—
Cabinet cooler. Vacuum cooler.
Cooling device. H. Mougey and C. R. Short. 1,865,877; July 5.
Cooling of rotary engine. J. F. N. Craig. 1,866,398; July 5.
Cop winding machine. W. Schweiter. 1,865,970; July 5.
Cord anchoring device. F. C. Marshall and J. L. Newport. 1,865,935; July 5.
Cords of plastic or gelatinous material into lengths, Dividing. J. Wood and H. F. Reynolds. 1,866,439; July 5.
Corners of frangible material, Means to protect. E. Sas. 1,865,485; July 5.
Cornstalk fiber composition. S. A. Gill. 1,866,204; July 5.
Couch, Folding. A. Zeyen. 1,865,606; July 5.
Coupling: *See*—
Mechanical coupling. Multiswitch coupling.
Coupling device. C. Fichandler. 1,866,456; July 5.
Coupling for lubrication, Pressure. J. F. MacIndoe. 1,865,932; July 5.
Coupling for sander drum shafts. C. H. Petskeyes. 1,865,950; July 5.
Coupling for wire ropes. H. Jason. 1,866,470; July 5.
Crane. R. W. Kaltenbach. 1,865,762; July 5.
Crank, Load balancing. H. N. Marsh. 1,866,049; July 5.
Cultivator. C. G. Strandlund. 1,865,800; July 5.
Cultivator, Motor. J. L. Jackson. 1,865,521; July 5.
Cup: *See*—
Paper cup.
Cup for artificial teeth, Suction. H. R. Priest. 1,865,957; July 5.
Current motor, Alternating. W. C. Nein and T. W. Varley. 1,866,507; July 5.
Current transformer. R. H. Borkent. 1,865,430; July 5.
Currents, Rectification of alternating. H. P. Hollnagel and G. A. F. Winckler. 1,866,351; July 5.
Curtain drying frame. L. W. Rickey. 1,866,056; July 5.
Cushioning mechanism. D. S. Barrows. 1,866,341; July 5.
Cutter: *See*—
Hair cutter.
Cutter, Making a. P. D. Merrill. 1,866,315; July 5.
Cylinder, Adjustable folding. H. C. Jordhoy. 1,865,696; July 5.
Cylinder and system for use of solid CO_2, Carbonating. W. T. Comer. 1,866,192; July 5.
Damper control for heating furnaces. L. M. Persons. 1,865,641; July 5.
Date indicating or registering apparatus. N. O. Willinder. 1,866,071; July 5.
Decomposer, particularly for the electrolysis of water under pressure. H. Niederreither. 1,865,946; July 5.
Deodorant and cleansing powder. W. F. Nutt. 1865,948; July 5.
Deodorizing apparatus. L. W. Hughes and W. H. von Hacht. 1,866,164; July 5.
Desk construction. B. E. Richardson. 1,866,174; July 5.
Detector: *See*—
Thin place detector.
Device for making vitreous like objects. S. H. Peltier. 1,865,787; July 5.
Device for rinsing and applying a suction action to washing. E. Eberhard. 1,866,198; July 5.
Device for squeezing segmental fruit slices. F. Ritter, jr. 1,866,487; July 5.
Dibenzanthrone, Producing oxidized. E. T. Howell. 1,866,501; July 5.
Die casting machine. W. J. During. 1,866,191; July 5.
Digger: *See*—
Peanut digger.
Dispenser, Beverage. F. A. Madden. 1,865,773; July 5.
Dispenser, Liquid soap. W. J. Thompson and R. G. Kirkwood. 1,866,237; July 5.
Dispenser, Mercury. E. L. Chott. 1,866,294; July 5.
Dispensing device for tooth-paste. A. Dazey. 1,866,190; July 5.
Dispensing system for gasoline and the like. G. H. Didinger. 1,866,298; July 5.
Display and vending method and device. H. H. McKee and C. T. Walter. 1,866,511; July 5.
Display device. N. Krawitz. 1,865,923; July 5.
Display device. A. G. Little. Des. 87,323–4; July 5.
Display device. R. E. Spiel. 1,866,135; July 5.
Display folder, Combination necktie and handkerchief. M. Grossman. 1,866,463; July 5.
Display or decoration device. E. H. Horton. 1,865,758; July 5.
Display sheet rack. W. A. Hanses. 1,866,208; July 5.
Dolly. E. Karfiol. Des. 87,307; July 5.
Domestic appliance. R. L. Lee. 1,865,867; July 5.
Door badge, Fresh flower. L. E. Roberts. 1,866,423; July 5.
Door, Car. G. B. Dorey. 1,865,747; July 5.
Door engine. L. P. Hynes. 1,865,913; July 5.
Door for box cars, Grain. A. J. Ketterling. 1,866,041; July 5.
Door operating mechanism, Electrical. J. E. Kunde. 1,865,925; July 5.
Door panels of fibrous materials, Making. E. C. Loetscher. 1,866,312; July 5.
Door reenforcement. A. Yurkovitch. 1,866,146; July 5.
Doors in automobile bodies, Hanging. A. S. Campbell. 1,865,673; July 5.
Dosing mixtures, Apparatus and method for preparing and proportioning. W. H. Green. Re18,510; July 5.
Dough working device. W. G. Kirchhoff. 1,866,213; July 5.
Doughnut former. P. J. Toews. 1,866,332; July 5.
Doughnut forming machine. F. L. Schoel. 1,866,061; July 5.
Draft device for mowers. T. W. Paul. 1,865,786; July 5.
Dresser, Vanity. H. S. Meldahl. 1,866,314; July 5.
Drill: *See*—
Earth boring drill. Well drill.
Rock drill.
Drill bit, Expansion. A. E. Carlson. 1,866,082; July 5.
Drill controlling apparatus. W. A. Ross. 1,866,131; July 5.
Drilling apparatus. B. Granville. 1,865,853; July 5.
Drilling machine. J. E. Horste. 1,865,567; July 5.
Drinking tank, Farm stock. C. Burnett. 1,865,829; July 5.
Drive, washing machine. T. S. Watson. 1,865,656; July 5.
Driving and steering mechanism for wheeled toys. C. J. Moore. 1,866,477; July 5.
Driving mechanism. T. A. Bryson. 1,866,291; July 5.
Driving mechanism of lubricating pumps. O. Hajek. 1,866,206; July 5.
Driving unit for loud speakers. H. P. Kuehni. 1,866,361; July 5.
Drum, Hinged forming. H. C. Bostwick. 1,866,391; July 5.
Drum, Segmental. H. C. Bostwick. 1,866,390; July 5.
Drying treatment. F. M. Clark. 1,866,346; July 5.
Duplicating material. J. Q. Sherman. 1,865,708; July 5.
Dust puff. W. S. Parker. 1,865,785; July 5.
Dyestuff containing metals and making same. F. Straub and W. Anderau. 1,865,978; July 5.
Earth boring drill. C. E. Reed. 1,865,706; July 5.
Easel. H. V. Marsh. 1,865,934; July 5.
Easel, Can display. H. V. Marsh. 1,865,534; July 5.
Educational device. F. L. Simon. 1,866,133; July 5.
Egg tester, Advertising. H. S. Wynne. 1,866,442; July 5.
Electric apparatus, Cooling. F. G. Baum. 1,865,499; July 5.
Electric crystal system, Piezo. A. Hund. 1,865,858; July 5.
Electric switch. R. C. Graseby. 1,866,406; July 5.
Electric switch. E. Karrer. 1,865,697; July 5.
Electric switch, Enclosed. M. B. Wood. 1,866,333; July 5.
Electrical regulating apparatus. R. M. Gilson. 1,865,562; July 5.
Electrical relay and the like. E. F. Weston. 1,866,436; July 5.
Electrode mounting for welding machines. H. E. White. 1,866,382; July 5.
Electrode support. K. H. Kingdon and L. Tonks. 1,866,358; July 5.
Electrode, Thermionically inactive. J. L. Wuertz. 1,865,449; July 5.
Electroholder for printing machines, Quick-change. E. L. Mueller. 1,865,478; July 5.
Electrolytic apparatus. A. E. Knowles. 1,866,472; July 5.
Electrolytic bright dip for iron and steel. G. B. Hogaboom and W. R. King. 1,865,470; July 5.
Electrolytic cell. K. E. Stuart. 1,866,065; July 5.
Electron emission material. M. N. Fredenburgh. 1,865,437; July 5.
Electron tube amplification system. B. F. Lee. 1,865,573–4; July 5.
Electroplating equipment. M. Kirchner. 1,865,767; July 5.
Elevator control system. L. J. Kinnard and E. M. Bouton. 1,866,359; July 5.
Emasculator. E. C. Bevans. 1,865,429; July 5.
Emergency selective switch, Automatic. C. H. Bissell. 1,866,007; July 5.

Emptying device for liquid couplings. C. Schmieske. 1,866,424; July 5.
Enamel remover. C. J. Stowie. 1,865,799; July 5.
Engine: *See*—
Cooling or rotary engine. Oil engine.
Door engine. Rotary engine.
Internal combustion engine. Valve combustion engine.
Engine. O. L. Snyder. 1,865,594; July 5.
Engine and ship's propelling machinery, Marine. W. Hincheliffe and J. Scott. 1,865,909; July 5.
Envelope feeding device. B. A. Wood. 1,865,495; July 5.
Equipment for freezing and packing materials. M. E. Miller. 1,866,316; July 5.
Evaporator, Cooling. R. W. Kritzer. 1,865,924; July 5.
Exercising device. F. L. Galley. 1,866,024; July 5.
Eye set for dolls, Movable. S. Marcus. 1,865,475; July 5.
Fan. L. M. Persons. 1,866,127; July 5.
Fastener socket member, Slide. A. F. Johnson. 1,866,355; July 5.
Fastening device. L. H. Lee. 1,865,866; July 5.
Fastening, Sprocket. A. Kindelmann and E. Boecking. 1,866,112; July 5.
Faucet, Mixing. N. H. Henderson. 1,865,517; July 5.
Feed, Dog. W. F. Newhouse. 1,865,879; July 5.
Feeder, Chicken. P. Kohl. 1,865,921; July 5.
Filaments, Manufacturing noninductive helical. W. L. Parrott. 1,865,442; July 5.
Filaments, Producing uniform length. S. Wadsten and C. W. Hunt. 1,865,490; July 5.
File, Indexed correspondence. Le R. E. Hutchings. 1,866,353; July 5.
Filler cap. C. E. Turner. 1,865,489; July 5.
Filler device. H. D. Geyer. 1,865,465; July 5.
Film-developing tank. M. F. Murphy and C. B. Metheny. 1,866,521; July 5.
Film race for cameras. H. G. Cunningham. 1,866,014; July 5.
Film records, Titling sound. F. H. Owens. 1,866,268; July 5.
Films and surfaces and resulting product, Hardening gelatine. F. C. Atwood. 1,865,497; July 5.
Filter, Air. C. C. Whittaker. 1,865,987; July 5.
Filter, Analytical. A. M. Van Doorn. 1,865,982; July 5.
Finger-ring. I. Roskin. 1,866,320; July 5.
Fire extinguisher. A. W. Burnham. 1,866,151; July 5.
Fire extinguishing apparatus. G. W. Burke, jr. 1,866,008; July 5.
Fish lure. A. F. Boehm. 1,866,289; July 5.
Fish lure. F. Harrington and H. Harrington. 1,866,565; July 5.
Fishing rod reel. C. T. O'Hara and W. A. Quirt. 1,866,052; July 5.
Fitting, Stop log. O. Holden. 1,866,350; July 5.
Floor plate and stove support, Combination adjustable. C. L. Gohmann. 1,865,899; July 5.
Flow check. S. B. Schnitter. 1,865,795; July 5.
Flow control. S. L. Adelson. 1,866,284; July 5.
Font of type or a similar article. H. S. Tabor. Des. 87,319; July 5.
Food chopping machine. A. C. Van Hooydonk. 1,865,545; July 5.
Food pack. J. M. Hart and M. P. Chaplin. 1,866,408; July 5.
Food package, Sanitary. W. W. Hartman and R. A. Steps. 1,866,036; July 5.
Form, Shoe. W. J. De Witt. 1,866,018; July 5.
Fracture appliance. E. A. Bryant. 1,865,827; July 5.
Frame: *See*—
Bag frame. Sign frame.
Curtain drying frame. Spinning frame.
Frame construction, Tank vehicle. F. M. Reid. 1,866,055; July 5.
Frame with equalizing journal boxes, Side. W. F. Richards. 1,865,589; July 5.
Freezer, Ice cream. A. L. Roebuck. 1,865,724; July 5.
Friction elements and making. W. A. Blume. 1,866,287; July 5.
Friction servo brake. G. P. Berry. 1,865,816; July 5.
Fruit pressing machine. F. M. Eaton. 1,865,846; July 5.
Fuel burner, Liquid. T. A. Curran. 1,865,889; July 5.
Fuel burning apparatus. S. T. Warner. 1,865,983; July 5.
Fuel burning furnace, Finely divided. M. Frisch and E. Lundgren. 1,866,404; July 5.
Furnace: *See*—
Fuel burning furnace. Sheet annealing furnace.
Preheating furnace.
Furnace. W. A. Gilchrist. 1,865,753; July 5.
Furniture, Printing. H. Powers. 1,866,223; July 5.
Furniture, Sheet metal. A. Witke, P. E. Huetten, O. Rosemann, J. P. Molling, and C. F. Martell. 1,865,603; July 5.
Furniture, Store. G. G. Wieland. 1,865,734; July 5.
Fuse, Self-indicating refillable electric cartridge. F. C. Schmid. 1,866,491; July 5.
Game. H. E. Goodwin. 1,866,158; July 5.
Game apparatus. T. H. Sloan. 1,866,063; July 5.
Garment former. A. J. Raus. 1,866,173; July 5.
Garment hanging and packaging device. J. H. Vineberg. 1,866,241; July 5.
Garment pocket construction. B. J. Smith. 1,866,428; July 5.
Garment, Protective. B. A. Slocum. 1,865,709; July 5.
Gas, Continuous process for producing high heating value. W. L. De Baufre. 1,866,399; July 5.
Gas purification. R. Heinrich. 1,865,907; July 5.
Gas purifier or scrubber. A. A. Criqui and R. T. Thornton. 1,866,196; July 5.
Gas shut-off system and apparatus. J. J. Donohue. 1,866,253; July 5.
Gases, Apparatus for preparing pressure. C. W. P. Heylandt. 1,866,514; July 5.
Gases, Converting liquefied. C. W. P. Heylandt. 1,866,516; July 5.
Gases, Method and apparatus for use in storing and transporting liquefied. C. W. P. Heylandt. 1,866,515; July 5.
Gases, Purification of furnace or other. J. G. Coutant. 1,866,193; July 5.
Gasket joint. T. Griswold, jr. 1,866,160; July 5.
Gate: *See*—
Ash hopper gate.
Gauge: *See*—
Liquid level gauge. Pressure gauge.
Gauge for ascertaining the lift of compressor air valves. P. A. Alonzo. 1,866,000; July 5.
Gear, Draft. W. H. Cotton. 1,865,838; July 5.
Gear, Draft. H. E. Tucker. 1,865,803; July 5.
Gear, Free-wheel. E. Eichhorn. 1,866,254; July 5.
Gear particularly for motor vehicles, Automatically variable transmission. H. F. Hobbs. 1,865,910; July 5.
Gear shift. J. G. Hanson. 1,865,690; July 5.
Gear shifting device, Automatic. A. Zinecker. 1,865,997; July 5.
Gear, Steering. C. E. Rymes. 1,865,966; July 5.
Geared motor. V. G. Apple. 1,866,339; July 5.
Glass annealing leer. J. L. Drake. 1,865,891; July 5.
Glass, Apparatus for forming and annealing sheet. F. Fraser. 1,865,894; July 5.
Glass, Apparatus for forming articles of. W. J. Miller. 1,866,506; July 5.
Glass apparatus, Sheet. L. D. Blackshere. 1,865,819; July 5.
Glass drawing. W. O. Amsler. 1,865,811; July 5.
Glass forming machine. L. D. Soubier. 1,865,730; July 5.
Glass manufacture, Process and apparatus for sheet. J. L. Drake. 1,865,890; July 5.
Glass, Process and apparatus for producing sheet. C. Cone. 1,865,836; July 5.
Glass, Process and apparatus for producing sheet. J. L. Drake. 1,865,843; July 5.
Glass, Process and apparatus for the manufacture of. J. C. Blair. 1,865,820; July 5.
Golf tee, Permanent. W. E. Willey. 1,866,143; July 5.
Governor for gramophones, Speed. O. Kurz. 1,866,045; July 5.
Grain deflector. E. H. Kidder. 1,865,633; July 5.
Grave digging machine. C. E. Helm and H. L. Handy. 1,866,037; July 5.
Grinder, Multiple groove. C. T. Raule. 1,865,642; July 5.
Grinder, Valve. C. Bawman. 1,866,447; July 5.
Grinding machine. G. T. Huxford and F. E. Stratton. 1,866,212; July 5.
Guide bar for slicing machines. C. F. M. van Berkel. 1,866,240; July 5.
Gun for applying liquid to dandelions. F. I. Jaden. 1,865,914; July 5.
Hair cutter. W. E. Loughmiller. 1,866,475; July 5.
Hair waver. A. E. Walsh. 1,865,655; July 5.
Halide residue, Treating metallic. W. H. Shimer. 1,865,797; July 5.
Hand bag. C. J. McCabe and I. Schoenholz. 1,865,938; July 5.
Hand brake. S. B. Haseltine. 1,865,630; July 5.
Hand brake. W. A. Heitner. 1,865,631; July 5.
Handle: *See*—
Steering wheel handle.
Handle for automobile doors and the like. W. J. Moore. Des. 87,311; July 5.
Handle for vehicles and other purposes, Electrically heated. S. J. Claridge. 1,865,834; July 5.
Hanger. I. Honsowetz. 1,865,757; July 5.
Hanger for traveling cases, Folding. O. L. Books. 1,866,150; July 5.
Headlight dimmer. P. E. Woodroffe. 1,866,440; July 5.
Headlight for vehicles, Automatically turning. D. Russo. 1,866,324; July 5.
Headrest for telephones. E. Königsberger. 1,866,043; July 5.
Heat control for wax carbonizing presses. G. A. Rutkoskie. 1,865,445; July 5.
Heat exchange. W. H. Armacost. 1,866,388; July 5.
Heat exchange unit. A. B. Modine. 1,865,536; July 5.
Heat regulator for leers. V. Mulholland and W. T. Honiss. 1,866,366; July 5.
Heat removal by mercury, Apparatus for. A. J. Nerad. 1,866,367; July 5.
Heater: *See*—
Tank car heater. Windshield heater.
Water heater.
Heaters, Method and apparatus for effecting automatic adjustments of thermostatically controlled. W. J. Crowell. 1,865,507; July 5.
Heating and cooking device for automobiles, Water. W. L. Davey. 1,866,015; July 5.
Heating and ventilating apparatus. M. O. Snediker. 1,866,178; July 5.
Heating device. A. B. Modine. 1,866,122; July 5.
Heating device, Electrical. J. H. Gaetje and A. B. Santachi. 1,866,097; July 5.

Heels, Nonslip attachment for shoe. G. Antz. 1,866,386; July 5.
Hinge, Awning. C. H. Lloyd. 1,866,474; July 5.
Hinge, Spring. J. G. Mitchell. 1,866,218; July 5.
Hinged box. C. S. Andrews. 1,865,608; July 5.
Hoist, Container. R. Bergmann. 1,865,739; July 5.
Holder and bookmark, Sheet. G. M. Sacerdote. 1,865,590; July 5.
Holder and buffer, Combined door. G. W. Wells. 1,865,661; July 5.
Holder and carrier, Bottle. G. T. Schroder. 1,865,645; July 5.
Holder, Cigarette. M. Rooney. Des. 87,318; July 5.
Holder, Cow tail. A. Grabowski. 1,866,020; July 5.
Holder, Cravat. A. L. Wurster. 1,865,995; July 5.
Holder, Display card. C. H. Colby. 1,865,835; July 5.
Holder, Gas. J. R. L. Santos. 1,865,791–2; July 5.
Holder, Key. S. Lippstadt. 1,866,216; July 5.
Holder, Memorandum pad. F. A. Watkins. 1,866,279; July 5.
Holder, Neverslip horseshoe. H. F. Knepley. 1,865,862; July 5.
Holder, Sanitary toothbrush. J. Amelotte. 1,866,001; July 5.
Holder, Windshield wiper. A. Ellerby. 1,866,402; July 5.
Holding device. R. R. Clark and R. A. Fontaine. 1,865,558; July 5.
Hook for doors. A. Brophy. 1,866,247; July 5.
Hoop: *See*—
Order and message hoop.
Horn. C. M. Lee. 1,865,473; July 5.
Hospital device or appliance. L. J. Clewley. 1,866,397; July 5.
Humidifier. H. A. Greenwald. 1,865,563; July 5.
Humidifier assembly. C. F. Warrick. 1,865,590; July 5.
Humidifying apparatus for space heaters. F. M. Young. 1,865,605; July 5.
Humidor. I. J. Lichter. 1,865,700; July 5.
Hydraulic operator, Quick release. W. J. Woods. 1,866,334; July 5.
Hydraulic press. A. C. Wisner. 1,866,383; July 5.
Hydraulic wheel. W. A. Martin. 1,866,476; July 5.
Hydrocarbon burner. G. W. Leiman. 1,866,311; July 5.
Hydrocarbons, Refining. T. T. Gray. 1,865,467; July 5.
Hydrocarbons, Refining. M. R. Mandelbaum. 1,865,474; July 5.
Hydrogen, Producing. J. S. Beekley. 1,866,246; July 5.
Hydrogen, Producing. A. T. Larson. 1,865,770; July 5.
Ice box. L. Baron. Des. 87,299; July 5.
Ice box candy rack. E. H. Nusbaum. 1,865,582; July 5.
Identification device. E. Ring. 1,865,643; July 5.
Impeller and making same. H. Junkers. 1,865,918; July 5.
Implement for loosening bottle stoppers. J. O. Patterson. 1,866,125; July 5.
Indelible marking, Art and apparatus for. R. S. Blair. 1,865,610; July 5.
Index and the like, Visible. R. Fitz Power. 1,866,421; July 5.
Index or file. W. H. Day. 1,866,089; July 5.
Index, Visible. Le R. E. Hutchings. 1,866,352; July 5.
Indexing device. F. H. Beulwitz. 1,865,552; July 5.
Indicating system. C. E. Stewart. 1,866,327; July 5.
Indicator: *See*—
Pressure indicator.
Induction motor, Adjustable speed. H. V. Green. 1,866,349; July 5.
Insect trap. H. K. Taylor. 1,865,713; July 5.
Instrument for viewing designs in multiple. W. G. Hunton. 1,866,306; July 5.
Insulator bracket. W. M. Helm. 1,866,104; July 5.
Intensity control. F. Schröter and W. Federmann. 1,865,646; July 5.
Internal combustion engine. L. O. French. 1,866,300; July 5.
Internal combustion engine. J. E. Whitfield. 1,865,493; July 5.
Internal combustion engine. L. M. Woolson. 1,866,280–1; July 5.
Internal combustion engine, Four-stroke. P. Findeisen. 1,866,022; July 5.
Iron: *See*—
Chair iron.
Ironer. N. H. Watts. Des. 87,321; July 5.
Jar closure. L. T. Crabbe. 1,866,194; July 5.
Joint: *See*—
Ball and socket joint. Pipe joint.
Gasket joint. Rail joint.
Joint or connecter for roofing sheets. J. M. Carter. 1,865,674; July 5.
Journal box wedges, Apparatus for surfacing railway. A. L. Prentice, S. G. Buckett, and C. C. Dibble. 1,865,955; July 5.
Junction box. A. J. Laing. 1,865,926; July 5.
Key cutting apparatus. H. Hansen. 1,866,033–4; July 5.
Key retainer. R. V. Creery. 1,866,086; July 5.
Kit, Drawing. J. R. Swift. 1,866,180; July 5.
Knitting machine. W. L. Smith, jr. 1,865,710; July 5.
Knitting machine, Full fashioned. W. D. Richter. 1,865,707; July 5.
Knitting machines, Thread-trapper and reverse-plating mechanism for. H. H. Holmes and R. H. Robinson. 1,866,108; July 5.
Lace. J. Moosherr. Des. 87,312; July 5.
Lace. S. H. Page. Des. 87,315–16; July 5.
Ladder device for ascending gas containers. F. Einbeck. 1,865,684; July 5.
Laminated products, Method of and machine for manufacturing. A. J. Chattillion. 1,865,455; July 5.
Lamp base. D. S. Gustin. 1,865,468; July 5.
Lamp, Glow discharge. F. Gray. 1,865,516; July 5.
Lamp, Portable. G. J. La Vigne and W. C. Greist. 1,865,928; July 5.
Lantern, Hand. J. S. Zook. Des. 87,322; July 5.
Latch. E. J. Cook. 1,866,011; July 5.
Latch and kick-out assembly, Combined door. D. Miller. 1,865,581; July 5.
Latch, Hood. N. A. Mears and D. P. Hynes. 1,865,778; July 5.
Latch pivots, Mechanism for forming. H. W. Kranz. 1,866,360; July 5.
Lawn edge trimming machine. J. C. Rowe. 1,866,225; July 5.
Leak stop. C. Boyce. 1,865,670; July 5.
Leather and making the same. A. C. Orthmann. 1,865,783; July 5.
Lens. H. W. Hill. 1,865,691; July 5.
Lever locking mechanism. C. L. Johnson. 1,866,309; July 5.
Levorotatory 1-(para-aminophenyl)-2-methylamino-propanol-1, Production of normal. M. Oberlin. 1,865,880; July 5.
Light cell control. H. W. Mattingly. 1,865,937; July 5.
Light fixture and mirror, Combination. C. D. McCann. Des. 87,309; July 5.
Lighter, Pyrophoric. A. Weissenburger. 1,865,659; July 5.
Lighting fixture. E. F. Guth. 1,865,469; July 5.
Line casting machine. J. W. Bittner, 1,866,445; July 5.
Line protecting and message transmitting system. E. Pfiffner. 1,865,952; July 5.
Lining machine, Compound. W. F. Butler. 1,865,830; July 5.
Lining of pipes by centrifugal action, Apparatus for the manufacture of. E. S. Hume. 1,865,692; July 5.
Liquid clarifier. A. B. Orr. 1,865,480; July 5.
Liquid-flow controlling device. E. F. Geiger. 1,865,851; July 5.
Liquid level gauge. D. H. Reeves. Des.18,514; July 5.
Liquid treatment. W. H. Green. 1,866,031; July 5.
Liquids and particularly of waste water from factories, Purification of aqueous. A. Mackert. 1,866,417; July 5.
Liquids, Apparatus for treating. G. D. Dodd. 1,866,091; July 5.
Load factor indicator for aircraft, Hydrostatic. W. Klemperer. 1,865,698; July 5.
Loader. F. F. Waechter. 1,865,654; July 5.
Locating the point of entry of water into oil wells. G. H. Ennis. 1,865,847; July 5.
Lock: *See*—
Sheet metal lock.
Lock. F. E. Best. 1,866,342; July 5.
Lock for car dumpers, Platen. R. W. Kaltenbach. 1,865,763; July 5.
Lock washer. R. T. Hosking. 1,866,304; July 5.
Locking mechanism for banks and the like, Door. S. I. and W. D. Merrill. 1,865,779; July 5.
Loom stop mechanism. H. Demers. 1,865,620; July 5.
Loud speaker. H. C. Hoyt. 1,866,163; July 5.
Lubricant dispensing apparatus. T. E. Herlihy. 1,866,106; July 5.
Lubricant tester. J. Heisenfeldt and H. Walsh. 1,866,105; July 5.
Lubricating means for centrifugal liquid separator mechanism. J. McC. Edwards. 1,866,092; July 5.
Luminous compound and producing luminous objects therewith. H. Schlundt. 1,866,132; July 5.
Luminous device for dial telephones. C. E. Ford. 1,866,157; July 5.
Machine and method for forming cores. F. C. Goodlin. 1,866,301; July 5.
Machine for and method of operating on hides, skins, leather, and other similar pieces of work. G. A. Schettler. 1,865,542; July 5.
Machine for cutting double thread single point screws. J. A. Arenz. 1,866,286; July 5.
Machine for feeding and collecting sheets of paper or the like. J. H. Elwell. 1,865,750; July 5.
Machine for forming perforated blanks. A. Novick. 1,865,947; July 5.
Machine for manufacturing hollow glass bodies. P. Schoonenberg. 1,865,967; July 5.
Magnetic material, making the same, and articles made therefrom. C. C. Neighbors. 1,866,123; July 5.
Magnetic treatment of iron ores. W. Luyken. 1,865,869; July 5.
Maize header. G. E. Ewbank. 1,866,020; July 5.
Maps, Producing relief. J. J. Braund. 1,866,448; July 5.
Mast, Mooring. C. E. Rosendahl. 1,865,790; July 5.
Mat: *See*—
Bath mat.
Match. N. H. Waldinger. 1,865,716; July 5.
Match box shells, Manufacturing. K. A. Johannson. 1,865,695; July 5.
Match package. J. W. Johansson. 1,865,694; July 5.
Material, Apparatus for handling. D. V. Waters. 1,866,142; July 5.

Material for sintering, Balling fine grained. W. Bradley. 1,865,554; July 5.
Material to fish-tail bits, Apparatus for applying hard facing. C. C. Goolsbee. 1,866,028; July 5.
Material, Transparent sheet. E. M. Kratz. 1,866,410; July 5.
Materials, Electroplating nonconductive. P. R. Zinser. 1,866,283; July 5.
Materials, Separation of dry. K. C. Appleyard, C. W. H. Holmes, and I. L. Bramwell. 1,866,186; July 5.
Materials, Treating fermented. T. D. Kelly. 1,866,409; July 5.
Measuring apparatus. A. E. Young. 1,865,996; July 5.
Measuring device for workholders. G. B. Lambert. 1,865,927; July 5.
Measuring froth, Method and apparatus for. L. J. Christmann. 1,866,296; July 5.
Meat holding method. C. C. Smith. 1,866,508; July 5.
Meat press. N. J. Dziedzic. 1,866,510; July 5.
Mechanical coupling. L. De Montgrand. 1,865,559; July 5.
Mechanical figure. J. G. Connor. 1,865,837; July 5.
Mechanical movement. G. V. Peck. 1,865,704; July 5.
Mediums, Apparatus for separating flowing. F Bartling. 1,865,425; July 5.
Mercapto benzothiazole, Manufacture of. W. E. Messer. 1,865,477; July 5.
Merry-go-round. J. A. Scharf. 1,866,490; July 5.
Metal objects, Forming decorated. A. O. Johnson, 1,866,110; July 5.
Metal products and making same, Colloidal. F. Wilcoxon. 1,866,069; July 5.
Meter: *See*—
Batch meter. Milliampere and voltage meter.
Microtome. R. H. Pietzsch. 1,865,539; July 5.
Milk, Increasing the digestibility and pharmacological action of animal. R. Websarg. 1,866,184; July 5.
Mill: *See*—
Rolling mill. Saw mill.
Milliampere and voltage meter. J. Webber. 1,866,243; July 5.
Milling machine. W. Ferris. 1,866,348; July 5.
Mixer: *See*—
Portable mixer.
Mixing apparatus. W. H. Green. 1,866,030; July 5.
Mixing apparatus, Centrifugal multistage. K. Winkler. 1,865,991; July 5.
Molding for doors and the like, Movable. C. G. Johnson. 1,865,568; July 5.
Molding for running boards and the like. A. R. Ketcham. 1,865,766; July 5.
Monoplane. A. Rohrbach. 1,865,964; July 5.
Mop. A. C. Kootz. 1,866,114; July 5.
Mop. A. C. Kootz. 1,866,505; July 5.
Mortar hawk. J. Bybre. 1,865,885; July 5.
Mortising machine and support therefor. E. Luginbuhl. 1,865,576; July 5.
Motor: *See*—
Current motor. Induction motor.
Geared motor.
Motor cycles, Rear suspension of. R. Gillet. 1,865,896; July 5.
Mounting for cultivator shovels and the like. H. R. Traphagen. 1,865,651; July 5.
Mounting for water meters. W. A. White and B. A. Flood. 1,866,437; July 5.
Mouthpiece for cigarettes. L. H. Colpe. 1,865,679; July 5.
Mouthpiece for tobacco pipes, cigar or cigarette holders or other articles to be held by the teeth. F. Naimaster. 1,865,780; July 5.
Mower. S. P. Townsend. 1,866,238; July 5.
Mower guard and knife. T. J. Bergman. 1,865,738; July 5.
Mower, Lawn. A. G. Wagner. 1,866,380; July 5.
Mower, Lawn. C. C. Worthington. 1,865,993; July 5.
Muffler. J. W. Beamer. 1,866,004; July 5.
Multiswitch coupling. P. V. Welch. 1,865,600; July 5.
Musical instrument. M. Jackson. 1,865,522; July 5.
Napkin, Paper. F. M. Kowalewski. 1,865,922; July 5.
Nebulizer. G. Miller. 7,865,942; July 5.
Needle, Knitting. M. L. Pledger. 1,866,222; July 5.
Needle threader. A. C. Longfellow. 1,865,931; July 5.
Nitrogen oxides, Recovery of. O. Kaselitz and W. Katz. 1,865,917; July 5.
Nozzle, C. Iverson. 1,866,502; July 5.
Nut, Lock. L. Stroher. 1,866,067; July 5.
Oil can. C. N. Wilcox. 1,865,990; July 5.
Oil check ring for journal boxes. W. Peylinghaus. 1,865,951; July 5.
Oil engine. C. L. Cummins. 1,865,841; July 5.
Oil gas and producer gas, Making mixed. W. W. Williams. 1,865,664; July 5.
Oil, Refining crude. H. E. Widdell. 1,865,494; July 5.
Oils, Method of and apparatus for the extraction of vegetable. E. D. Coleman. 1,865,615; July 5.
Opener and closure for paper milk containers, Combined. J. J. Schmerler. 1,865,543; July 5.
Opener, Egg. W. Dammrich. 1,865,619; July 5.
Opening and closing device for collapsible tubes. W. V. Roos. 1,865,484; July 5.
Operating mechanism for punches and similar devices. R. H. Heisel and H. L. Pierson. 1,865,755; July 5.
Ophthalmic lens. E. D. Tillyer. 1,865,714–15; July 5.
Ophthalmic mounting. E. M. Splaine. 1,865,711; July 5.
Optical system. A. Sonnefeld. 1,865,977; July 5.
Order and message hoop. H. D. Bryant and W. H. Speed. 1,866,189; July 5.
Ore, Treatment of. J. F. Taple. 1,865,979; July 5.
Ores, concentrates and the like, Agglomeration of finely-divided ferruginous. A. Folliet and N. Sainderichin. 1,866,203; July 5.
Oscillations from piezo electric crystals, Production of. A. McL. Nicolson. 1,866,267; July 5.
Oscillations, System for producing high frequency. E. F. W. Alexanderson. 1,866,337; July 5.
Oven implement. M. D. Judah. 1,866,039; July 5.
Package assembling machine. A. Podel. 1,866,369; July 5.
Package for displaying merchandise. L. J. Russell. 1,866,323; July 5.
Packing, Piston. J. G. Hodge. 1,865,566; July 5.
Pad for glasses, Table. E. F. Glenn and R. H. Herring. 1,866,460; July 5.
Padlock, Combination. E. Sinner. 1,866,273; July 5.
Pants, Baby. M. C. Reynolds. 1,865,541; July 5.
Paper clip. M. boy Frank. 1,866,458; July 5.
Paper cup. F. Brown. 1,865,555; July 5.
Paper, Inserting it in envelopes, tucking in the flap or sealing the envelopes, and stamping them, Apparatus for folding. A. G. Cogswell. 1,866,452; July 5.
Paper, Reenforced. J. W. Ballard. 1,866,513; July 5.
Paper, Safety. W. N. Doushkess. 1,866,400; July 5.
Paper shake apparatus and method. H. G. Chatain. 1,865,613; July 5.
Paper, Shield. E. Karfiol. Des. 87,306; July 5.
Partition. S. Lowy. 1,865,868; July 5.
Peanut digger. L. C. Thacker. 1,866,276; July 5.
Pearl essence, Manufacture of. J. Paisseau. 1,865,703; July 5.
Pencil, Magazine lead. A. Woelm. 1,866,072; July 5.
Pencil, Mechanical lead. A. Woelm. 1,865,992; July 5.
Pencil or similar article. T. Malcolm. Des. 87,308; July 5.
Percompounds which are decomposed by catalases upon animal or vegetable products, Enhancing the action of. G. Van der Lee. 1,866,412; July 5.
Phonograph. R. Y. Barrows. 1,865,550; July 5.
Phonograph. J. Begovich y Garcia. 1,866,405; July 5.
Phonograph and the like. A. V. Bodine. 1,866,288; July 5.
Phonograph recorder and reproducer arm. L. A. Elmer. 1,866,403; July 5.
Phosphate, Production of monopotassium. W. Schuppe. 1,865,968; July 5.
Phosphate with two molecules of water of crystallization, Production of a di-sodium. A. Reimann. 1,865,588; July 5.
Photographic print treating method and apparatus. G. M. Dye. 1,865,682; July 5.
Piano action. C. E. Cameron, jr. 1,866,152; July 5.
Piano harp, Electric. J. Bethenod. 1,865,428; July 5.
Pick, Weeding. H. Breen. 1,865,671; July 5.
Picture and frame construction. J. F. Coates. 1,865,888; July 5.
Picture transmission apparatus. E. F. W. Alexanderson. 1,866,338; July 5.
Pie wrapping machine. H. Dragon. 1,865,748; July 5.
Pigments and making same. E. C. deStubner. 1,866,017; July 5.
Pile forming apparatus. E. D. Watt. 1,865,658; July 5.
Pile joint, Composite. E. D. Watt and E. Whiteley. 1,865,657; July 5.
Pile shells, Apparatus and method for driving. M. M. Upson and E. D. Watt. 1,865,653; July 5.
Pipe and tapping means, Combination. E. Bouchard. 1,866,446; July 5.
Pipe joint elements, Method of and apparatus for assembling. J. R. McWane. 1,866,051; July 5.
Pipe laying apparatus. C. F. Ward. 1,866,381; July 5.
Pipe making machine. R. H. Dyer. 1,865,845; July 5.
Piston. C. A. Sawtelle. 1,865,793; July 5.
Piston and connecting rod. A. E. Reid. 1,866,057; July 5.
Planetary stirring machine. F. R. Shaughnessy. 1,866,227; July 5.
Plant box. R. Regelson. 1,865,960; July 5.
Plants, Method of and machine for causing fecundation of. J. P. T. Nielsen. 1,866,219; July 5.
Plate or dish, Absorbent. R. W. Chapman. 1,865,742; July 5.
Playground equipment. F. Albach. 1,865,810; July 5.
Plow elevating mechanism. J. E. Boda. 1,865,431; July 5.
Plug cap, Attachment. G. W. Lieberum. 1,866,362–3; July 5.
Plug tester, Spark. M. B. Koons. 1,866,113; July 5.
Plug, Ventable primable spark. E. B. Andersen. 1,866,385; July 5.
Pneumatic spring. G. A. Bonelli. 1,865,740; July 5.
Pocket and cuff cleaner. W. H. Dorsey. 1,865,510; July 5.
Pole, Window. S. C. Lawlor. 1,865,526; July 5.
Pontoon for flying machines, Collapsible. W. M. Carden. 1,866,451; July 5.
Portable mixer. W. M. Venable. 1,866,138; July 5.
Power, Device for the transmission of mechanical. A. B. Craig. 1,865,839; July 5.

Power generating system. C. F. Strong. 1,866,494; July 5.
Power supply, System of. P. P. Sosinski. 1,866,179; July 5.
Power unit. E. A. Rockwell. 1,865,644; July 5.
Preheating furnace. T. F. Powers. 1,865,954; July 5.
Press: *See*—
Hydraulic press. Meat press.
Press for molding inlite battery boxes, Multiple hydraulic. H. D. Geyer. 1,865,464; July 5.
Pressure gauge. J. Wahl. 1,866,140; July 5.
Pressure indicator. J. Marchese and M. B. D'Orsay. 1,865,871; July 5.
Pressure regulator. F. B. Stover. 1,866,377; July 5.
Printing machine, Rotary. R. F. Bonsch. 1,865,611; July 5.
Printing machine, Rotary. O. Wilhelm. 1,865,602; July 5.
Printing rolls, Producing multicolor. J. C. Hakim. 1,866,103; July 5.
Products from fibrous material, Method and apparatus for manufacturing. M. Skolnik. 1,865,649; July 5.
Products obtained from plastic masses, Treating. G. Petroff. 1,865,586; July 5.
Propelling and steering mechanism, Marine. L. S. Olsen. 1,866,482; July 5.
Protective device. F. R. Marine. 1,866,048; July 5.
Protector, Armored foot and ankle. I. W. Millard. 1,865,702; July 5.
Protector, Plant. H. R. Sage. 1,866,059; July 5.
Pulley, Wood rim. H. Hertfelder. 1,866,303; July 5.
Pulverizing materials, Apparatus for. W. De Coursey. 1,866,297; July 5.
Pump. H. Gerken. 1,866,026; July 5.
Pump. F. J. Miller. 1,865,873; July 5.
Pump, Electromagnetic fuel. P. S. Tice. 1,866,136–7; July 5.
Pump for medical purposes, Piston. C. Mayer. 1,866,217; July 5.
Pump, Fuel. L. and C. L. Chevrolet. 1,866,083; July 5.
Pump, Fuel. F. Frelin. 1,865,624; July 5.
Pump, Hot oil. C. W. Stratford. 1,866,064; July 5.
Pump, Rotary. J. C. Bird. 1,865,504; July 5.
Pumping apparatus, Deep well. J. W. Chancellor. 1,865,676; July 5.
Quinine preparation. L. Pink. 1,865,953; July 5.
Rack: *See*—
Display sheet rack. Ice box candy rack.
Radiator. I. T. Bennett and F. C. Reynolds. 1,865,427; July 5.
Radiator. R. V. Frost. 1,865,511; July 5.
Radiator. F. C. Reynolds. 1,865,962; July 5.
Radiator. C. J. Schlafman. 1,865,794; July 5.
Radiator, Electric steam. H. C. Pennington. 1,866,221; July 5.
Radiator guard, bumper support and tow hook for trucks, Combined. H. P. Moss. 1,866,265; July 5.
Radiator shells, Manufacturing. H. G. Kellogg. 1,865,570; July 5.
Radiator units, Producing. A. C. Recker and M. B. Nichols. 1,865,444; July 5.
Radio control device. F. L. Morse. 1,865,537; July 5.
Radioreceiver control. W. H. Grimditch and D. P. Earnshaw. 1,866,462; July 5.
Radio receiving system. M. C. Batsel. 1,865,426; July 5.
Radio signal apparatus and method. T. E. Brockstedt. 1,865,826; July 5.
Radio transformer. L. F. Croft and G. K. Barger. 1,865,840; July 5.
Radio valves employing gallium. P. Creuzé. 1,866,195; July 5.
Rail bond. A. M. Nardini. 1,865,717; July 5.
Rail bond. L. C. Perl. 1,865,718; July 5.
Rail bond. P. P. Pipes. 1,865,722; July 5.
Rail bond. P. P. Pipes. 1,865,723; July 5.
Rail bond and method of bonding. P. P. Pipes. 1,865,721; July 5.
Rail joint. H. C. Graham. 1,866,159; July 5.
Rake, cleaner. W. M. Paxson. 1,866,269; July 5.
Range, Heating. L. Jackson. 1,866,109; July 5.
Rat trap. J. F. Smith. 1,866,228; July 5.
Rayon, Manufacture of. G. R. Lockhart. 1,865,701; July 5.
Razor and blade. H. R. Segal. 1,865,971; July 5.
Razor, Safety. E. G. Weaver. 1,866,434; July 5.
Receptacle. W. F. Lutzke 1,865,533; July 5
Receptacle, Ash. A. C. Grunwald. 1,865,902; July 5.
Receptacle, Dispensing. H. R. Priest. 1,865,956; July 5.
Receptacle, Heat insulating. A. E. Payson and M. P. Wetmore. 1,866,126; July 5.
Rectifier. C. H. Zierdt. 1,865,450; July 5.
Rectifier construction, Electric current. A. Gaudenzi and E. Kobel. 1,865,512; July 5.
Rectifying device. P. R. Coursey and H. Andrewes. 1,865,616; July 5.
Reel: *See*—
Fishing rod reel.
Reel and protector, Hose. H. G. Davis. 1,866,251; July 5.
Refrigerating apparatus. R. S. Gaugler. 1,865,513; July 5.
Refrigerating apparatus. L. S. Kellholtz. 1,866,040; July 5.
Refrigerating apparatus. J. G. King. 1,866,042; July 5.
Refrigerating apparatus. H. F. Smith. 1,866,373; July 5.
Refrigerating device. O. Bahls. 1,866,889; July 5.
Refrigeration, Method of and apparatus for producing continuous. E. Babcock. 1,865,813; July 5.
Refrigerator. C. M. Weinheimer. 1,866,435; July 5.
Refrigerator, Show-case. T. A. Jostedt. 1,865,761; July 5.
Register: *See*—
Cash register.
Register. J. A. Henry and J. H. Yancey. 1,865,518; July 5.
Regulator: *See*—
Pressure regulator. Speed regulator.
Regulator system. H. C. Nycum and J. H. Ashbaugh. 1,865,949; July 5.
Reservoir, Cupola. C. F. Wells. 1,865,491; July 5.
Retarding mechanism. R. S. Sanford. 1,865,591; July 5.
Rice, malting. P. J. Dax. 1,865,680; July 5.
Ring: *See*—
Bead setting ring. Finger ring.
Road maintenance machine. C. G. Anderson. 1,865,812; July 5.
Rock drill. K. M. Perry. 1,865,585; July 5.
Rod: *See*—
Piston and connecting rod.
Roller guide. D. J. Binus. 1,866,149; July 5.
Rolling mill. R. Michel. 1,865 941; July 5.
Rolling mill. W. Sykes. 1,866,232; July 5.
Roof, Car. A. R. Wilson. 1,865,549; July 5.
Roofing. T. C. Prouty. 1,865,959; July 5.
Roofing, Manufacturing composition. C. R. MacDonald. 1,865,579; July 5.
Rotary engine. G. Aruga. 1,865,666; July 5.
Rubber vulcanization. R. L. Sibley. 1,865,728; July 5.
Saddle. F. Mesinger. 1,865,872; July 5.
Safety attachment for gas burners. A. T. Grentz. 1,865,901; July 5.
Safety attachment for punch presses. B. J. Victor. 1,865,806; July 5.
Safety control for gasoline dispensing systems. A. C. Mandel. 1,866,262; July 5.
Safety device for printing presses and the like. E. L. Mueller. 1,865,479; July 5.
Safety device for stokers. W. Friedemann. 1,865,438; July 5.
Safety feeding device for clothes wringers. W. T. Clark. 1,866,084; July 5.
Sand screen. P. D. B. Pavone. 1,866,171; July 5.
Sanitary comb. E. Silverman. 1,865,975; July 5.
Sausage twisting machine. C. H. Allen and E. T. Robbeloth. 1,866,497; July 5.
Saw mill, Portable band. G. E. Campbell. 1,866,395; July 5.
Saw teeth, Apparatus for shaping. C. A. Hach. 1,866,102; July 5.
Saw teeth, Apparatus for shaping. C. A. Hach and C. I. Hoag. 1,866,101; July 5.
Saw tooth. H. V. Jones. 1,866,356; July 5.
Scarf and making the same. W. L. Blayney. 1,865,821; July 5.
Scraper, Road. H. E. Price. 1,865,587; July 5.
Screen: *See*—
Sand screen.
Screening mechanism. G. C. Crangle. 1,865,745; July 5.
Scrubbing and absorbing apparatus. F. R. Zumbro. 1,866,443; July 5.
Seal device for regulators, Liquid. A. D. MacLean and C. B. Johnson. 1,865,870; July 5.
Seal, Freight car. C. K. Goschnick. 1,866,461; July 5.
Sealing composition. E. R. Hanson and M. E. Delaney. 1,865,629; July 5.
Sealing means for fluid storing containers. F. Schürmann. 1,765,969; July 5.
Securing means for electrical connecters. M. Guett. 1,866,407; July 5.
See-saw, Portable. M. Bustillos. 1,865,612; July 5.
Separating or churning. E. G. Salenius. 1,866,489; July 5.
Sewing machines for separating the warp between the sacks, Device in sack. F. Ebert. 1,865,893; July 5.
Shade operating device, Window. F. J. and B. A. Gossling. 1,865,466; July 5.
Shade, Window. H. R. Segal. 1,865,972; July 5.
Sheave assembly. W. D. Davidson. 1,865,842; July 5.
Shank piece for shoes. P. Hein. 1,866,209; July 5.
Sheet annealing furnace. P. A. Meehan. 1,866,121; July 5.
Sheet feeding mechanism. A. G. Cogswell. 1,866,453; July 5.
Sheet metal lock. E. P. Forbes. 1,866,156; July 5.
Shell and a fuse therefor, Explosive. H. G. Towner. 1,865,802; July 5.
Shield, Gas burner. G. L. Hammon. 1,865,904; July 5.
Shipping case. J. B. Wardwell. 1,866,183; July 5.
Shock absorber. E. L. Beecher. 1,865,668; July 5.
Shock absorber. G. W. Elsey. 1,865,460; July 5.
Shock absorber. W. H. Lolley. 1,866,167; July 5.
Shock absorber. W. W. Riedel. 1,865,483; July 5.
Shock absorber, Hydraulic. S. Lafuer. 1,865,865; July 5.
Shock absorber, Hydraulic. W. W. Riedel. 1,865,482; July 5.
Shoe making machine, Stitch down. P. W. Valentine. 1,866,182; July 5.
Shoes, Coasting attachment for. F. O. Bergstrand. 1,866,006; July 5.

Shot, Making. A. G. Schuricht and G. T. Wright. 1,865,727; July 5.
Show case. A. H. Ehrlich. 1,866,401; July 5.
Sign. A. Roberts and J. Shelton. 1,865,963; July 5.
Sign, Advertising. E. Raves. 1,865,725; July 5.
Sign, Airway. E. W. Edwards. 1,866,199; July 5.
Sign frame, Adjustable electric. J. P. Dunne. 1,865,892; July 5.
Sign, Moving. H. M. Austin. 1,865,498; July 5.
Signal: *See*—
Automobile signal. Train order signal.
Signal device, Indicating. J. Laucus and A. C. Grunow. 1,866,411; July 5.
Signal transmission system. K. Lutomirski. 1,866,261; July 5.
Signaling device, Automobile. T. L. Cordray. 1,865,506; July 5.
Signaling device for clutching or the like. J. O. Liffiander. 1,866,166; July 5.
Silencer, Bucket or can. J. R. Foley. 1,866,457; July 5.
Skate, Roller. F. R. Smith. 1,866,134; July 5.
Sled into a wheeled vehicle, Converting a. O. C. Larson. 1,866,115; July 5.
Smoke hood, Water jacketed. F. C. Bradbury. 1,866,290; July 5.
Snowplow. A. E. Fisher. 1,866,094; July 5.
Socket holding device. Lamp. W. L. Mappes. 1,865,933; July 5.
Sodium bicarbonate, Forming. H. H. Chesny. 1,865,833; July 5.
Sodium bicarbonate from solutions in form of coarse crystals, Precipitating. H. H. Chesny. 1,865,832; July 5.
Sodium sulphite, Manufacture of anhydrous. C. N. Hand. 1,865,754; July 5.
Sole construction, Rubber. C. J. Futter and G. W. Blair. 1,865,625; July 5.
Sound deadener. C. C. Cheyney. 1,865,667; July 5.
Sound emitting device. H. K. Bouvier and F. Wells. 1,866,188; July 5.
Sound emitting device. J. Swallow. 1,866,231; July 5.
Sound reproducer. I. Wolff. 1,865,735; July 5.
Sound reproducing device. L. de Forest. 1,866,090; July 5.
Sound reproduction, Electrophonic. R. M. Hill. 1,865,565; July 5.
Sound, Translating. E. D. Phinney. 1,865,705; July 5.
Speed mechanism, Hydraulic change. J. Nettel. 1,866,266; July 5.
Speed regulator. H. M. Stoller. 1,866,275; July 5.
Spinning and twisting machine. I. R. Rowe. 1,866,322; July 5.
Spinning frame. S. F. Rockwell and H. A. Owen. 1,866,058; July 5.
Splitting machine. A. Bates. 1,866,245; July 5.
Spool and making same. G. D. Atwood. 1,865,423; July 5.
Spray apparatus. H. Albertine. 1,866,285; July 5.
Spring: *See*—
Pneumatic spring.
Sprinkler: *See*—
Water sprinkler.
Stapling device. P. Switzeny. 1,865,597; July 5.
Starting and reversing device for multi-cylinder internal combustion engines. E. O. P. Thege. 1,866,234; July 5.
Starting and stopping device. B. F. Berry. 1,865,814; July 5.
Statuette or similar article. M. N. Neugass. Des. 87,314; July 5.
Steam generating installation. G. P. Jackson. 1,866,307; July 5.
Steam generator or boiler. W. A. Mills. 1,865,944; July 5.
Steam purifier discharge apparatus. W. J. Hughes. 1,866,305; July 5.
Steel billets, Method and apparatus for continuous casting of. J. E. Perry and G. Ramsey. 1,865,443; July 5.
Steel retainer. E. B. Lear. 1,865,637; July 5.
Steel sheets, Treating. J. H. Steele. 1,866,376; July 5.
Steering apparatus. R. Brooks. 1,866,393; July 5.
Steering wheel handle. W. S. Jones. 1,866,111; July 5.
Stereoscope. K. A. Edstrom. 1,865,683; July 5.
Stereovision. A. M. Nicolson. 1,866,169; July 5.
Stoker air control. H. M. Swindler. 1,866,431; July 5.
Stoker construction. E. A. Turner. 1,866,181; July 5.
Stop and alarm, Door. R. Tarrant. 1,866,233; July 5.
Stop mechanism, Diameter-stop and thread-break. C. Macbeth. 1,865,578; July 5.
Stop motion for looms, Canter fork. V. Lindsjo. 1,865,930; July 5.
Stopper: *See*—
Bottle stopper. Container stopper.
Stopper and making the same. J. Broadhurst. 1,865,884; July 5.
Stove. H. Houer. 1,865,911; July 5.
Stove. J. H. Siemer. 1,866,427; July 5.
Strands, etc., Delivering and winding. J. E. Barbour. 1,866,148; July 5.
Strip for automobiles and the like, Finishing. E. J. Welch. 1,865,660; July 5.
Striping instrument. J. M. Christman. 1,866,295; July 5.
Strop. A. Abranathy. 1,866,384; July 5.
Submarine apparatus. C. Williamson. 1,866,438; July 5.
Submarine safety vessel. C. H. White. 1,865,663; July 5.
Suction cleaner. M. F. Lowry. 1,866,118; July 5.
Suit, Inflated swimming. D. Simon, jr. 1,866,062; July 5.
Superheater. R. Stein, J. Euler, and W. Puff. 1,866,325; July 5.
Superheater boiler. W. H. Armacost. 1,866,387; July 5.
Support, Bell rod swivel. A. G. McKee. 1,865,476; July 5.
Support, Book. M. A. Brown. 1,866,394; July 5.
Support for baby swings, Collapsible. G. H. Rogers, jr. 1,866,175; July 5.
Support for golf bags. A. M. Hansen and J. L. Jones. 1,865,689; July 5.
Support for projection machines, Adjustable. L. S. Frappier and E. Boecking. 1,866,096; July 5.
Support for workbenches, Drawer. H. T. Hallowell and F. Bennett. 1,866,464; July 5.
Support, Garment. R. P. Brown. 1,866,081; July 5.
Support, Portable saw. J. H. Hughes. 1,865,759; July 5.
Support, Resilient. H. M. Stoller. 1,866,274; July 5.
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Supporting bracket, Shade. R. Jenkins. 1,866,308; July 5.
Supporting device for bodies on water, Stabilizing. S. Feir. 1,866,200; July 5.
Supporting device for triplex web presses, Web roll. H. A. W. Wood. 1,865,665; July 5.
Surf board attachment. W. L. Wheeler. 1,865,985; July 5.
Surface of a dielectric a thin layer in which the potential fall is concentrated, Forming on the. A. Joffe. 1,865,693; July 5.
Surgical and dental pack compositions and applying the same. A. Ward. 1,866,433; July 5.
Suspensory. P. W. Schmidt. 1,866,060; July 5.
Swing, Aeroplane. J. A. Lucas. 1,866,047; July 5.
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Emergency selective switch.
Switch and inclosing structure therefor, Electric. F. H. Macneil. 1,866,364; July 5.
Switch device, Electric. N. Ralph. 1,866,422; July 5.
Switch device for direction-signal systems. E. C. Akers. 1,865,809; July 5.
Switch gear and switch and door locking mechanism, Electric. F. H. Macneil. 1,866,365; July 5.
Switch gear, Electrical. W. Adam. 1,866,336; July 5.
Synchronizing apparatus. M. Artzt and R. Serrell. 1,866,340; July 5.
Table. W. J. Schmidt. 1,866,176; July 5.
Table and refuse conveyer, Combined picking. C. W. Waterman. 1,865,984; July 5.
Table and writing desk, Combined reading. R. C. Burnley. 1,866,450; July 5.
Tamper or spader. B. H. Flynn. 1,865,685; July 5.
Tank: *See*—
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Tank. H. C. Boardman. 1,865,822; July 5.
Tank car heater. C. D. Chase. 1,865,556; July 5.
Target practice, Apparatus for. M. Wiedeck. 1,865,988; July 5.
Teeth or segments for crusher rolls, Renewable. E. H. Keiper. 1,865,860; July 5.
Telegraph systems, Eliminating interference in grounded. W. H. Kline. 1,865,571; July 5.
Telegraph systems, Eliminating interference in grounded. F. J. Singer. 1,865,593; July 5.
Telephone receiver and transmitter set, Combined. G. Stabili. 1,866,429; July 5.
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Telephone system. K. Larsson. 1,865,699; July 5.
Television. S. J. Liacos. 1,866,413; July 5.
Temperatures of incandescent bodies, Measuring the. G. Naeser. 1,865,878; July 5.
Tension device for golf ball winding machines. C. Macbeth. 1,865,577; July 5.
Test tube heating apparatus. I. Lamstein. 1,865,472; July 5.
Textile winding machine. O. F. Kiehn. 1,866,471; July 5.
Thermal relay. T. T. Greenwood. 1,866,032; July 5.
Thermoaerostat. J. Biondin. 1,866,079; July 5.
Thermometer, Electrical. J. W. Allen. 1,865,999; July 5.
Thin place detector. J. H. Pope and B. Morgan. 1,866,053; July 5.
Thresher-spreader, Combined. H. M. Gilson. 1,865,686; July 5.
Throttle actuator, Hydraulic. C. E. Furgason. 1,865,561; July 5.
Thymol, Production of. W. Schoeller, H. Jordan, and R. Clerc. 1,865,544; July 5.
Tie back for curtains. C. P. Henry. 1,865,756; July 5.
Tie-back for drapes, curtains, and the like. W. C. Chapman. Des. 87,300; July 5.
Tie rod end. M. P. Graham. 1,866,098; July 5.
Tie-plate. L. B. Armstrong. 1,865,452; July 5.
Tile floor. J. A. Bried. 1,865,825; July 5.
Tile, Metal-clad. S. Levy. 1,865,771; July 5.
Time controlled device. C. Ruiz. 1,865,965; July 5.
Time controlled switch. W. L. King. 1,865,919; July 5.
Tire, Metallic spring. H. A. Cruz. 1,865,457; July 5.
Tire spreading machine. J. L. Peshette. 1,866,518; July 5.
Toaster, Electric. O. M. Anderson and F. W. Juengst. Des. 87,297; July 5.

Toilet accessory. W. Leidel. 1,866,116; July 5.
Tone tubes with acoustic action for sound-recording and sound-reproducing apparatus. A. J. J. van Akkeren. 1,866,239; July 5.
Tool, Cutting. E. J. Foley. 1,866,095; July 5.
Tool, Electric. A. Oldenburg. 1,866,368; July 5.
Tool for handling clamping members. W. W. McWilliams. 1,866,120; July 5.
Tool, Machine. E. J. Kearney. 1,866,259; July 5.
Tool, Machine. J. E. Lovely. 1,865,527–8; July 5.
Tool, Metal cutting. F. W. Curtis. 1,865,617; July 5.
Tool retaining means, Pneumatic. J. L. Moran and A. J. Lee. 1,865,439; July 5.
Tool, Sod cutting. W. J. Aberle. 1,866,073; July 5.
Top spinning holder. G. Ritossa. 1,866,486; July 5.
Torch, Heating. G. L. Hammon. 1,865,905; July 5.
Torpedo for shooting oil wells. M. D. Mitchell. 1,865,874; July 5.
Toy fireplace. H. M. Fancher. 1,866,155; July 5.
Toy, Spinning. G. F. Sargent. 1,866,226; July 5.
Tractor, Rim gear drive. H. H. Glasier. 1,865,898; July 5.
Train control, Automatic. F. W. Godsey, jr. 1,866,099; July 5.
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Train control system. A. G. Williamson. 1,866,070; July 5.
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Transformer for orificial applicators, Portable-standard. J. J. Rekar. Des. 87,317; July 5.
Transformer relay. S. B. Aylsworth. 1,866,147; July 5.
Transformer with primary parallel resistance and flux leakage path, Current. A. Callsen. 1,866,345; July 5.
Transmission. E. Anderson. 1,866,002; July 5.
Transmission mechanism. C. Sifton and L. K. Cheswright. 1,865,648; July 5.
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Trap: *See*—
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Tray freezing. R. H. Chilton. 1,865,456; July 5.
Tread stitcher, Motor driven. F. G. Reed and N. L. Cornell. 1,865,540; July 5.
Tri-calcium phosphate and aluminum phosphate composition salt filler. W. G. Warning and T. W. Schilb. 1,865,733; July 5.
Trimmer: *See*—
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Truck, Car. L. W. Melcher. 1,866,264; July 5.
Truck for vehicles, Traction. R. A. Morton. 1,865,463; July 5.
Truck, Industrial. W. D. Parker. 1,865,784; July 5.
Truck, Lifting. W. Stuebing, jr. 1,865,712; July 5.
Trunk and luggage carrier, Combination automobile. R. C. Collier. 1,866,010; July 5.
Trunk and wheel carrier. E. H. Coquille. 1,866,013; July 5.
Tube: *See*—
Vacuum tube. X-ray tube.
Tube and valve stem, Pneumatic inner. F. H. Watson. Re18,513; July 5.
Tubes, Method and apparatus for splicing unvulcanized inner. H. C. Bostwick. 1,865,669; July 5.
Tubes of celluloid and the like, Forming. S. A. Neidich. 1,866,168; July 5.
Tubing, Apparatus for manufacturing integral finned. A. A. Locke. 1,865,575; July 5.
Tubing, Apparatus for production of bellows. W. B. Clifford. 1,865,678; July 5.
Tubular members, Making composite. A. E. Wilson. 1,866,145; July 5.
Tunnel, Apparatus and the method of forming a. J. S. Macdonald. 1,866,416; July 5.
Tunnel walls and unit for use therein, Forming. A. W. Warner and R. F. Ballard. 1,866,242; July 5.
Turbine, Hydraulic. G. A. Biges. 1,865,502–3; July 5.
Turbine with variable velocity, Reversing steam. G. Belluzzo. 1,865,551; July 5.
Tuyère structure and changing the same. E. E. Brosius. 1,866,080; July 5.
Twisting machine. G. H. Gilligan. 1,865,897; July 5.
Typewriting machine. W. F. Helmond. 1,865,632; July 5.
Typewriting machine carrying case. A. G. F. Kurowski. 1,865,636; July 5.
Typewriting machine, Stenographic. A. B. Edwards. 1,865,622; July 5.
Vacuum brake. G. P. Berry. 1,865,817; July 5.
Vacuum cleaner. L. Ell. 1,866,154; July 5.
Vacuum cooler. H. B. Caldwell. 1,865,614; July 5.
Vacuum responsive device. F. B. West, K. J. Pidcock, and E. Donkin. 1,866,068; July 5.
Vacuum tube. D. Gabor. 1,865,752; July 5.
Valve. W. P. Bradford. 1,865,824; July 5.
Valve and air cushion, Combined. F. W. Seymour and D. A. Gillen. 1,865,486; July 5.
Valve, Automatic. J. P. Clingingsmith and A. J. Smith. 1,865,886; July 5.
Valve circuits, Electric. A. Boyajian. 1,866,343; July 5.
Valve combustion engine, Rotary. H. Manrodt. 1,866,119; July 5.
Valve, Differential. C. F. Peckham. 1,866,319; July 5.
Valve follower. H. T. Chandler. 1,866,293; July 5.
Valve, High pressure. M. W. Degnan. 1,865,458; July 5.
Valve mechanism, Locomotive. H. S. Vincent. 1,865,547; July 5.
Valve operating assembly. A. O. Abbott, jr. 1,865,998; July 5.
Valve, Pneumatic tire. A. J. Michelin. 1,865,580; July 5.
Valve, Pop. G. B. Dufield. 1,865,560; July 5.
Valve, Unitary rotary. G. W. Wright. 1,865,994; July 5.
Valve, Union-bonnet. R. G. Carlson. 1,866,292; July 5.
Vanity case, Combination. A. H. Hall. 1,866,162; July 5.
Vaporizer. E. R. Godward. 1,865,515; July 5.
Vaporizer, Gasoline. C. M. Kummerer. 1,865,473; July 5.
Vegetable cutting device. M. White. 1,865,986; July 5.
Vehicle. E. J. Stahl. 1,865,798; July 5.
Vehicle, Armored. B. Palmer. 1,865,882; July 5.
Vehicle body structure. J. P. Tarbox. 1,865,487; July 5.
Vehicle body wall construction. G. Trautvetter. 1,866,277; July 5.
Vehicle structure, Railway. K. S. Howard and E. G. Hallquist. 1,865,520; July 5.
Vehicle underframe, Railway. A. C. Wintemberg. 1,865,448; July 5.
Vehicle washing apparatus. W. G. Cunningham. 1,866,197; July 5.
Vehicle wheel. E. Bossert. 1,865,482; July 5.
Vehicles and the like, Transporting. I. H. Judd. 1,865,569; July 5.
Vehicles, Apparatus for lifting and turning. O. Umberto. 1,865,805; July 5.
Vending machine. B. L. Fry. 1,865,895; July 5.
Ventilator. E. T. Remy. 1,865,961; July 5.
Ventilator fitting for windows, Sound suppressing. E. T. Fish. 1,866,201; July 5.
Vessel capping machine. C. L. Turner. 1,865,804; July 5.
Vessel for gases, Transportation or pressure. C. W. P. Heylandt. 1,866,517; July 5.
Vise. T. M. Jolley. 1,865,916; July 5.
Wall. R. W. Raftis. 1,866,129; July 5.
Wall, Building. L. A. Banta. 1,865,424; July 5.
Wall construction. A. F. Bemis. 1,865,500; July 5.
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Washing machine. T. F. Rataiczak. 1,866,519; July 5.
Water control, Automatic. F. Lenz. 1,865,769; July 5.
Water distributor for condensers of ice manufacturing systems. J. A. Martocello, sr. 1,865,775; July 5.
Water evacuating device. M. Eidsmore. 1,865,623; July 5.
Water, Evaporation of sea. L. B. Allyn. 1,865,451; July 5.
Water heater. R. L. Blanding. 1,866,078; July 5.
Water heater, Flue. H. Goldhagen. 1,865,852; July 5.
Water heater, Instantaneous automatic. C. M. Lieber. 1,866,215; July 5.
Water sprinkler. J. K. Harford. 1,865,906; July 5.
Water with ozone, Apparatus for purifying. J. M. Daily. 1,865,433; July 5.
Waves of an order of one meter and one decimeter, Receiving. F. Schröter. 1,866,271; July 5.
Waving hair and apparatus therefor, Permanently. R. Castella and J. Nantua. 1,866,396; July 5.
Weatherstrip, Metal. W. J. Dennis. 1,865,746; July 5.
Wedge clamp. H. E. Priem. 1,866,484; July 5.
Weighing device. E. Sears. 1,865,446; July 5.
Welding. A. Krebs. 1,866,044; July 5.
Welding. G. A. Lutz. 1,865,529; July 5.
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Welding terminal, Attachable. E. C. Kirk. 1,865,719; July 5.
Welding tubular articles, Electrically. W. F. Heineman. 1,866,257; July 5.
Welding tubular articles, Flash. W. F. Heineman. 1,866,256; July 5.
Well drill, Pneumatic. P. Younpling. 1,866,335; July 5.
Wells, Cementing. C. E. Jackson and S. J. Ryan. 1,866,522; July 5.
Wells, Method and device for cementing oil. G. F. Johnson. 1,866,038; July 5.
Welt tempering mechanism. F. Ashworth. 1,866,003; July 5.
Wheel: *See*—
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Wheel construction for plows, Rear. W. J. Verity. 1,865,598; July 5.
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Wire drawing machine. G. Najarian. 1,865,781; July 5.
Wire ring rolling machine. J. Cipko. 1,866,249; July 5.
Wood pulp, Treating mechanical. P. Klem. 1,865,768; July 5.
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X-rays, Methods of and apparatus for controlling the direction of. A. Mutscheller. 1,865,441; July 5.

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	252: 1,866,375		20: 1,865,908		52: 1,866,334	75—	17: 1,865,969	100—	41: 1,866,487		315: 1,866,215
16—	85: 1,865,661		40: R. 18,512		54: 1,866,424		65: 1,865,554	101—	33: 1,866,103		356: 1,866,388
	1,865,875		1,865,758		54.6: 1,865,561		67: 1,865,979		47: 1,865,974		389: 1,866,302
	1,865,876		53: 1,865,848	61—	12: 1,865,769		73: 1,866,203		233: 1,865,811		462: 1,866,325
	180: 1,866,218		76: 1,866,725		28: 1,866,350	76—	48: 1,866,101		344: 1,865,446		478: 1,866,387
17—	16: 1,865,492		83: 1,866,208		45: 1,866,242		1,866,102		383: 1,865,478		491: 1,866,305
	32: 1,866,510		86: 1,865,963		53: 1,865,657		101: 1,866,315		394: 1,866,379	123—	32: 1,866,300
	34: 1,866,497		96: 1,865,498		57: 1,865,652	77—	23: 1,865,567		402: 1,866,223		33: 1,865,841
18—	17: 1,866,383		102: 1,866,089		69: 1,865,663	80—	13: 1,865,575	102—	4: 1,865,874		43: 1,866,398
	30: 1,865,464		112: 1,866,071		1,866,438		35: 1,865,941		9: 1,865,447		54: 1,866,022
	47.5: 1,866,287		119: 1,866,425		78: 1,865,658		1,866,232		39: 1,865,802		79: 1,866,281
	53: 1,865,728		125: 1,865,934		79: 1,865,653	81—	3: 1,866,120	103—	41: 1,865,624		81: 1,865,493
	54: 1,865,701		126: 1,865,534		85: 1,866,416		9.5: 1,866,095		53: 1,866,136		90: 1,865,998
	59: 1,866,168		130: 1,865,892	62—	1: 1,866,515		89: 1,866,426		1,866,137		1,866,293
19—	66: 1,866,205		1,866,199		1,866,516	82—	2: 1,865,527	104—	91: 1,865,788		122: 1,865,514
	133: 1,866,058		132: 1,866,135		3: 1,866,042		96: 1,865,504	105—	223: 1,865,589		1,866,076
20—	4: 1,865,424		1,866,442		5: 1,866,373		97: 1,866,004		1,866,264		83: 1,866,427
	1,865,868		152: 1,865,868		15: 1,866,065		123: 1,866,083		231: 1,865,520		113: 1,865,563
	12: 1,865,774	41—	17: 1,865,821		75: 1,866,389	83—	12: 1,865,860		415: 1,865,448		343.5: 1,865,556
	20: 1,865,568		24: 1,866,448		89: 1,866,435		18: 1,865,731	106—	6: 1,866,433	126—	87: 1,865,827
	31: 1,866,041		33: 1,866,110		89.6: 1,865,761		42: 1,866,412		8: 1,865,629		284: 1,865,541
	38: 1,866,146	42—	1: 1,866,048		91.5: 1,865,698		45: 1,866,207		24: 1,865,732		289: 1,866,220
	40.5: 1,865,675		3: 1,866,202		1,866,192		73: R. 18,511		37: 1,866,204		294: 1,866,060
	69: 1,865,746	43—	42: 1,866,289		92: 1,866,514		233: 1,865,676		39: 1,866,410		306: 1,865,429
22—	1: 1,866,026		1,866,455		95: 1,865,513	84—	1: 1,865,428	107—	9: 1,866,213	129—	1: 1,865,741
	9: 1,865,434		61: 1,866,228		108.5: 1,865,456		93: 1,865,522		14: 1,866,061		16: 1,866,352
	10: 1,866,301		87: 1,865,920		119.5: 1,865,513	85—	53: 1,865,756		16.7: 1,866,332		16.7: 1,866,353
	69: 1,866,191		107: 1,865,713		126: 1,866,509	87—	5: 1,865,799		19: 1,866,316		1,866,421
	76: 1,865,443	44—	44: 1,865,716		130: 1,865,924		231: 1,865,948		67: 1,866,039		17: 1,866,050
	163.5: 1,866,278	45—	5: 1,865,603		143: 1,866,466		415: 1,865,448	108—	5: 1,865,849	131—	11: 1,865,943
23—	42: 1,865,431		1,866,314		188: 1,865,614		6: 1,865,615		9: 1,865,771		12: 1,865,780
	64: 1,865,832		6: 1,866,174		159: 1,866,449		8: 1,865,629		10: 1,865,959		1,866,446
	1,865,833		7: 1,866,180		170: 1,866,504		21: 1,866,025		19: 1,865,674		30: 1,865,700
	107: 1,865,588		1,866,464	63—	15: 1,866,320		24: 1,866,170		22: 1,865,983		39: 1,865,831
	1,865,968		24: 1,866,056	64—	18: 1,866,303		26: 1,865,485		51: 1,865,902		52: 1,865,679
	120: 1,865,754		31: 1,866,176		91: 1,865,950		29: 1,865,663		52: 1,865,679		111: 1,865,975
	154: 1,865,797		57: 1,866,394	65—	15: 1,865,742		39: 1,866,306		171: 1,865,662		32: 1,865,665
	161: 1,865,917		68.2: 1,865,636		1,866,035		40: 1,865,539		43: 1,866,003	132—	36: 1,866,398
	213: 1,865,770		68.4: 1,866,460		46: 1,866,125		44: 1,865,711		80: 1,865,830		80: 1,865,956
	1,866,246		71: 1,866,126	66—	24: 1,865,710		54: 1,865,691		102: 1,865,916		83: 1,866,116
	225: 1,866,229		109: 1,866,450		82: 1,865,707		1,865,714		118: 1,865,570		85: 1,866,210
	243: 1,865,733		139: 1,865,899		120: 1,866,222		1,865,715		121: 1,866,469		85.5: 1,866,211
	258: 1,865,982	46—	14: 1,866,226		145: 1,866,108		57: 1,865,977	110—	7: 1,865,753	133—	1: 1,866,321
	261: 1,865,607		22: 1,866,496	67—	6.1: 1,865,659	89—	40: 1,865,882		22: 1,865,983	134—	1: 1,866,503
24—	49: 1,865,995		37: 1,866,155	68—	21: 1,865,867	90—	11: 1,866,259		171: 1,865,662		26: 1,865,628
	71: 1,866,165		40: 1,865,475		32: 1,866,084		13.5: 1,866,033	112—	43: 1,866,003		58: 1,865,437
	73: 1,865,854		48: 1,866,477		37: 1,866,198		1,866,034		252: 1,865,893		1,866,017
	77: 1,866,355	47—	28: 1,866,059	69—	12: 1,866,245		21: 1,866,348	113—	80: 1,865,830		136— 133: 1,866,016
	88: 1,865,915		37: 1,865,900	70—	7: 1,866,086		57: 1,865,552		102: 1,865,916		137— 53: 1,865,560
	123: 1,866,470		41: 1,866,423		46: 1,866,342		58: 1,865,927		118: 1,865,570		1,865,870
	153: 1,866,458		49: 1,865,914		50: 1,865,779	91—	45: 1,865,436		121: 1,866,469		68: 1,865,886
	163: 1,865,501		57: 1,866,219		113: 1,866,273		1,866,100	114—	169: 1,865,966		71: 1,865,486
	200: 1,865,509	48—	87: 1,865,929		127: 1,866,209		46: 1,866,418	115—	35: 1,866,482		75: 1,865,795
	255: 1,865,453		176: 1,865,791	72—	30: 1,865,800		62.6: 1,866,295	116—	9: 1,865,743		
	261: 1,865,590		1,865,792		41: 1,866,129		67.95: 1,866,400		52: 1,866,411		
25—	30: 1,865,692		180: 1,866,473		70: 1,865,903		68: 1,865,579		67: 1,866,166		
	99: 1,865,846		206: 1,866,399		135: 1,865,985		1,865,783		114: 1,865,777		
29—	18: 1,866,376		215: 1,865,664	73—	32: 1,865,990		1,866,132		147: 1,866,019		
	84: 1,866,484	49—	3: 1,865,843		51: 1,866,206		70: 1,865,497	117—	2: 1,865,897		
	88.2: 1,866,051		5: 1,866,506		82: R. 18,514		1,865,634		48: 1,866,272		
	105: 1,865,617		9: 1,865,730		111: 1,866,140	92—	13: 1,865,649	118—	43: 1,866,322		
	148: 1,865,808		1,865,967		167: 1,865,996		20: 1,865,768	119—	1: 1,865,564		

137—	153:	1,866,377	173—	321:	1,866,104	188—	200:	1,865,760	213—	36:	1,865,838
	156:	1,866,058		332:	1,865,600		218:	1,866,420		40:	1,865,903
	160:	1,956,004			1,866,407		250:	1,865,548	214—	1:	1,866,381
139—	342:	1,865,620		361:	1,866,362		251:	1,865,823		47:	1,865,638
	348:	1,866,053			1,868,363	189—	33:	1,865,765		52:	1,865,763
	374:	1,865,930	175—	21:	1,865,123		35:	1,865,866		47:	1,865,884
140—	71:	1,866,250		41:	1,865,640		46:	1,865,747		48:	1,866,313
	92. 2:	1,866,249			1,866,346		92:	1,865,546		56:	1,865,764
	149:	1,865,442		183:	1,865,383	190—	54:	1,866,483		63:	1,865,737
141—	1:	1,866,197			1,865,687	192—	3:	1,866,479		95:	1,866,194
143—	6:	1,865,759			1,865,847		41:	1,865,936		100:	1,865,645
	17:	1,866,395			1,866,113		53:	1,866,270	217—	17:	1,866,040
144—	70:	1,855,576			1,866,454		60:	1,866,266		53:	1,866,455
145—	2:	1,855,619		285:	1,865,610		82:	1,866,093		56:	1,866,183
	67:	1,835,545		294:	1,866,371		84:	1,866,128	219—	4:	1,865,519
	78:	1,865,986		298:	1,866,333		105:	1,865,772			1,866,382
	82:	1,866,027			1,866,336			1,866,291		6:	1,865,531
	102:	1,866,240			1,866,364		127:	1,865,479			1,865,532
	217:	1,866,236			1,866,365		129:	1,865,814			1,865,845
148—	21. 4:	1,855,727		320:	1,866,343		131:	1,865,806		8:	1,866,044
149—	19:	1,855,542		336:	1,866,147		150:	1,865,438		10:	1,865,529
150—	1. 5:	1,835,689		356:	1,856,179	195—	24:	1,865,680			1,865,530
	29:	1,855,938		358:	1,865,430	196—	16:	1,866,187			1,866,256
	35:	1,865,881		359:	1,865,840		94:	1,865,494			1,866,257
	38:	1,855,626		363:	1,865,512		96:	1,865,467		19:	1,865,472
151—	24:	1,866,007			1,865,562	197—	9:	1,865,622			1,865,834
	35:	1,856,304			1,865,616		130:	1,865,495			1,866,097
152—	5:	1,866,476		366:	1,865,450		160:	1,865,632		38:	1,866,221
	6:	1,855,432			1,866,351		161:	1,865,647	220—	1:	1,865,822
	8:	1,855,457	176—	32:	1,865,468	198—	127:	1,865,820		9:	1,865,724
	11. 5:	1,855,871		35:	1,865,752			1,865,890		15:	1,866,517
	12:	R. 18,513		122:	1,855,516			1,865,891		19:	1,865,533
		1,855,580	177—	7:	1,865,473			1,865,894		20:	1,866,074
153—	65:	1,865,490		329:	1,866,185		176:	1,865,879		24:	1,865,465
	73:	1,865,678		351:	1,866,327		213:	1,866,005		26:	1,865,909
	80. 5:	1,855,444		352:	1,865,952			1,866,181		27:	1,866,467
154—	2:	1,855,455		380:	1,866,403	199—	49:	1,866,445			1,866,468
		1,866,312	178—	6:	1,866,169	200—	5:	1,865,506		39:	1,865,489
		1,866,372			1,866,338		6:	1,866,422		55:	1,865,538
	9:	1,865,601			1,866,413		7:	1,865,697		69:	1,866,457
		1,865,669		44:	1,865,646		27:	1,866,492		82:	1,866,224
		1,866,390		69:	1,865,571		36:	1,865,919		90:	1,865,736
		1,866,391			1,865,593		59:	1,865,809	221—	47. 1:	1,866,106
		1,866,518	179—	18:	1,865,699			1,866,378		51:	1,865,990
	10:	1,865,540		27:	1,866,290		97:	1,866,007		60:	1,865,484
	49:	1,865,459		100. 1:	1,865,705		110:	1,866,436			1,866,177
155—	17:	1,866,175		100. 4:	1,865,565		121:	1,866,491			1,866,190
	25:	1,866,149		100. 41:	1,865,463		122:	1,866,032		94:	1,866,237
	65:	1,856,047		115:	1,866,231		144:	1,866,495		95:	1,866,138
	77:	1,866,498		115. 5:	1,866,188		166:	1,865,638			1,866,262
156—	10:	1,865,972			1,866,361	202—	42:	1,865,887			1,866,298
	17:	1,865,935		156:	1,866,043	204—	1:	1,865,470		106:	1,866,294
	22:	1,866,331		170:	1,866,261		5:	1,865,946	223—	18. 8:	1,865,837
	24:	1,866,308		171:	1,865,426			1,866,124		19:	1,866,173
	26:	1,865,496			1,865,573			1,866,472		36:	1,865,931
	42:	1,866,474			1,865,574		8:	1,866,283		65:	1,866,150
158—	1. 5:	1,865,904			1,866,462		11:	1,865,767	224—	29:	1,866,010
	27. 4:	1,865,905			1,866,456		25:	1,865,433			1,866,013
	53:	1,865,889		189:	1,866,429		31:	1,865,693			1,866,107
	63:	1,855,782	180—	6:	1,866,444		58:	1,866,065	225—	21:	1,865,773
	117. 1:	1,865,901		22:	1,866,463	205—	13:	1,866,142	226—	39:	1,866,172
	119:	1,865,672		54:	1,865,784		16:	1,865,781		80:	1,866,369
161—	1:	1,865,965	181—	27:	1,865,650	206—	7:	1,866,241		92:	1,865,804
	7:	1,855,604			1,866,239		15. 1:	1,866,001			1,866,255
164—	19:	1,865,947		31:	1,865,735		29:	1,865,694		125:	1,866,439
	50:	1,866,360			1,866,090		38:	1,866,162	228—	1:	1,865,684
	119:	1,865,755			1,866,163		44:	1,866,211	229—	1. 5:	1,865,543
166—	21:	1,866,038	183—	2. 5:	1,866,091			1,866,323			1,865,555
		1,866,522		4:	1,866,207		46:	1,865,535		5. 5:	1,866,496
167—	13:	1,856,409		7:	1,865,907			1,866,036		5. 6:	1,866,488
168—	22:	1,865,862		21:	1,866,193		50:	1,866,330		11:	1,865,608
169—	1:	1,865,670		67:	1,865,987		52:	1,866,130		25:	1,866,408
	2:	1,866,008		77:	1,865,425		56:	1,865,639		28:	1,866,354
	5:	1,866,253	184—	6:	1,866,092		57:	1,865,922		31:	1,865,635
	22:	1,866,319			1,866,280	208—	15:	1,865,872		32:	1,866,230
	26:	1,866,151		29:	1,866,206		97:	1,865,896		43:	1,866,317
171—	97:	1,865,595	186—	1:	1,865,596		139:	1,866,254		45:	1,865,454
	119:	1,866,345	187—	29:	1,865,937		175:	1,866,134		78:	1,866,156
	229:	1,865,949			1,866,359	209—	125:	1,865,984	230—	134:	1,865,918
	327:	1,865,858		52:	1,866,392		315:	1,866,171	232—	4:	1,865,864
172—	8:	1,865,909	188—	2:	1,865,525		365:	1,865,745	235—	1:	1,865,553
		1,865,980			1,866,252		467:	1,866,186		3:	1,865,883
	36:	1,866,339		10:	1,866,480		502:	1,865,726		23:	1,865,627
		1,866,344		78:	1,865,508	210—	9:	1,866,417		63:	1,865,751
		1,866,368			1,865,572		16:	1,866,030		85:	1,866,133
	239:	1,865,584			1,865,591		17:	R. 18,510		128:	1,865,592
	274:	1,866,349			1,866,419			1,866,031		130:	1,866,023
	275:	1,866,507			1,866,481		28:	1,865,976	236—	1:	1,865,507
	293:	1,866,275		79. 5:	1,865,524		43:	1,866,519		16:	1,865,641
173—	259:	1,865,681			1,866,248		58:	1,865,480		38:	1,865,981
	268:	1,866,235		88:	1,865,483		71:	1,866,499	238—	253:	1,866,159
	278:	1,865,717			1,866,167		125:	1,866,284		298:	1,865,452
		1,865,718		89:	1,865,668	211—	133:	1,865,582	240—	2. 25:	1,866,157
		1,865,719		140:	1,865,644		139:	1,865,923		41:	1,865,933
		1,865,720			1,865,816		156:	1,866,117		48. 4:	1,866,440
		1,865,721		152:	1,865,505		172:	1,865,757		62:	1,866,321
		1,865,722			1,865,815	213—	17:	1,865,729		73:	1,865,928
		1,865,723		187:	1,866,045		31:	1,866,341		78:	1,865,469
242—	3:	1,865,577	261—	90:	1,865,991
		1,865,578			1,866,196
	6:	1,865,650		96:	1,865,474
	13:	1,865,461		108:	1,866,443
	31:	1,865,970		114:	1,865,818
	55. 5:	1,866,370	263—	6:	1,865,954
	58:	1,865,665		8:	1,866,121
	62:	1,866,471	265—	1:	1,865,698
	84. 5:	1,866,052		47:	1,865,446
	106:	1,866,282	266—	27:	1,865,476
	119:	1,865,423		40:	1,865,491
244—	1:	1,865,749		41:	1,866,080
	2:	1,865,789	267—	8:	1,865,460
		1,865,790			1,865,482
		1,866,451		35:	1,865,740
	3:	1,866,079	268—	63:	1,865,925
	12:	1,865,744		134:	1,865,526
		1,865,964	270—	9:	1,865,602
		1,866,214		31:	1,866,088
	18:	1,865,859		58:	1,865,750
	25:	1,866,161		77:	1,865,696
	30:	1,866,299		86:	1,865,945
246—	16:	1,866,485	271—	20:	1,866,453
	34:	1,866,144	272—	1:	1,865,810
	63:	1,866,070		31:	1,866,432
		1,866,099		33:	1,866,490
		1,866,139		54:	1,865,612
247—	27:	1,865,926		83:	1,866,024
248—	16:	1,866,154	273—	33:	1,866,143
		1,866,274		61:	1,865,481
	29:	1,865,989		96:	1,866,158
	39:	1,866,402		138:	1,866,021
	47:	1,866,096		144:	1,866,063
250—	2:	1,865,826	274—	1:	1,866,403
		1,866,340		10:	1,866,405
	17:	1,866,459		17:	1,866,288
	20:	1,866,271		22:	1,865,517
	27:	1,866,243	279—	46:	1,866,374
	27. 5:	1,865,449	280—	5:	1,866,055
		1,866,195		8:	1,866,115
		1,866,358		33. 1:	1,865,569
	33:	1,866,357		33. 44:	1,865,786
	34:	1,865,441		50:	1,865,618
		1,866,141		91:	1,866,393
	35:	1,865,440		104:	1,865,865
	36:	1,866,267		163:	1,865,766
		1,866,337	281—	6:	1,866,279
		1,866,441	282—	12:	1,865,518
251—	39:	1,866,431		28:	1,865,708
	46:	1,865,824	284—	17:	1,866,502
	48:	1,865,458		19:	1,865,932
	49:	1,866,292	285—	3:	1,866,437
252—	1:	1,865,703		134:	1,866,160
	3:	1,865,667		172:	1,865,462
	6:	1,865,496	287—	53:	1,866,112
		1,866,069		90:	1,866,512
253—	70:	1,865,551			1,866,520
	148:	1,865,502		93:	1,866,098
	155:	1,865,503		125:	1,865,585
254—	10:	1,865,712	290—	30:	1,866,494
	87:	1,865,805	292—	13:	1,866,326
	132:	1,865,671		101:	1,866,247
255—	4:	1,866,335		150:	1,866,233
	19:	1,865,853		167:	1,865,581
		1,866,131		217:	1,865,778
	28:	1,865,912		319:	1,866,461
	71:	1,865,706		332:	1,866,011
	76:	1,866,082	293—	55:	1,865,801
257—	125:	1,865,877			1,866,265
	136:	1,865,511	294—	67:	1,865,739
		1,865,794		92:	1,866,075
		1,866,122	296—	28:	1,865,487
	137:	1,865,536			1,866,277
		1,866,178		44:	1,865,673
	141:	1,865,427			1,865,798
	149:	1,865,962		135:	1,865,660
	178:	1,865,775	299—	61:	1,865,906
	191:	1,865,499		77:	1,866,251
		1,866,189		88. 5:	1,865,942
258—	3:	1,866,189		95:	1,866,285
259—	102:	1,866,227		140:	1,866,311
260—	12:	1,865,978	300—	21:	1,865,785
	26:	1,865,953	308—	18:	1,865,842
	44:	1,865,477		25:	1,866,077
	61:	1,866,500		134:	1,865,951
		1,866,501		159:	1,866,478
	116:	1,866,328		180:	1,866,263
		1,866,329		189:	1,866,046
		1,866,430		213:	1,865,796
	128. 5:	1,865,880		226:	1,865,900
	134:	1,865,940	312—	94:	1,865,895
	154:	1,865,844		107:	1,865,734
	159:	1,865,776		116:	1,866,511
	170:	1,865,422		119:	1,866,401
261—	12:	1,865,515			
	18:	1,865,605			
	41:	1,865,488			
		1,865,851			
	46:	1,865,471			

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Agnes. (See Rittener, Agnes.)

Alaskan Products Incorporated, Baltimore, Md. Canned crab meat, crab meat in the bulk and steamed crabs. Serial No. 327,086; July 12. Class 46.

American Flyer Mfg. Co., Chicago, Ill. Miniature trains. Serial No. 327,643; July 12. Class 22.

Andreallo, Geronimo, doing business as Jerome, New York, N. Y. Scalp ointment, hair gloss, rinses, etc. Serial No. 325,844; July 12. Class 6.

Antimite Company, The, Wilmington, Del. and St. Louis, Mo. Antimite. Serial No. 324,928; July 12. Class 6.

Arko Herbs Incorporated, Buffalo, N. Y. Herb teas as a tonic. Serial No. 322,478; July 12. Class 6.

Arnesen Newsprint Publishers Corporation, Brooklyn, N. Y. Newspaper. Serial No. 327,573; July 12. Class 38.

Artform Incorporated, Philadelphia, Pa. Foundation garments. Serial No. 326,972; July 12. Class 39.

Arsen Laboratories, Inc. (See Charlton and Matsen.)

Associated Farmers' Exchanges, Inc., Worcester, Mass. Food for stock and poultry. Serial No. 326,847; Class 46.

Ayer Company, The, Lowell, Mass. Medicinal preparation. Serial No. 327,182; July 12. Class 6.

Ballard, James F., Inc., St. Louis, Mo. Bath tablet. Serial Nos. 326,572–4; July 12. Class 6.

Bancroft-Walker Company, Boston, Mass. Shoes. Serial No. 327,383; July 12. Class 39.

Banister, James A., Company, Inc., Newark, N. J. Shoes. Serial No. 324,692; July 12. Class 39.

Battle Creek Food Company, The, Battle Creek, Mich. Vegetable food. Serial No. 326,203; July 12. Class 46.

Beatrice Creamery Company, Chicago, Ill. Eggs and cheese. Serial No. 327,800; July 12. Class 46.

Bistrow, E., doing business as Spysup Manufacturing Company, St. Louis, Mo. Syrup. Serial No. 326,603; July 12. Class 46.

Bourjois, Inc., New York, N. Y. Perfume, toilet water, and powder, etc. Serial No. 322,781; July 12. Class 6.

Bragg-Kliesrath Corporation, Long Island City, N. Y. Brakes and brake systems and parts thereof. Serial No. 304,908; July 12. Class 19.

Brignall, Guy E., doing business as Sta-Wel Company (not incorporated), Aurora, Ill. Whole grain health flour, including whole wheat and other grains. Serial No. 327,751; July 12. Class 46.

Brown Shoe Company, Inc., St. Louis, Mo. Shoes. Serial No. 327,129; July 12. Class 39.

Bucklen, Herbert E., Corporation, Elkhart, Ind. Propeller type, wind-driven electric light and power plants. Serial No. 297,890; July 12. Class 21.

Burton, Leonard V. A., jr., doing business as Munchee Nuts Company, Minneapolis, Minn. Nuts. Serial No. 325,869; July 12. Class 46.

Byron Weston Company, Dalton, Mass. Paper. Serial No. 327,264; July 12. Class 37.

California Wool Growers Association, San Francisco, Calif. Blankets. Serial No. 312,226; July 12. Class 42.

Canellos, P. G., doing business as Quality Tea & Coffee Company, Boston, Mass. Coffee. Serial No. 326,934; July 12. Class 46.

Carboloy Company, Inc., Detroit, Mich. Metal composition or alloy. Serial Nos. 327,675–6; July 12. Class 14.

Carlo, Elpidia T., El Paso, Tex. Medicinal cigarettes. Serial No. 318,866; July 12. Class 6.

Carman River Duck Farm, Brookhaven, N. Y. Ducks. Serial No. 326,737; July 12. Class 46.

Carmo Shoe Mfg. Co., Carthage, Mo. Shoes, slippers, pumps, etc. Serial No. 321,586; July 12. Class 39.

Central Chemical Company, Inc., Hagerstown, Md. Oil emulsion. Serial No. 325,087; July 12. Class 6.

Central Iron & Metal Company, Ltd., The, London, England, and Westphalia, Germany. Non-ferrous wire, rods, and strips. Serial No. 323,525; July 12. Class 14.

Charlton and Matsen, doing business as Arsen Laboratories, Inc., Clinton, Iowa. Eye drops. Serial No. 326,706; July 12. Class 6.

Chicago Times Company, Chicago, Ill. Newspaper comic section. Serial No. 325,640; July 12. Class 38.

Chicopee Manufacturing Corporation, New Brunswick, N. J. Articles of special weave. Serial No. 327,552; July 12. Class 42.

Clay City Pipe Company, The, Uhrichsville, Ohio. Tiles and conduits. Serial No. 327,152; July 12. Class 12.

Clayton Magazines, Inc., The, New York, N. Y. Magazines. Serial No. 327,426; July 12. Class 38.

Collins, D. A., Mfg. Co., Inc., Brooklyn, N. Y. Automobile polishes. Serial No. 314,685; July 12. Class 16.

Columbus Show Case Company, The, Columbus, Ohio. Merchandise display cases. Serial No. 327,045; July 12. Class 32.

Cooper Manufacturing Company, Marshalltown, Iowa. Gaskets and finished sheet materials for gaskets. Serial No. 327,046; July 12. Class 35.

Cracker Jack Co., The, Chicago, Ill. Shelled popcorn. Serial No. 315,250; July 12. Class 46.

Crocetta Bros. & Company, Gloversville, N. Y. Gloves. Serial No. 324,733; July 12. Class 39.

Daggett & Ramsdell, New York, N. Y. Face powder, preparations for the skin and toilet, and creams. Serial No. 327,729; July 12. Class 6.

Davenport Seed Company, doing business as Sunburst Pop Corn Company, Davenport, Iowa. Pop corn. Serial No. 305,851; July 12. Class 46.

Davidson, Walter, New York, N. Y. Bacillus acidophilus culture. Serial No. 325,195; July 12. Class 6.

Davis, R. B. Company, Hoboken, N. J. Baking soda. Serial No. 324,154; July 12. Class 6.

Davis, R. B. Company, Hoboken, N. J. Baking powder. Serial No. 325,364; July 12. Class 6.

"Degewop" Gesellschaft Wissenschaftlicher Organpraeparate A. G., Berlin-Spandau, Germany. Medical preparation. Serial No. 326,283; July 12. Class 6.

Deland, C. M., New York, N. Y. Woolen piece goods. Serial No. 326,671; July 12. Class 42.

De Mars, Arthur J., Washington, D. C. Publication. Serial No. 327,582; July 12. Class 38.

Dennis, William V., San Francisco, Calif. Ice cream freezers. Serial No. 327,047; July 12. Class 31.

Distillers Preparations, Inc., Weehawken, N. J. Medicinal tonic. Serial No. 327,187; July 12. Class 6.

Dynamidon-Werk Engelhorn & Co. G. m. b. H., Fabrik für keramische Produkte, feuerfeste Massen und Schleifmaterialien, Mannheim-Waldhof, Germany. Refractory bricks. Serial No. 323,528; July 12. Class 12.

Eagle Straw Corporation, New York and Brooklyn, N. Y. Drinking straws. Serial No. 327,278; July 12. Class 50.

Earle, Baylus E., Colfax, La. Asphalt compound used as a joint filler, roofing compound, roof coating, etc. Serial No. 326,675; July 12. Class 12.

Eaton Paper Company, Pittsfield, Mass. Papeteries, cards, tablets, etc. Serial No. 327,385; July 12. Class 37.

Eiseman, Alfred S., New York, N. Y. Piece goods and fabrics. Serial Nos. 327,218–19; July 12. Class 42.

Elsemann-Werke Aktiengesellschaft, Stuttgart, Germany. Electric hair cutting machines and thinning-out clippers, etc. Serial No. 327,092; July 12. Class 21.

Elgin National Watch Company, Chicago and Elgin, Ill. Publication. Serial No. 327,306; July 12. Class 38.

Ellis, Everett, New York, N. Y. Periodical. Serial No. 327,647; July 12. Class 38.

Emerson Glass Corporation, Jamestown, N. Y. Metallic protecting paint. Serial No. 327,307; July 12. Class 16.

Emery, Bird, Thayer Dry Goods Company, Kansas City, Mo. Cotton and wool fabrics, etc. Serial No. 305,702; July 12. Class 42.

Ephrata Shoe Company, Ephrata, Pa. Shoes. Serial No. 327,007; July 12. Class 39.

Excelsior Varsity Underwear Corporation, Baltimore, Md. Pajamas. Serial No. 327,682; July 12. Class 39.

Faber, Eberhard, Pencil Company, Brooklyn, N. Y. Boxes containing pencils, holders, sharpeners, etc. Serial No. 327,847; July 12. Class 37.

Farm Crest Bakeries, Incorporated, Wilmington, Del., and Detroit, Mich. Bread, rolls, buns, etc. Serial No. 327,350; July 12. Class 46.

Fennimore, A. L., & Sons, Trenton, N. J. Medicine. Serial No. 282,289; July 12. Class 6.

Filippone, B., & Co., Passaic, N. J. Canned peas, tomatoes, etc. Serial No. 316,961; July 12. Class 46.

Finch, Theodore W., doing business as T. W. Finch & Company, Rochester, N. Y. Tea, mayonnaise, and vanilla. Serial No. 321,936; July 12. Class 46.

Fisher Flouring Mills Company, West Waterway, Harbor Island, Seattle, Wash. Flour. Serial Nos. 327,685–9; July 12. Class 46.

Fleer, Frank H., Corporation, Philadelphia, Pa. Chewing gum. Serial No. 312,797; July 12. Class 46.

Food Confections Company. (See Overland Candy Corporation.)

Footsol Mfg. Co., New York, N. Y. Balm for feet and foot lotions. Serial No. 326,980; July 12. Class 6.

Four Square Products, Inc., Dover, Del. Shaving cream. Serial No. 327,430; July 12. Class 4.

Fredrikstad Traemelfabrik Aktieselskab, Fredrikstad, Norway. Woodflour. Serial No. 325,849; July 12. Class 1.

Gessler, Siegfried. (See Ramm, Fred D.)

Gilby Wire Company, Newark, N. J. Wire, ribbon and strip for electrical purposes. Serial No. 324,679; July 12. Class 21.

Glatzer, Gustave, New York, N. Y. Laxatives and product comprising psyllium seed and agar-agar. Serial No. 326,322; July 12. Class 6.

Godman, H. C. Company, The, Columbus, Ohio. Shoes. Serial No. 321,871; July 12. Class 39.

Goldsmith, P. Sons Co., The, Cincinnati, Ohio. Swim suits, caps, coats, etc. Serial No. 326,142; July 12. Class 39.

Gosse, F. A. Company, Seattle, Wash. Canned fish. Serial No. 319,174; July 12. Class 46

Gould Storage Battery Corporation, Depew, N. Y. Storage batteries. Serial No. 313,185; July 12. Class 21.
Gouldbestos Corporation. (See S. B. G. Holding Corporation.)
Grant, W. T. Company, New York, N. Y. Kitchen cutlery. Serial No. 327,011; July 12. Class 23.
Griesemer, Adam, doing business as Saurinol Distributors, Colorado Springs, Colo. Oil used for massaging purposes. Serial No. 326,625; July 12. Class 6.
Groves Thread Company, Inc., Gastonia, N. C. Cotton thread, and yarns. Serial No. 327,669; July 12. Class 43.
Guiberson Diesel Engine Company, Dallas, Tex. Internal combustion engines and parts thereof. Serial No. 327,146; July 12. Class 23.
Hahn, Irvin H., Co., The, Baltimore, Md. Metal military ensignias, metal belt buckles, metal badges, etc. Serial No. 326,257; July 12. Class 28.
Hanson, H. P. & Company, Chicago, Ill. Apple candy confection. Serial No. 325,929; July 12. Class 46.
Hardwick & Magee Company, Philadelphia, Pa. Textile rugs. Serial Nos. 327,692–3; July 12. Class 42.
Harris, D. P. Hardware & Manufacturing Co., Inc., New York, N. Y. Roller skates. Serial No. 327,466; July 12. Class 22.
Harvel Corporation, The, Newark, N. J. Paints, varnishes, primers, etc. Serial No. 287,300; July 12. Class 16.
Harzfeld's, Inc., Kansas City, Mo. Perfume. Serial No. 326,856; July 12. Class 6.
Hautman, J. W., Minneapolis, Minn. Fruit salts. Serial No. 326,541; July 12. Class 6.
Hickok Oil Corporation, Toledo, Ohio. Radiator cement, adhesive patches, etc. Serial No. 326,898; July 12. Class 5.
Hickok Oil Corporation, Toledo, Ohio. Paint enamels, varnishes, lacquers, etc. Serial No. 326,900; July 12. Class 16.
Hirsh & Sons, Inc., Chicago, Ill. Coats. Serial No. 327,467; July 12. Class 39.
Hollander, A., & Son, Inc., Newark, N. J. Fur skins. Serial No. 327,694; July 12. Class 1.
Houma Mfg. Co., Houma, La. Washboards. Serial No. 327,468; July 12. Class 24.
Howse, Mead & Sons, Inc., New York, N. Y. Woolens in the piece. Serial No. 327,280; July 12. Class 42.
Humble Oil and Refining Company, Houston, Tex. Lubricating oils and greases. Serial No. 322,934; July 12. Class 15.
Humko Lard Co., Memphis, Tenn. Shortening. Serial No. 327,152; July 12. Class 46.
I. T. S. Company, The, Elyria, Ohio. Rubber heels. Serial No. 327,508; July 12. Class 39.
International Silver Spring, Meriden, Conn. Silverplated flat-ware and hollow-ware. Serial No. 324,609; July 12. Class 28.
Jacobs, Arthur E., Cleveland, Ohio. Toy cash registers. Serial No. 327,510; July 12. Class 22.
Jerome. (See Andreallo, Geronimo.)
Johnson & Johnson, New Brunswick, N. J. Antiseptic preparation. Serial No. 326,942; July 12. Class 6.
Johnson Educator Food Company, Cambridge, Mass. Cookies and crackers. Serial No. 327,590; July 12. Class 46.
Johnson, Matthey & Company, Incorporated, New York, N. Y. Finger rings. Serial No. 323,761; July 12. Class 28.
Kahn, David, Inc., North Bergen, N. J. Fountain pens, pencils, etc. Serial No. 327,632; July 12. Class 37.
Keil, Isidore, Newark, N. J. Bread and cake, noodles, and farfel. Serial No. 322,464; July 12. Class 46.
Kendall Company, The, Boston, Mass., and Chicago, Ill. Ointment. Serial No. 326,821; July 12. Class 6.
Kleenti Co., The, New York, N. Y. Liquid strainers. Serial No. 327,816; July 12. Class 13.
Klein, L., Inc., Chicago, Ill. Refrigerators. Serial No. 327,157; July 12. Class 31.
Knit Products Corporation, Belmont, N. C. Hosiery. Serial No. 327,363; July 12. Class 39.
Koenigsberg Bros., New York, N. Y. Bloomers, panties, brassières, etc. Serial No. 325,404; July 12. Class 39.
Kofeale Corporation, Pittsburgh, Pa. Beverage. Serial No. 327,541; July 12. Class 45.
Kolax Company, New York, N. Y. Medicinal preparations. Serial No. 326,771; July 12. Class 6.
Kuchle, Gustav E., doing business as Okay Distributing Service, Lakewood, Ohio. Cleaning compound. Serial No. 326,377; July 12. Class 4.
Lamm, Jacob C., doing business as Lamm Bros., Baltimore, Md. Suitings of linen and cotton mixtures, etc. Serial No. 322,759; July 12. Class 42.
La Mode Permanent Wave Corp., Buffalo, N. Y. Permanent wave sachets. Serial No. 327,224; July 12. Class 44.
Lansburgh & Bro., Washington, D. C. Shoes, slippers, oxfords, etc. Serial No. 306,403; July 12. Class 39.
Levin & Harris Shirt Co. Inc., assignor to Lubin-Weeker Co. Inc., New York, N. Y. Pajamas, night shirts, robes, etc. Serial No. 321,883; July 12. Class 39.
Lowe, Joe, Corporation, Brooklyn, N. Y. Knives and handles. Serial No. 324,896; July 12. Class 23.
Lowe, Joe, Corporation, Brooklyn, N. Y. Shortening. Serial No. 327,318; July 12. Class 46.
Lowry, Julius C. doing business as Lowry Electric Company, Detroit, Mich. Electric fire alarm signaling systems. Serial No. 327,282; July 12. Class 21.
Lubin-Weeker Co. Inc. (See Levin & Harris Shirt Co. Inc., assignor.)
M. C. Provision Co., Inc., Jersey City, N. J. Sausages. Serial No. 325,076; July 12. Class 46.
Magner, Mrs. John A., doing business as John A. Magner, New Orleans, La. Salve. Serial No. 324,160; July 12. Class 6.
Magnuson Products Corporation, Brooklyn, N. Y. Washing soda. Serial No. 327,064; July 12. Class 6.
Maison Jeurelle, Inc., Jersey City, N. J. Perfume, toilet water astringent lotion, etc. Serial No. 326,946; July 12. Class 6.
Martha Washington Candies Company, Chicago, Ill. Candies. Serial No. 312,967; July 12. Class 46.
Marvio Mills, Inc., New York, N. Y. Cotton, linen, etc., goods. Serial No. 327,367; July 12. Class 42.
Master Metal Products, Inc., Buffalo, N. Y. Utility chest. Serial No. 327,593; July 12. Class 2.
Mayer-Nock Co., The, Philadelphia, Pa. Suits, frocks, and dresses. Serial No. 327,543; July 12. Class 39.
Mendoc Mending Company, (See Roozendaal, Siegfried J.)
Mentmore Manufacturing Company, Limited, London, England. Pens, fountain pens, and pencil cases, etc. Serial No. 326,642; July 12. Class 37.
Meredith Publishing Company, Des Moines, Iowa. Magazine section. Serial No. 327,762; July 12. Class 38.
Metal Process Corporation, Fair Lawn, N. J. Pickle liquors. Serial No. 326,355; July 12. Class 6.
Michigan Tanning & Extract Co., Petoskey, Mich. Leather. Serial No. 326,614; July 12. Class 1.
Mille Fleurs, Inc., New York, N. Y. Cream for eyelashes and eyebrows. Serial No. 326,979; July 12. Class 6.
Miller, Samuel, jr., doing business as Miller Products Company, Cheviot, Ohio. Flake soap. Serial No. 314,854; July 12. Class 4.
Montero, Harry E., doing business as Tastle Tooth Paste Co., Bloomfield, N. J. Toothpaste. Serial No. 317,178; July 12. Class 6.
More, R. L., & Sons, Vernon, Tex. Oils and greases. Serial No. 327,230; July 12. Class 15.
Mulvey, William F., Los Angeles, Calif. Plastic blocks. Serial No. 319,120; July 12.
Munchee Nuts Company. (See Burton, Leonard V. A., jr.)
N. V. Phillips' Gloeilampenfabrieken, Eindhoven, Netherlands. Glass bulbs. Serial No. 326,628; July 12. Class 33.
Namm, A. I., & Son, doing business as The Namm Store, Brooklyn, N. Y. Mattresses and box springs. Serial No. 326,294; July 12. Class 32.
National Acme Co., The, Cleveland, Ohio. Paper rolls. Serial No. 327,595; July 12. Class 37.
National Oil Products Company, Inc., Harrison, N. J. Germicides, disinfectants, and deodorants. Serial Nos. 326,949–50; July 12. Class 6.
Nebraska Consolidated Mills Co., Omaha, Nebr. Flour. Serial No. 327,702; July 12. Class 46.
Nusbaum, Knitters, Inc., Ozone Park, L. I., N. Y. Scarfs and jackets. Serial No. 327,602; July 12. Class 39.
Okay Distributing Service. (See Kuchle, Gustave E.)
Overland Candy Corporation, doing business as Food Confections Company, Chicago, Ill. Cakes and peanuts. Serial No. 326,789; July 12. Class 46.
P. M. C. Manufacturing Corp., Kingston, N. Y. Kitchen utensils. Serial 321,733; July 12. Class 13.
Phenochrome Germicidal Corporation, Oxford, N. Y. Germicide. Serial No. 326,952; July 12. Class 6.
Pierce Shoe Co., Richmond, Va. Shoes. Serial No. 327,198; July 12. Class 39.
Pinkard, Elizabeth L., Swissvale, Pa. Hair gloss and restorer. Serial No. 300,540; July 12. Class 6.
Poirette Corsets, Inc., New York, N. Y. Foundation garments, corsets, brassières, etc. Serial No. 327,024; July 12. Class 39.
Polakoff, Allan A., doing business as Veritas Products Co., New York, N. Y. Antiseptic jelly. Serial No. 326,564; July 12. Class 6.
Premier Shoe Co. Inc., New York, and Brooklyn, N. Y. Shoes. Serial No. 296,921; July 12. Class 39.
Prima Manufacturing Company, Inc., Philadelphia, Pa. Laundry washing machines. Serial No. 327,473; July 12. Class 24.
Quality Tea & Coffee Company. (See Canellos, P. G.)
Quincy Show Case Works, The, Quincy, Ill. Wall cases, show cases, counters, etc. Serial No. 326,953; July 12. Class 32.
Ramm, Fred D., doing business as Siegfried Gessler, New York, N. Y. Bitters. Serial No. 326,791; July 12. Class 6.
Rath, Wm. C., Co. Inc., New York, N. Y. Pocket books and hand bags and suit cases. Serial No. 327,449; July 12. Class 3.
Ray Fuel Company, Detroit, Mich. Charcoal. Serial No. 327,002; July 12. Class 1.
Reed & Carnrick, Jersey City, N. J. General tonic. Serial No. 325,185; July 12. Class 6.

Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. Serial No. 326,989; July 12. Class 6.
Renou Chemical Corporation, The, Akron, Ohio. Cleaning compositions and compounds. Serial No. 327,604; July 12. Class 4.
Reynolds, Eleanor S., doing business as James E. Reynolds and Company, New York, N. Y. Braided cotton sash cord. Serial No. 321,314; July 12. Class 7.
Reynolds & Reynolds Company, The, Dayton, Ohio. Accounting forms, blanks, sheets, etc. Serial No. 326,912; July 12. Class 37.
Reynolds Wire Co., Dixon, Ill. Wire cloth. Serial No. 325,241; July 12. Class 13.
Riker Company, The, Newark, N. J. Buckles. Serial No. 321,919; July 12. Class 40.
Rittener, Agnes, doing business as Agnes, Paris, France. Hats. Serial No. 320,510; July 12. Class 39.
Roberts Manufacturing Company, Inc., Maple Shade, N. J. Electric skin stimulators or vibrator massagers. Serial No. 327,477; July 12. Class 44.
Roethlisberger & Co. Inc., New York, N. Y. Cheese. Serial No. 327,069; July 12. Class 46.
Roozendaal, Siegfried J., doing business as Mendoc Mending Company, Brooklyn, N. Y. Package containing materials and instructions for repairing garments. Serial No. 323,147; July 12. Class 50.
Roth, Otto, Inc., Newark, N. J. Safety razor blades. Serial No: 327,455; July 12. Class 28.
Ruzicka, Francis W., Chatham, N. J. Cut flowers. Serial No. 327,529; July 12. Class 1.
Rybak, Felix, doing business as Rybak Sales Co., Brooklyn, N. Y. Fruit syrups. Serial No. 327,372; July 12. Class 45.
S. B. G. Holding Corporation, doing business as Gouldbestos Corporation, New York, N. Y. Brake lining. Serial No. 313,055; July 12. Class 35.
S. M. Laboratories, Inc., Seattle, Wash. Vaginal suppositories. Serial No. 326,232; July 12. Class 6.
Sabella, Vincenzo, & Co., New York, N. Y. Canned olive oil and tomatoes. Serial No. 319,048; July 12. Class 46.
Saks & Company, New York, N. Y. Handbags. Serial No. 327,480; July 12. Class 3.
Saks & Company, New York, N. Y. Handbags and pocketbooks. Serial No. 327,605; July 12. Class 3.
Sanitex Mfg. Co. Ltd., Los Angeles, Calif. Sanitary napkin holders. Serial No. 315,764; July 12. Class 44.
Sargent & Company, New Haven, Conn. Metal shelves. Serial No. 327,201; July 12. Class 32.
Saurinol Distributors. (See Griesemer, Adam.)
Sears, Roebuck and Co., Chicago, Ill. Boots and shoes, etc. Serial No. 326,447; July 12. Class 39.
Silvertone Company, Inc., New York, N. Y. Bird tonics. Serial No. 310,266; July 12. Class 6.
Simons & French Company Incorporated, New York, N. Y. Fresh deciduous and citrus fruits, vegetables, etc. Serial No. 308,756; July 12. Class 46.
Smile Stores, Ltd., Hollywood, Calif. Cosmetics, toilet and medicinal preparations. Serial No. 317,857; July 12. Class 6.
Societe Anonyme Des Bas "Occulta", Lyon, France. Corrective devices. Serial No. 310,779; July 12. Class 44.
Soesman, Jacques, doing business as Souplex Company, Brussels, Belgium. Dentifrice, rouge, powder, etc. Serial No. 325,807; July 12. Class 6.
Souplex Company. (See Soesman, Jacques.)
Spanier, Harry, Brooklyn, N. Y. Face powder. Serial No. 326,839; July 12. Class 6.
Spysup Manufacturing Company. (See Bistrow, E.)
Stafford Chemical Company, Inc., Amherst, Mass. Chemical compound. Serial No. 320,837; July 12. Class 6.
Standard-Bronzefarben-Werke Carl Eckart, Furth, Germany. Bronze powder and aluminum powder, gold paint, etc. Serial No. 319,374; July 12. Class 16.
Sta-Wel Company (not incorporated). (See Brignall, Guy E.)
Sterling Automotive Products Corporation, Buffalo, N. Y. Tire valves. Serial No. 327,666; July 12. Class 13.
Sterling Products Company, Evansville, Ind. Malt extract. Serial No. 327,071; July 12. Class 46.
Stieff Company, The, Baltimore, Md. Tableware. Serial No. 327,639; July 12. Class 28.
Strathmore Paper Company, West Springfield, Mass. Paper. Serial No. 327,532; July 12. Class 37.
Studebaker Laboratories, Inc., Chicago, Ill. Radio receiving sets. Serial No. 320,749; July 12. Class 21.
Sucrest Corporation, New York, N. Y. Sugar and confectionery syrup. Serial No. 325,729; July 12. Class 46.
Sunburst Pop Corn Company. (See Davenport Seed Company.)
Sun-Glo Lamp Works, Inc., Brooklyn, N. Y. Incandescent lamps or bulbs. Serial No. 326,834; July 12. Class 21.
Superior Products Corporation, Elizabeth, N. J. Cases, compacts, and lip stick cases. Serial No. 327,377; July 12. Class 2.
Superior Products Corporation, Elizabeth, N. J. Compacts and vanity cases. Serial No. 327,378; July 12. Class 2.
Swift and Company, Chicago, Ill. Food. Serial No. 327,379; July 12. Class 46.
Tanning Process Company, The, Boston, Mass. Leather. Serial No. 327,640; July 12. Class 1.
Tastle Tooth Paste Co. (See Montero, Harry E.)
Teich & Makower, New York, N. Y. Sweaters and bathing suits. Serial No. 327,380; July 12. Class 39.
Thredlock Company, Inc., The, New York, N. Y. Lock. Serial No. 325,738; July 12. Class 25.
Time-O-Matic Corporation, New York, N. Y. Thermostatic electric switches, electrically heated cooking vessels, and electric plugs. Serial No. 314,538; July 12. Class 21.
Trophy Tower Sales Corporation, Cleveland, Ohio. Razor blades. Serial No. 320,741; July 12. Class 23.
Turner & Seymour Manufacturing Co., The, Torrington, Conn. Knife sharpeners, egg beaters, and mashers. Serial No. 327,080; July 12. Class 23.
Union Oil Company of California, Los Angeles, Calif. Fly spray, etc. Serial No. 324,201; July 12. Class 6.
Union Oil Company of California, Los Angeles, Calif. Cutting oil, thread cutting compound, gasoline, etc. Serial No. 324,914; July 12. Class 15.
Union Oil Company of California, Los Angeles, Calif. Medicinal petroleum oil, insecticidal oils, etc. Serial No. 324,915; July 12. Class 6.
United Elastic Corporation, Easthampton, Mass. Elastic fabrics. Serial No. 308,140; July 12. Class 42.
United Elastic Corporation, Easthampton, Mass. Elastic fabrics. Serial No. 308,464; July 12. Class 42.
United Health Equipment Company, Chicago, Ill. Exercising machines. Serial Nos. 326,967–8; July 12. Class 22.
United States Rubber Company, New York, N. Y. Automobile tires and inner tubes. Serial No. 325,302; July 12. Class 35.
United States Society, The, Washington, D. C. Periodical. Serial No. 321,044; July 12. Class 38.
Veritas Products Co. (See Polakoff, Allan A.)
Vita-Minn Company, Minneapolis, Minn. Medicines. Serial No. 325,306; July 12. Class 6.
Vogt Instant Freezers Incorporated, Louisville, Ky. Ice cream, water ice, sherbet, etc. Serial No. 325,733; July 12. Class 46.
Wahl Company, The, Chicago, Ill. Fountain pens. Serial No. 327,611; July 12. Class 37.
Waldes Koh-I-Noor, Inc., Long Island City, N. Y. Slide fasteners. Serial No. 327,115; July 12. Class 13.
Walton, Perry, Boston, Mass. Kitchen utensils. Serial No. 326,922; July 12. Class 23.
Ward, Joseph E., Long Beach, Calif. Skin tonic, powder base, hair tonic, etc. Serial No. 324,411; July 12. Class 6.
Waugh Equipment Company, Depew, N. Y. India-rubber buffing and draft springs and bearing springs, etc. Serial No. 327,571; July 12. Class 19.
White-Stokes Company, Inc., Chicago, Ill. Confectionery base, consisting of butter, fat, solids not fat, and sugar. Serial No. 323,017; July 12. Class 46.
Wil-Mor Company, Watertown, Wis. Root beer. Serial No. 326,311; July 12. Class 45.
Wilson-Jones Company, Chicago, Ill. Books, binders, and filler sheets. Serial No. 327,078; July 12. Class 37.
Yardley & Co., Limited, London, England. Bath salts, perfumes, tooth wash, etc. Serial No. 326,409; July 12. Class 6.
Zildjian, Avedis, Company, Norfolk Downs, Mass. Cymbals. Serial No. 326,316; July 12. Class 36.

LIST OF REGISTRANTS OF TRADE-MARKS

Abel & Asher Co., assignor to Frank Grocery Co. Inc., Shreveport, La. Coffee compound. 88,146; renewed Sept. 3, 1932.
Agrella, Alfred V., Brooklyn, N. Y. Compound for beautifying the teeth. 295,726; July 12; Serial No. 328,560; published Apr. 5, 1932. Class 6.
Alabama Barber Supply Company, Birmingham, Ala. Permanent wave solution. 295,858; July 12. Class 6.
Allied Mills, Inc., Chicago, Ill. Flour. 295,788; July 12; Serial No. 324,977; published Apr. 19, 1932. Class 46.
Alstrom, Harvey S., doing business as Lady Humphrey Products, Longmeadow, Mass. Cold, cleansing, and vanishing cream. 295,820; July 12; Serial No. 324,240; published Apr. 26, 1932. Class 6.
American Abrasive Metals Company, New York, N. Y. Cast metal. 88,991; renewed Nov. 5, 1932.
American Chemical Paint Company, Lower Gwynedd, Pa. Paint primer. 295,816; July 12; Serial No. 323,980; published Apr. 19, 1932. Class 16.
American Dry Yeast Products Corporation, New York, N. Y. Dry yeast. 295,841; July 12; Serial No. 325,131; published Apr. 26, 1932. Class 46.

American Pharmaceutical Co., Inc., New York, N. Y. Medicinal preparation. 295,740; July 12; Serial No. 324,026; published Apr. 12, 1932. Class 6.
American Steel & Wire Company of New Jersey, The, Hoboken, N. J., and Worcester, Mass., to The American Steel and Wire Company of New Jersey, Cleveland, Ohio. Rubber-covered wire. 88,140; renewed Sept. 3, 1932.
Anacin Company, The, Chicago, Ill. Dentifrices and mouth washes. 295,762; July 12; Serial No. 324,364; published Apr. 19, 1932. Class 6.
Anagnos, Tom, assignor to Pecan Krisp Co., Inc., Dallas, Tex. Ice cream. 295,738; July 12; Serial No. 323,882; published Apr. 26, 1932. Class 46.
Ancient Greek Laboratories, Inc., Pittsburgh, Pa. Medicine. 295,794; July 12; Serial No. 309,790; published Apr. 19, 1932. Class 6.
Arden, Elizabeth, Inc., New York, N. Y. Lipsticks. 295,807; July 12; Serial No. 316,871; published Apr. 12, 1932. Class 6.
Arkansas Company Inc., New York, N. Y. Sulphonated oil base. 295,735; July 12; Serial No. 323,852; published Apr. 5, 1932. Class 6.
Arkansas Company Inc., New York, N. Y. Compound used for delustering animal, etc., fibres. 295,736; July 12; Serial No. 323,854; published Apr. 5, 1932. Class 6.
Associated Silver Company, Chicago, Ill. Boxes and chests for silverware. 295,875; July 12. Class 2.
Atlanta Syrup Co. (See Young, John B.)
Atlas Supply Company, Newark, N. J. Automobile anti-freeze compound, radiator cleaning compound, and sealing compound. 295,699; July 12; Serial No. 320,346; published Apr. 12, 1932. Class 6.
Bach, Edward J., New York, N. Y. Sandwiches. 295,704; July 12; Serial No. 321,092; published Apr. 19, 1932. Class 46.
Baily, Joshua L., & Company, New York, N. Y. Sheets and pillow-cases. 295,856; July 12. Class 42.
Bakers Service Bureau, Inc., New York, N. Y. Bread, cake, and pies. 295,798–9; July 12; Serial Nos. 315,178–9; published Apr. 26, 1932. Class 46.
Baldwin Company, The, Cincinnati, Ohio. Pianos and player-pianos. 89,216–17; renewed Dec. 3, 1932.
Bandura, Stephen M., Long Island City, N. Y. Salad dressing. 295,849; July 12; Serial No. 325,249; published Apr. 26, 1932. Class 46.
Banks, Charles L., doing business as Naro Company, St. Louis, Mo. Hair and scalp oil treatments and shampoo. 295,713; July 12; Serial No. 322,918; published Apr. 12, 1932. Class 6.
Bass, Albert A., and N. A. Christensen, doing business as Medron Drug Co., Philadelphia, Pa. Medicinal preparation. 295,715; July 12; Serial No. 323,157; published Apr. 12, 1932. Class 6.
Bates, Fannie A., Denver, Colo. Device to prevent a baby from crawling out from under the covers. 295,764; July 12; Serial No. 324,453; published Apr. 26, 1932. Class 3.
Bayer Company, Inc., The. (See Farbenfabriken of Elberfeld Co., assignor.)
Belding Heminway Company. (See Richardson Silk Co.)
Bennie Worth Co., The. (See Herzberg, Louis.)
Bettinger Coal & Coke Corporation, Buffalo, N. Y. Coal and coke. 295,777; July 12; Serial No. 324,581; published Apr. 26, 1932. Class 1.
Billerman, William G., Newark, N. J. Glass top for percolators. 295,871; July 12. Class 33.
Blackstone Products Co., Inc., New York, N. Y. Aspirin tablets. 295,708; July 12; Serial No. 321,944; published Apr. 26, 1932. Class 6.
Borne Scrymser Company, Elizabeth, N. J., and New York, N. Y., to Borne Scrymser Company, New York, N. Y. Lubricating oil. 39,245; renewed Nov. 11, 1932.
Brach, E. J., & Sons, Chicago, Ill. Candy. 295,860; July 12. Class 46.
Brown Company, Portland, Me., and Berlin, N. H. Paper used in the manufacture of roofing, etc. 295,779; July 12; Serial No. 324,588; published Apr. 19, 1932. Class 12.
Brownlite Company, Inc., Baltimore, Md. Paints, lacquers, varnishes, etc. 295,809; July 12; Serial No. 322,919; published Apr. 19, 1932. Class 16.
Brunswick-Balke-Collender Company, Wilmington, Del., and Chicago, Ill. Billiard cue tips. 295,869; July 12. Class 22.
Cairo Syrup Company, Atlanta, Ga. Blended cane and corn syrup. 295,822; July 12; Serial No. 324,874; published Apr. 26, 1932. Class 46.
Cairo Syrup Company, Atlanta, Ga. Cane syrup. 295,823; July 12; Serial No. 324,875; published Apr. 26, 1932. Class 46.
California Packing Corporation. (See Code Portwood Canning Co., assignor.)
Central Valley Coal Co., Inc., Brooklyn, N. Y. Coal. 295,789; July 12; Serial No. 324,985; published Apr. 26, 1932. Class 1.
Chase Varnish Co. Inc., Long Island City, N. Y. Paints. 295,815; July 12; Serial No. 323,987; published Apr. 26, 1932. Class 16.
Chemische Fabrik Güstrow Dr. Hillringhaus & Dr. Hellmann Aktiengesellschaft, Gustrow, Germany. Medicinal preparation. 295,758; July 12; Serial No. 324,309; published Apr. 19, 1932. Class 6.
Chocolate Products Company, Chicago, Ill. Chocolate coating to be used for candy, ice cream, crackers, etc. 295,761; July 12; Serial No. 324,341; published Apr. 26, 1932. Class 46.
Clark-Hutchinson Co., Boston, Mass., assignor, by mesne assignments, to International Shoe Co., St. Louis, Mo. Boots, shoes, and slippers, and leather for same. 39,170; renewed Nov. 4, 1932.
Climax Rubber Company. (See Stein, Jacob.)
Code Portwood Canning Co., Fruitvale and Oakland, assignor, by mesne assignments, to California Packing Corporation, San Francisco, Calif. Canned fruits, vegetables, etc. 88,848; renewed Oct. 29, 1932.
Continental Rubber Works, Erie, Pa. Single-tube rubber tires. 89,228; renewed Dec. 3, 1932.
Corn Products Refining Company, New York, N. Y. Table syrup. 295,712; July 12; Serial No. 322,732; published Apr. 26, 1932. Class 46.
Crampton Canneries, Inc., Celina, Ohio. Canned vegetables and pickles. 295,796; July 12; Serial No. 314,154; published Aug. 18, 1931. Class 46.
Creo-Dipt Company Inc., North Tonawanda, N. Y. Shingles. 295,785; July 12; Serial No. 324,819; published Apr. 19, 1932. Class 12.
Crowell Corporation, The, Yorklyn, Del. Composition cloth tape. 295,880; July 12. Class 37.
Curtis's & Harvey, Limited, London, England. Gunpowder. 88,247; renewed Sept. 10, 1932.
Dacar Products Company, The, Canton, Ohio. Concentrated boiler water treating liquid, anti-freeze liquid and automobile radiator cleaning liquid. 295,747; July 12; Serial No. 324,033; published Apr. 12, 1932. Class 6.
Darnell Corporation, Ltd., Long Beach, Calif. Furniture casters. 295,863; July 12. Class 13.
Davenport's Sanitary Service, Ridgewood, N. Y. Insecticides and deodorants. 295,697; July 12; Serial No. 319,978; published Apr. 19, 1932. Class 6.
Davis, Rosa B., San Bernardino, Calif. Preparation for the treatment of hair. 295,725; July 12; Serial No. 323,527; published Apr. 19, 1932. Class 6.
Decatur Milling Company, Decatur, Ill. Hominy-grits, cornmeal, hominy, etc. 295,723; July 12; Serial No. 323,446; published Apr. 26, 1932. Class 46.
Denti-Kem Company, The. (See Long, Roscoe E.)
Digestive Ferments Company, Detroit, Mich. Medicinal preparation. 295,753; July 12; Serial No. 324,130; published Apr. 12, 1932. Class 6.
Dolge, C. B., Company, The, Westport, Conn. Liquid disinfectant and deodorizer. 295,840; July 12. Serial No. 324,703; published Apr. 26, 1932. Class 6.
Dowd, A., & Co., St. Louis, Mo. Foot lotions, and foot balm, powder, and creams. 295,851; July 12. Class 6.
Drug Products Co. Inc., The, Long Island City, N. Y. Manganese sodium gluconate colloidal solution. 295,727; July 12; Serial No. 323,615; published Apr. 5, 1932. Class 6.
Duct Electric Heater Corporation, New York, N. Y. Electric space heaters. 295,864; July 12. Class 21.
Dunn, Michael J., doing business as Humanity Chemical Co., Pottsville, Pa. Salve. 295,724; July 12; Serial No. 323,449; published Apr. 12, 1932. Class 6.
Du Pont, E. I., de Nemours and Company, Wilmington, Del. Antioxidant for rubber. 295,748; July 12; Serial No. 324,066; published Apr. 12, 1932. Class 6.
Duralé Company, The, St. Louis, Mo. Wave lotion. 295,698; July 12; Serial No. 320,189; published Apr. 19, 1932. Class 6.
Dwinell-Wright Company, Boston, Mass. Coffee. 89,236; renewed Dec. 3, 1932.
Eastern Shore Nurseries, Inc., Easton, Md. Nursery stock. 295,742; July 12; Serial No. 323,989; published Apr. 26, 1932. Class 1.
Emerson & Stevens Mfg. Co. Inc., Oakland, Me. Axes. 295,797; July 12; Serial No. 315,139; published Apr. 19, 1932. Class 23.
Faber, A. W., Stein, Germany, assignor to A. W. Faber, Inc., Newark, N. J. Pencils. 86,898; renewed June 11, 1932.
Farbenfabriken of Elberfeld Co., assignor to The Bayer Company, Inc., New York, N. Y. Remedy against gout and similar diseases. 39,251; renewed Nov. 11, 1932.
Farbenfabriken of Elberfeld Co., assignor, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y. Remedy splitting off iodine for subcutaneous or internal use. 39,252; renewed Nov. 11, 1932.
Farbenfabriken of Elberfeld Co., assignor, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y. Urinary antiseptic. 39,279; renewed Nov. 18, 1932.
Fisher Flouring Mills Company, West Waterway, Harbor Island, Seattle, Wash. Wheat flour. 295,824; July 12; Serial No. 325,093; published Apr. 19, 1932. Class 46.
"Force" Food Company, The, assignor to Hecker H-O Company, Inc., Buffalo, N. Y. Cereal food products. 39,313; renewed Nov. 18, 1932. Class 46.
Frank Grocery Co. Inc. (See Abel & Asher Co., assignor.)
Gel-a-Cote Corporation, Chicago, Ill. Gelatine for coating sausages and meats, etc. 295,739; July 12; Serial No. 323,935; published Apr. 26, 1932. Class 46.
General Mills, Inc. (See Washburn Crosby Company, assignor.)
General Mills, Inc., Minneapolis, Minn. Pancake flour. 295,825; July 12; Serial No. 325,225; published Apr. 26, 1932. Class 46.

General Mills, Inc., Minneapolis, Minn. Wheat flour. 295,826–7; July 12; Serial Nos. 325,226–7; published Apr. 26, 1932. Class 46.
General Mills, Inc., Minneapolis, Minn. Wheat flour. 295,844; July 12; Serial No. 325,219; published Apr. 26, 1932. Class 46.
General Mills, Inc., Minneapolis, Minn. Wheat flour. 295,845–8; July 12; Serial Nos. 325,221–4; published Apr. 26, 1932. Class 46.
George, Frank, Orrville, Ohio. Maltless syrup for making soft drinks. 295,866; July 12. Class 45.
Gilmore, James A., Spokane, Wash. Preparation for the scalp and stimulating hair growth. 295,842; July 12; Serial No. 325,141; published May 10, 1932. Class 6.
Gossard, Hampton D., Wichita, Kans. Insecticides. 295,755; July 12; Serial No. 324,164; published Apr. 19, 1932. Class 6.
Graphic-Gram Communications Service. (See Hodes-Wallach Co. Inc.)
Greenspan Bros. Co., doing business as United Service Grocers, Perth Amboy, N. J. Coffee. 295,700; July 12; Serial No. 320,672; published Apr. 26, 1932. Class 46.
Grey, Manuel, doing business as Grey Laboratories, Mexico City, Mexico; New York, N. Y.; and Los Angeles, Calif. Pharmaceutical preparation. 295,743–4; July 12; Serial Nos. 323,994–5; published Apr. 5, 1932. Class 6.
Griffith & Turner Co., doing business as Lemon Oil Company, Baltimore, Md. Insecticide. 295,854; July 12. Class 6.
Grossman Music Co., Cleveland, Ohio. Musical instruments and supplies. 295,855; July 12. Class 36.
H. D. T. Company, Factors. (See Triantafillu, Harry D.)
Haack Bros., Portland, Oreg. Cough compound, stimulant, expectorant, antispasmodic. 295,837; July 12; Serial No. 324,666; published Apr. 26, 1932. Class 6.
Haig, John, & Co. Limited, Markinch, Scotland. Whisky. 295,859; July 12. Class 49.
Haller, Louis, doing business as Paradise Bird Food Company, Cincinnati, Ohio. Bird food. 295,787; July 12; Serial No. 324,962; published Apr. 26, 1932. Class 46.
Hecker H-O Company, Inc. (See "Force" Food Company, The, assignor.)
Hemingway, H. C., & Company, Inc., Syracuse, N. Y. Canned fruits and vegetables and frosted, frozen, and iced fresh fruits and vegetables. 295,696; July 12; Serial No. 318,007; published Oct. 6, 1931. Class 46.
Heneph Corporation, The, Kingston, N. Y. Laxative. 295,768; July 12; Serial No. 324,518; published Apr. 19, 1932. Class 6.
Hertz, Max, Leather Company, Newark, N. J. Leather. 295,745; July 12; Serial No. 323,997; published Apr. 19, 1932. Class 1.
Herzberg, Louis, doing business as The Bonnie Worth Co., Hollywood, assignor to Morgan & Sampson, San Francisco, Calif. Nail polish and polish remover, nail whitening preparation, etc. 295,710; July 12; Serial No. 322,174; published Apr. 12, 1932. Class 6.
Hillyard Chemical Company, St. Joseph, Mo. Liquid floor wax. 295,831–2; July 12; Serial Nos. 324,515–16; published Apr. 26, 1932. Class 16.
Hodes-Wallach Co. Inc., doing business as Graphic-Gram Communications Service, New York, N. Y. Advertising matter. 295,867; July 12. Class 38.
Hood Rubber Co., Boston, Mass., assignor to Hood Rubber Company, Inc., Wilmington, Del. Rubber boots, shoes, overshoes, etc. 86,709; renewed May 28, 1932.
Horn Ice Cream Company, Inc. (See Maryland Ice Cream & Fruit Products Co., assignor.)
Hospital Products Corporation of America, Pleasantville, N. J. Salve. 295,800; July 12; Serial No. 316,487; published Sept. 11, 1931. Class 6.
Houbigant, Inc., New York, N. Y. Perfumes, toilet water, face powder, etc. 295,769–70; July 12; Serial Nos. 324,519–20; published Apr. 19, 1932. Class 6.
Houbigant, Inc., New York, N. Y. Perfumes, toilet water, powder, etc. 295,778; July 12; Serial No. 324,530; published Apr. 19, 1932. Class 6.
Houbigant, Inc., New York, N. Y. Perfumes, toilet water, powder, etc. 295,771–6; July 12; Serial Nos. 324,524–9; published Apr. 19, 1932. Class 6.
Houbigant, Inc., New York, N. Y. Perfumes, toilet water, powder, etc. 295,833–5; July 12; Serial Nos. 324,521–3; published Apr. 19, 1932. Class 6.
Hoyden, K., Company, Monterey and San Diego, Calif. Canned fish. 295,868; July 12. Class 46.
Humanity Chemical Co. (See Dunn, Michael J.)
Hunt-Rankin Leather Co., Boston, Mass. Leather. 295,780; July 12; Serial No. 324,606; published Apr. 26, 1932. Class 1.
Hygelyn, Inc., Minneapolis, Minn. Antiseptic jelly. 295,737; July 12; Serial No. 323,866; published Apr. 5, 1932. Class 6.
Ilg Electric Ventilating Company, Chicago, Ill. Refrigerators. 295,861; July 12. Class 31.
Illinois Iron & Bolt Co., Carpentersville, Ill. Steel carriage, wagon, and buggy axles. 86,992; renewed June 18, 1932.
Immunities Laboratories, Inc., New York, N. Y. Preparation for treatment of bacterial invasions. 295,836; July 12; Serial No. 324,608; published Apr. 26, 1932. Class 6.
International Shoe Co. (See Clark-Hutchinson Co., assignor.)
Jackson, Isaac, & Sons, Limited, Glossop, Derby, England. Machine belt fasteners. 295,865; July 12. Class 13.
Jayess, Dr., Pharmacal Products. (See Sparr, Joseph J.)
Johns-Manville Corporation, New York, N. Y. Refractory cements. 295,784; July 12; Serial No. 324,791; published Apr. 19, 1932. Class 12.
Jones Store Company, The, Kansas City, Mo. Lip rouge, skin tonic, tissue cream, etc. 295,804; July 12; Serial No. 321,139; published Apr. 5, 1932. Class 6.
Kaufman, Nathan, doing business as Modern Health Ass'n., Long Beach, N. Y. Psyllium seed. 295,714; July 12; Serial No. 322,935; published Apr. 12, 1932. Class 6.
Kaynee Company, The, Cleveland, Ohio. Children's combination outer garments. 295,876; July 12. Class 39.
Kennedy, Edward T., jr., doing business as Dr. Kennedy Medicine Co., Chicago, Ill. Preparation helpful in relief of dysmenorrhea. 295,819; July 12; Serial No. 324,171; published Apr. 26, 1932. Class 6.
Kerr, Stephen, Philadelphia, Pa. Mixture of coke and coal. 295,732; July 12; Serial No. 323,802; published Apr. 19, 1932. Class 1.
Kirby, Jesse R., doing business as Uthagen Laboratories, Hollywood, Calif. Facial treatment packs, creams, skin treating cream and liquid, etc. 295,795; July 12; Serial No. 313,785; published Apr. 12, 1932. Class 6.
Lady Humphrey Products. (See Alstrom, Harvey S.)
Laurich Malt & Supply Co., Cleveland, Ohio. Malt syrup. 295,783; July 12; Serial No. 324,668; published Apr. 26, 1932. Class 46.
Lemon Oil Company. (See Griffith & Turner Co.)
Limbershaft Golf Club Company, Tarpon Springs, Fla. Golf clubs. 295,857; July 12. Class 22.
Logan-Long Company, The, Chicago, Ill. Building material. 295,718; July 12; Serial No. 323,412; published Apr. 19, 1932. Class 12.
Long, Roscoe C., doing business as The Denti-Kem Company, St. Louis, Mo. Tooth-powder. 295,765; July 12; Serial No. 324,475; published Apr. 19, 1932. Class 6.
Longview Fibre Company, Longview, Wash. Fibre-board boxes. 295,874; July 12. Class 2.
M. D. Laboratories, Brooklyn, N. Y. Baby talcum powder. 295,756; July 12; Serial No. 324,261; published Apr. 12, 1932. Class 6.
MacLean, Robert S., doing business as Mastic Asphalt Company, Michigan City, Ind. Building covering materials. 295,711; July 12; Serial No. 322,368; published Apr. 26, 1932. Class 12.
Magnesia Products Company, Milwaukee, Wis. Bird and fish food. 295,741; July 12; Serial No. 323,974; published Apr. 26, 1932. Class 46.
Magnus, Mabee & Reynard, Inc., New York, N. Y. Aromatic chemicals, balsams, oils, etc. 295,807; July 12; Serial No. 322,050; published Apr. 12, 1932. Class 6.
Mahon, Samuel, Company. (See Merrill, J. H., Co., assignor.)
Marietta Paint & Color Co., The, Marietta, Ohio. Lacquer, varnish, paint, enamel, etc. 295,830; July 12; Serial No. 324,441; published Apr. 19, 1932. Class 16.
Marvelite Paint and Enamel Company, The, Baltimore, Md. Paints, paint enamels, varnishes, etc. 295,806; July 12; Serial No. 321,571; published Apr. 19, 1932. Class 16.
Maryland Ice Cream & Fruit Products Co., assignor, by mesne assignments, to Horn Ice Cream Company, Inc., Baltimore, Md. Ice cream. 89,126; renewed Nov. 12, 1932.
Mastic Asphalt Company. (See MacLean, Robert S.)
May Department Stores Company, Los Angeles, Calif. Piece goods. 295,808; July 12; Serial No. 322,322; published Apr. 19, 1932. Class 42.
Mayflower Mills, Fort Wayne, Ind. Flour. 295,766; July 12; Serial No. 324,477; published Apr. 19, 1932. Class 46.
Mead Johnson & Company, Evansville, Ind. Specially prepared food product for infants and invalids, etc. 295,757; July 12; Serial No. 324,293; published Apr. 26, 1932. Class 46.
Medron Drug Co. (See Bass, Albert A., and Newell A., Christensen.)
Merrill, J. H., Co., assignor to Samuel Mahon Company, Ottumwa, Iowa. Foods. 88,908–9; renewed Oct. 29, 1932.
Merz & Co., Frankfort-on-the-Main, Germany. Preparations for skin disorders, nerve and respiratory disorders. 295,802; July 12; Serial No. 320,364; published Apr. 19, 1932. Class 6.
Milson Company, The, Cincinnati, Ohio. Antiseptic powders, aspirin, boracic acid, etc. 295,790; July 12; Serial No. 282,665; published Apr. 12, 1932. Class 6.
Miner, Arlow W., doing business as the Nif-T Company, Sioux City, Iowa. Box covers. 295,767; July 12; Serial No. 324,480; published Apr. 26, 1932. Class 50.
Modern Health Ass'n. (See Kaufman, Nathan.)
Modernette, Inc., Des Moines, Iowa. Chemical hair remover. 295,716; July 12; Serial No. 323,203; published Apr. 19, 1932. Class 6.
Monarch Metal Weatherstrip Corporation, St. Louis, Mo. Metal weatherstrips. 295,786; July 12; Serial No. 324,848; published Apr. 19, 1932. Class 12.
Morgan & Sampson. (See Herzberg, Louis, assignor.)
Mullen Brothers, Brockton, Mass. Leather enamel and polishes. 88,510; renewed Sept. 24, 1932.
Nanu, John, Aliquippa, Pa. Preparation for rheumatism. 295,793; July 12; Serial No. 309,694; published Apr. 12, 1932. Class 6.

Naro Company. (See Banks, Charles L.)
National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuits. 89,133; renewed Nov. 12, 1932.
National Licorice Company, Brooklyn, N. Y. Stick-licorice, licorice chewing-gum and wafers. 88,935; renewed Oct. 29, 1932.
Newport Company, The, Carrollville, Wis. Turpentine. 295,791; July 12; Serial No. 296,665; published Apr. 19, 1932. Class 16.
Nif-T Company, The. (See Miner, Arlow W.)
Nolan Brothers, Minneapolis, Minn. Bituminous products. 295,740; July 12; Serial No. 323,960; published Apr. 19, 1932. Class 12.
Northrop & Lyman Co., Limited, Toronto, Ontario, Canada. Skin lotion. 295,694–5; July 12; Serial Nos. 317,007–8; published Apr. 12, 1932. Class 6.
Ohio Leather Company, The, Girard, Ohio. Leathers. 295,843; July 12; Serial No. 325,181; published Apr. 26, 1932. Class 1.
Or-All Laboratories. (See Sklow, J., and Mandelbaum.)
Paradise Bird Food Company. (See Haller, Louis.)
Parke, Davis & Co., Detroit, Mich. Radiopaque oil. 295,813; July 12; Serial No. 323,962; published Apr. 5, 1932. Class 6.
Pecan Krisp Co., Inc. (See Anagnos, Tom, assignor.)
People's Outfitting Company, Detroit, Mich. Dresses. 295,810; July 12; Serial No. 323,206; published Apr. 26, 1932. Class 39.
Pharma-Craft Corporation, The, Louisville, Ky. Skin salve. 295,792; July 12; Serial No. 308,952; published Apr. 19, 1932. Class 6.
Philadelphia Quartz Company, Philadelphia, Pa. Silicate of soda. 295,751; July 12; Serial No. 324,112; published Apr. 12, 1932. Class 6.
Philippé, Louis, New York, N. Y. Antiseptic-germicide for the hair and scalp. 295,821; July 12; Serial No. 324,354; published Apr. 26, 1932. Class 6.
Philippe, Louis, New York, N. Y. Antiseptic-germicide powder. 295,828; July 12; Serial No. 324,355; published Apr. 26, 1932. Class 6.
Philippe, Louis, New York, N. Y. Antiseptic-germicide powder. 295,829; July 12; Serial No. 324,358; published Apr. 26, 1932. Class 6.
Prentice, G. E., Manufacturing Company, New Britain, Conn. Separable fasteners, keycase trimmings, and assemblies. 295,870; July 12. Class 13.
Reed Drug Co., Miami, Fla. Preparation for the treatment of hemorrhoids. 295,754; July 12; Serial No. 324,133; published Apr. 12, 1932. Class 6.
Reilly Chemical Company, Inc., Indianapolis, Ind. Treated coal. 295,705; July 12; Serial No. 321,171; published Apr. 19, 1932. Class 1.
Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. 295,812; July 12; Serial No. 323,717; published Apr. 12, 1932. Class 6.
Reyes, Lorenzo C., Manila, P. I. Medicinal pomade. 295,707; July 12; Serial No. 321,826; published Apr. 12, 1932. Class 6.
Richardson Silk Co., Chicago, Ill., to Belding Heminway Company, New York, N. Y., successor. Mercerized cotton floss. 86,732; renewed May 28, 1932.
Robinson, H. A., & Co., Inc., New York, N. Y. Surfacing material. 295,706; July 12; Serial No. 321,218; published Apr. 19, 1932. Class 12.
Rogers, Lunt & Bowlen Company, Greenville, Mass. Sterling-silver and silver-mounted tableware, jewelry, etc. 88,364; renewed Sept. 10, 1932.
Romano, Joseph, doing business as R. Romano & Son, New York, N. Y. Alimentary paste products. 295,781; July 12; Serial No. 324,627; published Apr. 26, 1932. Class 46.
Rosenbach, Jacob C., New York, N. Y. Laxative ice cream. 295,803; July 12; Serial No. 320,874; published Apr. 5, 1932. Class 6.
Ross, Sydney, Co., The, Newark, N. J. General tonic preparation. 295,752; July 12; Serial No. 324,117; published Apr. 12, 1932. Class 6.
Sage, Peggy, Inc., New York, N. Y. Nail enamel, polish, paste, and powder, cuticle remover, etc. 295,858; July 12. Class 6.
St. Albans Grain Company, St. Albans, Vt. Fish meal. 295,878; July 12. Class 46.
Sanymetal Products Company, Cleveland, Ohio. Sectional steel frames. 295,782; July 12; Serial No. 324,629; published Apr. 12, 1932. Class 12.
Schacht & Co., Goshen, Ind., assignor to Schacht Rubber Mfg. Co., Huntington, Ind. Hardware and plumbing and steamfitting supplies. 87,260; renewed July 2, 1932.
Schliemann Companies, Inc., New York, N. Y. White mineral oil. 295,733–4; July 12; Serial Nos. 323,832–3; published Apr. 26, 1932. Class 6.
Scholl Mfg. Co., Inc., The, Chicago, Ill. Adhesive medicated shields, pads or plasters. 295,814; July 12; Serial No. 323,963; published Apr. 5, 1932. Class 6.
Schotz, John M., New York, N. Y. Toilet preparations. 295,703; July 12; Serial No. 320,996; published Apr. 12, 1932. Class 6.
Seneca Food Products Corporation, Utica, N. Y. Malt syrup. 295,877; July 12. Class 46.
Sherwin-Williams Company, The, Cleveland, Ohio. Paints, varnishes, paint enamels, etc. 295,811; July 12; Serial No. 323,591; published Apr. 19, 1932. Class 16.
Shortwave & Television Corporation, Boston, Mass. Radio receiving sets, kits for radio receiving sets, and parts of such sets, etc. 295,862; July 12. Class 21.
Siegel, William, doing business as Viomalt Laboratories, New York, N. Y. General tonic. 295,719; July 12; Serial No. 323,428; published Apr. 12, 1932. Class 6.
Silicate Paint Co. (J. B. Orr & Co.) Limited, The, Charlton and London, England. Water-paint. 88,598; renewed Oct. 1, 1932.
Skjelskor Frugtplantage A/S., Skjelskor, Denmark. Preparations for augmentation of the vital activity of the human body and its resisting power in cases of illness. 295,759; July 12; Serial No. 324,323; published Apr. 26, 1932. Class 6.
Sklow, Jacob, and William Mandelbaum, doing business as Or-All Laboratories, Richmond Hill, N. Y.; said Mandelbaum assignor to said Sklow. Mouth washes or gargles. 295,872; July 12. Class 6.
Society of Chemical Industry in Basle, Basel, Switzerland. Chemical products for use in the textile industry. 295,730; July 12; Serial No. 323,794; published Apr. 5, 1932. Class 6.
Sparr, Joseph J., doing business as Dr. Jayess Pharmacal Products, Boston, Mass. Medicinal preparation. 295,817; July 12; Serial No. 324,015; published Apr. 5, 1932. Class 6.
Squire, John P., & Company, Jersey City, N. J., and Boston, Mass., assignors, by mesne assignments, to John P. Squire Company, Cambridge, Mass. Lard, sausages, bacon, etc. 39,182; renewed Nov. 4, 1932.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Insecticides, deodorants, and disinfectants. 295,700; July 12; Serial No. 324,324; published Apr. 12, 1932. Class 6.
Stein, Jacob, doing business as Climax Rubber Company, New York and Brooklyn, N. Y. Crib sheeting, mattress covers, bath mats, etc. 295,701; July 12; Serial No. 320,705; published Apr. 26, 1932. Class 50.
Sugarman, Jacob, Union City, N. J. Astringents, beauty and cold creams, talcum powders, etc. 295,702; July 12; Serial No. 320,807; published Apr. 19, 1932. Class 6.
Swift and Company, Chicago, Ill. Packing house products. 38,398; renewed June 3, 1932.
Texaco Salt Products Company, New York, N. Y. Salt. 295,838; July 12; Serial No. 324,674; published Apr. 26, 1932. Class 6.
Texaco Salt Products Company, New York, N. Y. Salt. 295,839; July 12; Serial No. 324,676; published Apr. 26, 1932. Class 6.
Thomas, John H., Ashland, Ga. Healing powders, salves, herb medicine, etc. 295,709; July 12; Serial No. 322,116; published Apr. 12, 1932. Class 6.
Triantafillu, Harry D., doing business as H. D. T. Company, Factora, White Plains, N. Y. Polish. 295,850; July 12; Serial No. 282,207; published Dec. 24, 1929. Class 16.
Tri-Pie Corporation, Brooklyn, N. Y. Pies. 295,729; July 12; Serial No. 323,729; published Apr. 26, 1932. Class 46.
United Service Grocers. (See Greenspan Bros. Co.)
United States Gauge Company, Sellersville, Pa., and New York, N. Y., to United States Gauge Company, New York, N. Y. Vacuum, pressure, test gages, etc. 89,161; renewed Nov. 12, 1932.
Uthagen Laboratories. (See Kirby, Jesse R.)
Van Raalte Company, New York, N. Y. Laces. 295,818; July 12; Serial No. 324,020; published Apr. 26, 1932. Class 42.
Viomalt Laboratories. (See Siegel, William.)
Washburn Crosby Company, assignor to General Mills, Inc., Minneapolis, Minn. Wheat flour. 39,329; renewed Nov. 25, 1932.
West Disinfecting Company, Long Island City, N. Y. Disinfectant and deodorant. 295,763; July 12; Serial No. 324,451; published Apr. 19, 1932. Class 6.
Western Auto Supply Company, Kansas City, Mo. Golf balls and clubs. 295,879; July 12. Class 22.
Westfield River Paper Company, Inc., Russell, Mass. Glassine paper. 295,805; July 12; Serial No. 321,554; published Apr. 12, 1932. Class 37.
Weyerhaeuser Forest Products, St. Paul, Minn. Lumber, finishing lumber, framing lumber, etc. 295,873; July 12. Class 12.
Whelan Laboratories, Inc., New York, N. Y. Shaving cream. 295,852; July 12. Class 4.
White Star Mills, Staunton, Va. Wheat flour. 39,240; renewed Nov. 11, 1932.
Winthrop Chemical Company, Inc. (See Farbenfabriken of Elberfeld Co., assignor.)
Wolf, Charles A., Philadelphia, Pa. Medicament for epilepsy. 87,299; renewed July 2, 1932.
Wood Newspaper Machinery Corporation, New York, N. Y. Adhesive composition. 295,720–2; July 12; Serial Nos. 323,428–30; published Apr. 19, 1932. Class 5.
Wyeth, John, & Brother Incorporated, Philadelphia, Pa. Preparation for use as hemorrhoidal suppositories. 295,749; July 12; Serial No. 324,087; published Apr. 12, 1932. Class 6.

Wyeth, John, & Brother Incorporated, Philadelphia, Pa. Preparation for use as vaginal suppositories. 295,750; July 12; Serial No. 324,088; published Apr. 12, 1932. Class 6.
Ybry, Inc., New York, N. Y. Perfume, toilet water, and face powder. 295,717; July 12; Serial No. 323,382; published Apr. 12, 1932. Class 6.
Young, John B., doing business as Atlanta Syrup Co., South Pittsburg, Tenn. Table syrup. 295,731; July 12; Serial No. 323,799; published Apr. 26, 1932. Class 46.
Zmijarch, Matte, West Camp, N. Y. Belt dressing. 295,881; July 12. Class 4.
Zuffante, Giuseppe, Boston, Mass. Hair tonic. 295,728; July 12; Serial No. 323,646; published Apr. 12, 1932. Class 6.

LIST OF REGISTRANTS OF LABELS

Brockelman Bros. Inc., Worcester, Mass. Big Buster Bread. For Bread. 40,910; July 12.
California and Hawaiian Sugar Refining Corporation, Limited, San Francisco, Calif. C and H Menu Sugar Pure Cane Crystal Tablets. For Sugar. 40,911; July 12.
Central Waxed Paper Company, Chicago, Ill. Excello Wheat. For Bread. 40,912; July 12.
Cube Steak Machine Co. Inc., Boston, Mass. Cube Steak. For Steaks. 40,913; July 12.
Fremont Canning Company, Fremont, Mich. Gerber's. For Canned Vegetables. 40,914; July 12.
Gambee, Martin, Pawling, N. Y. The Grasshopper Chair. For Chairs. 40,915; July 12.
Grenpan Bakeries, Inc., Chicago, Ill. Dessert Special. For Cakes. 40,916; July 12.
Healoil Laboratories. (See Healy, Dan J.)
Healy, Dan J., doing busines as Healoil Laboratories, Detroit, Mich. Sunoil. For a Product of Scientific Research. 40,917; July 12.
Healy, Dan J., doing business as Healoil Laboratories, Detroit, Mich. Healoil. For a Product of Scientific Research. 40,918; July 12.
Hydrox Ice Cream Company, St. Louis, Mo. The Skipper. For Ice Cream. 40,919; July 12.
Lee, Barbara, Maplewood, Mo. Barbara Lee Ancient Night Cream. For Tissue Cream. 40,920; July 12.
Lincoln, Leo B., Chicago, Ill. Fix-Tite. For Cold Solder or Mender. 40,921; July 12.
McCurtain, Frank E., Denver, Colo. Sa-Wa-Sa. For Bread. 40,922; July 12.
Meyers, H., Sons, Pittsburgh, Pa. Meyers' Wheeling Stogies. For Stogies. 40,923; July 12.
North American Dye Corporation, Mount Vernon, N. Y. Barrington Hand Cream, for Soft Smooth Hands, for Lovely Hands. For Hand Cream. 40,924; July 12.
Peterson, Anna R., Chicago, Ill. Modern Method. For Face Powder. 40,925; July 12.
Rapid Mfg. Co., Seattle, Wash. Magic Shredders. For Shredders. 40,926; July 12.
Sholes & Sons, Birmingham, Ala. Colonial. For Floor Wax. 40,927; July 12.
Shulman Chemical Company, Philadelphia, Pa. Fumozone. For Deodorant. 40,928; July 12.
Shure, Arthur L., Brooklyn, N. Y. Shure RX Systems. For Medicine. 40,929; July 12.
Solo Products Co., Chicago, Ill. Solo. For Currants. 40,930; July 12.
Standard Solophone Mfg. Co. Inc., New York, N. Y. Tom Sawyer 10 Giant Crayons. For Crayons. 40,931; July 12.
Strong Cobb & Co. Inc., Cleveland, Ohio. Pioneer Aspirin. For Aspirin Tablets. 40,932; July 12.
Van Valin, W. B., Los Angeles, Calif. Pacifiers. For Confections. 40,933; July 12.
Ward Baking Company, New York, N. Y. Ward's Soft Bun Bread Sliced. For Bread. 40,934; July 12.

LIST OF REGISTRANTS OF PRINTS

Hatch, A. C., Laredo, Tex. Nex-Tu-Yu-Wear. For Underwear. 13,772; July 12.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Central Valley Coal Co. 295,789; July 12; Serial No. 324,985; published Apr. 26, 1932.
Coal and coke. Bettinger Coal & Coke Corporation. 295,777; July 12; Serial No. 324,581; published Apr. 26, 1932.
Coal, Treated. Reilly Chemical Company. 295,705; July 12; Serial No. 321,171; published Apr. 19, 1932.
Coke and coal, Mixture of. S. Kerr. 295,732; July 12; Serial No. 323,802; published Apr. 19, 1932.
Leather. Max Hertz Leather Company. 295,745; July 12; Serial No. 323,997; published Apr. 19, 1932.
Leather. Hunt-Rankin Leather Co. 295,780; July 12; Serial No. 324,606; published Apr. 26, 1932.
Leathers. Ohio Leather Company. 295,843; July 12; Serial No. 325,181; published Apr. 26, 1932.
Nursery stock. Eastern Shore Nurseries, Inc. 295,742; July 12; Serial No. 323,989; published Apr. 26, 1932.

CLASS 2

Boxes and chests for silverware. Associated Silver Company. 295,875; July 12.
Boxes, Fibre-board. Longview Fibre Company. 295,874; July 12.

CLASS 3

Device to prevent a baby from crawling out from under the covers. F. A. Bates. 295,764; July 12; Serial No. 324,453; published Apr. 26, 1932.

CLASS 4

Dressing, Belt. M. Zmijarch. 295,881; July 12.
Enamel and polishes, Leather. Mullen Brothers. 88,510; renewed Sept. 24, 1932.
Shaving cream. Whelan Laboratories, Inc. 295,852; July 12.

CLASS 5

Adhesive composition. Wood Newspaper Machinery Corporation. 295,720–22; July 12; Serial Nos. 323,428–30; published Apr. 19, 1932.

CLASS 6

Antioxidant for rubber. E. I. du Pont de Nemours and Company. 295,748; July 12; Serial No. 324,066; published Apr. 12, 1932.
Antiseptic-germicide for the hair and scalp. L. Philippe. 295,821; July 12; Serial No. 324,354; published Apr. 26, 1932.
Antiseptic jelly. Hygelyn, Inc. 295,737; July 12; Serial No. 323,866; published Apr. 5, 1932.
Antiseptic powders, aspirin, boracic acid, etc. Milson Company. 295,790; July 12; Serial No. 282,665; published Apr. 12, 1932.
Antiseptic, Urinary. Farbenfabriken of Elberfeld Co. 39,279; renewed Nov. 18, 1932.
Aspirin tablets. Blackstone Products Co. 295,708; July 12; Serial No. 321,944; published Apr. 26, 1932.
Astringents, astringent cerates, bleach and beauty creams, etc. F. C. Reilly. 295,812; July 12; Serial No. 323,717; published Apr. 12, 1932.
Astringents, beauty and cold creams, talcum powders, etc. J. Sugarman. 295,702; July 12; Serial No. 320,807; published Apr. 19, 1932.
Chemical hair remover. Modernette, Inc. 295,716; July 12; Serial No. 323,203; published Apr. 19, 1932.
Chemical products for use in the textile industry. Society of Chemical Industry in Basle. 295,730; July 12; Serial No. 323,794; published Apr. 5, 1932.
Chemicals, balsams, oils, etc., Aromatic. Magnus, Mabee & Reynard, Inc. 295,807; July 12; Serial No. 322,050; published Apr. 12, 1932.
Compound, Automobile anti-freeze, radiator cleaning, and sealing. Atlas Supply Company. 295,699; July 12; Serial No. 320,346; published Apr. 12, 1932.
Compound for beautifying the teeth. A. V. Agrella. 295,726; July 12; Serial No. 323,560; published Apr. 5, 1932.
Compound, stimulant, expectorant, antispasmodic, Cough. Haack Bros. 295,837; July 12; Serial No. 324,666; published Apr. 26, 1932.
Compound used for delustering animal, etc. fibres. Arkansas Company Inc. 295,736; July 12; Serial No. 323,854; published Apr. 5, 1932.
Cream, Cold, cleansing, and vanishing. H. S. Alstrom. 295,820; July 12; Serial No. 324,240; published Apr. 26, 1932.
Dentifrices and mouth washes. Anacin Company. 295,762; July 12; Serial No. 324,364; published Apr. 19, 1932.

Disinfectant and deodorant. West Disinfecting Company. 295,763; July 12; Serial No. 324,451; published Apr. 19, 1932.
Disinfectant and deodorizer, Liquid. C. B. Dolge Company. 295,840; July 12; Serial No. 324,703; published Apr. 26, 1932.
Facial treatment packs, creams, skin treating cream and liquid, etc. J. R. Kirby. 295,795; July 12; Serial No. 313,785; published Apr. 12, 1932.
Hair tonic. G. Zuffante. 295,728; July 12; Serial No. 323,646; published Apr. 12, 1932.
Insecticide. Griffith & Turner Co. 295,854; July 12.
Insecticides. H. D. Gossard. 295,755; July 12; Serial No. 324,164; published Apr. 19, 1932.
Insecticides and deodorants. Davenport's Sanitary Service. 295,697; July 12; Serial No. 319,978; published Apr. 19, 1932.
Insecticides, deodorants, and disinfectants. Stanco Incorporated. 295,760; July 12; Serial No. 324,324; published Apr. 12, 1932.
Laxative. Heneph Corporation. 295,768; July 12; Serial No. 324,513; published Apr. 19, 1932.
Laxative ice cream. J. C. Rosenbach. 295,803; July 12; Serial No. 320,874; published Apr. 5, 1932.
Lipsticks. Elizabeth Arden, Inc. 295,801; July 12; Serial No. 316,871; published Apr. 12, 1932.
Lotion, Skin. Northrop & Lyman Co. 295,694–5; July 12; Serial Nos. 317,007–8; published Apr. 12, 1932.
Lotion, Wave. Duralé Company. 295,698; July 12; Serial No. 320,189; published Apr. 19, 1932.
Lotions, and foot balm, powder, and creams, Foot. A. Dowd & Co. 295,851; July 12.
Manganese sodium gloconate colloidal solution. Drug Products Co. Inc. 295,727; July 12; Serial No. 323,615; published Apr. 5, 1932.
Medicament for epilepsy. C. A. Wolf. 87,299; renewed July 2, 1932.
Medicated shields, pads or plasters, Adhesive. Scholl Mfg. Co. 295,814; July 12; Serial No. 323,963; published Apr. 5, 1932.
Medicinal pomade. L. C. Reyes. 295,707; July 12; Serial No. 321,826; published Apr. 12, 1932.
Medicinal preparation. American Pharmaceutical Co. 295,746; July 12; Serial No. 324,026; published Apr. 12, 1932.
Medicinal preparation. Albert A. Bass and Newell A. Christensen. 295,715; July 12; Serial No. 323,157; published Apr. 12, 1932.
Medicinal preparation. Chemische Fabrik Güstrow Dr. Hillinghaus & Dr. Heilmann Aktiengesellschaft. 295,758; July 12; Serial No. 324,309; published Apr. 19, 1932.
Medicinal preparation. Digestive Ferments Company. 295,753; July 12; Serial No. 324,130; published Apr. 12, 1932.
Medicinal preparation. J. J. Sparr. 295,817; July 12; Serial No. 324,015; published Apr. 5, 1932.
Medicine. Ancient Greek Laboratories, Inc. 295,794; July 12; Serial No. 309,799; published Apr. 19, 1932.
Mineral oil, Non-medicinal white. Schliemann Companies. 295,733–4; July 12; Serial Nos. 323,832–3; published Apr. 26, 1932.
Mouth washes or gargles. Jacob Sklow and William Mandelbaum. 295,872; July 12.
Nail enamel, polish, paste, and powder, cuticle remover, etc. Peggy Sage, Inc. 295,858; July 12.
Nail polish, remover, whitening preparation, etc. L. Herzberg. 295,710; July 12; Serial No. 322,174; published Apr. 12, 1932.
Oil base, Sulphonated. Arkansas Company, Inc. 295,735; July 12; Serial No. 323,852; published Apr. 5,1932.
Oil, Radiopaque. Parke, Davis & Co. 295,813; July 12; Serial No. 323,962; published Apr. 5, 1932.
Oil treatment and shampoo, Hair and scalp. C. L. Banks. 295,713; July 12. Serial No. 322,918; published Apr. 12, 1932.
Perfume, toilet water, and face powder. Ybry, Inc. 295,717; July 12; Serial No. 323,382; published Apr. 12, 1932.
Perfume, toilet water, powder, etc. Houbigant, Inc. 295,771–6; July 12; Serial Nos. 324,524–9; published Apr. 19, 1932.
Perfumes, toilet water, face powder, etc. Houbigant, Inc. 295,769—70; July 12; Serial Nos. 324,519–20; published Apr. 19, 1932.
Perfumes, toilet water, powder, etc. Houbigant, Inc. 295,778; July 12; Serial No. 324,530; published Apr. 19, 1932.
Perfumes, toilet water, powder, etc. Houbigant, Inc. 295,883–5; July 12; Serial Nos. 324,521–3; published Apr. 19, 1932.
Permanent wave solution. Alabama Barber Supply Company. 295,853; July 12.
Pharmaceutical preparation. M. Grey. 295,743–4; July 12; Serial Nos. 323,994–5; published Apr. 5, 1932.
Powder, Antiseptic-germicide. L. Philippe. 295,828; July 12; Serial No. 324,355; published Apr. 26, 1932.
Powder, Antiseptic-germicide. L. Philippe. 295,829; July 12; Serial No. 324,358; published Apr. 26, 1932.
Powder, Baby talcum. M. D. Laboratories. 295,756; July 12; Serial No. 324,261; published Apr. 12, 1932.
Powders, salves, herb medicine, etc., Healing. J. H. Thomas. 295,709; July 12; Serial No. 322,116; published Apr. 12, 1932.
Preparation for rheumatism. J. Nanu. 295,798; July 12; Serial No. 309,694; published Apr. 12, 1932.
Preparation for the scalp and stimulating hair growth. J. A. Gilmore. 295,842; July 12; Serial No. 325,141; published May 10, 1932.
Preparation for the treatment of hair. R. B. Davis. 295,725; July 12; Serial No. 323,527; published Apr. 19, 1932.
Preparation for the treatment of hemorrhoids. Reed Drug Co. 295,754; July 12; Serial No. 324,138; published Apr. 12, 1932.
Preparation for use as hemorrhoidal suppositories. John Wyeth & Brother Incorporated. 295,749; July 12; Serial No. 324,087; published Apr. 12, 1932.
Preparation for use as vaginal suppositories. John Wyeth & Brother Incorporated. 295,750; July 12; Serial No. 324,088; published Apr. 12, 1932.
Preparation helpful in relief of dysmenorrhea. E. T. Kennedy, jr. 295,819; July 12; Serial No. 324,171; published Apr. 26, 1932.
Preparations for augmentation of the vital activity of the human body and its resisting power in cases of illness. Skjelskor Frugtplantage A/S. 295,759; July 12; Serial No. 324,323; published Apr. 26, 1932.
Preparations for skin, nerve, and respiratory disorders. Merz & Co. 295,802; July 12; Serial No. 320,364; published Apr. 19, 1932.
Preparations for treatment of bacterial invasions. Immunities Laboratories, Inc. 295,836; July 12; Serial No. 324,608; published Apr. 26, 1932.
Psyllium seed. N. Kaufman. 295,714; July 12; Serial No. 322,935; published Apr. 12, 1932.
Remedy against gout and similar diseases. Farbenfabriken of Elberfeld Co. 39,251; renewed Nov. 11, 1932.
Remedy splitting off iodine for subcutaneous or internal use. Farbenfabriken of Elberfeld Co. 39,252; renewed Nov. 11, 1932.
Rouge, skin tonic, tissue cream, etc., Lip. Jones Store Company. 295,804; July 12; Serial No. 321,139; published Apr. 5, 1932.
Salt. Texaco Salt Products Company. 295,838; July 12; Serial No. 324,674; published Apr. 26, 1932.
Salt. Texaco Salt Products Company. 295,839; July 12; Serial No. 324,676; published Apr. 26, 1932.
Salve. M. J. Dunn. 295,724; July 12; Serial No. 323,449; published Apr. 12, 1932.
Salve. Hospital Products Corporation of America. 295,800; July 12; Serial No. 316,487; published Sept. 1, 1931.
Salve, Skin. Pharma-Craft Corporation. 295,792; July 12; Serial No. 308,952; published Apr. 19, 1932.
Soda, Silicate of. Philadelphia Quartz Company. 295,751; July 12; Serial No. 324,112; published Apr. 12, 1932.
Toilet preparations. J. M. Schotz. 295,703; July 12; Serial No. 320,996; published Apr. 12, 1932.
Tonic, General. W. Siegel. 295,719; July 12; Serial No. 323,423; published Apr. 12, 1932.
Tonic preparation, General. Sydney Ross Co. 295,752; July 12; Serial No. 324,117; published Apr. 12, 1932.
Tooth-powder. R. C. Long. 295,765; July 12; Serial No. 324,475; published Apr. 19, 1932.
Water treating liquid, anti-freeze liquid, and automobile radiator cleaning liquid, Concentrated. Dacar Products Company. 295,747; July 12; Serial No. 324,033; published Apr. 12, 1932.

CLASS 9

Gunpowder. Curtis's & Harvey, Limited. 88,247; renewed Sept. 10, 1932.

CLASS 12

Bituminous products. Nolan Brothers. 295,740; July 12; Serial No. 323,960; published Apr. 19, 1932.
Building covering materials. R. S. MacLean. 295,711; July 12; Serial No. 322,368; published Apr. 26, 1932.
Building material. Logan-Long Company. 295,718; July 12; Serial No. 323,412; published Apr. 19, 1932.
Cements, Refractory. Johns-Manville Corporation. 295,784; July 12; Serial No. 324,791; published Apr. 19, 1932.
Lumber, finishing lumber, framing trim, etc. Weyerhaeuser Forest Products. 295,873; July 12.
Roofing, etc., Paper used in the manufacture of. Brown Company. 295,779; July 12; Serial No. 324,588; published Apr. 19, 1932.
Shingles. Creo-Dipt Company Inc. 295,785; July 12; Serial No. 324,819; published Apr. 19, 1932.
Steel frames, Sectional. Sanymetal Products Company. 295,782; July 12; Serial No. 324,629; published Apr. 12, 1932.
Surfacing material. H. A. Robinson & Co. 295,706; July 12; Serial No. 321,218; published Apr. 19, 1932.
Weatherstrips, Metal. Monarch Metal Weatherstrip Corporation. 295,786; July 12; Serial No. 324,848; published Apr. 19, 1932.

CLASS 13

Casters, Furniture. Darnell Corporation. 295,863; July 12.
Fasteners, keycase trimmings, and assemblies, Separable. G. E. Prentice Manufacturing Company. 295,870; July 12.
Fasteners, Machine belt. Isaac Jackson & Sons, Limited. 295,865; July 12.

Hardware and plumbing and steam-fitting supplies. Schacht & Co. 87,260; renewed July 2, 1932.

CLASS 14

Metal, Cast. American Abrasive Metals Company. 88,991; renewed Nov. 5, 1932.

CLASS 15

Oil, Lubricating. Borne Scrymser Company. 39,245; renewed Nov. 11, 1932.

CLASS 16

Lacquer, varnish, paint enamel, etc. Marietta Paint & Color Co. 295,830; July 12; Serial No. 324,441; published Apr. 19, 1932.
Paint primer. American Chemical Paint Company. 295,816; July 12; Serial No. 323,980; published Apr. 19, 1932.
Paint, Water-. Silicate Paint Co. (J. B. Orr & Co.) Limited. 88,598; renewed Oct. 1, 1932.
Paints. Chase Varnish Co. Inc. 295,815; July 12; Serial No. 323,987; published Apr. 26, 1932.
Paints, lacquers, varnishes, etc. Brownlite Company. 295,809; July 12; Serial No. 322,919; published Apr. 19, 1932.
Paints, paint enamels, varnishes, etc. Marvelite Paint and Enamel Company. 295,806; July 12; Serial No. 321,571; published Apr. 19, 1932.
Paints, varnishes, paint enamels, etc. Sherwin-Williams Company. 295,811; July 12; Serial No. 323,591; published Apr. 19, 1932.
Polishes. H. D. Triantafillu. 295,850; July 12; Serial No. 282,207; published Dec. 24, 1929.
Turpentine. Newport Company. 295,791; July 12; Serial No. 296,665; published Apr. 19, 1932.
Wax, Liquid floor. Hillyard Chemical Company. 295,831–2; July 12; Serial Nos. 324,515–16; published Apr. 26, 1932.

CLASS 19

Axles, Steel carriage, wagon, and buggy. Illinois Iron & Bolt Co. 86,992; renewed June 18, 1932.

CLASS 21

Electric space heaters. Duct Electric Heater Corporation. 295,864; July 12.
Radio receiving sets, kits for radio receiving sets, and parts of such sets, etc. Shortwave & Television Corporation. 295,862; July 12.
Wire, Rubber-covered. American Steel & Wire Company of New Jersey. 88,149; renewed Sept. 3, 1932.

CLASS 22

Billiard cue tips. Brunswick-Balke-Collender Company. 295,869; July 12.
Golf balls and clubs. Western Auto Supply Company. 295,879; July 12.
Golf clubs. Limbershaft Golf Club Company. 295,857; July 12.

CLASS 23

Axes. Emerson & Stevens Mfg. Co. Inc. 295,797; July 12; Serial No. 315,139; published Apr. 19, 1932.

CLASS 26

Vacuum, pressure, test gages, etc. United States Gauge Company. 89,161; renewed Nov. 12, 1932.

CLASS 28

Tableware, jewelry, etc., Sterling-silver and silver-mounted. Rogers, Lunt & Bowlen Company. 88,364; renewed Sept. 10, 1932.

CLASS 31

Refrigerators. Ilg Electric Ventilating Company. 295,861; July 12.

CLASS 33

Glass top for percolators. W. G. Billerman. 295,871; July 12.

CLASS 35

Tires, Single-tube rubber. Continental Rubber Works. 89,228; renewed Dec. 3, 1932.

CLASS 36

Musical instruments and supplies. Grossman Music Co. 295,855; July 12.
Pianos and player-pianos. Baldwin Company. 89,216–17; renewed Dec. 3, 1932.

CLASS 37

Paper, Glassine. Westfield River Paper Company. 295,805; July 12; Serial No. 321,554; published Apr. 12, 1932.
Pencils. A. W. Faber. 86,898; renewed June 11, 1932.
Tape, Composition cloth. Crowell Corporation. 295,880; July 12.

CLASS 38

Advertising matter. Hodes-Wallach Co. Inc. 295,867; July 12.

CLASS 39

Boots, shoes, and slippers, and leather for same. Clark-Hutchinson Co. 39,170; renewed Nov. 4, 1932.
Boots, shoes, overshoes, etc., Rubber. Hood Rubber Co. 86,709; renewed May 28, 1932.
Dresses. People's Outfitting Company. 295,810; July 12; Serial No. 323,206; published Apr. 26, 1932.
Garments, Children's combination outer. Kaynee Company. 295,876; July 12.

CLASS 42

Laces. Van Raalte Company. 295,818; July 12; Serial No. 324,020; published Apr. 26, 1932.
Piece goods. May Department Stores Company. 295,808; July 12; Serial No. 322,322; published Apr. 19, 1932.
Sheets and pillow-cases. Joshua L. Baily & Company. 295,856; July 12.

CLASS 43

Floss, Mercerized, cotton. Richardson Silk Co. 86,732; renewed May 28, 1932.

CLASS 45

Syrup for making soft drinks, Maltless. F. George. 295,866; July 12.

CLASS 46

Alimentary paste products. J. Romano. 295,781; July 12; Serial No. 324,627; published Apr. 26, 1932.
Biscuits. National Biscuit Company. 89,133; renewed Nov. 12, 1932.
Bread, cake, and pies. Bakers Service Bureau, Inc. 295,798–9; July 12; Serial Nos. 315,178–9; published Apr. 26, 1932.
Candy. E. J. Brach & Sons. 295,860; July 12.
Canned fish. K. Hovden Company. 295,868; July 12.
Canned fruits and vegetables and frosted, frozen, and iced fresh fruits and vegetables. H. C. Hemingway & Company. 295,696; July 12; Serial No. 318,007; published Oct. 6, 1931.
Canned fruits, vegetables, etc. Code Portwood Canning Co. 88,848; renewed Oct. 29, 1932.
Canned vegetables and pickles. Crampton Canneries, Inc. 295,796; July 12; Serial No. 314,154; published Aug. 18, 1931.
Cereal food products. "Force" Food Company. 39,313; renewed Nov. 18, 1932.
Chocolate coating to be used for candy, ice cream, crackers, etc. Chocolate Products Company. 295,761; July 12; Serial No. 324,341; published Apr. 26, 1932.
Coffee. Dwinell-Wright Company. 89,236; renewed Dec. 3, 1932.
Coffee, Greensbor Brs. C. 295,700; July 12; Serial No. 320,672; published Apr. 26, 1932.
Coffee compound. Abel & Asher Co. 88,146; renewed Sept. 3, 1932.
Dressing, Salad. S. M. Bandura. 295,849; July 12; Serial No. 325,249; published Apr. 26, 1932.
Fish meal. St. Albans Grain Company. 295,878; July 12.
Flour. Allied Mills. Inc. 295,788; July 12; Serial No. 324,477; published Apr. 19, 1932.
Flour. Mayflower Mills. 295,766; July 12; Serial No. 324,477; published Apr. 19, 1932.
Flour. Pancake. General Mills, Inc. 295,825; July 12; Serial No. 325,225; published Apr. 26, 1932.
Flour, Wheat. Fisher Flouring Mills Company. 295,824; July 12; Serial No. 325,093; published Apr. 19, 1932.
Flour, Wheat. General Mills, Inc. 295,826–7; July 12; Serial Nos. 325,226–7; published Apr. 26, 1932.
Flour. Wheat. General Mills, Inc. 295,844; July 12; Serial No. 325,219; published Apr. 26, 1932.
Flour, Wheat. General Mills, Inc. 295,845–8; July 12; Serial Nos. 325,221–4; published Apr. 26, 1932.
Flour, Wheat. Washburn Crosby Company. 39,329; renewed Nov. 25, 1932.
Flour, Wheat. White Star Mills. 39,240; renewed Nov. 11, 1932.
Food. Bird. L. Haller. 295,787; July 12; Serial No. 324,962; published Apr. 26, 1932.
Food. Bird and fish. Magnesia Products Company. 295,741; July 12; Serial No. 323,974; published Apr. 26, 1932.
Food products, etc. Mead Johnson & Company. 295,757; July 12; Serial No. 324,293; published Apr. 26, 1932.
Foods. J. H. Merrill Co. 88,908–9; renewed Oct. 29, 1932.
Gelatine for coating sausages and meats, etc. Gel-a-Cote Corporation. 295,739; July 12; Serial No. 323,935; published Apr. 26, 1932.
Hominy-grits, cornmeal, hominy, and corn flake. Decatur Milling Company. 295,723; July 12; Serial No. 323,446; published Apr. 26, 1932.
Ice cream. T. Anagnos. 295,738; July 12; Serial No. 323,882; published Apr. 26, 1932.
Ice cream. Maryland Ice Cream & Fruit Products Co. 89,126; renewed Nov. 12, 1932.
Lard, sausages, bacon, etc. John P. Squire & Company. 39,182; renewed Nov. 4, 1932.
Licorice, licorice chewing-gum and wafers, Stick. National Licorice Company. 88,935; renewed Oct. 29, 1932.
Packing house products. Swift and Company. 38,398; renewed June 3, 1932.

Pies. Tri-Pie Corporation. 295,729; July 12; Serial No. 323,729; published Apr. 26, 1932.
Sandwiches. E. J. Bach. 295,704; July 12; Serial No. 321,092; published Apr. 19, 1932.
Syrup. Corn Products Refining Company. 295,712; July 12; Serial No. 322,732; published Apr. 26, 1932.
Syrup. J. B. Young. 295,731; July 12; Serial No. 323,799; published Apr. 26, 1932.
Syrup, Blended cane and corn. Cairo Syrup Company. 295,822; July 12; Serial No. 324,874; published Apr. 26, 1932.
Syrup, Cane. Cairo Syrup Company. 295,823; July 12; Serial No. 324,875; published Apr. 26, 1932.
Syrup, Malt. Laurich Malt & Supply Co. 295,783; July 12; Serial No. 324,668; published Apr. 26, 1932.
Syrup, Malt. Seneca Food Products Corporation. 299,877; July 12.
Yeast, Dry. American Dry Yeast Products Corporation. 295,841; July 12; Serial No. 325,131; published Apr. 26, 1932.

CLASS 49

Whisky. John Haig & Co. Limited. 295,859; July 12.

CLASS 50

Covers, Box. A. W. Miner. 295,767; July 12; Serial No. 324,480; published Apr. 26, 1932.
Sheeting, covers, mats, etc. J. Stein. 295,701; July 12; Serial No. 320,705; published Apr. 26, 1932.

LIST OF LABELS

Barbara Lee Ancient Night Cream. For Tissue Cream. B. Lee. 40,920; July 12.
Barrington Hand Cream, for Soft Smooth Hands, for Lovely Hands. For Hand Cream. North American Dye Corporation. 40,924; July 12.
Big Buster Bread. For Bread. Brockelman Bros. Inc. 40,910; July 12.
C and H Menu Sugar Pure Cane Crystal Tablets. For Sugar. California and Hawaiian Sugar Refining Corporation. 40,911; July 12.
Colonial. For Flour Wax. Sholes & Sons. 40,927; July 12.
Cube Steak. For Steaks. Cube Steak Machine Co. Inc. 40,913; July 13.
Dessert Special. For Cakes. Grennan Bakeries, Inc. 40,916; July 12.
Excello Wheat. For Bread. Central Waxed Paper Company. 40,912; July 12.
Fix-Tite. For Cold Solder or Mender. L. B. Lincoln. 40,921; July 12.
Fumozone. For Deodorant. Shulman Chemical Company. 40,928; July 12.
Gerber's. For Canned Vegetables. Fremont Canning Company. 40,914; July 12.
Healoil. For a Product of Scientific Research. D. J. Healy. 40,918; July 12.
Magic Shredders. For Shredders. Rapid Mfg. Co. 40,926; July 12.
Meyers' Wheeling Stogies. For Stogies. H. Meyers & Sons. 40,923; July 12.
Modern Method. For Face Powder. A. R. Peterson. 40,925; July 12.
Pacifiers. For Confections. W. B. Van Valin. 40,933; July 12.
Pioneer Aspirin. For Aspirin Tablets. Strong Cobb & Co. Inc. 40,932; July 12.
Sa-Wa-Sa. For Bread. F. E. McCurtain. 40,922; July 12.
Shure RX Systems. For Medicine. A. L. Shure. 40,929; July 12.
Solo. For Currants. Solo Products Co. 40,930; July 12.
Sunoil. For a Product of Scientific Research. D. J. Healy. 40,917; July 12.
The Grasshopper Chair. For Chairs. M. Gambee. 40,915; July 12.
The Skipper. For Ice Cream. Hydrox Ice Cream Company. 40,919; July 12.
Tom Sawyer 10 Giant Crayons. For Crayons. Standard Solophone Mfg. Co. Inc. 40,031; July 12.
Ward's Soft Bun Bread Sliced. For Bread. Ward Baking Company. 40,934; July 12.

LIST OF PRINTS

Nex-Tu-Yu-Wear. For Underwear. A. C. Hatch. 13,772; July 12.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 12TH DAY OF JULY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Aastrup, Axel V., Belinska Villan, Sweden. Machine for kneading dough, whipping, and similar purposes. 1,867,243; July 12.
Abbott, Arthur B., Brixton, London, assignor of one-half to Robert Abbott, London, England. Coating composition. 1,866,743; July 12.
Abbott, Robert. (See Abbott, Arthur B., assignor.)
Abel, Michael, Columbus, Ohio. Directory system. 1,867,048; July 12.
Acco Products, Inc. (See Kline, Fred J., assignor.)
Accounting & Tabulating Corporation of Gt. Britain Limited, The. (See Brougham, Leslie E., assignor.)
Acly, Harry M., Pittsfield, Mass., assignor to General Electric Company. Support for transformers and associated protective apparatus. 1,867,394; July 12.
Adair, Sidney T., assignor to The Silica Gel Corporation, Baltimore, Md. Preparing solid adsorbents. 1,867,435; July 12.
Adams, Ernest A., assignor to M. Helland, Tacoma, Wash. Cup cake dropping machine. 1,866,589; July 12.
Adams, Henry W., Cincinnati, Ohio. Voice transmitter. 1,867,200; July 12.
Adams, James L., jr., assignor of nine-tenths to Graver Corporation, East Chicago, Ind. Method and apparatus for forming hollow metallic structures. 1,866,609; July 12.
Adams, James L., jr., assignor of nine-tenths to Graver Corporation, East Chicago, Ind. Machine for fabricating tubular metal structures. 1,866,610; July 12.
Addressograph Company. (See Lascelles, W. J., Peterson, Scott, and Wilson, assignors.)
Adler, Jacob, Hackensack, N. J., assignor of one-half to William Adler, New Haven, Conn. Construction material. 1,867,535; July 12.
Adler, William. (See Adler, Jacob, assignor.)
Affel, Herman A., Ridgewood, N. J., assignor to American Telephone and Telegraph Company. Concentric conducting system. 1,866,611; July 12.
Agfa Ansco Corporation. (See Baker, Thomas T., assignor.)
Agfa Ansco Corporation. (See Seifert, Max, assignor.)
Air Reduction Company. (See Anderson, James L., assignor.)
Ajemian, John, Detroit, Mich. Curtain rod cornice. 1,866,612; July 12.
Aktiengesellschaft Brown Boveri & Cie. (See Haller, Arnold, assignor.)
Albert, Walter P., East Orange, N. J., assignor to Harold O. Van Antwerp, Grand Rapids, Mich. Variable transmission mechanism. 1,866,614; July 12.
Albright, Edward C., assignor to Indiana Lamp Corporation, Connersville, Ind. Ornamented headlamp. 1,866,693; July 12.
Alexander, John M., Lincoln, Nebr. Automatic gasoline vending machine. 1,866,523; July 12.
Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to General Electric Company. Alternating current commutator machine. 1,867,396; July 12.
Allen, Carl G. (See McCormick, J. H., Allen, and Bender.)
Allen, Edward B., Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Thread cutting mechanism. 1,867,129; July 12.
Allen, Hugh E., Scotia, N. Y., assignor to General Electric Company. Remote control system. 1,867,395; July 12.
Allen-Sherman-Hoff Company, The. (See Deutsch, John, assignor.)
Alsaker, Alfred, assignor to The Delta-Star Electric Company, Chicago, Ill. Bus clamp. 1,867,130; July 12.
Altwicker, Hubert. (See de Ridder, E., and Altwicker.)
Ambler Asbestos Shingle & Sheathing Company. (See Ledeboer, John W., assignor.)
American Bemberg Corporation. (See Zart, A., Hartmann, and Hoelkeskamp, assignors.)
American Brake Materials Corporation. (See Blume, William A., assignor.)
American Brake Shoe and Foundry Company, The. (See Trainer, Maurice N., assignor.)
American Can Company. (See Peters, John F., assignor.)
American Coach & Body Co., The. (See Larsen, Neil P., assignor.)
American Electrical Company. (See Mason, William K., assignor.)
American Glanzstoff Corporation. (See Etzkorn, Rudolf, assignor.)
American Gypsum Co., The. (See Taylor, Roy J., assignor.)
American Optical Company. (See Tillyer, Edgar D., assignor.)
American Paper Goods Company, The. (See Haywood, Harry H., assignor.)
American Piano Corporation. (See Hickman, Clarence N., assignor.)
American Sales Book Company. (See Johnston, Clarence L., assignor.)
American Smelting and Refining Company. (See Slagle, Edgar A., assignor.)
American Telephone and Telegraph Company. (See Affel, Herman A., assignor.)
American Telephone and Telegraph Company. (See Dorff, L. A., and Sandalls, assignors.)
American Telephone and Telegraph Company. (See Rhodes, William A., assignor.)
American Voith Contact Company. (See Schmitthenner, Carlos, assignor.)
Amphibions, Inc. (See Leaman, Thomas P., assignor.)
Amrein Freudenberg Co. Inc. (See Freudenberg, Ernest W., assignor.)
Anders, Gladys C. (See Anders, William E., assignor.)
Anders, William E., West Asheville, N. C., assignor of two-fifths to G. C. Anders, Miami, Fla. Spring shackle. 1,867,486; July 12.
Anderson, Carl E., East Orange, assignor to Eastern Tool & Manufacturing Co., Bloomfield, N. J. Slide. 1,866,694; July 12.
Anderson, D. V., Company, The. (See Zies, Carl W., assignor.)
Anderson, Fritz A., assignor to The Burdick Corporation, Milton, Wis. Massage and exercise machine. 1,866,833; July 12.
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Torch cutting machine. 1,866,695; July 12.
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Torch cutting machine. 1,867,047; July 12.
Anderson, Oscar W., and E. E. Forrester, Denver, Colo. Gas burner and making the same. 1,867,526; July 12.
Andresen, Otto, Vinderen, near Oslo, Norway. Method and apparatus for concentrating pulp water. 1,867,436; July 12.
Andrews, Frederick Harold, Taihape, assignor to L. Brooks, Wellington, New Zealand. Lock. 1,867,244; July 12.
Andrus, Orrin E., assignor to A. O. Smith Corporation, Milwaukee, Wis. Structurally modifying the surfaces of metal bodies. 1,866,538; July 12.
Andrus, Orrin E., Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Repairing tools by welding. 1,867,345; July 12.
Anthracite Separator Company. (See Pardee, Frank jr., assignor.)
Anton, Frederick A., Topeka, Kans. Lateral arm and roller bracket support. 1,866,872; July 12.
Aparicio y Elizalde, Carlos, Engracia, Madrid, Spain. Closure for containers or receptacles for materials in a liquid or paste-like state. 1,866,635; July 12.
Apichell, Ralph, North Olmstead, assignor of one-half to C. Spero, Cleveland, Ohio. Toy animal. Des. 87,325; July 12.
Arcturus Radio Tube Company. (See Krahl, Walter L., assignor.)
Arkon Standard Mold Company, The. (See Bostwick, Henry C., assignor.)
Armstrong, Morgan K., Washington, D. C. Wall structure and building unit therefor. 1,867,299; July 12.
Arthur, Edward D., Palo Alto, assignor to Arthur Metal Products Company Ltd., San Francisco, Calif. Roller screen. 1,866,788; July 12.
Arthur Metal Products Company, Ltd. (See Arthur, Edward D., assignor.)
Associated Telephone and Telegraph Company. (See Simpson, Lancelot M., assignor.)
Aste, Anthony L., Brooklyn, assignor to Griffin Manufacturing Company, Inc., New York, N. Y. Dauber. 1,867,437; July 12.
Atwater Kent Manufacturing Company. (See Tarzian, Sarkes, assignor.)
Auryansen, Frederick, Jamaica, N. Y. Bridge. 1,866,613; July 12.
Automatic Gas Steam Radiator Company. (See Blackmore, George W., assignor.)
B. O. T. Manufacturing Company. (See Tilden, Bert O., assignor.)
Babb, Walter A., Glendale, Calif. Hammer. 1,867,201; July 12.
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)

Bachbuber, Leo. (See Fitz, C. L., and Bachbuber.)
Baeck, Adolph, Lake Ronkonkoma, N. Y. Tire. 1,867,438; July 12.
Bailey, Elpha E., Denver, Colo. Metallic socket and mold for amalgam dies. 1,867,300; July 12.
Bailey, Joseph Oswell, Atlanta, Ga. Vertical conveyer elevator. 1,867,245; July 12.
Baker Box Company. (See Curtis, Philip N., assignor.)
Baker Ice Machine Co. Inc. (See Hartmann, Frederick E., assignor.)
Baker, John C., Montclair, and F. C. Schmelkes, North Arlington, N. J., assignors to Wallace & Tiernan Products, Inc., Belleville, N. J. Improving the taste and odor of water. 1,866,524; July 12.
Baker Perkins Company. (See Hulme, Andrew G., assignor.)
Baker, Thomas T., Hatch End, England, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y. Three-color photography. 1,867,301; July 12.
Baldwin, Arthur S., Stratford, Conn. Overrunning clutch. 1,867,302; July 12.
Ballard, Milton H., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Skiving machine. 1,866,918; July 12.
Ballauf, Fritz. (See Schmelzer, A., Ballauf, and Hefner.)
Ballauf, Fritz. (See Tschunkur, E., Ballauf, and Herdieckerhoff.)
Ballauf, Fritz, and A. Schmelzer, Elberfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Ortho-hydroxy-carboxylic acid of fluorene. 1,867,049; July 12.
Balle, Gerhard, and Karl Ost, Frankfort-on-the-Main-Hochst, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Cellulose ethers and preparing them. 1,867,050; July 12.
Balsiger, Harold E. (See Steiner, A. P., and Balsiger.)
Barbarou, Marius J.-B., Paris, France. Internal-combustion engine. 1,866,873; July 12.
Barber-Greene Company. (See Barber, Harry H., assignor.)
Barber, Harry H., Aurora, Ill., assignor to Barber-Greene Company. Loading machine. 1,866,789; July 12.
Barber, Harry H., assignor to Barber-Greene Company, Aurora, Ill. Portable conveyer. 1,866,834; July 12.
Bard, Francis N., Highland Park, Ill. Pipe coupling and insulation therefor. 1,866,835; July 12.
Bareis, Charles J., Milwaukee, Wis. Advertising sign. 1,867,051; July 12.
Barner, Lawrence D. (See Hacker, M. L., Wells, Hacker, and Barner.)
Barnes, William A., and M. O.Wilkinson, assignor to The Swartzbaugh Manufacturing Company, Toledo, Ohio. Electric toaster. 1,866,874; July 12.
Barnett, Charles and W., Hatfield, Herts, England. Manufacture of brooms and brushes. 1,867,487; July 12.
Barnett, William. (See Barnett, Charles and W.)
Barney, Freeman. (See Lee, J. E., Barney, and Beatty.)
Barnhart, George, Salem, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Blue sulphur color and making the same. 1,867,202; July 12.
Barr, Jesse P., Humboldt, Tenn. Camera film and spool loading device. 1,867,488; July 12.
Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Draft rigging. 1,866,919; July 12.
Barthelmess, Emil, Dusseldorf-Oberkassel, assignor to Paul Rosin, Dresden, Germany. Pneumatic drying of materials. 1,866,744; July 12.
Barton Corporation, The. (See Labisky, Arthur H., assignor.)
Bateman, Ralph C., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Making tire molds. 1,866,790; July 12.
Bauer, Bruno, Vienna, Austria. Ventilation and construction of dye works. 1,866,875; July 12.
Bauer, Wilhelm. (See Wieners, F., and Bauer.)
Baylis, Walter S., assignor, by mesne assignments, to Filtrol Company of California, Los Angeles, Calif. Treatment of lubricating oils with an activated clay and water. 1,866,590; July 12.
Baylis, Walter S., Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California. Making a superior oil. 1,866,591; July 12.
Beacham, Thomas E. (See Garland, C. S., Beacham, and Pickard.)
Beam, Vilynn O. (See Branche, N. T., and Beam.)
Beatty, Philip J. (See Lee, J. E., Barney, and Beatty.)
Beaver Manufacturing Company et al. (See Slade, H. E., and Gehring, assignors.)
Beckley-Ralston Co., The. (See Beckley, Welcome L., assignor.)
Beckley, Welcome L., Santa Monica, Calif., assignor to The Beckley-Ralston Co., Chicago, Ill. Golf club. 1,866,615; July 12.
Bedford, Edward B., and M. G. Parker, assignors to Oneida Community, Limited, Oneida, N. Y. Dish or similar article. Des. 87,326; July 12.
Bedford, Edward B., and M. G. Parker, assignors to Oneida Community, Limited, Oneida, N. Y. Dish or similar article. Des. 87,327; July 12.
Beetem, Frank G., Philadelphia, Pa. Controlling the charge of storage batteries. Re18,516; July 12.
Bell, Elmer. (See Blackmore, William, and E. Bell, assignors.)
Bell, George W., Detroit, Mich. Brake system. 1,866,791; July 12.
Bell Telephone Laboratories, Incorporated. (See Bjornson, Bjorn G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Burchett, George W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Cioffi, Paul P., assignor.)
Bell Telephone Laboratories, Incorporated. (See Dahl, J. F., and Carpenter, assignors.)
Bell Telephone Laboratories, Incorporated. (See Friis, Harald T., assignor.)
Bell Telephone Laboratories, Incorporated. (See Horton, Joseph W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Lathrop, Hubbel, assignor.)
Bell Telephone Laboratories, Incorporated. (See Massonneau, Robert F., assignor.)
Bell Telephone Laboratories, Incorporated. (See Morton, Edmund R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Runyon, Benjamin F., assignor.)
Bell Telephone Laboratories, Incorporated. (See Schlenker, Vesper A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Siegmund, Humphreys O., assignor.)
Bell Telephone Laboratories, Incorporated. (See Smith, Edward M., assignor.)
Bell Telephone Laboratories, Incorporated. (See Weinhart, H. W., and Hall, assignors.)
Bellanca, Giuseppe M., New Castle, Del. Wing structure. 1,866,961; July 12.
Beluche, Fernand E. (See Brace, W. F., and Beluche.)
Benard, Arthur G., Rochester, N. Y., assignor to The Locke Insulator Corporation, Baltimore, Md. Multiple insulator trimming machine. 1,866,792; July 12.
Bender, Frank M. (See McCormick, J. H., Allen, and Bender.)
Bendix Stromberg Carburetor Company. (See Dalrymple, William P., assignor.)
Bendix Stromberg Carburetor Company. (See Mock, Frank C., assignor.)
Benn, Alonzo N., Chicago, Ill. Smokehouse trolley. 1,866,793; July 12.
Benner, Stanley J., Springfield, Mass. Conveyer chain. 1,866,993; July 12.
Bennett, Harry J., Phoenix, Ariz. Locomotive driving gear. 1,867,246; July 12.
Bennett, Morris H., assignor to Scoville Manufacturing Company, Waterbury, Conn. Method of and apparatus for testing condensers. 1,867,131; July 12.
Bennett, Robert, and S. B. Bowman, Zanesville, Ohio, assignors to Hazel-Atlas Glass Co., Wheeling, W. Va. Storing and supplying glass batches of uniform mixture. 1,867,489; July 12.
Berenstein, Frank, assignor to Panco Rubber Company, Chelsea, Mass. Making rubber heels. 1,867,132; July 12.
Berger Brothers Company. (See Kumpf, August D., assignor.)
Bergstrand, Frank O., Worcester, Mass. Mechanical toy. 1,867,052; July 12.
Berry, Edgar H., Harpers Ferry, W. Va. Container closure and applying the same. 1,866,920; July 12.
Bielouss, Elias, assignor to Henry A. Gardner Laboratory, Inc., Washington, D. C. Synthetic resin and preparing same. 1,866,962; July 12.
Bienert, Berthold. (See Gassner, S., and Bienert.)
Bierman, Frank H., Minneapolis, Minn. Lawn mower sharpening machine. 1,866,794; July 12.
Birman, Isidor, Peekskill, N. Y. Hospital bed attachment. 1,866,696; July 12.
Bisler, G. A., Inc. (See Dunn, Frank J., assignor.)
Bissell, Richard E., assignor to Thompson Products, Inc., Cleveland, Ohio. Alloy. 1,866,836; July 12.
Bisset, John D., Aberdeen, Scotland. Fish skinning machine. 1,867,133; July 12.
Bittorf, Louis A., assignor to National Manufacturing Company, Sterling, Ill. Friction hinge. 1,867,346; July 12.
Bjornson, Bjorn G., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Voice operated repeater circuit. 1,866,592; July 12.
Black, Corydon W., Council Grove, Kans. Electrical sound reproducer. 1,866,921; July 12.
Black, John C., Los Angeles, Calif., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del. Heating oils. Re18,517; July 12.
Blackburn, Jasper, Webster Groves, Mo. Toy. 1,866,697; July 12.
Blackmore, George W., assignor to Automatic Gas Steam Radiator Company, Pittsburgh, Pa. Radiator attachment. 1,867,303; July 12.
Blackmore, William, and E. Bell, Sharon, Pa., assignors of one-third to W. C. Blackmore, Cleveland, Ohio. Combined spring clip and snubber. 1,867,203; July 12.
Blackmore, William C. (See Blackmore, William, and E. Bell, assignors.)
Blair, Robert S., Stamford, Conn. Case for toilet articles and the like. 1,867,347; July 12.
Blake, Arthur J., and F. J. Tiffany, assignors to Harvey Hubbell, Incorporated, Bridgeport, Conn. Electric switch. 1,866,922; July 12.

Blanck, Joseph F., Lansdowne, Md. Game. 1,867,053; July 12.
Bliss, Malcolm G., North Grafton, assignor to Heywood Boot & Shoe Company, Worcester, Mass. Filler inserting machine. 1,866,745; July 12.
Blood, Howard E., assignor to Norge Corporation, Detroit, Mich. Water reservoir. 1,867,135; July 12.
Blume, William A., Detroit, Mich., assignor to American Brake Materials Corporation, New York, N. Y. Friction brake. 1,867,348; July 12.
Bobroff, Bornett L., Milwaukee, Wis. Hospital signaling system. 1,867,134; July 12.
Bodmer, Albert. (See Heberlein, G., and Bodmer.)
Bohnhardt, Charles F. H., Lynwood, assignor to J. A. Campbell, Long Beach, Calif. Liquid level gauge. 1,867,204; July 12.
Bonhôte, Gérald, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Azodyestuffs and making same. 1,867,439; July 12.
Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,866,539; July 12.
Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,866,540; July 12.
Bontempi, Giuseppe. (See Guidetti, F., and Bontempi.)
Born, Adolph, Lawrence, Mass. Shear machine. 1,867,205; July 12.
Borriello, Frank, Everett, Mass. Garment hanger. 1,867,247; July 12.
Borsetti, Gaspare, Biella, Italy. Fire extinguisher. 1,866,746; July 12.
Bosch, Robert, Aktiengesellschaft. (See Brodbeck, G., and Rehm, assignors.)
Bosch, Robert, Aktiengesellschaft. (See Katzenmaier, August, assignor.)
Bostwick, Henry C., assignor to The Akron Standard Mold Company, Akron, Ohio. Tire core and chuck. 1,866,994; July 12.
Bottle Tops, Inc. (See Crookshank, Clarence W., assignor.)
Bowen, jr., Francis J. (See Brotherman, Bernard, and Bowen, jr.)
Bower, Nicholas, Gasport, N. Y. Fruit grader. 1,867,054; July 12.
Bowman, Samuel B. (See Bennett, R., and Bowman.)
Bowser, S. F., & Company. (See Brace, W. F., and Beluche, assignors.)
Boyd, Thomas B., Butler, Pa. Metal coating furnace. 1,866,795; July 12.
Boylan, Glen. (See Gleason, O., and Boylan.)
Brace, William F., and F. E. Beluche, Buffalo, N. Y., assignors to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Filtering apparatus. 1,867,397; July 12.
Brady, Edmund W., assignor to The Brady Electric & Manufacturing Company, New Britain, Conn. Detachable insulator. 1,867,206; July 12.
Brady Electric & Manufacturing Company, The. (See Brady, Edmund W., assignor.)
Braham, John E. (See Hughes, G. E., Waring, and Braham.)
Branche, Nelson T., and V. O. Beam, assignors to Surface Combustion Corporation, Toledo, Ohio. Safety pilot mechanism for gas burning apparatus. 1,866,541; July 12.
Braren, Lorenz K., Munich, Germany. Gear transmission. 1,867,402; July 12.
Braren, Lorenz K., Munich, assignor to F. Deckel, Fabrik für Präzisionsmechanik und Maschinenbau, Munich, Bavaria, Germany. 1,867,490; July 12.
Braren, Lorenz K., assignor to the Firm: Friedrich Deckel, Präzisionsmechanik, und Maschinenbau, Munich, Bavaria, Germany. Injection of liquid fuel in internal combustion engines. 1,867,491; July 12.
Braselton, Chester H., New York, N. Y., and F. B. MacLaren, New Haven, Conn., said MacLaren, assignor to said Braselton. Fuel feed system. Re18,518; July 12.
Breuss, Edward B., Willows, Calif. Trailer hitch. 1,866,796; July 12.
Bridges, Edward G., Anderson, Ind., assignor to Lynch Glass Machine Company. Method of and apparatus for gathering molten glass in molds. 1,867,440; July 12.
Briggs & Stratton Corporation. (See Fitz Gerald, John W., assignor.)
Bright, John W., Grand Junction, Colo., assignor to P. D. Q. Auto Jack Mfg. Co. Automobile lift. 1,867,055; July 12.
Briney, Perry G. (See Dennis, C. R., and Briney.)
British Electrical and Allied Industries Research Association, The. (See Wedmore, E. B., and Whitney, assignors.)
Brodbeck, Gustav, Leonberg, and A. Rehm, Stuttgart, Germany, assignors to Robert Bosch, Aktiengesellschaft, Stuttgart, Germany. Curling tongs. 1,866,747; July 12.
Bronsstajn, Ruwin, Newark, N. J. Extracting vegetable proteins and product obtained thereby. 1,866,698; July 12.
Brooks, Leo. (See Andrews, Frederick H., assignor.)
Brostus, Edgar E., Pittsburgh, Pa. Valve. 1,867,349; July 12.
Brotherman, Bernard, and F. J. Bowen, jr., San Antonio, Tex. Tube repairing clamp. 1,867,248; July 12.
Brotz, Frank G., Kohler, Wis. Faucet. Des. 87,328; July 12.
Brougham, Leslie E., Thornton Heath, assignor to The Accounting & Tabulating Corporation of Great Britain Limited, London, England. Sorting machine for statistical cards or the like. 1,866,748; July 12.
Broughnam, Leslie E., Thornton Heath, assignor to The Accounting & Tabulating Corporation of Great Britain Limited, London, England. Sorting machine for statistical cards or the like. 1,866,749; July 12.
Brown Boveri & Cie. (See Van Rijswijk, Willem, assignor.)
Brown, Charles B. (See Brown, Charles H. and C. B.)
Brown, Charles H., and C. B., Flushing, N. Y. Shoe construction. 1,866,616; July 12.
Brown, Claude I. (See Glaze, C. H., and Brown.)
Brown, Harry C., Westwood, assignor to Henry B. Newhall Corporation, Garwood, N. J. Chain, method, and method of welding. 1,866,837; July 12.
Brown, James L., assignor to A. L. Rule, Knoxville, Tenn. Ironing board or table. 1,867,056; July 12.
Brownell, Myrtle I., Jackson, Mich., Transformer for floodlights. 1,866,750; July 12.
Brubacher, Wilbur, Bridgeport, Ontario, Canada. Headlight signal. 1,867,493; July 12.
Bruce, Alfred W., New York, N. Y. Truck for railroad vehicles. 1,866,839; July 12.
Brundage, James W., assignor to The Summit Mold & Machine Company, Akron, Ohio. Safety lock for presses. 1,867,304; July 12.
Brunk, Harold J., Chicago, Ill., assignor to C. F. Pease Company. Globe and carbon holder for arc lamps. 1,867,305; July 12.
Brush, Alanson P., and W. A., Detroit, Mich. Motor car construction. 1,867,207; July 12.
Brush, William A. (See Brush, Alanson P. and W. A.)
Brüstle, Ferdinand, Nutley, N. J., assignor to V. C. Thorne, New York, N. Y. Apparatus for threading radio coil cores. 1,866,838; July 12.
Bryant Electric Company, The. (See Von Hoorn, Fred G., assignor.)
Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Tabulating machine. 1,866,995; July 12.
Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Electric control mechanism. 1,866,996; July 12.
Bryce, James W., Bloomfield, N. J., assignor to International Time Recording Company of New York, New York, N. Y. Printing pay roll clock. 1,866,997; July 12.
Buchloh, Hans, Leverkusen-on-the-Rhine, W. Mieg, Opladen, near Cologne-on-the-Rhine, and W. Stoetzer, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparing monobenzoyldiamino-anthraquinone. 1,867,057; July 12.
Buchloh, Hans, Leverkusen-on-the-Rhine, W. Mieg, Opladen, near Cologne-on-the-Rhine, and W. Stoetzer, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparing monobenzoyldiamino-anthraquinones. 1,867,058; July 12.
Büchner, Carl T., Rudolstadt, Germany. Container for toilet preparations. 1,867,404; July 12.
Buckeye Steel Castings Company, The. (See Johnson, George T., assignor.)
Buckner, Henry K. (See Rowan, W. H., and Buckner.)
Budd, Edward G., Manufacturing Company. (See Trautvetter, George, assignor.)
Budd Wheel Company. (See Rosenberg, Ralph H., assignor.)
Buel, James F., Woburn, Mass. Turf roller. 1,866,998; July 12.
Buffalo Brake Beam Company. (See Busch, Charles R., assignor.)
Buffalo Brake Beam Company. (See Crone, Seth A., assignor.)
Bullard Company, The. (See Dunn, Thomas E., assignor.)
Bunts, Frank F., Monroe, and W. E. Rogers, Trenton, Mich. Generator pilot raising device. 1,866,876; July 12.
Burchett, George W., Peekskill, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Artificial larynx. 1,867,350; July 12.
Burdette, Richard S., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Solid tire. 1,866,797; July 12.
Burdick Corporation, The. (See Anderson, Fritz A., assignor.)
Burgman, Glen H., Chicago, Ill. Flat varnish. 1,867,306; July 12.
Burke, Ralph J. (See Worley, J. jr., and Burke.)
Burne, Stuart B., assignor to Pulver Company, Inc., Rochester, N. Y. Vending machine. 1,867,495; July 12.
Burrowe, Robert W., Petaluma, Calif. Filler pad. 1,866,617; July 12.
Busch, Charles R., Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y. Brake mechanism for railway cars. 1,866,999; July 12.
Bussdicker, Frederick R. (See Isaacson, M., Loudy, and Bussdicker.)
Bütow, Walter, assignor to Elektrizitäts-Actien-Gesellschaft vorm. W. Lahmeyer & Co., Frankfort-on-the-Main, Germany. Integrating and differential transformer. 1,866,751; July 12.

Buxton, Warner R., Longmeadow, Mass. Flexible pocket receptacle. 1,866,618; July 12.
Byrnes, Clarence P., trustee. (See James, Joseph H., assignor.)
Bysshe, Ernest T., and R. R. Finn, assignors to Jones & Lamson Machine Company, Springfield, Vt. Chaser. 1,866,542; July 12.
Cable, Rupert W., Greensboro, N. C. Coin controlled vending apparatus. 1,867,496; July 12.
Callahan, George F., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Mercury switch. Re18,525; July 12.
Cameron, James A., assignor to Cameron Machine Company, Brooklyn, N. Y. Slitting means. 1,867,059; July 12.
Cameron Machine Company. (See Cameron, James A., assignor.)
Campbell, Guy H., assignor to The Kennedy Car Liner & Bag Co., Shelbyville, Ind. Packing envelope. 1,866,963; July 12.
Campbell, Julian A. (See Bohnhardt, Charles F. H., assignor.)
Campbell, Julian A., Long Beach, Calif. Absorption. 1,867,136; July 12.
Campbell, Julian A., Long Beach, Calif. Absorption. 1,867,208; July 12.
Campbell, William H., et al. (See Triplett, James B.)
Campen, William H., and J. R. Smith, Omaha, Nebr. Cleaning mechanism. 1,866,877; July 12.
Caprio, Amerigo F. (See Walsh, J. F., and Caprio.)
Carborundum Company, The. (See Kirchner, Henry P., assignor.)
Carmean, James H., Kansas City, Mo. Heater. 1,866,840; July 12.
Carpenter, Charles E., Chicago, Ill. Doughnut machine and the like. 1,867,307; July 12.
Carpenter, Warren W. (See Dahl, J. F., and Carpenter.)
Carpentier, Melbourne L., assignor to Chrysler Corporation, Detroit, Mich. Cylinder water jacket cover. 1,867,351; July 12.
Carr, George T., Spokane, Wash. Detachable spout for cans. 1,867,060; July 12.
Carr-Lowrey Glass Co. (See Hilgenberg, Carl G., assignor.)
Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose acetate compositions containing mixed volatile solvents. 1,866,964; July 12.
Carson, Harry Y., Birmingham, Ala. Pipe joint. 1,866,619; July 12.
Carter, Philip S., Stony Brook, N. Y., assignor to Radio Corporation of America. Filter. 1,866,525; July 12.
Carter, William C., Flint, Mich. Carburetor. 1,866,543; July 12.
Cartwright Automatic Gear Shift Corporation. (See Cartwright, Forest S., assignor.)
Cartwright, Forest S., assignor to Cartwright Automatic Gear Shift Corporation, Indianapolis, Ind. Gear shift. 1,867,061; July 12.
Carver, Fred S., East Orange, N. J. Cage. 1,867,137; July 12.
Celluloid Corporation. (See Walsh, J. F., and Caprio, assignors.)
Central Scientific Company. (See Sachse, Herman P., assignor.)
Challenge Machinery Company. (See Lee, J. E., Barney, and Beatty, assignors.)
Chandler, Wallace L., East Lansing, Mich., assignor, by mesne assignments, to Merck & Co. Inc., Rahway, N. J. Colloidal iodine and making the same. 1,866,923; July 12.
Chase, Philip H., Bala-Cynwyd, Pa. Strand reenforcement. 1,867,536; July 12.
Chauveau, Louis Lucien Eugène, Paris, France. Alarm selector apparatus. 1,867,209; July 12.
Chavanne, J. Louis. (See Loebell, Henry O., assignor.)
Chemische Fabrik Kolk Gesellschaft mit beschrankter Haftung. (See Oehme, Hermann, assignor.)
Cherry-Burrell Corporation. (See Strandt, Gustav E., assignor.)
Chesnut, Mollie D., Des Moines, Iowa. Sprayer. 1,866,620; July 12.
Chicago Pneumatic Tool Company. (See Davenport, Ransom W., assignor.)
Chicago Pneumatic Tool Company (See Reed, Clarence E., assignor.)
Chicago Pump Company. (See Durdin, Augustus C., jr., assignor.)
Christie, Hugh K., assignor to Whiting Corporation, Harvey, Ill. Drop pit mechanism. 1,866,798; July 12.
Christmas, Burton, Saugerties, N. Y. Electric light and headlight. 1,867,138; July 12.
Chrysler Corporation (See Carpentier, Melbourne L., assignor.)
Chrysler Corporation. (See Churgay, L. A., and McClellan, assignors.)
Chrysler Corporation. (See Harness, J. King, assignor.)
Chrysler Corporation. (See Higby, Frank M., assignor.)
Chrysler Corporation. (See Lee, Roger K., assignor.)
Chrysler Corporation (See Werdehoff, Albert B. assignor.)
Churgay, Louis A., and H. S. McClellan, assignors to Chrysler Corporation, Detroit, Mich. Shipping device. 1,867,352; July 12.
Cincinnati Car Corporation, The. (See Ellis, Charles J., assignor.)
Ciolfi, Paul P., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Magnetic material. 1,866,924; July 12.
Ciolfi, Paul P., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Magnetic material. 1,866,925; July 12.
Circle F Mfg. Co. (See Petersen, Carl M., assignor.)
Clark Controller Company, The. (See Rippl, Charles H., assignor.)
Clark, Elmer, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Rubber cutting machine. 1,866,799; July 12.
Clark, Walter W., and J. F. McCann, assignors to Sprague Specialties Co., North Adams, Mass. Electrolytic device. 1,867,249; July 12.
Cleaver, John C., Oregon, Ill. Heating system for tank cars. 1,866,544; July 12.
Clement, Louis E., Meudon, France, assignor to Eastman Kodak Company, Rochester, N. Y. Separation of cellulosic materials. 1,866,965; July 12.
Cleveland Graphite Bronze Company, The. (See Klocke, William H., assignor.)
Cleveland Rock Drill Company, The. (See Feucht, Albert, assignor.)
Cleveland Rock Drill Company, The. (See Renfer, John E., assignor.)
Cleveland Rock Drill Company, The. (See Richardson, Led L., assignor.)
Clifford, Vernon J., London, England. Life guard or obstruction remover for motor road and other vehicles. 1,866,752; July 12.
Clifton Manufacturing Co. (See Crow, Lawrence M., assignor.)
Coates, Frederick, assignor to The Eagle-Picher Lead Company, Cincinnati, Ohio. Method for the manufacture of lead headed nails. 1,866,878; July 12.
Cockrell, William D., Schenectady, N. Y., assignor to General Electric Company. Control circuit for vapor electric discharge devices. 1,867,398; July 12.
Cohen, Jacob G., New York, N. Y. Game device. 1,866,545; July 12.
Cohen, Ralph, assignor to Perfection Steel Body Co., Galion, Ohio. Burial vault. Des. 87,329; July 12.
Cohn, Leonard B. (See Gragg, F. E., and Cohn.)
Cohoe Processes, Inc. (See Cohoe, Wallace, P., assignor.)
Cohoe, Wallace P., Riverdale-on-Hudson, assignor to Cohoe Processes, Inc., New York, N. Y. Machine for and method of dyeing cloth and otherwise treating textiles. 1,867,210; July 12.
Colby, Willis H., Hendersonville, N. C. Crossbow gun. 1,866,926; July 12.
Coles, Walter H., and B. J. Nelson, assignors to The Skinner Irrigation Company, Troy, Ohio. Irrigation device. 1,867,250; July 12.
Collings, William R., and D. L. Gibb, assignors to The Don Chemical Company, Midland, Mich. Article of manufacture. 1,867,071; July 12.
Combs, R. M., et al. (See Oliver, Guy C., assignor.)
Combustion Utilities Corporation. (See Wright, Carl J., assignor.)
Comoletti, John, Los Angeles, Calif. Tunneling machine. 1,866,753; July 12.
Conlin, Frederick, New York, N. Y. Brush for electroplating and electrocleaning and anode for use therein. 1,866,699; July 12.
Connor, Roger, N. S. Welk, and D. R. Zenner, assignors to The McBee Binder Company, Athens, Ohio. Posting stand. 1,866,966; July 12.
Consolidated Gas Company of New York, The. (See Gordon, D., and Ryan, assignors.)
Cook, C. Lee, Manufacturing Company. (See Durham, Fred D., assignor.)
Cook Laboratories, Inc. (See Fletcher, John P., assignor.)
Cooney, Francis M., and G. T. Darragh, Brandon, Manitoba, Canada. Humidor. 1,866,621 July 12.
Cooper-Bessemer Corporation. (See Gehres, Hewitt A., assignor.)
Coronet Phosphate Company. (See Waggaman, W. H., and Gooch, assignors.)
Corthell, Robert N., Auburn, Me. Bobbin and making the same. 1,866,622; July 12.
Cowlin, Eugene D., assignor to The Reliance Manufacturing Company, Massillon, Ohio. Spring washer. 1,867,251; July 12.
Craig, Frank R., River Edge, N. Y. Gearing for auto vehicles. 1,867,497; July 12.
Craig, John H., Oil City, Pa. Typewriter copyholder. 1,867,498; July 12.
Crane, Horace R., Pasadena, Calif. Rake. 1,866,754; July 12.
Crane Packing Company. (See De Vries, Fenno E., assignor.)
Crausbay Supply Co. Inc. (See Hacker, M. L., Wells, Hacker, and Barner.)
Crigler, James W., Mississippi City, Miss. Roach trap. 1,867,252; July 12.
Crone, Seth A., East Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y. Safety support for brake rods. 1,867,000; July 12.
Crookshank, Clarence W., San Diego, Calif., assignor, by direct and mesne assignments, to Bottle Tops, Inc. Cap for bottles. 1,866,841; July 12.

Crow, Harry L., Everett, assignor of one-half to E. E. Cushing, Seattle, Wash. Trolling spoon. 1,866,623; assignor.)
Crow, Lawrence M., assignor to Clifton Manufacturing Co., Waco, Tex. Sack buckle. 1,867,499; July 12.
Crowley, John C., Cleveland Heights, assignor to The Dill Manufacturing Company, Cleveland, Ohio. Air chuck. 1,867,253; July 12.
Curti, Ernesto, Milan, Italy. Pneumatic tool operating apparatus. 1,867,254; July 12.
Curtis, Philip N., assignor to Baker Box Company, Worcester, Mass. Chipping crate. 1,867,062; July 12.
Curtis, Winfred F., Saugus, Mass. Machine to serve ice cream. 1,866,842; July 12.
Cushing, Edgar E. (See Crow, Harry L., assignor.)
Cutler-Hammer, Inc. (See Le Van, J. D., and Stansbury, assignors.)
Dahl, Jack F., West Orange, N. J., and W. W. Carpenter, Garden City, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Call distributing system. 1,866,598; July 12.
Dall, Horace E., assignor to George Kent, Limited, Luton, England. Planimeter. 1,867,441; July 12.
Dällenbach, Walter, Zurich, Switzerland. Vacuum discharge vessel. 1,866,624; July 12.
Dalrymple, William P., assignor to Bendix Stromberg Carburetor Company, Chicago, Ill. Indicating the height of a liquid in a tank. 1,866,843; July 12.
Daman, Arthur C., and L. H. Logue, assignors to Denver Equipment Co., Denver, Colo. Rock crusher. 1,866,625; July 12.
Daniels, Joseph, Essen, Germany, assignor, by mesne assignments, to The Koppers Company, Pittsburgh, Pa. Tunnel kiln. 1,866,546; July 12.
Daniels, Joseph, Essen-Ruhr, Germany, assignor, by mesne assignments, to The Koppers Company, Pittsburgh, Pa. Tunnel oven. 1,866,547; July 12.
Darragh, George T. (See Cooney, F. M., and Darrah.)
Darsey, Van M., Morenci, assignor to Parker Rust-Proof Company, Detroit, Mich. Rustproofing material and treating the same. 1,866,879; July 12.
Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Refrigerating apparatus. 1,866,526; July 12.
Dawe, Charles C., Denver, Colo. Animal feed. 1,867,063; July 12.
Day, Harry G., and W. E. Skinner, Minneapolis, Minn. Smoke disposal and draft inducing apparatus for locomotives. 1,866,626; July 12.
Day, Harry G., and W. E. Skinner, Minneapolis, Minn. Smoke disposal and draft inducing apparatus for locomotives. 1,866,627; July 12.
Day, J. H., Company, The. (See Kirchhoff, William G., assignor.)
Deanesly, Richard M., Berkeley, assignor to Shell Development Company, San Francisco, Calif. Increasing the concentration of olefines in a mixture containing same. 1,866,800; July 12.
De Belleszie, Henri J. J. M. de R., Paris, France, assignor to Radio Corporation of America, New York, N. Y. Radio receiving apparatus. 1,867,189; July 12.
Deckel, Friedrich, Prazisionsmechanik, und Maschinenbau. (See Braren, Lorenz K., assignor.)
Decker, Carl, Knielingen, near Karlsruhe, assignor to the Firm Hennefer Maschinenfabrik C. Reuther & Reisert mit beschrankter Haftung Hennef-on-the-Sieg, Germany. Automatic feed welcher. 1,867,442; July 12.
De Cosimo, John. (See Principessa, T., and de Cosimo.)
De La Mater, George F., Gaylord, Mich. Snowplow. 1,867,255; July 12.
De Lano, Herman J., assignor to De Lano Service, Allegan, Mich. Deposit record. 1,867,211; July 12.
De Lano Service. (See De Lano, Herman J., assignor.)
Deleluvin, Maurice P. A. (See Prompt, Lucien L. J., assignor.)
Dellaree, Frank H., Detroit, Mich. Pick-up device for screws and the like. 1,866,880; July 12.
Dellinger, Martin C. (See Kulp, H. W., and Dellinger.)
Denmire, Harold A., assignor to The General Tire & Rubber Company, Akron, Ohio. Inner tube for pneumatic tires and apparatus for the manufacture thereof. 1,866,628; July 12.
Dennis, Clarence R., Los Angeles, and P. G. Briney, Torrance, Calif. Lineman's protector. 1,866,881; July 12.
Denver Equipment Co. (See Daman, A. C., and Logue, assignors.)
Denzler, Felix F., Pomona, Calif. Automatic fire and burglar alarm system. 1,867,500; July 12.
De Ridder, E., and H. Altwicker, Bitterfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Drawing hollow articles. 1,867,537; July 12.
Deta-Star Electric Company, The. (See Alsaker, Alfred, assignor.)
Detilloux, Francois, Brussels, Belgium. Brake. 1,866,755; July 12.
Deutsch, John, New York, N. Y., assignor to The Allen-Sherman-Hoff Company. Disposal of furnace residues. 1,866,756; July 12.
Deutsche Celluloid-Fabrik. (See Weihe, Adolf, assignor.)
Dever, Roger J., Wilkes-Barre, Pa. Humidifier. 1,867,064; July 12.
DeVilbiss Company, The. (See Schilpf, Albert F., assignor.)
De Vos, Peter, Grand Rapids, Mich. Rotary sprinkler. 1,866,844; July 12.
De Vries, Fenno E., Evanston, Ill., assignor to Crane Packing Company. Packing and composition. 1,866,757; July 12.
De Vries, Fenno E., Evanston, Ill., assignor to Crane Packing Company. Packing and composition. 1,866,758; July 12.
Dicke, Allen A., Montclair, N. J., assignor to Pioneer Heat Regulator Company. Thermostat. 1,866,548; July 12.
Dickson, George E., Evanston, Ill. Making weatherproof nails. 1,867,353; July 12.
Dickson, George E., Evanston, Ill. Weatherproof nail. 1,867,354; July 12.
Diesel, William F., assignor to Sargent & Greenleaf, Inc., Rochester, N. Y. Lock mechanism. 1,867,001; July 12.
Dieterle, Frank, Utica, N. Y. Casing and bladder connecter for footballs, basketballs, and the like. 1,867,443; July 12.
Dietz, August A., Richmond, Va. Alphabet type. 1,866,629; July 12.
Dietz, Karl, and K. Frank, Frankfort-on-the-Main-Hochst, assignors to Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Acid-proof cementing compositions. 1,867,444; July 12.
Dill Manufacturing Company, The. (See Crowley, John C., assignor.)
Dills, Reuben H., Seattle, Wash. Swimming suit. 1,867,445; July 12.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Movable aperture plate for motion picture machines. 1,866,549; July 12.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Switch for projection machines. 1,866,550; July 12.
Dinkins, Tyre J., Montclair, N. J. Flooring. 1,866,527; July 12.
Diodati, Alfred, New York, N. Y. Electrical circuit system. 1,867,212; July 12.
Di Sibio, Vincenzo. (See Mancusi, P., and Di Sibio.)
Dixson, Harry, assignor to Roscreen Company, Pella, Iowa. Combination screen mounting and weather-strip for casement windows. 1,866,882; July 12.
Doering, Ulrich. (See Spanner, H. J., and Doering.)
Don Chemical Company, The. (See Collings, W. R., and Gibb, assignors.)
Donahoo, Charles E., East Moline, Ill. Fruit and vegetable cutter. 1,866,630; July 12.
Dorff, Louis A., Bloomfield, N. J. and G. Sandalls, jr., North Tarrytown, N. Y., assignors to American Telephone and Telegraph Company. Magneto-optical device. 1,866,631; July 12.
Doubek, Joseph F., Cicero, Ill. Trucking apparatus. 1,867,446; July 12.
Douglas, John G., Leagrave, Luton, England. Machine for polishing or grinding cam tracks and like sinuous surfaces. 1,867,213; July 12.
Doyle, Charles A. (See Shelton, Thomas R., assignor.)
Dräger werk, Heinr. & Bernh. Dräger. (See Stelzner, Hermann, assignor.)
Drake, Louis L. (See Smith, Sidney, assignor.)
Drescher, Hugh A. E., David A. W. Fairweather, and J. Thomas, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Manufacture of aromatic acids. 1,866,632; July 12.
Drew, John E. (See Sheehan, T. C., and Drew.)
Duffy, Francis. (See Maclean, N. Quinn, and Duffy.)
Du-Gas Fire Extinguisher Corporation. (See Meigs, Charles H., assignor.)
Dunlop Tire and Rubber Corporation. (See Lambourn, Leonard J., assignor.)
Dunn, Frank J., assignor to G. A. Bisler, Inc., Philadelphia, Pa. Display box. 1,867,447; July 12.
Dunn, Thomas E., assignor to The Bullard Company, Bridgeport, Conn. Anodic removal of surface metal film. 1,867,527; July 12.
Du Pont, E. I., de Nemours & Company. (See Barnhart, George, assignor.)
Du Pont, E. I., de Nemours and Company. (See Izsak, A., and McDermott, assignors.)
Du Pont, E. I., de Nemours & Company. (See Lawson, Walter E., assignor.)
Du Pont, E. I., de Nemours & Company. (See Zinner, Daniel, assignor.)
Du Pont Rayon Company. (See Haskins, Joseph F., assignor.)
Du Pont Rayon Company. (See Nash, Roy W., assignor.)
Durbin, Stanley H., assignor to Gifford-Wood Company, Hudson, N. Y. Trolley bucket. 1,867,448; July 12.
Durdin, Augustus C., jr., assignor to Chicago Pump Company, Chicago, Ill. Seal for shafts. 1,866,551; July 12.
Durham, Fred D., assignor to C. Lee Cook Manufacturing Company, Louisville, Ky. Shaft packing. 1,866,967; July 12.
Durner, Loren, assignor to The Waterbury Tool Company, Waterbury, Conn. Hydraulic speed transmission. 1,867,308; July 12.
Duryea, John S., Johnstown, Pa. Rolled steel welded paving chock. 1,866,759; July 12.
Dzaman, Gabriel, Trenton, N. J. Wood surfacing machine. 1,867,501; July 12.
Eagle-Picher Lead Company, The. (See Coates, Frederick, assignor.)

Eastern Tool & Manufacturing Co. (See Anderson, Carl E., assignor.)
Eastman, Joseph P., assignor to Eastman Mfg. Co., Manitowoc, Wis. Attachment plug. 1,867,065; July 12.
Eastman Kodak Company. (See Carroll, Stewart J., assignor.)
Eastman Kodak Company. (See Clement, Louis E., assignor.)
Eastman Kodak Company. (See Garbutt, F. E., and Ingman.)
Eastman Kodak Company. (See Gray, H. L., and Staud, assignors.)
Eastman Kodak Company. (See Hickman, Kenneth C. D., assignor.)
Eastman Kodak Company. (See Jones, John C., assignor.)
Eastman Kodak Company. (See Jones, Loyd A., assignor.)
Eastman Kodak Company. (See Mihalyi, Joseph, assignor.)
Eastman Kodak Company. (See Othmer, Donald F., assignor.)
Eastman Kodak Company. (See Staud, C. J., and Fuess, assignors.)
Eastman Kodak Company. (See Webber, C. S., and Staud, assignors.)
Eastman Mfg. Co. (See Eastman, Joseph P., assignor.)
Eaton Manufacturing Company. (See Reid, James S., assignor.)
Ebeling, Charles W., assignor to General Talking Pictures Corporation, New York, N. Y. Sound head for sound-on-film mechanism. 1,866,528; July 12.
Ecket, Cora G., and R. V. Sheldon, Los Angeles, Calif. Metal fire block, bridging, and bracing. 1,867,449; July 12.
Eckstein, Reuben, et al. (See Slade, H. E., and Gebring, assignors.)
Edison, W. L., Manufacturing Corporation, The. (See Edison, William L., assignor.)
Edison, William L., assignor to The W. L. Edison Manufacturing Corporation, Wilmington, Del. Signaling system. 1,866,845; July 12.
Edstrom, Karl A., Denver, Colo. Light reflector. 1,867,502; July 12.
Edward & Deutsch Lithographing Company. (See Fairbanks, Clarence T., assignor.)
Egli, Arnold, Hamburg, Germany. Method of and apparatus for drying sheets in multicolor intaglio printing. 1,867,256; July 12.
Ehrenreich, Alfred, London, England. Treatment of the glands of the plagiostomi. 1,866,633; July 12.
Eisler, Charles, Newark, N. J. Bead machine. 1,866,634; July 12.
Ekstromer, Edward C., San Francisco, assignor of one-half to J. F. Gallagher, Berkeley, Calif., and one-half to The Edward C. Ekstromer Corporation, Reno, Nev. Oil well cleaner. 1,866,927; July 12.
Ekstromer, Edward C., Corporation, The. (See Ekstromer, Edward C., assignor.)
Electro-Therapy Products Corporation. (See Howard, Earl H., assignor.)
Electrolux Servel Corporation. (See Sellman, Folke E., assignor.)
Electrons, Inc. (See Spanner, Hans J., and Doering, assignors.)
Elektrizitats-Actien-Gesellschaft vorm. W. Lahmeyer & Co. (See Bütow, Walter, assignor.)
Elliott, Charles H. and H. K., St. Paul, Minn. Switch actuating mechanism. 1,866,594; July 12.
Elliott, Harmon P., Watertown, Mass. Making stencil frames. 1,867,399; July 12.
Elliott, Harold F., Palo Alto, Calif., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Radioreceiving system. 1,867,214; July 12.
Elliott, Harold K. (See Elliott, Charles H. and H. K.)
Ellis, Charles J., assignor to The Cincinnati Car Corporation, Cincinnati, Ohio. Magnetic brake. 1,866,552; July 12.
Ellison, Frank H., Brooklyn, N. Y. Indexed book. 1,866,968; July 12.
English, Aaron. (See Ridgeway, L. E., and English.)
Ernst, Richard, Reichenbach, near Waldheim, Germany. Blotting device. 1,867,400; July 12.
Erwin, Benjamin H., assignor to The Indestructor Trunk Company, Mishawaka, Ind. Trunk lock and covered bail. 1,867,140; July 12.
Eskandarian, Alexander, Oaklyn, N. J. Method of and apparatus for stretching trousers. 1,866,553; July 12.
Esseling, Cornelius J., Haarlem, Netherlands. Power take-off. 1,867,257; July 12.
Esseltine, Alfred B., assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,867,528; July 12.
Ettinger, Joe J., Warsaw, Ind. Surgical splint. 1,867,215; July 12.
Etzkorn, Rudolf, Oberbruch Regierungsbezirk Aachen, Germany, assignor to American Glanzstoff Corporation, New York, N. Y. Spool or cylinder for use in the wet handling of freshly-spun filaments. 1,867,309; July 12.
Euclid-Armington Corporation, The. (See Jergens, Winfred H., assignor.)
Euclid Crane & Hoist Company. (See Juergens, Winfred H., assignor.)
Evans, Edwin R., Detroit, Mich. Brake. 1,866,884; July 12.
Evans, Frederick H., Rochester, N. Y. Variable pace setter for automobiles. 1,866,760; July 12.
Evans, Homer A., Columbus, Ohio. Draft control for tunnel kilns. 1,867,066; July 12.
Everett, Charles E., Oregon City, Oreg. Ice scoring machine. 1,866,883; July 12.
Fageol, Rollie B., Oakland, Calif. Road vehicle. 1,866,637; July 12.
Fairbanks, Clarence T., assignor to Edward & Deutsch Lithographing Company, Chicago, Ill. Advertising sign. 1,866,554; July 12.
Fairweather, David A. W., et al. (See Drescher, H. A. E., Fairweather, and Thomas.)
Fantz, Fred C., Webster Groves, Mo. Return bend. 1,866,636; July 12.
Farkas, Michael J., Bridgeport, Conn. Reciprocatory hand tool for flexible shafts. 1,866,529; July 12.
Farmer, Thomas, jr., Mamaroneck, N. Y. Windshield wiper. 1,866,700; July 12.
Farnham, Sidney W., assignor to Goodman Manufacturing Company, Chicago, Ill. Cable reel locomotive. 1,867,141; July 12.
Farrel-Birmingham Company. (See Gregory, D. J., and Tifft, assignors.)
Farrel Birmingham Company. (See Leahy, James F., assignor.)
Farrell, James E., and J. I. Gaskill, assignors to West Boylston Manufacturing Company, Easthampton, Mass. Separator for twisting and spinning machines. 1,867,401; July 12.
Fawcett, Harold W., Harrowgate, England. Centrifugal separator. 1,866,638; July 12.
Feeley, Frank G., Pittsfield, Mass., assignor to M. D. Knowlton Company, Rochester, N. Y. Shearing mechanism. 1,867,402; July 12.
Feinauer, George A., assignor to International Silver Company, Meriden, Conn. Spoon, knife, fork or other article of flatware. Re87,330; July 12.
Feind, Walter, assignor to Siemens & Halske Aktiengesellschaft, Berlin-Siemensstadt, Germany. Intercommunication telephone system. 1,866,639; July 12.
Felins Tying Machine Company. (See Suelflow, A. G., and Wolford, assignors.)
Ferguson, J. L., Company. (See Ferguson, John L., assignor.)
Ferguson, John L., assignor to J. L. Ferguson Company, Joliet, Ill. Container sealer adjusting means. 1,866,885; July 12.
Ferris, Walter, assignor to The Oilgear Company, Milwaukee, Wis. Hydraulic crane. 1,866,801; July 12.
Feucht, Albert, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Rock drill. 1,867,072; July 12.
Feuerheerd, Ernest, assignor of one-half to J. A. Malcolm, London, England. Rotary pump, engine, meter, or the like. 1,866,761; July 12.
Field, Lloyd McK., Cleveland Heights, assignor to The Van Coll Company, Cleveland, Ohio. Spring device. 1,866,762; July 12.
Fieroh, Robert W., Chicago, Ill. Heating device for concrete plants. 1,867,310; July 12.
Filtrol Company of California. (See Baylis, Walter S., assignor.)
Finfrock, John Q., South Pasadena, Calif. Mail magazine. 1,866,847; July 12.
Fink, Henry W., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Automobile heater. 1,866,846; July 12.
Finn, Robert R. (See Bysshe, E. T., and Finn.)
Finney, George W. (See Protzeller, H. W., and Finney.)
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Oakum packing. 1,867,067; July 12.
Fischer, Joseph B., Chicago, Ill. Fermentation bung. 1,866,763; July 12.
Fisk Rubber Company, The. (See Maynard, Charles E., assignor.)
Fitz, Charles L., and L. Bachbuber, Mayville, Wis. Rectifier. 1,867,503; July 12.
Fitz, Gerald, John W., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Lock. 1,866,886; July 12.
Fitz Power, Richard, Hampstead, London, assignor to Morland and Impey Limited, Northfield, Birmingham, England. Visible index. 1,867,471; July 12.
Fletcher, John P., The United States Army, Carlisle, Pa., assignor to Cook Laboratories, Inc., Chicago, Ill. Hypodermic syringe. 1,867,355; July 12.
Fletcher, William, London, England, and A. O. Lewis, Glais, Wales. Hair waver. 1,866,555; July 12.
Flynn, Joseph F., Brooklyn, N. Y. Foot pad. 1,867,142; July 12.
Föhl, Carl, Stockholm, Sweden, assignor to Ruthsaccumulator Aktiebolag, Berlin, Germany. Method of and apparatus for controlling steam generation. 1,867,143; July 12.
Fontaine, Robert A., Martinsville, Va. Shiftable body truck. 1,866,640; July 12.
Ford Motor Company. (See Stout, William B., assignor.)
Forney, John J., Springdale, Wash. Liquid level gauge. 1,867,216; July 12.
Forrester, Edward E. (See Anderson, O. W., and Forrester.)
Fowler, Edgar K., Colorado Springs, Colo. Decorating walls and other surfaces. 1,867,068; July 12.
Fox, Maud C. (See Scott, I. G., and Fox.)

Frank, Karl. (See Dietz, K., and Frank.)
Frank, William A., Hackensack, N. J., assignor to National Water Main Cleaning Co., New York, N. Y. Pipe cleaning machine. 1,866,556; July 12.
Franklin, Charles S., London, England, assignor to Radio Corporation of America. Screened thermionic tube. 1,867,311; July 12.
Franklin, George E., Kansas City, Mo. Engine. 1,867,504; July 12.
Fredenhagen, Karl, Greifswald, Germany. Electrolytic production of fluorine. 1,866,969; July 12.
Freeman, Benjamin W. and L. G., Cincinnati, Ohio, and P. H. Koplan, Milwaukee, Wis., assignors to Louis G. Freeman Company, Cincinnati, Ohio. Abrading machine. 1,866,848; July 12.
Freeman, Charles H., Detroit, Mich. Arch support. 1,866,557; July 12.
Freeman, Louis G. (See Freeman, B. W. and L. G., and Koplan.)
Freeman, Louis G., Company. (See Freeman, B. W. and L. G., and Koplan, assignors.)
Frenkel, Isaac J., Moscow, Union of Socialist Soviet Republics. Viscose manufacturing. 1,866,558; July 12.
Freudenberg, Ernest W., Larchmont, assignor to Amrein Freudenberg Co. Inc., New York, N. Y. Embroidered textile fabric or a similar article. Des. 87,331; July 12.
Freudenberg, Ernest W., Larchmont, assignor to Amrein Freudenberg Co. Inc., New York, N. Y. Embroidered textile fabric or a similar article. Des. 87,332; July 12.
Freudenberg, Ernest W., Larchmont, assignor to Amrein Freudenberg Co. Inc., New York, N. Y. Embroidered textile fabric or a similar article. Des. 87,333; July 12.
Freudenberg, Ernest W., Larchmont, assignor to Amrein Freudenberg Co. Inc., New York, N. Y. Embroidered textile fabric or a similar article. Des. 87,334; July 12.
Freudenberg, Ernest W., Larchmont, assignor to Amrein Freudenberg Co. Inc., New York, N. Y. Embroidered textile fabric or a similar article. Des. 87,335; July 12.
Freudenberg, Ernest W., Larchmont, assignor to Amrein Freudenberg Co. Inc., New York, N. Y. Embroidered textile fabric or a similar article. Des. 87,336; July 12.
Freudenberg, Ernest W., Larchmont, assignor to Amrein Freudenberg Co. Inc., New York, N. Y. Embroidered textile fabric or a similar article. Des. 87,337; July 12.
Freudenberg, Ernest W., Larchmont, assignor to Amrein Freudenberg Co. Inc., New York, N. Y. Embroidered textile fabric or a similar article. Des. 87,338; July 12.
Freudenberg, Ernest W., Larchmont, assignor to Amrein Freudenberg Co. Inc., New York, N. Y. Embroidered textile fabric or a similar article. Des. 87,339; July 12.
Fried. Krupp Grusonwerk Aktiengesellschaft. (See Ullrich, Georg, assignor.)
Frigidaire Corporation. (See Henney, Charles F., assignor.)
Frigidaire Corporation. (See Killen, James R., assignor.)
Frigidaire Corporation. (See King, Jesse G., assignor.)
Frigidaire Corporation. (See Miller, Ralph K., assignor.)
Frigidaire Corporation. (See Rauen, John T., assignor.)
Frigidaire Corporation. (See Schmieding, Warren H. F., assignor.)
Frigidaire Corporation. (See Smith, Harry F., assignor.)
Friis, Harald T., Red Bank, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electric wave translating system. 1,867,356; July 12.
Frohring, William O., Shaker Heights, assignor to S. M. A. Corporation, Cleveland, Ohio. Measuring device for milk powders. 1,867,403; July 12.
Fruehauf, Oscar A., Detroit, Mich. Surgical splint. 1,867,258; July 12.
Fuess, James T. (See Staud, C. J., and Fuess.)
Fulford Mfg. Co. (See Smith, Alfred H., assignor.)
Funk, Frank E., Winchester, Ind. Support for signs. 1,866,530; July 12.
Furness Corporation. (See Furness, William H., assignor.)
Furness, William H., National Park, N. J., assignor, by mesne assignments, to Furness Corporation, Philadelphia, Pa. Making copper hydroxide. 1,867,357; July 12.
Gaines, Walter S., jr., East Cleveland, assignor to The Reid Products Company, Cleveland, Ohio. Channel. 1,867,312; July 12.
Gaines, Walter S., jr., East Cleveland, assignor to The Reid Products Company, Cleveland, Ohio. Window channel. 1,867,313; July 12.
Galsman, Henry J., New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,867,217; July 12.
Gallagher, James F. (See Ekstrommer, Edward C., assignor.)
Garbutt, Frank E., and T. M. Ingman, Los Angeles, Calif., assignors to Eastman Kodak Company. Method and apparatus for recovering silver from fixing solutions. 1,866,701; July 12.
Gardner, Clyde, deceased, by E. B. Gardner, administratrix, assignor, by mesne assignments, to Gardner Company, Ebensburg, Pa. Calculating machine. 1,867,002; July 12.
Gardner Company. (See Gardner, Clyde, assignor.)
Gardner, Edna B., administratrix. (See Gardner, Clyde.)
Gardner, Henry A., Laboratory, Inc. (See Bielouss, Elias, assignor.)
Garland, Charles S., T. E. Beacham, and J. A. Pickard, London, England. Apparatus for purifying used lubricating oil and the like. 1,866,970; July 12.
Gas Machinery Company, The. (See Russell, Walter M., assignor.)
Gaskill, Joseph I. (See Farrell, J. E., and Gaskill.)
Gasoline Products Company. (See Black, John C., assignor.)
Gassner, Sebastian, Leverkusen-on-the-Rhine, and B. Bienert, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacture of 1-hydroxy- or 1-alkoxy anthraquinone-3-carboxylic acids. 1,867,069; July 12.
Gauthier, Albert L., jr., and E. H. Mattocks, Chicago, assignors to The Norlipp Company, Chicago, Ill. Cigar and cigarette holder. 1,866,641; July 12.
Geer, Bert, Maryhill, Wash. Can top punching implement. 1,866,642; July 12.
Gehres, Hewitt A., assignor to Cooper-Bessemer Corporation, Mount Vernon, Ohio. Driving connection. 1,866,702; July 12.
Gehres, Hewitt A., assignor to Cooper-Bessemer Corporation, Mount Vernon, Ohio. Internal combustion engine. 1,866,703; July 12.
Gehring, John. (See Slade, H. E., and Gehring.)
Gelbman, Louis, Yonkers, N. Y. Concrete molding machine. 1,867,144; July 12.
Gemex Company. (See Roy, Wilfrid J., assignor.)
General Aniline Works, Inc. (See Buchloh, H., Mieg, and Stoetzer, assignors.)
General Aniline Works, Inc. (See Gassner, S., and Bienert, assignors.)
General Aniline Works, Inc. (See Krăzlein, G., and Sedlmayr, assignors.)
General Aniline Works, Inc. (See Krzikalla, H., Holzach, and Mueller, assignors.)
General Aniline Works, Inc. (See Nawiasky, P., and Wolff, assignors.)
General Aniline Works, Inc. (See Neelmeier, W., and Meiser, assignors.)
General Aniline Works, Inc. (See Ossenbeck, A., and Tietze, assignors.)
General Aniline Works, Inc. (See Ritter, H., and A. Holl, assignors.)
General Aniline Works, Inc. (See Schirmacher, K., and Schlichenmaier, assignors.)
General Aniline Works, Inc. (See Schmelzer, A., Ballauf, and Hefner, assignors.)
General Aniline Works, Inc. (See Tschunkur, E., Ballauf, and Herdlecherhoff, assignors.)
General Aniline Works, Inc. (See Wieners, F., and Bauer, assignors.)
General Chemical Company. (See Levermore, Charles L., assignor.)
General Electric Company. (See Acly, Harry M., assignor.)
General Electric Company. (See Alexanderson, Ernst F. W., assignor.)
General Electric Company. (See Allen, Hugh E., assignor.)
General Electric Company. (See Cockrell, William D., assignor.)
General Electric Company. (See Horowicz, Eugen, assignor.)
General Electric Company. (See Hubbard, Horace S., assignor.)
General Electric Company. (See Merrick, Eldridge G., assignor.)
General Electric Company. (See Müller, G., and Weinmann, assignors.)
General Electric Company. (See Möller, Rolf, assignor.)
General Electric Company. (See Peek, Frank W., jr., assignor.)
General Electric Company. (See Sampson, James M., assignor.)
General Electric Company. (See Sass, Friedrich, assignor.)
General Electric Company. (See Scherbius, Arthur, assignor.)
General Electric Company. (See Thompson, Browder J., assignor.)
General Electric Company. (See Woods, William J., assignor.)
General Electric X-Ray Corporation. (See Stout, Charles F., assignor.)
General Talking Pictures Corporation. (See Ebeling, Charles W., assignor.)
General Tire & Rubber Company, The. (See Denmire, Harold A., assignor.)
Genzmer, Paul R., assignor to Gifford-Wood Company, Hudson, N. Y. Trolley bucket conveyer. 1,867,450; July 12.
Geometric Tool Company, The. (See Strickland, Royce M., assignor.)
George, Anthony, Niagara Falls, N. Y., assignor, by mesne assignments, to Monsanto Chemical Works, St. Louis, Mo. Manufacture of benzoic acid, metallic benzoates, and alkyl benzoates. 1,866,849; July 12.
Gerisch, Richard, Dusseldorf, Germany. Tuyère for cupola furnaces. 1,866,764; July 12.
Gibb, Donald L. (See Collings, W. R., and Gibb.)
Gifford-Wood Company. (See Durbin, Stanley H., assignor.)
Gifford-Wood Company. (See Genzmer, Paul R., assignor.)
Gifford-Wood Company. (See Hallenbeck, Harold E., assignor.)

Gifford-Wood Company. (See Harding, Howard V., assignor.)
Gifford-Wood Company. (See Mercer, William B., assignor.)
Gillette Rubber Co. (See Hutchens, H. O., and Krause, assignors.)
Gillette Safety Razor Company. (See Gaisman, Henry J., assignor.)
Gillis, George H., Fitchburg, Mass. Shoe. 1,867,003; July 12.
Gingerich, Otto J., Trenton, Ohio. Internal combustion engine. 1,866,928; July 12.
Glascock, Harry, assignor to P. O. B. Manufacturing Co., Inc., Cincinnati, Ohio. Automobile engine support. 1,867,070; July 12.
Glascraft Corporation. (See Powers, Howard C., assignor.)
Glasner, Rudolph W., and F. J. Rode, Chicago, Ill. Metal working press. 1,866,559; July 12.
Glasner, Rudolph W., and F. J. Rode, Chicago, Ill. Metal working press. 1,866,595; July 12.
Glaze, Clifford H., Long Beach, and C. I. Brown, Compton, Calif. Centering device for punch presses. 1,866,704; July 12.
Gleason, Orville, and G. Boylan, assignors to Meredith Publishing Company, Des Moines, Iowa. Truck construction. 1,866,887; July 12.
Globe Oil Tools Co. (See Ridgeway, L. E., and English, assignor.)
Godfrey, Jonathan, New York, N. Y. Rotary cabinet. 1,867,145; July 12.
Goodell, William S. (See Rasmussen, A., and Goodell.)
Goodman Manufacturing Company. (See Esseltine, Alfred B., assignor.)
Goodman Manufacturing Company. (See Farnham, Sidney W., assignor.)
Gooch, Stampleton D. (See Waggaman. W. H. and Gooch, assignors.)
Goodyear Tire & Rubber Company, The. (See Bateman, Ralph C., assignor.)
Goodyear Tire & Rubber Company, The. (See Burdette, Richard S., assignor.)
Goodyear Tire & Rubber Company, The. (See Clark, Elmer, assignor.)
Goodyear Tire & Rubber Company. (See Park, Charles R., assignor.)
Gordon, David, Tarrytown, N. Y., and R. W. Ryan, Dover, N. J., assignors to The Consolidated Gas Company of New York, New York, N. Y. Dehydration of gas. 1,866,560; July 12.
Goss, Harold J., assignor to The International Paper Box Machine Company, Nashua, N. H. Machine for making paper boxes. 1,867,259; July 12.
Goss, John H., assignor to Scovill Manufacturing Company, Waterbury, Conn. Tube and tube sheet and ferrule therefor. 1,866,561; July 12.
Graf, Albert J., Westfield, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y. Sheet handling mechanism for printing machines. 1,866,562; July 12.
Gragg, Frances E., and L. B. Cohn, assignors to Edmund C. Hames, Los Angeles, Calif. Directional signal. 1,866,802; July 12.
Grandjean, Georges, Les Forgets, Isle Adam, France, assignor to Isothermos Corporation of America, New York, N. Y. Guard for automatic lubricating journal boxes. 1,867,260; July 12.
Graner, Harry G., Burlington, Iowa. Pliers. 1,867,505; July 12.
Grant, John. (See Santiago, James J., assignor.)
Grant, John. (See Triplett, James B., assignor.)
Grant, Matthew, Los Angeles, Calif. Fruit and vegetable press. Des. 87,340; July 12.
Grasselli Chemical Company, The. (See Lutz, George, assignor.)
Graver Corporation. (See Adams, James L., jr., assignor.)
Gray, Harry Le B., and C. J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Making cellulose acetate. 1,866,971; July 12.
Gray, Russell J., Minneapolis, Minn. Coupler. 1,866,929; July 12.
Great Western Fuse Company. (See LaMar, Frank C., assignor.)
Grebenstein, George W., Newtonville, Mass. Tire tool. 1,867,404; July 12.
Greear, Everett B., assignor of one-half to C. B. Stallard, Sharondale, Ky. Boat drain valve. 1,866,643; July 12.
Green, Irving A., assignor to The Washburn Company, Worcester, Mass. Reenforced wire fabric and making the same. 1,866,850; July 12.
Green, Robert M., & Sons. (See Zinser, Hermann, assignor.)
Greenhill, Morris. (See Heyl, George C.)
Greer, Benjamin B., New Canaan, Conn. Hose fitting for air brakes. 1,866,644; July 12.
Gregory, Dimitry J., New Haven, and W. C. Tifft, Seymour, assignors to Farrel-Birmingham Company, Incorporated, Ansonia, Conn. Press for belts or the like. 1,866,765; July 12.
Griffin Manufacturing Company. (See Aste, Anthony L., assignor.)
Griffith, William B., Audubon, N. J., assignor to Star Sprinkler Corporation. Dry pipe valve. 1,866,766; July 12.
Grissinger, James L., assignor to The Marion Steel Body Company, Marion, Ohio. Burial vault. Des. 87,341; July 12.
Gruman, Horace F., St. Louis, Mo., assignor to Lewis Invisible-Stitch Machine Company, Kittery, Me. Sewing machine. 1,866,645; July 12.
Gruman, Horace F., St. Louis, Mo., assignor to Lewis Invisible-Stitch Machine Company, Kittery, Me. Sewing machine. 1,866,646; July 12.
Gruman, Horace F., assignor to Lewis Invisible-Stitch Machine Company, St. Louis, Mo. Making French seams. 1,866,647; July 12.
Grypma, Theodore J., and M. Meulenberg, Grand Rapids, Mich. Sanitary toilet seat dispenser. 1,867,506; July 12.
Guerlain, Raymond, New York, N. Y., assignor to Guerlain Perfumery Corporation of Delaware, Wilmington, Del. Bottle. Des. 87,342; July 12.
Guerlain Perfumery Corporation of Delaware. (See Guerlain, Raymond, assignor.)
Guertin, Alfred E., jr. (See Guertin, Alfred E., sr., and A. E., jr.)
Guertin, Alfred E., sr., and A. E., jr., Kellogg, Idaho. Car brake. 1,866,767; July 12.
Gugler Lithographic Company. (See Schmidt, H. F., and Jung, assignors.)
Guidetti, Ferruccio, Elmhurst, and G. Bontempi, assignors to The Watairway Manufacturing Corporation, New York, N. Y. Sanitary water-closet attachment. 1,866,930; July 12.
Guldemann, Arnold, assignor to I. A. Hall & Co., Paterson, N. J. Shuttle. 1,867,146; July 12.
Gullett Gin Company. (See Wallace, Jeffery J., assignor.)
Günther, Fritz. (See Münz, F., Keller, and Günther.)
Gurney Elevator Company. (See Hammell, Charles E., assignor.)
Gurwick, Irving, assignor to Transparent Packaging & Printing Corporation, New York, N. Y. Multicolor printing on transparent cellulose paper and product resulting from the same. 1,867,314; July 12.
Gurwick, Irving, assignor, by mesne assignments, to Transparent Packaging & Printing Corporation, New York, N. Y. Intaglio printing. 1,867,405; July 12.
Gyr, Joseph, and O. Kaiser, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Azodyestuffs and process of making same. 1,867,451; July 12.
Hacker, Louis P. (See Hacker, Wells, Hacker and Barner.)
Hacker, Marcus L., J. W. Wells, L. P. Hacker, Beaumont, Tex., and L. D. Barner, Guffey, assignors, by mesne assignments, to Crausbay Supply Co. Inc., Beaumont, Tex. Throttle valve mechanism. 1,867,004; July 12.
Hackhofer, Ernst. Krefeld-Bockum, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Working up of chromium ores. 1,866,648; July 12.
Hale, Clarence F., Syracuse, N. Y. Garbage can cabinet. 1,866,649; July 12.
Hall, Howard. (See Weinhart, H. W., and Hall.)
Hall, I. A. & Co. (See Guldeman, Arnold, assignor.)
Hallenbeck, Harold E., assignor to Gifford-Wood Company, Hudson, N. Y. Combined indicator and limit switch actuator. 1,867,452; July 12.
Haller, Arnold, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Tap changing switch and system. 1,867,147; July 12.
Hames, Edmund C. (See Gragg, F. E., and Cohn, assignors.)
Hamilton, Albert G., assignor to J. T. & A. Hamilton Company, Pittsburgh, Pa. Glass container. Des. 87,343; July 12.
Hamilton, J. T. & A., Company. (See Hamilton, Albert G., assignor.)
Hammell, Charles E., Red Bank, N. J., assignor to Gurney Elevator Company, New York, N. Y. Electric switch. 1,866,563; July 12.
Hammond Clock Company, The. (See Hammond, Laurens, assignor.)
Hammond, John Hays, jr., Gloucester, Mass. System of television. 1,867,542; July 12.
Hammond, Laurens, Evanston, assignor to The Hammond Clock Company, Chicago, Ill. Synchronous motor. 1,867,315; July 12.
Hanauer, Henry J., Milwaukee, Wis. Sheet material feeding device. 1,866,851; July 12.
Hand, Carl N., and G. N. Magoun, Nitro, W. Va., assignors to The Rubber Service Laboratories Co., Akron, Ohio. Manufacture of triaryl phosphates. 1,866,852; July 12.
Hansen, Christian J., Essen, Germany, assignor, by mesne assignments, to The Koppers Company, Pittsburgh, Pa. Obtaining mixtures of ammonium sulphate and di-ammonium phosphate. 1,866,564; July 12.
Hanson & Orth. (See Worden, Edward C., 1st, assignor.)
Hanson, Rudolph L., Frewsburg, assignor to Jamestown Metal Desk Company, Jamestown, N. Y. File drawer. 1,867,218; July 12.
Harding, Howard V., New York, N. Y. Riddle apparatus. 1,866,531; July 12.
Harding, Howard V., assignor to Gifford-Wood Company, Hudson, N. Y. Drive for limit switches and the like. 1,867,453; July 12.
Hardy, Peter. (See Thomson, J. M., and Hardy.)

Harness, J King, assignor to Chrysler Corporation, Detroit, Mich. Motor mounting. 1,867,358; July 12.
Harper, George W., McNeil, Ark. Baseball cleat. 1,867,219; July 12.
Harrington, Alfred L., Rosslyn Farms, Pa., assignor to Pittsburgh Plate Glass Company. Fluid cooled roll. 1,867,148; July 12.
Harris, Alexander B. B., assignor of one-fourth to Frank H. T. Potter, Chicago, Ill. Spillway control method and apparatus. 1,867,316; July 12.
Harris, Carl C., Orange, Mass. Combination safety swimming float. 1,867,507; July 12.
Harris, Gordon D., South Beach, assignor, by mesne assignments, to The Industrial Dryer Corporation, Stamford, Conn. Drying liquid materials. 1,866,768; July 12.
Harris, Gordon D., assignor, by mesne assignments, to The Industrial Dryer Corporation, Stamford, Conn. Drying liquid materials. 1,866,769; July 12.
Harrison, Owen L., Coleta, Ill., assignor of two-fifths to S. M. Harrison, New York, N. Y. Heating flat irons on kerosene stoves. 1,867,073; July 12.
Harrison, Shelby M. (See Harrison, Owen L., assignor.)
Harshberger, Norman P. (See Theilacker, Frederick E., assignor.)
Hartman, August. (See Zart, A., Hartmann, and Hoelkeskamp.)
Hartmann, Carl W., Lyngby, near Copenhagen, Denmark. Producing lined cartons. 1,867,220; July 12.
Hartmann, Frederick E., assignor to Baker Ice Machine Co. Inc., Omaha, Nebr. Heating and cooling apparatus. 1,866,803; July 12.
Harvey, Herbert, Los Angeles, Calif. Round wire tensioning mechanism. 1,866,705; July 12.
Harvey Hubbell, Incorporated. (See Blake, A. J., and Tiffany, assignors.)
Harvey, Leo M. (See Thompson, Robert H., assignor.)
Haseman, William P., Oklahoma City, Okla. Apparatus for fluid lift of liquids. 1,866,972; July 12.
Haskins, Joseph F., Kenmore, assignor to Du Pont Rayon Company, Buffalo, N. Y. Esterification of cellulose. 1,866,532; July 12.
Hawley, George E., assignor to Master Woodworker Mfg. Co., Detroit, Mich. Sawing machine. 1,866,888; July 12.
Hawley, Kent A., assignor to Locke Insulator Corporation, Baltimore, Md. Utilizing wood poles to aid insulators. 1,866,804; July 12.
Hayes, Frank A., Middletown, N. J. Friction transmission. 1,867,149; July 12.
Haywood, Harry H., New Britain, Conn., assignor to The American Paper Goods Company, Montclair, N. J. Cup holder. 1,866,805; July 12.
Hazel-Atlas Glass Co. (See Bennett, R., and Bowman, assignors.)
Hazeltine Corporation. (See Wheeler, Harold A., assignor.)
Hazleton Manufacturing Co. (See Markle, George B., jr., assignor.)
Heaford, Edwin V., Denver, Colo. Attachment for clothes wringers. 1,867,005; July 12.
Health Developing Apparatus Company. (See Thomson, J. M., and Hardy, assignors.)
Health Developing Apparatus Co. Inc. (See Pareira, Fred, assignor.)
Heberlein, Georges, and A. Bodmer, Wattwil, Switzerland. Treating vegetable fibrous material and resulting product. 1,867,006; July 12.
Heffernan, George F., jr., St. Louis, Mo. Charcoal block. 1,866,931; July 12.
Hefner, Heinrich. (See Schmelzer, A., Ballauf, and Hefner.)
Hegenberger, Albert F. (See Luckey, G. P., and Hegenberger.)
Heidinger, Willy, Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y. Punching machine. 1,867,007; July 12.
Heinecke, Fredrick G., Alexandria, Minn. Chain connecter. 1,866,889; July 12.
Helland, Martin. (See Adams, Ernest A., assignor.)
Henderson, James B., Lee, England. Gyroscopic instrument and apparatus. 1,866,706; July 12.
Henderson, Myles, et al. (See Pitcher, Elmer, assignor.)
Hendrickson, James M., McKeesport, Pa. Aeroplane flight control. 1,866,596; July 12.
Hennefer Maschinenfabrik C. Reuther & Reisert mit beschrankter Haftung. (See Decker, Carl, assignor.)
Henney, Charles F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,867,261; July 12.
Hepburn, William M., assignor to Surface Combustion Corporation, Toledo, Ohio. Method of and apparatus for heating ingots. 1,867,221; July 12.
Herdieckerhoff, Ernst. (See Tschunkur, E. Ballauf, and Herdieckerhoff.)
Herman, Alexander, Berlin, Germany. Window. 1,867,454; July 12.
Herr, Henry C., assignor to Herr Manufacturing Co. Inc., Buffalo, N. Y. Self-lubricating spinning ring. 1,867,150; July 12.
Herr Manufacturing Co., Inc. (See Herr, Henry C., assignor.)
Herz, Alfred, assignor of one-half to Edmund O. Schweitzer, Chicago, Ill. Fused cut-out. 1,867,151; July 12.
Heusser, Wilfrid, Salt Lake City, Utah. Chain-poise variable weight balance. 1,867,008; July 12.
Heyl, George E., Westminster, assignor to M. Greenhill, London, England. Manufacture of non-splintering glass sheets. 1,867,009; July 12.
Heywood Boot & Shoe Company. (See Bliss, Malcolm G., assignor.)
Hickman, Clarence N., Jackson Heights, assignor to American Piano Corporation, New York, N. Y. Piano key action. 1,866,707; July 12.
Hickman, Kenneth C. D., assignor to Eastman Kodak Company, Rochester, N. Y. Recording manometer. 1,866,973; July 12.
Higby, Frank M., Birmingham, assignor to Chrysler Corporation, Detroit, Mica. Drill chuck. 1,867,359; July 12.
Higgin Manufacturing Company, The. (See Traut, Clifford, assignor.)
Higgins, John R., Mount Vernon, N. Y. Tag holder for textile fabrics. 1,867,152; July 12.
Hilgenberg, Carl G., assignor to Carr-Lowrey Glass Co., Baltimore, Md. Glass container. 1,866,770; July 12.
Hill, C. V., & Co. (See Hill, Clement V., assignor.)
Hill, Clement V., assignor to C. V. Hill Co., Inc., Trenton, N. J. Refrigerator display case door. 1,867,074; July 12.
Hill, Earl V., Chicago, Ill. Air treating apparatus. 1,866,650; July 12.
Hoe, R., & Co. (See Graf, Albert J., assignor.)
Hoe, R., & Co. (See Horton, Albert J., assignor.)
Hoefert, Reinhold, Berlin-Charlottenburg, and K. Wollack, Berlin, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Automatic telephone system. 1,866,597; July 12.
Hoelkeskamp, Franz. (See Zart, A., Hartmann, and Hoelkeskamp.)
Hohing, Fred J., Alden, and J. Livingston, Acme, Mich. Nonskid fruit tree ladder. 1,866,974; July 12.
Holsington, William F., Paris, France, assignor to G. H. Rees, London, England. Radioreceiver. 1,867,153; July 12.
Holl, Alfred. (See Ritter, H., and Holl, assignors.)
Holly, Ludwig F., Madison, N. J., assignor to Holly Pneumatic Systems, Inc., New York, N. Y. Control means for pneumatic ejectors. 1,866,806; July 12.
Holly Pneumatic Systems, Inc. (See Holly, Ludwig F., assignor.)
Holman, Arthur T. (See Holman, John L. and A. T.)
Holman Brothers Limited. (See Holman, John L. and A. T., assignors.)
Holman, John L. and A. T., assignors to Holman Brothers Limited, Camborne, Cornwall, England. Rock-drill and like tool. 1,867,317; July 12.
Holmes, George A., Newton, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Slide fastener socket. 1,867,360; July 12.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Drilling apparatus. 1,866,932; July 12.
Holst, Gilles, and E. Oosterhuis, Eindhoven, Netherlands, assignors to Radio Corporation of America. Device for converting electric oscillations into mechanical vibrations. 1,866,565; July 12.
Holzach, Karl. (See Krzikalla, H., Holzach and Mueller.)
Hook, Walter W., Los Angeles, Calif. Bootjack. 1,866,708; July 12.
Hopff, Heinrich. (See Meyer, K. H., and Hopff.)
Hormes, William T., Catonsville, Md. Shelving structure. 1,867,543; July 12.
Horowicz, Eugen, Charlottenburg, Germany, assignor to General Electric Company. Fault responsive apparatus. 1,867,406; July 12.
Horrocks Desk Company. (See Kretchmar, Max A., assignor.)
Horst, Gustav T., Mission, S. Dak. Corn planter attachment. 1,867,075; July 12.
Horsting, William F., Wilmette, assignor to Leather Equipment Company, Inc., Chicago, Ill. Pelt stretching frame. 1,866,709; July 12.
Horton, Albert J., White Plains, assignor to R. Hoe & Co., Inc., New York, N. Y., Gripper mechanism. 1,866,566; July 12.
Horton, Joseph W., Cambridge, Mass., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Vacuum tube mounting. 1,866,533; July 12.
Horvath, Anthony G., Dayton, Ohio, assignor, by mesne assignments, to The Permutit Company, New York, N. Y. Water-softening apparatus. 1,866,890; July 12.
Hotchner, Fred, Chicago, Ill. Fabricating vacuum vessels. 1,867,154; July 12.
Houseman, Harold E., Edge Moor, assignor to Standard-Trump Bros. Machine Company, Wilmington, Del. Knitting mechanism. 1,866,567; July 12.
Howard, Earl H., assignor to Electro-Therapy Products Corporation, Ltd., Los Angeles, Calif. Handle for therapeutic lamps. Des. 87,344; July 12.
Howle, James B., Richmond, Va. Flush tank valve seat. 1,867,262; July 12.
Hubbard, Horace S., Pittsfield, Mass., assignor to General Electric Company. Direct current high voltage cable testing system. 1,867,407; July 12.
Hubbell, Harvey, jr., Bridgeport, Conn. Separable attachment plug. 1,866,933; July 12.

Huber, Paul P., Hillside, assignor to Weston Electrical Instrument Corporation, Newark, N. J. Transmission mechanism for axle driven indicators. 1,867,508; July 12.
Huenefeld Company, The. (See Huenefeld, Walter E., assignor.)
Huenefeld, Walter E., assignor to The Huenefeld Company, Cincinnati, Ohio. Container. 1,867,408; July 12.
Hughes, Emery H. (See Reisner, Gustav A., assignor.)
Hughes, Guy E., A. H. Waring, and J. E. Braham, Norton-on-Tees, assignors to Imperial Chemical Industries Limited, London, England. Distillation of water. 1,867,076; July 12.
Hull, Walter A., Oak Park, Ill. Tunnel kiln. 1,867,318; July 12.
Hulme, Andrew G., Stockport, England, assignor to Baker Perkins Company Incorporated, Saginaw, Mich. Crystallization of gums, fondants, sweetmeats or the like. 1,867,263; July 12.
Hultgren, Emil, and H. Mikkelson, Warwick, N. Dak. Ratchet pinch bar. 1,866,651; July 12.
Humphrey, Glen S., Brooklyn, assignor to Metal Package Corporation, New York, N. Y. Carrying case. 1,867,455; July 12.
Huston, Jack, and A. L. Slee, San Francisco, Calif., said Slee assignor to said Huston. Variable spacing mechanism for typewriters. 1,867,155; July 12.
Hutchens, Howard O., and A. R. Krause, assignors to Gillette Rubber Co., Eau Claire, Wis. Method of and apparatus for making 4-ply stock on 3-roll calenders. 1,866,807; July 12.
Hyland, Lawrence A., Washington, D. C., assignor, by mesne assignments, to Seaboard Airways, Inc., Columbus, Ohio. Signal indicating system. 1,867,264; July 12.
I. G. Farbenindustrie Aktiengesellschaft. (See Ballauf, F., and Schmelzer, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Balle, G., and Ost, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See de Ridder, E. and Altwicker, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Dietz, K., and Frank, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hackhofer, Ernst, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Meyer, K. H., and Hopff, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Münz, F., Keller, and Günther, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Stalb, Karl, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Wurzschmitt, Bernhard, assignor.)
Imperial Chemical Industries Limited. (See Hughes, G. E., Waring, and Braham, assignors.)
Impey, Francis L., Northfield, assignor to Morland & Impey, Limited, Birmingham, England. Loose-leaf binder. 1,867,456; July 12.
Indestructo Trunk Company, The. (See Erwin, Benjamin H., assignor.)
Indiana Lamp Corporation. (See Albright, Edward C., assignor.)
Industrial Dryer Corporation, The. (See Harris, Gordon D., assignor.)
Ingersoll Milling Machine Company. (See Monosmith, Leroy B., assignor.)
Ingman, Thomas M. (See Garbutt, F. E., and Ingman.)
International Motor Company. (See Matthews, Philip E., assignor.)
International Nickel Company, The. (See Merica, P. D., and Vanick, assignors.)
International Paper Box Machine Company. (See Goss, Harold J., assignor.)
International Projection Corporation. (See Dina, Augusto, assignor.)
International Silver Company. (See Feinauer, George A., assignor.)
International Time Recording Company of New York. (See Bryce, James W., assignor.)
Iodine Educational Bureau, Inc. (See Karns, George M., assignor.)
Ireland, Murray, assignor to Waters-Genter Company, Minneapolis, Minn. Timing mechanism. 1,866,808; assignor.)
Isaacson, Max, Dayton, F. E. Loudy, Akron, and F. R. Bussdicker, Dayton, Ohio. Resilient wheel. 1,866,652; July 12.
Ishikawa, Seichi, Lahaina, Maui, assignor of one-half to F. K. Makino, Honolulu, Hawaii. Charge forming device for internal combustion engines. 1,867,457; July 12.
Isothermos Corporation of America. (See Grandjean, Georges, assignor.)
Izsak, Alexander, Central Park, N. J., and F. A. McDermott, Claymont, assignors, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del. Producing ethyl acetate, ethyl alcohol and other products by fermentation. 1,866,568; July 12.
Jackson, Maunsell B., Toronto, Ontario, Canada. Hydraulic clutch. 1,86,891; July 12.
Jackson, Walter C., assignor to Tingley Reliance Rubber Corporation, Rahway, N. J. Clamping device. 1,867,156; July 12.
James, Joseph H., Pittsburgh, assignor to C. P. Byrnes, trustee, Sewickley, Pa. Intermediate partial oxidation products and making same. Re18,522; July 12.
Jamestown Metal Desk Company. (See Hanson, Rudolph L., assignor.)
Janin, Albert S., West New Brighton, N. Y., assignor, by mesne assignments, to A. L. Janin. Aeronautical device. 1,866,534; July 12.
Janin, Alice L. (See Janin, Albert S., assignor.)
Jauch, Robert J., assignor to Wayne Company, Fort Wayne, Ind. Automatic inflating device. 1,866,653; July 12.
Jensen, Soren C., Presque Isle, Me. Barrel carrying device. 1,867,263; July 12.
Jessup, Alfred C., Clamart, France. Manufacture of magnesium. 1,866,975; July 12.
Johansen, Harry C., Michigan City, Ind., assignor to Sullivan Machinery Company. Drilling apparatus. 1,866,934; July 12.
Johnson, Alfred, Uniontown, Pa., and R. H. Johnson, Morgantown, assignors to Makeras, Inc., Fairmont, W. Va. Chuck. 1,867,266; July 12.
Johnson, George A., assignor to W. H. Miner, Inc., Chicago, Ill. Brake beam safety support. 1,866,710; July 12.
Johnson, George T., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Car truck. 1,867,267; July 12.
Johnson, John, Maplewood, N. J. Turbine blender and the like. 1,866,535; July 12.
Johnson, Joseph N., Irwin, Calif. Wrench. 1,866,771; July 12.
Johnson, Robert H. (See Johnson, Alfred and R. H.)
Johnson, Ross H., Chicago, Ill. Adjustable and removable metatarsal pad. 1,866,598; July 12.
Johnston, Archibald W. (See Walte, Charles F., assignor.)
Johnston, Clarence L., Oakland, Calif., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada. Selecting register. 1,867,544; July 12.
Jones, Everett R., Wyandotte, Mich., assignor, by mesne assignments, to J. J. Scheibel. Automobile bumper. Re18,519; July 12.
Jones, Francis C. E., Hounslow, England. Rotary press and the like. 1,867,529; July 12.
Jones, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Method and apparatus for perforating motion picture film. 1,866,711; July 12.
Jones & Lamson Machine Company. (See Bysshe, E. T., and Flan, assignors.)
Jones, Loyd A., assignor to Eastman Kodak Company, Rochester, N. Y. Making combined sound and picture records. 1,866,712; July 12.
Jones, Thomas H., Woodthorpe, and R. K. Mills, Sherwood, England. Knitted article or garment. 1,866,713; July 12.
Jordan, O. F., Company. (See Protzeller, Harry W., assignor.)
Joyce, Lyndon W., and J. H. Sanderson, Babylon, N. Y., assignors to Joyce-Venning Manufacturing Co., Inc., Greensboro, N. C. Buckle assembling machine for webbing. 1,867,077; July 12.
Joyce-Venning Manufacturing Co. (See Joyce, L. W., and Sanderson, assignors.)
Juergens, Winfred H., Cleveland, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio. Load brake for hoists. 1,867,409; July 12.
Juergens, Winfred H., Cleveland, assignor to The Euclid-Armington Corporation, Euclid, Ohio. Bolt support for trolley frames. 1,867,410; July 12.
Jung, Louis. (See Schmidt, H. F., and Jung.)
Kadel, Byers W., Baltimore, Md. Hand brake for railway cars. 1,867,268; July 12.
Kaiser, Otto. (See Gyr, J., and Kaiser, O.)
Kalenoff, Godel, New York, N. Y. Air cutoff for automobile radiators. 1,867,509; July 12.
Kampes, Herman, Essen-Ruhr, Germany. Yielding joint strip for thresholds and sills. 1,867,010; July 12.
Kantskuf Heel Corporation. (See Smith, Gardner M., assignor.)
Karns, George M., Pittsburgh, Pa., assignor to Iodine Educational Bureau, Inc. Surgical material. 1,867,222; July 12.
Kasser Egg Process Co. (See Kasser, Morris, assignor.)
Kasser, Morris, assignor to Kasser Egg Process Co., San Francisco, Calif. Egg processing machine. 1,866,809; July 12.
Kawai, Yoshisada, Seattle, Wash. Medicinal apparatus. 1,866,772; July 12.
Kazenmaier, August, assignor to Robert Bosch, Aktiengesellschaft, Stuttgart, Germany. Brake mechanism. 1,867,078; July 12.
Keeler, Irving J., Sidney, N. Y. Assembling elevator lifting mechanism for typographical machines. 1,866,976; July 12.
Keil, Francis, & Son, Inc. (See Keil, Henry F., assignor.)
Keil, Henry F., Scarsdale, N. Y., assignor to Francis Keil & Son, Inc. Keyhole lock construction. 1,867,361; July 12.
Keller, Karl. (See Münz, F. Keller, and Günther.)
Kells, Frank W., Lakeland, Fla., assignor to Kells Generator & Automatic Refrigerator, Inc. Generator. 1,866,935; July 12.
Kells Generator & Automatic Refrigerator, Inc. (See Kells, Frank W., assignor.)
Kendrick, Fayette D., St. Paul, Minn. Swivel lamp for motor vehicles. 1,867,411; July 12.

Kennedy, Albert C., Long Beach, assignor of one-third to W. F. Kennedy, Los Angeles, and one-third to J. C. Kennedy, Long Beach, Calif. Roller bearing drawer guide. 1,866,853; July 12.
Kennedy Car Liner & Bag Co., The. (See Campbell, Guy H., assignor.)
Kennedy, Janice C., et al. (See Kennedy, Albert C., assignor.)
Kennedy, William F. (See Kennedy, Albert C., assignor.)
Kent, George, Limited. (See Dall, Horace E., assignor.)
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Tube support. 1,866,570; July 12.
Kershaw, Frederick, Philadelphia, Pa., and E. B. Kerst, Providence, R. I., assignors to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Carrying chain. 1,867,510; July 12.
Kerst, Edgar B. (See Kershaw, F., and Kerst.)
Kestenman Bros. Mfg. Co. (See Kestenman, Charles H., assignor.)
Kestenman, Charles H., assignor to Kestenman Bros. Mfg. Co., Providence, R. I. Connecter for wrist-watch straps, bands, bracelets, and linkages. 1,867,011; July 12.
Keuper, Joe S., East Liverpool, Ohio. Fish bait. 1,867,458; July 12.
Kharasch, Morris S., Chicago, Ill. Purifying insulin. 1,866,569; July 12.
Kifer, Ward G., assignor to The Timken Roller Bearing Company, Canton, Ohio. Roller bearing and cage therefor. 1,866,936; July 12.
Killen, James R., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,867,530; July 12.
Kimble, Dwight, Decatur, Ind. Universal wood-working machinery. 1,867,269; July 12.
King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,866,864; July 12.
King, John H., Wickliffe, Ohio. Rotation transmitting means. 1,866,714; July 12.
Kingman, Russell B., Orange, assignor to Metal Textile Corporation, West Orange, N. J. All metal gimped material. 1,867,157; July 12.
Kinnaird, Lawrence, Berkey, Calif. Educational testing device. 1,867,511; July 12.
Kirchhoff, William G., assignor to The J. H. Day Company, Cincinnati, Ohio. Sheeter and curling roll adjustment device. 1,867,223; July 12.
Kirchner, Henry P., assignor to The Carborundum Company, Niagara Falls, N. Y. Furnace and operating the same. 1,867,012; July 12.
Kirsch, Rudolf, Frankfort-on-the-Main, assignor to K. Maxaner, Celle-Kl. Hehlen, Germany. Calendar. 1,867,079; July 12.
Kirsten, Oscar W., Milwaukee, Wis. Shear knife adjusting means. 1,866,855; July 12.
Kline, Fred J., Bayville, assignor to Acco Products, Inc., Long Island City, N. Y. Filing device. 1,867,158; July 12.
Kline, Fred J., Bayville, assignor to Acco Products, Inc., Long Island City, N. Y. Filing device. 1,867,159; July 12.
Klocke, William H., Woodhaven, N. Y., assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Making bearings. 1,867,412; July 12.
Knowlton, M. D., Company. (See Feeley, Frank G., assignor.)
Knox, Benjamin E., assignor to Special Clothing Company, Chicago, Ill. Waterproof coat. 1,866,892; July 12.
Knox Stove Works. (See Miller, John B., assignor.)
Koerner, George H., San Francisco, Calif. Fountain penholder and ink filler. 1,866,773; July 12.
Koplan, Paul H. (See Freeman, B. W. and L. G., and Koplan.)
Koppen Company, The. (See Sperr, Frederick W., jr., assignor.)
Koppers Company, The. (See Daniels, Joseph, assignor.)
Koppers Company, The. (See Hansen, Christian J., assignor.)
Kraft, Otto H., Denver, Colo. Ash container. 1,867,080; July 12.
Krahl, Walter L., Montclair, assignor to Arcturus Radio Tube Company, Newark, N. J. Assembly of elements in electron devices. 1,866,715; July 12.
Krinzlein, Georg, Frankfort-on-the-Main, Hochst, Germany, and R. Sedlmayr, Aussig, Czechoslovakia, assignors to General Aniline Works, Inc., New York, N. Y. Aralkylbenzanthrones and preparing them. 1,867,459; July 12.
Kratzer, Herbert J., St. Louis, Mo. Pilot vane for the aerofoil wings of airplanes. 1,867,013; July 12.
Krause, Arnold R. (See Hutchens, H. O., and Krause.)
Kretchmar, Max A., Albany, assignor to Horrocks Desk Company, Herkimer, N. Y. Lubricating machinery. 1,866,977; July 12.
Krider, George E., Duncansville, assignor to McLanahan & Stone Corporation, Hollidaysburg, Pa. Grinding pan. 1,867,081; July 12.
Kritzer, Richard W., assignor to Peerless Ice Machine Company, Chicago, Ill. Refrigeration unit. 1,866,810; July 12.
Kroler, Waldemar, Tampa, Fla. Awning. 1,867,082; July 12.
Krzikalla, Hand, Manheim, K. Holzach, and W. Mueller, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of complex metal compounds of O-hydroxy-azo dyestuffs. 1,867,083; July 12.
Kulp, Harry W., and M. C. Dellinger, Lancaster, Pa. Wheel, gear, and the like pulling device. 1,866,654; July 12.
Kumpf, August D., assignor to Berger Brothers Company, Philadelphia, Pa. Trough fastener. 1,867,460; July 12.
Kunstdünger-Patent-Verwertungs-Aktiengesellschaft. (See Larsson, Markus, assignor.)
Kunze, Walter, Berlin, Germany, assignor to Radio Corporation of America. Armature support for four pole loud speakers. 1,867,160; July 12.
Kusch, Max, Berlin-Friedenau, Germany. Apparatus for the purification of waste water. 1,867,512; July 12.
Labisky, Arthur H., assignor to The Barton Corporation, West Bend, Wis. Washing machine tub. Des. 87,845; July 12.
Labombarde, Harold S., Nashua, N. H. Packaging machine. 1,867,538; July 12.
La Croix, Frederick, Agawam, Mass. Paper-making apparatus. 1,866,811; July 12.
Lahti, Aimo J., Jyvaskyla, Finland. Cartridge case. 1,867,513; July 12.
Lake, Albert H., Rochester, assignor to The Symington Company, New York, N. Y. Journal box. 1,867,270; July 12.
La Mar, Frank C., assignor to Great Western Fuse Company, New York, N. Y. Electric fuse. 1,866,536; July 12.
Lambourn, Leonard J., Fort Dunlop, Erdington, Birmingham, England, assignor to Dunlop Tire and Rubber Corporation, Buffalo, N. Y. Abrasion testing machine. 1,866,537; July 12.
Lammerich, Philip E., Chicago, Ill. Folder-separator. 1,866,812; July 12.
La Mont, Corporation. (See La Mont, Walter D., assignor.)
La Mont, Walter D., New Rochelle, assignor to La Mont Corporation, New York, N. Y. Steam generation. 1,866,893; July 12.
Landis Tool Company. (See Steiner, A. P., and Balsiger, assignors.)
Langdon, Frank E., Bromley, England. Postal franking machine. 1,867,514; July 12.
Lange, Richard, Leonia, N. J. Affixing stamping material to book covers and the like. 1,867,224; July 12.
Langill, Ross E., assignor to The Prescott Company, Menominee, Mich. Sawmill dog. 1,866,937; July 12.
Larsen, Neil P., Cleveland Heights, assignor to The American Coach & Body Co., Cleveland, Ohio. Supporting device for telephones. 1,867,271; July 12.
Larsen, Neil P., Cleveland Heights, assignor to The American Coach & Body Company, Cleveland, Ohio. Canopy support. 1,867,272; July 12.
Larsson, Markus, Berlin, Germany, assignor to Kunstdünger-Patent-Verwertungs-Aktiengesellschaft, Glarus, Switzerland. Producing a mixture of calcium nitrate and ammonium nitrate. 1,866,571; July 12.
Lascelles, William J., M. F. Peterson, J. R. Scott, and K. McC. Wilson, Manchester, England, assignors to Addressograph Company, Cleveland, Ohio. Printing machine. 1,866,978; July 12.
Lassiter, John R., and H. L. Morris, Norfolk, Va. Hydraulic lubricant dispenser. 1,867,515; July 12.
Lathrop, Hubbel, Greenwich, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Insulation of metal bodies. 1,867,362; July 12.
Lauter-Humana Co. (See Pospisil, Joseph, assignor.)
Lawson, Walter E., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Polymerizing vinyl derivatives. 1,867,014; July 12.
Leahy, James F., assignor to Farrel Birmingham Company, Inc., Buffalo, N. Y. Gear cutter. 1,867,161; July 12.
Leeman, Thomas P., Hempstead, assignor to Amphibions, Inc., Garden City, N. Y. Trimming device for airplanes. 1,867,162; July 12.
Leather Equipment Company. (See Horsting, William F., assignor.)
Lebedinsky, Myron, assignor to Societe des Telephones Grammont, Paris, France. Filter for preventing distortion. 1,866,655; July 12.
Ledeboer, John W., Ambler, Pa., assignor to Ambler Asbestos Shingle & Sheathing Company. Panel board. 1,866,856; July 12.
Ledwinka, Hans, Koprivnice, Czechoslovakia. Motor vehicle driving device. 1,866,656; July 12.
Lee, James E., Freeman Barney, and P. J. Beatty, assignors to Challenge Machinery Company, Grand Haven, Mich. Three-way chase lockup. 1,867,363; July 12.
Lee, Roger K., assignor to Chrysler Corporation, Detroit, Mich. Steering mechanism. 1,867,364; July 12.
Lee, Roger K., Highland Park, assignor to Chrysler Corporation, Detroit, Mich. Motor mounting. 1,867,365; July 12.
Lee, Roger K., assignor to The Chrysler Corporation, Detroit, Mich. Balancing apparatus. 1,867,418; July 12.
Lehigh Silk Hosiery Mills, Inc. (See Mosser, Edward B., assignor.)
Leichter, Abraham, New York, N. Y. Electric sign. 1,867,516; July 12.

Lemmerman, Howard E., assignor to Simmons Manufacturing Company, Cleveland, Ohio. Muffler. 1,867,273; July 12.
Lennox, Ira, Grand Junction, Colo. Sirup pitcher cover. 1,867,461; July 12.
Lerio, Louis, Mobile, Ala. Shipping drum and making the same. 1,866,979; July 12.
Leschhorn, Heinrich, Zuffenhausen, near Stuttgart, Germany. Form of the kind used in office work. 1,866,980; July 12.
Leslie, John W., Evanston, assignor to Signode Steel Strapping Company, Chicago, Ill. Package strapping sealjoints. 1,866,894; July 12.
Le Van, James D., Milwaukee, and C. Stansbury, Wauwatosa, assignors to Cutler-Hammer, Inc., Milwaukee, Wis. Timing device. 1,867,225; July 12.
Levermore, Charles L., Rockville Center, L. I., assignor to General Chemical Company, New York, N. Y. Manufacture of alkali metal phosphate. 1,866,657; July 12.
Levitt, Max, Brooklyn, N. Y. Lady's coat. Des. 87,346; July 12.
Levitt, Max, Brooklyn, N. Y. Lady's coat. Des. 87,347; July 12.
Lewis, Albert O. (See Fletcher, W., and Lewis.)
Lewis Invisible Stitch Machine Company. (See Gruman, Horace F., assignor.)
Lewis, Wilbur R., and H. J. Weaver, Saratoga, Tex. Bailing line clamp. 1,867,084; July 12.
Libert, Marcel, Paris, France, assignor to Norddeutsche Tapetenfabrik Holscher & Breimer, Langenhagen, Germany. Wall paper. Des. 87,348; July 12.
Lichtig, Abraham J., Oakland, Calif. Vaporizing device. 1,866,658; July 12.
Light, Albert T., Brooklyn, N. Y., assignor to York Ice Machinery Corporation, York, Pa. Refrigeration. 1,866,988; July 12.
Lilly, Eli, and Company. (See Manske, Richard H. F., assignor.)
Lilly, Eli, and Company. (See Shonle, Horace A., assignor.)
Lindquist, David E., assignor to Mueller Brass Co., Port Huron, Mich. Joint. 1,866,857; July 12.
Lindvall, Gustaf, Port Menier, Anticosti Island, Canada. Chain shackle. 1,866,813; July 12.
Linen Thread Company, The. (See Runkle, Lloyd O., assignor.)
Little, Thomas J., jr., Detroit, Mich, assignor, by mesne assignments, to The Silica Gel Corporation, Baltimore, Md. Purifying the refrigerant in refrigerating systems. 1,866,659; July 12.
Livingston, James. (See Hobing, F. J., and Livingston.)
Locke Insulator Corporation, The. (See Benard, Arthur G., assignor.)
Locke Insulator Corporation, The. (See Hawley, Kent A., assignor.)
Locke, James N. (See Ridgeway, L. E., and English, assignors.)
Loebell, Henry O., New York, N. Y., assignor to J. Louis Chavanne, Paris, France. Heat recuperation. 1,867,163; July 12.
Loebl, Jerrold, assignor to J. R. Thompson Co., Chicago, Ill. Table. 1,866,572; July 12.
Lofstrand, Albin P., Chicago, Ill. Plow. 1,867,517; July 12.
Logue, Leland H. (See Daman, A. C., and Logue.)
Lombard, Nathaniel, Worcester, Mass. Control device for fluid pressure actuated mechanism. 1,866,858; July 12.
Lombardi, Vincent. (See Rasmussen, Osvald E., assignor.)
Lombardi, Vincent, Brooklyn, N. Y. Knitting machine. 1,866,945; July 12.
Lotter, Adolph G., assignor to Stationers Loose Leaf Company, Milwaukee, Wis. Loose leaf binder. 1,867,164; July 12.
Loudy, Flavius E. (See Isaacson, M., Loudy, and Bussdicker.)
Luckey, George P., Lancaster, Pa., and A. F. Hegenberger, Dayton, Ohio. Pressure indicator. 1,866,660; July 12.
Luff, Henry J. and W. J., Cleveland Heights, Ohio; said H. J. Luff assignor to W. J. Luff. Gas-vent T. 1,866,814; July 12.
Luff, Willard J. (See Luff, Henry J., assignor.)
Lundy, Beverly A., Larchmont, N. Y. Tube testing device. 1,867,015; July 12.
Luts, George, Rocky River, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Sulphurized cinchona bark inhibitor. 1,867,414; July 12.
Lux, Heins, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Reversing current impulses. 1,866,573; July 12.
Lynch Glass Machine Company. (See Bridges, Edward G., assignor.)
MacClatchie, John W. (See Young, J., and Wigle, assignors.)
MacLaren, Fred B. (See Braselton, C. H., and MacLaren.)
MacLean, Neil, T. Quinn, and F. Duffy, Glasgow, Scotland. Mud guard for motor cars, motor cycles, or other wheeled vehicles. 1,867,518; July 12.
Mac-Roh Sales & Mfg. Company. (See Rohwedder, Otto F., assignor.)
Madsen, Peter N., Brookline, Pa. Parachute. 1,867,366; July 12.
Magoun, George L. (See Hand, C. N., and Magoun.)
Maher, Bernard S., Oakland, Calif. Engine. 1,866,774; July 12.
Maier, Fred R., Kansas City, Mo. Boot tree. 1,866,859; July 12.
Maier, John, St. Louis, Mo. Forming apparatus. 1,866,895; July 12.
Maine Steel Products Company. (See Sargent, Don A., assignor.)
Maine Steel Products Company. (See Soule, G., and Woodbury, assignors.)
Makeras, Inc. (See Johnson, Alfred and R. H., assignors.)
Makino, Fred K. (See Ishikawa, Seichi, assignor.)
Malcolm, James A. (See Feuerheerd, Ernest, assignor.)
Mallory, Marion, Toledo, Ohio. Governor brake for timers. 1,866,896; July 12.
Mancusi, Pasquale, Ntw York, N. Y., and V. Di Sibio, Glassboro, N. J., assignors to Pursmoke Pipe Company, Inc., New York, N. Y. Tobacco pipe. 1,866,574; July 12.
Manske, Richard H. F., New Haven, Conn., assignor to Eli Lilly and Company, Indianapolis, Ind. Resolution of ephedrine and its homologues and of mandelic acid, and certain intermediates. 1,867,274; July 12.
Marckworth, Otto S., Columbus, Ohio. Manufacturing nonscatterable glass. 1,867,085; July 12.
Marion Steel Body Company, The. (See Grissinger, James L., assignor.)
Markle, George B., jr., assignor to Hazleton Manufacturing Co., Hazleton, Pa. Casket. Des. 87,349; July 12.
Marlin, Elmer E., Detroit, Mich. Measuring device. 1,867,367; July 12.
Marr, Arthur P. (See Marr, George M. and A. P.)
Marr, George M. and A. P., New York, N. Y. Visible whistle. 1,867,165; July 12.
Martin, James, Higher Denham, England. Frame-like structure for vehicles, aircraft and other conveyers. 1,867,226; July 12.
Marx, Richard, Philadelphia, Pa. Stove for burning rubbish. 1,866,661; July 12.
Mason, William K., Cambridge, assignor to American Electrical Company, Boston, Mass. Combination lock switch. 1,867,415; July 12.
Massonneau, Robert F., Scarsdale, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Testing system. 1,867,368; July 12.
Master Woodworker Mfg. Co. (See Hawley, George E., assignor.)
Matthews, Philip E., Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Transmission controlling mechanism. 1,866,662; July 12.
Mattocks, Edgar H. (See Gauthier, A. L., and Mattocks.)
Maxaner, Karl. (See Kirsch, Rudolf, assignor.)
Maxwell, William H., et al., executors. (See Triplett, James B.)
May, Russell P., et al. (See Wolff, I., May, and Ringel.)
Maynard, Charles E., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Automatic vulcanizing mold. 1,867,369; July 12.
Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Guide for tire building machines. 1,867,370; July 12.
Maytag Company, The. (See Snyder, Howard E., assignor.)
McArdle, Michael W., Chicago, Ill. Circuit connecting plug. 1,867,319; July 12.
McBee Binder Company, The. (See Connor, R., Welk, and Zenner, assignors.)
McCann, George M., New Castle, Del. Gun. 1,866,938; July 12.
McCann, John F. (See Clark, Walter W., and McCann, assignors.)
McCarter, Louis N., Norristown, assignor to Woodworking Machinery Company, Philadelphia, Pa. Sliding saw. 1,867,275; July 12.
McCarthy, John J., Malden, Mass. Speed changing transmission mechanism. 1,867,227; July 12.
McClellan, Harry S. (See Churgay, L. A., and McClellan.)
McConkey, Thomas C., Westmount, and Georges Picard, assignors, by mesne assignments, to The Stead Rail Anchor Company, Limited, Montreal, Quebec, Canada. 1,866,897; July 12.
McCormick, John H., C. G. Allen, and F. M. Bender, assignors to Vendi Cater, Inc., Williamsport, Pa. Vending machine. 1,866,716; July 12.
McDavitt, Alfred A. (See Moulton, Warren I., assignor.)
McDermott, Frank A. (See Izsak, A., and McDermott.)
McDonald, Dale F., Evanston, Ill. Combination convertible passenger automobile body. 1,866,898; July 12.
McEvoy, Joseph H., Houston, Tex. Pump packing assembly and packing rings. 1,867,320; July 12.
McEvoy, Joseph H., Houston, Tex. Safety pressure head. 1,867,321; July 12.
McEwen, John D., assignor to L. C. Moore & Company, Inc., Pittsburgh, Pa. Walking beam. 1,867,016; July 12.
McEwen, John D., assignor to Lee C. Moore & Company, Inc., Pittsburgh, Pa. Clamp for derrick legs. 1,867,371; July 12.
McGee, Henry S., Memphis, Tenn. Card index. 1,866,815; July 12.
McGuckin, John J., Passaic, N. J., assignor to Rinck-McIlwaine, Inc., New York, N. Y. Grease-fitting tool. 1,867,372; July 12.
McIlraith, Evan J. (See Neville, Harvey A., assignor.)
McIntyre, George E., Kansas City, Mo. Card holder. 1,867,276; July 12.

McKee, Garnet W., Rockford, Ill. Fuel burning device. 1,867,166; July 12.
McLanahan & Stone Corporation. (See Krider, George E., assignor.)
McLaughlin, Cornelius E. (See Moulton, Warren J., assignor.)
McMullin, Clyde C., Loon Lake, Wash. Friction brake. 1,866,816; July 12.
McWhirter, John S., Southport, Conn., assignor to National Pneumatic Company, New York, N. Y. Step mechanism. 1,867,228; July 12.
Mehner, William R., and S. Young, Brigham City, Utah. Freezer for ice cream and the like. 1,867,017; July 12.
Meigs, Charles H., assignor to Du-Gas Fire Extinguisher Corporation, New York, N. Y. Fire extinguisher container. 1,866,981; July 12.
Meiser, Wilhelm. (See Neelmeier, W., and Meiser, assignors.)
Meixell, John W., Lewisburg, Pa. Weed pulling device. 1,867,086; July 12.
Mercer, William B., Binghamton, assignor to Gifford-Wood Company, Hudson, N. Y. Discharge chute for storage bins. 1,867,462; July 12.
Merck & Co. Inc. (See Chandler, Wallace L., assignor.)
Meredith Publishing Company. (See Gleason, O., and Boylan, assignors.)
Merica, Paul D., Westfield, and J. S. Vanick, Elizabeth, N. J., assignors, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y. Alloy. 1,867,018; July 12.
Merrick, Eldridge G., Schenectady, N. Y., assignor to General Electric Company. Protection of dynamo-electric machines. 1,867,416; July 12.
Merrick, Eldridge G., Schenectady, N. Y., assignor to General Electric Company. Protection of electric-dynamo machines. 1,867,417; July 12.
Metal Package Corporation. (See Humphrey, Clen S., assignor.)
Metal Textile Corporation. (See Kingman, Russell B., assignor.)
Metropolitan Engineering Company. (See Phelps, George H., assignor.)
Meulenberg, Martin. (See Grypma, T. J., and Meulenberg.)
Meyer, Aubrey E., Paris, France. Textile fabric and forming it. 1,867,019; July 12.
Meyer, Fred C., assignor, by mesne assignments, to The Okonite-Callender Cable Company, Incorporated, Paterson, N. J. Reel. 1,867,322; July 12.
Meyer, John F., Pasadena, Calif. Display frame. 1,867,323; July 12.
Meyer, Kurt H., Mannheim, and H. Hopff, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of aromatic carboxylic acids. 1,866,717; July 12.
Michener, Ruby B., Detroit, Mich. Signal post. 1,866,982; July 12.
Mieg, Walter. (See Buchloh, H., Mieg, and Stoetzer.)
Mihalyi, Joseph, assignor to Eastman Kodak Company, Rochester, N. Y. Method and apparatus for focusing lenses. 1,866,718; July 12.
Mikkelson, Harold. (See Hultgren, E., and Mikkelson.)
Miles, Eustace H., London, and G. Reilly, Luton, England. Making a vegetable food. Re18,523; July 12.
Miller, Charles H., et al. (See Pitcher, Elmer, assignor.)
Miller Combination Boiler and Pump Company. (See Webber, Donald E., assignor.)
Miller, Edward, Portland, N. Dak. Heater. 1,867,519; July 12.
Miller, John B., assignor to Knox Stove Works, Knoxville, Tenn. Circulating heater. Des. 87,350; July 12.
Miller, Julien C., Paducah, Kentucky. Collapsible crate. 1,867,277; July 12.
Miller Printing Machinery Company. (See Upham, Burt F., assignor.)
Miller, Ralph R., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,866,575; July 12.
Miller, Truman A., Alameda, Calif. Base for a display stand. Des. 87,351; July 12.
Mills, Robert K. (See Jones, T. H., and Mills, assignors.)
Miner, W. H., Inc. (See Johnson, George A., assignor.)
Minier, William H., Toledo, Ohio. Traffic signal. 1,866,899; July 12.
Mitchell, August, New York, N. Y., assignor to Scovill Manufacturing Company, Waterbury, Conn. Cap for jars and the like. 1,867,167; July 12.
Mitchell, William J., San Francisco, Calif. Rig for rotary drills. 1,867,020; July 12.
Mitskoff, Samuel, Des Moines, Iowa. Gambrel. 1,866,900; July 12.
Mock, Charles F., Toledo, Oreg. Saw set. 1,867,520; July 12.
Mock, Frank C., East Orange, N. J., assignor to Bendix Stromberg Carburetor Company, Chicago, Ill. Airplane carburetor. Re18,520; July 12.
Mollins, Desmond W., Longwood, Bexley, England. Cigarette machine. 1,867,463; July 12.
Möller, Rolf, Hamburg, Germany, assignor to General Electric Company. Liquid purification for Kerr cells. 1,866,940; July 12.
Monosmith, Leroy B., assignor to The Ingersoll Milling Machine Company, Rockford, Ill. Producing metal working tools. 1,867,021; July 12.
Monowatt Electric Corporation, The. (See Sadacca, Henry, assignor.)
Monsanto Chemical Works. (See George, Anthony, assignor.)
Moore, Charles O. (See Morrow, Emmet H., assignor.)
Moore, J. L., et al. (See Pitcher, Elmer, assignor.)
Moore, Lee C., & Company. (See McEwen, John D., assignor.)
Moran, Patrick J., Newark, N. J., assignor to I. Rosner, New York, N. Y. Corset. 1,867,464; July 12.
Morland and Impey Limited. (See Fitz Power, Richard, assignor.)
Morland & Impey Limited. (See Impey, Francis L., assignor.)
Morris, Harry L. (See Lassiter, J. R., and Morris.)
Morris, Harry P., assignor to K. F. Smith, Coronado, Calif. Air cleaner and air turbination inductor. 1,866,663; July 12.
Morrow, Emmet H., assignor, by mesne assignments, to C. O. Moore, Chicago, Ill. Attachment for oil cans. Re18,526; July 12.
Morton, Edmund R., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Motor control system. 1,867,373; July 12.
Mosser, Edward B., Philadelphia, Pa., assignor to Lehigh Silk Hosiery Mills, Inc., New York, N. Y. Stocking. Re87,352; July 12.
Mote, Horace, London, England. Agricultural implement. 1,867,521; July 12.
Moulton, Warren I., assignor of one-fourth to Alfred A. McDavitt, and one-fourth to Cornelius E. McLaughlin, Boston, Mass. Automobile window screen. 1,866,983; July 12.
Moynan, Frederick K. O., Kingston on Soar, near Derby, England. Steam drier or dust extractor from gases. 1,867,465; July 12.
Mueller Brass Co. (See Lindquist, David E., assignor.)
Mueller, Werner. (See Krzikalla, H., Holzach, and Mueller.)
Mullan, Harry D., Milwaukee, Wis. Spark plug cleaner. 1,867,324; July 12.
Müller, Adolf M., Chemnitz in Sachsen, Germany. Needle operating mechanism. 1,867,087; July 12.
Müller, Gustav, Berlin-Steglitz, and C. Weinmann, Berlin-Charlottenburg, Germany, assignors to General Electric Company. Apparatus for feeding wires. 1,867,418; July 12.
Munitex Corporation. (See Stocker, Ernst, assignor.)
Munn, Charles G., assignor to Reynolds Spring Company, Jackson, Mich. Spring construction. 1,866,664; July 12.
Münz, Ferdinand, and K. Keller, Frankfort-on-the-Main-Fechenheim, and Fritz Günther, Ludwigshafen-on-the-Rhine, assignors, by mesne assignments, to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Wetting, cleansing, and emulsifying agent and making same. 1,867,022; July 12.
Murphy, P. H., Company. (See Bonsall, Charles D., assignor.)
Myers, Harold L., Morristown, N. J. Toy house. 1,867,374; July 12.
Nagle, M. T., et al. (See Pitcher, Elmer, assignor.)
Nardoni, Albert, assignor of one-half to G. Pusateri, Chicago Heights, Ill. Curtain bracket. 1,867,089; July 12.
Nash, Roy W., Kenmore, assignor to Du Pont Rayon Company, New York, N. Y. Rayon spinning machine. 1,867,022; July 12.
Nasmith, John W., Heaton Mersey, Manchester, England. Combing machine. 1,866,901; July 12.
National Carbon Company. (See Ornes Stephen W., assignor.)
National Laundry Machinery Company. (See Reeps, Charles O., assignor.)
National Manufacturing Company. (See Bittorf, Louis A., assignor.)
National Pneumatic Company. (See McWhirter, John S., assignor.)
National Water Main Cleaning Co. (See Frank, William A., assignor.)
Nawiasky, Paul, Ludwigshafen-on-the-Rhine, and H. Wolff, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Method for the production of vat dyestuffs and the product thereof. 1,867,090; July 12.
Neebe, Lawrence L., Woodbury, N. J. Footplate for locomotives. 1,867,466; July 12.
Neebee, Lawrence L., Woodbury, N. J. Crosstie for locomotives. 1,867,467; July 12.
Neelmeier, Wilhelm, and W. Meiser, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Hydroxy-1'. 8'-naphthoylenenaphthimidasoles. 1,867,091; July 12.
Neiman, Howard S., Brooklyn, N. Y. Loose powder container. 1,866,576; July 12.
Nelson, Bert J. (See Coles, W. H., and Nelson, assignor.)
Nelson, Emil A., Detroit, Mich. Making cap nuts. 1,867,229; July 12.
Neumeister, Anton W. (See Neimeister, Earl L. and A. W.)
Neumeister, Earl L. and A. W., Philip, S. Dak. Hay cutter and distributor. 1,867,168; July 12.

Neville, Harvey A., Bethlehem, Pa., assignor to E. J. McIlraith, Chicago, Ill. Removing carbon monoxide from exhaust gases. 1,867,325; July 12.
Newhall, Henry B., Corporation. (See Brown, Harry C., assignor.)
Niles Steel Products Company, The. (See Thomas, Wayne B., assignor.)
Noffsinger, Fred P., Greeley, Colo. Picking table. 1,867,522; July 12.
Norddeutsche Tapetenfabrik Holscher & Breimer. (See Libert, Marcel, assignor.)
Norge Corporation. (See Blood, Howard E., assignor.)
Norlipp Company of Chicago, The. (See Gauthier, A. L., jr., and Mattocks, assignors.)
Oehme, Hermann, assignor to Chemische Fabrik Kalk, Gesellschaft mit beschrankter Haftung, Cologne-Kalk Germany. Production of zinc hydrocarbonate. 1,866,775; July 12.
Oilgear Company, The. (See Ferris, Walter, assignor.)
O'Keefe, Michael R., Tacoma, Wash. Collapsible tube closure. 1,866,984; July 12.
Okonite-Callender Cable Company, The. (See Meyer, Fred C., assignor.)
Olin, George C., Chicago, Ill., assignor, by mesne assignments, to Servitor Manufacturing Company, Inc. Service attachment for furniture. 1,866,665; July 12.
Oliver, Guy C., Whittier, assignor of one-third to R. M. Combs, Whittier, and one-third to E. A. Spencer, Los Angeles, Calif. Core drill bit. 1,867,024; July 12.
Omurel, Fred Y., Honolulu, Hawaii. Apparatus for preparing powdered fish. 1,867,523; July 12.
Oneida Community, Limited. (See Bedford, E. B., and Parker, assignors.)
Oosterhuis, Ekko. (See Holst, G., and Oosterhuis.)
Orne, Stephen W., Fostoria, Ohio, assignor to National Carbon Company, Inc. Arc lamp electrode. 1,867,524; July 12.
Osinga, Thomas J., Chicago, Ill. Fascia plate installation; 1,867,230; July 12.
Ossenbeck, Anton, Cologne-Mulheim-on-the-Rhine, and E. Tietze, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New water soluble diazo amino compounds. 1,867,088; July 12.
Ost, Karl. (See Balle, G., and Ost.)
Othmer, Donald F., assignor to Eastman Kodak Company, Rochester, N. Y. Removing tar from pyroligneous liquids. 1,866,719; July 12.
Overmire, Wilfred J., Indianapolis, Ind. Locomotive tender tank gauge. 1,866,902; July 12.
Ovitz, Frank K., assignor to Standard Oil Company, Whiting, Ind. Pyrolytic decomposition of hydrocarbons. 1,866,666; July 12.
P. D. Q. Auto Jack Mfg. Co. (See Bright, John W., assignor.)
P. O. B. Manufacturing Co., Inc. (See Glascock, Harry, assignor.)
Palmer Bros. Engines, Inc. (See Ulrich, Julius M. assignor.)
Palmer, Charles S., Evanston, Ill., assignor, by mesne assignments, to Parke, Davis & Company, Detroit, Mich. Unsymmetrical arseno-benzene compound. 1,867,231; July 12.
Panco Rubber Company. (See Berenstein, Frank, assignor.)
Panski, Adolphe, Paris, France. Apparatus for extracting fats at low temperature. 1,867,326; July 12.
Pardee, Frank, jr., assignor to Anthracite Separator Company, Hazleton, Pa. Apparatus for lowering coal and the like. 1,866,720; July 12.
Pareira, Fred, assignor to Health Developing Apparatus Co. Inc., New York, N. Y. Rowing machine. 1,866,860; July 12.
Park, Charles R., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Forming rubber strips from latex. 1,866,820; July 12.
Parke, Davis & Company. (See Palmer, Charles S., assignor.)
Parker, Mary G. (See Bedford, E. B., and Parker, assignors.)
Parker Rust-Proof Company. (See Darsey, Van M., assignor.)
Parker, Ruth F., Minneapolis, Minn. Anaesthetic inhaler. 1,866,667; July 12.
Parker Wire Goods Company. (See Ribb, Carl H., assignor.)
Patent Novelty Company. (See Reimer, George H., assignor.)
Paterson Reed and Harness Company. (See Robertson, Robert K., assignor.)
Patterson, Edgar W., Los Angeles, Calif. Oil saver. 1,866,903; July 12.
Pease, C. F., Company. (See Brunk, Harold J., assignor.)
Pease, Frederick J., Wauwatosa, Wis. Combined thermostat and hygrostat instrument. 1,866,721; July 12.
Peck, Irving H., assignor to The Sterling Pin Company, Derby, Conn. Hairpin. 1,867,169; July 12.
Pedersen, John D., Jackson, Wyo. Rifle. 1,866,722; July 12.
Peek, Frank W., jr., Pittsfield, Mass., assignor to General Electric Company. Operation of series connected vacuum valves. 1,867,419; July 12.
Peerless Ice Machine Company. (See Kritzer, Richard W., assignor.)
Peirce, John R., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y. Combination hole punch. 1,867,025; July 12.
Peirce, John R., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y. Printing mechanism. 1,867,026; July 12.
Peirce, John R., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y. Accounting machine. 1,867,027; July 12.
Pelzer, Harold H., Astoria, assignor to Standard Automatic Candy Corporation, New York, N. Y. Vending cabinet. Des. 87,353; July 12.
Penka, William J., Claflin, Kans. Grease gun filler. 1,867,468; July 12.
Pensrum, Sylvanus, Washington, Mo. Circuit breaker for motor vehicles. 1,867,278; July 12.
Perfection Steel Body Co. (See Cohen, Ralph, assignor.)
Permutit Company, The. (See Horvath, Anthony G., assignor.)
Peters, John F., Rochester, assignor to American Can Company, New York, N. Y. Slitter. 1,866,941; July 12.
Petersen, Carl M., assignor to Circle F Mfg. Co., Trenton, N. J. Electric connecter. 1,866,985; July 12.
Peterson Magnus F., et al. (See Lascelles, W. J., Peterson, Scott, and Wilson.)
Pettis, Clifton D., New York, N. Y. Casting mold. 1,866,599; July 12.
Pfister, William A. (See Price, E., and Pfister.)
Phelps, George H., Warehouse Point, Conn., assignor, by mesne assignments, to Metropolitan Engineering Company. Welding. 1,867,028; July 12.
Philip Carey Manufacturing Company. (See Fischer, Albert C., assignor.)
Philips and Davies, Inc. (See Philips, Erwin B. assignor.)
Philips, Erwin B., assignor to Philips and Davies, Inc., Kenton, Ohio. Sluice gate. 1,866,817; July 12.
Picard, Georges. (See McConkey, T. C., and Picard.)
Pickard, Joseph A. (See Garland, C. S., Beachem, and Pickard.)
Piersall, Napoleon B., Newark, N. J. Attachment for faucets. 1,867,525; July 12.
Pingen, Henry M., Toledo, Ohio. Assembling the stems and associated parts of incandescent electric lamps. 1,866,004; July 12.
Pingrey, Wilson H., Blairstown, Iowa. Oil heater. 1,866,986; June 13.
Pioneer Heat Regulator Company. (See Dicke, Allen A., assignor.)
Pipher, Alvin E. (See Pipher, William E. A. and A. E.)
Pipher, William E. A. and A. E., Parkers Landing, Pa. Oil agitator. 1,867,092; July 12.
Pitcher, Elmer, St. Paul, Minn., assignor, by mesne assignments, to himself, M. T. Nagle, St. Paul, J. R. Schoffman, St. James, Minn., C. H. Miller, Portland, Oreg., J. L. Moore, Wimbledon, N. Dak., A. Running, St. James, Minn., and M. Anderson, Crosby, N. Dak. Snowplow. 1,866,861; July 12.
Pittman, Maggie, Kosciusko, Miss. Blouse. Des. 87,354; July 12.
Pittsburgh Plate Glass Co. (See Harrington, Alfred L., assignor.)
Pivoto, Felix Lucas, Beaumont, Tex. Casing head. 1,867,093; July 12.
Placide, Henry, Baltimore, Md. Water motor machine. 1,867,094; July 12.
Ploss, Frederick W., Philadelphia, Pa. Hanger. 1,867,469; July 12.
Poetsch, Chester M., Chicago, Ill. Game scoring device. 1,867,170; July 12.
Ponthieu, Henri, Viroflay, France. Compressor. 1,867,470; July 12.
Polis, Max, et al. (See Slade, H. E., and Gehring, assignors.)
Polsky, Michael, Brooklyn, N. Y. Undergarment. 1,867,327; July 12.
Pospisil, Joseph, Bloomfield, N. J., assignor to Lauter-Humana Co. Piano lift or similar article. Des. 87,355; July 12.
Post, Frank B., Minneapolis, Minn., assignor to Steiner Sales Company, Salt Lake City, Utah. Towel cabinet. Des. 87,356; July 12.
Potter, Frank H. T. (See Harris, Alexander B. B., assignor.)
Powers, Howard C., assignor to Glascraft Corporation, Niagara Falls, N. Y. Bracket for signs and the like. 1,866,723; July 12.
Powers Regulator Company, The. (See Snediker, Morton O., assignor.)
Prescott Company, The. (See Langill, Ross E., assignor.)
Prescott, Sydney I., New York, N. Y., and F. J. Rummler, Lyndhurst, N. J. Wheel. 1,867,095; July 12.
Prestwich, Ernest. (See Prestwich, Wright and E.)
Prestwich, Wright, and E. Prestwich, Lawrence, Mass. Wiping device. 1,866,862; July 12.
Price, Emil, and W. A. Pfister, Los Angeles, Calif. Valve. 1,867,279; July 12.
Priebe, Arthur W., assignor to A. O. Smith Corporation, Milwaukee, Wis. Arc welding. 1,867,375; July 12.
Principessa, Tito, and J. de Cosimo, Ellwood City, Pa. Hot or cold air home clothes drying machine. 1,866,987; July 12.

Printel Manufacturing Corporation. (See Roe, William C., assignor.)
Proctor & Schwartz, Incorporated. (See Kershaw, F., and Kerst, assignors.)
Prompt, Lucien L. J., Colombes, France. Pressure producing means. 1,866,905; July 12.
Protzeller, Harry W., assignor to O. F. Jordan Company, East Chicago, Ind. Railroad spreader. 1,866,577; July 12.
Protzeller, Harry W., and G. W. Finney, East Chicago, Ind. Method of and apparatus for making steel. 1,866,668; July 12.
Prym, Hans A., Great Neck, N. Y. Hairpin. 1,867,472; July 12.
Pulver Company. (See Burne, Stuart, assignor.)
Purser, Albert, Brooklyn, N. Y. Auxiliary airplane engine mechanism. 1,867,473; July 12.
Pursmoke Pipe Company. (See Mancusi, P., and Di Sibio, assignors.)
Pusateri, Giovanni. (See Nardoni, Albert, assignor.)
Quinn, Thomas. (See MacLean, N., Quinn, and Duffy.)
Radio Corporation of America. (See Carter, Philip S., assignor.)
Radio Corporation of America. (See de Bellescize, Henri J. J. M. de R., assignor.)
Radio Corporation of America. (See Elliott, Harold F., assignor.)
Radio Corporation of America. (See Franklin, Charles S., assignor.)
Radio Corporation of America. (See Holst, G., and Oosterhuis, assignors.)
Radio Corporation of America. (See Kunze, Walter, assignor.)
Radio Corporation of America. (See Ranger, Richard H., assignor.)
Radio Corporation of America. (See Roberts, Walter van B., assignor.)
Radio Corporation of America. (See Round, Henry J., assignor.)
Radio Corporation of America. (See Wolff, I., May, and Ringel, assignors.)
Rager, John C., Shelbyville, Ind. Teeter board. 1,866,906; July 12.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Tone stabilizing. 1,867,171; July 12.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Photographic strip feeding mechanism. 1,867,172; July 12.
Rasmussen, Andrew and W. S. Goodell, Racine, Wis. Automatic controller. 1,867,376; July 12.
Rasmussen, Osvald E., Lincoln Park, N. J., assignor to Vincent Lombardi, Brooklyn, N. Y. Knitting machine. 1,866,946; July 12.
Ratel, Maurice, Bievres, France. Stoker. 1,867,474; July 12.
Rather, Clifton V., San Francisco, Calif. Game. 1,866,821; July 12.
Raubvogel, Abraham H., New York, N. Y. Handle for bakers' peel. 1,867,029; July 12.
Rauch, Frank, Brooklyn, N. Y. Pocket flash light. 1,866,600; July 12.
Rauen, John T., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerator. 1,867,539; July 12.
Raule, Clifford T., Brookline, Pa. Steering knuckle bearing. 1,866,724; July 12.
Rayfield, Charles L., assignor to Rayfield Mfg. Co., Chicago, Ill. Oil burner feed mechanism. 1,866,725; July 12.
Rayfield Mfg. Co. (See Rayfield, Charles L., assignor.)
Reed, Clarence E., Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Deep well drilling apparatus. 1,867,531; July 12.
Reeps, Charles O., assignor to National Laundry Machinery Company, Inc., Syracuse, N. Y. Automatic ironing press. 1,867,173; July 12.
Reeps, Charles O., deceased, Waukegan, Ill., by Harriette E. Reeps, executrix, assignor to National Laundry Machinery Company, Inc., Syracuse, N. Y. Yoke, collar and cuff press. 1,867,174; July 12.
Reeps, Harriette E., executrix. (See Reeps, Charles O.)
Rees, Gower H. (See Hoisington, William F., assignor.)
Rehm, Alfred. (See Brodbeck, G., and Rehm.)
Reid, James S., assignor, by mesne assignments, to Eaton Manufacturing Company, Cleveland, Ohio. Closure. 1,866,818; July 12.
Reid, James S., Shaker Heights, assignor to The Reid Products Company, Cleveland, Ohio. Window channel. 1,867,175; July 12.
Reid Products Company, The. (See Gaines, Walter S., jr., assignor.)
Reid Products Company, The. (See Reid, James S., assignor.)
Reiland, Ernest S., and P. M. Reiland, St. Paul, Minn. Piston and ring. 1,866,907; July 12.
Reiland, Peter M. (See Reiland, Ernest S., and P. M.)
Reilly, Gerard. (See Miles, E. H., and Reilly.)
Reimer, George H., assignor to Patent Novelty Company, Fulton, Ill. Latch lock. 1,866,578; July 12.
Reisner, Gustav A., assignor of one-half to E. H. Hughes, Austin, Tex. Vegetable slicing machine. 1,866,947; July 12.
Reliance Manufacturing Company, The. (See Cowlin, Eugene D., assignor.)
Remington, Leonard F., Franklin, Mass., assignor to Thomson National Press Co. Inc. Sheet registering mechanism. 1,866,579; July 12.
Rendall, Arthur R. A., and E. K. Sandeman, Aldwych, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y. Compensating for distortion in transmission. 1,866,601; July 12.
Renfer, John E., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Hammer for rock drills. 1,866,819; July 12.
Reynolds Spring Company. (See Munn, Charles G., assignor.)
Rhodes, William A., New York, N. Y., assignor to American Telephone and Telegraph Company. Impulse transmitter. 1,866,669; July 12.
Ribb, Carl H., assignor to Parker Wire Goods Company, Worcester, Mass. Road chair. 1,867,096; July 12.
Ricardo, Harry R., London, England. Internal combustion engine of the compression ignition type. 1,867,475; July 12.
Richardson, Led L., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Drill steel retainer. 1,866,863; July 12.
Ridgeway, Leroy E. and A. English, assignors of one-third to J. N. Locke, Long Beach; said English assignor of one-third to Globe Oil Tools Co., Los Nietos, Calif. Cutting means and making the same. 1,866,602; July 12.
Rieber, Frank, San Francisco, Calif. Radiating vibratory mechanical impulses into solids, liquids, and the like. 1,867,098; July 12.
Rieckmann, Erich, Berlin-Charlottenburg, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Oscillograph. 1,867,176; July 12.
Rinck-McIlwaine, Inc. (See McGuckin, John J., assignor.)
Rienks, William, Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind. Alternating current motor. 1,867,328; July 12.
Ringel, Abraham, et al. (See Wolff, I., May, and Ringel.)
Rippl, Charles H., East Cleveland, assignor to The Clark Controller Company, Cleveland, Ohio. No-load relay. 1,867,280; July 12.
Rittenhouse, Arthur E., assignor to The A. E. Rittenhouse Co., Inc., Honeoye Falls, N. Y. Insect exterminator. Des. 87,357; July 12.
Rittenhouse, A. E., Co., The. (See Rittenhouse, Arthur E., assignor.)
Ritter, Claude C., Buckeye, Ariz. Combined mirror and frame. Des. 87,358; July 12.
Ritter, Heinrich, Frankfort-on-the-Main-Fechenheim, and A. Holl, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Compound of the thiazolanthrone sulphone series and making same. 1,867,097; July 12.
Roberts, Charles L., Los Angeles, Calif. Marine oil well derrick. 1,867,030; July 12.
Roberts, Walter van B., Princeton, N. J., assignor to Radio Corporation of America. Wireless receiving system. 1,867,232; July 12.
Robertson, Harry H., Worland, Wyo. Bean vine cutter. 1,866,948; July 12.
Robertson, H. H., Company. (See Young, James H., assignor.)
Robertson, Robert K., assignor to Paterson Reed and Harness Company, Paterson, N. J. Heddle frame. 1,866,908; July 12.
Rode, Fredrich J. (See Glasner, R. W., and Rode.)
Roe, William C., Pittsburgh, Pa., assignor to Printel Manufacturing Corporation. Electromagnetic relay. 1,867,099; July 12.
Roebrich, Carl, Berlin, Germany, assignor to the Firm Silfree Aktiengesellscbaft (Silfree Limited) Vaduz, Liechtenstein. Light source for photographic copying purposes. 1,867,100; July 12.
Rogers, Lorlys R., Greenville, Miss., assignor to Wailes Dove-Hermiston Corporation, New York, N. Y. Device and method for coating pipe joints and pipes. 1,867,476; July 12.
Rogers Warren E. (See Bunts, F. F., and Rogers.)
Rohr, Mamie E. (See Thornhill, B., and Rohr.)
Rohwedder, Otto F., assignor to Mac-Roh Sales & Mfg. Company, Davenport, Iowa. Machine for slicing an entire loaf of bread at a single operation. 1,867,377; July 12.
Rohwedder, Otto F., assignor to Mac-Roh Sales & Mfg. Company, Davenport, Iowa. Feeding appliance for bread slicing machines. 1,867,378; July 12.
Rolls Royce Limited. (See Royce, Frederick H., assignor.)
Rolscreen Company. (See Dixson, Harry, assignor.)
Roos, Henry W., Cincinnati, Ohio. Shore. 1,867,233; July 12.
Roosen, Richard, assignor to Stug Kohlenstaubfeuerung Patentverwertung G. m. b. H., Kassel, Germany. Cleaning device for pulverized fuel furnace. 1,867,101; July 12.
Root, A. I., Company, The. (See Root, Hubert H., assignor.)
Root, Huber H., assignor to The A. I. Root Company, Medina, Ohio. Candle and method relating thereto. 1,867,420; July 12.

Rosenberg, Ralph H., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Forming universal joints. 1,867,540; July 12.
Rosenthal, Sidney, Cedarhurst, N. Y. Button. Des. 87,359; June 12.
Rosin, Paul. (See Bathelmess, Emil, assignor.)
Rosner, Irving. (See Moran, Patrick J., assignor.)
Ross, Oscar A., New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Temperature controlled electric switch. 1,867,379; July 12.
Rounds, George H., Naples, Me. Cabinet for radioreceiving apparatus. Des. 87,360; July 12.
Round, Henry Joseph, Westfield, London, England, assignor to Radio Corporation of America. Loud speaker. 1,867,177; July 12.
Rowan, William H., and H. K. Buckner, Nashville, Tenn. Curing cement concrete. 1,867,421; July 12.
Roy, Wilfrid J., East Orange, N. J., assignor to Gemex Company. Bracelet end connecter. 1,866,670; July 12.
Royce, Frederick H., West Wittering, near Chichester, assignor to Rolls Royce Limited, Derby, England. Shock absorber device. 1,866,671. July 12.
Rubber Service Laboratories Co., The. (See Hand, C. N., and Magoun, assignors.)
Rule, Andrew L. (See Brown, James L., assignor.)
Rummler, Francis J. (See Prescott, S. I., and Rummler.)
Runkle, Lloyd O., Gloucester, Mass., assignor to The Linen Thread Company, New York, N. Y. Sifter trawl. 1,867,281; July 12.
Running, Albert, et al. (See Pitcher, Elmer, assignor.)
Runyon, Benjamin F., Bayside, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Thermal switch. 1,867,380; July 12.
Russell, Walter M., Wellesley, Mass., assignor to The Gas Machinery Company, Cleveland, Ohio. Making water gas. 1,867,102; July 12.
Ruthsaccumulator Aktiebolag. (See Föhl, Carl, assignor.)
Ryan, James H., St. Louis, Mo. Support for tile partitions. 1,867,329; July 12.
Ryan, Roger W. (See Gordon, D., and Ryan.)
S. M. A. Corporation. (See Frohring, William O., assignor.)
Sachs, Joseph, West Hartford, Conn. Electric circuit controlling appliance. Re18,524; July 12.
Sachse, Herman P., assignor to Central Scientific Company, Chicago, Ill. Rheostat. Re18,521; July 12.
Sadacca, Henri, City Island, N. Y., assignor, by mesne assignments, to The Monowatt Electric Corporation, Bridgeport, Conn. Circuit tap connection. 1,867,381; July 12.
Safety Car Heating & Lighting Company, The. (See Von Ohlsen, Louis H., assignor.)
Salinas, Melchor, Monterrey, Mexico. Shelling cotyledonous vegetables. 1,866,949; July 12.
Salmon, James P., Philadelphia, Pa. Pipe connecter. 1,866,672; July 12.
Salisbury, Ralph, Lancaster, Calif. Air compressor. 1,866,822; July 12.
Salsbury, Ralph T., Oakland, Calif. Bottle filler and capper. 1,866,673; July 12.
Sampson, James M., Schenectady, N. Y., assignor to General Electric Company. Foundry core and binder therefor. 1,867,382; July 12.
Samuels, Harry H., New York, N. Y. Germicidal transmitter mouthpiece. 1,867,282; July 12.
Sandalls, George, jr. (See Dorff, L. A., and Sandalls, jr.)
Sandelman, Edward K. (See Rendall, A. R. A., and Sandelman.)
Sanderson, Joseph H. (See Joyce, L. W., and Sanderson.)
Santiago, James J., assignor to J. Grant, Los Angeles, Calif. Casing head. 1,866,726; July 12.
Sarazin, Robert, Neuilly-sur-Seine, France. Automatic machine for arc welding. 1,866,675; July 12.
Sargent, Don A., assignor to Maine Steel Products Company, Portland, Me. Snowplow equipment. 1,867,178; July 12.
Sargent & Greenleaf, Inc. (See Diesel, William F., assignor.)
Sass, Friedrich, Charlottenburg, Germany, assignor to General Electric Company. Regulation of the fuel feed pumps of internal-combustion engines. 1,867,383; July 12.
Sasser, Edward C., Chevy Chase, Md. Coffeepot. 1,866,777; July 12.
Savary, Eugene A., Phoenicia, N. Y. Dice agitator. 1,867,031; July 12.
Scarlett, Robert L., Musselburgh, Scotland. Seed sowing tool or implement. 1,867,552; July 12.
Schaad, Paul H., New York, N. Y. Self-closing oil sampling valve. 1,866,676; July 12.
Schavoir, Frederick H., Stamford, Conn., assignor to Schavolite Golf Corporation, New York, N. Y. Golf club head and making same. 1,867,103; July 12.
Schavolite Golf Corporation. (See Schavoir, Frederick H., assignor.)
Schelbel, Joseph J. (See Jones, Everett R., assignor.)
Scheminger, jr., John, Providence, R. I. Fuel feeding tank. 1,867,104; July 12.
Scherbius, Arthur, Berlin, Germany, assignor to General Electric Company. Thermostatic switch. 1,867,384; July 12.
Schirmacher, Karl, Frankfort-on-the-Main-Hochst, and H. Schlichenmaier, Kelkheim in Taunus, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New process for preparing p-nitroso-amine compounds of the aromatic series and the compounds obtainable thereby. 1,867,105; July 12.
Schlenker, Charles E., Cleveland, Ohio, assignor to Western Reserve Air Motors Corporation. Mechanical movement. 1,867,385; July 12.
Schlenker, Vesper A., Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,866,603; July 12.
Schliebenmaier, Hans. (See Schirmacher, Karl, and H. Schlichenmaier, assignors.)
Schlipf, Albert F., assignor to The DeVilbiss Company, Toledo, Ohio. Atomizer. 1,866,909; July 12.
Schmelkes, Franz C. (See Baker, J. C., and Schmelkes.)
Schmelzer, Albert. (See Ballauf, F., and Schmelzer.)
Schmelzer, Albert, F. Ballauf, and H. Hefner, Elberfeld, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y. Hydroxy-benzocarbazole-carboxylic acids. 1,867,106; July 12.
Schmidt, Hugo F., and L. Jung, Milwaukee, Wis., assignor to Gugler Lithographic Company. Offset proof press. 1,866,910; July 12.
Schmidt, jr., Johann Peter, Remscheid, Germany. Corner bracket. 1,867,107; July 12.
Schmieding, Warren H. F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,866,823; July 12.
Schmitthenner, Carlos, Heidenheim-on-the-Brenz, Germany, assignor to American Voith Contact Company, Incorporated, New York, N. Y. Sealing device. 1,866,580; July 12.
Schoffman, J. R., et al. (See Pitcher, Elmer, assignor.)
Scott, Harry E., Cleveland Heights, assignor to The Thew Shovel Company, Lorain, Ohio. Turntable and truck apparatus. 1,867,386; July 12.
Schroeder, Bernard A., Wilmette, Ill. U-groove traction elevator. 1,866,911; July 12.
Schroeder, Walter, Davenport, Iowa. Fish line bobber. 1,866,864; July 12.
Schroeter, Fritz, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Telegraphone. 1,867,179; July 12.
Schutte, Harry S., Pittsburgh, Pa. Treating ferrous sheets and plates. 1,867,108; July 12.
Schutte and Koerting Company. (See Teller, Martin P., assignor.)
Schwab, Peter W., Peoria, Ill. Drill hitch mechanism. 1,866,912; July 12.
Schwalz, Adolf, Farm Colony, Staten Island, N. Y. Cementitious composition and making same. 1,867,180; July 12.
Schwartzman, Harry, Jersey City, N. J. Attaching device. 1,867,330; July 12.
Schweitzer, Edmund O. (See Herz, Alfred, assignor.)
Scott, Irving G., and M. C. Fox, New York, N. Y. Flower stand. Des. 87,361; July 12.
Scott, John R., et al. (See Lascelles, W. J., Peterson, Scott, and Wilson.)
Scott Paper Company. (See Wood, Ralph, assignor.)
Scottish Dyes, Limited. (See Drescher, H. A. E., Fairweather, and Thomas, assignors.)
Scovill Manufacturing Company. (See Bennett, Morris H., assignor.)
Scovill Manufacturing Company. (See Goss, John H., assignor.)
Scovill Manufacturing Company. (See Mitchell, August, assignor.)
Seaboard Airways, Inc. (See Hyland, Lawrence A., assignor.)
Sechrist, Theodore O. (See Zweibel, C. A., and Sechrist.)
Sedlmayr, Robert. (See Kränzlein, G., and Sedlmayr.)
Servitor Manufacturing Company. (See Olin, George C., assignor.)
Seifert, Max, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Shutter for photographic objectives. 1,867,109; July 12.
Sellman, Folke E., White Plains, assignor, by mesne assignments, to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,867,181; July 12.
Seymour, Claude M., Roanoke, Va. Shock eliminating device. 1,866,677; July 12.
Shapiro, Charles, New York, N. Y. Combined doll and pillow. 1,867,422; July 12.
Sheehan, Thomas C., Upper Montclair, and J. E. Drew, Jersey City, N. J., assignors to Wade & Butcher Corporation. Forging machine. 1,867,331; July 12.
Sheldon, Harry O., Minneapolis, Minn. Game apparatus. 1,866,674; July 12.
Sheldon, Roscoe V. (See Ecket, C. C., and Sheldon.)
Shell Development Company. (See Deanesly, Richard M., assignor.)
Shellabarger Grain Products Company. (See Shellabarger, William L., assignor.)
Shellabarger, William L., assignor to Shellabarger Grain Products Company, Decatur, Ill. Manufacturing soy bean flour. 1,867,541; July 12.
Shelton, Thomas R., assignor of one-half to C. A. Doyle, San Francisco, Calif. Sizing material. 1,867,234; July 12.
Sheridan, Leslie M., Copper Cliff, Ontario, Canada. Converter hood. 1,866,824; July 12.

Sherman, George, Newton, assignor to Sherman Paper Products Corporation, South Boston, Mass. Paper container. Des. 87,362; July 12.
Sherman Paper Products Corporation. (See Sherman, George, assignor.)
Shinn, Byron H., assignor to Shinn Devices Corporation, Washington, Pa. Refueling equipment. 1,866,942; July 12.
Shinn Devices Corporation. (See Shinn, Byron H., assignor.)
Shipley, Thomas, assignor to York Ice Machinery Corporation, York, Pa. Refrigeration. 1,866,989; July 12.
Shipley, Thomas, assignor to York Ice Machinery Corporation, York, Pa. Refrigeration. 1,866,990; July 12.
Shonle, Horace A., assignor to Eli Lilly and Company, Indianapolis, Ind. Ethanol-amine salts of theophylline and making them. 1,867,332; July 12.
Sicault, Paul, assignor to Societe Anonyme Etablissements Tissier, Paris, France. Closure for collapsible tubes. 1,867,182; July 12.
Siegmund, Humphreys O., West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrolytic device. 1,866,604; July 12.
Siemens & Halske Aktiengesellschaft. (See Feind, Walter, assignor.)
Siemens & Halske Aktiengesellschaft. (See Hoefert, R., and Wollack, assignors.)
Siemens & Halske Aktiengesellschaft. (See Rieckmann, Erich, assignor.)
Siemens & Halske Aktiengesellschaft. (See Swinne, Richard, assignor.)
Signode Steel Strapping Company. (See Leslie, John W., assignor.)
Signore, Joseph A., Los Angeles, Calif. Stove. 1,867,110; July 12.
Silfree Aktiengesellschaft (Silfree Limited). (See Roehrich, Carl, assignor.)
Silica Gel Corporation, The. (See Adair, Sidney T., assignor.)
Silica Gel Corporation, The. (See Litle, Thomas J., jr., assignor.)
Silver, John H. F., Philadelphia, Pa. Control mechanism for calculating machines. 1,866,950; July 12.
Silverman Bros. (See Silverman, Charles, assignor.)
Silverman, Charles, assignor to Silverman Bros., Providence, R. I. Collar holder. Des. 87,363; July 12.
Simjian, Luther G., New Haven, Conn. Self-focusing camera. 1,866,581; July 12.
Simmons Manufacturing Company. (See Lemmerman, Howard E., assignor.)
Simmons, Richard P., New York, N. Y. Well pumping apparatus. Re18,527; July 12.
Simmons, Richard P., New York, N. Y. Percussive well drilling apparatus. 1,866,943; July 12.
Simons, Paul, Weissig-Buhlau, near Dresden, Germany. Insulating tape. 1,867,183; July 12.
Simplex Engineering Company. (See Sylvester, Julius, assignor.)
Simpson, Lancelot M., Thorner, near Leeds, England, assignor to Associated Telephone and Telegraph Company, Chicago, Ill. Electrical relay arrangement. 1,866,678; July 12.
Simsinovici, Martin, Paris, France. Shield for batteries and their parts. 1,867,423; July 12.
Singer Manufacturing Company, The. (See Allen, Edward B., assignor.)
Skenandoa Rayon Corporation. (See Volk, Walter C., assignor.)
Skinner Irrigation Company, The. (See Coles, W. H., and Nelson, assignors.)
Skinner, William E. (See Day, H. G., and Skinner.)
Sky Specialties Corporation. (See Stover, Frank B., assignor.)
Slade, Harold E., Glen Ridge, and J. Gehring, Jersey City, assignors of one-half to Beaver Manufacturing Company, Newark, N. J., one-fourth to R. Eckstein, New York, and one-fourth to M. Polis, Brooklyn, N. Y. Electric current tap. 1,867,109; July 12.
Slagle, Edgar A., Cranford, N. J., assignor to American Smelting and Refining Company, New York, N. Y. Purification of ceramic materials by sodium cyanide. 1,866,727; July 12.
Slee, Arthur L. (See Huston, J., and Slee, assignors.)
Slepian, Joseph, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Direct current supply system. 1,866,679; July 12.
Sloulin, Edna C., Seattle, Wash. Take-down all metal box trap. 1,866,776; July 12.
Smidley, Henry J., Chicago, Ill. Vacuum cleaner. 1,867,284; July 12.
Smith, Alfred H., Auburn, R. I., assignor to Fulford Mfg. Co. Cover and initial mounting. 1,867,424; July 12.
Smith, A. O., Corporation. (See Andrus, Orrin E., assignor.)
Smith, A. O. Corporation. (See Priebe, Arthur W., assignor.)
Smith, David, Hamilton, Ohio. Indicating gauge. 1,867,387; July 12.
Smith, Edward B., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telegraph exchange switchboard. 1,867,338; July 12.
Smith, Franklin S., Brooklyn, N. Y. Construction of transformer tanks and the like. 1,867,032; July 12.
Smith, Gardner M., Clayton, assignor to Kantskuf Heel Corporation, St. Louis, Mo. Apparatus for covering heels. 1,866,728; July 12.
Smith, Harry F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,866,825; July 12.
Smith, James R. (See Campen, W. H., and Smith.)
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,866,582; July 12.
Smith, Karl F. (See Morris, Harry P., assignor.)
Smith, Sidney, Lyncroft, England, assignor to Louis Lincoln Drake, Riverside, Conn. Mill for grinding paints, enamels, inks, and other viscous substances. 1,867,184; July 12.
Snediker, Morton O., assignor to The Powers Regulator Company, Chicago, Ill. Heating and ventilating unit. Re18,528; July 12.
Snediker, Morton O., assignor to The Powers Regulator Company, Chicago, Ill. Hygrostat. 1,866,778; July 12.
Sniveley, Homer A., Covington, Ky. Clothes drier. 1,867,388; July 12.
Snyder, Howard F., assignor, by mesne assignments, to The Maytag Company, Newton, Iowa. Washing machine. 1,866,779; July 12.
Societe Anonyme Etablissements Tissier. (See Sicault, Paul, assignor.)
Societe Des Telephones Grammont. (See Lebedinsky, Myron, assignor.)
Society of Chemical Industry in Basle. (See Bonhôte, Gérald, assignor.)
Society of Chemical Industry in Basle. (See Gyr, J., and Kaiser, assignors.)
Sode, Frank E., Chicago, Ill. Vacuum floor cleaner. 1,867,477; July 12.
Sorenson, Henry, San Francisco, Calif. Holding members for reenforcement tensioning means. 1,867,185; July 12.
Soulary, Paul, Bruay-en-Artois, France. Apparatus for the pneumatic separation of materials of different densities. 1,866,951; July 12.
Soule, George C., and J. B. Woodbury, South Portland, assignors to Maine Steel Products Company, Portland, Me. Snowplow. 1,867,186; July 12.
Soule, George C., and J. B. Woodbury, South Portland, assignors to Maine Steel Products Company, Portland, Me. Snowplow. 1,867,187; July 12.
Spang, Ferdinand J., Butler, Pa. Rope knife. 1,867,033; July 12.
Spanner, Hans J., and Ulrich Doering, Berlin, Germany, assignors to Electrons, Inc. Obtaining metallic coatings. 1,866,729; July 12.
Special Clothing Company. (See Knox, Benjamin E., assignor.)
Specialty Papers Company, The. (See Wilshire, Van Hamm, assignor.)
Spence, Harry L., assignor to H. L. Spence Company, Richmond, Va. Bronze for welding. 1,867,111; July 12.
Spence, H. L., Company. (See Spence, Harry L., assignor.)
Spencer, E. A., et al. (See Oliver, Guy C., assignor.)
Spencer, Lorillard, New York, N. Y. Composite metal work. 1,866,583; July 12.
Spencer, Lorillard, New York, N. Y. Composite metal work. 1,866,584; July 12.
Spero, Charles. (See Apichell, Ralph, assignor.)
Sperr, Frederick W., jr., Pittsburgh, Pa., assignor to The Koppers Company. Carbonization process. 1,866,730; July 12.
Sperry, Elmer A., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Automatic steering mechanism for dirigible aircraft. 1,867,334; July 12.
Sperry Gyroscope Company, Inc. (See Sperry, Elmer A., assignor.)
Sperry Gyroscope Company, Inc., The. (See Tanner, Harry L., assignor.)
Spindler, Alfred G., Pittsburgh, Pa. Combined bird bath and sun dial. Des. 87,364; July 12.
Spooner, Henry W., Brooklyn, N. Y. Method and apparatus for printing security quotations. 1,866,944; July 12.
Sprague Specialties Co. (See Clark, Walter W., and McCann, assignors.)
S & S Corrugated Paper Machinery Co. (See Stern, Isaac, assignor.)
Staib, Karl, Bitterfeld, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing anhydrous aluminum chloride. 1,866,781; July 12.
Stallard, Calvin B. (See Greear, Everett B., assignor.)
Standard Automatic Candy Corporation. (See Pelzer, Harold H., assignor.)
Standard Oil Company. (See Ovitz, Frank K., assignor.)
Standard-Trump Bros. Machine Company. (See Housman, Harold E., assignor.)
Stansbury, Carroll. (See Le Van, J. D., and Stansbury.)
Starkey, Roy U., Columbus, Ohio. Clock face. Des. 87,365; July 12.
Star Sprinkler Corporation. (See Griffith, William B., assignor.)
Stationers Loose Leaf Company. (See Lotter, Adolph G., assignor.)

Staud, Cyril J. (See Gray, H. L., and Staud.)
Staud, Cyril J. (See Webber, C. S., and Staud.)
Staud, Cyril J., and J. T. Fuess, assignors to Eastman Kodak Company, Rochester, N. Y. Lubricant containing cellulose acetate. 1,866,732; July 12.
Stead Rail Anchor Company, Limited. (See McConkey, T. C., and Picard, assignors.)
Steele, John G., Latrobe, Pa. Wire twisting machine. 1,866,952; July 12.
Steiner, Amos P., and H. E. Balsiger, assignor to Landis Tool Company, Waynesboro, Pa. Hydraulic back rest for grinding machines. 1,867,112; July 12.
Steiner Sales Company. (See Post, Frank B., assignor.)
Stelzner, Hermann, assignor to Firm Dräger werk, Heinr. & Bernh. Dräger, Lubeck, Germany. Nonreturn valve for breathing appliances. 1,867,478; July 12.
Stenger, Willebald C., Chicago, Ill. Sound delivery construction. 1,866,913; July 12.
Stephens, Susan, Louisville, Ky. Bed. 1,866,953; July 12.
Sterling Pin Company, The. (See Peck, Irving H., assignor.)
Stern, Isaac, assignor to S & S Corrugated Paper Machinery Co., Inc., Brooklyn, N. Y. Machine for making liners for baskets and the like. 1,867,286; July 12.
Stettbacher, Alfred, Zurich, Switzerland. Plastic explosive mixture of high shattering power. 1,867,283; July 12.
Stettbacher, Alfred, Schwamendingen, near Zurich, Switzerland. Plastic explosive mixture. 1,867,285; July 12.
Stettbacher, Alfred, Zurich, Switzerland. Gelatinated explosive of great energy and constant detonation speed. 1,867,287; July 12.
Stevens, Frederick A., Providence, R. I. Lens strap. Des. 87,366; July 12.
Stevens, Frederick A., Providence, R. I. Spectacle temple. Des. 87,367; July 12.
Stevens, Frederick A., Providence, R. I. Lens strap. Des. 87,368; July 12.
Stevens, Frederick A., Providence, R. I. Lens strap. Des. 87,369; July 12.
Stevens, George H., Newark, N. J. Vulcanizing rubber. 1,867,034; July 12.
Stewart, Clarence B., Port Dover, Ontario, Canada. Automatic feeder for corn huskers. 1,866,605; July 12.
Stocker, Ernst, Basel, Switzerland, assignor to Munitex Corporation, Paterson, N. J. Process for making effect threads heat and storage proof. 1,867,035; July 12.
Stoeckly, Johann Joseph, Teltow-Seehof, and E. Witte, Berlin-Lichterfelde, Germany. Method of forming artificial silk, etc., of mat appearance. 1,867,188; July 12.
Stoetzer, Walther. (See Buchloh, H., Mieg, and Stoetzer.)
Stone, Earll R., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Combustion apparatus. 1,867,189; July 12.
Stout, Charles F., assignor to General Electric X-Ray Corporation, Chicago, Ill. Developing tank. 1,867,190; July 12.
Stout, William B., Detroit, assignor to Ford Motor Company, Highland Park, Mich. Airplane. 1,866,680; July 12.
Stover, Frank B., assignor to The Sky Specialties Corporation, Detroit, Mich. Tube connection. 1,866,914; July 12.
Strandt, Gustav E., assignor to Cherry-Burrell Corporation, Milwaukee, Wis. Machine for applying metal caps to bottles. 1,867,113; July 12.
Strauss, Albert A., Pittsburgh, Pa., Device for foot protection. 1,867,036; July 12.
Strecker, Gerald, Darmstadt, Germany. Cross cutter. 1,867,335; July 12.
Strickland, Royce M., assignor to The Geometric Tool Company, New Haven, Conn. Convertible rotary and nonrotary self-opening die-head. 1,867,191; July 12.
Strickland, Royce M., assignor to The Geometric Tool Company, New Haven, Conn. Self opening die-head. 1,867,192; July 12.
Strothmann, Theodore, Milwaukee, Wis. Hill draining system. 1,866,826; July 12.
Stuz Kohlenstaubfeuerung Patentverwertung G. m. b. H. (See Roosen, Richard, assignor.)
Stukart, Hendrik, assignor to U. S. Slicing Machine Company, La Porte, Ind. Work support guide for slicing machines. 1,867,336; July 12.
Suellow, Alfred G., and C. Wolford, assignors to Felins Tying Machine Company, Milwaukee, Wis. Vegetable root washer. 1,867,533; July 12.
Sullivan Machinery Company. (See Holmes, Morris P., assignor.)
Sullivan Machinery Company. (See Johansen, Harry C., assignor.)
Summers, Joe N., Mission, Tex. Dipper or bucket for excavating machines. 1,867,479; July 12.
Summit Mold & Machine Company, The. (See Brundage, James W., assignor.)
Super Mold Corporation. (See Woock, Walter R. J., assignor.)
Surface Combustion Corporation. (See Branche, N. T., and Beam, assignors.)
Surface Combustion Corporation. (See Hepburn, William M., assignor.)
Sutcliffe, Edwin A., Oak Park, assignor to Victor Manufacturing and Gasket Company, Chicago, Ill. Photography. 1,866,866; July 12.
Svetcoff, George J., Meadville, Pa. Fixture strap. 1,866,694; July 12.
Swartzbaugh Manufacturing Company, The. (See Barnes, W. A., and Wilkinson, assignors.)
Swayze, Paul D., Kansas City, Mo. Suspenders. 1,866,780; July 12.
Swetzel, Amanda D., Philadelphia, Pa. Combination double throw and mattress cover. 1,867,425; July 12.
Swink, Rufus C., Berkeley, Calif. Thermographic printing device. 1,866,867; July 12.
Swinne, Richard, Berlin-Steglitz, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Kerr cell. 1,867,193; July 12.
Sylvester, Julius, Washington, Pa., assignor to Simplex Engineering Company. Feeder for glass leers. 1,867,389; July 12.
Symington Company, The. (See Barrows, Donald S., assignor.)
Symington Company, The. (See Lake, Albert H., assignor.)
Tabulating Machine Company, The. (See Bryce, James W., assignor.)
Tabulating Machine Company. (See Heidinger, Willy, assignor.)
Tabulating Machine Company, The. (See Peirce, John R., assignor.)
Taft, Peter J., Philadelphia, Pa. Bicycle gear shift. 1,867,337; July 12.
Tait, William, West Reading, Pa. Stocking. Des. 87,370; July 12.
Tanner, Harry L., assignor to The Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Gyroscopic compass. 1,866,733; July 12.
Tarzian, Sarkes, assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Radio receiving apparatus. 1,867,037; July 12.
Tate, Alfred O., Toronto, Ontario, Canada. Apparatus for treating light and similar rays. 1,866,915; July 12.
Tatum, John J., Baltimore, Md. Freight car truck. 1,867,114; July 12.
Taylor, Clarence L., Youngstown, Ohio. Controlling means for electric conductors. 1,866,681; July 12.
Taylor, Roy J., Ashtabula, assignor of one-half to The American Gypsum Co., Port Clinton, Ohio. Metal clip for connecting plaster board panels and the like. 1,867,194; July 12.
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Lux, Heinz, assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Schroeter, Fritz, assignor.)
Teller, Martin P., assignor to Schutte and Koerting Company, Philadelphia, Pa. Heavy duty valve. 1,867,195; July 12.
Temmen, Frank X., Covington, Ky., assignor to Lawrence C. Turnock, Cleveland Heights, Ohio. Apparatus for and method of handling liquid metal. 1,866,682; July 12.
Tengler, Johann, Tagerwilen, Switzerland. Manufacture of a cleansing medium and product thereof. 1,867,117; July 12.
Tenney, Irving L., New York, N. Y. Making endless record bands. 1,866,585; July 12.
Terrill, George R., McAlester, Okla. Lock. 1,866,955; July 12.
Theilacker, Frederick E., Milwaukee, Wis., assignor, by mesne assignments, to Norman P. Harshberger, Scarsdale, N. Y. Composition shingle. Re18,515; July 12.
Thew Shovel Company, The. (See Scott, Harry E., assignor.)
Thomas, John. (See Brescher, H. A. E., Fairweather, and Thomas.)
Thomas, Wayne B., Youngstown, assignor to The Niles Steel Products Company, Niles, Ohio. Cap setting tool. 1,867,288; July 12.
Thompson, Browder J., Schenectady, N. Y., assignor to General Electric Company. Electric discharge apparatus. 1,867,390; July 12.
Thompson, John R., Co. (See Loebl, Jerrold, assignor.)
Thompson Products, Inc. (See Bissell, Richard E., assignor.)
Thompson, Robert H., assignor to L. M. Harvey, Los Angeles, Calif. Fluid operated mechanism. 1,867,115; July 12.
Thompson, Samuel A., New York, N. Y. Combined base and receptacle for toy typewriters or the like. 1,867,426; July 12.
Thomson, John M., Long Island City, N. Y., and P. Hardy, Bridgeport, Conn., assignors to Health Developing Apparatus Company, Inc., New York, N. Y. Exercising apparatus. 1,866,868; July 12.
Thomson National Press Co. Inc. (See Remington, Leonard F., assignor.)
Thorkildsen, Johan, Stavanger, Norway. Rotary valve. 1,867,235; July 12.
Thorne, Victor C. (See Brüstle, Ferdinand, assignor.)
Thornhill, Bertie R., and M. E. Rohr, Lynchburg, Va. Cover for handbags. 1,867,116; July 12.
Thurston, Albert P., London, England. Aircraft. 1,866,869; July 12.
Tietze, Ernst. (See Ossenbeck, A., and Tietze.)
Tiffany, Frank J. (See Blake, A. J., and Tiffany.)
Tifft, William C. (See Gregory, D. J., and Tifft.)
Tilden, Bert O., assignor to B. O. T. Manufacturing Company, Trenton, N. J. Connection for water closet combinations. 1,867,118; July 12.

Tillinghast, Edmund S., Carson Lake, Minn. Trolley pole. 1,867,480; July 12.
Tillyer, Edgar D., assignor to American Optical Company, Southbridge, Mass. Ophthalmic lens. 1,866,734; July 12.
Timken Roller Bearing Company, The. (See Kifer, Ward G., assignor.)
Tingley Reliance Rubber Corporation. (See Jackson, Walter C., assignor.)
Tinnes, Lee E., Sioux Rapids, Iowa. Poultry holder for weighing machines. 1,866,683; July 12.
Todt, Edward B., Elkhart, Ind. Wind musical instrument. 1,867,481; July 12.
Trainer, Maurice N., East Orange, N. J., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del. Brake shoe. 1,867,338; July 12.
Trainer, Maurice N., East Orange, N. J., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del. Brake shoe. 1,867,339; July 12.
Transit Mixers Inc. (See Willard, Carl L., assignor.)
Transparent Packaging & Printing Corporation. (See Gurwick, Irving, assignor.)
Traut, Clifford, assignor to The Higgin Manufacturing Company, Newport, Ky. Roller screen. 1,867,391; July 12.
Trautvetter, George, assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Cowl ventilator 1,866,735; July 12.
Triplett, James B., deceased, Whittier; W. H. Campbell, Los Angeles, and W. H. Maxwell, Beverly Hills, executors, assignors to John Grant, Los Angeles, Calif. Rotary underreamer. 1,866,736; July 12.
Tropic-Aire, Incorporated. (See Fink, Henry W., assignor.)
Tschunkur, Eduard, Cologne-Mulheim, F. Ballauf, Elberfeld, and E. Herdieckerhoff, Opladen, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Phenyl indol-sulphonic acids. 1,866,956; July 12.
Turnock, Lawrence C. (See Temmen, Frank X., assignor.)
Ullrich, Georg, Magdeburg, assignor to Fried Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Charging device of the hopper type. 1,866,781; July 12.
Ullrich, Julius M., Riverside, assignor to Palmer Bros. Engines, Inc., Cos Cob, Conn. Reversing mechanism for power boats. 1,867,427; July 12.
Union Switch & Signal Company, The. (See Wyant, Leroy, assignor.)
United-Carr Fastener Corporation. (See Holmes, George A., assignor.)
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United Metal Hose Co. Inc. (See White, Jonathan N., assignor.)
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U. S. Slicing Machine Company. (See Rienks, William, assignor.)
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Upham, Burt F., Boston, Mass., assignor to Miller Print-Machinery Company, Pittsburgh, Pa. Sheet separating device. 1,867,038; July 12.
Uroukoff, Steve, Harvey, Ill. Apparatus for cleaning pipes. 1,866,870; July 12.
V. D. Limited. (See Vigneron, Jean B. J. A., assignor.)
Van Antwerp, Harold O. (See Albert, Walter P., assignor.)
Van Coil Company, The. (See Field, Lloyd M., assignor.)
Van der Leun, Cornelis, Zeist, Netherlands. Locking device. 1,866,684; July 12.
Vanick, James S. (See Merica, P. D., and Vanick.)
Van Norden, Rudolph W., San Francisco, Calif. Multiple arch dam. 1,867,119; July 12.
Vann Sara, H., Birmingham, Ala. Doll. Des. 87,371; July 12.
Van Rijswijk, Willem, assignor to Brown Boveri & Cie., Baden, Switzerland. Gas sealed gland. 1,867,236; July 12.
Vendi Cater, Inc. (See McCormick, John H., Allen, and Bender, assignors.)
Ventresca, Ercole, Houston, Tex. Inside casing cutter. 1,867,269; July 12.
Vereinigte Eisenbahn-Signalwerke G. m. b. H. (See Wenzel, Karl E., assignor.)
Vereinigte Stahlwerke Aktiengesellschaft. (See Wenzel, Karl E., assignor.)
Victor Chemical Works. (See Weigel, Rothe, assignor.)
Victor Manufacturing and Gasket Company. (See Sutcliffe, Edwin A., assignor.)
Vigneron, Jean B. J. A., La Rochelle, France, assignor to V. D. Limited, London, England. Trawl gear. 1,867,196; July 12.
Vinson, William A., Baltimore, Md. Mechanical toy. 1,867,237; July 12.
Vitu, James E., assignor to Weil Pump Co., Chicago, Ill. Centrifugal pump. 1,867,290; July 12.
Vlchek, Frank J., assignor to Vlchek Tool Company, Cleveland, Ohio. Manufacture of swedged and tempered articles. 1,866,827; July 12.
Vlchek Tool Company, The. (See Vlchek, Frank J., assignor.)
Vogler, Max P., assignor to Walter Fred Hosiery Mills, Inc., Nashville, Tenn. Hosiery. Des. 87,372; July 12.
Vogt, Gustave L., Philadelphia, Pa. Smoke stick. 1,867,238; July 12.
Volk, Walter C., Rome, assignor to Skenandoa Rayon Corporation, Utica, N. Y. Apparatus for processing yarn. 1,867,197; July 12.
Vollmer, August, Hilden, Germany. Rolling out a tube with an internal thickening at the rear end from a tubular blank. 1,867,120; July 12.
Von Frommer, Rudolf, Budapest, Hungary. Tool post. 1,867,482; July 12.
Von Hoorn, Fred G., assignor to The Bryant Electric Company, Bridgeport, Conn. Heater circuit and control. 1,867,428; July 12.
Von Kleist, Felix B., Berlin-Siemensstadt, Germany, assignor to Westinghouse Electric & Manufacturing Company. Mercury-arc rectifier. 1,867,291; July 12.
Von Ohlsen, Louis H., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. Elastic belt. 1,867,039; July 12.
Wade & Butcher Corporation. (See Sheehan, T. C., and Drew, assignors.)
Wadsworth, William W., Tremonton, Utah. Detector for bulged end cans. 1,866,957; July 12.
Waggaman, William H., Fort Meade, and S. D. Gooch, Lake Wales, Fla., assignors to Coronet Phosphate Company, New York, N. Y. Reduction of phosphatic materials. 1,867,239; July 12.
Wailes Dove-Hermiston Corporation. (See Rogers, Lorlys R., assignor.)
Waite, Charles F., Somerville, Mass., assignor of one-half to A. W. Johnston, Bridgeport, Conn. Rotary pump. 1,867,198; July 12.
Walker, Charles, Knoxville, Tenn. Vending machine. 1,867,429; July 12.
Walker, Jacob N., Richmond, Va. Auto starter. 1,866,737; July 12.
Wallace, Jeffrey J., assignor to Gullett Gin Company, Amite, La. Cotton gin. 1,866,685; July 12.
Wallace & Tiernan Products, Inc. (See Baker, J. C., and Schmelkes, assignors.)
Waller, John A., Beverly Hills, assignor to Waller Manufacturing Corporation, Ltd., Los Angeles, Calif. Saw clamp. 1,867,042; July 12.
Waller Manufacturing Corporation, Ltd. (See Waller, John A., assignor.)
Walsh, James F., East Orange, and A. F. Caprio, Newark, N. J., assignors to Celluloid Corporation. Solvent for organic esters of cellulose. 1,867,040; July 12.
Walten, Max, Washington, D. C. Eaves-trough banger. 1,867,121; July 12.
Walter Fred Hosiery Mills, Inc. (See Vogler, Max P., assignor.)
Walters, Rollo F., Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass. Upholsterer's tool. 1,867,041; July 12.
Wardwell, Frank Wellington, assignor to The Wardwell Manufacturing Company, Cleveland, Ohio. Saw making machine. 1,867,240; July 12.
Wardwell Manufacturing Company, The. (See Wardwell, Frank W., assignor.)
Waring, Alfred H. (See Hughes, G. E., Waring, and Braham.)
Warner, Arthur P., Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. Friction device. 1,866,586; July 12.
Warner Electric Brake Corporation. (See Warner, Arthur P., assignor.)
Warner, Lester C., Plainfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Time-of-day announcing system. 1,866,606; July 12.
Warren, Guy S., Evanston, Ill. Film inspection device. 1,866,587; July 12.
Warren, Guy S., Evanston, Ill. Attachment for motion picture cameras. 1,866,588; July 12.
Washburn Company, The. (See Green, Irving A., assignor.)
Watairway Manufacturing Corporation, The. (See Guidetti, F., and Bontempi, assignors.)
Waterbury Tool Company, The. (See Durner, Loren, assignor.)
Waters-Genter Company. (See Ireland, Murray, assignor.)
Watling, Thomas W. B., Chicago, Ill. Weight recording machine. 1,866,871; July 12.
Watts, Arthur S., Columbus, Ohio. Tunnel kiln and draft control for the same. 1,867,122; July 12.
Wayne Company. (See Jauch, Robert J., assignor.)
Wearne, Richard D., Gary, Ind. Selective lubricant distributor. 1,867,483; July 12.
Weatherhead, Albert J., jr., Cleveland, Ohio. Controlling device. 1,867,292; July 12.
Weaver, Harry J. (See Lewis, W., and Weaver.)
Webber, Charles S. and Cyril J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Esterification of cellulose. 1,866,686; July 12.
Webber, Donald E., assignor to Miller Combination Bailer and Pump Company, Sapulpa, Okla. Combination sand pump and bailer. 1,866,828; July 12.
Weber, Helen M., Stevens Point, Wis. Artificial bait or similar article. Des. 87,373; July 12.
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Staud, Cyril J. (See Gray, H. L., and Staud.)
Staud, Cyril J. (See Webber, C. S., and Staud.)
Staud, Cyril J., and J. T. Fuess, assignors to Eastman Kodak Company, Rochester, N. Y. Lubricant containing cellulose acetate. 1,866,732; July 12.
Stead Rail Anchor Company, Limited. (See McConkey, T. C., and Picard, assignors.)
Steele, John G., Latrobe, Pa. Wire twisting machine. 1,866,962; July 12.
Steiner, Amos P., and H. E. Balsiger, assignor to Landis Tool Company, Waynesboro, Pa. Hydraulic back rest for grinding machines. 1,867,112; July 12.
Steiner Sales Company. (See Post, Frank B., assignor.)
Stelzner, Hermann, assignor to Firm Drägerwerk, Heinr. & Bernh. Dräger, Lubeck, Germany. Nonreturn valve for breathing appliances. 1,867,478; July 12.
Stenger, Willebald C., Chicago, Ill. Sound delivery construction. 1,866,913; July 12.
Stephens, Susan, Louisville, Ky. Bed. 1,866,953; July 12.
Sterling Pin Company, The. (See Peck, Irving H., assignor.)
Stern, Isaac, assignor to S & S Corrugated Paper Machinery Co., Inc., Brooklyn, N. Y. Machine for making liners for baskets and the like. 1,867,286; July 12.
Stettbacher, Alfred, Zurich, Switzerland. Plastic explosive mixture of high shattering power. 1,867,283; July 12.
Stettbacher, Alfred, Schwamendingen, near Zurich, Switzerland. Plastic explosive mixture. 1,867,285; July 12.
Stettbacher, Alfred, Zurich, Switzerland. Gelatinated explosive of great energy and constant detonation speed. 1,867,287; July 12.
Stevens, Frederick A., Providence, R. I. Lens strap. Des. 87,366; July 12.
Stevens, Frederick A., Providence, R. I. Spectacle temple. Des. 87,367; July 12.
Stevens, Frederick A., Providence, R. I. Lens strap. Des. 87,368; July 12.
Stevens, Frederick A., Providence, R. I. Lens strap. Des. 87,369; July 12.
Stevens, George H., Newark, N. J. Vulcanizing rubber. 1,867,034; July 12.
Stewart, Clarence B., Port Dover, Ontario, Canada. Automatic feeder for corn huskers. 1,866,605; July 12.
Stocker, Ernst, Basel, Switzerland, assignor to Munitex Corporation, Paterson, N. J. Process for making effect threads heat and storage proof. 1,867,035; July 12.
Stoeckly, Johann Joseph, Teltow-Seehof, and E. Witte, Berlin-Lichterfelde, Germany. Method of forming artificial silk, etc., of mat appearance. 1,867,188; July 12.
Stoetzer, Walther. (See Buchloh, H., Mieg, and Stoetzer.)
Stone, Earll R., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Combustion apparatus. 1,867,189; July 12.
Stout, Charles F., assignor to General Electric X-Ray Corporation, Chicago, Ill. Developing tank. 1,867,190; July 12.
Stout, William B., Detroit, assignor to Ford Motor Company, Highland Park, Mich. Airplane. 1,866,680; July 12.
Stover, Frank B., assignor to The Sky Specialties Corporation, Detroit, Mich. Tube connection. 1,866,914; July 12.
Strandt, Gustav E., assignor to Cherry-Burrell Corporation, Milwaukee, Wis. Machine for applying metal caps to bottles. 1,867,113; July 12.
Strauss, Albert A., Pittsburgh, Pa. Device for foot protection. 1,867,036; July 12.
Strecker, Gerald, Darmstadt, Germany. Cross cutter. 1,867,335; July 12.
Strickland, Royce M., assignor to The Geometric Tool Company, New Haven, Conn. Convertible rotary and nonrotary self-opening die-head. 1,867,191; July 12.
Strickland, Royce M., assignor to The Geometric Tool Company, New Haven, Conn. Self opening die-head. 1,867,192; July 12.
Strothmann, Theodore, Milwaukee, Wis. Hill draining system. 1,866,826; July 12.
Stur Kohlenstaubfeuerung Patentverwertung G. m. b. H. (See Roosen, Richard, assignor.)
Stukart, Hendrik, assignor to U. S. Slicing Machine Company, La Porte, Ind. Work support guide for slicing machines. 1,867,336; July 12.
Suelflow, Alfred G., and C. Wolford, assignors to Felins Tying Machine Company, Milwaukee, Wis. Vegetable root washer. 1,867,533; July 12.
Sullivan Machinery Company. (See Holmes, Morris P., assignor.)
Sullivan Machinery Company. (See Johansen, Harry C., assignor.)
Summers, Joe N., Mission, Tex. Dipper or bucket for excavating machines. 1,867,479; July 12.
Summit Mold & Machine Company, The. (See Brundage, James W., assignor.)
Super Mold Corporation. (See Woock, Walter R. J., assignor.)
Surface Combustion Corporation. (See Branche, N. T., and Beam, assignors.)
Surface Combustion Corporation. (See Hepburn, William M., assignor.)
Sutcliffe, Edwin A., Oak Park, assignor to Victor Manufacturing and Gasket Company, Chicago, Ill. Photography. 1,866,866; July 12.
Svetcoff, George J., Meadville, Pa. Fixture strap. 1,866,694; July 12.
Swartzbaugh Manufacturing Company, The. (See Barnes, W. A., and Wilkinson, assignors.)
Swayze, Paul D., Kansas City, Mo. Suspenders. 1,866,780; July 12.
Swetzel, Amanda D., Philadelphia, Pa. Combination double throw and mattress cover. 1,867,425; July 12.
Swink, Rufus C., Berkeley, Calif. Thermographic printing device. 1,866,867; July 12.
Swinne, Richard, Berlin-Steglitz, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Kerr cell. 1,867,193; July 12.
Sylvester, Julius, Washington, Pa., assignor to Simplex Engineering Company. Feeder for glass leers. 1,867,389; July 12.
Symington Company, The. (See Barrows, Donald S., assignor.)
Symington Company, The. (See Lake, Albert H., assignor.)
Tabulating Machine Company, The. (See Bryce, James W., assignor.)
Tabulating Machine Company. (See Heidinger, Willy, assignor.)
Tabulating Machine Company, The. (See Peirce, John R., assignor.)
Taft, Peter J., Philadelphia, Pa. Bicycle gear shift. 1,867,337; July 12.
Talt, William, West Reading, Pa. Stocking. Des. 87,370; July 12.
Tanner, Harry L., assignor to The Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Gyroscopic compass. 1,866,733; July 12.
Tarzian, Sarkes, assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Radio receiving apparatus. 1,867,037; July 12.
Tate, Alfred O., Toronto, Ontario, Canada. Apparatus for treating light and similar rays. 1,866,915; July 12.
Tatum, John J., Baltimore, Md. Freight car truck. 1,867,114; July 12.
Taylor, Clarence L., Youngstown, Ohio. Controlling means for electric conductors. 1,866,681; July 12.
Taylor, Roy J., Ashtabula, assignor of one-half to The American Gypsum Co., Port Clinton, Ohio. Metal clip for connecting plaster board panels and the like. 1,867,194; July 12.
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Lux, Heinz, assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Schroeter, Fritz, assignor.)
Teller, Martin P., assignor to Schutte and Koerting Company, Philadelphia, Pa. Heavy duty valve. 1,867,195; July 12.
Temmen, Frank X., Covington, Ky., assignor to Lawrence C. Turnock, Cleveland Heights, Ohio. Apparatus for and method of handling liquid metal. 1,866,682; July 12.
Tengler, Johann, Tagerwilen, Switzerland. Manufacture of a cleansing medium and product thereof. 1,867,117; July 12.
Tenney, Irving L., New York, N. Y. Making endless record bands. 1,866,585; July 12.
Terrill, George R., McAlester, Okla. Lock. 1,866,955; July 12.
Theilacker, Frederick E., Milwaukee, Wis., assignor, by mesne assignments, to Norman P. Harshberger, Scarsdale, N. Y. Composition shingle. Re18,515; July 12.
Thew Shovel Company, The. (See Scott, Harry E., assignor.)
Thomas, John. (See Brescher, H. A. E., Fairweather, and Thomas.)
Thomas, Wayne B., Youngstown, assignor to The Niles Steel Products Company, Niles, Ohio. Cap setting tool. 1,867,288; July 12.
Thompson, Browder J., Schenectady, N. Y., assignor to General Electric Company. Electric discharge apparatus. 1,867,390; July 12.
Thompson, John R., Co. (See Loebl, Jerrold, assignor.)
Thompson Products, Inc. (See Bissell, Richard E., assignor.)
Thompson, Robert H., assignor to L. M. Harvey, Los Angeles, Calif. Fluid operated mechanism. 1,867,115; July 12.
Thompson, Samuel A., New York, N. Y. Combined base and receptacle for toy typewriters or the like. 1,867,426; July 12.
Thomson, John M., Long Island City, N. Y., and P. Hardy, Bridgeport, Conn., assignors to Health Developing Apparatus Company, Inc., New York, N. Y. Exercising apparatus. 1,866,868; July 12.
Thomson National Press Co. Inc. (See Remington, Leonard F., assignor.)
Thorkildsen, Johan, Stavanger, Norway. Rotary valve. 1,867,235; July 12.
Thorne, Victor C. (See Brüstle, Ferdinand, assignor.)
Thornhill, Bertie R., and M. E. Rohr, Lynchburg, Va. Cover for handbags. 1,867,116; July 12.
Thurston, Albert P., London, England. Aircraft. 1,866,869; July 12.
Tietze, Ernst. (See Ossenbeck, A., and Tietze.)
Tiffany, Frank J. (See Blake, A. J., and Tiffany.)
Tifft, William C. (See Gregory, D. J., and Tifft.)
Tilden, Bert O., assignor to B. O. T. Manufacturing Company, Trenton, N. J. Connection for water closet combinations. 1,867,118; July 12.

Tillinghast, Edmund S., Carson Lake, Minn. Trolley pole. 1,867,480; July 12.
Tillyer, Edgar D., assignor to American Optical Company, Southbridge, Mass. Ophthalmic lens. 1,866,734; July 12.
Timken Roller Bearing Company, The. (See Kifer, Ward G., assignor.)
Tingley Reliance Rubber Corporation. (See Jackson, Walter C., assignor.)
Tinnes, Lee E., Sioux Rapids, Iowa. Poultry holder for weighing machines. 1,866,683; July 12.
Todt, Edward B., Elkhart, Ind. Wind musical instrument. 1,867,481; July 12.
Trainer, Maurice N., East Orange, N. J., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del. Brake shoe. 1,867,338; July 12.
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Transit Mixers Inc. (See Willard, Carl L., assignor.)
Transparent Packaging & Printing Corporation. (See Gurwick, Irving, assignor.)
Traut, Clifford, assignor to The Higgin Manufacturing Company, Newport, Ky. Roller screen. 1,867,391; July 12.
Trautvetter, George, assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Cowl ventilator 1,866,735; July 12.
Triplett, James B., deceased, Whittier; W. H. Campbell, Los Angeles, and W. H. Maxwell, Beverly Hills, executors, assignors to John Grant, Los Angeles, Calif. Rotary underreamer. 1,866,736; July 12.
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Weaver, Harry J. (See Lewis, W., and Weaver.)
Webber, Charles S. and Cyril J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Esterification of cellulose. 1,866,686; July 12.
Webber, Donald E., assignor to Miller Combination Bailer and Pump Company, Sapulpa, Okla. Combination sand pump and bailer. 1,866,828; July 12.
Weber, Helen M., Stevens Point, Wis. Artificial bait or similar article. Des. 87,373; July 12.
Weber, Helen M., Stevens Point, Wis. Artificial bait or similar article. Des. 87,374; July 12.

Wedmore, Edmund B., and W. B. Whitney, assignors to The British Electrical and Allied Industries Research Association, London, England. Electric circuit breaker. 1,867,293; July 12.

Weigel, Rothe, Nashville, Tenn., assignor to Victor Chemical Works. Production of phosphorus. 1,867,241; July 12.

Weihe, Adolf, assignor to Deutsche Celluloid-Fabrik, Eilenburg in Sachsen, Germany. Making mixed cellulose esters. 1,867,123; July 12.

Weiller, Paul G., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Radio receiving system. 1,866,916; July 12.

Well Pump Co. (See Vitu, James E., assignor.)

Weinhart, Howard W., Elizabeth, N. J., and H. Hall, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrooptical apparatus. 1,867,340; July 12.

Weinmann, Curt. (See Müller, G., and Weinmann.)

Welch, Walter H., Bristol, England. Testing apparatus for motor vehicles. 1,866,738; July 12.

Welk, Nelson S. (See Connor, R., Welk, and Zenner.)

Welling, Orville F., Oakland, Calif. Gasoline vaporizer. 1,866,829; July 12.

Wells, John W. (See Hacker, M. L., Wells, Hacker, and Barner.)

Wenzel, Karl E., Hamborn, assignor, by mesne assignments, to the Firm Vereinigte Eisenbahn-Signalwerke G. m. b. H., Berlin, Siemensstadt, Germany. Safety constrivances on permanent railway tracks. 1,867,124; July 12.

Wenzel, Karl E., Hamborn, assignor, by mesne assignments, to the Firm: Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Rail brake. 1,867,534; July 12.

Werdehoff, Albert B., Orion, assignor to Chrysler Corporation, Detroit, Mich. Chassis frame construction. 1,867,341; July 12.

West Boylston Manufacturing Company. (See Farrell, J. E., and Gaskill, assignors.)

Western Electric Company. (See Rendall, A. R. A., and Sandeman, assignors.)

Western Electric Company. (See Warner, Lester C., assignor.)

Western Reserve Air Motors Corporation. (See Schlenker, Charles E., assignor.)

Westinghouse Electric & Manufacturing Company. (See Ross, Oscar A., assignor.)

Westinghouse Electric & Manufacturing Company. (See Slepian, Joseph, assignor.)

Westinghouse Electric & Manufacturing Company. (See Stone, Earll R., assignor.)

Westinghouse Electric & Manufacturing Company. (See von Kleist, Felix B., assignor.)

Westinghouse Lamp Company. (See Callahan, George F., assignor.)

Weston Electrical Instrument Corporation. (See Huber, Paul P., assignor.)

Westover, Clark, Wauconda, Wash. Tree prop. 1,867,485; July 12.

Wheeler, Harold A., Baltimore, Md., assignor to Hazeltine Corporation, Jersey City, N. J. Radio volume control. 1,866,687; July 12.

Whitacre-Greer Fireproofing Company, The. (See Whitacre, John B., assignor.)

Whitacre, John B., assignor to The Whitacre-Greer Fireproofing Company, Waynesburg, Ohio. Salt-glazing brick and other clay products. 1,867,294; July 12.

White, Jonathan N., assignor to United Metal Hose Co. Inc., New York, N. Y. Method and implement for expanding springs. 1,866,782; July 12.

White, Jonathan N., assignor to United Metal Hose Co. Inc., New York, N. Y. Ring expander. 1,866,783; July 12.

Whitehouse, John N., New York, N. Y. Fountain pen barrel or the like and making it. 1,867,242; July 12.

Whiting Corporation. (See Christie, Hugh K., assignor.)

Whiting, Walter L., Olympia, Wash. Swimming suit. Des. 87,375; July 12.

Whiting, Walter L., Olympia, Wash. Swimming suit. Des. 87,376; July 12.

Whitney, Willis B. (See Wedmore, E. B., and Whitney.)

Wieg, Bruno, Hamburg, Germany. Device for removing finger rings. 1,867,342; July 12.

Wieners, Franz, Opladen, and W. Bauer, Leverkusen-Wiesdorf, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Water soluble sulphuric acid ester of anthraquinonyl-diphenyl-triazine-carboxylic acid amide. 1,867,125; July 12.

Wigle, Wilson B. (See Young, J., and Wigle.)

Wildhaber, Ernest, Brooklyn, N. Y. Projection screen. 1,867,199; July 12.

Wiley, Margaret C., Washington, D. C. Separable fastener. 1,867,126; July 12.

Wilkinson, Merle O. (See Barnes, W. A., and Wilkinson.

Willard, Carl L., Lynwood, Calif., assignor to Transit Mixers Inc. Mixing or agitating device. 1,866,688; July 12.

Williams, Charles L., assignor to The Wilton Wonder Oil Company, Ltd., Alhambra, Calif. One hand oil rifle. 1,866,784; July 12.

Williamson, Newton S., Borger, Tex. Engine draining apparatus. 1,866,739; July 12.

Willis, Ferguson E., Detroit, Mich. Brake. 1,867,392; July 12.

Wilmart, Pierre, Brussels, Belgium. Stabilizer for motor vehicles. 1,866,958; July 12.

Wilshire, Van Hamm, assignor to The Specialty Papers Company, Dayton, Ohio. Method and apparatus for waxing paper. 1,866,689; July 12.

Wilson, Harry W. San Francisco, Calif. Paper shreding and crimping machine. 1,866,690; July 12.

Wilson, Kenneth M., et al. (See Lascelles, W. J., Peterson, Scott, and Wilson.)

Wilton Wonder Oil Company Ltd. (See Williams, Charles L., assignor.)

Wine, William E., Toledo, Ohio. Railway car. 1,866,740; July 12.

Wine, William E., Toledo, Ohio. Railway car. 1,866,741; July 12.

Winkler, Carl, Bern, Switzerland. Matrix molding press. 1,866,830; July 12.

Wired Radio, Inc. (See Weiller, Paul G., assignor.)

Wirschitz, Eduard, Munich, Germany. Clamping means. 1,867,043; July 12.

Wirz, Albert, Basel, Switzerland. Electromagnetic pendulum driving device for clocks. 1,867,295; July 12.

Wisner, Josiah B., Camden, N. J. Lockable joint for hose sections. 1,867,430; July 12.

Witte, Erhard. (See Stockly, J. J., and Witte.)

Wittek, Joseph, Chicago, Ill. Automatic feed mechanism for punch presses and the like. 1,867,343; July 12.

Woelfel, George, Yerkes, Pa. Machine for soaping heavy woolen fabrics. 1,867,127; July 12.

Wolfe, Charles S. (See Wolfe, John H. and C. S.)

Wolfe, John H. and C. S., Punxsutawney, Pa. Flexible coupling. 1,867,484; July 12.

Wolff, Hugo. (See Nawiasky, P., and Wolff.)

Wolff, Irving, New York, R. P. May, Bronx, and A. Ringel, Brooklyn, N. Y., assignors to Radio Corporation of America. Auditorium loudspeaker. 1,866,831; July 12.

Wolford, Charles. (See Snellow, A. G., and Wolford.)

Wollack, Kurt. (See Hoefert, R., and Wollack.)

Woock, Walter R. J., assignor to Super Mold Corporation, Lodi, Calif. Heating element. 1,866,785; July 12.

Woock, Walter R. J., assignor to Super Mold Corporation, Ladi, Calif. Tire vulcanizing mold. 1,866,832; July 12.

Wood, Joseph H., Aurora Hills, Va. Cushion support. 1,867,431; July 12.

Wood, Ralph, Sharon Hill, Pa., assignor to Scott Paper Company. Slice and head box for paper making machines. 1,866,607; July 12.

Woodbury, John B. (See Soule, George C., assignor.)

Woodruff, Leonidas D., Chicago, Ill. Air line coupling. 1,867,296; July 12.

Woods, William J., Schenectady, N. Y., assignor to General Electric Company. Quick release hydraulic operator. 1,867,393; July 12.

Woodworking Machinery Company. (See McCarter, Louis M., assignor.)

Worden, Edward C., 1st, Milburn, N. J., assignor to Hanson & Orth, New York, N. Y. Manufacture of cellulose material from hemp fibers. 1,866,917; July 12.

Worley & Co. (See Worley, J., jr., and Burke, assignors.)

Worley, John, jr., Pasadena, and R. J. Burke, Los Angeles, assignors to Worley & Co., Pico, Calif. Ironing board clip. 1,866,691; July 12.

Wright, Carl J., West New Brighton, assignor to Combustion Utilities Corporation, New York, N. Y. Carbonization of bituminous fuel. 1,867,344; July 12.

Wright, William M., Wheeling, W. Va. Tip trade card. 1,867,432; July 12.

Wunderlich, William E., assignor to The Moore Company, Muncie, Ind. Spring forming machine. 1,867,128; July 12.

Wurzschmitt, Bernhard, Uerdingen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of chromium oxide. 1,866,608; July 12.

Wyant, Leroy, Chicago, Ill., assignor to The Union Switch & Signal Company, Swissvale, Pa. Slow release lock for railway switches. 1,867,044; July 12.

Wyse, Robert T., Mount Washington, Pa. Incinerator. 1,866,959; July 12.

York Ice Machinery Corporation. (See Light, Albert T., assignor.)

York Ice Machinery Corporation. (See Shipley, Thomas, assignor.)

York Ice Machinery Corporation. (See Zieber, William E., assignor.)

Young, James H., assignor to H. H. Robertson Company, Pittsburgh, Pa. Building construction. 1,867,433; July 12.

Young, John, Los Angeles, and W. B. Wigle, assignors to J. W. MacClatchie, Compton, Calif. Blow-out preventer. 1,867,045; July 12.

Young, Stella. (See Mehner, W. R., and Young.)

Young, William J., Cleveland, Ohio. Wall construction for absorbing sound waves. 1,866,742; July 12.

Zart, Arthur, Barmen-Rittershausen, A. Hartmann, Barmen, and Franz Hoelkeskamp, Barmen-Rittershausen, Germany, assignors to American Bemberg Corporation, New York, N. Y. Artificial cellulose yarns produced by the stretch spinning process. 1,867,297; July 12.

Zart, Arthur, Barmen-Rittershausen, A. Hartmann, Barmen, and Franz Hoelkeskamp, Barmen-Rittershausen, Germany, assignors to American Bemberg Corporation, New York, N. Y. Artificial yarn, particularly artificial silk yarn. 1,867,298; July 12.

Zenner, David R. (See Connor, R., Welk, and Zenner.)

Zieber, William E., assignor to York Ice Machinery Corporation, York, Pa. Refrigeration. 1,866,991; July 12.

Zieber, William E., assignor to York Ice Machinery Corporation, York, Pa. Refrigeration. 1,866,992; July 12.

Zies, Carl W., Lakewood, assignor to The V. D. Anderson Company, Cleveland, Ohio. Steam trap. 1,867,434; July 12.

Zimmer, Jacob, Appleton, Wis. Bread slicing machine. 1,866,960; July 12.

Zinner, Daniel, South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. Brown azo dyestuffs. 1,866,786; July 12.

Zinner, Daniel, South Milwaukee, Wis., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Brown azo dyestuffs. 1,866,787; July 12.

Zinser, Hermann, assignor to Robert M. Green & Sons, Philadelphia, Pa. Hinge construction. 1,867,046; July 12.

Zwelbel, Charles A., and T. O'H. Sechrist, Louisville, Ky. Packing material retainer for journal boxes of railway cars. 1,866,602; July 12.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 12TH DAY OF JULY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abrading machine. B. W. and L. G. Freeman and P. M. Kopian. 1,866,848; July 12.
Abrasion testing machine. L. J. Lambourn. 1,866,537; July 12.
Absorption. J. A. Campbell. 1,867,136; July 12.
Absorption. J. A. Campbell. 1,867,208; July 12.
Accounting machine. J. R. Peirce. 1,867,027; July 12.
Acid ester of anthraquinononyl-diphenyl-triazine-carboxylic acid amide, Water soluble sulphuric. F. Wieners and W. Bauer. 1,867,125; July 12.
Acid, metallic benzoates and alkyl benzoates, Manufacture of benzoic. A. George. 1,866,849; July 12.
Acid, Phenol-indol-sulphonic. E. Tschunkur, F. Ballauf, and E. Herdieckerhoff. 1,866,956; July 12.
Acids, Hydroxy-benzocarbazole-carboxylic. A. Schmelzer, F. Ballauf, and H. Hefner. 1,867,106; July 12.
Acids, Manufacture of aromatic. H. A. E. Drescher, D. A. W. Fairweather, and J. Thomas. 1,866,632; July 12.
Acids, Manufacture of 1-hydroxy- or 1-alkoxy anthraquinone-3-carboxylic. S. Gassner and B. Bienert. 1,867,069; July 12.
Acids of fluorene, Ortho-hydroxy-carboxylic. F. Ballauf and A. Schmelzer. 1,867,049; July 12.
Acids, Production of aromatic carboxylic. K. H. Meyer and H. Hopff. 1,866,717; July 12.
Acoustic device. V. A. Schlenker. 1,866,603; July 12.
Adsorbents, Preparing solid. S. T. Adair. 1,867,435; July 12.
Aeronautical device. A. S. Janin. 1,866,534; July 12.
Aeroplane flight control. J. M. Hendrickson. 1,866,596; July 12.
Agricultural implement. H. Mote. 1,867,521; July 12.
Air chuck. J. C. Crowley. 1,867,253; July 12.
Air cleaner and air turbination inductor. H. D. Morris. 1,866,663; July 12.
Air compressor. R. Salisbury. 1,866,822; July 12.
Aircraft. A. P. Thurston. 1,866,869; July 12.
Air cutoff for automobile radiators. G. Kalenoff. 1,867,509; July 12.
Air line coupling. L. D. Woodruff. 1,867,296; July 12.
Airplane. W. B. Stout. 1,866,680; July 12.
Air treating apparatus. E. V. Hill. 1,866,650; July 12.
Alarm selector apparatus. L. L. E. Chauveau. 1,867,209; July 12.
Alarm system, Automatic fire and burglar. F. F. Denzler. 1,867,500; July 12.
Alkali metal phosphate, Manufacture of. C. L. Levermore. 1,866,657; July 12.
All metal box trap, Take-down. E. C. Sloulin. 1,866,776; July 12.
Alloy. R. E. Bissell. 1,866,836; July 12.
Alloy. P. D. Merica and J. S. Vanick. 1,867,018; July 12.
Aluminum chloride, Producing anhydrous. K. Staib. 1,866,731; July 12.
Amino compounds, New water soluble diazo. A. Ossenbeck and E. Tietze. 1,867,088; July 12.
Ammonium sulphate and di-ammonium phosphate, Obtaining mixtures of. C. J. Hansen. 1,866,564; July 12.
Anæsthetic inhaler. R. F. Parker. 1,866,667; July 12.
Anchor, Rail. T. C. McConkey and G. Picard. 1,866,897; July 12.
Aralkylbenzanthrones and preparing them. G. Kränzlein and R. Sedlmayr. 1,867,459; July 12.
Arc welding. A. W. Priebe. 1,867,375; July 12.
Armature support for four pole loudspeakers. W. Kunze. 1,867,160; July 12.
Arseno-benzene compound, Unsymmetrical. C. S. Palmer. 1,867,231; July 12.
Article of manufacture. W. R. Collings and D. L. Gibb. 1,867,071; July 12.
Article or garment, Knitted. T. H. Jones and R. K. Mills. 1,866,713; July 12.
Articles, Drawing hollow. E. De Ridder and H. Altwicker. 1,867,537; July 12.
Articles, Manufacture of swedged and tempered. F. J. Vichek. 1,866,827; July 12.
Atomizer. A. F. Schlipf. 1,866,909; July 12.
Attaching device. H. Schwartzman. 1,867,330; July 12.
Automobile body, Combination convertible passenger. D. F. McDonald. 1,866,898; July 12.
Automobile heater. H. W. Fink. 1,866,846; July 12.
Automobile lift. J. W. Bright. 1,867,055; July 12.
Automobiles, Variable pace setter for. F. H. Evans. 1,866,760; July 12.
Awning. W. Kroier. 1,867,082; July 12.
Azo-dyestuffs and making same. G. Bonhôte. 1,867,439; July 12.
Back rest for grinding machines, Hydraulic. A. P. Steiner and H. E. Balsiger. 1,867,112; July 12.
Bailing line clamp. W. R. Lewis and H. J. Weaver. 1,867,084; July 12.
Bait or similar article, Artificial. H. M. Weber. Des. 87,373–4; July 12.
Balancing apparatus. R. K. Lee. 1,867,413; July 12.
Bar: *See*—
Ratchet pinch bar.
Barrel carrying device. S. C. Jensen. 1,867,265; July 12.
Barrel or the like and making it, Fountain pen. J. N. Whitehouse. 1,867,242; July 12.
Base and receptacle for toy typewriters or the like, Combined. S. A. Thompson. 1,867,426; July 12.
Base for a display stand. T. A. Miller. Des. 87,351; July 12.
Batteries, Controlling the charge of storage. F. G. Beetem. Re18,516; July 12.
Bead machine. C. Eisler. 1,866,634; July 12.
Beam, Walking. J. D. McEwen. 1,867,016; July 12.
Bean vine cutter. H. H. Robertson. 1,866,948; July 12.
Bearing and cage therefor, Roller. W. G. Kifer. 1,866,936; July 12.
Bearing drawer guide, Roller. A. C. Kennedy. 1,866,853; July 12.
Bearing, Steering knuckle. C. T. Raule. 1,866,724; July 12.
Bearings, Making. W. H. Klocke. 1,867,412; July 12.
Bed. S. Stephens. 1,866,953; July 12.
Bed attachment, Hospital. I. Birman. 1,866,696; July 12.
Belt, Elastic. L. H. Von Ohlsen. 1,867,039; July 12.
Bend, Return. F. C. Fantz. 1,866,636; July 12.
Binder, Loose leaf. F. L. Impey. 1,867,456; July 12.
Binder, Loose leaf. A. G. Lotter. 1,867,164; July 12.
Bird bath and sun dial, Combined. A. G. Spindler. Des. 87,364; July 12.
Bit: *See*—
Core drill bit.
Block: *See*—
Charcoal block.
Block, bridging, and bracing, Metal fire. C. G. Ecket and R. V. Sheldon. 1,867,449; July 12.
Blotting device, R. Ernst. 1,866,400; July 12.
Blouse. M. Pittman. Des. 87,354; July 12.
Blow-out preventer. J. Young and W. B. Wigle. 1,867,045; July 12.
Blue sulphur color and making the same. G. Barnhart. 1,867,202; July 12.
Board: *See*—
Panel board. Teeter board.
Boats, Reversing mechanism for power. J. M. Ulrich. 1,867,427; July 12.
Bobbin and making the same. R. N. Corthell. 1,866,622; July 12.
Bolt support for trolley frame. W. H. Juergens. 1,867,410; July 12.
Book, Indexed. F. H. Ellison. 1,866,968; July 12.
Bootjack. W. W. Hook. 1,866,708; July 12.
Boot tree. F. R. Maier. 1,866,859; July 12.
Bottle. R. Guerlain. Des. 87,342; July 12.
Bottle filler and capper. R. T. Salsbury. 1,866,673; July 12.
Box: *See*—
Display box. Journal box.
Bracelet and connecter. W. J. Roy. 1,866,670; July 12.
Bracket: *See*—
Corner bracket. Curtain bracket.
Bracket for signs and the like. H. C. Powers. 1,866,723; July 12.
Bracket support, Lateral arm and roller. F. A. Anton. 1,866,872; July 12.
Brake: *See*—
Car brake. Magnetic brake.
Friction brake. Rail brake.
Brake. F. Detilloux. 1,866,755; July 12.
Brake. E. R. Evans. 1,866,884; July 12.
Brake. F. E. Willis. 1,867,302; July 12.
Brake beam safety support. G. A. Johnson. 1,866,710; July 12.
Brake for hoists, Load. W. H. Juergens. 1,867,409; July 12.
Brake for railway cars, Hand. B. W. Kadel. 1,867,268; July 12.
Brake for timers, Governor. M. Mallory. 1,866,896; July 12.
Brake mechanism. A. Kazenmaier. 1,867,078; July 12.
Brake mechanism for railway cars. C. R. Busch. 1,866,999; July 12.
Brake shoe. M. N. Trainer. 1,867,338–9; July 12.
Brake system. G. W. Bell. 1,866,791; July 12.
Bread slicing machine. J. Zimmer. 1,866,960; July 12.

Brick and other clay products, Salt-glazing. J. B. Whitacre. 1,867,294; July 12.
Bridge. F. Auryansen. 1,866,613; July 12.
Bronze for welding. H. L. Spence. 1,867,111; July 12.
Brooms and brushes, Manufacture of. C. and W. Barnett. 1,867,487; July 12.
Brush for electroplating and electrocleaning and anode for use therein. F. Conlin. 1,866,699; July 12.
Bucket, Trolley. S. H. Durbin. 1,867,448; July 12.
Buckle assembling machine for webbing. L. W. Joyce and J. H. Sanderson. 1,867,077; July 12.
Buckle, Sack. L. M. Crow. 1,867,490; July 12.
Building construction. J. H. Young. 1,867,433; July 12.
Bumper, Automobile. E. R. Jones. Re18,519; July 12.
Bung, Fermentation. J. B. Fischer. 1,866,763; July 12.
Burner and making the same, Gas. O. W. Anderson and E. E. Forrester. 1,867,526; July 12.
Burner feed mechanism, Oil. C. L. Rayfield. 1,866,725; July 12.
Bus clamp. A. Alsaker. 1,867,130; July 12.
Button. S. Rosenthal. Des. 87,359; July 12.
Cabinet for radioreceiving apparatus. G. H. Rounds. Des. 87,360; July 12.
Cabinet, Garbage can. C. F. Hale. 1,866,649; July 12.
Cabinet, Rotary. J. Godfrey. 1,867,145; July 12.
Cabinet, Towel. F. B. Post. Des. 87,356; July 12.
Cabinet, Vending. H. H. Pelzer. Des. 87,353; July 12.
Cable testing system, Direct current high voltage. H. S. Hubbard. 1,867,407; July 12.
Cage. F. S. Carver. 1,867,137; July 12.
Cake dropping machine, Cup. E. A. Adams. 1,866,589; July 12.
Calcium nitrate and ammonium nitrate, Producing a mixture of. M. Larsson. 1,866,571; July 12.
Calculating machine. C. Gardner. 1,867,002; July 12.
Calendar. R. Kirsch. 1,867,079; July 12.
Call distributing system. J. F. Dahl and W. W. Carpenter. 1,866,593; July 12.
Camera film and spool loading device. J. P. Barr. 1,867,488; July 12.
Camera, Self-focusing. L. G. Simjian. 1,866,581; July 12.
Cameras, Attachment for motion picture. G. S. Warren. 1,866,588; July 12.
Can top punching implement. B. Geer. 1,866,642; July 12.
Cans, Attachment for oil. E. H. Morrow. Re18,526; July 12.
Candle and method relating thereto. H. H. Root. 1,867,420; July 12.
Cap for bottles. C. W. Crookshank. 1,866,841; July 12.
Cap for jars and the like. A. Mitchell. 1,867,167; July 12.
Car brake. A. E. Guertin, sr., and A. E. Guertin, jr. 1,866,767; July 12.
Car construction, Motor. A. P. and W. A. Brush. 1,867,207; July 12.
Car, Railway. W. E. Wine. 1,866,740–1; July 12.
Carbon monoxide from exhaust gases, Removing. H. A. Neville. 1,867,325; July 12.
Carbonization process. F. W. Sperr, jr. 1,866,730; July 12.
Carburetor. W. C. Carter. 1,866,543; July 12.
Carburetor, Airplane. F. C. Mock. Re18,520; July 12.
Card, Tip trade. W. M. Wright. 1,867,432; July 12.
Carrying case. C. S. Humphrey. 1,867,455; July 12.
Cartons, Producing lined. C. W. Hartmann. 1,867,220; July 12.
Cartridge case. A. J. Lahti. 1,867,513; July 12.
Case: *See*—
Carrying case. Cartridge case.
Case for toilet articles and the like. R. S. Blair. 1,867,347; July 12.
Casing and bladder connecter for footballs, basketballs, and the like. F. Dieterle. 1,867,443; July 12.
Casing cutter, Inside. E. Ventresca. 1,867,289; July 12.
Casing head. F. L. Pivoto. 1,867,093; July 12.
Casing head. J. J. Santiago. 1,866,726; July 12.
Casket. G. B. Markle, jr. Des. 87,349; July 12.
Casting mold. C. D. Pettis. 1,866,599; July 12.
Cellulose acetate compositions containing mixed volatile solvents. S. J. Carroll. 1,866,964; July 12.
Cellulose acetate, Making. H. Le B. Gray and C. J. Staud. 1,866,971; July 12.
Cellulose, Esterification of. J. F. Haskins. 1,866,532; July 12.
Cellulose, Esterification of. C. S. Webber and S. J. Staud. 1,866,686; July 12.
Cellulose esters and preparing them. G. Balle and K. Ost. 1,867,050; July 12.
Cellulose esters, Making mixed. A. Weihe. 1,867,123; July 12.
Cellulose material from hemp fibers, Manufacture of. E. C. Worden. 1,866,917; July 12.
Cellulosic materials, Separation of. L. E. Clement. 1,866,965; July 12.
Cement concrete, Curing. W. H. Rowan and H. K. Buckner. 1,867,421; July 12.
Cementing compositions, Acid-proof. K. Dietz and K. Frank. 1,867,444; July 12.
Cementitious composition and making same. A. Schwalz. 1,867,180; July 12.
Centering device for punch presses. C. H. Glaze and C. I. Brown. 1,866,704; July 12.
Centrifugal separator. H. W. Fawcett. 1,866,638; July 12.
Ceramic materials by sodium cyanide, Purification of. E. A. Slagle. 1,866,727; July 12.
Chain, Carrying. F. Kershaw and E. B. Kerst. 1,867,510; July 12.
Chain connecter. F. G. Heinecke. 1,866,889; July 12.
Chain, Conveyer. S. J. Benner. 1,866,993; July 12.
Chain, method, and method of welding. H. C. Brown. 1,866,837; July 12.
Chain shackle. G. Lindvall. 1,866,813; July 12.
Chair: *See*—
Road chair.
Channel. W. S. Gaines, jr. 1,867,312; July 12.
Charcoal block. G. F. Heffernan, jr. 1,866,931; July 12.
Charge forming device for internal combustion engines. S. Ishikawa. 1,867,457; July 12.
Charging device of the hopper type. G. Ullrich. 1,866,781; July 12.
Chase lockup, Three-way. J. E. Lee, F. Barney and P. J. Beatty. 1,867,363; July 12.
Chaser. E. T. Bysshe and R. R. Finn. 1,866,542; July 12.
Chassis frame construction. A. B. Werdehoff. 1,867,341; July 12.
Chromium oxide, Manufacture of. B. Wurzschmitt. 1,866,608; July 12.
Chuck. A. Johnson and R. H. Johnson. 1,867,266; July 12.
Chute for storage bins, Discharge. W. B. Mercer. 1,867,462; July 12.
Cigarette machine. D. W. Molins. 1,867,463; July 12.
Cinchona bark inhibitor, Sulphurized. G. Lutz. 1,867,414; July 12.
Circuit and control, Heater. F. G. von Hoorn. 1,867,428; July 12.
Circuit breaker, Electric. E. B. Wedmore and W. B. Whitney. 1,867,293; July 12.
Circuit breaker for motor vehicles. S. Pensrum. 1,867,278; July 12.
Circuit controlling appliance, Electric. J. Sachs. Re18,524; July 12.
Circuit for vapor electric discharge devices, Control. W. D. Cockrell. 1,867,398; July 12.
Circuit, Voice operated repeater. B. G. Bjornson. 1,866,592; July 12.
Circulating heater. J. B. Miller. Des. 87,350; July 12.
Clamp: *See*—
Bailing line clamp. Tube repairing clamp.
Saw clamp.
Clamp for derrick legs. J. D. McEwen. 1,867,371; July 12.
Clamping device. W. C. Jackson. 1,867,156; July 12.
Clamping means. E. Wirschitz. 1,867,043; July 12.
Cleaner: *See*—
Oil well cleaner. Vacuum cleaner.
Spark plug cleaner. Vacuum floor cleaner.
Cleaning device for pulverized fuel furnaces. R. Roosen. 1,867,101; July 12.
Cleaning mechanism. W. H. Campen and J. R. Smith. 1,866,877; July 12.
Cleansing medium and product thereof, Manufacture of a. J. Tengler. 1,867,117. July 12.
Cleat, Baseball. G. W. Harper. 1,867,219; July 12.
Clip: *See*—
Ironing board clip.
Clip for connecting plaster board panels and the like, Metal. R. J. Taylor. 1,867,194; July 12.
Clock, Printing pay roll. J. W. Bryce. 1,866,997; July 12.
Closet attachment, Sanitary water. F. Guidetti and G. Bontempi. 1,866,930; July 12.
Closure. J. S. Reid. 1,866,818; July 12.
Closure for collapsible tubes. P. Sicault. 1,867,182; July 12.
Closure for containers or receptacles for materials in a liquid or paste-like state. C. Aparicio y Elizalde. 1,866,635; July 12.
Clothes drier. H. A. Sniveley. 1,867,388; July 12.
Clothes drying machine, Hot or cold air home. T. Principessa and J. De Cosimo. 1,866,987; July 12.
Clutch, Hydraulic. M. B. Jackson. 1,866,891; July 12.
Clutch, Overrunning. A. S. Baldwin. 1,867,302; July 12.
Coal and the like, Apparatus for lowering. F. Pardee, jr. 1,866,720; July 12.
Coat, Lady's. M. Levitt. Des. 87,346–7; July 12.
Coat, Waterproof. B. E. Knox. 1,866,892; July 12.
Coating composition. A. B. Abbott. 1,866,743; July 12.
Coatings, Obtaining metallic. H. J. Spanner and U. Doering. 1,866,729; July 12.
Coffeepot. E. C. Sasser. 1,866,777; July 12.
Combing machine. J. W. Nasmith. 1,866,901; July 12.
Combustion apparatus. E. R. Stone. 1,867,189; July 12.
Compass, Gyroscopic. H. L. Tanner. 1,866,733; July 12.
Compound of the thiazolanthrone sulphone series and making same. H. Ritter and A. Holl. 1,867,097; July 12.
Compressor. H. Ponthieu. 1,867,470; July 12.
Concrete molding machine. L. Gelbman. 1,867,144; July 12.
Condensers, Method of and apparatus for testing. M. H. Bennett. 1,867,131; July 12.
Conducting system, Concentric. H. A. Affel. 1,866,611; July 12.
Connecter, Electric. C. M. Petersen. 1,866,985; July 12.
Connecter for wrist-watch straps, bands, bracelets, and linkages. C. H. Kestenman. 1,867,011; July 12.

Connection, Circuit tap. H. Sadacca. 1,867,381; July 12.
Connection, Driving. H. A. Gehres. 1,866,702; July 12.
Connection for water closet combinations. B. O. Tilden. 1,867,118; July 12.
Connection, Tube. F. B. Stover. 1,866,914; July 12.
Construction material. J. Adler. 1,867,535; July 12.
Container. W. E. Huenefeld. 1,867,408; July 12.
Container, Ash. O. H. Kraft. 1,867,080; July 12.
Container closure and applying the same. E. H. Berry. 1,866,920; July 12.
Container, Fire extinguisher. C. H. Meigs. 1,866,981; July 12.
Container for toilet preparations. C. T. Buechner. 1,867,494; July 12.
Container, Glass. A. G. Hamilton. Des. 87,343; July 12.
Container, Glass. C. G. Hilgenberg. 1,866,770; July 12.
Container, Loose powder. H. S. Neiman. 1,866,576; July 12.
Container, Paper. G. Sherman. Des. 87,362; July 12.
Container sealer adjusting means. J. L. Ferguson. 1,866,885; July 12.
Control device for fluid pressure actuated mechanism. N. Lombard. 1,866,858; July 12.
Control means for pneumatic ejectors. L. F. Holly. 1,866,806; July 12.
Control mechanism for calculating machines. J. H. F. Silver. 1,866,950; July 12.
Controller, Automatic. A. Rasmussen and W. S. Goodell. 1,867,376; July 12.
Controlling device. A. J. Weatherhead, jr. 1,867,292; July 12.
Controlling means for electric conductors. C. L. Taylor. 1,866,681; July 12.
Converter hood. L. M. Sheridan. 1,866,824; July 12.
Conveyer elevator, Vertical. J. O. Bailey. 1,867,245; July 12.
Conveyer, Portable. H. H. Barber. 1,866,834; July 12.
Conveyer, Trolley bucket. P. R. Genzmer. 1,867,450; July 12.
Copper hydroxide, Making. W. H. Furness. 1,867,357; July 12.
Core drill bit. G. C. Oliver. 1,867,024; July 12.
Corner bracket. J. P. Schmidt, jr. 1,867,107; July 12.
Corset. P. J. Moran. 1,867,464; July 12.
Cotton gin. J. J. Wallace. 1,866,685; July 12.
Coupler. R. J. Gray. 1,866,929; July 12.
Coupling: *See*—
Air line coupling. Flexible coupling.
Cover and initial mounting. A. H. Smith. 1,867,424; July 12.
Cover, Cylinder water jacket. M. L. Carpentier. 1,867,351; July 12.
Cover for handbags. B. R. Thornhill and M. E. Rohr. 1,867,116; July 12.
Cover, Sirup pitcher. I. Lennox. 1,867,461; July 12.
Cowl ventilator. G. Trautvetter. 1,866,735; July 12.
Crane, Hydraulic. W. Ferris. 1,866,801; July 12.
Crate, Collapsible. J. C. Miller. 1,867,277; July 12.
Crate, Shipping. P. N. Curtis. 1,867,062; July 12.
Cross cutter. G. Strecker. 1,867,335; July 12.
Crosstie for locomotives. L. L. Neebe. 1,867,467; July 12.
Crusher: *See*—
Rock crusher.
Crystallization of gums, fondants, sweetmeats or the like. A. G. Hulme. 1,867,263; July 12.
Current commutator machine, Alternating. E. F. W. Alexanderson. 1,867,396; July 12.
Current impulses, Reversing. H. Lux. 1,866 573; July 12.
Current motor, Alternating. W. Rienks. 1,867,328; July 12.
Current supply system, Direct. J. Slepian. 1,866,679; July 12.
Current tap, Electric. H. E. Slade and J. Gebring. 1,866,865; July 12.
Curtain bracket. A. Nardoni. 1,867,089; July 12.
Cut-out, Fused. A. Herz. 1,867,151; July 12.
Cutter: *See*—
Bean vine cutter. Fruit and vegetable cutter.
Casing cutter. Gear cutter.
Cross cutter.
Cutter and distributor, Hay. E. L. and A. W. Neumeister. 1,867,168; July 12.
Cutting means and making the same. L. E. Ridgeway and A. English. 1,866,602; July 12.
Dam, Multiple arch. R. W. Van Norden. 1,867,119; July 12.
Dauber. A. L. Aste. 1,867,437; July 12.
Derrick, Marine oil well. C. L. Roberts. 1,867,030; July 12.
Detector for bulged end cans. W. W. Wadsworth. 1,866,957; July 12.
Developing tank. C. F. Stout. 1,867,190; July 12.
Dice agitator. E. A. Savary. 1,867,031; July 12.
Die-head, Convertible rotary and non-rotary self-opening. R. M. Strickland. 1,867,191; July 12.
Die-head, Self opening. R. M. Strickland. 1,867,192; July 12.
Dipper or bucket for excavating machines. J. N. Summers. 1,867,479; July 12.
Directional signal. F. E. Gragg and L. B. Cohn. 1,866,802; July 12.
Directory system. M. Abel. 1,867,048; July 12.
Dish or similar article. E. B. Bedford and M. G. Parker. Des. 87,326–7; July 12.
Dispenser, Hydraulic lubricant. J. R. Lassiter and H. L. Morris. 1,867,515; July 12.
Dispenser, Sanitary toilet seat. T. J. Grypma and M. Meulenberg. 1,867,506; July 12.
Display box. F. J. Dunn. 1,867,447; July 12.
Display frame. J. F. Meyer. 1,867,323; July 12.
Doll. S. H. Vann. Des. 87,371; July 12.
Doll and pillow, Combined. C. Shapiro. 1,867,422; July 12.
Door, Refrigerator display case. C. V. Hill. 1,867,074; July 12.
Doughnut machine and the like. C. E. Carpenter. 1,867,307; July 12.
Draft control for tunnel kilns. H. A. Evans. 1,867,066; July 12.
Draft rigging. D. S. Barrows. 1,866,919; July 12.
Drawer, File. R. L. Hanson. 1,867,218; July 12.
Drier: *See*—
Clothes drier.
Drier or dust extractor from gases, Steam. F. K. O. Moynan. 1,867,465; July 12.
Drill: *See*—
Rock drill.
Drill chuck. F. M. Higby. 1,867,359; July 12.
Drill hitch mechanism. P. W. Schwab. 1,866,912; July 12.
Drilling apparatus. M. P. Holmes. 1,866,932; July 12.
Drilling apparatus. H. C. Johansen. 1,866,934; July 12.
Drive for limit switches and the like. H. V. Harding. 1,867,453; July 12.
Drum and making the same, Shipping. L. Lerio. 1,866,979; July 12.
Dyestuffs and making same, Azo. J. Gyr and O. Kaiser. 1,867,451; July 12.
Dyestuffs and the product thereof, Production of vat. P. Nawiasky and H. Wolff. 1,867,090; July 12.
Dyestuffs, Brown azo. D. Zinner. 1,866,786–7; July 12.
Eaves trough hanger. M. Walten. 1,867,121; July 12.
Educational testing device. L. Kinnaird. 1,867,511; July 12.
Egg processing machine. M. Kasser. 1,866,809; July 12.
Electric control mechanism. J. W. Bryce. 1,866,996; July 12.
Electric discharge apparatus. B. J. Thompson. 1,867,390; July 12.
Electric dynamo machines, Protection of. E. G. Merrick. 1,867,417; July 12.
Electric light and headlight. B. Christmas. 1,867,138; July 12.
Electric machines, Protection of dynamo. E. G. Merrick. 1,867,416; July 12.
Electric oscillations into mechanical vibrations, Converting. G. Holst and E. Oosterhuis. 1,866,565; July 12.
Electric switch. A. J. Blake and F. J. Tiffany. 1,866,922; July 12.
Electric switch. C. E. Hammell. 1,866,563; July 12.
Electric switch, Temperature controlled. O. A. Ross. 1,867,379; July 12.
Electric wave translating system. H. T. Friis. 1,867,356; July 12.
Electrical circuit system. A. Diodati. 1,867,212; July 12.
Electrical relay arrangement. L. M. Simpson. 1,866,678; July 12.
Electrode, Arc lamp. S. W. Orne. 1,867,524; July 12.
Electrolytic device. W. W. Clark and J. F. McCann. 1,867,249; July 12.
Electrolytic device. H. O. Siegmund. 1,866,604; July 12.
Electromagnetic relay. W. C. Roe. 1,867,099; July 12.
Electron devices, Assembly of elements in. W. L. Krahl. 1,866,715; July 12.
Electrooptical apparatus. H. W. Weinhart and H. Hall. 1,867,340; July 12.
Elevator: *See*—
Conveyer elevator. Traction elevator.
Elevator lifting mechanism for typographical machines, Assembling. I. J. Keeler. 1,866,976; July 12.
Engine: *See*—
Internal combustion engine.
Engine. G. E. Franklin. 1,867,504; July 12.
Engine. B. S. Maher. 1,866,774; July 12.
Engine draining apparatus. N. S. Williamson. 1,866,739; July 12.
Engine mechanism, Auxiliary airplane. A. Purser. 1,867,473; July 12.
Engine of the compression ignition type, Internal combustion. H. R. Ricardo. 1,867,475; July 12.
Envelope, Packing. G. H. Campbell. 1,866,963; July 12.
Ephedrine and its homologues and of mandelic acid and certain intermediates, Resolution of. R. H. F. Manske. 1,867,274; July 12.
Ethanol-amine salts of theophylline and making them. H. A. Shonle. 1,867,332; July 12.
Ethyl acetate, ethyl alcohol and other products by fermentation, Producing. A. Izsak and F. A. McDermott. 1,866,568; July 12.
Exercising apparatus. J. M. Thomson and P. Hardy. 1,866,868; July 12.
Explosive mixture of high shattering power, Plastic. A. Stettbacher. 1,867,283; July 12.
Explosive mixture, Plastic. A. Stettbacher. 1,867,285; July 12.
Explosive of great energy and constant detonation speed, Gelatinated. A. Stettbacher. 1,867,287; July 12.
Exterminator, Insect. A. E. Rittenhouse. Des. 87,357; July 12.

Fabric and making the same, Reenforced wire. I. A. Green. 1,866,850; July 12.
Fabric or a similar article, Embroidered textile. E. W. Freudenberg. Des. 87,331–9; July 12.
Face, Clock. R. U. Starkey. Des. 87,365; July 12.
Fascia plate installation. T. J. Osinga. 1,867,230; July 12.
Fastener, Separable. M. C. Wiley. 1,867,126; July 12.
Fastener, Trough. A. D. Kumpf. 1,867,460; July 12.
Fats at low temperature, Apparatus for extracting. A. Panski. 1,867,326; July 12.
Faucet. F. G. Brotz. Des. 87,328; July 12.
Faucet attachment. N. B. Piersall. 1,867,525; July 12.
Fault responsive apparatus. E. Horowick. 1,867,406; July 12.
Feed, Animal. C. C. Dawe. 1,867,063; July 12.
Feeder for corn huskers, Automatic. C. B. Stewart. 1,866,605; July 12.
Feeding appliance for bread slicing machines. O. F. Rohwedder. 1,867,378; July 12.
Filing device. F. J. Kline. 1,867,158–9; July 12.
Filler inserting machine. M. G. Bliss. 1,866,745; July 12.
Filler pad. R. W. Burrows. 1,866,617; July 12.
Film inspection device. G. S. Warren. 1,866,587; July 12.
Film, Method and apparatus for perforating motion picture. J. G. Jones. 1,866,711; July 12.
Filter. P. S. Carter. 1,866 525; July 12.
Filter for preventing distortion. M. Lebedinsky. 1,866,655; July 12.
Filtering apparatus. W. F. Brace and F. E. Beluche. 1,867,397; July 12.
Fire extinguisher. G. Borsetti. 1,866,746; July 12.
Fish, Apparatus for preparing powdered. F. Y. Omurel. 1,867,523; July 12.
Fish bait. J. S. Keuper. 1,867,458; July 12.
Fish line bobber. W. Schroeder. 1,866,864; July 12.
Fish skinning machine. J. D. Bisset. 1,867,133; July 12.
Fixture strap. G. J. Svetcoff. 1,866,954; July 12.
Flash light, Pocket. F. Rauch. 1,866,600; July 12.
Flexible coupling. J. H. Wolfe and C. S. Wolfe. 1,867,484; July 12.
Flooring. T. J. Dinkins. 1,866,527; July 12.
Flour, Manufacturing soy bean. W. L. Shellabarger. 1,867,541; July 12.
Flower stand. I. G. Scott and M. C. Fox. Des. 87,361; July 12.
Fluid lift of liquids, Apparatus for. W. P. Haseman. 1,866,972; July 12.
Fluid operated mechanism. R. H. Thompson. 1,867,115; July 12.
Fluorine, Electrolytic production of. K. Fredenhagen. 1,866,969; July 12.
Folder-separator. P. E. Lammerich. 1,866,812; July 12.
Food, Making a vegetable. E. H. Miles and G. Reilly. Re18,523; July 12.
Foot pad. J. F. Flynn. 1,867,142; July 12.
Footplate for locomotives. L. L. Neebe. 1,867,466; July 12.
Foot protection, Device for. A. A. Strauss. 1,867,036; July 12.
Forging machine. T. C. Sheehan and J. E. Drew. 1,867,331; July 12.
Form of the kind used in office work. H. Leschhorn. 1,866,980; July 12.
Forming apparatus. J. Maier. 1,866,895; July 12.
Foundry core and binder therefor. J. M. Sampson. 1,867,382; July 12.
4-Ply stock on 3-roll calenders, Method of and apparatus for making. H. O. Hutchens and A. R. Krause. 1,866,807; July 12.
Frame: *See*—
Display frame. Heddle frame.
Frame-like structure for vehicles, aircraft, and other conveyers. J. Martin. 1,867,226; July 12.
Freezer for ice cream and the like. W. R. Mehner and S. Young. 1,867,017; July 12.
Friction brake. W. A. Blume. 1,867,348; July 12.
Friction brake. C. C. McMullin. 1,866,816; July 12.
Friction device. A. P. Warner. 1,866,586; July 12.
Fruit and vegetable cutter. C. E. Donahoo. 1,866,630; July 12.
Fruit and vegetable press. M. Grant. Des. 87,340; July 12.
Fuel burning device. G. W. McKee. 1,867,166; July 12.
Fuel, Carbonization of bituminous. C. J. Wright. 1,867,344; July 12.
Fuel feed system. C. H. Braselton and F. B. MacLaren. Re18,518; July 12.
Fuel feeding tank. J. Scheminger, jr. 1,867,104; July 12.
Fuel in internal combustion engines, Injection of liquid. L. K. Braren. 1,867,491; July 12.
Furnace: *See*—
Metal coating furnace.
Furnace and operating the same. H. P. Kirchner. 1,867,012; July 12.
Furnace residues, Disposal of. J. Deutsch. 1,866,756; July 12.
Fuse, Electric. F. C. La Mar. 1,866,536; July 12.
Gambrel. S. Mitskoff. 1,866,900; July 12.
Game. J. F. Blanck. 1,867,053; July 12.
Game. C. V. Rather. 1,866,821; July 12.
Game apparatus. H. O. Sheldon. 1,866,674; July 12.
Game device. J. G. Cohen. 1,866,545; July 12.
Game scoring device. C. M. Poetsch. 1,867,170; July 12.
Garment hanger. F. Borriello. 1,867,247; July 12.
Gas dehydration. D. Gordon and R. W. Ryan. 1,866,560; July 12.
Gas, Making water. W. M. Russell. 1,867,102; July 12.
Gas sealed gland. W. van Rijswijk. 1,867,236; July 12.
Gas-vent T. H. J. and W. J. Luff. 1,866,814; July 12.
Gasoline vending machine, Automatic. J. M. Alexander. 1,866,523; July 12.
Gate: *See*—
Sluice gate.
Gauge: *See*—
Indicating gauge. Tank gauge.
Liquid level gauge.
Gear cutter. J. F. Leahy. 1,867,161; July 12.
Gear, Locomotive driving. H. J. Bennett. 1,867,246; July 12.
Gear shift. F. S. Cartwright. 1,867,061; July 12.
Gear shift, Bicycle. P. J. Taft. 1,867,337; July 12.
Gear transmission. L. K. Braren. 1,867,492; July 12.
Gear, Trawl. J. B. J. A. Vigneron. 1,867,196; July 12.
Gearing, Belt. L. K. Braren. 1,867,490; July 12.
Gearing for auto vehicles. F. R. Craig. 1,867,497; July 12.
Generator: *See*—
Steam generator.
Generator. F. W. Kells. 1,866,935; July 12.
Generator pilot raising device. F. F. Bunts and W. E. Rogers. 1,868,876; July 12.
Glands of the plagiostomi, Treatment of the. A. Ehrenreich. 1,866,633; July 12.
Glass batches of uniform mixture, Storing and supplying. R. Bennett and S. B. Bowman. 1,867,489; July 12.
Glass in molds, Method of and apparatus for gathering molten. E. G. Bridges. 1,867,440; July 12.
Glass leers, Feeder for. J. Sylvester. 1,867,389; July 12.
Glass, Manufacturing non-scatterable. O. S. Marckworth. 1,867,085; July 12.
Glass sheets, Manufacture of non-splintering. G. E. Heyl. 1,867,009; July 12.
Globe and carbon holder for arc lamps. H. J. Brunk. 1,867,305; July 12.
Golf club. W. L. Beckley. 1,866,615; July 12.
Golf club head and making same. F. H. Schavoir. 1,867,103; July 12.
Grader, Fruit. N. Bower. 1,867,054; July 12.
Grease gun filler. W. J. Penka. 1,867,468; July 12.
Grinding pan. G. E. Krider. 1,867,081; July 12.
Gripper mechanism. A. J. Horton. 1,866,566; July 12.
Guard for automatic lubricating journal boxes. G. Grandjean. 1,867,260; July 12.
Guard for motor cars, motor cycles, or other wheeled vehicles, Mud. N. MacLean, T. Quinn, and F. Duffy. 1,867,518; July 12.
Guide for slicing machines, Work support. H. Stukart. 1,867,336; July 12.
Guide for tire building machines. C. E. Maynard. 1,867,370; July 12.
Gun. G. M. McCann. 1,866,938; July 12.
Gun, Cross bow. W. H. Colby. 1,866,926; July 12.
Gyroscopic instrument and apparatus. J. B. Henderson. 1,866,706; July 12.
Hair waver. W. Fletcher and A. O. Lewis. 1,866,555; July 12.
Hairpin. I. H. Peck. 1,867,169; July 12.
Hairpin. H. A. Prym. 1,867,472; July 12.
Hammer. W. A. Babb. 1,867,201; July 12.
Hammer for rock drills. J. E. Renfer. 1,866,819; July 12.
Handle for bakers' peels. A. H. Raubvogel. 1,867,029; July 12.
Handle for therapeutic lamps. E. H. Howard. Des. 87,344; July 12.
Hanger: *See*—
Eaves trough hanger. Garment hanger.
Hanger. F. W. Ploss. 1,867,469; July 12.
Headlamp, Ornamented. E. C. Albright. 1,866,693; July 12.
Headlight signal. W. Brubacher. 1,867,493; July 12.
Heat recuperation. H. O. Loebell. 1,867,163; July 12.
Heater: *See*—
Automobile heater. Oil heater.
Heater. J. H. Carmean. 1,866,840; July 12.
Heater. E. Miller. 1,867,519; July 12.
Heating and cooling apparatus. F. E. Hartmann. 1,866,803; July 12.
Heating and ventilating unit. M. O. Snediker. Re18,528; July 12.
Heating device for concrete plants. R. W. Fleroh. 1,867,310; July 12.
Heating element. W. R. J. Woock. 1,866,785; July 12.
Heating system for tank cars. J. C. Cleaver. 1,866,544; July 12.
Heddle frame. R. K. Robertson. 1,866,908; July 12.
Heels, Apparatus for covering. G. M. Smith. 1,866,728; July 12.
Heels, Making rubber. F. Berenstein. 1,867,132; July 12.
Hill draining system. T. Strothmann. 1,866,826; July 12.
Hinge construction. H. Zinser. 1,867,046; July 12.
Hinge, Friction. L. A. Bittorf. 1,867,346; July 12.
Holder, Card. G. E. McIntyre. 1,867,276; July 12.

Holder, Cigar and cigarette. A. L. Gauthier, jr., and E. H. Mattocks. 1,866,641; July 12.
Holder, Collar. C. Silverman. Des. 87,363; July 12.
Holder, Cup. H. H. Haywood. 1,866,805; July 12.
Holder for textile fabrics, Tag. J. R. Higgins. 1,867,152; July 12.
Holder for weighing machines, Poultry. L. E. Tinnes. 1,866,683; July 12.
Holder, Typewriter copy. J. H. Craig. 1,867,498; July 12.
Holding members for reenforcement tensioning means. H. Sorenson. 1,867,185; July 12.
Hose fitting for air brakes. B. B. Greer. 1,866,644; July 12.
Hosiery. M. P. Vogler. Des. 87,372; July 12.
House: *See*—
Toy house.
Humidifier. R. J. Dever. 1,867,064; July 12.
Humidor. F. M. Cooney and G. T. Darragh. 1,866,621; July 12.
Hydraulic operator, Quick release. W. J. Woods. 1,867,393; July 12.
Hydrocarbons, Pyrolytic decomposition of. F. K. Ovitz. 1,866,666; July 12.
Hydroxy-1',8'-naphtholyene-naphthimidazoles. W. Neelmeier and W. Meiser. 1,867,091; July 12.
Hygrostat. M. O. Snediker. 1,866,778; July 12.
Ice scoring machine. C. E. Everett. 1,866,883; July 12.
Incinerator. R. T. Wyse. 1,866,959; July 12.
Index, Card. H. S. McGee. 1,866,815; July 12.
Index, Visible. R. Fitz Power. 1,867,471; July 12.
Indicating gauge. D. Smith. 1,867,387; July 12.
Indicator: *See*—
Pressure indicator.
Indicator and limit switch actuator, Combined. H. E. Hallenbeck. 1,867,452; July 12.
Inflating device, Automatic. R. J. Jauch. 1,866,653; July 12.
Ingots, Method of and apparatus for heating. W. M. Hepburn. 1,867,221; July 12.
Insulating tape. P. Simons. 1,867,183; July 12.
Insulation of metal bodies. H. Lathrop. 1,867,362; July 12.
Insulator, Detachable. E.W. Brady. 1,867,206; July 12.
Insulator trimming machine, Multiple. A. G. Benard. 1,866,792; July 12.
Insulin, Purifying. M. S. Kharasch. 1,866,569; July 12.
Intaglio printing. I. Gurwick. 1,867,405; July 12.
Internal combustion engine. M. J-B. Barbarou. 1,866,873; July 12.
Internal combustion engine. H. A. Gehres. 1,866,703; July 12.
Internal combustion engine. O. J. Gingerich. 1,866,928; July 12.
Iodine and making the same, Colloidal. W. L. Chandler. 1,866,923; July 12.
Ironing board clip. J. Worley, jr., and R. J. Burke. 1,866,601; July 12.
Ironing board or table. J. L. Brown. 1,867,056; July 12.
Ironing press, Automatic. C. O. Reeps. 1,867,173; July 12.
Irons on kerosene stoves, Heating flat. O. L. Harrison. 1,867,073; July 12.
Irrigation device. W. H. Coles and B. J. Nelson. 1,867,250; July 12.
Joint: *See*—
Pipe joint.
Joint. D. E. Lindquist. 1,866,857; July 12.
Joint for hose sections, Lockable. J. B. Wisner. 1,867,430; July 12.
Joint strip for thresholds and sills, Yielding. H. Kampes. 1,867,010; July 12.
Joints, Forming universal. R. H. Rosenberg. 1,867,540; July 12.
Journal box. A. H. Lake. 1,867,270; July 12.
Kerr cell. R. Swinne. 1,867,193; July 12.
Kiln and draft control for the same, Tunnel. A. S. Watts. 1,867,122; July 12.
Kiln, Tunnel. J. Daniels. 1,866,546; July 12.
Kiln, Tunnel. W. A. Hull. 1,867,318; July 12.
Knife, Rope. F. J. Spang. 1,867,033; July 12.
Knitting machine. V. Lombardi. 1,866,945; July 12.
Knitting machine. O. E. Rasmussen. 1,866,946; July 12.
Knitting mechanism. H. E. Houseman. 1,866,567; July 12.
Ladder, Nonskid fruit tree. F. J. Hohing and J. Livingston. 1,866,974; July 12.
Lamp for motor vehicles, Swivel. F. D. Kendrick. 1,867,411; July 12.
Lamps, Assembling the stems and associated parts of incandescent electric. H. M. Pingen. 1,866,904; July 12.
Larynx, Artificial. G. W. Burchett. 1,867,350; July 12.
Latch lock. G. H. Reimer. 1,866,578; July 12.
Lens strap. F. A. Stevens. Des. 87,366; July 12.
Lens strap. F. A. Stevens. Des. 87,368–9; July 12.
Lenses, Method and apparatus for focusing. J. Mihalyi. 1,866,718; July 12.
Life guard or obstruction remover for motor road and other vehicles. V. J. Clifford. 1,866,752; July 12.
Light and similar rays, Apparatus for treating. A. O. Tate. 1,866,915; July 12.
Light or similar article, Piano. J. Pospisil. Des. 87,355; July 12.
Light reflector. K. A. Edstrom. 1,867,502; July 12.
Light source for photographic copying purposes. C. Roehrich. 1,867,100; July 12.
Liquid in a tank, Indicating the height of a. W. P. Dalrymple. 1,866,843; July 12.
Liquid level gauge. C. F. H. Bohnhardt. 1,867,204; July 12.
Liquid level gauge. J. J. Forney. 1,867,216; July 12.
Liquid materials, Drying. G. D. Harris. 1,866,768–9; July 12.
Liquid purification for Kerr cells. R. Möller. 1,866,940; July 12.
Loading machine. H. H. Barber. 1,866,789; July 12.
Lock: *See*—
Latch lock.
Lock. F. H. Andrews. 1,867,244; July 12.
Lock. J. W. Fitz Gerald. 1,866,886; July 12.
Lock. G. R. Terrill. 1,866,955; July 12.
Lock and covered bail, Trunk. B. H. Erwin. 1,867,140; July 12.
Lock construction, Keyhole. H. F. Keil. 1,867,361; July 12.
Lock for presses, Safety. J. W. Brundage. 1,867,304; July 12.
Lock for railway switches, Slow release. L. Wyant. 1,867,044; July 12.
Lock mechanism. W. F. Diesel. 1,867,001; July 12.
Lock switch, Combination. W. K. Mason. 1,867,415; July 12.
Locking device. C. van der Leun. 1,866,684; July 12.
Locomotive, Cable reel. S. W. Farnham. 1,867,141; July 12.
Loud speaker. H. J. Round. 1,867,177; July 12.
Loudspeaker, Auditorium. I. Wolff, R. P. May, and A. Ringel. 1,866,831; July 12.
Lubricant containing cellulose acetate. C. J. Staud and J. T. Fuess. 1,866,732; July 12.
Lubricant distributor, Selective. R. D. Wearne. 1,867,483; July 12.
Lubricating machinery, Means for. M. A. Kretchmar. 1,866,977; July 12.
Machine for and method of dyeing cloth and otherwise treating textiles. W. P. Cohoe. 1,867,210; July 12.
Machine for applying metal caps to bottles. G. E. Strandt. 1,867,113; July 12.
Machine for arc welding, Automatic. R. Sarazin. 1,866,675; July 12.
Machine for fabricating tubular metal structures. J. L. Adams, jr. 1,866,610; July 12.
Machine for kneading dough, whipping and similar purposes. A. Aastrup. 1,867,243; July 12.
Machine for making liners for baskets and the like. I. Stern. 1,867,286; July 12.
Machine for making paper boxes. H. J. Goss. 1,867,259; July 12.
Machine for polishing or grinding cam tracks and like sinuous surfaces. J. G. Douglas. 1,867,213; July 12.
Machine for slicing an entire loaf of bread at a single operation. O. F. Rohwedder. 1,867,377; July 12.
Machine for soaping heavy woolen fabrics. G. Woelfel. 1,867,127; July 12.
Machine to serve ice cream. W. F. Curtis. 1,866,842; July 12.
Magazine, Mail. J. Q. Finfrock. 1,866,847; July 12.
Magnesium, Manufacture of. A. G. Jessup. 1,866,975; July 12.
Magnetic brake. C. J. Ellis. 1,866,552; July 12.
Magnetic material. P. P. Cioffi. 1,866,924–5; July 12.
Magneto-optical device. L. A. Dorff and G. Sandalls, jr. 1,866,631; July 12.
Manometer, Recording. K. C. D. Hickman. 1,866,973; July 12.
Massage and exercise machine. F. A. Anderson. 1,866,833; July 12.
Material, All metal gimped. R. B. Kingman. 1,867,157; July 12.
Material and resulting product, Treating vegetable fibrous. G. Heberlein and A. Bodmer. 1,867,006; July 12.
Material feeding device, Sheet. H. J. Hanauer. 1,866,851; July 12.
Material of different densities, Apparatus for the pneumatic separation of. P. Soulary. 1,866,951; July 12.
Material to book covers and the like, Affixing stamping. R. Lange. 1,867,224; July 12.
Materials, Pneumatic drying of. E. Barthelmess. 1,866,744; July 12.
Matrix molding press. C. Winkler. 1,866,830; July 12.
Measuring device. E. E. Marlin. 1,867,367; July 12.
Measuring device for milk powders. W. O. Frohring. 1,867,403; July 12.
Mechanical movement. C. E. Schlenker and C. F. Heinkel. 1,867,385; July 12.
Medicinal apparatus. Y. Kawai. 1,866,772; July 12.
Mercury-arc rectifier. F. B. von Kleist. 1,867,291; July 12.
Mercury switch. G. F. Callahan. Re18,525; July 12.
Metal. Apparatus for and method of handling liquid. F. X. Temmen. 1,866,682; July 12.
Metal bodies, Structurally modifying the surface of. O. E. Andrus. 1,866,538; July 12.
Metal coating furnace. T. B. Boyd. 1,866,795; July 12.
Metal compounds of o-hydroxy-azo dyestuffs, Production of complex. H. Krzikalla, K. Holzach, and W. Mueller. 1,867,083; July 12.

Metal film, Anodic removal of surface. T. E. Dunn. 1,867,527; July 12.
Metal work, Composite. L. Spencer. 1,866,583; July 12.
Metal working press. R. W. Glasner and F. J. Rode. 1,866,559; July 12.
Metal working press. R. W. Glasner and F. J. Rode. 1,866,595; July 12.
Metallic structures, Method and apparatus for forming hollow. J. L. Adams, jr. 1,866,609; July 12.
Metatarsal pad, Adjustable and removable. R. H. Johnson. 1,866,598; July 12.
Mill for grinding paints, enamels, inks, and other viscous substances. S. Smith. 1,867,184; July 12.
Mining machine. A. B. Esseltine. 1,867,528; July 12.
Mirror and frame, Combined. C. C. Ritter. Des. 87,358; July 12.
Mixing or agitating device C. L. Willard. 1,866,688; July 12.
Mold: *See*—
Casting mold. Vulcanizing mold.
Tire vulcanizing mold.
Molds, Making tire. R. C. Bateman. 1,866,790. July 12.
Monobenzoyldiamino-anthraquinones, Preparing. H. Buchloh, W. Mieg, and W. Stoetzer. 1,867,057–8; July 12.
Motor: *See*—
Current motor. Synchronous motor.
Motor control system. E. R. Morton. 1,867,373; July 12.
Motor machine, Water. H. Placide. 1,867,094; July 12.
Mounting, Motor. J. K. Harness. 1,867,358; July 12.
Mounting, Motor. R. K. Lee. 1,867,365; July 12.
Mounting, Vacuum tube. J. W. Horton. 1,866,533; July 12.
Mouthpiece, Germicidal transmitter. H. H. Samuels. 1,867,282; July 12.
Muffler. H. E. Lemmerman. 1,867,273;; July 12.
Musical instrument, Wind. E. B. Todt. 1,867,481; July 12.
Nail, Weatherproof. G. E. Dickson. 1,867,354; July 12.
Nails, Making weatherproof. G. E. Dickson. 1,867,353; July 12.
Nails, Manufacture of lead headed. F. Coates. 1,866,878; July 12.
Needle operating mechanism. A. M. Muller. 1,867,087; July 12.
Nuts, Making cap. E. A. Nelson. 1,867,229; July 12.
Offset proof press. H. F. Schmidt and L. Jung. 1,866,910; July 12.
Oil agitator. W. E. A. Pipher and A. E. Pipher. 1,867,092; July 12.
Oil and the like, Apparatus for purifying used lubricating. C. S. Garland, T. E. Beacham, and J. A. Pickard. 1,866,970; July 12.
Oil heater. W. H. Pingrey. 1,866,986; July 12.
Oil, Making a superior. W. S. Baylis. 1,866,591; July 12.
Oil saver. E. W. Patterson. 1,866,903; July 12.
Oil well cleaner. E. C. Ekstromer. 1,866,927; July 12.
Oils, Heating. J. C. Black. Re18,517; July 12.
Oils with an activated clay and water, Treatment of lubricating. W. S. Baylis. 1,866,590; July 12.
Olefines in a mixture containing same, Increasing the concentration of. R. M. Deanesly. 1,866,800; July 12.
Ophthalmic lens. E. D. Tillyer. 1,866,734; July 12.
Ores, Working up of chromium. E. Hackhofer. 1,866,648; July 12.
Oscillograph. E. Rieckmann. 1,867,176; July 12.
Oven, Tunnel. J. Daniels. 1,866,547; July 12.
Oxidation products and making same, Intermediate partial. J. H. James. Re18,522; July 12.
Packaging machine. H. S. Labombarde. 1,867,538; July 12.
Packing and composition. F. E. De Vries. 1,866,757–8; July 12.
Packing assembly and packing ring, Pump. J. H. McEvoy. 1,867,320; July 12.
Packing material retainer for journal boxes of railway cars. C. A. Zwelbel and T. O'N. Sechrist. 1,866,692; July 12.
Packing, Oakum. A. C. Fischer. 1,867,067; July 12.
Packing, Shaft. F. D. Durham. 1,866,967; July 12.
Pad: *See*—
Filler pad. Metatarsal pad.
Foot pad.
Pan: *See*—
Grinding pan.
Panel board. J. W. Ledeboer. 1,866,856; July 12.
Paper-making apparatus. F. LaCroix. 1,866,811; July 12.
Paper-making machines, Slice and head box for. R. Wood. 1,866,607; July 12.
Paper, Method and apparatus for waxing. V. H. Wilshire. 1,866,689; July 12.
Paper shredding and crimping machine. H. W. Wilson. 1,866,690; July 12.
Paper, Wall. M. Libert. Des. 87,348; July 12.
Parachute. P. N. Madsen. 1,867,366; July 12.
Paving chock, Rolled steel welded. J. S. Duryea. 1,866,759; July 12.
Pelt stretching frame. W. F. Horsting. 1,866,709; July 12.
Pendulum driving device for clocks, Electromagnetic. A. Wirz. 1,867,295; July 12.
Penholder and ink filler, Fountain. G. H. Koerner. 1,866,773; July 12.
Phosphates, Manufacture of triaryl. C. N. Hand and G. N. Magoun. 1,866,852; July 12.
Phosphatic materials, Reduction of. W. H. Waggaman and S. D. Gooch. 1,867,239; July 12.
Phosphorus, Production of. R. Weigel. 1,867,241; July 12.
Photographic strip feeding mechanism. R. H. Ranger. 1,867,172; July 12.
Photography. E. A. Sutcliffe. 1,866,866; July 12.
Photography, Three-color. T. T. Baker. 1,867,301; July 12.
Piano key action. C. N. Hickman. 1,866,707; July 12.
Picking table. F. P. Hoffsinger. 1,867,522; July 12.
Pick-up device for screws and the like. F. H. Dellaree. 1,866,880; July 12.
Picture machines, Movable aperture plate for motion. A. Dina. 1,866,549; July 12.
Pilot mechanism for gas burning apparatus, Safety. N. T. Branche and V. O. Beam. 1,866,541; July 12.
Pilot vane for the aerofoil wings of airplanes. H. J. Kratzer. 1,867,013; July 12.
Pipe: *See*—
Tobacco pipe.
Pipe cleaning machine. W. A. Frank. 1,866,556; July 12.
Pipe connecter. J. P. Salmon. 1,866,672; July 12.
Pipe coupling and insulation therefor. F. N. Bard. 1,866,835; July 12.
Pipe joint. H. Y. Carson. 1,866,619; July 12.
Pipe joints and pipes, Device and method for coating. L. R. Rogers. 1,867,476; July 12.
Pipes, Apparatus for cleaning. S. Uroukoff. 1,866,870; July 12.
Piston and ring. E. S. Reiland and P. M. Reiland. 1,866,907; July 12.
Pit mechanism, Drop. H. K. Christie. 1,866,798; July 12.
Planimeter. H. E. Dall. 1,867,441; July 12.
Planter attachment, Corn. G. T. Horst. 1,867,075; July 12.
Pliers. H. G. Graner. 1,867,505; July 12.
Plow. A. P. Lofstrand. 1,867,517; July 12.
Plug, Attachment. J. P. Eastman. 1,867,065; July 12.
Plug, Circuit connecting. M. W. McArdle. 1,867,319; July 12.
Plug, Separable attachment. H. Hubbell, jr. 1,866,933; July 12.
P-nitroso-amine compounds of the aromatic series and the compounds obtainable thereby, New process for preparing. K. Schirmacher and H. Schichenmaier. 1,867,105; July 12.
Pole, Trolley. E. S. Tillingbast. 1,867,480; July 12.
Poles to aid insulators, Utilizing wood. K. A. Hawley. 1,866,804; July 12.
Post: *See*—
Signal post. Tool post.
Postal franking machine. F. E. Langdon. 1,867,514; July 12.
Posting stand. R. Connor, N. S. Welk, and D. R. Zenner. 1,866,966; July 12.
Power take-off. C. J. Esseling. 1,867,257; July 12.
Press: *See*—
Ironing press. Metal working press.
Matrix molding press. Offset proof press.
Press and the like, Rotary. F. C. E. Jones. 1,867,529; July 12.
Press for belts or the like. D. J. Gregory and W. C. Tifft. 1,866,765; July 12.
Presses and the like, Automatic feed mechanism for punch. J. Wiitek. 1,867,343; July 12.
Pressure indicator. G. P. Luckey and A. F. Hegenberger. 1,866,660; July 12.
Pressure producing means. L. L. J. Prompt. 1,866,905; July 12.
Printing machine. W. J. Lascelles, M. F. Peterson, J. R. Scott, and K. McC. Wilson. 1,866,978; July 12.
Printing machines, Sheet handling mechanism for. A. J. Graf. 1,866,562; July 12.
Printing mechanism. J. R. Peirce. 1,867,026; July 12.
Printing on transparent cellulose paper and product resulting from the same, Multicolor. I. Gurwick. 1,867,314; July 12.
Projection screen. E. Wildhaber. 1,867,199; July 12.
Prop, Tree. C. Westover. 1,867,485; July 12.
Protector, Lineman's. C. R. Dennis and P. G. Briney. 1,866,881; July 12.
Pump and bailer, Combination sand. D. E. Webber. 1,866,828; July 12.
Pump, Centrifugal. J. E. Vitu. 1,867,290; July 12.
Pump, engine, meter, or the like, Rotary. E. Feuerbeerd. 1,866,761; July 12.
Pump, Rotary. C. F. Waite. 1,867,198; July 12.
Pumping apparatus, Well. R. P. Simmons. Re18,527; July 12.
Pumps of internal combustion engines, Regulation of the fuel feed. F. Sass. 1,867,383; July 12.
Punch, Combinational hole. J. R. Peirce. 1,867,025; July 12.
Punching machine. W. Heidinger. 1,867,007; July 12.
Radiator attachment. G. W. Blackmore. 1,867,303; July 12.
Radio coil cores, Apparatus for threading. F. Brustle. 1,866,838; July 12.
Radioreceiver. W. F. Hoisington. 1,867,153; July 12.
Radio-receiving apparatus. H. J. J. M. de R. de Bellescize. 1,867,139; July 12.
Radio receiving apparatus. S. Tarzian. 1,867,037; July 12.
Radio receiving system. H. F. Elliott. 1,867,214; July 12.

Radio receiving system. P. G. Weiller. 1,866,916; July 12.
Radio volume control. H. A. Wheeler. 1,866,687; July 12.
Rail brake. K. E. Wenzel. 1,867,534; July 12.
Railroad spreader. H. W. Protzeller. 1,866,577; July 12.
Rake. H. R. Crane. 1,866,754; July 12.
Ratchet pinch bar. E. Hultgren and H. Mikkelson. 1,866,651; July 12.
Rayon spinning machine. R. W. Nash. 1,867,023; July 12.
Razor, Safety. H. J. Gaisman. 1,867,217; July 12.
Receptacle, Flexible pocket. W. R. Buxton. 1,866,618; July 12.
Record bands, Making endless. I. L. Tenney. 1,866,585; July 12.
Record, Deposit. H. J. De Lano. 1,867,211; July 12.
Rectifier. C. L. Fitz and L. Bachbuber. 1,867,503; July 12.
Reel. F. C. Meyer. 1,867,322; July 12.
Refrigerant in refrigerating systems, Purifying the. T. J. Litle, jr. 1,866,659; July 12.
Refrigerating apparatus. R. W. Davenport. 1,866,526; July 12.
Refrigerating apparatus. C. F. Henney. 1,867,261; July 12.
Refrigerating apparatus. J. R. Killen. 1,867,530; July 12.
Refrigerating apparatus. J. G. King. 1,866,854; July 12.
Refrigerating apparatus. R. K. Miller. 1,866,575; July 12.
Refrigerating apparatus. W. H. F. Schmieding. 1,866,823; July 12.
Refrigerating apparatus. H. F. Smith. 1,866,825; July 12.
Refrigeration. A. T. Light. 1,866,988; July 12.
Refrigeration. F. E. Sellman. 1,867,181; July 12.
Refrigeration. T. Solpley. 1,866,989–90; July 12.
Refrigeration. W. E. Zieber. 1,866,991–2; July 12.
Refrigeration unit. R. W. Kritzer. 1,866,810; July 12.
Refrigerator. J. T. Rauen. 1,867,539; July 12.
Refueling equipment. B. H. Shinn. 1,866,942; July 12.
Register: *See*—
  Selecting register.
Relay, No-load. C. H. Rippl. 1,867,280; July 12.
Remote control system. H. E. Allen. 1,867,395; July 12.
Reservoir, Water. H. E. Blood. 1,867,135; July 12.
Resilient wheel. M. Isaacson. F. E. Loudy and F. R. Bussdicker. 1,866,652; July 12.
Resins and preparing same, Synthetic. E. Bielouss. 1,866,962; July 12.
Rheostat. H. P. Sachse. Re18,521; July 12.
Riddle apparatus. H. V. Harding. 1,866,531; July 12.
Rifle. J. D. Pedersen. 1,866,722; July 12.
Rifle, One hand oil. C. L. Williams. 1,866,784; July 12.
Rig for rotary drills. W. J. Mitchell. 1,867,020; July 12.
Ring: *See*—
  Spinning ring.
Ring expander. J. N. White. 1,866,783; July 12.
Rings, Device for removing finger. B. Wieg. 1,867,342; July 12.
Roach trap. J. W. Crigler. 1,867,252; July 12.
Road chair. C. H. Ribb. 1,867,096; July 12.
Rock crusher. A. C. Daman and L. H. Logue. 1,866,625; July 12.
Rock drill. A. Feucht. 1,867,072; July 12.
Rock-drill and like tool. J. L. and A. T. Holman. 1,867,317; July 12.
Rod cornice, Curtain. J. Ajemian. 1,866,612; July 12.
Roll, Fluid cooled. A. L. Harrington. 1,867,148; July 12.
Roller: *See*—
  Turf roller.
Roller screen. E. D. Arthur. 1,866,788; July 12.
Roller screen. C. Traut. 1,867,391; July 12.
Roof, Car. C. D. Bonsall. 1,866,539–40; July 12.
Rotary sprinkler. P. De Vos. 1,866,844; July 12.
Rotation transmitting means. J. H. King. 1,866,714; July 12.
Rowing machine. F. Pareira. 1,866,860; July 12.
Rubber cutting machine. E. Clark. 1,866,709; July 12.
Rubber strips from latex, Forming. C. R. Park. 1,866,820; July 12.
Rubber, Vulcanizing. G. H. Stevens. 1,867,034; July 12.
Rustproofing material and treating the same. V. M. Darsey. 1,866,879; July 12.
Safety contrivance on permanent railway tracks. K. E. Wenzel. 1,867,124; July 12.
Safety pressure head. J. H. McElroy. 1,867,321; July 12.
Saw clamp. J. A. Waller. 1,867,042; July 12.
Saw making machine. F. W. Wardwell. 1,867,240; July 12.
Saw set. C. F. Mock. 1,867,520; July 12.
Saw, Sliding. L. N. McCarter. 1,867,275; July 12.
Sawing machine. G. E. Hawley. 1,866,888; July 12.
Sawmill dog. R. E. Langill 1,866,937; July 12.
Screen: *See*—
  Projection screen. Window screen.
  Roller screen.
Screen mounting and weather strip for casement windows, Combination. H. Dixson. 1,866,882; July 12.
Seal for shafts. A. C. Durdin, jr. 1,866,531; July 12.
Seal-joints, Package strapping. J. W. Leslie. 1,866,894; July 12.
Sealing device. C. Schmitthenner. 1,866,580; July 12.
Seams, Making French. H. F. Gruman. 1,866,647; July 12.
Seat: *See*—
  Valve seat.
Security quotations, Method and apparatus for printing. H. W. Spooner. 1,866,944; July 12.
Selecting register. C. L. Johnston. 1,867,544; July 12.
Separator: *See*—
  Centrifugal separator. Folder separator.
Separator for twisting and spinning machines. J. E. Farrell and J. I. Gaskill. 1,867,401; July 12.
Service attachment for furniture. G. C. Olin. 1,866,665; July 12.
Sewing machine. H. F. Gruman. 1,866,645–6; July 12.
Sharpening machine, Lawn mower. F. H. Bierman. 1,866,794; July 12.
Shear knife adjusting means. O. W. Kirsten. 1,866,855; July 12.
Shear machine. A. Born. 1,867,205; July 12.
Shearing mechanism. F. G. Feeley. 1,867,402; July 12.
Sheet registering mechanism. L. F. Remington. 1,866,579; July 12.
Sheet separating device. B. F. Upham. 1,867,038; July 12.
Sheeter and curling roll adjustment device. W. G. Kirchhoff. 1,867,223; July 12.
Sheets and plates, Treating ferrous. H. S. Shutte. 1,867,108; July 12.
Sheets in multicolor intaglio printing, Method and apparatus for drying. A. Egli. 1,867,256; July 12.
Shelving structure. W. T. Hormes. 1,867,543; July 12.
Shield for batteries and their parts. M. Simsinovici. 1,867,423; July 12.
Shingle, Composition. F. E. Theilacker. Re18,515; July 12.
Shipping device. L. A. Churgay and H. S. McClellan. 1,867,352; July 12.
Shock absorber device. F. H. Royce. 1,866,671; July 12.
Shock eliminating device. C. M. Seymour. 1,866,677; July 12.
Shoe. G. H. Gillis. 1,867,003; July 12.
Shoe construction. C. H. and C. B. Brown. 1,866,616; July 12.
Shore. H. W. Roos. 1,867,233; July 12.
Shutter for photographic objectives. M. Seifert. 1,867,109; July 12.
Shuttle. A. Gildemann. 1,867,146; July 12.
Sifter trawl. L. O. Runkle. 1,867,281; July 12.
Sign, Advertising. C. J. Bareis. 1,867,051; July 12.
Sign, Advertising. C. T. Fairbanks. 1,866,554; July 12.
Sign, Electric. A. Leichter. 1,867,516; July 12.
Signal: *See*—
  Directional signal. Traffic signal.
  Headlight signal.
Signal indicating system. L. A. Hyland. 1,867,264; July 12.
Signal post. R. B. Michener. 1,866,982; July 12.
Signaling system. W. L. Edison. 1,866,845; July 12.
Signaling system, Hospital. B. L. Bobroff. 1,867,134; July 12.
Silk, etc., of mat appearance, Forming artificial. J. J. Stoeckly and E. Witte. 1,867,188; July 12.
Silver from fixing solutions, Method and apparatus for recovering. F. E. Garbutt and T. M. Ingman. 1,866,701; July 12.
Sizing material. T. R. Shelton. 1,867,234; July 12.
Skiving machine. M. H. Ballard. 1,866,918; July 12.
Slide. C. E. Anderson. 1,866,694; July 12.
Slitter. J. F. Peters. 1,866,941; July 12.
Slitting means. J. A. Camerin. 1,867,059; July 12.
Sluice gate. E. B. Philips. 1,868,817; July 12.
Smoke disposal and draft inducing apparatus for locomotives. H. G. Day and W. E. Skinner. 1,866,626–7; July 12.
Smokehouse trolley. A. N. Benn. 1,866,793; July 12.
Smoke stick. G. L. Vogt. 1,867,238; July 12.
Snowplow. G. F. De La Mater. 1,867,255; July 12.
Snowplow. E. Pitcher. 1,866,861; July 12.
Snowplow. G. C. Soule and J. B. Woodbury. 1,867,186–7; July 12.
Snowplow equipment. D. A. Sargent. 1,867,178; July 12.
Socket and mold for amalgam dies, Metallic. E. E. Bailey. 1,867,300; July 12.
Socket, Slide fastener. G. A. Holmes. 1,867,360; July 12.
Solvent for organic esters of cellulose. J. F. Walsh and A. F. Caprio. 1,867,040; July 12.
Sorting machine for statistical cards or the like. L. E. Brougham. 1,866,748–9; July 12.
Sound and picture records, Making combined. L. A. Jones. 1,866,712; July 12.
Sound delivery construction. W. C. Stenger. 1,866,913; July 12.
Sound head for sound-on-film mechanism. C. W. Ebeling. 1,866,528; July 12.
Sound reproducer, Electrical. C. W. Black. 1,866,921; July 12.
Spark plug cleaner. H. D. Mullan. 1,867,324; July 12.
Spectacle temple. F. A. Stevens. Des. 87,367; July 12.
Speed transmission, Hydraulic. L. Durner. 1,867,308; July 12.
Spillway control method and apparatus. A. B. B. Harris. 1,867,316; July 12.
Spinning ring, Self lubricating. H. C. Herr. 1,867,150; July 12.
Splint, Surgical. J. J. Ettinger. 1,867,215; July 12.

Splint, Surgical. O. A. Fruehauf. 1,867,258; July 12.
Spool or cylinder for use in the wet handling of freshly-spun filaments. R. Etzkorn. 1,867,309; July 12.
Spoon, knife, fork or other article of flatware. G. A. Feinauer. Des. 87,330; July 12.
Spoon, Trolling. H. L. Crow. 1,866,623; July 12.
Spout for cans, Detachable. G. T. Carr. 1,867,060; July 12.
Sprayer. M. D. Chesnut. 1,866,620; July 12.
Spring clip and snubber, Combined. W. Blackmore and E. Bell. 1,867,203; July 12.
Spring construction. C. G. Munn. 1,866,664; July 12.
Spring device. L. McK. Field. 1,866,762; July 12.
Spring forming machine. W. E. Wunderlich. 1,867,128; July 12.
Spring shackle. W. E. Anders. 1,867,486; July 12.
Spring washer. E. D. Cowlin. 1,867,251; July 12.
Springs, Method and implement for expanding. J. N. White. 1,866,782; July 12.
Sprinkler: *See*—
  Rotary sprinkler.
Stabilizer for motor vehicles. P. Wilmart. 1,866,958; July 12.
Stand: *See*—
  Posting stand.
Starter, Auto. J. N. Walker. 1,866,737; July 12.
Steam generation. W. D. LaMont. 1,866,893; July 12.
Steam generation, Method of and apparatus for controlling. C. Föhl. 1,867,143; July 12.
Steam trap. C. W. Zies. 1,867,434; July 12.
Steel, Method of and apparatus for making. H. W. Protzeller and G. W. Finney. 1,866,668; July 12.
Steel retainer, Drill. L. L. Richardson. 1,866,863; July 12.
Steering mechanism. R. K. Lee. 1,867,364; July 12.
Steering mechanism for dirigible aircraft, Automatic. E. A. Sperry. 1,867,334; July 12.
Stencil frames, Making. H. F. Elliott. 1,867,399; July 12.
Step mechanism. J. S. McWhirter. 1,867,228; July 12.
Stocking. E. B. Mosser. Des. 87,352; July 12.
Stocking. W. Tait. Des. 87,370; July 12.
Stoker. M. Ratel. 1,867,474; July 12.
Stove. J. A. Signore. 1,867,110; July 12.
Stove for burning rubbish. R. Marx. 1,866,661; July 12.
Strand reenforcement. P. H. Chase. 1,867,536; July 12.
Strap: *See*—
  Fixture strap.
Suit, Swimming. R. H. Dills. 1,867,445; July 12.
Suit, Swimming. W. L. Whiting. Des. 87,375–6; July 12.
Support, Arch. C. H. Freeman. 1,866,557; July 12.
Support, Automobile engine. H. Glassock. 1,867,070; July 12.
Support, Canopy. N. P. Larsen. 1,867,272; July 12.
Support, Cushion. J. H. Wood. 1,867,431; July 12.
Support for brake rods, Safety. S. A. Crone. 1,867,000; July 12.
Support for signs. F. E. Funk. 1,866,530; July 12.
Support for tile partitions. J. H. Ryan. 1,867,329; July 12.
Support for transformers and associated protective apparatus. H. M. Acly. 1,867,394; July 12.
Support, Tube. H. J. Kerr. 1,866,570; July 12.
Supporting device for telephones. N. P. Larsen. 1,867,271; July 12.
Surgical material. G. M. Karns. 1,867,222; July 12.
Suspenders. P. D. Swayze. 1,866,780; July 12.
Switch: *See*—
  Electric switch. Thermal switch.
  Lock switch. Thermostatic switch.
  Mercury switch.
Switch actuating mechanism. C. H. and H. K. Elliott. 1,866,594; July 12.
Switch and system, Tap changing. A. Haller. 1,867,147; July 12.
Switchboard, Telegraph exchange. E. B. Smith. 1,867,333; July 12.
Switch for projection machines. A. Dina. 1,866,550; July 12.
Synchronous motor. L. Hammond. 1,867,315; July 12.
Syringe, Hypodermic. J. P. Fletcher. 1,867,355; July 12.
Table: *See*—
  Picking table.
Table. J. Loebl. 1,866,572; July 12.
Tabulating machine. J. W. Bryce. 1,866,995; July 12.
Tank: *See*—
  Developing tank. Fuel feeding tank.
Tank gauge, Locomotive tender. W. J. Overmire. 1,866,802; July 12.
Tar from pyroligneous liquids, Removing. D. F. Othmer. 1,866,719; July 12.
Teeter board. J. C. Rager. 1,866,906; July 12.
Telegraphone. F. Schroeter. 1,867,179; July 12.
Telephone system, Automatic. R. Hoefert and K. Wollack. 1,866,597; July 12.
Telephone system, Intercommunication. W. Feind. 1,866,639; July 12.
Television system. J. H. Hammond, jr. 1,867,542; July 12.
Testing apparatus for motor vehicles. W. H. Welch. 1,866,738; July 12.
Testing system. R. F. Massonneau. 1,867,368; July 12.
Textile fabric and forming it. A. E. Meyer. 1,867,019; July 12.
Thermal switch. B. F. Runyon. 1,867,380; July 12.
Thermionic tube, Screened. C. S. Franklin. 1,867,311; July 12.
Thermographic printing device. R. C. Swink. 1,866,867; July 12.
Thermostat. A. A. Dicke. 1,866,548; July 12.
Thermostat and hygrostat instrument, Combined. F. J. Pease. 1,866,721; July 12.
Thermostatic switch. A. Scherbius. 1,867,384; July 12.
Thread cutting mechanism. E. B. Allen. 1,867,129; July 12.
Threads heat and storage proof, Making effect. E. Stocker. 1,867,035; July 12.
Throw and mattress cover, Combination double. A. D. Swetzel. 1,867,425; July 12.
Time-of-day announcing system. L. C. Warner. 1,866,606; July 12.
Timing device. J. D. Le Van and C. Stansbury. 1,867,225; July 12.
Timing mechanism. M. Ireland. 1,866,808; July 12.
Tire. A. Baeck. 1,867,438; July 12.
Tire core and chuck. H. C. Bostwick. 1,866,994; July 12.
Tire, Solid. R. S. Burdette. 1,866,797; July 12.
Tire vulcanizing mold. W. R. J. Woock. 1,866,832; July 12.
Toaster, Electric. W. A. Barnes and M. O. Wilkinson. 1,866,874; July 12.
Tobacco pipe. P. Mancusi and V. Di Sibio. 1,866,574; July 12.
Tone stabilizing. R. H. Ranger. 1,867,171; July 12.
Tongs, Curling. G. Brodbeck and A. Rehm. 1,866,747; July 12.
Tool, Cap setting. W. B. Thomas. 1,867,288; July 12.
Tool for flexible shafts, Reciprocatory hand. M. J. Farkas. 1,866,529; July 12.
Tool, Grease fitting. J. J. McGuckin. 1,867,372; July 12.
Tool operating apparatus, Pneumatic. E. Curti. 1,867,254; July 12.
Tool or implement, Seed sowing. R. L. Scarlett. 1,867,532; July 12.
Tool post. R. Von Frommer. 1,867,482; July 12.
Tool, Tire. G. W. Grebenstein. 1,867,404; July 12.
Tool, Upholsterer's. R. F. Walters. 1,867,041; July 12.
Tools by welding, Repairing. O. E. Andrus. 1,867,345; July 12.
Tools, Producing metal working. L. B. Monosmith. 1,867,021; July 12.
Torch cutting machine. J. L. Anderson. 1,866,695; July 12.
Torch cutting machine. J. L. Anderson. 1,867,047; July 12.
Toy. J. Blackburn. 1,866,697; July 12.
Toy animal. R. Apichell. Des. 87,325; July 12.
Toy house. H. L. Myers. 1,867,374; July 12.
Toy, Mechanical. F. O. Bergstrand. 1,867,052; July 12.
Toy, Mechanical. W. A. Vinson. 1,867,237; July 12.
Traction elevator, U groove. B. A. Schroeder. 1,866,911; July 12.
Traffic signal. W. H. Minier. 1,866,899; July 12.
Trailer hitch. E. B. Breuss. 1,866,796; July 12.
Transformer for floodlights. M. I. Brownell. 1,866,750; July 12.
Transformer, Integrating and differential. W. Bütow. 1,866,751; July 12.
Transformer tanks and the like, Construction of. F. S. Smith. 1,867,032; July 12.
Transmission, Compensating for distortion in. A. R. A. Rendall and E. K. Sandeman. 1,866,601; July 12.
Transmission controlling mechanism. P. E. Matthews. 1,866,662; July 12.
Transmission, Friction. F. A. Hayes. 1,867,149; July 12.
Transmission mechanism for axle driven indicators. P. P. Huber. 1,867,508; July 12.
Transmission mechanism, Speed changing. J. J. McCarthy. 1,867,227; July 12.
Transmission mechanism, Variable. W. P. Albert. 1,866,614; July 12.
Transmitter, Impulse. W. A. Rhodes. 1,866,669; July 12.
Transmitter, Voice. H. W. Adams. 1,867,200; July 12.
Trap: *See*—
  All metal box trap. Steam trap.
  Roach trap.
Trimming device for airplanes. T. P. Leaman. 1,867,162; July 12.
Trousers, Method of and apparatus for stretchering. A. Eskandarian. 1,866,553; July 12.
Truck, Car. G. T. Johnson. 1,867,267; July 12.
Truck construction. O. Gleason and G. Boylan. 1,866,887; July 12.
Truck for railroad vehicles. A. W. Bruce. 1,866,839; July 12.
Truck, Freight car. J. J. Tatum. 1,867,114; July 12.
Truck, Shiftable body. R. A. Fontaine. 1,866,640; July 12.
Trucking apparatus. J. F. Doubek. 1,867,446; July 12.
Tube: *See*—
  Thermionic tube.
Tube and tube sheet and ferrule therefor. J. H. Goss. 1,866,561; July 12.
Tube closure, Collapsible. M. R. O'Keefe. 1,866,984; July 12.
Tube for pneumatic tires and apparatus for the manufacture thereof, Inner. H. A. Denmire. 1,866,628; July 12.
Tube repairing clamp. B. Brotherman and F. J. Bowen, jr. 1,867,248; July 12.

Tube testing device. B. A. Lundy. 1,867,015; July 12.
Tube with an internal thickening at the rear end from a tubular blank, Rolling out a. A. Vollmer. 1,867,120; July 12.
Tunneling machine. J. Comoletti. 1,866,753; July 12.
Turbine blender and the like. J. Johnson. 1,866,535; July 12.
Turf roller. J. F. Buel. 1,866,998; July 12.
Turntable and truck apparatus. H. E. Scott. 1,867,386; July 12.
Tuyère for cupola furnaces. R. Gerisch. 1,866,764; July 12.
Type, Alphabet. A. A. Dietz. 1,866,629; July 12.
Typewriters, Variable spacing mechanism for. J. Huston and A. L. Slee. 1,867,155; July 12.
Typewriting machine. J. A. B. Smith. 1,866,582; July 12.
Undergarment. M. Polsky. 1,867,327; July 12.
Underreamer, Rotary. J. B. Triplett. 1,866,736; July 12.
Vacuum cleaner. H. J. Smidley. 1,867,284; July 12.
Vacuum discharge vessel. W. Dällenbach. 1,866,624; July 12.
Vacuum floor cleaner. F. E. Sode. 1,867,477; July 12.
Valve. E. E. Brosius. 1,867,349; July 12.
Valve. E. Price and W. A. Pfister. 1,867,279; July 12.
Valve, Boat drain. E. B. Greear. 1,866,643; July 12.
Valve, Dry pipe. W. B. Griffith. 1,866,766; July 12.
Valve for breathing appliances, Nonreturn. H. Steizner. 1,867,478; July 12.
Valve, Heavy duty. M. P. Teller. 1,867,195; July 12.
Valve mechanism, Throttle. M. L. Hacker, J. W. Wells, L. P. Hacker, and L. D. Barner. 1,867,004; July 12.
Valve, Rotary. J. Thorkildsen. 1,867,235; July 12.
Valve seat, Flush tank. J. B. Howle. 1,867,262; July 12.
Valve, Self-closing oil sampling. P. H. Schaad. 1,866,676; July 12.
Valves, Operation of series connected vacuum. F. W. Peek, jr. 1,867,419; July 12.
Vaporizer, Gasoline. O. F. Welling. 1,866,829; July 12.
Vaporizing device. A. J. Lichtig. 1,866,658; July 12.
Varnish, Flat. G. H. Burgman. 1,867,306; July 12.
Vault, Burial. R. Cohen. Des. 87,329; July 12.
Vault, Burial. J. L. Grissinger. Des. 87,341; July 12.
Vegetable proteins and product obtained thereby, Extracting. R. Bronsztajn. 1,866,698; July 12.
Vegetable root washer. A. G. Sueiflow and C. Wolford. 1,867,533; July 12.
Vegetable slicing machine. G. A. Reisner. 1,866,947; July 12.
Vegetables, Shelling cotyledonous. M. Salinas. 1,866,940; July 12.
Vehicle driving device, Motor. H. Ledwinka. 1,866,636; July 12.
Vehicle, Road. R. B. Fageol. 1,866,637; July 12.
Vending apparatus, Coin controlled. R. W. Cable. 1,867,496; July 12.
Vending machine. S. B. Burne. 1,867,495; July 12.
Vending machine. J. H. McCormick, C. G. Allen and F. M. Bender. 1,866,716; July 12.
Vending machine. C. Walker. 1,867,420; July 12.
Ventilation and construction of dye works. B. Bauer. 1,866,875; July 12.
Ventilator: *See*—
Cowl ventilator.
Vessels, Fabricating vacuum. F. Hotchner. 1,867,154; July 12.
Vibratory mechanical impulses into solids, liquids, and the like, Radiating. F. Rieber. 1,867,098; July 12.
Vinyl derivatives, Polymerizing. W. E. Lawson. 1,867,014; July 12.
Viscose manufacturing. I. J. Frenkel. 1,866,558; July 12.
Vulcanizing mold, Automatic. C. E. Maynard. 1,867,369; July 12.
Wall construction for absorbing sound waves. W. J. Young. 1,866,742; July 12.
Wall structure and building unit therefor. M. K. Armstrong. 1,867,299; July 12.
Walls and other surfaces, Decorating. E. K. Fowler. 1,867,068; July 12.
Washer: *See*—
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Washing machine. H. E. Snyder. 1,866,779; July 12.
Washing machine tub. A. H. Labisky. Des. 87,345; July 12.
Water, Apparatus for the purification of waste. M. Kusch. 1,867,512; July 12.
Water distillation. G. E. Hughes, A. H. Waring, and J. E. Braham. 1,867,076; July 12.
Water, Improving the taste and odor of. J. C. Baker and F. C. Schmelkes. 1,866,524; July 12.
Water, Method and apparatus for concentrating pulp. O. Andresen. 1,867,436; July 12.
Water softening apparatus. A. G. Horvath. 1,866,890; July 12.
Weed pulling device. J. W. Meixell. 1,867,086; July 12.
Weigher, Automatic feed. C. Decker. 1,867,442; July 12.
Weight balance, Chain-poise variable. W. Heusser. 1,867,008; July 12.
Weight recording machine. T. W. B. Watling. 1,866,871; July 12.
Welding. G. H. Phelps. 1,867,028; July 12.
Well drilling apparatus. C. E. Reed. 1,867,531; July 12.
Well drilling apparatus, Percussive. R. P. Simmons. 1,866,948; July 12.
Wetting, cleansing, and emulsifying agents, making same. F. Münz, K. Keller and F. Günther. 1,867,022; July 12.
Wheel: *See*—
Resilient wheel.
Wheel. S. I. Prescott and F. J. Rummler. 1,867,095; July 12.
Wheel, gear, and the like pulling device. H. W. Kulp and M. C. Dellinger. 1,866,654; July 12.
Whistle, Visible. G. M. Marr and A. P. Marr. 1,867,165; July 12.
Window. A. Herman. 1,867,454; July 12.
Window channel. W. S. Gaines, jr. 1,867,313; July 12.
Window channel. J. S. Reid. 1,867,175; July 12.
Window screen, Automobile. W. I. Moulton. 1,866,983; July 12.
Wing structure. G. M. Bellanca. 1,866,961; July 12.
Wiper, Windsbield. T. Farmer, jr. 1,866,700; July 12.
Wiping device. W. Prestwich and E. Prestwich. 1,866,862; July 12.
Wire tensioning mechanism, Round. H. Harvey. 1,866,705; July 12.
Wire twisting machine. J. G. Steele. 1,866,952; July 12.
Wires, Apparatus for feeding. G. Müller and C. Weinmann. 1,867,418; July 12.
Wireless receiving system. W. Van B. Roberts. 1,867,232; July 12.
Wood surfacing machine. G. Dzaman. 1,867,501; July 12.
Wood-working machinery, Universal. D. Kimble. 1,867,269; July 12.
Wrench. J. N. Johnson. 1,866,771; July 12.
Wringers, Attachment for clothes. E. V. Heaford. 1,867,005; July 12.
Yarn, Apparatus for processing. W. C. Volk. 1,867,197; July 12.
Yarn, particularly artificial silk yarn, Artificial. A. Zart, A. Hartmann, and F. Hoelkeskamp. 1,867,298; July 12.
Yarns produced by the stretch spinning process, Artificial cellulose. A. Zart, A. Hartmann, and F. Hoelkeskamp. 1,867,297; July 12.
Yoke, collar and cuff press. C. O. Reeps. 1,867,174; July 12.
Zinc hydrocarbonate, Production of. H. Oehme. 1,866,775; July 12.

CLASSIFICATION OF PATENTS

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18: 1,866,832
53: 1,867,034
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72: 1,867,024
75: 1,866,736
257— 10: 1,866,803
95: 1,867,148
132: 1,867,509
246: 1,867,163
259— 85: 1,867,243
96: 1,866,535
101: 1,866,779
102: 1,867,017
260— 2: 1,867,014
4: 1,866,962
10: 1,866,971
12: 1,867,083
15: 1,867,231
19: 1,867,202
27: 1,867,125
1,867,451
34: 1,867,332
44: 1,867,091
1,867,097
46: 1,867,106
47: 1,866,956
58: 1,867,069
60: 1,867,057
1,867,068
61: 1,867,090
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69: 1,867,105
70: 1,866,786
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86: 1,867,088
95: 1,867,439
98: 1,866,852
100: 1,866,558
101: 1,866,532
1,866,686
1,867,123
103: 1,866,849
108: 1,866,632
1,866,717
111: 1,867,049
116: R. 18,522
122: 1,866,719
128.5: 1,867,274
152: 1,867,050
261— 28: 1,866,725
41: 1,866,543
70: R. 18,520
113: 1,867,208
114: 1,867,136
262— 5: 1,866,753
9: 1,867,528
263— 1: 1,867,310
14: 1,866,795
43: 1,867,221
265— 25: 1,866,738
27: 1,866,683
60: 1,867,008
266— 6: 1,866,827
23: 1,866,695
1,867,047
36: 1,866,824
41: 1,866,764
267— 11: 1,866,958
48: 1,866,677
53: 1,867,203
54: 1,867,486
61: 1,866,762
271— 2.4: 1,867,343
18: 1,866,851
26: 1,867,038
271— 35: 1,866,847
62: 1,866,562
64: 1,866,812
272— 54: 1,866,906
72: 1,866,860
1,866,868
273— 65: 1,867,443
77: 1,866,615
1,867,103
107.5: 1,866,926
108: 1,866,674
125: 1,866,821
131: 1,867,053
139: 1,867,432
145: 1,867,031
277— 15: 1,867,004
37: 1,867,195
279— 2: 1,867,266
9: 1,867,359
280—33.44: 1,866,912
33.55: 1,866,796
53: 1,866,887
96.1: 1,866,724
106: 1,867,341
152: 1,867,156
156: 1,867,518
186: 1,867,228
179: 1,867,352
281— 44: 1,867,170
282— 3: 1,866,980
16: 1,867,544
283— 40: 1,866,968
57: 1,867,211
284— 17: 1,867,253
18: 1,866,676
285— 20: 1,866,636
22: 1,866,726
1,867,093
1,867,321
45: 1,866,561
62: 1,866,644
91: 1,866,535
115: 1,866,857
120: 1,867,296
122: 1,866,914
135: 1,866,619
143: 1,866,905
194: 1,866,672
1,867,430
286— 5: 1,867,260
7: 1,866,580
11: 1,866,967
16: 1,867,045
19: 1,867,236
287— 119: 1,867,364
292— 38: 1,866,684
293— 17: 1,866,752
55: R. 18,519
294— 26: 1,867,265
79: 1,866,900
296—44.5: 1,867,175
1,867,312
1,867,313
45: 1,866,898
297— 1: 1,866,778
299— 23: 1,866,658
66: 1,867,250
72: 1,866,844
84: 1,866,620
88: 1,866,909
300— 21: 1,867,487
301— 63: 1,867,095
302— 14: 1,866,756
19: 1,866,806
303— 54: 1,866,858
308— 47: 1,867,270
85: 1,867,114
89: 1,866,602
132: 1,866,977
141: 1,867,081
218: 1,866,936
312— 31: 1,866,621
65: 1,867,495
140: 1,867,107
185: 1,867,388

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. & M. Petroleum Company, El Paso, Tex. Lubricating oils and greases. Serial No. 327,329; July 19. Class 15.

Acme Staple Company, Camden, N. J. Stapling, tagging, binding, etc., machines. Serial No. 325,548; July 19. Class 13.

Alonso, Antonio, Hijos, Vigo, Spain. Canned fish. Serial No. 326,773; July 19. Class 46.

Alto Mfg. Co. (Not Incorporated.). (See Brandstetter, Josef.)

American Barley Corporation, The. (See Nunan, John D., receiver.)

American Crayon Company, The, Sandusky, Ohio. Birthday candles. Serial No. 322,815; July 19. Class 15.

Ancco Preserving Co. (See Bama Company, The.)

Appel, Robert, Brooklyn, N. Y. Pocket books. Serial No. 327,332; July 19. Class 3.

Atkinson, Fenion Co. Inc., New York, N. Y. Cotton drapery fabrics. Serial No. 323,387; July 19. Class 42.

Automatic Washer Company, Newton, Iowa. Insect exterminator. Serial No. 327,126; July 19. Class 6.

Balog, Jacques, doing business as Olla Spezialitaten Jacques Balog, Vienna, Austria. Prophylactic rubber articles. Serial No. 320,270; July 19. Class 44.

Bama Company, The, doing business as Ancco Preserving Co., Birmingham, Ala. Fruit and preserves and peanut butter. Serial No. 320,885; July 19. Class 46.

Bidwell, Joel R., doing business as Mother's Drumstick Sandwich Company, Dallas, Tex. Sandwiches. Serial No. 326,280; July 19. Class 46.

Bloomingdale Bros., Inc., New York, N. Y. Olive oil shampoo, essence of peppermint, etc. Serial No. 326,665; July 19. Class 6.

Bloomingdale Bros., Inc., New York, N. Y. Hats. Serial No. 327,335; July 19. Class 39.

Blue Plate Foods, Inc., New Orleans, La. Sauce or condiment. Serial No. 327,082; July 19. Class 46.

Blumas Cho-O-Lac Co. (See Rubin, L., & Son, Inc.)

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. Serial No. 327,864; July 19. Class 42.

Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Chemical substances. Serial No. 324,873; July 19. Class 6.

Bonanno, John, New York, N. Y. Marking paper. Serial No. 327,842; July 19. Class 37.

Borcherdt Malt Extract Company, Chicago, Ill. Medicine. Serial No. 326,666; July 19. Class 6.

Brague, Inc., Hinsdale, Mass. Soil. Serial No. 327,295; July 19. Class 1.

Brandstetter, Josef, doing business as Alto Mfg. Co. (Not Incorporated), Chicago, Ill. Receptacles. Serial No. 320,661; July 19. Class 2.

Brandstetter, Josef, doing business as Alto Mfg. Co., Chicago, Ill. Cans and bins. Serial No. 325,638; July 19. Class 2.

Brantley, Lewis R., doing business as Claritone Dairy Products Co., Marietta, Ga. Preparation for consumption by milch cows for preventing objectionable odors of milk yielded. Serial No. 326,841; July 19. Class 6.

Brooks, T. E., doing business as T. E. Brooks & Co., Red Lion, Pa. Cigars. Serial No. 327,844; July 19. Class 17.

Burnham Soluble Iodine Co., Auburndale, Newton, Mass. Soluble iodine. Serial No. 290,685; July 19. Class 6.

California Packing Corporation, San Francisco, Calif. Canned fruits, vegetables, tomato puree, etc. Serial No. 307,255; July 19. Class 46.

Celotex Company, The, Chicago, Ill. Fiber boards. Serial No. 327,389; July 19. Class 12.

Central Foundry Company, The, New York, N. Y. Oil and gasoline separator traps. Serial No. 315,229; July 19. Class 13.

Claritone Dairy Products Co. (See Brantley, Lewis R.)

Cooper Supply Company, Philadelphia, Pa. Caviar, mayonnaise, cooking wine, etc. Serial No. 327,245; July 19. Class 46.

Cutler-Lobingier Packing Company, Ontario, Calif. Canned fruits and vegetables. Serial No. 301,587; July 19. Class 46.

Cutler-Lobingier Packing Company, Ontario, Calif. Canned fruits. Serial No. 301,588; July 19. Class 46.

D'Angiola, Domenico, New York, N. Y. Canned peeled tomatoes. Serial No. 327,905; July 19. Class 46.

Dayton Rubber Manufacturing Company, The, Dayton, Ohio. Pulleys. Serial No. 326,129; July 19. Class 23.

Derman, Harry, Inc., Long Island City, N. Y. Transparent hoods. Serial No. 327,845; July 19. Class 19.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Soaps, steel wool, etc. Serial No. 318,197; July 19. Class 4.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Dynamite and blasting powders and the like, matches, etc. Serial No. 318,201; July 19. Class 9.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Embroideries, draperies, ribbons, etc. Serial No. 318,211; July 19. Class 42.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Fish hooks, skates, nets, etc. Serial No. 318,217; July 19. Class 22.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Jewelry. Serial No. 318,221; July 19. Class 28.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Strings for violins, etc. Serial No. 318,229; July 19. Class 36.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Fuel, lubricating oils, lubricating greases, etc. Serial No. 318,231; July 19. Class 15.

Doyon, Alphonse M., Montreal, Canada. Powder to be mixed with gasoline to increase the efficiency of the same. Serial No. 327,048; July 19. Class 6.

Du Pont Cellophane Company, Inc., New York, N. Y. Sheets and films of cellulose, etc. Serial No. 327,789; July 19. Class 50.

Du Pont Cellophane Company, Inc., New York, N. Y. Cellulosic wrapping paper. Serial No. 327,791; July 19. Class 37.

Duradene Company, Inc., Baltimore, Md. Hair waving fluids. Serial No. 318,551; July 19. Class 6.

Eiseman, Alfred, New York, N. Y. Textile fabrics. Serial No. 327,869; July 19. Class 42.

Electric City Box Co., Inc., Buffalo, N. Y. Cleaning and polishing cloths. Serial No. 327,503; July 19. Class 4.

Felder Bros., New York, N. Y. Handbags, pocket books, purses, etc. Serial No. 327,351; July 19. Class 3.

Fletcher, Abraham, doing business as Fletcher Chemical Company, Cincinnati, Ohio. Membraneous and rubber prophylactic articles. Serial No. 325,575; July 19. Class 44.

Florida Citrus Exchange, Tampa, Fla. Canned citrus fruits. Serial Nos. 326,812–13; July 19. Class 46.

Freihofer Baking Company, Philadelphia, Pa. Breads, cakes, buns, etc. Serial No. 321,641; July 19. Class 46.

Gambee, Martin H., Pawling, N. Y. Household furniture. Serial No. 327,553; July 19. Class 32.

General Cable Corporation, New York, N. Y. Electrical wires and cables. Serial No. 326,816; July 19. Class 21.

Getz Exterminators, Inc., St. Louis, Mo. Preparations for exterminating insects. Serial No. 322,634; July 19. Class 6.

Gintotabevage, Jean S., Marseilles, France. Curry sauce. Serial No. 323,504; July 19. Class 46.

Goldblatt Bros., Inc., Chicago, Ill. Motor lubricating oil. Serial No. 326,897; July 19. Class 15.

Goris & Arnstein, Inc., Chicago, Ill. Molding preparation for making up casts and models. Serial No. 327,010; July 19. Class 44.

Gould, Howard, Camden, N. J. Preparation for removing corns. Serial No. 326,782; July 19. Class 6.

Greenball, Leonard D., doing business as Greenhall Bros., Brooklyn and New York, N. Y. Suspenders, garters, and apparel belts. Serial No. 327,095; July 19. Class 39.

Gregg Publishing Company, The, New York, N. Y. Fountain pens. Serial No. 327,465; July 19. Class 37.

Halitest Company. (See Molchanoff, Stephen.)

Hammermill Paper Company, Erie, Pa. Cover paper. Serial No. 327,277; July 19. Class 37.

Hardwick, Hindle, Inc., Newark, N. J. Resistance units, rheostats, and potentiometers. Serial No. 308,780; July 19. Class 21.

Hartwig & Vogel Aktiengesellschaft, Dresden, Germany. Cacoa, chocolate, sugar-wares, etc. Serial No. 322,287; July 19. Class 46.

Hill, J. F., Inc., Philadelphia, Pa. Shoes. Serial No. 322,740; July 19. Class 39.

Hockmeyer Bros. Inc., New York, N. Y. Cotton corduroy piece goods. Serial No. 319,779; July 19. Class 42.

Hormann-Kaess Co. Inc., New York, N. Y. Restaurant foods. Serial No. 323,538; July 19. Class 46.

Huntsville-Sinclair Mining Company, Kansas City, Mo. Coal. Serial No. 327,659; July 19. Class 1.

Ice Cream Sandwich Corporation, The, Long Island City, N. Y. Ice cream confections. Serial No. 327,509; July 19. Class 46.

Kaufmann Department Stores, Inc., Pittsburgh, Pa. Soaps, soap chips, and soap flakes. Serial No. 327,223; July 19. Class 4.

Kayser, Julius, & Co., New York, N. Y. Hosiery. Serial No. 327,696; July 19. Class 39.

Keystone Oil Refining Co., Detroit, Mich. Oils and greases. Serial No. 327,361; July 19. Class 15.

Klüssendorf, Heinrich H. D., doing business as Heinrich H. Klüssendorf, Berlin, Germany. Automatic motion picture machines and films. Serial No. 324,825; July 19. Class 26.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Kremer, George L., New York, N. Y. Hair waving lotion. Serial No. 326,507; July 19. Class 6.
Kress, S. H. & Co., New York, N. Y. Kid hair curlers. Serial No. 327,399; July 19. Class 40.
Leco Manufacturing Co. Inc., College Point, N. Y. Paints, paint enamels, and varnishes. Serial No. 327,444; July 19. Class 16.
Lucky Break Co., San Diego, Calif. Ice cream and frozen confections. Serial No. 326,016; July 19. Class 46.
Magnum Products, Inc., New York, N. Y. Powder puffs and for fabric pads. Serial No. 327,366; July 19. Class 29.
Mallinger, Samuel, Company, Pittsburgh, Pa. Glass jars. Serial No. 321,809; July 19. Class 33.
May Department Stores Company, The, St. Louis, Mo. Shoes. Serial No. 320,439; July 19. Class 39.
Mead Johnson & Company, Evansville, Ind. Cereal food. Serial No. 327,942; July 19. Class 46.
Meigs, Curtis C., doing business as Octane Research Laboratory, Bala, Pa. Motor fluid. Serial No. 327,161; July 19. Class 6.
Molchanoff, Stephen, doing business as Halitest Company, San Diego, Calif. Antiseptic mouth wash. Serial No. 325,233; July 19. Class 6.
Mono Service Co., Newark, N. J. Cartons. Serial No. 322,301; July 19. Class 2.
Montagna, Joseph, Roxbury, Mass. Salve or unguentum. Serial No. 327,229; July 19. Class 6.
Mother's Drumstick Sandwich Company. (See Bidwell, Joel R.)
Myndall Cain. (See Powder Puff Shop.)
N E A Service Inc., Cleveland, Ohio. Comic strip. Serial No. 327,446; July 19. Class 38.
National Advisory Council on Radio in Education, Inc., New York, N. Y. Publication. Serial No. 326,984; July 19. Class 38.
National Mineral Company, The, Chicago, Ill. Hair waving pads. Serial Nos. 327,700–1; July 19. Class 44.
New England Importation Company, Boston, Mass. Antipasto, pickled limes, capers, etc. Serial No. 302,000; July 19. Class 46.
No Cli-Pad Corporation, New York, N. Y. Hair waving pads. Serial No. 321,252; July 19. Class 44.
North Whittier Heights Citrus Association, Puente, Calif. Fresh citrus fruit. Serial No. 327,943; July 19. Class 46.
Northern Paper Mills, Green Bay, Wis. Paper. Serial No. 327,830; July 19. Class 37.
Northwestern Pine Tar Co., Chicago, Ill. Pine tar. Serial No. 327,283; July 19. Class 6.
Noxacorn Company, Inc., New York, N. Y. Liquid corn remover. Serial No. 327,106; July 19. Class 6.
Nunan, John D., Receiver for The American Barley Corporation, Minneapolis, Minn. Cereal breakfast foods. Serial No. 326,987; July 19. Class 46.
Octane Research Laboratory. (See Meigs, Curtis C.)
Oldfield, Walter, Springfield, Mass. Tea and coffee. Serial No. 327,196; July 19. Class 46.
Olds Products Co., The, Chicago, Ill. Food relishes, salad spreads, dressing, etc. Serial No. 324,568; July 19. Class 46.
Olla Spezialitaten Jacques Balog. (See Balog, Jacques.)
Parodi Cigar Company of New York, Inc., Scranton, Pa. Cigars. Serial Nos. 327,524–7; July 19. Class 17.
Pinnix, W. Maple, doing business as The Smacks Co., New Bern, N. C. Laxative candy. Serial No. 327,001; July 19. Class 6.
Planters Nut & Chocolate Company, Suffolk, Va., and Wilkes-Barre, Pa. Salted peanuts and peanut bars. Serial No. 327,766; July 19. Class 46.
Porter Chemical Company, The, Hagerstown, Md. Outfits or sets containing drawing materials, etc. Serial No. 327,704; July 19. Class 50.
Powder Puff Shop, doing business as Myndall Cain, Minneapolis, Minn. Sachets for permanent waving. Serial No. 326,871; July 19. Class 44.
Private Brands, Inc., New York, N. Y. Canned mixed fruits, vegetables, salad dressing, etc. Serial No. 327,566; July 19. Class 46.
Puritan Mills, Incorporated, Atlanta, Ga. Mixed feeds for poultry, horses, etc. Serial No. 321,960; July 19. Class 46.
Quincy Stove Manufacturing Company, The, Quincy, Ill. Portable stoves, ranges, furnaces, etc. Serial No. 325,015; July 19. Class 34.
Reid, Albert S., Vancouver, British Columbia, Canada. Medicine. Serial No. 305,287; July 19. Class 6.
Reische, Albert, doing business as Springfield Auto Supply Company, Springfield, Ill. Vehicle batteries, battery cables, wire, etc. Serial No. 314,864; July 19. Class 21.
Rhea Manufacturing Company, The, Milwaukee, Wis. Wash dresses, smocks, and pajamas. Serial No. 327,772; July 19. Class 39.
Rossie Velvet Company, Mystic, Conn. Velvets in the piece. Serial No. 327,834; July 19. Class 42.
Rubin, L., & Son, Inc., doing business as Blumas Choc-O-Lac Co., Brooklyn, N. Y. Chocolate syrups. Serial No. 327,028; July 19. Class 46.
Santa Clara Pear Association, San Jose, Calif. Fresh deciduous fruit. Serial No. 327,948; July 19. Class 46.
Schoeneman, J., Incorporated, Baltimore, Md. Coats, vests, trousers, etc. Serial No. 327,290; July 19. Class 39.
Scott-Mebane Manufacturing Company, Graham, N. C. Overalls. Serial No. 327,855; July 19. Class 39.
Sears, Roebuck and Co., Chicago, Ill. Poultry feeds. Serial No. 325,414; July 19. Class 46.
Sears, Roebuck and Co., Chicago, Ill. Shoes. Serial No. 327,202; July 19. Class 39.
Shell Chemical Company, San Francisco, Calif. Amyl acetate, butyl acetate, etc. Serial No. 326,693; July 19. Class 6.
Shell Oil Company, San Francisco, Calif. Gasoline. Serial No. 326,990; July 19. Class 15.
Smacks Co., The. (See Pinnix, W. Maple.)
Solo Products Co., Chicago, Ill. Canned mushrooms, anchovies, tea, etc. Serial No. 324,764; July 19. Class 46.
Sotto, Eddie, Erie, Pa. Cartoon publication. Serial No. 327,612; July 19. Class 38.
Southern Dairies, Inc., Washington, D. C. Frozen confections. Serial No. 322,836; July 19. Class 46.
Springfield Auto Supply Company. (See Reisch, Albert.)
Standard Varnish Works, New York, N. Y. Paints, paint oils, varnishes, etc. Serial No. 326,502; July 19. Class 16.
Stieff Company, The, Baltimore, Md. Flat and hollow tableware. Serial No. 327,180; July 19. Class 28.
Straub, Francis J., New Kensington, Pa. Concrete building blocks. Serial No. 326,271; July 19. Class 12.
Super Concrete Emulsions, Ltd., Los Angeles, Calif. Hydraulic cement concrete paving materials. Serial No. 324,197; July 19. Class 12.
Super Concrete Emulsions, Ltd., Los Angeles, Calif. Cementitious surface coating. Serial No. 326,530; July 19. Class 12.
Superior Packing Corp., New York, N. Y. Dried pea beans, lima beans, marrow beans, etc. Serial No. 327,487; July 19. Class 46.
Supplee-Biddle Hardware Company, Philadelphia, Pa. Storage batteries. Serial No. 327,325; July 19. Class 21.
Takvorian, Hagop, doing business as James H. Takvorian, Modesto, Calif. Fresh apples. Serial No. 327,173; July 19. Class 46.
Teasdale & Co. Limited, Carlisle, England. Medicated pastilles. Serial No. 325,273; July 19. Class 6.
Televator Corporation, The, New York, N. Y. Electric audible annunciators. Serial No. 324,796; July 19. Class 21.
Theta Alpha Fraternity, Kenmore, N. Y. Jewelry. Serial No. 327,609; July 19. Class 28.
Thurberator Corporation, The, New York, N. Y. Liquid fuel carburetors. Serial No. 326,562; July 19. Class 23.
Tripoli Foods, Incorporated, Baltimore, Md. Potato salad. Serial No. 319,267; July 19. Class 46.
29th Division Association, Inc., The, Newark, N. J. Publications and circulars. Serial No. 319,791; July 19. Class 38.
Union Oil Company of California, Los Angeles, Calif. Cleaning compound. Serial No. 324,857; July 19. Class 4.
Union Oil Company of California, Los Angeles, Calif. Dry cleaning solvent, cleaning compound, etc. Serial No. 324,916; July 19. Class 4.
U. S. Manufacturing Corporation, Decatur, Ill. Fabrics. Serial No. 327,617; July 19. Class 42.
United States Quarry Tile Company, Parkersburg, W. Va. Building tile. Serial No. 327,326; July 19. Class 12.
White, Wilbur, Chemical Company, The, Oswego, N. Y. Emulsion. Serial No. 323,470; July 19. Class 6.
Windsor Coal Company, Kansas City, Mo. Coal. Serial No. 327,840; July 19. Class 1.
Winter, Milo, Company, Chicago, Ill. Posters. Serial No. 323,316; July 19. Class 38.
Worthington Pump and Machinery Corporation, New York, N. Y. Rock drills and hammers, sinkers, etc. Serial Nos. 323,642–3; July 19. Class 23.
X-Otic, Inc., New York, N. Y. Diaper holding garments and fillers therefor. Serial No. 326,597; July 19. Class 39.
York, Joseph W., New York, N. Y. Prophylactic rubber articles. Serial No. 323,431; July 19. Class 44.

LIST OF REGISTRANTS OF TRADE-MARKS

Ace Art Company, Reading, Mass. Corner mounts. 296,057; July 19; Serial No. 324,814; published May 10, 1932. Class 37.
Adams, Henry K., doing business as NaCalsun Company, Eugene, Oreg. Natural mineral waters. 295,956; July 19; Serial No. 320,788; published May 10, 1932. Class 45.

Alemite Company of Iowa, Davenport, Iowa. Lubricating oils. 295,899; July 19; Serial No. 323,554; published Apr. 26, 1932. Class 15.
American Business Publications, Inc., New York, N. Y. Magazine. 296,095; July 19; Serial No. 325,462; published May 10, 1932. Class 38.
American Institute of Banking, New York, N. Y. Booklets. 296,027; July 19; Serial No. 325,551; published May 10, 1932. Class 38.
Antonucci, Angelo C., doing business as Trulastic Research Laboratories, Philadelphia, Pa. Dental impression wax compositions. 296,076; July 19; Serial No. 325,451; published May 3, 1932. Class 44.
Asta Aktiengesellschaft, Brackwede, Germany. Preparation for inflammation of the nerves, sciatica, neuralgia, etc. 296,055; July 19; Serial No. 323,562; published May 10, 1932. Class 6.
Atlantic Steel Company, Atlanta, Ga. Welding electrodes. 295,927; July 19; Serial No. 324,028; published May 3, 1932. Class 14.
Atlantic Steel Company, Atlanta, Ga. Welding rods. 295,928; July 19; Serial No. 324,029; published May 3, 1932. Class 14.
B B Products Corporation, New York, N. Y. Crystal powder cleaning preparation. 295,900; July 19; Serial No. 322,569; published May 10, 1932. Class 4.
Baby's Own Soap Company. (See Curtis, William M.)
Bananola South Seas Products Company, New York, N. Y. Platane chips packed in paper bags. 295,964; July 19; Serial No. 324,307; published May 3, 1932. Class 46.
Barok, George D., doing business as The Barok Company, Columbus, Ohio. Amusement device. 295,988; July 19; Serial No. 325,508; published May 10, 1932. Class 22.
Bates Manufacturing Company, Lewiston and Augusta, Me. Bed spreads. 296,006; July 19; Serial No. 313,224; published May 3, 1932. Class 42.
Belluomini & Klein, Walnut Grove, Calif. Fresh vegetables. 295,989; July 19; Serial No. 325,509; published May 3, 1932. Class 46.
Bersuch, Fredrick, Burr, Nebr., to Frank Penner, Hillsboro, Kans., successor. Remedies for stomach diseases, rheumatism, and female complaints. 80,291; renewed June 29, 1927.
Bettoney, Harry, doing business as Cundy-Bettoney Co., Boston, Mass. Clarinets, flutes, piccolos, etc. 295,923; July 19; Serial No. 323,801; published April 26, 1932. Class 36.
Bid-Rite Playing Card Corporation, New York, N. Y. Playing cards. 295,992; July 19; Serial No. 325,613; published May 3, 1932. Class 22.
Big Ben Beverage Corporation, St. Louis, Mo. Fruit flavored milk food beverage. 295,895; July 19; Serial No. 321,943; published May 3, 1932. Class 46.
Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Rugs and carpets. 296,021; July 19; Serial No. 325,456; published May 10, 1932. Class 42.
Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Rugs and carpets. 296,022; July 19; Serial No. 325,457; published May 3, 1932. Class 42.
Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Rugs and carpets. 296,023; July 19; Serial No. 325,458; published May 10, 1932. Class 42.
Bill, Bell & Co., to Bill Bell Corporation, Ogdensburg, N. Y. Flour. 37,644; renewed Jan. 14, 1932.
Binney & Smith Co., New York, N. Y. Crayons. 296,038; July 19; Serial No. 324,425; published May 3, 1932. Class 37.
Bisgyer, Maurice, Washington, D. C. Columns in periodicals. 296,016; July 19; Serial No. 325,204; published May 3, 1932. Class 38.
Bloom, Charles, Inc., New York, N. Y. Cretonne piece goods. 296,060; July 19; Serial No. 324,149; published May 3, 1932. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 296,019; July 19; Serial No. 325,418; published May 3, 1932. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 296,061; July 19; Serial No. 324,059; published May 10, 1932. Class 42.
Brown Company, Portland, Me., and Berlin, N. H. Paper. 295,975; July 19; Serial No. 324,953; published Apr. 26, 1932. Class 37.
Bruscia, Mario, Brooklyn, N. Y. Maltless beverages. 295,994; July 19; Serial No. 325,679; published May 3, 1932. Class 45.
Burge, Flippen, doing business as The National "Who-Handles" Building Products Directory Co., Atlanta, Ga. Directories. 296,093; July 19; Serial No. 325,317; published May 3, 1932. Class 38.
Burnham & Morrill Company, Portland, Oreg. Baked beans. 295,958; July 19; Serial No. 321,838; published May 3, 1932. Class 46.
Cairo Syrup Company, Atlanta, Ga. Cane syrup. 295,952; July 19; Serial No. 324,954; published May 10, 1932. Class 46.
Campbell Soup Company, Camden, N. J. Canned tomato juice. 295,884; July 19; Serial No. 328,488 published May 3, 1932. Class 46.
Canada Last Company, Limited, The, Preston, Ontario, Canada. Last and trees for boots and shoes. 295,940; July 19; Serial No. 324,367; published May 10, 1932. Class 50.
Caulk, L. D., Company, The, Milford, Del. Preparation for use by dentists. 295,946; July 19; Serial No. 324,658; published May 10, 1932. Class 4.
Caulk, L. D., Company, The, Milford, Del. Modified cocoa butter. 195,951; July 18; Serial No. 324,775; published May 10, 1932. Class 44.
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 296,031; July 19; Serial No. 325,744; published May 10, 1932. Class 42.
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 296,032; July 19; Serial No. 325,746; published May 10, 1932. Class 42.
Chamberlin Cartridge & Target Co., The, Cleveland, Ohio. Clay pigeons. 295,976; July 19; Serial No. 324,955; published May 3, 1932. Class 22.
Chocolat Suchard Societe Anonyme, Neutchatel, Switzerland. Sweet chocolate and chocolate pastilles. 295,954; July 19; Serial No. 318,391; published May 10, 1932. Class 46.
Clago Radio Corporation, Chicago, Ill. Radio receiving sets. 295,883; July 19; Serial No. 317,424; published Apr. 19, 1932. Class 21.
Clayton Magazines, Inc., The, New York, N. Y. Periodical. 295,929; July 19; Serial No. 324,030; published May 10, 1932. Class 38.
Clifton Kraft Works. (See Wentz, Jere L.)
Climax Rubber Company. (See Stein, Jacob.)
Coast Envelope & Leather Products Co., Los Angeles, Calif. Writing paper. 296,046; July 19; Serial No. 319,229; published May 3, 1932. Class 37.
Colorado Potato Flake & Manufacturing Company, The, Denver, Colo. Potato waffles. 295,980; July 19; Serial No. 325,162; published May 10, 1932. Class 46.
Columbia Phonograph Company, Inc., Bridgeport, Conn. Radio receiving, detecting, and transmitting sets and parts thereof. 295,904; July 19; Serial No. 323,272; published Apr. 19, 1932. Class 21.
Compo, Alfred J., Edwards, N. Y. Insecticides. 296,097; July 19; Serial No. 325,516; published May 3, 1932. Class 6.
Creditors Service Trust Company, Louisville, Ky. Drafts. 296,058; July 19; Serial No. 324,699; published Apr. 26, 1932. Class 37.
Cromwell, Thos. B., Lexington, Ky. Weekly journal. 296,054; July 19; Serial No. 323,555; published May 3, 1932. Class 38.
Crown Cork & Seal Company, Inc., Baltimore, Md. Packing containers made from glass. 295,977; July 19; Serial No. 324,990; published May 3, 1932.
Crown Laboratories, Ogdensburg, N. Y. Yeast. 295,931; July 19; Serial No. 324,187; published May 10, 1932. Class 46.
Cumberland Steel Company, Cumberland, Md. Steel bars. 89,096; renewed Nov. 12, 1932.
Cundy-Bettoney Co. (See Bettoney, Harry.)
Curtiss, William M., doing business as Baby's Own Soap Company, Belmont, Mass. Toilet soap. 296,083; July 19; Serial No. 325,397; published May 3, 1932. Class 4.
Cyrex Manufacturing Co. (See Levy, Emanuel.)
Daily Graphic, Inc., New York, N. Y. Newspaper column. 296,037; July 19; Serial No. 324,660; published May 3, 1932. Class 38.
Davis, Fred W., New York, N. Y. Soaps and shaving creams. 295,887; July 19; Serial No. 319,474; published May 10, 1932. Class 4.
Dean, W. H., Company, The, New York, N. Y. Aprons and dresses. 87,731; renewed Aug. 6, 1932.
Dean-Lilly Coffee and Spice Company, The, doing business as Dean's, Memphis, Tenn. Coffee. 295,957; July 19; Serial No. 321,199; published May 10, 1932. Class 46.
Doerr, Robert C., Hoboken, N. J. Water repellent products. 295,922; July 19; Serial No. 323,742; published May 3, 1932. Class 4.
Doraldina, Inc., West Hollywood, Calif. Astringents, astringent cerates, bleach and beauty creams, etc. 296,049; July 19; Serial No. 320,495; published Apr. 26, 1932. Class 6.
Draper-Maynard Company, The, Plymouth, N. H. Foot balls and basket balls. 295,990; July 19; Serial No. 325,517; published May 3, 1932. Class 22.
Drugkraft, Inc., New York, N. Y. Laxative. 296,099; July 19; Serial No. 325,645; published May 3, 1932. Class 6.
Du Pont, E. I., de Nemours and Company, Wilmington, Del. Coating compositions. 296,096; July 19; Serial No. 325,463; published May 3, 1932. Class 6.
Eagle Pencil Company, New York, N. Y. Pencils, penholders, combination pens and pencils, etc. 296,066; July 19; Serial No. 325,090; published May 3, 1932. Class 37.
East Whittier Citrus Association, Whittier, Calif. Fresh citrus fruits. 295,995; July 19; Serial No. 325,747; published May 10, 1932. Class 46.
Edison, Thomas A., Incorporated, West Orange, N. J. Sound recording and reproducing apparatus. 295,886; July 19; Serial No. 318,979; published Apr. 19, 1932. Class 36.
Edison, Thomas A., Incorporated, West Orange, N. J. Sound recording and reproducing apparatus. 295,966; July 19; Serial No. 324,551; published Apr. 26, 1932. Class 36.

Edwards and Company, Inc., New York, N. Y. Electrical goods and apparatus, etc. 295,938; July 19; Serial No. 324,247; published Apr. 19, 1932. Class 21.
Elkton Drug Co. (See Fink, Samuel M.)
Emark Battery Corporation, West Orange, N. J. Electric batteries. 296,005; July 19; Serial No. 312,948; published Apr. 19, 1932. Class 21.
Faber, Eberhard, Pencil Company, Brooklyn, N. Y. Lead pencils. 296,015; July 19; Serial No. 325,253; published Apr. 26, 1932. Class 37.
Faichney Instrument Corporation, Watertown, N. Y. Clinical thermometers, hypodermic syringes, and hypodermic needles. 296,081; July 19; Serial No. 325,164; published May 10, 1932. Class 44.
Fair, The, Chicago, Ill. Dolls. 295,984; July 19; Serial No. 325,389; published May 3, 1932. Class 22.
Farmacia Garza. (See Longoria, Pedro.)
Fink, Samuel M., doing business as Elkton Drug Co., Elkton, Md. Antiseptic liquid, powder, and paste. 296,043; July 19; Serial No. 323,991; published May 3, 1932. Class 6.
Fischer's Surfa-Saver, Inc., Cincinnati, Ohio. Soap. 296,007; July 19; Serial No. 313,338; published May 10, 1932. Class 4.
Forsythe, Vic, Alhambra, Calif. Cartoon strip. 296,011; July 19; Serial No. 316,673; published May 3, 1932. Class 38.
Fox Head-Waukesha Corporation. (See Milwaukee-Waukesha Brewing Company.)
Furedy, Frank, Penn-Wynne, assignor to George M. Hessdoerfer, Philadelphia, Pa. Pencils and parts therefor. 296,000; July 19; Serial No. 305,398; published May 10, 1932. Class 37.
G. S. S. Publishing Company, Inc., The, New York, N. Y. Periodical. 296,072; July 19; Serial No. 325,785; published May 10, 1932. Class 38.
Galban & Co. Inc., New York, N. Y. Food products. 296,078; July 19; Serial No. 325,685; published May 10, 1932. Class 46.
Garat & Company, Whiterock, Nev. Cattle. 295,962; July 19; Serial No. 323,814; published May 10, 1932. Class 46.
Gardner, Alvin I., Pittsburgh, Pa. Section of a newspaper. 295,898; July 19; Serial No. 322,350; published May 10, 1932. Class 38.
General Laboratories, Inc., Detroit, Mich. Reducing lotion. 296,050; July 19; Serial No. 320,910; published May 10, 1932. Class 6.
General Timber and Lumber Company, The, Cleveland, Ohio. Perforators and holders for cigars, cigarettes, etc. 295,885; July 19; Serial No. 318,517; published May 10, 1932. Class 8.
Gittleman, Benjamin, doing business as the Lincoln Shoe Products Mfg. Co., Providence, R. I. Shoe polish. 295,947; July 19; Serial No. 324,707; published May 3, 1932. Class 4.
Gittleman, Benjamin, doing business as The Lincoln Shoe Products Mfg. Co., Providence, R. I. Cleaning, polishing, and whitening fluid or powder for shoes. 295,948; July 19; Serial No. 324,708; published May 3, 1932. Class 4.
Gore, Joseph M., jr., doing business as Gore Products Co., New Orleans, La. Preparation for the relief of ringworm of the feet. 296,040; July 19; Serial No. 324,344; published May 10, 1932. Class 6.
Gotham Tissue Corporation, New York, N. Y. Toilet paper and paper facial. 295,970; July 19; Serial No. 324,886; published Apr. 26, 1932. Class 37.
Grand Junction Fruit Growers Association, The, Grand Junction, Colo. Fruits. 89,024; renewed Nov. 5, 1932.
Great Western Electro-Chemical Co., San Francisco, Calif. Fertilizers. 296,068; July 19; Serial No. 325,258; published May 10, 1932. Class 10.
Greist Manufacturing Company, The, New Haven, Conn. Electric lamps. 295,901; July 19; Serial No. 322,694; published Apr. 19, 1932. Class 21.
Grenole Sales Corporation, New York, N. Y. Fly catcher. 296,087; July 19; Serial No. 325,619; published May 10, 1932. Class 50.
Grossman, Wallace G., New York, N. Y. Exercising machines. 295,981; July 19; Serial No. 325,289; published May 10, 1932. Class 22.
Guignon, Emile S., jr., assignor to Point-O-Purchase Company, Kansas City, Mo. Electric display signs and parts thereof. 295,924; July 19; Serial No. 323,815; published Apr. 19, 1932. Class 21.
Hahn Department Stores, Inc., Wilmington, Del. Silk and artificial silk yard goods. 296,017; July 19; Serial No. 325,259; published May 3, 1932. Class 42.
Hall, Gardiner, jr. Company, The, South Willington, Conn., and New York, N. Y. Thread. 296,024; July 19; Serial No. 325,467; published May 3, 1932. Class 43.
Halliwell-Shelton Electric Corporation, New York, N. Y. Hair-waving rods. 296,074; July 19; Serial No. 325,169; published May 3, 1932. Class 44.
Hardwick & Magee Company, Philadelphia, Pa. Textile carpets. 296,020; July 19; Serial No. 325,402; published May 10, 1932. Class 42.
Harvel Corporation, The, Newark, N. J. Paints, varnishes, primers, etc. 295,999; July 19; Serial No. 286,936; published May 10, 1932. Class 16.
Hassell, Bert R. J., Rockford, Ill. Ice cream confection bar and ice cream in brick and bulk form. 296,010; July 19; Serial No. 316,644; published May 10, 1932. Class 46.
Health Developing Apparatus Co., Inc., New York, N. Y. Athletic appliances. 295,996; July 19; Serial No. 325,753; published May 10, 1932. Class 22.
Hendee, George M., assignor, by mesne assignments, to Indian Motocycle Company, Springfield, Mass. Bicycles, and self propelled road vehicles. 39,008; renewed Oct. 7, 1932.
Henry & Close Co., Boston, Mass. Fresh fish fillets. 295,993; July 19; Serial No. 325,654; published May 10, 1932. Class 46.
Hessdoerfer, George M. (See Furedy, Frank.)
Hydrex Felt & Engineering Company, The, Portland, Me., New York, N. Y., and Rahway, N. J., to Hydrex Asphalt Products Corporation, New York, N. Y., successor. Building, sheathing, roofing, insulating, and case-lining papers. 86,299; renewed Apr. 30, 1932.
Ideal Novelty & Toy Co., Brooklyn, N. Y. Dolls. 295,982; July 19; Serial No. 325,291; published May 10, 1932. Class 22.
Indian Motocycle Company. (See Hendee, George M., assignor.)
Inter-Coastal Paint Corporation, East St. Louis, Ill. Ready mixed paint. 295,949; July 19; Serial No. 324,743; published May 3, 1932. Class 16.
Jacobs, D. Sons Co., The, Cincinnati, Ohio. Jewelry. 295,882; July 19; Serial No. 317,041; published Sept. 8, 1931. Class 28.
Kasper, P. J., Sons Co., Chicago, Ill. Beverages, syrups, and compounds. 295,997; July 19; Serial No. 325,827; published May 10, 1932. Class 45.
Kaumagraph Company, New York, N. Y. Inks and ink solvents. 295,905; July 19; Serial No. 323,334; published May 10, 1932. Class 11.
Keystone Malt Company. (See Stopper, L. J.)
Kimball Dental Manufacturing Co., Chicago, Ill. Dental burs. 295,945; July 19; Serial No. 324,565; published May 3, 1932. Class 44.
Kimberly-Clark Corporation, Neenah, Wis. Book paper. 296,014; July 19; Serial No. 325,230; published Apr. 26, 1932. Class 37.
Kotex Company, Chicago, Ill. Sanitary napkins. 296,077; July 19; Serial No. 325,474, published May 10, 1932. Class 44.
Kress, S. H., & Co., New York, N. Y. Soaps. 295,941; July 19; Serial No. 324,383; published May 10, 1932. Class 4.
Kress, S. H., & Co., New York, N. Y. Hair nets, towels, sheets, etc. 296,062; July 19; Serial No. 323,340; published May 3, 1932. Class 42.
La Choy Food Products, Inc., Detroit, Mich. Canned corn mush and chicken a la King. 296,004; July 19; Serial No. 312,525; published May 3, 1932. Class 46.
Len-Pep Company. (See Sefing, Leonard G.)
Levy, Emanuel, doing business as Cyrex Manufacturing Co., Brooklyn, N. Y. Cleaning compounds for metals, woodwork, marblework, etc. 296,080; July 19; Serial No. 325,148; published May 3, 1932. Class 4.
Lilly, Eli, and Company, Indianapolis, Ind. Powdered liver extract. 296,091; July 19; Serial No. 325,231; published May 3, 1932. Class 6.
Linco Products Corporation, Chicago, Ill. Javal water. 296,042; July 19; Serial No. 324,071; published May 3, 1932. Class 6.
Lincoln Shoe Products Mfg. Co., The. (See Gittleman, Benjamin.)
Longoria, Pedro, doing business as Farmacia Garza, Mercedes, Tex. Preparation for eye diseases. 296,002; July 19; Serial No. 309,783; published May 10, 1932. Class 6.
Los Angeles Soap Company, Los Angeles, Calif. Washing powder. 296,079; July 19; Serial No. 325,105; published May 10, 1932. Class 4.
Louisiana Pine Products Company, Inc., Shreveport, La. Turpentine and pine oil. 295,902; July 19; Serial No. 322,848; published May 3, 1932. Class 16.
Lovett, Laura, Sunnyside, L. I., N. Y. Candied citrous fruit peel. 295,983; July 19; Serial No. 325,369; published May 3, 1932. Class 46.
Lowe, Joe, Corporation, Brooklyn, N. Y. Units for making solidified carbon dioxide, cabinets for preserving products with solidified carbon dioxide, and parts for said units and cabinets. 295,971; July 19; Serial No. 324,894; published May 3, 1932. Class 31.
Lowe, Joe, Corporation, Brooklyn, N. Y. Divider oil and trough grease. 295,972; July 19; Serial No. 324,897; published Apr. 26, 1932. Class 15.
Lucky Strike Manufacturing Company, Incorporated, The, Baltimore, Md. Game. 295,963; July 19; Serial No. 324,044; published May 3, 1932. Class 22.
Lurgan Weaving Company, Limited, The, Lurgan, Northern Ireland. Bedspreads, sheets, tablecloths, etc. 296,063; July 19; Serial No. 320,595; published May 3, 1932. Class 42.
Luxtone Co., The. (See Moe, Blanche W., assignor.)
Luyties Pharmacy Co., as assignee of Frederick A. Luyties, assignor, by mesne assignments, to Luyties Pharmacal Company, St. Louis, Mo. Pharmaceutical preparations. 88,505; renewed Sept. 24, 1932.

Mac-Kee Drug Company. (See McLean, Samuel G.)
Maine Yacht Corporation, Dover-Foxcroft, Me. Toy boats. 295,985; July 19; Serial No. 325,436; published May 10, 1932. Class 22.
Marietta Manufacturing Company, The, The Union Trust Company of Indianapolis, receiver, Indianapolis, Ind. Wainscoting for walls, ceiling plates, etc. 296,088; July 19; Serial No. 325,006; published Apr. 26, 1932. Class 12.
Marietta Paint & Color Co., The, Marietta, Ohio. Sanding sealers, n lacquer type product. 295,943; July 19; Serial No. 324,442; published May 10, 1932. Class 16.
McLean, Samuel G., doing business as Mac-Kee Drug Company, Oakland, Calif. Alteratives, analgesics, anesthetics, etc. 296,051; July 19; Serial No. 320,988; published May 10, 1932. Class 6.
Meredith Publishing Company, Des Moines, Iowa. Magazine section. 296,053; July 19; Serial No. 322,323; published Apr. 26, 1932. Class 38.
Mettmanner Britanniawarenfabrik W. Seibel, Mettmann, Germany. Spoons and forks. 88,580; renewed Oct. 1, 1932.
Miller, D. L., doing business as Millerine Company, Chicago, Ill. Treatment for baldness, consisting in a liquid chemical scalp-stimulating compound. 296,039; July 19; Serial No. 324,890; published May 10, 1932. Class 6.
Miller High Life Company, doing business as Milo Malt Co., Milwaukee, Wis. Concentrated malt syrup. 295,944; July 19; Serial No. 324,538; published May 10, 1932. Class 46.
Millerine Company. (See Miller, D. L.)
Milo Malt Co. (See Miller High Life Company.)
Milwaukee-Waukesha Brewing Company, by change of name to Fox Head-Waukesha Corporation, Milwaukee, Wis. Ginger-ale and mineral water. 86,146; renewed Apr. 16, 1932.
Moceo, Benedict, San Jose, Calif. Fresh vegetables. 295,987; July 19; Serial No. 325,480; published May 3, 1932. Class 46.
Moe, Blanche W., New York, N. Y., assignor to The Luxtone Co., Chicago, Ill. Pharmaceutical preparations. 87,091; renewed June 25, 1932.
Moorhead Knitting Co., Inc., Harrisburg, Pa. Hosiery, knit underwear, and sweaters. 88,775; renewed Oct. 22, 1932.
Morgan, Robt. E., New York, N. Y. Game. 295,978; July 19; Serial No. 325,106; published May 3, 1932. Class 22.
Naamlooze Vennootschap tot Voortzetting der Zaken Van Pieter Schoen & Zoon, Zaandam, Netherlands. Paints, paint enamels, and varnishes. 295,950; July 19; Serial No. 324,753; published May 3, 1932. Class 16.
Nacalsun Company. (See Adams, Henry K.)
Nashua Baking Company, Inc., Nashua, N. H. Groceries. 295,894; July 19; Serial No. 321,915; published May 3, 1932. Class 46.
Nashua Gummed & Coated Paper Co., Nashua, N. H. Waxed paper and wrapping paper. 296,059; July 19; Serial No. 324,567; published Apr. 26, 1932. Class 37.
National Broom Manufacturing Company, Pueblo, Colo. Brooms. 296,071; July 19; Serial No. 325,371; published May 3, 1932. Class 29.
National Catholic Welfare Conference, Washington, D. C. Magazine. 295,897; July 19; Serial No. 323,271; published May 10, 1932. Class 38.
National Company, Inc., Malden, Mass. Radio transmitting and receiving apparatus and parts thereof. 295,890; July 19; Serial No. 321,168; published Apr. 26, 1932. Class 21.
National Union Radio Corporation, Newark, N. J. Radio electron tubes. 295,891; July 19; Serial No. 321,434; published Apr. 19, 1932. Class 21.
National "Who-Handles" Building Products Directory Co., The. (See Burge, Flippen.)
Négyes Tobacco Shop. (See Schachter, Helen.)
New Health Foods Company, Tulsa, Okla. Frozen confections. 295,935; July 19; Serial No. 324,229; published May 3, 1932. Class 46.
New York State Commission for the Blind, New York, N. Y. Handwoven rugs. 296,065; July 19; Serial No. 319,751; published May 10, 1932. Class 42.
Notarized Used Car Systems Inc., Detroit, Mich. Affidavits. 296,013; July 19; Serial No. 310,525; published Apr. 26, 1932. Class 38.
Package Paper Company, Holyoke, Mass. Wrapping and covering material. 295,955; July 19; Serial No. 318,744; published May 3, 1932. Class 37.
Pecano Manufacturing Company, Manheim, Pa. Meal. 295,968; July 19; Serial No. 324,721; published May 10, 1932. Class 46.
Peggy Kellogg Kottage Kandy Co. (See Sears, Roebuck and Co.)
Penner, Frank. (See Bersuch, Fredrick.)
Phillips Petroleum Company, Bartlesville, Okla. Motor fuel oils and lubricating oils. 295,893; July 19; Serial No. 321,665; published Apr. 19, 1932. Class 15.
Phillips Petroleum Company, Bartlesville, Okla. Motor fuel and lubricating oils. 295,906; July 19; Serial No. 323,683; published Apr. 19, 1932. Class 15.
Phillips Petroleum Company, Bartlesville, Okla. Motor fuel and lubricating oils. 295,907; July 19; Serial No. 323,695; published Apr. 19, 1932. Class 15.
Phillips Petroleum Company, Bartlesville, Okla. Motor fuel oils and lubricating oils. 295,908–13; July 19; Serial Nos. 323,699–704; published Apr. 26, 1932. Class 15.
Phillips Petroleum Company, Bartlesville, Okla. Motor fuel oils and lubricating oils. 295,914; July 19; Serial No. 323,706; published Apr. 26, 1932. Class 15.
Phillips Petroleum Company, Bartlesville, Okla. Motor fuel oils and lubricating oils. 295,915–20; July 19; Serial Nos. 323,708–13; published Apr. 26, 1932. Class 15.
Playskool Institute, Inc., Milwaukee, Wis. Toys. 296,101; July 19; Serial No. 325,075; published May 3, 1932. Class 22.
Point-O-Purchase Company. (See Guignon, Emile S., jr., assignor.)
Polefsky, Jacob S., New York, N. Y. Beverages and extracts. 295,961; July 19; Serial No. 322,971; published May 10, 1932. Class 45.
Polk Miller Products Corp., Richmond, Va. Soap. 295,932; July 19; Serial No. 324,189; published May 10, 1932. Class 4.
Polk Miller Products Corp., Richmond, Va. Preparation used as an antiseptic, germicide, etc.; liniment, an expectorant medicine, etc. 296,041; July 19; Serial No. 324,231; published May 3, 1932. Class 6.
Pollak Steel Company, The, Carthage, Cincinnati, Ohio. Metal fenceposts. 296,067; July 19; Serial No. 317,647; published Nov. 24, 1931. Class 13.
Portable Air Hammer Company, Inc., New York, N. Y. Electrically driven portable air hammers. 295,903; July 19; Serial No. 322,942; published Apr. 26, 1932. Class 21.
Postage and the Mailbag, Inc., Brooklyn, N. Y. Magazine. 296,028; July 19; Serial No. 325,621; published May 10, 1932. Class 38.
Potter Press, The, Waltham, Mass. Salesbooks, order books, ledger sheets, statements, etc. 296,056; July 19; Serial No. 324,829; published May 3, 1932. Class 37.
Primo Polish Manufacturing Company. (See Shoe, Charles N.)
Prince Lauten Corp., New York, N. Y. Rayon fabrics. 296,030; July 19; Serial No. 325,724; published May 10, 1932. Class 42.
Quaker City Wholesale Grocery Company, Inc., Philadelphia, Pa. Canned fruits, vegetables, fish, etc. 295,892; July 19; Serial No. 321,614; published May 10, 1932. Class 46.
Renfro, Rosine E., Greenville, Ill. Medicinal compound. 296,045; July 19; Serial No. 324,831; published May 3, 1932. Class 6.
Renofab Process, Inc., The, New York, N. Y. Dry cleaning fluid. 296,082; July 19; Serial No. 325,240; published May 10, 1932. Class 4.
Republican Publishing Company, The. (See Sheehan, Emmett L.)
Rice, Francis W., Syracuse, N. Y. Newspaper section or column. 296,026; July 19; Serial No. 325,531; published May 10, 1932. Class 38.
Rossie Velvet Company, Mystic, Conn. Velvets in the piece. 296,033–5; July 19; Serial Nos. 325,803–5; published May 10, 1932. Class 42.
Royal Saxon Company, Inc., Bound Brook, N. J. Polishing preparation. 295,930; July 19; Serial No. 324,118; published May 3, 1932. Class 16.
Ryan-Hampton Tobacco Company, Louisville, Ky. Smoking and chewing tobacco. 296,069; July 19; Serial No. 325,346; published May 3, 1932. Class 17.
Ryan-Hampton Tobacco Company, Louisville, Ky. Smoking and chewing tobacco. 296,086; July 19; Serial No. 325,532; published May 3, 1932. Class 17.
Schachter, Helen, doing business as Négyes Tobacco Shop, New York, N. Y. Smoking tobacco. 295,973–4; July 19; Serial Nos. 324,907–8; published May 3, 1932. Class 17.
Schelter, Joseph J., & Co., Philadelphia, Pa. Haircloth piece goods. 296,001; July 19; Serial No. 305,417; published May 10, 1932. Class 42.
Schlosser, Abraham, doing business as Schlosser Manufacturing Co., New York, N. Y. Fountain pens and pencils. 296,092; July 19; Serial No. 325,242; published May 3, 1932. Class 37.
Schwartz, Arnold A., Dunellen, N. J. Paper. 296,020; July 19; Serial No. 325,623; published May 10, 1932. Class 37.
Sears, Roebuck and Co., doing business as Peggy Kellogg Kottage Kandy Co., Chicago, Ill. Candy. 295,959; July 19; Serial No. 322,603; published May 3, 1932. Class 46.
Sefing, Leonard G., doing business as Len-Pep Company, Allentown, Pa. Carbon removing lubricating oils. 295,939; July 19; Serial No. 324,360; published Apr. 19, 1932. Class 15.
Sheehan, Emmett L., doing business as The Republican Publishing Company, Washington, D. C. Newspaper. 296,094; July 19; Serial No. 325,441; published May 10, 1932. Class 38.
Shoe, Charles N., doing business as Primo Polish Manufacturing Company, Westfield, Mass. Polishes for stoves, shoes, and metals. 295,942; July 19; Serial No. 324,402; published May 3, 1932. Class 4.
Simon, Moe, doing business as M. Simon & Co., New York, N. Y. Exercisers for babies. 295,986; July 19; Serial No. 325,444; published May 3, 1932. Class 22.

Society of Chemical Industry in Basle, Basel, Switzerland. Medicine. 296,044; July 19; Serial No. 323,754; published May 10, 1932. Class 6.
Soden, G. A., & Co., Chicago, Ill. Publication. 296,036; July 19; Serial No. 324,763; published Apr. 26, 1932. Class 38.
Spa-Tab Company, Baltimore, Md. Bath tablets. 296,100; July 19; Serial No. 325,808; published May 10, 1932. Class 6.
Sperry, Portia, Nashville, Ind. Dolls. 295,967; July 19; Serial No. 324,672; published May 3, 1932. Class 22.
Square D Company, Detroit, Mich. Electrical rectifying and filtering devices and condensive elements. 295,888; July 19; Serial No. 320,215; published Apr. 26, 1932. Class 21.
Standard Oil Company, Whiting, Ind., and Chicago, Ill. Lubricating oils and greases. 295,925; July 19; Serial No. 323,877; published Apr. 26, 1932. Class 15.
Stein, Jacob, doing business as Climax Rubber Company, New York and Brooklyn, N. Y. Medicated dress shields, sanitary baby pants, aprons, etc. 295,889; July 19; Serial No. 320,704; published May 10, 1932. Class 44.
Sten-O-Aide, Inc., Grand Rapids, Mich. Set or outfit of tools and supplies for use with typewriting machines. 295,936; July 19; Serial No. 324,234; published May 3, 1932. Class 50.
Stern & Co., Philadelphia, Pa. Units for varying the capacity of radio receiving set antennæ. 295,926; July 19; Serial No. 323,917; published Apr. 19, 1932. Class 21.
Stopper, L. J., doing business as Keystone Malt Company, Williamsport, Pa. Malt syrup. 296,012; July 19; Serial No. 309,010; published May 10, 1932. Class 46.
Superior Packing Corp., New York, N. Y. Malt syrup. 296,098; July 19; Serial No. 325,624; published May 10, 1932. Class 46.
Tacoma Paint & Lacquer Manufacturing Company, Tacoma, Wash. Painters' sizing. 296,075; July 19; Serial No. 325,300; published May 10, 1932. Class 16.
Three Star Publishing Company, New York, N. Y. Publication. 296,073; July 19; Serial No. 325,833; published May 10, 1932. Class 38.
Trebow Cigar Corporation, Philadelphia, Pa. Cigars. 296,085; July 19; Serial No. 325,491; published May 10, 1932. Class 17.
Triner, Joseph, Company, Chicago, Ill. Medicinal stimulant. 296,089; July 19; Serial No. 325,123; published May 3, 1932. Class 6.
Triplex Products Corporation, Clifton, N. J., and New York, N. Y. Clocks for operating electric switches. 296,070; July 19; Serial No. 325,354; published May 3, 1932. Class 27.
Trulastic Research Laboratories. (See Antonucci, Angelo C.)
Union Trust Company of Indianapolis, The, receiver. (See Marietta Manufacturing Company, The.)
United Publishers Corporation, New York, N. Y. Publication. 296,090; July 19; Serial No. 325,193; published May 3, 1932. Class 38.
United States Gypsum Company, Chicago, Ill. Concrete molded products. 295,998; July 19; Serial No. 276,053; published Apr. 26, 1932. Class 12.
United States Playing Card Company, The, East Norwood Cincinnati, Ohio. Playing cards. 295,969; July 19; Serial No. 324,807; published May 10, 1932. Class 22.
United States Rubber Company, New York, N. Y. Golf balls. 295,991; July 19; Serial No. 325,536; published May 3, 1932. Class 22.
United Telephone and Electric Company, The, Kansas City, Mo. Magazines. 295,953; July 19; Serial No. 324,974; published May 3, 1932. Class 38.
Van Wagner, Leo M., Far Rockaway, N. Y. Painted and enameled signs, emblems, and nameplates. 295,933; July 19; Serial No. 324,202; published May 3, 1932. Class 50.
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Raw and partly prepared iron. 295,937; July 19; Serial No. 324,238; published May 3, 1932. Class 14.
Vogt, F. G., & Sons, Incorporated, Philadelphia, Pa. Sausage and scrapple. 295,960; July 19; Serial No. 322,718; published May 10, 1932. Class 46.
Walker Hill Dairy, Inc., Washington, D. C. Milk, cream, buttermilk, cottage cheese, and chocolate milk. 296,003; July 19; Serial No. 311,711; published May 3, 1932. Class 46.
Ward, Samuel, Manufacturing Company, Boston, Mass. Record books. 296,018; July 19; Serial No. 325,307; published May 3, 1932. Class 37.
Washougal Woolen Mills, doing business as West Coast Woolen Mills, Ltd., Washougal, Wash. Woolen fabrics. 296,009; July 19; Serial No. 316,461; published May 3, 1932. Class 42.
Wentz, Jere L., doing business as Clifton Kraft Works, Clifton, N. J. Pencil sharpeners. 296,064; July 19; Serial No. 319,754; published May 10, 1932. Class 37.
West Coast Woolen Mills, Ltd. (See Washougal Woolen Mills.)
Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Electric vacuum cleaners. 295,921; July 19; Serial No. 323,732; published Apr. 26, 1932. Class 21.
Whirlwind Carburetor Company, Milwaukee, Wis. Graphite compounds for lubricating. 295,896; July 19; Serial No. 322,075; published Apr. 26, 1932. Class 15.
White & Wyckoff Mfg. Company, Holyoke and Riverside, Mass. Paper and papeteries. 296,025; July 19; Serial No. 325,494; published May 10, 1932. Class 37.
Wiegand, Edwin L., Company, Pittsburgh, Pa. Electric heating units, etc. 296,008; July 19; Serial No. 314,184; published Apr. 19, 1932. Class 21.
Wilhelm Lubrication Company, St. Paul, Minn. Lubricating oils. 295,934; July 19; Serial No. 324,204; published Apr. 26, 1932. Class 15.
Williams, Claude W., Pawhuska, Okla. Antiseptic tablets. 296,052; July 19; Serial No. 322,147; published May 10, 1932. Class 6.
Witko, John W., Wilkes-Barre, Pa. Table board game. 295,965; July 19; Serial No. 324,329; published May 10, 1932. Class 22.
Wright, Frederick H., New York, N. Y. Publication and/or magazine. 296,047; July 19; Serial No. 319,277; published May 10, 1932. Class 38.
Wright, Frederick H., New York, N. Y. Periodical and/or magazine. 296,048; July 19; Serial No. 319,278; published May 10, 1932. Class 38.
Zimmerman Brothers, Lock Haven, Pa. Malt syrup. 296,084; July 19; Serial No. 325,736; published May 10, 1932. Class 46.
Zitzman, Adolph W., Chicago, Ill. Hand operated toy. 295,979; July 19; Serial No. 325,159; published May 3, 1932. Class 22.

LIST OF REGISTRANTS OF LABELS

Beaver Brothers Baking Company, Incorporated, Burnham, Pa. Beaver's Honey Bread. For Bread. 40,935; July 19.
Bertolli, Gino, Minkler, Calif. Baby Baths. For Fresh Grapes. 40,936; July 19.
Birbeck, F. V., Watsonville, Calif. Wataman. For Fresh Lettuce. 40,937; July 19.
Blatz Brewing Company, Milwaukee, Wis. Blatz. For Malt Syrup. 40,938; July 19.
Central Illinois Cigar Company. (See Solomon, Nathan.)
Duff, P., & Sons, Inc., Pittsburgh, Pa. Duff's Devil's Food Mix. For Devil's Food Cake Mixture. 40,939; July 19.
Gordon Baking Company, Detroit, Mich. Guaranteed Fresh. For Bread. 40,940; July 19.
Hammer, Alice M., Hillsboro, Oreg. Hammer. For Pumpkin Pie Filling. 40,941; July 19.
Hinkelman, Louis, Los Angeles, Calif. Eldorado. For Depilatory. 40,942; July 19.
Hoague-Sprague Corporation, Lynn, Mass. Good Shoes. For Boxes. 40,943; July 19.
Honoroff, David, Gary, Ind. Diana Stock Spray. For a Liquid Repellent for House Flies, Stable and Horn Flies, and Mosquitoes. 40,944; July 19.
Kollner's, Inc., Jamaica, N. Y. Kollner's De Luxe Blend Coffee. For Coffee. 40,945; July 19.
Kroger Grocery & Baking Company, The, Cincinnati, Ohio. Country Club. For Pan Cake Flour. 40,946; July 19.
Lantz Bros. Baking Co., St. Louis, Mo. Grandma's. For Cake. 40,947; July 19.
Lantz Bros. Baking Co., St. Louis, Mo. Criss Cross. For Potatoes. 40,948; July 19.
Marsh, M., & Son, Inc., Wheeling, W. Va. Rondax. For Cigars. 40,949; July 19.
Meier Ice Cream Company, Milwaukee, Wis. Meier's Jumbo Kup. For Ice Cream. 40,950; July 19.
Miller, R. C., and Son, Oakland, Calif. Miller's Calax. For Confection Composed of Blended Fruits. 40,951; July 19.
North Whittier Heights Citrus Association, Puente, Calif. Archery. For Fresh Oranges. 40,952; July 19.
Remington Arms Company, Inc., New York, N. Y. Nitro Club Kleanbore Shells. For Ammunition. 40,953; July 19.
Remington Arms Company, Inc., New York, N. Y. Arrow Kleanbore Shells. For Ammunition. 40,954; July 19.
Rex Research Corporation, Toledo, Ohio. Roach-Tox. For Insecticide. 40,955; July 19.
Sanitary Grocery Company, Incorporated, Washington, D. C. Afternoon Tea. For Tea. 40,956; July 19.
Schlosser, Louis, doing business as Yeastone Co., Chicago, Ill. Yeastone. For Yeast Food to be Used in Baking. 40,957; July 19.
Solomon, Nathan, doing business as Central Illinois Cigar Company and Nathan Solomon Company, Peoria, Ill. Mirex. For Cigars. 40,958; July 19.

Taylor, John R., Portland, Me. Caramelized and Buttered Pop Corn. For Caramelized and Buttered Pop Corn. 40,959; July 19.
U. S. Mint & Vending Co., Baltimore, Md. Pros-Per-E-TI Board. For Game Boards. 40,960; July 19.
Ward Baking Company, New York, N. Y. Ward's Fresh Bread. For Bread. 40,961; July 19.
Yeastone Co. (See Schlosser, Louis.)

LIST OF REGISTRANTS OF PRINTS

Opitz, John, Inc., New York, N. Y. J. O. Fly Spray. For Fly Spray. 13,773; July 19.
Strong, Cobb & Co., Inc., Cleveland, Ohio. Pioneer Aspirin. For Aspirin. 13,774; July 19.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 4

Cleaning compounds for metals, etc. E. Levy. 296,080; July 19; Serial No. 325,148; published May 3, 1932.
Cleaning fluid, Dry. Renofab Process, Inc. 296,082; July 19; Serial No. 325,240; published May 10, 1932.
Cleaning preparation, Crystal powder. B B Products Corporation. 295,900; July 19; Serial No. 322,569; published May 10, 1932.
Fluid or powder for shoes, Cleaning, polishing, and whitening. B. Gittleman. 295,948; July 19; Serial No. 324,708; published May 3, 1932.
Polish, Shoe. B. Gittleman. 295,947; July 19; Serial No. 324,707; published May 3, 1932.
Polishes for stoves, shoes, and metals. C. N. Shoe. 295,942; July 19; Serial No. 324,402; published May 3, 1932.
Preparation for use by dentists. L. D. Caulk Company. 295,946; July 19; Serial No. 324,658; published May 10, 1932.
Soap. Fischer's Surfa-Saver, Inc. 296,007; July 19; Serial No. 313,338; published May 10, 1932.
Soap. Polk Miller Products Corp. 295,932; July 19; Serial No. 324,189; published May 10, 1932.
Soap, Toilet. W. M. Curtis. 296,083; July 19; Serial No. 325,397; published May 3, 1932.
Soaps. S. H. Kress & Co. 295,941; July 19; Serial No. 324,883; published May 10, 1932.
Soaps and shaving creams. F. W. Davis. 295,887; July 19; Serial No. 319,474; published May 10, 1932.
Washing powder. Los Angeles Soap Company. 296,079; July 19; Serial No. 325,105; published May 10, 1932.
Water repellent products. E. C. Doerr. 295,922; July 19; Serial No. 323,742; published May 3, 1932.

CLASS 6

Alteratives, analgesics, anesthetics, etc. S. G. McLean. 296,051; July 19; Serial No. 320,938; published May 10, 1932.
Antiseptic liquid, powder, and paste. S. M. Fink. 296,043; July 19; Serial No. 323,991; published May 3, 1932.
Antiseptic tablets. C. W. Williams. 296,052; July 19; Serial No. 322,147; published May 10, 1932.
Astringents, astringent cerates, bleach and beauty creams, etc. Doraldina, Inc. 296,049; July 19; Serial No. 320,495; published Apr. 26, 1932.
Bath tablets. Spa-Tab Company. 296,100; July 19; Serial No. 325,808; published May 10, 1932.
Chemical scalp-stimulating compound, Liquid. D. L. Miller. 296,039; July 19; Serial No. 324,390; published May 10, 1932.
Coating compositions. E. I. du Pont de Nemours and Company. 296,096; July 19; Serial No. 325,463; published May 3, 1932.
Extract, Powdered liver. Eli Lilly and Company. 296,091; July 19; Serial No. 325,231; published May 3, 1931.
Insecticide. A. J. Compo. 296,097; July 19; Serial No. 325,516; published May 3, 1932.
Javal water. Linco Products Corporation. 296,042; July 19; Serial No. 324,071; published May 3, 1932.
Laxative. Drugkraft, Inc. 296,099; July 19; Serial No. 325,645; published May 3, 1932.
Lotion, Reducing. General Laboratories, Inc. 296,050; July 19; Serial No. 320,910; published May 10, 1932.
Medicinal compound. R. E. Renfro. 296,045; July 19; Serial No. 324,831; published May 3, 1932.
Medicinal stimulant. Joseph Triner Company. 296,089; July 19; Serial No. 325,123; published May 3, 1932.
Medicine. Society of Chemical Industry in Basle. 296,044; July 19; Serial No. 323,754; published May 10, 1932.
Pharmaceutical preparations. Luyties Pharmacal Co. 88,505; renewed Sept. 24, 1932.
Pharmaceutical preparations. B. W. Moe. 87,091; renewed June 25, 1932.
Preparation for eye diseases. P. Longoria. 296,002; July 19; Serial No. 309,783; published May 10, 1932.
Preparation for inflammation of the nerves, sciatica, neuralgia, etc. Asta Aktiengesellschaft. 296,055; July 19; Serial No. 323,562; published May 10, 1932.
Preparation for the relief of ringworm of the feet. J. M. Gore, jr. 296,040; July 19; Serial No. 324,844; published May 10, 1932.
Preparation used as an antiseptic, germicide, etc.; liniment, an expectorant medicine, etc. Polk Miller Products Corp. 296,041; July 19; Serial No. 324,231; published May 3, 1932.
Remedies for stomach diseases, rheumatism, and female complaints. F. Bersuch. 30,291; renewed June 29, 1927.

CLASS 8

Perforators and holders. General Timber and Lumber Company. 295,885; July 19; Serial No. 318,517; published May 10, 1932.

CLASS 10

Fertilizers. Great Western Electro-Chemical Co. 296,068; July 19; Serial No. 325,258; published May 10, 1932.

CLASS 11

Inks and ink solvents. Kaumagraph Company. 295,905; July 19; Serial No. 323,334; published May 10, 1932.

CLASS 12

Building, sheathing, etc., papers. Hydrex Felt & Engineering Company. 86,299; renewed Apr. 30, 1932.
Concrete molded products. United States Gypsum Company. 295,998; July 19; Serial No. 276,053; published Apr. 26, 1932.
Wainscoting for walls, ceiling plates, etc. Marietta Manufacturing Company. 296,088; July 19; Serial No. 325,006; published Apr. 26, 1932.

CLASS 13

Fenceposts, Metal. Pollak Steel Company. 296,067; July 19; Serial No. 317,647; published Nov. 24, 1931.

CLASS 14

Electrodes, Welding. Atlantic Steel Company. 295,927; July 19; Serial No. 324,028; published May 3, 1932.
Iron, Raw and partly prepared. Vereinigte Stahlwerke Aktiengesellschaft. 295,937; July 19; Serial No. 324,238; published May 3, 1932.
Rods, Welding. Atlantic Steel Company. 295,928; July 19; Serial No. 324,029; published May 3, 1932.
Steel bars. Cumberland Steel Company. 89,096; renewed Nov. 12, 1932.

CLASS 15

Graphite compounds. Whirlwind Carburetor Company. 295,896; July 19; Serial No. 322,075; published Apr. 26, 1932.
Oil and trough grease, Divider. Joe Lowe Corporation. 295,972; July 19; Serial No. 324,897; published Apr. 26, 1932.
Oils and greases, Lubricating. Standard Oil Company. 295,925; July 19; Serial No. 323,877; published Apr. 26, 1932.
Oils, Lubricating. Alemite Company of Iowa. 295,899; July 19; Serial No. 323,554; published Apr. 26, 1932.
Oils, Lubricating. L. G. Sefing. 295,939; July 19; Serial No. 324,360; published Apr. 19, 1932.
Oils, Lubricating. Wilhelm Lubrication Company. 295,934; July 19; Serial No. 324,204; published Apr. 26, 1932.
Oils, Motor fuel and lubricating. Phillips Petroleum Company. 295,893; July 19; Serial No. 321,665; published Apr. 19, 1932.
Oils, Motor fuel and lubricating. Phillips Petroleum Company. 295,906; July 19; Serial No. 323,683; published Apr. 19, 1932.
Oils, Motor fuel and lubricating. Phillips Petroleum Company. 295,907; July 19; Serial No. 323,695; published Apr. 19, 1932.
Oils, Motor fuel and lubricating. Phillips Petroleum Company. 295,908–13; July 19; Serial Nos. 323,699–704; published Apr. 26, 1932.
Oils, Motor fuel and lubricating. Phillips Petroleum Company. 295,914; July 19; Serial No. 323,706; published Apr. 26, 1932.

Oils, motor fuel and lubricating. Phillips Petroleum Company. 295,915–20; July 19; Serial Nos. 323,708–13; published Apr. 26, 1932.

CLASS 16

Paint. Inter-Coastal Paint Corporation. 295,949; July 19; Serial No. 324,743; published May 3, 1932.
Paints, paint enamels and varnishes. Naamlooze Vennootschap tot Voortzetting der Zaken Van Pieter Schoen & Zoon. 295,950; July 19; Serial No. 324,753; published May 3, 1932.
Paints, varnishes, primers, etc. Harvel Corporation. 295,999; July 19; Serial No. 286,936; published May 10, 1932.
Polishing preparation. Royal Saxon Company. 295,930; July 19; Serial No. 324,118; published May 3, 1932.
Sanding sealers of clear and transparent type. Marietta Paint & Color Co. 295,943; July 19; Serial No. 324,442; published May 10, 1932.
Sizing, Painters'. Tacoma Paint & Lacquer Manufacturing Company. 296,075; July 19; Serial No. 325,300; published May 10, 1932.
Turpentine and pine oil. Louisiana Pine Products Company. 295,902; July 19; Serial No. 322,848; published May 3, 1932.

CLASS 17

Cigars. Trebow Cigar Corporation. 296,085; July 19; Serial No. 325,491; published May 10, 1932.
Tobacco. Ryan-Hampton Tobacco Company. 296,069; July 19; Serial No. 325,346; published May 3, 1932.
Tobacco. Ryan-Hampton Tobacco Company. 296,086; July 19; Serial No. 325,532; published May 3, 1932.
Tobacco, Smoking. H. Schachter. 295,973–4; July 19; Serial Nos. 324,907–8; published May 3, 1932.

CLASS 19

Bicycles, and self-propelled road vehicles. G. M. Hendee. 39,008; renewed Oct. 7, 1932.

CLASS 21

Electric batteries. Emark Battery Corporation. 296,005; July 19; Serial No. 312,948; published Apr. 19, 1932.
Electric display signs and parts thereof. E. S. Guignon, jr. 295,924; July 19; Serial No. 323,815; published Apr. 19, 1932.
Electric heating units, etc. Edwin L. Wiegand Company. 296,008; July 19; Serial No. 314,184; published Apr. 19, 1932.
Electric lamps. Greist Manufacturing Company. 295,901; July 19; Serial No. 322,694; published Apr. 19, 1932.
Electric vacuum cleaners. Westinghouse Electric & Manufacturing Company. 295,921; July 19; Serial No. 323,732; published Apr. 26, 1932.
Electrical goods and apparatus, etc. Edwards and Company. 295,938; July 19; Serial No. 324,247; published Apr. 19, 1932.
Electrical rectifying and filtering devices and condensive elements. Square D Company. 295,888; July 19; Serial No. 320,215; published Apr. 26, 1932.
Hammers, Electrically driven. Portable Air Hammer Company. 295,903; July 19; Serial No. 322,942; published Apr. 26, 1932.
Radio electron tubes. National Union Radio Corporation. 295,891; July 19; Serial No. 321,434; published Apr. 19, 1932.
Radio receiving, detecting, and transmitting sets and parts thereof. Columbia Phonograph Company. 295,904; July 19; Serial No. 323,272; published Apr. 19, 1932.
Radio receiving sets. Clago Radio Corporation. 295,883; July 19; Serial No. 317,424; published Apr. 19, 1932.
Radio transmitting and receiving apparatus and parts thereof. National Company. 295,890; July 19; Serial No. 321,108; published Apr. 26, 1932.
Units for varying the capacity of radio receiving set antennæ. Stern & Co. 295,926; July 19; Serial No. 323,917; published Apr. 19, 1932.

CLASS 22

Amusement device. G. D. Barok. 295,988; Julp 19; Serial No. 325,508; published May 10, 1932.
Athletic appliances. Health Developing Apparatus Co. 295,996; July 19; Serial No. 325,753; published May 10, 1932.
Balls, Foot and basket. Draper-Maynard Company. 295,990; July 19; Serial No. 325,517; published May 3, 1932.
Balls, Golf. United States Rubber Company. 295,991; July 19; Serial No. 325,536; published May 3, 1932.
Cards, Playing. Bid-Rite Playing Card Corporation. 295,992; July 19; Serial No. 325,613; published May 3, 1932.
Cards, Playing. United States Playing Card Company. 295,969; July 19; Serial No. 324,807; published May 10, 1932.
Clay pigeons. Chamberlin Cartridge & Target Co. 295,976; July 19; Serial No. 324,955; published May 3, 1932.
Dolls. The Fair. 295,984; July 19; Serial No. 325,399; published May 3, 1932.
Dolls. Ideal Novelty & Toy Co. 295,982; July 19; Serial No. 325,291; published May 10, 1932.
Dolls. P. Sperry. 295,967; July 19; Serial No. 324,672; published May 3, 1932.
Exercisers for babies. M. Simon. 295,986; July 19; Serial No. 325,444; published May 3, 1932.
Exercising machines. W. G. Grossman. 295,981; July 19; Serial No. 325,289; published May 10, 1932.
Game. Lucky Strike Manufacturing Company. 295,963; July 19; Serial No. 324,044; published May 3, 1932.
Game. R. E. Morgan. 295,978; July 19; Serial No. 325,106; published May 3, 1932.
Game, Table board. J. W. Witko. 295,965; July 19; Serial No. 324,329; published May 10, 1932.
Toy boats. Maine Yacht Corporation. 295,985; July 19; Serial No. 325,436; published May 10, 1932.
Toy, Hand operated. A. W. Zitzman. 295,979; July 19; Serial No. 325,159; published May 3, 1932.
Toys. Playskool Institute, Inc. 296,101; July 19; Serial No. 325,075; published May 3, 1932.

CLASS 23

Spoons and forks. Mettmanner Britanniawarenfabrik W. Seibel. 88,580; renewed Oct. 1, 1932.

CLASS 27

Clocks for operating electric switches. Triplex Products Corporation. 296,070; July 19; Serial No. 325,354; published May 3, 1932.

CLASS 28

Jewelry. D. Jacobs Sons Co. 295,882; July 19; Serial No. 317,041; published Sept. 8, 1931.

CLASS 29

Brooms. National Broom Manufacturing Company. 296,071; July 19; Serial No. 325,371; published May 3, 1932.

CLASS 31

Units for making solidified carbon dioxide, cabinets for preserving products with solidified carbon dioxide, and parts for said units and cabinets. Joe Lowe Corporation. 295,971; July 19; Serial No. 324,894; published May 3, 1932.

CLASS 33

Containers made from glass, Packing. Crown Cork & Seal Company. 295,977; July 19; Serial No. 324,990; published May 3, 1932.

CLASS 36

Clarinets, flutes, piccolos, etc. H. Bettoney. 295,923; July 19; Serial No. 323,801; published Apr. 26, 1932.
Sound recording and reproducing apparatus. Thomas A. Edison, Incorporated. 295,886; July 19; Serial No. 318,979; published Apr. 19, 1932.
Sound recording and reproducing apparatus. Thomas A. Edison, Incorporated. 295,966; July 19; Serial No. 324,551; published Apr. 26, 1932.

CLASS 37

Affidavits. Notarized Used Car Systems Inc. 296,013; July 19; Serial No. 310,525; published Apr. 26, 1932.
Books, Record. Samuel Ward Manufacturing Company. 296,018; July 19; Serial No. 325,307; published May 3, 1932.
Crayons. Binney & Smith Co. 296,038; July 19; Serial No. 324,425; published May 3, 1932.
Drafts. Creditors Service Trust Company. 296,058; July 19; Serial No. 324,699; published Apr. 26, 1932.
Mounts, Corner. Ace Art Company. 296,057; July 19; Serial No. 324,814; published May 10, 1932.
Paper. Brown Company. 295,975; July 19; Serial No. 324,953; published Apr. 26, 1932.
Paper. A. A. Schwartz. 296,029; July 19; Serial No. 325,623; published May 10, 1932.
Paper and paper facial tissues, Toilet. Gotham Tissue Corporation. 295,970; July 19; Serial No. 324,886; published Apr. 26, 1932.
Paper and papetries. White & Wyckoff Mfg. Company. 296,025; July 19; Serial No. 325,494; published May 10, 1932.
Paper and wrapping paper, Waxed. Nashua Gummed & Coated Paper Co. 296,059; July 19; Serial No. 324,567; published Apr. 26, 1932.
Paper, Book. Kimberly-Clark Corporation. 296,014; July 19; Serial No. 325,230; published Apr. 26, 1932.
Paper, Writing. Coast Envelope & Leather Products Co. 296,046; July 19; Serial No. 319,229; published May 3, 1932.
Pencil sharpeners. J. L. Wentz. 296,064; July 19; Serial No. 319,754; published May 10, 1932.
Pencils and parts therefor. F. Furedy. 296,000; July 19; Serial No. 305,398; published May 10, 1932.
Pencils, Lead. Eberhard Faber Pencil Company. 296,015; July 19; Serial No. 325,253; published Apr. 26, 1932.
Pencils, penholders, combination pens and pencils, etc. Eagle Pencil Company. 296,066; July 19; Serial No. 325,090; published May 3, 1932.
Pens and pencils, Fountain. A. Schlosser. 296,092; July 19; Serial No. 325,242; published May 3, 1932.
Salesbooks, order books, ledger sheets, statements, etc. Potter Press. 296,056; July 19; Serial No. 324,829; published May 3, 1932.

Wrapping and covering material. Package Paper Company. 295,955; July 19; Serial No. 318,744; published May 3, 1932.

CLASS 38

Booklets. American Institute of Banking. 296,027; July 19; Serial No. 325,551; published May 10, 1932.
Cartoon strip. V. Forsythe. 296,011; July 19; Serial No. 316,673; published May 3, 1932.
Column in daily newspaper. Daily Graphic, Inc. 296,037; July 19; Serial No. 324,660; published May 3, 1932.
Columns in periodicals. M. Bisgyer. 296,016; July 19; Serial No. 325,204; published May 3, 1932.
Directories. F. Burge. 296,093; July 19; Serial No. 325,317; published May 3, 1932.
Journal devoted to the turf. T. B. Cromwell. 296,054; July 19; Serial No. 323,555; published May 3, 1932.
Magazine. American Business Publications, Inc. 296,095; July 19; Serial No. 325,462; published May 10, 1932.
Magazine. National Catholic Welfare Conference. 295,897; July 19; Serial No. 323,271; published May 10, 1932.
Magazine. Postage and The Mailbag, Inc. 296,028; July 19; Serial No. 325,621; published May 10, 1932.
Magazine section. Meredith Publishing Company. 296,053; July 19; Serial No. 322,823; published Apr. 26, 1932.
Magazines, Periodical. United Telephone and Electric Company. 295,953; July 19; Serial No. 324,974; published May 3, 1932.
Newspaper. E. L. Sheehan. 296,094; July 19; Serial No. 325,441; published May 10, 1932.
Newspaper, Section of a. A. I. Gardner. 295,898; July 19; Serial No. 322,350; published May 10, 1932.
Newspaper section or column. F. W. Rice. 296,026; July 19; Serial No. 325,531; published May 10, 1932.
Periodical. Clayton Magazines, Inc. 295,929; July 19; Serial No. 324,030; published May 10, 1932.
Periodical. G. S. S. Publishing Company. 296,072; July 19; Serial No. 325,785; published May 10, 1932.
Periodical and/or magazine. F. H. Wright. 296,048; July 19; Serial No. 319,278; published May 10, 1932.
Publication. G. A. Soden & Co. 296,086; July 19; Serial No. 324,763; published Apr. 26, 1932.
Publication. Three Star Publishing Company. 296,073; July 19; Serial No. 325,833; published May 10, 1932.
Publication. United Publishers Corporation. 296,090; July 19; Serial No. 325,193; published May 3, 1932.
Publication and/or magazine. F. H. Wright. 296,047; July 19; Serial No. 319,277; published May 10, 1932.

CLASS 39

Aprons and dresses. W. H. Dean Company. 87,731; renewed Aug. 6, 1932.
Hosiery, knit underwear, and sweaters. Moorhead Knitting Co. 88,775; renewed Oct. 22, 1932.

CLASS 42

Bed spreads. Bates Manufacturing Company. 296,006; July 19; Serial No. 313,224; published May 3, 1932.
Bedspreads, sheets, tablecloths, etc. Lurgan Weaving Company. 296,063; July 19; Serial No. 320,595; published May 3, 1932.
Carpets, Textile. Hardwick & Magee Company. 296,020; July 19; Serial No. 325,402; published May 10, 1932.
Cretonne piece goods. Charles Bloom, Inc. 296,060; July 19; Serial No. 324,149; published May 3, 1932.
Fabrics of cellulose derivatives. Celanese Corporation of America. 296,031; July 19; Serial No. 325,744; published May 10, 1932.
Fabrics of cellulose derivatives. Celanese Corporation of America. 296,032; July 19; Serial No. 325,746; published May 10, 1932.
Haircloth piece goods. Joseph J. Scheiter & Co. 296,001; July 19; Serial No. 305,417; published May 10, 1932.
Nets, towels, sheets, etc., Hair, sport, and water wave. S. H. Kress & Co. 296,062; July 19; Serial No. 322,340; published May 3, 1932.
Pile fabrics. Sidney Blumenthal & Co. Inc. 296,061; July 19; Serial No. 324,059; published May 10, 1932.
Pile fabrics in the piece. Sidney Blumenthal & Co. Inc. 296,019; July 19; Serial No. 325,418; published May 3, 1932.
Rayon fabrics. Prince Lauten Corp. 296,030; July 19; Serial No. 325,724; published May 10, 1932.
Rugs and carpets. Bigelow-Sanford Carpet Co. 296,021; July 19; Serial No. 325,456; published May 10, 1932.
Rugs and carpets. Bigelow-Sanford Carpet Co. 296,022; July 19; Serial No. 325,457; published May 3, 1932.
Rugs and carpets. Bigelow-Sanford Carpet Co. 296,023; July 19; Serial No. 325,458; published May 10, 1932.
Rugs, Handwoven. New York State Commission for the Blind. 296,065; July 19; Serial No. 319,751; published May 10, 1932.
Silk and artificial silk yard goods. Hahn Department Stores, Inc. 296,017; July 19; Serial No. 325,259; published May 3, 1932.
Velvets in the piece. Rossie Velvet Company. 296,033–5; July 19; Serial Nos. 325,803–5; published May 10, 1932.
Woolen fabrics. Washougal Woolen Mills. 296,009; July 19; Serial No. 316,461; published May 3, 1932.

CLASS 43

Thread. Gardiner Hall Jr. Company. 296,024; July 19; Serial No. 325,467; published May 3, 1932.

CLASS 44

Cocoa butter, Modified. L. D. Caulk Company. 295,951; July 19; Serial No. 324,775; published May 10, 1932.
Dental burs. Kimball Dental Manufacturing Co. 295,945; July 19; Serial No. 324,565; published May 3, 1932.
Dental impression wax compositions. A. C. Antonucci. 296,076; July 19; Serial No. 325,451; published May 3, 1932.
Hair-waving rods. Halliwell-Shelton Electric Corporation. 296,074; July 19; Serial No. 325,169; published May 3, 1932.
Medicated dress shields, sanitary baby pants, aprons, etc. J. Stein. 295,889; July 19; Serial No. 320,704; published May 10, 1932.
Sanitary napkins. Kotex Company. 296,077; July 19; Serial No. 325,474; published May 10, 1932.
Thermometers, hypodermic syringes, and hypodermic needles, Clinical. Faichney Instrument Corporation. 296,081; July 19; Serial No. 325,164; published May 10, 1932.

CLASS 45

Beverages and extracts. J. S. Polefsky. 295,961; July 19. Serial No. 322,971; published May 10, 1932.
Beverages, Maltless. M. Brusoia. 295,994; July 19; Serial No. 325,679; published May 3, 1932.
Beverages, syrups, and compounds. P. J. Kasper Sons Co. 295,997; July 19; Serial No. 325,827; published May 10, 1932.
Ginger ale and mineral water. Milwaukee-Waukesha Brewing Company. 86,146; renewed Apr. 16, 1932.
Waters, Natural mineral. H. K. Adams. 295,956; July 19; Serial No. 320,788; published May 10, 1932.

CLASS 46

Beans, Baked. Burnham & Morrill Company. 295,958; July 19; Serial No. 321,838; published May 3, 1932.
Candy. Sears, Roebuck and Co. 295,959; July 19; Serial No. 322,603; published May 3, 1932.
Canned corn mush and canned chicken a la King. La Choy Food Products Inc. 295,004; July 19; Serial No. 312,525; published May 3, 1932.
Canned fruits, vegetables, fish, etc. Quaker City Wholesale Grocery Company. 295,892; July 14; Serial No. 321,614; published May 10, 1932.
Canned tomato juice. Campbell Soup Company. 295,884; July 19; Serial No. 318,438; published May 3, 1932.
Cattle. Garat & Company. 295,962; July 19; Serial No. 323,814; published May 10, 1932.
Chocolate and chocolate pastilles, Sweet. Chocolat Suchard Societe Anonyme. 295,954; July 19; Serial No. 318,391; published May 10, 1932.
Coffee. Dean-Lilly Coffee and Spice Company. 295,957; July 19; Serial No. 321,199; published May 10, 1932.
Confections, Frozen. New Health Foods Company. 295,935; July 19; Serial No. 324,229; published May 3, 1932.
Fish fillets, Fresh. Henry & Close Co. 295,993; July 19; Serial No. 325,654; published May 10, 1932.
Flour. Bill, Bell & Co. 37,644; renewed Jan. 14, 1932.
Food products. Galban & Co. Inc. 296,078; July 19; Serial No. 325,685; published May 10, 1932.
Fruit peel, Candied citrus. L. Lovett. 295,983; July 19; Serial No. 325,369; published May 3, 1932.
Fruits. Grand Junction Fruit Growers Association. 89,024; renewed Nov. 5, 1932.
Fruits, Fresh citrus. East Whittier Citrus Association. 295,995; July 19; Serial No. 325,747; published May 10, 1932.
Groceries. Nashua Baking Company. 295,894; July 19; Serial No. 321,915; published May 3, 1932.
Ice cream confection bar and ice cream in brick and bulk form. B. R. J. Hassell. 296,010; July 19; Serial No. 316,644; published May 10, 1932.
Meal. Pecano Manufacturing Company. 295,968; July 19; Serial No. 324,721; published May 10, 1932.
Milk, cream, buttermilk, cottage cheese, and chocolate milk. Walker Hill Dairy, Inc. 296,003; July 19; Serial No. 311,711; published May 3, 1932.
Milk food beverage, Fruit flavored. Big Ben Beverage Corporation. 295,895; July 19; Serial No. 321,943; published May 3, 1932.
Platane chips packed in paper bags. Bananola South Seas Products Company. 295,964; July 19; Serial No. 324,307; published May 3, 1932.
Sausage and scrapple. F. G. Vogt & Sons, Incorporated. 295,960; July 19; Serial No. 322,718; published May 10, 1932.
Syrup, Cane. Cairo Syrup Company. 295,952; July 19; Serial No. 324,954; published May 10, 1932.
Syrup, Concentrated malt. Miller High Life Company. 295,944; July 19; Serial No. 324,538; published May 10, 1932.
Syrup, Malt. L. J. Stopper. 296,012; July 19; Serial No. 309,010; published May 10, 1932.
Syrup, Malt. Superior Packing Corp. 296,098; July 19; Serial No. 325,624; published May 10, 1932.
Syrup, Malt. Zimmerman Brothers. 296,084; July 19; Serial No. 325,736; published May 10, 1932.
Vegetables, Fresh. Belluomini & Klein. 295,989; July 19; Serial No. 325,509; published May 3, 1932.
Vegetables, Fresh. B. Mocee. 295,987; July 19; Serial No. 325,480; published May 3, 1932.

Waffles, Potato. Colorado Potato Flake & Manufacturing Company. 295,980; July 19; Serial No. 325,162; published May 10, 1932.
Yeast. Crown Laboratories. 295,931; July 19; Serial No. 324,137; published May 10, 1932.

CLASS 50

Fly catcher. Grenole Sales Corporation. 296,087; July 19; Serial No. 325,619; published May 10, 1932.
Last and trees for boots and shoes. Canada Last Company Limited. 295,940; July 19; Serial No. 324,367; published May 10, 1932.
Set or outfit of tools and supplies for use with typewriting machines. Sten-O-Aide, Inc. 295,936; July 19; Serial No. 324,234; published May 3, 1932.
Signs, emblems, and nameplates. L. M. Van Wagner. 295,933; July 19; Serial No. 324,202; published May 3, 1932.

LIST OF LABELS

Afternoon Tea. For Tea. Sanitary Grocery Company, Incorporated. 40,956; July 19.
Archery. For Fresh Oranges. North Whittier Heights Citrus Association. 40,952; July 19.
Arrow Kleanbore Shells. For Ammunition. Remington Arms Company, Inc. 40,954; July 19.
Baby Batbs. For Fresh Grapes. G. Bertolli. 40,936; July 19.
Beaver's Honey Bread. For Bead. Beaver Brothers Baking Company, Incorporated. 40,935; July 19.
Blatz. For Malt Syrup. Blatz Brewing Company. 40,938; July 19.
Caramelized and Buttered Pop Corn. For Caramelized and Buttered Pop Corn. J. R. Taylor. 40,959; July 19.
Country Club. For Pan Cake Flour. The Kroger Grocery & Baking Company. 40,946; July 19.
Criss Cross. For Potatoes. Lantz Bros. Baking Co. 40,948; July 19.
Diana Stock Spray. For a Liquid Repellant for House Flies, Stable and Horn Flies, and Mosquitoes. D. Honoroff. 40,944; July 19.
Duff's Devil's Food Mix. For Devil's Food Cake Mixture. P. Duff & Sons, Inc. 40,939; July 19.
Eldorado. For Depilatory. L. Hinkelman. 40,942; July 19.
Good Shoes. For Boxes. Hoague-Sprague Corporation. 40,943; July 19.
Grandma's. For Cake. Lantz Bros. Baking Co. 40,947; July 19.
Guaranteed Fresh. For Bread. Gordon Baking Company. 40,940; July 19.
Hammer. For Pumpkin Pie Filling. A. M. Hammer. 40,941; July 19.
Kollner's De Luxe Blend Coffee. For Coffee. Kollner's, Inc. 40,945; July 19.
Meier's Jumbo Kup. For Ice Cream. Meier Ice Cream Company. 40,950; July 19.
Miller's Calax. For Confection Composed of Blended Fruits. R. C. Miller and Son. 40,951; July 19.
Mirex. For Cigars. N. Solomon. 40,958; July 19.
Nitro Club Kleanbore Shells. For Ammunition. Remington Arms Company, Inc. 40,953; July 19.
Pros-Per-E-Ti Board. For Game Boards. U. S. Mint & Vending Co. 40,960; July 19.
Roach-Tox. For Insecticide. Rex Research Corporation. 40,955; July 19.
Rondax. For Cigars. M. Marsh & Son, Inc. 40,949; July 19.
Ward's Fresh Bread. For Bread. Ward Baking Company. 40,961; July 19.
Wataman. For Fresh Lettuce. F. V. Birbeck. 40,937; July 19.
Yeastone. For Yeast Food to be Used in Baking. L. Schlosser. 40,957; July 19.

LIST OF PRINTS

J. O. Fly Spray. For Fly Spray. John Opitz, Inc. 13,773; July 19.
Pioneer Aspirin. For Aspirin. Strong, Cobb & Co., Inc. 13,774; July 19.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 19TH DAY OF JULY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbott, jr., Adrian O., assignor to Morgan and Wright, Detroit, Mich. Tire shaping machine. 1,867,557; July 19.
Abbott, Carroll B. (See Hammerly, Fred V., assignor.)
Ackerman-Blaesser-Fezzey, Inc. (See Ackerman, E. L., and Zwierzina, assignors.)
Ackerman, Edward L., and A. J., Zwierzina, assignors to Ackerman-Blaesser-Fezzey, Inc., Detroit, Mich. Clutch mechanism. 1,867,643; July 19.
Ackron, Albert, Nashville, Tenn. Water heater. 1,868,186; July 19.
Acme Card System Company. (See Powell, Frank D., assignor.)
Acoustical Correction Corporation. (See Brockmeyer, Richard C., assignor.)
Adams, Arthur H., Yonkers, assignor to Troy Laundry Machinery Company, Inc., New York, N. Y. Convoluted spring. 1,867,723; July 19.
Adams, James A., Deming, N. Mex. Reagent feeder. 1,867,961; July 19.
Aircraft Specialties Company. (See Gunn, Charles H., assignor.)
Akeyson, Swan M., Long Beach, Calif. Disk bit and reamer. 1,867,545; July 19.
Aktiebolaget Spontan. (See Ljungstrom, Fredrik, assignor.)
Aktieselskapet Eureka McKanlske Verksted. (See Eriksen, Olaf Arnfin Stam.)
Albertini, Ernesto, Chicago, Ill. Time switch. 1,868,086; July 19.
Albion Bottle Company Limited. (See Tucker, Arthur D. R., assignor.)
Alcor Manufacturing Company. (See Nielsen, Karl K., assignor.)
Alexander, Chauncey A., et al. (See Sweet, Alvin H., assignor.)
Allardt, Hans-Georg, Berlin-Reinickendorf-West, assignor to Schering-Kahlbaum A. G., Berlin, Germany. Producing alkalt salts of iodomethyl sulphonic acid. 1,867,793; July 19.
Allchin, Leonard J., Blackley, Manchester, England, assignor to Imperial Chemical Industries, Limited, Westminster, England. Manufacture of M-2-xylidine. 1,867,962; July 19.
Allen, Frank B., Lower Merion Township, Montgomery County, assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa. Hopper. 1,867,794; July 19.
Allen-Sherman-Hoff Company, The. (See Allen, Frank B., assignor.)
Allis-Chalmers Manufacturing Company. (See Strehlow, Walter F., assignor.)
Altorfer, Alpheus W., Peoria, Ill. Control means for washing machine roll wringer mechanism. 1,868,343; July 19.
Aluminum Co. of America. (See Moore, George L., assignor.)
Amco, Incorporated. (See Geer, Paul L., assignor.)
American Can Company. (See Meyers, Walter R., assignor.)
American Cyanamid Company. (See Buchanan, Guy H., assignor.)
American Cyanamid Company. (See Romieux, C. J., and Christmann, assignors.)
American District Telegraph Company. (See Hopkins, R. M., and McIntosh, assignors.)
American Fire Prevention Bureau. (See Derby, John H., assignor.)
American Flyer Mfg. Co. (See Cuff, James E., assignor.)
American Glanzstoff Corportion. (See Bitter, J. L., and Elssner, assignors.)
American Glanzstoff Corporation. (See Elssner, Richard, assignor.)
American Lace Paper Company. (See Huff, Ernest, assignor.)
American Radiator Company. (See Brabbée, Charles W., assignor.)
American Rolling Mill Company, The. (See Williams, Fred L., assignor.)
American Telephone and Telegraph Company. (See Garber, L. H., Hall, and Blackwood, assignors.)
American Telephone and Telegraph Company. (See Waever, Allan, assignor.)
American Temperature Indicating Company, The. (See Baker, W. A., and Kuhlman, assignor.)
American Tobacco Company, The. (See Penn, Charles A., assignor.)
Ames, Caroline F. (See Ames, Elmer U., assignor.)
Ames, Elmer U., deceased, Collingswood, by The Camden Safe Deposit and Trust Company, executor, Camden, assignor to Caroline F. Ames, Haddonfield, N. J. Knitting machine. 1,867,644; July 19.
Amiesite Asphalt Company of America. (See Sadtler, Samuel S., assignor.)
Ammidon and Company. (See Momberger, William G., assignor.)
Amusement Machine Corporation. (See Miner, G. H., assignor.)
Anderson, Emil C., Downers Grove, Ill., assignor to Wine Railway Appliance Company, Toledo, Ohio. Car door mechanism. 1,867,792; July 19.
Anderson, William F. (See Patrick, H. E., and Kurets, assignor.)
Andrews, William F., Brooklyn, N. Y., assignor to Bayley & Sons, Inc. Lighting fixture. Des. 87,377; July 19.
Angle, Glenn D., assignor to The Le Blond Aircraft Engine Corporation, Cincinnati, Ohio. Cylinder for internal combustion engines. 1,867,795; July 19.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Manual-magnetic servobrake. 1,867,645; July 19.
Arenz, John A., Mount Vernon, N. Y., assignor to International Screw Company, Wilmington, Del. Screw machine (movable latch). 1,867,796; July 19.
Arenz, John A., Mount Vernon, N. Y., assignor to International Screw Co., Wilmington, Del. Machine for mill cutting single point, double thread screws. 1,867,995; July 19.
Armstrong, Louis E., Fort Dodge, Iowa, assignor to Insulex Corporation, Chicago, Ill. Insulating board. 1,867,797; July 19.
Arndt, Ernest A., assignor to The Gabriel Karl-Keen Company, Sioux City, Iowa. Hinge. 1,867,798; July 19.
Arp, Ewald A., Minneapolis, Minn., assignor, by mesne assignments, to Van Norman Machine Tool Company, Springfield, Mass. Boring machine and method. 1,868,440; July 19.
Associated Engineering and Supply Company. (See Hughes, Howard R., assignor.)
Atlantic Refining Company, The. (See Henderson, L. M., and Ferris, assignors.)
Atwood, Francis C., Newton, Mass. Method of and apparatus for applying a liquid coating to a surface. 1,867,558; July 19.
Auerbach, Zemach, New York, N. Y. Index or filing system. 1,868,156; July 19.
Auger, Joseph T., assignor of one-third to E. O. Voyer and one-third to R. H. Monahan, Minneapolis, Minn. Rolls for corrugating sheet material. 1,868,302; July 19.
Automotive Engineering Corporation. (See Rayburn, Alden G., assignor.)
Automotive Fan & Bearing Co. (See Gardner, Archibald D., assignor.)
Avallone, Matteo D., East Boston, Mass. Scaffolding. 1,868,187; July 19.
Avery, Alfred H., Malden, assignor to North American Chemical Company, Boston, Mass. Shoe filler piece. 1,868,041; July 19.
Babb, James M. (See Rice, Hudson D., jr.)
Babcock & Wilcox Company, The. (See Lulofs, Warner, assignor.)
Babcock & Wilcox Company, The. (See Thorn, J. L., assignor.)
Back, Robert, assignor to The Wahl Company, Chicago, Ill. Fountain pen. Des. 87,378; July 19.
Badia, José M., Barcelona, Spain. Loom. 1,868,128; July 19.
Baer, Alvin H., assignor to Frick Company, Waynesboro, Pa. Quick freeze tunnel. 1,867,546; July 19.
Baer, Julius, New York, N. Y. Portable ferris wheel. 1,867,996; July 19.
Bakelite Gesellschaft mit beschrankter Haftung. (See Seebach, Fritz, assignor.)
Baker & Company. (See Colby, Edward A., assignor.)
Baker, Edwin M. (See Leslie, Eugene H., and Baker.)
Baker-Raulang Company, The. (See Remde, Edward H., assignor.)
Baker, Robert. (See Murray, T. E., and Baker.)
Baker, William A., and C. H. Kuhlman, assignors to The American Temperature Indicating Company, Toledo, Ohio. Telethermometer. 1,867,870; July 19.
Balch Luke W., and E. De Wagenaere, Minneapolis, Minn. Pneumatic socket for artificial limbs. 1,868,303; July 19.
Balinkin, Isay A., and C. F. Muth, Cincinnati, Ohio. Irradiation process. 1,868,042; July 19.

Balmos, Edward J., Devine, Tex. Folding chair for sewing machines. 1,867,799; July 19.

Barber Greene Company. (See Barber, Harry H., assignor.)

Barclay Davit Company Limited. (See Barclay, John S., assignor.)

Barclay, John S., assignor to Barclay Davit Company Limited, London, England. Chock for ships' boats. 1,868,043; July 19.

Barker, Howard F., assignor to Remington Rand Inc., Buffalo, N. Y. Index device. 1,868,188; July 19.

Barnsley, Frank Herbert, Smethwick, Birmingham, England, assignor to Imperial Chemical Industries Limited. Extrusion press. 1,868,189; July 19.

Barr, John Fillans. (See Skorkovsky, Jaroslav, assignor.)

Barrett Company, The. (See Forrest, L. R., and Conklin, assignors.)

Barrett Company, The. (See Miller, Stuart P., assignor.)

Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Journal box. 1,868,405; July 19.

Baruch, Herbert M., Los Angeles, Calif. Starting marker for phonograph records. 1,867,997; July 19.

Bassi, Adolph G., Chicago, Ill. Ink well. 1,868,375; July 19.

Bastian Brothers Company. (See Bott, Joseph, assignor.)

Bauer, Gustav, Hamburg, assignor to Deutsche Schiff- und Maschinenbau Aktiengesellschaft, Bremen, Germany. Turbine installation. 1,868,131; July 19.

Bauer, Gustav, Hamburg, and J. N. Klep, Altona, Germany. Hydraulic gear and coupling. 1,868,129; July 19.

Bauer, Gustav, and W. Brose, Hamburg, Germany. Control device for engines and rotors driven thereby. 1,868,130; July 19.

Baughman, George W., Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling system. 1,867,724; July 19.

Baxter, Harold G., Baldwin, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Distributing panel. 1,868,132; July 19.

Bayless, Jess K. (See Widders, O. and Bayless.)

Bayley & Sons, Inc. (See Andrews, William F., assignor.)

Beadle, Eugene E., Waterbury, Conn. Sack holder. 1,868,269; July 19.

Beall, William L., Chattanooga, Tenn., assignor to International Harvester Company. Dispensing mechanism. 1,868,516; July 26.

Beardsley & Piper Company, The. (See Stratford, Nathaniel W., assignor.)

Bechtol, Archie H., Daytona Beach, Fla., and W. A. Tratsch, Chicago, Ill. Game board. Des. 87,379; July 19.

Bechtol, Archie H., Daytona Beach, Fla., and W. A. Tratsch, Chicago, Ill. Dispensing cabinet. Des. 87,380; July 19.

Bechtold, Reuben E., Fort Wayne, Ind., assignor to Tokheim Oil Tank and Pump Company. Air eliminator for liquid. 1,868,444; July 19.

Beck, Ernest J., assignor to Blackwell & Sunde, Incorporated. Long Beach, Calif. Oil saver. 1,867,559; July 19.

Bell Telephone Laboratories, Incorporated. (See Bostwick, Lee G., assignor.)

Bell Telephone Laboratories, Incorporated. (See Carpenter, W. W. and Dahl, assignors.)

Bell Telephone Laboratories, Incorporated. (See Eighmey, David T., assignor.)

Bell Telephone Laboratories, Incorporated. (See Ellis, William C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Greenlidge, Ralph M. C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Harrison, Henry C., assignor.)

Bell Telephone Laboratories, Incorporated. (See King, Gerald V., assignor.)

Bell Telephone Laboratories, Incorporated. (See Pfannenstiehl, Harry, assignor.)

Bell Telephone Laboratories, Incorporated. (See Sailliard, John H., assignor.)

Bell Telephone Laboratories, Incorporated. (See Stokeley, Ray L., assignor.)

Bellman, Edward L., Rockford, Ill. Swimming device. 1,868,270; July 19.

Bendix Brake Company. (See Apple, Vincent G., assignor.)

Bendix Cowdrey Brake Tester, Inc. (See Wilkes, Don Q., assignor.)

Benedetto, Giuseppe, Novara, Italy, assignor to The Omes Holding Company Limited, London, England. Electric upsetting apparatus. 1,867,935; July 19.

Benedetto, Giuseppe, Novara, Italy, assignor to The Omes Holding Company Limited, London, England. Electric upsetting apparatus. 1,867,936; July 19.

Benjamin, John M., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Nail distributor. 1,867,560; July 19.

Benline, George A. (See Wright, J. E., and Benline.)

Benner, Raymond C., and G. J. Easter, Niagara Falls, N. Y., and C. E. Hawke, Metuchen, N. J., assignors to The Carborundum Company, Niagara Falls, N. Y. Electric furnace and operating the same. 1,867,646; July 19.

Benson, William E., Boston, assignor to Kalix Cup Company, West Chelmsford, Mass. Package filling machine. 1,867,998; July 19.

Bergen Building Block Company. (See Parker, Henry C., assignor.)

Bernier, Henry. (See Dufault, Homer D., assignor.)

Bernier, Hiram. (See Dufault, Homer D., assignor.)

Berthet, Jean L., and G. Michel, San Sebastian, Spain, assignors to Compagnie pour la Fabrication des Compteurs et Material d'Usines a Gaz Société Anonyme Francaise, Montrouge, France. Liquid meter. 1,868,133. July 19.

Bertsch, Heinrich, assignor to H. Th. Bohme Aktiengesellschaft, Chemnitz, Germany. Textile treatment liquid. 1,968,376; July 19.

Beryllium Development Corporation. (See Smith, Joseph K., assignor.)

Bessler Disappearing Stairway Company, The. (See Bessler, Frank E., assignor.)

Bessler, Frank E., assignor to The Bessler Disappearing Stairway Company, Akron, Ohio. Disappearing stairway. 1,867,904; July 19.

Bhosys, Charles W., New York, N. Y. Photographic background. 1,867,800; July 19.

Bias Cutting Machine Corporation. (See Draher, J., and Runk, assignor.)

Bienenstein, Andreas, Toledo, Ohio, and W. Douglas, Port Angeles, Wash.; said Bienenstein assignor to The Conklin Pen Company, Toledo, Ohio. Fountain pen filling attachment for ink bottles or the like. 1,867,801; July 19.

Bircher Company, Inc. (See Keiser, Arthur J., assignor.)

Birkenbeuel, Edward B., Portland, Oreg. Bucket tooth. 1,867,871; July 19.

Birkigt, Marc, Bois-Colombes, France. Crank-shaft casing. 1,868,377; July 19.

Bitter, Jack L., and R. Elssner, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y. Yarn treatment. 1,867,609; July 19.

Bitter, Jack L., Elizabethton, and R. Elssner, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y. Treatment of artificial filaments. 1,867,610; July 19.

Black-Cawson Company. (See Whistler, David B., assignor.)

Black Products Company. (See Lorimer, George W., assignor.)

Blackwell & Sunde, Incorporated. (See Beck, Ernest J., assignor.)

Blackwood, Conover. (See Garber, L. H., Hall, and Blackwood, assignors.)

Blahnik, Charles J., West Allis, Wis. Aircraft. 1,867,963; July 19.

Blair, Robert C., Stamford, Conn. Wave motor. 1,868,087; July 19.

Blair, Robert S., Stamford, Conn. Art and apparatus for games. 1,868,088; July 19.

Blakeslee, G. S., & Co. (See Anstiss, George P., assignor.)

Blaw-Knox Company. (See McCrery, Harold E., assignor.)

Bledsoe, Carl F., assignor to Ogle Construction Co., Chicago, Ill. Coal handling plant. 1,867,547; July 19.

Bliss, E. W., Company. (See Stront, Robert W., assignor.)

Blomberg, Knut H., Appelviken, and S. D. Vigren, assignors to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Switching arrangement for telephone plants. 1,868,378; July 19.

Blum, Michael, New York, N. Y. Light fixture for dial telephones. 1,868,344; July 19.

Blumenstock, Louis, Brooklyn, assignor to Spear Box Company, New York, N. Y. Shirt envelope. 1,868,458; July 19.

Blunt, James G., Schenectady, N. Y., assignor of one-half to J. W. Highleyman, Pocatello, Idaho. Expansion support for locomotive crosshead guides. 1,868,157; July 19.

Blunt, James G. (See Highleyman, James W., assignor.)

Bobrick, Arthur L., Los Angeles, Calif. Wrapping and packing bottles and the like. 1,867,561; July 19.

Boehm, Frederik, assignor to Schutte & Koerting Company, Philadelphia, Pa. Heat exchanger. 1,868,271; July 19.

Bogert, Clara, Akron, Ohio. Exhaust gas and odor eliminator for motor vehicles. 1,867,802; July 19.

Boben, Mark D. (See Sandberg, Egnar, assignor.)

Bohme H. Th. Aktiengesellschaft, The. (See Bertsch, Heinrich, assignor.)

Boland, Jerome A., Belle Vernon, Pa. Blast furnace tuyère. 1,868,306; July 19.

Bolton, Edgar A. (See Gray, T. F., and Bolton.)

Bonat, Harry, New York, N. Y. Hair waving apparatus. 1,868,089; July 19.

Bonath, Richard, Bussum, The Netherlands, assignor to Werkspoor, N. V. Apparatus for the heat treatment of sugar solutions either completely or partly crystallized. 1,868,406; July 19.

Bone, Herbert L., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway braking apparatus. 1,868,517; July 26.

Bonhôte, Gérald, assignor to Societe of Chemical Industry in Basle, Basel, Switzerland. Stable diazo preparations and process of making same. 1,867,937; July 19.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,868,134; July 19.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,868,158; July 19.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,868,159; July 19.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,868,190; July 19.

Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,868,191; July 19.

Bornemann, Joseph, Trenton, N. J. Safety razor. 1,868,379; July 19.

Borrmann, George R., Oakland, Calif. Storage rack. 1,867,611; July 19.

Boston Pressed Metal Company. (See Gyourko, Joseph R.)

Bostwick, Lee G., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound translating device. 1,868,090; July 19.

Bott, Joseph, assignor to Bastian Brothers Company, Rochester, N. Y. Badge. 1,867,904; July 19.

Boucher, Adam. (See Dufault, Homer D., assignor.)

Bourdes, Andreas A. (See Deligianes, T. N., and Bourdes.)

Brabbée, Charles W., Bronxville, assignor to American Radiator Company, New York, N. Y. Boiler. 1,868,445; July 19.

Branche, Nelson T., assignor to Surface Combustion Corporation, Toledo, Ohio. Heat radiator. 1,868,446; July 19.

Brandenburg, Hermann, assignor to J. Gruenberg and F. A. Scheu Gesellschaft mit beschrankter Haftung, Berlin, Germany. Hydraulic printing and impressing or stamping press. 1,868,380; July 19.

Brandt Automatic Cashier Company. (See Brandt, Edward J., assignor.)

Brandt, Edward J., assignor to Brandt Automatic Cashier Company, Watertown, Wis. Coin delivery machine. 1,868,272; July 19.

Brandt, Eugene, Geneva, Switzerland. Locking device. 1,868,345; July 19.

Brandt, Leopold, Dortmund-Horde, assignor to Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Producing ironcarbonyl. 1,868,044; July 19.

Bredenberg, Alfred, Champlain, N. Y., assignor of one-half to The Sheridan Iron Works, and one-half to T. W. & C. B. Sheridan Company. Manufacture of books. 1,867,803; July 19.

Brekke, Marshall T. (See Marshburn, P. W., and Brekke.)

Brewer, Harry W., St. Louis, Mo. Mailing parcel. 1,867,612; July 19.

Bristol Company, The. (See Richards, William J., assignor.)

British Needle Company Limited, The. (See Keesey, Edward W., assignor.)

British Radiostat Corporation, Limited. (See Williams, William E., assignor.)

Broadway, Hurshel H., Hattiesburg, Miss. Smoking apparatus. 1,868,469; July 19.

Brock, Clarence A., Detroit, Mich. Spring. 1,867,647; July 19.

Brocker, William J., Tampa, Fla. Apparatus for conditioning air. 1,867,548; July 19.

Brockmeyer, Richard C., assignor to Acoustical Correction Corporation, Baltimore, Md. Sound absorbent material. 1,867,549; July 19.

Bronander, Wilhelm B., Montclair, N. J. Fire extinguisher and support therefor. 1,868,135; July 19.

Bronstien, Edward L., St. Paul, Minn. Spring mechanism. 1,867,693; July 19.

Bronstien, Edward L., St. Paul, Minn. Box spring mechanism. 1,867,872; July 19.

Brooke, Frank W., assignor to William Swindell & Brothers, Pittsburgh, Pa. Ceramic kiln. 1,868,091; July 19.

Brose, Walter. (See Bauer, Gustav.)

Brotz, Frank G., assignor to Kohler Company, Kohler, Wis. Bathtub drain. 1,867,725; July 19.

Brown Bag Filling Machine Company, The. (See Greenlaw, Burpee D., assignor.)

Brown Company. (See Parker, Howard, assignor.)

Brown Company. (See Richter, George A., assignor.)

Brown Company. (See Schur, M. O., and Meglitz, assignors.)

Brown, Charles S., Syracuse, N. Y. Motor agricultural machine. 1,868,045; July 19.

Brown, Dimmick, Barrie, assignor to Marvel Headlight Limited, Toronto, Ontario, Canada. Automobile headlight dimming device. 1,867,648; July 19.

Brown, Lee R., East Orange, and A. A. Overbury, West Orange, assignors to Monroe Calculating Machine Company, Orange, N. J. Calculating machine. 1,868,407; July 19.

Brown, Theophilus, assignor to Deere & Company, Moline, Ill. Cultivator. 1,868,307; July 19.

Bowne, Vere B., Brackenridge, Pa. Producing magnetic alloys. 1,867,804; July 19.

Browne, William N., Port Angeles, Wash. Mechanical offbearer. 1,867,873; July 19.

Brownell, James L., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Motor vehicle body mounting. 1,867,806; July 19.

Brugler, Garrett M., Big Springs, Ohio. Loading device. 1,867,999; July 19.

Brügmann, William F., Evanston, Ill. Printer's register hook. 1,867,805; July 19.

Brumfield, Ross E., Uvalde, Tex. Capsule gun. 1,868,308; July 19.

Bruner, Preston M., San Francisco, Calif. Ignition means for internal combustion engines. 1,868,273; July 19.

Brush, Alanson P., Detroit, Mich. Internal combustion engine. 1,867,649; July 19.

Bryan, Arthur W., Tacoma, Wash. Gasoline tank cap lock. 1,867,650; July 19.

Bryant, Knoles C., Los Angles, Calif. Automatic valve construction. 1,867,874; July 19.

Buchanan, George W., Peekskill, N. Y. Coating and doubling apparatus. 1,867,875; July 19.

Buchanan, Guy H., Westfield, N. J., assignor to American Cyanamid Company, New York, N. Y. Making dithiophosphates and compositions containing same. 1,868,192; July 19.

Budd, Edward G., Manufacturing Company. (See Ledwinka, Joseph, assignor.)

Budd, Edward G., Mfg. Company. (See Tarbox, John P., assignor.)

Buffalo Forge Company. (See Yates, Arthur T., assignor.)

Bull, Arthur W. (See Ramsey, E. R., and Bull, assignors.)

Bulls-Eye Electric Manufacturing Company, The. (See Trumbull, George R., assignor.)

Burbank, Elizabeth W., executrix. (See Burbank, Luther.)

Burbank, Luther, deceased; E. W. Burbank, Santa Rosa, Calif., executrix, assignor to Stark Bro's. Nurseries & Orchards Company, Louisiana, Mo. Plum. Pl. Pt. 18; July 19.

Burggraff, Justus, Bowlus, Minn. Tractor hitch. 1,867,726; July 19.

Burke, Alfred, New York, N. Y. Lamp-shade. 1,867,562; July 19.

Burke, Ralph J. (See Worley, John, jr., and Burke, assignors.)

Burks, Arthur W., Decatur, Ill. Hydronir compressor and vacuum pump. 1,867,651; July 19.

Burks, Arthur W., Decatur, Ill. Air pumping centrifugal pump. 1,867,652; July 19.

Burks, Arthur W., Decatur, Ill. Air pumping centrifugal pump. 1,867,653; July 19.

Butler, William H., New York, N. Y. Pleasure car. Des. 87,381; July 19.

Büttner, Artur, assignor to Schnellpressenfabrik Aktiengesellschaft Heidelberg, Heidelberg, Germany. Sheet supplying device for printing machines. 1,868,381; July 19.

Buttress, George A., Los Angeles, Calif. Mechanism for forming lath panels. 1,867,727; July 19.

Cahn, Tillman, Elkins Park, Pa., assignor to Pioneer Suspender Company. Suspenders. Des. 87,382; July 19.

Cahn, Tillman, Elkins Park, Pa., assignor to Pioneer Suspender Company. Suspenders. Des. 87,383; July 19.

Cambridge Rubber Company. (See Crockett, James B., assignor.)

Camden Safe Deposit and Trust Company, The, executor. (See Ames, Elmer U.)

Cameron, James A., Brooklyn, N. Y., and R. M. Johnstone, Roselle Park, N. J., assignors to Cameron Machine Company, Brooklyn, N. Y. Preventing post-winding welts. 1,867,550; July 19.

Cameron Machine Company. (See Cameron, J. A., and Johnstone, assignors.)

Campbell, Charles S., New Haven, and W. H. Day, East Haven, Conn., assignors, by mesne assignments, to Remington Rand Inc., New York, N. Y. Index or file. 1,868,477; July 19.

Campbell, Harry E., assignor to Campbell Metal Window Corporation, Baltimore, Md. Heating apparatus. 1,867,807; July 19.

Campbell Metal Window Corporation. (See Campbell, Harry E., assignor.)

Canada Malting Company, Limited. (See Rankine, Andrew, assignor.)

Canadian Atlas Steels Limited. (See Norley, Harry C., assignor.)

Cannon, William R., and W. P. Pennington, Washington, D. C. Combined ash tray and razor sharpener. Des. 87,384; July 19.

Caplan, Solomon, Brooklyn, assignor to Combustion Utilities Corporation, New York, N. Y. Purification of tar-acid-bearing oil. 1,868,447; July 19.

Caplan, Solomon, Brooklyn, assignor to Combustion Utilities Corporation, New York, N. Y. Recovery of resin from residual oil. 1,868,448; July 19.

Carbide & Carbon Chemicals Corporation. (See Davidson, J. G., and Robertson, assignors.)

Carborundum Company, The. (See Benner, R. C., Easter, and Hawke, assignors.)

Card, William C., jr., Waverly, Mass., assignor to Compo Shoe Machinery Corporation, New York, N. Y. Upper-roughing machine. 1,867,728; July 19.

Cargill, Robert D., Christchurch, New Zealand. Mounting of electric pick-ups for gramophones. 1,868,304; July 19.

Carman & Co. (See Moll, Emil A., assignor.)
Carpenter, Warren W., Garden City, and J. F. Dahl, West Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,868,309; July 19.
Carr & Company Limited. (See Furness, Harold, assignor.)
Case, J. I., Company. (See Heth, Sherman C., assignor.)
Casey, Howard T., assignor to T. H. Symington & Son, Inc., Baltimore, Md. Swing hanger for railway trucks. 1,867,654; July 19.
Cash, Arthur L. (See Heinze, John O., assignor.)
Castle, Melvin J., assignor of one-half to W. H. Geraty, Seattle, Wash. Radio circuit. 1,867,808; July 19.
Caywood, Grant C. (See Caywood, G. C., and Dodd.)
Ceccarini, Olindo O., Beverly Hills, Calif., assignor to Metro-Goldwyn-Mayer Corporation, Culver City, Calif. Damped light valve. 1,867,729; July 19.
Celanese Corporation of America. (See Ellis, George H., assignor.)
Centrifix Corporation. (See Hawley, Charles G., assignor.)
Century Printing Company. (See Greenlee, James T., assignor.)
Chadwick, Lee S., Shaker Heights, Ohio. Shaving equipment. 1,867,905; July 19.
Chambers, Henry W., and A. Jakobi, Phoenix, Ariz. Combined lift jack and dolly. 1,868,193; July 19.
Chase, Herbert L., Denver, Colo. Propeller assembly for airships. 1,867,809; July 19.
Checker Cab Manufacturing Corporation. (See Brownell, James L., assignor.)
Chemical Engineering and Wilton's Patent Furnace Company Limited, The. (See Wilton, Thomas O., assignor.)
Cheney, Allan, Melrose, Mass. Seepage protector for masonry buildings. 1,868,092; July 19.
Chesler, Isidor, West Orange, N. J., assignor to Eagle Pencil Company, New York, N. Y. Mechanical pencil. Des. 87,885; July 19.
Cheston, Arthur S. (See Stuart, Frederick J., assignor.)
Chicago Bridge and Iron Company. (See Kimbell, James F., assignor.)
Chicago Manifold Products Company. (See Tupper, Lloyd A., assignor.)
Chilton, Roland, Ridgewood, N. J. Engaging and driving mechanism for rotary parts. 1,868,346; July 19.
Christiansen, Christian, assignor to Rotary Machine Company, Lynn, Mass. Taping machine. 1,867,655; July 19.
Christiansen, Oscar, assignor to Oscar S. Risvold, St. Paul, Minn. Game. 1,867,730; July 19.
Christmann, Ludwig J. (See Romieux, C. J., and Christmann.)
Cine-A-Graph Corporation. (See Rowley, Edward G., assignor.)
Clapp, Roger S., assignor to Waterhouse Company, Webster, Mass. Automobile. 1,868,093; July 19.
Clark Controller Company, The. (See Rippl, Charles H., assignor.)
Clark, Marion A., Tulare, Calif. Double-action pump. 1,867,906; July 19.
Clark, William T., Chicago, assignor to Whiting Corporation, Harvey, Ill. Eductor. 1,867,876; July 19.
Clarke, Herman E., Vancouver, British Columbia, Canada. Wheeled toy. 1,867,731; July 19.
Clarke, John D., West Haven, Conn. Air boat. 1,867,563; July 19.
Clay Equipment Corporation. (See Wille, Walter O., assignor.)
Clear View Windshield Company, The. (See Rowe, Fred H., assignor.)
Cleveland Pneumatic Tool Company. (See Greve, Louis W., assignor.)
Clifton, Enoch, and W. J. Cooper, Portland, Oreg. Retort. 1,867,877; July 19.
Cline, Allan J., Chicago, Ill. Web tension device. 1,868,310; July 19.
Clinton, Harry D., Johnson City, N. Y. Warping spool. 1,868,408; July 19.
Cloud, Orval S., Kemblesville, Pa. Lawn mower. 1,868,347; July 19.
Coadou, Marcel, Trebeurden, France. Automobile body. 1,868,382; July 19.
Coeur d'Alene Hardware and Foundry Company. (See Zeigler, William L., assignor.)
Colby, Edward A., Maplewood, N. J., assignor to Baker & Company, Inc. Electric annealing apparatus. 1,867,810; July 19.
Cole, Theodore S., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. System of electrical distribution. 1,868,046; July 19.
Colfelt, Wilma M., Portland, Oreg. Writing pad for writing instruments. 1,868,441; July 19.
Columbia Phonograph Company. (See Massey, Augustine H., assignor.)
Combustion Utilities Corporation. (See Caplan, Solomon, assignor.)
Combustion Utilities Corporation. (See Doherty, Henry L., assignor.)
Commercial Iron Works of Los Angeles. (See Rupp, Carl A., assignor.)
Compagnie pour la Fabrication des Compteurs et Material d'Usines A Gaz Société Anonyme Francaise. (See Berthet, J. L., and Michel, assignors.)
Compo Shoe Machinery Corporation. (See Card, William C., jr., assignor.)
Cone, Carroll, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass rolling machine. 1,868,274; July 19.
Conklin, Earl B. (See Forrest, L. R., and Conklin, assignors.)
Conklin Pen Company, The. (See Bienenstein, A., assignor, and Douglas.)
Conlon Corporation. (See Janda, Rudolph W., assignor.)
Conser, Le Roy N., Blackwell, Okla. Stop sign. 1,867,811; July 19.
Constantin, Louis, Paris, assignor of one-half to P. Fortier-Beaulieu, Roanne, Loire, France. Orienting and automatic stopping device for wind motors. 1,868,047; July 19.
Cooper, Waldren H., Parkersburg, W. Va. Piston ring. 1,867,658; July 19.
Cooper, William J. (See Clifton, E., and Cooper.)
Corbett, Alfred, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Arc quencher for circuit breakers. 1,868,442; July 19.
Corcoran-Brown Lamp Company, The. (See Schmidt, John F., assignor.)
Cordy, Ivor, Washington, Pa., assignor to Hills Brothers Company, Inc., New York, N. Y. Jar. Des. 87,386; July 19.
Cottrell, C. B., & Sons Company. (See Cottrell, Calvert B., 3d, assignor.)
Cottrell, Calvert B., 3d, assignor to C. B. Cottrell & Sons Company, Westerley, R. I. Bed and cylinder printing press. 1,868,311; July 19.
Coventry, William A., Lancaster, assignor to Grey Iron Casting Company, Mount Joy, Pa. Toy gun. 1,868,312; July 19.
Coviello, Anthony, Denver, Colo. Lawn sprinkler. 1,867,878; July 19.
Cowles, Irving, assignor to Union Bank of Chicago, Chicago, Ill. Force feed lubricating system, etc. 1,867,613; July 19.
Coyle, Francis B., Jersey City, N. J., assignor to The International Nickel Company, Inc. High strength gray cast irons. 1,867,732; July 19.
Craig, Roderick. (See Terry, J. B., and Craig.)
Cramer, Otto P., San Francisco, Calif. Door lock. 1,867,694; July 19.
Craven, William T., Philadelphia, Pa. Hanger for brooms, brushes, etc. 1,868,305; July 19.
Crispen, Clarence C., Harrisburg, Pa. Spring retrieving reel. 1,868,409; July 19.
Crockett, James Barret, assignor to Cambridge Rubber Company, Cambridge, Mass. Manufacture of rubber footwear. 1,867,879; July 19.
Crockett, James Barret, assignor to Cambridge Rubber Company, Cambridge, Mass. Manufacture of rubber footwear. 1,867,880; July 19.
Crockett, James Barret, assignor to Cambridge Rubber Company, Cambridge, Mass. Manufacture of rubber articles. 1,867,881; July 19.
Cromar Co., The. (See Dittmar, Irvin F., assignor.)
Crowley, Joseph P., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass surfacing machine. 1,868,275; July 19.
Crown Cork & Seal Company. (See Warth, Albin H., assignor.)
Cuff, James E., Hinsdale, assignor to American Flyer Mfg. Co., Chicago, Ill. Bell ringing device for toy locomotives. 1,868,194; July 19.
Cullen, John B., Richmond Hill, N. Y. Sanitary smoking appliance. 1,868,459; July 19.
Cumming, John Frederick, and W. P. Eklund, Morris, Minn. Composition of matter for use in sealing cracks in metal structures. 1,868,195; July 19.
Cuscaden, Henry J., Highland Park, Ill. Suit hanger. 1,867,614; July 19.
Cutler-Hammer, Inc. (See Meuer, George J., assignor.)
Dahl, Jack F. (See Carpenter, Warren W.)
Dällenbach, Walter, Zurich, Switzerland. Vacuum discharge vessel. 1,868,410; July 19.
Dalmas, Amadeus G., Oakland, Calif. Manicuring device. 1,868,160; July 19.
Dalton, Charles, Leeds, England. Free wheel or ratchet clutch. 1,867,938; July 19.
Daniel, Clarence P., Bristol, Va. Bumper. 1,867,551; July 19.
D'Ascanio, Corradino, assignor to Pietro Trojani, Rome, Italy. Propeller of helicopters. 1,867,733; July 19.
Daubendiek, Armin, St. Louis, Mo. Toy. 1,868,313; July 19.
Davenport, John Adrian, Butte, Mont. Grinding wheel dresser. 1,867,939; July 19.
Davidson, Joseph G., Yonkers, N. Y., and H. F. Robertson, Coraopolis, Pa., assignors to Carbide & Carbon Chemicals Corporation. Calcium carbide cake and making the same. 1,867,965; July 19.
Davis, Charles H., jr., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition apparatus. 1,868,000; July 19.
Davis, Clarke F., Westfield, assignor to Structural Gypsum Corporation, Linden, N. J. Slab and building construction. 1,867,615; July 19.
Davis, Elmer W., Newton, Mass., assignor, by mesne assignments, to Remington Rand Inc., Buffalo, N. Y. Record guide. 1,868,276; July 19.

Dawson, George H., Cambridge, Mass., assignor to Wilson-Jones Company, Chicago, Ill. Visible record cabinet. 1,867,907; July 19.
Day, Albert, Chapel Allerton, Leeds, and W. H. Naylor, Adel, Leeds, England. Machine for making and filling packets. 1,868,048; July 19.
Day, David E., Los Angeles, Calif. Purifying petroleum oils. 1,867,908; July 19.
Day, William H. (See Campbell, C. S., and Day.)
Dean, Edmund W., assignor to Duplex Printing Press Company, Battle Creek, Mich. Web feed for two plate wide rotary printing presses. 1,867,966; July 19.
Dean, Van R., Springfield, Mo. Adjustable hame fastener. 1,867,967; July 19.
De Bataafsche Petroleum Maatschappij. (See le Nobel, Jacobus W., assignor.)
De Costa, John B., Kansas City, Mo. Convertible drilling tool. 1,868,348; July 19.
Deere & Company. (See Brown, Theophilus, assignor.)
Deere & Company. (See Storm, Albion, assignor.)
Deere, John, Tractor Company. (See McCray, Harold E., assignor.)
Defays, Victor J., and P. J. Lefebvre, Brussels, Belgium. Power transmitting mechanism. 1,868,001; July 19.
De Ferranti, Sebastian Z., assignor to Ferranti, Limited, Hollinwood, England. Electric radiator fire. 1,868,411. July 19.
Defiance Manufacturing Corporation. (See Luland, Webster H., assignor.)
Degner, Charles F., Chicago, Ill. Condiment shaker. 1,868,277; July 19.
Deichmann, Artur O. W., Bad Godesberg-on-the-Rhine, Germany. Jointed figure with adjustable limbs. 1,868,049; July 19.
Delco-Remy Corporation. (See Davis, Charles H., assignor.)
Delco-Remy Corporation. (See Fitzsimmons, John T., assignor.)
Deligianes, Thomas N., and A. A. Bourdes, Chicago, Ill. Folding machine. 1,867,909; July 19.
Dellinger, Martin C., assignor of one-half to H. W. Kulp, Lancaster, Pa. Food chopper. 1,867,657; July 19.
Delloye, Lucien, assignor to Société Anonyme des Manufactures des Glaces & Products Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Apparatus and method of manufacturing sheet glass. 1,867,940; July 19.
De Mattia, Peter, Passaic, N. J., assignor, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio. Time-controlling mechanism for vulcanizing molds. 1,867,734; July 19.
Denison, William C., Cleveland Heights, Ohio. Air conditioning device. 1,868,278; July 19.
Derby, John H., Scarsdale, assignor to American Fire Prevention Bureau, New York, N. Y. Temperature responsive device. 1,868,136; July 19.
Detrick, M. H., Company. (See Foltz, Raymond D., assignor.)
Deutsche Schiff- und Maschinenbau Aktiengesellschaft. (See Bauer, Gustav, assignor.)
Devine, John U., Struthers, Ohio. Method of and machine for upsetting the ends of pipe. 1,868,094; July 19.
De Vlieg, Charles B., assignor to Sundstrand Machine Tool Co., Rockford, Ill. Machine tool. 1,867,616; July 19.
De Wagenaere, Edward. (See Balch, L. W., and De Wagenaere.)
Dicks, Thomas A., assignor to Pittsburgh Screw & Bolt Corporation, Pittsburgh, Pa. Air collector for propellers. 1,868,314; July 19.
Dietrich, Harold E. (See Henderson, W. F., and Dietrich.)
Dilg, Earl W., Detroit, Mich., assignor to Evans Appliance Company. Pump mechanism. 1,868,161; July 19.
Ditch, Harry W., Mason City, Iowa. Tree trimmer. 1,868,349; July 19.
Dittmar, Irvin F., assignor to The Cromar Co., Williamsport, Pa. Machine for coating strips of lumber. 1,868,050; July 19.
Dodd, West, Des Moines, Iowa, and G. C. Caywood, Omaha, Nebr. Automobile compass. 1,867,812; July 19.
Dodge, Adiel Y. (See Roth, Harris C., assignor.)
Dodge, Horace E., Boat & Plane Corporation. (See Horn, William M., assignor.)
Doell, Theodore W., Berkeley, assignor to Standard Oil Company of California, San Francisco, Calif. Lubricating oil and producing the same. 1,867,695; July 19.
Doherty, Henry L., assignor to Combustion Utilities Corporation, New York, N. Y. House heating system. 1,868,051; July 19.
Dohrn, Max, Berlin-Charlottenburg, and W. Hohlweg, Berlin-Homenneuendorf, assignors to Scherling-Kahlbaum, A.-G., Berlin, Germany. Recovery of a highly purified hormone of the anterior lobe of the pituitary gland. 1,868,095; July 19.
Dominion Motors, Limited. (See Ruppel, F. C., assignor.)
Dorr Company, Inc., The. (See Ramsey, E. R., and Bull, assignors.)
Derrill, Robert A., Little Silver, N. J. Garment hanger. 1,868,197; July 19.
Douglas, William. (See Bienenstein, A., and Douglas.)
Douglass, Gordon, Kensington, London, and S. R. Wright, Bedford, England. Electric remote control apparatus. 1,868,002; July 19.
Dow Chemical Company, The. (See Dow, Herbert H., assignor.)
Dow Chemical Company, The. (See Hale, William J., assignor.)
Dow Chemical Company, The. (See Hunter, R. M., and Ward, assignors.)
Dow, Herbert H., assignor to The Dow Chemical Company, Midland, Mich. High temperature lubricant. 1,867,968; July 19.
Dow, Richard F., assignor to The Whitney Mfg. Co., Hartford, Conn. Chain oiling device. 1,868,198; July 19.
Draher, John, and W. B. Runk, assignors to Bias Cutting Machine Corporation, Waterbury, Conn. Bias strip cutting machine. 1,868,226; July 19.
Drake, John L., and F. Fraser, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass grinding and polishing apparatus. Re18,533; July 19.
Draper Corporation. (See Smith, Henry N., assignor.)
Drew, Walter L., Palmyra, N. J. Machine for producing self-igniting cigarettes. 1,868,350; July 19.
Dreyfus, Henry, London, England. Treatment of yarns, fabrics, films, and the like. 1,867,658; July 19.
Dreyfus, Henry, London, England. Manufacture of methyl alcohol. 1,868,096; July 19.
Dubpernell, George, Ann Arbor, assignor to Udylite Process Company, Detroit, Mich. Anode. 1,868,052; July 19.
Ducamp, Albert J., Versailles, France. Preventing preignition in internal combustion engines. 1,868,053; July 19.
Dufault, Homer D., assignor of two-tenths to A. Fugere, two-tenths to E. Fugere, and two-tenths to A. Boucher, one-tenth to H. Bernier, and one-tenth to H. Bernier, Easthampton, Mass. Oil burner. 1,867,659; July 19.
Duncan Electric Manufacturing Company. (See Green, Stanley S., assignor.)
Dunker, Henry C. L., Helsingborg, Sweden. Pressing up of rubber footwear, galoshes, or the like. 1,868,137; July 19.
Dunlap, William J., Long Beach, Calif. Sand and gas separator. 1,868,003; July 19.
Dunzweiler, Carl J., assignor to Willard Storage Battery Company, Cleveland, Ohio. Battery holddown. 1,867,735; July 19.
Duplex Printing Press Company. (See Dean, Edmund W., assignor.)
Du Pont, E. I., de Nemours & Company. (See Thomaschewski, Paul E., assignor.)
Eagle Nailing Machine Co. Ltd. (See Sullivan, Albert V., assignor.)
Eagle Pencil Company. (See Chesler, Isidor, assignor.)
Eakins, Herbert W., Springfield, Ohio. Pop-corn machine. 1,867,910; July 19.
Easter, George J. (See Benner, R. C., Easter, and Hawke.)
Easterling, Elbert W. (See Kilbourn, J. L., and Easterling.)
Easthope, Ernest, Everett, Wash. Boat and operating the same. 1,868,054; July 19.
Easton, Lucian F., La Crosse, Wis. Dual purpose pumping apparatus. 1,867,813; July 19.
Edison, Thomas A., Incorporated. (See Jacobs, Charles T., assignor.)
Edwards, Henry J., assignor to The Willys Overland Company, Toledo, Ohio. Oil base for internal combustion engines. 1,868,055; July 19.
Edwards, Henry J., assignor to The Willys Overland Company, Toledo, Ohio. Single sleeve engine. 1,868,056; July 19.
Egli, Arnold, Hamburg, Germany. Bearing arrangement for multicolor printing machines. 1,868,097; July 19.
Egloff, Gustav. (See Morrell, J. C., and Egloff.)
Egry Register Company, The. (See Pfeiffer, Frank E., assignor.)
Ehlenbeck, Alfred, Wuppertal-Vohwinkel, Germany. Cushion or insert for mattresses or the like consisting of spiral springs. 1,868,279; July 19.
Ehrlich, Jacob. (See Gardiner, A. W., and Ehrlich.)
Eighmey, David T., Jamaica, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmitter. Des. 87,387; July 19.
Einson, Morris M., Yonkers, N. Y. Display device. 1,867,696; July 19.
Eklund, William P. (See Cumming, John F., and Eklund.)
Ekstromer, Edward C., Redwood City, assignor of one-half to J. F. Gallagher, Berkeley, Calif.; B. N. Gallagher, executrix of said James F. Gallagher, deceased, said Ekstromer assignor of one-half to The Edward C. Ekstromer Corporation. Pump and driving mechanism. 1,868,098; July 19.
Ekstromer, Edward C., Corporation, The. (See Ekstromer, Edward C., assignor.)
Eldred, Byron E., New York, N. Y. Casting molten metals. 1,868,099; July 19.
Electric Service Supplies Company. (See Graham, Herbert J., assignor.)
Electric Sorting Machine Company. (See Hanson, Martin C., assignor.)
Electrical Research Products Inc. (See Hopper, Francis L., assignor.)
Electrogaz S. A. (See Jenneret, Bernard H., assignor.)
Elling, William E., Long Island City, N. Y. Foldable or collapsible boat. 1,868,280; July 19.

Elliott, Harold F., Palo Alto, Calif., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Stabilized amplifier system. 1,868,162; July 19.
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Motor spirit containing metallo organic catalyzer and self-made anti-knocking compounds and making same. 1,867,814; July 19.
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Treatment of textiles. 1,867,660; July 19.
Ellis, William C., Rockville Center, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Continuously loaded conductor. 1,868,315; July 19.
Elssner, Richard. (See Bitter, J. L., and Elssner.)
Elssner, Richard, Johnson City, Tenn., assignor to American Glanzstoff Corporation, New York, N. Y. Evenness of shrinkage. 1,867,617; July 19.
Elssner, Richard, Johnson City, Tenn., assignor to American Glanzstoff Corporation, New York, N. Y. Drying process. 1,867,618; July 19.
Elssner, Richard, Johnson City, Tenn., assignor to American Glanzstoff Corporation, New York, N. Y. Drying of artificial filaments. 1,867,619; July 19.
Erickson, Ellis O., et al. (See Hyde, R. C., Northcott, and Erickson.)
Eriksen, O. A. S., Vestre Aker, Norway, assignor of one-half to Aktieselskapet Eureka McKaniske Verksted, Skoyen, Norway, and one-half to Emil Tranaas, Milwaukee, Wis. Tire chain hook. 1,867,911; July 19.
Ermitaño, Artemio, Manila, P. I. Fan and compact. 1,867,815; July 19.
Espantoso, Ángel, London, England. Digging machine. 1,868,004; July 19.
Esser, Heinrich, Hilden, Germany. Rolling mill. 1,868,227; July 19.
Esterly, Charles L., East Cleveland, assignor to The Wellman Bronze & Aluminum Company, Cleveland, Ohio. Flush valve. 1,868,316; July 19.
Esterson, Albert A., assignor to Holtite Manufacturing Company, Baltimore, Md. Rubber heel and wear plate therefor. 1,868,351; July 19.
Evans Appliance Company. (See Dilg, Earl W., assignor.)
Evans, Earl R., Washington, D. C. Electrical heater. 1,868,005; July 19.
Evans, Edwin R., Detroit, Mich. Shock insulating device. 1,868,163; July 19.
Evans Products Company. (See Snyder, Clifford L., assignor.)
Evey, George E., Torrance, Calif. Pliers. 1,867,912; July 19.
Exolon Company, The. (See Walton, Samuel F., assignor.)
Exploration Bodenuntersuchungs & Verertungs G. m. b. H. (See Haalck, Hans, assignor.)
Fabrik Elektrischer Zunder G. m. b. H. (See Schürmann, Julius, assignor.)
Fairbanks, Morse & Co. (See Goldberg, Morris J., assignor.)
Falkson, Isidor, Chicago, Ill. Headgear. 1,868,281; July 19.
Fantz, Fred C., Webster Groves, Mo. Return bend fittings for oil stills. 1,868,164; July 19.
Fegley, Thomas J., and G. O. Leopold, assignor to North Bro's M'f'g Co., Philadelphia, Pa. Christmas tree holder. Des. 87,388; July 19.
Feightner, Lewis E., Elida, Ohio. Flexible coupling for shafts. 1,868,282; July 19.
Ferranti, Limited. (See de Ferranti, Sebastian Z., assignor.)
Ferris, Seymour W. (See Henderson, L. M., and Ferris.)
Fiberloid Corporation, The. (See Preston, A. C., and Gress, assignors.)
Fiegel, Stella M., Marshall, Tex. Nursing bottle support. 1,867,969; July 19.
Finkbeiner, Daniel T., Beaver, Pa. Fence supporting device. 1,867,816; July 19.
Finkeldey, William H., New Rochelle, assignor to Singmaster & Breyer, Inc., New York, N. Y. Corrosion protection. 1,867,736; July 19.
Fischer, Wilhelm, et al. (See Ruppert, A., Voigt, and Hennig.)
Fisk, Edwin J., Cleveland, Ohio. Poppet valve. 1,868,138; July 19.
Fitzsimmons, John T., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition apparatus. 1,868,006; July 19.
Fleisch, Christian, Saarbrucken, France. Manufacture of a plastic waterproofing medium made of calf's tallow or fat and lime. 1,868,057; July 19.
Fleischer, Paul Werner, Weehawken, assignor to New Jersey Machine Corporation, Hoboken, N. J. Sheet reversing device for gumming machines. 1,868,283; July 19.
Fleischer, Paul Werner, and M. Feybusch, Weehawken, assignors to New Jersey Machine Corporation, Hoboken, N. J. Box covering machine. 1,868,284; July 19.
Fletcher, Harold W., assignor to Hughes Tool Company, Houston, Tex. Carburizing furnace. 1,867,737; July 19.
Floraday, Burton S., Toledo, Ohio, assignor to Hydraulic Brake Company, Detroit, Mich. Brake mechanism. 1,867,913; July 19.
Foltz, Raymond D., South Orange, N. J., assignor to M. H. Detrick Company, Chicago, Ill. Furnace construction. 1,868,352; July 19.
Foote, Kathryn Miller, Muskegon, Mich. Hair waver. 1,868,412; July 19.
Forbes, Duncan Davidson, Glen Head, assignor to Lancaster Asphalt, Inc., New York, N. Y. Apparatus for making molded products. 1,868,139; July 19.
Ford, Bruce, Philadelphia, Pa. Filling vent structure for storage batteries. 1,867,564; July 19.
Ford, George W. (See Ponting, H. G., and Ford.)
Forrest, Laurence Raymond, East Orange, N. J., and E. B. Conklin, Syracuse, assignor to The Barrett Company, New York, N. Y. Distillation of tar and apparatus therefor. 1,868,470; July 19.
Forse, Harry D., Anderson, Ind. Pressing member. 1,867,620; July 19.
Fortier-Beaulieu, Paul. (See Constantin, Louis, assignor.)
Foster, Howard L. (See Holley, Clarence M., assignor.)
Foster, Howard L., Huntington Woods, Mich. Artificial refrigerating apparatus and cabinet therefor. 1,868,353; July 19.
Foster, Walter L., Whittier, assignor to John W. MacClatchie, doing business as MacClatchie Manufacturing Company, Compton, Calif. Combination joint breaker and cathead. 1,867,621; July 19.
Fotel, George, Waterville, Me Cow-tail holder. 1,867,552; July 19.
Francis, Daniel R., assignor to The Waterbury Tool Company, Waterbury, Conn. Winder drive for paper machines. 1,868,285; July 19.
Frank, Paul R. (See Schorr, R. A., and Frank.)
Franklin Development Company. (See Oberhuber, William F., assignor.)
Frary, Francis C. (See Wood, R. T., and Frary, assignors.)
Fraser, Allan, Philadelphia, Pa. Tray. 1,867,738; July 19.
Fraser, Frank. (See Drake, J. L., and Fraser.)
Frazee, Walter G., assignor to Iowa Manufacturing Company, Cedar Rapids, Iowa. Apparatus for mixing material for making roads. 1,867,730; July 19.
Frazee, Walter G., assignor to Iowa Manufacturing Company, Cedar Rapids, Iowa. Apparatus for mixing materials for making roads. 1,867,817; July 19.
Freedman, Benjamin H., assignor to Hudson Holding Corporation, New York, N. Y. Lip stick holder. 1,868,200; July 19.
Freeland, Edward M., Pittsburgh, Pa. Treating silicon steel sheets. 1,867,818; July 19.
Freeman, John V., Bellerose, N. Y. Preparing colored granular material. 1,867,661; July 19.
Freeman, Leon, Chicago, Ill. Label. 1,867,622; July 19.
Freeman, Robert L., Pittsburgh, Pa. Clothes stick. Des. 87,389; July 19.
Frelin, Henri J., assignor to Societe Anonyme "L'Ecrou Indesserable Rev," Belfort, France. Lock nut. 1,868,007; July 19.
Frey, Elmer E., Los Angeles, Calif. Folding camp chair. 1,867,819; July 19.
Frick Company. (See Baer, Alvin H., assignor.)
Fridley, Elmer A., Sacramento, Calif. Engine starter. 1,867,662; July 19.
Frigidaire Corporation. (See Hull, Harry B., assignor.)
Frigidaire Corporation. (See Maccabee, David E., assignor.
Frigidaire Corporation. (See Maccabee, David E., assignor.)
Frigidaire Corporation. (See Slagel, Franklin G., assignor.)
Frigidaire Corporation. (See Van Deventer, Harry R., assignor.)
Fugere, Alderic. (See Dufault, Homer D., assignor.)
Fugere, Euclide. (See Dufault, Homer D., assignor.)
Furness, Harold, assignor to Carr & Company Limited, Carlisle, England. Machinery for making biscuits and like baked products. 1,868,058; July 19.
Gabriel Karl-Keen Company, The. (See Arndt, Ernest A., assignor.)
Gaillard, Henri, Nanterre, France. Differential pulley. 1,867,882; July 19.
Gallagher, Blanche N., executrix. (See Ekstromer, Edward C., assignor.)
Gallagher, James F. (See Ekstromer, Edward C., assignor.)
Garber, Leslie H., R. G. Hall, and C. Blackwood, Denver, Colo., assignors to American Telephone and Telegraph Company. Arrangement for producing modulated currents. 1,867,663; July 19.
Gardiner, Arthur W., and J. Ehrlich, assignors to General Motors Research Corporation, Detroit, Mich. Planetary friction transmission. 1,867,553; July 19.
Gardner, Archibald D., Jackson, Mich., assignor to Automotive Fan & Bearing Co. Fan. 1,868,008; July 19.
Gardner, Denver Company. (See Terry, Edward F., jr., assignor.)
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Inductance changing system. 1,867,820; July 19.
Geer, Paul L., Bellevue, assignor to Amco, Incorporated, Pittsburgh, Pa. Apparatus for heat treating. 1,867,941; July 19.
Geier, P. A., Company, The. (See Martinet, Eugene F., assignor.)
Geiger, John J., New York, N. Y. Automatic switching system for toy railroads. 1,868,354; July 19.
Geist, William J., Lockport, Ill. Collapsible container. 1,867,914; July 19.
Gelinski, Paul, Pasadena, Calif. Screw holding screwdriver. 1,868,009; July 19.

General Aniline Works, Inc. (See Mieg, Walter, assignor.)
General Aniline Works, Inc. (See Muth, Friedrich, assignor.)
General Aniline Works, Inc. (See Neelmeier, W., and Goll, assignors.)
General Aniline Works, Inc. (See Schindhelm, Hans, assignor.)
General Motors Corporation. (See Hunt, John H., assignor.)
General Motors Research Corporation. (See Gardiner, A. W., and Ehrlich, assignors.)
Geratz, William H. (See Castle, Melvin J., assignor.)
Glidden Company, The. (See Moore, C. G. and Zucker, assignors.)
Globe Oil Tools Company. (See Phipps, John T., assignor.)
Godsey, H. Mitchell, Salt Lake City, Utah. Sectional fluid heater. 1,868,413; July 19.
Goldberg, Morris J., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Manifold construction. 1,868,355; July 19.
Goldsmith, Hugo, assignor to The P. Goldsmith Sons Company, Cincinnati, Ohio. Cleated athletic shoe and cleat therefor. 1,867,915; July 19.
Goldsmith, P., Sons Company, The. (See Goldsmith, Hugo, assignor.)
Goll, Otto. (See Neelmeier, Wilhelm.)
Goodrich Company, The B. F. (See Whitcomb, J. H., assignor.)
Goodstein, Bella. (See Goodstein, Charles B., assignor.)
Goodstein, Charles B., Brooklyn, assignor to Bella Goodstein, New York, N. Y. Staple and driving the same. 1,868,100; July 19.
Gould Storage Battery Corporation. (See Hubbard, Albert S., assignor.)
Gouldbourn, Joseph, and F. Ricks, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Honing device. 1,867,623; July 19.
Graham, Herbert J., assignor to Electric Service Supplies Company, Philadelphia, Pa. Lighting unit. 1,867,821; July 19.
Gravenstine, George E. (See Hummert, R. H., and Gravenstine.)
Graves, Francis G., Alameda, assignor to Standard Oil Company of California, San Francisco, Calif. Treating petroleum oils. 1,867,697; July 19.
Gray, Tom F., and E. A. Bolton, assignors to Victory Valves Limited, Adswood, Stockport, England. Steam, hydraulic and like valve. 1,868,059; July 19.
Great Western Fuse Company. (See La Mar, Frank C., assignor.)
Grebenstein, George W., Newtonville, Mass. Wheel puller of the combination impact and compressor type. 1,868,060; July 19.
Green, Stanley S., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind. Electric switch. 1,868,460; July 19.
Green, Stanley S., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind. Electric switch. 1,868,461; July 19.
Green, Thomas Luther, and Charles H. Williams, Indianapolis, Ind.; said Williams assignor to said Green. Method and machine for sheeting and folding plastic materials. 1,868,317; July 19.
Greenidge, Ralph M. C., Arlington, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Adjustable inductance. 1,868,318; July 19.
Greenlaw, Burpee D., assignor to The Brown Bag Filling Machine Company, Fitchburg, Mass. Counter and ejector for packaging machines. 1,868,201; July 19.
Greenlee, James T., Oak Park, assignor to Century Printing Company, Chicago, Ill. Poster support. 1,867,565; July 19.
Greenwood, Henry B., assignor to F. X. Hooper Company, Inc., Glenarm, Md. Fountain roll feeding means for printing presses. 1,868,383; July 19.
Greenwood, Henry B., assignor to F. X. Hooper Company, Inc., Glenarm, Md. Stacker for box blanks. 1,868,384; July 19.
Greenwood, Henry B., Glenarm, Md. Means for adjusting register of machine parts. 1,868,385; July 19.
Gress, George C. (See Preston, A. C., and Gress.)
Gresvig, Aksel J., Oslo, Norway. Ski fastening device. 1,868,386; July 19.
Greve, Louis W., assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio. Aircraft strut. 1,868,228; July 19.
Grey Iron Casting Company. (See Coventry, William A., assignor.)
Grieve, Frederick W., Crestwood, N. Y. Golf club. 1,868,286; July 19.
Griffin, James C., assignor to Griffin Manufacturing Company, Erie, Pa. Door latch. 1,868,471; July 19.
Griffin Manufacturing Company. (See Griffin, James C., assignor.)
Gronemann, Carl W. (See Wahl, J. E., Gronemann, and Lungren.)
Grönwall, Eugen A. A., Stockholm, Sweden. Recovering cobalt. 1,868,414; July 19.
Grosjean, Pierre M., Rosny-Sous-Bois, France. Crossing for railway tracks. 1,868,061; July 19.
Grossmann, Paul, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Making condensation products of the anthraquinone series and new products of this class. 1,868,202; July 19.
Groves, James A., Albemarle, N. C. Yarn twisting device. 1,867,664; July 19.
Gruenberg, Josef, and F. A. Scheu, Gesellschaft mit beschraenkter Haftung. (See Brandenburg, Hermann, assignor.)
Grünberg, Josef, Berlin, Germany. Printing and impressing press. 1,868,387; July 19.
Guenther, Max. (See Kuss, E., and Guenther.)
Gulf Refining Company. (See Houghton, Alfred M., assignor.)
Gulf Refining Company. (See McAfee, Almer McD., assignor.)
Gulf Refining Company. (See Smith, Herschel G., assignor.)
Gundersen, Einar, and H. Lahn, Oslo, Norway. Method of manufacturing screws with one or two appending washers. 1,868,415; July 19.
Gunn, Charles H., San Francisco, assignor to Aircraft Specialties Company, San Mateo, Calif. Airplane propeller. 1,867,822; July 19.
Guy, Walter W., Oak Park, Ill. Electric fireplace. 1,867,740; July 19.
Gyourko, Joseph E., Shrewsbury, assignor to Boston Pressed Metal Company, Worcester, Mass. Metal spool. 1,868,229; July 19.
Haalck, Hans, Berlin-Steglitz, assignor to the Firm: Exploration Bodenuntersuchungs & Veruertungs G. m. b. H., Berlin, Germany. Torsion balance. 1,868,010; July 19.
Haas, Alphonse, San Bernardino, Calif. Cigar and cigarette ash protector and fire preventer. 1,868,011; July 19.
Haddlesay, Charles S., Elmhurst, Ill. Monorail track for conveyer systems. 1,867,883; July 19.
Haeringer, Jacques Edward, Washington, D. C. Electric bread toaster. 1,868,287; July 19.
Haeuber, Hans. (See Winkler, Fritz, and Haeuber, assignors.)
Hagedorn, Max, and Georg Hingst, Dessau in Anhalt, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Cellulose esters of high molecular organic acids and making the same. 1,867,942; July 19.
Hagen, Harry J. (See Smith, Thomas A., assignor.)
Hallwood, Anthony J., W. J. S. Naunton, and A. Shepherdson, Manchester, assignors to Imperial Chemical Industries Limited, London, England. Introducing chemicals into rubber or cellulose materials. 1,867,970; July 19.
Haldeman, Virgil K. (See Stanbrough, Roy G., assignor.)
Hale, William S., assignor to Webster Manufacturing Company, Chicago, Ill. Loader for skip hoist buckets. 1,868,319; July 19.
Hale, William E., assignor to Webster Manufacturing Company, Midland, Mich. Effecting organic reactions in aqueous media at high temperatures. 1,868,140; July 19.
Hall, Frank W., Port Arthur, Tex., and V. N. Jenkins, Elizabeth, N. J., assignors to The Texas Company, New York, N. Y. Treating hydrocarbon oils. 1,867,566; July 19.
Hall, Ralph G. (See Garber, L. H., Hall, and Blackwood, assignors.)
Halloran, Ralph A., and W. H. Shiffler, Berkeley, assignors to Standard Oil Company of California, San Francisco, Calif. Forming coke from mineral hydrocarbons. 1,867,823; July 19.
Hamilton, Charles E. H., sr., Hollywood, Calif. Flatwork ironer. 1,867,741; July 19.
Hammerly, Fred V., assignor of one-half to G. A. Hammerly, and one-half to C. B. Abbott, Berkeley, Calif. Apparatus for mixing fluids. 1,867,824; July 19.
Hammerly, Georgia A. (See Hammerly, Fred V., assignor.)
Hammerly, Herman J., Wallingford, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Inclosed switch. 1,868,449; July 19.
Hammond, Theodore A., Montclair, N. J. Tire valve. 1,868,165; July 19.
Hannon, Albert H., Springfield, Ohio. Electroplating machines. 1,868,320; July 19.
Hansell, Clarence W., Port Jefferson, N. Y., assignor to Radio Corporation of America. Detection of frequency modulated signals. 1,867,567; July 19.
Hanson, Martin C., assignor to Electric Sorting Machine Company, Grand Rapids, Mich. Lamp housing. Des. 87,390; July 19.
Harase, Hanzaburo, Los Angeles, Calif. Electric color ray device. 1,867,916; July 19.
Hardesty, Eugene, New Brighton, assignor to Mayer China Company, Beaver Falls, Pa. Ornamenting chinaware and the like. 1,868,230; July 19.
Hardwick Etter Company. (See Streun, John A., assignor.)
Hardwick Stove Company. (See Lee, Jerome, assignor.)
Harris, Percival, Rockaway Park, N. Y. Doll. 1,868,166; July 19.
Harris, William L., assignor to Motoscope Corporation of America, Chicago, Ill. Method of and apparatus for testing internal combustion engines. 1,867,698; July 19.
Harrison, Henry C., Port Washington, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound recording. 1,868,321; July 19.

Hart, Frank R., Pacific Grove, Calif. Clinical wastebag support. 1,867,971; July 19.
Hart, Frederick A., New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Computing machine. 1,868,062; July 19.
Harte, Richard T. (See Witty, George, assignor.)
Harter, Noah S., Waukegan, Ill. Fence making machine. 1,868,063; July 19.
Hartford-Empire Company. (See Parham, Sidney F., assignor.)
Hartstoff-Metall Aktien-Gesellschaft (Hametag). (See Kramer, Erwin, assignor.)
Harvey, Herbert, Los Angeles, Calif. Wire tying machine. 1,868,141; July 19.
Hasler A.-G. vormals Telegraphenwerkstätte von G. Hasler. (See Kohler, Ulrich, assignor.)
Hassenplug, Harry G. (See Whitney, W. E., and Hassenplug.)
Hatakeyama, Heisaku, and H. Watanabe, Kobe, Japan. Refining method of vegetable oils to be used as solvents for injection medicines. 1,867,665; July 19.
Havard, Alexandre, Brussels, Belgium, assignor to La Mondiale Typolitho, Société Cooperative. Typewriting machine. 1,868,288; July 19.
Hawke, Clarence E. (See Benner, R. C., Easter, and Hawks.)
Hawley, Charles G., Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio. Carburetor. 1,867,742; July 19.
Haworth, Walter N., Birmingham, England. Concentrating aqueous solutions of acetic or formic acid. 1,867,943; July 19.
Hazeltine Corporation. (See Wheeler, Harold A., assignor.)
Heaton, William H., Shawnee, Kans. Heating device for the windshields of motor vehicles. 1,868,142. July 19.
Hecht, Arthur J., New York, N. Y. Drawer construction for show and stock cases. 1,868,101; July 19.
Heil Co., The. (See Heil, Julius P., assignor.)
Heil, Julius P., assignor to The Heil Co., Milwaukee, Wis. Swinging partition cement compartment. 1,867,699; July 19.
Heinze, John O., Detroit, Mich. Turbine. 1,868,143; July 19.
Heinze, John O., Detroit, assignor of one-half to Arthur L. Cash, Marine City, Mich. Piston. 1,868,144; July 19.
Helenbolt, George S., assignor to Niagara Sprayer and Chemical Co., Inc., Middleport, N. Y. Fruit sizing machine. 1,868,356; July 19.
Henderson, Lawrence M., Narberth, and S. W. Ferris, Lansdowne, assignor to The Atlantic Refining Company, Philadelphia, Pa. Motor fuel and its production. 1,868,102; July 19.
Henderson, William F., and H. E. Dietrich, assignors to The Visking Corporation, Chicago, Ill. Sausage casing and preparing the same. 1,868,203; July 19.
Hengleln, Friedrich August, and F. W. Stauf, Cologne-Deutz, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing alkalihypochlorite solutions. 1,867,666; July 19.
Hennessy, Daniel E., assignor to Lewis-Shepard Company, Watertown, Mass. Pedal actuated elevating truck. 1,867,825; July 19.
Hennessy, Daniel E., assignor to Lewis-Shepard Company, Watertown, Mass. Pedal actuated elevating truck. 1,867,826; July 19.
Hennig, Bruno, et al. (See Ruppert, A., Fisher, Voigt, and Henuig.)
Henning, Malcolm E., assignor to Penn Electric Switch Co., Des Moines, Iowa. Mechanical linkage for control devices. 1,867,827; July 19.
Hennings, Raymond A., New Orleans, La. Game table. Des. 87,391; July 19.
Herlihy, John, Albany, N. Y. Box-holder clamp. 1,868,103; July 19.
Herrenbruck, Herman, assignor to Orbon Stove Co., Belleville, Ill. Door for stoves. 1,868,322; July 19.
Hershey, Orville S., Saginaw, Mich., assignor, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill. Automobile lock. 1,867,828; July 19.
Hershey, Orville S., Chicago, Ill., assignor, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill. Automobile lock. 1,867,829; July 19.
Hershey, Orville S., Chicago, Ill., assignor, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill. Automobile lock. 1,867,830; July 19.
Hershey, Orville S., Oak Park, assignor to Oakes Products Corporation, North Chicago, Ill. Automobile lock. 1,867,831; July 19.
Herthel, Eugene C., Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y. Operation of pressure stills. 1,868,204; July 19.
Heth, Sherman C., assignor to J. I. Case Company, Racine, Wis. Silo filler. 1,868,231; July 19.
Heuser, Herman, Chicago, Ill. Apparatus for producing aldehyde free alcoholic liquids. 1,867,554; July 19.
Hevi-Duty Electric Company. (See Smalley, Edwin L., assignor.)
Hickok Manufacturing Company. (See Sachs, Morris, assignor.)
Hidde Nijland, Hendrik A., Zeist, assignor to Naamlooze Vennootschap Electro-Apparaten-Fabrieken Systeem Coq, Utrecht, Netherlands. Apparatus for indicating the presence of potential or current in a cable or other metallic conductor. 1,867,944; July 19.
Highleyman, James W. (See Blunt, James G., assignor.)
Highleyman, James W., Pocatello, Idaho, assignor of one-half to James G. Blunt, Schenectady, N. Y. Cross head guide for engines. 1,868,205; July 19.
Hildebrandt, Hiram H., assignor to The John J. Hildebrandt Co., Logansport, Ind. Lure attaching means. 1,867,555; July 19.
Hildebrandt, John J., Co., The. (See Hildebrandt, Hiram H., assignor.)
Hill, Benjimen L., South Bend, Ind. Striping pencil. 1,868,416; July 19.
Hill, Frank F., assignor to Union Oil Company of California, Los Angeles, Calif. Subcirculation for oil well drilling. 1,867,832; July 19.
Hill, Frank F., assignor to Union Oil Company of California, Los Angeles, Calif. Subcirculation oil well drilling apparatus with suction pumping. 1,867,833; July 19.
Hill, Geoffrey Terence Roland, Yeovil, assignor to Petters Limited, Yeovil, Somerset, England. Adjusting wings of aircraft. 1,868,417; July 19.
Hill, Warren C., Evansville, Ind. Radio toning device. 1,868,357; July 19.
Hills Brothers Company. (See Cordy, Ivor, assignor.)
Hingst, Georg. (See Hagedorn, M., and Hingst.)
Hirshfeld, Jerome, assignor to Televator Corporation, New York, N. Y. Dumb waiter and dumb-waiter inclosure unit. 1,867,568; July 19.
Hodgson, Alan D'Arcy, Slough, Bucks, England, assignor to Radio Corporation of America. Radio transmitter. 1,868,358; July 19.
Hoe, R., & Co. (See Lamatsch, Frederick, assignor.)
Hoe, R. & Co. (See Tomlin, John R., assignor.)
Hoegger, Joseph A., Jersey City, N. J. Mirror dresser. 1,868,104; July 19.
Hoffman, William J., assignor to Memorial Hospital For The Treatment of Cancer and Allied Diseases, New York, N. Y. Device for obtaining biopsy specimens. 1,867,624; July 19.
Hohlweg, Walter. (See Dohrn, M., and Hohlweg.)
Hohn, Max F. E., assignor to the Firm "Universelle" Cigarettenmaschinen Fabrik J. C. Muller & Co., Dresden, Germany. Cigarette rod cutting device for cigarette machines. 1,868,012; July 19.
Holley, Clarence M., Highland Park, and H. L. Foster, Detroit, Mich., said Holley assignor to said Foster. Artificial refrigerating apparatus. 1,868,359; July 19.
Holtite Manufacturing Company. (See Esterson, Albert A., assignor.)
Hookless Fastener Company. (See Norton, Samuel H., assignor.)
Hooper, F. X., Company, Inc. (See Greenwood, Henry B., assignor.)
Hooven, William R., Brookline, Pa. Electrically operative sterilizer. 1,868,323; July 19.
Hopkins, George W., Cleveland, Ohio. Reel. 1,867,743; July 19.
Hopkins, Richard M., Rutherford, N. J., and F. P. McIntosh, assignors to American District Telegraph Company, New York, N. Y. Electric protection system for bank vaults, etc. 1,867,834; July 19.
Hopper, Francis L., Pasadena, Calif., assignor to Electrical Research Products Inc., New York, N. Y. Apparatus for measuring reverberation time. 1,868,105; July 19.
Hopson, W. C. Company. (See Hopson, William C., assignor.)
Hopson, William C., assignor to W. C. Hopson Company, Grand Rapids, Mich. Humidifier. 1,867,835; July 19.
Horger, James M., Corrigan, Tex. Firearm. 1,867,569; July 19.
Horn, William M., Hampton, Va., assignor to Horace E. Dodge Boat & Plane Corporation, New York, N. Y. Shaft-log and stuffing-box structure. 1,868,064; July 19.
Horton, Erwin C., Hamburg, and H. Hueber, assignors to Trico Products Corporation, Buffalo, N. Y. Windshield heater. 1,868,232; July 19.
Houdry Process Corporation. (See Joseph, Alfred, assignor.)
Hough, Arthur, Passaic, N. J. Explosive. 1,868,388; July 19.
Houghton, Alfred M., Washington, D. C., assignor to Gulf Refining Company, Pittsburgh, Pa. Cracking petroleum hydrocarbons. 1,868,418; July 19.
Howard, Norman W., Bath, Me. Funnel. 1,868,389; July 19.
Howe, George W. (See Tinklepaugh, M. I., and Howe.)
Howenstine, Charles C., Detroit, Mich. Lubricating mechanism. 1,868,167; July 19.
Howland, Louis H., Passaic, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treatment of rubber. 1,868,145; July 19.
Hrabal, Frank J. (See Spidia, F., and Hrabal.)
Hubbard, Albert S., Bethel, Conn., assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y. Current rectifying apparatus. 1,867,667; July 19.
Hubbert, Leslie S., and C. J. Zube, Los Angeles, Calif., assignors to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Press for manufacturing molded articles. 1,867,972; July 19.
Hudson Holding Corporation. (See Freedman, Benjamin H., assignor.)
Hueber, Henry. (See Horton, Erwin C., and Hueber.)

Huestis, Thomas B., assignor to The National India Rubber Company, Bristol, R. I. Process and apparatus for compacting conductors. 1,867,625; July 19.
Huff, Ernest, assignor to American Lace Paper, Company, Milwaukee, Wis. Web shearing apparatus. 1,867,884; July 19.
Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Producing oil gas. 1,868,462; July 19.
Hughes, Howard R., Oakland, assignor to Associated Engineering and Supply Company, San Francisco, Calif. Gas regulator valve mechanism. 1,868,324; July 19.
Hughes, James E., Dixon, Mo. Combined coin and article holder. 1,868,325; July 19.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined radiator, hood, and fenders for vehicles. Des. 87,392; July 19.
Hughes Tool Company. (See Fletcher, Harold W., assignor.)
Hughes Tool Company. (See Wellensiek, Louis H., assignor.)
Hull, Alva M., assignor to Hul-Lo-Wen Fireproof Everlasting Homes Company, Detroit, Mich. Building construction. 1,868,168; July 19.
Hull, Harry B., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,867,744; July 19.
Hul-Lo-Wen Fireproof Everlasting Homes Company. (See Alva M., assignor.)
Hummer, Robert H., and G. E. Gravenstine, assignors to The S. H. Thomson Manufacturing Company, Dayton, Ohio. Spring catch for metal sash hardware. 1,867,745; July 19.
Humphreys, David R., Los Angeles, Calif. Wall texture smoothing trowel. 1,868,013; July 19.
Hungerford, Daniel C., Corning, N. Y. Door. 1,868,233; July 19.
Hunt, John H., assignor to General Motors Corporation, Detroit, Mich. Planetary friction transmission. 1,868,234; July 19.
Hunter, H. B., Company. (See Hunter, Robert L., assignor.)
Hunter, Ralph M., and L. E. Ward, assignors to The Dow Chemical Company, Midland, Mich. Treating electrodes. 1,868,206; July 19.
Hunter, Robert L., assignor to H. B. Hunter Company, Norfolk, Va. Confection holder. 1,867,945; July 19.
Hutchings, Le Roi E., assignor to Remington Rand Inc., Buffalo, N. Y. Index device. 1,868,207; July 19.
Hutchinson, Henry B., Harpenden, England. Production of aliphatic acids by fermentation. 1,867,946; July 19.
Huth, Dr. Erich F., Ges. m. b. H., the Firm. (See Trautwein, Friedrich, assignor.)
Hyde, Ralph C., J. T. Northcott, Los Angeles, and E. O. Erickson, Altadena, Calif., assignors to Claude Neon Electrical Products Corporation, Ltd., Wilmington, Del. Support for neon signs. 1,867,836; July 19.
Hydraulic Brake Company. (See Floraday, Burton S., assignor.)
Hydraulic Press Manufacturing Company. (See Hubbert, L. S., and Zube, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hagedorn, M., and Hingst, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Henglein, F. A., and Stauf, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Kuss, E., and Guenther, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Rietz, Erich, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Ruppert, A., Fischer, Voight, and Hennig, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Winkler, F., and Haeuber, assignors.)
Iceless Air Wing Corporation. (See Thompson, Archie F., assignor.)
Ickes, Harold L., Hubbard Woods, Ill. Dahlia. Pl. Pt. 19. July 19.
Imperial Chemical Industries, Limited. (See Allchin, Leonard J., assignor.)
Imperial Chemical Industries Limited. (See Barnsley, Frank H., assignor.)
Imperial Chemical Industries Limited. (See Hallwood, A. J., Naunton, and Shepherdson, assignors.)
Imperial Chemical Industries Limited. (See Naunton, W. J. S. N., and Payman, assignors.)
Imperial Chemical Industries Limited. (See Wylam, B., and Wilson, assignors.)
Industrial Patents Corporation. (See Parsons, Clinton H., assignor.)
Ingersoll-Rand Company. (See Smith, William A., sr., assignor.)
Ingersoll-Rand Company. (See Smith, William A., sr., and W. A., jr.)
Ingold, Daniel C. (See McHenry, E. O., and McHenry, assignors.)
Ingold, Melvin J. (See McHenry, E. O., and McHenry, assignors.)
Insulex Corporation. (See Armstrong, Louis E., assignor.)
International Nickel Company, Inc. (See Coyle, Francis B., assignor.)
International Screw Co. (See Arenz, John A., assignor.)
Iowa Manufacturing Company. (See Frazee, Walter G., assignor.)
Jackson, Corwill, Chicago, Ill. Lining tunnels, aqueducts, and the like. 1,867,837; July 19.
Jackson, Corwill, Chicago, Ill. Concrete molding apparatus. 1,868,169; July 19.
Jacobs, Charles T., Chatham, assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Apparatus for amplifying electric oscillations. 1,867,746; July 19.
Jacobs, Edward, New York, N. Y. Capsule for carbonating liquids. Des. 87,393; July 19.
Jacot-Descombes, Léon, Tavannes, Switzerland. Change speed gear. 1,868,196; July 19.
Jaden, Fred I., Hastings, Nebr. Liquid dispensing gun. 1,868,235; July 19.
Jaeckel, Georg, Berlin-Lichterfelde, assignor to Firm Sendlinger Optische Glaswerke G. m. b. H., Berlin-Zehlendorf, Germany. Colorless glass. 1,868,065; July 19.
Jaeger, Gebhard, assignor to The Jaeger Machine Company, Columbus, Ohio. Truck concrete mixer. 1,867,838; July 19.
Jaeger Machine Company, The. (See Jaeger, Gebhard, assignor.)
Jakobi, Andrew. (See Chambers, H. W., and Jakobi.)
Janda, Rudolph W., Berwyn, assignor to Conlon Corporation, Cicero, Ill. Ironing machine. 1,867,839; July 19.
Janzen, Jetze Willem, The Hague, assignor to Naamlooze Vennootschap; Glasfabriek "Leerdam", voorheen Jeekel, Mijnssen & Co., Leerdam. The Netherlands. Glass building-stone, tile, or like building element. 1,868,236; July 19.
Jasgur, Samuel, Bronx, N. Y. Fabric treating device. 1,868,170; July 19.
Jasgur, Samuel, Brooklyn, N. Y. Window shade adjusting device. 1,868,463; July 19.
Jeanneret, Bernard Henri, assignor to Electrogaz S. A., Le Locle, Switzerland. Valve actuator for a switch. 1,868,419; July 19.
Jeffrey Manufacturing Company. (See Levin, Nils D., assignor.)
Jelinek, Rudolph, Chicago, Ill. Vessel holder. 1,867,571; July 19.
Jendrejczak, Vincent and T. Kolacki, Amsterdam, N. Y. Nonskid apparatus for automobiles. 1,868,390; July 19.
Jenkins, Vance N. (See Hall, F. W., and Jenkins, assignors.)
Johnson Edward, New Rochelle, N. Y. Resistance eliminator for aircraft and water craft. Re18,534; July 19.
Johnson, John A., Crawfordsville, Ind. Apparatus for regenerating water softening materials. 1,867,572; July 19.
Johnstone, Robert M. (See Cameron, J. A., and Johnstone.)
Jones, George L., Brooklyn, N. Y., assignor to Sperry Development Company, Dover, Del. Fuel feed system. 1,867,700; July 19.
Jones-Munn Tool Co. (See Jones, William S., assignor.)
Jones, Winfield S., Long Beach, Calif., assignor to Jones-Munn Tool Co., Ltd. Perforator. 1,867,840; July 19.
Jordan, Seth N., Burlington, Iowa. Automobile starting device. 1,868,208; July 19.
Joseph, Alfred, Enghein, France, assignor, by mesne assignments, to Houdry Process Corporation, Dover, Del. Process and apparatus for the catalytic cracking of petroleum oils, tar, and the like. 1,867,841; July 19.
Joseph, Alfred, Enghein, France, assignor, by mesne assignments, to Houdry Process Corporation, Dover, Del. Apparatus for the manufacture of light hydrocarbons by catalytic cracking of petroleum oils, tars, or other similar starting materials. 1,867,842; July 19.
Joyce, Harold L., Evanston, Ill. Power transmission apparatus. 1,867,843; July 19.
Judson, Russell V., Detroit, Mich. Apparatus for cleaning and loading grain. 1,868,237; July 19.
Jungersen, Thóger G., Lyngvy, near Copenhagen, Denmark. Dumping body for automobile trucks. 1,867,844; July 19.
Kadel, Byers W. (See Wine, W. E., and Kadel.)
Kala Sign Company. (See Saunders, Henry E.)
Kalix Cup Company. (See Benson, William E., assignor.)
Käpernick, Georg F., Frankfort-on-the-Main, Germany. Model fitting head for opticians. 1,868,209; July 19.
Kaps, Frank J., New York, N. Y. Bottle closure. 1,867,570; July 19.
Karibo, Edmond C. (See Pearce, E. S., Retterer, and Karibo.)
Karolus, August, Leipzig, Germany, assignor to Radio Corporation of America. Receiver arrangement for electric television apparatus. Re18,537; July 19.
Kay, Oscar J., Glendale, Calif. Valve actuating mechanism. Re18,531; July 19.
Kayser Hosiery Motor-Mend Corporation. (See Mandelick, Charles E., assignor.)
Keeler, Andrew L., Troy, N. Y. Furnace wall. 1,868,171; July 19.
Keeler Brass Company. (See Keeler, Isaac S., assignor.)
Keeler, Isaac S., assignor to Keeler Brass Company, Grand Rapids, Mich. Hood fastener. 1,867,846; July 19.

Keesey, Edward W., assignor of one-half to The British Needle Company Limited, Redditch, England. Container for gramophone needles. 1,868,066; July 19.
Keiser, Arthur J., assignor to Bircher Company, Inc., Rochester, N. Y. Letter opener. 1,867,973; July 19.
Keller, Auguste V., Welwyn Garden City, England. Manufacture of condensation products. 1,868,067; July 19.
Kelman Electric & Manufacturing Company. (See Kelman, Joseph N., assignor.)
Kelman, Joseph N., assignor to Kelman Electric & Manufacturing Company, Los Angeles, Calif. Operatinng mechanism for oil switches. 1,867,847; July 19.
Kelman, Joseph N., assignor to Kelman Electric & Manufacturing Company, Los Angeles, Calif. Arcing tip for oil switches. 1,867,848; July 19.
Keough, John, Philadelphia, Pa. Curtain bracket. 1,867,974; July 19.
Keown, John M., Chicago, assignor one-fifth to A. E. Sangdahl, Western Springs, one-fifth to W. Forrest Ogle, Chicago, one-fifth to E. J. Learned, Lake Forest, and one-fifth to B. F. Ramsdell, Geneva, Ill. Making grating. 1,867,701; July 19.
Keown, John M., Chicago, assignor of one-fifth to A. E. Sangdahl, Western Springs, one-fifth to W. Forrest Ogle, Chicago, one-fifth to E. J. Learned, Lake Forest, and one-fifth to B. F. Ramsdell, Geneva, Ill. Grating. 1,867,702; July 19.
Kidd, Herbert A. (See Traquair, John, and Kidd.)
Kiep, Johann N. (See Bauer, Gustav.)
Kiep, Johann Nikolaus, Altona-Hochkamp, Germany. Hydraulic coupling. 1,868,146; July 19.
Kilbourn, Jackson L., and E. W. Easterling, Appalachia, Va. Natural water cooling device. 1,867,975; July 19.
Kimbell James F., Los Angeles, Calif., assignor, by mesne assignments, to Chicago Bridge & Iron Company, Chicago, Ill. Pontoon seal for floating decks. 1,867,845; July 19.
Kinatome Patents Corporation. (See Ponting, H. G., and Ford, assignors.)
King, Gerald V., St. Albans, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,868,326; July 19.
King Manufaturing Company. (See Roe, Ernest S., assignor.)
Kispert, Joseph J., assignor to I. Newman & Sons, Inc., New Haven, Conn. Corset. 1,868,391; July 19.
Klein, John B., Kansas City, Kans. Building. Des. 87,394; July 19.
Kleinman, Jacob L., New York, N. Y. Tennis racket. 1,868,238; July 19.
Kleinman, Jacob L., New York, N. Y. Razor. 1,868,239; July 19.
Kleinschmidt, Edward E., Long Island City, N. Y., assignor, by mesne assignments, to Teletype Corporation, Chicago, Ill. System of signaling and repeater therefor. 1,867,976; July 19.
Knight, Maurice Gibbons Eagle, Claremont Hobart, Tasmania, Australia. Automatic steering apparatus. 1,868,360; July 19.
Kochs Company, Theo. A. (See Schwarzkopf, Arthur R., assignor.)
Koenig, Albert, Newark, N. J. Automatic alarm. 1,867,668; July 19.
Kohler Company. (See Brotz, Frank G., assignor.)
Kohler, John H., Pittsburgh, Pa., assignor, by mesne assignments, to Walker Manufacturing Company, Racine, Wis. Lifting jack. 1,868,478; July 19.
Kohler, Mary E. (See Rust, James E., assignor.)
Kohler, Ulrich, assignor to Hasler A.-G. vormals Telegraphenwerkstätte von G. Hasler, Bern, Switzerland. Escapement wheel for anchor escapements. 1,867,947; July 19.
Kolacki, Theodore. (See Jendrejczak, V., and Kolacki.)
Kooyenga, Jake D., Thornton, Ill. Tractor. 1,867,669; July 19.
Kraemer, Ludwig, Cologne-Mansfeld, Germany. Light metal piston. 1,868,420; July 19.
Kramer, Erwin, Berlin, assignor to Firm Hartstoff-Metall Aktien-Gesellschaft (Hametag), Berlin, Copenick, Germany. Mass core and means for and a method of making it. 1,868,327; July 19.
Kranz, William, jr., Little Rock, Ark. Subsoiling attachment for plows. 1,867,977; July 19.
Krembs, Ottmar M. (See Ternstedt, Klas H., assignor.)
Kress, Otto, Appleton, Wis. Manufacture of wood pulp. 1,867,626; July 19.
Kruse, Otto V., St. Davids, Pa., assignor to I. P. Morris and De La Vergne, Inc. Valve. 1,868,147; July 19.
Kubiak, Henry J., Madison, Wis. Battery overcharge indicator. 1,868,328; July 19.
Kuenhold, Otto J., Cleveland, Ohio, assignor to H. M. Sheer Company, Quincy, Ill. Regulator for gas-heated steam radiators. 1,867,849; July 19.
Kuhlman, Carl H. (See Baker, W. A., and Kuhlman.)
Kulp, Harry W. (See Dellinger, Martin C., assignor.)
Kureth, Irven William. (See Patrick, H. E., and Kureth.)
Kuss, Ernst, and M. Guenther, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of urea. 1,868,106; July 19.
La Burthe, Pierre, Nemours, assignor to Societe "Quartz & Silice," Paris, France. Mold for the manufacture of articles in silica glass and the like. 1,868,421; July 19.
Lachman, Maurice, New York, N. Y. Skeleton reenforcement. 1,868,108; July 19.
Lachman, Maurice, New York, and J. R. Tench, White Plains, N. Y. Grating. 1,868,107; July 19.
Lahn, Harald. (See Gundersen, Einar.)
La Mar, Frank C., assignor to Great Western Fuse Company, New York, N. Y. Fuse indicator. 1,868,464; July 19.
La Mar, Frank C., assignor to Great Western Fuse Company, New York, N. Y. Fuse indicator. 1,868,465; July 19.
Lamatsch, Frederick, Grantwood, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y. Folder for web printing machines. 1,868,109; July 19.
La Mondiale Typolitho. (See Havard, Alexandre, assignor.)
Lamp Studio, The. (See Moore, Gladys, assignor.)
Lancaster Asphalt, Inc. (See Forbes, Duncan D., assignor.)
Landmesser, William H., Salt Lake City, Utah. Novelty toy or similar article. Des. 87,395; July 19.
Landon, Lawrence E., Tacoma, Wash. Display card. 1,868,110; July 19.
Landrum, Rose, El Paso, Tex. Hair curling device. 1,867,850; July 19.
Lange, Henry, Quincy, Ill. Range. Des. 87,396; July 19.
Larson, Otto, St. Louis, Mo. Combustion rotary engine. 1,867,917; July 19.
Lasker, William W., Brooklyn, assignor to Remington Rand Inc., Buffalo, N. Y. Perforating machine. 1,868,111; July 19.
Lasker, William W., Brooklyn, assignor to Remington Rand Inc., Buffalo, N. Y. Sorting machine. 1,868,112; July 19.
Leach, Vernon G., assignor to Modern Coal Burner Company, Chicago, Ill. Mechanical underfeed stoker. 1,867,573; July 19.
Learned, Edwin J. (See Keown, John M., assignor.)
LeBlond Aircraft Engine Corporation, The. (See Angle, Glenn D., assignor.)
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Vehicle body tonneau construction unit. 1,867,851; July 19.
Lee, Jerome, assignor to Hardwick Stove Company, Cleveland, Tenn. Stove leg. 1,867,948; July 19.
Lees-Bradner Company, The. (See Schurr, Charles H., assignor.)
Lefebvre, Paul J. (See Defays, V. J., and Lefebvre.)
Leffert, Julius, Hillsboro, Mo., assignor of one-half to H. A. Spreckelmeyer, St. Louis, Mo. Helicopter. 1,868,392; July 19.
Leger, Clement A., Lincoln, Nebr. Level. 1,868,361; July 19.
Lehmann, Albert, Brooklyn, N. Y. Life saving vest. 1,868,210; July 19.
Leidel, William, Elmhurst, N. Y. Spoon. 1,868,289; July 19.
Leman, Arthur L., assignor to The National Supply Company, Toledo, Ohio. Rod-line weight. 1,867,574; July 19.
Lemke, Fritz, Milwaukee, Wis. Vehicle door hinge. 1,867,885; July 19.
LeNobel, Jacobus W., Amsterdam, assignor to De Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Manufacture of lighter colored products form earth oil residues, asphalt, and/or similar substances. 1,868,211; July 19.
Leopold, George O. (See Fegley, T. J., and Leopold.)
Lepine, Veuve Georges, née Marie-Thérèse Joséphine Rousel, Meaux, France. Manufacture of cement. 1,868,240; July 19.
Leslie, Eugene H., and E. M. Baker, Ann Arbor, Mich. Distilling process and apparatus. 1,868,466; July 19.
Leventry, Roy L., assignor to Republic Iron and Steel Company, Youngstown, Ohio. Furnace construction. 1,868,172; July 19.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Coal cutting machine. 1,867,853; July 19.
Lewis, Ben, New York, N. Y. Athletic trunks. 1,868,212; July 19.
Lewis-Shepard Company. (See Hennessy, Daniel E., assignor.)
Libby, McNeill & Libby. (See Nevills, John J., assignor.)
Libbey-Owens-Ford Glass Company. (See Cone, Carroll, assignor.)
Libbey-Owens-Ford Glass Company. (See Crowley, Joseph P., assignor.)
Libbey-Owens-Ford Glass Company. (See Watkins, George B., assignor.)
Lieberknecht, Paul, assignor of one-half to Maschinenfabrik-Einsiedel Gesellschaft mit beschrankter Haftung, Einsiedel, near Chemnitz, Germany. Device for coarse and fine setting of the loop length in flat hosiery machines. 1,867,703; July 19.
Lieberknecht, Paul, assignor of one-half Maschinenfabrik-Einsiedel, mit-beschrankter Haftung, Einsiedel, near Chemnitz, Germany. Device on flat knitting machines for producing goods patterned by reenforcement. 1,867,704; July 19.
Lieberknecht, Paul, assignor to Maschinenfabrik-Einsiedel, Gesellschaft mit beschrankter, Haftung, Einsiedel, near Chemnitz, Germany. Auxiliary drive for flat hosiery frames. 1,867,705; July 19.
Lied, Otto, Wandsbek, Germany, assignor to Firm Neuerburg'sche Verwaltungsgesellschaft G. m. b. H., Cologne-on-the-Rhine, Germany. Machine for making cigarettes. 1,867,852; July 19.

Ljungstrom, Fredrik, Lidingo, assignor to Aktiebolaget Spontan, Stockholm, Sweden. Fan. 1,868,113; July 19.
Lloyd, W. G. Company. (See Olsen, Henry E., assignor.)
Loetscher, Emil C., Dubuque, Iowa. Making articles of fibrous materials. 1,867,575; July 19.
Loetscher, Emil C., Dubuque, Iowa. Reproducing natural wood finishes on metal and other surfaces. 1,867,576; July 19.
Loewe, Siegmund, Berlin, Friedenau, Germany, assignor to Radio Corporation of America. Amplifier. 1,867,577; July 19.
Lofgren, John, Chicago, Ill., assignor to Ralco Manufacturing Co. Terminal connecter. 1,867,918; July 19.
Lohmann, Willi, New York, N. Y. Toilet stand. 1,867,747; July 19.
Lorimer, George W., Troy, Ohio, assignor, by mesne assignments, to Black Products Company, Chicago, Ill. Target trap. 1,867,578; July 19.
Low, John J., assignor to Six Wheel Corporation, Los Angeles, Calif. Running gear. 1,868,173; July 19.
Lowe, Cloyd A., Dayton, Ohio. Tire chain. 1,867,978; July 19.
Lowther, William P., Merced, Calif. Automatic lock. 1,867,919; July 19.
Lubbers, Lubbert E., assignor to The Stoughton Company, Stoughton, Wis. Fifth wheel. 1,867,670; July 19.
Lucas, John W., Los Angeles, Calif. Expansion joint. 1,868,014; July 19.
Luecke, Frank M. G., Nixa, Mo. Cheese manufacture. 1,868,422; July 19.
Luland, Webster H., Newark, N. J., assignor to Defiance Manufacturing Corporation, Orange, N. J. Check-writing machine. 1,868,015; July 19.
Lulofs, Warner, Amsterdam, Netherlands, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Furnace. 1,868,329; July 19.
Lungren, Arthur N. (See Wahl, J. E., Gronemann, and Lungren.)
Lux Clock Manufacturing Company, The. (See Lux, Frederick, assignor.)
Lux, Frederick, assignor to The Lux Clock Manufacturing Company, Waterbury, Conn. Interval timer. 1,868,241; July 19.
MacAndrews & Forbes Company. (See Swift, Clement K., assignor.)
Maccabee, David E., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,867,748; July 19.
MacClatchie, John W., doing business as MacClatchie Manufacturing Company. (See Foster, Walter L., assignor.)
Mackie, William, Glasgow, Scotland. Manufacture of shaped metal articles. 1,868,213; July 19.
Madison, Walter G., Ames, Iowa. Adjustable radiator bracket. 1,867,854; July 19.
Magnesium Development Corporation. (See Wood, Robert T., assignor.)
Magnesium Development Corporation. (See Wood, T., and Frary, assignors.)
Magoun, George L., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Bath for metal pickling processes. 1,868,214; July 19.
Malcolm, George S., Auburn, Calif. Display card holder. 1,867,920; July 19.
Mallett, George T., Elizabeth, N. J. Stereoscopic cinematography. 1,867,855; July 19.
Mandelick, Charles E., New York, N. Y., assignor to Kayser Hosiery Motor-Mend Corporation, Wilmington, Del. Machine for relooping the runs in stockings and other knitted fabrics. 1,867,579; July 19.
Manley, Robert E., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Dewaxing hydrocarbon oil. 1,867,580; July 19.
Mann, Seward W., assignor to Frank B. Smith, Jr., Pittsburgh, Pa. Emergency switch mechanism and lighting system. 1,868,242; July 19.
Marchant Calculating Machine Company. (See Talamini, Louis, assignor.)
Marietta, Alphonso H., Akron, Ohio. Rod bending machine. 1,867,581; July 19.
Marsh, Jas. P., Corporation. (See Thompson, Orville W., assignor.)
Marshburn, Preston W., New York, and M. T. Brekke, Scaradale, assignors to Northam Warren Corporation, New York, N. Y. Bottle. Des. 87,397; July 19.
Marsilius, Newman M., Bridgeport, and O. A. Olsen, Stratford, assignors to The Products Machine Company, Bridgeport, Conn. Milling machine. 1,868,016; July 19.
Martin, William A., Amarillo, Tex. Cultivator. 1,868,330; July 19.
Martinet, Eugene F., assignor to The P. A. Geier Company, Cleveland, Ohio. Suction cleaning apparatus. Re18,538; July 19.
Marvel Headlight Limited. (See Brown, Dimmick, assignor.)
Maschinenfabrik-Einsiedel Gesellschaft mit beschrankter Haftung. (See Lieberknecht, Paul, assignor.)
Massey, Augustine H., Stratford, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Electric heater plug. Des. 87,398; July 19.
Massoll, Curtis A., Detroit, Mich. Safety zone guard. 1,867,671; July 19.
Mathews, Fred, Northport, Wash. Fruit sizing machine. 1,868,114; July 19.
Mayer China Company. (See Hardesty, Eugene, assignor.)
Mayerhofer, John F., Brooklyn, N. Y. Hot water heater. 1,868,423; July 19.
Mayers, Horace C., Cleveland, Ohio. Traveling display case for shoes. 1,867,886; July 19.
Mayers, Joseph Alexander, deceased, Cumberland, Md.; Taylor Morrison, executor of said Joseph A. Mayers. Humidifying apparatus. 1,867,921; July 19.
Mayoh, Frank H., Springfield, Mass. Welding machine for machine constructions and the like. 1,867,979; July 19.
McAfee, Almer McD., Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa. Manufacture of aluminum chloride. 1,867,672; July 19.
McCandless, Harry E., Rochester, N. Y. Infant's combination dressing table and bathtub. 1,867,673; July 19.
McCandless, Harry E., Rochester, N. Y. Child's toilet seat. 1,867,674; July 19.
McCoy, Harry J. (See Stanbrough, Roy G., assignor.)
McCray, Harold E., assignor to John Deere Tractor Company, Waterloo, Iowa. Internal combustion engine. 1,867,582; July 19.
McCrery, Harold E., Appollo, assignor, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa. Apparatus for treating metal sheets. 1,867,856; July 19.
McGinty, Anthony C., Los Angeles, Calif. Turbine. 1,868,017; July 19.
McHenry, Earl O., and F. A. McHenry, Hoytville, assignors of one-third to D. C. Ingold, McComb, Ohio, and one-third to M. J. Ingold, St. Louis, Mich. Storage garage. 1,867,675; July 19.
McHenry, Frank A. (See McHenry, E. O. and F. A.)
McIntosh, Frederick P. (See Hopkins, R. M., and McIntosh.)
McIntyre, Sydney S., Sedro-Woolley, Wash. Winding engine frame. 1,867,707; July 19.
McKay, H. V., Proprietary Limited. (See Taylor, Headlie S., assignor.)
McKinney Manufacturing Company. (See Wilson, William J., assignor.)
McMillan-Miller Road Machinery-Inc. (See McMillan, W. K., and Walch, assignors.)
McMillan, Wesley K., and J. S. Walch, San Francisco, Calif., assignors, by direct and mesne assignments, to McMillan-Miller Road Machinery-Inc. Track link. 1,868,148; July 19.
Mead Corporation, The. (See Traquair, J., and Kidd., assignors.)
Mead Pulp and Paper Company, The. (See O'Connor, James J., assignor.)
Meade Corporation, The. (See Traquair, John, assignor.)
Meglitz, William B. (See Schur, M. O., and Meglitz.)
Meigs, Joseph V., Jersey City, N. J., assignor, by mesne assignments, to Plastix Corporation. Carbohydrate resinous material and making same. 1,868,215; July 19.
Meigs, Joseph V., Jersey City, N. J., assignor, by mesne assignments, to Plastix Corporation. Resinous product and making same. 1,868,216; July 19.
Melka, Charles A., Chicago, Ill. Shaving cream dispensing safety razor. 1,867,980; July 19.
Memorial Hospital for the Treatment of Cancer and Allied Diseases. (See Hoffman, William Joseph, assignor.)
Merle, André Noël, Vincennes, assignor to Pathe Cinema, Anciens Etablissements Pathe Freres, Paris, France. Motion picture apparatus. 1,868,331; July 19.
Metlox Corporation. (See Prouty, W. O., assignor.)
Metro-Goldwyn-Mayer Corporation. (See Ceccarini, Olindo, O., assignor.)
Metropolitan Device Corporation. (See Murray, T. E., and Baker, assignors.)
Meuer, George J., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electrical appliance plug connecter. Des. 87,399; July 19.
Meyers, Joseph M., Pittsburgh, Pa. Leaf mounting device. 1,868,332; July 19.
Meyers, Walter R., Baltimore, Md., assignor to American Can Company, New York, N. Y. Mechanism and method for making cans. 1,867,857; July 19.
Michel, Gaytan. (See Berthet, Jean L., and Michel, assignors.)
Michelin, André J., Paris, assignor to Michelin Et. Cie., Clermont-Ferrand, France. Railway vehicle. 1,868,424; July 19.
Michelin Et Cie. (See Michelin, André J.)
Middlehurst, George S., Nampa, Idaho. Side bearing for railroad cars. 1,868,393; July 19.
Mieg, Walter, Opladen, near Cologne, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Producing an anthraquinone dye. 1,867,858; July 19.
Miller, Austin J. (See Slater, F. S., and Miller.)
Miller, Howard H. and J., Cincinnati, Ohio. Mail distributing machine. 1,868,243; July 19.
Miller, Joseph. (See Miller, Howard H. and J.)
Miller, Stuart P., Tenafly, N. J., assignor to The Barrett Company, New York, N. Y. Distillation of tar. 1,868,394; July 19.
Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Distillation. 1,868,395; July 19.

Miller, William J., Swissvale, Pa. Method of and apparatus for manufacturing pottery ware. 1,868,425; July 19.
Miner, Earl J., Los Angeles, Calif. Pressure or graphic gauge protector. 1,868,018; July 19.
Miner, George H., assignor to Amusement Machine Corporation, Ltd., Los Angeles, Calif. Playing field for game apparatus. Des. 87,400; July 19.
Minton, John P., White Plains, and A. S. Ringel, Brooklyn, N. Y., assignors to Radio Corporation of America. Acoustic device. 1,868,019; July 19.
Modern Coal Burner Company. (See Leach, Vernon G., assignor.)
Molins, Walter E., Deptford, London, England. Carton for cigarettes and like articles. 1,867,949; July 19.
Moll, Emil A., Maspeth, assignor to Carman & Co., Inc., New York, N. Y. Envelope for laundered articles. 1,867,556; July 19.
Mollet, Samuel J., Massillon, Ohio. Printing press. 1,867,859; July 19.
Mollet, Samuel J., Massillon, Ohio. Printing press. 1,867,860; July 19.
Mollet, Samuel J., Massillon, Ohio. Printing cylinder. 1,867,861; July 19.
Momberger, William G., assignor to Ammidon and Company, Baltimore, Md. Sheet metal spoon. 1,868,426; July 19.
Monahan, R. H. (See Auger, Joseph T., assignor.)
Monroe Calculating Machine Company. (See Brown, L. R., and Overbury, assignors.)
Moore, Charles A., Edina, Minn. Refrigerating and ventilating apparatus. 1,867,749; July 19.
Moore, Charles G., Lakewood, and M. Zucker, assignors to The Glidden Company, Cleveland, Ohio. Synthetic resin and making. 1,867,583; July 19.
Moore, Charles G., Lakewood, and M. Zucker, assignors to The Glidden Company, Cleveland, Ohio. Synthetic resin and making the same. 1,867,584; July 19.
Moore, George L., Cleveland, Ohio, assignor to Aluminum Co. of America, Pittsburgh, Pa. Piston-sand core. 1,867,862; July 1.
Moore, Gladys, assignor to The Lamp Studio, Utica, N. Y. Doll. 1,868,427; July 19.
Moore, Thomas F., Morris Plains, N. J. Vacuum pump. 1,867,585; July 19.
Morgan, John L., Camden, N. J., assignor to Jesse Satenstein, New York, N. Y. Counter. 1,868,290; July 19.
Morgan and Wright. (See Abbott, Adrian O., jr., assignor.)
Morrell, Jacque C., and G. Egloff, assignors to Universal Oil Products Company, Chicago, Ill. Refining of hydrocarbon oils. 1,868,333; July 19.
Morris, I. P., and De La Vergne, Inc. (See Kruse, Otto V., assignor.)
Morrison, Taylor (executor). (See Mayers, Joseph A.)
Morse Chain Company. (See Morse, Frank L., assignor.)
Morse, Frank L., assignor to Morse Chain Company, Ithaca, N. Y. Drive chain. 1,868,334; July 19.
Morse, Lyman D., Butte City, Calif. Roller attached bulk-handling attachment for harvesters. 1,867,887; July 19.
Motoscope Corporation of America. (See Harris, William L., assignor.)
Moulton, Arthur J., Islip, N. Y. Theater. 1,868,068; July 19.
Mudd, Garrett W., Chicago, Ill. Filling machine. 1,868,244; July 19.
Mudd, Ora C., Edwardsville, Ill. Mechanical movement. 1,867,981; July 19.
Mueller Co. (See Mueller, Frank H., assignor.)
Mueller, Edmund M., Welcome, Minn. Refuse container. 1,867,676; July 19.
Mueller, Frank H., assignor to Mueller Co., Decatur, Ill. Gas meter hanger. 1,868,217; July 19.
Mulligan, Patrick J., Glenolden, Pa., assignor to Scott Paper Company. Manufacture of paper rolls. 1,868,115; July 19.
Munro, Alexander L., assignor to Smith Engineering Works, Milwaukee, Wis. Vibratory screen. Re18,530; July 19.
Munson, John M., Lakewood, Ohio. Composite bag. 1,868,069; July 19.
Murphy, P. H., Company. (See Bonsall, Charles D., assignor.)
Murphy, P. H., Company. (See Small, Arthur E., assignor.)
Murphy, Walter P., assignor to Union Metal Products Company, Chicago, Ill. Railway car construction. 1,868,335; July 19.
Murray, John F., executor. (See Murray, T. E., and Baker.)
Murray, Joseph B., executor. (See Murray, T. E., and Baker.)
Murray, Thomas E., jr., executor. (See Murray, T. E., and Baker.)
Murray, Thomas E., deceased, Brooklyn, and R. Baker, East Rockaway, N. Y.; said Baker assignor to said Murray; J. B. Murray, T. E. Murray, jr., and J. F. Murray, executors of said T. E. Murray, deceased, assignors to Metropolitan Device Corporation. Electric gallery and related parts. 1,867,706; July 19.
Muth, Clifford F. (See Balinkin, I. A., and Muth.)
Muth, Friedrich, Elberfeld, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Indophenol azine compounds. 1,867,863; July 19.
Naamlooze Vennootschap Electro-Apparaten-Frabrieken Systeem Coq. (See Hidde Nijland, Hendrik A., assignor.)
Naamlooze Vennootschap; Glasfabriek "Leerdam", voorheen Jeekel, Mijnssen & Co. (See Janzen, Jetze Willem, assignor.)
Naamlooze Vennootschap Splendor Gloeilampenfabriek Splendor Lampworks. (See Winter, Ernst, assignor.)
Nabors, William C., Mansfield, La. Load carrying vehicle. 1,868,020; July 19.
Nabors, William C., Mansfield, La. Vehicle trailer. 1,868,021; July 19.
Nachod & United States Signal Co. (See Stolp, S. S., and Richterkessing, assignors.)
National Folding Box Company. (See Reichel, Ferdinand, assignor.)
National India Rubber Company, The. (See Huestis, Thomas B., assignor.)
National Rubber Machinery Company. (See DeMattia, Peter, assignor.)
National Supply Company, The. (See Leman, Arthur L., assignor.)
Naugatuck Chemical Company, The. (See Howland, Louis H., assignor.)
Naugatuck Chemical Company. (See Seaman, Robert G., assignor.)
Naugle, John J., Rye, N. Y. Apparatus for heating and treating subdivided carbonaceous material and the like. 1,867,750; July 19.
Naunton, William J. S. (See Hallwood, A. J., Naunton, and Shepherdson.)
Naunton, William J. S., and J. B. Payman, Blackley, Manchester, assignors to Imperial Chemical Industries Limited, London, England. Morpholine derivatives of thiuram tetrasulphide and making the same. 1,867,982; July 19.
Naylor, William H. (See Day, A., and Naylor.)
Neelmeier, Wilhelm and O. Goll, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Carbazole-2,7-disulphonic acid. 1,867,864; July 19.
Nelson, Christian B., Chicago, Ill. Gauge. 1,867,922; July 19.
Nelson, John N., Rochester, N. Y., assignor to Universal Optical Corporation, Providence, R. I. Ophthalmic mounting. 1,867,865; July 19.
Neon, Claude, Electrical Products Corporation. (See Hyde, R. C., Northcott, and Erickson, assignors.)
Neuerburg'sche Verwaltungsgesellschaft G. m. b. H. (See Lied, Otto, assignor.)
Nevills, John J., Oakland, assignor to Libby, McNeill & Libby, San Francisco, Calif. Cooker. 1,868,022; July 19.
Newell, Robert E., Irwin, Pa. Regulator. 1,868,116; July 19.
New Jersey Machine Corporation. (See Fleischer, Paul Werner, assignor.)
New Jersey Machine Corporation. (See Fleischer and Feybusch, assignors.)
Newman, Edwin P. S., Washington, D. C. Ice tray. 1,868,070; July 19.
Newman, I., & Sons, Inc. (See Kispert, Joseph J., assignor.)
New Standard Corporation. (See Rollman, Michael A., assignor.)
New York Air Brake Company, The. (See Safford, L. A., and Tyler, assignors.)
Niagara Sprayer and Chemical Co. (See Helenbolt, George S., assignor.)
Nielsen, Bertram, Seattle, Wash. Milk and cream can cover. 1,867,677; July 19.
Nielsen, Karl K., assignor to Alcor Manufacturing Company, Chicago, Ill. Candle socket. Re18,535; July 19.
Nilsson, Johan A., assignor to Svenska Bindgarnsfabrikens Aktiebolag, Malmo, Sweden. Twine-holder for self-binding harvesters. 1,868,218; July 19.
Nitardy, Ferdinand W., Brooklyn, assignor to E. R. Squibb & Sons, New York, N. Y. Bottle. Des. 87,401; July 19.
Nonnast, Hermann, Chicago, Ill. Combined cabinet and table. Des. 87,402; July 19.
Nordberg Manufacturing Company. (See Ruegg, Clement, assignor.)
Nordberg Manufacturing Company. (See Symons, Edgar B., assignor.)
Norley, Harry C., North Bay, assignor to Canadian Atlas Steels Limited, Welland, Ontario, Canada. Drill. 1,867,950; July 19.
North American Chemical Company. (See Avery, Alfred H., assignor.)
North Bro's M'f'g Co. (See Fegley, T. J., and Leopold, assignor.)
North, Roy I., Hoosick Falls, N. Y. Ash or cigarette receptacle. 1,868,023; July 19.
Northam Warren Corporation. (See Marshburn, P. W., and Brekke, assignors.)
Northcott, John T., et al. (See Hyde, R. C., Northcott, and Erickson.)
Norton, Samuel H., Meadville, Pa., assignor to The Hookless Fastener Company. Slide fastener. 1,867,586; July 19.
Nowak, Karl Georg, Vienna, Austria. Eyeshade, goggles, and the like. 1,868,362; July 19.
Nunez, Frank M., San Francisco, Calif. Automatic door opener and closer. 1,868,149; July 19.

Oakes Products Corporation. (See Hershey, Orville S., assignor.)
Ober, Beverly, and E. H. Wight, assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md. Manufacturing mixed fertilizer. 1,867,866; July 19.
Oberhuber, William F., Lansdowne, assignor to Franklin Development Company, Philadelphia, Pa. Gun for condenser cleaning slugs. 1,867,751; July 19.
Obermoser, Karl, Baden-Baden, Germany. Electric motor starting clutch. 1,868,245; July 19.
Obidine, Waldimire J., Los Angeles, Calif. Calculating device. 1,867,888; July 19.
O'Connor, James J., Chillicothe, assignor to The Mead Pulp and Papper Company, Dayton, Ohio. Paper manufacture. 1,868,291; July 19.
O'Connor, Robert M., and R. T. Todd, Warren, Ohio. Type slug casting machine or the like. 1,868,363; July 19.
O'Donnell, Patrick J., New York, N. Y., assignor to Radio Corporation of America. Combined radio receiver and clock. Des. 87,403; July 19.
O'Donnell, Philip L., Cincinnati, ohio. Air supply system. 1,867,867; July 19.
O'Farrell, Thomas, Laguna Beach, assignor to Sparkletts Bottled Water Corporation, Los Angeles, Calif. Drinking water cooler. 1,867,868; July 19.
Ogle Construction Co. (See Bledsoe, Carl F., assignor.)
Ogle, Forest W. (See Keown, John M., assignor.)
Old Dominion Iron & Steel Works. (See Wheelwright, Thomas S., assignor.)
Olschewski, Leo, Union, N. J. Apparatus for teaching swimming. 1,867,627; July 19.
Olsen, Carl E. (See Peterson, J. A., and Olsen.)
Olsen, Henry E., assignor to W. G. Lloyd Company, Chicago, Ill. Binder. 1,867,983; July 19.
Olsen, Oswald A. (See Marsilius, N. M., and Olsen.)
Omes Holding Company Limited, The. (See Benedetto, Giuseppe, assignor.)
Onsrud Machine Works, Inc. (See Onsrud, Oscar, assignor.)
Onsrud, Oscar, assignor to Onsrud Machine Works, Inc., Chicago, Ill. Clamp mounting for automatic shapers. 1,867,869; July 19.
Orbon Stove Co. (See Herrenbruck, Herman, assignor.)
Oster, Jack, Greeley, Colo. Grain saving attachment for binders and harvesters. 1,868,428; July 19.
Ostro Research Laboratories, Inc. (See Ostromislensky, Iwan, assignor.)
Ostromislensky, Iwan, assignor to Ostro Research Laboratories, Inc., New York, N. Y. Purified phenylene-disazo-bismeta-phenylene-diamene. 1,867,587; July 19.
Overbury, Austin A., et al. (See Brown, L. R., and Overbury.)
Packard Motor Car Company. (See Paton, Clyde R., assignor.)
Packard Motor Car Company. (See Tibbetts, Milton, assignor.)
Paddock, Levi S., assignor to Swift and Company, Chicago, Ill. Meat stamping ink. 1,868,071; July 19.
Page, John W., Chicago, Ill. Bucket. 1,868,246; July 19.
Page, John W., Chicago, Ill. Tooth point construction. 1,868,247; July 19.
Pancoast, George E., Sea Bright, N. J. Web pasting mechanism. 1,868,117; July 19.
Parham, Sidney F., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Continuous two-table forming machine. 1,868,248; July 19.
Parham, Sidney F., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Continuous two-table forming machine. 1,868,249; July 19.
Parker, Alexander, Etna, Calif. Water elevator. 1,868,219; July 19.
Parker, Eugene L., Mount Pleasant, Tenn. Process for determining the quantity of potassium in fertilizers. 1,868,304; July 19.
Parker, Henry C., Maywood, N. J., assignor to Bergen Building Block Company. Tamper control mechanism. 1,868,072; July 19.
Parker, Howard, assignor to Brown Company, Berlin, N. H. Method of and apparatus for paper making. 1,867,588; July 19.
Parker, Thomas Hugh, Bosham, England. Sound reproducing mechanism. 1,868,396; July 19.
Parsons, Clinton H., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Egg separator. 1,868,336; July 19.
Pasley, Albert V., Rhea, Ark. Toy aeroplane. 1,868,429; July 19.
Pathe Cinema, Anciens Etablissements Pathe Freres. (See Merle, André Noël, assignor.)
Paton, Clyde R., assignor to Packard Motor Car Company, Detroit, Mich. Automobile construction. 1,867,708; July 19.
Paton, Clyde R., Birmingham, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,867,709; July 19.
Paton, Clyde R., Birmingham, assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich. Automobile construction. 1,867,752; July 19.
Paton, Clyde R., Birmingham, assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich. Automobile construction. 1,867,753; July 19.
Patrick, Harry E., deceased, Ocoee, and I. W. Kureth, Orlando, Fla., assignors of one-third to W. F. Anderson, Wisconsin Rapids, Wis.; L. M. Patrick, executrix of said H. E. Patrick. Transformer-converter. 1,867,754; July 19.
Patrick, Lena M., executrix. (See Patrick, H. E., and Kureth.)
Paul, Thomas M., St. Joseph, Mo. Current shut-off mechanism. 1,868,365; July 19.
Paulus, William, assignor to Trico Products Corporation, Buffalo, N. Y. Horn construction. 1,868,250; July 19.
Paxton, Hale, Sanger, Calif. Shook carriage for box making machines. 1,867,951; July 19.
Payman, Joseph B. (See Naunton, W. J. S., and Payman.)
Pearce, Edwin S., R. W. Retterer, and E. C. Karibo, Indianapolis, Ind. Cut-off controlling mechanism for and operating locomotives. 1,868,024; July 19.
Pearson, Robert D., et al. (See Sweet, Alvin H., assignor.)
Pearson, Robert S., and J. B. Peel, Lockport, N. Y. Brake release. 1,868,251; July 19.
Peel, Jesse B. (See Pearson, R. S., and Peel.)
Peissner, Alfons. (See Zapf, G., and Peissner.)
Pelc, Joseph J., Chicago, Ill. Production of beryllium and beryllium compounds and isolation of beryllium salts. 1,867,755; July 19.
Pelterie, Robert Esnault, Paris, France. Packing device. 1,868,199; July 19.
Penn, Albert, assignor to Penn Electric Switch Co., Des Moines, Iowa. Room thermostat. 1,867,756; July 19.
Penn, Charles A., deceased, assignor to The American Tobacco Company, New York, N. Y. Cigarette package. Re18,529; July 19.
Penn Electric Switch Co. (See Henning, Malcolm E., assignor.)
Penn Electric Switch Co. (See Penn, Albert, assignor.)
Pennington, William P. (See Cannon, William R.)
Peter, Henry A., Philadelphia, Pa., assignor to Pioneer Suspender Company. Garter. Des. 87,404; July 19.
Peterson, Joseph A., and C. E. Olsen, Houston, Tex. Tong. 1,867,889; July 19.
Petters Limited. (See Hill, Geoffrey T. R., assignor.)
Pfaller, John B. (See Riehle, R. R., and Pfaller.)
Pfannenstiehl, Harry, Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Driving mechanism. 1,868,366; July 19.
Pfeiffer, Frank E., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,868,367; July 19.
Phillips, Clayton L., Hamden, and H. E. Sprague, assignors to Sargent Company, New Haven, Conn. Hold open and closing mechanism for double doors. 1,867,589; July 19.
Phipps, John T., Huntington Park, assignor, by mesne assignments, to Globe Oil Tools Company, Los Angeles, Calif. Roller bit. 1,867,628; July 19.
Pick-Barth, Albert, Company. (See Sehlbach, Albert E., assignor.)
Pierce-Arrow Motor Car Company, The. (See Hughes, James R., assignor.)
Pioneer Suspender Company. (See Cahn, Tillman, assignor.)
Pioneer Suspender Company. (See Peter, Henry A., assignor.)
Pistor, Adolph F., Newark, N. J. Pipe-line covering. 1,867,984; July 19.
Pittsburgh Screw Bolt Corporation. (See Dicks, Thomas A., assignor.)
Pla Costa, Jose Miguel, Buenos Aires, Argentina. Monthly almanac and the like. 1,868,430; July 19.
Plastix Corporation. (See Meigs, Joseph V., assignor.)
Pollock, Sheldon L., New York, N. Y. Pocket check protector or similar article. Des. 87,405; July 19.
Ponselle, Robert A., New York, N. Y. Portable polishing device. 1,867,629; July 19.
Ponting, Herbert G., London, and G. W. Ford, Kensington, London, England, assignors, by mesne assignments, to Kingatome Patents Corporation. Cinematographic apparatus. 1,868,252; July 19.
Porter, Finley R., Port Jefferson, N. Y. Automatic variable speed mechanism. 1,867,590; July 19.
Potter, A. C., & Co., Limited. (See Potter, Arthur C., assignor.)
Potter, Arthur Crawley, assignor to A. C. Potter & Co., Limited, Grantham, England. Deep well pump. 1,868,150; July 19.
Powell, Frank D., assignor to Acme Card System Company, Chicago, Ill. Visible index and visible record system. 1,867,710; July 19.
Pranke, August S., Baltimore, Md. Dirigible air dock. 1,867,591; July 19.
Preston, Arthur C., Wilbraham, and G. C. Gress, Springfield, Mass., assignors to The Fiberloid Corporation, Indian Orchard, Me. Digesting nitrocellulose. 1,867,757; July 19.
Prevost, Omar J., and F. Tanguay, Rumford, Me. Combined curtain and shade fixture. 1,867,985; July 19.
Products Machine Company, The. (See Marsilius, N. M., and Olsen, assignors.)
Prouty, Willis O., Hermosa Beach, assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif. Radiant therapeutic device. Des. 87,406; July 19.

Prouty, Willis O., Hermosa Beach, assignor to Metlox Corportion, Ltd., Manhattan Beach, Calif. Hand supported therapeutic light. Des. 87,407; July 19.

Prouty, Willis O., Hermosa Beach, assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif. Medicinal radiant device. Des. 87,408; July 19.

Publow, Frederick J. (See Tysick, Robert W., assignor.)

Pyn, Wilbur W. H., New York, N. Y. Sprayer. 1,867,890; July 19.

Queck, Frederic, Monroe, Mich. Producing asphaltic emulsion. 1,867,923; July 19.

Rackebrandt, Heinrich, Hannover-Linden, Germany. Heat-responsive closure. 1,868,253; July 19.

Radio Corporation of America. (See Elliott, Harold F., assignor.)

Radio Corporation of America. (See Hansell, Clarence W., assignor.)

Radio Corporation of America. (See Hodgson, Alan D., assignor.)

Radio Corporation of America. (See Karolus, August, assignor.)

Radio Corporation of America. (See Loewe, Siegmund, assignor.)

Radio Corporation of America. (See Minton, J. P., and Ringel, assignors.)

Radio Corporation of America. (See O'Donnell, Patrick J., assignor.)

Radio Corporation of America. (See Seibt, Georg, assignor.)

Radio Corporation of America. (See White, Sidney Y., assignor.)

Ragsdale, Earl J. W., Norristown, Pa. Constructing airplane fuselages. 1,868,073; July 19.

Ralco Manufacturing Co. (See Lofgren, John, assignor.)

Rambo, James H., assignor to Sexton Manufacturing Company, Fairfield Ill. Apparel garment. 1,867,630; July 19.

Ramsdell, Bentley F. (See Keown, John M., assignor.)

Ramsey, Elmer R., Denver, Colo., and A. W. Bull, Westport, Conn., assignors, by mesne assignments, to The Dorr Company, Inc., New York, N. Y. Manufacture of sugar. 1,868,472; July 19.

Raney, Estel C., Columbus, Ohio. Defroster. 1,867,711; July 19.

Rankine, Andrew, Lachine, Quebec, assignor to Canada Malting Company, Limited, Montreal, Canada. Shelling machine. 1,867,986; July 19.

Ranney, Leo, New York, N. Y. Degasifying coal and other carbonaceous material in situ. 1,867,758; July 19.

Ravencroft, John F., Union Mills, Ind. Fertilizer distributor. 1,868,025; July 19.

Rayburn, Alden G., Sausalito, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation. Drive mechanism for motor vehicles. 1,867,678; July 19.

Reaves, Earl J., Detroit, Mich. Free wheeling drive for automobiles. 1,868,254; July 19.

Reese Engineering Company Ltd. (See Reese, Jesse C., assignor.)

Reese, Jesse C., Montebello, Calif., assignor to Reese Engineering Company Ltd. Rotary drill bit. 1,868,074; July 19.

Reese, Weston R., Scranton, Pa. Toothbrush. 1,868,368; July 19.

Rehbock, Jean, Washington, D. C. Aircraft. 1,867,759; July 19.

Reichel, Ferdinand, assignor to National Folding Box Company, New Haven, Conn. Container for packing and displaying merchandise. 1,868,174; July 19.

Reiland, Ernest S. and P. M., St. Paul, Minn. Piston and ring. 1,868,075; July 19.

Reiland, Peter M. (See Reiland, Ernest S. and P. M.)

Reisman, Emil, Brooklyn, N. Y., assignor to Technidyne Corporation, New York, N. Y. Rectifier. 1,868,175; July 19.

Reitzig, Albert, Magdeburg, Germany. Apparatus for stripping electric wires and for binding the end of the insulation. 1,867,712; July 19.

Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,868,176; July 19.

Remington Rand Inc. (See Barker, Howard F., assignor.)

Remington Rand Inc. (See Campbell, C. S., and Day, assignors.)

Remington Rand Inc. (See Davis, Elmer W., assignor.)

Remington Rand Inc. (See Hutchings, Le Roi E., assignor.)

Remington Rand Inc. (See Lasker, William W., assignor.)

Remington Typewriter Company. (See Hart, Frederick A., assignor.)

Republic Iron and Steel Company. (See Leventry, Roy L., assignor.)

Retterer, Raymond W. (See Pearce, E. S., Retterer, and Karibo.)

Reynolds, Donald H. B., St. Albans, England. Pipe joint and the like. 1,867,891; July 19.

Ricard, Eloi, assignor to Société Anonyme des Distilleries des Deux-Sevres, Melle, France. Continuous process for the manufacture of aliphatic ethers. 1,868,076; July 19.

Rice, Cyrus W., Pittsburgh, Pa. Proportioning blowdown water with oiler feed water. 1,868,431; July 19.

Rice, Cyrus William, Pittsburgh, Pa. Continuous automatic control of feed and blowdown water. 1,868,432; July 19.

Rice, Frank E., Detroit, Mich. Purifying apparatus. 1,867,892; July 19.

Rice, Hudson D., jr., and J. M. Babb, Dallas, Tex. Duplex disk valve. 1,867,952; July 19.

Richards, Franco, Pipecreek, Tex. Truck hoist. 1,867,760; July 19.

Richards, William J., assignor to The Bristol Company, Waterbury, Conn. Indexing attachment for automatic machines. 1,867,592; July 19.

Richter, George A., assignor to Brown Company, Berlin, N. H. Chemical fiber liberation. 1,867,593; July 19.

Richterkessing, Frank H. (See Stolp, S. S., and Richterkessing.)

Richtmyer, Artemus R., New York, N. Y. Textile fabric. Des. 87,409; July 19.

Ricks, Fred. (See Gouldbourn, Joseph, and Ricks, assignors.)

Riehle, Raymond R., and J. B. Pfaller, Milford, Ohio. Foot corrective sandal. 1,867,679; July 19.

Rieske, Otto G., Buffalo, N. Y. Fish cutting machine. 1,868,255; July 19.

Rietz, Erich, Wuppertal-Sonnborn, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Age improver. 1,867,761; July 19.

Riley, Francis B., Newton, Mass. Woven open fabric of nonfiaccid strands. Des. 87,410; July 19.

Riley, Francis B., Newton, Mass. Woven open fabric of nonfiaccid strands. Des. 87,411; July 19.

Ringel, Abraham S. (See Minton, J. P., and Ringel.)

Ringel, Albert L. C., Altoona, Pa. Radiodial or station selector. 1,868,433; July 19.

Rippl, Charles H., East Cleveland, assignor to The Clark Controller Company, Cleveland, Ohio. Time limit overload switch. 1,868,256; July 19.

Risvold, Oscar S. (See Christiansen, Oscar, assignor.)

Röber, Constantin F., assignor to Universelle Cigarettenmachinen Fabrick J. C. Müller & Co., Dresden, Germany. Tobacco spreading device for cigarette machines. 1,868,026; July 19.

Roberts, Joseph D., Springfield, and C. H. Thomas, Chicago, Ill.: said Roberts assignor to said Thomas. Fuse. 1,867,924; July 19.

Roberts, Margaret M., New York, N. Y. Paper creaser and slitter. 1,867,713; July 19.

Robertson, Harold F. (See Davidson, J. G., and Robertson.)

Roche, William P., Lakewood, Ohio. Collapsible battery handle. 1,867,632; July 19.

Rodanet, Charles H. H., Neuilly-sur-Seine, France. Clock lamp. Des. 87,412; July 19.

Roe, Ernest S., assignor to King Manufacturing Company, Plymouth, Mich. Air rifle. 1,868,292; July 19.

Roesch, August R. (See Slama, Richard, assignor.)

Roesen, Oscar C., Brooklyn, N. Y., and I. Tornberg, Plainfield, N. J., assignors to Wood Newspaper Machinery Corporation, New York, N. Y. Actuating device for counters. 1,867,762; July 19.

Rohr, Gustav, Oberramstadt, Germany. Automobile. 1,868,220; July 19.

Rollman, Michael A., assignor to New Standard Corporation, Mount Joy, Pa. Ice cream freezer. 1,867,953; July 19.

Romieux, Charles J., Elizabeth, and L. J. Christmann, Jersey City, N. J., assignors to American Cyanamid Company, New York, N. Y. Rubber accelerator and using the same. 1,867,631; July 19.

Rose, Lamar, Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Hospital table. 1,867,763; July 19.

Roseman, Leo, Newark, N. J. Tape winding apparatus. 1,867,596; July 19.

Rotary Machine Company. (See Christiansen, Christian, assignor.)

Roth, Harris C., assignor to A. Y. Dodge, South Bend, Ind. Thermostat device. 1,867,893; July 19.

Roussel, Marie-Thérèse J. (née). (See Lepine, Georges.)

Rowe, Edgar E., Chicago, Ill., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe stiffener conditioning machine. 1,867,594; July 19.

Rowe, Fred H., Gloucester, assignor to The Clear View Windshield Company, Boston, Mass. Manufacturing wired glass. 1,868,177; July 19.

Rowley, Edward G., Newark, N. J., assignor to Cine-A-Graph Corporation, New York, N. Y. Sign device. 1,867,595; July 19.

Rozenbroek, Meindert Danius, Delden, Netherlands. Sulphonating fatty acids and fatty acid derivatives. 1,867,954; July 19.

Rubber Service Laboratories Company, The. (See Magoun, George L., assignor.)

Ruben, Samuel, New Rochelle, N. Y. Apparatus for maintaining synchronism. 1,867,925; July 19.

Rubin, Benjamin, Philadelphia, Pa., assignor to Rubin Patents Corporation. Fastening device. 1,868,178; July 19.

Rubin Patents Corporation. (See Rubin, Benjamin, assignor.)

Ruegg, Clement, assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Resilient coupling. 1,867,987; July 19.

Rundle, Henry M., Glen Ridge, N. J. Combined doll or similar article and support for same. Des. 87,413; July 19.

Runk, William B. (See Draher, J., and Runk.)

Rupp, Carl A., assignor to Commercial Iron Works of Los Angeles, Los Angeles, Calif. Lubricating device for bearings on a shaft. 1,868,118; July 19.

Ruppel, Frederick C., Grand Rapids, Mich., assignor to Dominion Motors, Limited, Toronto, Ontario, Canada. Radiator ornament. Des. 87,414; July 19.

Ruppert, August, Frankfort-on-the-Main, W. Fischer, Ludwigshafen-on-the-Rhine, J. Voigt, and B. Hennig, Bitterfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing low-boiling dichloro-ethylene. 1,868,077; July 19.

Rush, Glen O., Oakland, Calif. Insulation for pole climbing spurs. 1,867,894; July 19.

Rust, James E., assignor, by mesne assignments, to M. E. Kohler, Chicago, Ill. Magazine reel. 1,867,764; July 19.

Ruth, Joseph P., jr., Denver, Colo. Drain device. 1,867,926; July 19.

Ryder, Frank Pittis, Niagara Falls, N. Y. String bean harvester. 1,867,955; July 19.

Sachs, Morris, assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt for personal wear. Des. 87,423; July 19.

Sadtler, Samuel S., Springfield Township, Montgomery County, assignor to Amiesite Asphalt Company of America, Philadelphia, Pa. Road composition. 1,868,221; July 19.

Safety Car Heating & Lighting Company, The. (See Cole, Theodore S., assignor.)

Safford, Lewis A., and W. D. Tyler, Watertown, N. Y., assignors to The New York Air Brake Company. Combined dust collector and shut-off valve. 1,867,988; July 19.

Sager, Solomon M., Evanston, Ill. Fountain pen. 1,868,257; July 19.

Sailliard, John H., Great Kills, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound recording machine. 1,868,369; July 19.

Sainte-Claire-Deville, Etienne, assignor to Societe des Etablissements Gaumont, Paris, France. Braking device for cinematographic spools. 1,868,078; July 19.

Salomon, Robert, Neuilly sur Seine, France. Machine for the drawing of glass into tubes or rods. 1,868,397; July 19.

Sandberg, Albert G. (See Sandberg, Egnar, assignor.)

Sandberg, Egnar, assignor of one-third to A. G. Sandberg, and one-third to Mark D. Bohen, Minneapolis, Minn. Vending machine. 1,868,222; July 19.

Sandberg, Nels H., Minneapolis, assignor to Waldorf Paper Products Company, St. Paul, Minn. Box crusher. 1,867,597; July 19.

Sanders, Richard W., Chicago, Ill. Coaster. Des. 87,415; July 19.

Sangdahl, Arthur E. (See Keown, John M., assignor.)

Sargent & Company. (See Phillips, C. L., and Sprague, assignors.)

Sargent & Company. (See Van Sickles, Irving N., assignor.)

Satenstein, Jesse. (See Morgan, John L., assignor.)

Saunders, Henry E., Toronto, Ontario, Canada, assignor to Kala Sign Company, Kalamazoo, Mich. Display device. 1,867,765; July 19.

Schaefer, Josef, Dortmund, Germany. Regenerative coke oven. 1,868,223; July 19.

Scharnagel, Herman J., Tompkinsville, N. Y., assignor to Sperry Development Company, Dover, Del. Internal combustion engine. 1,867,680; July 19.

Schering-Kahlbaum A. G. (See Ahardt, Hans-Georg, assignor.)

Schering-Kahlbaum A.-G. (See Dohrn, M., and Hohlweg, assignors.)

Schieferstein, Georg H., Berlin-Charlottenburg, Germany. Transmitting energy in the form of mechanical oscillations. 1,867,989; July 19.

Schieferstein, Georg H., Berlin-Charlottenburg, Germany. Suspension of vehicles. 1,868,258; July 19.

Schimmel, Fridolin, Faribault, Minn. Woodworking machine. 1,867,895; July 19.

Schindhelm, Hans, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Halogen-terephthalic-hexahalides and preparing same. 1,867,766; July 19.

Schludecker, Fred C., Massillon, Ohio. Two-tone ornamentation of stainless iron. 1,867,767; July 19.

Schmidt, John F., assignor to The Corcoran-Brown Lamp Company, Cincinnati, Ohio. Laminated lamp construction. 1,868,259; July 19.

Schnellpressenfabrik Aktiengesellschaft Heidelberg. (See Büttner, Artur, assignor.)

Schorr, Raymond A., Akron, and P. R. Frank, Cuyahoga Falls, Ohio. Billboard. 1,867,598; July 19.

Schulzke, Richard F., Portland, Oreg. Iron holder. 1,867,768; July 19.

Schur, Milton O., and W. B. Meglitz, assignors to Brown Company, Berlin, N. H. Manufacture of pulp rovings. 1,867,599; July 19.

Schürmann, Julius, Berlin-Zehlendorf, Germany, assignor to Fabrik Elektrischer Zunder G. m. b. H., Cologne-Niehl. Electric fuse. 1,868,224; July 19.

Schurr, Charles H., assignor to The Lees-Bradner Company, Cleveland, Ohio. Gear grinding machine. Re18,532; July 19.

Schutte & Koerting Company. (See Boehm, Frederik, assignor.)

Schwarzkopf, Arthur R., assignor to Theo. A. Kochs Company, Chicago, Ill. Barber's chair. 1,867,600; July 19.

Scott Paper Company. (See Mulligan, Patrick J., assignor.)

Scott & Williams, Incorporated. (See Swinglehurst, Harry, assignor.)

Seaman, Robert G., Dover, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Rubber disbursing agent. 1,867,633; July 19.

Seebach, Fritz, Erkner, near Berlin, assignor to Bakelite Gesellschaft mit beschrankter Haftung, Berlin, Charlottenberg, Germany. Purification of phenol-aldehyde resins. 1,868,079; July 19.

Segelhorst, August L., Huntington Beach, Calif. Automatic slip handler. 1,868,119; July 19.

Sehlbach, Albert E., assignor to Albert Pick-Barth Company, Inc., Chicago, Ill. Drinking glass. Des. 87,417; July 19.

Seibt, Georg, Berlin-Schoneberg, Germany, assignor to Radio Corporation of America. Electric discharge tube. 1,868,443; July 19.

Seidel, Arnold, Berlin-Charlottenburg, Germany. Air propeller with angle of pitch changeable in flight. 1,867,715; July 19.

Sendlinger Optische Glaswerke G. m. b. H. (See Jaeckel, Georg, assignor.)

Setright, Henry R., London, England. Portable machine for printing tickets. 1,868,027; July 19.

Sexton Manufacturing Company. (See Rambo, James H., assignor.)

Shamberger, George A., Shaw, Oreg. Thermometer. 1,867,990; July 19.

Sheer, H. M. Company. (See Kuenhold, Otto J., assignor.)

Shepherdson, Arnold. (See Hallwood, A. J., Naunton, and Shepherdson.)

Sheridan Iron Works, The. (See Bredenberg, Alfred, assignor.)

Sheridan, T. W. & C. B., Company. (See Bredenberg, Alfred, assignor.)

Shestakoff, Peter, Paris, France. Preparing solid or half solid solutions of alkaline hypochlorites. 1,868,151; July 19.

Shiffler, William H. (See Halloran, R. A., and Shiffler.)

Shinn, Joseph F., Hackensack, N. J. Safety device for elevators. 1,867,991; July 19.

Shippee, Carl C. (See Shippee, Winsor and C. C.)

Shippee, Winsor and C. C., Red Bank, N. J. Aerial toy. 1,867,714; July 19.

Siemens & Halske Aktiengesellschaft. (See Waschnack, Adolf, assignor.)

Siemens & Halske Aktiengesellschaft. (See Zapf, G., and Peissner, assignors.)

Sievert, Ernst, G. and H. Svensson, Sundbyberg, Sweden. Arrangement in condensers. 1,868,120; July 19.

Silbernagel, Adolf, Basel, Switzerland. Refrigerator of the absorption type. 1,868,434; July 19.

Simmons Company. (See Rose, Lamar, assignor.)

Simmons, Richard P., New York, N. Y. Well housing apparatus. 1,867,769; July 19.

Simon, Isidore, Chicago, Ill. Last. 1,868,225; July 19.

Simpson, John E., Portsmouth, Ohio. Sewer drain. 1,867,927; July 19.

Simson, Adolf P., assignor to The Vitler Manufacturing Company, Milwaukee, Wis. Compressor. 1,867,681; July 19.

Sinclair Refining Company. (See Herthel, Eugene C., assignor.)

Singmaster & Breyer, Inc. (See Finkeldey, William H.)

Sithens, Edward J., Cynwyd, Pa. Bookholder. 1,868,467; July 19.

Six Wheel Corporation. (See Low, John J., assignor.)

Sixthor, Franz K., assignor to Whittin Machine Works, Whitinsville, Mass. Apparatus for wet treatment of banks. 1,867,770; July 19.

Sizer, Albert W., Hessle, England. Machine for molding plastic substances. 1,868,370; July 19.

Skinner, Alva L., Bridgeport, Ill. Counterbalance for well pumps. 1,868,028; July 19.

Skorkovsky, Jaroslav, Vinohrady, Prague, Czechoslovakia, assignor to John Fillans Barr, Drogheda, Irish Free State. Machine for the manufacture of reenforced concrete pillars, high pressure tubes, and the like. 1,868,398; July 19.

Slagel, Franklin G., Buffalo, N. Y., assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,867,716; July 19.

Slama, Richard, Philadelphia, Pa., assignor of one-half to A. R. Roesch, Geneva, N. Y. Pasteurizing apparatus. 1,867,771; July 19.

Slater, Frazeur S., and A. J. Miller, Detroit, Mich.; said Slater assignor to said Miller. Weatherproof metal casement window. 1,868,080; July 19.

Sleeper, Harvey P. (See Walter, George F., assignor.)

Slezak, Marie K., Jamaica, N. Y. Cosmetic container. 1,868,399; July 19.

Sloane-Blabon Corporation. (See Whitney, W. E., and Hassenplug, assignors.)

Small, Arthur E., Chicago, Ill., assignor to P. H. Murphy Company, New Kensington, Pa. Load lifting beam for railway cars. 1,868,179; July 19.

Smalley, Edwin L., Whitefish Bay, assignor to Hevi-Duty Electric Company, Milwaukee, Wis. Recuperative counterflow furnace. 1,867,772; July 19.

Smalts, Claude B., Winchester, Va. Plant stake. 1,868,371; July 19.
Smith Engineering Works. (See Munro, Alexander L., assignor.)
Smith, jr., Frank B. (See Mann, Seward W., assignor.)
Smith, Harry R., Chicago, Ill. Automobile tire. Des. 87,418; July 19.
Smith, Harry R., Chicago, Ill. Automobile tire. Des. 87,419; July 19.
Smith, Henry N., assignor to Draper Corporation, Hopedale, Mass. Beam lock for looms. 1,868,152; July 19.
Smith, Herschel G., Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa. Green bloom oil. 1,868,473; July 19.
Smith, Joseph Kent, Detroit, Mich., assignor to Beryllium Development Corporation, New York, N. Y. Alloys. 1,868,293; July 19.
Smith, Thomas A., Overland, assignor to H. J. Hagen, St. Louis, Mo. Nail holding tool. 1,867,928; July 19.
Smith, William A., sr., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Feeding device. 1,867,929; July 19.
Smith, William A., jr. (See Smith, William A., sr., and W. A., jr.)
Smith, William A., sr., Easton, Pa., and W. A. Smith, jr., Phillipsburg, N. J., assignors to Ingersoll-Rand Company, Jersey City, N. J. Feeding device for rock drills. 1,868,294; July 19.
Snyder, Carl M., Syracuse, N. Y., assignor to Walker Dishwasher Corporation, Chicago, Ill. Dishwashing machine. 1,867,634; July 19.
Snyder, Clifford L., assignor to Evans Products Company, Detroit, Mich. Chock block. 1,868,260; July 19.
Société Anonyme des Distilleries des Deux-Sevres. (See Ricard, Eiol, assignor.)
Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint Gobain, Chauny & Cirey. (See Delloye, Lucien, assignor.)
Société Anonyme "L'Ecrou Indesserable Rex". (See Frelin, Henri J., assignor.)
Societe des Etablissements Gaumont. (See Sainte-Claire-Deville, Etienne, assignor.)
Society of Chemical Industry in Basle. (See Bonhôte, Gerald, assignor.)
Society of Chemical Industry in Basle. (See Grossmann, Paul, assignor.)
Societe "Quartz & Silice." (See La Burthe, Pierre, assignor.)
Soss, Mark, Spokane, Wash. Scrubbing brush. 1,867,896; July 19.
Sowden Robert S, assignor to William Wharton, jr., & Company, Incorporated, Easton, Pa. Compensating center. 1,868,435; July 19.
Sparkletts Bottled Water Corporation. (See O'Farrell, Thomas, assignor.)
Spear Box Company. (See Blumenstock, Louis, assignor.)
Spencer, Clyde C., Belmont, Mass. Apparatus for dispensing and teeing golf balls. 1,868,261; July 19.
Spenst, Jacob, Munich, N. Dak. Grain grader and cleaning machine. 1,868,121; July 19.
Sperry Development Company. (See Jones, George L., assignor.)
Sperry Development Company. (See Scharnagel, Herman J., assignor.)
Sperry Development Company, The. (See Sperry, Elmer A., assignor.)
Sperry, Elmer A., Brooklyn, N. Y., assignor to Sperry Development Company, Dover Green, Del. Improvement in combustion chamber for combustion engines. 1,867,682; July 19.
Sperry, Elmer A., Brooklyn, N. Y., assignor to The Sperry Development Company. Combustion engine. 1,867,683; July 19.
Sperry, Elmer A., Brooklyn, N. Y., assignor to Sperry Development Company, Dover, Del. Preventing the vibration of crank shafts. 1,867,684; July 19.
Sperry, Elmer A., assignor, by mesne assignments, to Sperry Products Inc., Brooklyn, N. Y. Fissure detector for magnetic materials. 1,867,685; July 19.
Spidla, Frank, and F. J. Hrabal, Limerick, Saskatchewan, Canada. Tire chain. 1,867,773; July 19.
Sprague, Herbert E. (See Phillips, C. L., and Sprague.)
Spreckelmeyer, Herbert A. (See Leffert, Julius, assignor.)
Sproul, Donald F., Chicago, Ill. assignor to Union Draft Gear Co. Draft gear. 1,868,295; July 19.
Squibb & Sons, E. R. (See Nitardy, F. W., assignor.)
Staley, Joseph H., Columbus, Ind. Frictional resistance device. 1,868,262; July 19.
Stanbrough, Roy G., Glendale, Calif., assignor of one-third to H. J. McCoy, Inglewood, Calif., and one-third to Virgil K. Haldeman, Hollydale, Calif. Tile board. 1,867,897; July 19.
Stancliffe, Cecil W., Aldwych, London, England. Heat transfer apparatus. 1,868,436; July 19.
Standard Oil Company of California. (See Doell, Theodore W., assignor.)
Standard Oil Company of California. (See Graves, Francis G., assignor.)
Standard Oil Company of California. (See Halloran, R. A., and Shiffler, assignors.)
Standard Oil Company of California. (See Terry, J. B., and Craig, assignors.)
Stark Bros. Nurseries & Orchards Company. (See Burbank, Luther, assignor.)
Starr, Robert P. E., Concordia, Kans. Combination shoe horn and case. 1,867,774; July 19.
Stauf, Friedrich Wilhelm. (See Henglein, Friedrich A., and Stauf, assignors.)
Stebler, Fred, assignor to Stebler Parker Co., Riverside, Calif. Conveyer control apparatus. 1,867,717; July 19.)
Stebler Parker Co. (See Stebler, Fred, assignor.)
Steinthal, Augustus, New York, N. Y. Book. 1,868,029; July 19.
Steinway & Sons. (See Weber, Stanley, assignor.)
Stokely, Ray L., Floral Park, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Automatic telephone system. 1,868,296; July 19.
Stokes, Francis J., Philadelphia, Pa. Filler mechanism for tubes and the like. 1,867,601; July 19.
Stolp, Samuel S., and F. H. Richterkessing, Louisville, Ky., assignors to Nachod & United States Signal Co., Inc. Trolley railway signal system. 1,868,180; July 19.
Stoop, Samuel E., New Hope, Pa. Post hole digger. 1,868,081; July 19.
Storm, Albion, Sherkston, Ontario, Canada, assignor to Deere & Company, Moline, Ill. Manure spreader. 1,868,337; July 19.
Stoughton Company, The. (See Lubbers, Lubbert E., assignor.)
Stover, Fred N., New Matamoras, Ohio. Well digging apparatus. 1,868,400; July 19.
Stratford, Nathaniel W., assignor to The Beardsley & Piper Company, Chicago, Ill. Mulling apparatus. 1,867,898; July 19.
Strehlow, Walter F., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Tractor. 1,868,474; July 19.
Streun, John A., assignor to Hardwicke Etter Company, Sherman, Tex. Feeder for hully cotton. 1,868,030; July 19.
Stringer, Alfred E., Chicago, Ill. Expansion means for bell and spigot pipes. 1,867,775; July 19.
Strout, Robert W., Brooklyn, assignor to E. W. Bliss Company, New York, N. Y. Machine element. 1,868,181; July 19.
Structural Gypsum Corporation. (See Davis, Clarke F., assignor.)
Stuart, Clyde W., New York, N. Y. Cutter for eggs, vegetables and the like. 1,868,401; July 19.
Stuart, Frederick J., assignor of one-half to Arthur S. Cheston, Birmingham, England. Sliding window. 1,867,776; July 19.
Stuart, John D., South Euclid, Ohio. Lamp globe. Des. 87,420; July 19.
Stukenborg, Louis C., Memphis, Tenn. Fueling system. 1,867,602; July 19.
Sudbrink, William, New York, N. Y. Glare shield for vehicles. 1,868,031; July 19.
Sullivan, Albert V., Oakland, assignor to Eagle Nailing Machine Co. Ltd., San Francisco, Calif. Box binding machine. 1,868,182; July 19.
Sullivan, Maurice S., Meriden, Conn. Nursing bottle holder. 1,867,992; July 19.
Sundstrand Machine Tool Co. (See De Vleg, Charles B., assignor.)
Surface Combustion Corporation. (See Branche, Nelson T., assignor.)
Svenska Bindgarnsfabrikens Aktiebolag. (See Nilsson, John A., assignor.)
Svensson, Henning. (See Sievert, E. G., and Svensson.)
Swartz, George A., Westwood, N. J. Power steering mechanism for motor vehicles. 1,868,082; July 19.
Sweet, Alvin H., assignor of one-third to C. A. Alexander, and one-third to R. D. Pearson, Los Angeles, Calif. Preparing foods. 1,868,183; July 19.
Swift, Clement K., Brookline, Pa., assignor to MacAndrews & Forbes Company, Camden, N. J. Gypsum plaster products and plaster-base material. 1,868,372; July 19.
Swift and Company. (See Paddock, Levi S., assignor.)
Swindell, William, & Brothers. (See Brooke, Frank W., assignor.)
Swinglehurst, Harry, Orange, N. J., assignor to Scott & Williams, Incorporated, New York, N. Y. Yarn furnisher. 1,867,635; July 19.
Symington Company, The. (See Barrows, Donald S., assignor.)
Symington, T. H. & Son, Inc. (See Casey, Howard T., assignor.)
Symons, Edgar B., Hollywood, Calif., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Crushing apparatus. 1,868,338; July 19.
Talamini, Louis, Oakland, Calif., assignor to Marchant Calculating Machine Company. Calculating machine. 1,867,603; July 19.
Tanguay, Fortunat. (See Prevost, O. J., and Tanguay.)
Tarbox, John P., assignor to Edward G. Budd Mfg. Company, Philadelphia, Pa. Vehicle body wall construction. 1,867,777; July 19.
Taylor, Headlie S., assignor to H. V. McKay Proprietary Limited, Sunshine, Victoria, Australia. Apparatus for gathering and feeding in crops. 1,868,437; July 19.
Technidyne Corporation. (See Reisman, Emil, assignor.)
Telefonaktiebolaget L. M. Ericsson. (See Blomberg, K. H., and Vigren, assignors.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Urtel, Rudolf, assignor.)
Teletype Corporation. (See Kleinschmidt, Edward E., assignor.)

Televator Corporation. (See Hirshfeld, Jerome, assignor.)
Tench, John R. (See Lachman, M., and Tench.)
Ternstedt, Klas H., assignor to O. M. Krembs, Chicago, Ill. Making welding rods. 1,867,781; July 19.
Terry, Edward F., jr., assignor to Gardner-Denver Company, Denver, Colo. Rock drill support. 1,868,373; July 19.
Terry, John B., Berkeley, and R. Craig, Oakland, assignors to Standard Oil Company of California, San Francisco, Calif. Producing sulphonic acids and sulphonates. 1,867,778; July 19.
Terry, Thaddeaus S., assignor of one-half to E. J. Work, McEwen, Tenn. Hedge trimmer. 1,868,402; July 19.
Texas Company, The. (See Hall, F. W., and Jenkins, assignors.)
Texas Company, The (See Manley, Robert E., assignor.)
Tharp, Charles W., Watsonville, Calif. Leveler. 1,868,122; July 19.
Tharp, Charles W., Watsonville, Calif. Leveler. 1,868,123; July 19.
Thies, Bernhard, Coesfeld, Germany. Dyeing or bleaching carding bands. 1,868,475; July 19.
Thomas, Cyril H. (See Roberts, J. D., and Thomas.)
Thomas, Cyril H., Flossmoor, Ill. Expulsion fuse. 1,867,899; July 19.
Thomas, Pacific J., Wyoming, assignor to U. S. Textile Machine Company, Scranton, Pa. Automatic belt take-up. 1,868,438; July 19.
Thomaschewski, Paul E., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Manufacture of monobenzoyldiaminoanthraquinones. 1,868,124; July 19.
Thompson, Archie F., assignor to Iceless Air Wing Corporation, Tulsa, Okla. Heater for airplane wings. 1,868,468; July 19.
Thompson, Henry G., assignor to Willard Storage Battery Company, Cleveland, Ohio. Battery hold-down. 1,868,032; July 19.
Thompson, Orville W., assignor, by mesne assignments, to Jas. P. Marsh Corporation, Chicago, Ill. Gauge and thermometer fitting. 1,867,779; July 19.
Thomson, Edward W. M., Toronto, Ontario, Canada. Carbon packs. 1,867,604; July 19.
Thomson, S. H., Manufacturing Company, The. (See Hummert, R. H., and Gravenstine, assignors.)
Thorn, Jesse L., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Economizer. 1,867,605; July 19.
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,867,686; July 19.
Tidwell, Hubert, Green River, Utah. Wave motor. 1,867,780; July 19.
Tinklepaugh, Mark L., Binghamton, and G. W. Howe, Waverly, N. Y. Sieve attachment for eaves troughs. 1,867,636; July 19.
Todd, Russell T. (See O'Connor, Robert M.)
Tokheim Oil Tank and Pump Company. (See Bechtold, Reuben E., assignor.)
Tomlin, John R., Brooklyn, assignor to R. Hoe & Co., Inc., New York, N. Y. Cutting mechanism for printing machine folders. 1,868,125; July 19.
Tornberg, Isidor. (See Roesen, O. C., and Tornberg.)
Towell, William B., Jersey City, N. J. Sealing ring. 1,867,718; July 19.
Trajani, Pietro. (See d'Ascanio, Corradino, assignor.)
Tranaas, Emil. (See Eriksen, Olaf Arnfin Stam, assignor.)
Traquair, John, Chillicothe, assignor, by mesne assignments, to The Mead Corporation, Dayton, Ohio. Paper manufacture. 1,867,930; July 19.
Traquair, John, and H. A. Kidd, Chillicothe, assignors, by mesne assignments, to The Mead Corporation, Dayton, Ohio. Paper manufacture. 1,867,931; July 19.
Tratsch, Walter A. (See Bechtol, A. H., and Tratsch.)
Trautwein, Friedrich, Berlin-Zehlendorf, assignor to Dr. Erich F. Huth Ges. m. b. H., Berlin, Germany. Arrangement for the onesided band modulation of high frequency vibrations. 1,868,339; July 19.
Trbojevich, Nikola, Highland Park, Mich. Method of and machine for generating worm gears. 1,867,782; July 19.
Trent Process Corporation, The. (See Trent, Walter E., assignor.)
Trent, Walter E., New York, N. Y., assignor to The Trent Process Corporation. Continuous process of purifying materials. 1,867,783; July 19.
Trico Products Corporation. (See Horton, E. C., and Hueber, assignors.)
Trico Products Corporation. (See Paulus, William, assignor.)
Troy Laundry Machinery Company. (See Adams, Arthur H., assignor.)
Trumbull Electric Manufacturing Company, The. (See Hammerly, Herman J., assignor.)
Trumbull, George R., Torrington, Conn., assignor to The Bulls-Eye Electric Manufacturing Company, Torrington, Conn. Fuse plug. 1,867,784; July 19.
Tucker, Arthur D. R., assignor to Albion Bottle Company Limited, Oldbury, England. Transferring bottles from bottle-forming machines. 1,867,785; July 19.
Tupper, Lloyd A., assignor to Chicago Manifold Products Company, Chicago, Ill. Ribbon guide. 1,868,153; July 19.
Tuttle, Harvey C., Atlanta, Ga. Bread slicing device. 1,867,993; July 19.
Tysick, Robert W., assignor of one-half to Frederick J. Publow, Perth, Ontario, Canada. Dustpan. 1,868,297; July 19.
Udylite Process Company. (See Dubpernell, George, assignor.)
Union Bank of Chicago. (See Cowles, Irving, assignor.)
Union Draft Gear Co. (See Sproul, Donald F., assignor.)
Union Metal Products Company. (See Murphy, Walter P., assignor.)
Union Oil Company of California. (See Hill, Frank F., assignor.)
Union Switch & Signal Company, The. (See Baughman, George W., assignor.)
United Shoe Machinery Corporation. (See Benjamin, John M., assignor.)
United Shoe Machinery Corporation. (See Gouldbourn, Joseph, and Ricks, assignors.)
United Shoe Machinery Corporation. (See Row, Edgar E., assignor.)
U. S. Textile Machine Company. (See Thomas, Pacific J., assignor.)
Universal Oil Products Company. (See Huff, Lyman C., assignor.)
Universal Oil Products Company. (See Morrell, J. C., and Egloff, assignors.)
Universal Optical Corporation. (See Nelson, John N., assignor.)
"Universelle" Cigarettenmaschinen Fabrik J. C. Muller & Co. (See Hohn, Max P. E., assignor.)
Universelle Cigarettenmaschinen Fabrick J. C. Müller & Co. (See Röber, Constantin F., assignor.)
Urtel, Rudolf, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Modulating arrangement for transmitter tubes. 1,868,033; July 19.
Urtel, Rudolf, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Modulating arrangement for transmitter tubes. 1,868,034; July 19.
Valstar, Dirk, Rotterdam, Netherlands. Device for trimming coal and like material in ships. 1,868,035; July 19.
Van Coppenolle, Gaston, Rochecorbon, France. Spinning machine, twisting frame, reeling on apparatus and like machine for winding threads and the like. 1,868,154; July 19.
Van Deventer, Harry R., New York, N. Y., assignor, by mesne assignments, to Frigidaire Corporation, Dayton, Ohio. Motor operated machine unit. 1,867,719; July 19.
Van Etten, William V., Bellingham, Wash. Balanced power scooter. 1,867,687; July 19.
Van Hook, Charles F., assignor to The Watson Machine Company, Paterson, N. J. Traverse mechanism for reeling machines. 1,867,688; July 19.
Van Leer, B. (See Van Leer, Floris H., assignor.)
Van Leer, Floris H., Glendale, Calif., assignor, to B. Van Leer, Amsterdam, Netherlands. Sealable padlock. 1,867,689; July 19.
Van Norman Machine Tool Company. (See Arp, Ewald A., assignor.)
Van Sickles, Irving N., assignor to Sargent & Company, New Haven, Conn. Lock for exit bolts. 1,867,606; July 19.
Vereinigte Stahlwerke Aktiengesellschaft. (See Brandt, Leopold, assignor.)
Victory Valves Limited. (See Gray, T. F., and Bolton, assignors.)
Vigren, Sten D. (See Blomberg, K. H., and Vigren.)
Visking Corporation, The. (See Henderson, W. F., and Dietrich, assignors.)
Vitlet Manufacturing Company, The. (See Simson, Adolf P., assignor.)
Vlchek, Frank J., assignor to The Vlchek Tool Company, Cleveland, Ohio. Drop hammer. 1,868,476; July 19.
Vlchek Tool Company, The. (See Vlchek, Frank J., assignor.)
Vogel, Willis A., Toledo, Ohio. Decorative outlining. 1,867,900; July 19.
Voigt, Julius et al. (See Ruppert, A., Fischer, Voigt, and Hennig.)
Voyer, E. O. (See Auger, Joseph T., assignor.)
Vultee, Gerald, Detroit, Mich. Retractable landing gear. 1,867,786; July 19.
Wachsmuth, Fred D., Sanford, Tex. Check valve for fluid lifts. 1,868,374; July 19.
Wahl Company, The. (See Back, Robert, assignor.)
Wahl Company, The. (See Wahl, J. E., Gronemann, and Lungren, assignors.)
Wahl, John E., C. W. Gronemann and A. N. Lungren, assignors to The Wahl Company, Chicago, Ill. Making pen nibs. 1,867,932; July 19.
Walch, Jacob S. (See McMillan, Wesley K., and Walch, assignors.)
Waldorf Paper Products Company. (See Sandberg, Nels H., assignor.)
Walker Dishwasher Corporation. (See Snyder, Carl M., assignor.)
Walker Manufacturing Company. (See Kohler, John H., assignor.)
Wall, Charles F., Drexel Hill, assignor to Wall & Ochs, Incorporated, Philadelphia, Pa. Nose grip for eyeglasses. 1,868,450; July 19.

Wall & Ochs, Incorporated. (See Wall, Charles F., assignor.)
Wallo, Olav, Minneapolis, Minn. Powder-dispensing device. 1,868,298; July 19.
Walter, George F., Maplewood, N. J., assignor of one-half to H. P. Sleeper, Short Hills, N. J. Live-wire detector. 1,867,901; July 19.
Walton, Samuel F., Hamburg, assignor to The Exolon Company, Blasdell, N. Y. Protective refractory glaze and applying the same to refractory bodies containing silicon-carbide. 1,868,451; July 19.
Ward, Louis E. (See Hunter, Ralph M., and Ward, assignors.)
Warren, Simon L., Quincy, Mass. Webbing support. 1,867,607; July 19.
Warth, Albin H., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md. Closure and interior facing therefor. 1,867,637; July 19.
Waschnack, Adolf, Neu-Finkenkrug, near Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Telephone system. 1,868,036; July 19.
Watanabe, Hotori. (See Hatakeyama, Heisaku, and Watanabe.)
Waterbury Tool Company, The. (See Francis, Daniel R., assignor.)
Waterhouse Company. (See Clapp, Roger S., assignor.)
Watkins, George B., assignor to Libby-Owens-Ford Glass Company, Toledo, Ohio. Laminated glass and producing the same. 1,867,787; July 19.
Watson Machine Company, The. (See Van Hook, Charles F., assignor.)
Weatherhead, Albert J., jr., Cleveland, Ohio. Producing angle fittings. 1,868,037; July 19.
Weaver, Allan, Port Washington, N. Y., assignor to American Telephone and Telegraph Company. Telegraph printer. 1,867,638; July 19.
Weaver, Charlie B., Los Angeles, Calif. Refueling aeroplanes in flight. 1,867,902; July 19.
Weber, Stanley, Long Island City, assignor to Steinway & Sons, New York, N. Y. Piano string frame. 1,867,788; July 19.
Webster Manufacturing Company. (See Hale, William E., assignor.)
Weinstein, Abraham S., Brighton, Mass. Briquetted interlocking flashing. 1,867,956; July 19.
Wellensiek, Louis H., assignor to Hughes Tool Company, Houston, Tex. Vent for core drills. 1,867,720; July 19.
Wellensiek, Louis H., assignor to Hughes Tool Company, Houston, Tex. Core catcher. 1,867,721; July 19.
Weller, Herbert C., Champaign, Ill. Controlling device for electrical circuits. 1,868,403; July 19.
Wellman Bronze & Aluminum Company, The. (See Esterly, Charles L., assignor.)
Wendorff, Gustav, Stettin, Germany. Playing card mixing device. 1,867,690; July 19.
Werkspoor N. V. (See Bonath, Richard, assignor.)
West, Robert N., Maplewood, N. J. Machine for pressing fabrics. 1,868,184; July 19.
Westinghouse Electric & Manufacturing Company. (See Baxter, Harold G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Corbett, Alfred, assignor.)
Wetzel, Kurt O., Los Angeles, Calif. Heat equalizer for burners. 1,867,957; July 19.
Weymann, Charles T., Paris, France, assignor, by mesne assignments, to Weymann Motor Bodies, Inc., Wilmington, Del. Vehicle body. 1,868,263; July 19.
Weymann Motor Bodies, Inc. (See Weymann, Charles T., assignor.)
Wharton, William jr., & Company. (See Sowden, Robert S., assignor.)
Wheeler, Harold A., Great Neck, N. Y., assignor to Hazeltine Corporation. Radio coupling system. 1,868,155; July 19.
Wheelwright, Thomas S., Richmond, assignor to Old Dominion Iron & Steel Works, Belle Isle, Richmond, Va. Stay bolt. 1,868,083; July 19.
Wheelwright, Thomas S., Richmond, assignor to Old Dominion Iron & Steel Works, Belle Isle, Richmond, Va. Stay bolt. 1,868,084; July 19.
Wheless, Eakin L., Shreveport, La. Apparatus for flowing wells. 1,867,639; July 19.
Whistler, David B., Dayton, assignor to The Black-Clawson Company, Hamilton, Ohio. Apparatus and method for making pulp or the like. 1,868,299; July 19.
Whitaker, Charles L., assignor to Frick Company, Waynesboro, Pa. Temperature regulating and humidifying apparatus. 1,868,264; July 19.
Whitcomb, John H., Lakewood, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Bathing cap. Des. 87,421; July 19.
White, Charles N. H. (See White, George E., and White.)
White, George E., and C. N. H. White, Doornfontein Johannesburg, Transvaal, Union of South Africa. Pedal control for motor cars. 1,868,265; July 19.
White, Sidney Y., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Selective receiving system. 1,867,608; July 19.
Whitehorne, William R., Lewiston, Me. Photographic print. 1,868,085; July 19.
Whiting Corporation. (See Clark, William T., assignor.)
Whitmanis Manufacturing Company, Inc. (See Whitney, Karl H., assignor.)
Whitney, Karl H., assignor to Whitmanis Manufacturing Company, Inc., Kirksville, Mo. Vibratory apparatus. 1,868,452; July 19.
Whitney Mfg. Co., The. (See Dow, Richard E., assignor.)
Whitney, William E., and H. G. Hassenplug, Philadelphia, Pa., assignors, by mesne assignments, to Sloane-Blabon Corporation, New York, N. Y. Making linoleum. 1,868,038; July 19.
Whittin Machine Works. (See Sixthor, Franz K., assignor.)
Widders, Oscar E., and J. K. Bayless, Monett, Mo. Renovating device. 1,867,640; July 19.
Wight, Edward Hyatt. (See Ober, B., and Wight.)
Wilcox, Frank, Los Angeles, Calif. Combination siren whistle. 1,867,903; July 19.
Wilkes, Don Q., Pueblo, Colo., assignor to Bendix-Cowdrey Brake Tester, Inc. Brake testing device for automobiles. Re18,536; July 19.
Willard Storage Battery Company. (See Dunzweiler, Carl J., assignor.)
Willard Storage Battery Company. (See Thompson, Henry G., assignor.)
Wille, Walter O., Waterloo, Iowa, assignor to Clay Equipment Corporation, Cedar Falls, Iowa. Lever stall. 1,867,722; July 19.
Williams, Bertha I. (See Worley, jr., John, and Burke, assignors.)
Williams, Charles Herbert. (See Green, T. L., and Williams.)
Williams, David E., St. Paul, Minn. Automatic watering valve. 1,867,691; July 19.
Williams, Fred L., Denver, Colo., assignor to The American Rolling Mill Company, Middletown, Ohio. Spiral pipe machine. 1,868,039; July 19.
Williams, William Ewart, Bromley, England, assignor, by mesne assignments, to British Radiostat Corporation, Limited. Directional aerial for transmission and reception of electromagnetic waves. 1,867,958; July 19.
Willys Overland Company, The. (See Edwards, Henry J., assignor.)
Wilson, James Stevenson. (See Wylam, Birkett, and Wilson, assignors.)
Wilson-Jones Company. (See Dawson, George H., assignor.)
Wilson, William J., assignor to McKinney Manufacturing Company, Pittsburgh, Pa. Hinge. 1,868,126; July 19.
Wilton, Thomas O., assignor to The Chemical Engineering and Wilton's Patent Furnace Company Limited, London, England. Apparatus for treating gases with liquids. 1,867,933; July 19.
Wine Railway Appliance Company. (See Anderson, Emil C., assignor.)
Wine, William E., Toledo, Ohio, and Byers W. Kadel, Baltimore, Md. Car door mechanism. 1,867,789; July 19.
Winkler, Fritz, and H. Haeuber, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfurt-on-the-Main, Germany. Production of valuable hydrocarbons. 1,868,127; July 19.
Winter, Ernst, Nijmegen, assignor to Naamlooze Vennotschap Splendor Gloeilampenfabriek Splendor Lampworks, Nijmegen, Netherlands. Incandescent cathode for thermionic tubes and manufacturing same. 1,867,959; July 19.
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wirth, Johann K., Berlin-Altglienicke, Germany. Acid-proof structure. 1,867,960; July 19.
Wise Patent and Development Company. (See Wise, Roy T., assignor.)
Wise, Roy T., Berkeley, Calif., assignor to Wise Patent and Development Company, New York, N. Y. Constant mesh gear transmission clutch. 1,868,040; July 19.
Wisenor, Gertrude C. and L. H., Seattle, Wash. Lid for cooking utensils. 1,867,994; July 19.
Wisenor, Lemuel H. (See Wisenor, Gertrude C. and L. H.)
Withers, Lewis B., Glendale, Calif. Trolley retriever. 1,867,692; July 19.
Witty, George, assignor of one-half to R. T. Harte, New York, N. Y. Manufacture of brick. 1,867,641; July 19.
Wood Newspaper Machinery Corporation. (See Roesen, O. C., and Tornberg, assignors.)
Wood, Robert T., Lakewood, Ohio, assignor, by mesne assignments, to Magnesium Development Corporation. Casting easily oxidizable metals. 1,868,453; July 19.
Wood, Robert Thomas, Lakewood, Ohio, assignor, by mesne assignments, to Magnesium Development Corporation. Casting easily oxidizable metal. 1,868,454; July 19.
Wood, Robert Thomas, Lakewood, Ohio, assignor, by mesne assignments, to Magnesium Development Corporation. Casting easily oxidizable metal. 1,868,455; July 19.
Wood, Robert Thomas, Lakewood, Ohio, assignor, by mesne assignments, to Magnesium Development Corporation. Casting easily oxidizable metals. 1,868,456; July 19.
Wood, Robert T., Lakewood, Ohio, and F. C. Frary, Oakmont, Pa., assignors, by mesne assignments, to Magnesium Development Corporation. Casting easily oxidizable metals. 1,868,457; July 19.
Woodard, William E., Forest Hills, N. Y. Railway vehicle supporting structure. 1,868,340; July 19.

Woods, Charles G., Glendale, Calif. Exercising apparatus. 1,867,642; July 19.
Woodsend, Leslie E., Los Angeles, Calif. Work supporting attachment for abrading machines. 1,868,266; July 19.
Work, Eddie J. (See Terry, Thaddeaus S., assignor.)
Worley, jr., John, and R. J. Burke, Pico, assignors to Bertha I. Williams, Los Angeles, Calif. Folding ironing board. 1,868,185; July 19.
Wright, John E., Wheeling, W. Va., and G. A. Benline, Martins Ferry, Ohio. Machine for finishing articles of pottery-ware. 1,867,790; July 19.
Wright, Stanley R. (See Douglass, G., and Wright.)
Wylam, Birkett, and J. S. Wilson, Grangemouth, Stirling, Scotland, assignors to Imperial Chemical Industries Limited. Dyeing, printing, and like process. 1,868,300; July 19.
Yates, Arthur T., West Seneca, assignor to Buffalo Forge Company, Buffalo, N. Y. Bending roll. 1,868,341; July 19.
Young, Charles D., Haverford, Pa. Freight handling system. 1,868,267; July 19.
Yurkovitch, Anton, Pittsburgh, Pa. Hinge lock. 1,868,342; July 19.
Zahner, Bernard B., Kansas City, Mo. Oil burner. 1,867,934; July 19.
Zapf, Georg, and Alfons Peissner, Berlin, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Automatic telephone system. 1,867,791; July 19.
Zeeman, Jan, Amsterdam, Netherlands. Internal combustion engine. 1,868,301; July 19.
Zeigler, William Le Verne, assignor to Coeur d'Alene Hardward and Foundry Company, Wallace, Idaho. Feeder for dry chemicals. 1,868,404; July 19.
Zibelman, Frank A., Chicago, Ill. Cigar lighter. Des. 87,422; July 19.
Zielinski, Alex, Milwaukee, Wis. Curtain rod. 1,868,439; July 19.
Zreblec, Rose, Beaver Falls, Pa. Dishwasher. 1,868,268; July 19.
Zube, Carl J. (See Hubbert, L. S., and Zube.)
Zucker, Milton. (See Moore, C. G., and Zucker.)
Zwierzina, Alois J. (See Ackerman, E. L., and Zwierzina.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 19TH DAY OF JULY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accelerator and using the same, Rubber. C. J. Romieux and L. J. Christmann. 1,867,631; July 19.
Acid-proof structure. J. K. Wirth. 1,867,960; July 19.
Acids and fatty acid derivatives, Sulphonating fatty. M. D. Rozenbroek. 1,867,954; July 19.
Acids and sulphonates, Producing sulphonic. J. B. Terry and R. Craig. 1,867,778; July 19.
Acids by fermentation Production of aliphatic. H. B. Hutchinson. 1,867,946; July 19.
Acoustic device. J. P. Minton and A. S. Ringel. 1,868,019; July 19.
Actuating device for counters. O. C. Roesen and I. Tornberg. 1,867,762; July 19.
Aerial for transmission and reception of electromagnetic waves, Directional. W. E. Williams. 1,867,958; July 19.
Aeroplanes in flight, Refueling. C. B. Weaver. 1,867,902; July 19.
Age improver. E. Rietz. 1,867,761; July 19.
Air, Apparatus for conditioning. W. J. Brocker. 1,867,548; July 19.
Air collector for propellers. T. A. Dicks. 1,868,314; July 19.
Air conditioning device. W. C. Denison. 1,868,278; July 19.
Aircraft. C. J. Blahnik. 1,867,963; July 19.
Aircraft. J. Rehbock. 1,867,759; July 19.
Aircraft strut. L. W. Greve. 1,868,228; July 19.
Air eliminator for liquid. R. E. Bechtold. 1,868,444; July 19.
Air propeller with angle of pitch changeable in flight. A. Seidel. 1,867,715; July 19.
Air supply system. P. L. O'Donnell. 1,867,867; July 19.
Airplane fuselages, Constructing. E. J. W. Ragsdale. 1,868,073; July 19.
Airplane propeller. C. H. Gunn. 1,867,822; July 19.
Alarm: *See*—
Automatic alarm.
Alcohol, Manufacture of methyl. H. Dreyfus. 1,868,096; July 19.
Aldehyde free alcoholic liquids, Apparatus for producing. H. Heuser. 1,867,554; July 19.
Alkali-hypochlorite solutions, Preparing. F. A. Henglein and F. W. Stauf. 1,867,666; July 19.
Alkali salts of iodomethyl sulphonic acid, Producing. H-G. Allardt. 1,867,793; July 19.
Alloys. J. K. Smith. 1,868,293; July 19.
Alloys, Producing magnetic. V. B. Browne. 1,867,804; July 19.
Almanac and the like, Monthly. J. M. Pla Costa. 1,868,430; July 19.
Aluminum chloride, Manufacture of. A. McD. McAfee. 1,867,672; July 19.
Amplifier. S. Loewe. 1,867,577; July 19.
Amplifier system, Stablized. H. F. Elliott. 1,868,162; July 19.
Anode. G. Dubpernell. 1,868,052; July 19.
Apparatus for gathering and feeding in crops. H. S. Taylor. 1,868,437; July 19.
Arc quencher for circuit breakers. A. Corbett. 1,868,442; July 19.
Arcing tip for oil switches. J. N. Kelman. 1,867,848; July 19.
Arrangement for the onesided band modulation of high frequency vibrations. F. Trautwein. 1,868,339; July 19.
Articles of fibrous materials, Making. E. C. Loetscher. 1,867,575; July 19.
Articles, Press for manufacturing molded. L. S. Hubbert and C. J. Zube. 1,867,972; July 19.
Autographic register. F. E. Pfeiffer. 1,868,367; July 19.
Automatic alarm. A. Koenig. 1,867,668; July 19.
Automatic lock. W. P. Lowther. 1,867,919; July 19.
Automobile. R. S. Clapp. 1,868,093; July 19.
Automobile. G. Rohr. 1,868,220; July 19.
Automobile body. M. Coadou. 1,868,382; July 19.
Automobile construction. C. R. Paton. 1,867,708; July 19.
Automobile construction. C. R. Paton. 1,867,752–3; July 19.
Automobile lock. O. S. Hershey. 1,867,828–31; July 19.
Automobile starting device. S. N. Jordan. 1,868,208; July 19.
Badge. J. Bott. 1,867,964; July 19.
Bag: *See*—
Composite bag.
Balance, Torsion. H. Haalck. 1,868,010; July 19.
Barber's chair. A. R. Schwarzkopf. 1,867,600; July 19.
Bath for metal pickling processes. G. L. Magoun. 1,868,214; July 19.
Battery handle, Collapsible. W. P. Roche. 1,867,632; July 19.
Battery hold-down. C. J. Dunzweiler. 1,867,735; July 19.
Battery hold-down. H. G. Thompson. 1,868,032; July 19.
Battery overcharge indicator. H. J. Kubiak. 1,868,328; July 19.
Bearing arrangement for multicolor printing machines. A. Egli. 1,868,097; July 19.
Bearing for railroad cars, Side. G. S. Middlehurst. 1,868,393; July 19.
Bell ringing device for toy locomotives. J. E. Cuff. 1,868,194; July 19.
Belt for personal wear. M. Sachs. Des. 87,423; July 19.
Belt take-up, Automatic. P. J. Thomas. 1,868,438; July 19.
Beryllium and beryllium compounds and isolation of beryllium salts, Production of. J. J. Pelc. 1,867,755; July 19.
Billboard. R. A. Schorr and P. R. Frank. 1,867,598; July 19.
Binder. H. E. Olsen. 1,867,983; July 19.
Biopsy specimens, Device for obtaining. W. J. Hoffman. 1,867,624; July 19.
Bit: *See*—
Roller bit. Rotary drill bit.
Block: *See*—
Check block.
Board: *See*—
Insulating board. Tile board.
Boat, Air. J. D. Clarke. 1,867,563; July 19.
Boat and operating the same. E. Easthope. 1,868,054; July 19.
Boat, Foldable or collapsible. W. E. Elling. 1,868,280; July 19.
Boiler. C. W. Brabbé. 1,868,445; July 19.
Book. A. Steinthal. 1,868,029; July 19.
Books, Manufacture of. A. Bredenberg. 1,867,803; July 19.
Boring machine and method. E. A. Arp. 1,868,440; July 19.
Bottle. P. W. Marshburn and M. T. Brekke. Des. 87,397; July 19.
Bottle. F. W. Nitardy. Des. 87,401; July 19.
Bottle closure. F. J. Kaps. 1,867,570; July 19.
Bottles and the like, Wrapping and packing. A. L. Bobrick. 1,867,561; July 19.
Bottles from bottle-forming machines, Transferring. A. D. R. Tucker. 1,867,785; July 19.
Box: *See*—
Journal box.
Box binding machine. A. V. Sullivan. 1,868,182; July 19.
Box covering machine. P. W. Fleischer and M. Feybusch. 1,868,284; July 19.
Box crusher. N. H. Sandberg. 1,867,597; July 19.
Box-holder clamp. J. Herlihy. 1,868,103; July 19.
Box spring mechanism. E. L. Bronstien. 1,867,872; July 19.
Bracket: *See*—
Curtain bracket.
Brake mechanism. B. S. Floraday. 1,867,913; July 19.
Brake release. R. S. Pearson and J. B. Peel. 1,868,251; July 19.
Brake testing device for automobiles. D. Q. Wilkes. Re18,536; July 19.
Braking device for cinematographic spools. E. Sainte-Claire-Deville. 1,868,078; July 19.
Bread slicing device. H. C. Tuttle. 1,867,993; July 19.
Brick manufacture. G. Witty. 1,867,641; July 19.
Brush, Scrubbing. M. Soss. 1,867,896; July 19.
Bucket. J. W. Page. 1,868,246; July 19.
Bucket tooth. E. B. Birkenbeuel. 1,867,871; July 19.
Building. J. Klein. Des. 87,394; July 19.
Building construction. A. M. Hull. 1,868,168; July 19.
Bumper. C. P. Daniel. 1,867,551; July 19.
Burner: *See*—
Oil burner.
Cabinet and table, Combined. H. Nonnast. Des. 87,402; July 19.
Cabinet, Dispensing. A. H. Bechtol and W. A. Tratsch. Des. 87,380; July 19.
Cabinet, Visible record. G. H. Dawson. 1,867,907; July 19.
Calcium carbide cake and making the same. J. G. Davidson and H. F. Robertson. 1,867,965; July 19.
Calculating device. W. J. Obidine. 1,867,888; July 19.
Calculating machine. L. R. Brown and A. A. Oberbury. 1,868,407; July 19.

Calculating machine. L. Talamini. 1,867,603; July 19.
Camp chair, Folding. E. E. Frey. 1,867,819; July 19.
Cans, Mechanism and method for making. W. R. Meyers. 1,867,857; July 19.
Cap, Bathing. J. H. Whitcomb. Des. 87,421; July 19.
Capsule for carbonating liquids. E. Jacobs. Des. 87,393; July 19.
Car construction, Railway. W. P. Murphy. 1,868,335; July 19.
Car, Pleasure. W. H. Butler. Des. 87,381; July 19.
Carbazole-2.7-disulphonic acid. W. Neelmeier and O. Goll. 1,867,864; July 19.
Carbohydrate resinous material and making same. J. V. Meigs. 1,868,215; July 19.
Carbon packs. E. W. M. Thomson. 1,867,604; July 19.
Carbonaceous material and the like, Apparatus for heating and treating subdivided. J. J. Naugle. 1,867,750; July 19.
Carburetor. C. G. Hawley. 1,867,742; July 19.
Carburizing furnace. H. W. Fletcher. 1,867,737; July 19.
Card, Display. L. E. Landon. 1,868,110; July 19.
Card mixing device, Playing. G. Wendorff. 1,867,690; July 19.
Carding bands, Dyeing or bleaching. B. Thies. 1,868,475; July 19.
Carton for cigarettes and like articles. W. E. Molins. 1,867,994; July 19.
Case for shoes, Traveling display. H. C. Mayers. 1,867,886; July 19.
Casing and preparing the same, Sausage. W. F. Henderson and H. E. Dietrich. 1,868,203; July 19.
Casing, Crank-shaft. M. Birkigt. 1,868,377; July 19.
Catch for metal spring hardware, Spring. R. H. Hummert and G. E. Gravenstine. 1,867,745; July 19.
Cathode for thermionic tubes and manufacturing same, Incandescent. E. Winter. 1,867,059; July 19.
Cellulose esters of high molecular organic acids and making the same. M. Hagedorn and G. Hingst. 1,867,942; July 19.
Cement, Manufacture of. V. G. Lepine. 1,868,240; July 19.
Chain, Drive. F. L. Morse. 1,868,334; July 19.
Chain oiling device. R. F. Dow. 1,868,198; July 19.
Chain, Tire. C. A. Lowe. 1,867,978; July 19.
Chain, Tire. F. Spidia and F. J. Hrabal. 1,867,773; July 19.
Chair: *See*—
Barber's chair. Camp chair.
Chair for sewing machines, Folding. E. J. Balmos. 1,867,799; July 19.
Check-writing machine. W. H. Luland. 1,868,015; July 19.
Cheese manufacture. F. M. G. Luecke. 1,868,422; July 19.
Chemical fiber liberation. G. A. Richter. 1,867,593; July 19.
Chemicals into rubber or cellulosic materials, Introducing. A. J. Hallwood, W. J. S. Naunton and A. Shepherdson. 1,867,970; July 19.
Child's toilet seat. H. E. McCandless. 1,867,674; July 19.
Chinaware and the like, Ornamenting. E. Hardesty. 1,868,230; July 19.
Chock block. C. L. Snyder. 1,868,260; July 19.
Chock for ships' boats. J. S. Barclay. 1,868,043; July 19.
Cigar and cigarette ash protector and fire preventer. A. Haas. 1,868,011; July 19.
Cigarette package. C. A. Penn. Re18,529; July 19.
Cigarette rod cutting device for cigarette machines. M. P. E. Hohn. 1,868,012; July 19.
Cinematographic apparatus. H. G. Ponting and G. W. Ford. 1,868,252; July 19.
Cleaning apparatus, Suction. E. F. Martinet. Re18,538; July 19.
Closure and interior facing therefor. A. H. Warth. 1,687,637; July 19.
Closure, Heat responsive. H. Rackebrandt. 1,868,253; July 19.
Clothes stick. R. L. Freeman. Des. 87,389; July 19.
Clutch, Constant mesh gear transmission. R. T. Wise. 1,868,040; July 19.
Clutch, Electric motor starting. K. Obermoser. 1,868,245; July 19.
Clutch, Free wheel or ratchet. C. Dalton. 1,867,938; July 19.
Clutch mechanism. E. L. Ackerman and A. J. Zwierzina. 1,867,643; July 19.
Coal and like material in ships, Device for trimming. D. Valstar. 1,868,035; July 19.
Coal and other carbonaceous material in situ, Degasifying. L. Ranney. 1,867,758; July 19.
Coal cutting machine. N. D. Levin. 1,867,853; July 19.
Coal handling plant. C. F. Bledsoe. 1,867,547; July 19.
Coaster. R. W. Sanders. Des. 87,415; July 19.
Coating and doubling apparatus. G. W. Buchanan. 1,867,875; July 19.
Coating to a surface, Method and apparatus for applying a liquid. F. C. Atwood. 1,867,558; July 19.
Cobalt, Recovering. E. A. A. Grönwall. 1,868,414; July 19.
Coin delivery machine. E. J. Brandt. 1,868,272; July 19.
Coke from mineral hydrocarbons, Forming. R. A. Halloran and W. H. Shiffler. 1,867,823; July 19.
Colorless glass. G. Jaeckel. 1,868,065; July 19.
Combustion chamber for combustion engines. E. A. Sperry. 1,867,682; July 19.
Combustion engine. E. A. Sperry. 1,867,683; July 19.
Compass, Automobile. W. Dodd and G. C. Caywood. 1,867,812; July 19.
Compensating center. R. S. Sowden. 1,868,435; July 19.
Composite bag. J. M. Munson. 1,868,069; July 19.
Composition of matter for use in sealing cracks in metal structures. J. F. Cumming and W. P. Eklund. 1,868,195; July 19.
Compressor. A. P. Simson. 1,867,681; July 19.
Compressor and vacuum pump, Hydroair. A. W. Burks. 1,867,651; July 19.
Computing machine. F. A. Hart. 1,868,062; July 19.
Concrete mixer, Truck. G. Jaeger. 1,867,838; July 19.
Concrete molding apparatus. C. Jackson. 1,868,160; July 19.
Condensation products, Manufacture of. A. V. Keller. 1,868,067; July 19.
Condensation products of the anthraquinone series and new products of this class, Making. P. Grossmann. 1,868,202; July 19.
Condensers, Arrangement in. E. G. Sievert and H. Svensson. 1,868,120; July 19.
Condiment shaker. C. F. Degner. 1,868,277; July 19.
Conductor, Continuously loaded. W. C. Ellis. 1,868,315; July 19.
Conductors, Process and apparatus for compacting. T. B. Huestis. 1,867,625; July 19.
Connecter, Electrical appliance plug. G. J. Meuer. Des. 87,399; July 19.
Connecter, Terminal. J. Lofgren. 1,867,918; July 19.
Container, Collapsible. W. J. Geist. 1,867,914; July 19.
Container, Cosmetic. M. K. Slezak. 1,868,399; July 19.
Container for gramophone needles. E. W. Keesey. 1,868,006; July 19.
Container for packing and displaying merchandise. F. Reichel. 1,868,174; July 19.
Container, Refuse. E. M. Mueller. 1,867,676; July 19.
Control device for engines and rotors driven thereby. G. Bauer and W. Brose. 1,868,130; July 19.
Control means for washing machine roll wringer mechanism. A. W. Altorfer. 1,868,343; July 19.
Control of feed and blowdown water, Continuous automatic. C. W. Rice. 1,868,432; July 19.
Controlling device for electrical circuits. H. C. Weller. 1,868,403; July 19.
Conveyer control apparatus. F. Stebler. 1,867,717; July 19.
Convoluted spring. A. H. Adams. 1,867,723; July 19.
Cooker. J. J. Nevills. 1,868,022; July 19.
Core and making it, Mass. E. Kramer. 1,868,327; July 19.
Core catcher. L. H. Wellensiek. 1,867,721; July 19.
Corrosion protection. W. H. Finkeldey. 1,867,736; July 19.
Corset. J. J. Kispert. 1,868,391; July 19.
Counter. J. L. Morgan. 1,868,290; July 19.
Counter and ejector for packaging machines. B. D. Greenlaw. 1,868,201; July 19.
Counterbalance for well pumps. A. L. Skinner. 1,868,028; July 19.
Counterflow furnace, Recuperative. E. L. Smalley. 1,867,772; July 19.
Coupling: *See*—
Hydraulic coupling. Resilient coupling.
Coupling for shafts, Flexible. L. E. Feightner. 1,868,282; July 19.
Cover, Milk and cream can. B. Nielsen. 1,867,677; July 19.
Covering, Pipe-line. A. F. Pistor. 1,867,984; July 19.
Creaser and slitter, Paper. M. M. Roberts. 1,867,713; July 19.
Cross head guide for engines. J. W. Highleyman. 1,868,205; July 19.
Crossing for railway tracks. P. M. Grosjean. 1,868,061; July 19.
Crusher: *See*—
Box crusher.
Crushing apparatus. E. B. Symons. 1,868,338; July 19.
Cultivator. T. Brown. 1,868,207; July 19.
Cultivator. W. A. Martin. 1,868,330; July 19.
Current rectifying apparatus. A. S. Hubbard. 1,867,667; July 19.
Currents, Arrangement for producing modulated. L. H. Garber, R. G. Hall, and C. Blackwood. 1,876,663; July 19.
Current shut-off mechanism. T. M. Paul. 1,868,365; July 19.
Curtain bracket. J. Keough. 1,867,974; July 19.
Curtain rod. A. Zielinski. 1,868,439; July 19.
Cushion or insert for mattresses or the like consisting of spiral springs. A. Ehlenbeck. 1,868,279; July 19.
Cut-off controlling mechanism for and method of operating locomotives. E. S. Pearce, R. W. Retterer, and E. C. Karibo. 1,868,024; July 19.
Cutter for eggs, vegetables, and the like. C. W. Stuart. 1,868,401; July 19.
Cutting machine, Bias strip. J. Drahar and W. B. Runk. 1,868,226; July 19.
Cutting mechanism for printing machine folders. J. R. Tomlin. 1,868,125; July 19.

Cylinder for internal combustion engines. G. D. Angle. 1,867,795; July 19.
Cylinder, Printing. S. J. Mollet. 1,867,861; July 19.
Dahlia. H. L. Ickes. Pl. Pt. 19; July 19.
Decorative outlining. W. A. Vogel. 1,867,900; July 19.
Defroster. E. C. Raney. 1,867,711; July 19.
Dial or station selector, Radio. A. L. C. Ringel. 1,868,433; July 19.
Diazo preparations and making same, Stable. G. Bonhôte. 1,867,937; July 19.
Dichloro-ethylene, Producing low-boiling. A. Ruppert, W. Fischer, J. Voigt, and B. Hennig. 1,868,077; July 19.
Digger: *See*—
Post hole digger.
Digging machine. A. Espantoso. 1,868,004; July 19.
Dirigible air dock. A. S. Franke. 1,867,591; July 19.
Disc bit and reamer. S. M. Akeyson. 1,867,545; July 19.
Dishwasher. R. Zrebiec. 1,868,268; July 19.
Dishwashing machine. C. M. Snyder. 1,867,634; July 19.
Dispensing and teeing golf balls, Apparatus for. C. C. Spencer. 1,868,261; July 19.
Display device. M. M. Elnson. 1,867,696; July 19.
Display device. H. E. Saunders. 1,867,765; July 19.
Distilling process and apparatus. E. H. Leslie and E. M. Baker. 1,868,466; July 19.
Dithiophosphates and composition containing same, Making. G. H. Buchanan. 1,868,192; July 19.
Doll. P. Harris. 1,868,166; July 19.
Doll. G. Moore. 1,868,427; July 19.
Doll or similar article and support for same, Combined. H. M. Rundle. Des. 87,413; July 19.
Door. D. C. Hungerford. 1,868,233; July 19.
Door for stoves. H. Herrenbruck. 1,868,322; July 19.
Door lock. O. P. Cramer. 1,867,694; July 19.
Door mechanism, Car. E. Anderson. 1,867,792; July 19.
Door mechanism, Car. W. E. Wine and B. W. Kadel. 1,867,789; July 19.
Drain, Bathtub. F. G. Brotz. 1,867,725; July 19.
Drain device. J. P. Ruth, jr. 1,867,926; July 19.
Drain, Sewer. J. E. Simpson. 1,867,927; July 19.
Drawer construction for show and stock cases. A. J. Hecht. 1,868,101; July 19.
Drill. H. C. Norley. 1,867,950; July 19.
Drinking glass. A. E. Sehlbach. Des. 87,417; July 19.
Drive for automobiles, Free wheeling. E. J. Reaves. 1,868,254; July 19.
Drive for flat hosiery frames, Auxiliary. P. Liberknecht. 1,867,705; July 19.
Drive for paper machines, Winder. D. R. Francis. 1,868,285; July 19.
Driving mechanism. H. Pfannenstiehl. 1,868,366; July 19.
Drive mechanism for motor vehicles. A. G. Rayburn. 1,867,678; July 19.
Drying process. R. Elssner. 1,867,618; July 19.
Dumb waiter and dumb waiter inclosure unit. J. Hirshfeld. 1,867,568; July 19.
Dumping body for automobile trucks. T. G. Jungersen. 1,867,844; July 19.
Dust collector and shut-off valve, Combined. L. A. Safford and W. D. Tyler. 1,867,988; July 19.
Dustpan. R. W. Tysick. 1,868,207; July 19.
Dye, Producing an anthraquinone. W. Mieg. 1,867,858; July 19.
Dyeing, printing, and like process. B. Wylam and J. S. Wilson. 1,868,300; July 19.
Economizer. J. L. Thorn. 1,867,605; July 19.
Eductor. W. T. Clark. 1,867,876; July 19.
Egg, separator. C. H. Parsons. 1,868,336; July 19.
Electric annealing apparatus. E. A. Colby. 1,867,810; July 19.
Electric color ray device. H. Harase. 1,867,916; July 19.
Electric discharge tube. G. Seibt. 1,868,443; July 19.
Electric oscillations, Apparatus for amplifying. C. T. Jacobs. 1,867,746; July 19.
Electric protection system for bank vaults, etc. R. M. Hopkins and F. P. McIntosh. 1,867,834; July 19.
Electric radiator fire. S. Z. de Ferranti. 1,868,411; July 19.
Electric remote control apparatus. G. Douglass and S. R. Wright. 1,868,002; July 19.
Electric switch. S. S. Green. 1,868,460–1; July 19.
Electric upsetting apparatus. G. Benedetto. 1,867,935–6; July 19.
Electric wires and for binding the end of the insulation, Apparatus for stripping. A. Reitzig. 1,867,712; July 19.
Electrical distribution, System of. T. S. Cole. 1,868,046; July 19.
Electrical heater. E. R. Evans. 1,868,005; July 19.
Electrodes, Treating. R. M. Hunter and L. E. Ward. 1,868,206; July 19.
Electroplating machine. A. H. Hannon. 1,868,320; July 19.
Elevator: *See*—
Water elevator.
Emulsion, Producing asphaltic. F. Queck. 1,867,923; July 19.
Energy in the form of mechanical oscillations, Transmitting. G. H. Schieferstein. 1,867,989; July 19.
Engaging and driving mechanism for rotary parts. R. Chilton. 1,868,346; July 19.
Engine: *See*—
Combustion engine. Internal-combustion engine.
Engines, Method of and apparatus for testing internal combustion. W. L. Harris. 1,867,698; July 19.
Envelope for laundered articles. E. A. Moll. 1,867,556; July 19.
Envelope, Shirt. L. Blumenstock. 1,868,458; July 19.
Ethers, Continuous process for the manufacture of allphatic. E. Ricard. 1,868,076; July 19.
Exercising apparatus. C. G. Woods. 1,867,642; July 19.
Expansion joint. J. W. Lucas. 1,868,014; July 19.
Expansion means for bell and spigot pipes. A. E. Stringer. 1,867,775; July 19.
Explosive. A. Hough. 1,868,388; July 19.
Extrusion press. F. H. Barnsley. 1,868,189; July 19.
Eye shade, goggles, and the like. K. G. Nowak. 1,868,362; July 19.
Fabric of nonflaccid strands, Woven open. F. B. Riley. Des. 87,410–11; July 19.
Fabric treating device. S. Jasgur. 1,868,170; July 19.
Fan. A. D. Gardner. 1,868,008; July 19.
Fan. F. Ljungstrom. 1,868,113; July 19.
Fan and compact. A. Ermitano. 1,867,815; July 19.
Fastener, Hood. I. S. Keeler. 1,867,846; July 19.
Fastener, Slide. S. H. Norton. 1,867,586; July 19.
Fastening device. B. Rubin. 1,868,178; July 19.
Feeder for dry chemicals. W. Le V. Zeigler. 1,868,404; July 19.
Feeder for hully cotton. J. A. Streun. 1,868,030; July 19.
Feeding device. W. A. Smith, sr. 1,867,929; July 19.
Feeding device for rock drills. W. A. Smith, sr., and W. A. Smith, jr. 1,868,204; July 19.
Fence making machine. N. S. Harter. 1,868,063; July 19.
Fence supporting device. D. T. Finkbeiner. 1,867,816; July 19.
Ferris wheel, Portable. J. Baer. 1,867,996; July 19.
Fertilizer distributor. J. F. Ravencroft. 1,868,025; July 19.
Fertilizer, Manufacturing mixed. B. Ober and E. H. Wight. 1,867,866; July 19.
Fifth wheel. L. E. Lubbers. 1,867,670; July 19.
Figure with adjustable limbs, Jointed. A. O. Deichmann. 1,868,049; July 19.
Filaments, Drying of artificial. R. Elssner. 1,867,619; July 19.
Filaments, Treatment of artificial. J. L. Bitter and R. Elssner. 1,867,610; July 19.
Filler mechanism for tubes and the like. F. J. Stokes. 1,867,601; July 19.
Filling machine. G. W. Mudd. 1,868,244; July 19.
Firearm. J. M. Horger. 1,867,569; July 19.
Fire extinguisher and support therefor. W. B. Bronander. 1,868,135; July 19.
Fireplace, Electric. W. W. Guy. 1,867,740; July 19.
Fish cutting machine. O. G. Rieske. 1,868,255; July 19.
Fissure detector for magnetic materials. E. A. Sperry. 1,867,685; July 19.
Fittings for oil stills, Return bend. F. C. Faatz. 1,868,164; July 19.
Fittings, Producing angle. A. J. Weatherhead, jr. 1,868,037; July 19.
Fixture, Combined curtain and shade. O. J. Prevost and F. Tanquay. 1,867,985; July 19.
Fixture, Lighting. W. F. Andrews. Des. 87,377; July 19.
Flashing, Briquetted interlocking. A. S. Weinstein. 1,867,956; July 19.
Fluid heater, Sectional. H. M. Godsey. 1,868,413; July 19.
Fluids, Apparatus for mixing. F. V. Hammerly. 1,867,824; July 19.
Folder for web printing machines. F. Lamatsch. 1,868,109; July 19.
Folding machine. T. N. Deligianes and A. A. Bourdes. 1,867,900; July 19.
Food chopper. M. C. Dellinger. 1,867,657; July 19.
Foods, Preparing. A. H. Sweet. 1,868,183; July 19.
Footwear. Manufacture of rubber. J. B. Crockett. 1,867,879–80; July 19.
Frame: *See*—
Window engine frame.
Freezer, Ice cream. M. A. Rollman. 1,867,953; July 19.
Freight handling system. C. D. Young. 1,868,267; July 19.
Fruit sizing machine. G. S. Helenbolt. 1,868,356; July 19.
Fruit sizing machine. F. Mathews. 1,868,114; July 19.
Fuel and its production, Motor. L. M. Henderson and S. W. Ferris. 1,868,102; July 19.
Fuel feed system. G. L. Jones. 1,867,700; July 19.
Fueling system. L. C. Stukenborg. 1,867,602; July 19.
Funnel. N. W. Howard. 1,868,389; July 19.
Furnace. W. Luiofs. 1,868,329; July 19.
Furnace and operating the same, Electric. R. C. Benner, G. J. Easter, and C. E. Hawke. 1,867,646; July 19.
Furnace construction. R. D. Foltz. 1,868,352; July 19.
Furnace construction. R. L. Leventry. 1,868,172; July 19.
Furnace wall. A. L. Keeler. 1,868,171; July 19.
Fuse. J. D. Roberts and C. H. Thomas. 1 867,924; July 19.
Fuse, Electric. J. Schürmann. 1,868,224; July 19.
Fuse, Expulsion. C. H. Thomas. 1,867,899; July 19.
Fuse indicator. F. C. La Mar. 1,868,464–5; July 19.
Gallery and related parts, Electric. T. E. Murray and R. Baker. 1,867,706; July 19.
Game. O. Christiansen. 1,867,730; July 19.

Game board. A. H. Bechtol and W. A. Tratsch. Des. 87,379; July 19.
Game table. R. A Hennings. Des. 87,391; July 19.
Games, Art and apparatus for. R. S. Blair. 1,868,088; July 19.
Garage, Storage. E. O. and F. A. McHenry. 1,867,675; July 19.
Garment, Apparel. J. H. Rambo. 1,867,630; July 19.
Garment hanger. R. A. Dorrill. 1,868,197; July 19.
Garter. H. A. Peter. Des. 87,404; July 19.
Gas and odor eliminator for motor vehicles, Exhaust. C. Bogert. 1,867,802; July 19.
Gas meter hanger. F. H. Mueller. 1,868,217; July 19.
Gas, Producing oil. L. C. Huff. 1,868,462; July 19.
Gases with liquids, Apparatus for treating. T. O. Wilton. 1,867,933; July 19.
Gauge. C. B. Nelson. 1,867,922; July 19.
Gauge and thermometer fitting. O. W. Thompson. 1,867,770; July 19.
Gauge protector, Pressure or graphic. E. J. Miner. 1,868,018; July 19.
Gear and coupling, Hydraulic. G. Bauer and J. N. Kiep. 1,868,129; July 19.
Gear, Change speed. L. Jacot-Descombes. 1,868,196; July 19.
Gear, Draft. D. F. Sproul. 1,868,295; July 19.
Gear grinding machine. C. H. Schurr. Re18,532; July 19.
Gear, Retractable landing. G. Vultee. 1,867,786; July 19.
Gear, Running. J. J. Low. 1,868,173; July 19.
Gears, Method of and machine for generating worm. N. Trbojevich. 1,867,782; July 19.
Glareshield for vehicles. W. Sudbrink. 1,868,031; July 19.
Glass: *See*—
Colorless glass.
Glass and producing the same, Laminated. G. B. Watkins. 1,867,787; July 19.
Glass, Apparatus and method of manufacturing sheet. L. Delloye. 1,867,940; July 19.
Glass building-stone, tile or like building element. J. W. Janzen. 1,868,236; July 19.
Glass grinding and polishing apparatus, Sheet. J. L. Drake and F. Fraser. Re18,533; July 19.
Glass, Manufacturing wired. F. H. Rowe. 1,868,177; July 19.
Glass rolling machine, Sheet. C. Cone. 1,868,274; July 19.
Glass surfacing machine. J. P. Crowley. 1,868,275; July 19.
Glaze and applying the same to refractory bodies containing silicon-carbide, Protective refractory. S. F. Walton. 1,868,451; July 19.
Globe, Lamp. J. D. Stuart. Des. 87,420; July 19.
Golf club. F. W. Grieve. 1,868,286; July 19.
Grader and cleaning machine, Grain. J. Spenst. 1,868,121; July 19.
Grain, Apparatus for cleaning and loading. R. V. Judson. 1,868,237; July 19.
Grain saving attachment for binders and harvesters. J. Oster. 1,868,428; July 19.
Granular material, Preparing colored. J. V. Freeman. 1,867,661; July 19.
Grating. J. M. Keown. 1,867,702; July 19.
Grating. M. Lachman and J. R. Tench. 1,868,107; July 19.
Grating, Making. J. M. Keown. 1,867,701; July 19.
Grip for eyeglasses, Nose. C. F. Wall. 1,868,450; July 19.
Guard, Safety zone. C. A. Massoll. 1,867,671; July 19.
Guide, Record. E. W. Davis. 1,868,276; July 19.
Guide, Ribbon. L. A. Tupper. 1,868,153; July 19.
Gun, Capsule. R. E. Brumfield. 1,868,308; July 19.
Gun for condenser cleaning slugs. W. F. Oberhuber. 1,867,751; July 19.
Gypsum plaster products and plaster-base material. C. K. Swift. 1,868,372; July 19.
Hair curling device. R. Landrum. 1,867,850; July 19.
Hair waver. K. M. Foote. 1,868,412; July 19.
Hair waving apparatus. H. Bonat. 1,868,089; July 19.
Halogen-terephthalic-hexahalides and preparing same. H. Schindhelm. 1,867,766; July 19.
Hame fastener, Adjustable. V. R. Dean. 1,867,967; July 19.
Hammer, Drop. F. J. Vlchek. 1,868,476; July 19.
Hanger: *See*—
Garment hanger. Suit hanger.
Gas meter hanger.
Hanger for brooms, brushes, etc. W. T. Craven. 1,868,305; July 19.
Hanks, Apparatus for wet treatment of. F. K. Sixthor. 1,867,770; July 19.
Harvester, String bean. F. P. Ryder. 1,867,955; July 19.
Head for opticians, Model fitting. G. F. Käpernick. 1,868,209; July 19.
Headgear. I. Falkson. 1,868,281; July 19.
Headlight dimming device, Automobile. D. Brown. 1,867,648; July 19.
Heat equalizer for burners. K. O. Wetzel. 1,867,957; July 19.
Heat exchanger. F. Boehm. 1,868,271; July 19.
Heat transfer apparatus. C. Stancliffe. 1,868,436; July 19.
Heat treating, Apparatus for. P. L. Geer. 1,867,941; July 19.
Heat treatment of sugar solutions either completely or partly crystallized, Apparatus for the. R. Bonath. 1,868,406; July 19.
Heater: *See*—
Electrical heater. Water heater.
Hot water heater. Windshield heater.
Heater for airplane wings. A. F. Thompson. 1,868,468; July 19.
Heating apparatus. H. E. Campbell. 1,867,807; July 19.
Heating device for the windshields of motor vehicles. W. H. Heaton. 1,868,142; July 19.
Heating system, House. H. L. Doherty. 1,868,051; July 19.
Hedge trimmer. T. S. Terry. 1,868,402; July 19.
Heel and wear plate therefor, Rubber. A. A. Esterson. 1,868,851; July 19.
Helicopter. J. Leffert. 1,868,392; July 19.
Hinge. E. A. Arndt. 1,867,798; July 19.
Hinge. W. J. Wilson. 1,868,126; July 19.
Hinge lock. A. Yurkovitch. 1,868,342; July 19.
Hinge, Vehicle door. F. Lemke. 1,867,885; July 19.
Hoist, Truck. F. Richards. 1,867,760; July 19.
Hold open and closing mechanism for double doors. C. L. Phillips and H. E. Sprague. 1,867,589; July 19.
Holder, Book. E. J. Slttnens. 1,868,467; July 19.
Holder, Christmas tree. T. J. Fegley and G. O. Leopold. Des. 87,388; July 19.
Holder, Combined coin and article. J. E. Hughes. 1,868,325; July 19.
Holder, Confection. R. L. Hunter. 1,867,945; July 19.
Holder, Cow-tail. G. Fotel. 1,867,552; July 19.
Holder, Display card. G. S. Malcolm. 1,867,920; July 19.
Holder, Iron. R. F. Schulzke. 1,867,768; July 19.
Holder, Lip stick. B. H. Freedman. 1,868,200; July 19.
Holder, Nursing bottle. M. S. Sullivan. 1,867,992; July 19.
Holder, Sack. E. E. Beadle. 1,868,269; July 19.
Holder, Vessel. R. Jelinek. 1,867,571; July 19.
Honing device. J. Gouldbourn and F. Ricks. 1,867,623; July 19.
Hook: *See*—
Printer's register hook. Tire chain hook.
Hopper. F. B. Allen. 1,867,794; July 19.
Hormone of the anterior lobe of the pituitary gland, Recovery of a highly purified. M. Dohrn and W. Hohlweg. 1,868,095; July 19.
Horn construction. W. Paulus. 1,868,250; July 19.
Hosiery machines, Device for coarse and fine setting of the loop length in flat. P. Lieberknecht. 1,867,703; July 19.
Hospital table. L. Rose. 1,867,763; July 19.
Hot water heater. J. F. Mayerhofer. 1,868,423; July 19.
Housing, Lamp. M. C. Hanson. Des. 87,390; July 19.
Humidifier. W. C. Hopson. 1,867,835; July 19.
Humidifying apparatus. J. A. Mayers. 1,867,921; July 19.
Hydraulic coupling. J. N. Kiep. 1,868,146; July 19.
Hydrocarbons by catalytic cracking of petroleum oils, tars, or other similar starting materials, Apparatus for the manufacture of light. A. Joseph. 1,867,842; July 19.
Hydrocarbons, Production of valuable. F. Winkler and H. Haeuber. 1,868,127; July 19.
Ignition apparatus. C. H. Davis, jr. 1,868,000; July 19.
Ignition apparatus. J. T. Fitzsimmons. 1,868,006; July 19.
Ignition means for internal combustion engines. P. M. Bruner. 1,868,273; July 19.
Inclosed switch. H. J. Hammerly. 1,868,449; July 19.
Index and visible record system, Visible. F. D. Powell. 1,867,710; July 19.
Index device. H. F. Barker. 1,868,188; July 19.
Index device. Le R. E. Hutchings. 1,868,207; July 19.
Index or file. C. S. Campbell and W. H. Day. 1,868,477; July 19.
Index or filing system. Z. Auerbach. 1,868,156; July 19.
Indexing attachment for automatic machines. W. J. Richards. 1,867,592; July 19.
Indophenol azine compounds. F. Muth. 1,867,863; July 19.
Inductance, Adjustable. R. M. C. Greenidge. 1,868,318; July 19.
Inductance changing system. L. A. Gebhard. 1,867,820; July 19.
Ink, Meat stamping. L. S. Paddock. 1,868,071; July 19.
Ink well. A. G. Bassi. 1,868,375; July 19.
Insulating board. L. E. Armstrong. 1,867,797; July 19.
Insulation for pole climbing spurs. G. O. Rush. 1,867,894; July 19.
Internal combustion engine. A. P. Brush. 1,867,649; July 19.
Internal combustion engine. H. E. McCray. 1,867,582; July 19.
Internal combustion engine. H. J. Scharnagel. 1,867,680; July 19.
Internal combustion engine. J. Zeeman. 1,868,301; July 19.
Ironcarbonyl, Producing. L. Brandt. 1,868,044; July 19.
Ironer, Flat work. C. E. H. Hamilton, sr. 1,867,741; July 19.
Ironing board, Folding. J. Worley, jr., and R. J. Burke. 1,868,185; July 19.

Ironing machiue. R. W. Janda. 1,867,839; July 19.
Irons, High strength gray cast. F. B. Coyle. 1,867,732; July 19.
Irradiation process. I. A. Balinkin and C. F. Muth. 1,868,042; July 19.
Jack: *See*—
Lifting jack.
Jack and dolly, Combined lift. H. W. Chambers and A. Jakobi. 1,868,193; July 19.
Jar. I. Cordy. Des. 87,386; July 19.
Joint: *See*—
Expansion joint. Pipe joint.
Joint breaker and cathead, Combination. W. L. Foster. 1,867,621; July 19.
Journal box. D. S. Barrows. 1,868,405; July 19.
Kiln, Ceramic. F. W. Brooke. 1,868,091; July 19.
Knitting machine. E. U. Ames. 1,867,644; July 19.
Knitting machines for producing goods patterned by reenforcement, Device on flat. P. Lieberknecht. 1,867,704; July 19.
Label. L. Freeman. 1,867,622; July 19.
Lamp, Clock. C. H. H. Rodanet. Des. 87,312; July 19.
Lamp construction, Laminated. J. F. Schmidt. 1,868,259; July 19.
Last. I. Simon. 1,868,225; July 19.
Latch, Door. J. C. Griffin. 1,868,471; July 19.
Lath panels, Mechanism for forming. G. A. Buttress. 1,867,727; July 19.
Lawn sprinkler. A. Coviello. 1,867,878; July 19.
Level. C. A. Leger. 1,868,361; July 19.
Leveler. C. W. Tharp. 1,868,122–3; July 19.
Lever stall. W. O. Wille. 1,867,722; July 19.
Lid for cooking utensils. G. C. Wisenor and L. H. Wisenor. 1,867,994; July 19.
Lifting jack. J. H. Kobler. 1,868,478; July 19.
Light fixure for dial telephones. M. Blum. 1,868,344; July 19.
Lighter, Cigar. F. A. Zibelman. Des. 87,422; July 19.
Lighting unit. H. J. Graham. 1,867,821; July 19.
Linkage for control devices, Mechanical. M. E. Henning. 1,867,827; July 19.
Linoleum, Making. W. E. Whitney and H. G. Hassenplug. 1,868,038; July 19.
Liquid dispensing gun. F. I. Jaden. 1,868,235; July 19.
Liquid meter. J. L. Berthet and G. Michel. 1,868,133; July 19.
Liquid, Textile treatment. H. Bertsch. 1,968,376; July 19.
Live-wire detector. G. F. Walter. 1,867,901; July 19.
Load lifting beam for railway cars. A. E. Small. 1,868,179; July 19.
Loader for ship hoist buckets. W. E. Hale. 1,868,319; July 19.
Loading device. G. M. Brugler. 1,867,999; July 19.
Lock: *See*—
Automatic lock. Door lock.
Automobile lock. Hinge lock.
Lock for exit bolts. I. N. Van Sickles. 1,867,606; July 19.
Lock for looms, Beam. H. N. Smith. 1,868,152; July 19.
Locking device. E. Brandt. 1,868,345; July 19.
Loom. J. M. Badia. 1,868,128; July 19.
Lubricant, High temperature. H. H. Dow. 1,867,968; July 19.
Lubricating device for bearings on a shaft. C. A. Rupp. 1,868,118; July 19.
Lubricating mechanism. C. C. Howenstine. 1,868,167; July 19.
Lubricating system, etc., Force feed. I. Cowles. 1,867,613; July 19.
Lure attaching means. H. H. Hildebrandt. 1,867,555; July 19.
M-2-xylidine, Manufacture of. L. J. Allchine. 1,867,962; July 19.
Machine element. R. W. Strout. 1,868,181; July 19.
Machine for coating strips of lumber. I. F. Dittmar. 1,868,050; July 19.
Machine for finishing articles of pottery-ware. J. E. Wright and G. A. Benline. 1,867,790; July 19.
Machine for making cigarettes. O. Lied. 1,867,852; July 19.
Machine for making and filling packets. A. Day and W. H. Naylor. 1,868,048; July 19.
Machine for mill cutting single point, double thread screws. J. A. Arenz. 1,867,995; July 19.
Machine for molding plastic substances. A. W. Sizer. 1,868,370; July 19.
Machine for pressing fabrics. R. N. West. 1,868,184; July 19.
Machine for printing tickets, Portable. H. R. Setright. 1,868,027; July 19.
Machine for producing self-igniting cigarettes. W. L. Drew. 1,868,350; July 19.
Machine for re-looping the runs in stockings and other knitted fabrics. C. E. Mandelick. 1,867,579; July 19.
Machine for the drawing of glass into tubes or rods. R. Salomon. 1,868,397; July 19.
Machine for the manufacture of reenforced concrete pillars, high pressure tubes and the like. J. Skorkovsky. 1,868,398; July 19.
Machine unit. Motor operated. H. R. Van Deventer. 1,867,719; July 19.
Machinery for making biscuits and like baked products. H. Furness. 1,868,058; July 19.
Magazine reel. J. E. Rust. 1,867,764; July 19.
Magnetic servo brake, Manual. V. G. Apple. 1,867,645; July 19.
Mail distributing machine. H. H. and J. Miller. 1,868,243; July 19.
Manicuring device. A. G. Dalmas. 1,868,160; July 19.
Manifolding construction. M. J. Goldberg. 1,868,355; July 19.
Marker for phonograph records, Starting. H. M. Baruch. 1,867,997; July 19.
Material for making roads, Apparatus for mixing. W. G. Frazee. 1,867,739; July 19.
Materials, Continuous process of purifying. W. E. Trent. 1,867,783; July 19.
Materials for making roads, Apparatus for mixing. W. G. Frazee. 1,867,817; July 19.
Measuring reverberation time, Apparatus for. F. L. Hopper. 1,868,105; July 19.
Mechanical movement. O. C. Mudd. 1,867,981; July 19.
Metal articles, Manufacture of shaped. W. Mackie. 1,868,213; July 19.
Metal sheets, Apparatus for treating. H. E. McCrery. 1,867,856; July 19.
Metals, Casting easily oxidizable. R. T. Wood. 1,868,453–6; July 19.
Metals, Casting easily oxidizable. R. T. Wood and F. C. Frary. 1,868,457; July 19.
Metals, Casting molten. B. E. Eldred. 1,868,099; July 19.
Mill: *See*—
Rolling mill.
Milling machine. N. M. Marsilius and O. A. Olsen. 1,868,016; July 19.
Mirror dresser. J. A. Hoegger. 1,868,104; July 19.
Modulating arrangement for transmitter tubes. R. Urtel. 1,868,033–4; July 19.
Mold for the manufacture of articles in silica glass and the like. P. La Burthe. 1,868,421; July 19.
Molded products, Apparatus for making. D. D. Forbes. 1,868,139; July 19.
Monobenzoyldiaminoanthraquinones, Manufacture of. P. E. Thomaschewski. 1,868,124; July 19.
Morpholine derivatives of thiuram tetrasulphide and making the same. W. J. S. Naunton and J. B. Payman. 1,867,982; July 19.
Motor: *See*—
Wave motor.
Motor agricultural machine. C. S. Brown. 1,868,045; July 19.
Mounting device, Leaf. J. M. Meyers. 1,868,332; July 19.
Mounting for automatic shapers, Clamp. O. Onsrud. 1,868,869; July 19.
Mounting, Motor vehicle body. J. L. Brownell. 1,867,806; July 19.
Mounting of electric pick-ups for gramophones. R. D. Cargill. 1,868,304; July 19.
Mounting, Ophthalmic. J. N. Nelson. 1,867,865; July 19.
Mower, Lawn. O. S. Cloud. 1,868,347; July 19.
Mulling apparatus. N. W. Stratford. 1,867,898; July 19.
Nail distributor. J. M. Benjamin. 1,867,560; July 19.
Nitrocellulose, Digesting. A. C. Preston and G. C. Gress. 1,867,757; July 19.
Non-skid apparatus for automobiles. V. Jendrejczak and T. Kolacki. 1,868,890; July 19.
Nut, Lock. H. J. Frelin. 1,868,007; July 19.
Offbearer, Mechanical. W. N. Browne. 1,867,873; July 19.
Oil and producing the same, Lubricating. T. W. Doell. 1,867,695; July 19.
Oil base for internal combustion engines. H. J. Edwards. 1,868,055; July 19.
Oil burner. H. D. Dufault. 1,867,659; July 19.
Oil burner. B. B. Zahner. 1,867,934; July 19.
Oil, Dewaxing hydrocarbon. R. E. Manley. 1,867,580; July 19.
Oil, Green bloom. H. G. Smith. 1,868,473; July 19.
Oil, Purification of tar-acid-bearing. S. Caplan. 1,868,447; July 19.
Oil saver. E. J. Beck. 1,867,559; July 19.
Oils, Refining of hydrocarbon. J. C. Morrell and G. Egloff. 1,868,333; July 19.
Oils, Treating hydrocarbon. F. W. Hall and V. N. Jenkins. 1,867,566; July 19.
Opener and closer, Automatic door. F. M. Nunez. 1,868,149; July 19.
Opener, Letter. A. J. Kelser. 1,867,975; July 19.
Operating mechanism for oil switches. J. N. Kelman. 1,867,847; July 19.
Ornament, Radiator. F. C. Ruppel. Des. 87,414; July 19.
Ornamentation of stainless iron, Two tone. F. C. Schludecker. 1,867,767; July 19.
Oven, Regenerative coke. J. Schaefer. 1,868,223; July 19.
Package filling machine. W. E. Benson. 1,867,998; July 19.
Packing device. R. E. Pelterie. 1,868,199; July 19.
Pad for writing instruments, Writing. W. M. Colfelt. 1,868,441; July 19.
Padlock, Sealable. F. H. Van Leer. 1,867,689; July 19.
Pan: *See*—
Dust pan.
Panel, Distributing. H. G. Baxter. 1,868,132; July 19.
Paper making, Method of and apparatus for. H. Parker. 1,867,588; July 19.
Paper manufacture. J. J. O'Connor. 1,868,291; July 19.

Paper manufacture. J. Traquair. 1,867,930; July 19.
Paper manufacture. J. Traquair and H. A. Kidd. 1,867,931; July 19.
Paper rolls, Manufacture of. P. J. Mulligan. 1,868,115; July 19.
Parcel, Mailing. H. W. Brewer. 1,867,612; July 19.
Partition cement compartment, Swinging. J. P. Heil. 1,867,699; July 19.
Pasteurizing apparatus. R. Slama. 1,867,771; July 19.
Pedal control for motor cars. G. E. and C. N. H. White. 1,868,265; July 19.
Pen filling attachment for ink bottles or the like, Fountain. A. Bienenstein and W. Douglas. 1,867,801; July 19.
Pen, Fountain. R. Back. Des. 87,378; July 19.
Pen, Fountain. S. M. Sager. 1,868,257; July 19.
Pen nibs, Making. J. E. Wahl, C. W. Gronemann, and A. N. Lungren. 1,867,932; July 19.
Pencil, Mechanical. I. Chesler. Des. 87,385; July 19.
Pencil, Striping. B. L. Hill. 1,868,416; July 19.
Perforating machine. W. W. Lasker. 1,868,111; July 19.
Perforator. W. S. Jones. 1,967,840; July 19.
Petroleum hydrocarbons, Cracking. A. M. Houghton. 1,868,418; July 19.
Petroleum oil, Treating. F. G. Graves. 1,867,697; July 19.
Petroleum oils, Purifying. D. E. Day. 1,867,908; July 19.
Petroleum oils, tar and the like, Process and apparatus for the catalytic cracking of. A. Joseph. 1,867,841; July 19.
Phenol-aldehyde resins, Purification of. F. Seebach. 1,868,079; July 19.
Phenylene-disazo-bisameta-phenylene-diamine, Purified. I. Ostromislensky. 1,867,587; July 19.
Photographic background. C. W. Bhosys. 1,867,800; July 19.
Photographic print. W. R. Whiteborne. 1,868,085; July 19.
Piano string-frame. S. Weber. 1,867,788; July 19.
Picture apparatus, Motion. A. N. Merle. 1,868,331; July 19.
Pipe joint and the like. D. H. Reynolds. 1,867,891; July 19.
Pipe machine, Spiral. F. L. Williams. 1,868,039; July 19.
Pipe, Method of and machine for upsetting the ends of. J. U. Devine. 1,868,094; July 19.
Piston. J. O. Heinze. 1,868,144; July 19.
Piston and ring. E. S. and P. M. Reiland. 1,868,075; July 19.
Piston, Light metal. L. Kraemer. 1,868,420; July 19.
Piston ring. W. H. Cooper. 1,867,656; July 19.
Piston sand core. G. L. Moore. 1,867,862; July 19.
Plastic materials, Method and machine for sheeting and folding. T. L. Green and C. H. Williams. 1,868,317; July 19.
Playing field for game apparatus. G. H. Miner. Des. 87,400; July 19.
Pliers. G. E. Evey. 1,867,912; July 19.
Plug, Electric heater. A. H. Massey. Des. 87,398; July 19.
Plug, Fuse. G. R. Trumbull. 1,867,784; July 19.
Plum. L. Burbank. Pl. Pt. 18; July 19.
Polishing device, Portable. R. A. Ponselle. 1,867,629; July 19.
Pontoon seal for floating decks. J. F. Kimball. 1,867,845; July 19.
Pop corn machine. H. W. Eakins. 1,867,910; July 19.
Post hole digger. S. E. Stoop. 1,868,081; July 19.
Potassium in fertilizers, Determining the quantity of. E. L. Parker. 1,868,364; July 19.
Potential or current in a cable or other metallic conductor, Apparatus for indicating the presence of. H. A. Hidde Nijland. 1,867,944; July 19.
Pottery ware, Method of and apparatus for manufacturing. W. J. Miller. 1,868,425; July 19.
Powder-dispensing device. O. Wallo. 1,868,298; July 19.
Power transmission apparatus. H. L. Joyce. 1,867,843; July 19.
Power transmitting mechanism. V. J. Defays and P. J. Lefebvre. 1,868,001; July 19.
Preignition in internal combustion engines, Preventing. A. J. Ducamp. 1,868,058; July 19.
Press: *See*—
Bed and cylinder printing press. Printing press.
Pressing member. H. D. Forse. 1,867,620; July 19.
Printer's register hook. W. F. Brügmann. 1,867,805; July 19.
Printing and impressing or stamping press, Hydraulic. H. Brandenburg. 1,868,380; July 19.
Printing and impressing press. J. Grünberg. 1,868,387; July 19.
Printing machines, Sheet supplying device for. A. Buttner. 1,868,381; July 19.
Printing press. S. J. Mollet. 1,867,859–60; July 19.
Printing press, Bed and cylinder. C. B. Cottrell, 3d. 1,868,311; July 19.
Printing presses, Fountain roll feeding means for. H. B. Greenwood. 1,868,383; July 19.
Printing presses, Web feed for two plate wide rotary. E. W. Dean. 1,867,966; July 19.
Products from earth oil residues, asphalt, and/or similar substances, Manufacture of lighter colored. J. W. LeNobel. 1,868,211; July 19.
Propeller assembly for airships. H. L. Chase. 1,867,809; July 19.
Propeller of helicopters. C. d'Ascanio. 1,867,733; July 19.
Protector for masonry buildings, Seepage. A. Cheney. 1,868,092; July 19.
Protector or similar article, Pocket check. S. L. Pollock. Des. 87,405; July 19.
Pulley, Differential. H. Gaillard. 1,867,882; July 19.
Pulp or the like, Apparatus and method for making. D. B. Whistler. 1,868,299; July 19.
Pulp rovings, Manufacture of. M. O. Schur and W. B. Meglits. 1,867,599; July 19.
Pump, Air pumping centrifugal. A. W. Burks. 1,867,652–3; July 19.
Pump and driving mechanism. E. C. Ekstromer. 1,868,098; July 19.
Pump, Deep well. A. C. Potter. 1,868,150; July 19.
Pump, Double action. M. A. Clark. 1,867,906; July 19.
Pump mechanism. E. W. Dilg. 1,868,161; July 19.
Pump, Vacuum. T. F. Moore. 1,867,585; July 19.
Pumping apparatus, Dual purpose. L. F. Easton. 1,867,813; July 19.
Purifying apparatus. F. E. Rice. 1,867,892; July 19.
Rack: *See*—
Storage rack.
Radiant device, Medicinal. W. O. Prouty. Des. 87,408; July 19.
Radiator bracket, Adjustable. W. G. Madison. 1,867,854; July 19.
Radiator, Heat. N. T. Branche. 1,868,446; July 19.
Radiator, hood, and fenders for vehicles, Combined. J. R. Hughes. Des. 87,392; July 19.
Radio circuit. M. J. Castle. 1,867,808; July 19.
Radio coupling system. H. A. Wheeler. 1,868 155; July 19.
Radio receiver and clock, Combined. P. J. O'Donnell. Des. 87,403; July 19.
Radio toning device. W. C. Hill. 1,868,357; July 19.
Radio transmitter. A. D. Hodgson. 1,868,358; July 19.
Range. H. Lange. Des. 87,396; July 19.
Razor. J. L. Kleinman. 1,868,239; July 19.
Razor, Safety. J. Bornemann. 1,868,379; July 19.
Razor, Shaving cream dispensing safety. C. A. Melka. 1,867,980; July 19.
Reaction in aqueous media at high temperatures, Effecting organic. W. J. Hale. 1,868,140; July 19.
Reagent feeder. J. A. Adams. 1,867,961; July 19.
Receiver arrangement for electric television apparatus. A. Karolus. Re18,537; July 19.
Receptacle, Ash or cigarette. R. I. North. 1,868,023; July 19.
Rectifier. E. Beisman. 1,868,175; July 19.
Reel: *See*—
Magasine reel.
Reel. G. W. Hopkins. 1,867,743; July 19.
Reeling machines, Traverse mechanism for. C. F. Van Hook. 1,867,688; July 19.
Refining method of vegetable oils to be used as solvents for injection medicine. H. Hatakeyama and H. Watanabe. 1,867,665; July 19.
Refrigerating and ventilating apparatus. C. A. Moore. 1,867,749; July 19.
Refrigerating apparatus. H. B. Hull. 1,867,744; July 19.
Refrigerating apparatus. D. E. Maccabee. 1,867,748; July 19.
Refrigerating apparatus. F. G. Slagel. 1,867,716; July 19.
Refrigerating apparatus and cabinet therefor, Artificial. H. L. Foster. 1,868,353; July 19.
Refrigerating apparatus, Artificial. C. M. Holley and H. L. Foster. 1,868,359; July 19.
Refrigerator of the absorption type. A. Silbernagel. 1,868,434; July 19.
Register: *See*—
Autographic register.
Register of machine parts, Adjusting. H. B. Greenwood. 1,868,385; July 19.
Regulator. R. E. Newell. 1,868,116; July 19.
Regulator for gas-heated steam radiators. O. J. Kuenhold. 1,867,849; July 19.
Renovating device. O. Widders and J. K. Bayless. 1,867,640; July 19.
Resilient coupling. C. Ruegg. 1,867,987; July 19.
Resin and making, Synthetic. C. G. Moore and M. Zucker. 1,867,583; July 19.
Resin from residual oil, Recovery of. S. Caplan. 1,868,448; July 19.
Resinous product and making same. J. V. Meigs. 1,868,216; July 19.
Resins and making the same, Synthetic. C. G. Moore and M. Zucker. 1,867,584; July 19.
Resistance device, Frictional. J. H. Staley. 1,868,262; July 19.
Resistance eliminator for aircraft and water craft. E. Johnson. Re18,534; July 19.
Retort. E. Clifton and W. J. Cooper. 1,867,877; July 19
Rifle, Air. E. S. Roe. 1,868,292; July 19.
Ring: *See*—
Piston ring. Sealing ring.
Road composition. S. S. Sadtler. 1,868,221; July 19.

Rod: *See*—
Curtain rod.
Rod bending machine. A. H. Marietta. 1,867,581; July 19.
Rod-line weight. A. L. Leman. 1,867,574; July 19.
Rods, Making welding. K. H. Ternstedt. 1,867,781; July 19.
Roll, Bending. A. T. Yates. 1,868,341; July 19.
Roller attached bulk-handling attachment for harvesters. L. D. Morse. 1,867,887; July 19.
Roller bit. J. T. Phipps. 1,867,628; July 19.
Rolling mill. H. Esser. 1,868,227; July 19.
Rolls for corrugating sheet material. J. T. Auger. 1,868,302; July 19.
Roof, Car. C. D. Bonsall. 1,868,134; July 19.
Roof, Car. C. D. Bonsall. 1,868,158–9; July 19.
Roof, Car. C. D. Bonsall. 1,868,190; July 19.
Roof, Car. C. D. Bonsall. 1,868,191; July 19.
Rotary drill bit. J. C. Reese. 1,868,074; July 19.
Rotary engine, Combustion. O. Larson. 1,867,917; July 19.
Rubber articles, Manufacture of. J. B. Crockett. 1,867,881; July 19.
Rubber disbursing agent. R. G. Seaman. 1,867,633; July 19.
Rubber footwear, galoshes, or the like, Pressing up of. H. C. L. Dunker. 1,868,137; July 19.
Rubber, Treatment of. L. H. Howland. 1,868,145; July 19.
Safety device for elevators. J. F. Shinn. 1,867,991; July 19.
Sand and gas separator. W. J. Dunlap. 1,868,003; July 19.
Sandal, Foot corrective. R. R. Rieble and J. B. Pfaller. 1,867,679; July 19.
Scaffolding. M. D. Avallone. 1,868,187; July 19.
Scooter, Balanced power. W. V. Van Etten. 1,867,687; July 19.
Screw driver, Screw holding. P. Gelinski. 1,868,009; July 19.
Screw machine (movable latch). J. A. Arenz. 1,867,796; July 19.
Screws with one or two appending washers, Manufacturing. E. Gundersen and H. Lahn. 1,868,415; July 19.
Sealing ring. W. B. Towell. 1,867,718; July 19.
Selective receiving system. S. Y. White. 1,867,608; July 19.
Separator: *See*—
Egg separator. Sand and gas separator.
Shade, Lamp. A. Burke. 1,867,562; July 19.
Shaft-log and stuffing-box structure. W. M. Horn. 1,868,064; July 19.
Shaving equipment. L. S. Chadwick. 1,867,905; July 19.
Sheet reversing device for gumming machines. P. W. Fleischer. 1,868,283; July 19.
Shelling machine. A. Rankine. 1,867,986; July 19.
Shock insulating device. E. R. Evans. 1,868,163; July 19.
Shoe and cleat therefor, Cleated athletic. H. Goldsmith. 1,867,915; July 19.
Shoe filler piece. A. H. Avery. 1,868,041; July 19.
Shoe horn and case, Combination. R. P. E. Starr. 1,867,774; July 19.
Shoe stiffener conditioning machine. E. E. Rowe. 1,867,594; July 19.
Shook carriage for box making machines. H. Paxton. 1,867,951; July 19.
Shrinkage, Evenness of. R. Elssner. 1,867,617; July 19.
Sieve attachments for eaves troughs. M. L. Tinklepaugh and G. W. Howe. 1,867,636; July 19.
Sign device. E. G. Rowley. 1,867,595; July 19.
Sign, Stop. Le R. N. Conser. 1,867,811; July 19.
Signal system, Trolley railway. S. S. Stoip and F. H. Richterkessing. 1,868,180; July 19.
Signaling and repeater therefor, System of. E. E. Kleinschmidt. 1,867,976; July 19.
Signals, Detection of frequency modulated. C. W. Hansell. 1,867,567; July 19.
Silicon steel sheets, Treating. E. M. Freeland. 1,867,818; July 19.
Silo filler. S. C. Heth. 1,868,231; July 19.
Single sleeve engine. H. J. Edwards. 1,868,056; July 19.
Siren whistle, Combination. F. Wilcox. 1,867,903; July 19.
Skeleton reenforcement. M. Lachman. 1,868,108; July 19.
Ski fastening device. A. J. Gresvig. 1,868,386; July 19.
Slab and building construction, C. F. Davis. 1,867,615; July 19.
Slip handler, Automatic. A. L. Segelhorst. 1,868,119; July 19.
Smoking apparatus. H. H. Broadway. 1,868,469; July 19.
Smoking appliance, Sanitary. J. B. Cullen. 1,868,459; July 19.
Socket, Candle. K. K. Nielsen. Re18,535; July 19.
Socket for artificial limbs, Pneumatic. L. W. Balch and E. DeWagenaere. 1,868,303; July 19.
Solutions for acetic or formic acid, Concentrating aqueous. W. N. Hawarth. 1,867,943; July 19.
Solutions of alkaline hypochlorites, Preparing solid or half solid. P. Shestakoff. 1,868,151; July 19.
Sorting machine. W. W. Lasker. 1,868,112; July 19.
Sound absorbent material. R. C. Brockmeyer. 1,867,549; July 19.
Sound recording. H. C. Harrison. 1,868,321; July 19.
Sound recording machine. J. H. Sailliard. 1,868,369; July 19.
Sound reproducing mechanism. T. H. Parker. 1,868,396; July 19.
Sound translating device. L. G. Bostwick. 1,868,090; July 19.
Speed mechanism, Automatic variable. F. R. Porter. 1,867,590; July 19.
Spinning machine, twisting frame, reeling apparatus and like machine for winding on threads and the like. G. Van Coppenolle. 1,868,154; July 19.
Spirit containing metallo organic catalyzers and self-made anti-knocking compounds and making same, Motor. C. Ellis. 1,867,814; July 19.
Spool, Metal. J. E. Gyourko. 1,868,229; July 19.
Spool, Warping. H. D. Clinton. 1,868,408; July 19.
Spoon. W. Leidel. 1,868,289; July 19.
Spoon, Sheet metal. W. G. Momberger. 1,868,426; July 19.
Sprayer. W. W. H. Pyn. 1,867,890; July 19.
Spreader, Manure. A. Storm. 1,868,337; July 19.
Spring: *See*—
Convoluted spring.
Spring. C. A. Brock. 1,867,647; July 19.
Spring mechanism. E. L. Bronstien. 1,867,693; July 19.
Spring retrieving reel. C. C. Crispen. 1,868,409; July 19.
Sprinkler: *See*—
Lawn sprinkler.
Stacker for box blanks. H. B. Greenwood. 1,868,384; July 19.
Stairway, Disappearing. F. E. Bessler. 1,867,904; July 19.
Stake, Plant. C. B. Smalts. 1,868,371; July 19.
Stand: *See*—
Toilet stand.
Staple and driving the same. C. B. Goodstein. 1,868,100; July 19.
Starter, Engine. E. A. Fridley. 1,867,662; July 19.
Stay bolt. T. S. Wheelwright. 1,868,083–4; July 19.
Steering apparatus, Automatic. M. G. E. Knight. 1,868,360; July 19.
Steering mechanism for motor vehicles, Power. G. A. Swartz. 1,868,082; July 19.
Stereoscopic cinematography. G. T. Mallett. 1,867,855; July 19.
Sterilizer, Electrically operative. W. R. Hooven. 1,868,323; July 19.
Stills, Operation of pressure. E. C. Herthel. 1,868,204; July 19.
Stoker, Mechanical underfeed. V. G. Leach. 1,867,573; July 19.
Stopping device for wind motors, Orienting and automatic. L. Constantin. 1,868,047; July 19.
Storage rack. G. R. Borrmann. 1,867,611; July 19.
Stove leg. J. Lee. 1,867,948; July 19.
Subcirculation for oil well drilling. F. F. Hill. 1,867,832; July 19.
Subcirculation oil well drilling apparatus with suction pumping. F. F. Hill. 1,867,833; July 19.
Subsoiling attachment for plows. W. Kranz, jr. 1,867,977; July 19.
Sugar, Manufacture of. E. R. Ramsey and A. W. Bull. 1,868,472; July 19.
Suit hanger. H. J. Cuscaden. 1,867,614; July 19.
Support, Clinical waste-bag. F. R. Hart. 1,867,971; July 19.
Support for locomotive crosshead guides, Expansion. J. G. Blunt. 1,868,157; July 19.
Support for neon signs. R. C. Hyde, J. T. Northcott, and E. O. Erickson. 1,867,836; July 19.
Support, Nursing bottle. S. M. Fiegel. 1,867,969; July 19.
Support, Poster. J. T. Greenlee. 1,867,565; July 19.
Support, Rock drill. E. F. Terry, jr. 1,868,373; July 19.
Support, Webbing. S. L. Warren. 1,867,607; July 19.
Supporting structure, Railway vehicle. W. E. Woodard. 1,868,340; July 19.
Suspenders. T. Cahn. Des. 87,382–3; July 19.
Swimming, Apparatus for teaching. L. Olschewski. 1,867,627; July 19.
Swimming device. E. L. Bellman. 1,868,270; July 19.
Swing hanger for railway trucks. H. T. Casey. 1,867,654; July 19.
Switch: *See*—
Electric switch. Time switch.
Inclosed switch.
Switch mechanism and lighting system, Emergency. S. W. Mann. 1,868,242; July 19.
Switching arrangement for telephone plants. K. H. Blomberg and S. D. Vigren. 1,868,878; July 19.
Switching system for toy railroads, Automatic. J. J. Geiger. 1,868,354; July 19.
Synchronism, Apparatus for maintaining. S. Ruben. 1,867,925; July 19.
Table: *See*—
Hospital table.
Table and bath tub, Infant's combination dressing. H. E. McCandless. 1,867,673; July 19.
Table forming machine, Continuous two. S. F. Parham. 1,868,248–9; July 19.

Tamper control mechanism. H. C. Parker. 1,868,072; July 19.
Tank cap lock, Gasoline. A. W. Bryan. 1,867,650; July 19.
Tape winding apparatus. L. Roseman. 1,867,596; July 19.
Taping machine. C. Christiansen. 1,867,655; July 19.
Tar and apparatus therefor, Distillation of. L. R. Forrest and E. B. Conklin. 1,868,470; July 19.
Tar, Distillation of. S. P. Miller. 1,868,394–5; July 19.
Target trap. G. W. Lorimer. 1,867,578; July 19.
Telegraph printer. A. Weaver. 1,867,638; July 19.
Telephone system. W. W. Carpenter and J. F. Dahl. 1,868,309; July 19.
Telephone system. G. V. King. 1,868,326; July 19.
Telephone system. A. Waschnack. 1,868,036; July 19.
Telephone system, Automatic. R. L. Stokeley. 1,868,296; July 19.
Telephone system, Automatic. G. Zapf and A. Peissner. 1,867,791; July 19.
Telethermometer. W. A. Baker and C. H. Kuhlman. 1,867,870; July 19.
Temperature regulating and humidifying apparatus. C. L. Whitaker. 1,868,264; July 19.
Temperature responsive device. J. H. Derby. 1,868,136; July 19.
Tennis racket. J. L. Kleinman. 1,868,238; July 19.
Textile fabric. A. R. Richtmyer. Des. 87,409; July 19.
Textiles, Treatment of. G. H. Ellis. 1,867,660; July 19.
Theater. A. J. Moulton. 1,868,068; July 19.
Therapeutic device, Radiant. W. O. Prouty. Des. 87,406; July 19.
Therapeutic light, Hand supported. W. O. Prouty. Des. 87,407; July 19.
Thermometer. G. A. Shamberger. 1,867,990; July 19.
Thermostat device. H. C. Roth. 1,867,893; July 19.
Thermostat, Room. A. Penn. 1,867,756; July 19.
Tile board. R. G. Stanbrough. 1,867,897; July 19.
Time controlling mechanism for vulcanizing molds. P. De Mattia. 1,867,734; July 19.
Time limit overload switch. C. H. Rippl. 1,868,256; July 19.
Time switch. E. Albertini. 1,868,086; July 19.
Timer, Interval. F. Lux. 1,868,241; July 19.
Tire, Automobile. H. R. Smith. Des. 87,418–19; July 19.
Tire chain hook. O. A. S. Eriksen. 1,867,911; July 19.
Tire shaping machine. A. O. Abbott, jr. 1,867,557; July 19.
Toaster, Electric bread. J. E. Haeringer. 1,868,287; July 19.
Tobacco spreading device for cigarette machines. C. F. Röber. 1,868,026; July 19.
Toilet sand. W. Lohmann. 1,867,747; July 19.
Tongs. J. A. Peterson and C. E. Olsen. 1,867,889; July 19.
Tool, Convertible drilling. J. B. De Costa. 1,868,348; July 19.
Tool, Machine. C. B. De Vleg. 1,867,616; July 19.
Tool, Nail holding. T. A. Smith. 1,867,928; July 19.
Tooth point construction. J. W. Page. 1,868,247; July 19.
Toothbrush. W. R. Reese. 1,868,368; July 19.
Toy. A. Daubendiek. 1,868,313; July 19.
Toy, Aerial. W. and C. C. Shippee. 1,867,714; July 19.
Toy aeroplane. A. V. Pasley. 1,868,429; July 19.
Toy gun. W. A. Coventry. 1,868,312; July 19.
Toy or similar article, Novelty. W. H. Landmasser. Des. 87,395; July 19.
Toy, Wheeled. H. E. Clarke. 1,867,731; July 19.
Track for conveyer systems, Monorail. C. S. Haddlesay. 1,867,883; July 19.
Track link. W. K. McMillan and J. S. Walch. 1,868,148; July 19.
Tractor. J. D. Kooyenga. 1,867,669; July 19.
Tractor. W. F. Strehlow. 1,868,474; July 19.
Tractor hitch. J. Burggraff. 1,867,726; July 19.
Traffic controlling system, Railway. G. W. Baughman. 1,867,724; July 19.
Transformer-converter. H. E. Patrick and I. W. Kureth. 1,867,754; July 19.
Transmission, Planetary friction. A. W. Gardiner and J. Ehrlich. 1,867,553; July 19.
Transmission, Planetary friction. J. H. Hunt. 1,868,234; July 19.
Transmitter. D. T. Eighmey. Des. 87,387; July 19.
Trap: *See*—
Target trap.
Tray. A. Fraser. 1,867,738; July 19.
Tray and razor sharpener, Combined ash. W. R. Cannon and W. P. Pennington. Des. 87,384; July 19.
Tray, Ice. E. P. S. Newman. 1,868,070; July 19.
Tree trimmer. H. W. Ditch. 1,868,349; July 19.
Trimmer: *See*—
Hedge trimmer. Tree trimmer.
Trolley retriever. L. B. Withers. 1,867,692; July 19.
Trowel, Wall texture smoothing. D. R. Humphreys. 1,868,013; July 19.
Truck, Industrial. E. H. Remde. 1,868,176; July 19.
Truck, Pedal actuated elevating. D. E. Hennessy. 1,867,825–6; July 19.
Trunks, Athletic. B. Lewis. 1,868,212; July 19.
Tube: *See*—
Electric discharge tube.
Tunnel, Quick freeze. A. H. Baer. 1,867,546; July 19.
Tunnels, aqueducts, and the like, Lining. C. Jackson. 1,867,837; July 19.
Turbine. J. O. Heinze. 1,868,143; July 19.
Turbine. A. C. McGinty. 1,868,017; July 19.
Turbine installation. G. Bauer. 1,868,131; July 19.
Tuyère, Blast furnace. J. A. Boland. 1,868,306; July 19.
Twine-holder for self-binding harvesters. J. A. Nilsson. 1,868,218; July 19.
Type slug casting machine or the like. R. M. O'Connor and R. T. Todd. 1,868,363; July 19.
Typewriting machine. A. Havard. 1,868,288; July 19.
Upper-roughing machine. W. C. Card, jr. 1,867,728; July 19.
Urea, Production of. E. Kuss and M. Guenther. 1,868,106; July 19.
Valve. O. V. Kruse. 1,868,147; July 19.
Valve actuating mechanism. O. J. Kay. Re18,531; July 19.
Valve actuator for a switch. B. H. Jeanneret. 1,868,419; July 19.
Valve, Automatic watering. D. E. Williams. 1,867,691; July 19.
Valve construction, Automatic. K. C. Bryant. 1,867,874; July 19.
Valve, Damped light. O. O. Ceccarini. 1,867,729; July 19.
Valve, Duplex disk. H. D. Rice, jr., and J. M. Babb. 1,867,952; July 19.
Valve, Flush. C. L. Esterly. 1,868,316; July 19.
Valve for fluid lifts, Check. F. D. Wachsmuth. 1,868,374; July 19.
Valve mechanism, Gas regulator. H. R. Hughes. 1,868,324; July 19.
Valve, Poppet. E. J. Fisk. 1,868,138; July 19.
Valve, Tire. T. A. Hammond. 1,868,165; July 19.
Valves, Steam, hydraulic and like. T. F. Gray and E. A. Bolton. 1,868,059; July 19.
Vehicle body. C. T. Weymann. 1,868,263; July 19.
Vehicle body tonneau construction unit. J. Ledwinka. 1,867,851; July 19.
Vehicle body wall construction. J. P. Tarbox. 1,867,777; July 19.
Vehicle, Load carrying. W. C. Nabors. 1,868,020; July 19.
Vehicle, Motor. C. R. Paton. 1,867,709; July 19.
Vehicle, Motor. M. Tibbetts. 1,867,686; July 19.
Vehicle, Railway. A. J. Michelin. 1,867,424; July 19.
Vehicle trailer. W. C. Nabors. 1,868,021; July 19.
Vehicles, Suspension of. G. H. Schieferstein. 1,868,258; July 19.
Vending machine. E. Sandberg. 1,868,222; July 19.
Vent for core drills. L. H. Wellensiek. 1,867,720; July 19.
Vent structure for storage batteries, Filling. B. Ford. 1,867,564; July 19.
Vessel, Vacuum discharge. W. Dallenbach. 1,868,410; July 19.
Vest, Life saving. A. Lehmann. 1,868,210; July 19.
Vibration of crankshafts, Preventing the. E. A. Sperry. 1,867,684; July 19.
Vibratory apparatus. K. H. Whitney. 1,868,452; July 19.
Vibratory screen. A. L. Munro. Re18,530; July 19.
Washer: *See*—
Dish washer.
Water cooler, Drinking. T. O'Farrell. 1,867,868; July 19.
Water cooling device, Natural. J. Kilbourn and E. W. Easterling. 1,867,975; July 19.
Water elevator. A. Parker. 1,868,219; July 19.
Water heater. A. Ackron. 1,868,186; July 19.
Waterproofing medium made of calf's tallow or fat and lime, Manufacture of a plastic. C. Fleisch. 1,868,057; July 19.
Water softening materials, Apparatus for regenerating. J. A. Johnson. 1,867,572; July 19.
Water with boiler feed water, Proportioning blowdown. C. W. Rice. 1,868,431; July 19.
Wave motor. R. S. Blair. 1,868,087; July 19.
Wave motor. H. Tidwell. 1,867,780; July 19.
Web pasting mechanism. G. E. Pancoast. 1,868,117; July 19.
Web shearing apparatus. E. Huff. 1,867,884; July 19.
Web tension device. A. J. Cline. 1,868,310; July 19.
Welding machine for machine construction and the like. F. H. Mayoh. 1,867,979; July 19.
Well digging apparatus. F. N. Stover. 1,868,400; July 19.
Well housing apparatus. R. P. Simmons. 1,867,769; July 19.
Wells, Apparatus for flowing. E. L. Wheless. 1,867,630; July 19.
Welts, Preventing post-winding. J. A. Cameron and R. M. Johnstone. 1,867,550; July 19.
Wheel: *See*—
Fifth wheel.
Wheel dresser, Grinding. J. A. Davenport. 1,867,939; July 19.
Wheel for anchor escapements, Escapement. U. Kohler. 1,867,947; July 19.
Wheel puller of the combination impact and compressor type. G. W. Grebenstein. 1,868,060; July 19.

Window engine frame. S. S. McIntyre. 1,867,707; July 19.
Window shade adjusting device. S. Jasgur. 1,868,463; July 19.
Window, Sliding. F. J. Stuart. 1,867,776; July 19.
Window, Weatherproof metal casement. F. S. Slater and A. J. Miller. 1,868,080; July 19.
Windshield heater. E. C. Horton and H. Hueber. 1,868,232; July 19.
Wings of aircraft, Adjusting. G. T. R. Hill. 1,868,417; July 19.
Wire tying machine. H. Harvey. 1,868,141; July 19.
Wood finishes on metal and other surfaces, Reproducing natural. E. C. Loetscher. 1,867,576; July 19.
Wood pulp, Manufacture of. O. Kress. 1,867,626; July 19.
Wood working machine. F. Schimmel. 1,867,895; July 19.
Work supporting attachment for abrading machines. L. E. Woodsend. 1,868,266; July 19.
Yarn furnisher. H. Swinglehurst. 1,867,635; July 19.
Yarn treatment. J. L. Bitter and R. Elsner. 1,867,609; July 19.
Yarn twisting device. J. A. Groves. 1,867,664; July 19.
Yarns, fabrics, films and the like, Treatment of. H. Dreyfus. 1,867,658; July 19.

CLASSIFICATION OF PATENTS

ISSUED JULY 19, 1932

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U. S. GOVERNMENT PRINTING OFFICE: 1928

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Allen-Sherman-Hoff Company, The, Philadelphia, Pa. Pumps and parts thereof. Serial No. 327,722; July 26. Class 23.

Alpha Chi Sigma Fraternity, Indianapolis, Ind. Pins, badges, and keys. Serial No. 327,211; July 26. Class 28.

American Bemberg Aktiengesellschaft. (See I. P. Bemberg Aktiengesellschaft, assignor.)

American Container Corporation, St. Paul, Minn. Boxes or containers for storage batteries. Serial No. 327,671; July 26. Class 21.

American Health Products Co., Washington, D. C. Preparation having bowel lubricating, laxative, and bowel regulation properties. Serial No. 327,331; July 26. Class 6.

Amtorg Trading Corporation, New York, N. Y. Santonin. Serial No. 306,255; July 26. Class 6.

Atlas Supply Company, Newark, N. J. Storage batteries. Serial No. 327,495; July 26. Class 21.

Barcalo Manufacturing Company, Buffalo, N. Y. Pillows or cushions. Serial No. 327,624; July 26. Class 32.

Barsanti, Frank A., Tulsa, Okla. Dressed broiling chickens. Serial No. 327,547; July 26. Class 46.

Bausch & Lomb Optical Company, Rochester, N. Y. Corundum and rouge for grinding and polishing lenses. Serial No. 327,967; July 26. Class 4.

Bernitz, Jeannot L., doing business as Lu Laboratories, New York, N. Y. Depilatory. Serial No. 326,250; July 26. Class 6.

Berry Brothers (Incorporated), Detroit, Mich. Lacquer enamels. Serial No. 327,575; July 26. Class 16.

Big Chief Candy Co., Inc., Wilkes-Barre, Pa. Salted peanuts and candy. Serial No. 323,119; July 26. Class 46.

Bilhuber, E., Inc., Jersey City, N. J. Medical compound for cough. Serial No. 327,970; July 26. Class 6.

Birbeck, F. V., Watsonville, Calif. Fresh vegetables. Serial No. 328,115; July 26. Class 46.

Black Diamond Coal Mining Company, Birmingham, Ala. Coal. Serial No. 327,269; July 26. Class 1.

Bowers, Charles R., doing business as The Ru-Win-Zo Co., Findlay, Ohio. Preparation for the treatment and relief of rheumatism, arthritis, acidosis, etc. Serial No. 327,337; July 26. Class 6.

Bradford Oil Company, North Kansas City, Mo. Gasoline. Serial No. 325,743; July 26. Class 15.

Bristol Aeroplane Company Limited, The, Bristol, England. Aircraft engines. Serial No. 327,618; July 26. Class 23.

Bromberg, William, doing business as W. Bromberg Company, Bronx, N. Y. Foot powder. Serial No. 327,243; July 26. Class 6.

Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Pocket billard tables. Serial No. 327,902; July 26. Class 22.

Burnett, R. B., Beckley, W. Va. Medicinal preparation. Serial No. 327,550; July 26. Class 6.

California Concentrating Company, San Jose, Calif. Laxative. Serial No. 327,425; July 26. Class 6.

Campbell, Wyant & Cannon Foundry Company, Muskegon Heights, Mich. Iron alloy castings. Serial No. 327,579; July 26. Class 14.

Cantor Bros., doing business as Grand Shellac Works, Brooklyn, N. Y. Ready mixed paints. Serial No. 324,984; July 26. Class 16.

Carr, Edward G., Chicago, Ill. Road machinery. Serial No. 323,479; July 26. Class 23.

Chez Francois, Inc., Miami, Fla. Confections. Serial No. 327,788; July 26. Class 46.

Clark-Dunn Manufacturing Company, St. Louis, Mo. Shoe dressing. Serial No. 326,634; July 26. Class 4.

Clayton Magazines, Inc., The, New York, N. Y. Periodical. Serial No. 327,867; July 26. Class 38.

Cliff, Jabez, & Co. Ltd., Walsall, England. Saddlery. Serial No. 299,391; July 26. Class 3.

Coffey-Humber, San Francisco, Calif. Extracts of biological glands. Serial No. 327,619; July 26. Class 6.

Daniel, Jack. (See Mothow, Lem.)

Davis, John H., Company, doing business as Sunset Line & Twine Company, San Francisco, Calif. Fishing lines. Serial No. 327,936; July 26. Class 22.

De Long Hook and Eye Company, The, Philadelphia, Pa. Sanitary napkins. Serial No. 322,687; July 26. Class 44.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Ink and colors. Serial No. 318,203; July 26. Class 11.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Mineral waters, maltless beverages, and concentrates for making the same. Serial No. 318,214; July 26. Class 45.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Brushes, brooms and mops. Serial No. 318,223; July 26. Class 29.

Diamond Brand Products, Inc., Philadelphia, Pa. Insecticides. Serial No. 327,906; July 26. Class 6.

Dickinson, Royal, Roselle, N. J. Skin ointment, salves, liquids, etc. Serial No. 326,895; July 26. Class 6.

Dixie Mills Company, East St. Louis, Ill. Plant ration. Serial No. 326,462; July 26. Class 10.

Doyle, B. W., doing business as Doyle Packing Co., Los Angeles, Calif. Dog food. Serial No. 326,365; July 26. Class 46.

Duart Manufacturing Co., Ltd., San Francisco, Calif. Oils, lotions, and shampoo preparations. Serial No. 327,216; July 26. Class 6.

Dunlop Rubber Company, Limited, Birmingham, England. Tennis and badminton rackets. Serial No. 327,818; July 26. Class 22.

Duo-Tint Bulb & Battery Co. (See Riggs, Dalton W.)

Essan-Kay Company, The, Carlisle, Pa. Preparation for relief of contagious abortion in cattle. Serial No. 327,681; July 26. Class 6.

Eyglo Company, Inc., New York, N. Y. Eye wash. Serial No. 327,504; July 26. Class 6.

Ferbo Research Laboratories, Inc., Miami, Fla., and New York, N. Y. Therapeutic agent for control of fermentation in the human system. Serial No. 328,059; July 26. Class 6.

Florasynth Laboratories, Inc., New York, N. Y. Maltless concentrates. Serial No. 305,434; July 26. Class 45.

Ford, J. B., Company, The, Wyandotte, Mich. Sterilizing material. Serial No. 327,310; July 26. Class 6.

Fowler, Harry C., doing business as Weber Pharmacal Company, Salt Lake City, Utah. Liquid chemicals. Serial No. 314,690; July 26. Class 6.

Friedricks, Irving, doing business at Irving Friedricks Co., New York, N. Y. Ladies' sport coats. Serial No. 328,094; July 26. Class 39.

Gabrieleen Co., Inc., New York, N. Y. Permanent waving lotion. Serial No. 324,959; July 26. Class 6.

Gans Company, Los Angeles, Calif. Marble projecting board game. Serial No. 327,630; July 26. Class 22.

Garment Attachment Corporation, New York, N. Y. Attachments for sewing machines and the like. Serial No. 315,309; July 26. Class 28.

Gassett, McKinley, Washington, D. C. Germicide. Serial No. 327,432; July 26. Class 6.

Geiss, Jack, Cleveland, Ohio. Checker game. Serial No. 327,871; July 26. Class 22.

General Cable Corporation, New York, N. Y. Electrical wires and cables. Serial No. 327,614; July 26. Class 21.

Gly-Ser-Dine Chemical Company, Milwaukee, Wis. Solution containing iodine for external application. Serial No. 327,654; July 26. Class 6.

Golf Ball Inc., Chicago, Ill. Golf balls. Serial No. 326,094; July 26. Class 22.

Golf Ball Inc., Chicago, Ill. Golf balls. Serial No. 328,121–2; July 26. Class 22.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Automobile body polish. Serial No. 327,394; July 26. Class 16.

Gordon, Graham M., Los Angeles, Calif. Machinery for tamping, vibrating, etc., wet concrete mixture in molds and forms. Serial No. 326,653; July 26. Class 23.

Grand Shellac Works. (See Cantor Bros.)

Gray, Charles P., West Chester, Pa. Mechanical advertising displays. Serial No. 327,691; July 26. Class 28.

Gray, William S., & Co., New York, N. Y. Chemical products. Serial No. 327,276; July 26. Class 6.

Great Lakes Varnish Works Inc., Chicago, Ill. Varnish. Serial No. 328,003; July 26. Class 16.

Greensboro Full Fashioned Hosiery Mills, Greensboro, N. C. Ladies' hosiery. Serial No. 328,062; July 26. Class 39.

Grozaire Laboratories. (See Kundtz, Louvenia L.)

Hanford, G. C., Mfg. Co., Syracuse, N. Y. Antiseptic dressing. Serial No. 327,012; July 26. Class 6.

Harrower Laboratory, Inc., The, Glendale, Calif. Preparation for treatment of menorrhagia and metrorrhagia. Serial No. 327,312; July 26. Class 6.

Hart, Hugh D., doing business as Herba-Vita Company, Camden, N. J. Tonic laxative medicine. Serial No. 325,711; July 26. Class 6.

Haspel Brothers, Inc., New Orleans, La. Suits. Serial No. 328,169; July 26. Class 39.

Herba-Vita Company. (See Hart, Hugh D.)

Howe & French, Inc., Boston, Mass. Floor and linoleum finish. Serial No. 323,407; July 26. Class 16.

Hygrade Sylvania Corporation, Salem, Mass. Electric incandescent lamps. Serial No. 327,589; July 26. Class 21.

I. P. Bemberg Aktiengesellschaft, Wuppertal-Oberbarmen and Wuppertal-Elberfeld, Germany, assignor to American Bemberg Corporation, New York, N. Y. Thread and yarn. Serial No. 326,659; July 26. Class 43.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

I. P. Bemberg Aktiengesellschaft, Wuppertal-Oberbarmen and Wuppertal-Elberfeld, Germany, assignor to American Bemberg Corporation, New York, N. Y. Thread and yarn. Serial Nos. 326,663–4; July 26. Class 43.

Kellogg Company, Battle Creek, Mich. Cerial breakfast foods. Serial No. 322,920; July 26. Class 46.

Kelp Laboratories. (See Walsh, Michael J.)

Kent, Roger, Inc., New York, N. Y. Suits, coats, and overcoats. Serial No. 327,878; July 26. Class 39.

Kinney & Levan Company, The, Cleveland, Ohio. Tinned, bottled, or packaged foodstuffs. Serial No. 326,042; July 26. Class 46.

Kresge Department Store, Corp., Newark, N. J. Account and blank books, toilet paper, paper napkins, etc. Serial No. 327,441; July 26. Class 37.

Kundtz, Louvenia L., doing business as Grozaire Laboratories, Lakewood, Ohio. Scalp and hair tonic. Serial No. 327,517; July 26. Class 6.

Lambert Pharmacal Company, Wilmington, Del. Medicinal compound in the nature of a kidney alterative. Serial No. 327,730; July 26. Class 6.

Larsen, Waldemar & Sigurd J. Hoff, Brooklyn, N. Y. Medicinal preparation for treatment of cuts, wounds, etc. Serial No. 328,102; July 26. Class 6.

Level Hat Co., Inc., South Norwalk, Conn. Men's hats. Serial No. 314,413; July 26. Class 39.

Locke, Herman C., doing business as Locke Nursery and Floral Co., New Braunfels, Tex. Seeds. Serial No. 324,536; July 26. Class 1.

Loewenthal Company, The, Akron, Ohio. Tires, inner tubes, tube repair kits, etc. Serial No. 325,952; July 26. Class 35.

Lu Laboratories. (See Bernitz, Jeannot I.)

Makina Corporation, New York, N. Y. Cameras, sensitized photographic plates and films, etc. Serial No. 327,099; July 26. Class 26.

Master Laboratories, Inc., Omaha, Nebr. Medicinal preparation. Serial No. 327,592; July 26. Class 6.

Matthews, C. Emmett, doing business as Matthews Chemical Co., Roanoke Rapids, N. C. Medicinal preparation. Serial No. 326,999; July 26. Class 6.

Mayer, M. E., Vienna, Austria. Grindstones, pumice stones; polishing powder, etc. Serial No. 316,496; July 26. Class 4.

McKee Refrigerator Company, Cobleskill, N. Y. Ice boxes and refrigerators. Serial No. 326,383; July 26. Class 31.

Mechling Brothers Chemical Company, Camden, N. J. Insecticides. Serial No. 327,445; July 26. Class 6.

Merrell, Wm. S., Company, The, Cincinnati, Ohio. Medical preparation. Serial No. 328,134; July 26. Class 6.

Milam, Inc., Winston-Salem, N. C. Herb compound. Serial No. 327,402; July 26. Class 6.

Montgomerie & Co., Ltd., Glasgow, Scotland. Malt beverages and extracts for making same. Serial No. 326,333; July 26. Class 48.

Montross & Clarke Company, Inc., New York, N. Y. Paper for printing and writing. Serial No. 327,880; July 26. Class 37.

Morrissey, William J. V., doing business as The Vizabid Co., San Francisco, Calif. Bridge table cover. Serial No. 326,904; July 26. Class 37.

Motlow, Lem, doing business as Jack Daniel, Lynchburg, Tenn. Whiskey. Serial No. 327,826; July 26. Class 49.

"Munich Brands", Maspeth, N. Y. Malt beverages and syrups for making same. Serial No. 324,900; July 26. Class 48.

National Aluminate Corporation, Chicago, Ill. Pumps, water motors, and mechanisms for proportioning reagents fed to a water purifying system. Serial No. 325,718; July 26. Class 23.

Naugatuck Chemical Company, The, New York, N. Y. Rubber paint. Serial No. 327,881; July 26. Class 16.

Nemicide Company, Limited, Honolulu, Hawaii. Fertilizers. Serial No. 323,172; July 26. Class 10.

New York Merchandise Co. Inc., New York, N. Y. Balls. Serial No. 325,180; July 26. Class 22.

Nicholas, Francis C., Gambrills, Md. Antiseptic medicinal preparation. Serial No. 327,613; July 26. Class 6.

Nicolay, A. Russell, doing business as Nik-O-Life Battery Company, Indianapolis, Ind. Storage batteries. Serial No. 327,562; July 26. Class 21.

Nik-O-Life Battery Company. (See Nicolay, A. Russell.)

Panhandle Refining Company, Wichita Falls, Tex. Gasoline. Serial No. 327,523; July 26. Class 15.

Paramat Limited, London, England. Paper fiongs for making printing plates. Serial No. 327,636; July 26. Class 50.

Parke, Davis & Co., Detroit, Mich. Digitalis. Serial No. 327,601; July 26. Class 6.

Parke, Davis & Co., Detroit, Mich. Iron citrate and copper nucleate. Serial No. 327,602; July 26. Class 6.

Parke, Davis & Co., Detroit, Mich. Preparation for the treatment of acidosis. Serial No. 327,764; July 26. Class 6.

Parker Rust Proof Company, Detroit, Mich. Phosphoric acid and phosphate compounds. Serial No. 327,448; July 26. Class 6.

Patermann, Myro, doing business as Firma Gebr. Patermann, Teltow, near Berlin, Germany. Fruit juices, cocoa and chocolate and malt extracts. Serial No. 320,369; July 26. Class 46.

Paul, Israel, doing business as Russ Pharmaco Products, Philadelphia, Pa. Medicinal preparation. Serial No. 327,258; July 26. Class 6.

Paulson, John P., Chicago, Ill. Lubrication oils and greases. Serial No. 325,694; July 26. Class 15.

Penn-Jersey Auto Stores, Inc., Easton, Pa. Patching repair kits. Serial No. 327,284; July 26. Class 35.

Pfeiff Brothers, Brooklyn, N. Y. Leather belting. Serial No. 326,494; July 26. Class 35.

Pharis Tire and Rubber Company, The, Newark, Ohio. Rubber tires for vehicles. Serial No. 314,961; July 26. Class 35.

Pillsbury Flour Mills Company, Minneapolis, Minn. Cake and wheat flour. Serial No. 328,036; July 26. Class 46.

Procter & Gamble Company, The, Cincinnati, Ohio. Soap. Serial No. 328,038; July 26.

RCA Victor Company, Inc., Camden, N. J. Radio receiving sets, television receiving sets, etc. Serial No. 326,431; July 26. Class 21.

Raybestos-Manhattan, Incorporated, Passaic, N. J., and Bridgeport, Conn. Brake and transmission lining. Serial No. 324,398; July 26. Class 35.

Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. Serial No. 327,415; July 26. Class 6.

Riggs Dalton W., doing business as Duo-Tint Bulb & Battery Co., Chicago, Ill. Electric incandescent lamp bulbs and batteries. Serial No. 324,115; July 26. Class 21.

Rosengart, Sylvain, Paris, France. Liquid treatment for eyes. Serial No. 327,738; July 26. Class 6.

Roussos, Phofa, doing business as Madam Roussos, Richmond Hill, N. Y. Facial creams. Serial No. 323,590; July 26. Class 6.

Russ Pharmaco Products. (See Paul, Israel.)

Ru-Win-Zo Co., The. (See Bowers, Charles R.)

S. M. Laboratories, Inc., Seattle, Wash. Silver and mercury in a colloidal state. Serial No. 326,233; July 26. Class 6.

Sanitary Grocery Company, Incorporated, Washington, D. C. Tea. Serial No. 327,854; July 26. Class 46.

Scadron, Louis H., New York, N. Y. Optical products. Serial No. 327,416; July 26. Class 26.

Seaboard Seed Company, Philadelphia, Pa. Seed. Serial No. 326,234; July 26. Class 1.

Sellers Manufacturing Co., Saxapahaw, N. C. Cotton yarns. Serial No. 327,949; July 26. Class 43.

Shorewood Mills, Milwaukee, Wis. Athletic union suits, shirts, and shorts. Serial No. 325,728; July 26. Class 39.

Société Internationale Du Catalex, Paris, France. Carburetors, catalyzing apparatus, and parts. Serial No. 292,395; July 26. Class 23.

Soluol Corporation, Providence, R. I. Boil-off scouring and dyeing oils. Serial No. 326,651; July 26. Class 6.

Spencerian Pen Company, The, New York, N. Y. Writing pens, penholders, paper clips, etc. Serial No. 327,838; July 26. Class 37.

Sponge Rubber Products Co., The, Derby, Conn. Rubber sponges. Serial No. 328,078; July 26. Class 1.

Stern Brothers, New York, N. Y. Tennis rackets and balls, golf balls, tees, and bags, etc. Serial No. 315,706; July 26. Class 22.

Sunset Line & Twine Company. (See Davis, John H., Company.)

Superior Laboratories, Inc., Cleveland, Ohio. Analgesic liniment, preparations for treatment of colds and catarrh, etc. Serial No. 322,277; July 26. Class 6.

Texaco Salt Products Company, New York, N. Y. Salt. Serial No. 327,858; July 26. Class 6.

Trojan Hosiery Mills, Inc., Indianapolis, Ind. Hosiery. Serial No. 300,765; July 26. Class 39.

Tully & Kolis Co., Newark, N. J. Vegetable oil made from hemp-seed. Serial No. 325,812; July 26. Class 46.

United Stores Company, The, Abilene, Kans. Butter. Serial No. 327,641; July 26. Class 46.

Universal Chemical Corporation, Akron, Ohio. Shampoo. Serial No. 326,005; July 26. Class 6.

Vaccaro, Leopold, doing business as The Visnova Company, Philadelphia, Pa. Pharmaceutical preparation. Serial No. 327,488; July 26. Class 6.

Ver-Vac Products Co., Inc., The, Baltimore, Md. Maltless beverages and syrups. Serial No. 326,695; July 26. Class 45.

Viennese Scalp Remedies, Inc., The, Baltimore, Md. Preparation for the scalp. Serial No. 324,022; July 26. Class 6.

Virgin Diamond Syndicate, The, Kansas City, Mo. Precious stones, finger rings, bar pins, etc. Serial No. 316,709; July 26. Class 28.

Visnova Company, The. (See Vaccaro, Leopold.)

Vizabid Co., The. (See Morrissey, William J. V.)

Walsh, Michael J., doing business as Kelp Laboratories, San Diego, Calif. Dried sea plant products. Serial No. 327,156; July 26. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Washington Co-Operative Egg & Poultry Association, Seattle, Wash. Egg syrup for cooking and confectionery purposes. Serial No. 325,158; July 26. Class 46.

Weber Pharmacal Company. (See Fowler, Harry C.)

Whiting, George A., Paper Company, Menasha, Wis. Bond paper. Serial No. 327,860; July 26. Class 37.

Whitney, Alton E., North Kansas City, Mo. Hand operated toy. Serial No. 327,492; July 26. Class 22.

Widdis, Albert L., Long Beach, Calif. Maltless fruit beverage. Serial No. 320,562; July 26. Class 45.

Worthall Products Company, New York, N. Y. Tonic treatment for the hair and scalp. Serial No. 325,610; July 26. Class 6.

Worthington Pump and Machinery Corporation, New York, N. Y. Rock drills and hammers, sinkers, drifters, etc. Serial No. 323,641; July 26. Class 23.

Xylos Rubber Company, The, Akron, Ohio. Reclaimed rubber. Serial No. 328,110; July 26. Class 1.

Young, L. A., Company, The, Detroit, Mich. Golf clubs. Serial No. 327,537; July 26. Class 22.

LIST OF REGISTRANTS OF TRADE-MARKS

Aero Supply Manufacturing Co., Inc., College Point, N. Y. Aeroplane supplies and equipment. 296,157; July 26; Serial No. 314,135; published May 3, 1932. Class 13.

Amazon Knitting Company, Muskegon, Mich. Children's waists. 296,164; July 26; Serial No. 325,632; published May 10, 1932. Class 39.

American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Metal fence posts. 296,161; July 26; Serial No. 325,506; published May 10, 1932. Class 13.

Artcraft Silk Hosiery Mills, Inc., Philadelphia, Pa. Women's hosiery. 296,146; July 26; Serial No. 324,980; published May 3, 1932. Class 39.

Bamberger, L., & Co., Newark, N. J. Dresses, coats, and sweater suits. 296,151; July 26; Serial No. 309,956; published May 10, 1932. Class 39.

Bob, H. D. Company, Inc., New York, N. Y. Shirts, windbreakers, blouses, etc. 296,129; July 26; Serial No. 323,563; published Apr. 12, 1932. Class 39.

Calwis Industries, Ltd., Beverly Hills, Calif. Toy boats. 296,187; July 26. Class 22.

Cedar Island Oyster Company, Greenport, N. Y. Oysters. 296,172; July 26; Serial No. 324,506; published May 17, 1932. Class 46.

Chicopee Manufacturing Corporation, New Brunswick, N. J. Absorbent piece goods. 296,144; July 26; Serial No. 324,988; published May 10, 1932. Class 42.

Closure Lock Corporation, Chicago, Ill. Locks. 296,103; July 26; Serial No. 325,161; published May 3, 1932. Class 25.

Consolidation Coal Company, The, New York, N. Y. Coal. 296,110; July 26; Serial No. 325,283; published May 3, 1932. Class 1.

Continental Mills, Inc., Philadelphia, Pa. Overcoats, topcoats, cloaks and capes, etc. 296,118; July 26; Serial No. 325,682; published May 10, 1932. Class 39.

Cook Paint and Varnish Company, North Kansas City, Mo. Dry paste for adhesive purposes. 296,104; July 26; Serial No. 325,062; published May 3, 1932. Class 5.

D & S Gasaver Co., Pittsburgh, Pa. Gas pressure regulators. 296,154; July 26; Serial No. 311,874; published May 3, 1932. Class 13.

Dailey, W. O., Manufacturing Co., Portland, Oreg. Collar stiffening and retaining devices, and for collar and necktie holders or stays. 296,128; July 26; Serial No. 323,111; published May 10, 1932. Class 40.

Dictograph Products Company, New York, N. Y. Dry cell batteries. 296,191; July 26. Class 21.

Edison Brothers Stores, Inc., St. Louis, Mo. Hosiery and leather shoes. 296,173; July 26. Class 39.

Fairfield Western Maryland Dairy. (See Western Maryland Dairy Corporation.)

Fenwick-Reddaway Mfg. Co., Newark, N. J. Nozzles, nipples, strainers, etc. 296,163; July 26; Serial No. 325,367; published May 10, 1932. Class 13.

Frank, Edgar K., & Co., New York, N. Y. Woolen piece goods. 296,186; July 26. Class 42.

French Coal Company, Bluefield, W. Va. Coal. 296,119; July 26; Serial No. 325,684; published May 10, 1932. Class 1.

Glass, Henry, & Co., New York, N. Y. Shirts, blouses, and pajamas. 296,158; July 26; Serial No. 315,399; published May 3, 1932. Class 39.

Gold Star Fur Ranch Inc., Owatonna, Minn. Live foxes. 296,116; July 26; Serial No. 325,468; published May 10, 1932. Class 1.

Goldfield & Newman, New York, N. Y. Suits, coats, dresses, etc. 296,138; July 26; Serial No. 324,787; published May 10, 1932. Class 39.

Goldring Neiman Corporation, New York, N. Y. Dresses, coats, suits, etc. 296,125; July 26; Serial No. 320,806; published Mar. 15, 1932. Class 39.

Goldschmidt, Th., A.-G., Essen-on-the-Ruhr, Germany. Cementing medium. 296,134; July 26; Serial No. 324,665; published May 10, 1932. Class 5.

Goodwin, Frederick P., doing business as Sun Mix Corporation, Strawn, Ill. Poultry feed. 296,150; July 26; Serial No. 281,144; published May 10, 1932. Class 46.

Governor and Company of Adventurers of England Trading into Hudson's Bay, The, doing business as Hudson's Bay Company, Winnipeg, Manitoba, Canada. Tobacco. 296,152; July 26; Serial No. 309,973; published May 10, 1932. Class 17.

Griffin Hosiery Mills, Griffin, Ga. Ladies' hosiery. 296,147; July 26; Serial No. 324,918; published May 3, 1932. Class 39.

Hand, Leslie T., Brooklyn, N. Y. Floor mats. 296,175; July 26. Class 50.

Hanes Hosiery Mills Co., Winston-Salem, N. C. Hosiery. 296,123; July 26; Serial No. 325,401; published May 3, 1932. Class 39.

Hanes Hosiery Mills Co., Winston-Salem, N. C. Yarns. 296,170; July 26; Serial No. 325,651; published May 10, 1932. Class 43.

Harris, Sara, doing business as Harris Products Company, Inc., Miami, Fla. Preparation for killing rats and mice. 296,182; July 26. Class 6.

Hart Oil Burner Corporation, Peoria, Ill. Fuel burning devices. 296,155; July 26; Serial No. 312,429; published May 10, 1932. Class 34.

Hartman, Hurvitz & Schakne, Inc., New York, N. Y. Dresses and frocks. 296,130; July 26; Serial No. 323,940; published May 10, 1932. Class 39.

Hilger, Adam, Limited, London, England. Apparatus for analysing metal alloys. 296,171; July 26; Serial No. 321,537; published Jan. 26, 1932. Class 26.

Hoy, F. P., Inc., New York, N. Y. Corsets, brassières, and underwear. 296,109; July 26; Serial No. 325,171; published May 3, 1932. Class 39.

Hudson's Bay Company. (See Governor and Company of Adventurers of England Trading into Hudson's Bay, The.)

Hump Hairpin Manufacturing Company, The, Chicago, Ill. Hairpins. 296,189; July 26. Class 40.

Independent Wholesale Dry Goods Ass'n, Inc., New York, N. Y. Cotton, rayon, linen, and silk piece goods, cotton sheets, and pillow cases. 296,135; July 26; Serial No. 322,017; published May 10, 1932. Class 42.

Isaly Dairy Company, The, Youngstown, Ohio. Butter. 296,183; July 26. Class 46.

Jordan, James, doing business as Jordan Brothers, Yeadon, Pa. Soil. 296,192; July 26. Class 1.

Kayser, Julius, & Co., New York, N. Y. Women's underwear. 296,167; July 26; Serial No. 325,472; published May 3, 1932. Class 39.

Kotkes, W., & Son, New York, N. Y. Dresses, smocks, Hoover aprons, and pyjamas. 296,139; July 26; Serial No. 324,891; published May 3, 1932. Class 39.

Krause, Chas. A., Milling Co., Milwaukee, Wis. Gelatinized wheat flour. 296,117; July 26; Serial No. 325,660; published May 10, 1932. Class 5.

La Payne, Rex, and C. F. Blake, Glendale, Calif. Frankfurter, weinerwurst, hamburger, etc., sandwiches. 296,149; July 26; Serial No. 324,713; published May 10, 1932. Class 46.

Lawndale Garment Company, Chicago, Ill. House dresses and silk underwear. 296,108; July 26; Serial No. 325,147; published May 10, 1932. Class 39.

Leather Products, Inc., Sheboygan, Wis. Horse boots, track harness, pacing hopples, etc. 296,178; July 26. Class 3.

Leonard Seed Co., Chicago, Ill. Sets of onion bulbs for planting. 296,131; July 26; Serial No. 324,144; published May 3, 1932. Class 1.

Les Corsets Sirene Paris, Societe Anonyme, Paris, France. Corsets, corset belts, and brassières. 296,133; July 26; Serial No. 324,474; published May 3, 1932. Class 39.

Lorch Manufacturing Company, Dallas, Tex. Frocks. 296,113; July 26; Serial No. 325,335; published May 3, 1932. Class 39.

Lorch Manufacturing Company, Dallas, Tex. Wash frocks. 296,120; July 26; Serial No. 325,336; published May 3, 1932. Class 39.

Martin Rocking Fifth Wheel and Trailer Company, Westfield, Mass. Fifth wheels and trailer wheels. 296,148; July 26; Serial No. 322,054; published May 10, 1932. Class 19.

McCormick, J. H., & Co., Williamsport, Pa. Fans and blowers, nozzles, etc. 296,142; July 26; Serial No. 324,718; published May 3, 1932. Class 34.

Midway Chemical Company, Chicago, Ill. Shoe polish. 296,176; July 26. Class 4.

Mogaco Laboratories, Buffalo, N. Y. Fluid treatment preparation for cleaning and eliminating rust, etc. 296,190; July 26. Class 6.

Mulligan, George E., Albany, N. Y. Fabric bags. 296,145; July 26; Serial No. 324,850; published May 3, 1932. Class 2.

Munsingwear Corporation, The, Minneapolis, Minn. Underwear. 296,165; July 26; Serial No. 325,593; published May 10, 1932. Class 39.
National Department Stores, Inc., New York, N. Y. Hosiery. 296,106; July 26; Serial No. 325,072; published May 3, 1932. Class 39.
Neustadter Bros., San Francisco, Calif. Beach and sport pants. 296,121; July 26; Serial No. 325,341; published May 3, 1932. Class 39.
New Idea Spreader Company, The, Coldwater, Ohio. Internal combustion engines. 296,185; July 26. Class 23.
Oklahoma City Mill & Elevator Company, Oklahoma City, Okla. Wheat flour. 296,124; July 26; Serial No. 319,150; published May 10, 1932. Class 46.
Oneida Community Limited, Oneida, N. Y. Chests, cabinets, and rolls for silverware. 296,102; July 26; Serial No. 325,373; published May 10, 1932. Class 2.
Pacific Manufacturing Co., Inc., Seattle, Wash. Fruit butter. 296,174; July 26. Class 46.
Paul, Richard, Inc., Los Angeles, Calif. Stocking feet. 296,166; July 26; Serial No. 325,527; published May 10, 1932. Class 39.
Pelham, Millie B., Clinton, Iowa. Flours for pie crust and biscuits. 296,159; July 26; Serial No. 315,498; published Oct. 20, 1931. Class 46.
Pepperell Manufacturing Company, Boston, Mass. Blankets. 296,169; July 26; Serial No. 325,529; published May 10, 1932. Class 42.
Perkins, Charles E., Mount Dora, Fla., and Milford, Conn. Boat bottom paint. 296,180; July 26. Class 16.
Petroleum Engineering Corporation, Springfield, Mass. Oil range burners. 296,143; July 26; Serial No. 324,851; published May 3, 1932. Class 34.
Pick-Barth, Albert, Company, Inc., New York, N. Y., and Chicago, Ill. Trays of fibrous composition. 296,153; July 26; Serial No. 310,575; published May 3, 1932. Class 2.
Pillsbury Flour Mills Company, Minneapolis, Minn. Flour. 296,111; July 26; Serial No. 325,298; published May 10, 1932. Class 46.
Pillsbury Flour Mills Company, Minneapolis, Minn. Flour. 296,114; July 26; Serial No. 325,359; published May 3, 1932. Class 46.
Pillsbury Flour Mills Company, Minneapolis, Minn. Flour. 296,115; July 26; Serial No. 325,343; published May 3, 1932. Class 46.
Pohatcong Hosiery Mills, Inc., Washington, N. J. Hosiery. 296,112; July 26; Serial No. 325,299; published May 10, 1932. Class 39.
Reed, Willard H., doing business as W. H. Reed & Co., Atlanta, Ga. Sanitary rubber protectors. 296,181; July 26. Class 44.
Rollins Hosiery Mills, Inc., Des Moines, Iowa. Ladies' hosiery. 296,126; July 26; Serial No. 322,232; published May 3, 1932. Class 39.
Rosenberg Bros. & Co., San Francisco, Calif. Dried fruits. 296,188; July 26. Class 46.
Sauter Brothers, New York, N. Y. Binders, kimonos, gertrudes, etc. 296,140; July 26; Serial No. 324,905; published May 10, 1932. Class 39.
Scolding Locks Corporation, Appleton, Wis. Hair pins of the "bobby" pin type. 296,156; July 26; Serial No. 312,864; published May 3, 1932. Class 40.
Société Anonyme des Etablissements Kalamazoo, Paris, France. Binders for loose sheets, cards or the like. 296,177; July 26. Class 37.
Sterno Corporation, New York, N. Y. Stoves, heaters, burners, etc. 296,137; July 26; Serial No. 324,541; published May 10, 1932. Class 34.
Sun Mix Corporation. (See Goodwin, Frederick P.)
Surface Combustion Corporation, Toledo, Ohio. Water heaters. 296,160; July 26; Serial No. 324,573; published May 10, 1932. Class 34.
Truax-Traer Coal Company, Chicago, Ill. Coal. 296,132; July 26; Serial No. 324,200; published May 10, 1932. Class 1.
Utility Products, Inc., Rockford, Ill. Aluminum cooking utensils, coffee urns, roasters, etc. 296,136; July 26; Serial No. 323,073; published May 3, 1932. Class 13.
Vanity Fair Silk Mills, Reading, Pa. Knitted and textile underwear and hosiery. 296,127; July 26; Serial No. 322,868; published May 3, 1932. Class 39.
Victaulic Company of America, Jersey City, N. J. Pipe couplings. 296,162; July 26; Serial No. 325,445; published May 3, 1932. Class 13.
Victor Balata & Textile Belting Co., Easton, Pa. Solid woven belting. 296,184; July 26. Class 35.
Western Maryland Dairy Corporation, doing business as Fairfield Western Maryland Dairy, Baltimore, Md. Poultry and stock feeding food. 296,105; July 26; Serial No. 325,053; published May 10, 1932. Class 46.
Woolsey, Leon H., doing business as Leon Woolsey, Oakland, Calif. Suits and overcoats. 296,122; July 26; Serial No. 322,530; published May 10, 1932. Class 39.
Youngstown Pressed Steel Company, The, Warren, Ohio. Enameled drainboards. 296,141; July 26; Serial No. 323,925; published May 10, 1932. Class 13.
Zildjian, Avedis, Company, Norfolk Downs, Mass. Cymbals. 296,179; July 26. Class 36.

LIST OF REGISTRANTS OF LABELS

Am-Bro Co., The, Lawton, Okla. Brown's Lotion. For Lotion. 40,962; July 26.
Benson, E. C., Chicago, Ill. Vit-Rex Four-Hour Enamel. For Enamel. 40,963; July 26.
Fead, John L., & Sons, Port Huron, Mich. Fead-Real-Rib. For Hosiery. 40,964; July 26.
Fead, John L., & Sons, Port Huron, Mich. Fead All-Sport Sox. For Hosiery. 40,965; July 26.
Gelfand, Samuel, doing business as Palestine Products Company, New York, N. Y. "Carmel" Palestine Pure Bee Honey. For Pure Bee Honey. 40,966; July 26.
Ivanhoe Foods Inc., Auburn, N. Y. Sealed Ivanboe. For Mayonnaise. 40,967; July 26.
Jewel Tea Co., Inc., Central Valley, N. Y., and Barrington, Ill. Jewel Tooth Paste. For Tooth Paste. 40,968; July 26.
Lipson & Solomon, Atlantic City, N. J. Phillip's Famous Salt Water Taffy. For Salt Water Taffy. 40,969; July 26.
Palestine Products Company. (See Gelfand, Samuel.)
Pharis Tire and Rubber Company, The, Newark, Ohio. The Pharis First Line Certificate. For Tires. 40,970; July 26.
Sutherland Paper Company, Kalamazoo, Mich. Supreme. For Ice Cream. 40,971; July 26.
Webster, Warren, & Company, Camden, N. J. Webster Boiler Protector. For Boiler Protectors. 40,972; July 26.

LIST OF REGISTRANTS OF PRINTS

Arden, Elizabeth, Inc., doing business as Elizabeth Arden, New York, N. Y. The World's Most Successful Trilogy—A Lovely Face . . . A Slender Figure . . . A Clever Wardrobe. For Illusion Powder, Rouge Amoretta, Eye Sha-Do, Eyelash Cosmetique, and Lipsticks. 13,775; July 26.
Fisher, Norman A., doing business as Fisher Products Co., Detroit, Mich. Try These Few Simple Tests with Liquid-gla-ss Yourself. For Automobile Varnish and Paint Enamel. 13,776; July 26.
Fisher, Norman A., doing business as Fisher Products Co., Detroit, Mich. Fisher's Liq-uid-gla-ss. For Automobile Varnish and Paint Enamel. 13,777; July 26.
Pennzoil Company, The, Oil City, Pa. Specialized Lubrication Chart. For Lubricating Oils. 13,778; July 26.
Tourner, Chester F., Bloomington, Ind. Anne Thrift Says . . . Save with Good-Will Thrift Tickets . . . . For Thrift Tickets. 13,779; July 26.
Tourner, Chester F., Bloomington, Ind. Anne Thrift Says—I Can Run my Kitchen a Month on . . . . Good-Will-Thrift Tickets. For Thrift Tickets. 13,780; July 26.
Tourner, Chester F., Bloomington, Ind. Anne Thrift Says—You Can Buy Your Fuel at the Regular Market Prices . . . . For Thrift Tickets. 13,781; July 26.
Tourner, Chester F., Bloomington, Ind. Anne Thrift Says—Nickels Make Dollars . . . Good-Will-Thrift Saves Both for You. For Thrift Tickets. 13,782; July 26.
Tourner, Chester F., Bloomington, Ind. Anne Thrift Says: Good-Will-Thrift is Excellent Training for the Children. For Thrift Tickets. 13,783; July 26.
Tourner, Chester F., Bloomington, Ind. Anne Thrift Says: Let Every Member of your Family Carry a Good-Will-Thrift Book. For Thrift Tickets. 13,784; July 26.
Tourner, Chester F., Bloomington, Ind. Anne Thrift Says: Good-Will Thrift Means Free Gasoline for Two Months. For Thrift Tickets. 13,785; July 26.
Tourner, Chester F., Bloomington, Ind. Anne Thrift Says: Nickels Make Dollars in a Hurry on the Good-Will-Thrift Plan. For Thrift Tickets. 13,786; July 26.
Tourner, Chester F., Bloomington, Ind. Anne Thrift Says: It's Hard to Train Men to be Thrifty. For Thrift Tickets. 13,787; July 26.
Tourner, Chester F., Bloomington, Ind. Anne Thrift Says—You Can Save Thousands of Pennies . . . For Thrift Tickets. 13,788; July 26.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Consolidation Coal Company. 296,110; July 26; Serial No. 325,283; published May 3, 1932.
Coal. French Coal Company. 296,119; July 26; Serial No. 325,684; published May 10, 1932.
Coal. Truax-Traer Coal Company. 296,132; July 26; Serial No. 324,200; published May 10, 1932.
Foxes, Live. Gold Star Fur Ranch Inc. 296,116; July 26; Serial No. 325,468; published May 10, 1932.
Sets of onion bulbs for planting. Leonard Seed Co. 296,131; July 26; Serial No. 324,144; published May 3, 1932.
Soil. J. Jordan. 296,192; July 26.

CLASS 2

Bags, Fabric. G. E. Mulligan. 296,145; July 26; Serial No. 324,850; published May 3, 1932.
Chests, cabinets, and rolls for silverware. Oneida Community Limited. 296,102; July 26; Serial No. 325,373; published May 10, 1932.
Trays of fibrous composition. Albert Pick-Barth Company. 296,153; July 26; Serial No. 310,575; published May 3, 1932.

CLASS 3

Horse boots, track harness, pacing hopples, etc. Leather Products, Inc. 296,178; July 26.

CLASS 4

Polish, Shoe. Midway Chemical Company. 296,176; July 26.

CLASS 5

Cementing medium. Th. Goldschmidt A.-G. 296,184; July 26; Serial No. 324,665; published May 10, 1932.
Gelatinized wheat flour used as an adhesive. Chas. A. Krause Milling Co. 296,117; July 26; Serial No. 325,660; published May 10, 1932.
Paste for adhesive purposes, Dry. Cook Paint and Varnish Company. 296,104; July 26; Serial No. 325,062; published May 3, 1932.

CLASS 6

Fluid treatment, Preparation. Mogaco Laboratories. 296,190; July 26.
Preparation for killing rats and mice. S. Harris. 296,182; July 26.

CLASS 13

Aeroplane supplies and equipment. Aero Supply Manufacturing Co. 296,157; July 26; Serial No. 314,135; published May 3, 1932.
Aluminum cooking utensils, coffee urns, roasters, etc. Utility Products, Inc. 296,136; July 26; Serial No. 323,073; published May 3, 1932.
Drainboards, Enameled. Youngstown Pressed Steel Company. 296,141; July 26; Serial No. 323,925; published May 10, 1932.
Fence posts, Metal. American Steel and Wire Company of New Jersey. 296,161; July 26; Serial No. 325,506; published May 10, 1932.
Nozzles, nipples, strainers, etc. Fenwick-Reddaway Mfg. Co. 296,163; July 26; Serial No. 325,367; published May 10, 1932.
Pipe couplings. Victaulic Company of America. 296,162; July 26; Serial No. 325,445; published May 3, 1932.
Regulators, Gas pressure. D & S Gasaver Co. 296,154; July 26; Serial No. 311,374; published May 3, 1932.

CLASS 16

Paint, Boat bottom. C. E. Perkins. 296,180; July 26.

CLASS 17

Tobacco. Governor and Company of Adventurers of England Trading into Hudson's Bay. 296,152; July 26; Serial No. 309,973; published May 10, 1932.

CLASS 19

Wheels and trailer wheels, Fifth. Martin Rocking Fifth Wheel and Trailer Company. 296,148; July 26; Serial No. 322,054; published May 10, 1932.

CLASS 21

Batteries, Dry cell. Dictograph Products Company. 296,191; July 26.

CLASS 22

Toy boats. Calwis Industries, Inc. 296,187; July 26.

CLASS 23

Engines, Internal combustion. New Idea Spreader Company. 296,185; July 26.

CLASS 25

Locks. Closure Lock Corporation. 296,103; July 26; Serial No. 325,161; published May 13, 1932.

CLASS 26

Apparatus for analyzing metal alloys. Adam Hilger, Limited. 296,171; July 26; Serial No. 321,537; published Jan. 26, 1932.

CLASS 34

Burners, Oil range. Petroleum Engineering Corporation. 296,143; July 26; Serial No. 324,851; published May 3, 1932.
Fans and blowers, nozzles, etc. J. H. McCormick & Co. 296,142; July 26; Serial No. 324,718; published May 3, 1932.
Fuel burning devices. Hart Oil Burner Corporation. 296,155; July 26; Serial No. 312,429; published May 10, 1932.
Heaters, Water. Surface Combustion Corporation. 296,160; July 26; Serial No. 324,573; published May 10, 1932.
Stoves, heaters, burners, etc. Sterno Corporation. 296,137; July 26; Serial No. 324,541; published May 10, 1932.

CLASS 35

Belting, Solid woven. Victor Balata & Textile Belting Co. 296,184; July 26.

CLASS 36

Cymbals. Avedis Zildjian Company. 296,179; July 26.

CLASS 37

Binders for loose sheets, etc. Société Anonyme des Etablissements Kalamazoo. 296,177; July 26.

CLASS 39

Binders, kimonos, gertrudes, etc. Sauter Brothers. 296,140; July 26; Serial No. 324,905; published May 10, 1932.
Corsets, brassières, and underwear. F. P. Hoy, Inc. 296,109; July 26; Serial No. 325,171; published May 3, 1932.
Corsets, corset belts, and brassières. Les Corsets Sirene Paris, Societe Anonyme. 296,133; July 26; Serial No. 324,474; published May 3, 1932.
Dresses and frocks. Hartman, Hurvitz & Schakne, Inc. 296,130; July 26; Serial No. 323,940; published May 10, 1932.
Dresses and silk underwear, House. Lawndale Garment Company. 296,108; July 26; Serial No. 325,147; published May 10, 1932.
Dresses, coats, and sweater suits. L. Bamberger & Co. 296,151; July 26; Serial No. 309,956; published May 10, 1932.
Dresses, Coats, suits, etc. Goldring Neiman Corporation. 296,125; July 26; Serial No. 320,806; published Mar. 15, 1932.
Dresses, smocks, Hoover aprons, and pyjamas. W. Kotkes & Son. 296,139; July 26; Serial No. 324,891; published May 3, 1932.
Frocks. Lorch Manufacturing Company. 296,113; July 26; Serial No. 325,335; published May 3, 1932.
Frocks, Wash. Lorch Manufacturing Company. 296,120; July 26; Serial No. 325,336; published May 3, 1932.
Hosiery. Hanes Hosiery Mills Co. 296,123; July 26; Serial No. 325,401; published May 3, 1932.
Hosiery. National Department Stores, Inc. 296,106; July 26; Serial No. 325,072; published May 3, 1932.
Hosiery. Pohatcong Hosiery Mills, Inc. 296,112; July 26; Serial No. 325,299; published May 10, 1932.
Hosiery and leather shoes. Edison Brothers Stores, Inc. 296,173; July 26.
Hosiery, Ladies'. Griffin Hosiery Mills. 296,147; July 26; Serial No. 324,918; published May 3, 1932.
Hosiery, Ladies'. Rollins Hosiery Mills, Inc. 296,126; July 26; Serial No. 322,232; published May 3, 1932.
Hosiery, Women's. Artcraft Silk Hosiery Mills, Inc. 296,146; July 26; Serial No. 324,980; published May 3, 1932.
Overcoats, topcoats, cloaks and capes, etc. Continental Mills, Inc. 296,118; July 26; Serial No. 325,682; published May 10, 1932.
Pants, Beach and sport. Neustadter Bros. 296,121; July 26; Serial No. 325,341; published May 3, 1932.
Shirts, blouses and pajamas. Henry Glass & Co. 296,158; July 26; Serial No. 315,399; published May 3, 1932.
Shirts, windbreakers, blouses, etc. H. D. Bob Company. 296,129; July 26; Serial No. 323,563; published Apr. 12, 1932.
Stocking feet. Richard Paul Inc. 296,166; July 26; Serial No. 325,527; published May 10, 1932.
Suits and overcoats. L. H. Woolsey. 296,122; July 26; Serial No. 322,530; published May 10, 1932.
Suits, coats, dresses, etc. Goldfield & Newman. 296,138; July 26; Serial No. 324,787; published May 10, 1932.
Underwear. Munsingwear Corporation. 296,165; July 26; Serial No. 325,593; published May 10, 1932.
Underwear and hosiery. Vanity Fair Silk Mills. 296,127; July 26; Serial No. 322,868; published May 3, 1932.

Underwear, Women's. Julius Kayser & Co. 296,167; July 26; Serial No. 325,472; published May 3, 1932.
Waists, Children's. Amazon Knitting Company. 296,164; July 26; Serial No. 325,632; published May 10, 1932.

CLASS 40

Collar stiffening and retaining devices, and for collar and necktie holders or stays. W. O. Dailey Manufacturing Co. 296,128; July 26; Serial No. 323,111; published May 10, 1932.
Hairpins. Hump Hairpin Manufacturing Company. 296,189; July 26.
Pins of the "Bobby" pin type, Hair. Scolding Locks Corporation. 296,156; July 26; Serial No. 312,864; published May 3, 1932.

CLASS 42

Blankets. Pepperell Manufacturing Company. 296,169; July 26; Serial No. 325,529; published May 10, 1932.
Cotton, rayon, etc., piece goods, cotton sheets, and pillow cases. Independent Wholesale Dry Goods Ass'n. Inc. 296,135; July 26; Serial No. 322,017; published May 10, 1932.
Piece goods, Absorbent. Chicopee Manufacturing Corporation. 296,144; July 26; Serial No. 324,988; published May 10, 1932.
Woolen piece goods. Edgar K. Frank & Co. 296,186; July 26.

CLASS 43

Yarns. Hanes Hosiery Mills Co. 296,170; July 26; Serial No. 325,651; published May 10, 1932.

CLASS 44

Sanitary rubber protectors. W. H. Reed. 296,181; July 26.

CLASS 46

Butter. Isaly Dairy Company. 296,183; July 26.
Butter, Fruit. Pacific Manufacturing Co. 296,174; July 26.
Feed, Poultry. F. P. Goodwin. 296,150; July 26; Serial No. 281,144; published May 10, 1932.
Flour. Pillsbury Flour Mills Company. 296,111; July 26; Serial No. 325,298; published May 10, 1932.
Flour. Pillsbury Flour Mills Company. 296,114; July 26; Serial No. 325,359; published May 3, 1932.
Flour. Pillsbury Flour Mills Company. 296,115; July 26; Serial No. 325,843; published May 3, 1932.
Flour, Wheat. Oklahoma City Mill & Elevator Company. 296,124; July 26; Serial No. 319,150; published May 10, 1932.
Flours, Prepared. M. B. Pelham. 296,159; July 26; Serial No. 315,498; published Oct. 20, 1931.
Food, Poultry and stock feeding. Western Maryland Dairy Corporation. 296,105; July 26; Serial No. 325,053; published May 10, 1932.
Fruits, Dried. Rosenberg Bros. & Co. 296,188; July 26.
Oysters. Cedar Island Oyster Company. 296,172; July 26; Serial No. 324,506; published May 17, 1932.
Sandwiches, Frankfurter, weinerwurst, hamburger, etc. R. La Payne and C. F. Blake. 296,149; July 26; Serial No. 324,713; published May 10, 1932.

CLASS 50

Mats, Floor. L. T. Hand. 296,175; July 26.

LIST OF LABELS

Brown's Lotion. For Lotion. Am-Bro Co. 40,962; July 26.
"Carmel" Palestine Pure Bee Honey. For Pure Bee Honey. S. Gelfand. 40,966; July 26.
Fead All-Sport Sox. For Hosiery. John L. Fead & Sons. 40,965; July 26.
Fead Real-Rib. For Hosiery. John L. Fead & Sons. 40,964; July 26.
Jewel Tooth Paste. For Tooth Paste. Jewel Tea Co. 40,968; July 26.
Phillip's Famous Salt Water Taffy. For Salt Water Taffy. Lipson & Solomon. 40,969; July 26.
Sealed Ivanhoe. For Mayonnaise. Ivanhoe Foods Inc. 40,967; July 26.
Supreme. For Ice Cream. Sutherland Paper Company. 40,971; July 26.
The Pharis First Line Certificate. For Tires. Pharis Tire and Rubber Company. 40,970; July 26.
Vit-Rex Four-Hour Enamel. For Enamel. E. C. Benson. 40,963; July 26.
Webster Boiler Protector. For Boiler Protectors. Warren Webster & Company. 40,972; July 26.

LIST OF PRINTS

Anne Thrift Says: Good-Will-Thrift is Excellent Training for the Children. For Thrift Tickets. C. F. Tourner. 13,783; July 26.
Anne Thrift Says: Good-Will Thrift Means Free Gasoline for Two Months. For Thrift Tickets. C. F. Tourner. 13,785; July 26.
Anne Thrift Says—I can run my Kitchen a Month on . . . Good-Will-Thrift Tickets. For Thrift Tickets. C. F. Tourner. 13,780; July 26.
Anne Thrift Says: It's Hard to train Men to be Thrifty. For Thrift Tickets. C. F. Tourner. 13,787; July 26.
Anne Thrift Says: Let Every Member of your Family carry a Good-Will-Thrift Book. For Thrift Tickets. C. F. Tourner. 13,784; July 26.
Anne Thrift Says—Nickels Make Dollars . . . Good-Will-Thrift Saves Both for You. For Thrift Tickets. C. F. Tourner. 13,782; July 26.
Anne Thrift Says: Nickels Make Dollars in a Hurry on the Good-Will-Thrift Plan. For Thrift Tickets. C. F. Tourner. 13,786; July 26.
Anne Thrift Says . . . Save with Good-Will Thrift Tickets . . . For Thrift Tickets. C. F. Tourner. 13,779; July 26.
Anne Thrift Says—You can buy your Fuel at the Regular Market Prices . . . For Thrift Tickets. C. F. Tourner. 13,781; July 26.
Anne Thrift Says—You can save Thousands of Pennies . . . For Thrift Tickets. C. F. Tourner. 13,788; July 26.
Fisher's Liq-uid-gla-ss. For Automobile Varnish and Paint Enamel. N. A. Fisher. 13,777; July 26.
Specialized Lubrication Chart. For Lubricating Oils. Pennsoil Company. 13,778; July 26.
The World's Most Successful Trilogy—A Lovely Face . . . A Slender Figure . . . A Clever Wardrobe. For Illusion Powder, Rouge, Amoretta, Eye Sha-Do, Eyelash Cosmetique and Lipsticks. Elizabeth Arden Inc. 13,775; July 26.
Try These Few Simple Tests with Liq-uid-gla-ss Yourself. For Automobile Varnish and Paint Enamel. N. A. Fisher. 13,776; July 26.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 26TH DAY OF JULY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbott, Edward J., assignor to Abbott Machine Company, Wilton, N. H. Knot tying. 1,868,682; July 26.
Abbott Machine Company. (See Abbott, Edward J., assignor.)
Abraham, Samuel, New York, N. Y. Combination dental appliance. 1,868,653; July 26.
Addressograph Company. (See Thompson, Herbert L., assignor.)
Adelson, Samuel L. (See Green, W. H., and Adelson.)
Agee, George M., Owensboro, Ky. Attachment for fluid meters. 1,869,037; July 26.
Ahlmann, Nikolai, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Attempering finely divided solid material. 1,868,512; July 26.
Ahrens, Edwin J., Cincinnati, Ohio, assignor, by mesne assignments, to Rueben Eli Ottenheimer, Baltimore, Md. Refrigerating apparatus. 1,868,961; July 26.
Ainslie, Thomas Dow, Metuchen, N. J., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company. Process and apparatus for treating textile materials. 1,868,513; July 26.
Ajax Manufacturing Company, The. (See Criley, William W., assignor.)
Aktiebolaget Gerh. Arehns Mekaniska Verkstad. (See Örström, Gustaf, assignor.)
Algemeene Kunstzijde Unie N.-V. (See Engel, Antonie J., assignor.)
Allen, Everett B., Kenmore, and S. B. Howe, Buffalo, assignors to Weatherbest Stained Shingle Company, North Tonawanda, N. Y. Wrapper for packages. 1,869,127; July 26.
Allen, John W., Los Angeles, Calif. Room service table. 1,869,001; July 26.
Allen, Samuel C., assignor, by mesne assignments to Dayton Racquet Company, Inc., Dayton, Ohio. Tennis racket. 1,869,038; July 26.
Aluminum Colors Incorporated. (See Bengston, Helmer, assignor.)
Aluminum Colors Incorporated. (See Gower, Charles H. R., assignor.)
Aluminum Company of America. (See Barnitt, Jesse B., assignor.)
Ambuiger, Marion S., Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio. Metal heating furnace. 1,868,866; July 26.
American Bicheroux Company, The. (See Bicheroux, Max, assignor.)
American Bicheroux Company, The. (See Dorsey, Vernon M., assignor.)
American Bicheroux Company, The. (See Von Reis, Lambert, assignor.)
American Buckle Company, The. (See Salisbury, Jessup, assignor.)
American Can Company. (See Hothersall, John M., assignor.)
American Electric Heating Company. (See Gannon, J. E., and Winter, assignors.)
American Engineering Company. (See Peck, Herbert A., assignor.)
American Farm Machinery Company. (See Loomis, Allen E., assignor.)
American Fibre Corporation. (See Nordstrom, Gustav E., assignor.)
American Iron & Machine Works Company. (See Hembree, assignor.)
American Iron and Machine Works Company. (See Myracle, Hobart M., assignor.)
American Rolling Mill Company, The. (See Amburgy, Marion S., assignor.)
American Sheet and Tin Plate Company. (See Beach, L. L., and Wright, assignors.)
American Smelting and Refining Company. (See Hughes, S., and Teats, assignors.)
American Smelting and Refining Company. (See Teats, Roscoe, assignor.)
American Steel and Wire Company of New Jersey, The. (See Gregory, Henry, assignor.)
American Steel and Wire Company of New Jersey, The. (See Skinner, Marion Chester, assignor.)
American Telephone and Telegraph Company. (See Bascom, Henry M., assignor.)
American Telephone and Telegraph Company. (See Lane, Elmer Z., assignor.)
American Telephone and Telegraph Company. (See Phelps, Henry E., assignor.)
Anchor Cap & Closure Corporation. (See Podel, Abraham, assignor.)
Anderson, August, deceased, Ida Anderson, administratrix of said August Anderson, Shoshoni, Wyo. Tension device. 1,868,558; July 26.
Anderson, Carl E., East Orange, and C. E. Peterson, Upper Montclair, assignors to Eastern Tool & Mfg. Co., Bloomfield, N. J. Clip. 1,868,867; July 26.
Anderson, Carl J., Chicago, Ill. Emergency switch. 1,869,330; July 26.
Anderson, Clarence A., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Test set. 1,868,960; July 26.
Anderson, Ida, administratrix. (See Anderson, August.)
Anderson, Sidney E., Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Transformer. 1,869,180; July 26.
Anderson, Waldemar F. (See Spiro, H., assignor, and Anderson.)
Andrews, Roland S. (See Broadhead, C. F., and Andrews.)
Anstiss, George P., Oak Park, assignor to G. S. Blakeslee & Co., Cicero, Ill. Conveyer. 1,868,514; July 26.
Apex Electrical Manufacturing Company, The. (See Frantz, Walter A., assignor.)
Apex Electrical Manufacturing Company, The. (See Rackleyeft, John W., assignor.)
App, Andrew J., assignor to L. Birkel and Sons, Louisville, Ky. Pan. 1,869,234; July 26.
Arcturus Radio Tube Company. (See Harding, Robert, jr., assignor.)
Arcturus Radio Tube Company. (See Horn, C. A., and Heltzman, assignors.)
Arena, Frank, Watertown, Mass. Bottle. Des. 87,424; July 26.
Armagnat, Pierre J., Bethune, France. Weighing device for use in traveling cranes. 1,868,683; July 26.
Armington, Arthur P., Willoughby, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio. Tread linkage. 1,869,002; July 26.
Arthur, James L. (See Fitzsimmons, J. T., and Arthur.)
Asahi Kenshoku Kabushiki-Kaisha. (See Tachikawa, Shozo, assignor.)
Ash, Charles S., Birmingham, Mich. Adjustable gun stock. 1,869,086; July 26.
Ash, Nelson T., Saugus, Mass. Frame for screening and the like. 1,868,488; July 26.
Ashley, John A., Chicago, Ill. Display apparatus. 1,869,003; July 26.
Asleson, Hans J., Minneapolis, Minn. Grating. 1,868,654; July 26.
Associated Electric Laboratories, Inc. (See Anderson, Clarence A., assignor.)
Associated Electric Laboratories, Inc. (See Crocker, Thomas F., assignor.)
Associated Electric Laboratories, Inc. (See Lomax, Clarence E., assignor.)
Associated Electric Laboratories, Inc. (See Nelson, Martin L., assignor.)
Associated Electric Laboratories, Inc. (See Saunders, Norman H., assignor.)
Associated Electric Laboratories, Inc. (See Tharp, Victor S., assignor.)
Atkinson, Ralph W., Perth Amboy, N. J., assignor, by mesne assignments, to General Cable Corporation. High voltage bushing. 1,868,962; July 26.
Atterbury, Oscar W., San Antonio, Tex. Grass shears. 1,869,295; July 26.
Aull, Harry. (See Decker, J. C., and Aull.)
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Compensating strut type insulation. 1,868,479; July 26.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Current transformer. 1,868,481; July 26.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Electric switch. 1,868,482; July 26.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Transformer. 1,868,483; July 26.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Transformer. 1,868,484; July 26.
Auto Research Corporation. (See Bijur, Joseph, assignor.)
Automatic Electric Company. (See Turney, Trevor H., assignor.)
Automatic Sprinkler Company of America. (See Lowe, Ernest A., assignor.)
Automatic Sprinkler Company of America. (See Lowe, E. A., and Hamilton, assignors.)
Automobile Storage Elevator Company, The. (See Goddard, Charles Franklin, assignor.)

Automotive Fan & Bearing Co. (See Gardner, Archibald D., assignor.)
Avery, W. & T., Limited. (See Timson, William, assignor.)
B. H. P. By-Products Proprietary Limited. (See Broadhead, C. F., and Andrews, assignors.)
Backstay Welt Company. (See Barr, Glen G., assignor.)
Badger, Floyd E., assignor to Detroit Steel Products Company, Detroit, Mich. Device for lubricating vehicle leaf springs and shock absorber therefor. 1,868,789; July 26.
Bahima, Puig, Jose M. and S. J. Gascon, Barcelona, Spain. Improved warping frame. 1,869,277; July 26.
Bähr, Hans, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Franfort-on-the-Main, Germany. Production of nitric and sulphuric acid. 1,868,868; July 26.
Bailey, James, assignor to Corning Glass Works, Corning, N. Y. Handling glass articles. 1,868,480; July 26.
Bailey, William M. (See Proctor, J. A., and Bailey.)
Ballantine, Stuart, Mountain Lakes, assignor to Boonton Research Corporation, Boonton, N. J. Automatic control for audion amplifiers. 1,869,331; July 26.
Bancel, Paul A., Montclair, assignor to Ingersoll-Rand Company, Jersey City, N. J. Condenser. 1,868,622; July 26.
Barber, Harry H., assignor to Barber Greene Company, Aurora, Ill. Scraper for ditching machines. 1,868,515; July 26.
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Multicolor rotary printing press. 1,868,963; July 26.
Barnitt, Jesse B., assignor to Aluminum Company of America, Pittsburgh, Pa. Adsorbent material and producing the same. 1,868,869; July 26.
Barr, Glen G., assignor to Backstay Welt Company, Union City, Ind. Gasket. 1,869,039; July 26.
Barr, Walter A., Fort Wayne, Ind., assignor to The Western Gas Construction Company. Apparatus for charging fuel. 1,868,870; July 26.
Barry, Garrett J., Toledo, Ohio. Signal system. 1,868,489; July 26.
Bartlett Hayward Company, The. (See Wagner, Frederick H., assignor.)
Bartling, Friedrich, Hugling, Germany. Conservation of unstable, hygroscopic or volatile granular masses. 1,869,235; July 26.
Bascom, Henry M., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Relay. 1,868,559; July 26.
Bassett, Harry P., Cynthiana, Ky. Preparation of cellulose solutions. 1,869,040; July 26.
Bates, Charles J. jr., Englewood, N. J., assignor to The Mosler Safe Company, Hamilton, Ohio. Fireproof joint construction. 1,868,485; July 26.
Batle, Joseph E., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Apparatus for advancing articles through a furnace. 1,868,790; July 26.
Battey, Bryan M., et al. (See Ludlow, Israel, assignor.)
Baughman, George W., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Supplying current to track sections. 1,868,490; July 26.
Baumann, Fritz, Leverkusen-on-the-Rhine, assignor to General Aniline Works, Inc., New York, N. Y. Aluminum lakes of 1.4-dihydroxy-and 1-amino-4- hydroxy-anthraquinone-disulphonic acids. 1,868,593; July 26.
Baumann, Karl, Urmston, England. Evaporator for generating high pressure steam. 1,869,236; July 26.
Bay State Fishing Company. (See Malcolm, John C., assignor.)
Bay State Optical Company. (See Nerney, George E., assignor.)
Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Cleansing fluid conveying tube. 1,868,684; July 26.
Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Safety device for rock drills. 1,868,685; July 26.
Beach, Letcher L., and C. G. Wright, Cambridge, Ohio, assignors to American Sheet and Tin Plate Company. Sheet handling apparatus. 1,868,560; July 26.
Beadle, Lynn C., assignor, by mesne assignments, to Timken Silent Automatic Company, Detroit, Mich. Draft stabilizer. 1,868,486; July 26.
Beall, John S. Portland, Oreg. Food preserving cabinet. 1,868,487; July 26.
Beasley, Ira V. (See Leriche W., and Beasley.)
Beasley, Starley F. (See Meadows, Claude C., assignor.)
Beck, William O., Ridgefield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electric test connecter. 1,869,181; July 26.
Becker, Harry G., Albany, N. Y. Driving shoebox oiling mechanism. 1,868,561; July 26.
Beckette, Edmund S. (See Harley, J. J., and Beckette.)
Bedell, Carl E., Sherrard, and A. J. Castle, assignors to Wheeling Steel Corporation, Wheeling, W. Va. Apparatus for rereeling strip metal. 1,869,004; July 26.
Bedford, Burnice D., Schenectady, N. Y., assignor to General Electric Company. Power measuring and telemetering apparatus. 1,869,128; July 26.
Beegle, Raymond E., East St. Louis, Ill. Spike. 1,868,964; July 26.
Behle, Joseph, and C. W. Hodde, assignors to The Murray Company, Dallas, Tex. Heat treating machine. 1,868,812; July 26.
Behrman, Abraham S., Chicago, Ill., assignor, by mesne assignments, to The Permutit Company, New York, N. Y. Base exchange material and preparting same. 1,869,087; July 26.
Beiler, Christian S., Gordonville, Pa. Molasses distributor. 1,869,296; July 26.
Belcher, Daniel, assignor to Bemis Bro. Bag. Co., Minneapolis, Minn. Method of and apparatus for closing and sealing containers. 1,868,686; July 26.
Bell & Howell Company, The. (See Howell, Albert S., assignor.)
Bell Telephone Laboratories, Incorporated. (See Beck, William O., assignor.)
Bell Telephone Laboratories, Incorporated. (See Burr, George W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gray, Frank, assignor.)
Bell Telephone Laboratories, Incorporated. (See Linton, Grant, assignor.)
Bell Telephone Laboratories, Incorporated. (See Marrison, Warren A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Rose, Charles F. P., assignor.)
Bell Telephone Laboratories, Incorporated. (See Sprague, Clarence A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Thuras, Albert L., assignor.)
Belt, William O. (See Woodman, George A., assignor.)
Bemis Bro. Bag Co. (See Belcher, Daniel, assignor.)
Bendix Aviation Corporation. (See Kruesi, Geoffrey G., assignor.)
Bendix Aviation Corporation. (See Leonard, Howard M., assignor.)
Bendix Brake Company. (See Frank, Frederick C., assignor.)
Bendix Brake Company. (See Whitworth, S., and Long, assignors.)
Bengston, Helmar, assignor, by mesne assignments, to Aluminum Colors Incorporated, Indianapolis, Ind. Coated aluminum. 1,869,041; July 26.
Bengston, Helmer, assignor, by mesne assignments, to Aluminum Colors Incorporated, Indianapolis, Ind. Coating aluminum. 1,869,042; July 26.
Bennett, Viola D. (See Clark, Calvin C., assignor.)
Bergstein, Paul, Cincinnati, Ohio. Machine and process for making paper boxes or the like. 1,868,871; July 26.
Bergstein, Samuel, Middletown, Ohio. Paper box making machine. 1,868,872; July 26.
Bergstein, Samuel, Cincinnati, Ohio. Machine for opening cartons or trays. 1,868,873; July 26.
Berkey, Hugh S., assignor of one-fourth to A. L. Segelhorst, Huntington Beach, Calif. Combination pump and gas lift. 1,868,874; July 26.
Berryman, Harry H., Elmhurst, Ill. Transmission clutch. 1,868,905; July 26.
Bertsche, Ralph, jr., assignor to Delco-Remy Corporation, Anderson, Ind. Engine starter. 1,869,088; July 26.
Beyer, Paul P., Park Ridge, assignor to Rand, McNally & Company, Chicago, Ill. Ticket container. 1,869,043; July 26.
Bicheroux, Max., Aachen, Germany, assignor, by mesne assignments, to The American Bicheroeroux Company. Process and apparatus for the manufacture and leering of glass sheets. 1,869,297; July 26.
Bigelow Sanford Carpet Co. (See McCabe, W. F., assignor.)
Bijur, Joseph, New York, N. Y., assignor, by mesne assignments, to Auto Research Corporation. Spring eye suspension. 1,868,687; July 26.
Bilde, Tord Erik Daniel. (See Engberg, Axel O., and Bilde, assignors.)
Birdsall, Wilfred T., Montclair, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Projector. 1,868,722; July 26.
Birkel, L., and Sons. (See App, Andrew J., assignor.)
Black, Knox C., Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Rectifier circuit. 1,869,089; July 26.
Black, Paul T., Dormont, and W. P. Boettner, McKees Rocks, Pa. Drive connection. 1,868,594; July 26.
Blackford Window Glass Company. (See Boush, John A., assignor.)
Blackie, Alfred, London, England. The method and apparatus for the measurement of heat. 1,868,623; July 26.
Blair, Robert S., Stamford, Conn. Claw hammer. 1,869,129; July 26.
Blanchard, Werner J., Hempstead, N. Y., assignor to Curtis Aeroplane & Motor Company, Inc. Propeller. 1,869,182; July 26.
Bley, Gustav. (See Harron, J. A., Diamond, and Bley.)
Bliss, E. W., Company. (See Gueritey, Charles, assignor.)
Block, Joseph, Brooklyn, assignor to Noma Electric Corporation, New York, N. Y. Decorative illuminating device. 1,869,321; July 26.
Blomstrom, Lowell C., assignor to Federal Mogul Corporation, Detroit, Mich. Forming half bearing shells and resultant article. 1,868,655; July 26.
Bock, Wilhelm, Gwynedd, and H. W. Matthews, assignors to Dexdale Hosiery Mills, Lansdale, Pa. Drying and shaping form for hosiery and the like. 1,868,875; July 26.
Boeing Airplane Company. (See Monteith, C. N., and Canney, assignors.)

Boesger, George A., Fairview Village, assignor to The W. W. Sly Manufacturing Company, Cleveland, Ohio. Dust collector. 1,868,876; July 26.
Boettner, William P. (See Black, P. T., and Boettner.)
Bolinders J. & C. G. Mekaniska Verkstads Aktiebolag. (See Österberg, Karl E. R., assignor.)
Bond Electric Corporation. (See Pratt, Goodrich B., assignor.)
Boonton Research Corporation. (See Ballantine, Stuart, assignor.)
Borchert, Fred L., Rockford, Ill. Cutting and coating machine. 1,869,090; July 26.
Borden Company, The. (See McClatchie, John M., assignor.)
Borden Company, The. (See Pennington, Mary E., assignor.)
Borden Company, The. (See Sprague, Alson J., assignor.)
Borden Company, The. (See Stevenson, Albert F., assignor.)
Borg & Beck Company, The. (See Reed, Harold V., assignor.)
Borgstrom, Wilhelm M., and O. E. Haglund, Minneapolis, Minn. Mud shoe for motor vehicle wheels. 1,869,298; July 26.
Boston Wire Stitcher Company. (See Maynard, Arthur H., assignor.)
Botnick, Maurice M., assignor to J. W. Wunsch and S. Wunsch, co-partners doing business as Silent Hoist Winch & Crane Co., Brooklyn, N. Y. Ash hoist and lowering attachment. 1,868,878; July 26.
Boush, John A., assignor to Blackford Window Glass Company, Vincennes, Ind. Glass cutting mechanism. 1,869,044; July 26.
Bowker, Ervin, Fall River, Mass. Bearing bolster for spindles. 1,868,688; July 26.
Bowser, S. F., & Company. (See Gilfith, C. P., and Worden, assignors.)
Boyce, William H., assignor to The Delta-Star Electric Company, Chicago, Ill. Insulating support. 1,868,723; July 26.
Braband, Karl, Berlin, Germany, assignor to General Electric Company. Cathode mounting for mercury vapor devices. 1,869,130; July 26.
Bracht, Harold E., Everett, assignor to J. de Bracht, Bedford, Pa. Pancake turner. 1,869,299; July 26.
Bradley, Samuel S., New York, N. Y., assignor to Manufacturers Aircraft Association, Inc. Medallion or similar article. Des. 87,425; July 26.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake system for automotive vehicles. 1,868,725; July 26.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Brander, William, New York, N. Y. Indicating the derangement of electrical illuminating apparatus. 1,868,689; July 26.
Brander, William, New York, N. Y. Signaling system and apparatus. 1,869,091; July 26.
Breen, William F. (See Fuller, George L., and Breen.)
Brekke, Marshall T., Scarsdale, assignor to Northam Warren Corporation, New York, N. Y. Bottle. Des. 87,426; July 26.
Breneman, Marvin F., Detroit, Mich. Air jack. 1,868,935; July 26.
Breuer, Adam A., Chicago, Ill. Sprayer. 1,868,518; July 26.
Breuer, Adam A., Chicago, Ill. Portable suction cleaner. 1,868,519; July 26.
Brezin, Joseph, assignor to Philadelphia Ice Cream Cone Machinery Company, Philadelphia, Pa. Dispensing device. 1,868,656; July 26.
Bridgeman, Frank J., assignor to The Lake Erie Chemical Company, Cleveland, Ohio. Foot control contact. 1,869,045; July 26.
Brigham, Frederick L., Upper Montclair, N. J. Elastic thread and fabric made therefrom. 1,868,690; July 26.
Bright, Hoyt V. (See Phare, Clinton J., assignor.)
Brightman, Rainald, Manchester, assignor to Imperial Chemical Industries Limited, London, England. Dyeing regenerated cellulose rayon. 1,868,936; July 26.
Briquet Engineering Company, The. (See Willard, Robert E., assignor.)
Brittain, Francis H., Pinner Wood, Pinner, England. Light sensitive device. 1,868,877; July 26.
Broadhead, Charles F., Toorak, and R. S. Andrews, Caulfield, Victoria, assignors to B. H. P. By-Products Proprietary Limited, Melbourne, Victoria, Australia. Treatment of tars. 1,868,879; July 26.
Broadmeyer, Albert, assignor to W. O. Hickok Manufacturing Company, Harrisburg, Pa. Sheet inspecting apparatus. 1,869,300; July 26.
Bronson, Budd, and E. R. Marbach, assignors to The Ohio Rubber Company, Cleveland, Ohio. Making steering wheels. 1,869,332; July 26.
Bronson, Budd, and E. R. Marbach, assignors to The Ohio Rubber Company, Cleveland, Ohio. Making steering wheel inserts. 1,869,333; July 26.
Bronson, Budd, and E. R. Marbach, assignors to The Ohio Rubber Company, Cleveland, Ohio. Making steering wheels. 1,869,334; July 26.
Bronson, Richard W., South Euclid, assignor to The Van Dorn Iron Works Company, Cleveland, Ohio. Swing door keyless locking device. 1,868,491; July 26.
Brooks, Benjamin T., Sound Beach, Conn., and T. T. Gray, Elizabeth, assignors to Gray Processes Corporation, Newark, N. J. Treatment of crude petroleum. 1,868,966; July 26.
Brooks, Robert A., Chicago, Ill. Flushing valve. 1,868,520; July 26.
Brosnan, John J., Worcester, Mass. Strong box. 1,869,302; July 26.
Brown, Archibald S., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Signaling system. 1,868,691; July 26.
Brown, Benjaman W., Hapeville, assignor of one-half to J. Chapman and one-fourth to L. E. Scott Chapman, Atlanta, Ga. Protector mechanism for looms. 1,868,813; July 26.
Brown Company. (See Burke, E., and Sherman, assignors.)
Brown Instrument Company, The. (See Eremeeff, Ivan I., assignor.)
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Browning, Howard D., South Kingstown, R. I. Vehicle control lever. 1,869,301; July 26.
Bruckmann, Heinrich, Essen, Germany. Lamp shade with fabric cover. 1,868,692; July 26.
Brueshaber, Martin W., Chicago, Ill., assignor to Goss Printing Press Company. Printing press. 1,868,880; July 26.
Bruhn, Bruno, Bethlehem, Pa., assignor to the Firm of G. Polysius, Aktiengesellschaft, Dessau, Germany. Producing a lining for a rotary furnace. 1,869,237; July 26.
Brush, Alanson P., Detroit, Mich. Purifier for lubricating systems. 1,868,814; July 26.
Buccicone, Dario, Gary, Ind. Pack opening machine. 1,868,624; July 26.
Bucheister, Paul. assignor to The Sterling Grinding Wheel Company, Tiffin, Ohio. Grinding wheel. 1,868,492; July 26.
Buck, Homer W., assignor to The Morgan Engineering Company, Alliance, Ohio. Car pusher and transfer. 1,869,046; July 26.
Buck, Otto F. (See Venziaff, R. R. W., and Buck.)
Buckeye Incubator Manufacturing Company, The. (See Sturgis, La Verne C., assignor.)
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Burgett, Neal J., assignor to J. W. Hoehl, Detroit, Mich. Enmael metallic tile. 1,868,815; July 26.
Burke, Edmund, Portland, and J. C. Sherman, Gorham, Me., assignors to Brown Company, Berlin, N. H. Laying of multiple fiber conduit. 1,868,881; July 26.
Burr, George W., Long Island City, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Jig. 1,869,184; July 26.
Bush, Albert A., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Chuck. 1,869,322; July 26.
Butler, Benjamin J., Somerville, Mass., assignor, by mesne assignments, to General Electric Company. Electrical condenser. 1,869,131; July 26.
Cahn, Leon J., New York, N. Y. Attachment plug receptacle or similar device. Des. 87,428; July 26.
Caldwell, John F., Houston, Tex. Artificial tooth. 1,869,047; July 26.
Camel Company. (See Heinen, F. C., and Tobin, assignors.)
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Fluid pressure brake. 1,869,048; July 26.
Campbell, Lorn, jr., Lakewood, Ohio. Iceless refrigerator. 1,868,882; July 26.
Campbell, Robert C., Millburn, N. J., assignor, by mesne assignments, to Oliver United Filters Inc., San Francisco, Calif. Continuous filter. 1,868,883; July 26.
Canney, Frank R. (See Monteith, C. N., and Canney.)
Caplin, Samuel. (See Lieberman, J. A., and Caplin.)
Capra, Benedetto, Sacramento, Calif. Safety hook for screen doors. 1,868,693; July 26.

Automotive Fan & Bearing Co. (See Gardner, Archibald D., assignor.)
Avery, W. & T., Limited. (See Timson, William, assignor.)
B. H. P. By-Products Proprietary Limited. (See Broadhead, C. F., and Andrews, assignors.)
Backstay Welt Company. (See Barr, Glen G., assignor.)
Badger, Floyd E., assignor to Detroit Steel Products Company, Detroit, Mich. Device for lubricating vehicle leaf springs and shock absorber therefor. 1,868,789; July 26.
Bahima, Puig, Jose M. and S. J. Gascon, Barcelona, Spain. Improved warping frame. 1,869,277; July 26.
Bähr, Hans, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Franfort-on-the-Main, Germany. Production of nitric and sulphuric acid. 1,868,868; July 26.
Bailey, James, assignor to Corning Glass Works, Corning, N. Y. Handling glass articles. 1,868,480; July 26.
Bailey, William M. (See Proctor, J. A., and Bailey.)
Ballantine, Stuart, Mountain Lakes, assignor to Boonton Research Corporation, Boonton, N. J. Automatic control for audion amplifiers. 1,869,331; July 26.
Bancel, Paul A., Montclair, assignor to Ingersoll-Rand Company, Jersey City, N. J. Condenser. 1,868,622; July 26.
Barber, Harry H., assignor to Barber Greene Company, Aurora, Ill. Scraper for ditching machines. 1,868,515; July 26.
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Multicolor rotary printing press. 1,868,963; July 26.
Barnitt, Jesse B., assignor to Aluminum Company of America, Pittsburgh, Pa. Adsorbent material and producing the same. 1,868,869; July 26.
Barr, Glen G., assignor to Backstay Welt Company, Union City, Ind. Gasket. 1,869,039; July 26.
Barr, Walter A., Fort Wayne, Ind., assignor to The Western Gas Construction Company. Apparatus for charging fuel. 1,868,870; July 26.
Barry, Garrett J., Toledo, Ohio. Signal system. 1,868,489; July 26.
Bartlett Hayward Company, The. (See Wagner, Frederick H., assignor.)
Bartling, Friedrich, Hugling, Germany. Conservation of unstable, hygroscopic or volatile granular masses. 1,869,235; July 26.
Bascom, Henry M., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Relay. 1,868,559; July 26.
Bassett, Harry P., Cynthiana, Ky. Preparation of cellulose solutions. 1,869,040; July 26.
Bates, Charles J. jr., Englewood, N. J., assignor to The Mosler Safe Company, Hamilton, Ohio. Fireproof joint construction. 1,868,485; July 26.
Batie, Joseph E., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Apparatus for advancing articles through a furnace. 1,868,790; July 26.
Battey, Bryan M., et al. (See Ludlow, Israel, assignor.)
Baughman, George W., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Supplying current to track sections. 1,868,490; July 26.
Baumann, Fritz, Leverkusen-on-the-Rhine, assignor to General Aniline Works, Inc., New York, N. Y. Aluminum lakes of 1.4-dihydroxy-and 1-amino-4- hydroxy-anthraquinone-disulphonic acids. 1,868,593; July 26.
Baumann, Karl, Urmston, England. Evaporator for generating high pressure steam. 1,869,236; July 26.
Bay State Fishing Company. (See Malcolm, John C., assignor.)
Bay State Optical Company. (See Nerney, George E., assignor.)
Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Cleansing fluid conveying tube. 1,868,684; July 26.
Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Safety device for rock drills. 1,868,685; July 26.
Beach, Letcher L., and C. G. Wright, Cambridge, Ohio, assignors to American Sheet and Tin Plate Company. Sheet handling apparatus. 1,868,560; July 26.
Beadle, Lynn C., assignor, by mesne assignments, to Timken Silent Automatic Company, Detroit, Mich. Draft stabilizer. 1,868,486; July 26.
Beall, John S. Portland, Oreg. Food preserving cabinet. 1,868,487; July 26.
Beasley, Ira V. (See Leriche W., and Beasley.)
Beasley, Starley F. (See Meadows, Claude C., assignor.)
Beck, William O., Ridgefield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electric test connecter. 1,869,181; July 26.
Becker, Harry G., Albany, N. Y. Driving shoebox oiling mechanism. 1,868,561; July 26.
Beckette, Edmund S. (See Harley, J. J., and Beckette.)
Bedell, Carl E., Sherrard, and A. J. Castle, assignors to Wheeling Steel Corporation, Wheeling, W. Va. Apparatus for rereeling strip metal. 1,869,004; July 26.
Bedford, Burnice D., Schenectady, N. Y., assignor to General Electric Company. Power measuring and telemetering apparatus. 1,869,128; July 26.
Beegle, Raymond E., East St. Louis, Ill. Spike. 1,868,964; July 26.
Behle, Joseph, and C. W. Hodde, assignors to The Murray Company, Dallas, Tex. Heat treating machine. 1,868,812; July 26.
Behrman, Abraham S., Chicago, Ill., assignor, by mesne assignments, to The Permutit Company, New York, N. Y. Base exchange material and preparting same. 1,869,087; July 26.
Beiler, Christian S., Gordonville, Pa. Molasses distributor. 1,869,296; July 26.
Belcher, Daniel, assignor to Bemis Bro. Bag. Co., Minneapolis, Minn. Method of and apparatus for closing and sealing containers. 1,868,686; July 26.
Bell & Howell Company, The. (See Howell, Albert S., assignor.)
Bell Telephone Laboratories, Incorporated. (See Beck, William O., assignor.)
Bell Telephone Laboratories, Incorporated. (See Burr, George W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gray, Frank, assignor.)
Bell Telephone Laboratories, Incorporated. (See Linton, Grant, assignor.)
Bell Telephone Laboratories, Incorporated. (See Marrison, Warren A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Rose, Charles F. P., assignor.)
Bell Telephone Laboratories, Incorporated. (See Sprague, Clarence A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Thuras, Albert L., assignor.)
Belt, William O. (See Woodman, George A., assignor.)
Bemis Bro. Bag Co. (See Belcher, Daniel, assignor.)
Bendix Aviation Corporation. (See Kruesi, Geoffrey G., assignor.)
Bendix Aviation Corporation. (See Leonard, Howard M., assignor.)
Bendix Brake Company. (See Frank, Frederick C., assignor.)
Bendix Brake Company. (See Whitworth, S., and Long, assignors.)
Bengston, Helmar, assignor, by mesne assignments, to Aluminum Colors Incorporated, Indianapolis, Ind. Coated aluminum. 1,869,041; July 26.
Hengston, Helmer, assignor, by mesne assignments, to Aluminum Colors Incorporated, Indianapolis, Ind. Coating aluminum. 1,869,042; July 26.
Bennett, Viola D. (See Clark, Calvin C., assignor.)
Bergstein, Paul, Cincinnati, Ohio. Machine and process for making paper boxes or the like. 1,868,871; July 26.
Bergstein, Samuel, Middletown, Ohio. Paper box making machine. 1,868,872; July 26.
Bergstein, Samuel, Cincinnati, Ohio. Machine for opening cartons or trays. 1,868,873; July 26.
Berkey, Hugh S., assignor of one-fourth to A. L. Segelhorst, Huntington Beach, Calif. Combination pump and gas lift. 1,868,874; July 26.
Berryman, Harry H., Elmhurst, Ill. Transmission clutch. 1,868,965; July 26.
Bertsche, Ralph, jr., assignor to Delco-Remy Corporation, Anderson, Ind. Engine starter. 1,869,088; July 26.
Beyer, Paul P., Park Ridge, assignor to Rand, McNally & Company, Chicago, Ill. Ticket container. 1,869,043; July 26.
Bicheroux, Max., Aachen, Germany, assignor, by mesne assignments, to The American Bicheroeroux Company. Process and apparatus for the manufacture and leering of glass sheets. 1,869,297; July 26.
Bigelow Sanford Carpet Co. (See McCabe, W. F., assignor.)
Bijur, Joseph, New York, N. Y., assignor, by mesne assignments, to Auto Research Corporation. Spring eye suspension. 1,868,687; July 26.
Bilde, Tord Erik Daniel. (See Engberg, Axel O., and Bilde, assignors.)
Birdsall, Wilfred T., Montclair, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Projector. 1,868,722; July 26.
Birkel, L., and Sons. (See App, Andrew J., assignor.)
Black, Knox C., Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Rectifier circuit. 1,869,089; July 26.
Black, Paul T., Dormont, and W. P. Boettner, McKees Rocks, Pa. Drive connection. 1,868,594; July 26.
Blackford Window Glass Company. (See Boush, John A., assignor.)
Blackie, Alfred, London, England. The method and apparatus for the measurement of heat. 1,868,623; July 26.
Blair, Robert S., Stamford, Conn. Claw hammer. 1,869,129; July 26.
Blanchard, Werner J., Hempstead, N. Y., assignor to Curtis Aeroplane & Motor Company, Inc. Propeller. 1,869,182; July 26.
Bley, Gustav. (See Harron, J. A., Diamond, and Bley.)
Bliss, E. W., Company. (See Gueritey, Charles, assignor.)
Block, Joseph, Brooklyn, assignor to Noma Electric Corporation, New York, N. Y. Decorative illuminating device. 1,869,321; July 26.
Blomstrom, Lowell C., assignor to Federal Mogul Corporation, Detroit, Mich. Forming half bearing shells and resultant article. 1,868,655; July 26.
Bock, Wilhelm, Gwynedd, and H. W. Matthews, assignors to Dexdale Hosiery Mills, Lansdale, Pa. Drying and shaping form for hosiery and the like. 1,868,875; July 26.
Boeing Airplane Company. (See Monteith, C. N., and Canney, assignors.)

Boesger, George A., Fairview Village, assignor to The W. W. Sly Manufacturing Company, Cleveland, Ohio. Dust collector. 1,868,876; July 26.
Boettner, William P. (See Black, P. T., and Boettner.)
Bolinders J. & C. G. Mekaniska Verkstads Aktiebolag. (See Österberg, Karl E. R., assignor.)
Bond Electric Corporation. (See Pratt, Goodrich B., assignor.)
Boonton Research Corporation. (See Ballantine, Stuart, assignor.)
Borchert, Fred L., Rockford, Ill. Cutting and coating machine. 1,869,090; July 26.
Borden Company, The. (See McClatchie, John M., assignor.)
Borden Company, The. (See Pennington, Mary E., assignor.)
Borden Company, The. (See Sprague, Alson J., assignor.)
Borden Company, The. (See Stevenson, Albert F., assignor.)
Borg & Beck Company, The. (See Reed, Harold V., assignor.)
Borgstrom, Wilhelm M., and O. E. Haglund, Minneapolis, Minn. Mud shoe for motor vehicle wheels. 1,869,298; July 26.
Boston Wire Stitcher Company. (See Maynard, Arthur H., assignor.)
Botnick, Maurice M., assignor to J. W. Wunsch and S. Wunsch, co-partners doing business as Silent Hoist Winch & Crane Co., Brooklyn, N. Y. Ash hoist and lowering attachment. 1,868,878; July 26.
Boush, John A., assignor to Blackford Window Glass Company, Vincennes, Ind. Glass cutting mechanism. 1,869,044; July 26.
Bowker, Ervin, Fall River, Mass. Bearing bolster for spindles. 1,868,688; July 26.
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Caldwell, John F., Houston, Tex. Artificial tooth. 1,869,047; July 26.
Camel Company. (See Heinen, F. C., and Tobin, assignors.)
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Fluid pressure brake. 1,869,048; July 26.
Campbell, Lorn, jr., Lakewood, Ohio. Iceless refrigerator. 1,868,882; July 26.
Campbell, Robert C., Millburn, N. J., assignor, by mesne assignments, to Oliver United Filters Inc., San Francisco, Calif. Continuous filter. 1,868,883; July 26.
Canney, Frank R. (See Monteith, C. N., and Canney.)
Caplin, Samuel. (See Lieberman, J. A., and Caplin.)
Capra, Benedetto, Sacramento, Calif. Safety hook for screen doors. 1,868,693; July 26.

Card, John L., Syracuse, N. Y. Dispensing closure. 1,869,049; July 26.
Cardot, Jean A., Bagneaux sur Loing, assignor to Societe Anonyme Le Pyrex, Paris, France. Process and apparatus for the manufacture of rods or tubes of glass or other materials. 1,869,303; July 26.
Cartier, Francois, Paris, France. Secret telegraphy system. 1,868,967; July 26.
Cartier, Inc. (See Cartier, Pierre C., assignor.)
Cartier, Pierre C., New York, assignor to Cartier, Inc., New York, N. Y. Cigar and cigarette lighter. Des. 87,429; July 26.
Cartoun, Meyer F., assignor to Heller-Deltah Company, Inc., New York, N. Y. Clock case. Des. 87,430; July 26.
Case, J. I., Company. (See Geraldson, Gerald, assignors.)
Cassidy, Leon S., and M. Rempfer, Bridgeton, N. J. Amusement railway. Re18,544; July 26.
Castle, Alfred J. (See Bedell, C. E., and Castle.)
Cavanagh, Gerald F. (See Marbach, E. R., and Cavanagh.)
Cement-Gun Contracting Company. (See Leriche, W., and Beasley, assignors.)
Champion Folding Furniture Company. (See Harter, Noah S., assignor.)
Champion Porcelain Company. (See Jaffery, J. A., and Riddle, assignors.)
Chapman, James, et al. (See Brown, Benjaman W., assignor.)
Chapman, Laura Emily Scott, et al. (See Brown, Benjaman W., assignor.)
Charlesworth, Stanton I., A. W. Harris and C. P. Linder, Cleveland, Ohio. Distilling apparatus. 1,868,625; July 26.
Charnock, John F., assignor to Hersey Manufacturing Company, Boston, Mass. Sugar molding machine. 1,868,005; July 26.
Chase, Leland H., Northampton, Mass., assignor to Holmes Electric Protective Company, New York, N. Y. Alarm system. 1,868,884; July 26.
Chekian, Frank, Modesto, Calif. Shook stop for box nailing machines. 1,868,885; July 26.
Cherry-Burrell Corporation. (See Feldmeier, Harvey, assignor.)
Chicago Pneumatic Tool Company. (See Coates, Charles B., assignor.)
Chicago Pneumatic Tool Company. (See Meunier, Leon F., assignor.)
Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)
Chicago Transformer Corporation. (See Leidy, W. J., and Knuth, assignors.)
Chilton, Ralph H., assignor to The Inland Manufacturing Company, Dayton, Ohio. Spring shackle. 1,869,132; July 26.
Christensen, Christian A., Copenhagen, Denmark. Machine for attaching labels to bottles, glasses, and the like. 1,868,938; July 26.
Chryst, William A., Dayton, assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,869,092; July 26.
Chubb, Kenneth A., and H. C. Ralston, Cleveland, and T. D. Williams, Garfield Heights, Ohio. Coil handling apparatus. 1,868,562; July 26.
Cicourel, Joseph, New York, N. Y. Key cover. 1,868,563; July 26.
Clark, Calvin C., assignor of one-half to V. D. Bennett, Verona, Pa. Tire spreader. 1,868,564; July 26.
Clausen, Harold C., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway braking apparatus. 1,868,493; July 26.
Cleveland Heater Company, The. (See Doen, Loran F., assignor.)
Cleveland, Robert D., assignor to Taylor Instrument Companies, Rochester, N. Y. Vulcanizing system. 1,868,791; July 26.
Clizbe, Floyd O., Chicago, Ill. Electromagnetic brake. 1,868,969; July 26.
Clum Manufacturing Company. (See Pease, Frederick J. and H. H., assignors.)
Coates, Charles B., Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Shock absorbing handle. 1,868,626; July 26.
Coates, Charles B., Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Shock absorbing handle. 1,868,627; July 26.
Coates, Charles B., Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Power tool and handle therefor. 1,868,628; July 26.
Coe Manufacturing Company, The. (See Moore, Richard C., assignor.)
Coffey, Oscar L., assignor to Whiting Corporation, Harvey, Ill. Mechanical load brake. 1,868,792; July 26.
Coghlan, Thomas G., Elizabeth, N. J. Slag tapping and disposal apparatus. 1,868,694; July 26.
Collier, David H., Carbon, Ind. Clothespin. 1,868,726; July 26.
Collins, Douglas, Salisbury, N. C., assignor to Stewart-Warner Corporation, Chicago, Ill. Liquid fuel feeding system. 1,868,970; July 26.
Collins, Lawrence B., Santa Barbara, Calif. Stabilized foundation construction and erecting the same. 1,868,494; July 26.
Collins, Raymond R., Newton, Mass., assignor to The Lummus Company. Method and apparatus for promoting contact. 1,868,886; July 26.
Coltman, Bertram W., Chicago, Ill. Flaking soap. Re18,546; July 26.
Combustion Utilities Corporation. (See Granger, Frederick S., assignor.)
Comer, William T., assignor to Crystal Carbonic Laboratory, Atlanta, Ga. Apparatus for continuous production of carbon dioxide ice. 1,869,346; July 26.
Concrete Products Company. (See Buente, Charles F., assignor.)
Condit Electrical Manufacturing Corporation. (See Janson, Gustav E., assignor.)
Connery, Alder F., Brooklyn, assignor to International Communications Laboratories, Inc., New York, N. Y. Indicating and applying orientation correction to telegraph distributors. 1,868,695; July 26.
Connolly, Gerald C., assignor to The Silica Gel Corporation, Baltimore, Md. Preparing adsorbent material. 1,868,565; July 26.
Conrad, Arthur, Chester, Ill. Connecter for connecting the cable to a battery post. 1,868,939; July 26.
Consolidated Trimming Corporation. (See Klahre, Hugo, assignor.)
Constable, Charles E., assignor to The National Marking Machine Company, Cincinnati, Ohio. Weighing hopper. 1,868,727; July 26.
Continental Oil Company. (See Davis, Lloyd L., assignor.)
Continuous Gramophones Limited. (See Oyston, William R., assignor.)
Coppage, William R., Cherrydale, Va. Conveyer chain. 1,869,050; July 26.
Corbett, Mitchell S., Chicago, Ill. Vaginal douche. 1,868,728; July 26.
Corning Glass Works. (See Bailey, James, assignor.)
Corning Glass Works. (See Fulcher, Gordon S., assignor.)
Corning Glass Works. (See Gray, D. E., and Strait, assignors.)
Cottrell, C. B., & Sons Company. (See Barber, Howard M., assignor.)
Couch, William W. (See Wolff, C. J., and Couch.)
Coughlin, James M., Wilkes-Barre, Pa. Cover for shipping drums. 1,868,940; July 26.
Coutts, William, Pittsburgh, Pa. Laundry hanger drier. 1,869,238; July 26.
Cowles, Irving, Detroit, Mich., assignor to Union Bank of Chicago, Chicago, Ill. Force feed lubricating system. 1,868,629; July 26.
Crago, Harry R., Schenectady, N. Y., assignor to General Electric Company. Remote control system. 1,869,185; July 26.
Crap, William H., Phillipsburg, N. J. Ice sandal. 1,868,729; July 26.
Crary, Thomas F., Middleport, Ohio. Elbow. 1,868,696; July 26.
Creed & Company, Limited. (See Salmon, Reginald D., assignor.)
Crewson, George G., Buffalo, N. Y., assignor to Swenson Evaporator Co., Harvey, Ill. Evaporator. 1,869,093; July 26.
Criley, William W., assignor to The Ajax Manufacturing Company, Cleveland, Ohio. Solid die header. 1,869,006; July 26.
Crispin, Clarence G., Berwick, Pa. Relief valve. 1,868,522; July 26.
Crocker First Federal Trust Company, executor. (See Hunt, Andrew M.)
Crocker, Thomas F., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,869,007; July 26.
Crompton & Knowles Loom Works. (See Morrell, Alfred F., assignor.)
Crompton & Knowles Loom Works. (See Payne, Oscar V., assignor.)
Crompton & Knowles Loom Works. (See Robertson, William W., assignor.)
Crossman, George J., assignor to Panelyte Corporation, Trenton, N. J. Manufacturing phenol-formaldehyde resin sheets and forms. 1,868,566; July 26.
Crucible Steel Company of America. (See McMillen, Russell H., assignor.)
Crystal Carbonic Laboratory. (See Comer, William T., assignor.)
Culver, Edward. (See Watson, Frank B., and Culver, assignors.)
Cunningham, M. E., Company. (See Speicher, Frank S., assignor.)
Cunningham, Raymond C., assignor to Hincher Paper Box Company, Seattle, Wash. Box forming and wrapping machine. 1,868,567; July 26.
Curtis Aeroplane & Motor Company. (See Blanchard, Werner J., assignor.)
Curtiss Aeroplane & Motor Company. (See Osborn, Robert R., assignor.)
Daniels, Monroe H., Hewlett, and J. A. Slack, assignors to Photomaton, Inc., New York, N. Y. Photographic developer tank liquid circulating system. 1,869,094; July 26.
Davidson, Abraham E., Rochester, N. Y. Float. 1,869,186; July 26.
Davies, William R. (See Thomas, H. S., and Davies.)
Davis, Durrell H., assignor to Highway Trailer Company, Edgerton, Wis. Auxiliary support for semitrailers. 1,868,971; July 26.

Davis, Lloyd L., assignor to Continental Oil Company, Ponca City, Okla. Process and apparatus for dehydrating oils. 1,869,008; July 26.
Davis, Roy Chandler, Gloucester, Mass. Tire pressure relief valve. 1,869,051; July 26.
Dawson, Elma N. (See Dawson, James C., assignor.)
Dawson, James C., assignor to E. N. Dawson, Webster Groves, Mo. Loose leaf binder. 1,868,793; July 26.
Day, Leonard, New York, N. Y. Electric precipitator. 1,869,335; July 26.
Dayton Racquet Company. (See Allen, Samuel C., assignor.)
De Andia Yrarrázaval, Jean G., Paris, France. Movable platform for conveying goods chiefly in ship's holds. 1,868,568; July 26.
De Bracht, Joseph. (See Bracht, Harold E., assignor.)
Decker, John C., Abington, and H. Aull, Philadelphia, assignors to Friedberger-Aaron Manufacturing Company, Philadelphia, Pa. Making hosiery and product thereof. 1,869,304; July 26.
Deere & Company. (See Drennan, Orville F., assignor.)
De Flores, Luis, Pomfret, Conn. Control system. 1,868,523; July 26.
De Flores, Luis, Pomfret, Conn. Liquid level control. 1,868,524; July 26.
De Forest, Alfred V., Southport, Conn. Thermal method of testing metallic bodies. 1,869,336; July 26.
Delaney, Edmund S., Washington, D. C. Calendar. 1,868,595; July 26.
Delco-Light Company. (See Wells, William C., assignor.)
Delco Products Corporation. (See Chryst, William A., assignor.)
Delco-Remy Corporation. (See Bertsche, Ralph, jr., assignor.)
Delco-Remy Corporation. (See Fitzsimmons, J. T., and Arthur, assignors.)
Delco-Remy Corporation. (See Nichols, Charles A., assignor.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
Delco-Remy Corporation. (See Phelps, Alva W., assignor.)
Delco-Remy Corporation. (See Prescott, Frank H., assignor.)
Delta-Star Electric Company. (See Boyce, William H., assignor.)
DeMott, Theron W., Chicago, Ill. Kite. 1,868,525; July 26.
Dempster, John R., Berkeley, Calif. Disk slide rule. 1,868,816; July 26.
Detroit Steel Products Company. (See Badger, Floyd E., assignor.)
Devers, Philip K., Lynn, and I. F. Hooper, Saugus, Mass., assignor to General Electric Company. Spark plug. 1,869,133; July 26.
De Von, James L., Pittsburgh, Pa. Erecting bridges. 1,868,630; July 26.
De Weese, Bernard D., assignor to Stinson Aircraft Corporation, Wayne, Mich. Emblem. Des. 87,431; July 26.
Dexdale Hosiery Mills. (See Bock, W., and Matthews, assignors.)
Diamond, James J. (See Harron, J. A., Diamond, and Bley.)
Dietze, Richard, Berlin-Pankow, Germany, assignor to General Electric Company. Regulating arrangement for prime mover. 1,869,134; July 26.
Dils, Logan A., assignor to Kellogg Dils, Inc., Chicago, Ill. Method of treating fibers for paper making and other uses. 1,868,569; July 26.
Dils, Logan A., assignor to Kellogg Dils, Inc., Chicago, Ill. Treating woody materials to obtain fibers therefrom. 1,868,570; July 26.
Display Price Corporation. (See Patinot, Philippe, assignor.)
Dockman, Louis A., Baltimore, Md. Sinker. 1,869,305; July 26.
Dodge, Milton L., Newburyport, Mass. Sole molding form. 1,868,526; July 26.
Doen, Loran F., assignor to The Cleveland Heater Company, Cleveland, Ohio. Valve. Re18,540; July 26.
Doidge, Russell Mervyn, assignor to The Morgan Crucible Company Limited, Battersea, London, England. Manufacture of graphitic compositions. 1,868,631; July 26.
Donley, Harold B., A. J. Frame, and J. G. Gilmore, assignors to Franklin Oil Heating, Incorporated, Columbus, Ohio. Oil burning apparatus. 1,869,239; July 26.
Dorsey, Vernon M., Chevy Chase, Md., assignor, by mesne assignments, to The American Bicheroux Company. Receiving glass sheets. 1,869,306; July 26.
Douglas, Archer M. (See Kunian, P., and Douglas.)
Dowrie, Charles F., assignor, by mesne assignments, to The Timken Silent Automatic Company, Detroit, Mich. Vent cap. 1,868,780; July 26.
Dreghorn, Herbert, Rugby, England, assignor to General Electric Company. Commutator type dynamo electric machine. 1,869,187; July 26.
Drennan, Orville F., assignor to Deere & Company, Moline, Ill. Planter. 1,868,731; July 26.
Dreyfus, Henry, London, England. Treatment of cellulose prior to esterification. 1,869,307; July 26.
Driftmeter, Incorporated. (See Hester, Wynes W., assignor.)
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Distilling coals. 1,868,782; July 26.
Dubow, Jacob A., Chicago, Ill. Inflatable ball. 1,869,135; July 26.
Dudley, Edmond R., Los Angeles, Calif. Rotary pump or motor. 1,869,053; July 26.
Duers, Clarence R., assignor to Duers Signal Company, Inc., Glens Falls, N. Y. Electrically operated whistle. 1,869,052; July 26.
Duers Signal Company, Inc. (See Duers, Clarence R., assignor.)
Duff Norton Manufacturing Company, The. (See Schwerin, F. H., and Hebbeln, assignors.)
Du Grenier, Arthur E., Haverhill, Mass. Coin controlled apparatus. 1,868,887; July 26.
Dunham, Orson W., Webb City, Mo., assignor to Wertzberger Derrick Company. Pitman bearing assembly. 1,868,817; July 26.
Dunlop Tire and Rubber Corporation. (See Willshaw, H., and Norcross, assignors.)
Dunmire, Russell P. (See Rodman, Clarence J., and Dunmire, assignors.)
Du Pont, E. I., de Nemours & Company. (See Craves, George D., assignor.)
Du Pont Viscoloid Company. (See Rocker, George, and Middleton, assignors.)
Duro Metal Products Company. (See McNaught, Norris F., and Peterson, assignors.)
Dutchess Tool Company. (See Van Houten, Frank H., assignor.)
Dziedzic, Nickolas J. (See McKee, H. H., and Dziedzic.)
Earley, Charles A., Dorchester, Mass. Cap for flashing. 1,868,888; July 26.
Eastern Laboratories, Inc. (See Kelley, John E., assignor.)
Eastern Tool & Mfg. Co. (See Anderson, Carl E., and Peterson, assignors.)
Eberhardt, Walter. (See Herschede, W. J., Eberhardt, and Hellmuth.)
Ebersole, George S., Elizabethtown, assignor to Wrightsville Hardware Co., Wrightsville, Pa. Cherry stoner. 1,869,095; July 26.
Eckman, Meril L., Warren, Ohio. Spot welder. 1,869,188; July 26.
Economy Baler Company. (See Langford, G. W., and Haines, assignors.)
Edge, Dexter, Pittsburgh, Pa. Spraying system. 1,868,632; July 26.
Edson, Arthur, Elk, California. Tool holding device. 1,869,240; July 26.
Eggert, Gustav B., Saginaw, Mich. Transmission. 1,869,189; July 26.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Distilling bitumen. 1,868,733; July 26.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Distilling bitumen. 1,868,734; July 26.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Distilling bitumen. 1,868,735; July 26.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Cracking bituminous material. 1,868,736; July 26.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Destructively distilling bitumen. 1,868,737; July 26.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Destructively distilling bitumen. 1,868,738; July 26.
Ehrhart, Raymond N., Edgewood, assignor to Elliott Company, Pittsburgh, Pa. Apparatus for evaporating liquid. 1,869,190; July 26.
Eichwald, Egon, Amsterdam, The Netherlands, assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Recovering sulphonic acids or their salts in a purified condition from impure sulphonation products. 1,868,596; July 26.
Einermann, Frederick, Ramsey, N. J. Refrigerator. 1,868,495; July 26.
Eitzen, August D., assignor to News Projection Corporation, New York, N. Y. Duplex projection. 1,868,889; July 26.
Eksergian, Carolus L., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Universal joint. 1,868,818; July 26.
Eldredge, Clyde T., Mill Valley, Calif. Sightometer. 1,868,597; July 26.
Electric Smelting & Aluminum Company, The. (See Guertler, William M., assignor.)
Electric Steel Foundry Company. (See Younie, Lewis E., assignor.)
Electric Vacuum Cleaner Company. (See Lang, Henry T., assignor.)
Electrical Research Products Inc. (See Hibbard, Frank H., assignor.)
Electro Metallurgical Company. (See Heath, Chester S., assignor.)
Electrolux Corporation. (See Engberg, A. O., and Bilde, assignors.)
Elié, Alexis D. J., Tananarive, Madagascar. Separation of solid substances. 1,869,241; July 26.
Elliott Company. (See Ehrhart, Raymond N., assignor.)

Ellis, Arthur L., New Rochelle, N. Y., assignor to The Waterbury Tool Company, Waterbury, Conn. Machine tool. 1,868,697; July 26.

Emanuell, Luigi, assignor to Società Italiana Pirelli, Milan, Italy. Impregnating insulating materials. 1,869,308; July 26.

Emerson, George H., Baltimore, Md. Single drum locomotive boiler. 1,869,309; July 26.

Emmert, John Russell, Berwyn, assignor to Emil J. Paidar Company, Chicago, Ill. Chiropody chair. 1,868,658; July 26.

Engberg, Axel O., and T. E. D. Bilde, Stockholm, Sweden, assignors, by mesne assignments, to Electrolux Corporation. Cleaner. 1,868,659; July 26.

Engel, Antonie J., assignor to Algemeene Kunstzijde Unie N.-V., Arnhem, Netherlands. Adjustable cam. 1,869,055; July 26.

Erdahl, Nicholai M., assignor to Highway Trailer Company, Edgerton, Wis. Collapsible cable reel. 1,868,972; July 26.

Eremeeff, Ivan I., assignor to The Brown Instrument Company, Philadelphia, Pa. Relay instrument. 1,869,096; July 26.

Esseltine, Alfred B., assignor to Goodman Manufacturing Company, Chicago, Ill. Apparatus for handling loose material. 1,868,973; July 26.

Essick, John H., Erie, Pa. Carbon remover. 1,869,810; July 26.

Euclid Crane & Hoist Company, The. (See Armington, Arthur P., assignor.)

Evans, Edward S., assignor to Evans Products Company, Detroit, Mich. Decking structure. 1,869,054; July 26.

Evans, Porter H., Brooklyn, assignor to Western Electric Company, Incorporated, New York, N. Y. Communication system. 1,869,323; July 26.

Evans Products Company. (See Evans, Edward S., assignor.)

Everett, Edward A., assignor to Nande Corporation, New York, N. Y. Power operated rail saw. 1,868,739; July 26.

Eyer, Carl, and F. Korn, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Mixed fertilizer. 1,868,890; July 26.

Fairmont Railway Motors, Inc. (See Walters, William R., assignor.)

Farraguto, Carmelo M., New York, N. Y. Propulsion of ships or the like. 1,869,136; July 26.

Faudl, Fritz, Dusseldorf-Oberkassel, Germany. Coupling. 1,868,891; July 26.

Fawick Manufacturing Company. (See Fawick, Thomas L., assignor.)

Fawick, Thomas L., Akron, Ohio, assignor to Fawick Manufacturing Company, Waukesha, Wis. Clutch adjustment. 1,869,097; July 26.

Fedders Manufacturing Company. (See Ihde, August F., assignor.)

Fedders Manufacturing Company. (See Siegel, Franklin G., assignor.)

Federal Merchandise Company. (See Hueglin, Herman C., assignor.)

Federal Mogul Corporation. (See Blomstrom, Lowell C., assignor.)

Federal Telegraph Company. (See Brown, Archibald S., assignor.)

Federal Telegraph Company. (See Kolster, Frederick A., assignor.)

Federal Telegraph Company. (See Overacker, Horace E., assignor.)

Feldmeier, Harvey, Little Falls, N. Y., assignor to Cherry-Burrell Corporation, Wilmington, Del. Heat exchange device. 1,868,698; July 26.

Ferguson, Donald M., Highland Park, and E. R. Maurer, assignors to Wilcox-Rich Corporation, Detroit, Mich. Front wheel drive automobile. 1,869,191; July 26.

Ferro Enameling Company. (See McIntyre, Glenn H., assignor.)

Fiberfraks Inc. (See Holcomb, Harry E., assignor.)

Filbert, John A., Chicago, Ill. Grate construction. 1,868,571; July 26.

Fildes, Frederick K., Altoona, Pa. Shipping container. 1,868,633; July 26.

Firestone Steel Products Company. (See Swain, Joseph G., assignor.)

Firestone Tire & Rubber Company, The. (See Bush, Albert A., assignor.)

Firestone Tire & Rubber Company. (See Robertson, Isaac W., assignor.)

Firestone Tire and Rubber Company, The. (See Stevens, Horace D., assignor.)

Fitts, James L. (See Serrell, J. A., and Fitts.)

Fitzsimmons, John T., Hartford, Conn. Sound reproducing device. 1,868,660; July 26.

Fitzsimmons, John T., and J. L. Arthur, assignors to Delco-Remy Corporation, Anderson, Ind. Ignition system. 1,869,098; July 26.

Fleming, Jared B., assignor to The Van Dorn Electric Tool Company, Towson, Md. Casing for a portable electric polisher. Des. 87,432; July 26.

Flintermann, Gerhard, West Orange, N. J. Flexible joint. 1,869,137; July 26.

Flintkote Corporation, The. (See Eichwald, Egon, assignor.)

Fly, Paul C. (See Vallendor, M. L., and Fly.)

Flynn, Benjamin H., Amarillo, Tex. Method and form for concrete highway construction. 1,868,819; July 26.

Flynn, Benjamin H., Alexandria, La. Highway construction over-pass. 1,868,820; July 26.

Fogarty, Michael L. (See Goold, Horace A., assignor.)

Follansbee Brothers Company. (See Reno, Robert E., jr., assignor.)

Foote-Burt Company, The. (See Schlitz, Bernard P., assignor.)

Forest, Joseph F. E., Joliette, Quebec, and A. F. Joanisse, Hawkesbury, Ontario, Canada. Rail joint. 1,869,138; July 26.

Frame, Augustus J. (See Donley, H. B., Frame, and Gilmore.)

Frame, Augustus J., assignor to Franklin Oil Heating, Inc., Columbus, Ohio. Oil burner construction. 1,869,242; July 26.

Frank, Frederick C., assignor to Bendix Brake Company, South Bend, Ind. Brake drum. 1,868,740; July 26.

Franklin, Charles S., Buckhurst Hill, England, assignor to Radio Corporation of America. Aerial for use in wireless signaling. 1,869,192; July 26.

Franklin Development Corporation. (See Marks, Edward S., assignor.)

Franklin Oil Heating, Incorporated. (See Donley, H. B., Frame, and Gilmore, assignors.)

Franklin Oil Heating, Inc. (See Frame, Augustus J., assignor.)

Frantz, Walter A., Cleveland Heights, assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio. Gearing. 1,869,056; July 26.

Fraser, Arthur C., et al. (See Ludlow, Israel, assignor.)

Fraser, William G., Fulham, London, England. Pulping machine. 1,869,243; July 26.

Free, John W., Aliquippa, assignor to Jones and Laughlin Steel Corporation, Pittsburgh, Pa. Mechanical feed for pipe galvanizing machines. 1,869,324; July 26.

Freed, A., trustee. (See Roos, Axel H., assignor.)

Friedberger-Aaron Manufacturing Company. (See Decker, John C., assignor.)

Frigidaire Corporation. (See King, Jesse G., assignor.)

Fulcher, Gordon S., assignor to Corning Glass Works, Corning, N. Y. Making composite refractory articles. 1,868,699; July 26.

Fuller, George L., and W. F. Breen, Santa Maria, Calif. Wiper device. 1,868,794; July 26.

Fuller, Jerrold C., Chicago, Ill. Closure construction. 1,868,821; July 26.

Fyffe & Company Limited. (See Fyffe, Thomas L., assignor.)

Fyffe, Thomas Lillie, assignor to Fyffe & Company Limited, Dundee, Scotland. Wrench and like hand tool. 1,868,892; July 26.

G-M Laboratories, Inc. (See McMaster, A. J., and Parson, assignors.)

Gabler, Frank M., Monument, Oreg. Tire tool. 1,869,244; July 26.

Gaisman, Henry J., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Blade package. 1,869,311; July 26.

Galicyjskie Towarzstwo Naftowe "Galicja" S. A. (See Von Piotrowski, W., and Winkler, assignors.)

Gammeter, John R. (See Perks, George W., assignor.)

Gannon, James E., and J. M. Winter, assignors to American Electric Heating Company, Erie, Pa. Electric control apparatus. 1,868,700; July 26.

Gardner, Archibald D., Jackson, Mich., assignor to Automotive Fan & Bearing Company. Fan. 1,868,528; July 26.

Garziulo, Richard, New York, N. Y. Hydro-cycle. 1,869,139; July 26.

Gas Tool Patents Corporation. (See Mould, James A., assignor.)

Gascon, Salvador J. (See Bahima Puig, J. M., and Gascon.)

Gasoline Products Company, Inc. (See Howard, F. A., and Loomis, assignors.)

Gassel, Gavil, Highland Park, assignor to D. Segal, Detroit, Mich. Bathing suit. 1,868,741; July 26.

Gatter, Rudolph, assignor to J. F. Meyer, Chicago, Ill. Amusement machine. 1,868,742; July 26.

Gatton, Walter C., Seattle, Wash. Shaving aid. 1,869,057; July 26.

Gelgy, J. R., S. A. (See Krebser, Adolf, assignor.)

Gelinas, Wilfred F., Lanesborough, Mass., assignor to General Electric Company. Electric heater. 1,869,140; July 26.

Genenger, Richard, Aachen-Forst, Germany, assignor to N. V. Maatschappij tot Beheer en Exploitatie van Octrooien, The Hague, Netherlands. Device for handling and emptying glass melting pots. 1,869,245; July 26.

General Aniline Works, Inc. (See Baumann, Fritz, assignor.)

General Aniline Works, Inc. (See Kunz, M. A., and Koeberle, assignors.)

General Aniline Works, Inc. (See Laska, Leopold, and Haller, assignors.)

General Cable Corporation. (See Atkinson, Ralph W., assignor.)

General Electric Company. (See Bedford, Burnice D., assignor.)

General Electric Company. (See Braband, Karl, assignor.)

General Electric Company. (See Butler, Benjamin J., assignor.)

General Electric Company. (See Crago, Harry R., assignor.)

General Electric Company. (See Devers, P. K., and Hooper, assignors.)

General Electric Company. (See Dietze, Richard, assignor.)

General Electric Company. (See Dreghorn, Herbert, assignor.)

General Electric Company. (See Gelinas, Wilfred F., assignor.)

General Electric Company. (See Jones, Laurence D., assignor.)

General Electric Company. (See Krämer, Christian, assignor.)

General Electric Company. (See Martin, Harold M., assignor.)

General Electric Company. (See May, Harold V., assignor.)

General Electric Company. (See Mead, Milton S., jr., assignor.)

General Electric Company. (See Merrill, Wilbur L., assignor.)

General Electric Company. (See Niedergesaass, Berthold F., assignor.)

General Electric Company. (See Proctor, John A., assignor.)

General Electric Company. (See Proctor, J. A., and Bailey, assignors.)

General Electric Company. (See Reist, Henry G., assignor.)

General Electric Company. (See St. Palley, Zoltan O., assignor.)

General Electric Company. (See Tobey, Harry W., assignor.)

General Electric Company. (See West, Harry R., assignor.)

General Petroleum Corporation of California. (See Hayes, Harry, assignor.)

General Steel Castings Corporation. (See Harley, J. J., and Beckette, assignors.)

General Steel Castings Corporation. (See Travilla, jr., James C., assignor.)

General Zeolite Company. (See Green, Walter H., and Adelson, assignors.)

General Zeolite Company. (See Hughes, Walter J., assignor.)

General Zeolite Company. (See Kean, Robert H., assignor.)

Gentle, Robert Bruce, New York, N. Y. Portable massage and spray apparatus. 1,868,893; July 26.

George, Philip E., South Fork, Pa. Rafter for greenhouses, etc. 1,869,246; July 26.

Geraldson, Gerald, assignor to J. I. Case Company, Racine, Wis. Agricultural implement. 1,868,974; July 26.

Gerhart, Arthur J., Lorain, Ohio. Signal operating switch. 1,868,527; July 26.

Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Steering wheel. 1,869,099; July 26.

Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Composite molded article and making same. 1,869,141; July 26.

Gilbert, A. C., Company, The. (See Gilbert, Alfred C., assignor.)

Gilbert, Alfred C., North Haven, assignor to The A. C. Gilbert Company, New Haven, Conn. Construction toy. 1,868,496; July 26.

Giles, Louis E., et al. (See Ludlow, Israel, assignor.)

Gillet, Alexis F., assignor to Jubilee Manufacturing Co., Omaha, Nebr. Warning signal. 1,869,142; July 26.

Gillette Safety Razor Company. (See Gaisman, Henry J., assignor.)

Gillette Safety Razor Company. (See Molkenthin, Joseph, jr., assignor.)

Gilmer, L. H., Company. (See Haines, George E., assignor.)

Gilmore, Jacksen G. (See Donley, H. B., Frame, and Gilmore.)

Glaenzer, Harry, Philadelphia, Pa. Locomotive frame. 1,869,248; July 26.

Glahn, Otto M., assignor to The Lamson Company, Syracuse, N. Y. Conveyer. 1,868,894; July 26.

Globe American Corporation. (See Hill, Dewey H., assignor.)

Globe American Corporation. (See Tolley, Donald B., assignor.)

Goddard, Charles Franklin, Los Angeles, Calif., assignor to The Automobile Storage Elevator Company, Denver, Colo. Road maintenance equipment. 1,868,895; July 26.

Goerland, Vilmuth P., Clawson, Mich. Hydraulic lubricating gun. 1,868,701; July 26.

Goffatt, William C. (See McLaughlin, Frank, assignor.)

Goldkind, Mordecai, Washington, D. C. Elevator operator's hand shield. 1,868,822; July 26.

Goldman, Max H., Chicago, Ill. Self-adjusting collar button. 1,869,145; July 26.

Good, Charles W., Erie, Pa., assignor to Weil-McLain Company, Michigan City, Ind. Air-heating apparatus. 1,868,743; July 26.

Goodman Manufacturing Company. (See Esseltine, Alfred B., assignor.)

Goodrich, Thomas V., Lincoln, Nebr. Educational material. 1,868,823; July 26.

Goold, Horace A., Southgate, assignor of one-half to Michael L. Fogarty, Los Angeles, Calif. Dry concentrator. 1,868,896; July 26.

Goss Printing Press Company. (See Brueshaber, Martin W., assignor.)

Gower, Charles Hugh Roberts, London, England, assignor to Aluminum Colors Incorporated, Indianapolis, Ind. Anodic coating of aluminum. 1,869,058; July 26.

Gower, Marie, Los Angeles, Calif. Shampoo apparatus. 1,868,598; July 26.

Gralenski, Michael, Amherst, Mass. Resilient wheel for vehicles. 1,869,100; July 26.

Granger, Frederick S., Elizabeth, N. J., assignor to Combustion Utilities Corporation, New York, N. Y. Phosphoric esters of tar acids and producing the same. 1,869,312; July 26.

Grant, Gerald M. M., Los Angeles, Calif. Piston ring. 1,868,744; July 26.

Granville, Bernard, New York, N. Y., assignor to Granville Holding Corporation. Underreaming apparatus. 1,868,702; July 26.

Granville Holding Corporation. (See Granville, Bernard, assignor.)

Grapp, Albert E., Minneapolis, Minn. Oven-circulating air type. 1,868,824; July 26.

Graves, George D., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Production of esters from alcohols and the salts of organic acids. 1,869,193; July 26.

Gray, David E., and D. W. Strait, assignors to Corning Glass Works, Corning, N. Y. Mold attaching device for glass working machines. 1,869,249; July 26.

Gray, Frank, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. 1,869,194; July 26.

Gray Processes Corporation. (See Brooks, B. T., and Gray, assignors.)

Gray, Thomas T. (See Brooks, B. T., and Gray.)

Green, Walter H., and S. L. Adelson, assignors to General Zeolite Company, Chicago, Ill. Liquid treatment. 1,869,144; July 26.

Greene, John W. (See Souther, B. L., and Greene.)

Gregory, Henry, Houston, Tex., assignor to The American Steel and Wire Company of New Jersey. Collapsible reel. 1,868,634; July 26.

Greimann, Benjamin F., Garner, Iowa. Heating system for buildings. 1,868,745; July 26.

Greis, Alphonse M., Hartsdale, N. Y. Electric circuit molding. 1,869,145; July 26.

Griffin, Frank S., West Palm Beach, Fla. Torch. 1,869,250; July 26.

Griffin, Percy M., Albany, N. Y. Closure operating device. 1,868,599; July 26.

Griffith, Clement P., and C. J. Worden, assignors to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Service equipment for aviation fields. 1,868,497; July 26.

Griffith, Ronald G., Croydon, England, assignor to International Communications Laboratories, Incorporated, New York, N. Y. Telegraph system. 1,868,703; July 26.

Griscom-Russell Company, The. (See Brown, S., and Price, assignors.)

Griscom-Russell Company, The. (See Heimberger, Oscar W., assignor.)

Grosjean, André, Ruell, France. Conveyer roll. 1,868,825; July 26.

Grosskinsky, Otto. (See Schmidt, O., and Grosskinsky.)

Grosskinsky, Otto. (See Schmidt, O., and Grosskinsky, assignors.)

Gruman, Lloyd B., Newark, N. J. Pump. 1,868,498; July 26.

Gueritey, Charles, Passaic, N. J., assignor to E. W. Bliss Company, Brooklyn, N. Y. Can heading machine. 1,868,897; July 26.

Guertler, William M., Berlin, Germany, assignor to The Electric Smelting & Aluminum Company, Cleveland, Ohio. Recovering alumina from siliceous materials containing it. 1,868,499; July 26.

Guest, Ward E., assignor to Kraft-Phenix Cheese Corporation, Chicago, Ill. Milk tank. 1,868,826; July 26.

Guiriato, Emilio. (See Romera, Manuel, assignor.)

Guiriato, Ettore. (See Romera, Manuel, assignor.)

Gulf Refining Company. (See Souther, B. L., and Greene, assignors.)

Gump, B. F., Co. (See Naeher, Paul, assignor.)

Guy, Sydney Slater, Wolverhampton, England. Motor vehicle. 1,868,827; July 26.

Haas, Jacob R., Chicago, Ill. Tie attachment. 1,869,251; July 26.

Haas, William F., Rockaway, N. Y. Button. Des. 87,433; July 26.

Haas, William F., Rockaway, N. Y. Clasp. Des. 87,434; July 26.

Haas, William F., Rockaway, N. Y. Clasp. Des. 87,435; July 26.

Haden, Arnim E., Galveston, Tex. Crude oil burner. 1,869,252; July 26.

Haglund, Olof E. (See Borgstrom, W. M., and Haglund.)

Haines, George E., Philadelphia, Pa., assignor to L. H. Gilmer Company. Buckle for belts, straps, or the like. 1,868,828; July 26.

Haines, Harold L. (See Langford, G. W., and Haines.)

Haldeman, William S. (See Hale, William J., assignor.)

Hale, William J., Midland, Mich., and W. S. Haldeman, Monmouth, Ill. Method of controlling the accumulation of aldehydes in the formation of organic acids from primary alcohols. 1,868,704; July 26.
Hall, Charles S., Los Angeles, Calif. Propeller drive mechanism. 1,868,975; July 26.
Hall, Charles S., Los Angeles, Calif. Aircraft propelling mechanism. 1,868,976; July 26.
Hall, Harry G., Atlanta, Ga. Guiding and folding attachment for paper box machines. 1,868,572; July 26.
Hall, Randolph F., Rochester, N. Y. Airplane. 1,869,253; July 26.
Hallden, Frederick G., Jamaica, assignor to International Communications Laboratories, Inc., New York, N. Y. Single line repeater. 1,868,705; July 26.
Hallden, Frederick G., Jamaica, assignor to International Communications, Inc., New York, N. Y. Single line repeater. 1,868,706; July 26.
Haller, Oskar. (See Laska, L., and Haller, assignors.)
Hamann, Edward W., Minneapolis, Minn. Display rack. 1,869,146; July 26.
Hamilton, John R. (See Lowe, E. A., and Hamilton.)
Hammond, Charles F., assignor to Winchester Repeating Arms Company, New Haven, Conn. Alloy. 1,868,898; July 26.
Hancock, William L., and B. C. Woodford, assignors to The Murray Company, Dallas, Tex. Cotton baling press. 1,868,829; July 26.
Hancock, William L., assignor to The Murray Company, Dallas, Tex. Roller adjusting device for cotton gins. 1,868,830; July 26.
Hanel, Charles L., Jackson Heights, assignor to Signal Engineering and Manufacturing Company, New York, N. Y. Electrical circuit controlling mechanism. 1,868,500; July 26.
Hansell, Clarence W., Rocky Point, N. Y., assignor to Radio Corporation of America. Antenna. 1,868,795; July 26.
Hanson, Alfred J., Cle Elum, Wash. Pipe and cigar and cigarette holder cleaner. 1,869,059; July 26.
Harbison, Clarence B., assignor to The Ohio Steel Foundry Company, Lima, Ohio. Truck side frame. 1,868,529; July 26.
Harder, Henry J., Beaver Dam, and H. R. Kotenberg, Waupun, Wis. Casket placer. 1,868,796; July 26.
Hardesty, Francis D., Ferndale, Mich. Doorlock. 1,868,746; July 26.
Harding, Robert, jr., White Plains, N. Y., assignor to Arcturus Radio Tube Company, Newark, N. J. Vacuum tube. 1,868,600; July 26.
Harley, Joseph J., Granite City, and E. S. Beckette, East St. Louis, assignors to General Steel Castings Corporation, Granite City, Ill. Railway vehicle structure. 1,868,530; July 26.
Harris, Arch W. (See Charlesworth, S. I., Harris, and Linder.)
Harris, Arthur J., Paterson, N. J. Ribbon pack. 1,868,601; July 26.
Harris and Reed Manufacturing Company. (See Reed, Edward A., assignor.)
Harron Hosiery Company. (See Harron, J. A., Diamond, and Bley, assignors.)
Harron, Joseph A., Elkins Park, and J. J. Diamond and G. Bley, Philadelphia, assignors to Harron Hosiery Company, Philadelphia, Pa. Knitting. 1,868,899; July 26.
Harter, Noah S., assignor to Champion Folding Furniture Company, Waukegan, Ill. Camping cot. 1,869,060; July 26.
Hartsell, Jonah L. (See Radford, Lee Wood, assignor.)
Harvey, Walter G. E., Los Angeles, Calif. Dental casting machine. 1,868,797; July 26.
Haseltine, Kirk Gruber. (See Sutter, Henry B., and Haseltine.)
Hayes, Harry, Los Angeles, Calif., assignor to General Petroleum Corporation of California. Chamfer slotting pipe. 1,868,900; July 26.
Hays Manufacturing Company. (See Schneider, Henry E., assignor.)
Hays Manufacturing Co. (See Schneider, William, assignor.)
Healy, William F., assignor to B. F. Sturtevant Company, Boston, Mass. Method and apparatus for assembling disks or fins on tubes. 1,869,195; July 26.
Heath, Chester S., South Charleston, W. Va., assignor to Electro Metallurgical Company. Annealing process. 1,869,254; July 26.
Hebbeln, Louis. (See Schwerin, F. H., and Hebbeln.)
Hecht, Gerhard, Wuppertal-Elberfeld, Anton Ossenback, Cologne-Mulheim, and Ernst Tietze, Cologne, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Contrast media for X-ray photography. 1,868,602; July 26.
Heimberger, Oscar W., West Brighton, Staten Island, assignor to The Griscom-Russell Company, New York, N. Y. Heat exchanger. 1,868,661; July 26.
Helnen, Frederick C., and K. J. Tobin, assignors to Camel Company, Chicago, Ill. Car door construction. 1,868,977; July 26.
Heltger, Frank H., Flint, Mich. Carburetor. 1,868,831; July 26.
Heltzman, Robert J. (See Horn, C. A., and Heltzman.)
Heller-Deltah Company. (See Cartoun, Meyer F., assignor.)
Hellmuth, Albert. (See Herschede, W. J., Eberhardt, and Hellmuth.)
Hembree, Samuel S., assignor to American Iron Machine Works Company, Oklahoma City, Okla. Drill pipe racking apparatus. 1,868,747; July 26.
Hemphill Company. (See Stibbe, Godfrey, assignor.)
Henderson, George N., Philadelphia, Pa. Hair cutting machine. 1,869,101; July 26.
Henderson, Nelson H., assignor of one-half to A. C. Parker, Clarkedale, Ark. Mowing machine blade grinder. 1,868,603; July 26.
Henter, Mathias, and E. Käser, West Allis, Wis. Aircraft. 1,868,832; July 26.
Herman, Alexander, Berlin, Germany. Manufacture of furniture. 1,868,573; July 26.
Herold, Lawrence C., Lakewood, Ohio. Rotary brush. 1,869,102; July 26.
Herschede Hall Clock Company, The. (See Herschede, W. J., Eberhardt and Hellmuth, assignors.)
Herschede, Walter J., W. Eberhardt, and A. Hellmuth, assignors to The Herschede Hall Clock Company, Cincinnati, Ohio. Clock. 1,868,941; July 26.
Hersey Manufacturing Company. (See Charnock, John F., assignor.)
Herthel, Eugene C., Flossmoor, Ill., assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,868,901; July 26.
Hester, Wynes W., assignor to Driftmeter, Incorporated, Tulsa, Okla. Apparatus for indicating angularity of crooked well holes. 1,868,833; July 26.
Hibbard, Frank H., Mountain Lakes, N. J., assignor to Electrical Research Products Inc., New York, N. Y. Method of and apparatus for measuring reverberation time. 1,869,196; July 26.
Hicken, Elmer E., Collingswood, N. J. Tender tank. 1,869,255; July 26.
Hickok, W. O., Manufacturing Company. (See Broadmeyer, Albert, assignor.
Hicks, J. N., et al. (See Patterson, Edgar W., assignor.)
Hiering, William C., assignor to J. E. Mergott Co., Newark, N. J. Bag frame fastener. 1,868,501. July 26.
Highway Trailer Company. (See Davis, Durrel H., assignor.)
Highway Trailer Company. (See Erdahl Nicholai M., assignor.)
Hill, Dewey H., Macomb, Ill., assignor to Globe American Corporation, Kokomo, Ind. Wafer shield for thermostatically controlled oil brooders. 1,868,978; July 26.
Hill, Earl V., Chicago, Ill. Air conditioning unit. Des. 87,436; July 26.
Hill, Roscoe, Hamilton, Ontario, Canada, assignor to Scott & Williams, Incorporated, New York, N. Y. Knitting machine. 1,869,147; July 26.
Hincher Paper Box Co. (See Cunningham, Raymond C., assignor.)
Hines, Margaret E., et al. (See Hines, Martin, assignor.)
Hines, Martin, assignor of one-fourth to M. J. Ward, A. F. Purser, and one-fourth to M. E. Hines, Brooklyn, N. Y. Combination flying machine and airship. 1,869,256; July 26.
Hitzler, Theodore Leonberg, Germany. Insole. 1,869,257; July 26.
Hobbs, Thomas J., Macon, Ga. Shock absorber. 1,869,009; July 26.
Hobson, Stanley H., assignor to Geo. D. Roper Corporation, Rockford, Ill. Water system pump unit. Re18,553; July 26.
Hodde, Christian W. (See Behle, J. and Hodde, assignors.)
Hoehl, Joseph W. (See Bugett, Neal J., assignor.)
Hofmann, Carl F., Schonau, near Chemnitz, Germany. Ring for spinning and doubling machines. 1,868,574; July 26.
Hoffman, David E., Jackson, Mich. Skid for motor vehicles. 1,868,942; July 26.
Hogan, Herbert J., Los Angeles, Calif. Variable camber airfoil. 1,868,748; July 26.
Hoke, Hay A., Altoona, Pa. Cylinder cock and the like. 1,868,635; July 26.
Holcomb, Harry E., Stratford, Conn., assignor to Fiberfraks Inc., New York, NN. Y. Apparatus for forming fibrous sheet material. 1,869,148; July 26.
Holland-Letz, John, assignor to The Letz Manufacturing Company, Crown Point, Ind. Cutting and grinding apparatus. 1,868,983; July 26.
Holland, Walter E., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Battery vent construction. 1,869,258; July 26.
Hollingsworth, William F. (See Norton, John S., assignor.)
Holmes Electric Protective Company. (See Chase, Leland H., assignor.)
Holz, Josef, Pforzheim, Germany. Instrument for removing corns and callosities without danger. 1,869,197; July 26.
Hooley, Leonard J. (See Tatum, W. W., Todd, Hooley and Thomas.)
Hooper, Irvin F. (See Devers, P. K., and Hooper.)
Horn, Clarence A., Rahway, and R. J. Heltsman, Union City, assignors to Arcturus Radio Tube Company, Newark, N. J. Tube element support. 1,868,604; July 26.
Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Sheet gauging device for slitting machines. 1,868,707; July 26.
Hotze, Charles, St. Louis, Mo. Golf bag. 1,868,979; July 26.

CARNEGIE LIBRARY OF ATLANTA

Howard, Frank A., and N. E. Loomis, Elizabeth, assignors, by mesne assignments, to Gasoline Products Company, Inc., Newark, N. J. Converting oil. 1,869,337; July 26.
Howe, Smith B. (See Allen, E. B., and Howe.)
Howell, Albert S., assignor to The Bell & Howell Company, Chicago, Ill. Calibrated adjusting device. 1,868,502; July 26.
Hueglin, Herman C., assignor to Federal Merchandise Company, Chicago, Ill. Ventilator. 1,868,980; July 26.
Hughes, Stanley, and R. Teats, Denver, Colo., assignors to American Smelting and Refining Company, New York, N. Y. Recovering thallium. 1,869,214; July 26.
Hughes, Stanley, and R. Teats, Denver, Colo., assignors to American Smelting and Refining Company, New York, N. Y. Extracting and separating cadmium. 1,869,259; July 26.
Hughes, Walter J., assignor to General Zeolite Company, Chicago, Ill. Steam purifier discharge. 1,869,149; July 26.
Huguenin, Albert, Paris, France. Closing device for large openings which are essentially horizontal and are made water-tight in all parts. 1,868,575; July 26.
Hunt, Andrew M., deceased, New York, N. Y.; Crocker First Federal Trust Company, executor of said A. M. Hunt, assignor to The Standard Stoker Company, Incorporated. Fluid cooled distributing member for stokers. 1,869,061; July 26.
Hunt, William, assignor to The C. M. Kemp Manufacturing Company, Baltimore, Md. Automatic fire safety device. 1,868,708; July 26.
Hurley, Albert B., New York, N. Y. Nonglare moving picture screen. 1,868,834; July 26.
Hutchens, Ralph W. (See Staake, Spencer O., assignor.)
Hyatt, Clinton B., Melrose Park, assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Adjustable condenser. 1,868,943; July 26.
I. G. Farbenindustrie Aktiengesellschaft. (See Bähr, Hans, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Eyer, C., and Korn, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Kämpf, Adolf, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Overdick, Fritz, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schmidt, O., and Grosskinsky, assignors.)
Ihde, August F., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Radiator corner construction. 1,869,338; July 26.
Imperial Chemical Industries Limited. (See Brightman, Rainald, assignor.)
Imperial Chemical Industries Limited. (See Tatum, W. W., Todd, Hooley, and Thomas, assignors.)
Industrial Patents Corporation. (See McKee, H. H., and Dziedzic, assignors.)
Ingersoll-Rand Company. (See Bancel, Paul A., assignor.)
Ingersoll-Rand Company. (See Bayles, Lewis C., assignor.)
Ingersoll Steel & Disc Co. (See Ingersoll, Stephen L., assignor.)
Ingersoll-Rand Company. (See Metzger, Chester W., assignor.)
Ingersoll-Rand Company. (See Wilhelm, Russell H., assignor.)
Ingersoll, Stephen L., assignor to Ingersoll Steel & Disc Co., Chicago, Ill. Making laminated metal. 1,868,749; July 26.
Inland Manufacturing Company, The. (See Chilton, Ralph H., assignor.)
Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)
International Cellucotton Products Co. (See Thompson, Oscar T., assignor.)
International Chromium Process Corporation. (See Simpson, Kenneth M., assignor.)
International Communications Laboratories, Inc. (See Connery, Alder F., assignor.)
International Communications Laboratories, Incorporated. (See Griffith, Ronald G., assignor.)
International Communications Laboratories, Inc. (See Halliden, Frederick G., assignor.)
International Communications Laboratories, Inc. (See Vernam, Gilbert S., assignor.)
International Communications Laboratories, Inc. (See Woodward, Marion H., assignor.)
International Harvester Company. (See Beall, William L., assignor.)
International Harvester Company. (See Lyford, Robert E., assignor.)
International Harvester Company. (See Morkovski, James, assignor.)
International Harvester Company. (See Slonneger, John C., assignor.)
International Harvester Company. (See Westberg, Carl R., assignor.)
Inventors' Patent Holding Company. (See Mahr, Julius A., assignor.)
Iowa State College of Agricultural and Mechanical Arts. (See Watson, Donald J., assignor.)
Ithaca Gun Company. (See Smith, Nestor F., assignor.)
Ivory, Chester S., assignor to The Estate of J. W. Ivory, Philadelphia, Pa. Matrix retainer. 1,868,981; July 26.
Ivory, J. W., The Estate of. (See Ivory, Chester S., assignor.)
Jackson, Alexander F., Mount Vernon, assignor to Wetherbest Stained Shingle Company, Inc., North Tonawanda, N. Y. Handling and treating shingles. 1,868,150; July 26.
Jackson, Thomas E., Youngstown, Ohio. Auxiliary air intake and mixing device. 1,868,902; July 26.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Oxidation of derivatives of fluorene. 1,868,531; July 26.
Jaeger, Alphons O., Mt. Lebanon, assignor to The Selden Company, Pittsburgh, Pa. Production of aryl ketones. 1,868,532; July 26.
Janalik, Alois, New York, N. Y. Legging. 1,869,103; July 26.
Jansson, Gustav E., Atlantic, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Potential transformer. 1,868,605; July 26.
Jansson, Gustav E., Atlantic, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Combined insulating bushing and transformer. 1,868,606; July 26.
Jay, Mary R., New York, N. Y. Sleeping balcony. 1,869,104; July 26.
Jeffery, Joseph A., and F. H. Riddle, assignors to Champion Porcelain Company, Detroit, Mich. Pyrometer tube. 1,869,151; July 26.
Jenkins, Alexander F., Baltimore, Md. Oxy-acetylene torch. 1,869,215; July 26.
Jenkins, Alexander F., Baltimore, Md. Fabricating tips for torches. 1,869,260; July 26.
Jenkins, Thomas B., Richmond, Ind., assignor to Jenkins Vulcan Spring Co., Richmond, Ind. Controlling and measuring liquids for remote delivery. 1,869,010; July 26.
Jenkins Vulcan Spring Co. (See Jenkins, Thomas B., assignor.)
Jenkins, William A., Wilmington, Calif. Reversible die head. 1,868,750; July 26.
Jennejohn, John C., assignor to Utility Manufacturing Co., Cudahy, Wis. Engraving machine. 1,868,662; July 26.
Jennings, Chester S., assignor to The Lamson Company, Syracuse, N. Y. Carrier for dispatch systems. 1,868,903; July 26.
Jennings, Ruby S., Butler, Ind. Pocket. 1,869,261; July 26.
Joanisse, Alzeard F. (See Forest, J. F. E., and Joanisse.)
Johnson, Carl. (See Thompson, N., and Johnson.)
Johnson, Carl E., Pasadena, Calif. Motor construction. 1,868,533; July 26.
Johnson, Clarence G., Hartford City, Ind. Door. 1,869,347; July 26.
Johnson, George T. (See Spiller, G. A., and Johnson.)
Johnson, George T., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Railway car. 1,869,325; July 26.
Johnson, Henry G., assignor to Summit Thread Company, East Hampton, Conn. Thread measuring mechanism. 1,868,663; July 26.
Johnson, Manton E., St. Louis, Mo. Signaling device. 1,868,576; July 26.
Johnson, Nathan C., Englewood, N. J. Joint for tubular concrete members and the like. 1,869,105; July 26.
Johnston, Ira J., Sac City, Iowa. Barber's sterilizer. 1,868,904; July 26.
Jones, Donald C. et al. (See Prizer, Eugene L., assignor.)
Jones, Donald C., et al. (See Prizer, Eugene L., and J. A., assignors.)
Jones, Helen P., Port Washington, N. Y. Drapery hanger. 1,868,944; July 26.
Jones and Laughlin Steel Corporation. (See Free, John W., assignor.)
Jones, Laurence D., Schenectady, N. Y., assignor to General Electric Company, Dynamo electric machine. 1,869,152; July 26.
Jubilee Manufacturing Co. (See Gillet, Alexis F., assignor.)
Junkers, Hugo, Dessau, Germany. Internal combustion engine with positive fuel feeds. 1,868,636; July 26.
Kämpf, Adolf, Dessau-Ziebigk, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Precipitating bath for making threads or the like from viscose. 1,868,577; July 26.
Karagheusian, A. & M., Inc. (See Kennedy, Martin, assignor.)
Käser, Ernst. (See Henter, Mathias.)
Kass, Samuel M., Philadelphia, Pa. Hose connection for faucets. 1,868,798; July 26.
Kayden, Gustave L., New York, N. Y. Airship. 1,868,664; July 26.
Kean, Robert H., assignor to General Zeolite Company, Chicago, Ill. Liquid treatment. 1,869,153; July 26.
Keeran, Charles R., Evanston, Ill. Mechanical pencil. 1,869,198; July 26.
Kelbsch, Floyd G. (See Parrish, L., and Kelbsch.)
Kelley, John E., Larchmont, assignor to Eastern Laboratories, Inc., New York, N. Y. Drier or blower. 1,868,905; July 26.
Kellogg Dills, Inc. (See Dills, Logan A., assignor.)
Kelsey-Hayes Wheel Corporation. (See Batie, Joseph E., assignor.)
Kelsey-Hayes Wheel Corporation. (See White, John W., assignor.)

Kelvinator Corporation. (See Larsen, Lawrence W., assignor.)
Kelvinator Corporation. (See Replogle, John R., assignor.)
Kemp, C. M., Manufacturing Company. (See Hunt, William, assignor.)
Kennedy, Allen E., Utica, N. Y. Boxing glove. 1,869,216; July 26.
Kennedy, George H., jr., Worcester, Mass. Ice tray for mechanical refrigerators. 1,868,503; July 26.
Kennedy, Hartridge D. (See Kennedy, Martin D., assignor.)
Kennedy, Martin, Freehold, N. J., assignor to A. & M. Karagheusian, Inc., New York, N. Y. Display stand. 1,869,217; July 26.
Kennedy, Martin, Freehold, N. J., assignor to A. & M. nedy, Dunedin, Fla. Gasoline saver. 1,869,262; July 26.
Kent Company Inc., The. (See Yutzler, F. W., and Kent, assignors.)
Keulers, Jakob, Hilden, Germany. Flange pipe connection. 1,868,906; July 26.
King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,868,907; July 26.
King, Manly E., Springville, N. Y. Differential drive mechanism for automobiles. 1,869,154; July 26.
Klahre, Hugo, Teaneck, N. J., assignor to Consolidated Trimming Corp., New York, N. Y. Multiple bow-shuttle. 1,869,062; July 26.
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Klod, John A., Chicago, Ill. Cutting member and holder therefor. 1,869,218; July 26.
Klod, John A., Chicago, Ill. Cutting member and holder therefor. 1,869,219; July 26.
Klod, John A., Chicago, Ill. Meat cutter. 1,869,220; July 26.
Klug, Kurt, Berlin-Charlottenburg, Germany, assignor to Locomotive Booster Company, New York, N. Y. Booster equipped locomotive. 1,869,155; July 26.
Knott, Eustace R., Sharon, Mass. Machine for popping corn. 1,868,578; July 26.
Knuth, Nick. (See Leidy, W. J., and Knuth, assignors.)
Koch, Henry C., Chicago, Ill. Prepared roofing and making same. 1,868,751; July 26.
Koch & Sterzel Aktiengesellschaft. (See Welter, Eduard, assignor.)
Koeberle, Karl. (See Kunz, M. A., and Koeberle.)
Koerber, John C., South Orange, N. J. Toy vehicle. 1,869,199; July 26.
Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Electromagnetic sound reproducer system. 1,868,607; July 26.
Korn, Friedrich. (See Eyer, C., and Korn.)
Kotenberg, Herbert R. (See Harder, Henry J., and Kotenberg.)
Kraft-Phenix Cheese Corporation. (See Guest, Ward E., assignor.)
Kramer, Andrew A., Kansas City, Mo. Complete discharge vehicle tank. 1,868,799; July 26.
Krämer, Christian, Berlin-Pankow, Germany, assignor to General Electric Company. Mercury arc rectifier. 1,869,156; July 26.
Kranich, Frank N. G., Winnetka, Ill. Harvesting apparatus. 1,868,835; July 26.
Krebser, Adolf, assignor to J. R. Geigy S. A., Basel, Switzerland. Manufacture of disazodyestuffs for dyeing and printing wool. 1,869,063; July 26.
Krebser, Adolf, assignor to J. R. Geigy S. A., Basel, Switzerland. Manufacture of disazodyestuffs for dyeing and printing wool. 1,869,064; July 26.
Kreidel, Hans, Wiesbaden, Germany. Central lubricating device, especially for motor driven vehicles. 1,868,800; July 26.
Kroger, Fred H., Brooklyn, N. Y., assignor to Radio Corporation of America. Direction finder. 1,868,982; July 26.
Kruesi, Geoffrey G., Albambra, Calif., assignor, by mesne assignments, to Bendix Aviation Corporation, South Bend, Ind. Radio direction finder. 1,868,945; July 26.
Kuhl, John, Oakland, assignor to Standard Oil Company of California, San Francisco, Calif. Relief valve. 1,868,504; July 26.
Kuhlke, Otto J., Akron, assignor, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio. Apparatus for the manufacture of laminated rubber sheeting. 1,869,011; July 26.
Kühner, Otto, assignor to the firm L. Schuler A. G., Goppingen, Germany. Die cushion for presses. 1,868,637; July 26.
Kuhnle, Frederick C., Chicago, Ill. Plumbing fixture adapter. 1,868,065; July 26.
Kunian, Paul. (See Douglas, Arthur M., assignor.)
Kunian, Paul, Minneapolis, and A. M. Douglas, St. Paul, Minn.; said Douglas assignor to said Kunian. Hair drier. 1,869,012; July 26.
Kunz, Max A., Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Halogenated dibenzanthrone. 1,868,608; July 26.
Kyler, Albert H., Westminster, Md. Mechanism for applying labels to cylindrical cans or the like. 1,869,065; July 26.
Lake Erie Chemical Company. (See Bridgeman, Frank J., assignor.)
Lam, Wah, Honolulu, Hawaii. Plant propagating device. 1,868,609; July 26.
Lamson Company, The. (See Glahn, Otto M., assignor.)
Lamson Company, The. (See Jennings, Chester S., assignor.)
Lane, Charles K., Rockland, Mass. Athletic supporter. 1,868,610; July 26.
Lane, Elmer Z., Mechanic Falls, Maine, assignor to American Telephone and Telegraph Company. Broad-band audio-amplifier. 1,868,579; July 26.
Lang, Henry T., assignor to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio. Brush for vacuum cleaners and the like. 1,869,157; July 26.
Langer, Arthur, Vienna, Austria. Extracting of iron. 1,868,666; July 26.
Langford, George W., and H. L. Haines, assignors to Economy Baler Company, Ann Arbor, Mich. High density compress. 1,868,752; July 26.
LaPointe, Albert D., Newark, N. J. Apparatus for preparing photo stipple intaglio engraved printing rolls. 1,868,709; July 26.
Larsen, Lawrence W., assignor to Kelvinator Corporation, Detroit, Mich. Ebullition initiator. 1,868,611; July 26.
Laska, Leopold, and O. Haller, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Arylamides of 3-hydroxy-phenyl-arylamine-carboxylic acids and making same. 1,868,612; July 26.
Latzko, Johann, Vienna, and O. Plechl, Pfaffstten, assignors to Oesterreichische Brown-Boveri-Werke A. G., Vienna, Austria. Indicating and recording apparatus. 1,869,221; July 26.
Laurain, Alfred, Paris, France. Brace for personal wear. 1,869,263; July 26.
Leader Card Works. (See Wilke, Gustave A., assignor.)
Leben, Henry, Harrow, assignor to A. Reyrolle & Company Limited. Hebburn-on-Tyne, England. Electric protective relay. 1,869,222; July 26.
LeGorre, Jean L. (See Shaw, A. B., and LeGorre.)
Leidy, Wilmer J., and N. Knuth, assignors to Chicago Transformer Corporation, Chicago, Ill. Coil winding machine. 1,868,667; July 26.
Leriche, Willis, Allentown, Pa., and I. V. Beasley, Yukon, Okla., assignors to Cement-Gun Contracting Company. Spacing device. 1,869,264; July 26.
Leriche, Willis, Allentown, Pa., and I. V. Beasley, Yukon, Okla., assignors to Cement-Gun Contracting Company. Lining ditches and the like. 1,869,265; July 26.
Levy, Joseph, Brookline, Mass. Stamp. 1,869,339; July 26.
Licktelg, Albert F., Detroit, assignor to National Brass Co., Grand Rapids, Mich. Latch. 1,868,984; July 26.
Lincoln Electric Company, The. (See Lincoln, J. C., assignor.)
Lincoln, John C., assignor to The Lincoln Electric Company, Cleveland, Ohio. Welding apparatus. 1,869,013; July 26.
Lincoln, John C., assignor to The Lincoln Electric Company, Cleveland, Ohio. Arc welding electrode control mechanism. 1,869,014; July 26.
Lincoln, John C., assignor to The Lincoln Electric Company, Cleveland, Ohio. Arc welding apparatus. 1,869,015; July 26.
Lincoln, John C., assignor to The Lincoln Electric Company, Cleveland, Ohio. Method of and apparatus for welding. 1,869,350; July 26.
Lincoln, John C., assignor to The Lincoln Electric Company, Cleveland, Ohio. Method of and apparatus for making pipe. 1,869,351; July 26.
Linton, Grant, Mineola, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Vacuum cleaner attachment. 1,869,200; July 26.
Lipp, Albert E., Philadelphia, Pa. Photographer's flash light apparatus. 1,869,158; July 26.
Leonard, Howard M., South Bend, Ind., assignor, by mesne assignments, to Bendix Aviation Corporation. Engine. 1,868,753; July 26.
Letz Manufacturing Company, The. (See Holland-Letz, John, assignor.
Lieb, Christian N., Findley, Ohio. Vehicle brake. 1,868,836; July 26.
Lieberman, Joseph A., and S. Caplin, Philadelphia, Pa. Riding breeches. Re18,541.
Linder, Carl P. (See Charlesworth, S. I., Harris, and Linder.)
Lindley, Henry William, Berlin-Lichterfelde, Germany. Microscope refractometer. 1,868,908; July 26.
Locomotive Booster Company. (See Klug, Kurt, assignor.)
Lomax, Clarence E., Oak Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,869,016; July 26.
Long, Leland E. (See Whitworth, S. and Long.)
Loomis, Allen E., Minneapolis, assignor to American Farm Machinery Company, St. Paul, Minn. Tool lift for cultivators. 1,869,159; July 26.
Loomis, Nathaniel E. (See Howard, F. A., and Loomis, assignors.)
Low, Frank S., Niagara Falls, assignor to Westvaco Chlorine Products, Inc., New York, N. Y. Manufacture of hydrochloric acid. 1,868,946; July 26.

Lowe, Ernest A., Plainfield, N. J., assignor to Automatic Sprinkler Company of America, Cleveland, Ohio. Automatic and manual remote control fire extinguishing system. 1,869,201; July 26.
Lowe, Ernest A., Plainfield, N. J., and J. R. Hamilton, Yonkers, N. Y., assignors to Automatic Sprinkler Company of America, Cleveland, Ohio. Fluid controlled system. 1,869,202; July 26.
Lowe, Ernest A., and J. R. Hamilton, Cleveland Heights, assignors to Automatic Sprinkler Company of America, Cleveland, Ohio. Automatic thermal valve actuator. 1,869,203; July 26.
Lowe, Ernest A., and J. R. Hamilton, Cleveland Heights, assignors to Automatic Sprinkler Company of America, Cleveland, Ohio. Deluge valve. 1,869,204; July 26.
Lucas-Girardville, Paul N., Paris, France. Vessel adapted for use as landing place for air lines crossing the sea. 1,869,247; July 26.
Lucas, Joseph, Limited. (See Tippen, Frank J., assignor.)
Lucas, Samuel M., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical rectifier. 1,869,017; July 26.
Ludlow, Israel, Mineola, N. Y., assignor of one-eighth to A. C. Fraser, Ridgefield, Conn., one-eighth to E. V. Myers, East Orange, N. J., one-eighth to L. E. Giles, New York, N. Y., and one-eighth to B. M. Battey, Ascawana, N. Y. Control system for airplanes and the like. 1,869,326; July 26.
Lummus Company, The. (See Collins, Raymond R., assignor.)
Lyford, Robert E., Chicago, Ill., assignor to International Harvester Company. Supercharger air cleaner. 1,868,534; July 26.
Lyon, James B., New York, N. Y. Nail buffer. 1,868,985; July 26.
Macallum, James, jr., and E. R. Powell, St. Louis, Mo., said Powell assignor to said Macallum. Liquid indicating device. 1,868,535; July 26.
Mackay, Joseph T., Brooklyn, assignor to United Fruit Company, New York, N. Y. Protective wrapper. 1,869,313; July 26.
Mackey, Albert E., Batavia, N. Y. Adjustable loading brace for railway cars. 1,868,638; July 26.
Mahon, Lee Henry, Liberty, assignor of one-half to H. H. Sloan, Houston, Tex. Gland packing. 1,868,668; July 26.
Mahr, Julius A., assignor to Inventors' Patent Holding Company, Minneapolis, Minn. Folding baby carriage. 1,869,205; July 26.
Malbohm, Harry C., assignor to The Simplex Radio Company, Sandusky, Ohio. Combined radioreceiver, electrical phonograph, and public address system. 1,868,613; July 26.
Malbohm, Harry C. (See West, M. B., and Malbohm.)
Maillard, Joseph E. B., Nogent-Le-Roy, France. Compact and vanity set. 1,868,909; July 26.
Maintenance Equipment Company. (See War-, Harold G., assignor.)
Malcolm, John C., Wollaston, assignor to Bay State Fishing Company, Boston, Mass. Trawling gear. 1,869,018; July 26.
Malmquist, Emil K., South Bellingham, Wash. Machine for testing filled and sealed cans and containers. 1,869,067; July 26.
Manly, Howard P., assignor to Manly Jail Works, Dalton, Ga. Communication device for jails. 1,869,266; July 26.
Manly Jail Works. (See Manly, Howard P., assignor.)
Mann, Matthew D., jr., Roselle, N. J., assignor to Standard Oil Dexelopment Company. Method and apparatus for heat transfer. 1,869,340; July 26.
Manning, Edward, assignor to Manning Manufacturing Co., Rutland, Vt. Quick flushing valve for milk pasteurizing machines. 1,868,947; July 26.
Manning Manufacturing Co. (See Manning, Edward, assignor.)
Manufacturers Aircraft Association, Inc. (See Bradley, Samuel S., assignor.)
Marbach, Edward R. (See Bronson, B., and Marbach, assignors.)
Marbach, Edward R., and G. F. Cavanagh, assignors to The Ohio Rubber Company, Cleveland, Ohio. Making steering wheel inserts. 1,869,267; July 26.
Marchant, Charles J., South Milwaukee, Wis. Rotary engine. 1,869,106; July 26.
Marien, Charles A., assignor to Ramsey Accessories Manufacturing Corporation, St. Louis, Mo. Piston ring-pander and making the same. 1,869,107; July 26.
Marien, Melvin W., assignor to Ramsey Accessories Manufacturing Corporation, St. Louis, Mo. Piston ring. 1,869,108; July 26.
Maris, Elwood S., Upper Darby, assignor to The Brown Instrument Company, Philadelphia, Pa. Relay instrument. 1,869,109; July 26.
Marks, Edward S., assignor, by mesne assignments, to Franklin Development Corporation, Syracuse, N. Y. Line air cooled internal combustion engine. 1,869,206; July 26.
Markus, Benjamin, Oak Park, Ill., assignor to H. P. Watson, Minneapolis, Minn. Drinking water cooling and dispensing apparatus. 1,868,837; July 26.
Marrison, Warren A., Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Piezo-electric resonator. 1,869,160; July 26.
Martin, Harold M., Schenectady, N. Y., assignor to General Electric Company. Electric discharge device. 1,869,207; July 26.
Martz, Mike, Harrisburg, Pa. Rail anchor. 1,869,268; July 26.
Matthews, Howard W. (See Bock, W., and Matthews.)
Mattison, Arthur C., Eau Claire, Wis. Cigar or cigarette holder. 1,868,986; July 26.
Maurer, Edwin R. (See Ferguson, D. M., and Maurer.)
May, Harold V., Pittsfield, Mass., assignor to General Electric Company. Welding torch. 1,869,341; July 26.
Maynard, Arthur H., Warwick, R. I., assignor to Boston Wire Stitcher Company, Portland, Me. Clutch-device for wire-stitching and stapling machine or like apparatus. 1,868,536; July 26.
McCabe, William F., New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 87,437; July 26.
McClatchie, John M., assignor to The Borden Company, New York, N. Y. Cover replacing device for can washing machines. 1,868,537; July 26.
McConnell, Max T., assignor of one-half to A. R. Rubager, Westfield, Pa. Automatic safety switch for radio auparatus. 1,869,068; July 26.
McCool, Peter F., Hackensack, N. J. Metal structural unit. 1,869,110; July 26.
McCullough, Ervin W., Indianapolis, Ind., Cooked garbage liquor solid and forming same. 1,868,069; July 26.
McCullough, Lee W., Yonkers, N. Y. Current controlling or regulating device. 1,868,710; July 26.
McDougall, George F., Portland, Oreg., assignor, by direct and mesne assignments, to Oregon Textile Machines, Inc. Fringe making machine. 1,868,711; July 26.
McEachern, Joseph H., San Anselmo, assignor to Standard Oil Company of California, San Francisco, Calif. Display rack for bottles. Des. 87,438; July 26.
McEachern, Joseph H., San Anselmo, assignor to Standard Oil Company of California, San Francisco, Calif. Display rack for bottles. Des. 87,439; July 26.
McIntyre, Glenn H., East Cleveland, assignor to Ferro Enameling Company, Cleveland, Ohio. Method for recovery of fluorides from enamel glass smelter gases. 1,869,019; July 26.
McIntyre, John, Portobello, Scotland. Shaving preparation. 1,868,838; July 26.
McKee, Harry H., and N. J. Dziedzic, assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Conveyer. 1,868,538; July 26.
McKenney, George F., Cleveland, Ohio. Wall construction. 1,869,069; July 26.
McKinney, Edward L., Indianapolis, Ind. Door lock. 1,868,580; July 26.
McLaren, Gerald J., Ballston Spa., assignor to Gilbert J. Scofield Company, Inc., Watervliet, N. Y. Vending machine. 1,869,070; July 26.
McLaughlin, Frank, assignor to W. C. Goffatt, Toronto, Ontario, Canada. Fishing lure. 1,869,111; July 26.
McLean, Asa D. F. Cowiche, Wash. Folding fish basket. 1,869,071; July 26.
McMaster, Archie J., and C. E. Parson, assignors to G-M Laboratories, Inc., Chicago, Ill. Photo-electric tube. 1,869,342; July 26.
McMillen, Russell H., Pittsburgh, Pa., assignor to Crucible Steel Company of America. Composite steel plate and bar. 1,869,208; July 26.
McNaught, Norris F., and E. H. Peterson, assignors to Duro Metal Products Company, Chicago, Ill. Ratchet lever. 1,868,839; July 26.
McNaught, Norris F., and E. H. Peterson, assignors to Duro Metal Products Company, Chicago, Ill. Ratchet lever. 1,868,840; July 26.
McVicker, Walter J., Minneapolis, Minn., assignor, by mesne assignments, to Minneapolis-Moline Power Implement Company. Threshing apparatus. 1,869,072; July 26.
Mead, Milton S., jr., Schenectady, N. Y., assignor to General Electric Company. Thermionic measuring device. 1,869,209; July 26.
Mead Research Engineering Company, The. (See Traquair, J., and Rawling, assignors.)
Meadows, Claude C., assignor of one-half to S. F. Beasley, Tulsa, Okla. Band anchoring means for tank cars. 1,868,841; July 26.
Mergott, J. E., Co. (See Hiering, William C., assignor.)
Merrill, Wilbur L., Scotia, N. Y., assignor to General Electric Company. Heat control apparatus. 1,869,161; July 26.
Metzgar, Chester W., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Heat exchanger. 1,868,639; July 26.
Meunier, Leon F., Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Handle for portable tools. 1,868,712; July 26.
Meyer, John F. (See Gatter, Rudolph, assignor.)
Middleton, Edmund B. (See Rocker, G., and Middleton, assignors.)
Miles, Eustace H., London, and G. Reilly, Luton, England. Composition of vegetable food and making the same. Re18,542; July 26.
Miller, Ernest B., assignor to The Silica Gel Corporation, Baltimore, Md. Revivifying adsorbents. 1,868,581; July 26.
Miller, Jacob A., Genoa, Colo. Corn harvester. 1,869,269; July 26.
Miller, Jerome J., Chadron, Nebr. Journal box packing holder. 1,868,842; July 26.

Miller, John M., assignor to Owens Development Corporation, New York, N. Y. Governor. 1,868,910; July 26.
Miller, Stanley D., Alameda, Calif. Fuel injection system. 1,868,713; July 26.
Miller, William F., Miami, assignor to Rellin Investment Company, Miami, Fla. Punch. 1,869,073; July 26.
Milligan, Clifford V., Houston, Tex. Flatwork ironer. 1,869,074; July 26.
Mills, Frank C., Lapland, S. Dak. Trap setting devices. 1,868,714; July 26.
Miner, Anson W., assignor to The Waterbury Brass Goods Corporation, Waterbury, Conn. Molded insert for compounds. 1,869,102; July 26.
Minneapolis-Moline Power Implement Company. (See McVicker, Walter J., assignor.)
Mochalle, Paul, Durrjentsch, and J. Mrochem, Breslau, Germany. Concentrated sulphur suspension and making same. 1,868,715; July 26.
Molkenthin, Joseph, jr., Glen Ridge, N. J., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor blade. 1,869,327; July 26.
Monitor Controller Company. (See Whittingham, George H., assignor.)
Monmouth Products Company, The. (See Salzman, George S., assignor.)
Montan- und Industrialwerke, vormals Joh. Dav. Starck, the Firm. (See Thum, Rudolf, assignor.)
Monteith, Charles N., and F. R. Canney, assignors to Boeing Airplane Company, Seattle, Wash. Transport airplane. Des. 87,440; July 26.
Moore, Richard C., assignor to The Coe Manufacturing Company, Painesville, Ohio. Automatic unloader for driers. 1,869,210; July 26.
Moorhouse, William R., assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Dyeing process. 1,868,987; July 26.
Morgan Crucible Company Limited, The. (See Doidge, Russell Mervyn, assignor.)
Morgan Engineering Company, The. (See Buck, Homer W., assignor.)
Morkoyski, James, Canton, Ill., assignor to International Harvester Company. Disk furrow opener. 1,868,539; July 26.
Morrell, Alfred F., assignor to Crompton-Knowles Loom Works, Worcester, Mass. Filling stop motion. 1,868,716; July 26.
Morterud, Einar, Oslo, Norway. Steam intake sleeve for sulphite pulp digesters. 1,869,270; July 26.
Mosler Safe Company, The. (See Bates, Charles J., jr., assignor.)
Mould, James A., Milwaukee, Wis., assignor to Gas Tool Patents Corporation, Chicago, Ill. Timer. 1,868,754; July 26.
Mount, William D., Lynchburg, Va. Dehydrator. 1,868,755; July 26.
Mrochem, Jacob. (See Mochalle, P., and Mrochem.)
Muller, Clement W., Modesto, Calif. Stationery rack. 1,868,756; July 26.
Munz, Elmer G., Detroit, Mich. Automatic control for irrigating systems. 1,868,801; July 26.
Murphy, Hoyt M., Hermleigh, Tex. Terracing and ditching machine. 1,869,271; July 26.
Murray Company, The. (See Behle, J., and Hodde, assignors.)
Murray Company, The. (See Hancock, William L., assignor.)
Murray Company, The. (See Hancock, William L., and Woodford, assignors.)
Muzzy, William H., Evanston, assignor to Stewart-Warner Corporation, Chicago, Ill. Liquid-sealed pumping system. 1,868,988; July 26.
Myers, Eugene V., et al. (See Ludlow, Israel, assignor.)
Myers, Hubert A., Toledo, Ohio. Universal joint. 1,868,540; July 26.
Myracle, Hobart M., assignor to American Iron and Machine Works Company, Oklahoma City, Okla. Pipe cutter. 1,868,757; July 26.
N. V. Maatschappij tot Beheer en Exploitatie van Octrooien. (See Genenger, Richard, assignor.)
Nacher, Paul, assignor to B. F. Gump Co., Chicago, Ill. Automatic delivery mechanism. 1,868,844; July 26.
Nakahara, Sadayoshi, New York, N. Y. Desk set fountain pen sleeve. 1,868,505; July 26.
Nande Corporation. (See Everett, Edward A., assignor.)
National Aniline & Chemical Company. (See Moorhouse, William R., assignor.)
National Brass Company. (See Lickteig, Albert F., assignor.)
National Marking Machine Company, The. (See Constable, Charles E., assignor.)
National Rubber Machinery Company. (See Kuhlke, Otto J., assignor.)
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Back head construction for rock drills. 1,868,670; July 26.
Nelson, Andrew C., Portland, Oreg. Suction producing device. 1,868,758; July 26.
Nelson, Martin L., Park Ridge, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Timing device. 1,868,989; July 26.
Nelson, William K., assignor to Universal Gypsum & Lime Co., Chicago, Ill. Method of and apparatus for making gypsum board. 1,868,671; July 26.
Nerney, George E., assignor to Bay State Optical Company, Attleboro, Mass. Ophthalmic mounting. Des. 87,441; July 26.
Nerney, George E., assignor to Bay State Optical Company, Attleboro, Mass. Pair of spectacles. Des. 87,442; July 26.
Nettleton, Lewis L., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Signalling apparatus and method. 1,869,020; July 26.
Neville Company, The. (See Schwalm, Bruce F., assignor.)
New York Air Brake Company, The. (See Campbell, Charles A., assignor.)
Newman, David F., Freeport, assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Projection screen. 1,868,759; July 26.
News Projection Corporation. (See Eitzen, August D., assignor.)
Nichols, Charles A., assignor to Delco-Remy Corporation, Anderson, Ind. Apparatus for removing cores from core molds. 1,869,112; July 26.
Niedergesass, Berthold F., Lynn, Mass., assignor to General Electric Company. Producing clear vitreous silica. 1,869,103; July 26.
Noell, Harry C., Weeping Water, Nebr. Wire stretcher. 1,869,118; July 26.
Noma Electric Corporation. (See Block, Joseph, assignor.)
Norberg, Ernest L., San Francisco, Calif. Lavatory. 1,868,760; July 26.
Norcross, Thomas. (See Willshaw, H., and Norcross.)
Nordstrom, Gustav E., assignor to American Fibre Corporation, Gardner, Mass. Reed loom. 1,868,717; July 26.
North American Chemical Company. (See Thoma, Andrew, assignor.)
Northam Warren Corporation. (See Brekke, Marshall T., assignor.)
Norton, John S., assignor of one-half to W. F. Hollingsworth, San Francisco, Calif. Adjustable fastener. 1,868,718; July 26.
Norviel, Harry E., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Ignition device. 1,869,104; July 26.
Nowery, Elsworth S. (See Schneider, G. B., and Nowery.)
Nutt, Harry G., et al. (See Prizer, Eugene L., assignor.)
Nutt, Harry G., et al. (See Prizer, E. L. and J. A., assignors.)
Ober, Beverly, and E. H. Wight, assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md. Preparing and ammoniating acid phosphate. 1,869,272; July 26.
Oberphos Company, The. (See Ober, B., and Wight, assignors.)
Oesterreichische Brown-Boveri-Werke A. G. (See Latzko, J., and Plechl, assignors.)
Ohanian, Horan, Watervliet, N. Y. Sign. 1,868,582; July 26.
Ohio Brass Company, The. (See Austin, Arthur O., assignor.)
Ohio Rubber Company, The. (See Bronson, B., and Marbach, assignors.)
Ohio Rubber Company, The. (See Marbach, C. R., and Cavanagh, assignors.)
Ohio Steel Foundry Company, The. (See Harbison, Clarence B., assignor.)
Okal, Luis S., Los Angeles, Calif. Basin flower holder. 1,868,802; July 26.
Okell, Stanley A. W., Cranford, N. J. Valve for steam radiators and the like. 1,868,541; July 26.
Olds, Howard A. (See Wells, Ira M., and Olds.)
Olinger, Elemuel I., Pollock, Mo. Agricultural machine. 1,869,273; July 26.
Oliver United Filters Inc. (See Campbell, Robert C., assignor.)
Oregon Textile Machines, Inc. (See McDougall, George F., assignor.)
Örström, Gustaf, Alsten, assignor to Aktiebolaget Gerh. Arehns Mekaniska Verkstad, Stockholm, Sweden. Controlling device for cigarette packaging machines. 1,868,583; July 26.
Osborn, Robert R., Garden City, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Aerofoil operating mechanism. 1,869,211; July 26.
Ossenbeck, Anton. (See Hecht, G., Ossenbeck, and Tietze.)
Österberg, Karl E. R., assignor to J. & C. G. Bollinders Mekaniska Verkstads Aktiebolag, Stockholm, Sweden. Device for inserting saw blades into saw frames. 1,868,845; July 26.
Ottenheimer, Reubel E. (See Abrens, Edwin J., assignor.)
Ottenstein, Friedrich, Nuremberg, Germany. Electric toy railway track. 1,868,584; July 26.
Overacker, Horace E., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Signaling system. 1,868,614; July 26.
Overbury, Frederick C., Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Roofing tile. 1,868,803; July 26.
Overdick, Fritz, Leverkusen/Wiesdorf, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Process for removing ammonia and hydrogen sulphide from gases. 1,868,843; July 26.
Owens Development Corporation. (See Miller, John M., assignor.)

Owens, Lee T., Tacoma, Wash. Blade holder. 1,869,075; July 26.
Oyston, William R., North Melbourne, Victoria, Australia, assignor to Continuous Gramophones Limited, London, England. Sound reproducing apparatus. 1,868,846; July 26.
Pabst, William F. (See Stenzel, Arthur E., assignor.)
Packard Motor Car Company. (See Vincent, Jesse G., assignor.)
Paldar, Emil J., Company. (See Emmert, John R., assignor.)
Palmer, James A., Taunton, Mass., assignor to Taunton Pearl Works, Inc. Necktie holder. 1,869,165; July 26.
Panclyte Corporation. (See Crossman, George J., assignor.)
Parker, A. C. (See Henderson, Nelson H., assignor.)
Parker, Elmer E., Grand Rapids, Mich. Brake shoe reliner. 1,869,343; July 26.
Parker Rust-Proof Company. (See Thompson, J. S., and Tanner, assignors.)
Parrish, Lee M., and F. G. Kelbsch, Redfield, S. Dak. Locomotor. 1,868,948; July 26.
Parson, Charles E. (See McMaster, A. J., and Parson, assignors.)
Parva Products Company. (See White, Birdora H., assignor.)
Pass & Seymour, Inc. (See Watkin, Bertram L., assignor.)
Pat, Louis, Chicago, Ill. Window fastener. 1,868,949; July 26.
Pat, Louis, Chicago, Ill. Necktie holder. 1,868,950; July 26.
Patent Button Company, The. (See Purinton, Forrest G., assignor.)
Patent and Licensing Corporation, The. (See Overbury, Frederick C., assignor.)
Patinot, Philippe, Brooklyn, N. Y., assignor to Display Price Corporation. Interchangeable character or symbol and holder therefor. 1,869,314; July 26.
Patterson, Edgar W., Los Angeles, Calif., assignor, by mesne assignments, to Clayton Severns and J. N. Hicks. Oil saver. 1,869,076; July 26.
Paulsen, Charles. (See Tate, George A., assignor.)
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Yarn spool. 1,868,719; July 26.
Pearson, Lee R., Ranger, Tex. Mouse trap. 1,868,847; July 26.
Pease, Frederick J., and H. H., Wauwatosa, assignors to Clum Manufacturing Company, Milwaukee, Wis. Sash pulley. 1,868,761; July 26.
Pease, Harlow H. (See Pease, Frederick J., and H. H.)
Peck, Herbert A., Glenside, assignor to American Engineering Company, Philadelphia, Pa. Electrically-operated windlass and the like. 1,869,223; July 26.
Peelle, Willis J., Chicago, Ill. Gasket forming machine. 1,868,990; July 26.
Pennington, Mary E., assignor to The Borden Company, New York, N. Y. Scale for determining the color of egg meat. 1,868,542; July 26.
Pennsylvania Globe Company. (See Shaw, A. B., and LeGorre, assignors.)
Perks, George W., assignor of one-half to John R. Gammeter, Akron, Ohio. Expansion joint or coupling. 1,869,021; July 26.
Permutit Company, The. (See Behrman, Abraham S., assignor.)
Peterson, Adolphe C., Minneapolis, Minn. Launching means. 1,869,212; July 26.
Peterson, Carl E. (See Anderson, Carl E., and Peterson, assignors.)
Peterson, Edward H. (See McNaught, Norris F., and Peterson, assignors.)
Phare, Clinton J., assignor to H. V. Bright, Cleveland, Ohio. Register. 1,869,022; July 26
Phelps, Alva W., assignor to Delco-Remy Corporation, Anderson, Ind. Stopping device for automatic lathes and the like. 1,869,114; July 26.
Phelps, Edward M., assignor to Terre Haute Advertising Company, Terre Haute, Ind. Thermometer. 1,868,911; July 26.
Pheips, Henry E., Tuckahoe, N. Y., assignor to American Telephone and Telegraph Company. Telephone system. 1,868,585; July 26.
Philadelphia Ice Cream Cone Machinery Company. (See Bresin, Joseph, assignor.)
Philadelphia Storage Battery Company. (See Holland, Walter E., assignor.)
Philadelphia Storage Battery Company. (See Hyatt, Clinton B., assignor.)
Philadelphia Storage Battery Company. (See Timmons, John S., assignor.)
Phillips, Frank F., Ironton, Ohio. Automobile door lock and post. 1,869,274; July 26.
Philips, Harold F., Belmont, Mass. Piston and skirt expanding ring therefor. 1,869,166; July 26.
Photomaton, Ind. (See Daniels, M. H., and Slack, assignors.)
Pickup, George E., assignor to The Wehrle Company, Newark, Ohio. Cook stove. 1,868,991; July 26.
Pierce, Robert H. H. (See Youngman, R. H., and Pierce.)
Pink, Clarence E., Cambridge, Md. Connecter for wire fabrics. 1,868,586; July 19.
Planer, Paul, Vienna, Austria. Projecting bright backgrounds by oblique projections. 1,869,275; July 26.
Plank, Walter E., San Francisco, Calif. Steering mechanism stabilizer. 1,868,912; July 26.
Plechl, Otto. (See Latzko, J., and Plechl.)
Plenge, Edwin H., Memphis, Mo. Game apparatus. 1,868,762; July 26.
Podel, Abraham, assignor to Anchor Cap & Closure Corporation, New York, N. Y. Sealed package. 1,869,167; July 26.
Podszus, Emil, Berlin-Friedrichshagen, Germany. Sound reproducing apparatus. 1,868,640; July 26.
Polysius, G., Aktiengesellschaft. (See Bruhn, Bruno, assignor.)
Porte, René, Paris, assignor to Societe Hardoll, Etablissements Hariveau, Dollmier et Rene Porte & Cie. Reunis, Levallois-Perret, France. Apparatus for delivering measured quantities of liquid. 1,868,848; July 26.
Powell, Edward R. (See Maccallum, J., jr., and Powell.)
Pratt Chuck Co., The. (See Scarritt, Winthrop T., assignor.)
Pratt, Goodrich B., Grantwood, assignor to Bond Electric Corporation, Jersey City, N. J. Flash light switch. 1,869,315; July 26.
Precourt, Ernest W., Phillipsburg, N. J. Advertising device. 1,869,276; July 26.
Prentice, James, Miami, Fla. Internal combustion engine. 1,869,077; July 26.
Prescott, Frank H., assignor to Delco-Remy Corporation, Anderson, Ind. Ventilating fan. 1,869,115; July 26.
Price, Joseph. (See Brown and Price, assignors.)
Pritchard, Arthur H., East Orange, N. J., assignor to Vacuum Oil Company, Inc., New York, N. Y. Lubricating means for roller pulverizers and the like. 1,869,023; July 26.
Prizer, Eugene L., Solana Beach, assignor of one-fourth to J. A. Prizer and one-fourth to D. C. Jones, Fullerton, and one-sixth to H. G. Nutt, Altadena, Calif. Method and apparatus for supplying soluble agents to liquids. 1,868,914; July 26.
Prizer, Eugene L., Solana Beach, and J. A. Prizer, Fullerton, assignors of one-third to said E. L. Prizer, one-fourth to said J. A. Prizer, and one-fourth to D. C. Jones, Fullerton, and one-sixth to H. G. McNutt, Altadena, Calif. Method of supplying soluble fertilizing agents to soil. 1,868,913; July 26.
Prizer, John A., et al. (See Prizer, Eugene L., assignor.)
Prizer, John A. (See Prizer, Eugene L. and J. A., assignors.)
Proctor, John A., Lexington, and W. M. Bailey, Lynn, Mass., assignors, by mesne assignments, to General Electric Company. Electrical condenser. 1,869,168; July 26.
Proctor, John A., Lexington, Mass., assignor, by mesne assignments, to General Electric Company. Electrical condenser. 1,869,169; July 26.
Purinton, Forrest G., assignor to The Patent Button Company, Waterbury, Conn. Machine for assembling and coating a multiplicity of articles. 1,868,804; July 26.
Purinton, Forrest G., assignor to The Patent Button Company, Waterbury, Conn. Article-assembling and conveying machine. 1,868,805; July 26.
Purinton, Forrest G., assignor to The Patent Button Company, Waterbury, Conn. Process and apparatus for decorating buttons and like articles. 1,868,849; July 26.
Purinton, Forrest G., assignor to The Patent Button Company, Waterbury, Conn. Machine for coating a multiplicity of articles. 1,868,850; July 26.
Purser, Albert F., et al. (See Hines, Martin, assignor.)
Pyrene, Minimax Corporation. (See Timpson, Lewis G. M., assignor.)
Racklyeft, John W., assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio. Ironing machine. 1,868,806; July 26.
Racklyeft, John W., assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio. Ironing machine. 1,868,807; July 26.
Radford, Lee Wood, Cabarrus, assignor of three-fourths to Jonah L. Hartsell, Concord, N. C. Safety device for carding machines. 1,868,615; July 26.
Radio Corporation of America. (See Black, Knox C., assignor.)
Radio Corporation of America. (See Franklin, Charles S., assignor.)
Radio Corporation of America. (See Hansell, Clarence W., assignor.)
Radio Corporation of America. (See Kroger, Fred H., assignor.)
Ralston, Harley C. (See Chubb, K. A., Ralston, and Williams.)
Rambold, Adolf, Dresden, Germany. Machine for closing little bags. 1,869,116; July 26.
Ramelli, Andrew D., New Orleans, La. Angle block. 1,869,278; July 26.
Ramsey Accessories Manufacturing Corporation. (See Marien, Charles A., assignor.)
Ramsey Accessories Manufacturing Corporation. (See Marien, Melvin W., assignor.)
Rand McNally & Company. (See Beyer, Paul P., assignor.)
Rawling, Francis G. (See Traquair, J., and Rawling.)
Raymond, Henry S., Waterloo, Iowa. Refrigerating device. 1,868,763; July 26.

Reed, Edward A., Brookfield, Ill., assignor to Harris and Reed Manufacturing Company. Caster. 1,869,279; July 26.
Reed, Harold V., assignor to The Borg & Beck Company, Chicago, Ill. Clutch plate. 1,868,764; July 26.
Reichenbach, William, Chicago, Ill. Aeroplane. 1,868,506; July 26.
Reilly, Gerard. (See Miles, E. H., and Reilly.)
Reinhardt, George, Pleasant Plains, Staten Island, N. Y. Sectional tire casng. 1,869,117; July 26.
Reist, Henry G., Schenectady, N. Y., assignor to General Electric Company. Bearing bracket for dynamo-electric machines and making the same. 1,869,118; July 26.
Rellim Investment Company. (See Miller, William F., assignor.)
Rempfer, Marvin. (See Cassidy, L. S., and Rempfer.)
Reno, Robert E., jr., Follansbee, W. Va., assignor to Follansbee Brothers Company, Pittsburgh, Pa. Producing low core loss magnetic material. 1,869,078; July 26.
Replogle, John R., assignor to Kelvinator Corporation, Detroit, Mich. Mechanically refrigerated cabinet. 1,869,119; July 26.
ReQua, Frederick L., assignor to Welding Service, Inc., San Francisco, Calif. Rail joint. 1,868,992; July 26.
Revere Copper and Brass Incorporated. (See Wilkins, Richard A., assignor.)
Reynolds, Benjamin F., Stockton, Calif. Pneumatic tire pump control. 1,868,766; July 26.
Reynolds, Frederick D., St. Louis, Mo. Shoe plate. 1,868,765; July 26.
Reyrolle, A., & Company Limited. (See Leben, Henry, assignor.)
Richards, Alonzo, Pompton Lakes, N. J. Connecting an implement to a motor. 1,868,587; July 26.
Richardson, Arthur Bruce Fraser Gillespie, Belvedere, England. Mounting for carriers for coils of flexible material in taping and other material. 1,868,915; July 26.
Richter, Alwin, Leipzig, Germany. Air pump valve. 1,869,170; July 26.
Riddle, Frank H. (See Jeffery, J. A., and Riddle.)
Riker Company, The. (See Whitehouse, Herbert G., assignor.)
Robbins, William H., Springfield, assignor to The Williams Company, London, Ohio. Filter. 1,868,808; July 26.
Roberts, Albert J., assignor of seventeen per cent to I. R. Whan, Cleveland, Ohio. Collapsible wing. 1,869,227; July 26.
Robertson, Isaac W., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Doorcheck. 1,869,316; July 26.
Robertson, William W., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle check and protector mechanism. 1,868,720; July 26.
Robinson, Joseph, New York, N. Y. Automatic train pipe coupling. 1,868,916; July 26.
Rocker, George, Westfield, and E. B. Middleton, New Brunswick, N. J., assignors to Du Pont Viscoloid Company, Inc., Wilmington, Del. Cellulose ester composition. 1,868,851; July 26.
Rodman, Clarence J., and R. P. Dunmire, assignors to The Buckeye Twist Drill Company, Alliance, Ohio. Method and apparatus for purifying oil. 1,868,917; July 26.
Roefnag, Aktiengesellschaft. (See Bucky, Gustav, assignor.)
Roemisch, Joseph A., Sequin, Tex. Controllable pitch propeller. 1,869,280; July 26.
Roessler & Hasslacher Chemical Company, The. (See Ainslie, Thomas D., assignor.)
Rollason, Charles H., assignor to Wheeling Steel Corporation, Wheeling, W. Va. Sheet metal container. 1,869,348; July 26.
Rollason, Charles H., assignor to Wheeling Steel Corporation, Wheeling, W. Va. Sheet metal container. 1,869,349; July 26.
Romera, Manuel, assignor of one-third to E. Guiriato, and one-third to E. Guiriato, Castroville, Calif. Automatic fertilizer distributing apparatus. 1,868,588; July 26.
Rooks, N. B. (See Wilson, Orkney P., assignor.)
Rooks, Nolan B. (See Wilson, O. P. (assignor), and Rooks.)
Roos, Axel H., Chico, assignor to A. Freed, San Francisco, Calif, trustee. Portable sander and polisher. 1,868,507; July 26.
Roper, Geo. D., Corporation. (See Hobson, Stanley H., assignor.)
Ros Casablancas, Rosa, Tarrasa, Spain. Machine for the manufacture of wire netting with hexagonal meshes of variable width. 1,868,968; July 26.
Rose, Charles F. P., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Oscillation generator. 1,869,171; July 26.
Rosenberg, Emanuel, Welz, Austria. Device for mechanically-operated welding. 1,869,079; July 26.
Rosenthal, Sidney, Cedarhurst, N. Y. Buckle. Des. 87,443; July 26.
Rosenthal, Sidney, Cedarhurst, N. Y. Clasp. Des. 87,444; July 26.
Ross, Oscar A., New York, N. Y. System of carburation for hydrocarbon motors. 1,868,767; July 26.
Rowell, Dudley G., Appleton, Wis. Car mover. 1,868,809; July 26.
Ruhbersan Products Inc. (See Vernet, Waldemar, assignor.)
Rufle, George H., New York, N. Y. Synchronizing method and apparatus for making sound-picture films. 1,868,993; July 26.
Rugaber, Arthur R. (See McConnell, Max T., assignor.)
Rumpf, Herman and I. J., San Francisco, Calif. Curtain rod holder. 1,869,281; July 26.
Rumpf, Irwin J. (See Rumpf, H. and I. J.)
Sabit, Sam H., Detroit, Mich. Coin release mechanism for vending machines. 1,868,641; July 26.
Safety Grinding Wheel & Machine Company. (See Vance, Edward D., assignor.)
St. Palley, Zoltan O., Pittsfield, Mass., assignor to General Electric Company. Electrical induction apparatus. 1,869,176; July 26.
Saks, Ira. (See Spase, Charles B., assignor.)
Salisbury, Jessup, Hamden, assignor to The American Buckle Company, West Haven, Conn. Loop slide buckle. 1,868,672; July 26.
Salmon, R. Dennis, assignor to Creed & Company, Limited, Croydon, England. Speed governor. 1,868,616; July 26.
Salzman, George S., Cleveland Heights, assignor to The Monmouth Products Company, Cleveland, Ohio. Clutch plate. 1,868,543; July 26.
Samuels, Albert S., San Francisco, Calif. Ring. Des. 87,445; July 26.
Sanford, William C., jr., La Oroya, Peru. Pencil. 1,868,951; July 26.
Saunders, Norman H., Homewood, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,868,994; July 26.
Scarritt, Winthrop T., Utica, assignor to The Pratt Chuck Co., Frankfort, N. Y. Receptacle and making the same. 1,869,224; July 26.
Scheerders-Van Kerchove, Léon, assignor to Usines Reunies Scheerders-Van Kerchove, Societe Anonyme, St-Nicolas-Waes, Belgium. Apparatus for simultaneously corrugating and trimming sheets of asbestos-cement and the like in a plastic condition. 1,868,645; July 26.
Schemmel, Robert C., Union City, Ind. Finishing welt. 1,869,080; July 26.
Schemmel, Robert C., Union City, Ind. Molding. 1,869,081; July 26.
Schenk, Tamis C., Brooklyn, N. Y. Lawn mower. 1,868,918; July 26.
Schield, Henry C., Merrill, Wis. Hat stand. Des. 87,446; July 26.
Schiltz, Bernard P., assignor to The Foote-Burt Company, Cleveland, Ohio. Tool driving mechanism for tapping machines or the like. 1,868,721; July 26.
Schlesinger, Louis, Newark, N. J. Foldable bed, table, or desk. 1,868,642; July 26.
Schmidt, Otto, and O. Grosskinsky, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of carbon black. 1,868,919; July 26.
Schmidt, Otto, and O. Grosskinsky, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-theMain, Germany. Production of carbon black. 1,868,920; July 26.
Schmidt, Otto, and O. Grosskinsky, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of carbon black. 1,868,921; July 26.
Schneider, George B., and Elsworth S. Nowery, Beaumont, Tex. Well bottom. 1,869,352; July 26.
Schneider, Henry E., Erie, Pa., assignor to Hays Manufacturing Company. Tube bending machine. 1,868,852; July 26.
Schneider, William, assignor to Hays Manufacturing Co., Erie, Pa. Diverter valve. 1,868,768; July 26.
Schoen, Arnold F., Saugerties, N. Y. Antiglare device for automobile headlights. 1,868,995; July 26.
Schonbein, William F., Portland, Oreg. Combination air cleaner and humidifier. 1,869,344; July 26.
Schroeder, George W. (See Watson, Charles E., assignor.)
Schuler, L., A. G. (See Kühner, Otto, assignor.)
Schuler, Max, Gottingen, Germany. Pendulum for measuring time. 1,868,769; July 26.
Schwalm, Bruce F., Pittsburgh, Pa., assignor, by mesne assignments, to The Neville Company. Compounding rubber. 1,869,172; July 26.
Schwartz, Louis, assignor to Minnie Schwartz, Brooklyn, N. Y. Radiator valve. 1,869,282; July 26.
Schwartz, Minnie. (See Schwartz, Louis, assignor.)
Schwerin, Frank H., and L. Hebbeln, Bellevue, Pa., assignors to The Duff Norton Manufacturing Company, Pittsburgh, Pa. Air-motor jack. 1,868,922; July 26.
Scofield, Gilbert J., Company. (See McLaren, Gerald J., assignor.)
Scott, Charles M., Carrollton, Ky. Radio antenna appliance. 1,869,024; July 26.
Scott & Williams, Incorporated. (See Hill, Roscoe, assignor.)
Scull Company, William S. (See Thompson, Charles P., assignor.)
Seastone, John B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Magnetic material and producing same. 1,869,025; July 26.
See, Harvey E., Bates City, Mo. Tractor attachment. 1,868,770; July 26.
Segal, David. (See Gassel, Gavil, assignor.)
Segelhorst, August L. (See Berkey, Hugh S., assignor.)
Selden Company, The. (See Jaeger, Alphons O., assignor.)

Semon, Arthur F., Kansas City, Mo. Burglar alarm. 1,868,923; July 26.
Serrell, John A., Passagrille, Fla., and J. L. Fitts, Pensauken Township, Merchantville, Camden County, N. J.; said Fitts assignor to Warren Webster & Company. Vacuum operated water lifting apparatus. 1,868,673; July 26.
Serrell, John J., Elizabeth, assignor to Smith & Serrell, Mahwah, N. J. Flexible coupling. 1,868,544; July 26.
Severns, Clayton, et al. (See Patterson, Edgar W., assignor.)
Shadlowsky, Joseph, Passaic Park, N. J. Button. Des. 87,447; July 26.
Shander, Otto M. (See Thoeming, Walter L., and Shander.)
Sharp, Paul F., Ithaca, N. Y. Egg preservation. 1,868,996; July 26.
Shaw, Arthur B., St. Louis, Mo., and J. L. LeGorre, assignors to Pennsylvania Globe Company, Philadelphia, Pa. Globe holder. 1,869,026; July 26.
Sherman, John C. (See Burke, E., and Sherman.)
Shonnard, Harold W. (See Valtier, Ralph P., assignor.)
Shonnard, Harold W., Montclair, N. J. Escalator hand rail. 1,868,771; July 26.
Sievers, William H., Buffalo, N. Y. Flowerpot holder. 1,868,853; July 26.
Signal Engineering and Manufacturing Company. (See Hanel, Charles L., assignor.)
Silent Hoist Winch & Crane Co. (See Botnick, Maurice M., assignor.)
Silica Gel Corporation, The. (See Connolly, Gerald C., assignor.)
Silica Gel Corporation, The. (See Miller, Ernest B., assignor.)
Simplex Engineering Company. (See Sylvester, Julius, assignor.)
Simplex Heating Specialty Company. (See Wiley, Edgar C., assignor.)
Simplex Radio Company, The. (See Maibohm, Harry C., assignor.)
Simplex Radio Company, The. (See West, M. B., and Maibohm, assignors.)
Simpson, Kenneth M., assignor to International Chromium Process Corporation, New York, N. Y. Production of sponge iron. 1,868,952; July 26.
Sinclair Refining Company. (See Herthel, Eugene C., assignor.)
Singer, Robert, New Rochelle, N. Y. Surface cover for ice cream cans. 1,868,772; July 26.
Sircoulomb, Louis, Torrington, Conn. Machine for straightening machine parts. 1,869,225; July 26.
Skinner, Marion C., Donora, Pa., assignor to The American Steel and Wire Company of New Jersey. Spelter furnace condenser support. 1,868,589; July 26.
Slack, John A. (See Daniels, M. H., and Slack.)
Slagel, Franklin G., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Evaporator for mechanical refrigeration. 1,869,173; July 26.
Slagel, Franklin G., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Heat transfer device. 1,869,174; July 26.
Sloan, H. H. (See Mahon, Lee Henry, assignor.)
Slonneger, John C., Milwaukee, Wis., assignor to International Harvester Company. Tinning machine. 1,868,545; July 26.
Sly, W. W., Manufacturing Company, The. (See Boesger, George A., assignor.)
Smarr, Morris R., Harrisburg, Pa. Bathing suit. 1,868,854; July 26.
Smidth, F. L. & Co. (See Ahlmann, Nikolai, assignor.)
Smith, A. O., Corporation. (See Stresau, Richard, assignor.)
Smith & Serrell. (See Serrell, John J., assignor.)
Smith, Edward St. John, St. Louis, Mo. Necktie holder. 1,868,674; July 26.
Smith, Nestor F., assignor to Ithaca Gun Company, Ithaca, N. Y. Recoil pad for guns. 1,868,953; July 26.
Smith, William Bunion, Hartselle, Ala. Gin saw gumming machine. 1,868,855; July 26.
Smyth Manufacturing Company, The. (See Thompson, Walter I., assignor.)
Societa Italiana Pirelli. (See Emanuell, Luigi, assignor.)
Societe Anonyme Le Pyrex. (See Cardot, Jean A., assignor.)
Societe Hardoll Etablissements Hariveau Dolimier et Rene Porte & Cie. Reunis. (See Porte, René, assignor.)
Soltl, Lajos, Pecs, Hungary. Locking device. 1,869,027; July 26.
Sorrel, Victor, and L. A. Lafont, assignors to Ugine-Infra, Grenoble, France. Furnace. 1,868,954; July 26.
Souther, Benjamin L., Pittsburgh, and J. W. Greene, Wilkinsburg, assignors to Gulf Refining Company, Pittsburgh, Pa. Cracking oil. 1,869,028; July 26.
Spase, Charles B., Syracuse, N. Y., assignor to Ira Saks, Cleveland, Ohio. Clutch servicing fixture. 1,868,675; July 26.
Speicher, Frank S., assignor to M. E. Cunningham Company, Pittsburgh, Pa. Marking device. 1,868,997; July 26.
Speidel, Albert E. R., Edgewood, R. I., assignor to Speidel Corporation. Bracelet chain. Des. 87,448; July 26.
Speidel Corporation. (See Speidel, Albert E. R., assignor.)
Spicknall, Thomas F., Baltimore, Md., assignor to The Western Gas Construction Company. Fuel charging device for gas generators. 1,868,924; July 26.
Spiller, George A., and G. T. Johnson, assignors to The Buckeye Steel Castings Company, Columbus, Ohio. Door. 1,869,029; July 26.
Spiro, Ada J. (See Spiro, H., assignor, and Anderson.)
Spiro, Harry, San Francisco, and W. F. Anderson, Alameda, Calif.; said Spiro assignor to Ada Joel Spiro. Temperature actuated circuit closing device. 1,868,925; July 26.
Sprague, Alson J., Middleton, assignor to The Borden Company, New York, N. Y. Detector mechanism. 1,868,546; July 26.
Sprague, Clarence A., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Radio clock regulation. 1,869,175; July 26.
Staake, Spencer O., assignor of one-half to R. W. Hutchens, Eau Claire, Wis. Rubber ice cream shipper. 1,868,773; July 26.
Standard Oil Company of California. (See Kubl, John, assignor.)
Standard Oil Company of California. (See McEachern, Joseph H., assignor.)
Standard Oil Development Company. (See Mann, Matthew D., jr., assignor.)
Standard Stoker Company, The. (See Hunt, Andrew M., assignor.)
Stenzel, Arthur E., Detroit, Mich., assignor, by mesne assignments, to W. F. Pabst, Milwaukee, Wis. Electric motor and dynamo machine. 1,868,774; July 26.
Sterling Grinding Wheel Company, The. (See Bucheister, Paul, assignor.)
Sternberg, Ernst J., Chicago, Ill., assignor to Thomson Machine Company, Belleville, N. J. Dough-molding device. Re18,545; July 26.
Stevens, Horace D., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Tire making machine. 1,869,317; July 26.
Stevenson, Albert F., Ridgewood, N. J., assignor to The Borden Company, New York, N. Y. Manufacture of cheese. 1,868,547; July 26.
Stewart-Warner Corporation. (See Collins, Douglas, assignor.)
Stewart-Warner Corporation. (See Muzzy, William H., assignor.)
Stewart, William H., Jacksonville, Fla. Sectional rod and coupling member therefor. 1,868,508; July 26.
Stibbe, Godfrey, Leicester, England, assignor to Hemphill Company, Central Falls, R. I. Patterning mechanism for circular knitting machines. 1,868,643; July 26.
Stinson Aircraft Corporation. (See De Weese, Bernard D., assignor.)
Stoeckicht, Wilhelm, Munich, Germany. Friction roller gearing. 1,868,676; July 26.
Strait, Donald W. (See Gray, D. E., and Strait.)
Stratford, Charles W., Kansas City, Mo. System of treating hydrocarbon distillates and apparatus used in connection therewith. 1,868,775; July 26.
Stresau, Richard, Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Electric arc welding. 1,868,998; July 26.
Strobach, Otto and P. A. Wickmann, Leipzig, Germany. Method for the extraction of tea aroma. 1,868,999; July 26.
Stukenborg, Louis C., Memphis, Tenn. Table for vehicle lifts. 1,869,283; July 26.
Sturgis, La Verne C., Springfield, assignor, by mesne assignments, to The Buckeye Incubator Manufacturing Company, Beachwood, Ohio. Incubator. 1,868,857; July 26.
Sturtevant, B. F., Company. (See Healy, William F., assignor.)
Suber, John C., Deshler, Ohio. Furnace. 1,869,228; July 26.
Sublck, George. Chicago, Ill. Supporting and display rack. 1,869,226; July 26.
Summit Thread Company. (See Johnson, Henry G., assignor.)
Sutter, Henry B., and K. G. Haseltine, Springfield, Mo. Fruit basket packing device. 1,868,590; July 26.
Swain, Joseph G., assignor to The Firestone Steel Products Company, Akron, Ohio. Airplane wheel. 1,869,318; July 26.
Swanson, Walfred G., Swanville, Minn. Cream can holder. 1,868,284; July 26.
Swenson Evaporator Co. (See Crewson, George G., assignor.)
Sylvester, Julius, assignor to Simplex Engineering Company, Washington, Pa. Heating device for leers. 1,868,856; July 26.
Taber, George H., Binghamton, N. Y. Vehicle body suspension. 1,869,285; July 26.
Tachikawa, Shozo, Shiga, assignor to Asahi Kenshoku Kabushiki-Kaisha, Kitaku, Osaka, Japan. Recovering caustic soda from waste lye. 1,868,955; July 26.
Tait, Samuel, assignor to The Vogue Silk Hosiery Co., Philadelphia, Pa. Undergarment. Des. 87,449; July 26.
Tanner, Robert R. (See Thompson, J. S., and Tanner.)
Tanner, William Charles, Wellington, New Zealand. Flushing valve. 1,868,591; July 26.
Tate, George A., assignor of one-half to C. Paulsen, Chicago, Ill. Sectional lamp shade. 1,868,776; July 26.

Tatore, Carmine and F., New York, N. Y. Batter's mask and the like. 1,868,926; July 26.
Tatore, Frank. (See Tatore, Carmine and F.)
Tatum, William W., Manchester, England, W. M. Todd, Falkirk, L. J. Hooley, Grangemouth, and J. Thomas, Polmont, Scotland, assignors to Imperial Chemical Industries Limited. Dyes and dyeing. 1,869,286; July 26.
Taunton Pearl Works, Inc. (See Palmer, James A., assignor.)
Taylor Instrument Companies. (See Cleveland, Robert D., assignor.)
Teats, Roscoe. (See Hughes, S., and Teats.)
Teats, Roscoe, Denver, Colo., assignor to American Smelting and Refining Company, New York, N. Y. Separating metals. 1,869,213; July 26.
Technik und Investment Aktiengesellschaft. (See Voglsamer, Peter, assignor.)
Teesdale, Clyde H., assignor to Teesdale Manufacturing Company, Grand Rapids, Mich. Float operated electric switch. 1,869,030; July 26.
Teesdale Manufacturing Company. (See Teesdale, Clyde H., assignor.)
Terre Haute Advertising Company. (See Phelps, Edward M., assignor.)
Tharp, Victor S., Elmhurst, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,868,956; July 26.
Thoeming, Walter L., and O. M. Shander, assignors to Z-Ro Specialties Company, Chicago Heights, Ill. Dispensing device. 1,869,120; July 26.
Thoma, Andrew, assignor to North American Chemical Company, Cambridge, Mass. Shoe-button filler. 1,868,927; July 26.
Thoma, Andrew, assignor to North American Chemical Company, Cambridge, Mass. Making shoe-filler. 1,868,928; July 26.
Thomas, Albert H., and H. H. Wolfe, assignors to The Buckeye Steel Castings Company, Columbus, Ohio. Truck bolster. 1,869,229; July 26.
Thomas, Hubert S., and W. R. Davies, Whitchurch, Wales. Conveyer for plates and other articles. 1,869,287; July 26.
Thomas, John. (See Tatum, W. W., Todd, Hooley, and Thomas.)
Thomas, Walter F., St. Helens, Isle of Wight, England. Power transmitting mechanism in prime movers. 1,869,288; July 26.
Thompson, Charles P., Westmont, assignor to William S. Scull Company, Camden, N. J. Bag or similar container. Des. 87,450; July 26.
Thompson, Herbert L., Elgin, Ill., assignor to Addressograph Company, Wilmington, Del. Making punches and dies for embossing printing characters in metal plates. 1,868,777; July 26.
Thompson, John S., and R. R. Tanner, assignors to Parker Rust-Proof Company, Detroit, Mich. Method and material for coating metal surfaces. 1,869,121; July 26.
Thompson, Norman, and C. Johnson, Duluth, Minn. Means for rebuilding furnace roofs. 1,868,592; July 26.
Thompson, Oscar T., Neenah, Wis., assignor, by mesne assignments, to International Cellucotton Products Co., Chicago, Ill. Sanitary napkin and machine for making same. 1,869,177; July 26.
Thompson, Walter Irving, East Hartford, assignor to The Smyth Manufacturing Company, Hartford, Conn. Book signature feed. 1,868,929; July 26.
Thompson, William J., Detroit, Mich. Removable package monthpiece. 1,868,930; July 26.
Thomson Machine Company. (See Sternberg, Ernst J., assignor.)
Thum, Rudolf, Unterreichenau, assignor to Firm Montan- und Industrialwerke, vormals Joh. Dav. Starck, Prague, Czechoslovakia. Homogenization of glass flux. 1,868,858; July 26.
Thuras, Albert L., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound translating device. 1,869,178; July 26.
Tietze, Ernst. (See Hecht, G., Ossenbeck, and Tietze.)
Timken Silent Automatic Company. (See Beadle, Lynn C., assignor.)
Timken Silent Automatic Company, The. (See Dowrie, Charles F., assignor.)
Timmons, John S., Wyncote, assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Electrical element. 1,869,230; July 26.
Timpson, Lewis G. M., Plainfield, N. J., assignor to Pyrene-Minimax Corporation. Fire extinguishing apparatus and method. 1,869,319; July 26.
Timson, William, Soho Foundry, assignor to W. & T. Avery, Limited, Birmingham, England. Improvement relating to weighing apparatus. 1,869,289; July 26.
Tippen, Frank John, Earlsdon, Coventry, assignor to Joseph Lucas Limited, Birmingham, England. Shock absorber. 1,868,859; July 26.
Tobey, Harry W., Pittsfield, Mass., assignor to General Electric Company. Welding torch. 1,869,328; July 26.
Tobin, Kenneth J. (See Heinen, F. C., and Tobin.)
Todd, William M. (See Tatum, W. W., Todd, Hooley, and Thomas.)
Toledo Machine & Tool Company, The. (See Williamson, Larkin R., assignor.)
Tolley, Donald B., Macomb, Ill., assignor to Globe American Corporation, Kokomo, Ind. Feeder for chicks and older fowls. 1,868,957; July 26.
Tomney, Charles C., New Brunswick, N. J. Illuminated tool. 1,868,778; July 26.
Tompkins, James G., Venice, Calif. Clasp for bandages and like wrappings. 1,868,644; July 26.
Tompkins, John D., Valatie, N. Y. Method of and apparatus for making paper. 1,868,617; July 26.
Tornberg, Isidor, Plainfield, N. J., assignor to The Wood Newspaper Machinery Corporation, New York, N. Y. Collecting and folding mechanism for web presses. 1,868,779; July 26.
Trans-Lux Daylight Picture Screen Corporation. (See Birdsall, Wilfred T., assignor.)
Trans-Lux Daylight Picture Screen Corporation. (See Newman, David F., assignor.)
Transue and Williams Steel Forging Corporation. (See Walter, Kent E., assignor.)
Traquair, John, and F. G. Rawling, Chillicothe, assignors to The Mead Research Engineering Company, Dayton, Ohio. Paper manufacture. 1,869,082; July 26.
Travilla, Jr., James C., University City, Mo., assignor to General Steel Castings Corporation, Granite City, Ill. Railway rolling stock construction. 1,868,509; July 26.
Turner, Joseph C., Oklahoma City, Okla. Roller skate. 1,868,548; July 26.
Turney, Trevor H., assignor to Automatic Electric Company, Liverpool, England. Electrical voice transmission network. 1,869,031; July 26.
Tweed, Russell B., and C. Watson, St. Petersburg, Fla. Aircraft skid shoe. 1,868,677; July 26.
Ugine-Infra. (See Sorrel, Victor, and Lafont, assignors.)
Union Bank of Chicago. (See Cowles, Irving, assignor.)
Union Switch & Signal Company, The. (See Baughman, George W., assignor.)
Union Switch & Signal Company, The. (See Bone, Herbert, assignor.)
Union Switch & Signal Company, The. (See Clausen, Harold C., assignor.)
Union Switch & Signal Company, The. (See Lucas, Samuel M., assignor.)
Union Switch & Signal Company, The. (See Nettleton, Lewis L., assignor.)
United Fruit Company. (See Mackay, Joseph T., assignor.)
United Kingdom Optical Company, Limited. (See Watson, Frank B., and Culver, assignors.)
United Shoe Machinery Corporation. (See Bunker, Darius W., assignor.)
Universal Gypsum & Lime Co. (See Nelson, William K., assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Usines Reunies Scheerders-Van Kerchove, Societe, Anonyme. (See Scheerders-Van Kerchove, Léon, assignor.)
Utility Manufacturing Co. (See Jennejohn, John C., assignor.)
Vacuum Oil Company, Inc. (See Pritchard, Arthur H., assignor.)
Vallendor, Max. L., and P. C. Fly, Ventura, Calif. Well sealing head. 1,869,345; July 26.
Valtier, Ralph P., New York, N. Y., assignor to Harold W. Shonnard, Montclair, N. J. Escalator. 1,868,780; July 26.
Van Buren, Clyde V., Chicago, Ill. Loose leaf holder. 1,869,032; July 26.
Vance, Edward D., assignor to The Safety Grinding Wheel & Machine Company, Springfield, Ohio. Making abrasive articles. 1,868,931; July 26.
Van Dorn Electric Tool Company, The. (See Fleming, Jared B., assignor.)
Van Dorn Iron Works Company. (See Bronson, Richard W., assignor.)
Van Houten, Frank H., assignor to Dutchess Tool Company, Beacon, N. Y. Dough handling apparatus. 1,869,033; July 26.
Veilleux, Adolphe, St. Maries, Idaho. Food cooler. 1,868,933; July 26.
Venzlaff, Richard R. W., and O. F. Buck, Berlin, Germany. Endless traction belt. 1,869,290; July 26.
Vernam, Gilbert S., River Edge, N. J., assignor to International Communications Laboratories, Inc. Telegraph repeater. 1,868,678; July 26.
Vernet, Waldemar, assignor to Rubbersan Products Inc., New York, N. Y. Method and apparatus for forming receptacles from sponge rubber. 1,868,932; July 26.
Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,869,122; July 26.
Voglsamer, Peter, Munich, Germany, assignor to Technik und Investment Aktiengesellschaft Vaduz, Liechtenstein. Metering apparatus for mixing machines. 1,868,540; July 26.
Vogue Silk Hosiery Co., The. (See Tait, Samuel, assignor.)
Von der Lippe-Lipski, Elaine, Washington, D. C. Changeable sign. 1,869,066; July 26.
Von Piotrowski, Waclaw, and J. Winkler, assignors to Galicyjskie Towarzstwo Naftowe "Galicja" S. A., Drohobycz, Poland. Preparing valuable compounds from the refining wastes of cracked products, particularly cracked benzines. 1,869,231; July 26.

Von Reis, Lambert, Herzogenrath, Germany, assignor, by mesne assignments, to The American Bicheroux Company. Roller conveyer for glass plates. 1,868,860; July 26.
Vossloh, Karl, Werdohl-in-Westphalia, Germany. Nut lock. 1,868,861; July 26.
Wagner, Edward B., Milton, Ind. Table. 1,868,550; July 26.
Wagner, Emanuel E., Lamar, Mo. Screen for projecting machines. 1,868,551; July 26.
Wagner, Frederick H., assignor to The Bartlett Hayward Company, Baltimore, Md. Gas and liquid contact apparatus. 1,868,618; July 26.
Wallace, Benjamin F., Brooklyn, N. Y. Foundry facing. 1,868,646; July 26.
Walter, Kent E., assignor to Transue and Williams Steel Forging Corporation, Alliance, Ohio. Caster. 1,868,552; July 26.
Walters, William R., assignor to Fairmont Railway Motors, Inc., Fairmont, Minn. Mowing mechanism. 1,869,123; July 26.
Ward, Michael J., et al. (See Hines, Martin, assignor.)
Warnock, Charles S., Los Angeles, Calif. Ventilator for vehicles. Des. 87,451; July 26.
Warr, Harold G., Park Ridge, assignor to Maintenance Equipment Company, Chicago, Ill. Operating mechanism for rail oilers. 1,868,647; July 26.
Warren Webster & Company. (See Serrell, John A., and Fitts, assignors.)
Washburn, Edward W., Washington, D. C. Detergent towel and making the same. 1,868,862; July 26.
Waterbury Brass Goods Corporation, The. (See Miner, Anson W., assignor.)
Waterbury Tool Company, The. (See Ellis, Arthur L., assignor.)
Watkin, Bertram L., assignor to Pass & Seymour, Inc., Syracuse, N. Y. Wall sconce. Des. 87,427; July 26.
Watson, Charles E., Chicago, assignor to G. W. Schroeder, Berwyn, Ill. Section insulator. 1,868,619; July 26.
Watson, Clayton. (See Tweed, Russell B., and Watson.)
Watson, Donald J., Sioux City, assignor to Iowa State College of Agricultural and Mechanical Arts, Ames, Iowa. Device for burning comminuted fuel during the water smoking period of the firing of clay products. 1,869,124; July 26.
Watson, Frank B., and E. Culver, assignors to United Kingdom Optical Company, Limited, London, England. Manufacturing bifocal lenses. 1,868,863; July 26.
Watson, Henry P. (See Markus, Benjamin, assignor.)
Watson, Thomas E. (See Wolff, William W. and R. W.)
Watts, Charles R., assignor of one-third to B. L. Watts, and one-third to C. R. Watts, jr., Berkeley, Calif. Steam radiator trap. 1,868,510; July 26.
Watts, Charles R., jr. (See Watts, Charles R., assignor.)
Watts, Edward L. (See Watts, Charles R., assignor.)
Weatherbest Stained Shingle Company. (See Allen, E. B., and Howe, assignors.)
Weatherbest Stained Shinle Company. (See Jackson, Alexander F., assignor.)
Wehrle Company, The. (See Pickup, George E., assignor.)
Weiland, John A., assignor to Weiland Packing Company Inc., Phoenixville, Pa. Molding apparatus. 1,869,232; July 26.
Weiland Packing Company Inc. (See Weiland, John A., assignor.)
Weil-McLain Company. (See Good, Charles W., assignor.)
Welding Service, Inc. (See ReQua, Frederick L., assignor.)
Wells, Ira M., Oakland, and H. A. Olds, San Francisco, Calif. Road working machine. 1,868,648; July 26.
Wells, William C., assignor to Delco-Light Company, Dayton, Ohio. Engine. 1,868,649; July 26.
Welter, Eduard, assignor to Koch & Sterzel Aktiengesellschaft, Dresden, Germany. High potential transformer. 1,869,233; July 26.
Wenderoth, Oscar, New York, N. Y. Interference free sound reproducing device. 1,868,958; July 26.
Wertzberger Derrick Company. (See Dunham, Orson W., assignor.)
West, Harry R., Pittsfield, Mass., assignor to General Electric Company. Variable voltage transformer. 1,869,125; July 26.
West, Maurice B., Lima, and H. C. Malbohm, assignor to The Simplex Radio Company, Sandusky, Ohio. Unitary control for condensers. 1,868,553; July 26.
Westberg, Carl R., Hinsdale, Ill., assignor to International Harvester Company. Forming mower guards. 1,868,511; July 26.
Western Electric Company. (See Anderson, Sidney E., assignor.)
Western Electric Company. (See Evans, Porter H., assignor.)
Western Gas Construction Company, The. (See Barr, Walter A., assignor.)
Western Gas Construction Company, The. (See Spicknall, Thomas F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Seaton, John B., assignor.)
Westvaco Chlorine Products, Inc. (See Low, Frank S., assignor.)
Whan, I. R. (See Roberts, Albert J., assignor.)
Wheeling Steel Corporation. (See Bedell, C. E., and Castle, assignors.)
Wheeling Steel Corporation. (See Rollason, Charles H., assignor.)
White, Birdora H., Chicago, Ill. Buckle. Re18,539; July 26.
White, Birdora H., Chicago, Ill., assignor to Parva Products Company, Hillsdale, Mich. Fastener. 1,868,810; July 26.
White, John W., Buffalo, N. Y., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Wheel. 1,868,781; July 26.
Whitehouse, Herbert G., Newark, N. J., assignor to The Riker Company. Buckle fastener. 1,869,126; July 26.
Whiting Corporation. (See Coffey, Oscar L., assignor.)
Whittingham, George H., assignor to Monitor Controller Company, Baltimore, Md. Disconnecting relay for reverse current braking devices. 1,869,034; July 26.
Whitworth, Stanley, and L. E. Long, assignors to Bendix Brake Company, South Bend, Ind. Welding apparatus. 1,868,782; July 26.
Wickmann, Paul A. (See Strobach, O., and Wickmann.)
Wiegand, Edwin L., Pittsburgh, Pa. Electrical heating unit. 1,868,620; July 26.
Wight, Edward H. (See Ober, B., and Wight.)
Wilbern, Edward V., Saugerties-on-the-Hudson, N. Y. Guard and trap. 1,868,554; July 26.
Wilcox-Rich Corporation. (See Feguson, D. M., and Maurer, assignors.)
Wiley, Edgar C., assignor to Simplex Heating Specialty Company, Inc., Lynchburg, Va. Regulating apparatus for steam heating systems. 1,868,555; July 26.
Wilhelm, Russell H., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Mounting for rock drills. 1,868,650; July 26.
Wilke, Gustave A., assignor to Leader Card Works, Milwaukee, Wis. Manufacturing cards with rounded corners. 1,868,864; July 26.
Wilke, Gustave A., assignor to Leader Card Works, Milwaukee, Wis. Manufacture of round cornered cards. 1,868,865; July 26.
Wilkins, Richard A., assignor to Revere Copper and Brass Incorporated, Rome, N. Y. Alloy. 1,868,679; July 26.
Willard, Robert E., assignor to The Briquet Engineering Company, Minneapolis, Minn. Binder and briquette and producing same. 1,869,083; July 26.
Williams, Clarence B., Santa Barbara, Calif. Windshield cleaner. 1,868,783; July 26.
Williams Company, The. (See Robbins, William H., assignor.)
Williams, Horace E., Chicago, Ill. Rail bender. 1,868,556; July 26.
Willams, Thomas D. (See Chubb, K. A., Ralston, and Williams.)
Williams, William D., Duluth, Minn. Fence post. 1,868,557; July 26.
Williamson, Larkin R., assignor to The Toledo Machine & Tool Company, Toledo, Ohio. Hydraulic control for power transmission mechanism. 1,869,084; July 26.
Williamson, Larkin R., assignor to The Toledo Machine & Tool Company, Toledo, Ohio. Fluid pressure control device. 1,869,085; July 26.
Willshaw, Harry, and T. Norcross, Erdington, Birmingham, England, assignors to Dunlop Tire and Rubber Corporation, Buffalo, N. Y. Mold for tires and annular articles. 1,868,959; July 26.
Wilson, Orkney P., assignor to N. B. Rooks, Humboldt, Tenn. Folding package. 1,869,291; July 26.
Wilson, Orkney P., and N. B. Rooks, Humboldt, Tenn.; said Wilson assignor to said Rooks. Folding package. 1,869,292; July 26.
Winchester Repeating Arms Company. (See Hammond, Charles F., assignor.)
Winkler, Jozef. (See Von Piotrowski, W., and Winkler, assignors.)
Winter, Joseph M. (See Gannon, James E.)
Winthron Chemical Company, Inc. (See Hecht, G., Ossenbeck, and Tietze, assignors.)
Wolfe, Harry H. (See Thomas, A. H., and Wolfe.)
Wolfe, Harry H., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Car coupler. 1,869,035; July 26.
Wolff, Charles J., and W. W. Couch, San Antonio, Tex. Impact ejector pump. 1,868,621; July 26.
Wolff, Robert W. (See Wolff, William W. and R. W.)
Wolff, William W., and R. W. Wolff, assignors of one-third to T. E. Watson, Los Angeles, Calif. Lifting jack mechanism for vehicles. 1,868,785; July 26.
Wolford, Riley B., Johnstown, Pa. Fishhook. 1,869,293; July 26.
Wood, Andrew C., Chicago, Ill. Liquid elevating apparatus. 1,868,651; July 26.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Inspection sheet conveyer for printing presses. 1,868,784; July 26.
Wood Newspaper Machinery Corporation, The. (See Tornberg, Isidor, assignor.)
Wood Newspaper Machinery Corporation, The. (See Wood, Henry A. W., assignor.)
Woodford, Bronson C. (See Hancock, William L., and Woodford.)
Woodman, George A., assignor of one-half to W. O. Belt, Chicago, Ill. Combination freight car side and grain door. 1,868,786; July 26.
Woodsall Industries, Incorporated. (See Zinser, Paul R., assignor.)

Woodward, Marion H., Brooklyn, assignor to International Communications Laboratories, Inc., New York, N. Y. Three-unit, three-element code and its application to submarine telegraphy. 1,868,680; July 26.
Worden, Charles J. (See Griffith, C. P., and Worden, assignors.)
Wright, Carl G. (See Beach, L. L., and Wright.)
Wright, George B., South Norwalk, Conn. Automobile tail and stoplight. 1,869,294; July 26.
Wrightsville Hardware Co. (See Ebersole, George S., assignor.)
Wrobbel, Gustav F. K., Hamburg, Germany. Frame system for ships of iron construction. 1,869,329; July 26.
Wunsch, Joseph W. (See Botnick, Maurice M., assignor.)
Wunsch, Samuel. (See Botnick, Maurice M., assignor.)
Wyatt, Ernest V., Somerville, Mass. Rope. 1,868,681; July 26.
Yarnall, David R., Germantown, assignor to Yarnall-Waring Company, Philadelphia, Pa. Valve plunger construction. 1,868,811; July 26.
Yarnall-Waring Company. (See Yarnall, David R.)
Youngman, Robert H., and R. H. H. Pierce, Pittsburgh, Pa. Flue construction for kilns. 1,869,000; July 26.
Younie, Lewis L., assignor to Electric Steel Foundry Company, Portland, Oreg. Power scraper. 1,869,320; July 26.
Yutzler, Fred W., and G. E. Kent, assignors to The Kent Company Inc., Rome, N. Y. Floor machine. 1,869,179; July 26.
Z-RO Specialties Company. (See Thoeming, W. L., and Shander, assignors.)
Zacharias, Edwin H., Reading, Pa. Shoulder and arm press. 1,868,934; July 26.
Zentmyer, Cyril H., Clifton Forge, Va. Rail joint chisel. 1,868,652; July 26.
Ziegner, Heinrich, Hagen, Germany. Manufacturing a composition containing matter of the character of caoutchouc. 1,868,787; July 26.
Zink, Theodore, Noel, Mo. Sanitary bedpan. 1,869,036; July 26.
Zinzer, Paul R., Chicago, Ill., assignor, by mesne assignments, to Woodall Industries, Incorporated, Detroit, Mich. Dies and making the same. 1,868,788; July 26.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 26TH DAY OF JULY, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acid, Manufacture of hydrochloric. F. S. Low. 1,868,946; July 26.
Acid phosphate, Preparing and ammoniating. B. Ober and E. H. Wight. 1,869,272; July 26.
Acid, Production of nitric and sulphuric. H. Bähr. 1,868,868; July 26.
Acids and making same, Arylamides of 3-hydroxy-phenyl-aryl-amine-carboxylic. L. Laska and O. Haller. 1,868,612; July 26.
Acids or their salts in a purified condition from impure sulphonation products, Recovering sulphonic. E. Eichwald. 1,868,596; July 26.
Adjusting device, Calibrated. A. S. Howell. 1,868,502; July 26.
Adsorbent material and producing the same. J. B. Barnitt. 1,868,869; July 26.
Adsorbent material, Preparing. G. C. Connolly. 1,868,565; July 26.
Adsorbents, Revivifying. E. B. Miller. 1,868,581; July 26.
Advertising device. E. W. Precourt. 1,869,276; July 26.
Aerial for use in wireless signaling. C. S. Franklin. 1,869,192; July 26.
Aerofoil operating mechanism. R. R. Osborn. 1,869,211; July 26.
Aeroplane. W. Reichenbach. 1,868,506; July 26.
Agricultural implement. G. Geraldson. 1,868,974; July 26.
Agricultural machine. E. I. Olinger. 1,869,273; July 26.
Air cleaner and humidifier, Combination. W. F. Schonbein. 1,869,344; July 26.
Air cleaner, Super-charger. R. E. Lyford. 1,868,534; July 26.
Air conditioning unit. E. V. Hill. Des. 87,436; July 26.
Aircraft. M. Henter and E. Käser. 1,868,832; July 26.
Aircraft propelling mechanism. C. S. Hall. 1,868,976; July 26.
Aircraft skid shoe. R. B. Tweed and C. Watson. 1,868,677; July 26.
Airfoil, Variable camber. H. J. Hogan. 1,868,748; July 26.
Air-heating apparatus. C. W. Good. 1,868,743; July 26.
Air intake and mixing device, Auxiliary. T. E. Jackson. 1,868,902; July 26.
Air jack. M. F. Breneman. 1,868,935; July 26.
Air-motor jack. F. H. Schwerin and L. Hebbeln. 1,868,922; July 26.
Airplane. R. F. Hall. 1,869,253; July 26.
Airplane, Transport. C. N. Monteith and F. R. Canney. Des. 87,440; July 26.
Airplane wheel. J. G. Swain. 1,869,318; July 26.
Airship. G. L. Kayden. 1,868,664; July 26.
Alarm: *See*—
Burglar alarm.
Alarm system. L. H. Chase. 1,868,884; July 26.
Alloy. C. F. Hammond. 1,868,898; July 26.
Alloy. R. A. Wilkins. 1,868,679; July 26.
Alumina from silicious materials containing it, Recovering. W. M. Guertler. 1,868,499; July 26.
Aluminum, Anodic coating of. C. H. R. Gower. 1,869,058; July 26.
Aluminum, Coated. H. Bengston. 1,869,041; July 26.
Aluminum, Coating. H. Bengston. 1,869,042; July 26.
Aluminum lakes of 1.4-dihydroxy and 1-amino-4-hydroxy-anthraquinone-disulphonic acids. F. Baumann. 1,868,593; July 26.
Ammonia and hydrogen sulphide from gases, Removing. F. Overdick. 1,868,843; July 26.
Amplifier, Broad band audio. E. Z. Lane. 1,868,579; July 26.
Amusement machine. R. Gatter. 1,868,742; July 26.
Amusement railway. L. S. Cassidy and M. Rempfer. Re18,544; July 26.
Anchor, Rail. M. Martz. 1,869,268; July 26.
Angle block. A. D. Ramelli. 1,869,278; July 26.
Annealing process. C. S. Heath. 1,869,254; July 26.
Antenna. C. W. Hansell. 1,868,795; July 26.
Antiglare device for automobile headlights. A. F. Schoen. 1,868,995; July 26.
Article and making same, Composite molded. H. D. Geyer. 1,869,141; July 26.
Article-assembling and conveying machine. F. G. Purinton. 1,868,805; July 26.
Articles, Making abrasive. E. D. Vance. 1,868,931; July 26.
Articles through a furnace, Apparatus for advancing. J. E. Battle. 1,868,790; July 26.
Aryl ketones, Production of. A. O. Jaeger. 1,868,532; July 26.
Asbestos-cement and the like in a plastic condition, Apparatus for simultaneously corrugating and trimming sheets of. L. Scheerders-Van Kerchove. 1,868,645; July 26.
Attempering finely divided solid material. N. Ahlmann. 1,868,512; July 26.
Automobile, Front wheel drive. D. M. Ferguson and E. R. Maurer. 1,869,191; July 26.
Automobile tail and stoplight. G. B. Wright. 1,869,294; July 26.
Back head construction for rock drills. G. M. Nell. 1,868,670; July 26.
Bag: *See*—
Golf bag.
Bag or similar container. C. P. Thompson. Des. 87,450; July 26.
Balcony, Sleeping. M. R. Jay. 1,869,104; July 26.
Ball: *See*—
Inflatable ball.
Band anchoring means for tank cars. C. C. Meadows. 1,868,841; July 26.
Base exchange material and preparing same. A. S. Behrman. 1,869,087; July 26.
Basket, Folding fish. A. D. F. McLean. 1,869,071; July 26.
Bath for making threads or the like from viscose, Precipitating. A. Kämpf. 1,868,577; July 26.
Battery vent construction. W. E. Holland. 1,869,258; July 26.
Bearing assembly, Pitman. O. W. Dunham. 1,868,817; July 26.
Bearing bolster for spindles. E. Bowker. 1,868,688; July 26.
Bearing bracket for dynamo-electric machines and making the same. H. G. Reist. 1,869,118; July 26.
Bearing, Crank shaft. E. Bugatti. 1,868,937; July 26.
Bedpan, Sanitary. T. Zink. 1,869,036; July 26.
Bed, table, or desk, Foldable. L. Schlesinger. 1,868,642; July 26.
Belt, Endless traction. R. E. R. Venzlaff and O. F. Buck. 1,869,290; July 26.
Binder and briquette and producing same. R. E. Willard. 1,869,083; July 26.
Binder, Loose leaf. J. C. Dawson. 1,868,793; July 26.
Bitumen, Destructively distilling. G. Egloff. 1,868,737; July 26.
Bitumen, Destructively distilling. G. Egloff. 1,868,738; July 26.
Bitumen, Distilling. G. Egloff. 1,868,733–5; July 26.
Bituminous material, Cracking. G. Egloff. 1,868,736; July 26.
Blade package. H. J. Gaisman. 1,869,311; July 26.
Block: *See*—
Angle block.
Boiler: *See*—
Locomotive boiler.
Book signature feed. W. I. Thompson. 1,868,929; July 26.
Bottle. F. Arena. Des. 87,424; July 26.
Bottle. M. T. Brekke. Des. 87,426; July 26.
Bow-shuttle, Multiple. H. Klahre. 1,869,062; July 26.
Box: *See*—
Strong box.
Box forming and wrapping machine. R. C. Cunningham. 1,868,567; July 26.
Box for observing translucent images, Viewing. G. Bucky. 1,868,521; July 26.
Box making machine, Paper. S. Bergstein. 1,868,872; July 26.
Brace for personal wear. A. Laurain. 1,869,263; July 26.
Brace for railway cars, Adjustable loading. A. E. Mackey. 1,868,638; July 26.
Bracelet chain. A. E. R. Speidel. Des. 87,448; July 26.
Brake: *See*—
Electromagnetic brake. Load brake.
Fluid pressure brake. Vehicle brake.
Brake drum. F. C. Frank. 1,868,740; July 26.
Brake shoe reliner. E. E. Parker. 1,869,348; July 26.
Brake system for automotive vehicles. C. S. Bragg and V. W. Kliesrath. 1,868,725; July 26.
Braking apparatus, Railway. H. L. Bone. 1,868,517; July 26.
Braking apparatus, Railway. H. C. Clausen. 1,868,493; July 26.
Breeches, Riding. J. A. Lieberman and S. Caplin. Re18,541; July 26.
Bridges, Erecting. J. L. de Vou. 1,868,630; July 26.

Brush for vacuum cleaners and the like. H. T. Lang. 1,869,157; July 26.
Brush, Rotary. L. C. Herold. 1,869,102; July 26.
Buckle. S. Rosenthal. Des. 87,443; July 26.
Buckle. B. H. White. Re18,539; July 26.
Buckle fastener. H. G. Whitehouse. 1,869,126; July 26.
Buckle for belts, straps, or the like. G. E. Haines. 1,868,828; July 26.
Buckle, Loop slide. J. Salisbury. 1,868,672; July 26.
Buffer, Nail. J. B. Lyon. 1,868,985; July 26.
Burglar alarm. A. F. Semon. 1,868,923; July 26.
Burner: *See*—
Oil burner.
Burner construction, Oil. A. J. Frame. 1,869,242; July 26.
Bushing and transformer, Combined insulating. G. E. Jansson. 1,868,606; July 26.
Bushing, High voltage. R. W. Atkinson. 1,868,962; July 26.
Button. W. F. Haas. Des. 87,433; July 26.
Button. J. Shadlowsky. Des. 87,447; July 26.
Button, Self adjusting collar. M. H. Goldman. 1,869,143; July 26.
Buttons and like articles, Process and apparatus for decorating. F. G. Purinton. 1,868,849; July 26.
Cabinet, Food preserving. J. S. Beall. 1,868,487; July 26.
Cabinet, Mechanically refrigerated. J. R. Replogle. 1,869,119; July 26.
Cable reel, Collapsible. N. M. Erdahl. 1,868,972; July 26.
Cadmium, Extracting and separating. S. Hughes and R. Teats. 1,869,259; July 26.
Calendar. E. S. Delancy. 1,868,595; July 26.
Cam, Adjustable. A. J. Engel. 1,869,055; July 26.
Can heading machine. C. Gueritey. 1,868,897; July 26.
Cap for flasning. C. A. Earley. 1,868,888; July 26.
Cap, Vent. C. F. Dowrie. 1,868,730; July 26.
Car mover. D. G. Rowell. 1,868,809; July 26.
Car pusher and transfer. H. W. Buck. 1,869,046; July 26.
Car, Railway. G. T. Johnson. 1,869,325; July 26.
Car side and grain door, Combination freight. G. A. Woodman. 1,868,786; July 26.
Carbon black, Production of. O. Schmidt and O. Grosskinsky. 1,868,919–21; July 26.
Carbon remover. J. H. Essick. 1,869,310; July 26.
Carburetion for hydrocarbon motors, System of. O. A. Ross. 1,868,767; July 26.
Carburetor. F. H. Heitger. 1,868,831; July 26.
Cards, Manufacture of round cornered. G. A. Wilke. 1,868,865; July 26.
Cards with rounded corners, Manufacturing. G. A. Wilke. 1,868,864; July 26.
Carpet. W. F. McCabe. Des. 87,437; July 26.
Carriage, Folding baby. J. A. Mahr. 1,869,205; July 26.
Carrier for dispatch systems. C. S. Jennings. 1,868,903; July 26.
Casing for a portable electric polisher. J. B. Fleming. Des. 87,432; July 26.
Casing, Sectional tire. G. Reinbardt. 1,869,117; July 26.
Casket placer. H. J. Harder and H. R. Kotenberg. 1,868,796; July 26.
Caster. E. A. Reed. 1,869,179; July 26.
Caster. K. B. Walter. 1,868,552; July 26.
Cathode mounting for mercury vapor devices. K. Braband. 1,869,130; July 26.
Cellulose ester composition. G. Rocker and E. B. Middleton. 1,868,851; July 26.
Cellulose prior to esterification, Treatment of. H. Dreyfus. 1,869,307; July 26.
Cellulose rayon, Dyeing regenerated. R. Brightman. 1,868,936; July 26.
Chain, Conveyer. W. R. Coppage. 1,869,050; July 26.
Chair: *See*—
Chiropody chair.
Chamfer slotting pipe. H. Hayes. 1,868,900; July 26.
Character or symbol and holder therefor, Interchangeable. P. Patinot. 1,869,314; July 26.
Cheese, Manufacture of. A. F. Stevenson. 1,868,547; July 26.
Cherry stoner. G. S. Ebersole. 1,869,095; July 26.
Chiropody chair. J. R. Emmert. 1,868,658; July 26.
Chisel, Rail joint. C. H. Zentmyer. 1,868,652; July 26.
Chuck. A. A. Bush. 1,869,322; July 26.
Circuit closing device, Temperature-actuated. H. Spiro and W. F. Anderson. 1,868,925; July 26.
Circuits, Rectifier. K. C. Black. 1,869,089; July 26.
Clasp. W. F. Haas. Des. 87,434–5; July 26.
Clasp. S. Rosenthal. Des. 87,444; July 26.
Clasp for bandages and like wrappings. J. G. Tompkins. 1,868,644; July 26.
Cleaner: *See*—
Air cleaner. Suction cleaner.
Holder cleaner. Windshield cleaner.
Cleaner. A. O. Engberg and T. E. D. Bilde. 1,868,659; July 26.
Clip. C. E. Anderson and C. E. Peterson. 1,868,867; July 26.
Clock. W. J. Herschede, W. Eberhardt, and A. Hellmuth. 1,868,941; July 26.
Clock case. M. F. Cartoun. Des. 87,430; July 26.
Clock regulation, Radio. C. A. Sprague. 1,869,175; July 26.
Closing device for large openings which are essentially horizontal and are made watertight in all parts. A. A. Huguenin. 1,868,575; July 26.
Closure construction. J. C. Fuller. 1,868,821; July 26.
Closure, Dispensing. J. L. Card. 1,869,049; July 26.
Closure operating device. P. M. Griffin. 1,868,599; July 26.
Clothespin. D. H. Collier. 1,868,726; July 26.
Clutch adjustment. T. L. Fawick. 1,869,097; July 26.
Clutch-device for wire-stitching and stapling machines or like apparatus. A. H. Maynard. 1,868,536; July 26.
Clutch plate. H. V. Reed. 1,868,704; July 26.
Clutch plate. G. S. Salzman. 1,868,543; July 26.
Clutch, Transmission. H. H. Berryman. 1,868,965; July 26.
Coals, Distilling. C. P. Dubbs. 1,868,732; July 26.
Coil handling apparatus. K. A. Chubb and H. C. Ralston. 1,868,562; July 26.
Coil winding machine. W. J. Leidy and N. Knuth. 1,868,667; July 26.
Coin controlled apparatus. A. H. Du Grenier. 1,868,887; July 26.
Coin release mechanism for vending machines. S. H. Sabit. 1,868,641; July 26.
Collapsible reel. H. Gregory. 1,868,634; July 26.
Collecting and folding mechanism for web presses. I. Tornberg. 1,868,779; July 26.
Communication device for jails. H. P. Manly. 1,869,266; July 26.
Communication system. P. H. Evans. 1,869,323; July 26.
Compact and vanity set. J. E. B. Maillard. 1,868,909; July 26.
Composition containing matter of the character of caoutchouc, Manufacturing a. H. Ziegner. 1,868,787; July 26.
Composition of vegetable food and making the same. E. H. Miles. Re18,542; July 26.
Compounds from the refining wastes of cracked products, particularly cracked benzines, Preparing valuable. W. Von Piotrowski and J. Winkler. 1,869,231; July 26.
Compress, High density. G. W. Langford and H. L. Haines. 1,868,752; July 26.
Concentrator, Dry. H. A. Goold. 1,868,896; July 26.
Concrete pipe, Reenforced. C. F. Buente. 1,869,183; July 26.
Condenser. P. A. Bancel. 1,868,622; July 26.
Condenser, Adjustable. C. B. Hyatt. 1,868,943; July 26.
Condenser, Electrical. B. J. Butler. 1,869,131; July 26.
Condenser, Electrical. J. A. Proctor. 1,869,169; July 26.
Condenser, Electrical. J. A. Proctor and W. M. Bailey. 1,869,168; July 26.
Conduit, Laying multiple fiber. E. Burke and J. C. Sherman. 1,868,881; July 26.
Connecter, Electric test. W. O. Beck. 1,869,181; July 26.
Connecter for connecting the cable to a battery post. A. Conrad. 1,868,939; July 26.
Connecter for wire fabrics. C. E. Pink. 1,868,586; July 26.
Connection, Flange pipe. J. Keulers. 1,868,906; July 26.
Contact, Method and apparatus for promoting. R. R. Collins. 1,868,886; July 26.
Container, Sheet metal. C. H. Rollason. 1,869,348–9; July 26.
Container, Shipping. F. K. Fildes. 1,868,633; July 26.
Container, Ticket. P. P. Beyer. 1,869,043; July 26.
Containers, Method of and apparatus for closing and sealing. D. Belcher. 1,868,686; July 26.
Contrast media for X-Ray photography. G. Hecht, A. Ossenback, and E. Tietze. 1,868,602; July 26.
Control contact, Foot. F. J. Bridgeman. 1,869,054; July 26.
Control for audion amplifiers, Automatic. S. Ballantine. 1,869,331; July 26.
Control for condensers, Unitary. M. B. West and H. C. Malbohm. 1,868,553; July 26.
Control for irrigating systems, Automatic. E. G. Munz. 1,868,801; July 26.
Control system. L. DeFlorez. 1,868,523; July 26.
Control system for airplanes and the like. I. Ludlow. 1,869,326; July 26.
Controlling device for cigarette packing machines. G. Örström. 1,868,583; July 26.
Controlling mechanism, Electrical circuit. C. L. Hanel. 1,868,500; July 26.
Controlling the accumulation of aldehydes in the formation of organic acids from primary alcohols. W. J. Hale and W. S. Haldeman. 1,868,704; July 26.
Conveyer. G. P. Antiss. 1,868,514; July 26.
Conveyer. O. M. Glahn. 1,868,894; July 26.
Conveyer. H. H. McKee and N. J. Dziedzic. 1,868,538; July 26.
Conveyer for plates and other articles. H. S. Thomas and W. R. Davies. 1,869,287; July 26.
Conveyer for printing presses, Inspection sheet. H. A. W. Wood. 1,868,784; July 26.
Conveyer roll. A. Grosjean. 1,868,825; July 26.
Conveying tube, Cleansing fluid. L. C. Bayles. 1,868,684; July 26.
Cooler: *See*—
Food cooler.
Cooling and dispensing apparatus, Drinking water. B. Markus. 1,868,837; July 26.
Cores from core molds, Apparatus for removing. C. A. Nichols. 1,869,112; July 26.

Cot, Camping. N. S. Harter. 1,869,060; July 26.
Cotton baling press. W. L. Hancock and B. C. Woodford. 1,868,829; July 26.
Coupler, Car. H. H. Wolfe. 1,869,035; July 26.
Coupling: *See*—
Flexible coupling. Pipe coupling.
Coupling. F. Faudi. 1,868,891; July 26.
Cover for ice cream cans, Surface. R. Singer. 1,868,772; July 26.
Cover for shipping drums. J. M. Coughlin. 1,868,940; July 26.
Cover, Key. J. Cicourel. 1,868,563; July 26.
Cover replacing device for can washing machines. J. M. McClatchie. 1,868,537; July 26.
Current controlling or regulating device. L. W. McCullough. 1,868,710; July 26.
Current to track sections, Supplying. G. W. Baughman. 1,868,490; July 26.
Cutter: *See*—
Meat cutter. Pipe cutter.
Cutting and coating machine. F. L. Borchert. 1,869,090; July 26.
Cutting and grinding apparatus. J. Holland-Letz. 1,868,983; July 26.
Cutting member and holder therefor. J. A. Klod. 1,869,218–19; July 26.
Cylinder cock and the like. H. A. Hoke. 1,868,635; July 26.
Decking structure. E. S. Evans. 1,869,054; July 26.
Dehydrator. W. D. Mount. 1,868,755; July 26.
Delivery mechanism, Automatic. P. Naeher. 1,868,844; July 26.
Dental appliance, Combination. S. Abraham. 1,868,653; July 26.
Dental casting machine. W. G. E. Harvey. 1,868,797; July 26.
Detector mechanism. A. J. Sprague. 1,868,546; July 26.
Device for handling and emptying glass melting pots. R. Genenger. 1,869,245; July 26.
Device for inserting saw blades into saw frames. K. E. R. Österberg. 1,868,845; July 26.
Dibenzanthrone, Halogenated. M. A. Kunz and K. Koeberle. 1,868,608; July 26.
Die cushion for presses. O. Kühner. 1,868,637; July 26.
Die head, Reversible. W. A. Jenkins. 1,868,750; July 26.
Die header, Solid. W. W. Criley. 1,869,006; July 26.
Dies and making the same. P. R. Zinser. 1,868,788; July 26.
Direction finder. F. H. Kroger. 1,868,982; July 26.
Disazodyestuffs for dyeing and printing wool, Manufacture of. A. Krebser. 1,869,063–4; July 26.
Disks or fins on tubes, Method and apparatus for assembling. W. F. Healy. 1,869,195; July 26.
Dispensing device. J. Brezin. 1,868,656; July 26.
Dispensing device. W. L. Thoeming and O. M. Shander. 1,869,120; July 26.
Dispensing mechanism. W. L. Beall. 1,868,516; July 26.
Display apparatus. J. A. Ashley. 1,869,003; July 26.
Display rack. E. W. Hamann. 1,869,146; July 26.
Display stand. M. Kennedy. 1,869,217; July 26.
Distilling apparatus. S. I. Charlesworth, A. W. Harris, and C. P. Linder. 1,868,625; July 26.
Distributing apparatus, Automatic fertilizer. M. Romera. 1,868,588; July 26.
Distributing member for stokers, Fluid cooled. A. M. Hunt. 1,869,061; July 26.
Door. C. G. Johnson. 1,869,347; July 26.
Door. G. A. Spiller and G. T. Johnson. 1,869,029; July 26.
Door check. I. W. Robertson. 1,869,316; July 26.
Door construction, Car. F. C. Heinen and K. J. Tobin. 1,868,977; July 26.
Doorlock. F. D. Hardesty. 1,868,746; July 26.
Door lock. E. L. McKinney. 1,868,580; July 26.
Douche, Vaginal. M. S. Corbett. 1,868,728; July 26.
Dough handling apparatus. F. H. Van Houten. 1,869,033; July 26.
Dough molding device. E. J. Sternberg. Re18,545; July 26.
Draft stabilizer. L. C. Beadle. 1,868,486; July 26.
Drapery hanger. H. P. Jones. 1,868,944; July 26.
Drier: *See*—
Hair drier. Laundry hanger drier.
Drier or blower. J. E. Kelley. 1,868,905; July 26.
Drive connection. P. T. Black and W. P. Boettner. 1,868,594; July 26.
Drive mechanism for automobiles, Differential. M. E. King. 1,869,154; July 26.
Drive mechanism, Propeller. C. S. Hall. 1,868,975; July 26.
Dust collector. G. A. Boesger. 1,868,876; July 26.
Dyeing process. W. R. Moorhouse. 1,868,987; July 26.
Dyes and dyeing. W. W. Tatum, W. M. Todd, L. J. Hooley, and J. Thomas. 1,869,286; July 26.
Ebullition initiator. L. W. Larsen. 1,868,611; July 26.
Educational material. T. V. Goodrich. 1,868,823; July 26.
Egg preservation. P. F. Sharp. 1,868,996; July 26.
Elbow. T. F. Crary. 1,868,696; July 26.
Electric control apparatus. J. E. Gannon and J. M. Winter. 1,868,700; July 26.
Electric discharge device. H. M. Martin. 1,869,207; July 26.
Electric heater. W. F. Gelinas. 1,869,140; July 26.
Electric machine, Commutator type dynamo. H. Dreghorn. 1,869,187; July 26.
Electric machine, Dynamo. L. D. Jones. 1,869,152; July 26.
Electric precipitator. L. Day. 1,869,335; July 26.
Electric switch. A. O. Austin. 1,868,482; July 26.
Electric switch, Float operated. C. H. Teesdale. 1,869,030; July 26.
Electrical element. J. S. Timmons. 1,869,230; July 26.
Electrical induction apparatus. Z. O. St. Palley. 1,869,176; July 26.
Electrical rectifier. S. M. Lucas. 1,869,017; July 26.
Electrode control mechanism, Arc welding. J. C. Lincoln. 1,869,014; July 26.
Electromagnetic brake. F. O. Clizbe. 1,868,969; July 26.
Electrooptical system. F. Gray. 1,869,194; July 26.
Emblem. B. D. De Weese. Des. 87,431; July 26.
Emergency switch. C. J. Anderson. 1,869,330; July 26.
Engine: *See*—
Internal combustion engine. Rotary engine.
Engine. H. M. Leonard. 1,868,753; July 26.
Engine. W. C. Wells. 1,868,649; July 26.
Engine with positive fuel feeds, Internal combustion. H. Junkers. 1,868,636; July 26.
Engraving machine. J. C. Jennejohn. 1,868,662; July 26.
Escalator. R. P. Valtier. 1,868,780; July 26.
Esters from alcohols and the salts of organic acids, Production of. G. D. Graves. 1,869,193; July 26.
Esters of tar acids and producing the same, Phosphoric. F. S. Granger. 1,869,312; July 26.
Evaporator. G. G. Creson. 1,869,093; July 26.
Evaporator for generating high pressure steam. K. Baumann. 1,869,236; July 26.
Evaporator for mechanical refrigeration. F. G. Slagel. 1,869,173; July 26.
Fan. A. D. Gardner. 1,868,528; July 26.
Fan, Ventilating. F. H. Prescott. 1,869,115; July 26.
Fastener. B. H. White. 1,868,810; July 26.
Fastener, Adjustable. J. S. Norton. 1,868,718; July 26.
Fastener, Bag frame. W. C. Hiering. 1,868,501; July 26.
Fastener, Window. L. Pat. 1,868,949; July 26.
Feed for pipe galvanizing machine, Mechanical. J. W. Free. 1,869,324; July 26.
Feeder for chicks and older fowls. D. B. Tolley. 1,868,957; July 26.
Fence post. W. D. Williams. 1,868,557; July 26.
Fertilizer, Mixed. C. Eyer and F. Korn. 1,868,890; July 26.
Fertilizing agents to soil, Supplying soluble. E. L. and J. A. Prizer. 1,868,913; July 26.
Fibers for paper making and other uses, Treating. L. A. Dils. 1,868,569; July 26.
Filter. W. H. Robbins. 1,868,808; July 26.
Filter, Continuous. R. C. Campbell. 1,868,883; July 26.
Fire extinguishing apparatus and method. L. G. M. Timpson. 1,869,319; July 26.
Fire extinguishing system, Automatic and manual remote control. E. A. Lowe. 1,869,201; July 26.
Fish hook. R. B. Wolford. 1,869,293; July 26.
Fishing lure. F. McLaughlin. 1,869,111; July 26.
Fixture, Clutch servicing. C. B. Spase. 1,868,675; July 26.
Flash light apparatus, Photographer's. A. E. Lipp. 1,869,158; July 26.
Flexible coupling. J. J. Serrell. 1,868,544; July 26.
Flexible joint. G. Flintermann. 1,869,137; July 26.
Flashlight switch. G. B. Pratt. 1,869,315; July 26.
Float. A. E. Davidson. 1,869,186; July 26.
Floor machine. F. W. Yutzler and G. E. Kent. 1,869,179; July 26.
Flue construction for kilns. R. H. Youngman and R. H. H. Pierce. 1,869,000; July 26.
Fluid controlled system. E. A. Lowe and J. R. Hamilton. 1,869,202; July 26.
Fluid pressure brake. C. A. Campbell. 1,869,048; July 26.
Fluid pressure control device. L. R. Williamson. 1,869,085; July 26.
Fluorene, Oxidation of derivatives of. A. O. Jaeger. 1,868,531; July 26.
Fluorides from enamel glass smelter gases, Recovery of. G. H. McIntyre. 1,869,019; July 26.
Flying machine and airship, Combination. M. Hines. 1,869,256; July 26.
Food cooler. A. Veilleux. 1,868,933; July 26.
Form for hosiery and the like, Drying and shaping. W. Bock and H. W. Matthews. 1,868,875; July 26.
Form, Sole-molding. M. L. Dodge. 1,868,526; July 26.
Foundation construction and erecting the same, Stabilized. L. B. Collins. 1,868,494; July 26.
Foundry facing. B. F. Wallace. 1,868,646; July 26.
Frame: *See*—
Locomotive frame. Warping frame.
Truck side frame.
Frame for screening and the like. N. T. Ash. 1,868,488; July 26.
Frame system for ships of iron construction. G. F. K. Wrobbel. 1,869,329; July 26.
Fringe making machine. G. F. McDougall. 1,868,711; July 26.
Fuel, Apparatus for charging. W. A. Barr. 1,868,870; July 26.
Fuel charging device for gas generators. T. F. Spicknall. 1,868,924; July 26.

Fuel during the water smoking period of the firing of clay products, Device for burning comminuted. D. J. Watson. 1,869,124; July 26.
Fuel feeding system, Liquid. D. Collins. 1,868,970; July 26.
Fuel injection system. S. D. Miller. 1,868,713; July 26.
Furnace: *See*—
Metal heating furnace.
Furnace. V. Sorrel and L. A. Lafont. 1,868,954; July 26.
Furnace. J. C. Suber. 1,869,228; July 26.
Furniture, Manufacture of. A. Herman. 1,868,573; July 26.
Furrow opener, Disk. J. Morkovski. 1,868,539; July 26.
Game apparatus. E. H. Plenge. 1,868,762; July 26.
Garbage liquor solid and forming same, Cooked. E. W. McCullough. 1,868,669; July 26.
Gas and liquid contact apparatus. F. H. Wagner. 1,868,618; July 26.
Gasket. G. G. Barr. 1,869,039; July 26.
Gasket forming machine. W. J. Peelle. 1,868,990; July 26.
Gasoline saver. M. D. Kennedy. 1,869,262; July 26.
Gear, Trawling. J. C. Malcolm. 1,869,018; July 26.
Gearing. W. A. Frantz. 1,869,056; July 26.
Gearing, Friction roller. W. Stoeckicht. 1,868,676; July 26.
Generator: *See*—
Oscillation generator.
Glass articles, Handling. J. Bailey. 1,868,480; July 26.
Glass cutting mechanism. J. A. Boush. 1,869,044; July 26.
Glass flux, Homogenation of. R. Thum. 1,868,858; July 26.
Glass sheets, Process and apparatus for the manufacture and leering of. M. Bicheroux. 1,869,297; July 26.
Glass sheets, Receiving. V. M. Dorsey. 1,869,306; July 26.
Glove, Boxing. A. E. Kennedy. 1,869,216; July 26.
Golf bag. C. Hotze. 1,868,979; July 26.
Governor. J. M. Miller. 1,868,910; July 26.
Governor, Speed. R. D. Salmon. 1,868,616; July 26.
Granular masses, Conservation of unstable, hygroscopic or volatile. F. Bartling. 1,869,235; July 26.
Graphitic compositions, Manufacture of. R. M. Doidge. 1,868,631; July 26.
Grass shears. O. W. Atterbury. 1,869,295; July 26.
Grate construction. J. A. Filbert. 1,868,571; July 26.
Grating. H. J. Asleson. 1,868,654; July 26.
Grinder, Mowing machine blade. N. H. Henderson. 1,868,603; July 26.
Grinding wheel. P. Buchelster. 1,868,492; July 26.
Guard and trap. E. V. Wilbern. 1,868,554; July 26.
Guards, Forming mower. C. R. Westberg. 1,868,511; July 26.
Guilding and folding attachment for paper box machines. H. G. Hall. 1,868,572; July 26.
Gun, Hydraulic lubricating. V. P. Goerland. 1,868,701; July 26.
Gun stock, Adjustable. C. S. Ash. 1,869,086; July 26.
Gypsum board, Method of and apparatus for making. W. K. Nelson. 1,868,671; July 26.
Hair cutting machine. G. N. Henderson. 1,869,101; July 26.
Hair drier. P. Kunian and A. M. Douglas. 1,869,012; July 26.
Hammer, Claw. R. S. Blair. 1,869,129; July 26.
Handle: *See*—
Shock absorbing handle.
Handle for portable tools. L. F. Meunier. 1,868,712; July 26.
Hanger: *See*—
Drapery hanger.
Harvester, Corn. J. A. Miller. 1,869,269; July 26.
Harvesting apparatus. F. N. G. Kranich. 1,868,835; July 26.
Hat stand. H. C. Schield. Des. 87,446; July 26.
Heat control apparatus. W. L. Merrill. 1,869,161; July 26.
Heat exchange device. H. Feldmeier. 1,868,698; July 26.
Heat exchanger. S. Brown and J. Price. 1,868,657; July 26.
Heat exchanger. O. W. Helmberger. 1,868,661; July 26.
Heat exchanger. C. W. Metzgar. 1,868,639; July 26.
Heat, Method and apparatus for the measurement of. A. Blackie. 1,868,623; July 26.
Heat transfer device. F. G. Slagel. 1,869,174; July 26.
Heat transfer, Method and apparatus for. M. D. Mann, jr. 1,869,340; July 26.
Heat treating machine. J. Behle and C. W. Hodde. 1,868,812; July 26.
Heater: *See*—
Electric heater.
Heating device for leers. J. Sylvester. 1,868,856; July 26.
Heating system for buildings. B. F. Greimann. 1,868,745; July 26.
Heating unit, Electrical. E. L. Wiegand. 1,868,620; July 26.
Highway construction, Method and form for concrete. B. H. Flynn. 1,868,819; July 26.
Highway construction over-pass. B. H. Flynn. 1,868,820; July 26.
Hoist and lowering attachment, Ash. M. M. Botnick. 1,868,878; July 26.
Holder, Basin flower. L. S. Okal. 1,868,802; July 26.
Holder, Blade. L. T. Owens. 1,869,075; July 26.
Holder, Cigar or cigarette. A. C. Mattison. 1,868,986; July 26.
Holder cleaner, Pipe and cigar and cigarette. A. J. Hanson. 1,869,059; July 26.
Holder, Cream can. W. G. Swanson. 1,869,284; July 26.
Holder, Curtain rod. H. and I. J. Rumpf. 1,869,281; July 26.
Holder, Flower pot. W. H. Sievers. 1,868,853; July 26.
Holder, Globe. A. B. Shaw and J. L. Le Gorre. 1,869,026; July 26.
Holder, Journal box packing. J. J. Miller. 1,868,842; July 26.
Holder, Loose leaf. C. V. Van Buren. 1,869,032; July 26.
Holder, Necktie. J. A. Palmer. 1,869,165; July 26.
Holder, Necktie. L. Pat. 1,868,950; July 26.
Holder, Necktie. E. St. J. Smith. 1,868,674; July 26.
Hook for screen doors, Safety. B. Capra. 1,868,693; July 26.
Hopper, Weighing. C. E. Constable. 1,868,827; July 26.
Hose connection for faucets. S. M. Kass. 1,868,798; July 26.
Hosiery and product thereof, Making. J. C. Decker and H. Aull. 1,869,304; July 26.
Hydraulic control for power transmission mechanism. L. R. Williamson. 1,869,084; July 26.
Hydrocarbon distillates and apparatus used in connection therewith, System of treating. C. W. Stratford. 1,868,775; July 26.
Hydrocarbons, Cracking. E. C. Herthel. 1,868,901; July 26.
Hydro-cycle. R. Gargiulo. 1,869,139; July 26.
Ice, Apparatus for continuous production of carbon dioxide. W. T. Comer. 1,869,346; July 26.
Ice cream shipper, Rubber. S. O. Staake. 1,868,773; July 26.
Ignition device. H. E. Norviel. 1,869,164; July 26.
Ignition system. J. T. Fitzsimmons and J. L. Arthur. 1,869,098; July 26.
Illuminating apparatus, Indicating the derangement of electrical. W. Brander. 1,868,689; July 26.
Illuminating device, Decorative. J. Block. 1,869,321; July 26.
Implement to a motor, Connecting an. A. Richards. 1,868,587; July 26.
Incubator. L. V. C. Sturgis. 1,868,857; July 26.
Indicating and recording apparatus. J. Latzko and O. Flechl. 1,869,221; July 26.
Inflatable ball. J. A. Dubow. 1,869,135; July 26.
Insert for compounds, Molded. A. W. Miner. 1,869,162; July 26.
Insole. T. Hitzler. 1,869,257; July 26.
Instrument for removing corns and callosities without danger. J. Holz. 1,869,197; July 26.
Insulating materials, Impregnating. L. Emanuell. 1,869,308; July 26.
Insulator, Compensating strut type. A. O. Austin. 1,868,479; July 26.
Insulator, Section. C. E. Watson. 1,868,619; July 26.
Internal combustion engine. J. Prentice. 1,869,077; July 26.
Internal combustion engine. J. G. Vincent. 1,869,122; July 26.
Internal combustion engine, Line air cooled. E. S. Marks. 1,869,206; July 26.
Iron, Extracting of. A. Langer. 1,868,606; July 26.
Iron, Production of sponge. K. M. Simpson. 1,868,952; July 26.
Ironer, Flatwork. C. V. Milligan. 1,869,074; July 26.
Ironing machine. J. W. Racklyeft. 1,868,806-7; July 26.
Jack: *See*—
Air jack.
Air motor jack.
Jack mechanism for vehicles, Lifting. W. W. and R. W. Wolff. 1,868,785; July 26.
Jig. G. W. Burr. 1,869,184; July 26.
Joint: *See*—
Flexible joint.
Universal joint.
Rail joint.
Joint for tubular concrete members and the like. N. C. Johnson. 1,869,105; July 26.
Joint or coupling, Expansion. G. W. Perks. 1,869,021; July 26.
Kite. T. W. De Mott. 1,868,525; July 26.
Knitting. J. A. Harron, J. J. Diamond, and G. Bley. 1,868,899; July 26.
Knitting machine. R. Hill. 1,869,147; July 26.
Knot tying. E. J. Abbott. 1,868,682; July 26.
Labels to cylindrical cans or the like, Mechanism for applying. A. H. Kyler. 1,869,065; July 26.
Latch. A. F. Lickteig. 1,868,984; July 26.
Launching means. A. C. Peterson. 1,869,212; July 26.
Laundry hanger drier. W. Coutts. 1,869,238; July 26.
Lavatory. E. L. Norberg. 1,868,760; July 26.
Legging. A. Janalik. 1,869,103; July 26.
Lenses, Manufacturing bifocal. F. B. Watson and E. Culver. 1,868,863; July 26.
Lever, Ratchet. N. F. McNaught and E. H. Peterson. 1,868,835–40; July 26.
Lever, Vehicle control. H. D. Browning. 1,869,301; July 26.
Lifting apparatus, Vacuum operated water. J. A. Serrell and J. L. Fitts. 1,868,873; July 26.
Light sensitive device. F. H. Brittain. 1,868,877; July 26.

Lighter, Cigar and cigarette. P. C. Cartier. Des. 87,429; July 26.
Lining ditches and the like. W. Leriche and I. V. Beasley. 1,869,265; July 26.
Lining for a rotary furnace, Producing a. B. Bruhn. 1,869,237; July 26.
Liquid, Apparatus for delivering measured quantities of. R. Porte. 1,868,848; July 26.
Liquid elevating apparatus. A. C. Wood. 1,868,651; July 26.
Liquid indicating device. J. Maccallum, jr., and E. R. Lowell. 1,868,535; July 26.
Liquid level control. L. DeFlores. 1,868,524; July 26.
Liquid treatment. W. H. Green and S. L. Adelson. 1,869,144; July 26.
Liquid treatment. R. H. Kean. 1,869,153; July 26.
Liquids, Apparatus for evaporating. R. N. Ehrhart. 1,869,190; July 26.
Liquids for remote delivery, Controlling and measuring. T. B. Jenkins. 1,869,010; July 26.
Load brake, Mechanical. O. L. Coffey. 1,868,792; July 26.
Lock: *See*—
Door lock.
Nut lock.
Lock and post, Automobile door. F. F. Phillips. 1,869,274; July 26.
Locking device. L. Solti. 1,869,027; July 26.
Locking device, Swing door keyless. R. W. Bronson. 1,868,491; July 26.
Locomotive boiler, Single drum. G. H. Emerson. 1,869,309; July 26.
Locomotive, Booster equipped. K. Klug. 1,869,155; July 26.
Locomotive frame. H. Glaenzer. 1,869,248; July 26.
Locomotor. L. M. Parrish and F. G. Kelbach. 1,868,948; July 26.
Loom, Reed. G. E. Nordstrom. 1,868,717; July 26.
Looms, Protector mechanism for. B. W. Brown. 1,868,813; July 26.
Lubricating device, especially for motor driven vehicles, Central. H. Kreidel. 1,868,800; July 26.
Lubricating means for roller pulverizers and the like. A. H. Pritchard. 1,869,023; July 26.
Lubricating system, Force feed. I. Cowles. 1,868,629; July 26.
Machine and process for making paper boxes or the like. P. Bergstein. 1,868,871; July 26.
Machine for assembling and coating a multiplicity of articles. F. G. Purinton. 1,868,804; July 26.
Machine for attaching labels to bottles, glasses and the like. C. A. Christensen. 1,868,938; July 26.
Machine for closing little bags. A. Rambold. 1,869,116; July 26.
Machine for coating a multiplicity of articles. F. G. Purinton. 1,868,850; July 26.
Machine for opening cartons or trays. S. Bergstein. 1,868,873; July 26.
Machine for popping corn. E. R. Knott. 1,868,578; July 26.
Machine for setting up cartons. M. Burger. Re18,547; July 26.
Machine for straightening machine parts. L. Sircoulomb. 1,869,225; July 26.
Machine for testing filled and sealed cans and containers. E. K. Malmquist. 1,869,067; July 26.
Machine for the manufacture of wire netting with hexagonal meshes of variable width. R. Casablancos. 1,868,908; July 26.
Magnetic material and producing same. J. B. Seastone. 1,869,025; July 26.
Magnetic material, Producing low core loss. R. E. Reno, jr. 1,869,078; July 26.
Marking device. F. S. Speicher. 1,868,997; July 26.
Mask and the like, Batter's. C. and F. Tatore. 1,868,926; July 26.
Massage and spray apparatus, Portable. R. B. Gentle. 1,868,893; July 26.
Materials, Apparatus for handling loose. A. B. Esseltine. 1,868,973; July 26.
Matrix retainer. C. S. Ivory. 1,868,981; July 26.
Measuring device, Thermionic. M. S. Mead, jr. 1,869,209; July 26.
Measuring mechanism, Thread. H. G. Johnson. 1,868,663; July 26.
Meat cutter. J. A. Klod. 1,869,220; July 26.
Medallion or similar article. S. S. Bradley. Des. 87,425; July 26.
Mercury arc rectifier. C. Krämer. 1,869,156; July 26.
Metal apparatus for rereeling strip. C. E. Bedell and S. and A. J. Castle. 1,869,004; July 26.
Metal heating furnace. M. S. Amburgy. 1,868,866; July 26.
Metal, Making laminated. S. L. Ingersoll. 1,868,749; July 26.
Metal structural unit. P. F. McCool. 1,869,110; July 26.
Metal surfaces, Method and material for coating. J. S. Thompson and R. R. Tanner. 1,869,121; July 26.
Metals, Separating. R. Teats. 1,869,213; July 26.
Metering apparatus for mixing machines. P. Voglsamer. 1,868,549; July 26.
Meters, Attachment for fluid. G. M. Agee. 1,869,037; July 26.
Microscope refractometer. H. W. Lindley. 1,868,908; July 26.
Milk tank. W. E. Guest. 1,868,826; July 26.
Molasses distributor. C. S. Beiler. 1,869,296; July 26.
Mold attaching device for glass working machines. D. E. Gray and D. W. Strait. 1,869,249; July 26.
Mold for tires and annular articles. H. Willshaw and T. Norcross. 1,868,959; July 26.
Molding. R. C. Schemmel. 1,869,081; July 26.
Molding apparatus. J. A. Weiland. 1,869,282; July 26.
Molding, Electric circuit. A. M. Greis. 1,869,145; July 26.
Motor and dynamo machine, Electric. A. E. Stenzel. 1,868,774; July 26.
Motor construction. C. E. Johnson. 1,868,583; July 26.
Mounting for carriers for coils of flexible strip material in taping and other material. A. B. F. G. Richardson. 1,868,915; July 26.
Mounting for rock drills. R. H. Wilhelm. 1,868,650; July 26.
Mounting, Ophthalmic. G. E. Nerney. Des. 87,441; July 26.
Mouse trap. L. R. Pearson. 1,868,847; July 26.
Mower, Lawn. T. C. Schenk. 1,868,918; July 26.
Mowing mechanism. W. R. Walters. 1,869,123; July 26.
Nut lock. K. Vossloh. 1,868,861; July 26.
Oil burner, Crude. A. E. Haden. 1,869,252; July 26.
Oil burning apparatus. H. B. Donley, A. J. Frame, and J. J. Gilmore. 1,869,239; July 26.
Oil, Converting. F. A. Howard and N. E. Loomis. 1,869,337; July 26.
Oil, Cracking. B. L. Souther and J. W. Greene. 1,869,028; July 26.
Oil, Method and apparatus for purifying. C. J. Rodman and R. P. Dunmire. 1,868,917; July 26.
Oil saver. E. W. Patterson. 1,869,076; July 26.
Oiling mechanism, Driving shoe box. H. G. Becker. 1,868,561; July 26.
Oils, Process and apparatus for dehydrating. L. L. Davis. 1,869,008; July 26.
Operating mechanism for rail oilers. H. G. Warr. 1,868,647; July 26.
Orientation correction to telegraph distributors, Indicating and applying. A. F. Connery. 1,868,695; July 26.
Oscillation generator. C. F. P. Rose. 1,869,171; July 26.
Oven-circulating air type. A. E. Grapp. 1,868,824; July 26.
Pack opening machine. D. Buccicone. 1,868,624; July 26.
Package, Folding. O. P. Wilson. 1,869,291; July 26.
Package, Folding. O. P. Wilson and N. B. Rooks. 1,869,292; July 26.
Package mouthpiece, Removable. W. J. Thompson. 1,868,930; July 26.
Package, Sealed. A. Podel. 1,869,167; July 26.
Packing device, Fruit basket. H. B. Sutter and K. G. Haseltine. 1,868,590; July 26.
Packing, Gland. L. H. Mahon. 1,868,668; July 26.
Pad for guns, Recoil. N. F. Smith. 1,868,953; July 26.
Pan. A. J. App. 1,869,234; July 26.
Pancake turner. H. E. Barcht. 1,869,299; July 26.
Paper manufacture. J. Traquair and F. G. Rawling. 1,869,082; July 26.
Paper, Method of and apparatus for making. J. D. Tompkins. 1,868,617; July 26.
Patterning mechanism for circular knitting machines. G. Stibbe. 1,868,643; July 26.
Pen sleeve, Desk set fountain. S. Nakahara. 1,868,505; July 26.
Pencil. W. G. Sanford, jr. 1,868,951; July 26.
Pencil, Mechanical. C. R. Keeran. 1,869,198; July 26.
Pendulum for measuring time. M. Schuler. 1,868,769; July 26.
Petroleum, Treatment of crude. B. T. Brooks and T. T. Gray. 1,868,966; July 26.
Photo-electric tube. A. J. McMaster and C. E. Parson. 1,869,342; July 26.
Photographic developer tank liquid circulating system. M. H. Daniels and J. A. Slack. 1,869,094; July 26.
Picture screen, Non-glare moving. A. B. Hurley. 1,868,834; July 26.
Pipe: *See*—
Chamfer slotting pipe.
Concrete pipe.
Pipe coupling, Automatic train. J. Robinson. 1,868,916; July 26.
Pipe cutter. H. M. Myracle. 1,868,757; July 26.
Pipe, Method of and apparatus for making. J. C. Lincoln. 1,869,351; July 26.
Pipe racking apparatus, Drill. S. S. Hembree. 1,868,747; July 26.
Piston and skirt expanding ring therefor. H. F. Phillips. 1,869,166; July 26.
Piston ring. G. M. M. Grant. 1,868,744; July 26.
Piston ring. M. W. Marien. 1,869,108; July 26.
Piston ring expander and making the same. C. A. Marien. 1,869,107; July 26.
Pitch propeller, Controllable. J. A. Roemisch. 1,869,280; July 26.
Plant propagating device. W. Lam. 1,868,609; July 26.
Planter. O. F. Drennan. 1,868,731; July 26.
Plate, Shoe. F. D. Reynolds. 1,868,765; July 26.
Platform for conveying goods chiefly in ship's holds, Movable. J. G. de Andia Yrarrázaval. 1,868,568; July 26.
Plug receptacle or similar article, Attachment. L. J. Cahn. Des. 87,428; July 26.
Plug, Spark. P. K. Devers and I. F. Hooper. 1,869,133; July 26.

Plumbing fixture adapter. F. C. Kuhnle. 1,868,665; July 26.
Pocket. R. S. Jennings. 1,869,261; July 26.
Post: *See*—
Fence post.
Power measuring and telemetering apparatus. B. D. Bedford. 1,869,128; July 26.
Power transmitting mechanism in prime movers. W. F. Thomas. 1,869,288; July 26.
Preparation of cellulose solutions. H. P. Bassett. 1,869,040; July 26.
Press: *See*—
Cotton baling press. Rotary printing press.
Printing press. Shoulder and arm press.
Printing press. M. W. Bruesbaber. 1,868,880; July 26.
Printing rolls, Apparatus for preparing photo stipple intaglio engraved. A. D. La Pointe. 1,868,709; July 26.
Projecting bright backgrounds by oblique projections. P. Planer. 1,869,275; July 26.
Projection, Duplex. A. D. Eitzen. 1,868,889; July 26.
Projection screen. D. F. Newman. 1,868,759; July 26.
Projector. W. T. Birdsall. 1,868,722; July 26.
Propeller. W. J. Blanchard. 1,869,182; July 26.
Pulley, Sash. F. J. and H. H. Pease. 1,868,761; July 26.
Pulping machine. W. G. Fraser. 1,869,243; July 26.
Pump. L. B. Gruman. 1,868,498; July 26.
Pump and gas lift, Combination. H. S. Berkey. 1,868,874; July 26.
Pump control, Pneumatic tire. B. F. Reynolds. 1,868,766; July 26.
Pump, Impact ejector. C. J. Wolff and W. W. Couch. 1,868,621; July 26.
Pump or motor, Rotary. E. R. Dudley. 1,869,053; July 26.
Pump unit, Water system. S. H. Hobson. Re18,543; July 26.
Pumping system, Liquid sealed. W. H. Muzzy. 1,868,988; July 26.
Punch. W. F. Miller. 1,869,073; July 26.
Punches and dies for embossing printing characters in metal plates, Making. H. L. Thompson. 1,868,777; July 26.
Purifier for lubricating systems. A. P. Brush. 1,868,814; July 26.
Pyrometer tube. J. A. Jeffery and F. H. Riddle. 1,869,151; July 26.
Rack: *See*—
Display rack. Supporting and display rack.
Stationery rack.
Rack for bottles, Display. J. H. McEachern. Des. 87,438–9; July 26.
Radiator corner construction. A. F. Ihde. 1,869,338; July 26.
Radiator trap, Steam. C. R. Watts. 1,868,510; July 26.
Radio antenna appliance. C. M. Scott. 1,869,024; July 26.
Radio direction finder. G. G. Kruesi. 1,868,945; July 26.
Radioreceiver electrical phonograph and public address system, Combined. H. C. Malbohm. 1,868,613; July 26.
Rafter for green-houses, etc. P. E. George. 1,869,246; July 26.
Rail bender. H. E. Williams. 1,868,556; July 26.
Rail, Escalator hand. H. W. Shonnard. 1,868,771; July 26.
Rail joint. J. F. E. Forest and A. F. Joanisse. 1,869,138; July 26.
Rail joint. F. L. Re Qua. 1,868,992; July 26.
Railway track, Electric toy. F. Ottenstein. 1,868,584; July 26.
Razor blade, Safety. J. Molkenthin, jr. 1,869,327; July 26.
Rebuilding furnace roofs. N. Thompson and C. Johnson. 1,868,592; July 26.
Receptacle and making the same. W. T. Scarritt. 1,869,224; July 26.
Receptacles from sponge rubber, Method and apparatus for forming. W. Vernet. 1,868,932; July 26.
Reel: *See*—
Cable reel. Collapsible reel.
Refractory articles and making them, Composite. G. S. Fulcher. 1,868,699; July 26.
Refrigerating apparatus. E. J. Ahrens. 1,868,961; July 26.
Refrigerating apparatus. J. G. King. 1,868,907; July 26.
Refrigerating device. H. S. Raymond. 1,868,763; July 26.
Refrigerator. F. Einermann. 1,868,495; July 26.
Refrigerator, Iceless. L. Campbell, jr. 1,868,882; July 26.
Register. C. J. Phare. 1,869,022; July 26.
Regulating apparatus for steam heating systems. E. C. Wiley. 1,868,555; July 26.
Regulating arrangement for prime movers. R. Dietze. 1,869,134; July 26.
Relay. H. M. Bascom. 1,868,559; July 26.
Relay, Electric protective. H. Leben. 1,869,222; July 26.
Relay for reverse current braking devices, Disconnecting. G. H. Whittingham. 1,869,034; July 26.
Relay instrument. I. I. Eremeeff. 1,869,096; July 26.
Relay instrument. E. S. Maris. 1,869,109; July 26.
Remote control system. H. R. Crago. 1,869,185; July 26.
Repeater, Single line. F. G. Halliden. 1,868,705–6; July 26.
Resonator, Piezo-electric. W. A. Marrison. 1,869,160; July 26.
Ribbon pack. A. J. Harris. 1,868,601; July 26.
Ring: *See*—
Piston ring.
Ring. A. S. Samuels. Des. 87,445; July 26.
Ring for spinning and doubling machines. C. F. Hofmann. 1,868,574; July 26.
Road maintenance equipment. C. F. Goddard. 1,868,895; July 26.
Road working machine. I. M. Wells and H. A. Olds. 1,868,648; July 26.
Rod and coupling member therefor, Sectional. W. H. Stewart. 1,868,508; July 26.
Rods or tubes of glass or other materials, Process and apparatus for the manufacture of. J. A. Cardot. 1,869,303; July 26.
Roller adjusting device for cotton gins. W. L. Hancock. 1,868,830; July 26.
Roller conveyer for glass plates. L. von Reis. 1,868,860; July 26.
Rolling stock construction, Railway. J. C. Travilla, jr. 1,868,509; July 26.
Roof joint construction, Fine. C. J. Bates, jr. 1,868,485; July 26.
Roofing and making same, Prepared. H. C. Koch. 1,868,751; July 26.
Rope. E. V. Wyatt. 1,868,681; July 26.
Rotary engine. C. J. Marchant. 1,869,106; July 26.
Rotary printing press, Multicolor. H. M. Barber. 1,868,963; July 26.
Rubber compounding. B. F. Schwalm. 1,869,172; July 26.
Rubber sheeting, Apparatus for the manufacture of laminated. O. J. Kuhlke. 1,869,011; July 26.
Rule, Disk slide. J. R. Dempster. 1,868,816; July 26.
Safety device, Automatic fire. W. Hunt. 1,868,708; July 26.
Safety device for carding machines. L. W. Radford. 1,868,615; July 26.
Safety device for rock drills. L. C. Bayles. 1,868,685; July 26.
Sandal, Ice. W. H. Crap. 1,868,729; July 26.
Sander and polisher, Portable. A. H. Roos. 1,868,507; July 26.
Sanitary napkins and machine for making same. O. T. Thompson. 1,869,177; July 26.
Saw gumming machine, Gin. W. B. Smith. 1,868,855; July 26.
Saw, Power operated rail. E. A. Everett. 1,868,739; July 26.
Scale for determining the color of egg meat. M. E. Pennington. 1,868,542; July 26.
Sconce, Wall. B. L. Watkin. Des. 87,427; July 26.
Scraper for ditching machines. H. H. Barber. 1,868,515; July 26.
Scraper, Power. L. E. Younie. 1,869,320; July 26.
Screen: *See*—
Picture screen. Projection screen.
Screen for projecting machines. E. E. Wagner. 1,868,551; July 26.
Screw equipment for aviation fields. C. P. Griffith and C. J. Worden. 1,868,497; July 26.
Service table, Room. J. W. Allen. 1,869,001; July 26.
Sewing machine, Chain stitch. D. W. Bunker. 1,868,724; July 26.
Shade, Sectional lamp. G. A. Tate. 1,868,776; July 26.
Shade with fabric cover, Lamp. H. Bruckmann. 1,868,692; July 26.
Shampoo apparatus. M. Gower. 1,868,598; July 26.
Shaving aid. W. C. Gatton. 1,869,057; July 26.
Shaving preparation. J. McIntyre. 1,868,838; July 26.
Sheet gaging device for slitting machines. J. M. Hothersall. 1,868,707; July 26.
Sheet handling apparatus. L. L. Beach and C. G. Wright. 1,868,560; July 26.
Sheet inspecting apparatus. A. Broadmeyer. 1,869,300; July 26.
Sheet material, Apparatus for forming fibrous. H. E. Holcomb. 1,869,148; July 26.
Sheets and forms, Manufacturing phenolformaldebyde resin. G. J. Crossman. 1,868,566; July 26.
Shells and resultant article, Forming half bearing. L. C. Blomstrom. 1,868,655; July 26.
Shield, Elevator operator's hand. M. Goldkind. 1,868,822; July 26.
Shield for thermostatically controlled oil brooders, Wafer. D. H. Hill. 1,868,978; July 26.
Shingles. Handling and treating. A. F. Jackson. 1,869,150; July 26.
Ships or the like, Propulsion of. C. M. Farraguto. 1,869,136; July 26.
Shock absorber. W. A. Chryst. 1,869,092; July 26.
Shock absorber. T. J. Hobbs. 1,869,009; July 26.
Shock absorber. F. J. Tippen. 1,868,859; July 26.
Shock absorbing handle. C. B. Coates. 1,868,626–7; July 26.
Shoe-bottom filler. A. Thoma. 1,868,927; July 26.
Shoe-filler, Making. A. Thoma. 1,868,928; July 26.
Shoe for motor vehicle wheels, Mud. W. M. Borgstrom and O. E. Haglund. 1,869,298; July 26.
Shoulder and arm press. E. H. Zacharias. 1,868,934; July 26.
Shuttle check and protector mechanism. W. W. Robertson. 1,868,720; July 26.
Sightometer. C. T. Eldredge. 1,868,597; July 26.
Sign. H. Ohanian. 1,868,682; July 26.

Sign, Changeable. E. von der Lippe-Lipski. 1,869,066; July 26.
Signal: *See*—
Warning signal.
Signal operating switch. A. J. Gerhart. 1,868,527; July 26.
Signal system. G. J. Barry. 1,868,489; July 26.
Signaling apparatus and method. L. L. Nettleton. 1,869,020; July 26.
Signaling device. M. E. Johnson. 1,868,576; July 26.
Signaling system. A. S. Brown. 1,868,691; July 26.
Signaling system. H. E. Overacker. 1,868,614; July 26.
Signaling system and apparatus. W. Brander. 1,869,091; July 26.
Silica, Producong clear vitreous. B. F. Niedergesass. 1,869,163; July 26.
Sinker. L. A. Dockman. 1,869,305; July 26.
Skate, Roller. J. C. Turner. 1,868,548; July 26.
Skid for motor vehicles. D. E. Hoffman. 1,868,942; July 26.
Slag tapping and disposal apparatus. T. G. Goghlan. 1,868,694; July 26.
Soap, Flaking. B. W. Coltman. Des. 18,546; July 26.
Soda from waste lye, Recovering caustic. S. Tachikawa. 1,868,955; July 26.
Solid substances, Separation of. A. D. Ellé. 1,869,241; July 26.
Soluble agents to liquids, Method and apparatus for supplying. E. L. Prizer. 1,868,914; July 26.
Sound reproducer system, Electromagnetic. F. A. Kolster. 1,868,607; July 26.
Sound reproducing apparatus. W. R. Oyston. 1,868,846; July 26.
Sound reproducing apparatus. E. Podszus. 1,868,640; July 26.
Sound reproducing device. J. T. Fitzsimmons. 1,868,660; July 26.
Sound reproducing device, Interference free. O. Wenderoth. 1,868,958; July 26.
Sound translating device. A. L. Thuras. 1,869,178; July 26.
Spacing device. W. Leriche and I. V. Beasley. 1,869,264; July 26.
Spectacles, Pair of. G. E. Nerney. Des. 87,442; July 26.
Spike. R. E. Beegle. 1,868,964; July 26.
Spool, Yarn. O. V. Payne. 1,868,719; July 26.
Sprayer. A. A. Breuer. 1,868,518; July 26.
Spraying system. D. Edge. 1,868,632; July 26.
Spring shackle. R. H. Chilton. 1,869,132; July 26.
Stabilizer, Steering mechanism. W. E. Plank. 1,868,912; July 26.
Stamp. J. Levy. 1,869,339; July 26.
Stand: *See*—
Display stand.
Starter, Engine. R. Bertsche, jr. 1,869,088; July 26.
Stationery rack. C. W. Muller. 1,868,756; July 26.
Steam intake sleeve for sulphite pulp digesters. E. Morterud. 1,869,270; July 26.
Steam purifier discharge. W. J. Hughes. 1,869,149; July 26.
Steel plate and bar, Composite. R. H. McMillen. 1,869,208; July 26.
Steering wheel. H. D. Geyer. 1,869,099; July 26.
Steering wheel inserts, Making. E. R. Marbach and G. F. Cavanagh. 1,869,267; July 26.
Sterilizer, Barber's. I. J. Johnston. 1,868,904; July 26.
Stop for box nailing machine, Shook. F. Cheklan. 1,868,885; July 26.
Stop motion, Filling. A. F. Morrell. 1,868,716; July 26.
Stopping device for automatic lathes and the like. A. W. Phelps. 1,869,114; July 26.
Stove, Cook. G. E. Pickup. 1,868,991; July 26.
Stretcher, Wire. H. C. Noell. 1,869,113; July 26.
Strong box. J. J. Brosnan. 1,869,302; July 26.
Suction cleaner, Portable. A. A. Breuer. 1,868,519; July 26.
Suction producing device. A. C. Nelson. 1,868,758; July 26.
Sugar molding machine. J. F. Charnock. 1,869,005; July 26.
Suit, Bathing. G. Gassel. 1,868,741; July 26.
Suit, Bathing. M. R. Smarr. 1,868,854; July 26.
Sulphur suspension and making same, Concentrated. P. Mochalle and J. Mrochem. 1,868,715; July 26.
Support for semi-trailers, Auxiliary. D. H. Davis. 1,868,971; July 26.
Support, Insulating. W. H. Boyce. 1,868,723; July 26.
Support, Spelter furnace condenser. M. C. Skinner. 1,868,589; July 26.
Support, Tube element. C. A. Horn and R. J. Heitzman. 1,868,604; July 26.
Supporter, Athletic. C. K. Lane. 1,868,610; July 26.
Supporting and display rack. G. Subick. 1,869,226; July 26.
Suspension, Spring eye. J. Bijur. 1,868,687; July 26.
Switch: *See*—
Electric switch. Flashlight switch.
Emergency switch. Signal operating switch.
Switch for radio apparatus, Automatic safety. M. T. McConnell. 1,869,068; July 26.
Synchronizing method and apparatus for making sound-picture films. G. H. Rufe. 1,868,993; July 26.
Table: *See*—
Service table.
Table. E. B. Wagner. 1,868,550; July 26.
Table for vehicle lifts. L. C. Stukenborg. 1,869,283; July 26.
Tank: *See*—
Milk tank. Vehicle tank.
Tender tank.
Tars, Treatment of. C. F. Broadhead and R. S. Andrews. 1,868,879; July 26.
Tea aroma, Extraction of. O. Strobach and P. A. Wickmann. 1,868,999; July 26.
Telegraph repeater. G. S. Vernam. 1,868,678; July 26.
Telegraph system. R. G. Griffith. 1,868,703; July 26.
Telegraphy system, Secret. F. Cartier. 1,868,967; July 26.
Telephone system. T. F. Crocker. 1,869,007; July 26.
Telephone system. C. E. Lomax. 1,869,016; July 26.
Telephone system. H. E. Phelps. 1,868,585; July 26.
Telephone system. N. H. Saunders. 1,868,994; July 26.
Telephone system. V. S. Tharp. 1,868,956; July 26.
Tender tank. E. E. Hicken. 1,869,255; July 26.
Tennis racket. S. C. Allen. 1,869,038; July 26.
Tension device. A. Anderson. 1,868,558; July 26.
Terracing and ditching machine. H. Murphy. 1,869,271; July 26.
Test set. C. A. Anderson. 1,868,960; July 26.
Textile materials, Process and apparatus for treating. T. D. Ainslie. 1,868,513; July 26.
Thallium, Recovering. S. Hughes and R. Teats. 1,869,214; July 26.
Thermal method of treating metallic bodies. A. V. de Forest. 1,869,336; July 26.
Thermometer. E. M. Phelps. 1,868,911; July 26.
Thread and fabric made therefrom, Elastic. F. L. Brigham. 1,868,690; July 26.
Three-unit, three-element code and its application to submarine telegraphy. M. H. Woodward. 1,868,680; July 26.
Threshing apparatus. W. J. McVicker. 1,869,072; July 26.
Tie attachment. J. R. Haas. 1,869,251; July 26.
Tile, Enamel metallic. N. J. Burgett. 1,868,815; July 26.
Tile, Roofing. F. C. Overbury. 1,868,803; July 26.
Time, Method of and apparatus for measuring reverberation. F. H. Hibbard. 1,869,196; July 26.
Timer. J. A. Mould. 1,868,754; July 26.
Timing device. M. L. Nelson. 1,868,989; July 26.
Tinning machine. J. C. Slonneger. 1,868,545; July 26.
Tips from torches, Fabricating. A. F. Jenkins. 1,869,260; July 26.
Tire making machine. H. D. Stevens. 1,869,317; July 26.
Tire spreader. C. C. Clark. 1,868,564; July 26.
Tool and handle therefor, Power. C. B. Coates. 1,868,628; July 26.
Tool driving mechanism for tapping machines or the like. B. P. Schiltz. 1,868,721; July 26.
Tool holding device. A. Edson. 1,869,240; July 26.
Tool, Illuminated. C. C. Tomney. 1,868,778; July 26.
Tool lift for cultivators. A. E. Loomis. 1,869,159; July 26.
Tool, Machine. A. L. Ellis. 1,868,697; July 26.
Tool, Tire. F. M. Gabler. 1,869,244; July 26.
Tooth, Artificial. J. F. Caldwell. 1,869,047; July 26.
Torch. F. S. Griffin. 1,869,250; July 26.
Torch, Oxy-acetylene. A. F. Jenkins. 1,869,215; July 26.
Torch, Welding. H. V. May. 1,869,341; July 26.
Torch, Welding. H. W. Tobey. 1,869,328; July 26.
Towel and making the same, Detergent. E. W. Washburn. 1,868,862; July 26.
Toy, Construction. A. C. Gilbert. 1,868,496; July 26.
Toy vehicle. J. C. Koerber. 1,869,199; July 26.
Tractor attachment. H. E. See. 1,868,770; July 26.
Transformer. S. E. Anderson. 1,869,180; July 26.
Transformer. A. O. Austin. 1,868,483–4; July 26.
Transformer, Current. A. O. Austin. 1,868,481; July 26.
Transformer, High potential. E. Welter. 1,869,233; July 26.
Transformer, Potential. G. E. Jansson. 1,868,605; July 26.
Transformer, Variable voltage. H. R. West. 1,869,125; July 26.
Transmission. G. B. Eggert. 1,869,189; July 26.
Transmission network, Electrical voice. T. H. Turney. 1,869,031; July 26.
Trap: *See*—
Mouse trap. Radiator trap.
Trap setting device. F. C. Mills. 1,868,714; July 26.
Tray for mechanical refrigerators, Ice. G. H. Kennedy, jr. 1,868,503; July 26.
Tread linkage. A. P. Armington. 1,869,002; July 26.
Truck bolster. A. H. Thomas and H. H. Wolfe. 1,869,229; July 26.
Truck side frame. C. B. Harbison. 1,868,529; July 26.
Tube: *See*—
Conveying tube. Pyrometer tube.
Photo-electric tube. Vacuum tube.
Tube bending machine. H. E. Schneider. 1,868,852; July 26.
Turner: *See*—
Pan cake turner.
Undergarment. S. Tait. Des. 87,449; July 26.
Under-reaming apparatus. B. Granville. 1,868,702; July 26.
Universal joint. C. L. Eksergian. 1,868,818; July 26.
Universal joint. H. A. Myers. 1,868,540; July 26.

Unloader for driers, Automatic. R. C. Moore. 1,869,210; July 26.
Vacuum cleaner attachment. G. Linton. 1,869,200; July 26.
Vacuum tube. R. Harding, jr. 1,868,600; July 26.
Valve. L. F. Doen. Re18,540; July 26.
Valve actuator, Automatic thermal. E. A. Lowe and J. R. Hamilton. 1,869,203; July 26.
Valve, Air pump. A. Richter. 1,869,170; July 26.
Valve, Deluge. E. A. Lowe and J. R. Hamilton. 1,869,204; July 26.
Valve, Diverter. W. Schneider. 1,868,768; July 26.
Valve, Flushing. R. A. Brooks. 1,868,520; July 26.
Valve, Flushing. W. C. Tanner. 1,868,591; July 26.
Valve for milk pasteurizing machines, Quick flushing. E. Manning. 1,868,947; July 26.
Valve for steam radiators and the like. S. A. W. Okell. 1,868,541; July 26.
Valve plunger construction. D. R. Yarnall. 1,868,811; July 26.
Valve, Radiator. L. Schwartz. 1,869,282; July 26.
Valve, Relief. C. G. Crispin. 1,868,522; July 26.
Valve, Relief. J. Kuhl. 1,868,504; July 26.
Valve, Tire pressure relief. R. C. Davis. 1,869,051; July 26.
Vehicle body suspension. G. H. Taber. 1,869,285; July 26.
Vehicle brake. C. N. Lieb. 1,868,836; July 26.
Vehicle leaf springs and shock absorber therefor, Device for lubricating. F. E. Badger. 1,868,780; July 26.
Vehicle, Motor. S. Guy. 1,868,827; July 26.
Vehicle structure, Railway. J. J. Harley and E. S. Beckette. 1,868,530; July 26.
Vehicle tank, Complete discharge. A. A. Kramer. 1,868,799; July 26.
Vending machine. G. J. McLaren. 1,869,070; July 26.
Ventilator. H. C. Hueglin. 1,868,980; July 26.
Ventilator for vehicles. C. S. Warnock. Des. 87,451; July 26.
Vessel adapted for use as landing place for air lines crossing the sea. P. N. Lucas-Girardville. 1,869,247; July 26.
Vulcanizing system. R. D. Cleveland. 1,868,791; July 26.
Wall construction. G. F. McKenney. 1,869,060; July 26.
Warning signal. A. F. Gillet. 1,869,142; July 26.
Warping frame. J. M. Bahima Puig and S. J. Gascon. 1,869,277; July 26.
Weighing apparatus, Improvement relating to. W. Timson. 1,869,289; July 26.
Weighing device for use in travelling cranes. P. J. Armagnat. 1,868,683; July 26.
Welder, Spot. M. L. Eckman. 1,869,188; July 26.
Welding apparatus. J. C. Lincoln. 1,869,013; July 26.
Welding apparatus. S. Whitworth and L. E. Long. 1,868,782; July 26.
Welding apparatus, Arc. J. C. Lincoln. 1,869,015; July 26.
Welding, Device for mechanically-operated. E. Rosenberg 1,869,079; July 26.
Welding, Electric arc. R. Stresau. 1,868,998; July 26.
Welding, Method of and apparatus for. J. C. Lincoln. 1,869,350; July 26.
Well bottom. G. B. Schneider and E. S. Nowery. 1,869,352; July 26.
Well holes, Apparatus for indicating angularity of crooked. W. W. Hester. 1,868,833; July 26.
Well sealing head. M. L. Vallendor and P. C. Fly. 1,869,345; July 26.
Welt, Finishing. R. C. Schemmel. 1,869,080; July 26.
Wheel: *See*—
Airplane wheel. Steering wheel.
Grinding wheel.
Wheel. J. W. White. 1,868,781; July 26.
Wheel for vehicles, Resilient. M. Gralenski. 1,869,100; July 26.
Wheel inserts, Making steering. B. Bronson and E. R. Marbach. 1,869,333; July 26.
Wheels, Making steering. B. Bronson and E. R. Marbach. 1,869,332; July 26.
Wheels, Making steering. B. Bronson and E. R. Marbach. 1,869,334; July 26.
Whistle, Electrically operated. C. R. Duers. 1,869,052; July 26.
Windlass and the like, Electrically-operated. H. A. Peck. 1,869,223; July 26.
Windshield cleaner. C. B. Williams. 1,868,783; July 26.
Wing, Collapsible. A. J. Roberts. 1,869,227; July 26.
Wiper device. G. L. Fuller and W. F. Breen. 1,868,794; July 26.
Woody materials to obtain fibers therefrom, Treating. L. A. Dills. 1,868,570; July 26.
Wrapper for packages. E. B. Allen and S. B. Howe. 1,869,127; July 26.
Wrapper, Protective. J. T. Mackay. 1,869,313; July 26.
Wrench and like hand tool. T. L. Fyffe. 1,868,892; July 26.

CLASSIFICATION OF PATENTS

ISSUED JULY 26, 1932

NOTE.—First number=class, second number=subclass, third number=patent number

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Designs	37—No.	87,286 to No. 87,334, inclusive.
Patents	1,101—No.	1,865,422 to No. 1,866,522, inclusive.
Total	1,443	

Trade-Marks Canceled

42,979. Coffee. William M. Swindler, Pittsburgh, Pa. Registered July 12, 1904. Canceled June 8, 1932.

109,602. Peanut-butter and salted peanuts. Arthur L. Lake, Danbury, Conn. Registered April 11, 1916. Canceled June 8, 1932.

142,705. Fresh citrus fruits. Harry W. Peterson & Company, Palmetto, Fla. Registered May 17, 1921. Canceled June 8, 1932.

146,705. Soda biscuits and crackers. J. B. Carr Biscuit Co., Wilkes-Barre, Pa. Registered September 20, 1921. Canceled June 8, 1932.

225,151. Washing soda. The Buckeye Soda Company, Painesville, Ohio. Registered March 15, 1927. Canceled June 3, 1932.

234,738. Fluid meters. Economy Meter Corporation, Los Angeles, Calif. Registered November 1, 1927. Canceled June 3, 1932.

246,755. Boots and shoes. Bresnahan Shoe Company, Boston, Mass. Registered September 11, 1928. Canceled June 3, 1932.

270,290. Motor delivery trucks and chassis. Standard Motor Truck Company, Detroit, Mich. Registered April 29, 1930. Canceled April 22, 1932.

270,293. Motor delivery trucks and chassis. Standard Motor Truck Company, Detroit, Mich. Registered April 29, 1930. Canceled April 22, 1932.

277,705. Baby napkins. W. F. Bender & Co., Inc., Buffalo, N. Y. Registered November 25, 1930. Canceled June 8, 1932.

Adjudicated Patents

(D. C. Del.) Faber and Driggs patent, No. 1,785,770, for aerial toy, claims 1, 3, and 8 *Held* not infringed. *Tipp. Fireworks Co. v. Victory Sparkler & Specialty Co.*, 57 F.(2d) 864.

Interference Notice

U. S. Patent Office, *Washington, June 9, 1932.*

H. J. Kent and Company, its assigns or legal representatives, take notice:

An interference has been declared by this Office between the application of the Standard-Tilton Milling Company, Planters Building, Saint Louis, Mo., for registration of a trade-mark and trade-mark registered February 10, 1925, No. 194,846, to Waukesha Flour Mills, Clinton Street, Waukesha, Wis., which registration, the assignment records of the Office show, has been transferred to H. J. Kent and Company, doing business as The Fluffy-Flour Company, Chicago, Ill. The notice of such declaration sent by registered mail to said H. J. Kent and Company, at the said address, having been returned by the post-office as undeliverable, notice is hereby given that unless said H. J. Kent and Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Rule 72

Rule 72. After the completion of the application the Office will not return the specification for any purpose whatever. If applicants have not preserved copies of the papers which they wish to amend, the Office will furnish them on the usual terms.

The drawing may be withdrawn only for such corrections as cannot be made by the Office; but a drawing cannot be withdrawn unless a photographic copy has been filed and accepted by the Examiner as a part of the application. Permissible changes in the construction shown in any drawing may be made only by the Office and after an approved photographic copy has been filed. Sketches filed to show proposed changes in construction must be in permanent ink. (See Rule 30.) Substitute drawings will not be admitted in any case unless required by the Office.

Condition of Applications Under Examination at Close of Business June 18, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 75,188; Trade-Mark Division, 930. Oldest new case, Nov. 27, 1931; oldest amended, Nov. 30, 1931. The dates given are 1932 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action: New	Oldest amended application awaiting office action: Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Mar. 9	Mar. 16	499
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Feb. 12	Feb. 12	1,024
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Mar. 3	Mar. 17	716
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Apr. 2	Apr. 4	502
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Feb. 10	Feb. 15	421
4898 C	6. LEWERS, A. M., Carbon Chemistry	†Dec. 11	†Dec. 11	1,974
5725	7. JARBOE, C. G., Optics; Photography	Jan. 22	Jan. 22	1,511
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Jan. 21	Jan. 22	1,231
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Mar. 18	Mar. 18	826
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Jan. 5	Jan. 6	921
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Feb. 15	Feb. 24	620
7701	12. HENRY, C. O., Machine Elements	Feb. 25	Feb. 26	631
5094	12. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Feb. 5	Feb. 5	1,155
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Mar. 14	Mar. 18	755
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Jan. 13	Jan. 13	2,034
5612	16. SPENCER, C. J., Telegraphy; Telephony	Feb. 25	Feb. 25	903
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	†Dec. 21	†Dec. 21	1,361
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Feb. 9	Feb. 10	742
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	†Nov. 30	†Dec. 10	1,719
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Mar. 1	Mar. 12	639
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Feb. 8	Feb. 12	906
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Feb. 27	Mar. 21	617
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	†Dec. 5	†Dec. 1	922
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Jan. 20	Jan. 29	715
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	†Dec. 22	†Dec. 26	1,505
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	†Dec. 22	†Dec. 24	1,023
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Feb. 18	Feb. 18	980
4628	28. BENSON, A. R., Internal-Combustion Engines	†Dec. 28	Jan. 21	1,309
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	†Dec. 11	†Dec. 11	978
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Feb. 20	Mar. 7	852
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	†Dec. 18	†Dec. 18	1,596
4096	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Feb. 19	Feb. 19	962
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	†Dec. 24	†Dec. 23	2,395
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Jan. 18	Jan. 21	917
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	May 4	May 2	438
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	†Dec. 28	†Dec. 21	1,751
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	†Dec. 23	†Dec. 31	1,327
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Apr. 8	Apr. 12	262
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	†Dec. 21	†Dec. 21	1,551
7880	40. OBERLIN, J. J., Receptacles	Jan. 18	Jan. 22	2,044
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Mar. 4	Mar. 17	735
5882	42. CUTTING, H. O., Electric Signaling	†Dec. 4	†Dec. 17	1,419
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Jan. 19	Jan. 19	1,459
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	†Nov. 27	†Dec. 11,	1,900
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Feb. 15	Feb. 15	1,142
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Feb. 10	Feb. 11	756
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Jan. 22	Jan. 23	2,129
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Jan. 2	Jan. 1	932
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	†Nov. 30	†Nov. 30	1,556
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	†Dec. 22	†Dec. 22	2,064
5628	51. BACKUS, C. D., Radiant Energy	Jan. 18	Jan. 18	1,269
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Mar. 17	Mar. 23	789
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Mar. 28	Mar. 28	583
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	†Dec. 14	†Dec. 14	1,187
6883	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	Apr. 21	Apr. 25	282
	55. BOWEN, S. T.—Designs	May 24	June 10	186
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Jan. 5	Jan. 5	1,442
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Jan. 18	Feb. 5	647
5605	58. DOWELL, E. F., Abrading; Typewriting	†Dec. 14	†Dec. 14	1,339
4709	59. RICHARD, V. L., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	†Dec. 11	†Dec. 14	1,614
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	†Dec. 15	†Dec. 14	1,514
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	†Dec. 15	†Dec. 19	1,416
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	†Dec. 18	†Dec. 18	1,765
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	†Dec. 24	†Dec. 29	1,433
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Feb. 4	Feb. 10	648
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	†Dec. 5	†Dec. 5	1,748
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	May 19	June 4	802
	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Labels and Prints	May 18	June 14	128

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

MILLER BECKER COMPANY *v.* KING OF CLUBS, INC.

No. 2,903. Decided March 28, 1932

1. TRADE-MARKS—SIMILARITY—WHAT MAY BE CONSIDERED. In determining whether the mark of the applicant is confusingly similar to the registered marks of the opposer what was said or done by the opposer in obtaining the registration of one of its marks can not be considered.

2. SAME—SAME—"ACE-OF-CLUBS", "ACE HY" AND "ACE". The notation "Ace-of-Clubs", used as a trade-mark for soft drinks, *Held* confusingly similar to the terms "Ace Hy" and "Ace" previously used as trade-marks for the same goods.

APPEAL from the Patent Office. Reversed.

Mr. John J. Riley for Miller Becker Co.

No appearance for King of Clubs, Inc.

BLAND, *J.*:

This is an appeal from the decision of the Commissioner of Patents in a trade-mark opposition case under section 6 of the Trade-Mark Act of February 20, 1905, dismissing the notice of opposition filed by appellant and adjudging that the applicant, appellee herein, was entitled to the registration of its trade-mark.

The mark which appellee sought to register is the term "Ace-of-Clubs". The marks of the opposer, appellant, upon which its opposition was based, are "Ace Hy", registered in 1926, and "Ace", application for registration of which was filed July 18, 1928. All the marks involved are used on soft drinks and it is admitted here that they are all used upon goods of the same descriptive properties.

The opposition is based on the fact that—

Applicant's mark Ace-of-Clubs so closely resembles opposer's trade-marks Ace Hy and Ace as to be likely to produce confusion and mistake in the mind of the public and to deceive purchasers, to opposer's damage.

The answer of the applicant, appellee, denies that the marks so closely resemble each other as to produce the confusion alleged and that the marks are applied to goods of the same descriptive properties, and denies that opposer will be injured by applicant's registration. Appellee also answers that the opposer can only claim ownership of the mark "Ace-of-Clubs" as a whole and that its ownership does not extend to the word "Ace"; that opposer is not entitled to any broad interpretation of its trade-mark for the reason that numerous registered trade-marks show various combinations employing the word "Ace" prior to and since the alleged date of the adoption and use by the opposer.

Neither party took testimony and the appellee has neither filed brief nor appeared for oral argument in this court.

The Examiner of Interferences stated in substance that it was not denied by the applicant that opposer's first use of "Ace Hy" and "Ace" was prior to any use of the applicant of its mark. He found affirmatively that the goods were of the same descriptive properties. He did not pass upon the similarity of the marks or the likelihood of confusion.

One of the registered marks suggested in the answer of the applicant was registered Trade-Mark No. 240,970, issued to A. Noe & Son on April 10, 1928, and consisted of the term: "The Ace of Ginger Ales." In the application of Noe & Son, it disclaimed the exclusive right to the use of the words "of Ginger Ales".

The Examiner of Interferences examined the record relating to opposer's application for registration No. 269,796 (the "Ace" mark) and stated that during opposer's prosecution of such application before the Examiner of Trade-Marks, the registration was rejected upon the said Noe registration, and that subsequently the applicant (opposer herein) filed A. Noe & Son's consent to such registration, following which the application was passed to publication. The Examiner of Interferences then stated:

* * * In view of the action of the opposer in urging before the Primary Examiner that the mark "The Ace of Ginger Ales" was not a bar to the registration of the word "Ace" the Examiner is of the opinion that opposer is now estopped to contend that the mark "Ace-of-Clubs" is barred from registration by the marks "Ace Hy" and "Ace". It seems clear to the Examiner that the resemblances between the mark disclosed in the Noe registration and the opposer's mark "Ace" are as great if not greater than those between the applicant's mark "Ace-of-Clubs" and the opposer's marks "Ace Hy" and "Ace".

Accordingly, for the reasons above set forth, the notice of opposition is dismissed and it is adjudged that the applicant, King of Clubs, Inc., is entitled to the registration for which it has filed application.

The Commissioner of Patents affirmed the decision of the Examiner of Interferences and stated:

It must be held that since the opposer claimed before the Examiner that its notation "Ace" is not confusingly similar to the registrant's notation "The Ace of Ginger Ales", it cannot maintain its contention that the equally dissimilar notation "Ace-of-Clubs" sought to be registered by the applicant in the case at bar, is confusingly similar. It may be the opposer was prior to the registrant in the adoption and use of the word "Ace" upon soft drinks of the character here under consideration but on being presented with an opportunity to prove that fact, when registration was denied opposer in view of the registration of the mark "The Ace of Ginger Ales", the opposer chose to obtain consent of the registrant. This must be regarded for the purposes of the proceedings here the equivalent of a concession of priority.

The Commissioner also ruled, agreeable to our holding in the case of *American Fruit Growers, Inc.*, v. *Michigan Fruit Growers, Inc.*, 17 C. C. P. A. (Patents) 906, 38 F.(2d) 696, 393 O. G. 789, that prior registrations were irrelevant in the determination of the issues presented. The decision in the case of *Goodall Worsted Co.* v. *Palm Knitting Co., Inc.*, 56 App. D. C. 148, 10 F.(2d) 1013, 352 O. G. 535, is also relied upon by the Commissioner.

[1] The record of what was said and done by the appellant in connection with its application for registration of the trade-mark "Ace" or what was said and done by A. Noe & Sons while it was prosecuting its application for registration of the mark "The Ace of Ginger Ales" is not before us, and we express no view as to the exact or full effect a consideration of it would have upon our decision of this case if it were before us. The conclusion of the Examiner of

Interferences that by reason of such action appellant was estopped from contending that the registration of "Ace of Clubs" is barred by the registration of "Ace Hy" and "Ace", and the Commissioner's conclusion that said conduct on the part of appellant was equivalent to a concession of priority, which would justify the registration of applicant's mark, we think, are erroneous. Regardless of what effect might be given to such conduct on the part of appellant under circumstances where such conduct might properly be considered, it should not have had the effect of requiring registration of appellee's mark, since other considerations herein referred to would seem to be controlling.

As far as we know, no one, here or elsewhere except in the formal answer of appellee, has made any contention that the goods are not of the same descriptive properties or that the marks are not sufficiently similar as to bring about confusion if owned by different persons and used by them on goods of the same descriptive properties.

We have so frequently held that, in determining the right of an applicant to register its trade-mark over the opposition of the owner of an opposing trade-mark, it was not helpful to the applicant to point out that other marks similar to that of opposer had been registered, that extended citation of authority, and discussion, seem unnecessary here. *Sharp & Dohme* v. *Parke, Davis & Co.*, 17 C. C. P. A. (Patents) 842, 37 F.(2d) 960, 394 O. G. 545; *American Fruit Growers, Inc.*, v. *Michigan Fruit Growers, Inc.*, 17 C. C. P. A. (Patents) 906, 38 F.(2d) 696, 393 O. G. 789; *National Biscuit Co.* v. *Sheridan*, 18 C. C. P. A. (Patents) 720, 44 F.(2d) 987, 402 O. G. 4.

[2] Opposer's registered trade-marks are presumptively valid. *Celotex Co.* v. *Chicago Panelstone Co.*, 18 C. C. P. A. (Patents) 1504, 1506, 49 F.(2d) 1051, 413 O. G. 284. Its right to oppose the registration of applicant's mark and raise the questions at bar can not be denied. The goods being of the same descriptive properties and the mark of applicant so nearly resembling the marks of the opposer as to cause confusion or mistake in the mind of the public or to deceive purchasers, the Commissioner, under the mandatory provisions of the statute, was required to deny applicant's application.

The framers of the Trade-Mark Act sought to prevent confusion by requiring that registration of marks which promoted confusion should be denied. *A. Leschen & Sons Rope Co.* v. *The American Steel and Wire Co. of New Jersey*, 19 C. C. P. A. (Patents) ——, 55 F.(2d) 455, 418 O. G. 3. It is not sufficient to justify the registration of a trade-mark to say that confusion already exists by reason of improperly-registered marks.

Assuming that opposer was not the owner of the "Ace" mark and had no right to register the same, it is not clear to us that this fact suggests that it was not the owner of the "Ace Hy" mark and was not entitled to register it. The Commissioner in his decision avoids mention of what effect the conduct of appellant would have upon its "Ace Hy" mark. Furthermore, a conclusion that the opposer was not entitled to register its "Ace" mark or that its "Ace" mark was not registrable because of the priority of the mark "The Ace of Ginger Ales" should militate against rather than for the right of registration of appellee's "Ace of Clubs" mark.

The decision of the Commissioner of Patents is reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE SOMMER AND MACA

No. 2,876. Decided March 28, 1932

PATENTABILITY—GLASS DRILLING MACHINES.

Claims for a glass-drilling machine *Held* unpatentable over the issue of an interference decided adversely to applicants, in view of the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Charles W. Hills and *Mr. Myron C. Clear* for Sommer and Maca.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying the application of appellants for a patent for an alleged invention relating to improvements in glass-drilling machines.

Appellants' structure is of the portable type, and is adapted for drilling holes through windshields so that spotlights may be mounted thereon.

There is but one claim in the application. It reads:

In an apparatus for boring holes in windshields, the combination of a frame, a stationary boring cup supported thereby and having its edge adapted to make liquid-tight contact with one surface of a windshield glass, a member adjustable in the frame toward and from said cup to clamp the latter against the glass, a shaft journaled in said cup, a cylindrical cutter in the cup having slots in its wall at one end, and a cap on the inner end of the shaft having portions entering and abutting the other end of said cylindrical cutter, as and for the purposes set forth.

The references relied on are: Interference No. 50,199; Foppiano, 1,048,059, December 24, 1912; Johnston, 1,219,461, March 20, 1917.

Interference No. 50,199 involved counts relating to a device of the same general character as the one here in question. Appellants were parties to that interference, and conceded priority of invention to the opposing party, Edward H. Hanson.

It is contended by counsel for appellants that the appealed claim is patentably distinguishable from the counts of that interference in that, as stated in the brief, it—

recites the manner in which the cutter is connected to the actuating shaft and more particularly in that it calls for a cap at the inner end of the shaft which cap has portions entering and abutting one end of the cutting cylinder.

At the time of oral argument in this court, counsel for appellants stated that the appealed claim contained another element, "a cylindrical cutter in the cup having slots in its wall at one end," which also distinguished it from the counts of the interference.

In affirming the decision of the Primary Examiner, the Board of Appeals said:

It appears from the Examiner's statement that in interference No. 50,199 the appellants herein filed a concession of priority of invention of a claim from which the claim on appeal differs merely by the inclusion of the slots in the cutting end of the cylindrical cutter and by the recitation of a support for the cutter which enters and abuts its other end. These features are old and common features in the art as shown respectively in the patents to Johnston and Foppiano. Appellants urge that these patents do not relate to a portable construction but we see no merit in this contention. We deem the claim clearly unpatentable over the matter as to which appellants conceded priority.

The Examiner further states that the claim on appeal is directly readable on the disclosure of each applicant who is now a party in said interference and holds that appellants' rights to the subject matter of the appealed claim is res adjudicata under the decision of *Blackford* v. *Wilder*, 127 O. G. 1255. Appellants do not deny this statement of facts. This ground of rejection is also deemed well founded.

Counsel for appellants contend that the patents to Foppiano and Johnston are from a nonanalogous art, and are, therefore, not proper references.

The patents referred to relate to *stationary* glass-cutting machines, whereas appellants' alleged invention is *portable*. However, the elements defined in the appealed claim, which, it is contended, patentably distinguish it from the counts of Interference No. 50,199, are clearly shown in the references. Obviously, the use of those elements in appellants' structure would readily occur to one of ordinary mechanical skill.

The conclusion reached by the Patent Office tribunals is so manifestly correct that we deem it unnecessary to extend this discussion.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

THE GOODYEAR TIRE & RUBBER COMPANY *v.* C. KENYON COMPANY, INC.

No. 2,904. Decided March 28, 1932

TRADE-MARKS—SIMILARITY.

A trade-mark for rubber tires consisting of the word "Kenyon" having extending laterally therefrom wings *Held* confusingly similar to marks of the opposer consisting of the word "Wing" and/or pictorial representations of a wing.

APPEAL from the Patent Office. Reversed.

Mr. O. E. Bee for The Goodyear Tire & Rubber Co.

Mr. Edwin Levisohn for C. Kenyon Company, Inc.

GARRETT, *J.*:

On March 26, 1928, C. Kenyon Company, Inc., filed an application in the United States Patent Office for registration as a trade-mark, for use upon "rubber or rubber and fabric tires and tubes for vehicles," of the mark at issue.

The claimed mark comprises a pictorial representation of a tire casing upon which is imprinted the word "Kenyon" in scriptlike letters and from each side of which, extending laterally therefrom, are wings, having above them a background also bearing the word "Kenyon." There was a disclaimer of the representation of the tire casting apart from the mark as shown.

Continuous use of the mark was alleged by applicant "since February 15, 1928."

Appellant, the Goodyear Tire and Rubber Company, filed notice of opposition, alleging ownership, use and registration of numerous marks for goods of the same descriptive properties with which it was claimed appellee's mark would conflict, and alleging that damage would result to opposer from the registration applied for if same should be granted.

Among other things opposer alleged:

6. That for many years prior to February 15, 1928, opposer herein has applied the terms "Wingfoot", "Goodwingfoot-Year", "Wing", "Red Wing" and "Black Wing", to its various products and specifically to rubber or rubber and fabric tires and tubes for vehicles, and other goods of the same descriptive properties, and has also applied the representation of a winged foot and the representation of a pair of out-spread wings, the latter in the identical manner illustrated by the drawing of application Serial No. 263,768, to various products of its manufacture including rubber or rubber and fabric tires and tubes for vehicles, and that opposer has extensively used and advertised these marks as applied to rubber or rubber and fabric tires and tubes for vehicles.

Only the appellee took testimony in the case, but appellant filed printed copies of a number of its registrations with certified copies of the abstracts of title thereto.

These are deemed sufficient to establish ownership of the marks claimed by appellant.

There is doubt whether appellee satisfactorily established use by it of its claimed mark as a trade-mark upon goods entering into interstate commerce prior to the filing of the application for its registration, but, in view of our conclusion as to the similarity of the marks of the respective parties, an adjudication of this question is immaterial, appellant's ownership and use of its mark having antedated by many years the entrance of appellee into the field.

The Examiner of Interferences held:

* * * there is at least a reasonable doubt that confusion in trade would be likely to arise from the concurrent use of these marks. The practice requires that this doubt be resolved in favor of the prior user, which is here the opposer.

He thereupon sustained the notice of opposition.

Upon appeal, the Commissioner of Patents reversed the decision of the Examiner of Interferences, in so far as that decision had sustained the opposition, but denied the registration as an ex parte proceeding based upon a mark registered May 3, 1921, by a third party.

Subsequently, appellee filed a petition for a reconsideration and presented therewith a statement in writing from said third party advising that:

* * * it has no objection to the registration by the C. Kenyon Company, Inc. of its * * * trade-mark, to be used on rubber or rubber and fabric tires and tubes for vehicles. * * *.

The Commissioner thereupon reconsidered the question and, adhering to his former conclusion that the mark was registrable as against the marks of appellant-opposer, granted the registration.

Appellant thereupon appealed to this court.

We are of the opinion that the holding of the Examiner of Interferences is more in accord with the weight of authority, particularly as represented in decisions of this court (many of which have been rendered since this case was before the tribunals of the Patent Office), than is the holding of the Commissioner. *National Biscuit Co.* v. *Sheridan*, 18 C. C. P. A. (Patents) 720, 44 F.(2d) 987, 402 O. G. 4;

Cluett, Peabody & Co., Inc., v. *Wright*, 18 C. C. P. A. (Patents) 937, 46 F.(2d) 711, 406 O. G. 851; *Pratt Food Co.* v. *The Crete Mills et al.*, 18 C. C. P. A. (Patents) 1083, 47 F.(2d) 960, 407 O. G. 1118; *Weyenberg Shoe Mfg. Co.* v. *Hood Rubber Co.*, 18 C. C. P. A. (Patents) 1449, 49 F.(2d) 1046, 412 O. G. 834.

Appellant owned and used marks consisting of both the word "Wing" and/or pictorial representations of a wing long prior to the adoption by appellee of the mark in issue.

It is true that appellee's mark contains features in addition to the representation of wings that are dissimilar to the marks of appellant, but, after all, that representation is the most noticeable feature of the mark and seems to us to be the dominating feature.

With a vast field open to appellee from which to choose a mark for use upon its goods (identical with the goods of appellant) there seems to us to be no sound reason why permission should be granted it to register one which so nearly simulates that of appellant. Upon the contrary, we think the opposition should be sustained and the registration applied for denied.

Accordingly, the decision of the Commissioner of Patents is reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE FESSENDEN

No. 2,900. Decided March 28, 1932

PATENTABILITY—PROCESS OF MODULATING ELECTRICAL ENERGY BY LIGHT.

Claims for a process for modulating electrical energy by action of light *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Ezekiel Wolf for Fessenden.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming the action of the Examiner in rejecting, for want of invention over the prior art, claims 1, 6, 7, 8 and 9 of appellant's application for patent filed on January 8, 1927, claims 3, 4 and 5 having been allowed.

Claims 6 and 8 are illustrative of the claims in issue and read as follows:

6. In the art of modulating electrical energy by the action of light, a selenium cell and a source of high frequency currents so operatively related to said cell that upon variation of the amount of light falling on said cell, the electrical capacity in the high frequency circuit is modulated in accordance therewith, said cell serving as a translucent condenser.

8. In the art of modulating electrical energy by the action of light, a translucent cell serving as a condenser and adapted to have its capacity varied in accordance with the amount of light falling on the cell and a source of high frequency current operatively connected to the terminals of the cell forming a circuit in which the current variations correspond exactly with the condenser variations brought about by the action of the light falling on the cell whereby the energy in the electric circuit is modulated in accordance with the variation of the light falling on the cell.

The references relied upon are: Bell et al., 235,497, December 14, 1880; Mercadier, 420,884, February 4, 1890; Fessenden, 1,015,881, January 30, 1912.

The alleged invention relates to a selenium cell, consisting of two short copper wires spaced from each other, around which selenium has been flowed; the selenium constitutes the dielectric between the said wires or electrodes; the cell is operatively connected to a source of high-frequency current. The capacity of said cell is said to be varied in accordance with the intensity of light thrown upon it, whereby variations in the high-frequency current are brought about which reflect the changes in degree of light impinging upon the cell; in other words, the result is that a current is produced which is modulated in accordance with the variations of light thrown upon the selenium cell. In the drawing accompanying the application this high-frequency circuit also contains an amplifying transformer whereby said modulations are intensified, but the claims on appeal do not include such element.

The reference Fessenden, which is a prior patent to appellant, relates to apparatus for transmission of pictures by modulating current of high frequency in accordance with the light projected from the picture upon a series of selenium cells. The structure of said cells is not described in said patent, nor is the operation of said cells in so modulating the current stated by appellant in said patent to be due either to changes in capacity or to changes in resistance of said cells, it merely being stated that "the character of the waves is altered" when the cells are affected by exposure to light.

In the course of its discussion of this reference the Board of Appeals stated as follows:

Applicant states that the selenium cells used in the picture transmitting apparatus of his prior patent were resistance cells and that he does not in fact know of any prior selenium cells which were used as condensers. He further states that so far as he knows selenium cells by reason of their lag in operation have never been shown to be capable of use in the art of television unless a considerable number of such cells were used.

Applicant contends that the cell of the present application when used with currents of very high frequency acts as a condenser and that the objectionable lag is eliminated.

The Examiner has taken the position that the selenium cell in applicant's prior patent had capacity as well as resistance, both of which were changed in response to the changes in the light projected on the cell. The cell being connected to a source of high frequency currents, the changes in the capacity as well as the changes in the resistance due to the changes in the light modified the currents.

Appellant vigorously contends that the action of the selenium cell in the application which forms the basis of this appeal is due to the capacity effect of such cell when impressed with a potential of high frequency, and that the action of the selenium cells in his prior patent was due solely to changes brought about by variations in light in the resistance of said cells. With respect to this latter contention regarding the cells in his prior patent, as heretofore noted, there is nothing in said patent which affords a basis for ascribing their action solely to resistance changes. Upon oral argument it was conceded that these cells would have a certain capacity characteristic; this being so, and the cells being impressed, as shown by said patent, with a potential of high frequency, it seems to us that the conclusion of the Board is sound that the modulations obtained under these conditions were due, at least to some extent, to the changes in capacity of the selenium cells which would be produced by varying intensities of light projected upon said cells. We agree with the conclusion of the Board as stated in said quoted matter.

Appellant, at the hearing of this appeal, made the point that there was a structural difference between the apparatus contained in said patent reference and that shown in the application here involved. He points to that portion of claim 8 which reads as follows:

* * * and a source of high frequency current operatively connected to the terminals of the cell * * *

In the structure shown in the patent reference, one terminal of a high frequency generator is shown to be connected to ground; the other terminal is connected to the transmitting aerial, in which aerial circuit is interposed the selenium cells hereinbefore referred to. There is no direct physical connection from said aerial to the ground, or to the other side of the generator. Appellant claims that this does not constitute a source of high-frequency current operatively connected to the terminals of the cells. It appears to us that the word "operatively" does not require that the connection necessarily be a physical one as to both terminals of the cell. In the structure disclosed in said patent reference, it does appear that the terminals of the selenium cells are connected in a circuit which is subjected to a high frequency potential, and that an oscillating current is produced in the circuit of which the selenium cells are a part; certainly current must oscillate in such circuit to produce any effect whatever. This being so, it appears to us that said cells are "operatively" connected to a source of high-frequency current.

We do not think that there are any structural elements described in the claims here involved, or relations between them, that are not shown in said patent reference.

Furthermore, the art here involved is highly technical. The expert tribunals of the Patent Office concurred in finding want of patentability in the claims in issue, and the well-established rule is here particularly applicable that in such a case this court will not reverse the Board of Appeals unless the decision appealed from is manifestly wrong. The decision here involved is not manifestly wrong, but, as hereinbefore indicated, appears to us to be right.

For the reasons stated, the decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,125,476, G. Claude, System of illuminating by luminescent tubes, D. C., W. D. Wash (Takoma), Doc. 450–E, *Claude Neon Electrical Products, Inc., et al.* v. *H. H. Sharpe, et al.* (*City Sign Co.*). Dismissed May 12, 1932.

1,151,501, J. Tomlinson, Printing plate, D. C. Minn., 4th Div., Doc. E 1803, *Speedaumat Mfg. Co.* v. *L. O. Kellogg, et al.* Claims 1 and 3 held valid and infringed May 7, 1932.

1,158,058, J. H. King, Centrifugal burner; 1,283,109, A. Doble, System of automatic regulation for steam driven automobiles; 1,644,496, L. L. Scott, Oil burner; 1,334,560, same, Combustion system; 1,640,729, Re. 17,405, same, Oil burning system; 1,379,008, A. B. Frenier, Temperature producing mechanism and controlling means therefor; 1,441,888, Scott & Staley, Combustion system; 1,579,497, L. I. Aldrich, Safety control mechanism for electrically controlled fuel burning devices; 1,583,564, same, Liquid fuel atomizer, filed May 10, 1932, D. C., E. D. Mich. (Detroit), Doc. 5385, *Cleveland Trust Co.* v. *A. B. C. Oil Burner Sale Corp.*

1,194,752, T. H. Krueger, Moistening device for gummed sticker or label; 1,567,655, 1,638,815, same, Tape serving device; 1,782,123, same, Package sealer, D. C., S. D. Ohio, W. Div., Doc. E 292, *Better Packages, Inc.*, v. *Superior Tape & Sealer Co., et al.* Claims 12, 14, and 15 of 1,194,752, claims 31, and 33 of 1,567,655, and claim 21 of 1,638,815, and claims 1, 2, 3, 4, 8, 10, 13, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 28, 29, and 30 of 1,782,123 held valid May 17, 1932.

1,207,359, M. Aufiero, Commutator; 1,414,612, 1,414,613, same, Signal for motor vehicles; 1,716,510, same, Warning signal; 1,808,335, same, Electrical connecting member, filed May 10, 1932, D. C., E. D. N. Y., Doc. E 6320, *E. A. Laboratories, Inc.*, v. *Ford Motor Co.*

1,228,009, C. F. Feltz, Motor driven vehicle, D. C., E. D. Mo. (St. Louis), Doc. 9478, *C. F. Feltz et al.* v. *A. R. Lindburg, Inc., et al.* Dismissed Jan. 25, 1932.

1,231,764, F. Lowenstein, Telephone relay; 1,403,475, H. D. Arnold, Vacuum tube circuit; 1,465,332, same, Vacuum tube amplifier; 1,403,932, R. H. Wilson, Electron discharge device, D. C., S. D. N. Y., Doc. E 60/175, *Radio Corp. of America, et al. v. F. W. Lang* (*Lang Radio Co*). Consent decree for plaintiff (notice Mar. 16, 1932). (To correct error in 409 O. G., p. 566 and 418 O. G., p. 556. Patent 1,465,332 originally reported as 1,465,932, E. H. Colpitts, Multiplex radiotelegraph system).

1,266,210, H. E. Campbell, Support for steam radiators; 1,620,632, J. H. Broderick, same; 1,725,730, J. H. Byrnes, Metal window, D. C., N. D. Ohio, E. Div., Doc. 3159, *Campbell Metal Window Corp.* v. *Truscon Steel Co.* Claims 3, 4, 5, and 6 of 1,266,210, claims 5 and 6 of 1,725,730 held valid and infringed May 14, 1932; bill dismissed without prejudice. Patent 1,620,632 Jan. 6, 1932.

1,283,109. (See 1,158,058.)

1,307,733 (*a*), A. B. Gullborg, Lubricating apparatus; 1,307,734, same, Lubricating means; 1,475,980, O. Zerk, Lubricating apparatus, filed May 18, 1932, D. C., S. D. N. Y., Doc. E 67/355, *Alemite Corp.* v. *Eastern Machine Co., Inc., et al.*

1,307,733 (*b*), A. V. Gullborg, Lubricating apparatus; 1,307,734, same, Lubricating means, filed May 18, 1932, D. C., S. D. N. Y., Doc. E 67/354, *Alemite Corp.* v. *O. Wildenberg, et al.*

1,307,734. (See 1,307,733 (*a*) and (*b*).)

1,313,080, L. H. Ensten, Knitted cap, D. C., S. D. N. Y., Doc. E 51/33, *L. H. Ensten, et al.* v. *R. H. Macy & Co., Inc.* Dismissed (notice May 10, 1932).

1,317,478, E. Aufiero, Physical instrument for the production of sound waves, filed May 10, 1932, D. C., S. D. N. Y., Doc. E 67/233, *E. A. Laboratories, Inc.* v. *Moto Meter Gauge & Equipment Corp.* Same, D. C., E. D. N. Y., Doc. E 6321, *E. A. Laboratories, Inc.* v. *Sears, Roebuck & Co.*

1,329,348. (See 1,499,740.) 1,334,560. (See 1,158,058.)

1,379,008. (See 1,158,058.) 1,403,475. (See 1,231,764.)

1,403,932. (See 1,231,764.) 1,414,612. (See 1,207,359.)

1,414,613. (See 1,207,359.)

1,435,199, L. V. Blair, Heat insulated receptacle, D. C., N. D. Ohio, E. Div., Doc. 2506, *The Mantle Lamp Co. of America* v. *The G. H. Bowman Co.* Claim 1 held valid and infringed May 10, 1932.

1,440,854, 1,575,879, J. B. Vigneron, Trawling fishing gear; 1,553,754, 1,582,041, Damelon & Verhoeven, same, filed May 21, 1932, D. C. Conn. (New Haven), Doc. E 2206, *V. D. Limited* v. *Atlantic Coast Fisheries, et al.*

1,441,888. (See 1,158,058.) 1,465,332. (See 1,231,764.)

1,470,524, H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confection, filed May 10, 1932, D. C., E. D. N. Y., Doc. E 6328, *Good Humor Corp. of America* v. *Arctic Frozen Products, Inc., et al.*

1,472,484, H. Mayer et al., Dumping wagon; Re. 17,130, G. W. Berry, Tilting mechanism for dumping-bodies, filed May 10, 1932, D. C., S. D. N. Y., Doc. E 67/235, *The Commercial Shearing & Stamping Co.* v. *Dutchess County, N. Y.*

1,475,980. (See 1,307,733 (a).)

1,499,740, F. H. Kolbe, Compressor for refrigerating machinery; 1,329,348, E. J. Copeland, Refrigerating apparatus, filed May 14, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4259, *Kelvinator Corp.* v. *Domestic Industries, Inc.*

1,526,982, E. H. Hill, Stencil sheet, D. C., S. D. N. Y., Doc. E 50/22, *A. B. Dick Co.* v. *Aladin Dry Stencil Corp.* Consent decree for plaintiff (notice May 10, 1932).

1,540,628, Hurxthal & Hurxthal, Automatic temperature control for bread toasters, D. C., E. D. N. Y., Doc. E 6261, *Proctor & Schwartz Electric Co.* v. *J. Davidson.* Consent decree for plaintiff May 20, 1932.

1,545,836, W. S. Lawrence, Transfer ink for marking leather, filed May 9, 1932, D. C., S. D. N. Y., Doc. E 67/195, *Kaumagraph Co.* v. *Mark-O-Gram Co., Inc., et al.*

1,552,826, P. J. Lunati, Lifting device for motor vehicles, D. C., S. D. N. Y., Doc. E 51/191, *Rotary Lift Co. et al.* v. *Mitchell Golbert Sales Corp.* Dismissed (notice May 10, 1932).

1,553,754. (See 1,440,854.)

1,562,787, I. M. Petersime, Incubator, D. C. Nebr. (North Platte), Doc. E 68, *I. M. Petersime* v. *R. H. Jandebeur (P. V. Hatchery).* Dismissed May 19, 1932.

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1,567,655. (See 1,194,752.)

1,571,930, P. Ceasar, Steaming device for yarn, filed May 11, 1932, D. C., E. D. N. Y., Doc. E 6330, *P. Ceasar* v. *J. Pernick Co., Inc.*

1,573,200 (See 1,564,378.)

1,575,307, A. B. Bachmann, Flexible shaft bench grinder; 1,588,839, Keller & Bachmann, Flexible shaft hand piece, D. C., S. D. N. Y., Doc. E 54/174, *Keller Mechanical Engineering Corp.* v. *Blax Flexible Shaft Co., Inc.* Consent and order of discontinuance (notice May 19, 1932).

1,575,879. (See 1,440,854.) 1,579,497. (See 1,158,058.)

1,582,641. (See 1,440,854.) 1,583,564. (See 1,158,058.)

1,588,839. (See 1,575,307.)

1,591,401, W. Palmer, Method of and apparatus for extinguishing fires, filed May 21, 1932, S. C. of D. C., Doc. E 54373, *American Fomon Co. et al.* v. *Afmyco Corp. et al.*

1,619,765, G. B. Ridley, Desiccator, D. C., S. D. Calif. (Los Angeles), Doc. E N-43-J, *E. B. Ward* v. *G. I. Bauer.* Dismissed Feb. 5, 1932.

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1,621,360, R. N. Falge, Incandescent lamp, filed May 20, 1932, D. C., E. D. N. Y., Doc. E 6349, *General Electric Co.* v. *T. Brown et al.*

1,638,815. (See 1,194,752.) 1,640,729. (See 1,158,058.)

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1,646,490, I. M. Petersime, Oven and dryer, D. C. Nebr. (North Platte), Doc. E 69, *I. M. Petersime & Son* v. *R. H. Jandebeur (P. V. Hatchery).* Dismissed May 19, 1932.

1,650,905, O. L. Mills, Welding rod, D. C., S. D. Calif. (Los Angeles), Doc. E R-113-J, *Mills Alloys, Inc.,* v. *Stoody Co. et al.* Dismissed Apr. 15, 1932.

1,687,510, M. Pipkin, Electric lamp bulb, D. C., S. D. N. Y., Doc. E 65/296, *General Electric Co.* v. *International Trading Co., Inc., et al.* Decree pro confesso May 17, 1932.

1,689,619, Chernow & Chernow, Monogram structure, D. C., S. D. N. Y., Doc. E 49/334, *M. Chernow et al.* v. *H. Forshay, et al.* Dismissed (notice May 10, 1932).

1,691,582, E. Nowak, Protector for backs of shoes, D. C., S. D. N. Y., Doc. E 51/1, *E. Nowak* v. *I. A. Lyons et al. (Lyons & Co.).* Dismissed without prejudice (notice May 10, 1932).

1,702,115, I. Gurwick, Envelope and process of making, D. C., S. D. N. Y., Doc. E 51/392, *Transparent Paper Printing Corp.* v. *A. Hers.* Dismissed (notice May 19, 1932).

1,710,073, 1,714,191, S. Ruben, Electrical condenser, filed May 18, 1932, D. C., S. D. N. Y., Doc. E 6342, *Ruben Condenser Co. et al.* v. *E. N. Tooker et al.*

1,711,514, Abrahams & Jonssens, Electromagnetic driving unit, D. C., S. D. N. Y., Doc. E 50/126, *Dynamic Unit Corp. of America* v. *M. Kulich (Miles Reproducers).* Dismissed (notice May 10, 1932).

1,711,814, C. C. Shipp, Radiator box base, D. C., S. D. Ind. (Indianapolis), Doc. 1207, *C. C. Shipp* v. *J. J. Barnhart, et al.* Dismissed Apr. 16, 1932.

1,714,191. (See 1,710,073.) 1,716,510. (See 1,207,359.)

1,718,997. (See 1,470,524.) 1,725,730. (See 1,266,210.)

1,740,929, R. J. Loock, Lubricant-retaining washer, filed May 10, 1932, D. C., S. D. N. Y., Doc. E 67/237, *R. J. Loock* v. *J. Staff*

1,743,822, J. F. Larkin, Carbon copying set, D. C., S. D. N. Y., Doc. E 55/222, *J. F. Larkin* v. *P. Hano Co., Inc.* Decree for plaintiff May 16, 1932.

1,750,251, J. M. Young, Combination tearing strip for friction closure can, C. C. A., 3d Cir., Doc. 4774, *American Can Co.* v. *M. J. B. Co.* Decree affirmed May 12, 1932.

1,750,898, R. M. Magnuson, Automatic oiling system for deep-well turbine pumps, D. C., S. D. Ind. (New Albany), Doc. E 81, *Sterling Pump Corp.* v. *A. D. Cook, Inc.* Dismissed without prejudice May 2, 1932.

1,782,123. (See 1,194,752.)

1,785,770, Faber & Driggs, Jr., D. C. Dela., Doc. E 866, *Tipp Fireworks Co., et al.* v. *Victory Sparkler & Specialty Co.* Dismissed May 20, 1932.

1,788,819, A. C. Armstrong, Radiator support, D. C., N. D. Ohio, E. Div., Doc. 4023, *Campbell Metal Window Corp.* v. *Truscon Steel Co.* Claims 1 and 3 not considered as to validity; claims 4 to 9 inclusive held invalid; dismissed with prejudice May 14, 1932.

1,796,142, F. C. Cramford, Tie-rod end construction, filed May 11, 1932, D. C., E. D. Mich. (Detroit), Doc. 5387, *Thompson Products, Inc.,* v. *Baker Wheel & Rim Co.*

1,808,335. (See 1,207,359.)

1,812,403, S. Hammer, Mirror and method of framing same, D. C., E. D. N. Y., Doc. E 5860, *United Metal Box Co., Inc.,* v. *National Metal Art Mfg. Co., Inc.* Decree for plaintiff May 20, 1932.

1,827,676, C. G. Snook, Umbrella construction, filed Apr. 12, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E W-83-H, *The Troy Sunshade Co.* v. *Kittie Mfg. Co., et al.*

1,852,130, M. B. Schier, Auditory insert, filed May 10, 1932, D. C., S. D. N. Y., Doc. E 67/234, *M. B. Schier* v. *Teutonophone, Inc.*

1,858,213, 1,858,214, E. A. Weeks, Road scraper, filed May 10, 1932, D. C., W. D. Mich. (Grand Rapids), Doc. 2543, *Root Spring Scraper Co.* v. *Willett Mfg. Co., et al.*

1,858,214. (See 1,858,213.)

Re. 16,067, C. F. Felts, Motor driven vehicle, D. C., E. D. Mo. (St. Louis), Doc. 9479, *C. F. Felts, et al.* v. *A. R. Lindburg, Inc., et al.* Dismissed for want of equity May 5, 1932.

Re. 17,130. (See 1,472,484.) Re. 17,405. (See 1,158,058.)

Re. 18,100, Mersfelder & Balse, Clean-out plug, filed Feb. 23, 1932, D. C., E. D. N. Y., Doc. E 6052, *M. & B. Mfg. Co., Inc.,* v. *Irving Bellock, et al.* (To correct error in 417 O. G., p. 7, originally published as Re. 18,000).

Des. 73,709, H. C. Noe, Lamp shade, D. C., S. D. Ind. (Indianapolis), Doc. 1345, *W. R. Noe & Sons* v. *Aladdin Mfg. Co.* Consent decree May 4, 1932.

Des. 75,567, A. R. Kanne, Lamp body, D. C., S. D. N. Y., Doc. E 51/291, *Kanne & Bessant, Inc.,* v. *W. L. Kessler, Inc.* Dismissed (notice May 17, 1932).

Des. 84,811, R. De Boer, Combination ash receiver and electric lighter, filed May 14, 1932, D. C., W. D. Mich. (Grand Rapids), Doc. 2550, *Grand Rapids Metalcraft Corp.* v. *Sears, Roebuck & Co.*

Disclaimers

1,327,945.—*Walter P. Cousino,* Curtice, Ohio. SPOTLIGHT-MOUNTING DEVICE. Patent dated January 13, 1920. Disclaimer filed June 15, 1932, by the assignee, *International Spotlight Corporation.*

Therefore enters this disclaimer and disclaims from the scope of claim 5 of said Patent 1,327,945 any spotlight mounting device excepting one wherein oscillation of the spotlight on the bracket is effected without movement of the interior operating connections transversely of the sleeve guide whose cross section is thus kept small and one wherein the handle grip of the handle surrounds its own axis of rotation, whereby the oscillation of the spotlight on the bracket may be accomplished by twirling the handle and which facilitates combined simultaneous oscillating of the spotlight on the bracket and rocking of the spotlight bracket with the sleeve; and disclaims from the scope of claim 6 of said Patent 1,327,945 any spotlight mounting device excepting one wherein the connection between the handle and spotlight for oscillating the latter on the bracket is confined within the guide against movement transverse to the guide axis and one wherein the handle has a gear at its inner end and the axis of rotation of the handle passes axially through both said gear and the hand grip portion of the handle, whereby the mechanical advantage of the handle to effect rocking of the spotlight bracket on the horizontal axis of the guide remains constant in all positions of rotation of the handle about its own axis.

1,434,468.—*Marcus F. Wielage,* Cleveland, Ohio. DIRIGIBLE SPOTLIGHT. Patent dated November 7, 1922. Disclaimer filed June 15, 1932, by the assignee, *International Spotlight Corporation.*

Hereby enters this disclaimer to that part of the claims in said specification which are in the following words, to-wit:

"1. In a dirigible lamp, in combination, a standard, concentric hollow shafts passing through said standard, said outward shaft provided with an upwardly turned outer end, and a laterally turned inner end, a lamp provided with a hollow stem, vertically pivoted upon the upwardly curved outer end of said outer shaft, and engaging gears upon the adjacent ends of said hollow stem and inner shaft, a shaft within the laterally turned inner end of said outer shaft, gearing connecting the adjacent ends of said last mentioned shaft and central shaft and means for rotating the same independently of the outer shaft, to revolve said lamp on its vertical axis, the aforesaid laterally turned inner end of said outer shaft serving as an arm for rotating said outer shaft, and said lamp, on its horizontal axis.

"2. In a dirigible lamp, in combination, a standard, concentric hollow shafts passing through said standard, said outward shaft provided with an upwardly turned outer end, and a laterally turned inner end, a lamp provided with a hollow stem, vertically pivoted upon the upwardly curved outer ends of said outer shaft, and engaging gears upon the adjacent ends of said hollow stem and inner shaft, a shaft within the laterally turned inner end of said outer shaft, gearing connecting the adjacent ends of said last mentioned shaft and central shaft, and means for rotating the same independently of the outer shaft, to revolve said lamp on its vertical axis, the aforesaid laterally turned inner end of said outer shaft serving as an arm for rotating said outer shaft, and said lamp, on its horizontal axis, and flexible conductors for the lighting current passing through said hollow inner tube and stem."

1,545,626.—*George L. Willson,* New York, N. Y. PRINTER'S BLANKET. Patent dated July 14, 1925. Disclaimer filed May 27, 1932, by the assignee, *New England Fibre Blanket Company.*

Hereby enters this disclaimer to the claims numbered 1, 2 and 5 of said Letters Patent, which are in the following words, to-wit:

"1. A printer's blanket, including, in combination, inner and outer sheets, each of resilient material and of a thickness less than standard and adapted for imprinting directly thereon, both sheets being associated to present a combined thickness equal to standard; said sheets being interchangeable in their relative positions and each affording a suitable impression-surface so that an inner sheet may be transposed and become the outer sheet to form the impression receiving surface of the blanket.

"2. A printer's blanket including, in combination, a plurality of identical sheets in superposed relation, each having its body-portion formed of the same resilient material as the other, each of a thickness less than standard, and each adapted for imprinting directly thereon; both sheets being cooperatively associated to present a combined thickness equal to standard and being interchangeable in their relative positions so that an inner sheet may be transposed and become the outer sheet to form the impression-receiving surface of the blanket."

"5. A printer's blanket including, in combination, a plurality of identical, interchangeable sheet-components in superposed relation, each made of resilient material and of a thickness less than standard, said components being cooperatively associated to present a combined thickness equal to standards; one component constituting a resilient support for another of the components and, while functioning as such support, having its serviceability preserved and enhanced, and also affording a suitable impression-receiving surface so that one component may be interchanged with the other."

1,593,302.—*Enos B. Hiatt,* Palisade, Colo. BASKET LINER. Patent dated July 20, 1926. Disclaimer filed May 31, 1932, by the assignee, *Carpenter-Hiatt Sales Company.*

Hereby disclaims any basket liner for use in packing fruit as described in the said claim, except a liner which is of sufficient weakness to render it susceptible of yielding to the extent of fracturing or breaking outwardly under the conditions stated in said claim.

1,675,915.—*Clifford Sklarek,* Chicago, Ill. DIRIGIBLY-MOUNTED LIGHT. Patent dated July 3, 1928. Disclaimer filed June 15, 1932, by the assignee, *International Spotlight Corporation.*

Hereby enters this disclaimer to those claims in said specification which are in the following words, to-wit:

"3. In a dirigible light, the combination with relatively fixed supporting means; a lamp movable about axes disposed substantially at right angles to each other; operating members one of which is rotatably mounted on said supporting means and the other of which is disposed within said first member; means for effecting independent movement of said operating members, said means including a hollow handle support adapted to be rigidly but detachably secured to the outer operating member to swing said lamp about one axis, said handle support having one end provided with an opening in line with the longitudinal axis of the outer operating member, and a handle rotatably carried by said handle support, the longitudinal axis of said handle being disposed substantially at right angles to the longitudinal axis of said outer operating member, and said handle being rotatable about its own longitudinal axis and provided with a gear secured there-

to adapted to cooperate with said inner member to effect movement of said lamp about a different axis; a removable closure for covering the open end of said handle support, said closure, with the wall of said support providing a chamber therein, and a switch finger lever associated with said closure and projecting to the exterior thereof; a switch block enclosed within said chamber and operable by means of said finger lever; and means affording electrical communication of said switch with said lamp.

"4. In a device of the character described, the combination with elongated inner and outer operating members; of a unit comprising a hollow handle support adapted to be rigidly but detachably secured to the outer operating member, said handle support having means defining an opening disposed in line with the longitudinal axis of said outer member, said handle support having a handle rotatably carried thereby with the longitudinal axis of said handle disposed at an angle to the longitudinal axis of the outer operating member, said handle being rotatable about its own longitudinal axis and provided with a gear adapted to cooperate with said inner member to effect movement thereof; a removable closure for covering the open end of said handle support, said closure with the wall of said support providing a chamber therein, said closure having a switch finger lever associated therewith and projecting to the exterior thereof; a switch enclosed within said chamber and operable by means of said finger lever; and means affording electrical communication of said switch along said operating members."

1,682,150.—*Clifford Sklarek*, Chicago, Ill. DRILL-GUIDING JIG. Patent dated August 28, 1928. Disclaimer filed June 15, 1932, by the assignee, *International Spotlight Corporation*.

Hereby enters this disclaimer to those claims in said specification which are in the following words, to-wit:

"5. In a jig of the character described, the combination with a carrier having extensions adapted to be disposed at opposite portions of a piece of work, one of said extensions being provided with guide means for the accommodation of a drill or boring tool, said guide means being adapted for disposition at one side of the work, and the other of said extensions being provided with means adapted to engage the opposite side of the work; and means carried at the inner end of said guide for temporary attachment to that surface of the work to be drilled through which the tool enters."

"7. In a jig of the character described, in combination: a yoke having the arms thereof relatively widely spaced apart; aligned extensions at the ends of the arms of said yoke, said extensions projecting towards each other, and one of them being adjustable toward and from the other to thereby adapt the jig for operation on work of different sizes and contours, one of said extensions having an opening extending lengthwise thereof to form the guide for a drill or boring tool, and provided at its inner end with means by which it may be attached to the face of the work to be drilled or bored, said two extensions determining the points of entrance and exit of the tool and said attaching means being provided with holes for locating points of attachment relative to the bored hole."

1,699,124.—*Clifford Sklarek*, Chicago, Ill. ADJUSTABLE LIGHT MOUNTING. Patent dated January 15, 1929. Disclaimer filed June 15, 1932, by the assignee, *International Spotlight Corporation*.

Hereby enters this disclaimer to that claim in said specification which is in the following words, to-wit:

"18. In a dirigible spotlight of the character described, the combination with a supporting member; of a lamp disposed at one side of said member; means for rotating said lamp about axes substantially at right angles to each other, said means including concentric shafts extending through said supporting member, the inner of said shafts being provided with an end portion polygonal in cross section; and means for independently rotating said shafts, said means being in the form of an assembled unit comprising a handle support telescopically engageable with the outer of said concentric shafts and being provided with an angularly extended handle by means of which said handle support may be rotated to rotate said outer shaft, said handle being provided with a rotatable element cooperating with a second rotatable member carried by said handle support, said second rotatable member having a polygonal opening adapted for detachable reception of the polygonal end portion of said inner shaft."

1,788,207.—*Charles U. Savoye*, Hackensack, and *Howard J. Kerr*, Westfield, N. J. WATERTUBE BOILER. Patent dated January 6, 1931. Disclaimer filed June 3, 1932, by the assignee, *The Babcock & Wilcox Company*.

Hereby disclaims claims 1 and 2 of said Letters Patent which are in the following words, to wit:

"1. In a steam boiler having front, middle and rear steam and water drums, each connected to a mud drum by a bank of tubes, circulators between the front and middle steam and water drums, and circulators between the middle and rear steam and water drums, some of the circulators between adjacent drums being steam circulators the total cross-sectional area of said circulators between the middle and rear drums being greater than that of said circulators between the front and middle drums, and a steam outlet from said rear drum.

"2. In a steam boiler having front, middle and rear steam and water drums, each connected to a mud drum by a bank of tubes, circulators between the front and middle steam and water drums, and circulators between the middle and rear steam and water drums, some of the circulators between adjacent drums being steam circulators, said circulators all being the same size and the number of circulators between the front and middle drums being less than the number of said circulators between the rear and middle drums, and a steam outlet from said rear drum."

1,791,489.—*Clarence A. De Giers*, New York, N. Y. LIQUID-LEVEL INDICATOR. Patent dated February 10, 1931. Disclaimer filed June 6, 1932, by the patentee, assignee, *The Liquidometer Corporation*, assenting.

Hereby enters this disclaimer to that part of the claim in said specification which reads as follows, to wit:

"13. In combination, a float, an indicator, and means controlled by said float for actuating said indicator, said means comprising a pair of liquid containing chambers and connections for causing one of said chambers to be expanded and the other to be contracted by movement of said float, and including a link connected to said chambers to be idly oscillated thereby upon expansion of both of said chambers or contraction of both of said chambers and to be operatively bodily shifted upon expansion of one of said chambers and contraction of the other.

"14. In combination, a pair of liquid containing chambers, a float, an indicator, float-controlled means for causing one of said chambers to expand (or contract) and the other of said chambers to contract (or expand) to actuate said indicator, said means including devices for preventing thermal expansion or contraction of the liquid in said chambers from actuating the indicator, said devices including a floating link connected to each of said chambers to be actuated by each of said chambers in opposite directions."

TRADE-MARKS

OFFICIAL GAZETTE, JULY 5, 1932

[VOL. 420. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 326,217. GUY LEE LEATHER COMPANY, Philadelphia, Pa. Filed Apr. 18, 1932.

VELVET

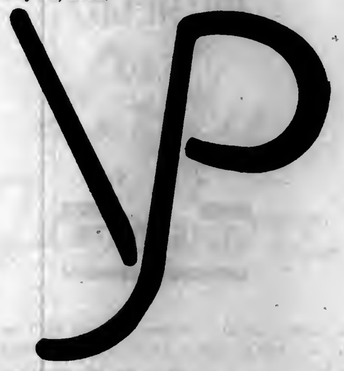
For Whole and Sole Leather, Including Sides, Backs, Crops, Bends, Shoulders, Bellies, and Heads; Also Strips, Blocks, Squares, and Slabs Cut Therefrom.
Claims use since Feb. 1, 1927.

Ser. No. 327,412. THE PHILADELPHIA SEED COMPANY, Philadelphia, Pa. Filed May 24, 1932.

STRATFORD GREEN

For Grass Seed.
Claims use since Feb. 27, 1932.

Ser. No. 327,463. GARAT & COMPANY, Whiterock, Nev. Filed May 26, 1932.



For Live Stock—Namely, Horses.
Claims use since 1852.

Ser. No. 327,501. DICKINSON FUEL COMPANY, Charleston, W. Va. Filed May 27, 1932.

SQUARDEE

For Coal.
Claims use since May 4, 1932.

CLASS 2

Receptacles

Ser. No. 326,299. OLDMILL-PAPER PRODUCTS CORP., Brooklyn, N. Y. Filed Apr. 20, 1932.



No registration rights are claimed for the word "Crinkle" apart from the mark shown in the drawing.
For Paper Baking Cups, Baking Dishes, Candy Cups, Finger-Bowl Liners, Shaving Cups, Butter Chips, Drinking Cups, Paper Dishes, Paper Plates, Paper Boxes, Paper Cartons, Paper Merchandise Envelopes, and Paper Bags.
Claims use since Aug. 15, 1919.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 300,698. MORRIS WHITE INC., New York, N. Y. Filed May 16, 1930.

Fifth Avenue VANITY

No claim is made to the exclusive right to the word "Vanity" apart from the mark as shown.
For Hand Bags.
Claims use since Feb. 26, 1930.

Ser. No. 322,831. LOUIS A. PRIESS, Minneapolis, Minn. Filed Jan. 8, 1932.

KEYLITE

In the drawing the trade-mark is vertically lined to indicate the color red.

For Combination Leather or Fibre Key Cases and Flashlights.

Claims use since Mar. 1, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 297,297. MORRIS COHN, doing business as Crystal Chemical Company, Belleville, N. J. Filed Mar. 14, 1930.



All the wording on the drawing except "Bully" and "Crystal Chemical Co." is disclaimed.

For Soap.

Claims use since Feb. 5, 1930.

Ser. No. 314,489. DIVERSEY MANUFACTURING COMPANY, Chicago, Ill. Filed May 13, 1931.

STERISOL

For Dish Washing and Cleansing Powder Having Incidental Disinfectant Properties.

Claims use since Jan. 17, 1931.

Ser. No. 325,285. W. J. DORAN, doing business as Norda Manufacturing Company, St. Louis, Mo. Filed Mar. 19, 1932.



For Cleansing and Polishing Preparation for Glass, Enamel, and Metal.

Claims use since Feb. 29, 1932.

Ser. No. 325,875. LOS ANGELES SOAP COMPANY, Los Angeles, Calif. Filed Apr. 7, 1932.



For Toilet Soap.

Claims use since Feb. 16, 1932.

Ser. No. 326,592. LOUIS B. KUNKEL, St. Louis, Mo. Filed Apr. 28, 1932.



No exclusive claim is made to the word "Shine" apart from the mark shown.

For Shoe Polish.

Claims use since Apr. 3, 1932.

Ser. No. 326,873. L. K. RHODES, Little Rock, Ark. Filed May 7, 1932.



The words "Metal," "Makes Tarnish Go," and "Metal Polish" not being claimed apart from the other features of the mark.

For Metal Polish.

Claims use since Apr. 1, 1932.

Ser. No. 327,200. J. L. PRESCOTT COMPANY, Passaic, N. J. Filed May 17, 1932.



For Shoe and Stove Polish.

Claims use since Mar. 18, 1902.

Ser. No. 327,397. AMOS M. HENSLEY, doing business as Miraglo Products Co., Cleveland, Ohio. Filed May 24, 1932.

Miraglo

For Liquid Compound to be Added to Water to Make a Solution for Cleaning Rugs, Upholstery, and Wood Work.

Claims use since about Feb. 15, 1932.

Ser. No. 327,475. RED & WHITE CORPORATION, Buffalo, N. Y. Filed May 26, 1932.

Lady Godiva

For Soap.

Claims use since Oct. 28, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 319,752. HALE FOOD COMPANY, Dayton, Ohio. Filed Oct. 1, 1931.



No claim is made to the words "Laxative Food Made Basically of Ground Whole Wheat" apart from the mark as shown on the drawing.

For Laxative Preparation.

Claims use since Sept. 1, 1930.

Ser. No. 320,775. MURRAY M. BANTICK, Boston, Mass. Filed Nov. 4, 1931.

PEP-UP

For Preparation for Headache and Indigestion.

Claims use since Sept. 28, 1931.

Ser. No. 322,487. THE RENTON COMPANY, LTD., Pasadena, Calif. Filed Dec. 28, 1931.

HYDROTON

For Laxative Preparation for Internal Use.

Claims use since Oct. 1, 1931.

Ser. No. 322,770. GEORGE EADE, LIMITED, London, England. Filed Jan. 6, 1932.

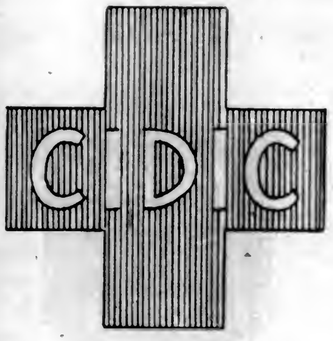


The words "Celebrated Pills" are disclaimed apart from the mark as shown.

For Medicines in the Form of Pills for the Treatment of Gout, Arthritis, Neuritis, and Allied Complaints.

Claims use since August, 1931.

Ser. No. 325,581. THE HY'NE CO., Chicago, Ill. Filed Mar. 28, 1932.



For Salve for the Treatment of Sunburn, Bruises, Boils, Ulcers, Chapping, Burns, Skin Diseases, Poison Ivy, Pimples, Wounds, Sprains, Hemorrhoids, Eczema and All Itching Affections.
Claims use since 1895.

Ser. No. 326,171. WALTHAM CHEMICAL CO., Waltham, Mass. Filed Apr. 15, 1932.

WA-CHE-CO

For Insect Exterminating Spray, Discs, Crystals, Tablets, Perfumed Sprays Used as Deodorants, and an Animal Washing and Disinfecting Preparation Used Primarily for Washing Dogs.
Claims use since Feb. 15, 1932.

Ser. No. 326,620. WILKINSON, GADDIS & COMPANY, Newark, N. J. Filed Apr. 29, 1932.

Ideal

For Ammonia, Borax, Camphor, Starch, Water Softener, Baking Powder, Drain Pipe Solvent, Food Colors, Cream of Tartar, Disinfectants, Baking Soda.
Claims use since 1887.

Ser. No. 326,688. RAYMOND E. MASSEY, doing business as The Krexit Company, Richardson Park, Del. Filed May 2, 1932.

KREXIT

For Medicinal Preparation to be Taken Internally for the Relief of Indigestion, Heartburn, Sour Stomach and Fullness After Meals.
Claims use since Feb. 1, 1932.

Ser. No. 326,694. MARGARET H. SMITH, Philadelphia, Pa. Filed May 2, 1932.



The word "Ointment" is disclaimed apart from the mark as shown on the drawing. The portrait and signature are of Edward J. Hall, deceased.
For Ointment for Piles, and Diseases of the Skin—Namely, Tetter, Itch, Pimples, Erysipelas, Eczema, Ulcers, Burns and Scalds.
Claims use since July 20, 1912.

Ser. No. 326,698. VIVINY PERFUMERS, INC., doing business as "Andre Chenier," West Haven, Conn. Filed May 2, 1932.

PRINTEMPS DE PARIS

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener in Liquid, Cream and Solid Form, Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eye-Lashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixers, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hasel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since March, 1926.

Ser. No. 326,700. JACQUES WOLF & CO., Passaic, N. J. Filed May 2, 1932.

Supertex

For Chemical Preparation for the Purpose of Thickening Solutions, Etc., of Coloring Matters, and Mordants Used in Textile Printing and for Finishing Textiles in Order to Bind, Strengthen, Stiffen or Otherwise Desirably Affect the Handle of the Treated Textile Materials.
Claims use since Mar. 25, 1931.

Ser. No. 326,824. ALFRED KRISTIANSEN, doing business as Kristy Laboratories, Stanley, Wis. Filed May 6, 1932.



No claim is made for the word "Gargle" apart from the mark shown.
For Gargle for Use in the Treatment of Sore Throats, Tonsilitis and Quinsy.
Claims use since 1910.

Ser. No. 326,863. KLEANE CHEMICAL CO., New York, N. Y. Filed May 7, 1932.



The drawing is lined to indicate the color red. No claim is made to the word "Fil" apart from the trademark shown in the drawing.
For Preparation for the Use as a Temporary Tooth Cavity Filler and Toothache Relief.
Claims use since Mar. 1, 1932.

Ser. No. 326,915. SKIN CULTURE LABORATORIES, INC., New York, N. Y. Filed May 9, 1932.

DERMURE

For Skin Lotion in Cream or Semi-Solid Form.
Claims use since May 4, 1932.

Ser. No. 326,940. THOMAS J. HENDERSON, doing business as Aspralgin Laboratories, Los Angeles, Calif. Filed May 10, 1932.



For Preparation in Tablet Form for Relief of Headaches, Neuralgia, Muscular Aches and Pains and Dental Pains.
Claims use since May 1, 1931.

Ser. No. 326,941. HARRY HERTZBERG, doing business as Harestol Co., Brooklyn, N. Y. Filed May 10, 1932.

HARESTOL

For Preparation for Restoring Gray or Faded Hair to Its Natural Color, for Removing Dandruff, for Retarding Falling Hair, and for Stimulating Hair Growth.
Claims use since Mar. 1, 1932.

Ser. No. 326,944. HAZEL M. LUCK, doing business as Lady Hazel M. Luck, Washington, D. C. Filed May 10, 1932.



In the drawing the silhouette of the woman's head is fanciful.
For Tetter and Dandruff Ointment, Skin Cream, Bleach Cream, Vanishing Cream, Cleansing Cream, Hair Tonic, Bald Spot Ointment, Shampoo and Hair Pomade.
Claims use since Sept. 1, 1931.

Ser. No. 327,108. PHILADELPHIA MAGNESIA CO., Philadelphia, Pa. Filed May 14, 1932.



For Citrate of Magnesia.
Claims use since December, 1931.

CLASS 7

Cordage

Ser. No. 327,140. GREAT WESTERN CORDAGE, INC., Orange, Calif. Filed May 16, 1932.

GREAT W

For Manila and/or Fiber Rope Lines and Twines.
Claims use since May 5, 1932.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 326,578. CENTRAL RAILWAY SIGNAL COMPANY, INC., Newton, Mass. Filed Apr. 28, 1932.

CENTRALITE

For Emergency Road Flares.
Claims use since Feb. 26, 1932.

CLASS 11

Inks and Inking Materials

Ser. No. 326,901. GENERAL LABORATORIES, INC., Chicago, Ill. Filed May 9, 1932.

UNIVERSAL

For Ink Surfacer.
Claims use since Apr. 14, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 308,211. THE MATTATUCK MANUFACTURING COMPANY, Waterbury, Conn. Filed Nov. 22, 1930.



For Upholstery Nails, Jack Chain, Brass Plumber's and Safety Chain, Eyelets, Coil and Flat Springs for General Use, Wire Mattress Fabric, and Screw Machine Products—Namely, Screws, Bolts, Nuts and Small Metal Parts of Articles of Hardware—and Plumbing and Steam-Fitting Supplies.
Claims use since about Jan. 1, 1915.

Ser. No. 314,356. "AUTOMATIC" SPRINKLER CORPORATION OF AMERICA, Cleveland, Ohio. Filed May 9, 1931.

PRE-ACTION

For Releasing Devices, Valves, Connecting Piping and Tubing, Compensating Vents, Sprinklers, and Fluid Pressure Monitors Actuated by Abnormal Thermal Changes, for Fire Extinguishing Systems for Permanent Installation for Fire Protection Purposes.
Claims use since Apr. 27, 1931.

Ser. No. 325,741. BLAKEY'S BOOT PROTECTORS LIMITED, Leeds, England. Filed Apr. 2, 1932.

SEGS

For Boot Protectors, Boot Studs, and Boot Nails.
Claims use since November, 1920.

CLASS 15

Oils and Greases

Ser. No. 327,000. OILRITE CORPORATION, Red Bank, N. J. Filed May 10, 1932.

FALCONOL

For Lubricating Oils and Greases.
Claims use since April, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 324,514. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo. Filed Feb. 26, 1932.

GRAIN-O-SEAL

For Liquid Wood Floor Preservative in the Nature of a Wax Coating or Wood Filler.
Claims use since Jan. 4, 1932.

Ser. No. 326,624. NORMAN ANTHONY FISHER, doing business as Fisher Products Co., Detroit, Mich. Filed Apr. 29, 1932.

Liquid-Glass

For Ready Mixed Varnishes and Paints and Paint Enamels.
Claims use since Dec. 21, 1931.

Ser. No. 326,831. SAMUEL REZNIK, doing business as La Sylvia Paint and Varnish Works, Brooklyn, N. Y. Filed May 6, 1932.

SUNNY BOY



The picture forming part of the trade-mark is a portrait of Solomon E. Reznik, infant son of the applicant.
For Paints in Liquid, Powder, and Paste Form, and Paint Enamels.
Claims use since Apr. 14, 1932.

Ser. No. 327,008. FRENCH-WOLF PAINT PRODUCTS CORPORATION, Bristol, Pa. Filed May 12, 1932.

NAMODOR

For Ready-Mixed Paints, Paint Enamels, Varnishes, and Lacquers.
Claims use since on or about May 3, 1932.

CLASS 17

Tobacco Products

Ser. No. 322,802. HERMAN E. NETTE, doing business as Independent Sales Company, Arlington Heights, Ill. Filed Jan. 7, 1932.

Independent



For Cigars.
Claims use since Dec. 1, 1931.

Ser. No. 327,334. BERRIMAN BROS. INC., Tampa, Fla. Filed May 23, 1932.



PILGRIM

For Cigars.
Claims use since January, 1914.

Ser. No. 327,354. FERNANDEZ, PALICIO Y COMPAÑIA, S. EN C., Habana, Cuba. Filed May 23, 1932.

HOYO

For Cigars.
Claims use since 1840.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 325,246. THE WILLYS-OVERLAND COMPANY, Toledo, Ohio. Filed Mar. 17, 1932.



Numeral "6" is hereby disclaimed apart from the mark as shown.

For Passenger Carrying Automobiles.

Claims use since Dec. 1, 1931.

Ser. No. 325,247. THE WILLYS-OVERLAND COMPANY, Toledo, Ohio. Filed Mar. 17, 1932.



Numeral "8" is hereby disclaimed apart from the mark as shown.

For Passenger Carrying Automobiles.

Claims use since Dec. 1, 1931.

Ser. No. 327,360. KELSEY-HAYES WHEEL CORPORATION, Detroit, Mich. Filed May 23, 1932.

KEL-SE-FUSE

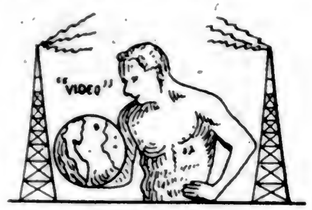
For Brake Drums.

Claims use since Apr. 12, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 319,949. SHORTWAVE & TELEVISION CORPORATION, Boston, Mass. Filed Oct. 10, 1931.



For Radio Receiving Sets, Kits for Radio Receiving Sets and Parts of Such Sets Consisting of Cables, Fixed and Variable Condensers, Knobs, Dials, Loud Speakers, Mounting Frames, Jacks, Reactors, Fixed and Variable Resistors, Sockets, Switches, Transformers, Amplifying and Rectifying Electron Tubes, Tuning Coils; and Unitary Apparatus for the Transmission and Reception of Pictures by Wire and by Radio, Kits for Such Unitary Reception Apparatus, and Parts for Such Picture Transmission and Reception Apparatus Consisting of Lenses, Synchronizing Apparatus, Filters, Signal Amplifiers, Synchronous and Assynchronous Motors, Picture-Viewing Screens, Scanning Apparatus, Gaseous, Space Discharge, and Cathode-Ray Tubes.

Claims use since April, 1930.

Ser. No. 323,372. THE TRUMBULL ELECTRIC MANUFACTURING COMPANY, Plainville, Conn. Filed Jan. 23, 1932.

CONVERTI-FUSE

No claim is made herein for the exclusive use of the word "Fuse" apart from the mark shown in the drawing.

For Electrical Power Distribution Switch Boards, Panel Boards, Safety Switches, Switchboard. Cabinets, Fuse Holders, Panel Board Sections, and Parts Thereof.

Claims use since Apr. 15, 1930.

Ser. No. 323,373. THE TRUMBULL ELECTRIC MANUFACTURING COMPANY, Plainville, Conn. Filed Jan. 23, 1932.

CONVERTI-FUSE

No claim is made herein for the exclusive use of the word "Fuse" apart from the mark shown in the drawing.

For Electrical Power Distribution Switch Boards, Panel Boards, Safety Switches, Switchboard Cabinets, Fuse Holders, Panel Board Sections, and Parts Thereof.

Claims use since Apr. 15, 1930.

Ser. No. 324,196. JOHN ALFRED STEVENS, Broadstairs, England. Filed Feb. 15, 1932.

STEVOLITE

For Electric Lamps.

Claims use since Oct. 1, 1931.

Ser. No. 325,763. STROMBERG-CARLSON TELEPHONE MANUFACTURING COMPANY, Rochester, N. Y. Filed Apr. 2, 1932.

TELEKTOR

For Remotely Controlled Radio Receiving Sets and/or Mechanism for Electrically Reproducing and Amplifying Sound Recorded Upon Phonograph Records; Electrical Mechanism for Selectively and Remotely Controlling Radio Receiving Sets, the Sound Reproducing and Amplifying Mechanisms Thereof, and Combinations of Such Radio Receiving Sets and Sound Reproducing Mechanisms.

Claims use since Mar. 14, 1932.

Ser. No. 326,324. FREDERICK W. GROSCHE, Baltimore, Md. Filed Apr. 21, 1932.



For Storage Batteries.

Claims use since Apr. 9, 1926.

Ser. No. 326,843. HERBERT L. NELSON, doing business as Battery Hi-Ball Sales Company, Boston, Mass. Filed May 6, 1932.

FREE WHEELING

For Secondary Batteries.

Claims use since Mar. 26, 1932.

Ser. No. 326,893. DEFIANCE SPARK PLUGS, INC., Toledo, Ohio. Filed May 9, 1932.

Defiance

For Electric Light Bulbs.

Claims use since May 5, 1932.

Ser. No. 327,188. THE FITZGERALD MFG. COMPANY, Torrington, Conn. Filed May 17, 1932.

KITCHEN WIZARD

For Electric Food and Beverage Mixers.

Claims use since Apr. 1, 1932.

Ser. No. 327,189. THE FITZGERALD MFG. COMPANY, Torrington, Conn. Filed May 17, 1932.

Merri-Maid

For Electric Food Mixer and Juice Extractor.

Claims use since Apr. 1, 1932.

Ser. No. 327,209. AMERICAN DISTRICT TELEGRAPH COMPANY, Jersey City, N. J. Filed May 14, 1932.

AERO

For Automatic Fire Alarm Devices and Parts Thereof.

Claims use since Apr. 10, 1920.

Ser. No. 327,250. GOLDBLATT BROS., INC., Chicago, Ill. Filed May 19, 1932.

GOLD COAST

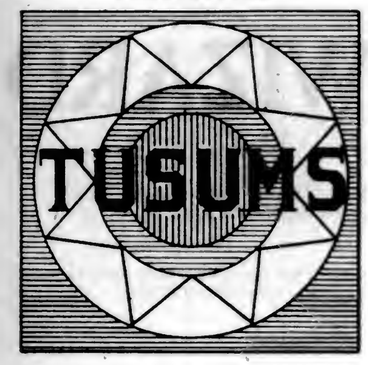
For Radio Tubes.

Claims use since Feb. 1, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 321,706. THE CAPITOL GAME AND NOVELTY COMPANY, St. Paul, Minn. Filed Dec. 2, 1931.



The drawing is lined for shading. No claim is made to the representation of the game appearing on the drawing.

For Table Board Game Played with Pieces.
Claims use since Aug. 15, 1931.

Ser. No. 326,647. LOUIS FRANK ROSENBERG, Providence, R. I. Filed Apr. 30, 1932.

NOTOP

For Golf Balls.
Claims use since October, 1931.

Ser. No. 326,981. KEYSTON BROS., San Francisco, Calif. Filed May 11, 1932.

Lasso 'em Bill

For Simulant Toy Equipment—Namely, Pistols, Dummy Cartridges, Holsters, Rubber Knives, Daggers, Spears and Swords, Sheaths and Scabbards, Holster and Sheath-Carrying Belts, Lassos, Lariats and Riatas, Bows and Arrows, Targets, Police Clubs, Whips and Spurs, Cartridge and Money Belts, Picks, Shovels, Lanterns, and Artificial Nuggets.
Claims use since May 15, 1926.

Ser. No. 327,101. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill. Filed May 14, 1932.

DOMINO POOL

For Coin-Controlled, Ball Projecting, Amusement Machines.
Claims use since Apr. 28, 1932.

Ser. No. 327,102. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill. Filed May 14, 1932.

HOT CHA!

For Coin-Controlled, Ball Projecting Amusement Machines.
Claims use since Apr. 28, 1932.

Ser. No. 327,103. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill. Filed May 14, 1932.

SHOOT THE MOON

For Coin-Controlled, Ball Projecting Amusement Machines.
Claims use since Apr. 28, 1932.

Ser. No. 327,104. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill. Filed May 14, 1932.

TOURNAMENT OF GAMES

No exclusive claim is made to the word "Games" apart from the mark as shown.
For Coin-Controlled, Ball Projecting Amusement Machines.
Claims use since Apr. 28, 1932.

Ser. No. 327,197. CHESTER L. PEARSON, doing business as Per-Plex Puzzle Co., Boston, Mass. Filed May 17, 1932.

PER-PLEX

For Jig Saw Puzzles.
Claims use since Dec. 11, 1931.

Ser. No. 327,353. FELDER BROS., New York, N. Y. Filed May 23, 1932.

TEXAS RANGER

For Toy Pistol Holsters and Cartridge Belts.
Claims use since Apr. 1, 1932.

Ser. No. 327,519. ARTHUR W. MORGAN, Yonkers, N. Y. Filed May 27, 1932.

REGAL

For Golf Balls.
Claims use since Mar. 1, 1931.

Ser. No. 327,520. ARTHUR W. MORGAN, Yonkers, N. Y. Filed May 27, 1932.

TUNGSTEN

For Golf Balls.
Claims use since Mar. 1, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 318,253. ROTO- UND DEBEGO-WERKE AKTIENGESELLSCHAFT, Konigslutter, Germany. Filed Aug. 20, 1931.

Rollo

For Multigraphing Machines and Parts Thereof, Stamping Rollers, Copying Presses, Copying Rollers, Addressing Machines and Parts Thereof, Folding Machines and Parts Thereof.
Claims use since Feb. 20, 1926.

Ser. No. 318,998. SOCIETE GENEVOISE D'INSTRUMENTS DE PHYSIQUE, Geneva, Switzerland. Filed Sept. 12, 1931.

SOCIÉTÉ GENEVOISE

SIP

For Machines, Lathes, and Tools for Cutting, Boring, Dividing, Grinding, and Machining Metals and Other Materials; Machinery Shafting and Parts Thereof.
Claims use since 1861.

Ser. No. 321,732. P. M. C. MANUFACTURING CORP., Kingston, N. Y. Filed Dec. 3, 1931.



The trade-mark consists of a yellow colored cap or tip on the free end of the handle of the tools. The broken cross hatching in the drawing represents the color yellow. No claim is made to the outline representation of the handle per se as shown on the drawing.

For Kitchen Utensils—Namely, Mixing Spoons (Plain and Perforated), Cake Turners (Plain and Perforated), Trowel Turners (Plain and Perforated), Flesh and Kitchen Forks, Spatulas, Parers, Corers, and Fish Scalers; Vegetable Mashers or Ricers, Mincing Knives, Ice Picks, Ice Chisels and Ice Shavers, Can Openers, Bottle Openers, Tack Pullers, Plate Scrapers, Sink Shovels, Fruit Ballers, Paring Knives, Scoops, Pie and Cook Knives, Tomato Slicers, Corkscrews, Batter Whips, and Egg Beaters.
Claims use since Mar. 5, 1931.

Ser. No. 326,495. PIONEER CHEMICAL WORKS, INC., Chicago, Ill. Filed Apr. 25, 1932.

VOLUNTEER

For Portable Fire Extinguishers.
Claims use since Apr. 18, 1932.

Ser. No. 326,679. HERBERTS MACHINERY CO., LTD., Los Angeles, Calif. Filed May 2, 1932.



The word "Wood" is disclaimed apart from the mark as shown.

For Power Operated Wood Working Machines—Namely, Band Saws, Jointers, Saw Tables, Lathes, and Vertical Spindle Shapers.

Claims use since Apr. 7, 1932.

Ser. No. 326,690. OUTBOARD MOTORS CORPORATION, Milwaukee, Wis. Filed May 2, 1932.

LAWN-BOY

For Lawn Mowers.

Claims use since April, 1932.

Ser. No. 326,691. OUTBOARD MOTORS CORPORATION, Milwaukee, Wis. Filed May 2, 1932.

Speedibike

For Internal Combustion Motors for Bicycles.

Claims use since March, 1932.

Ser. No. 326,732. GROVER C. ANDERSON, Gateway, Mont. Filed May 4, 1932.



The use of the words "Fire" and "Bomb" is disclaimed apart from the mark as shown.

For Fire Extinguishing Bombs and Grenades.

Claims use since Apr. 1, 1932.

Ser. No. 326,804. BROWN, BOVERI & CIE., Baden, Switzerland. Filed May 6, 1932.

Velox

For Circulating Water Pumps, and Exhaust Gas Turbines.

Claims use since 1930.

Ser. No. 326,886. BEAUTY APPLIANCE CORPORATION, Racine, Wis. Filed May 9, 1932.

BEAUTYTRIM

For Electric Hair Clippers.

Claims use since Mar. 25, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 325,889. ZEISS IKON AKTIENGESELLSCHAFT, Dresden, Germany. Filed Apr. 7, 1932.

Contax

For Photographic Apparatus—Namely, Photographic Lenses, Shutters, Light Filters, View Finders, Stereoscopes, Automatic Releases, Tripods, Tripod Heads, Camera Filters, Portable Dark Rooms, Dark-Room Lamps, Sensitized Plates, Sensitized Films, Sensitized Roll Films, Sensitized Film Packs, Sensitized Photographic Papers, Sensitized Photographic Cards, Masks, Vignettes, Finders for Picture Delineation, Plate Slides, Roll Film Slides, Film-Pack Slides, Developing Basins, Fixing Basins, Photographic Developing Machines, Dropping Bottles, Plate Lifters, Plate Holders, Draining Clamps for Films, Washing and Draining Racks, Washing Vats, Washing Tanks, Printing Frames, Retouching Desks, Retouching Mirrors, Flash-Light Lamps, Scales for Use in the Art of Photography, Weights for Scales, Thermometers, Enlarging Apparatus, Projection Apparatus for Episcopic Projection, Projection Apparatus for Diascopic and Episcopic Projection, Projection Apparatus for Lantern Slides, Projection Apparatus for Microscopic Projection, Cinematographic Moving-Picture Cameras, Cinematographic Projectors and Machines, Cine Printing Machines, Film Rewinders, Film Examining Machines, Film Counters, Projection Tables, Projection Screens, Slide Carriers Forming Part of Projecting Machines, Condenser Lenses, Prisms, Shooting Cinemas, Hemometers, Exposure Meters, Apparatus for Testing Powders and Explosives, Chronographs, Measuring Instruments for Film Backward Movement, Gas-Pressure Meters; Instruments for Measuring the Tensive Force of Bullets, Barometers, Field Prism Glasses, Telescopes, Microscopes, Densographs, Spectro-Densographs, Calculating Machines.

Claims use since Mar. 1, 1932.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 325,879. C. RAY RANDALL & CO., North Attleboro, Mass. Filed Apr. 7, 1932.

MONTE CARLO

For Necklaces, Bracelets, Earrings, Hat Ornaments Made of or Plated With Precious Metal and Other Articles of Jewelry for Personal Wear Not Including Watches.

Claims use since Jan. 10, 1931.

CLASS 31

Filters and Refrigerators

Ser. No. 327,356. GENERAL WATER HEATER CORPORATION, Los Angeles, Calif. Filed May 23, 1932.

ZEROLATOR

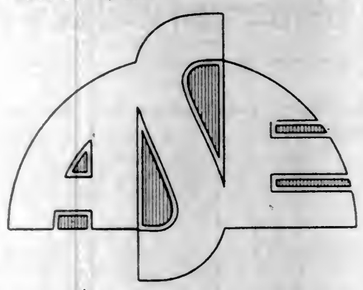
For Electric Refrigerators.

Claims use since May 3, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 319,682. ALL-STEEL-EQUIP COMPANY, Aurora, Ill. Filed Oct. 3, 1931.



The lining in the drawing is to represent shading.

For Steel Wardrobe, Storage and Supply Lockers and Cabinets, Tool Stands, Transfer Cases, Filing Cabinets, and Bench Drawers.

Claims use since Jan. 15, 1931.

Ser. No. 323,077. THE CLEMETSEN COMPANY, Chicago, Ill. Filed Jan. 15, 1932.

CLEMCOID

For Desks, Tables, Filing Cabinets for Office and Household Use.

Claims use since Apr. 28, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 327,405. THE OHIO STATE STOVE CORPORATION, Columbus, Ohio. Filed May 24, 1932.

Super-Automatic

The word "Automatic" forms no part of the registration sought apart from the mark shown in the drawing.

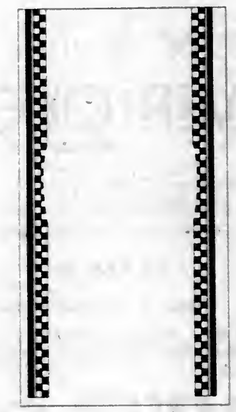
For Kitchen Ranges Operated Either by Gas or Electricity.

Claims use since May 1, 1932.

CLASS 37

Paper and Stationery

Ser. No. 306,081. A. P. W. PAPER COMPANY, INC., Albany, N. Y. Filed Sept. 26, 1930.



For Toilet Paper.

Claims use since June 6, 1924.

Ser. No. 323,379. WORTENDYKE MANUFACTURING CO., Richmond, Va. Filed Jan. 23, 1932.

Shirley

For Toilet Paper, Paper Towels, Paper Napkins.

Claims use since May 25, 1926.

Ser. No. 327,098. KOTEX COMPANY, Chicago, Ill. Filed May 14, 1932.

KLEENEX

For Paper Towels.
Claims use since July 7, 1931.

Ser. No. 327,481. SAXON PAPER PRODUCTS INC., New York, N. Y. Filed May 26, 1932.

Esquire Bond

No claim is made to the exclusive use of the word "Bond" apart from the mark as appearing on the drawing.
For Bond Paper.
Claims use since Jan. 2, 1932.

Ser. No. 327,489. VELDOWN COMPANY, INC., New York, N. Y. Filed May 26, 1932.

SILVER QUEEN

For Cleansing Tissue.
Claims use since Mar. 2, 1932.

CLASS 38

Prints and Publications

Ser. No. 324,630. FRANK G. STOBIE, doing business as Stobie Photo Copy Company, St. Louis, Mo. Filed Feb. 29, 1932.

SUPERSTAT

For Photographic Reproductions of Imprinted Matter, Drawings, Photographs, and Documents.
Claims use since about December, 1927.

Ser. No. 326,566. BURLEY H. WILDER, doing business as Wilder Photo Copy Co., Buffalo, N. Y. Filed Apr. 27, 1932.

COPYSTAT

For Printed Matter, Particularly Multiple Goods in the Form of Enlarged or Reduced Maps, Drawings, Testimonial Letters and Booklets, Printed by an Offset Process.
Claims use since Mar. 1, 1932.

Ser. No. 327,168. POWER WAGON PUBLISHING COMPANY, Chicago, Ill. Filed May 16, 1932.

Power Wagon
National Journal of the MOTOR TRUCK INDUSTRY

For Periodical.
Claims use since March, 1906, as to the mark "Power Wagon," and since April, 1924, as to sub-title "National Journal of the Motor Truck Industry."

Ser. No. 327,263. CHARLES F. STICKLER, doing business as The Paramount Press, Fort Wayne, Ind. Filed May 19, 1932.

SNICKERS

For Weekly Publication.
Claims use since Mar. 31, 1932.

CLASS 39

Clothing

Ser. No. 311,124. G. H. BASS & Co., Wilton, Me. Filed Feb. 17, 1931.

Lock Lap

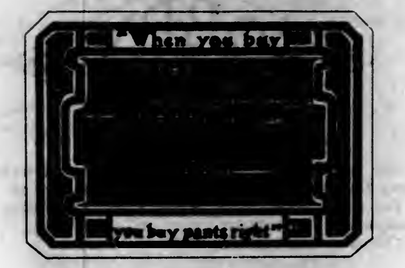
No exclusive right to the word "Lap" is claimed except in the particular association shown.
For Boots, Shoes, Slippers and Moccasins of Leather, Rubber, Fabric, and Combinations Thereof.
Claims use since Nov. 15, 1930.

Ser. No. 317,810. KOPS BROTHERS, INC., New York, N. Y. Filed Aug. 8, 1931.



No claim is made to the exclusive right to the pictorial representation of a piece of goods per se.
For Girdles, Brassières, and Combinations of Girdles and Brassières.
Claims use since July 7, 1931.

Ser. No. 320,896. ISADORE MEYERS, Philadelphia, Pa. Filed Nov. 7, 1931.



In the drawing, the lining appearing therein is for shading purposes only. Applicant disclaims the outline representation of the label shown, and the wording appearing on the drawing apart from the mark as shown in the drawing.
For Men's and Youths' Trousers and Pants.
Claims use since September, 1907.

Ser. No. 320,897. ISADORE MEYERS, Philadelphia, Pa. Filed Nov. 7, 1931.

"When you buy"
Odd Pants
you buy pants right

Applicant disclaims all of the wording appearing in the drawing apart from the mark as shown.
For Men's and Youths' Trousers and Pants.
Claims use since September, 1907.

Ser. No. 320,926. HAMILTON, BROWN SHOE COMPANY, St. Louis, Mo. Filed Nov. 9, 1931.

"Ambassador"
Genuine Calfskin
Combination Last

The right to the exclusive use of the phrases "Genuine Calfskin" and "Combination Last" is disclaimed.
For Men's Leather and Fabric Shoes.
Claims use since Oct. 4, 1931.

Ser. No. 321,874. THE H. C. GODMAN COMPANY, Columbus, Ohio. Filed Dec. 7, 1931.

DR. DRAKE'S
ARCH SUPPORT SHOE

The words "Arch Support Shoe" are disclaimed apart from the mark as shown.
For Shoes Constructed of Leather.
Claims use since Oct. 6, 1930.

Ser. No. 322,590. JAMES LOCK & CO. LTD., London, England. Filed Dec. 31, 1931.

LOCK & Co
HATTERS.
St. James's Street.
LONDON.

No claim is made to the word "Hatters" or to the address, "St. James's Street, London," apart from the mark as shown.
For Hats for Men.
Claims use since 1865.

Ser. No. 322,681. WALTER BOOTH SHOE CO., Milwaukee, Wis. Filed Jan. 4, 1932.



The picture forming a part of the drawing is merely fanciful. No claim is made to the words "Sure Cool" apart from the mark shown in the drawing.
For Boots, Shoes and Oxfords Made Wholly or in Part of Leather, Fabric, or Combinations Thereof.
Claims use since Nov. 13, 1931.

Ser. No. 324,613. LEBOW BROTHERS, Baltimore, Md. Filed Feb. 29, 1932.

Imperial Drape

No claim is made to the word "Drape" apart from the mark as shown.
For Men's Suits, Business, Sport, and Formal; Overcoats and Top Coats.
Claims use since on or about April, 1931.

Ser. No. 324,726. STRAW HAT CORPORATION OF AMERICA, New York, N. Y. Filed Mar. 2, 1932.

PANAROLL

Applicant disclaims the right to the exclusive use of the pictorial representations of the goods except in the particular association shown.

For Men's and Women's Straw Hats and Hat Bodies.
Claims use since Feb. 15, 1932.

Ser. No. 325,512. BROWN SHOE COMPANY, INC., St. Louis, Mo. Filed Mar. 26, 1932.

GOLD STANDARD

For Shoes Made of Leather, Cloth, Canvas, or Combinations Thereof.
Claims use since August, 1914.

Ser. No. 325,598. PAYNE-COWAN COMPANY, Dallas, Tex. Filed Mar. 28, 1932.



The mark is illustrated as printed in blue, but this is not essential.

For Ladies' Underwear.
Claims use since Mar. 1, 1932.

Ser. No. 325,799. LOUIS PLOTSKY, Kansas City, Mo. Filed Apr. 4, 1932.



The descriptive words "Jumper" and "Size" are disclaimed apart from the mark as shown on the drawing.

For Child's Tailored Overall Garment.
Claims use since Mar. 18, 1932.

Ser. No. 326,200. ATLANTIC ROMPER CO. INC., Linden, N. J. Filed Apr. 18, 1932.

BOBBY BOYSUITS

The term "Boys Suits" is disclaimed apart from the other features of the mark shown on the drawing.

For Boys' Wash Suits, Swim Suits, Play Suits, and Rompers.
Claims use since Mar. 1, 1932.

Ser. No. 326,292. MELVILLE SHOE CORPORATION, New York, N. Y. Filed Apr. 20, 1932.

WONDERBILT

For Shoes of Leather, Rubber or Fabric Construction, or a Combination of These Materials.
Claims use since Apr. 12, 1932.

Ser. No. 326,480. KABO CORSET COMPANY, Chicago, Ill. Filed Apr. 25, 1932.

NON RIDE
"Duo-Flex"

The exclusive use of the expression "Non Ride" is hereby disclaimed apart from the mark as shown in the drawings.

For Foundation Garments, Brassclettes—Namely, a Type of Skeleton Brassière; Girdles, Step-Ins, Corsets, and Corselettes.
Claims use since Mar. 1, 1932.

Ser. No. 326,717. NAUMKEAG STEAM COTTON COMPANY, Salem, Mass. Filed May 3, 1932.

PEQUOT

For Negligee Shirts, Pajamas, Nurses' Uniforms.
Claims use since Apr. 8, 1932.

Ser. No. 326,745. FINK SHOE CO. INC., Brooklyn, N. Y. Filed May 4, 1932.

FINK HIGH ARCH SHOE
Built-In Arch

The words "Fink High Arch Shoe" and "Built-In Arch" are claimed only in connection with the other features of the mark.

For Shoes of Leather and Hosiery for Men, Women, and Children.
Claims use since Dec. 1, 1931.

Ser. No. 326,746. FINK SHOE CO. INC., Brooklyn, N. Y. Filed May 4, 1932.

PODIAFLEX

For Shoes of Leather and Hosiery for Men, Women, and Children.
Claims use since Dec. 1, 1931.

Ser. No. 327,029. SALANT & SALANT, INC., New York, N. Y. Filed May 12, 1932.



For Men's and Boys' Negligee and Work Shirts.
Claims use since Jan. 1, 1900.

Ser. No. 327,056. MARIE A. KASPER, Miami, Fla. Filed May 13, 1932.



The term "Sleeping Jacket" is disclaimed apart from the other features of the mark shown in the drawing.

For Sleeping Jackets for Men, Women, and Children.
Claims use since Mar. 31, 1932.

Ser. No. 327,062. LEVI-OTTENHEIMER COMPANY, Baltimore, Md. Filed May 13, 1932.



For Pajamas for Girls and Women; Gymnasium, Sports, and Play Suits for Boys and Girls.
Claims use since Apr. 13, 1932.

Ser. No. 327,073. LOUIS C. TOPLITZ, New York, N. Y. Filed May 13, 1932.

Brown Beauty

No claim is made to the word "Brown" apart from the mark shown in the drawing.

For Hosiery.
Claims use since Dec. 3, 1931.

Ser. No. 327,087. THE ASSOCIATED MERCHANDISING CORPORATION, New York, N. Y. Filed May 14, 1932.

STURDIGIRL

For Girls' Coats and Dresses.
Claims use since Mar. 16, 1932.

Ser. No. 327,183. THE HOUSE OF BYER, INC., Cambridge, Mass. Filed May 17, 1932.

SNUG-N-KLADS

For Hosiery.
Claims use since spring of 1932.

Ser. No. 327,248. G. M. SALES CO., Fort Wayne, Ind. Filed May 19, 1932.

GM SALES CO.

ANN MARIE

For Hosiery.
Claims use since Mar. 1, 1932.

Ser. No. 327,260. ROGERS PEET COMPANY, New York, N. Y. Filed May 19, 1932.

Athlastic

For Men's and Boys' Underwear.
Claims use since Apr. 30, 1932.

Ser. No. 327,319. HERMAN MANTELL, New York, N. Y. Filed May 21, 1932.

Glad Nest



For Hosiery.
Claims use since Aug. 6, 1931.

Ser. No. 327,321. PENN ROSE HOSIERY MILLS, Philadelphia, Pa. Filed May 21, 1932.

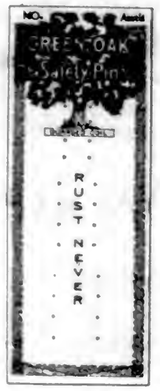
PENN ROSE

For Hosiery.
Claims use since July 1, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 326,205. THE DE LONG HOOK AND EYE COMPANY, Philadelphia, Pa. Filed Apr. 18, 1932.



Applicant disclaims the words "No.", "Asst'd.", "Guarded Coil", and "Rust Never" apart from the mark shown on the drawing, and disclaims the right to the exclusive use of the words "Safety Pin", the outline of the card, and the perforations therein.
For Safety Pins Not Made of Precious Metal.
Claims use since January, 1931.

Ser. No. 326,996. WM. E. WRIGHT & SONS CO., Orange, N. J. Filed May 11, 1932.



The drawing is lined to represent the colors red and pink.
For Bias Fold Tapes.
Claims use since Dec. 1, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 323,771. TWIN CITY TEXTILE MILLS, INCORPORATED, St. Paul, Minn. Filed Feb. 2, 1932.



For Jute and Shoddy Piece Goods and Wiping Cloth in the Piece Used by Mechanics for Cleaning Machinery Parts.
Claims use since June 1, 1927.

Ser. No. 326,878. DAVID WEISS, doing business as Stork Infant Wear, New York, N. Y. Filed May 7, 1932.

RED STORK



For Textile Diapers.
Claims use since March, 1925.

Ser. No. 327,458. WILKES-BARRE LACE MANUFACTURING COMPANY, Wilkes-Barre, Pa. Filed May 25, 1932.



The color lining shown on the drawing being for shading purposes only.
For Textile Material for Curtains and Draperies—Namely, Finished Rayon Curtains and Rayon Drapery Piece Goods.
Claims use since Apr. 22, 1932.

Ser. No. 327,497. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed May 27, 1932.

Permasheen

For Pile Fabrics in the Piece.
Claims use since May 6, 1932.

Ser. No. 327,511. KENT MANUFACTURING CO., Clifton, Pa., and New York, N. Y. Filed May 27, 1932.

KEN-MEDE

For Woolens and Worsteds in the Piece.
Claims use since Feb. 1, 1932.

CLASS 43

Thread and Yarn

Ser. No. 327,428. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed May 25, 1932. Under section 5b of the act of 1905 as amended in 1920.

Eastman

Applicant is owner of registrations No. 67012, renewed, and No. 67,137, renewed, effected on the ground of actual and exclusive use by the applicant for ten years next preceding Feb. 20, 1905.
For Artificial Silk Thread and Yarn.
Claims use since May 7, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 326,686. JAMES L. KNIPE, Washington, D. C. Filed May 2, 1932.

KOL-O-GRIP

For First Aid Medical Kit Containing Instructions for Treatment of Common Colds, Grippe, and Influenza, Including a Box or Case Containing an Atomizer and Medicines.
Claims use since Apr. 29, 1932.

Ser. No. 326,885. BEAUTY APPLIANCE CORPORATION, Racine, Wis. Filed May 9, 1932.

BEAUTYSAGE

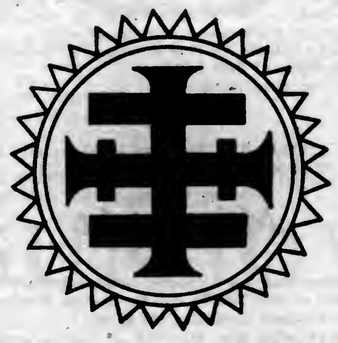
For Electrical Massage Device.
Claims use since Nov. 25, 1931.

Ser. No. 327,142. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass. Filed May 16, 1932.

SORBANT

For Surgical Gauze in the Piece and in Cut Lengths, Bandages, Bandage Rolls, Hospital Sponges, Surgical Slings, Absorbent Cellulose for Medical or Hygienic Use, and Absorbent Cotton.
Claims use since Nov. 15, 1926.

Ser. No. 327,144. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass. Filed May 16, 1932.



For Surgical Gauze in the Piece and in Cut Lengths, Bandages, Bandage Rolls, Hospital Sponges, Surgical Slings, Absorbent Cellulose for Medical or Hygienic Use, and Absorbent Cotton.
Claims use since 1890.

Ser. No. 327,302. LEO S. BLODGETT, New York, N. Y. Filed May 21, 1932.

ORALAMP

For Medical and Dental Inspection Lamp Instruments.
Claims use since May 2, 1932.

Ser. No. 327,410. PEOPLES DRUG STORES, INC., Washington, D. C., doing business as Vano Company, New York, N. Y. Filed May 24, 1932.

Vano

For Sanitary Napkins.
Claims use since Nov. 17, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 326,195. W. SHEINKER & SON, INC., New York, N. Y. Filed Apr. 16, 1932.

GREEN RIBBON BRAND

The drawing is lined to indicate the color green and no claim is made to the exclusive use of the word "Brand," apart from the mark as shown in the drawing.
For Non-Alcoholic Maltless Flavoring Extracts Used in the Preparation of Soft Drinks.
Claims use since October, 1927.

Ser. No. 327,418. THE STANDARD BOTTLING CO., Denver, Colo. Filed May 24, 1932.

Mile Height

For Carbonated Non-Alcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks, and for Syrups, Extracts, and Concentrates Used in Making the Same.
Claims use since Mar. 30, 1932.

Ser. No. 327,422. THE BEAUFONT COMPANY, INC., Richmond, Va. Filed May 25, 1932.

Climax

For Carbonated Non-Alcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks, and Syrups, Extracts, and Concentrates Used in Making the Same.
Claims use since Apr. 1, 1932.

Ser. No. 327,491. THE WARWICK CLUB GINGER ALE CO., INC., West Warwick, R. I. Filed May 26, 1932.

WARWICK CLUB
IT SINGS IN THE GLASS

For Gingerale.
Claims use since May, 1930.

CLASS 46

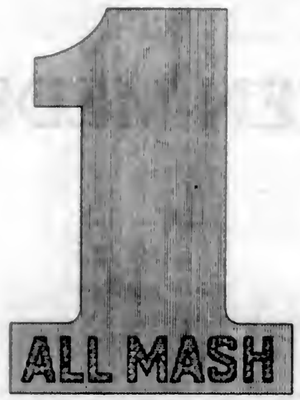
Foods and Ingredients of Foods

Ser. No. 276,015. VERGANI VENCESLAO DI SECONDO, Cremona, Italy. Filed Nov. 28, 1928. Under 10-year proviso.



For Sweet Cakes.
Claims use since 1881.

Ser. No. 310,274. BLATCHFORD CALF MEAL COMPANY, Waukegan, Ill. Filed Jan. 22, 1931.



The lining on the figure shown in the drawing is to indicate the color red and the lining on the letters shown in the drawing is to indicate the color yellow. No claim is made to the words "All Mash" apart from the mark as shown in the drawing.
For Mash or Meal, a Compounded Ground Feed Composed of Cereals and Other Suitable Ingredients for Poultry.
Claims use since Dec. 8, 1930.

Ser. No. 312,173. CHILDS COMPANY, New York, N. Y. Filed Mar. 16, 1931. Under section 5b of the act of 1905 as amended in 1920.

Childs

For Pepper Relish, Mince Meat, Plum Pudding, Tomato-Juice Cocktail, Maple Syrup, Currant Jelly, Mint Jelly, Marmalade, Mayonnaise, Baked Beans, Tea, Coffee, Candy, and Nuts.
Claims use since Dec. 4, 1930, on pepper relish; Nov. 22, 1930, on mince meat; Nov. 22, 1930, on plum pudding; Dec. 30, 1930, on tomato juice cocktail; Dec. 1, 1930, on maple syrup; Dec. 1, 1930, on currant jelly; about Mar. 1, 1930, on mint jelly; about Mar. 1, 1930, on marmalade; about Mar. 1, 1930, on mayonnaise; about Mar. 1, 1930, on baked beans; Sept. 19, 1930, on tea; July, 1929, on coffee; about January, 1930, on candy; about November, 1930, on nuts.

Ser. No. 315,937. SOCIETE ANONYME DES CAVES & DES PRODUCTEURS REUNIS DE ROQUEFORT, Roquefort, France. Filed June 16, 1931.

ROQUEFORT
PRODUCT OF FRANCE
NOUVELLE SOCIETE ANONYME DE PROPRIETAIRES
ROQUEFORT-AVEYRON
SURCHOIX

All the wording being disclaimed except the words "La Bergere."
For Cheese.
Claims use since December, 1910.

Ser. No. 322,678. BARNED PRODUCTS COMPANY, New Brunswick, N. J. Filed Jan. 4, 1932. Under 10-year proviso.

BARNED'S

For Vanilla Extract for Food Flavoring.
Claims use since 1885.

Ser. No. 325,232. MALLARS & COMPANY, doing business as Mandco, Chicago, Ill. Filed Mar. 17, 1932.

ARISTON

For Olive Oil.
Claims use since Jan. 1, 1932.

Ser. No. 325,487. SUPREME PRODUCTS COMPANY, Columbus, Ohio. Filed Mar. 25, 1932.

25
"TWO BITS"
BRAND
MALT SYRUP

Exclusive use as disclaimed of the words "Two Bits," "Malt Syrup," and "Brand" apart from the mark as shown in the drawing.
For Malt Syrup.
Claims use since Dec. 15, 1931.

Ser. No. 326,139. FISCHMAN SODA FOUNTAIN SUPPLY CO., Philadelphia, Pa. Filed Apr. 15, 1932.

SUN-JOY

For Crushed Fruit and Concentrated Fruit Syrups for Food Purposes Such as are Used in Preparing Ice Cream Confections.
Claims use since on or about Mar. 24, 1932.

Ser. No. 326,219. K & L MANUFACTURING COMPANY, Salt Lake City, Utah. Filed Apr. 18, 1932.

ah NURTS BAR

The word "Bar" is disclaimed apart from the other features of the mark shown in the drawing.
For Nut Candy Bars.
Claims use since Feb. 20, 1932.

Ser. No. 326,637. PAUL HAWKINS, doing business as Paul Hawkins Co., Los Angeles, Calif. Filed Apr. 30, 1932.

Milksicle 5¢

The characters "5¢" are disclaimed apart from the mark as shown in the drawing.
For Frozen Confections.
Claims use since Sept. 16, 1931.

Ser. No. 326,724. UNITED PACKING COMPANY, Fresno, Calif. Filed May 3, 1932.

ROSY 

The portrait of a girl appearing on the drawing is merely fanciful.
For Fresh Grapes, Fresh Deciduous Fruits, Fresh Citrus Fruits, Olives in Natural State, Fresh Cantaloupes, Fresh Berries, Fresh Vegetables.
Claims use since July 20, 1925.

Ser. No. 326,801. GOLDEN BEAR COFFEE COMPANY, LTD., Los Angeles, Calif. Filed May 5, 1932.

FLAVOR LOCKED

The descriptive word "Flavor" is disclaimed apart from the mark as shown.
For Coffee.
Claims use since Feb. 15, 1932.

Ser. No. 326,844. SANTA CLARA VALLEY FRUIT EXCHANGE, San Jose, Calif. Filed May 6, 1932.

MEDAL of HONOR

For Fresh Cherries.
Claims use since May 2, 1932.

Ser. No. 326,858. PAUL HAWKINS, doing business as Paul Hawkins Company, Los Angeles, Calif. Filed May 7, 1932.



The characters "5¢" and all the words, except "Candy-Nickel," are disclaimed apart from the mark as shown in the drawing.
For Frozen Confections.
Claims use since Apr. 21, 1932.

Ser. No. 326,867. MEAD JOHNSON & COMPANY, Evansville, Ind. Filed May 7, 1932.

FLORENA

For Specially Prepared Food Product in Powdered Form, Made from Wheat, Used to Supply Wheat Flour in Soup Mixtures, Malt Soup Mixtures, Cereal Gruels, and for Addition to Cows' Milk for Infants' Diet.
Claims use since April, 1923.

Ser. No. 326,969. HOHNECKER'S DAIRY, North Bergen, N. J. Filed May 10, 1932.

HOHNEKER'S DAIRY

The word "Dairy" appearing on the drawing is disclaimed apart from the other features of the mark as shown.
For Milk, Cream, Butter, Cheese, and Eggs.
Claims use since May 1, 1931.

Ser. No. 327,093. EMIL FLEISCHL & SON, New York, N. Y. Filed May 14, 1932.



The word "Brand" being disclaimed apart from the mark shown.
For Butter.
Claims use since Apr. 28, 1932.

Ser. No. 327,247. HARRY FAWCETT, doing business as Grocers Co-Operative Baking Co., Minneapolis, Minn. Filed May 19, 1932.

Shurfine

The descriptive word "Shurfine" not being claimed apart from the mark as shown on the drawing.
For Bread.
Claims use since Mar. 28, 1932.

Ser. No. 327,357. HARROW-TAYLOR BUTTER COMPANY, Kansas City, Mo. Filed May 23, 1932.

SPREDONASE

For Mayonnaise Dressing for Food Stuffs.
Claims use since Dec. 18, 1931.

Ser. No. 327,393. FRIGID PRODUCTS CORP., Brooklyn, N. Y. Filed May 24, 1932.



For Ice Cream.
Claims use since Apr. 4, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 327,117. SCHENLEY PRODUCTS COMPANY, INC., New York, N. Y. Filed May 13, 1932.

No. 4

For Whiskey.
Claims use since Nov. 1, 1931.

Ser. No. 327,482. SCHENLEY PRODUCTS COMPANY, New York, N. Y. Filed May 26, 1932.

Silver WEDDING

For Whiskey.
Claims use since Feb. 12, 1932.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 326,517. ELLIOTT B. CLARK, Weldon, N. C. Filed Apr. 26, 1932.

IF IT'S GOOD

NEC KIT

IT'S BETTER BOTTLED

No claim is made to the slogan "If It's Good It's Better Bottled" apart from the mark shown.

For Sanitary Coverings to be Used on the Neck of Bottles.

Claims use since Feb. 1, 1932.

Ser. No. 326,848. HENRY BECKER & SON, INC., Roseland, N. J. Filed May 7, 1932.



No claim is made to the words "Exclusively Grade A," "Raw," "New Jersey," and "Roseland, N. J." No claim is made to the representation of the bottle.

For Milk Bottle Covers Designed to be Inserted Over the Mouth and Neck Portion of Milk Bottles to Protect the Same and Keep Them Sanitary.

Claims use since 1880.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JULY 5, 1932

295,433. MEDICINAL PREPARATION FOR THE TREATMENT OF RHEUMATISM. JACOB FELDMAN, doing business as Sal-Trag Laboratories, Portland, Oreg.
Filed August 10, 1931. Serial No. 317,867. PUBLISHED APRIL 26, 1932. Class 6.

295,434. SAFETY RAZOR BLADE HONE. SAUNDERS COAL COMPANY, INC., Rochester, N. Y.
Filed August 20, 1931. Serial No. 318,256. PUBLISHED APRIL 26, 1932. Class 4.

295,435. COUNTER IRRITANT. STEEL LABORATORIES INC., Cleveland, Ohio.
Filed September 8, 1931. Serial No. 318,854. PUBLISHED NOVEMBER 8, 1931. Class 6.

295,436. BRAID MADE OF CELLULOSE. ALGEMEENE KUNSTZIJDE UNIE N. V., Arnhem, Netherlands.
Filed September 10, 1931. Serial No. 318,900. PUBLISHED APRIL 19, 1932. Class 40.

295,437. METALLIC FLUID-CONDUCTING TILE, METALLIC SEWER AND DRAIN PIPE, METALLIC CULVERT PIPE, LINED AND UNLINED METALLIC CONDUIT FOR STEAM AND OTHER FLUIDS. THE RIC-WIL COMPANY, Cleveland, Ohio.
Filed October 21, 1931. Serial No. 320,274. PUBLISHED APRIL 26, 1932. Class 13.

295,438. PYROXYLIN MENU COVERS. SAMECO COMPANY, INC., Brockton, Mass.
Filed October 24, 1931. Serial No. 320,448. PUBLISHED APRIL 19, 1932. Class 2.

295,439. SANITARY PADS. DIANA MANUFACTURING COMPANY, Green Bay, Wis.
Filed November 13, 1931. Serial No. 321,099. PUBLISHED APRIL 26, 1932. Class 44.

295,440. ANTISEPTIC BATH COMPOUND. HANS V. JANSEN, doing business as Jansen Soap & Chemical Company, San Francisco, Calif.
Filed November 20, 1931. Serial No. 321,341. PUBLISHED APRIL 19, 1932. Class 6.

295,441. DRY CLEANING SOLVENTS. THE ASIATIC PETROLEUM COMPANY, LIMITED, London, England, assignor to Shell Oil Company, San Francisco, Calif.
Filed November 30, 1931. Serial No. 321,581. PUBLISHED APRIL 26, 1932. Class 4.

295,442. WIRE MESH AND WIRE CLOTH. GILBY WIRE COMPANY, Newark, N. J.
Filed December 4, 1931. Serial No. 321,757. PUBLISHED APRIL 19, 1932. Class 13.

295,443. TOY ANIMALS AND DOLLS. MAGYAR RUGOGYANTAARUGYÁR RÉSZVÉNYTÁRSASÁG, Budapest, Hungary.
Filed December 10, 1931. Serial No. 322,004. PUBLISHED APRIL 19, 1932. Class 22.

295,444. DEODORANT FOR USE IN GARBAGE CONTAINERS. ODOR-GO CORPORATION, Wilmington, Del., and Baltimore, Md.
Filed December 12, 1931. Serial No. 322,059. PUBLISHED MARCH 1, 1932. Class 6.

295,445. LINOLEUM AND OILED FLOOR COVERING. KOOPERATIVA FÖRBUNDET FÖRENING U. P. A., Stockholm, Sweden.
Filed December 15, 1931. Serial No. 322,134. PUBLISHED APRIL 12, 1932. Class 20.

295,446. REPAIR AND REPLACEMENT PARTS FOR HEATING, VENTILATING, AND AIR-CONDITIONING STRUCTURES. THE FOREST CITY FOUNDRIES COMPANY, Cleveland, Ohio.
Filed December 29, 1931. Serial No. 322,508. PUBLISHED APRIL 26, 1932. Class 34.

295,447. DENTAL INSTRUMENTS AND SUPPLIES. THE DENTAL SPECIALTY COMPANY, Denver, Colo.
Filed January 4, 1932. Serial No. 322,688. PUBLISHED APRIL 19, 1932. Class 44.

295,448. ANTISEPTIC PREPARATION. JOSEPH M. SPIELBERG and ABRAHAM GOODSTEIN, doing business as Goudre Laboratories, Brooklyn, N. Y.
Filed January 9, 1932. Serial No. 322,911. PUBLISHED APRIL 12, 1932. Class 6.

295,449. TAMPONS. JOSEPH M. SPIELBERG and ABRAHAM GOODSTEIN, doing business as Goudre Laboratories, Brooklyn, N. Y.
Filed January 9, 1932. Serial No. 322,912. PUBLISHED APRIL 26, 1932. Class 44.

295,450. TAMPONS. JOSEPH M. SPIELBERG and ABRAHAM GOODSTEIN, doing business as Goudre Laboratories, Brooklyn, N. Y.
Filed January 9, 1932. Serial No. 322,913. PUBLISHED APRIL 26, 1932. Class 44.

295,451. METAL DISPENSING TUBES FOR FARE TOKENS. LABERT ST. CLAIR, Rye, N. Y.
Filed January 14, 1932. Serial No. 323,015. PUBLISHED APRIL 19, 1932. Class 2.

295,452. LIVER MEDICINE. THE CHATTANOOGA MEDICINE COMPANY, Chattanooga, Tenn.
Filed January 18, 1932. Serial No. 323,125. PUBLISHED APRIL 26, 1932. Class 6.

295,453. GAME PLAYED WITH DICE AND SPECIAL RULES. ASHLEY G. HAZELTINE, Woodsville, N. H.
Filed January 27, 1932. Serial No. 323,492. PUBLISHED APRIL 19, 1932. Class 22.

295,454. GINGER ALE. DREWERYS DRY GINGER ALE, CANADA, LIMITED, Winnipeg, Manitoba, Canada.
Filed January 29, 1932. Serial No. 323,572. PUBLISHED APRIL 19, 1932. Class 45.

295,455. PROPHYLACTIC RUBBER ARTICLES. I. J. FRIEDLAND, Atlanta, Ga.
Filed February 1, 1932. Serial No. 323,655. PUBLISHED APRIL 19, 1932. Class 44.

295,456. EFFERVESCING SOLUTION OF MAGNESIA, AND MORE PARTICULARLY A PURGATIVE AND LAXATIVE. QUEEN CITY CHEMICAL CO., Buffalo, N. Y.
Filed February 1, 1932. Serial No. 323,715. PUBLISHED APRIL 19, 1932. Class 6.

295,457. PROPHYLACTICS FOR THE PREVENTION OF VENEREAL DISEASES. JOHN A. SHANK, doing business as Nodiz Drug Company, Chicago, Ill.
Filed February 3, 1932. Serial No. 323,793. PUBLISHED APRIL 19, 1932. Class 6.

295,458. HAIR TONIC. JOHN THIBODEAUX, Port Arthur, Tex.
Filed February 4, 1932. Serial No. 323,835. PUBLISHED APRIL 12, 1932. Class 6.

295,459. HAIR TONIC. PETER MARIN KOTOFF, St. Louis, Mo.
Filed February 8, 1932. Serial No. 323,945. PUBLISHED APRIL 12, 1932. Class 6.

295,460. LADIES' DRESSES AND LADIES' DRESSES USED FOR SPORT WEAR. GARMENT SPECIALTY COMPANY, INC., New York, N. Y.
Filed February 5, 1932. Serial No. 323,848. PUBLISHED APRIL 26, 1932. Class 39.

295,461. CLOTHING — NAMELY, COATS, VESTS, TROUSERS, KNICKERBOCKERS, TOPCOATS, RAINCOATS, AND OVERCOATS FOR MEN; OVERCOATS, KNICKERBOCKERS, AND JACKETS FOR WOMEN; COATS, VESTS, PANTS, KNICKERBOCKERS, AND OVERCOATS FOR YOUTHS AND CHILDREN. ALFRED DECKER & COHN, INC., Chicago, Ill.
Filed February 5, 1932. Serial No. 323,858. PUBLISHED APRIL 19, 1932. Class 39.

295,462. MEN'S HEAVY RUBBERS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed February 6, 1932. Serial No. 323,910. PUBLISHED APRIL 19, 1932. Class 39.

295,463. PERFUMES AND TOILET WATER. MAURICE LEVY, New York, N. Y.
Filed February 9, 1932. Serial No. 324,004. PUBLISHED APRIL 12, 1932. Class 6.

295,464. A MEDICINAL COMPOUND FOR USE IN TREATING DIABETES. PAUL M. MEAD & MRS. PAUL M. MEAD, Blackwell, Oklahoma.
Filed February 9, 1932. Serial No. 324,005. PUBLISHED APRIL 12, 1932. Class 6.

295,465. SHAMPOO PREPARATION. DUART MANUFACTURING COMPANY, LTD., San Francisco, Calif.
Filed February 10, 1932. Serial No. 324,084. PUBLISHED APRIL 26, 1932. Class 6.

295,466. BUTTONS NOT MADE OF PRECIOUS METAL. GEORGE A. LIPPINCOTT, Philadelphia, Pa.
Filed February 11, 1932. Serial No. 324,072. PUBLISHED APRIL 26, 1932. Class 40.

295,467. MEDICINAL PREPARATION FOR THE TREATMENT OF TEETH. DR. JOHN MILTON ROSENTHAL, Fort Wayne, Ind.
Filed February 12, 1932. Serial No. 324,116. PUBLISHED APRIL 12, 1932. Class 6.

295,468. DENTURES. COE LABORATORIES, INC., Chicago, Ill.
Filed February 11, 1932. Serial No. 324,123. PUBLISHED APRIL 26, 1932. Class 44.

295,469. CERTAIN NAMED WEARING APPAREL. BETHLEHEM TEXTILES COMPANY, Bethlehem, Pa.
Filed February 13, 1932. Serial No. 324,146. PUBLISHED APRIL 26, 1932. Class 39.

295,470. TAILORED SEAT COVERS, SEAT PADS, TAILORED AUTOMOBILE SEAT COVERS AND SEAT PADS, TAILORED CHAIR COVERS, AND CHAIR PADS MADE OF FABRIC, LEATHER, IMITATION LEATHER, AND MATTING AND COMBINATIONS THEREOF. EVR-KLEAN SEAT PAD COMPANY, St. Louis, Mo.
Filed February 15, 1932. Serial No. 324,162. PUBLISHED APRIL 26, 1932. Class 32.

295,471. HATS FOR WOMEN. KNEALE, INC., New York, N. Y.
Filed February 15, 1932. Serial No. 324,173. PUBLISHED APRIL 19, 1932. Class 39.

295,472. PAINT AND WALL CLEANER. CHAS. A. KRAUSE MILLING CO., Milwaukee, Wis.
Filed February 15, 1932. Serial No. 324,174. PUBLISHED APRIL 19, 1932. Class 4.

295,473. LUMINOUS TUBES AND LAMPS THAT EMIT ULTRA VIOLET RADIATIONS. SANTE INSTITUTE, LTD., Los Angeles, Calif.
Filed February 15, 1932. Serial No. 324,194. PUBLISHED APRIL 26, 1932. Class 44.

295,474. MALT BEVERAGE CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. ERIC W. HARVEY, Portland, Oreg.
Filed February 16, 1932. Serial No. 324,222. PUBLISHED APRIL 26, 1932. Class 48.

295,475. ROOT BEER SYRUP. CHAIN STORE ROOT BEER CO., INC., Rochester, N. Y.
Filed February 17, 1932. Serial No. 324,242. PUBLISHED APRIL 12, 1932. Class 45.

295,476. PREPARATION IN THE NATURE OF TYPE CLEANER. ARDO HERING, doing business as Nuproducts Co., New York, N. Y.
Filed February 17, 1932. Serial No. 324,255. PUBLISHED APRIL 19, 1932. Class 4.

295,477. NARROW STRETCHABLE BANDS AND BANDING IN THE NATURE OF ELASTIC WEBBING AND COVERED ELASTIC CORD. I. B. KLEINERT RUBBER COMPANY, New York, N. Y.
Filed February 17, 1932. Serial No. 324,260. PUBLISHED APRIL 19, 1932. Class 40.

295,478. SAFETY RAZOR BLADES. RADIO CIRCULAR CO. INC., New York, N. Y.
Filed February 18, 1932. Serial No. 324,297. PUBLISHED APRIL 19, 1932. Class 23.

295,479. WOMEN'S AND CHILDREN'S FELT HATS AND FELT HAT BODIES. F. & A. STIRN CORPORATION, New York, N. Y.
Filed February 18, 1932. Serial No. 324,299. PUBLISHED APRIL 19, 1932. Class 39.

295,480. SURGICAL BANDAGES, SURGICAL WRAPPINGS, AND TOURNIQUETS. SURGICAL DRESSINGS, INC., Boston, Mass.
Filed February 19, 1932. Serial No. 324,325. PUBLISHED APRIL 26, 1932. Class 44.

295,481. HAIR WAVING PADS. ZOTOS, INC., New York, N. Y., now by change of name, Zotos Corporation, New York, N. Y., a Corporation of New York.
Filed February 19, 1932. Serial No. 324,330. PUBLISHED APRIL 26, 1932. Class 44.

295,482. FIRST AID KIT. LOUIS PHILIPPE, New York, N. Y.
Filed February 20, 1932. Serial No. 324,357. PUBLISHED APRIL 19, 1932. Class 44.

295,483. BASE METAL STEAK PLATTER. THE WAGNER MANUFACTURING COMPANY, Sidney, Ohio.
Filed February 20, 1932. Serial No. 324,361. PUBLISHED APRIL 19, 1932. Class 13.

295,484. AXES. EMERSON & STEVENS MFG. CO. INC., Oakland, Me.
Filed February 23, 1932. Serial No. 324,374. PUBLISHED APRIL 19, 1932. Class 23.

295,485. HAND HAMMERS. DAVID MAYDOLE TOOL CORPORATION, Norwich, N. Y.
Filed February 19, 1932. Serial No. 324,414. PUBLISHED APRIL 26, 1932. Class 23.

295,486. GAME APPARATUS HAVING BALL RECEIVING AND DISCHARGING MECHANISM. COINOMATIC CORPORATION, Buffalo, N. Y.
Filed February 24, 1932. Serial No. 324,429. PUBLISHED APRIL 19, 1932. Class 22.

295,487. MEN'S AND BOYS' UNDERWEAR. DUOFOLD HEALTH UNDERWEAR COMPANY, Mohawk, N. Y.
Filed February 24, 1932. Serial No. 324,433. PUBLISHED APRIL 26, 1932. Class 39.

295,488. PAPER USED IN THE PRINTING ART. INTERNATIONAL PAPER COMPANY, New York, N. Y.
Filed February 24, 1932. Serial No. 324,438. PUBLISHED APRIL 19, 1932. Class 37.

295,489. FROZEN CONFECTIONS, INCLUDING ICE CREAM AND WATER ICES. GENERAL FROZEN PRODUCTS, INC., Fort Worth, Tex.
Filed February 25, 1932. Serial No. 324,463. PUBLISHED APRIL 19, 1932. Class 46.

295,490. TOILET SOAP. HOLMAN SOAP COMPANY, Chicago, Ill.
Filed February 25, 1932. Serial No. 324,465. PUBLISHED APRIL 19, 1932. Class 4.

295,491. WOMEN'S, MISSES', AND CHILDREN'S SHOES CONSTRUCTED OF LEATHER AND/OR FABRIC. THE SELBY SHOE COMPANY, Portsmouth, Ohio.
Filed February 25, 1932. Serial No. 324,489. PUBLISHED APRIL 19, 1932. Class 39.

295,492. WOMEN'S, MISSES', AND CHILDREN'S SHOES CONSTRUCTED OF LEATHER AND/OR FABRIC. THE SELBY SHOE COMPANY, Portsmouth, Ohio.
Filed February 25, 1932. Serial No. 324,490. PUBLISHED APRIL 19, 1932. Class 39.

295,493. DRESS SHIRTS. STETSON SHIRT CO. INC., New York, N. Y.
Filed February 25, 1932. Serial No. 324,492. PUBLISHED APRIL 26, 1932. Class 39.

295,494. CERTAIN NAMED WEARING APPAREL. VANITY FAIR SILK MILLS, Reading, Pa.
Filed February 25, 1932. Serial No. 324,497. PUBLISHED APRIL 19, 1932. Class 39.

295,495. PROPHYLACTIC RUBBER ARTICLES. DEAN RUBBER MANUFACTURING COMPANY, North Kansas City, Mo.
Filed February 26, 1932. Serial No. 324,507. PUBLISHED APRIL 26, 1932. Class 44.

295,496. HATS FOR WOMEN. HODSHON-BERG, INCORPORATED, Norwalk, Conn., and New York, N. Y.
Filed February 26, 1932. Serial No. 324,518. PUBLISHED APRIL 19, 1932. Class 39.

295,497. SAFETY RAZOR BLADES. MARATHON RAZOR BLADE CO. INC., Irvington, N. J.
Filed February 26, 1932. Serial No. 324,537. PUBLISHED APRIL 19, 1932. Class 23.

295,498. INHALING AND RUBBING CREAM USED IN THE TREATMENT OF COLDS IN THE HEAD AND CHEST, MUSCULAR SORE THROAT, MUSCULAR ACHES, NEURALGIC PAINS, AND FOR COMFORTING TREATMENT IN BRONCHIAL AND ASTHMATIC CONDITIONS, AND AS AN ANALGESIC. DAVID MORTIMER, doing business as Bon de Mist Company, Boston, Mass.
Filed February 26, 1932. Serial No. 324,539. PUBLISHED APRIL 12, 1932. Class 6.

295,499. CORSETS, BRASSIERES, AND GIRDLES. VANITY BRASSIERE COMPANY, INC., New York, N. Y.
Filed February 26, 1932. Serial No. 324,545. PUBLISHED APRIL 19, 1932. Class 39.

295,500. SCYTHES. EMERSON & STEVENS MFG. CO. INC., Oakland, Me.
Filed February 27, 1932. Serial No. 324,552. PUBLISHED APRIL 19, 1932. Class 23.

295,501. PREPARATION USED IN THE TREATMENT OF COUGHS AND COLDS, COLD TABLETS, AND LAXATIVE TABLETS. FREDERICK H. FRICKE, St. Louis, Mo.
Filed February 27, 1932. Serial No. 324,554. PUBLISHED APRIL 12, 1932. Class 6.

295,502. POWDERED EGYPTIAN HENNA AND OTHER VEGETABLE PRODUCTS USED AS A HAIR TINT. JOHN WERT HELFRICH, doing business as Col-O-Ray Products Co., Los Angeles, Calif.
Filed February 27, 1932. Serial No. 324,559. PUBLISHED APRIL 19, 1932. Class 6.

295,503. SHOWER BATH FIXTURES, LAVATORY FIXTURES, BATH FIXTURES, FLUSH VALVES, FAUCETS, PLUMBING SUPPLY PIPES, AND COMPRESSION STOPS. SCOVILL MANUFACTURING COMPANY, Waterbury, Conn.
Filed February 27, 1932. Serial No. 324,572. PUBLISHED APRIL 19, 1932. Class 13.

295,504. MACHINERY AND MACHINE PARTS. THE TAYLOR MANUFACTURING CORPORATION, Milwaukee, Wis.
Filed February 27, 1932. Serial No. 324,574. PUBLISHED APRIL 26, 1932. Class 23.

295,505. MEN'S SUITS. BROWNING, KING & CO., New York, N. Y.
Filed February 27, 1932. Serial No. 324,582. PUBLISHED APRIL 19, 1932. Class 39.

295,506. PAINT ENAMELS, VARNISH STAINS, AND LACQUERS, BRONZE ENAMEL, AND BRONZING LIQUID. VALENTINE & COMPANY, New York, N. Y.
Filed February 29, 1932. Serial No. 324,635. PUBLISHED APRIL 12, 1932. Class 16.

295,507. HOSIERY; UNDERWEAR FOR MEN, WOMEN, AND CHILDREN; SWEATER COATS, BATHING SUITS, LEATHER AND FABRIC GLOVES, AND WORK SHIRTS. ASKIN BROTHERS COMPANY, Baltimore, Md.
Filed February 27, 1932. Serial No. 324,640. PUBLISHED APRIL 26, 1932. Class 39.

295,508. PHOTOGRAPHIC FILM. AGFA ANSCO CORPORATION, Binghamton, N. Y.
Filed March 1, 1932. Serial No. 324,643. PUBLISHED APRIL 19, 1932. Class 26.

295,509. WICKS FOR OIL BURNERS. PAUL BARGER, doing business as Barger & Co., Greenfield, Mass.
Filed March 1, 1932. Serial No. 324,647. PUBLISHED APRIL 19, 1932. Class 34.

295,510. MECHANICAL CONVEYOR BELTS. EDWARD C. BOWERS and CHARLES L. FELDMAN, receivers for Wickwire Spencer Steel Company, New York, N. Y.
Filed March 1, 1932. Serial No. 324,651. PUBLISHED APRIL 19, 1932. Class 23.

295,511. MEDICAMENT DISPENSING TUBES. THE L. D. CAULK COMPANY, Milford, Del.
Filed March 1, 1932. Serial No. 324,655. PUBLISHED APRIL 19, 1932. Class 44.

295,512. MEDICAMENT INJECTING TUBES. THE L. D. CAULK COMPANY, Milford, Del.
Filed March 1, 1932. Serial No. 324,656. PUBLISHED APRIL 19, 1932. Class 44.

295,513. SKIN OINTMENT. WALTER E. MASON, doing business as Derma-Helth Co., Omaha, Nebr.
Filed March 1, 1932. Serial No. 324,669. PUBLISHED APRIL 12, 1932. Class 6.

295,514. SUITS, DRESSES, CLOAKS FOR MISSES. METZGER AND BERNARD INC., New York, N. Y.
Filed February 25, 1932. Serial No. 324,680. PUBLISHED APRIL 19, 1932. Class 39.

295,515. CLEANSING PREPARATION. HAWLEY AND JONES, Philadelphia, Pa.
Filed March 2, 1932. Serial No. 324,710. PUBLISHED APRIL 19, 1932. Class 4.

295,516. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. PARFUMERIE ST. DENIS, New York, N. Y.
Filed March 2, 1932. Serial No. 324,720. PUBLISHED APRIL 26, 1932. Class 6.

295,517. MILITARY SMOKELESS POWDER. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed March 3, 1932. Serial No. 324,735. PUBLISHED APRIL 12, 1932. Class 9.

295,518. MILITARY SMOKELESS POWDER. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed March 3, 1932. Serial No. 324,736. PUBLISHED APRIL 12, 1932. Class 9.

295,519. TOY FIGURE REPRESENTING A CLOWN. INTERNATIONAL SILVER COMPANY, Meriden, Conn.
Filed March 3, 1932. Serial No. 324,744. PUBLISHED APRIL 12, 1932. Class 22.

295,520. FOOD DRINK CONSISTING OF A CHOCOLATE-FLAVORED POWDER CONTAINING CONTENTS AND EXTRACTS OF SOY BEANS. PETROLAGAR LABORATORIES, INC., Chicago, Ill.
Filed March 3, 1932. Serial No. 324,758. PUBLISHED APRIL 19, 1932. Class 46.

295,521. STRAP AND T HINGES. THE STANLEY WORKS, New Britain, Conn.
Filed March 3, 1932. Serial No. 324,765. PUBLISHED APRIL 26, 1932. Class 13.

295,522. LAXATIVE PREPARATION. ASSOCIATED LABORATORIES, INC., doing business as The Neogen Company, New York, N. Y.
Filed March 4, 1932. Serial No. 324,770. PUBLISHED APRIL 26, 1932. Class 6.

295,523. PLUMBING AND STEAM FITTING VALVES AND TRAPS. BARNES & JONES, Boston, Mass.
Filed March 4, 1932. Serial No. 324,772. PUBLISHED APRIL 26, 1932. Class 13.

295,524. CERTAIN NAMED WEARING APPAREL. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J.
Filed March 4, 1932. Serial No. 324,792. PUBLISHED APRIL 19, 1932. Class 39.

295,525. SPARK PLUG WRENCH SETS. DEFIANCE SPARK PLUGS, INC., Toledo, Ohio.
Filed March 4, 1932. Serial No. 324,784. PUBLISHED APRIL 19, 1932. Class 23.

295,526. CERTAIN NAMED WEARING APPAREL. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J.
Filed March 4, 1932. Serial No. 324,793. PUBLISHED APRIL 19, 1932. Class 39.

295,527. SEWING MACHINES. UNION SPECIAL MACHINE COMPANY, Chicago, Ill.
Filed March 4, 1932. Serial No. 324,806. PUBLISHED APRIL 26, 1932. Class 23.

295,528. PLAYING CARDS. THE UNITED STATES PLAYING CARD COMPANY, East Norwood, Cincinnati, Ohio.
Filed March 4, 1932. Serial No. 324,808. PUBLISHED APRIL 26, 1932. Class 22.

295,529. RUG AND CARPET WASHING MACHINES. UNITED VACUUM APPLIANCE CORP., Connersville, Ind.
Filed March 5, 1932. Serial No. 324,833. PUBLISHED APRIL 26, 1932. Class 24.

295,530. DETERGENTS MADE OF SOAP AND ALKALINE MATERIALS. BEACH SOAP COMPANY, Lawrence, Mass.
Filed March 7, 1932. Serial No. 324,836. PUBLISHED APRIL 19, 1932. Class 4.

295,531. ICE CREAM PAILS OF CARDBOARD. BLOOMER BROS. COMPANY, Newark, N. Y.
Filed March 7, 1932. Serial No. 324,838. PUBLISHED APRIL 26, 1932. Class 2.

295,532. COMMON PINS, SAFETY PINS, TOILET PINS, HAIRPINS, T HEAD PINS, NEEDLES FOR SEWING BY HAND, SNAP FASTENERS, HOOKS AND EYES, ALL MADE OF NON-PRECIOUS METAL. WILLIAM PRYM OF AMERICA, INC., New York and Long Island City, N. Y.
Filed March 7, 1932. Serial No. 324,852. PUBLISHED APRIL 19, 1932. Class 40.

295,533. NATURAL SPRING WATER. WONDER HEALTH SPRINGS, INC., Detroit, Mich.
Filed March 7, 1932. Serial No. 324,864. PUBLISHED APRIL 26, 1932. Class 45.

295,534. NONALCOHOLIC, MALTLESS SYRUPS, EXTRACTS, AND CONCENTRATES IN DRIED OR LIQUID FORM FOR MAKING SOFT DRINKS. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed March 8, 1932. Serial No. 324,893. PUBLISHED APRIL 19, 1932. Class 45.

295,535. WEEKLY HOUSE MAGAZINE. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed March 8, 1932. Serial No. 324,899. PUBLISHED APRIL 19, 1932. Class 38.

295,536. HAIR TONICS. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa.
Filed March 8, 1932. Serial No. 324,917. PUBLISHED APRIL 26, 1932. Class 6.

295,537. CAPS FOR AUTOMOBILE GASOLINE TANKS, AUTOMOBILE WINDSHIELD WIPERS, AUTOMOBILE WINDSHIELD WIPER BLADES, AND NON-GLARE REAR VISION MIRRORS FOR AUTOMOBILES. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed March 9, 1932. Serial No. 324,943. PUBLISHED APRIL 26, 1932. Class 19.

295,538. GOLF BALLS. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed March 9, 1932. Serial No. 324,945. PUBLISHED APRIL 12, 1932. Class 22.

295,539. OIL FILTER FOR COMBUSTION ENGINES. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed March 9, 1932. Serial No. 324,946. PUBLISHED APRIL 19, 1932. Class 23.

295,540. RADIATOR HOSE, BRAKE LININGS, AND AUTOMOBILE FAN BELTS. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed March 9, 1932. Serial No. 324,948. PUBLISHED APRIL 19, 1932. Class 35.

295,541. AUTOMOBILE GOGGLES. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed March 9, 1932. Serial No. 324,949. PUBLISHED APRIL 19, 1932. Class 26.

295,542. RAZOR BLADES. BLOOMINGDALE BROS., INC., New York, N. Y.
Filed March 9, 1932. Serial No. 324,952. PUBLISHED APRIL 19, 1932. Class 23.

295,543. ELECTRIC HAIR DRYERS. THE ELECTRIC MFG. CO., San Francisco, Calif.
Filed March 9, 1932. Serial No. 324,957. PUBLISHED APRIL 26, 1932. Class 44.

295,544. CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, EXCLUSIVE OF CIDERS. JOSEPH BRUNI, doing business as Nassau Coca Cola Bottling Co., Fernandina, Fla.
Filed March 10, 1932. Serial No. 324,983. PUBLISHED APRIL 19, 1932. Class 45.

295,545. LOCKS. DUDLEY LOCK CORPORATION, Chicago, Ill.
Filed March 10, 1932. Serial No. 324,991. PUBLISHED APRIL 26, 1932. Class 25.

295,546. LOCKS. DUDLEY LOCK CORPORATION, Chicago, Ill.
Filed March 10, 1932. Serial No. 324,992. PUBLISHED APRIL 26, 1932. Class 25.

295,547. HOSIERY. GOTHAM SILK HOSIERY COMPANY, INC., New York, N. Y.
Filed March 10, 1932. Serial No. 324,994. PUBLISHED APRIL 19, 1932. Class 39.

295,548. SENSITIZED PHOTOGRAPHIC PAPER. THE HALOID COMPANY, Rochester, N. Y.
Filed March 10, 1932. Serial No. 324,996. PUBLISHED APRIL 19, 1932. Class 26.

295,549. SENSITIZED PHOTOGRAPHIC PAPER. THE HALOID COMPANY, Rochester, N. Y.
Filed March 10, 1932. Serial No. 324,997. PUBLISHED APRIL 26, 1932. Class 26.

295,550. NON-TOXIC IODINE COMPOUND FOR THE TREATMENT OF GASTRIC ULCERS AND CHRONIC SUPERFICIAL ULCERS. JOHN C. HARRY, doing business as The Pyodin Hygienic Laboratories, El Paso, Tex.
Filed March 10, 1932. Serial No. 324,999. PUBLISHED APRIL 26, 1932. Class 6.

295,551. BOOK. JOHN MARTIN HISS, Columbus, Ohio.
Filed December 30, 1930. Serial No. 309,476. PUBLISHED APRIL 19, 1932. Class 38.

295,552. COCOA AND CHOCOLATE. NAAMLOOZE VENNOOTSCHAP DROSTE'S CACAO- EN CHOCOLADEFABRIEKEN, Haarlem, Netherlands.
Filed January 8, 1931. Serial No. 309,740. PUBLISHED APRIL 26, 1932. Class 46.

295,553. BASE METAL TRAYS FOR HOLDING BABY TOILET ARTICLES, BABY FOOD STERILIZERS, MILK PASTUERIZERS, BOTTLE WARMERS, AND FORMULA CONTAINERS. THE KITCHEN KATCH-ALL CORPORATION, Greenwich, Ohio.
Filed February 3, 1931. Serial No. 310,681. PUBLISHED APRIL 26, 1932. Class 13.

295,554. X-RAY APPARATUS, PARTS AND APPURTENANCES. THE KELLEY-KOETT MANUFACTURING COMPANY, Covington, Ky.
Filed March 4, 1931. Serial No. 311,739. PUBLISHED APRIL 19, 1932. Class 44.

295,555. DIE SETS. ADVANCE DIE SET CORPORATION, Chicago, Ill.
Filed March 20, 1931. Serial No. 312,328. PUBLISHED APRIL 26, 1932. Class 23.

295,556. AUTOMATIC SPRINKLER SYSTEMS FOR FIRE PROTECTION, AND PARTS THEREOF. "AUTOMATIC" SPRINKLER CORPORATION OF AMERICA, Cleveland, Ohio.
Filed March 27, 1931. Serial No. 312,594. PUBLISHED APRIL 26, 1932. Class 18.

295,557. WAVE SETTERS. S. H. KRESS & CO., New York, N. Y.
Filed March 30, 1931. Serial No. 312,712. PUBLISHED APRIL 12, 1932. Class 40.

295,558. RADIUM EMANATION APPARATUS. RADON COMPANY, INC., New York, N. Y.
Filed April 3, 1931. Serial No. 312,926. PUBLISHED APRIL 19, 1932. Class 44.

295,559. BACONS, HAMS, AND LARD. BABBITT BROTHERS TRADING COMPANY, Flagstaff, Ariz.
Filed April 27, 1931. Serial No. 313,881. PUBLISHED JANUARY 19, 1932. Class 46.

295,560. MACHINERY AND TOOLS. CHICAGO PNEUMATIC TOOL COMPANY, New York, N. Y.
Filed May 13, 1931. Serial No. 314,484. PUBLISHED AUGUST 18, 1931. Class 23.

295,561. CASTINGS OF FERROUS ALLOYS AND WROUGHT SHEETS AND BARS OF SUCH ALLOYS. THE DURIRON COMPANY, INC., Dayton, Ohio.
Filed May 21, 1931. Serial No. 314,842. PUBLISHED APRIL 19, 1932. Class 14.

295,562. CANDY. I. KOSLOFF & SONS, INC., New York, N. Y.
Filed May 22, 1931. Serial No. 314,914. PUBLISHED APRIL 19, 1932. Class 46.

295,563. ASBESTOS, COTTON, FIBROUS, AND METAL MACHINERY PACKINGS. JOHNS-MANVILLE CORPORATION, New York, N. Y.
Filed June 6, 1931. Serial No. 315,493. PUBLISHED APRIL 19, 1932. Class 35.

295,564. RAZOR BLADES. S. H. KRESS & CO., New York, N. Y.
Filed June 9, 1931. Serial No. 315,617. PUBLISHED APRIL 26, 1932. Class 23.

295,565. CONDENSER TUBES AND FERRULES. NATIONAL ELECTRIC PRODUCTS CORPORATION, New York, N. Y., assignor to Phelps Dodge Copper Products Corporation, a Corporation of Delaware.
Filed June 30, 1931. Serial No. 316,498. PUBLISHED APRIL 19, 1932. Class 13.

295,566. ANTACID LAXATIVE COMPRISING A SUSPENSION OF HYDRATE OF MAGNESIA IN WATER AND HAVING A MILK WHITE APPEARANCE, AND ALSO KNOWN PHARMACEUTICALLY AS MAGNESIA MAGMA. MARINE CHEMICALS COMPANY, LTD., South San Francisco and San Francisco, Calif.
Filed July 7, 1931. Serial No. 316,701. PUBLISHED APRIL 12, 1932. Class 6.

295,567. ANTACID LAXATIVE COMPRISING A SUSPENSION OF HYDRATE OF MAGNESIA IN WATER AND HAVING A MILK WHITE APPEARANCE, AND ALSO KNOWN PHARMACEUTICALLY AS MAGNESIA MAGMA. MARINE CHEMICALS COMPANY, LTD., South San Francisco and San Francisco, Calif.
Filed July 7, 1931. Serial No. 316,702. PUBLISHED APRIL 12, 1932. Class 6.

295,568. HAT RACKS AND HALL BOYS. IDA A. STEINER, Topeka, Kans.
Filed August 29, 1931. Serial No. 318,573. PUBLISHED APRIL 26, 1932. Class 32.

295,569. BRAKE LINING. MARSHALL ASBESTOS CORPORATION, Troy, N. Y.
Filed September 8, 1931. Serial No. 318,838. PUBLISHED APRIL 26, 1932. Class 35.

295,570. BRAKE LINING. MARSHALL ASBESTOS CORPORATION, Troy, N. Y.
Filed September 8, 1931. Serial No. 318,839. PUBLISHED APRIL 26, 1932. Class 35.

295,571. APPARATUS FOR THE TREATMENT OF SOLIDS SUSPENDED IN LIQUIDS AND MORE PARTICULARLY FOR THE CLASSIFICATION OF SUSPENDED SOLIDS AND THE REMOVAL OF SUCH SOLIDS—NAMELY, CONCENTRATING TABLES, JIGS, AND VANNERS. THE DORR COMPANY, INC., New York, N. Y.
Filed September 28, 1931. Serial No. 319,477. PUBLISHED APRIL 26, 1932. Class 23.

295,572. APPARATUS FOR THE TREATMENT OF SOLIDS SUSPENDED IN LIQUIDS, AND MORE PARTICULARLY FOR AGITATING APPARATUS. THE DORR COMPANY, INC., New York, N. Y.
Filed October 10, 1931. Serial No. 319,928. PUBLISHED APRIL 19, 1932. Class 23.

295,573. COMIC STRIPS. KENNETH L. KLING, New York, N. Y.
Filed November 9, 1931. Serial No. 320,936. PUBLISHED APRIL 19, 1932. Class 38.

295,574. BASSINETTES, INFANTS' SWINGS, INFANTS' CRIBS, PLAY-PENS, AND SIMILAR ARTICLES OF FURNITURE FOR THE CARE OF INFANTS. C. (CLARENCE) MARTIN, Tacoma, Wash.
Filed November 13, 1931. Serial No. 321,114. PUBLISHED APRIL 26, 1932. Class 32.

295,575. MAGNIFYING GLASSES MOUNTED IN FOLDING POCKET ALBUMS WITH RACKS FOR VIEWING PICTURES, PHOTOGRAPHS, AND THE LIKE. CARL NEITHOLD AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed November 14, 1931. Serial No. 321,129. PUBLISHED APRIL 26, 1932. Class 26.

295,576. CENTRIFUGES, CENTRIFUGAL SEPARATORS, AND CENTRIFUGE ACCESSORIES AND EQUIPMENT. INTERNATIONAL EQUIPMENT COMPANY, Boston, Mass.
Filed January 2, 1932. Serial No. 322,641. PUBLISHED APRIL 26, 1932. Class 26.

295,577. SEMI-ANNUAL PUBLICATION. AHRENS PUBLISHING COMPANY, INC., New York, N. Y.
Filed January 4, 1932. Serial No. 322,672. PUBLISHED APRIL 19, 1932. Class 38.

295,578. LUBRICANT FITTINGS OR NIPPLES, COUPLERS, AND NOZZLES, ETC. THE LUBRICATION CORPORATION, South Bend, Ind.
Filed January 8, 1932. Serial No. 322,827. PUBLISHED APRIL 26, 1932. Class 23.

295,579. COFFEE. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed February 25, 1932. Serial No. 324,491. PUBLISHED APRIL 19, 1932. Class 46.

295,580. CANNED ASPARAGUS. ROCHELLE ASPARAGUS COMPANY, Rochelle, Ill.
Filed February 27, 1932. Serial No. 324,571. PUBLISHED APRIL 26, 1932. Class 46.

295,581. CONCENTRATED FOOD PRODUCT IN THE FORM OF TABLETS OR POWDER, DRIED FRUIT, FRUIT PRESERVE, FRUIT JELLY, MARMALADE, CANNED FRUIT, AND CANDIED CONFECTION. AUSTIN W. LANDQUIST, New York, N. Y.
Filed March 3, 1932. Serial No. 324,749. PUBLISHED APRIL 19, 1932. Class 46.

295,582. PAPER PATTERNS FOR GARMENTS. THE NEW YORK PATTERN COMPANY, INC., New York, N. Y.
Filed March 10, 1932. Serial No. 325,013. PUBLISHED APRIL 26, 1932. Class 26.

295,583. VELVETS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed March 10, 1932. Serial No. 325,017. PUBLISHED APRIL 19, 1932. Class 42.

295,584. VELVETS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed March 10, 1932. Serial No. 325,018. PUBLISHED APRIL 19, 1932. Class 42.

295,585. PILE FABRICS IN THE PIECE. E. F. TIMME & SON, New York, N. Y.
Filed March 10, 1932. Serial No. 325,025. PUBLISHED APRIL 19, 1932. Class 42.

295,586. REFRIGERATING APPARATUS, PARTICULARLY DOMESTIC REFRIGERATORS OF THE ELECTRIC TYPE. DOMESTIC INDUSTRIES, INC., Mansfield, Ohio.
Filed March 11, 1932. Serial No. 325,037. PUBLISHED APRIL 19, 1932. Class 31.

295,587. INTERNAL COMBUSTION ENGINES. THE NEW IDEA SPREADER COMPANY, Coldwater, Ohio.
Filed March 11, 1932. Serial No. 325,045. PUBLISHED APRIL 19, 1932. Class 23.

295,588. MECHANICAL REFRIGERATORS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed March 11, 1932. Serial No. 325,048. PUBLISHED APRIL 19, 1932. Class 31.

295,589. SAFETY RAZOR BLADES. THE UNSINGER CUTLERY CO., INC., Newark, N. J.
Filed March 11, 1932. Serial No. 325,051. PUBLISHED APRIL 19, 1932. Class 23.

295,590. SAFETY RAZOR BLADES. THE UNSINGER CUTLERY CO., INC., Newark, N. J.
Filed March 11, 1932. Serial No. 325,052. PUBLISHED APRIL 19, 1932. Class 23.

295,591. WATCHES, MORE ESPECIALLY WRIST OR STRAP WATCHES. BULOVA WATCH COMPANY, INC., New York, N. Y.
Filed March 12, 1932. Serial No. 325,059. PUBLISHED APRIL 26, 1932. Class 27.

295,592. ELECTRIC CLOCKS AND CASES AND MOVEMENTS THEREFOR. DELTAH ELECTRIC CORPORATION, New York, N. Y.
Filed March 12, 1932. Serial No. 325,063. PUBLISHED APRIL 26, 1932. Class 27.

295,593. LADIES' UNDERWEAR. JULIUS KAYSER & CO., New York, N. Y.
Filed March 12, 1932. Serial No. 325,069. PUBLISHED APRIL 19, 1932. Class 39.

295,594. HOSIERY. MERIT HOSIERY COMPANY, INC., New York, N. Y.
Filed March 12, 1932. Serial No. 325,071. PUBLISHED APRIL 26, 1932. Class 39.

295,595. INDUSTRIAL OIL BURNERS. TITMAS CO., INC., New Orleans, La.
Filed March 12, 1932. Serial No. 325,080. PUBLISHED APRIL 26, 1932. Class 34.

295,596. CANDY. YES PURE FOOD PRODUCTS COMPANY, Riverside, Calif.
Filed March 12, 1932. Serial No. 325,082. PUBLISHED APRIL 19, 1932. Class 46.

295,597. BABY JUMPERS. JACOB KERSTEN, Kalamazoo, Mich.
Filed March 14, 1932. Serial No. 325,100. PUBLISHED APRIL 19, 1932. Class 22.

295,598. WOMEN'S, MISSES', AND CHILDREN'S COATS; MEN'S AND BOYS' COATS, RAIN COATS, AND BATHING SUITS. SARI R. SINGER, New York, N. Y.
Filed March 14, 1932. Serial No. 325,119. PUBLISHED APRIL 26, 1932. Class 39.

295,599. NON-ALCOHOLIC, MALTLESS SYRUP, CONCENTRATE, AND FLAVOR FOR MAKING SOFT DRINKS. TRIPLE "XXX" COMPANY, Galveston, Tex.
Filed March 14, 1932. Serial No. 325,125. PUBLISHED APRIL 19, 1932. Class 45.

295,600. FRESH OYSTERS. WEST COAST OYSTER FARMS, LTD., San Francisco, Calif.
Filed March 14, 1932. Serial No. 325,129. PUBLISHED APRIL 26, 1932. Class 46.

295,601. FISH LINES. ALBERT BROWN, Rochester, N. Y.
Filed March 15, 1932. Serial No. 325,134. PUBLISHED APRIL 19, 1932. Class 22.

295,602. REFRIGERATION APPARATUS AND PARTS THEREOF. EASTMAN, SCOTT & COMPANY, Atlanta, Ga.
Filed March 15, 1932. Serial No. 325,138. PUBLISHED APRIL 19, 1932. Class 31.

295,603. PAJAMAS. VAN RAALTE COMPANY, New York, N. Y.
Filed March 15, 1932. Serial No. 325,156. PUBLISHED APRIL 19, 1932. Class 39.

295,604. MEDICINAL PREPARATION USED IN THE TREATMENT OF CERTAIN TYPES OF NUTRITIONAL ANEMIA. THE PAINE DRUG COMPANY, Rochester, N. Y.
Filed March 16, 1932. Serial No. 325,182. PUBLISHED APRIL 26, 1932. Class 6.

295,605. YARN. CLOVER MILLS COMPANY, Clover, S. C.
Filed March 18, 1932. Serial No. 325,252. PUBLISHED APRIL 26, 1932. Class 43.

295,606. ANTISEPTIC, DISINFECTANT, AND DEODORANT FOR GENERAL FARM AND HOUSEHOLD USE. NORTH METAL & CHEMICAL COMPANY, INC., York, Pa.
Filed March 18, 1932. Serial No. 325,267. PUBLISHED APRIL 26, 1932. Class 6.

295,607. METAL BOTTLE AND JAR CLOSURES. ARMSTRONG CORK COMPANY, Lancaster, Pa.
Filed March 19, 1932. Serial No. 325,281. PUBLISHED APRIL 26, 1932. Class 50.

295,608. PREPARATION FOR DRESSING THE HAIR. BENJAMIN ANSEHL, doing business as The Benjamin Ansehl Company, University City, Mo.
Filed March 21, 1932. Serial No. 325,313. PUBLISHED APRIL 26, 1932. Class 6.

295,609. PREPARATION FOR THE TREATMENT OF RINGWORM. DON CAMERON KENT, doing business as Cherokee Medical Co., Cherokee, Iowa.
Filed March 22, 1932. Serial No. 325,368. PUBLISHED APRIL 26, 1932. Class 6.

295,610. ATHLETIC APPLIANCES—NAMELY, ROWING MACHINES. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y.
Filed March 24, 1932. Serial No. 325,429. PUBLISHED APRIL 26, 1932. Class 22.

295,611. HOSE, BELTING, AND PACKING MADE OF RUBBER AND FABRIC. HEWITT-GUTTA PERCHA RUBBER CORPORATION, Buffalo, N. Y.
Filed January 24, 1930. Serial No. 295,168. PUBLISHED APRIL 19, 1932. Class 35.

295,612. THERMOSTATIC VALVES AND TRAPS. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio.
Filed May 12, 1930. Serial No. 300,318. PUBLISHED APRIL 26, 1932. Class 26.

295,613. CANDIES. HUYLER'S WHOLESALE DIVISION, INC., New York, N. Y., assignor to Huyler's, New York, N. Y., a Corporation of New York.
Filed May 21, 1930. Serial No. 300,945. PUBLISHED APRIL 26, 1932. Class 46.

295,614. PORTABLE HAND FIRE EXTINGUISHERS AND STATIONARY AUTOMATIC FIRE EXTINGUISHERS. MERCHANT & EVANS COMPANY, Philadelphia, Pa.
Filed August 12, 1930. Serial No. 304,505. PUBLISHED APRIL 26, 1932. Class 23.

295,615. BAKING POWDER. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed September 24, 1930. Serial No. 306,020. PUBLISHED APRIL 12, 1932. Class 6.

295,616. RADIATORS PRIMARILY FOR HEATING OR COOLING. ROME BRASS RADIATION CORPORATION, New York, N. Y., assignor to Rome Radiator Company, Inc., Rome, N. Y., a Corporation of Maryland.
Filed November 3, 1930. Serial No. 307,509. PUBLISHED APRIL 19, 1932. Class 34.

295,617. GUT STRINGS FOR RACKETS. JOHNSON SUTURE CORPORATION, Chicago, Ill.
Filed December 12, 1930. Serial No. 308,890. PUBLISHED APRIL 26, 1932. Class 22.

295,618. CANDY BARS. F. A. MARTOCCIO COMPANY, doing business as Hollywood Candy Co., Minneapolis, Minn.
Filed August 10, 1931. Serial No. 317,848. PUBLISHED APRIL 26, 1932. Class 46.

295,619. CANDY. GOLDEN NUGGET SWEETS LTD., San Francisco, Calif.
Filed August 24, 1931. Serial No. 318,357. PUBLISHED APRIL 26, 1932. Class 46.

295,620. SALTED NUTS AND NUTS IN THEIR NATURAL STATE. TRIANGLE NUT CO., Kansas City, Mo.
Filed September 19, 1931. Serial No. 319,224. PUBLISHED APRIL 26, 1932. Class 46.

295,621. CHOCOLATE COVERED CANDY BAR COMPOSED OF HONEY, SUGAR, CORN SIRUP, EGG, COCOA, AND PROCESSED NUTS. YORK CONE COMPANY, York, Pa.
Filed October 10, 1931. Serial No. 319,958. PUBLISHED APRIL 26, 1932. Class 46.

295,622. SWEET POTATOES IN THEIR NATURAL STATE. ALBERT L. DEANE, doing business as Rancho Perdido, Foley, Ala.
Filed October 21, 1931. Serial No. 320,253. PUBLISHED APRIL 12, 1932. Class 46.

295,623. FRESH DOMESTIC RABBIT MEAT. LEHIGH PACKING CO. INC., Allentown, Pa.
Filed October 23, 1931. Serial No. 320,363. PUBLISHED APRIL 26, 1932. Class 46.

295,624. POTATOES IN THEIR NATURAL STATE. MONTELLE G. COE, Redmond, Oreg.
Filed November 14, 1931. Serial No. 321,134. PUBLISHED APRIL 26, 1932. Class 46.

295,625. ICE CREAMS. MISSION CREAMERIES, INC., Los Angeles, Calif.
Filed November 28, 1931. Serial No. 321,573. PUBLISHED APRIL 19, 1932. Class 46.

295,626. COMMON AND TOILET PINS, SAFETY PINS, HAIRPINS, T HEAD PINS, NEEDLES FOR SEWING BY HAND, SNAP FASTENERS, HOOKS AND EYES, ALL MADE OF NON-PRECIOUS METAL. WILLIAM PRYM OF AMERICA, INC., New York and Long Island City, N. Y.
Filed December 18, 1931. Serial No. 322,268. PUBLISHED APRIL 26, 1932. Class 40.

295,627. MEN'S CLOTHING. ISIDOR SPENCER, Chicago, Ill.
Filed December 18, 1931. Serial No. 322,275. PUBLISHED APRIL 19, 1932. Class 39.

295,628. LADIES' OR MISSES' SHOES MADE OF LEATHER, FABRIC, OR COMBINATIONS OF THOSE MATERIALS. FRANK PARLANTE, New York, N. Y.
Filed January 2, 1932. Serial No. 322,671. PUBLISHED APRIL 26, 1932. Class 39.

295,629. NON-INTOXICATING MALT BEVERAGE CONTAINING NOT MORE THAN ONE-HALF OF ONE PERCENT ALCOHOL BY VOLUME. THE BRUCKMANN CO., Cincinnati, Ohio.
Filed January 4, 1932. Serial No. 322,684. PUBLISHED FEBRUARY 23, 1932. Class 48.

295,630. NOODLES. WALKER PRODUCTS COMPANY, Indianapolis, Ind.
Filed January 11, 1932. Serial No. 322,904. PUBLISHED APRIL 19, 1932. Class 46.

295,631. SUGAR. GODCHAUX SUGARS, INC., New Orleans, La.
Filed January 14, 1932. Serial No. 323,004. PUBLISHED APRIL 19, 1932. Class 46.

295,632. CANDY BARS. THE CHICKY MFG. COMPANY, Grand Rapids, Mich.
Filed January 15, 1932. Serial No. 323,030. PUBLISHED APRIL 19, 1932. Class 46.

295,633. PERIODICAL. THE CLAYTON MAGAZINES, INC., New York, N. Y.
Filed January 20, 1932. Serial No. 323,189. PUBLISHED APRIL 19, 1932. Class 38.

295,634. NECKTIES AND WINDSOR TIES. WASHINGTON NECKWEAR CO., INC., New York, N. Y.
Filed January 21, 1932. Serial No. 323,261. PUBLISHED APRIL 26, 1932. Class 39.

295,635. MAYONNAISE, SALAD DRESSING, AND A FOOD PRODUCT USED AS A BASE FOR MAKING MAYONNAISE OR SALAD DRESSING. PRIVATE BRANDS, INC., New York, N. Y.
Filed January 22, 1932. Serial No. 323,307. PUBLISHED APRIL 12, 1932. Class 46.

295,636. LADIES' HATS. SOCIÉTÉ À RESPONSABILITÉ LIMITÉE MADO, Paris, France.
Filed January 26, 1932. Serial No. 323,469. PUBLISHED APRIL 19, 1932. Class 39.

295,637. ICE CREAM CONFECTIONS. ESKIMO PIE CORPORATION, New York and Brooklyn, N. Y.
Filed January 27, 1932. Serial No. 323,488. PUBLISHED APRIL 19, 1932. Class 46.

295,638. MALT SYRUP. GIZELLA KASSER, Philadelphia, Pa.
Filed January 30, 1932. Serial No. 323,621. PUBLISHED APRIL 19, 1932. Class 46.

295,639. MEN'S, WOMEN'S, AND CHILDREN'S BOOTS AND SHOES MADE OF LEATHER, FABRIC, RUBBER, OR ANY COMBINATION OF ONE OR MORE OF SAID MATERIALS. A. H. GEUTING COMPANY, Philadelphia, Pa.
Filed February 1, 1932. Serial No. 323,658. PUBLISHED APRIL 26, 1932. Class 39.

295,640. FRESH FISH FILLETS. HENRY & CLOSE CO., Boston, Mass.
Filed February 2, 1932. Serial No. 323,748. PUBLISHED APRIL 19, 1932. Class 46.

295,641. CONFECTIONERY—NAMELY, CANDY. SWEETS COMPANY OF AMERICA, INC., New York, N. Y.
Filed February 3, 1932. Serial No. 323,795. PUBLISHED APRIL 26, 1932. Class 46.

295,642. CANDIES. OLIVE SHERMAN WATSON, Alfred, N. Y.
Filed February 6, 1932. Serial No. 323,923. PUBLISHED APRIL 19, 1932. Class 46.

295,643. MOTION PICTURE FILM CARRYING POSITIVE PHOTOGRAPHICALLY PRODUCED IMAGES AND READING MATTER. KODASCOPE EDITING AND TITLING SERVICE, INC., New York, N. Y.
Filed February 10, 1932. Serial No. 324,043. PUBLISHED APRIL 26, 1932. Class 26.

295,644. TAILORED SEAT COVERS, SEAT PADS, TAILORED AUTOMOBILE SEAT COVERS AND SEAT PADS, TAILORED CHAIR COVERS, AND CHAIR PADS MADE OF FABRIC, LEATHER, IMITATION LEATHER, AND MATTING AND COMBINATIONS THEREOF. EVR-KLEAN SEAT PAD COMPANY, St. Louis, Mo.
Filed February 15, 1932. Serial No. 324,158. PUBLISHED APRIL 26, 1932. Class 32.

295,645. TAILORED SEAT COVERS, SEAT PADS, TAILORED AUTOMOBILE SEAT COVERS AND SEAT PADS, TAILORED CHAIR COVERS, AND CHAIR PADS MADE OF FABRIC, LEATHER, IMITATION LEATHER, AND MATTING AND COMBINATIONS THEREOF. EVR-KLEAN SEAT PAD COMPANY, St. Louis, Mo.
Filed February 15, 1932. Serial No. 324,160. PUBLISHED APRIL 26, 1932. Class 32.

295,646. TEXTILE PILLOW CASES, TEXTILE BED SHEETS, AND TEXTILE BED SHEETING. GOLDBLATT BROS. INC., Chicago, Ill.
Filed March 2, 1932. Serial No. 324,709. PUBLISHED APRIL 26, 1932. Class 42.

295,647. CIGAR AND CIGARETTE LIGHTERS. NELSON BEAD COMPANY, New York, N. Y.
Filed March 3, 1932. Serial No. 324,754. PUBLISHED APRIL 19, 1932. Class 8.

295,648. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed March 8, 1932. Serial No. 324,876. PUBLISHED APRIL 19, 1932. Class 42.

295,649. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed March 8, 1932. Serial No. 324,878. PUBLISHED APRIL 19, 1932. Class 42.

295,650. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed March 8, 1932. Serial No. 324,879. PUBLISHED APRIL 19, 1932. Class 42.

295,651. WATCHES AND WATCH CASES. ELGIN NATIONAL WATCH COMPANY, Chicago and Elgin, Ill.
Filed March 8, 1932. Serial No. 324,883. PUBLISHED APRIL 26, 1932. Class 27.

295,652. FOOD FOR PLANTS, VEGETABLES, LAWNS, SHRUBS, AND TREES. OLDS & WHIPPLE, INC., Hartford, Conn.
Filed March 8, 1932. Serial No. 324,901. PUBLISHED APRIL 19, 1932. Class 10.

295,653. UNWAXED FABRICS IN THE PIECE OR ROLLED OF THE NATURE OF CHEESE CLOTH. CHICOPEE MANUFACTURING CORPORATION, New Brunswick, N. J.
Filed March 10, 1932. Serial No. 324,986. PUBLISHED APRIL 19, 1932. Class 42.

295,654. WAX COATED OR IMPREGNATED FABRIC FOR USE PARTICULARLY IN ELECTRICAL INSTALLATIONS. CHICOPEE MANUFACTURING CORPORATION, New Brunswick, N. J.
Filed March 10, 1932. Serial No. 324,987. PUBLISHED APRIL 26, 1932. Class 50.

295,655. PIECE GOODS—VIZ, SHADE CLOTH. INTERSTATE SHADE CLOTH CO., Hoboken, N. J.
Filed March 10, 1932. Serial No. 325,003. PUBLISHED APRIL 19, 1932. Class 42.

295,656. COTTON PIECE GOODS. NOVELTEX, INC., New York, N. Y.
Filed March 10, 1932. Serial No. 325,014. PUBLISHED APRIL 26, 1932. Class 42.

295,657. FOOD PREPARATION CONSISTING OF A POWDER TO BE USED WITH HOT WATER OR MILK FOR MAKING BEVERAGES, PUDDINGS, OR OTHER FOODS. ADGENE INCORPORATED, Paterson, N. J.
Filed August 7, 1931. Serial No. 317,753. PUBLISHED APRIL 19, 1932. Class 46.

295,658. WOOLEN BLANKETS, FLANNELS IN THE PIECE, AND WOOLEN SUITINGS IN THE PIECE. AMANA SOCIETY, Amana and Homestead, Iowa.
Filed October 6, 1931. Serial No. 319,760. PUBLISHED APRIL 19, 1932. Class 42.

295,659. THREADS AND YARNS. J. & P. COATS (R. I.) INC., Pawtucket, R. I.
Filed October 23, 1931. Serial No. 320,352. PUBLISHED APRIL 26, 1932. Class 43.

295,660. BULKY AND HIGHLY ABSORBENT SHEET MATERIAL MADE FROM VEGETABLE FIBRES RESEMBLING IN APPEARANCE FELTS MADE FROM COTTON OR WOOL FIBRES. KRAFELT CORPORATION OF AMERICA, Wilmington, Del.
Filed November 2, 1931. Serial No. 320,729. PUBLISHED APRIL 19, 1932. Class 50.

295,661. WOVEN PILE CARPET. SANFORD MILLS, Sanford, Me.
Filed November 30, 1931. Serial No. 321,619. PUBLISHED APRIL 26, 1932. Class 42.

295,662. IMITATION LEATHER FABRIC. PHILIP G. WHITMAN, INC., New York, N. Y.
Filed December 10, 1931. Serial No. 322,009. PUBLISHED APRIL 19, 1932. Class 50.

295,663. STEEL SHEETS HAVING A SMALL COPPER CONTENT. BETHLEHEM STEEL COMPANY, Bethlehem, Pa.
Filed December 16, 1931. Serial No. 322,157. PUBLISHED APRIL 26, 1932. Class 14.

295,664. CASTINGS OF BRASS ALLOY. DOEHLER DIE CASTING CO., New York, N. Y.
Filed January 2, 1932. Serial No. 322,630. PUBLISHED APRIL 19, 1932. Class 14.

295,665. SHEETS, PILLOW CASES, SHEETINGS, AND TUBINGS OF COTTON OR LINEN, AND COTTON PIECE GOODS. CARSON PIRIE SCOTT & CO., Chicago, Ill.
Filed January 15, 1932. Serial No. 323,025. PUBLISHED APRIL 19, 1932. Class 42.

295,666. FOUNTAIN PEN INK. ERNEST M. PEARSON, Chicago, Ill.
Filed January 21, 1932. Serial No. 323,250. PUBLISHED APRIL 19, 1932. Class 11.

295,667. GLASS TABLE AND COUNTER TOPS, GLASS SCALE PLATES, AND GLASS SHELVES. THE MARIETTA MANUFACTURING COMPANY, Indianapolis, Ind.; The Union Trust Company of Indianapolis, Receiver.
Filed January 30, 1932. Serial No. 323,625. PUBLISHED APRIL 19, 1932. Class 33.

295,668. WATCHES AND PARTS THEREOF. HANS WILSDORF, Geneva, Switzerland.
Filed February 2, 1932. Serial No. 323,760. PUBLISHED APRIL 26, 1932. Class 27.

295,669. SILK PIECE GOODS. CONTINENTAL SILK COMPANY, INC., New York, N. Y.
Filed February 6, 1932. Serial No. 323,886. PUBLISHED APRIL 19, 1932. Class 42.

295,670. CIGARS AND CIGARETTES. THE FORTUNE TOBACCO COMPANY, New York, N. Y.
Filed February 12, 1932. Serial No. 324,090. PUBLISHED APRIL 26, 1932. Class 17.

295,671. CHINA AND PORCELAIN VASES, JARDINIÈRES, CROCKERY, AND POTTERY. MARY P. BECKWITH, Garrison, N. Y.
Filed March 2, 1932. Serial No. 324,693. PUBLISHED APRIL 26, 1932. Class 30.

295,672. SODA STRAWS. NATIONAL SODA STRAW CO., Chicago, Ill.
Filed February 29, 1932. Serial No. 324,622. PUBLISHED APRIL 19, 1932. Class 50.

295,673. TYPEWRITER INK-RIBBONS AND COATED TRANSFER-SHEETS FOR TYPEWRITER MANIFOLDING. UNDERWOOD ELLIOTT FISHER COMPANY, New York, N. Y.
Filed February 27, 1932. Serial No. 324,575. PUBLISHED APRIL 19, 1932. Class 11.

295,674. WOOLEN PIECE GOODS AND WOOLEN SUITINGS AND COATINGS IN THE PIECE. MORRIS W. HAFT & BROTHERS, INC., New York, N. Y.
Filed February 27, 1932. Serial No. 324,558. PUBLISHED APRIL 26, 1932. Class 42.

295,675. PAINT BRUSHES. WILLIAM H. STONEMAN, doing business as Country Gentleman Products Co., Albany, N. Y.
Filed February 26, 1932. Serial No. 324,542. PUBLISHED APRIL 26, 1932. Class 29.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

295,676. (CLASS 39. CLOTHING.) M. S. LEVY & SONS INCORPORATED, Baltimore, Md. Filed Mar. 31, 1931. Serial No. 312,763.

Lombardy

For Men's Hats.
Claims use since Mar. 2, 1931.

295,677. (CLASS 39. CLOTHING.) PHOENIX HOSIERY COMPANY, Milwaukee, Wis. Filed Apr. 25, 1931. Serial No. 313,795.

"EV-R-UP"

For Hosiery.
Claims use since Apr. 17, 1931.

295,678. (CLASS 3. BAGGAGE, ANIMAL EQUIPMENTS, PORTFOLIOS, AND POCKETBOOKS.) FRANK LOUIS MILLS, Chicago, Ill. Filed May 14, 1931. Serial No. 314,573.

pet bed

For Animal Beds.
Claims use since Apr. 22, 1931.

295,679. (CLASS 39. CLOTHING.) DRAPER HAT CORPORATION, New York, N. Y. Filed May 15, 1931. Serial No. 314,601.

GLENDALE

For Ladies' Hats.
Claims use since November, 1930.

295,680. (CLASS 39. CLOTHING.) R. H. MACY & CO., INC., New York, N. Y. Filed June 3, 1931. Serial No. 315,361.

DUL-SPUN

For Undervests, Bloomers, Panties, Chemises, Pajamas, and Nightgowns for Women.
Claims use since Mar. 10, 1931.

295,681. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) WM. A. VOIGT, Toledo, Ohio. Filed June 16, 1931. Serial No. 315,950.

PARFAIT

For Denture Material.
Claims use since Mar. 15, 1931.

295,682. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) RAYMOND C. BLANCHARD, North Attleboro, Mass. Filed June 27, 1931. Serial No. 316,355.

REDI-ACTION

For Radio Receiving Sets and Parts Thereof, Radio Loudspeakers, Vacuum and Electron Tubes, and Television Receiving Sets and Parts Thereof.
Claims use since May 1, 1931.

295,683. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed Aug. 13, 1931. Serial No. 317,926.

Gilka

For Woolen Piece Goods.
Claims use since May 15, 1931.

295,684. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) CHARLES A. MARKS, Elkhart, Ind. Filed Oct. 30, 1931. Serial No. 320,640.

BAR-LOK

For Battery Terminals.
Claims use since Mar. 2, 1931.

295,685. (CLASS 45. BEVERAGES, NONALCOHOLIC.) JACOB S. POLEFSKY, New York, N. Y. Filed Nov. 11, 1931. Serial No. 321,036.

UFA

For Non-Alcoholic, Non-Cereal, Maltless Beverages Sold as Soft Drinks and Flavoring Extracts and Syrups Therefor.
Claims use since Feb. 15, 1930.

295,686. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) MASLAND MANUFACTURING CORPORATION, Philadelphia, Pa. Filed Nov. 24, 1931. Serial No. 321,469.

NU-SHAM-EE

For Fibrous Fabric Serving as a Substitute for Leather.
Claims use since May 12, 1931.

295,687. (CLASS 39. CLOTHING.) R. P. HAZZARD CO., Gardiner, Me. Filed Mar. 10, 1932. Serial No. 325,000.

The HAZZARD SHOE

For Shoes Made of Leather, Moire, Satin, Other Fabrics or Combinations Thereof.
Claims use since Apr. 10, 1910.

295,688. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) GEO. KILGEN & SON, INCORPORATED, St. Louis, Mo. Filed Mar. 18, 1932. Serial No. 325,262.

Liturgical

For Organs and Parts of Organs.
Claims use since 1918.

295,689. (CLASS 39. CLOTHING.) KEEHN BROTHERS, Chicago, Ill. Filed Apr. 18, 1932. Serial No. 326,216.



For Shoes of Leather and Combinations of Leather and Fabric.
Claims use since Apr. 1, 1922.

295,690. (CLASS 39. CLOTHING.) KNOTHE BROTHERS COMPANY, INC., New York, N. Y. Filed Apr. 19, 1932. Serial No. 326,259.

INDIA ZEPHYR

For Pajamas and Night Clothes.
Claims use since Jan. 21, 1926.

295,691. (CLASS 2. RECEPTACLES.) CENTRAL FIBRE PRODUCTS COMPANY, INCORPORATED, Chicago, Ill. Filed May 2, 1932. Serial No. 326,670.

NU-PROCESS

For Egg Case Fillers.
Claims use since Mar. 23, 1926.

295,692. (CLASS 31. FILTERS AND REFRIGERATORS.) SUPERIOR METAL PRODUCTS COMPANY, St. Paul, Minn. Filed May 5, 1932. Serial No. 326,794.

SUPERIOR

For Milk and Cream Coolers and Ice Cream Cans for Use in Refrigerators.
Claims use since July 1, 1923.

295,693. (CLASS 25. LOCKS AND SAFES.) THE AMERICAN HARDWARE CORPORATION, New Britain, Conn. Filed May 13, 1932. Serial No. 327,037.

Good Buildings Deserve Good Hardware

For Locks and Latches.
Claims use since January, 1927.

TRADE-MARK REGISTRATIONS RENEWED

38,396. CERTAIN NAMED PACKING HOUSE PRODUCTS. Registered June 3, 1902. SWIFT AND COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed June 3, 1932.

38,726. PEPSIN COMPOUND. Registered August 5, 1902. BIRT LUCIUS MALTBIE, New York, N. Y. Renewed August 5, 1932, to Maltbie Chemical Company, Newark, N. J., a Corporation of New Jersey, assignee.

39,193. TOILET WATERS AND PERFUMES. Registered November 4, 1902. LOUIS H. PEARCE, Buffalo, N. Y. Renewed November 4, 1932, to Hinze Ambrosia, Inc., New York, N. Y., a Corporation of New York, successor.

85,003. LEATHER BOOTS AND SHOES. Registered January 16, 1912. REGAL SHOE COMPANY, assignee of Regal Shoe Company, Inc., Boston, Mass. Renewed January 16, 1932, to Regal Shoe Company, Whitman, Mass., a Corporation of Massachusetts, assignee by mesne assignments.

85,494. ARCH-SUPPORTS FOR THE FOOT. Registered February 20, 1912. REGAL SHOE COMPANY, Portland, Me., and Boston, Mass. Renewed February 20, 1932, to Regal Shoe Company, Whitman, Mass., a Corporation of Massachusetts, assignee.

86,594. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. Registered May 21, 1912. THE S. HOWES COMPANY. Renewed May 21, 1932, to S. Howes Co., Inc., Silver Creek, N. Y., a Corporation of New York, assignee.

86,610. FOOD COMPOUND COMPOSED OF VARIOUS CEREALS. Registered May 21, 1912. NEW ENGLAND CEREAL Co. Renewed May 21, 1932, to Trix Food Products, Inc., South Norwalk, Conn., a Corporation of Delaware, assignee by mesne assignments.

87,363. BOYS' AND YOUTHS' CLOTHING. Registered July 9, 1912. M. PHILLIPS & SONS. Renewed July 9, 1932, to Phillips-Jones Corporation, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

87,543. A GAME. Registered July 23, 1912. JOHN JAQUES & SON LIMITED, London, England, a Corporation of Great Britain. Renewed July 23, 1932.

87,805. GUTTA-PERCHA AND INDIA-RUBBER NIPPLES FOR THE NURSING BREAST. Registered August 6, 1912. EMIL RATH, Frankfort-on-the-Main, Germany. Renewed August 6, 1932.

88,595. TOOTH-POWDERS, TOOTH-POLISHES, GUM-TONICS, AND MOUTH-WASHES. Registered October 1, 1912. JULES J. SARRAZIN. Renewed October 1, 1932, to Jane H. Sarrazin, executrix of the estate of Jules J. Sarrazin, deceased, New Orleans, La., assignee.

88,740. NEGLIGÉE AND UNDER SHIRTS, DRAWERS, CORSET-COVERS, AND CORSETS. Registered October 22, 1912. THE DEIMEL LINEN-MESH SYSTEM COMPANY, San Francisco, Calif., a Corporation of California. Renewed October 22, 1932.

88,788. COLLARS. Registered October 22, 1912. AUSTIN REED, LTD., London, England, a Corporation of Great Britain. Renewed October 22, 1932.

88,794. CERTAIN KINDS OF ROPE, YARNS, TWINES, CORD, AND LINES. Registered October 22 1912. SOUTHERN MILLS CORPORATION, Oxford, Ala., a Corporation of Delaware. Renewed October 22, 1932.

88,916. REMEDIES FOR CERTAIN DISEASES. Registered October 29, 1912. MONTICELLO DRUG COMPANY, Jacksonville, Fla., a Corporation of Florida. Renewed October 29, 1932.

89,013. COTTON AND LINEN MESH CLOTH. Registered November 5, 1912. THE DEIMEL LINEN-MESH SYSTEM COMPANY, San Francisco, Calif., a Corporation of California. Renewed November 5, 1932.

89,171. BLENDED COFFEE. Registered November 12, 1912. THOMAS WOOD Co. Renewed November 12, 1932, to Berry, Dodge Co., Boston, Mass., a Corporation of Massachusetts, assignee.

LABELS

REGISTERED JULY 5, 1932

40,889.—*Title:* FRIGIES—THE ORIGINAL FROZEN BON-BON. For Frozen Bon-Bon. MELBER J. BAUER, Cincinnati, Ohio. Published February 27, 1932.

40,890.—*Title:* BUNTE CHOCOLATES. For Chocolates. BUNTE BROTHERS, Chicago, Ill. Published March 20, 1932.

40,891.—*Title:* HOME OWNED STORES WHITE BREAD. For Bread. GROCERS' HOME OWNED STORES, INC., Denver, Colo. Published December 15, 1931.

40,892.—*Title:* HELMS CABIN COOKIES. For Cookies. HELMS BAKERIES, LTD., Los Angeles, Calif. Published May 16, 1932.

40,893.—*Title:* KLEEN MAID. For Cake. KALAMAZOO LABEL COMPANY, Kalamazoo, Mich. Published November 16, 1931.

40,894.—*Title:* A SUPERIOR PRODUCT. For Cake. KALAMAZOO LABEL COMPANY, Kalamazoo, Mich., Published November 16, 1931.

40,895.—*Title:* RED SEAL. For Butter. KRENRICH-BRITTEN Co., New York, N. Y. Published May 10, 1932.

40,896.—*Title:* ROYAL SCARLET. For Butter. KRENRICH-BRITTEN Co., New York, N. Y. Published May 10, 1932.

40,897.—*Title:* QUICK SET GELATIN DESSERT. For Gelatin. LINCOLN COFFEE AND SPICE MILLS, Lincoln, Nebr. Published March 12, 1932.

40,898.—*Title:* 3 "SHAKES" WEED KILLER. For a Preparation for Killing Weeds. MIDWAY CHEMICAL COMPANY, Chicago, Ill. Published January 15, 1932.

40,899.—*Title:* FRSH FRUT ORANGE DRINK. For Orange Drink. W. D. MILLER, El Paso, T x. Published May 17, 1932.

40,900.—*Title:* MALLOWETTES. For Candy. REID, MURDOCK & Co., Chicago, Ill. Published March 17, 1932.

40,901.—*Title:* A ROYAL PRODUCT. For Medicinal Products. ROYAL LABORATORIES, INC., Newark, N. J. Published March 15, 1932.

40,902.—*Title:* THYMODINE. For Antiseptic Cream. ROYAL LABORATORIES, INC., Newark, N. J. Published May 14, 1932.

40,903.—*Title:* BOSTONIAN. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

40,904.—*Title:* PALE DRY GINGER ALE. For Ginger Ale. STERLING PRODUCTS COMPANY, Milwaukee, Wis. Published March 31, 1932.

40,905.—*Title:* "BLACK LEAF 40" NICOTINE SULPHATE. For Nicotine Sulphate. TOBACCO BY-PRODUCTS & CHEMICAL CORPORATION, Louisville, Ky. Published April 25, 1932.

40,906.—*Title:* "BLACK LEAF 40" NICOTINE SULPHATE. For Nicotine Sulphate. TOBACCO BY-PRODUCTS & CHEMICAL CORPORATION, Louisville, Ky. Published April 25, 1932.

40,907.—*Title:* "BLACK LEAF 40" NICOTINE SULPHATE. For Nicotine Sulphate. TOBACCO BY-PRODUCTS & CHEMICAL CORPORATION, Louisville, Ky. Published April 25, 1932.

40,908.—*Title:* "BLACK LEAF 40" NICOTINE SULPHATE. For Nicotine Sulphate. TOBACCO BY-PRODUCTS & CHEMICAL CORPORATION, Louisville, Ky. Published April 25, 1932.

40,909.—*Title:* "BLACK LEAF 40" NICOTINE SULPHATE. For Nicotine Sulphate. TOBACCO BY-PRODUCTS & CHEMICAL CORPORATION, Louisville, Ky. Published April 25, 1932.

PRINTS

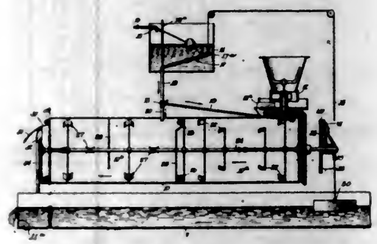
REGISTERED JULY 5, 1932

13,771.—*Title:* MUNCHEE-NUTS. For Nuts. LEONARD V. A. BURTON, Jr., doing business as Munchee Nuts Company, Minneapolis, Minn. Published March 1, 1932.

REISSUES

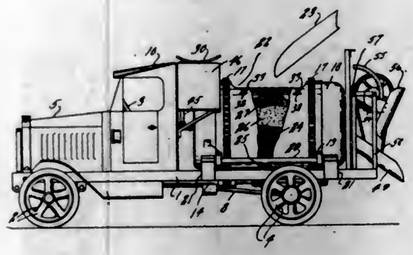
JULY 5, 1932

18,510. APPARATUS AND METHOD FOR PREPARING AND PROPORTIONING DOSING MIXTURES. WALTER H. GREEN, Chicago, Ill., assignor, by mesne assignments, to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Original No. 1,722,571, dated July 30, 1929, Serial No. 755,837, filed Dec. 15, 1924. Application for reissue filed July 29, 1931. Serial No. 553,866. 25 Claims. (Cl. 210—17.)



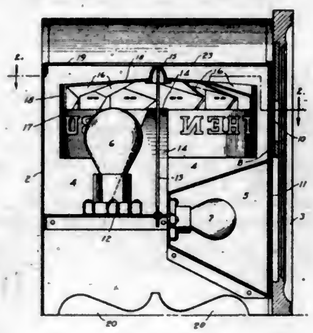
4. A method of preparing and proportioning a dosing mixture, comprising feeding lime and water together to hydrate the lime, feeding the hydrated lime and water together to form milk of lime, delivering the latter at its rate of preparation, and proportioning the lime and water feed to the raw water supply.

18,511. CONCRETE MIXTURE. HARRY J. SHAW, Toledo, Ohio. Original No. 1,615,315, dated Jan. 25, 1927, Serial No. 52,528, filed Aug. 26, 1925. Application for reissue filed Jan. 21, 1929. Serial No. 334,042. 22 Claims. (Cl. 83—73.)



1. The method of supplying a concrete mixture to work comprising dumping of a coarse material into a pile depositing fines and cement on said coarse material to a heaping extent, delivering said heaping mixture to the region of the work, delivering water to said mixture, effecting agitation of the mixture and water on a horizontal axis of rotation extending through the heaping mixture to decrease the gross bulk of said mixture by working the fines and cement into the voids of the coarse material as retained in said pile, and thereafter as a separate controllable step from said agitation discharging said agitated mixture.

18,512. ADVERTISING DEVICE. MARSHALL H. PAGE, Kansas City, Mo., assignor, by direct and mesne assignments, to Line-O-Graph Company, Kansas City, Mo., a Corporation of Missouri. Original No. 1,781,596, dated Nov. 11, 1930, Serial No. 338,698, filed Feb. 9, 1929. Application for reissue filed Aug. 17, 1931. Serial No. 557,706. 9 Claims. (Cl. 40—40.)

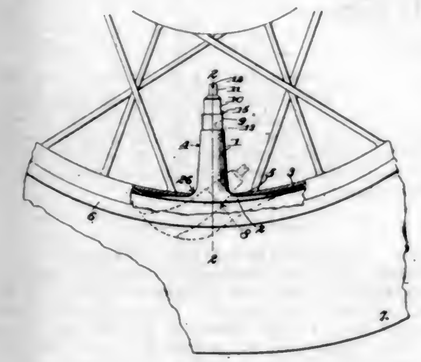


1. In an advertising device, a rotor compartment and a stationary sign compartment, said rotor compartment having a rotatable sign mounted therein, said rotor compartment having a horizontal wall portion, a vertical wall portion in said device intersecting said horizontal wall portion and upper and lower walls extending forwardly from said vertical wall portion, said vertical wall portion and said upper forwardly extending wall separating said two compartments and together with said lower forwardly extending wall forming said stationary sign compartment, said rotatable sign being provided with means for driving the same, and being mounted in its compartment so as to project over said upper forwardly extending wall portion, a window in front of said rotatable sign, so that the characters on said rotatable sign may be read during movement thereof through said window, a stationary sign in front of said stationary sign compartment and means in said last named compartment for illuminating said stationary sign.

18,513. PNEUMATIC INNER TUBE AND VALVE STEM. FRANK H. WATSON, Jonesboro, Ark., assignor to The F. H. Watson Company, Little Rock, Ark., a Corporation of Delaware. Original No. 1,804,294, dated May 5, 1931, Serial No. 490,805, filed Oct. 23, 1930. Application for reissue filed Jan. 7, 1932. Serial No. 585,404. 13 Claims. (Cl. 152—12.)

1. A valve stem of yieldable material, a cap, a core container carried by the stem and carrying the cap, and

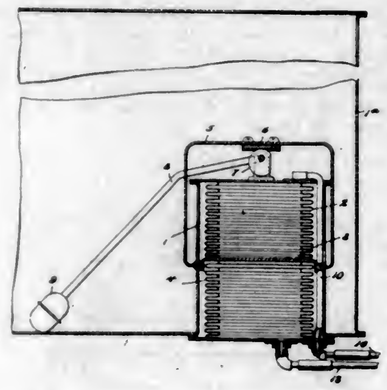
means confining the stem material around a portion of said container, leaving an exposed annulus to provide a



seat, said means being of greater internal diameter than the external diameter of the cap enabling fitting of the rim of the cap down inside of said means.

18,514. LIQUID LEVEL GAUGE. DONALD H. REEVES, Dayton, Ohio, assignor, by mesne assignments, to The Liquidometer Corporation, Long Island City, N. Y., a Corporation of Delaware. Original No. 1,758,975, dated May 20, 1930, Serial No. 428,096, filed Dec. 3, 1920. Application for reissue filed Feb. 18, 1932. Serial No. 595,192. 6 Claims. (Cl. 73—82.)

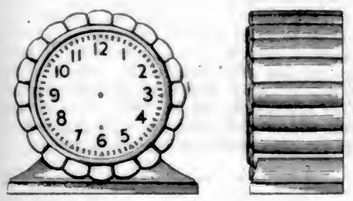
1. In a liquid level gauge, the combination of a liquid reservoir having opposed bellows positioned therein, a plate between said bellows and connected to each of the same, a float in said reservoir, means for imparting movement to said plate and said bellows upon movement of said float, an indicator actuator including opposed bellows, fluid conducting conduits connecting said first named bellows respectively with said second named bellows and visual indicating means connected to and actuated by the movement of said second named bellows.



DESIGNS

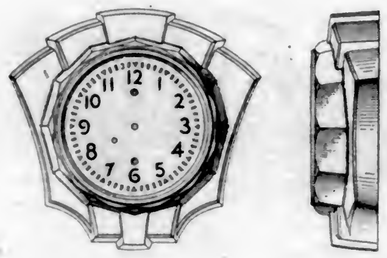
JULY 5, 1932

87,288. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed Dec. 31, 1931. Serial No. 42,336. Term of patent 7 years.



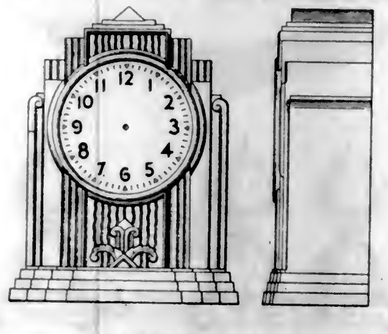
The ornamental design for a clock case, as shown.

87,289. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed Dec. 31, 1931. Serial No. 42,337. Term of patent 7 years.



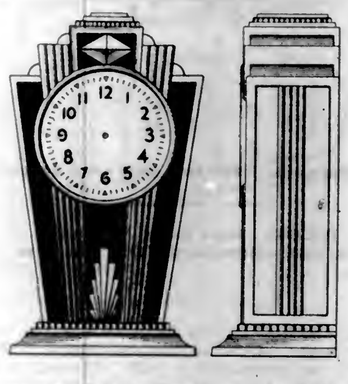
The ornamental design for a clock case, as shown.

87,290. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed Jan. 6, 1932. Serial No. 42,381. Term of patent 14 years.



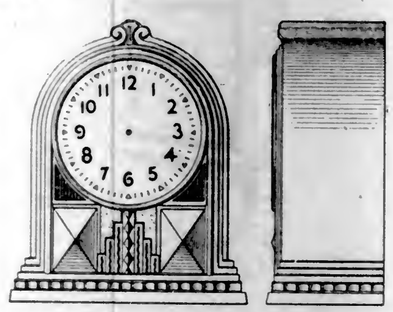
The ornamental design for a clock case, as shown.

87,291. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed Jan. 6, 1932. Serial No. 42,382. Term of patent 14 years.



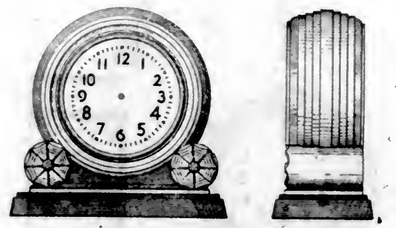
The ornamental design for a clock case, as shown.

87,292. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed Jan. 6, 1932. Serial No. 42,383. Term of patent 14 years.



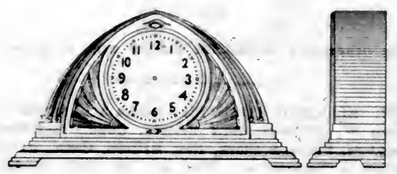
The ornamental design for a clock case, as shown.

87,293. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed Jan. 15, 1932. Serial No. 42,492. Term of patent 7 years.



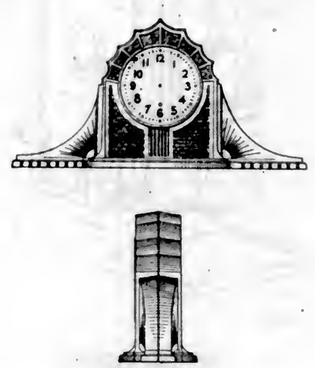
The ornamental design for a clock case, as shown.

87,294. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed Jan. 15, 1932. Serial No. 42,493. Term of patent 14 years.



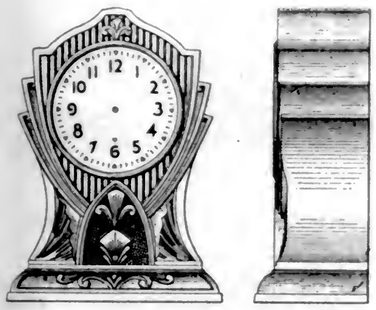
The ornamental design for a clock case, as shown.

87,295. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed Jan. 20, 1932. Serial No. 42,557. Term of patent 7 years.



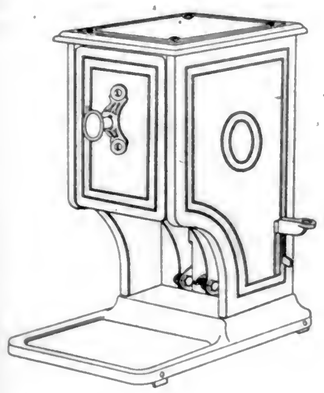
The ornamental design for a clock case, as shown.

87,296. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed Jan. 22, 1932. Serial No. 42,601. Term of patent 7 years.



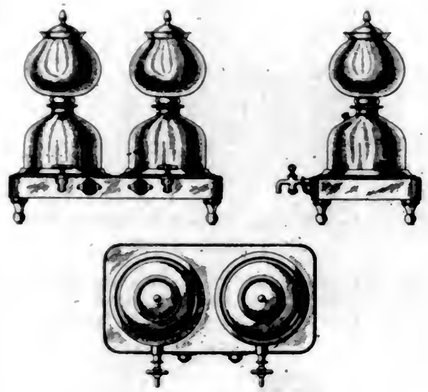
The ornamental design for a clock case, as shown.

87,297. ELECTRIC TOASTER. OSCAR M. ANDERSON and FRED W. JUENGST, New Britain, Conn., assignors to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 30, 1932. Serial No. 43,681. Term of patent 14 years.



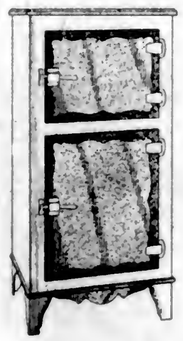
The ornamental design for an electric toaster as shown.

87,298. COFFEE MAKER. OSCAR M. ANDERSON and FRED W. JUENGST, New Britain, Conn., assignors to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 30, 1932. Serial No. 43,682. Term of patent 14 years.



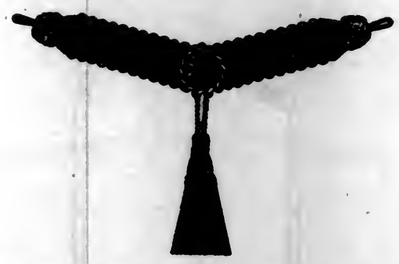
The ornamental design for a coffee maker as shown.

87,299. ICE BOX. LOUIS BARON, New York, N. Y. Filed May 5, 1932. Serial No. 43,721. Term of patent 3½ years.



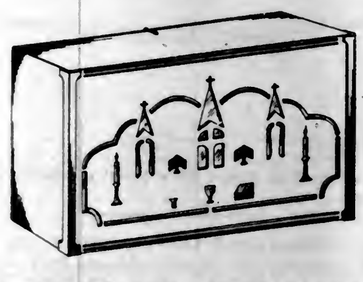
The ornamental design for an ice box, as shown.

87,300. TIE-BACK FOR DRAPES, CURTAINS, AND THE LIKE. WILLIAM C. CHAPMAN, Chicago, Ill. Filed Apr. 9, 1932. Serial No. 43,445. Term of patent 14 years.



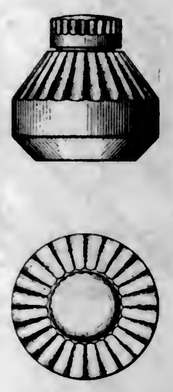
The ornamental design for a tie back for drapes, curtains and the like as shown.

87,301. HOME ALTAR. ANDREW DORDAN and ELMINA JOHNSON, Minneapolis, Minn. Filed Mar. 18, 1931. Serial No. 39,139. Term of patent 3½ years.



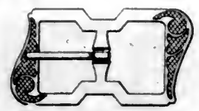
The ornamental design for a home altar, substantially as shown and described.

87,302. BOTTLE OR SIMILAR CONTAINER. EDWIN W. FUERST, Toledo, Ohio, assignor to The Parker Pen Company, Janesville, Wis., a Corporation of Wisconsin. Filed Nov. 23, 1931. Serial No. 41,811. Term of patent 14 years.



The ornamental design for a bottle or similar container, as shown.

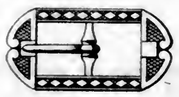
87,303. SHOE BUCKLE. WINIFRED L. GIBBONS, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Jan. 27, 1932. Serial No. 42,637. Term of patent 3½ years.





The ornamental design for a shoe buckle as shown.

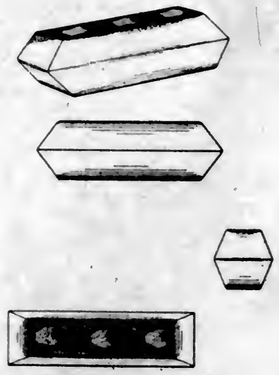
87,304. SHOE BUCKLE. WINIFRED L. GIBBONS, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Jan. 27, 1932. Serial No. 42,638. Term of patent 3½ years.





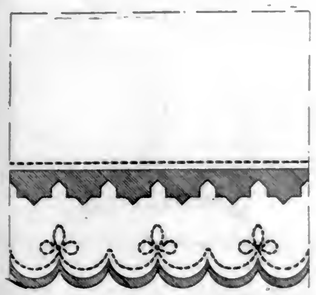
The ornamental design for a shoe buckle as shown.

87,305. CAKE. JOSEPH W. HAWKS, Scranton, Pa., assignor to The Williams Bakery, Inc., Scranton, Pa., a Corporation of Pennsylvania. Filed Mar. 25, 1932. Serial No. 43,290. Term of patent 7 years.



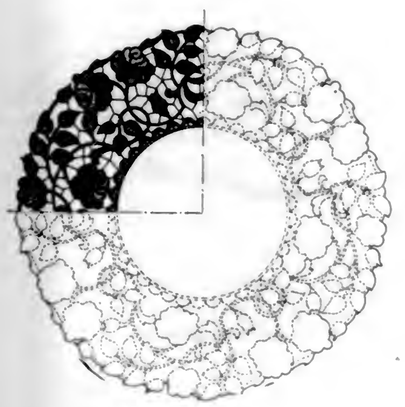
The ornamental design for a cake, substantially as shown.

87,306. SHELF-PAPER. EDWARD KARFIOL, Brooklyn, N. Y. Filed Apr. 15, 1932. Serial No. 43,504. Term of patent 14 years.



The ornamental design for shelf-paper as shown and described.

87,307. DOILY. EDWARD KARFIOL, New York, N. Y. Filed Apr. 22, 1932. Serial No. 43,571. Term of patent 14 years.



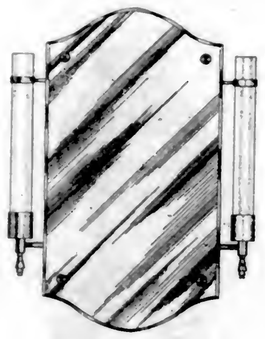
The ornamental design for a doily as shown and described.

87,308. PENCIL OR SIMILAR ARTICLE. THEODORE MALCOLM, New York, N. Y. Filed Apr. 5, 1932. Serial No. 43,400. Term of patent 3½ years.



The ornamental design for a pencil or similar article as shown.

87,309. COMBINATION LIGHT FIXTURE AND MIRROR. CLYDE D. MCCANN, Des Moines, Iowa, assignor to Capital City Electric Company, Des Moines, Iowa, a Corporation of Iowa. Filed May 2, 1932. Serial No. 43,689. Term of patent 7 years.



The ornamental design for a combination light fixture and mirror, substantially as shown.

87,310. AIRPLANE. CHARLES N. MONTEITH, ROBERT J. MINSHALL and JOHN C. SANDERS, Seattle, Wash., assignors to Boeing Airplane Company, Seattle, Wash., a Corporation of Washington. Filed Apr. 18, 1932. Serial No. 43,535. Term of patent 7 years.



The ornamental design for an airplane, as shown.

87,311. HANDLE FOR AUTOMOBILE DOORS AND THE LIKE. WILLIAM J. MOORE, Washington, D. C., assignor of one-half to John Janney, Leesburg, Va. Filed May 17, 1932. Serial No. 43,833. Term of patent 7 years.

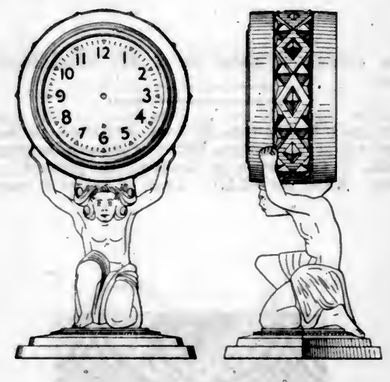
The ornamental design for a handle for automobile doors and the like as shown and described.

87,312. LACE. JOHN MOOSHEER, New York, N. Y., assignor to Liberty Lace and Netting Works, New York, N. Y., a Corporation of New York. Filed May 5, 1932. Serial No. 43,725. Term of patent 3½ years.



The ornamental design for lace, substantially as shown.

87,313. COMBINED CLOCK CASE AND SUPPORT THEREFOR. BERNARD F. MULDOON, Mountainview, N. J., assignor to Henry Hyman, Brooklyn, N. Y. Filed Dec. 31, 1931. Serial No. 42,333. Term of patent 14 years.



The ornamental design for a combined clock case and support therefor, as shown.

87,314. STATUETTE OR SIMILAR ARTICLE. MIRIAM N. NEUGASS, New York, N. Y. Filed Dec. 16, 1930. Serial No. 38,008. Term of patent 3½ years.



The ornamental design for a statuette or similar article, as shown and described.

87,315. LACE. SAMUEL H. PAGE, Stratford, Conn., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 16, 1932. Serial No. 43,519. Term of patent 7 years.



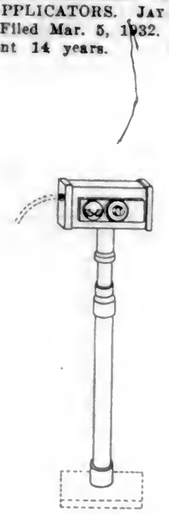
The ornamental design for a lace substantially as shown.

87,316. LACE. SAMUEL H. PAGE, Stratford, Conn., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 16, 1932. Serial No. 43,520. Term of patent 7 years.



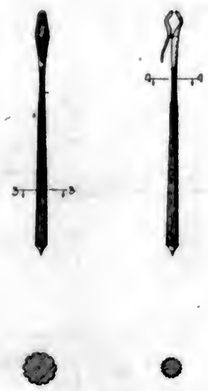
The ornamental design for a lace substantially as shown.

87,317. PORTABLE-STANDARD TRANSFORMER FOR ORIFICIAL APPLICATORS. JAY J. REKAR, Los Angeles, Calif. Filed Mar. 5, 1932. Serial No. 43,089. Term of patent 14 years.



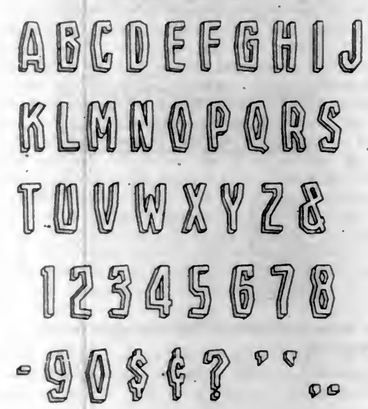
The ornamental design for a portable-standard transformer for orificial applicators, substantially as shown.

87,318. CIGARETTE HOLDER. MARION ROONEY, Emeryville, Calif. Filed Sept. 8, 1931. Serial No. 41,048. Term of patent 8½ years.



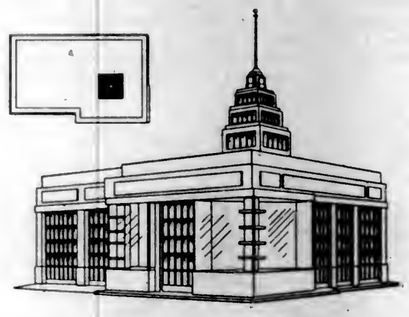
The ornamental design for a cigarette holder substantially as shown.

81,319. FONT OF TYPE OR A SIMILAR ARTICLE. HERMAN S. TABOR, Chicago, Ill. Filed Sept. 21, 1931. Serial No. 41,171. Term of patent 7 years.



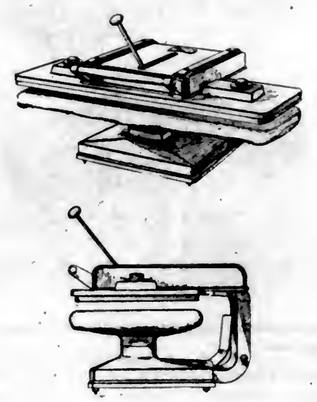
The ornamental design for a font of type or a similar article, as shown.

87,320. BUILDING. EARL B. WAGONER, Lakewood, Ohio, assignor to The Standard Oil Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 6, 1931. Serial No. 38,971. Term of patent 14 years.



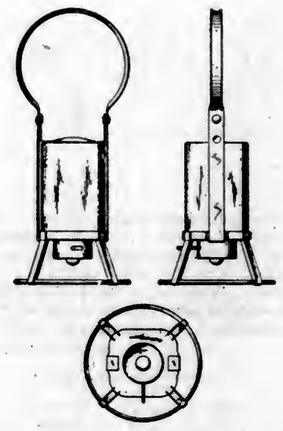
The ornamental design for a building as shown and described.

87,321. IRONER. NOBLE H. WATTS, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed Mar. 9, 1932. Serial No. 43,140. Term of patent 14 years.



The ornamental design for an ironer as shown.

87,322. HAND LANTERN. JOHN S. ZOOK, Madison, Wis., assignor to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed Oct. 17, 1931. Serial No. 41,420. Term of patent 14 years.



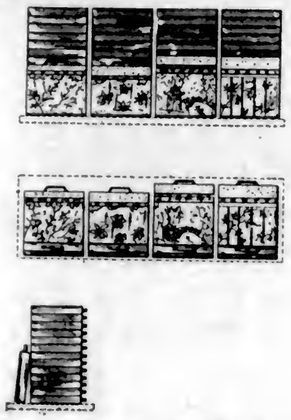
The ornamental design for a hand lantern, as shown.

87,323. DISPLAY DEVICE. ALVA G. LITLE, Denver, Colo. Filed Jan. 26, 1931. Serial No. 38,447. Term of patent 14 years.



The ornamental design for a display device as shown and described.

87,324. DISPLAY DEVICE. ALVA G. LITLE, Denver, Colo. Filed Jan. 26, 1931. Serial No. 38,448. Term of patent 14 years.



The ornamental design for a display device as shown and described.

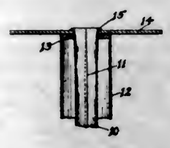
PATENTS

GRANTED JULY 5, 1932

1,865,422. PRODUCTION OF ACETYLENE. PAUL ASKENASY, Karlsruhe, Germany, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed July 25, 1929, Serial No. 381,100, and in Germany Aug. 4, 1928. 2 Claims. (Cl. 260—170.)

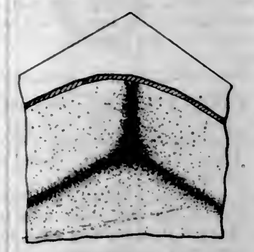
1. A process for separating acetylene in a concentrated form from gas mixtures which are poor in acetylene and contain, besides acetylene and ethylene, considerable proportions of both methane and hydrogen and at least traces of nitrogen, which process consists in passing said gas mixture through an active adsorbent, subjecting the active adsorbent, saturated in respect of acetylene and containing besides considerable proportions of methane and some hydrogen, to an evacuation in the cold, whereby chiefly methane and hydrogen are separated from the adsorbent without substantial loss of acetylene, and then heating the active adsorbent and again evacuating for the purpose of expelling the adsorbed acetylene in a high degree of concentration.

1,865,423. SPOOL AND METHOD OF MAKING SAME. GEORGE D. ATWOOD, Brooklyn, N. Y. Filed June 14, 1929. Serial No. 370,792. 4 Claims. (Cl. 242—119.)



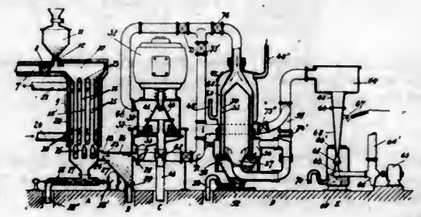
1. The method of constructing a spool which comprises assembling a hollow hub around a hollow, expansible core, sliding bushings on the core and into the ends of the hollow hub to center the hub on the core and prevent collapse of the hub in service, sliding plates on the ends of the core and against the ends of the hub and riveting the ends of the core over on the plates to fasten the members and to expand the core outward against the bushings.

1,865,424. BUILDING WALL. LEN A. BANTA, Clearfield, Pa. Original application filed May 11, 1927, Serial No. 190,606, now Patent No. 1,765,255, dated June 17, 1930. Divided and this application filed May 26, 1930. Serial No. 455,727. 8 Claims. (Cl. 20—4.)



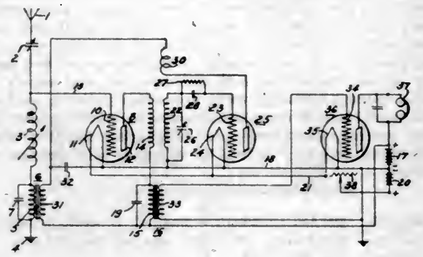
1. A building wall of the character described comprising sides forming one or more cells having cement on the interior surfaces thereof, making said cells substantially air-tight.

1,865,425. APPARATUS FOR SEPARATING FLOWING MEDIUMS. FRIEDRICH BARTLING, Hugliing, Germany. Filed Dec. 27, 1927. Serial No. 242,796, and in Germany Dec. 31, 1926. 5 Claims. (Cl. 183—77.)



1. A separator comprising means for imparting initial velocity to a flowing medium and to particles suspended in, and flowing with, said medium, a conduit in which said medium flows, and means for separating said particles in that region where the velocity is substantially equal to said initial velocity.

1,865,426. RADIO RECEIVING SYSTEM. MAX C. BATSEL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 30, 1928. Serial No. 316,067. 11 Claims. (Cl. 179—171.)

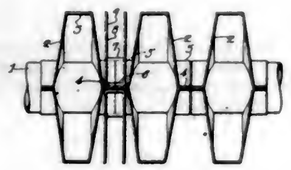


1. A radio receiving system comprising a plurality of thermionic triodes connected in cascade relation, said connecting means being so proportioned that one of said triodes tends to oscillate when receiving signals over the range of frequencies for which the system is intended, and means comprising a capacitor included in series with a portion of said connecting means for compensating said tendency toward oscillation.

1,865,427. RADIATOR. IRVING T. BENNETT, Brooklyn, and FRANK C. REYNOLDS, New York, N. Y., assignors, by mesne assignments, to American Radiator & Standard Sanitary Corporation, a Corporation of Delaware. Filed July 12, 1928. Serial No. 292,309. 9 Claims. (Cl. 257—141.)

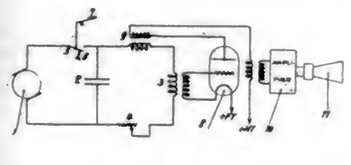
6. A heater comprising a heating element and an extended-area structure applied thereto in separate units

each comprising at least one laterally extending plate with longitudinally extending flanges at its vertical edges, said units being mounted on the heating element to form



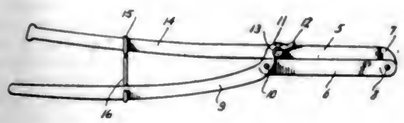
comparatively narrow closed flues with comparatively wide spaces between the flues and with separate fins in such comparatively wide spaces.

1,865,428. ELECTRIC PIANO HARP. JOSEPH BETHENOD, Paris, France. Filed Apr. 29, 1929, Serial No. 359,137, and in France May 5, 1928. 5 Claims. (Cl. 84—1.)



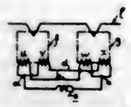
2. In an electrical system for producing damped acoustic vibrations, a thermionic tube, input and output circuits therefor, said input circuit being coupled to said output circuit in feed back relation, an oscillating circuit comprising inductance, a variable resistance, a condenser and a switch, said oscillating circuit being coupled to said input circuit, a source of direct current, said switch being connected to open said oscillating circuit and connect said condenser to said source of potential when in one position and to close said oscillating circuit and open the circuit connecting said condenser to said source of direct current potential when in another position, an electric reproducer in electrical relation with said output circuit, whereby sustained notes of varying damping characteristics may be produced by adjusting said variable resistor.

1,865,429. EMASCULATOR. EARL C. BEVANS, Monticello, Mo. Filed Aug. 24, 1931. Serial No. 559,053. 2 Claims. (Cl. 128—306.)



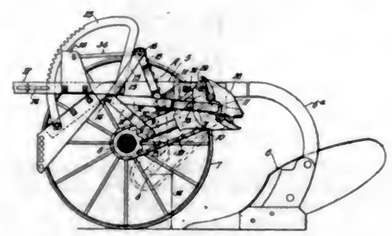
2. A castrating tool of the character described comprising a pair of jaws, said jaws being pivotally connected together at one of their ends, a stud at the remaining end of one of the jaws, a handle extension for the last mentioned jaw, a complementary handle pivotally connected adjacent one end to the remaining end of the other jaw, a hook at the end of the complementary handle adjacent to the pivotal connection, said hook being engageable with the said stud when the jaws are in the act of being contracted, and a hook extending from one of the handles for engagement with the complementary handle to retain the handles in contracted relation with respect to each other.

1,865,430. CURRENT TRANSFORMER. ROELOF HERMAN BORKENT, The Hague, Netherlands. Filed June 18, 1930, Serial No. 461,978, and in the Netherlands June 25, 1929. 4 Claims. (Cl. 175—358.)



1. A current transformer, comprising a plurality of magnetic cores some of them bearing each a plurality of electrically connected secondary coils, the several coils of at least two cores being such, that the number of turns of the coils upon the same core differ from each other, the secondary winding of the transformer comprising parallel branches formed by coils upon a plurality of cores.

1,865,431. PLOW ELEVATING MECHANISM. JOSEPH E. BODA, Rockford, Ill., assignor to J. I. Case Company, Racine, Wis., a Corporation of Wisconsin. Filed May 13, 1931. Serial No. 537,114. 4 Claims. (Cl. 97—73.)



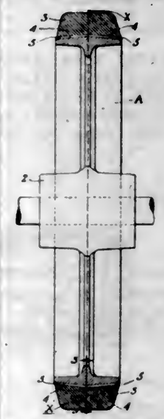
2. In an agricultural implement, the combination of a frame, a plow body carried by the frame, a ground wheel, means for vertically, adjustably mounting said ground wheel on the frame, the frame and plow body being vertically adjustable relative to the ground as an incident to adjustment of said wheel relative to the frame, a toggle link mechanism having one end of the toggle connected to the ground wheel mounting means and its other end connected to said frame, means connected with said toggle for adjusting the same from buckled position to relatively straightened position for elevating said plow body to inoperative position above the ground, and means for adjusting the position of the links of said toggle mechanism relative to each other for adjusting the plowing depth of the implement.

1,865,432. VEHICLE WHEEL. EDWARD BOSSERT, East Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 20, 1928. Serial No. 327,328. 5 Claims. (Cl. 152—6.)

1. A wheel comprising a metallic rim having a periphery of less diameter at the edges than at a portion intermediate said edges, and tire-retaining teeth on said periphery extending transversely thereof, and a tire of flexible material covering said teeth.

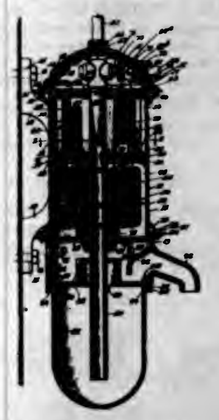
4. A wheel comprising a substantially continuous metal rim, transversely extending tire retaining teeth on the outer surface of said rim and integral therewith, the outer surface of said rim, as well as said teeth, extending

radially outwardly at least as much in portions disposed progressively nearer the longitudinal middle portion of the rim as in other portions disposed at the lateral edges



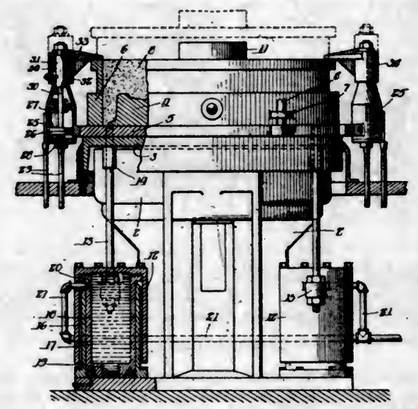
thereof, and a tire of flexible material covering said teeth, and extending into the spaces therebetween, said tire being adhesively secured to said rim.

1,865,433. APPARATUS FOR PURIFYING WATER WITH OZONE. JAMES MARLOWE DAILY, Chicago, Ill., assignor to American Ozone Company, Chicago, Ill., a Corporation of Illinois. Filed July 5, 1929. Serial No. 376,111. 14 Claims. (Cl. 204—25.)



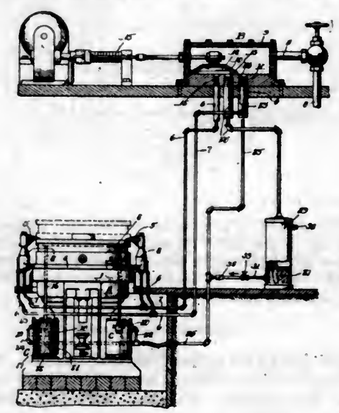
1. In an electric ozone generator, the combination of pairs of vertically extending rectangular dielectric plates, the plates of each pair being spaced apart to form therebetween a combined air passage and spark gap, a pair of conductor-members engaging the top and bottom edges of the plates, vertically extending posts of insulating material extending between the members and operating to clamp the latter against the aforesaid edges of the plates, a series of electrodes connected electrically to one of the conductor-members and associated with alternating dielectric plates, a second series of electrodes connected electrically to the other member, said second series of electrodes alternating with the first mentioned series and associated with the remainder of the dielectric plates, means for supplying electric current to the members, and means for forcing air through the passages.

1,865,434. AUTOMATIC CLAMPING MECHANISM FOR MOLDS. LEWIS EGGERT, Toledo, Ohio. Filed Aug. 30, 1929. Serial No. 389,393. 7 Claims. (Cl. 22—9.)



1. In a structure of the class described the combination of two relatively movable members for clamping a mold flask between them, and means for horizontally swinging one of said members into and out of position with respect to the flask when said member is moved vertically relative to the flask.

1,865,435. OIL COMPENSATOR FOR MOLD STRIPPERS. LEWIS EGGERT, Toledo, Ohio. Filed Aug. 30, 1929. Serial No. 389,394. 6 Claims. (Cl. 121—38.)

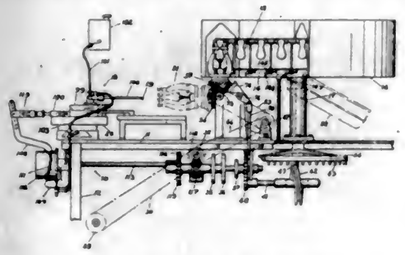


1. The combination of a fluid operated mechanism, means for applying air pressure to a liquid in said mechanism, means controlling the application of said air pressure on said liquid, means for releasing the pressure, means for accumulating the liquid from the exhaust of the air, means for returning the accumulated liquid to said mechanism when the mechanism is idle, and a check valve for preventing application of said air pressure in said accumulating means.

1,865,436. LAMP COATING. JOHN E. FERGUSON, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Sept. 26, 1928. Serial No. 308,562. 13 Claims. (Cl. 91—45.)

1. An apparatus for coating lamp bulbs comprising a conveyor for supporting a plurality of lamp bulbs, spray-

ing means, means for moving said conveyor to position a bulb adjacent to said spraying means, means for ter-



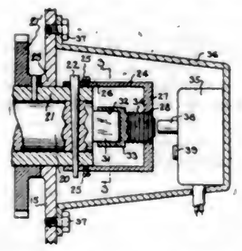
minating the movement of said conveyor, means for transferring a bulb from said conveyor for a spraying operation and means for actuating said spraying means.

1,865,437. ELECTRON EMISSION MATERIAL. MARK N. FREDENBURGH, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed July 18, 1928. Serial No. 293,801. 6 Claims. (Cl. 134—58.)



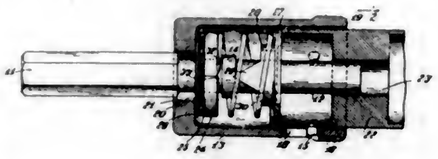
1. The method of producing barium and strontium carbonates in a preferred filterable crystalline form which comprises precipitating a solution containing barium and strontium with normal ammonium carbonate precipitant at temperatures approximating 50° C.

1,865,438. SAFETY DEVICE FOR STOKERS. WILLIAM FRIEDEMANN, Cincinnati, Ohio. Filed Jan. 26, 1931. Serial No. 511,223. 5 Claims. (Cl. 192—150.)



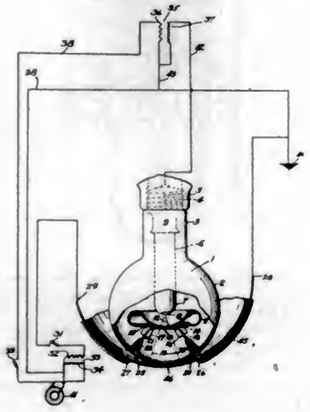
1. The combination of a driving member and a driven member, a shearing connection between said members, a cap secured to said driving member, a member rotatively secured to said driven member, a connection between said cap and said last named member whereby upon shearing of said shearing member said last named member will move endwise for operating a switch.

1,865,439. PNEUMATIC TOOL RETAINING MEANS. JOHN L. MORAN and ALVIN J. LEE, Spokane, Wash., assignor of one-fourth to Robert Malcom, Chicago, Ill., and one-fourth to Francis E. P. Wilder, Spokane, Wash. Filed Nov. 16, 1931. Serial No. 575,383. 9 Claims. (Cl. 121—32.)



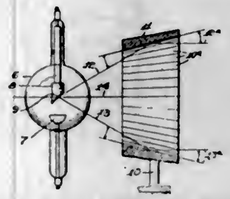
1. Pneumatic tool retaining means comprising, in combination with the air cylinder and a tool provided with a shoulder, a housing secured at the outer end of the cylinder, an expansible member adapted to surround the tool forward of its shoulder and located within the housing, wedge means located within the housing and adapted to cause said member to expand when the means and member are forced toward each other, and pressure means whereby the member and first means are normally held in spaced relation.

1,865,440. X-RAY TUBE. MONTFORD MORRISON, Chicago, Ill., assignor, by mesne assignments, to Westinghouse Lamp Company, a Corporation of Pennsylvania. Original application filed Oct. 18, 1923, Serial No. 669,315. Divided and this application filed Jan. 4, 1924. Serial No. 684,336. 1 Claim. (Cl. 250—35.)



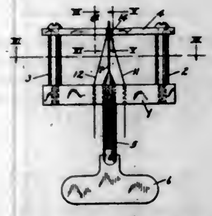
An X-ray device comprising an evacuated envelope, a target and a thermionic cathode therein, leading-in conductors for said cathode, and a focussing device for said cathode insulatingly supported by said leading-in conductors.

1,865,441. METHOD OF AND APPARATUS FOR CONTROLLING THE DIRECTION OF X-RAYS. ARTHUR MUTSCHELLER, New York, N. Y., assignor to Wappler Electric Company, Inc., Long Island City, N. Y. Filed Aug. 4, 1923. Serial No. 655,565. 6 Claims. (Cl. 250—34.)



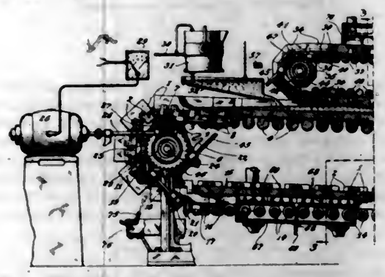
1. A device comprising an X-ray tube and a reflecting member for the purpose of reflecting X-rays from said tube, said reflecting member being made up of a crystalline substance capable of reflecting the X-rays and having the form of a cone frustum.

1,865,442. METHOD OF MANUFACTURING NONINDUCTIVE HELICAL FILAMENTS. WARLEY L. PARROTT, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Jan. 28, 1930. Serial No. 423,933. 7 Claims. (Cl. 140—149.)



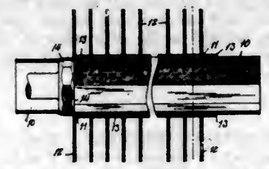
1. The method of forming a twin helical filament which comprises winding the legs of a hairpin filament in parallel spaced relationship about a mandrel of the desired diameter.

1,865,443. METHOD AND APPARATUS FOR CONTINUOUS CASTING OF STEEL BILLETS. JOHN E. PERRY, Youngstown, Ohio, and GEORGE RAMSEY, Brooklyn, N. Y. Filed Nov. 6, 1928. Serial No. 317,510. 8 Claims. (Cl. 22—76.)



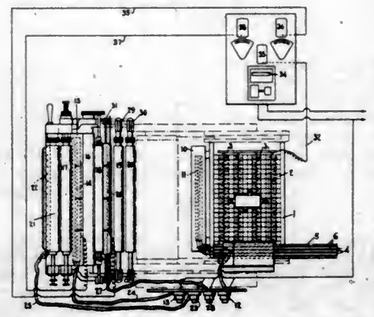
1. A machine for the continuous casting of a metal shape comprising in combination an endless travelling chain of open molds, an endless travelling chain of mold closures adapted to enter into and close the top of said open molds, variable speed driving means for moving said molds and said closures at predetermined rates, and means for controlling the temperature of said molds and said closures.

1,865,444. METHOD OF PRODUCING RADIATOR UNITS. ADOLPH C. RECKER, Oakville, and MALCOLM P. NICHOLS, New Haven, Conn., assignors to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed July 17, 1931. Serial No. 551,325. 9 Claims. (Cl. 153—80.5.)



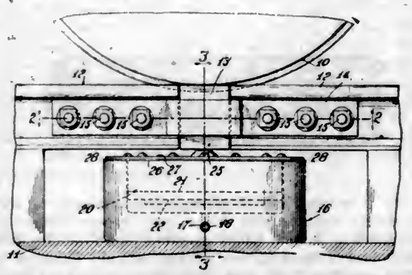
1. A method of producing radiator units, which comprises assembling a fin upon a tubular body member, and then altering the cross-sectional shape of both the said tubular body member and also that portion of the fin engaged therewith to effect a highly efficient heat-conductive union and a strong and durable mechanical union therebetween.

1,865,445. HEAT CONTROL FOR WAX CARBONING PRESSES. GEORGE A. RUTKOSKIE, Athens, Ohio, assignor to The McBee Binder Company, Athens, Ohio, a Corporation of Ohio. Filed Sept. 16, 1931. Serial No. 563,100. 4 Claims. (Cl. 101—344.)



1. The combination with a printing press having an ink fountain, direct driven rollers, a lock up base, and ink plate, of electric heating elements mounted adjacent said fountain, rollers, base and plate, means to connect said elements to a source of current supply and automatic temperature controls mounted in the line.

1,865,446. WEIGHING DEVICE. EDWARD SEARS, Deer Lodge, Mont. Filed Oct. 30, 1930. Serial No. 492,194. 4 Claims. (Cl. 265—47.)



1. A device of the character described, in combination with track-rail sections, a cylinder, arranged beneath the sections, adapted to hold an incompressible fluid, the lower

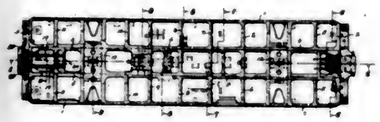
end of the cylinder having a conduit leading therefrom and to a registering gauge; a piston arranged in the cylinder on said fluid while the top of the piston is provided with an arcuate boss; means at the lower end of the piston whereby escape of the fluid between the piston and cylinder wall is prevented; a plunger member reciprocably mounted between the aligned rail sections with the lower end bearing on said arcuate boss on the piston; and a pair of straps secured to opposite sides of the rail sections whereby the plunger member is reciprocatingly held in upright position.

1,865,447. BLASTING ASSEMBLY. JOHN SWENEHART, Wilmington, Del., assignor to Atlas Powder Company, Wilmington, Del., a Corporation of Delaware.. Filed Apr. 25, 1931. Serial No. 532,942. 7 Claims. (Cl. 102—9.)



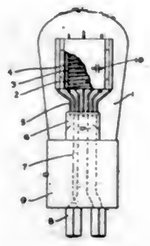
1. In combination, a safety fuse comprising a moisture proof sheath having an opening formed therethrough, an ignition train in said opening, said sheath having a concaved outer end, an igniting bead of highly inflammable material, oval in cross section, seated in the concaved outer end of the fuse with its long axis disposed transversely of said fuse, said bead spanning substantially the entire outer end of the sheath and completely sealing the ignition train opening thereof.

1,865,448. RAILWAY VEHICLE UNDERFRAME. ADELBERT C. WINTEMBERG, Drexel Hill, Pa., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Oct. 17, 1931. Serial No. 569,358. 11 Claims. (Cl. 105—415.)



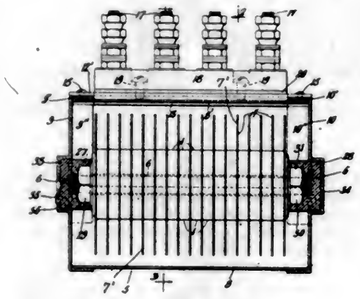
1. In a railway vehicle underframe arranged to serve as a water tight bottom for a tank superstructure applied thereto, a web plate disposed substantially horizontally, centrally disposed longitudinal sill elements extending upwardly from said plate, and a draft gear pocket below said plate, said pocket having vertical walls located intermediate said elements and merging with said web plate.

1,865,449. THERMIONICALLY INACTIVE ELECTRODE. JOHN L. WUERTZ, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Sept. 28, 1926. Serial No. 138,170. 3 Claims. (Cl. 250—27.5.)



1. An electron discharge device comprising an evacuated envelope containing a cathode coated with the oxides of the alkaline earth metals and a second electrode entirely coated with carbon, non-volatile at the operating temperature of the electrode and capable of combining with the material of the cathode on coming in contact therewith to render the same thermionically inactive and a clean-up agent within the envelope for fixing the reaction products of said combination.

1,865,450. RECTIFIER. CONRAD H. ZIERDT, Rosedale, Penn Township, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 6, 1930. Serial No. 418,714. 5 Claims. (Cl. 175—366.)

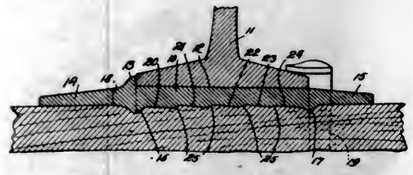


4. In combination, a rectifier unit, a housing member including an end element having a bushing supporting portion, a bushing receivable in said portion, and forming a support for said unit, projection and aperture engaging means between said bushing and said portion for preventing turning of said bushing with respect to said portion, and means between said bushing and said unit for preventing turning of said unit with respect to said bushing.

1,865,451. EVAPORATION OF SEA WATER. LEWIS BENAJAH ALLYN, Westfield, Mass., assignor to Vitamin Food Co. Inc., New York, N. Y., a Corporation of Delaware. Filed May 2, 1928. Serial No. 274,678. 4 Claims. (Cl. 23—42.)

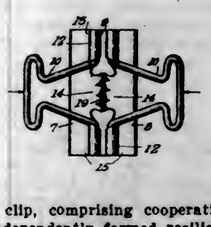
1. As an improvement in the evaporation of sea water, the method consisting of the addition of an alkaline substance so as to retain the other salts contained in the sea water along with the sodium chloride.

1,865,452. TIE-PLATE. LEVI B. ARMSTRONG, Chicago, Ill., assignor to The Lundie Engineering Corporation, New York, N. Y., a Corporation of New York. Filed May 7, 1931. Serial No. 535,788. 8 Claims. (Cl. 238—298.)



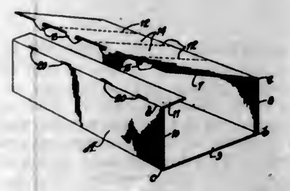
1. A tie plate having pronounced transverse bottom ribs positioned so as to be located below the edges of a rail which is to rest on the plate, and also having, between the ribs, a transverse series of shoulders and inclined surfaces intervening between the shoulders and between the ribs and the shoulders next to them, the inclined surfaces merging gradually with the lower edges of the shoulders and with the pronounced ribs, and the inclines extending downwardly in one direction away from one end of the plate.

1,865,453. BINDER CLIP. LOUIS E. BALTZLEY, Glen Ridge, N. J. Filed Feb. 27, 1930. Serial No. 431,660. 4 Claims. (Cl. 24—255.)



1. A binder clip, comprising cooperating spring jaws composed of independently formed resilient jaw portions and other jaw portions, one set of such jaw portions being offset from the remaining jaw portions to such an extent as will enable the independently formed resilient jaw portions to grip material before the other jaw portions.

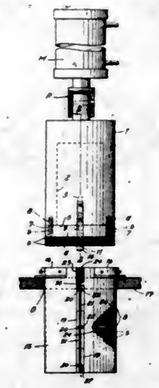
1,865,454. EGG CARTON. LEON BENOIT, Chicago, Ill. Filed Apr. 14, 1930. Serial No. 443,969. 4 Claims. (Cl. 229—45.)



1. A carton having a hinged cover with locking means in the form of a hook adapted for insertion through a slot formed in a fixed part of the enclosure, the slot being of increased width at the end wherein the hook is disposed when moved to locking position whereby a resistance to reverse movement of the hook is provided.

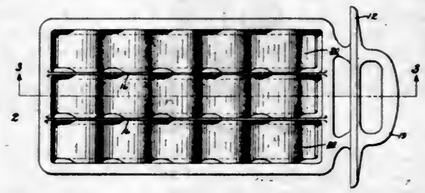
2. A carton for eggs and the like in which is comprised a filler and a collapsible enclosure therefor having a hinged cover provided with transverse lines of severance extending from the forward edge of the cover and terminating at the hinge thereof defining a plurality of separable sections, and a single hook depended from the free edge of each section permitting a severed cover portion to swing to open position independently of the remaining portions of the cover.

1,865,455. METHOD OF AND MACHINE FOR MANUFACTURING LAMINATED PRODUCTS. AUGUST J. CHATTILLION, St. Louis, Mo., assignor of one-half to Harry Buehler, jr., Clayton, Miss. Filed June 19, 1930. Serial No. 462,263. 9 Claims. (Cl. 154—2.)



1. In a machine of the character described, a ram, a cylinder disposed below said ram, means carried by the ram for receiving and holding against the face thereof a plurality of sheets adapted to constitute laminations of a block, and means for actuating the piston to ram said sheets into the cylinder on a down-stroke, said cylinder being adapted to disengage the sheets from the ram on an upstroke.

1,865,456. FREEZING TRAY. RALPH H. CHILTON, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 20, 1930. Serial No. 483,225. 4 Claims. (Cl. 62—108.5.)

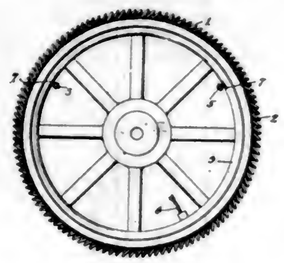


1. A freezing tray adapted to be inserted within a freezing chamber comprising: a molded flexible rubber container having a plurality of elongated pockets therein formed of flexible rubber, and a removable sinuous flexible metal band fitting within each pocket with the edges of said band contacting with the side walls of said pocket and forming a plurality of separate ice blocks in each pocket, said band and associated ice blocks in each pocket being removable bodily from said container by flexing the rubber walls of said pocket.

1,865,457. METALLIC SPRING TIRE. HECTOR ARMANDO CRUZ, Buenos Aires, Argentina. Filed Nov. 15, 1927, Serial No. 233,418, and in Argentina July 23, 1927. 1 Claim. (Cl. 152—8.)

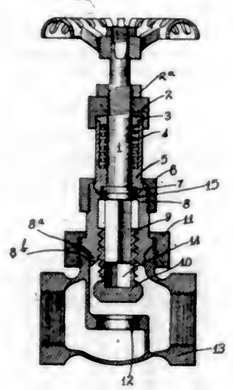
A metallic tire for vehicle wheels comprising a perforated and concaved rim, a coil spring having its convolu-

tions disposed at an oblique angle to said rim and extending over the entire outer periphery thereof, said spring seated in said concaved rim, a bed of resilient material having outwardly flaring borders on which said convolutions rest in spaced relation to the bottom of the cavity



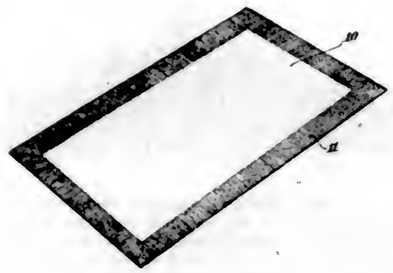
thereof to increase the resiliency of the wheel, means for securely holding the inner parts of said convolutions in position in said rim, and means for securely holding the ends of said spring together after their passage through one of the perforations in said rim.

1,865,458. HIGH PRESSURE VALVE. MATTHEW W. DEGNAN, Kansas City, Kans. Filed Sept. 14, 1928. Serial No. 305,959. 2 Claims. (Cl. 251—48.)



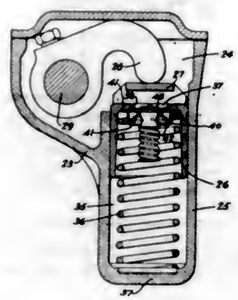
2. In a valve assembly a valve body having a seat, an internally threaded member secured to said valve body, said member having a seat, a unitary valve member having lower and upper valve surfaces for coaction with said valve body seat and said member seat respectively, said valve member having an integral external threaded extension for coaction with the internal threads on said member and being provided with an angular socket, a valve stem adapted to fit in said socket having an integral disc-shaped collar, a second member secured to said internally threaded member and housing the outer portion of said valve stem, a gasket, said second member having a recess adapted to receive said integral collar in bearing relation to said gasket, whereby to form a combined bearing and seal insuring tightness of the valve assembly under high pressure conditions, a spring surrounding said valve stem, a follower for said spring, and means mounted on said valve stem for retaining the pressure exerted by said spring.

1,865,459. BATH MAT. ALBERTA F. EDMANDS, New York, N. Y. Filed Nov. 20, 1930. Serial No. 496,948. 2 Claims. (Cl. 154—49.)



1. A bath mat comprising a plurality of layers of paper whose central portions are substantially plane and whose margins are formed into crimps whose edges are directed substantially outwardly from the center of said mat.

1,865,460. SHOCK ABSORBER. GEORGE W. ELSEY, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 11, 1931. Serial No. 521,695. 6 Claims. (Cl. 267—8.)

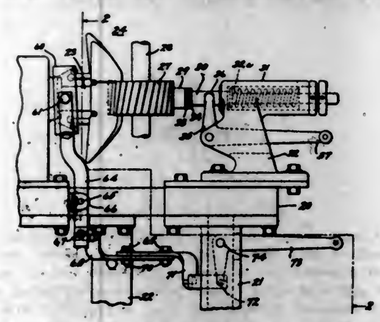


1. In a shock absorber, the combination with a casing providing a cylinder; of a piston in said cylinder, said piston having a passage for the transfer of fluid therethrough; a valve yieldably urged to close said passage; a plunger valve slidably carried by said first mentioned valve and operable by fluid pressure to establish a restricted flow of fluid through said valve; an orifice in said plunger valve; and a resilient disc normally closing said orifice but operable by fluid pressure initially to establish a restricted flow of fluid through said valve.

1,865,461. ARMATURE WINDING MACHINE. RODGER J. EMMERT, Dayton, Ohio, assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 11, 1927. Serial No. 182,602. 10 Claims. (Cl. 242—13.)

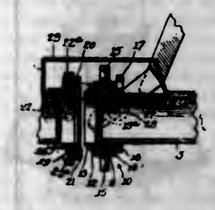
1. A winding head for armature winding machines comprising, a hub adapted to be mounted on a shaft and providing a recess for receiving an armature core, means

for guiding portions of armature coils into certain spaced slots of the core, and means for guiding those portions of the armature coils which overlie the ends of the core



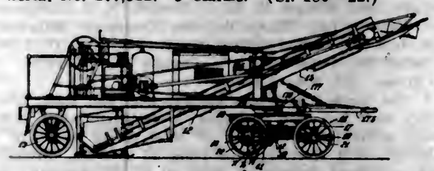
upon those parts of the core ends which are inside the bottoms of those core slots located between the slots into which armature coils are being wound.

1,865,462. PIPE CONNECTION. GEORGE M. ETNYRE, Oregon, Ill., assignor to E. D. Etnyre & Company, Inc., Oregon, Ill., a Corporation of Illinois. Filed Apr. 13, 1929. Serial No. 354,736. 2 Claims. (Cl. 285—172.)



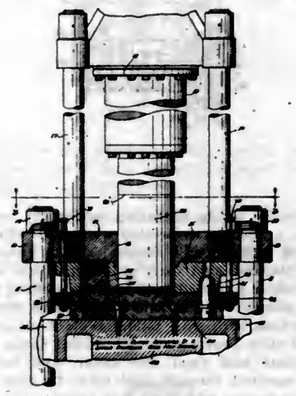
1. A pipe connection for securing two-sections of pipe together in fluid tight relation having, in combination, a male member on one of said pipe sections comprising a sleeve in screw threaded engagement with said pipe section, an annular head on the outer end of said sleeve having a tapered surface thereon, a split clamping ring on said pipe section arranged to be clamped in abutment with the end face of said sleeve, a collar rotatably mounted on the outer surface of said sleeve between the annular head on the one hand and the split clamping ring on the other, a plurality of radially extending stub shafts on said collar, a female member on the other one of said pipe sections presenting a complementary tapered surface for engagement with the tapered surface on said male member, hook means mounted on said stub shafts, and means on the opposite one of said pipe sections engageable by said hook means to secure said male and female members in operative relation.

1,865,463. TRACTION TRUCK FOR VEHICLES. ROLLA A. MORTON, Long Beach, Calif. Filed Mar. 23, 1927. Serial No. 177,512. 5 Claims. (Cl. 180—22.)



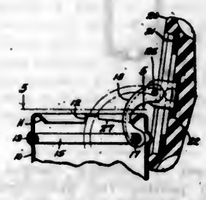
1. A vehicle comprising a main frame, a traction truck therefor comprising upper and lower truck frames, a fifth wheel connection between said main frame and said upper truck frame, propelling and steering wheels on said lower truck frame, springs connecting said upper and lower truck frames, a motor on said main frame, and power transmission mechanism connecting said motor with said propelling wheels, said power transmission mechanism comprising a telescopic drive connection permitting relative vertical movement between said upper and lower truck frames.

1,865,464. MULTIPLE HYDRAULIC PRESS FOR MOLDING INLITE BATTERY BOXES. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 2, 1927. Serial No. 210,183. 6 Claims. (Cl. 18—30.)



1. A molding machine for molding articles from a stiff plastic material comprising: a pressure cylinder for receiving the unformed plastic material, a ram for said cylinder, a mold having a plurality of mold cavities spaced adjacent the outside of said cylinder and individually connected to the cylinder interior by a plurality of relatively small extrusion apertures, said apertures being adjacent the cylinder head, said mold having a stationary upper section and a reciprocatable lower section dividing through said apertures said lower mold section and cylinder head being functionally integral and reciprocatable together, a movable platen for supporting said lower section during the molding operation, said ram being operable to press the movable lower mold section from the stationary upper section after the completion of the molding operation and thereby initiate the separation of the mold sections.

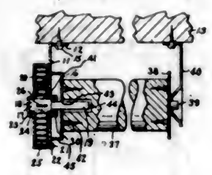
1,865,465. FILLER DEVICE. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed May 2, 1930. Serial No. 449,210. 3 Claims. (Cl. 220—24.)



1. A filler device for a tank comprising: an upstanding tank inlet duct having an inturned peripheral flange adjacent its upper edge, said flange having a slot therein, said duct having a ring rotatably supported therein below said flange, a closure cap for said duct having a hinge link hinged upon said rotatable ring and swingable thereupon

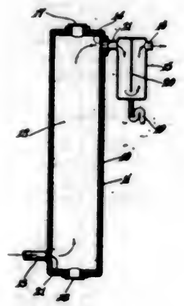
to open and closed positions, said cap having a radially outward projecting lug movable through said slot to a position under said flange when the cap is in closed position, to retain said cap in place.

1,865,466. WINDOW SHADE OPERATING DEVICE. FRANK J. GOSSLING, St. Bernard, and BERNARD A. GOSSLING, Norwood, Ohio. Filed June 26, 1930. Serial No. 464,030. 1 Claim. (Cl. 156—36.)



In a window shade operating device the combination of a roller, a housing associated with said roller, a shaft journaled in said housing, a spiral spring secured to said shaft and housing, said shaft provided with a squared extension, a collar provided with notches secured to said extension, a pawl pivoted to said housing and having operative connection with said collar, a plate secured to said roller, said plate provided with a radial flange forming a housing about said pawl and collar, and said squared extension received through said plate forming a driving connection between said shaft and roller.

1,865,467. PROCESS OF REFINING HYDROCARBONS. THOMAS T. GRAY, Elizabeth, N. J., assignor to The Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Filed Mar. 6, 1929. Serial No. 344,620. 6 Claims. (Cl. 196—96.)



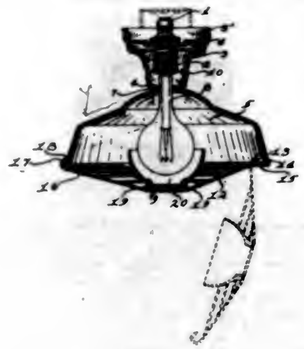
1. In the process of refining cracked hydrocarbons which consists in passing the hydrocarbons in vapor phase through a bed of solid adsorptive material thereby polymerizing unstable, unsaturated constituents present in the hydrocarbons, the improvement comprising maintaining the vapor flow at sufficient velocity to carry polymers out of the bed of adsorptive material substantially as fast as they are produced.

1,865,468. LAMP BASE. DANIEL S. GUSTIN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Aug. 29, 1929. Serial No. 389,123. 2 Claims. (Cl. 176—32.)



1. A lamp comprising a bulb, lead-wires extending from the neck of said bulb, a base having a tubular contact member disposed on the neck of said bulb and an end of one of said lead wires formed into a compact coiled mass of wire disposed in tight frictional engagement with the inner wall of said tubular member.

1,865,469. LIGHTING FIXTURE. EDWIN F. GUTH, Webster Groves, Mo. Filed Aug. 26, 1930. Serial No. 477,849. 4 Claims. (Cl. 240—78.)

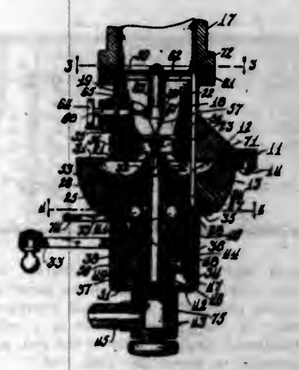


4. The combination in a lighting unit, of a canopy, a reflector secured thereto, a socket mounted in the canopy, a lamp in said socket, there being a plurality of openings in the side wall of said canopy, a wire guard, formed of annular and radial wires, a diffusing bowl having an opening in its center, the inner ends of said radial wires extending into said central opening and engaging the said bowl to hold it in position.

1,865,470. ELECTROLYTIC BRIGHT DIP FOR IRON AND STEEL. GEORGE B. HOGABOOM, New Britain, Conn., and WILLIS R. KING, Newark, N. J., assignors to Hanson-Van Winkle Munning Company, Matawan, N. J., a Corporation of New Jersey. Filed Oct. 17, 1930, Serial No. 489,486, and in Canada Oct. 9, 1930. 6 Claims. (Cl. 204—1.)

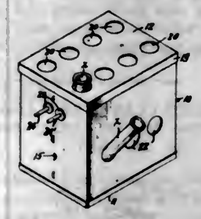
1. The method of bright dipping iron and steel, from which scale has been preliminarily removed, which comprises maintaining the iron or steel as an anode in a sulphuric acid electrolyte of from 25 to 75% strength with a current density of from 80 to 250 amperes per square foot of anode surface, and artificially cooling the electrolyte to maintain the temperature thereof between 50° F. and 100° F.

1,865,471. CARBURETOR. LUDWIG HUBER and RICHARD DISTEL, Detroit, Mich. Filed Oct. 20, 1930. Serial No. 489,834. 12 Claims. (Cl. 261—46.)



1. A fuel vaporizing device for an internal combustion engine, comprising, in combination, a mixing chamber having an outlet, a fuel inlet and an air inlet communicating with said mixing chamber, a valve in said fuel inlet, a shutter in the said outlet operatively connected to said valve, and yieldable means to maintain said shutter and valve closed while the engine is idle, said shutter being actuated upon the starting of said engine to open said valve.

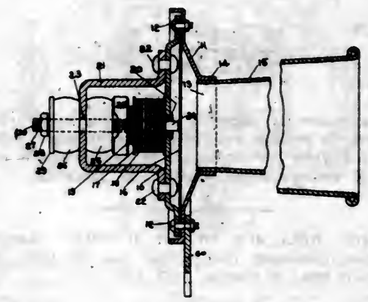
1,865,472. TEST TUBE HEATING APPARATUS. IRVING LAMSTEIN, Brooklyn, N. Y. Filed June 6, 1928. Serial No. 283,348. 2 Claims. (Cl. 219—19.)



1. A test-tube heater comprising a casing having a cover, a plate carried in spaced relation below said cover, said cover and plate having registering openings to guide tubes vertically therein, openings in the side walls of said casing to receive tubes in an inclined position, a raised bottom in said casing to support the ends of tubes entered therein, high resistance coils disposed in the casings, and electrical connections to energize said coils.

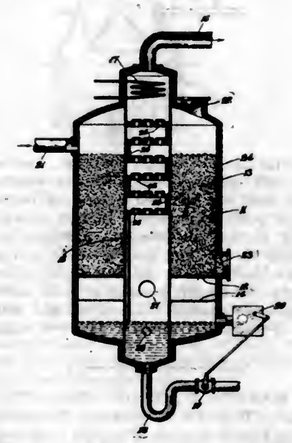
1,865,473. HORN. CLAIRE MELVIN LEE, Elyria, Ohio, assignor to The General Industries Company, Elyria, Ohio, a Corporation of Ohio. Filed Nov. 17, 1923. Serial No. 675,316. 4 Claims. (Cl. 177—7.)

1. An electric sound producing horn comprising a frame, a diaphragm carried thereby, an amplifying horn element carried by the frame in operative relation to the diaphragm, an electro-magnet secured to the frame, an armature cooperating with the magnet, a diaphragm hammer associated with the armature, a supporting bracket



for said armature and hammer secured to the frame, and a pad of vibration absorbing material between the bracket and the hammer and armature.

1,865,474. REFINING HYDROCARBONS. MALVIN R. MANDELBAUM, Elizabeth, N. J., assignor to The Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Filed July 29, 1930. Serial No. 471,451. 9 Claims. (Cl. 261—96.)

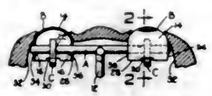


1. In combination, a shell, a fractionating tower arranged within said shell and forming a chamber therewith, means within said chamber for supporting solid adsorptive treating material for free drainage, said chamber having communication with the lower portion of said fractionating tower, a vapor inlet into said chamber, and a vapor outlet from said fractionating tower.

1,865,475. MOVABLE EYE SET FOR DOLLS. SAMUEL MARCUS, New York, N. Y., assignor, by mesne assignments, to Margon Corporation, New York, N. Y., a Corporation of New York. Filed July 12, 1930. Serial No. 467,529. 18 Claims. (Cl. 46—40.)

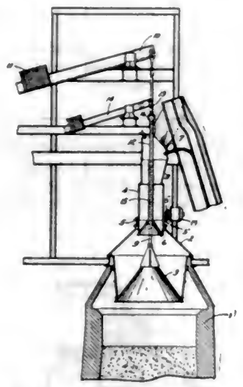
1. An eye set comprising a cross rod, a pair of approximately hemispherical eye members freely mounted thereon for movement along the cross rod, and an in-

termediate member localized at and directly affixed to the cross rod at each of the eye members, said intermediate members being independent and unconnected except through the cross rod and having bearing surfaces mating



with and directly engaging the peripheries of the eye members for causing the eye members to rotate with the cross rod while permitting a free and automatic adjustment of the eye members along the cross rod.

1,865,476. BELL ROD SWIVEL SUPPORT. ARTHUR G. MCKEE, Cleveland, Ohio. Filed Jan. 29, 1931. Serial No. 511,969. 9 Claims. (Cl. 266—27.)



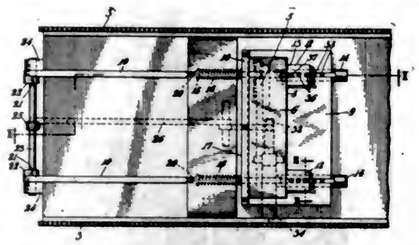
1. In combination, a tubular bell rod, means for operating said bell rod, a tubular member secured to the upper end of said bell rod and having an outwardly extending flange portion, an outer tubular member having a cup-shaped portion enclosing said flange, said outer tubular member having link connection to said means for operating said rod, and a roller bearing between said flange and the cup-shaped portion of said outer tubular member adapted to sustain the load on said bell rod and to permit free relative rotation between said tubular members.

1,865,477. MANUFACTURE OF MERCAPTO BENZOTHIAZOLE. WILLIAM E. MESSER, Naugatuck, Conn., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Sept. 22,1930. Serial No. 483,757. 7 Claims. (Cl. 260—44.)

1. A process of manufacturing a mercaptoaryl-thiazole compound which comprises heating under pressure the preformed reaction product of at least substantially 2 moles of a primary aryl amine and at least substantially 3 moles of sulphur with an amount of carbon disulphide in molecular excess of that theoretically required to form the desired thiazole compound.

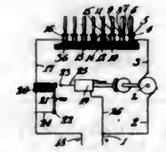
1,865,478. QUICK-CHANGE ELECTRO-HOLDER FOR PRINTING MACHINES. EMIL L. MUELLER, Rutherford, N. J. Filed July 30, 1930. Serial No. 471,728. 4 Claims. (Cl. 101—383.)

1. In a quick-change electro-holder for printing machines an electro-supporting plate having a flat surface upon which the electro may rest, said supporting plate also having a shoulder thereon against which an edge of the electro may engage, a clamp member movable toward and away from said shoulder, said clamp member providing a second shoulder in opposed relation to the first shoulder and adapted to engage an opposite edge of the electro, a slide rod slidably carried by the supporting plate, said slide rod having a series of threaded apertures



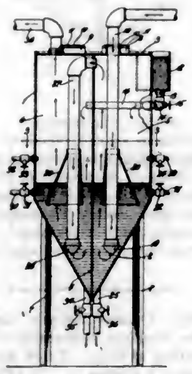
therein spaced apart longitudinally thereof selectively usable for the attachment of the clamp member to said slide rod, screws engageable in selected apertures of the rod to thereby fix the clamp member in a selected position of adjustment longitudinally of the rod, and means manually operable to move the slide rod.

1,865,479. SAFETY DEVICE FOR PRINTING PRESSES AND THE LIKE. EMIL L. MUELLER, Rutherford, N. J. Filed Aug. 5, 1930. Serial No. 473,140. 16 Claims. (Cl. 192—127.)



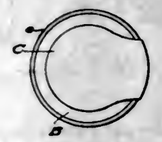
2. The combination with a pair of rotatable rollers, means to drive said rollers, and a brake to stop rotation of said rollers, of a guard device for said rollers comprising a guard member standing adjacent said rollers, means by which said guard member is movably mounted, and means by which movement of said guard member will control the operation of said brake.

1,865,480. LIQUID CLARIFIER. ALFRED B. ORR, Belleville, Ill. Filed May 27, 1929. Serial No. 366,175. 10 Claims. (Cl. 210—58.)



1. A device of the character described comprising a tank, a wall dividing the inside of said tank into two compartments, an additional tank supported by said first tank, pipes for conducting liquid from said additional tank into said two compartments respectively, means for discharging liquid into one of said compartments, means for discharging liquid from said one compartment into said other compartment, and means for conducting the liquid from said other compartment.

1,865,481. TENNIS BALL AND THE LIKE. ALBERT ERNEST PENFOLD, Birmingham, England, assignor to Dunlop Tire and Rubber Corporation of America, Buffalo, N. Y., a Corporation of New York. Original application filed Dec. 6, 1924, Serial No. 754,263, and in Great Britain Mar. 13, 1924. Divided and this application filed Apr. 4, 1927. Serial No. 180,952. 10 Claims. (Cl. 273—61.)



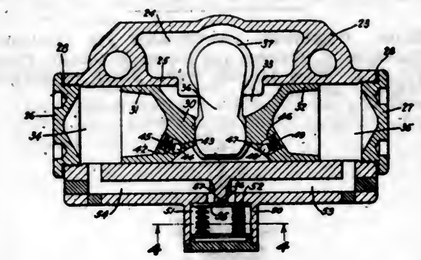
1. A tennis ball gas container comprising component parts of non-porous, non-rigid material composed of a rubber mixture containing a substantial percentage of a gum such as gutta percha or balata.

1,865,482. HYDRAULIC SHOCK ABSORBER. WALTER W. RIEDEL, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 31, 1929. Serial No. 382,476. 7 Claims. (Cl. 267—8.)

1. A shock absorber comprising in combination, a casing providing a fluid reservoir and a cylinder; pistons in the cylinder forming two compression chambers therein; ducts in the casing providing communication between the said chambers; a check-valve adapted, in response to a predetermined fluid pressure, to establish a flow of fluid through said ducts in one direction only; another check-valve adapted to establish a flow of fluid through said ducts in the other direction only, in response to another predetermined fluid pressure; and a common member secured to the casing and supporting both check valves, said member having means for establishing a restricted flow of fluid between the compression chambers independently of the check valves.

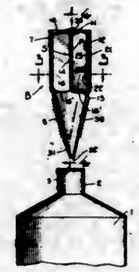
1,865,483. SHOCK ABSORBER. WALTER W. RIEDEL, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 23, 1930. Serial No. 470,037. 8 Claims. (Cl. 188—88.)

1. A shock absorber comprising, in combination, a casing providing a cylinder; a piston in said cylinder forming two compression chambers therein a valve chamber; a duct leading from each compression chamber into the valve chamber; a disc-valve in said valve chamber; and



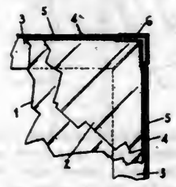
springs engaging said disc-valve at diametrically opposite sides, yieldably urging said disc-valve to shut off communication between the ducts and the valve chamber.

1,865,484. OPENING AND CLOSING DEVICE FOR COLLAPSIBLE TUBES. WENDEL V. ROOS, New York, N. Y. Filed Feb. 7, 1930. Serial No. 426,496. 7 Claims. (Cl. 221—60.)



1. In a closure device for a collapsible tube having a discharge orifice, a hollow body, spring actuated sealing means within said body, said spring actuated sealing means comprising a part arranged to be displaced from its normal position by application of pressure to the medium contained within the tube, and to be returned to its normal position upon release of the pressure, a hollow nozzle adapted to perforate a seal placed over the discharge orifice of the tube, said hollow nozzle affording communication between the interior of the hollow body and the tube, and means for locking said closure member to the collapsible tube.

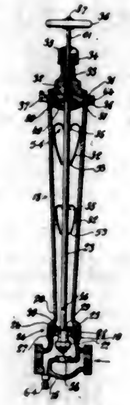
1,865,485. MEANS TO PROTECT CORNERS OF FRANGIBLE MATERIAL. ELMER SAR, New York, N. Y., assignor to The Perser Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1930. Serial No. 439,893. 4 Claims. (Cl. 88—26.)



1. The combination, with a glass plate provided with a binding which is spaced from the edge of the plate, of detachable corners formed of springy material, each angle

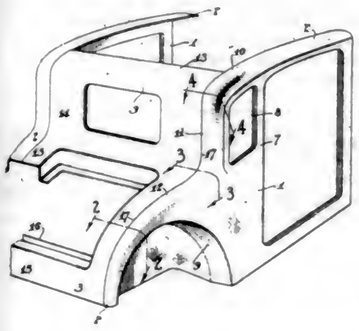
of which has an offset end portion adapted to be inserted intermediate the plate and the binding, the corner being spaced from the corner of said plate.

1,865,486. COMBINED VALVE AND AIR CUSHION. FREDERICK W. SEYMOUR and DANIEL A. GILLEN, Flushing, N. Y. Filed Jan. 24, 1929. Serial No. 334,638. 7 Claims. (Cl. 137—71.)



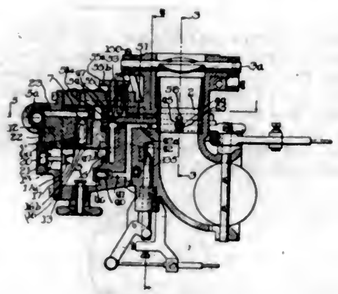
1. A device of the character described, including a valve body, a valve therein, a stem for the valve, a separable air cushion compartment coaxial with the stem and communicating with the valve body, a bonnet for said compartment at the free end thereof, and means to form a fluid tight connection between the stem and the bonnet, said stem consisting of a tubular member communicating with said compartment to form an auxiliary air cushion chamber.

1,865,487. VEHICLE BODY STRUCTURE. JOHN P. TARBOX, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 3, 1929. Serial No. 390,088. 4 Claims. (Cl. 296—28.)



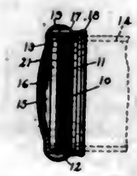
1. A coupé body comprising a one piece side panel comprehending rear door post, rear roof quarter panel, rear quarter panel, rear side panel and deck quarter panel flash welded along the inner edges of the quarters to a rear panel comprehending in a one piece stamping the rear quarter roof panel, the upper back panel and the deck panel.

1,865,488. CARBURETOR. PERCIVAL S. TICE, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Original application filed Nov. 29, 1926, Serial No. 151,287. Divided and this application filed Dec. 5, 1929. Serial No. 411,800. 7 Claims. (Cl. 261—41.)



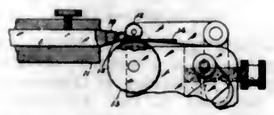
1. In a carburetor and the like for an internal combustion engine, in combination with a fuel mixture conduit comprising a throat through which the fuel mixture moves toward the engine intake, a fuel supply passage discharging in the conduit throat, said passage comprising a channel encompassing the throat, the conduit having a hollow bridge extending diametrically across the throat, the cavity of the bridge communicating at both ends with said throat-encompassing channel, and having a plurality of ports distributed along the length of the bridge for delivery of fuel onwardly in the conduit.

1,865,489. FILLER CAP. CHARLES E. TURNER, Waterbury, Conn., assignor to Bridgeport Brass Company, Bridgeport, Conn. Filed Nov. 25, 1929. Serial No. 409,568. 2 Claims. (Cl. 220—39.)



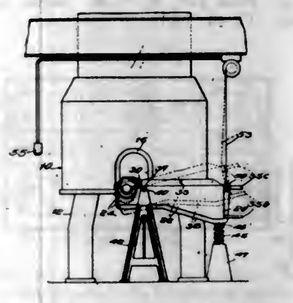
1. A filler cap comprising an inner body of inverted cup form having depressions in the outer surface of its top wall for holding solder, said depressions being located adjacent the periphery of the body top and spaced at intervals from each other, an outer shell having a top wall overlying said depressions, and a body of solder larger than each depression in each depression and melted and pressed to dispose it between the adjacent faces of said top walls to secure them together.

1,865,490. METHOD OF PRODUCING UNIFORM LENGTH FILAMENTS. STEN WADSTEN, Bloomfield, and CHARLES WALLACE HUNT, Wyoming, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Dec. 29, 1928. Serial No. 329,149. 12 Claims. (Cl. 153—65.)



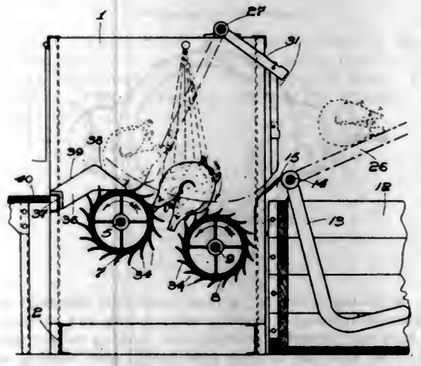
1. The method of making a lamp filament which comprises, winding a wire to helical form having a given number of turns per unit of length, heating the filament to remove deleterious substances, stretching the filament to a given over-all length and uniform pitch and again heating in a gaseous atmosphere.

1,865,491. CUPOLA RESERVOIR. CLAYTON F. WELLS, Chicago, Ill., assignor to Chicago Foundry Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 14, 1930. Serial No. 435,744. 6 Claims. (Cl. 266—40.)



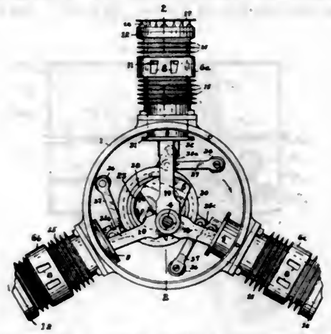
1. A cupola reservoir comprising an elongated receptacle having a relatively shallow end and a relatively deep end, said reservoir adapted to receive metal at its shallow end, the bottom wall thereof sloping downwardly from said shallow end to said deep end when said reservoir is in normal receiving position, said receptacle having a pouring outlet adjacent its shallow end, means pivotally supporting said receptacle, and means for tilting said reservoir about said pivot for pouring metal therefrom without interrupting the flow of metal thereto.

1,865,492. BRISTLE REMOVING MACHINE FOR HOG CARCASSES. NIELS ERIK WERNBERG, Copenhagen, Denmark. Filed July 3, 1930. Serial No. 465,619. 6 Claims. (Cl. 17—16.)



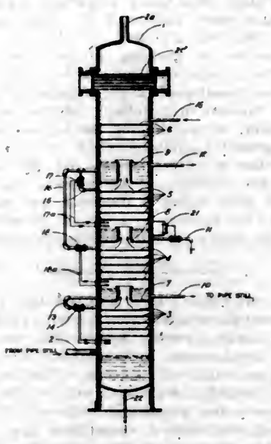
1. A machine for removing bristles from hog carcasses comprising in combination with a suitable housing, certain operative structures carried within and upon said housing, namely, a carcass-supplying cradle operative to deliver carcasses into bristle-removing relation to bristle-removing drums, two bristle-removing drums revolubly mounted in said housing in such juxtaposition to each other and revolving at differing speeds so as to cause them to cooperatively act to retain the carcass in functional relation thereto and remove the bristles therefrom, a stationary, upwardly inclined barrier positioned in carcass-retaining relation to one of said drums, a swinging arm mounted above said drums operative to remove the cleaned carcass over said barrier whereby the same is discharged from said housing, and power generating and transmission means for driving said operative structures whereby they are caused to perform the respective functions set forth.

1,865,493. INTERNAL COMBUSTION ENGINE. JOSEPH E. WHITFIELD, Pittsburgh, Pa., assignor to Whitfield-Johnson Motor Company, Pittsburgh, Pa., a Corporation of Delaware. Filed July 24, 1929. Serial No. 380,516. 9 Claims. (Cl. 123—81.)



1. In an internal combustion engine, the combination with a cylinder provided with fuel-inlet and exhaust ports, a sleeve valve working in the cylinder and provided with fuel-inlet and exhaust ports which are brought into registration with the corresponding cylinder ports by the movements of the sleeve valve, a piston working in the sleeve valve and a crank shaft to which the piston is coupled, of an eccentric rotatably mounted on the shaft, means whereby the eccentric is rotated by said shaft, and operative connection between the eccentric and the sleeve valve whereby the sleeve valve is given both an oscillatory and a reciprocating movement relative to the cylinder.

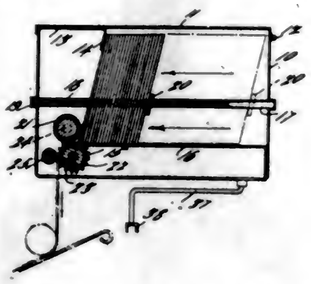
1,865,494. METHOD FOR REFINING CRUDE OIL. HENRY E. WIDDELL, Cleveland, Ohio. Filed Dec. 22, 1927. Serial No. 241,748. 4 Claims. (Cl. 196—94.)



1. The method of treating a paraffin or semi-paraffin base oil from which the lighter constituents such as gasoline and kerosene have been previously distilled off, which consists in heating the oil to the point of vaporization,

conducting the vapor to a fractionator and subjecting the rising vapors to successively lower temperatures to condense the vapor into fractions containing pressable wax and pressable and non-pressable waxes, revaporizing the fraction containing pressable and non-pressable waxes and recondensing it into separate fractions, and collecting the pressable wax-containing fraction as it is condensed in the first said fraction containing pressable wax.

1,865,495. ENVELOPE FEEDING DEVICE. BERNARD ANDREW WOOD, Charlottesville, Va. Filed Dec. 6, 1930. Serial No. 500,611. 2 Claims. (Cl. 197—130.)



1. In an envelope feeding device, a holder having outwardly extending side walls forming channels, springs adapted to expand and contract in the said channels, means for anchoring the springs at the front of the holder, a follower extending transversely of the holder and guided in the said channels to which the other ends of the springs are connected, a support on which envelopes are moved longitudinally of the holder, a feeding roller rotatively mounted in the holder with its periphery substantially on the plane of the envelope support, rollers associated with the first mentioned roller for feeding and guiding envelopes, a gear connected to the first mentioned roller, a typewriter platen shaft having a gear wheel thereon, and pinions interposed between the aforesaid gear wheels for communicating the rotary motion of the platen shaft to the feed roller.

1,865,496. PROCESS FOR OBTAINING COLLOIDAL CLAYS FROM ORDINARY SURFACE CLAYS. OSCAR E. J. ABRAHAMSON, Buffalo, N. Y. Filed July 30, 1929. Serial No. 382,294. 2 Claims. (Cl. 252—6.)

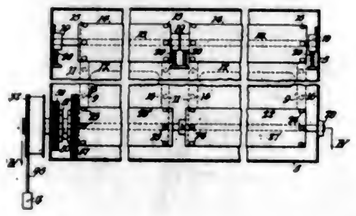
1. The method of treating surface clay to separate therefrom the colloidal clay suitable for replacing in molding sand those constituents dissipated during the use of the sand which consists in forming a mixture of the surface clay and water, so centrifuging the mixture as to remove the heavy granular particles which are above the order of .0002 inches in diameter while not affecting the equilibrium in the mixture of the colloidal particles below the order of .0002 inches in diameter, and subjecting the remainder of the mixture to a second centrifuging action to recover the said colloidal particles contained therein.

1,865,497. METHOD OF HARDENING GELATINE FILMS AND SURFACES AND RESULTING PRODUCT. FRANCIS CLARKE ATWOOD, Newtonville, Mass., assignor, by mesne assignments, to Technicolor, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 30, 1926. Serial No. 105,876. 8 Claims. (Cl. 91—70.)

3. A process for preparing cellulosic films with a hardened gelatine surface, comprising applying to said film a fluid coating of gelatine containing a hardening agent and an organic acid, effecting an intimate and uniform association of the fluid with the film surface, drying the same promptly and at low temperature, without appreciable reduction of the hardening agent, and subjecting the thus coated film to a temperature of 90 to 110° F. uniformly effective upon the film and coating.

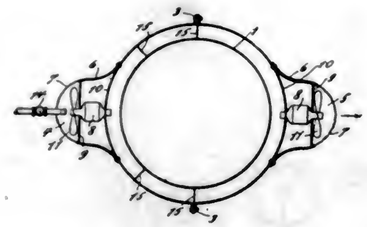
4. A process for preparing hardened gelatine, comprising the steps of treating a gelatine composition with a hardening agent and with acetic acid, causing the same to set to a firm consistency, and subjecting the same to an elevated temperature.

1,865,498. MOVING SIGN. HARRY MESSNER AUSTIN, Chestnut Hill, Pa., assignor to Charles Blum, Philadelphia, Pa. Filed Feb. 21, 1929. Serial No. 341,592. 5 Claims. (Cl. 40—96.)



1. In a moving sign, the combination with two endless belts, carrying the things to be displayed; of means adapted to intermittently shift said belts, including two independently rotatable rollers engaging said belts; a rotary drum; ratchet means adapted to alternately hold each of said rollers stationary, while the other is shifted by turning movement of said drum; a spring motor mechanism connecting said rollers and drum; and a cable carried by said drum; whereby said spring may be stressed to turn said rollers by traction on said cable.

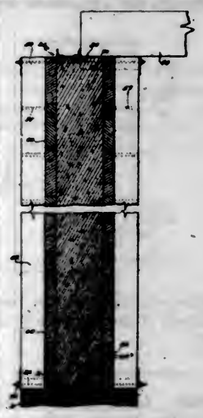
1,865,499. MEANS FOR COOLING ELECTRIC APPARATUS. FRANK G. BAUM, Cassel, Calif. Filed Sept. 13, 1929. Serial No. 392,421. 10 Claims. (Cl. 257—191.)



6. A cooling device for a tank containing electrical apparatus comprising, a housing surrounding and enclosing the tank and spaced therefrom, said housing having inlet and outlet openings therein, fans within said housing adjacent the inlet and outlet openings therein, means for driving said fans to cause a current of air to flow through the inlet in the housing and around the tank to the outlet in the housing, and means adjacent the inlet in the housing for introducing moisture into the air flowing therethrough.

1,865,500. WALL CONSTRUCTION. ALBERT F. BEMIS, Newton, Mass., assignor to Bemis Industries Inc., Boston, Mass., a Corporation of Delaware. Filed Feb. 27, 1929. Serial No. 342,996. 12 Claims. (Cl. 72—30.)

1. A method of building a wall which comprises forming a footing, erecting a framework thereon, securing rows of uprights in parallel spaced relation to the framework, placing parallel layers of slabs with their marginal faces



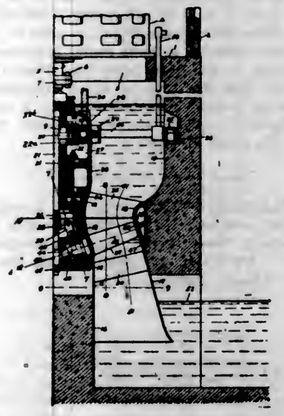
engaging the inner faces of the uprights, pouring cementitious material about the framework between the slab layers, and removing the uprights.

1,865,501. BUCKLE. SAMUEL N. BICKERSTAFF, Kalamazoo, Mich., assignor to The Henderson-Ames Company, Kalamazoo, Mich. Filed Dec. 5, 1931. Serial No. 579,137. 4 Claims. (Cl. 24—163.)



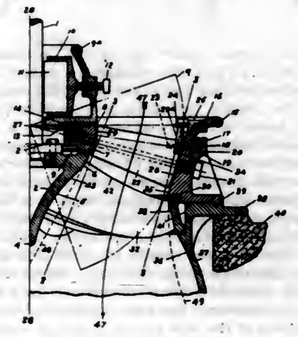
4. A buckle plate having a loop-like link pivoted thereto, said link being provided with a cross member and with reverse bends between its pivoted and free ends on opposite sides of said cross member.

1,865,502. HYDRAULIC TURBINE. GEORGE A. BIGGS, Springfield, Ohio, assignor to The James Leffel & Company, Springfield, Ohio, a Corporation of Ohio. Filed May 24, 1929. Serial No. 365,650. 16 Claims. (Cl. 253—148.)



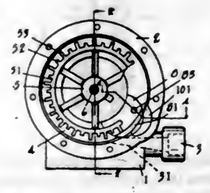
1. In combination in a gateless hydraulic turbine, a runner, a plurality of adjustable buckets, a plurality of superimposed superior stationary guide vanes, a plurality of inferior stationary draft tube vanes, outer and inner guide vane rings for supporting the superior vanes, the inner ring being supported by the outer ring, a draft tube for supporting the inferior vanes and a core tube adapted to support the inner end of said inferior vanes.

1,865,503. HYDRAULIC TURBINE. GEORGE A. BIGGS, Springfield, Ohio, assignor to The James Leffel & Company, Springfield, Ohio, a Corporation of Ohio. Original application filed Jan. 24, 1929, Serial No. 334,800. Divided and this application filed July 22, 1929. Serial No. 379,901. 36 Claims. (Cl. 253—155.)



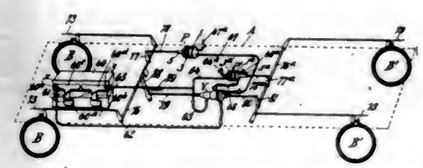
1. In a hydraulic turbine, a runner hub and a plurality of buckets of such curvature that a section through any bucket on a plane at an angle from 90 degrees to 30 degrees to a radial line from the runner axis will be convex on top and a section on the surface of the cylinder whose axis is parallel to the runner axis will be concave on top of the runner, and gate means the longitudinal axis of which is substantially parallel to the longitudinal axis of the runner buckets.

1,865,504. ROTARY PUMP. JOHN C. BIRD, Battle Creek, Mich., assignor to Union Steam Pump Company, Battle Creek, Mich. Filed Mar. 5, 1929. Serial No. 344,243. 4 Claims. (Cl. 103—96.)



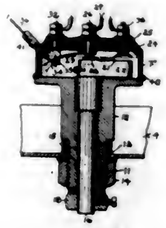
1. In a pump of the class described, the combination of a pump casing, a cylindrical chamber having an intake port opening into the periphery of said chamber, a rotor wheel with a heavy rim filling the said casing and with rectangular ended projections of alternate different height at its periphery, the higher of which conform to the peripheral wall of said chamber and are spaced therefrom for engaging and advancing the liquid being pumped, the forward faces of the higher of said projections being in radial planes, a segmental abutment on an arc concentric with the periphery of said chamber on a detachable plate in said casing and of sufficient length to substend at least two of the said longer projections and conforming to the ends thereof and closely engaging the same, a discharge port in advance of said abutment, and a cover plate with discharge connection disposed to connect to said discharge port.

1,865,505. VACUUM BRAKE SYSTEM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed June 11, 1930. Serial No. 460,334. 8 Claims. (Cl. 188—152.)



1. In a vacuum brake system for automotive vehicles provided with an internal combustion engine having throttle-controlled suction means for supplying combustible mixture to the engine cylinders, the combination of a plurality of power actuators each comprising a cylinder and piston, and means for connecting said actuators with brake mechanism, certain of said actuators having the piston vacuum balanced, and certain of said actuators having the piston pressure balanced, when in released position, valve mechanism connected with all of said actuators, a physically operable part for operating said valve mechanism to effect a power stroke of all of said actuators substantially simultaneously, said valve mechanism being provided with separate suction connections for the suction balanced and pressure balanced actuators, each connected with portions of the said suction means at widely separated points therein, so that the air exhausted from actuators of each type will be admitted to a portion of said suction means supplying a portion only of the engine cylinders, and at a different time from the admission of air exhausted from actuators of the other type.

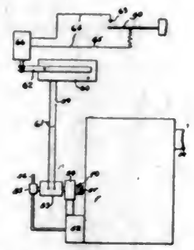
1,865,506. AUTOMOBILE SIGNALING DEVICE. THORNTON L. CORDRAY, Cleveland, Ohio. Filed July 2, 1930. Serial No. 465,390. 8 Claims. (Cl. 200—5.)



1. As a separate article of manufacture and sale for automobiles, an electrical signaling controller, having means for attaching it to a fixed part of an automobile, means for making and breaking a plural number of electrical circuits, said last mentioned means including a plurality of radially disposed flexible blades and keepers therefor, and a series of flexible operating elements extending obliquely therefrom adapted to be connected to several of the devices in the automobile for controlling the operations thereof.

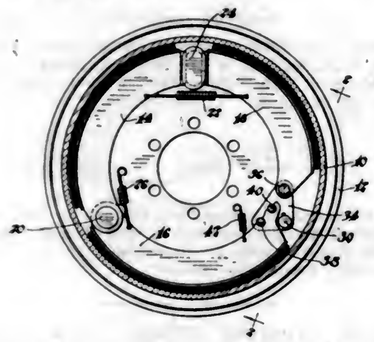
1,865,507. METHOD AND APPARATUS FOR EFFECTING AUTOMATIC ADJUSTMENTS OF THERMOSTATICALLY CONTROLLED HEATERS. WILLIAM J. CROWELL, Jr., Wyncote, Pa. Filed May 31, 1930. Serial No. 458,208. 20 Claims. (Cl. 236—1.)

1. The method of operating a thermostatically controlled furnace of the character indicated which consists in arranging the high or/and low heat periods in adjustment couples, in providing the furnace with one air adjustment during one of the periods of an adjustment couple and with a different air adjustment during the other



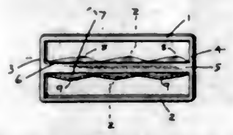
period of the couple, and in using the resultant difference between the durations of the two periods to effect a change of air adjustment.

1,865,508. BRAKE. ADIAL Y. DODGE, South Bend, Ind., and CECIL H. TAYLOR, Detroit, Mich., assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Apr. 4, 1929. Serial No. 352,353. 13 Claims. (Cl. 188—78.)



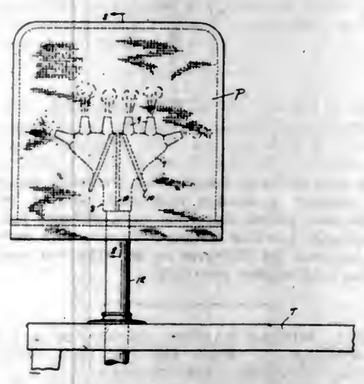
1. A brake comprising, in combination, a drum, a pair of shoes arranged end to end and engageable with the drum, and a rocking member connected to the adjacent ends of said shoes and whose connection to at least one of the shoes is by a pair of alternatively-effective parts, one of which transmits thrust from the shoe to the rocking member substantially without radial movement of the shoe with respect to the drum when the drum is turning in one direction, and the other of which transmits thrust from the rocking member to said shoe with a substantial component radially toward the drum when the drum is turning in the other direction.

1,865,509. SLIDE BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Oct. 21, 1931. Serial No. 570,083. 3 Claims. (Cl. 24—200.)



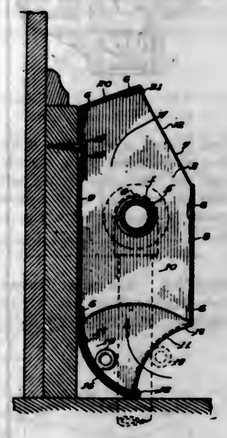
1. A slide buckle comprising a metal frame including upper, lower and side bar portions in a common plane, and an intermediate bar in said plane and having marginal portions bent at right angles thereto to provide cut-metal edged portions projecting in opposite directions out of said plane.

1,865,510. POCKET AND CUFF CLEANER. WILLIAM H. DORSEY, New Brighton, N. Y., assignor, by mesne asments, to Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Sept. 10, 1924. Serial No. 736,864. 5 Claims. (Cl. 15—20.)



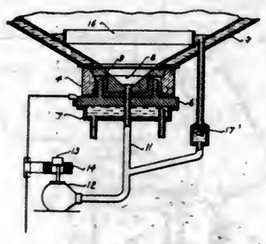
1. A garment pocket and cuff cleaner comprising a hollow head, means supporting the head in stationary service position on a standing structure, and air ejecting finger nozzles made on the head by which dirt is loosened and removed from the garment.

1,865,511. RADIATOR. ROBINSON V. FROST, Norristown, Pa., assignor to Frost Research Laboratory, Inc., a Corporation of Pennsylvania. Filed Aug. 3, 1928. Serial No. 297,252. 18 Claims. (Cl. 257—136.)



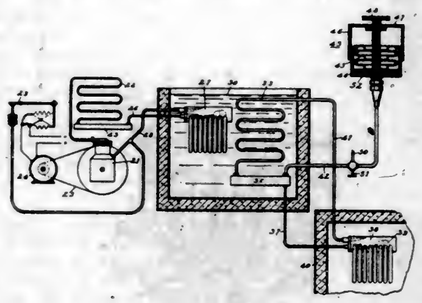
7. In a radiator, a pipe for a fluid heating medium, a plurality of fins mounted at intervals along the pipe, front and back plates extending across the fins and secured to each of such fins to tie the same together into a unitary structure, a foot extending downwardly from the back plate beneath the fins and forming a base or support for the radiator, and a damper pivotally mounted on the foot and movable to control the flow of air through the radiator.

1,865,512. ELECTRIC CURRENT RECTIFIER CONSTRUCTION. ARTHUR GAUDENZI, Baden, and ERNST KOBEL, Ennetbaden, Switzerland, assignors to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed May 20, 1930, Serial No. 453,951, and in Germany May 21, 1929. 14 Claims. (Cl. 175—363.)



1. In a construction for retaining the cathode material of an electric current rectifying device of the type having a metallic tank inclosing a metallic vapor, the bottom of the tank having an aperture therethrough, a closure plate, an insulator spacing said plate from the bottom of the tank, a basin having an internal conical shape arranged upon said closure plate to retain a quantity of cathode material, and means communicating with said basin to vary the quantity of cathode material therein in dependence on the current flowing through the rectifier.

1,865,513. REFRIGERATING APPARATUS. RICHARD S. GAUGLER, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 29, 1930. Serial No. 499,046. 8 Claims. (Cl. 62—95.)

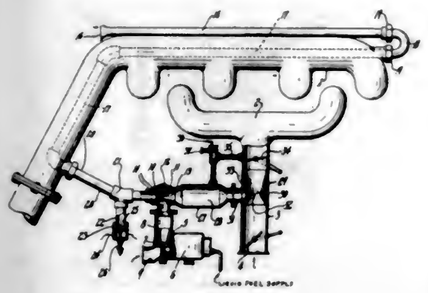


1. A refrigerating system including a closed circuit including a portion in contact with a cold medium and an evaporator, said system containing a refrigerant and an inert gas, and means for varying the volume of the system at will.

1,865,514. CARBURATION SYSTEM. ERNEST R. GONWARD, New York, N. Y., assignor to The Eclipse Petrol Economiser System Company, Limited, Christchurch, New Zealand, a Corporation of New Zealand. Filed Aug. 27, 1930. Serial No. 478,030. 8 Claims. (Cl. 123—122.)

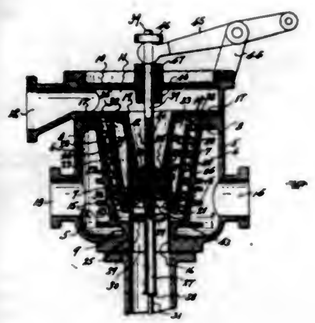
1. In a carburation system for internal combustion engines having an exhaust manifold and an intake manifold, the combination of an air heater conduit having an intake open to the atmosphere and the body of which is in part externally arranged contiguous to said exhaust manifold and in part internally extending through the same, means to initially atomize liquid fuel, a mixing device in mutual communication with said atomizing means and

air heater conduit to receive and mix atomized liquid fuel and superheated air to form a rich vaporized fuel mixture, means connected with said intake manifold to receive said rich fuel mixture and mix added cool air therewith to form the ultimate fuel mixture delivered to the engine



through said intake manifold, and means in communication with the discharge portion of said air heater conduit for admitting regulated amounts of cool air to modify the temperature of superheated air discharged from said heater conduit to said mixing device.

1,865,515. VAPORIZER. ERNEST R. GODWARD, New York, N. Y., assignor to The Eclipse Petrol Economiser System Company, Limited, Christchurch, New Zealand, a Corporation of New Zealand. Filed Mar. 6, 1931. Serial No. 520,519. 8 Claims. (Cl. 261—12.)



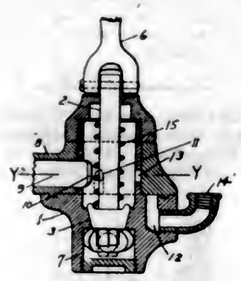
1. A vaporizer apparatus, comprising means to provide a spirally ascending vaporizing passage the convolutions of which are of successively increasing circumference, means to heat the outer walls of said passage, means to deliver an initial mixture of liquid fuel and a minor proportion of air for gyratory and expanding movement through said vaporizing passage whereby the wet constituents of said initial mixture are deposited upon the hot outer walls of said passage so as to be vaporized by the heat transmitted thereto, means for discharging the vaporized fuel mixture together with a major proportion of air intermixed therewith, and an expansion chamber intermediate said vaporizing passage and said discharge means through which the vaporized fuel mixture is passed from the former to the latter.

1,865,516. GLOW DISCHARGE LAMP. FRANK GRAY, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 1, 1926. Serial No. 138,831. 7 Claims. (Cl. 176—122.)



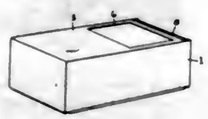
1. A glow discharge lamp having a metallic cathode, an anode member, a member positioned parallel to said cathode, and spaced therefrom by a distance less than the minimum sparking distance, whereby said cathode is insulated from the discharge on one side, and means for charging said member positively.

1,865,517. MIXING FAUCET. NELSON H. HENDERSON, Syracuse, N. Y. Filed Aug. 13, 1928. Serial No. 299,235. 10 Claims. (Cl. 277—22.)



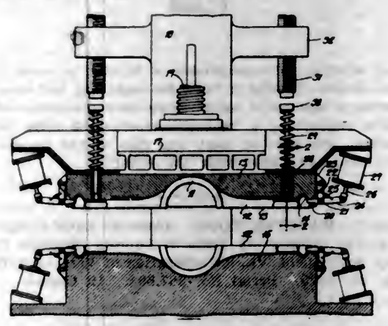
1. In a mixing faucet, a swinging discharge nozzle, a receiving chamber surrounded by a cylindrical wall, having two openings, the discharge nozzle being arranged to swing about a vertical axis and having passages which are adapted to operate to register with the openings in the cylindrical wall.

1,865,518. REGISTER. JAMES A. HENRY and JOHN H. YANCEY, Sturgis, Mich. Filed Oct. 29, 1931. Serial No. 571,708. 9 Claims. (Cl. 282—12.)



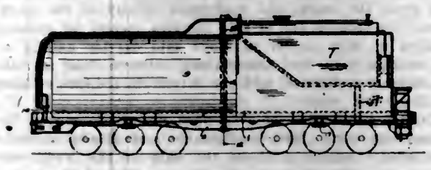
1. In a register of the class described, the combination with a casing having a compartment for storing a record strip, a writing table over which said strip may be positioned for entry of a record thereon, a pivoted transverse strip positioning detent over which the strip passes when drawn forwardly to said writing table, said strip being weakened on transverse lines against bending resistance and engaging said detent at said weakened lines to increase the resistance to the strip so as to facilitate the positioning of the strip upon said writing table, a vertically floating weighting roller coacting with said pivoted detent, stops limiting the rocking movement of said detent, and leaf spring means coacting with said pivoted detent to urge it into engagement with one of said stops whereby to resiliently hold it in an initial position such that when the strip is moved forward said detent is rocked against the force of said means to facilitate releasing said strip at said weakened lines.

1,865,519. WELDING APPARATUS. LE ROY H. HOFFER, Brooklyn, N. Y., assignor to Metropolitan Engineering Company, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 5, 1930. Serial No. 425,920. 8 Claims. (Cl. 219—4.)



1. In a machine of the class described for flash welding segments of a tubular article, the combination of a movable electrode and a stationary electrode, each recessed to carry a segment of the tubular article, means to retain each segment in each recess, each of said means being independently operable, and automatically operating means to disengage the welded segments from one of said electrodes.

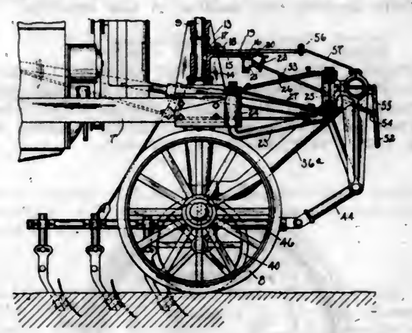
1,865,520. RAILWAY VEHICLE STRUCTURE. KARL S. HOWARD, St. Louis, Mo., and EINAR G. HALLQUIST, Edwardsville, Ill., assignors, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Aug. 24, 1927. Serial No. 215,172. 53 Claims. (Cl. 105—231.)



1. In a railway vehicle underframe casting, a box section longitudinal sill member adapted to form a portion of a tank structure.

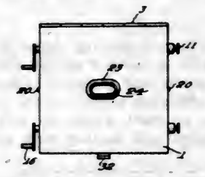
1,865,521. MOTOR CULTIVATOR. JOHN L. JACKSON, Chicago, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Jan. 8, 1930. Serial No. 419,292. 26 Claims. (Cl. 97—47.)

1. The combination with a tractor, of a forwardly extending support mounted on the tractor to swing laterally, a transversely disposed draft element mounted on said support to swing laterally therewith in a right line and pivotally connected with said support to swing vertically



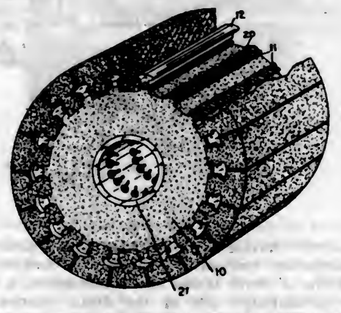
thereon, implement tools connected with said draft element, and means for controlling the lateral position of said support.

1,865,522. MUSICAL INSTRUMENT. MICHAEL JACKSON, Chicago, Ill. Filed Oct. 20, 1930. Serial No. 489,893. 3 Claims. (Cl. 84—93.)



2. In a player instrument, a case, a tracker bar removably mounted therein for carrying an harmonica, a perforated packing strip interposed between said tracker bar and harmonica, the perforations in said packing strip registering with the openings in the harmonica, spools upon opposite sides of said tracker bar, a notes sheet adapted to be wound and unwound back and forth from one spool to the other and over said tracker bar, and a mouth piece for said tracker bar upon the side thereof remote from said notes sheet.

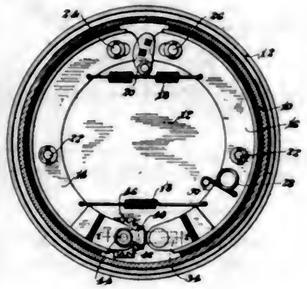
1,865,523. SEGMENTAL ABRASIVE WHEEL. GEORGE N. JEPPSON and THURE LARSSON, Worcester, Mass., assignors to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 2, 1928, Serial No. 266,481, and in Canada Oct. 4, 1928. 20 Claims. (Cl. 51—207.)



1. That improvement in the art of making grinding wheels which consists in arranging a plurality of abrasive segments independently of their final support in such a

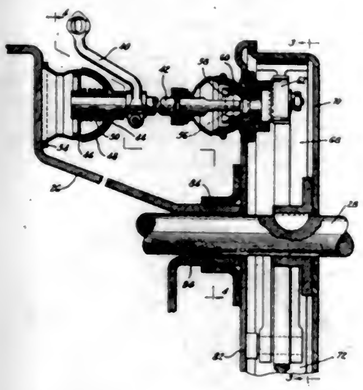
position as to form a grinding surface, then forming the internal supporting structure for all the segments in situ and thereafter adjustably forcing the segments radially inwardly into position on said structure.

1,865,524. BRAKE ADJUSTING DEVICE. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 6, 1928, Serial No. 310,837. Renewed Nov. 2, 1931. 19 Claims. (Cl. 188—79.5.)



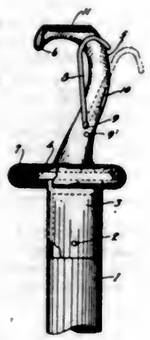
1. A brake having a floating joint including a pair of transverse pivots, a member having thrust engagement with one of the pivots and threaded engagement with the other pivot, an adjusting pinion on the member, and an operating pinion at right angles to and meshing with the adjusting pinion and floating with said joint.

1,865,525. BRAKING SYSTEM. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed Aug. 12, 1925, Serial No. 49,736. Divided and this application filed June 20, 1930. Serial No. 462,472. 5 Claims. (Cl. 188—2.)



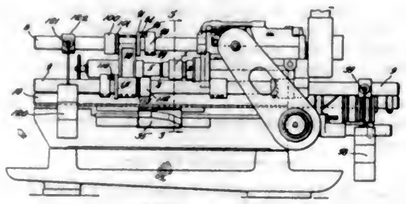
1. A vehicle having a transmission with a power-driven shaft extending rearwardly thereof, and comprising, in combination, a drum facing the transmission, a support on the transmission side of the drum, friction means between the drum and support, and a control shaft for the friction means supported at one end on the transmission and at the other end on the support.

1,865,526. WINDOW POLE. SIMEON C. LAWLOR, Chicago, Ill. Filed Sept. 25, 1929. Serial No. 395,003. 3 Claims. (Cl. 268—134.)



1. A window pole comprising a handle, a metal part on the handle forming a hook for engaging and opening or closing a window, a metal ridge near the hook end of the pole supporting a rubber bumper, said ridge offset as regards the pole so that one side of the bumper is farther from the pole than the other.

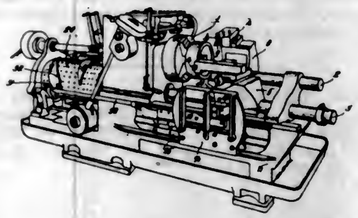
1,865,527. MACHINE TOOL. JOHN E. LOVELY, Springfield, Vt., assignor to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Aug. 22, 1929. Serial No. 387,094. 19 Claims. (Cl. 82—2.)



1. In a machine of the class described, means for supporting work, a pair of tool carriers, means for supporting said tool carriers with capability of rocking toward and from the work, and movement axially of the work, means for rocking one of said carriers, means for causing rocking of said carrier to move said carrier axially of its rocking axis, and connections between said carriers for causing rocking of said one carrier to produce rocking of the other carrier.

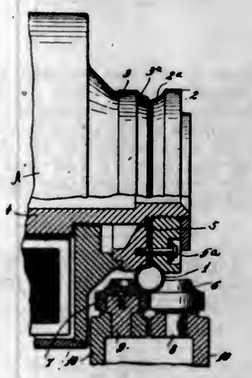
14. In a machine of the class described, means for supporting work, three oscillatable and axially movable tool shafts arranged about the axis of the work, one above, one beneath, and one at one side of the work, a tool carrier on each shaft, a cam drum, cams on said drum, followers for said cams, operative connections from said followers for oscillating the shafts beneath and at one side of the work, cam means for controlling the axial positions of the shaft above the work and of the shaft at one side of the work in accordance with their angular positions, and link connections from said shaft above the work to one of the other of said shafts for controlling the angular position of said upper shaft in accordance with the angular position of said other shaft.

1,865,528. MACHINE TOOL. JOHN E. LOVELY, Springfield, Vt., assignor to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Nov. 13, 1929. Seral No. 406,798. 6 Claims. (Cl. 82—2.)



1. In combination, a work holder, a pivoted tool carrier having a pair of sets of tools either movable into operative position to work held by said work holder while the other is moved out of said position by rocking of said tool carrier, a former cam for supporting said tool carrier by gravity and movable relative thereto to determine the operative position of one of said sets of tools, and means for positively determining the operative positions of the tool of said other set when said tool carrier is permitted to rock away from the operative position for the tools of said one set.

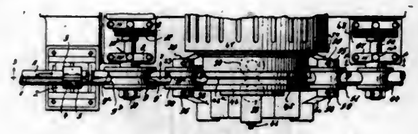
1,865,529. METHOD OF AND MEANS FOR WELDING. GEORGE A. LUTZ, Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del., a Corporation of Delaware. Filed Feb. 20, 1930. Serial No. 429,893. 12 Claims. (Cl. 219—10.)



1. The method of welding the edges of a tubular metal blank together consisting in moving said blank longitudinally with its meeting edges out of register and in contact with one another, heating said edges while out of register one with another while the blank travels longitudinally, and moving said edges into register one with another and in contact while the blank travels and while so heated.

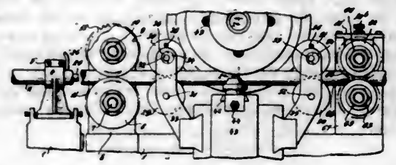
1,865,530. METHOD OF LAP WELDING. GEORGE A. LUTZ, Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del., a Corporation of Delaware. Filed Mar. 10, 1930. Serial No. 434,496. 6 Claims. (Cl. 219—10.)

2. The method of welding the overlapped marginal portions of a tubular metal blank consisting in displacing one of said portions with respect to the other portion, tucking the first named portion under the second named portion, compressing the overlapped portions to a predetermined thickness, causing the overlapped portions to



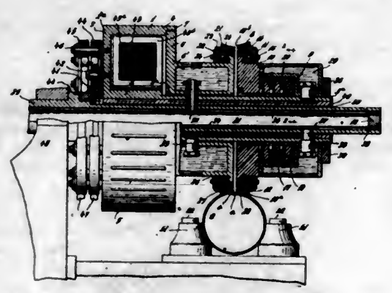
contact, heating said contacting portions to a welding temperature, and compressing said heated portions into contact with one another.

1,865,531. MEANS FOR LAP-WELDING. GEORGE A. LUTZ, Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del., a Corporation of Delaware. Original application filed Mar. 10, 1930. Serial No. 434,496. Divided and this application filed Apr. 23, 1930. Serial No. 446,463. 23 Claims. (Cl. 219—6.)



1. A welding apparatus comprising means to displace a marginal portion of a blank with respect to another marginal portion thereof and causing lapping of one marginal portion against another, means to compress the lapped portions to a definite thickness, means to traverse the blank, and means to compress and heat said overlapped marginal portions while the tube is traveling.

1,865,532. WELDING MACHINE. GEORGE A. LUTZ, Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del., a Corporation of Delaware. Filed Feb. 11, 1931. Serial No. 514,945. 10 Claims. (Cl. 219—6.)



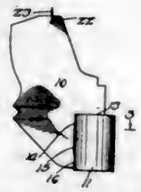
1. An electric welding machine comprising an axial portion, an electrode mounted thereon and insulated therefrom, a second electrode spaced from the first named electrode and mounted on and in electrical circuit with said axial portion, and means to supply said electrodes with electric current, said electrodes being rotative individually one with respect to the other to rotate at a different speed with respect to the speed of the latter.

1,865,533. RECEPTACLE. WILLIAM F. LUTZKE, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Feb. 14, 1930. Serial No. 428,352. 1 Claim. (Cl. 220—19.)



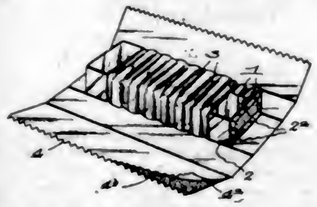
A downwardly tapered receptacle comprising top and bottom hoops and intermediate hoops, vertical wire slats having eyes at their ends engaging said top and bottom hooks and welded to the intermediate hooks, a plurality of said slats being curved inwardly between the bottom and the adjacent intermediate hoop and having outward kinks or bends in said curved portions providing inwardly facing recesses, and a bottom comprising an annular border member, said border member being engaged in said recesses, the slats containing said recesses being sprung outwardly to receive said bottom and yieldingly clamping the same.

1,865,534. CAN DISPLAY EASEL. HARRY V. MARSH, Chicago, Ill. Filed Mar. 11, 1931. Serial No. 521,802. 5 Claims. (Cl. 40—126.)



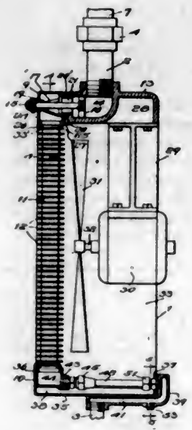
1. In a display device, a blank divisible into two substantially equal sections having complemental extensions of different configurations, one of said extensions being adapted to be articulated about the other to provide a simulation of a container of merchandise.

1,865,535. CONFECTION PACKAGE. ROBERT R. MEANY, Chicago, Ill., assignor to Wm. Wrigley Jr. Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 3, 1930. Serial No. 432,830. 7 Claims. (Cl. 206—46.)



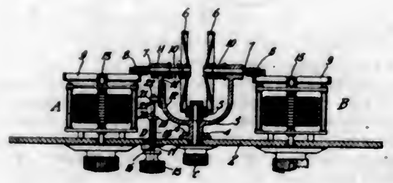
1. A confection package comprising a plurality of lozenge-shaped confections surrounded by an inner wrapper, having its end margins folded over but not closing the ends of the partially wrapped package, and an outer wrapper of metal foil having a lining of paraffine impregnated paper surrounding the package lengthwise with its longitudinal edges overlapping and its projecting side margins folded against the ends of the package, said wrapper being sealed along said overlapping edges and folded end portions by the paraffine in said lining rendered adhesive by the application of heat.

1,865,536. HEAT EXCHANGE UNIT. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 26, 1929. Serial No. 388,494. 28 Claims. (Cl. 257—137.)



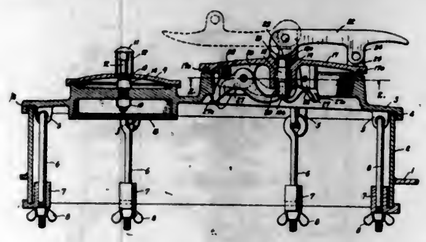
6. In a device of the class described, a heating unit comprising spaced tanks connected by tubular means and means for supporting said heating unit, said supporting means comprising a fluid supply conduit and a fluid draining conduit, means carried by one of said conduits for frictionally engaging one of said tanks, and a flexible tubular member connecting said last named tank with said last named conduit.

1,865,537. RADIO CONTROL DEVICE. FRANK L. MORSE, Ithaca, N. Y. Filed June 2, 1925. Serial No. 34,341. 5 Claims. (Cl. 74—7.)



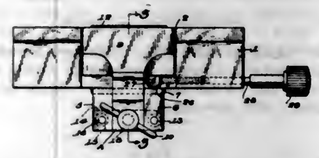
1. In apparatus of the character described, the combination of a pair of tuning elements including stators and rotors and control means for said rotors including a common control member, and means for driving said rotors from said member with an oscillating motion relative one to the other, together with means for disconnecting one of said rotors from said control member to effect a change in the point at which the relative oscillating motion of one of said members begins.

1,865,538. CLOSURE FOR TANK APERTURES. VICTOR C. NORQUIST, Kansas City, Mo., assignor to Butler Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed May 20, 1931. Serial No. 538,770. 3 Claims. (Cl. 220—55.)



1. A pressure tight closure for an aperture in a container comprising a cover having a movable pin therein, elements pivoted beneath the cover having one of their ends contacted by the pin and the opposite end adapted to grip the container, a cam lever pivoted on the cover, said lever adapted to reciprocate the pin and manipulate the pivoted elements to grip or release the container.

1,865,539. MICROTOME. RICHARD H. PIETZSCH, Philadelphia, Pa. Filed June 21, 1929. Serial No. 372,587. 17 Claims. (Cl. 88—40.)



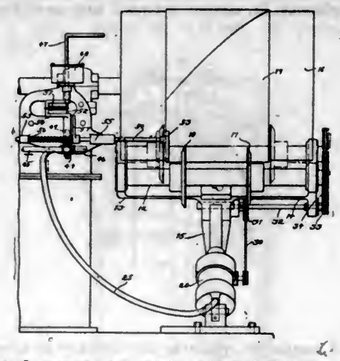
1. A blade holder, comprising a body portion having a blade-supporting surface, a member pivoted to said body and having a surface opposed to said first surface, said body and said member having arms together extending upon the side of the pivot opposite to said surfaces, and means to adjust the relative positions of said arms to vary the pressure upon a blade between said surfaces.

1,865,540. MOTOR DRIVEN TREAD STITCHER. FREDERICK GORDON REID and NOYCE LAWSON CORNELL, Buffalo, N. Y., assignors to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a Corporation of New York. Filed June 15, 1931. Serial No. 544,336. 14 Claims. (Cl. 154—10.)

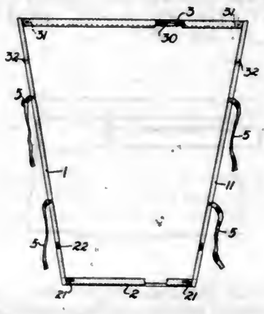
1. Apparatus of the type described which comprises a rotatable drum, a pair of rotatable stitching discs, a yoke having a stem and branches and carrying said discs between said branches, and a pivotal support for said stem to permit it to swing toward and from said drum and to turn on the center line of said stem.

5. Apparatus of the type described which comprises a drum, a pair of rotatable discs, a yoke carrying said discs to permit their free rotation and axial displacement, a pivotal support for said yoke to permit the edges of said discs to be brought toward the surface of said drum, and means for advancing said yoke towards said drum, said yoke being so proportioned relative to said support and to said advancing means that the thrust of said advancing means on said yoke is received nearer said drum than a line between the point of support and the edge of said disc nearest said drum.

8. Apparatus of the type described which comprises a rotatable stitching surface, a pair of rotatable discs, means for mounting said discs so that they may be separated one from the other on their axes of rotation, means for advancing and withdrawing said mounting means toward and from the surface of said drum, electrically driven reversible means for separating and bringing said discs together, and means actuated automatically to reverse said electric means upon the separation of said discs to a predetermined extent.



1,865,541. BABY PANTS. MARY CLARE REYNOLDS, Seattle, Wash. Filed Oct. 31, 1929. Serial No. 403,828. 3 Claims. (Cl. 128—284.)

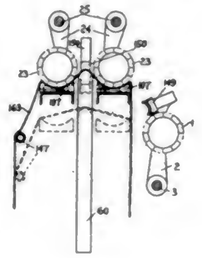


1. Baby pants comprising a sheet having two parallel edges and two substantially straight converging edges, and means for securing together opposite ends of each of said converging edges to define leg openings, the longer of the parallel edges being gathered to provide fullness over the back of the hips, the shorter of the parallel edges being folded up in front to the waist and means for securing together the converging side edges, above the fold and below the top edge, to define leg openings and to draw the fullness through the crotch and across the buttocks.

1,865,542. MACHINE FOR AND METHOD OF OPERATING ON HIDES, SKINS, LEATHER, AND OTHER SIMILAR PIECES OF WORK. GUSTAV A. SCHETTLER, Leeds, England, assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed May 15, 1928, Serial No. 278,030, and in Great Britain May 16, 1927. 49 Claims. (Cl. 149—19.)

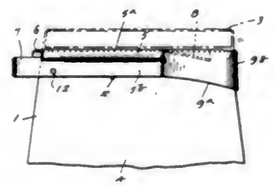
10. In a machine for operating upon hides, skins, leather, and other similar pieces of work, a table, a pair of work supports one on each side of the table all adapted to support a piece of work with the median longitudinally portion thereof resting over one of the work supports, a bladed cylinder for co-operation with one of the work supports to stretch and to put-out the median longitudinal portion of the work, a pair of bladed cylinders, means for moving the table and the work supports to present the

piece of work to the cylinders with the median longitudinal portion of the work over the edge of the table, means for positioning the work supports in predetermined work-supporting relation to the bladed cylinders while the table continues in motion between and past the cylin-



ders, and means for operating the cylinders in co-operative relation with the work supports to tension the piece of work and to cause the bladed cylinders to operate upon the work where it is backed by the table to perform putting-out operations upon portions of the work untreated by the first bladed cylinder.

1,865,543. COMBINED OPENER AND CLOSURE FOR PAPER MILK CONTAINERS. JOSEPH J. SCHMERLER, Bronx, N. Y. Filed May 28, 1931. Serial No. 540,712. 8 Claims. (Cl. 229—1.5.)

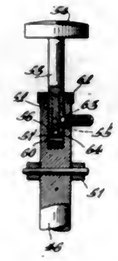


1. A device of the character set forth, comprising a blade adapted to remove the upper end portion of a closed container, a closure for a part of the opening formed by the removal of said container portion, the closure carrying the blade and adapted to be applied to the container during the removal of said portion of the latter, a former carried by the closure and provided with an opening adapted to egister with the remaining portion of said first opening after the application of the closure, and a spreader carried by the closure and former and adapted during the application of such parts to spread the walls of said remaining portion of said opening.

1,865,544. PRODUCTION OF THYMOL. WALTER SCHOELLER, Berlin-Charlottenburg, HANS JORDAN, Berlin-Steglitz, and REINHARD CLERC, Berlin, Germany, assignors to Schering-Kahlbaum A.-G., Berlin, Germany. Filed June 29, 1928, Serial No. 289,324, and in Germany July 15, 1927. 3 Claims (Cl. 260—154.)

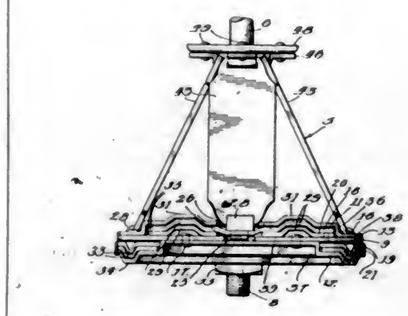
1. The process of producing thymol comprising heating an acylcompound of a condensation product obtained from meta-cresol and acetone at temperatures below 100° C. in the presence of an acidic condensing agent, belonging to the group consisting of hydrochloric acid, phosphorus oxychloride and anhydrous metallic chlorides and treating the acylcompound of 3-methyl-6-isopropy-lene-phenol thus obtained with hydrogen in the presence of a hydrogenation catalyst until two atoms of hydrogen have been taken up and subsequently saponifying the product.

1,865,545. FOOD CHOPPING MACHINE. ADRIAN C. VAN HOOYDONK, Buffalo, N. Y., assignor to John E. Smith's Sons Company, Buffalo, N. Y., a Corporation of New York. Filed Feb. 15, 1930. Serial No. 428,554. 6 Claims. (Cl. 146—67.)



1. In a machine of the character described, the combination of a rotary bowl, a coverplate arranged over said bowl, a cutter shaft journaled on said plate, a driving shaft disposed in line with the cutter shaft, cooperating clutch members applied to the opposing ends of said shafts, a driven shaft for the bowl geared to said driving shaft, the gear on said driven shaft being free to revolve thereon and having a key-way therein, and means applied to the driven shaft including a key adapted for releasable engagement with said key-way for controlling the transmission of motion to the bowl.

1,865,546. EARTH ANCHOR. HERBERT MUNRO TAYLOR, Toronto, Ontario, Canada, assignor to Albert B. Chance, Centralia, Mo. Filed Dec. 2, 1930. Serial No. 499,565. 6 Claims. (Cl. 189—92.)

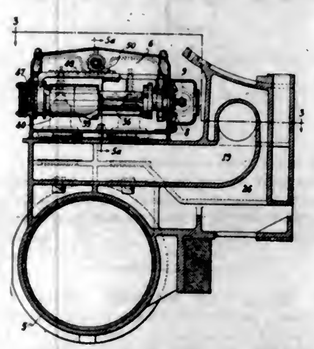


1. In an earth anchor in combination a housing comprising top and bottom plates, and a partition element between said plates forming therewith superposed compartments disposed in parallel planes and at an angle to each other, said top and bottom plates including offset horizontal flanges permanently fixed to said partition element, flukes arranged in the compartments and links connected therewith for extending the flukes radially from said housing.

1,865,547. LOCOMOTIVE VALVE MECHANISM. HARRY S. VINCENT, Ridgewood, N. J., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 22, 1929. Serial No. 349,074. 11 Claims. (Cl. 121—127.)

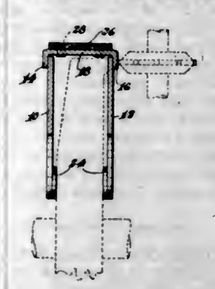
1. In mechanism for controlling the supply of steam to an engine cylinder, the combination of an inlet valve for each end of the cylinder, an exhaust valve for each end of the cylinder, a cam shaft, a cam on said shaft for

controlling the opening and closing of said exhaust valves, cam means on said shaft for controlling the opening and closing of said inlet valves, said cam means having tapered lobes, means for sliding said cam means along the shaft to change the cut-off of said inlet valves from maximum



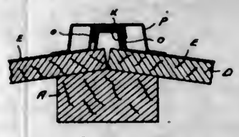
cut-off in forward motion to maximum cut-off in reverse motion and vice versa, means for rotating said cam means on the shaft during said sliding movement and means for rotatively adjusting the exhaust cam as said inlet cam means is moved.

1,865,548. BRAKE SHOE. STANLEY WHITWORTH, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 9, 1929. Serial No. 338,810. 5 Claims. (Cl. 188—250.)



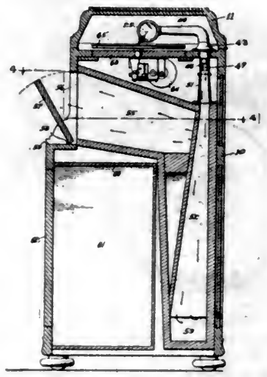
5. A brake shoe comprising a channel section of relatively shallow depth providing a rim part and flanges, and two radially extending web parts projection welded to said flanges, the said rim part alone forming a face adapted to engage a friction lining.

1,865,549. CAR ROOF. ALFRED R. WILSON, Detroit, Mich., assignor to Hutchins Car Roofing Company, Detroit, Mich., a Corporation of Delaware. Filed Aug. 19, 1929. Serial No. 386,918. 10 Claims. (Cl. 108—5.)



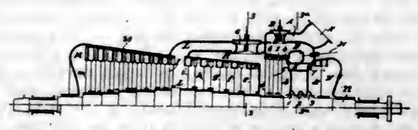
1. In a flexible car roof, a roof sheet extending from the ridge of the car to one of the eaves thereof, and member fixedly mounted at the ridge of the car for supporting the roof sheet, while providing for a limited movement of the roof sheet transversely of the car at the ridge thereof.

1,865,550. PHONOGRAPH. ROBERT Y. BARROWS, deceased, Rutherford, N. J., by Grace A. Barrows, administratrix, East Orange, N. J., and Harold P. Curtis, Jardine, Mont. Original application filed Jan. 27, 1921, Serial No. 440,384. Divided and this application filed Nov. 5, 1928. Serial No. 317,397. 6 Claims. (Cl. 181—27.)



5. In a phonograph, a horn structure comprising a sound vestibule, a horn section extending downwardly through said sound vestibule, said horn section having a cross sectional area which is substantially uniformly enlarged from end to end, a multiple branch horn section extending from the bottom of the first mentioned horn section and opening into said sound vesibule, and having a combined substantially uniformly enlarged cross sectional area from end to end, and a sound wave rectifying chamber interposed between said horn sections.

1,865,551. REVERSING STEAM TURBINE WITH VARIABLE VELOCITY. GIUSEPPE BELLUZZO, Rome, Italy. Filed Sept. 4, 1928, Serial No. 303,718, and in Italy Oct. 17, 1927. 1 Claim. (Cl. 253—70.)

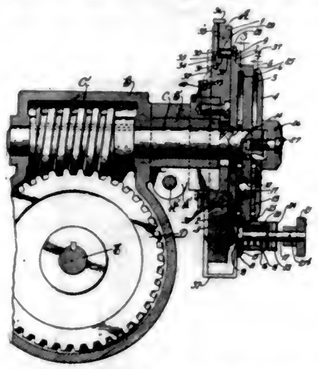


In a turbine, three groups of rotary turbine elements, the first group consisting of three turbine elements, the second group of turbine elements comprising five wheels, four of which are provided with two rows of blades and one of which is provided with three rows of blades and operated by steam only at cruising speeds, the third group of turbine elements comprising a plurality of wheels each provided with one row of blades actuated upon by steam at all speeds, steam supply means, and valve means controlling communication between the exhaust of the first group and the steam inlet of the third group.

1,865,552. INDEXING DEVICE. FREDERICK H. BEULWITZ, Milwaukee, Wis., assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 23, 1929. Serial No. 342,132. 13 Claims. (Cl. 90—57.)

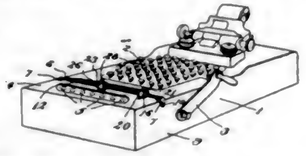
1. In a device of the character set forth, a rotatably mounted shaft, a disk carried by said shaft and provided with a circular scale consisting of spaced perforations, an index member carried by said shaft and provided with means for releasably engaging said perforations, releasable locking means serving to restrain said disk against ro-

tation, fixed gears secured to said disk and to said shaft, planetary gears carried by said index member and meshing with said fixed gears, said gear connections serving to



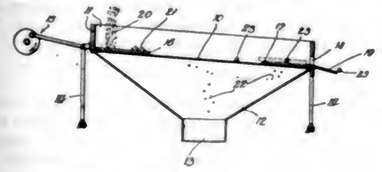
cause said shaft to rotate at the same speed with said index member when said disk is free to rotate and to cause said shaft to rotate at a reduced pre-determined relative speed when said disk is locked against rotation.

1,865,553. CALCULATING MACHINE ATTACHMENT. HENRY L. BERGER, Abbeville, La. Filed Aug. 28, 1929. Serial No. 389,038. 5 Claims. (Cl. 235—1.)



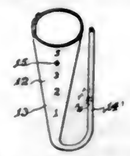
1. A calculating machine attachment comprising a bar adapted to be secured across a calculating machine adjacent and substantially parallel to total windows thereof, a strip extending parallel to said bar, a clamp carried by said strip for releasably securing the strip in an adjusted position longitudinally of said bar and including a pointer projecting from a side of the bar to extend towards a selected total window of the calculating machine, and a second clamp adjustable longitudinally of the strip and bar and having a pointer projecting from the said side of the bar.

1,865,554. BALLING FINE GRAINED MATERIAL FOR SINTERING. WILSON BRADLEY, Deerwood, Minn., assignor to Bradley-Fitch Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 1, 1930. Serial No. 425,084. 7 Claims. (Cl. 75—65.)



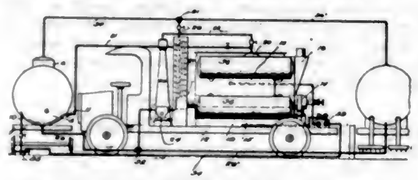
1. The method of balling fine grained material for sintering which comprises moistening the fine material substantially uniformly throughout, and subjecting the moistened material in a thin layer to a motion which produces rolling, whereby the moistened material agglomerates into balls.

1,865,555. PAPER CUP. FRANKLIN BROWN, White House, N. J., assignor to General Health Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed July 15, 1930. Serial No. 468,134. 2 Claims. (Cl. 225—1.5.)



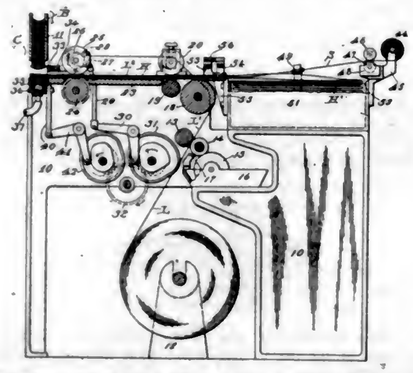
1. A cup made from a conical tubular body portion and bent substantially in half in the form of a U, the narrower leg of said U having an opening through which to draw out the liquid from the wider leg, said narrower leg being curved at the bottom.

1,865,556. TANK CAR HEATER. CURTIS D. CHASE, Alston, Mass., assignor to Chase Holding Corporation, a Corporation of Pennsylvania. Filed Oct. 19, 1927. Serial No. 227,340. 8 Claims. (Cl. 126—343.5.)



1. In an apparatus of the character described, in combination, a portable support, a steam generator mounted thereon including a single source of heat, a tank car provided with a coil for heating the contents thereof, steam connections from said generator to the heating coil, a chamber adjacent said generator, a coil mounted in said chamber subjected to said source of heat and communicating with the upper and lower parts of the interior of the tank car and thru which the contents of the car is adapted to be forced, and means for by-passing a portion of the heat from the generator thru said chamber.

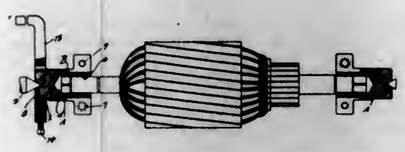
1,865,557. BOOKMAKING APPARATUS. LE GRAND L. CLARK, Brooklyn, N. Y., assignor to T. W. & C. B. Sheridan Company, New York, N. Y., a Corporation of New York. Filed June 9, 1927. Serial No. 197,616. 3 Claims. (Cl. 11—1.)



3. A machine of the class referred to comprising means for guiding a backlining web flatwise to a position for severance and application to a book, feed rolls between

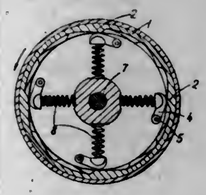
said guiding means and the severing point for advancingly feeding a backlining web from a supply and along said guiding means, a guide roll for the web arranged substantially tangent to the guiding means and delivering thereto, and means for delivering a headband strip to meet the backlining web at a point in line with said guiding means.

1,865,558. HOLDING DEVICE. ROLLAND R. CLARK and RAYMOND A. FONTAINE, New Haven, Conn. Filed Feb. 25, 1931. Serial No. 518,282. 2 Claims. (Cl. 82—33.)



1. A holding device of the class described comprising a body part having an enlargement at one end thereof with a bore in said body part passing through the enlarged end to an appreciable distance from the other end, the enlarged end of the body part being split to make this end of the device slightly resilient, screws passing through the enlarged part for imparting a clamping action to the resilient portion, the closed end of the body part having a center hole therein, and a split bushing adapted to be inserted in the bore whereby the device can be used on an object of smaller diameter than the bore.

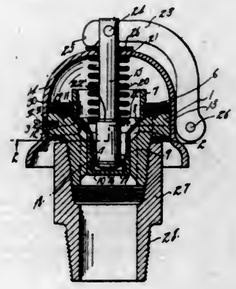
1,865,559. MECHANICAL COUPLING. LÉON DE MONTGRAND, Marseille, France. Filed Jan. 30, 1931, Serial No. 512,462, and in France Feb. 21, 1930. 1 Claim. (Cl. 74—14.)



A coupling mechanism for balancing automatically a driving torque and a resisting torque comprising a rotatable driving drum provided with interior cams of the same direction, a driven drum rotatable within the interior of the driving drum, centrifugally acting weighted shoes pivotally mounted on the driven drum for cooperating with the cams, and springs acting on said shoes, the weights of said shoes and the tension of said springs being so determined that the displacement of the driven drum is inversely proportional to the resisting torque for a same driving torque.

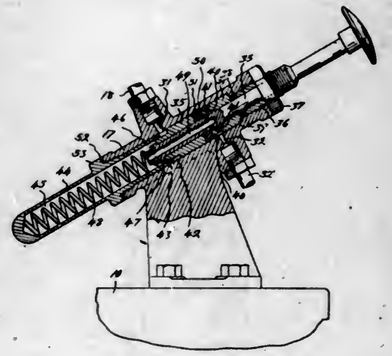
1,865,560. POP VALVE. GEORGE B. DUFFIELD, Detroit, Mich., assignor to Detroit Lubricator Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 29, 1926. Serial No. 84,744. 10 Claims. (Cl. 137—53.)

1. In a valve, the combination with an outer shell, of a hollow body within said shell provided with a valve seat, spaced lugs connecting said body and shell, guides projecting inwardly from said hollow body, an axially movable valve member co-operating with said seat and having a depending portion engaging said guides, said valve member having a stem projecting through said shell, and a lever attached to said valve stem outside of said



shell, said valve stem and lever being rotatably adjustable through a complete revolution with respect to said body and shell.

1,865,561. HYDRAULIC THROTTLE ACTUATOR. CLAUDE E. FURGASON, Lansing, Mich., assignor to Reo Motor Car Company, Lansing, Mich., a Corporation of Michigan. Filed June 10, 1929. Serial No. 369,907. 2 Claims. (Cl. 60—54.6.)

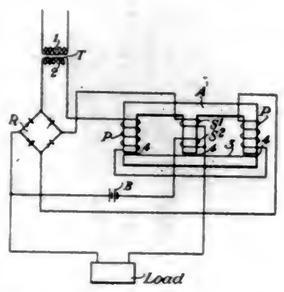


1. In a hydraulic throttle actuating mechanism, a fluid containing cylinder, a pair of bushings in said cylinder, a plunger in said cylinder reciprocally supported by said bushings and adapted to displace the fluid in said cylinder, one of said bushings having a press fit with said cylinder, sealing members surrounding said plunger and located at both ends of said last mentioned bushing, means threaded into said cylinder for compressing one of said sealing members against said last named bushing and means threaded into the other end of the cylinder and acting upon the other bushing for compressing said sealing member against the bushing having the press fit.

1,865,562. ELECTRICAL REGULATING APPARATUS. ROBERT M. GILSON, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1931. Serial No. 510,458. 1 Claim. (Cl. 175—363.)

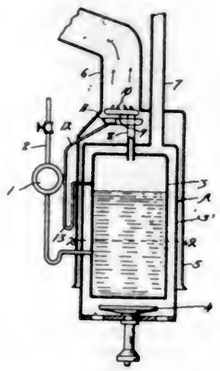
In combination, a source of alternating current, a direct current load, a rectifier interposed between said source and said load, a regulating device having a pri-

mary winding interposed between said source and said rectifier and a main secondary winding interposed between said rectifier and said load, and a battery connected across said load through an auxiliary winding on said regulating device, the relation between the polarity of



said battery and the direction of said auxiliary winding being such that the auxiliary winding opposes or aids the saturating effect of said main secondary winding according as the output voltage of said rectifier exceeds or is less than the voltage of the battery.

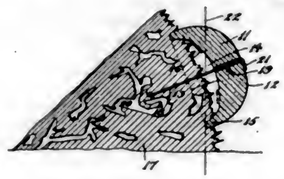
1,865,563. HUMIDIFIER. HAROLD A. GREENWALD, Detroit, Mich., assignor to Thomas C. Whitehead, Detroit, Mich. Filed Apr. 7, 1930. Serial No. 442,355. 3 Claims. (Cl. 126—113.)



1. In a humidifier, a hood having a flue, a combustion chamber within the hood having a stack extending through the hood, a boiler associated with the combustion chamber, a jet within the hood flue at approximately the juncture thereof with the hood, means for conducting steam and water vapor from the boiler to the jet, means below the jet for collecting condensation, and means associated with the last mentioned means for conducting such condensation back to the boiler.

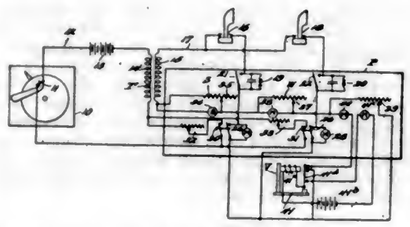
1,865,564. SPONGE CUTTING ANCHOR. OLIVER L. HARDGRAVE, Van Buren, Ark. Filed Apr. 10, 1931. Serial No. 529,278. 3 Claims. (Cl. 119—1.)

1. A sponge cutting, an anchor for said cutting applied against the under face of the cutting and having a convexed arcuate under face and a concaved upper face to define a marginal rim for the anchor about the upper face



thereof, and means to firmly secure said anchor against the cutting with its rim imbedded in the under face of the cutting.

1,865,565. ELECTROPHONIC SOUND REPRODUCTION. ROGER M. HILL, Washington, D. C. Filed Aug. 21, 1926. Serial No. 130,642. 6 Claims. (Cl. 179—100.4.)



1. The combination with a means for producing electrical sound impulses, of a plurality of receivers for transforming the impulses into sound, means under the instant control of an operator for causing the impulses to be transmitted to a given one or any number of the receivers simultaneously during the continued reception of impulses by the receivers and mechanical means for producing a tremolo effect during the operation of any one or all of said receivers.

1,865,566. PISTON PACKING. JAMES G. HODGE, East Orange, N. J., assignor to The Simplex Piston Ring Company of America, Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 20, 1929. Serial No. 341,447. 3 Claims. (Cl. 74—109.)

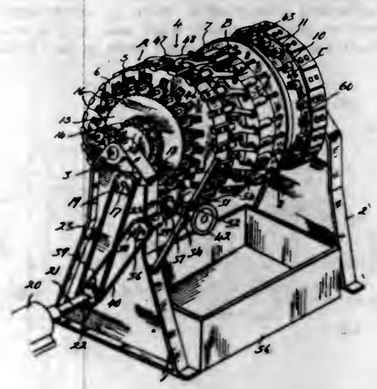


1. The combination with a grooved piston, of an axially resilient metallic packing having greater width than and positioned within the groove, comprising a plurality of transversely split ring members disposed with their split ends in displaced relative position, each of said members having spacing lugs provided upon their juxtaposed faces, and one of said members having a body portion with a series of circumferential saw cuts in staggered relation with the spacing lugs, substantially as set forth.

1,865,567. DRILLING MACHINE. JOSEPH E. HORSTE, Detroit, Mich., assignor to Detroit Harvester Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 30, 1929. Serial No. 417,547. 3 Claims. (Cl. 77—23.)

1. In a drilling machine, a fixed shaft, a rotary drum on said shaft including a pair of detachably connected sections, a stationary cam on said shaft arranged between

and housed by the sections of said drum, a plurality of drills carried by the drum and mounted for movement in a direction parallel with the axis thereof, and actuating



means for each of said drills including a radially movable follower actuated by said cam and connections between each of said drills and said followers.

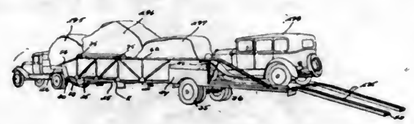
1,865,568. MOVABLE MOLDING FOR DOORS AND THE LIKE. CLARENCE G. JOHNSON, Hartford City, Ind. Filed Apr. 12, 1928. Serial No. 269,475. 9 Claims. (Cl. 20—20.)



3. In combination with a frame and a closure member slidably mounted to cover and uncover the frame, moldings movably mounted at the sides of said frame for oblique movement towards said member and normally disengageable from said member in the uncovering position of the latter, means carried by said closure member for drawing said moldings toward said member, and means for retracting said moldings from said member.

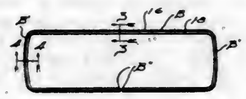
1,865,569. MEANS FOR TRANSPORTING VEHICLES AND THE LIKE. IRVING H. JUDD, Detroit, Mich., assignor to Whitehead & Kales Company, River Rouge, Mich., a Corporation of Michigan. Filed Mar. 4, 1931. Serial No. 520,175. 10 Claims. (Cl. 280—33.1.)

1. In a transportation means of the class described, a main frame of sufficient length to receive a plurality of vehicles arranged end to end, means providing a runway extending longitudinally of the main frame whereby vehicles to be carried may be moved longitudinsily of said main frame, a second frame elevated with respect to said main frame, and track sections carried by said second frame and movable from an operative vehicle supporting position vertically above the runway on said main frame to an inoperative position to one side of the runway on said main frame.



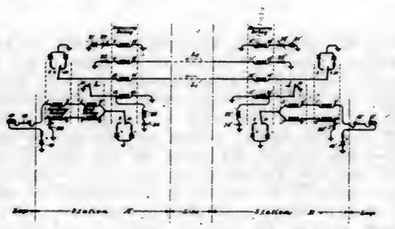
7. In a transportation means of the class described a main frame, a pair of substantially horizontally arranged supporting arms carried by said main frame and adapted to support a skid, and means arranged intermediate said supporting arms for yieldably holding a skid in position thereon.

1,865,570. METHOD OF MANUFACTURING RADIATOR SHELLS. HOMER G. KELLOGG, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed Dec. 22, 1930. Serial No. 504,098. 13 Claims. (Cl. 113—118.)



1. The method of manufacturing radiator shells and the like including the steps of rolling a strip to fashion the same transversely and to longitudinally fashion the same to produce opposed return-bent sections, uniting the free ends to form an annulus, re-fashioning said annulus, and severing said annulus.

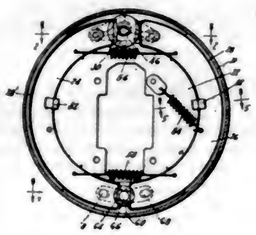
1,865,571. MEANS FOR ELIMINATING INTERFERENCE IN GROUNDED TELEGRAPH SYSTEMS. WILLIAM H. KLINE, Philadelphia, Pa., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 24, 1931. Serial No. 546,655. 1 Claim. (Cl. 178—69.)



In a telegraph signaling system, the combination with a pair of wires of a sending relay, a holding relay, a receiving relay having a plusality of windings one of which is connected between one of said wires and ground, the second winding is connected between the other of said wires and the armature of the sending relay, the third is connected in series with a source of current to form a biasing circuit, and a fourth is connected in series with a source of potential and the armature of the holding relay to form a holding circuit, the said first and second windings being effectively opposed, the said re-

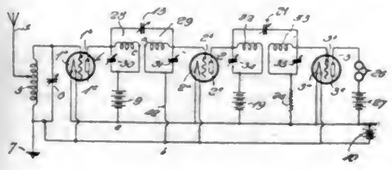
ceiving relay having its armature connected to the windings of the holding and sending relays, and also having sources of potential of opposite polarity connected to its contacts.

1,865,572. BRAKE. LUDGER E. LA BAIE, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 21, 1927, Serial No. 169,878. Renewed Apr. 7, 1931. 23 Claims. (Cl. 188—78.)



1. A brake comprising, in combination, a drum, a pair of floating shoes having a direct pivotal connection and engageable with the drum, means for forcing the shoes against the drum, means at the unconnected end of one of the shoes for taking the torque of both shoes when the drum is turning in one direction, and means arranged adjacent the connected ends of the shoes and projecting into one of the shoes for taking the torque of at least one shoe when the drum is turning in the other direction.

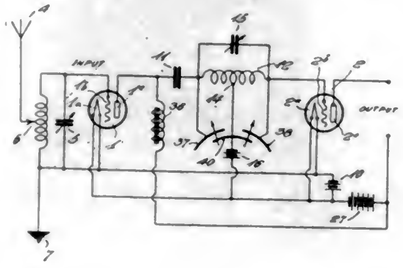
1,865,573. ELECTRON TUBE AMPLIFICATION SYSTEM. BENJAMIN F. LEE, Spray, N. C. Filed Apr. 25, 1928. Serial No. 272,766. 6 Claims. (Cl. 179—171.)



1. In an electron tube amplification system, a plurality of electron tubes each having grid, cathode and plate electrodes, an input circuit interconnecting said grid and cathode electrodes, an output circuit interconnecting said plate and cathode electrodes, a resonance wave coil divided into two axially aligned sections and interposed between said circuits, one of said sections being connected at one end with the plate electrode of one electron tube and the other of said sections being connected at one end with the grid electrode of the succeeding tube, and connections between the adjacent ends of said resonance wave coil with the cathode electrodes of each of said tubes.

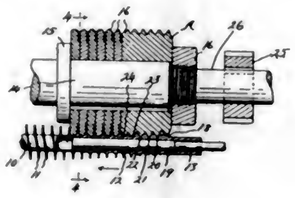
1,865,574. ELECTRON TUBE AMPLIFICATION SYSTEM. BENJAMIN F. LEE, Spray, N. C. Original application filed Apr. 25, 1928, Serial No. 272,766. Divided and this application filed Sept. 21, 1931. Serial No. 564,170. 2 Claims. (Cl. 179—171.)

1. An amplification system comprising means for coupling successive electron tube stages including a resonance wave coil disposed in series between the output circuit of one electron tube stage and the input circuit of a succeeding electron tube stage, a tuning condenser connected across the ends of said resonance wave coil, means for introducing a potential for biasing the input circuit of the succeeding amplification stage at substantially the midpoint of said resonance wave coil, and a balancing condenser for shifting the nodal point of said resonance



wave coil to a position corresponding with the point of introduction of the biasing potential therein, said balancing condenser including a fixed plate connected with each end of said resonance wave coil and a movable plate connected with the midpoint of said resonance wave coil and shiftable to vary the capacity across either portion of said resonance wave coil.

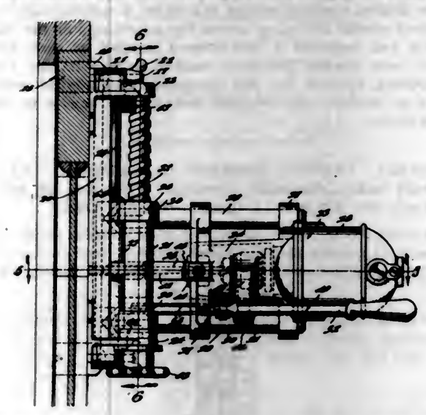
1,865,575. APPARATUS FOR MANUFACTURING INTEGRAL FINNED TUBING. ARTHUR A. LOCKE, Detroit, Mich., assignor to Wolverine Tube Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 30, 1928. Serial No. 322,914. 7 Claims. (Cl. 80—13.)



7. An apparatus for forming helical finned tubing comprising means for supporting a plain tube, a plurality of forming rolls each comprising a series of dies which intersect the outer cross-section of said tube, means for relatively rotating said tube and forming rolls and simultaneously axially feeding one with respect to the other, each forming tool comprising means for initially forming a helical groove in the outer periphery of the tube and for subsequently progressively squeezing the metal between the convolutions of the helical groove to reduce the thickness and increase the radial dimensions thereof.

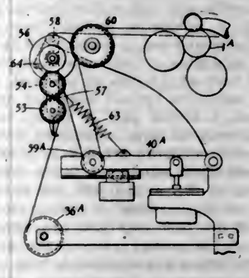
1,865,576. MORTISING MACHINE AND SUPPORT THEREFOR. ELIAS LUGINBUHL, Norwood, Ohio. Filed Mar. 24, 1930. Serial No. 438,301. 7 Claims. (Cl. 144—70.)

6. A mortising machine and support therefor, comprising, means for hanging the machine relative to the adjoining edges of the door and jamb, a slidable element mounted in said machine, a cutting tool mounted on said element and disposed in alignment with the crevice between the door and jamb, means for reciprocating said tool into the crevice, an elevating screw journalled in said machine and traversing said carriage, a manually



movable knob attached to the end of said screw, and means between the knob and frame for enabling the operator to move said knob a determinable amount.

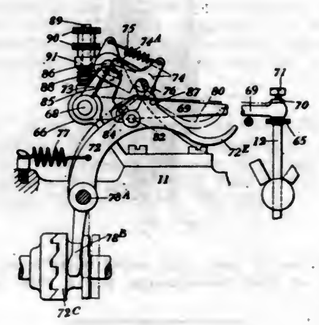
1,865,577. TENSION DEVICE FOR GOLF BALL WINDING MACHINES. COLIN MACBETH, Birmingham, England, assignor to Dunlop Rubber Company Limited, London, England, a Corporation of Great Britain. Original application filed Apr. 13, 1927, Serial No. 183,561, and in Great Britain June 3, 1926. Divided and this application filed July 22, 1929. Serial No. 380,016. 4 Claims. (Cl. 242—3.)



1. A machine of the type referred to for tensioning thread comprising in combination a thread driving unit, a thread driven unit, friction means connecting said units, a weighted member engaging a loop of thread between said units and movement of which is due to variations of thread tension, and a tension spring connecting the friction means to the weighted lever whereby, on the weighted member being raised or lowered, the tension of said spring and friction between said units is varied to permit of more or less slip between the latter.

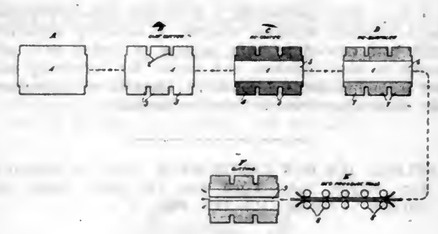
1,865,578. DIAMETER-STOP AND THREAD-BREAK STOP MECHANISM. COLIN MACBETH, Birmingham, England, assignor to Dunlop Rubber Company Limited, London, England, a Corporation of Great Britain. Original application filed Apr. 13, 1927, Serial No. 183,561, and in Great Britain June 3, 1926. Divided and this application filed July 22, 1929. Serial No. 380,017. 3 Claims. (Cl. 242—3.)

1. A diameter stop mechanism for machines of the kind referred to comprising in combination a drive control element for the machine, a detent engaging said element to prevent movement thereof, a spring-controlled lever carrying said detent, means for normally preventing release of said drive control element from its detent, an arm carrying said last mentioned means and a member



contacting with the work to move said arm gradually as the work diameter increases until a predetermined diameter is reached when the detent is released to release the drive control element.

1,865,579. METHOD OF MANUFACTURING COMPOSITION ROOFING. CHESTER R. MACDONALD, Monroe, Mich., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 9, 1928. Serial No. 298,515. 8 Claims. (Cl. 91—68.)

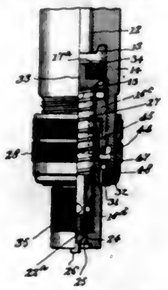


1. A process of manufacturing composition shingles, the steps which comprise the saturation and slating of a web and thereafter the slotting thereof to define tabs and in continuously advancing the thus saturated and slotted web to a position for receiving a recoating of asphalt or like material thereon on the opposite upper marginal faces only thereof and in subsequently reslating at least the exposed tabs thereof and dividing the web into shingle strips of desired configuration and lengths.

1,865,580. PNEUMATIC TIRE VALVE. ANDRÉ JULES MICHELIN, Paris, France, assignor to Michelin et Cie., Clermont-Ferrand, France, a Corporation of France. Filed Sept. 10, 1930, Serial No. 481,055, and in France Sept. 18, 1929. 3 Claims. (Cl. 152—12.)

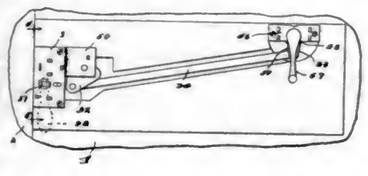
1. In a pneumatic tire valve, a housing having a valve seat, a two part barrel in said housing, the housing and the inner barrel part having interengaging threads, the outer barrel part being mounted for rotation in the housing without axial movement, a slidable noncircular connection between said barrel parts whereby upon rotation of the outer, the inner will be rotated and advanced on the

threads of the housing, a valve member on the inner part adapted upon advance of said barrel part to engage the valve seat, a rotary packed joint between the housing and



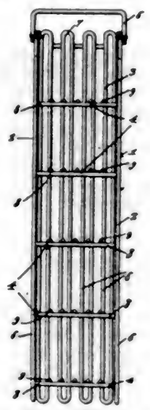
the outer barrel part, said barrel parts being provided with an air duct therethrough, and a valve insides in said duct.

1,865,581. COMBINED DOOR LATCH AND KICK-OUT ASSEMBLY. DORR MILLER, Detroit, Mich., assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 21, 1929. Serial No. 333,934. 25 Claims. (Cl. 292—167.)



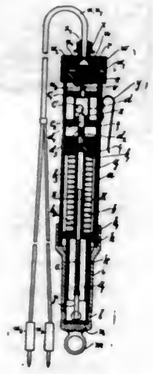
1. In a latch mechanism, a latch bolt assembly including a pivotally mounted member, a normally projecting latch bolt carried by said member, a rotary part connected to said member, and means for retracting said bolt including two independently operable means engageable respectively with said member and part.

1,865,582. ICE BOX CANDY RACK. EARL H. NUSBAUM, Fort Wayne, Ind. Filed Apr. 17, 1931. Serial No. 530,930. 1 Claim. (Cl. 211—133.)



A rack comprising rear and side walls, each including a plurality of relatively spaced elongated loop shaped members, substantially rectangular shaped frames fixed to the members to hold them assembled and forming connections between said walls, bars fixed to each of said frames and relatively spaced and cooperating therewith to provide shelves confined within the walls, a substantially U-shaped handle extending across the upper edge of the side walls and engaging a loop shaped member of each side wall, and headed fasteners carried by the handle and extending through the last mentioned loop shaped members to pivotally and slidably connect the handle to the side walls.

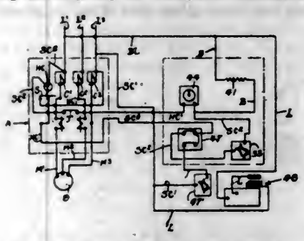
1,865,583. CIRCUIT TESTING INSTRUMENT. HEINRICH ONKEN, Oldenburg, Germany. Filed Nov. 23, 1928. Serial No. 321,297. 1 Claim. (Cl. 175—183.)



An electric signalling device including an insulating tubular body having a cap at one end, a plug disposed in said body beneath said cap, a terminal on the under face of said plug, a conductor leading from said terminal through said plug and cap, a magnet coil in said body and spaced from said plug, a pair of spaced insulating disks fitted in said body at the ends of said coil, a tubular core for said coil supported by said disks and opening through the lower disk, a second pair of spaced insulating disks fitted in said body to form a chamber between the plug and coil, a contact sleeve fitted axially of the body between the disks of the second pair, a pin extending through the upper disk of the second pair and having conductive connection with said terminal, a contact pin carried by the upper disk of the first pair and extending through the lower disk of the second pair, a contact ball loosely mounted in the sleeve and engageable with the contact pin, a conductive connection between the contact pin and one end of the coil, said coil having its other end connected to the core, an insulating sleeve extending downwardly from the lower of the first pair of disks, a cap surrounding the insulating sleeve, said cap and sleeve having registering sight ports at their lower ends, a contact member extending downwardly from the upper end of the body to the lower end of the sleeve and terminating in a contact terminal, and a contact pin of magnetic material slidable into and out from said core, and a spring normally holding the second contact pin on said last terminal.

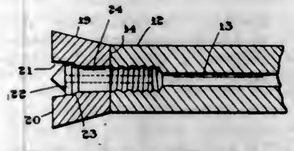
1,865,584. CONTROL SYSTEM AND MECHANISM. EMANUEL J. PERRY, New Bedford, Mass., assignor, by mesne assignments, to The American Laundry Machinery Company, Norwood, Ohio, a Corporation of Ohio. Filed Sept. 21, 1927. Serial No. 221,108. 6 Claims. (Cl. 172—239.)

4. The combination with a work performing unit, of a motor for driving said unit, a brake for stopping said unit, a spring for applying said brake, manual means for releasing said brake and energizing said spring and an electric controlled latch in the circuit of said motor for holding said spring in energized condition and with



the brake released while said motor circuit is energized and operative upon de-energization of said circuit to release said spring, whereby said brake is automatically applied.

1,865,585. ROCK DRILL. KENNETH M. PERRY, Montreal, Quebec, Canada, assignor to George C. Riley, Montreal, Canada. Filed Mar. 8, 1929. Serial No. 345,535. 2 Claims. (Cl. 287—125.)

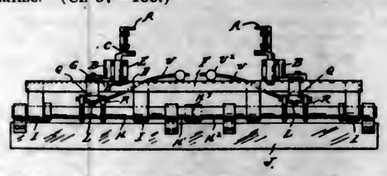


1. A rock drill comprising a drill rod, provided with a longitudinally extending bore, the end of the bore adjacent to the bit engaging end of the rod being enlarged and internally threaded, a bit having a base adapted to engage the said end of the drill rod, said bit being provided with a central bore aligned with the socket in the drill rod, the outer end of the bore being enlarged to form a central recess in the cutting face of the bit, and a bolt having a longitudinally extending groove passing through the bore of the bit with the head of the bolt countersunk in said recess and the shank of the bolt threaded into the socket formed in the drill rod, but terminating in spaced relation to the bottom wall of the socket.

1,865,586. PROCESS FOR TREATING PRODUCTS OBTAINED FROM PLASTIC MASSES. GRIGORI PETROFF, Moscow, Union of Socialist Soviet Republics. Filed Apr. 23, 1927. Serial No. 186,186, and in Union of Socialist Soviet Republics Sept. 14, 1926. 2 Claims. (Cl. 8—5.)

1. The process of treating hard, infusible, insoluble phenol-aldehyde condensation products to improve the same which comprises subjecting the products to the action of a solution comprising a coloring matter and resins dissolved in a volatile organic solvent chosen from the group consisting of alcohols, aldehydes, lower ketones and volatile organic acids.

1,865,587. ROAD SCRAPER. HARVEY EUGENE PRICE, Cadillac, Mich., assignor to Pneu-Hydro Road Machinery Company, Cadillac, Mich., a Corporation of Michigan. Filed Aug. 27, 1928. Serial No. 302,222. 5 Claims. (Cl. 37—155.)

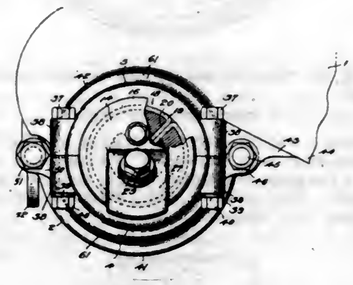


4. In a road scraper, the combination with a vehicle frame, of a scraper supporting beam mounted thereon and a scraper and means for independently rockably supporting portions of said scraper from said beam.

1,865,588. PROCESS FOR THE PRODUCTION OF A DI-SODIUM PHOSPHATE WITH TWO MOLECULES OF WATER OF CRYSTALLIZATION. ALBERT REIMANN, Ludwigshafen-on-the-Rhine, Germany. Filed Jan. 19, 1929, Serial No. 333,747, and in Germany Mar. 23, 1928. 2 Claims. (Cl. 23—107.)

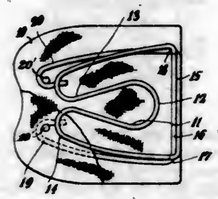
1. A process for the production of a di-sodium phosphate having two molecules of water of crystallization which consists in directly crystallizing the di-sodium phosphate from a pure di-sodium phosphate solution above 50° C.

1,865,589. SIDE FRAME WITH EQUALIZING JOURNAL BOXES. WILLARD F. RICHARDS, Depew, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed June 1, 1927. Serial No. 195,844. 10 Claims. (Cl. 105—223.)



1. In combination, a side frame having a jaw at each end thereof, journal boxes received in said jaws, and means extending therebeneath for resiliently holding said journal boxes in said jaws, the engaging surfaces between said jaws and journal boxes permitting equalizing of the boxes.

1,865,590. SHEET HOLDER AND BOOKMARK. GUIDO M. SACERDOTE, Bayside, N. Y. Filed May 16, 1928. Serial No. 278,240. 12 Claims. (Cl. 24—261.)

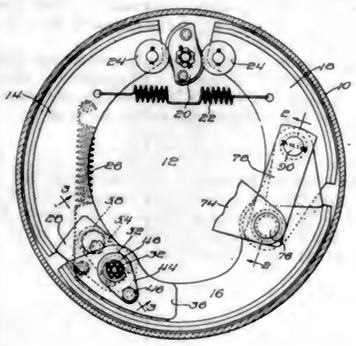


1. A device of the class described, comprising a clamping portion formed from a single piece of metallic wire bent to form two clamping members and an expansible head connecting said members, one of said clamping members being open at one end thereof and a plate member attached to the inner side of said open clamping member, forming a substantially flat clamping surface therefor.

1,865,591. RETARDING MECHANISM. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Apr. 6, 1928, Serial No. 267,860. Renewed Mar. 23, 1931. 23 Claims. (Cl. 188—78.)

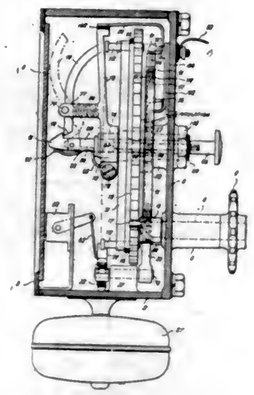
1. A brake comprising, in combination, a pair of friction devices having overlapping portions, means for tak-

ing braking torque from the overlapped end of one of said devices, and tension means connecting the overlapped



end of the other of said devices to said torque-taking means.

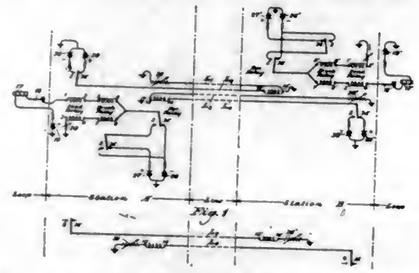
1,865,592. BATCH METER. SAMUEL SHAFER, Jr., and CHARLES F. BALL, Milwaukee, Wis., assignors to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 23, 1928. Serial No. 256,459. 11 Claims. (Cl. 235—128.)



1. In a batchmeter the combination of a rotary counting device arranged to be continuously moved, a plurality of movable means carried by the said counting device, any one of which may be set into position to be moved by the counting device to operate a signal, and means occupying a determined position and operable while the counting device is moving for selectively setting a signal-operating means that at the moment occupies a determined position in the path of movement of the signal-operating means.

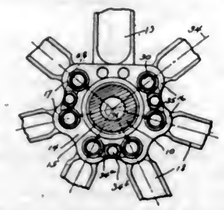
1,865,593. MEANS FOR ELIMINATING INTERFERENCE IN GROUNDED TELEGRAPH SYSTEMS. FRED J. SINGER, Rockville Center, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 24, 1931. Serial No. 546,636. 3 Claims. (Cl. 178—69.)

1. In a telegraph signaling system, the combination with a sending relay at one station of a receiving relay at another station, a line wire connecting the armature of the said sending relay to one terminal of the winding of the said receiving relay, another line wire connecting the other terminal of said winding of said receiving relay to ground at the first mentioned station, and means connected with the said other line wire to render the im-



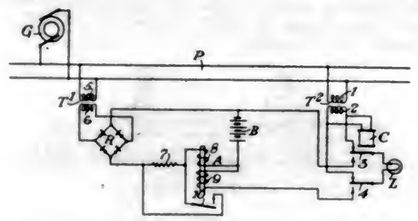
pedance to ground of the said other line wire substantially equal to the impedance to ground of the said first mentioned line wire.

1,865,594. ENGINE. OSCAR L. SNYDER, Marysville, Mich., assignor, by mesne assignments, to Continental Aircraft Engine Company, a Corporation of Delaware. Filed Aug. 8, 1929. Serial No. 384,431. 13 Claims. (Cl. 74—17.)



11. In an internal combustion engine of the radial cylinder type having in combination with a crank, a master rod having a hub provided with lubricant ports and surrounding the crank, a plurality of articulating rods pivotally connected to the hub, pins providing said pivotal connections, said pins each having a lubricant conducting passage in registration with one of said lubricant ports carried by the hub of said master rod, each pin provided with a slot having a predetermined angular relation with the axis of the lubricant conducting passage and located adjacent the outer end of said pin, and locking means supported on the face of the hub and adapted for engagement with said slot to locate the lubricant passage with respect to said associated lubricant port.

1,865,595. APPARATUS FOR CHARGING STORAGE BATTERIES. WILLIAM N. SPANGLER, Philadelphia, Pa. Filed July 8, 1930. Serial No. 466,398. 4 Claims. (Cl. 171—97.)



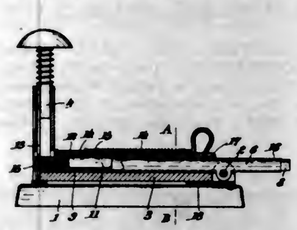
1. In combination, a storage battery, a source of alternating current, a load normally connected with said source, means responsive to failure of current from said source for connecting said load with said battery, a relay having two windings one of which is included in the output circuit of said battery, a charging circuit for said battery including said source and a rectifier as well as a resistance and the other winding of said relay, and a low resistance shunt around said resistance including a front contact of said relay.

1,865,596. CONVEYER. CHARLES WALLACE STARKS, Boise, Idaho, assignor to Automatic Food Machinery Corporation, Boise, Idaho. Filed May 15, 1930. Serial No. 452,679. 13 Claims. (Cl. 186—1.)



1. In a device of the class described, the combination of a fabricated framed structure, pairs of posts upwardly extending from the fabricated frame, transparent panels maintaining the pairs of posts spaced apart and slidable up and down relative thereto, a cross bar disposed upon the corner posts, transparent top panel elements supported upon the cross bar, guides disposed upon the posts having upturned legs to form positioning elements for the transparent top panels, pairs of secondary frames secured to the primary frame and outwardly extending therefrom and disposed at either side of the primary frame, channel ways disposed within the secondary frames, counters disposed upon the secondary frames, and strips disposed within the posts secured to the primary frame and having their upper surfaces disposed in registerable alignment with the counter and a lip upwardly extending from the inner edge of each of the strips.

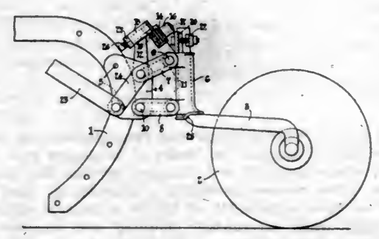
1,865,597. STAPLING DEVICE. PAUL SWITZENY, Vienna, Austria. Filed May 8, 1930, Serial No. 450,852, and in Austria Dec. 13, 1929. 2 Claims. (Cl. 8—1.)



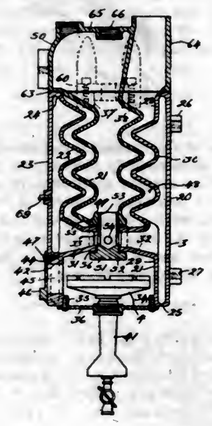
1. A stapling device comprising a lever piece, a pivot pin therefor, a carrying and guiding member for staples bent out of sheet metal and adapted to slide in the lever piece, said carrying and guiding member being adapted to yieldingly slide in tapered grooves and being secured by the pivot pin by means of a lug carried by said member, the upper portion of the member being provided with spaced openings, and a spring feed device for staples including a guide rod adjustably engageable in the opening of said member corresponding to the condition of the supply of clips.

1,865,598. REAR WHEEL CONSTRUCTION FOR PLOWS. WILLIAM J. VERITY, Brantford, Ontario, Canada, assignor to Massey-Harris Company, Limited, Toronto, Ontario, Canada. Filed Jan. 14, 1931. Serial No. 508,758. 7 Claims. (Cl. 97—127.)

1. A rear wheel construction for plows comprising a plow beam, a bracket on said beam, a tubular supporting member, links connecting said supporting member with said bracket, a rear axle rotatably mounted in said member, a trailing rear wheel on said axle, a lug pivotally mounted on said bracket and frictionally held thereby, a clamping device on said axle above said supporting member, and a roller and guide member carried one by said lug and the other by said clamping device, one of said links being extended forwardly to form a lever whereby the plow may be lifted to separate said roller from said guide member.

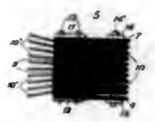


1,865,599. HUMIDIFIER ASSEMBLY. CHARLES F. WARRICK, Detroit, Mich., assignor to Whitehead & Kales Company, River Rouge, Mich., a Corporation of Michigan. Filed Apr. 14, 1930. Serial No. 444,289. 5 Claims. (Cl. 122—165.)



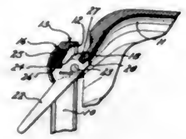
5. A boiler comprising two castings, one being tubular and provided throughout its length with spaced inner and outer walls and connecting end walls, and the other having a tubular portion extending longitudinally of the first casting in spaced relation to the inner wall thereof and having a dome portion at its upper end above and resting upon the upper end wall of the first casting, and fluid connections between the inner wall of the first casting and the lower end of the tubular portion of the second casting, and between the dome portion of the second casting and the upper end of the first casting whereby water supplied to the space between the inner and outer walls of the first casting may flow to and ascend in the tubular portion of the second casting and may flow from the dome portion of the latter, the space between the inner and outer walls of the first casting.

1,865,600. MULTISWITCH COUPLING. PAUL V. WELCH, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 9, 1931. Serial No. 561,915. 4 Claims. (Cl. 173—332.)



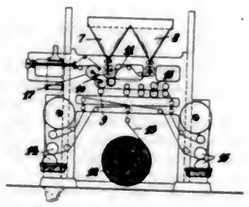
1. A switch coupling comprising two members, one member including a plurality of blocks of insulation with contact members mounted and clamped between the blocks, and the other member including a plurality of blocks of insulation with a plurality of layers or contact members each layer being alternately mounted and clamped between each of the blocks and the blocks of insulation projecting over and covering the active ends of the contact members on one side while leaving the other side of each contact member unprotected so that the coupling may be effected by inserting the contact member of the first member between the contact member and the insulation surfaces of the second member.

1,865,601. BEAD SETTING RING. GEORGE F. WIKLE, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Oct. 26, 1929. Serial No. 402,687. 2 Claims. (Cl. 154—0.)



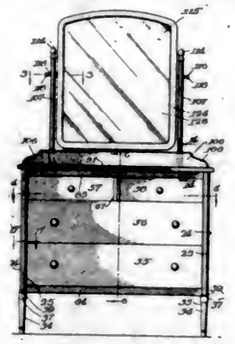
1. In a device of the character described a bead setting ring adapted to be removably locked to a tire former comprising an annular surface substantially equal to the inner diameter of a tire bead, a series of lugs on the ring adapted to engage with a flange on the tire former, a hook at one portion of the ring adapted to fit over the flange on the tire former, and means opposite the said hook for holding the ring to the tire former.

1,865,602. ROTARY PRINTING MACHINE. OTTMAR WILHELM, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a Corporation of Germany. Filed Mar. 3, 1929, Serial No. 345,833, and in Germany Mar. 15, 1928. 1 Claim. (Cl. 270—9.)



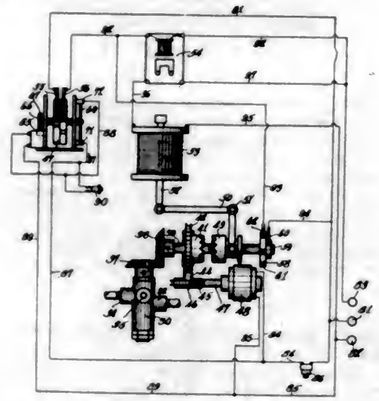
In a rotary web printing machine, the combination with the main printing mechanism inclusive of a frame and web printing, cutting and folding means carried thereby; of a supplemental printing mechanism complete in itself and independent of the main printing mechanism printing on a web separate from the web printed on by the main mechanism and disposed substantially within the limits of the frame of the main printing mechanism whereby the combined machine occupies no greater amount of floor space than the main printing mechanism alone, and means for assembling the products of the two independent printing mechanisms, the supplemental printing mechanism being disposed at right angles to the main printing mechanism and below the folding means of the main printing mechanism.

1,865,603. SHEET METAL FURNITURE. ALBERT WITKE, PETER E. HUETTEN, OTTO ROSEMANN, JOHN P. MOLLING, and CHARLES F. MARTELL, Kenosha, Wis., assignors to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 30, 1926. Serial No. 145,196. 14 Claims. (Cl. 45—5.)



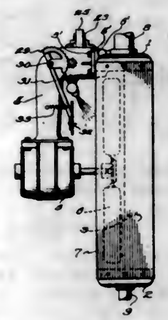
1. In metal furniture case goods, the combination of a sheet metal end panel provided at front and rear with integral hollow corner formations having re-entrant inwardly extending opposed flanges spaced from the exterior of the panel and drawer guides united at their ends to said flanges and rigidly tying the same together.

1,865,604. CONTROL FOR VALVE TURNING AND OTHER OPERATIONS. DAVID ROBERT YARNALL, Philadelphia, Pa., assignor to Yarnall-Waring Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May. 14, 1927. Serial No. 191,517. 2 Claims. (Cl. 161—7.)



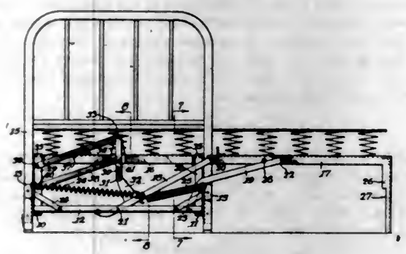
1. A two-pressure valve having high pressure, low pressure machine and exhaust connections, a continuously running valve-operating motor, an electrically controlled clutch and connections including a relay for causing the valve to be turned by the motor, an electric circuit for the relay, and time-controlled contact mechanism for successively passing a current through the relay in order to turn the valve at predetermined intervals.

1,865,605. HUMIDIFYING APPARATUS FOR SPACE HEATERS. FRED M. YOUNG, Racine, Wis. Filed Dec. 17, 1930. Serial No. 503,002. 5 Claims. (Cl. 261—15.)



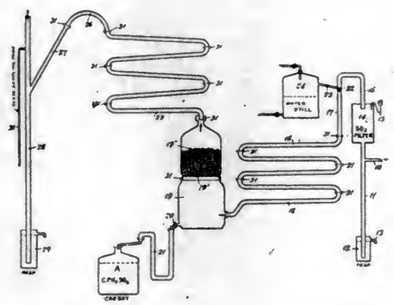
1. An air conditioning device comprising means for impelling a current of air, a fluid reservoir comprising a restricted outlet for injecting moisture under pressure into said current of air, and automatic regulating means in said outlet for varying the amount of moisture injected in proportion to the quantity of air impelled and its moisture absorbing capacity for maintaining the surrounding air at a substantially constant relative humidity.

1,865,606. FOLDING COUCH. ADAM ZEYEN, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 12, 1929. Serial No. 385,100. 9 Claims. (Cl. 5—22.)



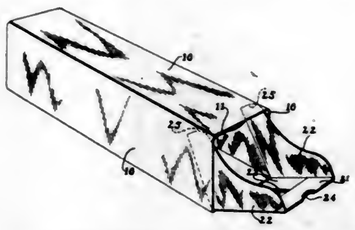
1. In a folding couch, the combination of a stationary main frame, an upper folding bed-bottom section, means connecting said folding section to said frame for movement from normal position over the area of the frame to extended bed position adjacent one side of the frame, a lower floating bed bottom section located under the folding section when the latter is in normal position, means operative as an incident to the unfolding movement of said folding section for automatically elevating the lower section into bed position substantially co-planar with the folding section when the latter is in bed position, said means comprising an arm pivoted on the frame and connected to said folding section so as to move therewith, and a link having its ends pivoted respectively to said arm and said lower section, and means for maintaining said lower section in substantially horizontal position during its upward movement, said means comprising a parallel link arrangement in which the links are pivoted at their respective ends on the main frame and lower section.

1,865,607. APPARATUS FOR THE MANUFACTURE OF SULPHURIC ACID. WALTER S. ALLEN, Flushing, N. Y., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Original application filed Aug. 29, 1924, Serial No. 734,853. Divided and this application filed Jan. 21, 1926. Serial No. 82,665. 3 Claims. (Cl. 23—261.)



1. An apparatus of the class set forth, comprising a reaction chamber having a gas inlet, means for injecting a fluid, and an outlet, a cooler, the inlet of which is connected with said outlet, a collector for the product, and a second cooler connected with the outlet of said collector, said coolers being made in sections, the joints of which are packed with asbestos previously pickled in hot concentrated sulphuric acid.

1,865,608. HINGED BOX. CHAMPE S. ANDREWS, Chattanooga, Tenn., assignor to Box Blank Corporation, New York, N. Y., a Corporation of Delaware. Filed May 31, 1929. Serial No. 367,272. 3 Claims. (Cl. 229—11.)

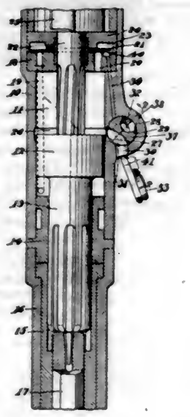


1. In a telescoping box, an open ended cover member, an open top member telescoped therein, said telescoped member having a hinged end wall, wings secured to said hinged end wall, said wings having portions adapted to engage with said cover member to hold said end wall in partly open position, said portions being adjustable to permit said end wall to be brought into full open position.

1,865,609. BLOWING DEVICE FOR ROCK DRILLS. LEWIS C. BAYLES, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Mar. 19, 1930. Serial No. 437,080. 6 Claims. (Cl. 121—6.)

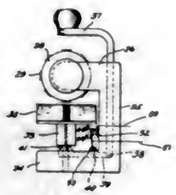
1. In a fluid actuated tool, the combination of a cylinder and a piston, inlet ports to each end of the cylinder,

a fluid supply port, a distributor valve to connect the supply port with each inlet port alternately, a central exhaust port in the cylinder normally controlled by the piston, a vent port opening one side of the distributor valve to atmosphere, a movable valve in the cylinder controlling both the exhaust port and the vent port and having axial and transverse bores registrable with said ports, and ad-



justable to three positions in one of which the vent port is closed and the exhaust port opened to atmosphere at the side of the tool through the valve, in the second of which the vent port is closed and the exhaust port opened to atmosphere at the front of the tool, and in the last of which the vent port is opened to atmosphere through the valve and the exhaust port is closed.

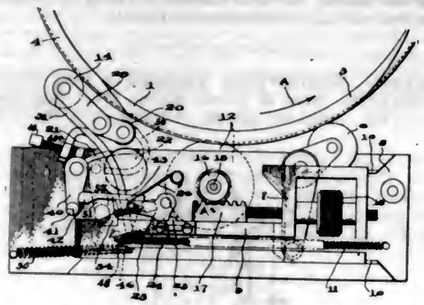
1,865,610. ART AND APPARATUS FOR INDELIBLE MARKING. ROBERT S. BLAIR, Stamford, Conn. Filed Dec. 13, 1923. Serial No. 680,355. 15 Claims. (Cl. 175—265.)



1. The herein described art which consists in forming legible characters upon a medium adapted to receive them by mounting said medium in operative relation to a conducting member and rocking over the opposite surface of said medium a conducting member of predetermined form and of a substantial potential difference with respect to said first conducting member.

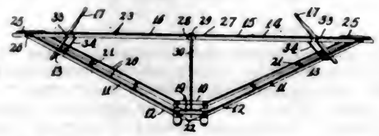
1,865,611. ROTARY PRINTING MACHINE. RODOLPHE F. BONSCH, Paris, France. Filed Apr. 5, 1930. Serial No. 441,778. 6 Claims. (Cl. 101—233.)

1. In a rotary printing machine, a printing drum, a platen, paper feeding rolls, means for moving said platen into inactive non-impression-receiving position and means for moving said paper feeding rolls into non-feeding position upon printing movement of the drum without paper in the machine, stop fingers, and means to move said stop fingers into paper stopping position to prevent feeding of paper into the machine during the interval between



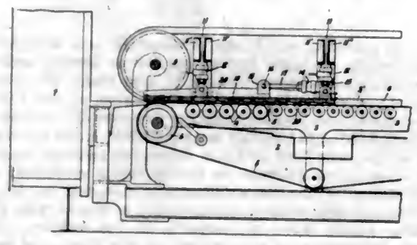
the starting of printing movement of the drum and the positioning of said paper feeding rolls in non-feeding position.

1,865,612. PORTABLE SEE-SAW. MANUEL BUSTILLOS, Santiago, Cuba. Filed Aug. 21, 1930. Serial No. 476,822. 3 Claims. (Cl. 272—54.)



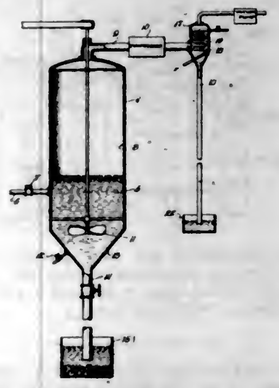
1. A portable see saw, comprising a base for resting on some surface, a pair of directly opposite arms pivotally mounted at their bottom ends on said base and extending at an inclination upwards and each including a transverse rung, top arms pivotally connected at their outer ends to the top ends of said inclined arms and pivotally connected with each other directly above said base, means for supporting the pivotal center of said top arms so that they are substantially horizontal, a lever pivotally supported on each of the top arms sections and engaging against the outer sides of said transverse rungs and having their top ends inclined toward each other so that the levers may be alternately moved by persons sitting on the outer ends of the top arms to cause see sawing, and means for latching the levers and rungs together for holding the device fixed against see sawing.

1,865,613. PAPER SHAKE APPARATUS AND METHOD. HENRI G. CHATAIN, Erie, Pa., assignor to Hammermill Paper Company, Erie, Pa., a Corporation of Pennsylvania. Filed Feb. 15, 1929. Serial No. 340,216. 23 Claims. (Cl. 92—45.)



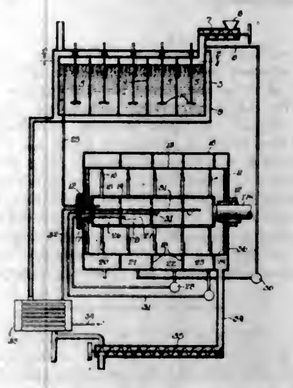
1. The method of agitating a stream of pulp which comprises applying impulses to the upper surface of the stream.

1,865,614. VACUUM COOLER. HAROLD B. CALDWELL, Mount Vernon, N. Y., assignor to Swenson Evaporator Company, Harvey, Ill., a Corporation of Illinois. Filed Aug. 16, 1928. Serial No. 299,955. 2 Claims. (Cl. 62—152.)



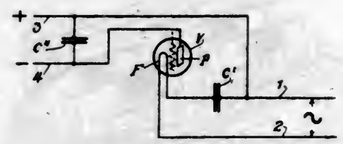
1. The method of crystallizing the solute of a liquid solution by cooling the liquid by means of a cooling medium that is not cool enough directly to effect the cooling, which consists in subjecting the liquid to a reduced pressure to extract vapor therefrom and thereby cool the same, compressing the vapors to a pressure that raises their temperature above the temperature of the cooling medium, and subjecting the compressed vapors to the cooling action of the cooling medium.

1,865,615. METHOD OF AND APPARATUS FOR THE EXTRACTION OF VEGETABLE OILS. EDWIN D. COLEMAN, Barron, Wis. Filed May 19, 1930. Serial No. 453,535. 7 Claims. (Cl. 87—6.)



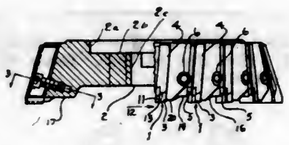
1. The method of extracting oil from oleaginous material by means of a volatile solvent which consists in advancing a mixture of the solvent and material in a continuous stream while the mixture is subjected to heat, agitating the mixture to maintain the material suspended in the solvent, directing the mixture onto a rotating cylindrical filtering surface through which the solvent from said mixture is thrown by centrifugal force, advancing the material continuously along said surface, supplying solvents of progressively decreasing oil concentrations to said material at successive points along said surface, distilling the solvent first filtered off from said material, collecting the solvent next filtered from said material, and mixing the same with untreated material to be added to said stream.

1,865,616. RECTIFYING DEVICE. PHILIP RAY COURSEY, Richmond, and HUMPHREY ANDREWES, London, England, assignors to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed July 5, 1928, Serial No. 290,392, and in Great Britain July 7, 1927. 5 Claims. (Cl. 175—363.)



5. An alternating current rectifier comprising a thermionic valve having filament and plate electrodes, means for connecting the filament to a source of alternating current power supply, a condenser connected in series with said filament to reduce the potential of the current supplied to the filament to a voltage for which the filament is adapted, the plate supply circuit of the rectifier being connected across the terminals of said condenser.

1,865,617. METAL CUTTING TOOL. FRANK W. CURTIS, Wauwatosa, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis. Filed May 21, 1931. Serial No. 538,937. 5 Claims. (Cl. 29—105.)

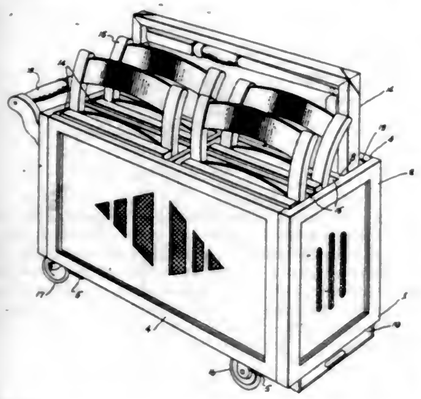


1. In a rotatable face milling cutter, the combination of an annular cutter body providing a plurality of peripherally open slots extended axially, blades removably fitted in said slots and adapted for work material removal to produce a plane surface when said cutter is rotated and advanced in a direction at right angles to said axis of rotation, and clamp devices restraining said blades against movement relative to said body, some of said blades comprising a supporting portion and a cutting portion separately formed and fitted with said supporting portion along a plurality of contact surfaces permanently bonded together, said contact surfaces being of a form providing a mechanical interlock for restraining said portions against separation when acted upon by the forces set up during work material removal and irrespective of said bonding, and of a form adapted to increase the surface area available for bonding, said body having portions cut away for the remaining portions to project axially whereby to provide for said blades a projecting body portion adapted for blade support in one direction along a line substantially tangent to the periphery of said annulus while providing for said blades a chip clearance space in the opposite direction and said blades being fixed in said body to project axially beyond said projecting body portions only a fractional part of the dimension of said blades in the direction of the extension of said line.

1,865,618. BRIDGE SET ACCESSORY. HELEN DAHLMAN and DUDLEY DAHLMAN, Brooklyn, N. Y. Filed Dec. 15, 1931. Serial No. 581,193. 2 Claims. (Cl. 280—50.)

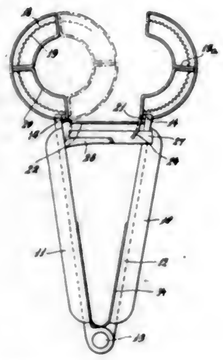
1. A bridge set accessory embodying a receptacle having four upstanding exterior walls and an open top, rigid partitions dividing the interior of the receptacle into a plurality of compartments and hinged partition members dividing certain of said compartments into smaller compartments to thereby divide the interior of the receptacle

into a plurality of compartments of such shape and dimension as to individually contain the different parts of a bridge set, two of the upstanding exterior walls of said receptacle being hinged whereby, when said exterior walls



are in opened position and the hinged partitions also in opened position, the parts of the bridge set may be conveniently positioned within or removed laterally from the receptacle.

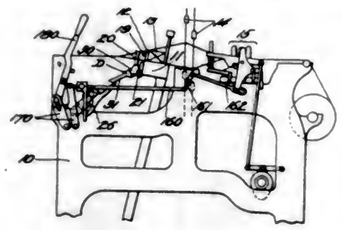
1,865,619. EGG OPENER. WALTER DÄMMRICH, Grassmere, N. Y. Filed Dec. 10, 1930. Serial No. 501,199. 8 Claims. (Cl. 146—2.)



1. An egg divider comprising a pair of legs hinged to each other, a cage section rigidly connected to each leg, said rigid cage sections being adapted to envelope a half of an egg, a movable cage section hingedly secured to each leg, said movable cage sections being complemental to the rigid cage sections, means bounding said movable and rigid cage sections for dividing an egg around its circumference upon closing of said legs, and means for spreading said hinge cage sections away from said rigid cage sections upon closure of said legs.

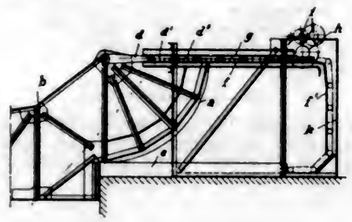
1,865,620. LOOM STOP MECHANISM. HONORE DEMERS, Manchester, N. H. Filed Jan. 31, 1930. Serial No. 424,863. 2 Claims. (Cl. 139—342.)

1. In a loom, in combination, mechanism for stopping the loom, including a shipper lever, a drop wire mechanism, a shipper rod and a reversing lever connecting said shipper rod to said drop wire mechanism, a lay, a protector shaft carried by said lay, a shuttle box on the lay, a binder carried by said shuttle box, a binder finger engaging said binder, and a flexible member connected with the protector shaft adapted to be moved by the binder



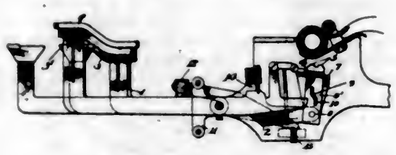
finger into engagement with said reversing lever to actuate the stopping mechanism to stop the loom and to withdraw the binder finger from contact with the binder to permit removal of the shuttle.

1,865,621. ACTUATING DEVICE FOR LEVER-DRAW-BRIDGES. FRIEDRICH DUWE, Mainz-Kastel, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Nuremberg, Germany, a Corporation of Germany. Filed June 18, 1930, Serial No. 461,871, and in Germany June 18, 1929. 3 Claims. (Cl. 14—38.)



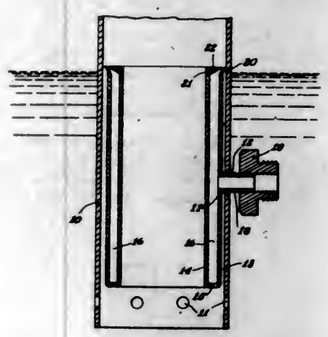
1. In combination with a drawbridge inclusive of a sector, a support having a surface on which the sector is rollable to raise and lower the drawbridge, a rack connected with the sector, said rack being composed of a plurality of rack sections pivotally connected together in end to end relation, elongated guide members between which said rack sections are movable, said guide members being effective to prevent the rack sections disposed therebetween from pivoting relative to each other whereby the rack is operable in tension to raise the drawbridge and in compression to close the same, a pinion engaged with the rack for moving the same longitudinally between said guide members, and means for actuating said pinion.

1,865,622. STENOGRAPHIC TYPEWRITING MACHINE. ALRAH B. EDWARDS, Chicago, Ill. Filed Nov. 11, 1927. Serial No. 232,547. 14 Claims. (Cl. 197—9.)



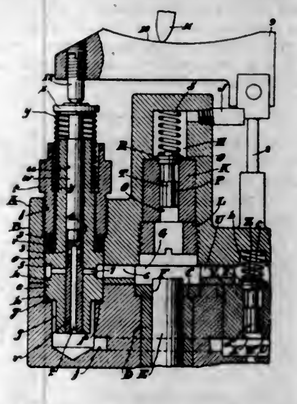
1. In a machine of the class described provided with type bars having printing characters, a platen, key buttons for operating said bars, and means connecting a pair of said bars for obtaining an imprint from an elevated character on a single type bar by pressing a pair of key buttons.

1,865,623. WATER EVACUATING DEVICE. MERTON EDSMORE, Astoria, N. Y. Filed Dec. 17, 1931. Serial No. 581,536. 7 Claims. (Cl. 103—232.)



1. A device of the class described comprising, in combination with a pipe inserted into water, a cylindrical member having an outer cylindrical wall and an inner concentric cylindrical wall enclosing a compartment, said walls being joined at the bottom to seal the bottom of said compartment, an inlet in said outer wall permitting the entrance of steam, compressed air, or the like into said compartment, and means for varying the flow of said steam or air out of said compartment comprising an annular cap threadably engaging said inner wall and extending over the upper end of said compartment.

1,865,624. FUEL PUMP. FRITJOF FRELIN, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 7, 1932. Serial No. 585,290. 2 Claims. (Cl. 103—41.)



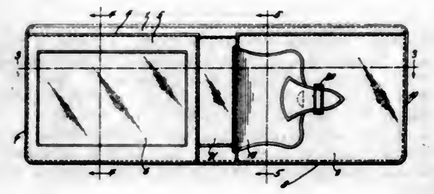
1. In a fuel pump, the combination of a casing having a pumping chamber and supply and discharge passages communicating therewith, valves to control communication between the passages and the chamber, a plunger in the chamber to pump fuel through the discharge passage, a guide member in the casing having a bore and a passage to afford communication between the bore and the pumping chamber, a sleeve valve in the bore having a relief passage in constant communication with the supply passage, and means for actuating the sleeve valve to establish registry between the relief passage and the pumping chamber for by-passing fuel from the pumping chamber to the supply passage.

1,865,625. RUBBER SOLE CONSTRUCTION. CHARLES J. FUTTER and GEORGE W. BLAIR, Mishawaka, Ind., assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed June 2, 1928. Serial No. 282,456. 14 Claims. (Cl. 36—14.)



3. In a shoe, the combination of an insole, a middle sole of leather with an attached facing of rubber on the under side, an upper lasted between and stitched to the insole and middle sole, a layer of rubber next to said facing and an outer sole next to said layer of rubber, all vulcanized into a unitary mass.

1,865,626. BILL FOLD. PRINCE A. GARDNER, Jr., University City, Mo. Filed May 10, 1929. Serial No. 361,947. 2 Claims. (Cl. 150—38.)

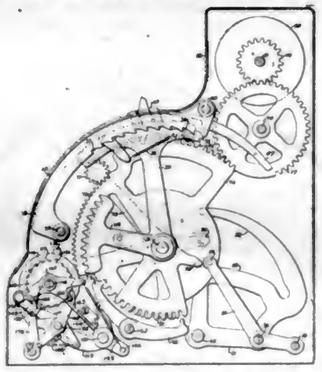


1. A bill fold comprising an outer wall member, two pocket wall members each less than one-half the length of said outer wall member folded downwardly and outwardly upon themselves and each having its outer and lower longitudinal edges secured to an end and the lower longitudinal edge of said outer wall member and each forming an inwardly open pocket, an additional wall member having one end secured to the inner end of one of said pocket wall members and having its opposite end telescoping in the opposite pocket, and a flexible element connecting the telescoped end of said last named wall member with the outer end of said pocket.

1,865,627. LEVER SET LEVER OPERATED CASH REGISTER. MAXIMILIAN M. GOLDBERG, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Nov. 21, 1925. Serial No. 70,580. 17 Claims. (Cl. 235—23.)

1. In a machine of the class described, the combination of a manipulative device, a member adapted to be set by said device, means for holding said device in its adjusted position, means for moving said member from the position to which it is adjusted by said manipulative de-

vice to a certain position, an actuator adapted to be adjusted by said member when it is returned to the certain position, means for holding the actuator in its adjusted



position, a means carried by said moving means for returning the manipulative device to its home position, and means to guide the returning means in its travel.

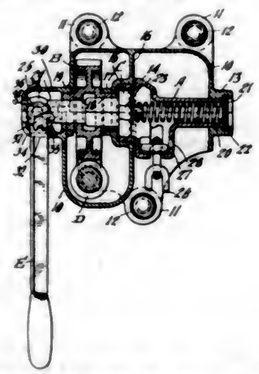
1,865,628. COATING COMPOSITION. FRAZIER GROFF, Verona, N. J., assignor to Bakelite Corporation, New York, N. Y., a Corporation of Delaware. Filed July 6, 1929. Serial No. 376,501. 8 Claims. (Cl. 134—26.)

1. A process of preparing a composition which comprises forming a varnish by the addition of a solvent to a plasticized phenolic resin, mixing cellulose fiber therewith, removing the solvent, and rolling the mixture to a homogeneous condition.

1,865,629. SEALING COMPOSITION. ERNEST R. HANSON, Bloomfield, and MYRON E. DELANEY, East Orange, N. J., assignors to Halowax Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 15, 1929. Serial No. 340,325. 4 Claims. (Cl. 106—8.)

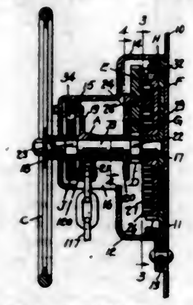
3. A process of preparing a sealing composition which comprises melting a wax-like halogenated naphthalene and dissolving gilsonite in said molten halogenated naphthalene.

1,865,630. HAND BRAKE. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 8, 1930. Serial No. 494,292. 11 Claims. (Cl. 74—112.)



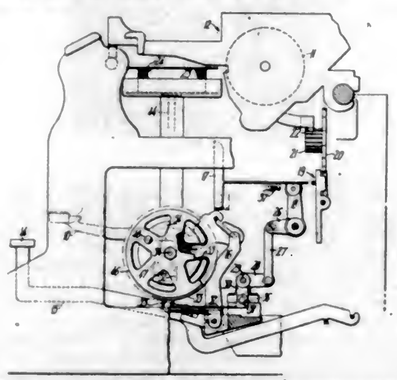
1. In a hand brake mechanism, the combination with a rotary brake tightening member; of rotary means for actuating said member; a manually operated rotary element; sliding clutch means normally operatively connecting said element and rotary means; a fixed supporting bearing member, and a manually actuated swinging clutch operating lever for sliding said clutch member to disengage the same, said clutch lever being swingingly supported by fulcrum means formed integral therewith, said fulcrum means having bodily travelling movement on said fixed bearing member with which it is interengaged.

1,865,631. HAND BRAKE. WILLIAM A. HEITNER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 28, 1930. Serial No. 478,319. 2 Claims. (Cl. 74—112.)



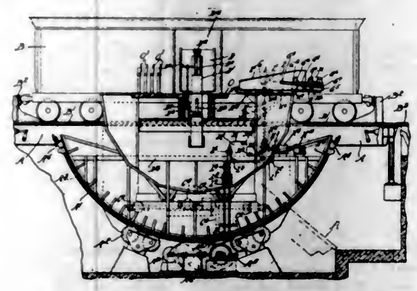
1. In a hand brake mechanism, the combination with a chain winding drum; of a hand wheel; means for transmitting power from the hand wheel to the drum including a planetary gear means and a cooperating internal gear member on which said planetary gear means travels, said internal gear member having ratchet teeth thereon; a lever actuated locking dog cooperating with said ratchet means for holding said gear member against rotary movement while the hand wheel is rotated to wind the chain on the drum, said locking means being releasable by actuation of said lever to free the dog from said ratchet teeth of said gear internal member to allow free rotation thereof and free unwinding movement of the chain winding drum with respect to the hand wheel; and a releasable locking dog for positively holding said hand wheel against rotation in an unwinding direction.

1,865,632. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 21, 1929. Serial No. 387,300. 2 Claims. (Cl. 197—160.)



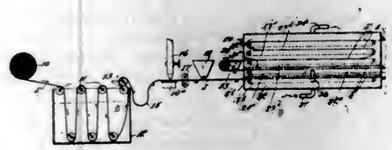
1. In a typewriting machine having ribbon-spools, a horizontal winding shaft for the spools, said shaft carrying wheels to shift the same endwise, and normally idle ribbon-reversing interponents co-operatively associated with said wheels, to shift the shaft to and fro endwise; a vertical shaft at each side of the machine and detachably mounted and having an arm operable by an obstruction on the ribbon, and a spring for returning said arm, said vertical shaft at its lower end formed into a crank-arm, said crank-arm formed with a finger to engage the interponent to operate the same, said ribbon-operated arm having a hub, said arm being keyed to said hub by means of a pin which forms an anchorage for said arm-returning spring.

1,865,633. GRAIN DEFLECTOR. ELWIN H. KIDDER, Chicago, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 25, 1929. Serial No. 409,497. 27 Claims. (Cl. 214—47.)



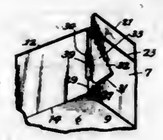
1. For use with a car unloader including a tiltable cradle and means for securing a car thereupon, a deflector member associated with said cradle and means for inserting said deflector into and retracting it from the side door of said car, including a generally vertical shaft and means for rotating it, an arm extending generally horizontally therefrom, the deflector member being pivoted upon said arm.

1,865,634. BUILDING MATERIAL AND PROCESS OF MAKING SAME. LESTER KIRSCHBRAUN, Leonia, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 2, 1931. Serial No. 519,432. 7 Claims. (Cl. 91—70.)



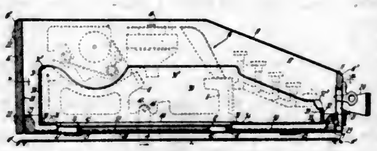
1. The process which comprises coating a face of a foundation material with a layer of an aqueous dispersion of bitumen capable of forming, when dry, a film in which the dispersing agent is distributed in the form of a honeycomb structure, and thereafter depositing upon said layer a layer of comminuted surfacing material while the layer of dispersion coating material is wet and uncoalesced and in a condition such that the deposition of the comminuted surfacing material thereon will not interfere with the formation of the gel or honeycomb structure in the coating layer and subsequently removing the water from the aqueous dispersion to thereby cause the bituminous particles to coalesce around the comminuted surfacing material to anchor the same.

1,865,635. BOX. STANLEY J. KLEIN, Chicago, Ill., assignor to Empire Box Corporation, Chicago, Ill., a Corporation of Illinois. Filed Feb. 14, 1931. Serial No. 515,657. 5 Claims. (Cl. 229—31.)



2. A box of the class described comprising a bottom, side walls, end walls, corner parts at the corresponding ends of said side walls and joined to the adjacent of said end walls, said corner parts having diagonally extending intersecting fold lines thereon and having portions between said fold lines at the outer edges thereof cut away to provide retaining tabs outwardly of corresponding of said fold lines, means securing the portions of said corner parts intermediate said fold lines to the adjacent portions of said side walls, and means detachably connecting said retaining tabs to said adjacent end wall when said tabs are folded into parallelism with said side walls.

1,865,636. TYPEWRITING MACHINE CARRYING CASE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Original application filed Apr. 24, 1924, Serial No. 708,633. Divided and this application filed Aug. 6, 1927. Serial No. 211,078. 1 Claim. (Cl. 45—68.2.)

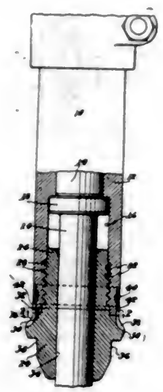


A carrying case for a portable typewriter, comprising a thin, flat base having all its bottom surface in a single plane, a relatively thick separate strengthening rim attached around the inner periphery of the base to form a reinforcement therefor, the base bottom having sockets to receive the rubber feet of the typewriting machine, sound absorbing felt covering the interior top of the base bottom and a cover for the case including relatively thick front and rear ends and thinner top and side portions, said top portion having an inclined front portion, said sides and top portion being all in a single piece and fastened to said relatively thicker ends.

1,865,637. STEEL RETAINER. EARL B. LEAR, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Mar. 17, 1931. Serial No. 523,283. 2 Claims. (Cl. 121—82.)

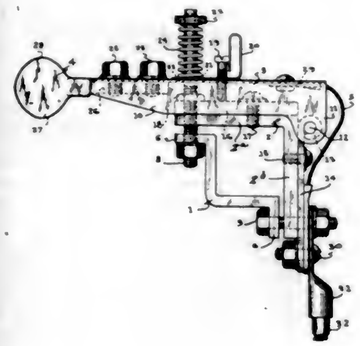
1. A steel retainer for pneumatic tools, comprising a front head, a threaded portion on the front head cooperating with a threaded portion on the cylinder of the pneumatic tool, a bore in the front head adapted to permit the passage of the shank of the working implement, a collar on the working implement larger than the bore in

the front head, a plurality of slots in the front head parallel to the axis of the tool, a plurality of slots in the cylinder to register with the first said slots and exceeding



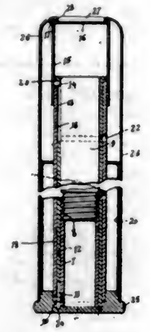
by one the number of slots in the front head, and a spring ring having an integral tongue adapted to lie in a pair of registering slots.

1,865,638. CONTACT FINGER ASSEMBLY FOR ELECTRIC CONTROLLERS. GEORGE J. LEXA, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 5, 1929. Serial No. 383,755. 4 Claims. (Cl. 200—166.)



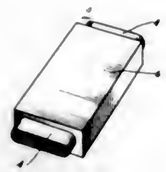
1. A contact finger assembly for electric controllers comprising a clamping member including angularly disposed arms defining an interior angle adapted to receive an element of a supporting structure, a finger hingedly connected to the exterior face of one of said arms and overlying the other of said arms, said finger including guide flanges operatively engaging the side faces of the other arm whereby to prevent lateral displacement of the finger.

1,865,639. CONTAINER. LUCIFER J. MOST, Kearny, N. J., assignor of one-half to Ralph W. Wilson, New York County, N. Y. Filed Aug. 3, 1931. Serial No. 554,683. 17 Claims. (Cl. 206—56.)



1. A container having an opening, a material carrier mounted to move to and from the opening, a lid for said opening interposed between the carrier and the opening, and means for moving successively the lid from the opening to expose the carrier to the opening and move the carrier toward the opening, and vice versa.

1,865,640. ELECTRICAL CONDENSER. ALEXANDER NYMAN, New York, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed June 24, 1926. Serial No. 118,310. 3 Claims. (Cl. 175—41.)

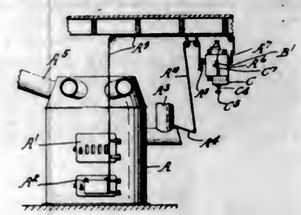


1. A condenser comprising armature elements separated by a sheet of fibrous insulating material, and having a filler of rubber comprising in combination with said fibrous material dielectric means for the condenser.

1,865,641. DAMPER CONTROL FOR HEATING FURNACES. LAURENCE M. PERSONS, Chicago, Ill. Filed Nov. 1, 1928. Serial No. 316,570. 6 Claims. (Cl. 236—16.)

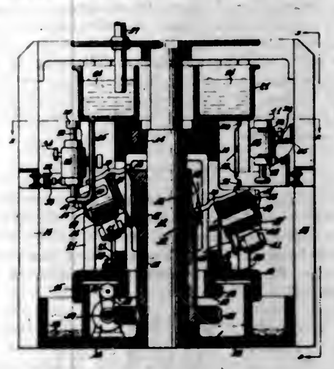
1. The combination with a thermostatically controlled damper operating motor of a manual control therefor adapted to interrupt the thermostatic control independent of the thermostatic control, and automatic means for re-

turning said manual control to its starting or neutral position, said means comprising a timing element adapted to reestablish the thermostatic control at a predetermined



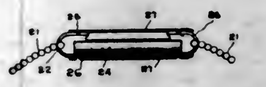
interval after manual operation of the control, said timing means comprising a clockwork adapted to be wound up by manipulation of the manually controlled member.

1,865,642. MULTIPLE GROOVE GRINDER. CLIFFORD T. RAULE, Brookline, Pa. Filed Mar. 2, 1929. Serial No. 343,879. 12 Claims. (Cl. 51—97.)



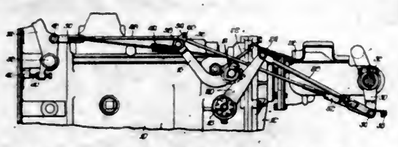
1. In a multiple grinding machine for grinding arcuate grooves, stationary supporting structure, a turn-table and grinding units spaced around the table, each unit including a tiltably mounted work-holder and a grinding wheel for continuous operation, in combination with cam mechanism for giving the work-holder of each unit an arcuate traverse against the curved grinding surface of the wheel.

1,865,643. IDENTIFICATION DEVICE. EUGENE RING, New York, N. Y., assignor of one-half to John W. McMillan, Marshfield, Mass. Filed Oct. 28, 1930. Serial No. 491,675. 5 Claims. (Cl. 40—19.)



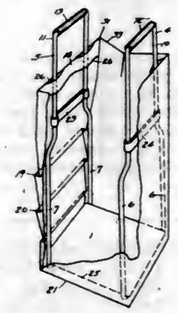
1. A device of the character described comprising a ball-link chain, a reception member detachably connecting the ends of said chain, a chamber formed in said reception member, an inscribed identifying paper roll disposed in said chamber, slots cut in the ends of said reception member rendering a portion of said structure resilient, grooves cut in the resilient enveloping ends of said reception member, and an ensealing casing open at both ends engaging said reception member provided with internal ribs adapted to engage the grooves on the inner member for interlocking said members together yet allowing movement in both directions to permit of access to the identifying roll disposed in said reception member without breaking the continuity of the chain or clasp forming structure.

1,865,644. POWER UNIT. EDWARD A. ROCKWELL, Chicago, Ill. Filed June 20, 1931. Serial No. 545,709. 5 Claims. (Cl. 188—140.)



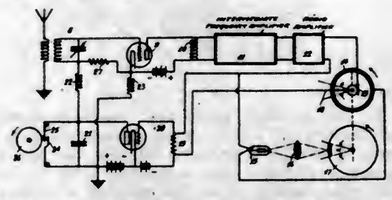
1. Brake mechanism for vehicles comprising in combination a pivoted brake pedal, a brake actuating rock shaft, a power brake intermediate the pedal and rock shaft, input and output levers associated with said power brake, a connection from said output lever to said rock shaft and an independent connection from said pedal to said rock shaft, said independent connection being so arranged as to transmit a component of pressure to said input lever.

1,865,645. BOTTLE HOLDER AND CARRIER. GEORGE T. SCHRODER, New York, N. Y. Filed Mar. 27, 1929. Serial No. 350,421. 6 Claims. (Cl. 215—100.)



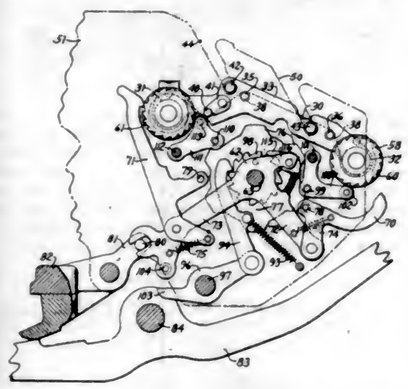
1. A container holder and carrier including a bottom frame member, a pair of frame handles connected thereto at opposite edges of said member and having upper handle portions, a bag associated with said holder attached to one of said handles upon one side, means within said bag for retaining the same in assembly with said bottom frame member, and means for locking said handles when a container is placed in position upon said bottom frame member.

1,865,646. INTENSITY CONTROL. FRITZ SCHRÖTER and WOLFGANG FEDERMANN, Berlin, Germany, assignors to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Apr. 5, 1930, Serial No. 441,972, and in Germany Apr. 24, 1929. 9 Claims. (Cl. 178—44.)



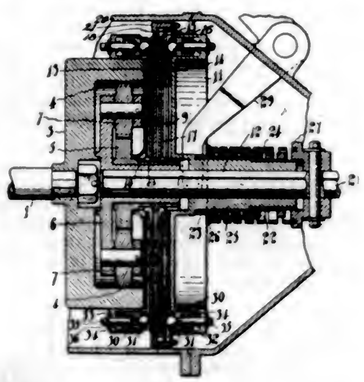
5. An apparatus for eliminating intensity fluctuations in radio receiving systems comprising signal receiving means, signal amplifying means, signal translating means, and capacity means for controlling the amplification of said received signals during predetermined periods of time in accordance with the strength of the received signals during a relatively small portion of said predetermined time.

1,865,647. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Mar. 5, 1929. Serial No. 344,362. 25 Claims. (Cl. 197—161.)



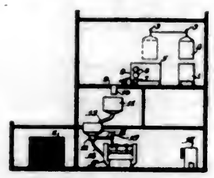
2. In a machine of the class described, the combination with a plurality of ribbon spools spaced apart from each other; of feed pawls normally adapted to drive the respective spools; a single bell crank located intermediate the spools, one of the feed pawls being mounted on each arm of the bell crank and operated thereby; and means co-axial with the bell crank to render ineffective one or another of the pawls.

1,865,648. TRANSMISSION MECHANISM. CLIFFORD SIFTON, Toronto, Ontario, and LEONARD K. CHESWRIGHT, Swansea, Ontario, Canada. Filed June 25, 1931. Serial No. 546,748. 6 Claims. (Cl. 74—34.)



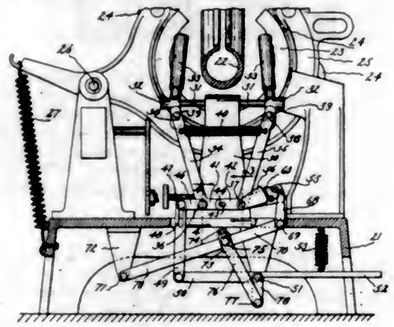
1. In transmission mechanism, the combination of alined driving and driven shafts, an epicyclic gear train forming a driving connection between the two shafts including a rotatable part concentric with the shafts; means, initially inoperative, for applying a variable frictional resistance to the rotation of said part relative to the driven shaft; a stationary part provided with a braking surface; means, initially inoperative, for applying a variable braking resistance to the rotation of the rotatable part relative to the stationary part; and manually controlled means adapted by a continuous uni-directional movement to first apply braking resistance to the movement of the rotatable part relative to the stationary part and subsequently applying braking assistance to the rotation of said part relative to the shafts; and means for automatically releasing the second mentioned braking resistance after both have been applied.

1,865,649. METHOD AND APPARATUS FOR MANUFACTURING PRODUCTS FROM FIBROUS MATERIAL. MAX SKOLNIK, Chicago, Ill., assignor to Insolo Holding Company, a Corporation of Minnesota. Filed June 1, 1931. Serial No. 541,159. 20 Claims. (Cl. 92—13.)



1. The method of converting straw into structural materials by placing loose straw in containers, cooking and chemically treating said straw in tanks without removal from said containers, delivering said cooked and treated straw to pulp crushing apparatus, delivering by gravity to a pulp storage space, providing gravity chutes from such pulp storage to a pulp mixing tank, and delivering from said pulp mixing tank through a measuring valve to a forming press.

1,865,650. BEAD CLOSING MECHANISM FOR TIRE WRAPPING MACHINES. EDWARD C. TAYLOR, Longmeadow, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Aug. 12, 1927. Serial No. 212,366. 8 Claims. (Cl. 242—6.)

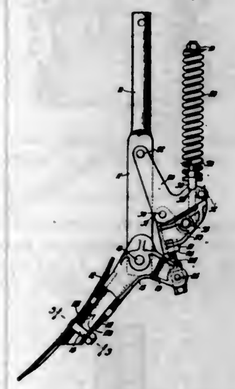


1. In a tire wrapping machine, a bead closing mechanism having a pair of tire engaging members movable against opposite sides of the tire, yielding means for urging the members towards the tire, pawl and ratchet mechanism for preventing outward movement of the members, and means for causing the pawl to engage the ratchet and to propel the members towards each other to compress the tire a predetermined amount.

1,865,651. MOUNTING FOR CULTIVATOR SHOVELS AND THE LIKE. HARRY RANDALL TRAPHAGEN, Rockford, Ill., assignor to J. I. Case Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 12, 1929. Serial No. 385,283. 2 Claims. (Cl. 97—184.)

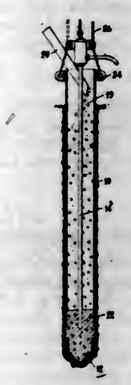
1. In a mounting for a cultivator shovel or the like, the combination of a main support, a bell crank foot piece pivoted intermediate its ends to said support, one

of the arms of said foot piece being adapted to have a shovel or the like secured thereto, toggle mechanism extending between and connecting the other arm of said foot piece and a point in the length of said support spaced upwardly from the pivotal connection between the foot piece and support, said toggle mechanism including a pair of pivotally connected parts provided with means for limiting relative pivotal movement therebetween in one direction, spring means urging said toggle parts toward said limit of relative pivotal movement, said spring and toggle mechanism serving to yieldingly maintain the



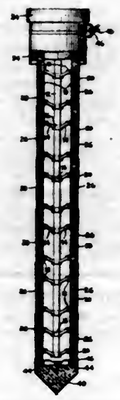
shovel in predetermined operative position, the connection between said toggle and said foot piece including an adjusting screw constituting part of the length of one of said toggle parts which is connected to said other arm of the foot piece, said screw being mounted in one of the parts which it connects so as to be rotatable therein but longitudinally stationary relative thereto and having threaded engagement with the other part, whereby rotation of said screw is operative to adjust the length of said toggle part to thereby adjust the normal operative position of the shovel.

1,865,652. METHOD AND APPARATUS FOR PLACING CONCRETE IN PILES. MAXWELL M. UPSON, Englewood, N. J., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 20, 1929. Serial No. 393,908. 4 Claims. (Cl. 61—57.)



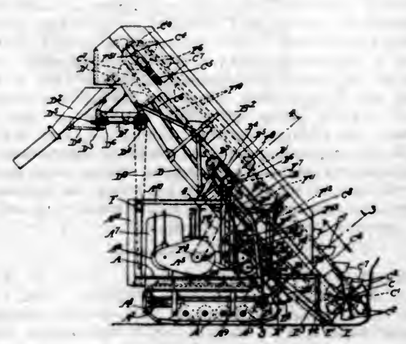
1. The method of forming a concrete pile which comprises placing a tubular shell in the ground, gradually withdrawing said shell, pouring concrete into the shell to fill the cavity below said shell as the shell is withdrawn, continuously vibrating a rod directly within the concrete as the same is fed to the shell and cavity and withdrawing said rod simultaneously with the shell.

1,865,653. APPARATUS AND METHOD FOR DRIVING PILE SHELLS. MAXWELL M. UPSON, Englewood, N. J., and ELIHU D. WATT, La Grange, Ill., assignors to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 20, 1930. Serial No. 476,608. 12 Claims. (Cl. 61—79.)



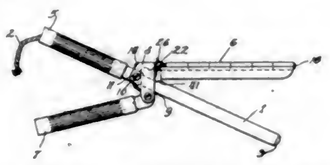
1. Apparatus for driving multi-section annular pile shells having cylindrical inner surfaces, comprising in combination, an expansible driving core, means independent of the driving operation for expanding said core into frictional driving engagement with the cylindrical surface of the shell sections, and means for maintaining said core in said expanded condition during the driving of said core and shell.

1,865,654. LOADER. FERDINAND F. WAECHTER and LOUIS F. SNYDER, Philadelphia, Pa., assignors to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1927. Serial No. 241,756. 20 Claims. (Cl. 37—190.)



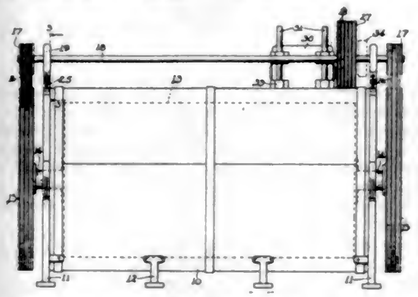
1. In a loader, a support, a loading boom supported from such support for movement therealong, such boom being top heavy and tending normally automatically to move out of the digging position.

1,865,655. HAIR WAVER. ARTHUR E. WALSH, Chicago, Ill. Filed July 17, 1930. Serial No. 468,519. 4 Claims. (Cl. 132—32.)



1. In a hair waver, a cylindrical waving member having a handle at one end, a second waving member having a yoke member provided with arms straddling said first waving member, said first member being pivoted to and between the arms of said yoke member, said second waving member having a fork member pivoted between the arms of said yoke member, said second waving member including a pin fastened to said yoke member and a pair of waving jaws each pivoted on said pin and swingable laterally into and out of cooperation with said first waving member, cam projections on said fork member for closing said waving jaws upon said first waving member, and means for holding said jaw members separated until said first waving member is brought into position between the jaws of said second waving member.

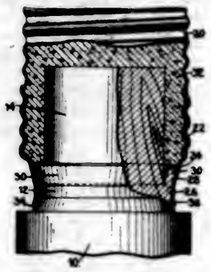
1,865,656. WASHING MACHINE DRIVE. THOMAS S. WATSON, Milwaukee, Wis. Filed Dec. 12, 1928. Serial No. 325,572. 3 Claims. (Cl. 74—21.)



1. In a washing machine, the combination of a frame structure including a pair of spaced end frames, a rotary washing drum extending horizontally between said end frames and having shaft members at opposite ends journalled in said end frames, sheaves carried on said shaft members, a counter-shaft arranged substantially parallel to the axis of said drum, sheaves carried on said counter-shaft in alignment with the sheaves on the shaft members of the drum, belts connecting the sheaves of said drum and counter-shaft, means for driving said counter-shaft, bearing blocks adjustably mounted on said end frames, self-aligning bearings carried on said bearing blocks for supporting said counter-shaft, and means for independently shifting said bearing blocks with respect to the axis of said drum for adjusting the tension of said belts and equalizing the transmission of power to the opposite ends of said drum.

1,865,657. COMPOSITE PILE JOINT. ELIHU D. WATT, La Grange, Ill., and EDMOND WHITELEY, New York, N. Y., assignors to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 24, 1931. Serial No. 510,896. 8 Claims. (Cl. 61—53.)

1. In a composite pile, a lower section of wood, a tenon on the upper end thereof, a shoulder on the tenon intermediate its length, a shell surmounting said lower section and adapted for receiving concrete to form the upper pile section, said shell being of diameter greater than said tenon and having a lower end of restricted diameter snugly surrounding said tenon below said shoulder; and



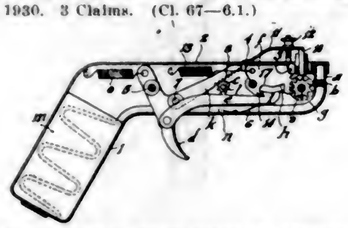
means for spreading out the shoulder above the restricted shell portion whereby said shell is locked to said lower pile section.

1,865,658. PILE FORMING APPARATUS. ELIHU D. WATT, La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 4, 1931. Serial No 519,921. 19 Claims. (Cl. 61—78.)



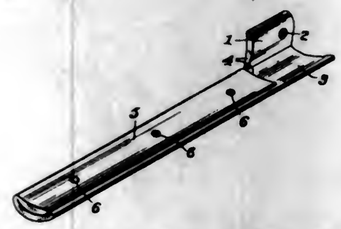
1. Apparatus for driving a pile shell having a driving shoe comprising, in combination, a core adapted for driving the shell into the ground, and means interposed between the core and shoe and unattached to said core or shell for changing the effective length of the core.

1,865,659. PYROPHORIC LIGHTER. ADOLF WEISSENBURGER, Evillard, Switzerland, assignor to the Firm, Hermann Thorens, S. A., Ste. Croix, Switzerland. Filed Mar. 16, 1931, Serial No. 523,098, and in Germany Mar. 17, 1930. 3 Claims. (Cl. 67—6.1.)



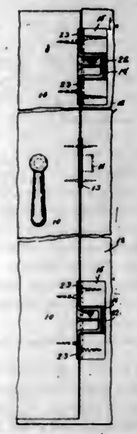
3. In a pyrophoric lighter having the shape of a pistol, an operating trigger for actuating the spark producing means, a friction wheel, a pinion operatively connected to the friction wheel, a rotatable toothed segment meshing with said pinion and provided with a projection, a hook pivoted on the operating trigger and adapted to engage with said projection on the toothed segment, a spring acting on said segment, and cooperating cam surfaces on said hook and on said segment.

1,865,660. FINISHING STRIP FOR AUTOMOBILES AND THE LIKE. EDWARD J. WELCH, New York, N. Y. Filed Apr. 7, 1930. Serial No. 442,375. 3 Claims. (Cl. 296—135.)



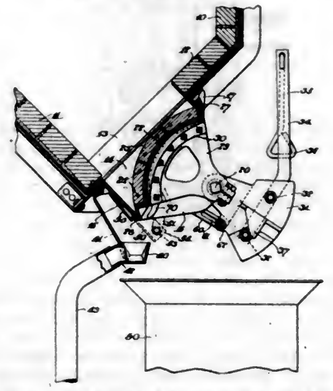
1. As an article of manufacture a deformable strip of extruded metal for automobiles and the like comprising a base flange for attachment to the automobile body, a covering flange normally standing at an angle to the base flange initially to permit driving of nails therethrough and foldable over said base flange to cover said nails, and end portions adapted to be bent in relation to the main portion of the strip, said end portions having a section of the base flange initially folded against the covering flange to provide superimposed layers to permit nails to be driven through both layers, substantially as described.

1,865,661. COMBINED DOOR HOLDER AND BUFFER. GEORGE W. WELLS, Amesbury, Mass., assignor of one-half to Walker Body Company, Amesbury, Mass., a Corporation of Massachusetts. Filed May 14, 1930. Serial No. 452,264. 5 Claims. (Cl. 16—85.)



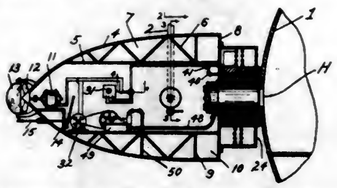
1. A combined holder and buffer for a door, comprising male and female members, one adapted to be mounted on the door and the other on its jamb, and to be moved relatively in a predetermined path, said male member having oppositely disposed rigid faces extending convergently towards the female member and said female member having a pair of elongated metal springs symmetrically disposed at opposite sides of said path and bowed uniformly towards each other to form a socket for receiving the male member, said springs being rigidly supported at each of their ends, with the ends at the inner end of the socket in closer proximity to said path than those at its outer end, thereby extending divergently from the inner end of the socket, to provide longitudinally convex faces arranged for simultaneous engagement with the corresponding faces of the male member and yieldable in directions perpendicular to the faces of the male member which they respectively engage during the further closing movement of the door.

1,865,662. ASH HOPPER GATE. LESLIE G. WEYGANDT, Wyncote, and PERCIVAL K. REED, Llanerch, Pa., assignors to Atlas Conveyor Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 9, 1929. Serial No. 384,653. 7 Claims. (Cl. 110—171.)



1. The combination, with a hopper having a discharge opening, of a frame surrounding said opening, a movable gate adapted to close the discharge opening, a stationary drain trough arranged below, said frame adapted to receive drainage therefrom, a movable plate member arranged below the lower portion of said frame, and means adapted to actuate said plate member to cause the same to be retracted out of the path of the drainage when the gate is in the closed position and to be extended over the drain trough when the gate is in the open position.

1,865,663. SUBMARINE SAFETY VESSEL. CURTIS H. WHITE, Spokane, Wash. Filed June 9, 1928. Serial No. 284,267. 3 Claims. (Cl. 61—69.)

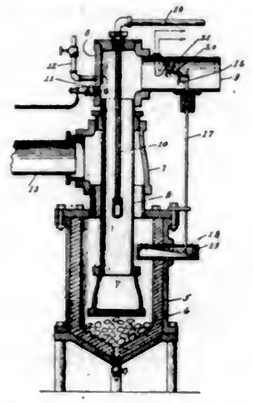


1. A submergible apparatus, for use in conjunction with a submerged portion of a vessel, comprising a chamber having a hatchway, an annular magnet core sealed on one face to said chamber and surrounding said hatchway, a solenoid surrounding the core, an annular recess in the other face of said core, and an inflatable sealing ring positioned in said recess.

1,865,664. METHOD FOR MAKING MIXED OIL GAS AND PRODUCER GAS. WALTER W. WILLIAMS, Bloomington, Ill., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill., a Corporation of Illinois. Filed Apr. 4, 1929. Serial No. 352,362. 1 Claim. (Cl. 48—215.)

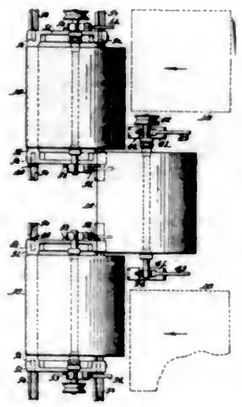
The method of making mixed oil gas and producer gas for domestic heating purposes; comprising the simultane-

ously mixing of oil, air and water and delivering said mixture from an atomizing nozzle in a controlled stream of supplemental air sufficient to support partial combustion, igniting the mixture, enclosing the flame therefrom and directing it upon the upper surfaces of a plurality of spaced apart particles of refractory material upon the bottom of a chamber surrounding the flame enclosure,



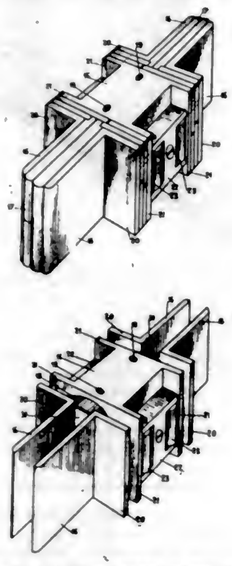
causing the particles of refractory material to become incandescent, automatically reducing the supplemental air by increasing the temperature within the chamber until a predetermined temperature is reached, thereby causing partial combustion and generation of lean oil gas, and leading the resultant fixed oil gas passing through the incandescent particles from said chamber about said flame enclosure.

1,865,665. WEB ROLL SUPPORTING DEVICE FOR TRIPLEX WEB PRESSES. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed Aug. 4, 1923, Serial No. 655,776, renewed Apr. 4, 1929, and in Canada May 15, 1928, now Patent No. 1,757,157, dated May 6, 1930. Divided and this application filed Aug. 14, 1929. Serial No. 385,728. 1 Claim. (Cl. 242—58.)



The combination with a support for a web roll located in fixed position, a web roll thereon of a pair of rails located parallel with the axes thereof at one side thereof, a carriage mounted on said rails to move thereon toward and from the fixed web roll, a web roll support on said carriage adapted to receive a web roll from the floor and adapted to be moved on the track up toward the end of the first named web roll, said rails having stops for limiting the motion of the second web roll toward the first so that it will not touch it.

1,865,666. ROTARY ENGINE. GIUSEPPE ARUGA, Turin, Italy. Filed Nov. 30, 1929, Serial No. 410,837, and in Italy Dec. 1, 1928. 13 Claims. (Cl. 121—84.)

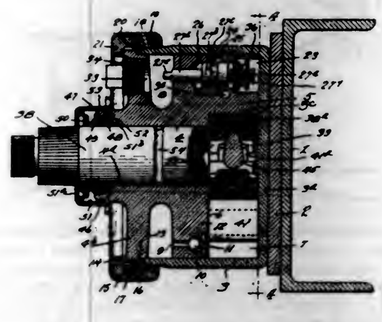


1. In a rotary engine comprising a stator chamber and a rotor rotatably mounted therein, a rotor piston slidably mounted within and diametrically of said rotor, said piston consisting of a rigid structure comprising a central body and two hub-like members fixed thereon and axially extending therefrom in opposite directions, each hub-like member having a pair of transversely spaced wings or extensions extending longitudinally of said body, forming a housing having open sides and an open end, and expansible end elements inserted within each housing, said elements consisting of two sets of substantially plane and triangular segments, each set consisting of two substantially right-angle outer pieces and an isosceles inner piece fitting between the same, the triangular segments of each set having their inner faces provided with a circularly milled recess of triangular cross section, elastic packing rings of a corresponding section being inserted in the recesses of both sets of juxtaposed segments, and tending to expand the segments of each set in a substantially radial direction.

1,865,667. ACTIVATION OF CARBONACEOUS MATERIAL. GUSTAV BAILLEUL, Frankfort-on-the-Main, Germany, assignor to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 23, 1930, Serial No. 483,979, and in Germany Oct. 4, 1929. 2 Claims. (Cl. 252—3.)

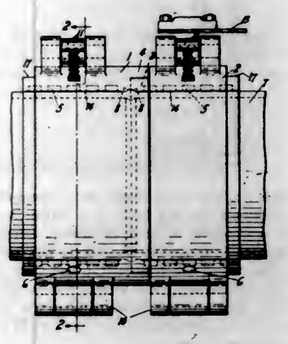
1. A process for the activation of carbonaceous material and the conjoint production of combustible gases, which comprises treating carbonaceous substances at temperatures of about 400–700° C., with a mixture of steam and gas containing free oxygen in an amount not exceeding 6 percent by volume and introduced at a temperature not exceeding 250° C., for such a period that the loss in burning does not exceed 40% by weight of the original carbonaceous substance.

1,865,668. SHOCK ABSORBER. EUGENE L. BEECHER, East Cleveland, Ohio, assignor to The Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 8, 1930. Serial No. 494,336. 31 Claims. (Cl. 188—89.)



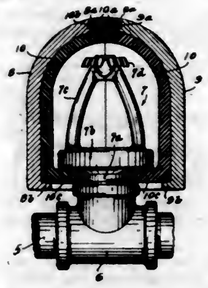
1. A shock absorber comprising, in combination, a cylindrical casing having a closed bottom, a unitary cylindrical block removably fitted in said casing and having one end thereof provided with a face substantially parallel with the bottom of the casing and a projection extending from one side of said face and adapted to engage the bottom of the casing and to provide therewith a partition between opposite ends of the working chamber formed between such face and projection and the bottom of the casing, the said block being provided between the said face and the opposite end thereof with a recess forming with the casing a reserve chamber, means engaging such opposite end of said block for securing the same within the casing, and a shaft having a piston within the working chamber, said shaft being mounted in an elongated bearing provided therefor in said block.

1,865,669. METHOD AND APPARATUS FOR SPLICING UNVULCANIZED INNER TUBES. HENRY C. BOSTWICK, Kenmore, Ohio, assignor to The Akron Standard Mold Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 27, 1928. Serial No. 322,148. 4 Claims. (Cl. 154—9.)



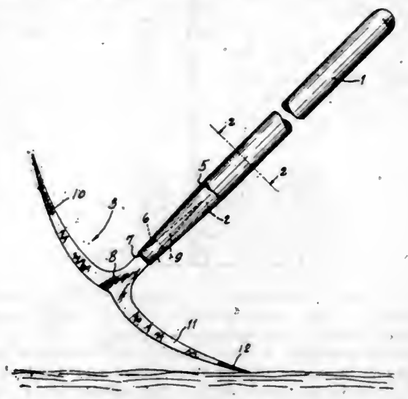
1. An apparatus for joining the ends of unvulcanized tubes, comprising cooperating male and female holders for surrounding the ends of the tube, means for applying a vacuum to the interior surfaces of the holders whereby the tube is securely held therein, and means for forcing said holders into cooperating relation to unite the ends of the tube.

1,865,670. LEAK STOP. CHARLES BOYCE, Minneapolis, Minn., assignor of one half to James H. Bohan, Minneapolis, Minn. Filed June 10, 1929. Serial No. 369,549. 3 Claims. (Cl. 169—1.)



1. A leak stop comprising a pair of casing members, a pair of co-operating semi-cylindrical shells respectively secured to said casing members, said shells being composed of resilient material and being rounded at their outer ends, and having semi-circular openings formed therein at their inner ends, and a pair of hinged handle members secured to said casing members and adapted to be operated to bring the side and end edges of said shells into close engagement to form a chamber having a circular opening at its inner end and closed at all other points.

1,865,671. WEEDING PICK. HENRY BREEN, Oakland, Calif., assignor of one-half to Albert St. John Williamson, Berkeley, Calif. Filed Nov. 22, 1927. Serial No. 234,996. 1 Claim. (Cl. 254—132.)

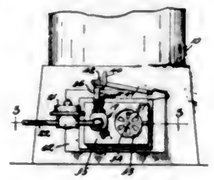


A weeding pick comprising a pick element of uniform width substantially throughout the length thereof, the end flaring outwardly to a broad cutting edge, and having a V notch formed therein, the top edges of said V notch being chamfered, said elements being curvilinearly formed and uniformly increasing in thickness from the cutting edge to the point of coincidence, continuing into an intermediately formed integral tang adapted to be secured in a tang aperture.

1,865,672. CONTROL DEVICE. CHARLES L. BRYANT, Cleveland, Ohio, assignor to C. L. Bryant Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 14, 1930. Serial No. 495,690. 4 Claims. (Cl. 158—119.)

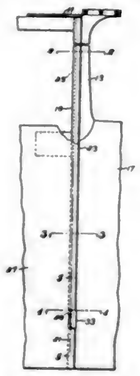
1. A device of the character described having a combustion chamber and a burner therein, valve means for supplying fuel to said burner and having a valve and a

valve stem movable therewith, a lever operably connected to, and movable with, said stem, cam means for moving said stem and valve, to adjust the quantity of fuel supplied to said burner, thus to vary the intensity of combustion, a handle connected to said cam means for operating said cam means, a quadrant cooperable with said handle and having a plurality of positions thereon, a latch car-



ried by said handle and engageable with said quadrant at any of said positions, and air supply means actuable by movement of said lever for admitting a quantity of air to said combustion chamber proportionate to any of the adjusted amounts of fuel supplied to said burner and in each case sufficient to properly support combustion in said chamber.

1,865,673. HANGING DOORS IN AUTOMOBILE BODIES. ALPHONSO S. CAMPBELL, Winchester, Mass., assignor to A. S. Campbell Company, East Boston, Mass., a Corporation of Massachusetts. Filed Oct. 16, 1928. Serial No. 312,848. 2 Claims. (Cl. 296—44.)



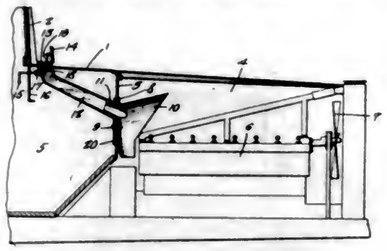
1. A vehicle body having a turn-under, a door therefor having a hinge pillar provided with a flange, hinging means for the door operating about an axis which above the belt lies inwardly of said flange and including a lower hinge in the zone of the turn-under, said flange being cut away to pass said hinge in the opening of the door, the hinge being formed to fill said cut-away portion when the door is closed.

1,865,674. JOINT OR CONNECTER FOR ROOFING SHEETS. JOHN M. CARTER, Orlando, Fla. Filed Nov. 29, 1930. Serial No. 499,085. 8 Claims. (Cl. 108—10.)



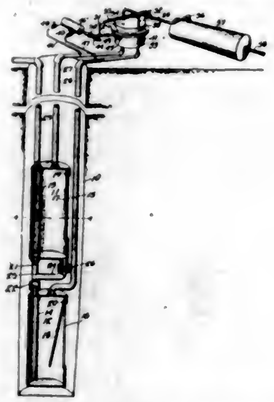
1. A connecter for roofing sheets formed to provide a medial upstanding bead and two integral lateral beads extending laterally in opposite directions from the base of the medial bead and having upwardly and then inwardly turned marginal portions.

1,865,675. WINDSHIELD HEATER. JAMES W. CAVANAUGH, Meshoppen, Pa. Filed June 1, 1931. Serial No. 541,464. 1 Claim. (Cl. 20—40.5.)



In combination with a motor vehicle having a partition between the engine compartment and the driver's compartment and provided with an opening, an attaching plate overlying said opening, fasteners detachably securing the plates to the partition, a collecting element carried by said plate and arranged in rear of the engine, nipples carried by the plate and in communication with the collecting element and extending through the opening, a second attaching plate receiving the nipples and removably secured to the partition by said fasteners and overlying the opening, flaring conduits formed on said second attaching plate and receiving the nipples extending through the cowl of the vehicle in advance of the windshield, and a control means for said conduits.

1,865,676. DEEP WELL PUMPING APPARATUS. JOHN WALTER CHANCELLOR, Bowie, Tex. Filed Feb. 21, 1931. Serial No. 517,574. 9 Claims. (Cl. 103—238.)

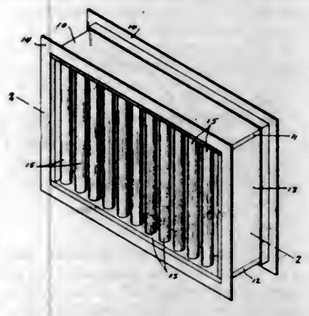


1. A pump suitable for deep wells comprising a plurality of cylinders having inlet and outlet valves, a discharge pipe connected to said cylinders, supply pipes for the pumping fluid connected to each of the said cylinders, a rotating disc valve for controlling the flow of the pumping fluid to the cylinders, and means for actuating said rotating valve, said means comprising an air operated piston actuated by compressed air from said supply pipes, substantially as set forth.

1,865,677. SOUND DEADENER. CHARLES C. CHENEY, Buffalo, N. Y., assignor to Buffalo Forge Company, Buffalo, N. Y., a Corporation of New York. Filed July 19, 1929. Serial No. 379,535. 4 Claims. (Cl. 98—1.)

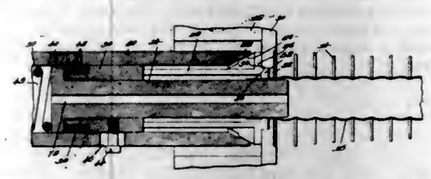
1. The combination with a ventilating system, having a duct, of a sound deadener comprising a frame forming

a section of the duct, and a plurality of cylindrical baffle members carried by the frame and having their axes posi-



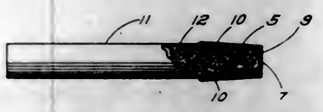
tioned at right angles to the direction of air flow in the duct, the frame and baffle members being made of sound deadening material.

1,865,678. APPARATUS FOR PRODUCTION OF BELLOWS TUBING. WALTER B. CLIFFORD, Cambridge, Mass., assignor to Clifford Manufacturing Co., Boston, Mass., a Corporation of Delaware. Filed Aug. 13, 1928. Serial No. 299,163. 13 Claims. (Cl. 153—73.)



4. Apparatus for the production of bellows tubing comprising a die assembly, a sleeve, a clutch assembly comprising inner and outer clutching members supported within the sleeve, means for normally maintaining the clutch assembly in advanced position, and means for relatively moving the inner and outer members into clutching position upon a rearward movement of the clutch assembly due to engagement with the die assembly.

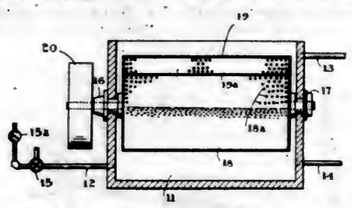
1,865,679. MOUTHPIECE FOR CIGARETTES. LORNE H. COLPE, San Francisco, Calif. Filed Nov. 16, 1929. Serial No. 407,640. 2 Claims. (Cl. 131—52.)



1. A mouthpiece for cigarettes comprising a substantially rectangular end portion of less width than the diameter of a cigarette and having a plurality of openings therein through which smoke may pass, and an integral flap extending from each of the opposite longitudinal sides of said end portion so as to overlie one end of a cigarette.

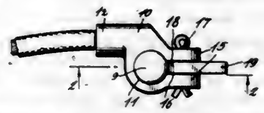
1,865,680. PROCESS OF MALTING RICE. PETER J. DAX, Montreal, Quebec, Canada, assignor to Canada Malting Company, Limited, Montreal, Canada. Filed Sept. 20, 1929. Serial No. 394,106. 1 Claim. (Cl. 195—24.)

A method of malting rice which consists in placing brown rice in a perforated container, submerging the container in a flowing stream of water, periodically rotating the submerged container so that the rice is subjected to a comparatively gentle tumbling operation to release the



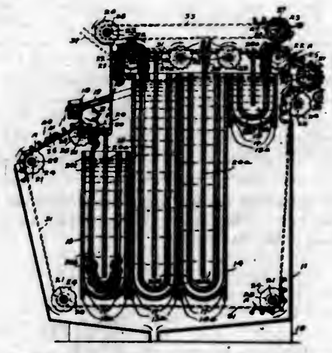
gases formed during germination and to prevent matting or packing of the rice in the container and drying and screening the rice when germination is completed.

1,865,681. BATTERY TERMINAL. TIMOTHY C. DOBBINS, Denver, Colo., assignor of one-half to S. H. Bassow and one-fourth to Eugene Messina, Denver, Colo. Filed Feb. 7, 1930. Serial No. 426,516. 3 Claims. (Cl. 173—259.)



1. A battery terminal connector comprising, a metal member having an opening adapted to receive a battery terminal, the member having a cut in communication with the opening and extending entirely through the wall surrounding the opening, and an eccentric cam located in the cut and pivotally attached to the walls thereof, said cam when in one position to extend into the opening in the connector whereby it will be forced against the side of the terminal so as to make good contact therewith and hold the lug in place thereon.

1,865,682. PHOTOGRAPHIC PRINT TREATING METHOD AND APPARATUS. GLEN M. DYE, Minneapolis, Minn. Filed Jan. 21, 1929. Serial No. 333,823. 25 Claims. (Cl. 95—94.)

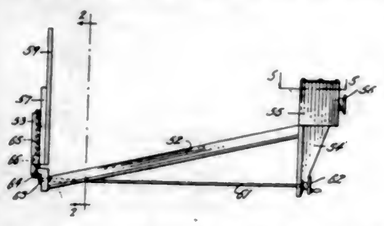


1. A device for handling sensitized photographic sheets having in combination, a conveyor constrained to follow a sinuous course and comprising cooperating oppositely disposed oscillating unconnected members having sheet-engaging portions constructed and arranged to engage a sheet therebetween at spaced points and progress the same.

1,865,683. STEREOSCOPE. KARL A. EDSTROM, Denver, Colo. Filed Feb. 18, 1929. Serial No. 340,675. 5 Claims. (Cl. 88—29.)

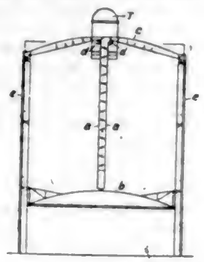
1. A device for viewing a pair of stereoscopically related views comprising: a supporting frame; a vertically

placed view frame carried in one extremity of said supporting frame; a prism frame carried at the other extremity of said supporting frame; a series of prisms supported by said prism frame; a vertically placed view support carried on said view frame; a threaded rod, the rotation of



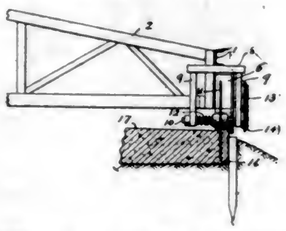
which moves said view support vertically; a second view support carried on said view frame; and means for moving said second view support horizontally, said means comprising: a rack connected with said second view support; and a pinion adapted to cooperate with said rack to move said view support horizontally.

1,865,684. LADDER DEVICE FOR ASCENDING GAS CONTAINERS. FRIEDRICH EINBECK, Dortmund, Germany, assignor to the Firm Aug. Klönne, Dortmund, Germany. Filed Dec. 20, 1928, Serial No. 327,440, and in Germany Jan. 5, 1928. 1 Claim. (Cl. 228—1.)



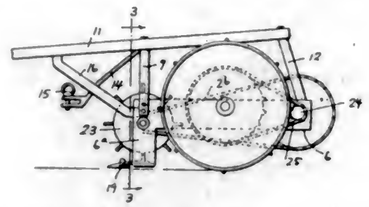
Ladder device for ascending gas containers with an ascending and descending disc, comprising two ladders with lateral inter-engaging elements, a member connecting said ladders at one end, a universal joint connecting said member to the movable disc adapted to articulate each of the two ladders, guide rollers secured to the cover of the container over which rollers the other ends of the link ladders pass, and counter-weights each connected to the free end of each ladder and holding taut the link ladders.

1,865,685. TAMPER OR SPADER. BENJAMIN H. FLYNN, Amarillo, Tex. Filed Apr. 2, 1929. Serial No. 351,896. 10 Claims. (Cl. 94—39.)



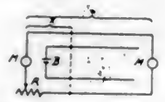
1. A tamping machine comprising a framework, carrier wheels therefor, rotatable side tamping or spading discs mounted on the framework and means establishing a driving relation between some of said carrier wheels and said discs.

1,865,686. COMBINED THRESHER-SPREADER. HOYT M. GILSON, Ocheltree, Kans. Filed June 9, 1931. Serial No. 543,216. 3 Claims. (Cl. 55—118.)



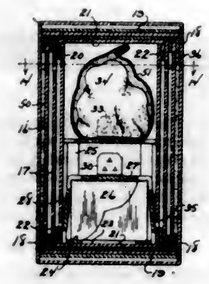
1. A machine of the character described comprising in combination a frame, an axle journalled transversely of the frame, said wheels supported on the end of the axle, brackets supported on the frame adjacent the front and rear thereof, a draft tongue supported by said brackets, and brace means for bracing the forward end of said tongue with respect to said frame, a threshing cylinder supported adjacent the forward end of the frame, said frame having opposite side members thereof provided with depending extensions, and a combined concave and spreader bar connecting said extensions.

1,865,687. METHOD OF LOCATING THE FAULT IN THE CASE OF MULTICONDUCTOR CABLES DAMAGED BY SHORT-CIRCUITING. WILHELM GRAF, Berlin, Germany. Filed July 11, 1928, Serial No. 291,949, and in Germany July 16, 1927. 1 Claim. (Cl. 175—183.)



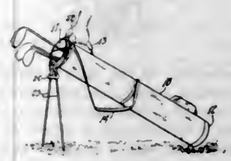
The method of ascertaining the location of a fault in a multi-core cable having intercore faults, consisting in connecting two of the cores at both ends into a loop, supplying these cores through other cores of the cable with current across the point of leakage into impress a potential difference upon said first cores, and determining the proportion of the currents flowing in the two loops.

1,865,688. PACKAGE CONTAINER. FREDERICK C. HANNAFORD, Morgan City, La. Filed Mar. 30, 1931. Serial No. 526,519. 10 Claims. (Cl. 62—91.5.)



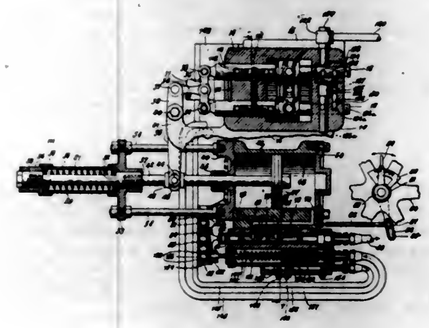
1. A cardboard container for a package of perishable foodstuffs, comprising a box having sealing flaps at the ends thereof, interfitting liners in the box frictionally engaging each other and the box, closure plates for the liners, and the said liners varying in lengths from the outer to the inner liners so that the closure plates arranged on the ends of the respective liners will be disposed in contacting engagement with each other to permit of all the liners resting against each other, and the closure plates for the liners being sealed thereto and means attached to the inner liner for supporting a package of perishable foodstuff therein and for providing a compartment for a solid refrigerant.

1,865,689. SUPPORT FOR GOLF BAGS. ALBERT M. HANSEN and JESSE L. JONES, Portland, Oreg. Filed Jan. 22, 1929. Serial No. 334,185. 4 Claims. (Cl. 150—1.5.)



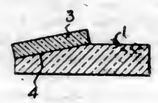
1. A support for golf bags consisting of a pair of foldable legs hinged at their upper ends to the mouth of a golf bag, a leg guiding arm hinged adjacent to the leg hinges through which arm said legs pass, a rock lever having a pivotal support on the mouth of the golf bag having one side thereof connected to said legs and the other side thereof near the handle of the golf bag, a spring for urging said last mentioned side away from the handle of the golf bag and at the same time urging said legs toward a folded position against said bag whereby a movement of said last mentioned side toward the handle of the golf bag will cause said legs to be spread apart at the feet thereof and to be moved away from said bag.

1,865,690. GEAR SHIFT. JOHN G. HANSON, Kenmore, N. Y. Filed Dec. 26, 1931. Serial No. 583,200. 11 Claims. (Cl. 74—58.)



1. A gear shift associated with the motor, gear box, propeller shaft and clutch of a vehicle and comprising: a cylinder; a suction tube tubularly connected with the intake manifold of the motor; a suction valve interposed between said cylinder and said suction pipe; a piston arranged in said cylinder and operatively connected with the shift rods of said gear box; an oil valve having a succession of ported positions and operatively connected to said suction valve; and an oil pump connected to the propeller shaft and adapted to actuate said oil valve.

1,865,691. LENS. HARRY W. HILL, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Apr. 11, 1928. Serial No. 269,224. 3 Claims. (Cl. 88—54.)



1. The process of making a shaded lens comprising forming on a base block of clear glass two surfaces, the second inclined at an angle to the first, placing a block of colored glass on the inclined surface of the base block, and cutting said colored glass block down to the plane of said first surface.

1,865,692. APPARATUS FOR THE MANUFACTURE OF LINING OF PIPES BY CENTRIFUGAL ACTION. EDWARD SHOTTON HUME, Perth, Western Australia, Australia. Filed July 17, 1928, Serial No. 293,335, and in Australia Jan. 10, 1928. 4 Claims. (Cl. 25—30.)

1. In apparatus for manufacturing or lining pipes by centrifugal action, wherein a mould, a pipe, or a casing containing a pipe, rests upon and is rotated by frictional contact with combined supporting and driving members, the combination with said supporting and driving members of a holding down element in the form of a band adapted to extend freely around the mould, pipe, or pipe casing, and provided with anti-friction devices adapted to contact with the upper arc of the rotating mould, pipe or pipe casing, and means for retaining said holding down element in such position whereby it exercises a steadying influence on the rotating mould, pipe, or pipe casing, and maintaining same in contact with said supporting and driving members.

1,865,693. PROCESS FOR FORMING ON THE SURFACE OF A DIELECTRIC A THIN LAYER, IN WHICH THE POTENTIAL FALL IS CONCENTRATED. ABRAHAM JOFFÉ, Leningrad, Union of Socialist Soviet Republics, assignor to Industrial Research Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 12, 1927, Serial No. 160,772, and in Germany Aug. 3, 1926. Renewed June 1, 1929. 3 Claims. (Cl. 204—31.)

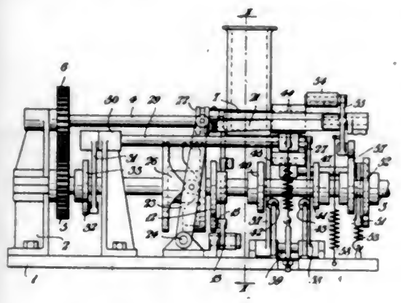
1. An insulating body having its insulating strength concentrated in one or more thin layers of a thickness of the order of about five microns or less.

1,865,694. MATCH PACKAGE. JOHAN WERNER JOHANSSON, Bankeryd, Sweden. Filed Oct. 14, 1930, Serial No. 488,645, and in Sweden Sept. 2, 1930. 3 Claims. (Cl. 206—29.)



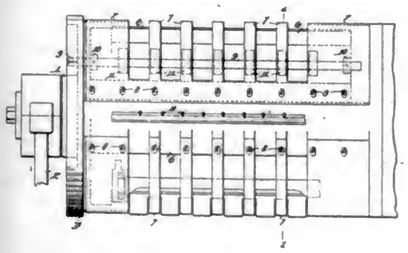
1. In a match package, a row of matches formed integral with a common base strip, the upper head-carrying portions of said matches being at some distance from said base strip folded down on said base strip, and means for attaching together the portions of said matches folded on each other.

1,865,695. METHOD OF AND MEANS FOR MANUFACTURING MATCH BOX SHELLS. KARL AUGUST JOHANSSON, Tidaholm, Sweden. Filed June 7, 1930, Serial No. 459,799, and in Sweden July 2, 1929. 5 Claims. (Cl. 93—40.)



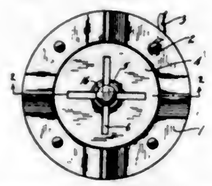
1. In a machine for manufacturing match box shells the combination with a rotary block to receive lengths of veneer to be wrapped around said block to form the shells of means to continuously rotate said block, and means to supply one length of veneer to a first position on the block for each revolution thereof.

1,865,696. ADJUSTABLE FOLDING CYLINDER. HANS CARL JORDHOY, North Plainfield, N. J., assignor to Wood Newspaper Corporation, New York, N. Y., a Corporation of Virginia. Filed Sept. 19, 1930. Serial No. 483,003. 6 Claims. (Cl. 270—77.)



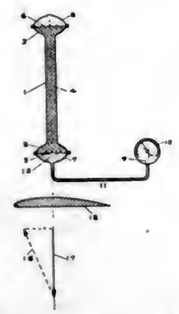
1. The combination with a folding cylinder, of cover plates carried thereby, of means connecting the edges of adjacent cover plates and on which the cover plates rest, and means for moving the cover plates out and in to change the effective diameter of the folding cylinder, said cover plates constituting the paper engaging surface of the cylinder.

1,865,697. ELECTRIC SWITCH. ENOCH KARRER, Akron, Ohio. Filed May 16, 1929. Serial No. 363,483. 4 Claims. (Cl. 200—7.)



1. Switch mechanism of the class described, comprising a plurality of switch structures embodying switch parts movable into or out of contacting relation with each other to close or open a circuit and a single operating means therefor, said operating means being tiltable to selectively and individually move any one of said switch structures into operative position without affecting the position of any of the other switch structures and being slidably movable to simultaneously render all of said switch structures inoperative after they have been placed in operative position, and yieldable means for returning said operating means to its original position.

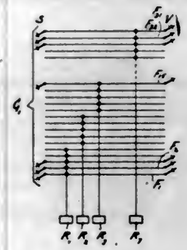
1,865,698. HYDROSTATIC LOAD FACTOR INDICATOR FOR AIRCRAFT. WOLFGANG KLEMPERER, Akron, Ohio, assignor to the Firm of Carl Zeiss, Jena, Germany. Original application filed Aug. 29, 1921, Serial No. 496,732, and in Germany Aug. 14, 1919. Divided and this application filed Mar. 28, 1929. Serial No. 350,722. 7 Claims. (Cl. 265—1.)



1. A load factor indicator for aircraft comprising a tube containing a liquid column, a vessel at each end thereof, a slack diaphragm housed in each of said vessels and confining said liquid column, a mechanical manometer, a tube connecting said mechanical manometer with one of the vessels, said tube having a fluid therein of considerably lighter density than said liquid column.

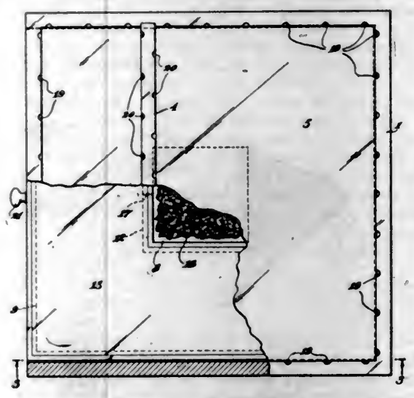
1,865,699. TELEPHONE SYSTEM. KNUT LARSSON, Stockholm, Sweden, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed Feb. 25, 1930, Serial No. 431,278, and in Sweden Feb. 28, 1929. 21 Claims. (Cl. 179—18.)

15. In a telephone exchange system a main group of calling lines, a number of junction lines accessible in common to all lines of said main group and divided into a number of sub-groups, automatic switches adapted to connect a calling line with a junction line in any one of said sub-groups, a number of call registering devices individually



allotted to different sub-groups of junction lines, and means for automatically connecting said call registering devices with any one of the appertaining junction lines.

1,865,700. HUMIDOR. IRA JEAN LICHTER, Teaneck, N. J., assignor of one-half to Crosby Gaige, New York, N. Y. Filed May 23, 1930. Serial No. 454,898. 8 Claims. (Cl. 131—30.)



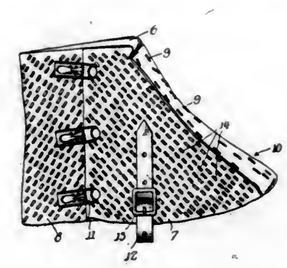
1. A humidor including a moistening unit having an evaporating pan surrounded by a reserve moistening liquid chamber with a small attenuated transfer passage between the pan and the reserve chamber permitting the gradual feeding of the reserve liquid into the evaporating pan, but preventing the thermal interchange through flow of liquid between the pan and the chamber.

1,865,701. MANUFACTURE OF RAYON. GEORGE R. LOCKHART, Providence, R. I., assignor to Manville Jenckes Company, Pawtucket, R. I., a Corporation of Rhode Island. Filed Nov. 9, 1928. Serial No. 318,308. 6 Claims. (Cl. 18—54.)

1. The process of producing dyed rayon thread which comprises precipitating cellulose in filament form from a viscose solution while impregnated with dyestuff in a reduced state, and oxidizing the dyestuff to fix the color in the filaments.

1,865,702. ARMORED FOOT AND ANKLE PROTECTOR. IRWIN W. MILLARD, Chicago, Ill., assignor to Industrial Gloves Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 27, 1929. Serial No. 358,471. 2 Claims. (Cl. 36—2.)

1. A reinforced protecting means for the lower portion of a leg comprising, in combination, a flexible covering adapted to encircle the exposed parts of a wearer's foot and ankle, means for securing said covering in place, and reinforcing means for strengthening said covering including small metallic members disposed in closely spaced relation about the surface of said covering, and a pair of metal

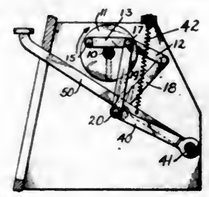


stays secured to said covering to extend from top to bottom thereof, said stays being positioned one on the front of said covering to overlie the wearer's instep, and the other at the rear of said covering to overlie the Achilles tendon.

1,865,703. PROCESS FOR THE MANUFACTURE OF PEARL ESSENCE. JEAN PAISSEAU, Paris, France. Filed Mar. 18, 1929, Serial No. 348,147, and in Germany Apr. 2, 1928. 6 Claims. (Cl. 252—1.)

1. In a process for the treatment of the parts of fish which contain brilliant crystalloids by a dissociating bath, for the manufacture of essence of pearls, the operation which consists in immersing the said parts, as soon as they are removed from the fish, in a diluted aqueous solution of an organic acid having little or no action upon the said crystalloids and in maintaining them therein until they are treated by the dissociating bath.

1,865,704. MECHANICAL MOVEMENT. GORDON V. PECK, Bloomfield, N. J. Filed Apr. 3, 1929. Serial No. 352,066. 22 Claims. (Cl. 74—14.)

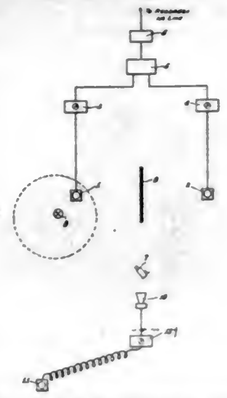


1. In a tuning device for a radio receiver, the combination, with a shaft adapted to move at least one tuning element, of a link conected to the shaft in spaced relation thereto; a link pivotally connected to the first named link, and means to pull the second named link away from the shaft.

1,865,705. METHOD AND MEANS FOR TRANSLATING SOUND. EDWARD D. PHINNEY, Mount Vernon, N. Y., assignor of one-half to Paul Kolisch, New York, N. Y. Filed June 26, 1930. Serial No. 464,080. 14 Claims. (Cl. 179—100.1.)

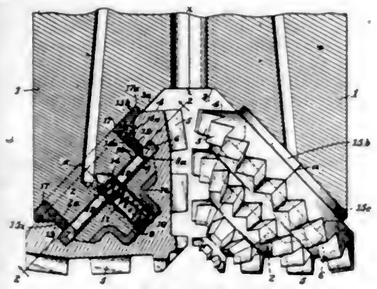
1. A sound translating system comprising in combination, a first microphone circuit for picking up sounds

originating at a plurality of separated points, an adjustable amplifier therefor, a second microphone circuit



for picking up said sounds, an adjustable amplifier for said second microphone and electrical means for combining the outputs of said amplifiers in opposed relationship.

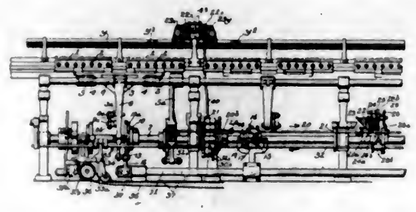
1,865,706. EARTH BORING DRILL. CLARENCE E. REED, Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed June 11, 1929. Serial No. 370,087. 19 Claims. (Cl. 255—71.)



1. In an earth boring drill, a spindle, a roller cutter having a bore to fit said spindle, and a front wall portion to cover the end of the spindle, means carried by the spindle to rotatively lock the roller cutter thereon, said means being operated to locking position through contact of said front wall portion with a part of said locking means in the act of moving the roller cutter onto the spindle, substantially as described.

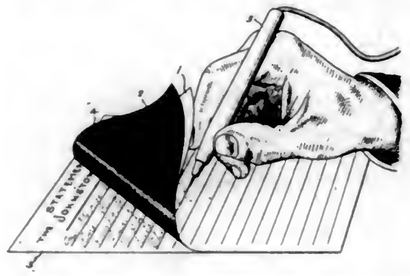
1,865,707. FULL FASHIONED KNITTING MACHINE. WOLFGANG D. RICHTER, Philadelphia, Pa., assignor to Wildman Mfg. Co., Norristown, Pa., a Corporation of Pennsylvania. Filed Jan. 30, 1930. Serial No. 424,651. 17 Claims. (Cl. 66—82.)

1. In a full fashioned knitting machine and in combination, a needle carrying bar, means for adjusting and bar automatically to a rearward position for making longer stitches during reinforcing, including a rotary cam and a member operable thereby and connected with the needle bar, means for rotating said cam, means for automatically changing the relative positions of the said member and cam, consisting of means for reciprocating said member and a rotary cam for stopping said member variably on one stroke, splicing yarn fingers, reciprocating carriers therefor, cam means for variably arresting the carriers, with means for automatically rotating the said cam, a controller, and connections therefrom to the member reciprocating means, for bringing the same into



action, and to the rotary cam operating means for variably stopping the member and to the rotary cam operating means for variably stopping the yarn carriers for bringing said cams into action, substantially as described.

1,865,708. DUPLICATING MATERIAL. JOHN Q. SHERMAN and ALBERT W. METZNER, Dayton, Ohio; said Metzner assignor to said Sherman. Filed Nov. 1, 1927. Serial No. 230,321. 7 Claims. (Cl. 282—28.)



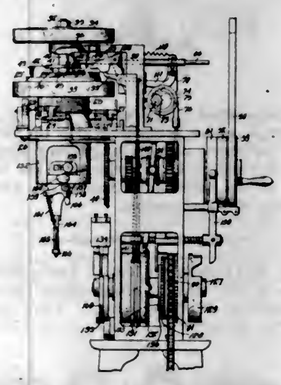
1. A record sheet, a coating of transfer pigment on the back thereof and a sealing coat of hard adherent material overlying the pigment coating.

1,865,709. PROTECTIVE GARMENT. BENJAMIN A. SLOCUM, Binghamton, N. Y., assignor to Matthew G. Schneider, Binghamton, N. Y. Filed July 10, 1930. Serial No. 467,001. 2 Claims. (Cl. 36—1.)



1. A protective garment comprising a pair of bags of foldable material secured together at their sides, and creases in the front portions of the bags extending angularly across the upper portions thereof whereby said front portions may be folded back to form flaps, and tie means secured to the flaps for holding said flaps in display position.

1,865,710. KNITTING MACHINE. WILLIAM L. SMITH, Jr., Nashville, Tenn., assignor to May Hosiery Mills, Nashville, Tenn., a Corporation of Tennessee. Filed Oct. 28, 1925. Serial No. 65,426. 15 Claims. (Cl. 66—24.)

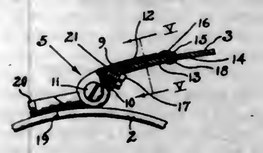


1. A knitting machine comprising dial and cylinder needles, a rotary needle cylinder, a rotary dial, needle actuating cams, pattern mechanism for controlling said cams to knit either ribbed, plain circular or reciprocating work as desired, yarn feeding means including a plurality of yarn-fingers, pattern mechanism controlling selectively the operation of said yarn-fingers, yarn-severing means on the dial cam cap, a cam moving in timed relation with the dial, and connections from said cam for operating said severing means, substantially as set forth.

6. A knitting machine comprising dial and cylinder needles, a rotary needle cylinder, a rotary dial, needle actuating cams, pattern mechanism for controlling said cams to knit either ribbed, plain circular or reciprocating work as desired, a take-up, and means for rendering the take-up inoperative during reciprocating work, substantially as set forth.

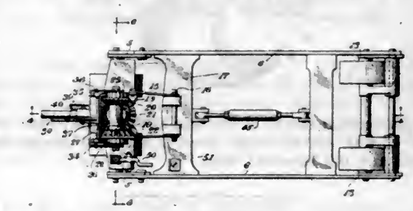
8. A knitting machine comprising dial and cylinder needles, a rotary needle cylinder, a rotary dial, needle actuating cams, pattern mechanism for controlling said cams to knit either ribbed, plain circular or reciprocating work as desired, connections from said pattern mechanism to a dial needle cam including an oscillatory cam cap, a fixed cam above said cam cap, and a follower on said needle cam engaging said fixed cam, substantially as set forth.

1,865,711. OPHTHALMIC MOUNTING. EDWARD M. SPLAINE, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Sept. 24, 1929. Serial No. 394,773. 7 Claims. (Cl. 88—44.)



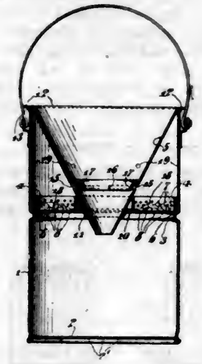
2. In a device of the character described in combination with the lens holding means of an ophthalmic mounting, a projecting member on the lens holding means having a tapered portion adjacent its free end, means for connecting the lens holding means together, a lug on the connecting means having a tapered under cut portion in engagement with the tapered end of the projecting member and means for securing the connecting means to the projecting member to hold the tapered under cut lug in engagement with the tapered end of said projecting member.

1,865,712. LIFTING TRUCK. WILLIAM STUEBING, JR., Cincinnati, Ohio, assignor to The Yale & Towne Manufacturing Company, Stamford, Conn., a Corporation of Connecticut. Filed Feb. 24, 1927, Serial No. 170,443. Renewed Apr. 11, 1931. 18 Claims. (Cl. 254—10.)



1. A side lift truck comprising in combination, a main frame, an elevating frame, a steering head swivelled in the main frame, a steering lever pivoted in the steering head for movement in a vertical plane and means arranged to be actuated by the steering lever in various steering positions for lifting the elevating frame comprising a pair of members movable in arcs in opposite directions about the axis of the steering head.

1,865,713. INSECT TRAP. HERBERT K. TAYLOR, Elkins Park, Pa., assignor to George D. Ellis and Sons, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 23, 1929. Serial No. 401,649. 7 Claims. (Cl. 43—107.)



1. An insect trap comprising a receptacle, a bait holder mounted within the said receptacle intermediate its opposite ends, a funnel projecting into the said receptacle from the top thereof, the inner end thereof extending beyond said bait holder, the said funnel being provided with a slot located in a plane extending transversely thereof, the said plane being located above the bait holder, and a shield mounted within and overlying and spaced from the portion of the said funnel within which the said slot is located, to prevent water flowing downwardly in said funnel from passing through said slot.

1,865,714. OPHTHALMIC LENS. EDGAR D. TILLYER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Sept. 18, 1929. Serial No. 393,498. 1 Claim. (Cl. 88—54.)

An ophthalmic lens having a length extending from the nasal canthus to beyond the temporal canthus of the eye when in place before the eye, comprising a visual field of substantially zero power having divergent surfaces and an optical center and having a recess there-

through adjacent the nasal edge and a second lens secured in said recess and having lens power surfaces on its opposite faces and having an optical center between



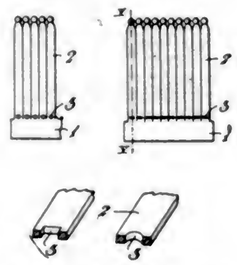
the geometrical center of the lens and its nasal edge, said first optical center lying between the said geometrical center and the temporal edge.

1,865,715. OPHTHALMIC LENS. EDGAR D. TILLYER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Oct. 25, 1929. Serial No. 402,414. 4 Claims. (Cl. 88—54.)



1. A multifocal or bifocal lens comprising a major portion of crown glass having a countersink therein, said glass including in its composition an amount of cerium sufficient to absorb a desired amount of the ultra violet rays and an amount of manganese dioxide sufficient to render said portion a pink color and a button of barium crown glass fused in said countersink, said button including in its composition a sufficient amount of manganese dioxide to render it the same color as the major portion.

1,865,716. MATCH. NILS HENRIK WALDINGER, Jonkoping, Sweden. Filed Oct. 14, 1930, Serial No. 488,658, and in Sweden Sept. 23, 1930. 3 Claims. (Cl. 44—44.)



1. In a strip of matches cohering with each other at their bases only, a number of matches, a common base strip formed integral with said matches, and perforations at the bases of said matches in the central portions thereof leaving the lateral edges of said matches uncut.

1,865,717. RAIL BOND. ANTHONY M. NARDINI, Philadelphia, Pa. Filed June 21, 1924. Serial No. 721,394. 6 Claims. (Cl. 173—278.)

1. A rail bond comprising a flexible portion and a separately formed attachment for either end thereof, the said attachment formed of ferrous metal and being adapted to co-operate with a rail base and web to form an upstanding wall with three sides one of which is adapted for application to the rail and cut away along its upper edge to reduce its height to form a receptacle to retain molten metal on the rail base in contact with the rail web and the end of the said flexible portion, a sleeve member secured to the end of the flexible portion against



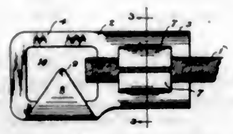
relative longitudinal displacement and the said attachment having a collar portion to grip the sleeve member, means on the sleeve member to prevent longitudinal displacement of the attachment relative to the sleeve and the said wall of the attachment having its greatest height adjacent the flexible portion.

1,865,718. RAIL BOND. LEO C. PERL, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Apr. 3, 1928. Serial No. 267,017. 9 Claims. (Cl. 173—278.)



3. A rail bond comprising a body member and a terminal member secured to each end thereof, the body comprising a plurality of superimposed laminations projecting to different distances at each end to form a surface oblique to the horizontal, a terminal member on each end and enclosing a portion of the body on three sides and offsetting the fourth side from the rail to which the bond is applied, the terminal having means to enclose the top and bottom sides of the body adjacent the inner end of the body to hold it out of alinement and a sleeve member interposed between the body and terminal member.

1,865,719. ATTACHABLE WELDING TERMINAL. EDWARD C. KIRK, St. Albans, W. Va., assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Dec. 30, 1926, Serial No. 158,019. Renewed June 26, 1931. 3 Claims. (Cl. 173—278.)

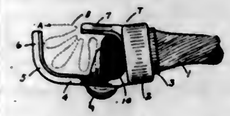


1. An attachable welding terminal formed from a single sheet of metal and having a flat end portion provided with an opening to form a puddling pool, and a curved end portion having means for clamping a conductor.

1,865,720. ELECTRICAL CONNECTER. PLINY P. PIPES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Apr. 28, 1925, Serial No. 26,500. Renewed Feb. 24, 1930. 2 Claims. (Cl. 173—278.)

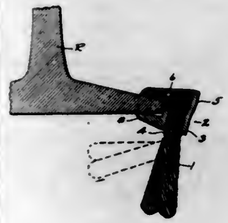
1. An electric connecter comprising a body member and a separately formed terminal member secured to the end thereof, the terminal member having a sleeve portion with a passage therethrough to receive the body member, the terminal member also provided with spaced walls extending from the sleeve portion and forming a space therebetween increasing in depth from the ends of the side walls to the sleeve portion and increasing in depth between the walls transversely of the longitudinal axis

and having an opening through the walls communicating with the space therebetween, the end of the body member exposed within the said space and means forming a part



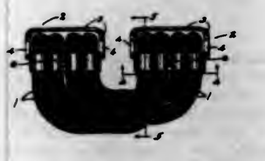
of the terminal member to engage the rail in clamping relation to hold the terminal in position on the rail while it is being welded thereto.

1,865,721. RAIL BOND AND METHOD OF BONDING. PLINY P. PIPES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Aug. 18, 1926. Serial No. 130,007. 13 Claims. (Cl. 173—278.)



4. A rail bond to be applied to the side face of a rail base comprising a body member and a terminal member secured together, spaced means projecting from the terminal and overlapping the side face and adjacent upper face of the rail and forming with said faces a receptacle to catch, support and retain attaching metal while in the fused condition and other means projecting from the terminal to cooperate with the first said projecting means to secure the bond in place on the rail temporarily.

1,865,722. RAIL BOND. PLINY P. PIPES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Jan. 29, 1927. Serial No. 164,488. 15 Claims. (Cl. 173—278.)



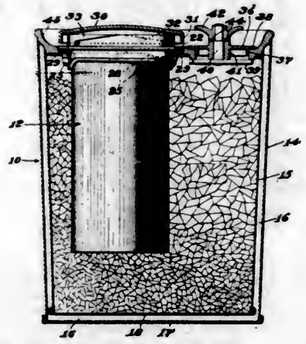
1. A rail bond comprising a body member and a metallic terminal member secured together, the terminal member consisting of an upstanding wall surrounding the exposed face of the body member on substantially three sides, projections from the ends of the wall to overhang the upper surface of the rail base and form therewith a receptacle to catch, support and retain welding metal in the molten state to unite the body, terminal and rail each to the other, a sleeve portion surrounding and gripping the end of the body leaving the end face exposed within the confines of the wall and holding the axis of the gripped portion of the body member at an acute angle to the plane of the lower surface of the rail base, the said sleeve projecting towards and underneath the rail base and means on the sleeve to engage the lower face of the rail base.

1,865,723. RAIL BOND. PLINY P. PIPES, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Apr. 2, 1929. Serial No. 351,883. 15 Claims. (Cl. 173—278.)



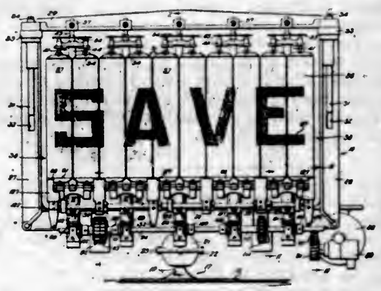
1. A rail bond comprising a pair of elongated tubular terminal members having means to catch and support welding metal and a flexible cable connecting the same, the cable comprising a plurality of preformed wires having an endurance limit not less than 41,000 pounds per square inch.

1,865,724. ICE CREAM FREEZER. ALFRED L. ROEBUCK, Winchendon, Mass. Filed Dec. 18, 1928. Serial No. 326,812. 12 Claims. (Cl. 220—9.)



1. An ice cream freezer, comprising in combination, a cream can, a tub, a closure secured to the upper portion of the tub to confine the cold air therein and provided with an opening for the cream can, a laterally extending flange adjacent the upper end of the cream can for supporting the can suspended from the closure and locking means for removably securing the upper portion of the can in said opening with a water-tight joint, including cams upon the closure at its lower face and cooperating projections on the can below said flange and a packing ring confined between the flange and closure.

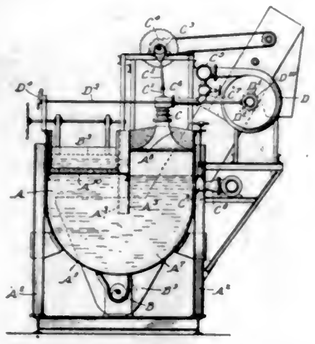
1,865,725. ADVERTISING SIGN. EDWARD RAVES, Los Angeles, Calif., assignor, by direct and mesne assignments, to Raves Manufacturing Co., Ltd., Los Angeles, Calif., a Corporation of California. Filed June 18, 1931. Serial No. 545,205. 14 Claims. (Cl. 40—76.)



1. A changing sign comprising a frame, a plurality of rotors mounted on said frame for rotation about parallel axes, a plurality of panels journaled on each of said rotors,

means for turning said rotors, means for rotating the panels of each rotor in planetary motion about the axis thereof as the rotor turns, and means for accurately alining at least one panel of each rotor with the corresponding panels of the other rotors.

1,865,726. METHOD OF AND APPARATUS FOR PROVIDING COMPRESSED AIR FOR THE OPERATION OF WASH BOXES. ALBERT J. SAYERS, Chicago, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 24, 1930. Serial No. 497,773. 11 Claims. (Cl. 209—502.)



1. A wash box comprising a tank adapted to contain water, a longitudinal partition therein, a screen located beneath the surface of the water on one side of the partition, a closed air pocket, the underside of which is bounded by the surface of the water on the opposed side of the partition, means for maintaining a continuous flowing bed of fragmentary material on the screen beneath the water level, a centrifugal air compressor, a pipe connecting it and the air pocket whereby it may supply air under pressure to the pocket and a quick acting valve associated with the pipe and the pocket and adapted alternately to permit the inflow of compressed air from the pipe to the pocket and the outflow of compressed air from the pocket to the atmosphere and a blast gate in the air intake of the centrifugal compressor adapted to adjustably control the amount of air discharged by the compressor, the capacity of the pipe connecting the air pocket and the air compressor being substantially equal to the capacity of the compressor itself whereby the storage of air between the compressor and the jig chamber is prevented.

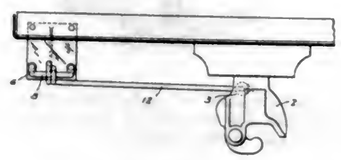
1,865,727. PROCESS OF MAKING SHOT. ALFONS G. SCHUBICHT and GEORGE T. WRIGHT, Alton, Ill., assignors to Western Cartridge Company, East Alton, Ill., a Corporation of Delaware. Filed Aug. 4, 1927. Serial No. 210,717. 5 Claims. (Cl. 148—21.4.)

2. In the art of making shot, the process comprising, plating lead alloy shot with a metal having a higher melting point, heating the plated shot to a temperature near the eutectic point of the alloy, quenching the same and permitting the same to age.

1,865,728. PROCESS FOR VULCANIZATION OF RUBBER. ROBERT L. SIBLEY, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed May 28, 1931. Serial No. 540,629. 22 Claims. (Cl. 18—53.)

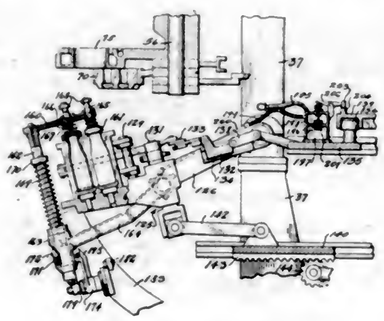
1. The process of vulcanizing rubber which comprises heating rubber and sulfur in the presence of an accelerator comprising a mercaptoarylthiazole derivative of a reaction product of an organic base and an organic acid halide.

1,865,729. CAR COUPLER OPERATING DEVICE. ARTHUR E. SMALL, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 22, 1931. Serial No. 531,984. 2 Claims. (Cl. 213—17.)



1. In a railway car provided with a coupler having a member mounted thereon arranged to operate said coupler upon rotation of an operating rod, the combination of a bracket mounted upon the car, and an operating rod having a shank operatively connected at its inner end to said member, said shank being bent upwardly at its outer end to form a substantially upright part for manual operation of the device, the upper end of said part rotatively connected to said bracket, said upright part extended above said bracket and inclined toward the car so as to form a pedal for operating the device by foot.

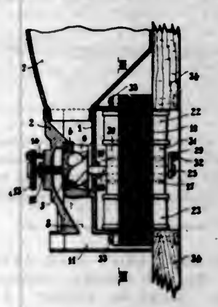
1,865,730. GLASS FORMING MACHINE. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 18, 1927. Serial No. 192,232. 14 Claims. (Cl. 49—9.)



1. A glassware forming machine comprising a finishing mold adapted to swing downward from a blank transfer and blowing station to a ware ejecting station, a knock-out arm, knock-out disks carried by said arm and adapted at times to seat upon the open ends of articles in the finishing mold, cam mechanism to alternately seat and unseat the knock-out disks, and means to apply blowing air through the knock-out arms and disks to the articles in the finishing mold during a portion of the downward movement of the latter.

1,865,731. COFFEE-MILL WITH ELECTRIC DRIVING DEVICE. JOSEF STOCKERT, Schwelm, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Aug. 15, 1930, Serial No. 475,574, and in Germany Aug. 20, 1929. 2 Claims. (Cl. 83—18.)

1. In an electrically driven coffee-mill, in combination a magnetic motor having fixed field poles, energizable by alternating operating current, an armature disposed between said poles to freely swing past them, a spring connected to said armature and disposed to counteract the attractive forces exerted by said poles, whereby said armature oscillates past said poles, a rotary grinding element



and a coaster clutch for coupling said grinding element with said armature for step by step operation of said grinding element in grinding direction.

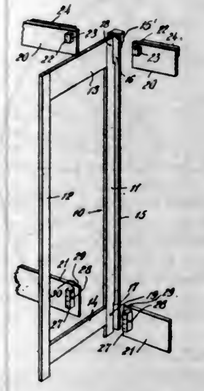
1,865,732. MAKING CONCRETE ARTICLES, AND THE LIKE. GLENN H. WAGNER, Belleville, Ill., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 23, 1930. Serial No. 504,272. 7 Claims. (Cl. 106—24.)

1. The method of developing uniformity in hydraulic cement-aggregate mixtures comprising adding to the mixture, bauxite residue from the treatment of bauxite with an alkaline solvent.

1,865,733. TRI-CALCIUM PHOSPHATE AND ALUMINUM PHOSPHATE COMPOSITION SALT FILLER. WILLIAM GEORGE WARNING and THEODORE WILLIAM SCHILB, St. Louis, Mo., assignors to Swann Research, Inc., a Corporation of Alabama. Filed Sept. 3, 1929. Serial No. 390,208. 6 Claims. (Cl. 23—243.)

1. A dry salt containing up to 1% of a filler consisting of tri-calcium phosphate with aluminum phosphate in exess of 4%.

1,865,734. STORE FURNITURE. GEORGE G. WIELAND, Brooklyn, N. Y., assignor to J. C. Penny Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 19, 1928. Serial No. 306,862. 10 Claims. (Cl. 312—107.)



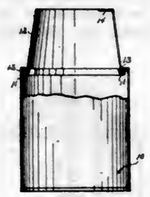
9. In knock-down furniture construction, the combination of a plurality of vertical frames, each consisting of front and rear posts and a top and a bottom rail connecting said posts, rails spacing adjacent frames at top and bottom, said rails having rearwardly projecting portions adjacent to the ends abutting the posts, and readily removable means engaging the rearwardly projecting portions of the contiguous rails for tightly binding together contiguous rails and intervening posts.

1,865,735. SOUND REPRODUCER. IRVING WOLFF, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,597. 9 Claims. (Cl. 181—31.)



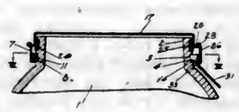
1. A sound reproducer comprising means for radiating sound waves to the open air and means positioned adjacent the first mentioned means and interposed in the path of said sound waves for diffusing said sound waves, said means having deflecting surfaces lying in different, non-parallel planes.

1,865,736. ATTACHMENT FOR PAINT CANS OR THE LIKE. ALBERT E. ASTLEY, Des Moines, Iowa. Filed Nov. 1, 1930. Serial No. 492,771. 1 Claim. (Cl. 220—90.)



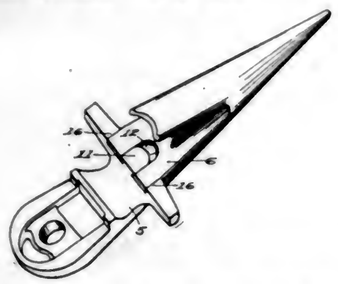
In a device of the class described, a tubular member designed to be detachably secured to an open top receptacle for increasing the capacity of said receptacle; said tubular member having its circular side wall extending upwardly from said receptacle, and a flange in said tubular member positioned at a height above the highest elevation of said receptacle designed to serve as a scraper for removing excess liquid from a paint brush or like.

1,865,737. CLOSURE FOR CONTAINERS. CHARLES S. BARON, Tiffin, Ohio. Filed July 17, 1929, Serial No. 378,985. Renewed Nov. 16, 1931. 1 Claim. (Cl. 215—63.)



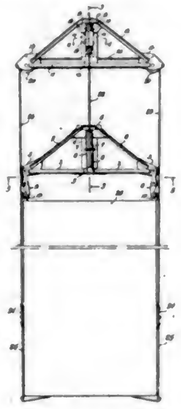
The combination with a container body and a neck surrounding the mouth thereof, and having an external annular groove, of a metallic band having overlapping terminals fitting within the said groove, a lid hinged to the band, a loop formed in the body of the band adapted for application of tension and permanent flexure thereto in order to hold the band in the groove, a hinge member by which the lid is secured to the band, and means for attaching and detaching at will the terminals of the band to the hinge member.

1,865,738. MOWER GUARD AND KNIFE. HENRY J. BERGMAN, Peoria, Ill. Filed May 18, 1931. Serial No. 538,212. 4 Claims. (Cl. 56—311.)



1. In a device of the character described the combination of a guard, a ledger plate receiving portion formed therein, an undercut lug carried by the guard and forming a part of the ledger plate receiving portion, a projection carried by the guard adjacent the undercut lug, a ledger plate, a recess formed therein and comprising in part a beveled portion to engage the undercut lug carried by the guard and a portion to engage the projection carried by the guard when the ledger plate is moved to operating position.

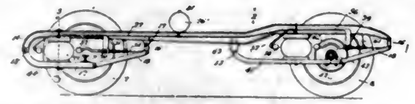
1,865,739. CONTAINER HOIST. REINHARD BERGMANN, West Allis, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 5, 1931. Serial No. 566,937. 3 Claims. (Cl. 294—67.)



1. In a device for lifting and discharging unit containers, the combination of a truss provided with means of attachment to a container, a hoisting block within and forming a part of said truss, a flexible member adapted to be retracted and extended engaged with said block, a second truss mounted above the first-mentioned truss, a second block mounted within and forming a part of said second truss, a second flexible member adapted to be extended and retracted engaged with said second block, and means secured to said second truss and extending downwardly therefrom to form attachment with opening and closing members of the container.

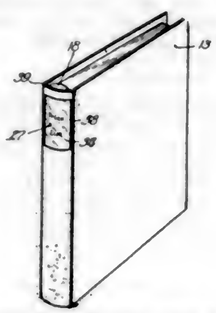
1,865,740. PNEUMATIC SPRING. GEORGE A. BONELLI, Kingman, Ariz. Filed Jan. 5, 1929. Serial No. 330,449. 11 Claims. (Cl. 267—35.)

1. A pneumatic spring comprising a yieldable receptacle under compression between opposed members movable toward and away from each other, a compressible fluid in said receptacle, that portion of each of said members which engages said receptacle being flat and extending



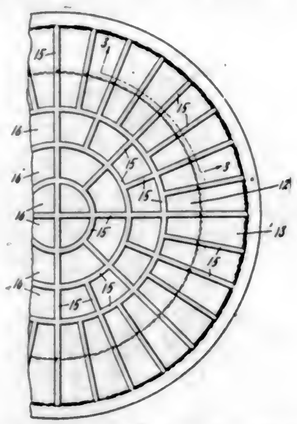
beyond the area of contact with the receptacle, and means actuated by relative movement of said members and engageable with said receptacle to limit said movement after a predetermined maximum has been reached.

1,865,741. BINDER AND INDICATING DEVICE THEREFOR. ROSE E. CARNEY, Chicago, Ill. Filed Mar. 19 1930. Serial No. 436,958. 7 Claims. (Cl. 129—1.)



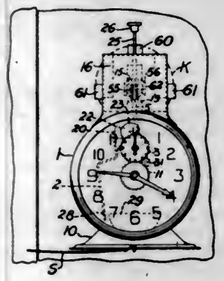
1. In combination with a book cover, a unitary transparent holder for the reception of an index card, said book cover having an opening, and said holder being fastened within said book cover and disposed adjacent said cover opening for exposing said index card.

1,865,742. ABSORBENT PLATE OR DISH. RALPH W. CHAPMAN, Old Town, Me., assignor to Old Town Company, Old Town, Me., a Corporation of Maine. Filed Feb. 17, 1930. Serial No. 428,990. 2 Claims. (Cl. 65—15.)



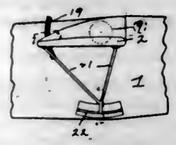
1. For use in absorbing moisture from an article such as the bottom crust of a baked pie while the latter is hot, a plate of absorbent fibrous material conforming approximately to said article and having a diversified top surface including a minor portion provided by spaced projections adapted to contact with said article, and a major portion intermediate said projections and spaced from an article deposited thereon, grease from the article being absorbed only by said projections and plate material backing the same, so that grease absorption by the major portion and the plate material backing it is prevented, and the entire major portion and its backing is adapted to absorb moisture emanating from the article.

1,865,743. COMBINED CLOCK AND BURGLAR ALARM. JAMES M. CODY and JOHN E. RHODES, Seattle, Wash. Filed Aug. 24, 1931. Serial No. 558,982. 4 Claims. (Cl. 116—9.)



1. In combination, in a clock, alarm mechanism including a vibratory striker and means to prevent vibration of said striker, a member supported in the clock and adapted to be oscillated in either direction from a normal position upon entrance of a burglar, and means to move said first means from operative position, thereby to allow vibration of the striker, upon oscillation of said member in either direction.

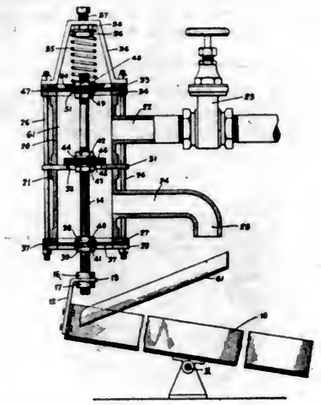
1,865,744. AIRPLANE. GEORGE W. CORNELIUS, San Leandro, Calif., assignor to Cornelius Aircraft Corporation, Limited, Los Angeles, Calif., a Corporation of California. Filed Sept. 17, 1928. Serial No. 306,515. 9 Claims. (Cl. 244—12.)



1. In an airplane, a main supporting surface rotatable to different acute angles relatively to the line of thrust thereon; propeller means universally mounted on the airplane in operative relation to the main supporting surface; a tail balancing surface mounted on the tail of the airplane with freedom of angular and rotary movement; and control means to turn said supporting surface to the desired angularity, said propeller means and said balancing surface being connected to said control means so as to allow the adjustment of the propeller and of the tail balancing surface either in unison with the supporting surface and with each other or independently thereof.

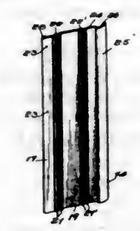
1,865,745. SCREENING MECHANISM. GEORGE C. CRANGLE, Butte, Mont. Filed Sept. 21, 1927. Serial No. 220,868. 6 Claims. (Cl. 209—365.)

1. In an apparatus of the character described, a reciprocating fluid operated motor, a chamber provided with an inlet and an outlet for fluid, said outlet comprising an intermittently acting valve, a rod secured to said valve



and interconnecting said valve with a flexible diaphragm and said diaphragm forming one of the walls of said chamber.

1,865,746. METAL WEATHER STRIP. WILLIAM J. DENNIS, Chicago, Ill. Filed Feb. 4, 1929. Serial No. 337,404. 1 Claim. (Cl. 20—69.)



A weather strip comprising a thin metal plate having a plurality of longitudinally extending spaced apart grooves, an inwardly turned flange on one edge portion of the plate providing rigidity adapting said edge portion for a nailing strip, the other longitudinal edge portion of the plate comprising an arcuate head having an inturned flange, said beaded portion being thereby adapted to co operate with a member movable in contact therewith and to yield under pressure resulting from contact with said movable member.

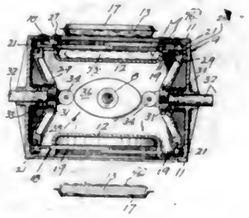
1,865,747. CAR DOOR. GEORGE B. DOREY, Evanston, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 25, 1929. Serial No. 349,620. 18 Claims. (Cl. 189—46.)



3. In a railway car having a main door and an auxiliary door, the combination with a Z-shaped marginal reinforcement at the outer edge of the main door, said

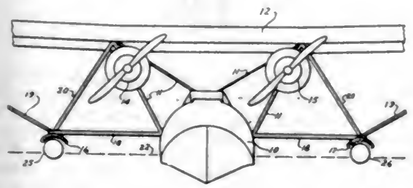
Z-shaped member having a transversely extending web and flanges respectively disposed in the outer and inner planes of the door; and an inwardly transversely extending wall on the auxiliary door adapted to cooperate with the inner flange and web of the Z-bar on the companion door to provide a weather proof joint.

1,865,748. PIE WRAPPING MACHINE. HIPPOLYTE DRAGON, San Francisco, Calif. Filed Jan. 25, 1930. Serial No. 423,467. 16 Claims. (Cl. 93—7.)



1. In a pie wrapping machine a recessed, pie-receiving element adapted to have a sheet of wrapping material placed over the recess and to have a pie inserted thereinto face down on said sheet; means on said element in operative relation to the recess being movable over the recess to fold the edges of said sheet of material over the bottom of the pie and to press an adhesive pie plate over the folded sheet on the bottom of the pie; and means to move said folding means into operative and inoperative positions.

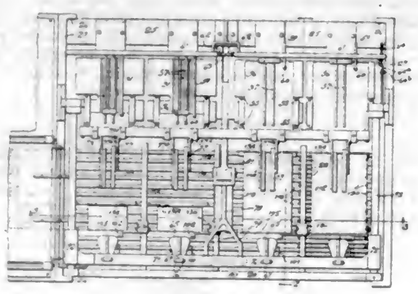
1,865,749. AIRCRAFT. REUBEN H. FLEET, Aberdeen, Wash., assignor to Consolidated Aircraft Corporation, Buffalo, N. Y., a Corporation of Delaware. Filed June 11, 1930. Serial No. 460,497. 4 Claims. (Cl. 244—1.)



1. In an aircraft, a main flotation body, a sustaining surface therefor, laterally positioned inflatable floats spaced from opposite sides of said body, and an elongated explosive shell carried below each of said floats.

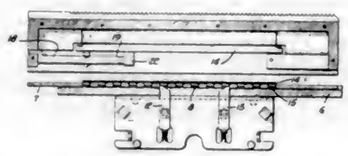
1,865,750. MACHINE FOR FEEDING AND COLLECTING SHEETS OF PAPER OR THE LIKE. JAY H. ELWELL, Chicago, Ill., assignor to Sol D. Golby, Chicago, Ill. Filed Nov. 5, 1930. Serial No. 493,505. 15 Claims. (Cl. 270—58.)

1. In a machine of the class described, a plurality of platforms adapted respectively to each carry a stack of sheets, means for elevating the respective platforms for maintaining the uppermost sheets at the intended feeding line, and a universal member carrying a plurality of feeding members adapted each to engage and withdraw the uppermost sheet of one of the stacks, said universal member being movable to withdraw the sheets engaged by the respective feeding members, and means for releasing the respective sheets, receiving means for supporting the released sheets in processional relation, and an accumulating



member movable with relation to the receiving means for successively engaging the deposited sheets and accumulating them in superposed relation.

1,865,751. CALCULATING MACHINE. CARL M. F. FAIDEN, Oakland, Calif., assignor to Marchant Calculating Machine Company, Emeryville, Calif., a Corporation of California. Filed May 5, 1928. Serial No. 275,309. 10 Claims. (Cl. 235—63.)



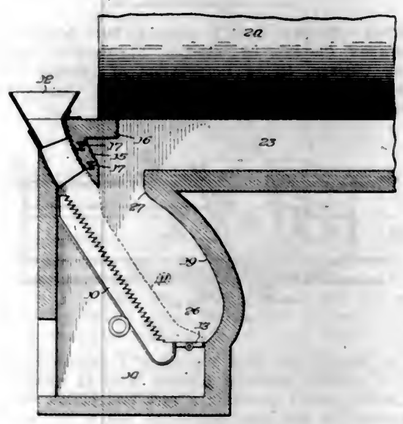
1. In a calculating machine, a transversely movable carriage provided with a series of recesses, means engaging the recesses for holding the carriage against transverse movement in either direction, a member carried by the carriage provided with teeth registering with said recesses and means for moving said member to cause the teeth to eject the holding means from the recesses.

1,865,752. VACUUM TUBE. DIONYS GÁBOR, Berlin-Wilmersdorf, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Feb. 28, 1931, Serial No. 518,936, and in Germany Feb. 3, 1930. 5 Claims. (Cl. 176—35.)



1. In a quartz vessel of the class described, an internally disposed terminal seal, comprising a cavity in said vessel, a metal disposed in said cavity, said metal being subject to enlargement in volume on solidifying, and conductors attached to said metal.

1,865,753. FURNACE. WILLIAM A. GILCHRIST, Chicago, Ill. Original application filed Apr. 14, 1921, Serial No. 461,364. Divided and this application filed Oct. 20, 1927. Serial No. 227,601. 6 Claims. (Cl. 110—7.)



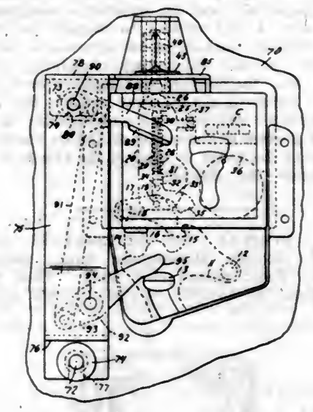
1. In a furnace, steeply inclined fuel supporting means adapted for supporting a relatively thin steeply inclined bed of fuel to permit the fuel to have a steeply inclined rearwardly facing exposed surface, and a combustion chamber having refractory walls one of which is opposite said surface and rises from adjacent the lower edge of the fuel bed curving first outwardly away from thence inwardly toward the fuel bed forming with the other said walls a restricted flue at the top of the chamber of less cross sectional area than that of said chamber and an enlarged lower combustion space extending rearwardly from the lower portion of said surface and a more restricted upper combustion space extending rearwardly from the upper portion of said surface, said chamber being shaped to retain the combustible volatiles in the enlarged space until they are substantially burned and to concentrate upon said lower portion of the fuel surface the heat reflected and radiated by said refractory walls.

1,865,754. PROCESS FOR THE MANUFACTURE OF ANHYDROUS SODIUM SULPHITE. CARL N. HAND, Nitro, W. Va., assignor to Elko Chemical Company, Nitro, W. Va., a Corporation of West Virginia. Filed Mar. 19, 1928. Serial No. 262,993. 2 Claims. (Cl. 23—129.)

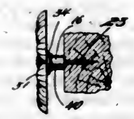
1. In the process for the manufacture of anhydrous sodium sulphite, the steps comprising in combination melting crystalline hydrated sodium sulphite, substantially free from other salts or solvent, in its own water of crystallization, heating the molten mass so obtained to approximately between 95° and 100° C., separating the precipitated anhydrous salt so formed at a temperature of approximately between 75° to 100° C., and drying the anhydrous sodium sulphite.

1,865,755. OPERATING MECHANISM FOR PUNCHES AND SIMILAR DEVICES. REUBEN H. HELSEL, Long Island City, and HILDING L. PIERSON, Brooklyn, N. Y., assignors to General Register Corporation, Brooklyn, N. Y., a Corporation of Pennsylvania. Filed June 23, 1931. Serial No. 546,238. 6 Claims. (Cl. 164—119.)

1. In combination, a punch device having an operating member, a bracket having a ticket supporting ledge, an element carried by the bracket and engaging said operating member, and means adjacent said ledge for operating said element and thus effecting the operation of said operating member.

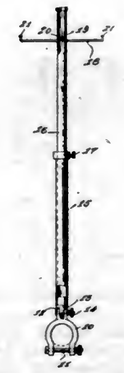


1,865,756. TIE BACK FOR CURTAINS. CHARLES P. HENRY, Providence, R. I., assignor to James N. Henry, Providence, R. I. Filed Aug. 26, 1931. Serial No. 559,463. 3 Claims. (Cl. 85—53.)



2. In a tie back, a stud comprising a head and a shank, a centrally apertured shield mounted through its opening upon the head, a washer upon the shank resting upon the shield; and a fin upon the shank engaging the washer.

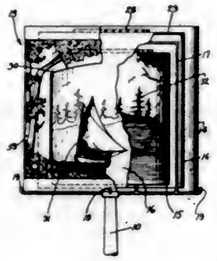
1,865,757. HANGER. ISABELLE HONSOWETZ, Coeur D'Alene, Idaho. Filed July 2, 1929, Serial No. 375,458. Renewed Nov. 17, 1931. 1 Claim. (Cl. 211—172.)



A clothes hanger comprising a hollow standard having spaced openings at an appropriate point in its length, a plurality of supporting arms singly received by said

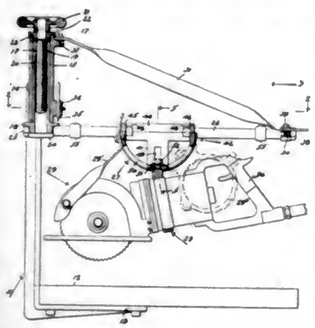
openings and adapted to be arranged horizontally for use or folded longitudinally within the standard when not in use, said standard having an instruck portion immediately above each opening adapted to cooperate with the lower side of said opening to support the rod in a horizontal position, parallel off-set extremities formed on each rod, one of said extremities cooperating with the standard to limit the outward movement of each arm and support the latter in a horizontal position for use, and a head formed on the other off-set extremity to engage the instruck portion of the standard and lie wholly within the confines of the latter to support the arm in its folded position within the standard.

1,865,758. DISPLAY OR DECORATION DEVICE. ELSIE H. HORTON, Minneapolis, Minn., assignor to Amasa C. Paul, Minneapolis, Minn. Filed Sept. 9, 1929. Serial No. 391,305. 6 Claims. (Cl. 40—40.)



5. A display device comprising a plurality of decorated shades one within the other, two of said shades being movable relative to each other, decorations on one of said movable shades representing objects capable of motion, decorations on the other movable shade representing stationary objects and means for moving said movable shades in opposite directions to produce an illusion by which said objects appear to have motion at a rate of speed other than the actual rate of movement of said movable shades.

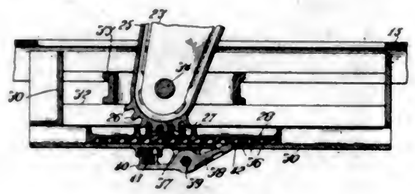
1,865,759. PORTABLE SAW SUPPORT. JOSEPH S. HUGHES, Los Angeles, Calif. Filed Oct. 2, 1929. Serial No. 396,726. 12 Claims. (Cl. 143—6.)



1. For use in combination with a portable power saw, a support embodying: a frame; an arm member mounted on said frame; a cradle slidably mounted on said arm member said cradle embodying curved intersecting slots; and a clamp adapted to travel in said slots and support said saw, said clamp being adapted for angular adjustment in said slots in two intersecting vertical planes.

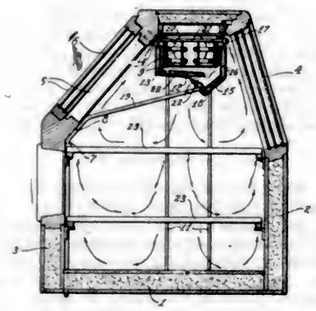
12. For use in combination with a portable power saw, a support embodying: a frame; a set of parallel arms mounted on said frame; a cradle comprising a head frame slidably mounted on said arms; two downwardly extending slotted intersecting arc members mounted on said head frame; a clamp adapted to support said saw; and means adapted to be received in said slots for supporting said clamp from either of said arc members.

1,865,760. BRAKE SLACK ADJUSTER. MALCOLM S. JOHNSON, Chicago, Ill., assignor to Transery Corporation, Chicago, Ill., a Corporation of Illinois. Filed May 31, 1930. Serial No. 457,740. 10 Claims. (Cl. 188—200.)



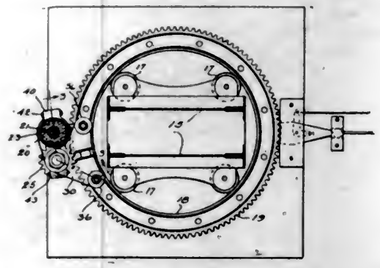
1. In combination with a lever of a foundation brake gear; a movably mounted fulcrum carrying element for said lever; means involving a rack and pinion whereby an anchor for the inner fulcrumed end of the lever is provided, a portion of said means being movable when said lever swings beyond its normal predetermined degree of travel; means whereby movement of said portion in one direction is prevented; and means whereby said fulcrum carrying element is locked against movement in one direction.

1,865,761. SHOW-CASE REFRIGERATOR. THEODORE A. JOSTEDT, St. Louis, Mo., assignor, by mesne assignments, to Hussmann-Ligonier Company, St. Louis, Mo., a Corporation of Delaware. Filed Jan. 16, 1928. Serial No. 247,010. 3 Claims. (Cl. 62—89.6.)



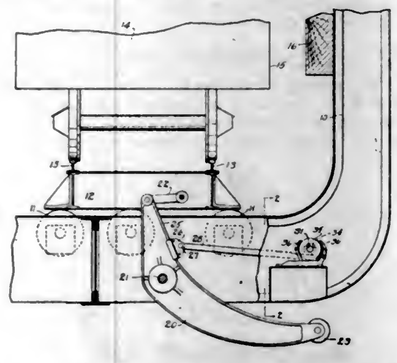
1. A showcase refrigerator, comprising, an elongated showcase compartment having transparent panels along the front thereof and having an inclined door at the back thereof provided with a transparent panel, a refrigerating coil extending along the top of said compartment, and baffles extending along said compartment below said coil and along the sides thereof constructed and arranged to provide top passages over the sides of said baffles and a bottom passage along the bottom thereof, one of said baffles extending below the inner edge of the other and having a gutter adapted to receive the drip from said first baffle, said coil and baffles being adapted and positioned to cause currents of air to circulate in paths from said bottom passage downwardly into said compartment and in return paths upwardly along said panels and into said top passages.

1,865,762. CRANE. ROBERT W. KALTENBACH, Cleveland Heights, Ohio. Filed Nov. 11, 1929. Serial No. 406,233. 6 Claims. (Cl. 74—7.)



1. A driving means for cranes and the like, comprising in combination, a relatively stationary circular rack, a turntable, a gear rotatably mounted on the turntable, an idler gear in mesh with the first named gear and with the rack, and means guided by the rack for maintaining the pitch alignment between the idler gear and the rack, and between the idler gear and the driving gear, notwithstanding variations in the distance between the axis of the driving gear and the rack.

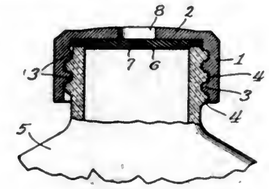
1,865,763. PLATEN LOCK FOR CAR DUMPERS. ROBERT W. KALTENBACH, Cleveland Heights, Ohio. Filed Mar. 10, 1930. Serial No. 434,558. 9 Claims. (Cl. 214—52.)



1. In a car dumper, the combination with a tiltable cradle, of a car supporting platen movably mounted thereon, a locking device on the cradle, means for connecting said device to the platen, and electro-magnetic means acting upon said device for locking it, whereby the platen may be locked against movement in either direction with reference to the cradle and independently of a car on the cradle.

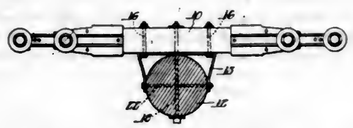
1,865,764. CONTAINER STOPPER. JOHN A. KEENAN, Madison, Wis., assignor to General Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Filed Sept. 26, 1930. Serial No. 484,488. 3 Claims. (Cl. 215—56.)

1. A cap for bottles or similar containers, said cap having a top wall provided with an opening, and having side walls internally formed to engage holding means on the neck of the bottle or other container, together with a flat elastic diaphragm having its marginal portions clamped upon the upper edge of the neck of the bottle or other container by the downward pressure of the top wall of the cap, with the diaphragm lying flat against the underside of said cap, sealing the bottle against escape of fluid pressure between the cap and bottle, the middle portion of the diaphragm being provided with a normally closed puncture to automatically vent any accumulated pressure in



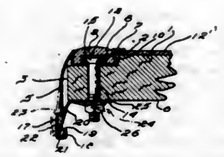
the bottle or other container through said opening in the top of the cap, said opening being formed to cause said diaphragm to balloon outward through said opening to open said puncture to relieve internal fluid pressure.

1,865,765. BRACE. WILL G. KELLEY, Winnetka, Ill. Filed June 29, 1928. Serial No. 289,185. 4 Claims. (Cl. 189—33.)



1. A bracket for securing a buck arm to a main support, including an arm engaging portion provided with apertures for receiving securing means from said arm, spaced flanged portions provided at the ends of said first named portion extending toward the main support, said flanged portions being provided with substantially parallel reflanged portions contacting the main support and provided with apertures for receiving securing means for fastening said bracket to said support, and securing means passing through said main support, said arm and said first named portion for securing together said main support, said arm and said first named portion.

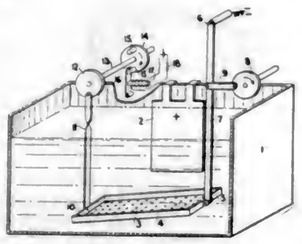
1,865,766. MOLDING FOR RUNNING BOARDS AND THE LIKE. ALONZO R. KETCHAM, Detroit, Mich. Filed Aug. 27, 1930. Serial No. 478,017. 19 Claims. (Cl. 280—163.)



1. A molding including a pair of angularly disposed parts, means for clamping one of said parts upon one side of a support, and a bar co-acting with the other part having a portion securable to the other side of said support and adapted to draw the latter part of said molding toward the edge of said support during the securement of said bar thereto.

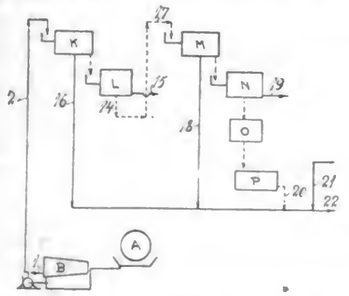
16. A molding for a running board including an angle bar, a pair of troughs, one formed in each side of one of the flanges of said bar, a tread strip in the external trough, the open side of the other trough being constricted so as to secure a fastening member against separation from said molding, and a member on the other flange for securing the latter to a running board.

1,865,767. ELECTROPLATING EQUIPMENT. MARTIN KIRCHNER, Berlin-Lankwitz, Germany, assignor to United Chromium, Incorporated, New York, N. Y., a Corporation of Delaware. Filed Dec. 6, 1930, Serial No. 500,459, and in Germany Oct. 18, 1929. 6 Claims. (Cl. 204—11.)



1. In an apparatus for electroplating articles in bulk, a container having an extended substantially flat bottom and means for connecting articles resting on the bottom thereof cathodically to a source of current, an anode, means for supporting said tray-like container in an inclined position and for periodically reversing the direction of inclination, and means for agitating the tray-like container while in positions of inclination, whereby the said articles are caused to move intermittently down the inclined bottom first in one direction and then in the other.

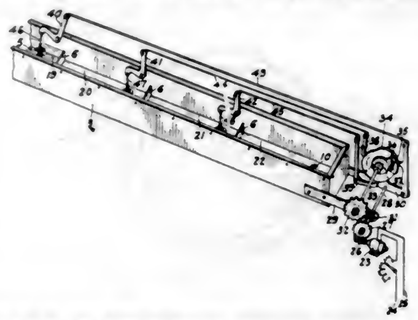
1,865,768. METHOD OF TREATING MECHANICAL WOOD PULP. PER KLEM, Oslo, Norway. Filed Nov. 30, 1929, Serial No. 410,665, and in Norway Nov. 30, 1928. 1 Claim. (Cl. 92—20.)



The process of treating wood to make paper-pulp, comprising grinding the wood, separating the knots, splinters and slivers from the chips, fiber and flour produced by the grinding, screening these latter constituents to separate the flour from the fiber and chips, screening the fiber and chips to separate the chips from the fiber, screening this latter fiber to separate therefrom the finer constituents, uniting the flour from the first screening with the said finer constituents, passing the residue from the second screening to another screening operation, separating the chips from said residue, passing the resultant finer particles through a thickening operation, passing the product thence through a beating operation to loosen and open the fiber bundles and render same pliable, mixing the pliablized fibers with the products of the first and second screenings and mixing cellulose with this last mixture.

1,865,769. AUTOMATIC WATER CONTROL. FRED LANZ, Borego, Calif. Filed Feb. 24, 1931. Serial No. 517,941. 3 Claims. (Cl. 61—12.)

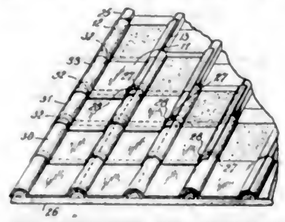
1. A flume having a series of cross pieces inserted in the bottom portion thereof at intervals to form weirs, there being a bottom outlet in the flume for each of said weirs, valves to control said outlets, an operating connection for each of said valves, means to mount said connections above the flume extending lengthwise thereof, and a common operating means for said connections adapted to exert traction upon them lengthwise of the flume to operate said valves.



1,865,770. PROCESS OF PRODUCING HYDROGEN. ALFRED T. LARSON, Wilmington, Del., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed July 21, 1927. Serial No. 207,574. 5 Claims. (Cl. 23—213.)

1. The process of manufacturing hydrogen which comprises subjecting a mixture of steam and carbon monoxide to the action of a catalyst consisting of the reduction product of a fused mixture of an oxide of a metal of the iron group and copper oxide.

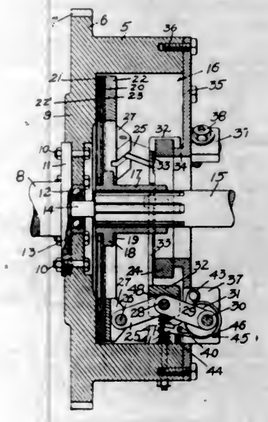
1,865,771. METAL-CLAD TILE. SOLOMON LEVY, Rutherford, N. J., assignor to Anaconda Sales Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 10, 1929. Serial No. 413,033. 4 Claims. (Cl. 108—9.)



1. A tiled roof comprising a plurality of tiles having arch and half-arch portions laid in overlapping courses, each tile in a course overlapping tiles of two preceding courses, and the arch portion of each tile overlying the half-arch portion of an adjacent tile in its course, a nail near the forward end of the half-arch portion of each tile securing that tile and two underlying tiles to the roof structure, and a second nail in the arch portion of each tile substantially mid-way between the ends of the tile and overlain by a tile of the next higher course, said nail penetrating the tile into which it is driven and a tile thereunder and entering the roof structure.

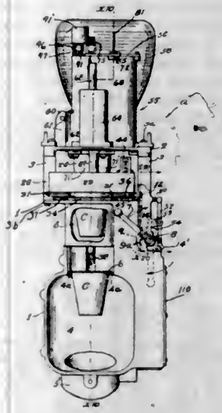
1,865,772. AUTOMATIC CLUTCH. KENNETH E. LYMAN, Rockford, Ill., assignor to Automatic Transmission Company, Rockford, Ill., a Corporation of Illinois. Filed Oct. 5, 1928. Serial No. 310,477. Renewed Nov. 30, 1931. 5 Claims. (Cl. 192—105.)

1. In a clutch, friction elements contributing to a clutching connection between driving and driven member, means for moving one of said clutching elements into clutching engagement with the other, comprising a thrust imparting link motion, an eccentrically mounted pivot for said link motion and means for changing the position of said pivot



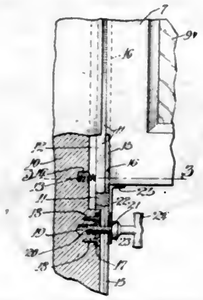
for regulating the effectiveness of the link motion to compensate for wear between said friction elements, comprising a ratchet wheel on which said pivot is eccentrically mounted and means for rotating said ratchet wheel.

1,865,773. BEVERAGE DISPENSER. FRANK A. MADDEN, Los Angeles, Calif. Filed Oct. 26, 1925. Serial No. 64,735. 33 Claims. (Cl. 225—21.)



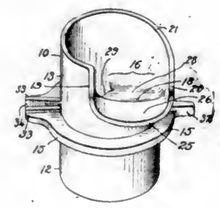
33. A drink vending machine comprising valved means for supplying an effervescent liquid component of a drink under pressure; manual means for starting into operation said effervescent liquid supplying means; means operated by gas from the effervescent liquid after the effervescent liquid component of the drink has been measured to supply another component of the drink; and means operated by gas from the effervescent liquid to permit and cause discharge of said components.

1,865,774. WINDOW CONSTRUCTION. NIELS PETER MADSEN and JOHN AAGE GUSTAV JENSEN, Chicago, Ill., assignors of one-third to Louis Platter, Oak Park, Ill. Filed Jan. 8, 1931. Serial No. 507,316. 4 Claims. (Cl. 20—12.)



1. In a window construction, a frame having a vertical side member in which a sash is slidably mounted, a spring-pressed guide element on said vertical frame member normally projecting in engagement with the sash whereby to guide the latter and yieldably support it in raised position, and means external of the frame for retracting said guide element to release it from operable engagement with the sash, said means comprising a plate having a shoulder portion for arresting the sash in its dropping movement after the release of said guide element.

1,865,775. WATER DISTRIBUTOR FOR CONDENSERS OF ICE MANUFACTURING SYSTEMS. JOSEPH A. MARTOCELLO, Sr., Philadelphia, Pa. Filed Aug. 27, 1931. Serial No. 559,652. 16 Claims. (Cl. 257—178.)



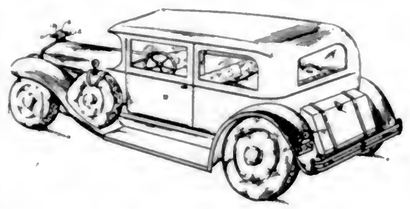
1. In a distributor for tubes of condensers, a body of hollow construction, a cylindrical shank upon the body adapted to enter a tube of the condenser, and said body having a tangentially positioned inlet opening formed therein.

1,865,776. PROCESS FOR THE PRODUCTION OF DIPHENYL MONOSULPHONIC ACID. CAMPBELL R. MCCULLOUGH, Anniston, Ala., assignor to Swann Research, Inc., a Corporation of Alabama. Filed Nov. 23, 1929. Serial No. 409,430. 7 Claims. (Cl. 260—159.)

6. A process for the production of diphenyl monosulphonic acid comprising mixing 100 parts of diphenyl with sufficient 66° Bé. sulphuric acid so that after the reaction is complete an excess of approximately 32 percent of sulphuric acid remains unreacted, maintaining the mix-

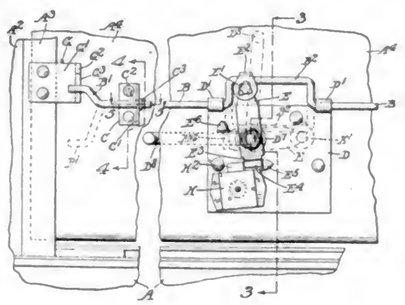
ture at a temperature in the neighborhood of 100° C., until substantially all the diphenyl has reacted, then diluting with water, cooling, and recovering the diphenyl monosulphonic acid by crystallization.

1,865,777. AUTOMOBILE SIGNAL. PATRICK J. MCMANAMAN, Cleveland, Ohio. Filed Apr. 23, 1930. Serial No. 446,510. 1 Claim. (Cl. 116—114.)



A head for radiators comprising a hollow body having a bulb therein, a removable lens cap in the top of the body, a thermostat tube projecting downwardly from said body and having a pivot bearing head within the same on which head the body is mounted, the rear side of the body having an indicator lens therein, and a swinging pointer attached to said pivot and projecting on the outer side of said indicator lens.

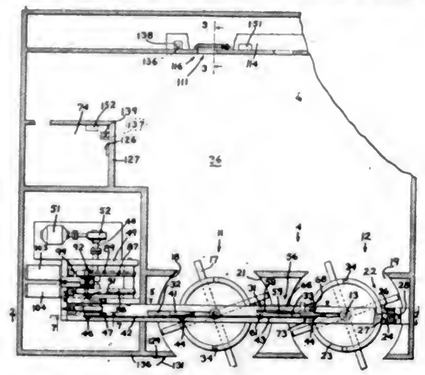
1,865,778. HOOD LATCH. NORTON A. MEARS and DIBRELL P. HYNES, Chicago, Ill., assignors to Chicago Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 11, 1931. Serial No. 562,263. 2 Claims. (Cl. 292—217.)



1. In a latching device for a double hinged hood including a rock shaft rotatably mounted on the inner face of the hood, and means for rotating said rock shaft, including a handle exterior to the hood, bearing means for the rock shaft, including brackets secured to the inner face of the hood closure and having each a flange apertured to permit the passage of the rock shaft therethrough, said aperture having associated therewith a generally cylindrical bearing member extruded from said flange.

1,865,779. DOOR LOCKING MECHANISM FOR BANKS AND THE LIKE. SAMUEL I. MERRILL, Los Angeles, and WALLACE D. MERRILL, Sierra Madre, Calif. Filed Dec. 18, 1929. Serial No. 415,068. 16 Claims. (Cl. 70—50.)

1. In a locking mechanism for a revolving door, a stationary track, an annular flange carried by said door coaxially therewith, an edge of said flange being movably disposed within a transverse slot in one side of said track, a disc movable within a longitudinal slot in the opposite side of said track, said slots intersecting each other and



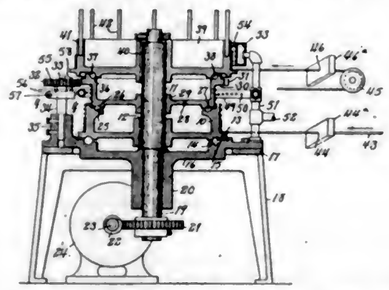
said flange having a notch therein, and means for rolling said disc within said longitudinal slot optionally into or out of the intersection of the two slots.

1,865,780. MOUTHPIECE FOR TOBACCO PIPES, CIGAR OR CIGARETTE HOLDERS, OR OTHER ARTICLES TO BE HELD BY THE TEETH. FREDERICK NAIMASTER, London, England. Filed Feb. 17, 1931, Serial No. 516,342, and in Great Britain Feb. 4, 1931. 1 Claim. (Cl. 131—12.)



In a mouthpiece in combination, a bore extending from the inner end partially along said mouthpiece, inclined passages communicating at their inner ends with said bore and having their outer ends disposed at the sides of the mouthpiece, a transversely disposed recess upon the top of the mouthpiece, a transversely disposed upwardly curved recess upon the underside of said mouthpiece, said recesses extending across the solid part of said mouthpiece between said inclined bores, surfaces disposed at a right angle to the bottom of said recesses and forming the walls thereof, and an inwardly curved surface at the end of the mouthpiece for contact with the tongue.

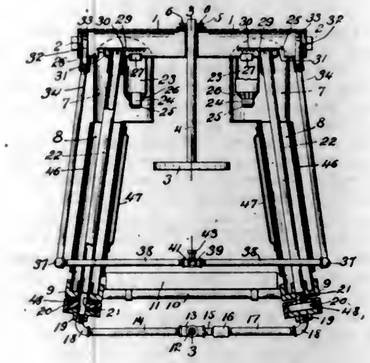
1,865,781. WIRE DRAWING MACHINE. GARABED NAJARIAN, New Haven, Conn. Filed May 13, 1930. Serial No. 451,905. 6 Claims. (Cl. 205—16.)



1. In a wire-drawing machine, the combination with a pair of drawing-die passages of different diameters; of a first-draw pull-reel for drawing wire through the larger

of the two said die-passages; a second-draw pull-reel arranged coaxially with said first-draw pull-reel for drawing wire through the smaller of the two said die-passages; an idler-reel concentric with and interposed between the said first-draw pull-reel and the said first-draw pull-reel, the wire drawn from the first-draw pull-reel being transferred to the idler-reel by slipping directly from the former to the latter, and feeding from said idler-reel to said smaller die-passage and thence to said second-draw pull-reel; and means for driving the two said pull-reels.

1,865,782. HYDROCARBON BURNER MECHANISM. WILLIAM G. B. OLSON, Kansas City, Kans. Filed Jan. 21, 1931. Serial No. 510,095. 11 Claims. (Cl. 158—63.)



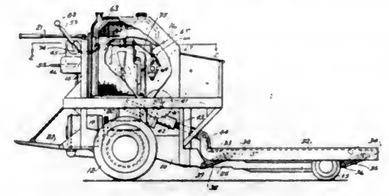
1. In a hydro-carbon burner mechanism, a generating chamber having above its bottom a liquid fuel outlet, a second generating chamber having a vapor discharge opening discharging into said first generating chamber, a third chamber in said second chamber and into which said outlet discharges, said third chamber having a liquid discharge opening discharging into said second chamber, a vapor conductor having an inlet communicating with said first chamber, a burner into which said vapor conductor discharges so located that flame therefrom will heat said first and second chambers, and a fuel conductor extending through said second chamber and discharging into said first chamber.

1,865,783. LEATHER AND METHOD OF MAKING THE SAME. AUGUST C. ORTHMANN, Milwaukee, Wis., assignor to Charles P. Vogel, Milwaukee, Wis. Filed Sept. 19, 1928. Serial No. 307,056. 5 Claims. (Cl. 91—68.)

1. The process of producing waterproof leather which consists in applying an impervious, colored coating to one side of the leather and then dipping the leather so prepared into waterproofing compound in a heated condition.

1,865,784. INDUSTRIAL TRUCK. WAYBARD D. PARKER, Bay Village, Ohio, assignor to The Elwell Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 4, 1931. Serial No. 527,840. 6 Claims. (Cl. 180—54.)

1. In an industrial truck, a truck frame, driving wheels adapted to support the frame, an electric motor drivingly connected to said driving wheels, a controller for said motor, an operating handle for said controller, an internal combustion engine, an electrical generator drivingly connected with said engine, a fuel supply for said engine, and control means operatively disposed between said fuel supply and said engine adapted to control the speed thereof, means connected with said handle adapted to



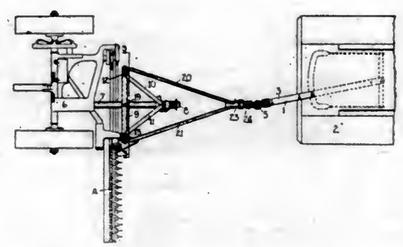
operate said control means independent of said controller and wherein said last named means is automatically operated when the controller is operated.

1,865,785. DUST PUFF. WILLIAM S. PARKER, Rockford, Ill., assignor to Burson Knitting Company, Rockford, Ill., a Corporation of Illinois. Filed May 19, 1928. Serial No. 278,960. 5 Claims. (Cl. 300—21.)



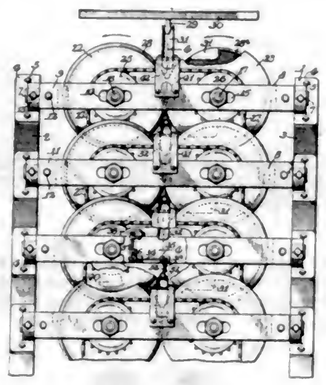
1. The method of making dust puffs comprising winding raveled strands in a continuous loop in superimposed intermeshed layers, until a desired quantity of intermeshed layers are formed, bringing opposite sides of the loop together to bring the strands at that point into close relation with one another in cylindrical form and tying the strands in compressed relation, whereby the looped ends are caused to flare out to form puffs.

1,865,786. DRAFT DEVICE FOR MOWERS. TALBERT W. PAUL, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed June 29, 1931. Serial No. 547,521. 4 Claims. (Cl. 280—33.44.)



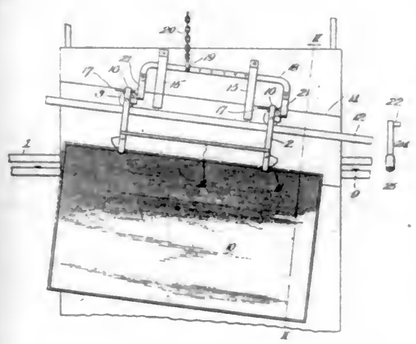
1. The combination with a mower including a cutter bar and a stub tongue having a supporting truck, and a tractor, of a draft device comprising a transverse element rigidly mounted intermediate its ends on the stub tongue, a draft tongue composed of dual bars attached to the ends of said element respectively by horizontal pivots and converging forwardly and pivotally connected with the rear of the tractor.

1,865,787. DEVICE FOR MAKING VITREOUS LIKE OBJECTS. SELLERS H. PELTIER, Ottawa, Ill., assignor to The Peltier Glass Company, Ottawa, Ill., a Corporation of Illinois. Filed Aug. 8, 1929. Serial No. 384,357. 10 Claims. (Cl. 49—33.)



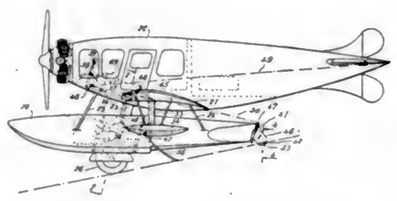
1. A device for making vitreous articles comprising a plurality of sets of relatively rotatable molding members, means for rotating said molding members, one member of each set having a peripheral recess for releasing the vitreous object from engagement therrewith, and means operating in timed sequence with respect to the release of the object to direct it to the next successive set of molding units.

1,865,788. CONVEYER SYSTEM. GWYNNE RAYMOND, Kansas City, Mo. Filed June 22, 1928. Serial No. 287,417. 6 Claims. (Cl. 104—91.)



1. An overhead conveyer loading track adapted to support wheeled conveyers, and a buffer bearing an angular relation to said track, said buffer and track being so related as to insure proper positioning of a conveyer.

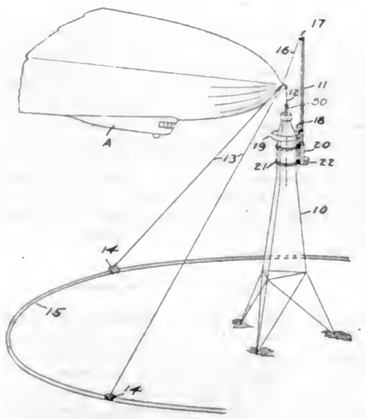
1,865,789. AEROPLANE. GORDON REEL, New York, N. Y. Filed Mar. 2, 1928, Serial No. 258,506. Renewed Feb. 17, 1930. 20 Claims. (Cl. 244—2.)



1. A flying-machine comprising a central body, a wing extending transversely of the longitudinal axis of said body, a wheel mounted on said body, a tail skid, adjustable wing skids for balancing said machine on said wheel and tail skid, and means under the control of the pilot for manipulating said wing skids.

15. In a monoplane, centrally disposed supporting means, adjustable wing skids disposed on opposite sides of said supporting means, and means under the control of the pilot for manipulating said wing skids.

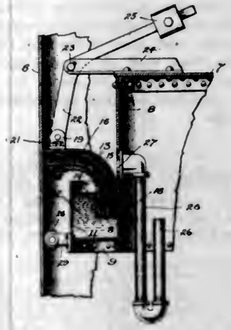
1,865,790. MOORING MAST. CHARLES E. ROSENDAHL, Washington, D. C. Filed Apr. 24, 1930. Serial No. 447,073. 10 Claims. (Cl. 244—2.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



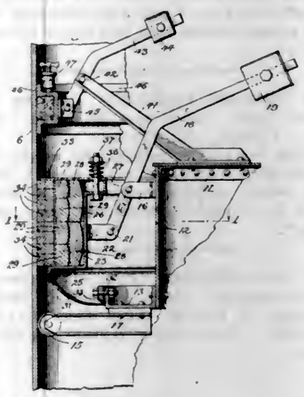
9. A mooring mast including a main mast having a topmast, and a secondary mast movably secured to said main mast.

1,865,791. GAS HOLDER. JOHN R. L. SANTOS, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 29, 1928. Serial No. 302,782. 7 Claims. (Cl. 48—176.)

4. In a waterless gas holder, the combination of a shell; a piston movable in the shell to vary the effective volume thereof; a packing seal on the piston and engaging the shell; means for retaining a lubricant bath below the area of engagement of said seal with the shell and subject solely to gas pressure obtaining within the holder; and connections for delivering to said area lubricant urged by such gas pressure.

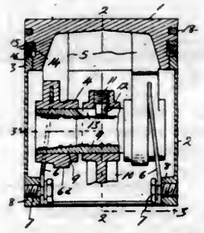


1,865,792. GAS HOLDER. JOHN R. L. SANTOS, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 29, 1928. Serial No. 302,788. 10 Claims. (Cl. 48—176.)



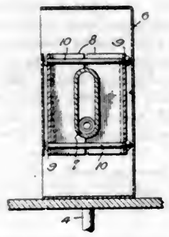
3. In a waterless gas holder, the combination of a shell; a piston vertically movable therein; a packing seal between the periphery of the piston and the shell; and force feed means carried by the piston and arranged to deliver lubricant to the shell throughout substantially the entire periphery of the piston and outside limits of the packing seal.

1,865,793. PISTON. CHARLES A. SAWTELLE, Detroit, Mich., assignor, by direct and mesne assignments, to S. and D. Engineering Company, Detroit, Mich., a Corporation of Michigan. Filed July 8, 1929. Serial No. 376,545. 11 Claims. (Cl. 74—108.)



1. A piston comprising a head and a separately formed skirt having end portions fitting freely, one within the other, said head comprising a pair of spaced wrist pin bearings projecting into said skirt, and means individually resiliently connecting each of said bearings to the skirt.

1,865,794. RADIATOR. CLIFFORD J. SCHLAFMAN, Washington, D. C. Filed Nov. 10, 1931. Serial No. 574,216. 1 Claim. (Cl. 257—136.)

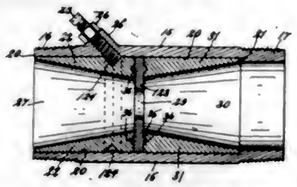


In a radiator, of the class described, comprising a vertically elongated core flanked, on either side, by a plurality of fins united directly to side plates, in spaced relation, said fins having central apertures therein conforming substantially to one half of the cross-sectional contour of said core, and a clamping means to assemble core and fins into intimate contact.

1,865,795. FLOW CHECK. SYLVESTER B. SCHNITTER, Maracaibo, Venezuela. Filed June 30, 1930. Serial No. 464,817. 5 Claims. (Cl. 137—75.)

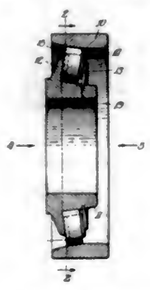
1. A flow check including a pipe fitting adapted to be connected to a flow pipe and having a cylindrical bore extended in from one end and terminating in a shoulder adjacent the other end thereof, a cylindrical block in the bore of said fitting having one end arranged against said shoulder and its other end terminating adjacent the cross center of said fitting, said block having an opening therethrough that tapers in a reducing diameter toward the approximate cross center of said fitting, a check

head secured in the bore of said fitting with its inner end abutted against said block and having an opening therethrough tapered reversely to the tapered opening through



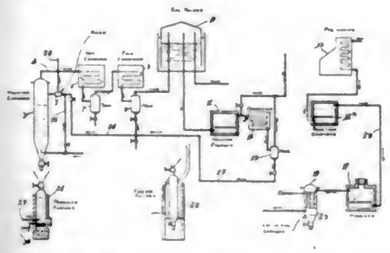
said block, and a baffle plate having a reduced opening therethrough that connects the tapered opening through said head and block.

1,865,796. ROLLER BEARING. FREDERICK G. SEIFARTH, Chicago, Ill. Filed June 30, 1928. Serial No. 289,358. 8 Claims. (Cl. 318—213.)



1. An anti-friction bearing comprising a cone, a cup, cylindrical rollers between said cone and cup, a cage for holding said rollers in spaced relationship with one another, said cage comprising a unitary member providing recesses having arcuate side walls, said rollers being disposed in said recesses with the cylindrical surfaces thereof adjacent to said arcuate walls, abutment means for the high side of said cage and rollers, and means for limiting movement of said cage and rollers toward the low side of said bearing, said rollers and cage having play in a direction parallel with the axis of said bearing and said rollers having play between said arcuate walls.

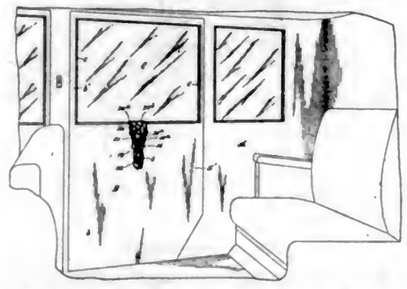
1,865,797. PROCESS FOR TREATING METALLIC HALIDE RESIDUE. WILLIAM H. SHIFFLER, Berkeley, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Sept. 8, 1926. Serial No. 134,327. 6 Claims. (Cl. 23—154.)



1. A process of treating aluminum chloride residues derived from the treatment of hydrocarbons, which process comprises atomizing the residue in the presence of steam at a temperature above 100° C. to decompose the residue into hydrocarbon chloride and a carbonaceous residue containing alumina, separating the gas from said carbonaceous residue.

6. A process of treating aluminum chloride residues derived from the treatment of hydrocarbon with aluminum chloride comprising atomizing the residues in the presence of steam at a temperature of above 100° C. to produce a gas containing hydrogen chloride and water, cooling the gas to condense water together with some hydrogen chloride, separately collecting uncondensed hydrogen chloride from said gas and employing the condensed solution to provide the steam for the decomposing of further residues and the production of additional hydrogen chloride.

1,865,798. VEHICLE. EDWARD J. STAHL, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 27, 1929. Serial No. 374,236. 12 Claims. (Cl. 296—44.)

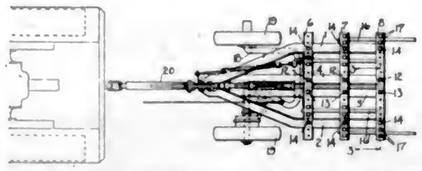


1. In an operating mechanism adapted to be mounted on a vehicle panel having a latch member and a movable member, the combination of a mounting on the interior side of the panel, said mounting comprising upper and lower sections in vertically spaced relation and an intermediate section, an operating device pivoted in the intermediate section and disposed inwardly thereof, an operating device pivoted on an axis on a horizontal line coincident with the axis of said first mentioned device, and operating means between each said device and one of said members.

1,865,799. ENAMEL REMOVER. CHARLES J. STOWIE, Oakland, Calif. Filed Apr. 26, 1930. Serial No. 447,781. 1 Claim. (Cl. 87—5.)

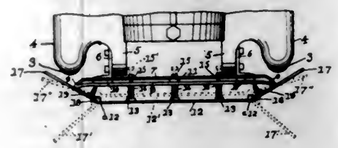
An enamel remover comprising, by weight benzol 90° Baumé, 50 parts; grain or wood alcohol, 190 to 200 proof, 25 parts; acetone, commercial, 10 parts; nitric acid, U. S. P., 10 parts; "monopole" oil, 5 parts; beeswax, 1 part.

1,865,800. CULTIVATOR. CARL G. STRANDLUND, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Aug. 31, 1929, Serial No. 389,725. Renewed Feb. 5, 1931. 6 Claims. (Cl. 97—234.)



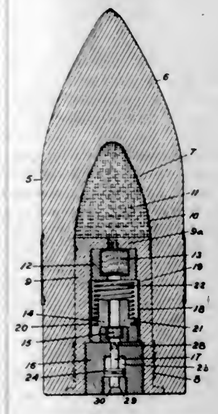
1. In an implement of the type described, a frame including side bars parallel for part of their length and converging forwardly, a clevis to which the forward ends of said bars are secured, centrally arranged parallel bars having their forward ends bent downwardly and bolted to said clevis, transverse bars spaced apart and secured to the side and central bars, and earth working devices carried on the frame.

1,865,801. OSCILLATIVE AUTOMOBILE BUMPER. WHITEFIELD R. TAATE, Bellingham, Wash. Filed Apr. 15, 1931. Serial No. 530,243. 1 Claim. (Cl. 293—55.)



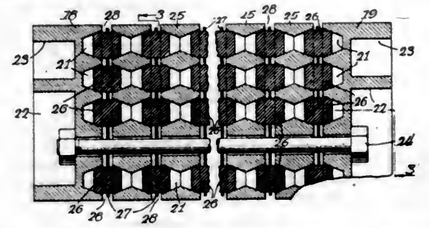
An automobile bumper including a bumper frame beam having ends disposed to stop oscillative bumper ends in operative positions, means to fasten said beam to said automobile, a central member of said bumper shorter than the width of said automobile, means to mount said central member on said beam for limited lateral reciprocation, springs between said beam and said central member reacting to separate the same, bearings on the ends of said central member having substantially vertical axes, said oscillative bumper ends mounted on said bearings for oscillation, and springs connected to said bumper reacting to return said bumper ends in oscillation to bear on said beam ends.

1,865,802. EXPLOSIVE SHELL AND A FUSE THEREFOR. HAROLD G. TOWNER, New Haven, Conn. Filed May 25, 1929. Serial No. 365,990. 7 Claims. (Cl. 102—39.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



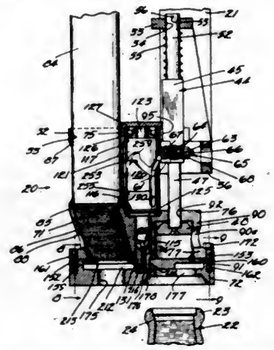
7. A fuse comprising a body, an inertia movable firing pin normally in unarmed position movable on impact to armed position, means for maintaining the firing pin in armed position, an inertia movable plunger normally in armed position, means operable by set back to release the plunger, a spring tensioned on impact to arm the plunger, and a primer carried by the plunger.

1,865,803. DRAFT GEAR. HERBERT E. TUCKER, Chicago, Ill., assignor to Cardwell Westinghouse Company, a Corporation of Delaware. Filed July 22, 1930. Serial No. 469,839. 4 Claims. (Cl. 213—40.)



4. A friction draft gear comprising a plurality of plates bearing substantially aligned opposing depressions in their faces, a plurality of cylinders of resilient material maintained in the depressions of each pair of plates, and a diaphragm of like resilient material connecting all of the cylinders between each pair of disks.

1,865,804. VESSEL CAPPING MACHINE. CHARLES L. TURNER, Los Angeles, Calif., assignor of one-half to Ford W. Harris, Los Angeles, Calif. Filed Mar. 30, 1927. Serial No. 179,605. 16 Claims. (Cl. 226—92.)

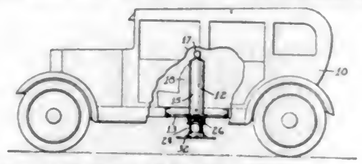


9. In an automatic bottle capping machine, the combination of: a magazine adapted to hold caps; a plunger adapted to reciprocate in a given path, a rotatable feeder adapted to feed a cap from said magazine to a lower portion of said path when rotated; and means for rotating said feeder when said plunger is in an upper portion of said path and holding said feeder against rotation when said plunger is in said lower portion of said path, said means being actuated by said plunger.

1,865,805. APPARATUS FOR LIFTING AND TURNING VEHICLES. ONORATI UMBERTO, Toledo, Ohio. Filed Jan. 29, 1931. Serial No. 512,069. 2 Claims. (Cl. 254—87.)

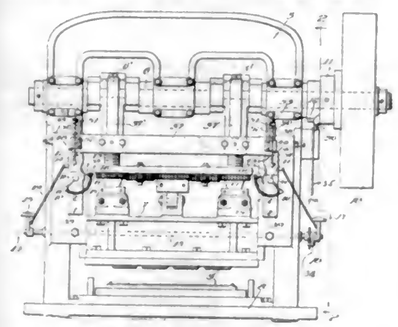
1. In a device of the class described, the combination of a vehicle frame, a mounting secured to said frame, a platform depending from said mounting, an elongate casing rising from said mounting, an actuating frame movable in said casing, racks on said frame, pinions on said platform meshing with said racks, a shaft connecting said pinions, a worm wheel on said shaft, a worm for driving said wheel, a shaft for said worm, a head on the lower end of said actuating frame, a foot, anti-friction bearings between said foot and actuating frame, a retainer for holding said foot and actuating frame together, a gear fixed to said foot, a vertically disposed shaft within said actuating frame, a gear on the end of said shaft meshing with said

gear on said foot, said shaft having a squared portion, a worm wheel on said shaft, means holding said worm wheel against longitudinal movement, a worm journaled on said



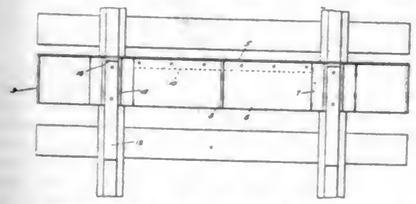
platform for driving said worm wheel, a tubular shaft for said last worm fitting said first mentioned worm shaft, and means for driving said worm shafts.

1,865,806. SAFETY ATTACHMENT FOR PUNCH PRESSES. BENJAMIN J. VICTOR, Oak Park, Ill., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 5, 1930. Serial No. 500,220. 9 Claims. (Cl. 192—131.)



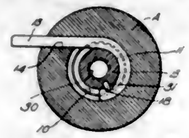
1. In a machine of the character described, the combination of a frame, a ram and means for operating the same, means for stopping the ram at the end of a cycle of operation, a cross bar carried by the ram, locking dogs pivotally mounted on the frame and normally disposed in stopping position in engagement with opposite ends of the cross bar, yieldable means acting directly on said locking dogs for urging said locking dogs into said stopping position, means for supporting said yieldable means to prevent displacement thereof, and means including levers connected with the stopping means and the locking dogs and requiring conjoint operation for retracting said stopping means and said locking dogs to permit a cycle of operation of said machine.

1,865,807. BALLAST CUTTING SHOE FOR RAILWAY TRACKS. WILLIAM W. WARD, Barboursville, W. Va., assignor of one-half to Charles T. Jimison, Barboursville, W. Va. Filed Apr. 19, 1930, Serial No. 445,702. Renewed Dec. 3, 1931. 5 Claims. (Cl. 37—104.)



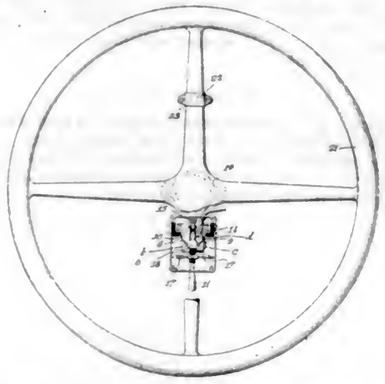
1. A device of the class described comprising a front plate rising from the front edge of the bottom and secured thereto, said bottom having upwardly disposed portions to receive rails, slide members secured in the crotches of said portions to slide on the rails.

1,865,808. METHOD OF MAKING CONNECTIONS BETWEEN MACHINE PARTS. WALTER A. ABEGG, Los Angeles, Calif., assignor, by direct and mesne assignments, to Wieman Kammerer Wright Co., Incorporated, Hollydale, Calif., a Corporation of California. Original application filed Mar. 12, 1928, Serial No. 261,057. Divided and this application filed Dec. 14, 1929. Serial No. 414,046. 6 Claims. (Cl. 29—148.)



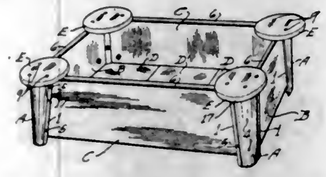
2. The method of connecting two parts one fitting around the other and having a space between them curved about their centers including heating a bar of metal that is rigid at normal temperatures to render it malleable, introducing the heated bar into the space through an opening in the outer part, connecting the entering end of the heated bar with the inner part, rotating one part relative to the other to cause the bar to be drawn into the space, and then allowing the bar to cool and shrink onto the inner part to be immovably connected therewith.

1,865,809. SWITCH DEVICE FOR DIRECTION-SIGNAL SYSTEMS. EARL C. AKERS, Detroit, Mich. Filed Apr. 30, 1928. Serial No. 273,871. 2 Claims. (Cl. 200—59.)



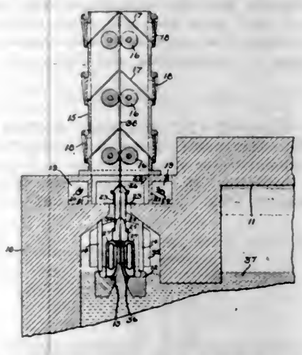
1. In a direction signal system for motor vehicles, means for controlling the operation of a signal device of said system including switch mechanism connected in an electric circuit for said device and comprising a casing having a slot in one end thereof formed with upward end extensions, a switch lever pivoted at one end within said casing for horizontal swinging movement along said slot and for limited lateral movement, said lever projecting through said slot, spring contact members at opposite sides of said lever within said casing and in spaced relation to said lever when the same is in mid position, a contact member carried by the underside of said lever, a contact member on the casing opposite said mid position of said lever to make contact when said lever is in mid position and close a circuit of a tail lamp of said system, springs for moving said lever to intermediate position to break the circuit of said signal system and light said tail lamp and to move said lever into said slot extensions at each end of its stroke, and means above said casing and operated by the steering of a vehicle upon which said system is installed for depressing said lever against the action of said springs when said lever is engaged within either of said slot extensions to release said lever and permit it to be moved to neutral position by said springs.

1,865,810. PLAYGROUND EQUIPMENT. FRANK ALBACH, St. Louis, Mo., assignor to Fred Medart Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 20, 1930. Serial No. 437,540. 10 Claims. (Cl. 272—1.)



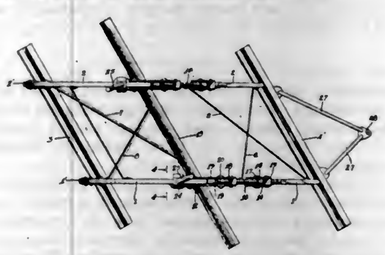
1. A children's sand-box including, in combination, a trough-shaped corner-post, meeting side and end walls having opposed ends presented in overlapped relation in the trough of, and approximately flatwise against, the corner post, and means engaging the abutting corner-post and overlapped ends of said walls for conjointly securing the walls together and to the corner-post.

1,865,811. GLASS DRAWING. WALTER O. AMSLER, Toledo, Ohio, assignor to Simplex Engineering Company, Washington, Pa., a Corporation of Delaware. Filed June 20, 1929. Serial No. 372,300. 7 Claims. (Cl. 49—17.)



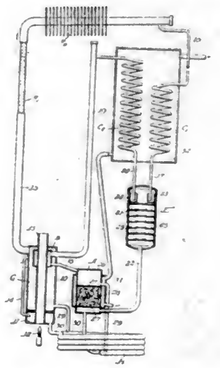
7. In apparatus for drawing sheet glass, a container for molten glass and means providing a slot from which glass is drawn, and means providing a substantially air-tight casing with walls so closely adjacent to the path of the glass from said slot for the distance through which the glass is cooled to a set condition so as to provide a substantially dead air space.

1,865,812. ROAD MAINTENANCE MACHINE. CARL GUSTAV ANDERSON, Bellwood, Ill. Filed May 25, 1931. Serial No. 539,958. 3 Claims. (Cl. 37—175.)



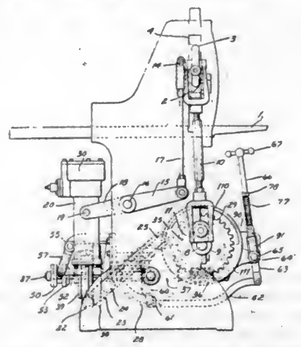
3. A road maintenance machine comprising a pair of parallel side members, one of said side members being disposed in advance of the other, a rear scraper bar rigidly secured to the rear ends of said side members, a front scraper secured to the front ends of said side members, said scraper bars being parallel, a cutter bar disposed in parallel relation with said scraper bars between the latter, means for raising and lowering each end of said cutter bar, and means independent of the raising and lowering means for adjusting the extreme position to which the cutter bar may be lowered.

1,865,813. METHOD OF AND APPARATUS FOR PRODUCING CONTINUOUS REFRIGERATION. EARL BABCOCK, Chicago, Ill., assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed June 28, 1930. Serial No. 464,453. 11 Claims. (Cl. 62—119.5.)



1. In refrigerating apparatus adapted to produce cooling effect by the simultaneous evaporation of two refrigerants, absorption means wherein both refrigerants may be changed from gaseous phases to more dense phases and separated by gravity action upon them, a boiler for each refrigerant, means for conducting the refrigerants from said absorption means to their respective boilers and a single source of heat for vaporizing both refrigerants in their respective boilers.

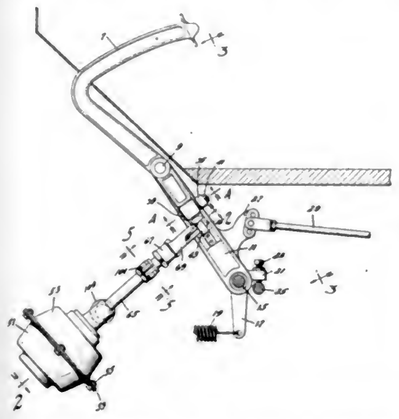
1,865,814. STARTING AND STOPPING DEVICE. BENJAMIN F. BERRY, St. Louis, Mo., assignor to Berry Machine Company, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 23, 1927. Serial No. 221,447. 13 Claims. (Cl. 192—129.)



1. In a machine provided with a manually operated starting member movable from an idle position to an active position to start the machine, a locking device whereby said starting member is locked in its idle position, said

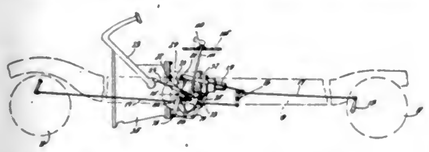
locking device including a support movable with said starting member to start the machine, a locking member slidable in said support and operatively secured to said starting member, said starting member being adapted to turn in said support to unlock said locking member, and a spring tending to retain said locking member in its operative position.

1,865,815. VACUUM BRAKE OPERATING MECHANISM. GEORGE P. BERRY, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 4, 1929. Serial No. 404,794. 2 Claims. (Cl. 188—152.)



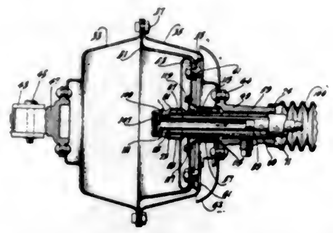
2. In a fluid pressure operated device, a manually operable lever, a power lever, means pivotally connecting said levers, a power device including a plunger therein, valve means comprising parts relative movement of which renders the power device operative to perform work, means rigidly connected to said plunger and connecting one of said parts to said manually operable lever, and other means operably connecting the other of said parts to the power lever whereby the power device reacts on the manually operable lever to balance the manually applied force and whereby the manually applied force together with the force derived from the power device may cooperate to rotate the power lever.

1,865,816. FRICTION SERVO BRAKE. GEORGE P. BERRY, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 21, 1930. Serial No. 476,753. 8 Claims. (Cl. 188—140.)



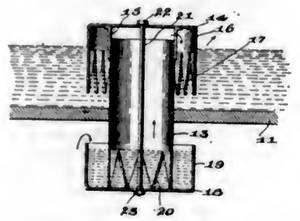
1. In a servo brake for vehicles, a manually operable member, a lever, means connecting said manually operable member to an intermediate point of said lever, means connected to said lever on one side of said intermediate point for actuating brakes, a frictionally energized servo motor, means connecting said servo motor to said lever on a second side of said intermediate point, and actuating means connecting said servo motor to said lever at a point adjacent said intermediate point.

1,865,817. VACUUM BRAKE. GEORGE P. BERRY, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 25, 1930. Serial No. 477,607. 5 Claims. (Cl. 121—41.)



1. In a servo brake, a power cylinder, a piston therein, a piston rod, said cylinder having an opening to the atmosphere on a first side of the piston, a sleeve slidable on the inner end of the piston rod, said sleeve carrying valve seats and one or more openings to the second side of the piston, means affording a passage circular in cross section within the piston rod, mechanism affording an annular passage surrounding the first passage also within said piston rod, said last named mechanism provided with an opening for affording communication with the second side of the piston and also including a valve member to engage one of said seats, and said means having a valve member to engage the other seat, said passages having other openings to communicate with fluids under unequal pressures.

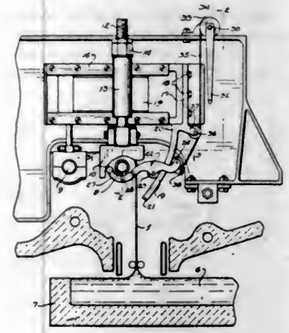
1,865,818. BUBBLE CAP FOR OIL DISTILLING APPARATUS. MARSDEN L. BERRYMAN, Joliet, Ill.; George Walters administrator of said Marsden L. Berryman, deceased. Filed Nov. 13, 1929, Serial No. 406,911. Renewed May 19, 1932. 2 Claims. (Cl. 261—114.)



1. An improved bubbler cap device comprising a tube, an upper flanged cap held in spaced relation above the upper end of the tube, a second cap inverted with respect to the upper cap and pressed against the lower serrated portion of the tube, an upstanding flange on the last mentioned cap, and means passing through both of said caps for suspending the lower cap from the upper cap.

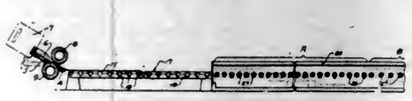
1,865,819. SHEET GLASS APPARATUS. LEWIS D. BLACKSHERE, Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 25, 1931. Serial No. 546,849. 11 Claims. (Cl. 49—17.)

11. In apparatus for producing sheet glass wherein the said sheet is initially drawn upwardly from a bath of molten glass and then deflected into the horizontal plane about a bending roll, means for normally supporting the bending roll, auxiliary means for temporarily supporting said roll in operative position during the repair of the first-mentioned supporting means, said auxiliary supporting means including a pair of substantially vertically disposed cam tracks, one at either side of the machine, a substantially horizontally disposed supporting arm movable along each cam track, rollers carried by each supporting arm for guiding the same in its movement along



its respective track, a plurality of additional rollers carried by each arm, and means for simultaneously moving said arms along said tracks to bring said last-mentioned rollers into supporting engagement with the bending roll.

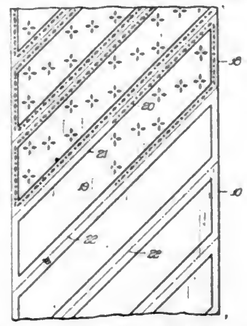
1,865,820. PROCESS AND APPARATUS FOR THE MANUFACTURE OF GLASS. JAMES C. BLAIR, Toledo Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 5, 1929. Serial No. 411,759. 2 Claims. (Cl. 198—127.)



1. The method of handling newly formed sheets of glass, comprising carrying the glass sheet forwardly and delivering it at a relatively high rate of speed onto a series of rotatable supporting rolls, positively driving alternate rolls at a speed substantially equal to the speed at which the sheet is delivered thereupon, simultaneously positively driving the remaining rolls at a relatively slower speed to cause the high speed rolls to push or shove the sheet forwardly over the slow speed rolls, and then lowering the high speed rolls away from and out of contact with the sheet when said sheet reaches a predetermined position, thereby causing the forward speed of travel of the sheet to be reduced to a speed equal to that of the slow speed rolls.

1,865,821. SCARF AND METHOD OF MAKING THE SAME. WILSON L. BLAYNEY, Chicago, Ill., assignor to Marshall Field & Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 3, 1931. Serial No. 560,981. 9 Claims. (Cl. 41—17.)

2. The herein described method of making scarfs, which comprises printing, upon a continuous piece of scarf material provided with longitudinal selvage edges, a longitudinal series of parallel ornamented unit parallelogram areas with each unit area extending diagonally across the piece of material substantially on the bias thereof, and also printing borders enclosing and defining the outline of the respective unit areas and extending from edge to edge of the material, with the adjacent longitudinal border portions of successive unit areas in mutual close relation, and severing the piece of material along the bias severing area located between successive borders to separate



the piece of material along the bias thereof into a plurality of bias unit scarfs having opposite uncut transverse end selvage edges and opposite longitudinal cut bias edges.

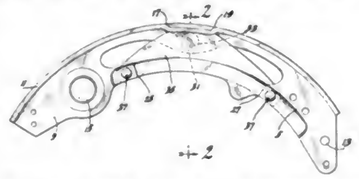
1,865,822. TANK. HARRY C. BOARDMAN, Chicago, Ill., assignor to Chicago Bridge & Iron Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 10, 1931. Serial No. 507,985. 3 Claims. (Cl. 220—1.)

1. A tank of the character described with a substantially cylindrical body portion having a curved sheet metal bottom with a central opening, said bottom being suspended partly by its outer edge and partly by its inner edge surrounding said opening, said bottom being so shaped that a diametrical vertical section defines two similar curves in each of which the successive radii from the lowest bottom point to the outer edge are successively longer and from the lowest point to the inner edge are successively shorter.

1,865,823. COMPOSITE BRAKE SHOE. ALFRED L. BOEGEHOLD, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 13, 1931. Serial No. 529,682. 9 Claims. (Cl. 188—251.)

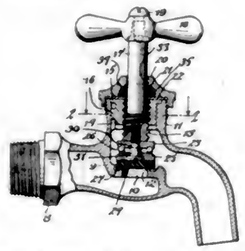
1. A brake shoe comprising a first portion of relatively lesser coefficient of expansion and including an intermediately interrupted lining-carrying flange and a stiffening web, said web having an intermediate recess, and a second portion of relatively greater coefficient of expansion, said second portion being terminally attached to the web of the first portion at the ends of the recess and having an intermediate part occupying the interruption of

the flange of the first part, whereby said second portion conducts heat from the surface of the shoe to the inner portion of its web, and whereby the expansion of said



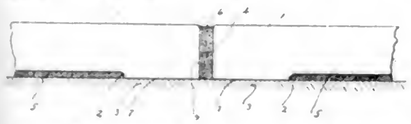
second portion between its point of attachment with the web flattens the arcuate lining-carrying surface of the shoe.

1,865,824. VALVE. WINSLOW P. BRADFORD, Buffalo, N. Y. Filed Dec. 30, 1930. Serial No. 505,557. 11 Claims. (Cl. 251—46.)



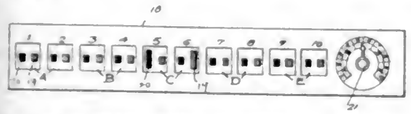
1. A faucet including a body having a valve seat, a valve stem having an integrally formed threaded end operatively connected with said body, a ball bearing race member abutting the end of said threaded end, a second ball bearing race member, balls interposed between said race members, a screw extending through said race members and having threaded engagement with said stem, said screw having an enlargement forming a shoulder which engages said first race member and holds it against said stem and a packing washer carried by said second bearing member and adapted to engage said seat.

1,865,825. TILE FLOOR. JULIEN A. BRIED, Oakland, Calif. Filed July 19, 1928. Serial No. 293,834. 15 Claims. (Cl. 94—15.)



1. A tile floor comprising rigid tile units supported on a base, flexible cementing material securing the tiles to said base, and a filling of relatively non-flexible cement in the seams of the tiles.

1,865,826. RADIO SIGNAL APPARATUS AND METHOD. THEOPHILE E. BROCKSTEDT, San Francisco, Calif. Filed Dec. 1, 1926. Serial No. 151,915. 18 Claims. (Cl. 250—2.)



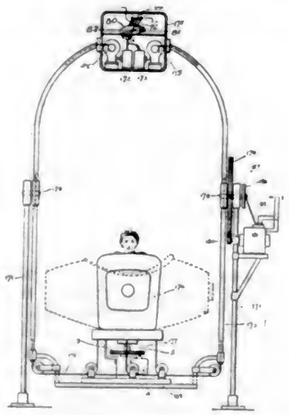
1. A radio signal device comprising a plurality of differently tuned reeds arranged in side by side relation, a panel constructed to expose the reeds to view in pairs, and a radio apparatus having tuning means allowing audio-frequency currents thereof to become active upon selected pairs of reeds.

1,865,827. FRACTURE APPLIANCE. EMORY A. BAYANT, Washington, D. C. Filed Nov. 14, 1929. Serial No. 407,088. 3 Claims. (Cl. 128—87.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



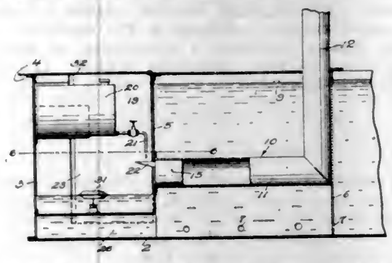
1. In a fracture appliance and bandage for fractures of the maxillary bones, adjustable sleeves, a chin cup, means adjustably securing said cup to the sleeves, a head piece extending over the head from points just below the ears, hinge means securing said sleeves to said head piece at a point corresponding with the junction of the condyles of mandible with the glenoid fossa, to allow horizontal motion to conform to the opening and closing of the mouth, a bandage around all of said parts to hold the same in position and an adjustable unit on said head piece adapted to position and to hold said bandage just below the lobes of the ears.

1,865,828. AERONAUTICAL INSTRUCTING DEVICE. JOHN P. BUCKLEY, Washington, D. C. Filed July 3, 1929. Serial No. 375,741. 20 Claims. (Cl. 35—12.)



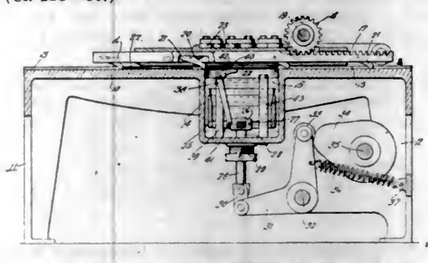
1. An instructing device comprising a body mounted for turning and universal tilting movement, an annular track beneath said body rigid therewith, a frame surrounded by said track and having supports resting upon the track, means connected with said frame in spaced relation circumferentially thereof to tilt the body and return the same to a horizontal position, means for selectively energizing said tilting means, and means to effect turning of the body in a horizontal path.

1,865,829. FARM STOCK DRINKING TANK. CHARLEY BURNETT, Washington C. H., Ohio. Filed May 29, 1930. Serial No. 457,444. 3 Claims. (Cl. 119—73.)



3. A farm stock drinking receptacle comprising an open topped water containing tank, a divisional wall arranged in said tank and dividing the latter into primary and secondary drinking compartments, a casing arranged in said primary compartment and disposed centrally and longitudinally thereof adjacent to said divisional wall, a submerged heater arranged in said casing comprising a flue secured at one end to said divisional wall and having its other end communicating with the atmosphere, an extension formed with said casing projecting into the secondary compartment, and means formed in connection with said extension for regulating the liquid level in said secondary compartment.

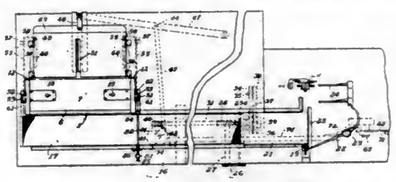
1,865,830. COMPOUND LINING MACHINE. WILLIAM F. BUTLER, Hillside, N. J., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 26, 1927. Serial No. 222,187. 9 Claims. (Cl. 113—80.)



1. In a gasket die lining machine, a holder for a can end having an inwardly curled flange, and means for applying a lining compound to the interior surface of the curled flange of a can end, said means comprising a die member of a width less than that of the flange, having a compound carrying end, and having sides reduced from the edge of the end for drawing compound by gravity away from the edges of the die, whereby the compound carried at the end is applied to the interior surface of a can end flange definite in amount and spreading on said surface sidewise from said die.

1,865,831. CIGAR HANDLING MACHINERY. EDWARD U. CAVE, Lancaster, Ohio, assignor of seventy-five per cent to James E. McKinnon, Columbus, Ohio. Filed Oct. 9, 1930. Serial No. 487,468. 14 Claims. (Cl. 131—39.)

1. In cigar handling machinery, the combination with the feeding means of an automatic machine including a movable belt, of a cigar containing holder arranged adjacent to and to one side of said belt, said holder comprising a plurality of cigar receiving trays disposed in superimposed order one above the other, each of the trays being opened at its front and rear, means controlled

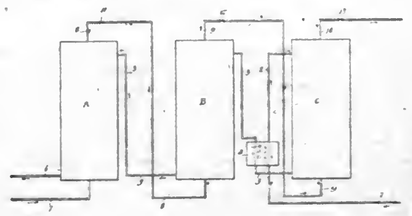


by the operation of the automatic machine for ejecting the cigars in layers upon said belt, and means controlled by the operation of said ejecting means for effecting the lowering of said holder so that each tray thereof may be placed in registration with said ejecting means.

1,865,832. PROCESS OF PRECIPITATING SODIUM BICARBONATE FROM SOLUTIONS IN FORM OF COARSE CRYSTALS. HEINZ H. CHESNY, Los Angeles, Calif., assignor to American Potash & Chemical Corporation, Trona, Calif., a Corporation of Delaware. Filed Jan. 21, 1929. Serial No. 333,982. 3 Claims. (Cl. 23—64.)

1. A process of obtaining coarse crystals of sodium bicarbonate which comprises, subjecting solutions of sodium carbonate to the action of carbon dioxide bearing gas, the solutions containing from 50 to 90 grams per liter of sodium chlorid and 150 to 220 grams per liter of sodium sulphate, the carbonation being carried out at a temperature between 46° and 76° C., and the carbon dioxide bearing gas being maintained under pressure.

1,865,833. PROCESS OF FORMING SODIUM BICARBONATE. HEINZ H. CHESNY, Los Angeles, Calif. Filed Jan. 21, 1929. Serial No. 333,986. 6 Claims. (Cl. 23—64.)

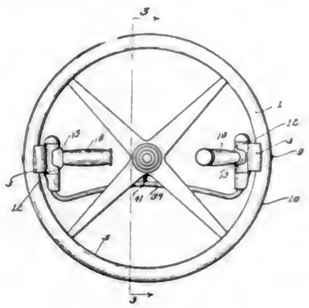


1. A process of precipitating sodium bicarbonate from solutions of sodium carbonate which comprises, contacting the solution with carbon dioxide at temperatures between 46 degrees and 76 degrees C. and under a partial pressure of carbon dioxide sufficient to substantially suppress formation of sesquicarbonates.

1,865,834. ELECTRICALLY HEATED HANDLE FOR VEHICLES AND OTHER PURPOSES. SAMUEL J. CLARIDGE, Portland, Oreg. Filed Apr. 19, 1930. Serial No. 445,802. 6 Claims. (Cl. 219—19.)

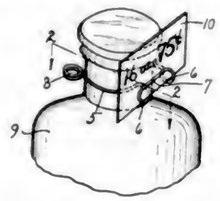
1. In a device of the class described, the combination of a steering wheel, wheel engaging elements adapted for attachment to the rim of the steering wheel, means for attaching the wheel engaging element to the steering wheel, a handle element rotatably disposed and mounted upon the wheel engaging element, a plug having a head disposed upon one end adjustably positioned within the

wheel engaging element, a hollow handle threadably attachable to the plug, a core disposed longitudinally of the handle, resistance wire disposed about the core, the said resistance wire being secured upon its one end to an electric conductor and a resilient contactor having a



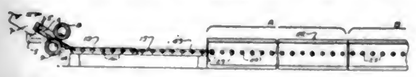
curved end adapted to ride upon and engage with the resistance wire and to conduct electricity therefrom, and means for predetermining the length of the resistance wire that will conduct electricity determinable upon the position of the handle element relative to the wheel engaging element.

1,865,835. DISPLAY CARD HOLDER. CLARENCE H. COLBY, Spokane, Wash. Filed Sept. 2, 1931. Serial No. 560,724. 1 Claim. (Cl. 40—11.)



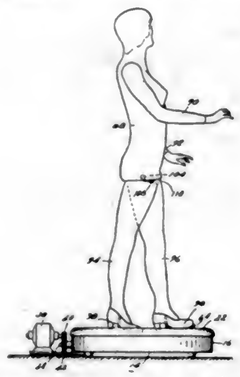
As an article of manufacture a display card holder having in combination a pair of corresponding arcuate spring arms disposed in spaced apart relation, a pair of corresponding forward loops formed by bending the ends of said arms downwardly and around, the plane of said loops disposed substantially at right angles to the plane of said arms, a transverse portion connecting said loops disposed forward of their downwardly bent portions, and a pair of corresponding spaced apart coils formed on the rear ends of said arms by bending said ends outwardly and around upon themselves.

1,865,836. PROCESS AND APPARATUS FOR PRODUCING SHEET GLASS. CARROLL CONE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 11, 1930. Serial No. 460,404. 2 Claims. (Cl. 49—87.)



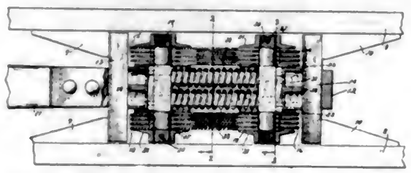
1. The process of producing sheet or plate glass, which consists in intermittently forming successive sheets of glass by a rolling operation, carrying each sheet forwardly upon a series of spaced movable supporting surfaces operating to advance the sheet at different speeds, in resting the major portion of the weight of the sheet upon certain of said surfaces to advance the sheet at one speed while retaining contact between the sheet and the remaining surfaces, and in then shifting the major portion of the weight of the sheet from the first mentioned surfaces to said last mentioned surfaces to vary the speed of travel thereof while maintaining all of said surfaces in contact with said sheet.

1,865,837. MECHANICAL FIGURE. JAMES G. CONNOR, Kansas City, Kans., assignor to The Animated Roboquin Display Company, a Corporation of Missouri. Filed Jan. 27, 1931. Serial No. 511,619. 11 Claims. (Cl. 223—18.8.)



3. A mechanical figure comprising a torso; legs pivotally mounted on said torso; means for oscillating said legs, and means actuated by said legs to maintain said body in an upright position as the legs are oscillated.

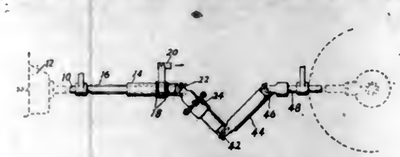
1,865,838. DRAFT GEAR. WALTER H. COTTON, Chicago, Ill., assignor to Union Draft Gear Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 15, 1924. Serial No. 755,844. 13 Claims. (Cl. 213—36.)



1. In combination, two groups of intercalated friction plates, means for creating transverse pressure on said plates during compression, said means including retracting bars extending through said plates, plate retaining members on the ends of said bars in frictional engagement with said group of plates, means for preventing the disengagement of said plates and bars, said last-named means at one side of said gear being connected to the corresponding means at the other side thereof, solely by said bars, and resilient means between said groups for returning the parts to normal position after compression.

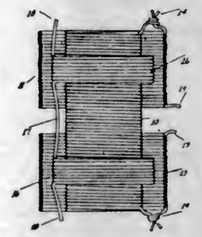
1,865,839. DEVICE FOR THE TRANSMISSION OF MECHANICAL POWER. ARTHUR B. CRAIG, Bethesda, Md. Filed Jan. 24, 1930, Serial No. 423,154. Renewed Mar. 30, 1932. 5 Claims. (Cl. 74—14.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A power transmission device comprising a pair of shafts, means for rotating the first of said shafts, means for transmitting driving torque from said first shaft to the second shaft, including two jointed shaft sections intermediate and pivotally connecting said pair of shafts,



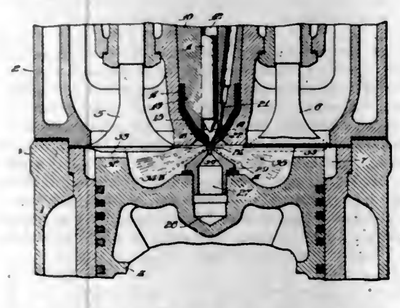
one of said sections being formed of independently revoluble terminal portions, and means for holding said sections at an angle of said pair of shafts.

1,865,840. RADIO TRANSFORMER. LAWRENCE FLOYD CROFT and GEORGE KEARNEY BARGER, Seattle, Wash. Filed Oct. 24, 1928, Serial No. 314,725. Renewed Nov. 19, 1931. 2 Claims. (Cl. 175—359.)



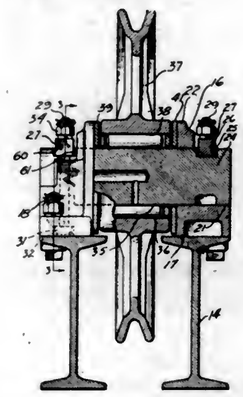
1. In a transformer, a primary coil and a secondary coil, said secondary coil comprising an inner coil located within the primary coil, and an outer sectional coil located upon the outside of the primary coil and connected with the inner coil.

1,865,841. OIL ENGINE. CLESSIE L. CUMMINS, Columbus, Ind., assignor to Oil Engine Development Company, Columbus, Ind., a Corporation of Indiana. Filed Mar. 6, 1930. Serial No. 433,603. 3 Claims. (Cl. 123—33.)



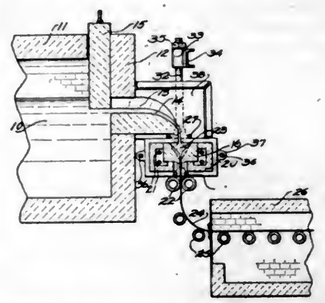
1. In an oil burning engine, the combination of a cylinder and a piston operable therein, of a fuel ejector having an end projecting into the combustion space and adapted to inject the fuel charge radiatingly into the combustion space in the form of a conical spray at about the end of the compression stroke of the piston, an auxiliary air chamber on the head of the piston, projecting into the combustion space and having an opening in close proximity to and in axial alignment with the projecting end of the injector at the end of the compression stroke of the piston, the direction of the conical spray and the shape and the projecting end of the air chamber being so related that the spray does not contact with the wall of said chamber.

1,865,842. SHEAVE ASSEMBLY. WILLIAM D. DAVIDSON, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Nov. 12, 1928. Serial No. 318,681. 5 Claims. (Cl. 308—18.)



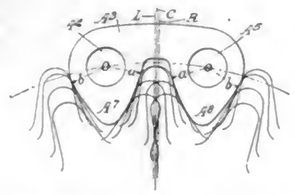
1. In combination: a shaft; a box adapted to receive and support a portion of said shaft; a clamp bar adapted to extend through a recess formed in said shaft, said recess having a bottom wall and a side wall engageable by said clamp bar; and separate bolt means for securing said clamp bar to said box and for causing said clamp bar to grip said bottom wall of said recess.

1,865,843. PROCESS AND APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 29, 1927. Serial No. 229,554. 9 Claims. (Cl. 49—3.)



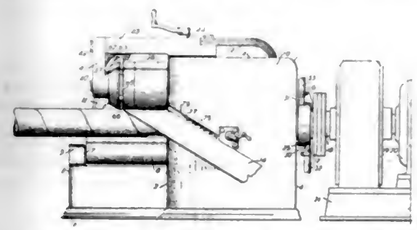
1. In apparatus for producing sheet glass, a receptacle containing a mass of molten glass and having an overflow spout by which a relatively thick, narrow stream is caused to flow therefrom, a slotted member arranged beneath said flow spout for receiving the stream of molten glass therefrom, the slot of said member being narrower at its center than at its ends, with the upper surfaces of the walls of said slot being arched, a pair of sheet forming rolls arranged beneath said slotted member for receiving the molten glass therefrom and reducing it to a sheet of predetermined thickness, a heating chamber surrounding said slotted member, and means for mounting said slotted member by which it may be tilted longitudinally.

1,865,844. FOUR POINT CONTACT CHAIN. RAYMOND W. DULL, Chicago, Ill., and ERIC GEERTZ, Indianapolis, Ind., assignors to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 7, 1931. Serial No. 520,977. 8 Claims. (Cl. 74—32.)



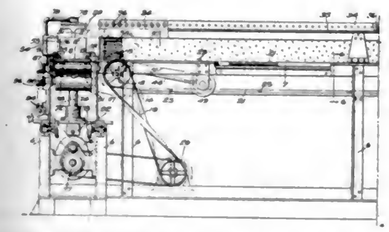
1. The process of generating a toothed link for silent chains and the like, which consists in generating the working faces of the tooth at one end of the link about link center lines located respectively on opposed sides of the radial center line of the straddled generating sprocket tooth.

1,865,845. PIPE MAKING MACHINE. REX H. DYER, Independence, Mo. Filed Dec. 10, 1930. Serial No. 501,294. 12 Claims. (Cl. 219—6.)



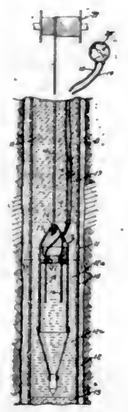
1. In a machine of the character described for progressively welding adjacent edges of metal for forming a joint including spaced electrodes arranged to pass a current through the edges to be welded to heat the metal, and percussion means arranged to strike the metal directly in the path of the current to force any irregular surfaces into complete uniform electrical contact simultaneously with the heating to effect a weld of the joint whereby stitch weld is eleminated and a joint of substantially uniform texture is effected.

1,865,846. FRUIT PRESSING MACHINE. FREDERICK M. EATON, Palo Alto, Calif., assignor to Rosenberg Bros. & Co., San Francisco, Calif., a Corporation of California. Filed July 25, 1928. Serial No. 295,204. 21 Claims. (Cl. 25—99.)



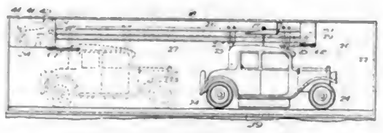
1. In a fruit pressing machine, a platform having an aperture therein, a stop on said platform adjacent said aperture, a conveyor for positioning a container proximate said aperture, and means for causing said container to register with said aperture by abutting said stop.

1,865,847. METHOD OF LOCATING THE POINT OF ENTRY OF WATER INTO OIL WELLS. GEORGE H. ENNIS, Long Beach, Calif., assignor of one-half to Robert V. Funk, Long Beach, Calif. Filed June 3, 1929. Serial No. 367,913. 4 Claims. (Cl. 175—183.)



1. In a process of the character described, the steps which comprise traversing an isolated mass of liquid electrolyte through the bore of a well, continuously and uniformly releasing said electrolyte into the fluid of the well during said traverse, diminishing the hydrostatic head within the well to allow influx of natural water and then electro-chemically determining the location of said influx.

1,865,848. ADVERTISING DISPLAY DEVICE. REGINALD D. FRENCH, Glen Ellyn, Ill., assignor to General Outdoor Advertising Co., Inc., Chicago, Ill., a Corporation of New Jersey. Filed June 30, 1930. Serial No. 464,723. 8 Claims. (Cl. 40—53.)

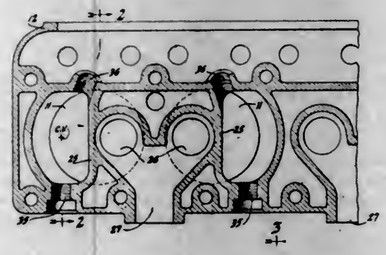


1. An advertising display device comprising a sign board provided with a display opening at one side thereof, a plurality of tracks located back of and parallel to said sign board, a plurality of display products supported on said tracks and adapted for movement thereon to and from a position back of said display opening in said sign board, a plurality of endless travelling belts, one for each display product, operatively connected thereto, a plurality of driving members, one for each of said endless belts, and means for operating said driving members in predetermined order to present said display products successively in display position back of said opening.

1,865,849. COMBUSTION CHAMBER FOR INTERNAL COMBUSTION ENGINES. ARTHUR W. GARDINER, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 3, 1930. Serial No. 432,795. 4 Claims. (Cl. 123—173.)

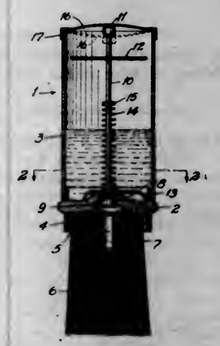
1. In an internal combustion engine having a cylinder and reciprocating piston, a cylinder head comprising a combustion chamber having a major portion of large ratio of volume to wall surface and a minor portion of small

ratio of volume to wall surface, with respect one to the other, a valve port in the roof of the minor portion and a valve port in the roof of the major portion, said valve



ports being disposed side by side in a plane substantially parallel with the cylinder axes and longitudinal of the engine.

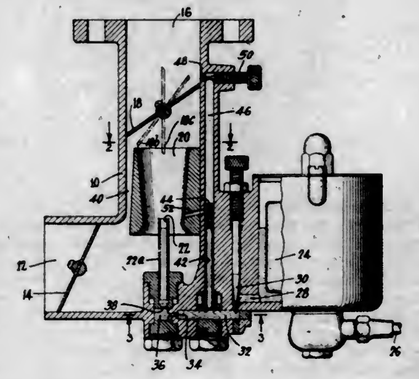
1,865,850. FOUNTAIN BRUSH. EDWARD S. GARVEY, Clayton, Mo. Filed Apr. 1, 1931. Serial No. 526,818. 2 Claims. (Cl. 15—138.)



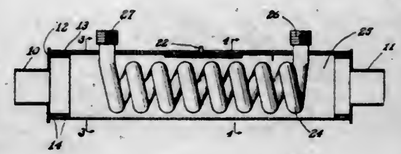
1. In a fountain brush, a reservoir having a bottom provided with a discharge port having a curved valve seat, a curved valve adapted to contact with said curved seat to close said port, a brush below said port, a diaphragm made of spring material seated on the top of said reservoir, a ring surrounding said reservoir and having an inturned flange seated on the diaphragm, said ring being sealed to said reservoir and diaphragm to prevent leakage, an operating device extending from said valve through said discharge port to a position adjacent the bottom of said diaphragm, said operating device being provided with an upper and lower spring seat, said lower spring seat being separated from said discharge port to provide a space for the delivery of fluid to said port, and a spring located between and seated on said spring seats whereby upward pressure is transmitted to said operating device and valve so as to yieldingly retain them in their elevated positions, said valve being movable downwardly in response to a downward movement of said diaphragm to permit a forcible discharge of liquid from said reservoir to said brush.

1,865,851. LIQUID FLOW-CONTROLLING DEVICE. EDWARD F. GRIGGS, Binghamton, N. Y. Filed Aug. 9, 1929. Serial No. 384,774. 6 Claims. (Cl. 261—41.)

1. In a carburetor provided with a nozzle for supplying fuel and means providing a constant head and supply of fuel for said nozzle and including in combination therewith a liquid flow controlling device for regulating the flow of the liquid through the nozzle under variable flow inducing heads on said nozzle, said flow controlling means comprising a supply passage disposed intermediate the nozzle and the constant head and fuel supply means and said supply passage being provided with walls and entrance and outlet openings disposed and related to one another and to the passage walls so as to set up a whirling movement of fuel in the passage intermediate the entrance and outlet openings and produce a centrifugal reaction which opposes fuel flow through the passage to modify the proportionate increase in rate of flow of the liquid through the nozzle.



1,865,852. FLUE WATER HEATER. HARRY GOLDHAGEN, New York, N. Y., assignor of one-half to Eli Goldhagen, New York, N. Y. Filed May 29, 1930. Serial No. 456,886. 1 Claim. (Cl. 122—20.)

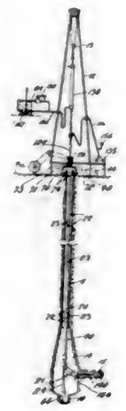


A device of the class described comprising a pair of complementary semi-cylindrical aprons forming a substantially cylindrical chamber having a pipe coil therein, said aprons being hinged to each other on one side, and means for locking the opposite sides of said aprons to each other comprising a raised tongue on one of said aprons forming a shoulder in the edge of said last-named apron, the adjacent edge of the other apron registering in said shoulder, said tongue and said adjacent edge having slots therein, a plate slidably mounted on said adjacent edge, and a pin rigid with said plate passing through said slots.

1,865,853. APPARATUS FOR DRILLING. BERNARD GRANVILLE, New York, N. Y., assignor to Granville Holding Corporation, a Corporation of New York. Filed July 21, 1923, Serial No. 652,905. Renewed Sept. 28, 1931. 28 Claims. (Cl. 255—19.)

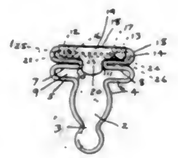
1. Lateral drilling apparatus, comprising the combination with a rotary drill and flexible means for rotating

said drill and forcing it forward, of means for placing said drill in a cavity in a well with its axis parallel to the axis of the well, and means operable from the top



of the well to turn said drill in said cavity so as to bring its axis at a predetermined angle to the axis of the well.

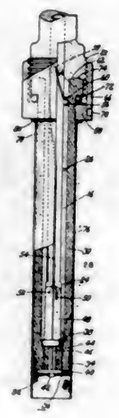
1,865,854. LOOP BUCKLE. ROBERT J. HODGE, West Haven, Conn., assignor to The American Buckle Company, West Haven, Conn., a Corporation of Connecticut. Filed July 26, 1930. Serial No. 470,991. 4 Claims. (Cl. 24—73.)



4. A loop buckle comprising a wire structure providing in one plane a clamping frame, to receive a strap threaded therein, and a button loop, the frame and the loop each having axially associated loops, the upper loop of the clamping frame being provided with strap-engaging teeth positioned therein; a clamping member pivotally mounted upon the clamping frame and having a frontal display portion and rear toothed portions movable from one side of said plane into and through the upper loop; and a tab rigidly carried by the frontal display portion and engageable with the threaded strap to limit the pivotal movement of the clamping member.

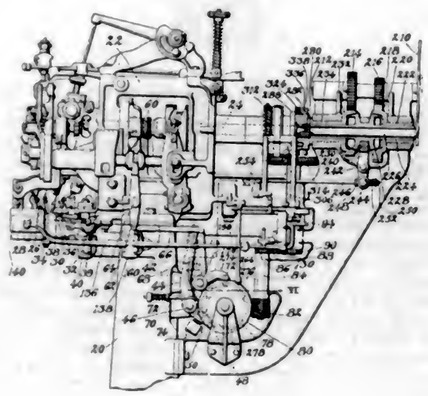
1,865,855. BUFFING MACHINE. EDWARD F. HODGKINS, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 20, 1928. Serial No. 320,585. 23 Claims. (Cl. 51—194.)

1. In a buffing machine, a rotary spindle having at its end a recess of non-circular cross-section, an elongated resilient casing carried upon said spindle, and a rigid member bonded to said casing and having a portion of a cross-section complementary to said non-circular cross-



section of said recess and adapted to enter said recess to prevent twisting of said casing with respect to said spindle.

1,865,856. CONTROLLING MECHANISM FOR SHOE MACHINES. CHARLES E. HOOD, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 14, 1929. Serial No. 332,469. 33 Claims. (Cl. 12—4.)



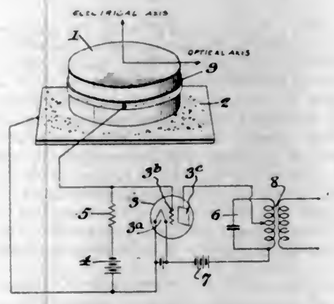
1. In a machine for operating upon shoes, the combination of a clutch, stopping mechanism, automatic mechanism including two cams for rendering said clutch and stopping mechanism alternately operative and inoperative respectively to drive and to stop the machine, and means movable by a shoe as it is presented to the machine to adjust the speed of one cam in accordance with the size of the shoe.

1,865,857. SUCTION CLEANER AGITATOR. WILLIS F. HUDSON, Riverside, Ill., assignor to The Hoover Company, a Corporation of Ohio. Filed Nov. 6, 1929. Serial No. 405,091. 8 Claims. (Cl. 15—141.)



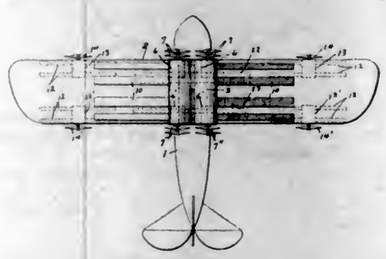
1. A suction cleaner agitator comprising spaced end members, means to rotatably support said end members and means maintaining said end members in fixed relation comprising a smooth beater element.

1,865,858. PIEZO ELECTRIC CRYSTAL SYSTEM. AUGUST HUND, Bethesda, Md. Filed Apr. 29, 1929. Serial No. 359,113. 9 Claims. (Cl. 171—327.)



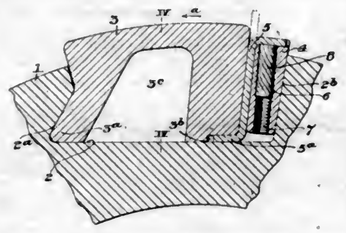
1. Means for establishing electrical connection with a piezo electric crystal element having the electrical axis coincident with the geometrical axis thereof with the optical axis extending normal thereto comprising a plate contacting with one face of said piezo electric crystal element and a member encircling the periphery of said piezo electric crystal element in a plane parallel to the optical axis of said crystal element.

1,865,859. AIRPLANE. REED E. JACOBS, Alameda, Calif., assignor of one-third to Granville I. Stewart, San Francisco, Calif. Filed Aug. 29, 1930. Serial No. 478,632. 19 Claims. (Cl. 244—18.)



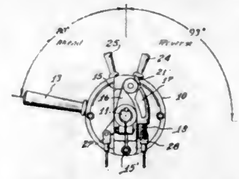
1. In an air vehicle a fuselage body, a relatively large tube arranged parallel with the body, means securing the tube and body together, and a plurality of driving motors secured to said tube, each motor provided with a propeller on its drive shaft with the propellers entirely outside the tube and arranged to overlap an open end thereof.

1,865,860. RENEWABLE TEETH OR SEGMENTS FOR CRUSHER ROLLS. EDWIN H. KEIPER, Philadelphia, Pa., assignor to Pennsylvania Crusher Company, New York, N. Y., a Corporation of New York. Filed May 31, 1930. Serial No. 458,335. 7 Claims. (Cl. 83—12.)



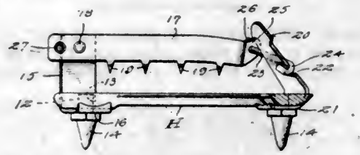
1. In crushing machinery, the combination of a supporting member having a recess with an undercut wall, an insertable impact member disposed in said recess and having a portion underlying said undercut wall, a wedge applied to said recess at the heel of the insertable member for holding the latter in said recess, and a key disposed between the insertable member and wedge and having its lower end retained by the insertable member and its opposite end bent over the top of the wedge to hold the latter in place; said insertable impact member being recessed for the reception of the inner end of the key.

1,865,861. CONTROL FOR REVERSIBLE ENGINES. JAMES NORMAN KIMBALL, Detroit, Mich. Filed Mar. 18, 1931. Serial No. 523,639. 5 Claims. (Cl. 74—20.)



1. A control device comprising a housing, a shaft journaled therein, a control lever and an operating handle secured to said shaft, a drag link member connected to said lever, said link member, in approaching the forward drive adjustment, being adapted to abut another of the aforementioned parts before reaching a dead center position in the system including said lever, shaft and drag link member.

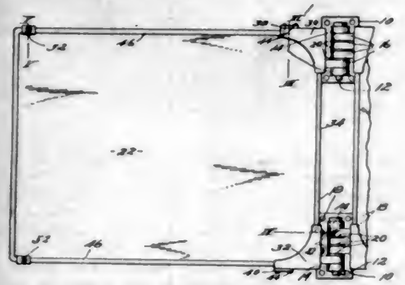
1,865,862. NEVERSLIP HORSESHOE HOLDER. HARRY F. KNEPLEY, Napoleon, Ohio. Filed Jan. 23, 1932. Serial No. 588,420. 2 Claims. (Cl. 168—22.)



2. A horseshoe as set forth comprising a U-shaped shoe, calks carried by the shoe, a bracket secured to each of the parallel legs of the shoe adjacent the rear end thereof, a securing bar having a plurality of apertures adjacent the rear end thereof, a pivot engaging the bracket in a selected aperture in the bar, tangs formed with the bar and inclined inwardly to engage the outer surface of a hoof above the bottom thereof, an outstanding lug formed with the free end of the bar, an upstanding

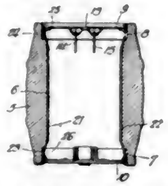
member secured to the forward end of the shoe, said upstanding member having a pair of notches, and a bolt carried by the lug, said bolt having a hook-shaped end portion engaging a notch in the upstanding member whereby to releasably secure the bar to the upstanding member.

1,865,863. BLACKBOARD. CHARLES H. KRAFT, Kansas City, Mo. Filed Dec. 19, 1930. Serial No. 503,406. 8 Claims. (Cl. 35—15.)



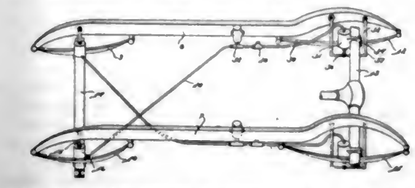
1. A blackboard comprising a vertically disposed panel, a frame adapted to engage one end of said panel, means carried adjacent the top of said frame for securing the panel to said frame, and means, carried by said frame, adjustable to move the lower portion of the panel toward or from said frame.

1,865,864. COIN BANK. ABRAHAM J. KUSEL, Chicago, Ill., assignor to Bankers Thrift Corporation, Chicago, Ill., a Corporation of Illinois. Filed Jan. 11, 1929. Serial No. 331,756. 7 Claims. (Cl. 232—4.)



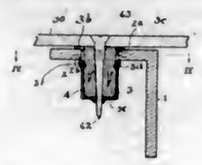
1. An article of the character described comprising a tubular body portion of wood, a plurality of end closures having flange portions fitting within the ends of said body portion and means for holding said end closures in position comprising a plurality of metallic members connecting said closures within said body portion, said members comprising thin strips lying against the inner wall of said body portion and having their ends secured to said flange portions.

1,865,865. HYDRAULIC SHOCK ABSORBER. SINAI LAFLEUR, Detroit, Mich. Filed Nov. 19, 1928. Serial No. 320,265. 3 Claims. (Cl. 280—104.)



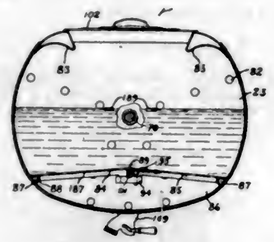
1. A shock absorber of the class described adapted for use with a vehicle having a chassis and axles extending transversely thereof at opposite ends of the chassis comprising: a plurality of cylinders, each mounted on one of said axles on the end thereof; a piston in each of said cylinders; a piston rod connected to each of said pistons; means for connecting said piston rod to said chassis, the piston rods at diagonally opposite sides of said chassis projecting oppositely outwardly from said cylinders; and means for communicating the upper side of one of said cylinders with the lower side of the lower diagonally opposite cylinder.

1,865,866. FASTENING DEVICE. LEFFMAN H. LEE, Bellevue, Pa. Filed Aug. 26, 1930. Serial No. 477,810. 5 Claims. (Cl. 189—35.)



1. In a structural member of metal, the combination of an orifice in said metal chamber, a teat on the wall of said orifice, a fastening device comprising a thin-walled metal member which is secured in said orifice, the wall of which member, when it is so secured, conforms substantially in cross section with said orifice and teat, a plug inserted in said metal member, and a nail driven into said plug for the securing of material to said steel frame member, the insertion of said plug and the driving of said nail being adapted to effect a lateral expansion of said thin-walled metal member, whereby the wall of said member is secured in tight engagement with said orifice and its teat, and the plug is secured in said last-mentioned member.

1,865,867. DOMESTIC APPLIANCE. RALPH L. LEE, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Original application filed Mar. 31, 1923, Serial No. 629,201. Divided and this application filed Aug. 31, 1927, Serial No. 216,756. Renewed Nov. 19, 1931. 7 Claims. (Cl. 68—21.)



1. Washing apparatus comprising, in combination, a tub, and means for supporting the clothes including a plurality of removable sections supported at the sides of the tub and meeting at the central portion of the tub, and means for locking one of said sections in position, said section comprising means for locking another of said sections in position.

1,865,868. PARTITION. SAMUEL LOWY, New York, N. Y. Filed May 27, 1926. Serial No. 111,958. 14 Claims. (Cl. 20—4.)

1. A room partition comprising a sectional base, vertical posts resting on said base, a sectional capping on said posts, extension posts on said capping, cross rails between said extension posts at the upper end thereof, panels between said base, posts and capping, panels between said cross rails, extension posts and capping, a molding connecting said cross rails to another and to said

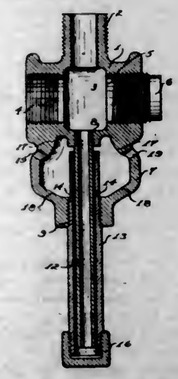


extension posts, and means for holding said partition in place by causing said extension posts to exert pressure on said capping and on the ceiling of said room.

1,865,869. PROCESS FOR THE MAGNETIC TREATMENT OF IRON ORES. WALTER LUYKEN, Dusseldorf, Germany, assignor to Kaiser Wilhelm Institut für Eisenforschung, Dusseldorf, Germany. Filed Oct. 8, 1931, Serial No. 567,751, and in Germany Aug. 10, 1928. 1 Claim. (Cl. 75—17.)

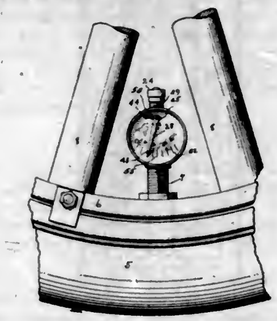
The process of treating red and brown iron ores by the magnetic method for the purpose set forth, which consists in subjecting the ore to a reducing treatment in the presence of sufficient carbonaceous material and for a sufficient period to transform the iron compounds of the ore into ferro-magnetic Fe_3O_4, then subjecting the ore to reoxidation in the presence of a gaseous oxidizing agent at temperatures maintained substantially within the range of from 220° to 500° C. for a sufficient period of time to convert the reduced ore of lower oxidation stage to ferro-magnetic Fe_3O_3, and then subjecting the treated ore to magnetic separation.

1,865,870. LIQUID SEAL DEVICE FOR REGULATORS. ALLEN D. MACLEAN and CHARLES B. JOHNSON, Pittsburgh, Pa., assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 2, 1929. Serial No. 411,097. 8 Claims. (Cl. 137—53.)



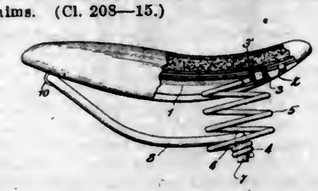
1. A liquid seal device for pressure regulators comprising an annular chamber, a passageway through the upper wall of said chamber, a depending pipe secured in said passageway and passing through said chamber, a second pipe surrounding the first pipe and concentrically spaced therefrom and terminating within said chamber at one end and extended beyond said first pipe at the other end, said second pipe being detachably secured to the lower wall of said annular chamber by screw threads, means closing the lower end of said second pipe, and a threaded cap for engagement over the end of said pipe to form a closed shipping cartridge for sealing liquid.

1,865,871. PRESSURE INDICATOR. JOHN MARCHESE, Portland, and MAURICE BYRON D'ORSAY, Aloha, Oreg., assignors, by mesne assignments, to Tire Savers Corporation, Ltd., San Jose, Calif., a Corporation of Nevada. Filed Aug. 25, 1930. Serial No. 477,686. 2 Claims. (Cl. 152—11.5.)



2. In an air pressure indicator for pneumatic tires which tires have a valve stem including a body with an end of reduced diameter; a case having a transparent front and a chamber enclosing Bourdon tube gauge elements with a dial and a pointer visible through said transparent front, said case including a back wall, an extension projecting rearwardly from said back wall, a swivel-nut coupling member formed to fit on the reduced-diameter end of the valve stem, means to mount said coupling member on said extension with the axis of the coupling member parallel to the plane of said back wall, said means-to-mount being so located with respect to said back wall as to hold said coupling member in proximity to said back wall and within the rearwardly extended compass of said case whereby said case will in part overlap the body of said valve stem and lie in proximity thereto, said extension and said mounting means having an air passage from the coupling member to and cooperatively communicating with the gauge elements in said case, means for holding the air valve of the valve stem open when the indicator is attached to the valve stem, and means including a one-way-valved passage communicating with said air passage of said extension through which the tire may be inflated.

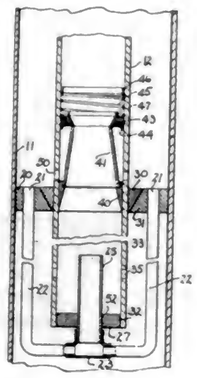
1,865,872. SADDLE. FREDERICK MESINGER, Mount Vernon, N. Y. Filed Oct. 11, 1930. Serial No. 487,955. 5 Claims. (Cl. 208—15.)



1. In a cycle saddle, a seat having a bottom plate, a reach member pivotally connected to the forward end of the bottom plate and having spaced parts terminating

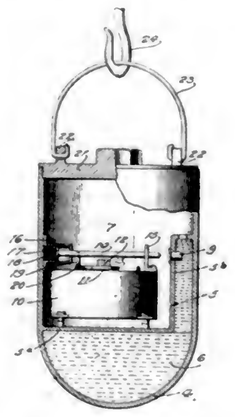
at their rear ends in lateral extensions, spaced cushioning springs formed on opposite ends of a single length of resilient wire, each of said springs being secured at its lower end to one of said laterally extending rear ends of the reach rod, and means for securing the intermediate part of the wire connecting said springs to the bottom plate of the saddle.

1,865,873. PUMP. FRANK J. MILLER, Hollywood, Calif. Filed Sept. 20, 1929. Serial No. 393,898. 5 Claims. (Cl. 103—233.)



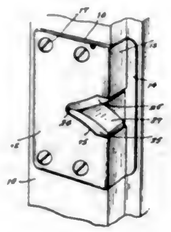
1. In a pump, a pipe, a tubing therein, a ring on said pipe adjacent the lower end, means to make a seal between said ring and said tubing, a nozzle at the lower end of said tubing and means connecting the space above said ring with said nozzle whereby fluid may be projected up through said nozzle, a Venturi passage above said nozzle, and means to flow fluid upwardly outside said Venturi passage within the said tubing.

1,865,874. TORPEDO FOR SHOOTING OIL WELLS. MARK D. MITCHELL, Independence, Kans. Filed July 29, 1922. Serial No. 578,387. 1 Claim. (Cl. 102—4.)



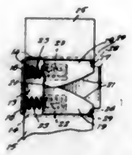
In a device of the class described, a waterproof shell capable of withstanding relatively high pressure, a diaphragm in the shell comprising a horizontal and a vertical portion and dividing the shell into a clock chamber and an explosive chamber, a detonator mounted in the vertical portion of the diaphragm, a clock mounted on the horizontal portion of the diaphragm, a reciprocable firing bolt above the clock and in line with the detonator, a spring for forcing the bolt toward the detonator and a cam operated by the clock and engaging the bolt for retracting and releasing the latter.

1,865,875. ANTIRATTLE DOVETAIL FOR DOORS. RAYMOND G. MOORE and ARTHUR CLAUD-MANTLE, Bridgeport, Conn., assignors to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed July 30, 1930. Serial No. 471,695. 4 Claims. (Cl. 16—85.)



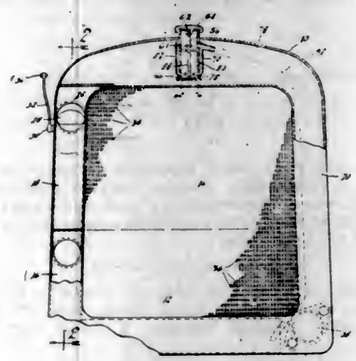
1. In an anti-rattle device for doors, a socket member, and a wedge member adapted to be engaged therewith, said socket member comprising a casing having upper and lower confining walls, opposed wedge engaging elements confined between said walls and adapted to have sliding movement parallel to said walls, one of said elements slidably supporting the other, and said elements adapted to be moved laterally through engagement of said wedge member therebetween.

1,865,876. ANTIRATTLE DOVETAIL FOR DOORS. RAYMOND G. MOORE and ARTHUR CLAUD-MANTLE, Bridgeport, Conn., assignors to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed July 30, 1930. Serial No. 471,696. 3 Claims. (Cl. 16—85.)



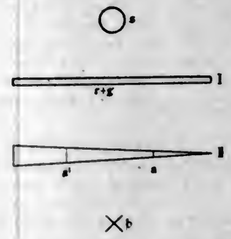
1. In an anti-rattle device for doors, the combination with a door frame metal post forming an angular corner and having a wedge receiving opening, of a casing adapted to be engaged at the inner side of said post and having a projecting lip portion adapted to engage in said opening to accurately position said casing with respect thereto, wedge engaging means disposed in said casing, and a wedge member adapted to be engaged therewith through said opening and to be guided by said projecting lip.

1,865,877. COOLING DEVICE. HARRY MOUGEY and CHARLES R. SHORT, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 22, 1927. Serial No. 221,227. 3 Claims. (Cl. 257—125.)



1. A cooling device for engines comprising in combination, a plurality of heat radiating units arranged one above another, an inlet header for each of said units, a single outlet header communiting with all of said units, and means adapted to cause the cooling fluid to flow through one or more of said units.

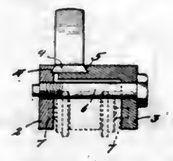
1,865,878. METHOD AND MEANS FOR MEASURING THE TEMPERATURES OF INCANDESCENT BODIES. GERHARD NAEBER, Dusseldorf, Germany, assignor to Kaiser-Wilhelm Institute für Eisenforschung, Registered Association, Dusseldorf, Germany. Filed Aug. 17, 1929, Serial No. 386,700, and in Germany Oct. 31, 1928. 3 Claims. (Cl. 88—14.)



1. Means for measuring the temperatures of radiant bodies by determination of the relationship between two colour rays of appreciably differing wave lengths emitted by the body, comprising a plane filter transparent to the rays of certain colours including the said two colour rays and upon which the rays emitted by the radiant body are directed, and a second filter whose thickness varies from point to point and which is set across the path of the rays transmitted by the plane filter, the second filter passing one of the two colour rays unabsorbed but absorbing the other of the said colour rays to a differing degree at different points of the surface whereby the two colour rays are rendered as a mixed neutral colour at a point upon the second filter which varies according to the temperature of the radiant body.

1,865,879. FEED DOG. WALTER F. NEWHOUSE, Benton Harbor, Mich. Filed Sept. 15, 1930. Serial No. 481,915. 7 Claims. (Cl. 198—176.)

1. A sprocket chain endless feed belt having pivotally connected links, a mounting provided with screw means for removably attaching it in straddling position to the outer ends of the pivots of said feed belt, outside the links of said belt, whereby said mounting is carried by the ends of said pivots, thereby obviating pressure against the links and insuring free articulation thereof on said pivots, and an engaging element on said mounting for engaging and feeding materials, said mounting having

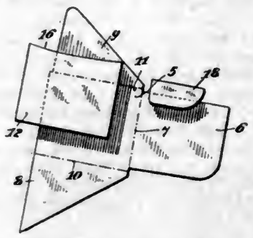


clamping means subject to said screw means for holding said engaging element in a plurality of adjusted positions thereon, longitudinally of said belt, whereby said element is slidably adjustable while maintaining the position of said mounting on said feed belt, the links of said belt being embraced between the sides of said mounting, and the belt pivots extending beyond the sides of the belt and into said mounting sides.

1,865,880. PROCESS FOR THE PRODUCTION OF NORMAL LEVOROTATORY 1-(PARA-AMINOPHENYL)-2-METHYLAMINO-PROPANOL-1. MAX OBERLIN, Darmstadt, Germany. Filed July 19, 1930, Serial No. 469,266, and in Germany Mar. 11, 1930. 2 Claims. (Cl. 260—128.5.)

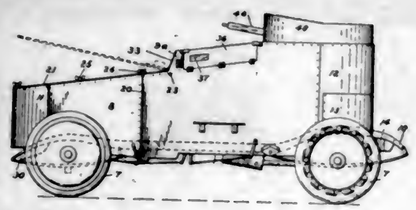
1. Process for the production of normal levorotatory 1-(para-aminophenyl)-2-methylamino-propanol-1 consisting in the treatment of a salt of normal levorotatory 1-phenyl-2-methylamino-propanol-1 with nitric acid of sp. g. 1,4 in mixture with sulfuric acid (sp. g. 1,8); care being taken that the temperature does not exceed 30° C; separating the so formed raw product and reducing it by one of the wellknown methods of reduction, finally transforming the salt into the free base.

1,865,881. COMBINED BILL FOLD AND COIN PURSE. NATHAN OTTINGER, New York, N. Y. Filed May 26, 1931. Serial No. 540,101. 4 Claims. (Cl. 150—35.)



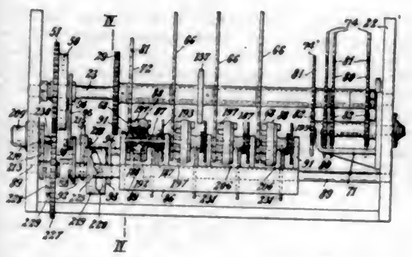
1. An article of the kind described comprising a sheet of flexible material having a rectangular section constituting one side wall of a pocket and an integral part extending from one edge of said rectangular section folded into superimposed relation therewith, said part having an edge thereof secured along another edge of said rectangular section and provided with an obliquely extending unattached edge at the open side of a pocket, a foldable extension integrally connected with another edge of said rectangular section and having a resiliently yieldable flap attached along one edge thereof for engagement with bills projecting from said pocket to retain the same upon said extension, and said extension with the bills thereon being foldable relative to said rectangular section and insertable into said pocket beneath said obliquely inclined edge of the pocket wall.

1,865,882. ARMORED VEHICLE. BRUCE PALMER, U. S. Army, Fort Riley, Kans. Filed Aug. 19, 1931. Serial No. 558,047. 9 Claims. (Cl. 89—40.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757)



9. In a vehicle having a side armored engine and driver's compartment, a cover for the engine compartment extending partially over the driver's compartment and hingedly mounted at its rear end, and a vision shield carried on the rear end of the cover.

1,865,883. CASH REGISTER. BRUNO BORNKESSEL, ERNST BREITLING, KARL AUGUST LEHMANN, and ALEXANDER VARREN, Essen, Germany, assignors to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed July 13, 1926, Serial No. 122,215, and in Germany May 22, 1925. 20 Claims. (Cl. 235—8.)



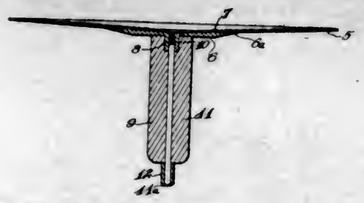
1. In a cash register, a rockable hand lever, resilient means urging said hand lever into a position of rest, a pivoted lever having a locking arc, a pin on said hand lever adapted to cooperate with said locking arc, impositive means urging said locking arc out of the path of said pin, and means for striking said pivoted lever to move said arc into the path of said pin upon movement of said hand lever into position of rest, said pivoted lever being adapted to remain by its inertia with its arc in the path of said pin until the rebounding tendency of said hand lever has come to an end, and then move under the influence of said impositive means out of the path of said pin.

1,865,884. STOPPER AND PROCESS OF MAKING THE SAME. JEAN BROADHURST, New York, N. Y., assignor of one-half to Stanley J. Stanley, New York, N. Y. Filed July 2, 1930. Serial No. 465,442. 5 Claims. (Cl. 215—47.)



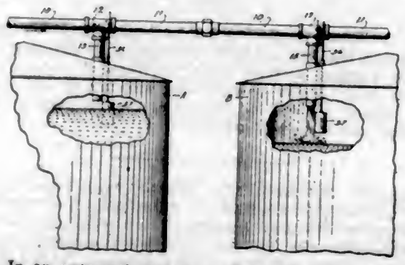
1. A stopper comprising a body of porous material of substantially true cylindrical shape, one end of said body being tapered and stitches in said end to hold the same in tapered position.

1,865,885. MORTAR HAWK. JACOB BYERS, Chicago, Ill. Filed Apr. 2, 1928. Serial No. 266,759. 4 Claims. (Cl. 72—135.)



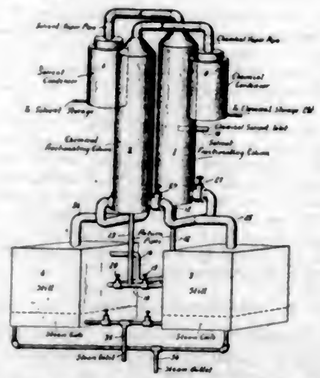
2. A plasterer's hawk comprising a receptacle plate having a substantially uniform concaved receiving face for the purpose of stiffening the hawk, and a handle projecting from its other face and substantially centered with respect to the concavity.

1,865,886. AUTOMATIC VALVE. JAMES P. CLINGINGSMITH and ARTHUR J. SMITH, Nocona, Tex. Filed July 31, 1929. Serial No. 382,486. 3 Claims. (Cl. 137—68.)



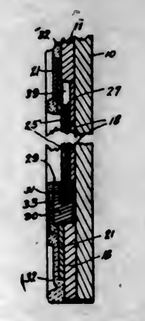
1. In an automatic valve, a valve case, a valve hinged in the case and normally open, a spring motor connected with the hinge of the valve and acting to close the same, a lever connected with the hinge of the valve and carrying a latch, said latch being engaged to hold the valve open and the spring motor under restraint, a vertically movable rod mounted on the valve case and having a projection for engaging and tripping the latch to release the lever and motor to close the valve, and a float connected with the rod.

1,865,887. METHOD OF AND APPARATUS FOR CONTINUOUSLY RECOVERING AND CONCENTRATING CHEMICALS. JESSE M. COAHRAN, Smethport, Pa. Filed Aug. 19, 1927. Serial No. 214,189. 5 Claims. (Cl. 202—42.)



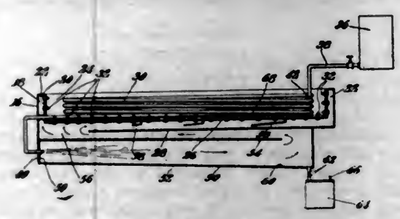
1. The process which comprises continuously fractionating a mixture of crude acetic acid containing impurities less volatile than the acid and an acetic solvent more volatile than said acid so as to remove said solvent, collecting the crude acid containing said impurities alternately in a pair of pools, and distilling and fractionating the crude acid alternately from each one of said pools so as to separate out acetic acid from said one pool while the other pool is being accumulated.

1,865,888. PICTURE AND FRAME CONSTRUCTION. JOHN F. COATES, Miami, Fla. Filed June 11, 1931. Serial No. 543,691. 3 Claims. (Cl. 40—152.)



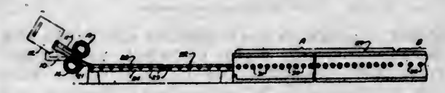
1. In a picture and frame assembly of the class described, in combination, a picture mounting comprising a backing member formed with ornamental facing means, said facing means being constructed to provide a receptacle for a picture unit, a picture unit located removably in said receptacle, the dimensions of the receptacle being such as to allow relative shifting of the picture unit to facilitate application and removal, and a removable retention element co-operable with the picture unit and one end portion of the receptacle, said element being such as to prevent displacement of the picture unit when the element is in place, and to allow bodily shifting of said unit when said element is removed.

1,865,889. LIQUID FUEL BURNER. THOMAS A. CURRAN, New York, N. Y., assignor to Hugh J. Sheeran, New Rochelle, N. Y. Filed Mar. 15, 1929. Serial No. 347,313. 3 Claims. (Cl. 158—63.)



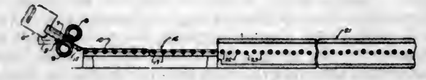
1. A liquid fuel burner comprising a combustion chamber and a mixing chamber, a plurality of burner nozzles opening into the bottom and side walls of the combustion chamber from the mixing chamber, fuel preheating and vaporizing means in the combustion chamber, means to introduce liquid fuel into said fuel preheating and vaporizing means and thence into the mixing chamber, means to admix air with the fuel vapor in the mixing chamber, means to remove the unvaporized portion of the fuel from the mixing chamber and baffle means to equally distribute the air-gas fuel mixture to the plurality of burner nozzles.

1,865,890. PROCESS AND APPARATUS FOR SHEET GLASS MANUFACTURE. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 20, 1929. Serial No. 415,372. 7 Claims. (Cl. 198—127.)



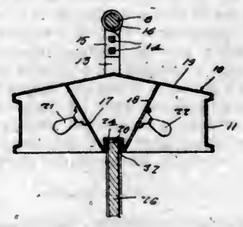
6. The method of handling newly formed sheets of glass, comprising carrying the glass sheet forwardly and delivering it at a relatively high rate of speed onto a series of rotatables supporting rolls, positively driving alternate rolls at a speed substantially equal to the speed at which the sheet is delivered thereupon, simultaneously positively driving the remaining rolls at a relatively slower speed, in causing the slow speed rolls to be driven by the sheet and thereby synchronised with the high speed rolls as the said sheet is delivered upon said rolls, and in then lowering the high speed rolls away from and out of contact with the sheet when said sheet reaches a predetermined position, thereby causing the forward speed of travel of the sheet to be reduced to a speed equal to that at which the slow speed rolls are positively driven.

1,865,891. GLASS ANNEALING LEER. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 3, 1930. Serial No. 499,698. 6 Claims. (Cl. 198—127.)



1. A sheet glass annealing leer of the roller type including two sets of rolls for conveying the sheet to be annealed, the rolls of one set alternating with the rolls of the second set, means for driving the rolls of the first set continuously in a direction to convey the glass from the entrance end of the leer toward the exit end thereof, means for driving the rolls of the second set continuously in a direction to convey the glass from the exit end toward the entrance end of the leer, and means for changing the horizontal relation of the two sets of rolls to move them alternately into and out of supporting contact with the sheet such that the peripheral contact of the first mentioned set of rolls with the glass sheet exceeds that of the second mentioned set.

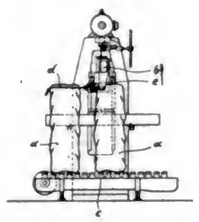
1,865,892. ADJUSTABLE ELECTRIC SIGN FRAME. JAMES P. DUNNE, Buffalo, N. Y. Filed Apr. 22, 1930. Serial No. 446,327. 2 Claims. (Cl. 40—130.)



2. In an illuminated sign, in combination, a supporting arm, an open bottomed hood supported thereby, lamps in the hood, a substantially rectangular frame having its

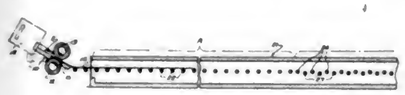
upper edge supported in the lower part of the hood at the center thereof, an extension frame composed of a bottom rail and a pair of end rails, straps connecting the ends of the first frame to the upper portions of the end rails of the extension frame, and panels in said frames.

1,865,803. DEVICE IN SACK SEWING MACHINES FOR SEPARATING THE WARP BETWEEN THE SACKS. FRITZ EBERT, Oberndorf-on-the-Neckar, Germany. Filed July 15, 1930, Serial No. 468,180, and in Germany July 24, 1920. 4 Claims. (Cl. 112—252.)



1. A sewing machine for closing filled sacks by sewing, comprising a sewing needle, a rotary circular knife whose center of rotation is stationary, for cutting the warp between successive sacks, means for rotating said knife, a table plate for said machine having a horizontal gutter-like groove behind the needle, arranged in the direction of movement of the sacks, the cutting edge of said knife entering into the said groove transversely to the longitudinal direction of the groove.

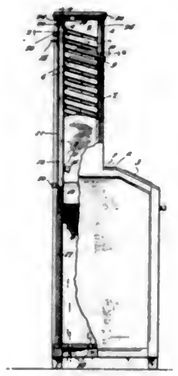
1,865,894. APPARATUS FOR FORMING AND ANNEALING SHEET GLASS. FRANK FRASER, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 24, 1930. Serial No. 497,791. 5 Claims. (Cl. 198—127.)



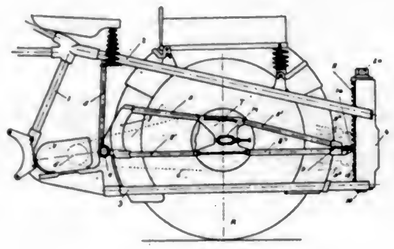
1. In sheet glass apparatus, an annealing leer, and conveying means for receiving a newly formed sheet thereupon and carrying it into and through said leer, said conveying means embodying a receiving section, an annealing section, and a transfer section interposed between said receiving and annealing sections and including two sets of rolls with the rolls of one set being arranged alternately with the rolls of the other set, means for positively driving one set of rolls at a relatively slow speed, the rolls of the other set being idler rolls, and means for moving one set of rolls vertically reative to the other set.

1,865,895. VENDING MACHINE. BENJAMIN L. FRY, St. Louis, Mo. Filed Feb. 28, 1930. Serial No. 432,207. 2 Claims. (Cl. 312—94.)

2. A vending machine comprising a column of downwardly and forwardly inclined shelves for supporting articles to be vended, a vertically movable closure adapted to extend across the fronts of all the shelves, and a projection on the closure at the upper end of the same to arrest outward movement of an article on an exposed inclined shelf and support the exposed end of said article.



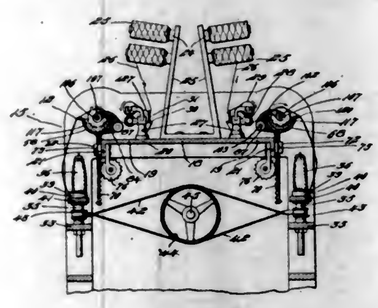
1,865,896. METHOD OF REAR SUSPENSION OF MOTOR CYCLES. RENÉ GILLET, Montrouge, France. Filed Aug. 8, 1930, Serial No. 474,018, and in France Oct. 7, 1929. 15 Claims. (Cl. 208—97.)



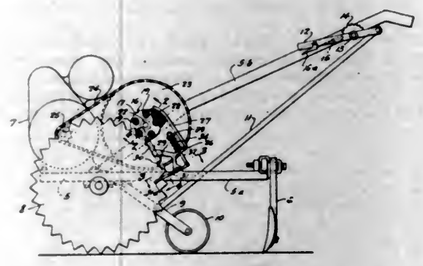
1. A device of the class described comprising a main frame including spaced rearwardly extending members, a casing member rigidly connected to the free extremity of said rearwardly extending members, a pair of opposed spring members disposed in said casing, and an auxiliary frame pivotally connected to said main frame and extending rearwardly therefrom intermediate the rearwardly extending members aforesaid, the free extremity of said auxiliary frame being interposed between said spring members.

1,865,897. TWISTING MACHINE. GEORGE H. GILLIGAN, Providence, R. I., assignor to U. S. Ring Traveler Company, Providence, R. I., a Corporation of Rhode Island. Filed Sept. 18, 1931. Serial No. 563,567. 17 Claims. (Cl. 117—2.)

1. In a twisting machine, a frame, feed rolls carried by the frame, a spindle, means for actuating the rolls, a trough adapted to contain a liquid mounted upon the frame between the feed rolls and the spindle, and a forming roll in the trough partially immersed in the liquid, said forming roll provided with a groove for crowding the strands into a substantially cylindrical form across which the strands pass and receive moisture.



1,865,898. RIM GEAR DRIVE TRACTOR. HAROLD H. GLASIER, Los Angeles, Calif. Filed Apr. 29, 1931. Serial No. 533,628. 6 Claims. (Cl. 97—48.)



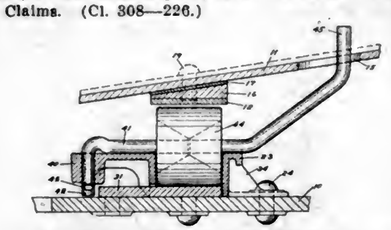
1. A self propelled ground working implement comprising a frame, a traction and ground cutting wheel journalled thereon, said wheel having peripheral serrations, and a motor mechanism to drive said wheel having gearing meshing with the serrations of said wheel to drive the latter.

1,865,899. COMBINATION ADJUSTABLE FLOOR PLATE AND STOVE SUPPORT. CHARLES L. GOHMANN, New Albany, Ind., assignor to Gohmann Bros. and Kahler Company, New Albany, Ind., a Corporation of Indiana. Filed Feb. 4, 1929. Serial No. 337,285. 4 Claims. (Cl. 45—139.)



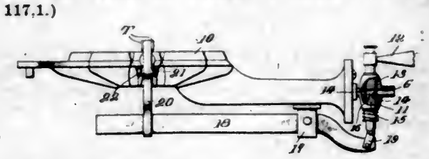
1. An adjustable support for stoves comprising a base having a plurality of inclined upper surfaces formed thereon, a member pivotally mounted upon said base having a plurality of inclined surfaces on its under side adapted to cooperate with said first-mentioned surfaces to raise said pivotally mounted member when it is turned upon its pivot, substantially as set forth and for the purposes specified.

1,865,900. SIDE BEARING. ERNEST G. GOODWIN, Pelham, N. Y. Filed Sept. 7, 1927. Serial No. 217,989. 3 Claims. (Cl. 308—226.)



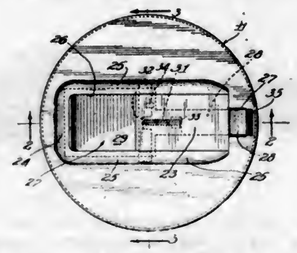
1. In a roller side bearing for railway cars, a roller, a positioning rod, a guideway for said roller having a removable roller supporting and engaging section, said section being held against lateral displacement from the guideway by the positioning rod only, whereby the said section may be removed from the housing simply by removing the said rod.

1,865,901. SAFETY ATTACHMENT FOR GAS BURNERS. ADOLPH T. GRENTZ, Philadelphia, Pa. Filed Oct. 30, 1928. Serial No. 316,048. 6 Claims. (Cl. 158—117.1.)



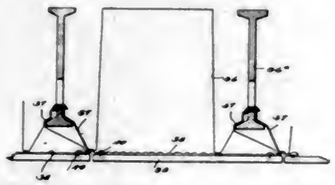
1. The combination with a gas burner and a cock for said burner having a passage therethrough, of a plunger slidably mounted in said cock and provided with an opening therein positioned to control the flow of gas through said passage, said plunger having an end extending through the top of the cock, so that it may be moved manually, a lever supported by said gas burner, means connecting one end of said lever with the plunger so that movement of the plunger to a position bringing said opening in register with the passage through the cock will impart movement to the lever, said lever having means normally acting upon said plunger to move it to a position with said opening and said passage out of register, and thermally responsive means operable to grip the lever so as to maintain the plunger in the first mentioned position while the gas flowing through the burner is ignited.

1,865,902. ASH RECEPTACLE. ALBERT C. GRUNWALD, River Forest, Ill., assignor to Precision Metal Workers, Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1931. Serial No. 529,409. 6 Claims. (Cl. 131—51.)



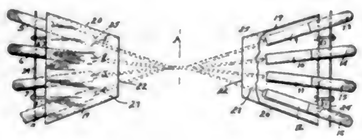
1. An ash receptacle comprising a cover formed to provide a relatively long ash receiver sloping from end to end, said receiver being provided with an opening whereby ashes may pass into the receptacle, a plate normally closing said opening, and means for sliding same to open same.

1,865,903. BUILDING UNIT. FRED H. HALSEY, Texarkana, Ark. Original application filed Feb. 26, 1929, Serial No. 342,760. Divided and this application filed Aug. 19, 1930. Serial No. 476,353. 2 Claims. (Cl. 72—70.)



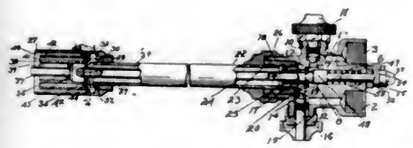
1. In a sheet metal building unit, a hollow filler formed from a length of sheet metal, the ends of the length of sheet metal being bent to provide suspension wings for engagement with two adjacent building beams, an integral horizontal sheet metal panel underlying the filler to which a ceiling panel is adapted to be secured, said horizontal panel and one of said suspension wings terminating into a laterally projecting extension underlying one of said beams.

1,865,904. GAS BURNER SHIELD. GEORGE L. HAMMON, San Francisco, Calif., assignor to National Welding Equipment Company, Incorporated, San Francisco, Calif. Filed May 12, 1930. Serial No. 451,572. 8 Claims. (Cl. 158—1.5.)



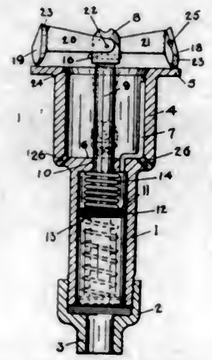
1. A series of opposed gas burner tips, the flames therefrom adapted to converge and meet to form intensified heat therebetween, deflecting shields set at an angle to said flames placed adjacent and below the flames to deflect disturbed hot air currents downwardly and away from the flames when objects are inserted in the meeting point of the flames.

1,865,905. HEATING TORCH. GEORGE L. HAMMON, San Francisco, Calif., assignor to National Welding Equipment Company, Incorporated, San Francisco, Calif. Filed Nov. 5, 1930. Serial No. 493,542. 10 Claims. (Cl. 158—27.4.)



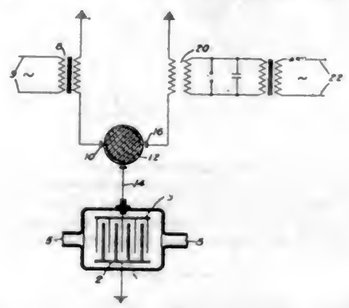
1. A heating torch comprising a torch body, means to mix air and gas in said body, a flame nozzle for said torch, means to distribute a certain amount of said mixture to said nozzle to produce a moderate heating flame, means to regulate said distributing means, an auxiliary means for admitting additional air to produce an intense heating flame, and automatically reduce said moderate heating flame.

1,865,906. WATER SPRINKLER. JOHN K. HARFORD, Clarkston, Wash. Filed Apr. 15, 1931. Serial No. 530,290. 5 Claims. (Cl. 299—61.)



1. In a sprinkler of the hydraulically operated type, the combination with a housing having a seat, a reciprocable plunger, and a cross head on the plunger, of a two-piece closure adapted to fit the seat and comprising a pair of complementary plates, pivot arms on the plates, and said arms pivoted to the cross head at opposite side of the dividing line of the two-piece closure.

1,865,907. GAS PURIFICATION. RICHARD HEINRICH, Berlin-Sudende, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 3, 1931, Serial No. 513,150, and in Germany Feb. 10, 1930. 5 Claims. (Cl. 183—7.)



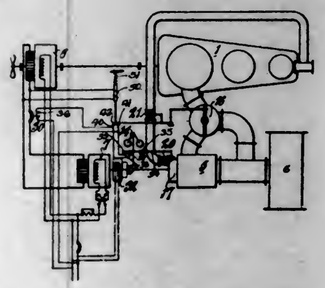
1. A precipitator comprising ap recipitator chamber, a set of collecting and a set of ionizing electrodes therein and means for applying alternately unidirectional and damped alternating current to the set of ionizing electrodes.

1,865,908. CONTROL BUTTON FOR THREAD ROBBINS. WALTER HENGST, Chemnitz, Germany. Filed Dec. 18, 1929. Serial No. 415,048. 2 Claims. (Cl. 40—20.)



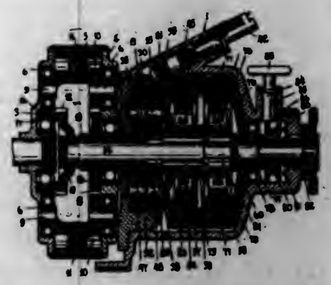
1. A control button for thread bobbins comprising in combination a lower disc shaped part having two diametrically opposite indentations in its edge, spring arms extending from said lower part designed to be inserted in the thread bobbin, an upper frame-shaped part colored corresponding to the thread, and downwardly and inwardly bent tongues arranged on said upper part adapted to engage with said indentations of said lower part.

1,865,909. MARINE ENGINE AND SHIP'S PROPELLING MACHINERY. WILLIAM HINCHCLIFFE, Higher Bebington, and JAMES SCOTT, Bootle, England, assignors to Associated Electrical Industries Limited, a Company of Great Britain. Filed May 3, 1929, Serial No. 360,166, and in Great Britain May 9, 1928. 5 Claims. (Cl. 172—8.)



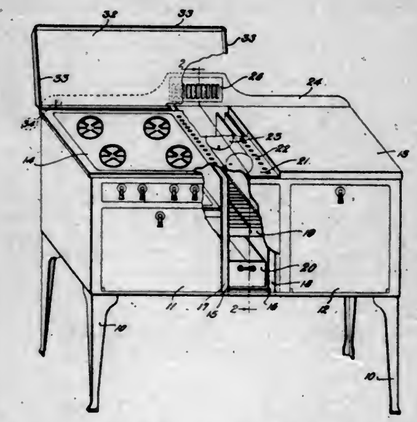
1. Marine propulsion system comprising a reciprocating steam engine driving a propeller shaft, a turbine utilizing the exhaust steam of said engine, an electric generator driven by said turbine, an electric motor mechanically connected to said propeller shaft and supplied with power from said generator, a governing device responsive to the speed of the turbine, a valve for controlling the supply of steam to the turbine and switch means in the electrical connections of the generator and the motor, both said valve and switch means being operatively connected with said governing device so that when the turbine speed rises above a predetermined value the valve is operated to shut off the steam supply and at the same time the switch means are operated to prevent either electrical machine supplying current to the other.

1,865,910. AUTOMATICALLY VARIABLE TRANSMISSION GEAR PARTICULARLY FOR MOTOR VEHICLES. HOWARD FREDERICK HOBBS, Paradise, South Australia, Australia. Filed Sept. 22, 1930, Serial No. 483,656, and in Australia Apr. 4, 1930. 5 Claims. (Cl. 74—34.)



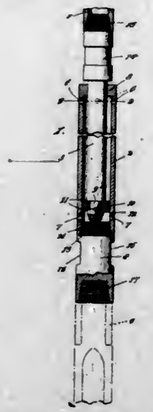
1. An automatically variable transmission gear comprising a driving shaft, at least two sets of planetary masses carried by the driving shaft, an intermediate shaft for each set of masses, connections between each intermediate shaft and its associated set of masses whereby the intermediate shaft is operated by the centrifugal impulses of the masses, a clutch device for each intermediate shaft, each device preventing the associated intermediate shaft from rotating in a direction other than the required direction, a driven shaft, and a flexible coupling between each intermediate shaft and the driven shaft so that each set of masses and associated intermediate shaft is independently flexibly coupled to the driven shaft.

1,865,911. STOVE. HENRY HONER, Palms Station, Calif. Filed June 18, 1931. Serial No. 545,183. 3 Claims. (Cl. 126—36.)



1. A stove having an oven, a burner box thereover, a fire box arranged at the side of the burner box and oven, a removable cover adapted to cover over the top of the burner box and the top of the fire box, there being a back guard for the stove having an air passage therethrough, and a grille mounted on the back guard over the outlet from the air passage, said cover being downwardly concave and communicating with said air passage when in closing position so as to collect heated air from the burner box and fire box and cause it to pass through the air passage before being discharged into the room.

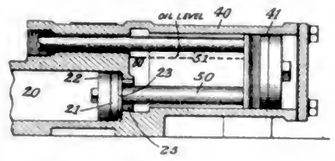
1,865,912. OIL WELL AGITATOR. WILLIAM HORN, Marietta, Ohio. Filed Mar. 25, 1930. Serial No. 438,872. 1 Claim. (Cl. 255—28.)



A tool for agitating liquid and fluid materials in shot holes of oil wells comprising an elongated barrel unobstructed internally throughout its entire length and pro-

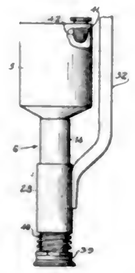
vided near its opposite ends with perforations extending through the side walls thereof, said tool being adapted to be inserted in an oil well with the barrel opposite the shot hole of the well, means closing the lower end of the barrel and holding said barrel in operative position, and a rod mounted for reciprocation within the barrel and having one end thereof passing through the upper end of said barrel for attachment to a drill stem and its other end provided with a piston head frictionally engaging the inner walls of the barrel between the upper and lower perforations therein, said piston head having a stroke more than twice the diameter of the barrel but less than the extreme length of said barrel whereby when the piston is reciprocated liquid and fluid materials in said shot hole will be drawn alternately through the upper and lower perforations into the barrel and then forced outwardly under pressure directly against the adjacent walls of the shot hole to agitate and loosen the material and permit ready removal thereof when said tool is withdrawn from the well.

1,865,913. DOOR ENGINE. LEE P. HYNES, Albany, N. Y., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y., a Corporation of New York. Filed Aug. 19, 1922. Serial No. 583,041. 3 Claims. (Cl. 121—44.)



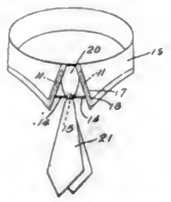
3. A door engine comprising a casing provided with two opposed relatively offset cylinders of unequal diameters, pistons reciprocably mounted within and complemental respective cylinders, a piston rod rigidly connecting said pistons, and a door operating rod extending from the casing at a position between the pistons and connected with one of the pistons in spaced relation with respect to said piston rod, said casing having means for guiding said door operating rod.

1,865,914. GUN FOR APPLYING LIQUID TO DANDELIONS. FRED I. JADEN, Hastings, Nebr. Filed Oct. 4, 1930. Serial No. 486,484. 9 Claims. (Cl. 47—49.)



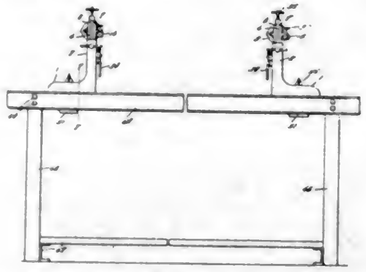
1. A dispenser comprising a gun having casing, a cylinder slidably mounted in said casing and having a discharge port therein, a piston having a passage therethrough supported by said casing and adapted to co-act with said cylinder, means for closing the passage in said piston, means for closing said discharge port in said cylinder and closure means in said piston adapted to open upon movement of said cylinder away from said piston and at the same time form a chamber for the collection of the material to be discharged and the closure means in said cylinder adapted to open and discharge material upon the return movement of said cylinder toward said piston.

1,865,915. COMBINED SOFT COLLAR STIFFENER AND TIE SUPPORT. WILLIAM A. JOHNSTON, Los Angeles, Calif., assignor of one-half to Sparrow E. Purdy, Chicago, Ill. Filed June 7, 1930. Serial No. 459,766. 13 Claims. (Cl. 24—88.)



13. In combination with a collar and necktie, as a collar stiffening and tie supporting device, the combination of: a pair of wires, each having a shank inserted at the lower end of a point of said collar, a reverse portion bent on the lower end of said shank substantially parallel with said shank to frictionally engage the surface of the point of said collar, and an extension bent on said reverse portion, said extension having a hook bent on its end resiliently resisting engagement or disengagement with the hook formed on said other wire, said hooks engaging under said tie.

1,865,916. VISE. THOMAS M. JOLLEY, Oskaloosa, Iowa. Filed Nov. 11, 1930. Serial No. 494,954. 7 Claims. (Cl. 113—102.)



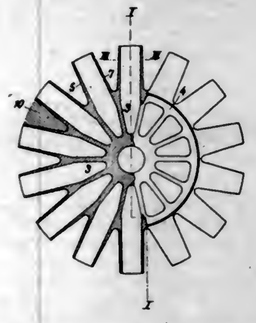
1. In a device of the character described, a pair of telescoping members, a disk pivotally mounted on one of said members, a second disk carried by the first mentioned disk tangential to the latter, and mounted for rotation relative to the first mentioned disk, means for supporing said second disk from the first mentioned disk, and a vise clamp carried by the second disk for movement relative to said second disk.

1,865,917. RECOVERY OF NITROGEN OXIDES. OSCAR KASELITZ and WALTER KATZ, Berlin, Germany. Filed Jan. 29, 1931, Serial No. 512,198, and in Germany May 20, 1930. 9 Claims. (Cl. 23—161.)

7. The method of recovering nitrogen oxides from nitrosyl chloride or mixtures containing same, comprising conducting the gas at an elevated temperature in contact with a mass containing iron in a form capable of chemically binding chlorine.

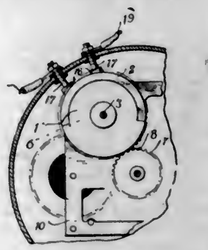
9. The method of recovering nitrogen oxides from gas mixtures containing nitrosyl chloride and free chlorine, comprising conducting the gas at an elevated temperature in contact with metallic iron.

1,865,918. IMPELLER AND METHOD OF MAKING SAME. HUGO JUNKERS, Dessau, Germany. Filed May 28, 1929, Serial No. 366,635, and in Germany June 30, 1928. 1 Claim. (Cl. 230—134.)



An impeller comprising a hub having radial webs defining axial passages therein, and straight radial tubes connected with said passages, the side walls of each adjacent pair of tubes being integrally connected with one of said webs at their inner end, and projecting freely from where they are thus connected.

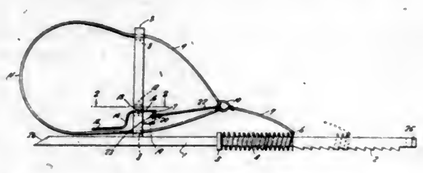
1,865,919. TIME CONTROLLED SWITCH. WALTER L. KING, Indianapolis, Ind. Filed Nov. 23, 1927. Serial No. 235,388. 1 Claim. (Cl. 200—36.)



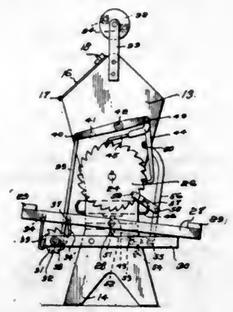
A time switch of the class described, comprising a clock train gear, a shaft having a disc fixed thereto of insulating material, a segmental strip fixed to the periphery of the disc, a clutch face carried by the disc, a gear, said shaft being rotatably and slidably engaged with the gear and having a clutch face for normally engaging the first named face, said gear being driven by the clock train, means for yieldably holding the clutch faces engaged, said means being releasable upon shifting the shaft to permit rotation thereof independently of said gear, and contact heads capable of engaging and disengaging the contact strip during the rotation of the disc, as and for the purpose set forth.

1,865,920. ANIMAL TRAP. WILLIAM KNIPPELMEIR, Minco, Okla. Filed June 27, 1931. Serial No. 547,226. 2 Claims. (Cl. 43—87.)

1. In a device of the kind described, a base, ratchet teeth formed along one end portion of the base, a post secured on the base, the said post having apertures near its ends, and expansion coil spring loosely mounted on the base and braced at one end inwardly of the ratchet teeth, an inwardly bent arm on the outer end of the spring, an eye formed on the inner end of the said arm, a snare passed through the apertures in the said post and connected at its ends to the said eye on the arm and trigger means for releasably holding the spring in a compressed position, the said trigger means comprising a trigger pivoted on the post and hooked at one end, a latch pivotally attached to the post and adapted to be engaged by the hooked end of the trigger, and a latch rod secured to the said eye on the arm and looped at its end for engagement with the said latch.

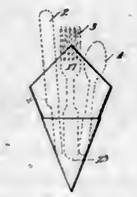


1,865,921. CHICKEN FEEDER. PAUL W. KOHL, Rock, Wis. Filed Oct. 26, 1931. Serial No. 571,233. 9 Claims. (Cl. 119—55.)



1. In a chicken feeder, a hopper for holding the feed or mash, a tray arranged beneath the hopper and having a part which is vertically movable, a movable feeding device for discharging the material from the hopper into the tray, a movable structure arranged near the hopper and embodying a perch bar, driving connecting means between the movable structure and the feeding device so that the movement of the movable structure effects a feeding movement of the feeding device, and means actuated by the downward movement of a part of the tray to render the driving connecting means inoperative with respect to moving the feeding device.

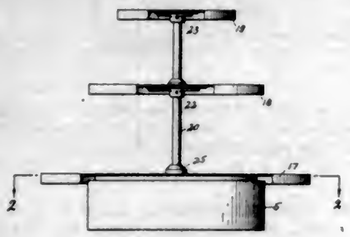
1,865,922. PAPER NAPKIN. FRANK M. KOWALEWSKI, Green Bay, Wis., assignor of one-half to William H. Cannard, Green Bay, Wis. Filed Mar. 3, 1927. Serial No. 172,305. 5 Claims. (Cl. 206—57.)



1. A napkin folded to provide a multiply pointed portion and a flared portion of less plies than the pointed portion, on said pointed portion being so formed as to

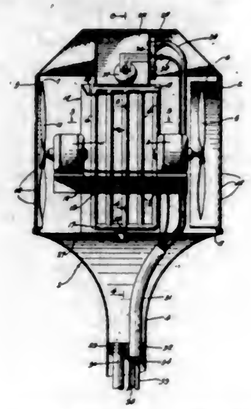
provide a pocket designed to contain articles, said pocket opening centrally of one face of the napkin and defined in part by the edges of the napkin and facing said flared portion.

1,865,923. DISPLAY DEVICE. NATHAN KRAWITZ, Philadelphia, Pa. Filed Nov. 3, 1928. Serial No. 316,925. 4 Claims. (Cl. 211—139.)



1. A display device comprising a housing, a wheel journaled with its perimeter horizontally within and vertically above the margin of the housing, a table upon the wheel extending radially beyond the wheel and housing, and means within the housing to rotate the wheel.

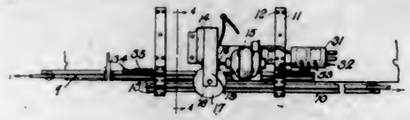
1,865,924. COOLING EVAPORATOR. RICHARD W. KRITZER, Chicago, Ill., assignor to Peerless Ice Machine Company, Chicago, Ill. Filed Aug. 11, 1930. Serial No. 474,438. 2 Claims. (Cl. 62—130.)



2. An evaporator element for cooling air including a cooling unit comprising a plurality of substantially parallel spaced-apart heat exchange members, each of said heat exchange members comprising a pair of grooved plates, the grooves in one plate being alternately arranged with respect to the grooves in its companion plate, and means communicating with said grooves for operatively connecting said heat exchange members, whereby a refrigerant fluid may be passed through said members, said means comprising a float chamber provided with a valve for controlling the amount of refrigerant fluid flowing into the cooling unit.

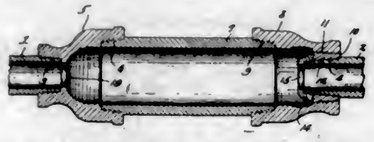
1,865,925. ELECTRICAL DOOR OPERATING MECHANISM. JOHN E. KUNDE, Los Angeles, Calif. Filed June 5, 1929. Serial No. 368,560. 3 Claims. (Cl. 268—63.)

1. An operator for a swinging door comprising a bar secured to said door, a sleeve slidable thereon, an arm pivoted to the door frame and connected to said sleeve, brackets mounted upon the frame, a perforated rail slidable in said brackets, a link connecting the arm and one end of the rail, a reversible electric motor secured to the frame above the rail, a worm on the shaft of the motor, a worm gear driven by said worm and having one member of a clutch secured thereto, a shaft upon



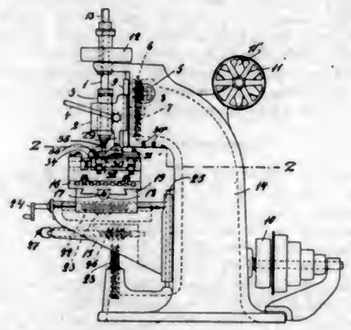
which said gear is rotatable, a spring controlled cooperating clutch member splined on the shaft, a hand lever for releasing the clutch, a sprocket on the shaft for driving the perforated rail, reversing switches for the motor, a slidable rod for controlling said switches, and means carried by the rail for contacting the rod, and a hand switch for supplying current to the motor.

1,865,926. JUNCTION BOX. ARTHUR J. LAING, Dearborn, Mich. Filed Nov. 5, 1930. Serial No. 493,628. 1 Claim. (Cl. 247—27.)



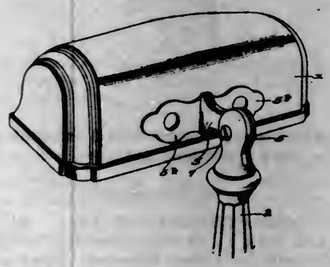
In a conduit adapted to be opened for the splicing of wires therein, first and second couplings, a tube having its ends threaded into the inner ends of the couplings, a ring threaded into the outer end of the second coupling, a pipe threaded into the ring, an annular retainer and guide threaded on the outside of the inner end of the pipe and cooperating with the ring to stop the inward movement of the ring, the retainer and guide having an annular rounded rib which overlaps the inner end surface of the pipe, and another pipe threaded into the outer end of the first coupling.

1,865,927. MEASURING DEVICE FOR WORKHOLDERS. GUSTAF PAUL LAMBERT, Stockholm, Sweden. Filed May 25, 1923, Serial No. 641,486, and in Sweden Aug. 31, 1922. Renewed Apr. 3, 1930. 7 Claims. (Cl. 90—58.)



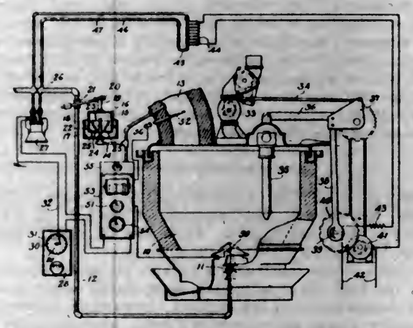
1. In drilling, boring and milling machines, the combination of a tool holding spindle rotatable about a fixed axis, a worktable, supporting means having two transverse guideways perpendicular to the axis of the spindle for permitting adjustment of the worktable relative to the spindle in two corresponding directions, two rulers on the table perpendicular to the guideways respectively and two independent abutments outside the spindle having relatively narrow accurate measuring surfaces arranged in determinate relation to the axis of the spindle and located substantially on intersecting planes through the axis of the spindle perpendicular to the rulers respectively.

1,865,928. PORTABLE LAMP. GEORGE J. LA VIGNE and WALTER C. GREIST, New Haven, Conn., assignors to The Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Sept. 22, 1930. Serial No. 483,661. 7 Claims. (Cl. 240—73.)



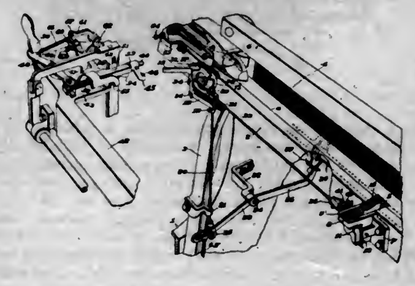
1. In a portable lamp, the combination with a shade, of a bracket comprising two mating parts, each of said parts composed of a member having inwardly extending rims which when assembled form a lamp cord receiving space, and a second member for each bracket part arranged at right angles to the first-named member and fastened to said shade, a lamp standard provided with a bifurcated terminal, and means for clamping the first-named members of said mating parts of the bracket between the bifurcations of said standard.

1,865,929. CONTROL MECHANISM FOR GAS PRODUCERS. FRANK E. LEAHY, Pittsburgh, Pa., assignor to Republic Flow Meters Co., Chicago, Ill., a Corporation of Illinois. Filed July 2, 1926. Serial No. 120,114. 3 Claims. (Cl. 48—87.)



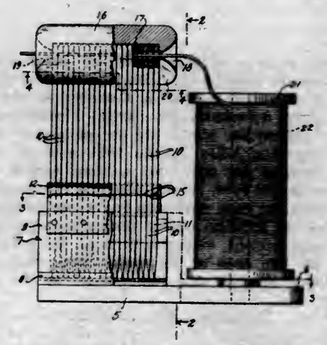
1. A gas producer comprising a producer gas generating chamber adapted to contain a solid fuel bed, an air and steam blast inlet in the bottom portion of the producer, and leading to the fuel bed, a fuel feeder mounted at the top of the producer, an electric motor connected to control the fuel feeder, a producer gas outlet main leading from the top of the gas generating chamber, a steam pipe for conducting steam to the blast inlet, a control valve in the steam pipe, a gas pressure regulator connected to the outlet main and to the steam control valve, a U-shaped mercury tube connected to the steam pipe, and electrical connections connected to the electric motor and controlled by the mercury tube.

1,865,930. CENTER FORK STOP MOTION FOR LOOMS. VERNER LINDSJO, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed June 15, 1931. Serial No. 544,377. 13 Claims. (Cl. 139—374.)



1. In a center fork stop motion for looms, the combination of the lay, a bunter mounted on the lay for movement relative thereto, a cam and connections between the cam and bunter for moving the bunter longitudinally of the lay in one direction, a spring for moving the bunter longitudinally of the lay in the opposite direction, a center fork mounted on the lay, a longitudinally movable link connected to the bunter for movement thereby and supporting a cam member bodily movable longitudinally of the lay with the link for raising the center fork as the bunter is moved by its actuating cam in one direction, and interlocking means between the center fork and movable link for arresting movement of the bunter by the spring when filling fails to be laid in the shed.

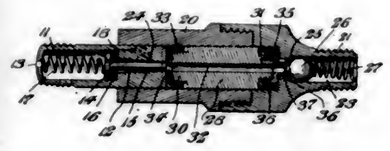
1,865,931. NEEDLE THREADER. ANNA C. LONGFELLOW, Larchmont, N. Y. Filed Feb. 27, 1929. Serial No. 343,086. 4 Claims. (Cl. 223—86.)



1. In a needle threading device, a base member for supporting a plurality of needles upon their point ends, means embracing said needles for positioning the needles with their eyes in alinement, and means for guiding a

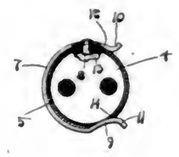
thread through the alined eyes of said needles, said last mentioned means comprising a member having a slot for receiving the eye ends of said needles, and a tapered opening leading through one of its walls to said slot.

1,865,932. PRESSURE COUPLING FOR LUBRICATION. JOHN FRANKLIN MACINDOE, East Falls, Pa. Filed Sept. 24, 1927. Serial No. 221,700. 3 Claims. (Cl. 284—19.)



1. A coupling mechanism comprising a coupling sleeve provided with a bore having a portion of reduced diameter, a valve controlling said bore, means normally holding said valve closed, an elongated plunger slidable in said bore having a plane transverse face on one end of the same area as the bore and a through passage, means on the end opposite said face to move said valve to open position, in combination with a nipple arranged to enter said bore and having a plane transverse face of the same area as the plunger face and adapted to seat flush against said face, the arrangement being such that the entering movement of said nipple causes said plunger means to open said valve and the withdrawing movement of said nipple breaks said flush relation to produce a vacuum and thereby automatically return said plunger and close said valve.

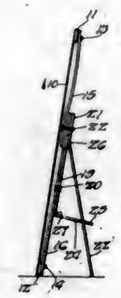
1,865,933. LAMP SOCKET HOLDING DEVICE. WILLIAM L. MAPPES, Cincinnati, Ohio, assignor to The Corcoran-Brown Lamp Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 27, 1929. Serial No. 366,323. 1 Claim. (Cl. 240—41.)



A lamp socket holding device for automobile lamps, comprising in combination with a mounting tube and a connector mounted therein, a C-shaped spring mounted on the tube detachably by partial circumferential engagement therewith, and a pin on one end of the spring loosely engaging holes in the tube and the connector thereby locking the connector against rotary and axial movement in the tube, the opposite end of the spring being bent toward the tube, said tube having an opening therein to receive the opposite end of the spring to permit of its bearing engagement with the wall of the connector, the tips of the two ends of the spring being bent outwardly to facilitate removal and replacement of the spring on the tube.

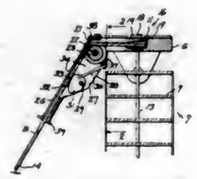
1,865,934. EASEL. HARRY V. MARSH, Chicago, Ill. Filed Feb. 21, 1931. Serial No. 517,440. 4 Claims. (Cl. 40—125.)

1. An easel for use with a blow-up sheet or poster sheet comprising a plurality of narrow strips two of which are pivotally connected to one another, said two strips being relatively movable to provide a spreader for said poster sheet, one of the remaining strips providing a leg for said spreader strips when extended, and the other a means



for holding said leg at an angle to said extended spreader strips there being a fastening means common to all four strips.

1,865,935. CORD ANCHORING DEVICE. FRED C. MARSHALL and JOHN L. NEWPORT, Pasadena, Calif.; said Marshall assignor to Mary Hanrahan, Pasadena, Calif. Filed May 7, 1931. Serial No. 535,682. 13 Claims. (Cl. 156—17.)

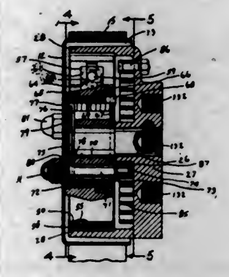


4. A cord anchoring device comprising a frame having a pair of spaced flanges, a shaft extending between said flanges, a sheave journaled on said shaft, a tube having an opening at one side and at the upper end thereof, flanges extending laterally from the sides of said opening, the flanges of said tube being pivotally engaged upon said shaft, a jaw pivoted between the flanges of said tube, a link pivoted at one end to said frame and at the other end to said jaw at a point offset from the axis of the jaw's pivotal mounting, and a spring urging said tube in rotary motion about said shaft.

1,865,936. CLUTCH CONSTRUCTION. JOSEPH J. MARTIN, New Castle, Ind., assignor of one-half to Harry Burris, New Castle, Ind. Filed Apr. 29, 1927. Serial No. 187,457. 3 Claims. (Cl. 192—41.)

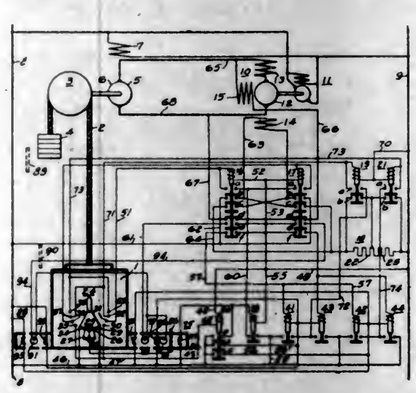
1. In a clutch construction suitable for shock absorbers and the like, the combination of a clutch collar having an enlarged recess at one end and a bore of predetermined diameter at the other end, one being a continuation of the other, a spring retaining cup seated in said recess and having a side wall with an internal diameter substantially that of the bore and an external diameter substantially that of the recess, a clutch spring positionable in the cup and bore and anchored at one end to the former, a rotatably mounted hub rigid with the cup for spacing the same, a spindle mounting said hub and including a

peripheral locking groove, a slotted hub-retaining plate receivable by said groove and straddling said spindle and including a peripheral portion positionable within



said spring for centering the opposite end thereof, and means securing said plate, hub and cup together for simultaneous rotation.

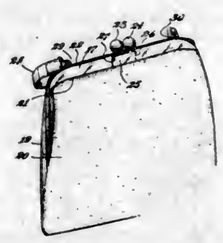
1,865,937. LIGHT CELL CONTROL. HAROLD W. MATTINGLY, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 11, 1928. Serial No. 291,992. 16 Claims. (Cl. 187—29.)



1. In a control system for an elevator car operable past a floor, multi-speed motive means for said elevator, a plurality of light-sensitive devices and means for illuminating said devices, both carried by said car, a plurality of light-varying means, one for each device, stationarily mounted at different distances from said floor for varying the illumination of the associated device by said illuminating means when said associated varying means and device are brought adjacent to each other, and controlling means for each speed of said motive means operable upon variation of the illumination of one of said devices.

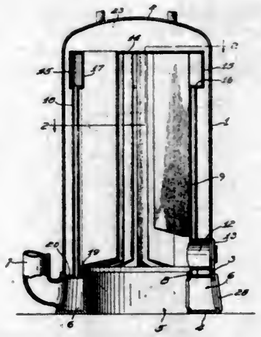
1,865,938. HAND-BAG. CHARLES J. MCCABE, Long Beach, and IRVING SCHOENHOLZ, Cedarhurst, N. Y. Filed Oct. 28, 1930. Serial No. 491,658. 4 Claims. (Cl. 150—29.)

1. In a handbag, a pair of U-shaped members hinged to each other at their ends, each member being channeled inwardly to provide spaced inner and outer walls extending outwardly, whereby the margin of the handbag fabric can be passed over the outer walls to conceal the latter and into secured position within said channels, the arms of one frame member being shorter than those of the other so as to provide one of the members with an exposed wall, and a pair of interengageable latch elements, one of which is mounted on one of the walls of the longer frame member and the other of which is mounted on the



inner walls of the shorter frame member, the last-named latch element being provided with an ornamental shank arranged centrally with respect to the frame members and adapted to overlie the center of said exposed wall when the bag is closed.

1,865,939. BOILER CONSTRUCTION. WILLIAM F. MCPHEE, Chicago, Ill. Filed Oct. 10, 1930. Serial No. 487,853. 2 Claims. (Cl. 122—182.)



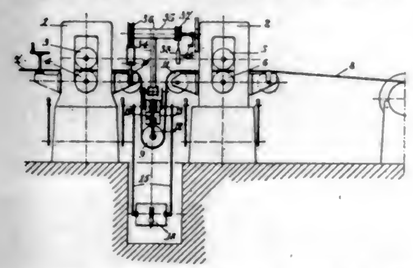
1. A boiler construction comprising a base having a flue chamber, an inner shell and an outer shell disposed upon the base and arranged in spaced-apart relation, a crown sheet having a cylindrical portion of larger diameter than the inner shell and a ring secured to the latter, said inner shell being provided with openings in its side, a plurality of hollow fins secured to the inner shell and having open sides communicating with the openings in the inner shell, the outer edges of said fins being substantially aligned with the inner edge of said ring, the upper ends of the fins being open and communicating with openings in the crown sheet, plates for closing the open side portions of the fins extending between the ring and the crown sheet, and plurality of hollow curved members connected with said ring and the base for placing the interior of the inner shell in communication with said flue chamber.

1,865,940. PRODUCTION OF ACETONE. HANS MEERWEIN and HEINRICH MORSCHEL, Konigsberg, Germany, assignors to the Firm Schering-Kahlbaum A. G., Berlin, Germany. Filed Apr. 5, 1929, Serial No. 352,909, and in Germany Apr. 7, 1928. 3 Claims. (Cl. 260—134.)

1. The process of producing acetone comprising conducting a mixture of acetylene and steam at a tempera-

ture between 300 and 550° C. in contact with a mixed catalyst containing an oxide of tin and an oxide of a metal of the group consisting of cerium, zirconium, thorium, chromium, zinc and the alkaline earth metals.

1,865,941. ROLLING MILL. RENÉ MICHEL, Argenteuil, France. Filed May 9, 1929, Serial No. 361,783, and in Germany May 19, 1928. 5 Claims. (Cl. 80—35.)



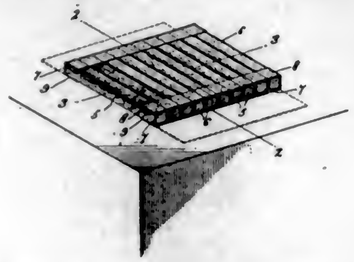
1. A rolling mill comprising two trains of rollers, a roller between said two trains of rollers adapted to rest upon the material treated, a lever connected by linkage to said roller, a counter-weight movably mounted upon said lever and means for displacing said counter-weight.

1,865,942. NEBULIZER. GEORGE MILLER, Cleveland, Ohio, assignor to Miller Wholesale Drug Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 10, 1930. Serial No. 427,085. 2 Claims. (Cl. 299—88.5.)



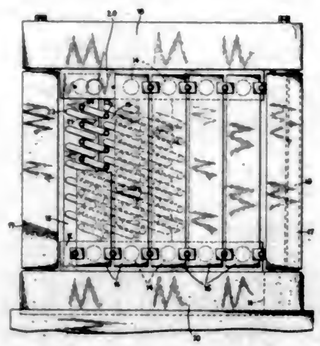
2. A nebulizer including a bulb open at one end, an open end receptacle for liquid extending into and longitudinally movable in said bulb, and means in said receptacle for atomizing a portion of the liquid and for discharging the liquid so atomized from the receptacle consequent upon compression of the bulb, said receptacle having an enlarged globular portion at the closed end, said bulb being shaped to present its inner wall area in intimate contact with the surface of said globular portion at all relative positions of the receptacle and bulb intermediate and extended and telescoped positions while the bulb is uncompressed and the bulb presenting a considerable area in sealing contact with the receptacle in the relatively extended position of the receptacle and bulb, the bulb and receptacle being adapted for increasing the sealing area when the bulb is compressed whereby an effective seal between the bulb and surface of the receptacle is provided at the beginning of and during the compressing operation.

1,865,943. CIGARETTE AND CIGARETTE PACKAGE. SAMUEL C. MILLER, Louisville, Ky. Filed Oct. 30, 1931. Serial No. 572,163. 2 Claims. (Cl. 131—11.)



1. An improved cigarette package comprising a plurality of cigarettes including fillers of tobacco and wrappers of moisture-proof material placed side by side, and end enclosing strips placed in common over both ends of the assembled cigarettes and having lateral flaps brought inwardly of the package and against opposite sides of the cigarettes and cemented thereto.

1,865,944. STEAM GENERATOR OR BOILER. WILLIAM A. MILLS, Port Chester, N. Y., assignor, by direct and mesne assignments, to Foran Boiler Company, Inc., a Corporation of New Jersey. Filed Dec. 19, 1930. Serial No. 503,467. 16 Claims. (Cl. 122—279.)

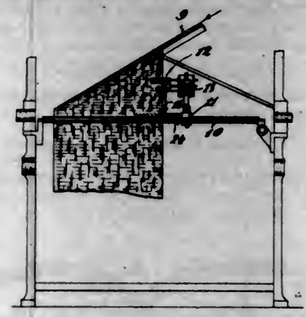


1. In a steam generator or boiler, in combination, a water base, a steam dome, return pipes communicating with said water base and said steam dome and capable by themselves of supporting said steam dome, a plurality of vertical circulating headers disposed along each side of the boiler, connections between the headers and the water base and steam dome, respectively, and a series of substantially horizontally extending boiler tubes carried with each header, the boiler tubes of one header extending between the boiler tubes of the opposite header, the steam generated in each boiler tube passing directly into the header.

1,865,945. CLOTH DOUBLING MACHINE. JOSEPH MONFORTS and FRANZ WIRTZ, Munich-Gladbach, Germany, assignors to A. Monforts, Munich-Gladbach, Germany, a Corporation of Germany. Filed Nov. 17, 1931, Serial No. 575,596, and in Germany Dec. 11, 1930. 2 Claims. (Cl. 270—86.)

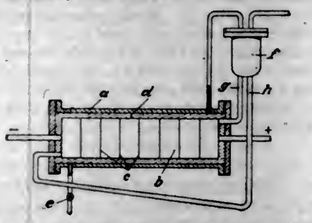
1. In a machine of the class described means for automatically regulating the travel of the web edges comprising fixed folding bars and electrically controlled pairs of guide rollers for each of the web edges, and a feeling mechanism adapted to trip the electric control of said

rollers and comprising a vertically suspended swing bar, a rocker mounted thereon for swing motion about a vertical axis in the range of the adjacent edges of the folded



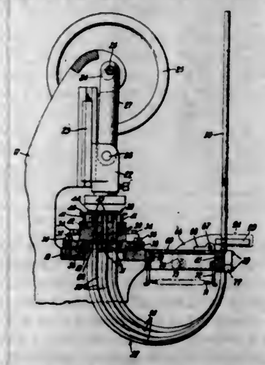
web, and contact pieces on said rocker cooperable with fixed contact pieces, to control the electric controlling means of said rollers.

1,865,946. DECOMPOSER, PARTICULARLY FOR THE ELECTROLYSIS OF WATER UNDER PRESSURE. HANS NIEDERREITHER, Munich, Germany, assignor to Lawaczeck Gesellschaft mit beschrankter Haftung, Berlin, Germany. Filed Aug. 13, 1930, Serial No. 474,952, and in Germany Oct. 2, 1928. 1 Claim. (Cl. 204—5.)



The process of electrolyzing an aqueous solution under high pressure which consists in conducting the electrolysis in a decomposing chamber containing a hydrocarbon insulating means disposed between the walls of such chamber and the groups of electrodes, the said hydrocarbon being in a liquid state at least at working temperatures.

1,865,947. MACHINE FOR FORMING PERFORATED BLANKS. ABRAHAM NOVICK, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Sept. 18, 1928. Serial No. 306,733. 6 Claims. (Cl. 164—19.)

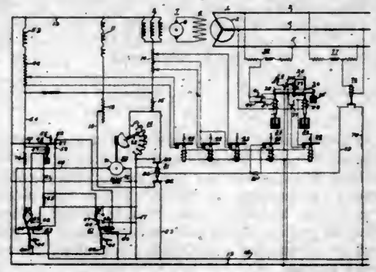


1. In a machine of the class described the combination of punching means, a magazine, said magazine including a receiving portion arranged beneath the punching means and extending downwardly therefrom, a curved portion extending from the receiving portion, and a delivery portion extending from the curved portion to conduct the punchings upwardly so that a group of them may be removed from the magazine while punchings are being supplied to the magazine, and resilient means holding the magazine and the punching means yieldingly together but permitting relative separation of them when the magazine becomes accidently jammed by the punchings.

1,865,948. DEODORANT AND CLEANSING POWDER. WILLIAM FRANCIS NUTT, Newburgh, N. Y. Filed June 11, 1928, Serial No. 284,669. Renewed Feb. 16, 1932. 2 Claims. (Cl. 87—5.)

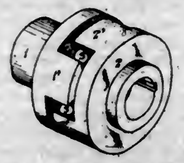
2. A perfumed cleaning powder and deodorant including a mixture of 80 parts of sodium bisulfate, a deodorising perfume, and 16 parts of sodium sulfate for preventing the sodium bisulfate from liquefying or caking when the perfume is added.

1,865,949. RERGULATOR SYSTEM. HOMER C. NYCUM, Wilkinsburg, and JOHN H. ASHBAUGH, Pittsburgh, Pa. assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 7, 1929. Serial No. 412,548. 8 Claims. (Cl. 171—229.)



1. In a regulator system, a power circuit, a dynamo-electric machine connected to said power circuit, means for governing the excitation of said dynamo-electric machine comprising a field-winding circuit, a resistor and a rheostat included in said circuit, a vibrating regulator for varying the effective value of said resistor in accordance with an electrical quantity of said power circuit, and means, controlled by said regulator, for operating said rheostat upon a predetermined variation in the effective value of said resistor from its mid value, and means, operating under predetermined power-circuit conditions, for short circuiting said rheostat.

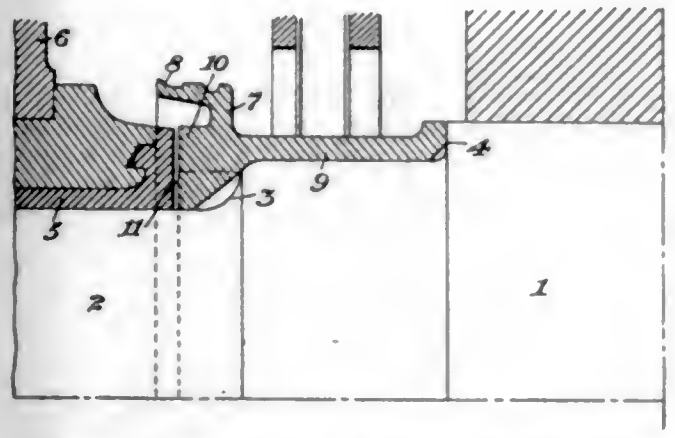
1,865,950. COUPLING FOR SANDER DRUM SHAFTS. CHARLES H. PETSKEYES, Cincinnati, Ohio, assignor to The J. A. Fay & Egan Company, Cincinnati, Ohio, a Corporation of West Virginia. Filed May 28, 1930. Serial No. 456,528. 2 Claims. (Cl. 64—91.)



1. A coupling for sander drum shafts comprising, in combination, a coupling member mounted for rotary motion, means for rotating said member, driving teeth on each member, the driving teeth on one member being undercut with the surface adjacent to the periphery curved and the remaining portion straight and the teeth of the other member being undercut with the portion adjacent to the

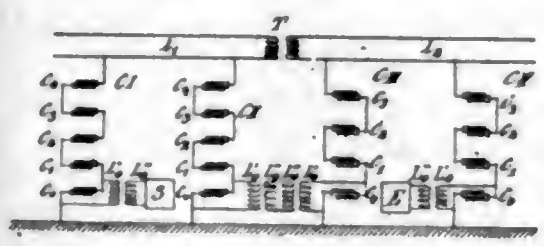
periphery straight and the remaining portion curved, said teeth being spaced apart and having a circular row of anti-friction driving balls mounted within said undercut portion between the respective teeth of the cooperating coupling members, whereby as said coupling is rotated centrifugal force will tend to spread the balls outwardly from the center and against the curved portion of one tooth and the straight portion of the cooperating tooth, thus locking the teeth together and eliminating any backlash or lost motion while in operation and permitting reciprocating motion of the ball between said teeth.

1,865,951. OIL CHECK RING FOR JOURNAL BOXES. WALTER PEYINGHAUS, Egge, Germany, assignor to Isothermos Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Mar. 29, 1929, Serial No. 350,951, and in Germany May 15, 1928. 5 Claims. (Cl. 308—134.)



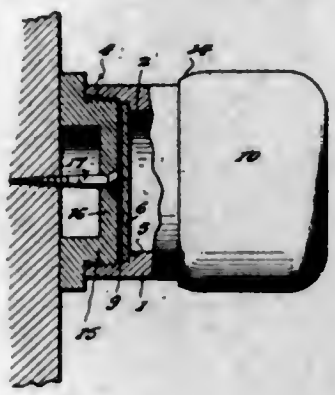
1. In combination, an axle inclusive of a journal portion of reduced diameter merging with the axle proper through a rounded fillet, a bearing for said journal portion, and a thrust ring mounted on the axle proper and including a portion of less diameter than the axle proper surrounding the journal porton of the axle for contact at its end with the end of the bearing to maintain the rounded fillet spaced from the bearing.

1,865,952. LINE PROTECTING AND MESSAGE TRANSMITTING SYSTEM. EMIL PFIFFNER, Fribourg, Switzerland, assignor, by mesne assignments, to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 23, 1926, Serial No. 83,266, and in Germany Mar. 3, 1925. 6 Claims. (Cl. 177—352.)



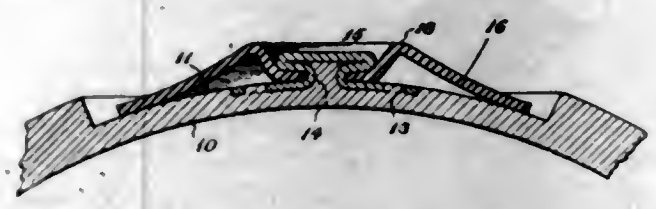
for the grinding wheel, a movable template having a curved surface corresponding to the curvature of the surface to be ground on the wedge, means carried by the grinding wheel mounting engaging the curved surface of the template, means connecting said template to said table for movement therewith, and means carried by a fixed part for grinding the template in such movement.

1,865,956. DISPENSING RECEPTACLE. HARRY R. PRIEST, Loudonville, Ohio. Filed May 15, 1930. Serial No. 452,730. 3 Claims. (Cl. 132—80.)



3. In dispensing receptacles of the class described, a hollow body open at one end, a base threaded onto the open end of the body and provided with a flange extending beyond the wall of said body, a closure for the open end of the body forming a compartment in the hollow body for a reserve supply of material, said closure being held in the hollow body by said base, the flange of the base engaging the end edge of the open end of said body and limiting insertion of the base in the body so that the closure is not crushed by the base, and a screw having the head secured in said base and confronting said closure and having the threaded end projecting beyond said base for permanently attaching said dispensing receptacle to a fixed support.

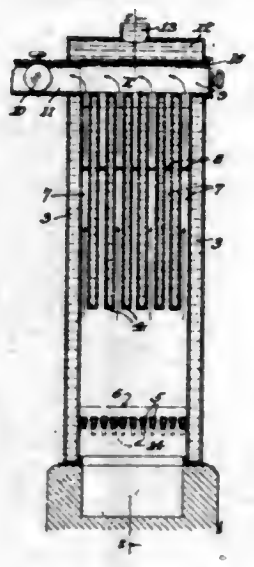
1,865,957. SUCTION-CUP FOR ARTIFICIAL TEETH. HARRY R. PRIEST, Loudonville. Ohio. Filed May 31, 1930. Serial No. 458,654. 1 Claim. (Cl. 32—4.)



A securing device for artificial denture or plates comprising a button having a base adapted to be embedded in the material of the plate and having a short neck and a head, and a rubber suction cup molded with a center opening receiving said neck and with an upstanding annular portion beyond said head when the cup is compressed and when the cup is not compressed, the outer portion of the cup being substantially flattened and lying at an angle to the annular portion.

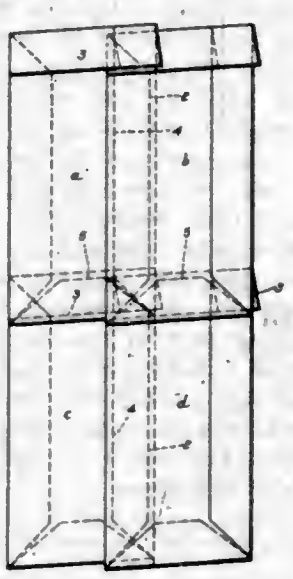
1,865,958. BOILER FOR HOT WATER AND LOW PRESSURE STEAM-HEATING. JOSEF PRINZ, Dinslaken, Germany. Filed Mar. 21, 1929, Serial No. 348,919, and in Germany Feb. 7, 1929. 2 Claims. (Cl. 122—260.)

1. A boiler for hot water and low pressure steam heating installations, comprising in combination a water jacket substantially U-shaped in transverse cross section closed at its top by a water and steam chamber, a plurality of spaced water pockets depending from said chamber and extending parallel with the arms of the U-shaped jacket, said pockets being in communication with the jacket at the rear, a furnace between the arms of the jacket and below said pockets, an offtake flue arranged in said chamber and



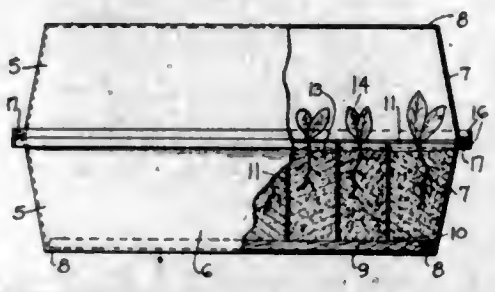
connected to the tops of the spaces between the pockets, and readily removable means closing the open side of the U-shaped jacket.

1,865,959. ROOFING. THEODORE C. PROUTY, Hermosa Beach, Calif., assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif., a Corporation of California. Filed June 27, 1927. Serial No. 201,806. 8 Claims. (Cl. 108—10.)



1. A roof comprising a plurality of base units, each of said units having a central flat section and marginal sections folded over said central section, said marginal sections of said units overlapping in interlocked engagement, and a tile secured to each of said base units.

1,865,960. PLANT BOX. RUBIN REGELSON, New York, N. Y. Filed Feb. 7, 1930. Serial No. 426,592. 3 Claims. (Cl. 47—37.)



1. A plant box comprising a receptacle having an open top and bottom, a relatively narrow edge flange bounding said bottom opening, a removable bottom supported

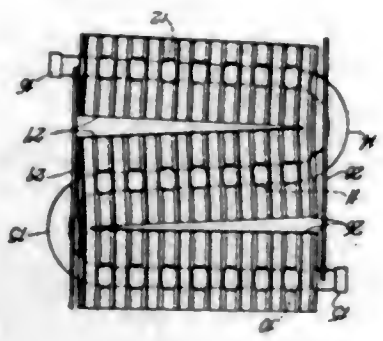
by said flange, a flange about the upper edge of the receptacle having a pin opening therein at one side of the receptacle, and a pin on the flange at the opposite side of the receptacle from said opening.

1,865,961. VENTILATOR. EARL T. REMY, Crestline, Ohio, assignor to Voisard, Incorporated, Shiloh, Ohio, a Corporation of Ohio. Filed Feb. 19, 1930. Serial No. 429,714. 1 Claim. (Cl. 98—2.)



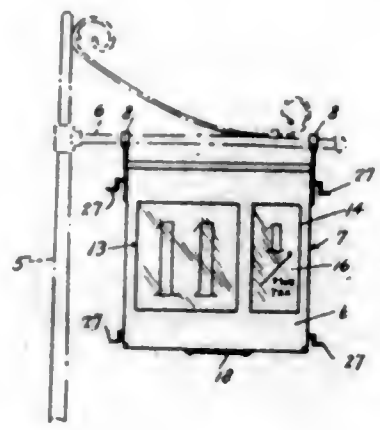
A ventilator for use in an opening having grooves in its sides and in its top and containing a pane slidable in the grooves in the sides of the opening, said ventilator comprising two plates having louvers formed therein and having their upper edges rolled to form beads, one bead fitting closely within the other bead to permit relative endwise movement and prevent relative sidewise movement, the outer bead fitting snugly in the groove in the top of the opening, and each plate having its lower edge formed into a crimp extending upwardly and outwardly from the plate and then downwardly, the crimp on the inner plate fitting snugly within the crimp on the outer plate and engaging over the upper edge of the vertically movable pane with the downwardly extending portions of the crimps bearing against the outer face of the pane and the plates lying wholly within the opening and substantially in the plane of the pane, the thrust on the pane edge being perpendicular to the edge face of the pane whereby to minimize the strain on the pane which tends toward chipping of the glass.

1,865,962. RADIATOR. FRANK C. REYNOLDS, New York, N. Y., assignor, by mesne assignments, to American Radiator & Standard Sanitary Corporation, a Corporation of Delaware. Filed Aug. 27, 1929. Serial No. 388,655. 6 Claims. (Cl. 257—149.)



4. A radiator of the type described which comprises lengths of pipe joined at alternate ends and slightly inclined to the horizontal, vertical fins on said lengths, the fins of each length being separated from, and approximately in alignment with, corresponding fins of the length immediately above and below and a dividing plate spanning and holding separated the unjoined ends of proximate lengths.

1,865,963. SIGN. ARTHUR ROBERTS and JACK SHELTON, East St. Louis, Ill. Filed Nov. 9, 1931. Serial No. 573,994. 2 Claims. (Cl. 40—86.)



1. An exhibitor of the character described comprising a casing open at a pair of its opposite sides, a vertically travelling exhibitor web disposed over each open side, a horizontal member mounted in the casing, bulbs mounted on the horizontal member and a fine mesh screen disposed over the said member so as to depend at opposite sides thereof to diffuse the light emanating from the bulb in the direction of the webs.

1,865,964. MONOPLANE. ADOLF ROHRBACH, Berlin-Wilmersdorf, Germany, assignor to Rohrbach Patents Corporation, a Corporation of Delaware. Filed Sept. 19, 1927, Serial No. 220,342, and in Germany Sept. 27, 1926. 15 Claims. (Cl. 244—12.)

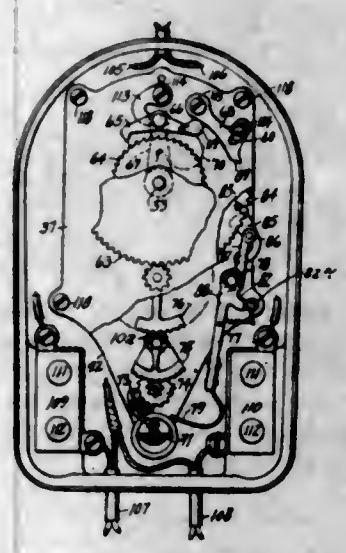


1. In a monoplane of a cantilever type the combination of a fuselage with wings joined to the sides thereof one side of the wing being connected directly to the fuselage and the other side of the wing being connected to the fuselage wholly exteriorly thereof by a short inclined strut which is joined at one end to the fuselage and at the other end to the wing root at a point located a short distance from the fuselage in the direction of wing span.

1,865,965. TIME CONTROLLED DEVICE. CHARLES RUIZ, Brooklyn, N. Y. Filed Mar. 21, 1927. Serial No. 177,159. 14 Claims. (Cl. 161—1.)

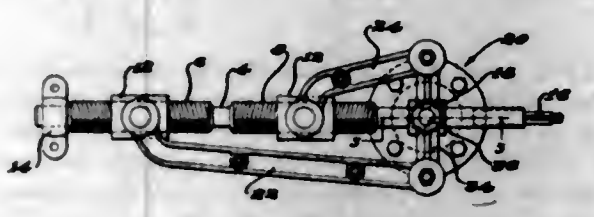
1. In a time-controlled device, the combination with a clock mechanism having a pinion, a clock face having a zero point and graduations representing periods of time, and a pointer normally disposed at said zero position and movable therefrom to any of said graduations, of a coiled spring, a shaft arranged for winding up said spring, a gear wheel mounted loosely on said shaft and meshing with said pinion, a ratchet-wheel mounted loosely on said shaft to be driven in the opposite direction to the movement of said shaft in winding said spring and fastened

to said gear wheel, an arm fast on said shaft, a drive pawl pivoted on said arm and operatively engaging said ratchet wheel, said pointer being connected to said shaft so that the latter is rotated to wind said spring when said pointer is moved to one of said graduations, said shaft being subsequently rotated in the opposite direction by the unwinding of said spring when said pointer is released, said subsequent rotation being controlled by



said mechanism and being effective for returning said pointer slowly to said zero position, a bell operatively connected to said shaft to be rung when the latter is rapidly rotated, and means for disconnecting said pawl from said ratchet wheel when said pointer is returned to zero position so that said shaft may be freed from control of said clock mechanism, whereupon it will rotate rapidly under action of said spring and ring said bell.

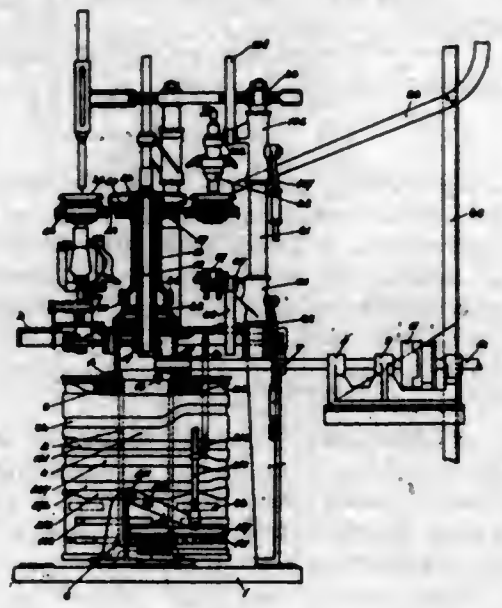
1,865,966. STEERING GEAR. CHRISTOPHER E. RYMES, Lexington, Mass., assignor to Edson Manufacturing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 18, 1931. Serial No. 516,627. 1 Claim. (Cl. 114—169.)



In marine steering gear, the combination with screw actuating means of a rudder head having separable upper and lower flanged members, a link connecting the screw with the rudder head, one having a boss received in a recess of the other to take the unbalanced thrust of the link, means for attaching the lower member to a rudder post, and means for securing the flanged members together after attachment of the lower member to the rudder post.

1,865,967. MACHINE FOR MANUFACTURING HOLLOW GLASS BODIES. PANCRAS SCHOONENBERG, Eindhoven, The Netherlands, assignor to Naamlooze Vennootschap Internationaal Octrooibureau, Eindhoven, (Thur). Filed Sept. 29, 1925, Serial No. 59,381, and in the Netherlands Oct. 8, 1924. 15 Claims. (Cl. 49—9.)

5. A machine for manufacturing hollow glass bodies comprising a pressing plunger and a pressing mold cooperating therewith, a blowing head with a final blowing mold cooperating therewith, a number of neck molds movable to bring the glass bodies to be operated upon simultaneously into operative relation to the said pressing plunger and mold and blowing head and mold, said neck molds being rotatable on their own axes, means for

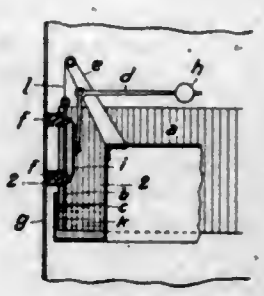


moving and rotating said neck molds, means for locking the normally rotating neck molds, means for operating the pressing plunger and blowing head when the neck molds are in operative relation thereto and means for removing the finished glass body from the machine.

1,865,968. PRODUCTION OF MONOPOTASSIUM PHOSPHATE. WALTHER SCHUPPE. Berlin, Germany. Filed Oct. 10, 1930, Serial No. 487,909, and in Germany Oct. 25, 1929. 1 Claim. (Cl. 23—107.)

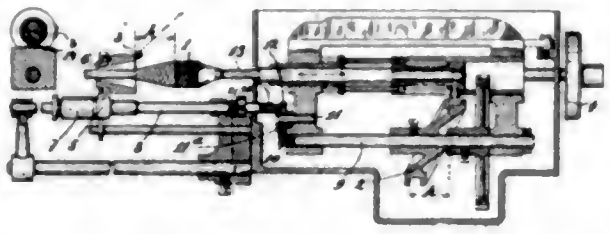
The process of producing mono-potassium phosphate from phosphoric acid and potassium chloride comprising introducing potassium chloride and phosphoric acid in molecular proportion into a solution saturated both with mono-potassium phosphate KH_2PO_4 and with the double salt $KH_2PO_4.H_3PO_4$, heating the reaction mixture until the chlorine has been expelled, while maintaining the percentage of water in the mixture, cooling the resulting liquor, separating the mono-potassium phosphate precipitated on cooling and utilizing the mother liquor in a succeeding operation.

1,865,969. SEALING MEANS FOR FLUID STORING CONTAINERS. FRIEDRICH SCHÜRMANN, Dortmund, Germany, assignor to the Firm Aug. Klonne, Dortmund, Germany. Filed Mar. 8, 1929, Serial No. 345,500, and in Germany Mar. 8, 1928. 4 Claims. (Cl. 220—26.)



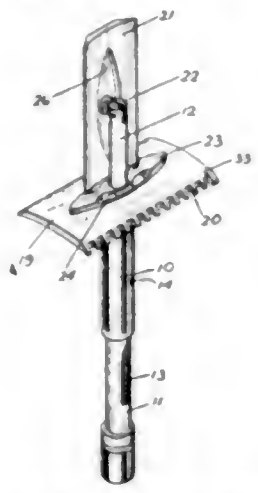
1. A sealing piston for containers for the storage of gas, steam or volatile fluids comprising an extensible ring of corrugated sheet metal, said corrugations being vertically disposed, and a sealing ring supported by said sheet metal ring.

1,865,970. COP WINDING MACHINE. WALTER SCHWEITER, Horgen, near Zurich, Switzerland. Filed Oct. 7, 1930, Serial No. 487,038, and in Switzerland Nov. 5, 1929. 3 Claims. (Cl. 242—31.)



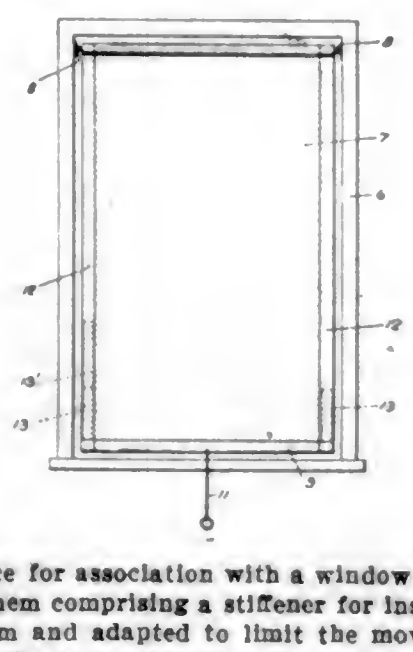
1. In a cop winding machine, a spindle adapted to receive a spool to be wound, means for rotating and reciprocating said spindle, a thread guide disposed adjacent the spool, and means for independently reciprocating said thread guide for displacing the ends of the successive layers of thread at the peak of the wound cop.

1,865,971. RAZOR AND BLADE. HYMAN R. SEGAL, New York, N. Y., assignor, by mesne assignments, to Segal Safety Razor Corporation, New York, N. Y., a Corporation of New York. Filed May 26, 1930. Serial No. 455,545. 8 Claims. (Cl. 30—12.)



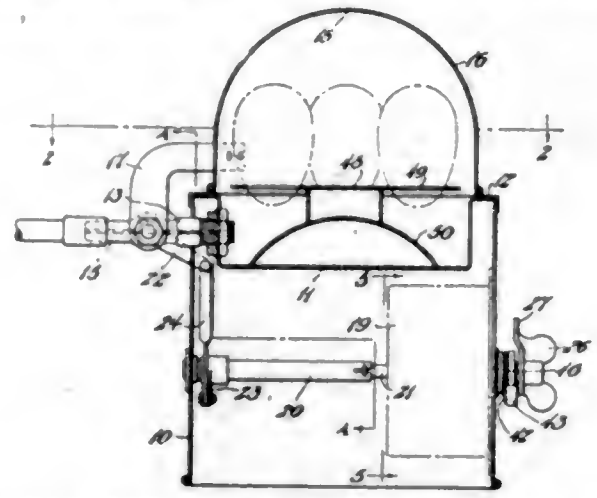
1. A razor including a guard, a cooperating clamping plate, means for pivotally supporting said plate and shifting the same vertically and rotatably with respect to said guard, and means comprising a substantially oval abutment assisting in the swinging of said plate with respect to said guard.

1,865,972. WINDOW SHADE. HYMAN R. SEGAL, New York, N. Y. Filed June 12, 1931. Serial No. 543,834. 7 Claims. (Cl. 156—10.)



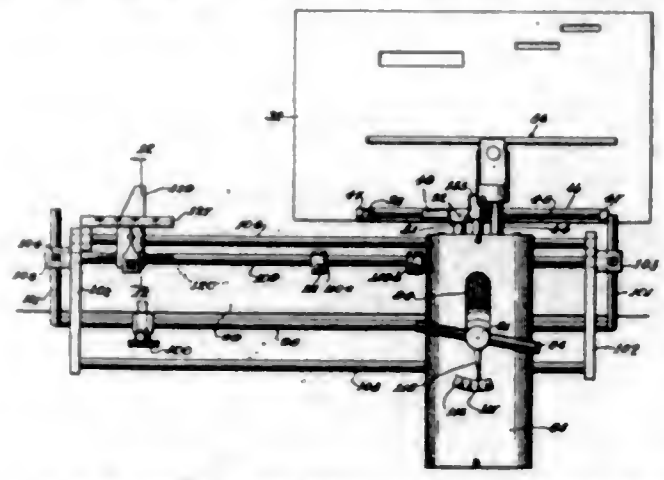
2. A device for association with a window shade formed with a side hem comprising a stiffener for insertion within said side hem and adapted to limit the movement of the shade when the latter is in place in a window frame.

1,865,973. FOOD COOKER. CURTIS W. SHIELDS, New York, N. Y. Filed Oct. 2, 1930. Serial No. 485,976. 11 Claims. (Cl. 53—1.)



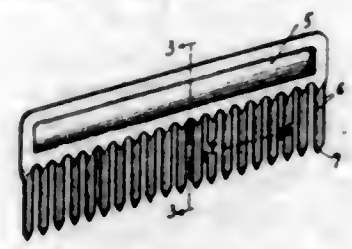
1. A food cooker comprising, in combination, a cooking compartment having a cover; means to admit a fluid cooking medium to the compartment; a valve controlling the supply of the cooking medium; and a single timer mechanism connected to operate both the valve and cover after a predetermined time.

1,865,974. ATTACHMENT FOR ADDRESSING MACHINES. EDWARD W. SIBLEY, Kenmore, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 7, 1926. Serial No. 127,765. 23 Claims. (Cl. 101—47.)



1. In a printing attachment, the combination with a printing plate having a plurality of lines of characters and means to press a card to be printed onto said plate, of a mask having a slot and interposed between said plate and card so that said slot registers with a portion of the lines on said plate, and an operating member operably connected to said card and mask to cause differential movement therebetween to various adjusted positions relative to each other and said plate, said operating member being capable of both rotation and translation movements to secure said differential movement.

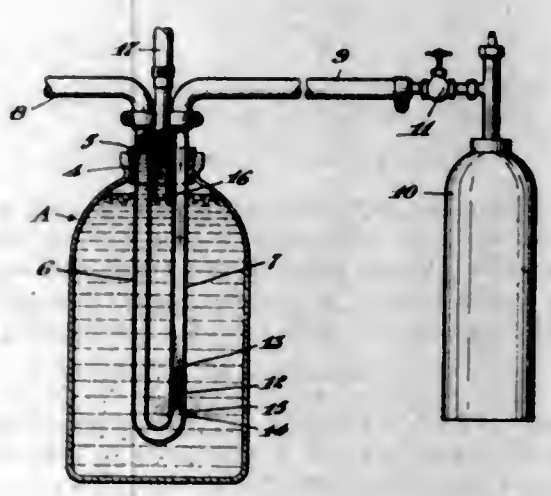
1,865,975. SANITARY COMB. EVELYN SILVERMAN, Brooklyn, N. Y. Filed Nov. 11, 1931. Serial No. 574,401. 1 Claim. (Cl. 132—11.)



A paper comb having a rigid back and a series of spaced teeth projecting therefrom side by side with free open spaces between them so that the comb may be drawn freely

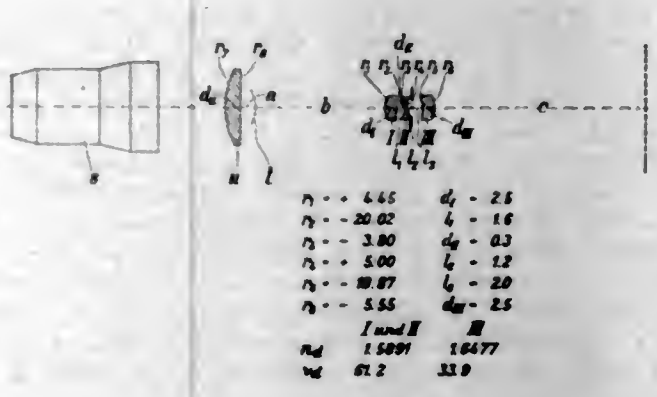
through the hair; said teeth being angular in cross section with the ridges of the angular portions facing in line towards the side of the comb to resist all lateral strains when the teeth are being drawn through the hair.

1,865,976. CHLORINATOR. LOUIS C. SOMERS, Los Angeles, Calif. Filed Dec. 8, 1930. Serial No. 500,771. 5 Claims. (Cl. 210—28.)



1. In a liquid and gas mixing apparatus, a liquid container, a mixing tube leading downwardly into said container and opening at its lower end thereto, means for delivering gas under pressure to the upper end of said tube, a liquid supply tube leading downwardly into said container, a nozzle on the lower end of said supply tube disposed in and opening upwardly into said mixing tube, means for delivering liquid under pressure through said supply tube and nozzle, and a discharge tube leading from the upper portion of said container.

1,865,977. OPTICAL SYSTEM. AUGUST SONNEFELD, Jena, Germany, assignor to the Firm Carl Zeiss, Jena, Germany. Filed Oct. 24, 1930, Serial No. 490,953, and in Germany Oct. 28, 1929. 4 Claims. (Cl. 88—57.)



n_1	= 1.665	d_1	= 25
n_2	= −20.02	l_1	= 16
n_3	= −3.80	d_{II}	= 03
n_4	= 5.00	l_2	= 12
n_5	= −10.87	l_3	= 20
n_6	= −5.55	d_{III}	= 25

	I and II	III
n_d	1.5891	1.6477
ν_d	61.2	33.9

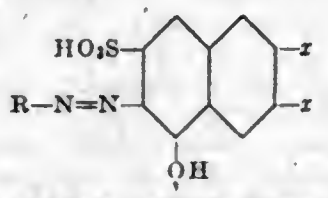
1. A converging optical system for imaging in a plane the image projected by a microscope objective on a curved surface, consisting of a dispersive lens and two converging lenses, the dispersive lens being placed between the converging lenses and separated from them by air, the said three lenses being so constructed that the Petzval sum

$$\Sigma\left(-\frac{\varphi}{n}\right)$$

is negative for the system.

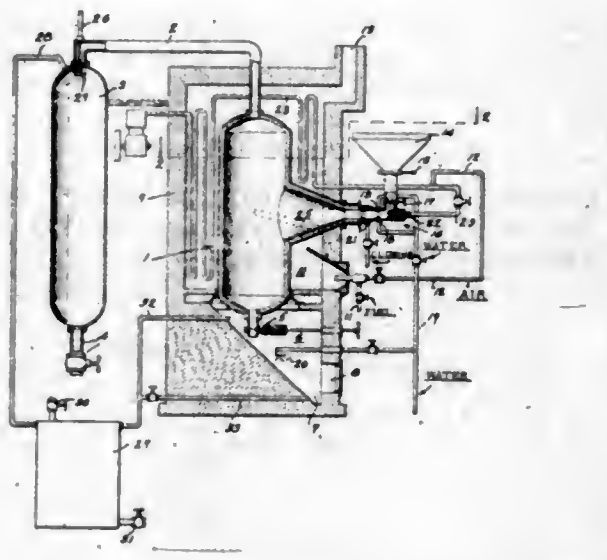
1,865,978. DYESTUFFS CONTAINING METALS AND PROCESS OF MAKING SAME. FRITZ STRAUB and WALTER ANDERAU, Basel, Switzerland, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed July 5, 1929, Serial No. 376,276, and in Switzerland July 13, 1928. 12 Claims. (Cl. 260—12.)

1. Process for the manufacture of new dyestuffs containing metals, consisting in treating azo-dyestuffs of the general formula



wherein one of the x's stands for hydrogen and the other x for an NH_2-group, and wherein R means an aromatic radicle of any diazo-compound which carries a group capable of forming lakes, in any desired sequence with oxidizing agents and with agents yielding metals which are capable of forming complexes.

1,865,979. PROCESS FOR THE TREATMENT OF ORE. JOSEPH F. TAPIE, Santa Barbara, Calif., assignor of one-half to George Fiske Hammond, Santa Barbara, Calif. Filed Sept. 2, 1931. Serial No. 560,858. 3 Claims. (Cl. 75—67.)



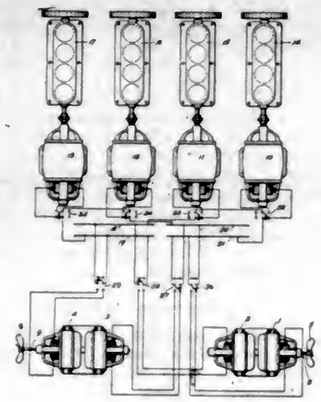
1. A process for treating ores comprising moistening crushed ore with water, contacting the moistened ore with chlorine thereby forming chlorides with metals contained in the ore, projecting the chlorinated ore against a heated surface to volatilize the metal chlorides in the ore, and precipitating the chloride vapors.

1,865,980. CONTROL SYSTEM. WALTER E. THAU, New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 19, 1927. Serial No. 220,584. 7 Claims. (Cl. 172—8.)

1. In a distribution system, in combination with a plurality of sets of mechanically coupled motors, a plurality of generators for supplying electric energy to the motors, means for electrically connecting one motor in each set of the motors in parallel circuit relation with one motor of each of the other sets and an electrical circuit comprising the parallel connected motors and the generators disposed alternately in series relation.

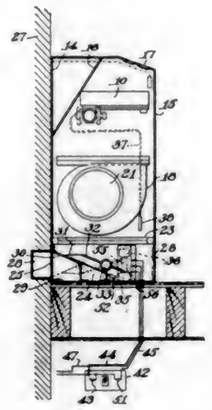
7. In a power-distribution system, in combination, a plurality of sets of mechanically-coupled motors, a plurality of sets of bus bars, means for connecting a motor of each set in parallel-circuit relation to one set of bus bars, means for connecting another motor of each set in

parallel-circuit relation to a different set of bus bars, a plurality of power-supplying units, and means for connecting the sets of bus bars and power-supply units alternately in series-circuit relation, whereby motors of differ-



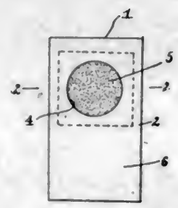
ent sets are connected in the main series circuit in parallel with respect to one another and the system caused to operate at a voltage equal to that of a single power-supply unit.

1,865,981. AIR CONDITIONING UNIT. REUBEN N. TRANE, La Crosse, Wis. Filed July 6, 1931. Serial No. 549,079. 3 Claims. (Cl. 236—38.)



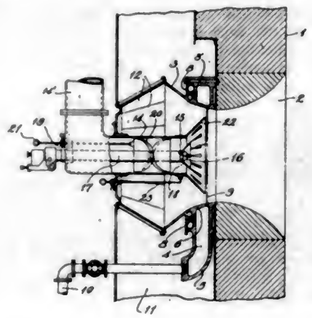
1. A heating and ventilating unit having a casing divided into an air inlet chamber, a blower chamber, a heater chamber and a discharge chamber, a recirculated air inlet and a fresh air inlet, and means for mixing the fresh air and recirculated air before entering the blower, an extended surface heater in said heating chamber and a thermostatic valve responsive to the temperature of the mixed air before such air enters the heater proportionately controlling the flow of heating fluid to said heater in relation to the different temperatures of such air.

1,865,982. ANALYTICAL FILTER. ANTHONIUS MARINUS VAN DOORN, Bilthoven, Netherlands. Filed Sept. 15, 1930, Serial No. 482,167, and in the Netherlands Sept. 27, 1929. 2 Claims. (Cl. 23—258.)



1. A filter card particularly for testing and determining the condition or milk comprising a strip of paper having an opening therein and a section for recording the data relating to the milk to be tested; and a filter material securely mounted on the strip and over the opening therein.

1,865,983. FUEL BURNING APPARATUS. SAMUEL T. WARNER, New York, N. Y., assignor to Peabody Engineering Corporation, New York, N. Y., a Corporation of New York. Filed May 13, 1927. Serial No. 191,064. 8 Claims. (Cl. 110—22.)



1. In combination, a furnace having a wall with an opening therein constituting the throat of the combustion chamber, a gas box and means for mounting the same about the entrance to said opening, an air register secured to said box, said register having a front plate, a pipe for pulverized coal extending through and supported by said front plate, a liquid fuel atomizer extending through and supported by said pipe, means for supplying liquid fuel to said atomizer, said parts being so mounted as to discharge the fuel either from the gas box or from the atomizer or the pulverized coal supply pipe into the combustion air at substantially the entrance to the furnace throat, and means for giving the combustion air a whirling motion.

1,865,984. COMBINED PICKING TABLE AND REFUSE CONVEYER. CLIFFORD W. WATERMAN, Pittsburg, Kans., assignor to The Pittsburg Boiler and Machine Company, Pittsburg, Kans. Filed May 31, 1930. Serial No. 458,173. 3 Claims. (Cl. 209—125.)

1. In an endless conveyer coal handling machine of the class described, the combination of a frame, an endless belt, means for causing the travel of the upper portion of the belt in one direction and the lower portion of the belt in another direction, a plurality of upper refuse receiving chutes disposed on one side of the conveyer belt and arranged to deliver the refuse material on the inner

surface of the lower portion of the belt on the same side thereof, a lower refuse material receiving chute, and a stationary deflecting plate positioned immediately above said inner surface and arranged for deflecting the refuse material off the edge of the belt on said side thereof directly above said lower chute, said frame carrying upper and lower runways for the belt disposed between the upper and lower portions of the belt, the belt comprising a series



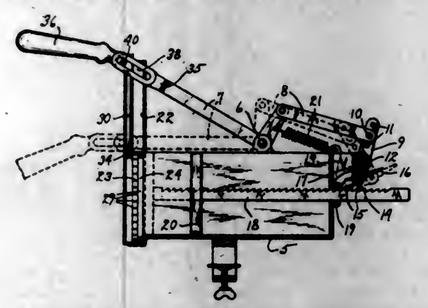
of plates, the plates carrying rollers for traveling on said runways, said upper and said lower runways being substantially centrally disposed intermediate of the end portions of said plates and being provided with a vertical plate disposed intermediate of the upper and lower portions of the belt and being adapted to shield the lower runway from the refuse deposited on the inner surface of the lower portion of the belt.

1,865,985. SURF BOARD ATTACHMENT. WILLIAM L. WHEELER, Los Angeles, Calif. Filed Sept. 2, 1931. Serial No. 560,766. 3 Claims. (Cl. 9—11.)



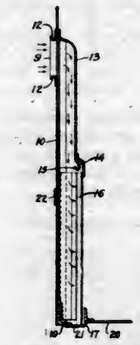
1. A surf board having an impeller hingedly mounted upon the under side of the board so as to be capable of swinging rearwardly against the under side of the board into an idle position, and means limiting the forward swinging movement of the impeller to an impelling position, said impeller being rotatably adjustable so that its transverse position with respect to the board may be varied.

1,865,986. VEGETABLE CUTTING DEVICE. MABEL WHITE, Spokane, Wash. Filed Apr. 22, 1931. Serial No. 531,911. 2 Claims. (Cl. 146—78.)



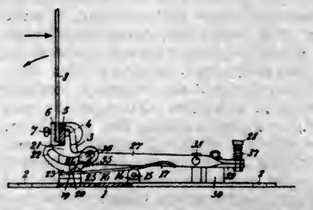
1. A vegetable cutting device having in combination a container open at one end, upstanding channel guides for said end, stationary blades mounted in said guides in transverse arrangement across said open container end, a cutting blade mounted for vertical movement in the guides across the front face of the stationary blades and having a central vertical slot, a spring fixed to said cutting blade whereby same is adapted to be moved away from the stationary blades, another spring for one of the guides adapted to retain said cutting blade in a normally raised position, a plunger for the container, a rack bar connected to the plunger and extending slidably through the rear end thereof, a pawl engaging the rack bar, means for releasing the pawl from engagement with the rack bar, a rod and pawl lever for actuating the pawl, a link member detachably and adjustably connected to the pawl lever, a bell crank lever fulcrumed to the container and pivotally connected to the link member, a spring adapted to retain the long arm of the bell crank in a normally raised position, a forward offset handle end portion for the long bell crank arm pivotally and slidably connected to the movable cutting blade and within its vertical slot whereby upward movement of the handle raises said blade and causes the plunger to move forward a predetermined distance and whereby downward movement of the handle and cutting blade causes the pawl to take a retracted hold on the rack bar, and said bell crank handle portion adapted to be disconnected from the movable cutting blade whereby said blade remains stationary in the raised position and said handle portion is adapted to move upon down in the vertical slot of said movable blade.

1,865,987. AIR FILTER. CHARLES C. WHITTAKER, Pittsburgh, Pa., assignor to Westinghouse Electric Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 6, 1930. Serial No. 480,150. 6 Claims. (Cl. 183—67.)



1. An air cleaner comprising a filter screen, a supporting structure for the screen, a gutter surrounding an opening through which air enters the cleaner, a baffle plate disposed opposite the opening to collect particles of moisture that enter through the opening, and means attached to the baffle plate for catching the moisture that collects on the baffle plate to prevent it from entering the filter screen.

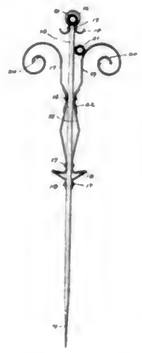
1,865,988. APPARATUS FOR TARGET PRACTICE. MAX WIEDECK, Berlin, Germany. Filed Aug. 15, 1931, Serial No. 557,402, and in Germany Dec. 19, 1930. 18 Claims. (Cl. 124—15.)



1. Apparatus for target practice comprising in combination a target carrier rotatable about a fixed horizontal axis between a working and a non-working position,

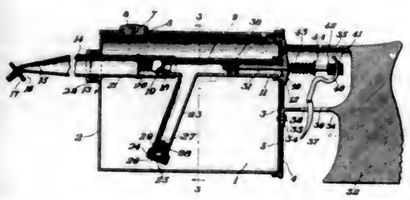
locking means for retaining said carrier in the working position and adapted to be rendered inoperative to permit said carrier to rotate into the non-working position and means for restoring said carrier to the working position and for rendering said locking means operative, said restoring means including an actuating member and means controlled by said member for automatically rendering said locking means inoperative.

1,865,989. GARDEN HOSE SUPPORTER. FLOYD S. WILBER and ATWATER W. HOLLISTER, Kingston, N. Y. Filed Sept. 15, 1931. Serial No. 562,846. 3 Claims. (Cl. 248—29.)



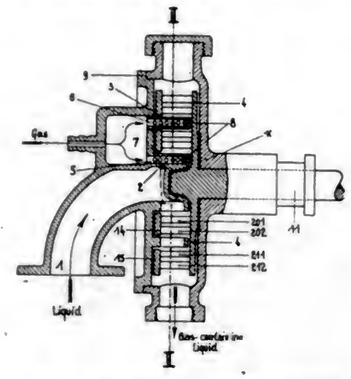
1. A garden hose support, comprising a rod adapted to be inserted into the ground, an adjustable loop pivoted to the top thereof, and a pair of resilient arms secured to the sides of said rod and adapted to retain a hose between the same and said rod.

1,865,990. OIL CAN. CHARLIE N. WILCOX, McCook, Nebr. Filed June 16, 1930. Serial No. 461,600. 6 Claims. (Cl. 221—51.)



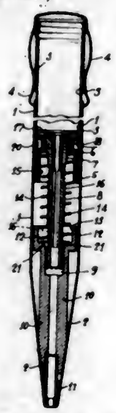
1. An oil dispenser comprising a receptacle having front and rear heads, a barrel extending longitudinally in said receptacle from the rear head, a spout removably carried by said barrel and projecting through the front head, an outwardly opening valve controlling flow of oil through the barrel and spout, an inlet tube depending from said barrel within the receptacle and having a valve controlled inlet, a handle carried by the rear head and formed with a pocket having a slot in its lower portion, a piston for drawing oil into the barrel through said tube and forcing the oil out of the barrel through said spout having a stem extending through the rear head into the pocket of said handle, and a trigger carried by the handle and having its upper end engaging with the stem of said piston and its lower portion projecting outwardly through said slot.

1,865,991. CENTRIFUGAL MULTISTAGE MIXING APPARATUS. KURT WINKLER, Frankenthal/Pfalz, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed July 14, 1930. Serial No. 467,881, and in Germany July 13, 1929. 2 Claims. (Cl. 261—90.)



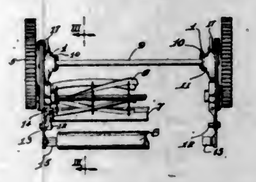
1. In a multi-stage apparatus of the turbine or centrifugal type for mixing, stirring and emulsifying liquids and provided, in the single mixers, with paddle wheels connected in series, the structure which comprises in combination a diaphragm positioned closely to and circularly around the axis of the apparatus, and one or more further diaphragms circularly positioned around the axis of the apparatus and separated from the first diaphragm and from each other by paddle wheels connected in series, all diaphragms having slots for guiding the liquid from the inlet pipe of the apparatus to the paddle wheels, and the remaining parts of the diaphragms which form bars or tubes being provided with passages communicating on one side with a gas chamber, mounted on the cover of the apparatus, and ending on the other side in fine outlet openings to convey a gas stream into the liquid moved by the paddle wheels.

1,865,992. MECHANICAL LEAD PENCIL. ALFRED WOELM, Berlin, Germany, assignor to Pencil Mechanism Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 19, 1929, Serial No. 348,161, and in Germany May 3, 1928. Renewed Nov. 25, 1931. 12 Claims. (Cl. 120—17.)



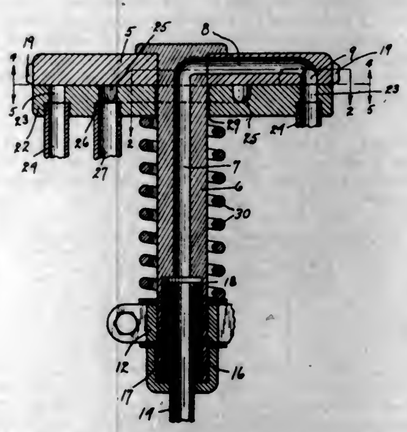
6. In a step-by-step lead pencil, the combination of a casing, longitudinally movable lead-gripping means within the casing, a gripper-operating member adapted to impart lead gripping and feeding action to the lead gripping means, a longitudinally movable exteriorly accessible actuating element, and means detachably to connect said gripper-operating member with said exteriorly accessible actuating element.

1,865,993. LAWN MOWER. CHARLES C. WORTHINGTON, Dunfield, N. J. Filed Oct. 24, 1928. Serial No. 314,554. 5 Claims. (Cl. 56—249.)



1. In a lawn mower, a frame comprising two closed side casings each containing fixed within it a journal stud for its appurtenant ground wheel and one or both containing speed-multiplying gearing through which the latter drives the fly knife, in combination with a cross-rod secured by its ends to said casings in line with but independently of said journal studs.

1,865,994. UNITARY ROTARY VALVE. GEORGE W. WRIGHT, Lewiston, Idaho. Filed Feb. 10, 1931. Serial No. 514,888. 1 Claim. (Cl. 123—190.)



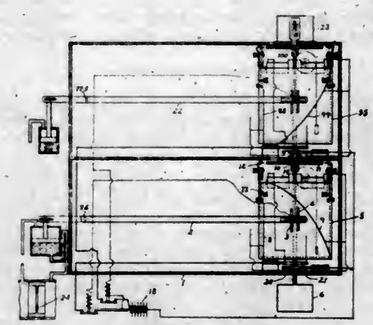
The combination with a multi-cylinder internal combustion engine, of a unitary rotary valve comprising a rotary disc member, a depending stem for said disc having a conduit therethrough, said conduit extending laterally through a portion of the rotary disc and terminating in a concentric groove on its underside, said stationary disc having another corresponding groove on its underside disposed at one-quarter circumference from the first-named groove, said stem revolubly connected with the carburetor pipe of the engine, a stationary disc member supported by the engine and supporting the rotary disc, means for causing one revolution of the rotary disc for each two revolutions of the engine crank shaft, said stem extending through a center hole of the stationary disc, spring means for retaining the two discs in revoluble engagement, said stationary disc having a plurality of spaced holes therethrough disposed in the path of the two aforesaid grooves on the underside of the rotary disc, a pipe connecting each of said holes with a cylinder of the engine, and said stationary disc having a concentric ring groove on its upper face with a hole extending through whereby an exhaust passage is established for the intake conduit at each revolution of the rotary disc.

1,865,995. CRAVAT HOLDER. AMSY L. WURSTER, Haddon Heights, N. J., assignor of one-half to Robert E. Albright, Philadelphia, Pa. Filed Oct. 6, 1931. Serial No. 567,144. 5 Claims. (Cl. 24—49.)



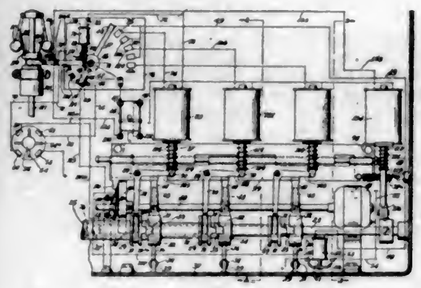
5. A cravat holder comprising a substantially rigid bar, eyes formed at the opposite ends of the bar, a chain having it opposite ends connected to eyes at the opposite ends of the bar, and a member resiliently connected to and coacting with the bar to press a garment part between said member and said bar throughout substantially their entire lengths.

1,865,996. MEASURING APPARATUS. ARCHER E. YOUNG, Pittsburgh, Pa. Continuation of application Serial No. 382,692, filed Aug. 1, 1929. This application filed Oct. 12, 1929. Serial No. 400,997. 9 Claims. (Cl. 73—167.)



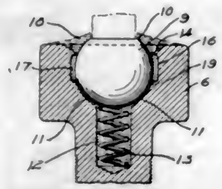
1. Apparatus for measuring the flow of gas in a conduit, including, in combination with said conduit, a member having an extended face, means for causing said member to move through a distance which in a given interval of time is greater or less, according to variation in one condition of a body of gas flowing in a stream through such conduit, a block movable adjacent the face of said movable member and in a direction transverse to that in which the member moves, means whereby said block is moved in response to variation in another condition of the body of gas flowing through such conduit, a second movable member, a clutch arranged between the movable member first named and the second, an electric control for said clutch, such control including mutually engaging parts borne by said block and by the movable member first named, the range of engagement being greater or less according to the position of the said block in its range of movement.

1,865,997. AUTOMATIC GEAR SHIFTING DEVICE. ARTHUR ZINECKER, Chicago, Ill. Filed Jan. 9, 1932. Serial No. 585,767. 8 Claims. (Cl. 74—97.)



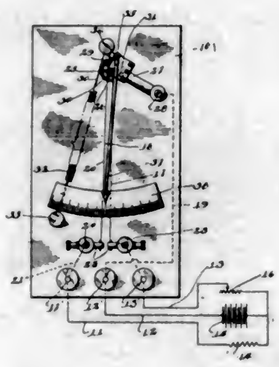
1. In a device of the class described in combination with an automobile transmission a plurality of shifting shafts extending concentrically to each other, means for rotating said shafts, means connected to each of said shafts for shifting a transmission gear selectively in and out of mesh, when said shafts are rotated, a shifting lever rotatably mounted on each of said shafts, a shaft extending parallel to the shifting shafts, a shifting motor adapted to rotate said shaft, a plurality of actuating cams rigidly mounted on the shaft driven by the motor and adapted to engage and pivot the shifting levers on the shifting shafts, a clutch on each shifting shaft adapted to couple each shifting lever to the corresponding shifting shaft, means for selectively actuating one of said clutches for coupling and uncoupling the corresponding clutch, and means for reversing the pivotal movement of the shifting levers.

1,865,998. VALVE OPERATING ASSEMBLY. ADRIAN O. ABBOTT, Jr., Grosse Pointe Park, Mich. Filed Oct. 23, 1929. Serial No. 401,658. 4 Claims. (Cl. 123—90.)



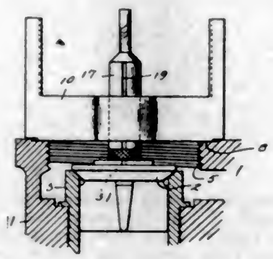
1. In a ball and socket assembly adapted for use with valve operating mechanism, a socket, a flat sided ball therein, projections extending from the edge of the socket for holding the ball in the socket, the dimension of the ball diametrically from its flat side being less than the distance between the projections whereby to permit placement and removal of the ball into and out of the socket when the same is turned with its flat portion adjacent a projection and to permit the ball to be retained in the socket when turned with its flat side upwardly as regards the projections.

1,865,999. ELECTRICAL THERMOMETER. JOSEPH W. ALLEN, Dayton, Ohio. Filed Aug. 28, 1924. Serial No. 734,817. 4 Claims. (Cl. 73—32.)



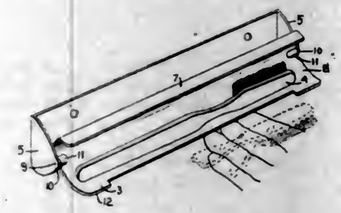
3. In an electrical measuring instrument of the class described, the combination of a constant current branch and a variable current branch in parallel, said constant current branch comprising a fixed resistance, said variable current branch comprising a variable resistance, two conductor segments having a high temperature co-efficient of expansion and connected to said resistances, a common source of electric current for both branches of said parallel circuit, a scale, a means operated relative to the scale by the expansion or contraction of one of said segments due to a change in temperature of said variable resistance.

1,866,000. GAUGE FOR ASCERTAINING THE LIFT OF COMPRESSOR AIR VALVES. PETER A. ALONZO, Guadalajara, Mexico. Filed Nov. 15, 1930. Serial No. 495,982. 7 Claims. (Cl. 33—181.)



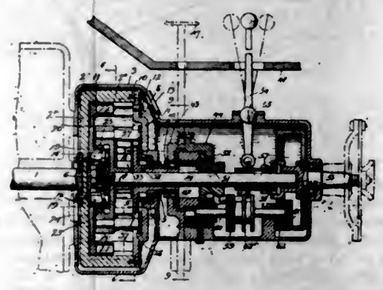
1. A gauge of the character set forth, comprising a bar, legs extending in a common diction from one side of the bar, a tube passing through the bar for endwise adjustment with respect to the opposite side of the bar, means for securing the tube in adjusted position, and a graduated bar slidable freely in the tube and extending from one end thereof in the general direction of the extension of the legs, said end of the tube cooperating with the graduations on the bar as a pointer.

1,866,001. SANITARY TOOTH BRUSH HOLDER. JOSEPH AMELOTTE, Lynn, Mass. Filed Mar. 22, 1929. Serial No. 349,249. 2 Claims. (Cl. 206—15.1.)



1. A brush holder comprising a flat vertically disposed supporting plate having at its ends flanges provided with bearings located at a distance from said plate, a swinging holder for the brush pivotally mounted in said bearings having a base portion forming a pocket for said brush and a closure portion extending therefrom rearwardly into engagement with the upper portion of said plate above and protecting the brush and means pivotally connecting said holder to said bearings operable to cause said holder to be retained by gravity selectively in closed position or in open position, said holder being operable when the brush is enclosed therein by upward pressure of the fingers on the base portion thereof to invert the holder and deliver the brush into the hand, said end flanges being resilient whereby said holder may be moved longitudinally to remove the same from the support to permit thorough cleansing of the device.

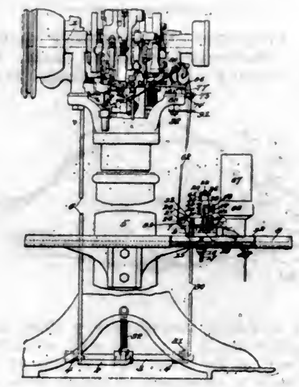
1,866,002. TRANSMISSION. EMIL ANDERSON, Briarcliff Manor, N. Y. Filed Sept. 8, 1928. Serial No. 304,793. 23 Claims. (Cl. 74—34.)



1. In a transmission device a driven shaft, a driving shaft for operating the same, transmission means interposed between said shafts, including means for coupling said shafts for operation by gear reduction ratio, including planetary gearing, fluid means for applying variable back stop pressure to said gearing to automatically modify said latter means to vary the gear ratio between said shafts from a fixed low speed to a high speed in accordance with the load on said driven shaft and a centrifugal clutch device for automatically coupling said shafts for direct drive when said driven shaft has reached a predetermined maximum speed by its operation through said planetary gearing.

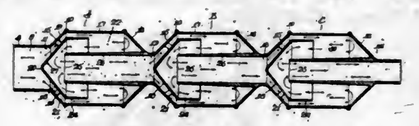
1,866,003. WELT TEMPERING MECHANISM. FRED ASHWORTH, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 23, 1929. Serial No. 365,316. 13 Claims. (Cl. 112—43.)

1. A welt shoe sewing machine having, in combination, stitch-forming devices, actuating means therefor, welt wetting devices including a receptacle for moistening liquid and a movable guide for the welt, and means operating



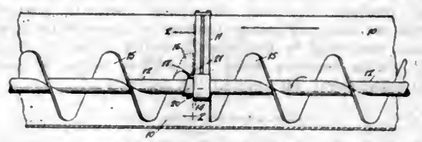
upon starting and stopping the machine to move the guide respectively to and from a position in which the welt is immersed.

1,866,004. MUFFLER. JOSEPH W. BEAMER, Chicago, Ill., assignor to Jennie J. Beamer, as trustee. Filed Dec. 29, 1928. Serial No. 329,297. 5 Claims. (Cl. 137—160.)



1. A muffler for internal combustion engines comprising a housing having oppositely arranged conical end walls, an intermediate cylindrical wall and axial openings at each end, being the inlet and outlet openings therefor, a conical baffle plate disposed relatively close to the conical end wall adjacent to the inlet opening for providing a passage of increasing diameter, means for continuing the flow of the gases after leaving said passage in a substantially straight line along and in intimate contact with said intermediate cylindrical wall, and an outlet member projecting inwardly from said outlet opening into said housing and substantially centrally into said conical baffle plate for receiving the gases after deflected therein from the opposite conical end wall of said housing.

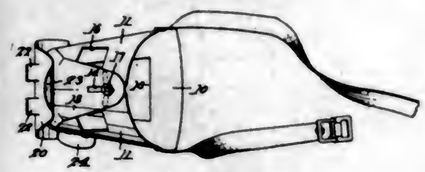
1,866,005. COTTON CONVEYER. JAMES T. BEATY, Charlotte, N. C. Filed Jan. 11, 1930. Serial No. 420,150. 8 Claims. (Cl. 198—213.)



1. A conveyer comprising a support, a spiral conveyer journaled at one end in said support, the end of the spiral flight of said spiral conveyer adjacent said support being

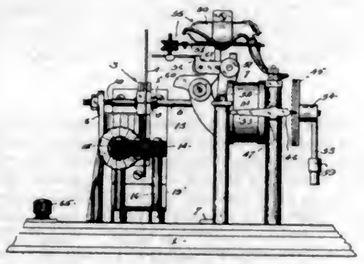
curved inwardly to the center of the spiral conveyer, and a baffle plate secured to the end of said conveyer adjacent the support and overlying the inner end of the conveyer flight.

1,866,006. COASTING ATTACHMENT FOR SHOES. FRANK O. BERGSTRAND, Worcester, Mass. Filed Dec. 21, 1931. Serial No. 582,217. 4 Claims. (Cl. 36—62.)



1. As an article of manufacture, a sheet metal blank for a toe guard having a central portion adapted to constitute the sole of the device and two side flanges having transverse slots in alignment with each other adapted to be bent over into contact to receive a bolt through the slots to secure the side projections in adjusted position, and a front projection having a longitudinal slot in the end adapted to be bent up into contact with the sides with the slot in registration with the first named slots to receive the same bolt.

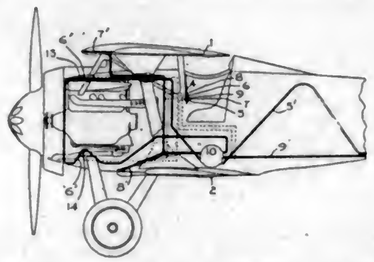
1,866,007. AUTOMATIC EMERGENCY SELECTIVE SWITCH. CARL H. BISSELL, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed June 13, 1928, Serial No. 285,029. 6 Claims. (Cl. 200—97.)



1. In an automatic emergency selective switch, a suitable frame, a load circuit conductor carried by the frame and having a series of contacts spaced apart, normally open switch means operable to selectively engage the contacts, means tending to actuate the switch means to open the same, locking means for holding the switch means engaged with the selective contact, a trip movable along the series of contacts to trip the locking means, an electric motor in circuit with the switch means, motion transmitting means between the motor and the trip to actuate the trip along the series of contacts, when the switch means is in operated position, the trip comprising normally separated clutch sections and means tending to separate them, and means controlled by the movable switch means to engage said clutch sections when the switch means is moved into engagement with one of the contacts.

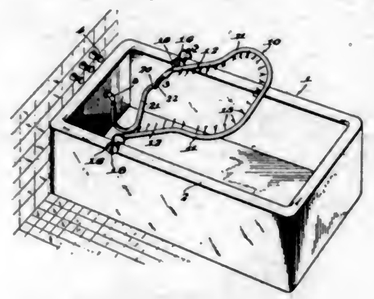
1,866,008. FIRE EXTINGUISHING APPARATUS. GEORGE W. BURKE, Jr., Dayton, Ohio. Filed May 20, 1919. Serial No. 298,515. 7 Claims. (Cl. 169—2.)

1. In apparatus of the character described, the combination with the plane of an airplane, of means secured to said plane to discharge a fire extinguishing material upon the same near its leading edge, whereby the rush of air due to the passage of the airplane through the air will



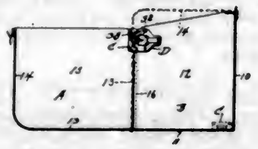
carry said fire extinguishing material over said plane, and means to supply a fire extinguishing material to said first mentioned means.

1,866,009. SHOWER BATH ATTACHMENT. ALBERT CLAYPOOLE, Findlay, Ohio. Filed Apr. 6, 1931. Serial No. 528,147. 2 Claims. (Cl. 4—148.)



1. A shower bath attachment comprising a spray tube of substantially U-shaped form with water discharge apertures on its inner face around the entire length thereof, spindles extending laterally outward from the legs of said tube, rollers mounted on said spindles and adapted to travel on a bath tub rim whereby the attachment may be readily shifted to suit the convenience of the user, and a flexible hose connecting said tube with a faucet.

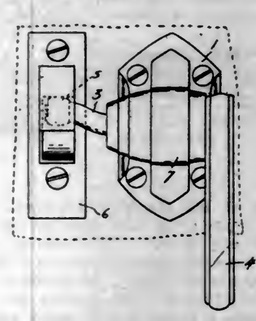
1,866,010. COMBINATION AUTOMOBILE TRUNK AND LUGGAGE CARRIER. ROY C. COLLIER, Sioux City, Iowa, assignor, by mesne assignments, to The Gabriel Karl-Keen Company, a Corporation of Delaware. Filed Feb. 19, 1929. Serial No. 341,258. 8 Claims. (Cl. 224—9.)



1. A combination trunk and luggage carrier, comprising a fixed trunk member including side walls, a movable trunk member including side walls adapted to move in

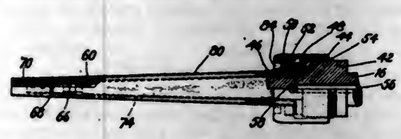
overlapping relation to the side walls of the fixed trunk member, coacting latch elements secured to the side walls of the fixed and movable trunk members, respectively, adapted to slide into hooked engagement during opening movement of the movable trunk member, a locking element, spring urged into operative position where it will prevent unhooking of the latch elements, and means for holding the locking element in inoperative position, said means being releasable by contact with a portion of the movable trunk member, when the latter is approaching closed position.

1,866,011. LATCH. EVERETT J. COOK, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 10, 1930. Serial No. 494,716. 9 Claims. (Cl. 292—332.)



5. A latch comprising a support, a rotatable shaft journaled on said support, a latch arm carried by said shaft, a shoulder on said shaft, a collar encircling said shaft and having a recess engageable with said shoulder for holding said shaft in one position of rotative adjustment, and yieldable means for urging said collar toward said shoulder.

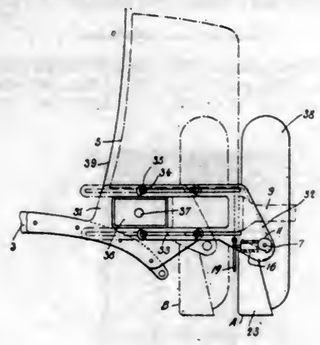
1,866,012. ABRADING MACHINE. JOHN W. COSGROVE, deceased, Medford, Mass., by Caroline E. Cosgrove, administratrix, Medford, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 6, 1928. Serial No. 259,538. 25 Claims. (Cl. 51—190.)



1. In an abrading machine, a hollow rotary spindle supported at one end with its other end free, a resilient inflatable casing covering the free end of said spindle and having a closed end, an abrasive cover over said resilient casing, and means holding both said casing and said cover on the spindle constructed and arranged to effect an air-tight joint between the casing and the spindle.

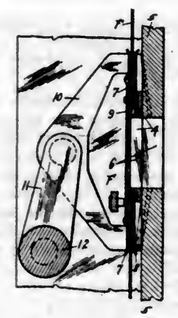
1,866,013. TRUNK AND WHEEL CARRIER. EMILE HENRI COQUILLE, Paris, France, assignor to Societe Anonyme des Usines Chausson, Asnieres, Seine, France. Filed Sept. 4, 1928, Serial No. 303,782, and in France Sept. 17, 1927. 3 Claims. (Cl. 224—29.)

1. A device for supporting trunks and spare wheels upon a motor vehicle, comprising trunk supporting brackets secured to the longitudinals of said motor vehicle, a cross shaft rotatably supported by the outer ends of said brackets, a spare wheel carrier rigidly secured to said shaft, locking means adapted to cooperate with said shaft and to hold said spare wheel carrier in its upward position, and yielding means adapted to bring automatically



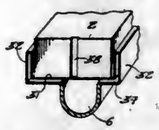
said locking means into its operative position when said sparewheel carrier is brought from a lower position into its upward position.

1,866,014. FILM RACE FOR CAMERAS. HARRY G. CUNNINGHAM, Los Angeles, Calif. Filed June 16, 1930. Serial No. 461,410. 3 Claims. (Cl. 88—17.)



3. In combination with an aperture frame through which light can pass, a plate over said frame, said plate being open over the opening in said aperture frame, and a plurality of wires across said opening in said plate and adapted to press a film against said aperture frame.

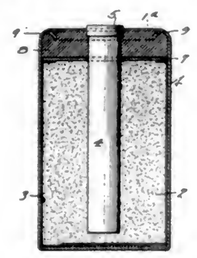
1,866,015. WATER HEATING AND COOKING DEVICE FOR AUTOMOBILES. WALTER LESLIE DAVEY, Melbourne, Victoria, Australia. Filed Mar. 24, 1930, Serial No. 438,595, and in Australia Nov. 2, 1929. 2 Claims. (Cl. 126—20.)



1. An elongated exhaust manifold having a plurality of inlet ports communicating with the respective cylinders of an engine, said manifold having its upper portion ex-

tended laterally and upwardly to define a hollow base and hollow side and end walls, the interiors of which are in open communication with the manifold, with the base designed to directly support and the side and end walls to partially enclose a vessel to be heated.

1,866,016. DRY CELL AND SEAL THEREFOR. CYRIL P. DEIBEL, Lakewood, Ohio. Filed June 30, 1931. Serial No. 547,934. 7 Claims. (Cl. 136—133.)

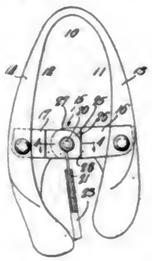


1. A dry cell comprising a metal container, a mass of depolarizing mix partially filling said container and insulated therefrom, an electrode disposed within said mass of mix, the upper edges of said container being bent over inwardly and downwardly, and having vent openings therein, a mass of sealing material extending above and below said curled edges and interlocking with said container.

1,866,017. PIGMENTS AND PROCESS OF MAKING SAME. EMILE C. DE STUBNER, Rochester, N. Y. Filed Sept. 23, 1926. Serial No. 137,382. 6 Claims. (Cl. 134—58.)

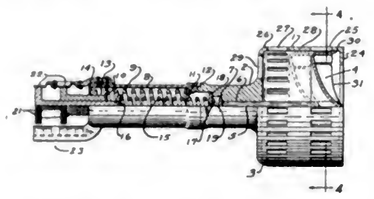
1. The process of preparing pigments for incorporation directly and without grinding into the product to be colored, which consists in producing a dispersion in water of the pigment in the form of a pigment pulp in a state of fine subdivision comparable in fineness to a precipitate of said pigment, treating the pulp with a liquid medium miscible with water to dehydrate the same, and controlling the dehydrating treatment to leave a sufficient amount of said medium to preserve the pulp form of the pigment in the said state of fine subdivision; whereby the fine, precipitate-like form of the pigment is maintained, and the pigment pulp may be dispersed directly into the product to be colored, without subjecting the pigment to the customary grinding or similar dispersing treatments.

1,866,018. SHOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Apr. 16, 1931. Serial No. 530,515. 9 Claims. (Cl. 12—128.2.)



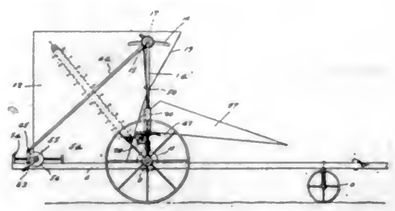
1. An expansible toe form comprising a hollow body portion and a crossbrace of the toggle type connecting the side walls of the body portion, the crossbrace comprising two bars, each pivotally connected at one end to one of said side walls and pivotally connected together at the other ends, said bars being movable relative to each other by application of pressure at the joined ends thereof, between two positions, in one of which the side walls are expanded and in the other of which the side walls are contracted, and means carried by one of said bars which engages the other bar and defines the position in which the side walls are contracted.

1,866,019. AUDIBLE AIR SPEED ANNUNCIATOR. JESSE E. ESHBAUGH, Flint, Mich. Filed June 24, 1931. Serial No. 546,639. 15 Claims. (Cl. 116—147.)



1. A device of the character described, including a casing having a shell, the shell being provided with two series of slots and having a blank portion intermediate the said two series of slots, a rotor and a shaft slidably mounted in said casing, said rotor including a series of blades disposed adjacent to said casing and a series of propelling blades, a spring in said casing and means for adjusting the spring to resiliently hold the said rotor in cooperative relation with the outermost series of slots in the said shell, a further spring within the casing and means for adjusting the same to resiliently hold the said rotor in position intermediate the said two series of slots in the shell, the last mentioned spring being capable of compression to permit movement of said rotor into cooperative relation with the innermost of said series of slots in the said shell.

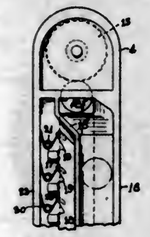
1,866,020. MAIZE HEADER. GENO E. EWBANK, Dalhart, Tex. Filed Feb. 18, 1930. Serial No. 429,397. 4 Claims. (Cl. 56—59.)



1. In a device of the character described, a hopper, an inclined elevator mounted in the hopper, and having one end thereof extending through an opening provided in the wall of the hopper, a movably mounted supporting frame, means for supporting the last referred to end elevator on said frame, and means for securing the frame at a desired angular adjustment relative to the perpendicular.

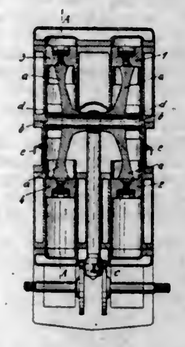
1,866,021. FINGER STRIKING AMUSEMENT DEVICE. EDMUND C. FEY, San Francisco, Calif. Filed Jan. 27, 1930. Serial No. 423,746. 4 Claims. (Cl. 273—138.)

1. An amusement device comprising a plurality of substantially vertical guides between which a coin or token may move, a lever member for moving the coin or token in an upward direction between the guides, and means



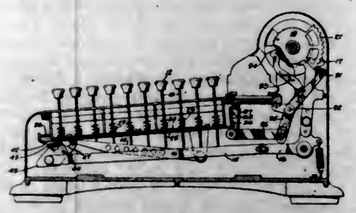
actuated by the lever member for temporarily maintaining the coin or token in a suspended position between the guides.

1,866,022. FOUR-STROKE INTERNAL COMBUSTION ENGINE. PAUL FINDEISEN, Berlin, Germany. Filed Apr. 25, 1931, Serial No. 532,952, and in Germany Apr. 28, 1930. 2 Claims. (Cl. 123—54.)



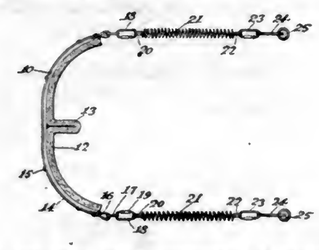
1. A four-stroke internal combustion engine comprising in combination four pistons travelling in corresponding cylinders, an H-shaped connecting member for securing the said pistons to its free ends, slidable blocks arranged on extensions of the cross pin at both sides of the said H-shaped connecting member for supporting the latter on the casing wall, and a connecting rod connected to the said cross pin.

1,866,023. CALCULATING MACHINE. CARL M. F. FRIDEN, Oakland, Calif., assignor to Marchant Calculating Machine Company, Emeryville, Calif., a Corporation of California. Filed June 29, 1927. Serial No. 202,203. 12 Claims. (Cl. 235—130.)



1. In a calculating machine, a rotary actuator including a plurality of adjustable selecting elements, a plurality of rows of depressible keys, a key bar associated with each row of keys and associated with the associated selecting element, depression of a key serving to position an associated selecting element, a movable member associated with each row of keys arranged to be moved by depression of a key in the row, an operating member and means actuated by the initial movement of the actuator for locking said keys and locking said selecting elements against movement.

1,866,024. EXERCISING DEVICE. FLORENCE L. GAILEY, Los Angeles, Calif. Filed June 24, 1930. Serial No. 463,455. 8 Claims. (Cl. 272—83.)

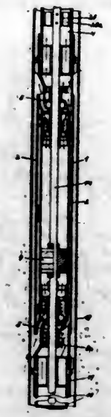


1. An exercising device, comprising a flexible foot engaging member, a strip of padding secured on one face of said foot engaging member and extending from one end thereof to the other, the central portion of said strip of padding being folded double and extended outwardly from the foot engaging member to provide a dividing wall, retractile springs connected to the ends of said foot engaging member and handles connected to said springs.

1,866,025. MOLDING OF BEESWAX CANDLES AND THE PRODUCT THEREOF. LEON W. GELLER, Syracuse, N. Y., assignor to Will & Baumer Candle Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed May 6, 1931. Serial No. 535,571. 4 Claims. (Cl. 87—21.)

1. A molded candle containing a substantial percentage of beeswax, and an aliphatic dihydric alcohol.

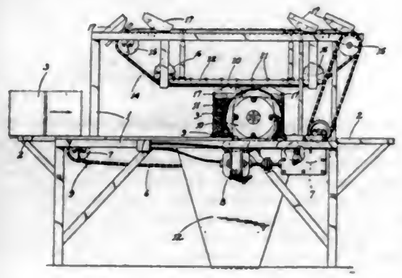
1,866,026. PUMP. HEINRICH GERKEN, Wandsbek, Germany. Filed May 5, 1930, Serial No. 449,913, and in Germany May 8, 1929. 2 Claims. (Cl. 103—156.)



1. A pump comprising a working cylinder, an outer cylinder, a piston and two valve casings, each valve casing containing several suction channels leading the liquid from the outside to the suction valve seat, a suction valve arranged concentrically around a pressure valve and guided by such pressure valve, which suction valve allows

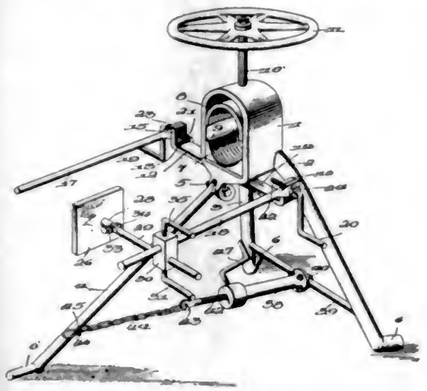
the liquid to flow past both sides of its seat when the liquid is being drawn into the cylinder and has openings through which the liquid flows to the pressure valve when the liquid is being pressed by the piston, a pressure valve through which passes the piston rod and which pressure valve is equipped with two guiding pieces above and below its seat, the guiding pieces having openings through which the liquid flows, several pressure channels which are connected with the space between working cylinder and outer cylinder, such space forming, within the valve casing, the connection between suction and pressure channels, and a spring which actuates both suction and pressure valve.

1,866,027. ASPARAGUS TRIMMER. THOMAS GILL, Jersey, Calif. Filed Apr. 14, 1931. Serial No. 529,923. 7 Claims. (Cl. 146—82.)



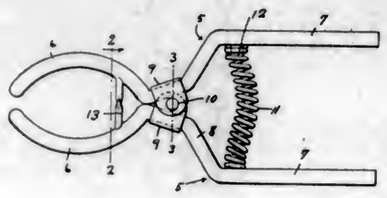
1. An asparagus trimming machine for use in connection with an asparagus holding container from one side of which the butt ends of the asparagus stalks initially project, said machine including horizontal supporting rails for the container, power means for moving the container along the rails, and a driven cutting element extending vertically of the container to one side of but adjacent the plane of the open side of the container and disposed intermediate the ends of the rails.

1,866,028. APPARATUS FOR APPLYING HARD FACING MATERIAL TO FISH-TAIL BITS. CHARLES CULBERSON GOOLSBEE, Houston, Tex. Filed May 8, 1930. Serial No. 450,864. 11 Claims. (Cl. 22—1.)



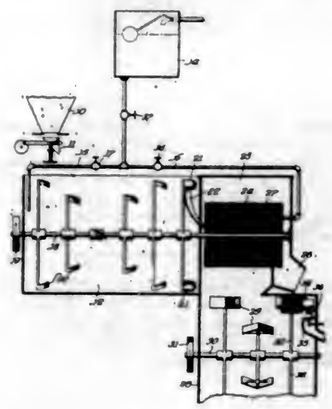
1. In an apparatus for applying hard facing alloys to drill bits and the like, the combination of a support for said bit, means for securing said bit on the support and a carbon block carried by said support and engaging the sides of the cutting edges of said bit.

1,866,029. COW TAIL HOLDER. ANTONI GRABOWSKI, Prosser, Wash. Filed Aug. 11, 1931. Serial No. 556,450. 1 Claim. (Cl. 119—105.)



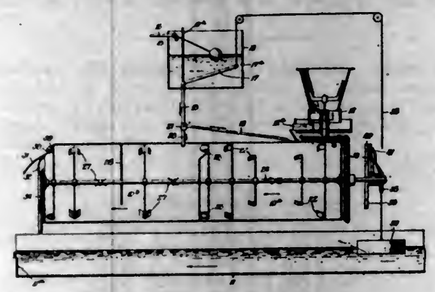
A device of the character described comprising a pair of opposed levers, each of which is provided on one end with a clamping jaw and at a relatively opposite end with a handle, and having an angular intermediate portion connecting said jaw and handle ends, a pair of pivotally connected substantially U-shaped members embracing the angular intermediate portions of the levers, a coil spring connecting the handle portions of the levers, a lateral spike projecting from adjacent one end of each of said jaws, and said spikes being inclined slightly at an angle to the horizontal whereby provision is made for the overlapping of the pointed ends of the spikes in slightly spaced relation when the jaws are in clamping relation.

1,866,030. MIXING APPARATUS. WALTER H. GREEN, Chicago, Ill., assignor, by mesne assignments, to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 6, 1924, Serial No. 754,278. Renewed May 2, 1930. 8 Claims. (Cl. 210—16.)



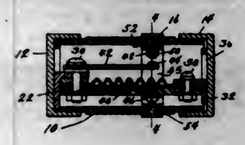
1. In a water treating apparatus, a vessel, a solid conduit and a liquid conduit having access to the vessel, an agitator in the vessel, another vessel, a conveyor from the first vessel to the second vessel having an intake from the first vessel at a point removed from the place of access of the solid and liquid conduits and a discharge into the second vessel, a second liquid conduit into the second vessel having access thereto at the place of discharge of the conveyor, an agitator in said second vessel, a conveyor from the second vessel having an intake at a place removed from the place of discharge of the first mentioned conveyor, a screening means in the second vessel placed between the first and second conveyors and a discharge from said screening means.

1,866,031. LIQUID TREATMENT. WALTER H. GREEN, Chicago, Ill., assignor to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Original application filed Dec. 15, 1924, Serial No. 755,837. Divided and this application filed May 31, 1929. Serial No. 367,254. 21 Claims. (Cl. 210—17.)



1. A liquid treatment apparatus, comprising in combination, a slaking compartment, a diluting means, feeding apparatus for supplying lime to the slaking compartment, supply apparatus for delivering water to the slaking compartment and diluting means, regulating means for automatically controlling the feeding and supply mechanisms, and means for feeding the diluted mixture to the liquid to be treated.

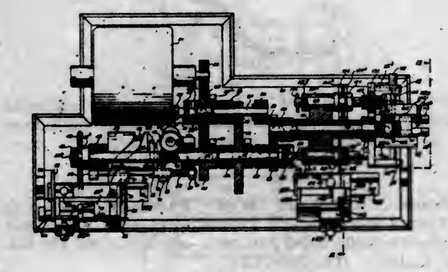
1,866,032. THERMAL RELAY. TALMA T. GREENWOOD, East Templeton, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Nov. 30, 1928. Serial No. 322,703. 20 Claims. (Cl. 200—122.)



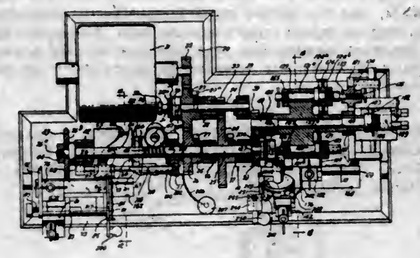
1. A thermal relay including the combination of an enclosing casing having terminals removably secured thereto, and a unitary relay structure movable into and out of said casing including cooperating contact members and a thermo-responsive member for controlling said contact members, and having end terminal members adapted to be held detachedly between and in pressure engagement with said casing terminals.

1,866,033. KEY CUTTING APPARATUS. HERMAN HANSEN, New York, N. Y., assignor to Francis Keil & Son, Inc., a Corporation of New York. Filed Feb. 17, 1926. Serial No. 88,729. 73 Claims. (Cl. 90—13.5.)

1. In apparatus of the class described, in combination, a cutting tool, means for holding a key blank for operation thereon by said tool, means mounting said key-holding means adapted to permit it to be moved past said tool and toward or away from said tool, a driven member for moving said mounting means past said tool, and means forming a connection with said driven member adapted to permit movement of said mounting means toward or away from said tool and adapted upon a predetermined movement away from said tool to become disconnected.



1,866,034. KEY CUTTING APPARATUS. HERMAN HANSEN, New York, N. Y., assignor to Francis Keil & Son, Inc., a Corporation of New York. Filed Mar. 28, 1927. Serial No. 178,953. 40 Claims. (Cl. 90—13.5.)

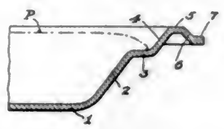


1. In apparatus of the class described, in combination, a movable support, means upon said support adapted to hold a key blank, means upon said support adapted to hold a master key, cutting means adapted to operate upon said key blank, a plurality of guides any one of which is adapted to coact with said master key to control a cutting operation of said cutting means upon a key blank, and movable means mounting said guides to enable them to be brought one at a time into operative relation to said master key.

1,866,035. CONTAINER. JOHN M. HART, New York, N. Y., and MERLE P. CHAPLIN, Waterville, Me., assignors, by mesne assignments, to Fidelity Trust Company, Portland, Me., a Corporation of Maine, trustee. Filed Feb. 1, 1930. Serial No. 425,286. 6 Claims. (Cl. 65—15.)

4. A food container formed of fibrous material comprising a supporting bottom, an enclosing side wall and an integral extension enclosing said side wall and providing a protective edge disposed above the plane of the upper

level of the food in spaced enclosing relation thereto and constituting both a hand hold by means of which the container may be grasped and lifted without contact with



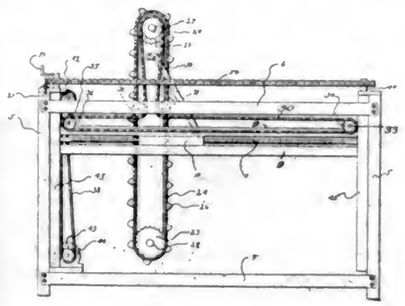
the enclosed food and a reinforcing annulus stiffening the filled container against rupture or collapse when lifted by its edge without bottom support.

1,866,036. SANITARY FOOD PACKAGE. WILLIAM WALTER HARTMAN and ROBERT ALEXANDER STEPS, Los Angeles, Calif. Filed July 23, 1930. Serial No. 469,945. 3 Claims. (Cl. 206—46.)



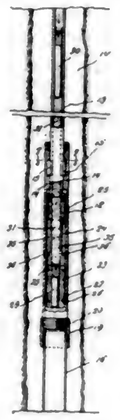
2. A sanitary food package comprising a food article, a plate member underlying same and formed of relatively thin material terminating in a perimetral edge that divides said plate material into two surfaces upon one of which surfaces, or a part thereof, said food article rests, and the other of which surfaces may for distinction be termed the opposite surface of said plate member, and a dust-excluding covering member having slits cut at intervals therein around its perimeter, said dust-excluding covering member over-lying said food article and plate member, and the slitted perimeter portion of said covering member being tucked around said perimetral edge of the plate member and being fastened to said opposite surface of said plate member in the vicinity of said perimetral edge.

1,866,037. GRAVE DIGGING MACHINE. CLARENCE EDWARD HEIM and HARRY LYMON HANDY, Sherman, Tex. Filed Nov. 25, 1930. Serial No. 498,154. 4 Claims. (Cl. 37—86.)



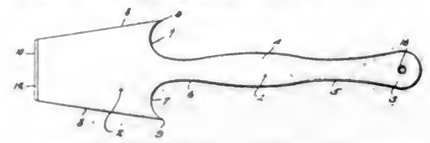
1. A grave digging apparatus comprising a supporting frame, a number of pairs of guiding bars constituting a track structure horizontally arranged and supported for vertical movement in the frame, means for moving said track structure, a carriage supported for sliding movement in the track structure, means for moving said carriage horizontally in the track structure, a vertically arranged frame carried by the carriage, an endless bucket carrying member movably supported by the last-mentioned frame, and means for actuating said bucket-carrying member.

1,866,038. METHOD AND DEVICE FOR CEMENTING OIL WELLS. GEORGE FULLERTON JOHNSON, Logansport, La., assignor of one-half to F. K. Johnson and Thomas Russell, De Soto Parish, La. Filed Aug. 28, 1931. Serial No. 560,020. 10 Claims. (Cl. 166—21.)



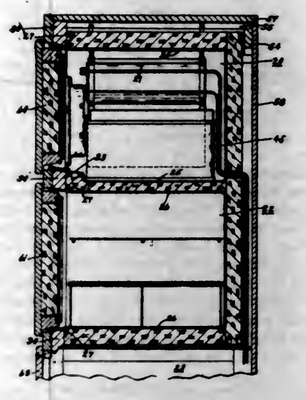
1. Means for cementing wells, comprising a pipe adapted to be lowered into the well through the well casing, a pair of spaced male plugs adapted to be placed in said pipe with a column of cement mixture therebetween and forced downwardly therefrom by pressure, a sectional tubular member supported by said pipe to receive said plugs and column of cement mixture, a pair of female plugs arranged in the uppermost section of the tubular member normally in end to end relation, with the lowermost female plug adapted to initially receive its male plug and be forced away from the other of said female plugs during continued downward movement of the male plugs and column of cement, and until the uppermost male plug is received by its female plug, said tubular member having outlet passages through which the cement mixture is forced by continued movement of one pair of united plugs with relation to the other pair of said plugs, and a valve normally covering the inlet ends of said passages and adapted to be opened by one pair of plugs.

1,866,039. OVEN IMPLEMENT. MANSFIELD DOUGLAS JUDAH, Long Beach, Calif. Filed Nov. 4, 1931. Serial Serial No. 573,028. 1 Claim. (Cl. 107—67.)



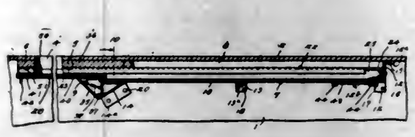
A device for removing hot articles from a domestic oven, comprising a handle of a common thickness from end to end and a broadened blade at one end of the handle, the device being made of wood, the handle having a laterally enlarged portion at its outer end a laterally portion intermediate its ends, an outer restricted portion between the enlarged portions, and an inner restricted portion between the inner enlarged portion and the blade and closely adjacent to the blade, the restricted portions affording spaced hand grips whereby the operator may take hold of the handle conveniently either near to the outer end of the handle, near to the blade or at both of said places at once, the device being short enough so that it may be used as a kitchen article and be put away conveniently without standing it up endwise or hanging it from a height approximating the height of the operator, the rear end of the blade having pronounced concavities located on opposite sides of the handle, and forming, at the outer lateral edges of the blade, sharp-pointed hooks to be used in moving an article in an oven, the outer lateral edges of the blade converging toward the forward end of the blade to make the hooks efficient, the blade tapering in thickness from its inner end to its outer end and being bevelled across its outer end, to facilitate the introduction of the blade under the article which is to be removed from the oven.

1,866,040. REFRIGERATING APPARATUS. LESTER S. KEILHOLTZ, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Dec. 31, 1923. Serial No. 683,589. 12 Claims. (Cl. 217—17.)



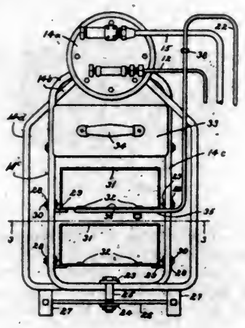
8. A mechanically cooled portable refrigerator having an insulated compartment, said compartment comprising an inner lining, an outer surrounding wall, an interposed insulating layer adjacent to but spaced from at least one of said walls, and providing a space for a filling and a filling in said space, said filling being of a material adapted for insertion therein in a substantially liquid state.

1,866,041. GRAIN DOOR FOR BOX CARS. ADOLPH J. KETTERLING, Zeeland, N. Dak. Filed Apr. 21, 1931. Serial No. 531,755. 5 Claims. (Cl. 20—31.)



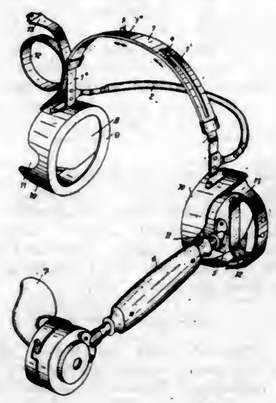
1. In combination, a box car having a door opening in a side thereof, means located within the car at one side of the door opening and cooperating with the car side to provide a housing open at that end thereof nearest the door opening, tracks supported horizontally within the housing, sets of slides carried by the tracks, door sections having certain ends thereof extending into the housing when in closed position and having their other ends extending beyond the housing when in opened position, means cooperating with the housing and said ends of the door sections to close the open end of the housing, pins carried by the door sections, and elements carried by said means and adapted to engage the pins to secure the door sections in one of said positions.

1,866,042. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 23, 1923. Serial No. 670,359. 7 Claims. (Cl. 62—3.)



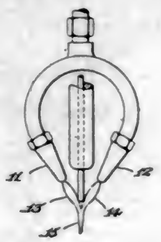
1. A refrigerator, comprising in combination, a cabinet, a cooling unit within the cabinet, means for circulating a refrigerating medium through said unit, a chamber for substance to be cooled within said unit, and a thermostat for controlling said means secured to the underside of a wall of said chamber, said thermostat having a substantial portion of its body attached in good heat conducting relation to said chamber whereby the thermostat is responsive to the temperature of the substance to be cooled and to the temperature of the unit.

1,866,043. HEADREST FOR TELEPHONES. EAICH KÖNIGSBERGER, Breslau, Germany. Filed July 10, 1931, Serial No. 549,895, and in Germany Mar. 3, 1930. 1 Claim. (Cl. 179—156.)



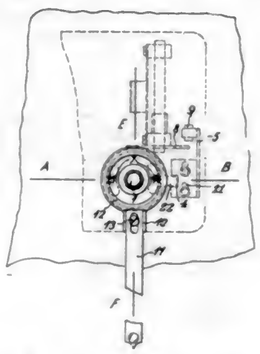
A head rest for a micro-telephone, comprising in combination with an adjustable head band adapted to be placed over the head of the user, a hollow cylindrical box adapted to hold the ear piece of a micro-telephone consisting of a bottom plate with a central aperture, a side wall having a cut out portion to receive the handle of the micro-telephone and a cover with a spring pressing the ear piece tightly against the bottom plate of said box and securely holding the handle in the cut out portion of the side wall of said box in the correct position for use, with the mouth piece before the mouth of the user.

1,866,044. WELDING. ADOLF KREBS, Jamaica Plain, Mass. Filed Oct. 15, 1927. Serial No. 226,321. 6 Claims. (Cl. 219—8.)



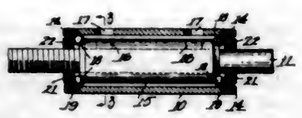
1. A method of producing a high temperature welding flame which comprises impinging one high velocity stream of gas against another and forming a broad relatively thin resultant flame directed toward the work, and passing an electric arc through a broad dimension of said flame.

1,866,045. SPEED GOVERNOR FOR GRAMOPHONES. OTTO KURZ, St. Georgen/Schwarzwald, Germany, assignor to Christian Steidinger, St. Georgen/Schwarzwald Germany. Filed Nov. 10, 1928, Serial No. 318,482, and in Germany May 18, 1928. 3 Claims. (Cl. 188—187.)



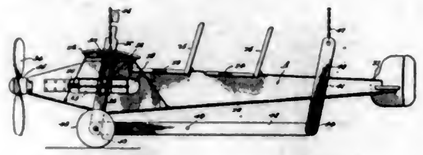
1. A speed governor for gramophones, comprising in combination with the centrifugal governor for the driving mechanism and with the vertical axle of the record plate, an adjustable angular lever, a brake block in the free end of said angular lever, a hollow body freely encircling said vertical axle, and a regulating lever shiftably mounted on said hollow body.

1,866,046. DOUBLE END BEARING. ARCHIBALD R. LEMIEUX, Worcester, Mass. Filed May 28, 1931. Serial No. 540,688. 2 Claims. (Cl. 308—189.)



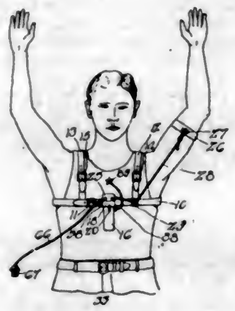
1. In a bearing of the class described, the combination with a shaft extending through the bearing, a sleeve secured to the shaft and having bearing surfaces on its opposite ends, said sleeve extending throughout the length of the bearing in a single piece, bearing balls located in contact with the said bearing surfaces, ball races outside the bearing balls on both ends, flanges bent inwardly from the housing to hold the races permanently in a definite position so as to keep the whole bearing rigid, a pair of flat washers pressing against the shaft and located against the outside surfaces of the two ball races, and dust caps each having a central recess for receiving said washers and a flat circular edge extending under the turned-over portion of the housing, said turned-over flat portion engaging said flat circular portion and holding the parts in rigid condition.

1,866,047. AEROPLANE SWING. JOHN A. LUCAS, Monessen, Pa. Filed Jan. 24, 1931. Serial No. 511,060. 3 Claims. (Cl. 155—65.)



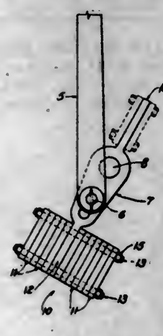
1. An aeroplane swing comprising a body shaped to simulate the appearance of a fuselage of an aeroplane, a wing connected with the upper edge of the body, supporting chains secured to the wings, operating handles pivotally connected to the body adjacent to the forward end thereof, operating links pivotally connected to the body adjacent to the rear end thereof, a connecting rod, means pivotally connecting the connecting rod to the lower ends of the handle and to the lower ends of the links, said connecting rod constituting a foot rest, and supporting chains connected with the upper ends of the operating links.

1,866,048. PROTECTIVE DEVICE. FIELD R. MARINE, Gary, Ind. Filed Sept. 24, 1930. Serial No. 484,226. 2 Claims. (Cl. 42—1.)



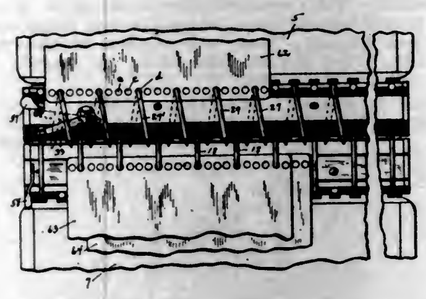
1. A protective device for the human person comprising a gas containing cartridge, a valve in the cartridge to control the escape of gas therefrom including a movable element, a slidable member adapted to be engaged with said valve element to move the latter into gas-releasing position, a member rotatably mounted on the slidable member, and a flexible member windable upon the rotative member and having one end attached thereto whereby a pulling force exerted on said flexible member will first rotate the rotative member to unwind the flexible member therefrom whereupon continued force exerted on the flexible member will move the rotative member and the slidable member together therewith and the latter into engagement with the movable valve element to release the gas from the cartridge.

1,866,049. LOAD BALANCING CRANK. HALLAN N. MARSH, Los Angeles, Calif. Filed May 7, 1928. Serial No. 275,801. 1 Claim. (Cl. 74—71.)



A load-balancing crank for oil well pumping, comprising: a crank, a first extension of said crank in the direction of its throw; a second extension of said crank in the direction opposite its throw; a plurality of weights, and means for securing said weights to said second extension and for securing said weights to said first extension in variable number on either side thereof in the plane of its revolution.

1,866,050. LOOSE-LEAF BINDER. JOHN L. MCMILLAN, Syracuse, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed Oct. 13, 1928. Serial No. 312,278. 23 Claims. (Cl. 129—17.)



9. In a device of the class described, opposed back members hingedly connected together, a plurality of arcuate prongs positioned on each back member, a bell-crank pivotally mounted on one back member and a pusher bar having one end pivotally mounted on an arm of the bell-crank and having its other end adapted to contact with the other back member whereby the pivotal movement of the bell-crank will cause the back members to move about their hinge.

10. In a device of the class described, opposed housings hingedly connected together and each being provided at their opposite ends with an end plate, a cover hingedly connected to said housing, and a frame positioned on an end plate of a housing and adapted to receive an indicia-carrying card.

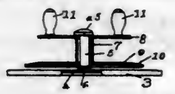
11. In a device of the class described, opposed back members hingedly connected together, a plurality of arcuate prongs positioned on each back member and normally in parallel relation, means for moving the prongs on one back member obliquely in relation to the prongs on the other back member, and means actuated by movement of the back members in relation to each other for moving the movable prongs to their normal position.

1,866,051. METHOD OF AND APPARATUS FOR ASSEMBLING PIPE JOINT ELEMENTS. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Feb. 11, 1927. Serial No. 167,509. 9 Claims. (Cl. 29—88.2.)



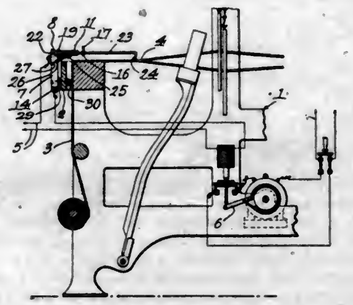
1. Apparatus for assembling a series of wooden blocks prior to their introduction into the bell of a pipe comprising, in combination, a circular base member having an inner, annular, upstanding core and a ledge surrounding the core, a removable forming ring having inner tapered walls and adapted to be supported on the base surrounding the core, said blocks being placed in flanking relation to each other in the space between the core and ring, and means for expanding the blocks to frictionally engage the ring for removal from the base and introduction into the ball of a pipe.

1,866,052. FISHING-ROD REEL. CHARLES T. OHARA and WILLIAM A. QUIRT, Bellingham, Wash.; said O'Hara assignor to said Quirt. Filed Oct. 29, 1928. Serial No. 315,647. 1 Claim. (Cl. 242—84.5.)



A fishing-rod reel consisting of a base for removable fastening to said rod longitudinally thereof, a reel axle fastened to said base operatively disposed radially with the axis of said rod, a reel spool mounted for revolution on said axle having an extended inner flange the rim of which is beveled outwardly toward said base, and a handle fastened to the outer flange of said spool.

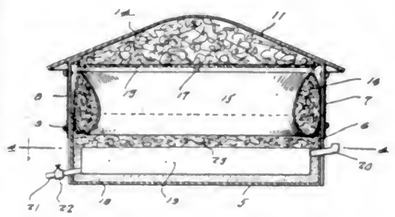
1,866,053. THIN PLACE DETECTOR. JOHN H. POPE and BEE MORGAN, Acworth, Ga. Filed Oct. 25, 1930. Serial No. 491,278. 1 Claim. (Cl. 139—348.)



A thin place detector for looms, comprising a bracket, means for securing said bracket to a loom, a conducting member including a body mounted in the bracket, the body

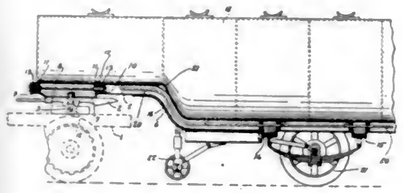
having a rectangular extension provided with a cross piece arranged approximately parallel to the brackets, the cross piece having an upstanding abutment, an arm mounted to swing on the bracket and extended above and across the cross piece, at one side of the abutment, the arm having means for engaging the fabric in which the thin place occurs, the arm being spaced from the cross piece by said means, while said means is in engagement with the fabric, the abutment limiting the lateral movement of the arm and keeping the arms above the cross piece, the arm swinging into direct electrical engagement with the cross piece when a thin place is encountered, means for connecting the conducting member and the arm to the conductors of an electrical circuit, mechanism interposed in said circuit for stopping the loom when the arm comes into direct electrical engagement with the cross piece, and a yoke connected to the bracket and to the extension of the conducting member.

1,866,054. FIRELESS BROODER. ALLEN M. PRITCHETT, Pacific, Mo. Filed Apr. 30, 1931. Serial No. 534,110. 5 Claims. (Cl. 119—33.)



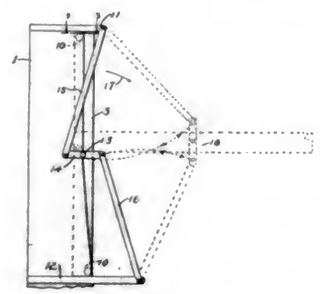
1. A brooder comprising a bottom, a wall rising from said bottom, said wall including a lower section of imperforate material and an upper section of reticulated material, a hood, supporting means for the hood, a tank arranged in the bottom of the brooder and adapted to contain a heating medium, a layer of heat retaining material supported on the top of said tank, and an annular member supported in the brooder above said tank, said annular member being formed of heat retaining material.

1,866,055. TANK VEHICLE FRAME CONSTRUCTION. FREDERICK M. REID, Detroit, Mich., assignor to Fruehauf Trailer Company, Detroit, Mich., a Corporation of Michigan. Filed July 5, 1929. Serial No. 376,061. 7 Claims. (Cl. 280—5.)



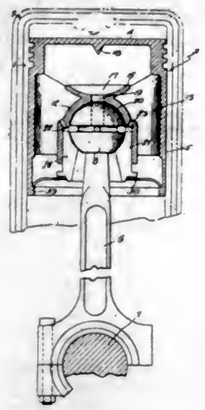
2. In a semi-trailer frame construction adapted to carry a tank, side rails each provided with an offset to form a drop frame construction, and a frame re-inforcing and tank protecting plate connecting the side rails at the offset portion, said plate having a shape corresponding to the offset and being relatively long so as to connect the side rails at the offset and at horizontal portions on each side of the offset.

1,866,056. CURTAIN DRYING FRAME. LOREN W. RICKEY, Santa Cruz, Calif., assignor of one-half to William O. Kerrick, Santa Cruz, Calif. Filed Sept. 30, 1930. Serial No. 485,345. 3 Claims. (Cl. 45—24.)



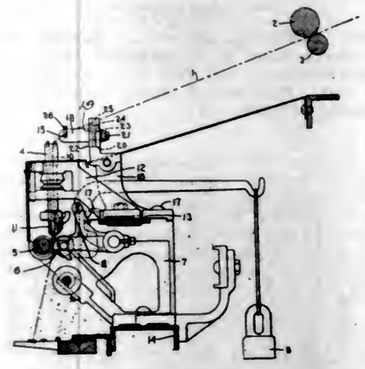
1. A stretcher frame mounting comprising, a rigid support mounted adjacent each corner of the frame when the frame is in a vertical position, trunnions mounted on opposite sides of the frame, a cross bar mounted on each trunnion, each cross bar having its ends connected by links to two of said supports.

1,866,057. PISTON AND CONNECTING ROD. ALLAN E. REID, Allston, Mass., assignor to Reid Piston Company, Brookline, Mass., a Corporation of Massachusetts. Filed May 25, 1929. Serial No. 365,992. 14 Claims. (Cl. 74—108.)



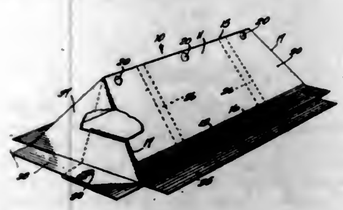
1. The combination of a piston and a connecting rod, the piston having a bearing comprising a fixed part and a movable part cooperating to define a socket, the rod having a member adapted to fit within said socket and with the latter to form an articulated joint, a circumferentially extending abutment rib projecting from the inner surface of the piston, and a spring having an element which engages the movable bearing part and a plurality of legs resting upon the abutment rib.

1,866,058. SPINNING FRAME. SAMUEL F. ROCKWELL, North Andover, and HENRY A. OWEN, Foxboro, Mass., assignors to Davis & Furber Machine Company, North Andover, Mass., a Corporation of Massachusetts. Filed Aug. 11, 1930. Serial No. 474,361. 2 Claims. (Cl. 19—133.)



1. In a spinning frame, feed rolls, drawing rolls cooperating therewith to produce draft in the roving, a plurality of twister tubes through which the roving is threaded acting to produce false twist therein, a plurality of supporting arms, a guide rod rotatably supported therein extending longitudinally of the machine over which the roving passes acting to direct the roving to the twister tubes, means operable to secure the guide rod against rotation and means acting to move said twister tubes relatively to the guide rod whereby the point of contact of the roving with the guide rod is constantly changed and the guide rod may be rotatably adjusted to present a new wear surface.

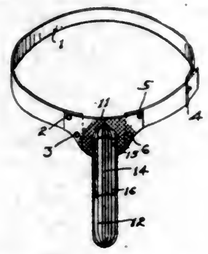
1,866,059. PLANT PROTECTOR. HERBERT R. SAGE, Los Angeles, Calif. Filed Apr. 4, 1932. Serial No. 603,018. 21 Claims. (Cl. 47—28.)



1. In a plant protector, the combination of: a single piece of paper having an upward ridge crease forming two substantially flat sloping roof sides meeting at said crease; earth-anchor flaps provided along the outer edges of said roof sides by straight longitudinal downward creases in said paper; roof ends formed upon said roof sides by creases in end portions of said piece of paper; and a plurality of relatively stiff rafters formed of fibrous material and applied to inner faces of said roof sides, said rafters under one roof side being flexibly related to those under the other roof side.

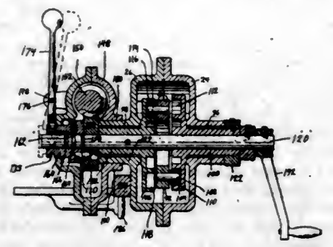
1,866,060. SUSPENSORY. WILHELM PAUL SCHMIDT, San Francisco, Calif. Filed Jan. 22, 1929. Serial No. 334,234. 4 Claims. (Cl. 128—294.)

4. A suspensory of the class described comprising a flat band adapted to be detachably secured to an adjustable body belt, a tube having longitudinal corrugated walls closed at the lower end and fixed to said band, an opening through the band to said tube, an opening in the



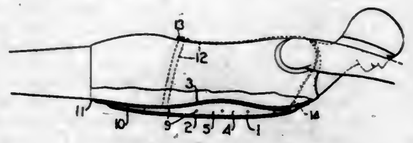
front of said tube having a closing flap, snap fasteners to secure said flap, and a series of ventilating holes in the upper portion of said tube.

1,866,061. DOUGHNUT FORMING MACHINE. FRED L. SCHOEL, Waterloo, Iowa, assignor to Gem Doughnut Machine Company, Inc., Waterloo, Iowa. Filed Dec. 18, 1929. Serial No. 414,942. 2 Claims. (Cl. 107—14.)



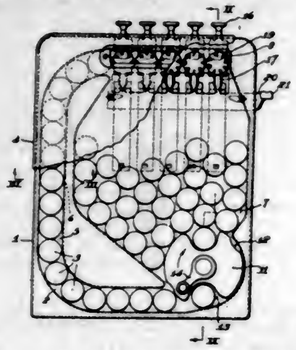
1. In a machine of the class described, a frame, a hopper detachable therefrom, a neck on the hopper, a plunger for travel therein, a plunger rod supporting said plunger, a guide bearing for said rod, a supporting arm for said guide bearing, said arm being split to receive the bearing, such split being wide enough for the plunger rod to pass therethru.

1,866,062. INFLATED SWIMMING SUIT. DANIEL SIMON, Jr., Upton, Mass. Filed Oct. 8, 1931. Serial No. 567,531. 5 Claims. (Cl. 9—17.5.)



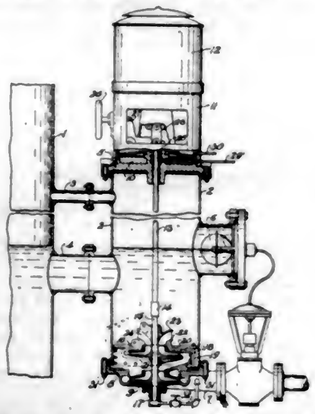
1. A buoyant swimming apparatus comprising a body plate shaped to fit the front of the trunk of the body and covering substantially the whole area thereof, a front plate overlying said body plate and secured at its edges thereto to form a fluid tight chamber therebetween and a plurality of ribs situated between the two plates and secured to said body plate to maintain the contour thereof and secured to said front plate to support the front plate from the body plate in position to present a stream line outer surface which presents a minimum resistance to the progress of the swimmer when in the water and means to secure the apparatus to the body.

1,866,063. GAME APPARATUS. THEODORE H. SLOAN, Charleroi, Pa. Filed June 17, 1931. Serial No. 544,977. 8 Claims. (Cl. 273—144.)



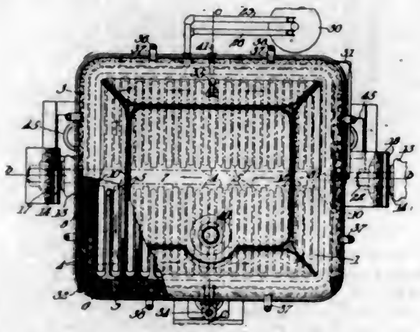
8. A game apparatus, comprising a casing having a pair of vertically disposed plates spaced from each other to form a chamber for the passage of a series of relatively movable playing units, and barriers mounted therebetween dividing said chamber into a magazine and a courseway having unit-entering and unit-discharging portions communicating with the magazine, said casing being provided with means along the courseway to expose a hand of counters, means to discard selected counters from the exposed hand into the magazine, means comprising a peripherally-recessed wheel mounted rotatably below the magazine to advance counters along the courseway from the magazine into the hand, said aperture being disposed over the courseway at the top of the magazine, and said means to discard counters from the exposed hand into the magazine comprising separate pairs of supporting prongs under each counter of the hand and separate key-links mounted through the casing for individual movement and having inclined tongues secured to the respective prongs, and slotted guide members mounted to engage the inclined tongues for withdrawing any counter support as its key-link is depressed, said slotted guide members being resiliently mounted in the casing, and a gang-plate extending across all the slotted guide members and mounted for forcing all the guide members and supporting prongs back together to discard a whole hand at once.

1,866,064. HOT OIL PUMP. CHARLES WALCOTT STRATFORD, Oakland, Calif. Filed Jan. 30, 1928. Serial No. 250,605. 5 Claims. (Cl. 103—97.)



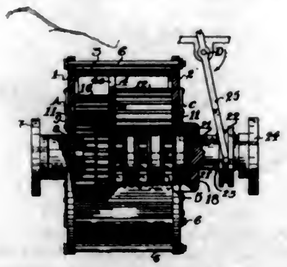
1. A reservoir and centrifugal pump assembly comprising a centrifugal pump having an open top suction mouth connected by liquid and vapor lines to a reservoir, a liquid and vapor space above the suction mouth of the pump, a controlled liquid discharge line connected to the pump, a liquid level control manipulating the control on the pump discharge line whereby a liquid level is maintained upon the pump suction.

1,866,065. ELECTROLYTIC CELL. KENNETH E. STUART, Niagara Falls, N. Y., assignor to Hooker Electrochemical Company, New York, N. Y., a Corporation of New York. Filed Apr. 25, 1930. Serial No. 447,819. 23 Claims. (Cl. 204—58.)



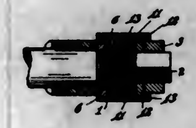
1. An electrolytic cell comprising a chamber adapted to contain fluid electrolyte, anode and cathode members in said chamber, a conduit for supplying electrolyte to said chamber, and a conduit for withdrawing a product of electrolysis from said chamber, portions of said conduits being arranged in heat transfer relation to each other and to a wall of said chamber.

1,866,066. HYDRAULIC CLUTCH. ALBERT N. THOMAS, Wichita, Kans. Filed Dec. 24, 1928, Serial No. 328,086. Renewed Nov. 12, 1931. 3 Claims. (Cl. 74—34.)



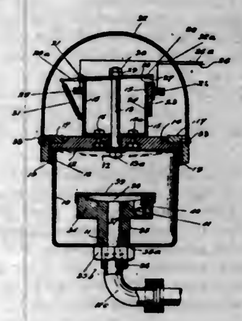
1. In a hydraulic clutch mechanism, a driving member, a system of planetary gears rotatable with respect to the driving member, fluid compressing gears rotatable with the planetary gears, compression walls about the compressing gears having fluid openings therein, means for adjusting the compression walls relative to the peripheries of the compressing gears, a cylindrical or piston by-pass valve slidably arranged within the clutch mechanism past the fluid openings, controlling the magnitude of fluid compression from the compressing gears to retard circulation of fluid, thereby opposing the rotation of the compression gears and transmitting the force of rotation from the driving to the driven member of the mechanism.

1,866,067. LOCK NUT. LUDWIG STROBEL, Munich, Germany. Filed June 17, 1930, Serial No. 461,688, and in Germany July 4, 1929. 2 Claims. (Cl. 151—28.)



2. A lock nut construction, comprising a bolt, a shouldered nut thereon having its forward face serrated, and having a peripheral shoulder, a lock nut having a peripheral shoulder and having its forward face serrated for interlocking engagement with the serrated forward face of the first mentioned nut, and a flexible split clamping member having lateral flanges for engaging the shoulders of said nuts and holding the serrated faces thereof in firm interengagement.

1,866,068. VACUUM RESPONSIVE DEVICE. FREDERICK BERTRAND WEST, KEVIN JOSEPH PIDCOCK, and EDWIN DONKIN, Kyogle, Australia. Filed Oct. 10, 1928, Serial No. 311,685, and in Australia Aug. 16, 1928. 1 Claim. (Cl. 137—156.)

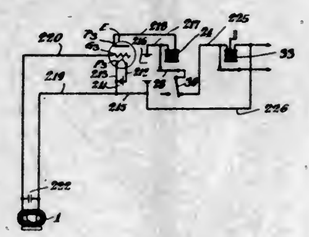


A device of the class described comprising a vacuum chamber connected by a pipe to the manifold intake of an internal combustion engine, an escape valve adapted to temporarily maintain a vacuum created within the chamber, said valve comprising a body including a chamber, a removable cap closing the chamber, two passages through the body, both communicating with the chamber of the body, one passage establishing communication between the pipe and body of the chamber, the other passage establishing communication between the chamber in the body and the vacuum chamber, the latter passage having an imperfect seat therein, a ball valve cooperative with the seat, means for securing the valve within the vacuum chamber, and means for connecting the pipe to the body of the valve.

1,866,069. COLLOIDAL METAL PRODUCTS AND PROCESS OF MAKING SAME. FRANK WILCOXON, Yonkers, N. Y. Filed Dec. 17, 1926. Serial No. 155,554. 10 Claims. (Cl. 252—6.)

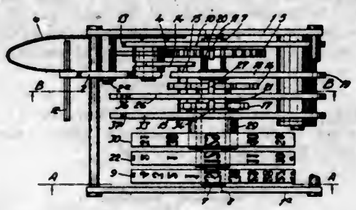
1. The process of producing finely divided metal products which comprises reducing a reducible heavy metal compound with waste molasses of sugar refineries in the presence of alkali until a finely divided metal product is obtained.

1,866,070. TRAIN CONTROL SYSTEM. ARBA G. WILLIAMSON, Carnegie, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Nov. 10, 1926, Serial No. 147,403. Divided and this application filed Nov. 14, 1930. Serial No. 495,724. 5 Claims. (Cl. 246—63.)



1. A train control system including: a trackway circuit having a source of current, a train, a train-carried closed circuit having a source of current, a train-carried receiving circuit in an inductive relation with said trackway circuit and responsive to current flowing therein, and a train-carried gas-containing electron discharge device included in said receiving circuit and controlled thereby to establish a predetermined value of direct current flowing in the said closed circuit in response to a flow of current in the trackway circuit.

1,866,071. DATE INDICATING OR REGISTERING APPARATUS. NILS OSKAR WILLINDER, Jamesrum, Sweden. Filed July 13, 1931, Serial No. 550,519, and in Sweden July 16, 1930. 5 Claims. (Cl. 40—112.)



1. Date indicating apparatus comprising rotatable and independent day, month and year advancing wheels and a driving member, which is so arranged in relation to the said wheels that it advances the day advancing wheel one step daily, adjusts the month advancing wheel to a new month at the end of a month and also adjusts the year advancing wheel to a new year at the end of a year, the month advancing wheel being provided with twelve notches corresponding to the months in a year, the depth of each notch corresponding to the number of days in the month, characterized by that an advancing pin, which is operatively connected with the said driving member and serves to advance the month advancing wheel, is controlled by a deflecting lever extending in front of the month advancing wheel, and by a cam path, which is adjusted in height according to the depth of the notches in the month advancing wheel, in such a manner that, when the day advancing wheel is advanced by the driving member, the advancing pin is prevented, by the deflecting lever, from engaging with the month advancing wheel until towards the end of the month, and only towards the end of the month, when a pin provided on the day advancing wheel moves the deflecting lever, according to the adjustment of the cam path serving as a guide for the advancing pin, is the latter permitted to pass sooner or later under the deflecting lever so as to come into engagement with the month advancing wheel.

1,866,072. MAGAZINE LEAD PENCIL. ALFRED WORLM, Berlin, Germany, assignor, by mesne assignments, to Pencil Mechanism Corporation, a Corporation of New York. Filed Sept. 16, 1922, Serial No. 588,688, and in Germany July 21, 1922. Renewed Nov. 25, 1931. 42 Claims. (Cl. 120—17.)

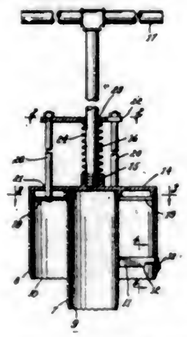


3. In a magazine pencil, the combination of a cylindrical holder with conical mouth piece, a compartment in said holder for containing strips of lead, a guide tube for leading said strips to said mouth piece, a gripping device reciprocable in said holder and adapted to grip and feed forward a lead when moved downward and to release its grip thereon when moved upward, and a spring normally forcing said device to grip a lead.

33. In a magazine pencil including a casing, a pair of longitudinally movable lead-propelling elements, at least one of said elements being rockingly mounted, and operating mechanism for said lead-propelling elements.

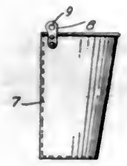
40. In a magazine pencil including a casing, lead-propelling mechanism in the lower end of the casing, and a lead magazine removably mounted in the upper end of the casing and having its bottom wall perforated to permit leads to be fed one at a time to said propelling mechanism.

1,866,073. SOD-CUTTING TOOL. WILLIAM J. AHERLE, Pasadena, Calif. Filed June 10, 1930. Serial No. 460,161. 2 Claims. (Cl. 97—226.)



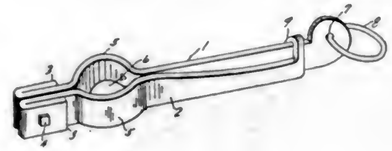
1. A sod-cutting tool comprising an inner member having a downwardly directed cutting edge all portions of which are equally spaced from a common vertical axis, an outer member attached to said inner member and having a downwardly directed cutting edge all portions of which are equally spaced from said vertical axis a greater distance than said first edge, sod ejecting means normally positioned between said members above said edges, means for forcing said ejecting means downwardly toward said edges and a handle attached to said inner and outer members for rotating said members about said vertical axis.

1,866,074. BUCKET. FRIEDA ANGELBECK, St. Louis, Mo. Filed Mar. 22, 1930. Serial No. 437,983. 1 Claim. (Cl. 220—20.)



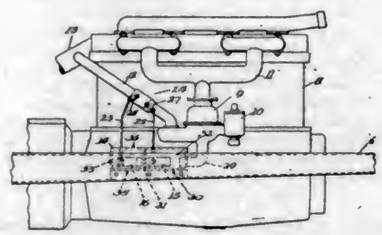
A bucket comprising compartments secured together by hoops, perforated ears formed on each compartment, a handle having bifurcated ends with projections formed on each bifurcated end for engagement in the perforated ears, the bifurcated ends of said handle being in engagement with the perforated ears on adjacent compartments.

1,866,075. PIPE CLAMP OR DOG. GEORGE BANNAN, Harrison, Nebr. Filed June 27, 1931. Serial No. 547,243. 2 Claims. (Cl. 294—92.)



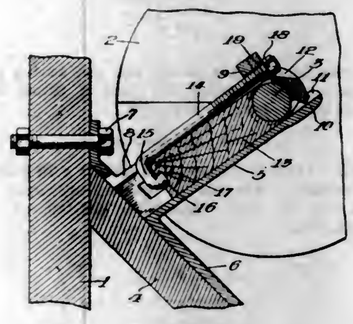
1. In a device of the kind described, a pair of elongated clamping bars of flat material folded back on themselves at one end, a bolt passed through these folded ends of the bars and pivotally connecting the same for movement apart in vertical parallel planes, the said bars having outwardly bulged portions adjacent their pivotally connected ends, and a hook on the free end of one bar adapted to fit over and set astraddle the other bar.

1,866,076. CARBURETOR REGULATING MECHANISM. JAMES BARELS, Chicago, Ill. Filed July 7, 1928. Serial No. 291,117. 4 Claims. (Cl. 123—122.)



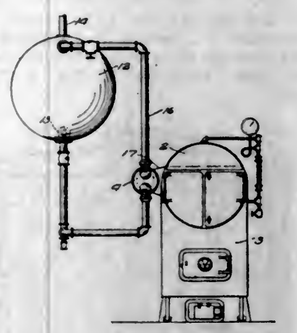
1. The combination with an automobile motor having an exhaust line and a carburetor, of a pipe line connecting the exhaust to the carburetor, for passing heated gases from the exhaust line through the carburetor, means controlled by atmospheric temperature for regulating the heat passing through the pipe line, and means controlled by the temperature of the heated gases passing through the carburetor for regulating the amount of heated gases coming through said pipe line.

1,866,077. CONVEYER BEARING. HENRY S. BILDERBACK, Elk City, Okla., and IDA B. MCCULLOUGH, Ballinger, Tex. Filed May 5, 1930. Serial No. 450,051. 8 Claims. (Cl. 308—25.)



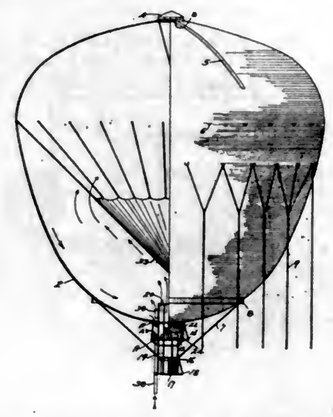
1. The combination with the casing and the shaft of a screw conveyer, of a pedestal within the casing radial to the screw shaft and inclined laterally and downwardly, the pedestal being hollow and open at the top, a bearing block in the pedestal having in the top a seat engaged with said shaft, a detachable bearing cap having in its under side a seat engaged with said shaft, and a fastening device holding the cap down against the upper end of the pedestal and drawing the block up against the shaft.

1,866,078. WATER HEATER. ROBERT L. BLANDING, Providence, R. I. Filed June 7, 1929. Serial No. 369,226. 3 Claims. (Cl. 122—32.)



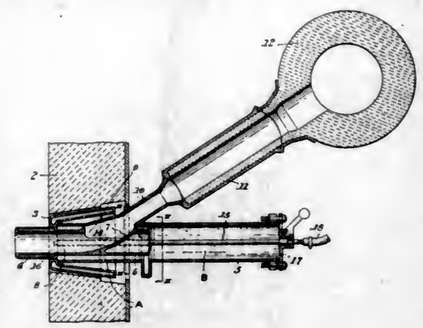
3. In combination, a boiler comprising a plurality of sections each having a water chamber, a water heater disposed laterally of said boiler adjacent and slightly below the water level of said chamber, and a single opening dual flow circulating connection between each of said chambers and said heater, said water heater being of the indirect type utilizing boiler water as the heating medium, said connections each communicating exclusively with said heater in such manner that the flow through the bottom of the connection is to the boiler.

1,866,079. THERMOAEROSTAT. JOSEPH BLONDIN, Los Angeles Calif. Filed Dec. 16, 1929. Serial No. 414,495. 15 Claims. (Cl. 244—3.)



1. In a thermo-aerostat, a balloon section coated inside with a heat deflecting and radiating medium, and coated outside with a heat absorbing medium; whereby a maximum heat transmission is effected throughout the air within the balloon and a minimum of heat loss to outside atmosphere is permitted from the balloon.

1,866,080. TUYÈRE STRUCTURE AND METHOD OF CHANGING THE SAME. EDGAR E. BROSIUS, Pittsburgh, Pa. Filed June 30, 1931. Serial No. 547,847. 12 Claims. (Cl. 266—41.)

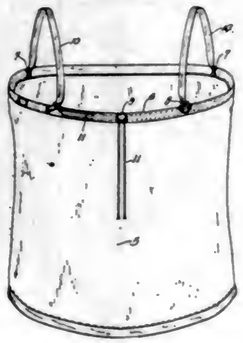


1. In the method of changing tuyères, the steps comprising moving a tuyère support outwardly from a furnace while delivering a blast to the furnace, sealing the tuyère support from communication with the furnace, applying a new tuyère to the support, reestablishing communication between the tuyère support and the furnace, and moving the tuyère support and tuyère into position in the furnace.

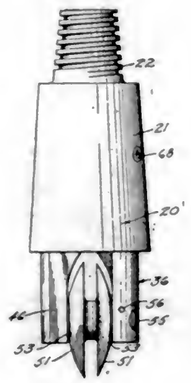
1,866,081. GARMENT SUPPORT. ROBERT P. BROWN, Milwaukee, Wis., assignor of one-third to Reinbold H. Bublitz and one-third to Harry W. Bublitz, Milwaukee, Wis. Filed Mar. 19, 1931. Serial No. 523,712. 5 Claims. (Cl. 2—113.)

1. In a garment having oppositely disposed tubular hem portions, a pair of shoulder straps of endless construc-

tion, a portion of each shoulder strap being slidably received by one of said tubular hem portions, and means engageable with portions of both of said straps for drawing said portions toward one another to cause a downward pull on both the front and rear portions of the straps and thereby vary the effective length of the straps.



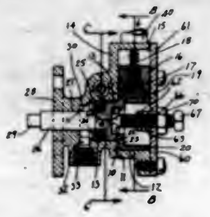
1,866,082. EXPANSION DRILL BIT. ANTHONY E. CARLSON, Los Angeles, Calif. Filed Aug. 10, 1927. Serial No. 211,972. 22 Claims. (Cl. 255—76.)



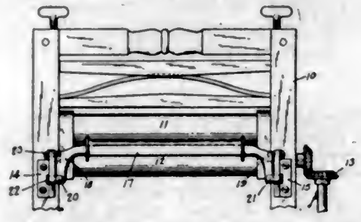
1. In an expansion drill bit, the combination of: a bit body; cutter supports pivotally mounted longitudinally therein; cutters rotatably mounted upon said supports, said supports being swingable about their longitudinal axes to move said cutters between retracted and extended positions, there being circulation passages in said supports through which lubricating fluid is supplied to said cutters.

1,866,083. FUEL PUMP. LOUIS CHEVROLET and CHARLES L. CHEVROLET, Indianapolis, Ind., assignors, by mesne assignments, to The Glenn L. Martin Co., Baltimore, Md., a Corporation of Maryland. Filed Jan. 16, 1930. Serial No. 421,093. 6 Claims. (Cl. 103—123.)

1. A pump device including in combination, a pump body having a cylindrical chamber; a co-axially mounted rotor including an eccentrically supported cylindrical piston; a radially movable vane supported by the body and normally constrained toward piston engagement; said rotor being hollow, open at one end and having a shaft extension at the opposite end; and a thrust bearing interiorly mounted within the rotor.

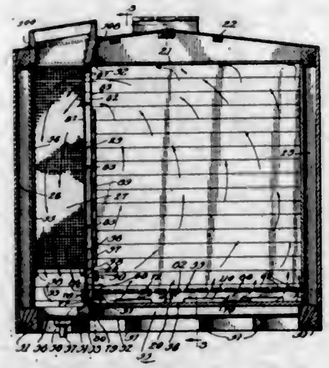


1,866,084. SAFETY FEEDING DEVICE FOR CLOTHES WRINGERS. WILLIAM T. CLARK, Milwaukee, Wis. Filed Nov. 21, 1930. Serial No. 497,120. 5 Claims. (Cl. 68—32.)



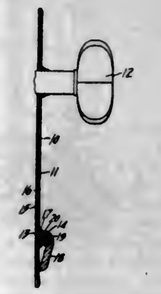
1. In a device of the class described, a frame, a pair of moisture-expressing rollers mounted thereon, and a normally retracted laterally movable pivoted bar for supporting and feeding a wet textile between the said rollers, the center of gravity of the said bar being at one side of the vertical plane of the axis of the bar, whereby when the textile is drawn from the bar by the rollers, the bar will automatically resume its normal retracted position.

1,866,085. REFRIGERATOR CAR. LOUIS L. COHEN, Highland Park, Ill., assignor to Equipment Specialties Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 22, 1930. Serial No. 497,374. 8 Claims. (Cl. 62—15.)



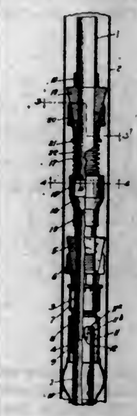
1. In a refrigerator car, the combination of an enclosure comprising floor, walls and ceiling with a bulkhead extending longitudinally of said car and spaced from the wall thereof to form an ice chamber, said bulkhead comprising a plurality of sheet metal members having laterally projecting flanges secured together, and an ice grating in said iec chamber, and extending longitudinally of said car, said ice grating comprising perforated metal sheets secured to said bulkhead and the adjacent wall.

1,866,086. KEY RETAINER. ROY V. CREERY, German Township, St. Joseph County, Ind. Filed Apr. 22, 1931. Serial No. 531,989. 2 Claims. (Cl. 70—7.)



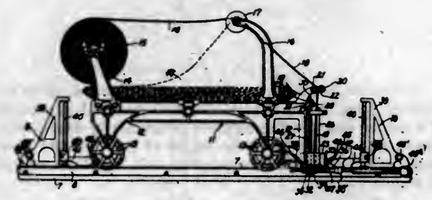
1. The combination with a lock face plate having a key hole and an opening spaced from said key hole, of a retaining plate positioned at the rear of said face plate and normally closing a portion of said key hole, said retaining plate having a notch therein adapted to register with said key hole, a stud fixedly carried by said retaining plate and extending through said opening, and a handle having a cam-shaped portion, said cam being pivoted to the outer side of said stud and bearing on said face plate whereby pivotal movement of said handle and cam draws said retaining plate into frictional locking engagement with said face plate.

1,866,087. TUBING ANCHOR. ERD V. CROWELL, Los Angeles, Calif. Filed May 5, 1930. Serial No. 450,012. 10 Claims. (Cl. 103—219.)



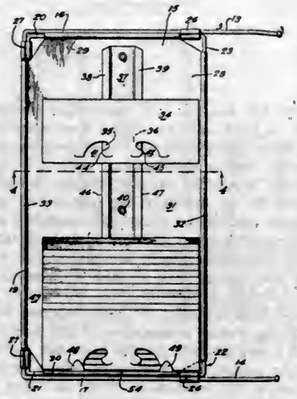
9. In a tubing catcher, a tubular support comprising superimposed telescopic sections, a head on each section, a slip cooperating with each head, and means actuated responsive to inertia of the tubing catcher when it is dropped, for automatically and consecutively radially displacing the slips which cooperate with the heads of the successively higher superimposed sections.

1,866,088. CLOTH LAYING MACHINE. ARTHUR L. CUTTER, Maplewood, Mo. Filed July 17, 1931. Serial No. 551,358. 2 Claims. (Cl. 270—81.)



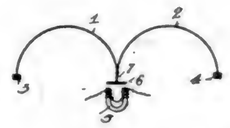
1. A cloth laying machine of the character described comprising a carriage, cloth bar supporting brackets supported on said carriage in sliding vertical engagement, cloth bars between which the cloth is drawn carried by said cloth bar supporting brackets and being in sliding engagement therewith, upwardly curved fingers secured to said cloth bars, operatively positioned to release said cloth bars from their locked position during the inoperative position of the machine cycle.

1,866,089. INDEX OR FILE. WILLIAM H. DAY, Clinton, Conn., assignor to Remington Rand Inc., Buffalo, N. Y. Original application filed July 27, 1925, Serial No. 46,336. Divided and this application filed Mar. 27, 1930. Serial No. 439,450. 10 Claims. (Cl. 40—102.)



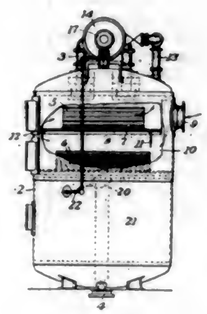
1. In an index or file, an index card carrier comprising a frame of rods or wire, a baseplate mounted therein, said frame being composed of two rods, one bent to form three sides of the frame and the other bent to form three sides of the frame and having a portion extending over the fourth side thereof, and means for supporting index elements flat-wise in overlapped relation on said frame.

1,866,090. SOUND REPRODUCING DEVICE. LEE DE FOREST, New York, N. Y. Filed May 22, 1926. Serial No. 110,880. 5 Claims. (Cl. 181—31.)



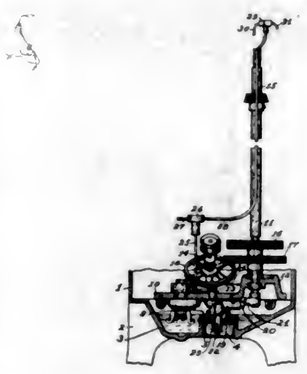
1. A sound reproducing device comprising a plurality of curved membranes having different radii of curvature, and a sound reproducing member tangentially attached to at least one of the marginal edges of each of the membranes, and a frame for supporting said membrances and said member.

1,866,091. APPARATUS FOR TREATING LIQUIDS. GERALD D. DODD, Oaklyn, N. J. Filed May 2, 1925. Serial No. 27,481. 1 Claim. (Cl. 183—2.5.)



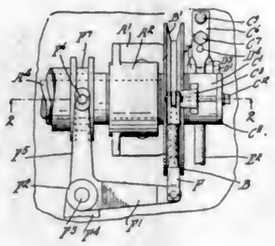
Apparatus for heating and deaerating water, comprising a tank, a bank of open ended and open sided water spreading trays located in an upper portion of the tank, water supply means discharging onto the top of said bank of trays, a second bank of similar water spreading trays located in an intermediate portion of the tank beneath the first mentioned trays and receiving water at its upper end from the upper bank of trays in divided streams distributed over substantially the entire area of the upper end of the tray bank, both of said tray banks being constructed to permit a substantially horizontal steam flow therethrough in a plurality of superimposed substantially parallel strata, means responsive to the accumulation of water in a lower portion of the tank for regulating said water supply means so as to maintain a water level in the tank below the lowermost bank of trays, means for supplying steam to the intermediate portion of the tank in which the lower bank of trays is located so as to obtain a substantially horizontal steam flow therethrough in superimposed strata, and baffle means located substantially outside of the tray bank area and out of the path of water passing from the upper trays onto the lower bank of trays for guiding the flow of steam passing through the upper trays and effective in normal operation to normally prevent downflow of steam from the space surrounding the upper trays, and means for withdrawing air from the upper portion of said tank.

1,866,092. LUBRICATING MEANS FOR CENTRIFUGAL LIQUID SEPARATOR MECHANISM. JAMES MCCOSH EDWARDS, Cedar Heights, Iowa, assignor to Associated Manufacturers Corporation of America, Waterloo, Iowa. Filed Feb. 19, 1930. Serial No. 429,731. 1 Claim. (Cl. 184—6.)



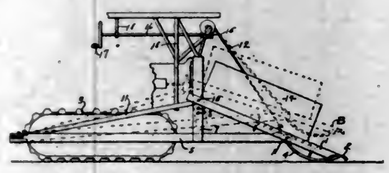
In combination, a closed housing, driving mechanism of a centrifugal liquid separator therein, including a rotary shaft and a pumping device, said puming device having an open end pumping cylinder and a reactively resiliently controlled imperforate plunger piston therein to project therefrom, a cam on said shaft engaging and adapted to actuate said piston, valvular devices in said pumping device to respectively control the inlet and outlet of the cylinder, a strainer covering said inlet, a distributing branching conduit in communication with said outlet and adapted to deliver a liquid lubricant from said pumping device upon different elements of said mechanism, and a sump in said housing containing a strainer septum for lubricant returned from said mechanism, the pump inlet being immersed in the strained lubricant below said strainer septum.

1,866,093. CLUTCH OPERATING MECHANISM. ASGER EILERSGAARD, Chicago, Ill., assignor to Link-Belt Company, a Corporation of Illinois. Filed Jan. 11, 1929. Serial No. 331,891. 16 Claims. (Cl. 192—82.)



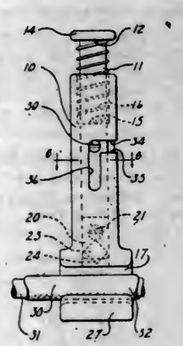
1. In combination, a rotating drive wheel, a power lever mounted for rotation concentric therewith, a driving connection extending from the power lever, a clutch block carried by the power lever, a clutch lever pivoted on the power lever adapted to move the clutch block into and out of contact with the wheel, means interposed between the clutch lever and the power lever to limit their angular movement.

1,866,094. SNOWPLOW. ADLAI E. FISHER, Haven, Kans., assignor of one-half to George D. Merritt, Haven, Kans. Filed Mar. 7, 1930. Serial No. 433,946. 1 Claim. (Cl. 37—42.)



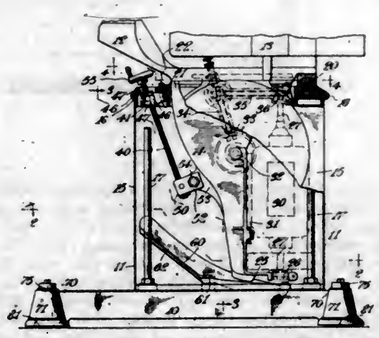
In a snow plow of the class described comprising a shovel member and a V-shaped mould board carried by the shovel, each member of the mould board being perpendicular with respect to the plane of the shovel, a pair of beams pivotally attached to the shovel, a spaced distance from the share of the shovel, the other end pivotally engaging at the rear of a tractor as propelling means for the shovel, a strut upwardly extending and secured to each of the beams, the strut having a plurality of apertures spaced longitudinally therealong, a brace member attached to and extending forward from the rear end of each of the beams, the forward end of each brace and each of the rear corners of the shovel being carried by the struts at the tops thereof, by which means the upward slant of the shovel may be varied and a truss function obtained as a result of the assembly, the forward end of the shovel being carried and spaced from the ground by a pair of arcuate runners, all substantially as shown.

1,866,095. CUTTING TOOL. EDWARD J. FOLEY, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 29, 1930. Serial No. 448,217. 1 Claim. (Cl. 81—9.5.)



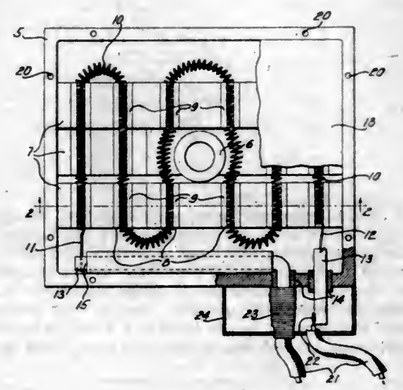
A slitting tool comprising a sleeve having a slot, a hook-shaped portion at one end thereof for receiving an article to be slit, a plunger mounted in the sleeve and rotatable to a plurality of positions with respect thereto, a blade projecting from one end of the plunger for slitting the article in a direction determined by the position of the plunger, and means carried by the plunger for cooperation with the slot in the sleeve for determining the position of the plunger.

1,866,096. ADJUSTABLE SUPPORT FOR PROJECTION MACHINES. LOUIS SIMON FRAPPIER and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 22, 1929. Serial No. 356,996. 10 Claims. (Cl. 248—47.)



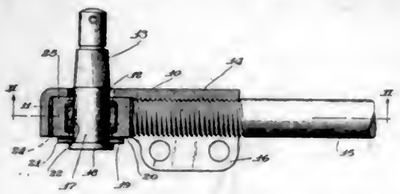
1. In combination with a supporting pedestal, a base therefor, a pedestal lever carrying a utility and pivotally supported on said pedestal to tilt in a vertical plane, means for clamping said lever to said pedestal and guiding means secured to said base and cooperating with said lever to prevent lateral movement of said device.

1,866,097. ELECTRICAL HEATING DEVICE. JOHN HERMAN GAETJE, Glenview, and ARTHUR EDWIN SANTSCHI, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 14, 1929. Serial No. 362,910. 2 Claims. (Cl. 219—19.)



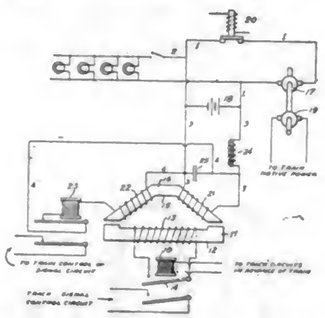
1. In an electrical heating device, a casing, a resistance element, means whereby said resistance element may be disposed in zigzag arrangement in said casing and held in place, said means comprising a plurality of bridges having aligned recesses therein through which said resistance element may be threaded and held in place by the walls thereof, a refractory material disposed in said casing and in said recesses for surrounding and embedding said resistance element and said bridges, a cover for said casing, and a tubular extension integral with the casing extending through the refractory material to the cover.

1,866,098. TIE ROD END. MATTHEW P. GRAHAM, Detroit, Mich., assignor to Thompson Products, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 9, 1928. Serial No. 268,433. 5 Claims. (Cl. 287—93.)



1. In a tie rod end assembly, a housing providing a cylindrical socket having an apertured end wall, a split bushing within said socket, a rubber ring positioned within said socket and held under radial compression between said bushing and said socket side wall in non-rotative engagement therewith relative thereto, a cylindrical stud swivelly mounted in said bushing with one of its ends extending freely through said apertured end wall and a member secured on the other end of said stud of larger diameter than said aperture to prevent said housing from dropping off of said stud.

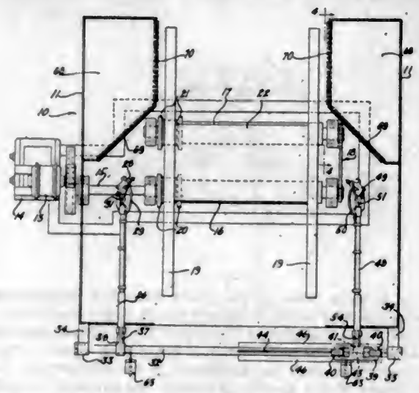
1,866,099. AUTOMATIC TRAIN CONTROL. FRANK W. GODSEY, Jr., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Feb. 4, 1929. Serial No. 337,276. 13 Claims. (Cl. 246—63.)



1. In an automatic train control system, in combination, a source of potential subject to fluctuations, two train-carried inductively coupled circuits each having associated therewith electro-responsive means energized by said source and responsive to track conditions, a relay connected with both of said circuits, and inductance means and capacity means forming a filter for preventing fluctuations in said source from actuating said relay.

1,866,100. COATING APPARATUS. CLARENCE ALBERT HACH, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 16, 1928. Serial No. 262,116. 4 Claims. (Cl. 91—45.)

1. In a mechanism for applying coating material to circular articles, a hood open at front and rear ends, means for rotating an article to be coated within the hood, oppositely disposed arms carrying spraying means for applying coating material simultaneously to both sides of the article, both of the arms being movable simultaneously across the article, means for adjusting the relative position of the arms to accommodate articles of different widths, means for adjusting the position of the arms to accommodate articles of different circumferences, and exhaust means equipped with removable,

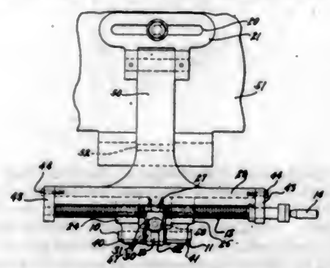


destructible baffles disposed at an angle such that spray ejected from the spraying means and deflected from the article will impinge directly upon them.

1,866,101. APPARATUS FOR SHAPING SAW TEETH. CLARENCE ALBERT HACH, Oak Park, and CHARLES IRVING HOAG, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1928. Serial No. 270,862. 2 Claims. (Cl. 76—48.)

1. In an apparatus for shaping the teeth of a saw, wherein abrasive members are mounted in oppositely disposed supports for engaging the teeth; a gauge shaped to project between the abrasive members and having a portion adapted to engage the saw, and means for securing the gauge to the supports.

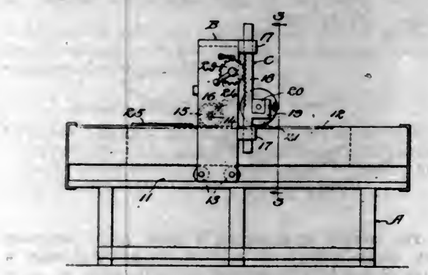
1,866,102. APPARATUS FOR SHAPING SAW TEETH. CLARENCE ALBERT HACH, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1928. Serial No. 270,863. 1 Claim. (Cl. 76—48.)



In an apparatus for shaping saw teeth, a supporting member pivoted to a fixed support adjacent the saw and having a portion movable in the plane of the saw into

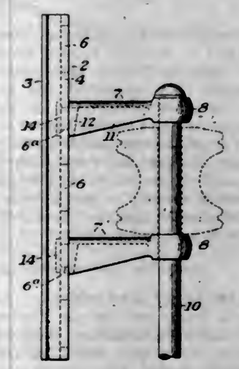
and out of operative relation to the saw, a jointing member carried by the supporting member and adjustable radially with respect to the saw, a pair of supports movable laterally of the saw, dressing members carried by said supports, and adjusting means operative to move the supports simultaneously toward or away from each other.

1,866,103. MEANS FOR PRODUCING MULTICOLOR PRINTING ROLLS. JOSEPH C. HAKIM, Hoboken, N. J. Filed Mar. 29, 1930. Serial No. 440,013. 1 Claim. (Cl. 101—33.)



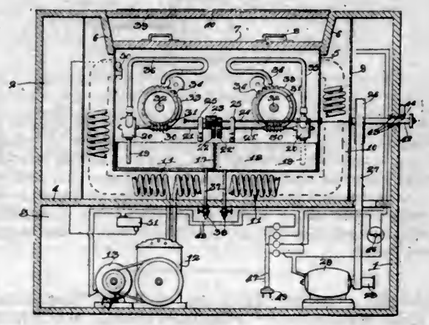
Mechanism for use in effecting transfer of a design from a lithographic plate to a printing roller comprising a bed structure on which the lithographic plate is adapted to be supported, a carriage mounted on said bed structure for movement with respect thereto over a lithographic plate supported thereon, and means for mounting a printing roller on said carriage for vertical adjustment with respect thereto whereby the pressure of the roller against the lithographic plate during movement of the carriage over the bed structure may be variably predetermined, said means comprising a pair of rack bars mounted on the carriage for vertical adjustments, means for vertically adjusting said rack bars, and brackets carried by said rack bars, respectively, for the reception of bearing blocks for the printing roller, each bracket being open at one side to facilitate the insertion and removal of the bearing blocks thereby to facilitate the changing of the printing rollers.

1,866,104. INSULATOR BRACKET. WARREN M. HEIM, Pittsburgh, Pa., assignor to Oliver Iron and Steel Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 21, 1927. Serial No. 220,969. 2 Claims. (Cl. 173—321.)



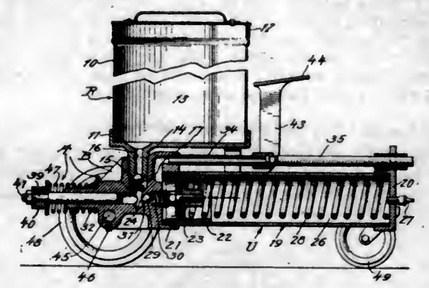
1. In an insulator bracket, a base member, a forged metal arm secured to the base member having an eye at the outer end thereof and having a shank portion which is channel-shaped in cross section, the inner end of the arm being solid in cross section and having an extension thereon projecting through the base member and upset against the opposite side of the base member for securing the arm to the base member.

1,866,105. LUBRICANT TESTER. JOHN HEISENFELDT, Wauwatosa, and HARRY WALSH, Milwaukee, Wis. Filed Feb. 4, 1931. Serial No. 513,360. 4 Claims. (Cl. 35—16.)



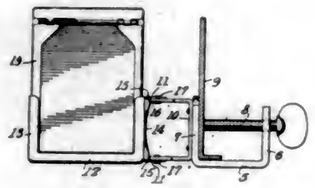
1. A display and testing device for lubricants comprising a cabinet, a casing arranged in the cabinet and spaced from the walls thereof, the casing and cabinet having sight panels, means arrranged in the cabinet for governing the temperature of the casing, driven intermeshing testing gears arranged in the casing, an oil pan in the casing disposed directly below the gears for receiving oil therefrom, and means delivering oil from the pan between the meshing gears.

1,866,106. LUBRICANT DISPENSING APPARATUS. THEODORE E. HERLIHY, Los Angeles, Calif., assignor, by direct and mesne assignments, to The Lubrication Corporation, South Bend, Ind., a Corporation of Delaware. Filed Nov. 20, 1928, Serial No. 320,652. Renewed June 1, 1931. 12 Claims. (Cl. 221—47.1.)



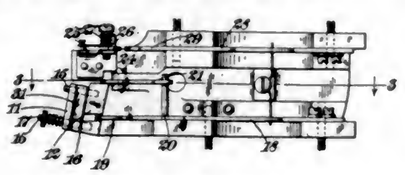
1. A lubricant dispensing apparatus comprising a cylinder, a piston in the cylinder dividing the latter into a lubricant receiving chamber having an outlet and a second chamber having a valve controlled inlet through which air under pressure is adapted to be supplied to the second chamber normally to urge the piston to one extreme position, means for pumping lubricant into the receiving chamber to force the piston to another extreme position against the expansive action of the air in the second mentioned chamber so that the air will be further compressed by the piston to such extent as to operate under its expansive action to place the lubricant in the receiving chamber under a high pressure and thereby tend forcibly to eject the lubricant from the receiving chamber through its outlet, and means for controlling the ejection of lubricant from said outlet.

1,866,107. ATTACHMENT FOR HOLDING CIGARETTE CASES. WILLIAM C. HIERING, Newark, N. J., assignor to J. E. Mergott Co., Newark, N. J., a Corporation of Delaware. Filed Mar. 22, 1930. Serial No. 438,115. 2 Claims. (Cl. 224—29.)



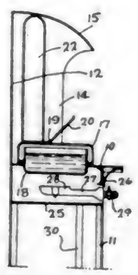
1. A device for supporting a cigarette case on the instrument board of an automobile, comprising a bracket having laterally projectings legs, a casing having laterally projecting arms pivotally connected with the legs, resilient means interposed between the extremities of the legs and a wall of the casing to maintain the casing in adjusted positions, and means to attach the bracket to the instrument board.

1,866,108. THREAD-TRAPPER AND REVERSE-PLATING MECHANISM FOR KNITTING MACHINES. HENRY HAROLD HOLMES and ROBERT HAROLD ROBINSON, Leicester, England, assignors to Wildt and Company Limited, Leicester, England, a British Company. Filed July 1, 1929, Serial No. 375,049, and in Great Britain Aug. 30, 1928. 14 Claims. (Cl. 66—145.)



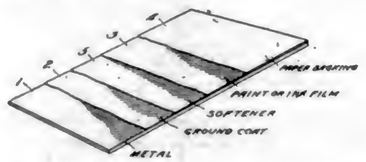
1. For a knitting machine, a yarn-trapper comprising in combination relatively separable jaw-plates, and at least one intermediate plate between them that is free to separate from the jaw-plates when the latter are opened apart thereby affording a plurality of gaps into any one of which a yarn can pass as it is withdrawn.

1,866,109. HEATING RANGE. LOUISA JACKSON, Toronto, Ontario, Canada. Filed Dec. 13, 1930, Serial No. 502,083, and in Canada Apr. 4, 1930. 1 Claim. (Cl. 126—1.)



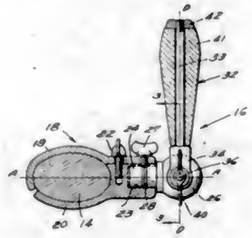
A heating range comprising a frame supported by standards and having a flat stove top, detachable casings secured to said stove top and having fat pans therein, an oven situated between said casings on said stove top and having a perforated plate forming the bottom and a hinged lid for the top, a container having a perforated plate forming a tray slidably arranged in said oven, flues detachably connected to said casings and extending upwardly therefrom and connected to a main flue having an outlet and suitably supported by said frame.

1,866,110. METHOD OF FORMING DECORATED METAL OBJECTS. ALVIN O. JOHNSON, Chicago, Ill., assignor to The Meyercord Company, a Corporation of Illinois. Filed Oct. 14, 1931. Serial No. 568,869. 9 Claims. (Cl. 41—38.)



4. The method of producing a sheet metal decorated object, which consists in applying to a metal sheet a varnish ground coat comprising synthetic gums or resins ground in oil and pigmented with colors, dipping in a liquid composed of ethyl lactate, ethylenechlorohydrin, ethyl alcohol and water a printed or lithographed design secured to a gum coating on a paper backing, laying the design face down on the ground coat, applying pressure, removing the backing, baking the decorated sheet, and then forming the sheet into the desired shape.

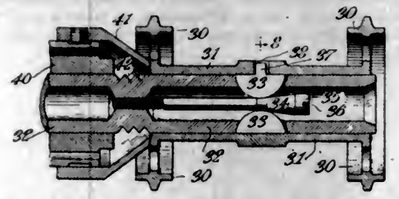
1,866,111. STEERING WHEEL HANDLE. WINFIELD S. JONES, Brea, Calif. Filed Apr. 25, 1930. Serial No. 447,168. 3 Claims. (Cl. 74—33.)



1. In combination with a steering wheel: attachment means adapted to be attached to said steering wheel and providing an opening therein, said opening having an axis at an angle to a tangential axis of said steering wheel at the point of attachment of said attachment means; a member having a portion thereof rotatable in said opening; friction means for securing said portion of said member in said opening and frictionally resisting rotation of said member relative to said attachment means; a handle pivotally secured to said member; and friction means for frictionally resisting the movement of said handle relative to said member.

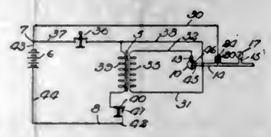
1,866,112. SPROCKET FASTENING. ALBERT KINDELMANN, Floral Park, and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 31, 1929. Serial No. 403,769. 2 Claims. (Cl. 287—53.)

1. In combination with a sprocket, a shaft, said sprocket having a hub in engagement with said shaft, a key carried by said shaft and adapted to contact with said hub, said key having a positioning extension adapted to seat



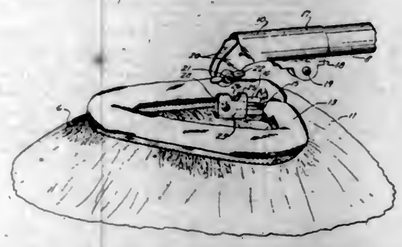
in a recess in said hub, and a tapered member carried internally of said shaft for bringing said key into frictional engagement with said hub.

1,866,113. SPARK PLUG TESTER. MORRIS B. KOONS, Youngstown, Ohio, assignor of one-half to Eddie Stainbrook, Youngstown, Ohio. Filed Mar. 13, 1931. Serial No. 522,237. 11 Claims. (Cl. 175—183.)



1. A spark plug tester comprising in combination a casing, a spark coil housed within said casing, a socket fixedly mounted on said casing, means within said socket for receiving the sparking end of a spark plug, means for producing a fluid pressure greater than atmospheric within said socket when a spark plug is therein, a valve for controlling the fluid preasure, and a switch operated by said fluid pressure for connecting and disconnecting said spark coil in circuit with said spark plug, said switch being operatively connected between the valve and the casing.

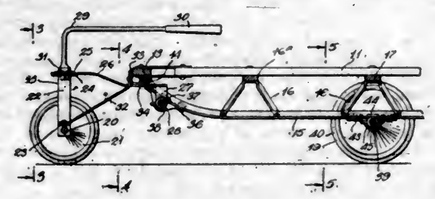
1,866,114. MOP. ARTHUR C. KOOTZ, Milwaukee, Wis. Filed Aug. 15, 1927, Serial No. 212,934. Renewed Aug. 29, 1931. 4 Claims. (Cl. 15—229.)



2. In a mop, the combination of a mop-receiving frame having separable ends extending inwardly of its periphery, one of said ends being of hooked formation, an apertured clip secured to said hooked end, a handle connector, a pivot for said handle connector passing through said connector, clip and the hooked end of said frame, the other end of said frame being in the form of a pin releasably engageable in said clip.

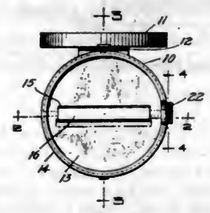
1,866,115. MEANS FOR CONVERTING A SLED INTO A WHEELED VEHICLE. OTTO C. LARSON, Brooklyn, N. Y. Filed Nov. 4, 1930. Serial No. 493,257. 11 Claims. (Cl. 280—8.)

1. The combination with a sled of conventional form including side runners, of two wheel units each consisting of a pair of wheels including a coupling shaft for converting the sled into a wheeled vehicle, means at the end portions of the shafts of each unit for detachably clamping the same in connection with the runners of the sled, said



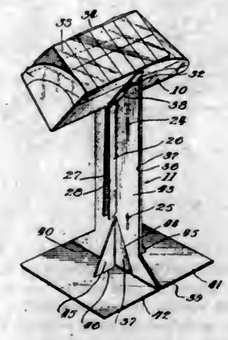
clamping means comprising relatively adjustable jaw members adjustable on the shafts of said units and movable relatively to each other, and one of said units including a wheel axle shaft disposed in spaced relation to the first named shaft and forwardly of said sled.

1,866,116. TOILET ACCESSORY. WILLIAM LEIDEL, Elmhurst, N. Y. Filed June 14, 1930. Serial No. 461,079. 5 Claims. (Cl. 132—83.)



1. A toilet accessory comprising a container with an enclosure having an outer surface from which powder may be wiped, a slot extending longitudinally and substantially the diameter of the enclosure, a roller fitted within said slot, and means for retaining said roller within the enclosure, said roller being triangular in shape and provided with longitudinal grooves on two sides for dispensing a measured quantity of powder from within said enclosure to the outer surface of said enclosure, and the other side of said roller being substantially flat to register with the outer surface of the enclosure to prevent seepage of powder through the slot when not in use.

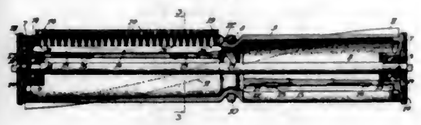
1,866,117. CONFECTION DISPLAY DEVICE. HENRY H. LOGAN, Chicago, Ill. Filed Mar. 28, 1931. Serial No. 525,929. 7 Claims. (Cl. 211—156.)



1. In a confection display device the combination of a base comprising oppositely extending flat portions of sheet material, a standard carried by said base, and com-

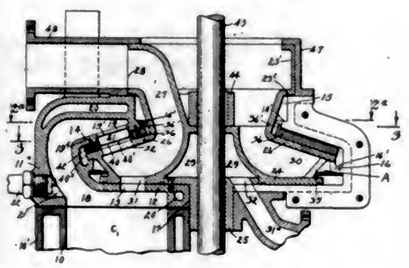
prising an upwardly extending part of sheet material at right angles to said base, said standard having a V-shaped end with edge portions extending at an angle to each other, a hod comprising a pair of sides of sheet material disposed at the same angle to each other as said V-shaped end, whereby said hod will substantially fit the end of said standard, an additional portion of said material connecting the sides of said hod and closing one end thereof, and a handle connected to the lower surface of said sides, and extending downward into engagement with said standard, said hod being proportioned to dispose the major portion of the weight on the same side of said standard as said handle to urge said handle into engagement with the side of said standard, and to support the hod in stable position on said standard.

1,866,118. SUCTION CLEANER. MILLARD F. LOWRY, North Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Jan. 28, 1929. Serial No. 335,432. 6 Claims. (Cl. 15—179.)



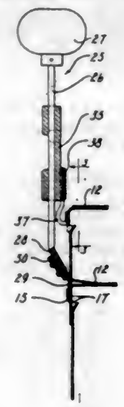
1. An agitating element for suction cleaners comprising a cylindrical body provided with longitudinal grooves and with recesses at the ends of said grooves forming shoulders, a brush having shoulders on the ends thereof and received in said grooves, the shoulders on the brush abutting the shoulders on the body, and springs mounted in the bottom of the groove for urging said brush upwardly.

1,866,119. ROTARY VALVE COMBUSTION ENGINE. HENRY MANRODT, Newark, N. J. Filed May 15, 1929. Serial No. 363,136. 11 Claims. (Cl. 123—190.)



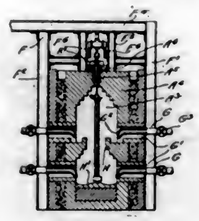
1. In an internal combustion engine having a valve chamber, a rotary valve for controlling the cyclic operations in the cylinders of said engine, means for balancing said valve, and means for compensating the expansion thereof during operation of said engine, said last named means including an annular member concentrically arranged with respect to the axis of said valve and adapted to be mounted between said valve and the walls of said valve chamber.

1,866,120. TOOL FOR HANDLING CLAMPING MEMBERS. WILLIAM W. MCWILLIAMS, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 8, 1931. Serial No. 507,422. 5 Claims. (Cl. 81—3.)



1. A tool for handling clamping members, comprising a handled bar terminating in a bent portion, a removable blade carried by the bent portion, and means movable with respect to the blade for engaging a clamping member.

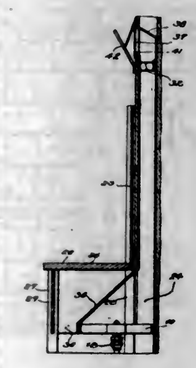
1,866,121. SHEET ANNEALING FURNACE. PAUL A. MEEHAN, Cleveland, Ohio, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 6, 1928. Serial No. 267,827. 13 Claims. (Cl. 263—8.)



1. In a horizontal furnace having a furnace chamber therein, means for passing sheet material through said furnace chamber in a vertical plane comprising an endless conveyor and a plurality of material carrying cages supported from said conveyor, and means adjacent one end of the furnace for automatically opening said cages to receive the sheet material.

1,866,122. HEATING DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Mar. 25, 1927. Serial No. 178,486. 5 Claims. (Cl. 257—136.)

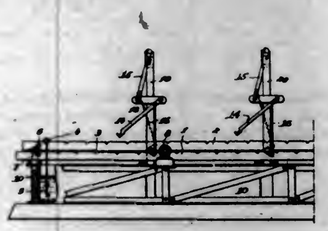
3. In combination with a wall of a room having a pair of vertically spaced apertures therein and a substantially vertical passage connecting said apertures, a heating unit, said heating unit projecting through the lower of said apertures and extending into said passage, an element forming part of said passage extending over the heating unit, means connected to said wall and projecting outwardly therefrom into said room so as to conceal said heating unit, said element and means having communicating openings for the passage of air, and means for directing air out of said passage through the upper of said apertures.



1,866,123. MAGNETIC MATERIAL, METHOD OF MAKING THE SAME, AND ARTICLES MADE THEREFROM. CHARLES C. NEIGHBORS, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1930. Serial No. 505,956. 24 Claims. (Cl. 175—21.)

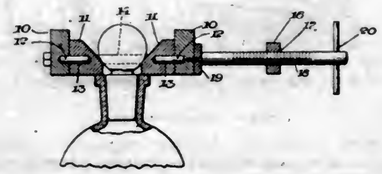
1. A magnetic material suitable for producing magnetic cores, comprising a finely divided magnetic metal, and an insulating composition mixed therewith and including a water-soluble organic acid.

1,866,124. CONVEYING APPARATUS, PARTICULARLY FOR ELECTROPLATING. JOSUA OERTLI, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Feb. 9, 1928, Serial No. 252,967, and in Germany Oct. 5, 1927. 5 Claims. (Cl. 204—5.)



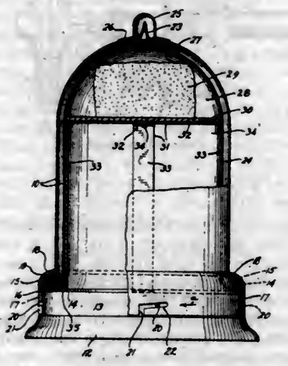
1. Apparatus for conveying objects to be treated through a bath containing a treating or other fluid, comprising, in combination, a plurality of rods for supporting the objects to be treated, at least two frames movably disposed above the bath and provided with notches at the upper surfaces thereof for receiving said rods, lateral guides at said notches for the ends of said rods, a drive for reciprocating one of said two frames through a looped path having a considerable vertical component, a second drive for reciprocating the other of said frames through a similar path, said second drive being so displaced with respect to said first drive, that said objects are given a looped path having a considerable vertical component through the bath, a stand arranged near said frames, a pair of levers operative to lift said rods off said two frames and place them on said stand, and a single motor for continuously actuating said drives and said pair of levers.

1,866,125. IMPLEMENT FOR LOOSENING BOTTLE STOPPERS. JAMES O. PATTERSON, Lower Merion Township, Montgomery County, Pa. Filed Sept. 30, 1931. Serial No. 565,982. 11 Claims. (Cl. 65—46.)



5. An implement for the purpose described comprising two opposed supporting members, guides for said supporting members, a pair of opposed stopper lifting members removably mounted on the supporting members, cooperating supporting means on the supporting members and the stopper lifting members independent of the guides, whereby various shaped lifting members may be applied to the supporting members without removing either of the supporting members from the guides, and means for actuating the stopper lifting members to exert a lifting force on a stopper.

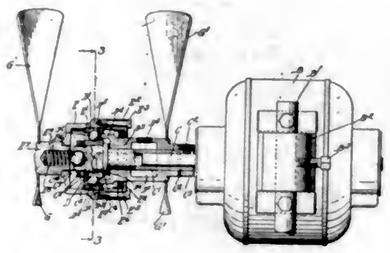
1,866,126. HEAT-INSULATING RECEPTACLE. AURIN E. PAYSON and MINER P. WETMORE, Norwich, Conn. Filed Mar. 12, 1928. Serial No. 260,869. 7 Claims. (Cl. 45—71.)



7. The combination of a base, a double-walled vacuum jar supported on said base in inverted position, a flat annular member adjustably mounted on said base, and out-

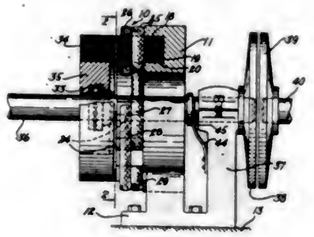
wardly projecting means on said jar near the mouth thereof arranged to be engaged by said member for holding the jar rigidly on said base.

1,866,127. FAN. LAURENCE M. PERSONS, St. Louis, Mo., assignor to Emerson Electric Manufacturing Co., St. Louis, Mo., a Corporation of Missouri. Filed Aug. 16, 1929. Serial No. 386,398. 4 Claims. (Cl. 74—34.)



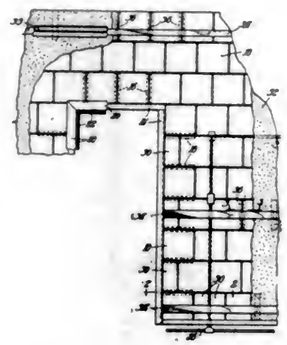
1. In a power transmitting mechanism adapted to drive fans in opposite rotational directions, a motor and a motor shaft, an extension sleeve mounted on said shaft, an inner race mounted on said extension sleeve, an outer race opposed thereto, rollers interposed therebetween, a rotatable retainer for said rollers, said retainer including a portion rotatable about said extension sleeve, a work performing element connected with said retainer and a work performing element connected with said outer race.

1,866,128. CLUTCH. CONRAD LOUIS PFEIFFER, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 24, 1928. Serial No. 280,190. 3 Claims. (Cl. 192—84.)



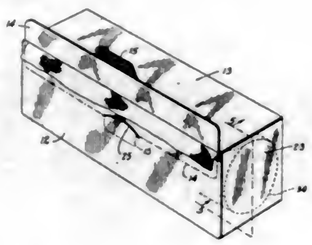
1. In an alternating current magnetic clutch, a driving shaft, a friction disk secured to its end, a friction disk positioned opposite the first friction disk, a second shaft to the end of which said second friction disk is secured and capable of a slight longitudinal movement, a laminated alternating current stator spaced from the friction disks and surrounding the second shaft, a laminated armature free to rotate around the second shaft but fixed longitudinally thereon, said armature being positioned adjacent the stator so that electrical energization of the latter moves the armature and the second shaft endwise to cause engagement of the two friction disks to drive the second shaft, and a resilient member for normally maintaining the friction disks separated.

1,866,129. WALL. RICHARD W. RAFTIS, Chicago, Ill.; Lillian B. Raftis, executrix of said Richard W. Raftis, deceased, assignor to Lillian B. Raftis, Chicago, Ill. Filed Jan. 15, 1930. Serial No. 420,872. 7 Claims. (Cl. 72—41.)



7. A building structure comprising a wall built up of cellular tiles, a vertical door buck, and nailing pieces embedded in said wall between the edges of adjacent tiles with their ends abutting said buck, the tiles adjacent said bucks being of identical construction with the rest of the tiles in the wall.

1,866,130. DISPENSING CARTON. FERDINAND REICHEL, New Haven, Conn., assignor to National Folding Box Company, New Haven, Conn., a Corporation of New Jersey. Filed Sept. 22, 1928. Serial No. 307,708. 6 Claims. (Cl. 206—52.)



3. A sanitary dispensing container comprising a receptable having a main cover, an auxiliary cover connected to and arranged to be opened independently of said main cover, means for retaining said main cover in its closed position and separate means for retaining said auxiliary cover in its closing position.

1,866,131. DRILL CONTROLLING APPARATUS. WARREN A. ROSS, Long Beach, Calif., assignor of one-fourth to Truman O. Boyd, Long Beach, Calif., and one-fourth to Donald M. Carter, Chicago, Ill. Filed Feb. 11, 1927, Serial No. 167,567. Renewed Dec. 7, 1931. 5 Claims. (Cl. 255—19.)

5. A drill controlling apparatus comprising a fluid circulation system, a pump therein, pressure indicating means for said system comprising three indicators, means for fixedly recording the fluid pressure in either of two of

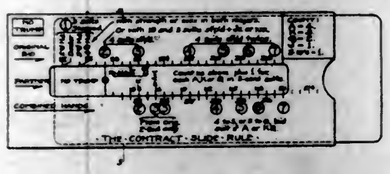


said indicators when desired, and an adjustable valve in said circulation system.

1,866,132. LUMINOUS COMPOUND AND METHOOD OF PRODUCING LUMINOUS OBJECTS THEREWITH. HERMAN SCHLUNDT, Columbia, Mo., assignor to United States Radium Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 22, 1929. Serial No. 349,278. 6 Claims. (Cl. 91—68.)

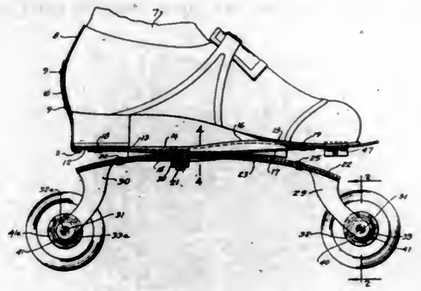
1. A method of producing luminous objects which comprises de-emanating a radio-active compound in solution and thereby rendering said compound temporarily substantially inactive, adding to the solution a radioactive-sensitive compound, recovering a mixture of said compounds from the solution and applying the mixture to the object while the period of temporary substantial inactivity of the radioactive compound continues.

1,866,133. EDUCATIONAL DEVICE. FRED L. SIMON, Baltimore, Md. Filed July 1, 1929. Serial No. 375,278. 5 Claims. (Cl. 235—85.)



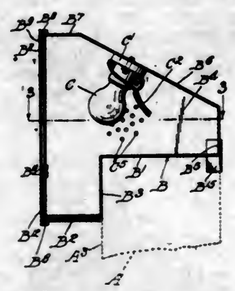
5. A device for assisting card players to estimate the probable trick-taking values of their hands by counting arbitrary values ascribed to the individual cards and groups of cards comprising the hands, consisting of two members, one of which has two sets of indicia, one set showing the relation between bidding values and count values for one hand and the other set showing the same relation when combined with partner's hand, the other member having one set of indicia representing the count values of partner's hand, the two said members being relatively movable to coordinate the three sets of indicia.

1,866,134. ROLLER SKATE. FRANK R. SMITH, Cleveland, Ohio. Filed June 19, 1931. Serial No. 545,431. 4 Claims. (Cl. 208—175.)



1. A roller skate comprising an upper spring foot plate, a lower, upwardly bowed spring plate clamped to the under side of the foot plate, said lower plate having a fork at each end, and a wheel supported in each fork.

1,866,135. DISPLAY DEVICE. ROBERT E. SPIEL, Chicago, Ill., assignor to Magill-Weinsheimer Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 6, 1930. Serial No. 500,490. 4 Claims. (Cl. 40—132.)

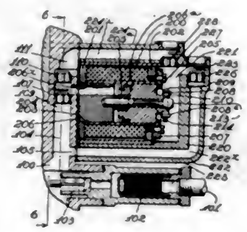


1. The combination with a dispensing member of a display device superposed upon on upper portion thereof, said display device including a portion resting upon said dispensing member and a portion forwardly extending from the dispensing member and overlapping the front thereof, the forward face of said display device including a light pervious member and a light source positioned within said display device adapted to illuminate said pervious member, and securing means downwardly depending from said display device adapted to engage the sides of the dispensing member other than that engaged by the overlapping front of the display device, and to prevent lateral movement of the display device in relation to the dispensing member.

1,866,136. ELECTROMAGNETIC FUEL PUMP. PERCIVAL S. TICE, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Original application filed Feb. 13, 1928, Serial No. 253,974. Divided and this application filed Aug. 1, 1931. Serial No. 554,513. 5 Claims. (Cl. 103—53.)

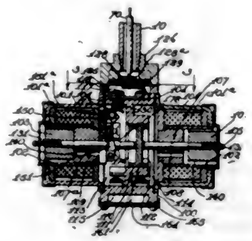
1. In an electromagnetic pumping apparatus, in combination with a pump cylinder and piston therein, an electromagnetic device comprising a fixed core of magnetiz-

able metal, electric circuit windings encompassing said core for magnetizing the same when the windings are electrically energized; a switch device for connecting said windings with the source of current, the pump cylinder and piston being axially aligned with the electromagnet core and windings, the piston being of metal suit-



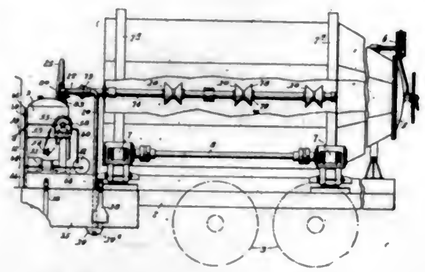
able to cooperate as an armature with the fixed core of the electromagnet, and having mechanical connections for operating the switch to open the circuit by its movement responsive to the attraction of the magnet core and to close the circuit by the reverse movement, and a spring reacting on the armature piston to cause such reverse movement.

1,866,137. ELECTROMAGNETIC FUEL PUMP. PERCIVAL S. TICE, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Original application filed Feb. 13, 1928, Serial No. 253,974. Divided and this application filed Aug. 1, 1931. Serial No. 554,514. 7 Claims. (Cl. 103—53.)



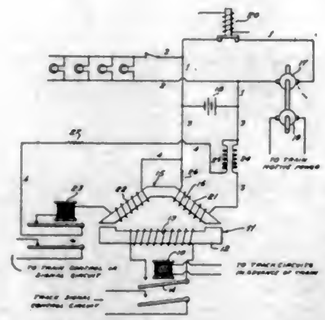
1. An electric pumping apparatus having a pair of solenoids each comprising a core tube and a fixed magnetizable core member occupying one end portion of the central cavity of the tube and an armature member reciprocable longitudinally of the tube in the opposite end portion thereof, said solenoids being mounted in axial alignment spaced apart from each other with the fixed core members in their proximate end portions, and the reciprocable armature members in their remote end portions; pumping chambers formed with a piston cylinder interposed between the two core tubes, and a piston reciprocably mounted in the cylinder, the reciprocable armature members in the respective core tubes having each a rigid stem extending out guidingly through the fixed core member of the tube for operative engagement with the piston; an electric circuit having two branches-in-parallel containing respectively the two solenoid windings; a switch device in said circuit having its movable member shiftable to alternate the circuit connections between the two branches-in-parallel, and thereby between the two solenoid windings, for magnetically energizing alternately the fixed core members and attracting the armature members alternately in opposite directions; one of the armature stems being operatively associated mechanically with the switch member for shifting the latter to shift the current course from one to the other of said branches-in-parallel.

1,866,138. PORTABLE MIXER. WILLIAM MAYO VENABLE, Pittsburgh, Pa., assignor to Blaw-Knox Company, Blawnox, Pa., a Corporation of New Jersey. Filed Mar. 28, 1931. Serial No. 524,491. 10 Claims. (Cl. 221—95.)



1. In combination with a portable mixer, a plurality of water tanks of different capacities arranged below the mixer, connections from each of the tanks to the mixer, and means for forcing water under pneumatic pressure from each tank to the mixer.

1,866,139. AUTOMATIC TRAIN CONTROL. LOUIS H. VON OHLSEN, New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Feb. 4, 1929. Serial No. 337,222. 19 Claims. (Cl. 246—63.)



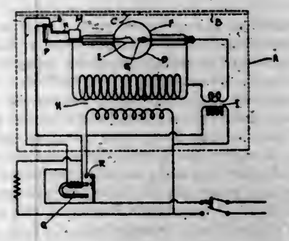
1. In an automatic train control system, in combination, a car movable along a track, a receiver mounted upon said car comprising an iron core and a primary and a secondary coil, a relay adapted to control the operation of translating devices on said car, a source of electrical potential, a receiver circuit connecting said primary coil with said source, a relay circuit connected to said source and including said secondary coil, and means associated with both of said circuits for neutralizing current effects produced in said relay circuit by sudden current changes in said primary coil due to potential fluctuations at the source.

1,866,140. PRESSURE GAUGE. JOHN WAHL, Rosedale, N. Y., assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Oct. 12, 1929. Serial No. 399,200. 8 Claims. (Cl. 73—111.)



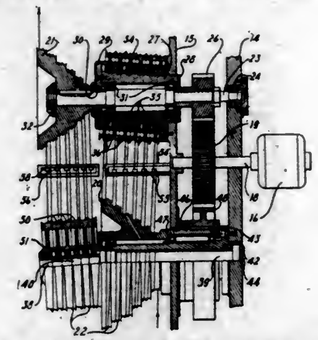
5. A pressure gauge of the piston type comprising a spring loaded piston provided with a compressible cupped packing, a pressure chamber within which the piston is movable, and a circumferential rib having a conical outer wall within the pressure chamber and spaced from the wall thereof, adapted to engage and press outwardly upon the inner wall of the cupped packing when the piston is held at its normal or zero position by the piston.

1,866,141. X-RAY APPARATUS. JULIUS B. WANTZ, Oak Park, Ill., assignor to General Electric X-Ray Corporation, Chicago, Ill., a Corporation of New York. Filed Sept. 6, 1927. Serial No. 217,664. 8 Claims. (Cl. 250—34.)



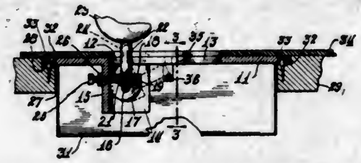
1. The combination with an X-ray tube having an anode and a transformer used in connection therewith of a thermostat secured to said anode, a relay, contacts controlled by said thermostat, and a circuit to said relay in which said contacts form a part, the overheating of said tube being adapted to cause said thermostat to close said contacts to said relay to open the circuit to said transformer.

1,866,142. APPARATUS FOR HANDLING MATERIAL. DANIEL V. WATERS, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 15, 1930. Serial No. 436,165. 10 Claims. (Cl. 205—13.)



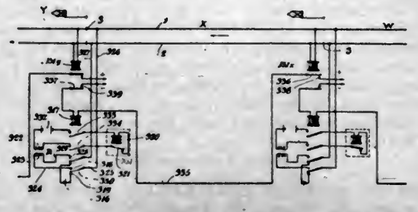
1. In a strand working mechanism, a rotatable shaft, a capstan driven thereby and engaging the strand, and an idler sheave for carrying the strand rotatable about an axis diagonal to that of the shaft, said shaft passing through said idler sheave.

1,866,143. PERMANENT GOLF TEE. WILLIAM E. WILLEY, Champaign, Ill. Filed June 11, 1930. Serial No. 460,361. 2 Claims. (Cl. 273—33.)



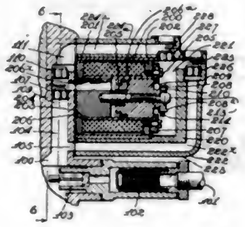
1. An article of the class described comprising, in combination, a plate having aligned bearings thereon, a wall connecting said bearings, a hub rotatably mounted between said bearings, a golf ball support removably mounted in said hub adapted to extend substantially vertically through a slot in said plate, means for supporting said support in a non-vertical position, and a stop threaded for adjustment in said wall to limit movement of the support in one direction.

1,866,144. TRACK CIRCUIT SYSTEM. ARBA G. WILLIAMSON, Carnegie, Pa., assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Feb. 3, 1927, Serial No. 165,603, Patent No. 1,807,330, dated May 26, 1931. Divided and this application filed Feb. 19, 1931. Serial No. 516,886. 12 Claims. (Cl. 246—34.)



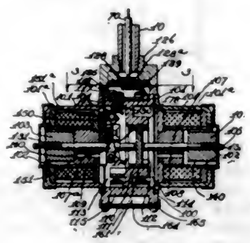
1. A track circuit system comprising: a track section having traffic rails; a circuit including a source of direct current, a motor an interrupter and a transformer; and means to supply current from the transformer to the rails of the section when a train enters said section.

able metal, electric circuit windings encompassing said core for magnetizing the same when the windings are electrically energized; a switch device for connecting said windings with the source of current, the pump cylinder and piston being axially aligned with the electromagnet core and windings, the piston being of metal suit-



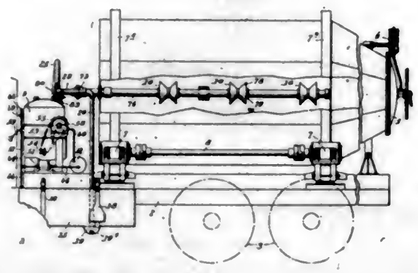
able to cooperate as an armature with the fixed core of the electromagnet, and having mechanical connections for operating the switch to open the circuit by its movement responsive to the attraction of the magnet core and to close the circuit by the reverse movement, and a spring reacting on the armature piston to cause such reverse movement.

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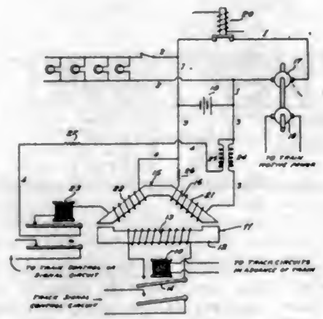
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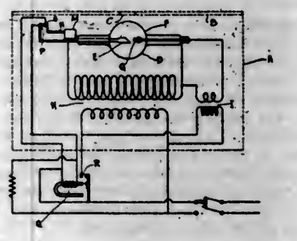
1. In an automatic train control system, in combination, a car movable along a track, a receiver mounted upon said car comprising an iron core and a primary and a secondary coil, a relay adapted to control the operation of translating devices on said car, a source of electrical potential, a receiver circuit connecting said primary coil with said source, a relay circuit connected to said source and including said secondary coil, and means associated with both of said circuits for neutralizing current effects produced in said relay circuit by sudden current changes in said primary coil due to potential fluctuations at the source.

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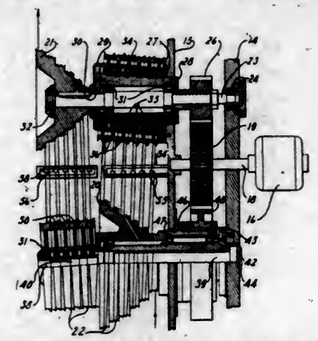
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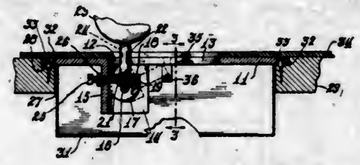
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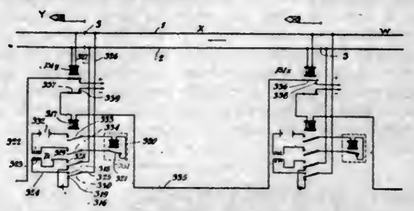
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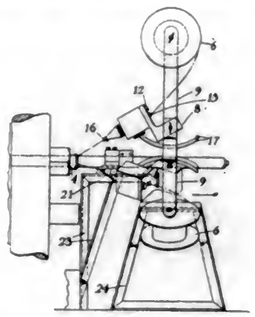
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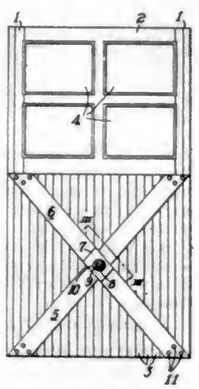
1. A track circuit system comprising: a track section having traffic rails; a circuit including a source of direct current, a motor an interrupter and a transformer; and means to supply current from the transformer to the rails of the section when a train enters said section.

1,866,145. METHOD OF MAKING COMPOSITE TUBULAR MEMBERS. ALFRED EDGAR WILSON, London, England. Filed Feb. 13, 1931, Serial No. 515,572, and in Great Britain Feb. 27, 1930. 2 Claims. (Cl. 29—188.)



1. A method of producing a metal tubular member having on the outside thereof a protective coating of another metal, consisting in subjecting a body of metal containing lead to an extrusion process to form the tube and then immediately spraying the coating metal on to the surface of the tube while the latter is still hot, plastic and clean.

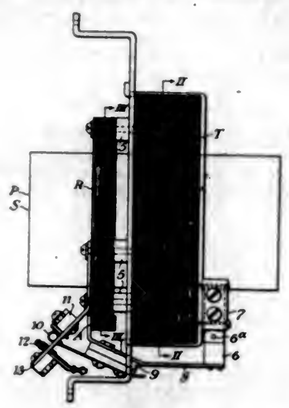
1,866,146. DOOR REENFORCEMENT. ANTON YURKOVITCH, Pittsburgh, Pa. Filed Feb. 24, 1931. Serial No. 517,741. 1 Claim. (Cl. 20—38.)



A door having a panel, side stiles and top and bottom rails, and means for maintaining the same in square, said means comprising a metal X-reenforcement having its four ends secured to said stiles and rails, said X-reenforcement being composed of two intersecting strips of strap iron, one of which is offset to receive the other at the point of intersection, the inner faces of the slats being flush or even with each other so as to lie flat against the panel, a pivot bolt extending through registering holes in the intersecting parts of the traps, the head of the bolt being countersunk in the inner face of the inner strip, and a clamping nut threaded onto the outer, projecting end of the bolt.

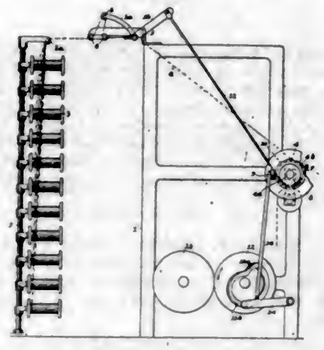
1,866,147. TRANSFORMER RELAY. SELDEN B. AYLSWORTH, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 26, 1931. Serial No. 583,277. 4 Claims. (Cl. 175—336.)

1. A transformer relay comprising a shell type transformer core and an E-shaped relay core, a primary and a secondary winding each enclosing the middle leg of each core, an auxiliary winding enclosing the middle leg of said relay core only, means for supplying said auxiliary



winding with a voltage which opposes the voltage induced therein by said primary winding, and an armature coacting with the open end of said relay core.

1,866,148. MEANS FOR DELIVERING AND WINDING STRANDS, ETC. JOHN E. BARBOUR, Paterson, N. J., assignor to National Net & Twine Co. Inc., Boston, Mass., a Corporation of Delaware. Filed Dec. 4, 1930. Serial No. 499,875. 5 Claims. (Cl. 96—21.)

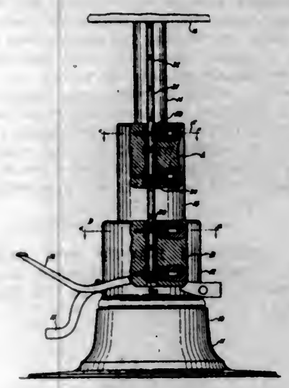


1. In combination, supporting structure, a rotary supply of wound material therein, a rotary core in said structure on which to wind the material, means between the supply and core movable forwardly and backwardly to respectively draw the material from the supply and release the same, a forwardly and backwardly movable driver for the core active when moving forwardly and inactive when moving backwardly to rotate the core in the direction for winding the material thereon, and means, connecting the driver and first means, to synchronize the forward and backward movements of the former with the backward and forward movements of the latter, respectively.

1,866,149. ROLLER GUIDE. DAVID J. BINUS, Canton, Ohio, assignor to The Weber Dental Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Aug. 13, 1929. Serial No. 385,616. 3 Claims. (Cl. 155—25.)

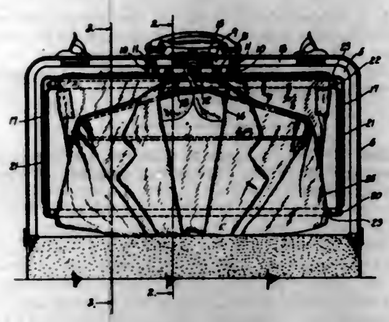
1. In combination, two telescopic members longitudinally movable with respect to each other, a longitudinally

extending rail secured on one member, spaced rollers movable with respect to each other and rotatably mounted on the other member, and means for moving said rollers



with respect to each other thereby maintaining opposite faces of the rollers in rolling contact against opposite sides of the rail.

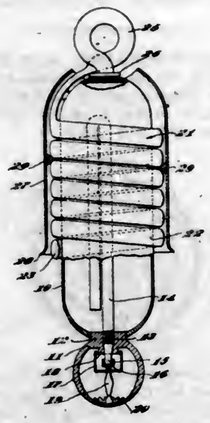
1,866,150. FOLDING HANGER FOR TRAVELING CASES. OTHO L. BOOKS, Kansas City, Mo. Filed May 4, 1931. Serial No. 534,729. 6 Claims. (Cl. 223—65.)



1. A garment hanger construction for traveling cases comprising supporting means adapted for attachment to the interior of the case, a hanger element carried by said supporting means, folding frame elements carried by said supporting means and including parallel bars spaced apart approximately the width of the case for supporting the garment in folds approximately fitting inside the case, one of said frame elements having a pivotal connection to said supporting means, and a second of said elements having a pivotal connection to said first frame element on an axis parallel to the axis of said first pivotal connection whereby the garment may be folded by successive folding movements taking place partly outside the case and partly thereafter as the garment and frame elements are deposited within the case.

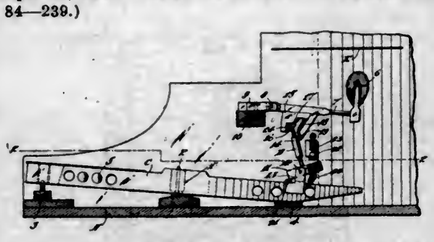
1,866,151. FIRE EXTINGUISHER. ARNOLD W. BURNHAM, Providence, R. I., assignor to Fire Control Inc., Malden, Mass., a Corporation of Massachusetts. Filed June 20, 1929. Serial No. 372,267. 10 Claims. (Cl. 169—26.)

9. A fire extinguisher comprising a container for a fire extinguisher chemical having an outlet, a closure for the outlet, spring means normally holding the closure closed which means acts until a predetermined pressure has been created in the container by the action of heat, and



fusible means which prevent the spring means from releasing the closure until said fusible means has been fused by heat.

1,866,152. PIANO ACTION. CHARLES EWEN CAMERON, Jr., East Orange, N. J., assignor to Lauter-Humana Co., Newark, N. J., a Corporation of New Jersey. Filed Apr. 16, 1931. Serial No. 530,454. 5 Claims. (Cl. 84—239.)



1. In a piano action, a key, a hammer including a butt having two opposed shoulders, a hammer lifter comprising a foot portion pivotally mounted on said key and having a shank projecting angularly therefrom with a head at its free end disposed between said shoulders to abuttingly engage one thereof for actuating the hammer toward a string, and a stop to engage said foot portion during the hammer actuating movement of said key so that the head of said lifter will be moved into the path of the other said shoulder and the latter will frictionally engage under said head upon rebound of the hammer from the string to check return of the hammer to the string.

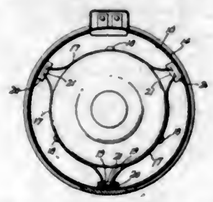
1,866,153. PARTIAL SAPONIFICATION OF CELLULOSE ESTER MATERIAL. CAMILLE DREYFUS, New York, N. Y., and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Oct. 22, 1929. Serial No. 401,578. 8 Claims. (Cl. 8—20.)



1. Method of partially saponifying fabric containing organic esters of cellulose comprising applying an alkaline

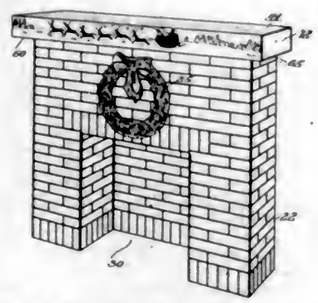
solution of relatively greater concentration to the fabric and then applying an alkaline solution of less concentration, the operations being performed while the fabric is moving continuously.

1,866,154. VACUUM CLEANER. LARS ELL, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Corporation, a Corporation of Delaware. Filed Jan. 7, 1930, Serial No. 419,019, and in Germany Jan. 15, 1929. 6 Claims. (Cl. 248—16.)



1. In a vacuum cleaner, a casing, a motor, and a resilient metal strip support for the motor having seating portions slidably seated adjacent the casing and intermediate portions adjacent to the motor, the parts of the support between the seating portions and the intermediate portions being yieldable.

1,866,155. TOY FIREPLACE. HOWARD M. FANCHER, Rochester, N. Y., assignor to The Rochester Folding Box Co., Rochester, N. Y., a Corporation of New York. Filed June 23, 1931. Serial No. 546,309. 8 Claims. (Cl. 46—37.)



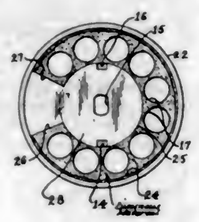
1. A toy fireplace comprising a collapsible body portion formed to provide a front wall and side walls, said front wall having a score line intermediate said side walls, said score line permitting said front wall to be folded on itself, a collapsible tubular mantel associated with said body portion, and means connecting said mantel and said body portion for securing said mantel in position on said body and for retaining said front and side walls in erected position.

1,866,156. SHEET METAL LOCK. EDWARD P. FORBES, Dorchester, Mass., assignor of one-eighth to William H. McKenney and one-eighth to Alma R. McKenney, Taunton, Mass. Filed Nov. 2, 1931. Serial No. 572,594. 3 Claims. (Cl. 229—78.)



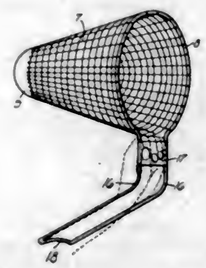
1. A lock of the character stated composed of two members each made wholly from a single piece of sheet meta' one member including a socket having a cylindrical wall, a head closing one end of the wall, an inwardly projecting annular rib contracting the opposite end of the wall, and a base flange surrounding the rib and having attaching means, the other member including a stud having a cylindrical wall, a head closing one end of the wall, resilient struts inclined outwardly from the wall, and a base flange surrounding the opposite end of the wall and having attaching means, the stud and struts being insertable through the rib into the socket, and the struts being adaped to spring outward into engagement with the rib at a plurality of points, each strut being joined at its inner end to the stud head and bearing at its opposite end on the socket wall so that the engagement of the struts with the rib and socket wall so connect the stud with the socket that said parts are inseparable without mutilation.

1,866,157. LUMINOUS DEVICE FOR DIAL TELEPHONES. CLINTON E. FORD, Winsted, Conn. Filed May 9, 1931. Serial No. 536,134. 2 Claims. (Cl. 240—2.25.)



1. In a dial telephone, a dial, an apertured finger wheel spaced from said dial and mounted to rotate with respect thereto, said finger wheel having its surface next to said dial coated with self-luminous material for rendering said dial visible in darkness.

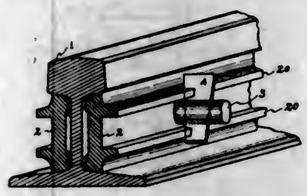
1,866,158. GAME. HARLEY E. GOODWIN, Hartford, Conn. Filed Nov. 28, 1930. Serial No. 498,715. 7 Claims. (Cl. 273—96.)



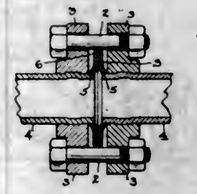
1. A game device including a net adapted to catch a ball, closed at one end and open at the other end, a frame to which the forward end of the net is connected, and handle means associated with the frame and including a grip adapted to be grasped by a hand, and an arm engaging member adapted to engage the arm.

1,866,159. RAIL JOINT. HARRY C. GRAHAM, Coraopolis Heights, Pa. Filed Aug. 11, 1931. Serial No. 556,347. 2 Claims. (Cl. 238—253.)

1. Means for joining together the rails of a railway including a fish-plate adapted to be arranged between and to engage the heads and the bases of two rails set end to end, such fish-plate being formed with a boss on its outer side, the fish-plate being perforate, and being in its bossed portion grooved with a groove which extends in diametrical direction with respect to such perforation, a bolt with slotted shank adapted to penetrate a bolt-hole in the web of a rail to which such fish-plate is applied and to penetrate at the same time the perforation in the fish-plate so applied, and a wedge key with opposite relatively oblique surfaces adapted to be applied to an assembly of fish-plate and bolt to a rail, and to engage simultaneously, upon its said opposite surfaces, the slot in the bolt and the groove in the bossed portion of the fish-plate.

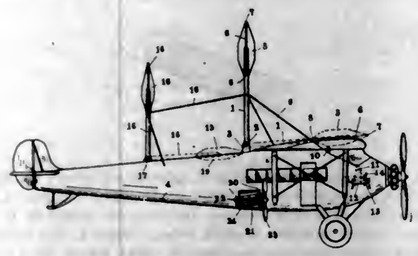


1,866,160. GASKET JOINT. THOMAS GRISWOLD, Jr., Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Aug. 11, 1927. Serial No. 212,189. 1 Claim. (Cl. 285—134.)



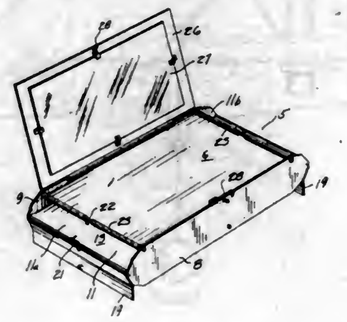
In a joint of the character described, flanged pipe ends in alignment adapted to be connected together, said pipe ends having oppositely disposed shoulder recesses inwardly directed and outwardly directed, means for sealing said joint comprising a gasket ring member having cone-like faces and an inner edge-surface engaging the outwardly directed recess of one pipe end, and an outer edge-surface engaging the inwardly directed recess of the other pipe end, and means for drawing the pipe ends toward each other and forcing said gasket edges into close engagement with the walls of said recesses.

1,866,161. AEROPLANE. CARL AUGUST GROSSER, Killarney, Boggabri, New South Wales, Australia. Filed June 2, 1931. Serial No. 541,576. 1 Claim. (Cl. 244—25.)



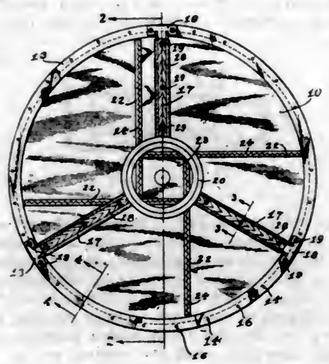
For the purpose specified in combination an aeroplane, rotatable paddle wheels located one upon each side of the body thereof, the paddles of the wheels longitudinally disposed relatively to the body of the areoplane, an air shield for some of the paddles and an air screw upon the axle of each paddle wheel as described.

1,866,162. COMBINATION VANITY CASE. AGNES H. HALL, Oakland, Calif. Filed Sept. 10, 1930. Serial No. 480,911. 4 Claims. (Cl. 206—38.)



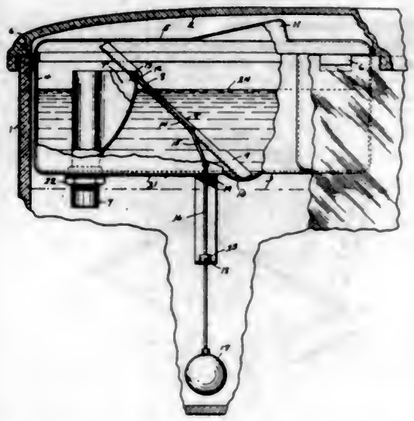
1. In an article of the character described, a casing having opposed side walls cooperating with opposed top and bottom walls to define a compartment, said side walls extending beyond the plane of said top wall to form a pocket at the outer side of said compartment, a hinged closure for said pocket, and a mirror carried by said closure arranged to lie within said pocket when the closure is in closed position.

1,866,163. LOUD SPEAKER. HAROLD C. HOYT, Thomaston, Conn. Filed July 3, 1930. Serial No. 465,567. 7 Claims. (Cl. 181—31.)



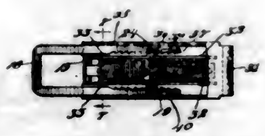
1. In a dynamic loudspeaker, a metal diaphragm, a frame surrounding said diaphragm, and a plurality of strips of light weight attached to said diaphragm for damping the vibration of the outer part of said diaphrgam to prevent radiation of undesired rattling and roaring sounds of flow frequencies under strong power, said diaphragm having an unsupported central section for radiating sounds of low pitch, said strips being arranged in substantially radial overlapping positions tangent to said central section.

1,866,164. DEODORIZING APPARATUS. LEONARD W. HUGHES, Oakland, and WILLIAM H. VON HACHT, San Francisco, Calif. Filed Feb. 24, 1930. Serial No. 430,746. 4 Claims. (Cl. 4—227.)



3. A receptacle for a deodorant arranged for positioning within a toilet flushing water box, an outlet from the receptacle to the water box comprising a pipe extending through the bottom of the box into the receptacle to a point above the level of the deodorant and extending into the water tank to a point below the normal level of the water in the box, a dipper pivotally mounted for discharging a quantity of the deodorant into said pipe for ejection into the water of the box, a float carried by the receptacle actuated by the water of said box arranged to operate said dipper each time the toilet is flushed, and lid completely covering the top of said receptacle.

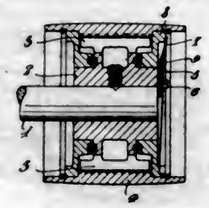
1,866,165. EXTENSIBLE BUCKLE. AUGUST F. KRAEMER, Providence, R. I., assignor to Louis Stern Company, a Corporation of Rhode Island. Filed Feb. 27, 1932. Serial No. 595,444. 9 Claims. (Cl. 24—71.)



1. In an extendible buckle, a plurality of sections hinged together and foldable one on the other, a member slidably mounted in one section, spaced sets of rack teeth on said member, a latch member provided on another section to hold said members and sections in different relative positions of adjustment, said latch member engaging said rack teeth when the sections are in folded position and being withdrawn therefrom when the sections are in unfolded position.

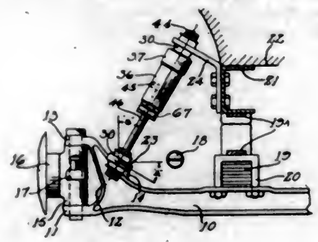
1,866,166. SIGNALING DEVICE FOR CLUTCHING OR THE LIKE. JOHAN OSCAR LIFFLANDER, Stockholm, Sweden, assignor to Pulvis Aktiengesellschaft, Glarus, Switzerland, a Corporation of Switzerland. Filed Dec. 11, 1930, Serial No. 501,678, and in Sweden Dec. 9, 1929. 2 Claims. (Cl. 116—67.)

1. The combination with a clutch, comprising a driving and a driven part and means to transmit power between said parts in such a way as to allow the driven part to slip relatively to the driving part due to an overload, of a cam on one of said parts, a plate spring having a deformed portion, a clip to attach said spring to the other part in position for the free end of the spring to engage said cam, and allow it to deflect axially under the action



of the cam due to a rotation of the clutch parts so as to cause the spring to emit audible clicks due to said deflections when relative rotation of the clutch parts is taking place.

1,866,167. SHOCK ABSORBER. WILLIAM H. LOLLEY, Buffalo, N. Y. Filed July 22, 1929. Serial No. 380,141. 9 Claims. (Cl. 188—88.)



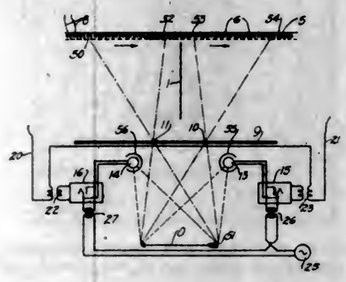
1. A shock absorber comprising a cylinder substantially filled with hydraulic fluid, a reciprocative piston rod, a floating piston adapted to slip lengthwise of the rod in unison with the strokes imparted thereto, said piston including a web member having a radially slotted port therethrough, a pair of spaced disc valves detachably carried by the rod and respectively mounted upon opposite sides of said web, the respective valve perimeters being kept inwardly of the radially outermost transverse port edge and which valves alternately cooperate with the floating piston to control fluid flow therethrough.

1,866,168. METHOD OF FORMING TUBES OF CELLULOID AND THE LIKE. SAMUEL A. NEIDICH, Edgewater Park, N. J. Filed Feb. 11, 1929. Serial No. 339,251. 5 Claims. (Cl. 18—59.)



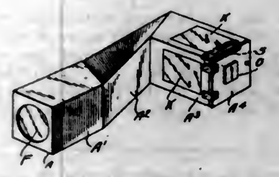
1. The method of forming a tube of cellulosic material presenting a pattern of visibly contrasting regions at its outer surface which includes decoratively marking a region of the material of said tube; wherein the marked region boundary includes opposite edges which have complementary, respectively recessed and extended, portions; whereby irregularity in lapping said edges is rendered inconspicuous and consequently negligible.

1,866,169. STEREOVISION. ALEXANDER MCLEAN, NICOLSON, New York, N. Y., assignor to Communication Patents, Inc., New York, N. Y., a Corporation of Delaware. Filed May 31, 1930. Serial No. 458,745. 16 Claims. (Cl. 178—6.)



1. A television scanning system comprising electrodes, means for polarizing said electrodes to form an arc therebetween, means for obtaining a magnetic field to propagate said arc along said electrodes, and means for scanning an object with light from said arc from different angles.

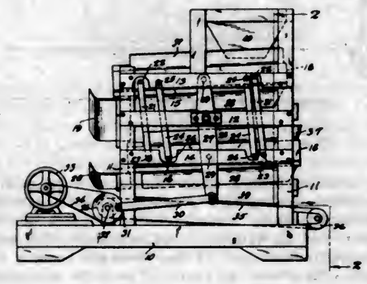
1,866,170. ADVERTISING APPARATUS. WALTER I. O'NEILL, New York, N. Y. Filed Apr. 25, 1930. Serial No. 447,394. 7 Claims. (Cl. 88—24.)



1. An advertising apparatus adapted for window display use comprising an enclosing casing, an object positioned in said casing, a light source in said casing adjacent to said object, a projection lens system in said casing in the optical axis of the reflected light rays from said object, and a magnifying lens positioned between said object and projection lens combination with said object optically within the focal length of said magnifying lens, whereby in operation an image of said object will appear in space in front of said apparatus.

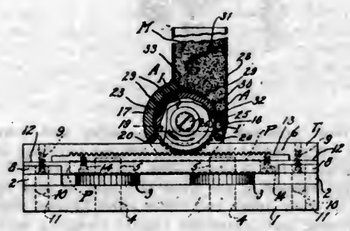
1,866,171. SAND SCREEN. PETER D. B. PAVONE, Bridgeport, Conn. Filed May 24, 1926. Serial No. 111,217. 1 Claim. (Cl. 209—315.)

A screening device for sand and similar material comprising a frame, a pair of longitudinally inclined screens arranged one above the other and each comprising a foraminous member and upright side members with one end member about the foraminous member, the other end providing a free exit for material too large to pass through the screens, laterally extending chutes under said free exit ends for carrying away the material received therefrom, a pair of rigid upright links pivoted at their upper ends to the upper screen adjacent each end thereof and pivoted at their lower ends to the frame, a pair of similar rigid upright links pivoted at their lower ends adjacent each end of the lower screen and pivoted at their upper ends to the frame, an upright lever pivoted intermediate its ends to the frame and having pivotal connection with the respective screens on opposite sides of said pivot whereby oscillation of said lever will simultaneously shift the screens longitudinally in opposite directions on their supporting links, downwardly and inwardly inclined deflector plates secured to each screen and extending longitudinally thereof at their under lateral sides, longitudinally extending upwardly and outwardly inclined deflector



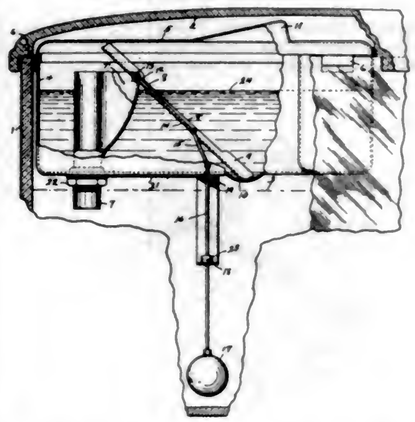
plates at the upper lateral sides of the screens with these latter plates on the lower screen extending outwardly of the lower deflector plates on the upper screen, a conveyor under the lower screen to convey the screen material therefrom out of the frame at the opposite ends of the frame from the laterally extending chutes, a shaft, means for driving the shaft, a crank operated by the shaft connected to said lever, and means for operating the conveyor from said shaft.

1,866,172. APPARATUS FOR USE IN THE PRODUCTION OF STORAGE BATTERY ELECTRODE ELEMENTS. PAUL D. PAYNE, Irvington, N. J., and MORTON IVERSEN, Brooklyn, N. Y., assignors to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Original application filed June 4, 1926, Serial No. 113,613. Divided and this application filed Mar. 8, 1929. Serial No. 345,571. 11 Claims. (Cl. 226—39.)



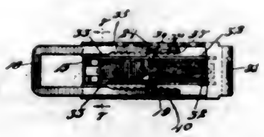
1. In apparatus of the character described, a base having supporting means for a member to be coated, a device mounted on said base for sliding movement in a path traversing said supporting means, said device comprising a hopper, a casing having an inlet opening communicating with said hopper and a discharge opening, and a rotatable pocketed barrel disposed in said casing for removing material from said hopper and discharging it through said discharge opening, and means for effecting rotation of said barrel upon sliding movement of the said device on said base, substantially as described.

1,866,164. DEODORIZING APPARATUS. LEONARD W. HUGHES, Oakland, and WILLIAM H. VON HACHT, San Francisco, Calif. Filed Feb. 24, 1930. Serial No. 430,746. 4 Claims. (Cl. 4—227.)



3. A receptacle for a deodorant arranged for positioning within a toilet flushing water box, an outlet from the receptacle to the water box comprising a pipe extending through the bottom of the box into the receptacle to a point above the level of the deodorant and extending into the water tank to a point below the normal level of the water in the box, a dipper pivotally mounted for discharging a quantity of the deodorant into said pipe for ejection into the water of the box, a float carried by the receptacle actuated by the water of said box arranged to operate said dipper each time the toilet is flushed, and lid completely covering the top of said receptacle.

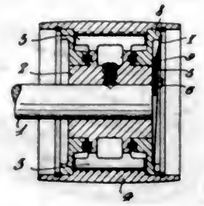
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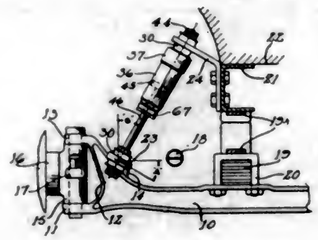
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1. The combination with a clutch, comprising a driving and a driven part and means to transmit power between said parts in such a way as to allow the driven part to slip relatively to the driving part due to an overload, of a cam on one of said parts, a plate spring having a deformed portion, a clip to attach said spring to the other part in position for the free end of the spring to engage said cam, and allow it to deflect axially under the action



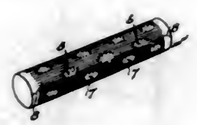
of the cam due to a rotation of the clutch parts so as to cause the spring to emit audible clicks due to said deflections when relative rotation of the clutch parts is taking place.

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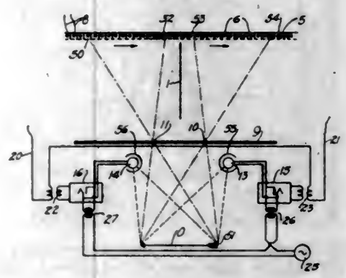
1. A shock absorber comprising a cylinder substantially filled with hydraulic fluid, a reciprocative piston rod, a floating piston adapted to slip lengthwise of the rod in unison with the strokes imparted thereto, said piston including a web member having a radially slotted port therethrough, a pair of spaced disc valves detachably carried by the rod and respectively mounted upon opposite sides of said web, the respective valve perimeters being kept inwardly of the radially outermost transverse port edge and which valves alternately cooperate with the floating piston to control fluid flow therethrough.

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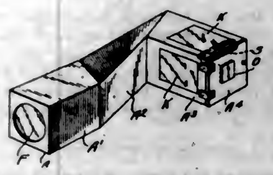
1. The method of forming a tube of cellulosic material presenting a pattern of visibly contrasting regions at its outer surface which includes decoratively marking a region of the material of said tube; wherein the marked region boundary includes opposite edges which have complementary, respectively recessed and extended, portions; whereby irregularity in lapping said edges is rendered inconspicuous and consequently negligible.

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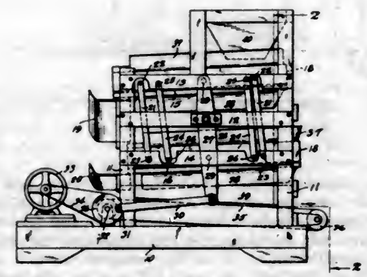
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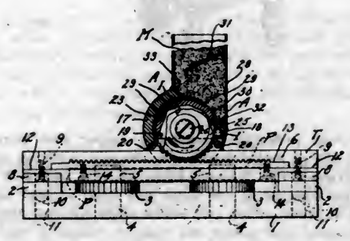
1,866,171. SAND SCREEN. PETER D. B. PAVONE, Bridgeport, Conn. Filed May 24, 1926. Serial No. 111,217. 1 Claim. (Cl. 209—315.)

A screening device for sand and similar material comprising a frame, a pair of longitudinally inclined screens arranged one above the other and each comprising a foraminous member and upright side members with one end member about the foraminous member, the other end providing a free exit for material too large to pass through the screens, laterally extending chutes under said free exit ends for carrying away the material received therefrom, a pair of rigid upright links pivoted at their upper ends to the upper screen adjacent each end thereof and pivoted at their lower ends to the frame, a pair of similar rigid upright links pivoted at their lower ends adjacent each end of the lower screen and pivoted at their upper ends to the frame, an upright lever pivoted intermediate its ends to the frame and having pivotal connection with the respective screens on opposite sides of said pivot whereby oscillation of said lever will simultaneously shift the screens longitudinally in opposite directions on their supporting links, downwardly and inwardly inclined deflector plates secured to each screen and extending longitudinally thereof at their under lateral sides, longitudinally extending upwardly and outwardly inclined deflector



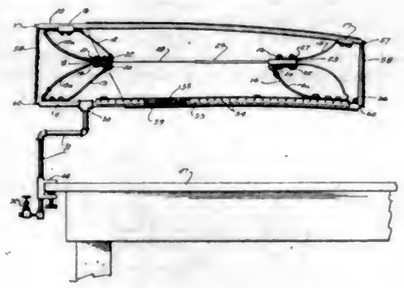
plates at the upper lateral sides of the screens with these latter plates on the lower screen extending outwardly of the lower deflector plates on the upper screen, a conveyor under the lower screen to convey the screen material therefrom out of the frame at the opposite ends of the frame from the laterally extending chutes, a shaft, means for driving the shaft, a crank operated by the shaft connected to said lever, and means for operating the conveyor from said shaft.

1,866,172. APPARATUS FOR USE IN THE PRODUCTION OF STORAGE BATTERY ELECTRODE ELEMENTS. PAUL D. PAYNE, Irvington, N. J., and MORTON IVERSEN, Brooklyn, N. Y., assignors to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Original application filed June 4, 1926, Serial No. 113,613. Divided and this application filed Mar. 8, 1929. Serial No. 345,571. 11 Claims. (Cl. 226—39.)



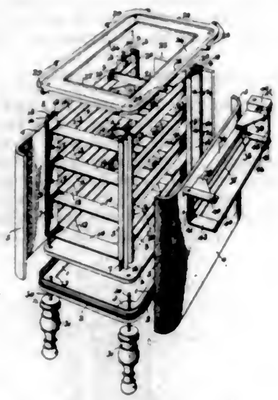
1. In apparatus of the character described, a base having supporting means for a member to be coated, a device mounted on said base for sliding movement in a path traversing said supporting means, said device comprising a hopper, a casing having an inlet opening communicating with said hopper and a discharge opening, and a rotatable pocketed barrel disposed in said casing for removing material from said hopper and discharging it through said discharge opening, and means for effecting rotation of said barrel upon sliding movement of the said device on said base, substantially as described.

1,866,173. GARMENT FORMER. ANTON J. RAUS, Cleveland, Ohio. Filed May 20, 1931. Serial No. 540,937. 2 Claims. (Cl. 223—19.)



1. A garment former comprising a pair of relatively rigid members spaced apart, springs between said members at opposite ends thereof, tending to press said members apart, and an extensible rod connecting the springs at the opposite ends, one of the members being a steam pipe with outlets into the space between the members.

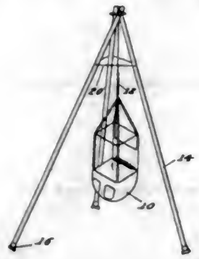
1,866,174. DESK CONSTRUCTION. BAYARD E. RICHARDSON, Grand Rapids, Mich., assignor of three-fourths to Joseph R. McCargar, Grand Rapids, Mich. Filed Dec. 27, 1926. Serial No. 157,181. 20 Claims. (Cl. 45—6.)



3. A desk pedestal comprising, upper and lower rectangular sheet metal frames, a drawer carrying unit located between the frames, sides for the pedestal and a back panel located at the sides and back of said unit and engaged at their upper and lower edges by said upper and lower frames, and means for tightly clamping said upper and lower frames against the upper and lower edges of the sides and back panel, thereby securing the same together.

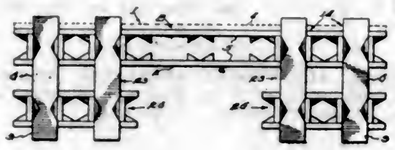
1,866,175. COLLAPSIBLE SUPPORT FOR BABY SWINGS. GEORGE H. ROGERS, Jr., Oak Park, Ill. Filed Sept. 5, 1929. Serial No. 390,483. 1 Claim. (Cl. 155—17.)

A collapsible support for baby swings, including a plurality of supporting legs mounted for loose movement about a retaining head, said retaining head comprising a ring loosely surrounding the upper ends of said supporting legs and a fastening element on each leg through which said ring passes, each of said fastening elements comprising an eye-bolt, and an additional supporting element adapted to suspend said baby swing from approximately



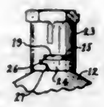
the center of said head, said means comprising a bolt passing through the upper end of one of said supporting legs.

1,866,176. TABLE. WILLIAM J. SCHMIDT, Chicago, Ill. Filed Mar. 8, 1930. Serial No. 434,420. 1 Claim (Cl. 45—31.)



A table or the like having a rectangular frame and a plurality of legs and comprising on each side a pair of similar frame bars disposed horizontally and at each corner a pair of upright leg bars, each pair of leg bars and the adjacent portions of the side bars being similarly mortised with spaced shoulders and being mutually interlocked.

1,866,177. CAP FOR PASTE TUBES. LOUIS SCHNEER, Waterbury, Conn. Filed May 25, 1931. Serial No. 539,784. 2 Claims. (Cl. 221—60.)

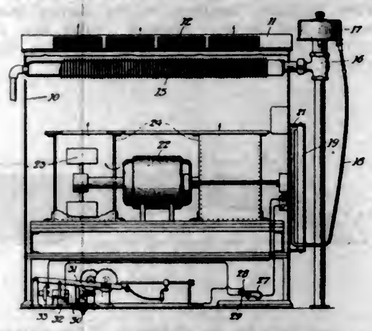


1. In an attachment for the neck of a paste tube having an outstanding lug in the side thereof, a rotary cap for fitting over said neck, said cap having a transverse slot for fitting over said lug to limit the twisting of said cap and to lock it on said neck, and a flexible tongue below said slot capable of yielding outwardly upon engaging said lug to permit the fitting of said cap over said neck.

1,866,178. HEATING AND VENTILATING APPARATUS. MORTON O. SNEDIKER, Chicago, Ill., assignor to The Powers Regulator Company, Chicago, Ill., a Corporation of Illinois. Filed May 5, 1930. Serial No. 449,946. 7 Claims. (Cl. 257—137.)

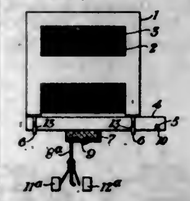
3. In combination, a casing, a radiator therein, means for effecting movement of a substantially constant and fixed volume of air through said casing and over said radiator, thermostatically controlled means for supplying said air to the casing either from the inside or the outside

of the space to which the air discharged from said casing is supplied, said thermostat being governed by the temperature of the air substantially at the floor of the inside space,



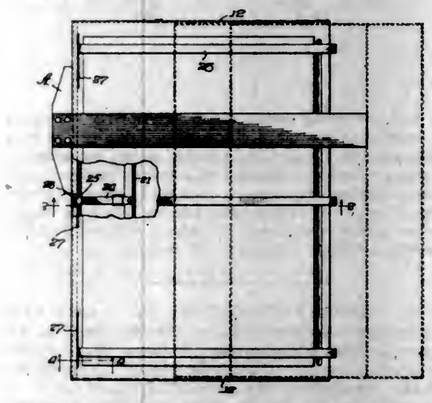
and separate thermostatic means located at a substantially higher point than said first thermostat for controlling the supply of heat to the radiator.

1,866,179. SYSTEM OF POWER SUPPLY. PAUL P. SOSINSKI, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 23, 1931. Serial No. 546,227. 3 Claims. (Cl. 175—356.)



1. In combination in a transformer, a closed magnetic structure, a divided magnetic structure, a primary and a secondary winding common to both structures, and a short-circuited winding on said divided magnetic structure for phase splitting a portion of the flux therein whereby upon energization of said primary winding the parts of said divided structure are continuously held in intimate contact.

1,866,180. DRAWING KIT. JUSTIN R. SWIFT, Chicago, Ill., assignor to The Superior Type Company, Chicago, Ill., a Corporation of Illinois. Filed June 25, 1928. Serial No. 288,173. 6 Claims. (Cl. 45—7.)



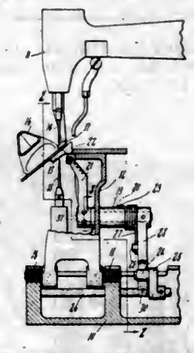
1. In combination, a metal box and a drawer slidable therein, the top wall of the box being adapted for use as a support for drawing paper, a side wall of the box being shaped to provide a narrow continuous plane surface near the said top wall for engagement by the head of a T-square and a relatively indented portion adapted to act as a stop for said drawer.

1,866,181. STOKER CONSTRUCTION. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed May 11, 1929. Serial No. 362,150. 1 Claim. (Cl. 198—213.)



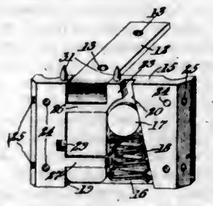
As an article of manufacture, a rigid conveyer screw consisting of cast metal separable sections, each comprising a core portion and an integral flight portion, the ends of the core portions of the sections being interseated and the joining edges of the flights being contiguous, said sections being united in rigid relationship by means of welding extending circumferentially of the section cores at their juncture and throughout the entire periphery as well as throughout the contiguous edges of the flight portions and means spaced apart from said welding lengthwise of the screw and extending transversely into the interseated core portions.

1,866,182. STITCH DOWN SHOEMAKING MACHINE. PERCY W. VALENTINE, Natick, Mass. Filed July 13, 1929. Serial No. 377,947. 8 Claims. (Cl. 12—6.)



1. A machine for lasting, stitching and trimming stitch-down shoes, comprising pressing, piercing and stitch forming instrumentalities, a cutter mounted independently of said instrumentalities, and means for giving reciprocative movements to said cutter parallel to the direction of feed of the shoe in course of stitching.

1,866,183. SHIPPING CASE. JOSEPH BRADFORD WARDWELL, Stamford, Conn. Filed Feb. 8, 1923, Serial No. 617,813. Renewed Jan. 10, 1930. 22 Claims. (Cl. 217—56.)



21. A single-use locking device comprising two members operative to have unobstructed movement relatively to each other in the direction in which the locking operation

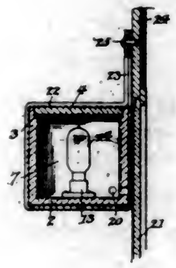
is effected and including means for automatically retaining the two members against relative movement in reverse direction, said means being so housed within the retaining member as to be inaccessible and theft proof against any release of said means.

1,866,184. PROCESS FOR INCREASING THE DIGESTIBILITY AND PHARMACOLOGICAL ACTION OF ANIMAL MILK. RICHARD WEHSARG, Eschau, Germany, assignor to "Saya" Gesellschaft Zur Herstellung Von Heilmich, Munich, Germany, a Company of Germany. Filed Oct. 19, 1929, Serial No. 401,015, and in Germany Nov. 10, 1928. 4 Claims. (Cl. 99—11.)

1. A process for increasing the digestibility and pharmacological action of animal milk, including either the whole milk as it leaves the cow or the skim milk freed from cream, in order to effect as far reaching a decomposition of the casein as possible and partially to amino acids, consisting in converting the raw milk containing cultures capable of splitting casein into simpler nitrogen compounds to a stable fermented form by cooling the milk to a low temperature and substantially freeing it from oxygen, and thereafter storing the milk for 4 to 6 weeks in hermetically sealed vessels at a low temperature.

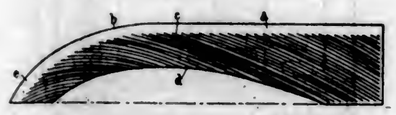
2. A process as claimed in claim 1 in which the raw milk in vessels is cooled to about 8° to 10° C. and treated with a culture which consists of *Streptococcus lactis* and *Streptococcus kefir*, and in which the freeing from oxygen is in a carbon dioxide atmosphere whilst being continually maintained at the cooling temperature, and in which the milk while stored in the hermetically sealed vessels is kept at a temperature of about 8° to 10° C.

1,866,185. AUTOMOBILE SIGNAL. ORAN YARNELL, Decatur, Ill. Filed Mar. 22, 1929. Serial No. 349,092. 1 Claim. (Cl. 177—329.)



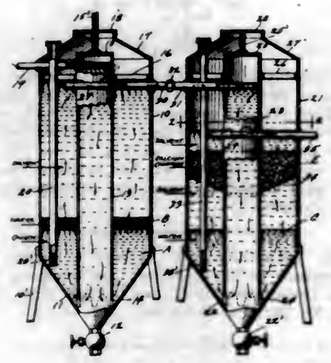
In an automobile direction signal, an elongated casing rectangular in cross section and having one of its longitudinally extending walls constituting a removable cover to permit access to the interior of the casing, the inside upper edge portions of side and end walls of the casing being formed with recesses corresponding in depth to the thickness of the cover whereby the cover may be seated in the recesses when in place and have its outer face flush with edge faces of the side and end walls, and clamps disposed transversely about said casing in spaced relation to each other longitudinally thereof and each consisting of a strip bent to form a collar fitting snugly about the casing and open at one corner and arms extending from the open corner of the collar, one arm fitting flat against the other arm and together therewith forming a shank of double thickness, the said shank being formed with fastener receiving openings.

1,866,186. SEPARATION OF DRY MATERIALS. KENELM CHARLES APPLEYARD, Birtley, COLIN WILLIAM HIGHAM HOLMES, Low Fell, and IVOR LLOYD BRAMWELL, Birtley, England, assignors to The Birtley Iron Company, Limited, Birtley, England. Filed Jan. 4, 1929, Serial No. 330,364, and in Great Britain Jan. 24, 1928. 2 Claims. (Cl. 209—467.)



1. An apparatus for the separation of dry material comprising an elongated table for the pneumatic separation of material consisting of a feed portion and a concentrating portion, a curver banking bar and a curved tailing riffle, the riffles of the concentrating portion being curver and disposed in acute angular relation with respect to the tailing riffle.

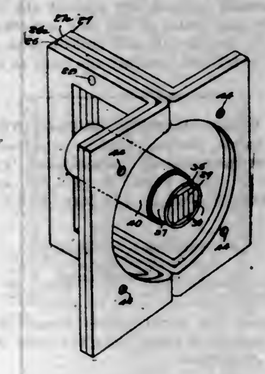
1,866,187. CLARIFICATION SYSTEM FOR DRY-CLEANING SOLVENTS. GUTHRIE B. BOON, Austin, Tex., assignor to R. R. Stolley, Inc. Filed Apr. 27, 1928, Serial No. 273,195. Renewed Feb. 17, 1930. 16 Claims. (Cl. 196—15.)



16. In a clarifying system for dry cleaning a solvent, a tank adapted to contain a cleansing solution in the base thereof, an inlet pipe for the solvent, means connected to said pipe to receive a quantity of solvent therefrom, said means being of greater capacity than said feed pipe whereby the solvent will be introduced below the level of the cleansing solution at a velocity which will not displace the solution, and an outlet for said tank.

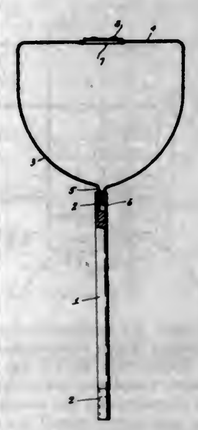
1,866,188. SOUND EMITTING DEVICE. HAROLD KARL BOUVIER and FREELAND WELLS, La Grange, Ill., assignors to Temple Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 15, 1929. Serial No. 371,237. 14 Claims. (Cl. 179—115.5.)

3. A device of the kind described comprising a magnet formed of a plurality of laminations, said laminations having substantially U-shaped slots formed therein to provide a pole piece, a tube of magnetic material disposed around said pole piece, a second pole piece disposed around said



tube to provide a magnetic field between itself and said tube, a diaphragm, and means reacting with said field for actuating said diaphragm.

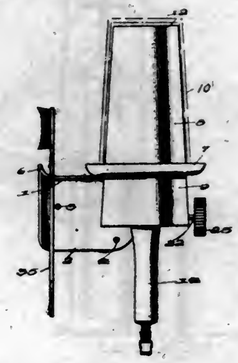
1,866,189. ORDER AND MESSAGE HOOP. HOWARD D. BRYANT and WALTER H. SPEED, Bluefield, Va. Filed June 22, 1931. Serial No. 546,120. 1 Claim. (Cl. 258—3.)



A device of the class described comprising a handle having a socket at one end thereof, a hoop of substantially U-shape with a straight part connecting the ends of its limbs together, the central part of the curved portion of the hoop having converging legs terminating in a coil for engaging the socket in the handle, a sleeve on the straight part and a clamp carried by the sleeve.

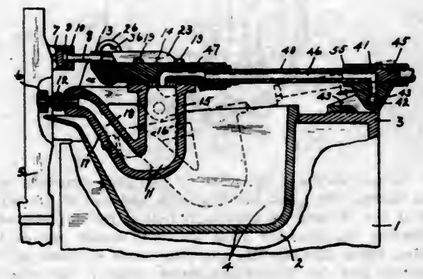
1,866,190. DISPENSING DEVICE FOR TOOTH-PASTE. ALLEN DAZEY, Loma Linda, Calif. Filed Jan. 27, 1931. Serial No. 511,588. 9 Claims. (Cl. 221—60.)

1. In a dispensing device for the purpose described, a horizontal base plate provided with means for securing it to a vertical surface, an annular member carried by the base plate on its upper face, a hollow member secured in the annular member extending above and below the base plate and means carried by the portion of the hollow member



below the base plate for compressing a collapsible tube so arranged as to feed the collapsed portion of the tube upward into said hollow member.

1,866,191. DIE-CASTING MACHINE. WILLIAM J. DURING, Syracuse, N. Y., assignor to Precision Castings Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Nov. 14, 1929. Serial No. 407,158. 13 Claims. (Cl. 22—69.)

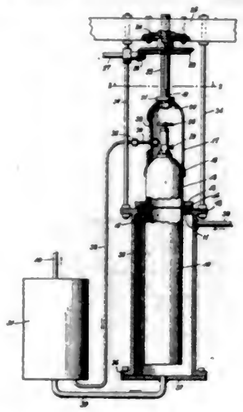


5. In a die-casting machine in combination with a melting pot adapted to contain molten metal, of a delivery pot provided with a pressure chamber therein and a delivery nozzle connected with said chamber, supporting means for the delivery pot comprising a pair of opposed trunnions projecting from the forward portion thereof, a pair of opposed guides extending vertically and horizontally of the melting pot in a rectilinear manner and adapted to guide the trunnions and the delivery pot connected therewith to bring the delivery nozzle from the charging position submerged in the metal, to a discharging position above the melting pot, and means operably connected with the trunnions for moving said delivery pot along said supporting means.

1,866,192. CARBONATING CYLINDER AND SYSTEM FOR USE OF SOLID CO_2. WILLIAM T. COMER, Atlanta, Ga., assignor to Crystal Carbonic Laboratory, Atlanta, Ga., a Corporation of Georgia. Filed Jan. 18, 1930. Serial No. 421,856. 5 Claims. (Cl. 62—91.5.)

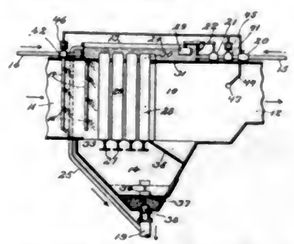
1. A pressure cylinder for carbonators comprising, in combination, a cylinder for reception of solid CO_2, a cap for

said cylinder, screw means revolubly connected to said cap, said means acting to press said cap into gas-tight contact



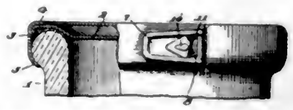
with said cylinder and to move said cap into spaced relation to said cylinder in accordance with its direction of revolution.

1,866,193. PURIFICATION OF FURNACE OR OTHER GASES. JAY GOULD COUTANT, New York, N. Y. Filed Dec. 8, 1930, Serial No. 500,696, and in France Dec. 10, 1929. 8 Claims. (Cl. 183—21.)



1. In gas purifying apparatus a purifying chamber, with flues leading the gases into one side and out of the other side of the chamber, a system of hollow tubular elements traversing the chamber from above to below, means for flowing water downwardly over the outer surfaces of the elements, and for circulating water through the interior thereof, comprising a water reservoir above the chamber with apertured bottom, the tubular elements extending up through such apertures to points above the water therein, means supplying water to the reservoir to pass down as an exterior film on the elements, and a separate means for circulating water through the elements to cool them and preheat the water.

1,866,194. JAR CLOSURE. LINDSAY THORNE CRABBE, Chicago, Ill., assignor to Phoenix-Hermetic Company, Brooklyn, New York, a Corporation, of New York. Filed Aug. 16, 1929. Serial No. 386,322. 1 Claim. (Cl. 215—95.)



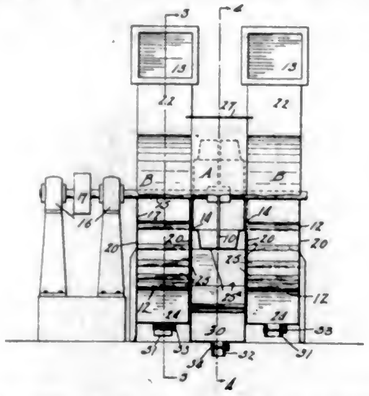
A jar closure comprising a cap and a band for securing the cap to the jar, one end of the band having a lifting tongue provided with a slot adjacent the base thereof, the other end of said band having a locking lug struck from the metal of the band and having a spear-shaped head projecting in the same direction as the lifting tongue and provided with laterally projecting wings adapted to be bent so that the head may be inserted through the slot and returned to normal position flat against the lifting tongue overlying the side walls of the slot whereby said lifting tongue may be used to lift and pull on said spear head to rupture the metal and separate the ends of the band.

1,866,195. RADIO VALVES EMPLOYING GALLIUM. PIERRE CREUZÉ, Paris, France, assignor to Société d'Etudes Scientifiques et Industrielles, Paris, France. Filed May 27, 1930, Serial No. 456,255, and in France June 1, 1929. 2 Claims. (Cl. 250—27.5.)



1. A filament for radio valves composed of a metal coated with a layer of glass, the glass being in turn coated with a layer of gallium.

1,866,196. GAS PURIFIER OR SCRUBBER. ALBERT A. CRIQUI and ROGER T. THORNTON, Buffalo, N. Y., assignors to Buffalo Forge Company, Buffalo, N. Y. Filed Apr. 23, 1928. Serial No. 272,044. 8 Claims. (Cl. 261—90.)

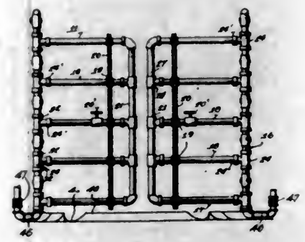


1. In a gas purifier, the combination of oppositely arranged spiral chambers which communicate at their central portions and respectively have a gas inlet and a gas outlet at their outer peripheral portions for the admission of gas to one chamber and the discharge of gas from the other chamber, and a centrifugal fan wheel arranged to rotate in one of said chambers and move gas in spiral paths through said chambers in succession from said inlet to said outlet, the spiral wall of each of said chambers having spaced openings through which foreign matter carried by the gas may pass and be separated from the gas, each of said chambers communicating by said openings with an otherwise substantially closed receiving chamber for the foreign matter.

1,866,197. VEHICLE WASHING APPARATUS. WILLIAM G. CUNNINGHAM, Atlanta, Ga. Filed Sept. 30, 1929. Serial No. 396,295. 2 Claims. (Cl. 141—1.)

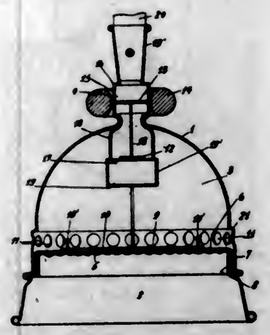
2. Apparatus of the character described comprising a substantially rectangular framework including a plurality of sides and corner posts, a set of T's carried by each corner post and forming a part thereof, pipes pivotally

connected to said T's on opposite sides of said framework and adapted to oscillate about their axes, a second set of T's pivotally carried by each corner post and adapted to swing about the axis thereof, a set of pipes pivotally connected to each of the second sets of T's and adapted



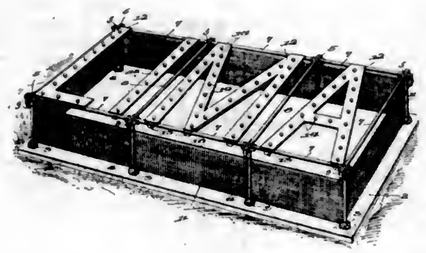
to oscillate about their axes, said sets of pipes constituting gates adapted to be opened to permit a vehicle to enter and leave the framework, means for supplying water to all of said pipes, and a plurality of spaced nozzles carried by each pipe and adapted to project water against the vehicle.

1,866,198. DEVICE FOR RINSING AND APPLYING A SUCTION ACTION TO WASHING. ERNST EBERHARD, Oerlikon, near Zurich, Switzerland. Filed Mar. 5, 1930, Serial No. 433,359, and in Switzerland Apr. 2, 1929. 1 Claim. (Cl. 68—37.)



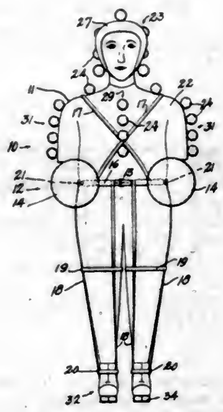
A suction pounder comprising a hood having a perforated diaphragm dividing the same into lower and upper chambers, said diaphragm having an annular wall spaced from the wall of the hood and forming a gutter therebetween and said hood having openings above the diaphragm, a vertically movable plate on the diaphragm having a depending flange movably fitted in said gutter and also having an opening at a point above the diaphragm, a valve plate on the first mentioned plate and connected thereto for vertical movement, and said hood having stop means above the openings to limit the vertical movement of the flange plate, the flange of said plate serving during its upward movement to cover the openings in the hood.

1,866,199. AIRWAY SIGN. EARL W. EDWARDS, Chicago, Ill. Filed Dec. 23, 1929. Serial No. 416,181. 6 Claims. (Cl. 40—130.)



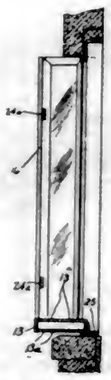
4. A sign of the character described comprising supporting posts, frame members carried by the posts and forming a polygonal framework, and extending approximately in a horizontal plane, and sign characters carried by said frame in an approximately horizontal position.

1,866,200. STABILIZING SUPPORTING DEVICE FOR BODIES ON WATER. SAMUEL FEIR, Brooklyn, N. Y. Filed Mar. 2, 1932. Serial No. 596,250. 3 Claims. (Cl. 9—20.)



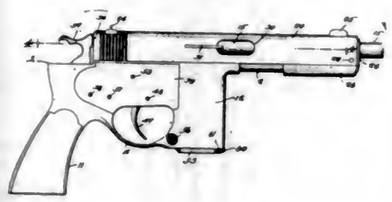
1. A device for the purpose specified comprising a harness adapted to be secured about the body of a swimmer, said harness comprising a belt portion, a plurality of buoyant elements secured to said belt, a pair of shoulder straps attached to the belt portion at the front and at the rear of the swimmer's body, a pair of leg straps attached to said belt at the opposite sides of the body at one end and attached at their other ends to the belt adjacent the front of the body, said leg straps passing down under the instep of the swimmer's foot and having spacing straps secured thereto approximately at the knee of the swimmer and at the ankle portion of the leg, substantially as set forth.

1,866,201. SOUND SUPPRESSING VENTILATOR FITTING FOR WINDOWS. ERNEST THOMAS FISK, Sydney, New South Wales, Australia. Filed Mar. 19, 1930, Serial No. 437,178, and in Australia July 27, 1927. 2 Claims. (Cl. 98—88.)



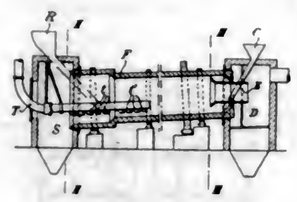
1. A sound suppressing ventilating attachment for casement windows comprising a casement sash and an auxiliary panel structurally adapted to form two sides of a triangular hopper like structure, the other side and the top of which are left open and a panel extending outward from the lower edge of the window aperture constituting the bottom of said hopper like structure.

1,866,202. AUTOGUN. WILLIAM C. FLOYD, Hawkinsville, Ga., assignor of one-third to D. A. Simpson, Hawkinsville, Ga. Filed Oct. 7, 1931. Serial No. 567,503. 7 Claims. (Cl. 42—3.)



1. A pistol comprising a frame, a hammer movably mounted on the frame, a barrel fixed upon the frame, a slide mounted to reciprocate on the frame, the slide forming an abutment for a cartridge in the barrel, the slide being rearwardly movable, responsive to the recoil of an exploding cartridge, to move the slide rearwardly, the slide engaging the hammer, as the slide moves rearwardly, thereby to cock the hammer, spring means for advancing the slide, firing means carried by the slide and located between the hammer and the barrel, a trigger movably mounted upon the frame, and carrying fixed connected therewith, a sear which engages the hammer, to hold the hammer cocked, and a sear operator movably mounted on the frame and engaging the sear, to cause the sear to engage the hammer and hold the hammer cocked, the sear operator extending into the path of the slide, whereby, when the slide moves rearwardly, to cock the hammer, the slide will act, through the instrumentality of the sear operator, to engage the sear with the hammer.

1,866,203. AGGLOMERATION OF FINELY-DIVIDED FERRUGINOUS ORES, CONCENTRATES AND THE LIKE. ALEXANDRE FOLLIET and NICOLAS SAINDERICHIN, Paris, France. Filed Oct. 2, 1930, Serial No. 486,054, and in France Oct. 30, 1929. 3 Claims. (Cl. 75—73.)



1. A process for agglomerating finely-divided ferruginous material, consisting in feeding forward said material in a thin layer, mixing carbonaceous fuel with said material prior to said layer entering the final zone of its forward feed, subjecting said mixture to the action of penetrating jets of air heated to temperatures of the order of 650° C. to 800° C. over only a final zone adjacent the end of said forward feed, and leading hot gaseous products from said final zone subjected to said jets back along said layer to preheat same.

1,866,204. CORNSTALK FIBER COMPOSITION. SAMUEL A. GILL, Ames, Iowa, assignor of one-half to Zac D. Dunlap and Harry B. Dunlap, Ames, Iowa. Filed Mar. 3, 1928. Serial No. 258,962. 6 Claims. (Cl. 106—37.)

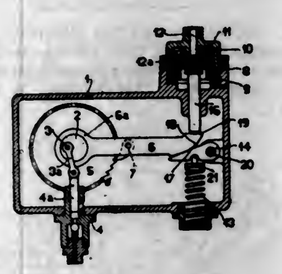


1. A composition of matter wherewith may be produced articles of manufacture that are non-elastic, hard, light in weight, dielectric, waterproof and susceptible of being worked and finished like wood, said composition comprising in intimate mixed relation celluloid, acetone, vegetable fiber, asbestos fiber, sawdust and gold size.

1,866,205. PROCESS OF CLEANING WOOL. ROBERT M. GREENLEAF, Los Angeles, Calif., assignor to Frosted Wool Process Company, a Corporation of Nevada. Filed Mar. 3, 1932. Serial No. 596,671. 9 Claims. (Cl. 19—66.)

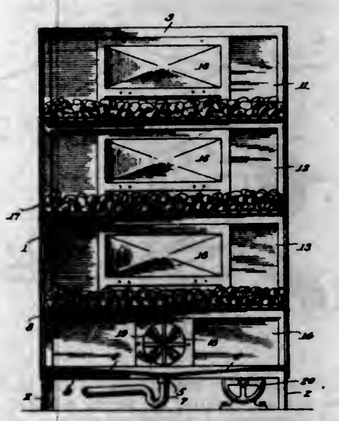
1. The process of cleaning wool or other animal fibres of extraneous foreign matters clinging thereto, consisting in washing the wool and foreign matters and subjecting the wool and foreign matters while moist to a freezing temperature for a time sufficient to freeze the moisture in or adhering to the foreign matters but not freeze the wool; and then removing the frozen foreign matters from the wool.

1,866,206. DRIVING MECHANISM OF LUBRICATING PUMPS. OTTO HAJEK, Vienna, Austria, assignor to The Firm Alex. Friedmann, Vienna, Austria. Filed Aug. 27, 1929. Serial No. 388,837. 7 Claims. (Cl. 184—29.)
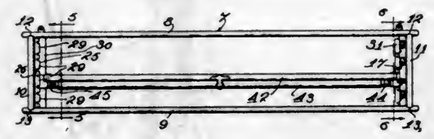


1. In a lubricating pump mechanism of the kind specified adapted to be driven by the pressure of a gaseous medium subjected to varying pressures, an auxiliary driving cylinder and a piston therein, said piston performing a working stroke under the influence of the pressure of the gaseous medium entering the auxiliary cylinder, a lubricating cylinder and piston, the latter adapted to be driven by the reciprocating piston in the auxiliary cylinder, a return spring acting upon the piston in the auxiliary cylinder, a transmitting mechanism inserted between said spring and said piston adapted to vary the effect of the back pressure exerted by the spring on said piston during part of the return stroke, said mechanism comprising a power transmitting means adapted to keep said effect at an approximately constant value during one part of the stroke and further adapted to increase said effect during another portion of the stroke.

1,866,207. AIR DRYING AND PURIFYING APPARATUS. AXEL S. HANSEN, Minneapolis, Minn. Filed Mar. 27, 1931. Serial No. 525,825. 1 Claim. (Cl. 183—4.)



An air drying and sterilising apparatus comprising a casing fully open at the top and having a water outlet at its bottom, a trap associated with the water outlet, a plurality of spaced superposed sectional gratings in said casing subdividing the same into superposed chambers, each chamber having an opening in one of its sides, said gratings serving to support layers of calcium chlorid or an equivalent treatment agent in rock form, doors in the casing closing the openings in the chambers above the bottom one, and a suction and exhaust fan mounted in the opening in the side of the bottom chamber for drawing air downward through the open top of the casing and through the layers of the treatment agent and discharging the dehydrated air through said opening.

1,866,208. DISPLAY SHEET RACK. WILLIAM A. HANSES, Chicago, Ill., assignor to Rand McNally & Company, Chicago, Ill., a Corporation of Illinois. Filed May 31, 1930. Serial No. 458,493. 4 Claims. (Cl. 40—83.)



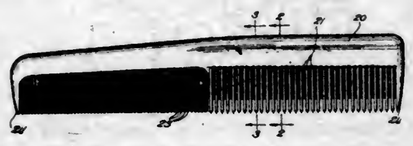
1. A roller-mounted display-sheet device comprising a frame formed of a rear bar member of sheet metal having its long edges bent rearwardly in opposite directions to form a bar of hollow form in cross section, brackets having end plate portions and upper, lower and rear flanges located at the ends of said hollow bar, said rear flanges flatwise opposing the front portion of said bar and being secured thereto, a roller journalled on said plate portions, and a display sheet wound on said roller.

1,866,209. SHANK PIECE FOR SHOES. PAUL HEIN, Berlin-Baumschulenweg, Germany. Filed Dec. 1, 1930, Serial No. 499,349, and in Germany July 2, 1930. 9 Claims. (Cl. 36—76.)



1. For use in a shoe having an upper leather and a welt, a shoe joint support comprising a member made of hard cardboard extending from the heel to about the ball of the wearer's foot, and a member made of softer cardboard united integrally to the hard cardboard member, the side margins of the softer cardboard member projecting beyond those of the hard cardboard member to afford passage to attaching means for the purpose of fastening the upper leather to the welt.

1,866,210. BRUSH-COMB. LON HERNON, Chicago, Ill. Filed Mar. 2, 1931. Serial No. 519,435. 17 Claims. (Cl. 132—88.)

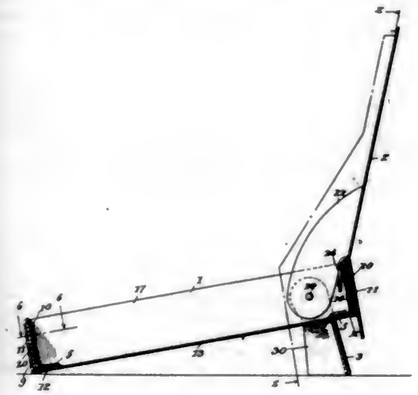


1. A brush-comb comprising comb teeth, and brush bristles anchored in and projecting from said comb teeth.

1,866,211. DISPLAY CARTON. JOHN E. HINES, Swampscott, Mass., assignor to Bakers Service Bureau, Inc., New York, N. Y. Filed Aug. 23, 1930. Serial No. 477,401. 4 Claims. (Cl. 206—44.)

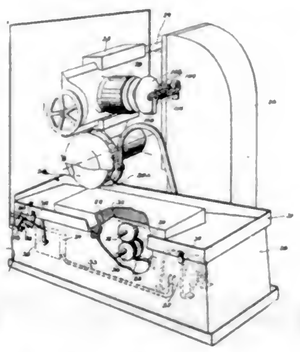
1. A display container comprising a receptacle open at its top and having a bottom and side and end walls, a

prop to support the receptacle in an inclined position consisting of a strip extending transversely beneath the receptacle and arms at its ends, a sheet having arms at its sides, the arms of the sheet and prop being bent to extend in overlapped relation to each other at opposite sides of the receptacle, and fasteners passed through the over-



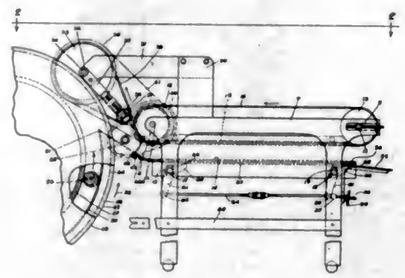
lapped arms and side walls of the receptacle to pivotally mount the arms whereby the prop may be moved from a position flat against the bottom of the receptacle to a depending operative position with its upper edge bearing against the receptacle and the sheet moved from a lowered position to an elevated position.

1,866,212. GRINDING MACHINE. GEORGE T. HUXFORD and FRANK E. STRATTON, Providence, R. I., assignors to Builders Iron Foundry, Providence, R. I., a Corporation of Rhode Island. Filed Mar. 16, 1927. Serial No. 175,850. 9 Claims. (Cl. 51—92.)



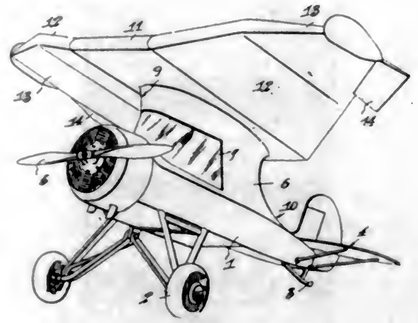
1. A machine of the class described for grinding flat surfaces comprising a table for holding work, means for reciprocating said table, a tool mounted on said machine independently of the reciprocating table to contact the flat surface of the reciprocating work, an electric motor for feeding the tool at right angle to the direction of table reciprocation, a circuit for energizing the motor, a switch in the circuit normally breaking the same, another circuit normally broken, an electro-magnet in the second circuit for operating the switch, means automatically operated at predetermined time intervals in the cycle of the table reciprocation for completing the second circuit to cause the energization of the motor, and means operated by the motor after predetermined time intervals of energization for breaking said second circuit.

1,866,213. DOUGH WORKING DEVICE. WILLIAM G. KIRCHHOFF, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 9, 1928. Serial No. 276,304. 4 Claims. (Cl. 107—9.)



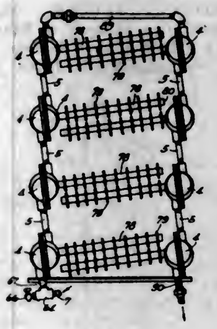
1. An auxiliary dough molder comprising a frame, a movable conveyor means mounted on the frame, a pressure board mounted on the frame and spaced from the conveyor means, a support means on the frame, a conveyor roller rotatably mounted on the support means, and a conveyor belt passing about the said conveyor roller and having frictional contact with the first mentioned conveyor means, whereby movement of the first mentioned conveyor means may be imparted to the second conveyor belt and roller.

1,866,214. AEROPLANE. EDWARD H. LANIER, Miami, Fla. Filed Nov. 16, 1931. Serial No. 575,342. 7 Claims. (Cl. 244—12.)



1. In an aeroplane, a body having suitable landing gear, a rudder and an elevator, an airfoil mounted over the body and comprising a hollow wing-like structure composed of a central section having its under surface horizontal, a pair of intermediate portions extending laterally from said central portion and having their under surfaces inclined upwardly laterally from the under surface of the central portion, and a pair of tip portions extending laterally from said intermediate portions with the under surfaces of said tip portions approximately horizontal, said tip portions having their top surfaces and bottom surfaces intact, said central portion having an air evacuation opening in its top surface, substantially as and for the purposes described.

1,866,215. INSTANTANEOUS AUTOMATIC WATER HEATER. CARL M. LIEBER, Oklahoma City, Okla. Filed June 24, 1929. Serial No. 373,428. 5 Claims. (Cl. 122—315.)



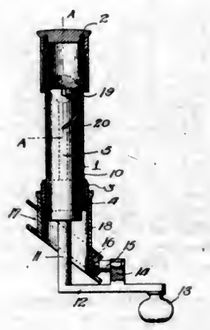
1. In an instantaneous water heater having heating units each comprising pairs of tubes arranged in horizontal courses, each pair of tubes including an outer closed ended tube and an inner open ended tube enclosed by the outer tube, said tubes connected to a header arranged to deliver water to the inner tubes and to receive water from the outer tubes, the arrangement of said units in vertical columns in a manner whereby the water first enters the lowermost unit of one column, passes upwardly through the next succeeding units of that column thereabove, then passes into the uppermost unit of the next column and descends through each succeeding unit of the last mentioned column.

1,866,216. KEY HOLDER. SIGMUND LIPPSTADT, New York, N. Y., assignor to Isabel G. Lippstadt, New York, N. Y. Filed Dec. 28, 1931. Serial No. 583,540. 6 Claims. (Cl. 59—96.)



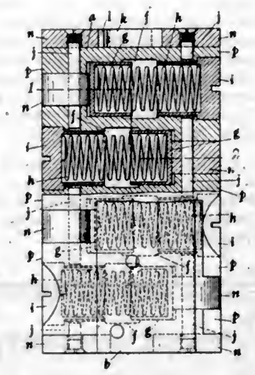
1. A key holder comprising a chain, means at one extremity for detachably fastening a key thereto, a sleeve around said chain and slidable thereon, means on said sleeve for detachably holding a key ring and a key ring attached to said second means.

1,866,217. PISTON PUMP FOR MEDICAL PURPOSES. CHARLES MAYER, Paris, France. Filed Apr. 22, 1929. Serial No. 357,275, and in France Apr. 30, 1928. 2 Claims. (Cl. 103—213.)



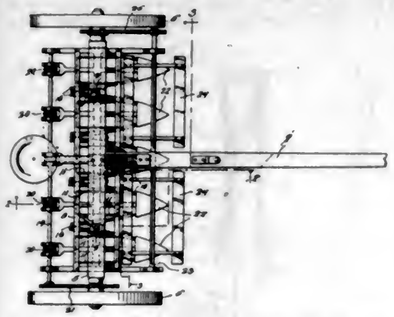
1. In a piston pump for medical purposes of the valveless type, a pump barrel, a rotating and reciprocating piston therein, a hand crank upon the piston for rotating the same, a radial finger upon the said crank, a roller freely mounted upon the said finger, two inclined flanges upon outer surface of the pump barrel and forming guiding members for the roller placed between them.

1,866,218. SPRING HINGE. JAMES GARTH MITCHELL, Belfast, Northern Ireland. Filed July 6, 1931, Serial No. 549,069, and in Great Britain July 15, 1930. 4 Claims. (Cl. 16—180.)



1. In spring hinges, the combination of knuckled and hingedly connected parts arranged to lie in parallel planes when in a closed position, a spring coating chamber arranged transversely across one of the said parts which has both ends exposed, so that one end of the chamber is accessible for the insertion of a spring, while the other end of the chamber is situated adjacent to a knuckle on the other hinge part, a thimble in said chamber acting on the said knuckle, a helical controlling spring in the chamber acting on the thimble, and a removable closure device inserted in the accessible end of the chamber so as to form a seating for said spring, substantially as described.

1,866,219. METHOD OF AND MACHINE FOR CAUSING FECUNDATION OF PLANTS. JENS PETER THEODOR NIELSEN, Lake Benton, Minn. Filed May 29, 1930. Serial No. 457,257. 9 Claims. (Cl. 47—57.)



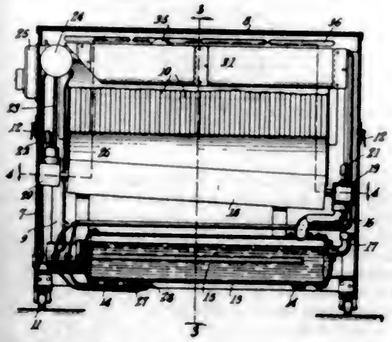
1. A fecundating machine comprising spaced mechanical devices to rub and press the blossoms of plants therebetween, said devices embodying mechanically actuated moving pressing elements and yieldable rubbing elements.

1,866,220. CATAMENIAL APPLIANCE. MARY C. NORTON, Corona, N. Y. Filed Oct. 6, 1930. Serial No. 486,774. 2 Claims. (Cl. 128—280.)



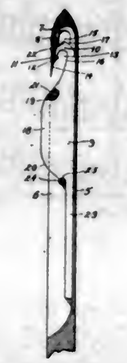
1. A device of the class described comprising a single length of elastic webbing, the middle portion of said webbing being made into a waist encircling band by overlapping the webbing at the front of said waist encircling band, the ends of the webbing being folded at an angle and being stitched at the overlapping portions thereof, and thence extending downwardly in converging relation and crossed, the free ends of said webbing extending up and being secured together at and to the top edge of the waist encircling band at the front of said band.

1,866,221. ELECTRIC STEAM RADIATOR. HAROLD C. PENNINGTON, East Orange, N. J., assignor to Joseph B. Grison, New York, N. Y., and Charles R. Morton, Summit, N. J. Filed Sept. 22, 1931. Serial No. 564,323. 5 Claims. (Cl. 219—38.)



1. A humidifying device, comprising a trough to hold water, a tube pivotally connected to a wall of the trough, an electrical heating element having a water-tight connection with the tube, wires passing through the tube to the heating element, and means to float the heating element so that it will heat substantially only the surface of water in the trough to create water vapor for humidifying purposes.

1,866,222. KNITTING NEEDLE. MARTIN LUTHER PLEDGER, Atlanta, Ga., assignor to Egan Cotton Mills, Atlanta, Ga., a Corporation of Georgia. Filed June 2, 1931. Serial No. 541,643. 7 Claims. (Cl. 66—120.)



1. In a knitting needle, the combination of an outer needle having a hook portion, said outer needle being provided with a slot extending around the inner side of the hook portion to adjacent the point thereof, and an inner needle slidably mounted in the slot of the outer needle and having a hook located within the hook portion of the outer needle, the edges of the hook of the inner needle extending into the slot of the outer needle at the front and back of the hook portion thereof.

1,866,223. PRINTING FURNITURE. HERMAN POWERS, Bayonne, N. J. Filed Oct. 11, 1930. Serial No. 487,970. 6 Claims. (Cl. 101—402.)

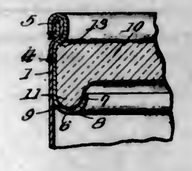


1. Furniture for printing, comprising a block formed of material impervious to the weather, there being continuous parallel grooves on the sides and edges of said block which extend from end to end and a plurality of apertures therethrough, and shoulders on the top, bottom and sides of said block adjacent the edges of said grooves, for the purpose set forth substantially as described.

1,866,224. DISPLAY PACKER'S CONTAINER. WILLIAM F. PUNTE, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed July 22, 1931. Serial No. 552,515. 2 Claims. (Cl. 220—82.)

1. A display packer's container comprising a cylindrical metal container body, a bottom end double seamed to said body and a transparent closure cover end for said body including a collar fitting snugly within said container body and secured thereto at its outer end by double seaming, said collar at the lower end thereof being bent inwardly and upwardly to form a curved seat, a plastic sealing material within said curved seat and a glass panel having an annular rib on the lower face thereof at the periphery of the panel with its lower face curved so as to conform to the curvature of the seat on the collar,

said glass panel fitting snugly within the collar and dimensioned relative to said collar so that the inward bending of the body wall and collar in the region beneath



the double seam will force the glass panel into sealing contact with the plastic material on said seat and retain said glass panel sealed thereon.

1,866,225. LAWN EDGE TRIMMING MACHINE. JOHN CHARLES ROWE, Caulfield, Victoria, Australia. Filed July 13, 1931. Serial No. 550,570, and in Australia Sept. 1, 1930. 3 Claims. (Cl. 56—247.)



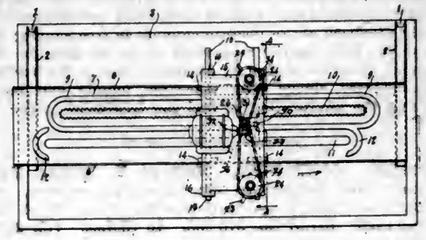
1. A lawn edge trimming machine including a frame having frame cheeks, each formed with a series of apertures, a ground wheel, an axle for the ground wheel capable of location in selected pairs of apertures to adjust the frame height relative to the ground, a fixed blade carried by the frame, a movable blade mounted on the frame, and means for actuating the movable blade with respect to the fixed blade in the turning of the ground wheel.

1,866,226. SPINNING TOY. GRAFTON F. SARGENT, Fitchburg, Mass. Filed Feb. 3, 1932. Serial No. 590,657. 3 Claims. (Cl. 46—14.)



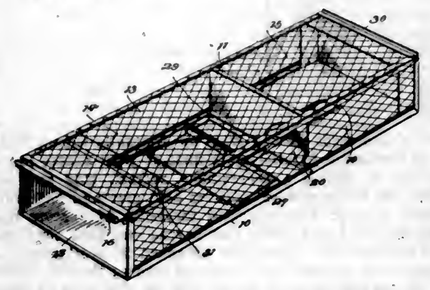
1. As an article of manufacture, a toy comprising a top body and spindle, the body having grooves longitudinally located on opposite sides of the spindle and extending through the body, and a pair of connecting members of yielding nature having legs extending into said grooves from opposite sides and having rounded projections by which they fit each other and prevent displacement under ordinary circumstances but allow detachment thereof upon the exertion of an increased pull, the rounded projections being located inside the body.

1,866,227. PLANETARY STIRRING MACHINE. FRANK R. SHAUGHNESSY, Troy, Ohio. Filed Oct. 15, 1930. Serial No. 488,861. 12 Claims. (Cl. 259—102.)



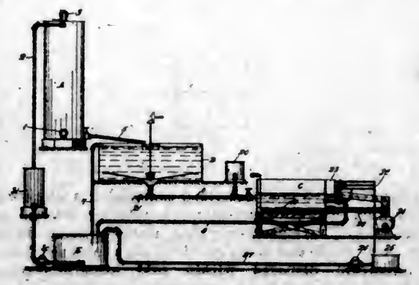
1. In a stirrer mechanism, stirring means, a rack bar having a guide bar around it, and a rotatable means for operating said stirring means and engaging said rack bar and guide bar whereby as it rotates it travels along the bar and rotates the stirring means.

1,866,228. RAT TRAP. JOHN F. SMITH, Dublin, Ga. Filed Feb. 24, 1930. Serial No. 430,935. 2 Claims. (Cl. 43—61.)



1. In an animal trap, a compartment provided with an entrance opening and an exit opening, a closure for said entrance opening and biased to closing movement, a latch normally holding said closure in open position, a depressible trigger in said compartment, a rod operatively connecting said latch and trigger, and elastic means supporting said rod from the top of said compartment.

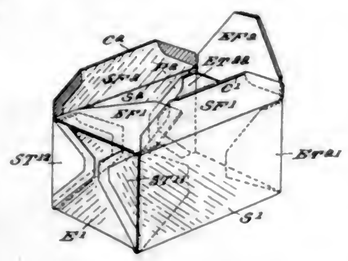
1,866,229. AERATION AND GAS PURIFICATION PROCESS. FREDERICK W. SPERR, Jr., Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 9, 1925. Serial No. 21,979. 4 Claims. (Cl. 23—225.)



1. A process for removing hydrogen sulphide and other acidic gaseous constituents from fuel gas which comprises: subjecting the fuel gas to the action of an alkaline

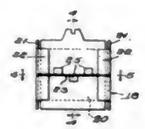
liquid containing in suspension a solid reactive to the hydrogen sulphide to absorb hydrogen sulphide from the gas; separating a substantial proportion of the sulphided solid from the liquid in the form of a concentrated sludge; subjecting the sludge while so separated to the action of finely atomized air to liberate sulphur as free sulphur and so as to effect thereby separation of the so liberated free sulphur from the sludge by flotation; mixing the oxidized sulphur-freed sludge with separated liquid; and re-employing the mixture in the fuel gas treatment stage.

1,866,230. CONTAINER. HERBERT R. STUBBS, Baltimore, Md., assignor to The Lafayette Company, Inc., Baltimore, Md., a Corporation of Maryland. Filed June 12, 1929. Serial No. 370,366. 10 Claims. (Cl. 229—32.)



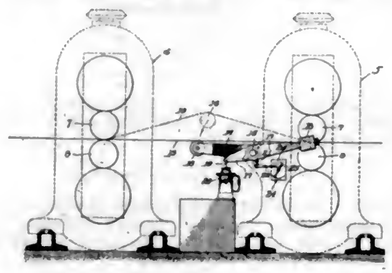
1. A container formed from an originally square blank having diagonal parallel score lines at right angles to one another to define a rectangular bottom, side and end walls for the container, each of said side and end walls having a cover flap connected therewith at a score line, said side and end walls also having end tabs connected therewith at score lines and arranged in overlapping relation with the adjacent walls and secured thereto, whereby to provide doubled thicknesses at the vertical edges of the container, the end cover flaps in the closed container extending inward in a single plane, the said cover flaps of the closed container extending inward in a second plane and overlapping said end cover flaps, said cover flaps being secured together to provide doubled thicknesses extending inwardly from the vertical edges whereby said flaps mutually support one another and reinforce the side walls.

1,866,231. SOUND EMITTING DEVICE. JOSEPH SWALLOW, Berwyn, Ill., assignor to Temple Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,438. 1 Claim. (Cl. 179—115.)



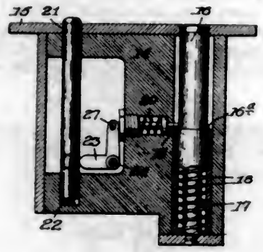
A device of the kind described comprising a diaphragm, a winding, an armature-carrying member within said winding, said armature-carrying member being formed from sheet metal and being provided with inturned flanges, an armature disposed within said armature-carrying member, a strip of metal extending transversely of said carrying member and said armature and extending in a plane normal to said inturned flanges, the ends of said strip of metal being soldered to said flanges and said strip of metal being provided with integral lugs extending at right angles from it, said lugs being soldered to said armature, and means operatively connecting said armature with said diaphragm.

1,866,232. ROLLING MILL. WILFRED SYKES, Chicago, Ill. Filed Oct. 31, 1931. Serial No. 572,386. 4 Claims. (Cl. 80—35.)



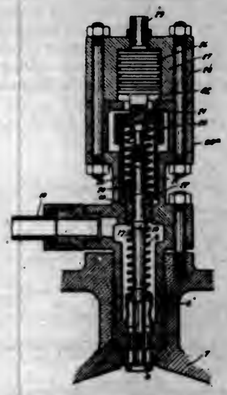
4. In a rolling mill, the combination of a plurality of roll stands through which the strip being rolled passes in succession, electric motors operatively connected with rolls of said stands, respectively, for operating said rolls, and means controlling the speed of operation of one of said motors relative to the other thereof to maintain the degree of tension in said strip between said stands substantially a constant comprising a movable member adapted to bear against a face of the strip, a potentiometer rheostat controlled by said movable member, a second rheostat controlling the speed of operation of the said controllable one of said motors, and a motor controllable by said potentiometer rheostat for controlling said second rheostat.

1,866,233. DOORSTOP AND ALARM. ROBERT TARRANT, Chicago, Ill. Filed Sept. 8, 1930. Serial No. 480,580. 3 Claims. (Cl. 292—150.)



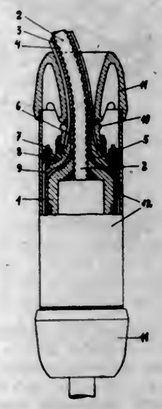
1. Mechanism of the character described including a casing adapted to be countersunk in a floor in the path of movement of a door, said casing having parallel recesses therein open at one end and closed at the other, a bolt slidably mounted in one of said recesses and adapted to move from a projected position in the path of the door to a position retracted out of said path, a trigger slidable in the other recess, a latch member slidable at a right angle to said bolt and trigger interiorly of the casing and between the bolt and trigger, said bolt having a shoulder, abutment means on the casing engageable by the shoulder in the projected position of the latter, means to urge projection of the bolt, means urging projection of the latch means so as to overlap said shoulder when the bolt is retracted, and a connection whereby the trigger upon depression will retract the latch means out of the path of movement of the bolt.

1,866,234. STARTING AND REVERSING DEVICE FOR MULTICYLINDER INTERNAL COMBUSTION ENGINES. EDVIN OSSIAN PARCIVAL THEGE, Stockholm, Sweden, assignor to Aktiebolaget Atlas Diesel, Stockholm, Sweden. Filed Aug. 15, 1927, Serial No. 213,160, and in Sweden July 16, 1926. 1 Claim. (Cl. 60—16.)



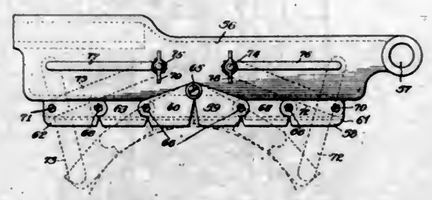
In a pneumatic device for opening the valves admitting compressed air to the working cylinders of multicylinder internal combustion engine for starting and reversing the same, the combination of an air admitting valve, means admitting starting air to the casing of the said valve, a cylinder, means admitting periodically a compressed medium into the cylinder, a piston operating in the said cylinder, a power accumulating device comprising a spiral spring interposed between the said piston and said valve, and a stationary abutment limiting the working stroke of said piston and controlling the maximum compression of the said spring, for the purpose that the said valve may be opened as the pressure of the combustion gases in the working cylinders respectively of the engine has become substantially less than the pressure of the starting air.

1,866,235. JUNCTION SLEEVE OR THE LIKE FOR DEEP SEA CABLES. VIKTOR THIEL, Cologne-Mulheim, Germany, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Koln-Mulheim, Germany. Filed Sept. 15, 1930, Serial No. 482,064, and in Germany Sept. 19, 1929. 1 Claim. (Cl. 173—268.)



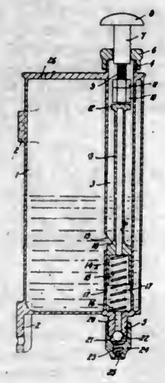
Junction sleeve for deep sea cables having armouring wires comprising in combination a pressure-protecting casing having conical ends, hollow cones on the conical ends of the pressure-protecting casing, the armouring wires of each cable end being led over the hollow cone at the respective end in contact therewith and over the pressure-protecting casing to the opposite end, and means for securing the armouring wires at the opposite ends to the respective hollow cones.

1,866,236. SUBSTANCE CLAMP FOR SLICING MACHINES. HENRY THOMAS, London, England, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed July 27, 1927, Serial No. 208,666, and in Great Britain July 19, 1926. 15 Claims. (Cl. 146—217.)



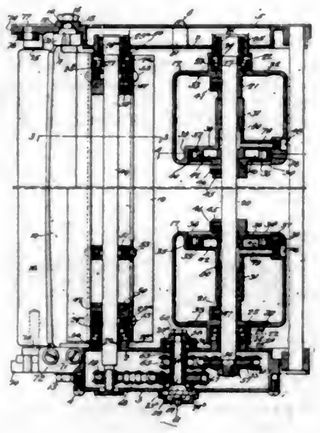
1. A substance clamp for slicing machines comprising a clamping bar having a substance gripping device along the lower edge thereof comprising chain-like members hingedly connected to the clamping bar intermediate the outer ends thereof, and means connecting the end ones of said members for adjusting the device to suit differently shaped substances to be gripped thereby.

1,866,237. LIQUID SOAP DISPENSER. WILLIAM JOHN THOMPSON and ROBERT GORDON KIRKWOOD, Auckland, New Zealand. Filed July 12, 1930, Serial No. 467,554, and in New Zealand Mar. 28, 1930. 2 Claims. (Cl. 221—94.)



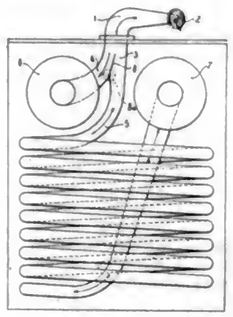
1. A dispensing apparatus comprising a container having an air vent, a cylinder in the container having an inlet establishing communication between its lower portion and the container and having an outlet at its lower end provided with a normally closed valve, a hollow plunger in the cylinder operable over said inlet and a spring by which said plunger is normally held clear of the inlet and adapted to provide an air cushion, plunger operating means, and a removable cap closing the upper end of the cylinder and by which the plunger operating means is guided, the said cylinder also having an opening above the plunger to enable the container to be charged through the cylinder when the cap is removed.

1,866,238. MOWER. SAMUEL P. TOWNSEND, Bloomfield, N. J. Filed Apr. 24, 1929. Serial No. 357,749. 2 Claims. (Cl. 56—254.)



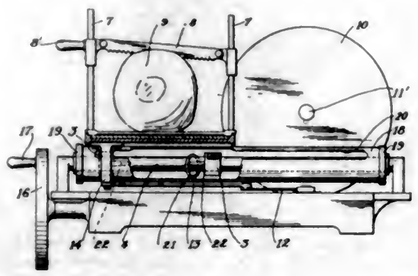
1. A lawn mower comprising a shaft, spaced spiders secured to the shaft and each having a substantially circular periphery, a plurality of rigid unitary spirally-extending bars secured to the peripheries of said spiders and combining therewith to produce a substantially cylindrical structure surrounding the shaft, each bar having a substantially radially-projecting flange the outer edge of which is formed as a cutting edge.

1,866,239. TONE TUBES WITH ACOUSTIC ACTIONS FOR SOUND RECORDING AND SOUND-REPRODUCING APPARATUS. ANTONIUS JOHANNES JACOBUS VAN AKKEREN, The Hague, Netherlands. Filed May 13, 1927, Serial No. 191,187, and in the Netherlands July 15, 1926. 3 Claims. (Cl. 181—27.)



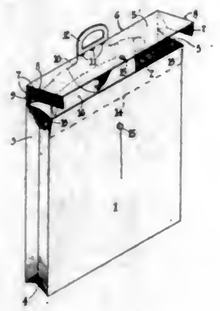
2. A device for use in connection with sound record recording and sound reproducing apparatus comprising in combination with a sound box, a single tone arm carrying the sound box, a fixed tube into which the tone arm opens, a pair of juxtaposed horns, and two tubes branching from the fixed tube one being short and directly connected to one horn while the other has a length of 10 to 20 meters longer than the short tube and is coiled helically and connected to the remaining horn.

1,866,240. GUIDE BAR FOR SLICING MACHINES. CORNELIS F. M. VAN BERKEL, Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Feb. 7, 1929, Serial No. 338,133, and in Great Britain Feb. 2, 1928. 12 Claims. (Cl. 146—102.)



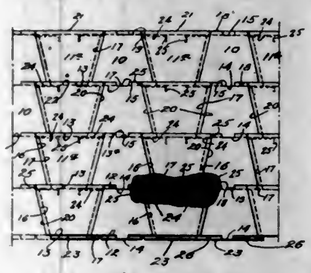
5. A slicing machine comprising a reciprocating table, a support, a guide mounted on said support, a tubular cover mounted on said guide and substantially covering the entire guide, said cover having a narrow slot in a vertically arranged face thereof, and a bearing fastened to said table and projecting through said slot into said cover to engage the guide.

1,866,241. GARMENT HANGING AND PACKAGING DEVICE. JOSEPH HIRSCH VINEBERG, Montreal West, Quebec, Canada. Filed Mar. 14, 1930. Serial No. 435,877. 2 Claims. (Cl. 206—7.)



1. A garment hanging and packaging device comprising a bag having rectangular front and rear walls, pleated side and bottom walls connecting said front and rear walls, the rear wall extending upwardly beyond the top of said front wall, a closure flap foldably connected with the top of said rear wall, pleated dust-excluding webs foldably connected with the side edges of said flap and the upwardly extending portion of the rear wall, a garment hanger adjacent the top of said rear wall, a handle integral with said hanger and projecting from the bag at the top of the rear wall, and means for detachably fastening the flap to the front wall.

1,866,242. METHOD OF FORMING TUNNEL WALLS AND UNIT FOR USE THEREIN. ARTHUR W. WARNER, Media, and ROSCOE F. BALLARD, Chester, Pa., assignors to Tunnel and Mine Machinery Company, Philadelphia, Pa., a Corporation of New Jersey. Filed May 8, 1931. Serial No. 536,060. 10 Claims. (Cl. 61—45.)



1. The method of forming tunnel walls consisting in laying up the wall in annular courses of trapezoidal blocks in which courses the adjacent blocks are reversely positioned with relation to one another, one having its major and the other its minor face in contact with the previously laid course while aligning each block, in a direction longitudinal to the tunnel, with similarly placed blocks of previously laid courses, and in laying each course initially placing those blocks whose major faces contact the previously laid course, and employing pressure applied to the previously laid course through said blocks to maintain such previously laid course and such blocks in position while positioning the remaining blocks of the course.

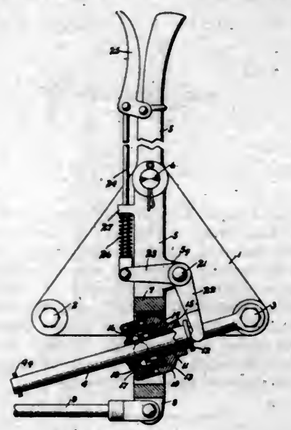
1,866,243. MILLIAMPERE AND VOLTAGE METER. JOSEPH WEBBER, Manchester, and JOSEPH COOPER, Market Drayton, England, assignors to Provincial Incandescent Fittings Company Limited, Manchester, England, a British Company. Filed May 10, 1930, Serial No. 451,357, and in Great Britain Sept. 4, 1929. 3 Claims. (Cl. 250—27.)



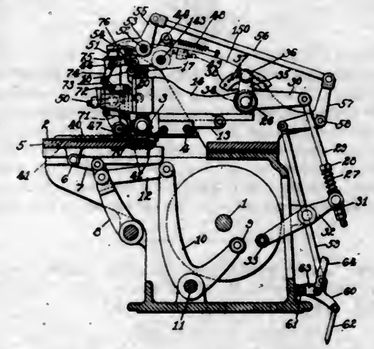
1. An electric testing instrument of the watch case type incorporating within its casing, a battery, a voltmeter movement, and a valve holder arranged so that when a thermionic valve is placed in the holder, a reading is given by the voltmeter if the valve filament is in order.

1,866,244. BRAKE LEVER CONSTRUCTION. FRANK B. WHITE, Ocean Park, Calif., assignor to Joseph Bergamo, Santa Monica, Calif. Filed Oct. 20, 1930. Serial No. 489,909½. 4 Claims. (Cl. 74—89.)

4. In a construction of the class described, a relatively fixed support, a lever pivotally mounted between its ends on said support, balls carried by said lever adjacent the lower end thereof, a member of circular cross section around which said balls are located, means normally tending to grip the balls against said member and prevent movement of the lever in one direction, and manually operable releasing means on said lever for releasing the balls from the rod to free the lever for movement.



1,866,245. SPLITTING MACHINE. ARTHUR BATES, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 26, 1929, Serial No. 409,968, and in Great Britain Dec. 14, 1928. 30 Claims. (Cl. 69—12.)

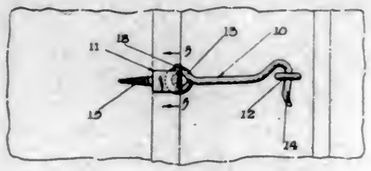


1. A machine of the class described having, in combination, a knife, a support for a blank, means for causing relative movement between the knife and the support to cause the knife to operate upon the blank, and a stop for engaging the end of the blank nearest to the knife for facilitating positioning of the blank upon the support, said stop being movable out of contact with the blank prior to said relative movement between the knife and the support.

1,866,246. PROCESS OF PRODUCING HYDROGEN. JOHN S. BEEKLEY, Wilmington, Del., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 12, 1926. Serial No. 148,115. 3 Claims. (Cl. 23—213.)

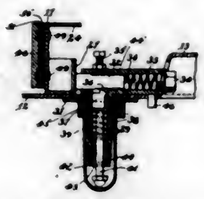
1. The process of manufacturing hydrogen, which consists in subjecting a mixture of steam and carbon monoxide to the action of a catalyst containing magnesium oxide and uranium oxide.

1,866,247. HOOK FOR DOORS. ARTHUR BROPHY, Santa Cruz, Calif. Filed Jan. 28, 1931. Serial No. 511,745. 1 Claim. (Cl. 292—101.)



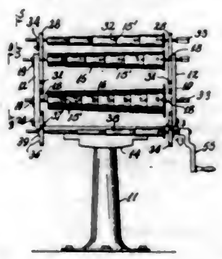
A combined closure hook and attaching means therefor including a hook shank having an eye formed at one end, an attaching member therefor comprising a rectangular piece of metal having a vertical slot formed therein and a cross-bar connecting opposite sides of said walls and adapted to be encircled by said eye, a separate screw member inserted in the rear wall of said member, and a yoke formed above said cross-bar to limit the rearward swinging of said shank, said cross bar being disposed centrally of said member and below the yoke.

1,866,248. BRAKE BAND ADJUSTING MEANS. ALFRED S. CATAUDELLA, Bridgeport, Conn. Filed Apr. 2, 1930. Serial No. 441,002. 4 Claims. (Cl. 188—79.5.)



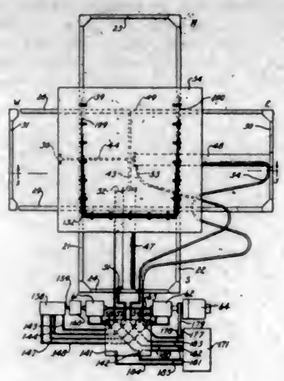
3. In a brake of the class described, the combination of a rotatable brake drum, a fixed shell therefor, a brake shoe hingedly supported upon the shell, a brake lining mounted upon the shoe, means for automatically taking up the wear on the shoe which comprises a member for engaging the shoe, a spring for moving said member into engagement with said shoe, and means for holding said member in positions obtained through the operation of the spring.

1,866,249. WIRE RING ROLLING MACHINE. JOSEPH CIPKO, New York, N. Y. Filed Apr. 6, 1931. Serial No. 527,915. 11 Claims. (Cl. 140—92.2.)



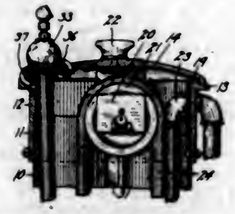
1. A wire ring rolling machine comprising a frame, a plurality of wire winding drums rotative in said frame, upper arms pivotally mounted in said frame, means to allow said upper arms to assume a rear and front position, lower arms pivotally mounted in said frame, means to allow said lower arms to extend towards the front, and drums mounted on the ends of said arms.

1,866,250. METHOD OF FORMING CABLES. NATHAN A. CURTISS, Ridgewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Aug. 8, 1929, Serial No. 383,386. Patent No. 1,823,680, dated Sept. 15, 1931. Divided and this application filed Dec. 24, 1930. Serial No. 504,503. 5 Claims. (Cl. 140—71.)



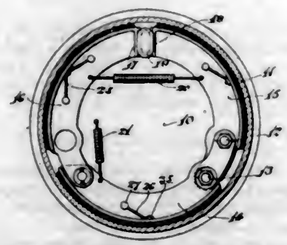
1. The method of forming cables which consists in supplying strands from a fixed point to a form, moving the form relative to the fixed point to apply strands thereto, and securing the applied strands into a unitary cable.

1,866,251. HOSE REEL AND PROTECTOR. HAROLD G. DAVIS, Denver, Colo. Filed Mar. 10, 1931. Serial No. 521,413. 4 Claims. (Cl. 299—77.)



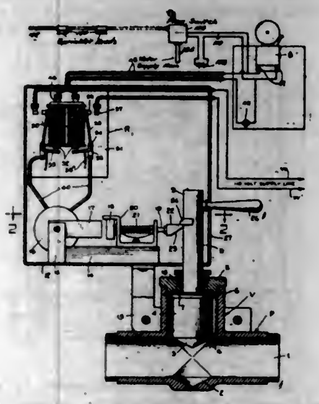
2. A hose reeling device comprising: a container; means for drawing a hose therewithin a band surrounding the upper extremity of said container; a roller carried by said band; a lid for said container, said lid being notched adjacent said roller for the passage of said hose so that said roller will close said notch when said lid is in position.

1,866,252. BRAKE. ADIEL Y. DODGE, South Bend, Ind. Filed May 31, 1930. Serial No. 458,711. 6 Claims. (Cl. 188—2.)



1. A brake comprising a brake shoe and a vibratory member secured to the shoe.

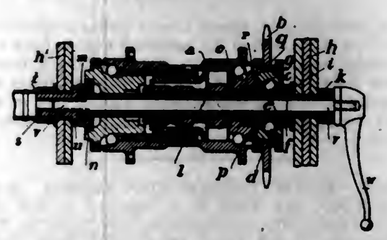
1,866,253. GAS SHUT-OFF SYSTEM AND APPARATUS. JAMES J. DONOHUE, Jersey City, N. J., assignor of one-half to John E. Hays, New York, N. Y. Filed Dec. 20, 1927. Serial No. 241,483. 12 Claims. (Cl. 196—5.)



1. The combination with a sprinkler system including an electric control circuit which is energized when the sprinkler system is active, of automatic gas shut-off mechanism comprising a gas-main, a valve, means normally retaining the valve in open position, and means actuated by the energizing of said electric circuit to cause the valve to close.

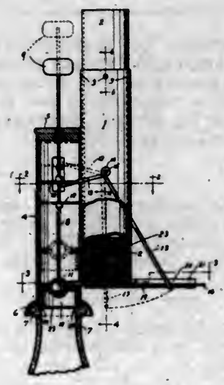
6. In apparatus of the class described, a gas-main, a valve therein having an enclosed valve stem provided with a reset handle projecting out of the enclosure, detent mechanism including a pawl engaging a lug on the valve stem, an armature connected to the pawl, a solenoid arranged to retract the armature, and a relay having contacts electrically connected to the solenoid.

1,866,254. FREE-WHEEL GEAR. ERNST EICHHORN, Schmolln, Germany, assignor of one-half to Reinhold Thieme, Schmolln, Thuringia, Germany. Filed Aug. 21, 1929, Serial No. 387,535, and in Germany Aug. 30, 1928. 1 Claim. (Cl. 208—139.)



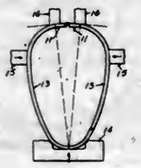
A free-wheel gear comprising a pair of coaxial sleeves connected to opposite fork members of a supporting frame, a flange at the inner end of one of said sleeves, a ball bearing ring secured rigidly to said latter sleeve behind the flange, a rotatable ball bearing ring mounted on said rigid ring, a chain wheel secured to said rotatable ring, a free-wheel and brake hub comprising a ball bearing cone mounted on the second sleeve and engaging over said flange, said bearing cone and said rotatable ball bearing ring being provided with interengaging clutch elements, and an axle adapted to pass through one of said sleeves and through the hub and to screw into the opposite sleeve for supporting the hub and maintaining it in engagement with the chain wheel.

1,866,255. BOTTLE CAPPER. LA ROY E. GREENMAN, Kalkaska, Mich. Filed May 3, 1930. Serial No. 449,379. 2 Claims. (Cl. 226—92.)



1. A milk bottle capping machine comprising a cap container, a plunger at one side of the cap container, a feed plate operable across the lower end of the cap container, a guide supporting and directing the feed plate in its movements, a yoke-shaped bell crank lever pivoted to opposite sides of the cap container and having an end portion extending beneath and along the sides of the said guide and engaging opposite sides of the feed plate, and having its opposite end terminating in transversely spaced elements at the sides of the plunger stem, and spaced disks carried by the stem of the plunger to engage the spaced elements of the lever and actuate the same.

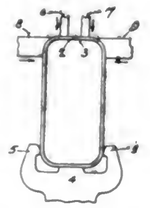
1,866,256. METHOD OF FLASH WELDING TUBULAR ARTICLES. WARREN F. HEINEMAN, Shorewood, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed May 13, 1929. Serial No. 362,722. 9 Claims. (Cl. 219—10.)



1. The method of making sheet metal pipe which comprises forming the longitudinal marginal portions of a metal sheet into flanges extending at an angle to the original plane of the sheet, bending the intermediate portion of the sheet to form a tubular structure of oblong cross section with the edges of the flanges in spaced relation to each other and having the marginal flanges adjacent thereto extending in the direction of the minor axis of the oblong section of the tube, then applying external pressure to the opposite sides of the tubular structure in the direction of the minor axis to bring the longitudinal edges together and into proper longitudinal alignment while applying electrodes to the marginal portions of the tubular structure adjacent the edges to be welded and exerting pressure on said electrodes in the direction of the major axis to deflect the marginal edges and thereby bring the same into transverse alignment, and employing the rigidity of the side walls of the blank in the direction of the major axis to support the marginal edge portions of the blank against the electrode pressures, then establishing

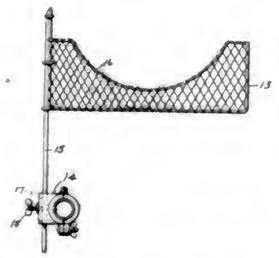
and maintaining an electric arc between the edges throughout the full length thereof to heat the same to welding temperature, and thereafter pressing the heated edges together to complete the weld.

1,866,257. METHOD OF ELECTRICALLY WELDING TUBULAR ARTICLES. WARREN F. HEINEMAN, Shorewood, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Dec. 1, 1930, Serial No. 499,210. Renewed Jan. 28, 1932. 3 Claims. (Cl. 219—10.)



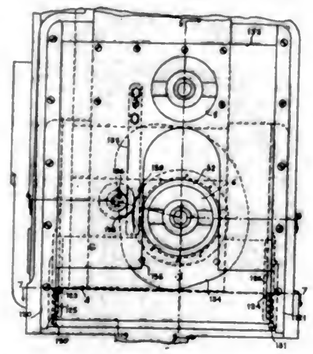
1. The method of electric welding a longitudinal seam of a tubular article, comprising forming the tubular blank to provide straight flange portions adjacent the edges, applying pressure to said blank in a direction to press the edges together while applying electrodes to said flange portions adjacent to the edges in a direction substantially perpendicular to the direction of said pressure application to the blank to thereby deflect said flange portions inwardly until said portions lie in a plane substantially parallel to the direction of said pressure application to the blank, applying welding current through said electrodes to the blank and across said edges to heat the same to welding temperature, and applying welding pressure to the blank in the direction of said flange portions to press the edges together and weld the same.

1,866,258. ATTACHMENT FOR HOSPITAL BEDS. EVA W. JIMMERSON, New York, N. Y. Filed July 8, 1929. Serial No. 376,739. 1 Claim. (Cl. 5—327.)



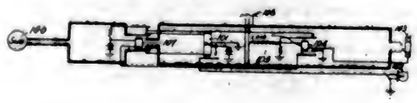
An attachment for beds suitable for use in supporting the limb of a patient and holding the same against lateral displacement, comprising a substantially square basket element having a flat bottom so as to rest stably directly upon the surface of a bed, one side of said basket being cut away for at least a portion of its length, whereby a trough may be formed by the limb of a patient in a pillow positioned in said basket, and means for detachably securing the basket to said bed to hold such basket against displacement upon the surface of the bed, said means comprising rods extending downwardly from two adjacent corners of said basket, and clamps attaching said rods to the frame of the bed.

1,866,260. MACHINE TOOL. EDWARD J. KEARNEY, Wauwatosa, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis. Filed July 8, 1931. Serial No. 549,447. 8 Claims. (Cl. 90—11.)
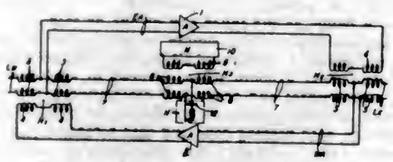


1. In a machine tool, the combination of a support providing a wall, a rotative spindle projecting through said wall and supported for bodily movement in a direction transverse to its axis, said wall having an opening disposed to permit such movement, means for said bodily spindle movement, means including a pivoted member adapted to close said opening in various positions of said spindle and during movement thereof, and a motion transmitting connection from said spindle moving means to said pivoted member.

1,866,260. TELEPHONE SYSTEM. GERALD V. KING, Springfield, N. J., and FELIX A. BONOMI, St. Albans, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 8, 1929, Serial No. 405,603. Renewed June 6, 1931. 29 Claims. (Cl. 179—27.)



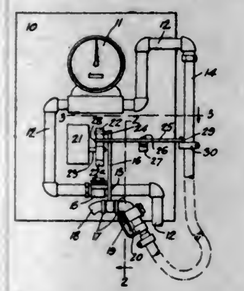
1. A universal cord circuit having means responsive to a first type of connection for providing local battery feed, said means being responsive to a second type of connection for providing locally supervised distant battery feed and said means being responsive to a third type of connection for providing a through path without series impedance.

1,866,261. SIGNAL TRANSMISSION SYSTEM. KAREL LUTOMIRSKI, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 7, 1930. Serial No. 466,081. 12 Claims. (Cl. 179—170.)



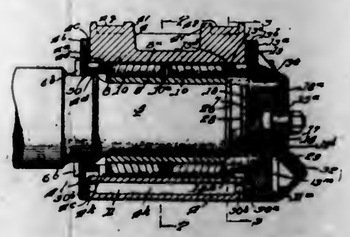
1. In combination in a signal transmission system, two two-way line sections, two oppositely directed one-way repeating paths, means coupling said one-way repeating paths to said two-way line sections in condition to repeat alternating current signal waves of frequencies comprised in a given range in opposite directions therebetween, means providing a continuous conductive connection between said two-way line sections, and means for effectively balancing the impedances of said two-way line sections through the last mentioned means.

1,866,262. SAFETY CONTROL FOR GASOLINE DISPENSING SYSTEMS. ARTHUR C. MANDEL, New York, N. Y. Filed May 16, 1930. Serial No. 452,884. 3 Claims. (Cl. 221—95.)



1. The combination in a gasoline dispensing system of an operating switch, a discharge hose, a hose nozzle, a pivotally supported lever having a support for the said nozzle at one end and means to obstruct operation of the said switch at the other, the said lever being adapted to be raised manually to unlock the said switch, and means to open and close the said switch comprising a bar in operative connection with the said switch and fastened to the said hose.

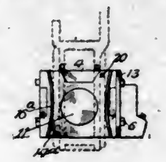
1,866,263. CAR AXLE BEARING. LEE W. MELCHER, West De Pere, Wis., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Oct. 12, 1927. Serial No. 225,769. 8 Claims. (Cl. 308—180.)



1. In a car axle bearing, the combination of a box body of hard metal having integrally cast therein a cylindrical bearing surface, members of the machinable metal for closing the ends of the box respectively, the box-body having holes extending longitudinally therethrough, soft metal linings in the holes, bolts extending through said holes and the members to clamp said body and members together, an axle extending through one of the members and into the box, and a series of bearing rollers around the axle and engaging said cylindrical bearing surface.

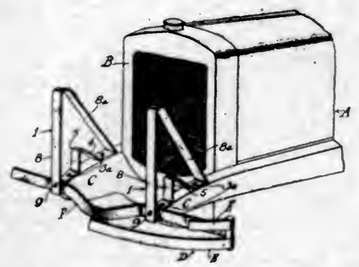
1,866,264. CAR TRUCK. LEE W. MELCHER, De Pere, Wis., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 1, 1929. Serial No. 336,874. 2 Claims. (Cl. 105—223.)

2. In a car truck, the combination of a pedestal having legs, a journal box in the pedestal, guide plates associated with the sides of the box and provided with outwardly extending flanges for engaging slidably the legs of the pedestal, said flanges being shaped to permit the box to rock or tilt to a limited degree relatively to the pedestal,



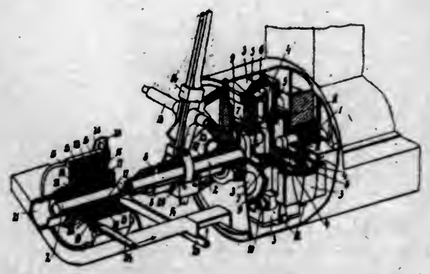
pivotal connections between the box and the plates whereby said box is permitted to tilt to a greater extent, and breakable means for connecting the box rigidly to the plates so that normally the pivotal connections are inoperative.

1,866,265. COMBINED RADIATOR GUARD, BUMPER SUPPORT AND TOW HOOK FOR TRUCKS. H. P. MOSS, Detroit, Mich. Filed Nov. 22, 1930. Serial No. 497,384. 4 Claims. (Cl. 293—55.)



1. As an article of manufacture, a bracket comprising an open substantially triangular spring metal strap having a base provided with means for attachment thereof to a support, the attaching portions being separated by an intermediate humped portion providing an anchorage for receiving a tow line, the free ends of the triangular member extending in spaced parallelism with each other and having means for attaching a bumper bar therebetween, the remaining portions of the triangular member constituting resilient impact means.

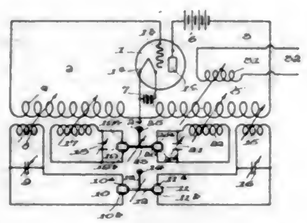
1,866,266. HYDRAULIC CHANGE-SPEED MECHANISM. JIŘÍ NETTEL, Prague, Czechoslovakia. Filed June 27, 1929, Serial No. 374,180, and in Czechoslovakia Apr. 29, 1929. 4 Claims. (Cl. 192—60.)



1. A hydraulic change-speed mechanism of the character described comprising a driving shaft, a casing on said shaft having radial passages which communicate in pairs at their

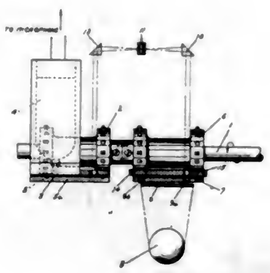
outer ends, a driven shaft having diametrically opposite cranks disposed within the casing, pairs of straight rectangular plates mounted on the cranks by means of centrally disposed transverse apertures, each plate guided in two diametrically opposite passages and adapted to drive liquid from one passage into another of a pair on a relative rotation of the cranks and the casing, and means for restricting the communication between the passages so as to oppose the movement of the liquid and relative rotation of the two shafts.

1,866,267. PRODUCTION OF OSCILLATIONS FROM PIEZO ELECTRIC CRYSTALS. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 24, 1927. Serial No. 163,273. 14 Claims. (Cl. 250—36.)



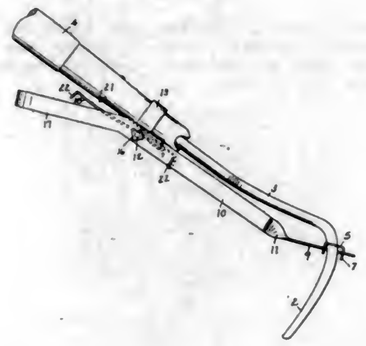
1. An oscillation generator comprising means for generating a plurality of different frequency oscillations, a piezo electric device having a plurality of crystal elements traversed by said oscillations and vibrating at a plurality of natural frequencies corresponding to the frequency of each of said oscillations, and means mechanically linking the crystal elements of said device for crystal-stressing to modify the frequency of the oscillations developed by said piezo electric device.

1,866,268. MEANS FOR TITLING SOUND FILM RECORDS. FREEMAN H. OWENS, New York, N. Y. Filed July 13, 1927. Serial No. 205,446. 5 Claims. (Cl. 88—16.2.)



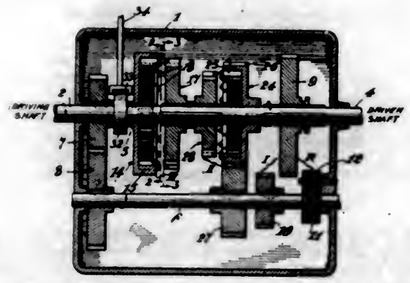
1. In combination, a film, means for recording a sound record thereon, a second film bearing a title, means for simultaneously and continuously moving said films in adjacent paths substantially separated from one another, and means for titling the sound recording film with said title at predetermined spaced intervals simultaneously with the recording of a sound record thereon.

1,866,269. RAKE CLEANER. WILLARD M. PAXSON, Dowagiac, Mich., assignor of one-half to Donald H. Miles, Cassopolis, Mich. Filed Mar. 27, 1931. Serial No. 525,727. 6 Claims. (Cl. 55—146.)



5. The combination with a rake and handle, of a stripper bar, a handle clip, a support for said stripper bar pivotally mounted on said clip, and a spring supported at a point intermediate its ends by said clip, its ends being detachably engageable with said support at either side of its pivot to yieldingly urge the support in either direction on its pivot.

1,866,270. CLUTCH MECHANISM. WILLIAM H. SCHOONMAKER, Montclair, N. J. Filed Oct. 30, 1930. Serial No. 492,137. 4 Claims. (Cl. 192—53.)



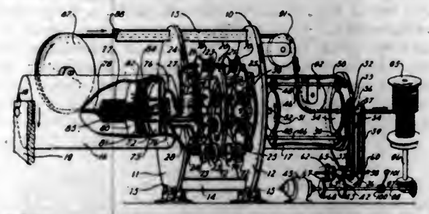
1. A first rotatable clutch member comprising an annular rim, internal clutch teeth on the interior of said rim, and a series of synchronization buttons extending laterally from said rim and positioned on a circumference larger than the circumference of said internal teeth; in combination with a second rotatable clutch member comprising external clutch teeth adapted to mesh with said internal teeth, and synchronization extensions on certain of said external teeth, said extensions extending radially of the clutch members and being positioned to engage said synchronization buttons as one clutch member is moved axially toward the other.

1,866,271. MEANS FOR RECEIVING WAVES OF AN ORDER OF ONE METER AND ONE DECIMETER. FRITZ SCHRÖTER, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Apr. 5, 1930, Serial No. 441,976 and in Germany Apr. 25, 1929. 4 Claims. (Cl. 250—20.)



1. In a receiving circuit arrangement adapted to receive waves of less than one meter, a reflector, a dipole adjacent said reflector, an energy feed line coupled to said dipole, a space discharge device circuit having its input circuit coupled to said feed line and means for symmetrically adjusting said feed line for tuning the circuit.

1,866,272. CABLE FORMING APPARATUS. GEORGE A. SEELEY, Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 1, 1930. Serial No. 432,334. 8 Claims. (Cl. 117—48.)



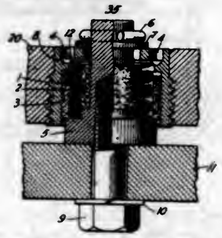
1. In a cable forming apparatus, a rotatable strand supply carrier, a plurality of strand supplies mounted upon the carrier, a flier for carrying the strands from the supplies bodily around the carrier, means for rotating the flier, means responsive to the rotation of the flier for rotating the supply carrier and means for rotating the carrier independently of the flier.

1,866,273. COMBINATION PADLOCK. EMIL SINNER, Milwaukee, Wis. Filed Aug. 22, 1931. Serial No. 558,661. 16 Claims. (Cl. 70—118.)



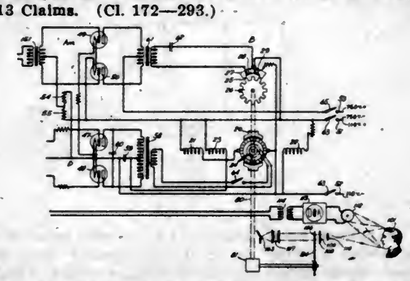
1. A combination lock comprising a locking member, a dog for blocking the movement of the locking member from its locking position, a tumbler for moving the dog from its blocking position, and means dependent on the movement of the locking member from its locking position for moving the tumbler.

1,866,274. RESILIENT SUPPORT. HUGH M. STOLLER, Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 20, 1930. Serial No. 437,357. 3 Claims. (Cl. 248—16.)



1. In a structure for supporting a vibrating and oscillating device, a vibration dampener comprising a coupling and a compression spring within said coupling and an oscillation dampening device comprising a pad fitted between the outer surface of said spring coils and the surface of said coupling and a second pad fitted between the inner surface of said spring coils and said coupling.

1,866,275. SPEED REGULATOR. HUGH M. STOLLER, Mountain Lake, N. J., and EDMUND R. MORTON, Brooklyn, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Original application filed June 23, 1927, Serial No. 200,799, and in Japan Apr. 5, 1928. Divided and this application filed Mar. 28, 1930. Serial No. 439,683. 13 Claims. (Cl. 172—293.)

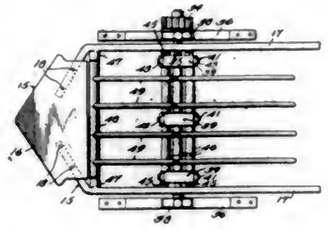


12. In combination, a plurality of rotatable elements, a plurality of direct current motors one of which is associated with each of said rotatable elements for driving it approximately in synchronism with another of said rotatable elements, a high frequency motor mechanically coupled to each of said direct current motors for maintaining said rotatable elements more accurately in synchronism, and means responsive to a low frequency simple wave associated with each of said direct current motors for bringing said rotatable elements approximately into a desired phase relation with respect to each other.

1,866,276. PEANUT DIGGER. LAWRENCE C. THACKER, Smithfield, Va. Filed Dec. 16, 1929. Serial No. 414,525. 4 Claims. (Cl. 55—113.)

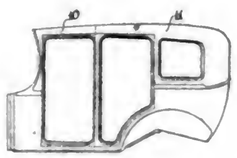
1. A device of the character described comprising a frame, traction means for moving said frame, a plow carried by said frame and adapted to uproot plants as a whole, a shaft associated with said traction means, a plurality of spaced rotatable members mounted on said shaft each provided with a plurality of outwardly extending

fingers adapted to engage said plants to convey the latter through the device, means for knocking the dirt from the roots of said plants as they pass through the device, and



means for operating said last named means comprising a plurality of spaced rollers arranged between said rotatable members and adapted to rotate therewith.

1,866,277. VEHICLE BODY WALL CONSTRUCTION. GEORGE TRAUTVETTER, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 28, 1930. Serial No. 456,397. 3 Claims. (Cl. 296—28.)

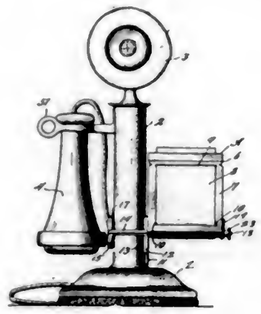


1. A unitary panel stamping for the side walls of vehicle bodies adapted to be interchangeably used with various types of vehicle bodies and extending entirely around a front doorway opening therein and flanged inwardly in the margin of the doorway opening and at top and bottom to form a hollow structure and terminating substantially in the plane of the rear margin of said opening and provided with rear edge formations adapted it to be interchangeably secured to various types of adjoining body units.

1,866,278. COMPOUND FOR USE IN CASTING METALS. BENJAMIN F. WALLACE, Brooklyn, N. Y. Filed Aug. 27, 1930. Serial No. 478,284. 5 Claims. (Cl. 22—163.5.)

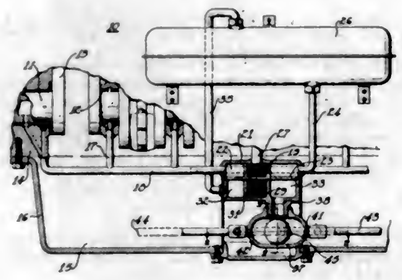
1. The method of making a parting composition for molds of foundries, which comprises impregnating a mass of an inert finely divided base with a small percentage, and not exceeding 10%, or by-product pitch derived from the manufacture of soap, heating the mixture during the continued agitation thereof to a temperature sufficient to drive off highly volatile ingredients thereof and until test portions of the mixture when thrown on water show a tendency, when submerged beneath the surface, to immediately rise again to the surface.

1,866,279. MEMORANDUM PAD HOLDER. FREDERICK A. WATKINS, Chicago, Ill. Filed July 28, 1928. Serial No. 295,894. 3 Claims. (Cl. 281—6.)



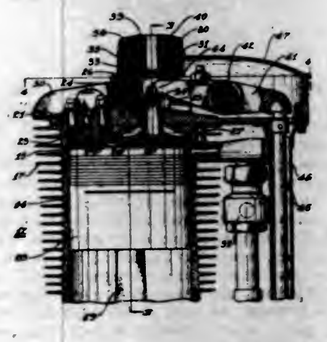
1. In a memorandum pad-holder for telephone pedestal comprising a frame including a platen, side members integral therewith and bent downward therefrom, a clamp of rectangular cross section having one end screw threaded and the other end bent at right angles and formed in a circular abutment; holes in the side members for mounting the said clamp member, one of the holes being of rectangular form to co-operate with the rectangular portion of the clamp member to prevent its turning; the side adjacent the pedestal having a portion thereof struck out to fit the form of the pedestal and held thereagainst by the said clamp.

1,866,280. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Continuation of application Serial No. 683,586, filed Dec. 31, 1923. This application filed Feb. 17, 1927. Serial No. 168,899. 9 Claims. (Cl. 184—6.)



1. The combination in an internal combustion engine having a crank case of an oil pan secured beneath the crank case, and a pump mounted in said pan and having a conduit at either end thereof extending to the opposite end of the pan, a port at the pump end of each said conduit forming a valve seat, and a ball valve operated by gravity on inclination of the pan to close the port corresponding to the conduit having least resistance.

1,866,281. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 28, 1928. Serial No. 295,938. 9 Claims. (Cl. 123—79.)



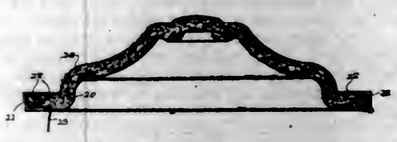
1. In an internal combustion engine, in combination, a valve, a stem for the valve having a laterally extending aperture therethrough, resilient means encircling the stem in a plane with the aperture for closing the valve, and means projecting into the aperture for opening the valve.

1,866,282. WINDLASS. WALTER R. WUEST, Louisville, Ky. Filed Dec. 31, 1928. Serial No. 329,611. 7 Claims. (Cl. 242—106.)



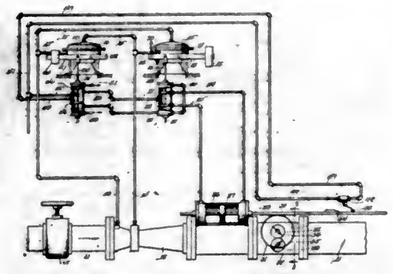
2. In a windlass constructed with a U flat spring frame, the outer faces of each arm being embraced by heads rigidly attached to a reel shaft extending through bearings in each arm of the frame, said frame being further provided with a pawl to engage annular notches formed in one of the embracing heads which upon rotation will cause the frame to yield.

1,866,283. PROCESS OF ELECTROPLATING NONCONDUCTIVE MATERIALS. PAUL R. ZINSER, Chicago, Ill., assignor, by mesne assignments, to Woodall Industries, Incorporated, Detroit, Mich. Filed Mar. 23, 1928. Serial No. 264,072. 2 Claims. (Cl. 204—6.)



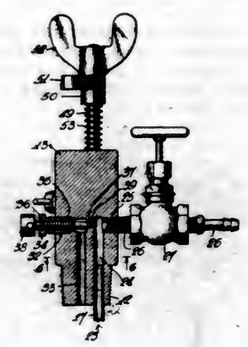
1. The method of electroplating a non-conductive substance consisting in surrounding said substance with and permanently attaching thereto a metallic binder, securing a conductor between said binder and said substance with a free end projecting beyond the confines of said binder, spraying the surface to be plated with a mixture of lacquer and metallic powder, and then electroplating the substance so treated.

1,866,284. FLOW CONTROL. SAMUEL L. ADELSON, Chicago, Ill., assignor to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 6, 1928. Serial No. 252,187. 9 Claims. (Cl. 210—125.)



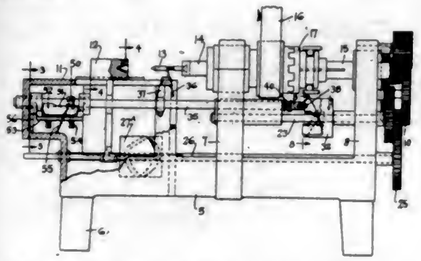
1. In a liquid treatment plant, treating apparatus, an effluent line from said treating apparatus, a main valve in said effluent line for cutting off the flow from said apparatus, a regulating valve in said effluent line for maintaining predetermined flow conditions in said line, flow measuring means, means associated with said flow measuring means to cause reduction of the opening of said regulating valve in response to an increase in the flow of said line and widening of the opening of said regulating valve in response to a decrease of flow in said line, and means actuated by the closing motion of said main valve for cutting out the regulating action of said regulating valve.

1,866,285. SPRAY APPARATUS. HERMAN ALBERTINE, Rutherford, N. J., assignor to Rogers Products Company, Inc., a Corporation of New Jersey. Filed Oct. 5, 1928. Serial No. 310,521. 4 Claims. (Cl. 299—95.)



4. As a new article of manufacture, a plug type spray fitting for pressure tanks including a body having three longitudinal passageways therein, one of said passageways constituting a compressed air supply line and being open at one end and valved at its other end, the other two of said passageways being of the dead-end type and having a valved connection with each other, a lateral-tap intersecting the upper end of one of the passageways in alinement with the valve, such passageway constituting a liquid outlet and communicating with the top of an open-ended liquid delivery pipe, the other of the dead-end passageways being adapted to communicate directly with compressed air in the top of the tank to which the fitting is applied.

1,866,286. MACHINE FOR CUTTING DOUBLE THREAD SINGLE POINT SCREWS. JOHN A. ARENZ, Mount Vernon, N. Y., assignor to International Screw Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 14, 1931. Serial No. 508,691. 3 Claims. (Cl. 10—101.)

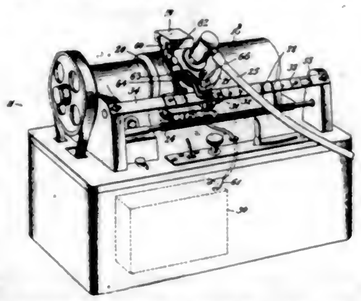


1. In a screw machine, a blank revolving spindle, a tool shaft arranged for rocking and longitudinal movement, a pitch cam controlling the longitudinal movement of the tool shaft comprising a plurality of sections providing separate surfaces, means for adjusting one of said sections longitudinally of the tool shaft to suit the pitch of the thread to be cut, a toothed depth cam for controlling the rocking movement of the shaft and the alternate teeth on said depth cam providing means for delaying the rocking movement of the tool shaft in relation to the blank revolving spindle.

1,866,287. FRICTION ELEMENTS AND METHOD OF MAKING. WILLIAM A. BLUME, Detroit, Mich., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 2, 1929. Serial No. 396,936. 4 Claims. (Cl. 18—47.5.)

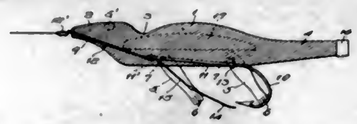
1. A friction element consisting of a solid compressed mixture of asbestos, finely divided natural pyrobituminous material, and a binder including a hard rubber cement and a drying vegetable oil.

1,866,288. PHONOGRAPH AND THE LIKE. ALFRED V. BODINE, Bridgeport, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Filed May 27, 1926. Serial No. 112,014. 22 Claims. (Cl. 274—17.)



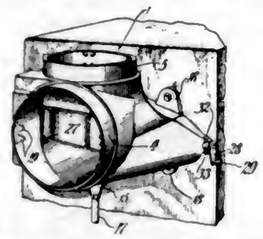
6. A dictation machine comprising, in combination, a frame; a record-support on the frame; a sound-box carriage movable over the frame and record-support; a strip supported on the frame in the path of the carriage; a magazine for metallic staples mounted in the carriage; the staple-setting means mounted in the carriage, which means when operated cause a staple to be removed from the magazine and to be imbedded in the strip, said staple-setting means being located in a predetermined position on the carriage and being operable at any point in the travel of the carriage.

1,866,289. FISH LURE. ALBERT FRANK BOEHM, Lake Villa, Ill. Filed Apr. 2, 1930. Serial No. 440,956. 1 Claim. (Cl. 43—42.)



A lure of the kind described comprising a body portion formed with a head at one end and a tail at the other, a reflector mounted adjacent the end of said tail, the body adjacent said head being reduced to provide a neck portion, the tail tapering rearwardly from the body and extending laterally to one side of the medial line of the body, a plurality of flexible leg members secured to the sides of the body and depending therefrom in an angular position, a hook projecting outwardly at an angle from the under side of the body, means for anchoring the shank of said hook at the point where it projects from the body, a leader secured to said hook and extending upwardly and in an offset position through the body to the head and projecting therefrom, and a weeder element imbedded in said body and secured to said hook.

1,866,290. WATER JACKETED SMOKE HOOD. FRANK C. BRADBURY, deceased, Riverside, Ill., by Carrie Landon Bradbury, executrix, Riverside, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 29, 1928. Serial No. 329,241. 1 Claim. (Cl. 122—20.)

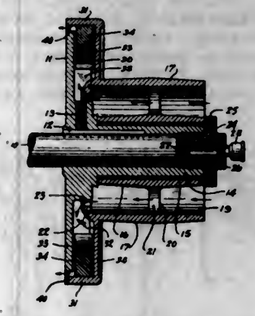


A combined smoke hood and economizer comprising an integral casing providing a channel for the products of combustion of a furnace and having a body portion provided with an inlet and a stack portion having a plurality of outlet openings for the products of combustion adapted to be selectively connected either to horizontal or vertical stove pipes, said casing including means thereon for securing the inlet of said casing directly to the smoke offtake of a furnace, one of said stack openings lying in a plane parallel to said inlet and the other lying in a plane at right angles thereto, said channel through said latter outlet being tortuous whereby the products of combustion are caused to be deflected in passing therethrough, an outer casing surrounding said first mentioned casing between said inlet and outlets and embracing a part of said body portion and a part of said stack portion and providing a water chamber therebetween in direct contact with that portion of the casing which deflects the products of combustion, and means for connecting said chamber to water inlet and outlet pipes.

1,866,291. DRIVING MECHANISM. TANDY A. BRYSON, Troy, N. Y., assignor, by mesne assignments, to Tolhurst Machine Works, Inc., a Corporation of Delaware. Filed Mar. 16, 1929. Serial No. 347,685. 7 Claims. (Cl. 192—105.)

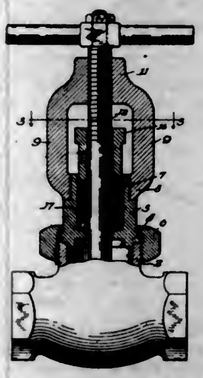
1. A driving mechanism including in combination a motor shaft, a flat disc fixed thereon, radially disposed guides on the flat face thereof, arcuate centrifugally operated clutching members freely moving along the guides, a drum

encircling the periphery of the disc against which the arcuate clutching members are pressed by centrifugal action, a flat disc supporting the drum and a belt pulley



supporting said disc, the guides on the first mentioned disc also acting as ventilating vanes, the pulley having a hollow hub.

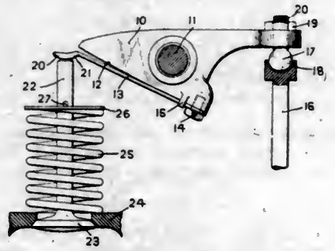
1,866,292. UNION BONNET VALVE. RALPH G. CARLSON, Chicago, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed May 21, 1930. Serial No. 454,204. 11 Claims. (Cl. 251—49.)



9. In a valve construction, a body member, a yoke having a pair of spaced arms terminating in a valve stem guide at one end, a union joint connecting said yoke to said body, a flanged gland disposed between the arms of said yoke, and means for adjustably securing said gland in position comprising a collar secured to the lower end of said yoke, and bolts secured to said collar and extending through said flange.

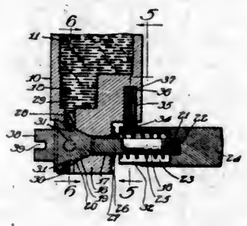
1,866,293. VALVE FOLLOWER. HENRY T. CHANDLER, New York, N. Y. Filed Feb. 3, 1928, Serial No. 251,507. Renewed Apr. 5, 1930. 1 Claim. (Cl. 123—90.)

A valve operating mechanism comprising a rotatable cam, a cam follower cooperating therewith, a valve stem and means for interconnecting said valve stem and said cam follower comprising a rocker arm, a supporting rod therefor, means for pivotally mounting said rocker arm thereon, adjustable means for operating said rocker arm in accordance with said cam follower, a spring member secured to said rocker arm, said spring member and rocker arm having cooperating surfaces of different curvature whereby the area of contact may be varied as a function of the force being transmitted, means for operating said valve stem in accordance with said spring member comprising a cylindrical segment secured to said spring at the free end thereof, said spring extending below the supporting rod whereby the free portion thereof comprises more than half the length of said rocker arm, said spring being



adapted to compensate for the expansion and contraction of the operating elements and to cause said valve to gradually seat and unseat whereby the normal valve clearance is used to reduce the momentum of said valve.

1,866,294. MERCURY DISPENSER. EDWARD L. CHOTT, Chicago, Ill. Filed Nov. 13, 1929. Serial No. 406,752. 4 Claims. (Cl. 221—106.)

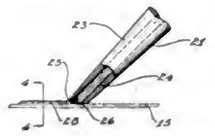


1. A dispensing device of the character described, comprising a cylindrical body member having a longitudinal liquid containing chamber therein, said body member having a longitudinal end extension provided with a restricted longitudinal passageway at one side of the axis of said body member, communicating at its inner end with the liquid containing chamber in said body member and at its outer end with a discharge outlet at the corner of said end extension of the body member, a transverse bore in said end extension of the body member intercepting communicably said longitudinal passageway and outlet opening, a valve member rotatable in said transverse bore and having circumferential recesses adapted to intermittently register with said restricted longitudinal passageway and said outlet opening whereby to deliver measured quantities of the contents from the liquid containing chamber in said body member, a laterally projecting handle member for rotating said valve element, and ratchet means for restricting rotation of said handle member to one direction only, said ratchet means including a spring-pressed stud cooperating with a shouldered flattened face on said handle member whereby to snap into yieldable retentive engagement therewith and by such action to impart vibratory shock to the device.

1,866,295. STRIPING INSTRUMENT. JOHN M. CHRISTMAN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 16, 1928. Serial No. 319,990. 2 Claims. (Cl. 91—62.6.)

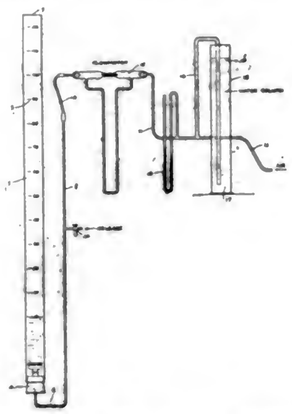
1. In a striping instrument for applying paint to a surface, a rigid circular nozzle having a bore extending axially therethrough, a portion of the discharge end of

the nozzle having a flat bearing face extending obliquely to the nozzle axis and the remaining portion of the discharge end of the nozzle being normal to the nozzle axis,



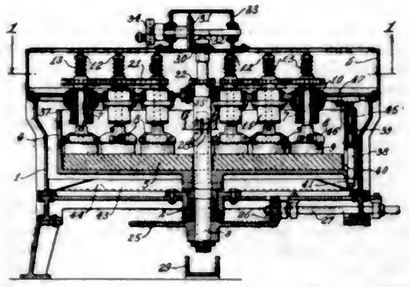
the bore being unrestricted and semi-elliptical in form through the normal discharge portion when the oblique portion bears against the surface to be striped.

1,866,296. METHOD AND APPARATUS FOR MEASURING FROTH. LUDWIG J. CHAISTMANN, Jersey City, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed May 15, 1928. Serial No. 277,933. 4 Claims. (Cl. 73—51.)



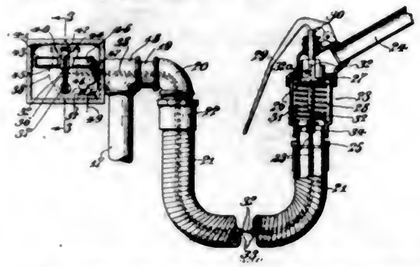
1. A method of measuring the frothing properties of materials which comprises placing liquid in a tube, adding a frothing material thereto, bubbling a gas through said liquid to produce a froth, noting the height of the column of froth and allowing said column to subside and noting the time required for said column to subside.

1,866,297. APPARATUS FOR PULVERIZING MATERIALS. WILLIAM DE COURSEY, St. Louis, Mo. Filed Oct. 23, 1926. Serial No. 143,599. 14 Claims. (Cl. 83—45.)



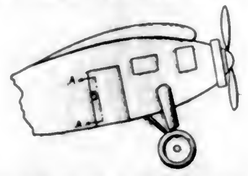
1. A wet pulverizer, comprising, a pan adapted for rotation and to maintain a liquid, mullers cooperating therewith, a drain valve at the rim of said pan, and means for operating said valve while said pan is in motion, whereby the liquid may be drained off by centrifugal action.

1,866,298. DISPENSING SYSTEM FOR GASOLINE AND THE LIKE. GEORGE H. DIDINGER, Philadelphia, Pa., assignor, by mesne assignments, to Sherwell Controls, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 3, 1926. Serial No. 297,344. 28 Claims. (Cl. 221—95.)



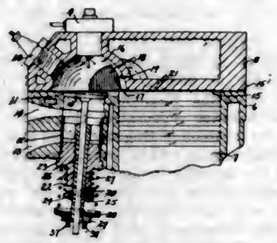
1. In a system for dispensing liquids, the combination of a storage tank for the liquid to be dispensed, a discharge conduit connected to said tank, said conduit terminating in a flexible hose having a valve in the nozzle thereof, means connected to said valve for controlling the flow of current through an electric circuit, and valve means responsive to the flow of current through said circuit for effecting the discharge of liquid from said tank.

1,866,299. AIRCRAFT ACCESSORY. GEORGE R. ERICSON, Alexandria, Va. Filed Jan. 4, 1929. Serial No. 330,238. 10 Claims. (Cl. 244—30.)



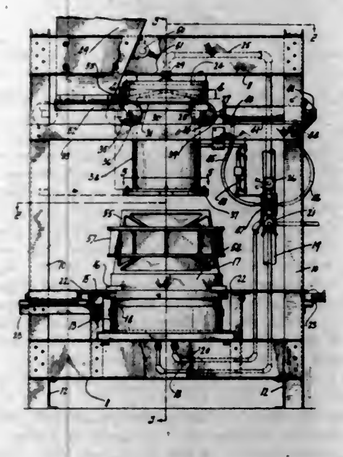
1. In an aircraft or other rapidly moving vehicle, the body of the vehicle, having a substantially stream lined fuselage, a swinging door in the wall of said fuselage, a latch for holding said door in closed position, and means for manually operating the latch from both the inside and the outside, said means being entirely within the stream line of the fuselage.

1,866,300. INTERNAL COMBUSTION ENGINE. LOUIS O. FRENCH, Milwaukee, Wis. Filed Oct. 26, 1929. Serial No. 402,622. 6 Claims. (Cl. 123—32.)



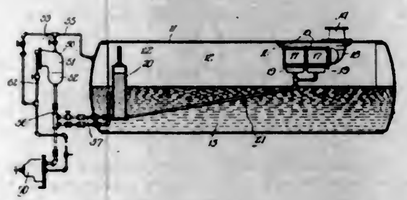
1. In an L-head internal combustion engine, the combination of a cylinder, a piston working in said cylinder, a dome-shaped combustion chamber offset from and in restricted communication with the end of the cylinder, said combustion chamber forming substantially the entire clearance space when the piston is at the end of its compression stroke, a single inlet and exhaust port communicating with said combustion chamber, a valve controlling said port, and a fuel injector mounted in the upper part of said dome-shaped chamber and discharging toward the lower portion thereof as the piston completes its compression stroke.

1,866,301. MACHINE AND METHOD FOR FORMING CORES. FRED C. GOODLIN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 15, 1929. Serial No. 386,218. 9 Claims. (Cl. 22—10.)



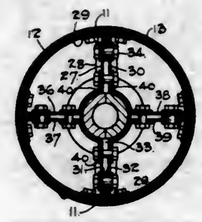
1. An air distributing chamber for a core forming machine, having positioned therein a baffle plate provided with a plurality of apertures of graduated sizes arranged in rows and in spaced relation with respect to each other.

1,866,302. BOILER CONTROL APPARATUS. WALTER H. GREEN, Chicago, Ill., assignor to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1929, Serial No. 336,863. Renewed Dec. 9, 1931. 12 Claims. (Cl. 122—389.)



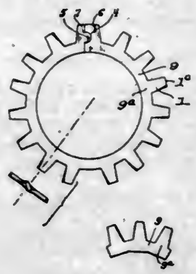
2. In combination with a boiler, a steam purifier, a chamber for receiving collected impurities, means for conducting the collected impurities from said chamber to the exterior of the boiler, means for blowing down the boiler, a conduit exterior to said boiler communicating with said impurity conducting means and said boiler blowdown means to receive said collected impurities and said blowdown, a valve upon said conduit and means actuated by the level of liquid in said chamber to control the action of said valve.

1,866,303. WOOD RIM PULLEY. HENRY HERTFELDER, Toronto, Ontario, Canada, assignor to Dodge Manufacturing Company Limited, Toronto, Ontario, Canada. Filed July 26, 1930, Serial No. 470,874, and in Canada Jan. 13, 1930. 2 Claims. (Cl. 64—18.)



1. In a wood rim pulley, a rim split diametrically and formed of alternate layers of wood veneer, bolts imbedded below the surface of said rim adjacent and either side of said split, pressed metal arms adapted to form a central hub an upstanding flange around the edges of said arms, and a central bush split diametrically within said hub adapted to encircle a shaft and grip thereon, auxiliary arms secured to said rim and adapted to encircle said hub and be secured to the fastenings of the first said arms.

1,866,304. LOCK WASHER. RICHARD T. HOSKING, Wilmette, Ill., assignor, by mesne assignments, to Shakeproof Lock Washer Company, Incorporated, Chicago, Ill., a Corporation of Delaware. Filed Dec. 16, 1927. Serial No. 240,393. 1 Claim. (Cl. 151—35.)

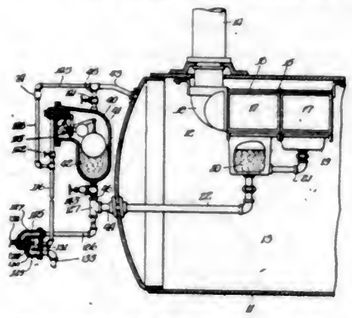


As an article of manufacture a lock washer comprising an annular ring having axially twisted teeth formed thereon, said teeth spaced apart at their roots a distance equal to the width of a tooth at its point, those portions of said ring that are located between successive teeth being bent circumferentially to a greater degree than the base portions of the teeth of said ring, for the purposes set forth.

1,866,305. STEAM PURIFIER DISCHARGE APPARATUS. WALTER J. HUGHES, Chicago, Ill., assignor to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1929. Serial No. 336,691. 3 Claims. (Cl. 122—491.)

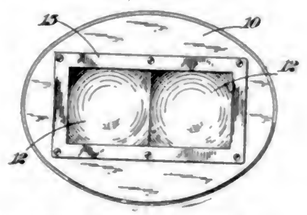
1. In combination with a boiler, a steam purifier within the steam space of the boiler, a drain chamber within the

boiler for collecting liquid separated by said purifier, a discharge line from said drain chamber, extending to without the boiler, and means located outside the boiler for



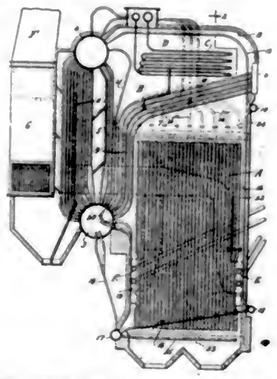
controlling said discharge line, said means being actuated by a level corresponding to the level within said drain chamber.

1,866,306. INSTRUMENT FOR VIEWING DESIGNS IN MULTIPLE. WILLIAM GORDON HUNTON, Great Missenden, England. Filed Sept. 13, 1929, Serial No. 392,330, and in Great Britain July 30, 1929. 7 Claims. (Cl. 88—39.)



1. A self-contained pocket instrument for the purpose set forth, comprising a substantially flat base-member having an opening therein, a plurality of double concave lenses mounted within said opening, and a metal frame secured to said base-member overlapping the edges of said opening.

1,866,307. STEAM GENERATING INSTALLATION. GEORGE P. JACKSON, Flushing, N. Y., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed June 4, 1929. Serial No. 368,227. 8 Claims. (Cl. 122—235.)



1. A boiler comprising, in combination, an upper steam and water drum, a lower mud drum, vertically extending bent tubes connecting said drums, upper header means located to one side of the upper drum, a bank of tubes connecting the lower drum to said header means comprising a plurality of rows of bent tubes, said tubes extending vertically adjacent to the aforesaid vertically extending bent tubes for a portion of their length and substantially horizontally for the remainder of their length, tubes connecting said upper header means with the steam space of the upper drum, said last mentioned tubes and the substantially horizontal portion of said bank of tubes constituting the upper and lower boundaries of a superheater space, and a superheater located in said space.

1,866,308. SHADE SUPPORTING BRACKET. ROBERT JENKINS, Sr., Baltimore, Md. Filed Jan. 17, 1930. Serial No. 421,331. 1 Claim. (Cl. 156—24.)



A combined shade supporting bracket and curtain pole support of the class described, comprising a blank stamped from a single piece of material having its opposite side longitudinal edges bent adjacent one face thereof to provide guide flanges, the longitudinal flanges of said plate terminating adjacent one another to provide a longitudinal slot, one end of said plate bent against one face thereof to provide a curtain pole support, a shade supporting element slidable on the face of said plate and located within the guide flanges, a shade supporting member extending at right angles from said element and movable in the slot defined by the flanges, and one of said flanges provided with means to receive an associating means of the element so that the latter may be retained in adjusted positions relative to the plate.

1,866,309. LEVER LOCKING MECHANISM. COLVIN L. JOHNSON, St. Louis, Mo., assignor, by mesne assignments, to Frank C. Webb, St. Louis, Mo. Filed Feb. 28, 1927. Serial No. 171,448. 15 Claims. (Cl. 70—127.)



1. The combination with a lever having a longitudinal passage therethrough, of a casing embodying a lever handle slidably and non-rotatably mounted on one end thereof, a spring between said casing and the end of the lever for urging said handle into unlocked position, control means connected at one end to the casing and extending through said passage, means connected to said control means and slidably mounted on the lever adjacent the other end thereof for locking the same from movement, and key-released means for locking the casing and lever against relative longitudinal movement.

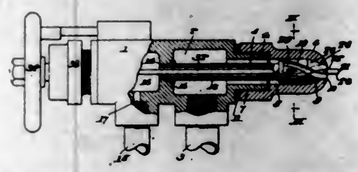
1,866,310. METAL COILING. CLIFFORD A. KAISER, Chicago, Ill. Filed Sept. 24, 1931. Serial No. 564,981. 3 Claims. (Cl. 29—148.)

3. A method of treating metal, which comprises heating the metal to a relatively high temperature, rolling the heated metal into sheet form, cooling the sheet to a temperature below that at which the grain structure of the metal changes due to the temperature, and forming the cooled sheet into a coil having a diameter at least as large as that derived from the formula

$$D=\frac{E}{S}T,$$

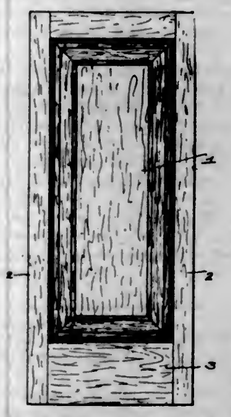
where D is the inside diameter of the coil, E is the modulus of elasticity of the metal, S is a unit stress insufficient to reach or exceed the elastic limit of the metal and T is the thickness of the metal sheet, whereby said sheet does not acquire coil breaks when being coiled or uncoiled.

1,866,311. HYDROCARBON BURNER. GEORGE W. LEIMAN, Newark, N. J., assignor to Leiman Bros. Inc., Newark, N. J., a Corporation of New Jersey. Filed Mar. 26, 1931. Serial No. 525,352. 6 Claims. (Cl. 299—140)



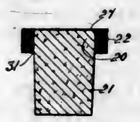
1. The combination with a hydrocarbon burner, of a discharge nozzle secured to the burner, a fuel discharge member located within said nozzle and provided with a reduced portion having a longitudinally arranged flat face disposed exteriorly of the nozzle and at least one transverse outlet duct in said flat face, said member also being provided in its outer surface with at least one longitudinal channel for the passage of the atomizing agent therethrough, said channel being inclined forwardly toward the longitudinal axis of the member for directing the atomizing agent obliquely across the fuel duct in the flat face to create an atomized spray radiating from the outer end of the channel and duct.

1,866,312. PROCESS OF MAKING DOOR PANELS OF FIBROUS MATERIALS. EMIL C. LOETSCHER, Dubuque, Iowa. Filed Dec. 12, 1929. Serial No. 413,454. 4 Claims. (Cl. 154—2.)



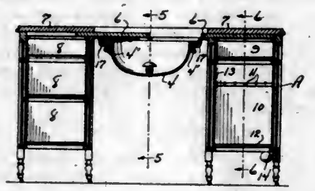
1. A process of manufacturing a panel or the like of a composite material having a base of a compressible fibrous material consisting of covering the surface of the base material with a sheet of fibrous material reproducing a natural wood finish with the grain extending in one direction and coated with a resinous substance, superimposing smaller sheets of the same coated fibrous material upon said first-mentioned sheet to cover predetermined areas with the grain extending transversely thereof, and compressing the base material and sheets of fibrous material.

1,866,313. BOTTLE STOPPER. HARRY C. LOHMAN, Brooklyn, N. Y., assignor of one-half to Albert Samuels, Morristown, N. J. Filed Sept. 27, 1929. Serial No. 395,558. 1 Claim. (Cl. 215—48.)



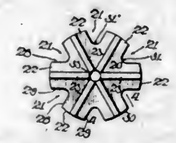
A bottle stopper comprising a core having an upper cylindrical portion and a lower tapered portion, a cap composed of a wound strip of material extending from and fastened to said cylindrical portion, the outer surface of said cap colored and having a legend marked thereon, a disc constituting a supplemental cap fastened to the upper face of said core and cap, said disc colored and having a legend marked thereon and a waterproofing agent covering said cap, supplemental cap and a portion of said core.

1,866,314. VANITY DRESSER. HORACE S. MELDAHL, Charleston, W. Va. Filed Dec. 9, 1929. Serial No. 412,891. 1 Claim. (Cl. 45—5.)



An article of furniture, comprising a plurality of spaced units for supporting drawers or the like, each unit including a top, flanged members extending from the upper portions of the units toward each other, a basin positioned between the units and supported by the flanges, and a basin-cover-member formed in sections, each section being slidable under the top of one of the units, said section being movable to edge-abutting position, above the basin, to form a complete top for said article of furniture first named.

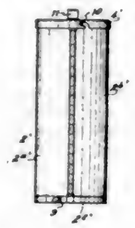
1,866,315. METHOD OF MAKING A CUTTER. PATTERSON D. MERRILL, South Bend, Ind., assignor to M. B. Skinner Co., South Bend, Ind., a Corporation of Indiana. Filed July 18, 1930. Serial No. 468,793. 1 Claim. (Cl. 76—101.)



The method of making a cutter of the character described which comprises forming a blank in substantially thick spider-like form from suitable material such as steel,

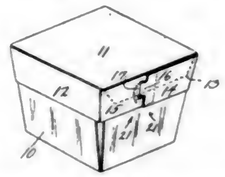
such blank having materially deep recesses extending inward from marginal portions of the blank to define a central body and substantially radially-directed integral arms, and then extruding metal from the face of the blank to provide a plurality of elongated substantially radially-directed upstanding integral cutting elements on the face surface of the blank with the cutting elements respectively rising from and extending longitudinally upon the respective arms from near the center of the body to near the ends of the arms respectively.

1,866,316. EQUIPMENT FOR FREEZING AND PACKING MATERIALS. MORRIS E. MILLER, Canton, Ohio, assignor to The H. H. Miller Industries Company, Canton, Ohio, a Corporation of Ohio. Original application filed May 26, 1927, Serial No. 194,336. Divided and this application filed Jan. 21, 1931. Serial No. 510,141. 4 Claims. (Cl. 107—19.)



2. A receiver for materials to be hardened comprising a plurality of curved side members hinged together along abutting longitudinal side edges, whereby one may be moved relative to the other, a flat bottom element having a downwardly extending peripheral flange fitting within the adjacent ends of said members when related to reinforce said ends, whereby the receiver may be supported thereon, a top element having a peripheral flange fitting the opposite ends of said members when related, and interlocking elements between the sides of said members and the flange of said top for detachably connecting said top to said members.

1,866,317. CONTAINER. ARLOW W. MINER, Sioux City, Iowa. Filed July 12, 1930. Serial No. 467,486. 7 Claims. (Cl. 229—43.)



1. In combination with a receptacle having a side wall diverging toward the mouth of the receptacle, a cover including a central region and flanges formed integrally therewith and bent downwardly from the sides thereof, two opposed flanges being continued longitudinally to form a pair of straps adapted to rest against said diverging wall and latching means on the ends of said straps to secure them together in engagement with said wall whereby the cover is held against the receptacle.

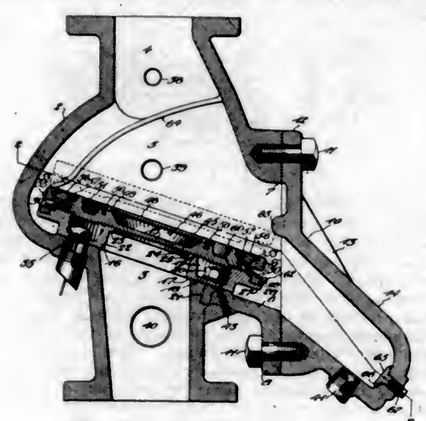
1,866,318. SPROCKET CHAIN. FRED MUHLENBRUCH, Bronx, N. Y. Filed Mar. 10, 1930. Serial No. 434,529. 4 Claims. (Cl. 74—32.)

1. In a link belt chain, a link having a flattened oval head at one end, the side edges of said head being convergently inclined, said head containing a transverse polygonal opening, a pair of opposed divergent arms constituting a fork extending from the narrow side of said head, pads on the ends of said arms, said pads having registering semi-circular openings, a semi-circular bar pin fixed



in the opening of said pads to engage the head of the next link, and a barrel shaped sleeve suited to the opening in the head, and means in said sleeeve to rock longitudinally on said pin.

1,866,319. DIFFERENTIAL VALVE. CHARLES F. PECKHAM, Providence, R. I.; Isabelle R. Peckham, executrix of said Charles F. Peckham, deceased. Filed Apr. 8, 1926. Serial No. 100,570. 6 Claims. (Cl. 169—22.)



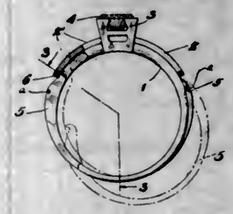
1. In a differential valve, the combination of a casing having an inlet-port surrounded by an annular rim, and an unconnected floating valve-closure adapted to seat across the port and provided with a shouldered annulus engaging the surrounding rim thereof to maintain the closure in register with the port, said valve provided with an air-seat having a greater area opposed to the pressure in the valve-casing than its area opposed to the pressure through the inlet-port.

5. In a differential valve, the combination of a casing having an inlet-port with an inclined water-seat, a free clapper adapted to seat across said port with a greater area of its surface opposed to the pressure in the casing than its area opposed to the pressure through the port, means for normally retaining the clapper in concentric relation with respect to the port, said clapper adapted to be lifted off from its seat to release its retaining means to cause it to slide laterally across the seat under the action of gravity when pressure in the casing is relieved, and an extended horizontal bearing at the rim of the seat on which the clapper rests as it slides laterally of its seat.

1,866,320. FINGER RING. ISRAEL ROSKIN, New York, N. Y. Filed Dec. 27, 1930. Serial No. 505,046. 3 Claims. (Cl. 63—15.)

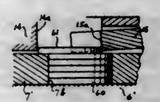
1. In a finger ring, the combination comprising a plurality of opposing, spaced annular spring shank members downwardly converging toward each other, an arc-like insert member, of greater thickness at the bottom thereof than

the width of the space normally existing between the bottom portions of said spring shank members, interposed between said shank members and generally concentric there-



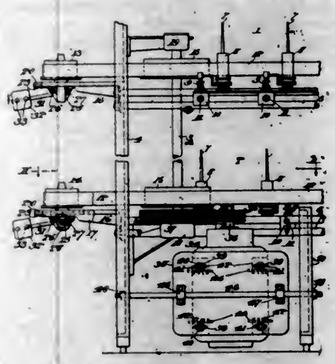
with and means in addition to the friction of said spaced shank members for preventing the accidental escape of said insert from between said shank members.

1,866,321. ARTICLE HANDLING DEVICE. ALBERT S. Ross, Dallas, Tex., assignor to O. R. Seagraves, Houston, Tex. Filed Mar. 24, 1930. Serial No. 438,273. 7 Claims. (Cl. 133—1.)



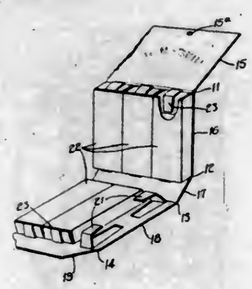
1. A dispensing machine having an article magazine, an article ejector, and an excess article detaining member movably mounted adjacent said magazine and ejector.

1,866,322. SPINNING AND TWISTING MACHINE. IRVING R. ROWE, Stonington, Conn., assignor to The Atwood Machine Company, Stonington, Conn., a Corporation of New Jersey. Filed Oct. 30, 1930. Serial No. 492,152. 13 Claims. (Cl. 118—43.)



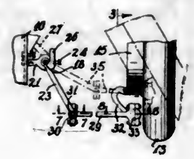
1. The combination with a spinning and twisting machine having an end frame, a plurality of rows of spindles, a spindle driving belt and guide pulleys therefor, of a belt driving pulley disposed within said end frame, at least one idler take up pulley for the belt, a motor mounted within the end frame beneath the spindles, and interchangeable driving means interposed between the motor and driving pulley.

1,866,323. PACKAGE FOR DISPLAYING MERCHANDISE. LOUIS J. RUSSELL, Richmond Hill, N. Y. Filed Apr. 5, 1929. Serial No. 352,622. 4 Claims. (Cl. 206—44.)



2. An article of manufacture of the class described comprising a mounting and display member having straight and continuous boundary edges, a plurality of pairs of supporting devices spaced transversely and longitudinally of said member and fashioned from the material thereof, said pairs of supporting devices being adapted to support elongated articles arranged transversely of said member and spaced longitudinally thereon, and said member being folded transversely into position to form thereof and of the articles thereon a compact package, the boundary walls of which are formed by the edges of said member and the long sides or the articles arranged at said edges.

1,866,324. AUTOMATICALLY TURNING HEADLIGHT FOR VEHICLES. DOMENICO RUSSO, Jersey City, N. J. Filed Dec. 12, 1930. Serial No. 501,819. 3 Claims. (Cl. 240—62.)

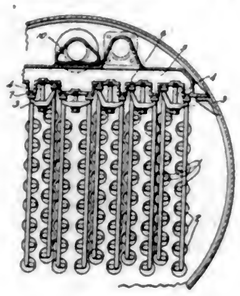


1. In a device of the class described, a radial arm for connection through links to a brake drum of a front wheel, a ring integral with one end of the arm, a bracket rotatively supporting said ring, a rod for supporting a headlight and rotatively supported and passing eccentrically through the ring, and means on said ring and coacting with said rod and for rotating said rod through a larger angle than initial turning of the ring and then maintaining the rod in its turned position and then continuing rotation of the rod all upon rotation of said ring.

1,866,325. SUPERHEATER. RICHARD STEIN, Cassel, JOHANNES EULER, Cassel-Wilhelmshohe, and WALTER PUFF, Cassel, Germany, assignors to The Superheater Company, New York, N. Y. Filed May 11, 1929, Serial No. 362,336, and in Germany July 18, 1928. 5 Claims. (Cl. 122—462.)

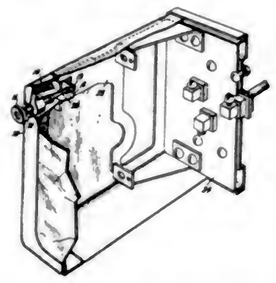
1. In apparatus of the class described, the combination of a flue sheet, flues extending back from said flue sheet, said flues lying in relatively staggered vertical rows, groups of tubular superheater elements located in said flues with their ends extending out of the front ends of said flues, a superheater header parallel to and forward of the flue sheet and above the flues, connecting seats being provided to which the element ends are connected to put them into communication with the interior of the

header, said seats being located in horizontal rows above the vertical rows of flues to which they respectively correspond and each end of each group of elements occupying an entire row of seats, the rows of seats having a



stepped arrangement corresponding to the staggering of the flues whereby the horizontal rows of seats are all at the same vertical distance above their associated vertical rows of flues and the groups of tubes are all alike.

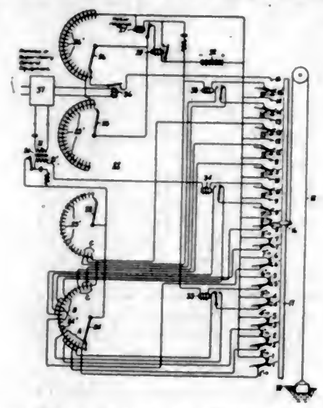
1,866,326. CASING FOR ELECTRICAL DEVICES. HARRY M. STEVENS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 12, 1928. Serial No. 305,519. 1 Claim. (Cl. 292—13.)



In combination, a base, a cover and means for securing said cover to the base including two opposed spaced lugs mounted on said base, two opposed spring members mounted on the inside of the cover having their free ends biased toward each other to be spaced less than the distance between said lugs, and an operating member mounted on said cover between said springs and arranged on movement in one direction to spread the free ends of said springs apart more than the distance between said lugs whereby to fasten the cover to the base.

1,866,327. INDICATING SYSTEM. CLYDE E. STEWART, Drexel Hill, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 16, 1929. Serial No. 386,459. 4 Claims. (Cl. 177—351.)

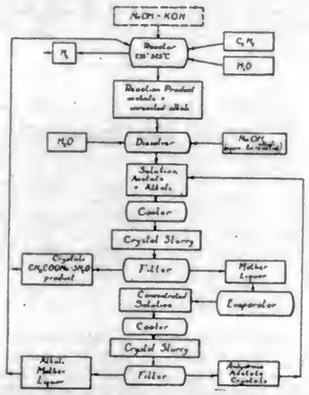
1. In combination, an element, means for moving said element over a predetermined path of movement with reference to a point, a rotary switching device having a bank of contacts arranged in groups, each group corresponding to a unit of displacement of said element from said point and each group comprising contacts corresponding to fractions of a unit of said displacement and additional contacts intermediate said last mentioned contacts, a wiper cooperating with said contacts, a circuit and means controlled in response to the position of said element for completing said circuit when said wiper engages each of said first mentioned contacts corresponding to fractions of a unit within the instant displacement of said element and for also completing said circuit through said wiper and said intermediate contacts in each group corresponding to units wholly within the instant displacement of said element, and signal means responsive to the current in said circuit.



1,866,328. CONTINUOUS METHOD OF MAKING ALKALI-METAL ACETATES. CHARLES J. STROSACKER and WILBUR T. STEPHENSON, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 5, 1929. Serial No. 411,976. 11 Claims. (Cl. 260—116.)

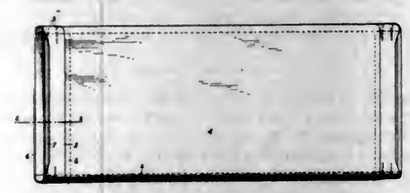
1. The method of making an alkali metal acetate which comprises providing a mixture of the corresponding hydroxide and acetate in comminuted form at a temperature above 200° C., but below that at which decomposition of acetate occurs, continuously introducing acetylene and water vapor thereto, while stirring the same, discharging reacted solid product and separating alkali metal acetate from unreacted hydroxide therein.

1,866,329. METHOD OF PREPARING ACETATES. CHARLES J. STROSACKER, CHESTER C. KENNEDY, and EARL L. PELTON, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 25, 1931. Serial No. 539,780. 11 Claims. (Cl. 260—116.)



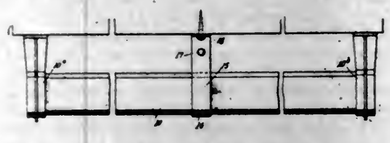
1. The method of making an acetate which comprises reacting a body of alkali metal hydroxide containing potassium hydroxide with acetylene and water simultaneously.

1,866,330. CLOTH BOARD. DAVID R. THOMSON, Paterson, N. J. Filed Sept. 19, 1930. Serial No. 482,945. 1 Claim. (Cl. 206—50.)



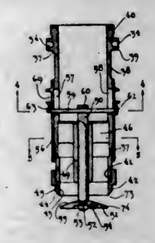
A reinforcing guard for a board having at least one broad face thereof impressionable near the end of the board, said guard consisting of an elongated strip of stiff elastic sheet material having longitudinal side flanges reaching in the same general direction and one of them formed with a sharp indenting portion extending lengthwise thereof and reaching toward the other flange and spaced from the latter less than the thickness of said board; whereby when said guard is forced lengthwise of itself onto the board into sheathing relation to said end and with said flanges receiving the latter between them and said portion presented to said impressionable face said portion will gouge the latter.

1,866,331. BRACKET FOR CURTAIN RODS. WALTER H. TOELLE, Wallingford, Conn., assignor to H. L. Judd Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 21, 1931. Serial No. 510,200. 2 Claims. (Cl. 156—22)



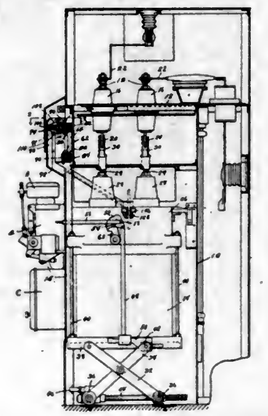
1. A bracket for curtain rods, said bracket comprising two members each adapted to be fixed to a wall and each having a rod-engaging jaw, said jaws being adapted to embrace a curtain rod, one of said members being longitudinally slidable on the other, whereby said slidable member may be moved to and fro after the other member is secured to the wall to permit a rod to be inserted or removed from between said jaws, and means to secure said slidable member to a supporting wall to so position said member as to hold the jaw thereon in rod clamping position with relation to the jaw on the other member.

1,866,332. DOUGHNUT FORMER. PETER J. TOEWS, Minneapolis, Minn. Filed Nov. 7, 1929. Serial No. 405,341. 5 Claims. (Cl. 107—14.)



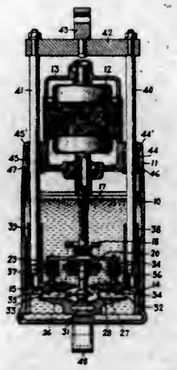
1. A doughnut former comprising a tube, a nozzle at the end of said tube, a bridge extending across said tube, a bearing formed on said bridge, a shank slidable along said bearing, a head on said shank movable toward and from said nozzle, said tube having slots along the sides thereof, a sleeve slidable upon the exterior of said tube, and a single pin extending through said slots and engaging said shank and sleeve for operating said head upon the reciprocating of said sleeve.

1,866,333. INCLOSED ELECTRIC SWITCH. MORRIS B. WOOD, Somerville, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Jan. 2, 1929. Serial No. 329,744. 28 Claims. (Cl. 175—298.)



1. In an electric switch gear of the vertical draw-out type having operating mechanism for the main switch contacts carried by the movable portion thereof, the combination of relatively fixed and movable secondary contact members carried by the fixed and movable portions thereof having cooperating vertical contact faces which have wiping engagement during the movement of said movable draw-out portion, and means operative during the engagement of said secondary contact members to urge both said fixed and said movable contact members positively toward each other into pressure engagement.

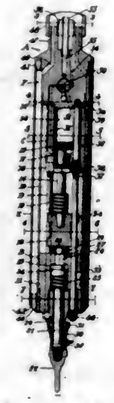
1,866,334. QUICK RELEASE HYDRAULIC OPERATOR. WILLIAM J. WOODS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 6, 1930. Serial No. 493,902. 9 Claims. (Cl. 60—52.)



1. A hydraulically operated device including a fluid casing, a piston therein movable between two positions and biased to one of said positions, a pump for creating a

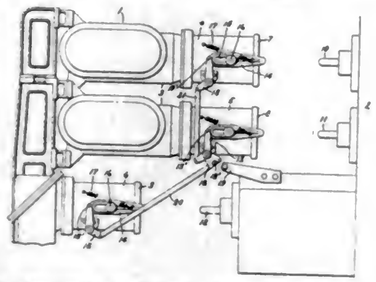
pressure within the fluid to move said piston to the other of said positions, a driving motor therefor, a brake for said pump biased to a braking position, and means responsive to the pressure of said pump for releasing said brake, said brake acting to stop said pump immediately after de-energization of said motor whereby said piston will return to its biased position without delay.

1,866,335. PNEUMATIC WELL DRILL. PAUL YUNGLING, Los Angeles, Calif., assignor to Monarch Oil Well Air Drill Co. Ltd., Reno, Nev., a Corporation of Nevada. Filed Feb. 24, 1931. Serial No. 517,879. 4 Claims. (Cl. 255—4.)



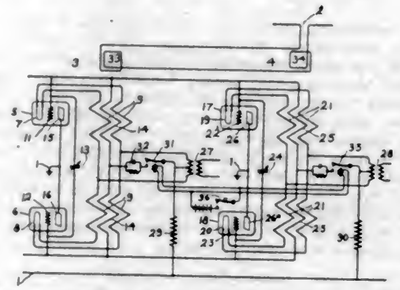
2. In a drill, spaced upper and lower drill shank sections, a cylindrical shell interconnecting said sections, a second shell carried by said sections surrounding said first named shell and forming a passage extending longitudinally between said shells, a passage leading through the upper drill shank section from the upper end thereof communicating with said passage between said shells for directing liquid thereto, means for directing liquid from the lower end of the passage between said shells, a bit carried by the lower drill shank section, and fluid pressure operated means carried by the upper drill shank section for actuating said bit.

1,866,336. ELECTRICAL SWITCH GEAR. WALTER ADAM, Berlin-Oberschenewelde, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 11, 1930, Serial No. 488,146, and in Germany Nov. 27, 1929. 8 Claims. (Cl. 175—298.)



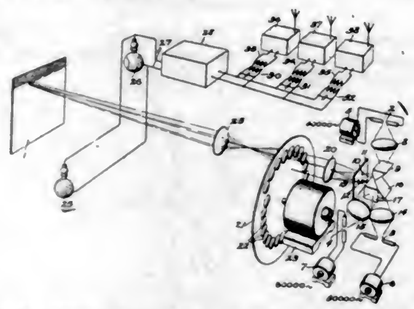
1. In electrical switchgear including a stationary bus structure having isolating contacts for coacting with contacts carried by a switch unit movable with respect to said stationary structure and an enclosing housing open at one end for said isolating contacts, means for covering and uncovering said stationary isolating contacts in accordance with the position of said movable unit comprising a cover member coacting with the open end of said housing, means for biasing said cover member directly against its seating surface with said housing when it is in the isolating position, and means coacting with said movable unit for moving said cover member longitudinally away from its seat and then laterally to the uncovering position.

1,866,337. SYSTEM FOR PRODUCING HIGH FREQUENCY OSCILLATIONS. ERNST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 30, 1927. Serial No. 179,650. 2 Claims. (Cl. 250—36.)



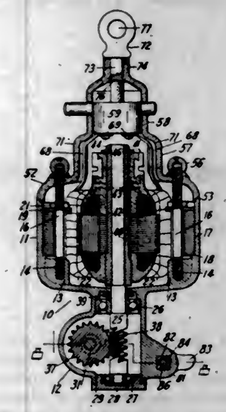
2. The combination, in a high power generator of oscillations of short wave length, a plurality of separate generators, each of said generators comprising a pair of electron discharge devices having small internal capacity and each device having an anode, a cathode, and a grid, means for maintaining one electrode of each device at ground potential, means connecting each of said pair of devices in push-pull relation, said means including an oscillatory circuit comprising the grid and anode of each device of the respective pair, a pair of bus bars connecting said oscillatory circuits in parallel, each bus bar being directly connected to one side of all of said oscillatory circuits, whereby all of said circuits operate in synchronism and the potential on said bus bars vary equally and in a balanced relation with respect to ground potential, energizing circuits for the anode and cathode of each device, and means for preventing interaction between different pairs of devices producing parasitic oscillations in any of said circuits.

1,866,338. PICTURE TRANSMISSION APPARATUS. ERNST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 23, 1930. Serial No. 446,724. 4 Claims. (Cl. 178—6.)



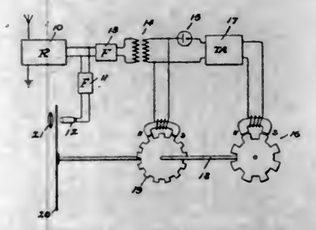
1. In picture transmitting apparatus, a plurality of pulsating light sources having frequencies differing from one another, a scanning disk having a plurality of light openings and means for projecting on the picture the light from all of said sources simultaneously through each of said openings.

1,866,339. GEARED MOTOR. VINCENT G. APPLE, Dayton, Ohio. Filed Mar. 1, 1930. Serial No. 432,543. 1 Claim. (Cl. 172—36.)



In a dynamo electric machine, an end enclosing head of molded insulation having a central hub, an electric switch in said hub, a smaller hub at the end of the first hub, and a swivel in said smaller hub.

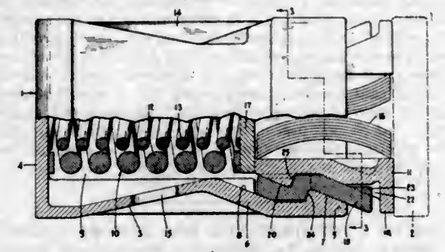
1,866,340. SYNCHRONIZING APPARATUS. MAURICE ARTZT, Scotia, and ROBERT SEARELL, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed July 16, 1929. Serial No. 378,768. 3 Claims. (Cl. 250—2.)



1. The combination of a radio receiver, means for supplying synchronizing and communication signals to said receiver, means for separating said synchronizing and communication signals, a synchronous motor, an alternating current generator, means comprising a two-element rectifier and a tuned amplifier for rectifying and amplifying said synchronizing signal and the current generated by said generator, and means for supplying the resulting beat frequency directly from the amplifier to said motor.

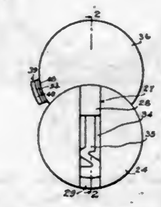
1,866,341. CUSHIONING MECHANISM. DONALD S. BARROWS, Rochester, N. Y., assignor to The Gould Coupler Company, New York, N. Y., a Corporation of Maryland. Filed Jan. 24, 1929. Serial No. 334,835. 14 Claims. (Cl. 213—31.)

3. In cushioning mechanism, in combination, a casing formed with a double bell mouth providing a plurality of sets of friction surfaces, friction wedge blocks movable longitudinally with respect to said casing and formed with friction surfaces spaced from those on the casing, intermediate friction elements disposed between the friction surfaces on the casing and wedge blocks and formed with friction surfaces complementary to and engaging those on the casing and wedge blocks, said blocks being adapted to have substantial sliding movement on the intermediate friction elements and the latter being adapted to have substantial sliding movement on the casing, resilient means directly opposing movement of the wedge blocks inwardly



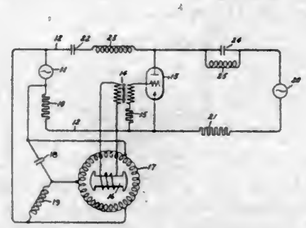
of the casing and resilient means disposed between the wedge blocks to press the same toward the intermediate friction elements and casing.

1,866,342. LOCK. FRANK ELLISON BEST, Wilmington, Del., assignor to Frank E. Best, Inc., Seattle, Wash., a Corporation of Washington. Filed June 24, 1930. Serial No. 463,383. 12 Claims. (Cl. 70—46.)



1. In a lock, a housing, a lock core insertable in said housing, a snap latch for locking said core within said housing, and means for preventing the displacement of said snap latch by rapping on the exterior of said housing.

1,866,343. ELECTRIC VALVE CIRCUITS. ARAM BOYAJIAN, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 24, 1930. Serial No. 504,621. 6 Claims. (Cl. 175—320.)

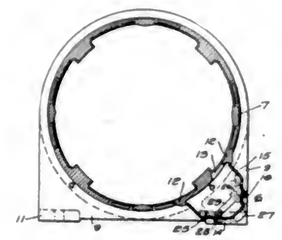


1. In combination, an alternating current circuit, a discontinuous control electric valve included in said circuit, and means for establishing control of said valve at any predetermined instant within a conducting half cycle of said alternating current comprising a source of periodic

current in circuit with said valve, the frequency of said periodic current being substantially greater than that of said alternating current circuit.

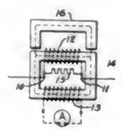
3. In combination, a discontinuous control electric valve provided with an anode, a cathode and a control grid, a circuit including a source of alternating current and the anode-cathode circuit of said valve, and means for enabling the control grid to regain control of the valve current at any predetermined instant within a half cycle of said alternating current comprising a second circuit also including said anode-cathode circuit, and a source of alternating current having a frequency substantially greater than that of said first circuit, and an amplitude such that the resultant current flowing in the two circuits periodically falls below the critical value of the valve.

1,866,344. TERMINAL BOX FOR MOTORS. JOHN L. BROWN, Verona, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 20, 1930. Serial No. 453,930. 3 Claims. (Cl. 172—36.)



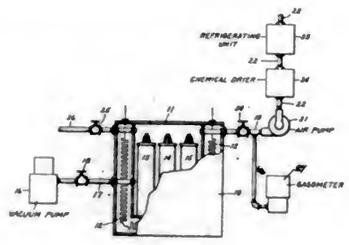
1. The combination with a motor frame having spaced lugs on the side surface and end flanges spaced apart which are provided on their inner faces with lugs, of a conduit box comprising a pair of complementary cooperating plates fitting in the space between the flanges and the lugs on the frame and supported on the lugs on the flanges, and means for releasably retaining the plates in cooperative assembled relation.

1,866,345. CURRENT TRANSFORMER WITH PRIMARY PARALLEL RESISTANCE AND FLUX LEAKAGE PATH. ALBERT CALLSEN, Stuttgart, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 12, 1930, Serial No. 501,852, and in Germany Dec. 19, 1929. 7 Claims. (Cl. 171—119.)



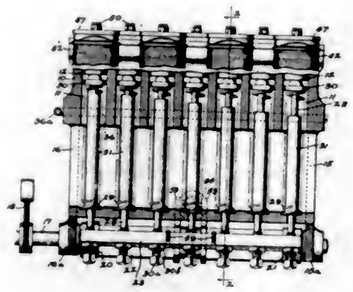
1. A current transformer having a parallel connected resistance and characterized by magnetizing winding coupled with at least one leakage member, the point of lowest magnetic reluctance of which is within the lower ranges of load on the transformer.

1,866,346. DRYING TREATMENT. FRANK M. CLARK, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 5, 1929. Serial No. 344,569. 8 Claims. (Cl. 175—41.)



1. The process of drying an object having a porous structure which consists in successively reducing the moisture content thereof by the repeated introduction and removal at an elevated temperature of a medium into the interstices of said object which has a greater affinity for moisture than said object, the residual pressure upon each removal of said medium being reduced to a vacuum of the order of a few millimeters of mercury.

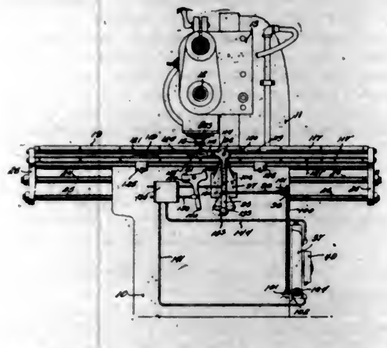
1,866,347. CONTROL DEVICE. ARTHUR T. CROCKER, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Dec. 15, 1928. Serial No. 326,399. 15 Claims. (Cl. 121—38.)



1. An electro-magnetically controlled pressure operated mechanism arranged for step-by-step operation of a throttle control including a cylinder block provided with a plurality of cylinders, pistons movable in said cylinders, a movable control member, operating connections between said pistons and movable member, a source of fluid pressure, conduits connecting said source of fluid pressure to said cylinders, valves in said conduits for controlling the admission of fluid under pressure to said pistons, stop members in said cylinders of graduated lengths cooperating with said pistons and electro-magnets for controlling successive operation of said valves to obtain a step-by-step movement of said movable control member.

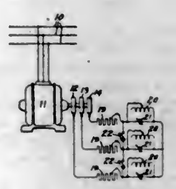
1,866,348. MILLING MACHINE. WALTER FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 20, 1927. Serial No. 199,936. 13 Claims. (Cl. 90—21.)

1. In a milling machine the combination of a table, a plurality of hydraulic motors connected in driving relation with said table, a pump mechanism, hydraulic connections between said pump mechanism and motors through which a driving liquid is supplied to said motors at a predetermined rate to drive said table at a predetermined



rate, and means for disconnecting one of said motors from said connections to thereby increase the rate of movement of said table in the same direction.

1,866,349. ADJUSTABLE SPEED INDUCTION MOTOR. HAROLD V. GREEN, Wilmette, Ill., assignor to General Electric Company, a Corporation of New York. Filed Jan. 22, 1929. Serial No. 334,274. 4 Claims. (Cl. 172—274.)

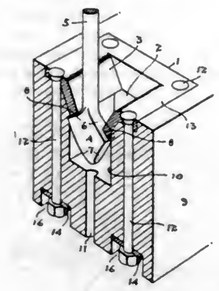


1. The combination with an induction motor having primary and secondary windings, of an external circuit connected to said secondary winding for regulating the power factor and speed of the motor during its operation, said external circuit containing relatively adjustable inductances and condensers connected in parallel with each other.

4. The method of selectively operating an induction motor at either of two stable operating speeds with a given value of motor torque, which consists in inserting parallel connected inductance and capacity into the circuit of the motor secondary winding after said motor has been started and when it has accelerated to the lower of said two speeds, said inductance and capacity having such relative values that the secondary winding circuit will be in resonance at a frequency corresponding to a speed which is intermediate said two speeds, excluding said inductance and capacity from said secondary winding circuit to obtain operation of the motor at the higher of said two speeds, and inserting said inductance and capacity into said secondary winding circuit when the motor has accelerated to the higher of said two speeds.

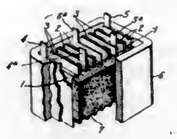
1,866,350. STOP LOG FITTING. OTTO HOLDEN, Toronto, Ontario, Canada, assignor to William Kennedy & Sons, Limited, Owen Sound, Ontario, Canada. Filed Nov. 9, 1931, Serial No. 573,899, and in Canada Nov. 12, 1930. 6 Claims. (Cl. 61—28.)

1. A stop log having a recess in one side thereof, a plate extending over said recess and having a slot therein, and a ram having a head adapted to enter the slot in said plate and when turned to engage the inner edges of the slotted plate to lift the log, and means carried by said ram in spaced relation to the head thereof



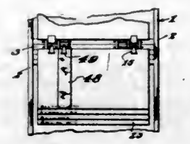
for engaging the upper surface of said plate, irrespective of the position to which said head has been turned to force said stop log into position.

1,866,351. RECTIFICATION OF ALTERNATING CURRENTS. HERBERT P. HOLLNAGEL, Swampscott, and GUNNAR A. F. WINCKLER, Worcester, Mass., assignors to General Electric Company, a Corporation of New York. Filed Jan. 29, 1927. Serial No. 164,642. 4 Claims. (Cl. 175—366.)



4. The combination of a member containing a mixture of tellurium, copper and sodium, a bimetallic member comprising elements consisting respectively of copper and magnesium, and a spacer interposed between the magnesium surface of said bimetallic member and a surface of the other of said members, said spacer constituting an asymmetric current conducting film at the junction of said surfaces.

1,866,352. VISIBLE INDEX. LE ROI E. HUTCHINGS, Buffalo, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Sept. 1, 1927. Serial No. 216,896. 14 Claims. (Cl. 129—16.)



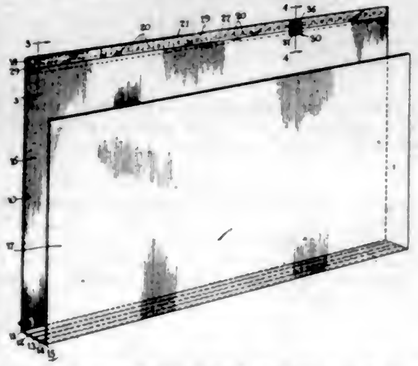
1. A card holder, comprising a strip member formed to provide a card-engaging portion, a support-embracing portion, and another portion for cooperating with the aforementioned portions to hold the card and for retaining said support-embracing portion in engaged relation with a support to prevent detachment under longitudinal pull, and operable to permit engagement and detachment thereof from the support under lateral pressure.

4. In combination, a supporting element, an index card, a card holder detachably mounting said index card on said

element, a signal, and a clip independently mounting said signal on said supporting element in superimposed relation on said card for signalling cooperation therewith.

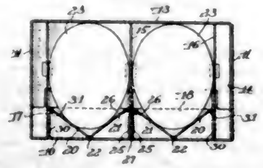
7. In combination, a supporting element, an index card, a sheet having a strip portion along one edge coincident with one edge of the card, a card holder engaging and retaining said strip portion, and the card in adjacent relation, said card holder detachably mounting said card and sheet on said supporting element, and a hinge portion connecting said strip portion to the remainder of the sheet.

1,866,353. INDEXED CORRESPONDENCE FILE. LE ROI E. HUTCHINGS, Tonawanda, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Feb. 24, 1930. Serial No. 430,961. 1 Claim. (Cl. 129—16.7.)



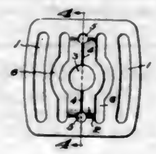
A correspondence folder formed of a piece of sheet material folded to provide major and minor flaps, said major flap having a visible marginal portion beyond the end of the minor flap, a series of appropriately designated sections provided on the inner face of said marginal portion, spaced from one end thereof and extending along said marginal portion to the other end, a transparent protective sheath coextensive with and enclosing said marginal portion and said series of sections, having a rear fold portion secured to said marginal portion and a front fold portion, said front fold portion having a coextensive inwardly and upwardly extending lip; said lip, front fold portion and marginal portion cooperating to form an uninterrupted pocket, an index slip mounted in said pocket between the first mentioned end of said marginal portion and said series of sections, and a signal having one end mounted between the lip of said front fold portion and said marginal portion, overlying a portion of said series of sections and provided with means cooperating with said lip for detachably and slidably retaining said signal in said pocket, in selective signalling cooperation with any of said sections.

1,866,354. CONTAINER FOR FRAGILE ARTICLES. HARRY A. INMAN, Newark, N. Y., assignor to Bloomer Bros. Company, Newark, N. Y., a Corporation of New York. Filed Apr. 17, 1930. Serial No. 444,910. 11 Claims. (Cl. 220—28.)



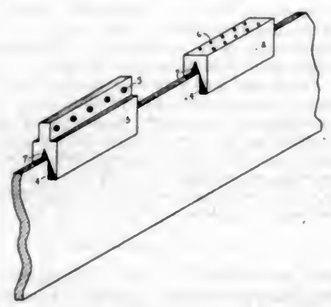
1. A container comprising a body having a bottom, a removable partition structure for subdividing said body into a plurality of compartments, said partition structure including a plurality of partition members spaced a substantial distance from each other when in normal position in said body and collapsible by moving longitudinally with respect to each other to a position adjacent each other when said partition structure is removed from said body, and a cushioning element secured to one of said partion members and removable from said body as a unit with said partition structure and extending in a generally transverse direction toward another partition member when said partition structure is in said body, to support an article placed in said body above the floor thereof, said cushioning element being collapsible as a unit with said partition structure when said partition members are removed from said body and collapsed, and said other partition member being movable longitudinally with respect to said cushioning element to permit collapse of the partition structure.

1,866,355. SLIDE FASTENER SOCKET MEMBER. ALFRED F. JOHNSON, Somerville, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 26, 1931. Serial No. 525,379. 2 Claims. (Cl. 24—77.)



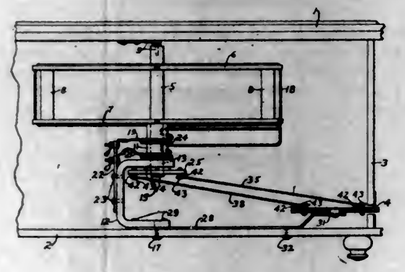
1. A slide fastener socket comprising a plate having strap-receiving slots disposed transversely thereof and located at opposite ends, centrally located laterally yieldable stud-engaging means providing a stud-receiving aperture and made yieldable by slits extending from the stud-receiving aperture toward the outer edges of said plate and said plate having other slots located between the stud-engaging means, and the strap-receiving slots to cooperate with said slits thereby to permit lateral expansion of said stud-engaging means and enlargement of the stud-receiving aperture when the socket is being engaged with or disengaged from a cooperating fastener stud without interference from a strap passing through the strap receiving slots.

1,866,356. SAW TOOTH. HOMER V. JONES, Bloomington, Ind. Filed Dec. 1, 1930. Serial No. 499,190. 1 Claim. (Cl. 125—22.)



In a stone saw, a saw blade having an unbroken edge, a series of saw-teeth each having a V-shaped notch in its rear face, said notch fitting over the edge of said blade and affixed thereto by fusible material.

1,866,357. CONTROL DEVICE. JOHN KERRIGAN, Swissvale, and ALBERT ROTH, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 13, 1926. Serial No. 134,988. 4 Claims. (Cl. 250—33.)



1. In combination, a cabinet having a panel, a control-disc partially projecting through an opening in said panel, a loop-antenna rotatably mounted in said cabinet, a plurality of substantially straight connecting elements disposed in parallelism between said disc and said loop, whereby angular movements of the disc are transferred to the loop to cause rotation thereof.

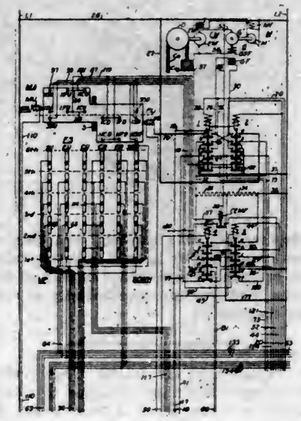
1,866,358. ELECTRODE SUPPORT. KENNETH H. KINGDON, Schenectady, and LEWI TONKS, Scotia, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Oct. 29, 1927. Serial No. 229,728. 2 Claims. (Cl. 250—27.5.)



1. In combination, a coiled filamentary electrode and means for supporting the electrode, said means comprising a wire extending loosely an appreciable distance into one end of the filament and secured to the filament at a point intermediate the ends of the wire and adapted to provide a frictional contact between the wire and filament.

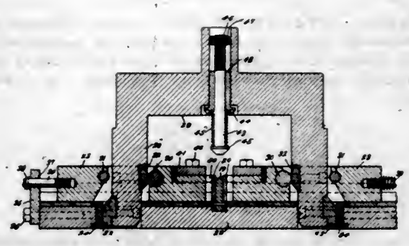
1,866,359. ELEVATOR CONTROL SYSTEM. LUTHER J. KINNARD and EDGAR M. BOUTON, Chicago, Ill., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 11, 1928. Serial No. 299,030. 24 Claims. (Cl. 187—29.)

1. In a control system for an elevator car operable past a plurality of floors, motive means therefor, actuable call-registering means for each of said floors, means operably responsive to the approach of said car to a floor for which a call means has been actuated for automatically reducing the speed of said motive means, and means



under the control of an attendant on said car for stopping said motive means subsequent to said speed reduction.

1,866,360. MECHANISM FOR FORMING LATCH PIVOTS. HARRY W. KRANZ, Lakewood, Ohio, assignor to The Cleveland Welding Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 4, 1929. Serial No. 404,538. 4 Claims. (Cl. 164—50.)

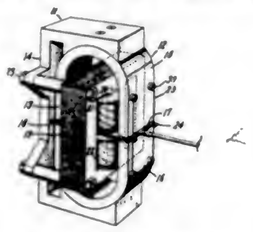


1. In a latch pivot forming mechanism of the character described, work holding means comprising a vertical flange and a lateral projection on said flange adapted to extend through an opening in said latch and maintain the latter in alignment during the forming operation.

1,866,361. DRIVING UNIT FOR LOUD-SPEAKERS. HANS P. KUEHNI, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 14, 1930. Serial No. 475,233. 2 Claims. (Cl. 179—115.5.)

1. A speech current device including a vibratable member, a short-circuited flat winding connected thereto, a speech current transformer comprising a core member and said winding, a magnet structure arranged to sur-

round said core member and having two oppositely disposed magnets forming a pair of air gaps, said winding being arranged to surround said core member and having oppositely disposed portions each arranged to move in the same direction in a different one of said air gaps, and



means to suspend said flat winding comprising pairs of flexible members connected to said winding, the individual members of each of said pairs extending in opposite directions from said winding substantially at right angles to the plane thereof.

1,866,362. ATTACHMENT PLUG CAP. GEORGE W. LIEBERUM, Stratford, Conn., assignor to General Electric Company, a Corporation of New York. Filed Feb. 19, 1930. Serial No. 429,779. 4 Claims. (Cl. 173—361.)



1. In a device of the character described, the combination of a body of insulation having shallow recesses therein with a contact element supported thereby, said element having short prongs having enlarged ends which embrace between them a portion of the body and are wedged into engagement with the side walls of said recesses.

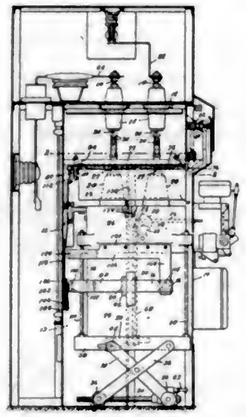
1,866,363. ATTACHMENT PLUG CAP. GEORGE W. LIEBERUM, Stratford, Conn., assignor to General Electric Company, a Corporation of New York. Filed Feb. 24, 1930. Serial No. 430,696. 7 Claims. (Cl. 173—361.)



1. In a device of the character described, the combination of a body of molded insulation having a seat formed thereon, a central opening to receive circuit wires, and preformed outer and inner recesses located at different distances from the axis of the plug, a contact element having a base which rests on the seat and has prongs thereon inserted into said recesses after they are formed and frictionally retained by the walls thereof.

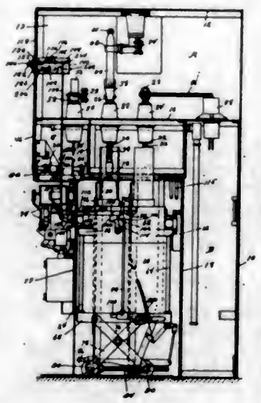
1,866,364. ELECTRIC SWITCH AND INCLOSING STRUCTURE THEREFOR. FREDERICK H. MACNEIL, Boston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 20, 1929. Serial No. 341,473. 24 Claims. (Cl. 175—298.)

1. In an inclosed draw-out electric switch gear, the combination of cooperating stationary and movable portions, said movable portions adapted to be moved horizontally and thereafter vertically in the cell, cooperating fixed and movable line disconnects carried by said stationary and movable portions, means to isolate the fixed disconnects from the remainder of the switch cell whenever the switch is withdrawn therefrom, and means carried by the switch adapted to render said isolating means ineffective during the movement of the switch into the cell and thereafter during its vertical movement to circuit controlling position.



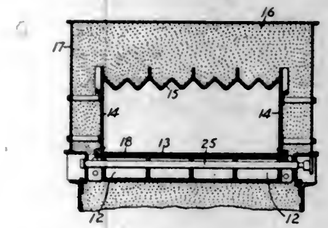
24. Electric switch gear comprising an inclosing cell having line terminals in the upper part and a removable switch having line terminals in the lower part, and means to isolate the upper part of the cell and the line terminals therein from the lower part of the cell comprising complemental swinging shutter members which are located under the line terminals and are hinged to opposite walls of the cell and swing concurrently from a vertical position upwardly into a horizontal position where their confronting free ends are juxtaposed beneath the line terminals, the interior of the cell being vertically unobstructed downwards of the line terminals when the shutters are in vertical position.

1,866,365. ELECTRIC SWITCH GEAR AND SWITCH AND DOOR LOCKING MECHANISM. FREDERICK H. MACNEIL, Boston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Oct. 31, 1929. Serial No. 403,890. 33 Claims. (Cl. 175—298.)



1. In an electric switch gear, the combination of an enclosing cell having a bus compartment and a switch compartment, a main switch and an isolating switch in said switch compartment, means to raise and lower said main switch to close and open said isolating switch, a bus in said bus compartment, a disconnecting switch in said bus compartment for connecting said main and isolating switches with said bus compartment, a door for said bus compartment, a lock for said door, and locking mechanism for said raising and lowering means having means controlling said lock of said door.

1,866,366. HEAT REGULATOR FOR LEERS. VERGIL MULHOLLAND and WILLIAM T. HONISS, West Hartford, Conn., assignors to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed June 18, 1927. Serial No. 199,823. 2 Claims. (Cl. 49—47.)



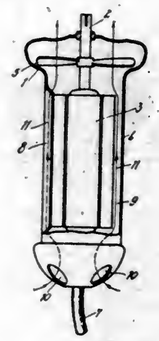
1. A leer for annealing glassware, comprising an elongate tunnel, a reticulated conveyor belt for supporting articles of glassware and moving them through said tunnel, means for supporting said belt, heating means below said belt, an elongate temperature responsive element located immediately below said belt and extending transversely of said tunnel substantially from side to side thereof, said element being equally responsive to thermal conditions over substantially its entire length, and means for controlling said heating means in response to said element, whereby said heating means are controlled in response to the integrated effect of thermal conditions transversely of the leer.

1,866,367. APPARATUS FOR HEAT REMOVAL BY MERCURY. ANTHONY J. NERAD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Continuation of applications Nos. 226,246, filed Oct. 14, 1927, and 473,403, filed Aug. 6, 1930. This application filed Jan. 14, 1932. Serial No. 586,637. 9 Claims. (Cl. 122—32.)



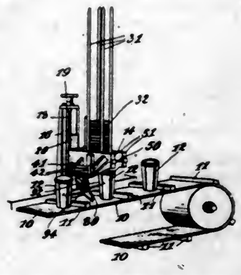
1. A heating apparatus comprising a drum and a plurality of tube units, each tube unit comprising an outer tube, a plurality of inner tubes, and a secondary heat-conducting fluid in the outer tube for conveying heat from the outer tube to the inner tubes, conduits connecting the inner tubes of each tube unit to said drum, and conduit means for conveying fluid to said inner tubes.

1,866,368. ELECTRIC TOOL. ALFRED OLDENBURG, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 31, 1930, Serial No. 458,017, and in Germany June 6, 1929. 4 Claims. (Cl. 172—36.)



3. In an electric tool a casing of the type adapted to be held in the hand of an operator and having a plurality of relatively narrow inwardly-extending corrugations, end shield bearing brackets at the two ends of the casing having openings therethrough, a motor structure in the casing including a stator engaging the corrugations of the casing and held thereby in proper operative position, a rotor and a rotor shaft supporter by the end shield bearing brackets, a fan on the rotor shaft for forcing air through the end shield bearing brackets and the casing.

1,866,369. PACKAGE ASSEMBLING MACHINE. ABRAHAM PODEL, Long Island City, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed July 15, 1926. Serial No. 122,516. 21 Claims. (Cl. 226—80.)

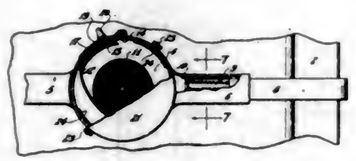


1. In a machine of the class described, the combination of an inclined plane adapted to receive a cap, a pivoted arm adapted to engage the lower edge of said cap and hold it on said plane, and means for moving a vessel into engagement with the lower edge of said cap to remove it from said plane, said pivoted arm being raised thereby to engage the cover portion of said cap and press it downwardly on said vessel.

21. In a machine of the class described, the combination of a support for a stack of caps, means for moving vessels under said support, oscillating devices having a plurality of fingers thereon adapted to engage said stack

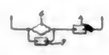
above the bottom cap thereof to raise said stack without disturbing said bottom cap, and means operated responsively to the vessel moving under said support for moving said bottom cap along said support into position for engagement with a vessel.

1,866,370. HYGIENIC COLLAR STRIP CONTAINER FOR ATTACHMENT TO BARBERS' CHAIRS. GEORGE POTTERN, Springfield, Mass. Filed Dec. 20, 1928. Serial No. 327,247. 2 Claims. (Cl. 242—55.5.)



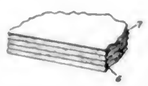
2. An attachment for barbers' chairs, comprising a cover with an opening for withdrawing the end of a strip of paper, a base member, means for removably securing the cover to the base member comprising plates on the base member and spaced from the edge of the base member, thumb screws rotatably connected to the cover, and threaded into the plates, the cover having slots in its edge for receiving the screws, whereby, when the edge of the cover is inserted between the plates and the edge of the base member and the screws are tightened, the cover is secured to the base member.

1,866,371. CIRCUIT INTERRUPTING SYSTEM. DAVID C. PRINCE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 1, 1929. Serial No. 396,548. 8 Claims. (Cl. 175—294.)



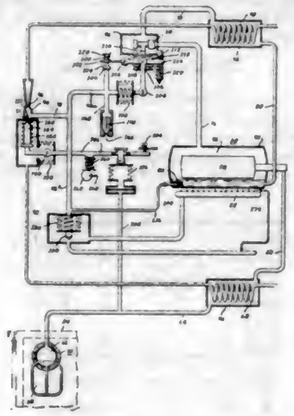
1. A circuit interrupting system comprising in combination, a main circuit breaker for normally interrupting the circuit, an auxiliary circuit interrupting device having an interrupting capacity comparable with that of said main breaker, and means for inserting said auxiliary device in the circuit in series with said breaker only after predetermined opening of said breaker, the circuit being open and normally interrupted by said breaker at said predetermined opening.

1,866,372. CELLULOSE RESIN PRODUCT AND METHOD OF ITS PREPARATION. HARRY CLAYTON ROHLFS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 9, 1928. Serial No. 253,181. 6 Claims. (Cl. 154—2.)



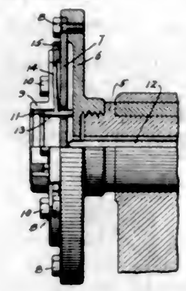
1. The method of cementing together a cellulose material which consists in surface coating said material with an alkyd resin in the B-stage superimposing material thus coated and subjecting the same to pressure at a temperature sufficiently high to produce a coherent, unitary structure.

1,866,373. REFRIGERATING APPARATUS. HARRY F. SMITH, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 30, 1929. Serial No. 396,230. 3 Claims. (Cl. 62—5.)



1. Apparatus of the character described comprising a normally closed pressure responsive actuator, means for reducing the pressure within the actuator including an orifice and means for discharging a jet of liquid into the orifice, and means for insuring continuous contact between the jet and a wall of the orifice including means responsive to a predetermined low pressure within the actuator for admitting gas to contact with the jet.

1,866,374. CHUCK. JOHN W. SMITH, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Oct. 27, 1930. Serial No. 491,565. 6 Claims. (Cl. 279—46.)



3. In a diaphragm chuck, a chuck body, a diaphragm thereon, chuck jaws on said diaphragm, means for flexing said diaphragm to move said chuck jaws, work stop means movable relatively to said chuck body by a work piece when moved into chuck jaw engaging position, for the purpose described.

1,866,375. WINDOW WIPER. RALEIGH J. SPINKS, Chicago, Ill. Filed Apr. 9, 1930. Serial No. 442,779. 6 Claims. (Cl. 15—252.)

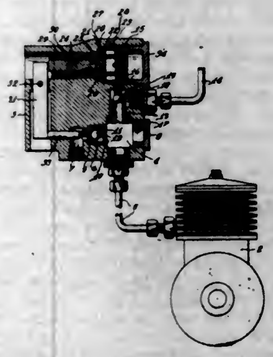
2. A device for wiping the pane of a window including a rotatable post mounted in the frame of said window, said post including a finger extending over said pane in spaced relation therewith, a wiping element, a rod slidably connected to said wiping element, means securing said wiping element to one end of said rod to hold said wiping element against sliding movement therealong, said finger having an opening therein spaced from the free end thereof, and means on the end of said rod opposite the end connected to said wiping means and adapted to be extended through said opening in said finger to detachably connect said rod to said finger, the free end of said finger engaging said rod intermediate the connection of said rod to said finger structure and the connection of said rod to urge said wiping means into engagement with said pane.



1,866,376. PROCESS OF TREATING STEEL SHEETS. JOHN HOMER STEELE, Wyandotte, Mich., assignor to Michigan Steel Corporation, a Corporation of Delaware. Filed Oct. 28, 1930. Serial No. 491,811. 5 Claims. (Cl. 29—18.)

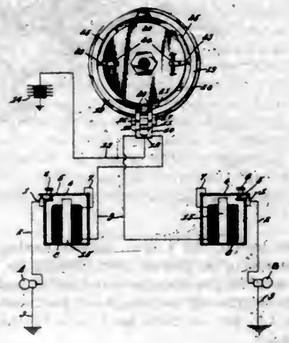
1. In the manufacture of metal sheets, the step of subjecting the sheets to a roller leveling operation and then to a cold rolling operation, between the hot rolling operation and the normalizing treatment.

1,866,377. PRESSURE REGULATOR. FRANK B. STOVER, Detroit, Mich., assignor to Sky Specialties Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 22, 1931. Serial No. 510,487. 10 Claims. (Cl. 137—153.)



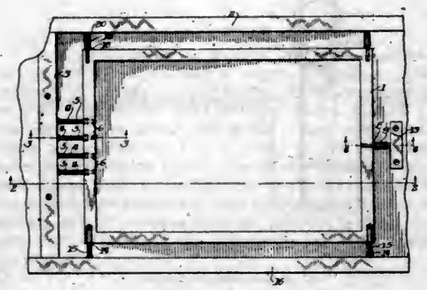
1. In combination with a fluid pump and a receiver, a pressure regulator having a relief opening, said regulator having an intake connected to said pump and an outlet connected to said receiver, a normally open valve adapted to govern communication between said intake and relief opening, said valve being positioned to be moved from open to closed position by pressure in said intake, means exposed to said outlet adapted to open said valve at a given pressure in the outlet, the connections from said regulator to said pump and receiver constituting the sole means of communication between the pump and the receiver.

1,866,378. CIRCUIT CONTROLLER. ROBERT G. TUGGLE, Peterstown, W. Va. Filed Nov. 5, 1929. Serial No. 404,928. 1 Claim. (Cl. 200—59.)



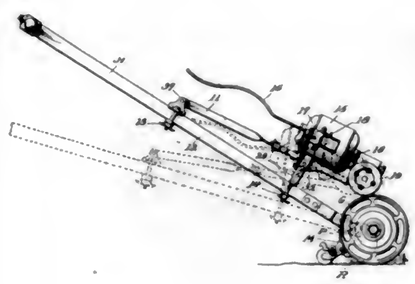
In a device of the kind described, a disc adapted to be actuated by a steering wheel shaft, spring tension dogs pivoted at opposite points on the disc, rack members engaged by the dogs and a normally closed electric switch having levers connected with the racks and actuated thereby to open the switch.

1,866,379. CHASE FOR PRINTING PRESSES. EDWARD O. VANDERCOOK, ROBERT O. VANDERCOOK, FRED R. VANDERCOOK, and DAVID D. VANDERCOOK, Chicago, Ill., assignors to Vandercook & Sons, Chicago, Ill., a Partnership. Filed May 26, 1927. Serial No. 194,267. 4 Claims. (Cl. 101—394.



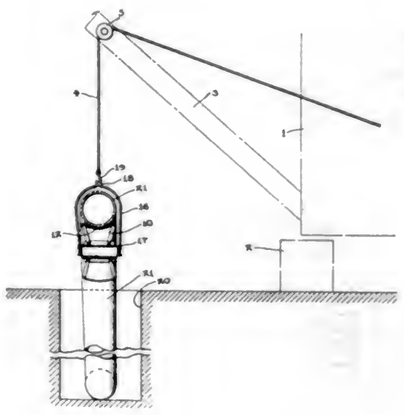
1. In a device of the character described the combination of a threaded adjusting element and an outwardly projecting spring controlled pin cooperating therewith for adjustably holding a member in a desired position.

1,866,380. LAWN MOWER. ALBERT G. WAGNER, Cincinnati, Ohio, assignor to The Glow Electric Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 8, 1930. Serial No. 487,328. 18 Claims. (Cl. 56—26.)



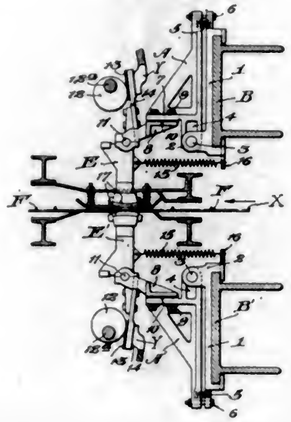
1. An attachment, for a lawn mower having a movable handle, comprising a power unit, means to detachably mount said unit on the lawn mower handle, and means, on said handle, effective by movements of the handle, to apply and remove the power from said unit to the mower to propel the same.

1,866,381. PIPE LAYING APPARATUS. CLARENCE F. WARD, Birmingham, Ala. Filed May 1, 1931. Serial No. 534,408. 9 Claims. (Cl. 214—1.)



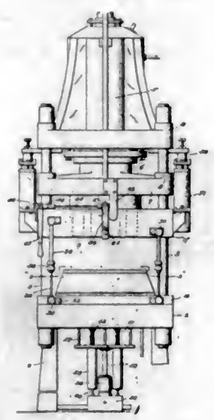
1. Apparatus for laying pipe lines comprising a frame, an endless conveyor operatively carried on said frame, means on said conveyor for progressively engaging a portion of the under-surface of a pipe line, means for suspending said frame over a ditch, and means for moving said frame longitudinally of said ditch under said pipe line.

1,866,382. ELECTRODE MOUNTING FOR WELDING MACHINES. HERBERT E. WHITE, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed Dec. 24, 1926. Serial No. 156,886. 14 Claims. (Cl. 219—4.)



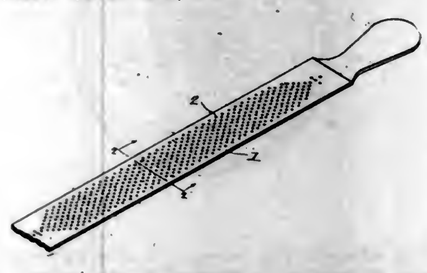
1. In a machine for welding wire fabric, an electrode mounting including a pair of cooperating electrode members, a pair of electrode brackets carrying said electrodes and pivotally mounted on the machine, and means engaging said brackets for yieldingly forcing said electrodes toward each other.

1,866,383. HYDRAULIC PRESS. ABRAM C. WISNER, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich. Filed Sept. 8, 1928. Serial No. 304,644. 13 Claims. (Cl. 18—17.)



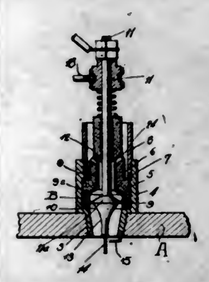
1. A hydraulic press including a separable mold having a mold cavity and composed of a plurality of separable sections, and a vertically movable chase surrounding the separable mold for holding the sections in molding position, said mold and chase having cooperating inclined faces effecting a wedging action of the chase on the mold to grip and clamp the said mold sections, the said chase and mold being provided at the top and bottom of the said inclined faces with short vertical faces.

1,866,384. STROP. ANTHONY ABRANATHY, Philadelphia, Pa., assignor of one-half to Anthony Grigal, Philadelphia, Pa. Filed Mar. 13, 1930. Serial No. 435,603. 2 Claims. (Cl. 51—200.)



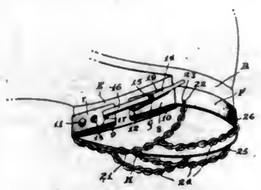
1. A razor strop comprising a strip of leather affording an extended stropping surface, said surface having inserted therein a plurality of plugs of leather the exposed surfaces of which extend across the grain of the leather and are substantially flush with the surface of the holding strip.

1,866,385. VENTABLE PRIMABLE SPARK PLUG. EARL B. ANDERSEN, Salinas, Calif. Filed Jan. 20, 1930. Serial No. 422,142. 1 Claim. (Cl. 123—169.)



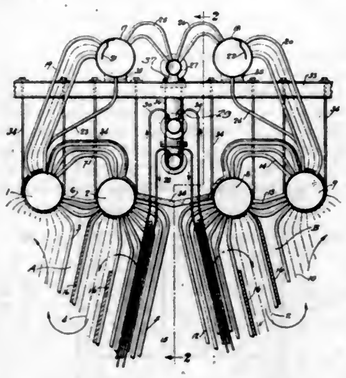
In a spark plug, a plug body, an insulator element within the body, the lower end of the insulator element contacting the body, the intermediate and upper portions of the insulator element being successively annularly reduced, a cylindrical priming cup and guard mounted in the upper end of the body and engaged with the lower end of the insulator element at the base of the annularly reduced intermediate portion with its upper end terminating adjacent the upper end of the insulator element, said cup and guard being spaced from the intermediate portion of the insulator element to form a pocket, said insulator element having a longitudinal bore therethrough annularly enlarged over substantially half its length at the lower end and the lower end being flared outwardly to provide a valve seat, a metallic lining for the bore and a valve seat, a valve stem frictionally engaged with the upper portion of the bore and freely passing through the bore enlargement and valve seat, a valve carried by the lower end of the stem to form an electrode, and the insulating member having vent openings therein above said pocket at the juncture of the successively annularly reduced portions forming communication between the interior of the element and a space between the cup and insulator element at the upper end of the pocket with the wall of the cup forming the guard spaced from the vent opening.

1,866,386. NONSLIP ATTACHMENT FOR SHOE HEELS. GEORGE ANTZ, Brooklyn, N. Y. Filed Nov. 25, 1930. Serial No. 498,134. 2 Claims. (Cl. 36—64.)



1. In a device of the character described, a band element comprising two sections pivotally connected with each other at one end on a horizontal axis to permit relative vertical swinging movement of the sections whereby said band may be adjusted to compensate for variations in the types of heels and to intimately engage with the marginal walls of shoe heels of either the straight or flared types, and inwardly directed terminals at the free ends bent upon themselves to define flatly contacting plies for increasing the rigidity of the terminals, and means carried by said terminals for contracting said element around the heel.

1,866,387. SUPERHEATER BOILER. WILBUR H. ARMACOST, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Mar. 28, 1929. Serial No. 350,566. 7 Claims. (Cl. 122—478.)

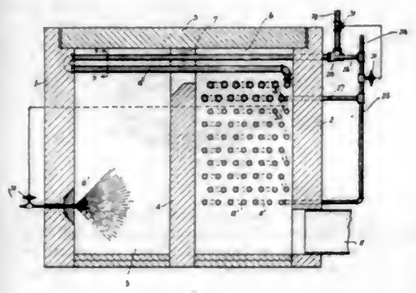


1. A superheater boiler comprising a pair of steam generating units each having a steam and water drum, a superheater having an inlet header, an intermediate header connected to the inlet header, means located above the level of the steam and water drums and forming a steam separating space, a plurality of relatively flexible tubes connecting the steam space of each of said drums and said means, and a plurality of relatively flexible tubes connecting said means and said intermediate header, there being a greater number of tubes between said drums and said means than between said means and said intermediate header.

1,866,388. HEAT EXCHANGE. WILBUR H. ARMACOST, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed May 16, 1929. Serial No. 363,677. 13 Claims. (Cl. 122—356.)

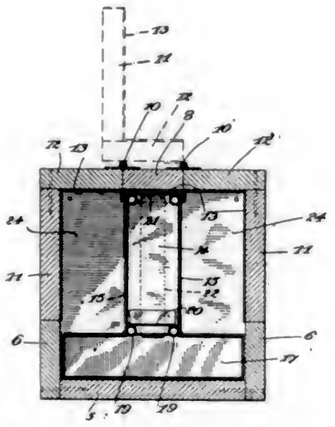
1. In the operation of continuous flow fluid heaters, that improvement which consists in by-passing a part of the fluid to be supplied to the heater and passing said part

through a portion of the heater in heat exchange relation with the fluid being heated and out of contact therewith



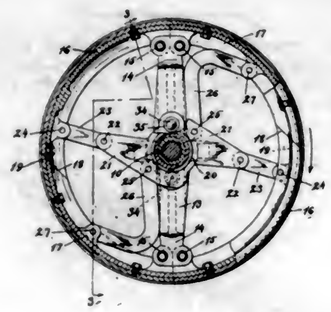
and mixing said part with the fluid from which it was separated while in a confined stream and before the fluid reaches its final temperature.

1,866,389. REFRIGERATING DEVICE. OTTO BAHLS, Long Island City, N. Y. Filed Jan. 24, 1929. Serial No. 334,738. 3 Claims. (Cl. 62—75.)



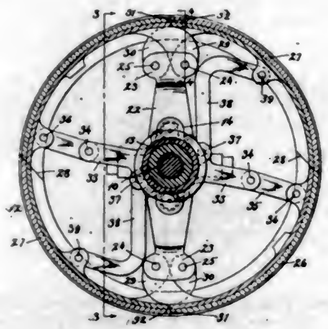
1. A refrigerating device including an elongated body structure having a relatively narrow longitudinally extending bar at the top thereof and angular closure members hinged to opposite edges of said bar and each having a top part and a side part, a relatively narrow longitudinally extending refrigerant receiving chamber wholly positioned within the plane of said central top bar of the body structure and of uniform dimensions throughout its depth, refrigerant supporting means substantially closing the lower end of said chamber, a second chamber disposed within said body structure and substantially enclosing said first named chamber, the corresponding walls of said chambers being spaced apart, and the space between said walls adapted to receive a residual of the refrigerant in the first named chamber.

1,866,390. SEGMENTAL DRUM. HENRY C. BOSTWICK, Akron, Ohio, assignor to The Akron Standard Mold Co., Akron, Ohio, a Corporation of Ohio. Filed May 6, 1931. Serial No. 535,455. 10 Claims. (Cl. 154—9.)



2. A collapsible form having a movable segment, and means displaceable by movement of said segment for yieldingly latching it in a fixed position.

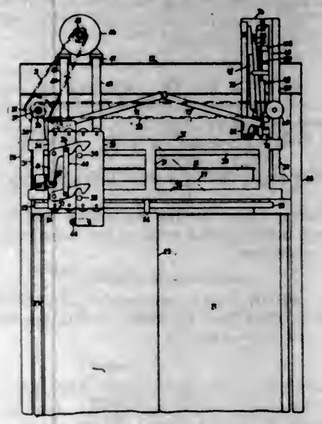
1,866,391. HINGED FORMING DRUM. HENRY C. BOSTWICK, Akron, Ohio, assignor to The Akron Standard Mold Co., Akron, Ohio, a Corporation of Ohio. Filed May 6, 1931. Serial No. 535,456. 3 Claims. (Cl. 154—9.)



1. A collapsible form comprising a supporting structure, and adjacent form segments pivoted to said structure on different centers and having crossed hinge portions.

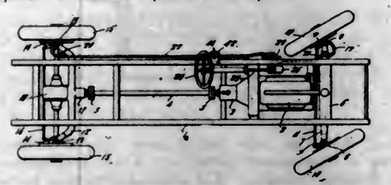
1,866,392. CLOSURE OPERATING MECHANISM. THOMAS BRADY, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 22, 1930. Serial No. 438,024. 15 Claims. (Cl. 187—52.)

1. Closure operating mechanism comprising; a driving member guided for movement in opposite directions relatively to the opening closed by said closure; a second member also guided for movement in opposite directions relatively to the opening closed by said closure, said second member being positioned in the path of movement of said driving member as it is moved in one direction but being disconnected therefrom when said closure is in closed position; means connecting the closure to said second member; means for moving said driving member in said opposite direction, said driving member when moved in the direction of opening movement of the closure pushing said second member in said direction to open said closure; and means for coupling said second member to said



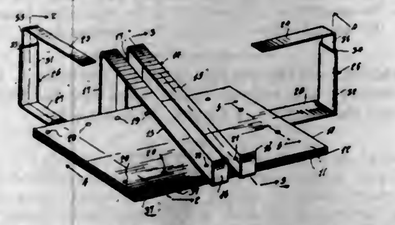
driving member during movement of said driving member in said opening direction, said driving member, upon movement by said moving means in the closing direction of said closure, acting through said coupling means to pull said second member therewith to close said closure.

1,866,393. STEERING APPARATUS. ROGER BROOKS, Washington, D. C. Filed Feb. 6, 1931. Serial No. 514,033. 3 Claims. (Cl. 280—91.)



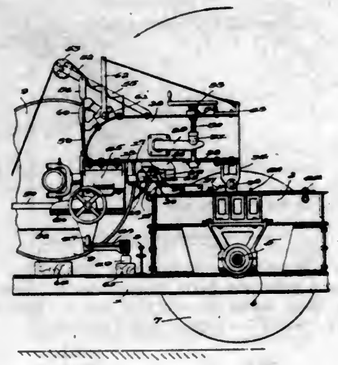
1. In a steering apparatus for a vehicle having a lever pivoted on the vehicle and a rod connected to said lever by a connection slidable longitudinally of the lever, electric means for sliding said connection comprising a motor and a plurality of contact bars associated with said motor, said contact bars being positioned in said lever and contacting with the connection for sliding it to any desired position.

1,866,394. BOOK SUPPORT. MARY AGNES BROWN, Nashville, Tenn. Filed Feb. 12, 1931. Serial No. 515,852. 4 Claims. (Cl. 45—57.)



1. A book support having a base, means thereon for engagement by the back of the book, and book leaf hold-down means slidably adjustable on the base, said hold-down means comprising relatively slidable sections of adjustment according to the thickness of the book engaged thereby.

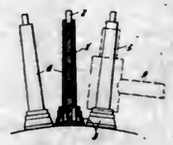
1,866,395. PORTABLE BAND-SAW MILL. GEORGE E. CAMPBELL, Chattanooga, Tenn., assignor to The Wheland Company, Chattanooga, Tenn., a Corporation of Tennessee. Filed Apr. 14, 1931. Serial No. 530,086. 16 Claims. (Cl. 143—17.)



12. In a band saw mill, the combination of a plurality of beams arranged in approximately parallel relation, a saw mill base supported upon the beams, a band wheel carried by the base, a second band wheel supported upon the base and adapted to receive a band saw which extends around the lower band wheel, the beams extending to positions beside the base in position to receive the second band-wheel supporting means for the upper band wheel and pivotally secured to the base, to permit swinging of the upper band wheel to a lowered position beside the base and into a supported position upon the beams, and a track for a saw mill carriage extending transversely across and supported upon the beams, each of the beams extending throughout the width of the track and base.

13. In a band saw-mill, the combination of a base, a lower band wheel supported by the base in fixed position relative thereto, an upright support carried by the base, a top band wheel carried by said upright support, and pivotal means connecting the upright support with the base for swinging movement relative thereto to an approximately horizontal position.

1,866,396. PROCESS OF PERMANENTLY WAVING HAIR AND APPARATUS THEREFOR. RAYMOND CASTELLA and JEAN NANTUA, Lausanne, Switzerland. Filed Feb. 24, 1930, Serial No. 430,776, and in Switzerland Apr. 9, 1929. 5 Claims. (Cl. 132—36.)

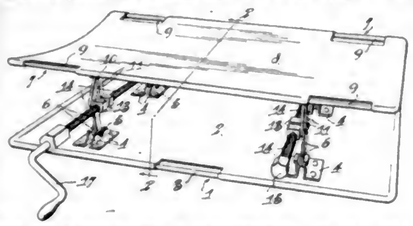


1. In hair-waving apparatus, the combination of a cup-shaped protector comprising at least one disk of yielding material having a hole with radial notches radiating therefrom for the passage of the hair, and a tubular moistener extending into said protector, and forming an annular space between said moistener and protector for the introduction of a heating element.

1,866,397. HOSPITAL DEVICE OR APPLIANCE. LULA J. CLEWLEY, Burlington, Vt. Filed Apr. 13, 1931. Serial No. 529,765. 9 Claims. (Cl. 5—327.)

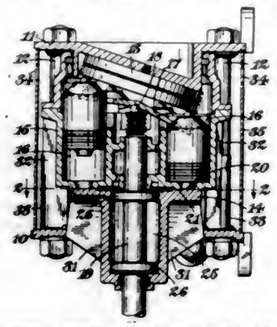
1. A device of the character stated comprising a flat base adapted to be set on a bed, a pan designed to fit the

trunk of a patient, and mechanical connections between the pan adjacent its ends and the base and including



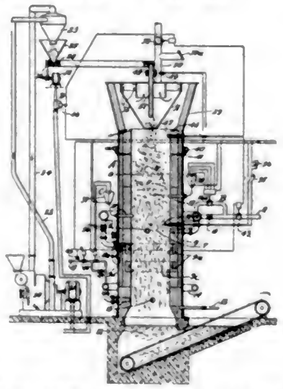
means by which either or both ends of the pan may be raised and lowered at will, and the pan held at any angle to the base at which it is placed.

1,866,398. COOLING OF ROTARY ENGINES. JOHN FREDERICK NEVINSON CRAIG, Broxbourne, England. Filed Mar. 4, 1930, Serial No. 433,128, and in Great Britain Mar. 11, 1929. 7 Claims. (Cl. 123—43.)



1. In a rotary engine of the type described the combination of a framework comprising an end-plate, a valve-plate supported by the end-plate but spaced therefrom to provide air-passages between the back of the valve-plate and the end-plate, a cylinder-block, and fan-blades carried upon the cylinder-block and extending outside of and axially beyond the edges of the valve-plate into line with said air passages.

1,866,399. CONTINUOUS PROCESS FOR PRODUCING HIGH HEATING VALUE GAS. WILLIAM L. DE BAUFRE, New York, N. Y. Filed July 9, 1927. Serial No. 204,445. 1 Claim. (Cl. 48—206.)



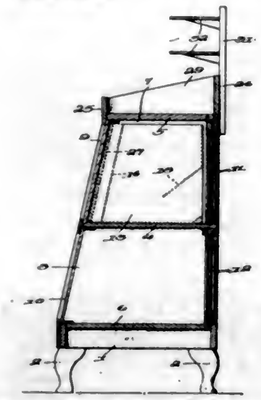
A process of making combustible gas: which comprises regularly admitting finely divided coal into the top of a gas generating chamber of a gas producer, admitting oxygen to an intermediate portion of the gas generating chamber, admitting steam at the bottom portion of the gas generating chamber, admitting oil at the upper portion of the gas generating chamber to enrich the generated gas, and automatically controlling the admission of the oxygen and steam by the temperature in the gasification zone in the gas generating chamber.

1,866,400. SAFETY PAPER. WILLIAM N. DOUSHKESS, Easton, Pa., assignor, by mesne assignments, to Milton C. Johnson Company, New York, N. Y., a Corporation of New York. Filed Mar. 6, 1928. Serial No. 259,594. 14 Claims. (Cl. 91—67.95.)

2. A safety paper having a leuco indamine applied thereto.

14. A safety paper having protective indicia thereon, such indicia being printed with an ink containing a leuco indamine compound.

1,866,401. SHOW CASE. ALBERT H. EHRLICH, St. Joseph, Mo. Filed Dec. 17, 1930. Serial No. 503,025. 1 Claim. (Cl. 312—119.)



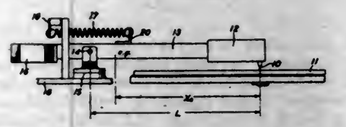
In a show case, the combination with a compartment having a transparent front and a non-transparent top, of a display container of a size and contour in vertical cross section approximately equal to the vertical area of the compartment to fit therein, said container having a bottom, side walls extending upwardly therefrom, a front wall extending upwardly from the bottom to the upper edges of the side walls and spaced rearwardly from the forward edges of the side walls, a transparent panel supported at the forward edges of the side walls, and a back wall extending downwardly from the upper edges of the side walls to a point approximately midway of the height of the side walls thence inclined downwardly and forwardly to provide an opening in the lower portion of the back of the container, the top of said container being open to be filled to its upper edges, and being arranged in the compartment in position to be concealed from view by the nontransparent top of the compartment.

1,866,402. WINDSHIELD-WIPER HOLDER. ALFRED ELLERBY, Los Angeles, Calif. Filed Apr. 23, 1931. Serial No. 532,259. 4 Claims. (Cl. 248—39.)



1. A holder for a windshield-wiper comprising a resilient rubber vacuum cup having a bracket formed integral therewith, the bracket being attached to the back of the cup and extending upwardly with two sides, back and front walls, the front wall being concave in shape to accommodate the compressed cup, the top of the bracket being flat to form a support for a windshield-wiper blade, said concave curve of the front of the bracket being adapted to bring the inner edge of the flat horizontal surface of the bracket close to the windshield when the cup is compressed.

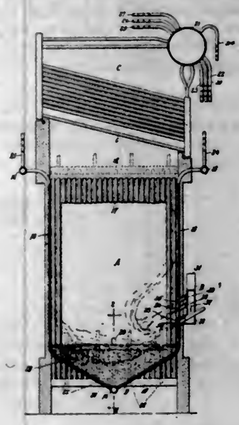
1,866,403. PHONOGRAPH RECORDER AND REPRODUCER ARM. LLOYD A. ELMER, West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 22, 1931. Serial No. 552,371. 8 Claims. (Cl. 274—1.)



3. A stylus actuated translating device for phonograph records, a record, and means for counter-balancing the lateral component of the force of friction between the stylus and the record.

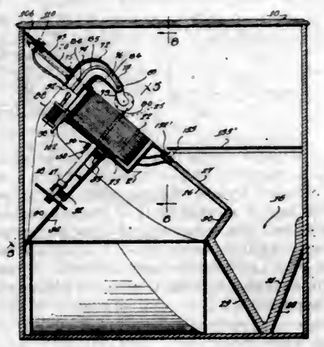
8. A stylus actuated translating device for phonographs, an arm for the translating device pivotally mounted, a disc type record cooperating with the stylus, and a mass of predetermined weight and distribution secured to the arm such that the center of percussion of the combined translating device, arm and mass falls over the pivot when the stylus is taken as the axis of rotation.

1,866,404. FINELY DIVIDED FUEL BURNING FURNACE. MARTIN FRISCH, New York, N. Y., and ERIC LUNDGREN, Frederick, Md., assignors to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 8, 1929. Serial No. 330,017. 22 Claims. (Cl. 122—235.)



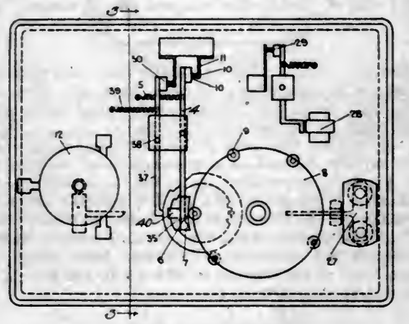
1. In a pulverized fuel fired furnace, the combination of a combustion chamber, steam evaporating tubes largely defining said chamber and including relatively closely spaced steam evaporating tubes defining a bottom for the chamber constructed and arranged to retain a stagnant bed of slag, means for introducing the fuel with carrying air into said chamber, and air nozzles for introducing additional air into the chamber, said fuel introducing means being directed toward the bed of slag retained in the bottom of the chamber.

1,866,405. PHONOGRAPH. JUAN BEGOVICH Y GARCIA, Santa Julia, Mexico City, Mexico. Filed Jan. 9, 1928, Serial No. 245,524, and in Mexico Oct. 22, 1927. 37 Claims. (Cl. 274—10.)



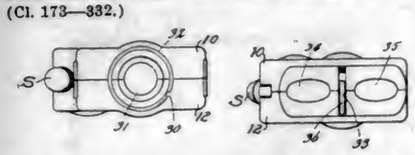
8. In a phonograph, an inclined record supporting turntable, an axially fixed centering spindle projecting through said turntable for holding a plurality of superimposed record disks thereon, reproducing means including a stylus adapted to travel in the sound groove of a record arranged on said turntable, means for elevating the stylus to free it from the record, and means for releasing a record from operative position with respect to the spindle to permit it to move from such position by gravity.

1,866,406. ELECTRIC SWITCH. ROBERT CONSTANTINE GRASEBY, Westminster, London, England. Filed Aug. 26, 1929, Serial No. 388,556, and in Great Britain Sept. 29, 1928. 4 Claims. (Cl. 177—380.)



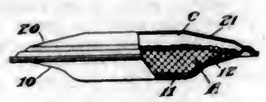
1. An electric circuit make-and-break device adapted to produce dot-and-dash signals comprising a pair of electric contacts, means to close the said contacts, the said means including a long cam and a short cam, a disc pivotally mounted adjacent to the cams with its periphery close to but spaced from them, contacting members all of similar shape mounted at predetermined intervals upon opposite sides of the disc, the relationship of the contacting members and the cams being such that on rotation of the disc all those contacting members on one side of the disc will in turn contact with the long cam to produce dash signals, and those contacting members on the other side of the disc will in turn contact with the short cam to produce dot signals, and means to rotate the disc.

1,866,407. SECURING MEANS FOR ELECTRICAL CONNECTERS. MONROE GUETT, Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Nov. 6, 1930. Serial No. 493,868. 3 Claims. (Cl. 173—332.)



1. An electrical connecting device comprising a casing formed of a plurality of parts and having a substantially circular channel formed therein adjacent to one end of said device and a substantially U-shaped channel formed therein adjacent the other end of said device, portions of each of said channels being located in each of said parts, a spring ring engaging in said circular channel and a spring clip engaging in said U channel whereby said parts are held together.

1,866,408. FOOD PACK. JOHN M. HART, New York, N. Y., and MERLE P. CHAPLIN, Waterville, Me., assignors, by mesne assignments, to Fidelity Trust Company, trustee, Portland, Me., a Corporation of Maine. Filed Nov. 11, 1929. Serial No. 406,257. 14 Claims. (Cl. 229—2.5.)



1. As a single-service fibre pack for a previously cooked pie or the like, a bottom member including an absorbent receiving portion adapted to receive the article and a flange extending outwardly and thence upwardly in protective relation to the upper edge of the food article, and an overlying cover member having a seating portion disposed for marginal interlock with said flange beyond the upper edge of said food article and out of contact therewith.

1,866,409. TREATING FERMENTED MATERIALS. THOMAS DANIEL KELLY, London, England. Filed Aug. 15, 1927, Serial No. 213,212, and in Great Britain July 29, 1927. 3 Claims. (Cl. 167—13.)

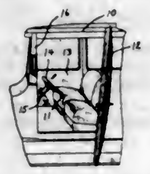
1. A process for solidifying ethyl alcohol to render same suitable for use as a preservative of medicinal or food products, comprising adding to the alcohol a small proportion of glycerol, and a small proportion of calcium phosphate to check any tendency of the material to acidify, solidifying said mixture by adding thereto a material capable of reducing it to a jelly-like form, raising the temperature of the mixture to between 50 and 80° C., and then cooling the mixture.

1,866,410. TRANSPARENT SHEET MATERIAL. EDOUARD M. KRATZ, Chicago, Ill., assignor to Marsene Products Co., a Corporation of Illinois. Filed Aug. 15, 1927. Serial No. 213,225. 7 Claims. (Cl. 106—39.)

2. Transparent sheet material, comprising gelatine, ethylene glycol, and a grease dispersing agent.

1,866,411. INDICATING SIGNAL DEVICE. JOHN LAUCUS and ARTHUR C. GRUNOW, Chicago, Ill.; said Grunow assignor to Henry P. Wray, Chicago, Ill. Filed Dec. 4, 1929. Serial No. 411,582. 1 Claim. (Cl. 116—52.)

A signal device for automotive vehicles comprising, a clamping member adapted to be mounted on the steering column of the vehicle, a spring actuated plunger mounted in said clamping member including a portion providing a handle, a substantially U-shaped member connected to said plunger, a bracket having recesses therein adapted to receive the arms of said U-shaped member, a spring having one end thereof connected to said U-shaped member, a rod member integral with one arm of said U-shaped member and rotatably mounted on the chassis of the

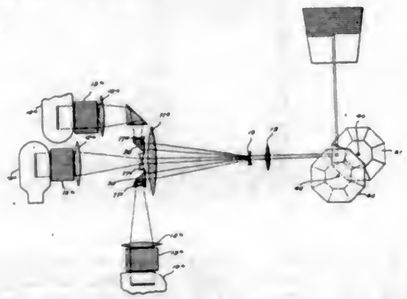


vehicle, and means including links adapted to provide pivotal connection between said rod and an indicating member, said spring normally acting to retain said indicating member in non-signalling position, whereby said spring actuated plunger may be manually depressed by the driver of the vehicle to depress said U-shaped member against said spring whereby said rod and said links may be actuated to move said indicating member into signalling position.

1,866,412. PROCESS FOR ENHANCING THE ACTION OF PERCOMPOUNDS WHICH ARE DECOMPOSED BY CATALASES UPON ANIMAL OR VEGETABLE PRODUCTS. GERRIT VAN DER LEE, Deventer, Netherlands, assignor to Naamlooze Vennootschap Noury & Van Der Lande's Handelmaatschappij, Deventer, the Netherlands. Filed Nov. 21, 1927, Serial No. 234,921, and in the Netherlands Nov. 25, 1926. 2 Claims. (Cl. 83—42.)

1. In the process of improving animal or vegetable substances by treatment with peroxide compounds which peroxide compounds are normally capable of being decomposed by catalases with liberation of molecular oxygen, the improvement which comprises effecting such treatment in the presence of a small quantity of an agent which is a chemical compound containing an acid radical, which compound has a strong oxidizing action and is capable of largely preventing the action of catalases upon the peroxide compound.

1,866,413. TELEVISION. STAVROS J. LIACOS, Brooklyn, N. Y. Filed Apr. 28, 1931. Serial No. 533,405. 20 Claims. (Cl. 178—6.)



1. A device for producing light images from a variable electrical potential which comprises a plurality of gaseous discharge lamps, means responsive to said varying potential for controlling the intensity of light emitted by each of said lamps so that the intensity from all will vary simultaneously, means for concentrating said light

from each lamp into a converging beam, means for condensing said beams into a single concentrated beam, and means for moving light of said beam over a predetermined path.

1,866,414. PROCESS FOR MAKING A CONCENTRATED COFFEE PRODUCT. EUGENE J. LORAND, State College, Pa., assignor to The Pennsylvania State College, State College, Pa., a Corporation of Pennsylvania. Filed June 13, 1928. Serial No. 285,199. 3 Claims. (Cl. 99—11.)

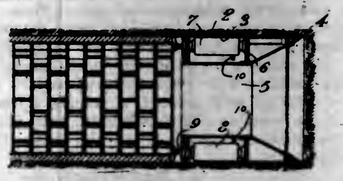
1. The process of preparing a concentrated soluble coffee extract, comprising heating ground roasted coffee beans with about four times their weight of anhydrous glycerine, at about 80-90° C., and filtering at an elevated temperature.

1,866,415. CONCENTRATED COFFEE PRODUCT AND PROCESS OF PREPARING IT. EUGENE J. LORAND, State College, Pa., assignor to The Pennsylvania State College, State College, Pa., a Corporation of Pennsylvania. Filed June 13, 1928. Serial No. 285,200. 12 Claims. (Cl. 99—11.)

3. A concentrated soluble coffee extract having the flavoring ingredients of coffee held in a mixture of sugars including a monosaccharose and a disaccharose.

5. The process of preparing a concentrated soluble coffee extract, comprising directly treating particles of the roasted coffee berry with a solution of a mixture of sugars, which act to catch and retain the characteristic flavoring ingredients of the coffee, the sugars remaining in the extract as part thereof.

1,866,416. APPARATUS FOR AND METHOD OF FORMING A TUNNEL. JOHN S. MACDONALD, Long Island City, N. Y. Filed Nov. 15, 1928. Serial No. 319,497. 2 Claims. (Cl. 61—85.)

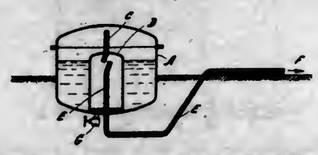


1. The method of constructing a concrete tunnel which comprises forming a tunnel and advancing a shield having a tail portion, successively placing in the tunnel rearwardly of the shield and in contacting relation to each other sections of a sectional form having the contour of the tunnel and of dimensions to provide a space between the outer walls of the form and the inner walls of the tunnel and the tail portion of the shield, placing concrete in the said space, advancing the shield by means which simultaneously engage the forward edge of the form and the concrete and, through the advancing means, applying pressure simultaneously to the concrete, to the form and to the shield, whereby the concrete is compressed and forced into the space left by the tail of the advancing shield and also into other cavities existing in the surrounding stratum simultaneously with the advancing of the sleeve and its tail portion.

1,866,417. PURIFICATION OF AQUEOUS LIQUIDS AND PARTICULARLY OF WASTE WATER FROM FACTORIES. ANTON MACKERT, Frankfort-on-the-Main, Germany. Filed Feb. 9, 1929, Serial No. 338,880, and in Germany Feb. 9, 1928. 6 Claims. (Cl. 210—9.)

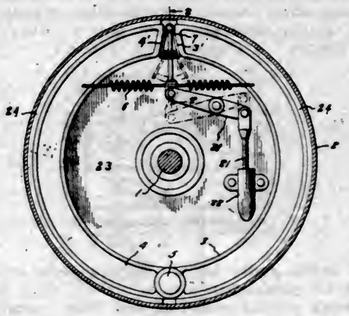
1. A process for purifying aqueous liquids, such as industrial waste waters, which comprises contacting the aqeous liquid with a highly porous solid adsorbent of the type of active carbon, removing adsorbed substances from the adsorbent by treatment with a liquid solvent and driving out the liquid solvent remaining in the adsorbent by scavenging with a gaseous medium.

1,866,418. CABLE IMPREGNATING APPARATUS. WALTER NEUHOLD, Berlin, Germany. Filed Dec. 16, 1929, Serial No. 414,609, and in Germany Dec. 20, 1928. 3 Claims. (Cl. 91—46.)



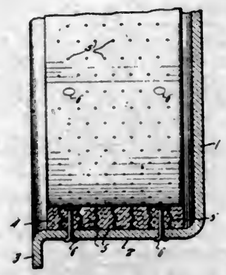
1. In an apparatus for impregnating cables having a saturation vessel for the cable, a displacer fitted in the said vessel, an evacuating connection for said vessel through said displacer and means within said displacer constructed to cooperate with said displacer for separating from the vapors drawn off during evacuation any particles of moisture and foam which may have been picked up.

1,866,419. BRAKE. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 15, 1929. Serial No. 347,395. 12 Claims. (Cl. 188—78.)



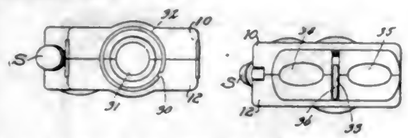
1. A braking means comprising a drum, means to engage the drum for retarding rotation thereof and a resilient wedge for actuating the drum engaging means.

1,866,420. BRAKE DRUM. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Dec. 12, 1930. Serial No. 501,862. 7 Claims. (Cl. 188—218.)



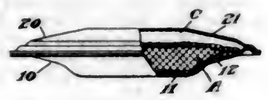
3. A brake drum comprising a metal braking flange, a molded non-metallic friction member secured to the flange and having metallic heat conductors extending therethrough.

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1. As a single-service fibre pack for a previously cooked pie or the like, a bottom member including an absorbent receiving portion adapted to receive the article and a flange extending outwardly and thence upwardly in protective relation to the upper edge of the food article, and an overlying cover member having a seating portion disposed for marginal interlock with said flange beyond the upper edge of said food article and out of contact therewith.

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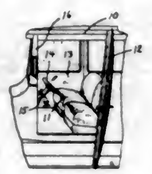
1. A process for solidifying ethyl alcohol to render same suitable for use as a preservative of medicinal or food products, comprising adding to the alcohol a small proportion of glycerol, and a small proportion of calcium phosphate to check any tendency of the material to acidify, solidifying said mixture by adding thereto a material capable of reducing it to a jelly-like form, raising the temperature of the mixture to between 50 and 80° C., and then cooling the mixture.

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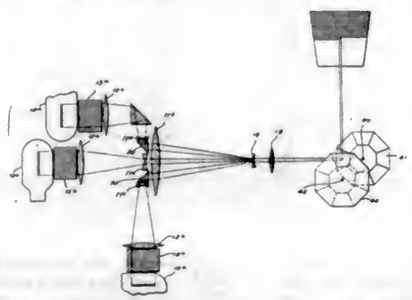


vehicle, and means including links adapted to provide pivotal connection between said rod and an indicating member, said spring normally acting to retain said indicating member in non-signalling position, whereby said spring actuated plunger may be manually depressed by the driver of the vehicle to depress said U-shaped member against said spring whereby said rod and said links may be actuated to move said indicating member into signalling position.

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1. In the process of improving animal or vegetable substances by treatment with peroxide compounds which peroxide compounds are normally capable of being decomposed by catalases with liberation of molecular oxygen, the improvement which comprises effecting such treatment in the presence of a small quantity of an agent which is a chemical compound containing an acid radical, which compound has a strong oxidizing action and is capable of largely preventing the action of catalases upon the peroxide compound.

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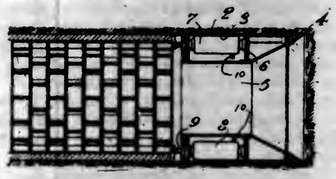
1. The process of preparing a concentrated soluble coffee extract, comprising heating ground roasted coffee beans with about four times their weight of anhydrous glycerine, at about 80–90° C., and filtering at an elevated temperature.

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3. A concentrated soluble coffee extract having the flavoring ingredients of coffee held in a mixture of sugars including a monosaccharose and a disaccharose.

5. The process of preparing a concentrated soluble coffee extract, comprising directly treating particles of the roasted coffee berry with a solution of a mixture of sugars, which act to catch and retain the characteristic flavoring ingredients of the coffee, the sugars remaining in the extract as part thereof.

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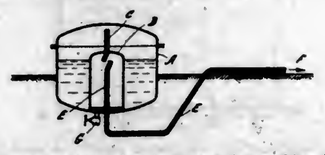


1. The method of constructing a concrete tunnel which comprises forming a tunnel and advancing a shield having a tail portion, successively placing in the tunnel rearwardly of the shield and in contacting relation to each other sections of a sectional form having the contour of the tunnel and of dimensions to provide a space between the outer walls of the form and the inner walls of the tunnel and the tail portion of the shield, placing concrete in the said space, advancing the shield by means which simultaneously engage the forward edge of the form and the concrete and, through the advancing means, applying pressure simultaneously to the concrete, to the form and to the shield, whereby the concrete is compressed and forced into the space left by the tail of the advancing shield and also into other cavities existing in the surrounding stratum simultaneously with the advancing of the sleeve and its tail portion.

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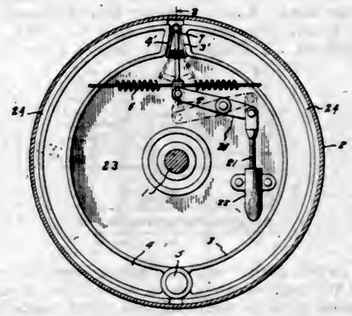
1. A process for purifying aqueous liquids, such as industrial waste waters, which comprises contacting the aqeous liquid with a highly porous solid adsorbent of the type of active carbon, removing adsorbed substances from the adsorbent by treatment with a liquid solvent and driving out the liquid solvent remaining in the adsorbent by scavenging with a gaseous medium.

1,866,418. CABLE IMPREGNATING APPARATUS. WALTER NEUHOLD, Berlin, Germany. Filed Dec. 16, 1929, Serial No. 414,609, and in Germany Dec. 20, 1928. 3 Claims. (Cl. 91—46.)



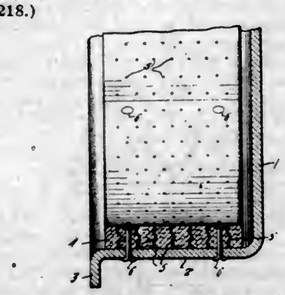
1. In an apparatus for impregnating cables having a saturation vessel for the cable, a displacer fitted in the said vessel, an evacuating connection for said vessel through said displacer and means within said displacer constructed to cooperate with said displacer for separating from the vapors drawn off during evacuation any particles of moisture and foam which may have been picked up.

1,866,419. BRAKE. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 15, 1929. Serial No. 347,395. 12 Claims. (Cl. 188—78.)



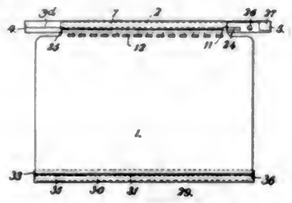
1. A braking means comprising a drum, means to engage the drum for retarding rotation thereof and a resilient wedge for actuating the drum engaging means.

1,866,420. BRAKE DRUM. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Dec. 12, 1930. Serial No. 501,862. 7 Claims. (Cl. 188—218.)



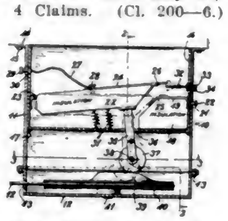
3. A brake drum comprising a metal braking flange, a molded non-metallic friction member secured to the flange and having metallic heat conductors extending therethrough.

1,866,421. VISIBLE INDEX AND THE LIKE. RICHARD FITZ POWER, Hampstead, London, England, assignor to Morland & Impey Limited, Northfield, Birmingham, England. Filed Nov. 16, 1929, Serial No. 407,774, and in Great Britain Dec. 31, 1928. 20 Claims. (Cl. 129—16.7.)



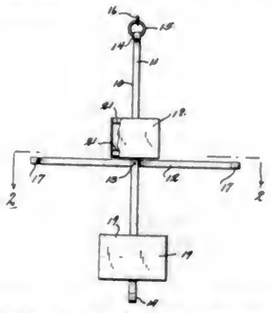
19. In combination, an index sheet or card having a continuous rib formed by a crease adjacent to and extending the length of the support edge of the card, and a support for said card, comprising a strip of material folded into a plurality of walls, of which one wall at least is provided with a continuous corresponding rib formed by a crease in the wall for the engagement by axial movement with said rib in the card, and an adjacent wall is disposed to hold the card rib interlockingly engaged with the support rib against unwanted transverse displacement while permitting relative axial movement between the card and the support.

1,866,422. ELECTRIC SWITCH DEVICE. NATE RALPH, Winona, Minn.; Laura J. Ralph administratrix of said Nate Ralph, deceased. Filed May 11, 1931. Serial No. 536,634. 4 Claims. (Cl. 200—6.)



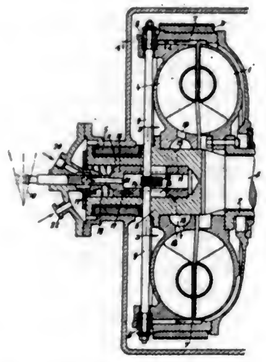
1. A switch device having relatively movable contacts adapted for engagement, a third contact, all of said contacts being serially mounted, said third contact being engageable by one of the first mentioned contacts through said relative movement and having a free end disposed in the path of said relative movement, said third contact being yieldable whereby it will be released with a snap action prior to engagement of the first mentioned contacts.

1,866,423. FRESH FLOWER DOOR BADGE. LEWIS EDWIN ROBERTS, Flint, Mich. Filed May 12, 1931. Serial No. 536,923. 1 Claim. (Cl. 47—41.)



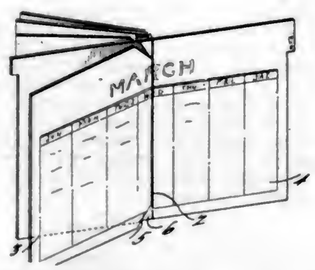
A door badge of the character described comprising a vertical bar, an eye member carried by one end of the bar, a ring disposed in said eye member, a horizontal bar, means for swingably securing the horizontal bar to said vertical bar intermediate the ends thereof, an upper receptacle mounted on said vertical bar above said horizontal bar, a lower receptacle mounted on said vertical bar below said horizontal bar, and means disposed within each of said receptacles whereby to hold flower stems in adjusted position within the receptacles.

1,866,424. EMPTYING DEVICE FOR LIQUID COUPLINGS. CARL SCHMIESKE, Bremen, Germany, assignor to Deutsche Schiff- und Maschinenbau Aktiengesellschaft, Bremen, Germany, a Corporation of Germany. Filed Jan. 10, 1930, Serial No. 419,916, and in Germany Jan. 8, 1929. 11 Claims. (Cl. 60—54.)



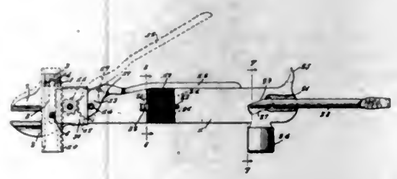
1. A liquid coupling of the Föttinger type, having driving and driven members coacting to form a liquid circulating chamber, said coupling having a liquid opening from said chamber at the periphery to permit emptying of said chamber, a rotatable valve having an axis extending radially with respect to the axis of the coupling, for closing said opening, a spindle extending radially of the coupling and connected to and coaxial with said valve for operating the latter, and means for rotating said spindle.

1,866,425. CALENDAR. HUGH E. SHEDD, Minneapolis, Minn. Filed Feb. 16, 1931. Serial No. 516,133. 2 Claims. (Cl. 40—119.)



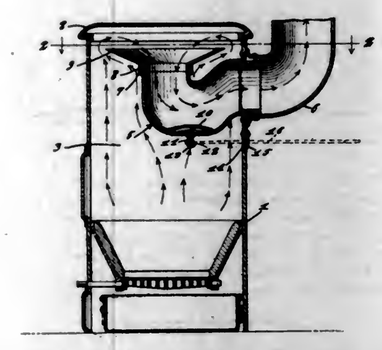
1. A book calendar including sheets folded on the vertical median line to present similar leaves, one leaf of each sheet being divided to form a tab free of the sheet except at the line of fold, the tab of a particular sheet being secured to the immediately adjacent leaf of the next successive sheet.

1,866,426. COMBINATION WRENCH. JACOB C. SIEGRIST, West View, Pa., assignor to James H. Crea, Buffalo, N. Y. Filed June 5, 1931. Serial No. 542,358. 1 Claim. (Cl. 81—89.)



A wrench comprising a handle, a body on the handle and having a slot, guide flanges on the sides of the body, a stationary jaw carried by the body, a movable jaw associated with the stationary jaw, spaced plates formed on the movable jaw and engaging opposite sides of the body, ribs on said plates and fitting between the flanges, a pin connecting the plates and extending through the slot, and an operating means for the movable jaw to adjust the latter relative to the stationary jaw.

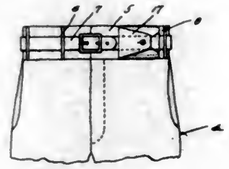
1,866,427. STOVE. JOHN H. SIEMER, Parker, S. Dak. Filed Feb. 26, 1930. Serial No. 431,486. 1 Claim. (Cl. 126—83.)



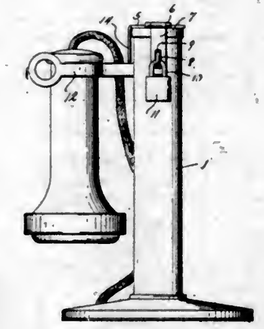
A stove comprising a casing having its upper end closed and provided with a smoke opening at one side adjacent the upper end thereof, a fire box in the casing, a tubular body of a goose neck shape located in the casing and having one end mounted in the smoke opening and the other end disposed vertically toward the top of the casing, an upwardly and outwardly flared spreader on the last named end of the body to direct products of combustion passing upwardly from the fire box toward the walls and top of the casing before entering said body by way of the spreader, said body having an opening located directly over the fire box, a removable cover for closing the last named opening, and an operating rod extending through the casing and connected to said cover for canting the latter when desiring a direct draft for the products of combustion into the body from the fire box.

1,866,428. GARMENT POCKET CONSTRUCTION. BARNETT J. SMITH, San Antonio, Tex. Filed May 9, 1931. Serial No. 536,236. 1 Claim. (Cl. 2—247.)

In a structure of the class described, in combination, a garment including a waistband, and a pocket attached thereto, said pocket being adapted to accommodate personal articles and accessories such as matches, cigarettes, pencils and the like, said pocket being of external location and generally rectangular in configuration and located lengthwise with respect to the waistband, and including a separate closing flap, one end of the pocket and the attached end of the flap having a portion unattached to the waistband to provide a slot to accommodate a belt, whereby to permit the pocket to have the additional function of a confining element for the belt.



1,866,429. COMBINED TELEPHONE RECEIVER AND TRANSMITTER SET. GIOACCHINO STABILI, Morrisville, Pa. Filed July 11, 1931. Serial No. 550,155. 3 Claims. (Cl. 179—189.)

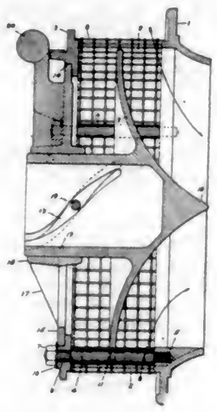


3. A telephone set comprising a stand having a socket, a receiver hook associated with the stand, a transmitter having a plug readily insertible within or removable from the socket, a plate hingedly connected to the stand and swinging into a position to close the socket against insertion therein of the plug of the transmitter, an arm pivotally connected to the plate, means for locking the arm to the stand to hold the plate in effective position with respect to the socket, and an arm carried by the plate engaging the receiver hook when the plate is in position to close the socket whereby the arm of the plate holds the receiver hook against movement when the receiver is taken from the hook.

1,866,430. METHOD OF MAKING ALKALI-METAL ACETATES. CHARLES J. STROSACKER, CHESTER C. KENNEDY, and EARL L. PELTON, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 1, 1928. Serial No. 323,199. 25 Claims. (Cl. 260—116.)

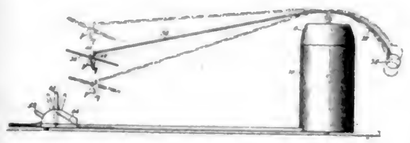
20. The method of making an alkali metal acetate which comprises simultaneously reacting acetylene, water and an alkali metal hydroxide.

1,866,431. STOKER AIR CONTROL. HARRY M. SWINDLER, Dayton, Ohio, assignor to The James Leffel and Company, Springfield, Ohio, a Corporation of Ohio. Filed Apr. 28, 1930. Serial No. 447,866. 14 Claims. (Cl. 251—39.)



10. In an air control apparatus, a casing having an air inlet, a frame supported by said casing, damper means supported by said frame and movable into and out of said inlet to regulate the flow of air therethrough, a spirally slotted barrel member extending from the damper means, and a rotatable ring member having a pin fitting in said slot for moving said damper means, said ring member being supported by the frame for rotation around the barrel member.

1,866,432. AIRPLANE AND MOUNTING THEREFOR. THOMAS J. URBAN, West Pittston, Pa. Filed Aug. 6, 1930. Serial No. 473,395. 26 Claims. (Cl. 272—31.)



1. An airplane having a propeller, means operating independently of the propeller for propelling the airplane, for directing the airplane vertically and keeping the airplane at a vertical level to which it has been moved, and means spaced from the airplane for controlling the first mentioned means while the airplane is in flight.

1,866,433. SURGICAL AND DENTAL PACK COMPOSITIONS AND METHOD OF APPLYING THE SAME. ABRAHAM W. WARD, San Francisco, Calif. Filed Apr. 8, 1930. Serial No. 442,686. 2 Claims. (Cl. 106—6.)

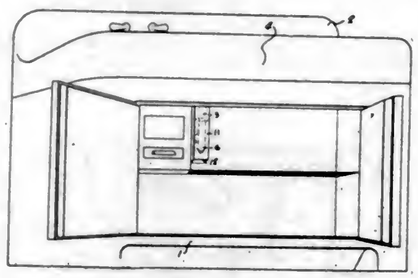
1. A dental composition comprising a basic metallic oxide and a natural gum, a solvent for said gum for bringing said basic metallic oxide and said gum into intimate association, asbestos disposed throughout the oxide-gum-solvent mixture to give the same mechanical strength, and being present in said composition in the proportion of substantially one part of asbestos to sixteen parts of the oxide-gum mixture, and a vegetable oil capable of delaying the setting of said composition incorporated therein.

1,866,434. SAFETY RAZOR. EDWARD G. WEAVER, Butte, Mont. Filed Dec. 22, 1930. Serial No. 504,190. 14 Claims. (Cl. 30—12.)



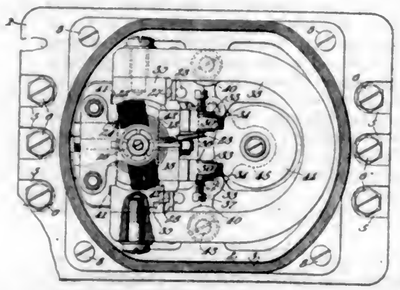
5. A razor comprising a frame, a blade holder pivotally mounted on the frame, a blade guard and means for moving the blade guard toward and from the blade holder, and means for shifting the axis of the blade holder pivot during the movements of the blade guard.

1,866,435. REFRIGERATOR. CARL M. WEINHEIMER, Buffalo, N. Y. Filed July 19, 1930. Serial No. 469,182. 5 Claims. (Cl. 62—89.)



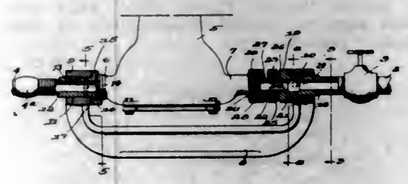
1 In a refrigerator casing adapted to be placed beneath a sink, and having a slot therein through which the projecting waste pipe extends into the refrigerator casing, of a casing surrounding such projecting portion of the waste pipe and detachably secured to the refrigerator casing, and members extending from the casing surrounding the waste pipe into the slot in the refrigerator casing.

1,866,436. ELECTRICAL RELAY AND THE LIKE. EDWARD F. WESTON, Newark, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a Corporation of New Jersey. Filed July 17, 1930. Serial No. 468,584. 12 Claims. (Cl. 200—110.)



1. In an electrical instrument of the permanent magnet and movable coil type, a base of insulating material, an abutment rising above said base, a core secured to said abutment, a lower jewel bearing mounted in said base, pillars secured to said base and passing through but not contacting with said abutment, a bridge member mounted on said pillars, an upper jewel bearing carried by said bridge member, and a coil system pivotally supported by said bearings.

1,866,437. MOUNTING FOR WATER-METERS. WALLACE A. WHITE and BERNARD A. FLOOD, Richmond, Va. Filed Apr. 17, 1929. Serial No. 355,930. 14 Claims. (Cl. 285—3.)



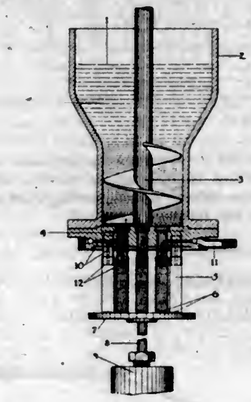
1. In a mounting for water-meters, the combination of inlet and outlet pipes, a valve connected with the inlet pipe, a yoke connecting the inner ends of the pipes together, a water-meter disposed between said inner ends, and connected with the outlet pipe, and a tubular member journaled in the yoke, and connecting one side of the water-meter with the valve of the inlet-pipe.

1,866,438. SUBMARINE APPARATUS. CHARLES WILLIAMSON, Perth Amboy, N. J. Filed Apr. 11, 1927. Serial No. 182,785. 18 Claims. (Cl. 61—69.)



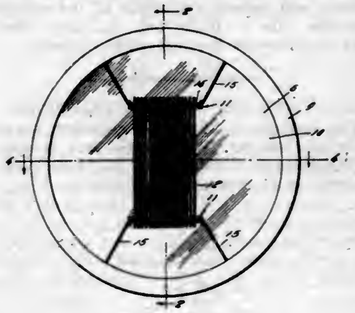
1. A tube for submarine operations comprising a tube of variable length adapted to withstand hydrostatic pressure, and a working chamber connected to the lower end of the tube, said chamber comprising a detachable working unit, said unit being provided with a projecting pocket dimensioned to freely accommodate the head of an operator and having glazed ports therein, arm extensions below said pocket, sleeves secured to said arm extensions and adapted to contain the arms and hands of an operator, doors to close the outer ends of said extensions, each door having means on the inner face thereof to be grasped by the hands of the operator in the arm extensions, whereby to close the doors.

1,866,439. DIVIDING CORDS OF PLASTIC OR GELATINOUS MATERIAL INTO LENGTHS. JAMES WOOD, Saltcoats, and HAROLD FRANK REYNOLDS, Ardrossan, Scotland, assignors to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed June 24, 1931, Serial No. 546,562, and in Great Britain June 12, 1930. 7 Claims. (Cl. 226—125.)



1. Method of severing a cord of plastic or gelatinous material, which comprises introducing a compressed gas within the body of the plastic and at predetermined intervals of time.

1,866,440. HEADLIGHT DIMMER. PERCY ERNEST WOODROFFE, Detroit, Mich. Filed Jan. 6, 1931. Serial No. 506,950. 6 Claims. (Cl. 240—48.4.)

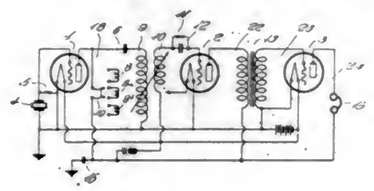


1. A dimmer for headlights comprising a pair of vertically spaced retainers, supporting means for the retainers, vertical parallel slats interposed between the said retainers, said retainers being provided with rectangular-shaped openings for receiving the end portions of the slats, the edges of the openings being provided with notches into which the edge portions of the slats are engaged and retained in uniform spaced relation.

1,866,441. UNIVERSAL CRYSTAL CONTROLLED CALIBRATOR. ROBERT H. WORRALL and RAYMOND B. OWENS, Washington, D. C., assignors, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 11, 1928. Serial No. 284,594. 2 Claims. (Cl. 250—36.)

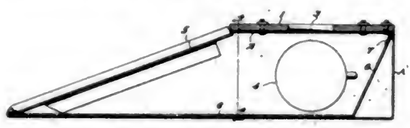
1. In a system wherein a piezo-electric crystal is associated with a thermionic vacuum tube having grid, filament and plate circuits, rectifying means associated with

said piezo-electric crystal and thermionic vacuum tube, amplifying means associated with said rectifying means, a plurality of means associated with said piezo-electric crystal and thermionic vacuum tube for causing said



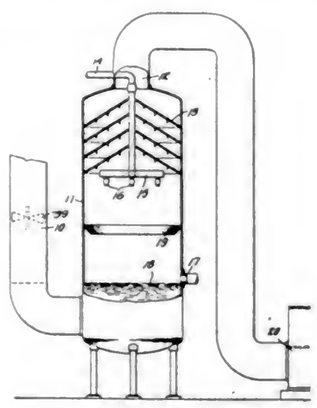
piezo-electric crystal to sustain oscillations at a frequency corresponding to one of its several operational axes, and means for selectively connecting said associated means to produce the frequency desired.

1,866,442. ADVERTISING EGG TESTER. HOKE SMITH WYNNE, Eastman, Ga. Filed Feb. 27, 1931. Serial No. 518,853. 1 Claim. (Cl. 40—132.)



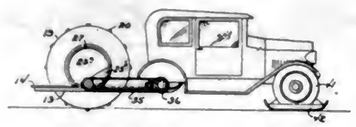
A device of the class described comprising a casing having its rear part of substantially rectangular shape and its forward part provided with a downwardly and forwardly sloping top part, the top of the rectangular part having an opening, a transparent member containing advertising matter covering said sloping part, a lamp in the casing and reflecting members in the casing for reflecting the rays of light from the lamp through the opening and through the transparent member.

1,866,443. SCRUBBING AND ABSORBING APPARATUS. FRANK R. ZUMBRO, Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Jan. 19, 1929. Serial No. 333,560. 4 Claims. (Cl. 261—108.)



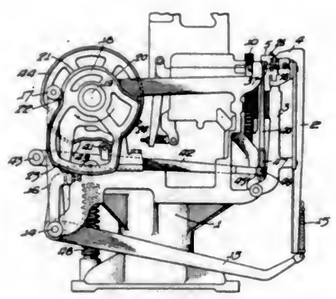
1. In a system for recovering carbon dioxide gas from a mixture of furnace gases, a scrubbing unit comprising an upright tower having an inlet for the furnace gases near its lower end with means for forcing said furnace gases under pressure into said tower, an inlet for water and an outlet, the said outlet being positioned somewhat above the bottom of the tank to provide a reservoir of water in the tank, the level of the water being positioned above the uppermost portion of the inlet for gases, a series of inverted cone-shaped perforated baffle plates positioned in the upper portion of the tank, an inlet for water extending down through the baffle plates and terminating in a plurality of spray nozzles, substantially as set forth.

1,866,444. ATTACHMENT FOR AUTOMOBILES. FRANK E. ADAMS, Blooming Prairie, Minn. Filed June 26, 1929, Serial No. 373,870. Renewed Nov. 23, 1931. 1 Claim. (Cl. 180—6.)



In a traction device for motor vehicles, a frame adapted to be secured to a vehicle, a traction drum within the frame, an axle extending eccentrically through said drum and mounted in bearings carried by the frame, spaced annular channel-shaped members within the drum, annular flanges extending from said members and secured to the drum and provided with said channel-shaped members, combined tracks and reinforcing members, wheels carried by the axle and positioned within and frictionally engaging the tracks, and means to drive the axle.

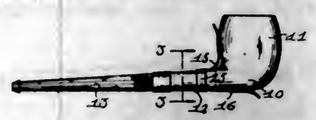
1,866,445. LINE CASTING MACHINE. JOHN W. BITTNER, West Forest Hills, Long Island, N. Y., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed June 30, 1931. Serial No. 547,994. 7 Claims. (Cl. 199—40.)



1. In a line casting machine comprising a slug casting mold, an elevator for presenting a line of matrices thereto, means for advancing the mold toward the matrix line to form a lock-up therewith, and means for lifting the elevator to aline the matrices against the mold, means independent of the elevator lifting means for holding the elevator substantially in its lifted matrix alining position.

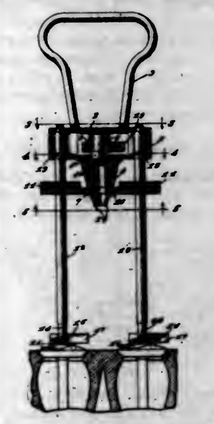
1,866,446. COMBINATION PIPE AND TAPPING MEANS. ELISÉE BOUCHARD, St. Pascal, Quebec, Canada. Filed Oct. 24, 1931. Serial No. 570,930. 3 Claims. (Cl. 131—12.)

2. The combination with a smoking pipe, of an elongated strip of resilient material having a portion thereof extending along the pipe stem and firmly secured thereto, and an extension of the resilient member lying against



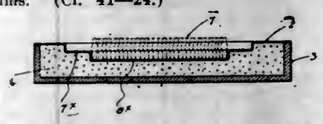
and resiliently pressed in contact with the exterior of the bowl for tapping the bowl for loosening of matter clinging to the interior thereof.

1,866,447. VALVE GRINDER. CLIFTON BOWMAN, Hampton, Va. Filed Dec. 7, 1931. Serial No. 579,607. 7 Claims. (Cl. 51—29.)



1. A valve tool of the character described comprising a housing, a top detachably secured to said housing, a handle secured to and rising from said top, spindles detachably mounted for rotation in said housing, bit members pivotally secured to the lower ends of said spindles, means for rotating the spindles simultaneously and means included in the rotating means for receiving either one of said spindles upon its removal from said housing, whereby either one of the spindles may be rotated singly.

1,866,448. METHOD OF PRODUCING RELIEF MAPS. JOHN J. BRAUND, Washington, D. C. Continuation of application Serial No. 544,933, filed June 16, 1931. This application filed Mar. 8, 1932. Serial No. 597,568. 4 Claims. (Cl. 41—24.)



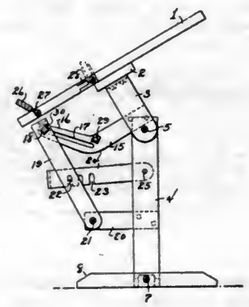
4. A relief map producing process comprising representing on one side of a sheet of ductile metal a series of contours and also placing on said side adjacent the contours height indicating legends, and embossing the series of contours one after the other according to said legends to scale until the highest elevation is reached to produce corners constituting contours and to proportionately represent hills or hill portions of different heights in relief at the opposite side of the sheet; the lowest elevation being embossed throughout the area of and within the outermost contour, and the next highest elevation being embossed throughout the area of and within the contour next to the outermost contour and by displacing part of the metal initially displaced for the representation of the lowest elevation.

1,866,449. BLEEDER FOR AIR HEADERS. LEON BUEHLER, Jr., and CONRAD J. ROMBERG, Waynesboro, Pa., assignors to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Dec. 9, 1926. Serial No. 153,638. 2 Claims. (Cl. 62—159.)



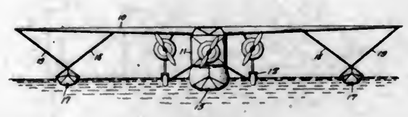
1. Ice making apparatus comprising a can grid, a plurality of cans in said grid, an air header mounted above and extending longitudinally of said grid, means for supplying air to each end of said header, an air bleed on and intermediate the ends of said header for allowing the slow escape of air from the header, and air laterals extending from said header to said cans, said laterals being attached to the header between the air supplying means and the said air bleed, substantially as set forth.

1,866,450. COMBINED READING TABLE AND WRITING DESK. ROBERT C. BURNLEY, Louisville, Ky. Filed Apr. 18, 1931. Serial No. 531,195. 1 Claim. (Cl. 45—109.)



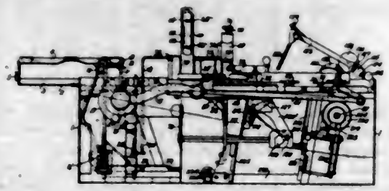
A combined reading table and writing desk comprising supporting legs, brackets pivoted to the legs, a top secured to the brackets, arms secured to the brackets and having angularly disposed slotted portions, adjusting arms pivotally and slidably secured to said portions, brackets secured to the legs and pivoted to the adjusting arms, a rod connecting the adjusting arms, and a U-shaped member pivoted to the legs and having notches therein to receive the rod for holding the top in various adjusted positions.

1,866,451. COLLAPSIBLE PONTOON FOR FLYING MACHINES. WILLIAM M. CARDEN, Birmingham, Ala. Filed Apr. 6, 1931. Serial No. 528,153. 4 Claims. (Cl. 244—2.)



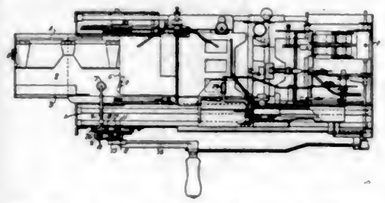
1. The combination with an aircraft having a fuselage and plane structure, of a plurality of collapsible pontoons, elastic webbing connecting certain of the pontoons with the fuselage, means connecting the remaining pontoons with the plane structure for moving said pontoons in a plane with the pontoons related to the fuselage and ground landing gears carried by the fuselage.

1,866,452. APPARATUS FOR FOLDING PAPER, INSERTING IT IN ENVELOPES, TUCKING IN THE FLAP OR SEALING THE ENVELOPES, AND STAMPING THEM. ALEXANDER GORDON COGSWELL, Chipping Sodbury, England. Filed July 21, 1928, Serial No. 294,495, and in Great Britain Aug. 3, 1927. 41 Claims. (Cl. 93—6.)



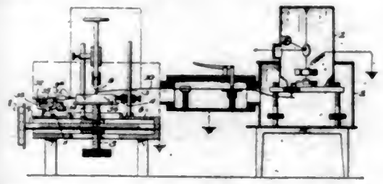
1. The combination of a plate adapted to move a sheet of material into an envelope, means for actuating said plate, and means for tucking in the flap of said envelope, said plate remaining in and forming a support for said envelope during at least a part of the flap-tucking operation.

1,866,453. SHEET FEEDING MECHANISM. ALEXANDER GORDON COGSWELL, Chipping Sodbury, England. Original application filed July 21, 1928, Serial No. 294,495, and in Great Britain Aug. 3, 1927. Divided and this application filed Sept. 21, 1929. Serial No. 394,274. 7 Claims. (Cl. 271—20.)



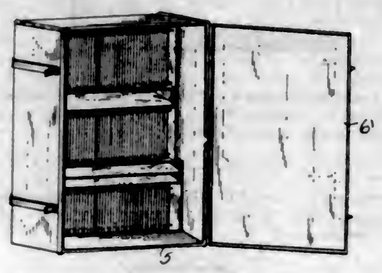
1. In apparatus for delivering sheets of material from a pile of sheets, the combination of a sheet gripping device mounted on an axis normal to the plane of the sheets for angular swimming movement in the plane of the sheets, means for angularly moving said device in the plane of the sheets, and means for moving said device away from the pile of sheets.

1,866,454. METHOD AND APPARATUS FOR DETERMINING THE DIRECTION OF THE ELECTRIC AXES OF CRYSTAL QUARTZ. LEO H. DAWSON, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 3, 1928. Serial No. 323,546. 3 Claims. (Cl. 175—183.)



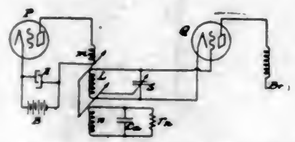
1. The method for determining the electrical axes of crystals comprising the steps of cutting a section from said crystal the plane from which is normal to the optical axis, subjecting different areas of said section to a mechanical pressure, and indicating the piezoelectric effect at different points on said section of said crystal whereby the axes of maximum effect may be located.

1,866,455. CABINET FOR PACKING CHINA AND GLASSWARE. GEORGE B. ECKRIGHT, Los Angeles, Calif. Filed May 27, 1931. Serial No. 540,430. 1 Claim. (Cl. 217—53.)



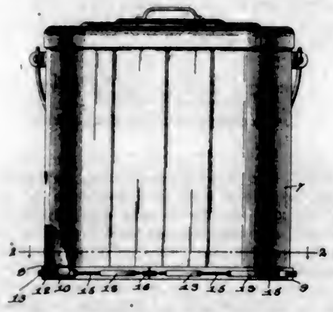
In a device of the character described, a box like structure having a plurality of drawers positioned therein, said drawers being lined with a resilient material, certain of said drawers having rods positioned therein and pads slidable on said rods.

1,866,456. COUPLING DEVICE. CARL FICHANDLER, New York, N. Y. Filed Apr. 21, 1930. Serial No. 446,128. 9 Claims. (Cl. 179—171.)



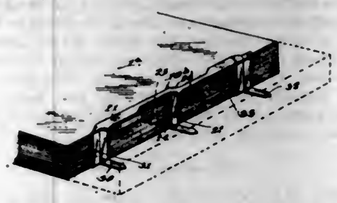
7. In a radio receiver having a first radio frequency circuit, and a second radio frequency circuit coupled thereto, the combination with a volume control device for regulating the volume of sound reproduced by said receiver, said device including a variable coupling means which introduces variations in tuning in one of said circuits as the coupling is varied to effect volume control, and means to compensate for such variations in tuning in such a way as to maintain the said tuning independent of said variations in coupling.

1,866,457. BUCKET OR CAN SILENCER. JOHN RUSSELL FOLEY, New York, N. Y. Filed May 12, 1931. Serial No. 536,900. 6 Claims. (Cl. 220—69.)



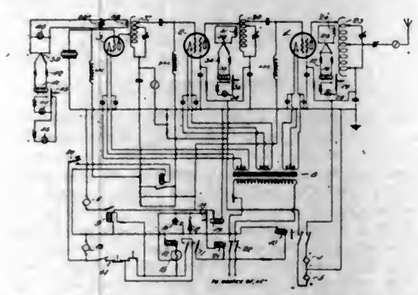
1. A can silencer comprising a substantially circular split ring of resilient material, integral feet projecting from one side of said ring, projections extending from the other side of the ring and provided with passageways, and a flexible endless fastening extending through said passageways for securely holding the ring on an annular edge of a can.

1,866,458. PAPER CLIP. MANUEL BOY FRANK, Stapleton, N. Y. Filed Feb. 17, 1931. Serial No. 516,422. 8 Claims. (Cl. 24—153.)



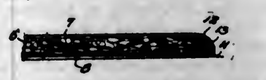
3. A paper fastener comprising a flat metal strip having parallel side edges, said strip being split at each end to provide integral tongues, each tongue being bent to bring the faces thereof into a plane parallel with the side edges of the strip and between said side edges and the central longitudinal axis of the strip.

1,866,459. TRANSMITTING SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,981. 2 Claims. (Cl. 250—17.)



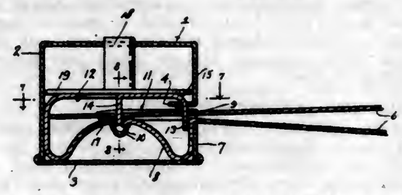
1. The combination in a vacuum tube transmitting system of a vacuum tube with a source of energizing current therefor, circuit connections between said source and said tube, switching means included in said circuit connections, electromagnetic means operable when energized to maintain said switching means closed, said switching means being open when said electromagnetic means is de-energized, a plurality of normally open contacts in shunt to said electromagnetic means, the arrangement being such that the closure of any of said contacts individually will short out said electromagnetic means and thereby cause its de-energization, a plurality of safety devices each individual to and adapted to close one of said contacts in response to the occurrence of an abnormal operating condition, one of said safety devices being arranged to respond to discontinuities of grid potential.

1,866,460. TABLE PAD FOR GLASSES. ETHEL F. GLENN and RUTH H. HERRING, San Antonio, Tex. Filed Jan. 26, 1931. Serial No. 511,356. 3 Claims. (Cl. 45—68.4.)



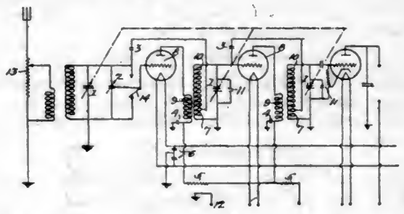
1. A table pad for glasses comprising a disc-like body of stiff, bibulous, unsized paper having its marginal portion, at the bottom face of the disc, burred and its marginal portion, at its upper face, rounded off and smooth from the plane of said face to adjacent the burred edge.

1,866,461. FREIGHT CAR SEAL. CATHERINE K. GOSCHNICK, Port Huron, Mich. Filed June 24, 1931. Serial No. 546,644. 6 Claims. (Cl. 292—319.)



6. A seal comprising a casing, a strap having one end anchored in the casing, an apertured lip in the casing, the other end portion of the strap being insertable in the casing and having an aperture therein for registry with the aperture in the lip, a tongue on said one end of the strap engageable in the registering apertures for anchoring said other end portion of the strap in the casing, and means for retaining the tongue in operative position.

1,866,462. RADIORECEIVER CONTROL. WILLIAM H. GRIMDITCH, Glenside, and DAVID P. EARNSHAW, Philadelphia, Pa., assignors to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 24, 1928. Serial No. 295,055. 11 Claims. (Cl. 179—171.)



1. In a signalling system, a unilateral mutual impedance device, a signal circuit preceding said device and a signal circuit succeeding said device, an electrical circuit including said unilateral mutual impedance device connecting said signal circuits, an electrical circuit independent of said device continuously connecting said circuits, and means whereby said first-mentioned electrical circuit may be rendered ineffective.

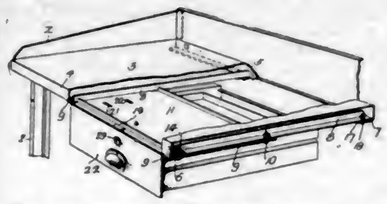
1,866,463. COMBINATION NECKTIE AND HANDKERCHIEF DISPLAY FOLDER. MORRIS GROSSMAN, New York, N. Y., assignor to Mollie Grossman, New York, N. Y. Filed Nov. 27, 1931. Serial No. 577,627. 5 Claims. (Cl. 206—78.)



1. A combination necktie and handkerchief display folder including a pair of sections swingably connected together, one section being of the size and shape to fit

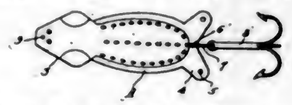
flatwise against the other section, said other section having a plurality of flanges overlapping the first mentioned section to hold the same in folded position, means on the first section for retaining a handkerchief therein, and means on the other section formed to retain a necktie therein so that part thereof will be displayed, said other section having openings through which said handkerchief may be seen.

1,866,464. DRAWER SUPPORT FOR WORKBENCHES. HOWARD T. HALLOWELL and FRANK BENNETT, Jenkintown, Pa., assignors to Standard Pressed Steel Co., Jenkintown, Pa., a Corporation of Pennsylvania. Filed Dec. 12, 1929. Serial No. 413,526. 6 Claims. (Cl. 45—7.)



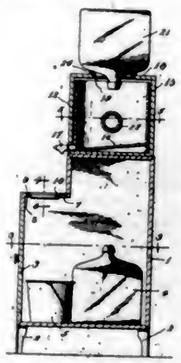
1. The combination in a drawer support for work benches, of a top having inturned flanges on its under side; slideways for a drawer; clamp plates secured to the slideways and overlapping the flanges of the top; and means for securing the clamp plate to the slideways and to the inturned flanges of the top.

1,866,465. FISH LURE. FREDRICK HARRINGTON and HIRAM HARRINGTON, St. Cloud, Minn. Filed Mar. 24, 1931. Serial No. 524,970. 1 Claim. (Cl. 43—42.)



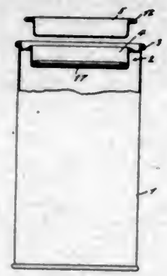
A lure of the class described comprising an elongated body of substantially semi-circular shape in cross section, with the concavity gradually decreasing in depth from the center towards the ends, the front end of the body being flat and shaped to represent a head, curved diverging extensions at the tail end of the body, and a fish hook connected to the tail end of the body.

1,866,466. CABINET COOLER. LOUIS W. HASSENSALL, Toledo, Ohio. Filed Nov. 7, 1929. Serial No. 405,439. 1 Claim. (Cl. 62—143.)



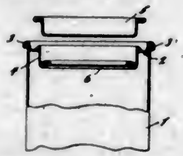
In a water cooler, a cabinet having a wall formed with an opening for access to the interior of the cabinet, the upper portion of the cabinet being set back to provide a ledge and the ledge being formed with an opening and about the opening being recessed to form a seat bordering the opening, a drain pan fitting in said opening and having a bottom and upstanding walls, the bottom being disposed at an incline at one end and having its lower end portion formed with an opening, the walls having outstanding flanges along their upper edges engaged in the seat about the opening to suspend the pan, a receptacle in said cabinet beneath the opening of said pan, and a cooling chamber resting upon the top of said cabinet and having an outlet extending over said pan.

1,866,467. CAN CLOSURE. LEONARD HIRSCH, Lyndhurst, and EDWIN A. HARRISS, Orange, N. J., assignors to R. B. Davis Company, Hoboken, N. J., a Corporation of New Jersey. Filed Mar. 29, 1929, Serial No. 351,068. Renewed Dec. 23, 1931. 8 Claims. (Cl. 220—27.)



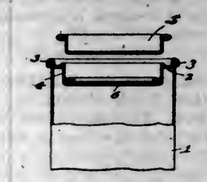
8. In combination, a can comprising a peripheral wall and a top, said top being formed of a single piece of relatively non-frangible sheet metal having its outer edges permanently sealed to the upper edge of said wall and extending inwardly therefrom and having a centrally disposed opening therein surrounded by a vertically extending wall, a substantially flat sealing member of relatively frangible sheet material extending across said opening within said vertically extending wall, the edge portion of said vertically extending wall overlapping and engaging the edge portion of said sealing member and constituting therewith a three-ply seam, said three-ply seam being deformed or crimped out of the plane of said sealing member and being located inside and above the lowest limits of the top.

1,866,468. CAN CLOSURE. LEONARD HIRSCH, Lyndhurst, and EDWIN A. HARRISS, Orange, N. J., assignors to R. B. Davis Company, Hoboken, N. J., a Corporation of New Jersey. Filed Feb. 4, 1930. Serial No. 425,747. 2 Claims. (Cl. 220—27.)



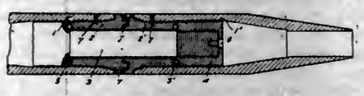
1. A can closure having a recess surrounded by a vertically extending wall of sheet material, said wall having its lower edge turned inwardly to constitute a wall edge portion and said recess having a bottom spaced along the wall from said turned in lower edge of the wall, said bottom having an opening therein, said bottom adjacent the opening being folded back to constitute a folded edge portion, and a sealing member extending across said opening and engaging the lower surface of said folded edge portion of the bottom, said turned in wall edge portion engaging said sealing member and holding it against said folded edge portion of the bottom.

1,866,469. METHOD OF FORMING CAN CLOSURES. LEONARD HIRSCH, Lyndhurst, and EDWIN A. HARRISS, Orange, N. J., assignors to R. B. Davis Company, Hoboken, N. J., a Corporation of New Jersey. Filed Apr. 4, 1930. Serial No. 441,445. 5 Claims. (Cl. 113—121.)



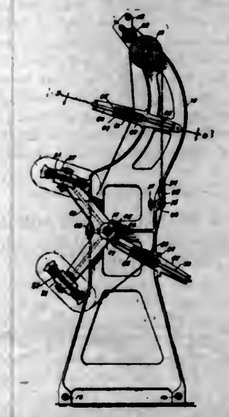
1. The method of manufacturing a can top which comprises drawing the top with a flat bottom connected to a peripheral wall, forcing said bottom upwardly by redrawing to form a close fold where the bottom is joined to the wall, cutting an opening in the bottom while leaving an inwardly extending annular portion adjacent the periphery thereof, placing a frangible sealing member on said annular peripheral portion, and bending said fold into engagement with the edge portion of the sealing member to clamp it against said remaining annular peripheral portion of the bottom.

1,866,470. COUPLING FOR WIRE ROPES. HELLMUTH JASON, Coto Menas, Seron, Spain. Filed Aug. 10, 1931, Serial No. 556,277, and in Germany Aug. 11, 1930. 2 Claims. (Cl. 24—123.)



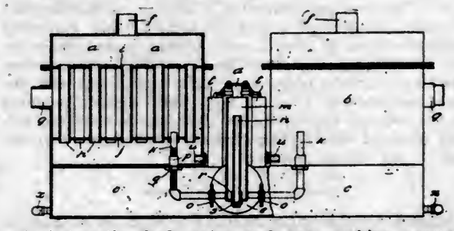
2. In a coupling having a pair of sleeves to fixedly receive two rope ends; bushings secured to the adjacent ends of the sleeves, the near ends of the bushings having interfitting annular sleeves and flanges, the remote ends forming supports for anti-friction means, a double-headed tie member loosely connecting the bushings, those peripheral portions of the heads which confront the said remote ends of the bushings also forming supports for anti-friction means, and anti-friction means interposed between said last mentioned supports and the remote ends.

1,866,471. TEXTILE WINDING MACHINE. OTTO FRITZ KIEHN, New York, N. Y. Filed Aug. 6, 1929. Serial No. 383,930. 6 Claims. (Cl. 242—62.)



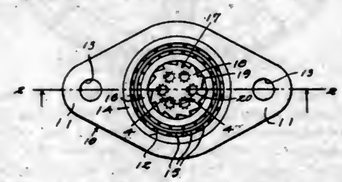
3. In a cloth winding machine, a core engaging element including a pair of jaws for clampingly embracing the side edges of a reel or core and a separate pair of gripping jaws for the opposite faces of said reel whereby the core engaging elements are adjustable to coact with reels of relatively different thicknesses and width.

1,866,472. ELECTROLYTIC APPARATUS. ALBERT EDGAR KNOWLES, Heswall, England. Filed June 24, 1930, Serial No. 463,378, and in Great Britain July 6, 1929. 4 Claims. (Cl. 204—5.)



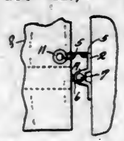
1. Automatic feed water and gas washing arrangement for electrolytic cells for the production of oxygen and hydrogen comprising in combination, a pair of gas washing chambers, one on each gas outflow from the cells; a liquid tank for feeding the liquid to the cells for decomposition, an outflow for liquid from each chamber to the tank, a liquid supply from a suitable source to the gas washers, which supply is controlled by a valve operated by a float in the cell feeding tank, and a unitary adjustable level control device in a compartment between the liquid outflows from the two washing chambers and their delivery connection to the cell feed tank, whereby the pressure on the gas imposed by the washing liquid is maintained constant in each chamber and on each gas and thus in each compartment of each cell.

1,866,473. GASOLINE VAPORIZER. CYRIL M. KUMMERER, Allentown, Pa. Filed May 16, 1931. Serial So. 537,914. 2 Claims. (Cl. 48—180.)



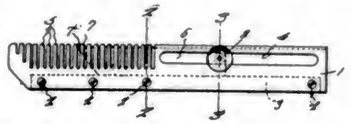
1. A mixer of the character described comprising a base plate adapted to be interposed between an intake manifold and a carbureter, a mixing wheel, and a ball race interposed between the wheel and the plate whereby to rotatably mount said wheel within the plate, said wheel having a plurality of inclined tapering apertures therethrough constituting nozzles for breaking up globules of liquid passing through said wheel.

1,866,474. AWNING HINGE. CHESTER H. LLOYD, Richmond, Va. Filed Dec. 3, 1931. Serial No. 578,807. 3 Claims. (Cl. 156—42.)



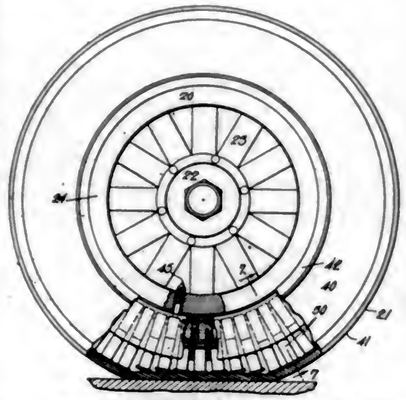
1. As a new article of manufacture, an awning hinge having one end extended, the extended portion terminating in a forwardly directed finger having an opening therethrough, said finger and opening providing means for connecting to the hinge the side curtain of an awning.

1,866,475. HAIR CUTTER. WILLIAM E. LOUGHMILLER, Flushing, N. Y. Filed Sept. 8, 1931. Serial No. 561,799. 7 Claims. (Cl. 30—12.)



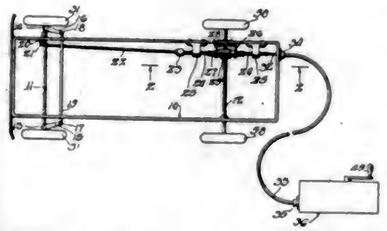
1. A hair cutter comprising a housing of substantially U-shaped transverse segments having slots extending thereinto from its closed side defining spaced teeth for the reception of the hair to be cut, and a cutter member having a plurality of cutting edges cooperating with the bight portion and sides of said teeth slidably mounted in the housing for cutting the hair in the slots the cutting edges of said cutting member being disposed at one end of the cutter member.

1,866,476. HYDRAULIC WHEEL. WILLIAM A. MARTIN, Brooklyn, N. Y. Filed Sept. 5, 1930. Serial No. 479,972. 2 Claims. (Cl. 152—5.)



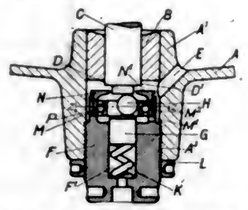
1. In a wheel of the character specified, an inner tire member having a plurality of radially extending cylinders and ports adjacent the inner portions of the cylinders to provide restricted communication between the cylinders, an outer tire member having pistons extending into said cylinders, and a liquid partially filling said cylinders and movable thru the cylinders.

1,866,477. DRIVING AND STEERING MECHANISM FOR WHEELED TOYS. CHESTER J. MOORE, Chicago, Ill. Filed Apr. 7, 1931. Serial No. 528,379. 5 Claims. (Cl. 46—48.)



1. Propelling and steering mechanism for toys including wheel-bearing axle structures, comprising a motor mechanism and a housing therefor, steering apparatus, and driven propelling means associated with said axle structures, flexible means including a slidable and rotative member for transmitting power from said motor mechanism to said driven means, and movement to said steering apparatus, and means including a finger gripping element movably mounted in said housing for slidably moving said slidable member to control movement of said steering apparatus and direction of movement of the toy.

1,866,478. END OR BOTTOM BEARING FOR QUICK REVOLVING SHAFTS OR SPINDLES. FRANTZ MORTENSEN, Helsingfors, Finland. Filed Aug. 10, 1928, Serial No. 298,726, and in Germany Aug. 20, 1927. 1 Claim. (Cl. 308—159.)



In combination, a shaft having a reduced end defining a shoulder, a bearing therefor, a closure for the outer end of the bearing, said closure, having in its inner end a cylindrical opening, a resilient base in said cylindrical opening, a ball bearing assembly mounted in said closure and disposed outwardly of said cylindrical opening and having a freely revoluble ring, a ball freely rotatable in said ring and disposed between said reduced end and said resilient base, and an annular member carried by said bearing assembly having an overhanging annular flange disposed beneath the shoulder of said spindle, whereby said spindle will be supported in the event of breakage of said ball.

1,866,479. FOUR WHEEL BRAKE MECHANISM. RAY C. MOUNTZ, Altoona, Pa. Filed July 11, 1929. Serial No. 377,452. 1 Claim. (Cl. 192—3.)



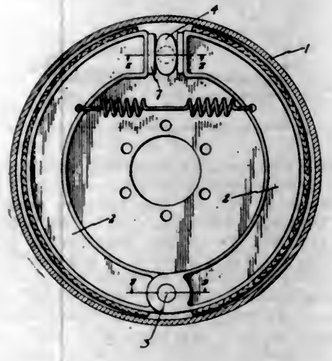
In combination, a lever, the pivot of said lever being located intermediate the ends thereof, braking mechanism, means positively connecting said lever to said braking mechanism, a lever pivoted to the forward end of the first lever and in effect constituting an extension thereof, spring means normally maintaining the second lever in alinement with the first lever and against movement independently of the first lever, the first lever being adapted for normal operation through rocking of the foot, said second lever being operable by pressure of the toe, and mechanism unconnected to the second lever and arranged adjacent to the same for operation thereby to actuate a throttle.

1,866,480. FOUR WHEEL BRAKE MECHANISM. RAY C. MOUNTZ, Altoona, Pa. Filed May 22, 1929. Serial No. 365,120. 5 Claims. (Cl. 188—10.)



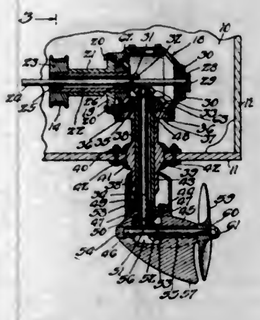
1. In a braking mechanism of the class described, brakes for four wheels, mechanism for operating the brakes of the front wheels, mechanism for operating the brakes of the rear wheels, equalizer means connecting said mechanisms comprising an equalizer bar having a sliding movement longitudinally, spring means urging said bar to normal or retracted position, and a rock shaft having loose connection with said bar, said rock shaft being under control of the brake pedal and means to limit the sliding movement of the equalizing means so that in the event of breakage of either mechanism the disabled brake or brakes alone will be inactive.

1,866,481. BRAKE OPERATOR. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 28, 1930. Serial No. 456,665. 16 Claims. (Cl. 188—78.)



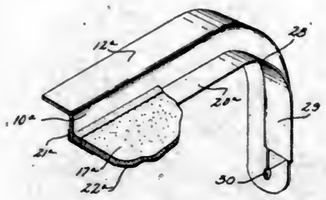
1. A chromium surfaced brake cam.

1,866,482. MARINE PROPELLING AND STEERING MECHANISM. LAWRENCE S. OLSEN, Chicago, Ill. Filed Feb. 2, 1931. Serial No. 512,952. 1 Claim. (Cl. 115—35.)



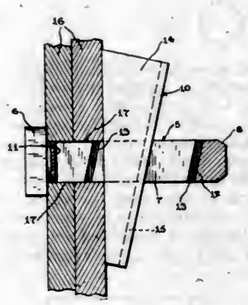
In combination with a vessel including power shaft and a transom wall, an outboard propeller and transmission mechanism mounted on said wall, the said mechanism including a rotatable sleeve about said shaft, a vertical shaft, a sleeve about the vertical shaft, means providing an arcuate groove outboard on the wall, a member carried by said vertical sleeve adapted to ride in said groove and be guided thereby, and a handle on the horizontal shaft inboard of the wall to rotate the horizontal sleeve and move said member through the groove and said mechanism to throw a vertical arc whereby to accomodate the propeller to shallow as well as deep water.

1,866,483. BAG FRAME. BENJAMIN A. OTTEN, Wauwatosa, Wis., assignor to Milwaukee Stamping Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 11, 1929. Serial No. 406,195. 1 Claim. (Cl. 190—54.)



The combination with a travelling bag, of a set of bag frame jaws, each composed of three members including a central member substantially perpendicular to the other two members, said other two members extending in opposite directions from the upper and lower margins of the central member to form upper and lower flanges, the lower member being secured to the inner face of the intermediate member and folded across the lower margin thereof and extending outwardly to form a bag supporting flange, said lower member acting to protect the contents of the bag from contacting with the lower margin of the intermediate member, said bag having its marginal portions secured to the upper surfaces of the flanges provided by the lower members of the jaws.

1,866,484. WEDGE CLAMP. HARRY E. PRIEM, Dunmore, Pa. Filed Nov. 4, 1929. Serial No. 404,851. 5 Claims. (Cl. 29—84.)

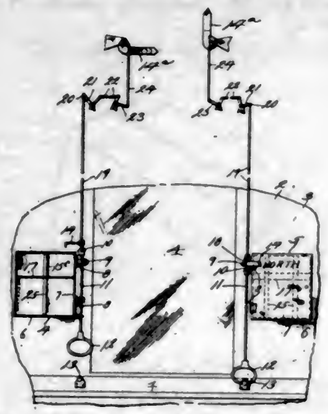


1. An adjustable wedge clamp comprising a slotted bolt member, a wedge member adapted to be inserted into the slot of the bolt member, one of said members having a guiding notch, and the other member having a projection extending into said notch.

1,866,485. TRAIN ORDER SIGNAL. ANDREW M. RITCHEY, San Antonio, Tex. Filed Feb. 16, 1931. Serial No. 516,234. 5 Claims. (Cl. 246—16.)

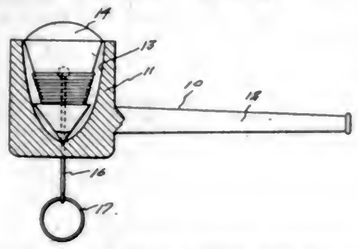
3. The combination with a train order cabinet, a signalling device, means for controlling the signalling device, a hinged closure carried by the cabinet, means for holding said closure against opening when the signal is

in a certain position, a hinged strip within the cabinet and adapted to hinge outwardly into the path of the closure and hold the same against closing until a train order



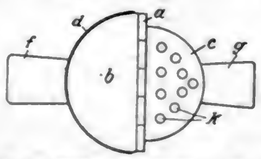
board has been returned to the cabinet and means whereby only the proper board can be placed within the cabinet.

1,866,486. TOP SPINNING HOLDER. GIOVANNI RITOSSA, Newport News, Va. Filed Jan. 13, 1930. Serial No. 420,556. 2 Claims. (Cl. 46—32.)



1. In a top spinning device, a holder comprising a bowl, a handle integrally formed therewith said handle and bowl forming a pipe-like unit, a recess in said bowl adapted to receive a top, a transverse opening in the wall of said bowl intermediate the top and bottom thereof, a top, said recess being larger than the top whereby said top may spin freely therein while resting with its point on the bottom of the recess, a string inserted through said opening and adapted to be wound on said top within said bowl, said string remaining out of contact with the sides of said bowl, and a ring attached to the depending end of said string.

1,866,487. DEVICE FOR SQUEEZING SEGMENTAL FRUIT SLICES. FRANZ RITTER, Jr., Pasing-Munich, Germany, assignor to the Firm F. Ritter & Sohn, Pasing-Munich, Bavaria, Germany. Filed July 30, 1931, Serial No. 554,091, and in Germany May 14, 1930. 2 Claims. (Cl. 100—41.)



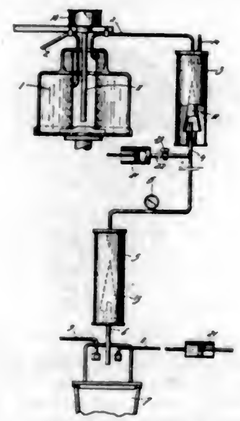
1. A device for squeezing segmental slices of fruit such as lemons or oranges comprising a pair of segmental pressure plates pivoted together at their straight edges, one of the said plates having an upright rim at its curved side, the said rim being throughout distant from the curved edge of the other pressure plate by an amount at least equal to the thickness of the peel at the curved edge of the segmental slice of fruit to be squeezed.

1,866,488. LIQUID-TIGHT CARTON AND METHOD OF CLOSING SAME. JOHN SANDERSON ROYLE, Binfield, and JOHN MELLOR, Feltham, England, assignors to Mono Containers Limited, London, England, a Company of Great Britain. Filed Aug. 26, 1929, Serial No. 388,498, and in Great Britain Sept. 10, 1928. 4 Claims. (Cl. 229—5.6.)



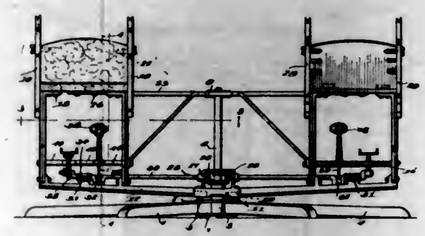
1. A carton comprising an elongated container of curved cross-section, of waterproof paper material, having a permanent closure at one end, said container being formed with an internally projecting annular rib adjacent to its open end, with an integral skirt portion extending from said rib to the edge of the open end a sufficient distance to enable the same to be folded over the flange of a flanged cap when the latter is seated within said skirt portion upon said rib, said container being formed of a wound blank having a lap joint, with the overlapping edges of the blank in the skirt portion cut away so as to enable the skirt portion to be folded or crimped over the cap flange, after filling, without buckling, to form a liquid tight seal.

1,866,489. METHOD OF SEPARATING OR CHURNING. ERIK GUSTAF NICOLAUS SALENIUS, Stockholm, Sweden, assignor to Elise Samalia Salenius, Stockholm, Sweden. Filed May 4, 1929, Serial No. 360,521, and in Sweden Nov. 25, 1925. 3 Claims. (Cl. 99—13.)



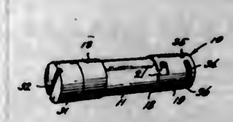
1. A method of continuously separating or churning directly a cream containing liquid which consists in passing the liquid from a centrifugal drum to a receptacle, and subjecting the liquid during its passage to different degrees of vacuum thereby maintaining the liquid at a desired temperature, causing it to evaporate, gasify, or be boiled or cooled down.

1,866,490. MERRY-GO-ROUND. JOHN A. SCHARF, Richwood, Ohio. Filed July 14, 1930. Serial No. 467,932. 2 Claims. (Cl. 272—33.)



1. In a merry-go-round, a vertically positioned mast, a pair of bearing castings positioned for rotation on said mast, and including radially extending bars connected to one of said bearing castings, a pair of substantially U-shaped frame members positioned at the outer extremities of each of said radially extending bars, seats positioned on the upper extremities of each of the pairs of U-shaped frame members, said U-shaped frame members having bowed portions extending in opposite directions and underlying said seats, tie rods connected between each pair of U-shaped members, and brace rods connected between said other bearing and said tie rods for lending strength to said frames and seats.

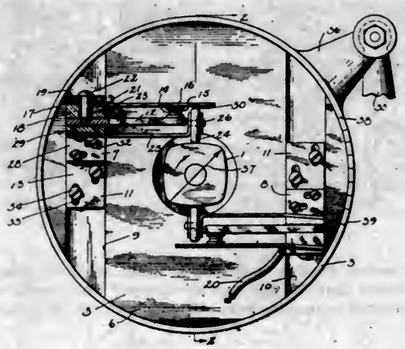
1,866,491. SELF-INDICATING REFILLABLE ELECTRIC CARTRIDGE FUSE. FRANCIS CHARLES SCHMID, U. S. Navy. Filed Aug. 29, 1929. Serial No. 389,259. 3 Claims. (Cl. 200—121.)



1. An electric cartridge fuse comprising a shell, a head secured at one end of said shell, said head having an axial aperture, a housing at the opposite end of said fuse, an indicator disk positioned in said housing, resilient means interposed between said indicator and the end of said shell, a replaceable fusible link having one of its ends attached to said indicator, the opposite end of said link adapted to extend through said axial aperture at the opposite end of the shell, means to hold the end of said fusible link in wedging engagement at said axial aperture, a screw cap on said cylindrical head, said cylindrical housing having a plurality of spaced window openings at the outer sides thereof, whereby the breaking of said fusible link is adapted to release said resilient means and project said indicator outward toward the outer end of said housing and render said indicator disk visible through said window openings.

1,866,492. ELECTRICAL CIRCUIT INTERRUPTER. FRED GLEN SHOEMAKER and JOHN J. ROSE, Dayton, Ohio. Filed June 16, 1926. Serial No. 116,360. 25 Claims. (Cl. 200—27.)

1. An electrical circuit interrupter comprising a pair of make and break contacts, a contact support on which said contacts are mounted in permanently fixed facial relation when contacting with each other, means for effecting make and break action of said contacts, and means for adjusting said support to bodily move said contacts rectilinearly equally and simultaneously without disturbing



their facial relation one to the other to obtain a predetermined extent of separation or dwell of said contacts at a predetermined instant in the proper timing relation of said cam.

1,866,493. ADVERTISING DISPLAY CARTON. HARRY B. STAATS, Mount Kisco, N. Y., assignor to Rusling Wood Inc., New York, N. Y., a Corporation of New York. Filed Dec. 1, 1931. Serial No. 578,366. 6 Claims. (Cl. 40—7.)

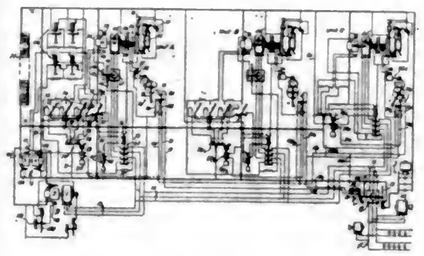


1. An advertising display carton comprising a carton body formed with marks thereon at predetermined places, said marks acting as guides for slitting the carton body, and sections of figures formed with means adapted to be inserted into the slits when formed, the arrangement being such that when said sections are correctly positioned, the sections and carton body will present a grotesque appearance of an animal or other object.

1,866,494. POWER GENERATING SYSTEM. CHESTER F. STRONG, Miami, Fla. Filed Mar. 26, 1930. Serial No. 438,923. 31 Claims. (Cl. 290—30.)

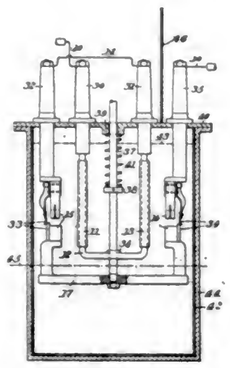
15. An alternating current generating system comprising, in combination, a plurality of units each having an alternating current generator driven by an internal combustion motor and adapted for parallel operation in supplying current to a system line, means for successively starting said units automatically in accordance with increases in line load, means for connecting the units to the line and synchronizing them with the line automati-

cally upon being successively started including means whereby the units are allowed to be brought substantially to synchronous speed before being connected with the line



and means whereby with two or more units in operation the same may be successively stopped automatically in accordance with successive reductions in the line load.

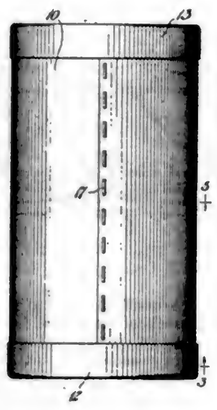
1,866,495. ELECTRIC CIRCUIT BREAKER. EDMUND BASIL WEDMORE, London, England, assignor to The British Electrical and Allied Industries Research Association, London, England, a British Association. Filed Mar. 30, 1925, Serial No. 19,320, and in Great Britain Apr. 5, 1924. 20 Claims. (Cl. 200—144.)



1. An electric circuit breaker in which there is a single series circuit having conductors and a breaking point, a conductor portion adjacent such point, and a further conductor portion adjacent a part of the circuit that moves in the breaking operation of the breaker, said conductor portions being so arranged that the current flowing in them at any instant produces electromagnetic effects tending respectively to prevent deflection of the arc formed at the breaking point and to prevent undue acceleration of the said moving part brought about by interaction between said moving part and adjacent parts of the breaker caused by the electromagnetic effects set up by the current flowing in the said moving part.

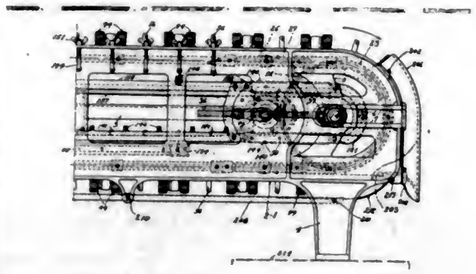
1,866,496. PAPER CONTAINER. JAMES G. WITTE, Keokuk, Iowa, assignor to Iowa Fiber Box Company, Keokuk, Iowa, a Corporation of Delaware. Filed June 19, 1930. Serial No. 462,322. 4 Claims. (Cl. 229—5.5.)

1. A container for ice cream and other solid commodities comprising, in combination, a cylindrical body made from a single sheet of paper and having a plurality of integral tongues at one end, adjacent tongues having edge contact with each other when the body is set up and the tongues are folded inwardly and all the tongues terminating short of the center of the body so as to leave a small central aperture; a paper disk secured to and above



said tongues and completely sealing off the interior of the body; a flanged paper cap on the bottom of the body below and supporting said tongues; and a closure for the top of the body.

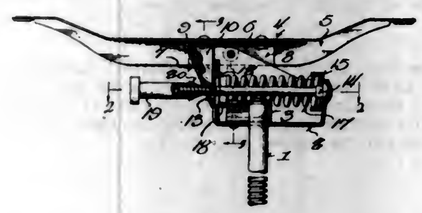
1,866,497. SAUSAGE TWISTING MACHINE. CHARLES H. ALLEN and EDWARD T. ROBBELOTH, Pittsburgh, Pa., assignors to Packers Specialty Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 26, 1929. Serial No. 416,475. 8 Claims. (Cl. 17—34.)



1. In a sausage linking machine, a unitary conveyor system having means mounted exclusively thereon to forwardly feed a stuffed sausage-casing, to divide same into sausage-links and to twist said links, said means comprising a plurality of sausage pinching and sausage twisting sets mounted alternately and equidistantly on said conveyor; individual cam-rail systems effective on said pinching and twisting sets to bring same into and out of engagement with the stuffed sausage casing to be linked; power means to operate said conveyor; a supporting-frame structure for said conveyor, and cam-rails longitudinally adjustable to accommodate conveyors of various lengths, and means to lock said frame into adjusted position.

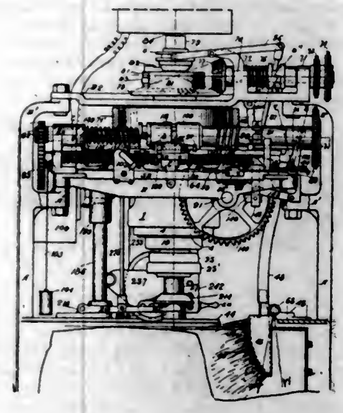
1,866,498. CHAIR IRON. HARRY W. BOLENS, Port Washington, Wis. Filed Oct. 29, 1930. Serial No. 491,955. 4 Claims. (Cl. 155—77.)

1. A chair iron comprising a stationary member, a seat spider pivotally connected to said stationary member adjacent its upper edge, resilient means for resisting tilting action of said seat spider, said means including a pair of spaced springs, an arched strap secured to said sta-



tionary member and having its arched portion positioned between said springs, and a spindle having its head secured to the arched portion of said strap.

1,866,499. CONTINUOUS AUTOMATIC CENTRIFUGAL MACHINE. HOMER A. HERR, Philadelphia, Pa., assignor to Automatic Centrifugal Company, a Corporation of Delaware. Filed June 4, 1923. Serial No. 643,329. 12 Claims. (Cl. 210—71.)



1. The combination in a centrifugal machine of a basket, a feeding mechanism including a feed regulating valve, a prime shaft in the machine, a mechanical connection between the said feed valve and the said prime shaft, adjustable means for the said valve whereby the volume of feed can be varied and regulated to meet different conditions of density and viscosity, and a controllable cleaning device, whereby material fed into the basket after the solids are separated therefrom, can be expelled.

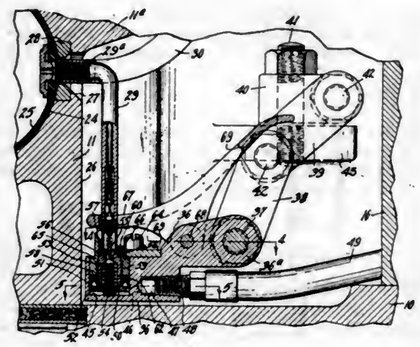
1,866,500. CAUSTIC FUSION OF BENZANTHRONE COMPOUNDS. EDWARD T. HOWELL, Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Aug. 15, 1931. Serial No. 557,379. 10 Claims. (Cl. 260—61.)

1. In the process of fusing a compound of the benzanthrone family having free peri positions, with caustic alkali to produce a dibenzanthrone compound, the improvement which comprises effecting the fusion in the presence of a diaryl-amine.

1,866,501. PROCESS FOR PRODUCING OXIDIZED DIBENZANTHRONE. EDWARD T. HOWELL, Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Aug. 15, 1931. Serial No. 557,380. 5 Claims. (Cl. 260—61.)

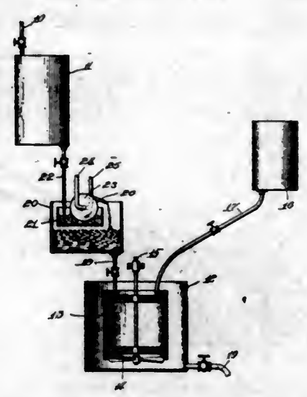
1. In the process of preparing an oxidized dibenzanthrone by reacting upon 2,2'-dibenzanthronyl with manganese dioxide and sulfuric acid, the improvement which comprises effecting the reaction in a sulfuric acid concentration not higher than 88% and not lower than 80%.

1,866,502. NOZZLE. CATO IVERSON, Akron, Ohio, assignor to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed June 1, 1931. Serial No. 541,189. 11 Claims. (Cl. 284—17.)



1. In a nozzle, the combination of a fixedly mounted body structure, a yieldingly mounted plunger therein formed with a passage for fluid therethrough, means for delivering fluid beneath said plunger, a gasket on the top of said plunger adapted to make sealed connection with an article, and means for manually depressing said plunger prior to the engagement of an article therewith.

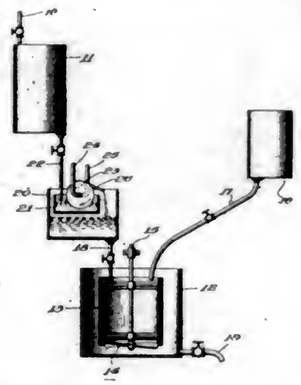
1,866,503. METHOD OF AND APPARATUS FOR PRODUCING BITUMINOUS EMULSIONS. LESTER KIRSCHBRAUN, Leonia, N. J. Filed Aug. 24, 1929. Serial No. 388,062. 1 Claim. (Cl. 134—1.)



In the art of producing aqueous emulsions of bitumen, non-fluid at normal temperatures, the steps which comprise heating the bitumen to a temperature sufficient to

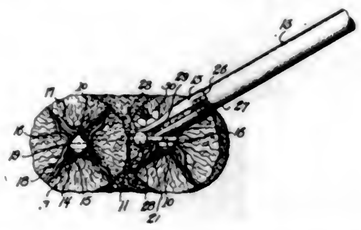
permit it to be fed as a fluid stream, feeding the thus heat liquefied bitumen to an emulsifying zone and cooling the bitumen just prior to its introduction to the emulsifying zone to a point less than 100° F. above the temperature of the mass undergoing emulsification in said zone, said heating of the bitumen being insufficient to decompose the bitumen, whereby the viscosity of the bitumen at a given temperature after said heating step will be substantially the same as its normal viscosity at said temperature before said heating step and whereby the melting point-penetration characteristics of said bitumen will be substantially the same before and after said heating step, the temperature of the mass undergoing emulsification in said zone being constantly maintained at a point approximating the melting point of the material to be emulsified, without substantial variation of the temperature due to the temperature of the incoming bitumen.

1,866,504. PROCESS OF COOLING MOLTEN BITUMEN. LESTER KIRSCHBRAUN, Leonia, N. J. Filed May 29, 1930. Serial No. 456,952. 2 Claims. (Cl. 62—170.)



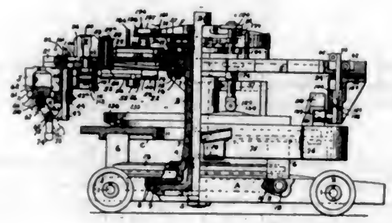
1. A process for cooling molten bitumen to a substantially predetermined temperature, which comprises maintaining a pool of molten bitumen, picking up the bitumen from said pool in a thin film and subjecting said film of bitumen to a cooling media in indirect contact therewith, and continuously delivering said film of cooled bitumen, in a liquid state, to a bulk supply.

1,866,505. MOP. ARTHUR C. KOOTZ, Milwaukee, Wis. Original application filed Aug. 15, 1927, Serial No. 212,034. Divided and this application filed Nov. 3, 1930. Serial No. 493,093. 2 Claims. (Cl. 15—229.)



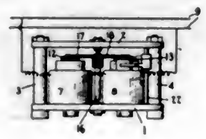
1. In a mop, the combination of a resilient mop-receiving frame having separable ends, a handle connector, a pivot pin on which said connector is pivotally mounted and having an eye and a shank, one of said ends being mounted on said shank, the other of said ends slidably fitting in the eye of said pin and releasable therefrom, and a nut having threaded engagement with said slidable end for holding the same against removal from said eye and means securing said pin in operative position.

1,866,506. APPARATUS FOR FORMING ARTICLES OF GLASS. WILLIAM J. MILLER, Swissvale, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Jan. 5, 1920. Serial No. 349,445. 34 Claims. (Cl. 49—5.)



1. In a machine for forming articles of glass, the combination of a movable mold support, a blow mold mounted on said support, a blow head mounted on said support and adapted to be brought, by the movement of said support, into blowing engagement with the mold for the application of blowing pressure, and means for regulating the duration of such application.

1,866,507. ALTERNATING CURRENT MOTOR. WILLIAM C. NEIN and THOMAS W. VARLEY, New York, N. Y. Filed Apr. 28, 1930. Serial No. 448,010. 8 Claims. (Cl. 172—275.)



1. The combination with a field member of a rotor, said rotor comprising a disk of magnetic material having openings therethrough and a disk of non-magnetic material, said disks being fixed upon a rotatably mounted shaft, said field having poles of opposite polarity on the same side of said disks.

6. The combination with a motor comprising a stator, a rotor, of means adapted to be moved into and out of engagement with said stator for locking the rotor against movement, time controlled means for moving said locking means into locking position with relation to said rotor, said locking means being controlled by the magnetism of said motor.

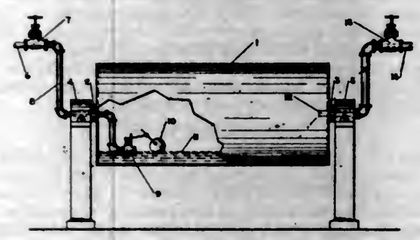
1,866,508. MEAT HOLDING METHOD. CECIL C. SMITH, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 16, 1929. Serial No. 386,423. 1 Claim. (Cl. 99—11.)

The method of treating bellies which consists in forming the same into slabs, smoking the same whereby they naturally become curled along their main axes, and mechanically restoring the slabs to their original planar form by applying a straight form to the concave side of the



slabs and maintaining a yieldable pressure against the convex sides of the said slabs, and then causing the slabs to become fixed in their original planar form.

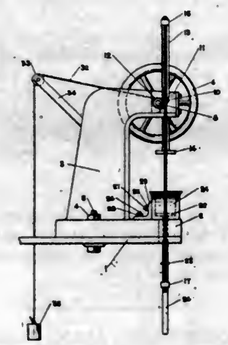
1,866,509. CHILL ROLL. ANSON W. DE VOUT and RICHARD W. REGENSBURGER, Chicago, Ill., assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 16, 1931. Serial No. 516,048. 2 Claims. (Cl. 62—126.)



1. A direct expansion refrigerated chill roll, means for rotatably supporting the chill roll, an intake pipe for a liquefied gaseous refrigerant leading into said roll through a trunnion at one end of the latter and terminating within the roll adjacent the end through which it enters, a float control valve within the chill roll to control the flow through said intake pipe, and an outlet pipe leading out of the opposite end of the chill roll through a trunnion at said end of the roll, spaced from and unconnected with said intake pipe, for withdrawing gas from the chill roll.

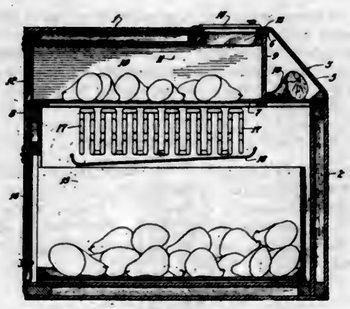
1,866,510. MEAT PRESS. NICHOLAS JOSEPH DZIEDZIC, Chicago, Ill., assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 24, 1931. Serial No. 510,867. 1 Claim. (Cl. 17—32.)

A meat press comprising a support, a stationary compression box thereon having fixed walls and a fixed bottom, there being openings in the bottom of the box and support, a horizontal meat ejecting plate arranged within the box and supported upon the fixed bottom thereof, a rod depending from the meat ejecting plate and passing loosely through the openings of the box and support and provided below the same with a projecting pin, an arm rising from the support and having a casing at its upper end, a rack bar slidable in the casing and provided at its lower end with a horizontal plate arranged to enter the compression box for compressing meat therein, a shaft mounted in the casing, a gear in the casing secured to the shaft and meshing with the rack bar, an upper cross bar carried by the rack bar, a lower cross bar located below the support and having an opening through which the depending rod of



the plate passes, side rods connecting the upper and lower cross bars and passing through the support, and means associated with the shaft to impart rotary movement thereto for operating the rack bar and the meat ejecting plate.

1,866,511. DISPLAY AND VENDING METHOD AND DEVICE. HARRY H. MCKEE and CHARLES T. WALTER, Chicago, Ill., assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 13, 1929. Serial No. 392,314. 5 Claims. (Cl. 312—116.)

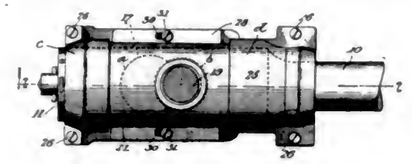


1. A self-service refrigerated vending cabinet for packaged meats, comprising a housing, a selling bin in said housing having a perflatory bottom and a delivery outlet located at the front portion of the selling bin so as to be accessible to customers, a storage bin below the perflatory bottom of said selling bin, a display case at the front of said housing in registration with the front end of said selling bin for exhibiting a specimen of the contents of said selling bin, and means below the perflatory bottom of the selling bin and adapted to refrigerate the contents of said display case and bins.

1,866,512. BALL AND SOCKET JOINT. WILLIAM TODD, Leominster, Mass. Filed Oct. 15, 1931. Serial No. 569,083. 5 Claims. (Cl. 287—90.)

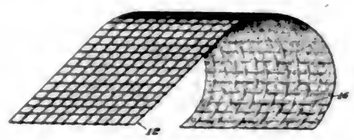
1. In a safety ball and socket joint including a tubular socket having an opened side face and longitudinal bearing faces on opposite sides of said opening, a ball inserted in the socket through said opening therein and having a shank extending through the opening, a slidably mounted

plate closing the opening in the socket and having an opening therein of a size to permit said shank to pass therethrough but to prevent said ball from passing therethrough, said plate having portions bearing against the



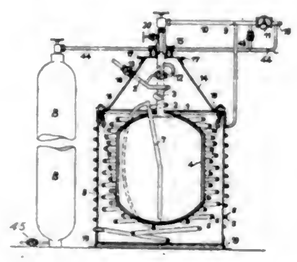
bearing surfaces of said socket and having longitudinally extending slots therein and means extending through said slots and detachably maintaining said plate in its slidably mounted position on the socket.

1,866,513. REENFORCED PAPER. JOSEPH W. BALLARD, Griswoldville, Mass., assignor to Griswoldville Manufacturing Company, Griswoldville, Mass., a Corporation of Massachusetts. Filed Oct. 10, 1930. Serial No. 487,761. 16 Claims. (Cl. 92—40.)



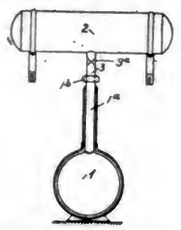
1. A fabric-paper sheet consisting of a fabric having an open mesh with a paper cover united to one face thereof, the fabric face of the sheet presenting a plane surface and the paper face of the sheet presenting an uneven surface, formed by short ridges corresponding in position to the interwoven yarn or threads of the fabric.

1,866,514. APPARATUS FOR PREPARING PRESSURE GASES. CHRISTIAN WILHELM PAUL HEYLANDT, Berlin-Sudende, Germany, assignor to Fluga Aktien-Gesellschaft, St. Moritz, Switzerland. Filed Oct. 5, 1927, Serial No. 224,268, and in Germany Oct. 18, 1926. 9 Claims. (Cl. 62—92.)



1. In a container for liquefied gases, the combination with a vessel for holding the liquefied gas provided with an insulating envelope, of a coil connected to said vessel, leading to a point in the outside atmosphere and provided with successive portions disposed in said insulating envelope in a manner such that the temperature drop therealong from the outer to the inner end is approximately coincident with the temperature gradient in said envelope.

1,866,515. METHOD AND APPARATUS FOR USE IN STORING AND TRANSPORTING LIQUEFIED GASES. CHRISTIAN WILHELM PAUL HEYLANDT, Lankwitz, Germany, assignor to Fluga Aktien-Gesellschaft, St. Moritz, Switzerland. Filed Nov. 12, 1927, Serial No. 232,922, and in Germany Nov. 13, 1926. 4 Claims. (Cl. 62—1.)

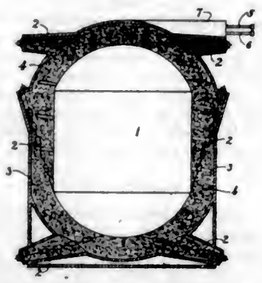


1. The method of conserving liquefied gases when being stored or transported, which comprises providing a gas receiver of fixed capacity to receive all the gas normally vaporized during a desired period of time and dimensioned so as to hold the same without exceeding a predetermined maximum pressure, and passing the gas normally vaporized in a container into said receiver while under a constantly increasing pressure.

1,866,516. METHOD OF CONSERVING LIQUEFIED GASES. CHRISTIAN WILHELM PAUL HEYLANDT, Berlin-Lankwitz, Germany, assignor to Flüga Aktiengesellschaft, St. Moritz, Switzerland, a Corporation of Switzerland. Filed July 17, 1929, Serial No. 379,075, and in Germany Aug. 4, 1928. 4 Claims. (Cl. 62—1.)

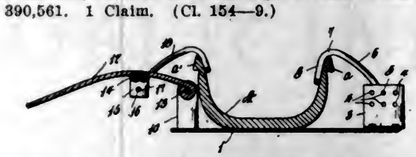
1. The method of conserving liquefied gases, while in storage or transport, which comprises charging an insulated liquefied gas container with a desired body of liquefied gas, raising the boiling point of said body of liquefied gas by increasing the pressure thereon, and thereafter absorbing the heat leakage which permeates the insulation as sensible heat within said body of liquefied gas.

1,866,517. TRANSPORTATION OR PRESSURE VESSEL FOR GASES. CHRISTIAN WILHELM PAUL HEYLANDT, Berlin-Lankwitz, Germany, assignor to Flüga Aktiengesellschaft, St. Moritz, Switzerland, a Corporation of Switzerland. Filed Jan. 11, 1930, Serial No. 420,043, and in Germany Nov. 13, 1926. 6 Claims. (Cl. 220—15.)



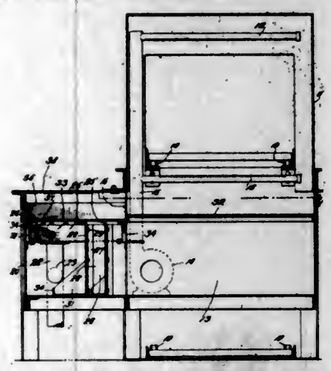
3. A container for transporting and conserving liquefied gases, comprising an inner vessel for holding liquefied gas and an outer supporting jacket disposed in spaced heat insulating relation without direct contact with said inner vessel, metallic chains anchored in the wall of said outer jacket and secured to the wall of said inner vessel whereby the space between said inner vessel and outer jacket is maintained in operative form, and means associated with one or more of said chains for obstructing the conduction of heat between any two consecutive links of said chains.

1,866,518. TIRE SPREADING MACHINE. JAMES L. PESHETTE, Peru, N. Y. Filed Sept. 5, 1929. Serial No. 390,561. 1 Claim. (Cl. 154—9.)



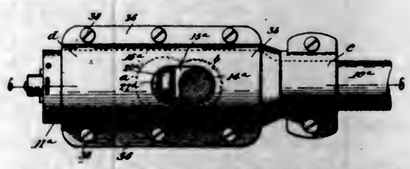
A tire spreading machine, comprising a base plate adapted to support a tire, ears on said base having a plurality of alined openings, a hook member, means to adjustably pivot said hook member in alined openings in said ears, a lever arm pivotally supported on said base plate, and a hook member pivotally mounted on said lever arm, said hook members being adapted to engage the beads of the tire and to spread it by actuation of said lever arm on its pivot, said hook members being formed from U-shaped members, and the lever being movable within said hook members for storage of the machine.

1,866,519. WASHING MACHINE. THOMAS F. RATAICZAK, Troy, Ohio. Filed June 20, 1929. Serial No. 372,231. 3 Claims. (Cl. 210—43.)



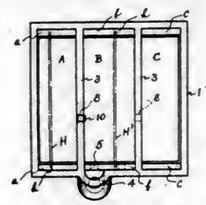
1. In a washing machine, a clarifying tank through which the washing liquid is passed between its contacts with the articles to be washed, overflow means for maintaining a constant liquid level in said tank, a removable vertical partition in said tank beyond the overflow means having an upper imperforate portion extending from above the liquid level to below the liquid level to skim grease and floating impurities from the liquid, a lower foraminous portion wholly below the liquid level to strain particles from the liquid, and a horizontal pan for collecting the particles strained out of the liquid secured to said partition near its lower edge and removable from the tank with the partition.

1,866,520. BALL AND SOCKET JOINT. WILLIAM TODD, Leominster, Mass. Filed Oct. 15, 1931. Serial No. 569,084. 2 Claims. (Cl. 287—90.)



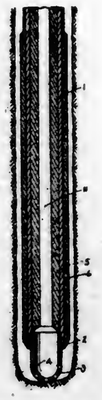
1. A safety attachment for ball and socket joints of drag links and connecting rods, which comprises a tubular socket member and an externally reduced portion inwardly from the outer end of the socket, said socket having a slot therein through which a headed shank may be inserted and removed, said attachment including a longitudinally split casing adapted to extend about said tubular socket and having an internally reduced portion corresponding to and to engage with the reduced portion of said joint, means for fastening the split portions of the casing together, said casing having a slot therein to permit the shank to extend therethrough and of a width less than the diameter of the said head of the shank, whereby the head of said shank is locked in said socket.

1,866,521. FILM-DEVELOPING TANK. MURDICK F. MURPHY and COLIGNEY BRAINERD METHENY, Beaver Falls, Pa., assignors to Sterling Photo Manufacturing Co., Beaver Falls, Pa., a Corporation of Pennsylvania. Filed June 19, 1931. Serial No. 545,386. 8 Claims. (Cl. 95—98.)



1. A developing tank including a compartment for a bath of film-developing solution and a compartment for a circulating bath of rinsing liquid, each compartment being provided with opposed edges for the support of film hangers, and an outlet conduit on the wall of said tank, which outlet conduit at its upper end terminates adjacent the top of the rinsing compartment, said rinsing compartment having an inlet for the introduction of rinsing liquid adjacent the bottom of the compartment, and a lip adjacent its top for the overflow of rinsing liquid into said conduit.

1,866,522. METHOD OF CEMENTING WELLS. CLARENCE E. JACKSON and STEPHEN J. RYAN, Houston, Tex. Filed Apr. 13, 1931. Serial No. 529,582. 8 Claims. (Cl. 166—21.)



1. A method of cementing well casing consisting of coating the lower end of the casing on the inner surface thereof with a charge of cementitious material hard at atmospheric temperatures, introducing the casing into position in the well, heating said charge to reduce the same to a liquid state and thus causing it to flow to the bottom of the well.

Patents Nos. 1,866,523 to 1,867,544

THE OFFICIAL GAZETTE

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Reissues	14—No.	18,515 to No. 18,528, inclusive.
Designs	62—No.	87,325 to No. 87,376, inclusive.
Patents	1022—No.	1,866,523 to No. 1,867,544, inclusive.
Total	1,326	

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,698,706, I. F. Byrnes, High frequency signaling system, decided June 15, 1932, claim 1.

Pat. 1,754,260, M. J. Callahan, Lowdown heating and ventilating unit, decided May 25, 1932, claims 25 and 26.

Pat. 1,759,809, P. E. Edelman, Acoustic condenser, decided May 24, 1932, claim 6.

Pat. 1,771,064, J. D. Rue, Process for the purification of chemical wood pulp, decided June 13, 1932, claim 1.

Pat. 1,788,537, C. H. Morrow, Gas valve structure, decided June 15, 1932, the single claim.

Pat. 1,789,979, F. C. Jones and V. Skillman, Method of lining bearings, decided June 11, 1932, claim 1.

Pat. 1,813,609, A. M. Clifford, Deterioration inhibitor for rubber, decided June 13, 1932, claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12.

Interference Notice

U. S. Patent Office, *Washington, June 9, 1932.*

H. J. Kent and Company, its assigns or legal representatives, take notice:

An interference has been declared by this Office between the application of the Standard-Tilton Milling Company, Planters Building, Saint Louis, Mo., for registration of a trade-mark and trade-mark registered February 10, 1925, No. 194,846, to Waukesha Flour Mills, Clinton Street, Waukesha, Wis., which registration, the assignment records of the Office show, has been transferred to H. J. Kent and Company, doing business as The Fluffy-Flour Company, Chicago, Ill. The notice of such declaration sent by registered mail to said H. J. Kent and Company, at the said address, having been returned by the post-office as undeliverable, notice is hereby given that unless said H. J. Kent and Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

NOTICE—CHANGES IN PATENT OFFICE FEES—EFFECTIVE JULY 31, 1932

The act of Congress approved June 30, 1932, amends section 4934, Revised Statutes (U. S. C. Title 35, Sec. 78) so as to provide that, except in design cases, the fee for filing each original application for patent and for each renewal application for patent, and the fee for issuing each original patent shall be $30.00 and $1.00 for each claim in excess of 20, instead of the present fee of $25.00 and $1.00 for each claim in excess of 20. These new fees are effective on and after July 31, 1932.

The act also provides that the fee for filing each petition to revive an abandoned application shall be $10.00. This fee is effective on and after June 30, 1932.

IN ALL APPLICATIONS IN WHICH THE FINAL FEE IS PAID PRIOR TO JULY 31, 1932, THE PATENT OFFICE RESERVES THE RIGHT TO DEFER THE ISSUANCE OF THE PATENT UNLESS, AT THE TIME THE FEE IS PAID, A SHOWING IS MADE OF THE NECESSITY OF HAVING THE PATENT ISSUE ON A SPECIFIED DATE.

Condition of Applications Under Examination at Close of Business June 25, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 75,601; Trade-Mark Division, 894. Oldest new case, Dec. 3, 1931; oldest amended, Dec. 22, 1931. The dates given are 1932 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action: New	Oldest new application awaiting office action: Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Mar. 14	Mar. 18	515
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Mar. 1	Mar. 2	1,017
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Mar. 3	Msr. 18	760
7063	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Apr. 8	Apr. 14	479
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Mar. 2	Mar. 2	429
4898 C	6. LEWERS, A. M., Carbon Chemistry	†Dec. 24	†Dec. 30	1,030
5725	7. JARBOE, C. G., Optics; Photography	Feb. 1	Feb. 1	1,485
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Jan. 25	Feb. 1	1,254
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Apr. 30	Apr. 4	854
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Jan. 15	Jan. 16	925
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Mar. 2	Mar. 1	631
7701	12. HENRY, C. C., Machine Elements	Mar. 4	Mar. 4	664
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Feb. 13	Feb. 12	1,175
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Mar. 15	Mar. 21	765
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Jan. 20	Jan. 20	2,037
5612	16. SPENCER, C. J., Telegraphy; Telephony	Mar. 1	Mar. 1	927
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	†Dec. 28	†Dec. 29	1,350
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Mar. 1	Mar. 1	725
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Jan. 2	Jan. 1	1,695
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Mar. 4	Mar. 12	680
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Feb. 23	Feb. 24	900
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Mar. 7	Mar. 26	630
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Jan. 4	Jan. 2	926
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Feb. 11	Feb. 23	727
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	†Dec. 31	†Dec. 31	1,488
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Jan. 2	†Dec. 26	1,039
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Mar 9	Mar. 9	1,004
4628	28. BENSON, A. R., Internal-Combustion Engines	†Dec. 27	†Dec. 27	1,287
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	†Dec. 24	†Dec. 24	994
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Mar. 3	Mar. 14	849
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	†Dec. 28	†Dec. 28	1,599
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Feb. 26	Feb. 29	952
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	†Dec. 30	†Dec. 26	2,432
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Jan. 26	Jan. 26	926
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	May 4	May 2	484
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Jan. 2	Jan. 2	1,774
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Jan. 2	Jan. 20	1,317
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Apr. 15	Apr. 15	274
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	†Dec. 26	†Dec. 28	1,553
7880	40. OBERLIN, J. J., Receptacles	Feb. 3	Feb. 2	2,074
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Mar. 25	Mar. 30	744
5882	42. CUTTING, H. O., Electric Signaling	Jan. 6	†Dec. 29	1,423
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Jan. 30	Jan. 30	1,446
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	†Dec. 22	†Dec. 22	1,90[illegible]
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Feb. 23	Feb. 2[illegible]	Mar.
4513	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Feb. 18	Feb. [illegible]	
7500	47. BARKER, R., Clutches and Power Stops; Brakes and Motors	Jan. 30	Jan. 2	
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Jan. 12	Jan. 1	
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	†Dec. 3	Jan. [illegible]	
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Jan. 2	Jan. [illegible]	2,112
5628	51. BACKUS, C. D., Radiant Energy	Jan. 27	Jan. 2	1,203
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Mar. 19	Mar. 21	322
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Apr. 4	Apr. [illegible]	586
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Jan. 2	Jan. 2	1,168
6883	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	Apr. 30	Apr. 30	287
	{Designs	June 4	June 8	183
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Jan. 16	Jan. 16	1,473
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Feb. 11	Feb. 8	646
5605	58. DOWELL, E. F., Abrading; Typewriting	Jan. 2	Jan. 2	1,310
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	†Dec. 21	†Dec. 23	1,632
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	†Dec. 22	†Dec. 22	1,512
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	†Dec. 30	†Dec. 30	1,414
7526	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	†Dec. 26	†Dec. 28	1,796
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	†Dec. 28	Jan. 2	1,475
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Mar. 1	Mar. 1	631
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Jan. 1	Jan. 1	1,712
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—{Trade-Marks	May 25	June 11	790
	{Labels and Prints	May 26	June 11	104

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re California Perfume Company, Inc.

No. 2,926. Decided March 28, 1932

Trade-Marks—Geographical—"Avon".

The term "Avon" *Held* not registrable under the act of 1905 as a trade-mark for tooth brushes since that term is merely geographical.

Appeal from the Patent Office. Affirmed.

Mr. Henry C. Hunt for California Perfume Company Inc.,

Mr. T. A. Hostetler for the Commissioner of Patents.

Bland, *J.:*

Applicant's application for registration of its alleged trade-mark "Avon", as applied to toothbrushes, was, by the Commissioner of Patents, denied on the ground that the term was geographical.

Upon appeal to this court, appellant contends that its mark is not *merely* geographical and is not, therefore, barred from registration by the following provision in section 5 of the Trade-Mark Act of February 20, 1905:

> • • • That no mark • • • merely a geographical name or term, shall be registered under the terms of this Act.

Appellant relies upon *In re Plymouth Motor Corp.*, 18 C. C. P. A. (Patents) 838, 46 F.(2) 211, 404 O. G. 269, as supporting its contention that the term "Avon" is not merely geographical within the meaning of the statute. It points out various dictionary and encyclopædia definitions of the word "Avon" and cites various uses of the term in standard literature.

As we understand appellant's position, it is that "Avon" is the name of various towns in at least three States of the United States and that to this extent the term is geographical, but that it is not *merely* geographical since it is the name also of a river in the midland country of England upon which William Shakespeare lived, and that the name suggests Shakespeare. It was also argued orally by appellant that "Avon" means river—any river. Appellant points out that in *Manogue-Pidgeon Iron Co.*, 97 O. G. 2084, 1901 C. D. 214, it was held that the word "Delta", although the name of counties in Michigan and Texas, as well as the name of numerous small towns, was a valid trade-mark for articles because its significance as a letter of the Greek alphabet and as a general term applied to the mouths of some rivers was superior to its geographical meaning. Other authorities are cited to which we deem reference unnecessary.

In *In re Plymouth Motor Corp.*, supra, this court held the words "Chrysler Plymouth", as applied to automobiles, to be registrable and not to be merely geographical. The conclusion in the case was reached upon the theory that while Plymouth is the name of towns in England, Massachusetts, and elsewhere, the term as a whole is not merely geographical. In that case it was also contended that the word "Plymouth" had acquired a secondary meaning suggestive of certain traits of character of the Pilgrims, such as endurance, strength, enterprise, honesty, etc. We held there that the term "merely", as used in the statute, must be given its ordinary meaning and that when a term acquires a secondary meaning it is not "*merely* geographic, or solely geographic, or only geographic". [Italics quoted.] We therein cited the cases of *Katschinski* v. *Keller et al.*, 49 Cal. App. 406, 193 P. 587, involving the trade-mark "Philadelphia Shoe Store", and *In re Jewell Belting Co.*, 110 O. G. 309, 1904 C. D. 150, involving the trade-mark "Gibraltar."

Appellant has called our attention to no meaning of the word "Avon" other than one which is merely geographical. The name of a river is geographical. "Geographical" is defined as "of or pertaining to geography". Geography relates to towns, countries and subdivisions thereof, mountains, valleys, rivers, etc., the names of which suggest fixed locations. Webster's New International Dictionary (1932). If "Avon" were a term which described all rivers, which it is not, appellant's cited authority *Manogue-Pidgeon Iron Co.*, supra, involving the trade-mark "Delta" would be more in point.

In *Columbia Mill Co.* v. *Alcorn*, 150 U. S. 460, 65 O. G. 1916, the Supreme Court of the United States held the trade-mark "Columbia" to be invalid. Columbia is the name of a river and the name of a town. One of the grounds upon which the Court held the mark to be invalid was that it did not indicate origin but indicated location only. The Supreme Court said that "the word or words, in common use as designating locality, or section of a country, cannot be appropriated by anyone as his exclusive trade-mark."

The decision of the Commissioner of Patents is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

In re Prosser

No. 2,846. Decided March 7, 1932

Patentability—Method of and Apparatus for Drying and Shaping Hosiery.

Claims for a method of and claims for an apparatus for drying hosiery *Held* unpatentable over the prior art.

Appeal from the Patent Office. Affirmed.

Mr. Harold Olsen for Prosser.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

Hatfield, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying all of the claims, 1 to 23, inclusive, in appellant's application for a patent for an alleged invention relating to a method and an apparatus for the drying and shaping of hosiery.

Claims 1 and 10 are illustrative. They read:

1. The method of drying hosiery and the like at a selected non-boiling temperature, which consists in subjecting the interior of the same to the resultant drying-action of a thermal fluid in a non-boiling condition, maintaining circulation of the fluid, heating it while in circulation, and varying the amount of heat supplied to the fluid in accordance with the heat abstracted therefrom to maintain the selected, non-boiling temperature at a degree not higher than that of saturated vapor at atmospheric pressure.

10. Apparatus for finishing hosiery at a selected drying temperature, including a series of hollow finishing forms, a supply-conduit in fluid-communication with the interior of the forms to supply a thermal fluid thereto, an exhaust-conduit also communicating with the interior of the forms, means for maintaining circulation of the fluid through the forms, means for heating it while in circulation to a non-boiling temperature, and means for varying the action of the heating means, to vary the amount of heat supplied to the fluid in accordance with the heat abstracted therefrom to maintain the selected non-boiling temperature of the forms and thereby meet the drying demands of hosiery thereon.

The references are: Schwartz, 1,055,235, Mar. 4, 1913; Ross, 1,061,635, May 13, 1913; Gibson, 1,189,806, July 4, 1916; MacDonald, 1,278,067, Sept. 3, 1918; Merrill, 1,287,071, Dec. 10, 1918.

Appellant's method for the drying and shaping of hosiery, and the apparatus for carrying out the claimed process are sufficiently described in the quoted claims.

The patent to Schwartz relates to a device for drying hosiery on hollow forms. The hollow forms are heated by the circulation of steam or hot water therethrough.

The patents to Ross, Gibson, MacDonald, and Merrill disclose hot water heating systems. The systems include means for heating, circulating, and controlling the rate of circulation of the water, and for controlling the amount of heat to be applied to the water, in accordance with the changes in its temperature.

The tribunals of the Patent Office have fully discussed and analyzed the references and their application to the involved claims, and have concurred in holding that the appealed claims are unpatentable over the patent to Schwartz in view of the other references.

In view of the fact that we are in entire accord with the conclusion reached by those tribunals, we deem it unnecessary to enter upon a discussion of the contentions made here by counsel for appellant.

The decision of the Board of Appeals is affirmed.

U. S. Court of Customs and Patent Appeals

IN RE REACH

No. 2,912. Decided March 28, 1932

PATENTABILITY—GOLF BALLS.

Claims for a golf ball with colored dots on the surface thereof for identification purposes *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Spear, Middleton, Donaldson & Hall and *Mr. William F. Hall* for Reach.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.:*

Appellant seeks a patent upon a multidot golf ball, his claims being typified by claim 7 which reads as follows:

7. A golf ball having small depressions substantially uniformly distributed over its surface and a plurality of individual, substantially uniform and widely spaced apart, colored dots on said surface, each dot being located in a depression and said dots being sufficiently numerous so that in any lie of the ball, when viewed from above, at least one of the dots will be clearly visible.

It is thought the quoted claim describes the article with sufficient clarity to enable its visualization without further description.

Appellant claims that the dot arrangement set forth in the claims performs three wholly new and novel functions, viz:

(1) It enables a player to identify the ball with which he is playing, and to distinguish that of his adversaries, in any lie of the ball on the golf course, *without lifting the ball.*
(2) It makes the ball appear larger than it is.
(3) It enables one, at a considerable distance from a player, to determine its make; * * * (Italics quoted).

All the claims, three in number, were rejected by the Examiner of the United States Patent Office on the ground that they presented nothing patentable, in view of the prior art as shown in patents cited, to wit: Knight et al., 676,506, June 18, 1901; Taylor, 878,254, February 4, 1908; Riblet, 906,932, December 15, 1908; Young 1,656,408, January 17, 1928.

Upon appeal the decision was affirmed by the Board of Appeals whereupon the appeal to this court was taken.

In its decision the Board of Appeals gave a somewhat more elaborate discussion of the issue than was contained in the decision of the Examiner, making reference to common knowledge of the use of a certain type of golf ball, and, in a supplemental opinion, given in response to applicant's request for clarification of part of its first opinion, added specifically a reference to a trade-mark registration, No. 62,085, April 16, 1907, of A. G. Spalding & Bros.

Physical exhibits of the ball upon which said trade-mark is applied were produced during the argument before us by counsel for appellant.

These show white golf balls having regular and uniform depressions or "dimples" upon their surfaces, and having at opposite sides, or poles, the name "Spalding" with a small dot underneath the name, the dot being placed not in one of the regular "dimples," but in a relatively smaller depression made in the "ridge" between certain of said "dimples." The name and the dot correspond in color which varies on different balls, some being black, some blue, etc.

Before us appellant's counsel stresses quite earnestly the feature of aid in identification by the golf player of the particular ball which he is using in a game, through the medium of the dots arranged as called for by the claims, without the necessity of lifting said ball in violation of the strict rules of the game. In whatever position the ball may come to rest a sufficient number of dots will be visible, as it lies, to enable identification of the individual ball which any particular player may be using. At the same time there are not a sufficient number of dots to destroy the general effect of whiteness appertaining to the ball's entire surface.

We are unable to find invention in behalf of appellant.

The desirability of providing means whereby a player may identify the ball which he has in use is taught by the prior art cited, and means stated for accomplishing the desideratum. It is true the means suggested in this prior art differ from the means adopted by appellant, but appellant in working out his means seems merely to have provided a ball marked with a larger number of dots than are used on the trade-marked ball exhibited, placed in the larger depressions, rather than in a smaller one, probably specially made for that purpose.

The case of *In re Meinecke*, 18 C. C. P. A. (Patents) 752, 44 F.(2d) 674, 402 O. G. 707, involved an application for both method and article claims relating to marking and marked barrels and pistons of glass syringes with corresponding numbers for the purpose of easy identification.

In holding same not patentable, this court said:

* * * Surely there can be no invention in applying to glass syringes a practice, the exact principle of which has been applied in innumerable arts, probably from the time that men first learned to write characters representing numbers.

It seems to us that even if there be invention in marking golf balls in some particular manner, or in the ball so marked, for the purpose of aiding in identification, there was no invention involved in marking the ball with a larger number of dots than the two present upon the trade-marked article.

We fail to see wherein there was an advance over the prior art which went beyond the exercise of mere skill and mounted to the dignity of discovery or invention.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BRUCE

No. 2,918. Decided March 28, 1932

PATENTABILITY—BUNDLE OF FLOORING HAVING LABELS THEREON.

Claims for a bundle of flooring having applied thereto a label indicating type, grade, and length of the wood *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. John Boyle, jr., for Bruce.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming the decision of the Examiner rejecting all claims, four in number, of appellant's application for a patent on a claimed invention stated in the specification simply as "improvements in label," but which claims seem to relate to the application of labels to bundles of wood flooring, the labels being designed to indicate various characteristics of the wood, such as length, grade and color.

Claim 1 appears to be typical:

1. A bundle of flooring having applied thereto a label having information imparting indicia as to the type, grade, and length of the wood, the said indicia being of different relative degrees of conspicuousness, the most conspicuous indicating the type of wood and the next indicating the grade of the wood.

The drawings filed show only three forms of label. No bundle of flooring is represented.

One of these label forms, which is illustrative of all, has upon it, in large type, the words "First grade" with the words "Plain white" in smaller letters underneath. To the left of these words, upon a somewhat circular background, appears the name "Bruce," and to the right, in still larger type, is the numeral "7".

As we understand appellant's contention, when this label is applied to a bundle of flooring it indicates to the observer that that particular bundle contains pieces of flooring of the first grade, plain white in color, with the numeral indicating the length of the pieces. The name, we assume, indicates the manufacturer.

Broadly, the claims were rejected by the tribunals of the Patent Office upon the ground, as stated by the Examiner, "that no invention is involved in placing a sign, label or tag on anything."

The Board of Appeals said:

It is our view that it does not involve the exercise of invention to attach a label to a package of flooring for the purpose disclosed by appellant and we consider the particular means employed for indicating the various characteristics is merely a matter of choice rather than of invention.

In the statement of the Examiner accompanying the appeal to the Board, merely "as illustration of the common practice of using labels wherever desired," there was cited an illustrated advertisement of an express company, showing packages bearing labels indicating whether the shipping charges had been prepaid, or were to be collected on delivery.

It is noted that all the claims are article claims calling for "a bundle of flooring" having the described label applied thereto.

Appellant insists that each claim constitutes a combination claim and that:

* * * it is immaterial and moot whether or not either element of the combination is novel.

Numerous authorities are cited and quoted from to substantiate this principle. None of the cited cases, however, shows facts analogous in any way, so far as we can see, to the facts presented in appellant's application.

Appellant further argues that the reference cited is not an anticipation. This may be true, in the technical sense that the claims do not read upon it, but it was not cited to show that they do. It was cited only for the purpose stated. Had the Examiner and the Board chosen to do so they doubtless could have cited hundreds of labels applied to various kinds of packages to indicate in detail the contents of such packages.

We are unable to see wherein appellant has added any patentable concept to "the sum total of human knowledge" by simply attaching to a bundle of sawed lumber a label showing certain characteristics of the pieces which compose the bundle.

In our opinion, there is nothing patentably novel in the label; nothing, in any wise, novel in the bundle of flooring; nothing novel in putting the label on the bundle, and nothing novel or unobvious in the result obtained by the combination.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE WELLS

No. 2,929. Decided March 28, 1932

PATENTABILITY—TREATMENT OF FIBROUS MATERIAL TO PRODUCE WOOD PULP.

Claims for a process of treating fibrous material to produce wood pulp *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. William L. Symons for Wells.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.:*

Fifteen claims in an application of appellant, appertaining to a process for the treatment of fibrous material to produce wood pulp used in the manufacture of paper, were rejected by the Examiner of the United States Patent Office as disclosing nothing inventive over prior art cited.

Upon appeal to the Board of Appeals the decision of the Examiner was modified to the extent that one claim (No. 30) was allowed. As to the other claims, numbered 1 to 14, inclusive, the Examiner's decision was affirmed. Appeal to this court followed.

Both tribunals of the Patent Office joined in a criticism of the number of claims, but multiplicity was not made a reason of rejection.

Appellant has, however, assigned error upon this, thereby, at least, inviting the comment of this court.

We think the criticism justified. All that appellant claims to be patentable in the fourteen claims disallowed is the element relating to the proportions of materials used. Claim 2 is quoted as typical:

2. In the production of fibers from vegetable material for use in making paper, the method of treating material which has been cooked with chemicals until the middle lamella is softened and which cook has been terminated before the middle lamella is completely dissolved, which method consists in separating the fibers of said softened material by pounding the same between parallel pounding surfaces of a pile of rods which substantially constantly extend parallel to each other and are tumbled with the material and which fall with the material and impact upon particles of the material, whereby the length of the fibers is maintained, the treatment being conducted under conditions in which the material treated includes fiber in proportions of at least five parts and not more than 9.5 parts to 100 parts of fluid by weight.

Everything which appellant claims to be patentable is embraced in the concluding words of the foregoing claim:

• • • the treatment being conducted under conditions in which the material treated includes fiber in proportions of at least five parts and not more than 9.5 parts to 100 parts of fluid by weight.

The fourteen claims to cover this comprise about 2000 words, or something more than one-fourth the number which were used in framing the Constitution of the United States.

We really feel that appellant could have reduced the number without sacrificing either substance, clarity or protection. The number may be accounted for, at least in part, by a prior patent to appellant referred to hereafter. Nevertheless it seems to us to have been unnecessary to have so many claims.

The prior art cited against the claims is embraced in patents to: Wells, 1,654,624, Jan. 3, 1928; Howard 1,039,286, Sept. 24, 1912; DeCew, 1,598,267, Aug. 31, 1926.

The first of the above references is a patent to appellant himself, containing fourteen claims which are similar to the fourteen herein at issue, except that in the patent claims there is no statement as to the ratio of the fibrous material to the fluid.

The patent to Howard relates to apparatus known as a ball type of mill for manufacturing wood pulp. It contains no statment as to the specific proportions of fibrous material and fluid used, but the specification teaches the feeding of said material "in approximately the proper proportions of fiber and water for efficient grinding."

The patent to DeCew is for a "method of hydrating cellulose fibers in concentrated stock." The claims of said patent call for a fiber stock, as expressed in claim No. 2 thereof, of "*more than* 4%." (Italics ours.)

As has been seen, appellant's involved claims are limited to "at least 5 parts and not more than 9.5 parts" of solid matter.

Appellant has presented a number of affidavits, said to be by experts in the wood pulp industry, setting forth the advantages and benefits derived from the proportions proposed in his application. These show elaborate laboratory tests on the part of appellant in arriving at the stated consistencies of materials, and recite the solution of various difficulties by the use of these consistencies.

There is no occasion to doubt the truth of these affidavits, but, accepting them as being, in all respects, true, they do not appear to us to establish invention in the patentable sense, in view of the prior art teachings.

This case is quite analogous in principle to that of *In re Richter*, 19 C. C. P. A. (Patents)——, 53 F.(2d) 525, 415 O. G. 221. That case involved certain claims for new preparations in acid sulphite cooking liquor used in the production of wood pulp. We there held that changes in proportions of agents used in combinations, such as were there involved, in order to be patentable, must be *critical* as compared with the proportions used in prior processes. We there pointed out that such was the doctrine of *Minerals Separation, Limited, et al.* v. *Hyde*, 242 U. S. 261, 234 O. G. 1311, which case was there relied upon, as it is here.

Other cases in point are *In re Williams*, 17 C. C. P. A. (Patents) 718, 36 F.(2d) 436, 392 O. G. 737; *In re Pilling*, 18 C. C. P. A. (Patents) 703, 44 F.(2d) 878, 403 O. G. 513, and cases cited in each.

We do not feel that the proportions named in appellant's claims are critical in the sense required sufficiently to render the claims patentable.

The decision of the Board of Appeals is, therefore, affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE HORMEL

No. 2,935. Decided March 28, 1932

PATENTABILITY—DESIGNS.

A design for a packing and display container *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

BLAND, *J.*, dissenting.

Mr. Comfort S. Butler, Messrs. Cromwell, Griest & Warden, and *Mr. Earle D. Crammond* for Hormel.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.:*

This case involves an appeal from the decision of the Board of Appeals of the United States Patent Office, affirming the decision of the Examiner rejecting an application for a design patent upon a "packing and display container," used by appellant primarily in the packaging of food products, particularly poultry canned whole or in halves.

The following is a description of the container taken from the opinion of the Board of Appeals:

The can as shown in the drawing consists of two flat, parallel sides, the lower edge of each side being substantially straight and a portion of the upper edge being parallel to the lower edge, and the remaining portion being inclined toward the lower edge. The shape of the container appears to lend itself particularly to receive the carcass of a chicken.

The references relied upon are: Design, Kinney, 22,270, Mar. 7, 1893; Design, Ferguson, 43,528, Feb. 11, 1913; Design, Wright, 43,295, Nov. 26, 1912.

The rejection was based upon the holding, as expressed by the Board, that:

• • • the distinctions in applicant's design over the can disclosed in the patent to Kinney are not of sufficient ornamental distinctiveness, especially in view of the design patents to Ferguson and Wright, to warrant the granting of a design patent to applicant.

The Kinney patent is for a design of a receptacle having flat, straight ends and a curvature of sides which gives it an oval appearance when viewed from the ends.

The respective patents to Ferguson and Wright are for designs of casings for vacuum and pneumatic cleaners of types which have become familiar, being widely used in households throughout the country. There is some slight suggestiveness of similarity in shape between one side of said casings and a side of appellant's receptacle, but the contours of the entire bodies of the respective devices do not impress us that such resemblance is very striking.

Also we are of opinion that the resemblance between the Kinney device and that of applicant is too remote to justify a rejection of patent upon the latter based upon the former.

The brief of the Solicitor for the Patent Office very accurately says:

That a design is not ornamental can not well be established by argument but only by a careful inspection of the design.

The contrary of this is likewise true.

In *Gorham Co.* v. *White*, 81 U. S. 511, the Supreme Court of the United States said:

• • • It is the appearance itself • • • that constitutes mainly, if not entirely, the contribution to the public which the law deems worthy of recompense.

No question is raised as to the object of manufacture—the container here involved—being a proper subject for ornamental design, and it is our conclusion that the references relied upon by the tribunals of the Patent Office do not bear a sufficiently close resemblance to the design of appellant to anticipate same. Furthermore, we are of the opinion that the conception and execution of the design involved invention and that there is about it sufficient of novelty and ornamentation to justify granting patent.

Accordingly, the decision of the Board of Appeals is reversed.

Reversed.

BLAND, *J.*, dissents.

U. S. Court of Customs and Patent Appeals

IN RE MALCOLM

No. 2,941. Decided April 4, 1932

PATENTABILITY—MUSIC NOTATION SHEET.

Claims for a music notation sheet *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Barnett & Truman, Mr. Otto R. Barnett, and *Mr. Percival H. Truman* for Malcolm.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.:*

For alleged lack of invention over the prior art cited, the tribunals of the United States Patent Office have concurred in rejecting the five claims of appellant's application for patent upon claimed improvements in music notation.

Claim 9 is selected by appellant as illustrative:

9. The herein described music notation sheet having thereon two pairs of staff lines, one for the treble and one for the base, numerals 1 to 7 inclusive for designating the white key notes of each octave and consecutive letters designating the black key notes of each octave, arranged with the characters designating the notes of each octave in horizontal alignment with each other and with the characters designating notes of certain octaves larger than the characters designating notes of other octaves.

The foregoing claim seems to relate to the application of appellant's system of writing that music which is to be used in the playing of a piano or like instrument. The other appealed claims differ from it in scope, or in providing a single pair of staff lines for music to be used in playing other instruments.

Originally appellant's application was rejected by an Examiner on the ground that musical notation as printed matter does not come within the statutory subjects of invention. Upon appeal the Board of Appeals having reviewed a number of court decisions found that in several cases the courts had indicated doubt as to the patentability of printed matter, but had stopped short of holding it nonpatentable per se and had decided the issues of those cases simply upon nonpatentability over prior art. In other cases such as *Johnson et al.* v. *Johnston*, 60 Fed. 618; *Rand, McNally & Co.* v. *Exchange Scrip-Book Co.*, 187 Fed. 984; and *Benjamin Menu Card Co.* v. *Rand, McNally & Co. et al.*, 210 Fed. 285, it was expressly held that the types of printed matter therein involved were patentable. The fact

was also noted that some of the references cited in the instant case were patents of printed musical notation plans or systems.

Accordingly, the Board of Appeals reversed the decision of the Examiner based upon nonpatentability of subject matter.

Thereupon appellant amended his application by introducing some new claims and the entire case was reopened before the Examiner.

The rejection of the new claims and also all the old claims by the Examiner, as not being inventive over cited prior art, followed, and this second decision being affirmed by the Board of Appeals, the instant appeal to this court was taken.

The final decision of the Patent Office tribunals being limited to rejection upon prior art, the broad question of whether printed musical notations are patentable is not involved in the reasons of appeal, and so is not before us for determination. Consequently, we are limited to a consideration of the issue of anticipation.

The references cited are: Harrison, 1,338, October 26, 1839; Clements-Kropp, 429,841; June 10, 1890; Thiriwell (Br.), 13,459 of 1896; Heffernan (Br.), 15,561 of 1906; No. XVII, public letter of Mr. R. Patterson to Francis Hopkinson, dated March 7, 1788., "Public School Music," p. 485, published Chicago, February 1, 1899, filed Division 53 under Class 283—47.

The chart of appellant's system, applied to music to be played upon the conventional piano, as same is disclosed in his specification and drawings, may be described as follows:

The octaves are numbered from left to right with Roman numerals, octaves I to IV being to the left of middle C and octaves V to VIII to the right thereof. The notes, which are to be sounded by the white keys of each octave are represented by the Arabic numerals 1 to 7, inclusive, and those to be sounded by the black keys are represented by the capital letters, A to E, inclusive.

Two pairs of lines are used in creating a staff, the space between the second and third lines from the top (the center space) being relatively wider than that between the first and second and between the third and fourth lines, respectively. The numbers and letters designating the keys which are to be struck by the right hand are carried by the upper pair of lines; those that are to be struck with the left hand are carried by the lower pair. Three successive octaves are shown in letters and numerals of uniform size placed, respectively, below, between and above each pair of lines, those uniform characters of the left hand clef beginning with octave III and ending with octave V and those of the right hand clef beginning with octave IV and ending with octave VI. The remaining octaves are shown either by different sized type or different shading of the type, or both. The arrangement of the key numerals and letters with reference to the lines and the varying sizes or shades is for distinguishing the notes in the different octaves.

The Harrison patent apparently relates to vocal music or to music for such instruments as require only the treble clef (the kind which appellant's claims 8 and 11 seem to contemplate) and Harrison's description indicates only one pair of parallel lines for the staff, but states: "When necessary I add two additional lines * * *." Harrison discloses the indication by numerals 1 to 7 of the seven primary tones. The octaves are indicated by placing the numerals below, between, and above the lines, as in appellant's system.

The patent to Thiriwell shows two pairs of horizontal lines for the treble staff and bass staff, respectively. The white keys are indicated by numerals printed in one style and the black keys by numerals printed in another style, and also different colors are used for the numerals which color arrangement limits to 10 numerals the number required to represent each of all the keyboard notes.

In the Clements-Kropp patent characters are used which by their dimensions indicate the time values.

Heffernan shows two pairs of horizontal lines for treble and bass staffs, respectively. The notes are indicated by numerals.

The Patterson letter discloses the use of letters of different styles to indicate notes, and the "Public School Music" reference employs numerals to indicate notes with dots to indicate the octaves.

Appellant insists that by his system a new combination has been created which simplifies musical notations, reduces the mental effort required in learning to play musical instruments and renders musical education simpler and less difficult of attainment.

It seems perfectly obvious that each of the elements used in appellant's system is to be found in some one of the systems shown in the prior art cited.

The designation of musical notes by numerals and letters is shown. It is true that they are not shown in the combination which appellant utilizes, but one combination does show the white keys and the black keys distinguished by numeral types. It scarcely seems to have required invention to substitute the letters taught by Patterson to indicate notes for the black key numerals taught by Thiriwell.

The four lines, or two pair lines, staff arrangement is shown (not in the same dimensions perhaps but the claims say nothing of dimension, even if that were a patentable distinction), and Harrison distinctly teaches an arrangement of characters precisely like that of appellant, with reference to the lines, so as to show different octaves. Also the feature of size in characters used to indicate certain musical terms or phases is shown.

Furthermore, each of the elements constituting appellant's combination appears to have been designed to function in the prior art substantially as it functions in the system of appellant.

Under this state of facts we are unable to find patentable invention, as defined by the statutes, in appellant's arrangement, ingenious and valuable though it may be.

The rule as to measuring an achievement in this art by the test of skill applies, so far as patentability is concerned, the same as in all other arts, and the court must here, as elsewhere, distinguish between invention and mere skill in workmanship.

Appellant's cited authorities have been carefully examined in the light of the facts of the case. These facts distinguish this case from those upon which appellant relies.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE SULZBERGER

No. 2,939. Decided April 4, 1932

PATENTABILITY—MEDICATED CHEWING TABLET.

A claim for a medicated chewing tablet including "an outer covering layer over said medicament" *Held* unpatentable on the ground that the application as filed did not disclose an outer coating of the tablet in which no portion of the medicament is incorporated.

APPEAL from the Patent Office. Affirmed.

Messrs. Hazell & Leech, Mr. Cleon J. Sawyer, Mr. J. J. Kennedy, Mr. P. B. Phillipp, Mr. Joseph W. Hazell, and *Mr. Francis B. Leech* for Sulzberger.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner, rejecting claim 8 of appellant's application upon the ground that it includes matter not disclosed in the application as originally filed.

All of the claims of the application were rejected but appeal was taken only as to claim 8, which reads as follows:

8. A medicated chewing tablet of predetermined accurate dose comprising an inner gum portion, a plurality of layers of water-insoluble medicament thereon and an outer covering layer over said medicament.

Appellant's application relates to laxative chewing gum sold under the trade name "Feen-a-mint." The claim before us is for a tablet comprising an inner gum portion, a plurality of layers of water-insoluble medicament thereon, and an outer covering layer over said medicament.

The question is whether the original specification of appellant's application discloses an outer coating of the tablet in which no portion of the medicament is incorporated.

The Board of Appeals held that such an outer coating was not disclosed in appellant's original specification, and for that reason affirmed the decision of the Examiner rejecting said claim 8.

Appellant contends that the element here in question is disclosed in the following language of his specification:

The outer coating layer of the chewing gum may be a simple sugar layer, formed of a suitable syrup, and it may have incorporated therewith other constituents such as flavoring, etc. A mint flavor can be given to the gum by incorporating the mint in the outer coating or in the inner gum layer or in both portions of the chewing gum.

Earlier in his specification appellant states:

* * * I provide a composite gum having a portion of chicle or chicle compound or similar material and having one or more layers or a coating combined therewith, in which the laxative is incorporated.

Where the laxative is insoluble or difficultly soluble, the compounding of the laxative with the coating of the gum, for example, *with a sugar coating,* facilitates the separation of the laxative from the gum when chewed and makes it more readily available, while such amounts of the laxatives as are not thus made available during the early period of chewing become more or less completely available gradually as the chewing is continued. (Italics ours.)

In the paragraph of the specification following the above quoted matter appellant further sets out the advantages of incorporating the medicament in the outer coating of the tablet and again refers to a *sugar coating* containing the medicament. Later on, he states that all of the medicament may be incorporated in the outer coating or a portion in the outer coating and a portion with the central gum portion, and again states the advantages of having all or the greater part of the medicament in the outer coating.

In the paragraph immediately preceding the one relied upon by appellant (first above quoted) the specification states:

In addition to incorporating the laxative with the chewing gum in the manner described, other pharmaceutical preparations or physiological preparations may be incorporated either in the central gum portion of the chewing gum or in the outer coating layer of the chewing gum, or both. So also, coloring matter, flavoring, etc. can be incorporated in either or both portions of the chewing gum.

We cannot agree with appellant that the language "The outer coating layer of the chewing gum may be a simple sugar layer, formed of a suitable syrup, and it may have incorporated therewith other constituents such as flavoring, etc." should be construed as disclosing an outer coating excluding the medicament. It is our view that by this language appellant intended merely to point out how one might make the sugar coating which, as recognized throughout the specification, was to be combined with part or all of the medicament. The entire specification is based upon the theory that some portion, at least, of the medicament shall be included in the outer coating, and that outer coating is repeatedly referred to as a *sugar coating.* When the entire specification is considered, the obvious construction of the language last quoted is that the outer coating *containing medicament* may be formed as described. There was no occasion for repeating in the paragraph relied upon by appellant that the outer coating should contain all or a part of the medicament because appellant had clearly taught that it should contain it in the preceding parts of the specification; consequently, its omission from said paragraph is without significance. Throughout appellant's specification he emphasizes the advantages of incorporating medicament in the outer coating, and it is clear to us that he never had in mind, and had no intention of disclosing, an outer coating that contained none of the medicament.

For the reasons stated, the decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,018,833, J. C. Lincoln, Convertible motor, D. C., S. D. Ohio (Dayton), Doc. E 237, *The Brown-Brockmeyer Co.* v. *The Master Electric Co.* Dismissed May 25, 1932.

1,135,108, L. Gschwind, Dish washing apparatus, D. C., W. D. Mich., S. Div., Doc. 2537, *L. Gschwind et al.* v. *Crane Co. et al.* Dismissed May 25, 1932.

1,141,319, H. G. Coykendall, Drive mechanism, filed May 27, 1932, D. C., N. D. Calif. (San Francisco), Doc. E 3282–K, *H. G. Coykendall* v. *The Studebaker Corp. et al.*

1,264,924, F. A. Headson, Brake band, brake shoe, and lining therefor; 1,771,749, F. J. Eisenhardt, Brake lining, filed May 24, 1932, D. C., N. D. Ind. (South Bend), Doc. E 473, *Johns-Manville Corp.* v. *Gatke Corp. et al.*

1,326,153, W. J. Fleming, Buckle support; 1,377,253, M. J. Keevers, Fastening device, D. C., S. D. N. Y., Doc. E 40/54, *Fleming & Keevers Co., Inc.* v. *Deuville Import Corp.* Consent order of discontinuance (notice May 24, 1932).

1,357,790, R. Marx, Furnace, D. C. R. I., Doc. 359, *American Electric Furnace Co.* v. *C. I. Hayes, Inc.* Dismissed May 23, 1932.

1,377,253. (See 1,326,153.)

1,382,726, E. A. Herr, Garment presser, D. C., S. D. N. Y., Doc. E 57/138, *E. A. Herr* v. *James McCreery & Co.* Dismissed without prejudice (notice May 25, 1932).

1,513,398, J. P. King, Braiding machine, D. C. R. I., Doc. 350, *Ideal Braiding Machine Co.* v. *Providence Braid Co.* Dismissed May 23, 1932.

1,538,308, C. R. Short, Transmission belt, filed May 26, 1932, D. C., S. D. Ohio, W. Div., Doc. E 329, *The Dayton Rubber Mfg. Co. et al.* v. *The Lewis Motor Mart Co.*

1,552,326, P. J. Lunati, Lifting device for motor vehicle, D. C., N. D. Ohio, E. Div., Doc. 3759, *Rotary Lift Co. et al.* v. *The Wurster Mfg. Co.* Patent held valid; claims 2, 3, 7 and 8 infringed (notice May 24, 1932).

1,570,364, J. Wieder, Sample tab, D. C., S. D. N. Y., Doc. E 58/328, *Standard Sample Card Co., Inc., et al.* v. *Sample Card Corp. of America.* Dismissed without prejudice (notice May 25, 1932).

1,606,212, Dunmore & Lowell, Power amplifier, C. C. A., 3d Cir., Doc. 4656–4657–4658, *U. S. of America* v. *Dubilier Condenser Corp.* Decree affirmed May 24, 1932.

1,611,128, J. H. Gunmison, Apparatus for making and handling aggregates, D. C., N. D. Iowa (Cedar Rapids), Doc. 124, *Pioneer Gravel Equipment Mfg. Co.* v. *Iowa Mfg. Co.* Dismissed May 23, 1932.

1,683,531. (See Re. 17,393.)

1,687,510, M. Pipkin, Electric lamp bulb, filed May 20, 1932, D. C., N. D. Ohio, W. Div., Doc. E 1265, *General Electric Co.* v. *Save Sales Co. et al.*

1,699,151, 1,699,152, Miller & Leong, Rotary earth working element; 1,816,210, J. L. Chong et al., Cutting tool unit for ground working implements, filed May 24, 1932, D. C., N. D. Calif. (Sacramento), Doc. 940–K, *Miller & Chong* v. *Paris Bros. et al.*

1,699,152. (See 1,699,151.) 1,771,749. (See 1,264,924.)

1,778,363, W. G. Kirchhoff, Dough mixer, filed May 24, 1932, D. C., S. D. Ohio, W. Div., Doc. 328, *The J. H. Day Co.* v. *The Peerless Bread Machine Co.*

1,797,451, J. C. Staton, Refrigerator, D. C., N. D. Ohio, E. Div., Doc. 4014, *The Coca Cola Co.* v. *Packer Mfg. Co.* Claim 1 held valid and infringed May 27, 1932.

1,808,692, E. W. Sudduth, Highway advertising sign, filed May 25, 1932, D. C., N. D. Ala. (Birmingham), Doc. 735, *E. W. Sudduth* v. *Sunny South Display, Inc.*

1,816,210. (See 1,699,151.)

1,844,280, Hacker & Wallenstein, Vamp guard, filed May 25, 1932, D. C., S. D. N. Y., Doc. E 68/58, *Cosmos Patents Corp.* v. *Vamp Bee Co.*

1,858,316, R. E. Thompson, Safety razor, filed May 26, 1932, D. C. Conn. (New Haven), Doc. 2207, *Gillette Safety Razor Co.* v. *Standard Safety Razor Corp.*

Re. 17,393, J. Mayer, Hair waving appliance and method; Re. 17,585, same, Permanent hair waving appliance; 1,683,531, G. Decker, Hair waving outfit, filed May 28, 1932, D. C., N. D. Ohio, E. Div., Doc. 4278, *The Philad Co. et al.* v. *Modernistic Permanent Wave Machine Co. et al.* Doc. E 4279, *The Philad Co. et al.* v. *E. Baum et al.*

Re. 17,585. (See Re. 17,393.)

Re. 18,171 (Reissue of No. 1,748,836), M. Falkovitz, Pocket construction for trousers, filed Mar. 2, 1932, D. C., E. D. Pa., Doc. 7007, *M. Falkovitz* v. *Perfect Trouser Co.* (To correct error in 419 O. G., p. 12, originally reported as 1,748,836).

Des. 66,525, Wurdack & Wurdack, Chair; Des. 68,027, A. Wurdack, same; Des. 70,495, I. K. Wurdack, Chair settee, D. C., E. D. Mo. (St. Louis), Doc. 9489, *A. Wurdack et al.* v. *Ozark Chair Co.* Consent decree for plaintiff May 21, 1932.

Des. 68,027. (See Des. 66,525.)

Des. 70,495. (See Des. 66,525.)

Des. 70,843, V. Jones, Bottle for soft drinks, filed May 20, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E W–124–J, *V. Jones* v. *M. Fishman et al.*

Adjudicated Patents

(C. C. A. III.) Ramsey patent No. 1,093,009, for lamp-support, claims 4 and 7 *Held* invalid. *Unity Mfg. Co.* v. *International Spotlight Corporation,* 57 F.(2d) 945.

(C. C. A. III.) Ulmann patent No. 1,224,977, for device for winding yarn and the like, claims 1, 2, 7, and 8 *Held* valid and infringed. *Collingbourne Mills* v. *Clark Thread Co.,* 57 F.(2d) 1002.

(C. C. A. III.) Ulmann patent No. 1,258,380, for package of yarn and the like, claims 1 and 3 *Held* invalid. *Id.*

(C. C. A. III.) Cousino patent No. 1,327,945 for spotlight-mounting device, claims 5 and 6 *Held* invalid. *Unity Mfg. Co.* v. *International Spotlight Corporation,* 57 F.(2d) 945.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 12, 1932

[VOL. 420. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 325,849. FREDRIKSSTAD TRAEMELFABRIK AKTIESELSKAB, Fredrikstad, Norway. Filed Apr. 6, 1932.



For Woodflour, Being Ground Sawdust and Ground Wood Refuse, for Use in the Manufacture of Various Products.

Claims use since Jan. 20, 1932.

Ser. No. 326,614. MICHIGAN TANNING & EXTRACT CO., Petoskey, Mich. Filed Apr. 29, 1932.



No claim is made to the exclusive use of the words "Boyne City" apart from the mark as shown on the drawing.

For Leather.

Claims use since on or about Feb. 1, 1932.

Ser. No. 327,002. RAY FUEL COMPANY, Detroit, Mich. Filed May 11, 1932.



In the drawing the design being lined for red and yellow. Exclusive appropriation of the word "Charcoal" is disclaimed except when used in connection with the mark shown.

For Charcoal.

Claims use since about Mar. 16, 1932.

Ser. No. 327,529. FRANCIS W. RUZICKA, Chatham, N. J. Filed May 27, 1932.



For Cut Flowers.

Claims use since Apr. 28, 1932.

Ser. No. 327,640. THE TANNING PROCESS COMPANY, Boston, Mass. Filed June 1, 1932.

Merrichrome

For Leather.
Claims use since Mar. 10, 1932.

Ser. No. 327,694. A. HOLLANDER & SON, INC., Newark, N. J. Filed June 3, 1932.

PAIN BRÛLÉ

For Fur Skins.
Claims use since May 16, 1932.

CLASS 2

Receptacles

Ser. No. 327,377. SUPERIOR PRODUCTS CORPORATION, Elizabeth, N. J. Filed May 23, 1932.

FLIP

For Empty Base Metal Vanity Cases, Compacts, and Lip Stick Cases.
Claims use since Apr. 12, 1932.

Ser. No. 327,378. SUPERIOR PRODUCTS CORPORATION, Elizabeth, N. J. Filed May 23, 1932.

POWDERIZER

For Compacts and Empty Base Metal Vanity Cases.
Claims use since Mar. 15, 1932.

Ser. No. 327,593. MASTER METAL PRODUCTS, INC., Buffalo, N. Y. Filed May 31, 1932.

MASTER

For Utility Chests.
Claims use since Apr. 30, 1932.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 327,449. WM. C. RATH CO. INC., New York, N. Y. Filed May 25, 1932.

Will Rath

For Pocket Books and Hand Bags and Suit Cases of Leather and Fabric.
Claims use since Mar. 10, 1932.

Ser. No. 327,480. SAKS & COMPANY, New York, N. Y. Filed May 26, 1932.

Lucky Elephant

For Ladies' Handbags.
Claims use since Mar. 26, 1932.

Ser. No. 327,605. SAKS & COMPANY, New York, N. Y. Filed May 31, 1932.

RICK AND RACK

For Handbags and Pocketbooks.
Claims use since May 14, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 314,854. SAMUEL MILLER, JR., doing business as Miller Products Company, Cheviot, Ohio. Filed May 21, 1931.

EASY-Z

The color lining on the drawing represents red.
For Flake Soap for a General Household and Laundry Use.
Claims use since Apr. 25, 1931.

Ser. No. 326,377. GUSTAV EDWARD KUCHLE, doing business as Okay Distributing Service, Lakewood, Ohio. Filed Apr. 22, 1932.

G. CLEANS E. IT CLEANS K.

The words "Cleans" and "It Cleans" are disclaimed apart from the mark as shown.
For Cleaning Compound Used for the Removal of Dirt, Grease, Finger Marks, Tar, Gum, and Grime from Furniture, Automobiles, Glass, Leather, Etc.
Claims use since Apr. 5, 1932.

Ser. No. 327,430. FOUR SQUARE PRODUCTS, INC., Dover, Del. Filed May 25, 1932.

4 SQUARE

The drawing is lined to indicate green, but applicant does not confine its claim to that color.
For Shaving Cream.
Claims use since Apr. 14, 1932.

Ser. No. 327,604. THE RENOU CHEMICAL CORPORATION, Akron, Ohio. Filed May 31, 1932.

RÉNOLI

For Cleaning Compositions and Compounds—Namely, Oil, Fat, and Grease Removers; Tar, Gum, and Organic Resin Removers; Washing and Cleaning Compounds, and Dry Cleaning and Spotting Fluids.
Claims use since May 10, 1932.

CLASS 5

Adhesives

Ser. No. 326,898. HICKOK OIL CORPORATION, Toledo, Ohio. Filed May 9, 1932.

HI-SPEED

For Radiator Cement, Adhesive Patches for Mending Articles, Tire Cements, Adhesive Tapes, Gasket Pastes and Cements for Use in Repairing Motors and Auto Bodies.
Claims use since 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 282,289. A. L. FENNIMORE & SONS, Trenton, N. J. Filed Apr. 12, 1929.



No claim being made to the word "Product" apart from the mark shown on the drawing.

For Medicine for the Treatment of Asthma, Constipation, Rheumatism, Paralysis, Sugar Diabetes, Blood Poison, Hemorrhoids, Cataracts and Stomach Disorders.

Claims use since Jan. 1, 1929.

Ser. No. 300,540. ELIZABETH L. PINKARD, Swissvale, Pa. Filed May 14, 1930.



The portrait appearing on the drawing is that of the applicant.

For Hair Gloss and Hair Restorer.

Claims use since September, 1912.

Ser. No. 310,266. SILVERTONE COMPANY, INC., New York, N. Y. Filed Jan. 22, 1931.

PICK-ME-UP

For Bird Tonics.

Claims use since about Aug. 1, 1924.

Ser. No. 317,178. HARRY E. MONTERO, doing business as Tastie Tooth Paste Co., Bloomfield, N. J. Filed July 21, 1931.



The words "Tooth", "Paste", and "Tastie" are disclaimed apart and aside from the mark as shown.

For Toothpaste.

Claims use since July 17, 1931.

Ser. No. 317,857. SMILE STORES, LTD., Hollywood, Calif. Filed Aug. 10, 1931.



For Cosmetics, Toilet Preparations, and Medicinal Preparations—Namely, Face and Hand Lotions, Muscle Oils, Astringent Tonics, Tissue Creams, Finishing Creams, Melting Creams, Cleansing Creams, and Theatrical Creams.

Claims use since Nov. 1, 1930.

Ser. No. 318,866. ELPIDIA TISCARENO CARIO, El Paso, Tex. Filed Sept. 9, 1931.

CARIO'S



The applicant disclaims the name "Cario's" and "E. T. Cario" apart from the mark shown in the drawing.

For Medicinal Cigarettes for the Relief of Hay Fever and Asthma.

Claims use since Aug. 5, 1931.

Ser. No. 320,837. STAFFORD CHEMICAL COMPANY, INC., Amherst, Mass. Filed Nov. 5, 1931.



No claim being made to the word "Kleen" apart from the mark shown.

For Chemical Compound for Removing Scale and Soot from Boilers.

Claims use since Oct. 1, 1931.

Ser. No. 322,478. ARKO HERBS INCORPORATED, Buffalo, N. Y. Filed Dec. 28, 1931.



No claim is made to the words "Herbs" and "Nature's Own Product" apart from the mark shown in the accompanying drawing.

For Herb Teas Beneficial for All Stomach Disorders and as a General Tonic.

Claims use since Jan. 1, 1931.

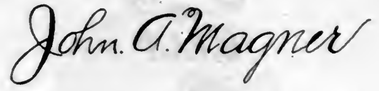
Ser. No. 322,731. BOURJOIS, INC., New York, N. Y. Filed Jan. 5, 1932.

SPRINGTIME IN PARIS

For Perfume, Toilet Water, Toilet Powder and Toilet Cream.

Claims use since Dec. 28, 1931.

Ser. No. 324,106. MRS. JOHN A. MAGNER, doing business as John A. Magner, New Orleans, La. Filed Feb. 12, 1932.

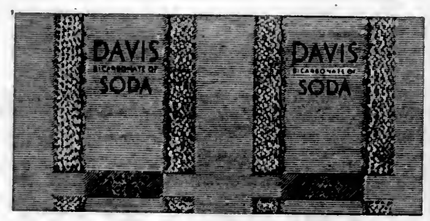


The name appearing on the drawing is a facsimile signature of John A. Magner, deceased.

For Salve for Eczema, Itch, Ringworm, Barber's Itch, Skin Eruptions, Scales on Body and Head, Tetter, and Diseases of the Skin.

Claims use since Oct. 1, 1911.

Ser. No. 324,154. R. B. DAVIS COMPANY, Hoboken, N. J. Filed Feb. 15, 1932.

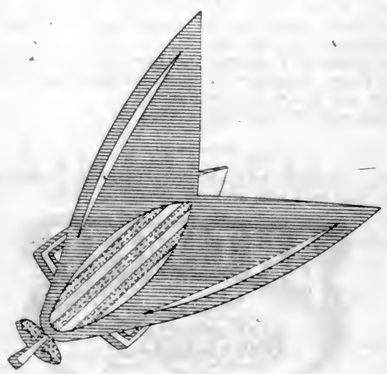


The terms "Bicarbonate of Soda" and "Baking Soda" are disclaimed apart from the mark as shown in the drawing. The representation of the label per se is disclaimed. The hatching is to indicate the colors blue, brown and dull gold, in which colors the mark has been displayed, but the right to display the mark in other colors is not waived.

For Baking Soda.

Claims use since Feb. 5, 1932.

Ser. No. 324,201. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Filed Feb. 15, 1932.



The mark consists of a fly having blue wings with white lines thereon, an orange striped back, a blue and orange head, and white legs outlined with blue.

For Fly Spray and Other Insecticidal Sprays.

Claims use since Oct. 27, 1931.

Ser. No. 324,411. JOSEPH E. WARD, Long Beach, Calif. Filed Feb. 23, 1932.



The words "Cream of Kelp" are disclaimed apart from the mark as shown.

For Skin Tonic, Powder Base, Hair Tonic, Shampoo, and a Tonic Derived from Sea Kelp, Containing Iodine and Other Salts.

Claims use since Sept. 15, 1931.

Ser. No. 324,915. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Filed Mar. 8, 1932.



The mark consists of the words "Red Line" and the representation of a red line.

For Medicinal Petroleum Oil, Insecticidal Oils, Oils for Oiling Paper, Cosmetic Oils, Radiator Glycerine, Radiator Cleaner and Anti-Corrosion Material.

Claims use since September, 1924.

Ser. No. 324,923. THE ANTIMITE COMPANY, Wilmington, Del., and St. Louis, Mo. Filed Mar. 4, 1932.



For Antimite, a Composition for Prevention of Termites, White Ants or Insect Attack on Wood or Wood Structures, or Their Contents.

Claims use since Sept. 15, 1930.

Ser. No. 325,087. CENTRAL CHEMICAL COMPANY, INC., Hagerstown, Md. Filed Mar. 14, 1932.

TAROLENE

Tar Oil Winter Wash

No claim is made to the words "Tar Oil Winter Wash."

For Oil Emulsion for Dormant Spraying on Trees, Plants, and Vines.

Claims use since Jan. 26, 1932.

Ser. No. 325,185. REED & CARNRICK, Jersey City, N. J. Filed Mar. 16, 1932.

Toniçine

For General Tonic.

Claims use since Feb. 16, 1932.

Ser. No. 325,195. WALTER DAVIDSON, New York, N. Y. Filed Mar. 11, 1932.



The words "Bacillus Acidophilus Culture" are disclaimed apart from the mark as shown.

For Bacillus Acidophilus Culture.

Claims use since Feb. 1, 1931.

Ser. No. 325,306. VITA-MINN COMPANY, Minneapolis, Minn. Filed Mar. 19, 1932.

VITA
JAMUN

For Medicines—Namely, a Tablet or Medicine in the Form of Tablets for Use in Ferment Deficiency and Diabetes.

Claims use since Mar. 1, 1932.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 325,364. R. B. DAVIS COMPANY, Hoboken, N. J. Filed Mar. 22, 1932.



The words "Baking Powder" are disclaimed apart from the mark as shown in the drawing.

For Baking Powder.

Claims use since May, 1927.

Ser. No. 325,807. JACQUES SOESMAN, doing business as Souplex Company, Brussels, Belgium. Filed Apr. 4, 1932.



The representation of the human head shown as part of the mark is purely fanciful and not a representation of any living person.

For Dentifrice, Mouth Wash, Toilet Rouge, Lip Stick, Face and Toilet Powder, Face and Toilet Creams, Perfume, Hair Tonic, Hair Pomade, Brilliantine, Bath Salts, Toilet Water, Eau de Cologne, Toilet and Hair Vinegar, Alum.

Claims use since Apr. 1, 1931.

Ser. No. 325,844. GERONIMO ANDREALLO, doing business as Jerome, New York, N. Y. Filed Apr. 6, 1932.

JE-RO-JÉ

For Scalp Ointment, Hair Gloss, Hair Rinses, Hair Tonics, Tissue Cream, Cleansing Cream, Hand Cream, Lotions for Cleansing the Skin, Toilet Powders, Rouges, and Lip Sticks.

Claims use since Apr. 4, 1932.

Ser. No. 326,232. S. M. LABORATORIES, INC., Seattle, Wash. Filed Apr. 18, 1932.



The lining shown in the drawing is for shading only, though the trade-mark is usually but not necessarily printed in blue. Applicant disclaims exclusive registration rights in the symbol "℞" apart from the mark as shown.

For Vaginal Suppositories.

Claims use since about Nov. 30, 1931.

Ser. No. 326,283. "DEGEWOP" GESELLSCHAFT WISSENSCHAFTLICHER ORGANPRAEPARATE A. G., Berlin-Spandau, Germany. Filed Apr. 20, 1932.

PREGNON

For Medical Preparation for Female Diseases.

Claims use since July, 1930.

Ser. No. 326,322. GUSTAVE GLATZER, New York, N. Y. Filed Apr. 21, 1932.

REGULAX

For Laxatives and Product Comprising Psyllium Seed and Acar-Agar.

Claims use since Jan. 15, 1932.

Ser. No. 326,355. METAL PROCESS CORPORATION, Fair Lawn, N. J. Filed Apr. 21, 1932.

MEPROCO

For Pickle Liquors Used for the Removal of Dirt, Rust, Scale, etc., from Metal Surfaces, and Constituents of Pickle Liquors.

Claims use since Feb. 23, 1932.

Ser. No. 326,409. YARDLEY & CO., LIMITED, London, England. Filed Apr. 22, 1932. Under 10-year proviso.

YARDLEY'S

For Bath Salts, Bath Salts Tablets, Perfumes, Tooth Wash, Brilliantine, Dentifrice, Hair Tonic, Mouth Wash, Dental Cream.

Claims use since 1890.

Ser. No. 326,541. J. W. HAUTMAN, Minneapolis, Minn. Filed Apr. 27, 1932.

UPSIDE DOWN

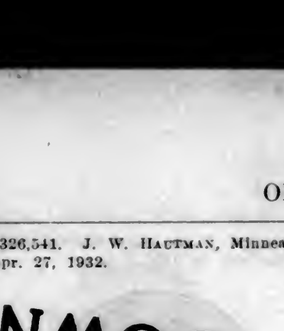
For Fruit Salts for Use as a Mild Laxative and Remedy for Sour Stomach.
Claims use since July 3, 1931.

Ser. No. 326,564. ALLAN A. POLAKOFF, doing business as Veritas Products Co., New York, N. Y. Filed Apr. 27, 1932.

Verithol

For Antiseptic Jelly.
Claims use since Mar. 22, 1932.

Ser. No. 326,573. JAMES F. BALLARD, INC., St. Louis, Mo. Filed Apr. 28, 1932.



No exclusive claim being made to the word "Pine" apart from the mark shown.
For Bath Tablet.
Claims use since Jan. 1, 1932.

Ser. No. 326,574. JAMES F. BALLARD, INC., St. Louis, Mo. Filed Apr. 28, 1932.

NE·O·PINE

No exclusive claim being made to the word "Pine" apart from the mark shown.
For Bath Tablet.
Claims use since Jan. 1, 1932.

Ser. No. 326,625. ADAM GRIESEMER, doing business as Saurinol Distributors, Colorado Springs, Colo. Filed Apr. 28, 1932.

SAURINOL! IT HITS THE SPOT TRADE MARK

The applicant hereby disclaims the exclusive use of the words "Trade-Mark."
For Oil Used for Massaging Purposes for the Relief of Lung and Asthma Afflictions, Ailments of the Spine, Lumbago, Rheumatism, Neuralgia, Neuritis, Earache, Sinus Trouble, Sprains, Bruises, Aching Feet, Neuritis of Arms and Legs, Stiff Joints, Varicose Veins, Rupture, and Other Ailments Where Massaging With Said Oil Yielded Relief.
Claims use since on or about Oct. 26, 1931.

Ser. No. 326,706. CHARLTON AND MATZEN, doing business as Arzen Laboratories, Inc., Clinton, Iowa. Filed May 3, 1932.

Eye·o·Eye

In the drawing the words "Eye" not being claimed apart from the mark as shown.
For Eye Drops.
Claims use since Oct. 8, 1931.

Ser. No. 326,771. KOLAG COMPANY, New York, N. Y. Filed May 4, 1932.

KOLAG

For Medicinal Preparations for the Treatment of Colitis.
Claims use since Apr. 25, 1932.

Ser. No. 326,791. FRED D. RAMM, doing business as Siegfried Gessler, New York, N. Y. Filed May 5, 1932.



The portrait appearing on the drawing is fanciful.
For Bitters.
Claims use since Oct. 1, 1931.

Ser. No. 326,821. THE KENDALL COMPANY, Boston, Mass., and Chicago, Ill. Filed May 6, 1932.

BURN-A-LAY

For Ointment Prepared Especially for the Relief of Burns, Scalds, Sunburn, Windburn, Insect Bites, Chapped Skin, and Similar Irritations.
Claims use since Apr. 12, 1932.

Ser. No. 326,839. HARRY SPANIER, Brooklyn, N. Y. Filed May 5, 1932.



For Face Powder.
Claims use since Feb. 1, 1931.

Ser. No. 326,856. HARZFELD'S, INC., Kansas City, Mo. Filed May 7, 1932.

Petticoat Lane

For Perfume.
Claims use since on or about Apr. 1, 1932.

Ser. No. 326,942. JOHNSON & JOHNSON, New Brunswick, N. J. Filed May 10, 1932.

ortho-gynol

For Antiseptic Preparation for Feminine Hygiene.
Claims use since Sept. 30, 1931.

Ser. No. 326,946. MAISON JEURELLE, INC., Jersey City, N. J. Filed May 10, 1932.

Maison Jeurelle

For Perfume, Toilet Water, Skin Freshener, Astringent Lotion, Eye Shadow, Cream Rouge, Compact Rouge, Face Powder, Compact Face Powder, Hand Lotion, Complexion Lotion, Cleansing Cream, Anti Wrinkle Cream, Foundation Cream, Tissue Cream, Brilliantine, Lip Stick, Sachet Powder, Talc Powder, Dusting Powder, and Mascara.
Claims use since Mar. 16, 1932.

Ser. No. 326,949. NATIONAL OIL PRODUCTS COMPANY, INC., Harrison, N. J. Filed May 10, 1932.



For Germicides, Disinfectants and Deodorants.
Claims use since Apr. 23, 1932.

Ser. No. 326,950. NATIONAL OIL PRODUCTS COMPANY, INC., Harrison, N. J. Filed May 10, 1932.

Nopco - San

For Germicides, Disinfectants and Deodorants.
Claims use since Apr. 23, 1932.

Ser. No. 326,952. PHENOCHROME GERMICIDAL CORPORATION, Oxford, N. Y. Filed May 10, 1932.

PHENOCHROME

For Germicide.
Claims use since Mar. 1, 1930.

Ser. No. 326,979. MILLE FLEURS, INC., New York, N. Y. Filed May 11, 1932.

NU-LASH

For Cream for Stimulating the Growth of Eyelashes and Eyebrows.
Claims use since Apr. 16, 1931.

Ser. No. 326,980. FOOTSOL MFG. CO., New York, N. Y. Filed May 11, 1932.

FOOTSOL

For Balm for Treatment of Feet and Foot Lotions.
Claims use since May 4, 1932.

Ser. No. 326,989. FRANK C. REILLY, New York, N. Y. Filed May 11, 1932.

JERZEE

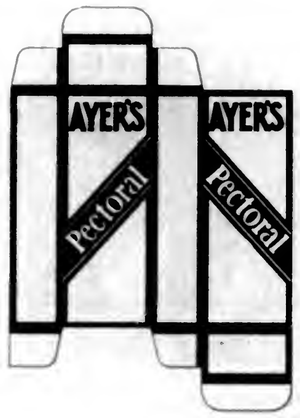
For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Skin Whitener in Liquid and Solid Form, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eye Lashes and Eyebrows, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Powders, Nail Creams, Nail Polishes, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Sept. 10, 1931.

Ser. No. 327,064. MAGNUSON PRODUCTS CORPORATION, Brooklyn, N. Y. Filed May 13, 1932.



No claim to the exclusive appropriation of the words shown on the drawing "For Quality-Plus" and "Cleaners Lead" is made except in the association as shown in the drawing.
For Washing Sodas.
Claims use since July 11, 1931.

Ser. No. 327,182. THE AYER COMPANY, Lowell, Mass. Filed May 17, 1932.



No claim is made to the representation of the carton appearing on the drawing.
For Medicinal Preparation for Use in the Treatment of Coughs Due to Colds.
Claims use since October, 1931.

Ser. No. 327,187. DISTILLERS PREPARATIONS, INC., Weehawken, N. J. Filed May 17, 1932.

RUMONOG

For General Medicinal Tonic.
Claims use since May 12, 1932.

Ser. No. 327,729. DAGGETT & RAMSDELL, New York, N. Y. Filed June 4, 1932.

DEBUTANTE

For Face Powder, Preparations for Treating the Skin, and Toilet, Cleansing, Vanishing, and Cold Creams.
Claims use since January, 1913.

CLASS 7

Cordage

Ser. No. 321,314. ELEANOR S. REYNOLDS, doing business as James E. Reynolds and Company, New York, N. Y. Filed Nov. 18, 1931. Under 10-year proviso.

SPARTA

For Braided Cotton Sash Cord.
Claims use since 1875.

CLASS 12

Construction Materials

Ser. No. 319,120. WILLIAM F. MULVEY, Los Angeles, Calif. Filed Sept. 16, 1931.

ARTEX
Designs of Distinction

No claim is made to the words "Designs of Distinction" appearing on the drawing, apart from the mark shown.
For Plastic Blocks for Making Decorative Floors.
Claims use since July 3, 1931.

Ser. No. 323,528. DYNAMIDON-WERK ENGELHORN & CO. G. M. B. H., FABRIK FÜR KERAMISCHE PRODUKTE, FEUERFESTE MASSEN UND SCHLEIFMATERIALIEN, Mannheim-Waldhof, Germany. Filed Jan. 28, 1932.

Magnesidon

For Refractory Bricks for Use in the Construction of Furnaces and Ovens.
Claims use since Aug. 1, 1919.

Ser. No. 326,675. BAYLUS E. EARLE, Colfax, La. Filed May 2, 1932.



For Asphalt Compound, Used as a Joint Filler, Roofing Compound, Roof Coating, Sealing Coating, Sealing Compound for Battery Cells, Cold Rolled Sheet Top, and Asphalt.
Claims use since Apr. 4, 1932, and the words "Tee Juana" alone since Oct. 17, 1927.

Ser. No. 327,132. THE CLAY CITY PIPE COMPANY, Uhrichsville, Ohio. Filed May 16, 1932.

ALINO

For Tiles and Conduits Other Than Those of Metal.
Claims use since Oct. 10, 1931.

CLASS 13

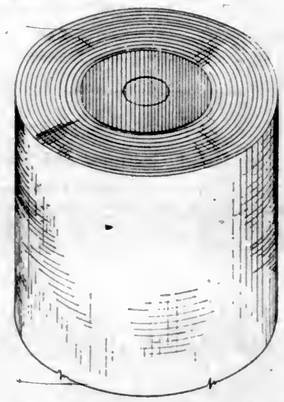
Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 321,733. P. M. C. MANUFACTURING CORP., Kingston, N. Y. Filed Dec. 3, 1931.



The mark consists of a yellow band arranged circumferentially about the handle of the goods and near the free end thereof.
For Kitchen Utensils—Namely, Kitchen Ladles and Tea and Coffee Strainers.
Claims use since Mar. 5, 1931.

Ser. No. 325,241. REYNOLDS WIRE CO., Dixon, Ill. Filed Mar. 17, 1932.



The trade-mark consists of a red disc. No claim is made to the bung or roll of wire cloth per se.
For Wire Cloth.
Claims use since 1907.

Ser. No. 327,115. WALDES KOH-I-NOOR, INC., Long Island City, N. Y. Filed May 14, 1932.

Koh-i-noor

For Slide Fasteners.
Claims use since about Dec. 1, 1931.

Ser. No. 327,316. THE KLEENTI CO., New York, N. Y. Filed May 21, 1932.

KLEENTI

For Liquid Strainers.
Claims use since about Apr. 15, 1932.

Ser. No. 327,666. STERLING AUTOMOTIVE PRODUCTS CORPORATION, Buffalo, N. Y. Filed June 2, 1932.

Biseal

For Tire Valves.
Claims use since on or about Apr. 1, 1932.

CLASS 14

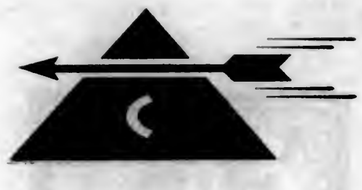
Metals and Metal Castings and Forgings

Ser. No. 323,525. THE CENTRAL IRON & METAL COMPANY, LTD., London, England, and Westphalia, Germany. Filed Jan. 28, 1932.

HERMES

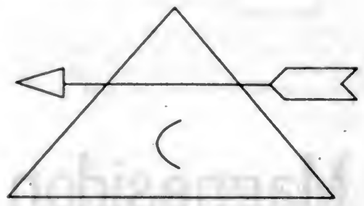
For Non-Ferrous Wire, Rods, and Strip.
Claims use since Feb. 25, 1924.

Ser. No. 327,675. CARBOLOY COMPANY, INC., Detroit, Mich. Filed June 3, 1932.



For Hard Metal Composition or Alloy Suitable for or for Use in Cutting Tools, Dies, and for Other Uses.
Claims use since September, 1928.

Ser. No. 327,676. CARBOLOY COMPANY, INC., Detroit, Mich. Filed June 3, 1932.



For Hard Metal Composition or Alloy Suitable for or for Use in Cutting Tools, Dies, and for Other Uses.
Claims use since September, 1928.

CLASS 15

Oils and Greases

Ser. No. 322,934. HUMBLE OIL AND REFINING COMPANY, Houston, Tex. Filed Jan. 12, 1932.



No claim is made to the word "Valve Oil" and the number "999" except in connection with the mark as shown.
For Lubricating Oils and Greases.
Claims use since Apr. 10, 1931.

Ser. No. 324,914. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Filed Mar. 8, 1932.



The drawing is lined to indicate that the rectangular line is red.
For Cutting Oil, Thread Cutting Compound, Tempering Oil, Illuminating Oil, Gasoline and Other Internal Combustion Engine Fuel Oils, Kerosene, Concrete Form Oils, Crankcase Flushing Oil, Hydraulic Oil.
Claims use since October, 1910.

Ser. No. 327,230. R. L. MORE & SON, Vernon, Tex. Filed May 18, 1932.



The words "Long Life" and the word "Oil" are disclaimed apart from the other features of the mark shown in the drawing.
For Motor Lubricating Oils and Motor Greases.
Claims use since Mar. 1, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 287,300. THE HARVEL CORPORATION, Newark, N. J. Filed July 18, 1929.

CASHEL

For Paints in Dry, Paste, or Ready Mixed Form, Varnishes, Primers, Fillers and Paint Bases Without Solvent Vehicle, All Made from Cashew Nut Shell Liquid.
Claims use since about July 10, 1929.

Ser. No. 314,685. D. A. COLLINS MFG. CO., INC., Brooklyn, N. Y. Filed May 18, 1931.

LUSTRE-LAC

Applicant disclaims the use of the words "Lustre-Lac" apart from the mark as shown.
For Automobile Polishes.
Claims use since May 15, 1931.

Ser. No. 319,374. STANDARD-BRONZEFARBEN-WERKE CARL ECKART, Furth, Germany. Filed Sept. 24, 1931.

"GLOSSOLAR"

For Bronze Powder and Aluminium Powder for Use in Painting, Gold Paint Ready For Use in an Already Mixed and a Ready to be Mixed Form; Aluminium Paint Ready for Use in an Already Mixed and a Ready to be Mixed Form.
Claims use since June, 1931.

Ser. No. 326,900. HICKOK OIL CORPORATION, Toledo, Ohio. Filed May 9, 1932.

HI-SPEED

For Paint Enamels, Varnishes, Lacquers, Ready-Mixed Paints, Preparations for Cleaning and Polishing Automobiles, Combination Tire Paint and Automobile Top Dressing.
Claims use since 1927.

Ser. No. 327,307. EMERSON GLASS CORPORATION, Jamestown, N. Y. Filed May 21, 1932.

COPPERLYTIC

For Metallic Protecting Paint for the Backs of Mirrors.
Claims use since May 4, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 304,908. BRAGG-KLIESRATH CORPORATION, Long Island City, N. Y. Filed Aug. 22, 1930.

THE SEAL OF B K SAFER DRIVING

Applicant being the owner of Trade-Mark Certificate No. 243,545, registered June 26, 1928. Applicant disclaims the word "Brake" apart from the mark as shown on the drawing.
For Brakes and Brake Systems and Parts Thereof.
Claims use since June 13, 1930.

Ser. No. 327,571. WAUGH EQUIPMENT COMPANY, Depew, N. Y. Filed May 28, 1932.

WAUGHMAT

For India-Rubber Buffing and Draft Springs and Bearing Springs for Railway Vehicles and India-Rubber Bearing Blocks for Railway Vehicles.
Claims use since May 10, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 297,890. HERBERT E. BUCKLEN CORPORATION, Elkhart, Ind. Filed Mar. 26, 1930.

HEBCO AEROLECTRIC

For Propeller Type, Wind-Driven Electric Light and Power Plants.
Claims use since November, 1929.

Ser. No. 313,185. GOULD STORAGE BATTERY CORPORATION, Depew, N. Y. Filed Apr. 10, 1931.

DREADNAUGHT GOULD BATTERY

No claim is made to the word "Battery" apart from the mark as shown.
For Storage Batteries.
Claims use since Jan. 1, 1916.

Ser. No. 314,538. TIME-O-MATIC CORPORATION, New York, N. Y. Filed May 13, 1931.

TIME-O-MATIC

For Thermostatic Electric Switches, Electrically Heated Cooking Vessels and Electric Plugs.
Claims use since Mar. 1, 1931.

Ser. No. 320,749. STUDEBAKER LABORATORIES, INC., Chicago, Ill. Filed Nov. 2, 1931.

WREN

For Radio Receiving Sets.
Claims use since Apr. 25, 1931.

Ser. No. 324,679. GILBY WIRE COMPANY, Newark, N. J. Filed Feb. 25, 1932.

TOPHET

For Round and Flat Wire, Ribbon and Strip for Electrical Purposes.
Claims use since May 1, 1923.

Ser. No. 326,834. SUN-GLO LAMP WORKS, INC., Brooklyn, N. Y. Filed May 6, 1932.

Sun-Glo Lamps

Sun Glo

Applicant disclaims the exclusive right to the use of the word "Lamps" and the representation of an incandescent lamp bulb separate and apart from the mark shown in the drawing.
For Incandescent Lamps or Bulbs.
Claims use since Dec. 1, 1930.

Ser. No. 327,092. EISEMANN-WERKE AKTIENGESELLSCHAFT, Stuttgart, Germany. Filed May 14, 1932.

FORFEX

For Electric Hair Cutting Machines and Thinning-Out Clippers, Electric Shears for Shearing Sheep and Other Animals, Cutter Heads and Cutting Plates for Said Goods; Small Electromotors, Electric Lamps and Stands Therefor; Electric Resistances and Switches.
Claims use since March, 1928.

Ser. No. 327,282. JULIUS C. LOWRY, doing business as Lowry Electric Company, Detroit, Mich. Filed May 20, 1932.

TEL-A-FIRE

For Electric Fire Alarm Signaling Systems.
Claims use since on or about Feb. 20, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 326,967. UNITED HEALTH EQUIPMENT COMPANY, Chicago, Ill. Filed May 9, 1932.

UNITED HEALTH ROW

No claim is made to the words "Health Row," except in the association shown on the drawing.
For Exercising Machines.
Claims use since Jan. 2, 1932.

Ser. No. 326,968. UNITED HEALTH EQUIPMENT COMPANY, Chicago, Ill. Filed May 11, 1932.

VARSITY

For Exercising Machines.
Claims use since Apr. 9, 1932.

Ser. No. 327,466. D. P. HARRIS HARDWARE & MANUFACTURING CO., INC., New York, N. Y. Filed May 26, 1932.

Rollfast

For Roller Skates.
Claims use since June, 1912.

Ser. No. 327,510. ARTHUR E. JACOBS, Cleveland, Ohio. Filed May 27, 1932.

KIDDIE CASH REGISTER

The words "Cash Register" are disclaimed except in the association shown on the drawing. No claim is made to the representation of a name-plate per se.
For Toy Cash Registers.
Claims use since February, 1932.

Ser. No. 327,643. AMERICAN FLYER MFG. CO., Chicago, Ill. Filed June 2, 1932.

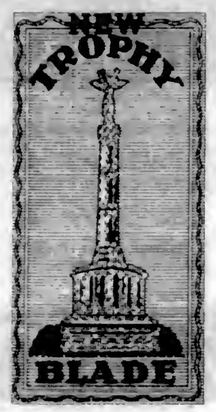
CHAMPION

For Miniature Trains.
Claims use since Feb. 12, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 320,741. TROPHY TOWER SALES CORPORATION, Cleveland, Ohio. Filed Nov. 2, 1931.

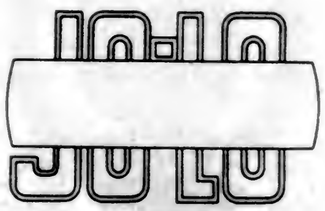


The cross hatching in the drawing indicates the colors, blue and gold. The words "New" and "Blade" are disclaimed apart from the mark as shown. Applicant claims ownership of registered Trade-Mark No. 231,853 issued Aug. 30, 1927.

For Razor Blades.

Claims use since Aug. 19, 1930.

Ser. No. 324,896. JOE LOWE CORPORATION, Brooklyn, N. Y. Filed Mar. 8, 1932.



For Brick Knives, or Cutting Devices for Cutting Brick Ice Cream and Frozen Confections, and Also for Handles for Ice Cream and Frozen Confection Cans.

Claims use since Jan. 1, 1922.

Ser. No. 326,922. PERRY WALTON, Boston, Mass. Filed May 9, 1932.

KITCHEN TROUSSEAU

For Kitchen Utensils—Namely, Egg Beaters, Potato Parers, Batter Beaters, Graters.

Claims use since January, 1932.

Ser. No. 327,011. W. T. GRANT COMPANY, New York, N. Y. Filed May 12, 1932.

WEARITE
FIRST QUALITY
CUTLERY

The words "First Quality" and "Cutlery" are disclaimed apart from the mark as shown on the drawing.

For Kitchen Cutlery—Namely, Butcher Knives, Slicing Knives, Paring Knives, Bread Knives, Table Knives, Table Forks Made of Base Metal, and Kitchen Forks.

Claims use since Apr. 10, 1932.

Ser. No. 327,080. THE TURNER & SEYMOUR MANUFACTURING CO., Torrington, Conn. Filed May 11, 1932.

BLUE STREAK

For Knife Sharpeners, Except Abrasive Stones and Strops, Egg Beaters, and Vegetable Mashers.

Claims use since Apr. 1, 1932.

Ser. No. 327,146. GUIBERSON DIESEL ENGINE COMPANY, Dallas, Tex. Filed May 16, 1932.



No claim to the legend "Better Be Safe Than Sorry" or the outline representation of an engine is made apart from the mark.

For Internal Combustion Engines, and Parts Thereof.

Claims use since Nov. 16, 1929.

Ser. No. 327,455. OTTO ROTH, INC., Newark, N. J. Filed May 25, 1932.

BAR
NONE

For Safety Razor Blades.

Claims use since May 1, 1931.

CLASS 24

Laundry Appliances and Machines

Ser. No. 327,468. HOUMA MFG. CO., Houma, La. Filed May 26, 1932.

CREOLE KLEAN
"BUY ONE IN A LIFETIME"

No claim is made to the word "Klean" apart from the mark shown.

For Washboards.

Claims use since Apr. 1, 1932.

Ser. No. 327,473. PRIMA MANUFACTURING COMPANY, INC., Philadelphia, Pa. Filed May 26, 1932.

Prima
SPIN-DRY

The words "Spin-Dry" not being claimed apart from the mark as shown.

For Laundry Washing Machines.

Claims use since Feb. 26, 1932.

CLASS 25

Locks and Safes

Ser. No. 325,738. THE THREDLOCK COMPANY, INC., New York, N. Y. Filed Mar. 31, 1932.

TRIPLE ACTION

Thredlock

The words "Triple Action" are disclaimed apart from the mark as shown.

For Lock.

Claims use since on or about Apr. 25, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 323,761. JOHNSON, MATTHEY & COMPANY, INCORPORATED, New York, N. Y. Filed Jan. 20, 1932.



For Finger Rings.

Claims use since Mar. 1, 1931.

Ser. No. 324,609. INTERNATIONAL SILVER COMPANY, Meriden, Conn. Filed Feb. 29, 1932.

MASTERPIECE

For Silver-Plated Flat-Ware and Hollow-Ware for Table Use and the Like.

Claims use since Jan. 28, 1932.

Ser. No. 326,257. THE IRVIN H. HAHN CO., Baltimore, Md. Filed Apr. 19, 1932.



HANCO

For Metal Military Insignias, Metal Belt Buckles, Metal Badges, Metal Tablet Plates, All Plated with Precious Metal.

Claims use since July 23, 1931.

Ser. No. 327,639. THE STIEFF COMPANY, Baltimore, Md. Filed June 1, 1932.

CAVALIER

For Flat and Hollow Tableware Made of or Plated with Precious Metals.

Claims use since May 23, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 327,047. WILLIAM V. DENNIS, San Francisco, Calif. Filed May 13, 1932.

CREAMIX

The drawing is lined for shading.
For Ice Cream Freezers.
Claims use since Mar. 1, 1932.

Ser. No. 327,157. L. KLEIN, INC., Chicago, Ill. Filed May 16, 1932.

GOLD COAST
L. KLEIN ---- CHICAGO

No claim is made to the representation of a name plate per se nor to the word "Chicago."
For Refrigerators.
Claims use since Apr. 15, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 326 294. A. I. NAMM & SON, doing business as The Namm Store, Brooklyn, N. Y. Filed Apr. 20, 1932.

REPOSE

For Mattresses and Box Springs.
Claims use since Jan. 12, 1932.

Ser. No. 326,953. THE QUINCY SHOW CASE WORKS, Quincy, Ill. Filed May 10, 1932.

EYE-LINE

For Wall Cases, Show Cases, Counters, Display Stands, Used to House and/or Display Merchandise of All Kinds and Merchandise Display Cases.
Claims use since Jan. 19, 1932.

Ser. No. 327,045. THE COLUMBUS SHOW CASE COMPANY, Columbus, Ohio. Filed May 13, 1932.

SalesCraft

For Merchandise Display Cases.
Claims use since Jan. 14, 1932.

Ser. No. 327,201. SARGENT & COMPANY, New Haven, Conn. Filed May 17, 1932.

SARGENT
SANITARY SHELVES

The words "Sanitary" and "Shelves" are disclaimed apart from the mark shown.
For Metal Shelves.
Claims use since Apr. 15, 1932.

CLASS 33

Glassware

Ser. No. 326,268. N. V. PHILIPS' GLOEILAMPENFABRIEKEN, Eindhoven, Netherlands. Filed Apr. 19, 1932.

ULTRASOL

For Glass Bulbs for Illuminating Purposes, The Glass of Which is Capable of Transmitting Ultraviolet Radiations.
Claims use since Mar. 15, 1930.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 313,055. S. B. G. HOLDING CORPORATION, doing business as Gouldbestos Corporation, New York, N. Y. Filed Apr. 7, 1931.

NATIONAL
BRAKE SERVICE

The applicant hereby disclaims the right to the exclusive use of the words "Brake Service," as used in connection with the trade-mark.
For Brake Lining.
Claims use since August, 1930.

Ser. No. 325,302. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed Mar. 19, 1932.

GUARD

For Automobile Tires and Inner Tubes.
Claims use since Oct. 16, 1931.

Ser. No. 327,046. COOPER MANUFACTURING COMPANY, Marshalltown, Iowa. Filed May 13, 1932.

GASKOID

For Gaskets and Finished Sheet Materials for Gaskets.
Claims use since Sept. 1, 1931.

CLASS 36

Musical Instruments and Supplies

Ser. No. 326,316. AVEDIS ZILDJIAN COMPANY, Norfolk Downs, Mass. Filed Apr. 19, 1932.

ZILCO

In the drawing the name "Zilco" is fanciful and in which "Zilco" is a translation of the Turkish word above the scimitar.
For Cymbals.
Claims use since Dec. 29, 1930.

CLASS 37

Paper and Stationery

Ser. No. 326,642. MENTMORE MANUFACTURING COMPANY LIMITED, London, England. Filed Apr. 30, 1932.

PLATIGNUM

For Pens, Fountain Pens, and Pencil Cases, None Being of Precious Metal or of Imitation Precious Metal, and Leads for Pencils.
Claims use since July, 1927.

Ser. No. 326,912. THE REYNOLDS & REYNOLDS COMPANY, Dayton, Ohio. Filed May 9, 1932.

DSA

For Accounting Forms, Blanks, Sheets, Leaves, Auxiliary Records, Indexes and Binders for Use in Accounting Systems, Including Journal, Ledger, and Record Leaves; Commission and Salary Reports, File and Summary Envelopes and Reports, Vouchers, Invoices, Register Sales Slips, Time Tickets, Repair Orders, Financial Statements, Annlysis and Trial Balance Sheets, Receipts, Purchase Orders, Requisitions, Receiving Reports, and Credit Memorandums for Use in Accounting Systems, and Sheets and Forms for Use in Manuals for Such Accounting Systems.
Claims use since December, 1929.

Ser. No. 327,078. WILSON-JONES COMPANY, Chicago, Ill. Filed May 13, 1932.

SLICKER

For Bound Blank Books, Loose Leaf Binders and Filler Sheets for Same.
Claims use since Mar. 6, 1929.

Ser. No. 327,264. BYRON WESTON COMPANY, Dalton, Mass. Filed May 19, 1932.



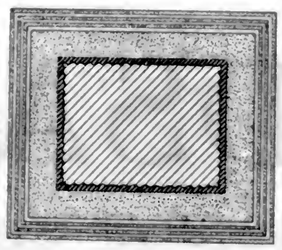
No claim is made to the word "Bond" apart from the mark shown.
For Ledger and Bond Paper.
Claims use since on or about May 1, 1932.

Ser. No. 327,347. EBERHARD FABER PENCIL COMPANY, Brooklyn, N. Y. Filed May 23, 1932.

SKIPPY

For Boxes Containing Lead Pencils, Copying Pencils, Coloring Pencils, Pencil Holders, Pencil Sharpeners, Rubber Erasers, and Rulers.
Claims use since May 15, 1932.

Ser. No. 327,385. EATON PAPER COMPANY, Pittsfield, Mass. Filed May 23, 1932.



The shading of the drawing represents tone contrasts, not colors, the mark consisting of the geometric figure shown without respect to the specific colors in which it may be displayed.
For Papeteries, Correspondence Cards, Writing Tablets, Correspondence and Mailing Envelopes, and Writing Paper, Including Ream and Pound Goods.
Claims use since Aug. 19, 1931.

Ser. No. 327,532. STRATHMORE PAPER COMPANY, West Springfield, Mass. Filed May 27, 1932.

Scotia

For Writing and Printing Paper.
Claims use since Jan. 1, 1895.

Ser. No. 327,595. THE NATIONAL ACME CO., Cleveland, Ohio. Filed May 31, 1932.

CHRONOLOG

For Paper Rolls for Use in Connection with Instruments for Combined Recording of Time and Production.
Claims use since Apr. 9, 1932.

Ser. No. 327,611. THE WAHL COMPANY, Chicago, Ill. Filed May 31, 1932.

EVERSHARP

For Fountain Pens.
Claims use since Sept. 24, 1930.

Ser. No. 327,632. DAVID KAHN, INC., North Bergen, N. J. Filed June 1, 1932.

GOTHIC

For Fountain Pens, Pencils, Pen and Pencil Sets, and Pen Points.
Claims use since Apr. 1, 1932.

CLASS 38

Prints and Publications

Ser. No. 321,044. THE UNITED STATES SOCIETY, Washington, D. C. Filed Nov. 11, 1931.

UNCLE SAM'S DIARY

For Periodical Published Weekly.
Claims use since Oct. 24, 1931.

Ser. No. 325,640. CHICAGO TIMES COMPANY, Chicago, Ill. Filed Mar. 30, 1932.

SUNDAY ILLUSTRATED TIMES
CHICAGO'S PICTURE NEWSPAPER
FUNNIES

The subtitle "Chicago's Picture Newspaper" and the word "Funnies" appearing on the drawing submitted herewith, being descriptive, are hereby disclaimed apart from the mark as shown.
For Newspaper Comic Section.
Claims use since Mar. 20, 1932.

Ser. No. 327,306. ELGIN NATIONAL WATCH COMPANY, Chicago and Elgin, Ill. Filed May 21, 1932.

THE
WATCH WORD

For Monthly Publication.
Claims use since August, 1921.

Ser. No. 327,426. THE CLAYTON MAGAZINES, INC., New York, N. Y. Filed May 25, 1932.



The words "A Clayton Magazine" being disclaimed apart from the mark shown.
For Magazines.
Claims use since January, 1924.

Ser. No. 327,573. ARNESEN NEWSPRINT PUBLISHERS CORPORATION, Brooklyn, N. Y. Filed May 31, 1932.

BAY RIDGE ADVERTISER

For Newspaper Published Periodically.
Claims use since May 17, 1932.

Ser. No. 327,582. ARTHUR JOSEPH DE MARS, Washington, D. C. Filed May 31, 1932.

GOVERNMENTS OF ALL NATIONS

For Periodical Publication.
Claims use since May 4, 1932.

Ser. No. 327,647. EVERETT ELLIS, New York, N. Y. Filed June 2, 1932.

THE
MODERN
MOTHER

For Periodical.
Claims use since May 24, 1932.

Ser. No. 327,762. MEREDITH PUBLISHING COMPANY, Des Moines, Iowa. Filed June 6, 1932.

COOKS'
ROUND TABLE

For Magazine Section.
Claims use since September, 1923.

CLASS 39

Clothing

Ser. No. 296,921. PREMIER SHOE CO. INC., New York and Brooklyn, N. Y. Filed Mar. 6, 1930.

Premier
Shoe Co Inc

For Leather and Fabric Shoes.
Claims use since about May 1, 1921.

Ser. No. 306,403. LANSBURGH & BRO., Washington, D. C. Filed Oct. 4, 1930.

LANSBURGH & BRO
Fitz-well
WASHINGTON

Applicant does not herein claim the word "Washington" standing alone. Applicant does not herein lay claim to "Fitz-Well." Applicant is the owner of Trade-Mark No. 182,587, registered April 15, 1924, under the ten-year clause.
For Canvas, Leather and Satin Shoes, Slippers, Oxfords, and Pumps.
Claims use since September, 1925.

Ser. No. 320,510. AGNES RITTENER, doing business as Agnes, Paris, France. Filed Oct. 27, 1931.

Agnès
6 RUE ST FLORENTIN
PARIS

The local address "6 Rue St., Florentin, Paris", is hereby disclaimed as a part of applicant's mark.
For All Kinds of Hats, Particularly Ladies' Hats.
Claims use since 1925.

Ser. No. 321,586. CARMO SHOE MFG. CO., Carthage, Mo. Filed Nov. 30, 1931.

Hollywood Creations

No exclusive claim being made to the phrase "Hollywood Creations" apart from the mark shown.
For Ladies' and Misses' Shoes, Slippers, Pumps, and Low Quarters of Leather, Fabric, and Combinations Thereof.
Claims use since Oct. 1, 1931.

Ser. No. 321,871. THE H. C. GODMAN COMPANY, Columbus, Ohio. Filed Dec. 7, 1931.

Dr. Drake's
JUNIOR
ROOM FOR EVERY TOE
SHOES

No claim is made to the words "Dr. Drake's," "Junior," "Shoes," or "Room For Every Toe" apart from the mark shown.
For Shoes Constructed of Leather.
Claims use since about Nov. 18, 1930.

Ser. No. 321,883. LEVIN & HARRIS SHIRT CO. INC., New York, N. Y., assignor to Lubin-Weeker Co. Inc., New York, N. Y., a Corporation of New York. Filed Dec. 7, 1931.

Certified
WELDON

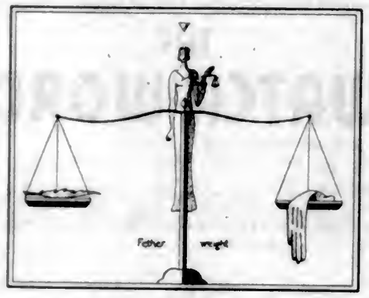
No claim is made to the word "Certified" apart from the mark shown in the drawing.
For Men's, Women's and Boys' Pajamas, Night Shirts, Robes and Underwear.
Claims use since about Nov. 25, 1931.

Ser. No. 324,692. JAMES A. BANISTER COMPANY, INC., Newark, N. J. Filed Mar. 2, 1932. Under section 5b of the act of 1905 as amended in 1920.

BANISTER
Shoes

No rights to registration of the word "Shoes" is claimed apart from the mark as shown.
For Shoes Made Wholly or in Part of Leather.
Claims use since October, 1929.

Ser. No. 324,733. CROCETTA BROS. & COMPANY, Gloversville, N. Y. Filed Mar. 3, 1932.



No claim being made for the words "Father Weight" apart from the mark as shown.
For Leather Gloves.
Claims use since Jan. 1, 1932.

Ser. No. 325,404. KOENIGSBERG BROS., New York, N. Y. Filed Mar. 23, 1932.

"KLOSFIT"

For Ladies' and Children's Bloomers, Panties, Brassières, and Combinations Thereof; Stepins in the Nature of Underdrawers, Chemises, Slips, and Girdles, and for Men's and Boys' Trunks, Undershirts, and Union Suits.
Claims use since Nov. 15, 1931.

Ser. No. 326,142. THE P. GOLDSMITH SONS CO., Cincinnati, Ohio. Filed Apr. 15, 1932.

REG'LAR FELLERS



For Swim Suits, Baseball Caps, Athletic Coats, Football and Track Pants, Football and Baseball Uniforms, Running Pants, Turner Pants, Warmup Pants, Sweat Pants, Athletic Coats, Baseball Coats, Baseball Hose, Athletic Jerseys, Athletic Shirts, Baseball Shoes, Bowling Shoes, Boxing Shoes, Running Shoes, Jumping Shoes, Football Shoes, Sweat Shirts, and Basketball Shoes.
Claims use since Mar. 10, 1932.

Ser. No. 326,447. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Apr. 23, 1932.



PLAINSMAN

For Men's and Boys' Boots and Shoes with Leather Uppers and with Either Leather or Composition Soles with or without Fabric Lining.
Claims use since Mar. 18, 1932.

Ser. No. 326,972. ARTFORM INCORPORATED, Philadelphia, Pa. Filed May 11, 1932.

Artform

For Foundation Garments.
Claims use since May 9, 1932.

Ser. No. 327,007. EPHRATA SHOE COMPANY, Ephrata, Pa. Filed May 12, 1932.



HORSIDE

The exclusive use of the expression "Horside" is disclaimed apart from the mark as shown.
For Children's Leather Shoes.
Claims use since Mar. 1, 1932.

Ser. No. 327,024. POIRETTE CORSETS, INC., New York, N. Y. Filed May 12, 1932.

"TOMORROW"

For Foundation Garments, Corsets, Brassières, and Combinations of the Same.
Claims use since September, 1929.

Ser. No. 327,129. BROWN SHOE COMPANY, INC., St. Louis, Mo. Filed May 16, 1932.

Pedwin Shoes
"THEY WIN YOUR FEET"

No claim is made to the word "Shoes" apart from the mark as shown in the drawing.
For Shoes Made of Leather, Cloth, Canvas, or Combinations Thereof.
Claims use since May 2, 1932.

Ser. No. 327,198. PEIRCE SHOE CO., Richmond, Va. Filed May 17, 1932.

Pace Setters

For Women's Shoes Made of Leather, Fabric, and Combinations Thereof.
Claims use since on or about Feb. 1, 1932.

Ser. No. 327,333. BANCROFT-WALKER COMPANY, Boston, Mass. Filed May 23, 1932.

Velfit

For Women's Leather Shoes.
Claims use since May 12, 1932.

Ser. No. 327,363. KNIT PRODUCTS CORPORATION, Belmont, N. C. Filed May 23, 1932.

Tide of Fashion

No claim is made to the words "Of Fashion," apart from the mark shown in the drawing.
For Hosiery.
Claims use since Jan. 29, 1932.

Ser. No. 327,380. TEICH & MAKOWER, New York, N. Y. Filed May 23, 1932.

TRU-T-FORM

For Knit Goods—Namely, Sweaters and Bathing Suits.
Claims use since Sept. 28, 1931.

Ser. No. 327,467. HIRSH & SONS, INC., Chicago, Ill. Filed May 26, 1932.

Hirshmaid

For Women's and Misses' Sport and Dress Coats.
Claims use since May 2, 1930.

Ser. No. 327,508. THE I. T. S. COMPANY, Elyria, Ohio. Filed May 27, 1932.



For Rubber Heels.
Claims use since Mar. 24, 1932.

Ser. No. 327,543. THE MAYER-NOCK CO., Philadelphia, Pa. Filed May 26, 1932.

HARMENO

For Boys' Suits, Girls' Frocks, and Children's Dresses.
Claims use since Mar. 4, 1932.

Ser. No. 327,662. NUSBAUM, KNITTERS, INC., Ozone Park, L. I., N. Y. Filed June 2, 1932.

Blouscarf

For Women's Scarfs and Jackets.
Claims use since Apr. 30, 1932.

Ser. No. 327,682. EXCELSIOR VARSITY UNDERWEAR CORPORATION, Baltimore, Md. Filed June 3, 1932.

Kendall Hall

For Men's and Women's Pajamas.
Claims use since Apr. 29, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 321,019. THE RIKER COMPANY, Newark, N. J. Filed Dec. 8, 1931.

WUNSO

For Buckles Made of Non-Precious Metal.
Claims use since about Nov. 1, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 305,702. EMERY, BIRD, THAYER DRY GOODS COMPANY, Kansas City, Mo. Filed Sept. 15, 1930.



Applicant disclaims the terms "Quality Guaranteed" "Torn Size Before Hemming" apart from the mark as shown in the drawing.
For Cotton and Wool Fabrics and Long Cloth in the Piece, and Cotton Napkins, Sheets, Pillow Cases, Table Pads, Diaper Cloth, Handkerchiefs, and Mattress Covers; and Cotton and Wool Blankets.
Claims use since April, 1902.

Ser. No. 308,140. UNITED ELASTIC CORPORATION, Easthampton, Mass. Filed Nov. 20, 1930.



Color is not an essential feature of the trade-mark.
For Elastic Fabrics.
Claims use since about 1915.

Ser. No. 308,464. UNITED ELASTIC CORPORATION, Easthampton, Mass. Filed Nov. 29, 1930.



Color is not an essential feature of the trade-mark.
For Elastic Fabrics.
Claims use since about 1915.

Ser. No. 312,226. CALIFORNIA WOOL GROWERS ASSOCIATION, San Francisco, Calif. Filed Mar. 13, 1931.

WOLGRO

For Household Blankets Made Wholly from Wool.
Claims use since Aug. 7, 1928.

Ser. No. 322,759. JACOB C. LAMM, doing business as Lamm Bros., Baltimore, Md. Filed Jan. 4, 1932.

Flan-L-Tex

For Suitings of Linen and Cotton Mixtures, Cotton, Wool, Wool and Cotton Mixtures, Wool and Silk Mixtures, Cotton and Silk Mixtures, Used in the Manufacture of Men's and Boys' Suits and Knickers as Distinguished from Shirtings.
Claims use since Jan. 1, 1930.

Ser. No. 326,671. C. M. DELAND, New York, N. Y. Filed May 2, 1932.

Glovella

For Woolen Piece Goods.
Claims use since Jan. 15, 1932.

Ser. No. 327,218. ALFRED S. EISEMAN, New York, N. Y. Filed May 18, 1932.

Vive le sport

For Piece Goods of Cotton, Silk, Linen, and/or Rayon or Combinations Thereof; Dish Cloths, Hair Nets, Handkerchiefs, Ribbons, Scarfs for Furniture, Doilies, Centerpieces, Table-Cloths, Napkins, Textile Diapers, Wash Cloths; Blankets, Rugs, Carpets, Floor Cloths, and Towels, All Made of Knitted, Netted and/or Textile Fabrics.
Claims use since Apr. 24, 1932.

Ser. No. 327,219. ALFRED S. EISEMAN, New York, N. Y. Filed May 18, 1932.

Dashaway

For Piece Goods of Cotton, Silk, Linen, and/or Rayon or Combinations Thereof; Dish Cloths, Hair Nets, Handkerchiefs, Ribbons, Scarfs for Furniture, Doilies, Centerpieces, Tablecloths, Napkins, Textile Diapers, Wash Cloths; Blankets, Rugs, Carpets, Floor Cloths, and Towels, All Made of Knitted, Netted and/or Textile Fabrics.
Claims use since Apr. 24, 1932.

Ser. No. 327,280. HOWSE, MEAD & SONS, INC., New York, N. Y. Filed May 20, 1932.

"Cold-Touch"

For Woolens in the Piece.
Claims use since Feb. 17, 1932.

Ser. No. 327,367. MARVLO MILLS, INC., New York, N. Y. Filed May 23, 1932.

DOLCEY CREPE

No claim is made to the word "Crepe" in and apart from the mark as shown.
For Cotton, Linen, Artificial and Natural Silk Goods, Plain, Colored and Printed, in Pieces.
Claims use since May 1, 1932.

Ser. No. 327,552. CHICOPEE MANUFACTURING CORPORATION, New Brunswick, N. J. Filed May 28, 1932.

CHICS

For Articles of Special Weave of the Nature of Face Cloths for Applying and Removing Cosmetics in Facial Treatments.
Claims use since Apr. 15, 1932.

Ser. No. 327,692. HARDWICK & MAGEE COMPANY, Philadelphia, Pa. Filed June 3, 1932.

CARDINAL
Lustra Rug

No claim being made to the word "Rug" apart from the mark as shown.
For Textile Rugs.
Claims use since May 16, 1932.

Ser. No. 327,693. HARDWICK & MAGEE COMPANY, Philadelphia, Pa. Filed June 3, 1932.

KINGSWAY
SEAMLESS
WILTON RUG

No claim being made to the words "Seamless Wilton Rug" apart from the mark as shown.
For Textile Rugs.
Claims use since May 16, 1932.

CLASS 43

Thread and Yarn

Ser. No. 327,669. GROVES THREAD COMPANY, INC., Gastonia, N. C. Filed May 24, 1932.

CLIPPER

For Cotton Thread and Yarns.
Claims use since July 1, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 310,779. SOCIETE ANONYME DES BAS "OCCULTA", Lyon, France. Filed Feb. 5, 1931.

OCCULTA

For Corrective Devices—Namely, Orthopedical Girdles, Orthopedical Corsets, Orthopedical Belts and Stockings for Varicose Veins.
Claims use since Mar. 28, 1923.

Ser. No. 315,764. SANITEX MFG. CO. LTD., Los Angeles, Calif. Filed June 12, 1931.

SANI VŌ G

For Sanitary Napkin Holders—Namely, a Combined Sanitary Pad Holder, Pad Protector and Apron.
Claims use since March, 1931.

Ser. No. 327,224. LA MODE PERMANENT WAVE CORP., Buffalo, N. Y. Filed May 18, 1932.



The words "La Mode" and "Permanent Wave" are disclaimed apart from the other features of the mark shown in the drawing. The representation of the girl appearing in the drawing is purely fanciful.
For Permanent Wave Sachets.
Claims use since Jan. 1, 1931.

Ser. No. 327,477. ROBERTS MANUFACTURING COMPANY, INC., Maple Shade, N. J. Filed May 26, 1932.

Ther-Mass-A-Derm

For Electric Skin Stimulators or Vibrator Massagers.
Claims use since on or about Mar. 21, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 326,311. WIL-MOR COMPANY, Watertown, Wis. Filed Apr. 20, 1932.

Wil-Mor

For Root Beer.
Claims use since Mar. 1, 1932.

Ser. No. 327,372. FELIX RYBAK, doing business as Rybak Sales Co., Brooklyn, N. Y. Filed May 23, 1932.

LA MARVOLA

For Nonalcoholic, Maltless Fruit Syrups Used for the Preparation of Soft Drinks.
Claims use since Apr. 1, 1932.

Ser. No. 327,541. KOFEALE CORPORATION, Pittsburgh, Pa. Filed May 25, 1932.

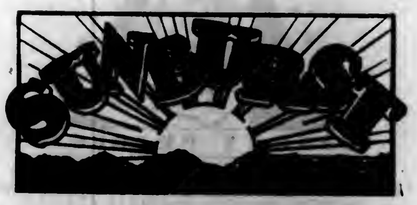
KOF-E-ALE

For Non-Alcoholic, Maltless Beverage Sold as a Soft Drink.
Claims use since Mar. 24, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 305,851. DAVENPORT SEED COMPANY, doing business as Sunburst Pop Corn Company, Davenport, Iowa. Filed Sept. 19, 1930.



For Pop Corn of a Certain Variety Having a Large Yellow Kernel in the Unpopped, Natural State, and the Popped Form, but Not Candied.
Claims use since May 15, 1929.

Ser. No. 308,756. SIMONS & FRENCH COMPANY INCORPORATED, New York, N. Y. Filed Dec. 8, 1930.

BROADWAY

For Fresh Deciduous Fruits, Fresh Citrus Fruits, Fresh Vegetables, Fresh Pineapples, Fresh Bananas, Fresh Cantaloups, Fresh Persian Melons, Fresh Honeydews; Fresh Honeyballs and Casabas, Fresh Grapes.
Claims use since Aug. 28, 1928.

Ser. No. 312,797. FRANK H. FLEER CORPORATION, Philadelphia, Pa. Filed Apr. 1, 1931.



The word "Gum" does not form a part of the registration sought apart from the trade-mark shown in the drawing.
For Chewing Gum.
Claims use since June 22, 1927.

Ser. No. 312,967. MARTHA WASHINGTON CANDIES COMPANY, Chicago, Ill. Filed Apr. 4, 1931.



The portraits shown on the drawing and the samples are those of Martha and George Washington.
For Candies.
Claims use since June, 1892.

Ser. No. 315,250. THE CRACKER JACK CO., Chicago, Ill. Filed June 1, 1931.

POP-IT

For Shelled Popcorn.
Claims use since May 8, 1931.

Ser. No. 316,961. B. FILIPPONE & CO., Passaic, N. J. Filed July 15, 1931.

PUCCINI



In the drawing the portrait shown being that of Giacomo Puccini, the celebrated musician, now deceased.
For Canned Peas, Canned Tomatoes, and Canned Tuna Fish, Salame, and Cheese.
Claims use since March, 1928, on peas and tuna fish; since March, 1929, on tomatoes; since October, 1930, on salame; since June 12, 1931, on cheese.

Ser. No. 319,048. VINCENZO SABELLA & CO., New York, N. Y. Filed Sept. 12, 1931.

GIOCONDA



The figure on the trade-mark represents no particular person.
For Canned Olive Oil and Canned Tomatoes.
Claims use since July 15, 1931.

Ser. No. 319,174. F. A. GOSSE COMPANY, Seattle, Wash. Filed Sept. 18, 1931.

RED BREAST



For Canned Fish.
Claims use since 1919.

Ser. No. 321,936. THEODORE W. FINCH, doing business as T. W. Finch & Company, Rochester, N. Y. Filed Dec. 8, 1931.



No claim is made to the word "Foods" except in the association and relation shown in the drawing.
For Tea, Mayonnaise, and Vanilla Used for Food Flavoring Purposes.
Claims use since Mar. 4, 1931.

Ser. No. 322,464. ISIDORE KEIL, Newark, N. J. Filed Dec. 26, 1931.



Disclaimer is made of the words "Noodles," "Farfel," and "Bakery Products" as shown in the mark.
For Bread and Cake, Noodles, and Farfel (Which is Dried Dough in the Shape of Small Round Balls of about 1/8" in Diameter).
Claims use since Dec. 10, 1931.

Ser. No. 323,017. WHITE-STOKES COMPANY, INC., Chicago, Ill. Filed Jan. 14, 1932.

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DARI-SOLIDS

The word "Solids" is disclaimed apart from the mark as shown on the drawing.
For Confectionery Base, Consisting of Butter, Fat, Solids Not Fats, and Sugar.
Claims use since Dec. 17, 1931.

Ser. No. 325,076. M. C. PROVISION CO., INC., Jersey City, N. J. Filed Mar. 12, 1932.

"EL BATURRO"

For Sausages.
Claims use since Mar. 10, 1932.

Ser. No. 325,729. SUCREST CORPORATION, New York, N. Y. Filed Apr. 1, 1932.



For Sugar and Confectionery Syrup.
Claims use since Mar. 15, 1932.

Ser. No. 325,733. VOGT INSTANT FREEZERS INCORPORATED, Louisville, Ky. Filed Apr. 1, 1932.

MELOROL

For Ice Cream, Water Ice, Sherbet, and Similar Frozen Confections.
Claims use since Feb. 13, 1932.

Ser. No. 325,869. LEONARD V. A. BURTON, Jr., doing business as Munchee Nuts Company, Minneapolis, Minn. Filed Apr. 7, 1932.

MUNCHEE

For Nuts.
Claims use since Jan. 1, 1932.

Ser. No. 325,929. H. P. HANSON & COMPANY, Chicago, Ill. Filed Apr. 7, 1932.

appladay

For Apple Candy Confection.
Claims use since Jan. 1, 1932.

Ser. No. 326,203. THE BATTLE CREEK FOOD COMPANY, Battle Creek, Mich. Filed Apr. 18, 1932.

SAUCETTES

For Vegetable Food Composed Principally of Soy Beans, Simulating Meat in Appearance, Taste, and Nutritive Properties.
Claims use since Dec. 15, 1931.

Ser. No. 326,603. E. BISTROW, doing business as Spysup Manufacturing Company, St. Louis, Mo. Filed Apr. 29, 1932.



The portrait of the child which forms a part of the mark is fanciful.
For Syrup for Making Cake and Confectionery.
Claims use since Mar. 15, 1932.

Ser. No. 326,737. CARMAN RIVER DUCK FARM, Brookhaven, N. Y. Filed May 4, 1932.



The words "Genuine Long Island Ducklings" and also the words "Brook Haven New York" are hereby disclaimed as used separate and apart from the mark as shown.
For Live and Dressed Ducks.
Claims use since November, 1927.

Ser. No. 326,789. OVERLAND CANDY CORPORATION, doing business as Food Confections Company, Chicago, Ill. Filed May 5, 1932.

Haarlem

Dutch Treat Sweet Meat"

For the purpose of registration no claim is made to the geographical term 'Haarlem', and to the descriptive term 'Sweet Meat' apart from the mark as shown in the drawing.

For Cakes and Peanuts.

Claims use since Nov. 19, 1931, on cakes; since Mar. 4, 1932, on peanuts.

Ser. No. 326,847. ASSOCIATED FARMERS' EXCHANGES, INC., Worcester, Mass. Filed May 7, 1932.

PROFIT MAKER

For Food for Stock and Poultry.

Claims use since May 7, 1931.

Ser. No. 326,934. P. G. CANELLOS, doing business as Quality Tea & Coffee Company, Boston, Mass. Filed May 10, 1932.



The word "Coffee" is disclaimed apart from the mark as shown. The drawing is lined for red.

For Coffee.

Claims use since Jan. 2, 1932.

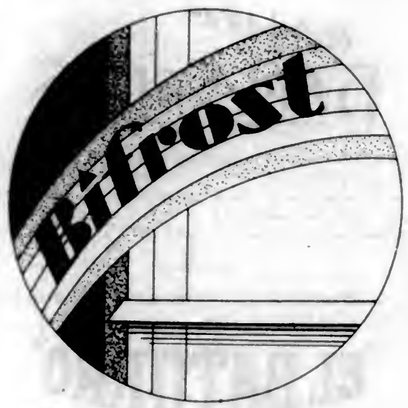
Ser. No. 327,036. ALASKAN PRODUCTS INCORPORATED, Baltimore, Md. Filed May 13, 1932.

FROZEN NORTH

For Canned Crab Meat, Crab Meat in The Bulk and Steamed Crabs.

Claims use since March, 1932.

Ser. No. 327,069. ROETHLISBERGER & CO. INC., New York, N. Y. Filed May 13, 1932.



For Cheese.

Claims use since May 11, 1932.

Ser. No. 327,071. STERLING PRODUCTS COMPANY, Evansville, Ind. Filed May 13, 1932.



For Malt Extract.

Claims use since Feb. 2, 1932.

Ser. No. 327,152. HUMKO LARD CO., Memphis, Tenn. Filed May 16, 1932.

HUMKO

For Shortening Made from Vegetable Oils or from a Mixture of Vegetable Oils and Animal Fats.

Claims use since June 1, 1930.

Ser. No. 327,300. BEATRICE CREAMERY COMPANY, Chicago, Ill. Filed May 21, 1932.

Meadow Gold

Applicant is the owner of registration Nos. 281,436 and 285,893.

For Eggs and Cheese.

Claims use since Apr. 1, 1911.

Ser. No. 327,318. JOE LOWE CORPORATION, Brooklyn, N. Y. Filed May 21, 1932.

ULTEX

For Vegetable Oil Shortening.

Claims use since Feb. 26, 1932.

Ser. No. 327,350. FARM CREST BAKERIES, INCORPORATED, Wilmington, Del., and Detroit, Mich. Filed May 23, 1932.

FARM CREST

For Bread, Rolls, Sweet Yeast Rolls, Buns, Cakes, Sweet Yeast Cakes, Cookies, Shortcakes, Doughnuts, Fried Cakes, Tarts, and Pies.

Claims use since about May 13, 1930.

Ser. No. 327,379. SWIFT AND COMPANY, Chicago, Ill. Filed May 23, 1932.



The drawing is lined to indicate the colors red, black, and silver, the color silver being represented by broken horizontal lines. No claim is made to the representation of a label or to the representations of dogs or to the words "A Meat Food Product," "Dog," and "Food" except in the association shown.

For Food for Carnivorous Animals.

Claims use since Apr. 25, 1932.

Ser. No. 327,590. JOHNSON EDUCATOR FOOD COMPANY, Cambridge, Mass. Filed May 31, 1932.

HOT-CHA

For Cookies and Crackers.

Claims use since May 3, 1932.

Ser. No. 327,685. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash. Filed June 3, 1932.

BIRD'S NEST



In the drawing the lining indicating shading only.

For Wheat Flour.

Claims use since Sept. 9, 1912.

Ser. No. 327,686. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash. Filed June 3, 1932.

DOUBLE ·F·

For Wheat Flour.

Claims use since May 4, 1932.

Ser. No. 327,687. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash. Filed June 3, 1932.

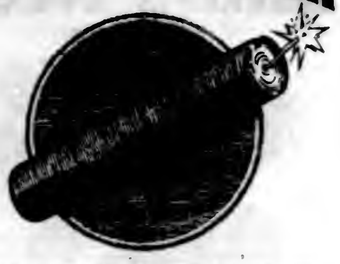
FASTIME

For Wheat Flour, Biscuit Flour, Pancake Flour, Muffin Flour, and Doughnut Flour.

Claims use since Apr. 21, 1932, on wheat flour; since May 10, 1932, on biscuit flour, pancake flour, muffin flour, and doughnut flour.

Ser. No. 327,688. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash. Filed June 3, 1932.

FIRE-CRACKER



In the drawing the lining indicating shading only.
For Wheat Flour.
Claims use since May 5, 1932.

Ser. No. 327,689. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash. Filed June 3, 1932.

RHODODENDRON

For Wheat Flour.
Claims use since May 7, 1932.

Ser. No. 327,702. NEBRASKA CONSOLIDATED MILLS CO., Omaha, Nebr. Filed June 3, 1932.

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In the drawing the lining indicating shading only.
For Biscuit Flour.
Claims use since May 14, 1932.

Ser. No. 327,751. GUY E. BRIGNALL, doing business as Sta-Wel Company (Not Incorporated), Aurora, Ill. Filed June 6, 1932.

STA-WEL

For Whole Grain Health Flour, Including Whole Wheat and Other Grains.
Claims use since Jan. 1, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 323,147. SIEGFRIED J. ROOZENDAAL, doing business as Mendoc Mending Company, Brooklyn, N. Y. Filed Jan. 18, 1932.

MENDOC

For Package Containing Materials and Instructions for Repairing Garments.
Claims use since Jan. 12, 1932.

Ser. No. 327,273. EAGLE STRAW CORPORATION, New York, and Brooklyn, N. Y. Filed May 20, 1932.

EAGLE

For Drinking Straws.
Claims use since March, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JULY 12, 1932

295,694. SKIN LOTION. NORTHROP & LYMAN CO., LIMITED, Toronto, Ontario, Canada.
Filed July 16, 1931. Serial No. 317,007. PUBLISHED APRIL 12, 1932. Class 6.

295,695. SKIN LOTION. NORTHROP & LYMAN CO., LIMITED, Toronto, Ontario, Canada.
Filed July 16, 1931. Serial No. 317,008. PUBLISHED APRIL 12, 1932. Class 6.

295,696. CANNED FRUITS AND VEGETABLES AND FROSTED, FROZEN, AND ICED FRESH FRUITS AND VEGETABLES. H. C. HEMINGWAY & COMPANY, INC., Syracuse, N. Y.
Filed August 15, 1931. Serial No. 318,007. PUBLISHED OCTOBER 6, 1931. Class 46.

295,697. INSECTICIDES AND DEODORANTS. DAVENPORT'S SANITARY SERVICE, Ridgewood, N. Y.
Filed October 12, 1931. Serial No. 319,978. PUBLISHED APRIL 19, 1932. Class 6.

295,698. WAVE LOTION. THE DUHALE COMPANY, St. Louis, Mo.
Filed October 19, 1931. Serial No. 320,189. PUBLISHED APRIL 19, 1932. Class 6.

295,699. AUTOMOBILE ANTI-FREEZE COMPOUND, AUTOMOBILE RADIATOR CLEANING COMPOUND, AND AUTOMOBILE RADIATOR SEALING COMPOUND. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed October 23, 1931. Serial No. 320,346. PUBLISHED APRIL 12, 1932. Class 6.

295,700. COFFEE. GREENSPAN BROS. CO., doing business as United Service Grocers, Perth Amboy, N. J.
Filed October 31, 1931. Serial No. 320,672. PUBLISHED APRIL 26, 1932. Class 46.

295,701. CRIB SHEETING, MATTRESS COVERS, BATH MATS, CARD TABLE COVERS, AND HOSPITAL SHEETING MADE OF RUBBER OR WATERPROOFED FABRIC. JACOB STEIN, doing business as Climax Rubber Company, New York and Brooklyn, N. Y.
Filed October 31, 1931. Serial No. 320,705. PUBLISHED APRIL 26, 1932. Class 50.

295,702. ASTRINGENTS, BRILLIANTINE, BEAUTY CREAMS, COLD CREAMS, ETC. JACOB SUGARMAN, Union City, N. J.
Filed November 3, 1931. Serial No. 320,807. PUBLISHED APRIL 19, 1932. Class 6.

295,703. TOILET PREPARATIONS. JOHN M. SCHOTZ, New York, N. Y.
Filed November 10, 1931. Serial No. 320,996. PUBLISHED APRIL 12, 1932. Class 6.

295,704. SANDWICHES. EDWARD J. BACH, New York, N. Y.
Filed November 13, 1931. Serial No. 321,092. PUBLISHED APRIL 19, 1932. Class 46.

295,705. TREATED COAL. REILLY CHEMICAL COMPANY, INC., Indianapolis, Ind.
Filed November 16, 1931. Serial No. 321,171. PUBLISHED APRIL 19, 1932. Class 1.

295,706. SURFACING MATERIAL—NAMELY, CRUSHED STONE, GROUND BRICK, AND A BINDING AGENT FOR TENNIS COURTS. H. A. ROBINSON & CO., INC., New York, N. Y.
Filed November 17, 1931. Serial No. 321,218. PUBLISHED APRIL 19, 1932. Class 12.

295,707. MEDICINAL POMADE FOR THE TREATMENT OF SKIN DISEASES. LORENZO C. REYES, Manila, P. I.
Filed December 5, 1931. Serial No. 321,826. PUBLISHED APRIL 12, 1932. Class 6.

295,708. ASPIRIN TABLETS. BLACKSTONE PRODUCTS CO., INC., New York, N. Y.
Filed December 9, 1931. Serial No. 321,944. PUBLISHED APRIL 26, 1932. Class 6.

295,709. HEALING POWDERS; SALVES FOR SORES, ECZEMA, ULCERS, FISTULAS, CARBUNCLES, CANCERS, AND ALL SLUGGING SORES; HERB MEDICINE FOR NERVES, RHEUMATISM, LUMBAGO, INDIGESTION, WORMS, AND VENEREAL DISEASES; COUGH SYRUP, AND BLOOD MEDICINE. JOHN H. THOMAS, Ashland, Ga.
Filed December 14, 1931. Serial No. 322,116. PUBLISHED APRIL 12, 1932. Class 6.

295,710. NAIL POLISH, NAIL POLISH REMOVER, AND NAIL WHITENING PREPARATION, CUTICLE OIL AND CUTICLE REMOVER IN LIQUID AND PASTE FORM. LOUIS HERZBERG, doing business as The Bonnie Worth Co., Hollywood, Calif., assignor to Morgan & Sampson, San Francisco, Calif., a Copartnership composed of D. Blaine Morgan and Carl O. Sampson.
Filed December 16, 1931. Serial No. 322,174. PUBLISHED APRIL 12, 1932. Class 6.

295,711. BUILDING COVERING MATERIALS IN THE FORM OF ASPHALT IMPREGNATED OR ASPHALT MASTIC OR COMPOSITION SHEETS OR UNITS. ROBERT S. MACLEAN, doing business as Mastic Asphalt Company, Michigan City, Ind.
Filed December 22, 1931. Serial No. 322,368. PUBLISHED APRIL 26, 1932. Class 12.

295,712. TABLE SYRUP. CORN PRODUCTS REFINING COMPANY, New York, N. Y.
Filed January 5, 1932. Serial No. 322,732. PUBLISHED APRIL 26, 1932. Class 46.

295,713. HAIR AND SCALP OIL TREATMENTS AND SHAMPOO. CHARLES L. BANKS, doing business as Naro Company, St. Louis, Mo.
Filed January 11, 1932. Serial No. 322,918. PUBLISHED APRIL 12, 1932. Class 6.

295,714. PSYLLIUM SEED. NATHAN KAUFMAN, doing business as Modern Health Ass'n., Long Beach, N. Y.
Filed January 12, 1932. Serial No. 322,935. PUBLISHED APRIL 12, 1932. Class 6.

295,715. MEDICINAL PREPARATION FOR USE IN NASAL CONGESTION. ALBERT A. BASS and NEWELL A. CHRISTENSEN, doing business as Medron Drug Co., Philadelphia, Pa.
Filed January 19, 1932. Serial No. 323,157. PUBLISHED APRIL 12, 1932. Class 6.

295,716. SEMI-LIQUID CHEMICAL HAIR REMOVER. MODERNETTE, INC., Des Moines, Iowa.
Filed January 20, 1932. Serial No. 323,203. PUBLISHED APRIL 19, 1932. Class 6.

295,717. PERFUME, TOILET WATER, AND FACE POWDER. YBRY, INC., New York, N. Y.
Filed January 23, 1932. Serial No. 323,382. PUBLISHED APRIL 12, 1932. Class 6.

295,718. BUILDING MATERIAL, MORE PARTICULARLY PREPARED ROOFING AND SHINGLES OF THE TYPE COMPRISING A FIBROUS BASE IMPREGNATED WITH A WATERPROOF COMPOUND AND COVERED WITH GRIT. THE LOGAN-LONG COMPANY, Chicago, Ill.
Filed January 25, 1932. Serial No. 323,412. PUBLISHED APRIL 19, 1932. Class 12.

295,719. GENERAL TONIC COMPRISING MALT EXTRACT WITH COD LIVER OIL. WILLIAM SIEGEL, doing business as Viomalt Laboratories, New York, N. Y.
Filed January 25, 1932. Serial No. 323,423. PUBLISHED APRIL 12, 1932. Class 6.

295,720. ADHESIVE COMPOSITION FOR USE ON PAPER. WOOD NEWSPAPER MACHINERY CORPORATION, New York, N. Y.
Filed January 25, 1932. Serial No. 323,428. PUBLISHED APRIL 19, 1932. Class 5.

295,721. ADHESIVE COMPOSITION FOR USE ON PAPER. WOOD NEWSPAPER MACHINERY CORPORATION, New York, N. Y.
Filed January 25, 1932. Serial No. 323,429. PUBLISHED APRIL 19, 1932. Class 5.

295,722. ADHESIVE COMPOSITION FOR USE ON PAPER. WOOD NEWSPAPER MACHINERY CORPORATION, New York, N. Y.
Filed January 25, 1932. Serial No. 323,430. PUBLISHED APRIL 19, 1932. Class 5.

295,723. HOMINY-GRITS, CORNMEAL, HOMINY, AND CORN FLAKE. DECATUR MILLING COMPANY, Decatur, Ill.
Filed January 26, 1932. Serial No. 323,446. PUBLISHED APRIL 26, 1932. Class 46.

295,724. SALVE USED EXTERNALLY IN THE TREATMENT OF COLDS, CORYZA, AND EAR TROUBLE. MICHAEL J. DUNN, doing business as Humanity Chemical Co., Pottsville, Pa.
Filed January 26, 1932. Serial No. 323,449. PUBLISHED APRIL 12, 1932. Class 6.

295,725. PREPARATION FOR THE TREATMENT OF HAIR. ROSA B. DAVIS, San Bernardino, Calif.
Filed January 28, 1932. Serial No. 323,527. PUBLISHED APRIL 19, 1932. Class 6.

295,726. COMPOUND FOR BEAUTIFYING THE TEETH. ALFRED V. AGRELLA, Brooklyn, N. Y.
Filed January 29, 1932. Serial No. 323,560. PUBLISHED APRIL 5, 1932. Class 6.

295,727. MANGANESE SODIUM GLUCONATE COLLOIDAL SOLUTION USED IN THE TREATMENT OF COCCI INFECTIONS. THE DRUG PRODUCTS CO. INC., Long Island City, N. Y.
Filed January 30, 1932. Serial No. 323,615. PUBLISHED APRIL 5, 1932. Class 6.

295,728. HAIR TONIC. GIUSEPPE ZUFFANTE, Boston, Mass.
Filed January 30, 1932. Serial No. 323,646. PUBLISHED APRIL 12, 1932. Class 6.

295,729. PIES. TRI-PIE CORPORATION, Brooklyn, N. Y.
Filed February 1, 1932. Serial No. 323,729. PUBLISHED APRIL 26, 1932. Class 46.

295,730. CHEMICAL PRODUCTS FOR USE IN THE TEXTILE INDUSTRY. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland.
Filed February 3, 1932. Serial No. 323,794. PUBLISHED APRIL 5, 1932. Class 6.

295,731. TABLE SYRUP. JOHN B. YOUNG, doing business as Atlanta Syrup Co., South Pittsburg, Tenn.
Filed February 3, 1932. Serial No. 323,799. PUBLISHED APRIL 26, 1932. Class 46.

295,732. MIXTURE OF COKE AND COAL. STEPHEN KERR, Philadelphia, Pa.
Filed February 2, 1932. Serial No. 323,802. PUBLISHED APRIL 19, 1932. Class 1.

295,733. NON-MEDICINAL WHITE MINERAL OIL INTENDED MAINLY FOR TREATING TEXTILES. SCHLIEMANN COMPANIES, INC., New York, N. Y.
Filed February 4, 1932. Serial No. 323,832. PUBLISHED APRIL 26, 1932. Class 6.

295,734. NON-MEDICINAL WHITE MINERAL OIL INTENDED MAINLY FOR TREATING TEXTILES. SCHLIEMANN COMPANIES, INC., New York, N. Y.
Filed February 4, 1932. Serial No. 323,833. PUBLISHED APRIL 26, 1932. Class 6.

295,735. SULPHONATED OIL BASE SOMETIMES IN COMBINATION WITH SOLVENTS USED FOR SOFTENING, SCOURING, AND FULLING OF TEXTILE FIBRES. ARKANSAS COMPANY INC., New York, N. Y.
Filed February 5, 1932. Serial No. 323,852. PUBLISHED APRIL 5, 1932. Class 6.

295,736. COMPOUND USED FOR DELUSTERING ANIMAL, VEGETABLE, AND ARTIFICIAL FIBRES. ARKANSAS COMPANY INC., New York, N. Y.
Filed February 5, 1932. Serial No. 323,854. PUBLISHED APRIL 5, 1932. Class 6.

295,737. ANTISEPTIC JELLY. HYGELYN, INC., Minneapolis, Minn.
Filed February 5, 1932. Serial No. 323,866. PUBLISHED APRIL 5, 1932. Class 6.

295,738. ICE CREAM. TOM ANAGNOS, Dallas, Tex., assignor to Pecan Krisp Co., Inc., Dallas, Tex.
Filed February 6, 1932. Serial No. 323,882. PUBLISHED APRIL 26, 1932. Class 46.

295,739. GELATINE FOR COATING SAUSAGES AND MEATS AND MADE PARTLY OF MEAT AND MEAT FAT. GEL-A-COTE CORPORATION, Chicago, Ill.
Filed February 8, 1932. Serial No. 323,935. PUBLISHED APRIL 26, 1932. Class 46.

295,740. BITUMINOUS PRODUCTS—NAMELY, ROAD FINISHING AND PAVING MATERIALS. NOLAN BROTHERS, Minneapolis, Minn.
Filed February 8, 1932. Serial No. 323,960. PUBLISHED APRIL 19, 1932. Class 12.

295,741. BIRD AND FISH FOOD. MAGNESIA PRODUCTS COMPANY, Milwaukee, Wis.
Filed February 6, 1932. Serial No. 323,974. PUBLISHED APRIL 26, 1932. Class 46.

295,742. NURSERY STOCK. EASTERN SHORE NURSERIES, INC., Easton, Md.
Filed February 9, 1932. Serial No. 323,989. PUBLISHED APRIL 26, 1932. Class 1.

295,743. PHARMACEUTICAL PREPARATION INDICATED IN THE TREATMENT OF TUBERCULOSIS. MANUEL GREY, doing business as Grey Laboratories, Mexico City, Mexico; New York, N. Y.; and Los Angeles, Calif.
Filed February 9, 1932. Serial No. 323,994. PUBLISHED APRIL 5, 1932. Class 6.

295,744. PHARMACEUTICAL PREPARATION INDICATED IN THE TREATMENT OF TUBERCULOSIS. MANUEL GREY, doing business as Grey Laboratories, Mexico City, Mexico, New York, N. Y., and Los Angeles, Calif.
Filed February 9, 1932. Serial No. 323,995. PUBLISHED APRIL 5, 1932. Class 6.

295,745. LEATHER. MAX HERTZ LEATHER COMPANY, Newark, N. J.
Filed February 9, 1932. Serial No. 323,997. PUBLISHED APRIL 19, 1932. Class 1.

295,746. MEDICINAL PREPARATION FOR USE IN THE TREATMENT OF AMENORRHEA, DYSMENORRHEA, AND MENSTRUAL DISORDERS. AMERICAN PHARMACEUTICAL CO., INC., New York, N. Y.
Filed February 10, 1932. Serial No. 324,026. PUBLISHED APRIL 12, 1932. Class 6.

295,747. CONCENTRATED BOILER WATER TREATING LIQUID, CONCENTRATED ANTI-FREEZE LIQUID, AND CONCENTRATED AUTOMOBILE RADIATOR CLEANING LIQUID. THE DACAR PRODUCTS COMPANY, Canton, Ohio.
Filed February 10, 1932. Serial No. 324,033. PUBLISHED APRIL 12, 1932. Class 6.

295,748. NON-DISCOLORING ANTIOXIDANT FOR RUBBER. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed February 11, 1932. Serial No. 324,066. PUBLISHED APRIL 12, 1932. Class 6.

295,749. HEMORRHOIDAL SUPPOSITORIES. JOHN WYETH & BROTHER INCORPORATED, Philadelphia, Pa.
Filed February 11, 1932. Serial No. 324,087. PUBLISHED APRIL 12, 1932. Class 6.

295,750. PREPARATION FOR USE AS VAGINAL SUPPOSITORIES. JOHN WYETH & BROTHER INCORPORATED, Philadelphia, Pa.
Filed February 11, 1932. Serial No. 324,088. PUBLISHED APRIL 12, 1932. Class 6.

295,751. SILICATE OF SODA EITHER ALONG OR IN ADMIXTURE WITH OTHER ALKALINE SALTS. PHILADELPHIA QUARTZ COMPANY, Philadelphia, Pa.
Filed February 12, 1932. Serial No. 324,112. PUBLISHED APRIL 12, 1932. Class 6.

295,752. GENERAL TONIC PREPARATION. THE SYDNEY ROSS CO., Newark, N. J.
Filed February 12, 1932. Serial No. 324,117. PUBLISHED APRIL 12, 1932. Class 6.

295,753. MEDICINAL PREPARATION DESIGNED TO SUPPLY THE DEFICIENCY IN THE VITAMIN B COMPLEX. DIGESTIVE FERMENTS COMPANY, Detroit, Mich.
Filed February 13, 1932. Serial No. 324,130. PUBLISHED APRIL 12, 1932. Class 6.

295,754. PREPARATION FOR THE TREATMENT OF HEMORRHOIDS. REED DRUG CO., Miami, Fla.
Filed February 13, 1932. Serial No. 324,133. PUBLISHED APRIL 12, 1932. Class 6.

295,755. INSECTICIDE. HAMPTON D. GOSSARD, Wichita, Kans.
Filed February 15, 1932. Serial No. 324,164. PUBLISHED APRIL 19, 1932. Class 6.

295,756. BABY TALCUM POWDER. M. D. LABORATORIES, Brooklyn, N. Y.
Filed February 17, 1932. Serial No. 324,261. PUBLISHED APRIL 12, 1932. Class 6.

295,757. SPECIALLY PREPARED FOOD PRODUCT FOR INFANTS AND INVALIDS, A SPECIALLY PREPARED CEREAL, BREWERS YEAST POWDER, AND POWDERED BEEF BONE FOR HUMAN USE. MEAD JOHNSON & COMPANY, Evansville, Ind.
Filed February 18, 1932. Serial No. 324,293. PUBLISHED APRIL 26, 1932. Class 46.

295,758. MEDICINAL PREPARATION USED IN THE TREATMENT OF RHEUMATIC AND NEURALGIC DISEASES. CHEMISCHE FABRIK GÜSTROW DR. HILLRINGHAUS & DR. HEILMANN AKTIENGESELLSCHAFT, Gustrow, Germany.
Filed February 19, 1932. Serial No. 324,309. PUBLISHED APRIL 19, 1932. Class 6.

295,759. PREPARATIONS FOR AUGMENTATION OF THE VITAL ACTIVITY OF THE HUMAN BODY AND ITS RESISTING POWER IN CASES OF ILLNESS. SKJELSKOR FRUGTPLANTAGE A/S, Skjelskor, Denmark.
Filed February 19, 1932. Serial No. 324,323. PUBLISHED APRIL 26, 1932. Class 6.

295,760. INSECTICIDES, DEODORANTS, AND DISINFECTANTS. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed February 19, 1932. Serial No. 324,324. PUBLISHED APRIL 12, 1932. Class 6.

295,761. CHOCOLATE COATING TO BE USED FOR CANDY, ICE CREAM, CRACKERS, COOKIES, AND SIMILAR ITEMS. CHOCOLATE PRODUCTS COMPANY, Chicago, Ill.
Filed February 20, 1932. Serial No. 324,341. PUBLISHED APRIL 26, 1932. Class 46.

295,762. DENTIFRICES AND MOUTH WASHES. THE ANACIN COMPANY, Chicago, Ill.
Filed February 23, 1932. Serial No. 324,364. PUBLISHED APRIL 19, 1932. Class 6.

295,763. DISINFECTANT AND DEODORANT. WEST DISINFECTING COMPANY, Long Island City, N. Y.
Filed February 24, 1932. Serial No. 324,451. PUBLISHED APRIL 19, 1932. Class 6.

295,764. DEVICE INTENDED TO PREVENT A BABY FROM CRAWLING OUT FROM UNDER THE COVERS. FANNIE A. BATES, Denver, Colo.
Filed February 25, 1932. Serial No. 324,453. PUBLISHED APRIL 26, 1932. Class 3.

295,765. TOOTH-POWDER. ROSCOE C. LONG, doing business as The Denti-Kem Company, St. Louis, Mo.
Filed February 25, 1932. Serial No. 324,475. PUBLISHED APRIL 19, 1932. Class 6.

295,766. WHEAT FLOUR, SELF RISING FLOUR, AND PHOSPHATED FLOUR. MAYFLOWER MILLS, Fort Wayne, Ind.
Filed February 25, 1932. Serial No. 324,477. PUBLISHED APRIL 19, 1932. Class 46.

295,767. BOX COVERS. ARLOW W. MINER, doing business as The Nif-T Company, Sioux City, Iowa.
Filed February 25, 1932. Serial No. 324,480. PUBLISHED APRIL 26, 1932. Class 50.

295,768. LAXATIVE. THE HENEPH CORPORATION, Kingston, N. Y.
Filed February 26, 1932. Serial No. 324,513. PUBLISHED APRIL 19, 1932. Class 6.

295,769. PERFUMES, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed February 26, 1932. Serial No. 324,519. PUBLISHED APRIL 19, 1932. Class 6.

295,770. PERFUMES, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed February 26, 1932. Serial No. 324,520. PUBLISHED APRIL 19, 1932. Class 6.

295,771. PERFUMES, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed February 26, 1932. Serial No. 324,524. PUBLISHED APRIL 19, 1932. Class 6.

295,772. PERFUMES, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed February 26, 1932. Serial No. 324,525. PUBLISHED APRIL 19, 1932. Class 6.

295,773. PERFUMES, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed February 26, 1932. Serial No. 324,526. PUBLISHED APRIL 19, 1932. Class 6.

295,774. PERFUMES, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed February 26, 1932. Serial No. 324,527. PUBLISHED APRIL 19, 1932. Class 6.

295,775. PERFUMES, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed February 26, 1932. Serial No. 324,528. PUBLISHED APRIL 19, 1932. Class 6.

295,776. PERFUMES, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed February 26, 1932. Serial No. 324,529. PUBLISHED APRIL 19, 1932. Class 6.

295,777. COAL AND COKE. BETTINGER COAL & COKE CORPORATION, Buffalo, N. Y.
Filed February 27, 1932. Serial No. 324,581. PUBLISHED APRIL 26, 1932. Class 1.

295,778. PERFUMES, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed February 26, 1932. Serial No. 324,530. PUBLISHED APRIL 19, 1932. Class 6.

295,779. PAPER SUITABLE FOR USE IN THE MANUFACTURE OF ROOFING AND FOR OTHER CONSTRUCTION AND HEAT-INSULATION PURPOSES. BROWN COMPANY, Portland, Me., and Berlin, N. H.
Filed February 29, 1932. Serial No. 324,588. PUBLISHED APRIL 19, 1932. Class 12.

295,780. LEATHER. HUNT-RANKIN LEATHER CO., Boston, Mass.
Filed February 29, 1932. Serial No. 324,606. PUBLISHED APRIL 26, 1932. Class 1.

295,781. ALIMENTARY PASTE PRODUCTS. JOSEPH ROMANO, doing business as R. Romano & Son, New York, N. Y.
Filed February 29, 1932. Serial No. 324,627. PUBLISHED APRIL 26, 1932. Class 46.

295,782. SECTIONAL STEEL FRAMES FOR PARTITIONS. SANYMETAL PRODUCTS COMPANY, Cleveland, Ohio.
Filed February 29, 1932. Serial No. 324,629. PUBLISHED APRIL 12, 1932. Class 12.

295,783. MALT SYRUP. LAURICH MALT & SUPPLY CO., Cleveland, Ohio.
Filed March 1, 1932. Serial No. 324,668. PUBLISHED APRIL 26, 1932. Class 46.

295,784. REFRACTORY CEMENTS. JOHNS-MANVILLE CORPORATION, New York, N. Y.
Filed March 4, 1932. Serial No. 324,791. PUBLISHED APRIL 19, 1932. Class 12.

295,785. SHINGLES OF WOOD AND ASPHALT AND COMPOSITION OF ASPHALT AND OTHER FIREPROOF MATERIAL. CREO-DIPT COMPANY INC., North Tonawanda, N. Y.
Filed March 5, 1932. Serial No. 324,819. PUBLISHED APRIL 19, 1932. Class 12.

295,786. METAL WEATHERSTRIPS. MONARCH METAL WEATHERSTRIP CORPORATION, St. Louis, Mo.
Filed March 7, 1932. Serial No. 324,848. PUBLISHED APRIL 19, 1932. Class 12.

295,787. BIRD FOOD. LOUIS HALLER, doing business as Paradise Bird Food Company, Cincinnati, Ohio.
Filed March 9, 1932. Serial No. 324,962. PUBLISHED APRIL 26, 1932. Class 46.

295,788. CEREAL PANCAKE AND WAFFLE FLOUR FOR HUMAN CONSUMPTION. ALLIED MILLS, INC., Chicago, Ill.
Filed March 10, 1932. Serial No. 324,977. PUBLISHED APRIL 19, 1932. Class 46.

295,789. COAL. CENTRAL VALLEY COAL CO., INC., Brooklyn, N. Y.
Filed March 10, 1932. Serial No. 324,985. PUBLISHED APRIL 26, 1932. Class 1.

295,790. ANTISEPTIC POWDERS, ASPIRIN, BORACIC ACID, ETC. THE MILSON COMPANY, Cincinnati, Ohio.
Filed April 19, 1929. Serial No. 282,665. PUBLISHED APRIL 12, 1932. Class 6.

295,791. TURPENTINE. THE NEWPORT COMPANY, Carrollville, Wis.
Filed February 28, 1930. Serial No. 296,665. PUBLISHED APRIL 19, 1932. Class 16.

295,792. SKIN SALVE FOR USE AS A FACIAL CREAM, ANTISEPTIC, AND BODY DEODORANT. THE PHARMA-CRAFT CORPORATION, Louisville, Ky.
Filed December 13, 1930. Serial No. 308,952. PUBLISHED APRIL 19, 1932. Class 6.

295,793. PREPARATION FOR THE TREATMENT OF RHEUMATISM. JOHN NANU, Aliquippa, Pa.
Filed January 7, 1931. Serial No. 309,694. PUBLISHED APRIL 12, 1932. Class 6.

295,794. MEDICINE FOR INDIGESTION, STOMACH ULCERS, LIVER, HEPATIC DISORDERS, GALLSTONES, SPLEEN, VARICOSE VEINS, JAUNDICE, WOMB TROUBLE, NEURITIS, INFLAMMATION OF BLADDER, ECZEMA AND ULCERS, DANDRUFF, DIARRHEA, AND GOITER. ANCIENT GREEK LABORATORIES, INC., Pittsburgh, Pa.
Filed January 10, 1931. Serial No. 309,799. PUBLISHED APRIL 19, 1932. Class 6.

295,795. FACIAL TREATMENT PACKS, FACIAL CREAMS, ETC. JESSE R. KIRBY, doing business as Uthagen Laboratories, Hollywood, Calif.
Filed April 25, 1931. Serial No. 313,785. PUBLISHED APRIL 12, 1932. Class 6.

295,796. CANNED VEGETABLES AND PICKLES. CRAMPTON CANNERIES, INC., Celina, Ohio.
Filed May 4, 1931. Serial No. 314,154. PUBLISHED AUGUST 18, 1931. Class 46.

295,797. AXES. EMERSON & STEVENS MFG. CO. INC., Oakland, Me.
Filed May 28, 1931. Serial No. 315,139. PUBLISHED APRIL 19, 1932. Class 23.

295,798. BREAD, CAKE, AND PIES. BAKERS SERVICE BUREAU, INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,178. PUBLISHED APRIL 26, 1932. Class 46.

295,799. BREAD, CAKE, AND PIES. BAKERS SERVICE BUREAU, INC., New York, N. Y.
Filed May 29, 1931. Serial No. 315,179. PUBLISHED APRIL 26, 1932. Class 46.

295,800. SALVE FOR TREATMENT OF RHEUMATISM, ARTHRITIS, LUMBAGO, BACKACHE, SCIATICA, SPRAINS, SWOLLEN JOINTS, SORE MUSCLES, ACHING FEET, CHILBLAINS, SUNBURN, BURNS AND SCALDS, CUTS AND WOUNDS, VARICOSE VEINS. HOSPITAL PRODUCTS CORPORATION OF AMERICA, Pleasantville, N. J.
Filed June 30, 1931. Serial No. 316,487. PUBLISHED SEPTEMBER 1, 1931. Class 6.

295,801. LIPSTICKS. ELIZABETH ARDEN, INC., New York, N. Y.
Filed July 13, 1931. Serial No. 316,871. PUBLISHED APRIL 12, 1932. Class 6.

295,802. PREPARATIONS FOR THE RELIEF OF SKIN DISORDERS, NERVE DISORDERS, AND RESPIRATORY DISORDERS. MERZ & CO., Frankfort-on-the-Main, Germany.
Filed October 23, 1931. Serial No. 320,364. PUBLISHED APRIL 19, 1932. Class 6.

295,803. LAXATIVE ICE CREAM. JACOB C. ROSENBACH, New York, N. Y.
Filed November 6, 1931. Serial No. 320,874. PUBLISHED APRIL 5, 1932. Class 6.

295,804. LIP ROUGE, MUSCLE OIL, SKIN TONIC, CLEANSING CREAM, ETC. THE JONES STORE COMPANY, Kansas City, Mo.
Filed November 14, 1931. Serial No. 321,139. PUBLISHED APRIL 5, 1932. Class 6.

295,805. EMBOSSED GLASSINE PAPER. WESTFIELD RIVER PAPER COMPANY, INC., Russell, Mass.
Filed November 27, 1931. Serial No. 321,554. PUBLISHED APRIL 12, 1932. Class 37.

295,806. CERTAIN NAMED PAINT PRODUCTS. THE MARVELITE PAINT AND ENAMEL COMPANY, Baltimore, Md.
Filed November 28, 1931. Serial No. 321,571. PUBLISHED APRIL 19, 1932. Class 16.

295,807. AROMATIC CHEMICALS, BALSAMS, OILS, ETC. MAGNUS, MABEE & REYNARD, INC., New York, N. Y.
Filed December 12, 1931. Serial No. 322,050. PUBLISHED APRIL 12, 1932. Class 6.

295,808. PIECE GOODS MADE OF SILK. MAY DEPARTMENT STORES COMPANY, Los Angeles, Calif.
Filed December 21, 1931. Serial No. 322,322. PUBLISHED APRIL 19, 1932. Class 42.

295,809. CERTAIN NAMED PAINT PRODUCTS. BROWNLITE COMPANY, INC., Baltimore, Md.
Filed January 11, 1932. Serial No. 322,919. PUBLISHED APRIL 19, 1932. Class 16.

295,810. WOMEN'S AND GIRLS' DRESSES. PEOPLE'S OUTFITTING COMPANY, Detroit, Mich.
Filed January 20, 1932. Serial No. 323,206. PUBLISHED APRIL 26, 1932. Class 39.

295,811. CERTAIN NAMED PAINT PRODUCTS. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio.
Filed January 29, 1932. Serial No. 323,591. PUBLISHED APRIL 19, 1932. Class 16.

295,812. ASTRINGENTS, ASTRINGENT CERATES, BLEACH AND BEAUTY CREAMS, ETC. FRANK C. REILLY, New York, N. Y.
Filed February 1, 1932. Serial No. 323,717. PUBLISHED APRIL 12, 1932. Class 6.

295,813. RADIOPAQUE OIL. PARKE, DAVIS & CO., Detroit, Mich.
Filed February 8, 1932. Serial No. 323,962. PUBLISHED APRIL 5, 1932. Class 6.

295,814. ADHESIVE MEDICATED SHIELDS, PADS OR PLASTERS FOR CORNS, CALLOUSES, AND BUNIONS. THE SCHOLL MFG. CO., INC., Chicago, Ill.
Filed February 8, 1932. Serial No. 323,963. PUBLISHED APRIL 5, 1932. Class 6.

295,815. PAINTS. CHASE VARNISH CO. INC., Long Island City, N. Y.
Filed February 9, 1932. Serial No. 323,987. PUBLISHED APRIL 26, 1932. Class 16.

295,816. PAINT PRIMER. AMERICAN CHEMICAL PAINT COMPANY, Lower Gwynedd, Pa.
Filed February 9, 1932. Serial No. 323,980. PUBLISHED APRIL 19, 1932. Class 16.

295,817. MEDICINAL PREPARATION. JOSEPH J. SPARR, doing business as Dr. Jayess Pharmacal Products, Boston, Mass.
Filed February 9, 1932. Serial No. 324,015. PUBLISHED APRIL 5, 1932. Class 6.

295,818. LACES IN THE FORM OF PIECE GOODS. VAN RAALTE COMPANY, New York, N. Y.
Filed February 9, 1932. Serial No. 324,020. PUBLISHED APRIL 26, 1932. Class 42.

295,819. PREPARATION HELPFUL IN RELIEF OF DYSMENORRHEA (PAINFUL MENSTRUATION). EDWARD T. KENNEDY, Jr., doing business as Dr. Kennedy Medicine Co., Chicago, Ill.
Filed February 15, 1932. Serial No. 324,171. PUBLISHED APRIL 26, 1932. Class 6.

295,820. COLD CREAM, CLEANSING CREAM, AND VANISHING CREAM. HARVEY S. ALSTROM, doing business as Lady Humphrey Products, Longmeadow, Mass.
Filed February 17, 1932. Serial No. 324,240. PUBLISHED APRIL 26, 1932. Class 6.

295,821. ANTISEPTIC-GERMICIDE USED IN THE TREATMENT OF THE HAIR AND SCALP. LOUIS PHILIPPE, New York, N. Y.
Filed February 20, 1932. Serial No. 324,354. PUBLISHED APRIL 26, 1932. Class 6.

295,822. BLENDED CANE AND CORN SYRUP. CAIRO SYRUP COMPANY, Atlanta, Ga.
Filed March 8, 1932. Serial No. 324,874. PUBLISHED APRIL 26, 1932. Class 46.

295,823. CANE SYRUP. CAIRO SYRUP COMPANY, Atlanta, Ga.
Filed March 8, 1932. Serial No. 324,875. PUBLISHED APRIL 26, 1932. Class 46.

295,824. WHEAT FLOUR. FISHER FLOURING MILLS COMPANY, West Waterway, Harbor Island, Seattle, Wash.
Filed March 14, 1932. Serial No. 325,093. PUBLISHED APRIL 19, 1932. Class 46.

295,825. PANCAKE FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed March 17, 1932. Serial No. 325,225. PUBLISHED APRIL 26, 1932. Class 46.

295,826. WHEAT FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed March 17, 1932. Serial No. 325,226. PUBLISHED APRIL 26, 1932. Class 46.

295,827. WHEAT FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed March 17, 1932. Serial So. 325,227. PUBLISHED APRIL 26, 1932. Class 46.

295,828. ANTISEPTIC-GERMICIDE POWDER FOR FIRST AID AND MINOR WOUNDS, ETC. LOUIS PHILIPPE, New York, N. Y.
Filed February 20, 1932. Serial No. 324,355. PUBLISHED APRIL 26, 1932. Class 6.

295,829. ANTISEPTIC-GERMICIDE POWDER FOR FIRST AID AND MINOR WOUNDS, ETC. LOUIS PHILIPPE, New York, N. Y.
Filed February 20, 1932. Serial So. 324,358. PUBLISHED APRIL 26, 1932. Class 6.

295,830. LACQUER, VARNISH, PAINT AND ENAMEL. THE MARIETTA PAINT & COLOR CO., Marietta, Ohio.
Filed February 24, 1932. Serial No. 324,441. PUBLISHED APRIL 19, 1932. Class 16.

295,831. FLOOR WAX. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo.
Filed February 26, 1932. Serial No. 324,515. PUBLISHED APRIL 26, 1932. Class 16.

295,832. LIQUID FLOOR WAX. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo.
Filed February 26, 1932. Serial No. 324,516. PUBLISHED APRIL 26, 1932. Class 16.

295,833. PERFUMES, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed February 26, 1932. Serial No. 324,521. PUBLISHED APRIL 19, 1932. Class 6.

295,834. PERFUMES, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed February 26, 1932. Serial No. 324,522. PUBLISHED APRIL 19, 1932. Class 6.

295,835. PERFUMES, TOILET WATER, FACE POWDER, ETC. HOUBIGANT, INC., New York, N. Y.
Filed February 26, 1932. Serial So. 324,523. PUBLISHED APRIL 19, 1932. Class 6.

295,836. PREPARATION FOR USE IN THE TREATMENT OF BACTERIAL INVASIONS OF AN ENDOTOXIC NATURE. IMMUNITIES LABORATORIES, INC., New York, N. Y.
Filed February 29, 1932. Serial No. 324,608. PUBLISHED APRIL 26, 1932. Class 6.

295,837. COUGH COMPOUND, STIMULANT, EXPECTORANT, ANTISPASMODIC. HAACK BROS., Portland, Oreg.
Filed March 1, 1932. Serial No. 324,666. PUBLISHED APRIL 26, 1932. Class 6.

295,838. SALT. TEXACO SALT PRODUCTS COMPANY, New York, N. Y.
Filed March 1, 1932. Serial No. 324,674. PUBLISHED APRIL 26, 1932. Class 6.

295,839. SALT. TEXACO SALT PRODUCTS COMPANY, New York, N. Y.
Filed March 1, 1932. Serial No. 324,676. PUBLISHED APRIL 26, 1932. Class 6.

295,840. LIQUID DISINFECTANT AND DEODORIZER. THE C. B. DOLGE COMPANY, Westport, Conn.
Filed March 2, 1932. Serial No. 324,703. PUBLISHED APRIL 26, 1932. Class 6.

295,841. DRY YEAST. AMERICAN DRY YEAST PRODUCTS CORPORATION, New York, N. Y.
Filed March 15, 1932. Serial No. 325,131. PUBLISHED APRIL 26, 1932. Class 46.

295,842. PREPARATION FOR THE TREATMENT AND CLEANSING OF THE SCALP AND FOR STIMULATING HAIR GROWTH. JAMES A. GILMORE, Spokane, Wash.
Filed March 15, 1932. Serial No. 325,141. PUBLISHED MAY 10, 1932. Class 6.

295,843. LEATHERS. THE OHIO LEATHER COMPANY, Girard, Ohio.
Filed March 16, 1932. Serial No. 325,181. PUBLISHED APRIL 26, 1932. Class 1.

295,844. WHEAT FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed March 17, 1932. Serial No. 325,219. PUBLISHED APRIL 26, 1932. Class 46.

295,845. WHEAT FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed March 17, 1932. Serial No. 325,221. PUBLISHED APRIL 26, 1932. Class 46.

295,846. WHEAT FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed March 17, 1932. Serial No. 325,222. PUBLISHED APRIL 26, 1932. Class 46.

295,847. WHEAT FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed March 17, 1932. Serial No. 325,223. PUBLISHED APRIL 26, 1932. Class 46.

295,848. WHEAT FLOUR. GENERAL MILLS, INC., Minneapolis, Minn.
Filed March 17, 1932. Serial No. 325,224. PUBLISHED APRIL 26, 1932. Class 46.

295,849. SALAD DRESSING. STEPHEN M. BANDURA, Long Island City, N. Y.
Filed March 18, 1932. Serial No. 325,249. PUBLISHED APRIL 26, 1932. Class 46.

295,850. AUTOMOBILE AND FURNITURE POLISH. HARRY D. TRIANTAFILLU, doing business as H. D. T. Company, Factors, White Plains, N. Y.
Filed April 10, 1929. Serial No. 282,207. PUBLISHED DECEMBER 24, 1929. Class 16.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

295,851. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) A. DOWD & Co., St. Louis, Mo. Filed June 24, 1931. Serial No. 316,195.

DR. A. DOWD'S
FOOT
HEALTH

For Foot Lotions, Foot Balm, Foot Powder and Foot Creams.
Claims use since Mar. 23, 1923.

295,852. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) WHELAN LABORATORIES, INC., New York, N. Y. Filed Apr. 23, 1932. Serial No. 326,440.

GIBSON'S

For Shaving Cream.
Claims use since Nov. 21, 1929.

295,853. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ALABAMA BARBER SUPPLY COMPANY, Birmingham, Ala. Filed Apr. 5, 1932. Serial No. 325,815.

OIL O'CASTOR

For Permanent Wave Solution.
Claims use since Jan. 1, 1931.

295,854. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GRIFFITH & TURNER CO., doing business as Lemon Oil Company, Baltimore, Md. Filed Mar. 17, 1932. Serial No. 325,228.

LEMON OIL COMPANY'S
STANDARD
INSECTICIDE

For Insecticide.
Claims use since 1910.

295,855. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) GROSSMAN MUSIC CO., Cleveland, Ohio. Filed Mar. 3, 1932. Serial No. 324,921.

Superior

For Cornets, Trumpets, Clarinets, Saxophones, Flutes, Piccolos, Trombones, Baritones, Bass Horns, Sousaphones, Mellophones, French Horns, Upright Basses, Helicon Basses, Circular Altos, and Upright Altos.
Claims use since Aug. 1, 1928.

295,856. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) JOSHUA L. BAILY & COMPANY, New York, N. Y. Filed Mar. 8, 1932. Serial No. 324,868.

LAKEWOOD

For Sheets and Pillow-Cases.
Claims use since July, 1923.

CARNEGIE LIBRARY OF ATLANTA

295,857. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) LIMBERSHAFT GOLF CLUB COMPANY, Tarpon Springs, Fla. Filed Dec. 7, 1931. Serial No. 321,884.

LIMBERSHAFT

For Golf Clubs.
Claims use since Mar. 23, 1931.

295,858. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PEGGY SAGE, INC., New York, N. Y. Filed Nov. 17, 1931. Serial No. 321,220.

Peggy Sage

For Nail Enamel, Nail Polish, Nail Paste and Powder, Treatment for the Hands in Cream Lotion and Powder Form, Cuticle Remover for the Nails, Cuticle Oil and Cuticle Cream.
Claims use since 1917.

295,859. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) JOHN HAIG & CO. LIMITED, Markinch, Scotland. Filed Nov. 16, 1931. Serial No. 321,162.

HAIG'S WHISKY

For Whisky.
Claims use since Jan. 30, 1926.

295,860. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) E. J. BRACH & SONS, Chicago, Ill. Filed Oct. 31, 1931. Serial No. 320,662.

Brach's

KETTLE
FRESH

For Candy.
Claims use since May, 1931.

295,861. (CLASS 31. FILTERS AND REFRIGERATORS.) ILG ELECTRIC VENTILATING COMPANY, Chicago, Ill. Filed Oct. 26, 1931. Serial No. 320,466.

ILG-KOLD

For Refrigerators.
Claims use since June 8, 1931.

295,862. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) SHORTWAVE & TELEVISION CORPORATION, Boston, Mass. Filed Oct. 10, 1931. Serial No. 319,948.

Baird

For Radio Receiving Sets, Kits for Radio Receiving Sets, and Parts of Such Sets, Consisting of Cables, Fixed and Variable Condensers, Knobs, Dials, Loud Speakers, Mounting Frames, Jacks, Reactors, Fixed and Variable Resistors, Sockets, Switches, Transformers, Amplifying and Rectifying Electron Tubes, Tuning Coils; and Unitary Apparatus for the Transmission and Reception of Pictures by Wire and by Radio, Kits for Such Unitary Reception Apparatus and Certain Named Parts Thereof.
Claims use since September, 1925.

295,863. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) DARNELL CORPORATION, LTD., Long Beach, Calif. Filed Sept. 8, 1931. Serial No. 318,822.

Always SWIVEL and ROLL

For Furniture Casters.
Claims use since Nov. 1, 1930.

295,864. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) DUCT ELECTRIC HEATER CORPORATION, New York, N. Y. Filed Aug. 27, 1931. Serial No. 318,481.

DUCT

For Electric Space Heaters Whose Heating Elements are Electrical.
Claims use since about April, 1931.

295,865. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) ISAAC JACKSON & SONS, LIMITED, Glossop, Derby, England. Filed Aug. 8, 1931. Serial No. 317,809.

JACKSONS

For Machine Belt Fasteners of Ordinary Metal.
Claims use since Mar. 15, 1904

295,866. (CLASS 45. BEVERAGES, NONALCOHOLIC.) FRANK GEORGE, Orrville, Ohio. Filed Aug. 8, 1931. Serial No. 317,801.

HONEY COLA

For Nonalcoholic Maltless Syrup for Making Soft Drinks.
Claims use since June 1, 1931.

295,867. (CLASS 38. PRINTS AND PUBLICATIONS.) HODES-WALLACH CO. INC., doing business as Graphic-Gram Communications Service, New York, N. Y. Filed July 17, 1931. Serial No. 317,038.

PHOTO-GRAPHIC-GRAM

For Completely Printed or Typed Advertisements.
Claims use since May 19, 1931.

295,868. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) K. HOVDEN COMPANY, Monterey and San Diego, Calif. Filed May 2, 1932. Serial No. 326,681.

STEAM GRILLED

For Canned Fish.
Claims use since Apr. 29, 1931.

295,869. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed May 11, 1932. Serial No. 326,976.

EVER READY

For Billiard Cue Tips.
Claims use since Jan. 1, 1924.

295,870. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) G. E. PRENTICE MANUFACTURING COMPANY, New Britain, Conn. Filed June 3, 1932. Serial No. 327,705.

PERSONAL HARDWARE

For Slide Operated Separable Fasteners, Keycase Trimmings and Assemblies—Namely, Metal Hooks and Snaps and Mountings Therefor and Base Metal Chains.
Claims use since 1919.

295,871. (CLASS 33. GLASSWARE.) WILLIAM G. BILLERMAN, Newark, N. J. Filed Nov. 28, 1930. Serial No. 308,351.

Hold Fast

For Glass Top for Percolators.
Claims use since Aug. 26, 1930.

295,872. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JACOB SKLOW and WILLIAM MANDELBAUM, doing business as Or-All Laboratories, Richmond Hill, N. Y.; said Mandelbaum assignor to said Sklow. Filed Aug. 26, 1929. Serial No. 289,048.

OR-ALL

For Mouth Washes or Gargles.
Claims use since June 22, 1929.

295,873. (CLASS 12. CONSTRUCTION MATERIALS.) WEYERHAEUSER FOREST PRODUCTS, St. Paul, Minn. Filed Jan. 30, 1931. Serial No. 310,584.

GUIDE-LINE

For Lumber—Namely, Timbers, Dimension Material, Planks, Boards, Rough and Dressed or Run to Any Pattern; Finishing Lumber, Framing Lumber, Exterior and Interior Trim, Beams, Siding, and Flooring.
Claims use since Dec. 4, 1930.

295,874. (CLASS 2. RECEPTACLES.) LONGVIEW FIBRE COMPANY, Longview, Wash. Filed Apr. 7, 1931. Serial No. 313,044.

FLUTEDFIBRE

For Fibre-Board Boxes.
Claims use since Mar. 25, 1931.

295,875. (CLASS 2. RECEPTACLES.) ASSOCIATED SILVER COMPANY, Chicago, Ill. Filed Apr. 8, 1931. Serial No. 313,071.

TARNISH PROOF SILVERWARE CHEST

For Boxes and Chests of Wood, Paper, Cardboard, Fabric, Composition Material of Pigments, Binder and Lacquer, and Base Metal for Silverware.
Claims use since Mar. 2, 1931.

295,876. (CLASS 39. CLOTHING.) THE KAYNEE COMPANY, Cleveland, Ohio. Filed Apr. 14, 1931. Serial No. 313,345.

SNOSUIT

For Children's Combination Outer Garments in the Form of Cover-All or One-Piece Suits and Two-Piece Suits, Made Up of Jackets and Trouser-Leggings, Coats, Leggings, Hats, and Caps.
Claims use since Apr. 10, 1931.

295,877. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SENECA FOOD PRODUCTS CORPORATION, Utica, N. Y. Filed June 4, 1931. Serial No. 315,431.

PRIZE TAKER

For Malt Syrup.
Claims use since May 25, 1931.

295,878. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ST. ALBANS GRAIN COMPANY, St. Albans, Vt. Filed June 5, 1931. Serial No. 315,470.

HYGRADE

For Fish Meal.
Claims use since Apr. 30, 1931.

295,879. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) WESTERN AUTO SUPPLY COMPANY, Kansas City, Mo. Filed June 6, 1931. Serial No. 315,509.

WIZARD

For Golf Balls and Golf Clubs.
Claims use since Mar. 15, 1931.

295,880. (CLASS 37. PAPER AND STATIONERY.) THE CROWELL CORPORATION, Yorklyn, Del. Filed June 19, 1931. Serial No. 316,034.

FIBRE FILLED

For Composition Cloth Tape Such As Used in Sealing Shipping Containers of Cardboard or Paper.
Claims use since March, 1927.

295,881. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) MATTE ZMIJARCH, West Camp, N. Y. Filed June 18, 1931. Serial No. 316,024.

SPECIAL NO. 1.

For Belt Dressing.
Claims use since May 27, 1931.

TRADE-MARK REGISTRATIONS RENEWED

38,398. CERTAIN NAMED PACKING HOUSE PRODUCTS. Registered June 3, 1902. SWIFT AND COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed June 3, 1932.

39,170. BOOTS, SHOES, AND SLIPPERS AND LEATHER FOR SAME. Registered November 4, 1902. CLARK-HUTCHINSON CO., Boston, Mass. Renewed November 4, 1932, to International Shoe Co., St. Louis, Mo., a Corporation of Delaware, assignee by mesne assignments.

39,182. LARD, SAUSAGES, BACON, AND RIBS. Registered November 4, 1902. JOHN P. SQUIRE & COMPANY, Jersey City, N. J., and Boston, Mass. Renewed November 4, 1932, to John P. Squire Company, Cambridge, Mass., a Corporation of Massachusetts, assignee by mesne assignments.

39,240. WHEAT FLOUR. Registered November 11, 1902. WHITE STAR MILLS, Staunton, Va., a Firm. Renewed November 11, 1932.

39,245. LUBRICATING OIL. Registered November 11, 1902. BORNE SCRYMSER COMPANY, Elizabeth, N. J., and New York, N. Y. Renewed November 11, 1932, to Borne Scrymser Company, New York, N. Y., a Corporation of New Jersey.

39,251. A REMEDY AGAINST GOUT AND SIMILAR DISEASES. Registered November 11, 1902. FARBENFABRIKEN OF ELBERFELD CO. Renewed November 11, 1932, to The Bayer Company, Inc., New York, N. Y., a Corporation of New York, assignee.

39,252. A REMEDY SPLITTING OFF IODINE FOR SUBCUTANEOUS OR INTERNAL USE. Registered November 11, 1902. FARBENFABRIKEN OF ELBERFELD CO. Renewed November 11, 1932, to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

39,279. URINARY ANTISEPTIC. Registered November 18, 1902. FARBENFABRIKEN OF ELBERFELD CO. Renewed November 18, 1932, to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

39,313. CEREAL FOOD PRODUCTS. Registered November 18, 1902. THE "FORCE" FOOD COMPANY. Renewed November 18, 1932, to Hecker H-O Company, Inc., Buffalo, N. Y., a Corporation of New York, assignee.

39,329. WHEAT-FLOUR. Registered November 25, 1902. WASHBURN CROSBY COMPANY. Renewed November 25, 1932, to General Mills, Inc., Minneapolis, Minn., a Corporation of Delaware, assignee.

86,709. RUBBER BOOTS, SHOES, OVERSHOES, AND RUBBER-SOLED TENNIS-SHOES. Registered May 28, 1912. HOOD RUBBER CO., Boston, Mass. Renewed May 28, 1932, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware, assignee.

86,732. MERCERIZED COTTON FLOSS. Registered May 28, 1912. RICHARDSON SILK CO., Chicago, Ill. Renewed May 28, 1932, to Belding Heminway Company, New York, N. Y., a Corporation of Connecticut, successor.

86,898. LEAD-PENCILS, COLORED PENCILS, COPYING-PENCILS, AND INK-PENCILS. Registered June 11, 1912. A. W. FABER, Stein, Germany. Renewed June 11, 1932, to A. W. Faber, Inc., Newark, N. J., a Corporation of New Jersey, assignee.

86,992. STEEL CARRIAGE, WAGON, AND BUGGY AXLES. Registered June 18, 1912. ILLINOIS IRON & BOLT CO., Carpentersville, Ill., a Corporation of Illinois. Renewed June 18, 1932.

87,260. CERTAIN HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES. Registered July 2, 1912. SCHACHT & Co., Goshen, Ind. Renewed July 2, 1932, to Schacht Rubber Mfg. Co., Huntington, Ind., a Corporation of Indiana, assignee.

87,299. A MEDICAMENT FOR EPILEPSY. Registered July 2, 1912. CHARLES A. WOLF, Philadelphia, Pa. Renewed July 2, 1932.

88,146. COFFEE COMPOUND. Registered September 3, 1912. ABEL & ASHER CO. Renewed September 3, 1932, to Frank Grocery Co. Inc., Shreveport, La., a Corporation of Louisiana, assignee.

88,149. RUBBER-COVERED WIRE FOR ELECTRICAL PURPOSES. Registered September 3, 1912. THE AMERICAN STEEL & WIRE COMPANY OF NEW JERSEY, Hoboken, N. J., and Worcester, Mass. Renewed September 3, 1932, to The American Steel and Wire Company of New Jersey, Cleveland, Ohio, a Corporation of New Jersey.

88,247. GUNPOWDER. Registered September 10, 1912. CURTIS'S & HARVEY, LIMITED, London, England, a Corporation of Great Britain. Renewed September 10, 1932.

88,364. STERLING-SILVER AND SILVER-MOUNTED TABLEWARE, JEWELRY, TOILET ARTICLES, AND TOYS. Registered September 10, 1912. ROGERS, LUNT & BOWLEN COMPANY, Greenfield, Mass., a Corporation of Massachusetts. Renewed September 10, 1932.

88,510. LEATHER ENAMEL AND POLISHES. Registered September 24, 1912. MULLEN BROTHERS, Brockton, Mass, a firm. Renewed September 24, 1932.

88,598. WATER-PAINT. Registered October 1, 1912. THE SILICATE PAINT CO. (J. B. ORR & CO.) LIMITED, Charlton and London, England, a Corporation of Great Britain. Renewed October 1, 1932.

88,848. CANNED FRUITS, CANNED VEGETABLES, FRUIT JAMS, AND FRUIT JELLIES. Registered October 29, 1912. CODE PORTWOOD CANNING CO., Fruitvale and Oakland, Calif. Renewed October 29, 1932, to California Packing Corporation, San Francisco, Calif., a Corporation of New York, assignee by mesne assignments.

88,908. CERTAIN NAMED FOODS. Registered October 29, 1912. J. H. MERRILL Co. Renewed October 29, 1932, to Samuel Mahon Company, Ottumwa, Iowa, a Corporation of Iowa, assignee.

88,909. CERTAIN NAMED FOODS. Registered October 29, 1912. J. H. MERRILL CO. Renewed October 29, 1932, to Samuel Mahon Company, Ottumwa, Iowa, a Corporation of Iowa, assignee.

88,935. STICK-LICORICE, LICORICE CHEWING-GUM, AND LICORICE WAFERS. Registered October 29, 1912. NATIONAL LICORICE COMPANY, Brooklyn, N. Y., a Corporation of New York. Renewed October 29, 1932.

88,991. SPECIALLY PREPARED CAST METAL FOR CERTAIN USES. Registered November 5, 1912. AMERICAN ABRASIVE METALS COMPANY, New York, N. Y., a Corporation of New York. Renewed November 5, 1932.

89,126. ICE-CREAM AND ICE-CREAM MADE UP IN FANCY SHAPES. Registered November 12, 1912. MARYLAND ICE CREAM & FRUIT PRODUCTS CO. Renewed November 12, 1932, to Horn Ice Cream Company, Inc., Baltimore, Md., a Corporation of Maryland, assignee by mesne assignments.

89,133. BISCUITS. Registered November 12, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed November 12, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

89,161. VACUUM-GAGES, PRESSURE-GAGES, TEST-GAGES, AND SELF-RECORDING GAGES. Registered November 12, 1912. UNITED STATES GAUGE COMPANY, Sellersville, Pa., and New York, N. Y. Renewed November 12, 1932, to United States Gauge Company, New York, N. Y., a Corporation of Pennsylvania.

89,216. PIANOS AND PLAYER-PIANOS. Registered December 3, 1912. THE BALDWIN COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed December 3, 1932.

89,217. PIANOS AND PLAYER-PIANOS. Registered December 3, 1912. THE BALDWIN COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed December 3, 1932.

89,228. SINGLE-TUBE RUBBER TIRES. Registered December 3, 1912. CONTINENTAL RUBBER WORKS, Erie, Pa., a Corporation of Pennsylvania. Renewed December 3, 1932.

89,236. COFFEE. Registered December 3, 1912. DWINELL-WRIGHT COMPANY, Boston, Mass., a Corporation of Massachusetts. Renewed December 3, 1932.

LABELS

REGISTERED JULY 12, 1932

40,910.—*Title:* BIG BUSTER BREAD. For Bread. BROCKELMAN BROS. INC., Worcester, Mass. Published May 4, 1932.

40,911.—*Title:* C AND H MENU SUGAR PURE CANE CRYSTAL TABLETS. For Sugar. CALIFORNIA AND HAWAIIAN SUGAR REFINING CORPORATION, LIMITED, San Francisco, Calif. Published May 3, 1932.

40,912.—*Title:* EXCELLO WHEAT. For Bread. CENTRAL WAXED PAPER COMPANY, Chicago, Ill. Published May 15, 1932.

40,913.—*Title:* CUBE STEAK. For Steaks. CUBE STEAK MACHINE CO. INC., Boston, Mass. Published March 17, 1932.

40,914.—*Title:* GERBER'S. For Canned Vegetables. FREMONT CANNING COMPANY, Fremont, Mich. Published December 16, 1931.

40,915.—*Title:* THE GRASSHOPPER CHAIR. For Chairs. MARTIN GAMBEE, Pawling, N. Y. Published April 18, 1932.

40,916.—*Title:* DESSERT SPECIAL. For Cakes. GRENNAN BAKERIES, INC., Chicago, Ill. Published December 31, 1931.

40,917.—*Title:* SUNOIL. For a Product of Scientific Research. DAN J. HEALY, doing business as Healoil Laboratories, Detroit, Mich. Published November 18, 1930.

40,918.—*Title:* HEALOIL. For a Product of Scientific Research. DAN J. HEALY, doing business as Healoil Laboratories, Detroit, Mich. Published November 18, 1930.

40,919.—*Title:* THE SKIPPER. For Ice Cream. HYDROX ICE CREAM COMPANY, St. Louis, Mo. Published March 5, 1932.

40,920.—*Title:* BARBARA LEE ANCIENT NIGHT CREAM. For Tissue Cream. BARBARA LEE, Maplewood, Mo. Published April 1, 1932.

40,921.—*Title:* FIX-TITE. For Cold Solder or Mender. LEO B. LINCOLN, Chicago, Ill. Published April 1, 1932.

40,922.—*Title:* SA-WA-SA. For Bread. FRANK E. MCCURTAIN, Denver, Colo. Published February 15, 1932.

40,923.—*Title:* MEYERS' WHEELING STOGIES. For Stogies. H. MEYERS & SONS, Pittsburgh, Pa. Published August 15, 1931.

40,924.—*Title:* BARRINGTON HAND CREAM, FOR SOFT SMOOTH HANDS, FOR LOVELY HANDS. For Hand Cream. NORTH AMERICAN DYE CORPORATION, Mount Vernon, N. Y. Published April 19, 1932.

40,925.—*Title:* MODERN METHOD. For Face Powder. ANNA R. PETERSON, Chicago, Ill. Published July 14, 1930.

40,926.—*Title:* MAGIC SHREDDERS. For Shredders. RAPID MFG. CO., Seattle, Wash. Published April 11, 1932.

40,927.—*Title:* COLONIAL. For Floor Wax. SHOLES & SONS, Birmingham, Ala. Published April 13, 1932.

40,928.—*Title:* FUMOZONE. For Deodorant. SHULMAN CHEMICAL COMPANY, Philadelphia, Pa. Published April 15, 1932.

40,929.—*Title:* SHURE RX SYSTEMS. For Medicine. ARTHUR LEWIS SHURE, Brooklyn, N. Y. Published April 20, 1932.

40,930.—*Title:* SOLO. For Currants. SOLO PRODUCTS CO., Chicago, Ill. Published November 20, 1931.

40,931.—*Title:* TOM SAWYER 10 GIANT CRAYONS. For Crayons. STANDARD SOLOPHONE MFG. CO. INC., New York, N. Y. Published April 4, 1932.

40,932.—*Title:* PIONEER ASPIRIN. For Aspirin Tablets. STRONG COBB & CO. INC., Cleveland, Ohio. Published April 5, 1932.

40,933.—*Title:* PACIFIERS. For Confections. W. B. VAN VALIN, Los Angeles, Calif. Published March 15, 1932.

40,934.—*Title:* WARD'S SOFT BUN BREAD SLICED. For Bread. WARD BAKING COMPANY, New York, N. Y. Published January 18, 1932.

PRINTS

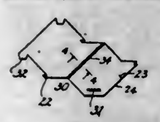
REGISTERED JULY 12, 1932

13,772.—*Title:* NEX-TU-YU-WEAR. For Underwear. A. C. HATCH, Laredo, Tex. Published October 1, 1931.

REISSUES

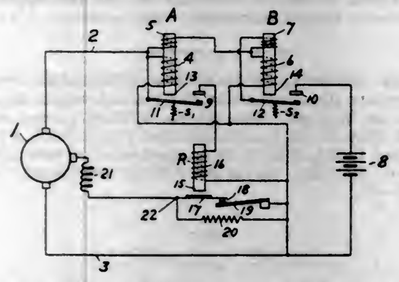
JULY 12, 1932

18,515. COMPOSITION SHINGLE. FREDERICK E. THEILACKER, Milwaukee, Wis., assignor, by mesne assignments, to Norman P. Harshberger, Scarsdale, N. Y. Original No. 1,710,954, dated Apr. 30, 1929, Serial No. 136,081, filed Sept. 17, 1926. Application for reissue filed Apr. 3, 1931. Serial No. 527,563. 13 Claims. (Cl. 108—7.)



6. A composition shingle having the shape in general of a parallelogram, a lug normally lying in the plane of the shingle and positioned adjacent one corner of one of the sides of the parallelogram and having its free end pointing downwardly, said lug having an edge portion common with a side of the shingle, and an interior slot adjacent the other corner of said side, the said lug of one shingle being adapted to be flexed out of the plane of the shingle during assembly to engage in a downward direction with the slot of a similar shingle.

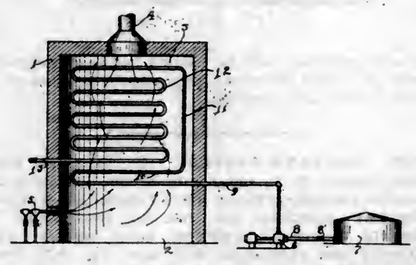
18,516. MEANS FOR CONTROLLING THE CHARGE OF STORAGE BATTERIES. FRANK G. BEETEM, Philadelphia, Pa. Original No. 1,833,349, dated Nov. 24, 1931, Serial No. 470,696, filed July 25, 1930. Application for reissue filed Dec. 30, 1931. Serial No. 584,005. 4 Claims. (Cl. 171—314.)



1. In combination, a storage battery, a generator and its circuit including a voltage responsive exciting coil adapted to be connected across said generator for adjusting the charging rate to the battery selectively at either a higher or a lower value, an automatic switch for connecting the generator to the battery, a relay adapted to control the adjusting means, said relay having a voltage responsive exciting coil, and means for connecting said coil to the circuit between the generator and the automatic switch only after said automatic switch has closed.

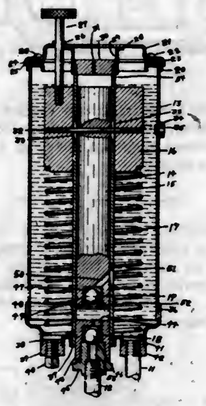
18,517. PROCESS FOR HEATING OILS. JOHN C. BLACK, Los Angeles, Calif., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Original No. 1,708,076, dated Apr. 9, 1929, Serial No. 712,156, filed May 9, 1924. Application for reissue filed May 4, 1929. Serial No. 360,573. 2 Claims. (Cl. 196—110.)

2. A process of heating petroleum oils in tubular coils situated in a furnace which comprises first passing the oil through a section of coil located in the hottest zone of the furnace and arranged to absorb radiant heat comprising a plurality of rows of tubes in which the flow of oil from row to row is in substantially the same direction as that of the flow of furnace gases, and then passing the oil through a section of coil located in a less highly heated zone of the furnace comprising a plurality of rows of tubes



in which the flow of oil through the tubes of each row is substantially transverse of the flow of furnace gases and in which the passage of oil from row to row is substantially countercurrent to that of the furnace gases.

18,518. FUEL FEED SYSTEM. CHESTER H. BRASELTON, New York, N. Y., and FRED B. MACLAREN, New Haven, Conn.; said MacLaren assignor to said Braselton. Original No. 1,715,638, dated June 4, 1929, Serial No. 566,292, filed June 6, 1922. Application for reissue filed Aug. 21, 1931. Serial No. 558,605. 16 Claims. (Cl. 103—208.)

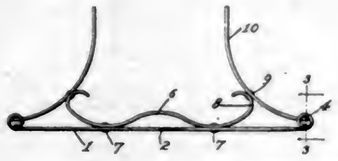


1. In a fuel feed system, the combination of a tank; a pump within said tank, said pump comprising a cylinder, and a plunger movable within the cylinder; and means secured within the cylinder for damping the movement of said plunger.

18,519. AUTOMOBILE BUMPER. EVERETT R. JONES, Wyandotte, Mich., assignor, by mesne assignments, to Joseph J. Scheibel. Original No. 1,416,834, dated May 23, 1922, Serial No. 527,960, filed Jan. 9, 1922. Application for reissue filed May 23, 1932. Serial No. 613,329. 10 Claims. (Cl. 293—55.)

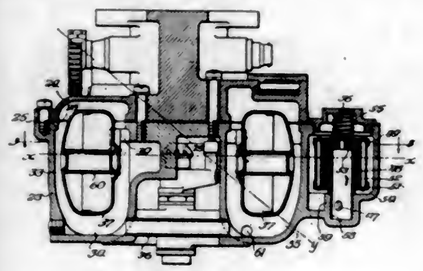
4. A bumper for automobiles and the like comprising a front impact strip structure provided with terminal barrels, and forwardly diverging side strip portions projecting into

and adapted to slide and swing within the barrels, all of the strips being of spring material, said strip portions each being of a lesser width than said front strip structure



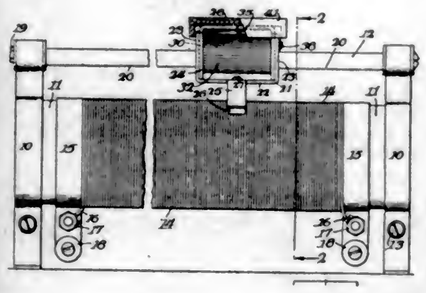
and each extending into an opening in the corresponding barrel for sliding movement with respect to edges of the barrel defining such opening.

18,520. AIRPLANE CARBURETOR. FRANK C. MOCK, East Orange, N. J., assignor to Bendix Stromberg Carburetor Company, Chicago, Ill., a Corporation of Illinois. Original application filed Jan. 16, 1924, Serial No. 686,474, Patent No. 1,600,008, dated Sept. 14, 1926. Divided and application filed Mar. 18, 1926, Serial No. 95,516, Patent No. 1,743,791, dated Jan. 14, 1930. Application for reissue filed Dec. 8, 1931. Serial No. 579,810. 12 Claims. (Cl. 261—70.)



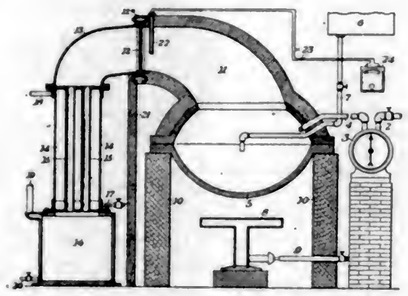
1. A carburetor comprising two vertical carburetor barrels, a float chamber, and a float therein comprising rigidly united float portions disposed forward and back of the plane of said two barrels.

18,521. RHEOSTAT. HERMAN PAUL SACHSE, Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Original No. 1,839,343, dated Jan. 5, 1932, Serial No. 343,734, filed Mar. 1, 1929. Application for reissue filed Feb. 1, 1932. Serial No. 590,278. 9 Claims. (Cl. 201—62.)



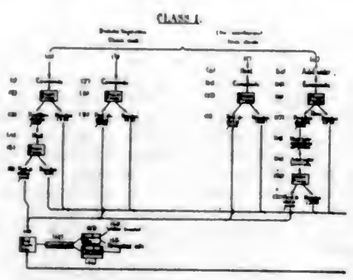
1. In a rheostat, a rack, a carriage engaged with the rack to travel along it, a sliding contact mounted to travel with the carriage, a frame associated with the carriage having limited movement relative to it, a nut journaled in the frame adapted to engage the rack to give slow motion and accurate adjustment to the contact and to be disengaged from the rack to release the contact for rapid adjustment, and means for holding the nut engaged with the rack.

18,522. INTERMEDIATE PARTIAL OXIDATION PRODUCTS AND METHOD OF MAKING SAME. JOSEPH HIDY JAMES, Pittsburgh, Pa., assignor to Clarence P. Byrnes, trustee, Sewickley, Pa. Original No. 1,697,653, dated Jan. 1, 1929, Serial No. 281,124, filed Mar. 7, 1919. Renewed Aug. 4, 1926. Continuation of application Serial No. 272,567, filed Jan. 22, 1919. Application for reissue filed May 21, 1932. Serial No. 612,838. 91 Claims. (Cl. 260—116.)



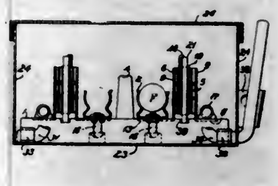
91. As a new article of manufacture, a liquid partial oxidation product containing oxygen derivatives of hydrocarbons of different molecular weights and containing a preponderance of oxygenated organic acids.

18,523. PROCESS OF MAKING A VEGETABLE FOOD. EUSTACE HAMILTON MILES, London, and GERARD REILLY, Luton, England. Original No. 1,775,967, dated Sept. 16, 1930, Serial No. 121,230, filed July 8, 1926, and in Great Britain July 15, 1925. Application for reissue filed Jan. 11, 1932. Serial No. 585,982. 5 Claims. (Cl. 99—11.)



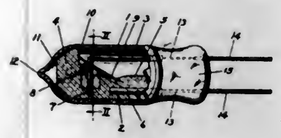
1. The process of making a concentrated vegetable food composition consisting in extracting the natural juices from edible vegetables which contain about 1% or less of saccharine material; extracting separately the natural juices from edible vegetables which contain about 3% to 15% of saccharine material; extracting with a vegetable acid the natural plant salts from the residues of said vegetables; intimately combining in a suitable vessel all juices thus extracted, acids and natural plant salts; heating the mixture until hydrolyzation of the sucrose therein is well advanced; and concentrating the mass in vacuo.

18,524. ELECTRIC CIRCUIT CONTROLLING APPLIANCE. JOSEPH SACHS, West Hartford, Conn. Original application filed July 18, 1927, Serial No. 206,782. Renewed Dec. 7, 1929. Original No. 1,755,369, dated Apr. 22, 1930. Application for reissue filed Apr. 27, 1932. Serial No. 607,848. 23 Claims. (Cl. 200—114.)



12. In a fused switch appliance, the combination of an insulating base, two fuse receiving contacts of which one is directly mounted upon the base at the front thereof, a pair of opposed stationary switch contacts carried by the base at the front thereof and immediately adjacent the fuse contact thereon, conducting means for electrically connecting one switch contact with the last said fuse contact, a rectilinearly movable switching member comprising an insulating element and a conducting element carried by the insulating element and normally engaging the said switch contacts to establish a circuit through the appliance, means normally engaging the insulating element of the said member to prevent forward movement thereof, and means for rectilinearly moving the switching member approximately parallelly with the front face of the base to engage the conducting element thereof with the stationary switch contacts or to disengage it therefrom.

18,525. MERCURY SWITCH. GEORGE FRANCIS CALLAHAN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Original No. 1,762,213, dated June 10, 1930, Serial No. 389,735, filed Aug. 31, 1929. Application for reissue filed Apr. 1, 1931. Serial No. 526,971. 11 Claims. (Cl. 200—152.)



1. In a switch of the mercury to mercury contact type, the combination with a sealed container having a body of mercury therein of a refractory element comprising a body having a pocket to hold a mercury pool positioned at one end of said container, a surface leading from one side of said pocket, a wall at the opposite side of and in close proximity to said pocket, said wall completely closing a portion of said container against the passage of mercury thereto, an electrical conductor extending from the other end of said container and having an end disposed in said pocket and another electrical conductor disposed in parallel spaced relation to said first named conductor in contact with said body of mercury, said wall and surface serving to shape said body of mercury to unite with said pool to electrically connect said conductors when the container is tilted.

18,526. ATTACHMENT FOR OIL CANS. EMMET H. MORROW, Chicago, Ill., assignor, by mesne assignments, to Charles O. Moore, Chicago, Ill. Original No. 1,767,228, dated June 24, 1930, Serial No. 234,334, filed Nov. 19, 1927. Application for reissue filed May 31, 1932. Serial No. 614,648. 12 Claims. (Cl. 221—38.)



10. An attachment for oil cans, comprising a resilient member adapted for engagement with the spout of the can, the end of said member adjacent the spout tip being adapted for contacting engagement with an oil hole and being endwise compressible when applied to the oil hole for sealing the hole.

18,527. WELL PUMPING APPARATUS. RICHARD P. SIMMONS, New York, N. Y. Original No. 1,687,899, dated Oct. 9, 1928, Serial No. 213,381, filed Aug. 16, 1927. Application for reissue filed Jan. 15, 1931. Serial No. 508,969. 7 Claims. (Cl. 103—5.)

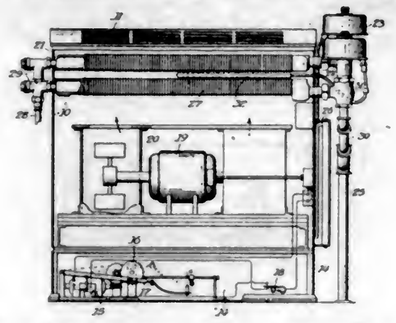


1. In a well pumping apparatus, a plurality of vertically spaced pump units arranged in a well one above the other, each of said pump units including a casing, a rotary pump within each casing, each casing having an

inlet and an outlet, the outlet of the casing of the lower pump unit being in communication with the inlet of the pump unit above it, discharge conduit means connected with the outlet of said above pump unit and extending to the surface of the well, a hollow shaft journaled in the well, means for transmitting power from said shaft to the upper rotary pump, a second hollow shaft journaled in said well, means for transmitting power from said second hollow shaft to the lower pump unit, and means cooperating with said hollow shafts for supplying compressed air to each outlet to assist in lifting the fluid pumped to the head of the well.

18,528. HEATING AND VENTILATING UNIT. MORTON O. SNEDIKER, Chicago, Ill., assignor to The Powers Regulator Company, Chicago, Ill., a Corporation of Illinois. Original No. 1,813,261, dated July 7, 1931, Serial No. 449,947, filed May 5, 1930. Application for reissue filed Mar. 30, 1932. Serial No. 602,072. 10 Claims. (Cl. 236—38.)

9. The method of heating an enclosed space which consists in introducing fresh air or recirculated air therein, according to the temperature of said space, maintaining the temperature of the introduced air at a predetermined point immediately after it passes a heat exchange element, and then applying additional heat to said air after it

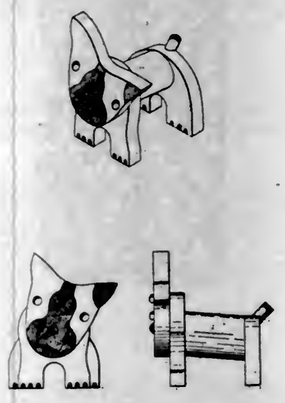


passes said heat exchange element if required to bring the temperature up to the required temperature of said enclosed space.

DESIGNS

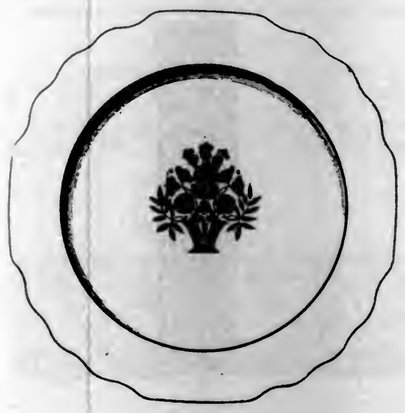
JULY 12, 1932

87,325. TOY ANIMAL. RALPH APICHELL, North Olmstead, Ohio, assignor of one-half to Charles Spero, Cleveland, Ohio. Filed Nov. 27, 1931. Serial No. 41,885. Term of patent 3½ years.



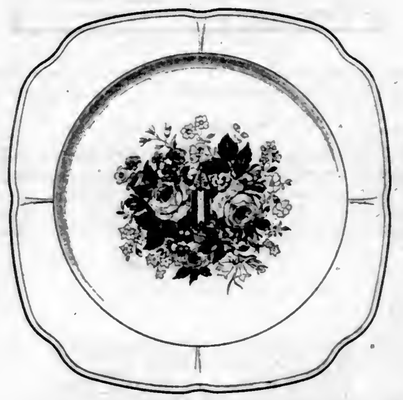
The ornamental design for a toy animal, as shown and described.

87,326. DISH OR SIMILAR ARTICLE. EDWARD B. BEDFORD and MARY G. PARKER, Oneida, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Apr. 21, 1932. Serial No. 43,567. Term of patent 7 years.



The ornamental design for a dish or similar article as shown and described.

87,327. DISH OR SIMILAR ARTICLE. EDWARD B. BEDFORD and MARY G. PARKER, Oneida, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Apr. 21, 1932. Serial No. 43,568. Term of patent 7 years.



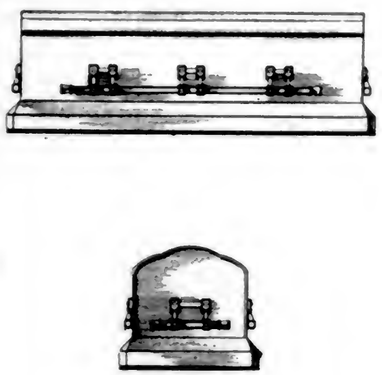
The ornamental design for a dish or similar article as shown and described.

87,328. FAUCET. FRANK G. BROTZ, Kohler, Wis. Filed May 12, 1932. Serial No. 43,775. Term of patent 14 years.



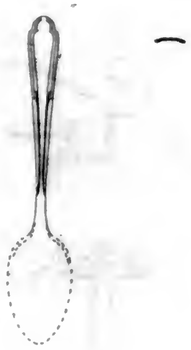
The ornamental design for a faucet as shown.

87,329. BURIAL VAULT. RALPH COHEN, Galion, Ohio, assignor to Perfection Steel Body Co., Galion, Ohio, a Corporation of Ohio. Filed May 31, 1932. Serial No. 43,933. Term of patent 14 years.



The ornamental design for a burial vault, as shown.

87,330. SPOON, KNIFE, FORK OR OTHER ARTICLE OF FLATWARE. GEORGE ALBERT FEINAUER, Meriden, Conn., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed May 3, 1932. Serial No. 43,702. Term of patent 7 years.



The ornamental design for a spoon, knife, fork, or other article of flatware, substantially as shown and described.

87,331. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y., assignor to Amrein Freudenberg Co. Inc., New York, N. Y., a Corporation of New York. Filed May 12, 1932. Serial No. 43,779. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

87,332. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y., assignor to Amrein Freudenberg Co. Inc., New York, N. Y., a Corporation of New York. Filed May 12, 1932. Serial No. 43,780. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

87,333. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y., assignor to Amrein Freudenberg Co. Inc., New York, N. Y., a Corporation of New York. Filed May 12, 1932. Serial No. 43,781. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

87,334. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y., assignor to Amrein Freudenberg Co. Inc., New York, N. Y., a Corporation of New York. Filed May 12, 1932. Serial No. 43,782. Term of patent 3½ years.



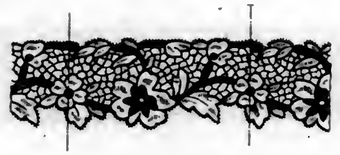
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

87,335. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y., assignor to Amrein Freudenberg Co. Inc., New York, N. Y., a Corporation of New York. Filed May 12, 1932. Serial No. 43,783. Term of patent 3½ years.



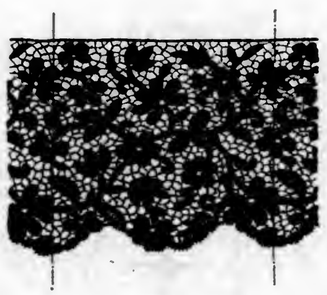
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

87,336. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y., assignor to Amrein Freudenberg Co. Inc., New York, N. Y., a Corporation of New York. Filed May 12, 1932. Serial No. 43,784. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

87,337. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y., assignor to Amrein Freudenberg Co. Inc., New York, N. Y., a Corporation of New York. Filed May 12, 1932. Serial No. 43,785. Term of patent 3½ years.



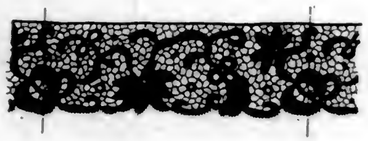
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

87,338. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y., assignor to Amrein Freudenberg Co. Inc., New York, N. Y., a Corporation of New York. Filed May 12, 1932. Serial No. 43,786. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

87,339. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y., assignor to Amrein Freudenberg Co. Inc., New York, N. Y., a Corporation of New York. Filed May 12, 1932. Serial No. 43,787. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

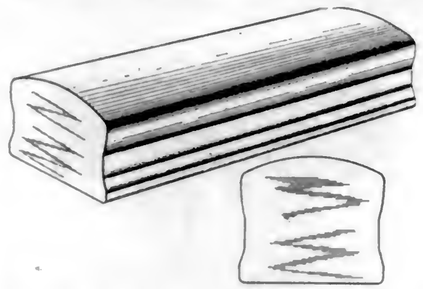
87,340. FRUIT AND VEGETABLE PRESS. MATTHEW GRANT, Los Angeles, Calif. Filed Mar. 4, 1932. Serial No. 43,074. Term of patent 3½ years.





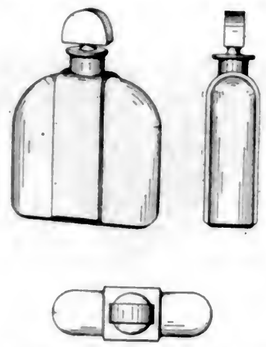
The ornamental design for a fruit and vegetable press as shown and described.

87,341. BURIAL VAULT. JAMES L. GRISSINGER, Marion, Ohio, assignor to The Marion Steel Body Company, Marion, Ohio, a Corporation of Ohio. Filed Feb. 5, 1932. Serial No. 42,745. Term of patent 7 years.



The ornamental design for a burial vault, substantially as shown.

87,342. BOTTLE. RAYMOND GUERLAIN, New York, N. Y., assignor to Guerlain Perfumery Corporation of Delaware, Wilmington, Del., a Corporation of Delaware. Filed Mar. 29, 1932. Serial No. 43,326. Term of patent 14 years.



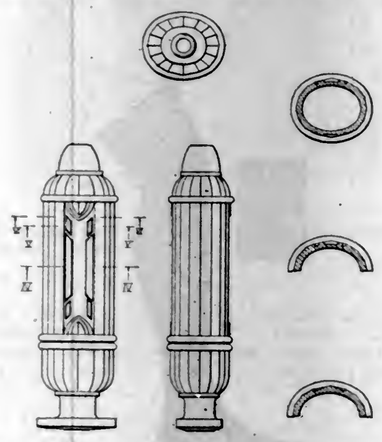
The ornamental design for a bottle substantially as shown.

87,343. GLASS CONTAINER. ALBERT G. HAMILTON, Pittsburgh, Pa., assignor to J. T. & A. Hamilton Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 14, 1932. Serial No. 43,800. Term of patent 7 years.



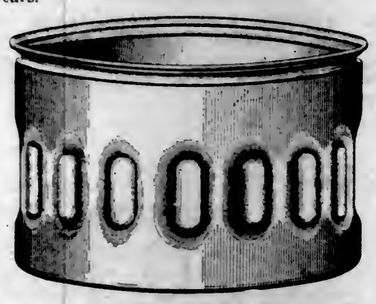
The ornamental design for a glass container, substantially as shown.

87,344. HANDLE FOR THERAPEUTIC LAMPS. EARL H. HOWARD, Los Angeles, Calif., assignor to Electro-Therapy Products Corporation, Ltd., Los Angeles, Calif., a Corporation of Delaware. Filed May 2, 1932. Serial No. 43,697. Term of patent 7 years.



The ornamental design for a handle for therapeutic lamps, as shown.

87,345. WASHING MACHINE TUB. ARTHUR H. LABISKY, West Bend, Wis., assignor to The Barton Corporation, West Bend, Wis., a Corporation of Wisconsin. Filed Jan. 18, 1932. Serial No. 42,531. Term of patent 14 years.



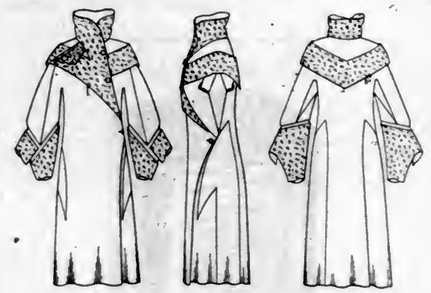
The ornamental design for a washing machine tub as shown.

87,346. LADY'S COAT. MAX LEVITT, Brooklyn, N. Y. Filed May 27, 1932. Serial No. 43,916. Term of patent 3½ years.



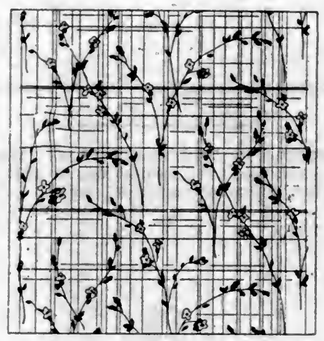
The ornamental design for a lady's coat, as shown.

87,347. LADY'S COAT. MAX LEVITT, Brooklyn, N. Y. Filed May 27, 1932. Serial No. 43,917. Term of patent 3½ years.



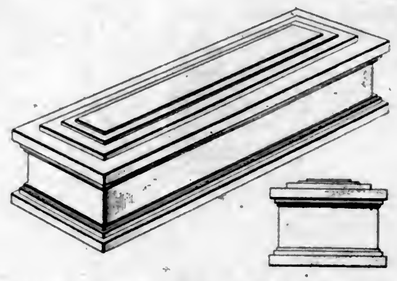
The ornamental design for a lady's coat, as shown.

87,348. WALL PAPER. MARCEL LIBERT, Paris, France, assignor to Norddeutsche Tapetenfabrik Holscher & Breimer, Langenhagen, Germany. Filed Nov. 16, 1931. Serial No. 41,740. Term of patent 3½ years.



The ornamental design for a wall paper as shown.

87,349. CASKET. GEORGE B. MARKLE, Jr., Hazleton, Pa., assignor to Hazleton Manufacturing Co., Hazleton, Pa., a Corporation of Pennsylvania. Filed May 8, 1931. Serial No. 39,761. Term of patent 14 years.



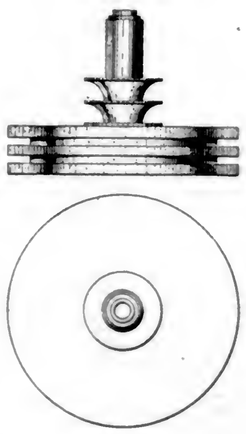
The ornamental design for a casket, as shown.

87,350. CIRCULATING HEATER. JOHN B. MILLER, Knoxville, Tenn., assignor to Knox Stove Works, Knoxville, Tenn., a Corporation of Tennessee. Filed May 12, 1932. Serial No. 43,788. Term of patent 7 years.



The ornamental design for a circulating heater, as shown.

87,351. BASE FOR A DISPLAY STAND. TRUMAN A. MILLER, Alameda, Calif. Filed May 3, 1932. Serial No. 43,703. Term of patent 3½ years.



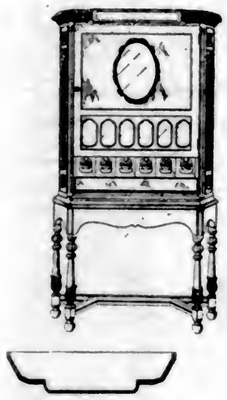
The ornamental design for a base for a display stand substantially as shown.

87,352. STOCKING. EDWARD B. MOSSER, Philadelphia, Pa., assignor to Lehigh Silk Hosiery Mills, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 16, 1932. Serial No. 42,502. Term of patent 3½ years.



The ornamental design for a stocking, as shown and described.

87,353. VENDING CABINET. HAROLD H. PELZER, Astoria, N. Y., assignor to Standard Automatic Candy Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 31, 1932. Serial No. 43,350. Term of patent 7 years.



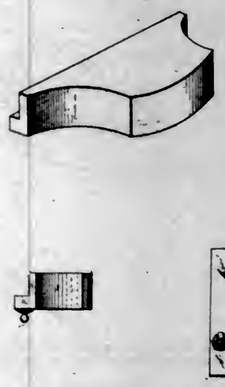
The ornamental design for a vending cabinet as shown and described.

87,354. BLOUSE. MAGGIE PITTMAN, Kosciusko, Miss. Filed Apr. 29, 1932. Serial No. 43,656. Term of patent 7 years.



The ornamental design for a blouse substantially as shown and described.

87,355. PIANO LIGHT OR SIMILAR ARTICLE. JOSEPH POSPISIL, Bloomfield, N. J., assignor to Lauter-Humana Co., a Corporation of New Jersey. Filed Aug. 26, 1931. Serial No. 40,934. Term of patent 7 years.



The ornamental design for a piano light or similar article, as shown.

87,356. TOWEL CABINET. FRANK BITTINGER POST, Minneapolis, Minn., assignor to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Filed May 16, 1932. Serial No. 43,821. Term of patent 14 years.



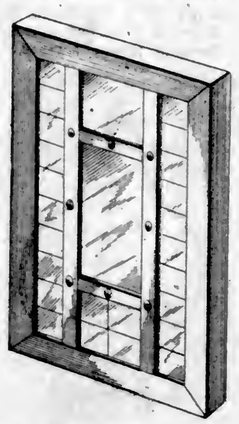
The ornamental design for a towel cabinet, as shown.

87,357. INSECT EXTERMINATOR. ARTHUR E. RITTENHOUSE, Honeoye Falls, N. Y., assignor to The A. E. Rittenhouse Co., Inc., Honeoye Falls, N. Y., a Corporation of New York. Filed May 4, 1932. Serial No. 43,708. Term of patent 7 years.



The ornamental design for an insect exterminator, as shown and described.

87,358. COMBINED MIRROR AND FRAME. CLAUDE C. RITTER, Buckeye, Ariz. Filed Oct. 12, 1931. Serial No. 41,364. Term of patent 3½ years.



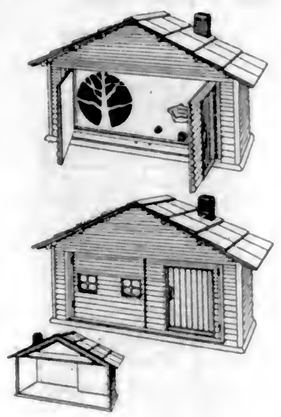
The ornamental design for a combined mirror and frame, as shown.

87,359. BUTTON. SIDNEY ROSENTHAL, Cedarhurst, N. Y. Filed June 6, 1932. Serial No. 43,999. Term of patent 3½ years.



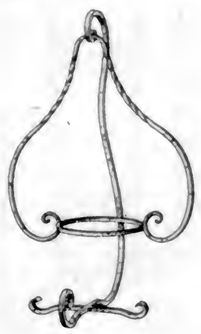
The ornamental design for a button, as shown.

87,360. CABINET FOR RADIORECEIVING APPARATUS. GEORGE H. ROUNDS, Naples, Me. Filed Apr. 4, 1932. Serial No. 43,389. Term of patent 14 years.



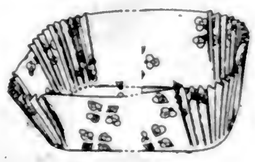
The ornamental design for a cabinet for radio receiving apparatus, as shown and described.

87,361. FLOWER STAND. IRVING G. SCOTT and MAUD C. FOX, New York, N. Y. Filed Apr. 29, 1932. Serial No. 43,662. Term of patent 7 years.



The ornamental design for a flower stand, as shown.

87,362. PAPER CONTAINER. GEORGE SHERMAN, Newton, Mass., assignor to Sherman Paper Products Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 20, 1932. Serial No. 42,949. Term of patent 7 years.



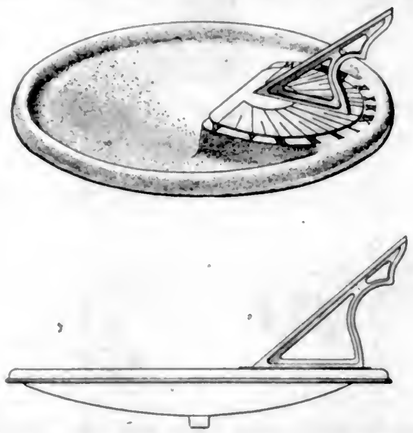
The ornamental design for a paper container as shown.

87,363. COLLAR HOLDER. CHARLES SILVERMAN, Providence, R. I., assignor to Silverman Bros., Providence, R. I., a Firm composed of Charles Silverman and Archibald Silverman. Filed Mar. 1, 1932. Serial No. 43,048. Term of patent 7 years.



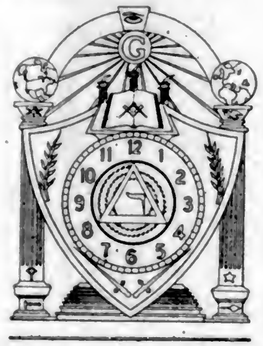
The ornamental design for a collar holder substantially as shown.

87,364. COMBINED BIRD BATH AND SUN DIAL. ALFRED G. SPINDLER, Pittsburgh, Pa. Filed May 14, 1932. Serial No. 43,809. Term of patent 14 years.



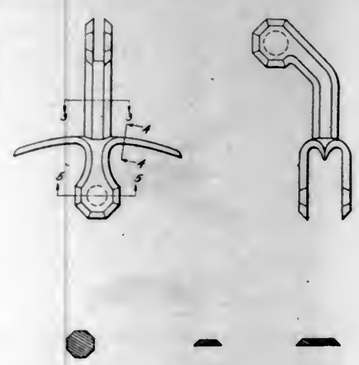
The ornamental design for a combined bird bath and sun dial, substantially as shown.

87,365. CLOCK FACE. ROY U. STARKEY, Columbus, Ohio. Filed Feb. 6, 1932. Serial No. 42,758. Term of patent 8½ years.



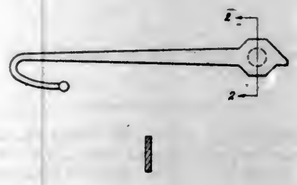
The ornamental design for a clock face as shown.

87,366. LENS STRAP. FREDERICK ARTHUR STEVENS, Providence, R. I. Filed Oct. 7, 1930. Serial No. 37,174. Term of patent 3½ years.



The ornamental design for a lens strap substantially as shown.

87,367. SPECTACLE TEMPLE. FREDERICK ARTHUR STEVENS, Providence, R. I. Filed Oct. 9, 1930. Serial No. 37,191. Term of patent 3½ years.



The ornamental design for a spectacle temple substantially as shown.

87,368. LENS STRAP. FREDERICK ARTHUR STEVENS, Providence, R. I. Filed Oct. 9, 1930. Serial No. 37,192. Term of patent 3½ years.



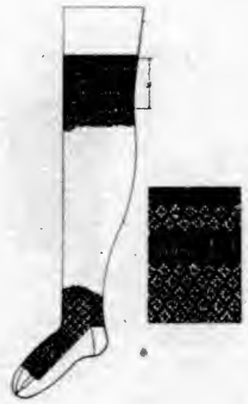
The ornamental design for a lens strap substantially as shown.

87,369. LENS STRAP. FREDERICK ARTHUR STEVENS, Providence, R. I. Filed Oct. 9, 1930. Serial No. 37,193. Term of patent 3½ years.



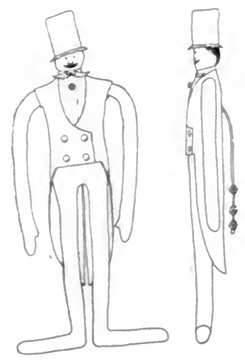
The ornamental design for a lens strap substantially as shown.

87,370. STOCKING. WILLIAM TAIT, West Reading, Pa. Filed Dec. 29, 1931. Serial No. 42,272. Term of patent 14 years.



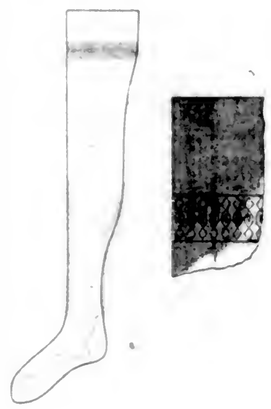
The ornamental design for a stocking substantially as shown and described.

87,371. DOLL. SARA HUNT VANN, Birmingham, Ala. Filed Apr. 20, 1932. Serial No. 43,543. Term of patent 3½ years.



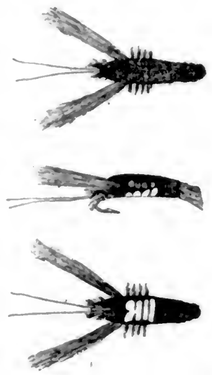
The ornamental design for a doll as shown.

87,372. HOSIERY. MAX PAUL VOGLER, Nashville, Tenn., assignor to Walter Fred Hosiery Mills, Inc., Nashville, Tenn., a Corporation of Delaware. Filed Sept. 2, 1931. Serial No. 40,986. Term of patent 3½ years.



The ornamental design for hosiery, as shown.

87,373. ARTIFICIAL BAIT OR SIMILAR ARTICLE. HELEN MARIE WEBER, Stevens Point, Wis. Filed May 10, 1932. Serial No. 43,767. Term of patent 3½ years.



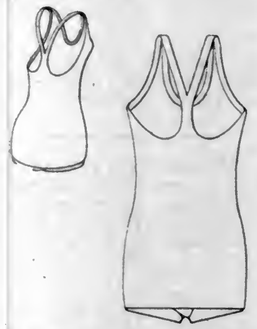
The ornamental design for an artificial bait or similar article, as shown.

87,374. ARTIFICIAL BAIT OR SIMILAR ARTICLE. HELEN MARIE WEBER, Stevens Point, Wis. Filed May 10, 1932. Serial No. 43,768. Term of patent 3½ years.



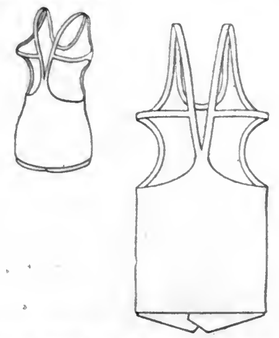
The ornamental design for an artificial bait or similar article, as shown.

87,375. SWIMMING SUIT. WALTER L. WHITING, Olympia, Wash. Filed July 29, 1931. Serial No. 40,708. Term of patent 7 years.



The ornamental design for a swimming suit, as shown.

87,376. SWIMMING SUIT. WALTER L. WHITING, Olympia, Wash. Filed July 29, 1931. Serial No. 40,709. Term of patent 7 years.

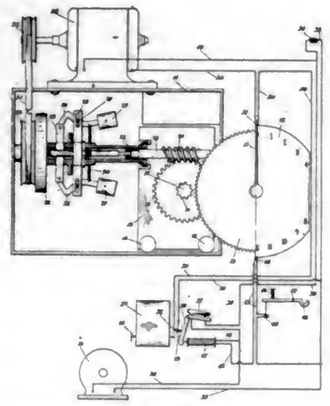


The ornamental design for a swimming suit, as shown.

PATENTS

GRANTED JULY 12, 1932

1,866,523. AUTOMATIC GASOLINE VENDING MACHINE. JOHN M. ALEXANDER, Lincoln, Nebr. Filed May 15, 1931. Serial No. 537,670. 5 Claims. (Cl. 221—101.)

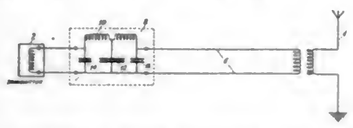


1. An automatic gasoline vending device having an indicator for indicating the quantity of gasoline delivered and having means for stopping the flow of gasoline and for stopping the movement of the said indicator when a predetermined quantity of gasoline has been delivered, and mechanism for automatically restoring said indicator to zero position immediately after the stoppage of the flow of gasoline through said vending device.

1,866,524. PROCESS OF IMPROVING THE TASTE AND ODOR OF WATER. JOHN C. BAKER, Montclair, and FRANZ C. SCHMELKES, North Arlington, N. J., assignors to Wallace & Tiernan Products, Inc., Belleville, N. J., a Corporation of New Jersey. Filed Aug. 18, 1928. Serial No. 300,616. 6 Claims. (Cl. 210—28.)

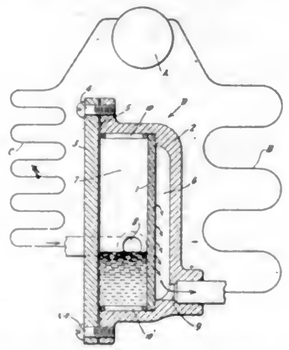
1. The method of treating water, which comprises sterilizing the water by adding chlorine thereto in proportionate amount sufficient to leave the usual residual, and preventing taste and odor resulting from the reaction between chlorine and substances in the water by adding to the water a small proportionate amount of a soluble iron salt with ammonia or an ammonium compound insufficient to be objectionable in the water.

1,866,525. FILTER. PHILIP S. CARTER, Stony Brook, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 14, 1928. Serial No. 269,962. 5 Claims. (Cl. 178—44.)



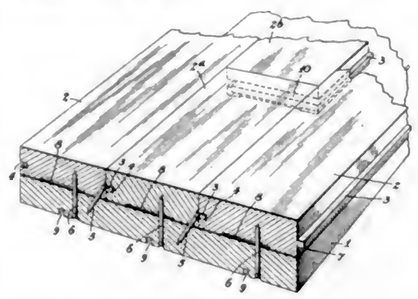
1. A transmission system comprising a transmitter, an antenna, a line coupling the transmitter to the antenna, and a low pass filter having series inductances and shunt capacitances arranged for a cut off frequency above the fundamental and below the first harmonic of the transmission frequency, and having a characteristic impedance equal to the surge impedance of this line, connected in the line.

1,866,526. REFRIGERATING APPARATUS. RANSOM W. DAVENPORT, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 7, 1928. Serial No. 252,447. 12 Claims. (Cl. 62—127.)



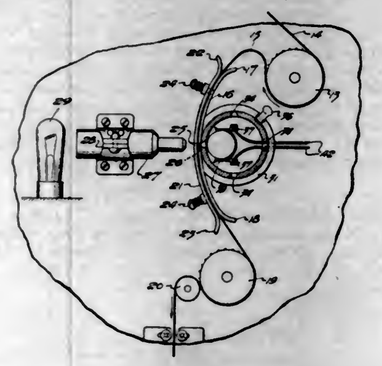
1. A refrigerating system comprising an evaporator, a compressor, and a condenser connected together to form a closed cycle system utilizing as a working substance a volatile liquid and an inert and insoluble gas, and means interposed between said condenser and said evaporator and providing a porous wall disposed at an angle to the horizontal and arranged to pass simultaneously both the liquid and the gaseous products of said condenser, thereby to cause said system to operate on the vapor-gas principle.

1,866,527. FLOORING. TYRE J. DINKINS, Montclair, N. J. Filed Aug. 2, 1929. Serial No. 382,933. 5 Claims. (Cl. 20—7.)



1. A composite floor board adapted to be laid as a unit, said board comprising a wide one piece base board, and a plurality of narrow surface boards secured to the top of the base board, the securing means including toe nailing through edges of the surface boards into the base board and nailing from the under side through the base board into the surface boards.

1,866,528. SOUND HEAD FOR SOUND-ON-FILM MECHANISM. CHARLES W. EBELING, New York, N. Y., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 31, 1930. Serial No. 440,589. 11 Claims. (Cl. 179—100.3.)



1. A sound head for sound-on-film mechanism, including a rotatable slit block having a plurality of circumferentially aligned slits and selective means for adjusting the same to present one slit at a time.

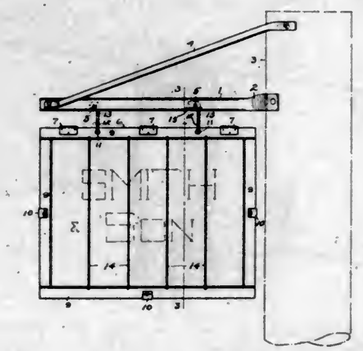
1,866,529. RECIPROCATORY HAND TOOL FOR FLEXIBLE SHAFTS. MICHAEL J. FARKAS, Bridgeport, Conn. Filed May 5, 1931. Serial No. 535,197. 2 Claims. (Cl. 143—60.)



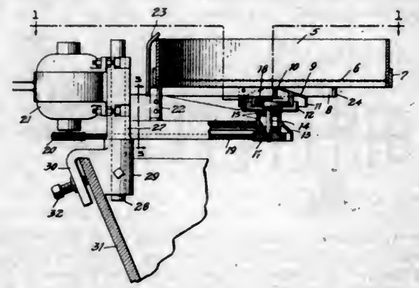
1. A reciprocating tool holder and mechanism, comprising a hollow stationary casing having a reduced hollow shank portion extending from its front end, a hollow rotary member having a reduced hollow shank portion extending from its rear end confined therein containing the reciprocating mechanism, a block bearing spaced from and surrounding the hollow rear shank portion, ball bearings arranged at each end of the block, one set of ball bearings being arranged to bear against the hollow rotary member, the other set being arranged to bear against a keeper driven on the outer end of the hollow rear shank portion.

1,866,530. SUPPORT FOR SIGNS. FRANK E. FUNK, Winchester, Ind. Filed Mar. 16, 1931. Serial No. 522,917. 3 Claims. (Cl. 40—128.)

1. A device of the class described comprising an angle bar having its angle opening downwardly, brackets at one end of the bar adapted to be attached to a fixed object, braces connected to the bar for vertical and lateral pivotal movement thereon, supporting members extending from one flange of the angle bar to the other flange thereof, and sign carrying means movably and removably carried by the supporting members.



1,866,531. RIDDLE APPARATUS. HOWARD V. HARDING, New York, N. Y. Filed Jan. 9, 1930. Serial No. 419,527. 1 Claim. (Cl. 209—332.)

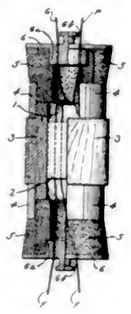


In an apparatus as characterized, a supporting frame adapted to receive and hold a screen, said frame having spider-like supports extended radially, a rigid support for said frame embodying a bracket arm, a vertical bifurcated member thereon adapted to receive one arm of said spider, said bracket arm extending to and beneath the normal center of said frame, a vibrator for said frame embodying a vertical rotary shaft having an eccentric member at the upper end thereof and a housing for said member forming a hood over said member, and a pocket recess for one of the arms of said spider, a prime mover operatively connected with said vibrator and the shaft thereof, and a friction reducing bearing interposed between said hood and said eccentric member whereby said eccentric member revolves within said hood to eccentrically vibrate the same.

1,866,532. ESTERIFICATION OF CELLULOSE. JOSEPH F. HASKINS, Kenmore, N. Y., assignor to Du Pont Rayon Company, Buffalo, N. Y., a Corporation of Delaware. Filed Apr. 25, 1930. Serial No. 447,425. 7 Claims. (Cl. 260—101.)

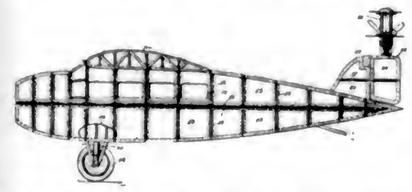
1. A method of esterifying a cellulose comprising treating it in a medium comprising pyridine with an organic acid anhydride and pyridine sulfate.

1,866,533. VACUUM TUBE MOUNTING. JOSEPH W. HORTON, Cambridge, Mass., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 28, 1929. Serial No. 374,539. 3 Claims. (Cl. 250—27.5.)



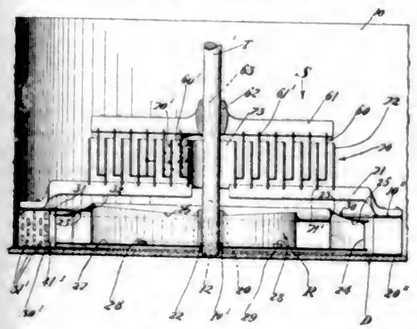
1. In combination, a casing of cellular material, for an electric space discharge device, means for increasing the mass of said casing, and means resiliently supporting said casing and said first means and closing said casing to render it sound proof, whereby said casing is adapted to shield said device from sound waves in a surrounding fluid medium.

1,866,534. AERONAUTICAL DEVICE. ALBERT S. JANIN, West New Brighton, N. Y., assignor, by mesne assignments, to Alice Lucille Janin. Filed Nov. 23, 1928. Serial No. 321,457. 8 Claims. (Cl. 244—31.)



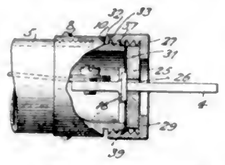
1. An airplane fuselage metal body unit comprising a plurality of preformed sections having flanges on all edges, and means for uniting the sections at the flanges to form a continuous unit having continuous flanges at its edges.

1,866,535. TURBINE BLENDER AND THE LIKE. JOHN JOHNSON, Maplewood, N. J. Filed Mar. 23, 1931. Serial No. 524,631. 6 Claims. (Cl. 259—96.)



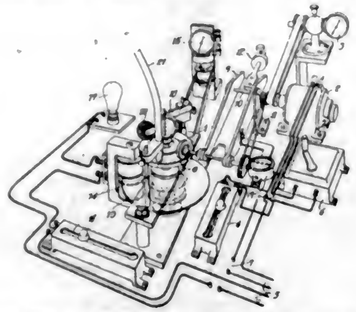
1. In an apparatus for shredding or disintegrating solid substances in the presence of a liquid, mixing means comprising a rotary mixing element and a spaced surrounding stationary mixing element, a plurality of closely spaced substantially cylindrical disintegrating elements carried by said rotary mixing element, and a plurality of cooperating substantially cylindrical disintegrating elements each interposed between a pair of said closely spaced disintegrating elements, said cooperating disintegrating elements being carried by said stationary mixing element, each of said disintegrating elements and of said cooperating disintegrating elements being provided with a plurality of teeth struck up from the material of which such disintegrating elements are formed so that each tooth is provided with an associated perforation, the teeth on one surface of the disintegrating element of one set of disintegrating elements being staggered with relation to the teeth on the opposed surface on the opposed disintegrating element of the other set of disintegrating elements.

1,866,536. ELECTRIC FUSE. FRANK C. LA MAR, New York, N. Y., assignor to Great Western Fuse Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 12, 1929. Serial No. 391,990. 4 Claims. (Cl. 200—132.)



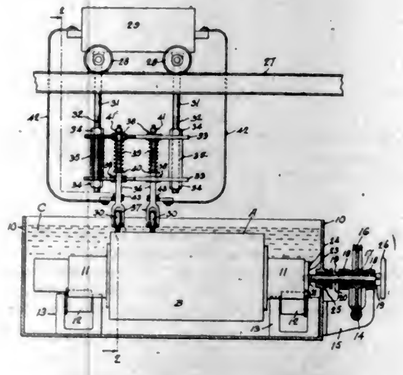
1. In an electric fuse; in combination; a hollow tubular body formed with an external helical groove adjacent an end thereof; a flanged cap formed with a mating internal helical groove; a washer interposed between the end of the body and the flange of the cap; means including a terminal blade for spacing the washer from the end of the body whereby a space is provided for the escape of gases and an empty groove transverse to the external helical groove formed therein communicating with said space at one end and with the atmosphere at the other end for the escape of gases to the atmosphere.

1,866,537. ABRASION TESTING MACHINE. LEONARD JOHN LAMBOURN, Fort Dunlop, Erdington, Birmingham, England, assignor to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a Corporation of New York. Filed Aug. 3, 1927, Serial No. 210,247, and in Great Britain Sept. 1, 1926. 5 Claims. (Cl. 73—51.)



1. An abrasive testing machine of the character described comprising a movably supported abrasive member, means for causing a test piece to drive said member and variable retarding means opposing the movement of the abrasive member whereby a slip or difference in relative motion between the test piece and the abrasive member is effected and separate means for indicating, respectively, the speed of said abrasive member and the speed of said test piece whereby the degree of slip at any instant can be determined.

1,866,588. METHOD OF STRUCTURALLY MODIFYING THE SURFACES OF METAL BODIES. ORRIN E. ANDRUS, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed July 13, 1928. Serial No. 292,377. 8 Claims. (Cl. 148—10.)



1. The method of structurally modifying a surface of a metal body by application thereto of an electric current having sufficient intensity to raise substantially instantaneously the temperature of a portion of said metal body above transformation temperature by reason of the natural resistance of the metal of said body to the flow of the current, which consists in subjecting a portion of the surface to the concentrated action of said current, and causing the temperature of a localized region of said metal body contiguous with said portion of the surface and substantially surrounded on all of its sides, except its side constituting the portion of the surface subjected to the current, by unheated metal of said body, to be raised above the transformation temperature of the metal, whereby the said unheated metal of the body about the said localized region heated above transformation temperature can quickly absorb the applied heat at the expiration of the interval of its application.

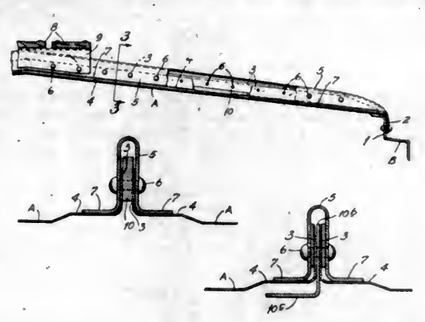
1,866,539. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed June 25, 1931. Serial No. 546,770. 17 Claims. (Cl. 108—5.)



1. In a car roof, a series of plates embodied therein and extending substantially from ridge to eaves thereof, a load-lifting beam located beneath said roof, and hangers for securing said beam to said roof, each of said hangers being secured to the top of said beam and to the adjacent ridge ends of said plates.

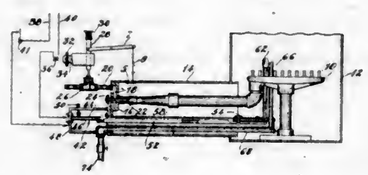
1,866,540. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed July 18, 1931. Serial No. 551,624. 11 Claims. (Cl. 101—5.4.)

1. A car roof comprising exterior carline members, roof sheets connected along their adjacent margins by upstanding seams that function as exterior carlines, and a plurality of filler plates embodied in said seams and extending



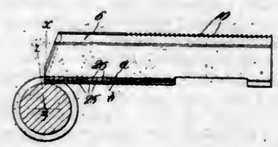
substantially from eaves to eaves, one of the filler plates on each seam having a portion extending below said roof for suspending a load therefrom.

1,866,541. SAFETY PILOT MECHANISM FOR GAS BURNING APPARATUS. NELSON T. BRANCHE and VILYNN O. BEAM, Toledo, Ohio, assignors to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed May 2, 1929. Serial No. 359,812. 6 Claims. (Cl. 158—117.1.)



1. The combination with a gas burning appliance comprising a gas burner and a conduit for supplying secondary air thereto, of a safety-pilot mechanism comprising an elongated support extending longitudinally within the conduit and terminating adjacent the burner, a pilot for the burner secured to and projecting upwardly from said support, a gas-supply pipe secured to and extending longitudinally of said support, and a gas-jet-orifice nozzle forming the outlet from said pipe, said nozzle being set to discharge into the inlet end of said pilot across an intervening air space.

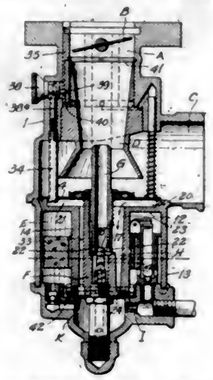
1,866,542. CHASER. ERNEST T. BYSSHE and ROBERT R. FINN, Springfield, Vt., assignors to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed June 21, 1930. Serial No. 462,753. 7 Claims. (Cl. 10—111.)



3. A chaser having a tangent series of ribs formed in cross section to conform to the valley contours between adjacent threads to be cut, the tips of said ribs at one side of the chaser being chamfered, the chamfered faces being cut back from the general plane of chamfer for clearance at intervals spaced by definite increments lengthwise of

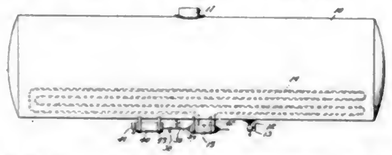
said ribs, said chaser having gaging elements spaced by said increments, the side faces of certain of said ribs having concavities substantially fitting the flanks of the threads to be cut and arranged with their ends mating the cut back intervals of said chamfer.

1,866,543. CARBURETOR. WILLIAM C. CARTER, Flint, Mich. Original application filed Dec. 23, 1929, Serial No. 415,995. Divided and this application filed Nov. 21, 1930. Serial No. 497,195. 5 Claims. (Cl. 261—41.)



1. A carburetor provided with a main passageway, and an idle speed fuel supply duct for delivering fuel to said passageway, the upper end portion of said duct being formed by co-acting surfaces in a groove in one side of said main passageway and a bar-like member positioned in said groove.

1,866,544. HEATING SYSTEM FOR TANK CARS. JOHN COURTNEY CLEAVER, Oregon, Ill. Filed Sept. 14, 1928. Serial No. 306,076. 5 Claims. (Cl. 122—32.)

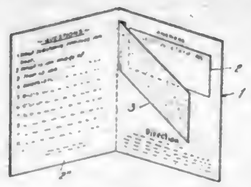


3. A tank car comprising, in combination, a tank, a heating coil in said tank, a horizontal steam generator mounted on said tank, said generator having a superheater at one end, the steam outlet of said superheater being connected to the inlet of said heating coil, and the discharge end of said heating coil being connected to the inlet of said generator, means at the other end of said generator for heating said generator and superheater, and means for supplying fuel to said heating means.

4. A steam generator comprising, in combination, a cylindrical drum adapted to contain water, the ends of said drum being respectively concave and convex, a plurality of heating tubes extending longitudinally through said drum and opening through said ends, a superheater coil having a central inlet opening from said convex end and being coiled about said inlet in an increasing taper to said convex end, and heating means disposed opposite said concave end for directing heated products of combustion through said tubes and then over said superheater coil.

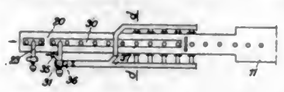
1,866,545. GAME DEVICE. JACOB G. COHEN, New York, N. Y. Filed June 26, 1929. Serial No. 373,805. 2 Claims. (Cl. 35—12.)

1. In an educational appliance, a sheet of material bearing a light-sensitive substance and having indicia invisibly photographed therein, a water-activated developer dissolved in a gum spread over said invisible indicia,



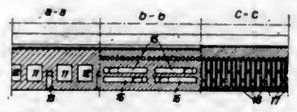
and a sheet of hygroscopic material attached to said first sheet and adapted to contact with said developer and activate same when moistened.

1,866,546. TUNNEL KILN. JOSEPH DANIELS, Essen, Germany, assignor, by mesne assignments, to The Koppers Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Mar. 8, 1930, Serial No. 434,295, and in Germany Mar. 15, 1929. 8 Claims. (Cl. 25—142.)



1. A tunnel kiln comprising, in combination: a firing chamber; a preheating chamber and a cooling chamber therefor at opposite ends thereof; independently regulable gas inlets distributed along the length of the preheating chamber for admission of heating gas thereto; independently regulable gas outlets distributed along the length of the cooling chamber for outflow of preheated cooling gas therefrom; and means for controlling the flow through said inlets and outlets so that they may be fed in graduation step-by-step toward the firing chamber; whereby the demarcation of the firing chamber from the preheating and cooling chambers may be attained without the use of dampers and solely on pressure conditions created by said inlets and outlets, and a gradual rise and fall in the temperature and a local concentration of heat above the critical temperature range may be concurrently effected in the critical temperature zone of the bricks.

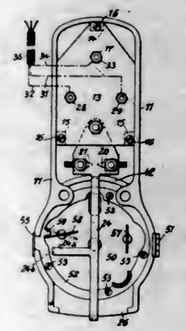
1,866,547. TUNNEL OVEN. JOSEPH DANIELS, Essen-Ruhr, Germany, assignor, by mesne assignments, to The Koppers Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Mar. 8, 1930. Serial No. 434,294, and in Germany Mar. 9, 1929. 12 Claims. (Cl. 25—142.)



1. A tunnel oven with regenerators for preheating air and gas for combustion distributed along the firing zone, the said regenerators feeding air and gas to air and gas inlets alternating with each other along the tunnel in such a manner that a sheet or strip of flame is produced, regulatable as regards its local intensity.

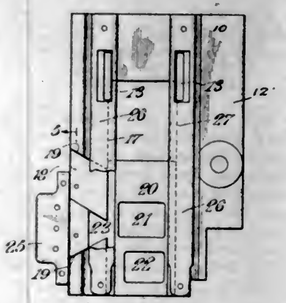
1,866,548. THERMOSTAT. ALLEN A. DICKE, Montclair, N. J., assignor to Pioneer Heat Regulator Company, a Corporation of New Jersey. Filed Nov. 8, 1927. Serial No. 231,885. 4 Claims. (Cl. 200—139.)

1. In a thermostat, a frame, means adapted for attaching the frame to a support, means forming a part of said frame for supporting a clock, said frame being formed with means for supporting a thermoresponsive mechanism and with a mechanism receiving casing, said casing



being formed with an opening to permit viewing of and to give access to said mechanism, and a thermometer mounting detachably attached to said casing and serving to cover said opening.

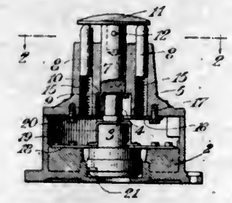
1,866,549. MOVABLE APERTURE PLATE FOR MOTION PICTURE MACHINES. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 31, 1928. Serial No. 329,335. 8 Claims. (Cl. 88—17.)



3. An aperture plate for a projection machine comprising a base member having an aperture and longitudinal recesses, a movable plate slidable in said recesses, film guides overlying said recesses to hold said plate in said recesse, said movable plate being provided with a plurality of apertures and having flanges surrounding said apertures and extending substantially flush with said film guides.

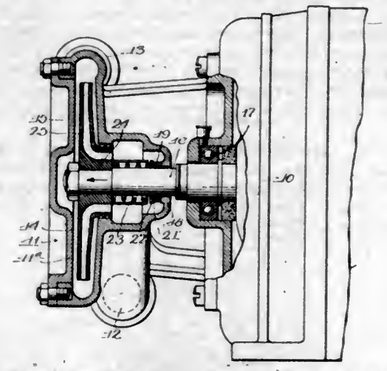
1,866,550. SWITCH FOR PROJECTION MACHINES. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Original application filed May 31, 1928, Serial No. 281,872. Divided and this application filed May 20, 1929. Serial No. 364,371. 7 Claims. (Cl. 200—86.)

7. A control for an intermittent push switch having a push button associated therewith comprising a casing adapted to surround said switch, a cover supported by said casing and recessed to receive said push button, a push rod slidably held in said cover, said push rod having an outwardly extending flange, a shoulder on said cover cooperating therewith to prevent withdrawal of said



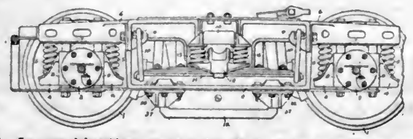
push rod, and a cap secured to the top of said push rod and adapted to engage said cover for limiting the downward movement thereof.

1,866,551. SEAL FOR SHAFTS. AUGUSTUS C. DURDIN, Jr., Chicago, Ill., assignor to Chicago Pump Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 13, 1928. Serial No. 312,295. 2 Claims. (Cl. 103—111.)



1. A seal for shafts comprising a case wall, a shaft bearing, a rotating shaft mounted in said bearing and extending through said case wall, an impeller on said shaft, said impeller being subject to water pressure in a lateral direction when in operation, thereby placing end thrust on said shaft, sealing ring members surrounding said shaft, one of said sealing ring members having a flat face bearing against a flat face of the wall and one of said sealing ring members comprising a resilient seal ring held under compression between the first mentioned sealing ring member and shaft, and a coiled compression spring surrounding the shaft and confined under compression between said impeller and the sealing ring members and acting to apply pressure upon the sealing ring members and to counteract end thrust of the shaft and therewith relieve the bearing from end thrust.

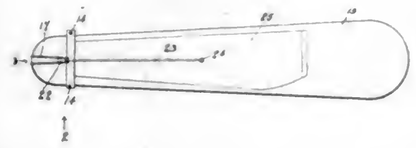
1,866,552. MAGNETIC BRAKE. CHARLES J. ELLIS, Cincinnati, Ohio, assignor to The Cincinnati Car Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 14, 1929. Serial No. 339,814. 16 Claims. (Cl. 188—165.)



1. In combination, a car truck frame, a unitary braking mechanism consisting of an air cylinder, magnetic brake shoes, yielding means for supporting said brake

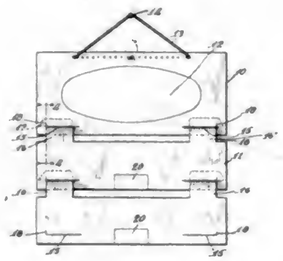
shoes, an air piston working in said cylinder attached to said brake shoe, a common detachable means for attaching said braking mechanism on said truck frame.

1,866,553. METHOD OF AND APPARATUS FOR STRETCHING TROUSERS. ALEXANDER ESKANDARIAN, Oaklyn, N. J. Filed Nov. 7, 1931. Serial No. 573,533. 3 Claims. (Cl. 223—19.)



1. The method of increasing the length of trousers consisting in laying the trousers upon a steam table, clamping the ends of the trouser legs firmly to the table, applying steam from the table to soften the fabric, and applying manual stress to stretch the fabric longer than the ultimate requirement to allow for contraction.

1,866,554. ADVERTISING SIGN. CLARENCE T. FAIRBANKS, Chicago, Ill., assignor to Edward & Deutsch Lithographing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 16, 1932. Serial No. 605,559. 7 Claims. (Cl. 40—128.)



1. An advertising sign comprising the combination of a main display portion and a plurality of subsidiary portions, all made of relatively thin material, said main and subsidiary portions being provided with slots parallel to their larger axes near the lower edges thereof, means for suspending said larger portion, tabs on said subsidiary portions capable of cooperative engagement with said slots, laterally extending projections on said tabs so arranged that when the tabs are in engagement with said slots said projections will lie on the reverse side of the portions beyond the extent of said slots.

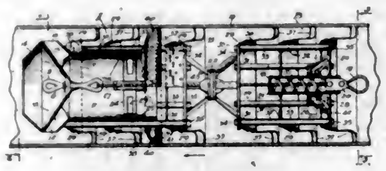
1,866,555. HAIR WAVER. WILLIAM FLETCHER, London, England, and ALBERT OGWIN LEWIS, Glais, Wales. Filed Sept. 2, 1931. Serial No. 560,714. 3 Claims. (Cl. 132—38.)

1. A hair waver comprising a resilient meshwork including a single length of an elastic element having portions forming front and rear head spanning members and a plurality of hair engaging elements, each of which is provided with a loop at each end through which the head spanning members of said elastic element is threaded,



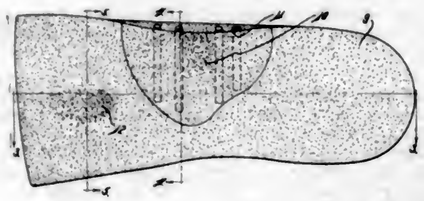
means for extending the meshwork about the head and means for retaining said meshwork in operative position on the head.

1,866,556. PIPE CLEANING MACHINE. WILLIAM A. FRANK, Hackensack, N. J., assignor to National Water Main Cleaning Co., New York, N. Y., a Corporation of Maine. Filed Feb. 25, 1930. Serial No. 431,087. 11 Claims. (Cl. 15—104,06.)



1. In a pipe cleaner, the combination of a sectional rotor having scraping elements arranged peripherally thereof, the leading section comprising a tubular shell terminating in a forward flared end provided with curved vanes against which a head of water is directed to rotate the sectional rotor and set up a whirling action of the water in advance of the cleaner, a cover for the vanes, and yielding means from the cover to the rearward end of the trailing section to hold the sections in line and the cover in place.

1,866,557. ARCH SUPPORT. CHARLES H. FREEMAN, Detroit, Mich. Filed Aug. 7, 1930. Serial No. 473,549. 1 Claim. (Cl. 36—71.)

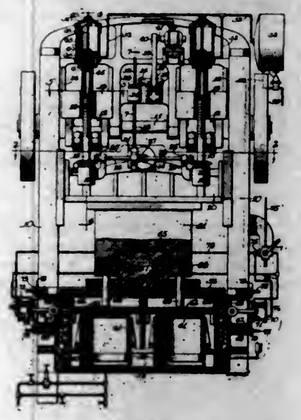


In an arch support of the class described, a main cushioning body; an enlargement projecting outwardly from the under surface of said main body and tapering in thickness toward the center of said main body, there being projected inwardly of said main body from one of the side faces thereof between the upper and lower surfaces thereof and at opposite sides of the transverse medial line of said enlargement a plurality of spaced passages.

1,866,558. VISCOSE MANUFACTURING. ISAAK J. FRENKEL, Moscow, Union of Socialist Soviet Republics. Filed Dec. 20, 1928, Serial No. 327,461, and in the Union of Socialist Soviet Republics Dec. 9, 1927. 1 Claim. (Cl. 260—100.)

A method for preparing viscose for manufacturing artificial silk, consisting in adding salts of nitrous acid to the solution of caustic alkali used in preparation of said viscose, the amount of said salts being sufficient to oxidize sulphurous gases formed during the process of spinning and fixation in acid oath.

1,866,559. METAL WORKING PRESS. RUDOLPH W. GLASNER and FREDRICH J. RODS, Chicago, Ill. Filed Jan. 2, 1930. Serial No. 417,934. 17 Claims. (Cl. 113—46.)



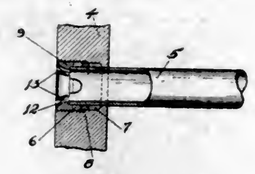
1. A press of the character described embodying an adjustable bed, a ram reciprocable towards and away from the bed with a set throw and providing a die space therebetween, and means for adjusting the ram and the bed with respect to each other to vary the said die space to compensate different size dies, while the working height of the various dies is maintained substantially the same, the last recited means being operable to impart different fixed extents of adjustment to the bed.

1,866,560. DEHYDRATION OF GAS. DAVID GORDON, Tarrytown, N. Y., and ROGER W. RYAN, Dover, N. J., assignors to The Consolidated Gas Company of New York, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1928. Serial No. 259,380. 6 Claims. (Cl. 23—2.)

1. The method of dehydrating gas which comprises bringing the gas at normal temperatures into contact with a supersaturated aqueous solution of a hygroscopic salt containing a sufficient amount of an organic substance interfering with crystallization of the salt from such solution to prevent freezing under conditions of use.

1,866,561. TUBE AND TUBE SHEET AND FERRULE THEREFOR. JOHN H. GOSS, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Aug. 7, 1930. Serial No. 473,711. 1 Claim. (Cl. 285—45.)

A preformed metal ferrule for anchoring a tube in a tube sheet, said ferrule having a threaded cylindrical outer wall and a bell-mouth inner front wall with a substantially cylindrical tube-engaging rearward wall and having at least one notch for receiving a manipulating tool, said notch being formed in the bell-mouth inner front



wall and having a concave bottom, with said notch extending from a point close to the rim of the bell-mouth to a point close to said tube-engaging rearward wall, whereby absence of angular projections in said notch tends to prevent turbulence of flow.

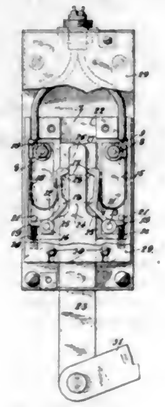
1,866,562. SHEET HANDLING MECHANISM FOR PRINTING MACHINES. ALBERT J. GRAF, Westfield, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 10, 1930. Serial No. 443,140. 5 Claims. (Cl. 271—62.)

1. In a mechanism for operating a vertically movable pile support for a sheet fed printing machine, means operated by the machine, for moving the pile support at a slow speed, to maintain the top of the pile at a substantially constant level, means operated by a separate source of power for moving the pile support at a higher rate of speed, and a safety device for disconnecting the said means when the motion of the pile support is obstructed.

1,866,563. ELECTRIC SWITCH. CHARLES E. HAMMELL, Red Bank, N. J., assignor to Gurney Elevator Company, New York, N. Y., a Corporation of Pennsylvania. Filed May 8, 1930. Serial No. 450,617. 12 Claims. (Cl. 200—163.)

1. In an electric switch, a movable contact, a switch bar of insulating material and a current conducting member carried thereby movable as a unit relative to said contact, means for yieldingly urging the contact to circuit closing position in engagement with said conducting

member, and directly coacting means on the switch bar and the contact operative in a continuous movement of said switch bar in one direction to progressively move

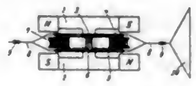


the contact to circuit breaking position and maintain the contact in such position during continuing movement of said switch bar.

1,866,564. PROCESS FOR OBTAINING MIXTURES OF AMMONIUM SULPHATE AND DI-AMMONIUM PHOSPHATE. CHRISTIAN JOHANNES HANSEN, Essen, Germany, assignor, by mesne assignments, to The Koppers Company, Pittsburgh, Pa., a Corporation of Delaware. Filed May 4, 1931, Serial No. 535,078, and in Germany May 5, 1930. 4 Claims. (Cl. 71—9.)

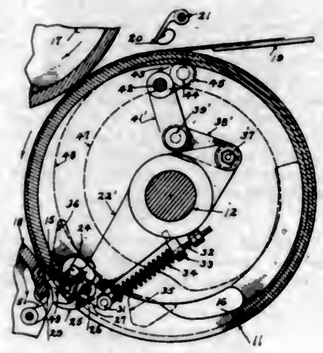
1. Method of producing salt mixtures of ammonium sulphate and di-ammonium phosphate from solutions containing ammonium sulphate and ammonium phosphates in any proportions, which consists in heating a solution saturated with ammonium sulphate and di-ammonium phosphate, adding to this solution the solution containing ammonium sulphate and ammonium phosphates which is to be treated, removing salt which separates out of the solution, treating the salt with a solution which is saturated with ammonium sulphate and di-ammonium phosphate and to which ammonia is added, and finally separating the salt from the latter solution, and drying the salt.

1,866,565. DEVICE FOR CONVERTING ELECTRIC OSCILLATIONS INTO MECHANICAL VIBRATIONS. GILLES HOLST and EKKO OOSTERHUIS, Eindhoven, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 7, 1927, Serial No. 181,650, and in the Netherlands Apr. 10, 1926. 11 Claims. (Cl. 175—339.)



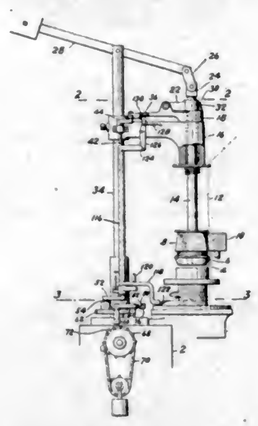
1. A device for converting electric oscillations into mechanical vibrations comprising a pair of magnets, a ferromagnetic armature whose ends are disposed between poles of unlike nature, said armature normally assuming a position of equilibrium between said magnets, a fixed coil surrounding said armature, said coil carrying electrical oscillations which are converted into mechanical vibrations of the armature, said armature in its movement maintaining a constant gap between the magnet poles and the armature.

1,866,566. GRIPPER MECHANISM. ALBERT J. HORTON, White Plains, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed May 28, 1930. Serial No. 456,485. 10 Claims. (Cl. 104—410.)



1. In a printing machine, a rotatable impression cylinder, a rotatable gripper carrier supported coaxial with the cylinder, a gripper mechanism on the carrier, and means to rotate the carrier oppositely to the rotation of the cylinder during a portion of the cylinder's revolution.

1,866,567. KNITTING MECHANISM. HAROLD E. HOUSEMAN, Edge Moor, Del., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 12, 1930. Serial No. 427,709. 13 Claims. (Cl. 66—135.)



12. A knitting mechanism including a circle of needles and devices cooperating therewith to form stitches, at least one wrap finger, a carrier therefor, means for actuating the wrap finger to cause it to cooperate with a needle, means for shogging the carrier to carry the wrap finger into positions to cooperate with various needles, said shogging means including a pawl and ratchet mechanism operative to move the carrier positively in either direction, and pattern mechanism for automatically reversing the movement of the carrier at predetermined times.

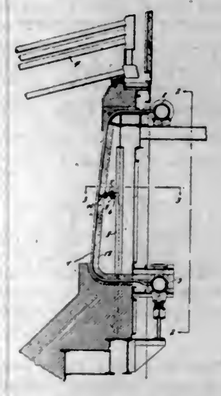
1,866,568. PROCESS OF PRODUCING ETHYL ACETATE, ETHYL ALCOHOL AND OTHER PRODUCTS BY FERMENTATION. ALEXANDER IZSAK, Central Park, N. J., and FRANK A. MCDERMOTT, Claymont, Del., assignors, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 8, 1927. Serial No. 231,990. 7 Claims. (Cl. 195—20.)

1. The process of producing ethyl acetate and ethyl alcohol by fermentation with yeast fungi that excrete their proteoclastic enzymes into an acid fermentable sugar medium which comprises inoculating the medium with fungi of the type of *Willia anomala, Mycoderma vini*, and *Mycoderma lactis* controlling the optimum conditions and causing the fermentation of the medium.

1,866,569. PROCESS OF PURIFYING INSULIN. MORRIS S. KHARASCH, Chicago, Ill. Filed Aug. 22, 1931. Serial No. 558,829. 8 Claims. (Cl. 167—75.)

1. The process of purifying insulin, which consists in treating a substantially anhydrous insulin-bearing material with ammonia in substantially anhydrous liquid form, separating the solution thus obtained from the solid residue, and removing the ammonia from such solution.

1,866,570. TUBE SUPPORT. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed June 18, 1929. Serial No. 371,910. 11 Claims. (Cl. 122—481.)

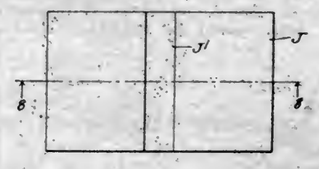


1. In combination, a furnace wall having a row of tubes therein subjected to the heat of the furnace, a fixed support disposed exteriorly of the tubes, a cross-piece fixed to the backs of a plurality of tubes, a buckstay extending transversely of the tubes, expansible connections between said cross-pieces and said buckstay, and expansible connections between said buckstay and said support.

1,866,571. METHOD OF PRODUCING A MIXTURE OF CALCIUM NITRATE AND AMMONIUM NITRATE. MARKUS LARSSON, Berlin, Germany, assignor to Kunstdünger-Patent-Verwertungs-Aktiengesellschaft, Glarus, Switzerland. Filed May 25, 1929, Serial No. 366,079, and in Sweden June 5, 1928. 4 Claims. (Cl. 71—9.)

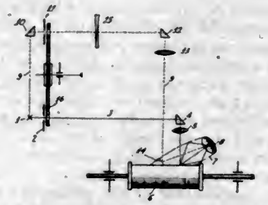
1. A method of producing a mixture of calcium nitrate and ammonium nitrate, which comprises reacting upon calcium sulphate with ammonia and carbon dioxide to form calcium carbonate and ammonium sulphate, removing the greater part of the ammonium sulphate solution, dissolving the remaining slurry in nitric acid under such conditions of temperature and concentration that the calcium sulphate by-product formed crystallizes as semihydrate, then causing the semihydrate to recrystallize into gypsum by lowering the temperature of the solution, and finally separating the gypsum from the solution produced.

1,866,572. TABLE. JERROLD LOEBL, Chicago, Ill., assignor to John R. Thompson Co., Chicago, Ill., a Corporation of West Virginia. Filed Feb. 28, 1930. Serial No. 432,003. 3 Claims. (Cl. 45—81.)



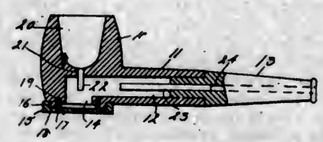
1. As a new article of manufacture, a table top having its upper surface formed into a plurality of generally plane areas, there being a portion separating such areas, said portion being on a plane different from that of the said areas.

1,866,573. MEANS FOR REVERSING CURRENT IMPULSES. HEINZ LUX, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed June 11, 1930, Serial No. 460,331, and in Germany Apr. 30, 1929. 6 Claims. (Cl. 178—7.)



1. An optical scanning system which comprises a photoelectric element for converting varying intensities of light and shadow on a record surface into varying strength electric currents, and means for alternately illuminating the photoelectric element with interrupted light of variable intensity proportionate to the varying intensity of light and shadow on successive elemental areas of the record surface and with interrupted light of constant intensity so as to produce from the interrupted light intensities reaching the photoelectric element electric potentials in the output circuit of the photoelectric element which are inversely proportional to the brightness of the scanned record surface.

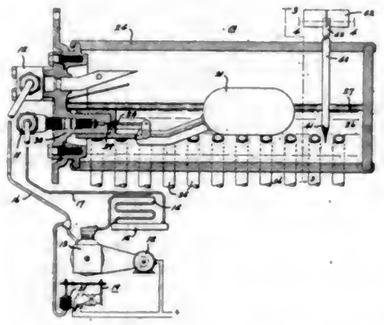
1,866,574. TOBACCO PIPE. PASQUALE MANCUSI, New York, N. Y., and VINCENZO DI SIBIO, Glassboro, N. J., assignors to Pursmoke Pipe Company, Inc., New York, N. Y., a Company of Delaware. Filed June 30, 1930. Serial No. 464,905. 8 Claims. (Cl. 131—12.)



1. A tobacco pipe including a bowl having a tobacco receiving chamber, a stem having a bore, a mouth piece mounted in said stem and provided with a draft passage

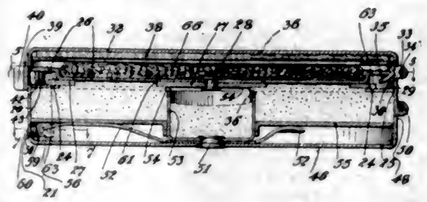
way, a tube forming a communication between the interior of the bowl and the bore of the stem and another tube mounted in the draft passageway of the mouth piece, both of said stems having ends projecting considerable distances of said tubes within the stem bore are spaced from all the walls thereof.

1,866,575. REFRIGERATING APPARATUS. RALPH K. MILLER, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 25, 1931. Serial No. 532,894. 5 Claims. (Cl. 62—126.)



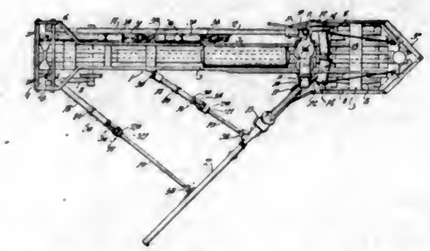
1. An evaporator of the type in which a large body of liquid refrigerant is maintained and in which a layer of lubricant floats on the liquid refrigerant, the combination of means for causing agitation of the refrigerant so as to destroy the blanketing effect of the lubricant, said means including an element of high heat conductivity especially constructed for readily conducting heat to a concentrated point in the body of liquid refrigerant and having a part thereof extending outside the evaporator and especially constructed and positioned so that it is exposed to the temperature of the circulating medium to be cooled by the evaporator and maintained at a materially higher temperature than the liquid refrigerant in the evaporator.

1,866,576. LOOSE POWDER CONTAINER. HOWARD S. NEIMAN, Brooklyn, N. Y. Filed Dec. 14, 1929. Serial No. 414,194. 18 Claims. (Cl. 132—83.)



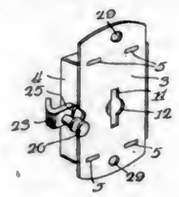
1. In a device of the character described, in combination, a casing, a fixed foraminous plate within said casing, a revoluble foraminous plate abutting upon the under face of said fixed plate, a vertically movable pressure plate spaced below said revoluble plate, resilient means for moving said pressure plate, means allowing the insertion of loose powder between said revoluble plate and said pressure plate, a cover for said receptacle, means for fastening said cover in closed position and means whereby unfastening said closed cover will move said revoluble plate, causing the openings in the two foraminous plates to pass from non-alignment, through alignment to non-alignment positions.

1,866,577. RAILROAD SPREADER. HARRY W. PROTZELLER, East Chicago, Ind., assignor to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Original application filed July 26, 1928, Serial No. 295,451. Divided and this application filed Dec. 9, 1929. Serial No. 412,645. 3 Claims. (Cl. 37—105.)



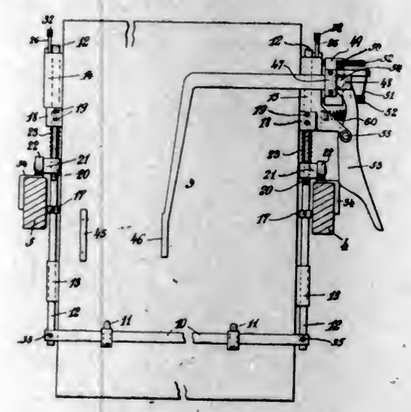
1. In a railroad spreader, a car, a side wing hinged thereto for a swinging movement toward and away from the car, a brace including telescopic members interposed between the car and side wing and which members have engaging surfaces whereby they are under certain conditions relatively turnable, a ball and socket joint connecting one of said members to the wing, a universal joint connecting the other member to the car and power actuated means operable from the car and including relatively movable clamping jaws for frictionally locking said telescopic members in the desired extended and relatively turned positions.

1,866,578. LATCH LOCK. GEORGE H. REIMER, Fulton, Ill., assignor to Patent Novelty Company, Fulton, Ill., a Corporation of Illinois. Filed Nov. 8, 1928, Serial No. 317,886. Renewed Mar. 23, 1932. 8 Claims. (Cl. 70—29.)



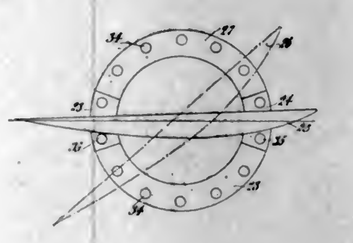
1. In latch-lock mechanism for a swinging door, the combination of a reciprocating latch member, a handle for operating said latch member into unlatched position, reciprocating therewith, a spring for operating said member into latched position, stationary strike means for engaging said latch member when the door is closed, operative when the door is being closed to shift said member and handle into unlatched position, rotary lock mechanism operable by a removable key for locking said member in latched position, operable into unlocking position while said member remains in latched position, and fixed means forming a key hole through which said key is insertable in engagement with said mechanism, said key and mechanism being rotatable forward one hundred and eighty degrees into locking position, or backward into unlocking position, to permit withdrawal of the key in either of said positions through said key hole, said lock mechanism comprising a rotatable member having diametrically opposite peripheral notches, a spring for engagement alternately with said notches, said rotatable member having a key-hole slot to receive the key, and having also a projection disposed in position to prevent displacement of said latch member when one of said notches is engaged by said last-mentioned spring, and which projection is disposed in position to prevent interference with free displacement of said latch member when the other notch is engaged.

1,866,579. SHEET REGISTERING MECHANISM. LEONARD F. REMINGTON, Franklin, Mass., assignor to Thomson National Press Co. Inc., a Corporation of Delaware. Filed Mar. 3, 1930. Serial No. 432,875. 3 Claims. (Cl. 101—114.)



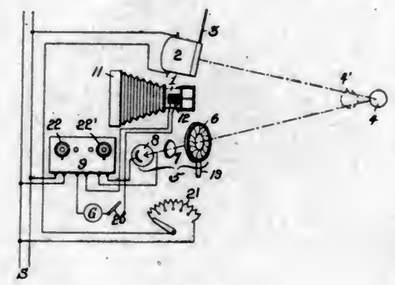
3. The combination with a platen press, the platen and its operating means, of gages for registering the leading edge of a sheet upon the platen, gage operating means carried by the platen and automatically actuatable during the closing movement thereof, cooperating latching means on the gage operating means and the platen for locking the gages after they have been operated, release pawls supported on the press for unlocking the gages when the press opens and a spring for returning the gages to initial position.

1,866,580. SEALING DEVICE. CARLOS SCHMITTHENNER, Heidenheim on the Brens, Germany, assignor to American Voith Contact Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 28, 1929, Serial No. 415,992, and in Germany Dec. 24, 1928. 5 Claims. (Cl. 286—7.)



1. Sealing means for use with a turbine wheel having a runner blade with a trunnion turning in a wheel part having an outside face presented to the blade, said sealing means including a seal seated in an annular recess surrounding the trunnion, the outer portion of said recess being open through the outside face and the seal being removable through said portion, an outside annular guard ring detachably secured to the wheel for wedging the seal against the trunnion, and shaped to fit within the outer portion of the recess, said ring composed of separate segments arranged in two pairs the members of each of which are in diametrically opposite relation, to allow the removal of one of the two pairs when the blade is in a position in front of the other of the two pairs.

1,866,581. SELF-FOCUSING CAMERA. LUTHER G. SIMJIAN, New Haven, Conn. Filed June 16, 1931. Serial No. 544,782. 10 Claims. (Cl. 95—44.)



1. An automatic focusing means for cameras including a light sensitive cell, a camera having an adjustable focus, and means governed by said cell for automatically adjusting said focus.

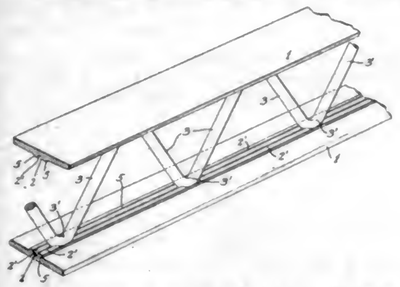
1,866,582. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed June 23, 1928. Serial No. 287,658. 9 Claims. (Cl. 197—182.)

1. Illuminating means for the work upon a typewriting machine enclosed in a sound-deadening casing and having a liftable cover provided with a window for viewing the work, including a plate of prism-ribbed glass extending along the window at the exterior of the casing in position to deflect the light received by said plate downwardly through said window, to fall upon and illuminate the work upon the platen of the typewriter, a sight opening being left between the prism and the lower edge of the window, whereby the operator may view the enclosed work, means supporting said plate by its ends in said position, and an opaque shade adjustably supported above the plate to screen the window from glare, said prism-plate being mounted between the shade and the window.

1,866,583. COMPOSITE METAL WORK. LORILLARD SPENCER, New York, N. Y. Filed Apr. 6, 1928. Serial No. 268,041. 5 Claims. (Cl. 189—37.)

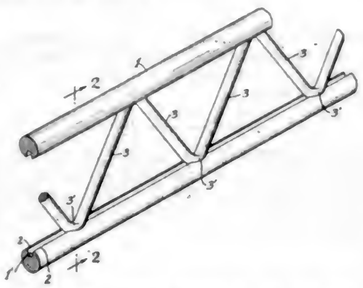
2. Composite metal work one member of which is provided with a longitudinal grooved ridge while the other

member consists of a bent rod rounded in cross-section and bent in a plane coinciding with the groove and having portions converging toward the axis of the groove said



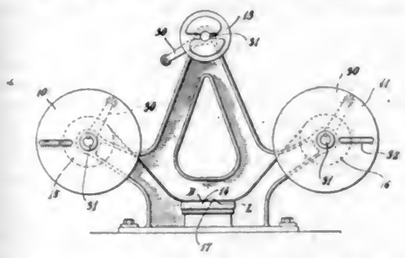
converging portions being seated within and welded to the edges of the groove at the apex or outside angle of the bend.

1,866,584. COMPOSITE METAL WORK. LORILLARD SPENCER, New York, N. Y. Filed Apr. 6, 1928. Serial No. 268,042. 2 Claims. (Cl. 189—37.)



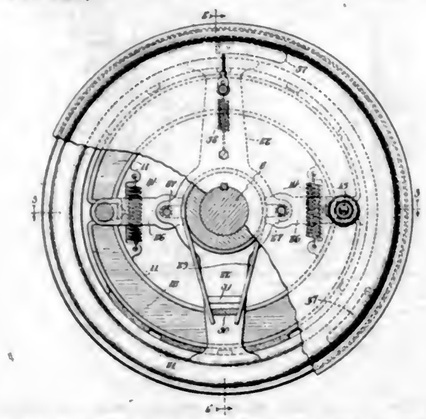
2. An electrically welded girder or the like the longitudinals of which consist of rods formed with relatively narrow grooves while the strut or brace portion consists of a zig-zag rod of a size which prevents the same initially from passing to the bottom of said groove, said zig-zag rod being seated and welded at its bends to said longitudinal rods within and without said grooves.

1,866,585. MAKING ENDLESS RECORD BANDS. IRVING L. TENNEY, New York, N. Y. Filed Oct. 22, 1931. Serial No. 570,316. 6 Claims. (Cl. 242—55.)



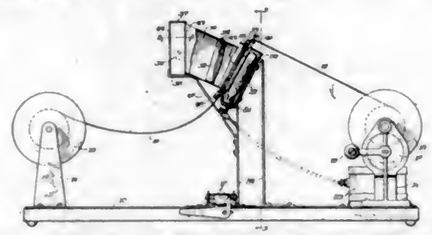
1. The method of forming an endless belt of two strips of record film, which consists of winding the strips reversely on separate reels so that the beginning of the record of one strip and the last of the record of the other strip are at the outside of their respective reels, joining the outside ends of the strips to one another securing the portion of the film between the reels to a third reel, winding the film from said first mentioned reels onto said third reel, doubled on itself, so that the remaining ends of the strips are at the outside of said third reel and joining together said remaining ends.

1,866,586. FRICTION DEVICE. ARTHUR P. WARNER, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed Mar. 5, 1928. Serial No. 259,050. 9 Claims. (Cl. 188—140.)



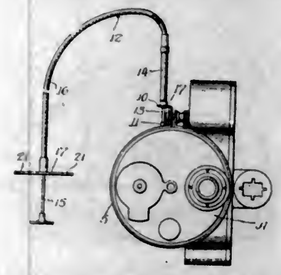
1. A vehicle brake of the momentum type comprising, in combination, a rotatable drum, a pair of segmental brake shoes arranged in end-to-end relation within said drum, a stationary member closing the open end of said drum, means mounted on said member for oscillation about the drum axis and providing two bell-crank levers having long and short arms disposed substantially in perpendicular relation with the long arms substantially in alinement, a friction ring carried by said long arms, means rotating with the drum and providing a friction surface for engaging said ring to produce angular movement of the latter, expanding devices for spreading the opposite end portions of said shoes each comprising a cam associated with two adjacent end portions of said shoes and a crank rigid with said cam, and means pivotally connecting the free end of each crank to the short arm of one of said bell-cranks.

1,866,587. FILM INSPECTION DEVICE. GUY S. WARREN, Evanston, Ill. Filed May 5, 1927. Serial No. 188,900. 8 Claims. (Cl. 88—14.)



1. A film inspection device having, in combination, a base, a film gate mounted on said base at an angle thereto, said gate including an elongated opening over which a strip of film is adapted to pass, a source of light for illuminating said opening, an elongated prism mounted perpendicularly to the base in a position to receive and divert the image of said film projected by said light, and an elongated lens interposed between said film gate and an observer for enlarging the images of said film.

1,866,588. ATTACHMENT FOR MOTION PICTURE CAMERAS. GUY S. WARREN, Evanston, Ill. Filed June 14, 1928. Serial No. 285,236. 2 Claims. (Cl. 95—53.)



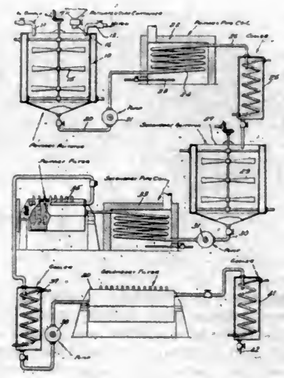
1. An attachment for cine-cameras and the like comprising, in combination, a split collar adapted to engage a part of the surface of the camera, means for drawing the split ends of the collar together to secure the clamp on the camera, an L-shaped bracket carried by said collar with the free leg of said bracket overlying the control device of the camera when the collar is fixed thereto, a plunger carried by said bracket and adapted to engage said control device, and means for actuating said plunger.

1,866,589. CUP CAKE DROPPING MACHINE. ERNEST A. ADAMS, Tacoma, Wash., assignor to Martin Helland, Tacoma, Wash. Filed Oct. 31, 1930. Serial No. 492,566. 7 Claims. (Cl. 107—28.)

1. A cup-cake dropping machine including a valve container attached below a bottom outlet from a dough container, said valve container having a plurality of cylindrical oscillatory valves therein, intermittent means for gathering and discharging dough from said container through said oscillatory valves, said means comprising a side hinged valve gate operated to fill the chambers of said oscillatory valves and provide the pressure to discharge the dough therefrom, and said valve gate composed of two parts hinged together near the center to facilitate its operation in the dough.

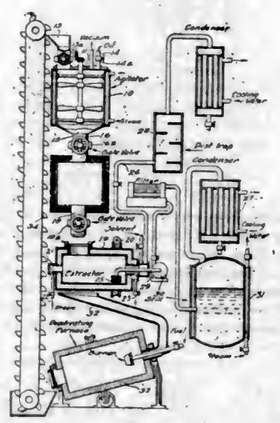
1,866,590. TREATMENT OF LUBRICATING OILS WITH AN ACTIVATED CLAY AND WATER. WALTER S. BAYLIS, Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California, Los Angeles, Calif., a Corporation of California. Filed Mar. 17, 1928. Serial No. 262,501. 4 Claims. (Cl. 87—12.)

1. A method of improving the color in lubricating oils, which consists in: adding a small percentage of water to said oil; agitating said oil and said water; adding an activated clay to said oil and said water; agitating the mixture of said oil, water and activated clay; heating said mixture under pressure to a temperature below the flash point of said oil, said temperature being maintained for a sufficient period for only a partial improvement of the



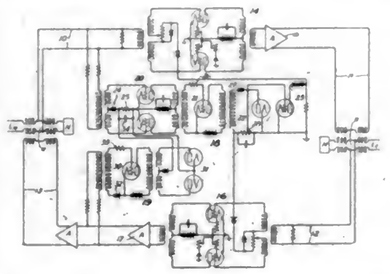
color of the oil to take place; adding additional activated clay; again agitating said mixture until the improvement of the color of the oil is complete; and filtering said mixture to separate said activated clay and said oil.

1,866,591. PROCESS OF MAKING A SUPERIOR OIL. WALTER S. BAYLIS, Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California, a Corporation of California. Filed Sept. 4, 1928. Serial No. 303,701. 6 Claims. (Cl. 87—12.)



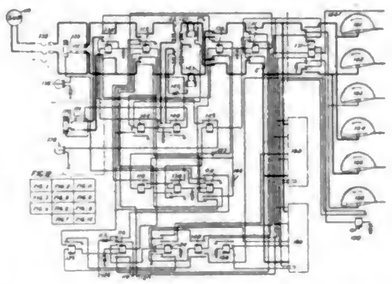
1. In the process of refining oil, the steps which comprise mixing an acid-activated powdered clay adsorbent with from about 20% to 150% by weight of the oil to be refined, heating the mixture to from 200° F. to 750° F., cooling the mixture from said temperatures in not less than ten hours, extracting the cooled mass with a solvent capable of removing the oil, but not the coloring matter from the adsorbent, separating the oil-laden solution from the solid matter and then recovering the solvent from the oil.

1,866,592. VOICE OPERATED REPEATER CIRCUIT. BJORN G. BJORNSON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 7, 1930. Serial No. 459,652. 4 Claims. (Cl. 179—170.)



1. In a voice operated circuit, a circuit for producing a direct current voltage from speech energy, comprising a rectifier preceded by an amplifier, and means to make the operation of said rectifier and amplifier marginal, said amplifier reaching substantial saturation at the input level corresponding to initial operation of said rectifier.

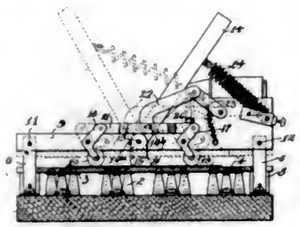
1,866,593. CALL DISTRIBUTING SYSTEM. JACK F. DAHL, West Orange, N. J., and WARREN W. CARPENTER, Garden City, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 18, 1931. Serial No. 523,387. 15 Claims. (Cl. 179—27.)



1. In a telephone system, a plurality of groups of operators' positions, a plurality of incoming trunk circuits, means to store calls incoming over said trunk circuits, means to cause said trunk circuits to hunt for an idle operator's position in the order in which the incoming calls are stored, and means to predetermine the group of positions in which the trunk circuit shall hunt.

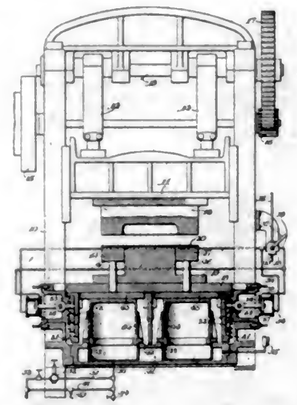
1,866,594. SWITCH ACTUATING MECHANISM. CHARLES H. ELLIOTT and HAROLD K. ELLIOTT, St. Paul, Minn. Filed Aug. 9, 1929. Serial No. 384,686. 2 Claims. (Cl. 200—107.)

1. A switch mechanism, comprising a base, a plurality of switch contacts mounted thereon, a slidably mounted plate having a plurality of contacts thereon to register with said switch contacts, a frame mounted above said plate, a pair of bell crank levers mounted on said frame to pivot thereon, a link connecting said bell crank levers, a roller mounted in an end of each of said bell crank levers to roll upon the upper surface of said plate, a handle lever mounted on said frame and connected to said link to operate said levers, a latch member pivotally connected to said bell crank lever and having a transverse portion to engage said lever on an operation thereof to remove said latch member from engagement with said plate, a spring connected to said operating handle to normally draw said operating handle to rotate said bell crank levers and depress said plate, a toggle joint connecting said lever to said frame, an eccentric member mounted beneath said



toggle joint to break said toggle joint upon an operation of said eccentric member, and electromagnetic means connected to said eccentric member to rotate said eccentric member and break said toggle joint to release said handle lever for operation by energization of said electromagnetic means.

1,866,595. METAL WORKING PRESS. RUDOLPH W. GLASNER and FREDRICH J. RODE, Chicago, Ill. Filed Nov. 29, 1929. Serial No. 410,317. 25 Claims. (Cl. 113—46.)

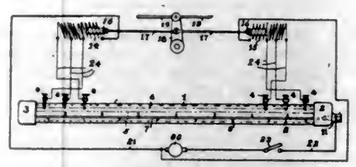


1. A press of the character described embodying a reciprocable ram, a bed with respect to which the ram is reciprocable, fluid pressure means constituting an integral part of the press, for bodily adjusting the said bed, and means other than the said adjusting means for locking said bed in its adjusted position.

1,866,596. AEROPLANE FLIGHT CONTROL. JAMES M. HENDRICKSON, McKeesport, Pa. Filed Mar. 6, 1931. Serial No. 520,731. 11 Claims. (Cl. 244—29.)

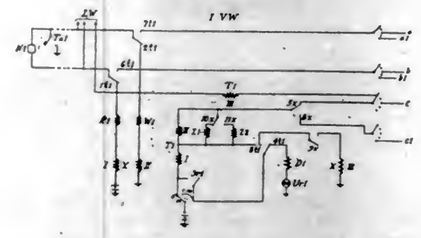
1. For use in circuit with the solenoids arranged to activate the controls of an aeroplane, a make and break device comprising a tube of non-conductive material, contact members extending into the tube adjacent the ends thereof and connected to the coils of the solenoids, a body of conductive liquid contained in said tube, the fluid being out of contact with said contact members when the tube is level, and a conductor member extending longitudinally of the tube and normally immersed in said conductive liquid, said conductor being connected to a source of

electrical current, said conductor being provided with means to prevent surging of the liquid resulting from the movement of the tube, whereby when the tube is tipped



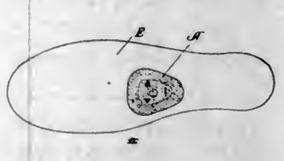
electrical contact is made between one of the members and the conductive liquid and the corresponding solenoid is energized.

1,866,597. AUTOMATIC TELEPHONE SYSTEM. REINHOLD HOEFERT, Berlin-Charlottenburg, and KURT WOLLACK, Berlin, Germany, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Filed Feb. 20, 1931, Serial No. 517,292, and in Germany Apr. 16, 1930. 6 Claims. (Cl. 179—9.)



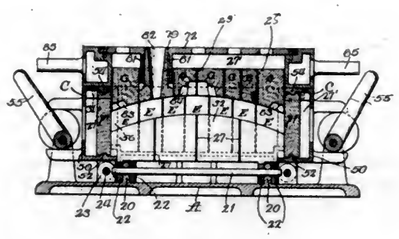
1. In a telephone system, a subscriber's line, a lineswitch individual to said line, a first and a second group of trunks extending to different zones accessible to said switch, a device located at the subscriber's substation, means responsive to the removal of the receiver by the subscriber for causing said switch to automatically hunt for and seize a trunk in the first group, and means responsive to the operation of said device and the removal of the receiver by the subscriber for causing said switch to automatically hunt for and seize a trunk in the second group.

1,866,598. ADJUSTABLE AND REMOVABLE METATARSAL PAD. ROSS H. JOHNSON, Chicago, Ill. Filed Nov. 18, 1927. Serial No. 234,195. 2 Claims. (Cl. 36—71.)



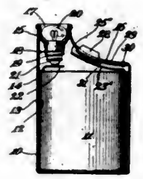
1. A metatarsal pad including, a felt body portion, a plate adapted to be positioned against the back of said body, securing means for holding said plate to said body portion, and piercing points formed on said plate by bending down cut portions from the body of the plate, leaving apertures through which the securing means may be further secured to the body portion.

1,866,599. CASTING MOLD. CLIFTON D. PETTIS, New York, N. Y. Filed Apr. 19, 1923. Serial No. 633,131. 59 Claims. (Cl. 22—124.)



1. In a casting mold, a flask comprising pivotally mounted side and end members, a cope separate from said members and adapted to rest thereon when said members are in closed position, and molding receptacle sections carried by each of said members and said cope, certain of said sections comprising a plurality of blocks secured together.

1,866,600. POCKET FLASH LIGHT. FRANK RAUCH, Brooklyn, N. Y. Filed Feb. 19, 1931. Serial No. 516,914. 2 Claims. (Cl. 240—10.65.)

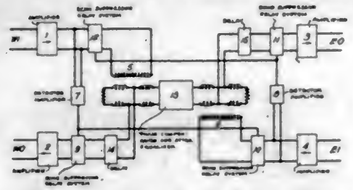


1. A pocket electric lamp comprising a thin flat dielectric casing having parallel side walls and rounded side edges and composed of two sections, respectively upper and lower connected midway the length of the casing, said upper section presenting a raised circular neck blending into one of the rounded side edge walls, the remaining portion of the upper wall of said section being reduced in height to present a finger receiving surface below the plane of the top of said neck, a lamp bulb in said upper section projecting into said neck, said bulb having a conducting base and a terminal insulated therefrom, a battery in the lower section, an electrical connection between said terminal and one of the poles of said battery, a conductor from the other pole of the battery its end extending normally adjacent said base, a spring fixed in the upper section of said casing to extend over said conductor, and means movable through the wall of the reduced portion of the upper section of said casing to deflect said spring and cause contact of said conductor with the base of said lamp.

1,866,601. COMPENSATION FOR DISTORTION IN TRANSMISSION. ARTHUR REGINALD ALBERT RENDALL and EDWARD KENNETH SANDEMAN, Aldwych, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1930, Serial No. 446,887, and in Great Britain July 10, 1929. 6 Claims. (Cl. 178—44.)

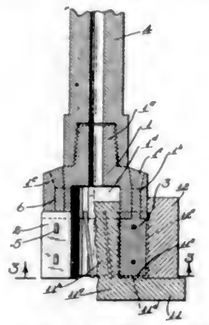
1. A telephone transmission system comprising two sections with adjacent terminals, each section consisting

of two transmission paths, one for one direction and the other for the opposite direction of transmission, and, join-



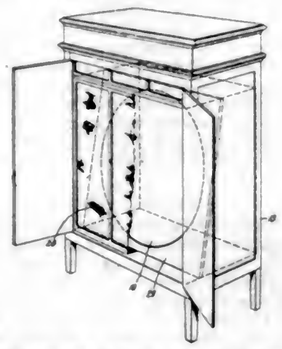
ing said sections, an intermediate path for transmission in both directions, a phase compensating network being situated in said intermediate path.

1,866,602. CUTTING MEANS AND METHOD OF MAKING THE SAME. LEROY E. RIDGEWAY and AARON ENGLISH, Long Beach, Calif., assignors of one-third to James N. Locke, Long Beach, Calif.; said English assignor of one-third to Globe Oil Tools Co., Los Nietos, Calif., a Corporation of California. Filed May 7, 1930. Serial No. 450,549. 14 Claims. (Cl. 22—203.)



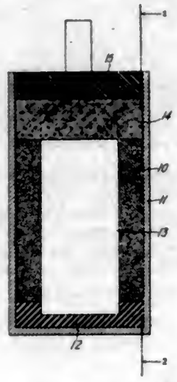
9. The herein described method of making cutters consisting in plating cutting blades, then placing the same in their normal cutting relation into a mold and relative to a supporting head, and then pouring a molten metal into the mold against the blades and against the supporting head.

1,866,603. ACOUSTIC DEVICE. VESPER A. SCHLENKER, Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 11, 1927. Serial No. 190,484. 25 Claims. (Cl. 181—32.)



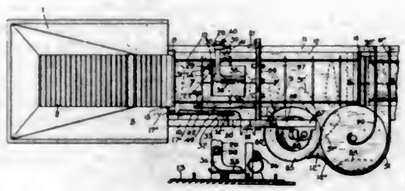
1. A diaphragm for radiating sound consisting of thin material tensioned to such a degree that the propagation velocity of transverse vibrational waves therein is greater than one-fourth the velocity of sound in air, said diaphragm having a sufficiently large surface area as to have a low fundamental natural frequency.

1,866,604. ELECTROLYTIC DEVICE. HUMPHREYS O. SIEGMUND, West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 25, 1926. Serial No. 144,000. 2 Claims. (Cl. 175—315.)



2. An electrolytic condenser comprising an electrolyte containing sodium silicate and a solution of sulphuric acid and having the consistency of jelly, and a tantalum film forming electrode.

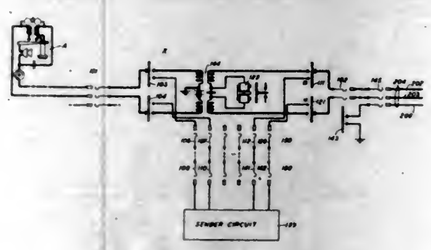
1,866,605. AUTOMATIC FEEDER FOR CORN HUSKERS. CLARENCE BYRON STEWART, Port Dover, Ontario, Canada. Filed Nov. 1, 1930. Serial No. 492,636. 8 Claims. (Cl. 130—33.)



1. In a feeding device for corn huskers, a conveyer on which the ears of corn are received in a transverse position with the butts and tips set indiscriminately in either direction, tip seizing means at one side of the conveyer, means for forcing the ears of corn longitudinally of themselves as they pass towards the seizing means, means for bending the resilient tips as the ears are forced longitudinally and for releasing the bent tips to spring outward to their normal position as they pass to the seizing means, and means for operating the seizing means to withdraw the ears.

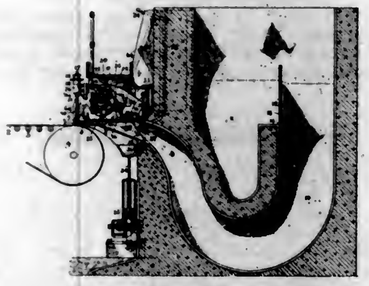
1,866,606. TIME-OF-DAY ANNOUNCING SYSTEM. LESTER C. WARNER, Plainfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 23, 1931. Serial No. 524,406. 12 Claims. (Cl. 179—6.)

1. An announcing system comprising a plurality of transparent films each having photographic sound traces thereon, clock-controlled means for periodically and successively advancing said films, means for illuminating an exposed portion of each film, a scanning prism for scanning the exposed portions of said films in succession, a photo-electric cell associated with said prism for producing telephonic currents in accordance with the variations



of the photographic traces scanned by said prism, means for amplifying said telephonic currents, and means for impressing the amplified currents upon a telephone circuit.

1,866,607. SLICE AND HEAD BOX FOR PAPER MAKING MACHINES. RALPH WOOD, Sharon Hill, Pa., assignor to Scott Paper Company, a Corporation of Pennsylvania. Filed Sept. 6, 1929. Serial No. 390,691. 4 Claims. (Cl. 92—44.)

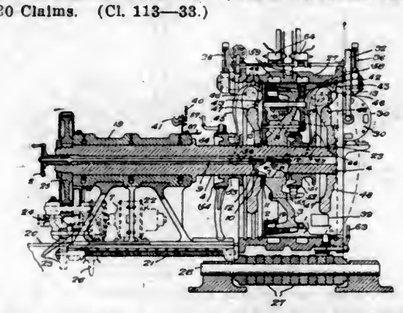


1. A slice for paper making machines, comprising a throat terminating in a nozzle, the upper lip of which is flexible, combined with a plurality of adjusting means arranged at spaced intervals across the machine for separately adjusting the nozzle lip to provide capacity for varying the vertical size of the nozzle orifice and fluid jet delivered therefrom and wherein further, the throat is made tapering in cross sectional area along its length and means constituting a static head within the throat are provided at its largest end for adjusting the static head to provide regulable initial velocity pressure.

1,866,608. MANUFACTURE OF CHROMIUM OXIDE. BERNHARD WURZSCHMITT, Uerdingen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 7, 1928, Serial No. 324,588, and in Germany Dec. 10, 1927. 5 Claims. (Cl. 23—145.)

1. A method for producing chromic oxide which comprises mixing an alkali metal chromate with such an amount of phosphorus as causes the formation of alkali metal phosphate only, igniting the mixture, and separating the chromic oxide from the alkali metal phosphate by dissolving the reaction mixture in water and filtering off the chromic oxide from the potassium phosphate lye.

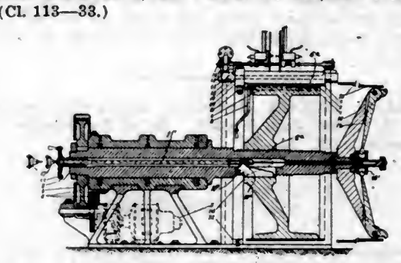
1,866,609. METHOD AND APPARATUS FOR FORMING HOLLOW METALLIC STRUCTURES. JAMES LUCIAN ADAMS, Jr., East Chicago, Ind., assignor of nine-tenths to Graver Corporation, East Chicago, Ind., a Corporation of Illinois. Filed Jan. 3, 1928. Serial No. 244,335. 30 Claims. (Cl. 113—33.)



6. In a machine of the character described, means for bending a plate to bring the end portions thereof into adjacent relationship, means for shaping the opposite edges of said plate to provide interlocking projections thereon, means for separating and bringing together said end portions at will, and means for securing said end portions.

16. In a method of assembling hollow cylindrical metal structures, the steps comprising pulling a plate around a rotating drum, then exteriorly clamping such plate solidly into substantially cylindrical form, rolling projecting ribs near the ends of the formed up cylinder, opening up the cylinder to permit entrance of a similar rib on a previously formed up plate, then closing down the last formed rib upon the previously formed one, and finally securing solidly together the meeting edges of the last formed plate so as to make the interlock permanent.

1,866,610. MACHINE FOR FABRICATING TUBULAR METAL STRUCTURES. JAMES LUCIAN ADAMS, Jr., East Chicago, Ind., assignor of nine-tenths to Graver Corporation, East Chicago, Ind., a Corporation of Illinois. Filed Jan. 3, 1928. Serial No. 244,336. 8 Claims. (Cl. 113—33.)

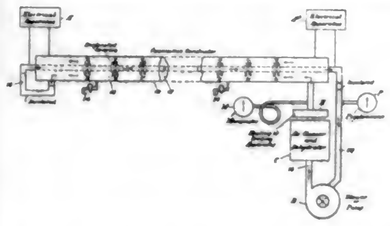


1. In a fabricating machine, shaping means adapted to produce a conical shape having a greater diameter at one end than the other, retractable attaching means co-operating therewith for holding the material to be shaped adjacent the shaping means, and other means cooperating with the shaping means for securing the adjacent end portions of a formed plate.

1,866,611. CONCENTRIC CONDUCTING SYSTEM. HERMAN A. AFFEL, Ridgewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 23, 1929. Serial No. 365,525. 4 Claims. (Cl. 173—265.)

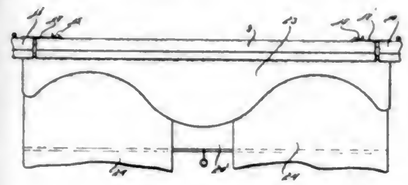
1. In a concentric conductor system comprising concentrically arranged tubular conductors for electricity, a gas conduit connecting one end of the inner tubular con-

ductor to the space between the conductors for the flow of gas between said inner conductor and said space, and gas pumping means having an input connection and an output connection, one of said connections being associated with the other end of said inner tubular conductor



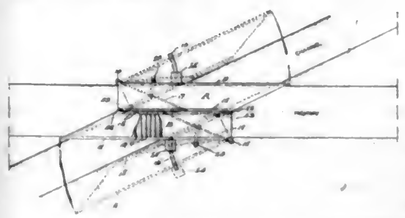
and the other connection being connected to the space between said conductors, whereby a continuous flow of gas is maintained through the space between said conductors and through the inside of the inner conductor in tandem.

1,866,612. CURTAIN ROD CORNICE. JOHN AJEMIAN, Detroit, Mich. Filed June 15, 1929, Serial No. 371,084. Renewed Nov. 26, 1931. 2 Claims. (Cl. 156—13.)



1. A curtain rod cornice of the class described: a front plate having on its rear face a pair of parallel longitudinally extending grooves formed therein for the reception of fabric supported thereon; a filler for engaging in each of said grooves and locking the fabric in position; and common means for locking each of said fillers in locking position.

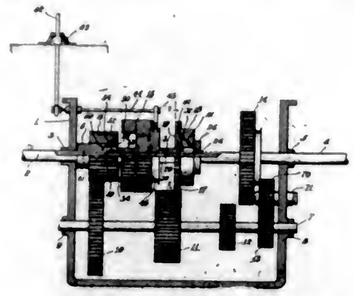
1,866,613. BRIDGE. FREDERICK AURYANSEN, Jamaica, N. Y. Filed June 6, 1929. Serial No. 368,800. 11 Claims. (Cl. 14—32.)



1. A swing bridge formed in two longitudinal segments and pivots at diagonally opposite corners of the segments about which the respective segments swing.

11. A skew swing bridge comprising a longitudinal segment having one end approximately at right angles to its length, crossing a channel and being pivoted at the corner of said end which is the more distant from the channel, said segment being adapted to cooperate with one or more similar segments to form a bridge wider than said segment.

1,866,614. VARIABLE TRANSMISSION MECHANISM. WALTER P. ALBERT, East Orange, N. J., assignor to Harold O. Van Antwerp, Grand Rapids, Mich. Filed Apr. 9, 1924. Serial No. 705,263. 28 Claims. (Cl. 74—58.)



1. In a variable speed mechanism, driving and driven members, means including gearing for connecting said members to rotate at various speed ratios, means for shifting from one gearing to another, and means for resisting the shifting operation while said members are rotating at another than the desired ratio, the resistance of said means to shifting increasing with an increase in the difference between the existing and desired speed ratios.

1,866,615. GOLF CLUB. WELCOME LOUIS BECKLEY, Santa Monica, Calif., assignor to The Beckley-Ralston Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 9, 1929. Serial No. 391,186. 3 Claims. (Cl. 273—77.)

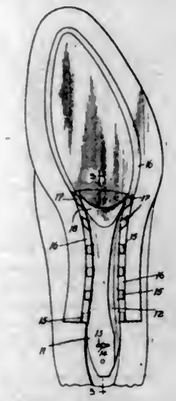


1. A metal golf club having a head with its face inclined relatively to the shaft, upper and lower rear surfaces extending angularly to each other and to the face, the lower of said rear surfaces merging with said face at its lower margin and forming a sharp edge, and the other rear surface extending from the first mentioned rear surface toward the upper margin of the face and merging with a narrow top of the head, the greatest weight of the head being behind the normal point of impact between ball and club face, and disposed in a plane paralleling a subjacent surface when the club is held in playing position relative to said surface.

1,866,616. SHOE CONSTRUCTION. CHARLES H. BROWN and CHARLES B. BROWN, Flushing, N. Y. Filed Jan. 15, 1931. Serial No. 508,906. 6 Claims. (Cl. 36—76.)

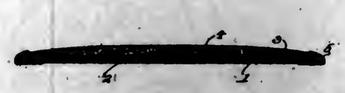
1. A shoe construction having an insole and upper secured thereto by inseams extending under the shank-arch

of the shoe in spaced relation, a shank iron comprising a plurality of pivotally connected members adapted to rest upon said insole between said inseams and to be ex-



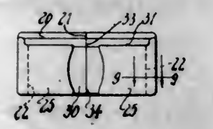
panded laterally to rest against the edges of said inseams, and means integral with said members for extending over said inseams to support the same in service.

1,866,617. FILLER PAD. ROBERT W. BURROWS, Petaluma, Calif. Filed Mar. 19, 1929. Serial No. 348,182. 3 Claims. (Cl. 154—54.)



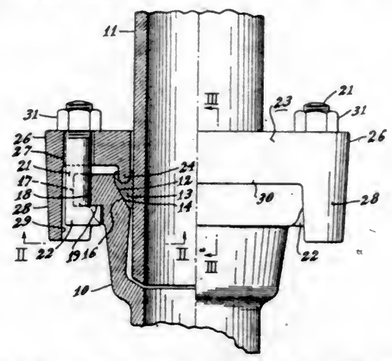
1. A filler pad comprising a back member of flexible relatively heavy paper stock material, a layer of intertwined excelsior filler resting on the face thereof and forming a base, tissue strips arranged in layer formation and resting on said excelsior base and providing a yieldable filler surface, and a tissue covering extending over said tissue filler and secured to said back.

1,866,618. FLEXIBLE POCKET RECEPTACLE. WARNER R. BUXTON, Longmeadow, Mass. Filed July 16, 1928. Serial No. 293,056. 17 Claims. (Cl. 150—38.)



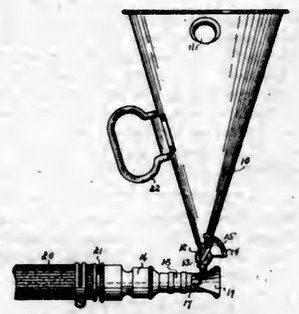
1. A bill fold, comprising, an outer wall, an inner wall consisting of two longitudinally spaced end sections attached along one end and one side edge to the outer wall and an intermediate section unattached to either the outer wall or the inner wall end sections and bridging the space between and partially overlapping the inner wall end sections, and a member connected to each inner wall end section along the opposite side edge thereof and extending between such section and the outer wall toward and adjacent to the first named side edge, the ends of said intermediate section being slidably received between said end sections and members.

1,866,619. PIPE JOINT. HARRY Y. CARSON, Birmingham, Ala. Filed Oct. 14, 1930. Serial No. 488,681. 2 Claims. (Cl. 285—135.)



1. In a joint for pipe having bell and spigot ends, a gland, a packing ring between the bell and spigot in the joint, a flange on the inner edge of the gland to engage and compress said packing ring into the joint, said bell having projecting portions adapted to be engaged by bolts, and bolts assembled with said gland and having angled ends adapted to engage under said projections on the bell, said gland having an outer flange which fits closely about the bell and about the body portion of the bolt under tension to form joint spaces with the bell close enough to be sealed by rust tubercles so as to enclose and protect said body portion of the bolt and said packing ring.

1,866,620. SPRAYER. MOLLIE D. CHESNUT, Des Moines, Iowa. Filed Feb. 28, 1930. Serial No. 432,236. 2 Claims. (Cl. 299—84.)

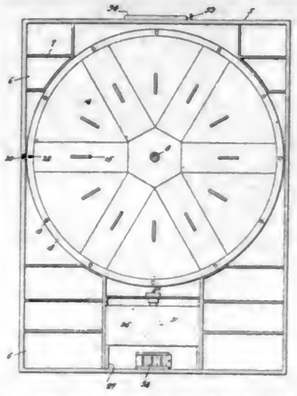


1. In a device of the class described, a hollow member having one of its ends opened and flared and its other end designed to be in communication with a source of water under pressure, a manually adjustable spraying mechanism inside said hollow member and some distance from the marginal edge of said flared end designed to be supplied with the said source of water under pressure, and a reservoir communicating with the inside of said flared end at a point forward of said spraying mechanism.

1,866,621. HUMIDOR. FRANCIS MICHAEL COONEY and GEORGE THOMAS DARRAGH, Brandon, Manitoba, Canada. Filed Jan. 20, 1931. Serial No. 510,046. 5 Claims. (Cl. 312—31.)

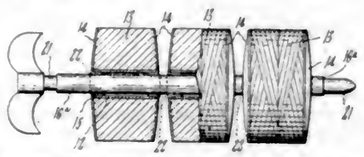
1. A humidor comprising in combination a casing the walls of which are opaque, humidifying means arranged within the casing, a drum rotatably mounted in the casing in operative position to said humidifying device, and hav-

ing a perforated peripheral wall and a circular series of perforated containers arranged within the drum and adapted to be selectively positioned opposite an aperture in one



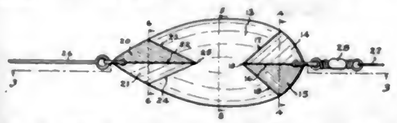
wall of the casing, means exteriorly of the casing for rotating the drum, and including a dial having an axis common to the axis of said drum.

1,866,622. BOBBIN AND METHOD OF MAKING THE SAME. ROBERT N. CORTHELL, Auburn, Me. Filed Oct. 12, 1931. Serial No. 568,425. 3 Claim. (Cl. 112—251.)



1. A filed reinforced bobbin, comprising a tubular core, a thread mass wound thereon, discoidal heads covering and conformed to the ends of the thread mass and having central openings surrounded by inwardly projecting tubular flanges inserted in the end portions of the core, and a reinforcing inner tube inserted in the flanges and core and adhesively united to the flanges and to the portion of the core between the flanges, said inner tube constituting the inner member of the hub portion of the bobbin.

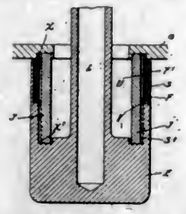
1,866,623. TROLLING SPOON. HARRY L. CROW, Everett, Wash., assignor of one-half to Edgar E. Cushing, Seattle, Wash. Filed Mar. 10, 1930. Serial No. 434,494. 5 Claims. (Cl. 43—45.)



2. In a trolling spoon, an oval body having a central portion of shallow spoon shaped cross section, a portion of concave cross section at the front end of said body forming a forwardly expanding trough on the convex side of the body, and another portion of shallow concave cross section at the rear end of said body forming a rearwardly expanding trough on the concave side of said body.

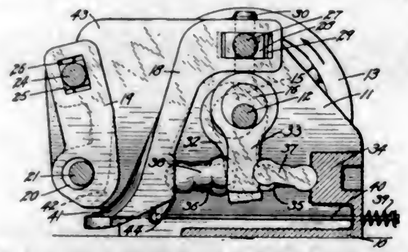
1,866,624. VACUUM DISCHARGE VESSEL. WALTER DALLENBACH, Zurich, Switzerland. Filed Feb. 24, 1927, Serial No. 170,505, and in Switzerland Mar. 4, 1926. 1 Claim. (Cl. 250—27.5.)

In a vacuum discharge vessel of metal for containing a rarefied fluid, the combination of an electrode, an insulator, sealing said electrode in said vessel and slightly spaced conducting parts covering a portion of the surface of said insulator within the vessel, one of said parts being electrically connected with said vessel and another of said parts with said electrode, said conducting parts forming



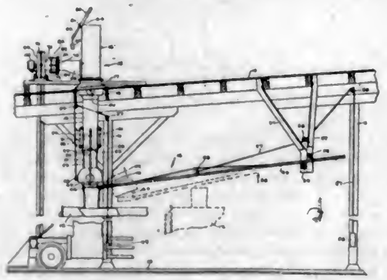
a narrow gap in which the drop in potential between said vessel and said electrode is to be concentrated, said gap being located from the points of contact of said insulator and conducting parts in the vacuum at a distance forming a multiple of its width, the latter being small compared with the path traveled by the electrons in the rarefied fluid.

1,866,625. ROCK CRUSHER. ARTHUR C. DAMAN and LELAND H. LOGUE, Denver, Colo., assignors to Denver Equipment Co., Denver, Colo., a Corporation of Colorado. Filed Apr. 21, 1928. Serial No. 271,811. 9 Claims. (Cl. 83—53.)



1. Crushing apparatus comprising a stationary jaw; a movable jaw; a hinge for said movable jaw, said hinge being arranged to allow said jaw to rotate in both a vertical and horizontal plane; and means for imparting a rocking movement to said movable jaw as it approaches said stationary jaw.

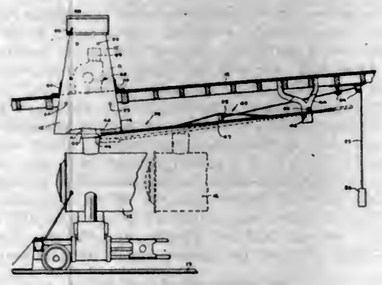
1,866,626. SMOKE DISPOSAL AND DRAFT INDUCING APPARATUS FOR LOCOMOTIVES. HARRY G. DAY and WILLIAM E. SKINNER, Minneapolis, Minn. Filed Dec. 17, 1931. Serial No. 581,688. 20 Claims. (Cl. 104—52.)



1. In an apparatus of the character described, an uptake conduit including a movable lower pipe, a member pivotally mounted upon a lower portion of said lower pipe

and adapted to be associated with the smoke stack of a locomotive, and means adapted to be actuated responsively to the approach of a locomotive for assembling said member and said smoke stack with each other.

1,866,627. SMOKE DISPOSAL AND DRAFT INDUCING APPARATUS FOR LOCOMOTIVES. HARRY G. DAY and WILLIAM E. SKINNER, Minneapolis, Minn. Filed Dec. 17, 1931. Serial No. 581,689. 20 Claims. (Cl. 104—52.)



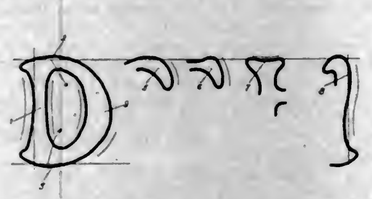
1. In an apparatus of the character described, an uptake conduit including a longitudinally slidable and vertically movable lower member adapted to be associated with the smoke stack of a locomotive, and means adapted to be actuated responsively to the approach of a locomotive for assembling said lower member and said smoke stack with each other.

1,866,628. INNER TUBE FOR PNEUMATIC TIRES AND APPARATUS FOR THE MANUFACTURE THEREOF. HAROLD A. DENMIRE, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 31, 1926. Serial No. 126,225. 4 Claims. (Cl. 152—13.)



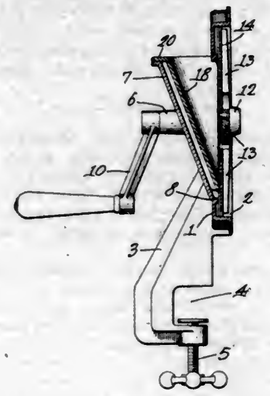
1. An inner tube for use in pneumatic tires having a surface containing a multiplicity of minute pockets adapted to carry a larger quantity of talc therein than would be carried by the smooth surface of the tube.

1,866,629. ALPHABET TYPE. AUGUST A. DIETZ, Richmond, Va. Filed Mar. 18, 1929. Serial No. 346,630. 4 Claims. (Cl. 101—399.)



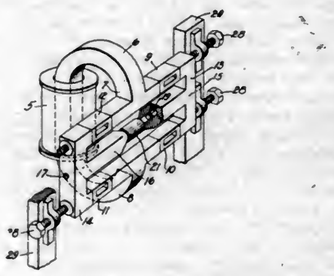
1. A font of alphabet type characters each characterized by entirely curved regular lines.

1,866,630. FRUIT AND VEGETABLE CUTTER. CHARLES E. DONAHOO, East Moline, Ill. Filed May 1, 1929. Serial No. 359,644. 1 Claim. (Cl. 146—114.)



A device of the class described including a recessed body having a marginal outlet, a hopper inclined relative to the body and opening laterally thereinto throughout the height of the hopper between the center of the body and the margin thereof, a spider mounted for rotation in the recessed body, a disk secured to the side of the spider and having slots extending thereinto from the margin, the advancing edges of these slots contituting cutting edge each arranged parallel with but in advance of one of the arms of the spider, the arms of the spider being secured to the disk to constitute radial reinforcements therefor, a lining removably mounted in the hopper, spacing ribs thereon, the free edge of the lining being positioned for wiping engagement by the cutting edges thereby to constitute renewable sharpening means, a sharpening rib extending from the body and around the open inner side of the hopper for wiping engagement by the cutting edges of the disk during the rotation of the disk to sharpen said edges, and means connected to the spider for rotating the disk.

1,866,631. MAGNETO-OPTICAL DEVICE. LOUIS A. DORFF, Bloomfield, N. J., and GEORGE SANDALLS, Jr., North Tarrytown, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed June 28, 1928. Serial No. 288,932. 22 Claims. (Cl. 88—61.)



1. In a magneto-optical device, a magnetic bridge having four bridge arms arranged in series to form a closed magnetic circuit, means to produce a magneto-motive force between one pair of opposite corners of said bridge to cause flux to pass from one corner to the other in parallel paths,

means to change the reluctance of at least one of said arms to cause a change in the magneto-motive force between the second pair of opposite corners of said bridge, a radiant energy path, and radiant energy controlling means in said radiant energy path controlled by the magneto-motive force between said second pair of opposite corners whereby a beam of radiant energy through said radiant energy path is controlled by the magneto-motive force between said second pair of opposite corners of said bridge.

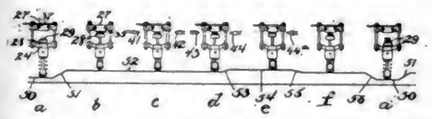
1,866,632. MANUFACTURE OF AROMATIC ACIDS. HUGH ALBERT EDWARD DRESCHER, DAVID ALEXANDER WHITE FAIRWEATHER, and JOHN THOMAS, Grangemouth, Scotland, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Filed July 6, 1929, Serial No. 376,487, and in Great Britain Aug. 4, 1928. 4 Claims. (Cl. 260—108.)

1. The process which consists in heating together the calcium salt of 2-α-naphthoyl-benzoic acid and calcium hydroxide for a shorter time than is necessary to produce phenyl naphthyl ketone and until the mass becomes liquid, raising the temperature to about 300 to 350° C., cooling the mass, treating it with a solution of an alkaline carbonate separating the calcium carbonate thus formed, diluting the liquor, raising it to the boil and adding hydrochloric acid for the precipitation of the naphthoic acid.

1,866,633. METHOD OF TREATMENT OF THE GLANDS OF THE PLAGIOSTOMI. ALFRED EHRENREICH, London, England. Filed Jan. 24, 1928, Serial No. 249,207, and in Belgium Feb. 3, 1927. 2 Claims. (Cl. 149—3.)

1. A method of treatment of the glands of the plagiostomi of the shark type for extracting enzymes, and ferments, comprising first the elimination of grease from the glands, and then the extraction of the active matter from the glands.

1,866,634. BEAD MACHINE. CHARLES EISLER, Newark, N. J. Filed Jan. 10, 1928. Serial No. 245,676. 26 Claims. (Cl. 49—2.)



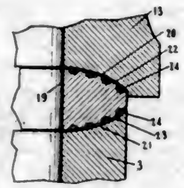
26. In a glass working machine, adapted for embedding metal parts in glass parts, in combination, a rotatable carrier member; a plurality of workholders on said carrier member, each workholder being equally spaced from the center of rotation of said carrier member and being equally spaced each from the other circumferentially about said center of rotation, a circumferential cam member concentric with said rotatable carrier; each of said workholders comprising means for holding a glass part and means for holding a metal part, said glass part holding means being movable toward and from said metal part holding means; heating means adjacent said cam in a position into which said workholders can be moved in operative relation thereto by movement with said rotatable carrier; means connected with said glass part holding means in operative relation to said cam, adapted upon movement of its workholder in a given direction with said rotatable carrier toward said heating means to move said glass holding means toward said metal part holding means and upon movement in the same direction and away from said heating means to move said glass part holding means away from said metal part holding means; and spring means, at said position, adapted to engage said glass part moving means to hold a glass part carried by said glass part holder under pressure against a metal part carried by said metal part holder.

1,866,635. CLOSURE FOR CONTAINERS OR RECEPTACLES FOR MATERIALS IN A LIQUID OR PASTE-LIKE STATE. CARLOS APARICIO Y ELIZALDE, Engracia, Madrid, Spain. Filed Nov. 4, 1930, Serial No. 493,305, and in Spain Mar. 4, 1930. 2 Claims. (Cl. 221—60.)



1. A device for closing receptacles containing fluid or plastic material and having an exit opening at one end thereof, which comprises a hollow cap fixedly mounted on said receptacle over said exit opening therein, an opening in the side wall of said cap, and a unitary rubber valve member having compressible side walls and a bottom normally pressing downwardly against said exit opening, said valve member being compressible within said cap to permit the flow of material through said exit opening from said receptacle upon the application of pressure to the said material therewithin, the inherent elasticity of said valve member being sufficient to automatically re-position it against said exit opening and thereby close the same upon relieving the pressure upon the said material.

1,866,636. RETURN BEND. FRED C. FANTZ, Webster Groves, Mo. Filed Nov. 7, 1929. Serial No. 405,295. 1 Claim. (Cl. 285—20.)



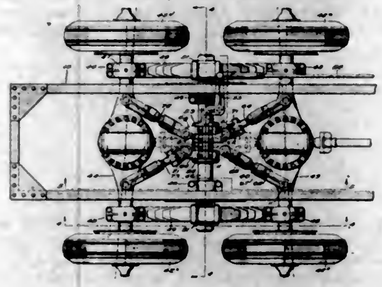
In a refinery apparatus, a return bend, a housing therefor, a pair of tubes communicating with said bend loosely mounted in said housing, means detachably mounted in said housing adapted to cause said housing and tubes to interlock, each face of said return bend being formed with an inwardly extending taper, there being a corresponding inwardly extending taper on the end of each of said tubes, bushings intermediate said taper portions the contacting faces of said bushings being convex, there being a plurality of concentric grooves formed in the faces of said bushings, said grooves being filled with metal softer than that of which said bushings are formed.

1,866,637. ROAD VEHICLE. ROLLIE B. FAGEOL, Oakland, Calif. Filed July 17, 1922. Serial No. 575,598. 32 Claims. (Cl. 180—22.)

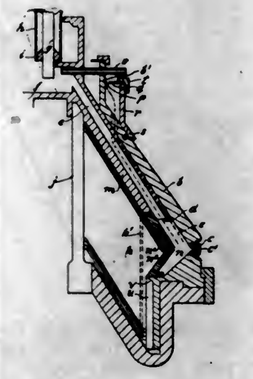
1. A road vehicle comprising a frame, a pair of axles arranged adjacent the front end of the frame, steering wheels on said axles, a pair of driving axles arranged adjacent the rear end of the frame, driving wheels on said axles, hangers universally mounted on said rear axles and depending therefrom, springs pivotally connected at their ends to said hangers and pivotally connected at their centers to said vehicle frame and means connected to the steering gear of the vehicle for varying the angular position of the rear axles with respect to the longitudinal axis of the vehicle.

29. In a vehicle suspension of the character described, a main frame; a pair of interspaced axles disposed below the frame; springs interposed between the ends of the axles and the frame; pivotal connections between the springs and the axles; a pair of wheels on each

axle; means whereby the axles may be moved towards each other on one side of the frame and away from each other on the other side of the frame; said means comprising a stationary member secured transversely of the frame; a crosshead member slidably mounted thereon; a pair of radius arms interposed between each axle and the crosshead member and connected with the respective axles and the crosshead member; and means for importing a sliding movement to the crosshead member transversely of the frame.

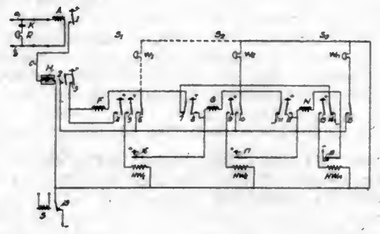


1,866,638. CENTRIFUGAL SEPARATOR. HAROLD WILLIAM FAWCETT, Harrogate, England. Filed Jan. 3, 1930, Serial No. 418,300, and in Great Britain Jan. 3, 1929. 5 Claims. (Cl. 233—20.)



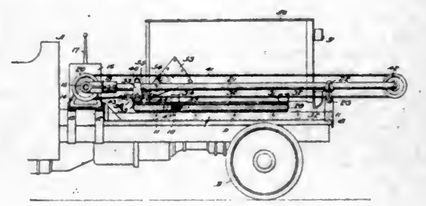
1. In a centrifugal separator for separating solids from liquids, a rotary bowl having a peripheral discharge aperture for separated solids, inlet means to said bowl for useful liquid to be purified, means for supplying separately from said useful liquid an auxiliary liquid inside said bowl to the vicinity of said discharge aperture, means in the vicinity of said discharge aperture, establishing communication between the useful and auxiliary liquids, said communication-establishing means having an area which is a multiple of that of said discharge aperture and adjustable outflow means on said bowl additional to said discharge aperture, for excess auxiliary liquid supplied, said outflow means being adjusted to maintain a substantially stationary interface between said auxiliary liquid and said useful liquid in said communication-establishing means.

1,866,639. INTERCOMMUNICATION TELEPHONE SYSTEM. WALTER FEIND, Berlin-Siemensstadt, Germany, assignor to Siemens & Halske Aktiengesellschaft, Berlin-Siemensstadt, Germany. Filed Dec. 18, 1929, Serial No. 415,040, and in Germany Dec. 22, 1928. 10 Claims. (Cl. 179—42.)



1. In a telephone system, a local exchange, a main station and a plurality of extension stations in said local exchange, a main exchange having a trunk line extending to the main station for calling the same, a call signal at said main station and each of said extension stations, means responsive to a call from said main exchange for operating the call signal at said main station, means at said main and extension stations for automatically operating the call signals at each of said stations in succession until the call from said main exchange is answered, and means for repeating the successive operation of the call signals in case the call is not answered.

1,866,640. SHIFTABLE BODY TRUCK. ROBERT A. FONTAINE, Martinsville, Va. Filed Sept. 25, 1929. Serial No. 395,170. 20 Claims. (Cl. 214—65.)



1. In a truck, the combination of main guide bars, a cradle movable longitudinally therealong, a hoisting mechanism including booms pivoted at the forward portion of the truck extending rearwardly, guide means on the cradle engaging and travelling along the booms, and a removable body normally seated upon the cradle and having means detachably connected with a portion of the guide means.

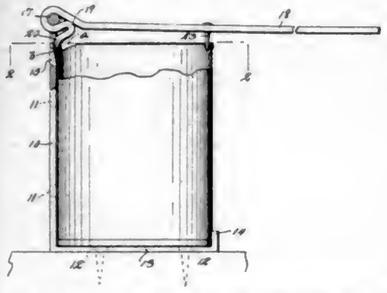
1,866,641. CIGAR AND CIGARETTE HOLDER. ALBERT L. GAUTHIER, Jr., and EDGAR H. MATTOCKS, Chicago, Ill., assignors to The Norlipp Company of Chicago, a Corporation of Illinois. Filed Aug. 16, 1928. Serial No. 299,934. 2 Claims. (Cl. 131—51.)



1. A cigarette holder comprising a mouth-piece having a smoke passage therethrough and a socket at its outer end for receiving the cigarette, an outer casing member

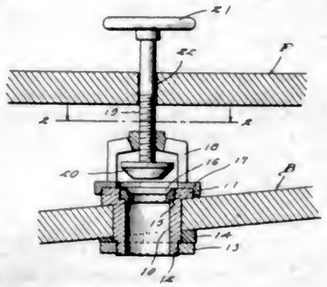
having screw-threaded engagement with said mouthpiece and being imperforate for a considerable distance beyond the end of the mouthpiece, the outer part of said casing having a series of openings spaced longitudinally and circumferentially, a removable cap attachable to the outer end of said casing, said cap having a lighting opening therein and being equipped with an internally positioned foraminated member covering said opening, and a removable foraminated member positioned within said casing and adapted to contain the cigarette, said cap being formed to receive the outer end of said removable foraminated member and to hold the latter centralized within the casing and spaced from the walls of the latter.

1,866,642. CAN TOP PUNCHING IMPLEMENT. BERT GEER, Maryhill, Wash. Filed Aug. 20, 1931. Serial No. 558,374. 4 Claims. (Cl. 164—120.)



1. An implement of the character described, comprising a bracket bent at right angles to form a can supporting seat and a portion extending at right angles to the seat, said portion at its end remote from the seat being bifurcated and having a transverse pintle, a lever pivotally mounted on the pintle to swing toward or away from the seat, the lever closely adjacent the pintle being formed with a blade extending toward the seat, the blade being triangular and having its side edges beveled in a direction inward and away from the extremity of the lever, said blade being so positioned upon the lever that it enters the junction between the top and sides of a can whereby as the lever is swung downward, the blade will be swung downward and outward to punch a hole in the can lid and press out the side of the can to form a spout.

1,866,643. BOAT DRAIN VALVE. EVERETT B. GREAR, Sharondale, Ky., assignor of one-half to Calvin B. Stallard, Sharondale, Ky. Filed Jan. 14, 1932. Serial No. 586,562. 2 Claims. (Cl. 114—196.)



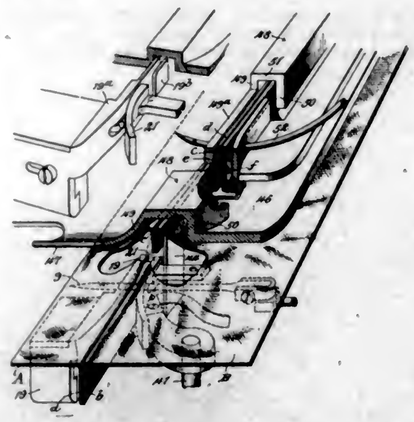
1. A draining means as set forth, comprising a tubular member having a flanged upper end portion, said flange being of tapering construction, a nut threadedly engaging the opposite end of the tubular member for securing the member in an opening provided in the bottom of a boat, a gasket interposed between the nut and the bottom of the boat, a valve seat removably mounted in the tubular member, a cage removably mounted on the member and extending upwardly therefrom, and a valve member supported by said cage for movement into open or closed position.

1,866,644. HOSE FITTING FOR AIR BRAKES. BENJAMIN B. GREER, New Canaan, Conn. Filed Jan. 30, 1931. Serial No. 512,464. 6 Claims. (Cl. 285—62.)



1. A hose nipple having a circumferential bead, and a lip or extension beyond said bead, the lip and bead being so coordinated that the lip embraces less than the entire circumference of the nipple, and the bead presents a rounded surface merging into the end of the nipple in that portion not embraced by the lip.

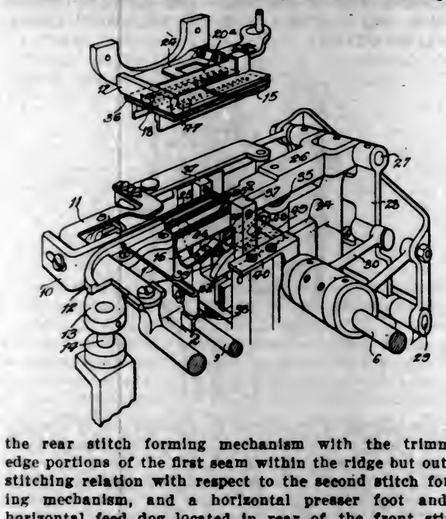
1,866,645. SEWING MACHINE. HORACE F. GRUMAN, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, Kittery, Me., a Corporation of Maine. Filed Dec. 9, 1927. Serial No. 238,793. 46 Claims. (Cl. 112—120.)



1. In a sewing machine for forming French seams, the combination with complete front and rear stitch forming mechanisms, each mechanism including a reciprocatory needle and a cooperating loop taker, one of said complete mechanisms operating entirely below the general plane of the fabrics to be seamed and the other complete mechanism operating entirely above the general plane of said fabrics, and work presenting mechanisms for successively presenting vertical edge portions of fabrics to said stitch forming mechanisms.

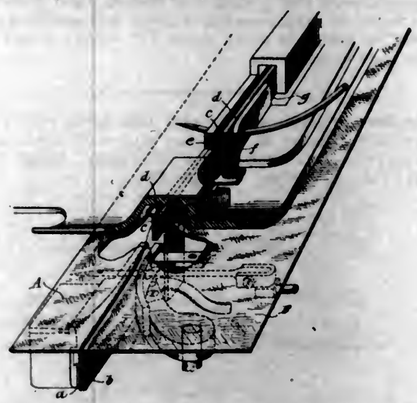
1,866,646. SEWING MACHINE. HORACE F. GRUMAN, St. Louis, Mo., assignor to Lewis Invisible-Stitch Machine Company, Kittery, Me., a Corporation of Maine. Filed May 3, 1928. Serial No. 274,884. 22 Claims. (Cl. 112—120.)

1. In a sewing machine for forming French seams, the combination with front and rear stitch forming mechanisms, one of said mechanisms operating entirely below the general plane of the fabrics to be seamed and the other operating entirely above the general plane of said fabrics, means for directing vertical edge portions of fabrics into position for seaming by the front stitch forming mechanism, a trimming mechanism operating in front of the rear stitch forming mechanism for trimming the edge portions of the seamed fabrics, means located in rear of the trimming mechanism for projecting a ridge of the fabrics including the trimmed seam into position for seaming by



the rear stitch forming mechanism with the trimmed edge portions of the first seam within the ridge but out of stitching relation with respect to the second stitch forming mechanism, and a horizontal presser foot and a horizontal feed dog located in rear of the front stitch forming mechanism and respectively disposed above and below the seamed fabrics to feed the same past the projecting means and the rear stitch forming mechanism.

1,866,647. METHOD OF MAKING FRENCH SEAMS. HORACE F. GRUMAN, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo., a Corporation of Maine. Filed Dec. 22, 1930. Serial No. 504,197. 4 Claims. (Cl. 112—262.)



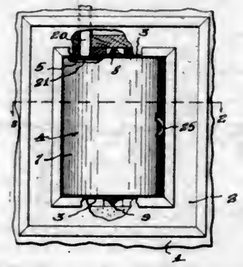
1. The method of French seaming body fabrics, consisting in turning the adjacent marginal portions out of the general plane of said fabrics, then seaming said marginal portions while thus turned by a line of stitches, then forming a ridge in the seamed fabrics along the line of and including the seam and with the marginal portions of the seam disposed within the ridge, and then seaming the ridged portion of the fabrics by a line of stitches in spaced relation to the line of stitches of the first seam while the fabrics remain in the same general plane.

1,866,648. WORKING UP OF CHROMIUM ORES. ERNST HACKHOFER, Krefeld-Bockum, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 15, 1929, Serial No. 378,589, and in Germany July 14, 1928. 2 Claims. (Cl. 23—56.)

1. Process which comprises heating chromium ore in an oxidizing atmosphere to a temperature exceeding 800° C. in the presence of a small quantity of a solid oxidizing material prior to subjecting it to decomposition in accordance with the known processes.

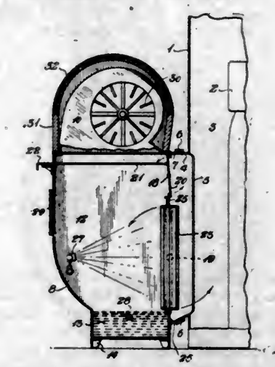
2. Process which comprises heating chromium ore in an oxidizing atmosphere to a temperature exceeding 800° C. in the presence of 2 percent of sodium nitrate prior to subjecting it to decomposition in accordance with the known processes.

1,866,649. GARBAGE CAN CABINET. CLARENCE F. HALE, Syracuse, N. Y. Filed Mar. 7, 1931. Serial No. 520,958. 11 Claims. (Cl. 220—18.)



1. In a cabinet of the class described, the combination of a frame designed to be mounted in the wall of a building, of a carrier cylindrical in general form and having upper and lower heads, and a part cylindrical wall between the heads and normally arranged to form a closure on one side of the frame, the heads having axles journalled in the frame, whereby the carrier is rotatable to bring the open side opposite the other side of the wall, a part cylindrical door mounted on the frame and forming a closure for the frame on said other side of the wall, the upright members of the frame being provided with upright stops, and the opposite edges of the part cylindrical wall of the carrier being provided with outwardly extending lips for coacting with the stops.

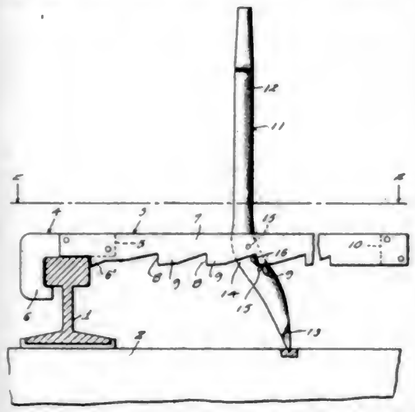
1,866,650. AIR TREATING APPARATUS. EARL VERNON HILL, Chicago, Ill. Filed Aug. 6, 1931. Serial No. 555,584. 20 Claims. (Cl. 183—23.)



1. In combination with an air heating chamber having an outer casing provided with an opening at the bottom thereof, a housing defining an air washing chamber hav-

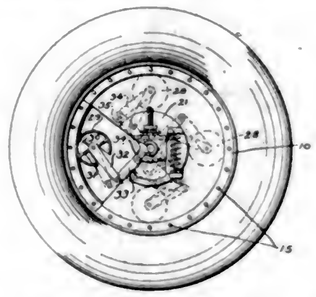
ing an outlet at the bottom thereof communicating with said heating chamber casing opening, means mounted in the washing chamber for spraying the air, a blower above the washing chamber for directing air at right angles into the spray, and eliminator means mounted in the path of the water spray for separating dust and water from the air.

1,866,651. RATCHET PINCH BAR. EMIL HULTGREN and HAROLD MIKKELSON, Warwick, N. Dak. Filed Sept. 4, 1929. Serial No. 390,343. 8 Claims. (Cl. 254—43.)



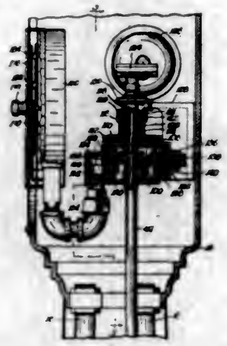
1. A ratchet pinch bar comprising an elongated body formed of a pair of beams arranged in spaced parallel relation, ratchet teeth formed along the lower edge of each beam, a head connecting said beam at one end and designed for engagement over a railway track rail, the other end of the body, when in use, being unsupported, a pinch bar having a handle terminating at one end in a head, said head being formed to provide a tie penetrating point offset a substantial distance from the line of the handle and further being adapted to be positioned between said beams, and a fulcrum pin carried by and extending through the head of the fulcrum bar adapted to engage certain of said teeth to provide a fulcrum point for the bar.

1,866,652. RESILIENT WHEEL. MAX ISAACSON, Dayton, FLAVIUS E. LOUDY, Akron, and FREDERICK R. BUSSDICKER, Dayton, Ohio. Filed Feb. 11, 1931. Serial No. 515,074. 23 Claims. (Cl. 244—2.)



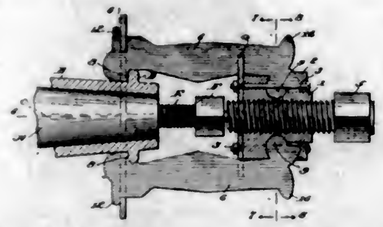
1. In a vehicle wheel assembly, dampening fluid means carried by said wheel assembly, means adapted to be movable relative to said wheel and independent of the rotation thereof, and means interconnecting said dampening means and said movable means for effecting a dampening action of said relative movement.

1,866,653. AUTOMATIC INFLATING DEVICE. ROBERT J. JAUCH, Fort Wayne, Ind., assignor to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Aug. 1, 1929. Serial No. 382,755. 9 Claims. (Cl. 221—73.5.)



1. In dispensing apparatus, the combination of a source of fluid supply, a discharge conduit having means thereon whereby connection may be made with a receptacle to be maintained at a predetermined pressure, means cooperating with said conduit and said source for regulating the flow of fluid from said conduit and the pressure of fluid in said receptacle, said means including a prime mover, a valve operated by said prime mover for permitting intermittent supply of fluid from said source, a gauge for determining pressures to be maintained in said receptacle, said gauge having selecting means for selecting a pressure to be maintained in said container, a valve operated by said prime mover for permitting intermittent supply of fluid to said gauge, a normally closed switch for controlling operation of said prime mover, a relay connected thereto, and means on said gauge for operating said relay when the predetermined pressure is attained in said receptacle whereby said switch is operated to stop said prime mover for ceasing supply of fluid to said container.

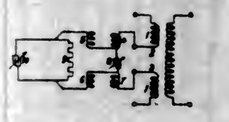
1,866,654. WHEEL, GEAR, AND THE LIKE PULLING DEVICE. HARRY W. KULP and MARTIN C. DELLINGER, Lancaster, Pa. Filed June 29, 1929. Serial No. 374,832. 12 Claims. (Cl. 29—85.)



1. A pulling device comprising a centrally bored internally screw-threaded block, a thrust-screw working in said block, guide-means operatively rigid with said block and formed with a plurality of radially extending slots disposed in spaced relation in a peripheral direction, and a collar adjustable with relation to said block, said collar and block having opposed annularly extending faces diverging from each other in a radially inward

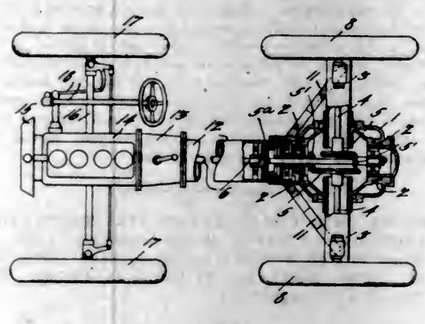
direction, in combination with a plurality of jaw-members respectively extending through the respective slots of said guide means and formed with portions extending in a radial plane with relation to said bore and having edge faces in sliding engagement with the respective opposing faces of, and held between, said collar and block.

1,866,655. FILTER FOR PREVENTING DISTORTION. MYRON LEBEDINSKY, Paris, France, assignor to Societe des Telephones Grammont, Paris, France, a Company of France. Filed Mar. 16, 1928, Serial No. 262,260, and in France Mar. 26, 1927. 2 Claims. (Cl. 178—44.)



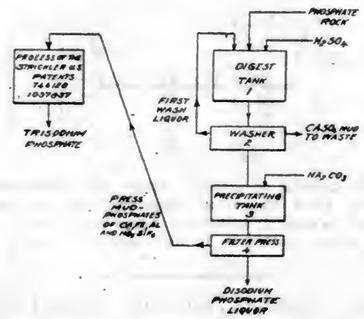
1. A filter adapted to prevent distortion in telephonic circuits inserted in series in said circuits and comprising at least one four pole network constituted by four inductance coils wound on a single magnetic core, means to connect in series the first input pole, the two first of said inductance coils and the first output pole in such a manner that the magnetic flux generated by one of said coils be in opposite direction with the magnetic flux generated by the other, means to connect in series the second input pole, the two remaining coils and the second output pole in such a manner that the magnetic flux generated by one of said coils be in opposite direction with the flux generated by the other, an adjustable condenser disposed between the connection point of the two first coils and the connection point of the remaining ones, means to insert the input poles in the telephone circuit, an adjustable ohmic resistance without self induction and an adjustable condenser disposed in series and connecting to each other the output poles of the network.

1,866,656. MOTOR VEHICLE DRIVING DEVICE. HANS LEDWINKA, Koprivnice, Czechoslovakia. Filed Feb. 10, 1930, Serial No. 427,342, and in Germany Jan. 21, 1929. 2 Claims. (Cl. 180—73.)



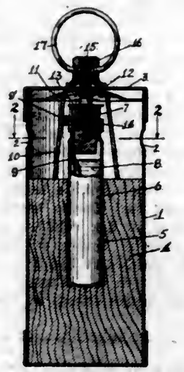
1. In a driving arrangement for a motor vehicle in combination a longitudinal shaft driven by a motor and supported by the chassis frame, an axle shaft arranged transversely to and extending only on one side of said longitudinal shaft, means for transmitting the rotation of said longitudinal shaft to said axle shaft, a road wheel, a member arranged between said longitudinal shaft and said road wheel for supporting said road wheel and for supporting said axle shaft below the axis of said road wheel, means for transmitting the rotation of said axle shaft to said road wheel and means for connecting the inner free end of said supporting member to said chassis frame so as to enable its outer end to oscillate up and down.

1,866,657. MANUFACTURE OF ALKALI METAL PHOSPHATE. CHARLES L. LEVERMORE, Rockville Centre, Long Island, N. Y., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed May 7, 1928. Serial No. 275,792. 17 Claims. (Cl. 23—107.)



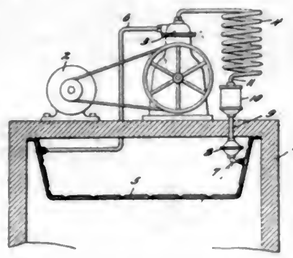
15. In the production of alkali phosphate from crude fluorine-containing phosphoric acid, the improvement which comprises partially neutralizing the phosphoric acid liquor by the addition of alkali to a condition of weak acidity to phenolphthalein to precipitate the insoluble phosphate and fluorine compounds, and separating the insoluble compounds thereby obtained from the phosphate liquor.

1,866,658. VAPORIZING DEVICE. ABRAHAM J. LICHTIG, Oakland, Calif. Filed Nov. 10, 1930. Serial No. 494,585. 4 Claims. (Cl. 299—23.)



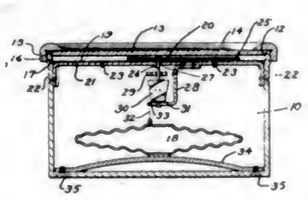
4. A vaporizing device comprising a vial for containing a volatile substance; a holder for said vial; a wick dipping into the volatile substance and extending through the mouth of the vial; a plug in the neck of the vial adapted both to seal said neck and to compress said wick to prevent its capillary function; and means carried by the holder for withdrawing said plug to relieve its pressure upon the wick.

1,866,659. METHOD AND MEANS FOR PURIFYING THE REFRIGERANT IN REFRIGERATING SYSTEMS. THOMAS J. LITLE, JR., Detroit, Mich., assignor, by mesne assignments, to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Aug. 21, 1926. Serial No. 130,646. 4 Claims. (Cl. 62—170.)



1. The process of filtering liquid refrigerant and abstracting water therefrom comprising filtering said refrigerant, passing it through a non-soluble dehydrator to remove water carried by it, and then refiltering it.

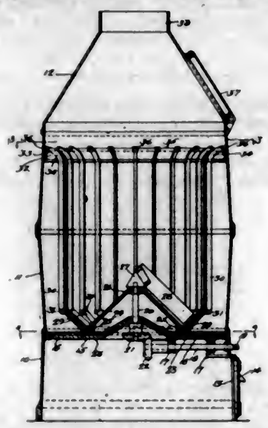
1,866,660. PRESSURE INDICATOR. GEORGE P. LUCKEY, Lancaster, Pa., and ALBERT F. HEGENBERGER, Dayton, Ohio. Filed Aug. 13, 1930. Serial No. 475,080. 2 Claims. (Cl. 73—4.)



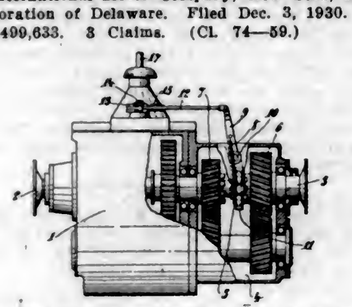
2. In a pressure indicating instrument in combination a casing, a dial therefor and having a scale thereon, an indicator cooperating with said scale, a sealed gas filled diphragm, an indicator actuating mechanism actuated by said diaphragm and carrying said indicator, a thermo-responsive means for supporting said diaphragm, said means comprising a bi-metallic thermal element mounted on and forming a part of said casing, the portion of the thermal element forming the casing having a comparatively higher temperature coefficient of expansion than the corresponding portion of the other thermal portion, said last named thermal portion being arcuate in longitudinal cross section and fixedly secured at its ends to said casing and free to flex relative to the first named thermal portion whereby flexing of said flexible thermal portion moves said diaphragm bodily to effect a movement of said indicator relative to its scale to compensate for errors due to temperature effects on the sealed gases in said diaphragm.

1,866,661. STOVE FOR BURNING RUBBISH. RICHARD MARX, Philadelphia, Pa. Filed Oct. 10, 1929. Serial No. 398,754. 6 Claims. (Cl. 110—18.)

1. In a rubbish-burning stove, a casing having a flue outlet at its upper end, a support within the casing adjacent the lower end thereof, a base carried by the support, vertically-extending arms carried by said base and arranged in spaced relation to the side walls of the casing, extensions upon the upper ends of said arms engaging the casing walls, a door in the casing permitting the introduction of rubbish to the firepot provided by said base and arms, and means for admitting air to the lower end of the casing, the extensions of said arms having engagement with the walls of the casing permitting movement thereof in a direction longitudinal to the arms while holding the same against transverse displacement.

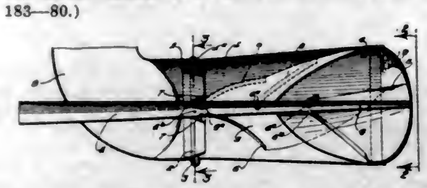


1,866,662. TRANSMISSION CONTROLLING MECHANISM. PHILIP E. MATTHEWS, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 3, 1930. Serial No. 499,633. 3 Claims. (Cl. 74—59.)



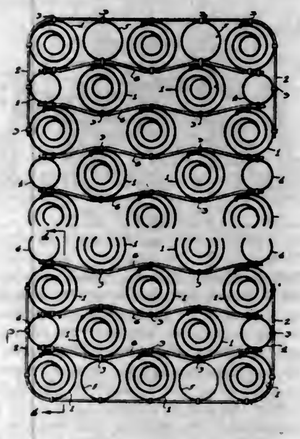
1. In combination with a main and an auxiliary transmission, manual shifting means for the main transmission, a low pressure source, a cylinder, a piston in the cylinder, means to actuate an auxiliary transmission by the piston, a shaft journaled in the manual means, a valve disc mounted on the shaft, communicating means between the low pressure source, valve, and opposite ends of the cylinder, and means on the manual means for operating the valve operating means.

1,866,663. AIR CLEANER AND AIR TURBINATION INDUCTOR. HARRY P. MORRIS, Coronado, Calif., assignor to Karl F. Smith, Coronado, Calif. Filed Oct. 11, 1928. Serial No. 311,723. 23 Claims. (Cl. 183—80.)



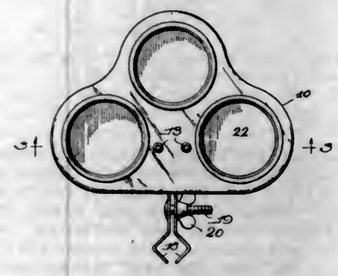
17. In an air cleaning device, an air passage, a plurality of vanes positioned helically within said air passage, and a plurality of ducts formed on each vane and in communication with the exterior of said passage for directing particles of deleterious matter out of said air passage.

1,866,664. SPRING CONSTRUCTION. CHARLES G. MUNN, Jackson, Mich., assignor to Reynolds Spring Company, Jackson, Mich., a Corporation of Michigan. Filed July 11, 1930. Serial No. 467,280. 4 Claims. (Cl. 5—248.)



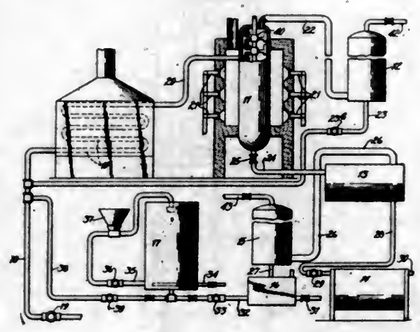
3. A spring structure comprising a plurality of transversely arranged rows of spaced apart helical springs, border members at the upper and lower ends of said springs and extending longitudinally of the end rows at the ends of said structure and extending across the ends of adjacent transverse rows, means for attaching said springs to said border members, the intermediate rows of springs being free of said border members, and resilient members extending longitudinally of and between adjacent rows of springs and attached to the several springs thereof.

1,866,665. SERVICE ATTACHMENT FOR FURNITURE. GEORGE C. OLIN, Chicago, Ill., assignor, by mesne assignments, to Servitor Manufacturing Company, Inc., a Corporation of Illinois. Filed Sept. 21, 1929. Serial No. 394,191. 3 Claims. (Cl. 248—20.)



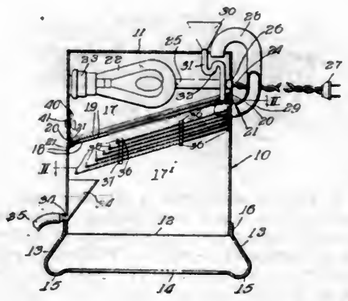
3. A service attachment for furniture comprising a shelf portion of sheet material, clamp arms pivoted in spaced relation with each other to the under side of said shelf portion and extending in both directions from the points of attachment, said ends upon one side of the point of attachment being extended beyond said shelf and formed into clamping jaws, and means for adjustably securing said clamping jaws in desired relation.

1,866,666. PYROLYTIC DECOMPOSITION OF HYDROCARBONS. FRANK K. OVITZ, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Feb. 27, 1928. Serial No. 257,524. 5 Claims. (Cl. 196—55.)



5. The method of decomposing hydrocarbon oils which comprises cracking the oil under pressure, withdrawing unvaporized liquid products and passing them to a zone of lower pressure wherein light and heavy fractions are formed, mixing iron oxide with said light fractions, and returning said mixture to the oil being cracked.

1,866,667. ANÆSTHETIC INHALER. RUTH FOSTER PARKER, Minneapolis, Minn. Filed July 11, 1928. Serial No. 291,846. 4 Claims. (Cl. 128—195.)

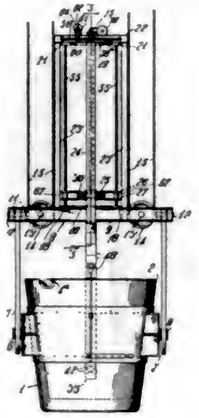


1. In an inhaler, the combination with a casing constituting a facial mask, a yieldable diaphragm associated with said casing to create a hermetic seal in the application thereof, a heating compartment, an incandescent bulb in said heating compartment, an anæsthetic compartment, a branched tube connecting said heating and anæsthetic compartments, a shutter for regulating the air supply to said heating compartment, an anæsthetic carrier in said anæsthetic compartment, and means for directing a fluid anæsthetic to said carrier.

1,866,668. METHOD OF AND APPARATUS FOR MAKING STEEL. HARRY W. PROTZELLER and GEORGE W. FINNEY, East Chicago, Ind. Filed Feb. 11, 1928. Serial No. 253,543. 2 Claims. (Cl. 75—45.)

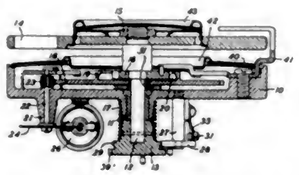
1. The steps in the manufacture of an alloy steel, comprising drawing a heat of molten steel containing

a certain percentage of alloy from a furnace into a ladle, adding a greater percentage of alloy to the molten metal in the ladle, and then mechanically agitating the metal



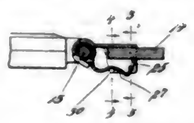
and alloy while in the ladle and without the addition of extraneous heat, causing the central portion of the mixture to travel upwardly and the peripheral portion of the same to travel downwardly.

1,866,669. IMPULSE TRANSMITTER. WILLIAM A. RHODES, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 25, 1931. Serial No. 559,324. 10 Claims. (Cl. 179—90.)



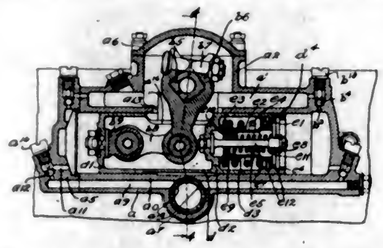
1. In an impulse mechanism, a rotatable shaft, an impulse wheel secured to said shaft, impulse springs operated by said impulse wheel upon the actuation of said shaft, a governor for regulating the speed of rotation of said shaft and a ball clutch interposed between said shaft and said governor for transmitting the rotational movement of said shaft in one direction to said governor.

1,866,670. BRACELET END CONNECTER. WILFRID J. ROY, East Orange, N. J., assignor to Gemex Company, a Corporation of New Jersey. Filed June 27, 1930. Serial No. 464,134. 5 Claims. (Cl. 24—265.)



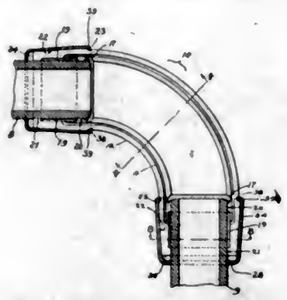
1. A bracelet end connecter comprising a body member having a hook end to engage the ball or cross pin of a wrist watch, and a jaw member pivotally mounted in said body member and having a portion extending to close the opening at said hook end through which said ball or cross pin passes and also a lip on said jaw member bent at generally right angles to said portion and extending entirely laterally across the jaw and concaved to frictionally engage the ball or cross pin.

1,866,671. SHOCK ABSORBER DEVICE. FREDERICK HENRY ROYCE, West Wittering, near Chichester, England, assignor to Rolls Royce Limited, Derby, England. Filed June 24, 1927, Serial No. 201,183, and in Great Britain June 24, 1926. 7 Claims. (Cl. 188—88.)



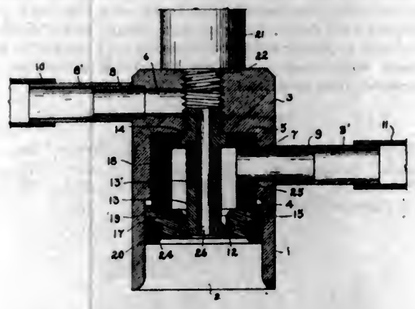
1. A hydraulic shock absorber comprising a closed cylinder, a hollow piston having one end open, a compression chamber on each side of the piston, a diaphragm in the piston forming a chamber adjacent its open end, a conduit through the piston connecting the chamber within the same to the compression chamber remote therefrom, valve mechanism controlling the passage of liquid through the chamber within the piston adapted to open on pressure in either direction, and two springs, one reacting to restrain the opening of the valve in one direction and the other reacting to restrain the opening in the other direction, so that during a predetermined initial amount of movement of the piston from normal position, the valve shall remain closed.

1,866,672. PIPE CONNECTER. JAMES P. SALMON, Philadelphia, Pa. Filed May 16, 1930. Serial No. 452,823. 6 Claims. (Cl. 285—194.)



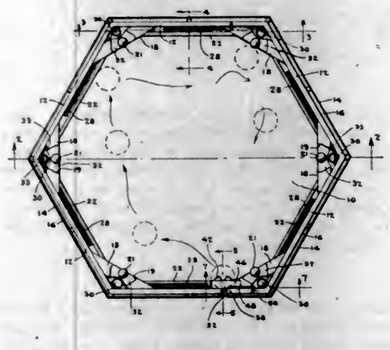
1. A longitudinally divided, two-part tubular pipe connecter, adapted to receive in its free ends the ends of pipes to be joined, said connecter having an inwardly facing annular shoulder in the interior thereof, spaced a suitable distance inwardly from each of the free ends thereof, for engagement with the annular burrs on the cut ends of the pipes; the outer terminal surfaces of each of the free ends of said connecter being tapered, tapered sleeves adapted to fit over said tapered ends of the connecter to retain the two juxtaposed parts thereof in assembled relation on the ends of the pipes, and means to lock said tapered sleeves on the tapered ends of the connecter, including a rearward shoulder on said tapered ends of the connecter and an inwardly extending projection on said sleeves adapted to interlock with said shoulder.

1,866,673. BOTTLE FILLER AND CAPPER. RALPH T. SALSBURY, Oakland, Calif. Filed Apr. 29, 1930. Serial No. 448,224. 5 Claims. (Cl. 226—77.)



1. A bottle filler and capper comprising a shell having a closed head and a chamfered opening adapted when forced thereon to crimp a bottle cap and having a filler inlet therein and a vent therefrom; and a valve within said shell below said inlet.

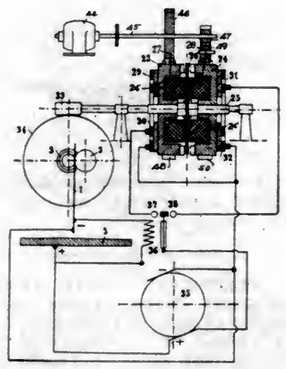
1,866,674. GAME APPARATUS. HARRY O. SHELDON, Minneapolis, Minn. Filed May 11, 1931. Serial No. 536,355. 9 Claims. (Cl. 273—108.)



9. A game apparatus comprising a box, ledge members disposed within the box adjacent the sides thereof, game pieces adapted to be set up on said ledge members, a top which when spun in the box is adapted to dislodge various ones of said game pieces, figures which are movably mounted in the box in such manner as to be elevated by the game pieces which have been knocked down, the wall of the box containing a vertical slot for use in starting the spinning operation of the top, and a gate adapted to close the upper end of said slot when the top is spinning in the box.

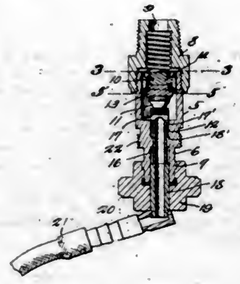
1,866,675. AUTOMATIC MACHINE FOR ARC WELDING. ROBERT SARAZIN, Neuilly-sur-Seine, France. Filed June 6, 1927, Serial No. 196,880, and in France July 12, 1926. 6 Claims. (Cl. 219—8.)

1. In a machine of the type described, a shaft, two magnetizable plates freely rotating about said shaft, a coil respectively in each inner face of these plates, means for setting either coil in communication with an auxiliary source of current, a motor, means driven by the motor for actuating the said plates in reverse directions about their common shaft, a disc arranged between the said plates and coils and keyed on the shaft, but capable of sliding



along it and of imparting to it a rotary movement, driving rollers actuated by said shaft, and an electrode wire driven by said rollers.

1,866,676. SELF-CLOSING OIL SAMPLING VALVE. PAUL H. SCHAAD, New York, N. Y. Filed May 16, 1931. Serial No. 537,928. 2 Claims. (Cl. 284—18.)

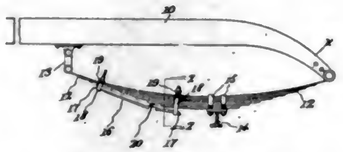


1. A self closing valve for transformers, comprising a body portion having a central passageway, a tube slidably mounted within the central passageway, a valve member mounted within the passageway and adapted to control the passage of liquid through the body portion, said valve member comprising an upper section and a lower section, yieldable means for removably securing the sections of the valve together, said upper section having notches to permit liquid to pass through the valve, said tube adapted to engage the valve to unseat the valve, and a spring bearing against the valve to normally seat the valve.

1,866,677. SHOCK ELIMINATING DEVICE. CLAUDE M. SEYMOUR, Roanoke, Va. Filed Jan. 21, 1926. Serial No. 82,716. 2 Claims. (Cl. 267—48.)

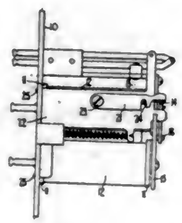
1. A shock eliminating device for use in connection with leaf springs comprising a flat spring having a camber intermediate its ends providing a fulcrum for contact with the convex side of the leaf spring, adjustable clips

mounted on the opposite ends of the flat spring for embracing the leaf spring at spaced points thereon, and anti-friction means carried by one of the clips for en-



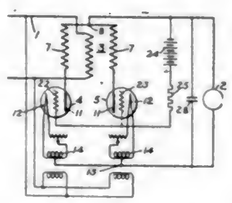
gaging the leaf spring to permit the shifting of the clip thereon incident to the variable movement between the leaf and flat springs.

1,866,678. ELECTRICAL RELAY ARRANGEMENT. LANCELOT MARTIN SIMPSON, Thorner, near Leeds, England, assignor to Associated Telephone and Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 20, 1930, Serial No. 421,969, and in Great Britain Apr. 16, 1929. 7 Claims. (Cl. 179—18.)



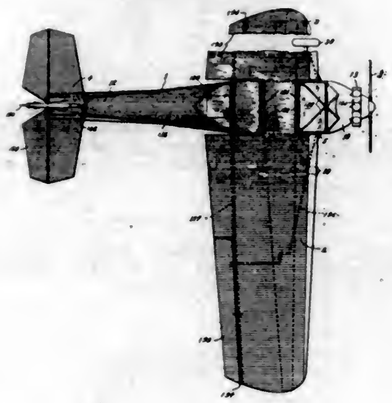
1. In a relay arrangement, a first and a second relay, an armature for each of said relays, an interlocking lever controlled by the armature of said first relay, a pawl member controlled by the armature of said second relay, means for energizing said first relay to move its armature and operate said interlocking member, means for energizing said second relay to move its armature and operate its pawl into engagement with said interlocking member, and means for deenergizing said first relay to restore its armature only, said pawl preventing the release of said interlocking member.

1,866,679. DIRECT CURRENT SUPPLY SYSTEM. JOSEPH SLEPIAN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 31, 1926. Serial No. 98,853. 9 Claims. (Cl. 175—363.)



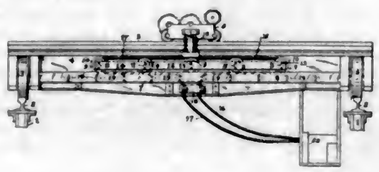
7. The combination with an alternating-current source, a rectifying space-current device and a direct-current load connected in operative relation, the space-current device being of a type having an anode, a cathode and a grid susceptible of increasing the internal impedance of the device when it is negative with respect to the cathode, of a fixed resistor and a variable-resistance device connected in shunt across the load, and a connection between the grid and the common terminal of said fixed and variable resistors, the connections being such and said variable-resistance device being of such nature as to inherently operate to render said grid negative with respect to said cathode only whenever excessive rectified potentials are impressed upon said load.

1,866,680. AIRPLANE. WILLIAM B. STOUT, Detroit, Mich., assignor to Ford Motor Company, Highland Park, Mich. Filed Aug. 11, 1928. Serial No. 299,022. 12 Claims. (Cl. 244—14.)



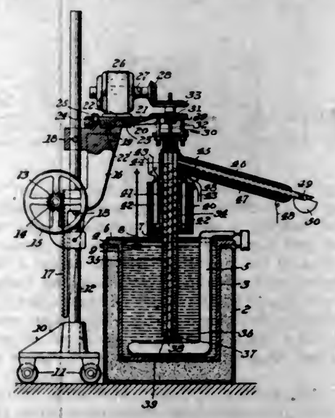
1. An airplane including, in combination, a body section, a monoplane wing including beams continuous across the body, the upper portion of said body section being cut out to accommodate said beams, means associated with one of said beams for pivoting said wing to said body section, and means associated with another of said beams for effecting a relative tilting movement between said wing and said body section.

1,866,681. CONTROLLING MEANS FOR ELECTRIC CONDUCTORS. CLARENCE L. TAYLOR, Youngstown, Ohio. Filed June 22, 1929, Serial No. 372,876. Renewed Dec. 5, 1931. 5 Claims. (Cl. 191—12.)



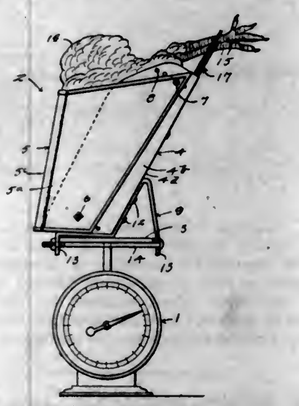
1. In combination, a traveling means, a carriage movable parallel with the traveling means, two draft lines, each having one end attached to the traveling means and its other end fixedly secured to the opposite side of the carriage from the traveling means, the intermediate portions of the draft lines being formed into U-shaped loops loosely engaging the respective ends of the carriage, whereby the movement of the traveling means causes one draft line or the other to move the carriage.

1,866,682. APPARATUS FOR AND METHOD OF HANDLING LIQUID METAL. FRANK X. TEMMEN, Covington, Ky., assignor to Lawrence C. Turnock, Cleveland Heights, Ohio. Filed Nov. 8, 1928. Serial No. 317,945. 13 Claims. (Cl. 22—71.)



2. In liquid metal conveying apparatus, a conduit, a rotatable screw therein having a rounded lower extremity, and a floating thrust bearing having a portion embracing the rounded extremity of the screw and adapted to be maintained in operative relation with the screw by the upward force of the liquid metal thereagainst.

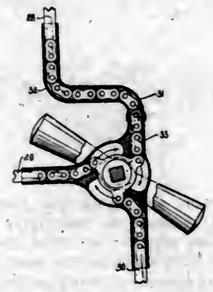
1,866,683. POULTRY HOLDER FOR WEIGHING MACHINES. LEE E. TINNES, Sioux Rapids, Iowa. Filed Oct. 9, 1930. Serial No. 487,559. 13 Claims. (Cl. 265—27.)



1. A poultry holder comprising a receptacle adjustable as to width and open at its upper end to permit a chicken to be inserted headfirst therein, and a clamp at the upper end of the receptacle and adapted to receive the legs of the chicken during its insertion in the receptacle.

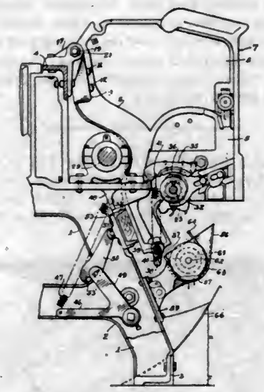
1,866,684. LOCKING DEVICE. CORNELIS VAN DER LEUN, Zeist, Netherlands. Filed May 29, 1930, Serial No. 457,268, and in Germany June 7, 1929. 2 Claims. (Cl. 292—38.)

1. In a locking device, a rotatable, substantially circular element, a radial projection on said element, a chain hinged at its inner end to said projection, a locking bolt hinged to the outer end of said chain, a substantially circular casing coaxially enclosing said element and radially spaced therefrom to form with said element a curved channel having a width substantially equal to the radial dimension of said chain, a tubular member secured to said casing and in communication therewith, said member snug-



ly enclosing and guiding said chain and bolt and permitting said chain to act in compression, and a guide piece secured within said casing in the path of said projection to provide an abutment therefor and forming, together with the inner wall of said casing, a smooth transition from said channel to said tubular member.

1,866,685. COTTON GIN. JEFFREY JOHN WALLACE, Amite, La., assignor to Gullett Gin Company, Amite, La. Filed May 6, 1931. Serial No. 535,523. 7 Claims. (Cl. 19—48.)

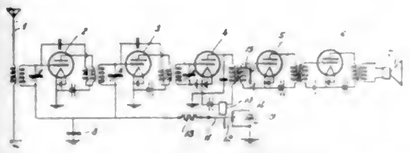


1. In a cotton gin, a supporting frame, a cotton box having a channel bar extending lengthwise thereof, a pair of recessed members fitting snugly over the ends of said channel bar and suitably secured thereto, axially alined trunnions extending outwardly from said members, a pair of bearing members secured to said frame and having bearing recesses to receive said trunnions, and means in said bearing members to contact with the ends of said trunnions for adjusting the cotton box bodily on said frame.

1,866,686. PROCESS FOR THE ESTERIFICATION OF CELLULOSE. CHARLES S. WEBBER and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 26, 1929. Serial No. 395,454. 8 Claims. (Cl. 260—101.)

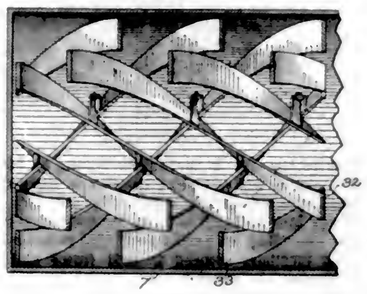
1. The process of making cellulose acetate which comprises treating cellulose with an acetylating bath and catalyzing the reaction with sulfur dioxide and an oxide of nitrogen.

1,866,687. RADIO VOLUME CONTROL. HAROLD A. WHEELER, Baltimore, Md., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Dec. 8, 1927. Serial No. 238,488. 9 Claims. (Cl. 250—20.)



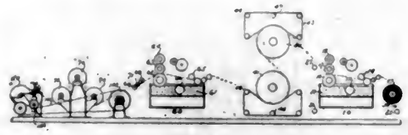
1. A signal-current amplifying and rectifying system including, in combination; an amplifying vacuum tube having a grid whose negative potential limits the degree of amplification, a plate which carries amplified signal current and a filament system; a rectifying vacuum tube having a grid circuit coupled to said plate, and a plate circuit in which flows a uni-directional rectified signal current which varies with said amplified signal current; a two-way relay having a coil conected in said plate circuit, and two contacts, the first of which remains closed only when said amplified signal current remains less than a certain value, and the second of which closes only when said amplified signal current exceeds said certain value; a condenser having one terminal connected to said filament system and another terminal connected to said grid and connectable alternately to a condenser discharging circuit and to a condenser charging circuit, said condenser discharging circuit including said first contact and a high resistance in series, and said condenser charging circuit including said second contact, a high resistance and a negative-potential source in series, whereby the average intensity of said amplified signal current is maintained at said certain value substantially independently of large variations in signal intensity.

1,866,688. MIXING OR AGITATING DEVICE. CARL L. WILLARD, Lynwood, Calif., assignor to Transit Mixers Inc., a Corporation of Nevada. Filed Nov. 23, 1928. Serial No. 321,805. 11 Claims. (Cl. 83—73.)



1. A mixing device comprising a horizontal rotatable cylinder provided with a discharge opening at one end, a closure for said opening, a plurality of spiral conveyers pitched in opposite directions and arranged concentrically of each other within the cylinder, means for rotating the cylinder in either of two directions to cause the conveyers to move the material in continuous layers travelling reversely to each other to and from said discharge opening depending on the direction of rotation of the cylinder and while the cylinder is in substantially horizontal position, and means for cooperating with the discharge opening for directing material therefrom, dependent on the direction of rotation of the cylinder.

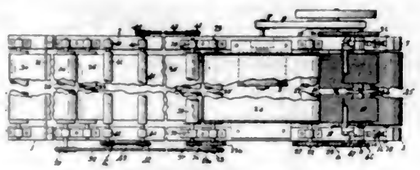
1,866,689. METHOD AND APPARATUS FOR WAXING PAPER. VAN HAMM WILSHIRE, Dayton, Ohio, assignor to The Specialty Papers Company, Dayton, Ohio, a Corporation of Ohio. Filed June 16, 1927. Serial No. 199,353. 19 Claims. (Cl. 91—70.)



8. Apparatus of the character described for applying a coating to a traveling sheet of paper comprising a container for holding a supply of melted coating material, may pass with sustained surface contact to cause the surface coating to the traveling sheet of paper, a large hot roll adjacent said container over which the coated paper may pass with sustained surface contact to cause the surface coating to penetrate the body of the paper, and means for applying a surface coating to either on or both sides of the paper as desired after the paper leaves said hot roll.

19. In the coating of paper with wax to provide a substantially transparent and waterproof paper, the method which comprises applying a coating of wax of controlled uniform thickness to the surface of a traveling sheet of paper, thereafter subjecting the paper to a sustained heating action to cause the complete and thorough impregnation of the coating of wax into the body of the paper, and then applying the second surface coating of wax to the paper without impregnation of the wax.

1,866,690. PAPER SHREDDING AND CRIMPING MACHINE. HARRY W. WILSON, San Francisco, Calif. Filed May 18, 1931. Serial No. 538,167. 6 Claims. (Cl. 93—1.)



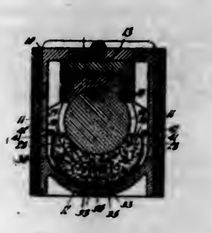
1. In a machine of the class described, a pair of oppositely rotated parallel shafts mounted on the frame, each shaft mounting a plurality of intermeshing beveledged discs, a pair of oppositely rotated intermeshing parallel corrugated drums mounted on the frame and positioned to intercept material passing between the pairs of discs, and means for rotating the shafts and drums.

1,866,691. IRONING BOARD CLIP. JOHN WORLEY, Jr., Pasadena, and RALPH J. BURKE, Los Angeles, Calif., assignors to Worley & Co., Pico, Calif., a Corporation of California. Filed Aug. 1, 1930. Serial No. 472,430. 1 Claim. (Cl. 24—259.)



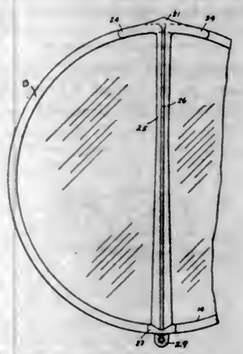
A cover fastening clip of the character described comprising a substantially S-shaped resilient piece of material having a reentrant and toothed fabric gripping end, said toothed end of the S-shaped piece of material lying substantially opposite the intermediate portion of the clip.

1,866,692. PACKING MATERIAL RETAINER FOR JOURNAL BOXES OF RAILWAY CARS. CHARLES A. ZWEIBEL and THEODORE O'HARA SECHRIST, Louisville, Ky. Filed Aug. 1, 1929. Serial No. 382,638. 7 Claims. (Cl. 308—89.)



1. In a journal box cooperating with the journal portion of a car axle, said journal box having a curved bottom wall the combination with a trough-like, one piece sheet metal holder for waste, said holder having a curved bottom wall, end walls and side wall members, said holder being disposed in the journal box beneath the journal portion of the axle with the side walls in embracing relation, but spaced from said journal portion; of a pair of detachable retaining cover members for the waste anchored to said side walls and spanning the space between the upper portions of said side walls and the journal portion of said axle.

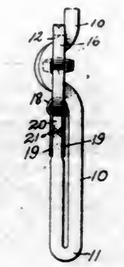
1,866,963. ORNAMENTED HEADLAMP. EDWARD C. ALBRIGHT, Connersville, Ind., assignor to Indiana Lamp Corporation, Connersville, Ind. Filed Dec. 31, 1930. Serial No. 505,813. 5 Claims. (Cl. 240—7.1.)



3. In a headlamp, the combination with a door or rim, and a closure therefor, of a sheet metal ornament exterior thereof and yieldingly secured to the rim at the upper rear portion thereof, said ornament merging with said rim for simulating an integral drawn ornamented rim, said ornament including a depending portion extending across the rim and having its extended end operatively associated with said rim for anchorage.

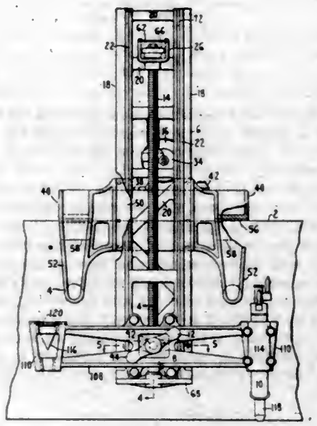
1,866,694. SLIDE. CARL E. ANDERSON, East Orange, N. J., assignor to Eastern Tool & Manufacturing Co., Bloomfield, N. J. Filed Apr. 1, 1931. Serial No. 526,816. 7 Claims. (Cl. 24—265.)

1. A slide comprising a frame having three substantially parallel strands, and a sheet metal clip bent over one of the outside strands and having opposed plates each provided with prongs out of alingnment with the prongs



on the other and of a length to engage the other plate when the clip is compressed to grasp a strap whereby the ends of the prongs are clinched.

1,866,695. TORCH CUTTING MACHINE. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 30, 1931. Serial No. 553,931. 9 Claims. (Cl. 266—23.)

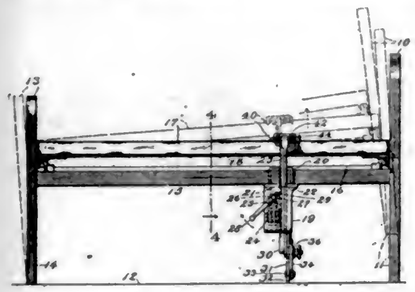


2 An apparatus for cutting the flanges of H shapes and the like, having a clamp for affixing the apparatus over the upper edge first of one upstanding flange and then of the other, a frame rigid with said clamp, a torch carriage, and mechanism for propelling said carriage vertically of said frame.

1,866,696. HOSPITAL BED ATTACHMENT. ISIDOR BIRMAN, Peekskill, N. Y. Filed July 2, 1930. Serial No. 465,327. 4 Claims. (Cl. 5—327.)

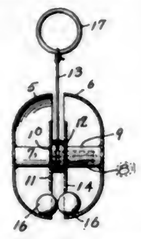
1. As an article of manufacture, a hospital bed attachment comprising a framework and means for adjustably attaching it to a bedstead, the frame-work being fashioned

at its respective ends to form housings and guideways, bars mounted for reciprocation in such guideways, a sling mounted on the bars at one side of the housings, and floor



engaging feet mounted on the bars at the other side of the housings, and means located in and upon the housings for reciprocating the bars.

1,866,697. TOY. JASPER BLACKBURN, Webster Groves, Mo. Filed Dec. 13, 1929. Serial No. 413,741. 1 Claim. (Cl. 46—14.)



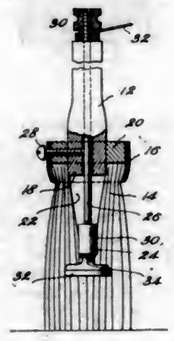
A toy of the kind described, comprising a pair of concavo-convex members, an axle element projecting inwardly from each of said members, one of said axle elements being detachably connectable with the other to secure said members together in spaced apart position and whereby both of said members may be rotated together in unison, a drum carried by one of said axle elements within said pair of members, a pair of substantially parallel disks carried by said axle elements and having their periphery spaced from said concavo-convex members, a flexible member adapted to suspend said toy and secured at one end to said drum and adapted to be wound thereon between said disks for imparting a rotary movement to said members, and means carried by said pair of members to roll about the inner periphery thereof to cause a sound when the toy is rotated.

1,866,698. METHOD OF EXTRACTING VEGETABLE PROTEINS AND PRODUCT OBTAINED THEREBY. RUWIN BRONSZTAJN, Newark, N. J. Filed Oct. 22, 1930, Serial No. 490,554. Renewed Dec. 2, 1931. 12 Claims. (Cl. 99—11.)

1. The method of extracting proteins from vegetable material, which comprises treating the material in the cold first with an etiolating agent of such character and in such amount as not to dissolve out an appreciable quantity of proteins and then with a solution of a basic compound of an alkali metal to extract the proteins from such material, and subsequently acidifying the solution to precipitate the proteins.

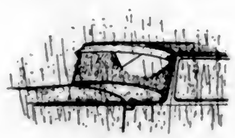
11. As a new composition of matter, a substantially white, soluble, digestible, protein extract of vegetable origin containing at least in large part the albumens, glutens, conglutins, globulins, and peptones present in the parent vegetable material, capable of being beaten into a froth, and in such disinfected and stable condition as to be capable of remaining at room temperature, after being beaten, for approximately eight days without putrefying, said extract being soluble in the cold in vegetable glue solvents.

1,866,699. BRUSH FOR ELECTROPLATING AND ELECTROCLEANING AND ANODE FOR USE THEREIN. FREDERICK CONLIN, New York, N. Y. Filed Apr. 16, 1930. Serial No. 444,854. 5 Claims. (Cl 204—5.)



1. A brush for electrolytic use, comprising a bristle-mass having a flexible portion adapted to take up electrolytic solution, an anode support extending within the flexible portion of the bristle mass and an anode on said anode support also within said flexible portion of the bristle-mass, said anode having means thereon for spacing the bristles from said support.

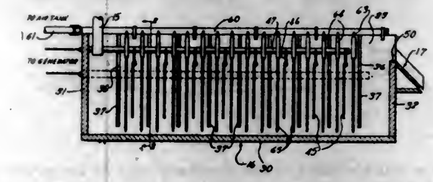
1,866,700. WINDSHIELD WIPER. THOMAS FARMER, Jr., Mamaroneck, N. Y. Filed Jan. 23, 1931. Serial No. 510,665. 4 Claims. (Cl. 15—253.)



1. Windshield wiping mechanism comprising a driving engine mounted at the upper edge of the windshield, a radial arm driven by said engine and oscillable thereby, a wiping element pivotally mounted on said arm at a point near the lower end of the arm and a gear rigidly connected to and oscillating with the wiping element, a second gear engaging it and mounted to rotate on the arm, and a third gear mounted on the arm at its upper end and engaging a stationary rack, the second and third gears being rigidly connected.

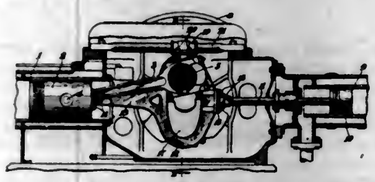
1,866,701. METHOD AND APPARATUS FOR RECOVERING SILVER FROM FIXING SOLUTIONS. FRANK E. GARBUTT and THOMAS M. INGMAN, Los Angeles, Calif., assignors to Eastman Kodak Company, a Corporation of New York. Filed Mar. 13, 1929. Serial No. 346,683. 10 Claims. (Cl. 204—26.)

1. The method of recovering silver from a silver laden photographic fixing solution which comprises impressing an electrical potential across an anode and cathode in said solution, said anode being of a substance other than silver, and agitating said solution to move the same over



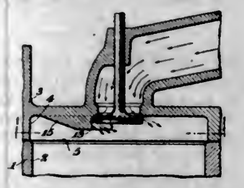
the surface of said cathode whereby metallic silver is deposited upon said cathode and the precipitation of silver sulfide is prevented.

1,866,702. DRIVING CONNECTION. HEWITT A. GEHRES, Mount Vernon, Ohio, assignor to Cooper-Bessemer Corporation, Mount Vernon, Ohio, a Corporation of Ohio. Filed Apr. 15, 1930. Serial No. 444,519. 4 Claims. (Cl. 74—14.)



1. In combination, a driving cylinder, a piston of the trunk type working therein, a crank and crank pin, a connecting rod direct connected and pivoted with respect to the piston and crank pin, a driven plunger and means for driving said plunger from said piston comprising a yoke interposed therebetween, said yoke being located between the paths of swing of the connecting rod and crank.

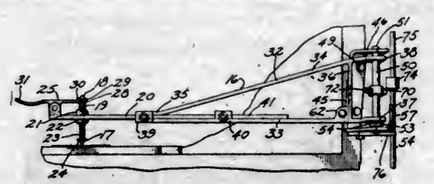
1,866,703. INTERNAL COMBUSTION ENGINE. HEWITT A. GEHRES, Mount Vernon, Ohio, assignor to Cooper-Bessemer Corporation, Mount Vernon, Ohio, a Corporation of Ohio. Filed July 26, 1930. Serial No. 470,877. 8 Claims. (Cl. 123—191.)



1. In an internal combustion engine of the class described, having a valve seat, a valve member cooperating with said seat, a shroud projecting inwardly of the combustion chamber and disposed at one side of said valve seat and adapted to direct the intake gas passing through the valve transversely toward the opposite side of said valve seat, said shroud affording substantially full valve opening space between it and the valve member when the latter is in open position.

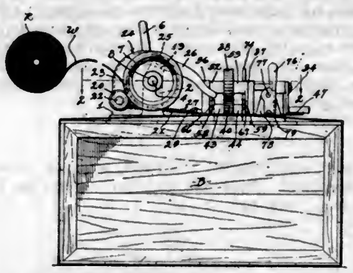
1,866,704. CENTERING DEVICE FOR PUNCH PRESSES. CLIFFORD H. GLAZE, Long Beach, and CLAUDE I. BROWN, Compton, Calif. Filed June 10, 1929. Serial No. 369,854. 13 Claims. (Cl. 164—86.)

1. A work locator of the character described, including: an arm; means enabling the swinging of said arm from an inoperative position, at a side, in lateral and downward direction towards operative position; an adjustable stop for determining the operative position of said arm; and a center point carried by said arm for



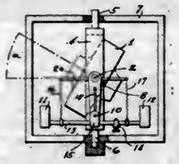
engaging a depression in an article of work, said center point having a definite position when said arm is in operative position, said center point being vertically movable from engagement with said depression.

1,866,705. ROUND WIRE TENSIONING MECHANISM. HERBERT HARVEY, Los Angeles, Calif. Filed June 25, 1930. Serial No. 463,694. 14 Claims. (Cl. 140—93.)



1. In a wire tensioning machine, the combination of a rotatable drum having a peripheral groove of gradually decreasing width inwardly from the face of the drum, and a presser roller tensioned relative to the drum and disposed in the plane of said groove, for frictionally wedging a wire in the groove of said drum so as to effect a movement of the wire when the drum is rotated.

1,866,706. GYROSCOPIC INSTRUMENT AND APPARATUS. JAMES BLACKLOCK HENDERSON, Lee, England. Filed July 26, 1919, Serial No. 313,537, and in Great Britain June 23, 1917. 34 Claims. (Cl. 33—226.) (Granted under the provisions of the act of Mar. 3, 1921, 41 Stat. L., 1313.)

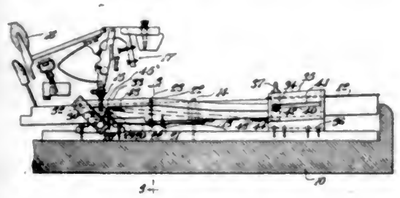


4. A gyroscopic apparatus comprising a gyroscope and a liquid level device associated therewith and having a movement relative to said gyroscope for applying a torque about an axis of the gyroscope.

7. A gyroscopic apparatus comprising a gyroscope and a fluid system comprising a pair of interconnected vessels, said vessels being pivotally mounted for movement relative to said gyroscope for applying a torque about an axis of the gyroscope.

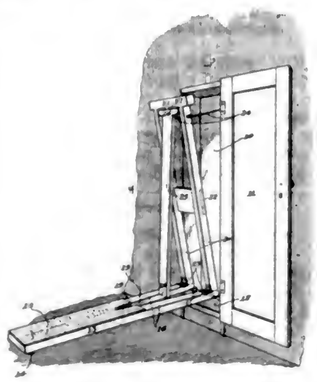
9. A gyroscopic apparatus comprising a gyroscope rotating in the opposite direction to the direction of rotation of the earth and a liquid level device associated with the gyroscope for applying a torque around an axis of the gyroscope.

1,866,707. PIANO KEY ACTION. CLARENCE N. HICKMAN, Jackson Heights, N. Y., assignor to American Piano Corporation, New York, N. Y., a Corporation of New Jersey. Filed May 1, 1929. Serial No. 359,466. 12 Claims. (Cl. 84—439.)



1. A key mounting for pianos and related instruments comprising in combination, a plurality of fulcrumed keys, leaf springs secured at one end to each of said keys, means for separately adjusting the touch of each of said keys, including a headed screw provided with a turning-tool-receiving portion at its upper end accessible from above the key, and means for collectively adjusting the touch of all of said keys, including a member extending transversely of said keys and engaging said springs, friction bearings provided with adjustment springs embracing said member, and means accessible from the outside of said instrument casing for turning said member.

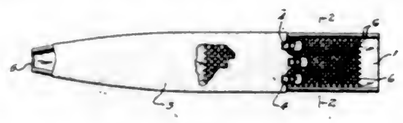
1,866,708. BOOTJACK. WALTER WILLIAM HOOK, Los Angeles, Calif. Filed Mar. 23, 1931. Serial No. 524,529. 6 Claims. (Cl. 132—4.)



1. A boot jack comprising a support associated with a lower supporting surface; a platform having a heel notch at its inner end and hingedly connected at its inner end to said support to fold upwardly and inwardly or outwardly and downwardly to rest on said surface in outwardly and downwardly inclined operative position; and an upright member hingedly connected with said platform to fold into contact therewith when the platform is swung upwardly but assume outwardly inclined position when the latter is swung outwardly.

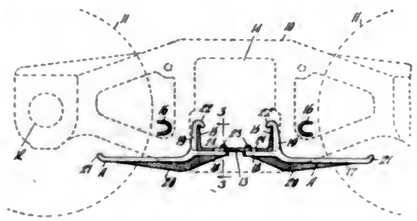
1,866,709. PELT STRETCHING FRAME. WILLIAM F. HORSTING, Wilmette, Ill., assignor to Leather Equipment Company, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 16, 1930. Serial No. 475,754. 3 Claims. (Cl. 149—21.)

2. A pelt stretching and drying frame comprising a body portion provided with a plurality of perforations therein, the edges of said body portion being curved in substantially circular conformation to form beads, where-



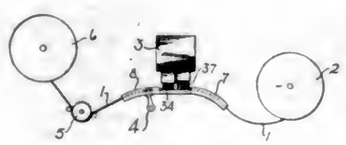
by a pelt stretched across the frame will be supported by the beads in spaced relation from the perforated body portion.

1,866,710. BRAKE BEAM SAFETY SUPPORT. GEORGE A. JOHNSON, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 25, 1930. Serial No. 470,560. 2 Claims. (Cl. 188—210.)



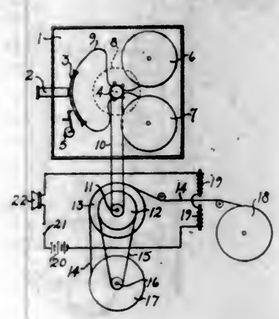
1. A one piece brake beam supporting casting having a bar-like horizontal arm adapted to underlie the brake beam, a horizontal inwardly extending supporting flange formed integral therewith and adapted to engage beneath the spring plank of a truck member, and an upstanding plate-like section integral with said arm and flange and adapted to abut the upstanding side flange of the channel-shaped spring plank member, said plate-like section having a hook-like upper end portion adapted to engage over the upper edge of said side flange, said horizontal supporting flange having an upstanding cylindrical lug integral therewith and engaging in a seat on said spring plank for locking the casting thereto.

1,866,711. METHOD AND APPARATUS FOR PERFORATING MOTION PICTURE FILM. JOHN G. JONES, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 27, 1929. Serial No. 416,874. 10 Claims. (Cl. 164—89.)



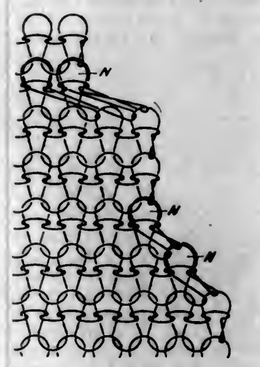
1. In a motion picture film perforating machine, the combination with a punch and die, of mechanism for holding film flat between the punch and die for perforating comprising arcuate shaped guideways adapted to flex the film on each side of the punch and die and to hold a portion of the film flat between the guideways, said guideways contacting with the film edges only.

1,866,712. METHOD OF MAKING COMBINED SOUND AND PICTURE RECORDS. LOYD A. JONES, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 5, 1930. Serial No. 426,111. 2 Claims. (Cl. 88—16.2.)



1. The method of making photographic sound and picture records that comprises exposing a sensitized film band in a motion picture camera, thus forming a latent picture image thereon, making a magnetic sound record in a metallic carrier, translating the magnetic sound record into a latent photographic record upon the said sensitized film band carrying the latent picture image and transforming the two latent images by a single reversal process into positive silver images.

1,866,713. KNITTED ARTICLE OR GARMENT. THOMAS HENRY JONES, Woodthorpe, and ROBERT KIRKLAND MILLS, Sherwood, England. Filed May 14, 1931, Serial No. 537,460, and in Great Britain May 9, 1930. 4 Claims. (Cl. 66—189.)



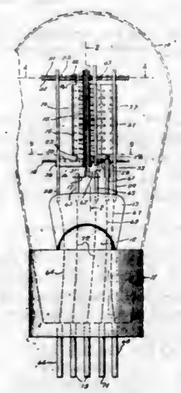
1. As a new article of manufacture a shaped knitted weft fabric such as a full-fashioned stocking or sock composed wholly or in the main of ladder-proof or ladder-resisting knitted fabric which embodies locked or tied stitches composed of and produced from the common ground or weft thread of the fabric, such stitches consisting of thread loops extending through and also around other thread loops.

1,866,714. ROTATION TRANSMITTING MEANS. JOHN H. KING, Wickliffe, Ohio. Filed Apr. 18, 1928. Serial No. 270,905. 9 Claims. (Cl. 64—30.)



1. A rotation transmitting means including a curved tubular housing and individual axially interengaging rotation transmitting members rotatable in said housing and having the contacting surfaces thereof curved axially and transversely to form substantially spherically convex contacting surfaces for smooth transmission of rotation.

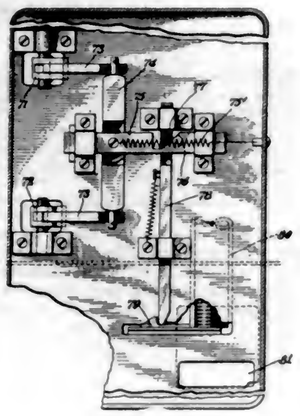
1,866,715. ASSEMBLY OF ELEMENTS IN ELECTRON DEVICES. WALTER LOUIS KRAHL, Montclair, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Jan. 25, 1930. Serial No. 423,504. 4 Claims. (Cl. 250—27.5.)



1. In an electron device a tubular electrode, a second tubular electrode within said first electrode, a third tubular electrode within said second electrode, an insulating plate rigidly supported upon one end of said first electrode, said plate having an opening to permit a portion of said second electrode to pass therethrough without touching said plate and a second opening adapted to cooperate with a portion of said third electrode to maintain said third electrode in position with respect to said first electrode, a second insulating plate mounted upon said first electrode in close proximity to said first insulating plate but spaced therefrom, said second insulating plate having an opening cooperating with a portion of said second electrode whereby said second electrode is supported in spaced relation from said first electrode, and an opening to permit said third electrode to extend through it without touching said plate.

4. In an electron device, the combination of an anode, grid and cathode, and an insulator for maintaining the electrodes in spaced relation, one of said electrodes passing through the insulator, said insulator having an opening the perimeter of which differs in shape from the circumferential shape of the electrode passing therethrough whereby contact between the insulator and said electrode is effected at a limited number of points.

1,866,716. VENDING MACHINE. JOHN H. MCCORMICK, CARL G. ALLEN, and FRANK M. BENDER, Williamsport, Pa., assignors to Vendi Cater, Inc., Williamsport, Pa., a Corporation of Pennsylvania. Original application filed Feb. 16, 1929, Serial No. 340,462. Divided and this application filed Aug. 27, 1929. Serial No. 388,652. 21 Claims. (Cl. 194—4.)



1. In combination, a carrier for receiving and transferring bottles, a coin ejector, a spring for actuating said ejector to deliver a coin, a detent for said ejector, means operable by a bottle to effect release of said detent and means operable by said carrier for resetting said ejector.

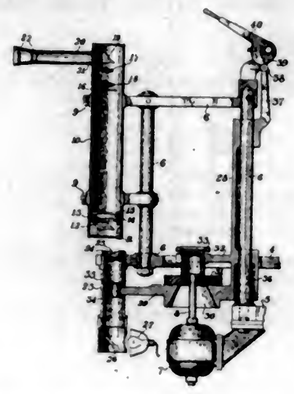
1,866,717. PRODUCTION OF AROMATIC CARBOXYLIC ACIDS. KURT H. MEYER, Mannheim, and HEINRICH HOPFF, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 23, 1928, Serial No. 314,539, and in Germany Dec. 10, 1927. 5 Claims. (Cl. 260—108.)

1. The process of producing aromatic carboxylic acids, which comprises acting with carbon dioxid on an aromatic compound selected from the group consisting of hydrocarbons and mono-halogen derivatives thereof, containing at least 2 hydrogen atoms connected to carbon atoms of the aromatic nucleus in the liquefied state in the presence of a halide of aluminium at a pressure above 10 atmospheres while heating.

1,866,718. METHOD AND APPARATUS FOR FOCUSING LENSES. JOSEPH MIHALYI, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,189. 13 Claims. (Cl. 88—1.)

1. The method of focusing a lens to a given focal plane which comprises passing a ray of light from a source through the lens to be focused, splitting the ray of light, passing one portion of the split ray through a medium of one character, passing the other portion of the split ray through a medium of another character, adjusting the distance between said source and said lens until said split portions of the ray appear as parallel rays.

6. The method of indicating that a shutter-board of a camera is bored to the proper distance for a given lens so that when said lens is mounted in said board it will focus on the film plane of said camera, which comprises boring the shutter-board, simultaneously projecting rays of light from a light source through said lens while correspondingly changing the distance between said light source

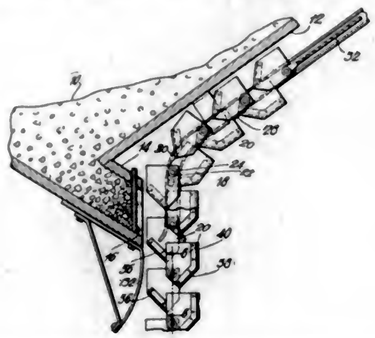


and said lens in accordance with the changing depth of the bore, until rays from said source emerge from said lens as parallel rays.

1,866,719. PROCESS OF REMOVING TAR FROM PYROLIGNEOUS LIQUIDS. DONALD F. OTHMER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 19, 1931. Serial No. 509,875. 11 Claims. (Cl. 260—122.)

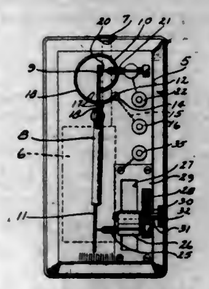
1. The process of absorbing pyroligneous tarry compounds which comprises treating with a material containing a dihalogenoalkyl ether, fluid resulting from the destructive distillation of wood.

1,866,720. APPARATUS FOR LOWERING COAL AND THE LIKE. FRANK PARDEE, Jr., Hazleton, Pa., assignor to Anthracite Separator Company, Hazleton, Pa., a Corporation of Pennsylvania. Filed May 28, 1930. Serial No. 456,365. 12 Claims. (Cl. 214—17.)



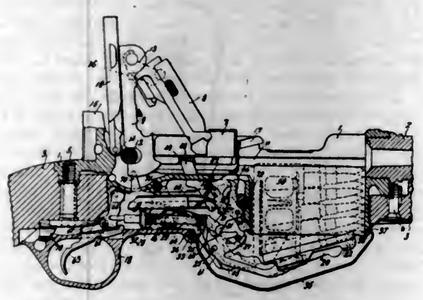
1. An apparatus for lowering coal and similar material comprising a bin or pocket having an outlet and a flexible chute including a series of runway carrying sections flexibly connected with one another and adapted to be successively positioned adjacent said outlet, and a guide for supporting the sections shaped to change the direction of travel of said sections with relation to said outlet, said sections having means which ride on said guide.

1,866,721. COMBINED THERMOSTAT AND HYGROSTAT INSTRUMENT. FREDERICK J. PEASE, Wauwatosa, Wis. Filed Apr. 25, 1929. Serial No. 357,974. 10 Claims. (Cl. 236—44.)



10. A device of the character described comprising the combination with temperature and humidity regulating means, of a single bi-metallic strip integrally providing controls for both of said means, said strip being supported at one end and having portions reversed as to direction of operation freely movable with respect to the supported end, the portion most remote from said supported end being provided with means for evaporating liquid in proximity thereto.

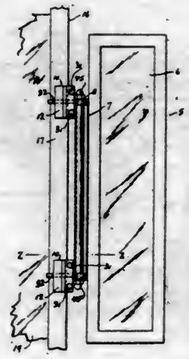
1,866,722. RIFLE. JOHN D. PEDERSEN, Jackson, Wyo. Filed Nov. 29, 1930. Serial No. 499,030. 13 Claims. (Cl. 42—3.)



1. In a rifle, in combination, a receiver, a trigger guard frame, means for detachably securing said guard frame to said receiver comprising a pivotal mortise connection between said receiver and one end of said guard frame, and a finger releasable spring pressed latch between the receiver and the other end of said guard frame, said latch arranged to be automatically engaged when the guard is pivotally swung on its mortise connection into assembled position with respect to said receiver.

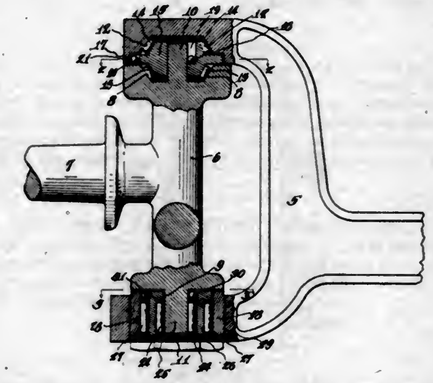
1,866,723. BRACKET FOR SIGNS AND THE LIKE. HOWARD C. POWERS, Niagara Falls, N. Y., assignor to Glascraft Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed July 23, 1931. Serial No. 552,662. 4 Claims. (Cl. 40—125.)

1. The combination with the angle of a show window, of a bracket, comprising a body having legs arranged at substantially right angles to each other, bolts passing through the body, the outer ends of the bolts being



provided with hooks for engagement with the edges of the legs of the window angle, and means carried by the bracket for securing a sign thereto.

1,866,724. STEERING KNUCKLE BEARING. CLIFFORD T. RAULE, Brookline, Pa. Filed May 21, 1929. Serial No. 364,928. 14 Claims. (Cl. 280—96.1.)

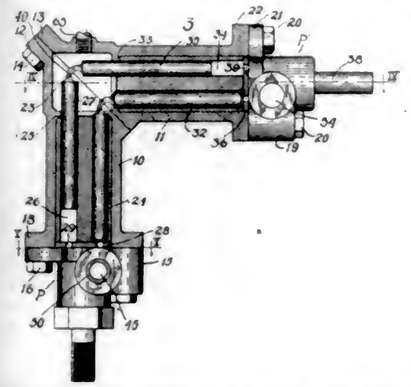


1. A bearing for a knuckle steering gear including a knuckle member and a wheel axle, a runway on the knuckle member, a second runway coaxial therewith on the wheel axle member, sets of rollers on the respective runways, a floating bearing intermediate the sets of rollers presenting cooperating runways to the respective sets of rollers, a check effective between the axle and the floating bearing to prevent movement in one direction, allowing movement in the opposite direction and a second check between the floating bearing and the knuckle member preventing movement in the direction allowed by the first check and allowing movement in the direction prevented by the first check.

1,866,725. OIL BURNER FEED MECHANISM. CHARLES L. RAYFIELD, Chicago, Ill., assignor to Rayfield Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 26, 1929. Serial No. 416,392. 8 Claims. (Cl. 261—28.)

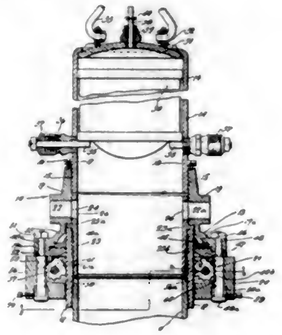
5. In a fluid pumping device an angular pump construction comprising sets of connected pistons, the pis-

tons of each set being disposed at an angle to each other, housing means including angular legs to define cylinders for said pistons, and a chamber at the junction of said



legs, and means for conveying the fluid discharge from one leg through said chamber to enable said fluid to act as a sealing medium for said sets of pistons.

1,866,726. CASING HEAD. JAMES J. SANTIAGO, Los Angeles, Calif., assignor to John Grant, Los Angeles, Calif. Filed Sept. 20, 1929. Serial No. 393,935. 12 Claims. (Cl. 285—22.)



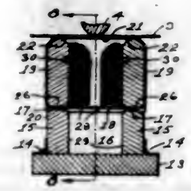
1. A circulating head for attachment to well pipe, comprising a body having relatively vertically movable upper and lower sections and adapted to be placed over and around the supper end of the pipe, said sections being relatively movable by the application of fluid pressure to the head through the well pipe, pipe gripping means mounted on the body and adapted to be brought into gripping engagement with the outside of the pipe by virtue of upward movement of the upper section relative to the lower section, and fluid pressure actuated packing means between said body and the pipe.

1,866,727. PURIFICATION OF CERAMIC MATERIALS BY SODIUM CYANIDE. EDGAR A. SLAGLE, Cranford, N. J., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 26, 1930. Serial No. 505,000. 12 Claims. (Cl. 23—50.)

1. The process of purifying opacifying agents used in enamels, glazes and glasses to remove impurities therefrom which are capable of introducing an undesirable color into the finished product which comprises treating said opacifying agents with a cyanide solution whereby the undesirable materials are dissolved and separated therefrom, and then removing the opacifying agents from the solution.

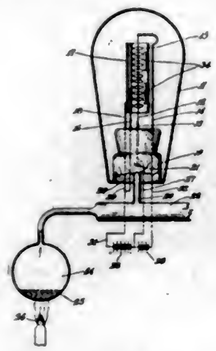
8. The process of purifying sodium antimonate which comprises leaching the same with sodium cyanide in the presence of an amount of sodium hydroxide sufficient to impart an alkalinity to the solution and to retard the hydrolysis of the cyanide.

1,866,728. APPARATUS FOR COVERING HEELS. GARDNER M. SMITH, Clayton, Mo., assignor to Kantskuf Heel Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 1, 1930. Serial No. 499,145. 5 Claims. (Cl. 12—42.)



1. A device of the character described comprising brush bristles arranged to form opposing yieldable walls, and a yieldable web overlying the space between said walls.

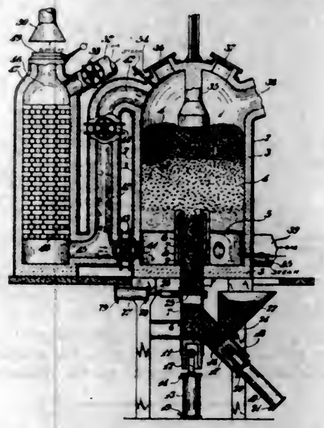
1,866,729. METHOD OF OBTAINING METALLIC COATINGS. HANS J. SPANNER and ULRICH DOERING, Berlin, Germany, assignors to Electrons, Inc., a Corporation of Delaware. Filed Apr. 30, 1929, Serial No. 359,327, and in Germany June 9, 1928. Renewed Aug. 7, 1930. 9 Claims. (Cl. 250—27.5.)



1. A method of coating an electrode of a discharge tube with a metal of a class including the alkali and alkali-earth groups comprising introducing a gaseous compound of the metal to be used as a coating into the tube and decomposing said compound by gaseous electrolysis whereby the metal is set free and deposited on the body to be coated.

1,866,730. CARBONIZATION PROCESS. FREDERICK W. SPERR, Jr., Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed May 24, 1927. Serial No. 193,824. 4 Claims. (Cl. 202—8.)

1. The process of coking coal which comprises bringing a bed of previously heated carbonaceous fuel to an incandescent state by blasting it with air, introducing coal directly to the central portion of the incandescent fuel bed in such manner as to be subjected not only to the sensible heat of said fuel bed but also to be subjected to the weight of at least a portion of said fuel bed, whereby said coal is carbonized, and removing from the fuel



bed that portion of the coke thereby produced not required for combustion to maintain the temperature of said fuel bed.

1,866,731. PROCESS FOR PRODUCING ANHYDROUS ALUMINUM CHLORIDE. KARL STAIB, Bitterfeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 28, 1929, Serial No. 335,746, and in Germany Feb. 7, 1928. 6 Claims. (Cl. 23—95.)

1. The process for producing anhydrous aluminum chloride from raw materials containing both alumina and silicic acid, which process comprises heating the said raw materials admixed with carbonaceous matter acting as reducing material in the presence of chlorine, causing the material to react with chlorine charged with silicon tetrachloride vapors and separating the resulting aluminum chloride from the mixture of vapors by condensation.

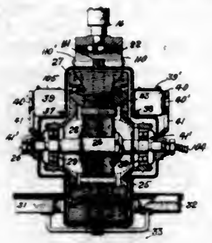
6. The process for producing anhydrous aluminum chloride from raw materials containing both alumina and silicic acid, which process comprises admixing brown coal to the said raw materials, briqueting the mixture, heating it to about 700° to 800° C., causing the material to react with chlorine charged with about an equal part by weight of silicon tetrachloride, separating the resulting aluminum chloride from the mixture of vapors by condensation, admixing fresh chlorine with the remaining silicon tetrachloride and subjecting the resulting gaseous mixture to further reaction with said raw materials.

1,866,732. LUBRICANT CONTAINING CELLULOSE ACETATE. CYRIL J. STAUD and JAMES T. FUESS, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 24, 1930. Serial No. 504,633. 6 Claims. (Cl. 87—9.)

1. A lubricant comprising acetone soluble cellulose acetate, diethyl phthalate and ethyl lactate.

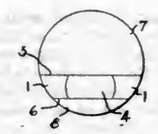
1,866,733. GYROSCOPIC COMPASS. HARRY L. TANNER, Brooklyn, N. Y., assignor to The Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 19, 1918. Serial No. 263,118. 9 Claims. (Cl. 33—226.)

9. In an apparatus of the class described, the combination with a gyroscope, means for mounting the gyroscope for oscillation about a plurality of axes and for rotation in a direction opposite that of an ordinary pendulous gyroscopic compass, and means for transferring liquid



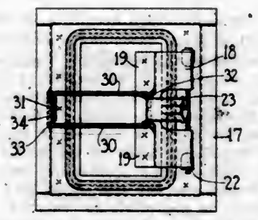
from one side to the other, by gravity, so constructed that the natural period of oscillation of the liquid is substantially different than the period of rolling of the ship.

1,866,734. OPHTHALMIC LENS. EDGAR D. TILLYER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Mar. 8, 1928. Serial No. 260,037. 8 Claims. (Cl. 88—54.)



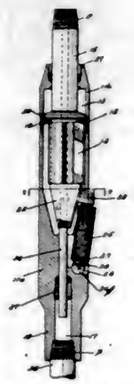
1. A multifocal lens comprising a segment of glass having a portion of glass of different index of refraction secured thereto intermediate its ends and a separate piece of glass of the same index of refraction as the segment but of a different melting point secured to a longitudinal edge of the segment and the portion of glass secured thereto.

1,866,735. COWL VENTILATOR. GEORGE TRAUTVETTER, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 9, 1929. Serial No. 376,892. 2 Claims. (Cl. 98—2.)



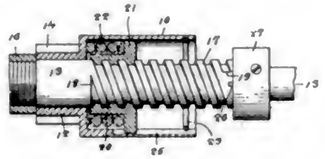
2. As an article of manufacture, a pressed metal bracket adapted to be associated with a cover for an opening, and to be formed from flat sheet metal stock, comprising a portion in one plane adapted to be secured to a cover, spaced curved portions extending laterally from said first-named portion and having their remote edges shaped to form hinge elements, and a central portion having a channel section base portion pressed out from the metal intermediate said spaced portions and extending laterally from the first-named portion to form an operating handle, the side walls of said channel section base portion of the handle being joined to the inner edges of said spaced curved portions.

1,866,736. ROTARY UNDERREAMER. JAMES B. TRIPLETT, Whittier, Calif.; William H. Campbell, Los Angeles, Calif., and William H. Maxwell, Beverly Hills, Calif., executors of said James B. Triplett, deceased, assignors to John Grant, Los Angeles, Calif. Filed May 10, 1926. Serial No. 107,999. 7 Claims. (Cl. 255—75.)



2. In an underreamer, a hollow body having a longitudinal opening, a roller cutter for operation in the opening, a mounting for the cutter icluding a supporting member rotatably carrying the cutter having its lower end pivotally supported and a block movable relative to said member and carrying the upper end of said member, and means for moving the block outwardly, the mounting including a part engaging the body to limit outward movement.

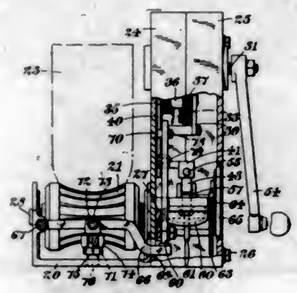
1,866,737. AUTO STARTER. JACOB N. WALKER, Richmond, Va. Filed Dec. 11, 1929. Serial No. 413,319. 4 Claims. (Cl. 74—7.)



1. In an engine starting device, a barrel, a spirally threaded driving shaft extending therethrough, a gear affixed to one end of the barrel for engagement with the fly wheel of an engine to be started, a sleeve located within the barrel and having a fixed abutment thereon, the sleeve being threaded on the shaft, for forward movement thereon when the shaft is rotated, a resilient element surrounding the shaft inside of the barrel and bearing against said abutment and against the inner end of said barrel, and means whereby said sleeve may be telescoped into said barrel, in non-rotatable relation therewith, to compress said resilient element and provide a yielding driving connection between said sleeve and said gear.

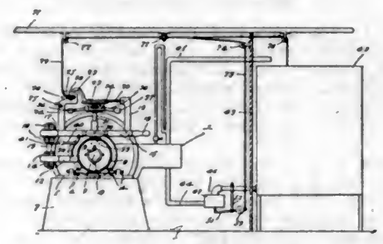
1,866,738. TESTING APPARATUS FOR MOTOR VEHICLES. WALTER HENRY WELCH, Bristol, England. Original application filed July 21, 1928, Serial No. 294,535, and in Great Britain Dec. 30, 1927. Divided and this application filed July 11, 1931. Serial No. 550,234. 1 Claim. (Cl. 265—25.)

In a device as specified, a roller support adapted to receive a wheel of a motor vehicle thereon, gear means connected to the roller support for turning the same to rotate the wheel, an indicator, yieldable connecting means between the indicator and the gear means for operation by the latter upon resistance to turning to actuate the indicator and measure the torque applied to the wheel,



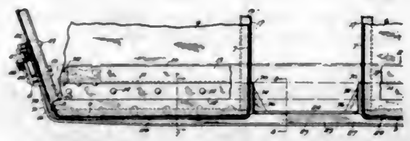
and weighing means between the roller support and said connection for operating the latter by the weight on the support and showing such weight on the indicator.

1,866,739. ENGINE DRAINING APPARATUS. NEWTON S. WILLIAMSON, Borger, Tex. Filed July 10, 1931. Serial No. 550,036. 4 Claims. (Cl. 123—174.)



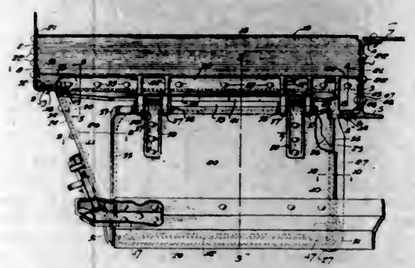
1. In combination with an engine having a water jacket, a water supply tank, a pipe extending from the tank into the water jacket for conducting water to said jacket, a normally closed drain valve interposed in the pipe, a normally open supply control valve connected with the pipe, a cable connected with the valves, a keeper engageable with the cable for releasably securing said cable in a position to maintain the first named valve in its closed position and maintain the second named valve in its open position, and a speed responsive unit operatively conected to the engine for actuation thereby, said speed responsive unit being engageable with the keeper for disengaging said keeper from the cable when said speed responsive unit is stationary, said speed responsive unit being disengaged from the keeper when in operation.

1,866,740. RAILWAY CAR. WILLIAM E. WINE, Toledo, Ohio. Filed Sept. 11, 1930. Serial No. 481,298. 17 Claims. (Cl. 105—308.)



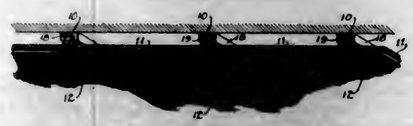
1. In a railway car, the combination with a pair of spaced hoppers, each of said hoppers being provided with a hingedly mounted door, of mechanisms for respectively maintaining said door in closed positions, each of said mechanisms involving a movably mounted locking member, a combined tie and reinforcing member for the hoppers comprising a beam extending beneath and rigidly secured to each of the hoppers adjacent their lower ends, said beam being integrally formed with upwardly extending legs rigidly secured to the sides of the hoppers, the movable locking members of said mechanisms being respectively mounted on said legs.

1,866,741. RAILWAY CAR. WILLIAM E. WINE, Toledo, Ohio. Filed Aug. 11, 1931. Serial No. 556,435. 20 Claims. (Cl. 105—249.)



1. In a railway car, the combination with a hopper comprising inner and outer side sheets and a slope sheet, of a door frame having a lading discharge opening and provided with portions rigidly secured to said hopper sheets, a door for closing said discharge opening, and a floor sheet extending transversely of the car and inclined downwardly toward the hopper, the portion of said frame above the opening involving a flange rigidly secured to said floor sheet, a rigidifying portion extending outwardly from the lower edge of said flange, a portion extending downwardly from said rigidifying portion intermediate the edges of the latter, the lower edge of said downwardly extending portion bounding the upper edge of the lading discharge opening.

1,866,742. WALL CONSTRUCTION FOR ABSORBING SOUND WAVES. WILLIAM J. YOUNG, Cleveland, Ohio. Filed July 25, 1928. Serial No. 295,819. 4 Claims. (Cl. 20—4.)

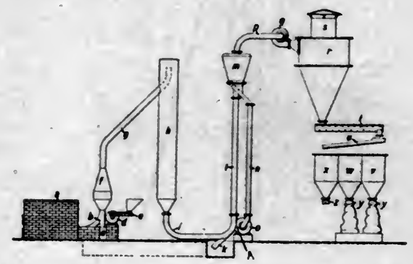


1. In an acoustic wall construction, the combination of a fibrous sound absorbing material laid adjacent the surface being treated, means for securing said material to the surface being treated, a locally flexible metallic sheathing material applied over the fibrous material but in spaced relation thereto, means for securing the metallic covering in position in said spaced relation to the fibrous material, said metallic sheathing comprising a sound filter having closely spaced converging openings extending therethrough, which function to preliminarily dissipate the volume of the sound waves before the sound waves impinge upon the fibrous material.

1,866,743. COATING COMPOSITION. ARTHUR BERTRAM ABBOTT, Brixton, London, England, assignor of one-half to Robert Abbott, London, England. Filed Dec. 19, 1929, Serial No. 415,370, and in Great Britain Jan. 19, 1929. 3 Claims. (Cl. 106—8.)

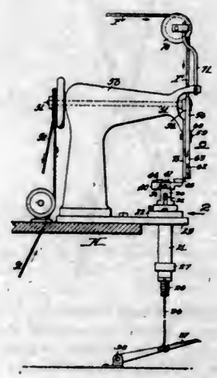
1. A composition of matter comprising, in combination, 32 parts by weight of treacle; 32 parts by weight of chalk in granular form; 2 parts by weight of rouge; 0.166 parts by weight of turpentine; 0.166 parts by weight of a 10% aqueous solution of sulphurated potash; and 0.083 parts by weight of tincture of ferric chloride.

1,866,744. PNEUMATIC DRYING OF MATERIALS. EMIL BARTHELMESS, Dusseldorf-Oberkassel, Germany, assignor to Paul Rosin, Dresden, Germany. Filed Sept. 27, 1928, Serial No. 308,806, and in Germany Apr. 24, 1928. 5 Claims. (Cl. 34—34.)



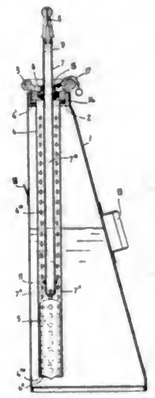
1. In apparatus for pneumatic drying of materials, the combination of an oven, a conduit in communication with the oven and with the outside air, means for supplying material to be dried to the conduit, a relatively large chamber into the upper end of which the conduit opens for the discharge of the material and its further drying while falling, a conduit opening out of the bottom of said chamber, and a second drying chamber to which said conduit leads, a hot air passage opening into said conduit, means for the return of moist material from the drying chamber to the last mentioned conduit for further drying, and means for exhausting dry material from said drying chamber.

1,866,745. FILLER INSERTING MACHINE. MALCOLM G. BLISS, North Grafton, Mass., assignor to Heywood Boot & Shoe Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 20, 1931. Serial No. 517,860. 10 Claims. (Cl. 12—17.)



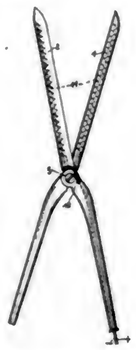
1. A machine for inserting a filler strip in the gutter of the in-sole of a lasted and stitched welt shoe, said machine comprising a support for the edge of the shoe, means to guide a filler strip to the gutter at the inner side of the welt-attaching lip of the insole of said shoe, and means to press the filler strip firmly into said gutter.

1,866,746. FIRE EXTINGUISHER. GASPARE BORSETTI, Biella, Italy. Filed Dec. 13, 1928, Serial No. 325,882, and in Italy Jan. 10, 1928. 9 Claims. (Cl. 169—32.)



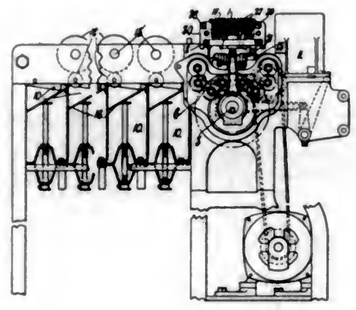
9. In a fire extinguisher comprising a tank to contain a fire extinguishing charge, a frangible container for a reagent, a support in said tank for said container, and means for delivering said reagent in said tank; a nozzle mounted to move through the wall of said tank and having outlet means outside of said tank and inlet means near its end inside of said tank, said inlet means being adapted to be carried adjacent either end of said tank by shifting said nozzle with respect to said tank, and means for selectively stopping said nozzle with said inlet means adjacent to either end of said tank.

1,866,747. CURLING TONGS. GUSTAV BRODBECK, Leonberg, and ALFRED REHM, Stuttgart, Germany, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Apr. 19, 1929, Serial No. 356,506, and in Germany Nov. 22, 1928. 11 Claims. (Cl. 132—37.)



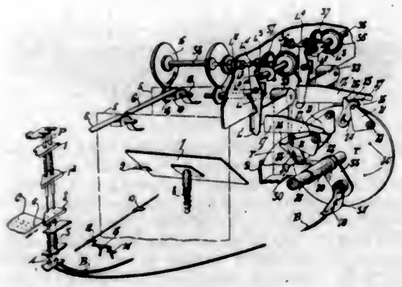
11. Electrical curling tongs consisting of one tong element which comprises a handle and an arm of circular cross section and a second tong element which comprises a handle and an arm of channel cross-section each of said elements being formed of a single longitudinally symmetrical metallic blank which is symmetrically bent about a longitudinal plane and seamed along a line in said plane to form a container, an eectric heater in each container portion, one of said tong elements having grooves pressed out in the material thereof substantially at its midlength, and electric circuit connections to said electric heaters arranged in said grooves.

1,866,748. SORTING MACHINE FOR STATISTICAL CARDS OR THE LIKE. LESLIE ERNEST BROUGHAM, Thornton Heath, England, assignor to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Filed Jan. 10, 1930, Serial No. 419,975, and in Great Britain Jan. 21, 1929. 16 Claims. (Cl. 209—110.)



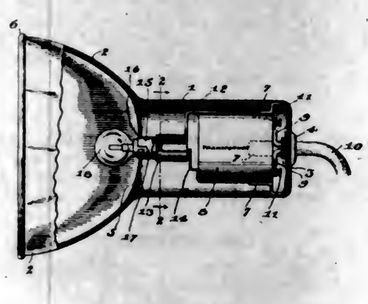
1. In a sorting machine the combination with removable sensing pins disposed in a plurality of columns, whereby a particular group of perforations in a card may be sensed, a perforated bed plate through which the pins are adapted to pass, means for reciprocating the bed plate in the machine, means for locking the pins to the bed plate when they all pass through perforations in a card, and means whereby when a particular group of perforations is selected the card causing the selection is sorted out and delivered.

1,866,749. SORTING MACHINE FOR STATISTICAL CARDS OR THE LIKE. LESLIE ERNEST BROUGHAM, Thornton Heath, England, assignor to The Accounting & Tabulating Corporation of Great Britain Limited, London, England. Filed Jan. 10, 1930, Serial No. 419,980, and in Great Britain Apr. 5, 1929. 10 Claims. (Cl. 209—110.)



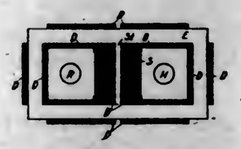
1. In a machine for sorting statistical cards the combination of a plurality of sensing pins sensing perforations on a card, a plurality of compartments corresponding to the pins for the reception of the sorted cards, flaps disposed at the mouths of said compartments, means whereby said flaps are controlled in synchronism with the passage of cards under the pins, a latch for each flap adapted to hold said flap in a position to deflect the cards into the corresponding compartment, and release means adapted to remove the latch after a predetermined interval.

1,866,750. TRANSFORMER FOR FLOODLIGHTS. MYRTLE I. BROWNELL, Jackson, Mich. Filed July 6, 1929. Serial No. 376,397. 4 Claims. (Cl. 240—1.)



1. In combination with a floodlight having a transformer, said floodlight comprising a housing open and flared at one end, an apertured reflector seated snugly in said flared portion of the housing and secured thereto, transformer supporting brackets remote from the open end, one of said brackets having an extended portion and supporting a bulb socket and said bulb socket passing through the apertured portion of the reflector, and said apertured portion serving as an additional support for the transformer.

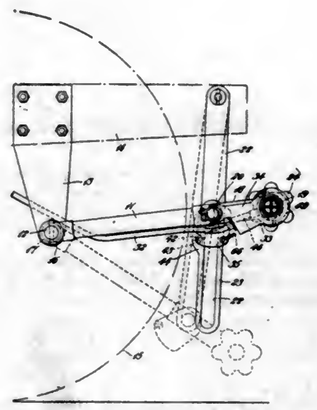
1,866,751. INTEGRATING AND DIFFERENTIAL TRANSFORMER. WALTER BÜTOW, Frankfort-on-the-Main, Germany, assignor to Elektrizitäts-Actien-Gesellschaft vorm. W. Lahmeyer & Co., Frankfort-on-the-Main, Germany, a German Company. Filed Dec. 9, 1929, Serial No. 412,894, and in Germany June 11, 1928. 15 Claims. (Cl. 175—358.)



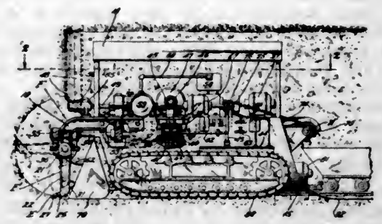
1. An integrating and differential current transformer comprising a plurality of primary windings, an iron core formed with two outer branches and a central branch and provided with the usual windows, primary conductors passing through said windows, the number of the said primary conductors being substantially equal for each window, a winding mounted on said central branch and generating a current corresponding to the sum of the currents passing through said primary conductors, and windings mounted on each of said outer branches and generating currents corresponding to the single currents passing through said primary conductors whereby said windings on each of the outer branches being differentially connected so that the resulting current on the secondary side corresponds to the difference of the currents passing through said primary conductors.

1,866,752. LIFEGUARD OR OBSTRUCTION REMOVER FOR MOTOR ROAD AND OTHER VEHICLES. VERNON JOHN CLIFFORD, London, England. Filed Apr. 21, 1930, Serial No. 446,118, and in Great Britain May 13, 1929. 8 Claims. (Cl. 293—17.)

1. A lifeguard or obstruction-remover for vehicles comprising, in combination, a roller; a pivoted frame for the roller permitting lateral movement thereof; a catch to hold the pivoted frame in an elevated position; and eccentric means actuated by lateral movement of the roller when encountering an obstruction to release the catch and thus permit the pivoted frame and roller to fall by gravity.



1,866,753. TUNNELING MACHINE. JOHN COMOLETTI, Los Angeles, Calif. Filed Mar. 16, 1931. Serial No. 523,119. 14 Claims. (Cl. 262—5.)

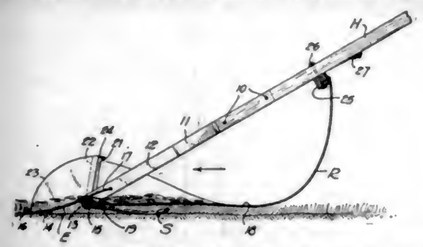


1. A tunneling machine, comprising two earth digging units, means for supporting the two units for swinging movement about a common horizontal axis, and means for supporting the two units for swinging movement on the first supporting means so that they can move about other horizontal axes which are at right angles to the first supporting axis.

1,866,754. RAKE. HORACE R. CRANE, Pasadena, Calif. Filed Feb. 12, 1930. Serial No. 427,911. 11 Claims. (Cl. 55—10.)

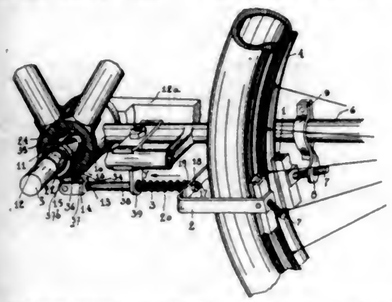
1. A rake comprising a handle, a raking element having tines, a handle on which the raking element is pivotally mounted, means for maintaining the raking element in a position for its tines to comb through the grass of a lawn under leaves on the latter during movement of the

raking element over the lawn irrespective of pivoting of the handle relative to the element, and means disposed



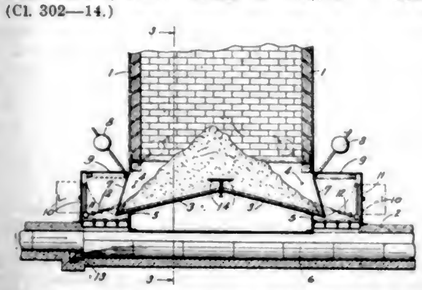
in a position relative to the raking element to receive and collect leaves from the tines as the raking operation proceeds.

1,866,755. BRAKE. FRANÇOIS DETILLOUX, Brussels, Belgium. Filed July 18, 1928, Serial No. 293,688, and in Belgium July 27, 1927. 4 Claims. (Cl. 192—5.)



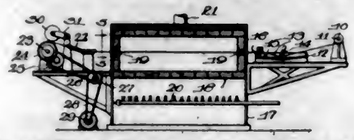
1. A brake device for bicycles or the like comprising a rod; braking blocks on one end of said rod; a pedal-crank-axle having a notch therein; a box surrounding said axle in spaced relation therewith; an element disposed around said axle, and arranged interiorly of said box; said element being comprised of two parts adapted to be joined together, a screw fixed to one of said parts, and having an eye, whereby a yoke on the said rod may be connected with said part, said rod thus being pivotally connected to said element; pawl mounted on said element; and resilient means urging said pawl into engagement with said notch, to cause rotation of the element upon rearward rotation of the axle, producing displacement of the rod and braking blocks.

1,866,756. DISPOSAL OF FURNACE RESIDUES. JOHN DEUTSCH, New York, N. Y., assignor to The Allen-Sherman-Hoff Company, a Corporation of Pennsylvania. Filed June 5, 1929. Serial No. 368,716. 7 Claims. (Cl. 302—14.)



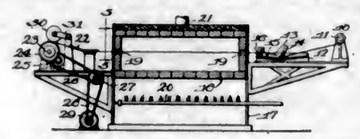
1. Apparatus for handling loose solids comprising a hopper formed by lateral walls extending upwardly from adjacent to a floor, there being a plurality of openings provided in the opposite lateral walls near the floor, bottom walls for the hopper extending downwardly from intermediate the opposite lateral side walls and projecting through said openings, doors for closing the openings, means for directing a stream of liquid under pressure through said openings and substantially parallel to the top of said bottom walls, and sluiceway means below the said floor for receiving and carrying away solids washed from the bottom walls by said fluid.

1,866,757. PACKING AND COMPOSITION. FENNO E. DE VRIES, Evanston, Ill., assignor to Crane Packing Company, a Corporation of Illinois. Filed Aug. 29, 1929. Serial No. 389,155. 10 Claims. (Cl. 154—45.5.)



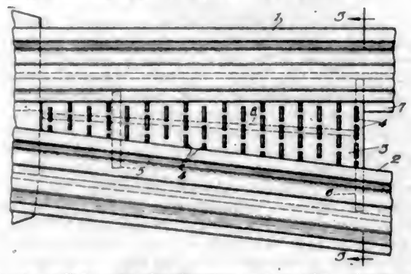
1. A metallic packing comprising a mechanically deformed metallic foil having a coating of a finally reacted synthetic resin of a flexibility at least equal to the flexibility of the foil, and an electrically conductive filler incorporated in said resin.

1,866,758. PACKING AND COMPOSITION. FENNO E. DE VRIES, Evanston, Ill., assignor to Crane Packing Company, a Corporation of Illinois. Filed Aug. 29, 1929. Serial No. 389,156. 8 Claims. (Cl. 154—45.5.)



1. A metallic packing comprising a mechanically deformed metallic foil having an adherent cellulosic coating of a flexibility at least equal to the flexibility of the foil and an electrically conductive filler incorporated in said coating.

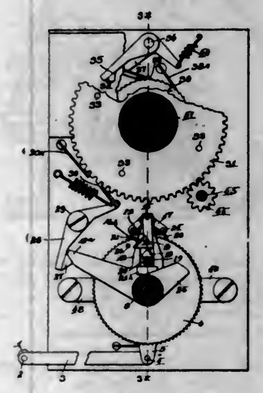
1,866,759. ROLLED STEEL WELDED PAVING CHOCK. JOHN S. DURYEA, Johnstown, Pa. Filed Aug. 26, 1931. Serial No. 559,563. 4 Claims. (Cl. 238—8.)



1. In railway track structures a paving chock comprised of rolled sheet materials welded together to form a unitary structure.

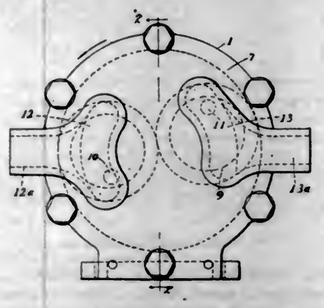
1,866,760. VARIABLE PACE SETTER FOR AUTOMOBILES. FREDERICK H. EVANS, Rochester, N. Y. Filed Dec. 28, 1927. Serial No. 243,124. 15 Claims. (Cl. 235—103.5.)

15. In a pace setting device for an automobile having a clock with an hour and a minute hand thereon, and indicators traveling around said dial independently of the hour and minute hand, but adjustable to keep even therewith, gearing by which said indicators are driven by the automobile in proportion to its pace, said gearing being variable to cause the indicators to keep even with the hour and minute hand when the auto is driven uniformly at a given pace, said gearing including a gear, means to oscillate said gear to an angle greater than



the circular pitch of one tooth thereon and less than the circular pitch of two teeth thereon, a plate driven thereby through a step by step motion, each step having an angle equal to the circular pitch of one tooth, means to cause said plate to oscillate through cycles having variable numbers of steps, a gear rotated with a step by step motion by said oscillating plate, one of said steps being taken for each cycle of movement of the oscillating plate.

1,866,761. ROTARY PUMP, ENGINE, METER, OR THE LIKE. ERNEST FEUERHEERD, London, England, assignor of one-half to James Aratoon Malcolm, London, England. Filed July 22, 1929, Serial No. 380,151, and in Great Britain July 27, 1928. 5 Claims. (Cl. 103—130.)



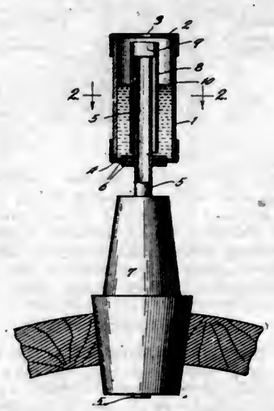
1. A rotary pump, engine, meter or the like comprising a casing, a working chamber, a pair of cylindrical or disc-like pistons continuously revolving in said chamber and dividing said chamber into two parts without a central hub and rocking axes about which said pistons oscillate so as to change their disposition relative to one another during their revolution in the working chamber and form between themselves and the internal wall of said casing chambers of varying size said pistons at any given time having the parts of their perimeters which are facing one another in working contiguity, the amount of clearance varying from a minimum to a maximum.

1,866,762. SPRING DEVICE. LLOYD MCKINSEY FIELD, Cleveland Heights, Ohio, assignor to The Van Coil Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 30, 1931. Serial No. 512,259. 6 Claims. (Cl. 267—61.)



1. A spring device adapted for securement to the frame member of a motor vehicle and including a bracket adapted to be secured in fixed relation to said frame member and a coil spring securely held by said bracket and adapted to engage against a portion of the vehicle movable with respect to said frame member, said bracket being provided with a spring receiving socket in which one end of said spring is received and held by its own resilience, the end of said spring which is received in said socket being enlarged.

1,866,763. FERMENTATION BUNG. JOSEPH B. FISCHER, Chicago, Ill. Filed Dec. 9, 1931. Serial No. 579,917. 3 Claims. (Cl. 217—105.)

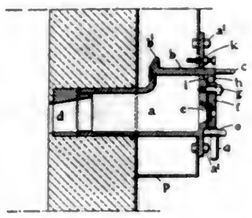


1. A valve structure for fermentation bungs, comprising a housing formed by a cylindrical shell, a removable closure head at top of said shell and a fixed closure head at the bottom of the shell, a vertical tubular member fixedly secured in the aforesaid lower head with its upper end constituting a stationary annular valve seat, with its lower portion depending for attachment to a bung or closure head, and a tubular sleeve encircling said vertical member and carrying in its upper end an elastic valve head adapted for closure contact with the upper end of said vertical member.

1,866,764. TUYÈRE FOR CUPOLA FURNACES. RICHARD GERISCH, Dusseldorf, Germany. Filed July 8, 1931, Serial No. 549,403, and in Germany July 23, 1930. 5 Claims. (Cl. 266—41.)

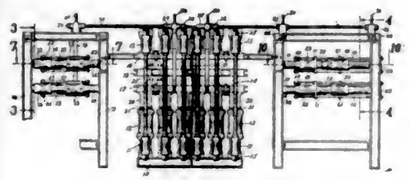
1. An interchangeable tuyère for cupola furnaces having a body formed to a right angle and set to produce a horizontal blast and provided with a peephole in the line of the blast, a closure member for said body and a

peephole cover, the closure member and peephole cover being interlocked in such manner that the peephole cover cannot be moved to the open position when the closure



member is in the closed position and the closure member cannot be moved completely into the closed position when the peephole cover is in the open position.

1,866,765. PRESS FOR BELTS OR THE LIKE. DIMITRY J. GREGORY, New Haven, and WILLIAM C. TIFFT, Seymour, Conn., assignors to Farrel-Birmingham Company, Incorporated, Ansonia, Conn. Filed Sept. 26, 1929. Serial No. 395,304. 41 Claims. (Cl. 69—1.5.)

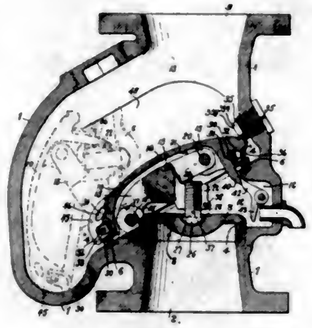


1. A press for belt-like articles comprising article pressing means including a movable platen, article clamping means disposed at one end of said pressing means, and article stretching means disposed at the other end of said pressing means, said clamping and stretching means being disposed substantially in the same plane and movable substantially in unison with said platen.

1,866,766. DRY PIPE VALVE. WILLIAM B. GRIFFITH, Audubon, N. J., assignor to Star Sprinkler Corporation, a Corporation of New Jersey. Filed Feb. 14, 1929. Serial No. 339,754. 14 Claims. (Cl. 169—21.)

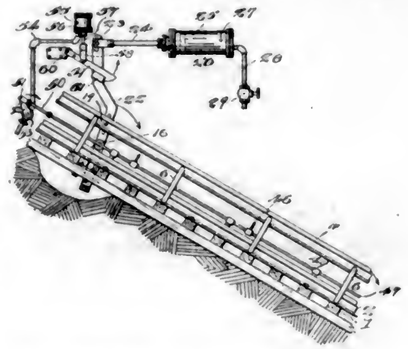
3. A dry pipe valve comprising a casing having an inlet opening and an outlet opening, an air valve seat surrounding the inlet opening, a water valve seat surrounding the inlet opening, a lever arm pivoted to the casing, an air clapper pivoted on the arm and movable therewith to and from the air valve seat when the arm is moved, said casing having an abutment part, one side of said air clapper having a shoulder abutting against said part in opposition to the opening movement of the air clapper when it is closed, the pivot connecting the arm and the air clapper being located between said shoulder and the pivot connecting the arm and the casing, and a water clapper carried by the arm and movable to and from the water valve seat when the arm is moved.

9. A dry pipe valve comprising a casing having an inlet opening and an outlet opening, a valve seat surrounding said inlet opening, a clapper, an arm pivotally mounted within the casing adjacent to the valve seat for carrying said clapper to and from said seat, a pivotal connection between said arm and said clapper, an abutment part upon the casing positioned to be engaged by the clapper upon its initial opening movement from said seat for tilting the clapper relatively to said arm into a position to pass said part, and said part positioned upon the casing to be engaged by the clapper in the event of



a return movement of the clapper toward the seat and prevent the clapper from reseating by the action of a downward pressure upon the clapper.

1,866,767. CAR BRAKE. ALFRED E. GUERTIN, Sr., and ALFRED E. GUERTIN, Jr., Kellogg, Idaho. Filed Jan. 30, 1930. Serial No. 424,650. 4 Claims. (Cl. 188—62.)

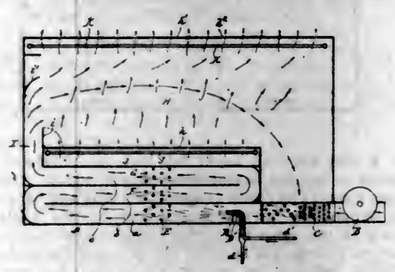


1. The combination in a railway brake mechanism for a traveling car, of a pair of brake rails and means for supporting them over the path of travel of car wheels, a speed operated governor and trip mechanism carried by the car, holding means for the brake rails, and track-trip mechanism co-acting with the car-trip mechanism for releasing the holding means for an application of the brake mechanism.

1,866,768. DRYING LIQUID MATERIALS. GORDON D. HARRIS, Sound Beach, Conn., assignor, by mesne assignments, to The Industrial Dryer Corporation, Stamford, Conn., a Corporation of Connecticut. Filed Mar. 15, 1923, Serial No. 625,236. Renewed June 26, 1931. 25 Claims. (Cl. 159—3.)

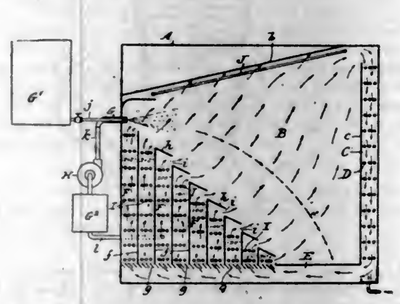
10. A process of drying solids suspended in liquids comprising spraying material in a finely divided state into a moving body of drying gas, and so treating the drying gas as to keep the temperature of the material substantially constant.

17. An apparatus for drying liquid material comprising a chamber, means for expanding into said chamber a current of drying gas in which is suspended particles of a partially dried material, and means for moving the vapor laden gas away from the particles of material, said means comprising a radiator positioned within the chamber substantially above the path of flotation of the suspended particles of material.



22. An apparatus for drying liquid material comprising a chamber, means for projecting a current of material carrying gas across said chamber, means in said chamber beneath the current of drying gas for effecting an upward movement of the gas to facilitate drying of the material, said means comprising a heat radiator positioned in the lower portion of the chamber.

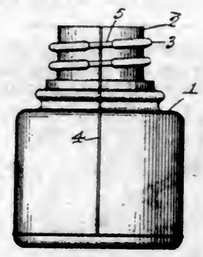
1,866,769. ART OF DRYING LIQUID MATERIALS. GORDON D. HARRIS, Stamford, Conn., assignor, by mesne assignments, to The Industrial Dryer Corporation, Stamford, Conn., a Corporation of Connecticut. Filed June 22, 1923, Serial No. 647,000. Renewed Nov. 6, 1929. 21 Claims. (Cl. 159—4.)



8. In the art of evaporating liquid material containing solids in a body of drying air, utilizing a portion of said air to deliver in a forwardly moving direction and in an atomized state the said material into said body of air, generating at levels below that of said atomized material forwardly and upwardly moving successively placed currents of said air of progressively decreasing temperature to mingle with, and aid in the flotation of, and progressively dry, said atomized material, and providing beyond the region of flotation a downwardly flowing current of cooled air supplied from said upwardly moving air and in turn supplying the air for said upwardly moving currents.

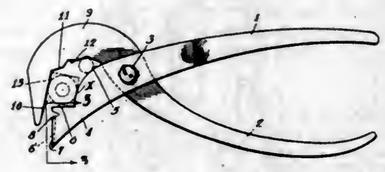
17. A method of drying liquid material containing solids comprising floating the material in finely divided form in a substantially horizontally flowing stream of drying gas, supplying upwardly flowing heated gas to said material from a plurality of points below and spaced along the path of said stream, and graduating the temperature of the upwardly flowing gas to maintain the temperature of the material substantially constant.

1,866,770. GLASS CONTAINER. CARL G. HILGENBERG, Baltimore, Md., assignor to Carr-Lowrey Glass Co., Baltimore, Md. Filed Jan. 2, 1931. Serial No. 506,249. 3 Claims. (Cl. 215—1.)



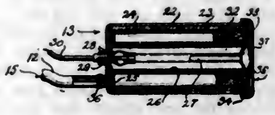
1. A glass container having a neck provided with a seam and a screw thread molded on the neck and extending therearound, that portion of the thread crossed by the seam being reduced in size to an extent not less than the height of the seam.

1,866,771. WRENCH. JOSEPH N. JOHNSON, Irwin, Calif. Filed Jan. 28, 1929. Serial No. 335,586. 4 Claims. (Cl. 81—51.)



1. A wrench having two jaws pivoted together, one of said jaws having straight nut gripping edges re-entrantly inclined with respect to each other, and the other jaw having a curved or cam edge, with an abutment at the outer edge of said cam, said abutment contacting the other jaw when in closed position.

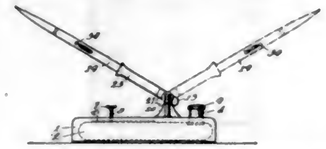
1,866,772. MEDICINAL APPARATUS. YOSHISADA KAWAI, Seattle, Wash. Filed June 24, 1929. Serial No. 373,203. 3 Claims. (Cl. 174—177.)



1. In a therapeutic instrument, in combination, a tubular non-conductive body having its outer end open, a conductive centrically apertured head received about said open end, a strip of heat insulating material disposed about the inner periphery of the body walls, a tubular insulator arranged axially of said body and interiorly of said heat insulating strip to provide an annular space therebetween, an electrically conductive chambered shell received within said space and contactually engaging said head, said shell having its outer end open, a vacuum tube received within said tubular insulator, means for continuously admitting

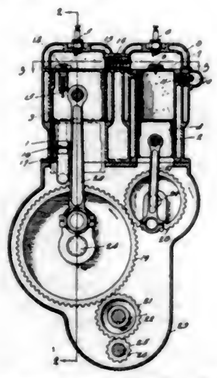
a vaporized medicinal preparation to the chamber of said shell, means to electrically energize said vacuum tube, means to electrically energize said shell for intermittent impulses, and means to restrict the egression of said vaporized preparation co-incident with electrical effects imparted by said energized tube and the conductive head.

1,866,773. FOUNTAIN PENHOLDER AND INK FILLER. GEORGE H. KOERNER, San Francisco, Calif. Filed Jan. 25, 1930. Serial No. 423,396. 9 Claims. (Cl. 120—62.)



1. A fountain pen holder and filler comprising a base, a socket-shaped member pivotally carried by said base for receiving a fountain pen, an ink reservoir fixedly disposed in the base, and liquid conducting means extending from the reservoir to the interior of the socket.

1,866,774. ENGINE. BERNARD STANLEY MAHER, Oakland, Calif. Filed Nov. 18, 1929. Serial No. 408,043. 7 Claims. (Cl. 123—47.)

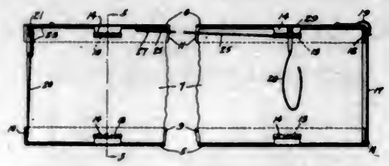


3. An engine comprising a power cylinder, a pump cylinder having a chamber connecting it with the power cylinder, check valves placed between the pump cylinder and chamber and between the chamber and the power cylinder, said pump cylinder having an inlet and said power cylinder having an exhaust opening, valves for said inlet and exhaust openings, a spark plug disposed in the power cylinder and a second spark plug disposed in the chamber, pistons mounted in both of said cylinders, means interconnecting the pistons for reciprocating the pump piston at twice the speed of the power piston, whereby two charges will be delivered to the power cylinder for each power stroke of the piston, the spark plug in said power cylinder igniting the first charge, and the spark plug in the chamber igniting the second charge.

1,866,775. PROCESS FOR THE PRODUCTION OF ZINC HYDROCARBONATE. HERMANN OEHME, Cologne-Kalk, Germany, assignor to Chemische Fabrik Kalk, Gesellschaft mit beschrankter Haftung, Cologne-Kalk, Germany. Filed Aug. 8, 1929, Serial No. 384,519, and in Germany Feb. 14, 1927. 4 Claims. (Cl. 23—61.)

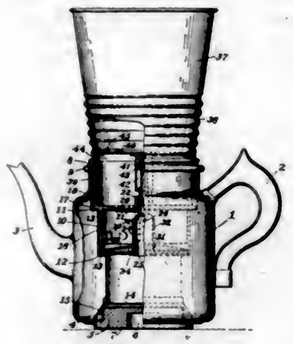
1. The process of producing a highly voluminous zinc hydrocarbonate which consists in treating solid basic zinc chloride in aqueous suspension with a solution of an alkali metal carbonate at a temperature below 100° C.

1,866,776. TAKE-DOWN ALL METAL BOX TRAP. EDNA COOPER SLOULIN, Seattle, Wash. Filed Dec. 14, 1931. Serial No. 580,944. 3 Claims. (Cl. 43—61.)



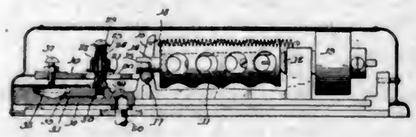
1. A take-down all metal box trap comprising in combination a bottom having side flanges and a front end flange, a top having side flanges and a rear end flange, said side flanges having spaced apart slots, side walls, lips formed on the upper and lower edges of said walls spaced apart to fit into the slots of the side flanges, wedges installed in holes of the row of lips on one edge portion of said walls whereby the top, bottom and side walls are locked in rectangular disposition, a spring retained door pivoted to the rear end of the trap, a front door pivoted to the front end of the trap, a spring adapted to retain said door in a normally closed position, and trigger means for restraining said door in a retracted set position.

1,866,777. COFFEEPOT. EDWARD C. SAASER, Chevy Chase, Md. Filed June 9, 1930. Serial No. 460,056. 13 Claims. (Cl. 53—3.)



1. A coffee pot having a heat-retaining element at the bottom thereof, a stepped member fitting above said element, and the steps of the stepped member provided with openings whereby a constant circulation for the liquid is provided up through the stepped member and around and down the sides of the pot.

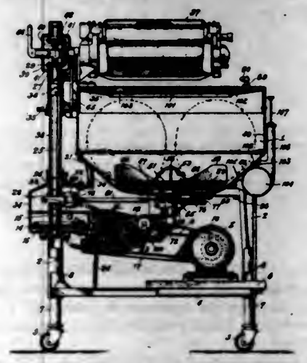
1,866,778. HYGROSTAT. MORTON O. SNEDIKER, Chicago, Ill., assignor to The Powers Regulator Company, Chicago, Ill., a Corporation of Illinois. Filed June 10, 1931. Serial No. 543,378. 4 Claims. (Cl. 297—1.)



3. In a hygrostat, the combination of a support, a moisture-sensitive expansible element mounted on said support, means for effecting adjustment of said element, an angular

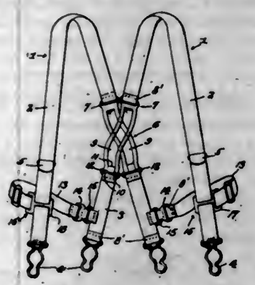
lever having a fulcrum on said support and provided with a short primary arm and a relatively long secondary arm, an air passage in said support, a leak valve in said passge, said valve being in position to be moved to open or closed position by the secondary arm, and a diaphragm in the air passage, said diaphragm acting on said secondary arm at a point near its extremity.

1,866,779. WASHING MACHINE. HOWARD F. SNYDER, Newton, Iowa, assignor, by mesne assignments, to The Maytag Company, Newton, Iowa, a Corporation of Delaware. Filed June 14, 1922. Serial No. 568,158. 39 Claims. (Cl. 259—101.)



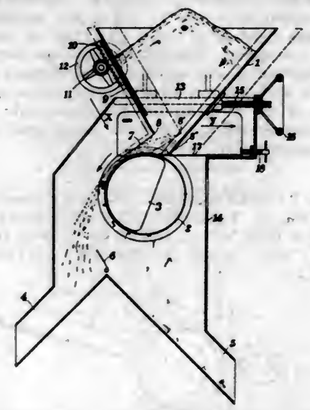
1. The method of cleansing fabrics in a tub consisting in agitating a washing fluid in such a way as to create positively driven violently flowing currents moving away from and back to the plane of the source of agitation, and also around the tub in one direction in a plane approximately parallel with the plane of agitation, and then causing it to move away from the back to the plane of the source of agitation and in a reverse direction in a plane approximately parallel with the plane of agitation so as to bodily and forcibly cause the fabrics in the tub to travel in substantially the same paths as the fluid, whereby thorough cleansing of the fabric is effected without substantial contact with rubbing surfaces.

1,866,780. SUSPENDERS. PAUL DANIEL SWAYZE, Kansas City, Mo. Filed Jan. 19, 1931. Serial No. 509,822. 2 Claims. (Cl. 241—12.)



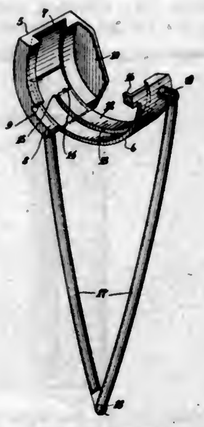
1. A pair of suspenders comprising a pair of garment supporting straps each including a front elastic section and a rear elastic section, means for detachably connecting one end of each of the sections with a garment, connected inelastic means for coupling the front and rear sections of each strap together for independent movement of said straps relative to each other, and a pair of inelastic side straps, each side strap having one end detachably connected to the rear section of one of the supporting straps and its other end adjustably connected to the front section of the other supporting strap.

1,866,781. CHARGING DEVICE OF THE HOPPER TYPE. GEORG ULLRICH, Magdeburg, Germany, assignor to Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Filed Mar. 22, 1928, Serial No. 263,850, and in Germany May 28, 1927. 3 Claims. (Cl. 209—231.)



1. In a charging device for a magnetic separator, a rotating magnetic discharge drum, a hopper supplying material to said drum, an adjustable slide coordinated with the hopper and adjusting the discharge area of said hopper and means for changing the amount of the discharge area which is in contact with the drum, but leaving the discharge area of the hopper substantially unchanged, by displacing the hopper relatively to the drum.

1,866,782. METHOD AND IMPLEMENT FOR EXPANDING SPRINGS. JONATHAN NEWTON WHITE, New York, N. Y., assignor to United Metal Hose Co. Inc., New York, N. Y., a Corporation of New York. Filed Nov. 1, 1927. Serial No. 230,376. 15 Claims. (Cl. 29—87.1.)

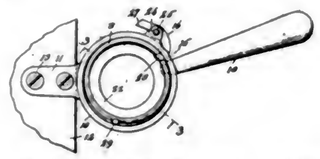


1. In combination, a pair of oppositely curved slidably associated members, a raised longitudinally portion formed on the inner face of one of the members to hold a coil spring against movement in one lateral direction and a transverse abutment to engage one of the spring terminals, means for retaining the spring against movement in the opposite lateral direction, a second abutment on the other member to engage the opposite spring terminal, and manually operable means for moving the members in a direction to apply

pressure to the spring to expand its convolutions circumferentially or in a direction to release the pressure from the spring.

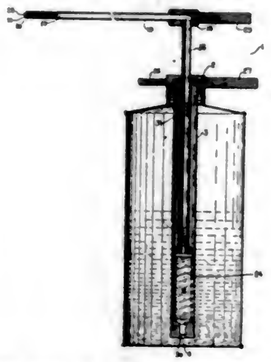
2. In the art of expanding helically wound springs having a plurality of convolutions to permit their insertion while so expanded over a cylindrical member, the method which consists in applying pressure in reverse circumferential directions to the spring terminals while limiting the freedom of radial distention of the convolutions of the spring, whereby to place the entire spring under compression and move the convolutions uniformly relative to each other to expand the diameter of the convolutions of the entire spring and thus retain the cylindrical shape of the spring while temporarily increasing their diameters.

1,866,783. RING EXPANDER. JONATHAN NEWTON WHITE, New York, N. Y., assignor to United Metal Hose Co. Inc., New York, N. Y., a Corporation of New York. Filed Jan. 9, 1931. Serial No. 507,595. 12 Claims. (Cl. 29—87.1)



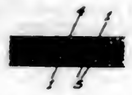
1. In a device for circumferentially expanding helically wound springs, the combination of a cylinder provided with means for mounting the same fixedly in place and provided with an arcuate slot, an actuator barrel mounted for rotary movement in the cylinder and provided with an actuating handle projecting therefrom through said slot, said cylinder and barrel each provided with means for engaging and applying pressure to an end of the spring to be expanded and with means for restraining axial movement of the springs while permitting a freedom of circumferential movement of the convolutions forming the spring.

1,866,784. ONE HAND OIL RIFLE. CHARLES L. WILLIAMS, Alhambra, Calif., assignor to The Wilton Wonder Oil Company Ltd., Alhambra, Calif. Filed Oct. 4, 1930. Serial No. 486,397. 3 Claims. (Cl. 221—50.)



1. In a one hand oil rifle, the combination of a pump comprising a cap, a barrel attached to and having its upper end closed by said cap, a foot valve attached to the lower end of said barrel, a plunger slidably mounted in said barrel and provided with an outlet orifice, and forming a suction valve, an oil chamber formed in said barrel between said plunger and said foot valve, a plunger rod attached to said plunger and provided with a passageway therein disposed to register with said outlet orifice for communication with said oil chamber, a nozzle pipe provided with a nozzle and separably attached perpendicular to said plunger rod, by means of an elbow fitting, and a gripping means comprising a handle rigidly attached to said elbow fitting, and disposed to provide a guiding means for said nozzle, and oppositely extended gripping members rigidly secured to said cap and disposed in cooperable relation with said handle, said gripping members being disposed and adapted to provide levers wherewith to tightly secure said cap to a container.

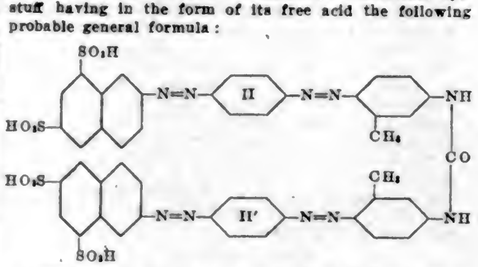
1,866,785. HEATING ELEMENT. WALTER R. J. WOOCK, Lodi, Calif., assignor to Super Mold Corporation, Lodi, Calif., a Corporation. Filed June 24, 1929. Serial No. 373,114. 1 Claim. (Cl. 219—46.)



An electric heating unit comprising a universally flexible soft rubber pad, a flexible electric heating wire embedded in the pad, and powdered mica covering said wire from end to end to allow the wire to slip relative to the pad.

1,866,786. BROWN AZO DYESTUFFS. DANIEL ZINNER, South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Feb. 24, 1931. Serial No. 518,029. 10 Claims. (Cl. 260—70.)

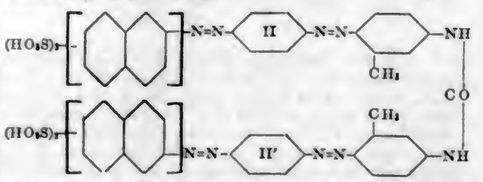
1. As a new product of manufacture, a tetrakisazo dyestuff having in the form of its free acid the following probable general formula:



in which the phenylene residues II and II′ are free or substituted by like or different substituents of the group consisting of alkyl and alkoxy groups, said dyestuff being characterized by dyeing cotton from a neutral or alkaline bath in yellowish brown to reddish brown shades of great brightness and of good fastness to light and to washing.

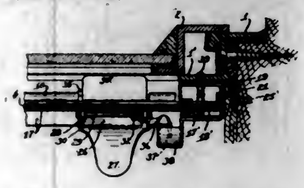
1,866,787. BROWN AZO DYESTUFFS. DANIEL ZINNER, South Milwaukee, Wis., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 15, 1932. Serial No. 593,212. 19 Claims. (Cl. 260—70.)

1. As a new product of manufacture, a tetrakisazo dyestuff having in the form of its free acid the following probable general formula:



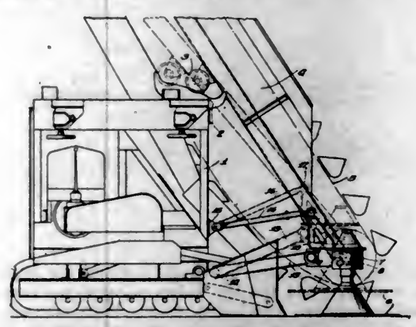
in which the phenylene residues II and II′ are free or substituted by like or different substituents of the group consisting of alkyl and alkoxy groups, said dyestuff being characterized by dyeing cotton from a neutral or alkaline bath in yellowish brown to reddish brown shades of great brightness and of good fastness to light and to washing.

1,866,788. ROLLER SCREEN. EDWARD D. ARTHUR, Palo Alto, Calif., assignor to Arthur Metal Products Company Ltd., San Francisco, Calif., a Corporation of California. Filed Dec. 12, 1930. Serial No. 501,859. 8 Claims. (Cl. 156—39.)



2. In a roller screen having a bar secured to its lower end, a latch comprising a plate hinged to said bar at its lower edge; a keeper positioned for wedging engagement by said latch; and resilient means for moving said latch into engagement with said keeper.

1,866,789. LOADING MACHINE. HARRY H. BARBER, Aurora, Ill., assignor to Barber-Greene Company, a Corporation of Illinois. Filed May 10, 1930. Serial No. 451,226. 4 Claims. (Cl. 198—9.)



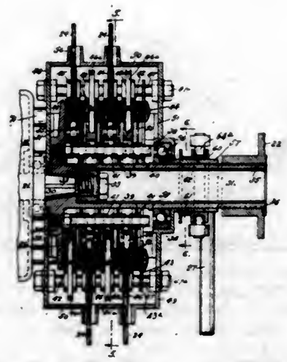
2. In a loading machine comprising a frame, a boom floatingly mounted upon said frame, horisontal feeding members having vertical axis pivotally mounted upon the lower end of said boom, and a pair of parallel bars pivotally connected to said frame and to each feeding element for maintaining the axis of said feeding elements in vertical position during the raising and lowering of the boom.

1,866,790. METHOD OF MAKING TIRE MOLDS. RALPH C. BATEMAN, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 13, 1930. Serial No. 435,478. 2 Claims. (Cl. 22—203.)



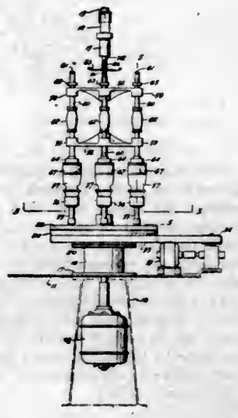
1. A method of making molds which comprises forming a matrix about a core, vulcanises the matrix, disposing the matrix about a core of a size sufficient to compensate for shrinkage of the matrix, and forming a metal shell upon the matrix.

1,866,791. BRAKE SYSTEM. GEORGE WILLIAM BELL, Detroit, Mich. Filed Feb. 15, 1928. Serial No. 254,500. 21 Claims. (Cl. 188—140.)



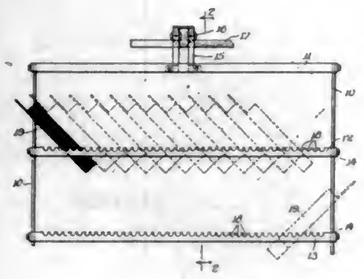
1. An apparatus of the character described having in combination a motor vehicle having a running gear including wheels, a drive shaft connected therewith, fixed and movable brake members associated with each wheel, a separate cable connected individually with each of said movable brake members, a separate cable take-up means independently supported on the frame of the vehicle and connected with each of said cables, and means associated with said drive shaft for actuating said cable take-up means.

1,866,792. MULTIPLE INSULATOR TRIMMING MACHINE. ARTHUR G. BENARD, Rochester, N. Y., assignor to The Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Mar. 3, 1930. Serial No. 432,934. 15 Claims. (Cl. 25—3.)



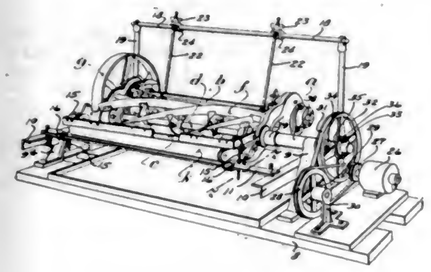
1. In a machine of the character described, a plurality of individually rotating insulator carriers, relatively stationary cutting means, and means for moving said carriers to bring the insulators thereon successively into engagement with the cutting means.

1,866,793. SMOKEHOUSE TROLLEY. ALONZO NEWTON BENN, Chicago, Ill. Filed June 17, 1929. Serial No. 371,339. 7 Claims. (Cl. 99—2.)



1. The combination of a skeleton frame, and a plurality of meat receiving, foraminous baskets carried by said frame, said baskets being arranged in a reclining, stacked relation and each basket serving as a support for the next adjacent basket.

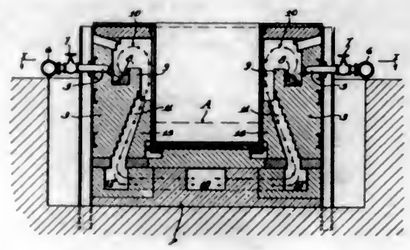
1,866,794. LAWN MOWER SHARPENING MACHINE. FRANK H. BIERMAN, Minneapolis, Minn. Filed June 18, 1931. Serial No. 545,189. 7 Claims. (Cl. 51—26.)



1. A machine for sharpening lawn mowers comprising laterally spaced supports, means applied to one of said supports for rotating the cutter head of a lawn mower, laterally spaced rails secured in respect to said supports and extending both forward and rearward thereof, a rest bar for the roller-equipped extension of the lawn mower adjustably applied to said rails and shiftable from the front to the rear end portions thereof, and clamping means applied to said rest bar for clamping the lawn mower against said bar in both forwardly and rearwardly applied positions, whereby the machine is arranged to hold and sharpen lawn mowers regardless of whether they have right- or left-hand drives.

1,866,795. METAL COATING FURNACE. THOMAS B. BOYD, Butler, Pa. Filed June 30, 1931. Serial No. 547,886. 4 Claims. (Cl. 263—14.)

1. A metal coating furnace, comprising a tank encased in refractory walls, a plurality of fuel burners in said walls near the top of the tank, stack flues in the bottom portions of said walls, and vertical passages for products of combustion extending downwardly from said burners to said flues, the upper portion of said passages



being adjacent to and the lower portions receding from the sides of the tank to apply greater heat to the upper than to the lower strata of metal in the tank.

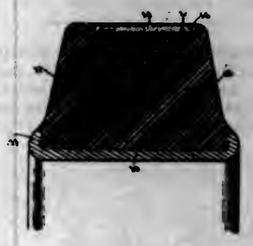
1,866,796. TRAILER HITCH. EDWARD B. BREUSS, Willows, Calif. Filed Nov. 1, 1930. Serial No. 492,853. 1 Claim. (Cl. 280—33.55.)



In combination with a vehicle including its chassis, the front axle and the rod which connects the steering knuckles together, upper and lower plates fastened to the central part of the axle, vertically alined pivot bushings in said plates, a bar having a hole therein for receiving the top bushing, a reinforcing bar connected with the first bar and connected thereto forwardly and rearwardly of the axle, said reinforcing bar having an opening therein for receiving the lower bushing, means for connecting the bushings to the bars, a clamp on the connecting rod, a pivot bushing carried thereby and the end of the first bar having an opening therein for receiving a bushing, means for connecting said end of the bar to the bushing, a second bar pivotally connected to the front part of the chassis for movement about a vertical axis, the pivotal point being in alinement with the pivot bushing connected with the axle, means for slidably supporting the front end of the second bar, a frame pivotally connected with the front end of the second bar for movement about a horizontal axis, a draw bar yieldably supported in the frame, and a link pivotally connected to the front end of the first bar and to a part of the front portion of the second bar.

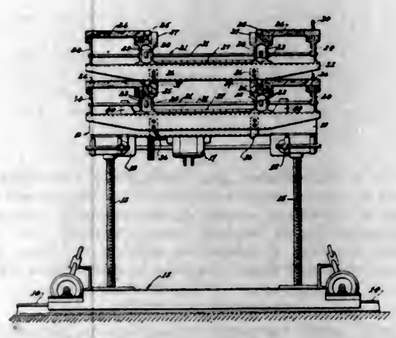
1,866,797. SOLID TIRE. RICHARD S. BURDETTE, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 10, 1927. Serial No. 239,172. 3 Claims. (Cl. 152—1.)

2. A tire for a vehicle wheel comprising a body portion secured to the periphery of the wheel and a layer of material substantially unaffected by heat and having a relatively low coefficient of heat transmission disposed on



the outer surface of the body portion in circumferential plies and constituting its tread, said material being vulcanized to the remainder of the body portion.

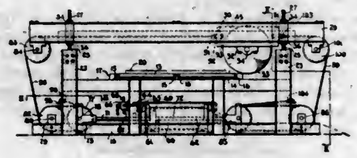
1,866,798. DROP PIT MECHANISM. HUGH K. CHRISTIE, Harvey, Ill., assignor to Whiting Corporation, Harvey, Ill., a Corporation of Illinois. Filed Aug. 17, 1931. Serial No. 557,551. 15 Claims. (Cl. 104—32.)



1. In equipment of the character described, the combination with a pit, of a plurality of drop tables, each adapted to bridge and to be lowered in the pit, means for securing the tables in pit-bridging position, and mechanism in the pit for raising and lowering the tables and separable from the tables, the tables being adapted to be superimposed one upon the other in close relation, and provided with interengaging means for preventing lateral displacement of one table while it is superimposed on the other, when the tables are in close relation.

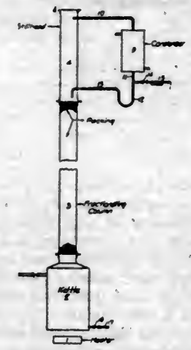
1,866,799. RUBBER CUTTING MACHINE. ELMER CLARK, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 6, 1930. Serial No. 418,738. 3 Claims. (Cl. 164—77.)

1. An apparatus for cutting rubber or the like comprising a frame, a plurality of horizontally disposed rollers journaled on the frame and comprising a bed for the material to be cut, a pair of parallel guides, means for adjustably securing each end of the guides to the frame in superimposed relation thereto and parallel to the axes of the rollers, a crosshead carried by the guides, a cutting disc freely journaled on the crosshead, a cutting bar having a groove therein cooperating with the



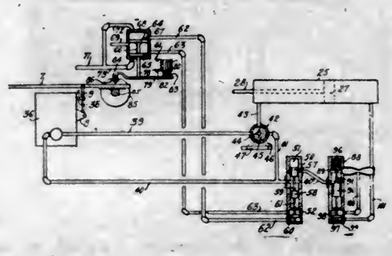
cutting disc, the bar being fixed on the frame between the rollers in alignment with the guides, and means for reciprocating the crosshead.

1,866,800. PROCESS OF INCREASING THE CONCENTRATION OF OLEFINES IN A MIXTURE CONTAINING SAME. RICHARD M. DEANESLY, Berkeley, Calif., assignor to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed June 5, 1929. Serial No. 368,612. 19 Claims. (Cl. 202—42.)



1. A process for increasing the concentration of olefines in a mixture of olefine and paraffin hydrocarbons, comprising: fractionally distilling the mixture in the presence of a nitrogenous solvent with a preferential attraction for the olefine fraction.

1,866,801. HYDRAULIC CRANE. WALTER FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 13, 1926. Serial No. 88,114. 5 Claims. (Cl. 60—52.)

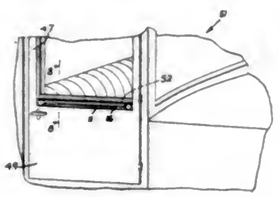


1. In a hydraulic crane, the combination of a hoisting cable, a piston and cylinder for operating said cable, said piston having faces of unequal areas, a pump for deliver-

ing a driving liquid to said cylinder at a predetermined rate, and means adjustable to direct the liquid from said pump to one end of said cylinder for slow hoisting or to direct the liquid from said pump to both ends of said cylinder for rapid hoisting.

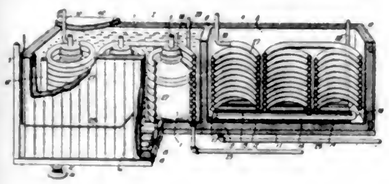
5. The combination of a hydraulic motor, a variable displacement pump for driving said motor, means for regulating pump displacement, means for driving said pump, a cut-off valve between said pump and motor, and means operable to close said valve when pump displacement is zero or in the event of failure in said pump driving means.

1,866,802. DIRECTIONAL SIGNAL. FRANCES ETHEL GRAGG and LEONARD B. COHN, Los Angeles, Calif., assignors to Edmund C. Hames, Los Angeles, Calif. Filed May 29, 1929. Serial No. 367,030. 2 Claims. (Cl. 177—329.)



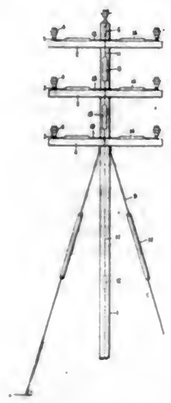
1. A vehicle side signal comprising an elongated, rigid housing having an opening in the forward face thereof extending longitudinally of said housing, a tube carried within said housing and containing a gas adapted to be rendered luminous by electrical discharge, said tube being visible through said opening, means for conducting energizing current to said tube, and means for mounting said housing upon a side surface of a vehicle with a face of the housing abutting against said surface and with the remainder of the housing projecting outwards therefrom.

1,866,803. HEATING AND COOLING APPARATUS. FREDERICK E. HARTMANN, Omaha, Nebr., assignor to Baker Ice Machine Co. Inc., Omaha, Nebr., a Corporation of Nebraska. Filed Oct. 24, 1929. Serial No. 402,020. 3 Claims. (Cl. 257—10.)



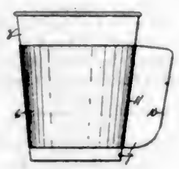
1. In apparatus of the character described, in combination with a container, a refrigerant supply, and a steam supply, a cabinet adapted to hold water and receive the container, a steam coil in the cabinet connected with said steam supply for heating water contained by the cabinet for heating the container, means for circulating water at normal temperature from said supply means through the cabinet to initially cool the container, and an expansion coil connected with said refrigerant supply for completing the cooling of the container.

1,866,804. MEANS FOR UTILIZING WOOD POLES TO AID INSULATORS. KENT A. HAWLEY, Baltimore, Md., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed May 21, 1929. Serial No. 364,889. 6 Claims. (Cl. 175—30.)



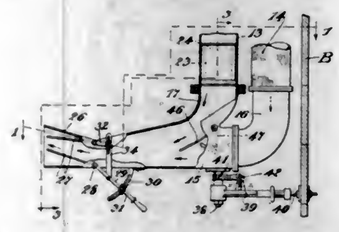
2. In a transmission line installation embodying a wooden structure, metallic elements mounted thereon and conductor insulators carried by said metallic elements, the combination of bonding wires connected with the metallic elements, a connection common to all of said bonding wires, and fuses interposed in said bonding wires.

1,866,805. CUP HOLDER. HARRY H. HAYWOOD, New Britain, Conn., assignor to The American Paper Goods Company, Montclair, N. J., a Corporation of New Jersey. Filed Jan. 8, 1930. Serial No. 419,302. 2 Claims. (Cl. 65—13.)



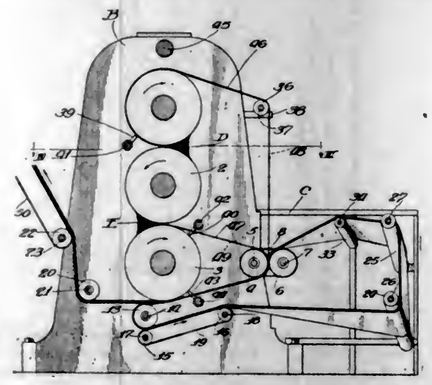
1. A cup holder open at the bottom-end composed of foldable flexible material, said holder including a body folded at opposite ends on oppositely inclined lines to conform to a paper cup, and tabs extending from said folds and permanently secured together to comprise a handle.

1,866,806. CONTROL MEANS FOR PNEUMATIC EJECTORS. LUDWIG F. HOLLY, Madison, N. J., assignor to Holly Pneumatic Systems, Inc., New York, N. Y., a Corporation of New York. Original application filed May 1, 1926, Serial No. 105,936. Divided and this application filed Apr. 2, 1929. Serial No. 352,042. 2 Claims. (Cl. 302—19.)



1. A portable ejector nozzle for granular materials having means at one end through which the material and compressed air are supplied to the nozzle in separate streams entering said nozzle along convergent paths, spaced plates pivotally mounted in the discharge end of the nozzle, means for adjusting one of said plates with respect to the other to vary the effective discharge area between said plates, and means for connecting said plates for movement as a unit in the operation of said adjusting means to thereby alter the angle of discharge of the stream of material with respect to the nozzle.

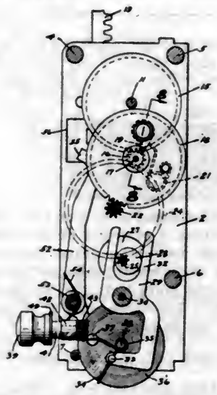
1,866,807. METHOD OF AND APPARATUS FOR MAKING FOUR-PLY STOCK ON THREE-ROLL CALENDERS. HOWARD O. HUTCHENS and ARNOLD R. KRAUSE, Eau Claire, Wis., assignors to Gillette Rubber Co., Eau Claire, Wis., a Corporation of Wisconsin. Filed June 20, 1929. Serial No. 372,281. 7 Claims. (Cl. 154—1.)



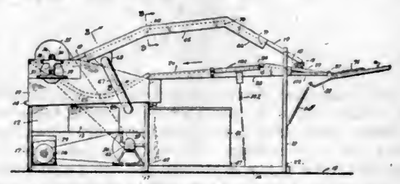
1. Method of making 4-ply stock on 3-roll calenders which consists in forming two full width sheets of single ply stock, slitting said sheets, bringing together similar halves of said two slit sheets to make two 2-ply strips, and then directing one of the two-ply strips so formed on to the other two-ply strip.

1,866,808. TIMING MECHANISM. MURRAY IRELAND, Minneapolis, Minn., assignor to Waters-Genter Company, Minneapolis, Minn., a Corporation of Minnesota. Filed May 31, 1930. Serial No. 457,893. 15 Claims. (Cl. 161—1.)

15. The combination with a timing mechanism comprising a spring-actuated shaft having an eccentric operatively connected therewith, and also having a member adapted to be actuated by rotation of said shaft to cause it to engage a mechanism to be controlled, of an oscillator having one end engaged with said eccentric and provided with a movable support, a balance wheel yieldingly connected with the opposite end of said oscillator, and a device for relatively moving said support to control the oscillations of the oscillator, whereby the timed operating period of the mechanism may be varied.

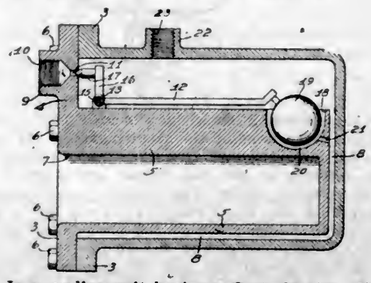


1,866,809. EGG PROCESSING MACHINE. MORRIS KASSER, San Francisco, Calif., assignor to Kasser Egg Process Co., San Francisco, Calif., a Corporation of California. Filed Nov. 10, 1926. Serial No. 147,464. 17 Claims. (Cl. 99—2.)



3. In an unloading device, an egg tray having pockets therein for accommodating eggs, means forming a surface beneath the tray, and means for causing downward movement of the tray over the surface to cause said surface to act on the bottom of the eggs to free them from the pockets.

1,866,810. REFRIGERATION UNIT. RICHARD W. KRITZER, Chicago, Ill., assignor to Peerless Ice Machine Company, Chicago, Ill. Filed Feb. 20, 1929. Serial No. 341,523. 17 Claims. (Cl. 62—126.)



14. In a cooling unit having a float chamber, displacement means disposed within the float chamber and having a recess, and float operated valve means disposed with-

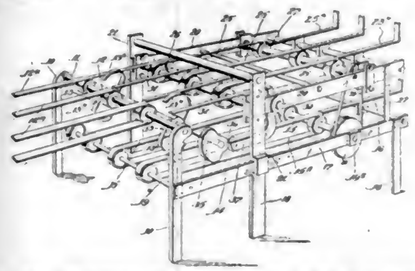
in the chamber and having its float disposed within said recess, said recess being of such dimension with respect to the float that the latter will be actuated by a relatively small quantity of refrigerant.

1,866,811. PAPER-MAKING APPARATUS. FREDERICK LA CROIX, Agawam, Mass. Filed Nov. 28, 1930. Serial No. 498,620. 2 Claims. (Cl. 92—48.)



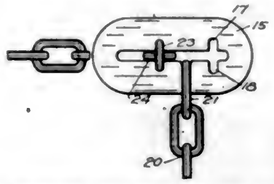
1. A paper-marking element of the class described comprising in combination, a plurality of spaced rods of relatively soft annealed material secured together at spaced points throughout their length, adjacent rods being offset from the plane of the main body thereof in the form of a design to provide a depression and a raised portion on opposite sides of the element.

1,866,812. FOLDER-SEPARATOR. PHILIP E. LAMMERICH, Chicago, Ill. Filed June 5, 1931. Serial No. 542,212. 11 Claims. (Cl. 271—64.)



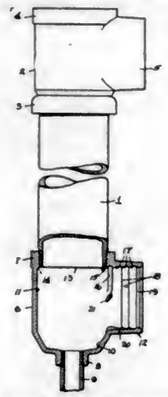
1. An attachment for folder delivery devices including a fan bucket and a horizontal delivery table below said fan bucket, said attachment consisting of an auxiliary delivery table detachably connectible above said first named table, and a gate having an operating arm adapted to be connected with said fan bucket to intercept alternate folders before they reach said fan bucket.

1,866,813. CHAIN SHACKLE. GUSTAF LINDVALL, Port Menier, Anticosti Island, Canada. Filed Feb. 24, 1931. Serial No. 517,792. 2 Claims. (Cl. 24—116.)



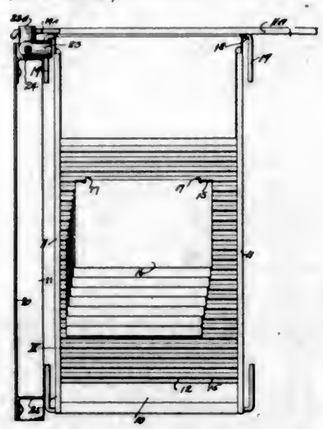
2. A chain fastening comprising a shackle plate having a longitudinal slot extending the greater part of the length of the plate and transverse extensions from the longitudinal slot adjacent to one end thereof and a chain link recess intermediate of the length of the longer reach of the longitudinal slot and a chain having one link in operating position engaging the shackle plate in the shorter reach of the longitudinal slot and adapted to be moved along the longitudinal slot past the transverse slots to said recess for the insertion of the other end of the chain into said slots and along the longer reach of the longitudinal slot.

1,866,814. GAS-VENT T. HENRY J. LUFF and WILLARD J. LUFF, Cleveland Heights, Ohio; said Henry J. Luff assignor to said Willard J. Luff. Filed Apr. 13, 1929. Serial No. 354,738. 3 Claims. (Cl. 126—307.)



1. A gas-vent T having a leg adapted to be disposed in a substantially horizontal position, said leg being formed with a tapered annular groove to prevent flow of liquid along the interior surface of said leg to the outer end thereof.

1,866,815. CARD INDEX. HENRY S. MCGEE, Memphis, Tenn. Filed June 19, 1930. Serial No. 462,334. 6 Claims. (Cl. 40—102.)

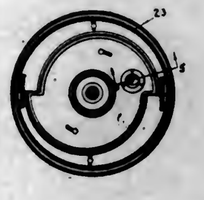


1. In a file, a frame-support, a horizontally disposed rod carried thereby, a plurality of hinge blocks mounted on and turnable about said rod, each of said blocks having a hole therethrough at right-angles to and axially spaced from said rod, and a plurality of card-supporting frames, each having a projecting hinge pin engaging a hole in a hinge block.

1,866,816. FRICTION BRAKE. CLYDE C. MCMULLIN, Loon Lake, Wash. Filed May 17, 1930. Serial No. 453,191. 1 Claim. (Cl. 188—78.)

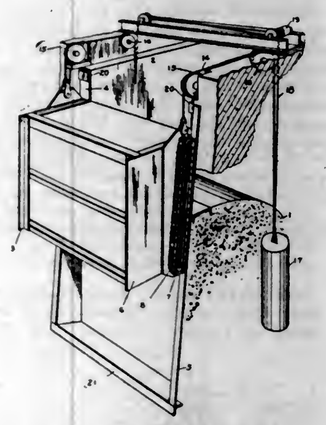
The combination with a brake drum and a stationary plate, of an oscillatable, slotted, disk having a pair of opposed peripheral cams forming diametrically extending shoulders, of a pair of slotted brake shoes having angular ends complementary to said shoulders, guide pins on the plate for the slotted disk and slotted brake shoes, said shoes having outer friction faces for engagement with

the drum and inner cam faces complementary to the disk-cams, springs connecting adjoining ends of the shoes for holding them in contact and for holding the shoes in contact with the shoulders when the shoes are retracted,



a cam shaft journaled in the plate and disposed eccentrically in a circular opening of the disk, a cam on the shaft for co-action with the walls of the opening, and means for turning the cam shaft.

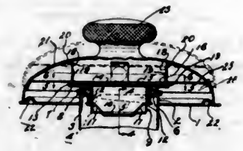
1,866,817. SLUICE GATE. ERWIN B. PHILIPS, Kenton, Ohio, assignor to Philips and Davies, Inc., Kenton, Ohio, a Corporation of Ohio. Filed May 19, 1928. Serial No. 279,160. 2 Claims. (Cl. 61—28.)



1. A sluice gate construction comprising a framework having vertical sealing surfaces thereon, a gate having sealing surfaces thereon and movable downwardly to open position, inclined guide ways for influencing the movement of said gate into and out of closing position with relation to said framework, said guideways being so inclined as to cause said gate to reciprocate at an angle to the vertical, means for applying a lifting force to said gate to move it into closed position, said means embodying a weight heavier than the weight of said gate, and means for relieving said gate of such lifting force.

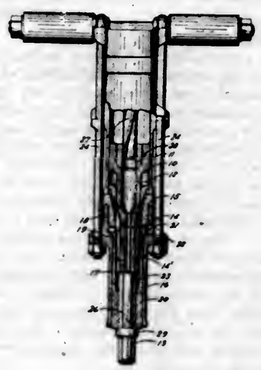
1,866,818. CLOSURE. JAMES S. REID, Cleveland, Ohio, assignor, by mesne assignments, to The Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 27, 1928. Serial No. 257,388. 3 Claims. (Cl. 220—40.)

1. A closure for a receptacle neck extending through a surrounding member, comprising an inner member provided with locking means adapted for releasable assembly with said neck by rotation relative thereto, an outer member having a transversely extending wall portion therein provided with a plurality of openings, and a plurality of arms connecting said inner and outer members whereby said inner member may be rotated by said outer member, said arms being movable in said openings to permit axial movement of said outer member relative



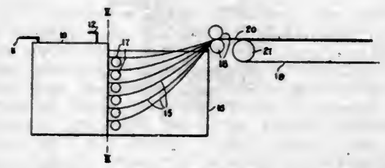
to said inner member whereby said outer member may be moved into and out of engagement with said surrounding member.

1,866,819. HAMMER FOR ROCK DRILLS. JOHN E. RENFER, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 19, 1929. Serial No. 400,752. 6 Claims. (Cl. 121—7.)



1. In a drill, a piston having a splined stem, the portion of said splines adjacent the free end of said stem being of less depth than the remainder thereof.

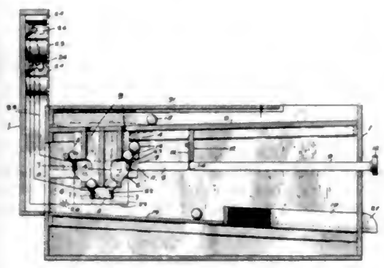
1,866,820. FORMING RUBBER STRIPS FROM LATEX. CHARLES R. PARK, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 14, 1929. Serial No. 363,092. 1 Claim. (Cl. 18—2.)



A machine for manufacturing rubber articles from compounded latex comprising an enclosed container, means for creating pressure within the container, a plurality of openings formed in the container, a container for coagulant so disposed as to receive filaments of latex extruded through the openings in the container, rollers disposed in the container in position partially to support the filaments as they emerge from the openings, rollers

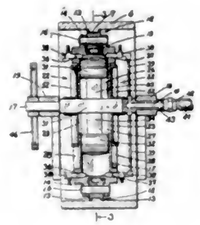
disposed adjacent the coagulant container for drawing the strips of coagulated material from the coagulant container and for pressing them together, and means for conveying away the strips of material thus formed.

1,866,821. GAME. CLIFTON V. RATHER, San Francisco, Calif. Filed May 11, 1931. Serial No. 536,397. 8 Claims. (Cl. 273—125.)



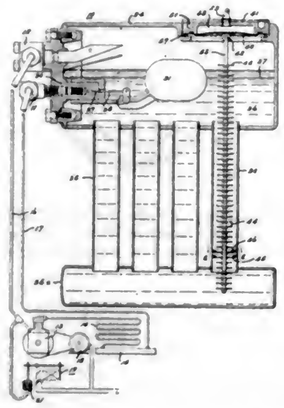
5. A game comprising a housing having an inclined member therein provided with a plurality of pockets arranged in a plurality of rows, and having open bottoms to permit the passage of balls thru said pockets, certain of said rows of pockets depending below adjacent rows, and all of said pockets being provided with at least one open side whereby a second ball deposited within any pocket may be ejected thru said open side by a first ball therein; a common barrier slidably mounted within the housing and comprising a plurality of bars arranged opposite the open bottoms of each row of apertures; a separate indicator mounted upon the housing for each pocket; separate means mounted upon the bars, one for each pocket and connected to its respective indicator and actuated by a ball within said pocket to operate said respective indicator; and an oppositely inclined member arranged within the housing and below the pockets and barrier to return balls from said pockets.

1,866,822. AIR COMPRESSOR. RALPH SALISBURY, Lancaster, Calif. Filed Nov. 20, 1930. Serial No. 496,916. 5 Claims. (Cl. 230—177.)



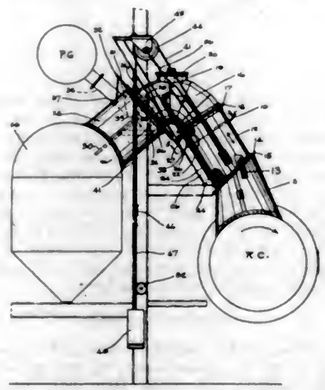
1. A compressor comprising a frame, a circular track thereon, a cylinder housing mounted on said track for rotation about the axis thereof, said housing having a cylinder disposed radially with respect to said circular track, a shaft perpendicular to the axis of said cylinder and journaled on said frame eccentrically with respect to said track, a piston rigid with said shaft and slidably disposed within said cylinder and means on said shaft slidably engaging said cylinder housing to rotate the housing with the shaft.

1,866,823. REFRIGERATING APPARATUS. WARREN H. F. SCHMIEDING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 29, 1931. Serial No. 533,758. 14 Claims. (Cl. 62—115.)



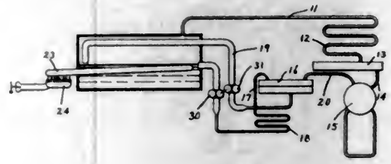
1. In a refrigerating system of the type in which a body of liquid refrigerant is maintained in an evaporator and in which a layer of lubricant floats on the liquid refrigerant in the evaporator, the combination of an evaporator, means for supplying liquid refrigerant to and for withdrawing gaseous refrigerant from said evaporator, means for starting and stopping said first named means, means for agitating the liquid refrigerant in said evaporator to destroy the blanketing effect of the lubricant, said last named means including a portion disposed below the liquid level in said evaporator, and means responsive during each cycle due to the cyclical operations of said first named means for actuating said portion of said last named means.

1,866,824. CONVERTER HOOD. LESLIE MITCHELL SHERIDAN, Copper Cliff, Ontario, Canada. Filed Sept. 12, 1930. Serial No. 481,576. 8 Claims. (Cl. 266—36.)



1. A converter hood comprising a plurality of sections extending from a stationary delivery stack and movable in relation thereto, a roller running gear on fixed rails supporting said sections, cables attached to an intermediate section and trained to and from suitable pulleys and an operating mechanism suitably driven and coacting with a compensating weight adapted to slide said sectional stack over the mouth of a converter.

1,866,825. REFRIGERATING APPARATUS. HARRY F. SMITH, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 30, 1930. Serial No. 485,429. 6 Claims. (Cl. 62—119.)



1. In the art of refrigeration through the agency of an absorption system wherein a refrigerant is separated from a liquid absorbent in a generator, condensed in a condenser, evaporated in an evaporator, and absorbed in an absorber, that step comprising, circulating the strong liquor from the absorber to the generator by forces generated by the flow of refrigerant from the generator to the condenser and by the flow of weak liquor from the generator to the absorber.

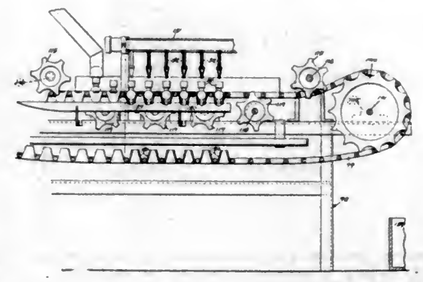
3. Refrigerating apparatus comprising a generator, a condenser, an evaporator, an absorber, a connection between said generator and said condenser, an expansion engine in said connection, a second connection between said generator and said absorber, a second expansion engine in said second-named connection, and means driven by said expansion engines for forcing strong liquor from the absorber to the generator.

1,866,826. HILL DRAINING SYSTEM. THEODORE STROTHMANN, Milwaukee, Wis. Filed Nov. 28, 1930. Serial No. 498,689. 3 Claims. (Cl. 61—10.)



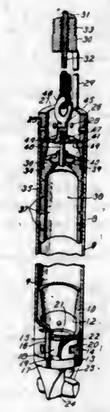
1. A system of hillside drainage comprising a trench of substantial depth extending from an upper portion of a hill downwardly and having a groove in the bottom thereof, a porous drainage pipe line laid in said groove and extending downwardly to a point of discharge, a portion of the pipe line projecting above the groove into the trench, porous drainage material in said trench covering said projecting portion of the pipe line, the bottom of the trench being of such width as to provide a space on the side of the pipe line within which some of the porous drainage material is disposed, and substantially horizontal ducts for leading seepage water from strata of quick sand below the trench to said porous drainage material in the bottom thereof.

1,866,827. MANUFACTURE OF SWAGED AND TEMPERED ARTICLES. FRANK J. VLCHEK, Cleveland, Ohio, assignor to The Vlchek Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 21, 1928. Serial No. 271,873. 18 Claims. (Cl. 266—6.)



1. Mechanism for tempering the striking face of an article, comprising means for supporting said article, and means for directing tempering fluid against only the center of said striking face.

1,866,828. COMBINATION SAND PUMP AND BAILER. DONALD E. WEBBER, Sapulpa, Okla., assignor to Miller Combination Bailer and Pump Company, Sapulpa, Okla., a Corporation of Oklahoma. Filed June 21, 1928. Serial No. 287,091. 4 Claims. (Cl. 166—19.)

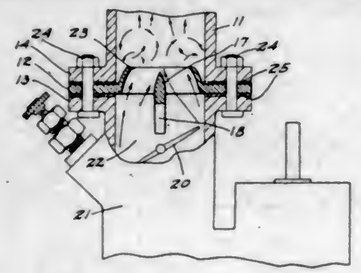


1. In a bailer including a barrel and a plunger having circumferential spaced apart oil retaining grooves in its outer surface reciprocable in the barrel and having a reduced opening in its upper end, means for supporting the barrel from the plunger including an inner shoulder on the barrel, and a valve cage having air passage means secured to the upper end of the plunger engageable at its top with said shoulder, a cable-receiving ring carried by the cage extensible into the barrel, a valve-guiding pin removably secured in the interior of the cage, and a valve freely slidable on said pin controlling said opening.

1,866,829. GASOLINE VAPORIZER. ORVILLE F. WELLING, Oakland, Calif. Filed Oct. 27, 1930. Serial No. 491,508. 2 Claims. (Cl. 48—180.)

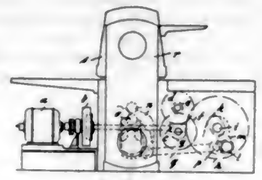
1. A gaseous fuel mixing device adapted to be inserted between a carburetor and an intake manifold com-

prising a frusto-spherical Venturi tube provided with a flange extending outwardly from the base thereof, and a transverse, centrally disposed wall extending from a point



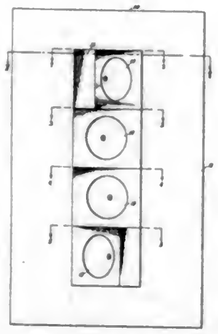
adjacent the top, and downwardly beyond the base, said wall having a concavity formed at the lower end on a transverse axis.

1,866,830. MATRIX MOLDING PRESS. CARL WINKLER, Bern, Switzerland. Filed Oct. 10, 1930, Serial No. 487,766, and in Germany Oct. 23, 1929. 1 Claim. (Cl. 101—12.)



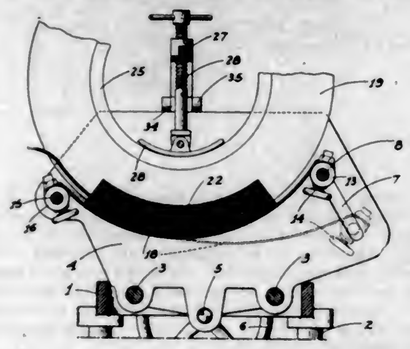
Press for molding stereotype matrices and the like, having in combination a movable pressure head, power means for actuating said head, a clutch, toggle members, a crank for moving said toggle members, and non-circular gears operatively associated with said power means, and arranged between said means and crank so that said pressure head will move at a minimum rate of speed when the amount of maximum pressure is reached.

1,866,831. AUDITORIUM LOUD SPEAKER. IRVING WOLFF, New York, RUSSELL P. MAY, Bronx, and ABRAHAM RINGEL, Brooklyn, N. Y., assignors to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 3, 1928. Serial No. 297,218. 20 Claims. (Cl. 181—31.)



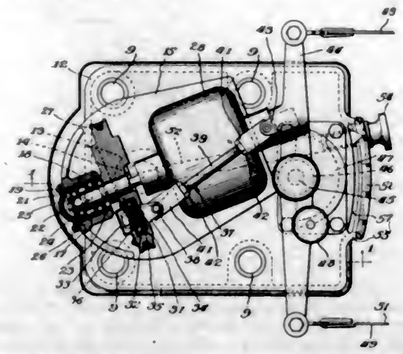
1. A loudspeaker comprising a supporting member, and a plurality of sound radiating elements in vertical alignment carried by said member, said sound radiating elements being arranged to radiate sound waves directly to the open air in directions substantially perpendicular to the line of vertical alignment and at angles to each other.

1,866,832. TIRE VULCANIZING MOLD. WALTER R. J. WOOCK, Lodi, Calif., assignor to Super Mold Corporation, Lodi, Calif., a Corporation of Nevada. Filed Dec. 8, 1930. Serial No. 500,799. 10 Claims. (Cl. 18—18.)



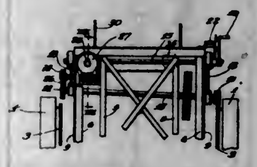
8. A tire repair mold comprising rigid transversely spaced side plates, a flexible tire supporting strip disposed therebetween and curved from end to end, a fixed anchor for one end of the strip, a member to which the other end of the strip is secured projecting transversely of the mold and slidable through slots provided in the side plates, and clamping means applied to said member to hold the same at any position along the slots; said slots being arranged relative to the anchor so that the straight line distance between the ends of the strip will be constantly altered with the movement of said member from one end to the other of the slots.

1,866,833. MASSAGE AND EXERCISE MACHINE. FRITZ A. ANDERSON, Milton, Wis., assignor to The Burdick Corporation, Milton, Wis., a Corporation of Delaware. Filed Nov. 20, 1928. Serial No. 320,665. 5 Claims. (Cl. 128—63.)



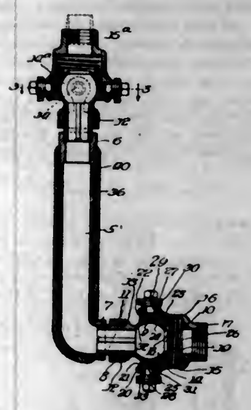
3. An exercising machine comprising a pivotally mounted base, an adjusting arm for pivoting the base, means for selectively holding the arm in one of a plurality of positions, a wheel mounted on the base, a rotatable shaft eccentrically mounted on the wheel an oscillating member, means including a universal connection for connecting the oscillating member to the rotatable shaft, and an applicator operable by said oscillating member, the movement of said applicator being adjustable by the adjusting arm for pivoting the base.

1,866,834. PORTABLE CONVEYER. HARRY H. BARBER, Aurora, Ill., assignor to Barber-Greene Company, Aurora, Ill., a Corporation of Illinois. Original application filed Jan. 20, 1928, Serial No. 248,031. Divided and this application filed May 27, 1929. Serial No. 366,221. 3 Claims. (Cl. 198—233.)



1. In a portable conveyer, including a pair of traction wheels, a gear secured to each wheel, a frame, a boom thereon, a transverse shaft, pinions thereon for engaging said gears, means for selectively engaging said pinions and gears, and operating mechanism for varying the inclination of the boom adapted to be selectively driven from said transverse shaft.

1,866,835. PIPE COUPLING AND INSULATION THEREFOR. FRANCIS NORWOOD BARD, Highland Park, Ill. Filed Nov. 15, 1926. Serial No. 148,435. 1 Claim. (Cl. 285—91.)

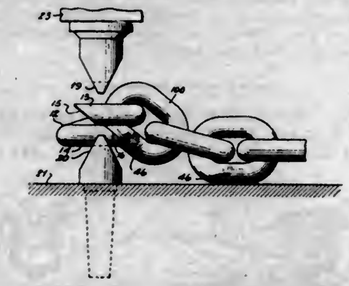


In a universal joint, a socket member having an open end, a multiple part ball seat in said socket, a ball member engaging said seat, means angularly displaceable with respect to said socket for supporting the ball and socket in operative relation, and removable means on the open end of said socket member for retaining the parts of said seat irrespective of said angularly displaceable means.

1,866,836. ALLOY. RICHARD E. BISSELL, Cleveland, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 4, 1928. Serial No. 303,973. 3 Claims. (Cl. 148—31.)

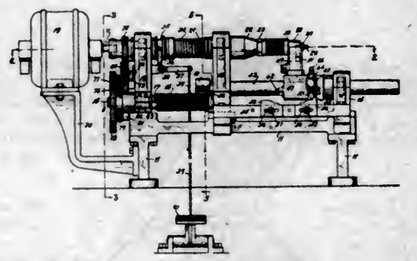
1. An alloy having a martensitic structure consisting principally of chromium, cobalt, silicon, carbon and iron in which the chromium is approximately 14%, cobalt, about 8.5%, silicon about 3.5% and carbon about .25 to .35%, said alloy being heat treated for about four hours at about 1650° F., followed by a slow cooling at about 50° F. per hour to about 1350° F. and finally being air cooled to room temperature.

1,866,837. CHAIN, METHOD, AND METHOD OF WELDING. HARRY C. BROWN, Westwood, N. J., assignor to Henry B. Newhall Corporation, Garwood, N. J., a Corporation of New Jersey. Filed Apr. 30, 1930. Serial No. 448,578. 12 Claims. (Cl. 59—35.)



1. The process of manufacturing chain consisting in forming an open link, heating the link to a welding heat, and progressively welding or knitting the open portions of the link by a plurality of progressive blows each delivered over a comparatively small area of the welded surface, thereby extruding and forcing out of the weld substantially all foreign matter and impurities and increasing the strength of weld.

1,866,838. APPARATUS FOR THREADING RADIO COIL CORES. FERDINAND BRÜSTLE, Nutley, N. J., assignor to Victor C. Thorne, New York, N. Y. Filed June 26, 1930. Serial No. 463,978. 16 Claims. (Cl. 82—5.5.)



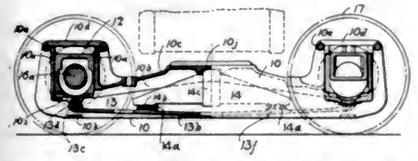
1. In an apparatus for threading radio coil cores, the combination of a motor, a rotatable shaft having rigidly secured thereto a threaded cylindrical feed screw, a hollow shaft driven by said motor disposed parallel to said feed screw and having mounted on one end thereof a chuck and a mandrel for supporting the work piece, the axes of said hollow shaft and said feed screw being spaced from each other, a continuously rotating spindle within said hollow shaft, a slidable and rockable shaft adapted to engage said feed screw and to be moved longitudinally thereof when brought into engagement with the same, and a tool supporting carriage mounted on said shaft and adapted to permit said work piece to be operatively engaged by a tool in the course of the longitudinal movement of said shaft when in engagement with the feed screw.

16. In an apparatus for threading radio coil cores, the combination of a supporting frame, a motor, an axially rotatable feed screw, a gear train driving said feed screw, a slidable and rockable feed shaft adapted to engage said feed screw and to be moved longitudinally thereof, a tool supporting carriage mounted on said arm, a hollow shaft operatively connected to said feed screw and revolving at a fixed ratio to the speed of rotation of said feed screw, a chuck mounted on said hollow shaft for supporting the work piece and adapted to be operatively engaged by the cutting tool controlled by said feed arm, and

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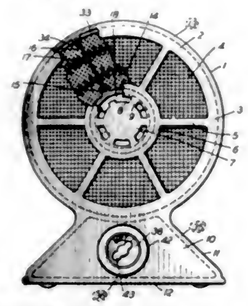
means for adapting the apparatus to a different speed of operation on the work piece by changing the speed of rotation of the feed screw, comprising a split housing and a slotted arm secured therein, in which is mounted one of the gear elements of said gear train, a clamping bolt engaging the elements of said split housing, said slotted arm being adapted to be lowered to permit the substitution of a gear element of different transmission ratio for the element mounted thereon.

1,866,839. TRUCK FOR RAILROAD VEHICLES. ALFRED W. BRUCE, New York, N. Y. Filed Sept. 13, 1927. Serial No. 219,253. 19 Claims. (Cl. 105—194.)



1. In a frame for trucks for railroad vehicles, the combination of a pair of side frame members, each side frame member embodying two pairs of inverted pedestal jaws, and means between the pairs of pedestal jaws adapted to engage a support for supporting the side frame member from beneath the said frame member; and a cross member, connecting the side frame members.

1,866,840. HEATER. JAMES H. CARMEAN, Kansas City, Mo. Filed Mar. 15, 1930. Serial No. 436,013. 11 Claims. (Cl. 219—39.1.)



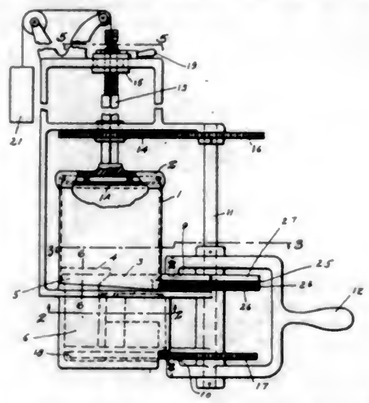
1. In a device of the character described including a heater, a heater casing including a drum, a base supporting the drum, a face plate integral with the drum and having a depending portion forming the end of the base, and means supported by the face plate and spaced from the drum to form a housing for said heater.

1,866,841. CAP FOR BOTTLES. CLARENCE W. CROOKSHANK, San Diego, Calif., assignor, by direct and mesne assignments, to Bottle Tops, Inc., a Corporation of Delaware. Filed Dec. 26, 1928. Serial No. 328,574. 5 Claims. (Cl. 215—46.)



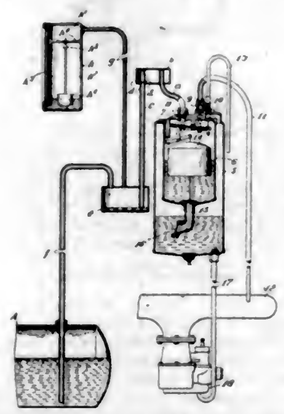
1. In a cap for bottles adapted to contain effervescent beverages, a metallic shell having a securing portion at its outer edge, a slitted opening intermediate its edge, a sealing gasket member secured on the inner side of said shell over said opening and a preservative metallic covering for said cap filling the slits therein.

1,866,842. MACHINE TO SERVE ICE CREAM. WINFRED F. CURTIS, Saugus, Mass. Filed Apr. 30, 1931. Serial No. 533,907. 9 Claims. (Cl. 107—8.)



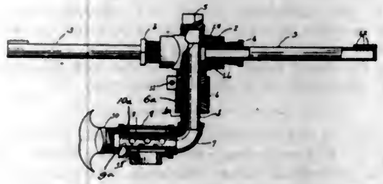
2. In a machine for serving ice cream or like material provided with a discharge outlet, the combination of means for holding the container of said material, means for rotating the container upon its axis and gradually imparting longitudinal motion thereto so as to discharge said material through said outlet, means for removing portions of the sides of said container to allow its further downward longitudinal motion, a turret movable transversely of said outlet having therein a series of chambers adaptable to receive said material as discharged through said outlet, means for moving said turret across the mouth of said outlet, so as to sever the previously discharged material, and to bring said turret into the next operative position opposite said outlet, and means acting at one limit of the turret's movements to eject said material from said chambers, all substantially as described.

1,866,843. MEANS FOR INDICATING THE HEIGHT OF A LIQUID IN A TANK. WILLIAM P. DALRYMPLE, Chicago, Ill., assignor to Bendix Stromberg Carburetor Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 6, 1923. Serial No. 611,002. 9 Claims. (Cl. 73—54.)



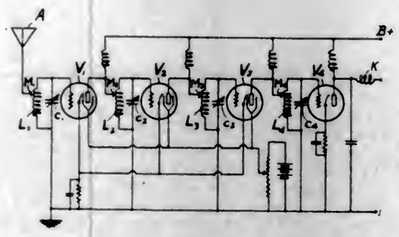
4. In combination, a main tank, a chamber providing an air trap, conduit means placing said air trap in communication with the liquid of the tank at the depth to be measured, said chamber lying above the bottom of said tank, a suction pipe communicating with the liquid in the tank through said chamber and conduit means, means for drawing liquid in said pipe to a point above the level of liquid in the tank and permitting it to recede to the tank, and means cooperating with said suction pipe for introducing air into said receding column, said suction pipe and said conduit means opening into said air trap so as to retain some of the entrained air in said trap.

1,866,844. ROTARY SPRINKLER. PETER DE VOS, Grand Rapids, Mich. Filed Oct. 24, 1929. Serial No. 401,991. 1 Claim. (Cl. 299—72.)



In a lawn sprinkler, a standard having a bearing sleeve provided with a lateral water inlet, a sleeve within and spaced from the bearing sleeve and perforated in its sides, a sprinkler head connected with one end of the perforated sleeve and at an angle thereto and engaging the adjacent end of the bearing sleeve, and a nut threaded to the opposite end of and closing the perforated sleeve and frictionally engaging the corresponding end of the bearing sleeve to hold the sprinkler head in the desired angular position.

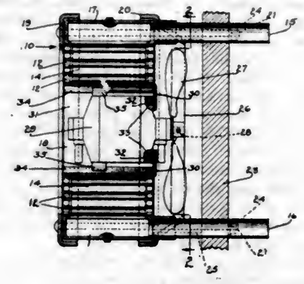
1,866,845. SIGNALING SYSTEM. WILLIAM LESLIE EDISON, Wilmington, Del., assignor to The W. L. Edison Manufacturing Corporation, Wilmington, Del., a Corporation of Delaware. Filed Nov. 26, 1930. Serial No. 498,281. 16 Claims. (Cl. 179—171.)



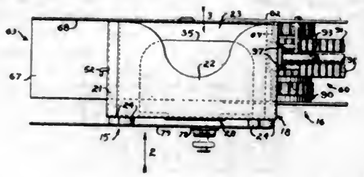
1. An amplifying system including a thermionic tube having cathode, grid and plate elements, a grid circuit joining the grid and cathode of the tube, a coil in the grid circuit, and a conducting member spaced from, but closely adjacent to, convolutions of the coil, said member being connected to a point the potential of which varies during the operation of the system, the capacity between the member and coil providing a low coupling impedance at radio frequencies.

1,866,846. AUTOMOBILE HEATER. HENRY W. FINK, Minneapolis, Minn., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Oct. 23, 1929. Serial No. 401,908. 1 Claim. (Cl 248—14.)

Means for positioning and securing a motor within a heating member having an inner wall providing an opening adapted to receive the motor, said wall having longitudinally extending recesses, diametrically disposed projections upon the motor adapted to be received in said recesses, lugs on said inner wall against which the motor is seated, and means for securing the motor to said lugs.

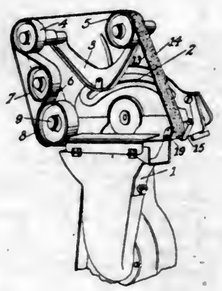


1,866,847. MAIL MAGAZINE. JOHN Q. FINFROCK, South Pasadena, Calif. Filed Aug. 28, 1930. Serial No. 478,487. 18 Claims. (Cl. 271—35.)



1. In a magazine for mail matter the combination of: a tray in which said mail matter may be placed in stacked formation; means adjustable to said stack for pressureably retaining the stack in said tray; and means for releasing said stack from said pressure for feeding the same from said tray.

1,866,848. ABRADING MACHINE. BENJAMIN W. FREEMAN and LOUIS G. FREEMAN, Cincinnati, Ohio, and PAUL H. KOPLIN, Milwaukee, Wis., assignors to Louis G. Freeman Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 18, 1920. Serial No. 333,375. 20 Claims. (Cl. 51—141.)



1. In combination for use in an abrading machine having an abrading belt and a carrying belt therefor, a guard constructed and arranged to extend over the edge of said carrying belt and substantially to the plane of the rear surface of the abrading belt and to thereby provide a guard to prevent inadvertent injury to the work by contact with an edge of said carrying belt.

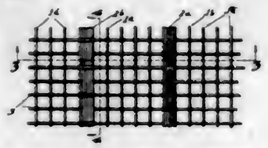
1,866,849. MANUFACTURE OF BENZOIC ACID, METALLIC BENZOATES, AND ALKYL BENZOATES. ANTHONY GEORGE, Niagara Falls, N. Y., assignor, by mesne assignments, to Monsanto Chemical Works, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 22, 1925. Serial No. 25,132. 8 Claims. (Cl. 260—103.)

1. The method of producing alkyl benzoates, which comprises reacting upon benzotrichloride successively with water and with an alcohol, the amount of water employed being less than that theoretically required to form benzoyl chloride from the benzotrichloride.

6. The method of producing alkali metal benzoates which comprises causing benzotrichloride to react successively with less than the stochiometric equivalent of water required to form benzoyl chloride and with an aliphatic alcohol and hydrolyzing the alkyl benzoate product with an alkali metal hydroxide.

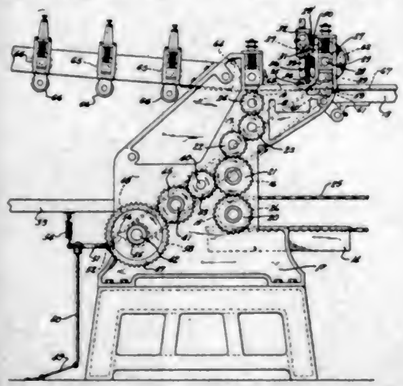
8. The method of producing benzoic acid which comprises causing benzotrichloride to react successively with less than the stochiometric equivalent of water required to form benzoyl chloride and with an alkyl alcohol, hydrolyzing the alkyl benzoate so produced with an alkaline compound of a metal and finally acidifying the metallic benzoate so formed whereby benzoic acid is formed.

1,866,850. REENFORCED WIRE FABRIC AND METHOD OF MAKING THE SAME. IRVING A. GREEN, Worcester, Mass., assignor to The Washburn Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 15, 1930. Serial No. 436,204. 2 Claims. (Cl. 139—425.)



1. A wire fabric comprising a plurality of equally spaced warp and weft wires woven to provide a uniform mesh, and groups of closely lying parallel warp wires disposed at intervals between the spaced warp wires, each group comprising a multiplicity of wires of substantially the same diameter as the weft wires, with all the wires of each group passing alternately over and under successive weft wires, and all of said wires passing as a unit on one side of each weft wire.

1,866,851. SHEET MATERIAL FEEDING DEVICE. HENRY J. HANAUER, Milwaukee, Wis. Filed June 10, 1930. Serial No. 462,261. 4 Claims. (Cl. 271—18.)

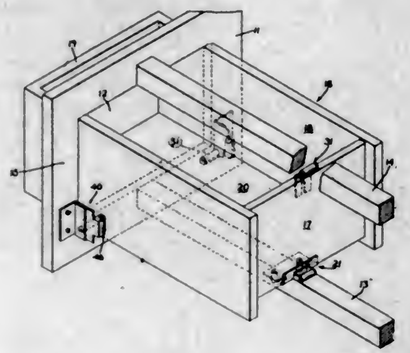


1. In a sheet material working apparatus, a bed having a forward portion for progressively receiving sheets in non-overlapping single file, and a rear overlapped sheet receiving portion, a gauge movably mounted adjacent said bed between the forward and rear portions thereof, a sheet propelling member adjacent the bed rear portion, and controlled means for reciprocating said gauge and for simultaneously imparting a movement to said propelling member to move a rearwardly disposed sheet forwardly a desired distance.

1,866,852. MANUFACTURE OF TRIARYL PHOSPHATES. CARL NELSON HAND and GEORGE LESTER MADDUX, Nitro, W. Va., assignors to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed Apr. 5, 1929. Serial No. 352,907. 13 Claims. (Cl. 260—98.)

1. In the purification of a triaryl phosphate prepared by the reaction of a phenol with phosphorus oxychloride, the steps comprising adding dilute alcohol thereto, separating the upper layer formed thereby and allowing the triaryl phosphate to crystallize therefrom.

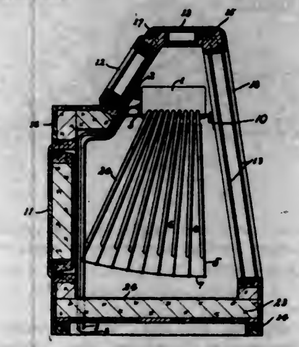
1,866,853. ROLLER BEARING DRAWER GUIDE. ALBERT C. KENNEDY, Long Beach, Calif., assignor of one-third to William Francis Kennedy, Los Angeles, Calif., and one-third to Janice Caroline Kennedy, Long Beach, Calif. Filed Feb. 12, 1930. Serial No. 427,798. 7 Claims. (Cl. 45—77.)



1. A device as described, comprising in combination a fixture having a drawer opening with upper and lower central guide bars extending inwardly from the opening, a drawer mounted to slide through said opening and between the bars, a roller mounting secured to the inner and lower edge of the drawers having a pair of vertical rollers to engage opposite sides and a horizontal roller to engage the top of the lower guide bar and a roller mounting secured to the upper edge of the inner end of the drawer engaging the lower side of the upper guide bar and roller mountings secured to opposite sides of the drawer opening on the fixture, each having a vertical and a horizontal roller, the vertical rollers engaging the sides of the drawer and the horizontal rollers the lower edge of the drawer, the roller mounting on the fixture comprising an angularly bent plate with one side secured to the fixture and the other side having a U-shaped roller mounting with a pin mounting the vertical roller, and a strap secured to one part of the plate and extending inwardly under the drawer and having a horizontal pin mounted in the horizontal roller.

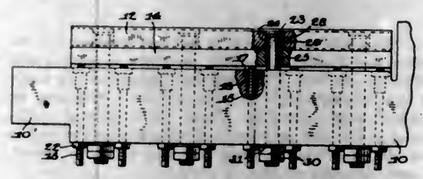
1,866,854. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 31, 1927, Serial No. 229,909. Renewed July 26, 1930. 10 Claims. (Cl. 62—95.)

1. A refrigerating element for mechanical refrigerators comprising a horizontal header, duct loops depending from the body of said header and connected thereto in parallel circuit relation, fins upon said duct loops, said fins comprising sheet metal members attached to said loops in good thermal relation, said ducts and said fins forming a fan-shaped structure radiating outwardly from the header body and providing wedge-shaped air passages between said fins.



3. In a display case refrigerator, a food display compartment of substantially rectangular ground plan, sloping front and rear walls for said case, a plurality of chilling chambers within said compartment, a refrigerating element disposed in each chamber, each of said refrigerating elements comprising a header, a plurality of ducts depending from said header and connected thereto in parallel circuit relation but in non-parallel spatial relation to each other and conforming to the shape of said walls.

1,866,855. SHEAR KNIFE ADJUSTING MEANS. OSCAR W. KIRSTEN, Milwaukee, Wis. Filed May 9, 1930. Serial No. 451,182. 2 Claims. (Cl. 164—58.)

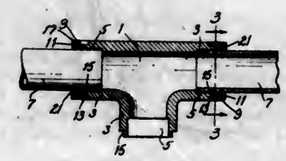


1. In a shear, the combination of a support having a rabbet extending along an edge portion thereof and presenting a pair of substantially perpendicular faces, a shear knife resting on one of said faces to transmit shearing pressure thereagainst, a backing member engageable with a side face of said knife and disposed between said knife and the side face of said rabbet, said backing member being spaced from the side face of said rabbet a plurality of screws extending transversely through said support at substantially right-angles to the plane of said knife and having an end engagement with the side face of said backing member opposite said knife, said screws having threaded connections with said support for determining the lateral positions of said backing member and said knife with respect to said support, and clamping bolts extending through said backing member and said support and clamping said knife in lateral abutment with said screw-engaging backing member.

1,866,856. PANEL BOARD. JOHN W. LEDEBOER, Ambler, Pa., assignor to Ambler Asbestos Shingle & Sheathing Company, a Corporation of Pennsylvania. Filed Jan. 22, 1930. Serial No. 422,543. 3 Claims. (Cl. 91—68.)

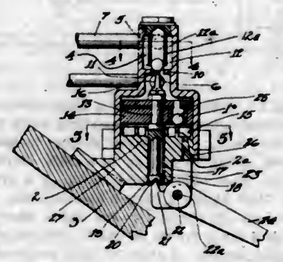
1. Insulating panel board and the like comprising a mixture of Portland cement and asbestos fibers with the cement set under pressure in porous condition from a mixture containing an excess of water, the amount of asbestos being in excess of the amount of said cement before setting and the surfaces of the board being smoothly ground and porous and uncompacted, and an impregnating insulating material throughout the board and at the porous ground surfaces thereof to render it solid and close-grained.

1,866,857. JOINT. DAVID E. LINDQUIST, Port Huron, Mich., assignor to Mueller Brass Co., Port Huron, Mich., a Corporation of Michigan. Filed May 14, 1930. Serial No. 452,452. 3 Claims. (Cl. 285—115.)



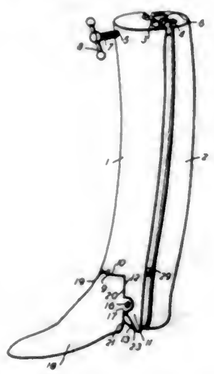
1. A joint comprising a receiving portion, a member adapted to telescope therein, a sleeve slidable on said member and engageable with said receiving portion, said sleeve having a notch adapted to receive sealing material and deliver same to the assembled joint, said sleeve being revoluble with respect to said receiving portion before sealing material is applied and being rigidly held thereto by said sealing material after the sealing material has been applied.

1,866,858. CONTROL DEVICE FOR FLUID PRESSURE ACTUATED MECHANISM. NATHANIEL LOMBARD, Worcester, Mass. Filed June 13, 1928. Serial No. 285,013. 2 Claims. (Cl. 303—54.)



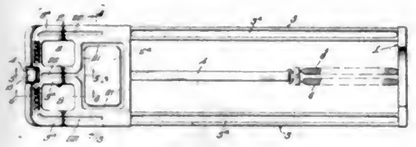
1. In a device of the class described, the combination with a source of fluid pressure and pressure responsive means adapted to be operated from said pressure source, of a control device comprising a gravity seated valve interposed between said pressure source and said pressure responsive means, a spring for operating said valve, a movable foot treadle for moving said spindle to lift open said valve and a piston carried by said valve spindle adapted to receive the pressure for operating the pressure responsive means when said valve is opened, whereby to exert a force tending to move said spindle downwardly against the opening pressure exerted by said foot treadle and thereby permit closing of said valve continued movement of said piston also automatically opening a second gravity seated valve carried by said piston for releasing the pressure applied to said pressure responsive means.

1,866,859. BOOT TREE. FRED R. MAIER, Kansas City, Mo. Filed Aug. 15, 1930. Serial No. 475,421. 5 Claims. (Cl. 12—116.)



1. A boot tree comprising front and rear sections, screw means at the upper ends of said sections for spreading said upper end, a spring fixed to one of said sections adjacent the lower end thereof, and a web mounted in the other section to engage said spring for spreading the lower ends of said sections.

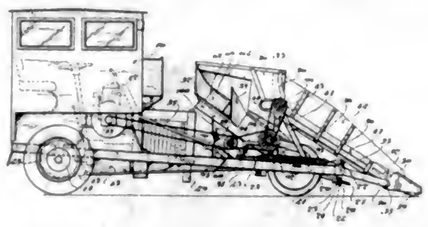
1,866,860. ROWING MACHINE. FRED PEREIRA, New York, N. Y., assignor to Health Developing Apparatus Co. Inc., New York, N. Y., a Corporation of Delaware. Filed June 6, 1932. Serial No. 615,684. 20 Claims. (Cl. 272—72.)



1. A rowing machine comprising a front frame member, a rear frame member, sides connecting said front and rear frame members, said front frame member being formed of sheet metal having an upwardly inclined front portion with at least one opening forming a plurality of flanged arms, said arms having longitudinally extending deformed portions intermediate the sides thereof, guiding means on said front frame member, a foot rest disposed on said arms and supported thereby, and tensioning means passing over said guiding means.

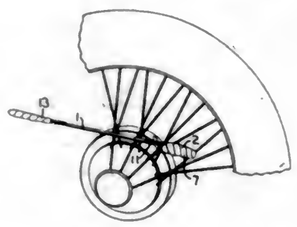
1,866,861. SNOWPLOW. ELMER PITCHER, St. Paul, Minn., assignor, by mesne assignments, to himself, M. T. Nagle, St. Paul, Minn., J. R. Schoffman, St. James, Minn., Charles H. Miller, Portland, Oreg., J. L. Moore, Wimbledon, N. Dak., Albert Running, St. James, Minn., and Myles Henderson, Crosby, N. Dak. Filed Mar. 27, 1929. Serial No. 350,260. 6 Claims. (Cl. 37—45.)

1. In a snow plow, a carrying truck, a hopper carried by said truck, a centrifugally-acting ejecting rotor located in said hopper for rotation on a forwardly inclined plane that is at a substantial angle both to horizontal and to vertical, said rotor comprising a disc-like bottom plate and radial propelling blades, engine-driven means for rotating said rotor in a constant direction, a discharge spout for directing the discharge of snow from said rotor, said spout being rotatively adjustable for the discharge of snow from said rotor at either side of the plow, at will, and under constant direction of the rotation of said rotor, said hopper having discharge passages at opposite sides for



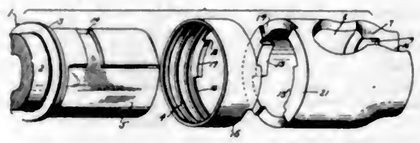
cooperation with said discharge spout, and means for closing the discharge passage in said hopper away from which said spout is adjusted.

1,866,862. WIPING DEVICE. WRIGHT PRESTWICH and ERNEST PRESTWICH, Lawrence, Mass. Filed Aug. 25, 1931. Serial No. 559,238. 4 Claims. (Cl. 15—210.)



1. The combination with a holding member for wiping cloths comprising a handle member, a cloth-receiving portion at one end, a fixed projecting anchoring means at the base of said cloth-receiving portion, a clamping means adjacent said anchoring means, of a wiping cloth anchored at one end on said anchoring means, twisted about said cloth-receiving portion and secured at its other end by said clamping means.

1,866,863. DRILL STEEL RETAINER. LED L. RICHARDSON, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 31, 1929. Serial No. 367,486. 4 Claims. (Cl. 121—32.)



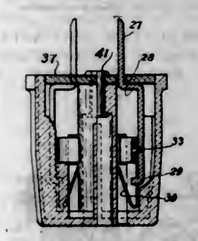
1. A drill tool retainer having means cooperating with the front head of a drill for detachably securing the retainer thereto, a passage in the retainer adapted to pass the shank of a tool and to prevent passage of an abutment on the tool shank, an aperture in the side of the retainer connecting with the passage, said aperture permitting insertion of the tool and abutment carried thereby, the aperture being closed by the front head of the drill when the retainer is secured thereto.

1,866,864. FISH LINE BOBBER. WALTER SCHROEDER, Davenport, Iowa. Filed Oct. 5, 1931. Serial No. 566,883. 7 Claims. (Cl. 43—15.)



1. A bobber comprising a hollow metallic float, having means at one side thereof for the attachment of a fish line, a bracket at the opposite side of said float, said bracket having an arm extending away from the body of the float and another arm extending in the same general direction as the first arm but spaced therefrom, a lever pivoted on the second mentioned arm, means for attaching a fish line to said lever so that when the lever is turned in one direction about its pivotal connection to the second mentioned arm the fishhook suspending line will be pulled toward the surface of the water.

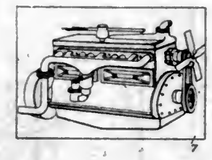
1,866,865. ELECTRIC CURRENT TAP. HAROLD E. SLADE, Glen Ridge, and JOHN GEHRING, Jersey City, N. J., assignors, by direct and mesne assignments, to Beaver Manufacturing Company, Newark, N. J., one-fourth to Reuben Eckstein, New York, N. Y., and one-fourth to Max Polls, Brooklyn, N. Y. Filed May 1, 1928. Serial No. 274,195. 10 Claims. (Cl. 173—334.)



5. An electric current tap, comprising a one piece casing having therein vertically disposed ribs, extending from the bottom to about the mid height of the casing, and a series of bottom shorter ribs, a disc-like closure for the top of said casing having apertures therein, jack blade elements projecting through apertures in said closure and each having an offset element below said closure, and a terminal hook-like element at the end opposite to said jack blade element, resilient current carrying contact clips attached to said jack blade elements adjacent the hook element and arranged transversely and intermediate of the hook-like element and the opposite end of said offset element, fastening means for said contact clips, the latter being supported on certain of said ribs, and means for locking said closure to said one piece casing.

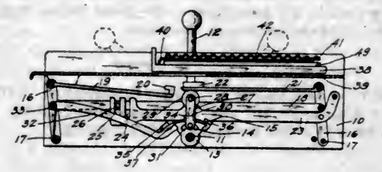
1,866,866. ART OF PHOTOGRAPHY. EDWIN A. SUTCLIFFE, Oak Park, Ill., assignor to Victor Manufacturing and Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed May 16, 1930. Serial No. 452,916. 3 Claims. (Cl. 95—5.)

1. The improvement in the art of photography which consists in preparing a ground-glass negative of an object and arranging the negative in the usual position of a ground-glass in a camera; posing a part of the object and using the ground-glass negative as a finder whereby an image of the part may be made to appear in its proper position on the negative, and maging a negative of said posed part; repeating the posing of the parts and



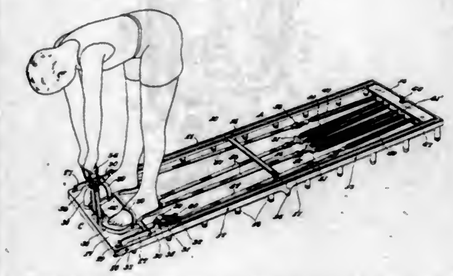
the making of negatives thereof as often as required for showing as many parts of the object as are desired to be shown; preparing an object print from the ground-glass negative and part prints from the part negatives; making part cut-outs from the part prints and assembling the same in their proper position upon the object print; and making a photographic negative of the assembly.

1,866,867. THERMOGRAPHIC PRINTING DEVICE. RUFUS C. SWINK, Berkeley, Calif. Filed Sept. 15, 1930. Serial No. 481,923. 4 Claims. (Cl. 101—27.)



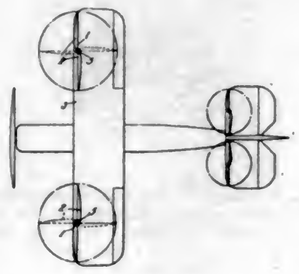
1. A thermographic printing device in combination with impression actuating mechanism and a series of type bars, electric heating means interposed between said type bars.

1,866,868. EXERCISING APPARATUS. JOHN MALCOLM THOMSON, Long Island City, N. Y., and PETER HARDY, Bridgeport, Conn., assignors to Health Developing Apparatus Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 19, 1928. Serial No. 313,557. 15 Claims. (Cl. 272—72.)



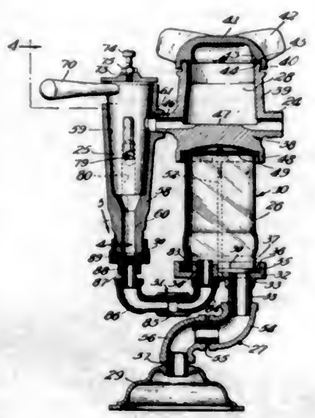
1. In an exercising apparatus, a seat adapted to be propelled back and forth over a track comprising a wheel carriage, a seat body pivoted thereon, springs acting upon said seat body to normally tilt the same in a forward direction, and coacting guide elements between said carriage and said seat body for guiding said seat body in its rocking movements upon said wheel carriage.

1,866,869. AIRCRAFT. ALBERT PETER THURSTON, London, England. Filed July 20, 1929, Serial No. 379,667, and in Great Britain Apr. 6, 1929. 14 Claims. (Cl. 244—12.)



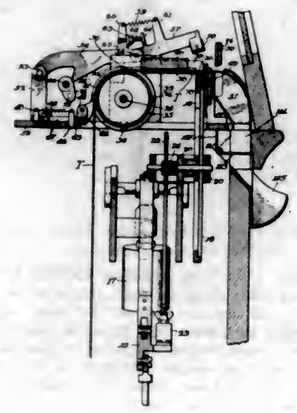
1. In aircraft, the combination of a main plane and a rider of helical formation mounted for free rotation under the influence of air forces in proximity to the upper surface of the main plane about an axis transverse to the latter, whereby on rotation in the appropriate direction taking place the air passing over the plane during flight is deflected on to the surface of the plane.

1,866,870. APPARATUS FOR CLEANING PIPES. STEVE UROUKOFF, Harvey, Ill. Filed May 2, 1930. Serial No. 449,192. 6 Claims. (Cl. 225—12.)



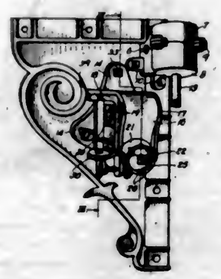
1. A pipe cleaning apparatus comprising a metal chamber for cleaning compound formed with a removable cover and a socket in its lower surface, a supporting plate formed with a similar socket and having a pair of conduits passing through said plate, a tumbler communicating with said conduits and having its ends secured in said sockets, the first of said conduits passing through said compound chamber into said tumbler and the second of said conduits leading from said tumbler into a discharge opening.

1,866,871. WEIGHT RECORDING MACHINE. THOMAS W. B. WATLING, Chicago, Ill. Filed Dec. 2, 1926, Serial No. 152,127. Renewed Nov. 18, 1931. 21 Claims. (Cl. 194—21.)



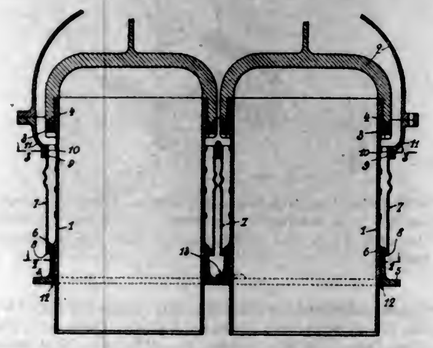
1. In a machine of the character described, the combination with a cabinet, of article dispensing mechanism in said cabinet, a spring for actuating said dispensing mechanism, manually operable means for tensioning said spring, releasable means for locking said spring in tensioned condition, and means controlling the issuance of articles from said cabinet actuated by said spring-tensioning means.

1,866,872. LATERAL ARM AND ROLLER BRACKET SUPPORT. FREDERICK A. ANTON, Topeka, Kans. Filed Apr. 13, 1931. Serial No. 529,600. 2 Claims. (Cl. 156—44.)



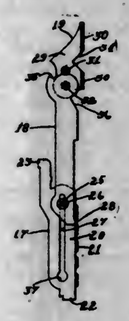
1. A bracket for the support of window awnings formed along two of its sides with a reinforced braced securing edge adaptable for detachable engagement with the upper corner of a window glass supporting frame and spaced from the glass carried by said frame, said bracket being of generally triangular form with means adjacent its right-angle corner to detachably support an end of an awning roller, the central area of said bracket being unobstructed for supporting an awning arm in adjustable relation to the bracket.

1,866,873. INTERNAL COMBUSTION ENGINE. MARIUS JEAN-BAPTISTE BARBAROU, Paris, France. Filed Dec. 21, 1929, Serial No. 415,768, and in France Feb. 2, 1929. 5 Claims. (Cl. 123—173.)



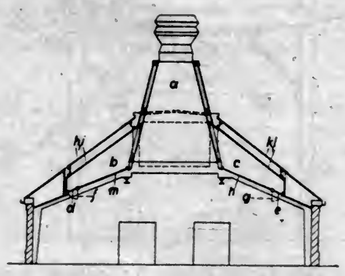
1. In an internal combustion engine, a cylinder head, a cylinder screwed therein and a locking member screwed on one of these parts and having smooth parts engaging the other part, said member surrounding portions of both said cylinder and said cylinder head and having a smaller coefficient of expansion than said cylinder head.

1,866,874. ELECTRIC TOASTER. WILLIAM A. BARNES and MERLE O. WILKINSON, Toledo, Ohio, assignors to The Swartzbaugh Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 24, 1930. Serial No. 497,694. 5 Claims. (Cl. 53—5.)



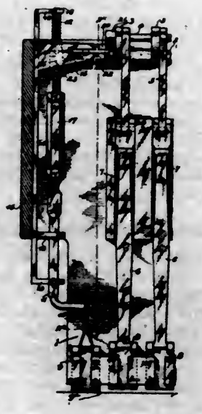
1. In combination, a unit including spaced side walls with a series of shoulders adjacent thereto, a hinge member having a slidable rockable connection with said unit between said side walls and having a shoulder selectively engageable with said series of shoulders to adjustably limit the slidable movement of the hinge member, a second unit pivotally connected to said hinge member, and coengaging means on said second unit and said hinge member limiting the movement of said second unit in either direction about its pivot.

1,866,875. VENTILATION AND CONSTRUCTION OF DYE WORKS. BRUNO BAUER, Vienna, Austria. Filed June 17, 1930, Serial No. 461,668, and in Austria July 20, 1929. 2 Claims. (Cl. 98—31.)



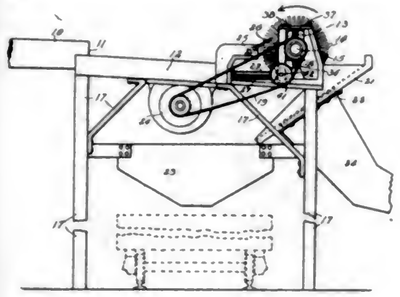
1. In a building construction for dispersing fog having a glass roof, the combination therewith of hot air conduits each thereof comprising a glass bottom wall spaced from the roof, side walls disposed between the bottom walls and a space short of the roof, a glass plate superimposed on said side walls and forming an insulating space under the roof, outlet members adjustable in the bottom wall to admit hot air to the interior of the building, and vents open to the interior of the building for communication with the outside of the building.

1,866,876. GENERATOR PILOT RAISING DEVICE. FRANK F. BUNTS, Monroe, and WARREN E. ROGERS, Trenton, Mich. Filed July 3, 1929. Serial No. 375,840. 3 Claims. (Cl. 171—324.)



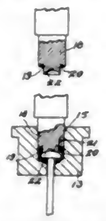
2. The combination with a commutator, a main brush and an auxiliary brush cooperable with said commutator of means for alternately raising said brushes so that when one brush is in engagement with the commutator the other will be out of engagement, consisting of a rock shaft interconnecting said brushes for causing one to be lowered while the other is being raised.

1,866,877. CLEANING MECHANISM. WILLIAM H. CAMPEN and JAMES R. SMITH, Omaha, Nebr. Filed June 11, 1931. Serial No. 543,720. 3 Claims. (Cl. 209—6.)



1. In a cleaning mechanism for indurate substances comprising a downwardly inclined platform, a revoluble brush transversely positioned adjacent the roller edge of said platform, a comb in operative communication with said brush and in longitudinal alinement therewith, and means for imparting revoluble movements to said brush.

1,866,878. METHOD FOR THE MANUFACTURE OF LEAD HEADED NAILS. FREDERICK COATES, Cincinnati, Ohio, assignor to The Eagle-Picher Lead Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 24, 1930. Serial No. 463,552. 3 Claims. (Cl. 10—161.)



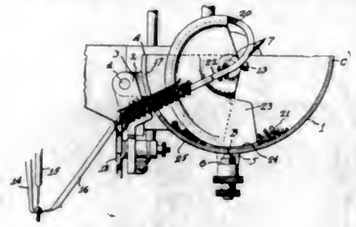
1. The process of fabricating plastic headed nails, comprising causing a nail shank to enter a quantity of plastic material about a nail shank, forcing the head of the nail into the plastic material under conditions which cause the plastic material to be extruded outwardly and upwardly about the nail head, then applying a forming tool to the extruded material for shaping the plastic head upon the top of the nail head.

1,866,879. RUSTPROOFING MATERIAL AND METHOD OF TREATING THE SAME. VAN M. DARSEY, Morenci, Mich., assignor to Parker Rust-Proof Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 15, 1928. Serial No. 319,733. 9 Claims. (Cl. 23—243.)

2. A rust-proofing material comprising high acid phosphates of metals suitable for forming a rust-proofing bath for iron or steel, and containing a material which deters the drying out of the phosphate and thereby prevents lumping and caking.

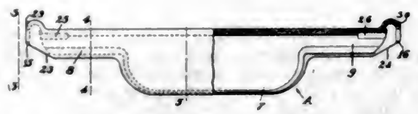
1,866,880. PICK-UP DEVICE FOR SCREWS AND THE LIKE. FRANK H. DELLAREE, Detroit, Mich. Original application filed Jan. 9, 1926, Serial No. 80,184. Patent No. 1,813,697. Divided and this application filed July 7, 1930. Serial No. 466,127. 17 Claims. (Cl. 10—169.)

1. In a screw handling machine, a magazine, a shaft rotatable in said magazine, a pair of non-planar plates mounted on said shaft and having their peripheries formed and spaced to provide a slot of such width as to admit the shank of a screw but arrest the head thereof, said plates being spaced at their respective leading edges and



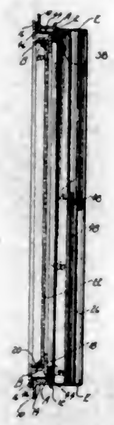
radially inward of said slot sufficiently to admit a quantity of screws in a disorderly condition, and screw receiving means with which the trailing end of said slot is adapted to register.

1,866,881. LINEMAN'S PROTECTOR. CLARENCE RAY DENNIS, Los Angeles, and PERRY G. BRINEY, Torrance, Calif. Filed Oct. 6, 1930. Serial No. 486,592. 15 Claims. (Cl. 173—28.)



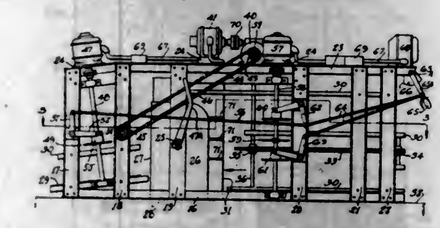
10. A lineman's protector comprising an electrically non-conductive sheath formed with a longitudinal open-ended slit, a pair of spaced endless lips extending along each side thereof and extending upwardly in arcs around the ends of said sheath.

1,866,882. COMBINATION SCREEN MOUNTING AND WEATHER-STRIP FOR CASEMENT WINDOWS. HARRY DIXSON, Pella, Iowa, assignor to Rolscreen Company, Pella, Iowa. Filed Nov. 25, 1929. Serial No. 409,590. 5 Claims. (Cl. 156—39.)



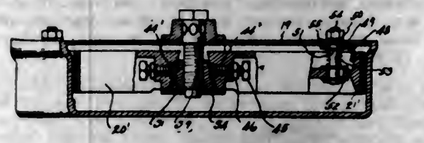
2. A screen mounting and weather strip for mounting in a casement frame comprising a jamb member, having a channel portion formed therein for receiving an inner flange of the casement frame, one wall of said channel portion having a yielding projection for engaging the window and said wall being adapted to fit between the casement frame and the window thereof, whereby to provide a weather strip between the casement frame and the window thereof, and a screen device mounted on said member on the inner side of said casement frame.

1,866,883. ICE SCORING MACHINE. CHARLES E. EVERETT, Oregon City, Oreg. Filed June 12, 1930. Serial No. 460,569. 9 Claims. (Cl. 125—18.)



6. An ice scoring machine, having in combination two sets of scoring saws whereby a cake of ice may be scored in two directions normal to each other, and interconnected means for adjustably positioning said saws in a pre-determined relation.

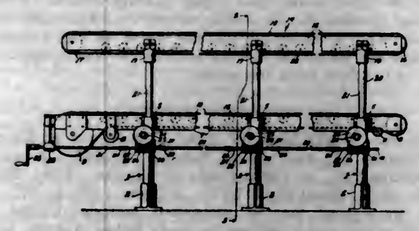
1,866,884. BRAKE. EDWIN R. EVANS, Detroit, Mich. Filed Sept. 14, 1925. Serial No. 56,366. 30 Claims. (Cl. 188—79.5.)



3. A vehicle brake comprising in combination with a brake drum and a pair of brake shoes adapted to be moved into engagement with the drum, a fixed bracket, a nut engageable with the adjacent ends of said brake shoes, said bracket forming a housing for said nut, and pivotally receiving said brake shoe ends, and means controlling the movement of said nut.

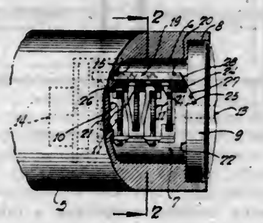
9. A vehicle brake comprising in combination with a brake drum and a pair of brake shoes adapted to be moved into engagement with said drum, a bracket pivotally housing one end of each of said shoes, adjustable means for positioning the shoes with respect to the bracket, and other means for adjusting said shoes circumferentially.

1,866,885. CONTAINER SEALER ADJUSTING MEANS. JOHN L. FERGUSON, Joliet, Ill., assignor to J. L. Ferguson Company, Joliet, Ill., a Corporation of Illinois. Filed Apr. 14, 1930. Serial No. 444,321. 9 Claims. (Cl. 93—2.)



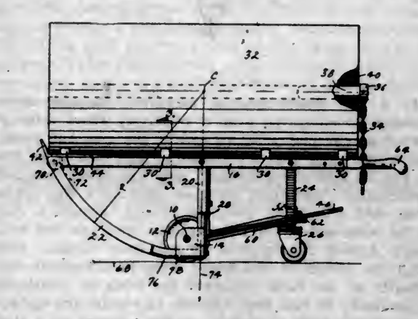
1. In a device of the character described, a conveyor for moving containers, means for supporting said conveyor comprising tubular columns, means telescopically mounted in said columns, means supported by said telescoping means, and in parallel alignment with said conveyor for cooperation with said containers, and means for adjusting the relative position of said last means and comprising a transverse shaft for cooperating with a plurality of said columns, racks on said telescopic means, pinions on said shaft cooperating with said racks, and means comprising a worm and gear for driving said shaft and for holding said parts in adjusted position.

1,866,886. LOCK. JOHN W. FITZ GERALD, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 5, 1931. Serial No. 566,977. 34 Claims. (Cl. 70—46.)



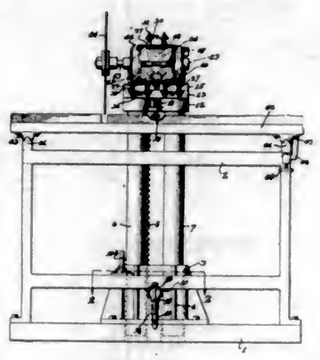
1. A lock comprising a bored mounting member, a lock cylinder movable therein, tumblers adapted to normally secure the lock cylinder in a predetermined position in the mounting member bore, said tumblers being movable to free the lock cylinder for movement upon the insertion of a proper key into the lock cylinder, and means movable simultaneously upon movement of the lock cylinder while at least one of the tumblers is in any but fully inactive position, to a position interlocking the lock cylinder and mounting member to restrict such movement of the lock cylinder.

1,866,887. TRUCK CONSTRUCTION. ORVILLE GLEASON and GLEN BOYLAN, Des Moines, Iowa, assignors to Meredith Publishing Company, Des Moines, Iowa. Filed Apr. 30, 1929. Serial No. 359,198. 2 Claims. (Cl. 280—53.)



1. In a hand truck of the kind described, a frame, handle means at the rear end of the frame, means at the front of the frame for engaging and positioning a load on the frame, an upright support under the frame near the longitudinal center thereof, wheels on the support slightly forward with relation to such center, a support under the frame rearwardly of the first support, a rocker on the frame forwardly of the wheels extending from the forward end of the frame to the lower end of the first support and curved on the arc of a circle having its center above the frame in a line extended vertically above the first support.

1,866,888. SAWING MACHINE. GEORGE E. HAWLEY, Detroit, Mich., assignor to Master Woodworker Mfg. Co., Detroit, Mich., a Corporation of Michigan. Filed Mar. 11, 1931. Serial No. 521,623. 5 Claims. (Cl. 143—1.)



1. A sawing machine comprising a table, a support vertically slidable and adjustable adjacent said table, a carrier rotatably mounted on said support for angular adjustment in a horizontal plane, a carriage horizontally slidable in said carrier, and a saw carried by said carriage, whereby said saw may be positioned above or below the top of said table.

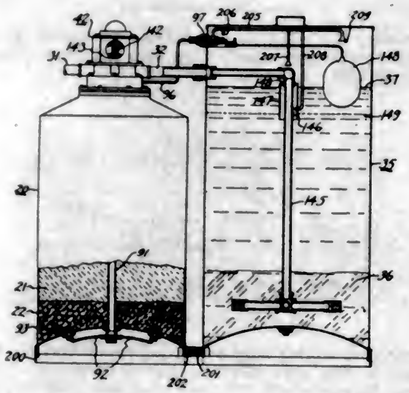
1,866,889. CHAIN CONNECTER. FREDRICK G. HEINECKE, Alexandria, Minn. Filed Mar. 22, 1932. Serial No. 600,505. 5 Claims. (Cl. 24—69.)



1. In a tire chain securing means, a coupling hook comprising an elongated arm, a relatively short member connected at one end with an end of the arm and forming an acute angle therewith, and an eye formed at the other end of said short member, said eye being designed for permanent connection with one end of a tire chain and the said arm being designed to slip through a link upon the other end of the tire chain to draw the link into the angle formed thereby with the said short member, said eye and the vertex of said angle being in alignment longitudinally of the hook and said eye lying in relatively close proximity to said arm whereby to require the springing out of the arm to permit of the passage of a link past the eye.

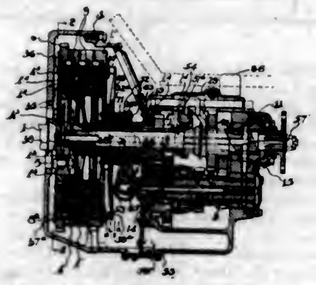
1,866,890. WATER-SOFTENING APPARATUS. ANTHONY G. HORVATH, Dayton, Ohio, assignor, by mesne assignments, to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 23, 1926. Serial No. 89,989. 31 Claims. (Cl. 210—24.)

1. Water-softening apparatus comprising a softening tank containing water-softening mineral; and means for regenerating said mineral, said means comprising a tank of salt water, means for passing salt water from said tank to the softening tank, and means responsive to the level of salt water in the salt water tank for admitting air to



said passing means to arrest the withdrawal of salt water from said tank, and provision for flushing said last mentioned means with fresh water.

1,866,891. HYDRAULIC CLUTCH. MAUNSELL B. JACKSON, Toronto, Ontario, Canada. Filed Mar. 31, 1927, Serial No. 179,947. Renewed Nov. 30, 1931. 19 Claims. (Cl. 192—87.)

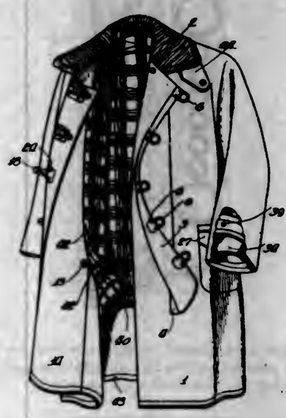


1. A clutch including a driving member provided with an annular recess; a disk; a ring having a driving connection with the member and slidably mounted in the recess; a fluid supply passage communicating with the recess; an exhaust passage communicating with the recess and with the exterior of the clutch; a manually operable valve in the fluid supply passage carried by the driving member for controlling the flow of fluid into the recess; and a manually operable valve in the exhaust passage carried by the driving member for controlling the exit of the fluid from the recess.

1,866,892. WATERPROOF COAT. BENJAMIN E. KNOX, Chicago, Ill., assignor to Special Clothing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 20, 1931. Serial No. 517,221. 1 Claim. (Cl. 2—87.)

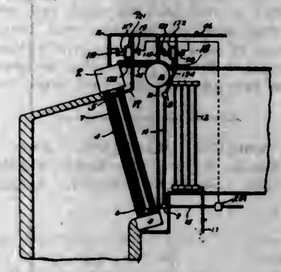
A waterproof coat of rubberized material having a fabric collar and a removable inner lining, a strip vulcanized to the coat along the collar and having means thereon for attachment thereto of the inner lining, strips

vulcanized to the inside of the coat body along the front margins thereof and having means thereon for attachment thereto of the inner lining, the portions of all the said strips carrying the attaching means being free from the coat, a flap vulcanized on the outside of the coat along one side of the front opening thereof to receive between



it and adjacent coat margins the margin of the other side of the front of the coat, rings secured to said flap by loops passing through said rings and vulcanized to said flap along its free edge, and hooks attached to the other side of the coat front by loops engaging said hooks and being vulcanized to the front of the coat.

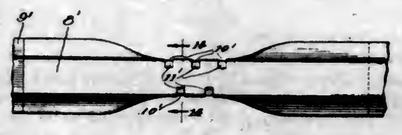
1,866,893. STEAM GENERATION. WALTER DOUGLAS LA MONT, New Rochelle, N. Y., assignor to La Mont Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 23, 1926. Serial No. 83,235. 30 Claims. (Cl. 122—479.)



18. An apparatus for the generation of superheated steam, comprising in combination saturated steam generating tubes, superheater tubes, at least two sets of which are arranged in zones of different heat and a part of which are arranged parallel to and adjacent to at least a part of the generating tubes, a common main into which the superheater tubes discharge, and means for varying the relative amounts of steam passing through the different superheaters.

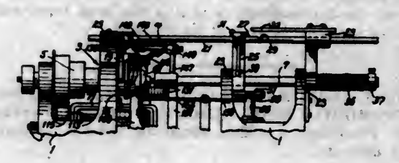
24. Apparatus for generating superheated steam comprising steam generating elements, steam superheating elements for superheating steam as it flows therethrough arranged closely adjacent to and interspersed with the steam generating elements, and means for confining the heating gases closely to and causing them to flow along said superheating elements in counterflow relation to the flow of the steam therethrough, the arrangement of the superheating, elements in the gas flow and the points at which steam is introduced into and discharged from said elements being such that the steam substantially throughout its flow through the superheater is progressively heated under temperature gradient conditions produced by the presence of the steam generating elements in the gas flow along the superheater elements.

1,866,894. PACKAGE STRAPPING SEAL-JOINTS. JOHN W. LESLIE, Evanston, Ill., assignor to Signode Steel Strapping Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 9, 1931. Serial No. 521,166. 16 Claims. (Cl. 24—20.)



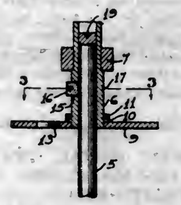
16. A seal-joint comprising overlapping strap portions, opposite edges of which are crimped inwardly over a substantial length to provide interlock between the portions, the overlapping portions being provided at a location substantially within the deformed portion, with a transverse slit, the metal on either sied of the slit being relatively displaced to provide interlock opposing longitudinal separation.

1,866,895. FORMING APPARATUS. JOHN MAIER, St. Louis, Mo. Filed Mar. 23, 1931. Serial No. 524,463. 13 Claims. (Cl. 113—53.)



1. Forming apparatus comprising means for rotating an article, a tool, means for mounting said tool for universal movement, automatic means constraining said tool to move substantially along an outline of the surface of said article during a working stroke of the tool, and spacedly from said outline during a non-working stroke and emergency means for lifting said tool from said outline when at any point thereon without interfering with the cyclic action of said automatic means when effected either by normal operation or through said emergency lifting means.

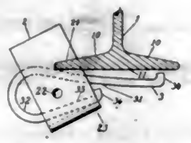
1,866,896. GOVERNOR BRAKE FOR TIMERS. MARION MALLORY, Toledo, Ohio. Filed Mar. 7, 1930. Serial No. 434,181. 8 Claims. (Cl. 64—90.5.)



1. An ignition timer comprising a rotatable shaft, a cam normally rotatable with the shaft but capable of a limited relative circumferential movement with respect

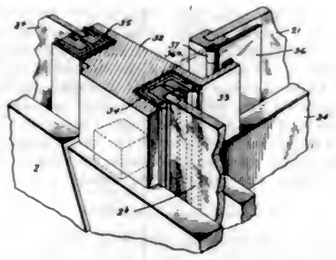
thereto, a governor for controlling said relative circumferential movement, and a brake held for rotation with one of said rotatable members and engaging the other to resist said relative circumferential movement.

1,866,897. RAIL ANCHOR. THOMAS CLARKSON MCCONKEY, Westmount, and GEORGES PICARD, Montreal, Quebec, Canada, assignors, by mesne assignments, to The Stead Rail Anchor Company, Limited, Montreal, Canada, a Corporation of Canada. Filed Feb. 18, 1924. Serial No. 693,475. 67 Claims. (Cl. 238—324.)



1. In a two-piece rail anchor, a U-shaped clamp member including substantially parallel flat side members and a flat web connecting corresponding ends of the side members, said side members having slots in corresponding edges thereof adapted to receive one edge of a rail base and a holding member therefor of resilient strip metal bent to wedge form, including an approximately semicylindrical portion, a long leg bent outwardly at a point intermediate its ends and outwardly hooked at its free end, said leg being when relaxed substantially straight between the semicylindrical bend and the intermediate bend and between the intermediate bend and the hook bend, and a short leg inwardly hooked at its free end.

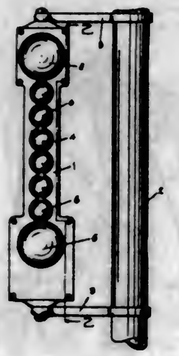
1,866,898. COMBINATION CONVERTIBLE PASSENGER AUTOMOBILE BODY. DALE F. MCDONALD, Evanston, Ill. Filed Sept. 3, 1929. Serial No. 390,063. 2 Claims. (Cl. 296—45.)



1. In combination with a vehicle body having front and rear side windows and an intermediate windshield, a removable post carried by the body, means carried by the post to slidably receive said windows and windshield, and a flap carried by said intermediate windshield and adapted to form a weather-tight joint between said windshield and the rear side window when the post is removed.

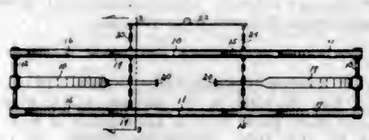
1,866,899. TRAFFIC SIGNAL. WILLIAM H. MINIER, Toledo, Ohio. Filed Mar. 15, 1929. Serial No. 347,400. 4 Claims. (Cl. 177—337.)

1. In a traffic signal, a pair of electric main signal lamps, a plurality of auxiliary electric lamps located intermediate the main signal lamps, a source of supply of current, a means connecting the source of supply with the main signal lamps during alternate periods and with the auxiliary lamps in succession and progressively from the disconnected main signal lamp towards the connected main signal lamp, and means for maintaining



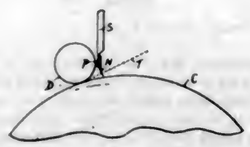
the connected main signal lamp connected to the source of supply of current, while the auxiliary signal lamps are being connected to the source of supply.

1,866,900. GAMBREL. SAMUEL MITSKOFF, Des Moines, Iowa. Filed Apr. 11, 1931. Serial No. 529,509. 8 Claims. (Cl. 294—79.)



1. In a device of the class described, two spaced apart bars, connecting members between said bars, an arm pivoted to each of said connecting members, and a plurality of elongated flexible supporting members secured to one of said bars and engaging said arms, respectively.

1,866,901. COMBING MACHINE. JOHN WILLIAM NASMITH, Heaton Mersey, Manchester, England. Filed Sept. 19, 1930. Serial No. 483,027. 5 Claims. (Cl. 19—115.)

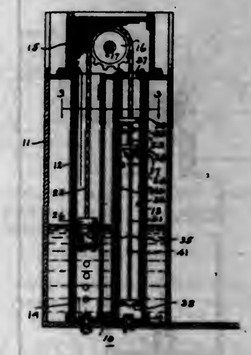


1. For use in the combing of textile fibres in a combing machine, a top comb consisting of a straight comb stock, and comb needles the upper portions of which are secured to and parallel with the lower portions of a face of such comb stock, lower portions of the said needles forming an angle to such stock.

1,866,902. LOCOMOTIVE TENDER TANK GAUGE. WILFRED J. OVERMIRE, Indianapolis, Ind. Filed Mar. 8, 1930. Serial No. 434,250. 3 Claims. (Cl. 73—82.)

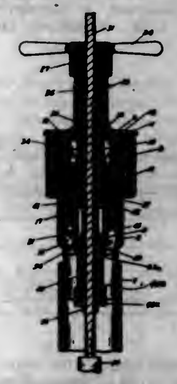
1. In a tank gauge, a sprocket wheel, a chain over the wheel, an indicating means operable upon rotation of

the wheel, a float on one end of the chain, a plurality of weights freely strung at their middles on the other end of the chain, a pair of guide rods one on each side of



the chain through each of said weights, stops selectively spaced along said rods, and a stop on the end of the chain under said weights.

1,866,903. OIL SAVER. EDGAR W. PATTERSON, Los Angeles, Calif. Filed Sept. 1, 1931. Serial No. 560,605. 5 Claims. (Cl. 166—14.)



1. An oil saver comprising a tubular body adapted for attachment to the upper end of a well casing, a cap construction fitted to the upper end of said body and having a passage through which the cable may extend, and locking means normally to lock said cap to said body, said locking means comprising two concentric members movable with relation to each other both of which are adapted to be disposed concentrically of the cable, one of said members normally projecting below the other, whereby a part carried by said cable may engage first one and then both of said members, said locking means comprising two locking devices one of which is operated by one of said members and the other of which is operated by the other of said members.

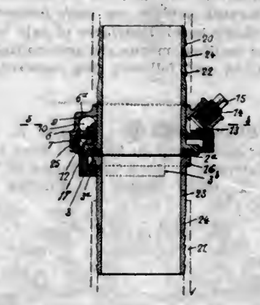
1,866,904. METHOD OF ASSEMBLING THE STEMS AND ASSOCIATED PARTS OF INCANDESCENT ELECTRIC LAMPS. HENRY M. PINGEN, Toledo, Ohio. Filed July 19, 1930. Serial No. 469,234. 2 Claims. (Cl. 49—78.)

2. The method of assembling the stem, exhaust tube, and lead-in wires of an incandescent electric lamp which comprises providing a cylindrical stem, forming an exhaust tube with a shoulder intermediate its ends, said shoulder being of substantially the same diameter as the interior of the stem, then anchoring lead-in wires in said



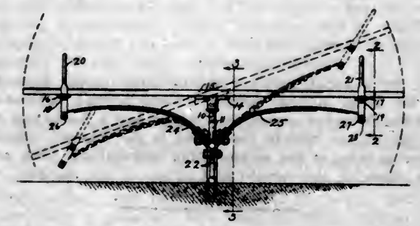
shoulder and finally fusing the shoulder to the upper extremity of the stem to effect a sealing of the upper end of the latter and a secure anchorage for said lead-in wires.

1,866,905. PRESSURE PRODUCING MEANS. LUCIEN LOUIS JOSEPH PROMPT, Colombes, France. Filed June 24, 1929, Serial No. 373,432, and in France July 4, 1928. 8 Claims. (Cl. 285—143.)



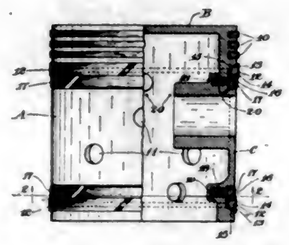
2. In a pressure producing contrivance comprising balls arranged in a row within a housing the surfaces of which in contact with the balls allow the latter to roll and means for pressing the balls together, an apertured housing the apertures of which are elongated and of such a shape that but one ball can project at a time through one aperture beyond the external wall of the housing and be moved longitudinally of the row.

1,866,906. TEETER BOARD. JOHN C. RAGER, Shelbyville, Ind. Filed Dec. 4, 1930. Serial No. 499,995. 12 Claims. (Cl. 272—54.)



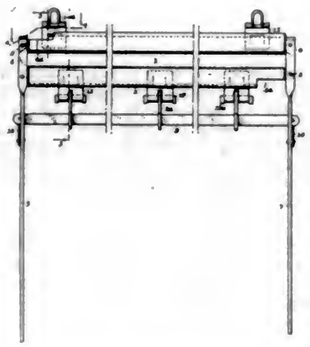
1. In an amusement device, a support, a board rockably carried by the support, a handle near each end of the board pivotally secured thereto to extend both above and below the board, and spring members fixed to said support centrally below the board to have their outer ends attached to the said handles below the board.

1,866,907. PISTON AND RING. ERNEST S. REILAND and PETER M. REILAND, St. Paul, Minn. Filed Feb. 19, 1927. Serial No. 169,457. 4 Claims. (Cl. 74—109.).



1. A piston and bearing ring including, a piston body, a groove formed in said piston body, a beveled surface on one side of said groove and a rectangular corner on the other side, a bearing ring having oppositely disposed beveled surfaces, one of which is adapted to bear against the beveled surface in said groove, a follower compensating ring, a beveled surface on said follower ring for engaging one of the beveled surfaces of said bearing ring, and a series of resilient means circumferentially disposed adapted to expand said follower ring outwardly.

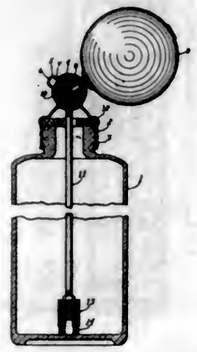
1,866,908. HEDDLE FRAME. ROBERT K. ROBERTSON, Paterson, N. J., assignor to Paterson Reed and Harness Company, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 12, 1930. Serial No. 443,734. 9 Claims. (Cl. 139—92.)



1. In a heddle-frame, a heddle-frame proper including a flat metal side-bar having its end portion twisted 90 degrees from the normal and rebent and a horizontal bar having its end held in the rebend of the side-bar, opposite exterior faces of the rebend being substantially flush with the edges of the remaining portion of the side-bar.

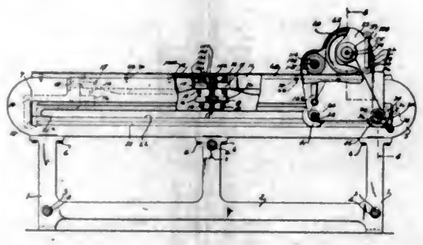
1,866,909. ATOMIZER. ALBERT F. SCHLIPF, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 21, 1930. Serial No. 476,770. 2 Claims. (Cl. 299—88.)

2. An atomizer comprising a receptacle having a mouth, a spray head, a mounting for said spray head and closing said mouth, an adjustable connection between said mounting and receptacle, a liquid tube carried by and discharging through said spray-head and projecting into said receptacle, and a gasket carried by the inner end of



said tube for sealing engagement with the adjacent wall of the receptacle whereby adjustment of said mounting seats or unseats said gasket.

1,866,910. OFFSET PROOF PRESS. HUGO F. SCHMIDT, and LOUIS JUNG, Milwaukee, Wis., assignors to Gugler Lithographic Company, a Corporation of Wisconsin. Filed Mar. 14, 1929. Serial No. 346,841. 39 Claims. (Cl. 101—251.)

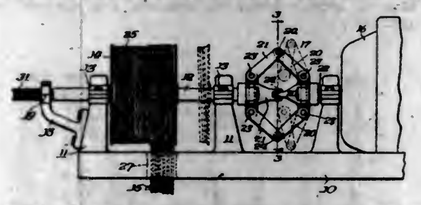


1. An offset proof press of the character described comprising a bed, a carriage reciprocable along the bed, a traveling transfer cylinder rotatably mounted on the carriage and adapted to have rolling contact with the bed, a pair of fixed racks associated with the bed, a drive shaft rotatably mounted on the carriage, a pair of carriage driving gears meshed with the racks, means for transmitting the driving force from the drive shaft to said driving gears only when the teeth of both exert uniform driving pressure on the teeth of their racks, cylinder driving gears meshed with the racks and movable relative to the cylinder, and motion transmission means between said cylinder driving gears and said cylinder operable to transmit the driving force to the cylinder only when the teeth of both cylinder driving gears exert uniform driving pressure on the teeth of their respective racks.

1,866,911. U GROOVE TRACTION ELEVATOR. BERNARD A. SCHROEDER, Wilmette, Ill. Filed Apr. 7, 1928 Serial No. 268,113. 13 Claims. (Cl. 254—176.)

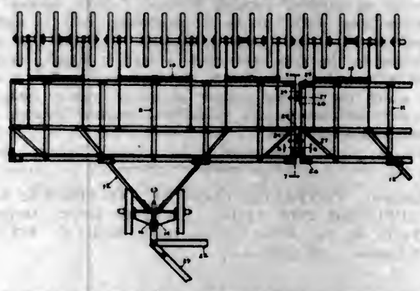
1. In apparatus of the kind described, a base member, a sub-base member, a driven shaft, bearing supports in which said shaft is rotatably mounted, said bearing supports being fixedly mounted on the base member, means

preventing longitudinal movement of the shaft in its bearing supports, and a bearing fixedly mounted on the sub-base member, said bearing loosely fitting and having a



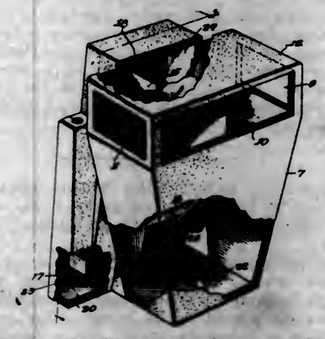
threaded connection with the shaft, and said base member being supported upon and movable relative to the sub-base member.

1,866,912. DRILL HITCH MECHANISM. PETER W. SCHWAB, Peoria, Ill. Filed July 17, 1929. Serial No. 378,825. 2 Claims. (Cl. 280—33.44.)



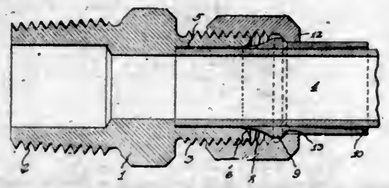
2. In a device of the class described, in combination, plural drill members, hitch and connecting mechanism for said drill including connecting means between the opposed inner sides of adjacent drills for holding the drills in such position that there is an equal spacing between the furrow openers, said connecting means including a sliding strap connection insuring proper travel of the adjacent drills through the field, irrespective of ground conditions.

1,866,913. SOUND DELIVERY CONSTRUCTION. WILLEBALD CONRAD STENGER, Chicago, Ill. Filed Apr. 3, 1930. Serial No. 441,334. 4 Claims. (Cl. 181—27.)



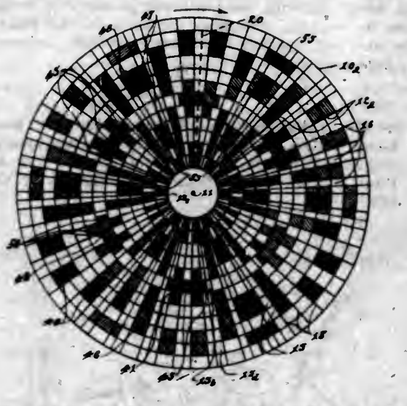
1. A sound conducting construction comprising a plurality of flared adjacent tubes rectangular in cross section, and in reverse relationship as to their large and small ends, and a connection between the adjacent ends of said tubes providing an air chamber, including an end wall angularly disposed with respect to the axes of the sections for diverting sound waves from one tubular section to another, the inner surfaces and end walls being coated with a plastic substance.

1,866,914. TUBE CONNECTION. FRANK B. STOVER, Detroit, Mich, assignor to Sky Specialties Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 15, 1929. Serial No. 378,242. 4 Claims. (Cl. 285—122.)



1. In a joint for tubing, an exteriorly threaded tubular coupler, a tube having one end received in said coupler, a ferrule surrounding said tube at said coupler, said ferrule having a portion of its wall diversing gradually and spaced radially from the outer wall of said tube, a rib formed on said ferrule, and a nut screwed on said coupler and having an internal flange abutting said rib and adapted to press the same towards said coupler, said spaced portion of said ferrule being disposed exteriorly of said nut.

1,866,915. APPARATUS FOR TREATING LIGHT AND SIMILAR RAYS. ALFRED ORDE TATE, Toronto, Ontario, Canada. Filed Dec. 3, 1928. Serial No. 323,588. 8 Claims. (Cl. 88—1.)

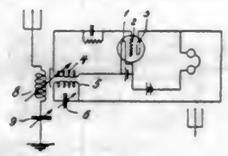


8. In an apparatus for treating light and similar rays, a disc mounted at its central axis on a rotating shaft and having apertures formed therein arranged in series, successive apertures being displaced radially and circumferentially, a portion of each aperture being in the same concentric zone as a portion of the neighbouring aperture, whereby a portion of a light reflecting object, which is revealed through any one of said apertures, will also be revealed through the neighbouring aperture.

1,866,916. RADIO RECEIVING SYSTEM. PAUL G. WEILLER, East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Apr. 23, 1924, Serial No. 708,341. Patent No. 1,684,164, dated Sept. 11, 1928. Divided and this application filed Aug. 2, 1928. Serial No. 296,974. 8 Claims. (Cl. 250—27.)

1. In a radio receiving system, an electron tube having cathode, grid and plate, an antenna circuit, a grid inductance connected between said grid and cathode, a tuned circuit comprising a second inductance shunted by a variable condenser, said second inductance being coupled to said grid inductance, and both of said grid in-

ductance and said second inductance being coupled to said antenna circuit, said tuned circuit being connected

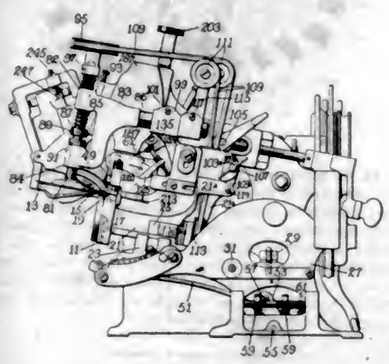


to other elements of said system by a single conductor connected to said plate whereby both of said inductances may be tuned simultaneously.

1,866,917. MANUFACTURE OF CELLULOSE MATERIAL FROM HEMP FIBERS. EDWARD CHAUNCEY WORDEN, 1st, Milburn, N. J., assignor to Hanson & Orth, New York, N. Y., a Firm composed of Charles D. Orth, sr. and Charles D. Orth, jr., and Michael J. Smith. Filed Mar. 16, 1929. Serial No. 347,728. 6 Claims. (Cl. 92—9.)

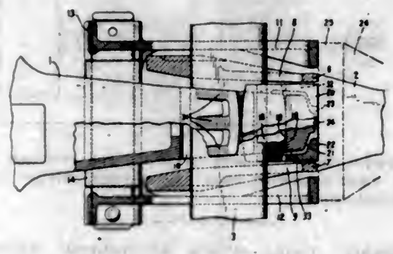
1. A process for treating hemp fibers for the isolation therefrom of alphacellulose in a highly purified condition, comprising mechanically disintegrating said fibers, removing impurities therefrom by treatment with a hot solution of alkaline hydroxide, alkaline silicate and a softening body, removing reactants and products of decomposition by washing, bleaching the same in the absence of the air, and washing free from chemicals, substantially as herein set forth.

1,866,918. SKIVING MACHINE. MILTON H. BALLARD, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 27, 1930. Serial No. 456,208. 27 Claims. (Cl. 69—16.)



1. A machine of the class described having, in combination, a rotary disk knife, a feed roll located beneath the knife, a feed disk cooperating with the roll, a presser and an edge guide for holding the work on the roll and guiding it to the knife, an arm overhanging the roll upon which the presser and guide are mounted, and means for firmly fastening the arm to a part of the machine located above the level of the top of the roll, there being a free and unobstructed space beneath the arm and at one end of the roll to permit pieces of work to be freely swung about the edge gage.

1,866,919. DRAFT RIGGING. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Mar. 9, 1928. Serial No. 260,504. 15 Claims. (Cl. 213—69.)



9. In railway draft rigging, in combination, a coupler having an exterior rocking surface, a yoke, means for transmitting draft forces therebetween, and a rocker block back of said coupler, movable therewith on buff relative to the yoke, and with a surface which, on the application of buffing forces, is normally engaging and on which the rocking surface of the coupler is adapted to roll horizontally for permitting angling motion between coupler and yoke.

1,866,920. CONTAINER CLOSURE AND PROCESS FOR APPLYING THE SAME. EDGAR H. BERRY, Harpers Ferry, W. Va. Filed Oct. 17, 1930. Serial No. 489,292. 5 Claims. (Cl. 229—43.)



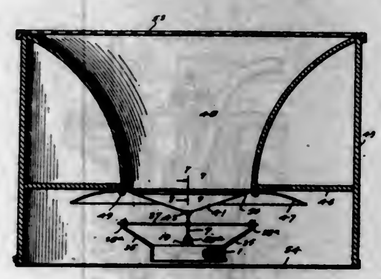
1. A closure for a dispensing aperture in the wall of a container, the said closure comprising a closure strip and means for binding this strip to an external surface of the container, the strip presenting a taper adapted to enter into wedged engagement with the edge of the dispensing aperture, and the large end of the taper being inside the container.

1,866,921. ELECTRICAL SOUND REPRODUCER. CORYDON W. BLACK, Council Grove, Kans. Filed May 27, 1929. Serial No. 366,422. 20 Claims. (Cl. 179—115.)

1. An electromagnetic device, comprising an armature, means for creating variable magnetic lines of force to actuate the armature, tensioned flexible members arranged at substantially right angles to each other and crossing each other at relatively spaced points coincident with the axis of said means, and means connecting said members at such points thereof to the armature.

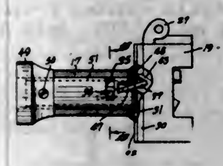
19. An electromagnetic device, comprising an armature having a connecting rod secured thereto, means for creating variable magnetic lines of force to actuate the armature, axially tensioned flexible members arranged at substantially right angles to each other and connected respectively to the armature and to the connecting rod

at relatively spaced points, the flexible members supporting the armature and the connecting rod for movement in the direction of the axis of said means and re-



storing the armature to its normal or non-actuated position, and means for adjusting the axial tension of the flexible members.

1,866,922. ELECTRIC SWITCH. ARTHUR J. BLAKE and FRANK J. TIFFANY, Bridgeport, Conn., assignors to Harvey Hubbell, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 30, 1929. Serial No. 359,288. 14 Claims. (Cl. 200—67.)

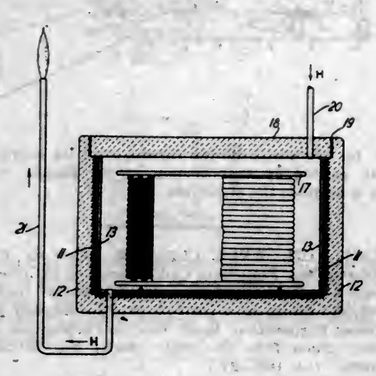


2. In an electric switch, a support, an insulating body member, means for securing the body to said support, stationary switch contacts carried by the body, a pivoted switch member carried by the body and movable to and from engagement with said contacts, a toggle mechanism for operating the switch member including a pivoted member, an operating member mounted for turning movements in the support, and an operative connection between said operating member and said pivoted member for operating said toggle mechanism, said operative connection including a slot in one of said members and an extension on the other member disposed in said slot.

1,866,923. COLLOIDAL IODINE AND THE PROCESS OF MAKING THE SAME. WALLACE L. CHANDLER, East Lansing, Mich., assignor, by mesne assignments, to Merck & Co. Inc., Rahway, N. J., a Corporation of New Jersey. Filed Nov. 21, 1925. Serial No. 70,697. 11 Claims. (Cl. 252—6.)

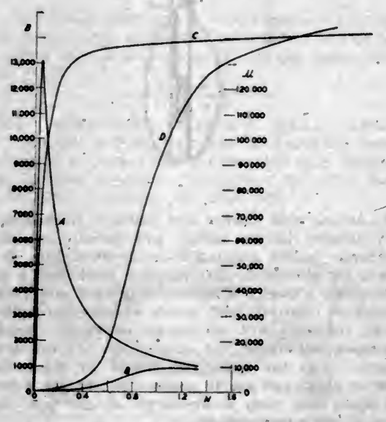
1. The process of producing finely divided or colloidal iodine consisting in subjecting crystalline iodine to the action of one per cent. solution of sodium hydroxide until a straw-colored liquid results, cooling the straw-colored liquid, adding ten grams of gum arabic or other protective colloid for each pound of iodine, then adding rapidly strong hydrochloric acid to precipitate all the iodine in the form of a brick red precipitate filtering out the coarse crystals, allowing the filtrate to stand and concentrate and drawing off the supernatant solution to remove the sodium chloride.

1,866,924. MAGNETIC MATERIAL. PAUL P. CIOFFI, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 10, 1930. Serial No. 451,306. 7 Claims. (Cl. 178—45.)



1. Method of loading an electrical conductor, which comprises heat treating a magnetic material, applying the material to the conductor and heat treating the material on the conductor, characterized in this, that at least one of the heat treatments takes place in a hydrogenous atmosphere.

1,866,925. MAGNETIC MATERIAL. PAUL P. CIOFFI, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 31, 1930. Serial No. 471,988. 9 Claims. (Cl. 175—21.)

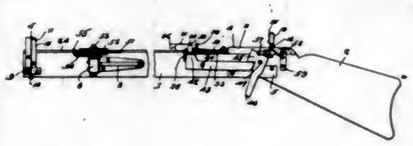


1. The method of increasing the efficiency of hydrogenous atmospheres as annealing media for magnetic materials at temperatures above about 1000° C., which method comprises adding water vapor to the hydrogenous atmosphere.

1,866,926. CROSSBOW GUN. WILLIS H. COLBY, Hendersonville, N. C. Filed Dec. 10, 1930. Serial No. 501,380. 8 Claims. (Cl. 273—107.5.)

1. In a sight, a barrel, standards mounted on the barrel, a flexible element extended between the standards,

longitudinally of the standards, and beneath the barrel, means for securing the flexible element adjustably in



place, for movement in the direction of its length, and a bead carried by that portion of the flexible element which is between the standards.

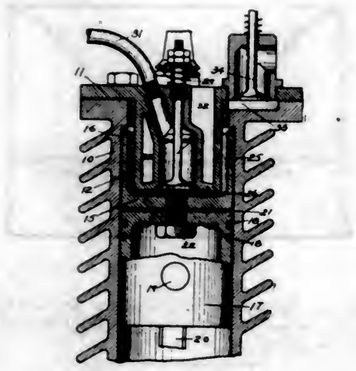
1,866,927. OIL WELL CLEANER. EDWARD C. EKSTROMER, San Francisco, Calif., assignor, by direct and mesne assignments, of one-half to James F. Gallagher, Berkeley, Calif., and one-half to The Edward C. Ekstromer Corporation, Reno, Nev., a Corporation of Nevada. Filed Feb. 19, 1929. Serial No. 341,259. 7 Claims. (Cl. 166—21.)



1. An oil well cleaner and agitator comprising a rotary element having axially and radially spaced liquid discharge outlets adapted to be lowered into the well, means for alternately introducing a liquid and a gas into said rotary element, a motor for driving said rotary element at a relatively high speed, whereby the liquid introduced thereinto will be thrown outwardly through its discharge outlets in jets against the oil well screen to thereby clean the same, and means for controlling the flow of liquid and gas to produce alternately a discharge of liquid and then a discharge of gas into the well through the rotary element.

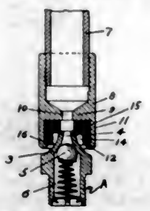
1,866,928. INTERNAL COMBUSTION ENGINE. OTTO J. GINGERICH, Trenton, Ohio. Filed June 1, 1929. Serial No. 367,685. 21 Claims. (Cl. 123—191.)

1. In an internal combustion engine of the four-stroke-cycle type, a cylinder having a head, a column attached to said head and extending toward the other end of the cylinder, thereby forming an annular compression chamber, and a piston comprising a member having packing rings and a deep cylindrical cup, the bottom of which cup is secured to said member with a layer of heat-insulating material between them, the wall of the cup, which shields from the flame of combustion a zone of the cylinder equal to the altitude of the cup, occupying a large



part of the compression chamber at the end of the exhaust stroke of the piston, the column then nearly filling the cup.

1,866,929. COUPLER. RUSSELL J. GRAY, Minneapolis, Minn. Filed Dec. 30, 1929. Serial No. 417,441. 4 Claims. (Cl. 221—47.4.)

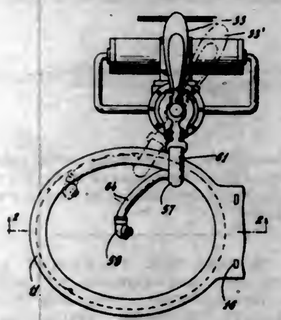


2. A coupler unit for connecting a lubricant supply member to a fitting having a tapered receiving head, said coupler unit comprising a cylindrical member, a gasket secured in one end of the member and having an axial perforation for the passage of lubricant to the fitting head, said perforation being substantially reduced at its inner end to form an inner shoulder for initial sealing contact with the fitting head, and the outer relatively larger end of the perforation having a shoulder for secondary sealing contact with the fitting head.

1,866,930. SANITARY WATER-CLOSET ATTACHMENT. FERRUCCIO GUIDETTI, Elmhurst, and GIUSEPPE BONTEMPI, New York, N. Y., assignors to The Watairway Manufacturing Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 30, 1930. Serial No. 485,440. 13 Claims. (Cl. 4—7.)

1. In apparatus of the class described comprising a bowl adapted to support a human body in a sitting posture, a nozzle within said bowl, directed against the portion of

the body of the occupant thereof exposed within said bowl, said nozzle comprising two adjoining tubular passages and an outlet common to both passages, insuring substantially



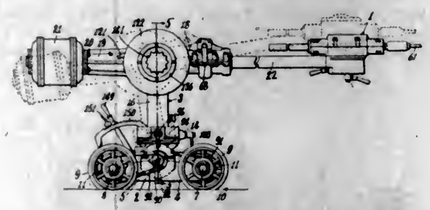
the same direction of flow for a jet of cleansing liquid and a jet of air respectively supplied to said outlet through said passages.

1,866,931. CHARCOAL BLOCK. GEORGE F. HEFFERNAN, Jr., St. Louis, Mo. Filed Feb. 25, 1931. Serial No. 518,141. 3 Claims. (Cl. 44—39.)



1. A device of the character described comprising a body of combustible substance having a concave upper side and a convex lower side, a series of ribs rising integrally from the concave upper side of and spreading ignition of said body, and an ignition device embedded near the center of said body and adapted to be ignited by friction.

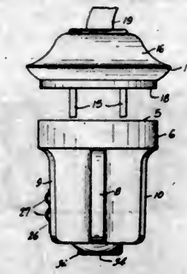
1,866,932. DRILLING APPARATUS. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed July 27, 1928. Serial No. 295,786. 48 Claims. (Cl. 255—47.)



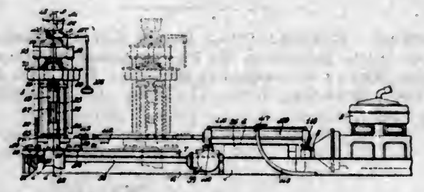
10. In a drilling apparatus, a wheeled support, a standard pivotally mounted thereon to rock relative thereto on a transverse axis, a motor carried at the upper end of said standard, a boom mounted on said standard, a drilling tool carried by said boom, and driving connections between said motor and drilling tool and the wheels of said support.

1,866,933. SEPARABLE ATTACHMENT PLUG. HARVEY HUBBELL, Jr., Bridgeport, Conn. Filed Nov. 2, 1928. Serial No. 316,679. 8 Claims. (Cl. 173—343.)

2. In an attachment plug, a body member of insulating material having spaced passages extending longitudinally therethrough, one wall of each passage having a shoulder spaced inwardly from the inner end of the body, said plug having a radially extending groove leading from the inner end of one of said passages to the outer wall of the plug spring contacts in said passages extending from the inner ends thereof to provide a central and a side contact to engage the contacts of a socket, said side contact including a portion extending through said groove whereby the contact is held against movement relative to the plug and said spring contacts having shoulders cooperating with the shoulders in the passages to retain the contacts in said passage.

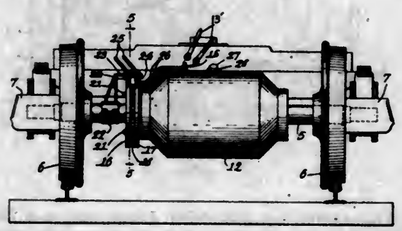


1,866,934. DRILLING APPARATUS. HARRY C. JOHANSEN, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 29, 1930. Serial No. 491,978. 22 Claims. (Cl. 255—22.)



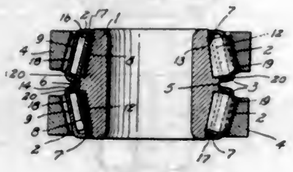
5. In a drilling apparatus, a rotary table, a grief stem rotated thereby, and mechanism independent of said table for rotating said grief stem at a drilling speed during drilling.

1,866,935. GENERATOR. FRANK W. KELLS, Lakeland, Fla., assignor to Kells Generator & Automatic Refrigerator, Inc., a Corporation of Delaware; R. A. King and J. M. Harman, receivers. Filed Nov. 22, 1930. Serial No. 497,576. 9 Claims. (Cl. 105—57.)



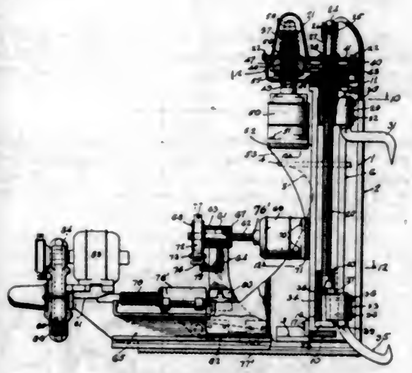
1. A generator comprising an armature mounted on a car axle to rotate therewith, a housing surrounding the armature, field coils supported within the housing and cooperating with the armature to generate electricity, outlet wires for carrying off electric energy from the generator, removable means for normally securing the housing against rotary movement, and said housing adapted to rotate around the armature when the housing securing means is removed and when current is supplied through the outlet wires to convert the generator into a motor for testing the generator.

1,866,936. ROLLER BEARING AND CAGE THEREFOR. WARD G. KIFER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed July 17, 1929. Serial No. 378,853. 3 Claims. (Cl. 308—218.)



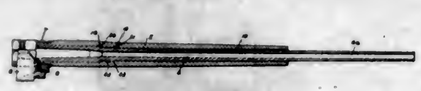
1. A cage for conical roller bearings comprising an outer conical shell having pockets in which the conical rollers fit, and having inturned flanges at each end, and an inner conical shell having corresponding roller pockets and having its small end abutting against the inside face of the small end flange of said outer shell and having its large end ring fitting snugly in the large end ring of said outer shell, said small end ring originally having crimped portions corresponding in curvature to said rollers to facilitate assembly of the cage and rollers.

1,866,937. SAWMILL DOG. ROSS E. LANGILL, Menominee, Mich., assignor to The Prescott Company, Menominee, Mich., a Corporation of Michigan. Filed Sept. 23, 1925. Serial No. 57,993. 23 Claims. (Cl. 143—131.)



1. A sawmill dog comprising a knee having a face, a member slidably mounted on said knee for movement with respect thereto transverse to said face of the same, a rotatable screw carried by said member, log-holding elements arranged upon said screw and provided with log-engaging portions transverse to the face of said knee, means for rotating said screw in either direction to cause movement of said log-holding elements toward and away from each other, and means for effecting said movement of said first-mentioned member and holding the same in adjusted position whereby said portions of said log-holding elements may be operatively positioned and maintained varying distances beyond the face of said knee.

1,866,938. GUN. GEORGE M. MCCANN, New Castle, Del. Filed Mar. 13, 1931. Serial No. 522,466. 7 Claims. (Cl. 89—16.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



7. A gun comprising an internally cylindrical jacket and an externally tapered tube insertable in the jacket, the outer diameter of the tube being less than the inner diameter of the jacket.

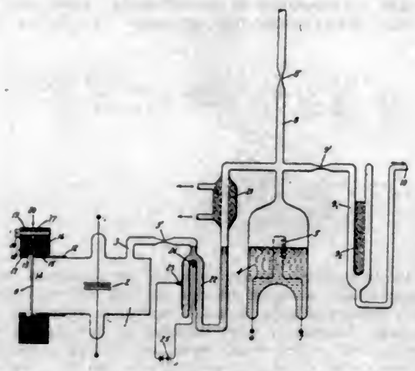
1,866,939. PROCESS FOR PREPARING ALUMINUM CHLORIDE AND RECOVERING METALS. CLAUDE G. MINER, Berkeley, Calif. Filed Aug. 31, 1927. Serial No. 216,776. 20 Claims. (Cl. 23—94.)

1. The process of producing aluminum chloride and a metal below aluminum in the electromotive series of metals, the chloride of which metal is vaporizable, which comprises reacting upon an aluminous material with such metal chloride and carbon at a temperature at which such metal chloride assumes a [illegible] state.

11. The process of producing aluminum chloride and other products from a material containing aluminum in combination with oxygen which comprises reacting upon such material in the presence of a reducing agent with copper chloride vapor at a temperature of about from 1500 to 2200° C.

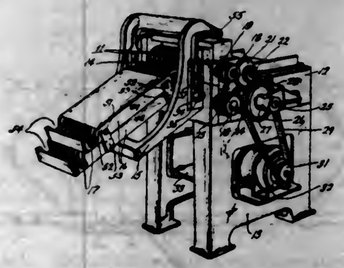
12. The process of producing aluminum chloride by reacting upon an aluminous material concurrently with carbon and a chloride of a metal or metals selected from the group consisting of copper, iron, zinc, lead, silver and gold.

1,866,940. LIQUID PURIFICATION FOR KERR CELLS. ROLF MÖLLER, Hamburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Nov. 25, 1929, Serial No. 409,631, and in Germany Dec. 6, 1928. 2 Claims. (Cl. 88—61.)



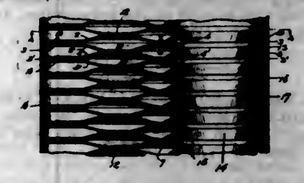
1. In the making of a Kerr cell, the method of providing the cell receptacle with a liquid having electro-optical properties and having a high degree of purity which comprises heating the liquid and simultaneously removing air and water vapor therefrom, condensing the vapors of the liquid, purifying the condensed vapors by passing them through an electrostatic field and then passing the condensed purified vapors as fast as produced directly into the cell receptacle.

1,866,941. SLITTER. JOHN F. PETERS, Rochester, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 22, 1928. Serial No. 263,673. 12 Claims. (Cl. 164—60.)



1. In combination, rotary slitting means, a plurality of stacking magazines, each comprising a plurality of compartments, and a plurality of feed rollers arranged in pairs, the rollers of each pair being of different diameter and adapted to direct cut strips to the several compartments.

1,866,942. REFUELING EQUIPMENT. BYRON H. SHINN, Washington, Pa., assignor to Shinn Devices Corporation, Washington, Pa., a Corporation of Delaware. Filed Dec. 23, 1929. Serial No. 416,144. 16 Claims. (Cl. 244—1.)



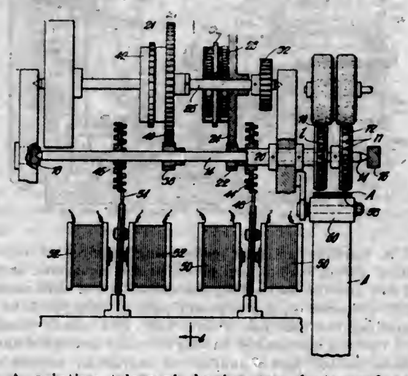
1. A refueling conduit for transferring liquids from one aircraft to another during flight wherein the conduit is made up of interconnected bellows sections of rubberized canvas or the like, which can move toward and away from each other, for varying the effective length of the conduit.

1,866,943. PERCUSSIVE WELL DRILLING APPARATUS. RICHARD P. SIMMONS, New York, N. Y. Filed June 29, 1928, Serial No. 289,271. Renewed Feb. 25, 1931. 6 Claims. (Cl. 61—78.)



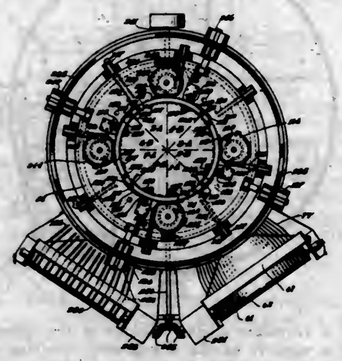
1. A well drilling apparatus including a cylindrical body, a conical drill head slidable with respect to said body, reaming bits slidably mounted in said body, suspension cables attached to said body and said drill head, an anvil on the top of said body, a hammer slidably mounted above said anvil for pounding thereon, means for actuating said reaming bits upon actuation of said drill head with respect to said body and cables attached to said hammer by which the same may be raised and released to drop by gravity upon said anvil.

1,866,944. METHOD AND APPARATUS FOR PRINTING SECURITY QUOTATIONS. HENRY W. SPOONER, Brooklyn, N. Y. Filed Nov. 23, 1926. Serial No. 150,228. 12 Claims. (Cl. 178—35.)



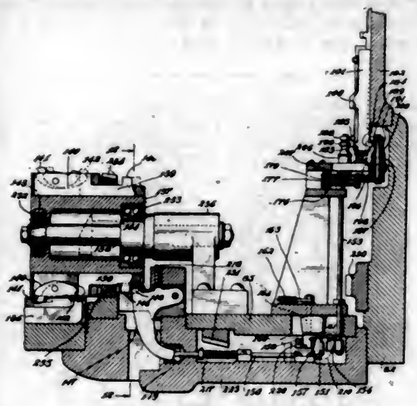
7. A printing telegraph having two juxtaposed separate and independently movable type wheels having characters thereon and separate means for stopping each wheel in position to print a desired character and means for simultaneously printing selected characters said type wheels being adapted to both move independently at the same time.

1,866,945. KNITTING MACHINE. VINCENT LOMBARDI, Brooklyn, N. Y. Filed Aug. 5, 1930. Serial No. 473,212. 33 Claims. (Cl. 66—42.)



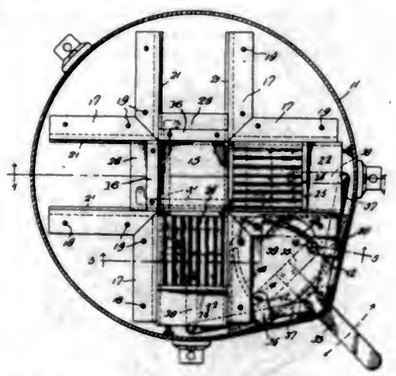
1. A knitting machine comprising a row of needles, a plurality of yarn feeds each carrying yarn to be incorporated into a fabric by said needles, controlling means for said needles, means comprising a pattern drum mounted for movement along said row and rotating in response to said movement for automatically setting said control means to subsequently cause said controlling means to form pattern effects from said yarns, and means responsive to the operation of said machine for wiping out at times the pattern settings of said controlling means for a group of needles, said wiping out occurring before said pattern settings have been made effective on said last mentioned group of needles.

1,866,946. KNITTING MACHINE. OSVALD EDMUND RASMUSSEN, Lincoln Park, N. J., assignor to Vincent Lombardi, Brooklyn, N. Y. Filed Aug. 5, 1930. Serial No. 473,241. 13 Claims. (Cl. 66—42.)



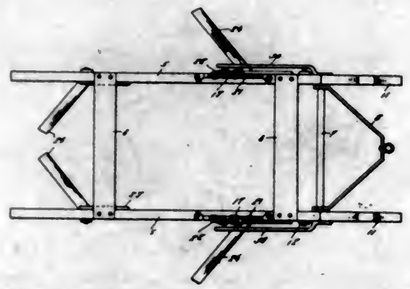
1. A knitting machine comprising a circular row of needles, an adjustable cam mounted for movement around said row and for controlling the actuations of said needles, a jack mounted on a stationary part of said machine for controlling the position of said cam, and means comprising a pattern mechanism having selective pattern determinations thereon and mounted for movement around said row for controlling said jack.

1,866,947. VEGETABLE SLICING MACHINE. GUSTAV A. REISNER, Austin, Tex., assignor of one-half to Emery H. Hughes, Austin, Tex. Filed June 1, 1931. Serial No. 541,407. 6 Claims. (Cl. 146—78.)



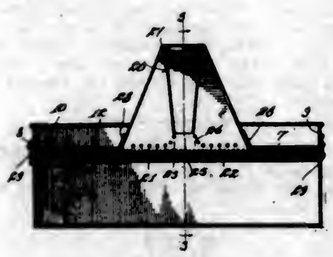
1. In a vegetable slicing machine of the character described, a support having a vegetable receiving opening, spaced pairs of guide brackets mounted beneath said support at opposite sides of the opening, a table normally arranged beneath said opening to support said vegetable, a cutter slidably mounted between one pair of brackets for movement across said opening, and including a corrugated blade for producing slices of the vegetable having corrugated surfaces, means for sliding said table and cutter as a unit with relation to the vegetable, a guide block associated with the table directly opposite the cutter, and connected with the latter, and adapted to be guided between the adjacent pair of said brackets, and means for limiting the movement of said unit in opposite directions.

1,866,948. BEAN VINE CUTTER. HARRY H. ROBERTSON, Worland, Wyo. Filed Jan. 17, 1931. Serial No. 509,508. 4 Claims. (Cl. 56—192.)



1. In a bean vine cutter of the class described, an upper frame and a lower frame, said upper frame comprising a pair of longitudinal side members, said lower frame including a pair of longitudinal side members under which are runners, cross members connecting the side members of the upper frame, links connecting the side members with the two frames together, a lever having one end pivotally connected to a side member of the lower frame and another part pivotally connected to a side member of the top frame whereby tilting movement of the lever will raise and lower the top frame with respect to the lower frame, and blades carried by the upper frame.

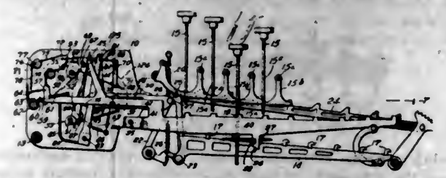
1,866,949. MEANS FOR SHELLING COTYLEDONOUS VEGETABLES. MELCHOR SALINAS, Monterey, Mexico. Filed Apr. 17, 1930, Serial No. 444,998, and in Mexico Apr. 13, 1929. 3 Claims. (Cl. 130—30.)



1. In a machine for shelling cotyledonous vegetables and the like, a water tank having a stationary grate, said grate being spaced from the end walls of said tank to provide openings, a movable grate positioned above said stationary grate and adapted for cooperation therewith to break the shells of the vegetables, means for feeding the vegetables between said grates, and walls positioned at the ends of said movable grate to engage the vegetable after the breaking of the shell to force the same through the openings at the end of said stationary grate.

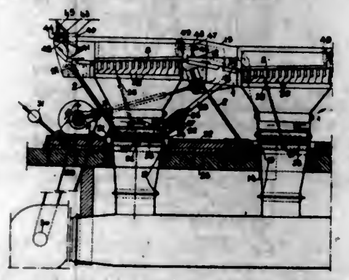
1,866,950. CONTROL MECHANISM FOR CALCULATING MACHINES. JOHN H. F. SILVER, Philadelphia, Pa. Filed Mar. 30, 1927. Serial No. 179,536. 4 Claims. (Cl. 235—130.)

1. In a keyboard calculating machine, a plurality of columns of keys, means operative upon partial depression of a given key to lock all of the keys in the column containing said partially depressed key, and means operative upon release of said partially depressed key to effect locking of all keys of the remaining columns, said last named locking means including a key control lever associated with



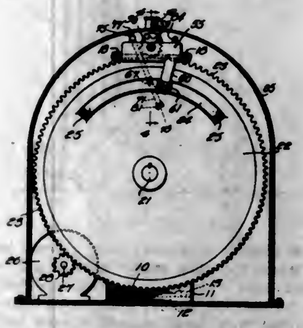
each column and having hook portions adapted to engage the keys of said column for holding down any key which is relieved of pressure after a partial depression.

1,866,951. APPARATUS FOR THE PNEUMATIC SEPARATION OF MATERIALS OF DIFFERENT DENSITIES. PAUL SOULARY, Bruay-en-Artois, France. Filed Aug. 12, 1929, Serial No. 385,132, and in France Aug. 22, 1928. 3 Claims. (Cl. 209—467.)



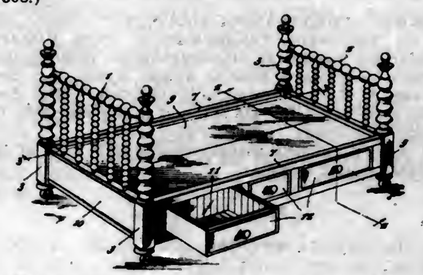
1. In an apparatus of the type indicated, in combination, boxes with perforated substantially horizontal bottom, a wall for connecting two adjacent boxes, partitions for separating layers of materials of a known type but arranged above the said wall, a tight enclosure under each of the boxes, means for independently admitting the blown air into each of the said enclosures and means for uniformly distributing the said air under the perforated bottom of the box, means for imparting to the said boxes periodical shaking movements which agitate the treated materials so that the air admitted in a continuous manner passes through the said materials in the form of pulsations.

1,866,952. WIRE TWISTING MACHINE. JOHN GALLAGHER STEELE, Latrobe, Pa. Filed Feb. 20, 1931. Serial No. 517,367. 20 Claims. (Cl. 140—119.)



1. Apparatus of the character described comprising a pair of relatively fixed wire gripping members, a pair of rotatable wire gripping members spaced from said first named members, the members of each pair being normally spaced apart a sufficient distance to permit the insertion of a pair of wires therebetween, and means for simultaneously moving each pair of members into gripping engagement with the wires.

1,866,953. BED. SUSAN STEPHENS, Louisville, Ky. Filed June 22, 1931. Serial No. 546,047. 1 Claim. (Cl. 5—308.)



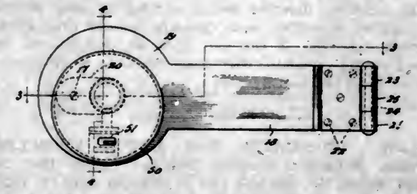
In a bed, a head, a foot, side rails extending between and connected with the head and foot, inwardly projecting ledges on the inner sides of the head, foot and rails, the rails being formed with openings above the ledges, boxes extending longitudinally of said bed in side by side relation to each other and resting upon said ledges with their tops spaced below the upper edges of the side rails, said boxes being open at their outer sides, the inner sides of the boxes contacting with each other and the outer sides bearing against the side rails above and below the openings therein, the tops of the boxes constituting a support for a mattress coextensive in area with the bed drawers in said boxes projecting from the outer sides thereof through the openings in the side rails whereby they may be drawn outwardly through said openings, and parting strips on the bottoms of the boxes between the drawers to guide the latter.

1,866,954. FIXTURE STRAP. GEORGE J. SVETCOFF, Meadville, Pa. Filed Mar. 10, 1931. Serial No. 521,558. 1 Claim. (Cl. 240—85.)



In a fixture strap for attaching electric fixtures to outlet boxes, an elongated body provided between the ends thereof with an opening, having the wall thereof threaded, said body being provided on one side with an annular boss concentric to said opening and being internally and externally threaded and constituting a means by which a pipe may be guided into said threaded opening, said body being provided with means by which the same may be connected to an outlet box.

1,866,955. LOCK. GEORGE R. TERRILL, McAlester, Okla. Filed Apr. 30, 1930. Serial No. 448,624. 4 Claims. (Cl. 70—5.)

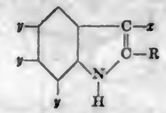


1. A lock comprising a post, a body mounted to swivel on said post, a radially movable latch carried by said body and having a tongue slidably fitting in an annular groove

in said post, a pivoted plug carried by said body and pivotally connected to said latch for moving said latch into and out of said groove, a casing carried by said body and receiving said core, said casing and said plug being of angular cross-section whereby said plug is held against being twisted in said body, and means for normally locking said plug against movement.

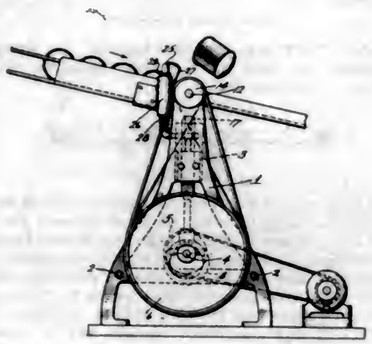
1,866,956. PHENYL-INDOL-SULPHONIC ACIDS. EDUARD TSCHUNKUR, Cologne-Mulheim, FRITZ BALLAUF, Elberfeld, and ERNST HERDIECKERHOFF, Opladen, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 29, 1930, Serial No. 478,784, and in Germany Feb. 11, 1928. 15 Claims. (Cl. 260—47.)

9. As new products phenyl-indol-sulphonic acids of the probable general formula:



wherein one *y* stands for a sulphonic acid group, the other *y*'s stand for hydrogen, R stands for methyl, ethyl or a radical of the benzene series, *x* stands for hydrogen or methyl, but R and *x* not simultaneously representing a radical of the benzene series and methyl, being generally colorless crystalline substances, in the form of their alkali metal salts easily soluble in water and being valuable intermediate products in the manufacture of dyestuffs.

1,866,957. DETECTOR FOR BULGED END CANS. WILLIAM W. WADSWORTH, Tremonton, Utah. Filed May 17, 1928, Serial No. 278,552. Renewed Nov. 23, 1931. 19 Claims. (Cl. 209—88.)



1. An apparatus for detecting bulged end cans comprising opposed devices, means for rotating said devices in opposite directions, other means for moving said devices axially, yielding detector means carried by said devices and adapted to contact with opposite ends of cans simultaneously whereby if the can ends are bulged the increased central pressure will cause the cans to be ejected from between the said devices.

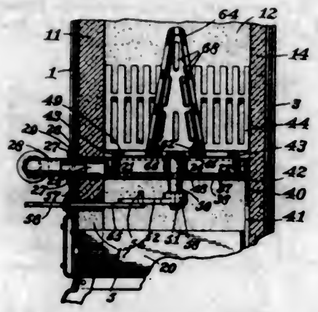
1,866,958. STABILIZER FOR MOTOR VEHICLES. PIERRE WILMART, Brussels, Belgium. Filed Dec. 26, 1929, Serial No. 416,595, and in Belgium Apr. 13, 1929. 4 Claims. (Cl. 267—11.)

1. In combination with a vehicle axle and a pair of suspension leaf springs thereon, shock absorbing means comprising a cross bar and springs attached thereto, said cross bar being connected to the suspension springs at



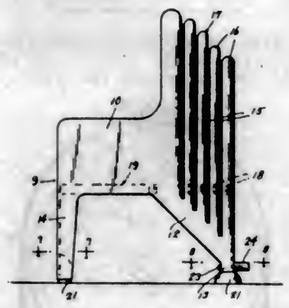
points near the outer ends thereof for oscillating movement and the free ends of said shock absorbing springs being connected to the suspension springs at points near the axle.

1,866,959. INCINERATOR. ROBERT T. WYSE, Mount Washington, Pa. Filed Dec. 27, 1930. Serial No. 505,105. 8 Claims. (Cl. 110—18.)



1. In a device of the character described, a casing, a burner spaced from the sides thereof, inclined side grates resting on said burner and having portions spaced therefrom, said side grates being engaged at their upper and lower portions with the sides of the casing, and a bottom grate movable substantially in a horizontal plane within the spaces between the burner and side grates.

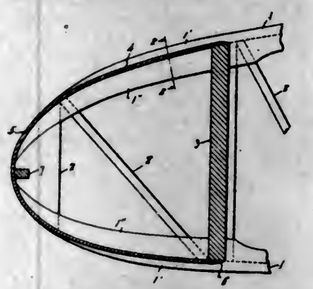
1,866,960. BREAD SLICING MACHINE. JACOB ZIMMER, Appleton, Wis. Filed Jan. 17, 1931. Serial No. 509,487. 1 Claim. (Cl. 146—150.)



As a new product of manufacture, a bread holder comprising a frame including spaced parallel side walls, supporting feet, and a front stop wall, together with an openwork bottom, the frontal portions of said side walls being provided with longitudinally spaced vertically extending slits defining a multiplicity of guide fingers, said guide fingers being graduated in length, having their upper ends rounded to facilitate application and removal of cutting means, and being transversely bowed in cross

section to secure rigidity of structure, and cushioning feet for said rack, together with forwardly projecting cushioned bumpers carried by the forward portion of the frame and located adjacent the supporting surface for co-operation with a part of the cutter to limit the downward stroke of said cutter.

1,866,961. WING STRUCTURE. GIUSEPPE M. BELLANCA, New Castle, Del. Filed July 2, 1931. Serial No. 548,437. 7 Claims. (Cl. 244—31.)

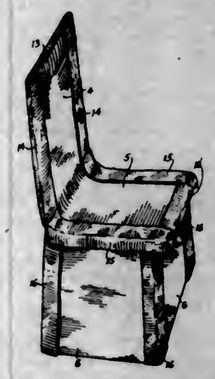


1. A wing structure comprising a spar and associated ribs, each rib at at least the forward portion thereof comprising a flange section and an associated web; a nose piece defining the entering edge of the wing and extending rearwardly and being confined between the web and flange of the rib and being attached at its termini to the spar.

1,866,962. SYNTHETIC RESINS AND PROCESS OF PREPARING SAME. ELIAS BIELOUSS, Washington, D. C., assignor to Henry A. Gardner Laboratory, Inc., Washington, D. C., a Corporation of the District of Columbia. Filed May 17, 1930. Serial No. 453,417. 6 Claims. (Cl. 260—4.)

1. Process which comprises forming in the presence of a natural esterifiable resin a synthetic resin of the group consisting of alkyd resin and phenol-formaldehyde resin, and esterifying the natural resin and forming in the mixture another synthetic resin of the group consisting of alkyd resin and phenol-formaldehyde resin.

1,866,963. PACKING ENVELOPE. GUY HARDY CAMPBELL, Shelbyville, Ind., assignor to The Kennedy Car Liner & Bag Co., Shelbyville, Ind. Filed Feb. 18, 1930. Serial No. 429,438. 5 Claims. (Cl. 45—68.)

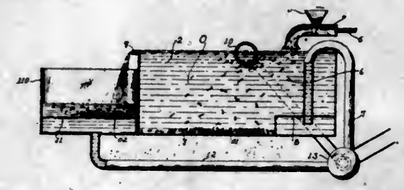


1. A packing envelope comprising a substantially rectangular sheet of flexible material, a skirt of similar material surrounding said sheet and secured at three edges thereto, a pocket having a mouth defined by two edges, said pocket being coextensive with and secured by one edge of its mouth to the fourth edge of said sheet, said skirt secured to the other edge of the mouth of said pocket substantially as specified.

1,866,964. CELLULOSE ACETATE COMPOSITIONS CONTAINING MIXED VOLATILE SOLVENTS. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 23, 1927. Serial No. 186,188. 7 Claims. (Cl. 134—79.)

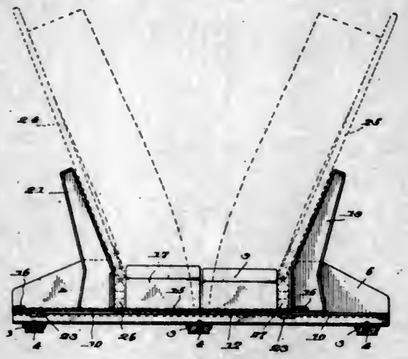
1. A flowable film-forming composition comprising acetone-soluble cellulose acetate dissolved in a volatile solvent mixture of 50 parts by weight of methyl acetate, 10 to 40 parts of ethyl acetate and 40 to 10 parts of acetone, said solution containing in the order of 30% cellulose acetate.

1,866,965. PROCESS FOR THE SEPARATION OF CELLULOSIC MATERIALS. LOUIS ETIENNE CLEMENT, Meudon, France, assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 29, 1929. Serial No. 374,819. 2 Claims. (Cl. 209—173.)



1. A process of separating two colloidized cellulose derivatives, whose specific gravities differ by less than approximately .3 which comprises forcibly separating the derivatives into individual particles, immersing these particles in a substantially non-solvent liquid which has a specific gravity between that of the derivatives being separated and floating off the cellulose derivative of lesser specific gravity.

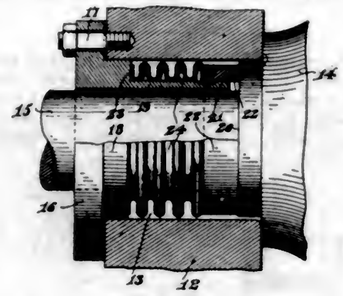
1,866,966. POSTING STAND. ROGER CONNOR, NELSON S. WELK, and DAVID R. ZENNER, Athens, Ohio, assignors to The McBee Binder Company, Athens, Ohio. Filed Dec. 22, 1930. Serial No. 504,130. 2 Claims. (Cl. 45—57.)



1. A posting stand comprising a support formed of a sheet-metal section, two sheet-metal sections having flat portion and diverging upper portions resting upon said support, one of said last mentioned sections being adjustable and sliding above the other, each of said sections being provided with a pair of parallel slot portions, one of

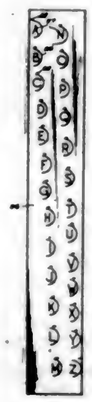
the pairs of slots being parallel to the other pair, the two pairs of slots being thus adapted to support the covers of a temporary binder in a substantially parallel relation, and cooperating means on all three of said sheet-metal sections, whereby said adjustable section may slide above and with respect to the other two fixed sections to support the binder covers in a closed position when in one position and in another position to support the binder covers in a posting position.

1,866,967. SHAFT PACKING. FRED D. DURHAM, Louisville, Ky., assignor to C. Lee Cook Manufacturing Company, Louisville, Ky., a Corporation of Kentucky. Filed Oct. 4, 1930. Serial No. 486,493. 13 Claims. (Cl. 286—11.)



1. The combination with relatively rotatable members having a joint to be packed, one of said members being a shaft, of a carrier sleeve on the shaft, a packing washer having a bearing on the sleeve and engaging the other member, and a bellows interposed between the sleeve and washer.

1,866,968. INDEXED BOOK. FRANK H. ELLISON, Brooklyn, N. Y. Filed Jan. 10, 1930. Serial No. 419,972. 3 Claims. (Cl. 283—40.)

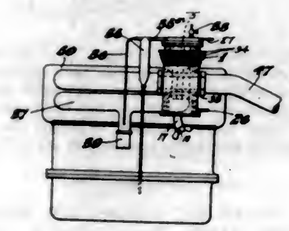


1. A plurality of assembled leaves producing a stack, successive leaves having marks upon their faces extending to the edges of the leaves and visible at such edges, the arrangement of the marks being such that the assembled marks produce a character.

1,866,969. ELECTROLYTIC PRODUCTION OF FLUORINE. KARL FREDENHAGEN, Greifswald, Germany. Filed July 11, 1929, Serial No. 377,608, and in Germany July 17, 1928. 4 Claims. (Cl. 204—19.)

1. The process of producing fluorine which comprises passing a current of a dry inert gas through an alkali metal bifluoride in the electrolysis system at an elevated temperature, but below the melting point of the salt, until the hydrogen fluoride given off by the salt when occasionally heated to decomposition has a specific conductivity at 0° C. of less than 0.02 reciprocal ohm, and carrying out electrolysis with the salt in a liquid condition while avoiding access of moisture.

1,866,970. APPARATUS FOR PURIFYING USED LUBRICATING OIL AND THE LIKE. CHARLES SAMUEL GARLAND, THOMAS EDWARD BEACHAM, and JOSEPH ALLEN PICKARD, London, England. Filed Feb. 24, 1927, Serial No. 170,701, and in Great Britain Mar. 1, 1926. 9 Claims. (Cl. 196—16.)



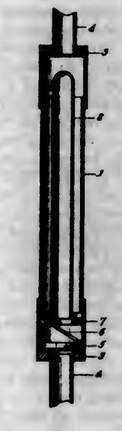
1. Lubricating oil purifying apparatus for internal combustion engines comprising in combination a filter, means for delivering oil to be purified to said filter, means for delivering the purified oil from the filter, a vessel in which the filter is contained, a casing surrounding said vessel, means for heating the lower part of said vessel by waste heat derived from the engine, means for preventing the temperature rising above a given value and means for maintaining its upper portion sufficiently low to condense oil vapors generated by the heat of its lower portion.

1,866,971. PROCESS OF MAKING CELLULOSE ACETATE. HARRY LE B. GRAY and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 22, 1928. Serial No. 328,054. 5 Claims. (Cl. 260—10.)

1. In the process of making cellulose acetate, treating cellulose with acetic anhydride, a catalyst and acetic acid, subsequently adding a volatile organic liquid thereto, said acetic acid, by itself, being insufficient to dissolve the cellulose acetate formed, said volatile organic liquid being substantially immiscible with water and inert toward the reagents present in the reaction bath, which cooperates with said acetic acid to complete the solution, the final reaction mixture containing dissolved cellulose acetate being treated in an aqueous precipitating bath at a temperature above the boiling point of said volatile liquid.

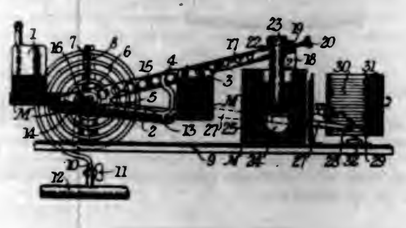
1,866,972. APPARATUS FOR FLUID LIFT OF LIQUIDS. WILLIAM P. HASEMAN, Oklahoma City, Okla. Filed Sept. 15, 1930. Serial No. 481,927. 1 Claim. (Cl. 103—232.)

Apparatus of the nature specified, comprising a flow tube, means for supplying a fluid to the interior of said flow tube, an inverted tube with perforations in its lower section, said inverted tube being mounted within the flow



tube, dividing it into a lower section and an upper section and providing an aeration chamber for regulating the fluid stream through the flow tube.

1,866,973. RECORDING MANOMETER. KENNETH C. D. HICKMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 17, 1928. Serial No. 255,132. 5 Claims. (Cl. 234—17.)



1. In combination, a recording instrument including a support, a carriage pivotally mounted upon the support, a pair of connected mercury columns carried by the carriage, means for evacuating air from one mercury column including a spirally coiled flexible tube connected to one mercury column and passing from the carriage at its pivotal support to the base, and means for evacuating air from the mercury column, and a recording member mounted to move with the carriage to indicate the degree of vacuum.

1,866,974. NONSKID FRUIT TREE LADDER. FRED J. HOHING, Alden, and JAMES LIVINGSTON, Acme, Mich. Filed Nov. 1, 1930. Serial No. 492,796. 1 Claim. (Cl. 228—32.)

A hillside ladder comprising side rails, a head member connecting the side rails, steps connecting the side rails, a pair of angle iron brackets carried by said head member, a hinge plate having upturned flanges overlapping said angle iron brackets, a hinge pintle passed through said flanges and said brackets, a channel iron bridge plate, rear legs received in the channel of said bridge plate, pivots passed through the upper ends of said legs and said bridge plate to permit of said legs being swung laterally apart, and a swivel bolt passed through said bridge plate and through said hinge plate and swivelly connecting said legs to said hinge plate whereby said legs may be twisted around said swivel bolt as an axis

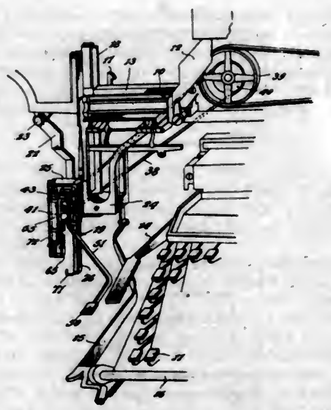


and disposed at various angular positions with respect to each other and to the side rails to rigidly support the ladder against collapse or skidding on uneven ground.

1,866,975. PROCESS FOR THE MANUFACTURE OF MAGNESIUM. ALFRED CLAUDE JESSUP, Clamart, France. Filed May 19, 1930, Serial No. 453,865, and in Germany June 1, 1929. 6 Claims. (Cl. 204—19.)

1. Process for the production of magnesium by electrolysis, consisting in first preparing a mixture of potassium chloride and magnesium chloride containing less than three molecules of the former to one of the latter, and containing not substantially more than 2% of water; proceeding with a first electrolysis of the mentioned mixture in such a way as to obtain a mixture which is practically anhydrous and containing more than three molecules of potassium chloride for one of magnesium chloride, and then to proceed with a second electrolysis of the mixture obtained as a result of the first electrolysis.

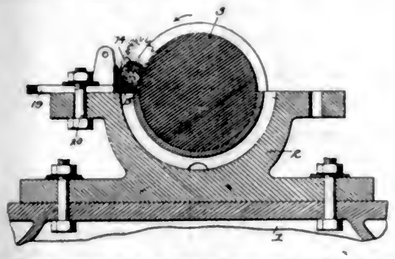
1,866,976. ASSEMBLING ELEVATOR LIFTING MECHANISM FOR TYPOGRAPHICAL MACHINES. IRVING JOHN KEELER, Sidney, N. Y. Filed May 26, 1930. Serial No. 455,934. 12 Claims. (Cl. 199—31.)



1. In a linotype machine, the combination of an assembling elevator, a power driven clutch, rack and pinion mechanism operated by the clutch to raise the elevator,

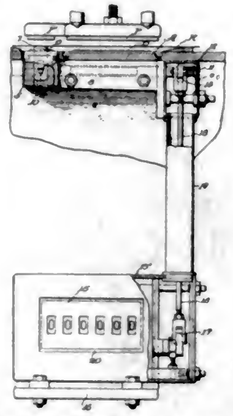
an air check for cushioning descent of the elevator, means for controlling the air check to maintain the elevator stationary at any desired point in its ascent, a spring pressed shipper for controlling the clutch, and a manually operated key for actuating the shipper.

1,866,977. MEANS FOR LUBRICATING MACHINERY. MAX ALBERT KRETCHMAR, Albany, N. Y., assignor to Horrocks Desk Company, Herkimer, N. Y., a Corporation of New York. Filed June 3, 1925. Serial No. 34,638. 2 Claims. (Cl. 308—132.)



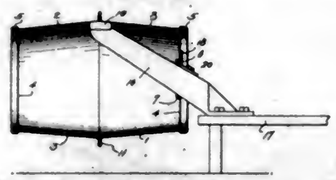
1. Lubricating means for calendering and like machinery, wherein journals of the calendering rolls or drums and bearings for said journals are located between heads of the drums and gear wheels carried by the drums to transmit motion from one to another, said means comprising a bearing and an oil receptacle to stand below each journal; a wick support having its longitudinal axis approximately parallel with the axis of the journal and its surface inclining downwardly and toward the journal; and a wick having a portion extending into the oil receptacle and another portion overlying said support, the parts being so constructed and arranged that the frictional engagement of the journal with the wick urges the wick downward over the support and into thrust engagement with the journal.

1,866,978. PRINTING MACHINE. WILLIAM JOSEPH LASCELLES, MAGNUS FRASER PETERSON, JOHN RUSSELL SCOTT, and KENNETH MCCLYMONT WILSON, Manchester, England, assignors to Addressograph Company, Cleveland, Ohio, a Corporation of Delaware. Filed Nov. 28, 1931, Serial No. 577,736, and in Great Britain Sept. 2, 1930. 9 Claims. (Cl. 101—287.)



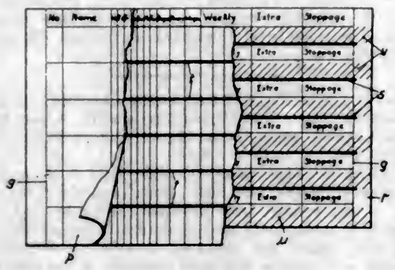
9. In a printing machine which has an anvil supporting a printing device in printing position, a platen for making impressions from said printing device, and a counting device, the combination therewith of a housing having a printing die extending therefrom, said printing die embodying fixed and movable parts having a printing form distributed thereon adapted for cooperation with the platen and having the portion of the printing form on the fixed part disposed substantially in the same plane as the printing device on the anvil, said housing including an arm extending past said anvil to a second housing, holding means arranged in said housings and said arm and including a shaft supported for rotative movement, means connecting said shaft to said movable part, and a spring acting on said shaft to hold the movable part in an extended position relative to the fixed part whereby the movable part is moved to position the portion of the printing form thereon in the same plane as the portion of the printing form on the fixed part upon application of printing pressure by said platen in an operation thereof to make an impression from said printing device and printing form, a housing enclosing said counting device, a hollow arm connecting the second housing and the housing enclosing the counting device, a lever in the second housing connected to said shaft, a link extending through said hollow arm and interconnecting said lever and said counting device, the movement of said movable part upon operation of said platen being transmitted through said rotatable shaft, lever, and link to said counting device to operate said counting device upon each operation of said platen.

1,866,979. SHIPPING DRUM AND PROCESS OF MAKING THE SAME. LOUIS LERIO, Mobile, Ala. Filed June 27, 1930. Serial No. 464,307. 8 Claims. (Cl. 113—120.)



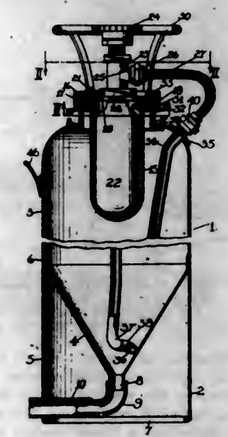
1. A receptacle comprising opposed sections, each having closing means at one end and having opposed ends normally open and flanged, said flanged ends being constructed for subsequent interengagement to form a flattened tight joint disposed substantially parallel with the wall of the receptacle.

1,866,980. FORM OF THE KIND USED IN OFFICE WORK. HEINRICH LESCHHORN, Zuffenhausen, near Stuttgart, Germany. Filed May 1, 1931, Serial No. 534,355, and in Germany May 20, 1930. 2 Claims. (Cl. 282—3.)



1. A combination form comprising a plurality of superposed sheets, transversely slotted to provide strips, and adhesive strips for holding together the said sheets, the slots of the said sheets being staggered relative to one another by the width of an adhesive strip and each strip of a sheet being adhesively connected with a strip of the underlying sheet.

1,866,981. FIRE EXTINGUISHER CONTAINER. CHARLES H. MEIGS, New York, N. Y., assignor to Du-Gas Fire Extinguisher Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 11, 1929. Serial No. 406,217. 2 Claims. (Cl. 169—31.)



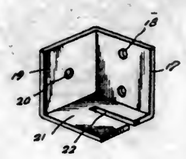
2. A fire extinguisher comprising a dry powder receptacle having a discharge opening and a filling opening, a well member removably inserted in said receptacle and supported thereon sealing the filling opening, a gas cylinder in said well member, a valve body in threaded connection with said cylinder, said valve body including a valve stem and a wheel, means to restrain said valve body against turning when the valve wheel is turned, said means comprising a hinged member supported on said receptacle in engagement with said valve body.

1,866,982. SIGNAL POST. RUBY B. MICHENER, Detroit, Mich. Filed Oct. 26, 1931. Serial No. 571,192. 5 Claims. (Cl. 40—145.)



1. In a device of the character described, a hollow tubular foundation member adapted to be embedded in the ground and project above the latter, and including a bottom, a rubber post supported within said member and having a longitudinal bore therethrough, means connecting the post to said foundation member, a metallic disk molded in the post adjacent its upper end, coiled springs longitudinally arranged within the post and terminally connected with the bottom of said member and said disk, and a sign supported by the upper end of the post.

1,866,983. AUTOMOBILE WINDOW SCREEN. WARREN ISAIAH MOULTON, Boston, Mass., assignor of one-fourth to Alfred A. McDavitt and one-fourth to Cornelius E. McLaughlin, Boston, Mass. Filed Aug. 21, 1931. Serial No. 558,595. 2 Claims. (Cl. 156—39.)



1. A bracket adapted to support a screen supporting roller, including a bottom wall slotted to slidably receive the screen from said roller, and to limit the upward movement of the screen.

1,866,984. COLLAPSIBLE TUBE CLOSURE. MICHAEL R. O'KEEFE, Tacoma, Wash. Filed July 17, 1931. Serial No. 551,499. 4 Claims. (Cl. 221—60.)

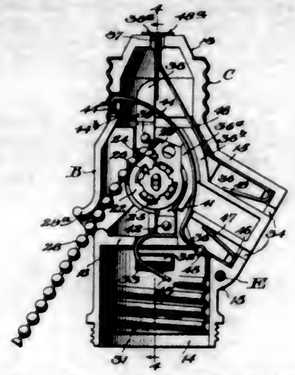


1. In a structure of the class described, in combination, a collapsible tube embodying a discharge neck, a cap adapted to fit slidably and telescopically on said neck, a bail swingably attached to the crown portion of the cap, an operating lever pivotally attached to the bail and means for connecting said lever swingably with said neck.

1,866,985. ELECTRIC CONNECTER. CARL M. PETERSEN, Trenton, N. J., assignor to Circle F Mfg. Co., Trenton, N. J., a Corporation of New Jersey. Filed Oct. 8, 1928. Serial No. 311,145. 4 Claims. (Cl. 173—336.)

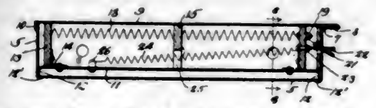
1. An electrical connecter, including longitudinal complemental housing-shell sections of molded insulating material, a socket formed at one end of said members, a screw shell contact within the socket, a center contact within the screw shell, said housing shell having a side outlet, said outlet terminals arranged in said side outlet, a conductor for one of said terminals connected with the screw shell, a ring carried by one end of the housing shell sections and electrically connected with said last named conductor, the other of said side outlet terminals including a conductor portion passing through the end of the plug portion of the device and constituting a center con-

tact thereof, an electrical connection between the center contact of the said plug portion of the device and the center contact of the socket independent of the connec-



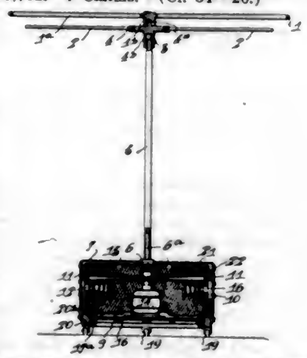
tion of either of said side outlet terminals with the plug portion of the device, and a pull switch arranged in said last named connection.

1,866,986. OIL HEATER. WILSON H. PINGREY, Blairstown, Iowa. Filed Mar. 16, 1931. Serial No. 523,080. 2 Claims. (Cl. 219—38.)



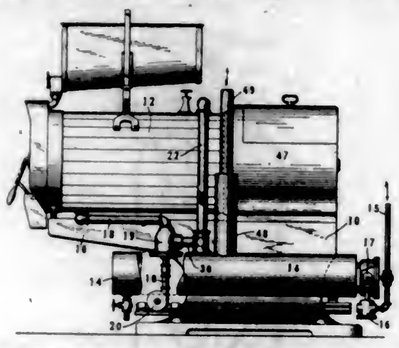
1. A liquid heater to be submerged in the oil of a crank case, comprising a body portion, a base removably supported within the body portion and disposed in spaced relation with the bottom of the body portion, providing a passageway, coil supporting members secured to the base, near the ends thereof, coil supporting members disposed intermediate the ends of the base, resistance coils mounted on the coil supporting members and dividing the body portion into compartments, a cover mounted on the body portion and engaging the coil supporting members, providing a passageway, the sides of the body portion and cover having openings to permit oil to pass into the body portion, and means connected with the coils to supply electric energy thereto.

1,866,987. HOT OR COLD AIR HOME CLOTHES DRYING MACHINE. TITO PRINCIPESSA and JOHN DE COSIMO, Ellwood City, Pa. Filed Mar. 3, 1931. Serial No. 519,782. 7 Claims. (Cl. 34—26.)



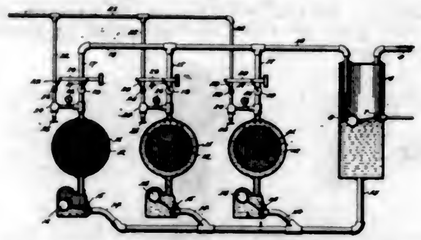
1. In clothes dryers, a drum-like base unit having foraminous peripheral and top walls, a post mounted on the top of the base unit and extending vertically upwardly therefrom, an electric motor driven fan within the drum-like base for causing movement of an air stream upwardly around said post, a disk having radial arms rotatably mounted on the upper end of said post, and a ring with spokes and hub mounted on said disk.

1,866,988. REFRIGERATION. ALBERT T. LIGHT, Brooklyn, N. Y., assignor to York Ice Machinery Corporation, York, Pa. Filed Oct. 25, 1927. Serial No. 228,529. 21 Claims. (Cl. 62—114.)



13. The combination of an ice cream freezer having an evaporator in heat exchanging relation therewith; a low pressure receiver for volatile liquid refrigerant substantially devoid of heat exchanging relation with said freezer; means affording a closed circuit for refrigerant from the receiver upward through said evaporator and back to the receiver; a suction connection leading from the receiver; a supply line for liquid refrigerant leading to said receiver; means responsive to the quantity of liquid in the receiver for controlling flow through said supply line; and means operable at will for discharging liquid refrigerant from said evaporator to said receiver.

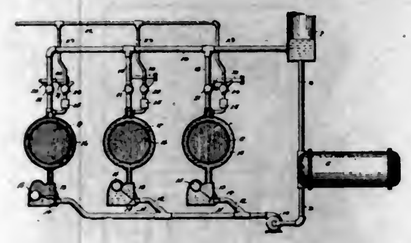
1,866,989. REFRIGERATION. THOMAS SHIPLEY, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Oct. 12, 1927. Serial No. 225,775. 14 Claims. (Cl. 62—3.)



1. The method of unloading a cooler having an inlet connection and an outlet connection for the circulation of a refrigerating medium through the cooler, which consists in arresting the circulation and admitting gas under pressure to expel the liquid medium from the cooler.

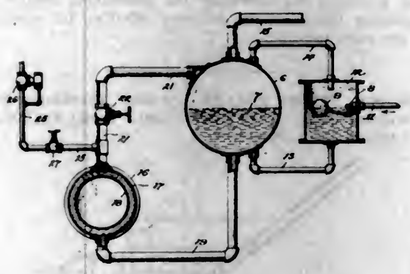
1,866,990. REFRIGERATION. THOMAS SHIPLEY, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Oct. 12, 1927. Serial No. 225,776. 10 Claims. (Cl. 62—101.)

1. In a refrigerating system, the combination of liquid cooled refrigerating device; a cooler for abstracting heat from a liquid; a reservoir adapted to contain a variable volume of the liquid; a circulating pump; liquid conducting connections between the above enumerated parts serving normally to direct the liquid through the refrigerating device, cooler and pump in a closed circuit said circuit, excepting said reservoir, being normally filled with



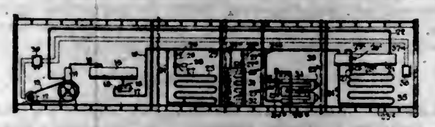
liquid; and means including a valve mechanism associated with said circuit operable to arrest flow through said refrigerating device and control discharge therefrom into said reservoir.

1,866,991. REFRIGERATION. WILLIAM E. ZIEBER, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Aug. 13, 1928. Serial No. 299,271. 13 Claims. (Cl. 62—2.)



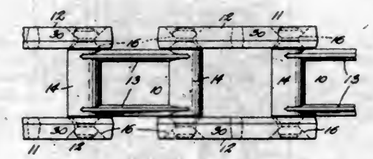
1. The method of discharging refrigerant from a flooded evaporator having a liquid feed connection and a vapor connection, which consists in closing the vapor connection evaporating some of the liquid refrigerant and causing the refrigerant vapor thus formed to displace the liquid refrigerant from the evaporator through the liquid connection.

1,866,992. REFRIGERATION. WILLIAM E. ZIEBER, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Oct. 10, 1929. Serial No. 398,745 16 Claims. (Cl. 62—6.)



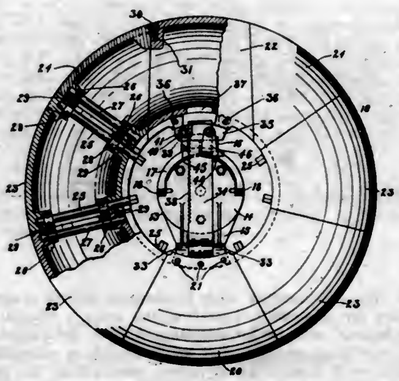
1. The method of controlling the refrigerative action of a normally flooded evaporator, having two independent connections with a trap in which a charge of liquid refrigerant is maintained under suction pressure, and from which the evaporator is fed with liquid refrigerant by gravity flow, which consists in variably throttling one of said connections according to changes in the artificial temperature created by said evaporator, while evaporation of refrigerant is taking place in the evaporator, and thus varying the effective surface of the evaporator by a varying partial displacement of liquid refrigerant therefrom.

1,866,993. CONVEYER CHAIN. STANLEY J. BENNER, Springfield, Mass. Filed Dec. 4, 1929. Serial No. 411,518. 3 Claims. (Cl. 74—32.)



2. A chain link having a body, and a pivot stud extending laterally therefrom and which comprises an axial cylindrical intermediate portion, an inner flaring conical portion extending from one side thereof and connecting with a part on said body which extends lengthwise of said pivot axis directly away from said conical portion, and an outer flaring, interrupted conical enlargement extending from the opposite side thereof.

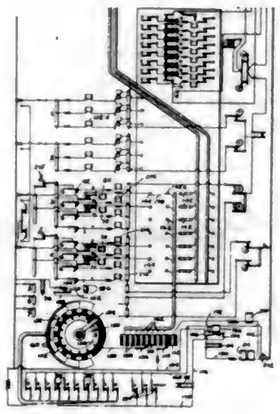
1,866,994. TIRE CORE AND CHUCK. HENRY C. BOSTWICK, Akron, Ohio, assignor to The Akron Standard Mold Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 1, 1930. Serial No. 499,309. 19 Claims. (Cl. 154—9.)



1. Tire building apparatus comprising a guide, and a collapsible tire-building core including a key segment slidably mounted on said guide and formed to receive the latter within its interior.

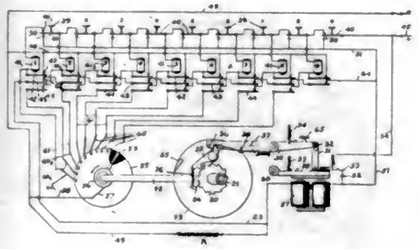
11. The combination of a segmental core including a base segment and a key segment, and a chuck attached to said base segment and having a member movable toward and from the core plane and constituting a removable lateral support for the key segment.

1,866,995. TABULATING MACHINE. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Sept. 14, 1925. Serial No. 56,149. 38 Claims. (Cl. 235—58.)



1. In a machine of the class described, in combination, a card punching device, for sequentially punching in different denominational orders, an accumulating device, and means to operate said devices conjointly for entering corresponding items therein as the card is being sequentially punched.

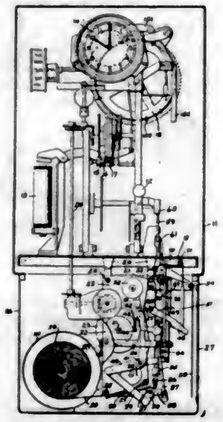
1,866,996. ELECTRIC CONTROL MECHANISM. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Dec. 13, 1927. Serial No. 239,742. 18 Claims. (Cl. 192—142.)



1. The combination with mechanism having operating means for repeatedly operating the same a plurality of revolutions without interruption, control mechanism for said operating means including a plurality of common elements each element alone having connections for predetermining a different number of repeat revolutions of said mechanism and means whereby each element initiates the operation of said operating means.

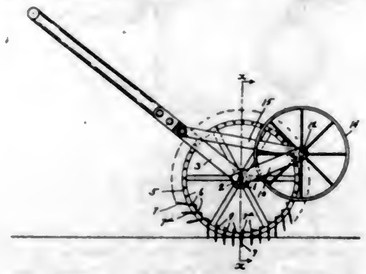
18. In a revolution controlling device comprising in combination, a shaft coupling means, a main relay for rendering the shaft coupling means operative or inoperative, a series of elements, a corresponding number of supplemental relays, means controlled by the elements for deenergizing one or more supplemental relays and energizing the main relay and means for deenergizing the main relay after the supplemental relays are successively energized.

1,866,997. PRINTING PAY ROLL CLOCK. JAMES W. BRYCE, Bloomfield, N. J., assignor to International Time Recording Company of New York, New York, N. Y., a Corporation of New York. Filed May 26, 1930. Serial No. 455,661. 15 Claims. (Cl. 234—43.)



14. In a workman's time recording device, a main recorder, a normally ineffective auxiliary recorder associated with the main recorder and adapted to be operated by the latter, time controlled means for preventing operation of the main recorder during predetermined periods, and a device for disabling the preventing means and rendering the auxiliary recorder effective for operation by the main recorder.

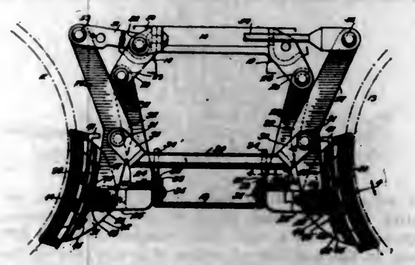
1,866,998. TURF ROLLER. JAMES FREDERICK BUEL, Woburn, Mass. Filed Jan. 8, 1931. Serial No. 507,366. 2 Claims. (Cl. 97—52.)



1. A turf roller comprising a wheel having a rim provided with a cylindrical rolling face, a series of shafts mounted for oscillation within said rim and extending in parallelism with the arcs and with the face thereof, a series of pointed spikes rigidly mounted in each shaft perpendicularly thereto, said spikes being extended through said rim beyond its face and arranged to swing with their respective shafts through limited arcs, and means for holding each shaft in a position in which the spikes thereof will simultaneously enter the supporting surface of the roller perpendicularly and will yield to permit withdrawal thereof in their entering positions.

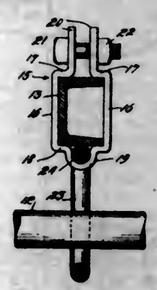
1,866,999. BRAKE MECHANISM FOR RAILWAY CARS. CHARLES R. BUSCH, Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y., a Corporation of New York. Filed June 9, 1928. Serial No. 284,066. 23 Claims. (Cl. 188—53.)

1. In a braking mechanism for railway cars, of the inside-hung type, in combination, a car-truck side frame, truck bolster, spring plank and brake-shoe heads, swingable hangers suspending the brake-shoe heads from the side frame, pivots connecting the lower ends of the hangers with the brake-heads, live and dead levers pivotally connected at the said pivots and terminating thereat, a



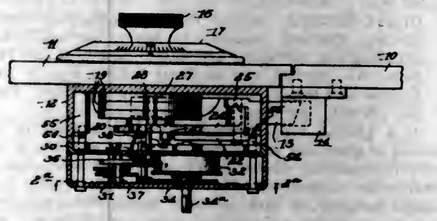
rod connecting the live and dead levers in a pair and extending between the truck bolster and spring plank, means for pivotally supporting the upper end of the dead lever, and operating mechanism connected with the upper end of the live lever.

1,867,000. SAFETY SUPPORT FOR BRAKE RODS. SETH A. CRONE, East Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,229. 7 Claims. (Cl. 188—205.)



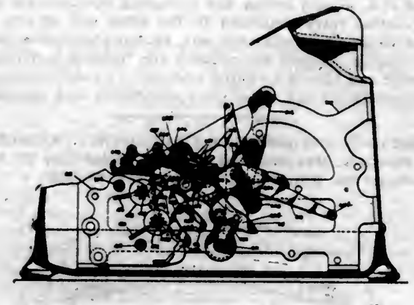
1. In a safety support for brake rods, the combination of a brake beam, an attachment rigidly removably secured to the beam, and a rod supporting member carried swingably by the attachment at a point directly under the beam.

1,867,001. LOCK MECHANISM. WILLIAM F. DIESEL, Rochester, N. Y., assignor to Sargent & Greenleaf, Inc., Rochester, N. Y., a Corporation of New York. Filed May 18, 1929. Serial No. 364,250. 11 Claims. (Cl. 70—26.)



1. In mechanism of the class described, the combination of a lock comprising a bolt and relatively movable cooperating parts for shifting the bolt including an actuating member for said bolt connected therewith and a rotary operating device arranged when rotated in one direction to cooperate with said member to effect release of the bolt and adapted when rotated in an opposite direction to move said actuating member to a non-cooperating position, a timing mechanism having a part engaged by said member when in said last mentioned position whereby the timing mechanism is held in check, a guard arranged for movement automatically into locking engagement with said actuating member when in said non-cooperating position and adapted to be released by the timing mechanism after operation thereof for a predetermined period, said rotary device being operable to permit said actuating member to shift relative to the guard whereby to free the timing mechanism for operation to effect release of the guard.

1,867,002. CALCULATING MACHINE. CLYDE GARDNER, deceased, Ebensburg, Pa., by Edna B. Gardner, administratrix, Ebensburg, Pa., assignor, by mesne assignments, to Gardner Company, Ebensburg, Pa., a Corporation of Delaware. Filed June 7, 1924. Serial No. 718,678. 5 Claims. (Cl. 235—60.)



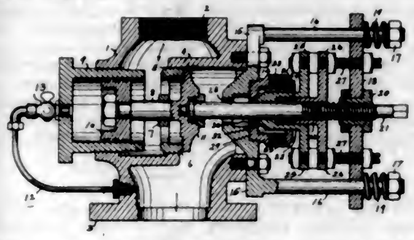
1. In a calculating and recording machine, the combination of a counter having a plurality of denominational orders, normally restrained spring located stops one for each of the orders to stop the elements at zero, actuators one for each order of the counter, a total key, means for holding the actuators inactive, means controlled by the total key for first releasing the stop and then the actuator of every order of the counter beginning with the lowest.

1,867,003. SHOE. GEORGE H. GILLIS, Fitchburg, Mass. Filed Sept. 12, 1931. Serial No. 562,533. 6 Claims. (Cl. 36—17.)



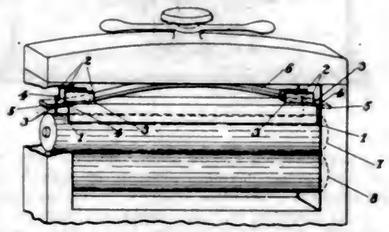
1. An outer sole of elastic material having on its upper side an inseparable protuberance of the same material, formed as a filler having a marginal edge spaced from the margin of the outer sole fore part by a welt seat, the rear end of said filler being provided with a confining abutment formed to bear on the forward end portion of a shank stiffener associated with the shank portion of the sole, the toe end of the filler being provided with rigid washers embedded therein for the purpose specified.

1,867,004. THROTTLE VALVE MECHANISM. MARCUS L. HACKER, JOHN W. WELLS, and LOUIS P. HACKER, Beaumont, and LAWRENCE D. BARNER, Guffey, Tex., assignors, by mesne assignments, to Crausbay Supply Co. Inc., Beaumont, Tex., a Corporation of Texas. Filed July 30, 1928. Serial No. 296,392. 7 Claims. (Cl. 277—15.)



1. A valve mechanism including a valve casing having a pressure fluid passageway therethrough, a valve seat in said passageway, a cylinder in the casing on one side of said seat, a by pass conduit leading from said cylinder and connected into said casing on the other side of said seat, a piston in the cylinder, a piston rod connected, at one end, to said piston and extending through said seat, a control valve connected to the other end of said rod and cooperating with said seat, an end plate connected to the casing opposite the cylinder and forming part of said casing and having an outlet opening, a yieldably mounted, outwardly opening relief valve controlling said opening.

1,867,005. ATTACHMENT FOR CLOTHES WRINGERS. EDWIN V. HEAFORD, Denver, Colo. Filed July 27, 1929. Serial No. 381,550. 3 Claims. (Cl. 68—32.)



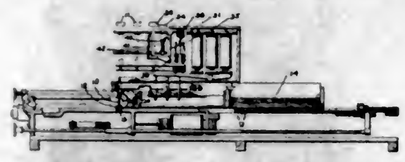
1. An attachment for clothes wringers having a wringer roll and a pressure member comprising an elongated body adapted to be mounted along one wringer-roll and having side-edges extending lengthwise of the roll adapted to strip material therefrom, and pairs of upwardly extending portions at the ends of the body, adapted to hold the body movably to the pressure member.

1,867,006. METHOD OF TREATING VEGETABLE FIBROUS MATERIAL AND RESULTING PRODUCT. GEORGES HEBERLEIN and ALBERT BODMER, Wattwil, Switzerland. Filed Nov. 23, 1928, Serial No. 321,506, and in Germany Nov. 28, 1927. 4 Claims. (Cl. 8—20.)

1. Method of producing permanent finish effects on cellulosic material, which comprises subjecting the material to a plurality of swelling actions, each by concentrated mineral acid under swelling conditions, and without permitting an intermediate coagulation of the material between such actions.

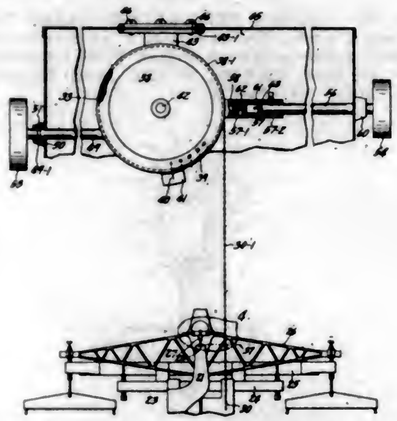
1,867,007. PUNCHING MACHINE. WILLY HEIDINGER, Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed June 25, 1928, Serial No. 287,018, and in Germany Mar. 16, 1928. 10 Claims. (Cl. 164—113.)

1. A punching machine for perforating tabulating cards comprising a plurality of manually operated controlling members, punching means comprising a corresponding number of punches for punching different data of a given group and connections between the controlling members and the punching means to control the latter to punch data of the group individually appropriate to the several controlling members on operation of the same and means



for selectively shifting the connections between the plurality of controlling members and the corresponding punches to cause a controlling member to punch different data by the selection of either of a plurality of punches of the aforesaid given group on operation of the controlling member.

1,867,008. CHAIN-POISE VARIABLE WEIGHT BALANCE. WILFRID HEUSSER, Salt Lake City, Utah. Filed Sept. 27, 1930. Serial No. 484,762. 10 Claims. (Cl. 265—60.)

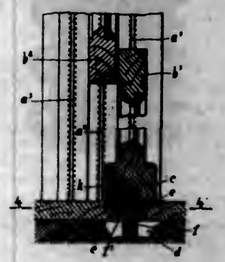


1. A balance, including in combination, an oscillating system, a flexible weight having one end thereof connected to a member of the oscillating system, a graduated wheel for raising or lowering the other end of said flexible weight, and an indicator disposed to register with graduations of said graduated wheel, said indicator being movable along the graduated portion of the wheel so as to have an angular displacement relative to the axis of said wheel.

1,867,009. MANUFACTURE OF NONSPLINTERING GLASS SHEETS. GEORGE EDWARD HEYL, Westminster, London, England, assignor to Morris Greenhill, London, England. Original application filed Sept. 18, 1928, Serial No. 306,750, and in Great Britain Aug. 8, 1928. Divided and this application filed Aug. 30, 1930. Serial No. 479,091. 2 Claims. (Cl. 49—81.)

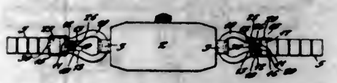
1. A process for effecting the interadherence of two sheets of glass and an interposed sheet of cellulose derivative composition, consisting in moistening said cellulose derivative composition sheet with a high boiling point liquid softener of said cellulose derivative composition, bringing said glass sheets into close surface contact with said moistened cellulose derivative sheet, and wholly exposing said closely contacting sheets directly in steam under pressure.

1,867,010. YIELDING JOINT STRIP FOR THRESHOLDS AND SILLS. HERMANN KAMPES, Essen-Ruhr, Germany. Filed Nov. 20, 1930, Serial No. 496,931, and in Germany Nov. 18, 1929. 9 Claims. (Cl. 20—69.)



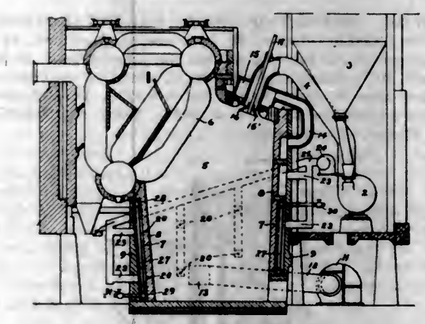
1. In a threshold or sill, a lower sash, a strip fixedly attached to the lower rail of the said sash and a groove provided in the threshold or sill adapted to receive the said strip in the lower position of the said sash.

1,867,011. CONNECTER FOR WRIST-WATCH STRAPS, BANDS, BRACELETS, AND LINKAGES. CHARLES H. KESTENMAN, Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Sept. 10, 1931. Serial No. 562,054. 11 Claims. (Cl. 24—265.)



1. In a connecter for wrist-watch bracelets, bands and linkages, the combination of a fastening-device adapted for permanent attachment to the end of the bracelet or the like, an open-ended connecting-link having means releasably engaging the fastening-device, and manually operable clasping-means hinged to the fastening-device to adapt it to be closed thereagainst to releasably hold the open end of the connecting-link in place therein.

1,867,012. FURNACE AND METHOD OF OPERATING THE SAME. HENRY P. KIRCHNER, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed July 21, 1930. Serial No. 469,494. 3 Claims. (Cl. 110—28.)

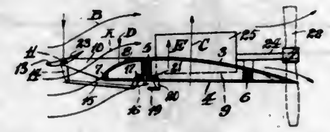


2. In a powdered coal furnace means for selectively controlling the surface temperatures of the combustion chamber comprising an inner lining of refractory having a thermal conductivity greater than

.006 cal/cm³/sec/°C.,

an outer lining of insulating refractory spaced from said inner lining to form a space for cooling air in motion, means for supplying the main body of such air at a sufficient rate to regulate the temperature of the major portion of the furnace wall, and additional means for supplying cooling air to regulate the temperatures of selected regions of the inner wall.

1,867,013. PILOT VANE FOR THE AEROFOIL WINGS OF AIRPLANES. HERBERT J. KRATZER, St. Louis, Mo. Filed June 15, 1929. Serial No. 371,113. 5 Claims. (Cl. 244—29.)



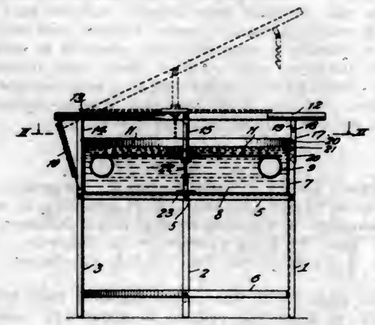
1. In an airplane the combination of an aerofoil wing and a pilot vane having a convexed under surface and a concaved upper surface located forwardly of said wing above the wing chord thereof, said pilot vane adapted to cause deflected air strata to cooperate with the upper contour of said wing.

1,867,014. PROCESS OF POLYMERIZING VINYL DERIVATIVES. WALTER E. LAWSON, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 22, 1928. Serial No. 307,774. 14 Claims. (Cl. 260—2.)

1. A process of polymerizing a polymerizable vinyl compound which comprises continuously forcing a solution of a vinyl ester and a catalyst through a reaction tube heated to the reaction temperature of the solution.

5. The process of claim 1 in which solvent is chlorobenzene and the catalyst comprises 3% of benzoyl peroxide based on the vinyl ester content, and this is forced through the reaction tube under 200 pounds pressure at a temperature of 118° C.

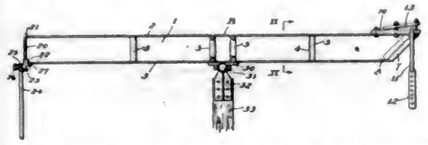
1,867,015. TUBE TESTING DEVICE. BEVERLY A. LUNDY, Larchmont, N. Y. Filed Jan. 15, 1929. Serial No. 332,617. 1 Claim. (Cl. 73—51.)



In an inflated tube testing device, in combination; a receptacle; fluid in the receptacle; a vertical link; a hub mounted for rotation upon the link and provided with rigid radiating arms for contact with an inflated tube; a pin forming a projection on the link below the hub; a pin receptacle for cooperation with the pin and attached to the bottom of the first mentioned receptacle and substantially central thereof; an arm pivoted to the receptacle and to which the upper end of the link is pivotally attached whereby the link, hub and radiating arms may be lifted so that a completely inflated tube may be slid

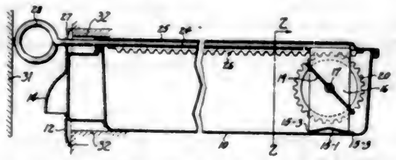
sidewise onto the fluid and then a depression of the pivoted arm will cause the radiating arms to force the tube under the surface of the fluid and then the hub, arms and tube may be rotated to different positions.

1,867,016. WALKING BEAM. JOHN D. MCEWEN, Pittsburgh, Pa., assignor to Lee C. Moore & Company, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 22, 1928. Serial No. 307,567. 2 Claims. (Cl. 74—5.)



1. A walking beam assembly for oil well rigs comprising an H-beam section having a fulcrum pivot secured to its under side substantially midway between its two ends, a work element engaging-bearing mounted on one end of the beam on the upper side thereof and another at the other end on the lower side thereof, said latter bearing element being rigidly secured to the end of the beam with its bearing surface disposed below the lower edge of the beam in axial alignment with the center of said fulcrum pivot and provided with a releasable clamp for holding a work element on its bearing surface.

1,867,017. FREEZER FOR ICE CREAM AND THE LIKE. WILLIAM R. MEHNER and STELLA YOUNG, Brigham, Utah. Filed May 5, 1930. Serial No. 449,923. 6 Claims. (Cl. 259—102.)



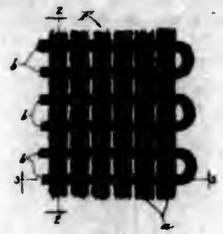
1. A freezer for ice cream and the like, including in combination, a container, a frame having upwardly extending side portions longitudinally movable back and forth in said container, a scraper between said side portions, a stirring element rotatably mounted in said upwardly extending side portions above said scraper, a tongue extending from said frame to a point outside said container, and means whereby said stirring element is rotated when said frame is moved back and forth.

1,867,018. ALLOY. PAUL D. MERICA, Westfield, and JAMES S. VANICK, Elizabeth, N. J., assignors, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed July 3, 1926. Serial No. 120,515. 3 Claims. (Cl. 75—1.)

1. An alloyed cast iron containing more than 50% of iron having from 2% and up to about 4%, and also containing nickel, copper and chromium, the nickel being from 10–20%, the copper being over 1% but less than ¾ of the nickel and the chromium from a material percentage to not over 10%.

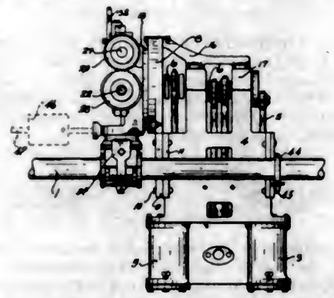
1,867,019. TEXTILE FABRIC AND ART OF FORMING IT. AUBREY E. MEYER, Paris, France. Filed Jan. 14, 1930. Serial No. 420,646. 6 Claims. (Cl. 139—420.)

1. In the textile fabric art, the step which consists in forming a fabric in part at least from detwisted yarn having gum thereon in moist or tacky condition during the fabric-forming operation whereby the fabric includes a



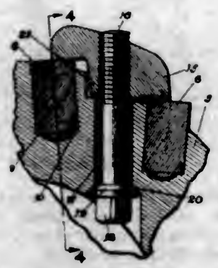
greater number of strand sections per unit of distance than would be the case if the gum on said detwisted yarn was dry during the fabric-forming operation.

1,867,020. RIG FOR ROTARY DRILLS. WILLIAM J. MITCHELL, San Francisco, Calif. Filed Aug. 1, 1930. Serial No. 472,281. 3 Claims. (Cl. 255—19.)



1. In a rig for portable rotary drilling machines, the combination with a motor and its frame, and a socket ring rigid with the frame, of a driving head, a swivel ring rigid with the head and co-acting with the socket ring, a swivel head rigid with the driving head disposed in a plane at an angle to the plane of the swivel ring and having an axis intersecting the axis of the ring, a jack-bar, an adjustable support on the jack-bar and fastening means for the support, and co-acting means on the support and swivel head for rigidly connecting these members.

1,867,021. METHOD OF PRODUCING METAL WORKING TOOLS. LEROY B. MONOSMITH, Rockford, Ill., assignor to The Ingersoll Milling Machine Company, Rockford, Ill., a Corporation of Illinois. Original application filed May 3, 1930, Serial No. 449,422. Divided and this application filed Jan. 2, 1931. Serial No. 506,207. 1 Claim. (Cl. 76—101.)

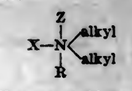


The hereindescribed method of producing inserted tooth milling cutters, which consists in forming slots at spaced intervals around the periphery of the cutter head, and

thereafter milling the base of each slot to produce serrated median grooves in the base of the slots with the serrations thereof extending at an angle to the longitudinal axis of the slots and with ledge like shoulders on opposite sides of the serrations.

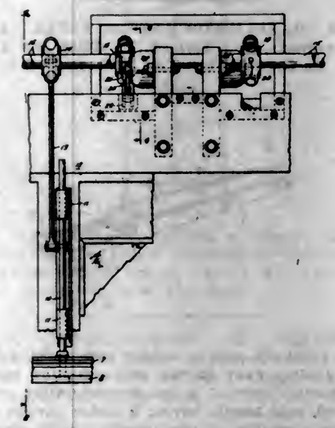
1,867,022. WETTING, CLEANSING, AND EMULSIFYING AGENTS AND PROCESS OF MAKING SAME. FERDINAND MÜNZ and KARL KELLER, Frankfort-on-the-Main-Fechenheim, and FRITZ GÜNTHER, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 11, 1928, Serial No. 325,383, and in Germany Dec. 15, 1927. 8 Claims. (Cl. 252—1.)

1. A process which comprises mixing an alkylated naphthalene sulfonic acid compound and up to equivalent amounts of an organic quaternary ammonium compound of the general formula:



wherein X means OH or an acid residue, Z represents an alkyl or an aralkyl group and R represents phenyl or naphthyl.

1,867,023. RAYON SPINNING MACHINE. ROY WITZEL NASH, Kenmore, N. Y., assignor to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed April 1, 1930. Serial No. 440,703. 7 Claims. (Cl. 118—1.)



1. In a machine for the manufacture of artificial silk, the combination comprising a spinning bucket, a funnel adapted to guide thread filaments in the interior of said spinning bucket, a shaft, means responsive to the rotation of said shaft for axially reciprocating said funnel between predetermined limits, and means responsive to any accelerating or decelerating force on said shaft for braking or dampening said force whereby any intermediate reciprocation of said funnel between said predetermined limits is obviated.

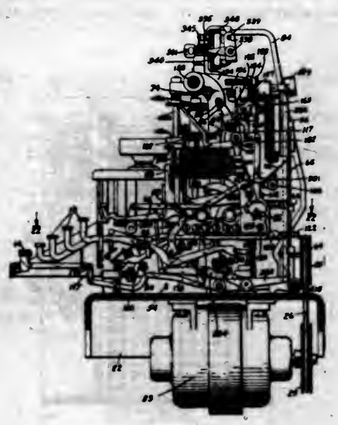
1,867,024. CORE DRILL BIT. GUY C. OLIVER, Whittier, Calif., assignor of one-third to R. M. Combs, Whittier, Calif., and one-third to E. A. Spencer, Los Angeles, Calif. Filed Jan. 23, 1929. Serial No. 334,377. 4 Claims. (Cl. 255—72.)

1. A drill bit embodying: a body member having cutters on its lower end and provided with a substantially uninterrupted passage extending between said cutters and through the peripheral wall of said body, means for



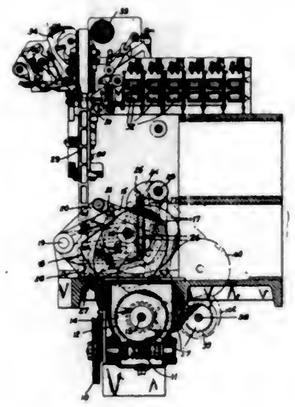
delivering a circulating fluid through said body to the cutting edge of said cutters, and means for diverting a part of said circulating fluid into said passage.

1,867,025. COMBINATIONAL HOLE PUNCH. JOHN ROYDEN PEIRCE, New York, N. Y., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 7, 1930. Serial No. 442,347. 29 Claims. (Cl. 164—112.)



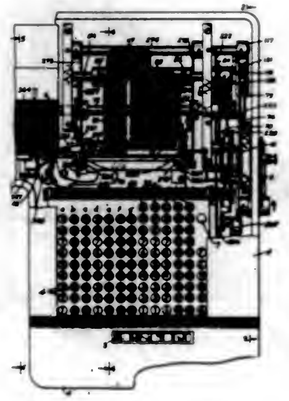
1. In a machine of the class described, type bar actuating mechanism, punches, a constantly running actuator, coupling devices between said punches and said actuator, means controlled by said type bar actuating mechanism to move said coupling devices into cooperation with said actuator and means controlled by said actuator for causing positive operation and retraction of said punches.

1,867,026. PRINTING MECHANISM. JOHN ROYDEN PEIRCE, New York, N. Y., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 9, 1930. Serial No. 442,780. 19 Claims. (Cl. 101—93.)



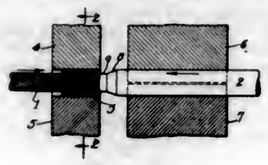
1. Printing mechanism comprising type carriers having a plurality of linearly adjacent type thereon and means for selecting the type for printing comprising settable elements adapted when set to select several type on the carrier and additional settable elements for determining which of the several type are to be selected.

1,867,027. ACCOUNTING MACHINE. JOHN ROYDEN PEIRCE, New York, N. Y., assignor, by mesne assignments, to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 6, 1930. Serial No. 473,367. 25 Claims. (Cl. 164—112.)



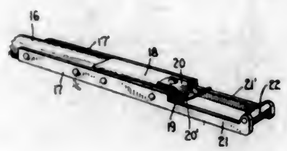
1. In a punching machine, punching means, a bank of sales amount keys each for controlling the punching means to punch the amount of a sale on a card, a locking member for holding an amount key in actuated position, operation of one key releasing a previously actuated key from the locking member, a discount key in the same bank as the amount keys adapted to be locked by the same locking member, and means whereby said discount key is ineffective to release the locking member from any of the previously actuated keys.

1,867,028. WELDING. GEORGE H. PHELPS, Warehouse Point, Conn., assignor, by mesne assignments, to Metropolitan Engineering Company, a Corporation of New York. Filed July 15, 1927. Serial No. 205,928. 9 Claims. (Cl. 219—10.)



1. The method of butt welding the end of a stranded workpiece to a second workpiece which consists in clamping the stranded piece in an electrode embracing the extreme ends of the strands to hold such ends against lateral movement, pressing them endwise against the second piece and passing a welding current between the two pieces.

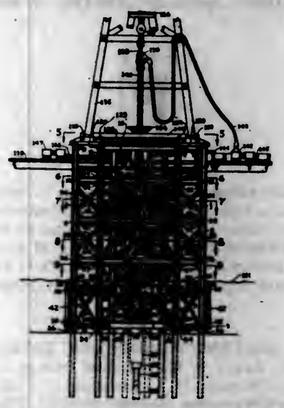
1,867,029. HANDLE FOR BAKERS' PEELS. ABRAHAM H. RAUBVOGEL, New York, N. Y. Filed Apr. 17, 1931. Serial No. 530,800. 4 Claims. (Cl. 107—67.)



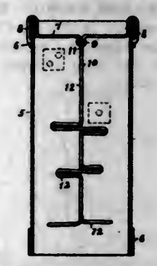
1. In a baker's peel, a slotted peel board having an attaching plate fixed therein and extending across the slotted portion thereof, a handle cooperating with said peel board, said handle having a socket portion adapted to receive a section of the attaching plate disposed in the slotted portion of the peel board, the opposite extremities of said socket portion being bounded by respectively fixed and resilient gripping members acting against the surface of the specified section of said attaching plate, the resilient gripping member comprising a metallic stamping having a U-shaped surface for contacting a portion of the surface of the attaching plate.

1,867,030. MARINE OIL WELL DERRICK. CHARLES L. ROBERTS, Los Angeles, Calif. Filed Sept. 2, 1930. Serial No. 479,175. 7 Claims. (Cl. 61—48.)

1. A marine oil well derrick comprising a plurality of vertical beams extending into the ocean bottom, structural shapes for tying said beams into a plurality of compound columns to act as piers, a derrick mounted on said piers, means to interconnect said piers to form a rigid foundation, a plurality of vertical structural shapes extending into the ocean bottom tied together in a compound column disposed centrally of said piers, means for interconnecting said center column with said piers, a metallic pot centrally disposed of center compound column and carried thereby, a caisson concentric with said pot and carried by said piers, and a conductor pipe cemented within said caisson above and below water line.

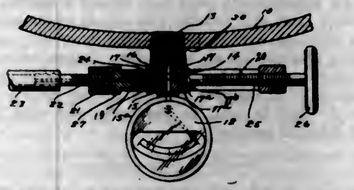


1,867,031. DICE AGITATOR. EUGENE A. SAVARY, Phoenicia, N. Y. Filed May 21, 1931. Serial No. 538,916. 5 Claims. (Cl. 273—145.)



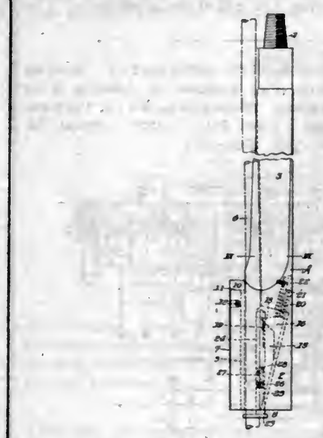
1. A dice agitator comprising a tubular member, a stationary bar fixed in the tube near the top, a movable stem suspended from the bar, and a series of branched members projecting from the stem.

1,867,032. CONSTRUCTION OF TRANSFORMER TANKS AND THE LIKE. FRANKLIN S. SMITH, Brooklyn, N. Y. Filed Aug. 10, 1927. Serial No. 211,983. 13 Claims. (Cl. 220—85.)



1. In a device of the class described, in combination, a member having a passage for fluid therethrough, a removable device for forming a fluid-tight connection between an outer fluid conductor and said passage comprising a part having a fluid passage therethrough and means for clamping said part tightly against said first member with the mouths of said two fluid passages in registry, and means operatively related to and housed within the passage in said member for sealing said passage and having a part for operating it to effect a sealing accessible only upon removal of said device.

1,867,033. ROPE KNIFE. FERDINAND J. SPANG, Butler, Pa. Filed Feb. 3, 1931. Serial No. 513,139. 5 Claims. (Cl. 255—34.)



2. In a rope knife, a body having rope-receiving and retaining means therein, a cutter movable in the body, a transversely movable trip pin normally engaging the cutter, a trip rod disposed and movable parallel to the axis of the body for retracting the trip pin, a trip plate, and a guide rod for the trip plate movable parallel to the axis of the body.

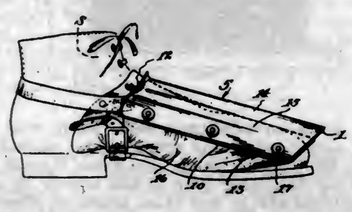
1,867,034. VULCANIZING RUBBER. GEORGE H. STEVENS, Newark, N. J. Filed Oct. 24, 1927. Serial No. 228,486. 2 Claims. (Cl. 18—53.)

1. A process of vulcanizing rubber which consists in, modifying the melting point or nitrogen content of di-tolyl guanidine by incorporating di-phenyl guanidine with it into a solid solution as a modified symmetrical di-substituted guanidine accelerator, then incorporating the accelerator thus formed into compounded rubber, and then heating the resultant rubber mixture with a vulcanizing agent to effect vulcanization.

1,867,035. PROCESS FOR MAKING EFFECT THREADS HEAT AND STORAGE PROOF. ERNST STOCKER, Basel, Switzerland, assignor to Munitex Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 5, 1928. Serial No. 267,800. 21 Claims. (Cl. 8—20.)

1. A process for making effect materials substantially heat and storageproof which comprises treating said materials with an acid-binding substance which has no saponifying effect on the cellulose ester in the fibers.

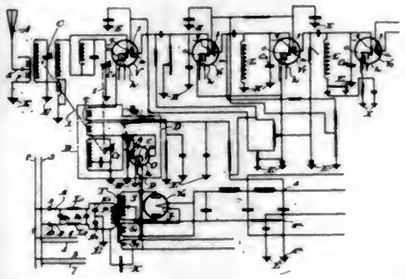
1,867,036. DEVICE FOR FOOT PROTECTION. ALBERT A. STRAUSS, Pittsburgh, Pa. Filed Nov. 4, 1930. Serial No. 493,427. 5 Claims. (Cl. 36—72.)



1. A shoe guard comprising an integral metallic shield adapted to extend over the instep and toe of a shoe, and a flexible cushioning member secured to the under side

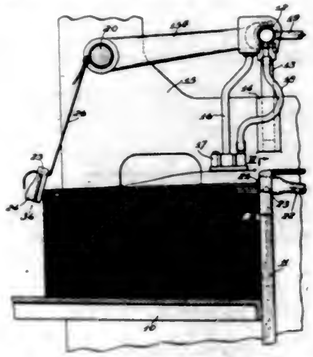
of said shield and interposed between the shield and the shoe when in position, said cushioning member maintaining the shield spaced from the shoe at all points, and means for securing the guard to a shoe.

1,867,037. RADIO RECEIVING APPARATUS. SARKES TARZIAN, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 7, 1930. Serial No. 465,831. 2 Claims. (Cl. 250—27.)



1. The combination with a power circuit, of a heterodyne receiving system comprising vacuum tubes receiving their power from said circuit, means for tuning said receiver through a range of signal frequencies, means within said receiver and including one of said tubes for locally producing oscillations of frequencies within said range of signal frequencies, and means for preventing impression of said locally produced oscillations through said power circuit upon other receiving systems supplied thereby comprising a capacitative and inductive filter interposed between said power circuit and the power input terminals of said heterodyne receiving system, and whose constants are suited substantially to preclude transfer to the power circuit of the oscillations locally produced by said means.

1,867,038. SHEET SEPARATING DEVICE. BURT F. UPHAM, Boston, Mass., assignor to Miller Printing Machinery Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 27, 1929. Serial No. 410,219. 2 Claims. (Cl. 271—26.)



1. A device for separating sheets singly from a pile thereof, comprising a sheet lifting member adapted to operate on the top sheet of the pile, means disposed in the path of the sheet being lifted by said member for engagement with the edge of such sheet, means for directing an air blast towards the pile both below and above said engagement means, and means for combing the top sheets of the pile towards said engagement means.

1,867,039. ELASTIC BELT. LOUIS H. VON OHLSEN, New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Apr. 6, 1929. Serial No. 353,171. 6 Claims. (Cl. 74—66.)

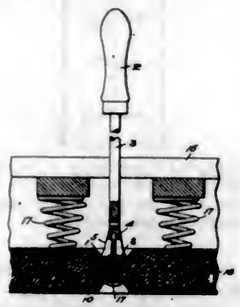


1. A power transmission comprising, in combination, a drive-pulley, a driven pulley, and a transmission belt connecting said pulleys, said belt comprising an endless strip of elastic material forming a plurality of strands looped about said pulleys and adapted resiliently to transmit motion from said drive-pulley to said driven pulley.

1,867,040. SOLVENT FOR ORGANIC ESTERS OF CELLULOSE. JAMES F. WALSH, East Orange, and AMERIGO F. CAPRIO, Newark, N. J., assignors to Celluloid Corporation, a Corporation of New Jersey. Filed June 23, 1928. Serial No. 287,884. 8 Claims. (Cl. 134—79.)

4. A composition of matter comprising a clear solution of cellulose acetate dissolved in a solvent mixture containing ethyl acetate, ethyl alcohol and water in such proportions that the solvent evaporates uniformly.

1,867,041. UPHOLSTERER'S TOOL. ROLLO F. WALTERS, Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 12, 1929. Serial No. 332,121. 3 Claims. (Cl. 45—138.)

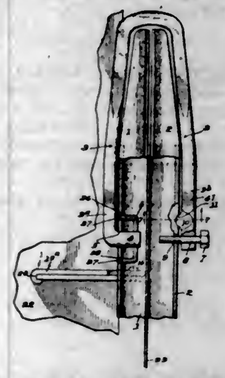


1. An upholsterer's hand tool having a handle, a shank extending from said handle, and a head at the end of said shank provided with means adapted to receive and hold a disc-like element of an upholstery button assembly and said head having a bore of substantial depth to receive the shank of a fastener member of the button assembly when the tool is used to press the disc over the sank of the fastener member.

1,867,042. SAW CLAMP. JOHN A. WALLER, Beverly Hills, Calif., assignor to Waller Manufacturing Corporation, Ltd., Los Angeles, Calif., a Corporation of Nevada. Filed Mar. 28, 1929. Serial No. 350,472. 6 Claims. (Cl. 76—78.)

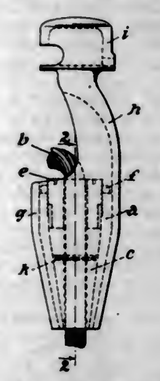
1. In a saw clamp, two resilient clamp bars extending side by side and formed as angle irons with their salient angles outwardly diposed and their inner edges in alignment with one another, said clamp bars having their end portions bent outwardly from one another, a U-shaped operating member at each end of the clamp, one of said

clamp bars adjacent each end having an opening at the angle thereof and one arm of each operating member being bent inwardly and extending through said opening, means pivotally connecting the arm of each operating



member to the other clamp bar, and an inward projection on said other arm adapted to engage the outer edge of said other clamp bar upon movement of said operating member alongside the clamp bars.

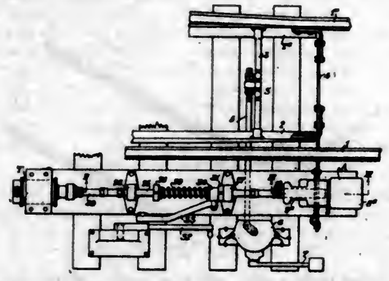
1,867,043. CLAMPING MEANS. EDUARD WIRSCHITZ, Munich, Germany. Filed Sept. 5, 1930, Serial No. 479,965, and in Germany Sept. 10, 1929. 6 Claims. (Cl. 24—126.)



5. In a clamping device in combination, a sleeve-like supporting member, mounting means at one end of said member, and an inwardly tapering seating extension at the other end of said member, a conical, cross-sectionally ring-shaped packing, displaceably disposed in the seating extension and having a reduced portion, a plurality of similar, substantially wedge-shaped clamping members, mounted in said packing with their narrower ends at the reduced portion of the packing, a recessed part near the broadened portion of the clamping members, and flexible bundling and connecting means engaging the recessed parts and on which the clamping members are spacedly secured, and an axially extending gripping surface on the inside of each of the clamping members.

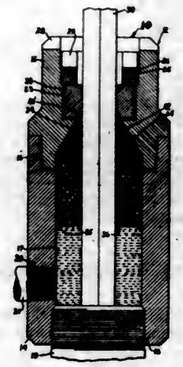
1,867,044. SLOW RELEASE LOCK FOR RAILWAY SWITCHES. LEROY WYANT, Chicago, Ill., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 26, 1932. Serial No. 588,925. 4 Claims. (Cl. 246—253.)

1. In combination, a manually operated railway switch, a lock rod connected therewith, a locking plunger adapted to cooperate with the lock rod to lock the switch in one extreme position and movable between a locking and an unlocking position, resilient means for moving said locking plunger from its locking to its unlocking position,



and a timing device connected with said locking plunger for regulating the time required for said resilient means to move said locking plunger from its locking to its unlocking position.

1,867,045. BLOW-OUT PREVENTER. JOHN YOUNG, Los Angeles, and WILSON B. WIGLE, Compton, Calif., assignors to John W. MacClatchie, Compton, Calif. Filed Dec. 14, 1929. Serial No. 414,060. 11 Claims. (Cl. 286—16.)

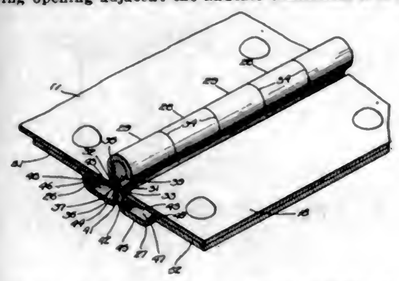


1. A packing device, said device comprising a body, a longitudinal cylindrical bore in said body, the base of said bore being tapered, a stem positioned in said bore and rotatable therein, said stem being polygonal in cross section, a resilient member positioned in said bore, said member surrounding said stem and conforming to the shape thereof, the outer periphery of said member being cylindrical, one end of said member being tapered to conform to said tapered portion of said bore, the opposite end of said member including a feather edge adapted to engage the outer periphery of said stem and a feather edge adapted to engage the side walls of said bore, a chamber adjacent the top of said body; a ring positioned in said chamber, said ring surrounding said stem and snugly fitting the outer surface of said stem, said ring having a tapered recess in alignment with the taper in said bore, the tapered end of said resilient member being movable into said tapered recess in said ring.

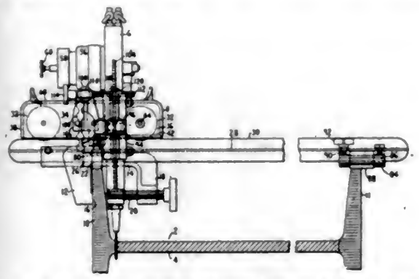
1,867,046. HINGE CONSTRUCTION. HERMANN ZINSER, Philadelphia, Pa., assignor to Robert M. Green & Sons, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 23, 1928. Serial No. 314,489. 1 Claim. (Cl. 16—128.)

In combination with a pair of members to be connected, a hinge comprising knuckle connected leaves connecting

the same and combining therewith to provide longitudinally extending recesses at opposite sides of the knuckle connection, said recesses each affording a longitudinally extending opening adjacent the knuckle connection and having one end thereof open, and a projecting member for said knuckle connection having its edges slidably mounted in said recesses and longitudinally shiftable to permit removal or replacement thereof without disconnecting said knuckle portions.

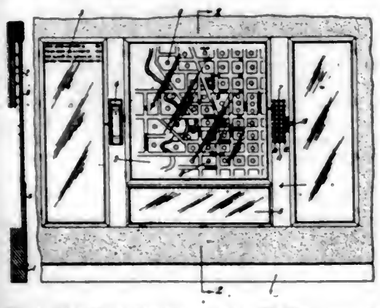


1,867,047. TORCH CUTTING MACHINE. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 30, 1931. Serial No. 553,932. 9 Claims. (Cl. 226—23.)



1. A machine for cutting flanged shapes with a torch or the like, said machine having means for anchoring it over one edge only of a flange of the shape, a bridge extending from said means, a torch carriage guided along said bridge to move transversely of another plate portion of the shape, and means for moving said carriage to advance the cut at uniform speed.

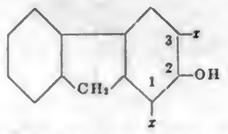
1,867,048. DIRECTORY SYSTEM. MICHAEL ABEL, Columbus, Ohio. Filed Feb. 28, 1931. Serial No. 519,041. 11 Claims. (Cl. 40—130.)



8. In a directory system, a map divided into areas in each of which several concerns are located, an indicating signal in each of said areas, a symbol for each area of the map applicable to all concerns located in that particular area, and means for selecting and actuating any of said signals by means of the symbol of the area in which such signal is located.

1,867,049. ORTHO-HYDROXY-CARBOXYLIC ACIDS OF FLUORENE. FRITZ BALLAUF and ALBERT SCHMELZER, Elberfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 17, 1930, Serial No. 421,589, and in Germany Jan. 23, 1929. 4 Claims. (Cl. 260—111.)

4. As new products compounds of the probable general formula:



wherein one x stands for hydrogen and the other x stands for a carboxylic acid group, the 2-hydroxy-fluorene 3-carboxylic acid being a yellowish substance, scarcely soluble in alcohol and melting at 256–260° C., the 2-hydroxy-fluorene-1-carboxylic acid being a greyish-white colored substance, easily soluble in alcohol, melting at 236–240° C., being valuable intermediate products for the manufacture of dyestuffs and pharmaceutical agents.

1,867,050. CELLULOSE ETHERS AND PROCESS OF PREPARING THEM. GERHARD BALLE and KARL OST, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 6, 1929, Serial No. 338,029, and in Germany Feb. 10, 1928. 7 Claims. (Cl. 260—152.)

1. In a process of preparing cellulose ethers by acting upon alkali metal compounds of the cellulose by means of alkylating agents, the step which comprises causing a mixture of alkyl halide and aralkyl halide to act upon the cellulose metal compounds, said mixture containing 10 to 30 mols of alkyl halide and up to 2 mols of aralkyl halide per weight of a $C_6H_{10}O_5$ unit of the cellulose molecule, at a temperature of between 100° C. and 120° C. and a pressure of between 15 and 20 atmospheres.

1,867,051. ADVERTISING SIGN. CHARLES J. BAREIS, Milwaukee, Wis. Filed July 17, 1930. Serial No. 468,673. 5 Claims. (Cl. 40—137.)



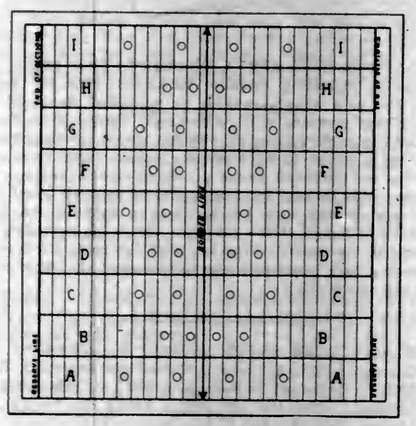
1. An advertising device of the class described comprising a casing including a transparent panel in the upper part thereof bearing advertising indicia and vertical opaque stripes thereon and transparent spaces therebetween, an opaque panel behind and spaced from said transparent panel having unbroken vertical spaced stripes extended there across, said opaque panel being angularly spaced from said transparent panel, lighting means between said panels and below the transparent panel.

1,867,052. MECHANICAL TOY. FRANK O. BERGSTRAND, Worcester, Mass. Filed Mar. 14, 1932. Serial No. 598,782. 5 Claims. (Cl. 46—48.)



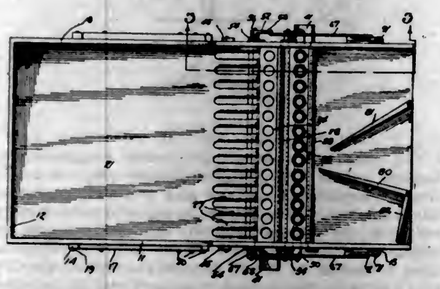
1. As an article of manufacture, a toy comprising a wheel supporting it at one end, a frame carried by the wheel, a handle at the other end of the frame for use in manipulating the toy, a body representing an aeroplane, two parallel pivoted levers between the frame and aeroplane, and hand-operated means carried by the handle for raising said aeroplane.

1,867,053. GAME. JOSEPH F. BLANCK, Lansdowne, Md. Filed Jan. 21, 1931. Serial No. 510,307. 5 Claims. Cl. 273—131.)



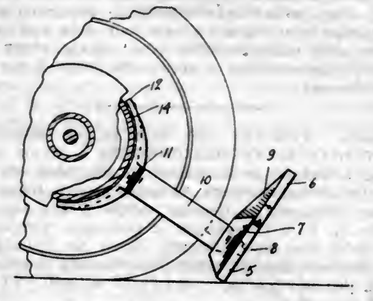
1. A game apparatus comprising a playing surface having transverse lines thereon and longitudinal lines intersecting the transverse lines in a manner to define game-piece accommodating areas, in combination with a set of game pieces of such size and shape that a plurality of the same may be exactly accommodated in and cover any one of said areas.

1,867,054. FRUIT GRADER. NICHOLAS BOWER, Gasport, N. Y. Filed May 29, 1930. Serial No. 457,316. 3 Claims. (Cl. 209—85.)



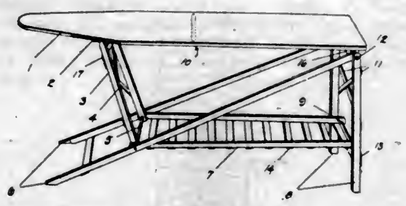
1. A fruit grading machine of the character described comprising an inclined chute, having sides and one end and having transverse slots formed in the mid section thereof, a guide flange at the lower side edge of each opening, apertured strips slidably secured in the guide flanges, buffer strips extending longitudinally relative to the transverse slots, inclined conveyor chutes mounted below the apertured strips, cross bars pivotally mounted below the apertured strips between the conveyor chutes and the table, plungers mounted in spaced relation on the cross bars, said plungers being adapted to register with the apertures in the removable strip for clearing the same, means for guiding the cross bars and plungers into and out of the apertures and manual means on opposite sides of the chute for causing the plungers to be moved into and out of the apertures.

1,867,055. AUTOMOBILE LIFT. JOHN W. BRIGHT, Grand Junction, Colo., assignor to P. D. Q. Auto Jack Mfg. Co., a Corporation of Colorado. Filed Aug. 22, 1930. Serial No. 477,096. 3 Claims. (Cl. 254—94.)



1. An automobile lift of the class described comprising a base, a shank rising from the base, an arcuate head on the upper end of the shank for engaging the brake drum of a wheel, a lining in said head, said upper end of the shank being offset to one side, said base having an enlargement with a pocket therein to detachably receive the lower end of the shank, said lower end of the shank being pointed and said pocket being tapered so as to receive said pointed end, said base having an extension, and a brace rib along the extension.

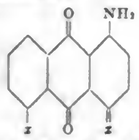
1,867,056. IRONING BOARD OR TABLE. JAMES LENVILLE BROWN, Knoxville, Tenn., assignor to Andrew L. Rule, Knoxville, Tenn. Filed Apr. 29, 1930. Serial No. 448,260. 2 Claims. (Cl. 68—10.)



1. In a foldable ironing board or table, the combination with an ironing board, of rear upright legs hinged thereto, inclined legs hinged to the rear upright legs, a single pivot rod connecting the inclined legs together and located between the lower ends of said inclined legs and the point where said inclined legs are hinged to the rear upright legs, a tray pivoted on said single rod at one end and at its other end having means for its detachable connection to the upright legs, and a front brace whose lower end is pivoted to the aforesaid single pivot rod and whose upper end is engageable with the ironing board at different points of the length thereof, said upright legs, tray, inclined braces and front brace being adapted to be folded flatwise against the bottom of the ironing board.

1,867,057. PROCESS OF PREPARING MONOBENZOYLDIAMINO-ANTHRAQUINONE. HANS BUCHLOH, Leverkusen-on-the-Rhine, WALTER MIEG, Opladen, near Cologne-on-the-Rhine, and WALTER STOETZER, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 21, 1928, Serial No. 321,034, and in Germany Aug. 30, 1926. 5 Claims. (Cl. 260—60.)

1. In the process of preparing monobenzoyl-diamino anthraquinones, the step which comprises heating a compound of the general formula

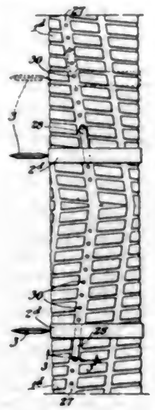


wherein one x stands for hydrogen and the other x for the amino group, with benzoyl-chloride in the presence of a high boiling inert organic solvent and of an acid binding medium, the benzoylchloride being slowly added in a quantity corresponding to about 120–140% of the theoretical amount.

1,867,058. PROCESS OF PREPARING MONOBENZOYLDIAMINO-ANTHRAQUINONES. HANS BUCHLOH, Leverkusen-on-the-Rhine, WALTER MIEG, Opladen, and WALTHER STOETZER, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Nov. 21, 1928, Serial No. 321,034, and in Germany Aug. 30, 1926. Divided and this application filed Mar. 13, 1930. Serial No. 435,030. 3 Claims. (Cl. 260—60.)

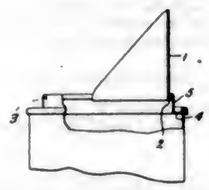
1. Process for preparing 1-benzoylamino-4-aminoanthraquinone, which consists in slowly adding, while stirring, benzoylchloride in a quantity corresponding to 120–140% of the theoretical amount, to a mixture of 1.4-diaminoanthraquinone, a high boiling organic solvent being inert to the starting materials and of an acid binding medium, while maintaining the temperature between about 10–50° C.

1,867,059. SLITTING MEANS. JAMES A. CAMERON, Brooklyn, N. Y., assignor to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Original application filed Jan. 12, 1929, Serial No. 332,037. Divided and this application filed Apr. 9, 1930, Serial No. 442,754. Renewed Dec. 10, 1931. 6 Claims. (Cl. 164—65.)



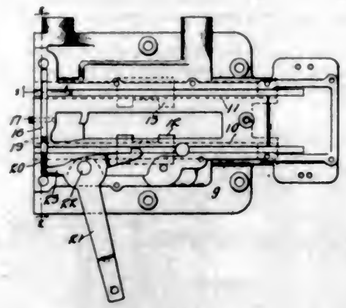
1. In a slitting machine, a backing-roll having a circumferential paper-engaging surface provided with circumferential grooves, an annular slitting member mounted on and adjustable over said paper-engaging surface in a direction lengthwise of the roll, means to secure said annular member in the position to which it is adjusted, and a slitting member mounted independently of the back-roll and adjustable lengthwise of the latter to engage the annular member in its differently adjusted positions.

1,867,060. DETACHABLE SPOUT FOR CANS. GEORGE T. CARR, Spokane, Wash. Filed Apr. 27, 1931. Serial No. 533,336. 1 Claim. (Cl. 220—85.)



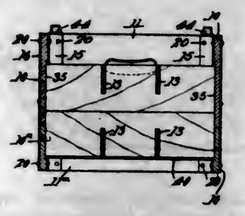
In combination with a friction top can having an inwardly extending annulus connected with its upper end and said annulus having an upturned flange at its inner edge provided with an inwardly turned down flange in its top part forming an annular groove opening downwardly, a spout of substantially semi-circular form and having an upturned flange at its inlet end and on the convex face thereof forming a groove between itself and the said convex face for receiving a part of the last-mentioned flange of the can with the flange on the spout fitting in the groove of the can with the parts frictionally engaging each other to removably connect the spout with the top of the can.

1,867,061. GEAR SHIFT. FOREST S. CARTWRIGHT, Indianapolis, Ind., assignor to Cartwright Automatic Gear Shift Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed May 26, 1931. Serial No. 540,146. 4 Claims. (Cl. 74—30.)



1. A fuel tank embodying a main rectangular conmovable axially to position automobile gears in low, reverse, intermediate and high gear positions, one of said rods being notched and being engageable by a latch for preventing its being accidentally removed to reverse gear position, manually operable means for disengaging said latch to permit the rod to be moved to reverse gear position, means on the steering column of the automobile for operating said latch, and operable connection from said means to the said gear shifting rod releasing means, substantially as set forth.

1,867,062. SHIPPING CRATE. PHILIP N. CURTIS, Worcester, Mass., assignor to Baker Box Company, Worcester, Mass., a Corporation of Massachusetts. Filed Oct. 7, 1930. Serial No. 487,014. 1 Claim. (Cl. 217—19.)

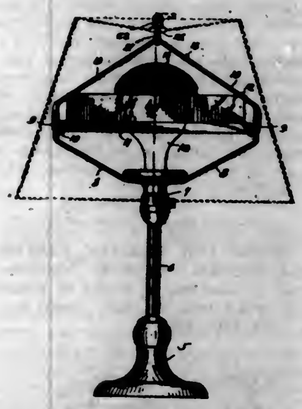


A shipping crate comprising a rectangular side wall casing formed in upper and lower sections, a multi-cell partition structure secured within said casing, a bottom for said crate secured to said lower casing section and upwardly spaced from the lower edge thereof, and means to secure said upper and lower casing sections together, said lower casing section comprising side and end wall portions and being free from direct attachment to said partition structure and said lower casing section and bottom being removable and replaceable as a unit in said crate.

1,867,063. ANIMAL FEED. CHARLES C. DAWE, Denver, Colo. Filed Nov. 27, 1931. Serial No. 577,698. 7 Claims. (Cl. 99—11.)

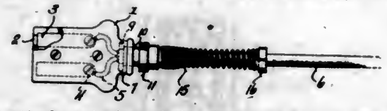
1. A wet poultry or stock feed containing particles adapted to settle, and containing bentonite holding said particles in suspension.

1,867,064. HUMIDIFIER. ROGER J. DEVER, Wilkes-Barre, Pa. Filed July 23, 1930. Serial No. 470,179. 3 Claims. (Cl. 219—45.)



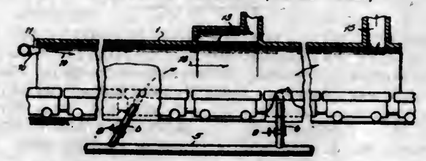
1. In combination with an electric lamp and the lamp stand thereof, a supporting member, arms extending laterally from the supporting member and having upstanding end portions, inwardly extended arms connected with the upstanding end portions, a rectangular frame having ears at its corners, said ears having openings to accommodate the inwardly extended arms, a container mounted on the rectangular frame and having an opening through which the lamp extends, a wick supported above the lamp and extending into the container to absorb liquid held in the container, and means for removably supporting a lamp shade above the container.

1,867,065. ATTACHMENT PLUG. JOSEPH PETER EASTMAN, Manitowoc, Wis., assignor to Eastman Mfg. Co., Manitowoc, Wis., a Corporation. Filed Nov. 19, 1925. Serial No. 70,024. 1 Claim. (Cl. 173—322.)



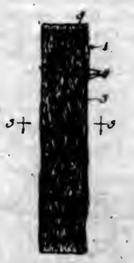
An attachment plug of the character described including a body nipple having an annular curved inner face at one end thereof, a hexagonal flange around the exterior of the body at the other end, screw threads on the exterior of the body at the end provided with the annular curved face, an elongated hub having an enlarged portion with an inner curved face and an inner threaded portion adjacent the curved face adapted to cooperate with the threads on the body nipple, a clamping sleeve having a spherical external surface adapted to cooperate with the curved face on the body nipple and the hub, said clamping sleeve having a plurality of slots extending inwardly from the ends thereof whereby when the elongated hub is threaded onto the body nipple, the clamping sleeve will be contracted and a plurality of serrations on the inner face of the clamping sleeve adapted to be moved into engagement with a yieldable object arranged in the sleeve.

1,867,066. DRAFT CONTROL FOR TUNNEL KILNS. HOMER A. EVANS, Columbus, Ohio. Filed Oct. 28, 1930. Serial No. 491,793. 2 Claims. (Cl. 25—142.)



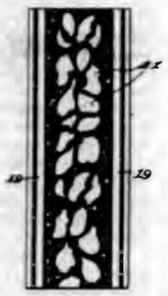
1. In a tunnel kiln having a heating up zone, one or more high temperature zones, and a cooling zone through which the ware travels, an injector arranged at the exit end of the tunnel for introducing a blast of air thereinto for travel toward the inlet end of the tunnel, injectors arranged at intervals in the length of the tunnel for injecting blasts of air supplementing the first-named blast, whereby blasts of air counter to the natural draft of the tunnel are produced to substantially nullify such draft, and means for independently controlling the blasts through said injectors.

1,867,067. OAKUM PACKING. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Apr. 16, 1928. Serial No. 270,515. 5 Claims. (Cl. 154—45.5.)



1. Packing material of the class described, comprising a plastic rope-like strand which includes a plastic mixture of finely divided fibres and plastic bituminous material, and having relatively long fibrous material incorporated therein which lend the desired degree of strength to the strand material.

1,867,068. PROCESS FOR DECORATING WALLS AND OTHER SURFACES. EDGAR K. FOWLER, Colorado Springs, Colo. Filed Dec. 18, 1930. Serial No. 503,333. 2 Claims. (Cl. 41—38.)



1. A process of decorating walls or other surfaces which consists in laying a basic color to form a ground and allowing the ground to dry, applying thereto a glazing liquid tinted with any desired color, applying different colors of color on to the coating of glazing liquid before the latter has set, breaking up the spots of color and blending them together, and then applying a tool to the blended layer to further blend the color together more completely and to remove color in selected places from the ground.

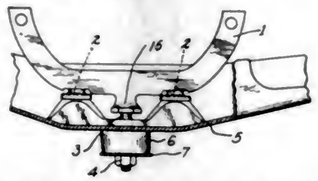
1,867,069. MANUFACTURE OF 1-HYDROXY- OR 1-ALKOXY ANTHRAQUINONE-3-CARBOXYLIC ACIDS. SEBASTIAN GASSNER, Leverkusen-on-the-Rhine, and BERTHOLD BIENERT, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 7, 1930, Serial No. 426,763, and in Germany Feb. 14, 1929. 7 Claims. (Cl. 260—58.)

6. The products of the general formula



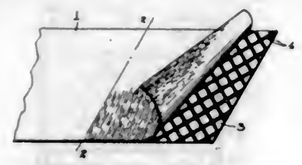
wherein w means hydrogen or alkyl, z hydrogen or halogen, x and y hydrogen or halogen, at least one y being hydrogen, said compounds forming yellow to red needles soluble in strong sulfuric acid with a yellow to bluish-red coloration, in alkalies with a red to blue coloration.

1,867,070. AUTOMOBILE ENGINE SUPPORT. HARRY GLASCOCK, Cincinnati, Ohio, assignor to P. O. B. Manufacturing Co., Inc., Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 10, 1931. Serial No. 562,128. 4 Claims. (Cl. 248—14.2.)



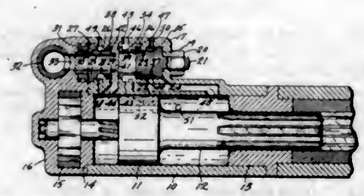
2. A cushioned front motor support for an automobile of the character specified comprising a pair of upstanding bumper blocks joined with a middle member of reduced cross section to extend past a mounting bolt clamping the motor support to the chassis frame.

1,867,071. ARTICLE OF MANUFACTURE. WILLIAM R. COLLINGS and DONALD L. GIBB, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 8, 1929. Serial No. 345,406. 6 Claims. (Cl. 154—52.)



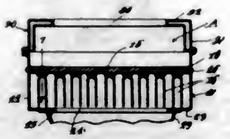
1. An elastic composite reinforced paper comprising two sheets of creped paper cementitiously united by a layer of adhesive therebetween and having embedded in such adhesive layer a plurality of substantially parallel diagonally laid strands of spun yarn in two plies crossing each other in unwoven relation.

1,867,072. ROCK DRILL. ALBERT FEUCHT, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 13, 1932. Serial No. 586,275. 7 Claims. (Cl. 121—28.)



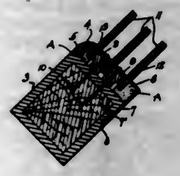
1. A rock drill comprising a cylinder having a piston reciprocable therein, a valve chest formed with a valve chamber, a tubular valve reciprocable within said chamber, passages for constantly admitting motive fluid within said valve, other passages through said valve in constant registration with passageways opening into the forward and rearward end of said cylinder for intermittently admitting motive fluid therein for actuating said piston, actuating areas adjacent the outer end of said valve alternately subjected to motive fluid from said cylinder to actuate the valve and holding areas alternately subjected to the pressure of motive fluid for holding said valve in its extreme position.

1,867,073. MEANS FOR HEATING FLATIRONS ON KEROSENE STOVES. OWEN L. HARRISON, Coleta, Ill., assignor of two-fifths to Shelby M. Harrison, New York, N. Y. Filed June 13, 1929. Serial No. 370,615. 9 Claims. (Cl. 126—228.)



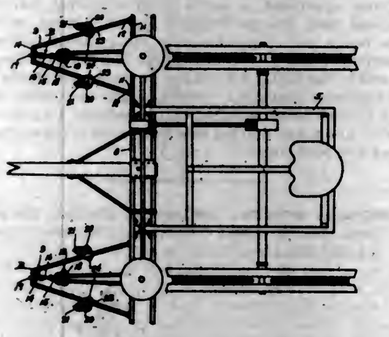
1. A sad iron heating attachment for kerosene and like stoves comprising a relatively deep pan including side walls and a bottom wall having an oblong shaped opening in the bottom portion thereof, a depending collar carried by the bottom wall and surrounding said opening for engagement with the chimney of the burner, a metal plate having a smooth flat upper surface having its sides secured to the side walls of the pan and its ends spaced from the end walls of the pan, a plurality of depending heat conducting fins carried by the lower surface of the plate and terminating short of the lower wall of the pan and arranged transversely of the opening therein, and an apertured cover hingedly carried by the pan for housing the irons.

1,867,074. REFRIGERATOR DISPLAY CASE DOOR. CLEMENT V. HILL, Trenton, N. J., assignor to C. V. Hill & Co., Inc., Trenton, N. J., a Corporation of New Jersey. Filed Sept. 23, 1929. Serial No. 394,669. 5 Claims. (Cl. 20—56.5.)



1. In a door, the combination with the stile, an undercut arm extending from the inner edge of the edge of the stile toward the center of the door providing an elongated putty reservoir, a stop on said stile having a recess facing and forming a part of said reservoir, said stop being spaced from said arm to provide for the insertion of a pane of glass therebetween, a plate secured to the opposite side of the stile having an inturned flange at its free end extending toward said arm, a stop secured to the stile adjacent to, but spaced from the first named stop and provided with a putty reservoir facing said plate.

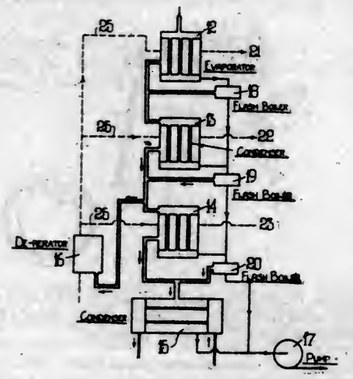
1,867,075. CORN PLANTER ATTACHMENT. GUSTAV T. HORST, Mission, S. Dak. Filed Sept. 8, 1931. Serial No. 561,798. 4 Claims. (Cl. 111—85.)



1. In combination with a planter including a front cross bar, a boot having forwardly directed guides at its bottom, a V-shaped bracket having its ends fixed to the cross bar to extend forwardly and horizontally therefrom, and a brace engaged in the apex of the bracket and on the forward end of the guide.

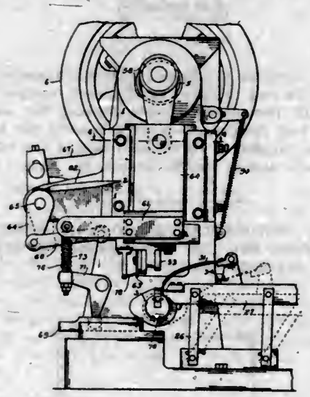
1,867,076. DISTILLATION OF WATER. GUY ERSKINE HUGHES, ALFRED HAROLD WARING, and JOHN EDGAR BRAHAM, Norton-on-Tees, England, assignors to Imperial Chemical Industries Limited, London, England, a British Company. Filed Feb. 13, 1930, Serial No. 428,120, and in Great Britain Feb. 14, 1929. 3 Claims. (Cl. 202—64.)

1. An apparatus for the distillation of water comprising a plurality of evaporators, connected in series and in multiple effect, a plurality of main steam pipes between successive effects, a plurality of flash boilers each adapted to receive condensate from a separate effect, and



each having a steam pipe joining the main steam pipe between successive effects, a condensed water main connecting all of said flash boilers and an extraction pump on said condensed water main.

1,867,077. BUCKLE ASSEMBLING MACHINE FOR WEBBING. LYNDON W. JOYCE, Greensboro, N. C., and JOSEPH H. SANDERSON, Babylon, N. Y., assignors to Joyce-Venning Manufacturing Co., Inc., Greensboro, N. C., a Corporation of Delaware. Filed Apr. 9, 1931. Serial No. 528,944. 18 Claims. (Cl. 223—59.)

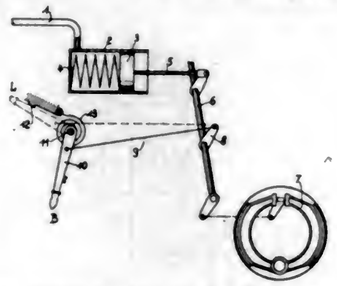


1. Machine for assembling a suspender web and slide parts comprising means for holding the middle bar of the slide, means for drawing the web in an endless path to form a closed loop surrounding said bar and overlapping in the region of said bar, and means for uniting said middle bar and the frame of a slide placed on the outside of the cooperating portions of said loop in juxta-position to said middle bar.

1,867,078. BRAKE MECHANISM. AUGUST KAZENMAIER, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed June 3, 1929, Serial No. 368,105, and in Germany Dec. 3, 1928. 8 Claims. (Cl. 188—170.)

8. Brake mechanism for vehicles comprising a brake, means tending to apply said brake, manual means oper-

able to hold said brake in released position, means urging said manual means to braking position, said manual means adapted to be held in brake-releasing position by



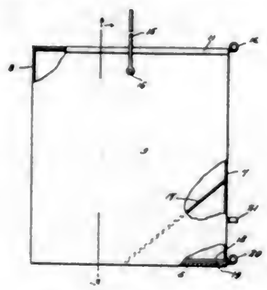
the means tending to apply the brake, and servo mechanism operable to release the brake and to permit the manual means to move to braking position.

1,867,079. CALENDAR. RUDOLF KIASCH, Frankfort-on-the-Main, Germany, assignor to Karl Maxaner, Celle-Kl. Hehlen, Germany. Filed July 31, 1930, Serial No. 472,035, and in Germany Aug. 2, 1929. 10 Claims. (Cl. 40—122.)



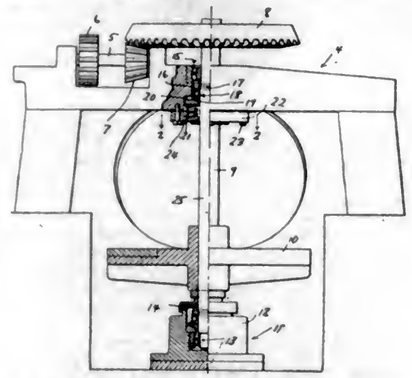
1. In a calendar of the block type, transparent sheets for the dates and the days of the week, opaque portions on the said transparent sheets bearing the said dates and days, and opaque sheets each bearing the particular month and adapted to be situated behind the said transparent sheets and be visible through the same.

1,867,080. ASH CONTAINER. OTTO H. KRAFT, Denver, Colo. Filed Nov. 12, 1928. Serial No. 318,739. 1 Claim. (Cl. 220—41.)



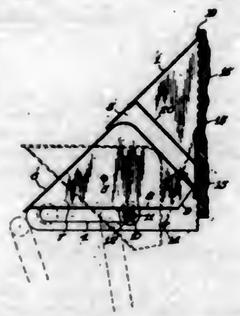
In a container for the purpose described, and in combination, a body of rectangular form in horizontal section having a bottom with an opening therein adjacent one end thereof, side walls and end walls fixed with respect to each other and said bottom, the lower end of one end wall being slightly spaced above the bottom, retaining flanges on the side walls and spaced above said bottom, and an inclined false bottom arranged between and fixed to the side walls and to one end wall and extending from an intermediate portion in the height of said end wall to the adjacent portion of the opening in the bottom, and a horizontal closure plate supported on the bottom and slidable between the bottom and said retaining flanges and through the space between one end wall and the bottom and adapted in one position to close the said opening in the bottom wall and in another position to leave said opening free, said closure plate having one end normally projecting beyond the end wall that is spaced above the bottom.

1,867,081. GRINDING PAN. GEORGE E. KRIDER, Duncansville, Pa., assignor to McLanahan & Stone Corporation, Hollidaysburg, Pa., a Corporation of Pennsylvania. Filed Feb. 14, 1930. Serial No. 428,422. 2 Claims. (Cl. 308—141.)



1. In a structure of the class described, a frame including a horizontal cross piece having an intermediate portion apertured, a rotary shaft extending through and beyond said aperture, and a thrust bearing carried by the frame and cooperable with the adjacent intermediate portion of the shaft, said thrust bearing including a removable bed plate, a plurality of circumferentially spaced coil springs supported thereon, upper and lower contacting beveled rings mounted on the springs, a collar on said shaft, and a ball bearing race interposed between the upper ring and said collar.

1,867,082. AWNING. WALDEMAR KROIER, Tampa, Fla. Filed Nov. 6, 1931. Serial No. 573,466. 5 Claims. (Cl. 156—15.)

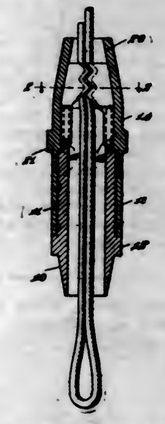


5. An awning of the character described comprising a canopy, a fabric portion having connection with said canopy, ventilating means carried by said canopy and being in the form of a hood controlling an elongated opening in said canopy, said hood being substantially V-shape in cross section and being capable of closing said opening, and said hood when open acting in the capacity of a shield for directing heated air from the underside of said awning outwardly through said opening.

1,867,083. PRODUCTION OF COMPLEX METAL COMPOUNDS OF O-HYDROXYAZO DYESTUFFS. HANS KRZIKALLA, Mannheim, and KARL HOLZACH and WERNER MUELLER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1929, Serial No. 345,591, and in Germany Mar. 10, 1928. 4 Claims. (Cl. 260—12.)

1. As a new article of manufacture complex metal compounds of o-hydroxymonoazo dyestuffs obtainable from a diazotized o-hydroxyamino derivative of a compound selected from the group consisting of benzene and naphthalene substituted by a nitro and a sulphonic acid group, and monohydroxy benzene coupling in the ortho position to the hydroxy group and substituted at least in the para position to the hydroxy group by a substituent selected from the group consisting of halogen, alkyl- and aralkyl-groups.

1,867,084. BAILING LINE CLAMP. WILBUR R. LEWIS and HARRY J. WEAVER, Saratoga, Tex. Filed Mar. 9, 1931. Serial No. 521,248. 2 Claims. (Cl. 24—124.)



1. In a line clamp for well bailing, a gripping apparatus embodying telescopically associated sleeve sections threadedly connected for progressive adjustment, a tubular extension formed upon the innermost end of the housed sleeve section having inverted T-shaped slots within diametrically opposite sides thereof, arm members disposed within the longitudinal portions of the slots having cross pins rockingly mounted within the transverse portions of the slots, toothed faces for the arm members disposed axially of the longitudinal center of the apparatus to grippingly engage the thicknesses of the bailing line passing therethrough, said arm members and one of the sleeve sections being shaped to regulate clearance between the toothed faces coincident with the progressive adjustment of the sections.

1,867,085. METHOD OF MANUFACTURING NONSCATTERABLE GLASS. OTTO S. MARCKWORTH, Columbus, Ohio. Filed Mar. 7, 1924. Serial No. 697,677. 8 Claims. (Cl. 49—81.)

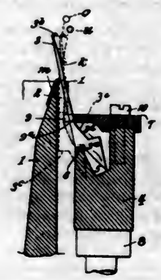
1. A method of manufacturing non-scatterable glass comprising applying a solvent which is free of extraneous retarding agents, to a binder element and then assembling the constituent laminæ to provide a blank, said steps being performed while the solvent and constituent laminæ are maintained at a temperature below that at which the solvent is normally active and substantially below room temperature, and then subjecting the assembled blank to pressure at approximately room temperature.

1,867,086. WEED PULLING DEVICE. JOHN W. MEIXELL, Lewisburg, Pa. Filed July 9, 1931. Serial No. 549,774. 7 Claims. (Cl. 55—65.)



1. A weed pulling device of the character described comprising a flat metal blade of concavo-convex form in cross section, having a jointed extremity, and serrations in one edge thereof adjacent to said extremity, flat curved wings extending laterally, upwardly and forwardly from said body at a position between the curved extremity and said serrations, and a handle secured to said body.

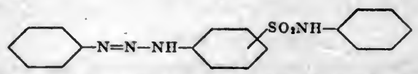
1,867,087. NEEDLE OPERATING MECHANISM. ADOLF MAX MÜLLER, Chemnitz in Sachsen, Germany. Filed Jan. 3, 1931, Serial No. 506,451, and in Germany Jan. 10, 1930. 5 Claims. (Cl. 66—5.)



5. In a needle operating mechanism for the purpose set forth, the combination with needles which are provided at their lower end with a heel portion, the latter presenting two working faces extending substantially vertical to the main shank of the needle and two other working faces in inclined position relatively to the needle shank, of a needle actuating member having a groove and a crown plate, the front wall of said groove and the said crown plate having working faces which are cooperatively associated with the heel and shank of the needles.

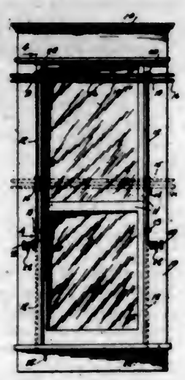
1,867,088. NEW WATER SOLUBLE DIAZO AMINO COMPOUNDS. ANTON OSSENBECK, Cologne-Mulheim-on-the-Rhine, and ERNST TIETZE, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 20, 1930, Serial No. 422,214, and in Germany Jan. 23, 1929. 5 Claims. (Cl. 260—86.)

1. As new products, the compounds of the probable formula



wherein the benzene nuclei may be substituted by monovalent substituents of the group consisting of alkyl, alkoxy, nitro and halogen, said products forming yellowish to yellow brown compounds, rather difficultly soluble in the usual organic solvents, soluble in alkalies, and being easily split up by acids.

1,867,089. CURTAIN BRACKET. ALBERT NARDONI, Chicago Heights, Ill., assignor of one-half to Giovanni Pusateri, Chicago Heights, Ill. Filed Oct. 29, 1931. Serial No. 571,883. 4 Claims. (Cl. 156—27.)



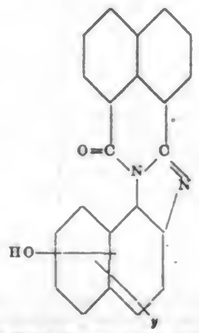
1. In a curtain bracket of the character described, a pair of side rods, curtain supporting cross bars at the upper ends thereof, a laterally directed arm at the lower end of each side rod, and a depending finger at the outer end of the arm.

1,867,090. METHOD FOR THE PRODUCTION OF VAT DYESTUFFS AND THE PRODUCT THEREOF. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, and HUGO WOLFF, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 11, 1928, Serial No. 299,112, and in Germany Aug. 18, 1927. 7 Claims. (Cl. 260—61.)

1. A process of producing vat dyestuffs which comprises heating an aminobenzanthron selected from the group consisting of 5-, 6-, 7- and 8- aminobenzanthrones in the presence of an alkaline condensing agent at a temperature sufficient to bring about condensation.

1,867,091. HYDROXY-1',8'-NAPHTHOYLENE-NAPHTHIMIDAZOLES. WILHELM NEELMEIER and WILHELM MEISER, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 19, 1929, Serial No. 379,573, and in Germany July 23, 1928. 5 Claims. (Cl. 260—44.)

1. As new products, the compounds of the general formula:



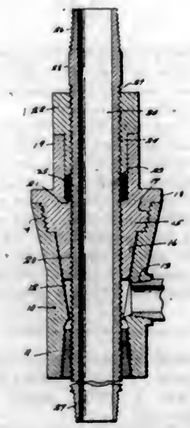
wherein y stands for hydrogen or the sulfonic acid group and wherein the naphthalene nuclei may be further substituted by a hydroxy group, said compounds being generally yellowish to orange colored substances, having a high melting point or melting not at all, difficultly soluble or insoluble in organic solvents and being valuable intermediate products in the manufacture of dyestuffs and pharmaceutical substances.

1,867,092. OIL AGITATOR. WILLIAM E. A. PIPHER and ALVIN E. PIPHER, Parkers Landing, Pa. Filed July 18, 1931. Serial No. 551,806. 5 Claims. (Cl. 103—204.)



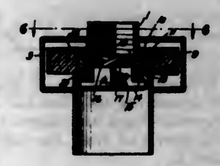
1. An oil agitator for attachment to the lower end of a working barrel, including a tubing having ports at its upper end and a slot in its wall, a valve normally closing the ports and liftable by suction in the working barrel, an agitator slidable along the outside of the tubing, and a connection between the valve and agitator, said connection working in the slot.

1,867,093. CASING HEAD. FELIX LUCAS PIVOTO, Beaumont, Tex. Filed Apr. 29, 1930. Serial No. 448,379. 4 Claims. (Cl. 285—22.)



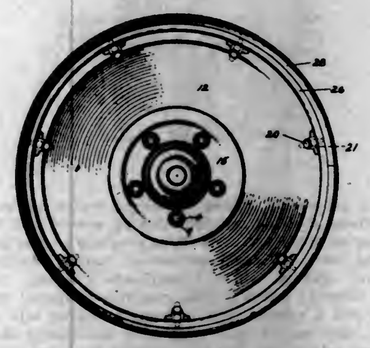
1. A casing head comprising a casing head body threaded at its lower end and at its upper end, an exteriorly threaded nipple passing entirely through the casing head body and less in diameter than the interior diameter of the casing head body, a casing head cover and nut having threaded engagement with the upper end of the body and interiorly threaded for engagement with the nipple, the nut having an upwardly extending annular portion greater in interior diameter than the exterior diameter of the nipple, a gland having threaded engagement with the nipple and bearing upon the upper end of the annular portion of the nut and having a portion extending downward into the annular portion, and packing disposed between the lower end of the gland and the upper end of the screw-threaded portion of the nut.

1,867,094. WATER MOTOR MACHINE. HENRY PLACIDE, Baltimore, Md. Filed July 29, 1931. Serial No. 553,868. 5 Claims. (Cl. 253—3.)



1. In a machine of the class described, a stock barrel, an impeller plate provided with nozzles, a shoulder on the inside of the stock barrel for supporting the impeller plate, a wheel bushing provided with impeller blades, a shoulder on the outside of the stock barrel for supporting the wheel bushing in such a manner that the impeller blades carried thereby are in operative relation to the nozzles of the impeller plate.

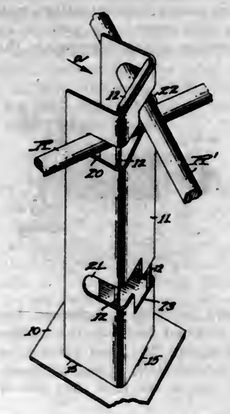
1,867,095. WHEEL. SYDNEY I. PRESCOTT, New York, N. Y., and FRANCIS J. RUMMLER, Lyndhurst, N. J. Filed Dec. 12, 1919, Serial No. 344,282. Renewed July 11, 1931. 14 Claims. (Cl. 301—63.)



9. A wheel body having means for establishing therein an odd number of nodal lines to damp vibration set up therein.

1,867,096. ROAD CHAIR. CARL H. RIBB, Worcester, Mass., assignor to Parker Wire Goods Company, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 7, 1931. Serial No. 507,209. 8 Claims. (Cl. 94—8.)

1. A rond chair comprising an upright supporting member formed of sheet metal, angular in cross section and having openings in certain corners thereof to receive reenforcing rods obliquely disposed relatively to the front face

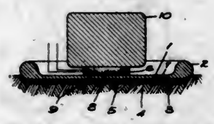


of said supporting member, and a separate locking member insertable vertically between each rod and the adjacent inner corner surface of said supporting member.

1,867,097. COMPOUNDS OF THE THIAZOLANTHRONE SULPHONE SERIES AND PROCESS OF MAKING SAME. HEINRICH RITTER, Frankfort-on-the-Main-Fechenheim, and ALFRED HOLL, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 4, 1930, Serial No. 493,463, and in Germany Nov. 8, 1929. 7 Claims. (Cl. 260—44.)

1. A process for producing oxidation products which process comprises treating compounds of the thiazolanthrone series with an oxidant usual for the conversion of organic sulphides into sulphonic compounds in an acid medium.

1,867,098. METHOD AND MEANS FOR RADIATING VIBRATORY MECHANICAL IMPULSES INTO SOLIDS, LIQUIDS, AND THE LIKE. FRANK RIEBER, San Francisco, Calif. Filed Sept. 8, 1925. Serial No. 55,203. 12 Claims. (Cl. 177—386.)

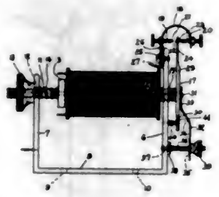


10. Apparatus for geological exploration comprising a diaphragm adapted to have the lower face thereof in pressure transmitting contact with the ground, a relatively heavy mass secured to the periphery of the diaphragm, a container in contact with the upper face of said diaphragm, the area of the diaphragm covered by the container being substantially less than the area of the upper face of the diaphragm, and a mass disposed on top of the container, said container being adapted to receive an explosive charge.

1,867,099. ELECTROMAGNETIC RELAY. WILLIAM C. ROE, Pittsburgh, Pa., assignor to Printel Manufacturing Corporation, a Corporation of New York. Filed Sept. 11, 1926. Serial No. 134,883. 7 Claims. (Cl. 175—336.)

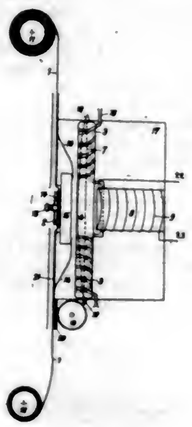
1. In an electromagnetic relay, a core, an armature element, a winding adapted to energize the core and attract the armature element, a supporting element, said

armature element making a two point contact with the supporting element, the contact at each point being had by a pointed pin of the one element projecting within a recess of the other, each recess having inclined walls substantially entirely closely surrounding the point of contact with the pin point, and spring means to maintain the points and re-



cesses in pressed resilient engagement and the armature element in a retracted position, the inclination of the recessed walls directing the point therein to the portion of the recess of substantially greatest depth, being greater relative to the axes of the pins than the tapering walls of the pin point.

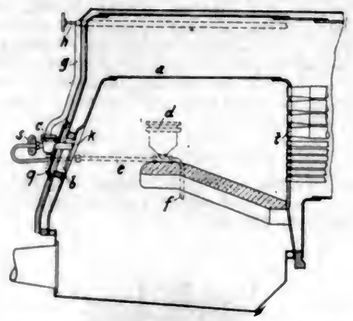
1,867,100. LIGHT SOURCE FOR PHOTOGRAPHIC COPYING PURPOSES. CARL ROTHERICH, Berlin, Germany, assignor to the Firm Silfree Aktiengesellschaft (Silfree Limited), Vaduz, Liechtenstein. Filed Mar. 16, 1929, Serial No. 347,604, and in Germany Mar. 22, 1928. 14 Claims. (Cl. 95—75.)



1. A device for copying photographic films, comprising a body having an opening for exposing the film, means for moving the negative and the copying film past said opening, a source of light comprising an electric discharge tube wherein discharges are effected through a gaseous atmosphere, and magnetic means for producing a constant deflection of the discharges through said tube towards said opening whereby to maintain a uniform distribution and constant intensity of the light.

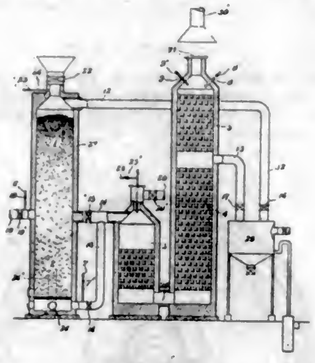
1,867,101. CLEANING DEVICE FOR PULVERIZED FUEL FURNACES. RICHARD ROOSEN, Kassel, Germany, assignor to Stug Kohlenstaubfeuerung Patentverwertung G. m. b. H., Kassel, Germany. Filed Aug. 13, 1930, Serial No. 475,069, and in Germany Nov. 13, 1929. 2 Claims. (Cl. 122—395.)

1. A cleaning device for pulverized fuel furnaces comprising a steam nozzle mounted by means of a ball joint in front of and projecting into a hole in the fire door of the furnace, another nozzle concentrically arranged within said stream nozzle, means for supplying sand under pressure to said other nozzle, a duct for feeding steam to said



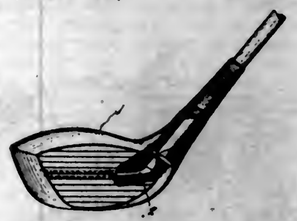
steam nozzle through said ball joint and comprising another ball joint situated in the pivot axis of said fire door, and pipe connections from the source of steam to said last-named ball joint and from the latter to said first-named ball joint.

1,867,102. PROCESS OF MAKING WATER GAS. WALTER M. RUSSELL, Wellesley, Mass., assignor to The Gas Machinery Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 4, 1928. Serial No. 303,745. 11 Claims. (Cl. 48—208.)



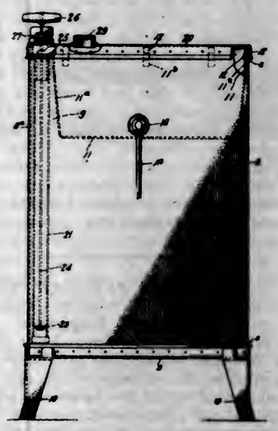
1. A process of making carbureted water gas in a set comprising a single generator having a solid fuel bed including an upper coal carbonizing zone and a lower gas generating zone, a single carburetor having checkerbrick therein, and a single superheater having checkerbrick therein; which process comprises a special cycle of steps and a regular cycle of steps following said special cycle; said special cycle comprising air-blasting the lower zone only of the fuel bed, burning the blast gases and heating the checkerbrick in the carburetor and superheater, then passing steam through the highly heated lower zone only of the fuel bed and generating water gas, passing the water gas through the carburetor and the lower portion of the superheater, withdrawing the water gas from an intermediate portion of the superheater, then passing steam through the upper zone of the fuel bed and withdrawing the resulting gas directly from said upper zone and from the generator, then admitting aqueous fluid to the heated checkerbrick in the upper portion of the superheater above the intermediate gas offtake, passing steam downwardly through the superheater, through the carburetor and through the fuel bed in the generator, and withdrawing the resulting gas directly from the generator; and said regular cycle comprising air-blasting the lower zone only of the fuel bed, burning the blast gases and heating the checkerbrick in the carburetor and superheater, then passing steam through the highly heated lower zone only of the fuel bed and generating water gas, passing the water gas through the carburetor and enriching the water gas by adding oil thereto, passing the enriched water gas to the lower portion of the superheater and fixing the oil vapors mixed with the water gas, withdrawing the carbureted water gas from an intermediate portion of the superheater, then admitting aqueous fluid to the heated checkerbrick in the upper portion of the superheater, above the intermediate gas offtake, passing steam downwardly through the superheater, through the carburetor and through the fuel bed in the generator, and withdrawing the resulting gas directly from the generator.

1,867,103. GOLF CLUB HEAD AND PROCESS OF MAKING THE SAME. FREDERICK H. SCHAVOIR, Stamford, Conn., assignor to Schavolite Golf Corporation, New York, N. Y. Filed Nov. 23, 1927. Serial No. 235,225. 5 Claims. (Cl. 273—77.)



1. A golf club head or the like formed of homogeneous vulcanized rubber having a relatively hard impact surface backed by a resilient mass.

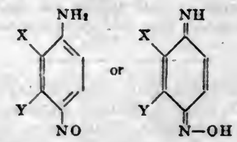
1,867,104. FUEL FEEDING TANK. JOHN SCHEMINGER, Jr., Providence, R. I. Filed Mar. 18, 1930. Serial No. 436,851. 7 Claims. (Cl. 158—46.)



1. A fuel tank embodying a main rectangular container of substantially greater depth and length than breadth providing a reservoir space and a relatively small also rectangular container in the upper end thereof providing a supply space, said small or inner container fitting in the main container with a three-side contact and having walls receding from the surrounding walls of the latter at the three sides while lying flush therewith at the fourth side; said two containers being formed of sheet metal and secured together along their top edges, and having a common top closure plate overextending their upper ends and secured to the main or outer one thereof in a sealed union, a gauge for determining the liquid level in the small tank; a pump for filling said small container from the larger main one, an opening for filling said main container, a gravity-feed connection with the inner container passing through the outer container and having means therein for straining the fuel in feed flow; and a cut-off valve in said feed connection.

1,867,105. NEW PROCESS FOR PREPARING P-NITROSO-AMINE COMPOUNDS OF THE AROMATIC SERIES AND THE COMPOUNDS OBTAINABLE THEREBY. KARL SCHIRMACHER, Frankfort-on-the-Main-Hochst, and HANS SCLICHENMAIER, Kelkheim in Taunus, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 27, 1930, Serial No. 478,308, and in Germany Sept. 14, 1929. 8 Claims. (Cl. 260—69.)

4. As new products, the compounds corresponding with one of the following formulæ:



wherein X and Y represent methyl or jointly one of the two four-membered groups:

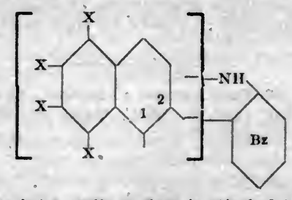
$$-CH_2-CH_2-CH_2-CH_2-$$

or $$-CH=CH-CH=CH-,$$

the said compounds, on condensation with aromatic amines, yielding intensely red colored products and, on reduction, being converted into para-diamines or aminohydroxy compounds.

1,867,106. HYDROXY-BENZOCARBAZOLE-CARBOXYLIC ACIDS. ALBERT SCHMELZER, FRITZ BALLAUF, and HEINRICH HEFNER, Elberfeld, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 30, 1930, Serial No. 424,734, and in Germany Feb. 8, 1929. 3 Claims. (Cl. 260—46.)

1. As new products hydroxy-benzocarbazole carboxylic acids of the probable general formula:



wherein the heterocyclic nucleus is attached to the naphthalene nucleus in 1.2-position, one x stands for a hydroxy group, one x stands for a carboxylic acid group and the other x's stand for hydrogen, being generally yellowish or greyish to greenish substances of high melting points, insoluble in water, soluble in alcohol, and being valuable intermediate substances for the manufacture of dyestuffs and therapeutical agents.

1,867,107. CORNER BRACKET. JOHANN PETER SCHMIDT, Jr., Remscheid, Germany. Filed Sept. 18, 1929, Serial No. 393,456, and in Germany Feb. 18, 1929. 1 Claim. (Cl. 312—140.)

A corner bracket support particularly for plate glass and the like, consisting of a pair of U-shaped members

interconnected at an angle on one side, each member on the other side comprising a clip projected inwardly to form a bearing surface at its upper edge and at least one tongue stamped therefrom forming an inwardly bent

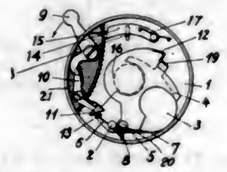


tongue to form a bearing member at the end of the tongue, the upper edge of the clip and the end of the tongue forming two spaced bearing points on the plate glass to support and secure the plate in position.

1,867,108. TREATING FERROUS SHEETS AND PLATES. HARRY S. SCHUTTE, Pittsburgh, Pa. Filed July 31, 1930. Serial No. 472,186. 4 Claims. (Cl. 148—4.)

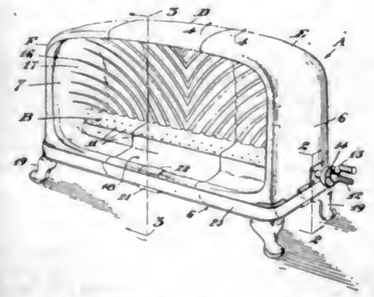
3. The method of preventing sticking in box annealing sheets and plates which consists in chemically treating the rolled and pickled sheets or plates by immersion in an aqueous solution of a sodium salt of a chromic acid of a concentration of .001 to .20 per cent., piling the treated materials and then box annealing the pile.

1,867,109. SHUTTER FOR PHOTOGRAPHIC OBJECTIVES. MAX SEIFERT, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Nov. 27, 1928, Serial No. 322,255, and in Germany Dec. 9, 1927. 3 Claims. (Cl. 95—60.)



1. In a shutter for photographic objectives the combination of a casing and blade pivoted upon said casing, a second blade pivoted upon the first blade eccentrically with respect to the pivot of the latter, separate springs to effect the movement of the two blades past the objecive, means for moving he two blades against the tension of said springs and into operating position, and means for holding one of said blades in tensioned position until a determinable time after the other blade has been released.

1,867,110. STOVE. JOSEPH A. SIGNORE, Los Angeles, Calif. Filed June 23, 1930. Serial No. 463,190. 3 Claims. (Cl. 126—86.)

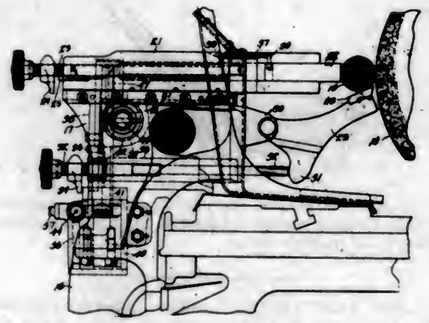


1. A stove comprising a plurality of stove sections each comprising a bottom wall, a back wall, and a top wall of integral formation and certain of which sections include end walls; gas burner sections formed integral with said sections and including in each section a bore and burner orifices leading from said bore; a base, and means for collectively securing said stove sections in assembled relation on said base.

1,867,111. BRONZE FOR WELDING. HARRY L. SPENCE, Richmond, Va., assignor to H. L. Spence Company, a Corporation of Virginia. Filed Aug. 1, 1929. Serial No. 382,852. 4 Claims. (Cl. 219—8.)

1. As an article of manufacture, a welding rod for use as an electrode in electrically welding a bronze to steel, cast steel, cast iron, malleable iron and the like, consisting of copper 80 to 96 percent, tin 1 to 10 percent, and phosphorus copper .2 to 1 percent.

1,867,112. HYDRAULIC BACK REST FOR GRINDING MACHINES. AMOS P. STEINER and HAROLD E. BALSIGER, Waynesboro, Pa., assignors to Landis Tool Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Oct. 21, 1926. Serial No. 143,248. 7 Claims. (Cl. 51—238.)

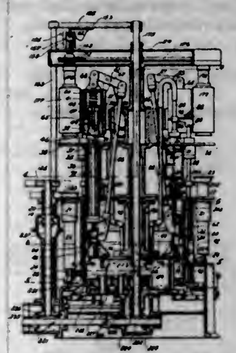


1. A hydraulic back-rest and support for cylindrical grinding machines comprising a base, a horizontal slide mounted on said base, a jaw pivoted to said base, a bushing slidable in said base, an adjusting screw mounted in said bushing and coacting with said pivoted jaw, a bracket connecting said slide and bushing, a rack secured to the under side of said slide, a horizontal shaft beneath said slide and at right angles thereto, a large pinion on said shaft meshing with said rack, a small pinion on the opposite end of said shaft, a vertical pressure cylinder secured to said casting, and a piston rod in said cylinder having a rack on one side to mesh with said small pinion to rotate said shaft, substantially as set forth.

1,867,113. MACHINE FOR APPLYING METAL CAPS TO BOTTLES. GUSTAV E. STRANDT, Milwaukee, Wis., assignor to Cherry-Burrell Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed May 6, 1929. Serial No. 360,696. 43 Claims. (Cl. 226—87.)

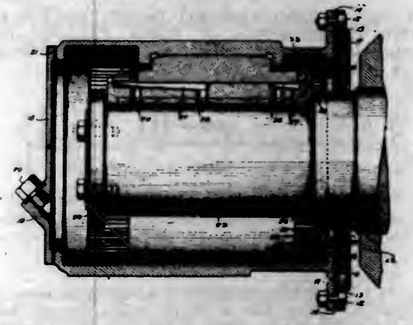
32. In apparatus for applying metal caps to bottles, the combination of a turret provided with groups of cap forming, applying and affixing mechanisms, a work carrier associated with each group and adapted to be actuated to effect a delivery of the work successively to the members of the group, means for actuating the turn table continuously, and means for actuating the work carrier step by step in a cycle of work carrying and carrier removing movements.

35. A revoluble bottle carrying turret provided with cap supplying and cap applying mechanism, in combination with means for delivering bottles to the turret successively, and pneumatic means, controlled by the infeeding bottles, for regulating the cap supply in correspondence with the number of bottles delivered.



40. In a bottle capping machine, a rotary spinning head provided with laterally movable resiliently yielding spinning rollers, a vertically disposed tubular shaft for supporting and rotating said head, a non-rotative resiliently supported tubular slide in said shaft, an axially disposed resiliently supported slide rod to which the tubular slide is connected for independent vertical movement, a cap clamp at the lower end of said slide rod and a spreader rotatively mounted on the slide tube and adapted in one positon to move the spinning rollers laterally to an inoperative position.

1,867,114. FREIGHT CAR TRUCK. JOHN J. TATUM, Baltimore, Md. Filed Aug. 28, 1929. Serial No. 388,991. 5 Claims. (Cl. 308—85.)



1. In combination, in a car truck, a journal box, a journal in said box, a disc secured to said journal having a bodily crimped annular flange, said crimps of the flange forming corrugations to pick up oil in the bottom of the box and convey it to the top of the box and means to convey the oil to the top of the journal.

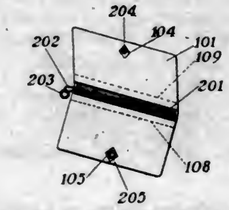
1,867,115. FLUID OPERATED MECHANISM. ROBERT H. THOMPSON, Los Angeles, Calif., assignor to Leo. M. Harvey, Los Angeles, Calif. Filed Nov. 24, 1930. Serial No. 497,796. 2 Claims. (Cl. 103—46.)

1. In a device of the class described, the combination of a vertically extending casing, a pipe mounted concentrically within the casing, a fluid motor including a cylinder mounted within the casing and connected to said pipe, a hollow piston operatively mounted in said cylinder, means for venting the cylinder below the piston into the casing, a pump mounted within the casing below said cylinder and including a pump plunger, means connecting the pump plunger with the piston, the static pressure of the column of fluid in the casing being exerted on the under side of said piston, the static pressure of a column of fluid in the pipe being exerted against the upper side of said piston, means for intermittently increasing the pressure exerted by the latter said column of fluid on the upper side of said



piston, and means carried by the piston for closing the passage therethrough operable when the pressure of the fluid in the pipe exceeds a given amount to permit said fluid to pass through said piston and circulate through the cylinder and out through said casing.

1,867,116. COVER FOR HANDBAGS. BERTIE R. THORNHILL and MAMIE E. ROHR, Lynchburg, Va. Filed Mar. 26, 1931. Serial No. 525,450. 5 Claims. (Cl. 150—28.)



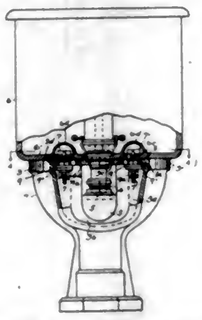
4. A removable cover for a handbag comprising a pair of pockets formed by an outer side and a pair of inner sides, one of said pockets being adapted to receive the pocket of the handbag and the other pocket being adapted to receive a closure of the handbag, and said pair of pockets substantially covering the entire handbag.

1,867,117. PROCESS FOR THE MANUFACTURE OF A CLEANSING MEDIUM AND PRODUCT THEREOF. JOHANN TENGLER, Tagerwilen, Switzerland. Filed May 26, 1927, Serial No. 194,529, and in Switzerland June 3, 1926. 3 Claims. (Cl. 87—5.)

1. A process for making a cleansing medium comprising the following steps, the mixing of a caustic soda solution with a saponifiable oil and in proportions to produce saponification and treating to produce a hard composition, next melting such composition and adding benzine thereto then hardening to a state wherein it can be pulverized and with benzine contained therein, next pulverizing such resulting hardened benzine containing mass, next mixing such pulverized mass into a semi-fluid saponaceous mass so that the individual particles of the pulverized mass are coated with such semi-fluid material, and finally cooling the resulting mass to a hard state.

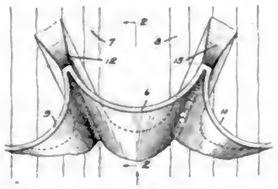
3. A soap comprising a body consisting of a quantity of soap particles containing benzine, such particles being enclosed in an envelope of saponaceous material which seals against the escape of the benzine by evaporation.

1,867,118. CONNECTION FOR WATER CLOSET COMBINATIONS. BERT O. TILDEN, Trenton, N. J., assignor to B. O. T. Manufacturing Company, Trenton, N. J., a Corporation of New Jersey. Filed Nov. 10, 1931. Serial No. 574,054. 6 Claims. (Cl. 4—14.)



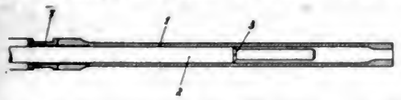
1. The combination with a water closet bowl having a housing at its rear end, and a flush tank mounted upon the deck of said housing, said bowl and said tank having registering slots, of means for clamping the tank to the bowl comprising T-shaped bolts adapted to extend downwardly through the bottom of the tank and said deck, nuts disposed in the slots of the housing to secure the bolts to the tank, and nuts engaging the bolts beneath the said deck to prevent separation of the tank and bowl.

1,867,119. MULTIPLE ARCH DAM. RUDOLPH W. VAN NORDEN, San Francisco, Calif. Filed Aug. 8, 1927. Serial No. 211,337. 4 Claims. (Cl. 61—32.)



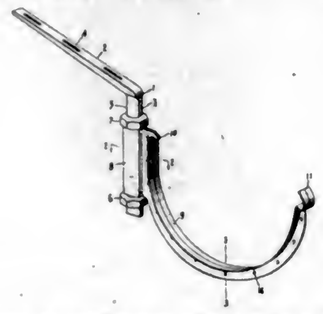
1. A multiple arch dam comprising a plurality of conoidal shells arranged in juxtaposition with their apices toward the base of the dam, and supplementary conoidal shells in abutment with said first named shells and having their apices toward the top of the dam.

1,867,120. MEANS FOR ROLLING OUT A TUBE WITH AN INTERNAL THICKENING AT THE REAR END FROM A TUBULAR BLANK. AUGUST VOLLMER, Hilden, Germany. Filed Sept. 22, 1930, Serial No. 483,601, and in Germany Feb. 8, 1930. 5 Claims. (Cl. 80—62.)



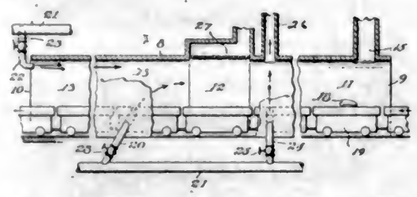
1. Method of rolling out a tube with internally thickened ends from a tubular blank in a pilgering mill by means of a mandrel with a portion of reduced diameter and a shoulder, where said portion commences, consisting in rolling down the forward thickened end on the reduced portion of said mandrel, thereupon rolling down the tube on the thicker portion of said mandrel throughout the length of the tube all but a portion corresponding to the thickened rear end of the tube, thereupon withdrawing said mandrel from the blank, providing it with an abutment member so as to rest against the shoulder of the mandrel and to act as an abutment for the rear end of the blank, reintroducing the reduced portion of said mandrel into the tube and rolling down the rear end of the tube on said reduced portion to form an internal-thickening as set forth.

1,867,121. EAVES-TROUGH HANGER. MAX WALTEN, Washington, D. C. Filed Jan. 23, 1929. Serial No. 334,457. 2 Claims. (Cl. 108—29.)



1. A circle for eaves-troughs constructed of a flat sheet of metal and comprising a pair of oppositely curved arms brought together in mating relation, means for securing said arms together in contacting relation, lateral supporting flanges on each of said arms, said flanges extending beyond the arms at one end thereof to form gutter retaining elements adapted to be bent over the outer marginal edge of a gutter to retain the same in place in the circle, and other gutter retaining elements formed integral with the opposite ends of said arms and adapted to engage the inner marginal edge of a gutter.

1,867,122. TUNNEL KILN AND DRAFT CONTROL FOR THE SAME. ARTHUR S. WATTS, Columbus, Ohio. Filed Oct. 28, 1930. Serial No. 491,795. 2 Claims. (Cl. 25—142.)

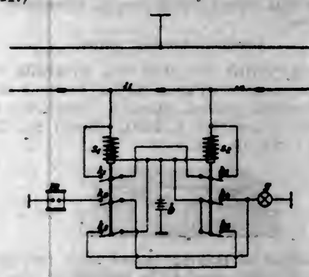


1. In a tunnel kiln consisting of a heating up zone, high temperature zones, and a cooling zone, through which ware travels, and an artificial draft element, an auxiliary ventilator for the tunnel between the high temperature zone and the entrance of the tunnel, means to create a draft through the tunnel into said auxiliary ventilator and at substantially right angles to the line of travel of the artificial and natural drafts of the tunnel thereby diverting a limited portion of heat existing between the point of entrance of the blast and ventilator whereby a zone of lower temperature is developed and the penetration of heat from a high temperature zone beyond this temperature drop is regulated.

1,867,123. PROCESS OF MAKING MIXED CELLULOSE ESTERS. ADOLF WEIHE, Ellenburg in Sachsen, Germany, assignor to Deutsche Celluloid-Fabrik, Ellenburg in Sachsen, Germany, a Corporation of Germany. Filed Mar. 14, 1930, Serial No. 435,961, and in Germany Mar. 25, 1929. 9 Claims. (Cl. 260—101.)

1. The process which comprises acting upon an organic cellulose ester containing unsubstituted hydroxyl groups in the cellulose molecule with diacetyl-ortho-nitric acid in the presence of a dehydrating agent.

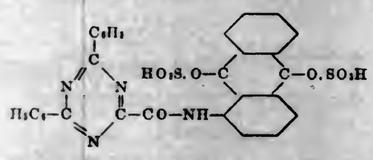
1,867,124. SAFETY CONTRIVANCE ON PERMANENT RAILWAY TRACKS. KARL ERNST WENZEL, Hamborn, Germany, assignor, by mesne assignments, to the Firm; Vereinigte Eisenbahn-Signalwerke G. m. b. H., Berlin-Siemensstadt, Germany. Filed Jan. 14, 1929, Serial No. 331,919, and in Germany Feb. 9, 1928. 3 Claims. (Cl. 246—41.)



1. A device for releasing, operating and locking safety contrivances on railway tracks, comprising in combination with a two section insulated track, a relay for each section of said insulated track, and two contacts for each of said relays mutually connected so that they cause said relays to remain operative as long as a train is on one of the two sections of said insulated track by the passage of the train from the other section.

1,867,125. WATER SOLUBLE SULPHURIC ACID ESTER OF ANTHRAQUINONYL-DIPHENYL-TRIAZINE-CARBOXYLIC ACID AMIDE. FRANZ WIENERS, Opladen, and WILHELM BAUER, Leverkusen-Wiesdorf, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 4, 1931, Serial No. 542,198, and in Germany June 5, 1930. 1 Claim. (Cl. 260—27.)

The new water soluble sulphuric acid ester having in its free form the probable formula:—



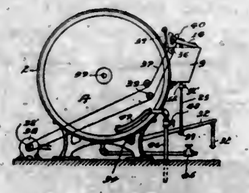
said ester yielding when developed on textile fibres clear greenish-yellow shades of excellent fastness properties.

1,867,126. SEPARABLE FASTENER. MARGARET CROSSON WILEY, Washington, D. C. Filed May 10, 1930. Serial No. 451,385. 4 Claims. (Cl. 24—224.)



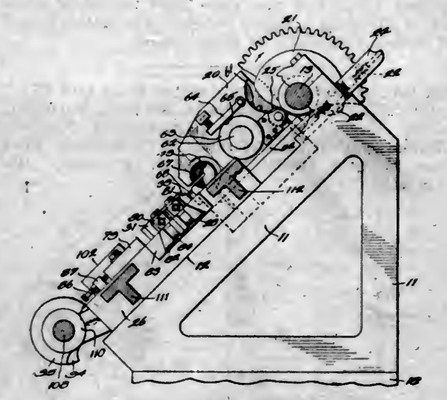
1. A separable fastener comprising a stud member and a slotted member having a key hole slot substantially in the form of an inverted V whose one entrance end is enlarged to admit the head of said stud so that the reduced neck portion of said stud may be held in sliding engagement by the remaining portion of said slot, said slotted member being provided with an angular spring member whose apex is adapted and positioned to resiliently impede the manipulation of said stud over the apex of said slot, to prevent its accidental passage therefrom and to confine said stud in the unenlarged end portion of said slot.

1,867,127. MACHINE FOR SOAPING HEAVY WOOLEN FABRICS. GEORGE WOELFEL, Yerkes, Pa. Filed Apr. 2, 1929. Serial No. 351,866 5 Claims. (Cl. 68—18.)



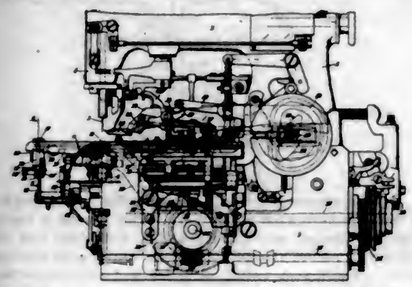
1. A soap expressing device adapted for use in connection with an elongated soaping container having a trough on the side thereof near the top of said container and provided with a drain to said container, comprising the combination of a driven roller mounted in said trough with its axis parallel to that of said container and with the upper surface thereof substantially level with the top edges of said trough, a presser roller arranged substantially parallel to said driven roller, the space above said rollers being clear to give the operator free access over said rollers into the inside of said soaping container, means to continuously rotate said driven roller so that goods passing between said rollers will be drawn away from said casing, resilient means normally holding said presser roller substantially spaced away from the top of said driven roller, foot operated means to lower said presser roller against the tension of said resilient means into engagement with the upper surfaces of any goods between said rollers, whereby the motion of said driven roller on the goods between said rollers assists the operator to manually draw the goods between said rollers and said rollers are operative to express liquid soap from said goods without felting the fibres of said goods, and resilient means between said casing and the ends of said rollers to yieldingly press against the edges of said goods to keep the goods away from the ends of said rollers.

1,867,128. SPRING FORMING MACHINE. WILLIAM E. WUNDERLICH, Muncie, Ind., assignor to The Moore Company, Muncie, Ind., a Corporation of Indiana. Filed Feb. 21, 1931. Serial No. 517,502. 14 Claims. (Cl. 140—101.)



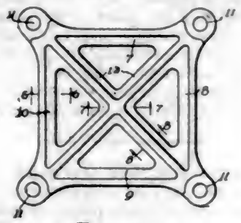
1. In combination, a mandrel for positioning and supporting a coiled spring, means for clamping and wrapping the end of the spring around the adjacent coil, and means co-operating with the mandrel for forming loops in the end coil of the spring while the spring is clamped on the mandrel.

1,867,129. THREAD CUTTING MECHANISM. EDWARD B. ALLEN, Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Mar. 3, 1928. Serial No. 258,772. 20 Claims. (Cl. 112—252.)



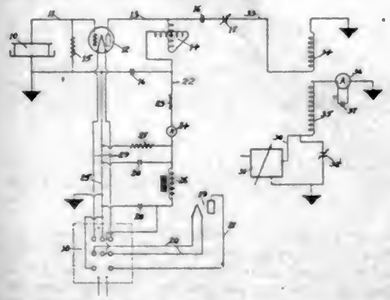
1. In a sewing machine in which the thread to be cut extends from the last stitch to the needle-throat member substantially in contact with the under surface of the work, a thread-cutter including an element normally occupying a retracted position, means for relatively separating the work and threads to be cut to provide a space for entry of the thread-cutter element, and means for projecting the thread-cutter element into such space.

1,867,130. BUS CLAMP. ALFRED ALSAKER, Chicago, Ill., assignor to The Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 29, 1927. Serial No. 187,671. 4 Claims. (Cl. 173—251.)



1. A spring clamping plate for clamping bus bars comprising an elastic convex metal plate of double convexity, requiring a relatively large force below the elastic stress limit of the metal to deflect the same into contact with a flat surface with which the same engages.

1,867,131. METHOD OF AND APPARATUS FOR TESTING CONDENSERS. MORRIS H. BENNETT, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 24, 1929. Serial No. 365,645. 8 Claims. (Cl. 175—183.)



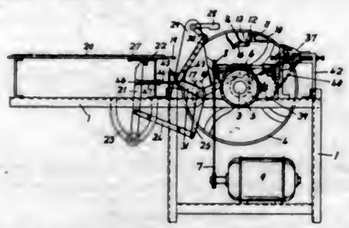
1. The method of testing a variable electric condenser which comprises inserting the condenser in a tuned circuit, generating currents of known fundamental frequency and known higher harmonics of said fundamental, impressing said currents on the tuned circuit including the condenser, so that certain currents have frequencies at spaced intervals within the range of the condenser, varying the setting of the condenser, and ascertaining those points of setting where conditions of resonance for the currents occur.

1,867,132. METHOD OF MAKING RUBBER HEELS. FRANK BERENSTEIN, Chelsea, Mass., assignor to Panco Rubber Company, Chelsea, Mass., a Corporation of Massachusetts. Filed Feb. 6, 1931. Serial No. 513,841. 2 Claims. (Cl. 18—59.)



1. The method of making rubber heels provided with inserted plugs which consists in assembling one or more unvulcanized rubber tubes of generally cylindrical form over shouldered positioning pins in the plate of a mold cavity provided with a forming recess at the base of each pin of greater diameter than the diameter of the rubber tube, superimposing over each tube and supported thereby a concave washer of larger diameter than that of the tube, assembling an unvulcanized rubber heel blank above the pins, and subjecting the entire assembly to heat and pressure for the purpose of simultaneously forcing the heel blank over the pins, washers and tubes and the washers on to the shouldered portions of the pins, with the tubes forced downwardly into the recesses and conforming therewith while held against further deformation at opposite ends by the washers and recesses respectively.

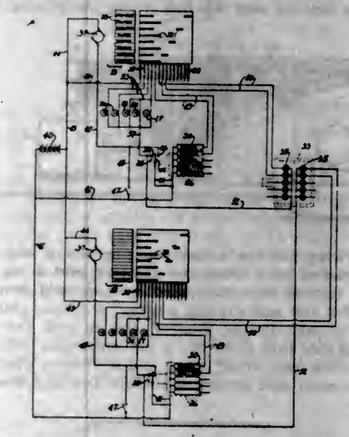
1,867,133. FISH-SKINNING MACHINE. JOHN DAVID BISSET, Aberdeen, Scotland. Filed Apr. 15, 1931, Serial No. 530,217, and in Great Britain Apr. 16, 1930. 5 Claims. (Cl. 17—5.)



1. In a fish-dressing machine, a fish carrier, tail-engaging members located in a depression in the surface of said carrier, a compound feed table comprising two slidable surfaces, one extending further towards the carrier than the other to support the fish tail and the other supporting the fish body, means for moving both table surfaces together towards the carrier, and means for checking the tail-carrying surface while motion of the other table surface continues towards the carrier.

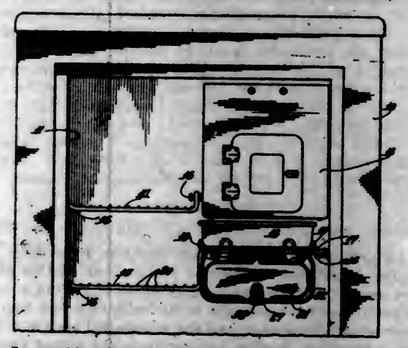
1,867,134. HOSPITAL SIGNALING SYSTEM. BORNETT L. BORROFF, Milwaukee, Wis. Filed Apr. 4, 1928. Serial No. 267,455. 4 Claims. (Cl. 177—337.)

1. In a signaling system, the combination of a plurality of indicating lamps, switching means movable to successive switching positions and having electric circuit connections with said lamps to selectively light said lamps, a motor for driving said switching means, means for operating said motor including an electric circuit, a circuit-closer in said circuit and in said circuit connections movable to either of two positions and in one position closing said motor circuit and in the other position closing the circuit connections for said indicating lamps, and signal lamps having circuit connections with said switching means and disposed at the place of said circuit-closer for apprising the operator of the switching position of said switching means, said circuit-closer when moved to one position closing the motor circuit to operate said switching means and signal lamps and simul-



taneously opening the circuit connections through said indicating lamps to prevent lighting thereof, and said circuit-closer when moved to its other position opening the motor circuit to stop the operation of said switching means in a selected switching position and simultaneously closing the circuit connections through the corresponding indicating lamp to light said lamp.

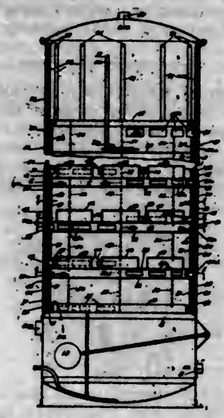
1,867,135. WATER RESERVOIR. HOWARD E. BLOOD, Detroit, Mich., assignor to Norge Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 15, 1931. Serial No. 537,554. 6 Claims. (Cl. 62—141.)



1. In combination a refrigerator cabinet including heat extracting means and supporting shelving therein, a drip pan on said shelving beneath the heat extracting means, an auxiliary shelf depending from the shelf on which the drip pan is mounted and below the same, and a water reservoir carried by said auxiliary shelf.

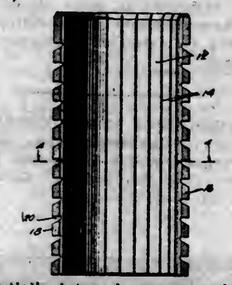
1,867,136. METHOD OF ABSORPTION. JULIAN A. CAMPBELL, Long Beach, Calif., Filed Dec. 17, 1927. Serial No. 240,742. Renewed Jan. 16, 1932. 6 Claims. Cl. 261—114.)

1. The method that includes first forming a froth of a liquid and a vapor laden gas, at a selected pressure, then expanding the froth in an atmosphere of the gas at a comparatively less pressure and thereby breaking the froth bubble-films into fine particles, there being an abrupt pressure change between the pressure at which the froth is formed and the pressure of the gaseous atmosphere in which the froth is broken up, and allowing the fine liquid



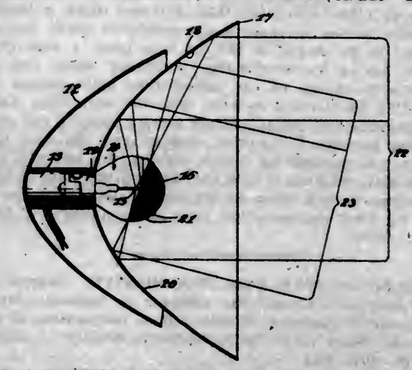
particles to settle in the gaseous atmosphere and to coalesce into a body of liquid out of contact with the froth being introduced into the gaseous atmosphere.

1,867,137. CAGE. FRED S. CARVER, East Orange, N. J., Filed July 31, 1928. Serial No. 296,530. 3 Claims. (Cl. 100—50.)



1. A substantially integral press cage having substantially longitudinal interior grooves and substantially circumferential exterior grooves in communication with one another at the crossings thereof.

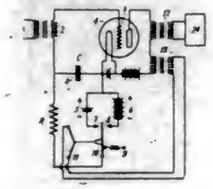
1,867,138. ELECTRIC LIGHT AND HEADLIGHT. BURTON CHRISTMAS, Saugerties, N. Y. Filed Sept. 12, 1930. Serial No. 481,475. 4 Claims. (Cl. 240—48.1.)



1. A headlight including a parabolic mirror, a lamp having a base and a filament adapted to throw a beam of

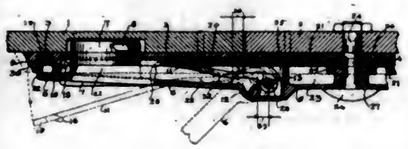
light reflected from the mirror, a reflecting shield adapted to shut off all rays of light from the filament except those that strike the mirror, and an extension of the shield at the bottom terminating in a vertical plane back of but adjacent to the focal plane of the parabolic mirror.

1,867,139. RADIO RECEIVING APPARATUS. HENRI JEAN JOSEPH MARIE DE REGNAULD DE BELLESCIZE, Paris, France, assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Mar. 30, 1927. Serial No. 179,469, and in France Apr. 13, 1926. Renewed Sept. 16, 1930. 12 Claims. (Cl. 250—27.)



1. Radio receiving apparatus of the class described, comprising a high frequency amplifier, an electromechanical relay controlled by the output of said amplifier, said relay having an armature connected to the control electrode of the amplifier, and a pair of contacts raised to different potentials arranged to cooperate with said armature, whereby variations in mean signal intensity will actuate the relay armature to contact with one or the other of said contacts to maintain the signal intensity substantially constant.

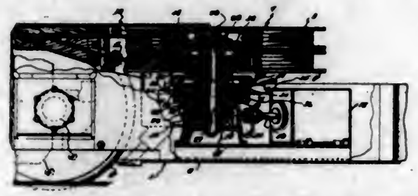
1,867,140. TRUNK LOCK AND COVERED BAIL. BENJAMIN H. ERWIN, Mishawaka, Ind., assignor to The Indestructo Trunk Company, Mishawaka, Ind., a Corporation of Ohio. Filed May 7, 1930. Serial No. 450,509. 2 Claims. (Cl. 70—115.)



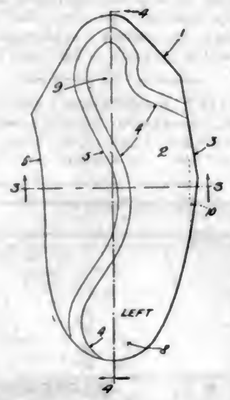
1. In trunks, a pair of base plates in alignment with each other, a flange bordering the extreme outside of both plates except at their adjacent edges, a locking member having an inner flange positioned inside and adjacent to the flange of the one base plate, a supporting plate having an inner flange positioned inside and adjacent the flange of the second base plate, means for pivoting the locking member onto the supporting plate, a swinging bail pivoted to the locking member and positioned between the locking member and the first base plate, and cooperating means between the bail and said base plate adapted to hold the bail and the plate in fixed relation to each other as the locking member is moved on its pivot to move the base plates toward or from each other.

1,867,141. CABLE REEL LOCOMOTIVE. SIDNEY W. FARNHAM, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 5, 1930. Serial No. 493,480. 9 Claims. (Cl. 191—12.)

1. In combination with a cable reel locomotive, means for supplying power to said locomotive comprising a plurality of single conductor cables insulated from each other and having connection with an outside source of power, winding means for supporting said cables on said locomotive comprising a separate winding drum for winding in or paying off each cable, said winding drums being insulated from each other and rotatable about a common vertical axis, and means for independently or simultaneously driving said winding drums comprising a motor, a driving member, a disk engaging one of said drums for supporting said drum and rotating said drum therewith, a friction disk interposed between said first mentioned disk and said driving member, a driving plate supported by said driving member and rotated thereby, a disk engaging said other drum for supporting said drum and rotating said other drum, and a friction disk interposed between said second mentioned disk and said driving plate.



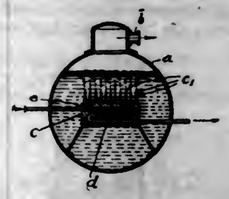
1,867,142. FOOTPAD. JOSEPH F. FLYNN, Brooklyn, N. Y. Filed July 30, 1931. Serial No. 554,030. 1 Claim. (Cl. 36—71.)



An arch supporting pad for insertion in a shoe, comprising a resilient member of the general outline of the shoe sole at the heel and shank portion, having a raised supporting portion adapted to underlie only the heel, the inner longitudinal arch, and the metatarsal arch of a foot; and a boundary portion sloping from the raised supporting portion to a marginal portion at a lower level, the edge of said marginal portion serving accurately to position the pad within the shoe.

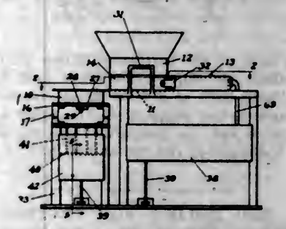
1,867,143. METHOD AND APPARATUS FOR CONTROLLING STEAM GENERATION. CARL FÖHL, Stockholm, Sweden, assignor to Ruthsaccumulator Aktiebolag,, Berlin, Germany, a Corporation of Sweden. Filed Feb. 2, 1929. Serial No. 337,117, and in Germany Feb. 17, 1928. 11 Claims. (Cl. 122—35.)

3. The method of storing and producing steam which comprises charging steam into a body of water when there is a surplus of steam to heat the body of water and store the steam, reducing the pressure above the surface of the body of water when there is a demand for stored steam to produce surface evaporation and introducing a relatively small amount of steam into the body of water below the surface to produce internal disturbance.



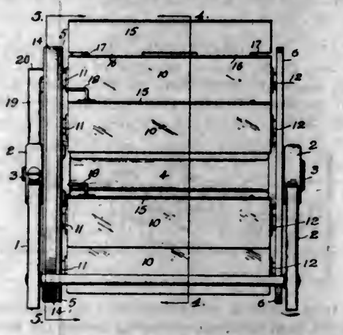
10. A steam storer comprising a shell having an extended vertical extent, a partition in said shell dividing the same into a number of compartments in circulatory relationship with each other, means to withdraw steam from said shell, means to charge steam into said shell and means in one of said compartments for producing localized steam generation in liquid contained in the shell.

1,867,144. CONCRETE MOLDING MACHINE. LOUIS GELBMAN, Yonkers, N. Y. Filed Jan. 24, 1930. Serial No. 422,984. 14 Claims. (Cl. 25—41.)



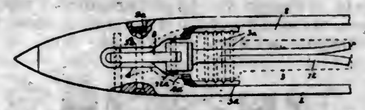
11. In a concrete molding machine, a resiliently supported mold, means for limiting the amplitude of possible motion of the mold, means for vibrating said mold and normally tending, without said limiting means, to vibrate molds of larger amplitudes, and said limiting means stopping the mold on each stroke of vibration, the resilient supporting of the mold being accomplished by a plurality of brackets interposed between a support frame and the mold and each bracket consisting of a top section connected with the mold, a bottom section connected with the support frame, a spring urging the sections apart, and means for adjusting the tension of said spring, comprising washers shimmed outside of the ends of said spring.

1,867,145. ROTARY CABINET. JONATHAN GODFREY, New York, N. Y. Filed Apr. 30, 1930, Serial No. 448,451. Renewed Dec. 8, 1931. 5 Claims. (Cl. 211—164.)



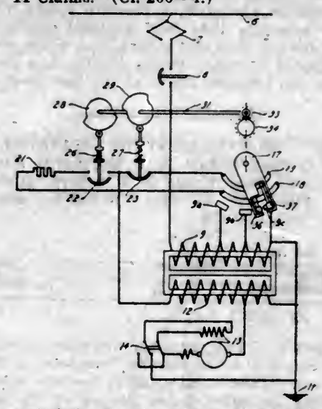
1. A rotary cabinet, comprising spaced standards, a connecting spindle rigidly secured thereto, a rotary sleeve journaled on said spindle, a pair of spaced disks secured to the ends of said sleeve, a central spur gear keyed to said spindle at one end thereof, a series of pinions journaled to one of said disks in circular disposition and meshing with said spur gear, a corresponding series of outer spur gears likewise journaled to said disk and meshing with said pinions, and receptacles between said disks and secured at one end to the shafts of said outer gears and having their other ends pivotally carried by the opposite disk.

1,867,146. SHUTTLE. ARNOLD GULDEMANN, Paterson, N. J., assignor to I. A. Hall & Co., Paterson, N. J., a Firm composed of Alice Van Gieson, Vaugh S. and Mary Hall, Albert H. Morehead, Sarah A. Roe, and Mary S. Warburton. Filed Apr. 15, 1931. Serial No. 530,160. 6 Claims. (Cl. 139—209.)



1. In combination, a shuttle body having a space therein open at one longitudinal face thereof, a trifurcate structure held in said body and having its prongs in said space and the two outer prongs on opposite sides of a plane extending lengthwise of the shuttle and through said face and forming wound-core-gripping jaws, and a spindle pivoted at its butt to the intermediate prong to move in said plane into and out of said space and into and out of position where a core therein will be gripped by the jaws.

1,867,147. TAP CHANGING SWITCH AND SYSTEM. ARNOLD HALLER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed May 29, 1931, Serial No. 540,964, and in Germany June 10, 1930. 11 Claims. (Cl. 200—4.)



1. In a switch for the step-wise making and breaking of electric circuits, a plurality of interrupted fixed contacts arranged in a circle, a plurality of continuous fixed contacts arranged in a circle, contacts for rolling movement over said fixed contacts, and means for moving said rolling contacts in steps over said fixed contacts.

1,867,148. FLUID COOLED ROLL. ALFRED L. HARRINGTON, Rosslyn Farms, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Aug. 13, 1930. Serial No. 474,898. 6 Claims. (Cl. 257—95.)

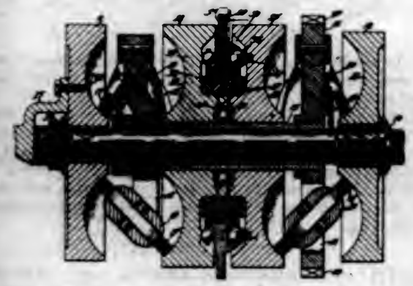
1. A glass forming or sizing roll with a cooling passage extending through its center longitudinally thereof and

having its surface provided with two series of slots one of which extends circumferentially of the roll at spaced intervals and the other of which extends longitudinally



of the roll at spaced intervals transversely of the first series, said slots being of relatively small width so that the glass will not flow into and fill them.

1,867,149. FRICTION TRANSMISSION. FRANK A. HAYES, Middletown, N. J. Filed Aug. 2, 1930. Serial No. 472,601. 9 Claims. (Cl. 74—34.)



1. In a friction transmission, the combination of a pair of disks adapted for unitary rotation and axial separation, at least one driving disk, friction rollers adapted for angular displacement disposed between said disks in driving relation therewith, a pressure means tending to move the separable disks into frictional driving contact with the driving disks and rollers, and torque responsive means adapted to create driving friction to a greater degree than said pressure means as the load goes on.

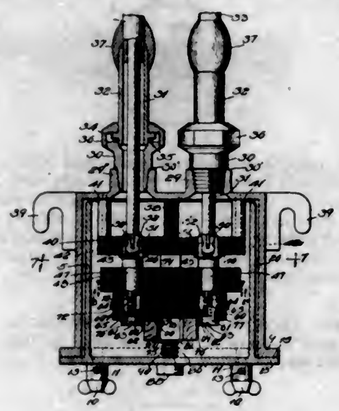
1,867,150. SELF-LUBRICATING SPINNING RING. HENRY C. HERR, Buffalo, N. Y., assignor to Herr Manufacturing Co. Inc., Buffalo, N. Y., a Corporation of New York. Filed Nov. 25, 1929. Serial No. 409,453. 7 Claims. (Cl. 118—59.)



1. A device of the character described, comprising a traverse ring for a bar traveler containing a lubricant-chamber and formed of an upper section and a lower section having oppositely-facing flanges at the inner peripheries thereof, said flanges being spaced apart in overlapping substantially vertical relation to provide a lubricant discharge passage, and a depending guard rim applied to the outer edge of the upper section and extending below the bottom side of the lower section.

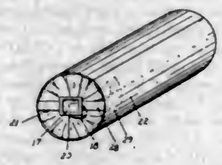
1,867,151. FUSED CUT-OUT. ALFRED HERZ, Chicago, Ill., assignor of one-half to Edmund O. Schweitzer, Chicago, Ill. Filed June 7, 1923. Serial No. 643,854. 19 Claims. (Cl. 200—120.)

1. In combination, a container, cut-out means disposed within the container and having leads entering the container and connected thereto, said container comprising a bottom part having an upstanding wall, directly surrounding the cut-out means and adapted for holding a liquid bath therefor, a cover having a depending wall surrounding the upstanding wall of said bottom part and forming a space between them adapted for communication above the cut-out means within the internal space of the container which is directly exposed to said cut-out means, means for securing the bottom part and cover together, the



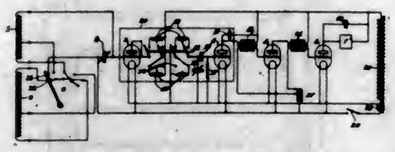
upstanding wall of the bottom container part extending to substantially the top of the cover part to hold the insulating liquid bath at a level to substantially the top of the container and away from the joint between the container parts and the depending wall of the top part completely surrounding the upstanding wall of the bottom part.

1,867,152. TAG HOLDER FOR TEXTILE FABRICS. JOHN RAYMOND HIGGINS, Mount Vernon, N. Y. Filed Dec. 16, 1929. Serial No. 414,414. 9 Claims. (Cl. 40—10.)



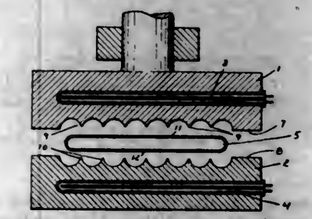
1. In combination, a roll of fabric, having an outer wrapper, a strip of flexible material extending across the end of such roll and having its ends disposed beneath said wrapper, and means medial of said strip for supporting a card in a visible position.

1,867,153. RADIORECEIVER. WILLIAM FOLWELL HOISINGTON, Paris, France, assignor to Gower H. Rees, London, England. Filed Nov. 25, 1927, Serial No. 235,525, and in Great Britain Dec. 1, 1926. 9 Claims. (Cl. 250—20.)



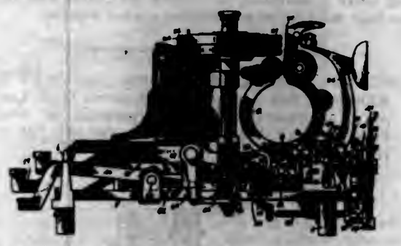
1. In a portable radio receiver, the combination of a sectional loop antenna, switching means for selecting one or more sections of said antenna and for connecting said section to the input circuit of a first three electrode tube, a second three electrode tube, and means for coupling the output circuit of the first tube to the input circuit of the second tube comprising a transformer having relatively adjustable primary and secondary windings, the inductance of each winding being approximately equal to the inductance of the corresponding antenna section.

1,867,154. METHOD OF FABRICATING VACUUM VESSELS. FRED HOTCHNER, Chicago, Ill. Filed Dec. 16, 1930. Serial No. 502,662. 13 Claims. (Cl. 49—84.)



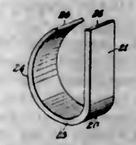
1. The method of fabricating a vessel of vitreous material having a generally flattened form which consists in heating a blank having a form approaching that of the desired finished article to a temperature at which it will flow under pressure but will not otherwise change its shape to an appreciable degree while passing through the steps of this process, positioning the same in a mould and applying fluid pressure within said article to blow the walls thereof into the recesses of said mould.

1,867,155. VARIABLE SPACING MECHANISM FOR TYPEWRITERS. JACK HUSTON and ARTHUR L. SLEE, San Francisco, Calif., said Slee assignor to said Huston. Filed Aug. 5, 1929. Serial No. 383,729. 12 Claims. (Cl. 197—84.)



10. In a variable spacing mechanism for typewriters, a variable stop to limit the movement of a carriage control pawl to regulate the amount of forward movement of the carriage of a typewriter when a letter or character is printed; and a pivoted lever mounted adjacent the type keys of the typewriter and connected to the stop, said lever being actuated to different positions by different keys, each position corresponding to the width of the letter or character printed.

1,867,156. CLAMPING DEVICE. WALTER C. JACKSON, Rahway, N. J., assignor to Tingley Reliance Rubber Corporation, Rahway, N. J., a Corporation of New Jersey. Filed Mar. 23, 1932. Serial No. 600,623. 7 Claims. (Cl. 280—152.)



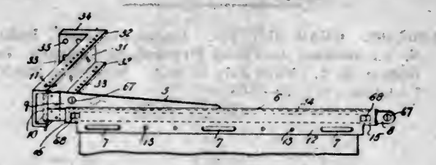
1. A rubber body formed into a pair of jaws having opposing faces presenting a slot between them opening into an enlarged cavity, there being a lip formed at the juncture of one of the jaw faces and the wall of the enlarged cavity, and a triangularly shaped free body of harder material than the rubber body and disposed within the mass of rubber rearwardly of the said lip.

1,867,157. ALL METAL GIMPED MATERIAL. RUSSELL B. KINGMAN, Orange, N. J., assignor to Metal Textile Corporation, West Orange, N. J., a Corporation of Delaware. Filed Nov. 1, 1930. Serial No. 492,781. 3 Claims. (Cl. 117—52.)



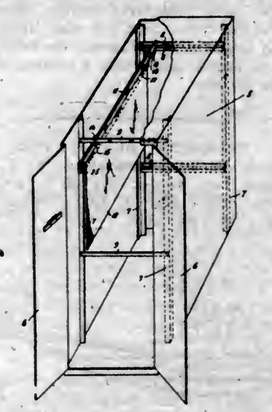
1. All metallic gimped material, comprising a flat ribbon-like metallic carrier member shaped to provide lateral projections more or less regularly spaced throughout its length, and metallic gimping spirally convolved about and extending longitudinally along said carrier member.

1,867,158. FILING DEVICE. FRED J. KLINE, Bayville, N. Y., assignor to Acco Products, Inc., Long Island City, N. Y., a Corporation of New York. Filed Feb. 11, 1931. Serial No. 514,957. 21 Claims. (Cl. 40—102.)



1. In a filing and display device, a unit comprising a supporting arm having means at one end to provide a pivotal support therefor, said arm including a flat strip at its upper edge spaced from the body of the arm and a member slidably mounted on the flat strip and having a plurality of spaced openings adapted to receive fasteners whereby sheets or other material are secured to the member.

1,867,159. FILING DEVICE. FRED J. KLINE, Bayville, N. Y., assignor to Acco Products, Inc., Long Island City, N. Y., a Corporation of New York. Filed Feb. 11, 1931. Serial No. 514,958. 15 Claims. (Cl. 129—16.)



1. In a filing device, a filing unit comprising a bar and a member having a downturned flange on its upper edge to engage the bar and slidably supported thereon and

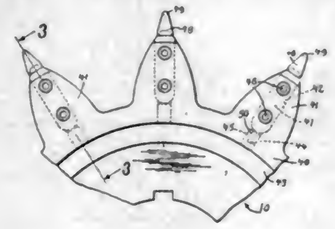
having a plurality of openings to receive fasteners whereby sheets and like material are secured thereto, spaced supports for the bar and means on the bar to engage the spaced supports.

1,867,160. ARMATURE SUPPORT FOR FOUR POLE LOUD SPEAKERS. WALTER KUNZE, Berlin, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 13, 1931, Serial No. 522,493, and in Germany June 21, 1930. 4 Claims. (Cl. 179—114.)



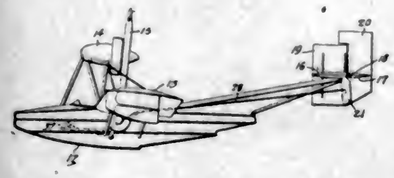
1. Apparatus for the interconversion of mechanical vibrations and electrical oscillations comprising pole pieces, an armature interposed between said pole pieces, a spring on said armature, supporting members for the ends of said spring, and a material of low-melting point surrounding the ends of said spring in said supporting member.

1,867,161. GEAR CUTTER. JAMES F. LEAHY, Buffalo, N. Y., assignor to Farrel-Birmingham Company, Inc., Buffalo, N. Y. Filed July 5, 1928. Serial No. 290,375. 7 Claims. (Cl. 29—105.)



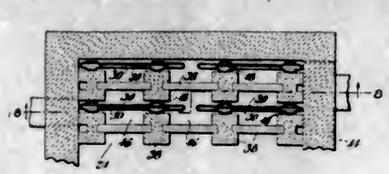
1. In a gear cutter, a disk-like body part having a series of circumferentially spaced apart projections of tooth-like form on the periphery thereof, each of said projections having a cutting bit receiving opening therein open only at the outer peripheral surface thereof and confined within the front, back and side walls of each projection, and means passing through the front wall of each projection to engage and clamp a cutting bit disposed in the opening therein.

1,867,162. TRIMMING DEVICE FOR AIRPLANES. THOMAS P. LEAMAN, Hempstead, N. Y., assignor to Amphibions, Inc., Garden City, N. Y., a Corporation of New York. Filed Mar. 4, 1931. Serial No. 520,020. 5 Claims. (Cl. 244—29.)



1. In an airplane having a tail portion including vertical and horizontal stabilizers, a fin extending between the vertical and horizontal stabilizers on each side of the vertical stabilizer, and each fin being inclined at an angle between the vertical and horizontal, means mounting each fin to turn about its longitudinal axis, and means for adjusting the positions of the fins.

1,867,163. HEAT RECUPERATION. HENRY O. LOEBELL, New York, N. Y., assignor to J. Louis Chavanne, Paris, France. Filed Jan. 26, 1925. Serial No. 4,880. 1 Claim. (Cl. 257—246.)



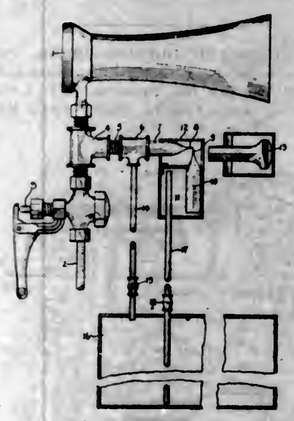
Apparatus for effecting transfer of heat from a heating gas to a gas to be heated through the medium of heat conducting walls which comprises a housing, heat conducting conduits extending therethrough and each comprising a flat, thin flue, means for passing gas to be heated through said conduits, a flat, thin plate of refractory material inside each flue and having heat absorbing and heating surfaces spaced from and substantially parallel to the inner walls of said flues, means for passing a heating gas through said housing in contact with the outer surfaces of said flues, refractory material in said housing between adjacent flues and outside the same, said outside refractory comprising supporting posts and flat plates mounted therebetween and spaced from said heat conducting flue walls to form flues for said heating gas, said heat conducting flue walls being provided at spaced points with protuberances engaging said supporting posts to maintain said outer flat plates and heat conducting flues in predetermined spaced relation.

1,867,164. LOOSE LEAF BINDER. ADOLPH G. LOTTER, Milwaukee, Wis., assignor to Stationers Loose Leaf Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 17, 1930. Serial No. 482,394. 12 Claims. (Cl. 129—9.)



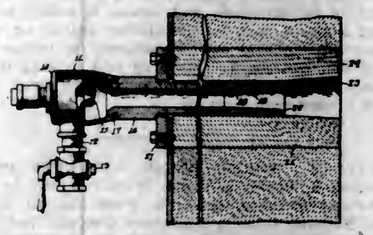
1. In a loose leaf binder adapted to contain record leaves, two series of impaling prongs having their ends normally engaged to form binder rings, means for mounting and guiding the series of impaling prongs for movement away from each other to permit removal and addition of record leaves, means mounting the impaling prongs of one series for tilting movement to stagger their ends with respect to the impaling prongs of the other series to effect longitudinal shifting of said leaves with respect to each other, and means for simultaneously tilting the prongs of said first series.

1,867,165. VISIBLE WHISTLE. GEORGE M. MARR and ARTHUR PHELPS MARR, New York, N. Y. Filed May 26, 1930. Serial No. 455,519. 4 Claims. (Cl. 116—4.)



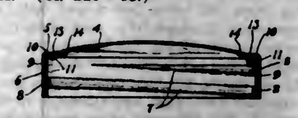
1. A whistle, and in combination therewith, an atomizing means, a reservoir adjacent thereto, a supply tank, and means for discharging a liquid from said supply tank into said reservoir upon each operation of the whistle.

1,867,166. FUEL BURNING DEVICE. GARNET W. McKEE, Rockford, Ill. Filed May 14, 1927. Serial No. 191,326. 4 Claims. (Cl. 158—1.)



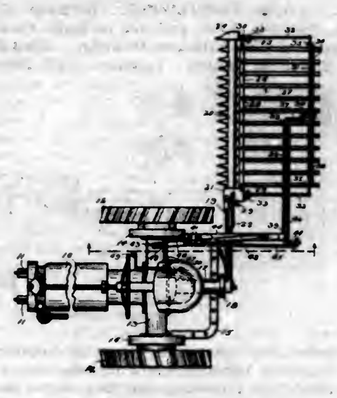
1. In combination with a combustion chamber wall having a passage therethrough, a fuel delivery tube extending into and terminating within said passage, means for projecting a combustible mixture through said tube, the extremity of the tube having a chamfered edge for producing eddy currents in the mixture along the wall of said passage, the internal diameter of the tube near its chamfered extremity being considerably less than the diameter of the part of the passage through which the mixture flows after leaving the tube.

1,867,167. CAP FOR JARS AND THE LIKE. AUGUST MITCHELL, New York, N. Y., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 18, 1930. Serial No. 445,246. 2 Claims. (Cl. 215—43.)



1. A jar having a mouth and an exterior locking shoulder, a metal cap comprising two parts only, one part providing a cover for the jar and having an outwardly extending peripheral flange and also having a skirt adapted for association with the jar and provided on its interior surface with cooperating locking devices produced by forming in the metal of the cap, the other part of the cap comprising an open ring enclosing the skirt and concealing the same and having a concentric inwardly extending peripheral flange extending over the cover flange, and concealed means carried by the ring and bearing against the inside of the cover for rigidly locking the cap and ring together.

1,867,168. HAY CUTTER AND DISTRIBUTOR. EARL L. NEUMEISTER and ANTON W. NEUMEISTER, Philip, S. Dak. Filed Dec. 12, 1930. Serial No. 501,980. 4 Claims. (Cl. 56—193.)



1. A hay gatherer comprising a slatted bottom, means for pivotally mounting the bottom at the rear side of the sickle, a buncher box arranged over the bottom and having a back plate and pivotally connected end plates, means for pivotally connecting the forward ends of the end plates to the opposite end portions of the sickle whereby the buncher box may adjust itself to the slatted bottom, a bracket structure adapted to be mounted in overhanging relation to the bottom, and means carried by the bracket structure and connected to the buncher box for swinging the same upwardly from the bottom at times.

1,867,169. HAIRPIN. IRVING H. PECK, Derby, Conn., assignor to The Sterling Pin Company, Derby, Conn. Filed Oct. 27, 1931. Serial No. 571,372. 11 Claims. (Cl. 132—50.)



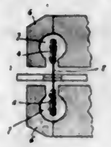
1. A hairpin comprising a single piece of material of round cross-section folded intermediate of its ends to form two legs, both of said legs being corrugated and at least one of said legs having a flattened portion back of the corrugated portion which imparts a spring action to the pin and causes the legs normally to be in contact with each other, said leg having the flattened portion being of round cross-section in front of said flattened portion.

1,867,170. GAME SCORING DEVICE. CHESTER M. POETSCH, Chicago, Ill. Filed Oct. 11, 1930. Serial No. 487,952. 7 Claims. (Cl. 281—44.)

1. A golf scoring device comprising frame means provided with means for detachably carrying a score card thereon, depending flange means on said frame means and

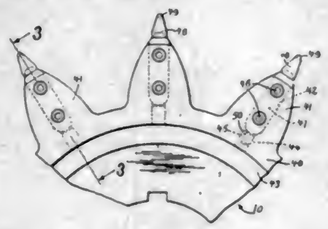
having a plurality of openings to receive fasteners whereby sheets and like material are secured thereto, spaced supports for the bar and means on the bar to engage the spaced supports.

1,867,160. ARMATURE SUPPORT FOR FOUR POLE LOUD SPEAKERS. WALTER KUNZE, Berlin, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 13, 1931, Serial No. 522,493, and in Germany June 21, 1930. 4 Claims. (Cl. 179—114.)



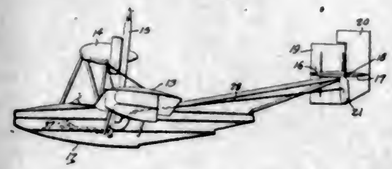
1. Apparatus for the interconversion of mechanical vibrations and electrical oscillations comprising pole pieces, an armature interposed between said pole pieces, a spring on said armature, supporting members for the ends of said spring, and a material of low-melting point surrounding the ends of said spring in said supporting member.

1,867,161. GEAR CUTTER. JAMES F. LEAHY, Buffalo, N. Y., assignor to Farrel-Birmingham Company, Inc., Buffalo, N. Y. Filed July 5, 1928. Serial No. 290,375. 7 Claims. (Cl. 29—105.)



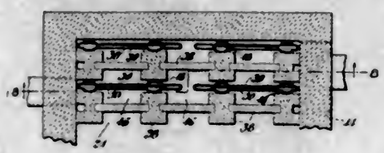
1. In a gear cutter, a disk-like body part having a series of circumferentially spaced apart projections of tooth-like form on the periphery thereof, each of said projections having a cutting bit receiving opening therein open only at the outer peripheral surface thereof and confined within the front, back and side walls of each projection, and means passing through the front wall of each projection to engage and clamp a cutting bit disposed in the opening therein.

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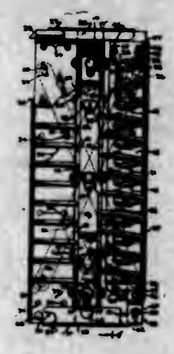
1. In an airplane having a tail portion including vertical and horizontal stabilizers, a fin extending between the vertical and horizontal stabilizers on each side of the vertical stabilizer, and each fin being inclined at an angle between the vertical and horizontal, means mounting each fin to turn about its longitudinal axis, and means for adjusting the positions of the fins.

1,867,163. HEAT RECUPERATION. HENRY O. LOEBELL, New York, N. Y., assignor to J. Louis Chavanne, Paris, France. Filed Jan. 26, 1925. Serial No. 4,880. 1 Claim. (Cl. 257—246.)



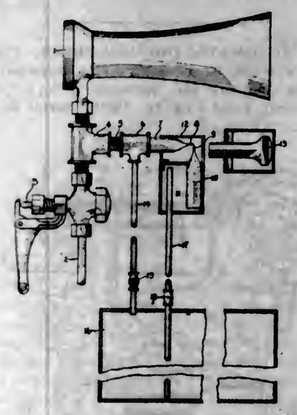
Apparatus for effecting transfer of heat from a heating gas to a gas to be heated through the medium of heat conducting walls which comprises a housing, heat conducting conduits extending therethrough and each comprising a flat, thin flue, means for passing gas to be heated through said conduits, a flat, thin plate of refractory material inside each flue and having heat absorbing and heating surfaces spaced from and substantially parallel to the inner walls of said flues, means for passing a heating gas through said housing in contact with the outer surfaces of said flues, refractory material in said housing between adjacent flues and outside the same, said outside refractory comprising supporting posts and flat plates mounted therebetween and spaced from said heat conducting flue walls to form flues for said heating gas, said heat conducting flue walls being provided at spaced points with protuberances engaging said supporting posts to maintain said outer flat plates and heat conducting flues in predetermined spaced relation.

1,867,164. LOOSE LEAF BINDER. ADOLPH G. LOTTER, Milwaukee, Wis., assignor to Stationers Loose Leaf Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 17, 1930. Serial No. 482,394. 12 Claims. (Cl. 129—9.)



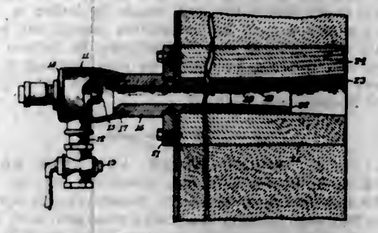
1. In a loose leaf binder adapted to contain record leaves, two series of impaling prongs having their ends normally engaged to form binder rings, means for mounting and guiding the series of impaling prongs for movement away from each other to permit removal and addition of record leaves, means mounting the impaling prongs of one series for tilting movement to stagger their ends with respect to the impaling prongs of the other series to effect longitudinal shifting of said leaves with respect to each other, and means for simultaneously tilting the prongs of said first series.

1,867,165. VISIBLE WHISTLE. GEORGE M. MARR and ARTHUR PHELPS MARR, New York, N. Y. Filed May 26, 1930. Serial No. 455,519. 4 Claims. (Cl. 116—4.)



1. A whistle, and in combination therewith, an atomizing means, a reservoir adjacent thereto, a supply tank, and means for discharging a liquid from said supply tank into said reservoir upon each operation of the whistle.

1,867,166. FUEL BURNING DEVICE. GARNET W. MCKEE, Rockford, Ill. Filed May 14, 1927. Serial No. 191,326. 4 Claims. (Cl. 158—1.)



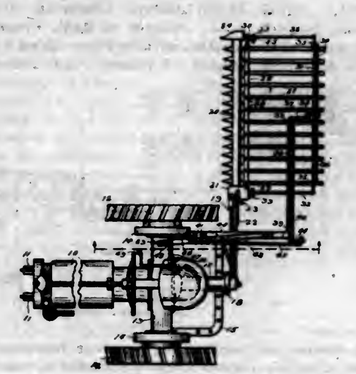
1. In combination with a combustion chamber wall having a passage therethrough, a fuel delivery tube extending into and terminating within said passage, means for projecting a combustible mixture through said tube, the extremity of the tube having a chamfered edge for producing eddy currents in the mixture along the wall of said passage, the internal diameter of the tube near its chamfered extremity being considerably less than the diameter of the part of the passage through which the mixture flows after leaving the tube.

1,867,167. CAP FOR JARS AND THE LIKE. AUGUST MITCHELL, New York, N. Y., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 18, 1930. Serial No. 445,246. 2 Claims. (Cl. 215—43.)



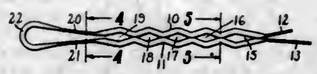
1. A jar having a mouth and an exterior locking shoulder; a metal cap comprising two parts only, one part providing a cover for the jar and having an outwardly extending peripheral flange and also having a skirt adapted for association with the jar and provided on its interior surface with cooperating locking devices produced by forming in the metal of the cap, the other part of the cap comprising an open ring enclosing the skirt and concealing the same and having a concentric inwardly extending peripheral flange extending over the cover flange, and concealed means carried by the ring and bearing against the inside of the cover for rigidly locking the cap and ring together.

1,867,168. HAY CUTTER AND DISTRIBUTOR. EARL L. NEUMEISTER and ANTON W. NEUMEISTER, Philip, S. Dak. Filed Dec. 12, 1930. Serial No. 501,980. 4 Claims. (Cl. 56—193.)



1. A hay gatherer comprising a slatted bottom, means for pivotally mounting the bottom at the rear side of the sickle, a buncher box arranged over the bottom and having a back plate and pivotally connected end platea, means for pivotally connecting the forward ends of the end plates to the opposite end portions of the sickle whereby the buncher box may adjust itself to the slatted bottom, a bracket structure adapted to be mounted in overhanging relation to the bottom, and means carried by the bracket structure and connected to the buncher box for swinging the same upwardly from the bottom at times.

1,867,169. HAIRPIN. IRVING H. PECK, Derby, Conn., assignor to The Sterling Pin Company, Derby, Conn. Filed Oct. 27, 1931. Serial No. 571,372. 11 Claims. (Cl. 132—50.)

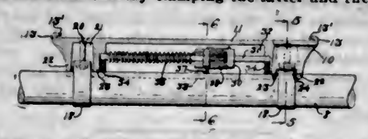


1. A hairpin comprising a single piece of material of round cross-section folded intermediate of its ends to form two legs, both of said legs being corrugated and at least one of said legs having a flattened portion back of the corrugated portion which imparts a spring action to the pin and causes the legs normally to be in contact with each other, said leg having the flattened portion being of round cross-section in front of said flattened portion.

1,867,170. GAME SCORING DEVICE. CHESTER M. POETSCH, Chicago, Ill. Filed Oct. 11, 1930. Serial No. 487,952. 7 Claims. (Cl. 281—44.)

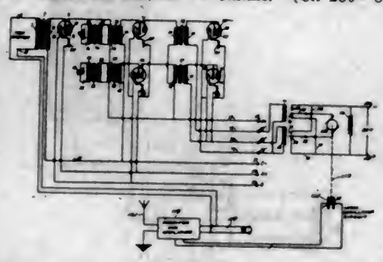
1. A golf scoring device comprising frame means provided with means for detachably carrying a score card thereon, depending flange means on said frame means and

band means co-operating therewith for clasping a golf club therebetween, and adjusting means for tightening said band means and thereby clamping the latter and the flange



means upon said club, so that this device will be held in position for readily keeping score and can be readily detached from the club without marring the same.

1,867,171. TONE STABILIZING. RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 26, 1929. Serial No. 342,841. 7 Claims. (Cl. 250—8.)



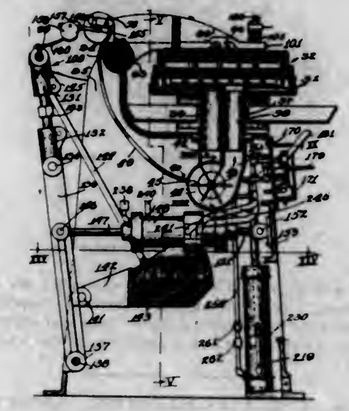
1. A system for maintaining constant frequency from received signaling impulses which includes means for receiving signals and producing beat frequencies therefrom, a circuit tuned to a frequency above that of the normal beat frequency resulting from said received signals coupled to said receiving means, a circuit tuned to a frequency below that of the normal beat frequency resulting from said received signals also coupled to said receiving means, and means responsive to the output energy of each of said circuits for controlling and maintaining constant beat frequency from the received signals in accordance with the differential output energy of each of said circuits.

1,867,172. PHOTOGRAPHIC STRIP FEEDING MECHANISM. RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 14, 1930. Serial No. 461,073. 17 Claims. (Cl. 95—94.)



1. In a developing apparatus for photographic strips, a plurality of tanks, means in each tank for conveying a film in reverse directions within the tank, said means comprising oscillatory members for intermittently moving said film and stationary guiding means intermediate two tanks whereby the film from one tank may be delivered to the feeding means of the second tank.

1,867,173. AUTOMATIC IRONING PRESS. CHARLES O. REEPS, Syracuse, N. Y., assignor to National Laundry Machinery Company, Inc., Syracuse, N. Y., a Corporation of Delaware. Filed Aug. 16, 1929. Serial No. 386,339. 4 Claims. (Cl. 68—9.)



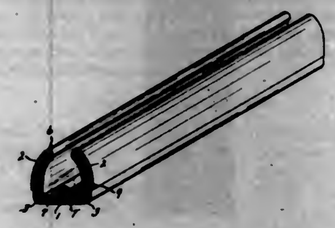
4. In combination in an ironing machine, an ironing buck having a chamber and a padding disposed thereover adapted to be ballooned, and means including a duct forming a closed path for circulating heated air under pressure through said chamber whereby to balloon said padding and whereby an article on said padding is continuously subjected to heat and conveyance away therefrom of the moisture-laden air.

1,867,174. YOKE, COLLAR, AND CUFF PRESS. CHARLES O. REEPS, deceased, Waukegan, Ill., by Harriette Estelle Reeps, executrix, Waukegan, Ill., assignor to National Laundry Machinery Company, Inc., Syracuse, N. Y., a Corporation of Delaware. Filed Jan. 2, 1930. Serial No. 418,124. 2 Claims. (Cl. 68—9.)



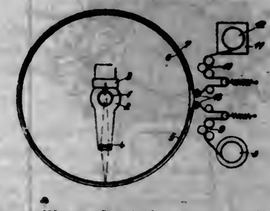
2. In an ironing machine, the combination of a supporting framework, a unitary buck structure mounted on said framework and comprising a plurality of buck heads separated from each other for receiving separate parts of an article to be ironed, padding on each buck head, each buck head having an inner air space and a surrounding outer air space below and open to the padding, passageways through the buck structure connecting the inner spaces of the heads together and passageways through the buck structure connecting the outer passageways of the buck heads together, an air circulating device connected with said passageways to cause circulation of air under pressure therethrough and through the inner and outer air spaces of said heads whereby to cause raising or ballooning of the padding, and a common ironing head adapted to be moved into ironing cooperation with the article parts on said paddings.

1,867,175. WINDOW CHANNEL. JAMES S. REID, Shaker Heights, Ohio, assignor to The Reid Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 8, 1930. Serial No. 480,429. 2 Claims. (Cl. 296—44.5.)



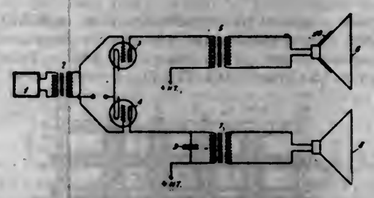
1. A window channel, comprising an inner thin spring sheet metal core bent into substantially U-form with the side flanges extending inward to engage the glass pane, a coating of rubber surrounding the entire core and thickened in the base of the channel to form a half-round spacer bead, a rope-like core in said bead, and a soft fabric covering upon the inner surface of the channel and extending over and down upon the outside of the flanges.

1,867,176. OSCILLOGRAPH. ERICH RUCKMANN, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed July 10, 1930, Serial No. 467,117, and in Germany June 18, 1929. 12 Claims. (Cl. 234—1.5.)



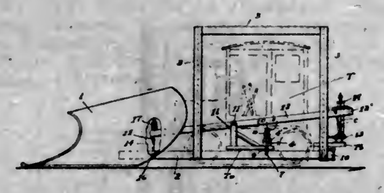
1. In an oscillograph of the type in which the oscillations to be measured are optically projected on to a film by a bifilar suspension upon which is mounted a mirror controlled by an alternating current field, a stationary sensitized film, and a revolving optical system.

1,867,177. LOUD SPEAKER. HENRY JOSEPH ROUND, Westfield, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 3, 1930, Serial No. No. 418,173, and in Great Britain Jan. 10, 1929. 4 Claims. (Cl. 179—1.)



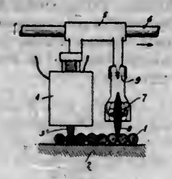
1. Sound reproducing apparatus comprising two loudspeakers of the same type and response characteristics, both of said loudspeakers being adapted to normally reproduce sound at both high and low frequencies, means for reducing the high frequency output of one of said loudspeakers only, and stiffening means applied to the diaphragm of the other loudspeaker to increase its output at the higher frequencies.

1,867,178. SNOWPLOW EQUIPMENT. DON A. SARGENT, Portland, Me., assignor to Maine Steel Products Company, Portland, Me., a Corporation of Maine. Filed Oct. 21, 1930. Serial No. 490,235. 10 Claims. (Cl. 37—44.)



1. In a snow plow equipment or the like, a nose member, a frame adapted to receive a tractive vehicle, a draw-bar connection at the rear thereof, means for yieldingly suspending the frame at four points from the vehicle in advance of the draw-bar connection two of said four points of suspension being located at one side of the plow in substantially longitudinal alinement with each other and the other two of said four points of suspension being located at the other side of the plow and in substantially longitudinal alinement with each other substantially opposite said first named pair of suspension points, whereby the entire weight of the plow is symmetrically carried by said tractive device.

1,867,179. TELEGRAPHONE. FRITZ SCHROETER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Oct. 9, 1930, Serial No. 487,461, and in Germany Nov. 19, 1929. 7 Claims. (Cl. 179—100.2.)

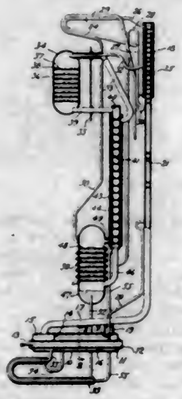


1. A telephone arrangement which comprises in combination a cylindrical sound record carrier adapted to be rotated at a uniform speed, a plurality of turns of magnetizable wire closely disposed on the surface of said carrier, a guide rod disposed parallel to the axis of said carrier, a sleeve adapted to slide on said guide rod, a working magnet adapted to be supported by said sleeve, a pole piece for said magnet adapted to be supported adjacent various turns of said wire, a link member adapted to be carried by said sleeve member, and a guide member pivotally mounted on said link member, adapted to operate in the groove between the turns of wire so as to move the sleeve member relative to said carrier member in the direction of its axis, and thus move the working magnet and its pole piece to keep it adjacent a turn of the wire as the carrier member rotates.

1,867,180. CEMENTITIOUS COMPOSITION AND METHOD OF MAKING SAME. ADOLF SCHWALZ, Farm Colony, Staten Island, N. Y. Filed Mar. 27, 1931. Serial No. 525,873. 4 Claims. (Cl. 106—24.)

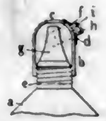
1. A slow setting cementitious composition consisting of magnesium oxid 2 parts, alum 2 parts, caustic soda 3 parts, salt 1 part, lime 100 parts, water 67 parts, a pigment 2 parts and a filler 125 parts substantially as described.

1,867,181. REFRIGERATION. FOLKE EMIL SELLMAN, White Plains, N. Y., assignor, by mesne assignments, to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 11, 1929. Serial No. 346,130. 4 Claims. (Cl. 62—119.5.)



3. Absorption refrigerating apparatus comprising a generator, an evaporator, an absorber, means to circulate an absorption liquid between and through the generator and absorber comprising a thermo-siphon tube extending downwardly into the generator, a flue extending longitudinally through the generator located within the lower part of the said generator, the top of the flue being below the bottom of the thermo-siphon tube and heating means for said flue.

1,867,182. CLOSURE FOR COLLAPSIBLE TUBES. PAUL SICAULT, Paris, France, assignor to Societe Anonyme Etablissements Tissier, Paris, France. Filed Aug. 6, 1929, Serial No. 383,830, and in France July 16, 1929. 3 Claims. (Cl. 221—60.)



1. A closure for a collapsible tube, including the combination, with a threaded end on said tube, an apertured cap normally screwed on said threaded end and a yoke swingably mounted on said cap, of a tapered extremity surmounting the threaded end of said tube, and an enclosed yielding body for sealing said tapered extremity carried upon said yoke and arranged in line with said tapered extremity and exposed toward the same when said yoke is swung to its uppermost position over the aperture in said cap, the screwing on of the same cap causing said tapered extremity to extend into the aperture of said cap and directly meet and engage said yielding body so as to be closed thereby when said cap is screwed down upon said threaded end while said yielding body is aligned with said tapered extremity.

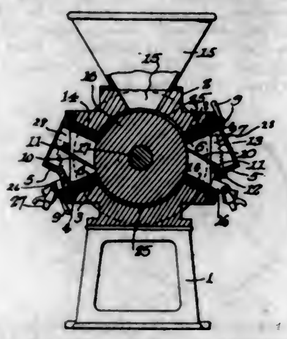
1,867,183. INSULATING TAPE. PAUL SIMONS, Weissig, Buhlau, near Dresden, Germany. Filed Aug. 1, 1930, Serial No. 472,312, and in Germany Jan. 18, 1929. 6 Claims. (Cl. 154—2.6.)

6. A method of transforming bias cloth having warp and weft threads crossing at right angles into insulating tape having its warp and weft threads inclined at an acute angle pointing in longitudinal direction of the tape, consisting in stretching square mesh bias cloth in a direction in parallel to its lateral edges until the said warp and weft threads form the desired acute angle, im-



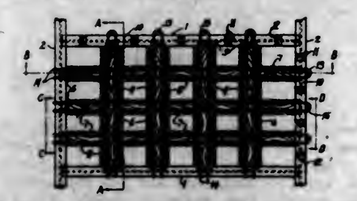
pregnating the stretched cloth with varnish and cutting the stretched and varnished cloth longitudinally of its edges into strips of suitable width to form the tape.

1,867,184. MILL FOR GRINDING PAINTS, ENAMELS, INKS, AND OTHER VISCOUS SUBSTANCES. SIDNEY SMITH, Lyncroft, England, assignor to Louis Lincoln Drake, Riverside, Conn. Filed Mar. 20, 1931, Serial No. 524,179, and in Great Britain June 24, 1930. 8 Claims. (Cl. 83—22.)



3. In a mill for grinding paints, enamels, inks and other viscous substances, the combination of a casing, a hopper in said casing, a grinding roller mounted and totally enclosed in the casing whereby the circumferential surface and ends are completely immersed in the material to be ground, grinding members bearing on the roller, and completely enclosed outlet chambers positioned in the casing and spaced from the hopper, the grinding members being mounted in said outlet chambers.

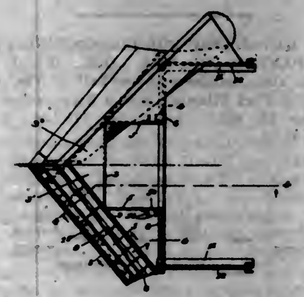
1,867,185. HOLDING MEMBERS FOR REENFORCEMENT TENSIONING MEANS. HENRY SORENSEN, San Francisco, Calif. Filed Mar. 25, 1931. Serial No. 525,184. 3 Claims. (Cl. 72—71.)



1. In a device to impart initial tension into the reenforcements of a bay composed of two pairs of opposed beams in a concrete floor including means to hold said

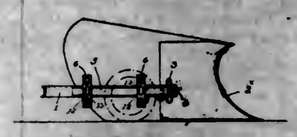
reenforcements to said beams while under tension, the combination of one set of spaced strut members intermediate the one of said opposed pairs, lateral spaced strut members intermediate the individual members of said first set, said lateral members extending from said first members to the other pair of said opposed beams, means to hold said lateral members in place, and said first members and said lateral members isolated from the concrete, whereby said members may be removed after said concrete has set into cohesion with said reenforcements.

1,867,186. SNOWPLOW. GEORGE C. SOULE and JOHN B. WOODBURY, South Portland, Me., assignors to Maine Steel Products Company, Portland, Me., a Corporation of Maine. Filed Oct. 18, 1929. Serial No. 400,549. 10 Claims. (Cl. 37—44.)



7. In an integrated snow plow nose, a pair of reinforcing members having spaced webs extending outwardly therefrom, and a pair of mold plates fastened to the webs of said members.

1,867,187. SNOWPLOW. GEORGE C. SOULE and JOHN B. WOODBURY, South Portland, Me., assignors to Maine Steel Products Company, Portland, Me., a Corporation of Maine. Filed Sept. 29, 1930. Serial No. 485,257. 15 Claims. (Cl. 37—44.)

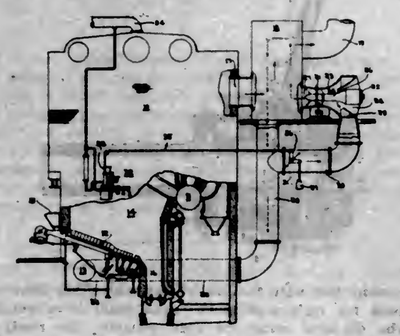


1. In a snow plow rig for trucks or the like, a pair of push arms adapted to contact a plow nose beyond the end of the truck frame, a pair of frame clamp members for each arm, means for adjustably clamping said frame clamp members to frames of different depth and thickness, a pair of coacting arm clamp members, means for adjustably clamping an arm between said arm clamp members in different positions relative to the frame clamp members.

1,867,188. METHODS OF FORMING ARTIFICIAL SILK, ETC., OF MAT APPEARANCE. JOHANN JOSEPH STOECKLY, Teltow-Seehof, and EBHARD WITTE, Berlin-Lichterfelde, Germany. Filed Apr. 25, 1930, Serial No. 447,418, and in Germany Apr. 17, 1929. 5 Claims. (Cl. 18—54.)

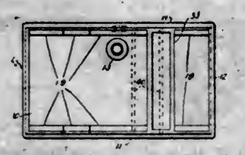
1. In the production of artificial cellulosic materials of the class described possessing a mat appearance, the steps of incorporating in the cellulosic spinning solution an emulsified suspension of an organic substance which is insoluble in the spinning solution, thereafter extruding the spinning solution and extracting the organic substance prior to drying the product and while the artificial cellulosic material is in a swollen condition.

1,867,189. COMBUSTION APPARATUS. EARLL R. STONE, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 1, 1931. Serial No. 554,477. 6 Claims. (Cl. 110—56.)



1. In combustion apparatus, the combination with a furnace having an air inlet and a waste gas outlet; of an air preheater utilising the heat of the waste gases discharged from the furnace to preheat the air supplied to the furnace for supporting combustion; conduit means for conveying such preheated air from the preheater to the air inlet of the furnace; fluid translating means for delivering air under pressure to the preheater; means for by-passing the preheated air from said conduit means to the inlet of the fluid translating means; and means for controlling the flow of fluid through the by-passing means.

1,867,190. DEVELOPING TANK. CHARLES F. STOUT, Chicago, Ill,, assignor to General Electric X-Ray Corporation, Chicago, Ill., a Corporation of New York. Filed Jan. 23, 1928. Serial No. 248,589. 11 Claims. (Cl. 95—96.)

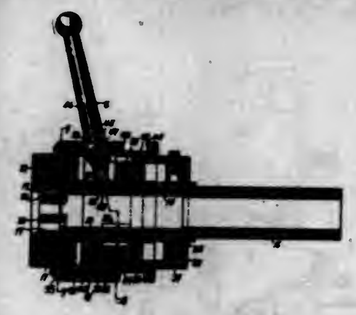


1. In combination, a rectangular sectional tank having a removable longitudinal internal rim, a portion of which is adapted to be removed to admit of an auxiliary tank being disposed therein, the distance from between the internal edges of said main tank with said removable rim detached being the same as the rim to rim external breadth of said auxiliary tank.

1,867,191. CONVERTIBLE ROTARY AND NONROTARY SELF-OPENING DIE-HEAD. ROYCE M. STRICKLAND, New Haven, Conn., assignor to The Geometric Tool Company, New Haven, Conn., a Corporation. Filed May 19, 1931. Serial No. 538,449. 5 Claims. (Cl. 10—95.)

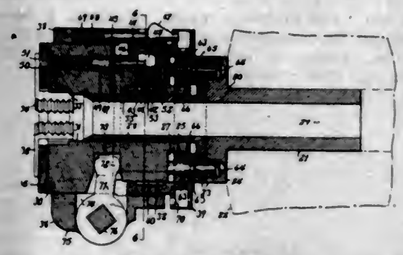
5. In a convertible rotary and non-rotary self-opening die-head, the combination as a unitary structure for oper-

ation in either capacity; of a body-member and chasers thereof; a reciprocating chaser-controlling sleeve formed with a forwardly-facing annular chaser-releasing shoulder and with a rearwardly-facing annular chaser-resetting shoulder, both adapted to be engaged by a relatively fixed member carried by a threading machine to which said die-head is applied, said member adapted to effect the retraction and resetting of the said chasers by appropriate reciprocation of said sleeve; and a combined chaser-releasing and chaser-resetting hand-lever having an opera-



tive connection with the said chaser-controlling sleeve and adapted for reciprocating the same, said lever mounted in the die-head structure with capacity for ready removal therefrom without disassembling the same; whereby two optional means are provided for operating the said chaser-controlled sleeve without disturbing the unitary die-head structure, so that the die-head may be readily converted from a non-rotary to a rotary die-head by the removal of the said lever and vice versa by the re-installation of the said lever.

1,867,192. SELF OPENING DIE-HEAD. ROYCE M. STRICKLAND, New Haven, Conn., assignor to The Geometric Tool Company, New Haven, Conn., a Corporation. Filed May 28, 1931. Serial No. 540,542. 5 Claims (Cl. 10—95.)



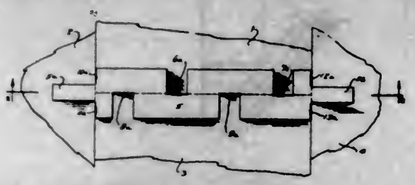
1. In a pull-off die-head, the combination with a mounting-member formed with a forwardly-facing diametrical coupling-groove provided in each of its respective opposite side walls with a forwardly-and-inwardly-inclined shoulder; of a chaser-carrying member carried by the said mounting-member with capacity for relative axial sliding movement with respect thereto and provided with a rearwardly-extending coupling-tang having sliding engagement with the walls of the forwardly-facing diametrical coupling-groove in the said mounting-member; chasers mounted in the said chaser-carrying member; a chaser-operating member operatively engaged with the said chasers for controlling the same and formed with a locking-shoulder; and a locking member mounted in the coupling-tang of the said chaser-carrying member in position to engage the locking-shoulder of the said chaser-operating member and having each of its opposite ends engaged respectively with the inclined shoulders in the coupling-groove of the said mounting-member.

1,867,193. KERR CELL. RICHARD SWINNE, Berlin-Steglitz, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Oct. 25, 1930, Serial No. 491,185, and in Germany Oct. 25, 1929. 3 Claims. (Cl. 88—61.)



1. A method of operating Kerr cells which comprises supplying signal potentials to the cell, simultaneously supplying biasing potentials to the cell, and upon interruption of the signals supplied to the Kerr cell changing the polarity of the biasing potential supplied thereto.

1,867,194. METAL CLIP FOR CONNECTING PLASTER BOARD PANELS AND THE LIKE. ROY J. TAYLOR, Ashtabula, Ohio, assignor of one-half to The American Gypsum Co., Port Clinton, Ohio, a Corporation of Ohio. Filed June 13, 1931. Serial No. 544,146. 2 Claims. (Cl. 72—118.)



1. A clip for connecting plaster board panels and the like, comprising a flat plate having a line of tongues projecting from one side thereof at the middle line of the plate, cut and bent in alternation at opposite edges of the plate with oppositely directed flanges at the ends of the tongues respectively, said flanges being parallel to the plate, to engage the edges of panels at opposite sides of the tongues.

1,867,195. HEAVY DUTY VALVE. MARTIN P. TELLER, Philadelphia, Pa., assignor to Schutte and Koerting Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 14, 1930. Serial No. 452,173. 5 Claims. (Cl. 277—37.)



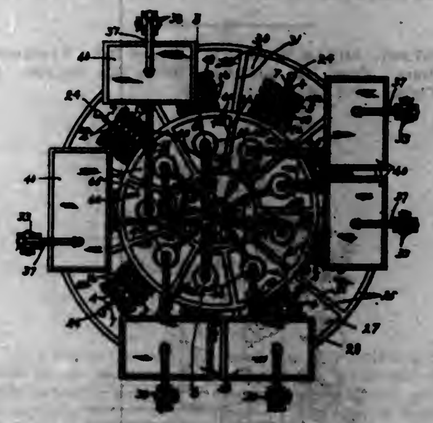
1. In a valve structure, the combination of a casing having a valve seat interiorly thereof, a movable valve member located within said casing and cooperating with said seat to open and close the passageway through said valve casing, said valve member having a passageway therethrough, a pilot valve for opening and closing the said passageway, said pilot valve having a stem which projects from the said casing and also having an opening extending through the said valve and stem axially thereof, a rod extending through said opening and having connection at one end with the said valve member, and means acting upon the opposite end of said rod which tends to hold the said valve member in closed position.

1,867,196. TRAWL GEAR. JEAN BAPTISTE JOSEPH ALPHONSE VIGNERON, La Rochelle, France, assignor to V. D. Limited, London, England. Filed June 12, 1931, Serial No. 543,840, and in France July 24, 1930. 2 Claims. (Cl. 43—9.)



1. A trawl net embodying a rear pocket, a covering sheet, rigid members at the inlet of said rear pocket, further rigid members at the front corners of the covering sheet, a traction cable attached to the corresponding lower lateral edge of the covering sheet and to the corresponding rigid members at a material distance above the base thereof, whereby said traction cables are raised above the ground by said rigid members and weighted flexible curtain-like members freely suspended from said traction cables.

1,867,197. APPARATUS FOR PROCESSING YARN. WALTER C. VOLK, Rome, N. Y., assignor to Skenandoa Rayon Corporation, Utica, N. Y., a Corporation of Delaware. Filed June 15, 1929. Serial No. 371,280. 13 Claims. (Cl. 8—19.)



1. A yarn processing apparatus comprising a rotatable supporting means, a chambered head secured to the supporting means having an inlet and a plurality of outlets, a plurality of removable members having perforated walls secured in a liquid-tight manner to the head, each one of said members registered with an outlet from the head, means connected with the head for draining said head, feeding means connected with the head adapted to supply fluid through the head to the interiors of said members, and fluid-supplying means adapted at a predetermined position to supply fluid to the feeding means.

1,867,198. ROTARY PUMP. CHARLES F. WAITE, Somerville, Mass., assignor of one-half to Archibald W. Johnston, Bridgeport, Conn. Filed Apr. 10, 1930. Serial No. 443,054. 14 Claims. (Cl. 103—160.)



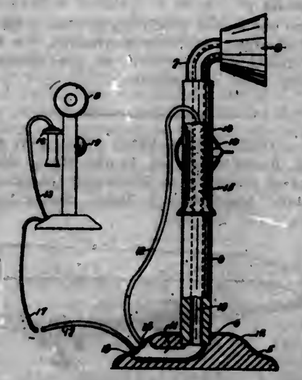
1. A rotary pump having, in combination, a rotor, a piston mounted for reciprocation in said rotor and provided with a groove, eccentric positioning means in said groove reciprocating with respect to the piston, passages in said rotor leading to an internal pumping chamber defined by surfaces of the rotor and said eccentric positioning means, whereby the reciprocation of said means relatively to the rotor surface produces a pumping effect complementary to the operation of the piston.

1,867,199. PROJECTION SCREEN. ERNEST WILDHABER, Brooklyn, N. Y. Filed Mar. 11, 1930. Serial No. 434,963. 7 Claims. (Cl. 88—24.)



7. A projection screen of concave and substantially cylindrical shape, containing a system of wave like corrugations of curved and constant profile extending along the straight line elements of said cylindrical shape, and another system of finer corrugations extending over the first said corrugations in a general direction at right angles thereto.

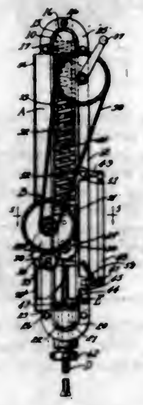
1,867,200. VOICE TRANSMITTER. HENRY W. ADAMS, Cincinnati, Ohio. Filed Mar. 21, 1931. Serial No. 524,285. 6 Claims. (Cl. 181—20.)



1. In a portable voice transmitting and receiving means, the combination of a telephone body having a chamber therein, an ear and a mouth appliance, relatively

independent and movable, and each communicating with said chamber, and a tube communicating at one end with said chamber and at the other end with the chamber of a second and similar voice transmitting means.

1,867,201. HAMMER. WALTER A. BABB, Glendale, Calif. Filed Dec. 12, 1927. Serial No. 239,445. 2 Claims. (Cl. 255—42.)



1. A device of the character disclosed, including a supporting frame, a hammer block mounted for reciprocation within such frame, means for reciprocating such hammer block, means for holding a bit in position in the path of such hammer block, means for rotating such holding means, such rotating means including a ratchet on such holding means, a lever pivoted to the frame, a portion of such lever lying in the path of the hammer block and adapted to be operated during the up-stroke thereof, a bell-crank lever pivoted to the frame, a pawl carried by such bell-crank lever and adapted to actuate the ratchet, and a connection between the first named lever and the bell-crank lever, whereby reciprocation of the hammer block serves to rotate such holding means.

1,867,202. BLUE SULPHUR COLOR AND PROCESS OF MAKING THE SAME. GEORGE BARNHART, Salem, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 13, 1926. Serial No. 81,106. 22 Claims. (Cl. 260—19.)

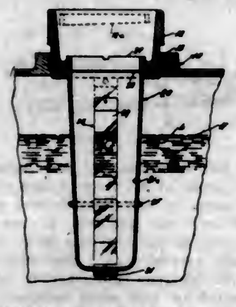
1. In the process of producing a blue sulphur dye by thionating dinitro-hydroxy-diphenylamine, the step which comprises treating the product of the thionation with caustic soda prior to oxidation.

1,867,203. COMBINED SPRING CLIP AND SNUBBER. WILLIAM BLACKMORE and ELMER BELL, Sharon, Pa., assignors of one-third to William C. Blackmore, Cleveland, Ohio. Filed Apr. 7, 1930. Serial No. 442,082. 8 Claims. (Cl. 267—53.)



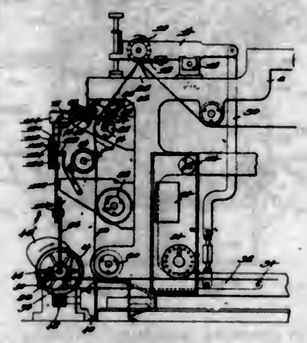
1. The combination with a spring composed of superposed leaves, of a shock absorber comprising a resilient steel clip having spaced arms adapted to receive a plurality of superposed leaves of the spring between them and to clamp said leaves with spring pressure, one of said arms having a flat bearing portion of less width than the arm, said bearing portion of the arm extending longitudinally and engaging the leaf on one face of the spring, the other arm having a bearing projection opposite said flat bearing portion and centrally disposed with respect thereto, said projection having rocking engagement with the leaf on the face of the spring opposite that engaged by the flat bearing portion.

1,867,204. LIQUID LEVEL GAUGE. CHARLES F. H. BOHNHARDT, Lynwood, Calif., assignor to Julian A. Campbell, Long Beach, Calif. Filed Dec. 5, 1928. Serial No. 324,039. 5 Claims. (Cl. 73—54.)



3. A liquid level gauge embodying a vertically extending sight tube around which liquid is adapted to rise, the interior of the tube being visible from its upper end and sealed against the entrance of liquid, said tube having a downwardly and inwardly inclined transparent wall, a light reflecting surface outside said transparent wall and spaced therefrom, the space between the reflecting surface and said member communicating with the liquid, and the interior of the tube exclusive of said transparent wall being coated so as to appear substantially white.

1,867,205. SHEAR MACHINE. ADOLPH BORN, Lawrence, Mass. Filed Jan. 31, 1929. Serial No. 336,498. 2 Claims. (Cl. 26—17.)



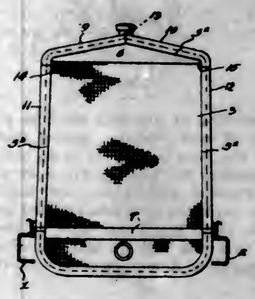
1. A shear machine comprising a shear cylinder and blade, a feeler adapted to be engaged by a seam or imperfection in the material to be sheared, a feeler switch associated with the feeler, a motor, means for starting the motor upon closing of the feeler switch, a cam associated with the motor, connections between the cam and the shear cylinder and blade for lifting the cylinder and blade out of engagement with the material, a crank associated with the motor, a motor switch adapted to be closed upon movement of the crank, a counter associated with the crank, the motor switch being adapted to be opened by the crank upon completion of a single revolution of the cam.

1,867,206. DETACHABLE INSULATOR. EDMUND W. BRADY, New Britain, Conn., assignor to The Brady Electric & Manufacturing Company, New Britain, Conn. Filed July 14, 1928. Serial No. 292,710. 1 Claim. (Cl. 173—321.)



An insulator head comprising an insulating member and a securing member permanently attached thereto, said securing member projecting from the insulating member and being provided with a stem and transversely extending oppositely disposed foot portions at the end of the stem, and a spring washer loosely mounted on said securing member, said washer having an opening therein through which said foot portion may be passed, the opening in the washer being of greater length than the distance between an outer end of one of the foot portions and the remote side of the stem and of less length than the distance between the outer ends of the foot portions.

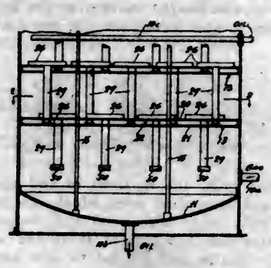
1,867,207. MOTOR CAR CONSTRUCTION. ALANSON P. BRUSH and WILLIAM A. BRUSH, Detroit, Mich. Filed July 28, 1928. Serial No. 295,965. 2 Claims. (Cl. 180—69.)



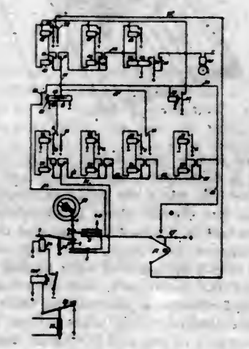
2. A motor vehicle engine hood structure including two side panels and two top panels, hinges connecting said side panels to said top panels, said side and top panels being inturned at their respective front ends to form a framing for the frontal opening of said hood, and the hinges between said side and top panels having axes lying adjacent the inner edges of the framing aforesaid.

1,867,208. METHOD OF ABSORPTION. JULIAN A. CAMPBELL, Long Beach, Calif. Original application filed July 19, 1926, Serial No. 123,417. Divided and this application filed Feb. 24, 1930. Serial No. 430,642. 8 Claims. (Cl. 261—113.)

1. The method of causing intimate contact between a gas and a liquid, that includes forming a froth of the gas and liquid at any certain pressure, and then breaking the froth films into fine particles in an atmosphere of the gas at a comparatively less pressure, there being a relatively abrupt pressure change between the pressure at which the froth is formed and the pressure of the gaseous atmosphere in which the froth is broken up.



1,867,209. ALARM SELECTOR APPARATUS. LOUIS LUCIEN EUGÈNE CHAUVEAU, Paris, France. Filed May 21, 1929, Serial No. 364,720, and in France May 22, 1928. 1 Claim. (Cl. 177—353.)

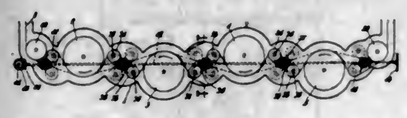


In a selective apparatus responsive to a certain predetermined series of signal impulses separated by intervals, means for measuring the length of a particular signal impulse comprising a signal responsive device, an oscillating mechanism adapted to be set in motion thereby upon receipt of a signal impulse and brought to rest at the end of said impulse, an electric circuit, means including said oscillating mechanism for periodically sending a current impulse through said circuit and a series of relay devices operatively associated with said circuit and means for successively operating said relay devices in accordance with said impulses, and means comprising a slow acting relay connected between the signal responsive device and said oscillating mechanism for rendering said oscillating mechanism operative only upon receipt of signals exceeding a predetermined length.

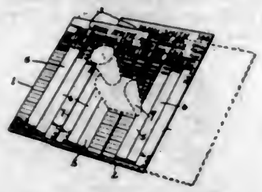
1,867,210. MACHINE FOR AND METHOD OF DYEING CLOTH AND OTHERWISE TREATING TEXTILES. WALLACE P. COHOE, Riverdale-on-Hudson, N. Y., assignor to Cohoe Processes, Inc., New York, N. Y., a Corporation of New York. Original application filed Dec. 28, 1926, Serial No. 157,520. Divided and this application filed Dec. 28, 1928. Serial No. 328,922. 8 Claims. (Cl. 8—18.)

5. A machine for treating a textile with a fluid including a container for the fluid, an active roll within a container for contact with the fluid and adjacent which the

textile passes, means adapted to pass the textile through the container, means adapted to revolve the active roll at such a high rate of speed that a substantial layer of the fluid is formed on the surface of the active roll and moved therewith and forced against the textile, and adjustable guide rolls, one in front of and one behind the active roll and in contact with which the textile passes, said guide rolls being adjustable and connected to each other to move together and to move the same amount whereby the textile may be led to and away from the active roll at the desired angle.

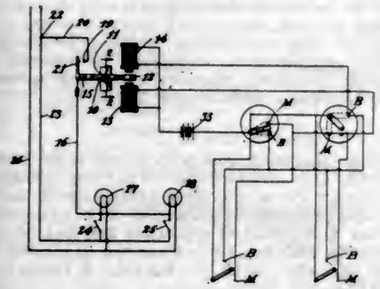


1,867,211. DEPOSIT RECORD. HERMAN J. DE LANO, Allegan, Mich., assignor to De Lano Service, Allegan, Mich. Filed Mar. 24, 1930. Serial No. 438,326. 3 Claims. (Cl. 283—57.)



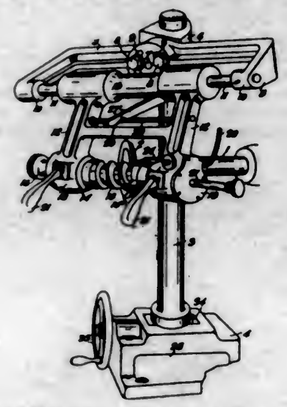
1. A record device comprising a pair of record sheets each having a designated name space and corresponding number at the top, one sheet being shorter than the other so that when the shorter sheet is superimposed upon the longer, the names in the name spaces and numbers of both sheets are exposed for comparison, both sheets having a longitudinal center ruling and both having filled in designated amount-due, total-paid, and date-due columns and blank date-paid columns at each side of their center rulings, the date-paid columns of the longer sheet being arranged adjacent its center ruling and the blank date-paid columns of the shorter sheet being arranged at its side edges so that the sheets may be arranged to juxtapose corresponding date-paid spaces of the sheets, thereby facilitating the entry of dates in the corresponding date spaces and permitting their simultaneous entry as by means of a double dating device.

1,867,212. ELECTRICAL CIRCUIT SYSTEM. ALFRED DIODATI, New York, N. Y. Filed July 14, 1927. Serial No. 205,758. 1 Claim. (Cl. 175—375.)



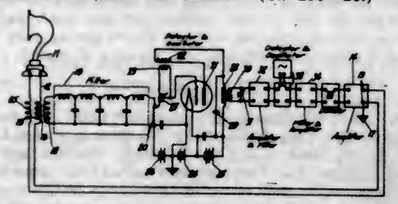
In an electrical circuit system, in combination a main normally-open electric circuit connected with a source of relatively high voltage electric current, instrumentalities included in said circuit to be energized when the same is closed, a pivotal make-and-break armature adapted to respectively complete and interrupt said main circuit, a pair of electromagnets associated therewith for moving said armature to its circuit completing and circuit interrupting positions, and control circuits including a source of relatively low voltage electric current and connected with the respective electromagnets, said circuits embodying a plurality of circuit closing elements each having a make and a break point and so interconnected that when a circuit is closed thereby at the make point, the main circuit will be closed by said armature and will remain closed thereat notwithstanding a subsequent disconnection at the said make point and until a circuit closing element closes its circuit at a break point, and an additional circuit closing element for the control circuit to the electromagnet for completing the main circuit and in series with the make points of the plurality of circuit closing elements.

1,867,213. MACHINE FOR POLISHING OR GRINDING CAM TRACKS AND LIKE SINUOUS SURFACES. JOHN GEORGE DOUGLAS, Leagrave, Luton, England. Filed Apr. 1, 1931, Serial No. 526,890, and in Great Britain May 6, 1930. 5 Claims. (Cl. 51—95.)



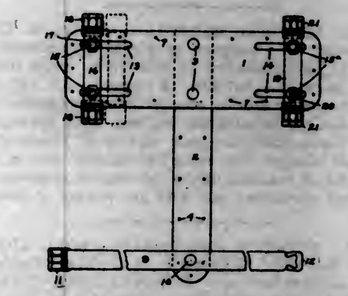
1. In a polishing or grinding machine a mop or tool holder a pair of axially aligned spaced work holders between which the work is adapted to be held, means with one of said holders for rotating the work axially, a substantially horizontal guide above said holders, the said holders being suspended from beneath said guide by means freely slidable along said guide whereby the work by its engagement with the tool or mop constitutes the sole means of imparting a movement of translation to the work holders.

1,867,214. RADIO RECEIVING SYSTEM. HAROLD F. ELLIOTT, Palo Alto, Calif., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1925. Serial No. 77,039. 15 Claims. (Cl. 250—20.)



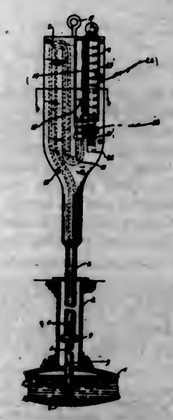
1. In a receiving system, a local oscillator of adjustable frequency arranged to heterodyne with the received signals to produce a constant frequency much higher than any to be received, a fixed filter for passing a narrow band neighboring said constant frequency, a fixed oscillator for reducing the said frequency by heterodyning to a much lower constant value, and a filter passing a narrow band neighboring said lower frequency.

1,867,215. SURGICAL SPLINT. JOE S. ETTINGER, Warsaw, Ind. Filed Nov. 30, 1927. Serial No. 236,623. 1 Claim. (Cl. 128—83.)



A surgical splint comprising a flat T-shaped padded frame, two bars laterally adjustably mounted adjacent opposite ends respectively of the cross member of the frame, means to press the bars in adjusted position onto the cross member, each bar being folded at its opposite ends to form buckle-receiving members, said folded portions being adapted to engage the cross member and tending to lock the bars to said member and a pad adjustably engaged by the buckles.

1,867,216. LIQUID LEVEL GAUGE. JOHN J. FORNEY, Springdale, Wash. Filed Mar. 12, 1929. Serial No. 346,356. 1 Claim. (Cl. 73—54.)



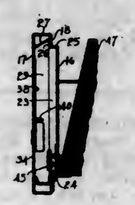
The combination in a liquid level gauge, of a recessed holder having a slot, a sectional, telescoping, tubular rod adapted to be lowered into a tank and having intake ports at its lower end, a transparent vent tube mounted in the recessed holder, means including a pair of oppositely arranged bends forming a trapped connection between the rod and tube for maintaining a registering liquid, an adjustable scale located adjacent to and parallel with the vent tube, a bolt on the scale, and a non-traveling nut on the bolt supported in the slot of the holder for adjusting the scale relatively to the vent tube.

1,867,217. SAFETY RAZOR. HENRY J. GAISMAN, New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Apr. 17, 1931. Serial No. 530,837. 4 Claims. (Cl. 30—12.)



1. A safety razor comprising blade clamping members, a handle pivotally connected with one of said members and adapted to be folded thereagainst, a rod slidable along said handle, said rod and the other member having cooperative means to clamp said members against a blade, and means cooperative between said members to permit them to move toward one another while being clamped against the blade.

1,867,218. FILE DRAWER. RUDOLPH L. HANSON, Frewsburg, N. Y., assignor to Jamestown Metal Desk Company, Jamestown, N. Y., a Corporation of New York. Filed July 16, 1931. Serial No. 551,163. 10 Claims. (Cl. 129—16.)



4. In a file drawer, a drawer head having spacedly joined inner and outer plates forming a compartment, a door in the outer of said plates, a hinge joining said door to the bottom wall of said drawer, a card retaining rod projecting into said compartment through the inner of said plates, said door giving access to said compartment and said rod.

1,867,219. BASEBALL CLEAT. GEORGE W. HARPER, McNeil, Ark. Filed Jan. 26, 1928, Serial No. 249,560. Renewed July 17, 1929. 2 Claims. (Cl. 36—59.)

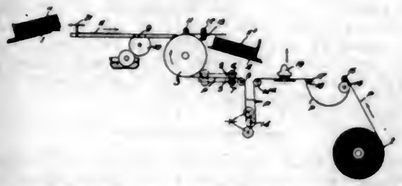
1. The combination with the ball portion of a shoe sole, of a pair of rearwardly converging cleats projecting

downwardly from said sole portion at opposite sides thereof, means adjacent said cleats to secure the same to the sole portion, a rearwardly extending arch member



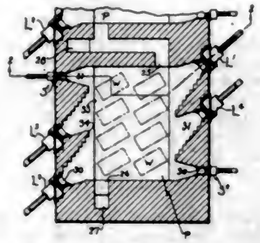
connecting said cleats and engaging the under surface of said sole portion, and means to secure said arch portion to the sole rearwardly of said cleats.

1,867,220. MEANS FOR PRODUCING LINED CARTONS. CARL WILHELM HARTMANN, Lyngby, near Copenhagen, Denmark. Filed Apr. 25, 1931, Serial No. 532,872, and in Great Britain Apr. 29, 1930. 15 Claims. (Cl. 93—36.)



1. In apparatus for producing lined cartons, a moving surface and means for feeding a carton blank simultaneously with a sheet of lining material on to said moving surface, means with said moving surface adapted to apply suction to the lining, the said surface by its movement delivering the registering sheet and carton therefrom, means for applying an adhesive to one of the said two carton members on predetermined lines before they are brought into registration and means for pressing them together.

1,867,221. METHOD OF AND APPARATUS FOR HEATING INGOTS. WILLIAM M. HEPBURN, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Mar. 20, 1930. Serial No. 437,416. 9 Claims. (Cl. 263—43.)



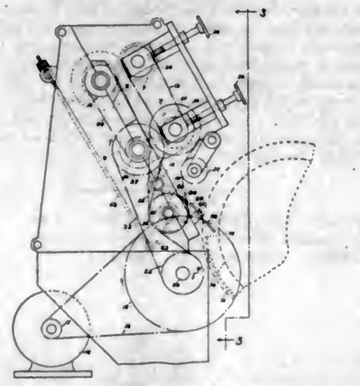
1. In the heating of ingots to prepare them for rolling, the method which consists in placing them in a pit at an angle to the sides of the pit and in spaced relation to each other and supplying gaseous fuel to the pit in a manner to cause the gases to swirl about the ingots.

4. The combination with a soaking pit, of a plurality of fuel injecting means in each of two opposite side walls, said means being set back from the pit proper and firing into expansion combustion chambers which converge from the pit toward said means, the axes of said chambers being at such angle to the side walls of the pit that the heating gases on entering the pit will tend to rotate about the vertical axis of the pit, and additional fuel injecting means at diagonally opposite corners of the pit firing thereinto in a manner to assist in imparting a rotary motion to the heating gases as said.

1,867,222. SURGICAL MATERIAL. GEORGE M. KARNS, Pittsburgh, Pa., assignor to Iodine Educational Bureau, Inc., a Corporation of New York. Filed May 16, 1931. Serial No. 537,999. 3 Claims. (Cl. 167—84.)

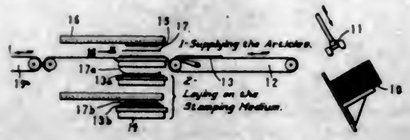
1. A surgical material consisting of superposed webs of water-penetrable material, one web being impregnated with an iodine-containing salt capable of releasing free iodine, and another web being impregnated with a material capable of reacting in the presence of moisture with such iodine containing salt with the release of iodine.

1,867,223. SHEETER AND CURLING ROLL ADJUSTMENT DEVICE. WILLIAM G. KIRCHHOFF, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 14, 1931. Serial No. 537,255. 11 Claims. (Cl. 107—9.)



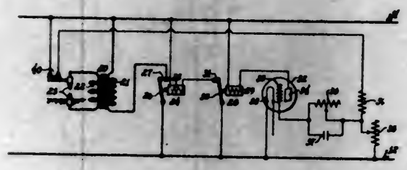
1. In a device for developing masses of plastic material into sheets and rolling the sheets to cylindrical shape, the combination of a power operated sheet forming means, a curling mechanism and a drive means therefor the curling mechanism being located so as to receive the sheeted material from the sheet forming means for development thereof into cylindrical shaped loaves, and means for varying the speed of operation of the curling mechanism relative to that of the sheet forming means.

1,867,224. METHOD OF AFFIXING STAMPING MATERIAL TO BOOK COVERS AND THE LIKE. RICHARD LANGE, Leonia, N. J. Filed May 24, 1930. Serial No. 455,299. 9 Claims. (Cl. 41—37.)



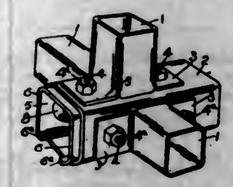
1. The method of applying and affixing a stamping medium to a book cover and the like article, which comprises affixing a stamping medium to the surface of a book cover, then moving said cover and stamping and again impressing the affixed stamping medium into the surface of the book cover and burnishing the same, then cleaning said cover, then applying a protective coating material and drying said coating material.

1,867,225. TIMING DEVICE. JAMES J. LE VAN, Milwaukee, and CARROLL STANSBURY, Wauwatosa, Wis., assignors to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 2, 1930. Serial No. 417,969. 11 Claims. (Cl. 219—4.)



3. In combination, a translating device, an electron tube controlling the continuity of circuit thereof and having a control electrode, an impedance and a parallel resistance connected in series with said control electrode, means to impress a potential upon said resistance and said control electrode to render the tube conductle to effect completion of the circuit of said translating device, said means being operative thereafter to alter said potential and to affect the potential of said grid by a transient voltage resulting from such alteration to interrupt the continuity of circuit of said translating device for a given time interval.

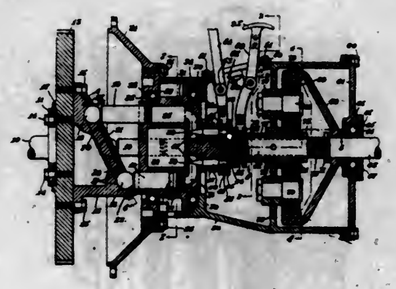
1,867,226. FRAME-LIKE STRUCTURE FOR VEHICLES, AIRCRAFT, AND OTHER CONVEYERS. JAMES MARTIN, Higher Denham, England. Filed July 15, 1930, Serial No. 468,106, and in Great Britain July 16, 1929. 2 Claims. (Cl. 189—36.)



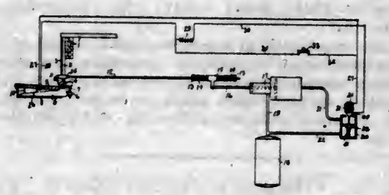
1. In means for connecting to each other a pair of tubular section frame members so that one abuts transversely across an end of the other, a third tubular member split longitudinally so as to expand outwards fitted into the transversely abutting tubular member, integral lateral lugs on the abutting end of the other tubular member and inwardly directed bosses on the internally fitted tubular member receiving studs passed through said lugs.

1,867,227. SPEED CHANGING TRANSMISSION MECHANISM. JOHN J. MCCARTHY, Malden, Mass. Filed Nov. 27, 1929. Serial No. 410,070. 5 Claims. (Cl. 192—59.)

1. In a device of the kind described, the combination of a driving element, a plurality of pistons connected thereto, a driven element, a plurality of cylinders in said driven element for engaging said pistons, a source of fluid supply connected to said cylinders, means for controlling the flow of fluid to and from the cylinders, and means operable to engage one of said pistons to prevent reciprocation of all said pistons.



1,867,228. STEP MECHANISM. JOHN S. MCWHIRTER, Southport, Conn., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Feb. 26, 1931. Serial No. 518,481. 20 Claims. (Cl. 280—166.)



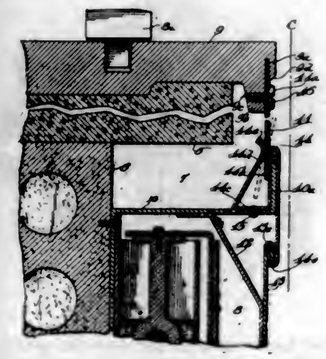
20. The combination with a folding step and power means connected thereto for operating it, of control means for the power means associated with said step to be operated when pressure is applied to the step to prevent movement of the step by the power means.

1,867,229. METHOD OF MAKING CAP NUTS. EMIL A. NELSON, Detroit, Mich. Filed Apr. 7, 1930. Serial No. 442,147. 12 Claims. (Cl. 10—86.)



1. In the manufacture of cap nuts, the method of forming a blank which consists in supporting a piece of stock in a close fitting die part beyond which a portion of the stock extends and is unrestricted, inserting a punch centrally through the unrestricted portion of said stock and into the portion thereof which is seated in said die part so as to laterally spread the unrestricted portion of said stock and flow a portion of the restricted portion thereof toward said unrestricted portion.

1,867,230. FASCIA PLATE INSTALLATION. THOMAS J. OSINGA, Chicago, Ill. Filed Jan. 21, 1930. Serial No. 422,472. 29 Claims. (Cl. 189—46.)

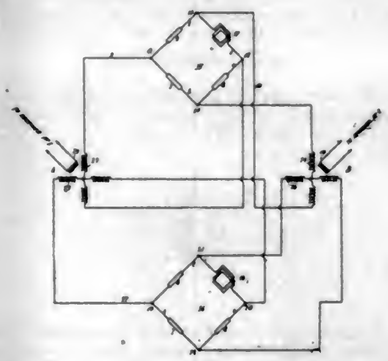


1. A fascia plate installation for elevator shafts, comprising a door-sill extension opposite the upper portion of the fascia plate, said extension being recessed to receive such portion.

1,867,231. UNSYMMETRICAL ARSENO-BENZENE COMPOUNDS. CHARLES S. PALMER, Evanston, Ill., assignor, by mesne assignments, to Parke, Davis & Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 19, 1926. Serial No. 103,155. 20 Claims. (Cl. 260—15.)

1. An unsymmetrical arseno-compound capable of forming soluble alkali compounds, comprising an aromatic grouping containing a substituted amino-group and incapable of forming stable alkali compounds and an aromatic grouping capable of forming stable alkali compounds.

1,867,232. WIRELESS RECEIVING SYSTEM. WALTER VAN B. ROBERTS, Princeton, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 19, 1928. Serial No. 320,357. 11 Claims. (Cl. 250—11.)



1. In a radio receiving system the combination of, a plurality of bridge circuits, a plurality of frame aerials each frame aerial being included in one arm of one of said bridge circuits, and a plurality of radio goniometers each operatively associated with each of said bridge circuits.

1,867,233. SHORE. HENRY W. ROOS, Cincinnati, Ohio. Filed Nov. 27, 1929. Serial No. 410,168. 11 Claims. (Cl. 248—30.)

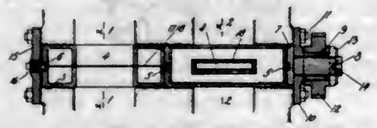


11. In a shore, the combination with a support, a frame carried thereby having a pair of spaced side members, of a head bearing member, a bracket arranged between said side members and secured thereto on which said head bearing member is seated, means on one side of the frame for retaining the head bearing member against lateral movement in one direction but leaving it free for lateral movement in the other direction, and means on the head bearing member movable into engagement with means on the side members for detachably securing the head bearing member between the side members.

1,867,234. SIZING MATERIAL. THOMAS R. SHELTON, San Francisco, Calif., assignor of one-half to Charles A. Doyle, San Francisco, Calif. Filed July 18, 1928. Serial No. 293,789. 7 Claims. (Cl. 134—18.)

1. A water resistant sizing containing the following ingredients in substantially the proportions stated: two gallons of tung oil, ten pounds of casein, eight pounds of borax, one ounce of para-formaldehyde and thirty-six pounds of animal glue.

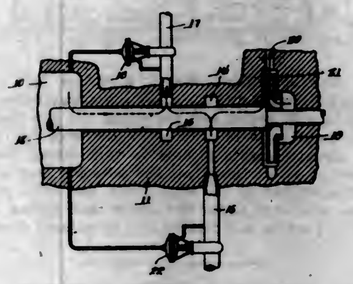
1,867,235. ROTARY VALVE. JOHAN THORKILDSEN, Stavanger, Norway. Filed Nov. 10, 1930, Serial No. 494,647, and in Norway June 8, 1929. 2 Claims. (Cl. 123—59.)



1. A rotary valve, more particularly for internal combustion engines, comprising a cylindrical valve section formed with a valve port and with a slot extending over the whole length of the valve section, and a plate inserted into said slot, substantially as and for the purpose described.

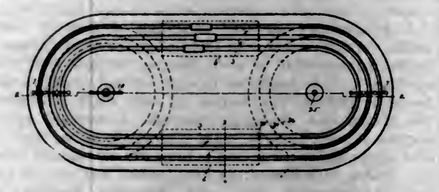
1,867,236. GAS SEALED GLAND. WILLEM VAN RIJSWIJK, Baden, Switzerland, assignor to Brown Boveri & Cie, Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Apr. 25, 1927, Serial No. 186,553, and in Germany May 3, 1926. 2 Claims. (Cl. 286—19.)

1. In fluid-pressure apparatus, a fluid containing casing, an operating shaft disposed within said casing, a gland associated with said casing and loosely receiving said shaft and communicating at one end with said casing and at its other end with the atmosphere exterior of said casing, means providing for injection into said gland at a point intermediate the ends thereof of sealing fluid different from the fluid in said casing and at a pressure substantially equal to the pressure in said casing, means adjacent said gland providing for withdrawal from said gland at a point thereof intermediate said first-named point and the casing end of said gland of that portion of the sealing fluid



flowing inwardly along said shaft toward the casing at a pressure below the fluid pressure in said casing by such amount as to induce flow of fluid in said casing outwardly along said shaft to such second-named point and withdrawal of such outwardly flowing casing fluid from said second-named point together with said inwardly flowing sealing fluid, and fluid-pressure means operable to maintain a constant pressure difference between the respective pressures of the casing fluid and the sealing fluid at such second-named point.

1,867,237. MECHANICAL TOY. WILLIAM A. VINSON, Baltimore, Md. Filed Dec. 4, 1928. Serial No. 323,637. 1 Claim. (Cl. 46—40.)



A mechanical toy comprising a base having an annular projecting flange and a series of endless slots in said base, a removable carriage adapted to travel in each of said slots means to permit the carriage to yield when passing around the curve of said slots, an image mounted on each of said carriages and having legs movable independent of the body, means carried by said carriages for operating the legs of said images, and means mounted within said base to cause the carriages and images to travel in an endless course around said base at irregular speeds.

1,867,238. SMOKE STICK. GUSTAVE L. VOGT, Philadelphia, Pa. Filed Aug. 7, 1929. Serial No. 384,122. 2 Claims. (Cl. 99—2.)



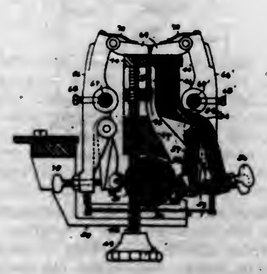
1. A smoke stick for sausages comprising a unitary angle bar the lega of which are arranged so as to diverge upwardly, providing spaced line contact supports for the links of sausages and so that the under surface of said angle bar serves to direct smoke toward said lines of contact.

1,867,239. REDUCTION OF PHOSPHATIC MATERIALS. WILLIAM H. WAGGAMAN, Fort Meade, and STAPLETON D. GOOCH, Lake Wales, Fla., assignors to Coronet Phosphate Company, New York, N. Y., a Corporation of New York. Filed July 6, 1929. Serial No. 376,490. 13 Claims. (Cl. 23—223.)

1. A process for the production of phosphorus comprising subjecting phosphatic material to a sintering operation, impregnating the sinter with carbonaceous material, and subjecting the impregnated material to a temperature at which reduction of the phosphatic material to phosphorus will take place.

11. A composition of matter suitable for the production of phosphorus comprising sintered phosphatic material impregnated with carbonaceous material.

1,867,240. SAW MAKING MACHINE. FRANK WELLINGTON WARDWELL, Cleveland, Ohio, assignor to The Wardwell Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 18, 1930. Serial No. 421,784. 1 Claim. (Cl. 76—33.)



In a saw making machine, a saw vise, a stationary jaw and a movable jaw on said vise, an oscillatory lever supported by said vise, means pivotally supporting said mov-

able jaw upon said lever, a rotatable shaft, a cam on said shaft, operating means for said lever pivotally connected therewith and interposed between said cam and lever, said operating means including an adjustable screw and a compression spring, and means mounted on said vise for opening said movable jaw and locking same in an open position.

1,867,241. PRODUCTION OF PHOSPHORUS. ROTHE WEIGEL, Nashville, Tenn., assignor to Victor Chemical Works, a Corporation of Illinois. Filed June 8, 1931. Serial No. 543,028. 9 Claims. (Cl. 23—223.)

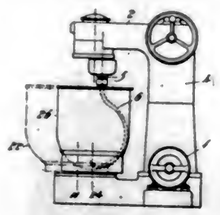
1. The method of producing phosphorus in a volatilization furnace which comprises commingling phosphorus-containing mineral with a proportion of carbonaceous material less than that required for reduction of its phosphorus content and forming coherent briquettes of constant average composition therefrom, charging such briquettes into the furnace to pass into the volatilization zone therein, and maintaining a temperature in said furnace to liberate phosphorus and form a molten slag.

1,867,242. FOUNTAIN PEN BARREL OR THE LIKE AND METHOD OF MAKING IT. JOHN N. WHITEHOUSE, New York, N. Y. Filed Feb. 15, 1929. Serial No. 340,311. 2 Claims. (Cl. 41—21.)



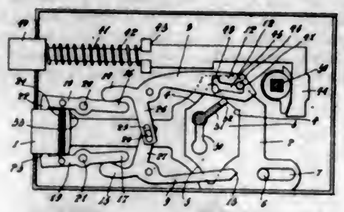
1. As a new article of manufacture, a tube for fountain-pen barrels, caps, and the like, comprising a multiplicity of distinct layers of continuous translucent sheet material carrying a design, the designs of the respective superimposed layers being combined to impart to the finished article the appearance of a blended design of appreciable depth.

1,867,243. MACHINE FOR KNEADING DOUGH, WHIPPING, AND SIMILAR PURPOSES. AXEL VALDEMAR AASTRUP, Bellinska Villan, Sweden. Filed Aug. 11, 1930, Serial No. 474,503, and in Germany Nov. 22, 1929. 1 Claim. (Cl. 259—85.)



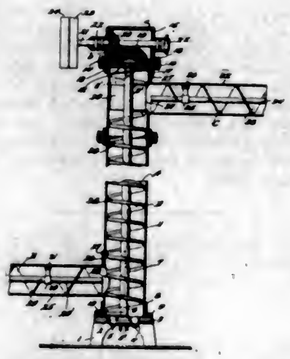
In a machine for kneading dough, whipping and similar purposes, the combination of a rotating, working implement carrying spindle, a plurality of carriers for vessels of different widths, the carrier for the vessel of the slightest width being fixed and located nearest to the said spindle and so that the implement thoroughly works the goods in the same, and the other carrier being rotatable and located laterally of the fixed carrier at a distance adapted to the difference of the widths of the vessels, and a driving mechanism for the rotatable carrier.

1,867,244. LOCK. FREDERICK HAROLD ANDREWS, Taihape, New Zealand, assignor to Leo Brooks, Wellington, New Zealand. Filed Oct. 14, 1930. Serial No. 488,613. 6 Claims. (Cl. 70—77.)



1. A lock including a casing, a locking bolt, a plate from said locking bolt having key contacting edges, levers pivoted to said casing and traversing the key contacting edges of said plate in order to be actuated by the key, spring operated pawls pivoted to said casing one upon each side of said locking bolt and normally resting thereon and controlled by the said levers, but when said bolt has been shot said pawls will under their spring tension engage and retain said locking bolt in its shot position.

1,867,245. VERTICAL CONVEYER ELEVATOR. JOSEPH OSWELL BAILEY, Atlanta, Ga. Filed Sept. 6, 1930. Serial No. 480,241. 4 Claims. (Cl. 198—213.)

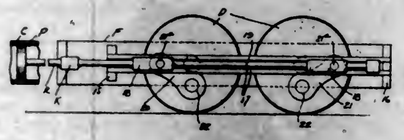


1. A granular elevator including a vertical tubular casing having intake and discharge openings, means for delivering material to said elevator through said intake opening, a shaft journaled in said vertical casing, a spiral elevator blade secton carried by said shaft intermediate the intake and discharge openings, a reversed spiraled section carried by said shaft intermediate the upper end and discharge opening, and a plurality of radially extending blades interconnecting said spiral sections in longitudinal alignment with said discharge opening, said blades having means for permitting limited passage of material therethrough, whereby the elevation of the material above said opening is prevented, and positive discharge thereof through said opening is effected.

1,867,246. LOCOMOTIVE DRIVING GEAR. HARRY J. BENNETT, Phoenix, Ariz. Filed Apr. 8, 1930, Serial No. 442,627. Renewed Jan. 4, 1932. 2 Claims. (Cl. 105—84.)

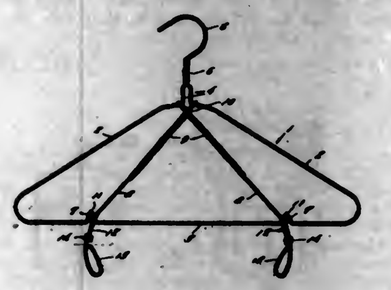
1. In a locomotive, a pair of driving wheels arranged one in advance of the other, a driving cylinder in advance of the driving wheels, a driving rod longitudinally aligned and connected to the piston rod of the driving cylinder, a

frame in which the driving rod moves in a rectilinear path, and links connected respectively, to the driving rod at the cross heads and to the driving wheels so that under move-



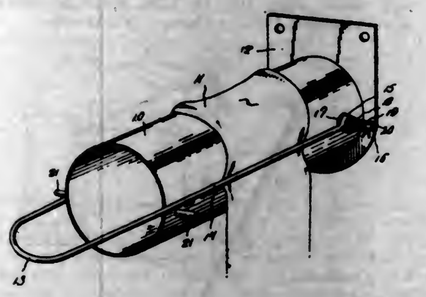
ment of the driving rod in either direction push and pull impulses are transmitted, respectively, to the two driving wheels.

1,867,247. GARMENT HANGER. FRANK BORRIELLO, Everett, Mass. Filed Oct. 21, 1931. Serial No. 570,189. 6 Claims. (Cl. 223—64.)



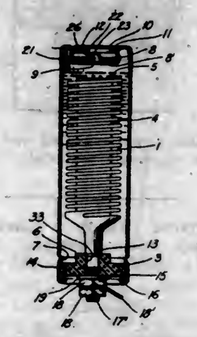
1. A garment hanger comprising a substantially triangular frame including a pair of converging arms and a connecting bar, wires folded upon themselves and connected to the arms and to the bar, the folds of said wires terminating, at their free ends, in normally diverging shanks extending downwardly from the bar for clamping a garment therebetween, and a ring slidably encircling the shanks for moving said shanks toward each other and securing the same in clamping position.

1,867,248. TUBE REPAIRING CLAMP. BERNARD BROTHERMAN and FRANCIS J. BOWEN, Jr., San Antonio, Tex. Filed Dec. 11, 1930. Serial No. 501,653. 3 Claims. (Cl. 152—27.)



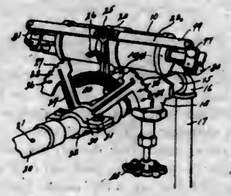
1. In a device of the character described, a cylindrical tubular member for supporting a pneumatic inner tube for repair, a yoke including spaced limbs pivoted on said member and utilized for stretching a portion of the tube circumferentially about said member, and means on said member for limiting the movement of the yoke in one direction, whereby said limbs clamp the stretched portion of the tube to said member at points beneath the transverse central plane thereof.

1,867,249. ELECTROLYTIC DEVICE. WALTER W. CLARK and JOHN F. MCCANN, North Adams, Mass., assignors to Sprague Specialties Co., North Adams, Mass., a Corporation of Massachusetts. Filed May 14, 1931. Serial No. 537,444. 7 Claims. (Cl. 175—315.)



1. In an electrolytic device, the combination of a container having a reentrant portion provided with a perforation, a compressible gasket having a nipple, said nipple registering with the perforation of the reentrant portion, and a perforated washer surrounding said nipple and compressing said gasket, whereby an air and liquid tight seal is provided between the gasket and the reentrant portion.

1,867,250. IRRIGATION DEVICE. WALTER H. COLES and BERT J. NELSON, Troy, Ohio, assignors to The Skinner Irrigation Company, Troy, Ohio, a Corporation of Ohio. Filed Dec. 14, 1927. Serial No. 239,930. 10 Claims. (Cl. 299—66.)

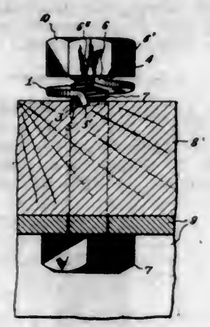


1. In an irrigation system of the class described, a distributing pipe, a water motor mounted in fixed position adjacent thereto, a leverage-multiplying connection between said motor and said pipe whereby the pipe is oscillated by the water motor, water discharge means for said water motor independent of said distributing pipe, and means for automatically varying the direction of flow of the discharge from said water discharge means during the operation of the same.

1,867,251. SPRING WASHER. EUGENE D. COWLIN, Massillon, Ohio, assignor to The Reliance Manufacturing Company, Massillon, Ohio, a Corporation of Ohio. Filed May 28, 1931. Serial No. 540,576. 8 Claims. (Cl. 151—36.)

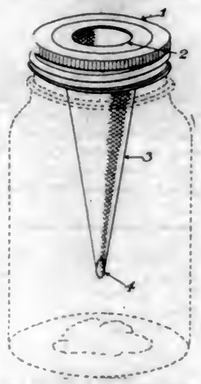
1. A spring washer comprising a split ring segment of uniform cross-sectional shape and size throughout,

said segment having a body portion, a wood-engaging end bent from said body portion to an approximately ninety-



degree angle, and a nut-engaging end bent from said body portion at an angle materially less than ninety degrees.

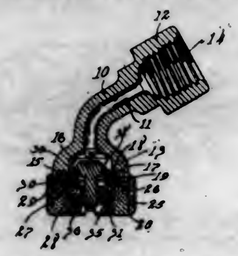
1,867,252. ROACH TRAP. JAMES W. CRIGLER, Mississippi City, Miss. Filed Mar. 26, 1931. Serial No. 525,498. 1 Claim. (Cl. 43—121.)



An insect trap comprising a body portion, a frusto-conical member, a removable cover for the body portion, said removable cover having an opening and having a downwardly and outwardly extended portion spaced from the cover, an inwardly extended flange formed on the frusto-conical member and held between the inturned portion of the cover and the cover, to secure the frusto-conical member in position, and said frusto-conical member being constructed of wire mesh material.

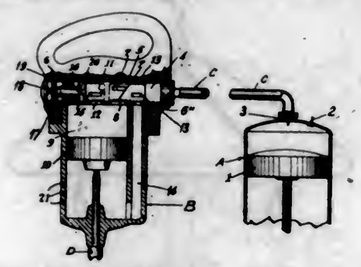
1,867,253. AIR CHUCK. JOHN C. CROWLEY, Cleveland Heights, Ohio, assignor to The Dill Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 16, 1929. Serial No. 347,468. 2 Claims. (Cl. 284—17.)

1. An air chuck comprising a member provided with a chambered head, a second member secured to the head of said first member and having an axial opening therethrough communicating with the said chambered head, means in said chambered head and restricting the opening in said second named member, a valve cooperating with said means and having a head arranged in said chamber on one side of said means and a plunger associated with said head and arranged in the opening in the second named member on the other side of said means and comprising a plunger stem extending from said head through said means into the opening in said second named member, and a plunger member having a sliding fit within said opening, said plunger stem being provided with longitudinally extending flats and with a threaded portion and said plunger member



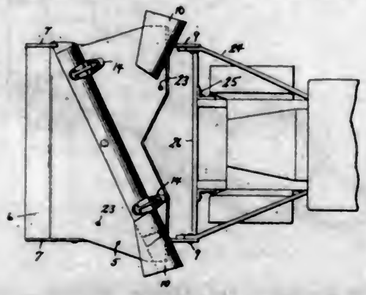
having an opening provided with threads cooperating with the threaded portion of said stem to secure the said stem and plunger member together.

1,867,254. PNEUMATIC TOOL OPERATING APPARATUS. ERNESTO CURTI, Milan, Italy. Filed Feb. 27, 1928, Serial No. 257,441, and in Italy Feb. 28, 1927. 5 Claims. (Cl. 60—62.)



1. In combination a pneumatic driver including a piston and a valve controlled compressed air supply pipe, a machine tool connected to the supply pipe and including a piston, and a rotatably mounted distributor also movable in one direction in the tool in response to each pressure applying impulse of the driver piston and provided with ports certain of which control the admission of compressed air to the piston in the tool so that the latter is given its operative stroke simultaneously with the pressure applying impulse of the driver piston, the remaining ports of the distributor acting to control the application of a second impulse on a tool piston for returning the latter to its original position during the rotation of said distributor.

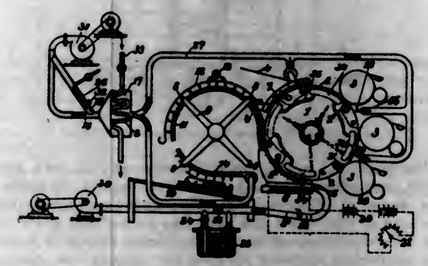
1,867,255. SNOWPLOW. GEORGE F. DE LA MATER, Gaylord, Mich. Filed Dec. 18, 1930, Serial No. 503,305. Renewed Jan. 4, 1932. 4 Claims. (Cl. 37—42.)



1. A snowplow comprising a substantially rectangular inclined cutting blade having a forwardly deflected lower edge portion, a pair of oppositely and angularly disposed

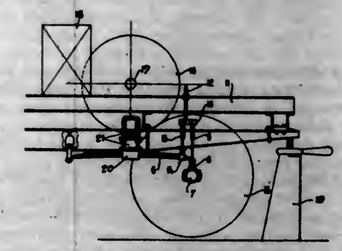
conveyor extensions rigidly secured to the side portions of the upper end of the cutting blade, a vertical plate extending rearwardly from each side of the cutting blade, a swingable delivery blade pivoted on the middle portion of the cutting blade and cooperable with either of said delivery extensions.

1,867,256. METHOD OF AND APPARATUS FOR DRYING SHEETS IN MULTICOLOR INTAGLIO PRINTING. ARNOLD EGLI, Hamburg, Germany. Filed May 18, 1929, Serial No. 364,268, and in Germany May 19, 1928. Renewed Nov. 27, 1931. 14 Claims. (Cl. 101—416.)



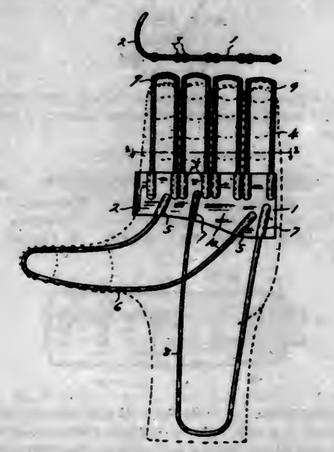
1. In a multi-color sheet intaglio printing machine, in combination, an impression cylinder, printing cylinders, movable towards the impression cylinder and away from it, means adapted to convey different printing colors to the printing cylinders, boxes arranged around the impression cylinder and subdivided in the direction of the shaft of the impression cylinder, means for supplying the several boxes with compressed air, means for regulating the compressed air supply of the several boxes, said boxes constructed with discharge nozzles on the sides facing the impression cylinder, heating arrangements for heating the air discharge by the individual boxes, and means for changing the degree of heating of such air.

1,867,257. POWER TAKE-OFF. CORNELIS J. ESSELING, Haarlem, Netherlands. Filed Aug. 18, 1930, Serial No. 476,144, and in the Netherlands July 10, 1930. 2 Claims. (Cl. 180—53.)



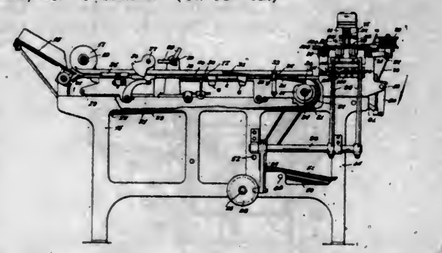
1. The combination with a truck and its motor driven rear axle, of a tool axle on the truck, tool driving wheels on the tool axle, springs detachably connecting the frame of the truck and rear axle, levers connected with the truck frame, rods connected to the ends of the levers, straps carried by the springs and axle, said rods being adapted to unite the straps of the axle and springs when the springs are detached from the axle, said levers being operable to flex the springs and lift the axle to move the wheels thereof into engagement with the tool driving wheels.

1,867,258. SURGICAL SPLINT. OSCAR A. FRUEHAUF, Detroit, Mich. Filed Mar. 19, 1928. Serial No. 262,733. 2 Claims. (Cl. 128—87.)



1. A surgical splint comprising a supporting plate engageable with the palm of an injured hand and formed with sockets opening at its front and rear edges, a plurality of finger splint members selectively detachably engageable with the sockets opening at the front edge of said plate, and splint members for engagement with the wrist and thumb of said hand selectively detachably engageable with the sockets opening at the rear edge of said plate, said thumb-engaging splint member being laterally bent.

1,867,259. MACHINE FOR MAKING PAPER BOXES. HAROLD J. GOSS, Nashua, N. H., assignor to The International Paper Box Machine Company, Nashua, N. H., a Corporation of Maine. Filed May 30, 1930. Serial No. 457,638. 6 Claims. (Cl. 93—42.)



1. In a machine for making boxes, a forming chamber, upper and lower plungers, means for actuating the upper plunger to cause it to lift a blank into said chamber, tuckers for acting on side portions of the blank, means for actuating the lower plunger to cause it to follow the upper plunger, a slide movable to and from position to cause it to temporarily hold the blank on the upper plunger during the rise of the lower plunger, and stitching mechanism cooperating with the sides of the lower plunger.

1,867,260. GUARD FOR AUTOMATIC LUBRICATING JOURNAL BOXES. GEORGES GRANDJEAN, Les Forgets, Isle Adam, France, assignor to Isothermos Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Feb. 9, 1929, Serial No. 338,860, and in Switzerland Nov. 14, 1928. 3 Claims. (Cl. 286—5.)

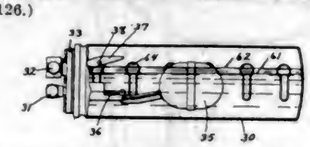
1. A device of the character described, comprising an annular disk, two annular flanges of different diameters

projecting from and concentric with one face of said disk, and inwardly and outwardly extending tapered peripheral



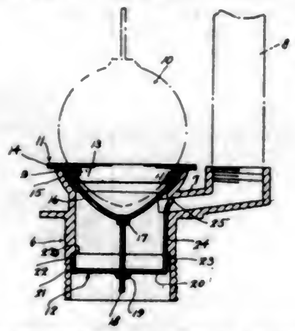
lips at the outer edge of the inner flange, the outwardly extending lip being of greater external diameter than the outer flange.

1,867,261. REFRIGERATING APPARATUS. CHARLES F. HENNEY, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 448,583. 9 Claims. (Cl. 62—126.)



1. An evaporator for a mechanical refrigerator comprising, a reservoir, a tall narrow keyhole shape in cross section duct extending horizontally from the reservoir, said reservoir and duct being adapted to contain a quantity of liquid refrigerant and a blanket of oil floating on the refrigerant, means for maintaining a substantially constant level of liquid refrigerant in said reservoir, the duct having its lower portion connected below the surface of liquid refrigerant and its upper portion with the free space above the oil in the reservoir, said duct being flared outwardly at the oil blanket.

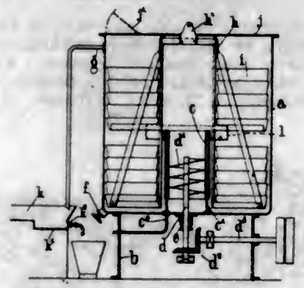
1,867,262. FLUSH TANK VALVE SEAT. JAMES B. HOWLE, Richmond, Va. Filed May 13, 1931. Serial No. 537,131. 2 Claims. (Cl. 251—167.)



1. As a new product of manufacture, a repair seat for a flush tank valve comprising a unit including an annular seat, and an outstanding marginal flange, and an integral longitudinally bowed retaining strap, an anchor, a bolt connection between the anchor and central portion of said strap, said anchor being of general U-shaped form and embodying prong-equipped sustaining arms adapted to engage recesses in the walls of the valve outlet passage.

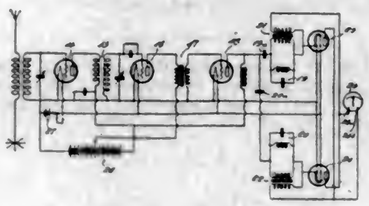
1,867,263. CRYSTALLIZATION OF GUMS, FONDANTS, SWEETMEATS OR THE LIKE. ANDREW GORDON HULME, Stockport, England, assignor to Baker Perkins Company Incorporated, Saginaw, Mich. Filed Aug. 20, 1928, Serial No. 300,882, and in Great Britain Nov. 7, 1927. 11 Claims. (Cl. 91—4.)

1. Plant for use in crystallization of the kind indicated comprising a vessel for containing the crystallization syrup, means associated with the vessel for heat treating the syrup, means adapted for causing the circulation or agitation of the syrup during the heating period means projecting through the bottom of the vessel for driving said circulating or agitating means, and a carrier for the goods adapted to be introduced into and removed from the top of the vessel.



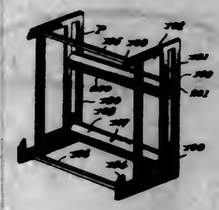
10. Plant for use in crystallization of the kind indicated, comprising a vessel for containing the crystallization syrup, a cylindrical heating element arranged about the axis of the vessel and affording an annular space for the accommodation of the goods, means arranged within the cylindrical element adapted for causing the circulation or agitation of the syrup during the heating period, and a strainer adapted to be interposed in the circulation path of the syrup and detachably to be hung upon the upper end of the heating element, and a carrier for the goods adapted to be introduced into and removed from the vessel.

1,867,264. SIGNAL INDICATING SYSTEM. LAWRENCE A. HYLAND, Washington, D. C., assignor, by mesne assignments, to Seaboard Airways, Inc., Columbus, Ohio, a Corporation of Delaware. Filed June 26, 1929. Serial No. 373,914. 5 Claims. (Cl. 250—11.)



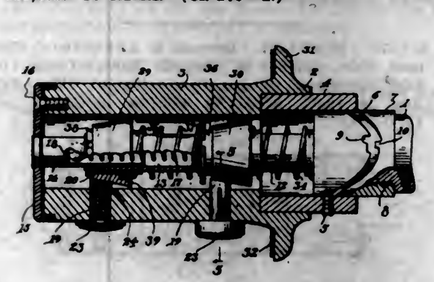
1. In a direction finding system employing a directive radio transmitting station emitting two radio frequency waves directed in different directions and modulated at different audio frequencies, a receiving station comprising a receiving antenna, an electron tube detector having its input connected to said receiving antenna, a pair of audio frequency filters, a pair of audio frequency amplifiers comprising a pair of electron tubes having their input circuits connected in parallel to the output of said detector and having their output circuits connected individually to said filters, a pair of rectifier tubes having their inputs respectively connected to each of said filters and having their output circuits connected together in mutually opposed polar relation, and an indicating device connected to the output circuit of said rectifier tubes and adapted to indicate the polarity and magnitude of the voltage effective in said output circuit, said filters being respectively adapted to pass one of the audio frequencies employed for modulation at said transmitting station and to exclude the other of said modulating frequencies, whereby said indicator indicates the location of said receiving station with reference to the directions of the directed waves emitted from said transmitting station.

1,867,265. BARREL CARRYING DEVICE. SOREN C. JENSEN, Presque Isle, Me. Filed Nov. 26, 1930. Serial No. 498,473. 2 Claims. (Cl. 294—26.)



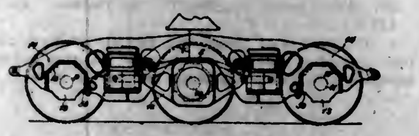
1. A barrel handling and carrying device comprising a pair of like side plates having forwardly projecting barrel engaging prongs on their upper ends and upwardly projecting hooks on their lower ends, said side plates being provided with vertically extending slots, a bolt extending through the slots, a hand grip formed on the bolt, a second bolt extending through the side plates having a hand grip thereon, and upper and lower brace bars connecting the side plates together.

1,867,266. CHUCK. ALFRED JOHNSON, Uniontown, Pa., and ROBERT H. JOHNSON, Morgantown, W. Va., assignors to Makeras, Inc., Fairmont, W. Va., a Corporation of West Virginia. Filed Jan. 17, 1930. Serial No. 421,462. 10 Claims. (Cl. 279—2.)



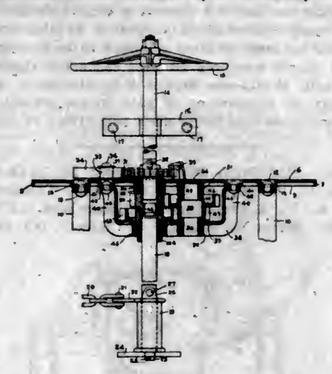
1. A chuck including a shaft, a body portion slidably mounted on said shaft, a plurality of radially movable grippers mounted in the body portion, means for moving said grippers to operative position as the body portion is moved inwardly, and means for automatically locking the body portion in its inner position.

1,867,267. CAR TRUCK. GEORGE T. JOHNSON, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Aug. 29, 1929. Serial No. 389,233. 28 Claims. (Cl. 105—195.)



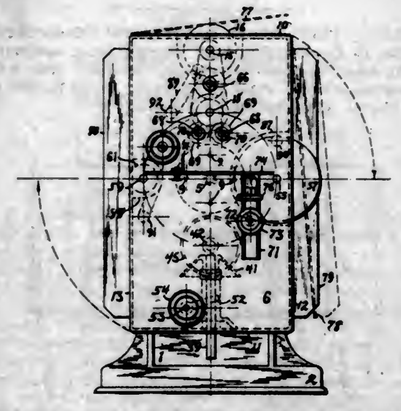
1. In a car truck, a side frame having an inverted U-shaped opening therein, an anti-friction bearing housing extending into the opening, and portions of the side frame projecting into the bearing housing.

1,867,268. HAND BRAKE FOR RAILWAY CARS. BYRES W. KADEL, Baltimore, Md. Filed Dec. 7, 1926. Serial No. 153,054. 8 Claims. (Cl. 74—119.)



4. A hand brake mechanism for railway cars, including a cast metal brake step with a gear housing member rigidly secured thereto, reduction gearing arranged between the brake step and the housing member, said gearing involving a driving gear pinion and a driven gear wheel arranged beneath and in axial alignment with the driving pinion, and idler gears connected to a common spindle and arranged to mesh respectively with the driving pinion and driven wheel, the said spindle being journalled at one end in the brake step and at the other end in the said housing member, the adjacent ends of the said driving pinion and driven wheel being socketed one within the other, and the remote ends thereof being journalled, one thereof in the brake step and the other in the housing member, and high and low powered brake shafts connected respectively to the said driving gear pinion and the said driven gear wheel.

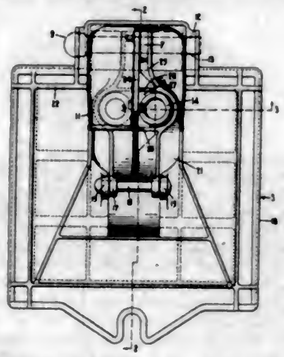
1,867,269. UNIVERSAL WOOD-WORKING MACHINERY. DWIGHT KIMBLE, Decatur, Ind. Filed Sept. 28, 1931. Serial No. 565,458. 6 Claims. (Cl. 144—1.)



1. A wood-working machine of the class described comprising a supporting stand, a housing pivotedly mounted on said stand having a series of work-supporting surfaces and constituting a turret, locking means to secure said turret in adjusted positions relative to the stand, a series of units positioned in said turret operatively associated respectively with said surfaces, a series of ex-

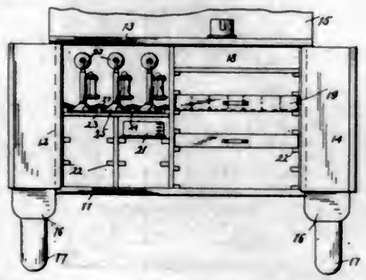
tension shafts rotatably supported in the turret operatively associated respectively with said units, said shafts being spaced equidistant from the axis of the turret and each having on one end thereof a clutch member, and a motor actuated drive-shaft supported by the stand provided with a clutch-member adapted to have engagement with the clutch members on said extension shafts severally as said shafts are moved into alinement with the drive-shaft by adjustment of said turret whereby power is imparted from said drive-shaft selectively to said units.

1,867,270. JOURNAL BOX. ALBERT H. LAKE, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Jan. 5, 1929. Serial No. 330,516. 5 Claims. (Cl. 308—47.)



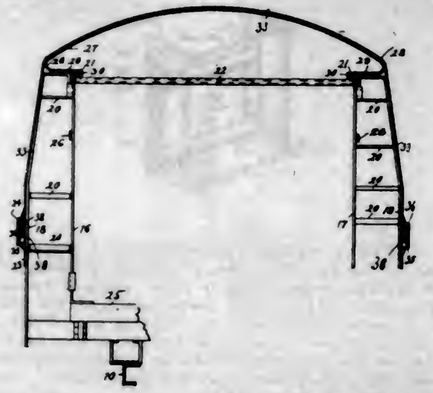
1. In combination, a journal box having a hinge lug, a lid including a cover, a hood and a lever, said hood being rigid and said lever pivoted with respect to the cover, an intermediate portion of said lever being widened and formed with outstanding rigidifying web portions and a pair of coil springs seated on said widened portion and held in place by said outstanding portions, the outer ends of said springs being seated on the inner face of the hood for urging said lever inwardly to hold the lid firmly over the outer opening of the box and the upper end of the lever against the hinge lug, and means pivotally connecting said lid to said box.

1,867,271. SUPPORTING DEVICE FOR TELEPHONES. NEIL P. LARSEN, Cleveland Heights, Ohio, assignor to The American Coach & Body Co., Cleveland, Ohio, a Corporation of Ohio. Filed June 5, 1928. Serial No. 283,111. 1 Claim. (Cl. 248—20.)



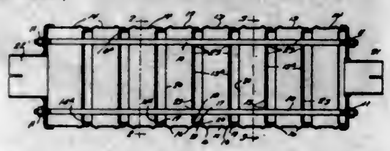
In a telephone supporting device, a base adapted to support telephones in longitudinal alignment, means for dividing said base into longitudinal rows, non-metallic members extending along said rows and adapted to engage said telephones, and resilient means associated with said non-metallic members and adapted to normally press said non-metallic members into engagement with said telephones to thereby retain the latter upon said base.

1,867,272. CANOPY SUPPORT. NEIL P. LARSEN, Cleveland Heights, Ohio, assignor to The American Coach & Body Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 28, 1929. Serial No. 417,125. 9 Claims. (135—5.)



1. A canopy support comprising spaced longitudinal frame members, and a resilient transverse member bowed upwardly and sprung between said longitudinal members, the opposite end portions of said transverse member being bowed inwardly and engaging respectively said longitudinal members and overlying the same, whereby stress in said transverse member tends to maintain the end portions thereof in engagement with said longitudinal members.

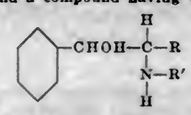
1,867,273. MUFFLER. HOWARD E. LEMMERMAN, Cleveland, Ohio, assignor to Simmons Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 21, 1930. Serial No. 476,764. 2 Claims. (Cl. 137—160.)



1. In a muffler, a plurality of cup-like members each having a portion telescoping and fitting within a portion of an adjacent member, each of said members having a bead comprised of two, spaced, cylindrical wall portions extending beyond the bottom wall, each member having at its top a constricted, cylindrical portion adapted to telescope within the bead of an adjacent member, said constricted portion being longer than said bead whereby to space the main wall portions of said members.

1,867,274. RESOLUTION OF EPHEDRINE AND ITS HOMOLOGUES AND OF MANDELIC ACID, AND CERTAIN INTERMEDIATES. RICHARD H. F. MANSKE, New Haven, Conn., assignor to Eli Lilly and Company, Indianapolis, Ind., a Corporation of Indiana. Filed Nov. 20, 1929. Serial No. 408,675. 24 Claims. (Cl. 260—128.5.)

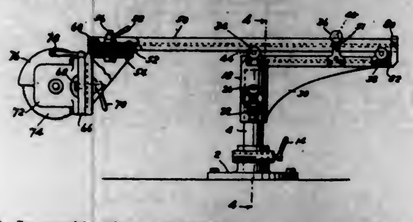
1. The process of resolving a racemic mixture, comprising causing a reaction in alcoholic solution between a mandelic acid and a compound having the formula:



where R and R′ each equal $H(CH_2)_x$ and x in either radical equals an integer between zero and 2 inclusive, with

one of said two substances in racemic form and the other in optically active form, to produce an ephedrine-mandelate of which the major portion has both its acid part and its base part of the same sign as that of the optically active initial substance.

1,867,275. SLIDING SAW. LOUIS N. MCCASTER, Norristown, Pa., assignor to Woodworking Machinery Company, Philadelphia, Pa. Filed Feb. 25, 1928. Serial No. 256,828. 2 Claims. (Cl. 143—6.)



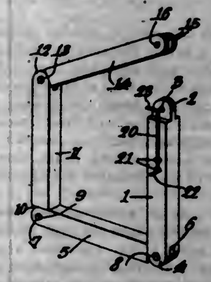
2. In combination, supporting means, a slide mounted on the supporting means for longitudinal movement and having a bearing surface under its forward end, an angle member pivoted to the slide about a vertical axis and having the outer surface of one leg bearing on the said bearing surface, a tool, a tool carrying bracket supporting the tool pivoted about a horisontal axis to the other leg of the angle member and having a surface bearing on the outer surface of the last named leg, whereby the tool is mounted for adjustment about both horisontal and vertical axes, means for clamping the bracket to said outer surface of the last named leg including a manually operable handle located rearwardly of the last named leg, and means for driving the tool in all positions of adjustment.

1,867,276. CARD HOLDER. GEORGE E. MCINTYRE, Kansas City, Mo. Filed Nov. 22, 1930. Serial No. 497,443. 8 Claims. (Cl. 40—11.)



1. As a new article of manufacture, a card holder, comprising an easel, an integral extension therefrom rebent rearwardly thereof to form a supporting bracket in parallelism to said easel and adjustable clamping means carried by the bracket disposed to engage a support behind said easel.

1,867,277. COLLAPSIBLE CRATE. JULIEN C. MILLER, Paducah, Ky. Filed May 9, 1929. Serial No. 361,615. 1 Claim. (Cl. 217—43.)



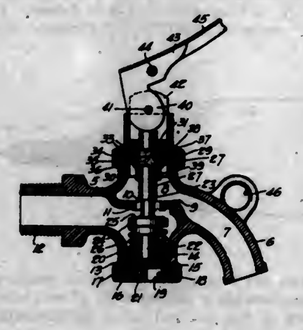
A collapsible crate including relatively movable panels, and means for detachably connecting the panels, each of said means including a resilient wire slidably and rotatably mounted on one of the panels and fingers radiating from the respective ends of the wire but in different planes, one of said fingers constituting means for limiting the rotation of the wire and the other finger constituting means for engaging the two panels to hold them against relative movement.

1,867,278. CIRCUIT BREAKER FOR MOTOR VEHICLES. SYLVANUS PENSRUM, Washington, Mo. Filed Feb. 25, 1929. Serial No. 342,563. 1 Claim. (Cl. 200—152.)



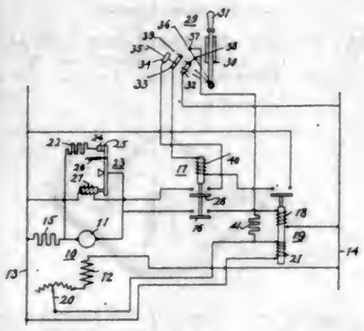
In a circuit closer, an elongated bulb adapted to be supported in an upright position, hollow arms formed integral with said bulb and extending radially and upwardly therefrom, at spaced intervals around said bulb, said arms being closed at their outer ends to form pockets, said closed ends of the arms being normally disposed above the plane of the open ends thereof, spaced terminals in the ends of said arms, having their contact surfaces exposed at the base of the pockets and a conducting liquid in the bottom of said bulb adapted to flow into said arms when the bulb is tilted at a predetermined angle.

1,867,279. VALVE. EMIL PRICE and WILLIAM A. PFISTER, Los Angeles, Calif. Filed Mar. 24, 1930. Serial No. 438,578. 1 Claim. (Cl. 251—132.)



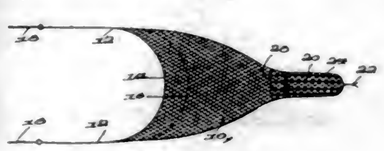
The combination, with a valve structure including a body portion having a downwardly directed nozzle, a packing gland carried by the body, a reciprocal valve disk contained in the body and provided with a stem, a seat for the disk, means for urging the disk against the seat, a portion of the stem passing through the gland and terminally disposed exteriorly of the body, a cylindrical guard extending about the exterior portion of the stem, an operating lever pivoted to the body and having a manipulating portion adapted to overlie the nozzle, means for locking the lever to the nozzle, and an eccentric portion formed on the lever and contained within the guard and freely bearing against the extremity of the exterior portion of the stem and adapted to depress the stem and to move the disk away from its seat when the lever is tilted in one direction, the cylindrical guard serving to conceal the free extremity of the exterior portion of the stem so as to prevent access being had thereto from a point exteriorly of said guard.

1,867,280. NO-LOAD RELAY. CHARLES H. RIPPL, East Cleveland, Ohio, assignor to The Clark Controller Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 6, 1930. Serial No. 433,713. 7 Claims. (Cl. 172—179.)



1. In a control system for direct current motors, the combination of an electric motor, a circuit for said motor, master switching means, an underload relay having windings in additive relation, one of said windings being in said circuit and another in circuit with initial contacts of said master switching means, and an electromagnetic contactor for closing said motor circuit, said contactor having a winding in circuit with contacts of said relay and with other contacts of said master switching means.

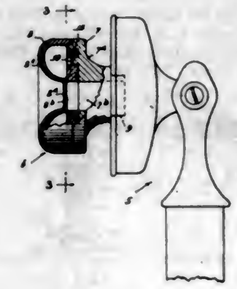
1,867,281. SIFTER TRAWL. LLOYD O. RUNKLE, Gloucester, Mass., assignor to The Linen Thread Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 14, 1931. Serial No. 557,170. 11 Claims. (Cl. 43—9.)



1. A trawl net comprising a body of mesh, and a cod end of mesh, forming a continuation of said body, the size of the mesh in the cod end being substantially uniform with that in the body.

1,867,282. GERMICIDAL TRANSMITTER MOUTHPIECE. HARRY H. SAMUELS, New York, N. Y. Filed July 14, 1931. Serial No. 550,783. 1 Claim. (Cl. 179—185.)

A telephone mouthpiece comprising front and rear members of which the latter is adapted for connection to a telephone transmitter and the former has a detachable threaded engagement with the latter, said rear member having a central opening therethrough, and a cake containing germicidal material vaporizable at ordinary temperatures and disposed against the front face of the rear member and completely enclosed by the front member, the front member having a central depressed portion disposed in the plane of the front face of the cake, the cake having an opening therethrough in axial alignment with that in the rear member and the front member having perforations in the depressed portion and perforations disposed in its front face arranged in circular series with the depressed portion as a center, the rear member being provided with

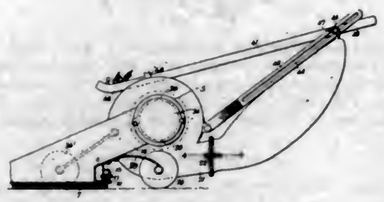


lugs on its front face and the cake having openings therein disposed for the entrance of said lugs to retain the cake in position on the rear member.

1,867,283. PLASTIC EXPLOSIVE MIXTURE OF HIGH SHATTERING POWER. ALFRED STETTBACHER, Zurich, Switzerland. Filed June 16, 1930, Serial No. 461,652, and in Switzerland Feb. 27, 1930. 4 Claims. (Cl. 52—13.)

1. A plastic explosive mixture detonating with maximum velocity, suitable for military purposes, consisting of a mixture of 5 to 95 parts by weight of pentaerythritetetranitrate with 95 to 5 parts by weight of a liquid nitric acid ester of polyvalent aliphatic alcohols, and 8 to 0.1% collodion-cotton.

1,867,284. VACUUM CLEANER. HENRY J. SMIDLEY, Chicago, Ill. Filed May 5, 1927. Serial No. 188,894. 9 Claims. (Cl. 15—10.)



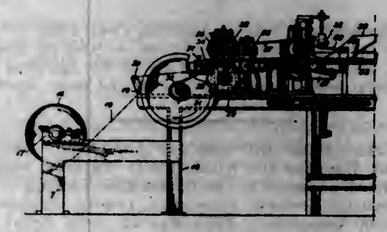
1. In a suction cleaner, a suction channel having an inlet at its base, a brush chamber extending parallel with the suction channel and separate from said channel but having an open base at the rear of the open base of channel, and a vertically movable brush comprising a head loosely fitting in the brush chamber and freely movable vertically therein and normally retained in a lowered position by its own weight alone and carrying brush bristles projecting through the base of the chamber for contact with a floor or other surface.

2. In a suction cleaner, a suction head forming branches arranged in V-formation and forming suction channels, a partition at the apex of the branches and between said channels, brushes extending alongside the channels in parallel relation therewith, and suction devices communicating with the respective channels.

1,867,285. PLASTIC EXPLOSIVE MIXTURE. ALFRED STETTBACHER, Schwamendingen, near Zurich, Switzerland. Filed May 17, 1929, Serial No. 363,999, and in Switzerland May 24, 1928. 1 Claim. (Cl. 52—13.)

A plastic explosive composition detonating with great velocity and energy, consisting of 70 to 90 parts by weight of pentaerythrite tetranitrate in a finely crystalline form and 30 to 10 parts by weight of substances selected from a group consisting of glycol dinitrate, nitroglycerine and homologous substances.

1,867,286. MACHINE FOR MAKING LINERS FOR BASKETS AND THE LIKE. ISAAC STERN, Brooklyn, N. Y., assignor to S & S Corrugated Paper Machinery Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 18, 1928. Serial No. 255,318. 6 Claims. (Cl. 93—1.)



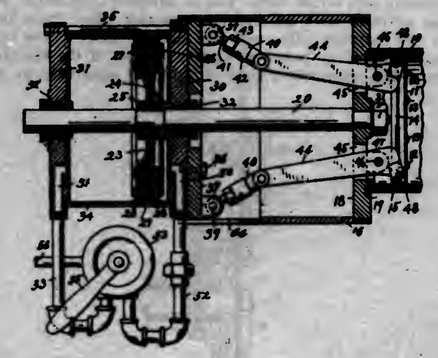
1. In a machine for forming liners from a web of paper, in combination, a cylinder, a pair of spaced arcuate knives on the cylinder, one of said knives being adapted to cut the edge of one blank and the other knife being adapted to cut the succeeding edge of the next blank, said knives by their cutting action severing from between two succeeding blanks a section of paper corresponding to the shape of the space between said knives, a second pair of arc-shaped knives, spaced from and corresponding to said first mentioned pair, and adapted to form similar cuts in said web, a corresponding cylinder having a surface adapted to cooperate with said knives during their severing action, means to form transverse crease lines in said blank, paste applying means adapted to apply paste near one edge of one of the blank ends, folders to raise the opposite ends of the blank and permit them to fall towards the body of the blank and arms to press said blank ends together to cause them to adhere.

1,867,287. GELATINATED EXPLOSIVES OF GREAT ENERGY AND CONSTANT DETONATION SPEED. ALFRED STETTBACHER, Zurich, Switzerland. Filed June 16, 1930, Serial No. 461,651, and in Switzerland Jan. 21, 1930. 5 Claims. (Cl. 52—13.)

1. A plastic explosive containing oxysalts, possessing great energy and high and constant detonation speed, which can easily be pressed, comprising plastic mixture consisting of 90 to 4% pentaerythrie tetranitrate, 70 to 4% nitroglycerine, and 20 to 2% dinitroglycol, mixed with substances selected from a group consisting of 70 to 10% of nitrate of ammonium and perchlorate of ammonium, sodium and potassium in suitable proportion.

1,867,288. CAP SETTING TOOL. WAYNE B. THOMAS, Youngstown, Ohio, assignor to The Niles Steel Products Company, Niles, Ohio, a Corporation of Ohio. Filed Aug. 28, 1930. Serial No. 478,537. 18 Claims. (Cl. 113—18.)

1. In a tool for sealing and securing in place cup shaped caps, a lever carrying plate, means associated therewith for centering the plate with respect to the cap, levers pivotally mounted upon the carrier plate and projecting through openings therein, an arcuate shoe upon the forward end of each lever having a curvature approximating



that of the cap side wall, and means for moving simultaneously the rear ends of said levers to force said shoes outwardly.

1,867,289. INSIDE CASING CUTTER. ERCOLE VENTRESCA, Houston, Tex. Filed Mar. 13, 1931. Serial No. 522,274. 7 Claims. (Cl. 81—193.)

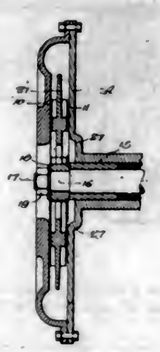


1. A cutting and pulling device for pipe in wells comprising a stem, a slidably mounted cutter body nonrotatable on said stem, cutters mounted to oscillate in said body, a cutter rotating rack resiliently connected with said stem, a dog-expanding collar above said body, dogs thereon, a sleeve supporting said dogs and means engaging said sleeve and responsive to a rotation of said stem to lift said dogs, said stem being rotatable independently of said dogs.

1,867,290. CENTRIFUGAL PUMP. JAMES B. VITU, Chicago, Ill., assignor to Weil Pump Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 12, 1929. Serial No. 385,302. 1 Claim. (Cl. 103—103.)

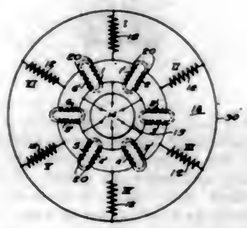
In a single stage centrifugal pump, the combination with a casing having a centrally disposed intake orifice in

one side thereof and a peripheral discharge orifice; of an open type impeller having a centrally disposed web and curved impelling blades on opposite sides thereof; and a shaft on which said impeller is mounted, the shaft being rotatably mounted in the casing, said casing, on the side opposite said intake orifice and in alinement therewith, being provided with an auxiliary chamber offset from and in free communication with the main chamber of the casing in which the impeller rotates, the web of the impeller being also provided with a plurality of apertures in its



central portion in alinement with said intake orifice and auxiliary chamber, the total area of the web apertures being such with reference to the intake orifice, as to allow approximately half the volume of liquid to pass freely therethrough when the pump is in operation, said auxiliary chamber providing an increased space for accommodation and change of direction of flow for that portion of the liquid passing through said apertures and which is handled by those blades on the side of the impeller adjacent the auxiliary chamber whereby to produce substantially equalized pressures on the opposite sides of the impeller.

1,867,291. MERCURY-ARC RECTIFIER. FELIX BARON VON KLEIST, Berlin-Siemensstadt, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 31, 1930, Serial No. 458,038, and in Germany June 3, 1929. 11 Claims. (Cl. 175—363.)



7. A rectifier system comprising the combination, with a transformer having star-connected six-phase secondary windings and a multi-anode mercury-arc rectifier connected thereto, of two parallel-connected distributor coils connected in series with each of the six secondary phase windings, characterized by the fact that the twelve distributor coils are mounted on a multi-legged transformer core with a coil of one phase mounted on one leg and balanced against an equal-sized oppositely connected coil in the next lagging phase, and with the other coil of the first phase mounted on another leg and balanced against an equal-sized oppositely connected coil in the next leading phase.

1,867,292. CONTROLLING DEVICE. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Filed May 1, 1930. Serial No. 448,885. 16 Claims. (Cl. 40—8.)



I. A controlling device, comprising a rod, a disk riveted to one end of said rod, an index plate covering the riveted union between said parts, and means for clamping the peripheral border edges of said disk and plate together.

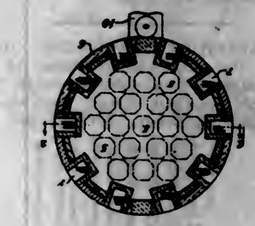
1,867,293. ELECTRIC CIRCUIT BREAKER. EDMUND BASIL WEDMORE and WILLIS BEVAN WHITNEY, London, England, assignors to The British Electrical and Allied Industries Research Association, London, England, a British Association. Filed May 22, 1929, Serial No. 365,081, and in Great Britain June 8, 1928. 7 Claims. (Cl. 200—144.)



1. Circuit-breaking apparatus comprising in combination relatively movable contacts affording at least one gap between which an arc may form, a guard of conducting material for and electrically connected to each arcing contact for modifying the distribution of potential in the gap between the contacts, one at least of the guards being movably relatively to its own contact in the direction of relative movement of the contacts.

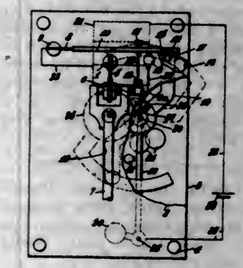
1,867,294. METHOD OF SALT-GLAZING BRICK AND OTHER CLAY PRODUCTS. JOHN B. WHITACRE, Waynesburg, Ohio, assignor to The Whitacre-Greer Fireproofing Company, Waynesburg, Ohio, a Corporation of Ohio. Filed Aug. 14, 1931. Serial No. 557,019. 17 Claims. (Cl. 25—157.)

1. The method of salt-grazing ceramic products made from clay containing metallic compounds as impurities, which includes heating the products in a kiln to that temperature required for obtaining a desired color, then volatilizing salt-glazing material in the kiln to salt glaze the products, and then maintaining and oxidizing atmosphere in the kiln and around surfaces being glazed



while cooling the products until the glaze has solidified to such an extent that the color of the products is not affected by metallic impurities in the clay.

1,867,295. ELECTROMAGNETIC PENDULUM DRIVING DEVICE FOR CLOCKS. ALBERT WIRZ, Basel, Switzerland. Filed May 31, 1930, Serial No. 457,701, and in Switzerland June 16, 1929. 4 Claims. (Cl. 58—29.)



1. An electromagnetic pendulum driving mechanism comprising, in combination, a pendulum, a loading lever to impart movement to the pendulum in one direction, an electromagnet and a cooperating armature having a normal position of equilibrium and movable from such position by the magnet when the latter is energised to lift the loading lever, a magnet circuit means whereby the magnet circuit is interrupted prior to lifting of the loading lever by the armature, whereby the momentum of the armature serves to lift the loading lever, means whereby the loading lever holds the armature against return to its normal position during part of the return movement of the pendulum and whereby the armature holds the loading lever in a raised position, means whereby the last part of the return movement of the pendulum releases the armature and the loading lever to permit the former to return to its normal position and the latter to impart an impulse to the pendulum, and means operable in part by descent of the loading lever and in part by movement of the armature to its normal position to restore the electromagnet circuit.

1,867,296. AIR LINE COUPLING. LEONIDAS D. WOODRUFF, Chicago, Ill. Filed Nov. 14, 1929. Serial No. 407,064. 3 Claims. (Cl. 285—120.)

1. An air-line coupling comprising a pair of tubular members, a coupling-sleeve having a screw-threaded connection with one member, a normally expanded and inwardly contractible ring in the sleeve and between said one member and the sleeve, an annular shoulder on the other member, and coacting conoidal wedge-surfaces on the sleeve and said



one member for contracting the ring to overlap said shoulder and secure the members against separation when the sleeve is screwed onto the member to which it is connected.

1,867,297. ARTIFICIAL CELLULOSE YARNS PRODUCED BY THE STRETCH SPINNING PROCESS. ARTHUR ZART, Barmen-Rittershausen, AUGUST HARTMANN, Barmen, and FRANZ HOELKESKAMP, Barmen-Rittershausen, Germany, assignors to American Bemberg Corporation, New York, N. Y. Filed Dec. 18, 1928, Serial No. 326,891, and in Germany Dec. 22, 1927. 1 Claim. (Cl. 28—1.)

A cuprammonium filament possessing a dry strength of from 220 to 268 grams per denier, and a wet strength of from 140 to 183 grams per 100 denier.

1,867,298. ARTIFICIAL YARN, PARTICULARLY ARTIFICIAL SILK YARNS. ARTHUR ZART, Barmen-Rittershausen, AUGUST HARTMANN, Barmen, and FRANZ HOELKESKAMP, Barmen-Rittershausen, Germany, assignors to American Bemberg Corporation, New York, N. Y. Filed Dec. 18, 1928, Serial No. 326,892, and in Germany May 5, 1928. 2 Claims. (Cl. 28—1.)
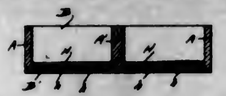


1. Yarn of artificial origin comprising filaments with an individual titre of less than 1 denier, said yarn having a dry strength of at least 2.2 grams per denier and a wet strength of at least 1.4 grams per denier.

1,867,299. WALL STRUCTURE AND BUILDING UNIT THEREFOR. MORGAN K. ARMSTRONG, Washington, D. C. Filed Apr. 7, 1930. Serial No. 442,296. 7 Claims. (Cl. 72—41.)

1 A building unit consisting of an elongated member rectangular in cross section and comprising end and in-

termediate members spaced at equal intervals of the length of said unit, and a sheet of plasterboard formed and scored



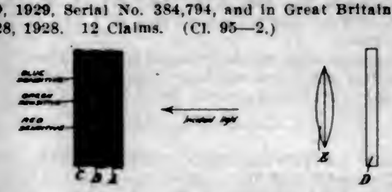
to be wrapped about said end and intermediate members secured thereto and forming the sides, top and bottom of said unit.

1,867,300. METALLIC SOCKET AND MOLD FOR AMALGAM DIES. ELPHA E. BAILEY, Denver, Colo. Filed May 15, 1930. Serial No. 452,625. 4 Claims. (Cl. 32—6.)



1. A metallic socket for use in molding the root end of an amalgam die to facilitate the accurate seating of the die in a master mold, said socket comprising a tubular tapered metal member whose wall is of substantially the same thickness at all points of unsymmetrical cross section and open at both ends.

1,867,301. THREE-COLOR PHOTOGRAPHY. THOMAS THORNE BAKER, Hatch End, England, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Aug. 9, 1929, Serial No. 384,794, and in Great Britain Aug. 28, 1928. 12 Claims. (Cl. 95—2.)



1. A tri-pack comprising a front layer of silver halide emulsion rendered highly sensitive to the red region of the spectrum but substantially insensitive to the green region, an intermediate layer of silver halide emulsion rendered sensitive to the green region of the spectrum but not to the red region, and a back layer of non-color-sensitized silver halide emulsion having a substantially higher sensitivity than either of the other two emulsions, in combination with light-filtering means for the front layer adapted to absorb ultra-violet radiation, to transmit violet light and to absorb at least a proportion of blue light.

1,867,302. OVERRUNNING CLUTCH. ARTHUR S. BALDWIN, Stratford, Conn. Filed Oct. 7, 1930. Serial No. 486,912. 2 Claims. (Cl. 192—42.)



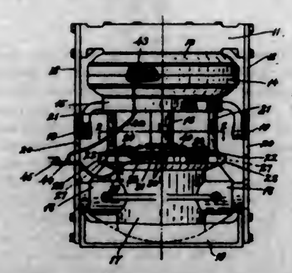
1. An overrunning clutch comprising a shaft, an enlarged circular head fixed thereto and having a pocket within its periphery, a ring having side recesses journaled around said head and having gear teeth on its outer periphery and a recess in its inner periphery, a pawl structure carried by said head within said pocket and provided with spaced spring arms that embrace opposite faces of said ring and lie within the recesses, and means for initially revolving said ring.

1,867,303. RADIATOR ATTACHMENT. GEORGE W. BLACKMORE, Pittsburgh, Pa., assignor to Automatic Gas Steam Radiator Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 23, 1929. Serial No. 349,397. 3 Claims. (Cl. 220—25.)



1. In combination with a radiator having a water space, a vapor space above the water level and a threaded opening through a side wall of the radiator below the water level, a filling attachment threaded into said opening and having its inlet upwardly directed, said attachment having a web separating a lower passageway for conducting liquid into the radiator from an upper passageway for venting entrapped gases while the water space is being filled.

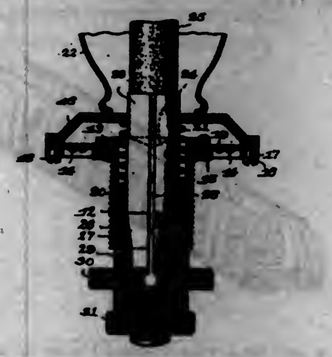
1,867,304. SAFETY LOCK FOR PRESSES. JAMES WILLIAM BRUNDAGE, Akron, Ohio, assignor to The Summit Mold & Machine Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 8, 1931. Serial No. 528,527. 14 Claims. (Cl. 18—17.)



12. In a press, the combination of a reciprocating and tilting press head, a pivoted ram cylinder having a ram carrying said head, a pair of abutment members projecting backwardly from said head on opposite sides of the ram cylinder, and a pair of locks pivoted on said cylinder and oppositely movable into and out of the path of said abutment members.

1,867,305. GLOBE AND CARBON HOLDER FOR ARC LAMPS. HAROLD J. BRUNK, Chicago, Ill., assignor to C. F. Pease Company, a Corporation of Delaware. Filed Jan. 16, 1930. Serial No. 421,091. 5 Claims. (Cl. 176—119.)

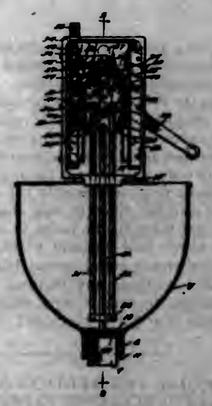
1. A device of the class described comprising a supporting structure, a globe seat for supporting an open globe thereon, a flexible diaphragm connecting said structure to said seat and permitting the vertical and angular adjustment of the latter with reference to the normal axis of the globe, said globe seat and said supporting structure having aligned openings forming a passage communicating with the interior of said globe, and a lower carbon holder adapted to be inserted in said passage for closing the same and for supporting a lower carbon within said globe.



1,867,306. FLAT VARNISH. GLEN HARVEY BURGMAN, Chicago, Ill. Filed June 3, 1929. Serial No. 368,192. 1 Claim. (Cl. 134—39.)

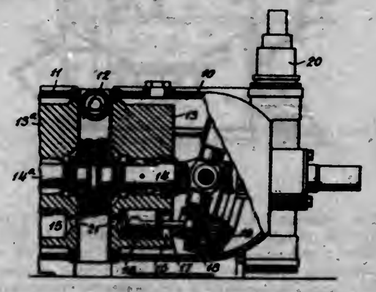
A composition of matter that will form a glazed surface composed of 15 to 30% by weight of drying oils, 15 to 30% solids, comprising metallic soaps of fatty acid pigments, the quantity of solids and drying oils not to exceed 50% of the total ingredients, the balance of the composition of matter, being not less than 50% of the total weight, consisting of from 33⅓ to 40% of a kerosene oil of about 40 B6., and the remaining 16⅔ to 10% consisting of a mixture of high and low boiling naphtha.

1,867,307. DOUGHNUT MACHINE AND THE LIKE. CHARLES E. CARPENTER, Chicago, Ill. Filed Oct. 17, 1931. Serial No. 569,377. 8 Claims. (Cl. 107—14.)



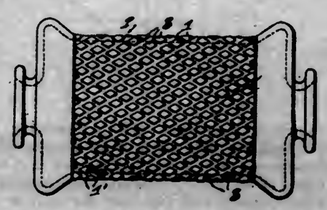
1. In a device of the class described, the combination of a dough hopper, having a downwardly extending throat, plunger and valve devices working in conjunction with said throat, a disk journaled for rotation above the hopper, studs extending outwardly from the opposite faces of said disk, cam plates adjacent to the faces of the disk, connections between the cam plates and the plunger and valve devices respectively, and cam slots in said cam plates engaging the studs aforesaid, one of the cam plates having its cam slot enlarged at one end, a U-shaped member pivotally connected to said cam plate adjacent to said end of the cam slot thereof, said U-shaped member having a cam slot extension registering with the cam slot of said plate, and means for adjusting said U-shaped member with respect to the cam plate to which it is pivoted, substantially as described.

1,867,308. HYDRAULIC SPEED TRANSMISSION. LOREN DURNER, Waterbury, Conn., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 4, 1931. Serial No. 527,684. 4 Claims. (Cl. 103—162.)



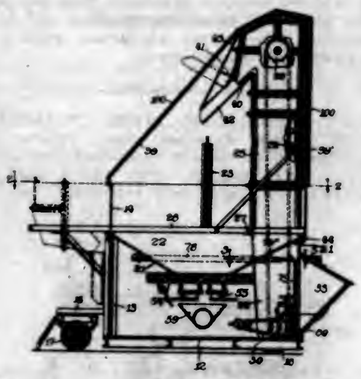
1. In a hydraulic speed transmission including a rotating cylinder barrel having a rigid flat end face and provided with cylinders having reduced ports in said flat end face of the barrel, a valve plate provided with arcuate ports co-operating with the ports of said cylinders to control the flow of the operating pressure fluid, an annular bearing surface on said valve plate arranged to be engaged by said flat end face of said cylinder barrel, said arcuate ports being located in said bearing surface, and a plurality of rigid segmental auxiliary bearing surfaces on said valve plate in surface engagement with the flat end face of said barrel and located annularly about said annular bearing surface in radially spaced outward relation thereto, and having their opposed ends spaced apart to form radial channels covered by said flat end face whereby pressure fluid leakage is induced across said auxiliary bearing surfaces to form a film between said cylinder barrel and valve plate, said oil channels being bevelled along their opposite sides to force the pressure fluid inwardly at these points.

1,867,309. SPOOL OR CYLINDER FOR USE IN THE WET HANDLING OF FRESHLY-SPUN FILAMENTS. RUDOLF ETZKORN, Oberbruch Regierungsbezirk, Aachen, Germany, assignor to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 19, 1930, Serial No. 496,715, and in Germany Dec. 6, 1929. 3 Claims. (Cl. 242—118.)



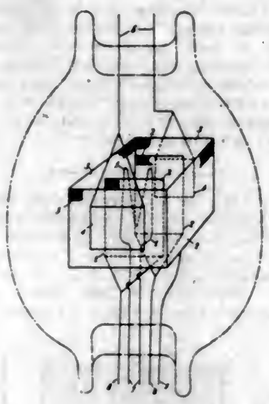
1. A spool, the winding surface of which is provided with two series of grooves running in straight lines, the first series of grooves intersecting the second, but the grooves of the second series being noncontinuous.

1,867,310. HEATING DEVICE FOR CONCRETE PLANTS. ROBERT W. FIEROH, Chicago, Ill. Filed Dec. 6, 1930. Serial No. 500,458. 4 Claims. (Cl. 263—1.)



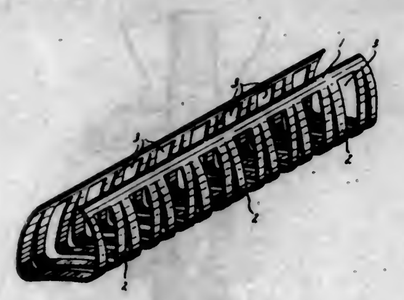
1. The combination with a storage hopper for paving material, an upright conveyor casing adjacent to said hopper, and an elevating conveyor in said casing, of means for preventing freezing of material in said hopper and conveyor casing comprising a substantially horizontal pipe extending through said hopper and discharging into said casing, and means for supplying a heating medium to said pipe.

1,867,311. SCREENED THERMIONIC TUBE. CHARLES SAMUEL FRANKLIN, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 20, 1928, Serial No. 313,741, and in Great Britain Oct. 28, 1927. 4 Claims. (Cl. 250—27.5.)



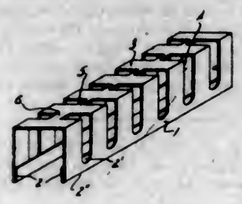
1. An electron discharge device comprising a sealed envelope enclosing a cathode, a pair of independent control electrodes, one located on each side of said cathode, a pair of independent plate electrodes, one located on each side of said cathode and adjacent the control electrode on that side of the cathode, and a screen electrode surrounding said cathode and said control electrodes and interposed between each plate electrode and its adjacent control electrode.

1,867,312. CHANNEL. WALTER S. GAINES, Jr., East Cleveland, Ohio, assignor to The Reid Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 5, 1930. Serial No. 479,866. 5 Claims. (Cl. 296—44.5.)



1. A core for a window channel made up of a strip of thin flexible metal and stamped out to provide continuous edge portions and transverse straps extending at an angle to each other to provide openings therebetween, whereby the channel may be flexed back and forth in the plane to be occupied by the window pane.

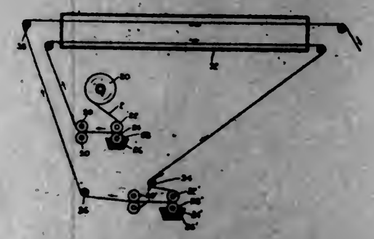
1,867,313. WINDOW CHANNEL. WALTER S. GAINES, Jr., East Cleveland, Ohio, assignor to The Reid Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 13, 1930. Serial No. 488,267. 5 Claims. (Cl. 296—44.5.)



1. A metal core for a window channel, comprising a generally channel-shaped flexible metal member having continuous longitudinal edge portions, which edge portions constitute the free or upper edge portions of the side walls of said channel member, said edge portions being connected by transverse strap portions longitudinally spaced to form therebetween transverse slots each extending from a point within one side wall of said channel member through the bottom thereof to a point within the opposite side wall of said channel member, whereby said channel member may be flexed back and forth in the plane to be occupied by the window pane which said channel member is adapted to receive, and reenforcing metal means lying alongside said longitudinal edge portions and lapping over the ends of said slots, whereby tearing of said edge portions at the ends of said slots is at least minimized.

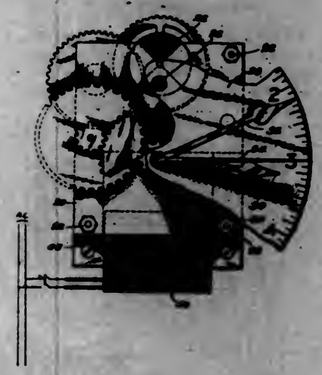
1,867,314. METHOD FOR MULTICOLOR PRINTING ON TRANSPARENT CELLULOSE PAPER AND PRODUCT RESULTING FROM THE SAME. IRVING GURWICK, New York, N. Y., assignor to Transparent Packaging & Printing Corporation, New York, N. Y., a Corporation of New York. Filed June 4, 1931. Serial No. 541,974. 12 Claims. (Cl. 101—170.)

1. The method of printing a multi-color design on lustrous grease-proof transparent regenerated cellulose paper, which includes first printing on said sheet a solid body of color, drying the printed sheet, and thereafter printing on top of a portion of the first solid body of



color another solid body of a different color, in order to obtain a design in a plurality of solid colors printed in superposition instead of in juxtaposition.

1,867,315. SYNCHRONOUS MOTOR. LAURENS HAMMOND, Evanston, Ill., assignor to The Hammond Clock Company, Chicago, Ill., a Corporation of Delaware. Filed July 30, 1930. Serial No. 471,656. 31 Claims. (Cl. 172—275.)

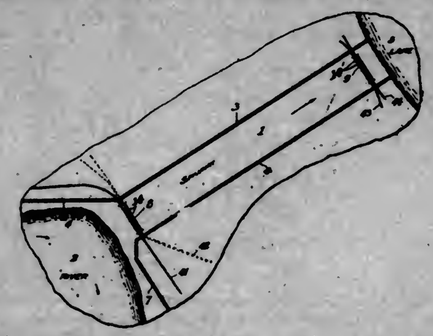


1. In combination, a synchronous motor having a load, and comprising stationary means for producing a magnetic field of periodically varying density, a rotor rotatably mounted in the field produced by said means, and a frictionally mounted pole piece movable between said means and said rotor by magnetic forces and forming a path for the passage of flux from said means to said rotor, the friction tending to prevent movement of said pole piece being sufficiently great that the energy dissipated upon movement of said pole piece will be greater than the energy dissipated in said load during the same interval of time.

9. In a synchronous motor, the combination of relatively stationary means for producing and conducting a magnetic flux of periodically varying density, a pole piece associated with said means and substantially freely movable relative thereto by magnetic forces, a rotor, and cooperating teeth on said rotor and pole piece.

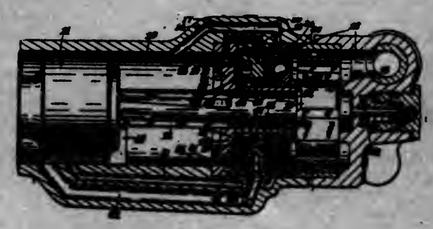
1,867,316. SPILLWAY CONTROL METHOD AND APPARATUS. ALEXANDER B. B. HARRIS, Chicago, Ill., assignor of one-fourth to Frank H. T. Potter, Chicago, Ill. Filed Nov. 1, 1929. Serial No. 403,926. 7 Claims. (Cl. 61—1.)

4. A method of preventing erosion therein during use of an intermittently used spillway comprising admitting water into the spillway and restricting discharge therefrom until a desired depth is obtained, and thereafter admitting and discharging approximately equal quantities



of water simultaneously while maintaining a depth and rate of flow therein sufficient to prevent erosion of the bottom of the spillway.

1,867,317. ROCK-DRILL AND LIKE TOOL. JOHN LEONARD HOLMAN and ARTHUR TREVE HOLMAN, Camborne, Cornwall, England, assignors to Holman Brothers Limited, Camborne, Cornwall, England, a British Company. Filed Jan. 19, 1929, Serial No. 333,635, and in Great Britain Aug. 11, 1928. 10 Claims. (Cl. 121—19.)



1. For a rock-drill or like tool, means which, for controlling the admission of driving-fluid to opposite ends of the cylinder, comprises, in combination, an annular valve-chamber that is coaxial with the cylinder, an internal guide-member, an annular distributing valve which surrounds and engages said internal guide-member, valve-seats spaced apart on opposite sides of the valve wherein the valve is free to move bodily between said valve seats and lies in a plane transverse to the cylinder axis, a fluid inlet passage for delivering driving-fluid to the outer margin of the valve from which it can pass to either side of the valve, and an axial extension on the valve, which extension affords an additional bearing surface, and whereby the areas of the two opposite valve faces are unequal.

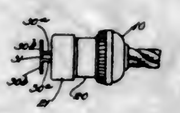
1,867,318. TUNNEL KILN. WALTER A. HULL, Oak Park, Ill. Filed Feb. 26, 1930. Serial No. 431,882. 66 Claims. (Cl. 25—142.)



1. A tunnel kiln of the character described having in combination, an enclosed tunnel space for accommodating ware, a combustion chamber and means for establishing

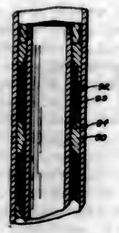
in certain portions of the length of said space, cooling and heating currents, and a plurality of movable ware supporting means having communicating longitudinal flues therein with side openings adapted for registration with flues for cooling drafts and heating drafts derived from said combustion chamber in the walls of said tunnel.

1,867,319. CIRCUIT CONNECTING PLUG. MICHAEL W. MCARDLE, Chicago, Ill. Filed July 19, 1930. Serial No. 469,106. 4 Claims. (Cl. 173—361.)



1. A circuit connecting plug comprising in combination with a main body member and a terminal member, coaxially mounted one upon the other and movable relatively in the direction of their common axis, means connecting said main body member and terminal for limiting the relative co-axial movement, and spring means reacting between the main body and the terminal for holding them normally extending to the limit of the connecting means, said main body and terminal having aligned axial apertures, a pair of circuit contacts mounted insulatedly from each other in the main body member fixedly with respect to said body member as against longitudinal displacement relative to the latter and protruding therefrom at opposite ends thereof and at the end toward the terminal member protruding through said terminal member and a substantial distance therebeyond, said contacts at the ends thus protruding from the terminal being deflected in opposite directions away from each other in T-form, the opposite ends protruding at the opposite end of the body member being arranged for attachment of circuit wires.

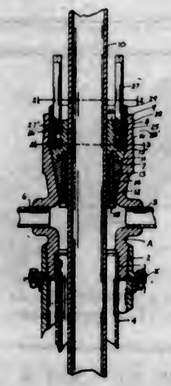
1,867,320. PUMP PACKING ASSEMBLY AND PACKING RINGS. JOSEPH H. MCEVOY, Houston, Tex. Filed Sept. 11, 1928. Serial No. 305,222. 4 Claims. (Cl. 74—109.)



1. In a pump, alternate packing and spacing rings, each packing ring being elongated adjacent the inner side and of shorter length on its outer side, said spacing rings being shaped to interfit between said packing rings and formed with a plurality of shoulders, and an inner sleeve on said packing rings to engage one of said shoulders on said adjacent spacing rings.

1,867,321. SAFETY PRESSURE HEAD. JOSEPH H. MCEVOY, Houston, Tex. Filed May 7, 1929. Serial No. 361,059. 14 Claims. (Cl. 285—22.)

1. In a device of the character described, a casing head having a downwardly tapered seat therein through which the drill stem may pass, the combination of a pressure head shaped to fit said seat and close about said drill stem, said pressure head including upper and lower plates, a flexible packing member between said plates, and means on said upper plate slidable laterally in said



pressure head to engage said casing head in a plurality of adjusted positions and hold said pressure head from upward movement.

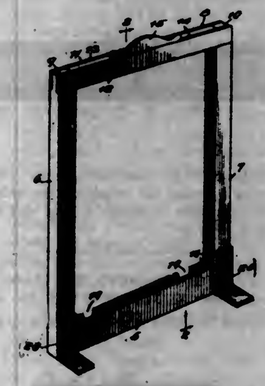
1,867,322. REEL. FRED C. MEYER, Paterson, N. J., assignor, by mesne assignments, to The Okonite-Callender Cable Company, Incorporated, Paterson, N. J., a Corporation of New Jersey. Filed July 3, 1930. Serial No. 465,539. 3 Claims. (Cl. 206—59.)



1. In combination, a reel provided with end flanges, a metal flange surrounding each of said reel flanges, the base of each of said last mentioned flanges extending inwardly of the reel away from the reel end flanges, a metal lagging lying between the reel end flanges and resting upon said inwardly extending flange bases, and means for holding the metal lagging in place.

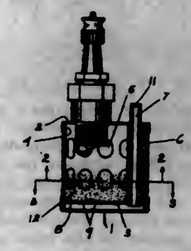
1,867,323. DISPLAY FRAME. JOHN F. MEYER, Pasadena, Calif. Filed Aug. 20, 1930. Serial No. 476,495. 1 Claim. (Cl. 40—152.)

A display frame including side, bottom, and top rails, said side and bottom rails having a card receiving groove therein, said top rail having an opening therein communicating with said groove, a block mounted in said opening, a handle member secured on said block including a portion extending over a section of the top rail to retain said block in said opening, said lower rail having notches in the rear face extending to the groove therein to afford access to the edges of cards mounted in the



groove in said side and bottom rails whereby said cards may be easily slid from said groove through said opening after said block is removed from said opening.

1,867,324. SPARK PLUG CLEANER. HARRY D. MULLAN, Milwaukee, Wis. Filed Dec. 24, 1928. Serial No. 328,179. 9 Claims. (Cl. 51—8.)

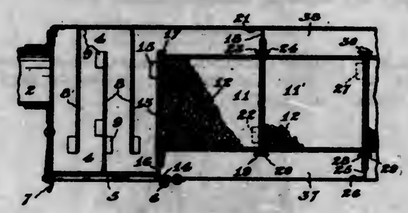


1. A device of the character described, comprising a side member having a plurality of holes, a top member having a pair of holes one of which is adapted to receive a spark plug, a bottom member, a false bottom within said device spaced from the bottom member and having a plurality of holes beneath the plug receiving hole in the top member and having also another hole beneath the other hole in said top member, and a tube leading from the exterior at the top of the device through said last mentioned holes.

1,867,325. PROCESS OF REMOVING CARBON MONOXIDE FROM EXHAUST GASES. HARVEY A. NEVILLE, Bethlehem, Pa., assignor to Evan J. McIlraith, Chicago, Ill. Filed Nov. 18, 1929. Serial No. 407,882. 9 Claims. (Cl. 23—213.)

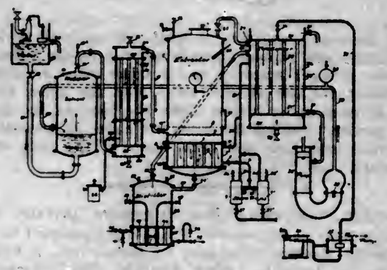
3. The process of oxidising carbon monoxide in exhaust gases from internal combustion motors which comprises passing the hot gases through a reaction chamber containing a catalytic agent which is capable of promoting the reaction between carbon monoxide and water vapor from the temperature attained in the exhaust passages of the motor within a few seconds after the motor is started, without causing the temperature to exceed about 500° C. during the operation of the motor, and catalytically oxidising the carbon monoxide by means of water vapor in the presence of said agent.

9. The process of oxidising carbon monoxide in exhaust gases from internal combustion engines, which comprises passing the hot gases through a reaction chamber containing a catalytic agent comprising a predominant amount of a member of the iron group and a small proportion of one or more additional oxides selected from a group consisting of thorium, aluminum, potassium, cerium, manganese and chromium oxides and catalytically oxidizing the carbon monoxide by the water vapor



at temperatures normally occurring in the exhaust passages of the engine within a few seconds after the motor is started and at temperatures occurring in the exhaust gases while the motor is being operated without causing the temperature of the exhaust gases to exceed 500° C., said catalytic agent being capable of selectively oxidizing the carbon monoxide by means of water vapor.

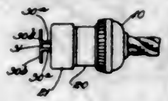
1,867,326. APPARATUS FOR EXTRACTING FATS AT LOW TEMPERATURE. ADOLPHE PANSKI, Paris, France. Filed Jan. 9, 1928, Serial No. 245,529, and in France May 18, 1927. 1 Claim. (Cl. 87—6.)



An apparatus for extracting fats from animal and vegetable raw materials by solvent vaporized at low temperature, comprising a closed extractor, two perforated superposed gratings therein, the upper grating supporting the raw material and the lower grating supporting a filtering canvas, a steam chest in the lower part of the extractor, a condenser consisting of a bundle of vertical inside watercooled tubes surrounded by a vapor chest for condensing and cooling the solvent vapors, means for connecting the extractor-top with the condenser chest to maintain inside the extractor a pressure below the atmospheric pressure and a low temperature, means for connecting the steam chest of the extractor with the chest of the condenser to maintain the steam chest below atmospheric pressure and at a low temperature, a safety valve connected to the steam chest to prevent the steam pressure exceeding atmospheric pressure, vacuum steam traps connected to the steam chest to remove the condensed water therefrom, a still for distilling the extracted fat, a steam chest at the lower part of the still, means for connecting the upper part of the still with the chest of the condenser to maintain in the still a less, than atmospheric pressure and a low temperature, means for filling the still with steam and blowing out the air therefrom, means for condensing the steam in the still by cold water circulation in the steam chest of the still to maintain a high vacuum therein, a solvent holder sealed by water for preventing an air contact with the solvent, means for connecting the bottom of

in certain portions of the length of said space, cooling and heating currents, and a plurality of movable ware supporting means having communicating longitudinal flues therein with side openings adapted for registration with flues for cooling drafts and heating drafts derived from said combustion chamber in the walls of said tunnel.

1,867,319. CIRCUIT CONNECTING PLUG. MICHAEL W. MCARDLE, Chicago, Ill. Filed July 19, 1930. Serial No. 469,106. 4 Claims. (Cl. 173—361.)



1. A circuit connecting plug comprising in combination with a main body member and a terminal member, coaxially mounted one upon the other and movable relatively in the direction of their common axis, means connecting said main body member and terminal for limiting the relative co-axial movement, and spring means reacting between the main body and the terminal for holding them normally extending to the limit of the connecting means, said main body and terminal having aligned axial apertures, a pair of circuit contacts mounted insulatedly from each other in the main body member fixedly with respect to said body member as against longitudinal displacement relative to the latter and protruding therefrom at opposite ends thereof and at the end toward the terminal member protruding through said terminal member and a substantial distance therebeyond, said contacts at the ends thus protruding from the terminal being deflected in opposite directions away from each other in T-form, the opposite ends protruding at the opposite end of the body member being arranged for attachment of circuit wires.

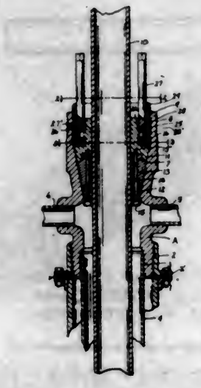
1,867,320. PUMP PACKING ASSEMBLY AND PACKING RINGS. JOSEPH H. MCEVOY, Houston, Tex. Filed Sept. 11, 1928. Serial No. 305,222. 4 Claims. (Cl. 74—109.)



1. In a pump, alternate packing and spacing rings, each packing ring being elongated adjacent the inner side and of shorter length on its outer side, said spacing rings being shaped to interfit between said packing rings and formed with a plurality of shoulders, and an inner sleeve on said packing rings to engage one of said shoulders on said adjacent spacing rings.

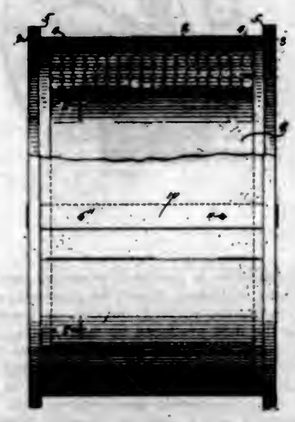
1,867,321. SAFETY PRESSURE HEAD. JOSEPH H. MCEVOY, Houston, Tex. Filed May 7, 1929. Serial No. 361,059. 14 Claims. (Cl. 285—22.)

1. In a device of the character described, a casing head having a downwardly tapered seat therein through which the drill stem may pass, the combination of a pressure head shaped to fit said seat and close about said drill stem, said pressure head including upper and lower plates, a flexible packing member between said plates, and means on said upper plate slidable laterally in said



pressure head to engage said casing head in a plurality of adjusted positions and hold said pressure head from upward movement.

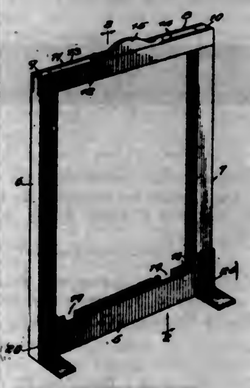
1,867,322. REEL. FRED C. MEYER, Paterson, N. J., assignor, by mesne assignments, to The Okonite-Callender Cable Company, Incorporated, Paterson, N. J., a Corporation of New Jersey. Filed July 3, 1930. Serial No. 465,539. 3 Claims. (Cl. 206—59.)



1. In combination, a reel provided with end flanges, a metal flange surrounding each of said reel flanges, the base of each of said last mentioned flanges extending inwardly of the reel away from the reel end flanges, a metal lagging lying between the reel end flanges and resting upon said inwardly extending flange bases, and means for holding the metal lagging in place.

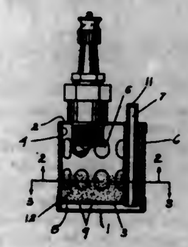
1,867,323. DISPLAY FRAME. JOHN F. MEYER, Pasadena, Calif. Filed Aug. 20, 1930. Serial No. 476,495. 1 Claim. (Cl. 40—152.)

A display frame including side, bottom, and top rails, said side and bottom rails having a card receiving groove therein, said top rail having an opening therein communicating with said groove, a block mounted in said opening, a handle member secured on said block including a portion extending over a section of the top rail to retain said block in said opening, said lower rail having notches in the rear face extending to the groove therein to afford access to the edges of cards mounted in the



groove in said side and bottom rails whereby said cards may be easily slid from said groove through said opening after said block is removed from said opening.

1,867,324. SPARK PLUG CLEANER. HARRY D. MULLAN, Milwaukee, Wis. Filed Dec. 24, 1928. Serial No. 328,179. 9 Claims. (Cl. 51—8.)

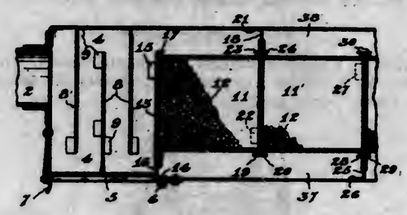


1. A device of the character described, comprising a side member having a plurality of holes, a top member having a pair of holes one of which is adapted to receive a spark plug, a bottom member, a false bottom within said device spaced from the bottom member and having a plurality of holes beneath the plug receiving hole in the top member and having also another hole beneath the other hole in said top member, and a tube leading from the exterior at the top of the device through said last mentioned holes.

1,867,325. PROCESS OF REMOVING CARBON MONOXIDE FROM EXHAUST GASES. HARVEY A. NEVILLE, Bethlehem, Pa., assignor to Evan J. McIlraith, Chicago, Ill. Filed Nov. 18, 1929. Serial No. 407,882. 9 Claims. (Cl. 23—213.)

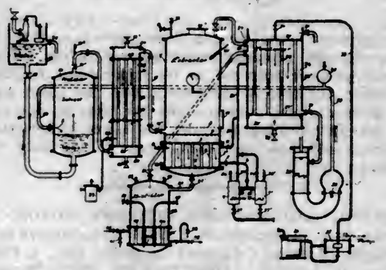
3. The process of oxidising carbon monoxide in exhaust gases from internal combustion motors which comprises passing the hot gases through a reaction chamber containing a catalytic agent which is capable of promoting the reaction between carbon monoxide and water vapor from the temperature attained in the exhaust passages of the motor within a few seconds after the motor is started, without causing the temperature to exceed about 500° C. during the operation of the motor, and catalytically oxidising the carbon monoxide by means of water vapor in the presence of said agent.

9. The process of oxidising carbon monoxide in exhaust gases from internal combustion engines, which comprises passing the hot gases through a reaction chamber containing a catalytic agent comprising a predominant amount of a member of the iron group and a small proportion of one or more additional oxides selected from a group consisting of thorium, aluminum, potassium, cerium, manganese and chromium oxides and catalytically oxidizing the carbon monoxide by the water vapor



at temperatures normally occurring in the exhaust passages of the engine within a few seconds after the motor is started and at temperatures occurring in the exhaust gases while the motor is being operated without causing the temperature of the exhaust gases to exceed 500° C., said catalytic agent being capable of selectively oxidizing the carbon monoxide by means of water vapor.

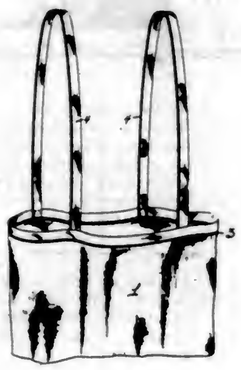
1,867,326. APPARATUS FOR EXTRACTING FATS AT LOW TEMPERATURE. ADOLPHE PANSKI, Paris, France. Filed Jan. 9, 1928, Serial No. 245,529, and in France May 18, 1927. 1 Claim. (Cl. 87—6.)



An apparatus for extracting fats from animal and vegetable raw materials by solvent vaporized at low temperature, comprising a closed extractor, two perforated superposed gratings therein, the upper grating supporting the raw material and the lower grating supporting a filtering canvas, a steam chest in the lower part of the extractor, a condenser consisting of a bundle of vertical inside watercooled tubes surrounded by a vapor chest for condensing and cooling the solvent vapors, means for connecting the extractor-top with the condenser chest to maintain inside the extractor a pressure below the atmospheric pressure and a low temperature, means for connecting the steam chest of the extractor with the chest of the condenser to maintain the steam chest below atmospheric pressure and at a low temperature, a safety valve connected to the steam chest to prevent the steam pressure exceeding atmospheric pressure, vacuum steam traps connected to the steam chest to remove the condensed water therefrom, a still for distilling the extracted fat, a steam chest at the lower part of the still, means for connecting the upper part of the still with the chest of the condenser to maintain in the still a less than atmospheric pressure and a low temperature, means for filling the still with steam and blowing out the air therefrom, means for condensing the steam in the still by cold water circulation in the steam chest of the still to maintain a high vacuum therein, a solvent holder sealed by water for preventing an air contact with the solvent, means for connecting the bottom of

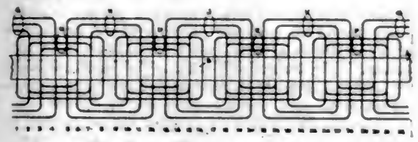
the solvent holder with a higher placed constant level water tank for separating the water from the solvent and for displacing solvent from the holder, a conduit connecting a plunger pump with the solvent holder, a conduit connecting the bottom of the condenser chest with the plunger pump, a heat exchanger interposed between the holder and the extractor for preheating the solvent and removing therein separated water.

1,867,327. UNDERGARMENT. MICHAEL POLSKY, Brooklyn, N. Y. Filed Aug. 29, 1931. Serial No. 560,118. 1 Claim. (Cl. 2—73.)



A garment comprising a body portion and an upper marginal hem, shoulder straps secured to the outer face of the garment material at its upper edge, by lines of stitching, the end of each strap with the upper edge of the garment being turned under the hem, at the rear of the garment forming five piles and a line of hemstitching securing said hem and each strap to the body of the garment.

1,867,328. ALTERNATING CURRENT MOTOR. WILLIAM RIENKS, Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed July 13, 1927, Serial No. 205,374, and in the Netherlands July 30, 1926. 10 Claims. (Cl. 172—274.)



1. An alternating current induction motor comprising a stator, a set of coils for said stator arranged to produce a predetermined number of poles, the coils for each pole comprising a plurality of loops arranged to span different numbers of slots in said stator, the number of turns for the loops of any pole being arranged to decrease outwardly from the axis of the pole, and a supplemental set of coils having a plurality of loops for each pole, the loops of said second set being displaced relative to the loops of said first set.

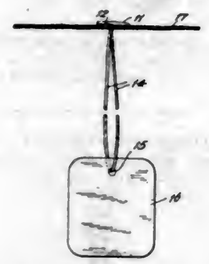
1,867,329. SUPPORT FOR TILE PARTITIONS. JAMES H. RYAN, St. Louis, Mo. Filed July 26, 1930. Serial No. 470,870. 2 Claims. (Cl. 72—115.)

1. Supports for supporting tiles in walls comprising adjacent supports one of which consists of a channel bar for receiving the ends of a vertical series of tiles and having projections for engaging the ends of an adjacent series of tiles, and the adjacent support consisting of a



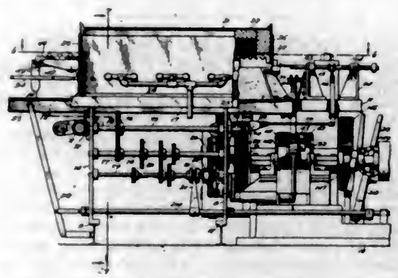
pair of matching angle members, each of said angle members having a flange for engaging the sides of a vertical series of tiles and a flange across the ends of said series of tiles.

1,867,330. ATTACHING DEVICE. HARRY SCHWARTZMAN, Jersey City, N. J. Filed Jan. 28, 1932. Serial No. 589,358. 9 Claims. (Cl. 40—22.)



1. An attaching device comprising a needle-like member having a substantially semi-circular groove extending longitudinally thereof to an intermediate point in said member, securing means adjacent the inner end of said groove, a filamentary strand adapted to lie in said groove and having its end held by said securing means, said member having its pointed portion connected by a relatively frangible portion to the main portion thereof to which said strand is attached.

1,867,331. FORGING MACHINE. THOMAS C. SHEEHAN, Upper Montclair, and JOHN E. DREW, Jersey City, N. J., assignors to Wade & Butcher Corporation, a Corporation of New Jersey. Filed Apr. 4, 1928, Serial No. 267,442. Renewed May 27, 1932. 20 Claims. (Cl. 80—2.)

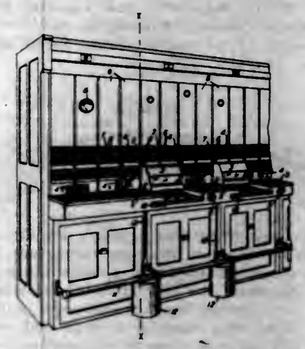


19. In a device for supplying heated blanks from a furnace to a shaper, the combination with a guideway for directing the blanks to the shaper, of means for successively transferring blanks from the furnace to the guideway, said means including a chute for delivering the blanks to the guideway comprising a section supported for movement away from the guideway, and a second section at a lesser incline to the guideway for delivering blanks from the first mentioned section to said guideway.

1,867,332. ETHANOL-AMINE SALTS OF THEOPHYLLINE AND PROCESS OF MAKING THEM. HORACE A. SHONLE, Indianapolis, Ind., assignor to Eli Lilly and Company, Indianapolis, Ind., a Corporation of Indiana. Filed Nov. 8, 1930. Serial No. 494,450. 7 Claims. (Cl. 260—34.)

1. The process of making an ethanol-amine salt of theophylline, comprising suspending the theophylline in a solvent in which the ethanol-amine salt to be formed is soluble, and adding the ethanol-amine to such suspension.

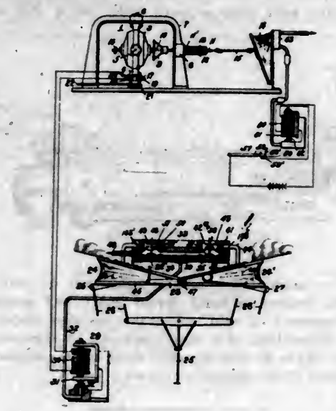
1,867,333. TELEGRAPH EXCHANGE SWITCHBOARD. EDWARD M. SMITH, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1930. Serial No. 505,826. 4 Claims. (Cl. 178—4.)



1. A telegraph exchange switchboard apparatus comprising a vertical panel, jacks in said panel to serve as terminations of associated telegraph subscribers' circuits, horizontal key shelves and cord shelves projecting forwardly from said panel and having keys and cords respectively mounted therein for associating a local printer apparatus at the operator's position with a subscriber's circuit terminating at said switchboard and for interconnecting the circuit of a calling subscriber with the circuit of a called subscriber, said horizontal shelves being discontinuous at operators' positions and telegraph printer apparatus detachably mounted in the spaces provided by said discontinuities to enable an operator upon an incoming call to ascertain the subscriber who is wanted and to perform the necessary supervision incidental to connecting the circuits of the calling and called subscribers.

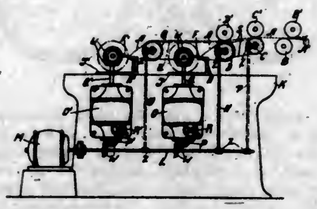
1,867,334. AUTOMATIC STEERING MECHANISM FOR DIRIGIBLE AIRCRAFT. ELMER A. SPERRY, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Original application filed July 29, 1924, Serial No. 728,812. Divided and this application filed Mar. 27, 1925, Serial No. 18,678. Renewed Oct. 20, 1931. 11 Claims. (Cl. 244—29.)

1. In a control system for dirigible bodies, the combination of a movable body, steering means therefor, a stabilizing device, means including a vacuum system controlled by said stabilizing device for operating said steer-



ing means, and means controlled by said vacuum system for rendering said stabilizing device inactive.

1,867,335. CROSS CUTTER. GERALD STRECKER, Darmstadt, Germany. Filed Sept. 5, 1931, Serial No. 561,351, and in Germany Sept. 11, 1930. 17 Claims. (Cl. 164—68.)

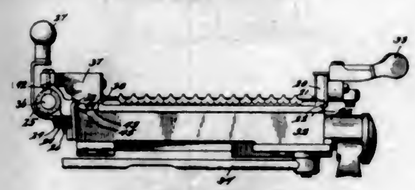


1. In a cross cutter for uniformly moving webs of paper and so forth having a machine frame, a main driving shaft arranged parallel to the direction of feed of said web and arranged on one longitudinal side of said machine frame, a feed roller for said web, a vertical intermediate shaft between said main shaft and said feed roller, a rotary cross cutter, and variable speed gearing without steps between said main driving shaft and said cross cutter, said variable gearing including a vertical driving and driven shaft.

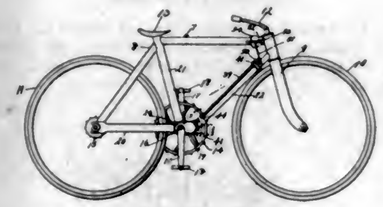
1,867,336. WORK SUPPORT GUIDE FOR SLICING MACHINES. HENDRIK STUKART, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Dec. 21, 1927. Serial No. 241,467. 11 Claims. (Cl. 209—102.)

1. In a slicing machine having an under table and a meat table mounted to slide over said under table; a guide rail located at one side of said meat table; co-operating bearing faces between the bottom of said rail and under table located below the top surface of said under table; cooperating bearing faces between one side of said rail

and said under table, a ledge on the other side of said rail; a guide member carried by said under table releasably and slidably engaging said ledge, a ledge on the side of said under table opposite said guide member; and a retaining member on the same side of said meat table slidably engaging said ledge on said under table, said retaining member preventing vertical movement of said meat table with respect to said under table but permitting sliding movement of said meat table on said under table and also permitting said meat table to be released from said under table by moving said meat table transverse to the direction of its sliding movement.

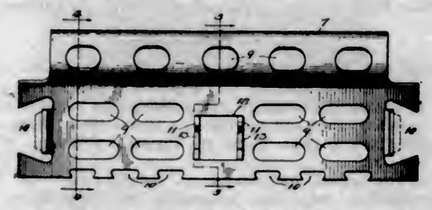


1,867,337. BICYCLE GEAR SHIFT. PETER J. TAFT, Philadelphia, Pa. Filed Feb. 4, 1931. Serial No. 513,275. 3 Claims. (Cl. 208—154.)



1. In a device of the kind described, a casing formed as a part of the bicycle frame open at both ends, end caps to close the open ends, bearing elements carried by said end caps, a crank shaft passing through the casing with both ends projecting beyond the end caps, a jack shaft entirely within the casing and paralleling the crank shaft, a train of gears for transmitting motion from the crank shaft to the jack shaft, a hollow shaft surrounding the crank shaft and having one end projecting outside of the casing, a sprocket wheel on the projecting end of said hollow shaft, a multiple gear structure comprising a small, an intermediate and a large gear carried by the hollow shaft, a second multiple gear structure mounted to revolve with and slide on the jack shaft and including a large gear, an intermediate gear and a small gear in reverse sequence to the gears of the first mentioned multiple gear structure and also including a trunnion, a sleeve mounted on said trunnion which is prevented from endwise movement in one direction by the contiguous gear, means removably mounted on the trunnion to prevent endwise movement of the sleeve in the opposite direction, a post carried by said sleeve, a rack fixed on the outside of the casing adjacent a slot in said casing, an operating shaft projected through the slot, a socket on the inner end of said operating shaft for registration with the post, a gear mounted on said operating shaft and meshing with the rack to walk along the same when the operating shaft is rotated whereby the sliding multiple gear structure will be moved along the jack shaft for selectively bringing the gears on the sliding multiple gear structure into mesh with the gears of the other multiple gear structure, and means to revolve the operating shaft.

1,867,338. BRAKE SHOE. MAURICE N. TRAINER, East Orange, N. J., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed May 31, 1930. Serial No. 457,792. 2 Claims. (Cl. 188—255.)



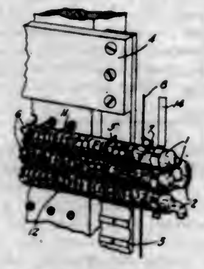
1. A brake shoe comprising a body having a reenforce back embedded therein, a lug strap interlocked with the body and the back, supports struck up from the back and having shoulder engagement with the lug strap, there being an opening in the back formed by striking up the supports and said supports having recesses therein, the cast metal forming the body of the shoe projecting through the opening in the back and seated in said recesses and partly filling the lug strap.

1,867,339. BRAKE SHOE. MAURICE N. TRAINER, East Orange, N. J., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed May 31, 1930. Serial No. 457,794. 1 Claim. (Cl. 188—255.)



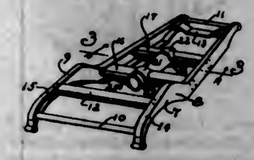
A brake shoe comprising a body, a continuous reenforce back embedded in the body throughout its length, and a lug strap, said back having oppositely disposed cut-outs in it side edges, and said lug strap being separate from the back and having legs engaged with said cut-outs, the body metal being extended through said cut-outs and alongside said legs, and wings forming part of the lug strap and projecting inwardly from the ends of said legs, said wings extending longitudinally of the back and against the inner face thereof and secured rigidly to the back to reenforce that portion of the back where it is reduced in cross-section by the cut-outs.

1,867,340. ELECTROOPTICAL APPARATUS. HOWARD W. WEINHART, Elizabeth, N. J., and HOWARD HALL, New York, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 23, 1929. Serial No. 401,662. 6 Claims. (Cl. 176—122.)



1. An electric glow lamp comprising a plurality of transparent tube sections arranged side by side and connected to constitute a discharge space provided with a continuous conductor and enclosing a conductive gas, separate electrodes on the outer surfaces of said sections, a mount for said lamp including a support for said sections, and means independent of said support to provide an electrical connection for each external electrode.

1,867,341. CHASSIS FRAME CONSTRUCTION. ALBERT B. WERDEHOFF, Orion, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 29, 1930. Serial No. 424,355. 5 Claims. (Cl. 280—106.)



1. A frame comprising spaced side members, substantially vertically aligned brace elements extending between said side members each having an arcuate cross section, registering oppositely bowed portions in said elements, and a stiffener having a curvature conforming with said bowed portions rigidly secured thereto.

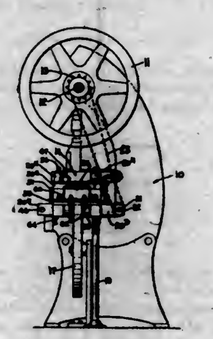
1,867,342. DEVICE FOR REMOVING FINGER RINGS. BRUNO WIEG, Hamburg, Germany. Filed Aug. 8, 1929, Serial No. 384,456, and in Germany Nov. 20, 1928. 2 Claims. (Cl. 29—69.)



1. The device for removing rings from fingers, comprising in combination, a pair of members and a lever pivoted at a point intermediate their ends, a saw-wheel rotatably mounted on one end of said lever, one pair of corresponding ends of said members being provided with gripping jaws, one of which embraces said saw-wheel, and resilient means connected with said lever and one of said members for forcing said saw-wheel into engagement with a ring held by said jaws, while the other pair of ends of said members is formed to provide handles for actuating said gripping jaws and placing said resilient means under extra tension.

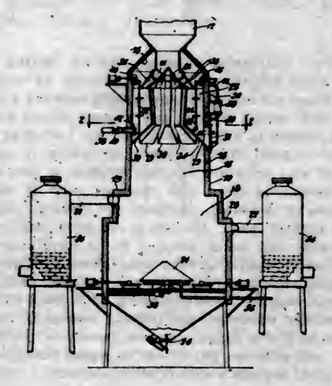
1,867,343. AUTOMATIC FEED MECHANISM FOR PUNCH PRESSES AND THE LIKE. JOSEPH WITTEK, Chicago, Ill. Filed Apr. 11, 1929. Serial No. 354,216. 4 Claims. (Cl. 271—2.4.)

1. In an automatic unit feed adapted to feed a strip of material to a power driven machine, the combination of a base, a pair of main feed rolls disposed one directly above the other, a pair of auxiliary feed rolls and an auxiliary feed roll mounted above said pair of auxiliary feed rolls midway the vertical center line of said pair of auxiliary feed rolls, shafts for said rolls, the shafts for the lower main feed roll and said auxiliary pair of feed rolls being rotatably supported in said base, vertically movable bearings mounted on said base for the shafts of the upper one of said main feed rolls and the upper auxiliary feed roll, resilient means exerting downward pressure on said bearings, means for variably adjusting the pressure of said resilient means, means comprising a pair of sprockets and an interconnecting chain drive for positively rotating the lower one of said main feed rolls with said pair of lower auxiliary feed rolls, means for operatively interconnecting the upper main feed roll with the lower main feed roll a pair of oscillatively mounted pins extending under said bearings and transversely to the longitudinal



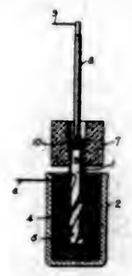
axis of the upper main and auxiliary feed roll shafts, said pins having seats cut therein for said bearings, an arm fixed to one end of each of said shafts, and means for intermittently oscillating said arms and pins to cause the corners of said seats to raise said bearings and thereby simultaneously raise said upper main and auxiliary feed rolls to arrest the movement of the strip of material.

1,867,344. CARBONIZATION OF BITUMINOUS FUEL. CARL J. WRIGHT, West New Brighton, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed July 17, 1925. Serial No. 44,181. 13 Claims. (Cl. 202—15.)



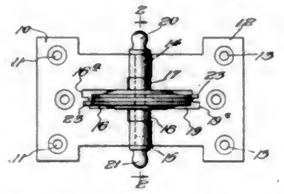
1. The method of heat treating solid volatile-containing carbonizable fuel which comprises, gasifying a previously carbonized charge of said fuel so as to produce a supply of hot combustible gas, passing said hot gas upwardly around and then downwardly through a stationary uncarbonized body of said fuel so as to effect its carbonization by indirect and direct heat transfer therewith, periodically replacing the thus carbonized fuel body with another body of the uncarbonized fuel and carbonizing the same, and transferring additional heat liberated during said gasification by radiation and conduction to the body of the fuel undergoing carbonization.

1,867,345. METHOD OF REPAIRING TOOLS BY WELDING. ORRIN E. ANDRUS, Wauwatosa, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Mar. 3, 1930. Serial No. 432,788. 9 Claims. (Cl. 219—10.)



1. A method of repairing tools which comprises embedding a portion thereof in a solid electrode material which will fuse at a temperature that is low relative to the temperature which will change the temper of the tool, and welding the unconfined portion thereof to a quantity of repair metal.

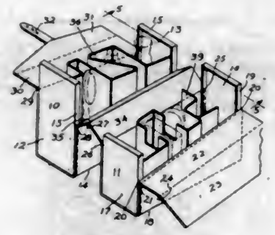
1,867,346. FRICTION HINGE. LOUIS A. BITTORF, Sterling, Ill., assignor to National Manufacturing Company, Sterling, Ill., a Corporation of Illinois. Filed Sept. 19, 1927. Serial No. 220,310. 7 Claims. (Cl. 16—140.)



1. A hinge comprising a hinge member, having a pair of spaced hinge pin sleeves, another member having a pair of spaced hinge pin sleeves adapted to fit between and align with said first-named sleeves, and friction means for holding said members in any hinging position including a pair of opposed cupped friction discs providing a yieldable center part and an outer friction surface, a friction element between said discs and engaged only by the friction surfaces of the same, the discs and element being of a thickness greater than the space between said second-named sleeves and being adapted to be yieldingly forced between and retained between said sleeves to provide a self-adjusting frictional engagement between said discs and element, means for interlocking said discs with said hinge members whereby said friction means is rendered effective to hold the hinge members in any of the hinging positions, and a hinge pin freely engaging the sleeves of said members, the discs and friction element.

1,867,347. CASE FOR TOILET ARTICLES AND THE LIKE. ROBERT S. BLAIR, Stamford, CCnn. Filed Apr. 14, 1928. Serial No. 269,960. 12 Claims. (Cl. 206—16.)

1. In a portable hollow case for implements of varying size and contour, in combination, a plurality of sections each comprising a bottom and a plurality of walls extending away from said bottom and held in a position to embrace a space and each of substantially uniform depth in the direction of its shortest transverse dimension and of varying depth in the direction of its other transverse dimension, and each of said sections having an open end, means connecting said sections one to the other to permit their open ends to swing together to close the case, and holding means positioned within each of said sections



within the planes of the open ends thereof and shaped to removably hold articles of different shapes in a position extending toward the corresponding open ends.

1,867,348. FRICTION BRAKE. WILLIAM A. BLUME, Detroit, Mich., assignor to American Brake Materials Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 2, 1929. Serial No. 343,964. 8 Claims. (Cl. 188—251.)



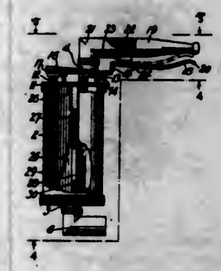
1. In a friction brake, the combination of a detachable friction block comprising a body and a back united therewith, a support for the block, and fastening devices passing directly through said body and back and support from front to back thereof for securing the block to the support, there being interlocking parts between said block and support other than and disposed intermediate of said fastening devices to prevent movement of the block on the support which would tend to shear the fastening devices.

1,867,349. VALVE. EDGAR E. BROSIUS, Pittsburgh, Pa. Filed Feb. 23, 1928. Serial No. 256,301. 18 Claims. (Cl. 251—18.)



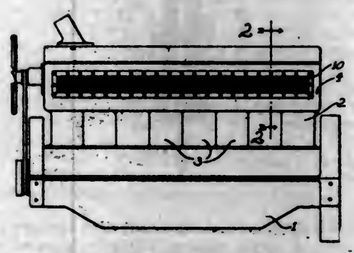
1. In a valve, a pair of substantially annular seats, a valve disc movable into a position between said seats and into a position entirely outside of said seats, and power means operable radially of the valve and external thereto for effecting a predetermined relative movement between said seats to clamp the valve when in position therebetween and to bring said seats together when the valve is out of position therebetween.

1,867,350. ARTIFICIAL LARYNX. GEORGE W. BURCHETT, Peekskill, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 8, 1930. Serial No. 419,423. 2 Claims. (Cl. 3—1.)



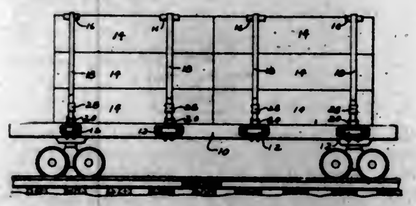
1. In an artificial larynx having an inlet connection, an outlet connection and a tone producing element, a breather valve and control means therefor, through the operation of which the artificial larynx may be used as either a breather or a tone producer, said control means supported by the outlet connection and operable by jaw movements of the user.

1,867,351. CYLINDER WATER JACKET COVER. MELBOURNE L. CARPENTIER, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 21, 1930. Serial No. 454,455. 9 Claims. (Cl. 123—173.)



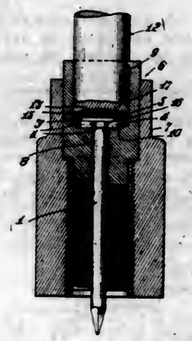
1. In an internal combustion engine, a cylinder block, a cylinder water jacket including mainly a non-ductile structure having an opening in a wall thereof, and a closure for said opening having an expansible portion.

1,867,352. SHIPPING DEVICE. LOUIS A. CHURGAY and HARRY S. MCCLELLAN, Detroit, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 21, 1928. Serial No. 271,709. 2 Claims. (Cl. 280—179.)



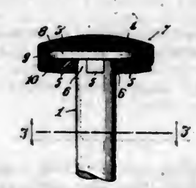
1. The combination with a freight car having a pair of stake sockets, one on each side thereof, a pair of adjustable anchoring members, one extending through each of said sockets and each having an opening at one end, means on said members abutting the lower side of said sockets for securing said members against upward movement, and a flexible band for securing articles on said freight car having its respectively opposite end portions extending through said openings and reversely bent under an initial tension upon the adjacent portions of said band, and means securing the end portion of said band and the portions adjacent thereto together.

1,867,353. METHOD OF MAKING WEATHERPROOF NAILS. GEORGE E. DICKSON, Evanston, Ill. Filed Mar. 27, 1931. Serial No. 525,755. 4 Claims. (Cl. 10—161.)



1. The method of making weatherproof nails which consists in providing a headed nail having a plurality of lugs on the underside of the head and enclosing all of the head and all surfaces of said lugs except the bottom thereof in a cap of softer metal.

1,867,354. WEATHERPROOF NAIL. GEORGE E. DICKSON, Evanston, Ill. Filed Mar. 27, 1931. Serial No. 525,756. 3 Claims. (Cl. 85—28.)

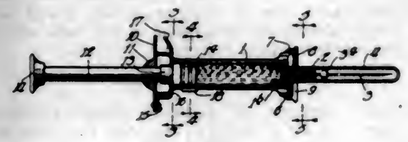


1. A weatherproof nail or the like embodying therein a shank and a head with a plurality of spaced lugs on the underside of the head and a cap member of relatively soft metal enclosing and in direct engagement with said head and with the sides and end of each lug and having parts disposed between said lugs, the cap terminating substantially flush with the bottom surface of said lugs.

1,867,355. HYPODERMIC SYRINGE. JOHN P. FLETCHER, U. S. Army, Carlisle, Pa., assignor to Cook Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 11, 1929. Serial No. 345,977. 5 Claims. (Cl. 128—218.)

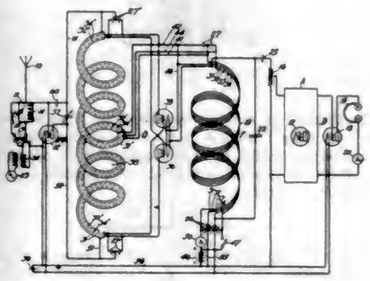
1. A hypodermic syringe comprising, in combination, a sealed medicament container comprising a tube having a fore closure to be pierced by a needle and having a displaceable rear plug; a holder in which said container is removably mounted said holder having an abutment for the fore end of the container and a spring plate to press against

the butt end of the container and hold it in engagement with said abutment; means to hold a needle in position for piercing the fore closure of the container; and a plunger



arranged to enter said tube and drive in the piston plug; the said spring plate embodying an annular portion to permit entry of the plunger into the tube.

1,867,356. ELECTRIC WAVE TRANSLATING SYSTEM. HARALD T. FRIIS, Red Bank, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 26, 1926. Serial No. 104,619. 14 Claims. (Cl. 250—20.)



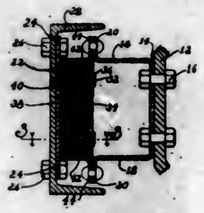
1. A translating device having input and output circuits, and means comprising an oscillator including two electric space discharge devices connected in push-pull relation to each other and coupling the circuits of said translating device to each other.

1,867,357. METHOD OF MAKING COPPER HYDROXIDE. WILLIAM H. FURNESS, National Park, N. J., assignor, by mesne assignments, to Furness Corporation, Philadelphia, Pa., a Corporation of New Jersey. Filed Feb. 23, 1927. Serial No. 170,433. 1 Claim. (Cl. 23—147.)

The herein described cyclic process of making copper hydroxide which comprises preparing an ammoniacal solution of a copper salt, precipitating copper hydroxide by adding a caustic alkali, removing the copper hydroxide, and heating the resultant filtrate under reduced pressure and at a temperature not exceeding about 55° C. to simultaneously volatilize the ammonia and precipitate residual copper hydroxide, and absorbing the ammonia in a fresh solution of a copper salt to repeat the cycle.

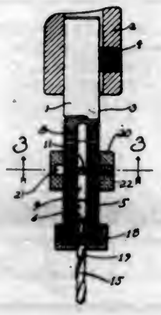
1,867,358. MOTOR MOUNTING. J KING HARNESS, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 26, 1930. Serial No. 431,569. 3 Claims. (Cl. 248—14.2.)

1. A mounting of the class described comprising, a rectangular member having lateral projections provided with openings, an intermediate member embraced by the rectangular member having lateral projections provided with openings, and rubber in the rectangular member embracing



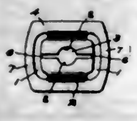
the intermediate member, the openings in one of the members being in axial alignment with the openings in the other member.

1,867,359. DRILL CHUCK. FRANK M. HIGBY, Birmingham, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 441,089. 9 Claims. (Cl. 279—9.)



1. A drill chuck comprising a body part having a tubular end portion, a socket member shiftably mounted in said tubular end portion adapted to receive the shank of a drill, and means on the outer extremity of said tubular end portion having an inner peripheral wall closely embracing said drill for supporting the parts of the latter which are in close proximity to the cutting end thereof.

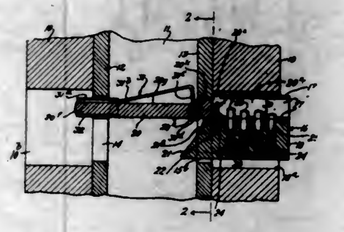
1,867,360. SLIDE FASTENER SOCKET. GEORGE A. HOLMES, Newton, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 6, 1931. Serial No. 520,562. 3 Claims. (Cl. 24—77.)



2. A slide fastener socket comprising a plate having a central depressed portion provided with a stud-receiving aperture, a continuous yieldable ledge portion at the periphery of said plate, said plate having strap-receiving slots at opposite ends and said depressed portion having slots each of which extends from the stud-receiving aperture to

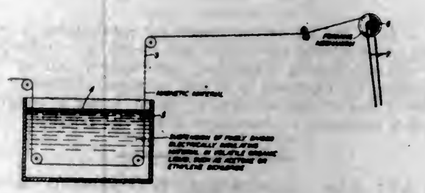
one of the strap-receiving slots thereby to divide the depressed portion into jaw portions movable away from each other due at least partly to the resiliency of the ledge portion thereby to permit enlargement of the stud-receiving aperture when the socket is engaged with or disengaged from a cooperating stud.

1,867,361. KEYHOLE LOCK CONSTRUCTION. HENRY F. KEIL, Scarsdale, N. Y., assignor to Francis Keil & Son, Inc., a Corporation of New York. Filed Nov. 6, 1928. Serial No. 317,642. 4 Claims. (Cl. 70—8.)



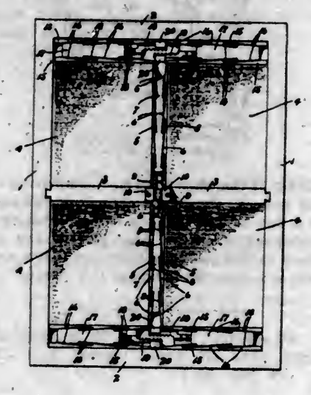
1. In lock construction of the character described, in combination, a plug shaped to be passed into a keyhole, a solid member projecting rearwardly therefrom and rotatable with respect thereto, said member having an opening therethrough adjacent said plug and having a reduced end portion, a spring having a portion resting against said reduced end portion, a second portion bent progressively away from said member in a direction toward said plug, a third portion bent at a sharp angle to said second portion and passing through said opening in said member, and a fourth portion bent at an angle to said third portion to prevent the latter from coming out of said opening, a ring member over said reduced end portion of said first-mentioned member for holding said spring in place, and key-controlled means for permitting or preventing rotation of said first-mentioned member relative to said plug.

1,867,362. INSULATION OF METAL BODIES. HUBBEL LATHROP, Greenwich, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 21, 1930. Serial No. 497,261. 7 Claims. (Cl. 175—21.)



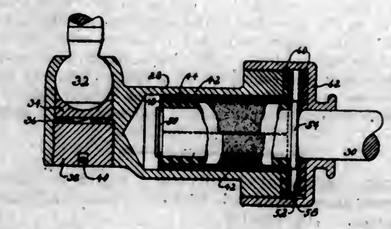
1. The process of applying a permanent, adherent coating of an insulating material to a metal body requiring subsequent heat treatment at high temperatures, which consists in mixing the insulating material in colloidal form with an organic liquid comprising acetone to form a suspension of said insulating material, immersing said body in said suspension while rapidly stirring the latter to coat said body, and then exposing the coated body to the atmosphere to evaporate the acetone.

1,867,363. THREE-WAY CHASE LOCKUP. JAMES EDGAR LEE, FREEMAN BARNEY, and PHILIP J. BEATTY, Grand Haven, Mich., assignors to Challenge Machinery Company, Grand Haven, Mich., a Corporation of Michigan. Filed May 30, 1930. Serial No. 457,578. 5 Claims. (Cl. 101—394.)



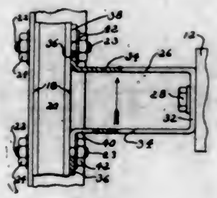
1. In combination, a printer's chase, a plurality of set-ups located in the chase, each having one side bearing against a side of the chase, manually operable locking means located between the set-ups at their other sides, means to simultaneously force the set-ups into secure holding engagement with the sides of the chase, and other manually operable locking means located against ends of said set-ups to bear thereagainst and to simultaneously force the opposite ends of the set-ups against and into secure holding engagement with a fixed part of said chase.

1,867,364. STEERING MECHANISM. ROGER K. LEE, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 14, 1927. Serial No. 239,889. 4 Claims. (Cl. 287—119.)



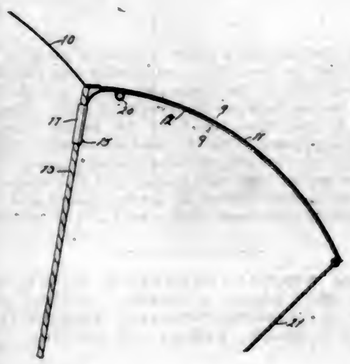
1. A connection of the class described comprising a tubular end portion, a removable cap having an opening in axial alignment with the tubular end portion and spaced from the end thereof, a rod axially movable in the opening in said cap and the tubular end portion, means on said rod frictionally engaging said tubular end portion, a radial flange on said rod projecting radially in the radial recess formed by the spaced cap and the end of the tubular member, and a rubber disk at the opposite faces of said flange between said flange and the end of the tubular member and between the flange and the inner face of said cap.

1,867,365. MOTOR MOUNTING. ROGER K. LEE, Highland Park, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 14, 1930. Serial No. 435,904. 3 Claims. (Cl. 248—142.)



1. A bracket of the class described comprising a channel having side flanges, outwardly extending flanges on said side flanges, one of said flanges having openings therein extending through the outer edge thereof and the other of said flanges having openings therein which are continued through and into the side flange of the channel.

1,867,366. PARACHUTE. PETER N. MADSEN, Brookline, Pa. Filed June 30, 1931. Serial No. 547,808. 3 Claims. (Cl. 244—21.)

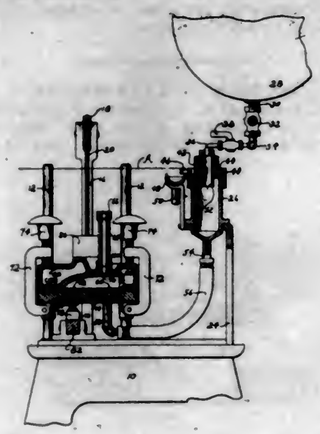


2. A parachute, shroud lines connected therewith, a skirt attached to the free edge of the parachute and projecting outside of the latter, stay-lines connected with the free edge of the skirt and the shroud lines, spring wires underlying the skirt and connected therewith and having their inner ends fashioned to parallel the shroud lines and clamps for fixing the inner ends of said wires to the shroud lines.

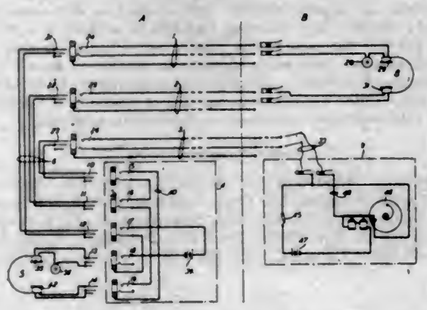
1,867,367. MEASURING DEVICE. ELMER E. MARLIN, Detroit, Mich. Filed Oct. 13, 1927. Serial No. 226,003. 11 Claims. (Cl. 73—151.)

1. A device of the class described comprising, a base, a liquid reservoir supported on said base, vertical guiding means on said base, a plate vertically movable on said guiding means, securing means carried by said plate and adapted to secure a chambered member on said plate, and a conduit forming a communication between said liquid reservoir and the interior of said chambered member.

8. The method of comparing the volumes of the chambers of a cylinder head which consists of forming a liquid tight seal between said chambers, providing separate equal quantities of liquid, one in communication with each chamber, said quantities being substantially greater in volume than the volume of said chambers, introducing into each chamber a sufficient amount of the liquid of each separate quantity respectively to completely fill each chamber, and forcing the excess liquid of each of said separate quantities into uniform liquid head measuring devices while said chambers are filled and in communication with said measuring devices so as to indicate the difference between the volumes of said chambers by the level of liquid in said devices.



1,867,368. TESTING SYSTEM. ROBERT F. MASSONNEAU, Scarsdale, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 6, 1931. Serial No. 506,864. 9 Claims. (Cl. 179—175.1.)



1. In a testing device, means for establishing a talking and listening connection, and means for establishing a separate testing connection comprising a pair of conductors for listening to a test, a signal producing device, a pair of conductors to be tested, a pair of receivers and a condenser all connected in a serial relation.

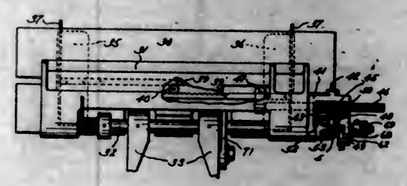
1,867,369. AUTOMATIC VULCANIZING MOLD. CHARLES EDGAR MAYNARD, Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Feb. 23, 1928. Serial No. 256,078. 5 Claims. (Cl. 18—17.)

2. A vulcanizing mold for annular articles comprising a plurality of mold sections, mechanism for opening and closing the sections, manually controlled means for setting said mechanism in operation to close the mold, a valve for admitting fluid pressure to the interior of an article in the mold, a cam for controlling said valve, means automatically operable at a predetermined time prior to the closure of the mold to initially move said cam to open the valve and admit fluid pressure to the article, means operative after complete closure of the mold to continue the movement of the cam to maintain



the valve open during a predetermined period and to thereafter release the pressure in the article and automatic means to actuate the mold opening mechanism.

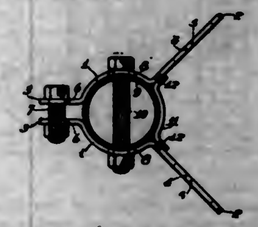
1,867,370. GUIDE FOR TIRE BUILDING MACHINES. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed May 20, 1930. Serial No. 453,906. 12 Claims. (Cl. 154—10.)



2. A device for guiding fabric to the building former of a tire building machine which comprises a plate mounted for movement of and from operative position with respect to the building former, guide flanges slidably supported on the plate, extended portions on the flanges projecting over the edge of the plate a distance sufficient to guide material onto the building former when the latter is in collapsed position, and means to automatically set the flanges in position to accommodate varying widths of fabric upon successive movements of the plate into operative position.

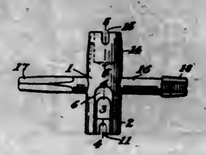
3. A device for guiding fabric to the building former of a tire building machine which comprises a plate, mounted for movement to and from operative position with respect to the building former, guide flanges supported on the plate for simultaneous movement toward and from each other and means to automatically move the guide flanges a predetermined amount upon movement of the plate to and from operative position.

1,867,371. CLAMP FOR DERRICK LEGS. JOHN D. MCEWEN, Pittsburgh, Pa., assignor to Lee C. Moore & Company, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 25, 1928. Serial No. 295,150. 3 Claims. (Cl. 189—19.)



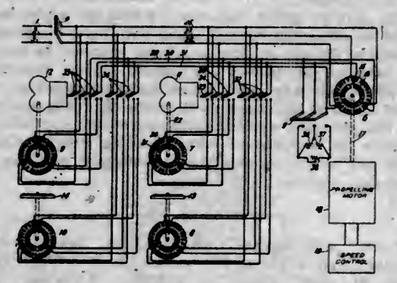
1. A clamp for joining tubular leg sections of oil well derricks, comprising a pair of similar plates pressed intermediate their lateral edges to form tubular segments and having their lateral edges bent to form outstanding flanges, said flanges being perforated to receive attachment bolts, and an intermediate member permanently and rigidly connecting the plates to form a unitary clamp.

1,867,372. GREASE-FITTING TOOL. JOHN J. MCGUCKIN, Passaic, N. J., assignor to Rinck-McIlwaine, Inc., New York, N. Y., a Corporation of New York. Filed May 9, 1930. Serial No. 450,941. 5 Claims. (Cl. 81—121.)



1. In a tool for manipulating a grease fitting of the Zerk type described, the combination of a tubular body, adapted to receive the body of the fitting and having a longitudinal slot at one side extending through the wall of the body, a series of nine longitudinal notches, spaced substantially 30 degrees apart around the interior wall of the body to engage the hexagonal shoulder below the fitting body, the sides of the slot being bevelled outwardly to accommodate the nipple of the fitting so that a side of the nipple may bear evenly against a side of the slot.

1,867,373. MOTOR CONTROL SYSTEM. EDMUND R. MORTON, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 19, 1928. Serial No. 306,821. 11 Claims. (Cl. 172—293.)

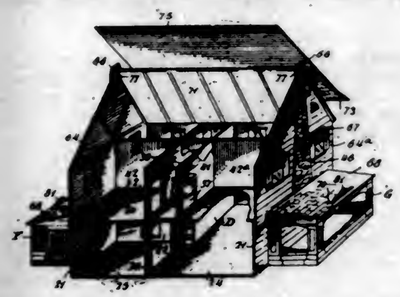


1. In a motor system, a plurality of polyphase motors having rotor and stator windings, a source of polyphase current connected to said motors, means for connecting said rotor windings together and for connecting said stator windings together whereby movement of one motor effects synchronous movement of all motors, means for rotating one motor at constant speed to rotate all the motors synchronously at constant speed, and means comprising impedance elements connected to certain of the motor windings for operating the motors as induction motors to develop driving torque on each of said motors and insure constant speed operation of the polyphase motors by said motor rotating means.

1,867,374. TOY HOUSE. HAROLD L. MYERS, Morristown, N. J. Filed May 1, 1931. Serial No. 534,197. 9 Claims. (Cl. 46—27.)

1. A collapsible toy house comprising a plurality of collapsible interior sections detachably connected with each other to form the interior divisions of the house, an external collapsible section, including foldable side walls foldable about said interior sections to form the

exterior of the house, a collapsible porch section detachably connected with said interior sections to simulate a porch, and a porch roof panel forming part of one of said



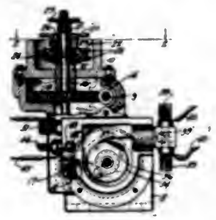
foldable side walls and foldable out of the plane thereof and relatively thereto into connection with said porch section to form the roof thereof.

1,867,375. METHOD OF ARC WELDING. ARTHUR W. PRIEBE, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Aug. 26, 1929. Serial No. 388,367. 6 Claims. (Cl. 219—10.)



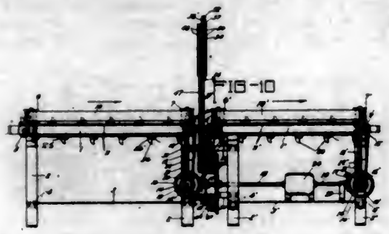
3. The method of arc welding longitudinal seams in tubular articles which comprises tacking the edges to be welded to effect the desired alignment thereof, manually controlling the arc to deposit a layer of metal in the region adjacent the ends of the tubular article, quenching said deposited layer and thereafter superimposing the second layer of deposited metal while manually controlling the arc, and automatically controlling the welding operation in accordance with changing characteristics of the arc while welding the intermediate portions between said regions.

1,867,376. AUTOMATIC CONTROLLER. ANDREW RASMUSSEN and WILLIAM S. GOODELL, Racine, Wis. Filed Feb. 20, 1928. Serial No. 255,663. 3 Claims. (Cl. 200—33.)



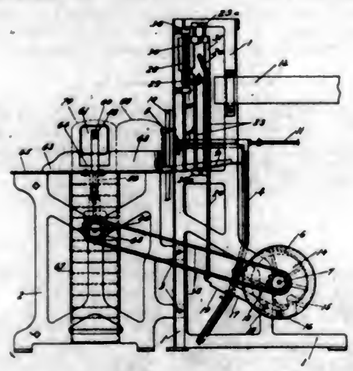
1. An automatic controller, comprising a casing, a driven shaft journaled therein and having a worm forming part thereof, a second shaft journaled in the casing at right angles to the first mentioned shaft and having a worm wheel in mesh with the word, a third shaft journaled in the casing and extending parallel to the first shaft and having a worm wheel in mesh with a worm forming part of the second shaft, a shouldered sleeve loosely mounted on the driven shaft, an electric make and break wheel formed in part of insulating material and mounted fast on the sleeve, means for adjustably clamping the sleeve to the second shaft, metal contacts mounted on opposite peripheral portions of the insulating wheel, contact fingers mounted on the casing and insulated therefrom and each other and engaging the peripheral portion of the insulating wheel, an insulating sleeve mounted fast on the third shaft, an insulating wheel mounted fast on the insulating sleeve and having a metal band covering a portion of the periphery of said wheel, and contact fingers mounted on and insulated from the casing and each other and engageable with the peripheral portion of the insulating wheel to form an electrical contact between the fingers.

1,867,377. MACHINE FOR SLICING AN ENTIRE LOAF OF BREAD AT A SINGLE OPERATION. OTTO F. ROHWEDDER, Davenport, Iowa, assignor to Mac-Roh Sales & Mfg. Company, Davenport, Iowa, a Corporation of Delaware. Filed Nov. 26, 1928. Serial No. 321,921. 16 Claims. (Cl. 146—88.)



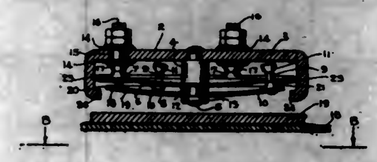
1. In a bread slicing machine having a frame and a series of continuous cutting bands mounted thereon, an adjusting mechanism comprising a plurality of arms pivoted at one end to the frame, a series of guides mounted upon each arm adjacent to and bearing upon the cutting bands, and means for varying the inclination of the arms to the vertical axis of the frame.

1,867,378. FEEDING APPLIANCE FOR BREAD SLICING MACHINES. OTTO F. ROHWEDDER, Davenport, Iowa, assignor to Mac-Roh Sales & Mfg. Company, Davenport, Iowa, a Corporation of Delaware. Filed May 13, 1929. Serial No. 362,574. 10 Claims. (Cl. 146—153.)



1. In a bread slicing machine of the class described, having a feeding table, a charging apparatus comprising guide-bars secured to the machine at each side thereof and above the feeding table, slides mounted upon the guide-bars, supporting bars secured to the slides and movable therewith, carriers united to the supporting bars, pivoted bread supports mounted on said carriers, a drive shaft, cams mounted upon the drive shaft, pivoted actuating levers having certain ends connected to the carriers and the opposite ends adapted to engage and be positively driven by the cams, and means for permitting said bread supports to pivot as they approach the lower end of their travel.

1,867,379. TEMPERATURE CONTROLLED ELECTRIC SWITCH. OSCAR A. ROSS, New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 15, 1927. Serial No. 233,483. 5 Claims. (Cl. 200—138.)



1. A thermo-electric switch comprising in combination; a base member, contacts insulatively supported thereby, a biased disk member supported by the base member having a movable circumferential portion, contacts supported by the movable circumferential portion arranged to engage the base member contacts, a thermostatic member supported by the base member having a heat affected movable portion arranged to actuate the movable circumferential portion of the biased member, and lost motion means actuated by the heat affected movable portion of the thermostatic member for operating the movable circumferential portion of the biased member only during the final movement periods thereof whereby a substantially initial rapid movement of the movable circumferential portion of the biased member is effected as the contacts are separated.

1,867,380. THERMAL SWITCH. BENJAMIN F. RUNYON, Bayside, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 4, 1929. Serial No. 330,221. 3 Claims. (Cl. 200—122.)



1. In combination a magnet having opposed pole-pieces, a support, a pair of bimetallic bars secured together on said support and extending in a V formation therefrom to form a pivotal point for the bars, a heating coil on each bar, an armature for said magnet secured to said bars and extending between said pole pieces, circuits, each including one of said heating coils, a two-position switch controlled by the bimetallic bars and in each position closing a circuit through one heating coil, whereby circuits are successively closed through said heating coils to cause the bimetallic bars to flex at their point of support for actuating the armature.

1,867,381. CIRCUIT TAP CONNECTION. HENRI SADACCA, City Island, N. Y., assignor, by mesne assignments, to The Monowatt Electric Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec 29, 1926. Serial No. 157,850. 7 Claims. (Cl. 173—334.)

1. In an electrical connecter, the combination of a body portion of insulating material provided with an annular groove in its inner end forming an outer wall and having a pair of diametrically opposite notches in said outer wall and a central boss extending beyond the level of said wall, said inner end also being provided with a relatively wide shallow groove disposed across said boss and the bottom of said annular groove and provided at the mid part of its side walls with a pair of positioning recesses, longitudinal socket openings extending through said body member, a retaining member secured to the

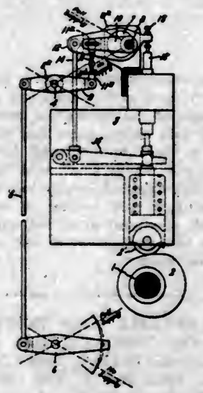


inner end of said body member and provided on its inner surface with an annular groove forming an outer wall, notches formed therein complementary to the notches in the body member to form wire outlets, a central key lug on said retaining member adapted to engage said positioning recesses of the body member, and conducting members each comprising a blade disposed in and projecting outside a blade receiving opening in said retaining member and a contact portion disposed in a corresponding socket opening of said body member.

1,867,382. FOUNDRY CORE AND BINDER THEREFOR. JAMES M. SAMPSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 6, 1931. Serial No. 514,076. 10 Claims. (Cl. 22—188.)

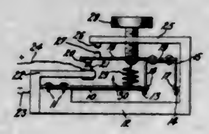
1. A foundry core comprising a refractory material and a bond therefor, said bond comprising largely a drying oil and a relatively minor proportion of cereal product.

1,867,383. REGULATION OF THE FUEL FEED PUMPS OF INTERNAL-COMBUSTION ENGINES. FRIEDRICH SASS, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Aug. 20, 1929, Serial No. 387,169, and in Germany Sept. 12, 1928. 2 Claims. (Cl. 103—41.)



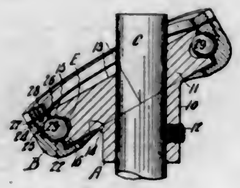
1. In a fuel supplying mechanism for an internal combustion engine, the combination of a plurality of pumps, a separately mounted eccentric for each pump, a pump control lever on each eccentric, a regulating shaft, means connecting each eccentric to said regulating shaft, said means including a connecting rod for each eccentric, and means for adjusting the length of said connecting rods to effect individual adjustment of the eccentrics.

1,867,384. THERMOSTATIC SWITCH. ARTHUR SCHERBIUS, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed May 23, 1929, Serial No. 365,437, and in Germany Sept. 7, 1928. 3 Claims. (Cl. 200—138.)



1. A thermostatic switch comprising a bimetallic strip having one end fixed and its other end arranged to move from one position to another in response to changes in temperature, resilient means cooperating with said strip so as to give said free end a snap action, a second resilient means cooperating with the free end of said strip and means for adjusting said second resilient means to vary the temperature setting of said device.

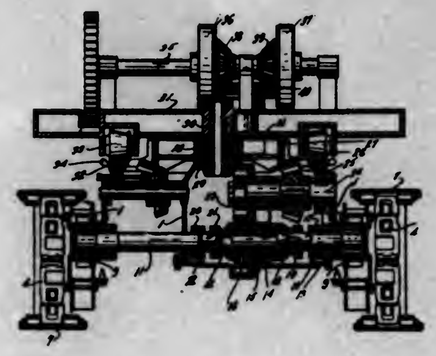
1,867,385. MECHANICAL MOVEMENT. CHARLES E. SCHLENKER, Cleveland, Ohio, assignor to Western Reserve Air Motors Corporation, a Corporation of Ohio. Filed June 11, 1927. Serial No. 198,184. 5 Claims. (Cl. 74—14.)



1. In an apparatus of the character described, a rotatable member having a groove disposed at an inclination with a radial axis of the member, a row of balls in said groove, each of said balls contacting both sides of said groove, a cap on said member and having a ball race contacting one side of each of said balls, a ball race threaded into said cap and contacting the other side of each of said balls, a lock washer in said cap and contacting said ball race and anchored against rotation in said cap, and a lock nut threaded into said cap and contacting said lock washer.

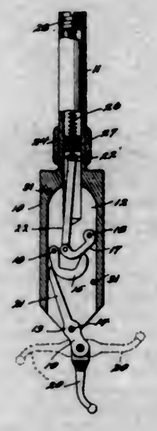
1,867,386. TURNTABLE AND TRUCK APPARATUS. HARRY E. SCOTT, Cleveland Heights, Ohio, assignor to The Thew Shovel Company, Lorain, Ohio, a Corporation of Ohio. Filed May 2, 1929. Serial No. 359,856. 1 Claim. (Cl. 180—9.2.)

In a machine of the class described and having a turn table with power means thereon, and a supporting and propelling truck means therefor, said truck means comprising a frame, an associated pair of through axles, wheels carried by said axles, endless tread linkages associated with said wheels, said truck frame having a transverse driving shaft with pinions thereon having driving engagement with said wheels, a ring gear arranged between said turn table and said truck frame, and arranged to be driven by said power means, a jack shaft carried by said truck frame and arranged to be driven by said ring gear, a driving clutch member carried by said truck frame and arranged to be driven from said jack shaft,



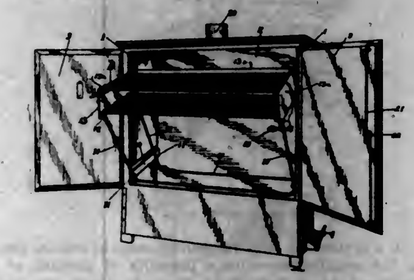
said transverse shaft being split and having a portion bearing in said clutch member and driven clutch members upon the transverse shaft portions and arranged for optional driven engagement with said driving clutch member.

1,867,387. INDICATING GAUGE. DAVID SMITH, Hamilton, Ohio. Filed May 28, 1930. Serial No. 456,420. 2 Claims. (Cl. 33—172.)



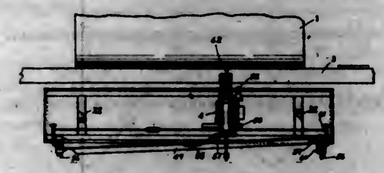
1. An indicating gauge comprising an elongated rectangular body and a tubular stem integral with one end thereof and formed with a longitudinal slot, said body having a recess in one face which communicates with the bore of said stem and extends throughout the length of the body, a lever pivoted in said recess adjacent the open end thereof and having relatively short and long arms projecting from the body and into the recess respectively, a curved cam lever pivoted in said recess and engaged by the long arm of said lever, a second cam lever pivoted in said recess and engaged by the first mentioned cam lever, an indicating collar slidable on said stem and carrying a pin which extends through the longitudinal slot in said stem, a link connecting the free end of the second cam lever to said pin, a coil spring in said stem yieldingly holding said pin at the lower end of said slot and a cover plate secured to said body over the recess therein.

1,867,388. CLOTHES DRIER. HOMER A. SNIVELY, Covington, Ky. Filed Sept. 28, 1929. Serial No. 395,933. 5 Claims. (Cl. 312—185.)



2. A drying rack having pivoted bars for supporting said rack in such position in a compartment as will permit the movement of the drying rack from a position completely enclosed in the compartment to a position in which said rack is exposed exteriorly of said compartment, pivot means for said rack intermediate the ends of said pivoted bars, means bracing said pivoted bars comprising bars extending across said compartment and connecting the lower ends of said pivoted bars, and a support for said pivot means.

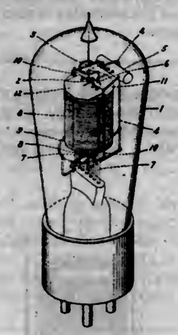
1,867,389. FEEDER FOR GLASS LEERS. JULIUS SYLVESTER, Washington, Pa., assignor to Simplex Engineering Company, a Corporation of Delaware. Filed Jan. 7, 1931. Serial No. 507,072. 24 Claims. (Cl. 198—31.)



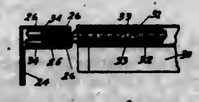
5. In transfer apparatus, and in combination with approaching and receding conveyors traveling in courses at right angles one to the other, a support, a carriage movable on said support in the direction of the course of the approaching conveyor and equipped with an arm extensible in the direction of the course of the receding conveyor, two prime movers borne by the carriage, one adapted to effect the extension of said arm and the other adapted to effect both the regression of the said arm and the movement of the carriage on said support, means operatively by a piece of work advancing on the approaching conveyor for rendering one of said prime movers effective, and means operative in sequence upon the means last defined and operative by the extension of the said arm for rendering the other of said prime movers effective.

1,867,390. ELECTRIC DISCHARGE APPARATUS. BROWDER J. THOMPSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 2, 1925. Serial No. 296,901. 3 Claims. (Cl. 250—27.5.)

3. In thermionic apparatus, a plurality of cooperating electrodes including a filamentary cathode, and means for preventing microphonic movement of the filament, said means comprising a flat disk presented edgewise to an extremity of the filament, said member being cut away so as to provide a frictional contact with a substantial part of the periphery of said filament.

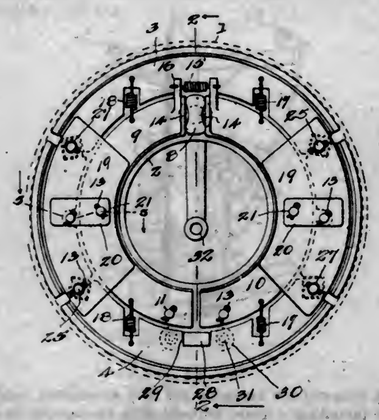


1,867,391. ROLLER SCREEN. CLIFFORD TRAUT, Newport, Ky., assignor to The Higgin Manufacturing Company, Newport, Ky., a Corporation of West Virginia. Filed Mar. 5, 1929. Serial No. 344,470. 8 Claims. (Cl. 156—39.)



8. In a window screen device including in combination with a wire fabric, an end bar with which said wire fabric is engaged, and shoes secured to the end bar, said shoes having spaced members between which the fabric is engaged, ears on said members between which the fabric is secured, and return-bent more widely spaced members serving to engage within suitable side guide members.

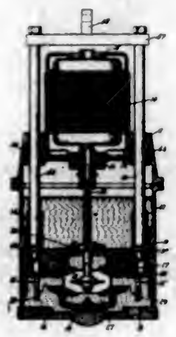
1,867,392. BRAKE. FERGUSON E. WILLIS, Detroit, Mich. Filed Sept. 9, 1929. Serial No. 391,847. 6 Claims. (Cl. 188—78.)



1. In a brake device the combination with an expanding ring and means for expanding the ring, of a plurality of shoes surrounding the ring, means intermediate its ends

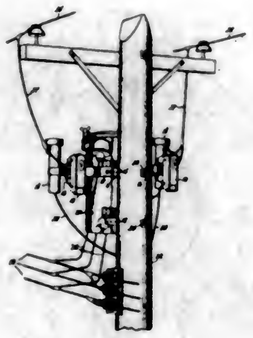
for anchoring one only of the shoes against circumferential movement, resilient means connecting the shoes and ring, expanding members coupling the adjoining ends of the shoes, and means for transmitting motion of the expanding ring to said members.

1,867,393. QUICK RELEASE HYDRAULIC OPERATOR. WILLIAM J. WOODS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 6, 1930. Serial No. 493,903. 14 Claims. (Cl. 60—52.)



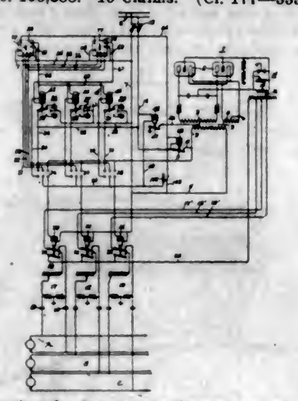
1. A hydraulic operator including a fluid casing, a piston therein, a pump for creating a pressure within the fluid to move the piston, a driving motor therefor, said piston having means for bypassing fluid for rendering said pump ineffective to move said piston and means for rendering said last means effective when the pressure created by said pump falls to a predetermined value.

1,867,394. SUPPORT FOR TRANSFORMERS AND ASSOCIATED PROTECTIVE APPARATUS. HARRY M. ACLY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 30, 1932. Serial No. 589,915. 5 Claims. (Cl. 175—356.)



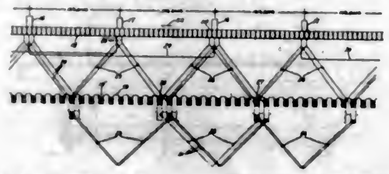
1. A transformer assembly for pole suspension, said assembly including a metal support with two spaced flanges, a transformer secured to one of said flanges, the other flange having an open slot, and a headed bolt, the headed end of the bolt engaging said open slot to secure the transformer assembly to the pole.

1,867,395. REMOTE CONTROL SYSTEM. HUGH E. ALLEN, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 31, 1927. Serial No. 195,888. 15 Claims. (Cl. 177—353.)



1. In a system for selective performance of remote functions, the combination with a plurality of circuits, of a transmitter, means individual to each circuit for connecting said transmitter to the respective circuit, selective switching means, and a control means operable through said switching means for actuating said connecting means to connect said transmitter to a selected circuit, for keying said transmitter through said selective switching means in accordance with the function to be performed and for actuating said connecting means to disconnect said transmitter from said circuit after said keying has been effected.

1,867,396. ALTERNATING CURRENT COMMUTATOR MACHINE. ERNST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 30, 1929. Serial No. 410,798. 7 Claims. (Cl. 171—228.)

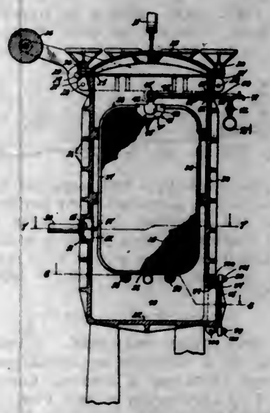


1. An alternating current dynamo-electric machine of the commutator type subject to load for appreciable durations under standstill conditions, having its armature coils so disposed that coils connected to brushes displaced from each other by substantially 180 electrical degrees will be in inductive relation, and provided with armature brushes of a width such as to permit contact with not more than two commutator segments at any instant, and so disposed on the commutator that when a commutator segment breaks contact with a brush of one polarity a brush of another polarity will be in engagement with two commutator segments, the voltage between adjacent commutator segments at the brush positions being such in relation to the resistance of the brushes that undesirable heating of the brushes is avoided under stand-still load conditions.

1,867,397. FILTERING APPARATUS. WILLIAM F. BRACE and FERNAND E. BELUCHE, Buffalo, N. Y., assignors to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed Jan. 19, 1931. Serial No. 509,591. 2 Claims. (Cl. 210—181.)

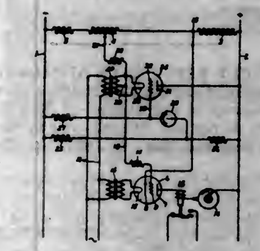
1. In a filtering apparatus of the character described, an enclosing casing having a rectangular top and bottom

and four sides connecting said top and bottom, a plurality of flat filtering units arranged in spaced face-to-face relation in said casing, each of said units comprising at least one foraminous member forming a central chamber and the opposite vertical edges of all of said units being arranged immediately adjacent the corresponding opposite walls of said casing and the outer faces of the endmost units being arranged immediately adjacent the other opposite walls, a distributing chamber formed in one wall



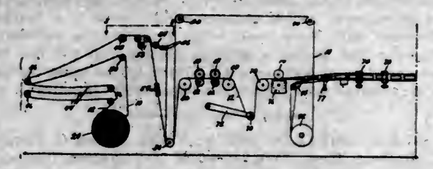
of said casing adjacent the edges of said units and extending substantially the full horizontal extent of said wall, said chamber extending outwardly from said wall and being open on one side to the interior of said casing, an inlet pipe connected to said chamber, a flat perforated plate secured flat against the inner side of said casing and extending over the open side of said distributing chamber, means for conducting the filtered liquid from the interior chambers of each of said units, and means for detachably securing said plate in position.

1,867,398. CONTROL CIRCUIT FOR VAPOR ELECTRIC DISCHARGE DEVICES. WILLIAM D. COCKRELL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 28, 1931. Serial No. 571,694. 6 Claims. (Cl. 250—27.)



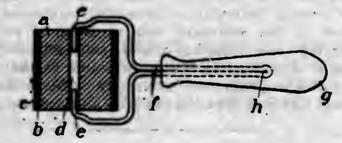
1. In combination, a direct current supply circuit, a vapor electric device having anode and cathode elements connected therewith and having a grid, means for supplying to said grid from said circuit a potential which is negative with respect to that of said cathode and a control device for supplying to said grid from said circuit a potential which is positive with respect to that of the cathode.

1,867,399. METHOD OF MAKING STENCIL FRAMES. HARMON P. ELLIOTT, Watertown, Mass. Filed June 11, 1931. Serial No. 543,581. 12 Claims. (Cl. 93—1.)



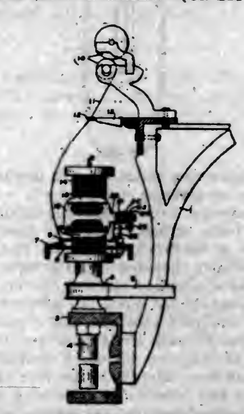
1. The method of making stencils having frames composed of two united paper sheets which consists in providing long lengths of such sheets that may have different moisture conditions in different localities located along the lengths thereof, and combining together such portions of the sheets as have the same moisture conditions.

1,867,400. BLOTTING DEVICE. RICHARD ERNST, Reichenbach, near Waldheim, Germany. Filed Mar. 18, 1931. Serial No. 523,527, and in Germany Jan. 26, 1931. 1 Claim. (Cl. 120—26.)



The combination with a blotting roller divided into two hingedly connected halves, of a wire fork whose members are formed with pivot pins for the roller and tend to maintain themselves in a spread-out position, a hand grip adapted to be slipped on to said fork for clamping the members together, studs connected to the end faces of one half of said roller, and tension springs pivoted to the end faces of the other half of the roller and adapted to be hooked on to said studs.

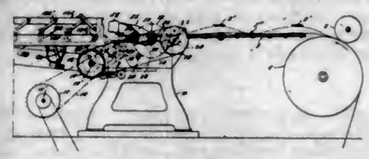
1,867,401. SEPARATOR FOR TWISTING AND SPINNING MACHINES. JAMES E. FARRELL and JOSEPH I. GASKILL, Easthampton, Mass., assignors to West Boylston Manufacturing Company, Easthampton, Mass., a Corporation of Massachusetts. Filed May 21, 1930. Serial No. 454,481. 2 Claims. (Cl. 118—11.)



1. In a ring twisting frame, the combination with a plurality of spindles, bobbins carried thereby, and means to twist cords and wind them on the bobbins, of a separa-

tor between each two adjacent spindles, one face of each separator with which the cord to be wound on one bobbin engages being concave in a vertical direction and the opposite face of the separator with which the cord wound on an adjacent bobbin engages being convex in a vertical direction, said faces, both being straight in a horizontal direction and having a nesting relation and the top and bottom edges of each separator being in the same vertical plane situated midway between the adjacent spindles.

1,867,402. SHEARING MECHANISM. FRANK G. FEELEY, Pittsfield, Mass., assignor to M. D. Knowlton Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 24, 1927. Serial No. 170,578. 43 Claims. (Cl. 164—49.)



1. The combination with shearing means comprising relatively moving blades for transversely cutting a flat web of moving material, of positively actuated means controlled by the aforesaid web of material for bodily reciprocating said shearing means, said actuated means including a stop and trip device connected to and movable with the shearing means to accurately regulate the length of the web material between the stop and shearing means.

1,867,403. MEASURING DEVICE FOR MILK POWDERS. WILLIAM O. FROHRING, Shaker Heights, Ohio, assignor to S. M. A. Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 7, 1927. Serial No. 231,656. 1 Claim. (Cl. 73—165.)



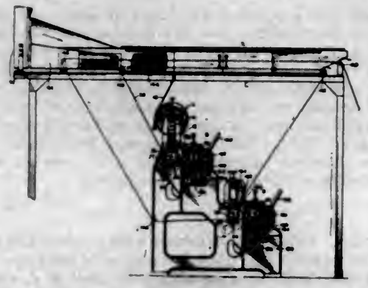
A sanitary measuring device for milk powder or the like, comprising two cooperating units, to wit, a body formed of a plain elongated tubular member having a smooth uninterrupted inner cylindrical surface from end to end and being open at its forward discharge end and its rear end being externally threaded for attachment of a screw cap thereto, and a combined cap and ejector member comprising a plain cup shaped screw cap adapted for threaded connection to said rear tube end and a plunger member including a stem slidable freely back and forth through an opening in the cap and having an ejecting head on its forward end and bent laterally at its rear end to provide a finger portion and between its ends being provided with longitudinally spaced integral projections which limit its reciprocating motion through the cap and permanently couple the stem and cap, the rear one of said projections being so located that when it is in engagement with the cap the ejecting head extends slightly beyond the forward open tube end to insure complete emptying thereof, and the distance between said projections being materially less than the length of the tube, thereby securing accurate measurement of a definite volume of material to be ejected and enabling the extended rear end of the tube to be utilized as a measuring handle during filling and ejecting, said cap being detachable from the tube for complete exposure, sterilization and cleansing of all surfaces and parts.

1,867,404. TIRE TOOL. GEORGE W. GREENSTEIN, Newtonville, Mass. Filed Oct. 18, 1929. Serial No. 400,506. 4 Claims. (Cl. 157—1.)



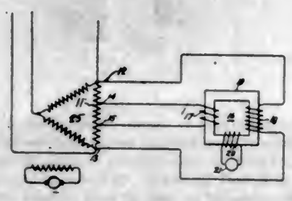
1. A tool for operating a link connected split rim comprising a bar having a straight lever portion and a bent and twisted end extension thereof, which has a socket transversely thereof, the axis of which socket is inclined relative to said lever portion so that when the socket is engaged with the link, the lever will be laterally spaced from the rim.

1,867,405. INTAGLIO PRINTING. IRVING GURWICK, New York, N. Y., assignor, by mesne assignments, to Transparent Packaging & Printing Corporation, New York, N. Y., a Corporation of New York. Filed May 9, 1929. Serial No. 361,584. 31 Claims. (Cl. 101—152.)



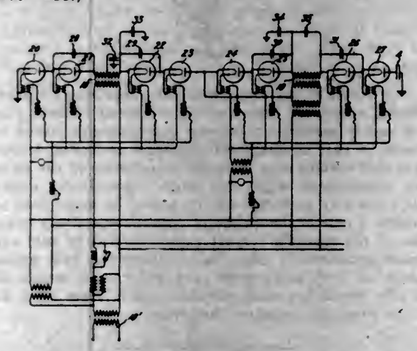
12. The combination with an intaglio printing machine used for printing solid color on non-absorbent paper, of means other than the printing means to positively feed the paper through the printing means independently of the printing means.

1,867,406. FAULT RESPONSIVE APPARATUS. EUGEN HOROWICZ, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Apr. 5, 1930, Serial No. 441,985, and in Germany Apr. 24, 1929. Renewed Feb. 6, 1932. 5 Claims. (Cl. 175—294.)



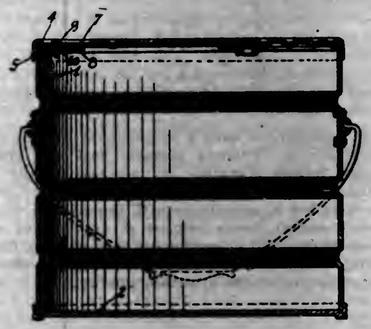
1. In combination with an alternating current dynamo-electric machine having a winding in which occur voltages differing in phase in different parts of the winding, means operative in response to abnormal conditions of said winding including a plurality of cooperating coils respectively connected to be energized in accordance with the voltages across different parts of said winding normally having voltages alike in phase.

1,867,407. DIRECT CURRENT HIGH VOLTAGE CABLE TESTING SYSTEM. HORACE S. HUBBARD, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed June 25, 1928, Serial No. 287,991. Renewed Mar. 11, 1932. 6 Claims. (Cl. 175—183.)



3. In a cable insulating testing device, a plurality of insulated transformer windings adapted to be connected in series to a cable to be tested, a plurality of vacuum tube rectifiers connected between said transformer windings, and means whereby an alternating electromotive force may be supplied to said transformer windings.

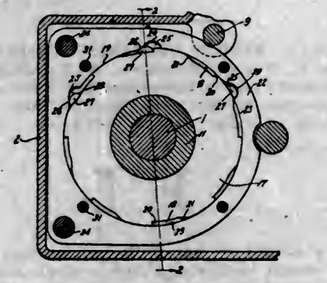
1,867,408. CONTAINER. WALTER E. HUENEFELD, Cincinnati, Ohio, assignor to The Huenefeld Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 24, 1929. Serial No. 334,798. 9 Claims. (Cl. 220—55.)



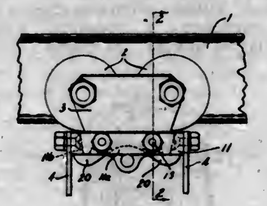
1. A container having an inward projection on the inner surface of the side wall thereof, a lid for the container having a spring clip the end of which will interlock in said inward projection when said lid is applied to said container, and means for demountably mounting said clip on said lid.

1,867,409. LOAD BRAKE FOR HOISTS. WINFRED H. JUERGENS, Cleveland, Ohio, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio, a Corporation of Ohio. Filed Aug. 18, 1930. Serial No. 476,076. 5 Claims. (Cl. 192—8.)

1. Apparatus of the character described and comprising a rotatable driving member having a hub portion, a circular ratchet plate rotatable upon said hub portion, an anchor plate arranged in the plane of said ratchet plate to bear upon the periphery thereof, a side plate secured with said anchor plate with an inner edge portion overlying the ratchet plate, and a friction disc arranged on the face by said ratchet plate and positioned thereon by said side plate, with a central opening to clear said driving member hub portion.

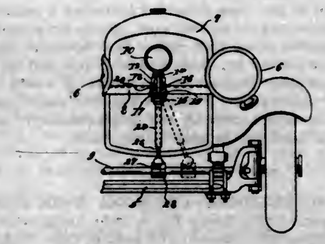


1,867,410. BOLT SUPPORT FOR TROLLEY FRAMES. WINFRED H. JUERGENS, Cleveland, Ohio, assignor to The Euclid-Armington Corporation, Euclid, Ohio, a Corporation of Ohio. Filed Nov. 21, 1931. Serial No. 576,491. 1 Claim. (Cl. 105—154.)



Bolt support means for the purpose described, comprising a yoke adapted for association with a carriage frame, with end portions bearing upon opposite side members of the frame, and an intermediate portion extending between said frame members and having openings to receive and support bolts in a transverse frame member which joins said side frame members.

1,867,411. SWIVEL LAMP FOR MOTOR VEHICLES. FAYETTE D. KENDRICK, St. Paul, Minn. Filed Apr. 7, 1930. Serial No. 442,286. 4 Claims. (Cl. 240—62.)



1. An attachment for a motor vehicle comprising, a vertical shaft, a swivel lamp secured to said shaft, a horizontal shaft, means for securing said shafts to the vehicle, gearing connecting said horizontal and vertical

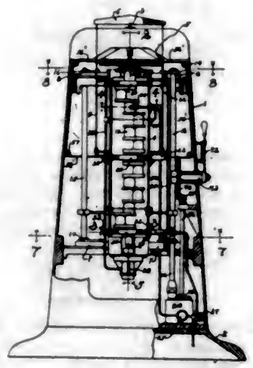
shafts, means for changing the driving ratio between said shafts, a pendant crank on said horizontal shaft and a connection between said crank and a steering element of the vehicle adapted to actuate said crank to turn said lamp when the vehicle is turned.

1,867,412. METHOD OF MAKING BEARINGS. WILLIAM H. KLOCKE, Woodhaven, N. Y., assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 28, 1928. Serial No. 328,968. 1 Claim. (Cl. 29—149.5.)



In a method of making flanged bearings, the steps which consist in drawing a circular blank into a cup and simultaneously forming an encircling flange at the open end of said cup, removing the closed end of said cup, forcing the end wall of said cup adjacent to the former closed end outwardly at an engle to the wall thereof, and then bending said end further outwardly into a right-angled encircling flange, trimming said flange to true circular shape, the thickness of said blank being maintained a constant during all of said preceding steps and then lining the flanged shell thus formed by integrally uniting thereto a suitable bearing material.

1,867,413. BALANCING APPARATUS. ROGER K. LEE, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 19, 1929. Serial No. 408,267. 28 Claims. (Cl. 73—51.)

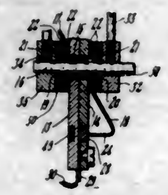


1. A device of the class described including a support, a rocker bar fulcrumed on said support, means for supporting an article located below said rocker bar, elements depending from said rocker bar and pivotally attached to said means for normally supporting the latter in stable equilibrium, and apparatus for measuring the amplitude of overbalance of said article by the displacement to which said means is subjected by said overbalance.

1,867,414. SULPHURIZED CINCHONA BARK INHIBITOR. GEORGE LUTZ, Rocky River, Ohio, assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Dec. 16, 1931. Serial No. 581,518. 4 Claims. (Cl. 148—8.)

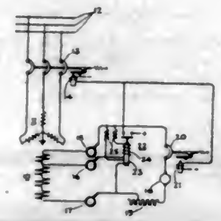
1. A cleaning and pickling bath for metals comprising a dilute, non-oxidizing acid containing a small amount of a sulphurized cinchona bark alkaloid.

1,867,415. COMBINATION LOCK SWITCH. WILLIAM K. MASON, Cambridge, Mass., assignor to American Electrical Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 18, 1929. Serial No. 393,357. 6 Claims. (Cl. 200—43.)



1. A device of the class described comprising a rotatable spindle, a pair of arms having electrical contact points and loosely mounted to revolve independently about said spindle, a pair of abutment members projecting laterally from said spindle and movable by rotation of the spindle into engagement with said arms respectively, whereby said arms may be independently moved by rotation of said spindle, a pair of fixed contact points respectively engageable by the movable contact points carried by said arms, means permanently electrically connecting said movable points on both arms with each other, and means electrically insulating said movable points from said fixed points when not engaged therewith.

1,867,416. PROTECTION OF DYNAMO-ELECTRIC MACHINES. ELDRIDGE G. MERRICK, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 5, 1930, Serial No. 433,456. Renewed Mar. 16, 1932. 9 Claims. (Cl. 175—294.)



1. In combination with a synchronous dynamo-electric machine having relatively movable field and armature windings, means operative in response to the short-circuiting of a portion of the armature winding connected to be energized in accordance with the relative values of the electromotive forces induced at any instant in two different predetermined numbers of field winding turns by the relative movement of the field winding and the short-circuited portion of the armature winding.

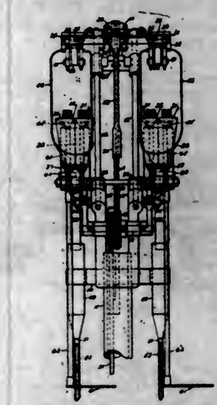
1,867,417. PROTECTION OF DYNAMO-ELECTRIC MACHINES. ELDRIDGE G. MERRICK, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 8, 1930. Serial No. 487,273. 5 Claims. (Cl. 175—294.)



1. In combination, a synchronous dynamoelectric machine having relatively movable field and armature windings and means operative in response to the short-circuit-

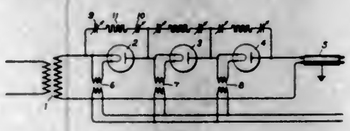
ing of a portion of the armature winding connected to be energized in accordance with the electromotive force induced in a predetermined number of field winding turns by the relative movement of the field winding and the short-circuited portion of the armature winding including a resistance having a negative ampere characteristic and an electroresponsive device in circuit therewith, said resistance and said device being connected across said predetermined number of field winding turns.

1,867,418. APPARATUS FOR FEEDING WIRES. GUSTAV MÜLLER, Berlin-Steglitz, and CURT WEINMANN, Berlin-Charlottenburg, Germany, assignors to General Electric Company, a Corporation of New York. Filed Apr. 20, 1931, Serial No. 531,301, and in Germany May 2, 1930. 9 Claims. (Cl. 140—132.)



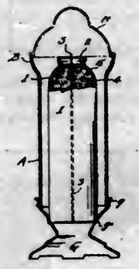
1. In an apparatus for transferring wires, the combination of a container adapted to support a number of wires with their ends projecting therefrom and a wire clamping means mounted for movement toward and away from said container to grip a wire at its projecting end and to remove it from said container, comprising a plurality of jaws and means for causing a simultaneous closing movement thereof after said clamping means reaches a position adjacent said wire ends, said jaws and closing means being so proportioned and arranged that one pair of said jaws closes faster than the other so that the second pair is rendered inoperative if the first pair grips a wire and becomes operative if said first pair fails to grip a wire.

1,867,419. OPERATION OF SERIES CONNECTED VACUUM VALVES. FRANK W. PEEK, Jr., Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 27, 1927. Serial No. 164,083. 9 Claims. (Cl. 175—363.)



7. In combination, a circuit including a plurality of vacuum tube valves connected in series, means for impressing an electromotive force on said circuit, means including a condenser in parallel with each of said tubes for equalizing the voltage assumed by each of said tubes, the capacity of said condensers being relatively large compared with the internal capacity of a valve.

1,867,420. CANDLE AND METHOD RELATING THERETO. HUBER H. ROOT, Medina, Ohio, assignor to The A. I. Root Company, Medina, Ohio, a Corporation of Ohio. Filed Nov. 10, 1930. Serial No. 494,459. 9 Claims. (Cl. 67—21.)

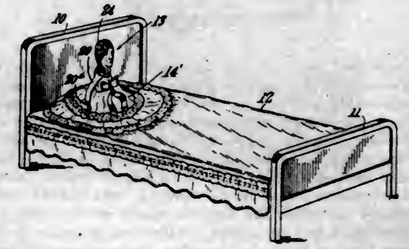


3. As a new article of manufacture, a relatively non-fusible translucent rigid casing of fixed length, means providing a restricted mouth for the casing, and fusible solid fuel candle material contained in the casing in substantially uniform intimate contact with the side walls thereof and perforated to receive a suitable wick.

1,867,421. METHOD OF CURING CEMENT CONCRETE. WILLIAM H. ROWAN and HENRY K. BUCKNER, Nashville, Tenn. Filed Aug. 24, 1929. Serial No. 388,260. 4 Claims. (Cl. 25—154.)

1. A method of protecting freshly poured concrete paving while it is curing which consists in applying to the damp surface of the pavement a relatively thin coating of paraffin dissolved in a volatile solvent.

1,867,422. COMBINED DOLL AND PILLOW. CHARLES SHAPIRO, New York, N. Y. Filed Oct. 8, 1931. Serial No. 567,722. 2 Claims. (Cl. 46—40.)

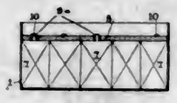


1. In a combined doll and pillow, the combination of a substantially round flattened pillow adapted to act as a support, a body portion secured to the central upper portion of said pillow and retained upright thereby and having a head-piece attached thereto, and a dress portion covering the pillow and hiding the same from view and adapted to be spread about the pillow upon a surface on which the combined doll and pillow rests.

1,867,423. SHIELD FOR BATTERIES AND THEIR PARTS. MARTIN SIMSINOVICI, Paris, France. Filed June 15, 1926, Serial No. 116,162, and in France May 10, 1926. 3 Claims. (Cl. 136—109.)

1. A protecting plate for a dry battery having a plurality of cells provided with tapering terminal sockets and arranged in a container, said plate being of insulating

material and having a plurality of tapering apertures positioned to receive the terminal sockets of the battery cells to hold said cells from movement and to indicate by their



location of the voltage of the battery, said plate having means at its edges to engage the walls of the container for insulating the battery cells and hermetically sealing them.

1,867,424. COVER AND INITIAL MOUNTING. ALFRED H. SMITH, Auburn, R. I., assignor to Fulford Mfg. Co., a Corporation of Rhode Island. Filed Apr. 12, 1932. Serial No. 604,727. 7 Claims. (Cl. 40—20.)



1. A fastener device having two parts, each engaging opposite surfaces of a material to which it is attached and with parts of one extending through the material and secured to parts of the other, a cover member for one of said parts, resilient fingers on said cover member having a beaded portion so shaped as to provide an inner surface of a different contour than the outer surface of the part to be covered thereby, whereby the beaded portion of said fingers engages the part to be covered along a definite line of contact.

1,867,425. COMBINATION DOUBLE THROW AND MATTRESS COVER. AMANDA D. SWETZEL, Philadelphia, Pa. Filed Nov. 12, 1930. Serial No. 495,074. 1 Claim. (Cl. 5—334.)



A combined double throw and cover for mattresses, the body consisting of opposite pieces being stitched together at least three quarters of the way around the margin of the body, the remaining portion of the edge being free and unstitched, causing an opening to be formed to permit of the insertion of the mattress, the opposite pieces of the body being of different design or color, a pair of throws carried by the opposite edges of the opening, said throws correspondingly matching the opposite pieces of the body, one to be exposed and to overlie a pillow to match with the exposed piece of the body, the other throw necessarily folded under the cover, thereby avoiding contrasting appearance, fastening means to connect the free ends of the throws to the cover, a plurality of pairs of valance sections carried by the edge of the cover which is stitched three quarters of the way around, one set of valance sections corresponding in design and color to one piece of the body, the other set corresponding in design and color to the opposite piece of the body, only one set of valance sections being exposed to match the exposed piece of the body, the while the other set of valance sections are folded under the cover.

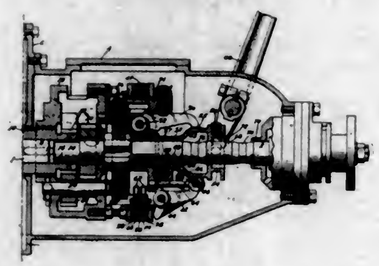
1,867,426. COMBINED BASE AND RECEPTACLE FOR TOY TYPEWRITERS OR THE LIKE. SAMUEL A. THOMPSON, New York, N. Y. Filed May 4, 1931. Serial No. 535,057. 6 Claims. (Cl. 45—7.)

1. In a combined supporting base and receptacle, the combination of a hollow rectangular body open at its opposite ends and a rectangular drawer slidably received through said ends and snugly housed by said body, said drawer having an open upper end provided with



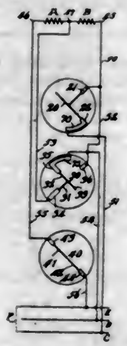
an inwardly extending continuous marginal flange and downturned flaps at the opposite ends of the drawer opening bearing respectively on the bottom of the drawer.

1,867,427. REVERSING MECHANISM FOR POWER BOATS. JULIUS M. ULRICH, Riverside, Conn., assignor to Palmer Bros. Engines, Inc., Cos Cob, Conn., a Corporation of Connecticut. Filed Feb. 27, 1931. Serial No. 518,871. 14 Claims. (Cl. 74—34.)



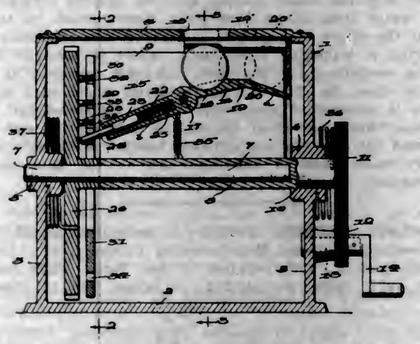
1. In a reverse gear, a drive shaft, a driven shaft, forward and reverse drive clutches for connecting said drive and driven shafts, means for operating said clutches yielding means for holding one of said clutches disengaged when both clutches are disengaged and means engaging the operating means of said one clutch to prevent operation thereof under centrifugal force when the other clutch operating means is operated.

1,867,428. HEATER CIRCUIT AND CONTROL. FRED G. VON HOORN, Bridgeport, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 2, 1930. Serial No. 441,017. 3 Claims. (Cl. 219—20.)



1. A switch having three circuit closing positions and an open position for controlling flow of current in a two part resistance to give three degrees of heating, said switch having a blade and contacts establishing in alternate positions a connection from one end of the resistance to one feeder, a second blade and contacts controlling connections from another feeder to the midpoint and to the other end of the resistance, and closing a connection to the midpoint in two consecutive "on" positions and to said other end in a third "on" position, the first blade being open in the second of said consecutive "on" positions, together with a third blade controlling connections from said other end of the resistance to a third feeder, and closing a connection in said two consecutive "on" positions and opening it in the third "on" position, said switch having a spindle to which said blades are connected and by which they are rotatable simultaneously.

1,867,429. VENDING MACHINE. CHARLES WALKER, Knoxville, Tenn. Filed Feb. 19, 1931. Serial No. 516,848. 12 Claims. (Cl. 194—72.)



1. A vending machine comprising a housing, a movable element mounted in said housing, means for moving said element, a lever fulcrumed on and movable with said element, means on said lever for receiving a coin, an abutment mounted in said housing and adapted to be engaged by said coin upon the movement of said element, to rock said lever on its fulcrum, a vending device adjacent said element, and having means for operatively engaging said lever when the latter is rocked on its fulcrum, whereby the movement of said element is transmitted to said vending device, and means for limiting the operating movement of said element, comprising a guide member having a slot closed at one end and lying in the plane of movement of said movable element, said slot being adapted to receive a portion of said lever.

1,867,430. LOCKABLE JOINT FOR HOSE SECTIONS. JOSIAH B. WISNER, Camden, N. J. Filed Oct. 3, 1931. Serial No. 566,719. 5 Claims. (Cl. 285—194.)



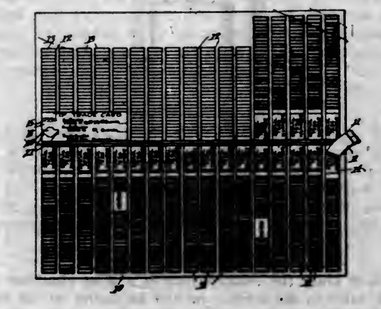
1. A lockable joint for hose or sleeve sections, comprising at least one integral lug extending circumferentially halfway about an end of one of the sections to be coupled together, said lug having a curved surface and a flat surface intersecting therewith to form a sharp ridge, and an integral protruding enclosure on an end of the other of the sections to be coupled together, said enclosure receiving said first-mentioned end and having a recess shaped similarly to said lug to lockably receive said lug when said sections are placed in end to end abutting relation.

1,867,431. CUSHION SUPPORT. JOSEPH H. WOOD, Aurora Hills, Va. Filed Mar. 20, 1931. Serial No. 524,122. 2 Claims. (Cl. 36—71.)



1. A combined insole and arch support of the character described, fashioned to conform in outline to a portion of the sole of a shoe, and comprising two layers of material and a pad forming a metatarsal support inserted therebetween, one of said layers composed of compressible elastic material, and having relatively minute perforated semi-globules on the lower surface which causes it to cling to the surface to which it is applied and hold the insole in place.

1,867,432. TIP TRADE CARD. WILLIAM M. WRIGHT, Wheeling, W. Va. Filed Aug. 9, 1928. Serial No. 298,539. 4 Claims. (Cl. 273—139.)

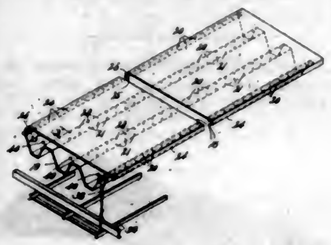


1. In a device of the character described, the combination of a card, a series of strips of paper or tickets each secured to the card at one end and arranged in overlapping relation, said strips or tickets being folded on themselves at their free ends to conceal indicia carried thereby, and narrow strips of adhesive paper secured about the folded ends to hold the folded ends in position.

1,867,433. BUILDING CONSTRUCTION. JAMES HOWARD YOUNG, Pittsburgh, Pa., assignor to H. H. Robertson Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 30, 1932. Serial No. 608,487. 7 Claims. (Cl. 189—34.)

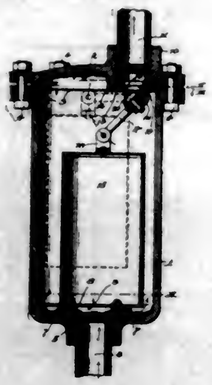
7. A metal flooring for a building comprising a multicellular metallic flooring having a plurality of cells structurally closed in cross section and forming cooperating hollow load supporting beams, each beam being not less than three inches nor more than ten inches in depth, said beams being capable of resisting within them-

selves all of the normal load stresses to which the floor is subjected and being spaced apart not over twice the depth of the cells, the width, depth, lateral spacing and



thickness of the walls of said beams being correlated to impart to the structure a section modulus of at least 1.0 inches per foot width.

1,867,434. STEAM TRAP. CARL W. ZIES, Lakewood, Ohio, assignor to The V. D. Anderson Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 26, 1931. Serial No. 511,340. 5 Claims. (Cl. 137—103.)

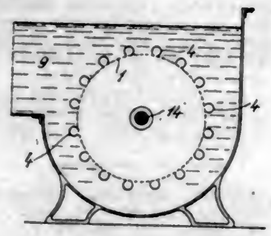


1. In a trap, the combination of a float chamber having an inlet at its lower end and an outlet at its upper end; a baffle plate overlying the inlet and standing in spaced relation thereto and to the lower inner portion of the chamber and to the adjacent side walls thereof, said plate having a relatively small opening formed therein; a float mounted in the chamber, said float standing entirely above the upper face of the baffle plate; and a valve associated with said float adapted when the float is raised to close the outlet opening in the upper portion of the chamber.

1,867,435. METHOD OF PREPARING SOLID ADSORBENTS. SIDNEY T. ADAIR, Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Aug. 29, 1930. Serial No. 478,787. 7 Claims. (Cl. 252—3.)

1. The process of preparing a solid adsorbent consisting in impregnating gel material with a solution of a substance capable of being converted into a highly activated carbon, drying the impregnated material, and heating it to convert the said substance in activated carbon.

1,867,436. METHOD AND APPARATUS FOR CONCENTRATING PULP WATER. OTTO ANDRESEN, Vinderen, near Oslo, Norway. Filed Jan. 22, 1929, Serial No. 334,266, and in Norway June 30, 1928. 15 Claims. (Cl. 92—29.)



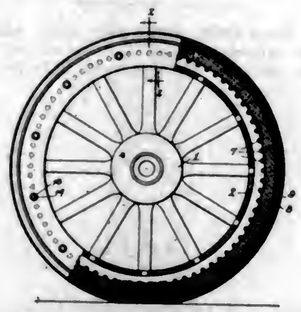
1. Method of concentrating pulp water, particularly fibre pulp for paper making and the like, by straining off water from dilute fibre pulp, characterized by this that the dilute fibre pulp is introduced into a container having a travelling sieve cloth, water is strained off upon sections above the cloth, the mass deposited as a layer upon the cloth during its travel under each section is scraped off completely and is conducted into a compartment located at the end of each section and is passed out from the compartment together with water or pulp water received simultaneously in the said compartment.

1,867,437. DAUBER. ANTHONY L. ASTE, Brooklyn, N. Y., assignor to Griffin Manufacturing Company, Inc., New York, N. Y., a Corporation of New York. Filed June 9, 1931. Serial No. 543,201. 5 Claims. (Cl. 15—209.)



1. In a dauber, a casing, a block having substantially parallel faces and disposed in the casing, an absorbent member having its inner portion disposed against the outer face of the block and within the casing, the outer portion of the absorbent member extending beyond the casing, and a cloth disposed over the absorbent member and having portions disposed between the casing and the block.

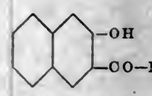
1,867,438. TIRE. ADOLPH BAECK, Lake Ronkonkoma, N. Y. Filed Oct. 23, 1931. Serial No. 570,716. 2 Claims. (Cl. 152—1.)



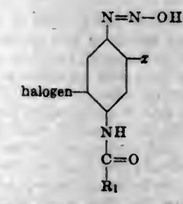
1. The combination with a rim, of a circular series of pins supported in the rim, and a duplex tire mounted on the pins and comprising two annular members, the inner annular member being of soft resilient material and the outer annular member of harder, greater wearing material.

1,867,439. AZO-DYESTUFFS AND PROCESS OF MAKING SAME. GÉRALD BONHÔTE, Basel, Switzerland, assignor to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed July 14, 1930, Serial No. 467,957, and in Switzerland July 18, 1929. 15 Claims. (Cl. 260—95.)

1. A manufacture of new azo-dyestuffs by coupling with an arylide of 2:3-naphthoic acid of the general formula

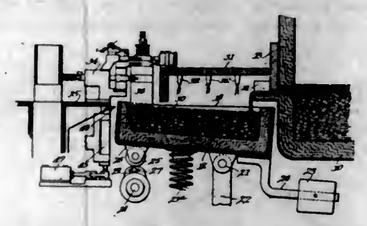


in which R_2 stands for an aryl nucleus of the benzene or of the naphthalene series, a diazo-compound of the general formula



in which x represents halogen, an alkyl-group or an alkoxy-group, and R_1 an aryl nucleus of the benzene series.

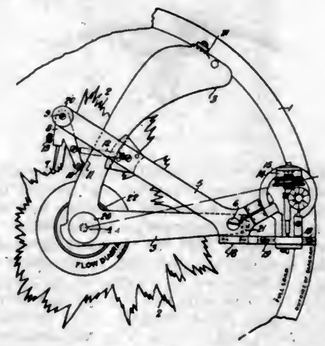
1,867,440. METHOD OF AND APPARATUS FOR GATHERING MOLTEN GLASS IN MOLDS. EDWARD G. BRIDGES, Anderson, Ind., assignor to Lynch Glass Machine Company, a Corporation of Indiana. Filed Dec. 26, 1929. Serial No. 416,621. 15 Claims. (Cl. 49—56.)



4. The improvement in the art of gathering charges of molten glass into molds which consists in successively moving a series of gathering molds in a certain predetermined order over an exposed portion of a receptacle containing a supply of molten glass, circulating the glass in said receptacle in separate supply and return passages leading respectively to and from the exposed end thereof, raising the exposed portion of the receptacle as a mold is moved thereover to establish cooperative charging contact between the bottom of the mold and the glass in said receptacle, and simultaneously accelerating the flow of glass in the return passage away from the exposed end, and thereafter lowering the exposed portion of the receptacle to its normal position to effect flow of a fresh supply of glass to the exposed end and permit movement of the charged mold away therefrom.

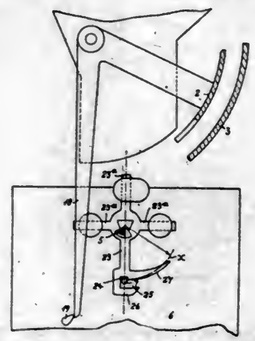
14. Glass gathering apparatus comprising a receptacle containing a supply of molten glass, means for continuously flowing a fresh supply of glass into said receptacle adjacent one end thereof, means for mounting said receptacle for tilting movement to effect raising and lowering of the opposite gathering end thereof, means for circulating the glass in said receptacle in separate passages to and from the gathering end, and means for imparting tilting movement to said receptacle to periodically raise and lower said gathering end to permit the flow of a fresh supply of glass to the gathering end when lowered and to accelerate the return flow of chilled glass away from the gathering end upon successive raising thereof.

1,867,441. PLANIMETER. HORACE EDWARD DALL, Luton, England, assignor to George Kent, Limited, Luton, England. Filed Nov. 1, 1930, Serial No. 492,825, and in Great Britain Nov. 2, 1929. 11 Claims. (Cl. 33—122.)



1. In a planimeter for use in integrating a diagram, means for approximately producing the required angular displacement of the planimeter wheel for correct integration, comprising a movably mounted traversing frame, an arm pivoted to said traversing frame, a tracing point on said arm, a planimeter wheel carried by said arm, and means connected to said tracing point and cooperating with said frame as said arm is turned about its pivot to cause the angles between successive intersections of the tracing point and the diagram to be approximately those required for correct integration.

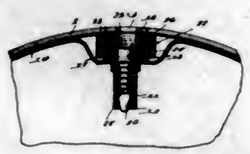
1,867,442. AUTOMATIC FEED WEIGHER. CARL DECKER, Knielingen, near Karlsruhe, Germany, assignor to the Firm Hennefer Maschinenfabrik C. Reuther & Reisert mit beschrankter Haftung, Hennef-on-the-Sieg, Germany. Filed Aug. 2, 1929, Serial No. 382,994, and in Germany Dec. 27, 1926. 10 Claims. (Cl. 249—51.)



1. In an automatic feed weigher of that type in which there is a main feed and a dribble feed the combination comprising a fixed frame, a movable receptacle, a shutter for said main feed, such shutter being adapted to close

automatically upon the completion of the main feed, an unbalanced member pivoted upon said fixed frame, means upon said movable receptacle cooperating with said unbalanced member to maintain said member out of balance until the termination of said main feed and means upon said unbalanced member to retard temporarily the downward movement of said receptacle to prepare the same for the dribble feed.

1,867,443. CASING AND BLADDER CONNECTER FOR FOOTBALLS, BASKETBALLS, AND THE LIKE. FRANK DIETERLE, Utica, N. Y. Filed Feb. 24, 1930. Serial No. 430,812. 1 Claim. (Cl. 273—65.)

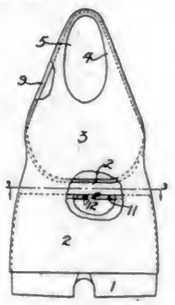


The combination with a compressed air container having an opening with an expansible and contractible tube secured around said opening and depending into said container, a casing for encompassing said container having an opening to register with the container opening, a bed surrounding said opening and fixed to the inner face of the casing and composed of superposed sections with a groove between them adjacent the openings therein to form a flange seat, a tubular valve stem having an annular flange at its outer end to fit in said seat, and a rib spaced inward from said flange, said contractible tube having means for gripping the valve stem between its flange and rib to hold the parts yieldably yet securely engaged being separable by a pull exerted on one of the members, said flange having prongs on its outer face to engage the bed and hold the tube against turning.

1,867,444. ACID-PROOF CEMENTING COMPOSITIONS. KARL DIETZ and KARL FRANK, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 23, 1931, Serial No. 510,841, and in Germany July 30, 1925. 4 Claims. (Cl. 106—8.)

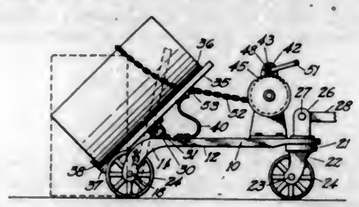
1. Acid-proof cementing compositions consisting of a mixture of water-glass, an acid-proof filling agent and a small quantity of an alkali silicon-fluoride.

1,867,445. SWIMMING SUIT. REUBEN H. DILLS, Seattle, Wash. Filed Mar. 6, 1929. Serial No. 344,657. 4 Claims. (Cl. 2—67.)



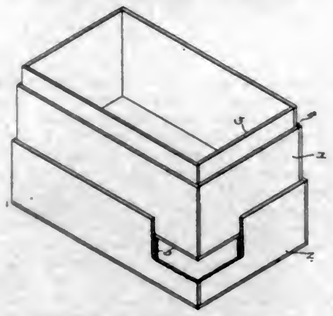
1. A swimming suit constructed of knit material including a lower pants portion extending substantially as high as the wearer's waist, and an upper shirt portion joined thereto and having its edges extending generally upward from the waist, below the armpits, to the shoulders of the wearer, and passing in front of the arms, and means passing in front of the shoulders and behind the neck for supporting the uppermost portion of the garment, the side edges of the upper portion, from shoulder to waist, including tensioning means, whereby these edges are made to cling tightly to the wearer in all positions.

1,867,446. TRUCKING APPARATUS. JOSEPH FRANK DOUBEK, Cicero, Ill. Filed Feb. 14, 1930. Serial No. 428,449. 1 Claim. (Cl. 214—77.)



A trucking apparatus comprising a substantially V-shaped vehicle frame including side members joined at the front of the frame and spaced apart at the rear thereof, portions depending from said members at the rear of the frame, a wheel-bearing axle structure journaled in said depending portions and a guide wheel-bearing axle structure at the front of the frame, a shaft journaled on the top of the frame and forwardly of the rear wheels, a trucking frame pivotally mounted on the shaft for movement in a vertical arc between the depending portions and the rear wheels and including a lifting foot at the base thereof to support an object on the trucking frame, a stop on said vehicle frame forwardly of the shaft to limit movement of the trucking frame and object toward the frame, a windlass on said vehicle frame, and a flexible element adapted to encircle the object and windable on the windlass to pivot the trucking frame and object toward the stop whereby when an object is placed upon the trucking frame and the trucking frame and object are tilted against the stop by winding the flexible element on the windlass stop the center of gravity of the object will be disposed forwardly of the rear wheels and the object will thus be prevented from tipping the apparatus backward.

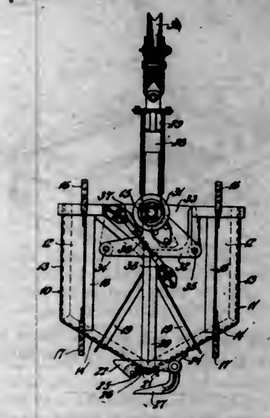
1,867,447. DISPLAY BOX. FRANK J. DUNN, Philadelphia, Pa., assignor to G. A. Bisler, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 7, 1931. Serial No. 520,933. 2 Claims. (Cl. 206—44.)



1. As a new article of manufacture, a box, a reinforcing member secured to the inner surface of the box and having the sides thereof extending above the sides of said box, a cover for the box, the inside peripheral dimensions of the said cover being substantially equal to the outer peripheral dimensions of the box, and a reinforcing member secured to the inner surface of the cover the said member having downwardly extending sides, shorter than

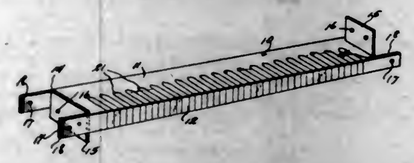
the sides of the cover, the downwardly extending sides of the reinforcing cover member normally resting on the reinforcing member of the box, thereby affording a double seal for said box when closed.

1,867,448. TROLLEY BUCKET. STANLEY H. DURBIN, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Mar. 19, 1931. Serial No. 523,886. 6 Claims. (Cl. 214—116.)



1. A bucket comprising two complemental sections together making up the body of the bucket and each having two side walls, an end wall and a sloping bottom; a pair of spaced plates on each side of the bucket having pivotal members at the opposite ends; the bucket sections having their side walls between the two plates of each pair and being pivotally supported by the aforesaid pivotal members; a bail attached to said plates for supporting the bucket; and obstruction-tripped latching means for holding the bucket sections in closed position.

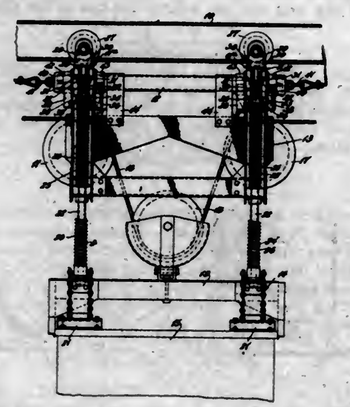
1,867,449. METAL FIRE BLOCK, BRIDGING, AND BRACING. CORA G. ECKET and ROSCOE V. SHELDON, Los Angeles, Calif. Filed Oct. 9, 1930. Serial No. 487,575. 1 Claim. (Cl. 20—4.)



A device of the character described comprising an elongated body plate, a pair of side members integrally formed with the plate and angularly disposed with respect thereto whereby to provide a channelled bracing member, extensions secured to said side members and extending beyond the ends of said body plate, a securing plate secured to said body at one end thereof, and a second securing plate secured to the opposite end of said body, said body having longitudinally disposed scores therein whereby to permit bending of said second securing plate at varying points.

1,867,450. TROLLEY BUCKET CONVEYER. PAUL R. GENZMER, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Jan. 14, 1932. Serial No. 586,625. 8 Claims. (Cl. 212—77.)

1. A trolley of the type which is adapted to operate suspended from an overhead monorail comprising, in combination, a trolley chassis having wheels on which the trolley can travel along the monorail; a trolley undercarriage depending from and hinged to the chassis; bucket stabilizing, guiding and holding means on the undercarriage by which a bucket suspended from a bail can be

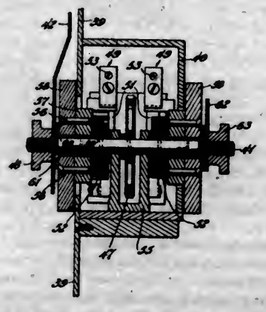


hoisted up to the undercarriage and held rigidly against it; resilient means interposed between the undercarriage and the chassis; the carriage thus yielding, independently of the chassis, in planes more or less perpendicular to the vertical plane of the monorail responsive to lateral thrusts on the trolley.

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1. A process for the manufacture of new direct dyeing azo-dyestuffs containing at least one thiazole ring and at least on cyanuric ring, consisting in causing diazotised diazotization components of the benzene or naphthalene series to react on coupling components, these components being so selected that at least one component contains at least one thiazole ring and at least one component contains at least one cyanuric ring.

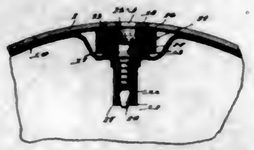
1,867,452. COMBINED INDICATOR AND LIMIT SWITCH ACTUATOR. HAROLD E. HALLENBECK, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Dec. 12, 1931. Serial No. 580,686. 9 Claims. (Cl. 200—47.)



1. A combined actuator for limit switches and for an indicator comprising, in combination, a shaft driven through a reduction gearing; a pointer on the shaft; a

automatically upon the completion of the main feed, an unbalanced member pivoted upon said fixed frame, means upon said movable receptacle cooperating with said unbalanced member to maintain said member out of balance until the termination of said main feed and means upon said unbalanced member to retard temporarily the downward movement of said receptacle to prepare the same for the dribble feed.

1,867,443. CASING AND BLADDER CONNECTER FOR FOOTBALLS, BASKETBALLS, AND THE LIKE. FRANK DIETERLE, Utica, N. Y. Filed Feb. 24, 1930. Serial No. 430,812. 1 Claim. (Cl. 273—65.)

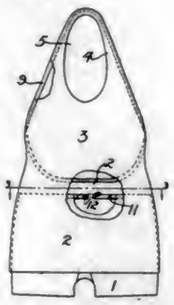


The combination with a compressed air container having an opening with an expansible and contractible tube secured around said opening and depending into said container, a casing for encompassing said container having an opening to register with the container opening, a bed surrounding said opening and fixed to the inner face of the casing and composed of superposed sections with a groove between them adjacent the openings therein to form a flange seat, a tubular valve stem having an annular flange at its outer end to fit in said seat, and a rib spaced inward from said flange, said contractible tube having means for gripping the valve stem between its flange and rib to hold the parts yieldably yet securely engaged being separable by a pull exerted on one of the members, said flange having prongs on its outer face to engage the bed and hold the tube against turning.

1,867,444. ACID-PROOF CEMENTING COMPOSITIONS. KARL DIETZ and KARL FRANK, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 23, 1931, Serial No. 510,841, and in Germany July 30, 1925. 4 Claims. (Cl. 106—8.)

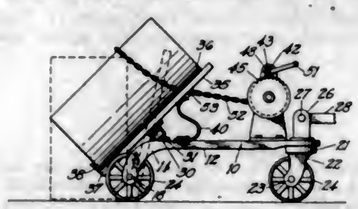
1. Acid-proof cementing compositions consisting of a mixture of water-glass, an acid-proof filling agent and a small quantity of an alkali silicon-fluoride.

1,867,445. SWIMMING SUIT. REUBEN H. DILLS, Seattle, Wash. Filed Mar. 6, 1929. Serial No. 344,657. 4 Claims. (Cl. 2—67.)



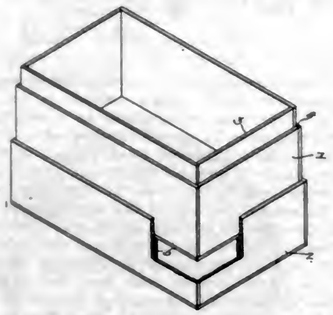
1. A swimming suit constructed of knit material including a lower pants portion extending substantially as high as the wearer's waist, and an upper shirt portion joined thereto and having its edges extending generally upward from the waist, below the armpits, to the shoulders of the wearer, and passing in front of the arms, and means passing in front of the shoulders and behind the neck for supporting the uppermost portion of the garment, the side edges of the upper portion, from shoulder to waist, including tensioning means, whereby these edges are made to cling tightly to the wearer in all positions.

1,867,446. TRUCKING APPARATUS. JOSEPH FRANK DOUBEK, Cicero, Ill. Filed Feb. 14, 1930. Serial No. 428,449. 1 Claim. (Cl. 214—77.)



A trucking apparatus comprising a substantially V-shaped vehicle frame including side members joined at the front of the frame and spaced apart at the rear thereof, portions depending from said members at the rear of the frame, a wheel-bearing axle structure journaled in said depending portions and a guide wheel-bearing axle structure at the front of the frame, a shaft journaled on the top of the frame and forwardly of the rear wheels, a trucking frame pivotally mounted on the shaft for movement in a vertical arc between the depending portions and the rear wheels and including a lifting foot at the base thereof to support an object on the trucking frame, a stop on said vehicle frame forwardly of the shaft to limit movement of the trucking frame and object toward the frame, a windlass on said vehicle frame, and a flexible element adapted to encircle the object and windable on the windlass to pivot the trucking frame and object toward the stop whereby when an object is placed upon the trucking frame and the trucking frame and object are tilted against the stop by winding the flexible element on the windlass stop the center of gravity of the object will be disposed forwardly of the rear wheels and the object will thus be prevented from tipping the apparatus backward.

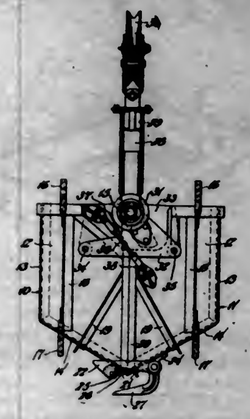
1,867,447. DISPLAY BOX. FRANK J. DUNN, Philadelphia, Pa., assignor to G. A. Bisler, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 7, 1931. Serial No. 520,933. 2 Claims. (Cl. 206—44.)



1. As a new article of manufacture, a box, a reinforcing member secured to the inner surface of the box and having the sides thereof extending above the sides of said box, a cover for the box, the inside peripheral dimensions of the said cover being substantially equal to the outer peripheral dimensions of the box, and a reinforcing member secured to the inner surface of the cover the said member having downwardly extending sides, shorter than

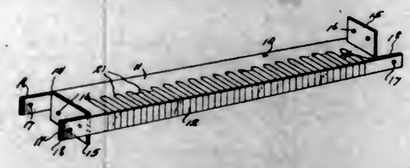
the sides of the cover, the downwardly extending sides of the reinforcing cover member normally resting on the reinforcing member of the box, thereby affording a double seal for said box when closed.

1,867,448. TROLLEY BUCKET. STANLEY H. DURBIN, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Mar. 19, 1931. Serial No. 523,886. 6 Claims. (Cl. 214—116.)



1. A bucket comprising two complemental sections together making up the body of the bucket and each having two side walls, an end wall and a sloping bottom; a pair of spaced plates on each side of the bucket having pivotal members at the opposite ends; the bucket sections having their side walls between the two plates of each pair and being pivotally supported by the aforesaid pivotal members; a bail attached to said plates for supporting the bucket; and obstruction-tripped latching means for holding the bucket sections in closed position.

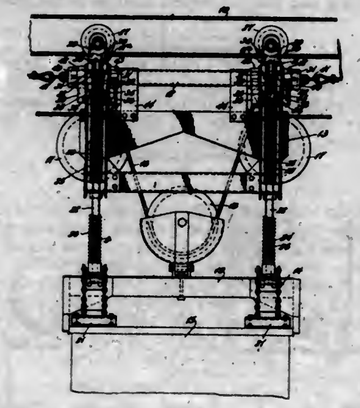
1,867,449. METAL FIRE BLOCK, BRIDGING, AND BRACING. CORA G. ECKET and ROSCOE V. SHELDON, Los Angeles, Calif. Filed Oct. 9, 1930. Serial No. 487,575. 1 Claim. (Cl. 20—4.)



A device of the character described comprising an elongated body plate, a pair of side members integrally formed with the plate and angularly disposed with respect thereto whereby to provide a channelled bracing member, extensions secured to said side members and extending beyond the ends of said body plate, a securing plate secured to said body at one end thereof, and a second securing plate secured to the opposite end of said body, said body having longitudinally disposed scores therein whereby to permit bending of said second securing plate at varying points.

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1. A trolley of the type which is adapted to operate suspended from an overhead monorail comprising, in combination, a trolley chassis having wheels on which the trolley can travel along the monorail; a trolley undercarriage depending from and hinged to the chassis; bucket stabilising, guiding and holding means on the undercarriage by which a bucket suspended from a bail can be

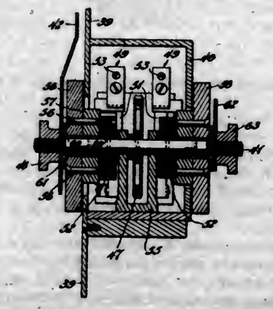


hoisted up to the undercarriage and held rigidly against it; resilient means interposed between the undercarriage and the chassis; the carriage thus yielding, independently of the chassis, in planes more or less perpendicular to the vertical plane of the monorail responsive to lateral thrusts on the trolley.

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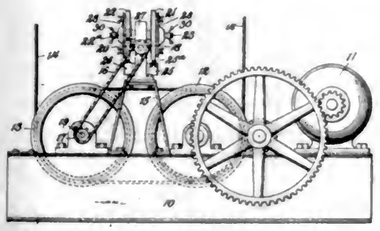
1,867,452. COMBINED INDICATOR AND LIMIT SWITCH ACTUATOR. HAROLD E. HALLENBECK, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Dec. 12, 1931. Serial No. 580,686. 9 Claims. (Cl. 200—47.)



1. A combined actuator for limit switches and for an indicator comprising, in combination, a shaft driven through a reduction gearing; a pointer on the shaft; a

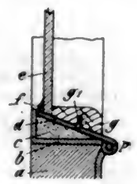
pair of limit switches adjacent the shaft; a pair of cams carried on the shaft in position to actuate said limit switches; and means on the shaft to hold the pointer and also the cams immovable relative to the shaft, said means being disengageable to permit angular adjustment of each cam and also the pointer relative to the shaft.

1,867,453. DRIVE FOR LIMIT SWITCHES AND THE LIKE. HOWARD V. HARDING, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed May 27, 1927. Serial No. 194,842. 18 Claims. (Cl. 192—138.)



1. A traversing hoist comprising, in combination, a motor; a drum driven by the motor; a second drum on a counter shaft; a traverse rope wound about both drums and driving the second drum; a set of limit switches connected in the motor circuit; means driven by the shaft of the second drum for actuating the limit switches; an indicator constructed and arranged to indicate the traverse of the rope; and connections between the indicator and the limit switch actuating means, said connections being so constructed and arranged that adjustment of said actuating parts also properly adjusts the indicator.

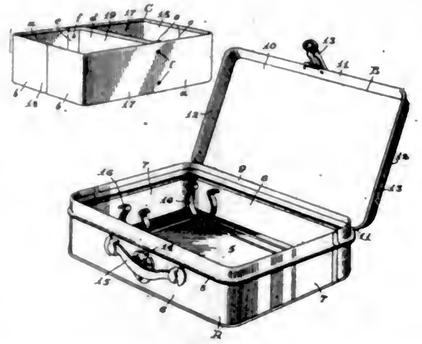
1,867,454. WINDOW. ALEXANDER HERMAN, Berlin, Germany. Filed Oct. 21, 1930, Serial No. 490,275, and in Germany Sept. 25, 1929. 10 Claims. (Cl. 20—56.4.)



1. In a window frame construction a sash of flat inclined metal bars.

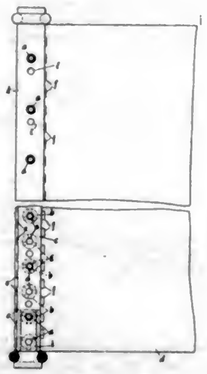
1,867,455. CARRYING CASE. CLEN S. HUMPHREY, Brooklyn, N. Y., assignor to Metal Package Corporation, New York, N. Y., a Corporation of Delaware. Filed May 23, 1930. Serial No. 455,051. 4 Claims. (Cl. 220—20.)

1. In a carrying case of the character set forth, a body having a bottom and spaced parallel side and end walls and a partition element for optional use in the case, said element having spaced side and end walls approximately equal in depth to the depth of the body, the latter end walls being spaced apart an appropriate distance to frictionally fit between the side walls of the body to constitute means for subdividing said body into several compartments between its end walls, said partition element being constructed from two lengths of sheet material, the main portions thereof forming the opposite side walls and



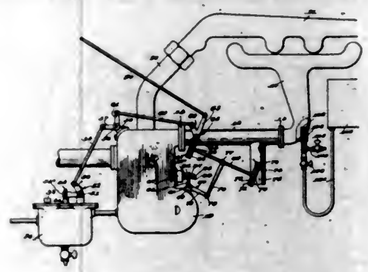
angularly related opposite end portions joined respectively to each other to define the end walls of said partition element.

1,867,456. LOOSE-LEAF BINDER. FRANCIS LEVITT IMPEY, Northfield, England, assignor to Morland & Impey Limited, Birmingham, England. Filed Nov. 11, 1930, Serial No. 494,939, and in Great Britain Apr. 12, 1930. 3 Claims. (Cl. 129—5.)



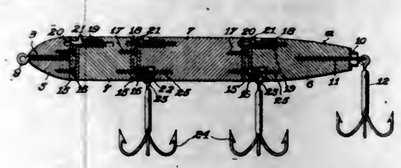
1. In loose leaf binders, the combination of a leaf-supporting sheet, a plurality of hollow tapered posts, a flange formed integrally with the larger end of each post, a perforated strip disposed along one edge of and adapted to co-operate with the supporting sheet for securing the posts, the flanged ends of the posts being interposed between said strip and said sheet, and tongue pieces formed integrally with each longitudinal edge of the strip, one row of tongue pieces being engaged with one edge of the supporting sheet and the other set being inserted through perforations and engaging the edges defining said perforations in the supporting sheet, for securing together the strip, the flanged posts and the supporting sheet, substantially as described.

1,867,457. CHARGE FORMING DEVICE FOR INTERNAL COMBUSTION ENGINES. SEICHI ISHIKAWA, Lahaina, Maui, Territory of Hawaii, assignor of one-half to Fred K. Makino, Honolulu, Territory of Hawaii. Filed Mar. 13, 1931. Serial No. 522,413. 5 Claims. (Cl. 123—122.)



1. A charge forming device for internal combustion engines comprising an intake manifold, a vaporizing chamber, an exhaust heater embracing the vaporizing chamber, a conduit connecting the chamber with the intake manifold, an air inlet connected with the conduit, a valve for controlling the air inlet, a throttle valve in the conduit, means operatively connecting the air inlet valve with the throttle valve for manual actuation, means for supplying the vaporizing chamber with a heavy fuel, means included in the operative connection between the air inlet and throttle valve for causing a differential movement between the air inlet valve and the throttle valve.

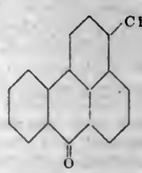
1,867,458. FISH BAIT. JOE S. KEUPER, East Liverpool, Ohio. Filed Oct. 30, 1931. Serial No. 572,126. 3 Claims. (Cl. 43—46.)



1. A bait of the kind described comprising a body formed of a plurality of sections, means for detachably connecting the sections end to end to permit omission of one or more or interchanging of a section, and means for detachably locking the sections when joined with each other.

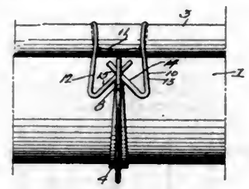
1,867,459. ARALKYLBENZANTHRONES AND PROCESS OF PREPARING THEM. GEORG KRÄNZLEIN, Frankfort-on-the-Main-Hochst, Germany, and ROBERT SEDLMAYR, Aussig, Czechoslovakia, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1929, Serial No. 356,290, and in Germany Aug. 19, 1925. 10 Claims. (Cl. 260—61.)

6. As new products, the compounds of the following general formula:



wherein R stands for an aryl group of the benzene series.

1,867,460. TROUGH FASTENER. AUGUST D. KUMPF, Philadelphia, Pa., assignor to Berger Brothers Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 19, 1930. Serial No. 476,332. 2 Claims. (Cl. 108—29.)



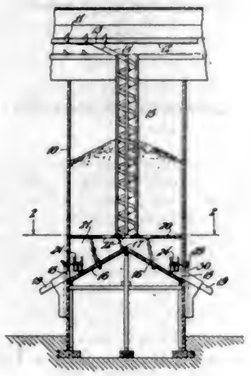
1. A spring clip for fastening a trough to a trough supporting member, comprising a single piece of spring material bent to form a hook portion for engaging said trough, a pair of substantially parallel arms extending away from said hook portion, and a pair of crossed arms extending at an acute angle toward the top of said hook portion for engagement by said supporting member at their crossed portions.

1,867,461. SIRUP PITCHER COVER. IRA LENNOX, Grand Junction, Colo. Filed Nov. 18, 1929. Serial No. 408,060. 2 Claims. (Cl. 65—31.)



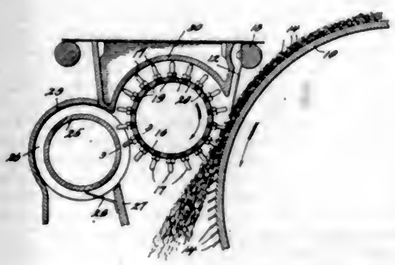
1. A removable cover for sirup pitchers or the like, comprising, in combination, a member which includes an outer cylinder to be attached to the mouth of the pitcher and an inner cylinder, an annular flange connecting the cylinders to rest on the mouth of the pitcher, said inner cylinder having an opening therethrough and its upper edge arranged at an angle and cut inwardly for half of its periphery to provide the elevated portion thereof with a pouring spout whose edge is arranged at an angle, a semi-cylindrical top plate removably secured to the outer cylinder and partly covering the inner deepened portion of the pouring spout of the inner cylinder, a depending flange on the outer periphery of the top plate having a spring engagement with the outer cylindrical member, interengaging means between the flange and the outer cylinder to permit of the top plate being removably connected to the said outer cylinder, an inner lid for covering the spout, said lid, on its inner end having an angle extension which is hingedly secured to the straight edge of the top plate, and which extends beyond its hinged connection with the top plate, a semi-cylindrical outer lid having its inner straight edge hingedly secured to the top plate, said outer lid having a slot through which the extension on the inner lid freely passes and said outer lid being provided with a handle, spring means between the cover plate and the outer lid for normally swinging said lid against the outer cylindrical member, said cylindrical member, opposite the spout having its outer edge notched, and said outer lid having its outer periphery formed with inner and outer depending flanges providing wipers for the spout and for the outer cylinder.

1,867,462. DISCHARGE CHUTE FOR STORAGE BINS. WILLIAM B. MERCER, Binghamton, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Jan. 14, 1932. Serial No. 586,683. 10 Claims. (Cl. 214—17.)



1. In combination with a silo having a discharge opening, a bottom in the silo sloping downwardly to the opening; a discharge chute communicating with the opening and extending outwardly from the wall of the silo; a floor in the silo above the upper edge of the bottom; said floor being relatively narrow and extending from above the discharge opening to the opposite side of the bin; said floor having openings therethrough adjacent the upper edge of the floor; spaced side walls extending between the floor and the bottom; and gate-controlled openings in the walls adjacent to the lower edge of the bottom.

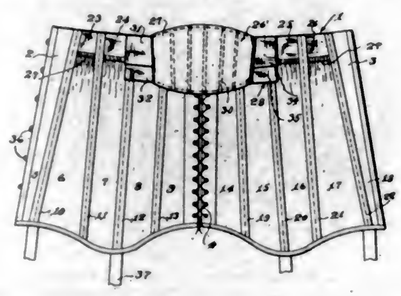
1,867,463. CIGARETTE MACHINE. DESMOND WALTER MOLINS, Longwood, Bexley, England. Filed Sept. 9, 1931. Serial No. 561,960. 6 Claims. (Cl. 131—39.)



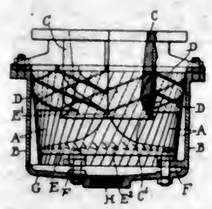
1. In apparatus for feeding tobacco, the combination with a corded conveyor for the tobacco, of a picker roller having projections thereon for removing tobacco from said conveyor, and means moving between the projections on said roller for collecting and removing dust.

1,867,464. CORSET. PATRICK J. MORAN, Newark, N. J., assignor to Irving Rosner, New York, N. Y. Filed June 15, 1931. Serial No. 544,574. 1 Claim. (Cl. 2—43.)

In a garment of the class described, the combination of a body portion made in two sections and joined together by lacings, each of said sections divided into five portions, an elastic insert sewed to the top of four of said portions, the said portions below and adjacent the elastic inserts made of a non-elastic material, the upper edge of said non-elastic material ruffled where joined to said elastic material, a belt comprising a stiff non-elastic front portion and elastic end portions, one of said elastic end portions removably attached to said front portion, each of said elastic end portions made of two strips of elastic material placed one above the other, the outward edges of the upper of said elastic strips attached to the inward edges of the innermost of said elastic inserts at the meeting places of the non-elastic material with the said elastic inserts, the lower of said elastic strips attached to the innermost of said non-elastic ruffled material.



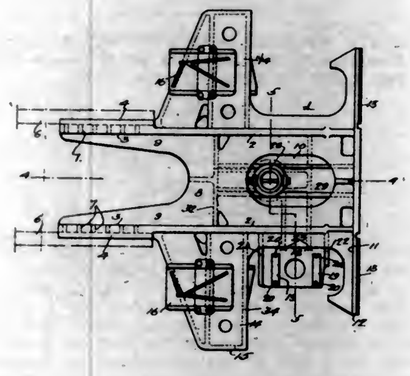
1,867,465. STEAM DRIER OR DUST EXTRACTOR FROM GASES. FREDERICK KNOX OUSELEY MOYNAN, Kingston on Soar, near Derby, England. Filed Apr. 8, 1930, Serial No. 442,608, and in Great Britain Oct. 18, 1929. 3 Claims. (Cl. 183—92.)



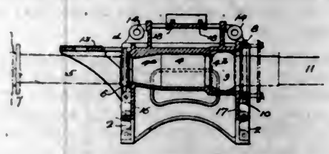
1. A drier or extractor of the class described having a casing interiorly conical, the inner wall of said casing having a multiplicity of substantially inclined ribs knife edged in cross section with one surface thereof radial and the other surface at an angle and reaching to the base of the next rib, a pipe member extending into the casing having tapering deflector vanes on the exterior thereof extending to said ribs and having openings between the vanes to afford inleta for the material to be treated, a conical plate supported independently of the pipe member and disposed in said casing and extending to said ribs having its base portion spaced below said pipe member and vanes, the bore of the pipe member constituting an outlet for the treated material and the apex of the conical plate being adjacent the said bore.

1,867,466. FOOTPLATE FOR LOCOMOTIVES. LAWRENCE L. NEEBE, Woodbury, N. J. Filed Aug. 4, 1931. Serial No. 555,099. 5 Claims. (Cl. 105—172.)

1. The combination in a foot plate for a locomotive, of two longitudinal side members extending the full length of the plate, the forward end of the side members being flanged at the top and bottom and having perforations for securing bolts by which the frame is secured to the side frames of the locomotive; a substantially horizontal web extending from one side member to the other and perforated above the coupling pin bearings, and cut away at the forward end, forming tapered reinforcing flanges for the extending forward ends of the longitudinal members; and a bracket extending laterally from one of the side members for a feed pump.



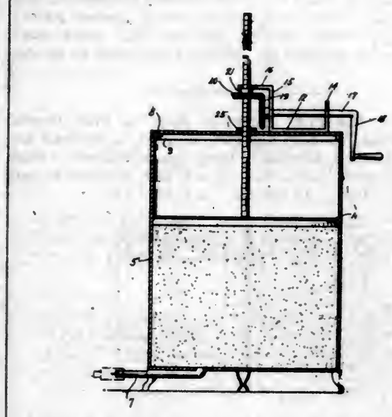
1,867,467. CROSSTIE FOR LOCOMOTIVES. LAWRENCE L. NEEBE, Woodbury, N. J. Filed Aug. 5, 1931. Serial No. 555,286. 7 Claims. (Cl. 105—37.)



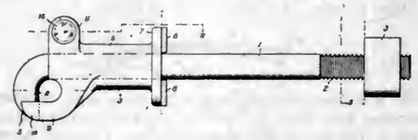
1. The combination of side members of the frame of a locomotive; and a cross-tie connecting the frames, said cross-tie having a longitudinal interior steam passage therein, said passage being enlarged at one end to receive the ball-and-socket connection of the pipe leading from the rear cylinder to the cross-tie and reduced at the other end where the cross-tie is rigidly secured to the section of the pipe leading from the cross-tie to the forward cylinder.

1,867,468. GREASE GUN FILLER. WILLIAM J. PENKA, Claflin, Kans. Filed Oct. 2, 1931. Serial No. 566,557. 2 Claims. (Cl. 221—79.)

1. In combination, a container, a lid for the container, an apparatus on the lid comprising a diametrically extending bar with a central opening, a U-shaped bracket having a cross portion in the same plane with and at right angles to the bar and having upstanding legs, one of the legs having a right angular extension formed with an opening and merging into extensions in the same plane therewith and at right angles thereto and merging into depending extensions fixed to the bar, the first mentioned extension having an opening registering with the opening in the bar, a threaded shaft extending through the openings, a beveled gear having a hub threaded on the shaft under the first mentioned extension, a shaft journalled through the legs and having a beveled gear on the inner end for meshing with the first mentioned beveled gear, and a follower on the inner or bottom end of the shaft, and means for engaging the ends of the bar with the container.

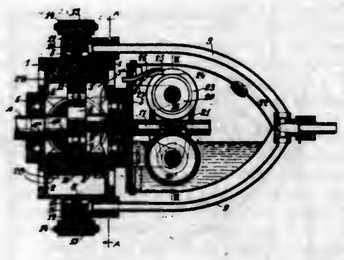


1,867,469. HANGER. FREDERICK W. PLOSS, Philadelphia, Pa. Filed Nov. 25, 1931. Serial No. 577,362. 5 Claims. (Cl. 248—31.)



2. In a hanger, the combination of a bolt; a sleeve on said bolt; a bracket on said sleeve having a transverse bore; reflectors mounted in said bore; and a second bracket on said sleeve provided with a claw.

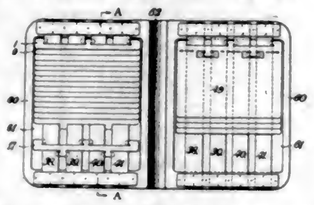
1,867,470. COMPRESSOR. HENRI PONTHIEU, Viroflay, France. Filed Oct. 10, 1929, Serial No. 398,766, and in France June 25, 1929. 2 Claims. (Cl. 230—187.)



1. A compressor comprising the combination of a crank-shaft, an eccentric on said crank-shaft, four fixed cylinders arranged crosswise about the said shaft, in a plane at right

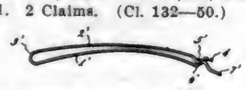
angles, to its axis of revolution, pistons moving in the said cylinders, a ball bearing fitted upon the eccentric of the crank shaft, hard steel pieces respectively on each of the said pistons and bearing against the external ring of the said ball bearing; two stay members respectively connecting every group of two diametrically opposed pistons, ball bearings fitted upon the pivots of the crank shaft, and means for securing the delivery of the fluid to be compressed.

1,867,471. VISIBLE INDEX. RICHARD FITZ POWER, Hampstead, London, England, assignor to Morland and Impey Limited, Northfield, Birmingham, England. Filed Aug. 16, 1930, Serial No. 475,814, and in Great Britain Sept. 28, 1929. 13 Claims. (Cl. 129—16.)



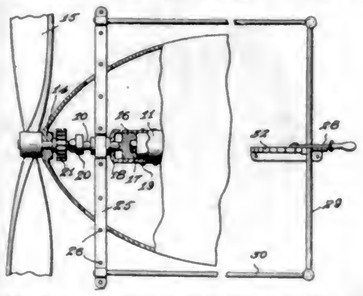
1. An index strip provided with a plurality of lugs projecting from both longitudinal edges of the strip in staggered relation and each lug formed with one or more lateral projections adapted to engage underholding ribands for securing the strip thereto, the lugs permitting the strip to be secured in close juxtaposed relation with another strip without overlapping therewith.

1,867,472. HAIRPIN. HANS A. PRYM, Great Neck, N. Y. Filed Oct. 21, 1931, Serial No. 570,179, and in Germany July 7, 1931. 2 Claims. (Cl. 132—50.)



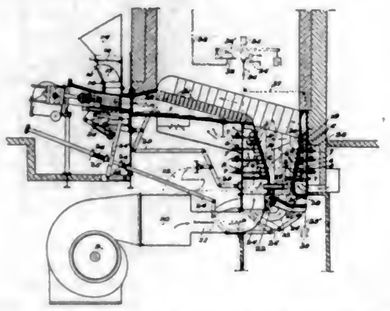
1. A hairpin formed from a single strand of resilient material bent back on itself to provide complemental legs and a connecting loop giving the legs a spring tendency towards each other, the terminals of the legs being bent to provide a shoulder on the one and a seat on the other with which the shoulder is engageable, the extremities of the legs beyond the shoulders and seat being arranged in divergent relation, the legs being arched in the direction of their length with the radius of the arc of the one less than that of the arc of the other.

1,867,473. AUXILIARY AIRPLANE ENGINE MECHANISM. ALBERT PURSER, Brooklyn, N. Y. Filed Aug. 3, 1931. Serial No. 554,917. 1 Claim. (Cl. 244—25.)



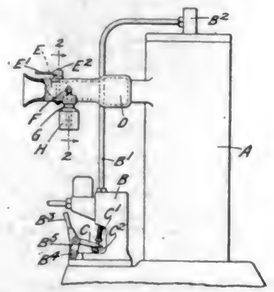
Mechanism for the purpose indicated comprising a propeller and an axially movable shaft therefor, a pair of drive shafts constituting elements of separate driving members, clutch elements carried by the propeller shaft, complemental clutch elements carried one by one of the drive shafts and the other by the propeller shaft but floatingly mounted thereon, operative connections between the other drive shaft and said floatingly mounted clutch element, and means for imparting axial movement to the propeller shaft to selectively connect either pair of clutch elements.

1,867,474. STOKER. MAURICE RATEL, Bievres, France. Filed June 29, 1928, Serial No. 289,167, and in France July 8, 1927. 3 Claims. (Cl. 110—32.)



1. In the operation of a furnace, the method which consists in providing continuous, moving fuel and refuse beds, constantly maintaining said beds, continuously flowing a single current of air past said fuel and refuse beds in a reverse direction to the movement of said beds, and supplying air from said air current to the refuse bed and to the fuel bed to support combustion.

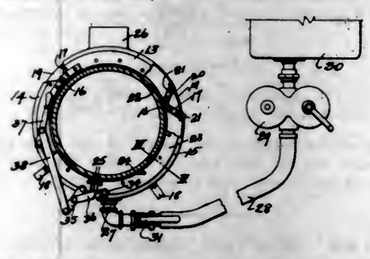
1,867,475. INTERNAL COMBUSTION ENGINE OF THE COMPRESSION IGNITION TYPE. HARRY RALPH RICARDO, London, England. Filed Apr. 22, 1929, Serial No. 357,309, and in Great Britain May 18, 1928. 10 Claims. (Cl. 123—187.5.)



1. An internal combustion engine of the liquid fuel injection compression ignition type including in combination an air inlet passage, a throttle valve controlling the quantity of air which can flow through such passage, a fuel jet in the air inlet passage disposed intermediate the throttle valve and the engine so that a depression will be exerted on the jet sufficient to cause fuel to flow therethrough only when the throttle valve is partially closed so as to reduce the quantity of air flowing through the air inlet passage below that for normal operation with liquid fuel injection, and a starting fuel reservoir communicating with the fuel jet so that when the throttle valve is closed to a sufficient extent a fuel and air mixture can be delivered to the engine during the suction period and ignited by the heat of compression for starting purposes.

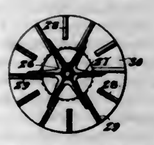
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1,867,476. DEVICE AND METHOD FOR COATING PIPE JOINTS AND PIPES. LORLYS R. ROGERS, Greenville, Miss., assignor to Wailes Dove-Hermiston Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 15, 1928. Serial No. 319,528. 3 Claims. (Cl. 91—43.)



1. An annular form for use in coating pipe couplings or pipe; comprising a plurality of arcuate sections, channel shaped in cross section with the channel legs projecting inward, hinges each connecting a section to an adjacent section, two of said sections having an unhinged end each, means for clamping said unhinged ends together to complete said annular form, gaskets projecting inward from said channel legs to form a seal between said form and said pipe when said form is clamped thereon, gaskets forming a seal between said clamped ends, and flexible material completing said annular form at said hinged joints, one of said sections having an opening therein for the introduction of coating material.

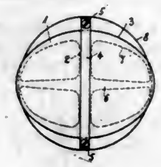
1,867,477. VACUUM FLOOR CLEANER. FRANK E. SODE, Chicago, Ill. Filed Nov. 1, 1926. Serial No. 145,497. 1 Claim. (Cl. 234—134.)



In a mobile vacuum cleaner, a sectional casing formed adjacent its periphery with a portion of reduced width, bearings carried by the casing, a shaft extending through the casing and journaled in said bearings, a spider element including a hub detachably mounted on the shaft and further including a plurality of arms projecting radially from the hub, a blade secured to each arm and projecting beyond the sides and outer end thereof, each of said blades tapering toward its outer end, a pair of annular members secured to said blades, said annular members converging in an outward direction and terminating within the reduced width portion of the casing, and a plurality of relatively short blades secured between said annular members, said relatively short blades being disposed midway between and alternately with respect to the tapered blades, said tapered blades having their inner and outer edges respectively flush with the inner and outer peripheries of said annular members, said relatively short blades having their outer edges flush with the outer peripheries of said annular members and terminating at their inner edges in a line concentric to the shaft and located between the inner peripheries of the annular members and the outer ends of said arms.

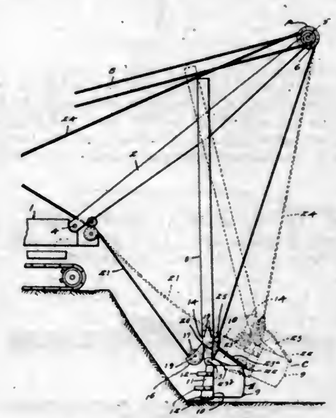
1,867,478. NONRETURN VALVE FOR BREATHING APPLIANCES. HERMANN STELZNER, Lubeck, Germany, assignor to Firm Drägerwerk, Heinr. & Bernh. Dräger, Lubeck, Germany. Filed June 7, 1928, Serial No. 283,703, and in Germany Aug. 12, 1927. 11 Claims. (Cl. 251—119.)

1. A non-return valve comprising an annular valve seat, and an elastic diaphragm secured at points within said seat and below its rim, the bearing surface of said diaphragm upon said valve seat decreasing with the increasing distance from the points of attachment whereby



the pressure per unit area of said diaphragm on said valve seat is substantially the same at varying distances from the point of attachment.

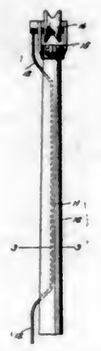
1,867,479. DIPPER OR BUCKET FOR EXCAVATING MACHINES. JOE N. SUMMERS, Mission, Tex. Filed June 14, 1930. Serial No. 461,172. 1 Claim. (Cl. 214—137.)



In an excavating machine, a boom provided at its upper end with a sheave, a dipper handle, bracket plates secured to and extending solely in a downward direction from the lower end of the dipper handle, a dipper or bucket pivoted at its upper front corner to the lower ends of the bracket plates, a block secured to and between the bracket plates above the pivot of the dipper or bucket, the block extending for a short distance rearwardly beyond the bracket plates and for a considerably greater distance forwardly beyond the bracket plates, the rear end of the block inclining upwardly and rearwardly from the lower ends of the bracket plates and the forwardly extending portion of the block being inclined downwardly, a guide sheave journaled in the lower end of the forwardly projecting portion of the block, a control sheave journaled in the block between the bracket plates, a loading line passing under the guide sheave and over the control sheave and anchored to the upper rear corner of the dipper or bucket, a block secured to the upper side of the dipper or bucket and having an upwardly and rearwardly inclined front side adapted to contact with the inclined rear side of said first block to limit the movement of the dipper or bucket by the loading line, the upper side of said second block inclining downwardly and rearwardly from the upper edge of the control sheave to the upper rear corner of the dipper or bucket to provide a guide and rest for that portion of the loading line ex-

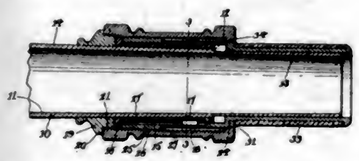
tending from the control sheave to such corner of the dipper or bucket, and a hoisting line passing over the sheave on the boom and secured to the rear end of said first block.

1,867,480. TROLLEY POLE. EDMUND S. TILLINGHAST, Carson Lake, Minn. Filed Nov. 5, 1930. Serial No. 493,626. 2 Claims. (Cl. 191—64.)



1. As a new article of manufacture, a trolley pole comprising a relatively stiff bendable body made from rubber and having a longitudinal central bore, and angularly disposed wire outlet passages leading from the bore through one side of the pole adjacent the opposite ends thereof.

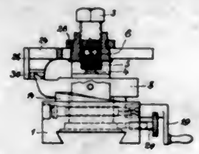
1,867,481. WIND MUSICAL INSTRUMENT. EDWARD B. TODT, Elkhart, Ind. Filed May 11, 1931. Serial No. 536,604. 14 Claims. (Cl. 84—386.)



1. In wind musical instruments of the reed type, means to provide a mouth pipe tube having a portion thereof providing a bearing on its outer face, a mouth piece carrier including a forward and a rear part, the latter being of greater diameter than the former and mounted against, encompassing and extending forwardly from said bearing, said forward part being inset with respect to said rear part and mounted against and encompassing said pipe forwardly of the bearing, said carrier being lengthwise shiftable in opposite directions with respect to the tube for increasing and decreasing the length of the air column, and a revolnble adjusting element encompassing said rear part and said tube rearwardly of said rear part for shifting the carrier lengthwise of and in opposite directions with respect to the tube.

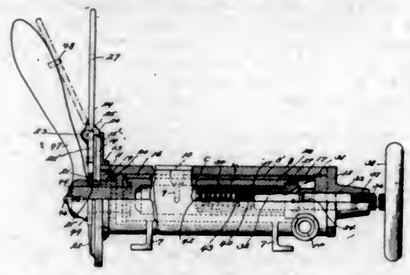
1,867,482. TOOL POST. RUDOLF VON FROMMER, Budapest, Hungary. Filed Feb. 6, 1929, Serial No. 337,956, and in Hungary Feb. 13, 1928. 1 Claim. (Cl. 82—37.)

A tool holder comprising a support, a tool post rotatably mounted in the said support, a ground plate rotatable in the support and having a double threaded helicoidal working surface, a worm gear for driving said ground plate, a compensating plate for supporting the tool and resting on the said ground plate, a clamping screw for securing the tool in the vertical direction, a spring controlled pressure device adapted to temporarily secure the tool in the vertical direction, a gauge adapted



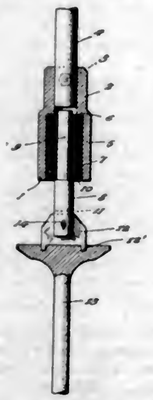
to mark the pitch of the centres of the lathe rotatably mounted on the tool post, and a nut for securing the said gauge in any desired position thereof.

1,867,483. SELECTIVE LUBRICANT DISTRIBUTOR. RICHARD D. WEARNE, Gary, Ind. Filed Mar. 30, 1929. Serial No. 351,442. 8 Claims. (Cl. 184—35.)



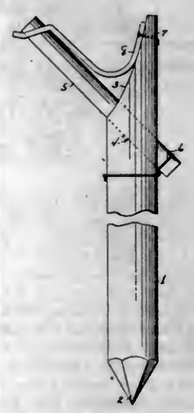
1. A selective lubricant distributor, including a main casing having a longitudinal bore and provided with an inlet port and a plurality of outlet ports, two concentric rotary tubular members fitting in said bore and provided with distributing ports for relative alinement with one another and the respective outlet ports of the main casing, independent means carried by each member to permit independent adjustment of said members, and means for locking said means for simultaneous manipulation of both members.

1,867,484. FLEXIBLE COUPLING. JOHN H. WOLFE and CHARLES S. WOLFE, Punxsutawney, Pa. Filed Feb. 5, 1930. Serial No. 426,142. 2 Claims. (Cl. 64—96.)



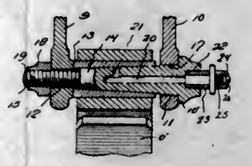
1. A device of the class described including, in combination with a valve grinding machine having a shaft, a body having a recess defining a shoulder and reduced at one end portion to define a shank accommodating the shaft, a cushioning bushing carried in the recess and abutting the shoulder, a stem having a reduced portion defining a shoulder, said reduced portion being embedded in the bushing with said second mentioned shoulder abutting said housing whereby the stem will be limited against creeping into the body toward the shaft, and valve head engaging means carried by the stem.

1,867,485. TREE PROP. CLARK WESTOVER, Wauconda, Wash. Filed May 20, 1931. Serial No. 538,815. 3 Claims. (Cl. 47—43.)



1. A tree prop for the purpose set forth, comprising a prop member having one end pointed for insertion in the ground, its second end being cut angularly on one of its faces, and a pin member inserted angularly through the prop adjacent to its said upper end and means for adjustably securing said pin on said prop.

1,867,486. SPRING SHACKLE. WILLIAM ERNEST ANDERS, West Asheville, N. C., assignor of two-fifths to Gladys Curtis Anders, Miama, Fla. Filed Aug. 22, 1929. Serial No. 387,682. 1 Claim. (Cl. 267—54.)



A shackle for vehicle springs having an eye terminal, including a pair of spaced links having a relatively large threaded opening and a smaller unthreaded opening alined at the opposite ends of the eye terminal of the spring, a bushing fitted tightly in said eye terminal and having its inner surface tapered from one end to the other, and projecting beyond the ends of said eye terminal to constitute an abutment for one of said links, a shackle bolt having a tapered intermediate portion of a length equal to that of said bushing, a threaded portion received by said enlarged threaded opening of one of the links, and a reduced threaded extremity slidable through said small unthreaded opening, and a nut on said reduced extremity.

1,867,487. MANUFACTURE OF BROOMS AND BRUSHES. CHARLES BARNETT and WILLIAM BARNETT, Hatfield, Herts, England. Filed Apr. 19, 1930, Serial No. 445,695, and in Great Britain Apr. 26, 1929. 3 Claims. (Cl. 300—21.)



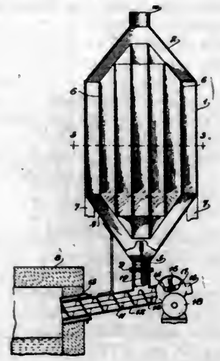
1. A method of forming a knot for a broom or brush consisting in enclosing the bristles in a binding, twisting the free ends of the bristles relatively to the binding, and closing the binding upon the bristles.

1,867,488. CAMERA FILM AND SPOOL LOADING DEVICE. JESSE PAUL BARR, Humbolt, Tenn. Filed Mar. 3, 1930. Serial No. 432,914. 1 Claim. (Cl. 242—74.)



A film loading device comprising a spool having a longitudinal slot therein, a backing strip provided at its end with a tongue of the same transverse breadth as the length of the slot whereby the side edges of the tongue contact with the end walls of the slot when inserted therein, a wedge strip folded in the end of the tongue and a holding strip adhered to the backing strip and the wedge strip at said fold.

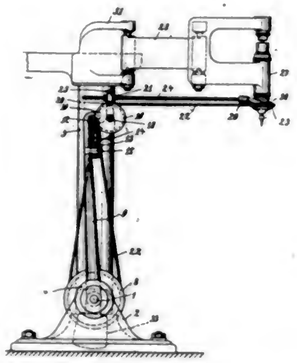
1,867,489. MEANS FOR STORING AND SUPPLYING GLASS BATCHES OF UNIFORM MIXTURE. ROBERT BENNETT and SAMUEL B. BOWMAN, Zanesville, Ohio, assignors to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Apr. 16, 1928. Serial No. 270,438. 3 Claims. (Cl. 214—17.)



3. A batch bin for glass batches, including a vertically disposed receptacle having tapered upper and lower ends, a plurality of vertical partitions in said receptacle, the

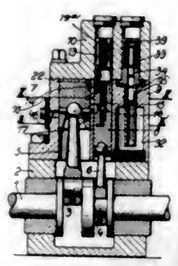
partitions being of varying lengths to conform to the tapered upper and lower ends, a screw conveyer associated with the lower end of the receptacle and leading to a glass melting tank, means for continuously rotating said screw conveyer, and a gate for regulating the flow of the batch from the receptacle to the conveyer.

1,867,490. BELT GEARING. LORENZ KONRAD BRAREN, Munich, Germany, assignor to the Firm Friedrich Deckel, Fabrik für Präzisionsmechanik und Maschinenbau, Munich, Bavaria, Germany. Filed Dec. 4, 1923, Serial No. 678,486, and in Germany Dec. 11 1922. 12 Claims. (Cl. 74—21.)



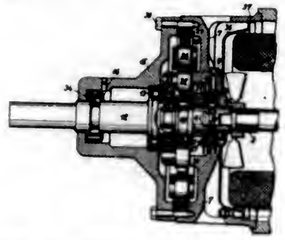
1. In an engraving machine and the like, in combination, a cutter head provided with a rotary cutting tool spindle having a driven pulley for driving said spindle, mechanism for moving said head laterally over the work, an endless friction belt transmission for driving said pulley, and supported means for said transmission constructed and arranged to maintain said transmission under uniform tension, said supporting means embodying a counter balanced upright vertically swingable lever having lateral push and pull connection with said cutter head including a head carried by said lever and rotatable on a vertical axis and carrying pulleys for said transmission.

1,867,491. INJECTION OF LIQUID FUEL IN INTERNAL COMBUSTION ENGINES. LORENZ KONRAD BRAREN, Munich, Germany, assignor to the Firm: Friedrich Deckel, Prazisionsmechanik, und Maschinenbau, Munich, Bavaria, Germany. Filed Jan. 25, 1927, Serial No. 163,528, and in Germany Feb. 4, 1926. 10 Claims. (Cl. 123—33.)



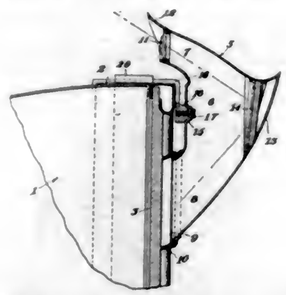
1. In internal combustion engines of the type where the fuel is injected into the combustion chamber at or near the end of the compression period, means for mixing and compressing liquid fuel and a gas, means for regulating the pressure under which the fuel-gas-emulsion is held, and means for varying the duration of fuel injection, both said pressure and time regulating means being adapted for varying the amount of fuel injected during each cycle of operation of the internal combustion engine.

1,867,492. GEAR TRANSMISSION. LORENZ KONRAD BRAREN, Munich, Germany. Filed Nov. 25, 1929, Serial No. 409,719, and in Germany Nov. 30, 1928. 8 Claims. (Cl. 74—34.)



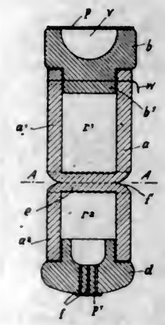
1. In a gear transmission a fast rotating member, a slowly rotating member, an eccentric portion on said fast rotating member, a disc mounted rotatably on said eccentric portion, coupling means connecting said disc rotatably to said slowly rotating member, a set of engaging members on said disc, and a second set of stationary engaging members working together with said first set of engaging members, one set of said engaging members forming part of a prolate trochoidal curve differing slightly from the curve traced by the two sets of engaging members in relation to each other in that the actual curve is relieved by diverging gradually and smoothly from said traced curve adjacent the high and low points of the teeth thereof for disengaging said two sets of engaging members periodically during each revolution of said fast rotating member.

1,867,493. HEADLIGHT SIGNAL. WILBUR BRUBACHER, Bridgeport, Ontario, Canada. Filed May 8, 1931. Serial No. 536,018. 1 Claim. (Cl. 240—8.4.)



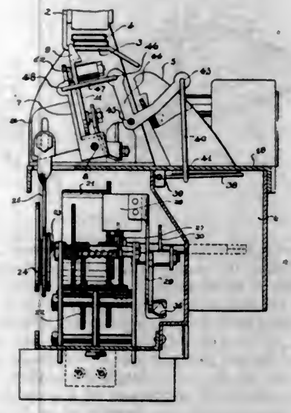
A reflecting device for headlights comprising a hollow member adapted to be arranged exteriorly of a headlight and including integral portions arranged angularly to each other, a cushion element secured to the end of one of said portions and contacting with a lens of the headlight, said other portion having the end thereof disposed in a plane laterally of the headlight, a reflector in said member and located at the juncture of said angularly related portions, said member having an apertured seat therein, a fastener extending through the apertured seat, a semispherical shaped supporting element adjustably secured to the seat by the fastener to permit adjustment of the hollow member relative to the lens of the headlight, and means detachably securing the supporting element to the headlight.

1,867,494. CONTAINER FOR TOILET PREPARATIONS. CARL THEODOR BÜCHNER, Rudolstadt, Germany. Filed Aug. 2, 1930, Serial No. 472,706, and in Germany Aug. 8, 1929. 7 Claims. (Cl. 87—23.)



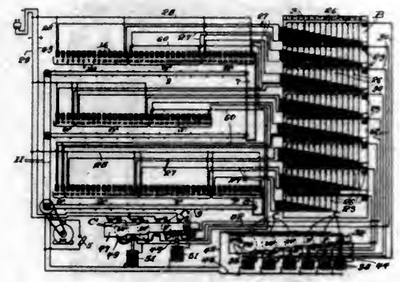
3. A container made from hard soap and having a chamber adapted to receive a toilet preparation, a lid for closing said chamber being formed at its outerside with a cavity, and a cover for said cavity.

1,867,495. VENDING MACHINE. STUART BURDETTE BURNE, Rochester, N. Y., assignor to Pulver Company, Inc., Rochester, N. Y. Filed Apr. 12, 1928. Serial No. 269,404. 2 Claims. (Cl. 312—65.)



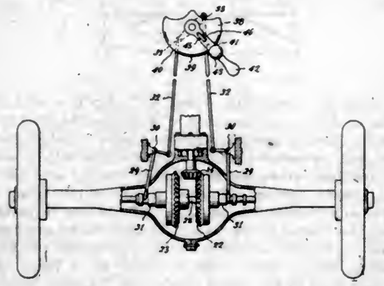
1. In a vending machine, the combination of an article holder having a receiving portion for holding a stack of articles to be vended, a chute disposed forwardly of said article holder and comprising an upper portion arranged to receive an article ejected from the article holder into the chute and a lower portion from which the article is delivered, a pivoted member adapted to be swung transversely beneath the holder and having an ejector mounted thereupon for delivering an article from the holder into the chute, a shutter normally extending across the chute for preventing surreptitious removal of articles from the machine by way of the delivery chute, a bell crank lever having one arm connected to the pivoted member whereby movement is imparted from the pivoted member when moved to the bell crank lever, the other arm of the lever being connected to the shutter for operating the same, and mechanism for actuating the pivoted member.

1,867,496. COIN CONTROLLED VENDING APPARATUS. RUPERT WINFRED CABLE, Greensboro, N. C. Filed Sept. 21, 1929. Serial No. 394,199. 8 Claims. (Cl. 194—7.)



1. A coin controlled vending machine comprising a plurality of compartments containing articles to be vended, electrically operated article ejector means for each compartment, circuits for such means, selective switch means for selecting the ejector means of any desired compartment, combined coin controlled circuit closers and coin selectors for closing the circuits of the article ejector means, electrically operated means for causing the ejection of the coins, conveyor means for conveying the articles ejected from the compartment to a point of delivery to a purchaser, and means for operating the conveyor means.

1,867,497. GEARING FOR AUTO VEHICLES. FRANK R. CRAIG, River Edge, N. Y. Filed July 10, 1931. Serial No. 549,989. 22 Claims. (Cl. 74—99.)

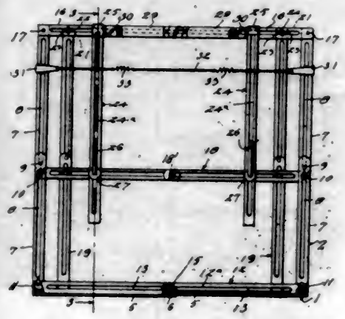


1. Gearing for the purpose indicated comprising driving and driven members, of which the latter is movable into and out of engagement with the former, a clutch embodied in the driven member between it and the load, and means for shifting the driven member into and out of engagement with the driving member and simultaneously engaging and releasing the clutch.

1,867,498. TYPEWRITER COPYHOLDER. JOHN H. CRAIG, Oil City, Pa. Filed May 17, 1930. Serial No. 453,303. 5 Claims. (Cl. 120—28.)

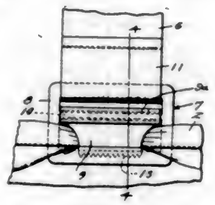
1. A typewriter copy stand, comprising a base in the form of a rectangular frame having a pair of side bars and a two part transverse front bar connecting the side bars, said two part front bar being adjustable for length, a back frame comprising a pair of side bars and upper and lower cross bars connecting the side bars, said side bars and said cross bars each being longitudinally adjustable, supporting elements attached to the back for main-

taining it in upright position, a hinge connection between the lower portion of the back and each of the side bars of the base, a pair of bars detachably carried by the back



and extending downwardly from the top thereof, and a copy sheet holder carried by each of said last mentioned bars and adjustable longitudinally thereon.

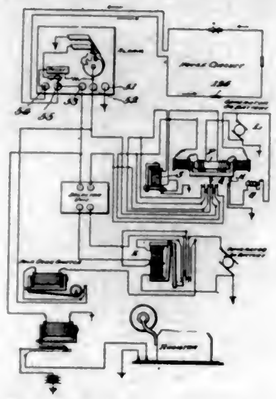
1,867,499. SACK BUCKLE. LAWRENCE M. CROW, Waco, Tex., assignor to Clifton Manufacturing Co., Waco, Tex., a Copartnership composed of A. T. and W. R. Clifton. Filed Dec. 31, 1929. Serial No. 417,778. 1 Claim. (Cl. 24—170.)



A buckle for connecting a shoulder strap to a sack, comprising an open frame adapted to be secured by its top side to the shoulder strap and adapted to have a looped portion of the sack extended therethrough over its bottom side, a bar extending across the frame near the top side thereof, and a tongue having a looped portion surrounding said bar and substantially equal in length thereto to pivotally connect the tongue to the frame and hold the tongue against endwise movement with relation to the frame, the tongue extending downwardly from the bar to a point below the upper edge of the lower side of the frame to adapt its lower end to enter the looped portion of the sack and to hold such portion bent downwardly over the lower side of the frame, the side edges of the tongues curving downwardly and inwardly from the ends of the loop to the lower end of the tongue to permit parts of the looped portion of the sack to extend between the side edges of the tongue and the lateral sides of the frame, and the lower end of the tongue being serrated to engage the bottom of the looped portion of the sack.

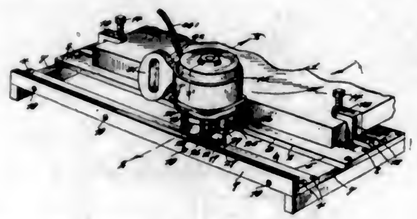
1,867,500. AUTOMATIC FIRE AND BURGLAR ALARM SYSTEM. FELIX F. DENZLER, Pomona, Calif. Filed Jan. 8, 1930. Serial No. 419,345. 12 Claims. (Cl. 179—5.)

1. In an alarm signal apparatus for use in conjunction with an automatic telephone system a power driven apparatus for automatically dialing the desired telephone number, a closed electric circuit, means normally locking said dialing apparatus against operation, means actuated upon the breaking of said closed electric circuit to release the dialing apparatus for automatic operation and the mechanical dialing of the desired telephone number, and means also driven by the motive power which drives said dialing



apparatus for automatically and mechanically sending an alarm in the form of electrical impulses over the telephone system after the telephone connection has been made.

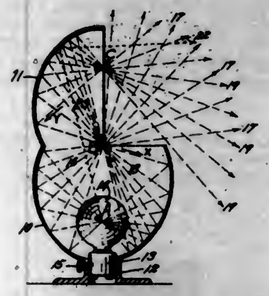
1,867,501. WOOD SURFACING MACHINE. GABRIEL DZAMAN, Trenton, N. J. Filed July 14, 1930. Serial No. 467,948. 1 Claim. (Cl. 164—34.)



In a wood surfacing machine attachment, the combination with a frame comprising two end pieces which may be adapted as supports, a pair of longitudinal pieces connecting the end pieces and having certain of their longitudinal edges spaced in parallelism and constituting parallel guide tracks, a guard rail secured on one edge of one of said longitudinal pieces, a pair of clamps carried by the upper surface of the other longitudinal piece and being oppositely opposed and which may be adapted for supporting the frame on a movable member when the end pieces are not used as supports, of a motor provided with downwardly projecting guide pieces to engage said guide tracks, clamping plates secured to the downwardly projecting guide pieces and engaging the under surfaces of the longitudinal pieces for supporting the motor in guiding relation to the guide tracks, the shaft of the motor having a tool carrying head, and a tool mounted on the head.

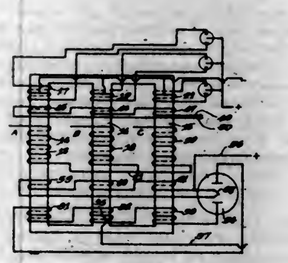
1,867,502. LIGHT REFLECTOR. KARL A. EDSTROM, Denver, Colo. Filed Mar. 7, 1930. Serial No. 433,932. 2 Claims. (Cl. 240—41.35.)

1. A light reflector comprising: an ellipsoidal reflector; means for supporting a light source at the rear focus, said reflecting surface being truncated adjacent the forward focus; a second ellipsoidal reflecting surface joining said first surface at said truncation, the rear focus of the latter coinciding with the forward focus of the primary reflecting surface, the forward focus of the latter being in alignment with the two foci of the primary surface, said secondary reflector comprising: substantially half



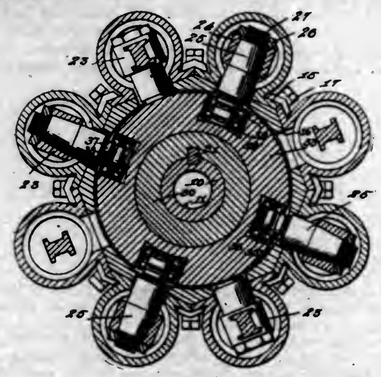
of an ellipsoid positioned to one side of the major axis so as to leave the other half open to allow the rays from one side of the forward focus of the second surface to project outwardly.

1,867,503. RECTIFIER. CHARLES LEO FITZ and LEO BACHBUBER, Mayville, Wis. Filed Sept. 9, 1927. Serial No. 218,521. 2 Claims. (Cl. 175—363.)



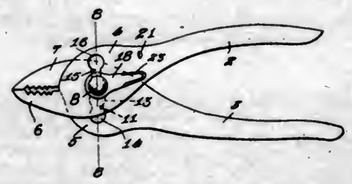
1. A transformer structure comprising a core structure, primary windings associated with said core structure, conductors connected to a source of single phase alternating current, one of said conductors having a condenser therein, means for connecting said last named conductor to the free end of one of said primary windings, means for interconnecting said last named conductor and the free end of another of said primary windings, said last named means having an inductance therein and being connected to said last named conductor ahead of said condenser, the other of said conductors having a resistance therein and being connected to the free end of another of said primary windings, secondary windings associated with said core structures and said primary windings, said secondary windings having the ends thereof connected to the anodes of rectifying devices, the output leads of said rectifying devices being connected to a common conductor to provide the positive terminal for a unidirectional current supply, a negative conductor for said unidirectional current supply connected to the midpoints of said secondary windings, other secondary windings connected in series with each other and to the anodes of a rectifying device, a filament for said last named rectifying device, windings associated with said core structure for supplying current to the filament of said rectifying device, a conductor connected to the output of said rectifying device for supplying a positive unidirectional current, and another conductor connected to the midpoint of one of said last named secondary windings for supplying a negative unidirectional current.

1,867,504. ENGINE. GEORGE E. FRANKLIN, Kansas City, Mo. Filed Oct. 22, 1928. Serial No. 314,195. 1 Claim. (Cl. 74—14.)



In a cam movement, a shaft, a grooved follower-driven cam fixed on the shaft, piston operated devices extending into the groove radially of the cam, and each including a plurality of grooved portions constituting the inner members of adjacent raceways, eccentric with reference to each other, threaded mounting means for the piston operated devices, the angular position of these devices determining the points of maximum and minimum eccentricity of the grooved portions thereof with reference to the walls of the cam groove, outer raceways surrounding the grooved radial devices and engaging the walls of the cam groove, and mounting means between the inner and outer race elements.

1,867,505. PLIERS. HARRY G. GRANER, Burlington, Iowa. Filed May 21, 1931. Serial No. 539,041. 1 Claim. (Cl. 81—51.3.)

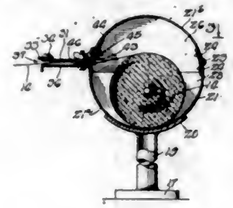


Pliers comprising body portions, handles on said body portions, jaws on said body portions, said body portions having slots provided with spaced restricted portions and enlarged portions forming chambers with communicating passages, a pivot bolt having oppositely disposed flattened faces extending through the slots and capable of being moved from one chamber of each body portion to another chamber for adjusting the body portions relative to each other whereby the jaws may be adjusted to various working positions, one of said body portions having spaced notches, and a locking plate secured to the bolt and engageable with either of said notches and when in one position adapted to hold the bolt against adjustment relative to one of the body portions and when in a second position adapted to permit the bolt to be adjusted relative to said last named body portion.

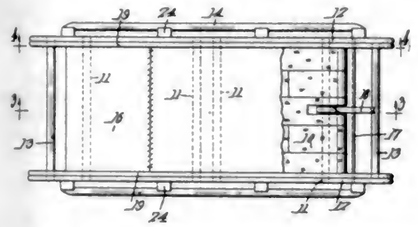
1,867,506. SANITARY TOILET SEAT DISPENSER. THEODORE J. GRYPMA and MARTIN MEULENBERG, Grand Rapids, Mich. Filed Apr. 7, 1931. Serial No. 528,374. 1 Claim. (Cl. 4—247.)

A dispensing device for sanitary toilet seat covers arranged in rolls comprising a drum including a station-

ary section and having an open upper side, and including a closure member hingedly connected to said section to close said open side, a flange member carried by the free end of said closure member and projecting radially from said drum, a flange member on said stationary section arranged in parallelism with said first-named flange member and cooperating with said first named flange member to provide a guideway through which the free end of said roll may be withdrawn from said housing, said flange members having finger notches in the ends thereof so that the paper may be grasped by the fingers, and resilient members carried by the closure member and having portions disposed in the guideway to exert a drag upon the paper therein.

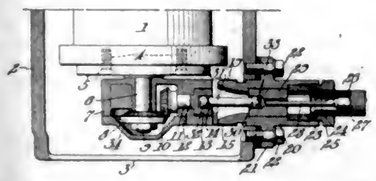


1,867,507. COMBINATION SAFETY SWIMMING FLOAT. CARL C. HARRIS, Orange, Mass. Filed Feb. 17, 1931. Serial No. 516,380. 9 Claims. (Cl. 9—11.)



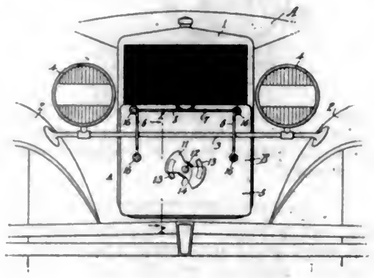
1. A float comprising a pair of side pieces and blocks of buoyant material mounted between them, a pair of cross rods extending from one side piece to the other at the ends beyond the buoyant material to serve as rigid transverse handles, a second pair of side pieces pivoted thereto, and a pair of longitudinal rigid side handles supported by the side pieces and spaced laterally from them.

1,867,508. TRANSMISSION MECHANISM FOR AXLE DRIVEN INDICATORS. PAUL P. HUBER, Hillside, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a Corporation of New Jersey. Filed Apr. 3, 1930. Serial No. 441,397. 11 Claims. (Cl. 105—118.)



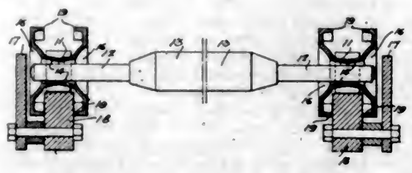
1. In a transmission mechanism for axle driven indicators for electric locomotives and the like, the combination with an axle, and an axle box in which said axle is journalled, of a driving member secured to the end face of said axle, a driven member at the exterior of said axle box, means rotatably mounting said driven member on said axle box and restraining the same from both axial and transverse displacement with respect thereto, said drive means including telescoping element for imparting the rotary motion of said driving member to said driven member, whereby an operative connection between said members is maintained during relative movement of said axle and axle box.

1,867,509. AIR CUTOFF FOR AUTOMOBILE RADIATORS. GODEL KALENOFF, New York, N. Y. Filed Dec. 26, 1930. Serial No. 504,052. 3 Claims. (Cl. 257—sub 132.)



1. An air cut-off device of the character described, comprising a plate of suitable material, and bracket members secured to the plate and adapted to removably engage the headlight supporting rod of an automobile, said brackets each comprising two horizontal series of rod-engaging members, the lower members constituting loops and the upper members constituting hooks whereby the plate may be supported at different horizontal and vertical adjustments relative to the rod.

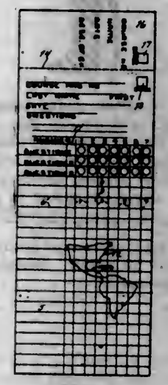
1,867,510. CARRYING CHAIN. FREDERICK KERSHAW, Philadelphia, Pa., and EDGAR B. KERST, Providence, R. I., assignors to Proctor & Schwartz, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 11, 1928. Serial No. 291,915. 17 Claims. (Cl. 198—189.)



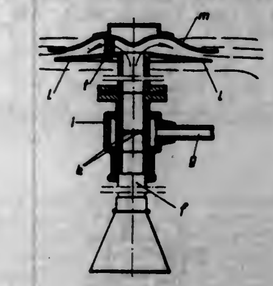
1. The combination of a pair of laterally spaced carrying chains having substantially aligned transverse openings extending completely through said chains and adapted to receive, respectively, the opposite ends of a pole adapted to be temporarily carried by said chains, the ends of the pole loosely fitting within the respective openings and the mouth of each opening being flared in order that the pole may be readily removed from and inserted within said openings.

1,867,511. EDUCATIONAL TESTING DEVICE. LAWRENCE KINNAIRD, Berkeley, Calif. Filed July 12, 1929. Serial No. 377,803. 2 Claims. (Cl. 35—12.)

1. In an educational device, two cards having similar indicia adapted to be in vertical registry when said cards are superposed, certain of said indicia being in sets, one set defining horizontal columns, another set defining vertical columns, said sets crossing each other to define spaces, one set of columns having indicia to indicate respective questions, the other set having indicia to designate respective ones of said other columns to indicate spaces for respective answer indications where said columns cross each other, whereby one or more of several possible answers to respective questions may be indicated by punching in one or more of said spaces, one of said cards being punched to indicate correct answers and becoming thereby a master card, the other, constituting a test card and adapted to be punched to indicate answers, whereby when said master card is placed in registry over said test card any correct answer indications of said test card will register with the answer indications of said master card, and when said master card is placed behind said test card, the master card will show through and thereby render conspicuous any incorrect answer indication of the test card and any failure to indicate answers will be visible on the face of the test card.

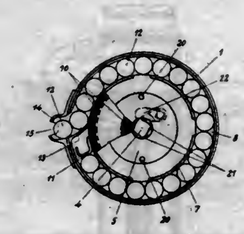


1,867,512. APPARATUS FOR THE PURIFICATION OF WASTE WATER. MAX KUSCH, Berlin-Friedenau, Germany. Filed Nov. 26, 1928, Serial No. 322,000, and in Germany Jan. 3, 1927. 2 Claims. (Cl. 210—24.)



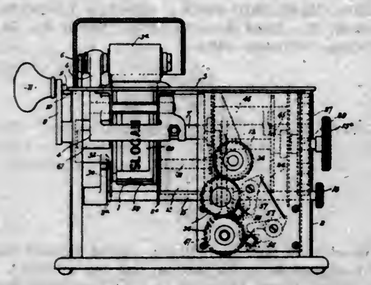
1. Apparatus for the purification of waste water with quickened sludge, comprising a funnel shaped vessel, a submerged open ended ascending pipe having a submerged nozzle at its upper end comprising a lower disc through which said pipe extends and an upper disc spaced from said lower disc, said discs extending downwardly and also converging toward their peripheries and means to introduce air into the ascending pipe at a point intermediate the ends thereof.

1,867,513. CARTRIDGE CASE. AIMO JOHANNES LAHTI, Jyvaskyla, Finland. Filed Dec. 26, 1930, Serial No. 504,925, and in Finland July 5, 1930. 4 Claims. (Cl. 89—33.)



1. A cartridge magazine comprising a cylindrical case, a feeding drum mounted in said case of smaller diameter than said case thereby forming a cartridge channel, and a rigid arm pivoted upon the outer periphery of said drum for feeding the cartridges in said channel.

1,867,514. POSTAL FRANKING MACHINE. FRANK EDWARD LANGDON, Bromley, England. Filed Dec. 26, 1929, Serial No. 416,586, and in Great Britain Jan. 28, 1929. 3 Claims. (Cl. 101—91.)

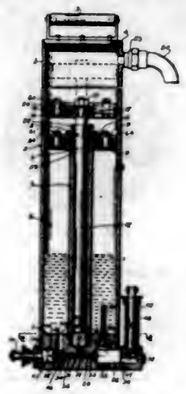


1. A machine for printing postal franks on mail matter comprising a rotary printing drum, a pressure roller, means for feeding the mail matter between said drum and pressure roller, a magazine mounted adjacent said printing drum, a series of interchangeable stamp dies slidably carried in said magazine, a casing enclosing said stamp drum and magazine, mechanism having an external actuating handle for adjusting said magazine to bring any selected one of said interchangeable dies into a position to be transferred from the magazine to the printing drum, mechanism having an external operating handle for transferring the selected die from said magazine to said printing drum and for returning the same to said magazine, means for locking said magazine against movement when a die is transferred to the printing drum, and means for locking the printing drum against rotation when said die is returned to the magazine.

1,867,515. HYDRAULIC LUBRICANT DISPENSER. JOHN R. LASSITER and HARRY L. MORRIS, Norfolk, Va. Filed May 20, 1931. Serial No. 538,800. 4 Claims. (Cl. 221—47.1.)

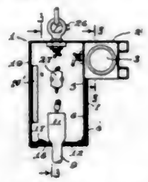
1. Hydraulic viscous fluid dispenser comprising a base inner and outer cylinders secured to said base, the inner cylinder terminating at an intermediate point within the outer cylinder, a head supported by said inner cylinder and fitting the outer cylinder in sealing relation defining a reservoir for the hydraulic transmission fluid within said outer cylinder between said head and base, plungers in said inner and outer cylinders unitarily related, that

part of the outer cylinder above the plunger of said outer cylinder constituting a reservoir for the viscous fluid to be dispensed, a pump, and a valve controlled inlet and



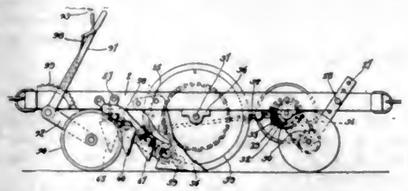
outlet for said pump carried by said base and communicating with the chamber in the lower part of said outer cylinder and with the inner cylinder respectively.

1,867,516. ELECTRIC SIGN. ABRAHAM LEICHTER, New York, N. Y. Filed June 2, 1931. Serial No. 541,648. 2 Claims. (Cl. 40—130.)



1. An electric sign including a casing formed substantially L-shaped in cross section, one leg of the L being open, electric lamps arranged in said last mentioned leg, a transformer arranged in the other leg of said casing, a sign board carried exteriorly of said last mentioned leg and positioned to be illuminated by said lamps, and a neon tube sign carried by said casing with the main part spaced therebelow, said tube sign being electrically connected with said transformer to receive current therefrom, and means for directing house current into the casing, said means being connected with the transformer and with said lamps.

1,867,517. PLOW. ALBIN PAULUS LOFSTRAND, Chicago, Ill. Filed June 1, 1931. Serial No. 541,461. 10 Claims. (Cl. 97—34.)



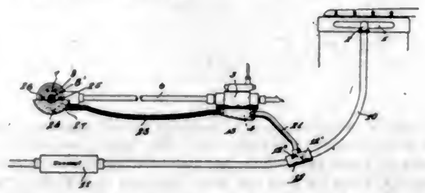
1. A plow comprising a mold board element including a plurality of rotatable soil abutting members angularly disposed with respect to each other, each of said members being of conoidal contour and having the apex at the outer end thereof, driving means connected to the inner ends of said members for rotating them, and supporting means for said driving means.

1,867,518. MUD GUARD FOR MOTOR CARS, MOTOR CYCLES, OR OTHER WHEELED VEHICLES. NEIL MACLEAN, THOMAS QUINN, and FRANCIS DUFFY, Glasgow, Scotland. Filed Apr. 10, 1928, Serial No. 268,968, and in Great Britain May 7, 1927. 1 Claim. (Cl. 280—156.)



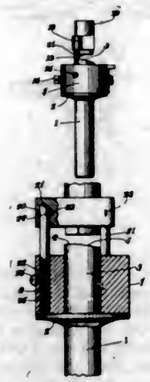
A wheel having a splash guard comprising a ring of flexible material arranged on one side of the wheel rim and a second ring having a groove therein in which the inner edge of the guard is fitted, and a disc secured to the post of the wheel and bearing at its peripheral edge on the second ring to clamp the latter in place.

1,867,519. HEATER. EDWARD MILLER, Portland, N. Dak. Filed Sept. 23, 1929. Serial No. 394,560. 2 Claims. (Cl. 184—104.)



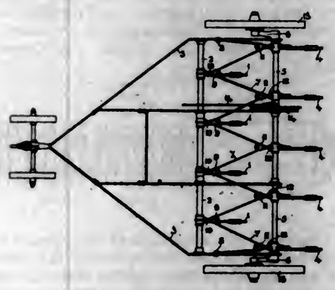
2. A heating device of the character described comprising in combination, a jacket designed to receive a portion of the transmission case of an automobile, and having a closed continuous heat receiving passage therein, a second heat receiving jacket designed to partly embrace the differential casing of the automobile, in spaced relation thereto and opening at its upper end to the atmosphere, a heat supply pipe communicating with the first mentioned jacket, and a pipe establishing communication between the respective jackets, whereby the heat will pass from the closed passage of one jacket to the atmosphere through the second mentioned jacket.

1,867,520. SAW SET. CHARLES F. MOCK, Toledo, Oreg. Filed Apr. 3, 1931. Serial No. 527,547. 6 Claims. (Cl. 76—70.)



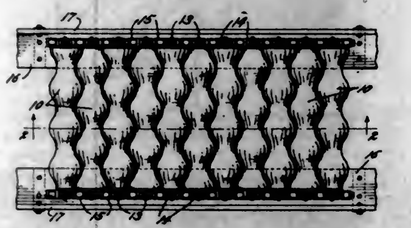
5. A saw set including an anvil, a support carrying and having said anvil arranged axially thereof, a drum encompassing and detachably connected to said anvil, the latter projecting from the outer end of the drum, and a reciprocatory spring controlled saw impacting element slidably connected at spaced points to said drum and having centrally thereof an impacting head opposing said anvil.

1,867,521. AGRICULTURAL IMPLEMENT. HORACE MOTE, London, England. Filed Mar. 4, 1930, Serial No. 433,135, and in Great Britain Mar. 26, 1929. 2 Claims. (Cl. 97—145.)



1. The combination of a traveling frame with working arms pivotally mounted thereon for forward and backward movement and arranged in front and rear rows in staggered formation, upwardly extending arms on the front pivoted arms, depending arms on the rear pivoted arms, and flexible means connecting the upwardly and last-named downwardly extending arms alternately, whereby when one or more of said working arms are moved backward relative to the frame, a force tending to produce forward movement relative to the frame is exerted on all the other working arms.

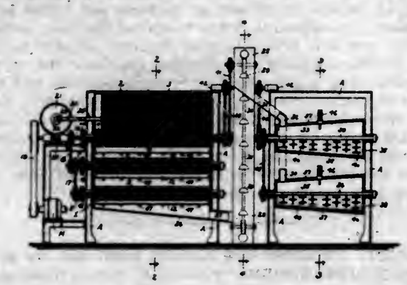
1,867,522. PICKING TABLE. FRED P. NOFFSINGER, Greeley, Colo. Filed Feb. 5, 1931. Serial No. 513,652. 3 Claims. (Cl. 209—125.)



1. A picking table comprising: a travelling series of parallel closely spaced rollers; each roller comprising a series of spherical portions; and concave cylindrical necks joining said spherical portions, said rollers being arranged in staggered relation so that the spherical portions of one roller will project into the concavities of the necks of the adjacent rollers.

1,867,523. APPARATUS FOR PREPARING POWDERED FISH. FRED Y. OMUARI, Honolulu, Territory of Hawaii. Filed May 16, 1930. Serial No. 453,016. 2 Claims. (Cl. 99—2.)

1. An apparatus of the class described comprising a housing, a plurality of pairs of grinding rollers in the housing placed one above the other, a screen below each set of rollers, a reciprocatory grinding plate having a portion arranged between the members of the first set of

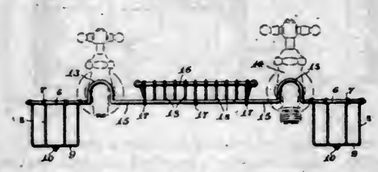


rollers, heating coils associated with each screen and motor driven means for reciprocating the plate and rotating the rollers.

1,867,524. ARC LAMP ELECTRODE. STEPHEN W. ORNE, Fostoria, Ohio, assignor to National Carbon Company, Inc., a Corporation of New York. Filed Apr. 8, 1929. Serial No. 353,651. 2 Claims. (Cl. 176—133.)

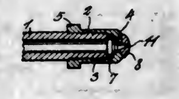
2. A carbon electrode comprising a slow burning shell and a core comprising rare earth fluorides in excess of 5%, carbon in excess of 25% with the balance principally calcium fluoride, said calcium fluoride constituting at least substantially 60% of the core.

1,867,525. ATTACHMENT FOR FAUCETS. NAPOLEON B. PIERSALL, Newark, N. J. Filed Mar. 7, 1931. Serial No. 520,920. 9 Claims. (Cl. 248—20.)



1. In an attachment of the class described, two wires looped at their outer ends to form holders and each having inwardly extending arms with portions bent to fit over faucets respectively, the arms extending inwardly beyond the bent portions, and a soap holder having guides in which the arms are disposed, the soap holder being supported on the arms and serving to hold the arms relatively to each other.

1,867,526. GAS BURNER AND METHOD OF MAKING THE SAME. OSCAR W. ANDERSON and EDWARD E. FORRESTER, Denver, Colo. Filed Jan. 2, 1931. Serial No. 506,078. 5 Claims. (Cl. 29—157.)



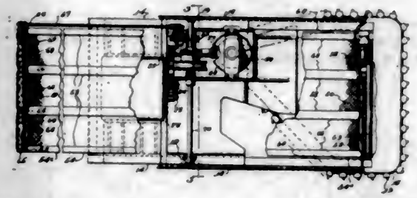
3. A two-part orifice cap comprising the combination with a cylindrical cap member having a concentric cylindrical threaded opening extending inwardly from one end and the other end being provided with an opening of smaller diameter and concentric with said threaded opening, of an adapter located in the smaller opening of said cap, said adapter having a cylindrical portion whose outer surface is smooth and whose diameter is such that it will

enter the said opening in the end wall of the cylindrical cap member with a snug fit, the outer end of the adapter having a head of larger diameter than its cylindrical portion, an annular radial wall at the inner end of the head forming a shoulder adapted to fit against the outer surface of the end wall of the cylinder cap, the adapter having an opening extending therethrough, the inner end of the opening being slightly smaller in diameter than said cylindrical portion, thereby leaving a thin cylindrical wall, the inner end of which cylindrical wall is expanded and flanged outwardly to secure the adapter to the cylindrical cap, the outer end of the opening through the adapter being smaller than the inner end and connected with the latter by a tapering section.

1,867,527. PROCESS FOR ANODIC REMOVAL OF SURFACE METAL FILM. THOMAS E. DUNN, Bridgeport, Conn., assignor to The Bullard Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 15, 1930. Serial No. 444,613. 4 Claims. (Cl. 204—1.)

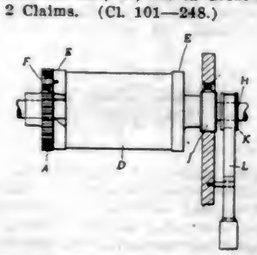
1. A process for the removal of metallic surface film which is characterized by the subjection of the work to two simultaneous reactions namely, the anodic dissolution of the metal composing the film and the simultaneous reaction of part of the ions of the metal film with such anions of the electrolyte as to produce a new insoluble film protecting the metal of the work from etching or corrosion.

1,867,528. MINING MACHINE. ALFRED B. ESSELTINE, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 16, 1930. Serial No. 444,679. 12 Claims. (Cl. 262—9.)



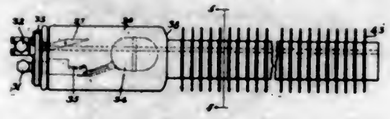
10. In a mining and loading machine, a stationary frame, a movable frame slidably supported on said stationary frame for reciprocable movement therealong, a motor supported on said movable frame, a relatively wide horizontal chain carrying cutter bar extending forwardly from and movable with said movable frame and plural speed frictionally controlled gear reduction means driven by said motor for moving said movable frame and cutter bar along said stationary frame.

1,867,529. ROTARY PRESS AND THE LIKE. FRANCIS CHARLES EDWIN JONES, Hounslow, England. Filed Feb. 15, 1930, Serial No. 428,772, and in Great Britain Feb. 23, 1929. 2 Claims. (Cl. 101—248.)



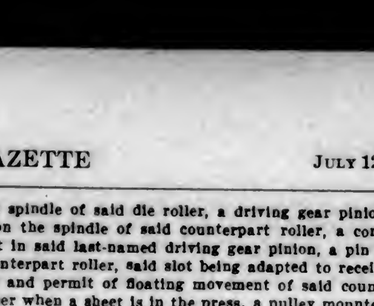
1. Improvements relating to rotary presses applicable to printing and the like, comprising in combination a die roller, a counterpart roller, a driving gear pinion fast upon the spindle of said die roller, a driving gear pinion loose upon the spindle of said counterpart roller, a concentric slot in said last-named driving gear pinion, a pin in said counterpart roller, said slot being adapted to receive said pin and permit of floating movement of said counterpart roller when a sheet is in the press, a pulley mounted upon said counterpart roller spindle and a loaded belt passing over said pulley and adapted to restore the counterpart roller to its original position when said sheet has been removed.

1,867,530. REFRIGERATING APPARATUS. JAMES R. KILLEN, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 448,540. 13 Claims. (Cl. 62—95.)



3. An evaporator for a mechanical refrigerator comprising a reservoir for liquid refrigerant, a tall narrow refrigerant duct extending horizontally from the reservoir, means for maintaining the refrigerant level intermediate the top and bottom of said duct, and fin means thermally connected with said duct.

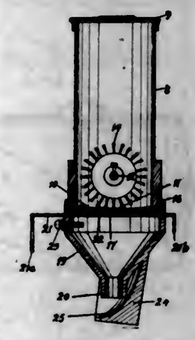
1,867,531. DEEP WELL DRILLING APPARATUS. CLARENCE E. REED, Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 1, 1927. Serial No. 171,831. 38 Claims. (Cl. 255—71)



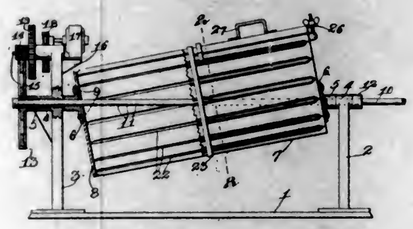
1. In a deep well drilling apparatus, a drill head having a recess in its under side, the opposite inclined walls of which recess diverge downwardly, a pair of main roller cutters of substantially equal diameter and altitude mounted one on each inclined face with their axes respectively at right angles thereto and converging downwardly, and a smaller diameter supplemental roller cutter coaxially mounted with respect to one of said main cutters and disposed mainly to one side of the vertical axis of the drill head and between the main roller cutters there being a vacant space between said supplemental roller and the other main roller and on the opposite side of said vertical axis.

1,867,532. SEED SOWING TOOL OR IMPLEMENT. ROBERT LINDSAY SCARLETT, Musselburgh, Scotland. Filed Jan. 20, 1928, Serial No. 248,217, and in Great Britain June 1, 1927. 7 Claims. (Cl. 111—82.)

1. In a seed sowing implement, a seed receptacle having an apertured bottom, a funnel shaped outlet member communicating with said apertured bottom, an adjustable device for controlling the effective size of the aperture, and a plough attached to the outlet member and having a portion positioned beneath the outlet of said outlet member, whereby the seeds passing through the outlet fall on the said plough portion for distribution to the soil.



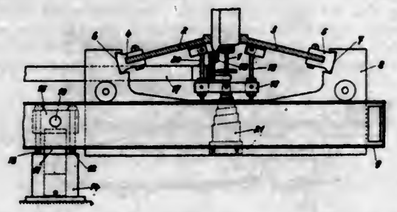
1,867,533. VEGETABLE ROOT WASHER. ALFRED G. SUELFLOW and CHARLES WOLFORD, Milwaukee, Wis., assignors to Felins Tying Machine Company, Milwaukee, Wis. Filed Oct. 17, 1930. Serial No. 489,384. 1 Claim. (Cl. 146—200.)



A device for washing vegetables comprising a cylinder including rigid end heads and corrugated slats secured to and connecting said heads, the slats being arranged to provide slots therebetween, a base arranged below the cylinder, a pair of spaced uprights secured to the base provided with bearings, bearing sleeves secured to the heads and arranged on opposite sides of the axial center thereof, said bearing sleeves being rotatably mounted within the bearings, a perforated hollow pipe extending through the bearing sleeves and eccentrically through the cylinder, and means for rotating the cylinder from one of the bearing sleeves.

1,867,534. RAIL BRAKE. KARL ERNST WENZEL, Hamborn, Germany, assignor, by mesne assignments, to the Firm: Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Jan. 11, 1929, Serial No. 331,918, and in Germany Jan. 18, 1928. 6 Claims. (Cl. 188—62.)

1. A rail brake, the maximum braking effect of which is dependent upon the weight of the car, comprising a separately arranged ramp rail adapted to be acted upon by the wheel pressure when the car is running through the brake, an intermediate suspension depressed by the downward movement of said ramp rail, two tippable brake rods free of the ramp rail upon which the downward movement of said suspension is transmitted, and a bow

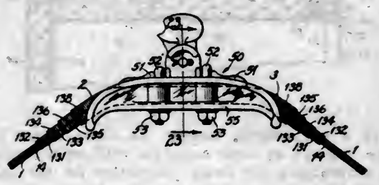


in which said brake rods are mounted, being continuous and rigid in longitudinal direction and the controlling force engaging on said suspension.

1,867,535. CONSTRUCTION MATERIAL. JACOB ADLER, Hackensack, N. J., assignor of one-half to William Adler, New Haven, Conn. Filed Feb. 5, 1932. Serial No. 591,234. 2 Claims. (Cl. 106—24.)

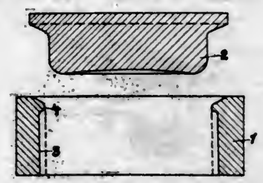
1. A composition comprising a mixture of approximately 57% of trachyte tuff, approximately 34% of sand washed so as to be free of clay, approximately 5.7% of Portland cement, approximately 2% of soda, said proportions being by weight, and a sufficient quantity of water to cause the mixture to set.

1,867,536. STRAND REENFORCEMENT. PHILIP H. CHASE, Bala-Cynwyd, Pa. Filed Apr. 24, 1931. Serial No. 532,497. 15 Claims. (Cl. 173—251.)



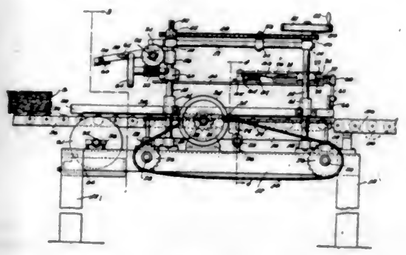
1. A reenforcement for damping vibrations in wire comprising a plurality of corrugated layers of reenforcing material wrapped about the wire, the reenforcement having edges which converge.

1,867,537. DRAWING HOLLOW ARTICLES. ERNST DE RIDDER and HUBERT ALTWICKER, Bitterfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 20, 1929. Serial No. 394,119. 5 Claims. (Cl. 113—51.)



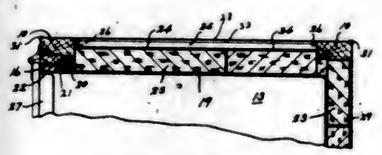
1. The method of drawing hollow articles from sheets of magnesium and magnesum alloys which comprises drawing the sheets within a temperature range in which the transverse strength exceeds the longitudinal strength limit of the sheet.

1,867,538. PACKAGING MACHINE. HAROLD S. LABOMBARDE, Nashua, N. H. Filed Aug. 7, 1930. Serial No. 473,657. 15 Claims. (Cl. 93—2.)



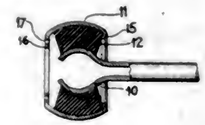
1. A machine for securing a cover member having wall flaps to a receptacle member, said machine having means for slidably compressing the cover member onto the receptacle member, and said machine having means for effecting the overlapping of portions of a container, and means for simultaneously effecting sealing of the package and subjecting it to pressure.

1,867,539. REFRIGERATOR. JOHN T. RAUEN, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Aug. 23, 1926, Serial No. 130,838. Renewed June 24, 1931. 10 Claims. (Cl. 220—10.)



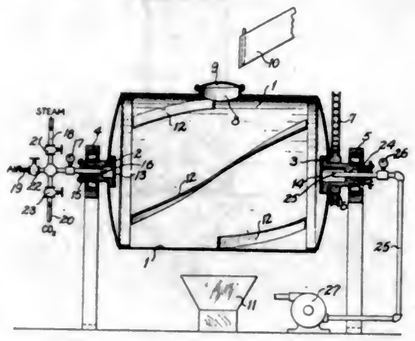
6. In a refrigerating cabinet, an inner metal lining for the cabinet; an outer cover for said cabinet substantially surrounding the lining; insulation for the cabinet interposed between the lining and the cover, said insulation comprising blocks entirely of substantially stiff heat insulating substance completely water-proofed on all sides, the sides parallel to the direction of heat flow being water-proofed with nonconducting material, one of the sides being water-proofed by a sheet of flexible material constituting an expansion diaphragm.

1,867,540. METHOD OF FORMING UNIVERSAL JOINTS. RALPH H. ROSENBERG, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 12, 1930. Serial No. 427,725. 6 Claims. (Cl. 18—59.)



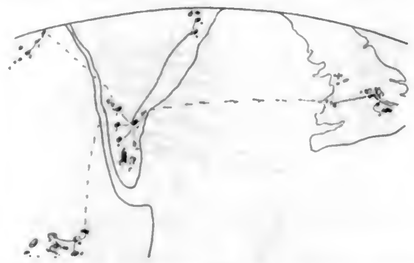
4. A method of forming a shaft coupling which includes assembling a substantially cylindrical shell and an inner member with a filler of rubber interposed therebetween, vulcanizing the interposed rubber and turning the ends of the shell inwardly about said vulcanized rubber.

1,867,541. PROCESS OF MANUFACTURING SOY BEAN FLOUR. WILLIAM L. SHELLABARGER, Decatur, Ill., assignor to Shellabarger Grain Products Company, Decatur, Ill., a Corporation of Illinois. Filed Nov. 9, 1931. Serial No. 573,767. 7 Claims. (Cl. 99—11.)



4. In a process of manufacturing soy bean flour, the step of improving the odor and flavor of soy beans comprising subjecting said beans to treatment with steam at a temperature of the order of 140° F., and at a vacuum of about 24 inches, and for the order of forty minutes.

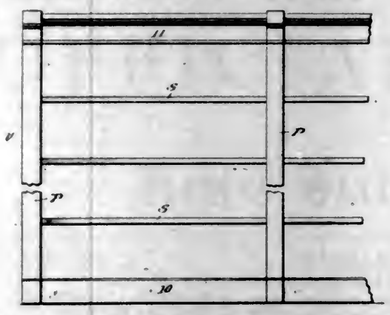
1,867,542. SYSTEM OF TELEVISION. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed Dec. 6, 1928. Serial No. 324,078. 5 Claims. (Cl. 178—6.)



1. The method of television which comprises analyzing a scene and recording the impulses produced thereby upon an electromagnetic tape, transmitting said tape to a studio, electromagnetically reproducing said impulses from said tape and transmitting the reproduced impulses, receiving and recording said transmitted impulses, at some later time reproducing said transmitted impulses and retransmitting said reproduced impulses, receiving said retransmitted impulses, recording said last mentioned impulses and at some later period of time reproducing said last mentioned recorded impulses and projecting a beam of light controlled in accordance therewith to re-form the originally analyzed scene.

1,867,543. SHELVING STRUCTURE. WILLIAM T. HORMES, Catonsville, Md. Filed Feb. 2, 1929. Serial No. 336,981. 23 Claims. (Cl. 211—148.)

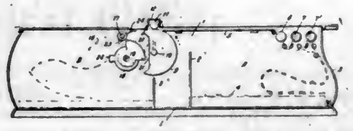
1. In a shelving structure, a unit container comprising laterally spaced skeleton end frames, and a top member and a bottom member interposed between said frames, the end faces of the bottom member and the lower ends of each end frame having complemental portions by which said end frames are each independently and removably supported by the bottom section and normally held against lateral movement with respect thereto, means for removably engaging the top member with the upper



ends of said end frames, and shelving supported by said end frames in planes between said top and bottom members.

1,867,544. SELECTING REGISTER. CLARENCE L. JOHNSTON, Oakland, Calif., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada, a Corporation of Ontario, Canada. Filed Feb. 2, 1925. Serial No. 6,174. 18 Claims. (Cl. 282—16.)

1. In a device of the character described, in combination, means to feed a record strip into inscription-receiving position, a record strip storage compartment adjacent said feeding means, a shiftable strip guide positioned adjacent the path of movement of the feeding strip and adjacent said storage compartment, and a mount mounting said strip guide so that it may be shifted into alternate strip-guiding positions, in one of which the strip may be fed thereagainst by the feeding means thereby to guide and deflect the strip into folded condition at



one end of the folded pad in said compartment and in the other of the alternate positions, said strip may be fed by the feeding means against said strip guide, thereby to guide and deflect the strip into folded condition at the other end of said pad, and positively operated mechanism to move said strip guide in definite predetermined cycles toward and away from its alternate strip guiding positions.

Patents Nos. 1,867,545 to 1,868,478

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THE OFFICIAL GAZETTE OF THE United States Patent Office

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Issue of July 19, 1932

Trade-Marks	220—No.	295,882 to No.	296,101, inclusive.
T. M. Renewals	12		
Labels	27—No.	40,935 to No.	40,961, inclusive.
Prints	2—No.	13,773 to No.	13,774, inclusive.
Reissues	10—No.	18,529 to No.	18,538, inclusive.
Plant Patents	2—No.	18 to No.	19, inclusive.
Designs	47—No.	87,377 to No.	87,423, inclusive.
Patents	934—No.	1,867,545 to No.	1,868,478, inclusive.
Total	1,254		

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,721,640, L. L. Ruggles, Automatic telephone system, decided June 17, 1932, claim 2.

Pat. 1,785,972, R. W. Osborne, Communication system, decided June 22, 1932, claim 1.

Pat. 1,789,873, H. Lecher and A. Koch, Polymerization of butadiene hydrocarbons, decided June 24, 1932, claims 1 and 2.

Pat. 1,793,141, Albert Stoll, Machine element, decided June 24, 1932, claims 8 and 10.

Design Pat. 85,864, George Brain, Design for Flushing tank, decided June 20, 1932, the claim as shown.

Trade-Marks Canceled

233,287. Gasoline, kerosene, lubricating oil, and lubricating grease. The Michigamme Oil Company, Ann Arbor, Mich. Registered September 27, 1927. Canceled June 20, 1932.

252,632. Canned grapefruit and canned fruit juices. Fruit Products Company of Florida, Eagle Lake, Fla. Registered February 12, 1929. Canceled June 20, 1932.

269,806. Door closers. The Everedy Company, Frederick, Md. Registered April 15, 1930. Canceled June 20, 1932.

287,906. Anti-freeze compound for automobile radiators. Sam Palazzolo, doing business as Garfield Motor Products Co., St. Louis, Mo. Registered October 18, 1931. Canceled June 20, 1932.

NOTICE—CHANGES IN PATENT OFFICE FEES—EFFECTIVE JULY 31, 1932

The act of Congress approved June 30, 1932, amends section 4934, Revised Statutes (U. S. C. Title 35, Sec. 78) so as to provide that, except in design cases, the fee for filing each original application for patent and for each renewal application for patent, and the fee for issuing each original patent shall be $30.00 and $1.00 for each claim in excess of 20, instead of the present fee of $25.00 and $1.00 for each claim in excess of 20. These new fees are effective on and after July 31, 1932.

The act also provides that the fee for filing each petition to revive an abandoned application shall be $10.00 This fee is effective on and after June 30, 1932.

IN ALL APPLICATIONS IN WHICH THE FINAL FEE IS PAID PRIOR TO JULY 31, 1932, THE PATENT OFFICE RESERVES THE RIGHT TO DEFER THE ISSUANCE OF THE PATENT UNLESS, AT THE TIME THE FEE IS PAID, A SHOWING IS MADE OF THE NECESSITY OF HAVING THE PATENT ISSUE ON A SPECIFIED DATE.

Condition of Applications Under Examination at Close of Business June 25, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 75,601; Trade-Mark Division, 804. Oldest new case, Dec. 3, 1931; oldest amended, Dec. 22, 1931. The dates given are 1932 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Mar. 14	Mar. 18	515
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Mar. 1	Mar. 2	1,017
4063	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Mar 3	Mar. 18	760
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Apr. 8	Apr. 14	479
2628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Mar. 2	Mar. 2	429
4808 C	6. LEWERS, A. M., Carbon Chemistry	†Dec. 24	†Dec. 30	1,930
6725	7. JARBOE, C. G., Optics; Photography	Feb. 1	Feb. 1	1,485
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Jan. 25	Feb. 1	1,254
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Apr. 30	Apr. 4	804
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Jan 15	Jan. 16	925
8067 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Mar. 2	Mar. 1	651
7701	12. HENRY, C. C., Machine Elements	Mar. 4	Mar. 4	904
8094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Feb. 13	Feb. 12	1,175
8097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Mar. 15	Mar. 21	765
4807	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Jan. 20	Jan. 20	2,037
5612	16. SPENCER, C. J., Telegraphy; Telephony	Mar. 1	Mar 1	927
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	†Dec. 28	†Dec. 29	1,350
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices..	Mar. 1	Mar. 1	725
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Jan. 2	Jan. 1	1,695
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Mar. 4	Mar. 12	980
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Feb. 23	Feb. 24	900
5734	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Mar. 7	Mar. 26	630
7982	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Jan. 4	Jan. 2	926
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Feb. 11	Feb. 23	727
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	†Dec. 31	†Dec. 31	1,488
8068	26. HODGES, J. S., Electricity, Generation; Motive Power	Jan. 2	†Dec. 26	1,039
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Mar 9	Mar. 9	1,004
4626	28. BENSON, A. R., Internal-Combustion Engines	†Dec. 27	†Dec. 27	1,287
8080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	†Dec. 24	†Dec. 24	994
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Mar. 3	Mar 14	849
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	†Dec. 28	†Dec. 28	1,599
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Feb. 26	Feb. 29	952
6086	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	†Dec. 30	†Dec. 26	2,432
6685	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Jan. 26	Jan. 26	926
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	May 4	May 2	484
7626	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Jan. 2	Jan. 2	1,774
8089	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Jan. 2	Jan. 20	1,317
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Apr. 15	Apr. 15	274
4574	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	†Dec. 26	†Dec. 28	1,553
7690	40. OBERLIN, J. J., Receptacles	Feb. 3	Feb. 2	2,074
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Mar 25	Mar. 30	744
5882	42. CUTTING, H. O., Electric Signaling	Jan. 6	†Dec. 29	1,423
4686 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Jan. 30	Jan. 30	1,446
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	†Dec. 22	†Dec. 22	1,906
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Feb. 23	Feb. 23	1,139
4513	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Feb. 18	Feb. 28	745
7009	47. BARKER, R., Clutches and Power Stops; Brakes and Motors	Jan. 30	Jan. 30	2,117
8028 C	48. ROEPKE, O. B., Electricity, General Applications	Jan. 12	Jan. 11	943
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	†Dec. 3	Jan. 1	1,586
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Jan. 2	Jan. 2	2,112
5626	51. BACKUS, C. D., Radiant Energy	Jan. 27	Jan. 27	1,268
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Mar. 19	Mar. 23	822
6607	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Apr. 4	Apr. 7	586
5876	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Jan. 2	Jan. 2	1,168
6683	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	Apr. 30	Apr. 30	287
	{Designs	June 4	June 8	183
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Jan. 16	Jan. 16	1,473
3629	57. NICOLSON, O. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Feb. 11	Feb. 8	646
5605	58. DOWELL, E. F., Abrading; Typewriting	Jan. 2	Jan. 2	1,310
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	†Dec. 21	†Dec. 23	1,632
5806	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	†Dec. 22	†Dec. 22	1,512
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	†Dec. 30	†Dec. 30	1,414
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	†Dec. 26	†Dec. 28	1,796
4066	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	†Dec. 28	Jan. 2	1,475
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Mar. 1	Mar. 1	631
5634	65. McDERMOTT, F. F. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Jan. 1	Jan. 1	1,712
2000 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—{Trade-Marks	May 25	June 11	790
	{Labels and Prints	May 25	June 11	104

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE ABRAHAMSEN

No. 2,931. Decided April 4, 1932

PATENTABILITY—MOULDING SCRAPER.

Claims for a moulding scraper *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. C. A. Weed for Abrahamsen.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

The appellant filed his application in the United States Patent Office for a patent upon certain improvements in floor scrapers. All his claims, nine in number, were rejected. Claims 1 and 2 are typical and are as follows:

1. A moulding scraper comprising a cup-shaped blade having a cutting edge and a handle secured to the outer face of the blade at the apex thereof.

2. A moulding scraper comprising a cup-shaped blade having a cutting edge sharpened by filing or grinding the edge crosswise of the cup-shaped blade thereby preserving the shape thereof at all times and a handle secured to the outer face of the blade at the apex thereof.

The cited references were as follows: Harris, 48,554, July 4, 1865; Rewrick et al., 231,850, Aug. 31, 1880; Agan, 407,562, July 23, 1889; Nittinger, 478,810, July 12, 1892; Kraeuter, 953,171, Mar. 29, 1910.

Appellant's device, as shown by his application, is a tool having a round concavo-convex metal blade, with a detachable handle rigidly secured to and projecting from the center of the convex surface. The peripheral edge of the blade is sharp in a plane perpendicular to the axis of the handle.

The rejected claims, with the exception of the introductory words, "A moulding scraper," read directly upon the references Agan and Nittinger. The construction is identical. The Agan and Nittinger tools are proposed to be used for scraping hogs and appellant insists these are not proper references, because taken from a non-analogous art. In this connection *Potts* v. *Creager*, 155 U. S. 597, 70 O. G. 494, is cited.

The gist of the case cited is found in the following words:

As a result of the authorities upon this subject, it may be said that, if the new use be so nearly analogous to the former one, that the applicability of the device to its new use would occur to a person of ordinary mechanical skill, it is only a case of double use, but if the relations between them be remote, and especially if the use of the old device produce a new result, it *may* at least involve an exercise of the inventive faculty. Much, however, must still depend upon the nature of the changes required to adapt the device to its new use.

In the case now before us, no changes of any kind are required to adapt Agan's and Nittinger's devices for the use which appellant proposes. The patentees are entitled to any use to which their devices may be put. *In re Smith*, 17 C. C. P. A. (Patents) 644, 36 F.(2d) 802, 391 O. G. 247; *Potts* v. *Creager* supra.

In this connection, reference may be had to *In re Voorhees*, 17 C. C. P. A. (Patents) 1162, 40 F.(2d) 773, 399 O. G. 7, where this court held that a patent upon a can cover might be cited as a reference against an application for patent upon a cap for flash lights.

The words "A moulding scraper," appearing in the claims, are introductory only, and add no inventive element to the claims. In that respect they much resemble the words, "In an engraving machine," discussed by this court in *Draren* v. *Horner* 18 C. C. P. A. (Patents) 971, 47 F.(2d) 358, 408 O. G. 825, and other cases therein cited.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE FISCHER

No. 2,960. Decided April 4, 1932

PATENTABILITY—EXPANSION JOINTS.

Claims for an expansion joint *Held*, in view of the prior art, unpatentable over what is claimed in applicant's earlier patent.

APPEAL from the Patent Office. Affirmed.

Mr. Albert F. Robinson for Fischer.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

The appellant has appealed from the decision of the United States Patent Office, rejecting claims 1, 2, and 3 of his application for a patent upon an improvement in expansion joints.

Claim 1 reads as follows:

1. An expansion joint comprising a preformed plastic strip embodying in its construction a homogeneous mixture of bituminous material and a vegetable straw having a solid pithy center, the bituminous material in said strip being over fifty (50) per cent by weight of the material in the strip.

The two remaining claims are substantially the same, claim 3 having the added element that the bituminous element must be at least seventy-five per centum of the mixture.

The claims were rejected upon reference to appellant's Patent 1,597,273, of August 24, 1926, and upon Brown et al., 1,369,911, of March 1, 1921. The rejection by the board was upon the theory that, in view of Brown, the appellant had already received a patent for all his patentable disclosure in his said prior Patent 1,597,273.

Appellant's present application was filed July 30, 1925, and the application upon which his said patent was issued was filed December 26, 1925. They were, hence, copending.

As shown by appellant's claim 1, his alleged invention consists in mixing an excess of bituminous material with a solid straw material. The specification discloses that he proposes to use broom corn straw. No other kind of straw is therein referred to.

In appellant's said Patent 1,597,273, the invention consists of an expansion joint composed of bituminous material and hollow straw, preferably cereal straw. However, the specification recites that the inventor does not restrict himself to cereal straw but includes any straw that may be "easily compressed to a flattened condition." There are several claims in this patent which include a mixture of bituminous material and "straw," without limitation as to variety.

The reference patent to Brown et al. discloses a roof and wall composition composed of bituminous material, ashes, and broom corn straw. In the specification, the inventor fully discloses the advantages of broom corn straw in such a mixture.

We agree with the Board of Appeals in its conclusion that, in view of the prior art as disclosed by Brown et al., the appellant has disclosed no patentable matter here which is not fully protected by his claims in his existing Patent 1,597,273. The effect, therefore, of allowing his claims herein would result in double patenting, and this will not be permitted. *In re Swan*, 18 C. C. P. A. (Patents) 935, 46 F.(2d) 572, 407 O. G. 295; *In re Slepian*, 18 C. C. P. A. (Patents) 1393, 49 F.(2d) 835, 412 O. G. 282; *In re Laughlin*, 18 C. C. P. A. (Patents) 1239, 48 F.(2d) 921, 411 O. G. 9; *In re Peiler* 18 C. C. P. A. (Patents) 1102, 48 F.(2d) 405, 409 O. G. 841; *In re La Montague*, 19 C. C. P. A. (Patents)—, 55 F.(2d) 486, 418 O. G. 271.

It is complained by appellant that the arts of making wall or roofing material and expansion joints are not analogous, and that, therefore, the Brown et al. reference should not be urged against him here. It is sufficient to say that appellant's specification and claims herein describe a strip of material. The same thing is substantially true in the Brown et al. reference. While the use may be somewhat different, it is thought the arts are sufficiently analogous to make the reference proper. The new use claimed in the present application is so nearly analogous to that in the Brown et al. patent, that the applicability of this material to its new use would occur to a person of ordinary mechanical skill. *In re Schneider*, 18 C. C. P. A. (Patents) 1114, 47 F.(2d) 970, 410 O. G. 3; *In re Metzger*, 18 C. C. P. A. (Patents) 808, 45 F.(2d) 918, 404 O. G. 3; *Potts* v. *Creager*, 155 U. S. 597, 70 O. G. 494.

The decision of the Board of Appeals is affirmed.
Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE EPPLEY

No. 2,965. Decided April 4, 1932

PATENTABILITY—STEAM POWER PLANTS.

Claims for improvements in steam power plants *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. William J. Jacobi and *Mr. Herbert J. Jacobi* for Eppley.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

The appellant filed his application in the United States Patent Office on July 7, 1926, for a patent upon certain improvements in a steam-power plant. As a result of the action of the tribunals of that Office, claim number 10 of that application was rejected and is now here on appeal. Said claim is as follows:

10. The method of generating and utilizing an expansive vapor which consists in heating a non-inflammable, non-volatile fluid by circulating the same through a heating zone, passing the heated fluid through a heat exchanging zone, simultaneously circulating a vaporizing liquid through the heat exchanger zone whereby heat is transferred from the fluid to the liquid and the liquid is vaporized, utilizing the vapor and condensing the used vapor, heating the condensation and returning the heated condensation to the heat exchanging zone.

The claim was rejected on reference to Emmet, 1,167,158, of January 4, 1916.

Appellant's claimed invention consists of a method for heating a fluid only vaporizable at very high temperatures, circulating this heated fluid through a heat exchanging chamber where it comes in conductive contact with a more easily vaporizable substance, utilizing the vapor thus created to operate a turbine and to heat another more volatile liquid, and chambers for condensing the used vapors produced by the successive vaporizations and means to conduct the successive condensates, preheated, back to the respective heat exchanging zones.

The rejected claim reads directly upon the reference Emmet with the exception of one element which will later be referred to. Emmet shows a device which heats a fluid volatilizable only at very high temperatures, circulates this heated fluid through a heat-exchanging chamber, circulates an easily-volatilizable liquid through this heat-exchanging chamber, where it becomes vaporized, operates a turbine, and returns the preheated condensate. It is true, Emmet adds certain mechanisms to his combination and performs additional functions, as, for example, the operation of a turbine in the heat-exchanging zone by the circulating primary heating element. The omission of this element, however, with its corresponding function, does not affect the anticipatory character of this reference. *In re Collins*, 18 C. C. P. A. (Patents) 951, 46 F.(2d) 582, 408 O. G. 5; *In re Treater*, 17 C. C. P. A. (Patents) 642, 36 F.(2d) 133, 391 O. G. 501.

The element above suggested, in which there seems to be a difference between appellant's claim and those of Emmet, is this: Appellant claims his primary heating element is a "non-inflammable, non-volatile fluid." Emmet discloses and claims a volatilizable fluid, namely, mercury. Appellant's amended specification recites that he proposes to use phenylamine as his primary nonvolatile heating fluid. Both tribunals of the Patent Office state that this liquid has a boiling point of approximately 184 degrees centigrade, while the mercury used by Emmet has a boiling point of approximately 357 degrees centigrade. This fact is not controverted by the appellant and, therefore, will be accepted by the court as conceded.

It follows that while appellant's refused claim reads: "a non-volatile fluid," his disclosure is of a liquid which is no more nonvolatile than that used in the Emmet patent. In fact, it is much less so. The appellant has, apparently, so limited his application and claim as to call for the use of phenylamine as a primary heating fluid, and in this respect, we believe, his claim is anticipated by the reference patent to Emmet.

The decision of the Board of Appeals is affirmed.
Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE FISCHER

No. 2,951. Decided April 4, 1932

1. PATENTABILITY—DOUBLE PATENTING—COPENDING APPLICATIONS.

"We think the weight of authority is to the effect that an inventor is only entitled to one patent for one invention and that he cannot prolong his monopoly by claiming nothing more than the same invention in different language."

2. SAME—CONSTRUCTION MATERIAL.

Claims for construction material *Held* unpatentable over what is claimed in applicant's prior patents.

APPEAL from the Patent Office. Affirmed.

Mr. Albert F. Robinson for Fischer.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

Claims 1 to 5 inclusive of appellant's application for a patent relating to construction material were rejected by the Examiner, which rejection was affirmed by the Board of Appeals of the United States Patent Office. Claims 2 and 5 are regarded as illustrative and follow:

2. Construction material comprising a preformed sheet of bituminous material having web-like strengthening pieces incorporated therein and separated one from another by a substantial thickness of said bituminous material.

5. Construction material comprising a plurality of watery roofing sheets of bituminous material, having incorporated therein roofing scrap of considerable length which present web-like strengthening pieces, said pieces being arranged in segregated and parallel relation to one another and separated by a substantial thickness of bituminous material of which each of the superimposed sheets are formed.

The Examiner rejected the claims on the ground that there was no inventive difference between applicant's patents of record, Fischer, 1,591,968, and Fischer, 1,597,273, and the claims of the pending application.

The Board of Appeals, in affirming the Examiner, said:

It is our view that the claims in this case are directed to the same subject matter as that claimed substantially as broadly in Patent #1,591,968, and that the appealed claims were properly rejected on this patent. While some of the claims call for a plurality of sheets in parallel relation, layer formation in expansion joints is acknowledged in the patent to be old and that limitation is not a patentable one.

Appellant argues that the decisions of the two tribunals below are not concurring and that the rule in *Townsend* v. *Smith*, 17 C. C. P. A. (Patents) 647, 36 F.(2d) 292, 391 O. G. 753, does not apply. It seems that both tribunals rejected the claims of appellant's application on the ground that he already had a patent for the same subject matter, and that there was nothing inventive in the pending application not claimed and granted in appellant's allowed patents. Both rejections were upon the ground of double patenting.

Appellant argues that the invention claimed in the patents is different from that claimed in the application because of the preamble or introductory clauses, and relies upon *Schram Glass Manufacturing Co.* v. *Homer Brooke Glass Co.*, 249 Fed. 228; *Forsyth* v. *Garlock*, 142 Fed. 461, and *In re Phelps et al.*, 18 C. C. P. A. (Patents) 1036, 47 F.(2d) 387, 409 O. G. 289. For the reasons assigned by the Board, we disagree with this contention. Appellant further contends that separate Office classification is evidence of separate invention. In view of our conclusion, this contention requires no discussion.

On the question of double patenting, appellant cites *Traitel Marble Co.* v. *Hungerford Brass & Copper Co.*, 22 F.(2d) 259. It is claimed that this case is authority for the proposition that the difference between the claims of a pending application and those of a patent granted to the same party need not amount to invention.

[1] We think the weight of authority is to the effect that an inventor is only entitled to one patent for one invention and that he cannot prolong his monopoly by claiming nothing more than the same invention in different language. *In re Hutter*, 55 App. D. C. 210, 337 O. G. 721; *In re Woodsome et al.*, 56 App. D. C. 138, 349 O. G. 4; *In re Forrest*, 18 C. C. P. A. (Patents) 1028, 47 F.(2d) 395, 408 O. G. 830; *In re Laughlin*, 18 C. C. P. A. (Patents) 1239, 48 F.(2d) 921, 411 O. G. 9; *In re Isherwood*, 46 App. D. C. 507, 245 O. G. 847; *In re Swan*, 18 C. C. P. A. (Patents) 935, 46 F.(2d) 572, 407 O. G. 295; *In re Peiler*, 18 C. C. P. A. (Patents) 1102, 48 F.(2d) 405, 409 O. G. 841; *In re Byck*, 18 C. C. P. A. (Patents) 1208, 48 F.(2d) 665, 410 O. G. 284; *In re Robinson*, 18 C. C. P. A. (Patents) 1271, 48 F.(2d) 931, 411 O. G. 274; *In re Slepian*, 18 C. C. P. A. (Patents) 1393, 49 F.(2d) 835, 412 O. G. 282.

[2] We have examined, with great care, the pending claims and the claims in the patents referred to and have carefully read and considered the very elaborate brief of counsel for appellant. We have arrived at the same conclusion as that arrived at by the Patent Office tribunals. We think they were clearly right, and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE STONE

No. 2,965. Decided April 4, 1932

PATENTABILITY—CLUTCH LUBRICATION.

Claims relating to means for lubricating a clutch collar *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Thomas Howe, Mr. Robert Watson for Stone.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner denying patentability, in

view of the prior art, of all of the claims of appellant's application which are numbered 1, 2, 5, 6, 8, 9, 10 and 12, of which claim 9 is illustrative and follows:

9. The combination with a casing of a rotatable shaft extending therein, a clutch member slidable on said shaft and rotatable therewith, means for moving said clutch member along said shaft, said clutch member and said means being relatively rotatable and having a bearing between them, a conduit in the bottom of said means for admitting lubricant to said bearing, a flexible tube, a swivel coupling connecting one end of said tube with said conduit and depending downwardly therefrom, a second conduit in said casing and extending from the exterior to the interior thereof, and a coupling connecting the end of said tube with the last mentioned conduit, the tube depending downwardly therefrom and having the form of a loop between said conduits, the swivelling axis of said swivel coupling being coincident with the axis of said flexible tube.

The references relied upon for rejection are: Winkley, 1,201,414, Oct. 17, 1916; Bristow, 1,526,048, Feb. 10, 1925; Skelley, 1,580,863, Apr. 13, 1926.

The claimed invention relates to clutch lubrication, particularly to means for lubricating the clutch collar and throwout bearing in the clutch of an automobile and other articles, and involves conducting the lubricant through a flexible tube which takes the form of a loop. The loop eliminates tension on the tube brought about by the movement of the part to be lubricated. The tube has certain connections including a swivel connection which is described in the above-quoted claim.

We have given very careful consideration to the references and have noted all the contentions of appellant in connection therewith. We can see no useful purpose in discussing in detail the operation of the various parts of the references since we agree not only with the result arrived at by the Board of Appeals but agree also with the reasons assigned for arriving at such result.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

BRAGG AND KLIESRATH *v.* BESLER

No. 2,928. Decided April 4, 1932

1. INTERFERENCE—PRIORITY—CONSTRUCTION OF ISSUE.
"Although it is unquestionably the law that counts of an interference should be given the broadest interpretation which they will reasonably support, expressly defined limitations should not be ignored."

2. SAME—SAME—RIGHT TO MAKE THE CLAIMS.
Priority *Held* properly awarded to B. on the ground that B. & K. have no right to make the claims.

APPEAL from the Patent Office. Affirmed.

Mr. Harry H. Semmes, Mr. H. O. Clayton, Mr. M. W. McConkey and *Messrs. Semmes and Semmes* for Bragg and Kliesrath.

Mr. Lee B. Kemon and *Mr. Earl R. Evans* for Besler.

HATFIELD, *J.:*

This is an appeal in an interference proceeding from the decision of the Board of Appeals of the United States Patent Office reversing the decision of the Examiner of Interferences awarding priority of invention to appellants.

The invention relates to a brake mechanism for motor vehicles.

Appellee's application, filed June 18, 1927, matured into Patent No. 1,637,177, June 12, 1928.

Appellants' application, No. 163,351, filed January 25, 1927, is a division of application No. 31,281, filed May 19, 1925.

The counts of the interference, copied by appellants from appellee's patent, are as follows:

1. In brake mechanism for motor vehicles, a system of connected elements which includes an operating lever, an operating rod for manually applying the brakes with a lost motion connection to said lever, a fluid pressure motor for operating the brakes and having an operative connection therewith and a valve for controlling the operation of the motor, said valve being supported upon and movable with the operating rod, and having a direct controlling connection with the operating lever of the brake system so that initial movement of said lever in the direction to apply the brakes will operate the valve to energize the fluid pressure motor.

2. In brake mechanism for motor vehicles, a system of connected elements which includes an operating lever, an operating rod for manually applying the brakes with a lost motion connection to said lever, a fluid pressure motor for operating the brakes and having an operative connection therewith, a source of fluid pressure lower than atmospheric pressure and a valve for controlling the connection of said fluid pressure motor to said source to apply and release the brakes by power, said valve being supported upon and movable with the operating rod and having a movable member mechanically connected to the operating lever of the brake system so that initial movement of said lever in the direction to apply the brakes will actuate the valve.

Appellee moved to dissolve the interference on the ground that appellants could not make the counts in issue. This motion was overruled by the Law Examiner.

In view of the fact that the date alleged in appellee's preliminary statement for conception of the invention was subsequent to the filing date of appellants, and as appellee had failed to show cause why judgment on the record should not be entered against him, the Examiner of Interferences awarded priority of invention to appellants.

On appeal by appellee, the Board of Appeals held that appellants could not make the counts in issue because they did not disclose in their application a valve "supported upon and movable with the operating rod, and having a direct controlling connection with the operating lever of the brake system," as defined in count 1, nor a valve "supported upon and movable with the operating rod and having a movable member mechanically connected to the operating lever of the brake system," as defined in count 2. In so holding, the Board, among other things, said:

We believe the sleeve 920 in the application may not be considered either as the rod or a portion of the rod defined in the counts. The latter require a lost motion connection between the operating rod and the lever and there is no lost motion connection between the valve sleeve 920 and the foot pedal 988 in the application. A lost motion connection is provided between the head 926 on the valve sleeve and a shoulder of the valve casing, and this lost motion connection may be said to be between the rod 997 and the pedal but the valve is not supported upon and movable with the rod 997.

Furthermore, count 1 requires a direct controlling connection between the valve and the operating lever. This connection in Besler comprises the rod 23. It is urged that this requirement of the claim is a functional limitation and does not necessarily require additional structure, and furthermore, that the same structure may be recited twice in a claim if it has two different functions, under the holding in Duncan, Prichard & Macaully (1906 C. D., 348). Whether this limitation be considered as one of function or as one of structure it seems to us the claim requires some connection between the valve and the lever other than the indirect connection established between the two through the operating rod and lost motion connection by virtue of the structure previously recited in the count. Count 2 requires a mechanical connection between the valve and operating lever so that initial movement of the lever in the direction to apply the brakes will actuate the valve. This language requires something in addition to the lost motion connection between the operating rod and lever previously set forth in the count which becomes effective during the latter part of the pedal movement.

It is our view that the counts are clearly and definitely limited to the Besler device and are not readable upon the disclosure in the senior party's application. Any attempt to read them on said disclosure requires the ignoring of some of the limitations of the counts with the result that their meaning is changed from the meaning they have in the Besler patent.

It clearly appears that appellants' valve is *connected to* the end of an operating rod by means of a link, and to the operating lever by means of a lost motion connection. In appellee's mechanism, which was designed for use as an automobile accessory, the valve has a direct controlling connection with the operating lever, and is mounted *upon* the operating rod, the latter running through it.

It is contended by counsel for appellants that if the counts are given the broadest interpretation which they will reasonably support, as is required in cases of this character, they will read on appellants' disclosure.

[1] Although it is unquestionably the law that counts of an interference should be given the broadest interpretation which they will reasonably support, expressly defined limitations should not be ignored. *In re Bijur*, 17 C. C. P. A. (Patents) 1134, 40 F.(2d) 999, 398 O. G. 355; *Atherton* v. *Payne*, 19 C. C. P.A. (Patents) ——, 54 F.(2d) 821.

[2] The counts in issue are expressly limited to a valve for controlling the operation of the motor "supported upon and movable with the operating rod." The valve in appellants' structure is connected to the end of an operating rod by means of a link. Accordingly, appellants' valve may be supported *by* the operating rod, as argued by their counsel, but it certainly is not supported *upon* it. See *Henry P. Field* v. *Audley Hart Stowe*, 18 C. C. P. A. (Patents) 1437, 49 F.(2d) 840, 412 O. G. 557.

Furthermore, as appellants' valve is connected to the operating lever by a lost motion connection, we are of opinion that it does not have a "direct controlling connection" with that lever, as required by count 1.

In view of the fact that the counts in issue contain express limitations, which, in our opinion, are not disclosed in appellants' specification, we must hold that appellants are not entitled to make them.

For the reasons stated, the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE EBERT, NEWKIRK, AND MOSKOWITZ

No. 2,940. Decided April 4, 1932

1. PATENTABILITY—SCIENTIFIC EXPLANATION OF OPERATION OF A KNOWN PROCESS—NOT PATENTABLE.
"The patentee, Johnson, may not have known anything about catalysis, nor why, scientifically, his silicate enameled converter produced the desired results. Nevertheless, it was he, not appellants, who discovered and disclosed to the art that advantageous results could be obtained by the use of such a converter. All that appellants did in this connection was to discover and give to the art the scientific explanation of the successful operation of the Johnson converter. Appellants are not entitled to a patent for this scientific explanation."

2. SAME—METHOD OF MANUFACTURING DEXTROSE.
Claims for a method of manufacturing dextrose *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Barnett & Truman and *Mr. Percival H. Truman* for Ebert, Newkirk, and Moskowitz.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner rejecting all of the claims in appellants' application for a patent for an alleged invention relating to a method of converting starch into dextrose, the primary purpose of which is to increase the dextrose content of a "starch converted dextrose solution."

Claims 1, 2, and 3 are illustrative. They read:

1. Method of manufacturing dextrose solutions which comprises converting the starch in the presence of a material which is free from and adsorbs substances tending to catalyze dextrose to polysaccharides.

2. Method of manufacturing dextrose solutions which comprises converting the starch in a converter, the interior surfaces of which are of a substance which in the presence of the hydrolizing acid does not catalyze dextrose to polysaccharides.

3. Method of increasing the dextrose content of a starch converted dextrose solution which consists in converting the starch in the presence of a material which is free from and adsorbs substances tending to catalyze dextrose to polysaccharides and in a vessel the interior surfaces of which are of a material catalytically inert in the converting reaction.

The references are: Hirsh, 58,824, October 16, 1866; Johnson, 186,935, February 6, 1877.

The appealed claims relate to three methods of converting starch into dextrose: The first, defined in claim 2, comprises the use of a converter, the interior surfaces of which are catalytically inert with respect to the dextrose; the second, defined in claims 1, 4, 5, and 6, involves the employment of adsorption agents, such as animal and vegetable carbon, during hydrolysis to neutralize the catalytic effect of impurities in the starch tending to catalyze the dextrose to polysaccharides; the third, defined in claims 3 and 8, includes the first and second methods in combination.

The patent to Hirsh relates to a method of manufacturing sugar from Indian corn or other cereals containing starch. The patentee stated that sulphuric acid, sulphate of alumina, and finely-powdered coke or vegetable charcoal were added to the mixture in the converter. He further stated that the joint use of the alumina and charcoal was an improvement over the old method, which he said dispensed with the alumina.

The patent to Johnson relates to a method and an apparatus for the manufacture of glucose "from grain, whole, crushed, bruised, or broken, or granular amylaceous substances." The patentee disclosed the use of a "strong wrought iron vessel, lined with lead or with a silicate enamel, capable of resisting the action of the acid; or the vessel may be made of gun-metal, and in such case it need not be lined with lead."

In its decision, denying the patentability of the involved claims, the Board of Appeals, among other things, said:

The Examiner rejected all the claims because he holds that Johnson shows the use of an enamel lined converter

which is inert and would have no effect on the dextrose, and because Hirsh shows the use of an adsorption agent. Appellant urges that Johnson merely uses an inert lining of enamel to prevent corrosion the same as his alternative lining of lead, and that he had no conception of using such lining to prevent catalytic action on the dextrose. We do not see that it is patentable to discover an effect of the lining as long as the lining is used in the same relation and must necessarily have this effect. Even though Johnson only mentions overcoming corrosion the enamel lining will also have the same effect as in appellants' vessel. Hence such a claim as claim 2 is clearly unpatentable. Appellant also urges that the patent to Hirsh has no disclosure of using an adsorption substance for adsorbing substances tending to catalyze dextrose, and especially because he introduces alumina. Hirsh discloses the use of coke or vegetable charcoal. The latter is well known to possess adsorbing properties and it would without a doubt serve the function of adsorbing substances tending to catalyze dextrose to higher sugars when introduced. The presence of alumina may be open to some objection but in line 4, page 2, disclosure is made of prior methods where alumina was not used. Hence if objectionable the alumina may be omitted. We believe that Hirsh by using an adsorption substance during the conversion of starch into dextrose must necessarily obtain the same effect as in appellants' process. Hence we regard claims 1, 4, 5, 6 and 8 as unpatentable. Claims 3 and 7 include both the inert lining and the adsorption material. They are regarded unpatentable in view of both of the above patents.

It is contended by counsel for appellants that the patent to Johnson had to do merely with the protection of the converter against corrosion; that, as it discloses three converters, two of which will not produce the result obtained by appellants, and as it is doubtful whether at the time it was issued anything was known about catalysis, it is not a proper reference; and that neither of the references related to the problem of increasing the percentage of dextrose.

[1] The patentee, Johnson, may not have known anything about catalysis, nor why, scientifically, his silicate enameled converter produced the desired results. Nevertheless, it was he, not appellants, who discovered and disclosed to the art that advantageous results could be obtained by the use of such a converter. All that appellants did in this connection was to discover and give to the art the scientific explanation of the successful operation of the Johnson converter. Appellants are not entitled to a patent for this scientific explanation. *De Forest Radio Co.* v. *General Electric Co.*, 283 U. S. 664, 408 O. G. 283. See also *In re Modine*, patent appeal No. 2,938, 19 C. C. P. A. (Patents)—, —F.(2d)—, decided concurrently herewith.

[2] In view of the fact that it was old to employ adsorption agents, "powdered coke or vegetable charcoal," during the hydrolyzing process, as disclosed in the patent to Hirsh, we are of opinion that the Patent Office tribunals reached the right conclusion, and that the authorities relied upon by counsel for appellants have no application to the issues here involved.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE WIENER

No. 2,947. Decided April 4, 1932

PATENTABILITY—FEED FOR CIGARETTE MACHINE.

Claims for a feed for a cigarette machine *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Sydney I. Prescott and *Mr. George S. Hastings* for Wiener.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner rejecting claims 1, 2, 8, and 9 in appellant's application for a patent for an alleged invention relating to improvements in a "constant - level tobacco - feed for cigarette machines," and particularly to a mechanism for maintaining tobacco in the hopper of a tobacco feeding machine at a substantially uniform level.

Claim 1 is illustrative. It reads:

1. In a tobacco feed, the combination with a device for feeding a stream of tobacco from a magazine, of mechanism for intermittently delivering quantities of tobacco to said magazine, and means for variably measuring and regulating at will the amount of tobacco delivered by said mechanism to that fed from the magazine.

The reference is: Ruau, 1,501,622, July 15, 1924.

As stated in the involved claims, appellant provides a device for feeding tobacco from a magazine into a hopper and a mechanism for intermittently delivering quantites of tobacco to the magazine, and means for "variably measuring and regulating at will the amount of tobacco delivered by said mechanism to that fed from the magazine."

The patent to Ruau relates to a tobacco feeding apparatus for cigarette machines. The patentee discloses an endless conveyor provided with pockets for intermittently delivering quantities of tobacco to the hopper. The conveyor is automatically started or stopped by a filler head in contact with the tobacco in the hopper. When the level of the tobacco in the hopper falls below a predetermined level, the filler head operates a clutch to start the operation of the conveyor. When the level of the tobacco in the hopper rises above the predetermined level, the filler head disengages the clutch and the conveyor is stopped. The patentee depended upon the rise and fall of the tobacco level in the hopper to control the starting and stopping of his conveyor feed. He did not disclose any means for variably measuring and regulating *at will* the quantities of tobacco delivered by the conveyor feed.

The Board of Appeals held that if the conveyor of the patentee delivered the tobacco at an undesirable rate, a mere adjustment of the speed of the conveyor, or a mere change in the size of the pockets thereon, would accomplish the same results as those obtained by appellant's device; that is to say, by merely dispensing with the filler head and its clutch operating rod and their functions, and regulating the speed of the conveyor or increasing the size of the pockets thereon, the amount of the tobacco in the hopper could be maintained at a substantially uniform level. Such a modification of the Ruau device, it was held, would not amount to invention.

Appellant was allowed several claims, which specifically define his device. However, the appealed claims are so broad as to read upon the references as changed or adjusted as hereinbefore stated. We are of opinion that such changes or adjustments would not involve invention, but would be obvious to one of ordinary mechanical skill.

The decision is affirmed.

Affirmed.

CARNEGIE LIBRARY OF ATLANTA

U. S. Court of Customs and Patent Appeals

IN RE O'BRIEN

No. 2,945. Decided April 4, 1932

PATENTABILITY—TOWEL HOLDERS.

Claims for a towel holder *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Paul, Paul and Moore and *Mr. James T. Newton* for O'Brien.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner, rejecting, for want of patentability in view of the prior art, claims 18, 20, 26 and 27 of appellant's application, the remaining claims having been allowed.

Upon argument before us, appellant's counsel announced that the appeal as to claims 20 and 27 would be abandoned, and that the appeal would be limited to claims 18 and 26, which read as follows:

18. A towel holder comprising a casing having a chamber for the clean towel, feed rolls mounted therein, the towel being adapted to depend from said chamber in position to be grasped and pulled by the user, a friction roll mounted to press the depending web of the towel against a feed roll and insure a frictional contact between them so that downward pull on the towel will revolve said rolls a device for locking said feed rolls and preventing delivery of the towel, means permanently attached to said device and extending outside the towel holder adapted to be actuated by the user for moving said device to its release position, said device being adapted when in its release position to be automatically returned to its locking position when said feed rolls are revolved.

26. A towel holder comprising a support for a clean towel, a feed roll actuatable by a pull of the user on the towel, and feed limiting devices comprising a lug extending beyond the periphery of said roll, a pivoted forked member with the prongs of the fork embracing the periphery of said feed roll and having the end of one prong of the fork normally in the path of said lug and between the pivot of said forked member and said lug, means permanently attached to said device and extending outside the towel holder actuatable by the user of the towel for moving the locked end of the locking prong to its released position away from the periphery of said roll and out of the path of said lug, the end of the other prong of the fork being simultaneously moved towards the periphery of the roll and into the path of said lug but beyond the lug from the pivot of said forked member, whereby, a continued movement of said lug will move the locking prong of said pivoted member towards the periphery of said roll and into the path of the lug to lock it and said feed roll.

The references relied upon are: Clawson, 807,722, December 19, 1905; Shattuck, 1,092,405, April 7, 1914.

The alleged invention relates to towel cabinets and is sufficiently described in the claims.

The patent to Clawson relates to a coin controlled apparatus, used with a cabinet, for delivering a certain amount of clean toweling from a roll when a coin is deposited.

The patent to Shattuck relates to a towel cabinet, and was cited merely to show a roll for pressing a towel against a feed roll.

Appellant concedes that Shattuck is a valid reference for that part of the claims relating to the location of the feed rolls, but contends that invention lies in the latter part of the claims, relating to the device for locking the feed rolls and preventing delivery of the towel.

The Patent Office tribunals held that there would be no invention in omitting the coin control feature of Clawson and making the changes necessary to operate the device manually, without the use of a coin, in the manner that appellant has done.

Appellant in his specification states:

The object of my invention is to provide a towel cabinet in which the delivery of the towel is prevented by a locking means which may or may not be controlled by the deposit of a coin, as preferred, the locking means when released allowing a predetermined length of the toweling to be delivered before the mechanism again becomes locked to check further delivery.

* * * * * * *

The operation of the push rod 23 may, of course, be regulated by the deposit of a coin in the casing. Such mechanism, however, would form no part of this invention and I do not illustrate it or claim it herein.

Appellant further contends that he has provided a chain upon which there is a lug, which chain and lug directly pass around his roll 13, thereby dispensing with a great deal of mechanism shown in the Clawson patent, and that this constitutes invention.

However, the claims here in issue do not specify this feature and therefore it cannot be considered.

We are in accord with the conclusion reached by the Board of Appeals and its decision is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,082,784, A. A. West, Hair curler, D. C., S. D. N. Y., Doc. E 52/70, *West Electric Hair Curler Co.* v. *F. Rubio et al.* (*New York Export Co.*). Dismissed without prejudice (notice June 6, 1932.

1,183,161, F. N. Bierce, Guard for guys and the like, D. C., S. D. Ohio, W. Div., Doc. E 730, *The Specialty Device Co. et al.* v. *South East Joslyn Co.* Claims 1, 2, 8, and 4 held valid and infringed (notice June 8, 1932).

1,296,588, 1,296,590, J. H. Bamberg, Metal mold; 1,296,589, same, Casting and process of making same; 1,296,591, same, Piston casting; 1,296,595, A. B. Norton, Process of making castings; 1,525,893, J. L. Schnobrich, Metal mold, appeal filed May 31, 1932, C. C. A. 8th Cir. (St. Louis), Doc. 9588, *Aluminum Co. of America* v. *Sterling Products Corp.*

1,296,589. (See 1,296,588.) 1,296,590. (See 1,296,588.)

1,296,591. (See 1,296,588.) 1,296,595. (See 1,296,588.)

1,315,743, A. L. Raven, Screen for moving pictures, D. C., S. D. N. Y., Doc. E 44/228, *A. L. Raven et al* v. *National Theatre Supply Co., Inc.* Dismissed without prejudice (notice June 6, 1932).

1,352,715, J. H. Wiley, Gas cannon, D. C., S. D. N. Y., Doc. E 66/151, *The Conestoga Corp. et al.* v. *J. W. Wiley et al.* Consent decree for plaintiff (notice June 2, 1932).

1,379,172, 1,552,679, V. C. Crites, Photometric device, filed May 27, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E X–5–J, *Crites Patents, Inc.*, v. *R. C. A. Photophone, Inc., et al.* Doc. E X–6–H, *Crites Patents, Inc.*, v. *Electrical Research Products, Inc., et al.*

1,385,839, L. Lewitt, Two piece watch casing, D. C., S. D. N. Y., Doc. E 42/306, *L. Lewitt & Co., Inc.* v. *Bulova Watch Co., Inc.* Dismissed without prejudice (notice June 6, 1932).

1,470,524, H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confection, filed May 28, 1932, D. C., N. D. Ala. (Birmingham), Doc. 736, *Good Humor Corp. of America* v. *Highland Ice Cream & Creamery Co.*

1,476,804, M. G. DeSimone, Denominator and adding mahine, D. C., S. D. N. Y., Doc. E 44/267, *M. G. DeSimone v. R. H. Macy & Co., Inc.* Injunction granted (notice May 31, 1932).

1,494,514, Stowers & De Hymel, Art of producing motion pictures and sound synchronized therewith, filed June 7, 1932, D. C., E. D. N. Y., Doc. E 6368, *The Aleograph Co. v. Western Electric Co., Inc.*

1,525,893. (See 1,296,588.) 1,552,679. (See 1,379,172.)

1,562,787, I. M. Petersime, Incubator, D. C., S. D. N. Y., Doc. E 50/16, *I. M. Petersime & Son et al. v. E. L. Plass (Hickory Ridge Farm).* Dismissed with prejudice (notice June 3, 1932).

1,568,532, B. Riesner, Hood for cooking range, D. C., S. D. N. Y., Doc. E 52/168, *B. Riesner v. G. Mayer et al. (Mayer & Kornbau).* Dismissed without prejudice (notice June 6, 1932).

1,650,897, A. J. Liebmann, Tungsten contact breaker arms, filed June 3, 1932, D. C., S. D. N. Y., Doc. E 68/211, *P. R. Mallory & Co., Inc., v. Chadick, DeLamater Corp.*

1,659,889, E. C. Morgan, Mining machine, D. C., S. D. Ohio, W. Div., Doc. E 692, *O. E. Morgan et al. v. O. S. Oldroyd et al.* Claims 5, 80, 86, 98, 115, 118, and 119 held valid and infringed (notice June 3, 1932).

1,673,727, L. V. Aronson, Cigar lighter, D. C., S. D. N. Y., Doc. E 50/160, *Art Metal Works, Inc., v. Automatch Corp.* Dismissed without prejudice (notice June 6, 1932).

1,680,894, H. G. Lykken, Pulverizer, D. C., S. D. N. Y., Doc. E 53/347, *H. G. Lykken v. The New Yorker Hotel Corp.* Dismissed without prejudice (notice June 6, 1932).

1,701,940, A. S. Alexander, Tire mirror; 1,719,821, same, Rear-view mirror bracket, D. C., S. D. N. Y., Doc. E 55/10, *McGrath Holding Corp. v. Yankee Metal Products Corp.* Dismissed on the merits (notice June 6, 1932).

1,710,073, 1,714,191, S. Ruben, Electrical condenser, filed June 3, 1932, D. C., S. D. N. Y., Doc. E 68/212, *Ruben Condenser Co. et al. v. Condenser Corp. of America.*

1,714,191. (See 1,710,073.) 1,718,997. (See 1,470,524.)

1,719,821. (See 1,701,940.)

1,731,967, L. J. Antonsen, Paper excelsior machine, filed June 1, 1932, D. C., W. D. Wash., N. Div., Doc. 932, *L. J. Antonsen v. H. C. Haner.* Doc. 933, *L. J. Antonsen v. S. Michelson.*

1,755,252, E. W. Goeser, Upset lock pin for chain belt, D. C., S. D. Calif., C. Div., Doc. E V–68–H, *Emsco Derrick & Equipment Co. v. Chain Belt Co.* Decree for plaintiff June 1, 1932.

1,789,901, F. Hotchner, Electrode, D. C., E. D. Wash. (Spokane), Doc. E 4416, *Q. R. S. Neon, Inc., et al. v. U. S. Neon Corp. et al.* Dismissed without prejudice May 26, 1932.

1,803,281. (See 1,803,309.)

1,803,309, 1,803,281, E. J. Budlong, Piston ring, filed June 7, 1932, D. C., E. D. N. Y., Doc. E 6367, *E. J. Budlong et al. v. Brooklyn Auto Parts Co., Inc.*

1,832,437, L. J. Wahl, Vibrator, filed June 7, 1932, D. C., E. D. Wis. (Milwaukee), Doc. 3596, *Wahl Clipper Corp. v. Andis Clipper Co. et al.*

1,858,316, Thompson & Smith, Safety razor, filed May 28, 1932, D. C., S. D. N. Y., Doc. E 68/148, *Gillette Safety Razor Co. v. Segal Lock & Hardware Co., Inc.*

Re. 17,925, M. J. Wightman, Mechanical stoker; Re. 18,006, C. H. Hall, Ash-removing device, filed June 2, 1932, D. C. Conn. (New Haven), Doc. E 2209, *Domestic Stoker Co. v. G. E. Whitney et al.*

Re. 18,006. (See Re. 17,925.)

Des. 79,670, H. Sarafian, Advertising panel, D. C., S. D. N. Y., Doc. E 51/323, *Novelite, Inc., v. Advance Display Corp. et al.* Dismissed without prejudice (notice June 6, 1932).

Disclaimers

1,235,883.—*Redus D. Dodds*, Humble, Tex. SAMPLE-TAKING DEVICE. Patent dated August 7, 1917. Disclaimer filed June 30, 1932, by the assignees, *George J. Barrett, Sosthene Robichaux,* and *Wm. J. Miller,* and the sole and exclusive licensee, *Reed Roller Bit Company.*

Severally and jointly make disclaimer of such parts of the thing patented as they do not choose to claim or hold by virtue of the patent or their respective rights, titles and interests therein, as follows:—

to the subject matter of claims 1 to 7, inclusive, of said patent except as applied to drills of the class described in the specification, wherein the tubular barrel or tubular member specified in said claims is removable through the drill stem.

1,295,134.—*Redus D. Dodds*, Humble, Tex. SAMPLE-TAKING DEVICE. Patent dated February 25, 1919. Disclaimer filed June 30, 1932, by the assignees, *George J. Barrett, Sosthene Robichaux,* and *Wm. J. Miller,* and the sole and exclusive licensee, *Reed Roller Bit Company.*

Severally and jointly make disclaimer of such parts of the thing patented as they do not choose to claim or hold by virtue of the patent or their respective rights, titles and interests therein, as follows:—

To the subject matter of claims 1 to 4, inclusive, of said patent except as applied to drills of the class described in the specification, wherein said tubular barrel, supporting member, tubular supporting member, or tubular member, referred to, respectively, in claims 1 to 4, inclusive, is removable through the drill stem.

1,776,650.—*Sidney T. Carter*, Parnassus, Pa. PROPELLER. Patent dated September 23, 1930. Disclaimer filed June 24, 1932, by the assignee, *Bendix Aviation Corporation.*

Hereby enters this disclaimer to that part of the claims in said specification which are in the following words, to wit:

"5. In a reversible propeller, in combination, a propeller shaft, a propeller support on the shaft, propeller blades mounted in said support, said propellers being disposed for turning about their longitudinal axes, each propeller having a gear and a worm for turning the same about its longitudinal axis, a pinion for each worm, and two concentric gears turnably mounted on said shaft, said pinions meshing with said gears.

"6. In a reversible propeller, in combination, a propeller shaft, a propeller support on the shaft, propeller blades mounted in said support, said propellers being disposed for turning about their longitudinal axes, each propeller having a gear and a worm for turning the same about its longitudinal axis, a pinion for each worm, two concentric gears turnably mounted on said shaft, said pinions meshing with said gears, and brake mechanism for each of said concentric gears for effecting relative movement between said gears and shaft, whereby the pitch of said propellers may be reversed."

TRADE-MARKS

OFFICIAL GAZETTE, JULY 19, 1932

[VOL. 420. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 327,295. BRAGUE, INC., Hinsdale, Mass. Filed May 19, 1932.

SOIL-CO

For Raw or Unprepared Soil.
Claims use since Feb. 24, 1932.

Ser. No. 327,659. HUNTSVILLE-SINCLAIR MINING COMPANY, Kansas City, Mo. Filed June 2, 1932.



The exclusive use of the word "Coal" is disclaimed except in connection with the mark as shown.
For Coal.
Claims use since Apr. 15, 1932.

Ser. No. 327,840. WINDSOR COAL COMPANY, Kansas City, Mo. Filed June 8, 1932.



No claim is made to the word "Coal" or to the words "The Economy Fuel," except as in combination with the trade-mark as shown.
For Coal.
Claims use since Mar. 25, 1932.

CLASS 2

Receptacles

Ser. No. 320,601. JOSEF BRANDSTETTER, doing business as Alto Mfg. Co. (Not Incorporated), Chicago, Ill. Filed Oct. 31, 1931.

GAR-BAG

No claim is made to the exclusive use of the word "Bag" apart from the mark as shown.
For Receptacles, Particularly Intended for Receiving Garbage or the Like, Such Receptacles Comprising Metal Cans Adapted to Hold Removable Paper Bags.
Claims use since on or about Jan. 15, 1931.

Ser. No. 322,301. MONO SERVICE CO., Newark, N. J. Filed Dec. 18, 1931.



The representation of the goods is disclaimed apart from the mark as shown. The horizontal lining indicates the color blue.

For Cartons.

Claims use since October, 1929.

Ser. No. 325,638. JOSEF BRANDSTETTER, doing business as Alto Mfg. Co., Chicago, Ill. Filed Mar. 30, 1932.

GAR-CAN

The word "Can" is disclaimed apart from the mark as shown.

For Garbage Cans and Vegetable Bins.

Claims use since Jan. 1, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 327,332. ROBERT APPEL, Brooklyn, N. Y. Filed May 23, 1932.

Stepag

For Ladies' Pocket Books.

Claims use since Feb. 25, 1932.

Ser. No. 327,351. FELDER BROS., New York, N. Y. Filed May 23, 1932.

FELBRO PRODUCT

No claim is made to the word "Product" apart from the mark shown.

For Leather Goods—Namely, Handbags and Pocketbooks, Coin Purses, Billfolds, Luggage Identification Tags, Card Cases, Combination Key Case and Card Holders, Wallets, Pass Cases, Combination Key Case and License Holders, and Toilet Cases.

Claims use since Apr. 1, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 318,197. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Soaps, Steel Wool, Washing Compounds, Glass and Metal Polish, Shoe Polish, Preparations for the Polishing and Conserving of Leathers, and Preparations for the Removal of Stains.

Claims use since Sept. 24, 1930.

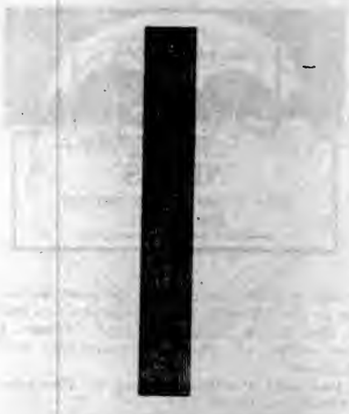
Ser. No. 324,857. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Filed Mar. 7, 1932.

UNION

For Cleaning Compound for Removing Spots, Particularly Oil Soluble or Oil Emulsifiable Soap to be Used with Cleaning Solvent; Harness Oil; Tanners' Finishing Oil.

Claims use since March, 1928.

Ser. No. 324,916. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Filed Mar. 8, 1932.



The mark consists of the words "Red Line" and the representation of a red line.

For Dry Cleaning Solvent, Cleaning Compound for Removing Spots, Particularly Oil Soluble or Emulsifiable Soap to be Used with Cleaning Solvent; Tanners' Finishing Oil; Harness Oil.

Claims use since March, 1928.

Ser. No. 327,223. KAUFMANN DEPARTMENT STORES, INC., Pittsburgh, Pa. Filed May 18, 1932.

sollo

The drawing being lined for blue.

For Soap, Soap Chips, and Soap Flakes.

Claims use since Feb. 20, 1932.

Ser. No. 327,503. ELECTRIC CITY BOX CO., INC., Buffalo, N. Y. Filed May 27, 1932.

BRITE WAY

For Chemically Treated and Chemically Impregnated Cleaning and Polishing Cloths.

Claims use since Mar. 2, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 290,685. BURNHAM SOLUBLE IODINE CO., Auburndale, Newton, Mass. Filed Oct. 5, 1929.

Soluble Iodine

The drawing is lined to indicate the color green, which forms a feature of applicant's mark. No exclusive claims to the words "Soluble Iodine" is made excepting in combination as shown.

For Soluble Iodine for External, Internal, Oral and Topical Use, and Hypodermic Intramuscular and Intravenous Use.

Claims use since March, 1902.

Ser. No. 305,287. ALBERT S. REID, Vancouver, British Columbia, Canada. Filed Sept. 3, 1930.

REID'S

BETTER HEALTH LONGER LIFE

NEU-RHEUMATIC

TRADE MARK REG'D

The portrait appearing on the drawing is that of the applicant. All the wording appearing on the drawing, with the exception of the word "Reid's" is disclaimed except in the association shown.

For Medicine for the Treatment of Rheumatism, Neuritis, Arthritus, Lumbago, Sciatica, Gout, Backache, Kidney and Bladder Troubles.

Claims use since Sept. 24, 1929.

Ser. No. 318,551. DURADENE COMPANY, INC., Baltimore, Md. Filed Aug. 29, 1931.

Kerol

For Hair Waving Fluids.

Claims use since July 1, 1930.

Ser. No. 322,634. GETZ EXTERMINATORS, INC., St. Louis, Mo. Filed Jan. 2, 1932.

Getz

For Preparations for Exterminating Insects.
Claims use since 1888.

Ser. No. 323,470. THE WILBUR WHITE CHEMICAL COMPANY, Owego, N. Y. Filed Jan. 26, 1932.

WAX LAC

Applicant hereby disclaims for purposes of this registration exclusive right to use of the word "Wax" apart from the rest of the mark shown in the drawing.
For Emulsion for the Preservation of Fruits and Vegetables.
Claims use since Aug. 29, 1931.

Ser. No. 324,873. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Mar. 8, 1932.

Äthalin

For Chemical Substances for Use as Thread and Fiber Moistening, Protecting, Penetrating, Smoothing, and Finishing Preparations.
Claims use since Jan. 22, 1932.

Ser. No. 325,233. STEPHEN MOLCHANOFF, doing business as Halitest Company, San Diego, Calif. Filed Mar. 17, 1932.

halitest

The lining in the drawing indicates shading and not color.
For Antiseptic Mouth Wash.
Claims use since Feb. 26, 1932.

Ser. No. 325,273. TEASDALE & CO. LIMITED, Carlisle, England. Filed Mar. 18, 1932.



No claim is made, apart from the mark shown in the drawing, to the following legends appearing on the label—"Don't Risk Going Without"—"Voice, Throat & Chest Pastilles"—"Per 1d. Pkt."—"Manufactured by"—"Carlisle, England."
For Medicated Pastilles for Use in Affections of the Voice, Throat and Chest.
Claims use since Nov. 15, 1928.

Ser. No. 326,507. GEORGE L. KREMER, New York, N. Y. Filed Apr. 23, 1932.

LA PETITE

For Hair Waving Lotion.
Claims use since Oct. 3, 1931.

Ser. No. 326,665. BLOOMINGDALE BROS., INC., New York, N. Y. Filed May 2, 1932.

† Labratest †

For Olive Oil Shampoo, Essence of Peppermint, Bay Rum West Indian, Pine Tar Shampoo, Castor Oil Tasteless, Lilas Vegetale, Eau de Cologne, Rhubarb and Soda Mixture, Tincture Green Soap, Antiseptic Mouth Wash, Astringent Mouth Wash, Cod Liver Oil Norwegian, Dobell's Solution, Extract Witch Hazel Distilled, Russian Mineral Oil (for Medicinal Purposes), Cascara Sagrada, Cascara Sagrada Aromatic, Eau de Quinine, Cocoanut Oil Shampoo, Honey and Almond Lotion (for Hands and Face), Aspirin, Tincture of Benzoin, Glycerine and Rose Water, Glycerine C. P., Bath Salts, Rubbing Alcohol, Glycerine Rose Benzoin Lotion.
Claims use since Apr. 20, 1932.

Ser. No. 326,666. BORCHERDT MALT EXTRACT COMPANY, Chicago, Ill. Filed May 2, 1932.

CUMALTRON

For Medicine Comprising a Nutritious Malt Combination Containing Copper, Iron, and Red Bone Marrow for Use as a General Tonic.
Claims use since Mar. 1, 1932.

Ser. No. 326,693. SHELL CHEMICAL COMPANY, San Francisco, Calif. Filed May 2, 1932.



For Amyl Acetate, Butyl Acetate, Amyl Alcohol, Butyl Alcohol, Amyl Ketone, and Methyl Ethyl Ketone.
Claims use since Sept. 24, 1931.

Ser. No. 326,782. HOWARD GOULD, Camden, N. J. Filed May 5, 1932.

Get at the root!

NEO-CORN

The words "Get at the Root!" and "Corn" are disclaimed apart from the mark shown in the drawing.
For Preparation for Removing Corns.
Claims use since Feb. 1, 1932.

Ser. No. 326,841. LEWIS R. BRANTLEY, doing business as Claritone Dairy Products Co., Marietta, Ga. Filed May 6, 1932.

"CLA-RI-TONE"

For Preparation for Consumption by Milch Cows for Preventing Objectionable Odors of Milk Yielded.
Claims use since Apr. 8, 1932.

Ser. No. 327,001. W. MAPLE PINNIX, doing business as The Smacks Co., New Bern, N. C. Filed May 10, 1932.

SMACKS

For Laxative Candy.
Claims use since June 8, 1931.

Ser. No. 327,048. ALPHONSE M. DOYON, Montreal, Canada. Filed May 18, 1932.



The word "Gas" on the drawing is disclaimed by the applicant.
For Powder to be Mixed with Gasoline to Increase the Efficiency of the Same.
Claims use since Apr. 13, 1932.

Ser. No. 327,106. NOXACORN COMPANY, INC., New York, N. Y. Filed May 14, 1932.

NOXACORN

For Liquid Corn Remover.
Claims use since Feb. 1, 1932.

Ser. No. 327,126. AUTOMATIC WASHER COMPANY, Newton, Iowa. Filed May 16, 1932.



The descriptive words "Automatic Electric Moth Exterminator" are disclaimed apart from the mark as shown.
For Insect Exterminator of a Type Adapted to Kill Moth Eggs, Larvæ and Moths Themselves by the Vaporizing of a Composition by Heating Process.
Claims use since Mar. 1, 1931.

Ser. No. 327,161. CURTIS C. MEIGS, doing business as Octane Research Laboratory, Bala, Pa. Filed May 16, 1932.

A-CEL-O

For Motor Fluid, Being a Volatile Hydrocarbon for the Improvement of Motor Fuel.
Claims use since April 1, 1932.

Ser. No. 327,229. JOSEPH MONTAGNA, Roxbury, Mass. Filed May 18, 1932.



Montagna's Anti Dermatiti

The portrait is that of applicant. The words "Anti Dermatiti" are disclaimed apart from the mark shown in the drawing.

For Salve or Unguentum for Healing Infections, Cuts, Bruises, Rash, Burns, Impetigo, Eczema, Ringworm, Chafing, Insect Bites, Abrasions, Pimples, Itch, Scalds, Pruritus Ani and Vulvæ.

Claims use since Mar. 16, 1932.

Ser. No. 327,283. NORTHWESTERN PINE TAR CO., Chicago, Ill. Filed May 20, 1932.



No claim is made to the words "Brand" and "Pine Tar" apart from the mark.

For Pine Tar.

Claims use since January, 1912.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 318,201. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.



For Dynamite and Blasting Powders and the Like, Matches, Fire Works, Shells, and Ammunition.

Claims use since Sept. 24, 1930.

CLASS 12

Construction Materials

Ser. No. 324,197. SUPER CONCRETE EMULSIONS, LTD., Los Angeles, Calif. Filed Feb. 15, 1932.



Use of the word "Concrete" apart from the mark shown is disclaimed.

For Hydraulic Cement Concrete Paving Material.

Claims use since Nov. 16, 1931.

Ser. No. 326,271. FRANCIS J. STRAUB, New Kensington, Pa. Filed Apr. 19, 1932.

STRAUBLOX

For Concrete Building Blocks.

Claims use since Mar. 24, 1932.

Ser. No. 326,530. SUPER CONCRETE EMULSIONS, LTD., Los Angeles, Calif. Filed Apr. 26, 1932.



For Cementitious Surface Coating for Floors, Walls, and Other Structures.

Claims use since Feb. 10, 1931.

Ser. No. 327,326. UNITED STATES QUARRY TILE COMPANY, Parkersburg, W. Va. Filed May 21, 1932.

ROMANY RUSHWEAVE TILE

No claim is made to the word "Tile" apart from the mark as shown.

For Building Tile.

Claims use since April, 1932.

Ser. No. 327,339. THE CELOTEX COMPANY, Chicago, Ill. Filed May 23, 1932.

FEROX

For Treated Fiber Boards Having Distributed Therethrough Substances Toxic to Insects and Fungi.

Claims use since Nov. 1, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 315,229. THE CENTRAL FOUNDRY COMPANY, New York, N. Y. Filed May 29, 1931.

SOLUS

For Oil and Gasoline Separator Traps.

Claims use since Apr. 22, 1931.

Ser. No. 325,548. ACME STAPLE COMPANY, Camden, N. J. Filed Mar. 28, 1932.

ACME

For Staples for Use in Stapling Machines, Tagging Machines, Binding Machines, Stitching Machines, and Tacking Machines.

Claims use since Nov. 30, 1894.

CLASS 15

Oils and Greases

Ser. No. 318,231. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.



For Fuel Oils, Lubricating Oils, Lubricating Greases, Benzene, Gasoline, Kerosene, Rust Preventive Oils.

Claims use since Sept. 24, 1930.

Ser. No. 322,815. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio. Filed Jan. 8, 1932.

KROMA

For Birthday Candles.

Claims use since February, 1920.

Ser. No. 326,897. GOLDBLATT BROS., INC., Chicago, Ill. Filed May 9, 1932.

GOLD COAST

For Motor Lubricating Oil.

Claims use since Mar. 15, 1932.

Ser. No. 326,990. SHELL OIL COMPANY, San Francisco, Calif. Filed May 11, 1932.



No claim is made to the word "Gasoline" apart from the mark shown in the drawing.

For Gasoline.

Claims use since Feb. 2, 1932.

Ser. No. 327,329. A. & M. PETROLEUM COMPANY, El Paso, Tex. Filed May 23, 1932.

PENNVANE

For Lubricating Oils and Lubricating Greases.
Claims use since Feb. 18, 1932.

Ser. No. 327,361. KEYSTONE OIL REFINING CO., Detroit, Mich. Filed May 23, 1932.

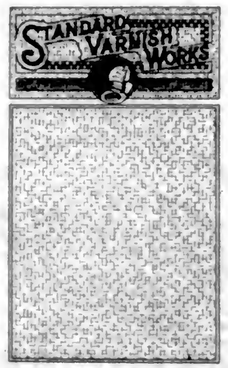
MAXIMILE

For Refined, Semi-Refined, and Unrefined Oils and Greases Made from Petroleum, Both With and Without Admixture of Animal, Vegetable and Mineral Substances, for Illuminating, Burning, Power, Fuel and Lubricating Purposes.
Claims use since Aug. 19, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 326,502. STANDARD VARNISH WORKS, New York, N. Y. Filed Apr. 25, 1932.



No claim being made to the exclusive use of the label per se. The drawing is lined to indicate the colors yellow, red, and black, which are claimed as features of the mark.
Applicant is the owner of Reg. No. 151,361 for the mark "Standard," issued under the 10-year proviso.
For Dry, Ready-Mixed, and Paste Paints; Paint Oils; Floor Polishes and Polishes for Automobiles, Furniture and Painted, Varnished or Lacquered Surfaces; Varnishes, Paint and Varnish Enamels, Stains, Fillers; Driers for Paints, Varnishes and Oils; Bronzing Liquids; Japans; Colors in Oil and Japan; Wood Sealers; Primers, Surfacers, Lacquers, and Thinners for Paints, Varnishes and Lacquers.
Claims use since June, 1930.

Ser. No. 327,444. LECO MANUFACTURING CO. INC., College Point, N. Y. Filed May 25, 1932.

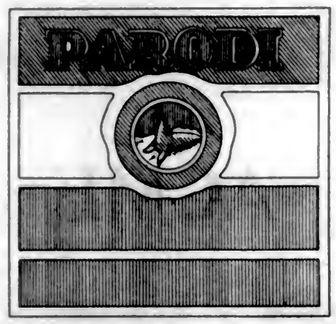
GLEAM COAT

The word "Coat" is claimed only in association with the other features of the mark.
For Ready-Mixed Paints, Paint Enamels, and Varnishes.
Claims use since Apr. 10, 1931.

CLASS 17

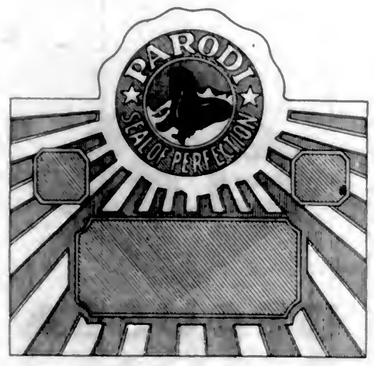
Tobacco Products

Ser. No. 327,524. PARODI CIGAR COMPANY OF NEW YORK, INC., Scranton, Pa. Filed May 27, 1932.



The color lining shown on the drawing indicates green and red.
For Cigars.
Claims use since June 1, 1929.

Ser. No. 327,525. PARODI CIGAR COMPANY OF NEW YORK, INC., Scranton, Pa. Filed May 27, 1932.



The color lining shown on the drawing indicates green and red.
For Cigars.
Claims use since Feb. 1, 1932.

Ser. No. 327,526. PARODI CIGAR COMPANY OF NEW YORK, INC., Scranton, Pa. Filed May 27, 1932.



The color lining shown on the drawing indicates green and red.
For Cigars.
Claims use since June 1, 1929.

Ser. No. 327,527. PARODI CIGAR COMPANY OF NEW YORK, INC., Scranton, Pa. Filed May 27, 1932.



The color lining shown on the drawing indicates green and red.
For Cigars.
Claims use since Apr. 1, 1932.

Ser. 327,844. T. E. BROOKS, doing business as T. E. Brooks & Co., Red Lion, Pa. Filed June 9, 1932.



The words "Exceptional Quality" are not claimed apart from the other features of the mark.
For Cigars.
Claims use since May 13, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 327,345. HARRY DERMAN, INC., Long Island City, N. Y. Filed May 23, 1932.

SUNCULATOR

For Transparent Hoods for Baby Carriages, Cribs, and Similar Articles.
Claims use since Apr. 1, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 308,780. HARDWICK, HINDLE, INC., Newark, N. J. Filed Dec. 9, 1930.

TOROSTAT

For Resistance Units, Rheostats and Potentiometers for Adjusting the Voltage Applied to a Load.
Claims use since Aug. 5, 1930.

Ser. No. 314,864. ALBERT REISCH, doing business as Springfield Auto Supply Company, Springfield, Ill. Filed May 21, 1931.

SASCO

For Vehicle Batteries, Battery Cables, Insulated Wire, Starting Motors, Generators, Spark Plugs, Distributors, Transformer Coils, Electric Lamps, Condensers, Switches and Choke Coils.
Claims use since Nov. 12, 1926.

Ser. No. 323,796. THE TELEVATOR CORPORATION, New York, N. Y. Filed Feb. 3, 1932.

TELECEPTOR

For Electric Audible Annunciators for Hotel, Restaurant, Domestic, and Similar Uses.
Claims use since Nov. 1, 1931.

Ser. No. 326,816. GENERAL CABLE CORPORATION, New York, N. Y. Filed May 6, 1932.

A-A RED

No claim is made for the word "Red" apart from the mark shown in the drawing.
For Bare and Insulated Electrical Wires and Cables.
Claims use since 1919.

Ser. No. 327,325. SUPPLEE-BIDDLE HARDWARE COMPANY, Philadelphia, Pa. Filed May 21, 1932.

GREAT AMERICAN

For Storage Batteries.
Claims use since Mar. 26, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 318,217. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Fish Hooks, Ice and Roller Skates, Tennis and Fish Nets, Christmas Tree Ornaments, Such as Toy Balls, Toy Figures, Decorative Toys and the Like.
Claims use since Sept. 24, 1930.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 323,642. WORTHINGTON PUMP AND MACHINERY CORPORATION, New York, N. Y. Filed Jan. 30, 1932.

WORTHINGTON

Applicant claims ownership of trade-mark registrations No. 156,788 dated July 11, 1922 and 166,717 dated April 10, 1923, both effected under the 10-year proviso clause of section 5b of the act of Feb. 20, 1905.
For Rock Drills, Rock Hammers, Sinkers, Drifters, Plug and Feather Drills, Foot Hole Drills, Tripod Drills, Self-Feeding Rock Drills, Channel Bar Drills, Broaching Drills, Pavement Breakers, Asphalt Cutters, Concrete Breakers, Shaft Sinkers, Block Holers, Self-Rotating Stopers, Hand-Rotated Stopers, Column and Bar Drills, Drill Bits, Moil Points, Chisels, Tampers, Air Line Manifolds, Tunnel Bars and Clamps, Columns and Arms and Clamps, Tripods, Quarry Bars, Roving Trucks, Drill Steel. Heat Treating Machines, and Reaming Gauge Drill Bit Die Equipment.
Claims use since September, 1930.

Ser. No. 323,643. WORTHINGTON PUMP AND MACHINERY CORPORATION, New York, N. Y. Filed Jan. 30, 1932.

GILMAN

No claim is made for the word "Gilman" apart from the mark as shown.
For Rock Drills, Rock Hammers, Sinkers, Drifters, Plug and Feather Drills, Foot Hole Drills, Tripod Drills, Self-Feeding Rock Drills, Channel Bar Drills, Broaching Drills, Pavement Breakers, Asphalt Cutters, Concrete Breakers, Shaft Sinkers, Block Holers, Self-Rotating Stopers, Hand-Rotated Stopers, Column and Bar Drills, Drill Bits, Moil Points, Chisels, Tampers, Air Line Manifolds, Tunnel Bars and Clamps, Columns and Arms and Clamps, Tripods, Quarry Bars, Roving Trucks, Drill Steel Heat Treating Machines, and Reaming Gauge Drill Bit Die Equipment.
Claims use since September, 1930.

Ser. No. 326,129. THE DAYTON RUBBER MANUFACTURING COMPANY, Dayton, Ohio. Filed Apr. 15, 1932

DAY-STEEL

The word "Steel" is disclaimed except in combination with the word "Day."
For Pulleys.
Claims use since Mar. 1, 1932.

Ser. No. 326,562. THE THURBERATOR CORPORATION, New York, N. Y. Filed Apr. 27, 1932.

THURBERCO

For Liquid Fuel Carburetors.
Claims use since Apr. 6, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 324,825. HEINRICH HERMANN DAVID KLÜSSENDORF, doing business as Heinrich H. Klüssendorf, Berlin, Germany. Filed Mar. 5, 1932.

Klüssendorf's Autofilm

For Automatic Motion Picture Machines and Motion Picture Films.
Claims use since Oct. 24, 1931.

CARNEGIE LIBRARY OF ATLANTA

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 318,221. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Jewelry for Personal Wear Made of Precious Metals and Non-Precious Metals Plated with Precious Metals, Not Including Watches, Buttons of Precious Metals.
Claims use since Sept. 24, 1930.

Ser. No. 327,180. THE STIEFF COMPANY, Baltimore, Md. Filed May 16, 1932.

BETSY PATTERSON

The trade-mark is the name of the Baltimore belle, deceased, who married Jerome Bonaparte, brother of Napoleon Bonaparte.
For Flat and Hollow Tableware Made of or Plated with Precious Metal.
Claims use since Mar. 26, 1932.

Ser. No. 327,609. THETA ALPHA FRATERNITY, Kenmore, N. Y. Filed May 31, 1932.

ΘA

For Jewelry for Personal Wear, Not Including Watches, All Made of or Plated with Precious Metal.
Claims use since 1909.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 327,366. MAGNUM PRODUCTS, INC., New York, N. Y. Filed May 23, 1932.

SANI-PUFFS

The Word "Puffs" is disclaimed apart from the mark shown on the drawing.
For Powder Puffs and for Fabric Pads for the Application and Removal of Make Up.
Claims use since Mar. 15, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 327,553. MARTIN H. GAMBEE, Pawling, N. Y. Filed May 28, 1932.



Applicant disclaims the words "The" and "Chair" as essential parts of said trade-mark.
For Household Furniture—Namely Chairs.
Claims use since May 10, 1932.

CLASS 33

Glassware

Ser. No. 321,809. SAMUEL MALLINGER COMPANY, Pittsburgh, Pa. Filed Dec. 5, 1931.

Samco

For Glass Jars.
Claims use since Aug. 1, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 325,015. THE QUINCY STOVE MANUFACTURING COMPANY, Quincy, Ill. Filed Mar. 10, 1932.

MONOGRAM

For Portable Stoves, Ranges, Combination Ranges, Furnaces, Hot Air and Water Circulators and Heaters and Parts Thereof Adapted for Employing Hard Coal, Soft Coal, Wood, Coke, Gas, and Oil, as Fuels.
Claims use since Jan. 1, 1908.

CLASS 36

Musical Instruments and Supplies

Ser. No. 318,229. DEUTSCHE GOLD- & SILBER-SCHEIDE-ANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Strings for Violins and Similar Instruments.
Claims use since Sept. 24, 1930.

CLASS 37

Paper and Stationery

Ser. No. 327,277. HAMMERMILL PAPER COMPANY, Erie, Pa. Filed May 20, 1932.

Duchrome

For Cover Paper.
Claims use since May 4, 1932.

Ser. No. 327,465. THE GREGG PUBLISHING COMPANY, New York, N. Y. Filed May 26, 1932.

GREGG

For Fountain Pens.
Claims use since Mar 1, 1928.

Ser. No. 327,791. DU PONT CELLOPHANE COMPANY, INC., New York, N. Y. Filed June 7, 1932.

CELLOPHANE

For Cellulosic Wrapping Paper, Sometimes Called Parchment-Tissue.
Claims use since April, 1908.

Ser. No. 327,830. NORTHERN PAPER MILLS, Green Bay, Wis. Filed June 8, 1932.



The solid color represents the color blue which is an essential feature of the mark.
For Toilet Paper.
Claims use since Jan. 21, 1928.

Ser. No. 327,842. JOHN DONANNO, New York, N. Y. Filed June 9, 1932.



No claim is made to the exclusive use of the words "Marking" and "Paper" except in so far as they form a part of the particular trade-mark.
For Marking Paper Used in the Manufacture of Various Articles of Clothing.
Claims use since Apr. 29, 1932.

CLASS 38

Prints and Publications

Ser. No. 319,791. THE 29TH DIVISION ASSOCIATION, INC., Newark, N. J. Filed Oct. 6, 1931.



The drawing is lined to indicate the colors blue and gray.
For Periodical Publications Published from Time to Time, Printed and Mimeographed Circulars Published from Time to Time.
Claims use since Jan. 1, 1921.

Ser. No. 323,316. MILO WINTER COMPANY, Chicago, Ill. Filed Jan. 22, 1932.

MURAGRAPH

For Posters.
Claims use since Aug. 20, 1931.

Ser. No. 326,984. NATIONAL ADVISORY COUNCIL ON RADIO IN EDUCATION, INC., New York, N. Y. Filed May 11, 1932.

LISTEN *and* LEARN

For Weekly Publications or Publication from Time to Time.
Claims use since Sept. 1, 1931.

Ser. No. 327,446. N E A SERVICE INC., Cleveland, Ohio. Filed May 25, 1932.

MAJOR HOOPLE

For Comic Strip.
Claims use since Mar. 10, 1932.

Ser. No. 327,612. EDDIE SOTTO, Erie, Pa. Filed May 24, 1932.

Horoscetch

For Cartoon Publication.
Claims use since May 9, 1932.

CLASS 39

Clothing

Ser. No. 320,439. THE MAY DEPARTMENT STORES COMPANY, St. Louis, Mo. Filed Oct. 24, 1931.

PEDO-GRACE

For Shoes Made of Leather and Fabric.
Claims use since Oct. 3, 1931.

Ser. No. 322,740. J. F. HILL, INC., Philadelphia, Pa. Filed Jan. 5, 1932.

FOOT-REST

For Men's, Women's, and Children's Shoes, Made of Leather and Combinations of Leather and Fabric.
Claims use since Dec. 29, 1931.

Ser. No. 326,597. X-OTIC, INC., New York, N. Y. Filed Apr. 28, 1932.

dry-dee

For Diaper Holding Garments of Combination Textile and Waterproof Materials and Fillers Therefor to be Used as a Unit, the Garments Being Designed to Hold the Diaper Fillers in Place on the Infant.
Claims use since Apr. 15, 1932.

Ser. No. 327,095. LEONARD D. GREENHALL, doing business as Greenhall Bros., Brooklyn and New York, N. Y. Filed May 14, 1932.

MULTI-FLEX

For Suspenders, Garters, and Apparel Belts.
Claims use since May 1, 1932.

Ser. No. 327,202. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed May 17, 1932.

"The School Season Shoe"

The word "Shoe" is disclaimed apart from the mark shown in the drawing.
For Misses' and Children's Shoes, Made of Leather and Fabric and Combinations of the Same.
Claims use since Jan. 15, 1931.

Ser. No. 327,290. J. SCHOENEMAN, INCORPORATED, Baltimore, Md. Filed May 20, 1932.

Long Worth

For Coats, Vests, Trousers, Knickerbockers, Top Coats and Overcoats for Men, Youths and Boys.
Claims use since January, 1930.

Ser. No. 327,335. BLOOMINGDALE BROS., INC., New York, N. Y. Filed May 23, 1932.

STEEPLECHASE

For Women's and Misses' Hats.
Claims use since May 11, 1932.

Ser. No. 327,696. JULIUS KAYSER & CO., New York, N. Y. Filed June 3, 1932.

KAYSERS KANTRUN

The term "Kantrun" is hereby disclaimed apart from the mark as shown on the drawing.
For Hosiery.
Claims use since Apr. 4, 1932.

Ser. No. 327,772. THE RHEA MANUFACTURING COMPANY, Milwaukee, Wis. Filed June 6, 1932.



For Wash Dresses, Smocks and Pajamas for Women, Girls and Children.
Claims use since Feb. 20, 1932.

Ser. No. 327,855. SCOTT-MEBANE MANUFACTURING COMPANY, Graham, N. C. Filed June 9, 1932.



The drawing is lined with vertical lines to show the color red.
For Overalls.
Claims use since November, 1929.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 327,309. S. H. KRESS & CO., New York, N. Y. Filed May 24, 1932.

BONITA

For Kid Hair Curlers.
Claims use since May 3, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 318,211. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.



For Embroideries Sold by the Yard, Draperies of Cotton, Wool and the Like, Ribbons and Laces Sold by the Yard.
Claims use since Sept. 24, 1930.

Ser. No. 319,779. HOCKMEYER BROS. INC., New York, N. Y. Filed Oct. 6, 1931.

Victoroy

For Cotton Corduroy Piece Goods.
Claims use since Nov. 13, 1930.

Ser. No. 323,387. ATKINSON, FENLON CO. INC., New York, N. Y.. Filed Jan. 25, 1932.

CASTLE

For Cotton Drapery Fabrics Used for Hangings, Upholstery and the Like.
Claims use since Jan. 12, 1932.

Ser. No. 327,617. U. S. MANUFACTURING CORPORATION, Decatur, Ill. Filed May 28, 1932.

FIBR-CELO

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Feb. 2, 1932.

Ser. No. 327,834. ROSSIR VELVET COMPANY, Mystic, Conn. Filed June 8, 1932.

Shirredvel

For Velvets in the Piece.
Claims use since Apr. 29, 1932.

Ser. No. 327,864. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed June 10, 1932.

Velaccordia

For Pile Fabrics, in the Piece.
Claims use since May 28, 1932.

Ser. No. 327,869. ALFRED EISEMAN, New York, N. Y. Filed June 10, 1932.

Chaneleen

For Textile Fabrics of Wool, Silk, Cotton and Rayon and Combinations Thereof.
Claims use since Apr. 4, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 320,270. JACQUES BALOG, doing business as Olla Spezialitäten Jacques Balog, Vienna, Austria. Filed Oct. 21, 1931.



Applicant disclaims the right to the exclusive use of the word "Gum" apart from the mark shown in the drawing.
For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since 1910.

Ser. No. 321,252. NO CLI-PAD CORPORATION, New York, N. Y. Filed Nov. 18, 1931.

NO-CLI-PADS

No claim is made to the word "Pads" apart from the mark shown on the drawing.
For Hair Waving Pads.
Claims use since April, 1930.

Ser. No. 323,431. JOSEPH W. YORK, New York, N. Y. Filed Jan. 25, 1932.



The applicant disclaims the right to the use of the words "Selected Brand," except as in the association shown. The color lining appearing on the drawing is for shading purposes only.
For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Feb. 20, 1931.

Ser. No. 325,575. ABRAHAM FLETCHER, doing business as Fletcher Chemical Company, Cincinnati, Ohio. Filed Mar. 28, 1932.

DURO-SKIN

The applicant expressly disclaims any claim to the exclusive use of the word "Skin" apart from the other features of the mark.
For Membraneous and Rubber Prophylactic Articles for the Prevention of Contagious Diseases.
Claims use since Apr. 15, 1929.

Ser. No. 326,871. POWDER PUFF SHOP, doing business as Myndall Cain, Minneapolis, Minn. Filed May 7, 1932.



The words "Permanent Wave" are disclaimed apart from the mark as shown and the word "Deauville" is also disclaimed apart from the mark as shown.
For Sachets for Permanent Waving.
Claims use since Nov. 1, 1931.

Ser. No. 327,010. GORIS & ARNSTEIN, INC., Chicago, Ill. Filed May 12, 1932.

KALSTONE

For Molding Preparation for Use in Making up Casts and Models.
Claims use since Feb. 22, 1932.

Ser. No. 327,700. THE NATIONAL MINERAL COMPANY, Chicago, Ill. Filed June 3, 1932.

kemi-therm

For Hair Waving Pads.
Claims use since Apr. 15, 1932.

Ser. No. 327,701. THE NATIONAL MINERAL COMPANY, Chicago, Ill. Filed June 3, 1932.



The words "Mineral Steam" are disclaimed apart from the mark as shown.
For Hair Waving Pads.
Claims use since Apr. 15, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 301,587. CUTLER-LOBINGIER PACKING COMPANY, Ontario, Calif. Filed May 29, 1930.

REGAL

For Canned Fruits and Vegetables.
Claims use since 1904.

Ser. No. 301,588. CUTLER-LOBINGIER PACKING COMPANY, Ontario, Calif. Filed May 29, 1930.

RIVER SIDE

For Canned Fruits.
Claims use since 1904.

Ser. No. 302,000. NEW ENGLAND IMPORTATION COMPANY, Boston, Mass. Filed May 31, 1930.



No claim being made to the word "Brand" apart from the mark shown in the accompanying drawing.
For Anti-Pasto, Pickled Limes, Capers, Dill Pickles, Horse Radish, Sweet Mixed Pickles, Mustard, Sweet Pickles, Sour Pickles, Spanish Olives, Piccalilli, Roquefort Cheese, Camembert Cheese, Chili Sauce, Catsup, and Canned Anchovies Filet in Olive Oil.
Claims use since Spring of 1925 and the name "Victory" since December, 1914.

Ser. No. 307,255. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Oct. 28, 1930.

Gold Bar

For Canned Fruit, Canned Vegetables, Tomato Puree, Dried Fruit, Raisins, Canned and Dried Prunes, Mincemeat, Maraschino-Type Cherries, Sauerkraut, Canned Beans with and without Pork and Tomato Sauce, Catsup, Fruit Juices for Food Purposes, Jams, Jellies, Fruit Preserves, Marmalades, Tomato Sauce, Canned Hominy, Olives, Fresh Vegetables, Fruit Butter, Apple Sauce, Cranberry Sauce, Canned Fish, Pickles, Mustard, Chow-Chow, Pickle Relishes, Chili Sauce, Vinegar, Vegetable Oil, Coffee, Tomato Juice, Honey, Meat Sauces, Mayonnaise, Ravioli, Soup, Evaporated Milk, Gelatine, Sauerkraut Juice, Tamales, Spices, Peanut Butter, Salted Nuts, Shortening, Flavoring Extracts for Food Purposes, Sugar and Maple Syrup, Canned Meat—Namely, Canned Chicken; Tapioca, Macaroni, Noodles, Spaghetti, Cornstarch, Farina, Dry Rice, Tea, Sugar, Cookies, Dried Vegetables, Candies, and Cocoa.

Claims use since Jan. 2, 1908 on canned fruit, canned vegetables and tomato puree; Apr. 4, 1908 on dried fruit, raisins, Canned and dried prunes; Oct. 10, 1914 on mincemeat; 1917 on maraschino type cherries; 1918 on sauerkraut, canned beans with and without pork and tomato sauce, catsup and fruit juices for food purposes; 1919 on jams, jellies, fruit preserves, marmalades and tomato sauce; 1920 on canned hominy, olives, fresh vegetables, fruit butter, apple sauce and cranberry sauce; Sept. 22, 1921 on canned fish, pickles, mustard, chow-chow, pickle relishes and chili sauce; 1924 on vinegar and vegetable oil; June 11, 1929 on coffee; Oct. 11, 1929 on tomato juice; Mar. 18, 1930 on honey, meat sauces, mayonnaise, ravioli, soup, evaporated milk, gelatine, sauerkraut juice, tamales, spices, peanut butter, salted nuts, shortening, flavoring extracts for food purposes and sugar and maple syrup; Apr. 9, 1930 on canned meat—namely, canned chicken; Apr. 25, 1930 on tapioca, macaroni, noodles, spaghetti, cornstarch, farina, dry rice, tea, sugar, cookies, dried vegetables, candies and cocoa.

Ser. No. 319,267. TRIPOLI FOODS, INCORPORATED, Baltimore, Md. Filed Sept. 21, 1931.

KRE-ME

For Potato Salad.
Claims use since June 8, 1931.

Ser. No. 320,885. THE BAMA COMPANY, doing business as Ancco Preserving Co., Birmingham, Ala. Filed Nov. 7, 1931.



For Fruit Preserves and Peanut Butter.
Claims use since Aug. 1, 1931.

Ser. No. 321,641. FREIHOFER BAKING COMPANY, Philadelphia, Pa. Filed Dec. 1, 1931.

Thrifty Twins

For Breads, Cakes, Buns, Muffins, Doughnuts, and Crullers.
Claims use since Apr. 27, 1931.

Ser. No. 321,969. PURITAN MILLS, INCORPORATED, Atlanta, Ga. Filed Dec. 9, 1931.



The word "Variety" is disclaimed apart from the mark as shown on the drawing.
For Mixed Feeds for Poultry, Horses and Mules, and Cows.
Claims use since Apr. 1, 1930.

Ser. No. 322,287. HARTWIG & VOGEL AKTIENGESELLSCHAFT, Dresden, Germany. Filed Dec. 19, 1931.

Tell

For Cacao, Chocolate, Sugar-Wares, Confectionery Articles and Bake-Wares—Namely, Chocolate Slabs, Chocolate Cakes, Cocoa, Cacaobutter, Caramels, Hard Candy, Dragees, Fondants, Almond Paste Goods, Honey Cakes, Wafers, Biscuits, Gingerbread, Pastry Desserts, Fruit Pastes.
Claims use since Nov. 28, 1908.

Ser. No. 322,836. SOUTHERN DAIRIES, INC., Washington, D. C. Filed Jan. 8, 1932.

CHOCKOW

For Frozen Confections Comprising a Body Composed of a Frozen Milk Product and a Coating of Edible Substance.
Claims use since Dec. 8, 1931.

Ser. No. 322,837. SOUTHERN DAIRIES, INC., Washington, D. C. Filed Jan. 8, 1932.



For Frozen Confections Comprising a Body Composed of a Frozen Milk Product and a Coating of Edible Substance.
Claims use since Dec. 8, 1931.

Ser. No. 322,838. SOUTHERN DAIRIES, INC., Washington, D. C. Filed Jan. 8, 1932.



For Frozen Confections Comprising a Body Composed of a Frozen Milk Product and a Coating of Edible Substance.
Claims use since Dec. 8, 1931.

Ser. No. 323,504. JEAN SUARIS GINTOTAHEVAGE, Marseilles, France. Filed Jan. 27, 1932.

SUARI'S FAMOUS "CURRY SAUCE"



Applicant hereby disclaims the words "Curry Sauce" and "Trade Mark", apart from the mark as shown in the drawing.

The non-Latin characters appearing around the reproduction of the elephant and the monument are Cingalese and Hindustan characters respectively meaning in English: "The World's Best Sauce." Applicant likewise disclaims these characters, apart from the mark as shown in the drawing.

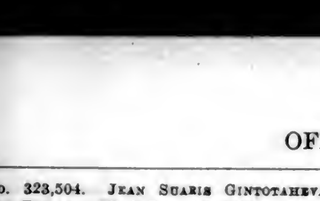
For Curry Sauce.

Claims use since Dec. 29, 1931.

Ser. No. 323,538. HORMANN-KAESS CO. INC., New York, N. Y. Filed Jan. 28, 1932.

ORIGINAL BAVARIAN

MAXL'S



For Restaurant Foods—Namely, Cooked Meats Including Beef, Lamb, Pork; Cooked Fowl Including Chicken, Duck, Turkey, Goose; Cooked Vegetables Including String Beans, Peas, Spinach, Cabbages; for Baked Products—Namely, Pies, Cakes, Tarts.

Claims use since Apr. 1, 1930.

Ser. No. 324,568. THE OLDS PRODUCTS CO., Chicago, Ill. Filed Feb. 27, 1932.

GOOD GRAVY!

No claim is made to the word "Good" separate and apart from the combination shown in the drawing.

For Food Relishes, Salad Spreads, Salad Dressing, Pickles, Barbecue Sauce, and Prepared Mustard.

Claims use since Nov. 11, 1931.

Ser. No. 324,764. SOLO PRODUCTS CO., Chicago, Ill. Filed Mar. 3, 1932.



The lining in the drawing indicates blue color.

For Canned Mushrooms, Anchovies, Filets of Anchovies, Dried Currants, Tea, Saffron for Flavoring and Coloring, Herbs for Food Purposes, Canned Red Peppers, and Coffee.

Claims use since 1910 on canned red peppers; since 1916 on the remaining goods.

Ser No. 325,414. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Mar. 23, 1932.



The drawing is lined to indicate the colors red and green.

For Poultry Feeds.

Claims use since Jan. 27, 1932.

Ser. No. 326,016. LUCKY BREAK CO., San Diego, Calif. Filed Apr. 12, 1932.

Lucky Break

For Ice Cream and Frozen Confections.

Claims use since March, 1931.

Ser. No. 326,280. JOEL R. BIDWELL, doing business as Mother's Drumstick Sandwich Company, Dallas Tex. Filed Apr. 20, 1932.

Mother's DRUMSTICK



SANDWICH

The descriptive word "Sandwich" is disclaimed apart from the mark as shown on the drawing. Representation of the goods shown on the drawing is disclaimed apart from the mark as shown.

For Sandwiches Made of Pork and Beef.

Claims use since Jan. 1, 1931.

Ser. No. 326,773. ANTONIO ALONSO, HIJOS, Vigo, Spain. Filed May 5, 1932.



No claim is made to the exclusive use of the word "Brand."

For Canned Fish.

Claims use since 1910.

Ser. No. 326,812. FLORIDA CITRUS EXCHANGE, Tampa, Fla. Filed May 6, 1932.

Jucypak

For Canned Citrus Fruits.

Claims use since Jan. 27, 1932.

Ser. No. 326,813. FLORIDA CITRUS EXCHANGE, Tampa, Fla. Filed May 6, 1932.

SEAL of FLORIDA

For Canned Citrus Fruits.

Claims use since Jan. 27, 1932.

Ser. No. 326,987. JOHN D. NUNAN, receiver for The American Barley Corporation, Minneapolis, Minn. Filed May 11, 1932.

CREAM of BARLEY

No claim being made to the exclusive use of the word "Barley" apart from the mark shown in the drawing.

For Cereal Breakfast Foods.

Claims use since July 1, 1914.

Ser. No. 327,028. L. RUBIN & SON, INC., doing business as Blumas Choc-O-Lac Co., Brooklyn, N. Y. Filed May 12, 1932.

CHOC-O-LAC

For Chocolate Syrups, a Food Preparation Containing Cocoa, Malt and Sugar.

Claims use since January, 1918.

Ser. No. 327,082. BLUE PLATE FOODS, INC., New Orleans, La. Filed May 12, 1932.

BLUE PLATE

For Sauce or Condiment—Namely, a Liquid, Spicy Table Sauce, Used for Seasoning Soups, Gravies, Meats, Game, Fish and Vegetables.

Claims use since Nov. 5, 1931.

Ser. No. 327,173. HAGOP TAKVORIAN, doing business as James H. Takvorian, Modesto, Calif. Filed May 16, 1932.

CALIFORNIAN

For Fresh Apples.

Claims use since Apr. 26, 1932.

Ser. No. 327,196. WALTER OLDFIELD, Springfield, Mass. Filed May 17, 1932.

BRIDGE CLUB

For Tea and Coffee.

Claims use since May 6, 1932.

Ser. No. 327,245. COOPER SUPPLY COMPANY, Philadelphia, Pa. Filed May 19, 1932.

NAMAR

For Caviar, Mayonnaise, Cooking Wine, Canned Crushed Fruits in Syrup, Canned Table Syrups for Food Purposes, Olives, and Tomato Juice.
Claims use since May, 1929.

Ser. No. 327,487. SUPERIOR PACKING CORP., New York, N. Y. Filed May 26, 1932.

Superior



Applicant disclaims the word "Superior" apart from the mark as shown in the drawing.
For Dried Pea Beans, Dried Lima Beans, Dried Marrow Beans, Dried Green Split Peas, Dried Yellow Split Peas, Dried Lentils, and Rice.
Claims use since Feb. 6, 1932.

Ser. No. 327,509. THE ICE CREAM SANDWICH CORPORATION, Long Island City, N. Y. Filed May 27, 1932.



The words "Frozen Pattie" are disclaimed apart from the mark shown.
For Ice Cream Confections.
Claims use since May 15, 1932.

Ser. No. 327,566. PRIVATE BRANDS, INC., New York, N. Y. Filed May 28, 1932.

HADASSAH

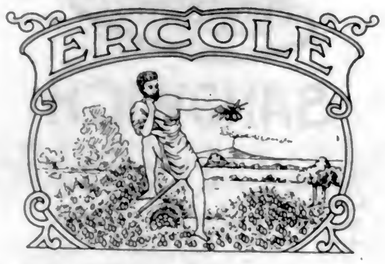
For Canned Mixed Fruits, Canned Mixed Vegetables, Salad Dressing, Cakes, Jam and Pickles.
Claims use since May 24, 1932.

Ser. No. 327,766. PLANTERS NUT & CHOCOLATE COMPANY, Suffolk, Va., and Wilkes-Barre, Pa. Filed June 6, 1932.

PENNY LUNCH

No claim is made to the word "Penny" apart from the mark as shown.
For Salted Peanuts and Peanut Bars.
Claims use since June, 1930.

Ser. No. 327,905. DOMENICO D'ANGIOLA, New York, N. Y. Filed June 11, 1932.



For Canned Peeled Tomatoes.
Claims use since Apr. 15, 1932.

Ser. No. 327,942. MEAD JOHNSON & COMPANY, Evansville, Ind. Filed June 13, 1932.

PABLUM

For Specially Prepared Cereal Food Consisting of a Mixture of Wheat Meal, Oatmeal and Yellow Corn Meal, to Which Have Been Added Wheat Embryo, Dried Yeast, Powdered Dehydrated Alfalfa Leaf and Powdered Beef Bone Prepared for Human Use.
Claims use since June 4, 1932.

Ser. No. 327,943. NORTH WHITTIER HEIGHTS CITRUS ASSOCIATION, Puente, Calif. Filed June 13, 1932.

ARCHERY

For Fresh Citrus Fruit.
Claims use since May 6, 1932.

Ser. No. 327,948. SANTA CLARA PEAR ASSOCIATION, San Jose, Calif. Filed June 13, 1932.

GOLDEN SAILS

For Fresh Deciduous Fruit.
Claims use since May 15, 1932.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 327,704. THE PORTER CHEMICAL COMPANY, Hagerstown, Md. Filed June 8, 1932.



No claim is made to the words "Cartoon Lessons" apart from the mark shown in the drawing.
For Outfits or Sets Containing Drawing Materials, Such as Pencils, Pens, Crayons, Brushes, Ink, Paper, Erasers, and Instruction Books for Use in Making and/or Teaching the Making of Drawings and Cartoons.
Claims use since Mar. 29, 1932.

Ser. No. 327,789. DU PONT CELLOPHANE COMPANY, INC., New York, N. Y. Filed June 7, 1932.

CELLOPHANE

For Sheets and Films of Cellulose, Transparent, Opaque, Colored or Uncolored, Metallized, Embossed, Ornamented or Plain, Moistureproof or Otherwise.
Claims use since April, 1908.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JULY 19, 1932

295,882. JEWELRY FOR PERSONAL WEAR, NOT INCLUDING WATCHES. The D. Jacobs Sons Co., Cincinnati, Ohio.
Filed July 17, 1931. Serial No. 317,041. PUBLISHED SEPTEMBER 8, 1931. Class 28.

295,883. RADIO RECEIVING SETS. Clago Radio Corporation, Chicago, Ill.
Filed July 29, 1931. Serial No. 317,424. PUBLISHED APRIL 19, 1932. Class 21.

295,884. CANNED TOMATO JUICE. Campbell Soup Company, Camden, N. J.
Filed August 26, 1931. Serial No. 318,438. PUBLISHED MAY 3, 1932. Class 46.

295,885. PERFORATORS FOR PREPARING AND HOLDERS FOR HOLDING CIGARS, CIGARETTES, AND THE LIKE DURING SMOKING. The General Timber and Lumber Company, Cleveland, Ohio.
Filed August 28, 1931. Serial No. 318,517. PUBLISHED MAY 10, 1932. Class 8.

295,886. SOUND RECORDING AND REPRODUCING APPARATUS. Thomas A. Edison, Incorporated, West Orange, N. J.
Filed September 12, 1931. Serial No. 318,979. PUBLISHED APRIL 19, 1932. Class 36.

295,887. SOAPS AND SHAVING CREAMS. Fred W. Davis, New York, N. Y.
Filed September 28, 1931. Serial No. 319,474. PUBLISHED MAY 10, 1932. Class 4.

295,888. ELECTRICAL RECTIFYING AND FILTERING DEVICES AND CONDENSIVE ELEMENTS. Square D Company, Detroit, Mich.
Filed October 19, 1931. Serial No. 320,215. PUBLISHED APRIL 26, 1932. Class 21.

295,889. CERTAIN NAMED SANITARY AND SURGICAL ARTICLES. Jacob Stein, doing business as Climax Rubber Company, New York and Brooklyn N. Y.
Filed October 31, 1931. Serial No. 320,704. PUBLISHED MAY 10, 1932. Class 44.

295,890. RADIO TRANSMITTING AND RECEIVING APPARATUS AND PARTS THEREOF. National Company, Inc., Malden, Mass.
Filed November 16, 1931. Serial No. 321,168. PUBLISHED APRIL 26, 1932. Class 21.

295,891. RADIO ELECTRON TUBES. National Union Radio Corporation, Newark, N. J.
Filed November 23, 1931. Serial No. 321,434. PUBLISHED APRIL 19, 1932. Class 21.

295,892. CANNED FRUITS, VEGETABLES, FISH, ETC. Quaker City Wholesale Grocery Company, Inc., Philadelphia, Pa.
Filed November 30, 1931. Serial No. 321,614. PUBLISHED MAY 10, 1932. Class 46.

295,893. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville Okla.
Filed December 1, 1931. Serial No. 321,665. PUBLISHED APRIL 19, 1932. Class 15.

295,894. GROCERIES. Nashua Baking Company, Inc. Nashua, N. H.
Filed December 8, 1931. Serial No. 321,915. PUBLISHED MAY 3, 1932. Class 46.

295,895. FRUIT FLAVORED MILK FOOD BEVERAGE Big Ben Beverage Corporation, St. Louis, Mo.
Filed December 9, 1931. Serial No. 321,943. PUBLISHED MAY 3, 1932. Class 46.

295,896. GRAPHITE COMPOUNDS FOR LUBRICATING. Whirlwind Carburetor Company, Milwaukee, Wis.
Filed December 12, 1931. Serial No. 322,075. PUBLISHED APRIL 26, 1932. Class 15.

295,897. MONTHLY MAGAZINE. National Catholic Welfare Conference, Washington, D. C.
Filed January 21, 1932. Serial No. 323,271. PUBLISHED MAY 10, 1932. Class 38.

295,898. SECTION OF A NEWSPAPER. Alvin I. Gardner, Pittsburgh, Pa.
Filed December 21, 1931. Serial No. 322,350. PUBLISHED MAY 10, 1932. Class 38.

295,899. LUBRICATING OILS. Alemite Company of Iowa, Davenport, Iowa.
Filed January 28, 1932. Serial No. 323,554. PUBLISHED APRIL 26, 1932. Class 15.

295,900. A CRYSTAL POWDER CLEANING PREPARATION. B B Products Corporation, New York, N. Y.
Filed December 31, 1931. Serial No. 322,569. PUBLISHED MAY 10, 1932. Class 4.

295,901. PORTABLE TABLE OR DESK ELECTRIC LAMPS. The Greist Manufacturing Company, New Haven, Conn.
Filed January 4, 1932. Serial No. 322,604. PUBLISHED APRIL 19, 1932. Class 21.

295,902. TURPENTINE AND PINE OIL. Louisiana Pine Products Company, Inc., Shreveport, La.
Filed January 9, 1932. Serial No. 322,848. PUBLISHED MAY 3, 1932. Class 16.

295,903. ELECTRICALLY DRIVEN PORTABLE AIR HAMMERS. Portable Air Hammer Company, Inc., New York, N. Y.
Filed January 12, 1932. Serial No. 322,942. PUBLISHED APRIL 26, 1932. Class 21.

295,904. RADIO RECEIVING, DETECTING, AND TRANSMITTING SETS AND PARTS THEREOF. Columbia Phonograph Company, Inc., Bridgeport, Conn.
Filed January 21, 1932. Serial No. 323,272. PUBLISHED APRIL 19, 1932. Class 21.

295,905. STAMPING AND PRINTING INKS AND INK SOLVENTS NOT INCLUDING ORDINARY INK ERADICATORS. Kaumagraph Company, New York, N. Y.
Filed January 23, 1932. Serial No. 323,334. PUBLISHED MAY 10, 1932. Class 11.

295,906. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,683. PUBLISHED APRIL 19, 1932. Class 15.

295,907. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,695. PUBLISHED APRIL 19, 1932. Class 15.

295,908. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,699. PUBLISHED APRIL 26, 1932. Class 15.

295,909. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,700. PUBLISHED APRIL 26, 1932. Class 15.

295,910. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,701. PUBLISHED APRIL 26, 1932. Class 15.

295,911. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,702. PUBLISHED APRIL 26, 1932. Class 15.

295,912. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,703. PUBLISHED APRIL 26, 1932. Class 15.

295,913. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,704. PUBLISHED APRIL 26, 1932. Class 15.

295,914. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,706. PUBLISHED APRIL 26, 1932. Class 15.

295,915. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,708. PUBLISHED APRIL 26, 1932. Class 15.

295,916. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,709. PUBLISHED APRIL 26, 1932. Class 15.

295,917. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,710. PUBLISHED APRIL 26, 1932. Class 15.

295,918. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,711. PUBLISHED APRIL 26, 1932. Class 15.

295,919. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,712. PUBLISHED APRIL 26, 1932. Class 15.

295,920. MOTOR FUEL OILS AND LUBRICATING OILS. Phillips Petroleum Company, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,713. PUBLISHED APRIL 26, 1932. Class 15.

295,921. ELECTRIC VACUUM CLEANERS. Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa.
Filed February 1, 1932. Serial No. 323,782. PUBLISHED APRIL 26, 1932. Class 21.

295,922. WATER REPELLENT TO BE USED ON WIND-SHIELDS AND GLASS. Robert C. Dosse, Hoboken, N. J.
Filed February 2, 1932. Serial No. 323,742. PUBLISHED MAY 3, 1932. Class 4.

295,923. CLARINETS, FLUTES, PICCOLOS, ETC. Harry Bettoney, doing business as Cundy-Bettoney Co., Boston, Mass.
Filed February 2, 1932. Serial No. 323,801. PUBLISHED APRIL 26, 1932. Class 36.

295,924. ELECTRIC DISPLAY SIGNS AND PARTS THEREOF. Emile S. Guignon, Jr., Kansas City, Mo., assignor to Point-O-Purchase Company, Kansas City, Mo., a Corporation of Missouri.
Filed February 4, 1932. Serial No. 323,815. PUBLISHED APRIL 19, 1932. Class 21.

295,925. LUBRICATING OILS AND GREASES. Standard Oil Company, Whiting, Ind., and Chicago, Ill.
Filed February 5, 1932. Serial No. 323,877. PUBLISHED APRIL 26, 1932. Class 15.

295,926. SELF-CONTAINED UNITS FOR VARYING THE CAPACITY OF RADIO RECEIVING SET ANTENNÆ. Stern & Co., Philadelphia, Pa.
Filed February 6, 1932. Serial No. 323,917. PUBLISHED APRIL 19, 1932. Class 21.

295,927. WELDING ELECTRODES. Atlantic Steel Company, Atlanta, Ga.
Filed February 10, 1932. Serial No. 324,028. PUBLISHED MAY 3, 1932. Class 14.

295,928. WELDING RODS. Atlantic Steel Company, Atlanta, Ga.
Filed February 10, 1932. Serial No. 324,029. PUBLISHED MAY 3, 1932. Class 14.

295,929. PERIODICAL. The Clayton Magazines, Inc., New York, N. Y.
Filed February 10, 1932. Serial No. 324,030. PUBLISHED MAY 10, 1932. Class 38.

295,930. AUTOMOBILE BODY POLISH. Royal Saxon Company, Inc., Bound Brook, N. J.
Filed February 12, 1932. Serial No. 324,118. PUBLISHED MAY 3, 1932. Class 16.

295,931. A VITAMIN B FOOD—NAMELY, YEAST. Crown Laboratories, Ogdensburg, N. Y.
Filed February 12, 1932. Serial No. 324,187. PUBLISHED MAY 10, 1932. Class 46.

295,932. SOAP. Polk Miller Products Corp., Richmond, Va.
Filed February 15, 1932. Serial No. 324,189. PUBLISHED MAY 10, 1932. Class 4.

295,933. PAINTED AND ENAMELED SIGNS USED FOR MECHANICAL AND BUSINESS ADVERTISING PURPOSES, EMBLEMS, AND NAMEPLATES. Leo M. Van Wagner, Far Rockaway, N. Y.
Filed February 15, 1932. Serial No. 324,202. PUBLISHED MAY 3, 1932. Class 50.

295,934. LUBRICATING OILS. Willhelm Lubrication Company, St. Paul, Minn.
Filed February 15, 1932. Serial No. 324,204. PUBLISHED APRIL 26, 1932. Class 15.

295,935. FROZEN CONFECTIONS. New Health Foods Company, Tulsa, Okla.
Filed February 16, 1932. Serial No. 324,229. PUBLISHED MAY 3, 1932. Class 46.

295,936. SET OR OUTFIT OF TOOLS AND SUPPLIES FOR USE WITH TYPEWRITING MACHINES BY TYPISTS AND STENOGRAPHERS, SAID OUTFIT CONSISTING OF RIBBON RENEWER, PLATEN RENEWER, PLATEN GRINDER, TYPE CLEANER, TYPEWRITER OIL, AND TYPEWRITER BRUSHES. Sten-O-Aide, Inc., Grand Rapids, Mich.
Filed February 16, 1932. Serial No. 324,234. PUBLISHED MAY 3, 1932. Class 50.

295,937. RAW AND PARTLY PREPARED IRON. Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany.
Filed February 16, 1932. Serial No. 324,238. PUBLISHED MAY 3, 1932. Class 14.

295,938. ELECTRICAL GOODS AND APPARATUS. Edwards and Company, Inc., New York, N. Y.
Filed February 17, 1932. Serial No. 324,247. PUBLISHED APRIL 19, 1932. Class 21.

295,939. CARBON REMOVING LUBRICATING OILS. LEONARD G. SEFING, doing business as Len-Pep Company, Allentown, Pa.
Filed February 20, 1932. Serial No. 324,360. PUBLISHED APRIL 19, 1932. Class 15.

295,940. LASTS AND TREES FOR BOOTS AND SHOES. THE CANADA LAST COMPANY LIMITED, Preston, Ontario, Canada.
Filed February 23, 1932. Serial No. 324,367. PUBLISHED MAY 10, 1932. Class 50.

295,941. SOAPS. S. H. KRESS & CO., New York, N. Y.
Filed February 23, 1932. Serial No. 324,383. PUBLISHED MAY 10, 1932. Class 4.

295,942. POLISHES FOR STOVES, SHOES, AND METALS. CHARLES. N. SHOE, doing business as Primo Polish Manufacturing Company, Westfield, Mass.
Filed February 23, 1932. Serial No. 324,402. PUBLISHED MAY 3, 1932. Class 4.

295,943. LACQUER TYPE SEALER. THE MARIETTA PAINT & COLOR CO., Marietta, Ohio.
Filed February 24, 1932. Serial No. 324,442. PUBLISHED MAY 10, 1932. Class 16.

295,944. CONCENTRATED MALT SYRUP AS A FOOD PRODUCT. MILLER HIGH LIFE COMPANY, doing business as Milo Malt Co., Milwaukee, Wis.
Filed February 26, 1932. Serial No. 324,538. PUBLISHED MAY 10, 1932. Class 46.

295,945. DENTAL BURS. KIMBALL DENTAL MANUFACTURING CO., Chicago, Ill.
Filed February 27, 1932. Serial No. 324,565. PUBLISHED MAY 3, 1932. Class 44.

295,946. PREPARATION FOR USE BY DENTISTS IN REMOVING STAINS FROM AND IN CLEANING AND POLISHING TEETH. THE L. D. CAULK COMPANY, Milford, Del.
Filed March 1, 1932. Serial No. 324,658. PUBLISHED MAY 10 1932. Class 4.

295,947. SHOE POLISH. BENJAMIN GITTLEMAN, doing business as The Lincoln Shoe Products Mfg. Co., Providence, R. I.
Filed March 2, 1932. Serial No. 324,707. PUBLISHED MAY 3, 1932. Class 4.

295,948. CLEANING, POLISHING AND WHITENING FLUID OR POWDER FOR SHOES. BENJAMIN GITTLEMAN, doing business as The Lincoln Shoe Products Mfg. Co., Providence, R. I.
Filed March 2, 1932. Serial No. 324,708. PUBLISHED MAY 3, 1932. Class 4.

295,949. READY MIXED PAINT. INTER-COASTAL PAINT CORPORATION, East St. Louis, Ill.
Filed March 3, 1932. Serial No. 324,743. PUBLISHED MAY 3, 1932. Class 16.

295,950. PAINTS, ENAMELS AND VARNISHES. NAAMLOOZE VENNOOTSCHAP TOT VOORTZETTING DER ZAKEN VAN PIETER SCHOEN & ZOON, Zaandam, Netherlands.
Filed March 3, 1932. Serial No. 324,753. PUBLISHED MAY 3, 1932. Class 16.

295,951. MODIFIED COCOA BUTTER PREPARED FOR USE BY DENTISTS. THE L. D. CAULK COMPANY, Milford, Del.
Filed March 4, 1932. Serial No. 324,775. PUBLISHED MAY 10, 1932. Class 44.

295,952. CANE SYRUP. CAIRO SYRUP COMPANY, Atlanta, Ga.
Filed March 9, 1932. Serial No. 324,954. PUBLISHED MAY 10, 1932. Class 46.

295,953. PERIODICAL MAGAZINES. THE UNITED TELEPHONE AND ELECTRIC COMPANY, Kansas City, Mo.
Filed March 9, 1932. Serial No. 324,974. PUBLISHED MAY 3, 1932. Class 38.

295,954. SWEET CHOCOLATE AND CHOCOLATE PASTILLES. CHOCOLAT SUCHARD SOCIETE ANONYME, Neuchatel, Switzerland.
Filed August 25, 1931. Serial No. 318,391. PUBLISHED MAY 10, 1932. Class 46.

295,955. WRAPPING AND COVERING MATERIAL IN SHEET FORM MADE OF PAPER, GLASSINE, GELATIN, CELLOPHANE, OR THE LIKE. PACKAGE PAPER COMPANY, Holyoke, Mass.
Filed September 4, 1931. Serial No. 318,744. PUBLISHED MAY 3, 1932. Class 37.

295,956. NATURAL MINERAL WATERS. HENRY K. ADAMS, doing business as NaCalsun Company, Eugene, Oreg.
Filed November 4, 1931. Serial No. 320,788. PUBLISHED MAY 10, 1932. Class 45.

295,957. COFFEE. THE DEAN-LILLY COFFEE AND SPICE COMPANY, doing business as Dean's, Memphis, Tenn.
Filed November 17, 1931. Serial No. 321,190. PUBLISHED MAY 10, 1932. Class 46.

295,958. BAKED BEANS. BURNHAM & MORRILL COMPANY, Portland, Me.
Filed December 7, 1931. Serial No. 321,838. PUBLISHED MAY 3, 1932. Class 46.

295,959. CANDY. SEARS, ROEBUCK AND CO., doing business as Peggy Kellogg Kottage Kandy Co., Chicago, Ill.
Filed December 31, 1931. Serial No. 322,603. PUBLISHED MAY 3, 1932. Class 46.

295,960. SAUSAGE AND SCRAPPLE. F. G. VOGT & SONS, INCORPORATED, Philadelphia, Pa.
Filed January 4, 1932. Serial No. 322,718. PUBLISHED MAY 10, 1932. Class 46.

295,961. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND EXTRACTS FOR MAKING THE SAME. JACOB S. POLEFSKY, New York, N. Y.
Filed January 13, 1932. Serial No. 322,971. PUBLISHED MAY 10, 1932. Class 45.

295,962. LIVE STOCK—NAMELY, CATTLE. GARAT & COMPANY, Whiterock, Nev.
Filed February 4, 1932. Serial No. 323,814. PUBLISHED MAY 10, 1932. Class 46.

295,963. COIN-CONTROLLED BALL-PROJECTING AMUSEMENT GAME. THE LUCKY STRIKE MANUFACTURING COMPANY, INCORPORATED, Baltimore, Md.
Filed February 10, 1932. Serial No. 324,044. PUBLISHED MAY 3, 1932. Class 22.

295,964. PLATANE CHIPS PACKED IN PAPER BAGS. BANANOLA SOUTH SEAS PRODUCTS COMPANY, New York, N. Y.
Filed February 19, 1932. Serial No. 324,307. PUBLISHED MAY 3, 1932. Class 46.

295,965. TABLE BOARD GAME PLAYED WITH PIECES. JOHN W. WITKO, Wilkes-Barre, Pa.
Filed February 19, 1932. Serial No. 324,329. PUBLISHED MAY 10, 1932. Class 22.

295,966. SOUND RECORDING AND REPRODUCING APPARATUS. THOMAS A. EDISON, INCORPORATED, West Orange, N. J.
Filed February 27, 1932. Serial No. 324,551. PUBLISHED APRIL 26, 1932. Class 36.

295,967. DOLLS. PORTIA SPERRY, Nashville, Ind.
Filed March 1, 1932. Serial No. 324,672. PUBLISHED MAY 3, 1932. Class 22.

295,968. MEAL FOR HUMAN CONSUMPTION MANUFACTURED FROM NUT KERNELS. PECANO MANUFACTURING COMPANY, Manheim, Pa.
Filed March 2, 1932. Serial No. 324,721. PUBLISHED MAY 10, 1932. Class 46.

295,969. PLAYING CARDS. THE UNITED STATES PLAYING CARD COMPANY, East Norwood, Cincinnati, Ohio.
Filed March 4, 1932. Serial No. 324,807. PUBLISHED MAY 10, 1932. Class 22.

295,970. TOILET PAPER AND PAPER FACIAL TISSUES. GOTHAM TISSUE CORPORATION, New York, N. Y.
Filed March 8, 1932. Serial No. 324,886. PUBLISHED APRIL 26, 1932. Class 37.

295,971. CARBONIC ICE UNITS AND ARTIFICIAL REFRIGERATING UNITS AND PARTS THEREOF. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed March 8, 1932. Serial No. 324,894. PUBLISHED MAY 3, 1932. Class 31.

295,972. DIVIDER OIL AND TROUGH GREASE USED BY BAKERS FOR LUBRICATING AND GREASING PANS AND OTHER EQUIPMENT. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed March 8, 1932. Serial No. 324,897. PUBLISHED APRIL 26, 1932. Class 15.

295,973. SMOKING TOBACCO. HELEN SCHACHTER, doing business as Négyes Tobacco Shop, New York, N. Y.
Filed March 8, 1932. Serial No. 324,907. PUBLISHED MAY 3, 1932. Class 17.

295,974. SMOKING TOBACCO. HELEN SCHACHTER, doing business as Négyes Tobacco Shop, New York, N. Y.
Filed March 8, 1932. Serial No. 324,908. PUBLISHED MAY 3, 1932. Class 17.

295,975. PAPER SUITABLE FOR USE AS WRAPPING PAPER AND FOR SIMILAR PURPOSES. BROWN COMPANY, Portland, Me., and Berlin, N. H.
Filed March 9, 1932. Serial No. 324,953. PUBLISHED APRIL 26, 1932. Class 37.

295,976. CLAY PIGEONS. THE CHAMBERLAIN CARTRIDGE & TARGET CO., Cleveland, Ohio.
Filed March 9, 1932. Serial No. 324,955. PUBLISHED MAY 3, 1932. Class 22.

295,977. PACKING CONTAINERS MADE FROM GLASS SUCH AS JARS, BOTTLES, AND CANS. CROWN CORK & SEAL COMPANY, INC., Baltimore, Md.
Filed March 10, 1932. Serial No. 324,990. PUBLISHED MAY 3, 1932. Class 33.

295,978. GAME, PARTICULARLY A GAME OF SKILL WHERE A BALL IS THROWN INTO ONE OF A PLURALITY OF HOLES IN THE BOTTOM OF A BASKET OR THE LIKE. ROBT. EDWARD MORGAN, New York, N. Y.
Filed March 14, 1932. Serial No. 325,106. PUBLISHED MAY 3, 1932. Class 22.

295,979. HAND OPERATED TOY CONSISTING OF A NOTCHED SUPPORT HAVING A SPINNER MOUNTED ON AN END THEREOF. ADOLPH W. ZITZMAN, Chicago, Ill.
Filed March 15, 1932. Serial No. 325,159. PUBLISHED MAY 3, 1932. Class 22.

295,980. POTATO WAFFLES. THE COLORADO POTATO FLAKE & MANUFACTURING COMPANY, Denver, Colo.
Filed March 16, 1932. Serial No. 325,162. PUBLISHED MAY 10, 1932. Class 46.

295,981. EXERCISING MACHINES. WALLACE G. GROSSMAN, New York, N. Y.
Filed March 19, 1932. Serial No. 325,289. PUBLISHED MAY 10, 1932. Class 22.

295,982. DOLLS. IDEAL NOVELTY & TOY CO., Brooklyn, N. Y.
Filed March 19, 1932. Serial No. 325,291. PUBLISHED MAY 10, 1932. Class 22.

295,983. CANDIED CITROUS FRUIT PEEL. LAURA LOVETT, Sunnyside, L. I., N. Y.
Filed March 22, 1932. Serial No. 325,369. PUBLISHED MAY 3, 1932. Class 46.

295,984. DOLLS. THE FAIR, Chicago, Ill.
Filed March 23, 1932. Serial No. 325,399. PUBLISHED MAY 3, 1932. Class 22.

295,985. TOY BOATS. MAINE YACHT CORPORATION, Dover-Foxcroft, Me.
Filed March 24, 1932. Serial No. 325,436. PUBLISHED MAY 10, 1932. Class 22.

295,986. EXERCISERS FOR BABIES. MOE SIMON, doing business as M. Simon & Co., New York, N. Y.
Filed March 24, 1932. Serial No. 325,444. PUBLISHED MAY 3, 1932. Class 22.

295,987. FRESH VEGETABLES. BENEDICT MOCHO, San Jose, Calif.
Filed March 25, 1932. Serial No. 325,480. PUBLISHED MAY 3, 1932. Class 46.

295,988. COIN-CONTROLLED BALL-PROJECTING AMUSEMENT DEVICE. GEORGE D. BAROK, doing business as The Barok Company, Columbus, Ohio.
Filed March 26, 1932. Serial No. 325,508. PUBLISHED MAY 10, 1932. Class 22.

295,989. FRESH VEGETABLES. BELLUOMINI & KLEIN, Walnut Grove, Calif.
Filed March 26, 1932. Serial No. 325,509. PUBLISHED MAY 3, 1932. Class 46.

295,990. FOOT BALLS AND BASKET BALLS. THE DRAPER-MAYNARD COMPANY, Plymouth, N. H.
Filed March 26, 1932. Serial No. 325,517. PUBLISHED MAY 3, 1932. Class 22.

295,991. GOLF BALLS. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed March 26, 1932. Serial No. 325,536. PUBLISHED MAY 3, 1932. Class 22.

295,992. PLAYING CARDS. BID-RITE PLAYING CARD CORPORATION, New York, N. Y.
Filed March 29, 1932. Serial No. 325,613. PUBLISHED MAY 3, 1932. Class 22.

295,993. FROZEN FISH FILLETS. HENRY & CLOSE CO., Boston, Mass.
Filed March 30, 1932. Serial No. 325,654. PUBLISHED MAY 10, 1932. Class 46.

295,994. NON-ALCOHOLIC, MALTLESS BEVERAGES, SOLD AS SOFT DRINKS. MARIO BRUSCIA, Brooklyn, N. Y.
Filed March 31, 1932. Serial No. 325,679. PUBLISHED MAY 3, 1932. Class 45.

295,995. FRESH CITRUS FRUITS. EAST WHITTIER CITRUS ASSOCIATION, Whittier, Calif.
Filed April 2, 1932. Serial No. 325,747. PUBLISHED MAY 10, 1932. Class 46.

295,996. ATHLETIC APPLIANCES—NAMELY, ROWING MACHINES. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y.
Filed April 2, 1932. Serial No. 325,753. PUBLISHED MAY 10, 1932. Class 22.

295,997. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES, AND FOR SYRUPS, AND COMPOUNDS IN THE FORM OF POWDERS, CUBES, AND PELLETS USED IN THE PREPARATION OF SUCH BEVERAGES. P. J. KASPER SONS CO., Chicago, Ill.
Filed April 5, 1932. Serial No. 325,827. PUBLISHED MAY 10, 1932. Class 45.

295,998. CONCRETE MOLDED PRODUCTS—NAMELY, LIGHT WEIGHT TILE AND BLOCKS. UNITED STATES GYPSUM COMPANY, Chicago, Ill.
Filed November 30, 1928. Serial No. 276,053. PUBLISHED APRIL 26, 1932. Class 12.

295,999. CERTAIN NAMED PAINT PRODUCTS. THE HARVEL CORPORATION, Newark, N. J.
Filed July 11, 1929. Serial No. 286,936. PUBLISHED MAY 10, 1932. Class 16.

296,000. PENCILS AND PARTS THEREFOR. FRANK FUREDY, Penn-Wynne, Pa., assignor to George M. Hessdoerfer, Philadelphia, Pa.
Filed September 6, 1930. Serial No. 305,398. PUBLISHED MAY 10, 1932. Class 37.

296,001. HAIRCLOTH PIECE GOODS MADE OF COTTON AND HORSEHAIR AND USED AS AN INTERLINING FOR REINFORCEMENT OF CLOTHING. JOSEPH J. SCHEITER & CO., Philadelphia, Pa.
Filed September 6, 1930. Serial No. 305,417. PUBLISHED MAY 10, 1932. Class 42.

296,002. PREPARATION FOR EYE DISEASES. PEDRO LONGORIA, doing business as Farmacia Garza, Mercedes, Tex.
Filed January 9, 1931. Serial No. 309,783. PUBLISHED MAY 10, 1932. Class 6.

296,003. MILK, CREAM, BUTTERMILK, COTTAGE CHEESE, AND CHOCOLATE MILK. WALKER HILL DAIRY, INC., Washington, D. C.
Filed March 3, 1931. Serial No. 311,711. PUBLISHED MAY 3, 1932. Class 46.

296,004. CANNED CORN MUSH AND CANNED CHICKEN A LA KING. LA CHOY FOOD PRODUCTS, INC., Detroit, Mich.
Filed March 25, 1931. Serial No. 312,525. PUBLISHED MAY 3, 1932. Class 46.

296,005. ELECTRIC BATTERIES. EMARK BATTERY CORPORATION, West Orange, N. J.
Filed April 4, 1931. Serial No. 312,948. PUBLISHED APRIL 19, 1932. Class 21.

296,006. BED SPREADS. BATES MANUFACTURING COMPANY, Lewiston and Augusta, Me.
Filed April 11, 1931. Serial No. 313,224. PUBLISHED MAY 3, 1932. Class 42.

296,007. LIQUID TOILET SOAP. FISCHER'S SURFA-SAVER, INC., Cincinnati, Ohio.
Filed April 14, 1931. Serial No. 313,338. PUBLISHED MAY 10, 1932. Class 4.

296,008. ELECTRIC HEATING UNITS AND STOVES AND HEATERS EMBODYING SUCH UNITS. EDWIN L. WIEGAND COMPANY, Pittsburgh, Pa.
Filed May 4, 1931. Serial No. 314,184. PUBLISHED APRIL 19, 1932. Class 21.

296,009. WOOLEN FABRICS. WASHOUGAL WOOLEN MILLS, doing business as West Coast Woolen Mills, Ltd., Washougal, Wash.
Filed June 29, 1931. Serial No. 316,461. PUBLISHED MAY 3, 1932. Class 42.

296,010. ICE CREAM CONFECTION BAR AND ICE CREAM IN BRICK AND BULK FORM. BERT R. J. HASSELL, Rockford, Ill.
Filed July 6, 1931. Serial No. 316,644. PUBLISHED MAY 10, 1932. Class 46.

296,011. CARTOON STRIP. VIC FORSYTHE, Alhambra, Calif.
Filed July 6, 1931. Serial No. 316,673. PUBLISHED MAY 3, 1932. Class 38.

296,012. MALT SYRUP. L. J. STOPPER, doing business as Keystone Malt Company, Williamsport, Pa.
Filed December 15, 1930. Serial No. 309,010. PUBLISHED MAY 10, 1932. Class 46.

296,013. AFFIDAVITS SOLD TO THE TRADE AS SUCH. NOTARIZED USED CAR SYSTEMS INC., Detroit, Mich.
Filed January 29, 1931. Serial No. 310,525. PUBLISHED APRIL 26, 1932. Class 37.

296,014. BOOK PAPER. KIMBERLY-CLARK CORPORATION, Neenah, Wis.
Filed March 17, 1932. Serial No. 325,230. PUBLISHED APRIL 26, 1932. Class 37.

296,015. LEAD PENCILS. EBERHARD FABER PENCIL COMPANY, Brooklyn, N. Y.
Filed March 18, 1932. Serial No. 325,253. PUBLISHED APRIL 26, 1932. Class 37.

296,016. COLUMNS IN PERIODICALS. MAURICE BISGYER, Washington, D. C.
Filed March 16, 1932. Serial No. 325,204. PUBLISHED MAY 3, 1932. Class 38.

296,017. SILK AND ARTIFICIAL SILK YARD GOODS. HAHN DEPARTMENT STORES, INC., Wilmington, Del.
Filed March 18, 1932. Serial No. 325,259. PUBLISHED MAY 3, 1932. Class 42.

296,018. RECORD BOOKS. SAMUEL WARD MANUFACTURING COMPANY, Boston, Mass.
Filed March 19, 1932. Serial No. 325,307. PUBLISHED MAY 3, 1932. Class 37.

296,019. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed March 24, 1932. Serial No. 325,418. PUBLISHED MAY 3, 1932. Class 42.

296,020. TEXTILE CARPETS. HARDWICK & MAGEE COMPANY, Philadelphia, Pa.
Filed March 23, 1932. Serial No. 325,402. PUBLISHED MAY 10, 1932. Class 42.

296,021. WOVEN TEXTILE RUGS AND CARPETS. BIGELOW-SANFORD CARPET CO., INC., Thompsonville, Conn.
Filed March 25, 1932. Serial No. 325,456. PUBLISHED MAY 10, 1932. Class 42.

296,022. WOVEN TEXTILE RUGS AND CARPETS. BIGELOW-SANFORD CARPET CO., INC., Thompsonville, Conn.
Filed March 25, 1932. Serial No. 325,457. PUBLISHED MAY 3, 1932. Class 42.

296,023. WOVEN TEXTILE RUGS AND CARPETS. BIGELOW-SANFORD CARPET CO., INC., Thompsonville, Conn.
Filed March 25, 1932. Serial No. 325,458. PUBLISHED MAY 10, 1932. Class 42.

296,024. THREAD. THE GARDINER HALL JR. COMPANY, South Willington, Conn., and New York, N. Y.
Filed March 25, 1932. Serial No. 325,467. PUBLISHED MAY 3, 1932. Class 48.

296,025. WRITING AND PRINTING PAPER AND PAPETRIES. WHITE & WYCKOFF MFG. COMPANY, Holyoke and Riverside, Mass.
Filed March 25, 1932. Serial No. 325,494. PUBLISHED MAY 10, 1932. Class 37.

296,026. NEWSPAPER SECTION OR COLUMN. FRANCES WARD RICE, Syracuse, N. Y.
Filed March 26, 1932. Serial No. 325,531. PUBLISHED MAY 10, 1932. Class 38.

296,027. BOOKLETS. AMERICAN INSTITUTE OF BANKING, New York, N. Y.
Filed March 28, 1932. Serial No. 325,551. PUBLISHED MAY 10, 1932. Class 38.

296,028. MAGAZINE. POSTAGE AND THE MAILBAG, INC., Brooklyn, N. Y.
Filed March 29, 1932. Serial No. 325,621. PUBLISHED MAY 10, 1932. Class 38.

296,029. PREPARED MATRIX PAPER FOR STEREOTYPING. ARNOLD A. SCHWARTZ, Dunellen, N. J.
Filed March 29, 1932. Serial No. 325,623. PUBLISHED MAY 10, 1932. Class 37.

296,030. RAYON FABRICS IN THE PIECE. PRINCE LAUTEN CORP., New York, N. Y.
Filed April 1, 1932. Serial No. 325,724. PUBLISHED MAY 10, 1932. Class 42.

296,031. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed April 2, 1932. Serial No. 325,744. PUBLISHED MAY 10, 1932. Class 42.

296,032. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed April 2, 1932. Serial No. 325,746. PUBLISHED MAY 10, 1932. Class 42.

296,033. VELVETS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed April 4, 1932. Serial No. 325,803. PUBLISHED MAY 10, 1932. Class 42.

296,034. VELVETS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed April 4, 1932. Serial No. 325,804. PUBLISHED MAY 10, 1932. Class 42.

296,035. VELVETS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed April 4, 1932. Serial No. 325,805. PUBLISHED MAY 10, 1932. Class 42.

296,036. PERIODICAL PUBLICATION IN MAGAZINE FORM. G. A. SODEN & Co., Chicago, Ill.
Filed March 3, 1932. Serial No. 324,763. PUBLISHED APRIL 26, 1932. Class 38.

296,037. NEWSPAPER COLUMN IN DAILY NEWSPAPER. DAILY GRAPHIC, INC., New York, N. Y.
Filed March 1, 1932. Serial No. 324,660. PUBLISHED MAY 3, 1932. Class 38.

296,038. CRAYONS. BINNEY & SMITH CO., New York, N. Y.
Filed February 24, 1932. Serial No. 324,425. PUBLISHED MAY 3, 1932. Class 37.

296,039. TREATMENT FOR BALDNESS CONSISTING IN A LIQUID CHEMICAL SCALP-STIMULATING COMPOUND. D. L. MILLER, doing business as Millerine Company, Chicago, Ill.
Filed February 23, 1932. Serial No. 324,390. PUBLISHED MAY 10, 1932. Class 6.

296,040. PREPARATION FOR THE RELIEF OF RINGWORM OF THE FEET CAUSED BY THE PARASITE, TINEA TRICHOPHYTON. JOSEPH M. GORE, JR., doing business as Gore Products Co., New Orleans, La.
Filed February 20, 1932. Serial No. 324,344. PUBLISHED MAY 10, 1932. Class 6.

296,041. PREPARATION USED AS AN ANTISEPTIC GERMICIDE, ETC. POLK MILLER PRODUCTS CORP., Richmond, Va.
Filed February 16, 1932. Serial No. 324,231. PUBLISHED MAY 3, 1932. Class 6.

296,042. JAVAL WATER. LINCO PRODUCTS CORPORATION, Chicago, Ill.
Filed February 11, 1932. Serial No. 324,071. PUBLISHED MAY 3, 1932. Class 6.

296,043. ANTISEPTIC LIQUID, POWDER, AND PASTE. SAMUEL M. FINK, D. D. S., doing business as Elkton Drug Co., Elkton, Md.
Filed February 9, 1932. Serial No. 323,991. PUBLISHED MAY 3, 1932. Class 6.

296,044. A MEDICINE INTENDED FOR USE IN ALL CASES IN WHICH A RATIONAL PHOSPHORUS THERAPY IS NEEDED. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland.
Filed February 2, 1932. Serial No. 323,754. PUBLISHED MAY 10, 1932. Class 6.

296,045. MEDICINAL COMPOUND FOR THE TREATMENT OF WEAK LUNGS AND A RUN-DOWN SYSTEM. ROSINE E. RENFRO, Greenville, Ill.
Filed March 5, 1932. Serial No. 324,831. PUBLISHED MAY 3, 1932. Class 6.

296,046. WRITING PAPER. COAST ENVELOPE & LEATHER PRODUCTS CO., Los Angeles, Calif.
Filed September 15, 1931. Serial No. 319,229. PUBLISHED MAY 3, 1932. Class 37.

296,047. PERIODICAL AND/OR MONTHLY MAGAZINE. FREDERICK HEIZER WRIGHT, New York, N. Y.
Filed September 18, 1931. Serial No. 319,277. PUBLISHED MAY 10, 1932. Class 38.

296,048. PERIODICAL AND/OR MONTHLY MAGAZINE. FREDERICK HEIZER WRIGHT, New York, N. Y.
Filed September 18, 1931. Serial No. 319,278. PUBLISHED MAY 10, 1932. Class 38.

296,049. ASTRINGENTS, ASTRINGENT CERATES, BLEACH AND BEAUTY CREAMS, ETC. DORALDINA, INC., West Hollywood, Calif.
Filed October 27, 1931. Serial No. 320,495. PUBLISHED APRIL 26, 1932. Class 6.

296,050. REDUCING LOTION. GENERAL LABORATORIES, INC., Detroit, Mich.
Filed November 6, 1931. Serial No. 320,910. PUBLISHED MAY 10, 1932. Class 6.

296,051. ALTERATIVES, ANALGESICS, ANESTHETICS, ETC. SAMUEL G. MCLEAN, doing business as MacKee Drug Company, Oakland, Calif.
Filed November 9, 1931. Serial No. 320,938. PUBLISHED MAY 10, 1932. Class 6.

296,052. ANTISEPTIC TABLETS. CLAUDE W. WILLIAMS. Pawhuska, Okla.
Filed December 15, 1931. Serial No. 322,147. PUBLISHED MAY 10, 1932. Class 6.

296,053. MAGAZINE SECTION. MEREDITH PUBLISHING COMPANY, Des Moines, Iowa.
Filed December 21, 1931. Serial No. 322,323. PUBLISHED APRIL 26, 1932. Class 38.

296,054. WEEKLY JOURNAL DEVOTED EXCLUSIVELY TO THE TURF. THOS. B. CROMWELL, Lexington, Ky.
Filed January 28, 1932. Serial No. 323,555. PUBLISHED MAY 3, 1932. Class 38.

296,055. PREPARATIONS FOR SLEEPLESSNESS, EXHAUSTION, ETC. ASTA AKTIENGESELLSCHAFT, Brackwede, Germany.
Filed January 29, 1932. Serial No. 323,562. PUBLISHED MAY 10, 1932. Class 6.

296,056. ORDER BOOKS, LEDGER SHEETS, STATEMENTS, ETC. THE POTTER PRESS, Waltham, Mass.
Filed March 5, 1932. Serial No. 324,829. PUBLISHED MAY 3, 1932. Class 37.

296,057. CORNER MOUNTS FOR PHOTOGRAPHS. ACE ART COMPANY, Reading, Mass.
Filed March 5, 1932. Serial No. 324,814. PUBLISHED MAY 10, 1932. Class 37.

296,058. DRAFTS SENT OUT FOR COLLECTION PURPOSES. CREDITORS SERVICE TRUST COMPANY, Louisville, Ky.
Filed March 2, 1932. Serial No. 324,699. PUBLISHED APRIL 26, 1932. Class 37.

296,059. WAXED PAPER AND WRAPPING PAPER. NASHUA GUMMED & COATED PAPER CO., Nashua, N. H.
Filed February 27, 1932. Serial No. 324,567. PUBLISHED APRIL 26, 1932. Class 37.

296,060. CRETONNE PIECE GOODS. CHARLES BLOOM, INC., New York, N. Y.
Filed February 15, 1932. Serial No. 324,149. PUBLISHED MAY 3, 1932. Class 42.

296,061. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed February 11, 1932. Serial No. 324,059. PUBLISHED MAY 10, 1932. Class 42.

296,062. CERTAIN NAMED TEXTILE ARTICLES. S. H. KRESS & Co., New York, N. Y.
Filed January 23, 1932. Serial No. 323,340. PUBLISHED MAY 3, 1932. Class 42.

296,063. CERTAIN NAMED TEXTILE ARTICLES. THE LURGAN WEAVING COMPANY, LIMITED, Lurgan, Northern Ireland.
Filed October 29, 1931. Serial No. 320,595. PUBLISHED MAY 3, 1932. Class 42.

296,064. HAND PENCIL SHARPENERS AND HAND PENCIL SHARPENERS MOUNTED IN CONTAINERS. JERE L. WENTZ, doing business as Clifton Kraft Works, Clifton, N. J.
Filed October 2, 1931. Serial No. 319,754. PUBLISHED MAY 10, 1932. Class 37.

296,065. HANDWOVEN RUGS OF SILK, COTTON, AND MIXTURES OF SILK AND COTTON. NEW YORK STATE COMMISSION FOR THE BLIND, New York, N. Y.
Filed September 30, 1931. Serial No. 319,751. PUBLISHED MAY 10, 1932. Class 42.

296,066. LEAD PENCILS, MECHANICAL PENCILS, PENHOLDERS, ETC. EAGLE PENCIL COMPANY, New York, N. Y.
Filed March 14, 1932. Serial No. 325,090. PUBLISHED MAY 3, 1932. Class 37.

296,067. METAL FENCEPOSTS. THE POLLAK STEEL COMPANY, Carthage, Cincinnati, Ohio.
Filed August 4, 1931. Serial No. 317,647. PUBLISHED NOVEMBER 24, 1931. Class 13.

296,068. FERTILIZERS. GREAT WESTERN ELECTRO-CHEMICAL CO., San Francisco, Calif.
Filed March 18, 1932. Serial No. 325,258. PUBLISHED MAY 10, 1932. Class 10.

296,069. SMOKING AND CHEWING TOBACCO. RYAN-HAMPTON TOBACCO COMPANY, Louisville, Ky.
Filed March 21, 1932. Serial No. 325,346. PUBLISHED MAY 3, 1932. Class 17.

296,070. CLOCKS FOR OPERATING ELECTRIC SWITCHES. TRIPLEX PRODUCTS CORPORATION, Clifton, N. J., and New York, N. Y.
Filed March 21, 1932. Serial No. 325,354. PUBLISHED MAY 3, 1932. Class 27.

296,071. BROOMS. NATIONAL BROOM MANUFACTURING COMPANY, Pueblo, Colo.
Filed March 22, 1932. Serial No. 325,371. PUBLISHED MAY 3, 1932. Class 29.

296,072. PERIODICAL. THE G. S. S. PUBLISHING COMPANY, INC., New York, N. Y.
Filed April 4, 1932. Serial No. 325,785. PUBLISHED MAY 10, 1932. Class 38.

296,073. MONTHLY PUBLICATION. THREE STAR PUBLISHING COMPANY, New York, N. Y.
Filed April 5, 1932. Serial No. 325,833. PUBLISHED MAY 10, 1932. Class 38.

296,074. HAIR-WAVING RODS. HALLIWELL-SHELTON ELECTRIC CORPORATION, New York, N. Y.
Filed March 16, 1932. Serial No. 325,169. PUBLISHED MAY 3, 1932. Class 44.

296,075. PAINTERS' SIZING. TACOMA PAINT & LACQUER MANUFACTURING COMPANY, Tacoma, Wash.
Filed March 19, 1932. Serial No. 325,300. PUBLISHED MAY 10, 1932. Class 16.

296,076. DENTAL IMPRESSION WAX COMPOSITIONS. ANGELO C. ANTONUCCI, doing business as Trulastic Research Laboratories, Philadelphia, Pa.
Filed March 25, 1932. Serial No. 325,451. PUBLISHED MAY 3, 1932. Class 44.

296,077. SANITARY NAPKINS. KOTEX COMPANY, Chicago, Ill.
Filed March 25, 1932. Serial No. 325,474. PUBLISHED MAY 10, 1932. Class 44.

296,078. FOOD PRODUCTS—NAMELY, DRIED PEAS AND BEANS, LENTILS, BARLEY, AND RICE. GALBAN & CO. INC., New York, N. Y.
Filed March 31, 1932. Serial No. 325,685. PUBLISHED MAY 10, 1932. Class 46.

296,079. WASHING POWDER. LOS ANGELES SOAP COMPANY, Los Angeles, Calif.
Filed March 14, 1932. Serial No. 325,105. PUBLISHED MAY 10, 1932. Class 4.

296,080. CLEANING COMPOUNDS FOR METALS, WOODWORK, MARBLEWORK, AND GLASSWARE. EMANUEL LEVY, doing business as Cyrex Manufacturing Co., Brooklyn, N. Y.
Filed March 15, 1932. Serial No. 325,148. PUBLISHED May 3, 1932. Class 4.

296,081. CLINICAL THERMOMETERS, HYPODERMIC SYRINGES AND NEEDLES. FAICHNEY INSTRUMENT CORPORATION, Watertown, N. Y.
Filed March 16, 1932. Serial No. 325,164. PUBLISHED MAY 10, 1932. Class 44.

296,082. DRY CLEANING FLUID. THE RENOFAB PROCESS, INC. New York, N. Y.
Filed March 17, 1932 Serial No. 325,240. PUBLISHED MAY 10, 1932. Class 4.

296,083. TOILET SOAP. WILLIAM M. CURTIS, doing business as Baby's Own Soap Company, Belmont, Mass.
Filed March 23, 1932. Serial No. 325,397. PUBLISHED MAY 3, 1932. Class 4.

296,084. MALT SYRUP USED AS A FOOD PRODUCT. ZIMMERMAN BROTHERS, Lock Haven, Pa.
Filed April 1, 1932. Serial No. 325,736. PUBLISHED MAY 10, 1932. Class 46.

296,085. TOBACCO PRODUCTS—NAMELY, CIGARS. TREBOW CIGAR CORPORATION, Philadelphia, Pa.
Filed March 25, 1932. Serial No. 325,491. PUBLISHED MAY 10, 1932. Class 17.

296,086. SMOKING AND CHEWING TOBACCO. RYAN-HAMPTON TOBACCO COMPANY, Louisville, Ky.
Filed March 26, 1932. Serial No. 325,532. PUBLISHED MAY 3, 1932. Class 17.

296,087. FLY CATCHER. GRENOLE SALES CORPORATION, New York, N. Y.
Filed March 29, 1932. Serial No. 325,619. PUBLISHED MAY 10, 1932. Class 50.

296,088. WAINSCOTING FOR WALLS, CEILING PLATES, AND TILES FOR FLOORS OF VITREOUS MATERIAL. THE MARIETTA MANUFACTURING COMPANY, The Union Trust Company of Indianapolis, receiver, Indianapolis, Ind.
Filed March 10, 1932. Serial No. 325,006. PUBLISHED APRIL 26, 1932. Class 12.

296,089. MEDICINAL STIMULANT, A TONIC FOR NERVOUSNESS, GENERAL DEBILITY, SLEEPLESSNESS, NEURASTHENIA, AND FATIGUE. JOSEPH TRINER COMPANY, Chicago, Ill.
Filed March 14, 1932. Serial No. 325,123. PUBLISHED MAY 3, 1932. Class 6.

296,090. MONTHLY PUBLICATION. UNITED PUBLISHERS CORPORATION, New York, N. Y.
Filed March 16, 1932. Serial No. 325,193. PUBLISHED MAY 3, 1932. Class 38.

296,091. POWDERED LIVER EXTRACT TO BE TAKEN ORALLY IN CAPSULES IN THE TREATMENT OF ANEMIA. ELI LILLY AND COMPANY, Indianapolis, Ind.
Filed March 17, 1932. Serial No. 325,231. PUBLISHED MAY 3, 1932. Class 6.

296,092. FOUNTAIN PENS AND PENCILS. ABRAHAM SCHLOSSER, doing business as Schlosser Manufacturing Co., New York, N. Y.
Filed March 17, 1932. Serial No. 325,242. PUBLISHED MAY 3, 1932. Class 37.

296,093. DIRECTORIES PUBLISHED ANNUALLY. FLIPPEN BURGE, doing business as The National "Who-Handles" Building Products Directory Co., Atlanta, Ga.
Filed March 21, 1932. Serial No. 325,317. PUBLISHED MAY 3, 1932. Class 38.

296,094. NEWSPAPER. EMMETT L. SHEEHAN, doing business as The Republican Publishing Company, Washington, D. C.
Filed March 24, 1932. Serial No. 325,441. PUBLISHED MAY 10, 1932. Class 38.

296,095. MONTHLY MAGAZINE. AMERICAN BUSINESS PUBLICATIONS, INC., New York, N. Y.
Filed March 25, 1932. Serial No. 325,462. PUBLISHED MAY 10, 1932. Class 38.

296,096. COATING COMPOSITIONS. E. I. DUPONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed March 25, 1932. Serial No. 325,463. PUBLISHED MAY 3, 1932. Class 6.

296,097. INSECTICIDE. ALFRED J. COMPO, Edwards, N. Y.
Filed March 26, 1932. Serial No. 325,516. PUBLISHED MAY 3, 1932. Class 6.

296,098. MALT SYRUP. SUPERIOR PACKING CORP., New York, N. Y.
Filed March 29, 1932. Serial No. 325,624. PUBLISHED MAY 10, 1932. Class 46.

296,099. LAXATIVE. DRUGKRAFT, INC., New York, N. Y.
Filed March 30, 1932. Serial No. 325,645. PUBLISHED MAY 3, 1932. Class 6.

296,100. BATH TABLETS. SPA-TAB COMPANY, Baltimore, Md.
Filed April 4, 1932. Serial No. 325,808. PUBLISHED MAY 10, 1932. Class 6.

296,101. TOYS—NAMELY, BUILDING BLOCKS, PEG BOARDS, WOODEN BEADS, CHESTS, BLACK BOARDS, CONSTRUCTION OUTFITS, AND MINIATURE LUMBER. PLAYSKOOL INSTITUTE, INC., Milwaukee, Wis.
Filed March 12, 1932. Serial No. 325,075. PUBLISHED MAY 3, 1932. Class 22.

TRADE-MARK REGISTRATIONS RENEWED

30,291. REMEDIES FOR STOMACH DISEASES, RHEUMATISM, AND FEMALE COMPLAINTS. Registered June 29, 1897. FREDRICK BERSUCH, Burr, Nebr. Renewed June 29, 1927, to Frank Penner, Hillsboro, Kans., successor.

37,644. FLOUR. Registered January 14, 1902. BILL BELL & Co. Renewed January 14, 1932, to Bill Bell Corporation, Ogdensburg, N. Y., a Corporation of New York, successor.

39,008. BICYCLES, AND SELF-PROPELLED ROAD VEHICLES. Registered October 7, 1902. GEORGE M. HENDEE. Renewed October 7, 1932, to Indian Motocycle Company, Springfield, Mass., a Corporation of Massachusetts, assignee by mesne assignments.

86,146. GINGER-ALE AND MINERAL WATER. Registered April 16, 1912. MILWAUKEE-WAUKESHA BREWING COMPANY. Renewed April 16, 1932, to Fox Head-Waukesha Corporation, Milwaukee, Wis., a Corporation of Wisconsin, by change of name.

86,299. BUILDING, SHEATHING, ROOFING, INSULATING, AND CASE-LINING PAPERS. Registered April 30, 1912. THE HYDREX FELT & ENGINEERING COMPANY, Portland, Me.; New York, N. Y.; and Rahway N. J. Renewed April 30, 1932, to Hydrex Asphalt Products Corporation, New York, N. Y., a Corporation of Delaware, successor.

87,091. CERTAIN PHARMACEUTICAL PREPARATIONS. Registered June 25, 1912. BLANCHE W. MOE, New York, N. Y. Renewed June 25, 1932, to The Luxtone Co., Chicago, Ill., a Corporation of Illinois, assignee.

87,731. MEN'S, WOMEN'S, AND CHILDREN'S APRONS AND WOMEN'S AND CHILDREN'S DRESSES. Registered August 6, 1912. THE W. H. DEAN COMPANY, New York, N. Y., a Corporation of New Jersey. Renewed August 6, 1932.

88,505. CERTAIN NAMED PHARMACEUTICAL PREPARATIONS. Registered September 24, 1912. LUYTIES PHARMACY CO., as assignee of Frederick August Luyties. Renewed September 24, 1932, to Luyties Pharmacal Company, St. Louis, Mo., a Corporation of Missouri, assignee by mesne assignments.

88,580. SPOONS AND FORKS OF OTHER THAN PRECIOUS METAL. Registered October 1, 1912. METTMANNER BRITANNIAWARENFABRIK W. SEIBEL, Mettmann, Germany, a Firm. Renewed October 1, 1932.

88,775. HOSIERY, KNIT UNDERWEAR, AND SWEATERS. Registered October 22, 1912. MOORHEAD KNITTING CO., INC., Harrisburg, Pa., a Corporation of Pennsylvania. Renewed October 22, 1932.

89,024. FRESH AND GREEN FRUITS. Registered November 5, 1912. THE GRAND JUNCTION FRUIT GROWERS ASSOCIATION, Grand Junction, Colo., a Corporation of Colorado. Renewed November 5, 1932.

89,096. STEEL BARS. Registered November 12, 1912. CUMBERLAND STEEL COMPANY, Cumberland, Md., a Corporation of Maryland. Renewed November 12, 1932.

LABELS

REGISTERED JULY 19, 1932

40,935.—*Title:* BEAVER'S HONEY BREAD. For Bread. BEAVER BROTHERS BAKING COMPANY, INCORPORATED, Burnham, Pa. Published June 1, 1932.

40,936.—*Title:* BABY BATHS. For Fresh Grapes. GINO BERTOLLI, Minkler, Calif. Published September 27, 1931.

40,937.—*Title:* WATAMAN. For Fresh Lettuce. F. V. BIRBECK, Watsonville, Calif. Published May 19, 1932.

40,938.—*Title:* BLATZ. For Malt Syrup. BLATZ BREWING COMPANY, Milwaukee, Wis. Published February 25, 1932.

40,939.—*Title:* DUFF'S DEVIL'S FOOD MIX. For Devil's Food Cake Mixture. P. DUFF & SONS, INC., Pittsburgh, Pa. Published June 18, 1932.

40,940.—*Title:* GUARANTEED FRESH. For Bread. GORDON BAKING COMPANY, Detroit, Mich. Published March 23, 1932.

40,941.—*Title:* HAMMER. For Pumpkin Pie Filling. ALICE M. HAMMER, Hillsboro, Oreg. Published June 3, 1932.

40,942.—*Title:* ELDORADO. For Depilatory. LOUIS HINKELMAN, Los Angeles, Calif. Published May 12, 1932.

40,943.—*Title:* GOOD SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published June 20, 1932.

40,944.—*Title:* DIANA STOCK SPRAY. For a Liquid Repellent for House Flies, Stable, and Horn Flies and Mosquitoes. DAVID HONOROFF, Gary, Ind. Published February 8, 1932.

40,945.—*Title:* KOLLNER'S DE LUXE BLEND COFFEE. For Coffee. KOLLNER'S, INC., Jamaica, N. Y. Published June 1, 1932.

40,946.—*Title:* COUNTRY CLUB. For Pan Cake Flour. THE KROGER GROCERY & BAKING COMPANY, Cincinnati, Ohio. Published November 1, 1931.

40,947.—*Title:* GRANDMA'S. For Cake. LANTZ BROS. BAKING CO., St. Louis, Mo. Published May 28, 1932.

40,948.—*Title:* CRISS CROSS. For Potatoes. LANTZ BROS. BAKING CO., St. Louis, Mo. Published May 31, 1932.

40,949.—*Title:* RONDAX. For Cigars. M. MARSH & SON, INC., Wheeling, W. Va. Published April 10, 1932.

40,950.—*Title:* MEIER'S JUMBO KUP. For Ice Cream. MEIER ICE CREAM COMPANY, Milwaukee, Wis. Published April 22, 1932.

40,951.—*Title:* MILLER'S CALAX. For Confection Composed of Blended Fruits. R. C. MILLER AND SON, Oakland, Calif. Published June 11, 1932.

40,952.—*Title:* ARCHERY. For Fresh Oranges. NORTH WHITTIER HEIGHTS CITRUS ASSOCIATION, Puente, Calif. Published May 6, 1932.

40,953.—*Title:* NITRO CLUB KLEANBORE SHELLS. For Ammunition. REMINGTON ARMS COMPANY, INC., New York, N. Y. Published March 21, 1932.

40,954.—*Title:* ARROW KLEANBORE SHELLS. For Ammunition. REMINGTON ARMS COMPANY, INC., New York, N. Y. Published March 22, 1932.

40,955.—*Title:* ROACH-TOX. For Insecticide. REX RESEARCH CORPORATION, Toledo, Ohio. Published May 27, 1932.

40,956.—*Title:* AFTERNOON TEA. For Tea. SANITARY GROCERY COMPANY, INCORPORATED, Washington, D. C. Published June 8, 1932.

40,957.—*Title:* YEASTONE. For Yeast Food to be Used in Baking. LOUIS SCHLOSSER, doing business as Yeastone Co., Chicago, Ill. Published May 19, 1932.

40,958.—*Title:* MIREX. For Cigars. NATHAN SOLOMON, doing business as Central Illinois Cigar Company, and Nathan Solomon Company, Peoria, Ill. Published June 1, 1932.

40,959.—*Title:* CARAMELIZED AND BUTTERED POP CORN. For Caramelized and Buttered Pop Corn. JOHN R. TAYLOR, Portland, Me. Published March 21, 1932.

40,960.—*Title:* PROS-PER-E-TI BOARD. For Game Boards. U. S. MINT & VENDING CO., Baltimore, Md. Published March 5, 1932.

40,961.—*Title:* WARD'S FRESH BREAD. For Bread. WARD BAKING COMPANY, New York, N. Y. Published February 19, 1932.

PRINTS

REGISTERED JULY 19, 1932

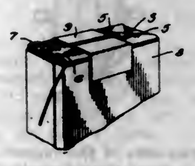
13,773.—*Title:* J. O. FLY SPRAY. For Fly Spray. JOHN OPITZ, INC., New York, N. Y. Published March 7, 1932.

13,774.—*Title:* PIONEER ASPIRIN. For Aspirin. STRONG, COBB & CO., INC., Cleveland, Ohio. Published May 13, 1932.

REISSUES

JULY 19, 1932

18,529. CIGARETTE PACKAGE. CHARLES A. PENN, deceased, New York, N. Y., by The American Tobacco Company, New York, N. Y., assignee, a Corporation of New Jersey. Original No. 1,759,366, dated May 20, 1930, Serial No. 340,503, filed Feb. 16, 1929. Application for reissue filed Apr. 22, 1932. Serial No. 607,014. 6 Claims. (Cl. 229—51.)



4. A package of cigarettes designed to simulate a bag of smoking tobacco of a standard brand, provided with a draw-string having a tag at the free end thereof, the package being of substantially the shape and size of the bag, and including an inner and an outer wrapper folded at one end of the cigarettes, the inner wrapper having a fold free at its side edges from the other fold, a tearing cord having the intermediate portion thereof covered by the free fold, and that portion of one end of the cord adjacent to the free fold being folded inwardly beneath the adjacent fold of the outer wrapper, leaving the extremity of the cord free, said extremity being provided with a tag.

18,530. VIBRATORY SCREEN. ALEXANDER L. MUNRO, Milwaukee, Wis., assignor to Smith Engineering Works, Milwaukee, Wis., a Corporation of Wisconsin. Original No. 1,730,435, dated Oct. 8, 1929, Serial No. 304,404, filed Sept. 7, 1928. Application for reissue filed Apr. 25, 1931. Serial No. 532,966. 15 Claims. (Cl. 209—326.)



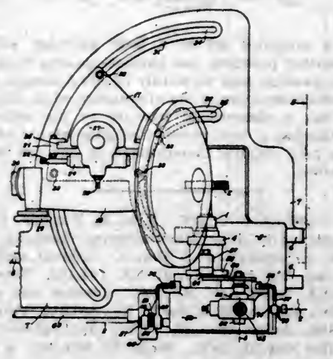
1. A vibratory screen, comprising a support, an upper and a lower screen member positioned adjacent the support, a shaft journaled on the support and having connections with the screen members for vibrating said members in opposite directions with relation to each other, means yieldingly and pivotally connecting the screen members together and pivotally connecting the said members to the support, and means for rotating the shaft.

18,531. VALVE ACTUATING MECHANISM. OSCAR J. KAY, Glendale, Calif. Original No. 1,814,045, dated July 14, 1931, Serial No. 406,020, filed Nov. 9, 1929. Application for reissue filed Feb. 16, 1932. Serial No. 593,403. 7 Claims. (Cl. 158—117.1.)



1. As an article of manufacture, a valve having a substantially concave side, a leaf spring tending to assume a curvature which is opposed to the concave side of the valve, and means securing the spring to the concave side of the valve so that the spring is flexed to a curvature corresponding to the curvature of said side.

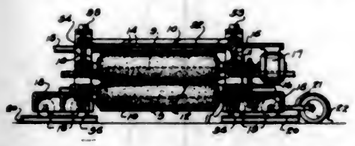
18,532. GEAR GRINDING MACHINE. CHARLES H. SCHUER, Cleveland, Ohio, assignor to The Lees-Bradner Company, Cleveland, Ohio, a Corporation of Ohio. Original No. 1,751,104, dated Mar. 18, 1930, Serial No. 254,382, filed Feb. 15, 1928. Application for reissue filed Mar. 17, 1932. Serial No. 599,557. 15 Claims. (Cl 51—52.)



1. In a gear grinding machine, a main frame, a grinding wheel supporting column on the frame, a planular faced grinding wheel rotatably mounted on the column, ways on the frame, a reciprocable slide on the ways, a work spindle rotatably mounted on the slide, means for

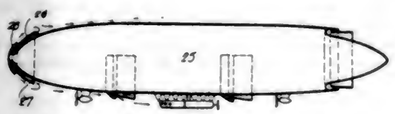
reciprocating the slide and oscillating the work spindle to cause a work gear mounted on the work spindle to roll on an imaginary conjugate rack, means for adjustably moving the column on the frame and for adjustably moving the planular face of the grinding wheel on the column to bring the wheel plane into coincidence with a tooth face of an imaginary right hand or left hand helical rack of helical angle from zero degrees upward.

18,533. SHEET GLASS GRINDING AND POLISHING APPARATUS. JOHN L. DRAKE and FRANK FRASER, Toledo, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Original No. 1,836,364, dated Dec. 15, 1931, Serial No. 138,515, filed Sept. 29, 1926. Application for reissue filed Feb. 29, 1932. Serial No. 595,955. 9 Claims. (Cl. 51—40.)



1. In apparatus for surfacing sheet glass, a plurality of pairs of abrasive rolls arranged in two lines for receiving the glass sheets to be surfaced therebetween, feed rolls positioned between adjacent pairs of abrasive rolls, means for driving the feed rolls to feed the glass between the abrasive rolls, means for driving the abrasive rolls, means for reciprocating said abrasive rolls transversely of the line of feed of the glass, and means carried at the ends of the feed rolls and engaging the edges of the glass for preventing transverse movement of the glass upon reciprocation of the abrasive rolls.

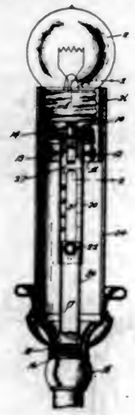
18,534. RESISTANCE ELIMINATOR FOR AIRCRAFT AND WATER CRAFT. EDWARD JOHNSON, New Rochelle, N. Y. Original No. 1,857,960, dated May 10, 1932, Serial No. 439,148, filed Mar. 26, 1930. Application for reissue filed May 24, 1932. Serial No. 613,330. 11 Claims. (Cl. 244—12.)



1. In a propelled device, a body provided with two communicating passages, one passage opening forward of the other passage, said forwardly opening passage having a dimensional decrease to the atmosphere while said other passage has a dimentional increase to the atmosphere thereby causing a continuous circulation of air or water from the rear opening therethrough as and for the purpose specified.

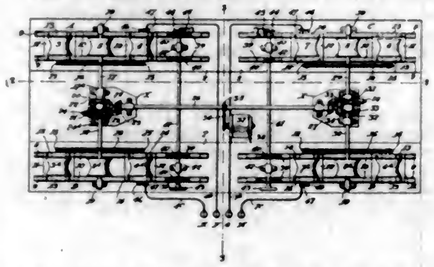
18,535. CANDLE SOCKET. KARL K. NIELSEN, Chicago, Ill., assignor to Alcor Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Original application filed Jan. 28, 1927, Serial No. 164,165, Patent No. 1,690,693, dated Nov. 6, 1928. Divided and application filed Jan. 9, 1928, Serial No. 245,312, Patent No. 1,855,889, dated Apr. 26, 1932. Application for reissue filed May 31, 1932. Serial No. 614,640. 9 Claims. (Cl. 240—52.4.)

1. A support for an upright lamp socket, comprising an upper member of inverted U-shape secured at its top to the socket; a lower U-shaped member adapted to be secured to a fixture part and having its shanks slidably engaging the shanks of the upper member, the shanks of the upper member being provided with longitudinal slots; cooperating means spanning the shanks of both members for clamping each shank of one member firmly against the adjacent shank of the other member and for preventing an approach of the shanks at one side of the support to



those at the other side of the support; one of the said members having a shank thereof provided with graduations whereby the end of the adjacent shank of the other member indicates the total length of the socket and support combination.

18,536. BRAKE TESTING DEVICE FOR AUTOMOBILES. DON Q. WILKES, Pueblo, Colo., assignor to Bendix-Cowdrey Brake Tester, Inc., a Corporation of Delaware. Original No. 1,669,584, dated May 15, 1928, Serial No. 146,718, filed Nov. 6, 1926. Application for reissue filed May 15, 1930. Serial No. 452,415. 9 Claims. (Cl. 73—51.)



1 In a brake testing device of the character described, the combination with opposite sets of three rollers for supporting the wheels of an automobile of power driven gearing for driving the middle rollers of said sets in common, and for permitting a slowing down of either of said driven rollers independently of the other under increased resistance, means for connecting the other two rollers of each set to rotate in unison, and means for indicating the speed for each of said middle driven rollers.

18,537. RECEIVER ARRANGEMENT FOR ELECTRIC TELEVISION APPARATUS. AUGUST KAROLUS, Leipzig, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Original No. 1,762,231, dated June 10, 1930, Serial No. 132,702, filed Aug 31, 1926, and in Germany Sept. 5, 1925. Application for reissue filed Sept. 23, 1930. Serial No. 483,960. 12 Claims. (Cl. 178—6.)

1. A receiver for electric television apparatus including a light relay of the Kerr type, comprising, a light screen, a source of luminous rays, means for projecting said luminous rays as a position controlled point source of light upon said screen, and a light relay intervosed between an observer and said screen whereby said observer when looking through said light relay toward said screen may view a series of position controlled light spots and visually construct a moving image upon said screen.



18,538. SUCTION CLEANING APPARATUS. EUGENE F. MARTINET, Cleveland, Ohio, assignor to The P. A. Geier Company, Cleveland, Ohio, a Corporation of Ohio. Original No. 1,753, 799, dated Apr. 8, 1930, Serial No. 198,957, filed June 15, 1927. Application for reissue filed Apr. 7, 1932. Serial No. 603,905. 9 Claims. (Cl. 15—158.)



9. The combination with a suction cleaning tool having an elongated suction mouth with its rear lip slotted, of a brush having a stud positioned in said slot said brush being removably positioned within the mouth, and means removably holding the brush within the suction mouth.

PLANT PATENTS

GRANTED JULY 19, 1932

18. PLUM. LUTHER BURBANK, deceased, Santa Rosa, Calif., by Elizabeth Waters Burbank, executrix, Santa Rosa, Calif., assignor to Stark Bro's. Nurseries & Orchards Company, Louisiana, Mo. Filed Dec. 23, 1930. Serial No. 504,400. 1 Claim. (Cl. 47—1.)

The new and distinct variety of plum tree characterized particularly by the chrome yellow color and firmness of the flesh of its fruit as herein shown and described.

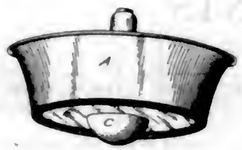
19. DAHLIA. HAROLD L. ICKES, Hubbard Woods, Ill. Filed Feb. 18, 1931. Serial No. 516,660. 1 Claim. (Cl. 47—1.)

The dahlia as herein shown and described characterized by its color being Coral red, shading to Eugenia red towards the center, involute florets and strong healthy growing habits.

DESIGNS

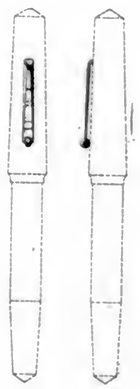
JULY 19, 1932

87,377. LIGHTING FIXTURE. WILLIAM F. ANDREWS, Brooklyn, N. Y., assignor to Bayley & Sons, Inc., a Corporation of New York. Filed May 28, 1932. Serial No. 43,928. Term of patent 3½ years.



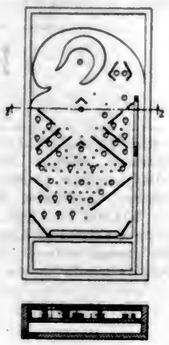
The ornamental design for a lighting fixture as shown and described.

87,378. FOUNTAIN PEN. ROBERT BACK, Chicago, Ill., assignor to The Wahl Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 20, 1930. Serial No. 38,040. Term of patent 14 years.



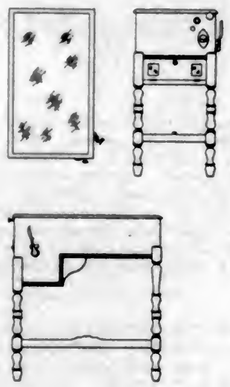
The ornamental design for a fountain pen substantially as shown and described.

87,379. GAME BOARD. ARCHIE H. BECHTOL, Daytona Beach, Fla., and WALTER A. TRATSCH, Chicago, Ill. Filed May 19, 1932. Serial No. 43,853. Term of patent 14 years.



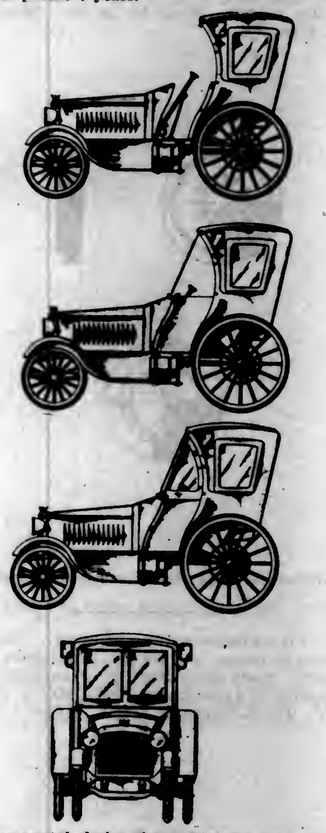
The ornamental design for a game board as shown.

87,380. DISPENSING CABINET. ARCHIE H. BECHTOL, Daytona Beach, Fla., and WALTER A. TRATSCH, Chicago, Ill. Filed June 3, 1932. Serial No. 43,974. Term of patent 14 years.



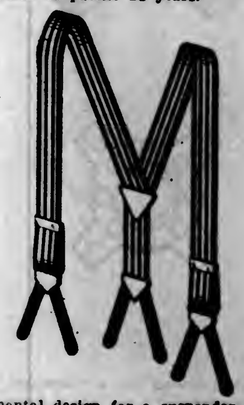
The ornamental design for a dispensing cabinet as shown.

87,381. PLEASURE CAR. WILLIAM H. BUTLER, New York, N. Y. Filed Apr. 21, 1932. Serial No. 43,557. Term of patent 7 years.



The ornamental design for a pleasure car, as shown and described.

87,382. SUSPENDERS. TILLMAN CAHN, Elkins Park, Pa., assignor to Pioneer Suspender Company, a Corporation of Pennsylvania. Filed Jan. 6, 1932. Serial No. 42,378. Term of patent 14 years.



The ornamental design for a suspender as shown and described.

87,383. SUSPENDERS. TILLMAN CAHN, Elkins Park, Pa., assignor to Pioneer Suspender Company, a Corporation of Pennsylvania. Filed Jan. 6, 1932. Serial No. 42,379. Term of patent 14 years.



The ornamental design for a suspender as shown and described.

87,384. COMBINED ASH TRAY AND RAZOR SHARPENER. WILLIAM R. CANNON and WILLIAM P. PENNINGTON, Washington, D. C. Filed May 19, 1932. Serial No. 43,852. Term of patent 3½ years.



The ornamental design for a combined ash tray and razor sharpener, substantially as shown.

87,385. MECHANICAL PENCIL. ISIDOR CHESLER, West Orange, N. J., assignor to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware. Filed May 2, 1932. Serial No. 43,684. Term of patent 14 years.



The ornamental design for a mechanical pencil, as shown.

87,386. JAR. IVOR CORDY, Washington, Pa., assignor to Hills Brothers Company, Inc., New York, N. Y., a Corporation of New York. Filed May 19, 1932. Serial No. 43,851. Term of patent 7 years.



The ornamental design for a jar, as shown.

87,387. TRANSMITTER. DAVID T. EIGHMEY, Jamaica, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 8, 1931. Serial No. 39,780. Term of patent 14 years.



The ornamental design for a transmitter as shown.

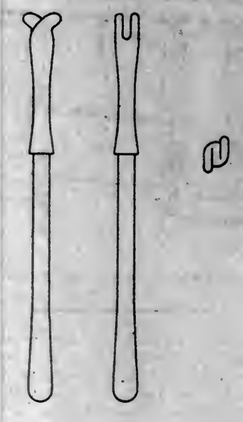
87,388. CHRISTMAS TREE HOLDER. THOMAS J. FEGLEY and GEORGE O. LEOPOLD, Philadelphia, Pa., assignors to North Bro's Mfg Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 4, 1932. Serial No. 43,718. Term of patent 7 years.



The ornamental design for a Christmas tree holder, substantially as shown.

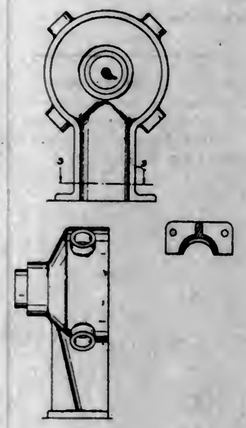
CARNEGIE LIBRARY OF ATLANTA

87,389. CLOTHES STICK. ROBERT L. FREEMAN, Pittsburgh, Pa. Filed Mar. 15, 1932. Serial No. 43,199. Term of patent 14 years.



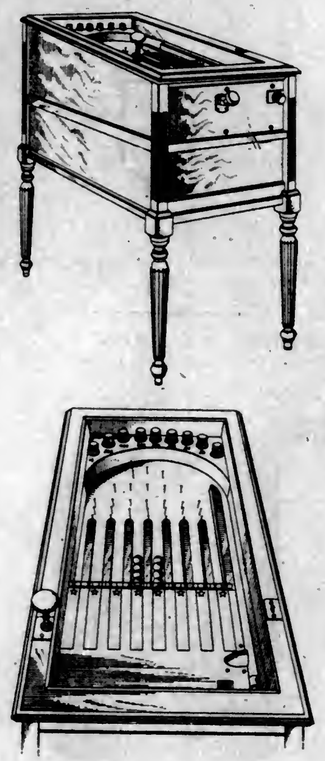
The ornamental design for a clothes stick, as shown.

87,390. LAMP HOUSING. MARTIN C. HANSON, Grand Rapids, Mich., assignor to Electric Sorting Machine Company, Grand Rapids, Mich. Filed Feb. 15, 1932. Serial No. 42,856. Term of patent 7 years.



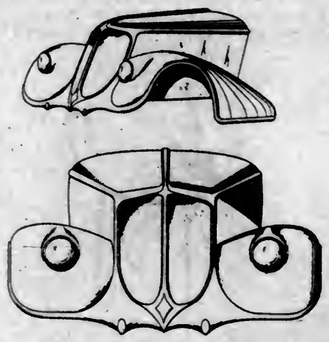
The ornamental design for a lamp housing, as shown.

87,391. GAME TABLE. RAYMOND A. HENNINGS, New Orleans, La. Filed May 12, 1932. Serial No. 43,772. Term of patent 7 years.



The ornamental design for a game table, as shown.

87,392. COMBINED RADIATOR, HOOD, AND FENDERS FOR VEHICLES. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Apr. 27, 1932. Serial No. 43,627. Term of patent 14 years.



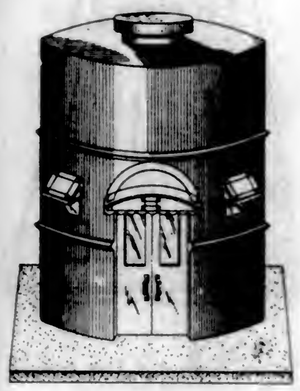
The ornamental design for a combined radiator, hood and fenders for vehicles substantially as shown.

87,393. CAPSULE FOR CARBONATING LIQUIDS. EDWARD JACOBS, New York, N. Y. Filed Apr. 19, 1932. Serial No. 43,540. Term of patent 14 years.



The ornamental design for a capsule for carbonating liquids as shown.

87,394. BUILDING. JOHN B. KLEIN, Kansas City, Kans. Filed Nov. 7, 1931. Serial No. 41,654. Term of patent 3½ years.



The ornamental design for a building, as shown and described.

87,395. NOVELTY TOY OR SIMILAR ARTICLE. WILLIAM H. LANDMESSER, Salt Lake City, Utah. Filed May 4, 1932. Serial No. 43,711. Term of patent 7 years.



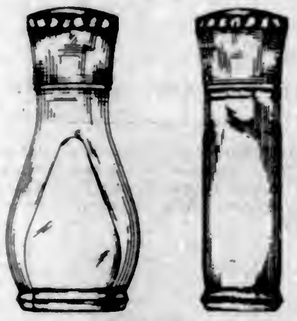
The ornamental design for a novelty toy, or similar article, as shown.

87,396. RANGE. HENRY LANGE, Quincy, Ill. Filed May 23, 1932. Serial No. 43,879. Term of patent 7 years.



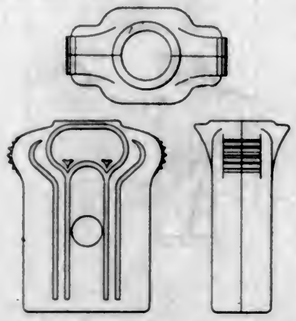
The ornamental design for a range as shown.

87,397. BOTTLE. PRESTON W. MARSHBURN, New York, and MARSHALL T. BREKKE, Scarsdale, N. Y., assignors to Northam Warren Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 18, 1931. Serial No. 42,136. Term of patent 14 years.



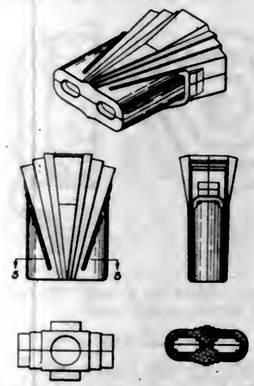
The ornamental design for a bottle substantially as shown.

87,398. ELECTRIC HEATER PLUG. AUGUSTINE H. MASSEY, Stratford, Conn., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Apr. 11, 1932. Serial No. 43,459. Term of patent 7 years.



The ornamental design for an electric heater plug, substantially as shown and described.

87,399. ELECTRICAL APPLIANCE PLUG CONNECTER. GEORGE J. MEUER, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed May 9, 1932. Serial No. 43,754. Term of patent 14 years.



The ornamental design for an electrical appliance plug connecter, substantially as shown.

87,400. PLAYING FIELD FOR GAME APPARATUS. GEORGE H. MINER, Los Angeles, Calif., assignor to Amusement Machine Corporation, Ltd., Los Angeles, Calif., a Corporation of Nevada. Filed Aug. 28, 1931. Serial No. 40,950. Term of patent 14 years.

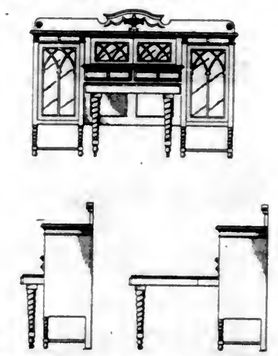
The ornamental design for a playing field for game apparatus, as shown.

87,401. BOTTLE. FERDINAND W. NITARDY, Brooklyn, N. Y., assignor to E. R. Squibb & Sons, New York, N. Y., a Corporation of New York. Filed Aug. 16, 1930. Serial No. 36,682. Term of patent 14 years.



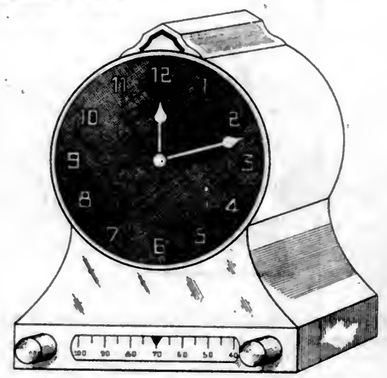
The ornamental design for a bottle substantially as shown and described.

87,402. COMBINED CABINET AND TABLE. HERMANN NONNAST, Chicago, Ill. Filed May 19, 1932. Serial No. 43,849. Term of patent 7 years.



The ornamental design for a combined cabinet and table, as shown and described.

87,403. COMBINED RADIO RECEIVER AND CLOCK. PATRICK J. O'DONNELL, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 27, 1931. Serial No. 41,886. Term of patent 7 years.



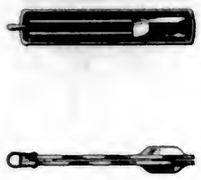
The ornamental design for a combined radio receiver and clock as shown.

87,404. GARTER. HENRY A. PETER, Philadelphia, Pa., assignor to Pioneer Suspender Company, a Corporation of Pennsylvania. Filed Apr. 26, 1932. Serial No. 43,616. Term of patent 14 years.



The ornamental design for a garter as shown.

87,405. POCKET CHECK PROTECTOR OR SIMILAR ARTICLE. SHELDON L. POLLOCK, New York, N. Y. Filed Jan. 19, 1932. Serial No. 42,544. Term of patent 7 years.



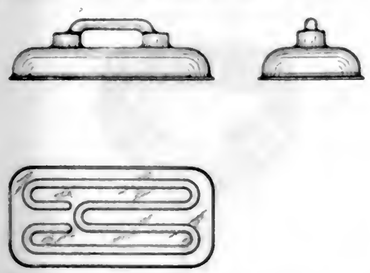
The ornamental design for pocket check protector or similar article substantially as shown and described.

87,406. RADIANT THERAPEUTIC DEVICE. WILLIS O. PROUTY, Hermosa Beach, Calif., assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif., a Corporation of California. Filed Feb. 19, 1932. Serial No. 42,932. Term of patent 14 years.



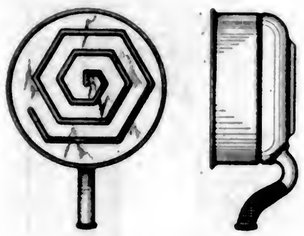
The ornamental design for a radiant therapeutic device substantially as shown and described.

87,407. HAND SUPPORTED THERAPEUTIC LIGHT. WILLIS O. PROUTY, Hermosa Beach, Calif., assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif., a Corporation of California. Filed Feb. 19, 1932. Serial No. 42,933. Term of patent 14 years.



The ornamental design for a hand-supported therapeutic light substantially as shown and described.

87,408. MEDICINAL RADIANT DEVICE. WILLIS O. PROUTY, Hermosa Beach, Calif., assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif., a Corporation of California. Filed Feb. 19, 1932. Serial No. 42,936. Term of patent 14 years.



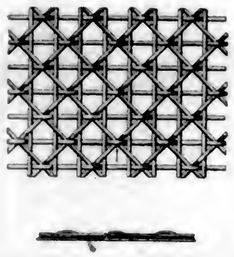
The ornamental design for a medicinal radiant device substantially as shown and described.

87,409. TEXTILE FABRIC. ARTEMUS R. RICHTMYER, New York, N. Y. Filed Apr. 20, 1932. Serial No. 43,550. Term of patent 14 years.



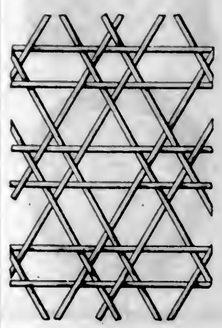
The ornamental design for a textile fabric substantially as shown and described.

87,410. WOVEN OPEN FABRIC OF NONFLACCID STRANDS. FRANCIS B. RILEY, Newton, Mass. Filed June 15, 1928. Serial No. 27,145. Term of patent 3½ years.



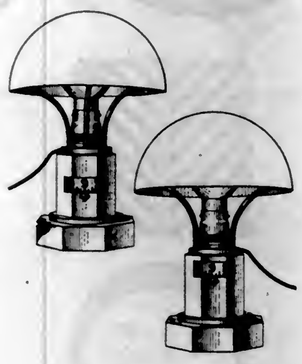
The ornamental design for a woven open fabric of nonflaccid strands substantially as shown.

87,411. WOVEN OPEN FABRIC OF NONFLACCID STRANDS. FRANCIS B. RILEY, Newton, Mass. Filed June 15, 1928. Serial No. 27,151. Term of patent 3½ years.



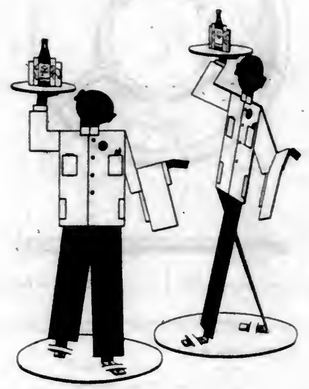
The ornamental design for a woven open fabric of nonflaccid strands substantially as shown.

87,412. CLOCK LAMP. CHARLES HILAIRE HENRI RODANET, Neuilly-sur-Seine, France. Filed Nov. 27, 1931, Serial No. 41,889, and in France Aug. 13, 1931. Term of patent 7 years.



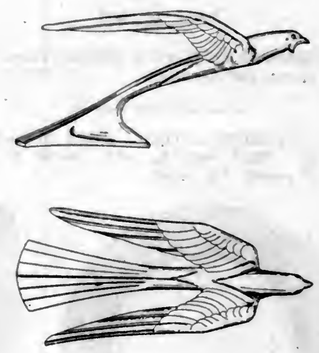
The ornamental design for a clock lamp, substantially as shown.

87,413. COMBINED DOLL OR SIMILAR ARTICLE AND SUPPORT FOR SAME. HENRY M. RUNDLE, Glen Ridge, N. J. Filed Apr. 30, 1932. Serial No. 43,666. Term of patent 14 years.



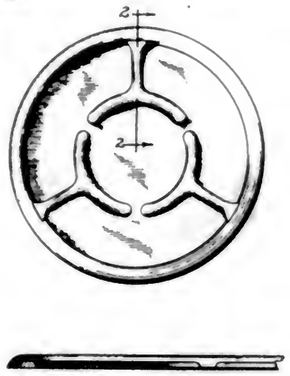
The ornamental design for a combined doll or similar article and support for same, substantially as shown.

87,414. RADIATOR ORNAMENT. FREDERICK C. RUPPEL, Grand Rapids, Mich., assignor to Dominion Motors, Limited, Toronto, Canada. Filed May 21, 1932. Serial No. 43,865. Term of patent 3½ years.



The ornamental design for a radiator ornament, as shown.

87,415. COASTER. RICHARD W. SANDERS, Chicago, Ill. Filed May 23, 1932. Serial No. 43,875. Term of patent 7 years.



The ornamental design for a coaster, substantially as shown.

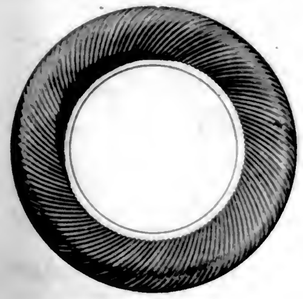
87,416. [WITHDRAWN].

87,417. DRINKING GLASS. ALBERT E. SEHLBACH, Chicago, Ill., assignor to Albert Pick-Barth Company, Inc., Chicago, Ill., a Corporation of New York. Filed May 2, 1932. Serial No. 43,687. Term of patent 7 years.



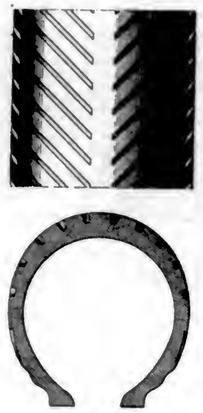
The ornamental design for a drinking glass, substantially as shown and described.

87,418. AUTOMOBILE TIRE. HARRY R. SMITH, Chicago, Ill. Filed Sept. 5, 1930. Serial No. 36,873. Term of patent 3½ years.



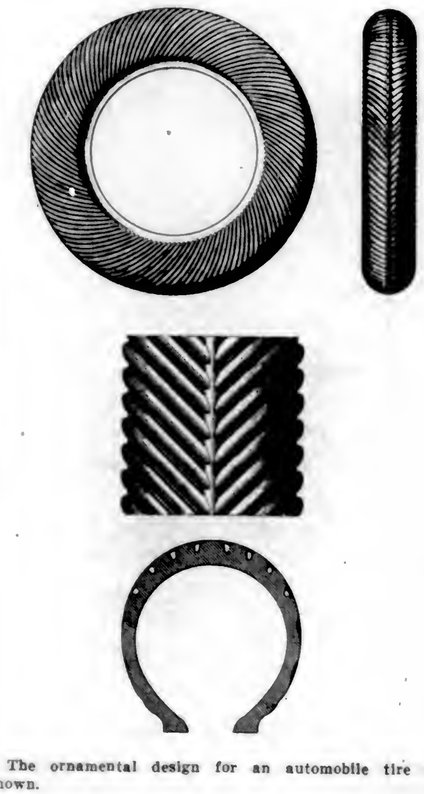
The ornamental design for an automobile tire as shown.

87,418.—Continued.



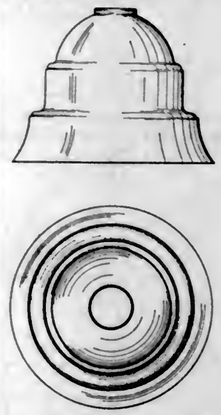
The ornamental design for an automobile tire as shown.

87,419. AUTOMOBILE TIRE. HARRY R. SMITH, Chicago, Ill. Filed Sept. 5, 1930. Serial No. 36,874. Term of patent 3½ years.



The ornamental design for an automobile tire as shown.

87,420. LAMP GLOBE. JOHN D. STUART, South Euclid, Ohio. Filed Nov. 16, 1931. Serial No. 41,742. Term of patent 3½ years.



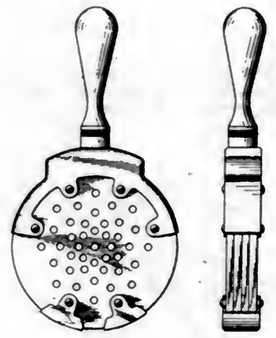
The ornamental design for a lamp globe, substantially as shown.

87,421. BATHING CAP. JOHN HULL WHITCOMB, Lakewood, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 18, 1932. Serial No. 43,231. Term of patent 14 years.



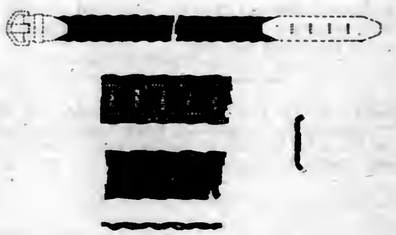
The ornamental design for a bathing cap as shown.

87,422. CIGAR LIGHTER. FRANK A. ZIBELMAN, Chicago, Ill. Filed Oct. 12, 1931. Serial No. 41,369. Term of patent 3½ years.



The ornamental design for a cigar lighter substantially as shown.

87,423. BELT FOR PERSONAL WEAR. MORRIS SACHS, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed June 9, 1932. Serial No. 44,035. Term of patent 3½ years.

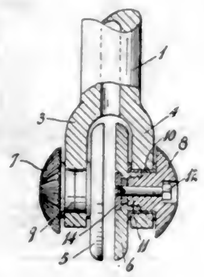


The ornamental design for a belt for personal wear as shown and described.

PATENTS

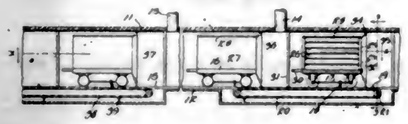
GRANTED JULY 19, 1932

1,867,545. DISK BIT AND REAMER. SWAN M. AKEYSON, Long Beach, Calif. Filed Apr. 28, 1930. Serial No. 447,787. 4 Claims. (Cl. 255—71.)



1. A disk bit and reamer comprising a shank, a pair of spaced legs depending from the shank, a disk cutter journaled on the inside of each of the legs, a reaming cutter on the outside of the legs, said reaming cutter being of lesser diameter than said disk, said reaming cutter being secured to the disk whereby the disk and reaming cutter will rotate together.

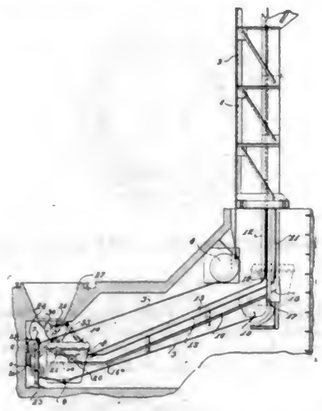
1,867,546. QUICK FREEZE TUNNEL. ALVIN H. BAER, Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Oct. 16, 1930. Serial No. 489,165. 6 Claims. (Cl. 257—23.)



1. A refrigerating tunnel comprising walls of insulating material, trucks movable through said tunnel, said trucks having means thereon for preventing air passing around the sides of the trucks and to cause it to pass only through predetermined channels across the trucks, said means comprising wings resiliently mounted in the frame of the truck and adapted to be pressed against the inner walls of the tunnel, substantially as set forth.

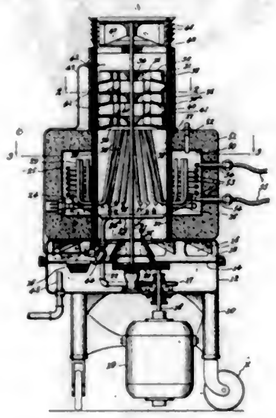
1,867,547. COAL HANDLING PLANT. CARL F. BLEDSOE, Chicago, Ill., assignor to Ogle Construction Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 1, 1928. Serial No. 303,423. 9 Claims. (Cl. 214—125.)

1. In an apparatus of the class described, upper and lower inclined tracks terminating in horizontal portions more closely spaced than the inclined portions, the upper track having a greater depth at the inclined portion to provide a uniform roller space between said tracks, in combination with a bucket having horizontally and vertically spaced rollers for traveling movements upon said



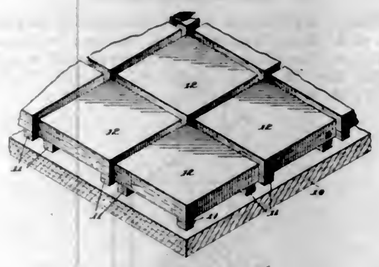
tracks, and cable means attached to the lower side of said bucket the lower rollers being confined between said tracks against vertical movement.

1,867,548. APPARATUS FOR CONDITIONING AIR. WILLIAM J. BROCKER, Tampa, Fla. Filed June 24, 1931. Serial No. 546,626. 5 Claims. (Cl. 261—9.)



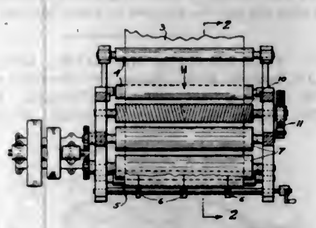
1. In apparatus for conditioning air, separated vaporizing and mixing chambers, numerous U-shaped pipes extending between said chambers and having opposed legs disposed in the respective chambers, the legs in the mixing chamber converging upwardly, and means for drawing air through the mixing chamber.

1,867,549. SOUND ABSORBENT MATERIAL. RICHARD C. BROCKMEYER, Baltimore, Md., assignor to Acoustical Correction Corporation, Baltimore, Md., a Corporation of Maryland. Filed July 19, 1929. Serial No. 379,503. 8 Claims. (Cl. 20—4.)



1. In an insulating material for walls or ceilings, a plurality of tables of said absorptive material providing a wall surface, said tables being spaced to provide sound-penetrable openings in said surface, a plurality of intermediate tables of sound absorptive material located between said surface tables and the wall or ceiling, and plural supporting means of sound absorptive material to hold said tables on said wall or ceiling, each said supporting means being smaller than the adjacent tables whereby to form a sound-absorbing labyrinth beneath said surface tables.

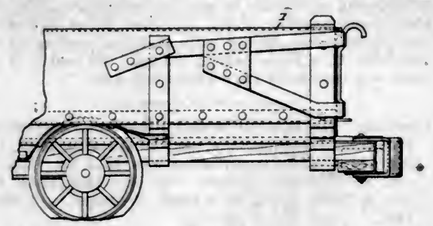
1,867,550. METHOD OF PREVENTING POST-WINDING WELTS. JAMES A. CAMERON, Brooklyn, N. Y., and ROBERT McC. JOHNSTONE, Roselle Park, N. J., assignors to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Nov. 21, 1924. Serial No. 751,409. 3 Claims. (Cl. 164—65.)



1. The method of preventing formation of post-winding welts in wound paper webs that consists in: subjecting a paper web, while advancing under tension exerted by the winding means, to a lateral spreading action, in opposition to the longitudinal tension exerted by the winding means, of such amplitude as to bring the paper substantially to the natural width it would assume if free from tension, and winding said web while the paper retains substantially its natural width.

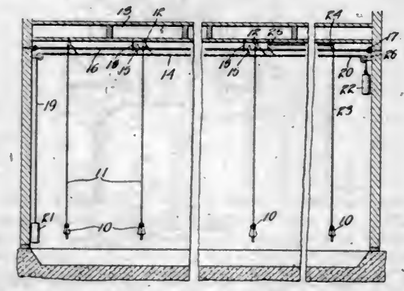
1,867,551. BUMPER. CLARENCE P. DANIEL, Bristol, Va. Filed Jan. 17, 1930. Serial No. 421,445. 4 Claims. (Cl. 213—221.)

1. In a bumper for car ends, wherein the car end is provided with a projection, an inner channel shaped member secured over the outer edge portion of the projection, an outer channel shaped member, the upper and lower walls thereof being slidably disposed on the adjacent walls of the inner channel shaped member, the crown portion of the outer channel shaped member being spaced with respect to the crown portion of the inner channel shaped member, and a flat elongated rubber cushioning pad interposed and filling the space between the crown portion of said channel shaped members, said pad being formed with air pockets



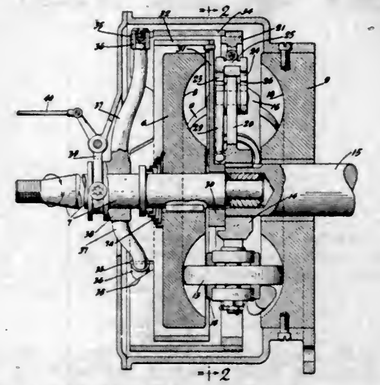
opening through its inner face and the inner member having means engaged in certain of said pockets to prevent shifting of the pad out of position.

1,867,552. COW-TAIL HOLDER. GEORGE FOTEL, Waterville, Me. Filed Aug. 21, 1931. Serial No. 558,540. 6 Claims. (Cl. 119—105.)



1 A device of the kind described comprising clamps, cables supporting the clamps, a chain to which each of the cables are attached for operating them, said chain having weights on its opposite ends to counterbalance the weight of the clamps and cables, substantially as set forth.

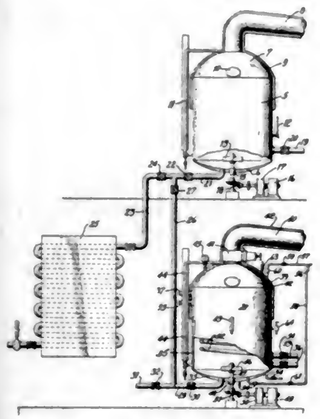
1,867,553. PLANETARY FRICTION TRANSMISSION. ARTHUR W. GARDINER and JACOB EHRLICH, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 19, 1931. Serial No. 569,733. 6 Claims. (Cl. 74—34.)



1. In a transmission gearing, a planetary torque transmitting roller and carrier therefor, the axis of said roller

lying at an angle to the axis about which it has planetary motion, a counterweight mounted on the roller carrier, of such mass and in such a position that it will develop an opposing centrifugal torque counterbalancing the combined resultant effect of the gyroscopic forces and of the centrifugal forces due to roller position tending to tilt the roller in a plane passing through the center of the roller and containing the transmission axis.

1,867,554. APPARATUS FOR PRODUCING ALDEHYDE FREE ALCOHOLIC LIQUIDS. HERMAN HEUSER, Chicago, Ill. Original application filed June 28, 1926, Serial No. 119,057. Divided and this application filed Nov. 8, 1928. Serial No. 318,096. 6 Claims. (Cl. 202—235.)



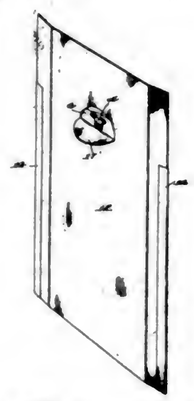
1. In apparatus for producing aldehyde-free residues from alcoholic liquids, a container for a body of the liquid, means for supplying heat to said container, stirring means within the container, a vapor outlet leading from the container, means for sealing the container off from its vapor outlet at substantially the entrance to the latter, thermal insulation surrounding the upper portion of the container and the adjacent portion of the vapor outlet, thereby preventing reflux to the container, and separate means for cooling the contents of the container.

1,867,555. LURE ATTACHING MEANS. HIRAM H. HILDEBRANDT, Logansport, Ind., assignor to The John J. Hildebrandt Co., Logansport, Ind. Filed Oct. 28, 1929. Serial No. 403,066. 4 Claims. (Cl. 43—28.)



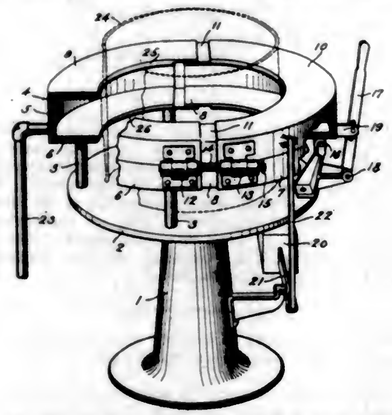
4. In a device of the class described, a member provided with a loop on one end thereof, an extension on said loop adapted to be brought into contact with the body of said member, a fish hook pivotally connected to said loop, a coil spring encircling said member and extension and having a part thereof extending beyond said loop to serve as a stop for the pivotal movement of said fish hook.

1,867,556. ENVELOPE FOR LAUNDERED ARTICLES. EMIL A. MOLL, Maspeth, N. Y., assignor to Carman & Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 21, 1929. Serial No. 408,810. 2 Claims. (Cl. 206—46.)



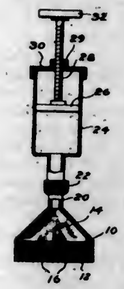
1. A laundry package comprising a folded laundered garment, a small laundry tag serving as an identifying insignia and detachably secured to said garment in a location normally hidden from view during the wear of the garment and on the exterior of the folded garment, and a flat paper containing enclosing said garment, said container having an opening for insertion and removal of the garment, and also having a relatively small opening registering with said tag for the purpose of removing the latter.

1,867,557. TIRE SHAPING MACHINE. ADRIAN O. ABBOTT, Jr., Detroit, Mich., assignor to Morgan and Wright, Detroit, Mich., a Corporation of Michigan. Filed June 22, 1928. Serial No. 287,619. 8 Claims. (Cl. 154—10.)



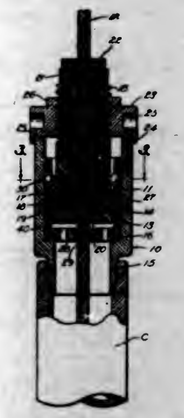
2. Vacuum tire-pulley-band shaping apparatus comprising a circumscribing vacuum box having a pulley band receiving opening around its inner perimeter, said box composed of at least two sections telescopically adjustable in a direction circumferentially of the box, and means for exhausting air from said box.

1,867,558. METHOD OF AND APPARATUS FOR APPLYING A LIQUID COATING TO A SURFACE. FRANCIS C. ATWOOD, Newton, Mass. Filed July 18, 1929. Serial No. 378,060. 4 Claims. (Cl. 91—68.)



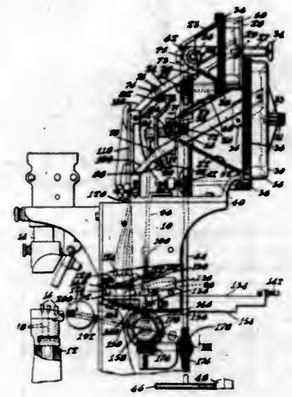
1. The method of producing a decorative finish upon a rough wall or ceiling, which consists in applying to the surface a quantity of a liquid glaze from the operative edge of a pliable squeegee by manually passing the squeegee over the surface to thereby wipe the liquid glaze from the high-lights and into the depressions of the surface substantially simultaneously with the application of the glaze.

1,867,559. OIL SAVER. ERNEST J. BECK, Long Beach, Calif., assignor to Blackwell & Sunde, Incorporated, Long Beach, Calif., a Corporation of California. Filed Mar. 23, 1931. Serial No. 524,606. 12 Claims. (Cl. 286—16.)



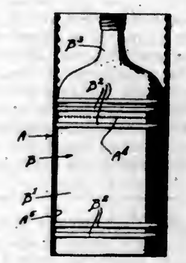
1. An oil saver of the character described including, a tubular body adapted to be mounted on the upper end of a well casing, a packing gland for packing about an object extending through the body, and means for releasably retaining the packing gland in the body, said means including a sleeve in the body surrounding the packing gland, and balls carried by the sleeve to wedge between the gland and body.

1,867,560. NAIL DISTRIBUTOR. JOHN M. BENJAMIN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Oct. 24, 1924, Serial No. 745,684. Divided and this application filed Oct. 15, 1929. Serial No. 399,847. 16 Claims. (Cl. 1—39.)



1. In a nail-distributor, a casing including lower and upper sections, a nail-drum rotatable upon each section, a raceway leading through each casing-section from the drum, and a nail-delivering device to which the raceways are connected.

1,867,561. METHOD AND MEANS FOR WRAPPING AND PACKING BOTTLES AND THE LIKE. ARTHUR L. BOBRICK, Los Angeles, Calif. Filed June 21, 1929. Serial No. 372,743. 4 Claims. (Cl. 229—90.)

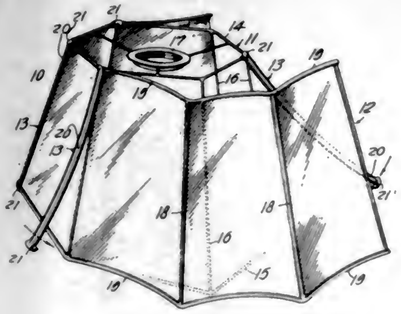


1. In combination with a bottle, ribs formed on said bottle, a wrapper of cushioned material placed around said bottle, and including means for engaging said ribs to hold the wrapper on the bottle.

1,867,562. LAMP-SHADE. ALFRED BURKE, New York, N. Y. Filed July 8, 1930. Serial No. 466,390. 4 Claims. (Cl. 240—108.)

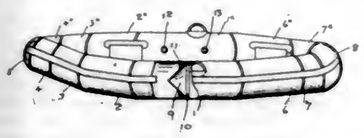
1. A lamp shade frame comprising a pair of ring members, and a plurality of braces each consisting of a

pair of diverging spring arms clamped to one of said ring members, each of said arms being provided at its free



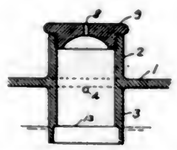
ends with interlocking loop portions adapted to be sprung into engagement with each other for firmly gripping the other of said ring members.

1,867,563. AIR BOAT. JOHN D. CLARKE, West Haven, Conn. Filed Feb. 23, 1929. Serial No. 342,036. 2 Claims. (Cl. 9—2.)



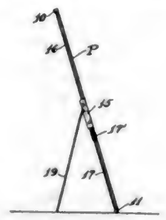
1. A boat comprising, in part, multiple geometrically shaped pieces of flexible material capable of providing tubular sections so angularly interfitted and assembled as to form a shaped endless inflatable rim longitudinally providing an intermediate base supporting upwardly inclined bow and stern portions; flexible cone-shaped partitions, each having an annular integrally flanged marginal portion secured to the annular interior wall of the rim; a reinforcing member carried by the conical portion of the partition and having an annular flanged marginal portion secured to the annular interior wall of the rim but in an opposite direction to that of the integral flange, the conical portion of the partition, and the portion of the reinforcing member carried thereby, having a hinged relation to both annular flanged marginal portions thus secured, the partitions dividing the endless course of the rim interior into separate relatively expansible air compartments; and means through which the compartments may be separately and independently inflated and deflated.

1,867,564. FILLING VENT STRUCTURE FOR STORAGE BATTERIES. BRUCE FORD, Philadelphia, Pa. Filed Mar. 29, 1926. Serial No. 98,316. 1 Claim. (Cl. 136—162.)



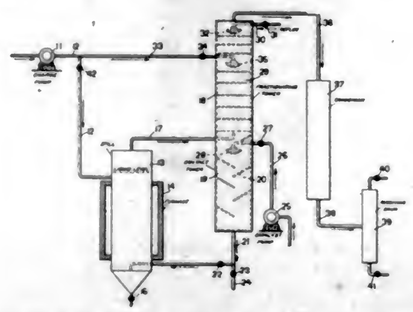
A filling vent structure for storage battery cells containing a liquid electrolyte, said vent structure comprising a normally horizontal cover having an integral, unitary, tubular structure extending above and below said cover and having upper and lower openings therein, the lower portion of the tubular structure having its interior wall offset to form a bottom chamber of larger diameter, the relative diameters of the tubular structure and of the bottom chamber and the height of the tubular structure and of the bottom chamber being so proportioned that a straight line connecting the lower inner edge of the bottom chamber and the lower inner edge of the tubular structure at the top of the offset passes through the upper opening of the tubular structure so that the lower edge of the bottom chamber is visible from the exterior of the tubular structure, the lower inner edge of the tubular structure at the top of the offset being at substantially the normal level of the electrolyte, so that the lower inner edge of the tubular structure at the top of the offset provides an indicator of the normal level of the electrolyte when filling the cell and the lower edge of the tubular structure provides a warning level of the electrolyte.

1,867,565. POSTER SUPPORT. JAMES T. GREENLEE, Oak Park, Ill., assignor to Century Printing Company, Chicago, Ill., a Corporation of Illinois. Filed June 10, 1931. Serial No. 543,320. 2 Claims. (Cl. 40—125.)



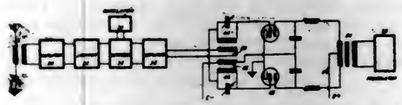
2. In combination with a poster having bars secured to opposite edges thereof, of a supporting structure comprising a block, a strut member extending from said block to one of said bars, another strut member extending from said block to the other bars, and a prop extending from said block, one of said strut members having threaded engagement with said block and being rotatable relative to the corresponding bar whereby said strut may be rotated relative to said block and said strut structure thereby lengthened to stretch the poster without disturbing said prop.

1,867,566. TREATING HYDROCARBON OILS. FRANK W. HALL, Fort Arthur, Tex., and VANCE N. JENKINS, Elizabeth, N. J., assignors to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed July 9, 1928. Serial No. 291,202. 2 Claims. (Cl. 196—54.)



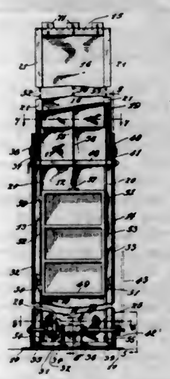
1. The process of converting higher boiling hydrocarbon oil into lower boiling oil which comprises maintaining a body of oil under conditions of distillation, passing evolved vapors into a fractionating tower, continuously introducing fresh oil into the tower whereby a portion or all of the vapors are condensed and the fresh oil heated, contacting said condensate and fresh oil with an aluminum chlorid catalyst while maintained at a conversion temperature, separate from said body of oil undergoing distillation and not in direct contact with said vapors evolved from said body of oil, whereby a portion of the condensate is converted into lower boiling oil, passing vapors of said lower boiling oil through said fractionating tower and returning the unconverted portion of the oil to the said body of oil undergoing distillation.

1,867,567. DETECTION OF FREQUENCY MODULATED SIGNALS. CLARENCE W. HANSELL, Port Jefferson, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 1, 1929. Serial No. 336,772. 15 Claims. (Cl. 250—27.)



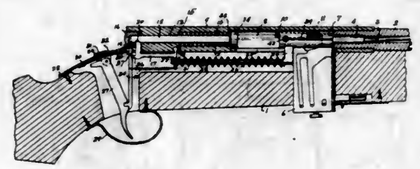
1. The method of securing a response dependent upon the frequency of alternating electrical energy which includes locally converting direct energy to alternating energy in an oscillator adjusted to a fixed frequency applying the alternating energy to the oscillator in order to vary the oscillation frequency, and securing a response in accordance with the magnitude of the direct energy supplied to the oscillator as an indication of the frequency of the alternating energy.

1,867,568. DUMB-WAITER AND DUMB-WAITER INCLOSURE UNIT. JEROME HIRSHFELD, New York, N. Y., assignor to Televator Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 20, 1928. Serial No. 263,158. 5 Claims. (Cl. 187—3.)



1. In a dumbwaiter apparatus, an outer closed casing, an inner closed casing adapted to fit within the outer casing and to form therewith n dumb-waiter inclosure, means for moving the inner casing out of the outer casing to a position for use, devices independent of the aforesaid means for supporting the inner casing when in its extended position for use, a car, means for moving the car in the inner and outer casings when extended, guide ropes connected to said casings for directing the travel of the car, said ropes being slack when the inner casing is within the outer casing and straight when the inner casing is moved out of the outer casing, all of said parts forming a unitary assembly for installation in the building as such.

1,867,569. FIREARM. JAMES MILTON HORGER, Corrigan, Tex. Filed Nov. 17, 1930. Serial No. 496,235. 5 Claims. (Cl. 42—3.)



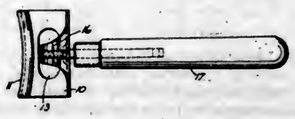
1. In a fire arm having a firing bolt, a reciprocable breech block and a firing pin in said block; a sear engageable with said bolt when the latter is in retracted position, a yieldable member disposed between the sear and breech block and effective to hold the sear in bolt engaging position and to return said breech block to original position after its recoil, a trigger, means connected to the trigger and effective to release the sear from said bolt upon actuation of said trigger.

1,867,570. BOTTLE CLOSURE. FRANK J. KAPS, New York, N. Y. Filed May 31, 1930. Serial No. 457,776. 8 Claims. (Cl. 215—73.)



1. A bottle closure, comprising a bottle neck cap having a large base portion adaptable to a bottle neck and a small upper threaded portion and a conical top with a pinhole aperture, a cover for engagement on said cap formed with a large base engageable over said large base portion of the cap and an interior small threaded top engageable over the said upper threaded portion of the cap, and a sealing member supported on said cover for engagement against said conical cap top and against the pinhole aperture for preventing evaporation of liquid within a bottle provided with the closure.

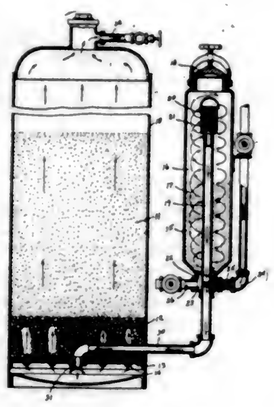
1,867,571. VESSEL HOLDER. RUDOLPH JELINEK, Chicago, Ill. Filed Apr. 19, 1930. Serial No. 445,736. 1 Claim. (Cl. 294—31.)



A device of the character described, comprising a handle, a blade secured to said handle and terminating at the upper end in an arched portion to engage the inner side

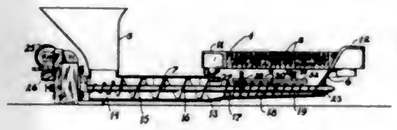
of a vessel, the lower end bearing a plate extending at right angles to said blade and formed with a curved margin to conform to the curvature of the vessel and engaging the same under pressure.

1,867,572. APPARATUS FOR REGENERATING WATER SOFTENING MATERIALS. JOHN A. JOHNSON, Crawfordsville, Ind. Filed Feb. 16, 1929. Serial No. 340,366. 5 Claims. (Cl. 210—24.)



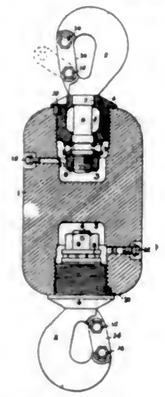
1. The combination with a water softener tank containing a bed of zeolitic substance therein, of means for regenerating the same, comprising a dissolving chamber associated therewith for containing a quantity of salt, a conduit for conducting a salt solution to be discharged through said substance having one end open to the contents of said chamber, a fresh water supply line and a nozzle connected with said line having an orifice in the side thereof in communication with said chamber and an orifice adjacent the discharge end thereof communicating with said conduit, whereby a portion of the water will be passed through the salt in said chamber into said conduit to mix with the fresh water therein so as to be diluted thereby.

1,867,573. MECHANICAL UNDERFEED STOKER. VERNON G. LEACH, Chicago, Ill., assignor to Modern Coal Burner Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 24, 1929. Serial No. 388,064. 1 Claim. (Cl. 110—47.)



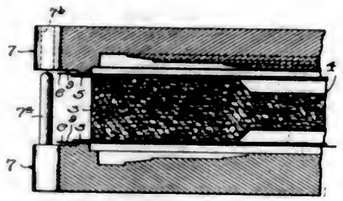
In an underfeed stoker including a hopper, a retort casing, and a conduit connecting said hopper and said retort casing, a screw conveyer having a plurality of helical flights, said conveyer having a portion thereof extending in the retort casing, said portion of the conveyor being substantially continuous and having segmental portions of certain flights thereof entirely cut away on opposite sides of the longitudinal axis of the conveyer to provide propeller-like blades.

1,867,574. ROD-LINE WEIGHT. ARTHUR L. LEMAN, Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 27, 1931. Serial No. 559,662. 3 Claims. (Cl. 294—82.)



1. A weight having oppositely disposed openings at its ends, removable bushings in the openings, hooks having axially-rotatable shanks extending through the bushings and into the openings beyond the bushings, enlargements on the inner ends of the shanks, and antifriction bearings between each bushing and the adjacent enlargement.

1,867,575. PROCESS FOR MAKING ARTICLES OF FIBROUS MATERIALS. EMIL C. LOETSCHER, Dubuque, Iowa. Filed Dec. 12, 1929. Serial No. 413,453. 4 Claims. (Cl. 154—2.)

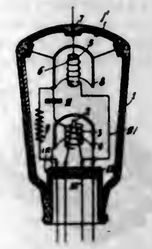


1. A process for manufacturing articles of a composite fibrous material and having irregular and sharply defined surface contours, consisting of forming a mat from a cellulosic fibrous pulp with portions of varying thickness and of substantially greater thickness and less density than the finished article, coating the surfaces of said mat with a resinous varnish and allowing the same to dry, preparing a covering for said mat of a plurality of sheets of paper coated with a resinous substance and having an intermediate layer of a dry mixture of a pulverized resinous substance and a cellulose filler, applying the covering over said mat and compressing the whole between heated dies whereby the same is reduced to the final thickness and surface contour of the finished article.

1,867,576. PROCESS OF REPRODUCING NATURAL WOOD FINISHES ON METAL AND OTHER SURFACES. EMIL C. LOETSCHER, Dubuque, Iowa. Filed Apr. 28, 1930. Serial No. 448,160. 5 Claims. (Cl. 95—5.)

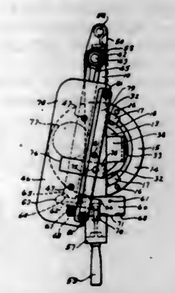
1. In a process for reproducing natural wood finishes on surfaces, the steps of producing a positive print by direct contact print of a sheet of natural wood veneer of such thinness as to transmit light therethrough, and making a printing plate from said print.

1,867,577. AMPLIFIER. SIEGMUND LOEWE, Berlin, Friedenau, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 11, 1926, Serial No. 147,643, and in Germany Nov. 12, 1925. 10 Claims. (Cl. 250—27.5.)



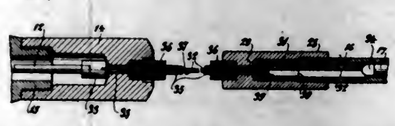
1. A multi-stage amplifier tube housing an end triode system having an anode and a cathode adapted to emit electrons and light, and a preceding triode system having a cathode independent of said first cathode and anode and adapted to emit electrons by virtue of the luminous emission from the cathode of the end triode system.

1,867,578. TARGET TRAP. GEORGE W. LORIMER, Troy, Ohio, assignor, by mesne assignments, to Black Products Company, Chicago, Ill., a Corporation of Illinois. Filed June 23, 1930. Serial No. 463,153. 17 Claims. (Cl. 124—6.)



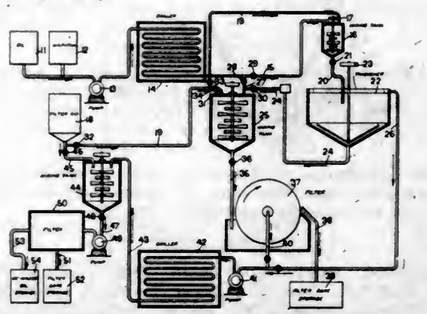
1. In a target trap, target throwing means, a reversibly mounted latch for said target throwing means, said means being adapted to be reversibly mounted so as to be cocked to engage said latch by movement in either of two directions to throw targets either in right-hand or left-hand directions when released.

1,867,579. MACHINE FOR RELOOPING THE RUNS IN STOCKINGS AND OTHER KNITTED FABRICS. CHARLES E. MANDELICK, New York, N. Y., assignor, by mesne assignments, to Kayser Hosiery Motor-Mend Corporation, Wilmington, Del., a Corporation of Delaware. Filed Apr. 23, 1929. Serial No. 357,599. 5 Claims. (Cl. 74—39.)



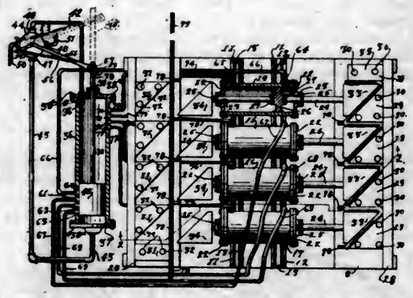
1. In a flexible power transmission member, the combination of a tubular handle, an impulse member extending through said handle, a cable for protecting the portion of said impulse member leading to said handle and having an end intruded into the handle, an anchoring member extending through the cable and having an end projecting therefrom into the handle, and means secured to said ends of the cable and anchoring member for securing the cable and anchoring member while permitting the handle to rotate freely about the same.

1,867,580. DEWAXING HYDROCARBON OIL. ROBERT E. MANLEY, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1928. Serial No. 270,868. 8 Claims. (Cl. 196—19.)



8. The process of dewaxing hydrocarbon oil which comprises chilling the oil whereby wax constituents are precipitated, settling the precipitated wax constituents whereby concentration of the wax in one portion of the oil is effected, separating the concentrate from that portion of the oil from which the wax has been settled, and filtering said concentrate in the presence of a filter-aid material to form a filtrate free from precipitated wax and filter-aid material.

1,867,581. ROD BENDING MACHINE. ALPHONSO H. MARIETTA, Akron, Ohio. Filed July 18, 1929. Serial No. 379,133. 4 Claims. (Cl. 153—21.)

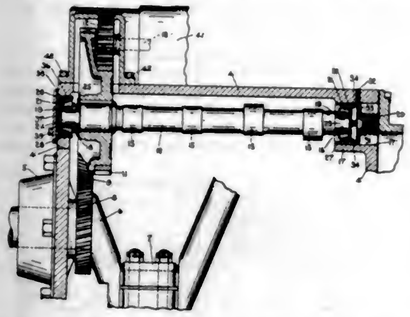


4. In apparatus of the character described, a supporting structure, a plurality of cylinders mounted thereon, a piston on each of said cylinders, a plunger attached to each piston, each plunger projecting from each end of each cylinder, a head on each end of each plunger, bending dies arranged along the like ends of said plungers and fluid pressure means for operating said pistons to bring said heads into mating relation with said dies.

1,867,582. INTERNAL COMBUSTION ENGINE. HAROLD E. MCCRAY, Waterloo, Iowa, assignor to John Deere Tractor Company, Waterloo, Iowa, a Corporation of Iowa. Filed Sept. 4, 1928. Serial No. 303,828. 7 Claims. (Cl. 74—7.)

1. The combination with an internal combustion engine comprising a crank shaft, a cam shaft, spiral gears

for driving said cam shaft from said crank shaft, of bearing members for said cam shaft, one of said bearing members preventing axial movement thereof in one direction



but permitting axial movement in the opposite direction, and spring means exerting an end thrust on said cam shaft in the first mentioned direction.

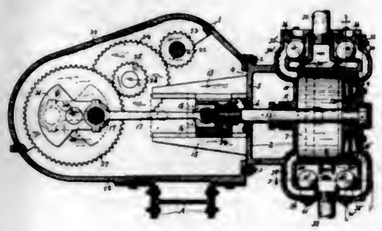
1,867,583. SYNTHETIC RESIN AND PROCESS OF MAKING. CHARLES G. MOORE, Lakewood, and MILTON ZUCKER, Cleveland, Ohio, assignors to The Glidden Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 10, 1929. Serial No. 369,916. 20 Claims. (Cl. 260—4.)

1. The reaction product of a polyhydric alcohol, an organic polybasic acid, an organic monobasic acid, and a preformed soluble phenolic resin of the type formed from the group of reactants consisting of aldehydes and ketones.

1,867,584. SYNTHETIC RESIN AND PROCESS OF MAKING THE SAME. CHARLES G. MOORE, Lakewood, and MILTON ZUCKER, Cleveland, Ohio, assignors to The Glidden Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 12, 1929. Serial No. 370,454. 12 Claims. (Cl. 260—4.)

1. A composition, consisting of the reaction product of a polyhydric-alcohol, an organic polybasic acid, an unsaturated fatty-acid, a phenol, and a compound selected from the group consisting of aldehydes and ketones.

1,867,585. VACUUM PUMP. THOMAS F. MOORE, Morris Plains, N. J. Filed Feb. 16, 1931. Serial No. 516,057. 3 Claims (Cl. 230—188.)



1. A vacuum pump comprising a gear-case element and a cylinder element releasably secured together end to end, a partition extending transversely across the meeting ends of said elements and provided with a gland co-axial with the cylinder element, a piston reciprocally movable endwise in the cylinder element and provided with a rod extended through said gland, power-driven means including a gear train in the gear-case element operatively connected to said rod for reciprocating the piston, said cylinder being provided with air inlet and outlet passages and valves controlled by the movement of the piston for controlling said passages.

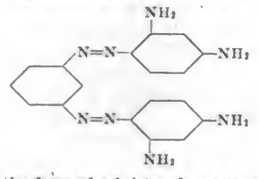
1,867,586. SLIDE FASTENER. SAMUEL H. NORTON, Meadville, Pa., assignor to Hookless Fastener Company, a Corporation of Pennsylvania. Filed Aug. 22, 1931. Serial No. 558,687. 6 Claims. (Cl. 24—205.)



1. A slide fastener having cooperating series of fastener elements on opposite edges of an article to be fastened, a slider movable along said series of elements for opening and closing the fastener, guide flanges on the slider, and cooperating track surfaces on said fastener elements adapted to abut against said guide flanges, said track surfaces extending substantially more than half way across the ends of the elements and being inclined outwardly from each other in the direction of closing movement of the slider to facilitate closure of the fastener.

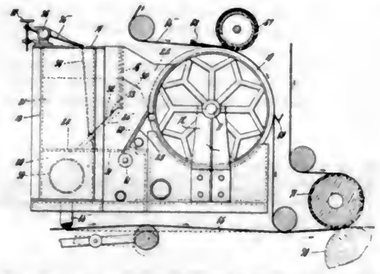
1,867,587. PURIFIED PHENYLENE-DISAZO-BISMETA-PHENYLENEDIAMINE. IWAN OSTROMISLENSKY, New York, N. Y., assignor to Ostro Research Laboratories, Inc., New York, N. Y., a Corporation of New Jersey. Filed Nov. 11, 1929, Serial No. 406,528. Renewed Dec. 9, 1931. 5 Claims. (Cl. 260—76.)

1. As a new material, a purified phenylene-disazo-bis-meta-phenylenediamine having the formula



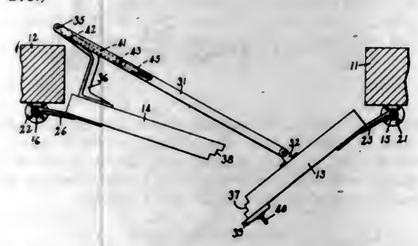
and having the form of a brick red powder and a melting point of approximately 183°–185° C.

1,867,588. METHOD OF AND APPARATUS FOR PAPER MAKING. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Apr. 28, 1930. Serial No. 447,892. 6 Claims. (Cl. 92—42.)



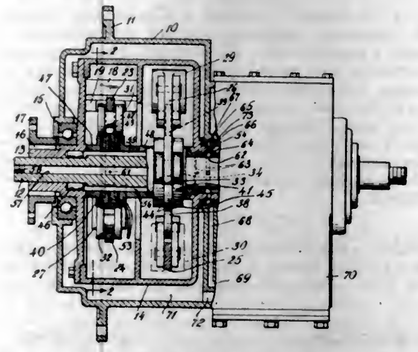
1. In the art of paper making, a method which comprises presenting a body of pulp stock to an upper quadrant only of a rotating cylinder mold, and maintaining in said body of stock a downward current and an upward current meeting to form a region of relative quiescence adjacent to the portion of the mold receiving the initial deposit of fibers thereon.

1,867,589. HOLD OPEN AND CLOSING MECHANISM FOR DOUBLE DOORS. CLAYTON L. PHILLIPS, Hamden, and HERBERT E. SPRAGUE, New Haven, Conn., assignors to Sargent & Company, New Haven, Conn. Filed Mar. 7, 1929. Serial No. 344,968. 2 Claims. (Cl. 292—275.)



1. A mechanism for holding a pair of doors mounted for pivotal movement into and out of an opening in open position, said mechanism including a pair of members adapted to be connected to the doors for relative movement when the doors are opened or closed, and means cooperating with said members and adapted to restrain them against relative movement when the doors are fully opened, said last named means including a rod pivotally mounted on one of said members, a sleeve pivotally mounted on the other member in which said rod is slidably received, a U-shape member slidably mounted on the rod and having a pair of arms adapted to engage said sleeve and resilient means for opposing sliding movement of said U-shape member on said rod.

1,867,590. AUTOMATIC VARIABLE SPEED MECHANISM. FINLEY R. PORTER, Port Jefferson, N. Y. Filed Mar. 24, 1930. Serial No. 438,441. 10 Claims. (Cl. 74—14.)



1. In a variable speed change mechanism, the combination of a driving member, a driven member, centrifugal means connected to one of said members, variable motion means connected to the other member, and leading and trailing elements mounted upon said centrifugal means and engaging said variable motion means.

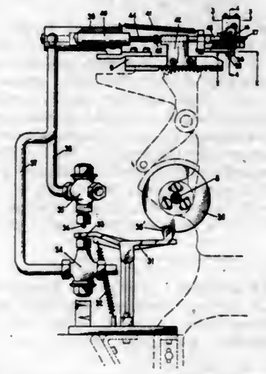
1,867,591. DIRIGIBLE AIR DOCK. AUGUST S. PRANKE, Baltimore, Md. Filed Nov. 29, 1930. Serial No. 499,106. 5 Claims. (Cl. 244—2.)

2. A structure of the class described comprising in combination, tracks, a carriage movable along said tracks, a rotatable pilot house extending upwardly from the carriage, a horizontally disposed unit connected to the pilot



house for rotation therewith above the carriage, and means arranged on the unit for anchoring an airship thereto.

1,867,592. INDEXING ATTACHMENT FOR AUTOMATIC MACHINES. WILLIAM J. RICHARDS, Waterbury, Conn., assignor to The Bristol Company, Waterbury, Conn., a Corporation of Connecticut. Filed Jan. 16, 1931. Serial No. 509,051. 8 Claims. (Cl. 29—57.)



1. In an automatic machine of the nature set forth: a tool-holder adapted to be mounted in the turret of said machine and embodying a rotatable tool-retaining element carried by the turret, and means to index said element about its rotational axis and relatively to the turret.

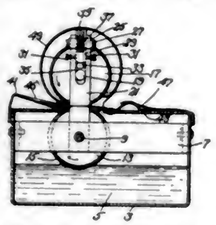
7. In an automatic machine of the nature set forth and including a cam shaft: a holder adapted to be mounted in the turret of said machine, a tool-retaining element rotatably mounted in the holder, indexing means for the said element including pawl and ratchet mechanism, the latter being rotatable with the tool-retaining element, a locking wheel secured to the said element, means to actuate the pawl for advancing the tool-retaining element a predetermined distance, fluid-actuated means for controlling the movement of said pawl-actuating means, and means actuated from the cam shaft of the machine for controlling said fluid-actuated means.

1,867,593. PROCESS OF CHEMICAL FIBER LIBERATION. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Apr. 12, 1929. Serial No. 354,716. 6 Claims. (Cl. 92—11.)

1. A cyclic process which comprises cooking raw cellulosic material in a non-acid solution of sodium sulphite without completing fiber liberation, cooking in an alkaline liquor containing sodium compounds to complete fiber liberation, mixing the spent liquors resulting from both cooking steps, smelting the inorganic content of the mixture in a reducing atmosphere to produce sodium carbonate and sodium sulphide crystallizing out sodium carbonate from the smelt, treating it with sulphur dioxide

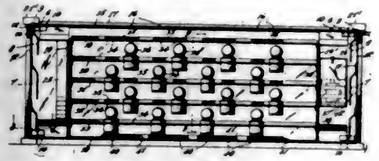
and water to produce a non-acid sulphite liquor for subsequent first-mentioned cooking, and using the rest of the smelt to produce an alkaline liquor for subsequent second-mentioned cooking.

1,867,594. SHOE STIFFENER CONDITIONING MACHINE. EDGAR E. ROWE, Chicago, Ill., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 25, 1929. Serial No. 335,107. 6 Claims. (Cl. 91—51.)



1. A machine of the class described having, in combination, a pair of cooperating rolls the outer portions of which consists of deformable material, yielding means for urging one of the rolls toward the other, means for supplying liquid to the rolls, whereby upon rotation of the rolls liquid accumulates at one side of the bite of the rolls and a blank passed through this liquid and between the rolls is progressively immersed in the liquid and then progressively embedded in the deformable material of the rolls, and means for preventing the escape of the liquid which accumulates at one side of the bite of the rolls, thereby increasing the accumulation of such liquid.

1,867,595. SIGN DEVICE. EDWARD G. ROWLEY, Newark, N. J., assignor to Cine-a-Graph Corporation, New York, N. Y., a Corporation of Delaware. Filed July 20, 1931. Serial No. 551,934. 6 Claims. (Cl. 40—132.)

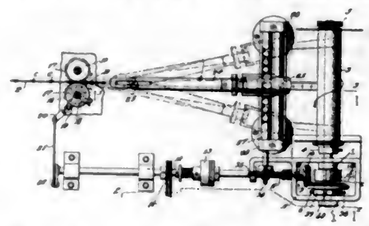


5. In a sign device, a plurality of shelves having spaced apertures and upturned flanges at their longitudinal edges, incandescent lamps mounted on the shelves between the apertures, said apertures and lamps being arranged so that each lamp is directly beneath and above apertures in adjacent shelves, and hoods positioned over the apertures, said hoods and upturned flanges preventing the passage of light from one compartment to another at the same time enabling free circulation of air throughout the sign device.

6. In a double faced sign device, a rectangular casing, a chassis having a plurality of incandescent lamps mounted thereon, angle members attached to the side walls of the casing and channels attached to the angles to support sign plates, said angle members and channels forming a rectangular guide to slidably receive the chassis.

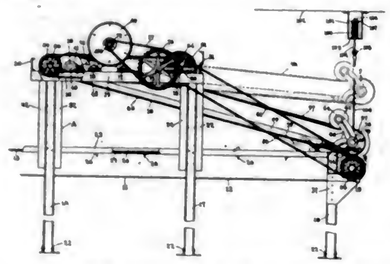
1,867,596. TAPE WINDING APPARATUS. LEO ROSEMAN, Newark, N. J. Filed Apr. 21, 1930. Serial No. 445,888. 5 Claims. (Cl. 242—158.)

1. In apparatus for reeling ribbon-like material, the combination of means for guiding the material with longitudinal movement in a fixed path, a winding spindle, drive means for rotating said spindle, a traversing guide for receiving said material from said guiding means and directing it into layers upon said spindle, means for driving said guide longitudinally of said spindle alternately in opposite directions, said traversing guide being shaped to hold said material with its plane at an angle to the plane



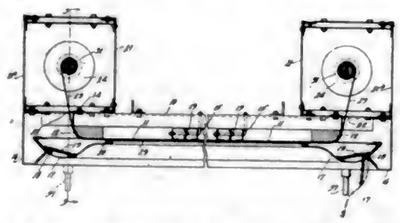
thereof as it leaves said guiding means and parallel with the axis of said spindle, whereby the material may be wound flatwise on said spindle and bent or flexed on a line in its own plane adjacent said guiding means as the material is moved longitudinally of the spindle.

1,867,597. BOX CRUSHER. NELS H. SANDBERG, Minneapolis, Minn., assignor to Waldorf Paper Products Company, St. Paul, Minn., a Corporation of Minnesota. Filed July 8, 1929. Serial No. 376,797. 8 Claims. (Cl. 100—1.)



1. A box crusher comprising a substantially horizontal belt, a framework straddling said belt, said framework including a superstructure, a shaft journalled in said superstructure, a plate extending between said framework and inclining downwardly toward said belt, bearings secured to said plate and journalled on said shaft, a roller carried by said shaft, bearings secured to the other end of said plate, a shaft journalled in said bearings, and a second roller mounted on said shaft, and a belt extending over said rollers, said belt having a run thereof lying adjacent said plate.

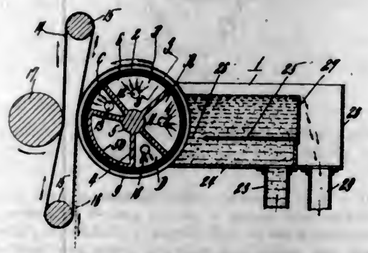
1,867,598. BILLBOARD. RAYMOND A. SCHORR, Akron, and PAUL R. FRANK, Cuyahoga Falls, Ohio. Filed Apr. 14, 1930. Serial No. 444,027. 6 Claims. (Cl. 40—125.)



1. A billboard for outdoor advertising of that type upon which posters are mounted comprising a panel, said panel comprising sections having wind-tight joints therebetween,

casings at the side edges of the panel, reels in the casings journaled to rotate on vertical axes, molding strips hinged about the panel to swing open, said casings having slots therein in back of certain molding strips through which the bill may pass, means for rotating the reels, and means for releasably locking the reels to prevent unwinding of the bill therefrom whereby a bill may be removably applied over said panel without adhesives.

1,867,599. MANUFACTURE OF PULP ROVINGS. MILTON O. SCHUR and WILLIAM B. MEGLITZ, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed June 27, 1931. Serial No. 547,246. 10 Claims. (Cl. 92—39.)



1. A method which comprises progressively depositing pulp fibers from aqueous suspension as continuous spaced ribbons on a portion of a rotating cylinder mould, and progressively furling the pulp ribbons into rovings on another portion of the mould.

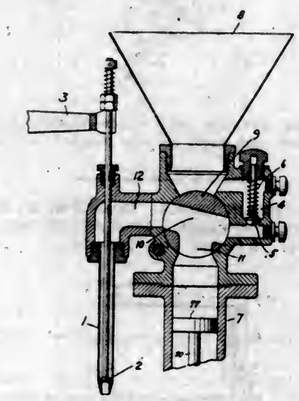
1,867,600. BARBER'S CHAIR. ARTHUR R. SCHWARZKOPF, Chicago, Ill., assignor to Theo. A. Kochs Company, Chicago, Ill., a Corporation of Illinois. Filed July 8, 1929. Serial No. 376,684. 12 Claims. (Cl. 155—177.)



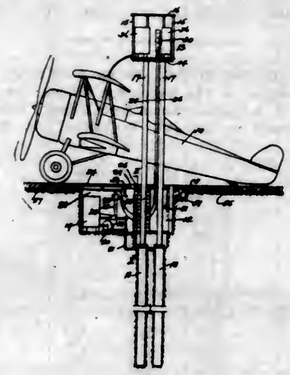
1. In a chair, the combination with the wooden framework of a chair back, said framework having a vertical groove in one side thereof, of a guide member contained within said groove and having integrally formed side walls and end walls defining a longitudinally extending enclosed guideway for a head rest slide, screws extending through the side wall of said guide member behind said guideway and through said framework, and tapped members for holding said screws, said tapped members being positioned against the opposite side of and rigidly fastened to said wooden framework, whereby to provide an anchor for the screws and strengthen the frame adjacent the groove.

1,867,601. FILLER MECHANISM FOR TUBES AND THE LIKE. FRANCIS J. STOKES, Philadelphia, Pa. Filed June 9, 1928. Serial No. 284,186. 3 Claims. (Cl. 226—107.)

1. A filling machine for tubes or the like including in combination a feeding hopper for material to be fed, a feeding nozzle for introducing the material to the tube to be filled, a cut off for said nozzle, means independent of the tube to be filled for opening and closing said cut off, a pump for conveying the material to be fed from said hopper to said nozzle, a mechanically actuated valve alternately opening connection between said hopper and said pump or between said pump and said nozzle, and a by-pass between said valve and said hopper for returning excess material to said hopper, said valve intermittently opening an unobstructed connection between said pump and said by-pass.



1,867,602. FUELING SYSTEM. LOUIS C. STUKENBORG, Memphis, Tenn. Filed Dec. 1, 1930. Serial No. 499,178. 9 Claims. (Cl. 221—100.)



1. A fueling system comprising a runway, a pit below the surface of said runway, a tank disposed in said pit, means for raising and lowering said tank, means for covering said pit when said tank is lowered therein to complete said runway, and means for filling said tank in lowered position.

1,867,603. CALCULATING MACHINE. LOUIS TALAMINI, Oakland, Calif., assignor to Marchant Calculating Machine Company, a Corporation of California. Filed Oct. 13, 1930. Serial No. 488,362. 5 Claims. (Cl. 235—138.)

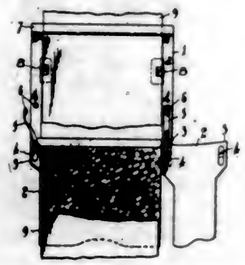
1. In a calculating machine, accumulator wheels, a plurality of successively acting carry actuating members

therefor, carry controlling elements associated with said members, and means for concurrently conditioning said



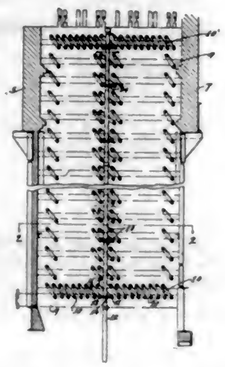
members and operating said wheels thereby comprising complementary cam faces on said members and said elements.

1,867,604. CARBON PACKS. EDWARD W. M. THOMSON, Toronto, Ontario, Canada. Filed Apr. 23, 1931. Serial No. 532,241. 8 Claims. (Cl. 282—28.)



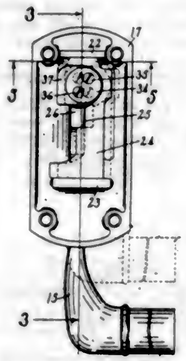
1. In a carbon pack for use in the manifolding of continuous forms on a typewriter or similar machine, the combination of a carrier; means on said carrier for limiting its passage through the typewriter; and a carbon sheet hingedly connected at one edge to the carrier, and means for detachably connecting the opposite edge to the carrier.

1,867,605. ECONOMIZER. JESSE L. THORN, Bayonne, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Sept. 15, 1927. Serial No. 219,662. 9 Claims. (Cl. 257—239.)



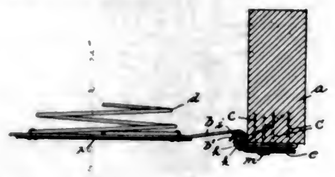
1. In an economizer, a plurality of substantially straight headers, and U-tubes connecting said headers, some of said U-tubes having longer bends than others, said bends being inclined with respect to the length of the economizer, the legs of said tubes having longer bends being aligned with legs of other said U-tubes.

1,867,606. LOCK FOR EXIT BOLTS. IRVING N. VAN SICKLES, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn. Filed May 28, 1929. Serial No. 366,687. 14 Claims. (Cl. 70—14.)



1. In a lock, a casing, a latch retracting lever pivotally mounted in said casing, a pair of spaced transversely extending guideways in said casing, a slidable dog mounted between said guideways, said dog being provided with a notch in which said lever may be received to be held against movement, a rotatable plug mounted in said casing near the upper end of said dog, said dog being provided with a notch near the upper end thereof, a stem on said plug received in said notch and adapted in cooperation therewith to move said dog in said guideways into and out of engagement with said lever upon rotation of said plug, and a spring mounted between said dog and casing, said spring being provided with a bulge therein, and an abutment on said dog adapted to cooperate with the bulge to retain the dog in either of said positions.

1,867,607. WEBBING SUPPORT. SIMON L. WARREN, Quincy, Mass. Filed Apr. 5, 1930. Serial No. 442,016. 4 Claims. (Cl. 155—179.)

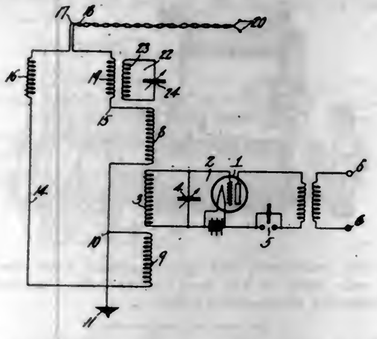


1. In an upholstery construction of the character described, a frame, a webbing stretched crosswise of the frame from its under side and having fasteners securing the same thereto, a strap of rigid material arranged to engage the under side of the webbing within the frame and to hold the same against the inner side of the frame adjacent the lower inner edge thereof, said strap having a top face with which the webbing is engaged as it extends inward from said inner side and fasteners engaged with the strap and extending obliquely outwardly and upwardly thru the strap and webbing and into the frame from its inner side.

1,867,608. SELECTIVE RECEIVING SYSTEM. SIDNEY Y. WHITE, New York, N. Y., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Jan. 17, 1928. Serial No. 247,297. 9 Claims. (Cl. 250—20.)

1. In a high frequency receiving system, a multiple part antenna, a pair of branch circuits in extension thereof, like

impedance means having like effective inductance in each of said branch circuits for equalizing the impedance of



said circuits, a coupled rejector for unbalancing said circuits at a selected frequency, and a circuit equally but oppositely coupled to said branch circuits.

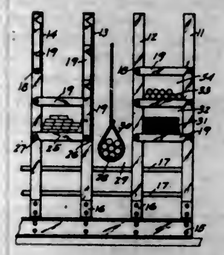
1,867,609. YARN TREATMENT. JACK L. BITTER and RICHARD ELSSNER, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed July 2, 1931. Serial No. 548,474. 6 Claims. (Cl. 34—24.)

5. In a process of the class described, the steps of wrapping wet artificial yarn wound upon a perforated spool with an impermeable covering, and then applying a drying medium to the inner surface of the spool, thus drying the yarn from the inner side of the spool only.

1,867,610. TREATMENT OF ARTIFICIAL FILAMENTS. JACK L. BITTER, Elizabethton, and RICHARD ELSSNER, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 29, 1931. Serial No. 560,226. 9 Claims. (Cl. 28—61.)

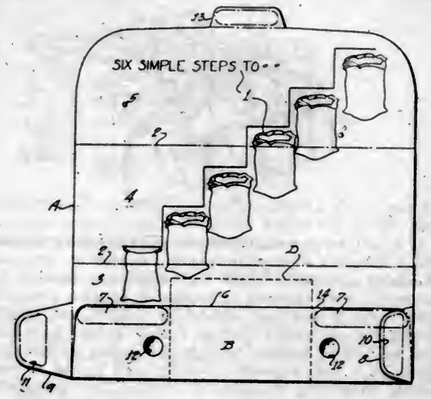
1. In a method of treating spooled artificial filaments, and the like the steps of wet-treating, drying, rewetting and redrying, the filaments and the like being rewound onto another holder between the first and second drying.

1,867,611. STORAGE RACK. GEORGE R. BORRMANN, Oakland, Calif. Filed Oct. 23, 1931. Serial No. 570,670. 2 Claims. (Cl. 211—1.)



1. A rack comprising a plurality of series of spaced apart standards, vertically spaced shafts rotatably mounted and extending through each series of standards, arms spaced apart and secured to one shaft in one series and adapted to freely rest on a shaft in the next adjacent series, said arms being adapted to swing upwardly out of obstructive relation to the space beneath.

1,867,612. MAILING PARCEL. HARRY W. BREWER, St. Louis, Mo. Filed Apr. 27, 1931. Serial No. 533,352. 1 Claim. (Cl. 229—87.5.)



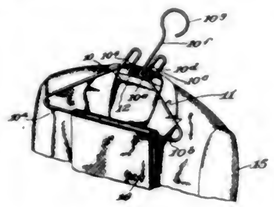
A mailing parcel constructed of a single section of flexible material and integrally including a body-portion comprising opposed end-panels and an intermediate panel, an end-extension on one of the end-panels of reduced width relatively to the width of said one end-panel, said extension being folded to partially overlie and being at its end fixed flatwise upon said one panel to form therewith an open-end pocket, additional opposed extensions on the opposite side margins of said one end-panel folded for adhesive connection over and upon the said marginal portions of said one extension for closing the ends of said pocket, said end extension having a contents-exposing aperture intermediate the ends of the pocket and said other end and intermediate panels being folded to respectively overlie and underlie said first end-panel and said pocket, an a flap-extension on said other end-panel for securement flatwise upon the outer face of an adjacent panel for sealing the parcel, the parcel being normally flat and being squeezably expandable under opposed pressure applied at opposed edges of the parcel for visually exposing said aperture.

1,867,613. FORCE FEED LUBRICATING SYSTEM, ETC. IRVING COWLES, Chicago, Ill., assignor to Union Bank of Chicago, Chicago, Ill., a Corporation of Illinois, as trustee. Filed Aug. 27, 1926. Serial No. 131,843. 36 Claims. (Cl. 184—7.)



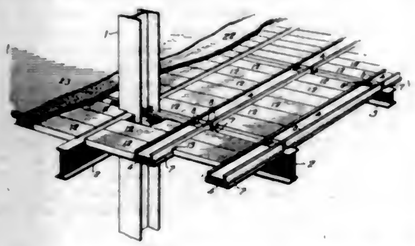
1. A pump including a pump-barrel, a reciprocable piston therein, a valve casing associated with the pump-barrel and having an intake port, and a plurality of discharge ports, two of the latter communicating with the source of supply of fluid associated with the intake port and another thereof communicating with piping for distribution of fluid under pressure, means associated with said piping for limiting discharge from the latter, a spring-held slide-valve controlling all of said ports and associated with the piston for actuation by the latter, said valve normally held against the action of its spring to maintain the last-mentioned discharge port and one of the other discharge ports closed and adapted, during the suction stroke of said piston to open said ports and close the remaining discharge port, a spring-held check-valve controlling the intake port, and a check-valve controlling the discharge port leading to the piping.

1,867,614. SUIT HANGER. HENRY J. CUSCADEN, Highland Park, Ill. Filed Apr. 26, 1929. Serial No. 358,229. 7 Claims. (Cl. 223—62.)



1. A suit hanger comprising a coat supporting member and a trousers supporting member formed of wire and swingably attached to said coat supporting member for movement with trousers in supported position about its attachment to said coat supporting member, and further having the supporting portion thereof spaced from said coat supporting member when in supporting position and overlying a coat supported thereby, and having an outwardly projecting engagement portion for engagement with a support.

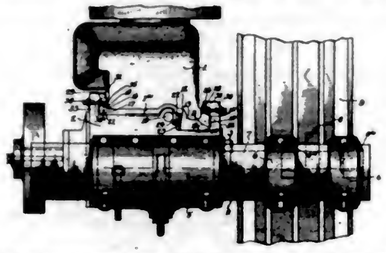
1,867,615. SLAB AND BUILDING CONSTRUCTION. CLARKE F. DAVIS, Westfield, N. J., assignor to Structural Gypsum Corporation, Linden, N. J., a Corporation of Delaware. Filed Apr. 7, 1931. Serial No. 528,302. 39 Claims. (Cl. 72—68.)



1. As an article of manufacture a composite slab comprising two spaced apart metallic structural members, and a set mass of plastic material therebetween, said mass extending below the bottom of said members and terminating short of the top thereof.

1,867,616. MACHINE TOOL. CHARLES B. DE VLIEG, Rockford, Ill., assignor to Sundstrand Machine Tool Co., Rockford, Ill., a Corporation of Illinois. Filed Apr. 1, 1927. Serial No. 180,171. 2 Claims. (Cl. 90—16.)

1. In a milling machine having a column, a table slidable transversely in front of said column, and a head slidable vertically on a side face of the column and arranged to support a cutter arbor extending forwardly from the head across said table, and means for slidably supporting and clamping the head on said column, said means comprising a narrow guide along the forward edge of said column having two pairs of vertically extending opposed slideways, one pair being parallel and the other pair perpendicular to the axis of the cutter, a second narrow guide along the rear edge of said column providing opposed vertically extending slideways parallel to the cutter axis, surfaces on integrally formed parts of said head slidably engaging one of each of said pairs of slideways, integrally formed portions on said head positioned in opposing relation to the other one of each pair of slideways, adjustable gibs interposed between said integral portions of the head and the adjacent slideways, adjusting means for said gibs, the gibs opposing the front and rear surfaces which are parallel to the cutter axis being wedge-shaped in horizontal cross section, and clamping screws engaging



said last mentioned gibs and projecting from the front and rear sides of the head so that the head may be conveniently clamped in position.

1,867,617. EVENNESS OF SHRINKAGE. RICHARD ELSSNER, Johnson City, Tenn., assignor to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 29, 1931. Serial No. 560,225. 4 Claims. (Cl. 28—61.)

1. In a process for treating wet artificial filaments wound upon a spool or bobbin, the steps of drying, rewetting and redrying the filaments, rewinding onto another spool or bobbin, rewetting, redrying, rewetting and redrying the filaments.

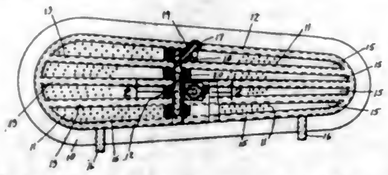
1,867,618. DRYING PROCESS. RICHARD ELSSNER, Johnson City, Tenn., assignor to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 11, 1931. Serial No. 562,427. 4 Claims. (Cl. 117—53.)

1. In a process for producing a yarn with a technically even shrinkage, the steps of winding the yarn upon a bobbin spool, or like device, wet treating the yarn thus wound, drying the yarn slowly at a temperature of from 20°–30° C., and at a humidity of approximately 80% twisting into a loose body onto another holder, rewetting the yarn, and redrying the same slowly.

1,867,619. DRYING OF ARTIFICIAL FILAMENTS. RICHARD ELSSNER, Johnson City, Tenn., assignor to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 26, 1932. Serial No. 595,427. 3 Claims. (Cl. 117—53.)

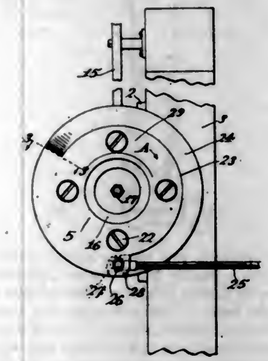
1. In the production of artificial filaments with even shrinkage, the steps of spinning the filaments on perforated bobbins, washing, drying the bobbin in the open air until there remains approximately 80% moisture content, rewinding these filaments onto perforated disk spools, so that a loose body is obtained, twisting after a short period onto a twisting bobbin, and drying the yarn to about a 3–12% moisture content.

1,867,620. PRESSING MEMBER. HARRY D. FORSE, Anderson, Ind. Filed Sept. 29, 1930. Serial No. 485,104. 10 Claims. (Cl. 68—9.)



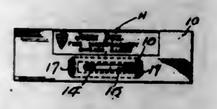
10. In a presser device, the construction of a perforated pressing plate, heating tubes secured to said plate in spaced relation to each other, cover plate means bridging the space between the tubes and forming therewith and the perforated plate steaming chambers, and a header communicating with each of said chambers for supplying steam thereto.

1,867,621. COMBINATION JOINT BREAKER AND CATHEAD. WALTER L. FOSTER, Whittier, Calif., assignor to John W. MacClatchie, doing business as MacClatchie Manufacturing Company, Compton, Calif. Filed Jan. 20, 1930. Serial No. 421,987. 31 Claims. (Cl. 254—173.)



1. A rotatable member adapted for winding of a flexible medium thereon and having means operating irrespective of continued rotation of the rotatable member for automatically releasing the coiled portion of the flexible medium before one complete revolution of the rotatable member.

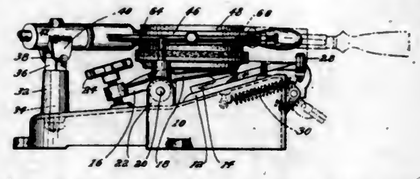
1,867,622. LABEL. LEON FREEMAN, Chicago, Ill. Filed July 30, 1931. Serial No. 553,988. 1 Claim. (Cl. 40—2.)



As an article of manufacture, a woven fabric label adapted for attachment to an article, the label having identifying data such as the name of the manufacturer, distributor or dealer, or his trade-mark thereon, a clip device having a substantially flat base and an integral tongue-like spring element extending therefrom and overlying the plane of the base, said spring element projecting through the label and extending on the front side thereof, said base being secured on the rear side of the label, the construction providing that the article to be held may be passed between the spring element and the portion of the label overlying the base for ready removability.

1,867,623. HONING DEVICE. JOSEPH GOULDBOURN and FRED RICKS, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 27, 1926, Serial No. 157,353, and in Great Britain Apr. 3, 1926. 3 Claims. (Cl. 51—59.)

3. In a honing and sharpening device, the combination with a honing tool and a knife holder, of a gage comprising a movable elongated member, a pivot for the gage, a spring connected to the gage, said spring passing by the pivot upon movement of the gage to maintain the gage in either one of two positions, one of said positions being an operative position against which the knife may be positioned and the other being an inoperative position



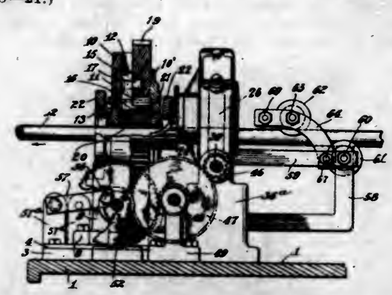
away from the knife, and a co-operating clamp member for maintaining rigidly the knife within the holder after it has been positioned against the gage.

1,867,624. DEVICE FOR OBTAINING BIOPSY SPECIMENS. WILLIAM JOSEPH HOFFMAN, New York, N. Y., assignor to Memorial Hospital for the Treatment of Cancer and Allied Diseases, New York, N. Y., a Corporation of New York. Filed Apr. 1, 1930. Serial No. 440,725. 3 Claims. (Cl. 128—2.)



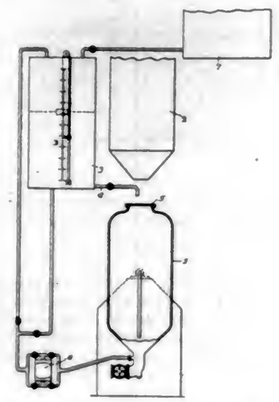
1. A device adapted for obtaining specimens of subcutaneous tissues comprising a non-slotted tube having a cutting edge and a cutting rod capable of longitudinal movement within and removable from said tube, said cutting rod having an extended conical head capable of extension beyond the extremity of said tube and capable of longitudinal movement within said tube, the base of said head being recessed to form a peripheral cutting edge co-operating with the cutting edge of said tube during the longitudinal movement of the cutting rod to produce a shearing effect.

1,867,625. PROCESS AND APPARATUS FOR COMPACTING CONDUCTORS. THOMAS B. HUESTIS, Bristol, R. I., assignor to The National India Rubber Company, Bristol, R. I., a Corporation of Rhode Island. Filed Nov. 4, 1927. Serial No. 231,152. 2 Claims. (Cl. 78—21.)



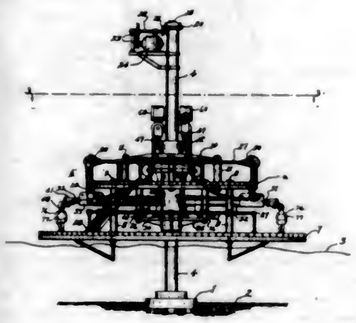
1. A device for compacting a continuously longitudinally moving electrically insulated conductor having in combination, an apertured frame, through which the conductor moves continuously, members mounted for radial movement on the frame and adapted to apply pressure to the surface of the conductor when in innermost position, means for simultaneously actuating the members so as to apply a uniform radial pressure throughout the circumference of a length of the conductor, means for reciprocating the frame in the direction of movement of the conductor, and synchronizing means to effect the operation of the members into pressure applying relation with the conductor only when the frame and conductor are moving in unison.

1,867,626. MANUFACTURE OF WOOD PULP. OTTO KRESS, Appleton, Wis. Filed Apr. 2, 1927. Serial No. 180,407. 3 Claims. (Cl. 92—13.)



1. The method of making kraft wood pulp which comprises impregnating a charge of wood before cooking with hot liquor under pressure and which impregnating liquor contains substantially from 5.4 to 6.3 per cent of sodium hydroxide and substantially from 4 to 5.7 per cent of sodium sulphide, withdrawing a portion only of the excess liquor and of such amount that substantially from 17 to 22 pounds of active chemicals per 100 pounds of wood is left in the digester and in the proportions substantially of two parts of sodium hydroxide to one part of sodium sulphide, then cooking the charge, and restoring the withdrawn impregnating liquor to its original strength and amount by the addition of recovered "white liquor" containing substantially from 8.4 to 11 per cent of sodium hydroxide and from 4.2 to 5.5 per cent of sodium sulphide substantially in the proportions of two parts of sodium hydroxide to one part of sodium sulphide, substantially as described.

1,867,627. APPARATUS FOR TEACHING SWIMMING. LEO OLSCHEWSKI, Union, N. J. Filed May 8, 1931. Serial No. 535,823. 13 Claims. (Cl. 272—32.)



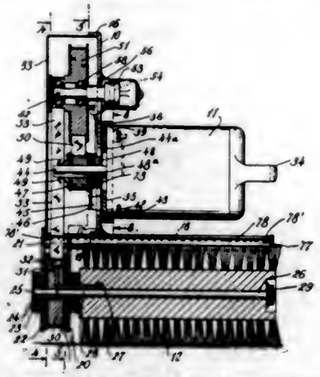
1. An apparatus for teaching swimming comprising, a rotatable carriage, means for supporting said carriage for rotation with respect to a body of water, a derrick device carried by said carriage and adapted to support a person in the water so that the person may swim in circles as the carriage revolves, said derrick device being radially extensible, whereby the person may swim in circles of varying diameters.

1,867,628. ROLLER BIT. JOHN T. PHIPPS, Huntington Park, Calif., assignor, by mesne assignments, to Globe Oil Tools Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 27, 1929. Serial No. 395,574. 3 Claims. (Cl. 255—72.)



1. A rotary drilling tool having roller cutters, comprising a body with a cavity for a cutter and provided with cavity side walls having alined cylindrical bores for a cutter journal pin with a counterbore at one end oblique to the main axis of said bores, a cutter journal pin detachably mounted therein having a head at one end and a washer set in said counterbore and secured at its other end to said pin whereby said pin is secured against rotary and longitudinal movement, and a cutter journalled on said pin.

1,867,629. PORTABLE POLISHING DEVICE. ROBERT A. PONSELLE, New York, N. Y. Filed June 8, 1927. Serial No. 197,339. 17 Claims. (Cl. 15—49.)

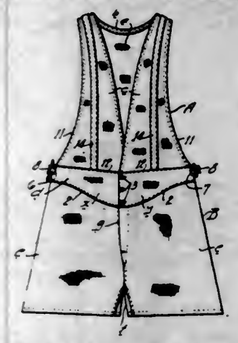


10. The combination of a frame, a motor mounted on the frame, a rotary element adapted to receive the motor shaft to be driven thereby and supported thereon, and means on the frame independent of the shaft for engaging said element to position it in proper operative relation to the shaft lengthwise of the latter.

1,867,630. APPAREL GARMENT. JAMES H. RAMBO, Fairfield, Ill., assignor to Sexton Manufacturing Company, Fairfield, Ill., a Corporation of Illinois. Filed Apr. 17, 1930. Serial No. 444,933. 1 Claim. (Cl. 2—78.)

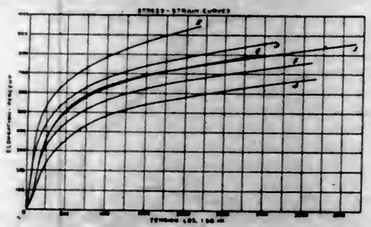
A unitary bifurcated garment including a pants-portion comprising a waist-band widened longitudinally of the garment over the abdomen and depending loin and leg-encircling members, the pants-portion being permanently closed at its crotch and having an overlapping placket extending longitudinally, and centrally in the front, of

the garment downwardly through the widened waist-band and leg members to adjacent the closed crotch thereof, the waist-band having pairs of spaced openings upon opposite sides of the garment, a shirt-portion comprising a back section having a width at its one end approximately equal to the space between, and being permanently stitched at and transversely along its one end to the waist-band in the rear of the garment intermediate, said waist-band-openings, said back-section fully extending over the back and upwardly to the neck and having at its upper end a bifurcated extension the legs of which are of gradually increasing width and of a length to fit over the shoulders and to extend at their broader ends to the waist-band in the front of the garment, said legs at their broader ends having a combined width greater than the distance between said pairs of waist-band openings and overlapping

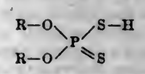


in the longitudinal center of the garment, said legs at their said broader ends being respectively permanently stitched to the waist-band intermediate the placket and said respective waist-band openings, said extension-legs being spaced throughout their outer margin from said back-section and with said back-section providing at the opposite sides of the garment elongated arm-openings extending from the shoulders to said waist-band, and tapes engaging the waist-band at said openings intermediate the points of attachment of said back-section and of the respective extension-legs to the waist-band for adjustably varying the size-dimensions of said waist-band, and a row of co-operative fastener elements extending longitudinally centrally on the garment only on the waist-band at said placket for removably securing the garment on the body of the wearer.

1,867,631. RUBBER ACCELERATOR AND METHOD OF USING THE SAME. CHARLES J. ROMIEUX, Elizabeth, and LUDWIG J. CHRISTMANN, Jersey City, N. J., assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Dec. 30, 1931. Serial No. 583,924. 8 Claims. (Cl. 18—53.)

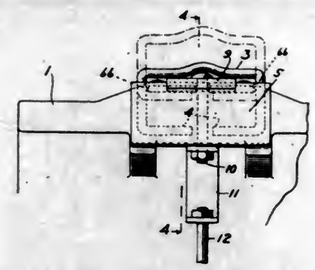


1. A vulcanizable rubber composition containing an accelerator having most probably the following structural formula—



where R is an aliphatic or aromatic radical.

1,867,632. COLLAPSIBLE BATTERY HANDLE. WILLIAM P. ROCHE, Lakewood, Ohio. Filed Dec. 17, 1930. Serial No. 502,903. 1 Claim. (Cl. 16—114.)

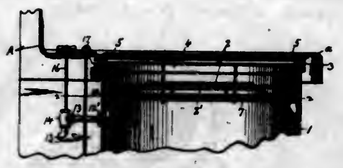


A handle for storage battery containers comprising a grip having inturned ends with space between, a mounting in which said grip is afforded a range of sliding movement parallel with a wall of the container, said mounting comprising interengaging face and top plates, each adapted to engage a wall of the container with space between the face of the wall and the plates in which space the ends of the grip have limited sliding movement, and a bolt engaging said plates and arranged between the inturned ends of the grip and in the space provided between the plates and the container wall.

1,867,633. RUBBER DISPERSING AGENT. ROBERT G. SEAMAN, Dover, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Aug. 27, 1930. Serial No. 478,283. 6 Claims. (Cl. 134—17.)

2. A method of forming artificial dispersions of rubber which comprises dispersing rubber in a non-solvent thereof with the aid of silk-boil-off liquor comprising sericin and alkali soaps as a dispersing agent for the rubber.

1,867,634. DISHWASHING MACHINE. CARL M. SNYDER, Syracuse, N. Y., assignor to Walker Dishwasher Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 23, 1929. Serial No. 394,583. 4 Claims. (Cl. 141—9.)

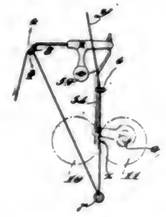


1. In a mechanical dishwasher, the combination with a vat and a dish-supporting basket removably mounted within the vat, of a water supply nozzle secured in an opening in one side of the vat and projecting into said vat, and a perforated pipe ring operatively mounted upon the basket within the vat for removal therewith and having a telescopic pipe connection with said nozzle to permit the removal of the pipe ring without disturbing the nozzle.

1,867,635. YARN FURNISHER. HARRY SWINGLEHURST, Orange, N. J., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed July 22, 1931. Serial No. 552,311. 17 Claims. (Cl. 66—132.)

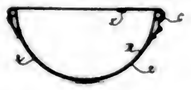
1. The combination, in a yarn furnisher for a machine using the yarn, of coacting yarn advancing devices, at least one of said devices comprising a series of spaced resiliently yieldable yarn engaging elements, means for moving said

latter device at least in the direction of yarn travel to draw off yarn from a source of supply, and means for controlling the drawing-off rate comprising a control device having freedom of motion in one direction according



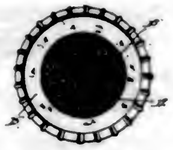
to the tension on the yarn between the furnisher and the machine, said control device having means for stressing it in the opposite direction by a force variable according to a force transmitted from one of said coacting devices to the other.

1,867,636. SIEVE ATTACHMENT FOR EAVES TROUGHS. MARK L. TINKLEPAUGH, Binghamton, and GEORGE W. HOWE, Waverly, N. Y. Filed June 27, 1930. Serial No. 464,199. 4 Claims. (Cl. 108—30.)



1. An attachment for eaves troughs comprising a section of wire mesh disposed over the side edges of the trough, a bent portion along the outer edge of the wire mesh for engaging the outer edge of the trough, hook members penetrating the wire mesh along its inner edge, and flexible means extending around under the trough body and secured to the hook members and the bent outer edge of the wire mesh.

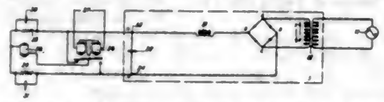
1,867,637. CLOSURE AND INTERIOR FACING THEREFOR. ALBIN H. WARTH, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md., a Corporation of New York. Filed Dec. 23, 1930. Serial No. 504,409. 2 Claims. (Cl. 215—38.)



1. A cap having a sealing liner, an interior facing of metal foil on the liner, the facing leaving exposed the surface of the liner around the periphery of the facing, adhesive coextensive with the undersurface of the facing and uniting the same to the liner, and a coating of acid or alkali resistant varnish on the outer surface of the facing.

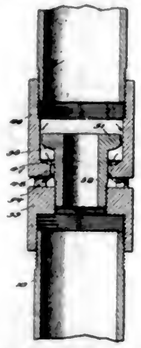
1,867,638. TELEGRAPH PRINTER. ALLAN WEAVER, Port Washington, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 7, 1930. Serial No. 459,762. 6 Claims. (Cl. 178—88.)

1. A telegraph receiver having a polar relay, adapted for printing characters in response to groups of signal impulses, a source of voltage, a continuously closed circuit for said source, elements of fixed impedance in said circuit for producing a plurality of potential drops, and electromagnet means responsive to said signal impulses for selecting one of the elements in said circuit across which



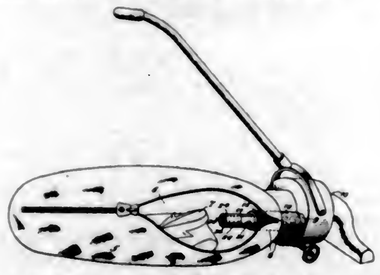
the potential drop occurs, in order to utilize the potential drop produced for operating the polar relay of said receiver in accordance with the signal impulses.

1,867,639. APPARATUS FOR FLOWING WELLS. EAKIN L. WHELESS, Shreveport, La. Filed Apr. 29, 1930. Serial No. 448,275. 4 Claims. (Cl. 103—232.)



1. A port valve for use intermediate a sectional string of tubing, comprising a tubular member having means at one end for attachment to one section of said string and having at the other end a radially outwardly extending annular shoulder, and a sleeve member having at one end means for attachment to the other section of said string, said sleeve member being loosely telescoped about the shoulder portion of said tubular member and having an inwardly extending annular shoulder, with which the shoulder of the tubular member is engageable by extension of the members to constitute a continuous tubular section, or separable by relative telescopic movement of the members to constitute a port, said shoulders having concavo-convex engaging surfaces thereby providing perfect seating despite misalinement of the sections of the tubing string.

1,867,640. RENOVATING DEVICE. OSCAR WIDDERS and JESS K. BAYLESS, Monett, Mo. Filed Mar. 28, 1930. Serial No. 439,747. 5 Claims. (Cl. 167—3.)



3. A structure as specified in claim 2; said reduced extension having a coarse external circumferential ridge, the second tube being deformed by said ridge, establishing a tenacious connection between the second tube and the extension.

1,867,641. MANUFACTURE OF BRICK. GEORGE WITTY, New York, N. Y., assignor of one-half to Richard T. Harte, New York, N. Y. Filed Nov. 22, 1929. Serial No. 409,192. 2 Claims. (Cl. 106—24.)

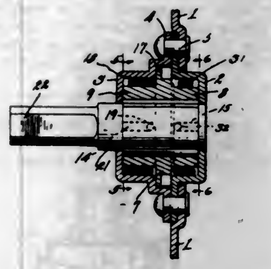
1. A blast furnace slag brick consisting of granulated blast furnace slag, cement, calcium chloride, lead borate and a pigment.

1,867,642. EXERCISING APPARATUS. CHARLES G. WOODS, Glendale, Calif. Filed June 6, 1930. Serial No. 459,549. 4 Claims. (Cl. 272—79.)



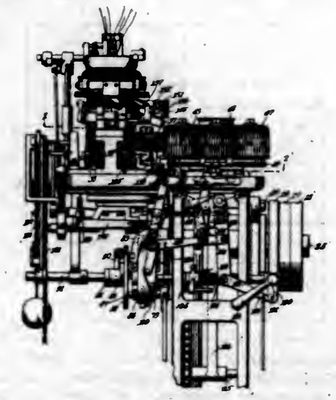
1. An apparatus for exercising purposes comprising a portable enclosing casing having one of its walls forming an abutment for the feet of the operator, spring drum mechanism within the casing, and pull handles having connections with the drum mechanism and passing through the said abutment wall.

1,867,643. CLUTCH MECHANISM. EDWARD L. ACKERMAN and ALOIS J. ZWIERZINA, Detroit, Mich., assignors to Ackerman-Blaesser-Fezzey, Inc., Detroit, Mich., a Corporation of Michigan. Filed July 28, 1930. Serial No. 471,375. 10 Claims. (Cl. 192—8.)



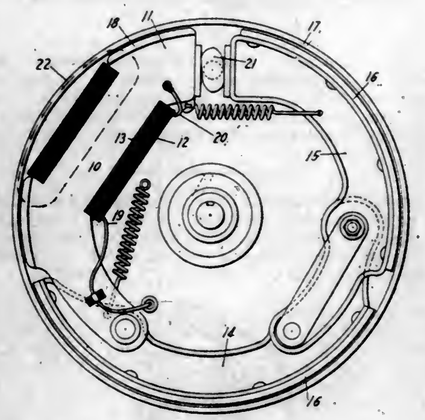
1. In a clutch mechanism, a housing, a drive gear rotatable therein and provided with hub portions extending each side thereof, the said hub portions being provided with a central bore therethrough and having radial shoulders therein, a coiled spring on each side of the gear positioned about the hub, each spring normally expanding into frictional engagement with the inner wall of the housing, each hub being provided with a slot and each spring being provided with an inturned end engaging in the respective slot, the free end of each spring being also provided with an inturned end and each hub being provided with an elongated notch to receive the said free inturned ends, a shaft rotatable within said central bore and provided with shoulders adapted to engage the shoulders of the gear hubs to limit rotative movement of the shaft in relation to the gear, the said shaft being provided with longitudinal faces adapted upon turning of the shaft to engage the ends of the springs extending into the notches of the hubs, the arrangement being such that the springs are released from frictional engagement with the housing upon engagement of the free inturned end by one of the longitudinal faces of the shaft.

1,867,644. KNITTING MACHINE. ELMER U. AMES, deceased, Collingswood, N. J., by The Camden Safe Deposit and Trust Company, executor, Camden, N. J., assignor to Caroline F. Ames, Haddonfield, N. J. Filed Sept. 5, 1929. Serial No. 390,613. 30 Claims. (Cl. 66—30.)



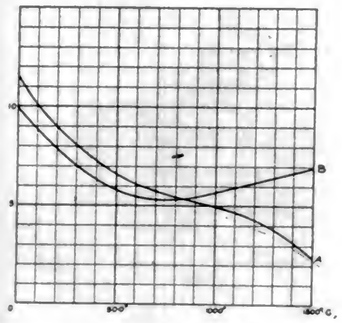
30. In a knitting machine, a needle cylinder, selectively movable instrumentalities coacting with the cylinder in the operation of knitting, a rotatable turret, a plurality of pattern forms on the turret, transmitting devices between the turret and the needle cylinder for connecting pattern forms operatively to selected instrumentalities, and means for rotating the turret, said turret rotating means being pattern-controlled to vary the order in which the pattern forms are operatively positioned with respect to the transmitting devices.

1,867,645. MANUAL-MAGNETIC SERVO-BRAKE. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 16, 1928. Serial No. 293,191. 21 Claims. (Cl. 188—164.)



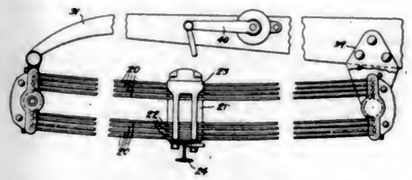
1. In a manual-magnetic servo brake, the combination of a brake drum, primary and secondary arcuate brake shoes concentrically arranged within said drum and interconnected whereby the primary shoe acts to apply the secondary shoe, manual means to apply said primary shoe to said drum, and an electric coil about the primary shoe to assist said manual means.

1,867,646. ELECTRIC FURNACE AND THE METHOD OF OPERATING THE SAME. RAYMOND C. BENNER and GEORGE J. EASTER, Niagara Falls, N. Y., and CLARENCE E. HAWKE, Metuchen, N. J., assignors to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Oct. 2, 1930, Serial No. 485,998, and in Canada Mar. 20, 1929. 7 Claims. (Cl. 13—34.)



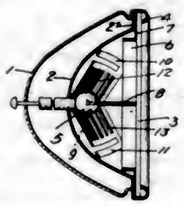
1. The method of electrical heating which comprises connecting a silicon carbide heating element having a negative temperature coefficient of electrical resistance throughout the principal operating range in series with a silicon carbide heating element having a positive temperature coefficient of electrical resistance within the operating range and generating heat within an electric furnace from both of the said heating elements.

1,867,647. SPRING. CLARENCE A. BROCK, Detroit, Mich. Filed July 19, 1928. Serial No. 293,858. 7 Claims. (Cl. 267—36.)



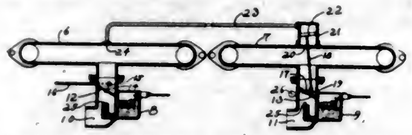
1. In combination, a leaf spring comprising a plurality of superimposed spring leaves of substantially equal length, each of said leaves being provided at its ends with an elongated laterally projecting end portion extending perpendicularly with respect to the length of said leaf.

1,867,648. AUTOMOBILE HEADLIGHT DIMMING DEVICE. DIMMICK BROWN, Barrie, Ontario, Canada, assignor to Marvel Headlight Limited, Toronto, Ontario, Canada, a Corporation of Ontario. Filed Dec. 6, 1929. Serial No. 412,164. 2 Claims. (Cl. 240—48.2.)



1. In a headlight including a reflector and light source, a pair of opposing transversely curved plates, a plate being located above and below the light source each provided with fingers or teeth forming a comb like structure, the forward face of the plate and teeth forming reflecting surfaces and set in the reflector to coincide with chords of the arc forming the reflector surface above and below the light source.

1,867,649. INTERNAL COMBUSTION ENGINE. ALANSON P. BRUSH, Detroit, Mich. Filed Aug. 2, 1928. Serial No. 296,921. 20 Claims. (Cl. 123—52.)



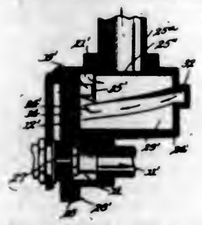
1. An internal combustion engine having a plurality of intake manifolds, means for delivering a combustible fuel mixture thereto, means for regulating the pressure in one manifold and movable means, controlled by the pressure in said manifold, for regulating the pressure in another of said manifolds.

1,867,650. GASOLINE TANK CAP LOCK. ARTHUR W. BRYAN, Tacoma, Wash. Filed May 15, 1931. Serial No. 537,689. 13 Claims. (Cl. 220—55.)



1. In combination with a filling neck of a tank and retaining flanges on said neck, a hollow cap receiving the neck and having a keyhole to receive an operating key, a supporting member journalled to the cap, a closure disk engaging the neck and secured to the supporting member, fastening means slidably secured to the closure disk and engaging under the flanges, and means under the influence of the key to secure the supporting member to the cap.

1,867,651. HYDROAIR COMPRESSOR AND VACUUM PUMP. ARTHUR W. BURKS, Decatur, Ill. Filed Feb. 4, 1930. Serial No. 425,868. 13 Claims. (Cl. 103—96.)

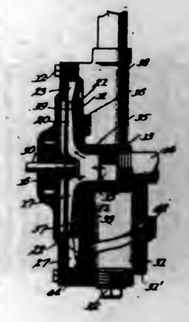


I. In a rotary pump, a rotor having a series of buckets, a casing having a main inlet and an outlet, and a chamber in communication with the rotor buckets through said outlet for maintaining a body of liquid which has imparted thereto by the rotor action a whirling movement in which it separates air, said chamber having means for guiding the water from one plane of the whirlpool to another to engage the rotor buckets after it has been freed from air.

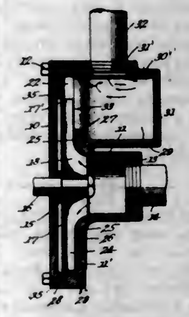
1,867,652. AIR PUMPING CENTRIFUGAL PUMP. ARTHUR W. BURKS, Decatur Ill. Filed Feb. 6, 1930. Serial No. 426,358. 16 Claims. (Cl. 103—96.)

1. A centrifugal pump comprising a rotor having a centrifugal discharge, a casing having an inlet adapted to

introduce fluid to the rotor inwardly from its periphery, an arcuate fluid channel into which the rotor discharges, said casing having an outlet with which the channel communicates and through which it discharges, a series of rotatable buckets disposed laterally of the rotor and rotatable therewith adapted to receive air entering the pump casing, means for maintaining by the action of said buckets a liquid whirlpool, the liquid from which engages the buckets and displaces their contents into the whirlpool, and means for leading liquid carried by the buckets from the whirlpool back to the latter.

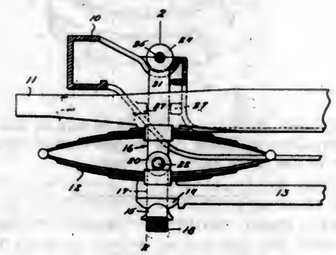


1,867,653. AIR PUMPING CENTRIFUGAL PUMP. ARTHUR W. BURKS, Decatur, Ill. Filed Feb. 7, 1930. Serial No. 426,639. 4 Claims. (Cl. 103—96.)



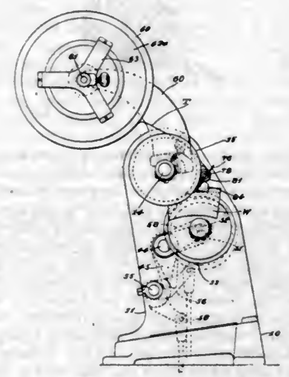
1. A pump comprising a rotor having a laterally opening inlet and peripherally directed passages leading therefrom, said passages being laterally closed by a rotor wall on one side of the rotor only part way to the periphery and having at their outlets a plurality of buckets opening both toward said side and toward the periphery, and a casing having a wall closing the buckets and passages at their open sides substantially entirely around the rotor and forming around the rotor periphery a raceway into which said passages centrifugally discharge, said raceway having an outlet, a chamber adapted to maintain an air separating whirlpool and having an opening in its wall through which said buckets communicate with the chamber at said open side of the rotor, said chamber being adapted to maintain an air-separating whirlpool which engages said buckets and displaces air therefrom into the whirlpool, the chamber being in communication with said raceway outlet and being adapted to receive the raceway discharge therethrough.

1,867,654. SWING HANGER FOR RAILWAY TRUCKS. HOWARD T. CASEY, Baltimore, Md., assignor to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed Oct. 13, 1930. Serial No. 488,499. 9 Claims. (Cl. 105—190.)



1. In a lateral motion truck including transoms and a suspended bolster movable laterally thereof, supporting means for the bolster comprising a plurality of connected parts movable as a whole for the first portion of their travel and relatively movable for the remainder of their travel.

1,867,655. TAPING MACHINE. CHRISTIAN CHRISTIANSEN, Lynn, Mass., assignor to Rotary Machine Company, Lynn, Mass., a Corporation of Massachusetts. Filed June 28, 1928. Serial No. 289,017. 16 Claims. (Cl. 154—42.)

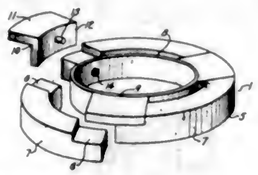


1. In a machine for applying an adhesive tape along a seam uniting two pieces of work, the combination of a pair of tape pressing rolls having parallel oppositely inclined working faces, said lower roll having an annular flat portion separating the inclined faces thereof, and a guide for guiding the work along the seam and for holding the seam on said flat portion.

1,867,656. PISTON RING. WALDREN H. COOPER, Parkersburg, W. Va. Filed Feb. 24, 1931. Serial No. 517,757. 2 Claims. (Cl. 74—109.)

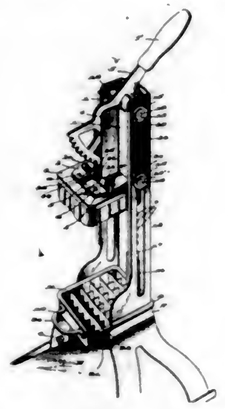
1. In a device of the character described, an outer ring split transversely to form segments, an inner resilient

split ring spaced concentrically from the outer ring, blocks between the inner and outer rings in locking en-



gagement with the outer ring, and means on one of said blocks engaging the inner ring for preventing independent rotation of the inner and outer rings.

1,867,657. FOOD CHOPPER. MARTIN C. DELLINGER, Lancaster, Pa., assignor of one-half to Harry W. Kulp, Lancaster, Pa. Filed Dec. 26, 1930. Serial No. 504,956. 6 Claims. (Cl. 146—169.)

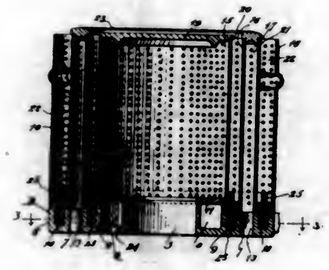


1. A food chopper comprising a guideway of channel form and having parallel vertical sides formed with registering vertical guide slots, a carriage extending between the sides of said guideway and having side portions of substantial vertical length disposed closely adjacent, and substantially parallel, to said sides of said guideway, studs mounted in the upper and lower end portions of each of said carriage sides and projecting outwardly through the corresponding guide slots of the respective sides of the guideway, a pair of guiding and antifriction rollers mounted in opposed relation on each stud, each roller of each said pair of rollers being formed with a reduced portion to engage the edge walls of its slot and with a flange portion to engage the corresponding opposed face of the corresponding side of said guideway adjacent the slot thereof, a pressing block carried by said carriage, a cutting element adapted to receive the food stuff to be operated upon and operatively rigidly held and supported in the path of movement of said pressing block, in combination with means for causing movement of said carriage endwise of said guideway.

1,867,658. TREATMENT OF YARNS, FABRICS, FILMS, AND THE LIKE. HENRY DREYFUS, London, England. Filed Oct. 24, 1927, Serial No. 228,505, and in Great Britain Nov. 12, 1926. 15 Claims. (Cl. 8—13.)

1. Process for loading materials comprising organic substitution derivatives of cellulose, comprising treating the materials at any stage of the loading operation with a ureoid base.

1,867,659. OIL BURNER. HOMER D. DUFAULT, Easthampton, Mass., assignor of two-tenths to Alderic Fugere, two-tenths to Euclide Fugere, two-tenths to Adam Boucher, one-tenth to Henry Bernier, and one-tenth to Hiram Bernier, Easthampton, Mass. Filed Aug. 19, 1931. Serial No. 558,136. 2 Claims. (Cl. 158—87.)



1. An oil burner comprising a substantially flat circular base having a central air-conducting opening therethrough, said opening occupying substantially one-third of the diameter of the base, said base being provided with an annular air-conducting slot therethrough between said opening and its peripheral edge, said base being provided around said opening with a retort groove and with a gas groove between said retort groove and said slot, said base having another gas groove between its peripheral edge and said slot, both of said gas grooves being narrower than said retort groove and upwardly open, a closure for the upper side of said retort groove, webs spanning said slot, said base having passages from said retort groove to said gas grooves extending through said webs, said passages being substantially tangential to said retort groove to facilitate cleaning and said retort groove being provided with an oil inlet; concentric perforated cylinder resting on said base and providing annular spaces which communicate with said air-conducting slot and said gas grooves, the innermost cylinder being in communication with said air-conducting opening, a closure for the upper end of said inner cylinder, and a closure for the cylinder-defined spaced above said air-conducting slot.

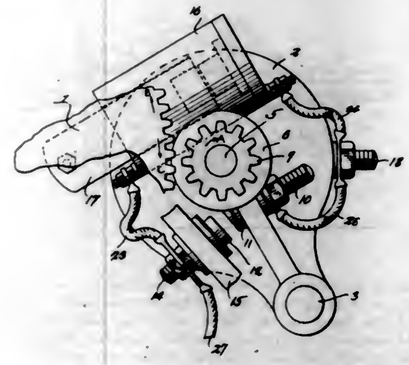
1,867,660. TREATMENT OF TEXTILES. GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Mar. 10, 1928, Serial No. 260,820, and in Great Britain Nov. 15, 1927. 9 Claims. (Cl. 8—2.)

4. Process for degumming materials comprising natural silk and cellulose acetate, comprising treating the materials with an alkaline liquor having a hydrogen ion concentration of at least $10^{-12.5}$ grams per litre.

1,867,661. PROCESS OF PREPARING COLORED GRANULAR MATERIAL. JOHN V. FREEMAN, Bellerose, N. Y. Filed Oct. 24, 1928. Serial No. 314,848. 2 Claims. (Cl. 91—70.)

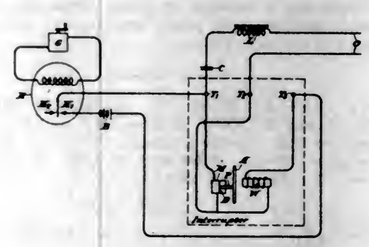
1. The herein described method of treating calcined clay granules to heighten and fix the color thereof, which comprises, soaking the granules in an iron solution to increase their iron content, drying the soaked granules, then feeding the granules in a substantially continuous stream throughout successive zones, subjecting the stream of granules to heat and increasing the temperature from each stream zone to the next succeeding stream zone, supplying air to the granules being heated, agitating the granules while being heated at the successive zones, and discharging the treated and color fixed granules from the last of the successive stream zones.

1,867,662. ENGINE STARTER. ELMER ALONZO FRIDLEY, Sacramento, Calif. Filed Apr. 1, 1930. Serial No. 440,709. 3 Claims. (Cl. 290—38.)



2. The combination with a starting gear, of a motor, a pinion carried by the motor, means for mounting the motor for radial swinging movement to bring the pinion into and out of mesh with the starting gear, and solenoid means for imparting swinging movement to the motor, said solenoid means embodying, as cooperating elements, a core and a coil, one of said cooperating elements being fixed, and the other of said cooperating elements being carried by the motor.

1,867,663. ARRANGEMENT FOR PRODUCING MODULATED CURRENTS. LESLIE H. GARBER, RALPH G. HALL, and CONOVER BLACKWOOD, Denver, Colo., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed May 20, 1931. Serial No. 538,824. 3 Claims. (Cl. 179—175.1.)



1. In a portable test set, the combination of a polar relay, a source of current of one frequency connected to the winding of the polar relay, an interrupter, a source of direct current connected to said interrupter for producing alternating current variations at a second frequency, and means interconnecting the armature of the polar relay and said interrupter for producing current of the second frequency interrupted in accordance with the first frequency.

1,867,664. YARN TWISTING DEVICE. JAMES A. GROVES, Albermarle, N. C. Filed Nov. 15, 1930. Serial No. 495,972. 9 Claims. (Cl. 117—2.)

1. In methods of twisting, winding or doubling a plurality of yarn rovings together in a single strand, the improvement which consists in passing the combined rovings first dampened and under drawing tension over a



soft surface frictioning material introduced between the dampening and drawing points and tending to lay the fuzz or loose fibres therearound.

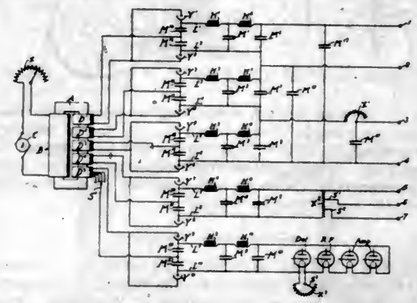
1,867,665. REFINING METHOD OF VEGETABLE OILS TO BE USED AS SOLVENTS FOR INJECTION MEDICINES. HEISAKU HATAKEYAMA and HOTORI WATANABE, Kobe, Japan. Filed Sept. 7, 1929, Serial No. 391,112, and in Japan Sept. 12, 1928. 2 Claims. (Cl. 87—12.)

1. A refining method of vegetable oils to be used as solvents for medical injection, which comprises removing the greater portion of glycerine and free fatty acid contained in the oil, and transforming free fatty acid which remain in trace in the oil into an ester by combination with an aromatic alcohol.

1,867,666. PROCESS OF PREPARING ALKALI-HYPOCHLORITE SOLUTIONS. FRIEDRICH AUGUST HENGLEIN and FRIEDRICH WILHELM STAUF, Cologne-Deutz, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 6, 1929, Serial No. 338,028, and in Germany Feb. 11, 1928. 2 Claims. (Cl. 23—86.)

1. The process which comprises passing into an alkali metal hydroxide waste solution, containing cellulose substances in a finely divided form, chlorine gas at a temperature between the freezing point and about +10° C. until the liquor reacts weakly alkaline.

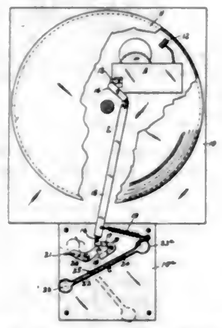
1,867,667. CURRENT RECTIFYING APPARATUS. ALBERT S. HUBBARD, Bethel, Conn., assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y., a Corporation of Delaware. Filed July 21, 1928. Serial No. 294,463. 1 Claim. (Cl. 175—363.)



In a current distribution system, an alternating current supply circuit, a transformer having a primary included in the supply circuit and further having a plurality of secondary coils, the secondary coils being arranged in a cir-

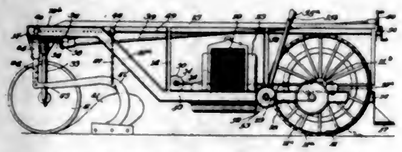
cuit including a plurality of rectifiers and capacitances, the rectifiers being similarly arranged and connected in series with each other and with the corresponding capacitances, one terminal of each secondary coil being connected between the associated capacitances and the other being connected directly to both associated rectifiers, the connection of the successive secondary coils with the associated and corresponding rectifiers and condensers being reversed to eliminate strain.

1,867,668. AUTOMATIC ALARM. ALBERT KOENIG, Newark, N. J. Filed Aug. 12, 1931. Serial No. 556,690. 11 Claims. (Cl. 116—103.)



1. In an alarm of the character described, a hollow actuator provided with an expansible fluid therein, means for movably supporting said actuator so that it will move from a predetermined position by expansion of said fluid, an alarm control lever, means connected with said lever for normally moving it to and retaining it in a predetermined alarm-released position, means positioned to engage said lever while it is in an alarm-stopped position, so as to retain it in the last mentioned position, said retaining means being operative independently of any position assumed by the actuator, and means positioned to be engaged and moved by said actuator during movement thereof for positively disengaging said lever from its releasing means, so that it is free for movement to its alarm-released position.

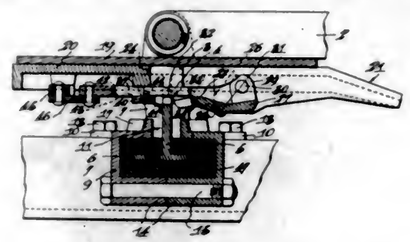
1,867,669. TRACTOR. JAKE D. KOOYENGA, Thornton, Ill. Filed Mar. 15, 1929. Serial No. 347,240. 3 Claims. (Cl. 180—20.)



1. A tandem tractor comprising an elongated frame having an elevated front frame section and a relatively low rear frame section, a steering wheel journaled on the front frame section, and a relatively wide traction wheel of substantially the same width as the frame journaled above the rear frame section.

1,867,670. FIFTH WHEEL. LUBBERT E. LUBBERS, Stoughton, Wis., assignor to The Stoughton Company, Stoughton, Wis., a Corporation of Wisconsin. Filed June 18, 1931. Serial No. 545,339. 12 Claims. (Cl. 280—33.1.)

1. In fifth wheels, a lower unit and an upper unit, said upper unit including a body carrying a pivot pin which has a shank and a head, said lower unit including a plate having a slot to receive the shank of said pin, a dog pivoted beneath the lower plate to engage behind the pin head when the upper and lower units have been assembled, and means cooperative with said dog for locking the dog



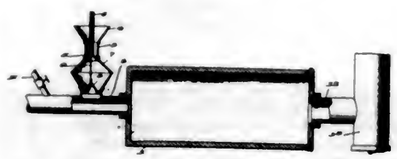
against movement when said means is in one position and for holding said dog set for automatically engaging said pin head as the units are being connected, when said means is in another position, and for releasing and holding said dog out of action when said means is in a third position.

1,867,671. SAFETY ZONE GUARD. CURTIS A. MASSOLL, Detroit, Mich. Filed Sept. 8, 1931. Serial No. 561,712. 3 Claims. (Cl. 256—1.)



1. A safety zone protecting device, comprising barrier posts respectively located adjacent to lines bounding opposite side of the safety zone; a sheet metal barrier plate bent to a substantially parabolic form to provide a resilient barrier across the end of the zone; and means for securing the ends of said barrier plate to the barrier posts, comprising a plurality of anchor strips encircling and rigidly secured to the barrier posts and to the marginal edges of the barrier plate.

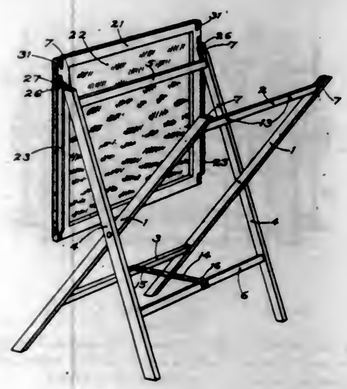
1,867,672. MANUFACTURE OF ALUMINUM CHLORIDE. ALMER MCDUFFIE MCAFEE, Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed Sept. 30, 1927. Serial No. 223,066. 5 Claims. (Cl. 23—93.)



1. In the manufacture of aluminum chloride, the process which comprises projecting a burning fine grained mixture of carbon and bauxite by a jet of chlorin containing some oxygen, the said oxygen being accompanied by some nitrogen but not in amount greater than its own volume.

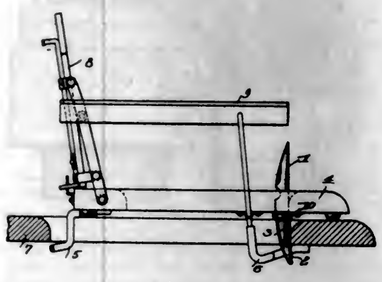
4. In the manufacture of aluminum chloride, the process which comprises burning a jet of finely divided aluminous and carbonaceous material in an atmosphere of gases comprising oxygen, chlorin and nitrogen, the said gases being in the approximate ratios by volume of 20 : 67 : 13.

1,867,673. INFANT'S COMBINATION DRESSING TABLE AND BATHTUB. HARRY E. MCCANDLESS, Rochester, N. Y. Filed Mar. 16, 1928. Serial No. 262,283. 2 Claims. (Cl. 4—177.)



2. The combination with a cross-legged foldable supporting stand, of a dressing table including a frame supportable directly on the upper ends of the legs when in horizontal position, guide rods carried by the dressing table, trunnions engaging said guide rods and mounted on the rear legs of the stand, said trunnions projecting beyond the supporting stand endwise, and a tub frame detachably mounted on the stand and located beneath the upper ends of the legs and beneath the dressing table when the latter is horizontally positioned.

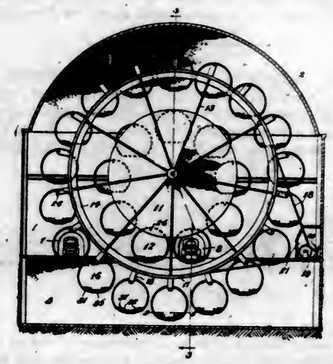
1,867,674. CHILD'S TOILET SEAT. HARRY E. MCCANDLESS, Rochester, N. Y. Filed Feb. 19, 1931. Serial No. 516,975. 10 Claims. (Cl. 4—239.)



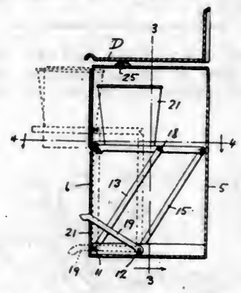
3. A flexible guard for a toilet seat constructed of resilient material of substantially elliptical formation having its minor axis curved to conform to the shape of an opening in a toilet seat, and having a pocket formed at one end whereby it may be detachably mounted on a supporting bracket.

1,867,675. STORAGE GARAGE. EARL O. MCHENRY and FRANK A. MCHENRY, Hoytville, Ohio, assignors of one-third to Daniel C. Ingold, McComb, Ohio, and one-third to Melvin J. Ingold, St. Louis, Mich. Filed Dec. 4, 1930. Serial No. 500,076. 5 Claims. (Cl. 214—16.1.)

1. Means for the purpose set forth comprising a building having alined doors in its front and rear walls, a rotatable frame mounted within the building with its axis parallel with a plane passing through the alined doors, and concentric annular series of vehicle supports pivotally suspended on said rotatable frame and arranged to simultaneously aline a support in each series with the doors.



1,867,676. REFUSE CONTAINER. EDMUND M. MUELLER, Welcome, Minn. Filed May 5, 1931. Serial No. 535,213. 2 Claims. (Cl. 312—185.)



1. In a device of the character described, in combination, a cabinet having a wall provided with an opening and a slot, a platform adapted to be received in said cabinet, means within said cabinet swingably supporting said platform for projecting and retracting it through said opening, said means including a rockably mounted shaft, bars connected with the shaft for movement therewith and being also pivotally connected with the platform, and a treadle arm operatively connected with said shaft and extending through said slot.

1,867,677. MILK AND CREAM CAN COVER. BERTRAM NIELSEN, Seattle, Wash. Filed Oct. 14, 1929. Serial No. 399,563. 5 Claims. (Cl. 220—24.)



1. A milk can cover, comprising a cylindrical portion adapted to engage the outside wall or the neck of the can,

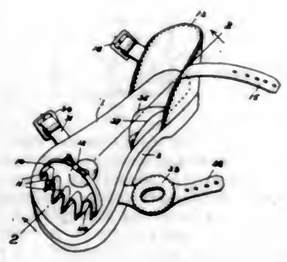
an annular flanged portion adapted to engage the shoulder of the can adjacent the base of said neck, and locking means for said cover comprising a collar adapted to fit between said neck and said cover, and means integral with said collar for securing said cover in fixed position.

1,867,678. DRIVE MECHANISM FOR MOTOR VEHICLES. ALDEN G. RAYBURN, Sausalito, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation, a Corporation of Delaware. Filed Jan. 10, 1927. Serial No. 160,230. 14 Claims. (Cl. 105—62.)



1. A motor driven vehicle comprising a frame; trucks at each end of said frame; means to connect said trucks to said frame in a manner permitting limited universal movement of each truck relative to the frame about fixed points substantially in horizontal alignment; an internal combustion engine and a transmission mechanism on said frame and means to distribute the power of said engine through said mechanism to said trucks, said means including a substantially horizontally extending flexible drive shaft whose axis under normal conditions is in alignment with said points.

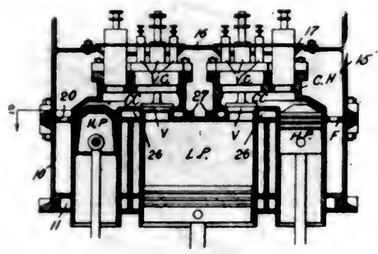
1,867,679. FOOT CORRECTIVE SANDAL. RAYMOND R. RIEHLE and JOHN B. PFALLER, Milford, Ohio. Filed Sept. 22, 1931. Serial No. 564,368. 7 Claims. (Cl. 36—8.5.)



1. A foot corrective sandal comprising a rigid sole member, a counter secured to the heel portion of said member and having an ankle strap thereon, a plurality of strap guides disposed upon the upper face of the sole member and so positioned and spaced as to embrace between each pair thereof a toe of the normal human foot, and a strap for passing loosely through said strap guides to form toe-receiving loops adapted each to be tightened about a toe inserted therethrough, the ends of the strap being adapted to be returned over the toes of a positioned foot and secured together for holding the toes in normal position.

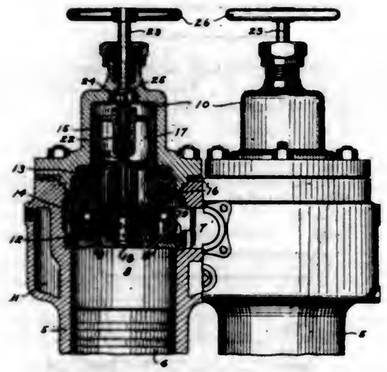
1,867,680. INTERNAL COMBUSTION ENGINE. HERMAN J. SCHARNAGEL, Tompkinsville, N. Y., assignor to Sperry Development Company, Dover, Del., a Corporation of Delaware. Filed May 12, 1927. Serial No. 190,688. 3 Claims. (Cl. 123—173.)

1. In an internal combustion engine having a plurality of cylinders and cylinder heads, a cooling jacket for said cylinders, a cooling jacket for said cylinder heads, a valve in each cylinder head, there being a groove surrounding said valves, means for enclosing said grooves to form



cooling jackets for said valves, and means for directing fluid from said valve jackets after cooling said valves into said cylinder jacket for cooling said cylinder.

1,867,681. COMPRESSOR. ADOLF P. SIMSON, Milwaukee, Wis., assignor to The Vilter Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 31, 1931. Serial No. 554,259. 10 Claims. (Cl. 230—21.)

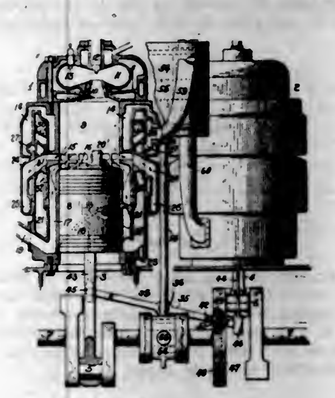


1. In combination, a cylinder, a piston movable in said cylinder to compress fluid therein, means forming a plurality of chambers, and a valve for placing one or more of said chambers in open communication with the displacement chamber of said piston and cylinder.

1,867,682. IMPROVEMENT IN COMBUSTION CHAMBER FOR COMBUSTION ENGINES. ELMER A. SPERRY, Brooklyn, N. Y., assignor to Sperry Development Company, Dover Green, Del., a Corporation of Delaware. Filed Aug. 5, 1922. Serial No. 579,863. 6 Claims. (Cl. 123—32.)

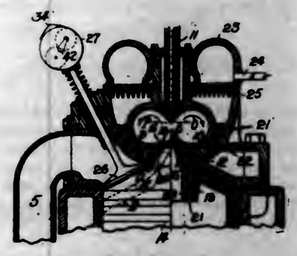
1. In a combustion engine, the combination with the cylinder, piston, intake ports adapted to be uncovered by the piston, and a source of fluid supply at one side

connected to said ports, of a hot bulb eccentrically mounted with respect to said piston, and a convex top on the piston having the apex thereof to one side of the center



of the piston, the vertical axes of said hot bulb and apex being in alignment, said axes being positioned nearer the ports furthest removed from said source.

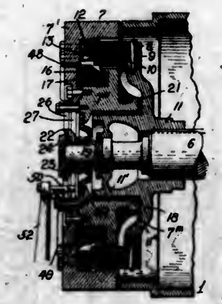
1,867,683. COMBUSTION ENGINE. ELMER A. SPERRY, Brooklyn, N. Y., assignor to The Sperry Development Company. Filed Oct. 22, 1923. Serial No. 669,940. 11 Claims. (Cl. 123—32.)



1. In a combustion engine in which the oil or other liquid fuel is injected into compressed air, a combustion chamber, a cylinder, a piston operating in said cylinder, and means whereby a gradually increasing air swirl of high terminal velocity is set up as the piston approaches and until it arrives at the end of its compression stroke, said means including a throat connecting said chamber and cylinder and increasing in diameter from said combustion chamber to its conjunction with said cylinder, a projection carried by said piston and adapted to enter said throat near the end of the compression stroke, and means for cooling said projection.

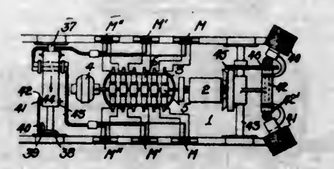
1,867,684. MEANS FOR PREVENTING THE VIBRATION OF CRANK SHAFTS. ELMER A. SPERRY, Brooklyn, N. Y., assignor to Sperry Development Company, Dover, Del., a Corporation of Delaware. Original application filed Dec. 17, 1919, Serial No. 345,660. Divided and this application filed June 4, 1928. Serial No. 282,820. 7 Claims. (Cl. 74—6.)

2. The method of minimizing the vibrations of a source of power having a rotatable element which consists of changing the moment of inertia of said element when a certain speed of rotation thereof is approached.



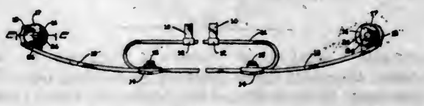
3. The combination with a source of power having a rotatable shaft, of means brought into action when the speed of rotation of said shaft approaches a value corresponding to the natural period of vibration of said source of power for changing the moment of inertia of said shaft.

1,867,685. FISSURE DETECTOR FOR MAGNETIC MATERIALS. ELMER A. SPERRY, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y., a Corporation of New York. Original application filed Dec. 20, 1923, Serial No. 681,718. Divided and this application filed Nov. 21, 1928. Serial No. 320,886. 7 Claims. (Cl. 234—1.5.)



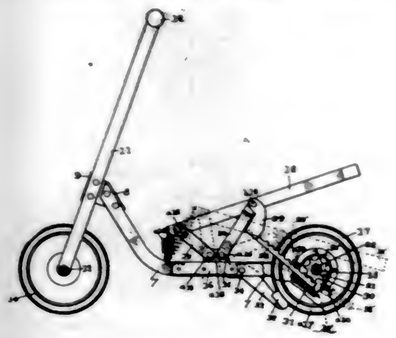
1. The method of detecting flaws in magnetic materials which consists in placing the same in a rapidly changing magnetic field, including an E. M. F. in suitable detector windings placed adjacent the material under test, in balancing out the E. M. F. induced under normal conditions, and actuating indicating means by the E. M. F. induced by variations in said field due to causes external to the primary or energizing system.

1,867,686. MOTOR VEHICLE. MILTON TIBBETS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 31, 1931. Serial No. 572,426. 12 Claims. (Cl. 293—55.)



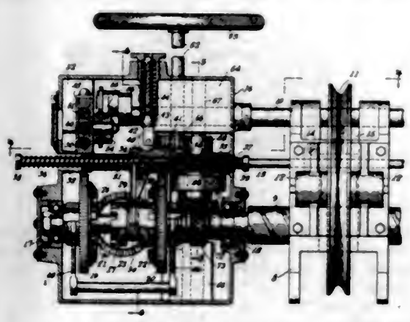
1. In a vehicle bumper structure, the combination of an impact bar, and a weight carried solely by the impact bar.

1,867,687. BALANCED POWER SCOOTER. WILLIAM V. VAN ETTEN, Bellingham, Wash. Filed Sept. 13, 1930. Serial No. 481,667. 6 Claims. (Cl. 208—37.)



1. In a scooter, a pedal bar having a fulcrum end and a pedal end, an end link pivoted to the fulcrum end of the pedal bar and to the scooter body, another link pivoted to the pedal bar distant from the end link and pivoted to the scooter body adjacent to the end link, and a tension spring connected to the fulcrum end of the pedal bar and to the scooter body.

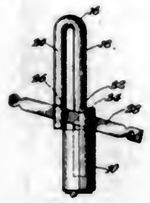
1,867,688. TRAVERSE MECHANISM FOR REELING MACHINES. CHARLES F. VAN HOOK, Paterson, N. J., assignor to The Watson Machine Company, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 25, 1928. Serial No. 308,211. 3 Claims. (Cl. 74—54.)



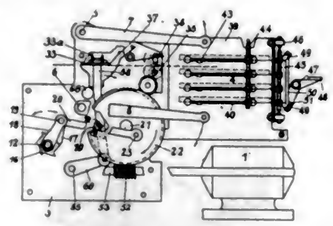
1. In a mechanism of the character described the combination of a traverse carriage, a screw rotatably mounted in operative engagement with said carriage, two sets of ratchet and pawl means for rotating said screw in opposite directions respectively, a slidable clutch adapted for operatively connecting either of said ratchets with said screw, means governed by the movement of said carriage for shifting said clutch and means, operable by hand at a point remote from the mechanism for moving said clutch to a neutral position between said ratchets and for rotating said screw.

1,867,689. SEALABLE PADLOCK. FLORIS H. VAN LEER, Glendale, Calif., assignor to B. Van Leer, Amsterdam, Netherlands. Filed Aug. 28, 1929. Serial No. 388,915. 1 Claim. (Cl. 70—97.)

A padlock of the type having a pivoting and sliding shackle and a socket for the free end of the shackle, a flange on the body of the lock adjacent such socket, substantially vertical slots through the free end of the shackle and such flange which substantially register when the shackle is locked in the socket, and which are partly but not completely in registry when the lock is unlocked and the shackle is out of the socket, and a sealing member adapted to be inserted substantially vertically through the slots when the shackle is either locked in the socket or partly pivoted away from said flange which sealing member is narrower in width than the length of said slots, but wider than the registering portion of the slots when the shackle is in pivoting position and contacting with said flange.

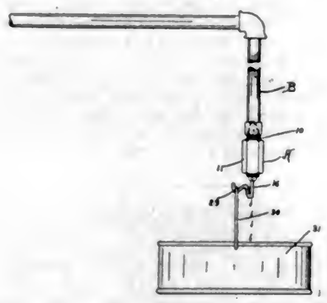


1,867,690. PLAYING CARD MIXING DEVICE. GUSTAV WENDORFF, Stettin, Germany. Filed Oct. 10, 1929, Serial No. 398,684, and in Germany Dec. 13, 1928. 3 Claims. (Cl. 273—149.)



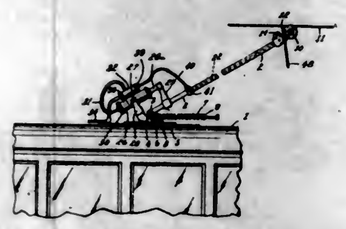
1. A playing card mixing machine, comprising, in combination, members arranged to form superposed compartments, means adapted to introduce the cards singly and successively into said compartments, and means for withdrawing the first-mentioned members from card supporting position so as to cause the cards to drop and form a pile of thoroughly mixed cards.

1,867,691. AUTOMATIC WATERING VALVE. DAVID E. WILLIAMS, St. Paul, Minn. Filed Jan. 28, 1926. Serial No. 84,426. 7 Claims. (Cl. 119—81.)



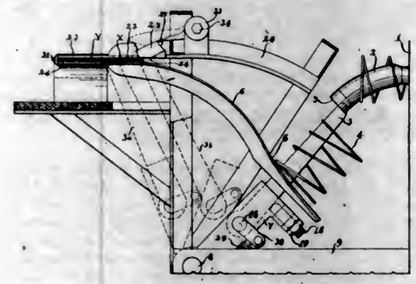
1. An automatic liquid shut-off valve including, a body portion, a valve stem extending through said body portion, a valve on one end of said stem cooperating with said body portion, and a supporting hook on the other end, and resilient means interposed between the valve and the hook in a manner to cause the valve to open when the liquid supported by the valve stem is decreased sufficiently to permit the resilient means to open the valve.

1,867,692. TROLLEY RETRIEVER. LEWIS B. WITHERS, Glendale, Calif. Filed Aug. 18, 1930. Serial No. 475,960. 8 Claims. (Cl. 191—90.)



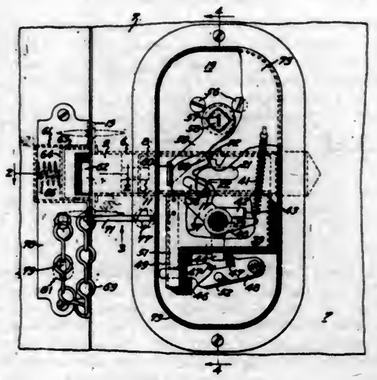
1. In a trolley retriever for electric cars, the combination of a pole mounted at its base on the car, a harp carrying the trolley wheel, means for movably supporting the harp on the upper end of the pole operating to permit movement of the harp relative to the pole, when the wheel gets off the trolley, a pneumatic cylinder mounted on the car roof and connected with the pole to lower the same, a pneumatically actuated valve for controlling flow of compressed air to the pneumatic cylinder, a single air duct leading from the pneumatic valve to the upper end of the pole, and means for liberating compressed air from said duct when the wheel comes off the wire, to actuate the pneumatically controlled valve and lower the pole.

1,867,693. SPRING MECHANISM. EDWARD L. BRONSTIEN, St. Paul, Minn. Filed Aug. 2, 1929. Serial No. 383,088. 14 Claims. (Cl. 226—18.)



1. A spring machine attachment, comprising a frame adapted to be attached to a spring manufacturing machine, a lever pivotally mounted on said frame, a second lever pivotally connected to said first lever and adapted to receive a coil spring as it is discharged from said spring manufacturing machine, a camway mounted in the path of said second lever as it is moved forward to laterally compress the coil spring carried by said second lever, operative means connecting said levers to said spring manufacturing mechanism to move said levers forward on completion of each cycle of operation of said spring manufacturing machine, and means to withdraw said second lever from engagement with said spring on a retractive movement of said levers.

1,867,694. DOOR LOCK. OTTO P. CRAMER, San Francisco, Calif. Filed July 22, 1929. Serial No. 379,939. 14 Claims. (Cl. 70—29.)

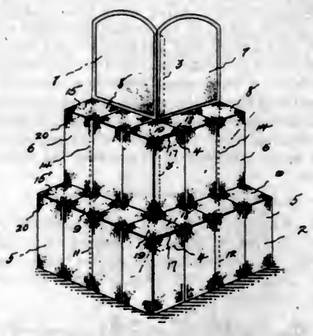


1. A door lock comprising a casing adapted to be mounted within the door and having an aperture therein, a latch bolt slidable in said casing, a pin on said latch bolt and projecting thru said aperture, a pair of turnable spindles each adapted for accessibility from a side of the door, and means actuated by turning of either of said spindles for moving said pin to retract the latch bolt.

1,867,695. LUBRICATING OIL AND PROCESS OF PRODUCING THE SAME. THEODORE W. DOELL, Berkeley, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Aug. 24, 1927. Serial No. 215,260. 26 Claims. (Cl. 87—9.)

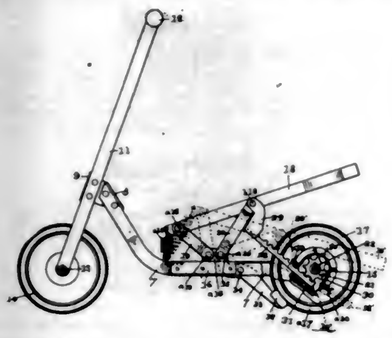
1. A fluid lubricating oil containing a mineral lubricating oil, and lead salts of unsaturated fatty acid and of sulfonic acid.

1,867,696. DISPLAY DEVICE. MORRIS M. EINSON, Yonkers, N. Y. Filed July 12, 1930. Serial No. 467,407. 4 Claims. (Cl. 211—156.)



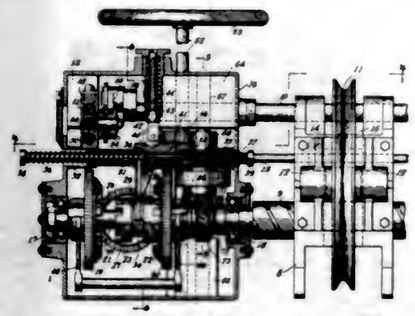
1. A collapsible device of the class described comprising two hinged sections folding back to back in the collapsed position, said sections in the set up position thereof being folded on transverse creases to form tiers or steps of which the treads and risers are continuous, and said device when erected being substantially of triangular shape and providing its own supporting base.

1,867,687. BALANCED POWER SCOOTER. WILLIAM V. VAN ETTEN, Bellingham, Wash. Filed Sept. 13, 1930. Serial No. 481,667. 6 Claims. (Cl. 208—37.)



1. In a scooter, a pedal bar having a fulcrum end and a pedal end, an end link pivoted to the fulcrum end of the pedal bar and to the scooter body, another link pivoted to the pedal bar distant from the end link and pivoted to the scooter body adjacent to the end link, and a tension spring connected to the fulcrum end of the pedal bar and to the scooter body.

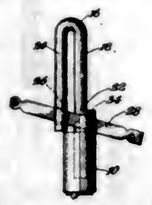
1,867,688. TRAVERSE MECHANISM FOR REELING MACHINES. CHARLES F. VAN HOOK, Paterson, N. J., assignor to The Watson Machine Company, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 25, 1928. Serial No. 308,211. 8 Claims. (Cl. 74—54.)



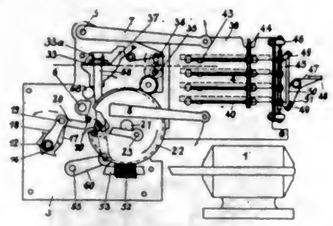
1. In a mechanism of the character described the combination of a traverse carriage, a screw rotatably mounted in operative engagement with said carriage, two sets of ratchet and pawl means for rotating said screw in opposite directions respectively, a slidable clutch adapted for operatively connecting either of said ratchets with said screw, means governed by the movement of said carriage for shifting said clutch and means, operable by hand at a point remote from the mechanism for moving said clutch to a neutral position between said ratchets and for rotating said screw.

1,867,689. SEALABLE PADLOCK. FLORIS H. VAN LEER, Glendale, Calif., assignor to B. Van Leer, Amsterdam, Netherlands. Filed Aug. 28, 1929. Serial No. 388,915. 1 Claim. (Cl. 70—97.)

A padlock of the type having a pivoting and sliding shackle and a socket for the free end of the shackle, a flange on the body of the lock adjacent such socket, substantially vertical slots through the free end of the shackle and such flange which substantially register when the shackle is locked in the socket, and which are partly but not completely in registry when the lock is unlocked and the shackle is out of the socket, and a sealing member adapted to be inserted substantially vertically through the slots when the shackle is either locked in the socket or partly pivoted away from said flange which sealing member is narrower in width than the length of said slots, but wider than the registering portion of the slots when the shackle is in pivoting position and contacting with said flange.

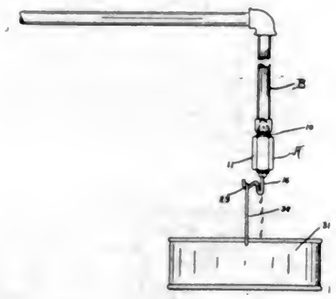


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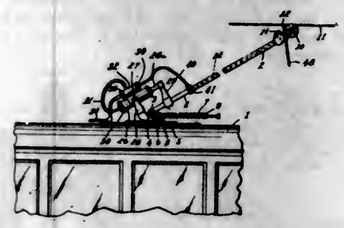
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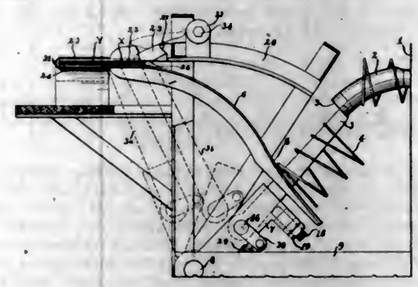
1. An automatic liquid shut-off valve including, a body portion, a valve stem extending through said body portion, a valve on one end of said stem cooperating with said body portion, and a supporting hook on the other end, and resilient means interposed between the valve and the hook in a manner to cause the valve to open when the liquid supported by the valve stem is decreased sufficiently to permit the resilient means to open the valve.

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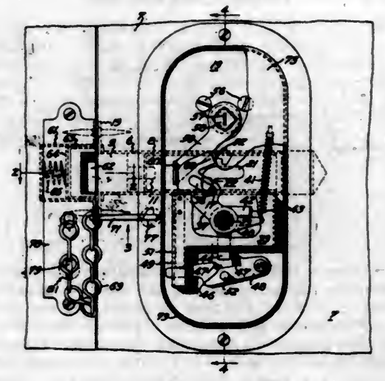
1. In a trolley retriever for electric cars, the combination of a pole mounted at its base on the car, a harp carrying the trolley wheel, means for movably supporting the harp on the upper end of the pole operating to permit movement of the harp relative to the pole, when the wheel gets off the trolley, a pneumatic cylinder mounted on the car roof and connected with the pole to lower the same, a pneumatically actuated valve for controlling flow of compressed air to the pneumatic cylinder, a single air duct leading from the pneumatic valve to the upper end of the pole, and means for liberating compressed air from said duct when the wheel comes off the wire, to actuate the pneumatically controlled valve and lower the pole.

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1. A spring machine attachment, comprising a frame adapted to be attached to a spring manufacturing machine, a lever pivotally mounted on said frame, a second lever pivotally connected to said first lever and adapted to receive a coil spring as it is discharged from said spring manufacturing machine, a camway mounted in the path of said second lever as it is moved forward to laterally compress the coil spring carried by said second lever, operative means connecting said levers to said spring manufacturing mechanism to move said levers forward on completion of each cycle of operation of said spring manufacturing machine, and means to withdraw said second lever from engagement with said spring on a retractive movement of said levers.

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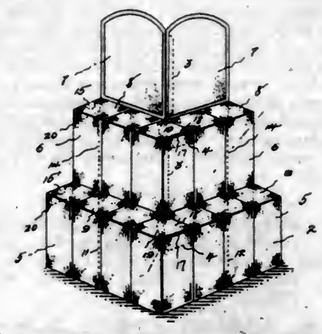


1. A door lock comprising a casing adapted to be mounted within the door and having an aperture therein, a latch bolt slidable in said casing, a pin on said latch bolt and projecting thru said aperture, a pair of turnable spindles each adapted for accessibility from a side of the door, and means actuated by turning of either of said spindles for moving said pin to retract the latch bolt.

1,867,695. LUBRICATING OIL AND PROCESS OF PRODUCING THE SAME. THEODORE W. DOELL, Berkeley, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Aug. 24, 1927. Serial No. 215,260. 26 Claims. (Cl. 87—9.)

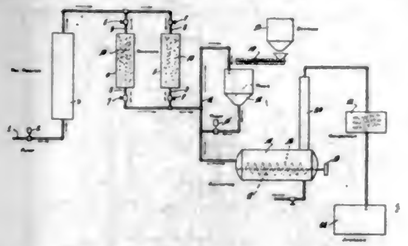
1. A fluid lubricating oil containing a mineral lubricating oil, and lead salts of unsaturated fatty acid and of sulfonic acid.

1,867,696. DISPLAY DEVICE. MORRIS M. EINSON, Yonkers, N. Y. Filed July 12, 1930. Serial No. 467,407. 4 Claims. (Cl. 211—156.)



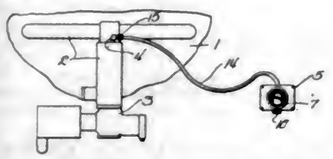
1. A collapsible device of the class described comprising two hinged sections folding back to back in the collapsed position, said sections in the set up position thereof being folded on transverse creases to form tiers or steps of which the treads and risers are continuous, and said device when erected being substantially of triangular shape and providing its own supporting base.

1,867,697. PROCESS OF TREATING PETROLEUM OILS. FRANCIS G. GRAVES, Alameda, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Mar. 2, 1927. Serial No. 171,951. 5 Claims. (Cl. 196—23.)



1. A process of treating petroleum distillates containing gum-forming bodies, comprising the steps of contacting a distillate containing gum-forming bodies at a temperatnre above atmospheric with metallic copper in the absence of appreciable amounts of copper oxide, separating the treated distillate from the copper, and then contacting the treated distillate, at a temperature above atmospheric, with an adsorbent clay.

1,867,698. METHOD OF AND APPARATUS FOR TESTING INTERNAL COMBUSTION ENGINES. WILLIAM L. HARRIS, Chicago, Ill., assignor to Motoscope Corporation of America, Chicago, Ill., a Corporation of Illinois. Filed June 9, 1928. Serial No. 284,055. 1 Claim. (Cl. 73—31.)



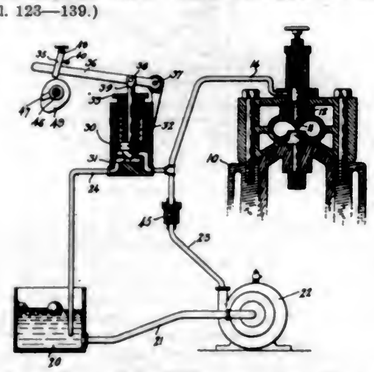
A device for testing an internal combustion engine having an intake manifold, which device comprises a casing having openings in walls thereof, a vacuum gauge within said casing and having a dial mounted adjacent the opening in a side wall of the casing, a valve chamber formed within the casing behind said dial, a connection establishing communication between the valve chamber and gauge, said valve chamber having an opening provided with a valve seat, a nipple communicating with said opening and projecting towards a wall of the casing, a flexible conduit connected to said nipple and adapted to establish communication between the intake manifold of the engine and said valve chamber, a valve stem projecting through the opening in a wall of the casing which is at right angles to said side wall, said valve stem being positioned behind said dial and terminating in a valve adapted to register with said seat and means exterior of the casing for operating said valve stem.

1,867,699. SWINGING PARTITION CEMENT COMPARTMENT. JULIUS P. HEIL, Milwaukee, Wis., assignor to The Heil Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 20, 1929. Serial No. 408,491. 2 Claims. (Cl. 298—8.)



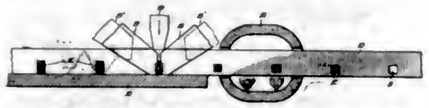
1. In combination, a rearwardly tiltable dump body having opposite side walls and a bottom portion, a swingable partition transversely positioned within the dump body to divide the same into separate compartments, an auxiliary compartment carried by said partition and having its lower open end spaced from the bottom of the dump body, a door for said open end having a front hinge and being inclined rearwardly and upwardly relative to said hinge when closed, and a plurality of depending members carried by said door and formed to produce longitudinal grooves in the material passing from one compartment to another beneath said door during tilting of said body.

1,867,700. FUEL FEED SYSTEM. GEORGE LESTER JONES, Brooklyn, N. Y., assignor to Sperry Development Company, Dover, Del., a Corporation of Delaware. Filed Aug. 31, 1925. Serial No. 53,537. 6 Claims. (Cl. 123—139.)



4. In a fuel injection system for an engine, a source of fuel supply, means for imparting velocity to the fuel, means for suddenly stopping the flow of fuel, and means whereby the fuel is injected into said engine solely by the reaction pressure thus generated.

1,867,701. METHOD OF MAKING GRATING. JOHN M. KEOWN, Chicago, Ill., assignor of one-fifth to Arthur E. Sangdahl, Western Springs, Ill., one-fifth to W. Forrest Ogle, Chicago, Ill., one-fifth to Edwin J. Learned, Lake Forest, Ill., and one-fifth to Bentley F. Ramsdell, Geneva, Ill. Filed Sept. 6, 1929. Serial No. 390,704. 7 Claims. (Cl. 29—160.)

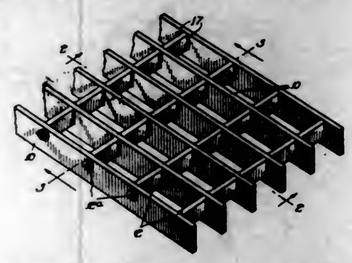


4. A method of fabricating metallic grating which comprises providing a plurality of carrier bars each with a plurality of transverse apertures spaced apart longitudinally thereof, disposing said bars in collateral spaced relationship, placing a plurality of connector bars of solid metal cross section in the apertures in such fashion that each extends through a plurality of the carrier bars, and re-forming the portions of the connector bars intermediate the carrier bars to change the cross sectional form of said portions throughout their entire length and bind the intersecting bars together in fixed relative positions.

1,867,702. GRATING. JOHN M. KEOWN, Chicago, Ill., assignor of one-fifth to Arthur E. Sangdahl, Western Springs, Ill., one-fifth to W. Forrest Ogle, Chicago, Ill., one-fifth to Edwin J. Learned, Lake Forest, Ill., and one-fifth to Bentley F. Ramsdell, Geneva, Ill. Original application filed Sept. 6, 1929, Serial No. 390,704. Divided and this application filed Dec. 10, 1931. Serial No. 580,042. 10 Claims. (Cl. 94—30.)

1. A grating comprising a plurality of collaterally spaced carrier bars having transverse apertures located

in their compression portions and spaced from their margins and a plurality of solid metal connecting bars each extending through and solidly filling apertures in a plurality of the carrier bars, portions of said connecting



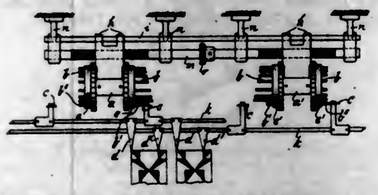
bars at opposite sides of the carrier bars being of cross-sectional form different from the shape of the apertures and having abutting contact with opposite lateral surfaces of the carrier bars for a substantial portion of the depth of said portions.

1,867,703. DEVICE FOR COARSE AND FINE SETTING OF THE LOOP LENGTH IN FLAT HOSIERY MACHINES. PAUL LIEBERKNECHT, Einsiedel, near Chemnitz, Germany, assignor of one-half to Maschinenfabrik-Einsiedel, Gesellschaft mit beschrankter Haftung, Einsiedel, near Chemnitz, Germany. Filed June 16, 1930, Serial No. 461,479, and in Germany June 21, 1929. 3 Claims. (Cl. 66—82.)



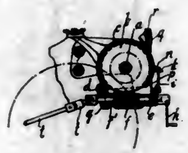
1. A device for coarse and fine setting of the loop length in flat hosiery machines, comprising a cam, an oscillatable shaft, a lever loosely mounted on the shaft and acted on by the cam, a lever mounted on a part of the device and acted on by the first named lever, a lever which is shorter than the second named lever and fixed to the said shaft and acted on by the second named lever, adjustment means between the third and second named lever for obtaining the coarse setting, and motion transmission means between the said shaft and the needle bar.

1,867,704. DEVICE ON FLAT KNITTING MACHINES FOR PRODUCING GOODS PATTERNED BY REENFORCEMENT. PAUL LIEBERKNECHT, Einsiedel, near Chemnitz, Germany, assignor of one-half to Maschinenfabrik-Einsiedel, Gesellschaft mit beschrankter Haftung, Einsiedel, near Chemnitz, Germany. Filed Oct. 29, 1930, Serial No. 491,899, and in Germany May 16, 1930. 3 Claims. (Cl. 66—129.)



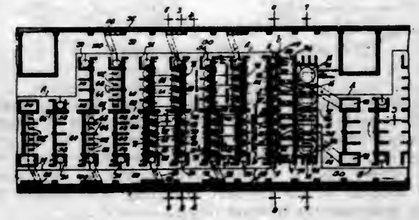
1. In a device on flat knitting machines for the production of goods patterned by reenforcement by means of pattern drums each having several stops for the reenforcement thread guides, means for rotating the pattern drums in combination with means for moving the pattern drums longitudinally of the machine and causing the drums to act on the reenforcement thread guides at any place along the arrangement of the needles of the machine.

1,867,705. AUXILIARY DRIVE FOR FLAT HOSIERY FRAMES. PAUL LIEBERKNECHT, Einsiedel-Chemnitz, Germany, assignor of one-half to Maschinenfabrik-Einsiedel, Gesellschaft mit beschrankter Haftung, Einsiedel, near Chemnitz, Germany. Filed Sept. 19, 1931, Serial No. 563,774, and in Germany Oct. 6, 1930. 4 Claims. (Cl. 66—82.)



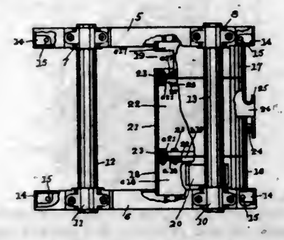
1. An auxiliary drive for flat hosiery machines, comprising a driving shaft, a worm wheel secured to the said driving shaft, and a worm adapted to disengageably mesh with the said worm wheel.

1,867,706. ELECTRICAL GALLERY AND RELATED PARTS. THOMAS E. MURRAY, Brooklyn, and ROBERT BAKER, East Rockaway, N. Y.; said Baker assignor to said Murray; Joseph Bradley Murray, Thomas E. Murray, jr., and John F. Murray, executors of said Thomas E. Murray, deceased, assignors to Metropolitan Device Corporation, a Corporation of New York. Filed July 22, 1925. Serial No. 45,441. 22 Claims. (Cl. 175—298.)



1. In an electrical distribution system duplicate busses constituting one phase of a main and an auxiliary supply, group busses connected to said main and auxiliary busses and distribution equipment operatively associated with the group busses extending substantially at right angles between the main and auxiliary supply busses.

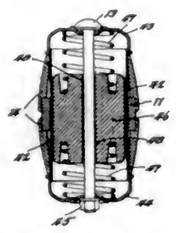
1,867,707. WINDING ENGINE FRAME. SYDNEY S. MCINTYRE, Sedro-Woolley, Wash. Filed June 29, 1931. Serial No. 547,681. 1 Claim. (Cl. 74—56.)



A winding engine frame including two side frames, two oppositely-disposed side-frame gear housings one being fastened to the inner wall of each of said side frames,

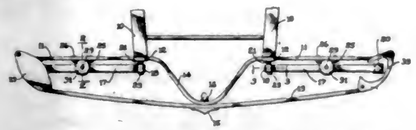
an intervening gear housing being fastened to each of said side-frame gear housings joining the side frames, and a plurality of drum axles each being clamped to both of said side frames joining the same.

1,867,708. AUTOMOBILE CONSTRUCTION. CLYDE R. PATON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 25, 1931. Serial No. 539,099. 23 Claims. (Cl. 293—55.)



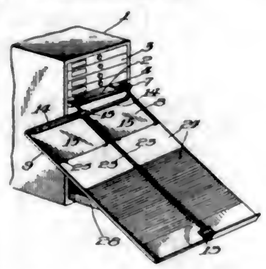
1. A bumper for use on vehicles comprising an impact bar and a weight vibratable in a vertical direction at each end of said bar.

1,867,709. MOTOR VEHICLE. CLYDE R. PATON, Birmingham, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 31, 1931. Serial No. 572,425. 15 Claims. (Cl. 293—55.)



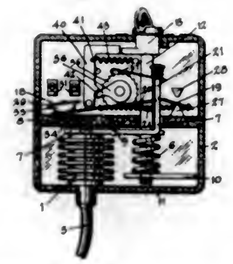
1. In a motor vehicle having a frame and a bumper forming parts of a primary vibratory system, a secondary vibratory system for damping the vibrations of the primary system comprising a resilient mounting secured to the bumper, and a weighted arm pivoted to the frame and secured to the resilient mounting intermediate its pivot point and the free end thereof.

1,867,710. VISIBLE INDEX AND VISIBLE RECORD SYSTEM. FRANK D. POWELL, Chicago, Ill., assignor to Acme Card System Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 17, 1930. Serial No. 444,902. 6 Claims. (Cl. 45—2.)



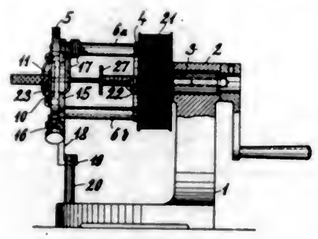
1. In combination, a cabinet, drawers mounted for slidable movement in said cabinet, each drawer comprising a master tray connected to an auxiliary tray, and a plurality of visible index or record data cards disposed upon each of said trays.

1,867,711. DEFROSTER. ESTEL C. RANEY, Columbus, Ohio. Filed Jan. 2, 1932. Serial No. 584,453. 6 Claims. (Cl. 200—83.)



1. In a refrigerating defrosting device, a bellows responsive to pressure, means for resisting the expansive movement of the bellows, a switch for closing and opening a circuit upon expansion and contraction of the bellows and at predetermined pressure points, a member progressively moved upon each expansive movement of the bellows, and means for yieldingly resisting the expansion of the bellows when the last named member has been moved a predetermined number of times to increase the required switch closing pressure of the bellows.

1,867,712. APPARATUS FOR STRIPPING ELECTRIC WIRES AND FOR BINDING THE END OF THE INSULATION. ALBERT REITZIG, Magdeburg, Germany. Filed Mar. 26, 1928, Serial No. 264,832, and in Germany Apr. 4, 1927. 6 Claims. (Cl. 81—9.51.)



1. An apparatus for stripping the ends of electric cables and wires and for binding the end of the remaining insulation, comprising in combination a slidable knife, means for holding the wire, a knife-head travelling around the wire and means for moving said knife towards the wire so that it cuts the insulation radially to the axis of rotation of said knife-head, a bobbin carrying a thread to be wound around the end of the insulation on the wire and a winding device adjacent the plane of said knife-head.

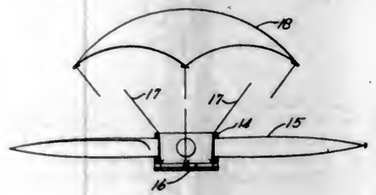
1,867,713. PAPER CREASER AND SLITTER. MARGARET MARY ROBERTS, New York, N. Y. Filed June 29, 1929. Serial No. 374,704. 2 Claims. (Cl. 120—8.)



1. In a combined letter opener and creaser, a tubular paper creaser adapted to fit over the finger end and carrying both a connection at the top adapted to removably hold

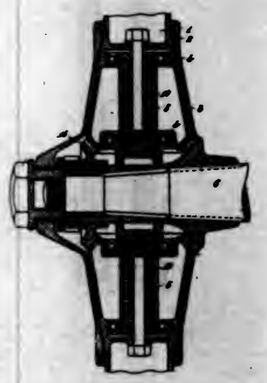
a letter opener and a letter creasing means at the bottom and means whereby said creasing means is adjustable to varying degrees of slant with respect to the direction of its stroke when creasing paper.

1,867,714. AERIAL TOY. WINSOR SHIPPEE and CARL C. SHIPPEE, Red Bank, N. J. Filed May 21, 1931. Serial No. 538,915. 5 Claims. (Cl. 46—52.)



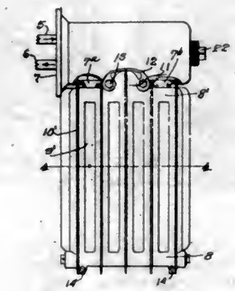
1. In aerial toys, the combination comprising a hollow cylindrical hub provided with propeller blades disposed to lift the hub into the air when rotating, a parachute of flexible sheeting having a plurality of cords for attaching the same over an end of said hub whereby it may be nested in the top of said hub, spider means in the bottom of said hub for anchoring said cords and admitting air for displacing the parachute, and means engaging the bottom of said hub for applying an initial angular velocity sufficient to cause the propeller blades to lift the hub into the air.

1,867,715. AIR PROPELLER WITH ANGLE OF PITCH CHANGEABLE IN FLIGHT. ARNOLD SEIDEL, Berlin-Charlottenburg, Germany. Filed Feb. 27, 1930, Serial No. 431,794, and in Germany Mar. 1, 1929. 4 Claims. (Cl. 170—162.)



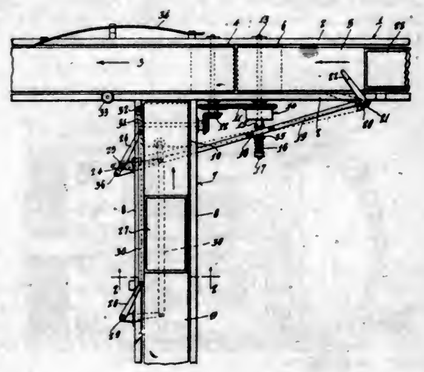
1. An air propeller with pitch angle adjustable in flight, comprising in combination a system of eccentric spindles of high pitch, a concentric catch disc locking said spindles individually against rotation, a hub of said propeller, a number of pinions corresponding to the number of spindles eccentrically mounted in said hub, adapted to be actuated by the axial displacement of said spindles in relation to said hub, and a main concentric operating wheel of the individual propeller blades, engaging commonly with each of said pinions.

1,867,716. REFRIGERATING APPARATUS. FRANKLIN G. SLAGEL, Buffalo, N. Y., assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Aug. 18, 1926. Serial No. 129,043. 10 Claims. (Cl. 62—95.)



1. In refrigerating apparatus a refrigerating element comprising a header forming a reservoir for refrigerant, and a unit, forming a plurality of circulating conduits, detachably connected to the header.

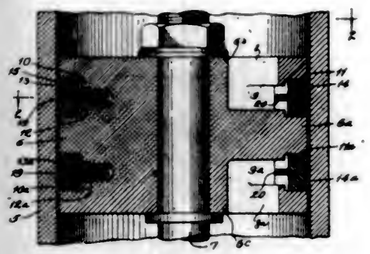
1,867,717. CONVEYER CONTROL APPARATUS. FRED STEBLER, Riverside, Calif., assignor to Stebler Parker Co., Riverside, Calif., a Corporation of California. Filed May 29, 1928. Serial No. 281,514. 8 Claims. (Cl. 198—21.)



5. In a conveyer system, the combination of a plurality of conveyers joined together at an intersection to form a single conveyer leading to an exit, one of said conveyers having a constantly driven part, another of said conveyers having a part adapted to be intermittently driven, a box actuated member projecting into the path of boxes

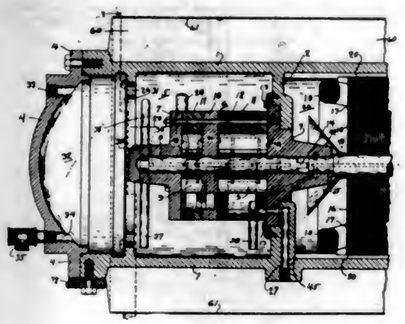
on each of said conveyers, and a member mechanically attached to each of said members and actuated by the conjoint action of both of them for stopping the operation of the intermittently driven part.

1,867,718. SEALING RING. WILLIAM B. TOWELL, Jersey City, N. J. Filed Apr. 16, 1930. Serial No. 444,728. 3 Claims. (Cl. 74—109.)



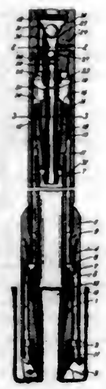
1. A device of the class described comprising a body mounted to reciprocate in a cylinder structure, said body having an annular ring groove, a plurality of spoke-like ribs extending radially from the longitudinal axis of said body, the outer surfaces of said ribs being exposed to said ring groove and forming in said body between said ribs a plurality of large circumferentially spaced chambers opening into said ring groove between opposed sides of said ribs and opening outwardly through one end wall of said body, whereby the prevailing pressure in the corresponding end of said cylinder may be subjected to said chambers and ring groove, a sealing ring composed of a plurality of similar ring sections having overlapping end portions arranged in said ring groove upon said ribs and forming a closure for said chambers whereby the prevailing pressure in said chambers is exposed to the inner face of said ring.

1,867,719. MOTOR OPERATED MACHINE UNIT. HARRY R. VAN DEVENTER, New York, N. Y., assignor, by mesne assignments, to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 12, 1926. Serial No. 141,213. 5 Claims. (Cl. 62—115.)



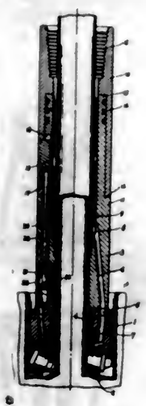
1. The combination with a pump and a motor, of a casing therefor adapted to radiate heat therefrom, a shroud about said casing, means for causing a current of air to flow between said casing and shroud, and a condenser outside said casing connected to receive fluid from said pump and be cooled by said air current.

1,867,720. VENT FOR CORE DRILLS. LOUIS H. WELLENSIEK, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Apr. 6, 1928. Serial No. 267,839. 6 Claims. (Cl. 255—72.)



3. In a core drill, a drill, a nipple connected therewith, a core barrel on said drill within said nipple, a head on the upper end of said nipple, said head having an axial passage therethrough, a tube in said passage, an automatic fluid seal between said tube and said core barrel, a valve at the upper end of said passage, and a lateral vent from said passage below said valve.

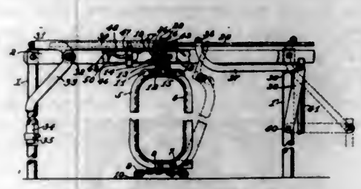
1,867,721. CORE CATCHER. LOUIS H. WELLENSIEK, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Jan. 10, 1929. Serial No. 331,526. 14 Claims. (Cl. 255—72.)



11. In a core drill, a drill collar, a core barrel, core engaging means below said core barrel in said collar, and means actuated by the weight of the drill and core barrel to force said core engaging means into contact with the core.

1,867,722. LEVER STALL. WALTER O. WILLE, Waterloo, Iowa, assignor to Clay Equipment Corporation, Cedar Falls, Iowa. Filed Oct. 27, 1930. Serial No. 491,390. 6 Claims. (Cl. 119—148.)

1. In a lever stall, an elevated track, a pair of movably connected stanchions positioned thereunder with approximated upper ends, a bearing element movable along said track and apertured to receive one of said stanchion ends both slidably and rockingly, and an arcuate cross member fixedly secured across said track with its axis



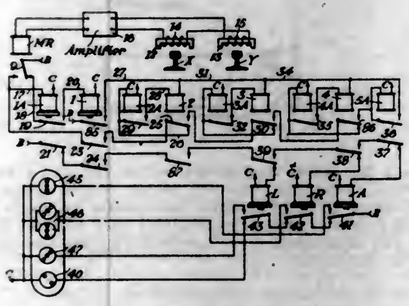
that of the aperture in the bearing member in one position of the latter, the other of said stanchions having its upper end part hook shaped to engage and ride upon said arcuate cross member when the stanchions are closed together and rocked as one together laterally.

1,867,723. CONVOLUTED SPRING. ARTHUR H. ADAMS, Yonkers, N. Y., assignor to Troy Laundry Machinery Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 20, 1928. Serial No. 313,858. 13 Claims. (Cl. 267—61.)



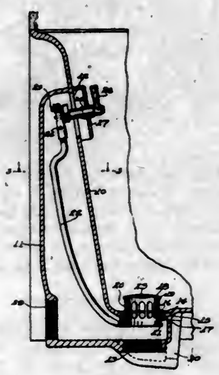
1. As a new article of manufacture a convoluted spring having the convolutions inclined to the spring axis, and with portions of adjacent convolutions nesting when subjected to pressure transverse to their common axis.

1,867,724. RAILWAY TRAFFIC CONTROLLING SYSTEM. GEORGE W. BAUGHMAN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 5, 1930. Serial No. 500,314. 11 Claims. (Cl. 246—63.)



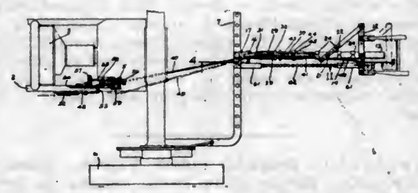
1. In combination, a signaling circuit, a plurality of inter-inclusive groups of sending relays associated with said signaling circuit for supplying said circuit with a plurality of different codes of current impulses by operating the relays of the selected group in a cyclic order, a plurality of inter-inclusive groups of receiving relays also associated with said circuit adapted to be selectively operated in a cyclic order by the different codes of current impulses, and a plurality of signals selectively controlled by the said groups of receiving relays.

1,867,725. BATHTUB DRAIN. FRANK G. BROTZ, Kohler, Wis., assignor to Kohler Company, Kohler, Wis., a Corporation of Wisconsin. Filed June 19, 1931. Serial No. 545,441. 5 Claims. (Cl. 4—203.)



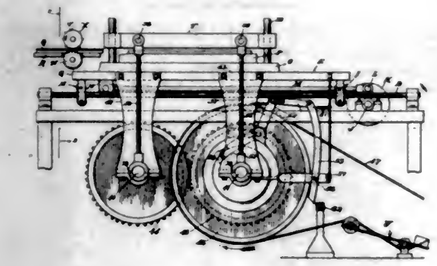
1. A bathtub having a drain opening and an overflow opening and having an integral passageway connecting said openings, a valve-operating means including a rod bent to be capable of entering through the overflow opening and passing through the passageway to a position beneath the drain opening, and a valve fitting on the drain opening and passing therethrough and screw threaded onto said rod, whereby the valve and rod may be assembled from above by entering them through the respective openings to their engaging relation.

1,867,726. TRACTOR HITCH. JUSTUS BURGGRAFF, Bowlus, Minn. Filed July 3, 1930. Serial No. 465,552. 6 Claims. (Cl. 180—14.5.)



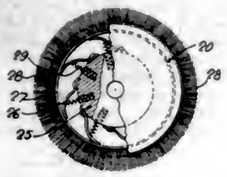
2. In a tractor hitch, a pair of draft members, one adapted to be connected to a tractor and the other to a plow, one of said members having an elongated aperture therein, a hook element pivotally supported in said aperture and having a face abuttingly engaged with a wall of the aperture when said element is in normal operative position, means for retaining the hook element in normal operative position, a link pivotally mounted upon the other of said draft members and adapted to engage said hook element to operatively connect together said draft members, said hook-retaining means being adapted to yield when the hitch is subjected to an abnormal pulling load whereby the hitch is rendered inoperative, and means whereby said hitch may automatically be rendered operative upon reversal of the tractor with reference to the plow.

1,867,727. MECHANISM FOR FORMING LATH PANELS. GEORGE A. BUTTRESS, Los Angeles, Calif. Filed Feb. 4, 1929. Serial No. 337,492. 18 Claims. (Cl. 154—1.)



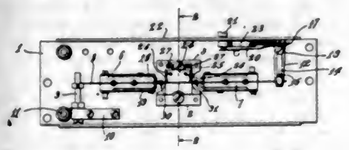
1. In a machine for forming fabricated lath panels, means for advancing a ribbon having a series of parallel longitudinally extending plastic composition ribs of substantially rectangular cross-section covered with fibrous facing sheets, and means operable to press the side walls of the ribs inwardly while the ribbon is advancing.

1,867,728. UPPER-ROUGHING MACHINE. WILLIAM C. CARD, Jr., Waverly, Mass., assignor to Compo Shoe Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed May 29, 1929, Serial No. 366,829. Renewed Dec. 9, 1931. 2 Claims. (Cl. 12—51.)



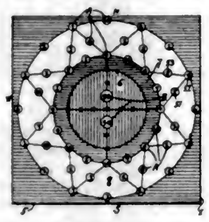
1. A roughing machine for lasted shoe uppers, comprising, in combination, a rotatable roughing element, means for rotating the same, said roughing element comprising a circular block, a circular band disposed circumferentially of said block and carrying a plurality of outwardly-extending wire bristles; means pivotally mounted peripherally of said block and extending outwardly to said band; and means for resiliently urging said pivotally-mounted members outwardly with respect to said block.

1,867,729. DAMPED LIGHT VALVE. OLINDO O. CECCARINI, Beverly Hills, Calif., assignor to Metro-Goldwyn-Mayer Corporation, Culver City, Calif., a Corporation of New York. Filed Jan. 7, 1931. Serial No. 507,194. 4 Claims. (Cl. 88—61.)



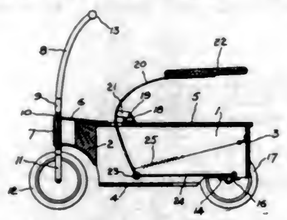
1. An improved light valve adapted to be activated by an oscillating current comprising an armature member, an aperture in said armature member, means for supporting a metallic tape over said armature member and over said aperture therein, a metallic tape suspended over said aperture and damping means carried by said armature member between said supporting means and aperture, said damping means being adapted to hold a damping medium in contact with the metallic tape.

1,867,730. GAME. OSCAR CHRISTIANSEN, St. Paul, Minn., assignor to Oscar S. Risvold, St. Paul, Minn. Filed Aug. 17, 1931. Serial No. 557,579. 1 Claim. (Cl. 273—131.)



In a game of the class described, a flat playing board with its upper surface comprising the playing area; said area comprising a central field, an intermediate field encircling the center field and an outer field encircling the intermediate field, delineations on said playing area separating the respective fields, a pair of crossed straight lines intersecting the two innermost fields, pairs of lines, each of said pairs being in V-formation with the apex on the outer perimeter of the outer field and the opposite ends contacting with the adjacent lines on the perimeter of the intermediate field to form with said collective pairs of lines a multi-point star design, spots on all said lines in predetermined spacing, two sets of blocks adapted to cover a predetermined number of said spots and movable in directions indicated by said lines, said sets of blocks comprising one set of two blocks each with an arbitrary value indicated on it, and one set of a larger number of blocks with numerical designations thereon relatively smaller than the numerical designations of the first described set of blocks.

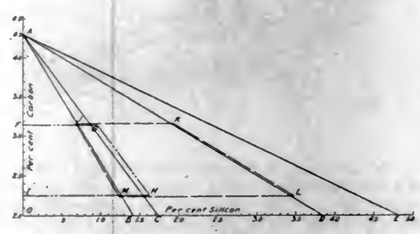
1,867,731. WHEELED TOY. HERMAN EDWARD CLARKE, Vancouver, British Columbia, Canada. Filed Apr. 27, 1931. Serial No. 533,158. 1 Claim. (Cl. 208—38.)



In a toy having road wheels, a foot rest and a seat, a crank operatively connected to one of the wheels, a leaf spring pivotally mounted intermediate its length to the toy, said spring supporting the seat adjacent one end and being operatively connected adjacent the other end to the crank.

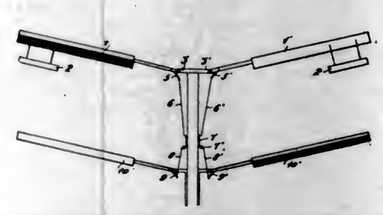
1,867,732. HIGH STRENGTH GRAY CAST IRONS. FRANCIS B. COYLE, Jersey City, N. J., assignor to The International Nickel Company, Inc., a Corporation of Delaware. Filed Jan. 5, 1929. Serial No. 330,534. 2 Claims. (Cl. 75—45.)

1. The process of making machinable, gray cast iron having a tensile strength above 50,000 pounds per square inch which comprises melting a charge containing at least 60% of steel scrap and the balance ferrous metals or alloys, which when solidified by cooling in the usual manner against a non-chilling surface would yield non-machinable, weak, white or mottled iron, tapping such molten white or mottled iron into a ladle, transforming said weak, white or mottled iron to gray iron by adding to said molten white or mottled iron nickel and silicon to an extent of more than about 2.5% and less than about 7.0%, the nickel constituting more than about 1% and less than about 5%, permitting the thus-treated molten metal to stand for a limited period of time only sufficient to cause the distribution of carbon in the form of thoroughly distributed fine particles of graphite and



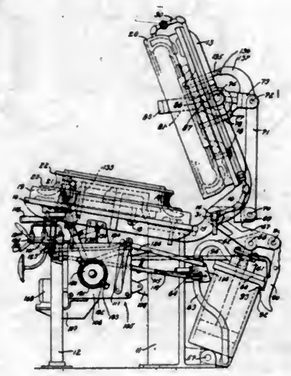
insufficient for the formation and growth of large graphite flakes, controlling the aforesaid period to less than about 20 to 35 minutes, and before the expiration of the said controlled, restricted period of time, pouring the thus-treated molten metal into conventional, non-heated and non-chilling molds whereby a machinable gray cast iron comprising a fine pearlitic and sorbitic ground mass containing fine particles of nodular, dendritic graphite distributed throughout said ground mass and having a tensile strength in excess of 50,000 pounds per square inch and containing a low carbon content of about 2.5% to about 3.1%, nickel more than about 1.00% and less than about 5.00% and silicon more than about 1.00% and less than about 4.00%.

1,867,733. PROPELLER FOR HELICOPTERS. CORRADINO D'ASCANIO, Rome, Italy, assignor to Pietro TROJANI, Rome, Italy. Filed Jan. 8, 1932, Serial No. 585,487, and in Germany Jan. 8, 1931. 2 Claims. (Cl. 244—19.)



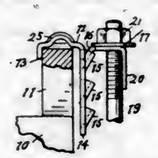
1. Helicopter wherein between the blades of a propeller, which have stabilizing planes or another automatic incidence controlling device, is arranged an incidence controlling connection with transmissions which compel all the blades to always take up an equal incidence so that all the blades rotate always through equal angles around their axes and on their joint which consists in a swivel joint at the end of a short arm which is secured to, or integral with, the driving shaft, a limiting and damping device being provided for the horizontal rotation of the blades respecting their joints, so that through the combination of these arrangements a perfect and automatic working of the propeller system of a helicopter is obtained.

1,867,734. TIME-CONTROLLING MECHANISM FOR VULCANIZING MOLDS. PETER DE MATTIA, Passaic, N. J., assignor, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed July 5, 1928. Serial No. 290,387. 6 Claims. (Cl. 18—17.)



1. Vulcanizing apparatus comprising a lower fixed mold section and an upper swinging mold section, power mechanism for raising and lowering the swinging mold section to open and close the mold, separate clamping means carried by the swinging mold section and operated by the power mechanism for automatically locking and unlocking the sections in the closing and opening of the mold, means for manually controlling the closing of the mold, time-controlling means for automatically controlling the opening of the mold at the end of a definite vulcanizing period, and means associated with said clamping means for initiating the operation of said time-controlling means as the mold is closed.

1,867,735. BATTERY HOLDDOWN. CARL J. DUNZWEILER, Cleveland, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed May 27, 1929. Serial No. 366,486. 10 Claims. (Cl. 180—68.5.)

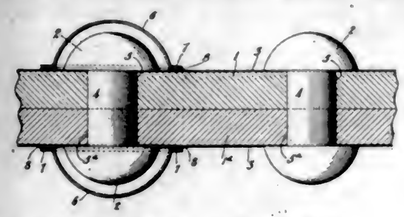


1. In a battery hold-down, a bracket adapted to engage a battery, a hook member adapted to be loosely mounted upon a hold-down bolt, cooperating means upon said bracket member and hook member providing selective engagement between said members at different relative positions thereof, said hook member having a portion thereof extending along said bolt for maintaining the hook member in a given angular relation with the bolt.

1,867,736. CORROSION PROTECTION. WILLIAM H. FINKELDEY, New Rochelle, N. Y., assignor to Singmaster & Breyer, Inc., New York, N. Y., a Corporation of New York. Filed July 30, 1929. Serial No. 382,220. 3 Claims. (Cl. 85—57.)

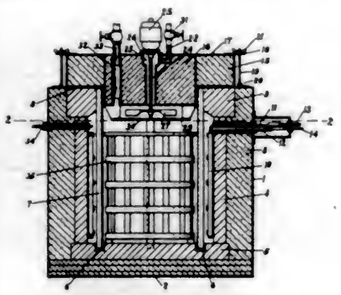
1. The method of providing a corrosion resistant structural steel structure which comprises providing gal-

vanized structural steel members, securing said members together by riveting and protecting said rivets from corrosion by covering the exposed heads of said rivets



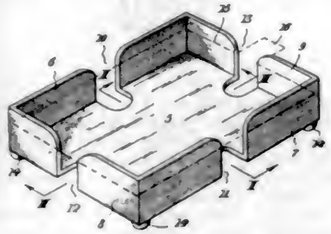
with preformed corrosion resistant caps and securing said caps to the face of said structural steel members by a moisture proof joint.

1,867,737. CARBURIZING FURNACE. HAROLD W. FLETCHER, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed July 11, 1930. Serial No. 467,203. 2 Claims. (Cl. 266—5.)



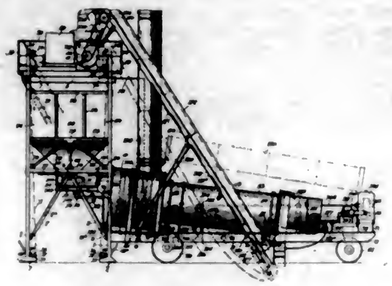
1. A furnace, an electrical heating unit therein, a skeleton support for the charge, a door to said furnace, an inlet for gas through said door and provided with a shaft extending through said inlet, a circulating fan on said door and a vent from said furnace for spent gas.

1,867,738. TRAY. ALLAN FRASER, Philadelphia, Pa. Filed Feb. 5, 1931. Serial No. 513,607. 4 Claims. (Cl. 206—73.)



1. A receptacle for holding a pile of sheets and rendering them accessible, comprising a bottom and side walls, there being in one side wall and the bottom an aperture in such form as to promote ready access of the fingers to the sheets when contained in the receptacle, and there also being another such aperture so provided in another side wall and the bottom as to coact with the first-mentioned aperture to facilitate sorting through the shees.

1,867,739. APPARATUS FOR MIXING MATERIAL FOR MAKING ROADS. WALTER GUY FRAZER, Cedar Rapids, Iowa, assignor to Iowa Manufacturing Company, Cedar Rapids, Iowa, a Corporation of Iowa. Filed Sept. 25, 1929. Serial No. 395,026. 21 Claims. (Cl. 94—41.)



1. In apparatus of the character described and including a rotating gravel-heating drum and a stationary hood surrounding one end of said drum and a burner arranged to discharge heated gases into and through said drum and hood, variable means for heating road oil including a heating coil surrounding said drum within said hood, a conduit having branch pipes extending from without through said hood and connected with different turns of said coil, and valves outside said hood for opening and closing communication through said branch pipes, whereby sections of said coil may be cut out from circulation.

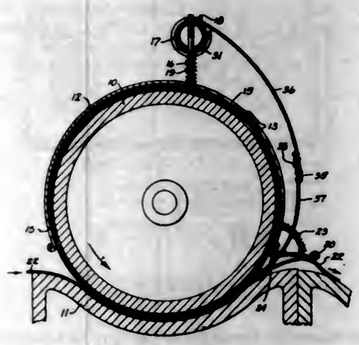
1,867,740. ELECTRIC FIREPLACE. WALTER W. GUY, Oak Park, Ill. Filed Dec. 31, 1928. Serial No. 329,399. 5 Claims. (Cl. 126—121.)



1. A fireplace unit comprising three spaced metal partitions, conduits permitting air flow through the spaces between said partitions, an incandescent electric heating element between two of said partitions near the lower end of the conduit between them, means near said element for retarding and mixing the air flowing through said conduit, the other conduit being unobstructed, the obstructed conduit having a horizontally directed delivery orifice at its upper end, the unobstructed conduit having a similar orifice immediately above the orifice for the obstructed conduit, a mixing hood extending forward and downward from the upper edge of the upper orifice and terminating above the level of the lower edge of the lower orifice, heat insulation covering the rear of said unobstructed conduit, the walls of the obstructed conduit near the heating element being of relatively thick

cast metal, the remaining conduit walls being of relatively thin sheet metal, the middle one of said partitions being devoid of any insulation to function in the transfer of heat.

1,867,741. FLATWORK IRONER. CHARLES EDWIN HAMILTON, Sr., Hollywood, Calif. Filed June 28, 1929. Serial No. 374,477. 13 Claims. (Cl. 68—9.)



1. In a flat work ironer, including ironing rolls with lapped cover cloth: a plurality of narrow, spaced guard members associated with each individual roll and extending transversely over substantially the exposed portion of a roll and bearing upon both the feed and delivery sides thereon to retain its cover cloth thereon.

5. In a flat work ironer, including ironing rolls with lapped cover cloth: guard members associated with the individual rolls, extending over substantially the exposed portion of a roll and bearing upon both the feed and delivery sides thereof to retain its cover cloth thereon, and guide toes connected with the respective guard members and extending outwardly therefrom at the delivery side for limiting the rise of work delivered by the roll.

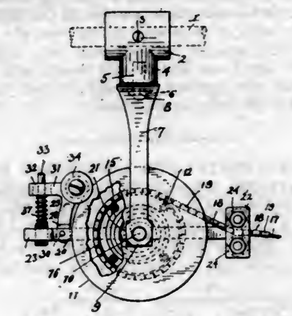
9. A member for stripping material from a roll, comprising a stripper finger mounted along the delivery side of the roll, and a contact finger hinged to the lower end of the stripper finger and bearing normally upon the surface of the roll.

1,867,742. CARBURETOR. CHARLES GILBERT HAWLEY, Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed June 5, 1928. Serial No. 283,089. 14 Claims. (Cl. 261—79.)



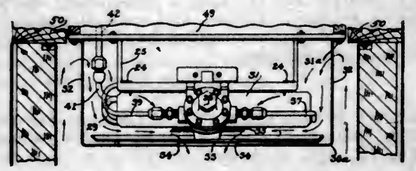
1. The herein described process of making combustible mixtures of substantially constant ratios for internal combustion engines that consists in setting the combustion supporting air into rotation as it is drawn into the engine and localizing a rapidly whirling vortex thereof coaxially in advance of the engine mixture intake, and admitting fuel to the entrance end or base of said vortex and through an orifice of fixed size.

1,867,743. REEL. GEORGE W. HOPKINS, Cleveland, Ohio. Filed May 16, 1928. Serial No. 278,287. 6 Claims. (Cl. 242—107.)



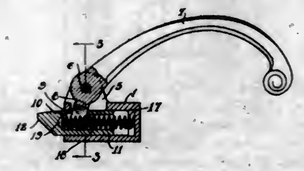
1. A reel comprising a supporting post, a hub carried thereby, a rotatable winding drum spring actuated in one direction arranged on said hub, and a member pivoted on said hub including means for guiding the medium wound on said drum and adjustable spring tension means for governing the spring actuated speed of the drum and constantly in effective engagement with said drum.

1,867,744. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Dec. 30, 1927. Serial No. 243,701. 13 Claims. (Cl. 62—99.)



1. A refrigerating element for mechanically refrigerated cabinets, comprising a coil having means for supporting substances placed thereon for congealing, and a coil disposed below said first coil for cooling the air in said cabinet, said first coil comprising convolutions of pipe disposed in a horizontal plane and said cooling coil comprising loops of pipe disposed in a vertical plane, and shielding means for directing the circulation of air over said cooling coil.

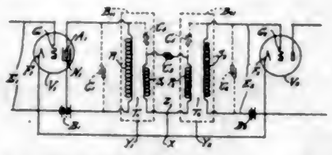
1,867,745. SPRING CATCH FOR METAL SASH HARDWARE. ROBERT H. HUMMERT and GEORGE E. GRAVENSTINE, Dayton, Ohio, assignors to The S. H. Thomson Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 16, 1930. Serial No. 502,744. 2 Claims. (Cl. 292—173.)



1. A device of the type described, comprising a barrel closed at its rear end, a plunger square in cross section in said barrel and free to move out of its front end, said

plunger formed with an axial hole extending inwardly from its rear end to a point well near its front end, a V slot in the upper portion of said plunger opening into said axial hole, a helical spring projecting from the rear wall of said barrel into the axial hole in the plunger, ears projecting outwardly from said barrel over the V slot, a handle pivotally secured between said ears, and a finger integral with the inner end of said handle and having a forked portion for entrance into said V slot to straddle the spring for the purpose specified.

1,867,746. APPARATUS FOR AMPLIFYING ELECTRIC OSCILLATIONS. CHARLES T. JACOBS, Chatham, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed July 26, 1930. Serial No. 470,788. 7 Claims. (Cl. 179—171.)



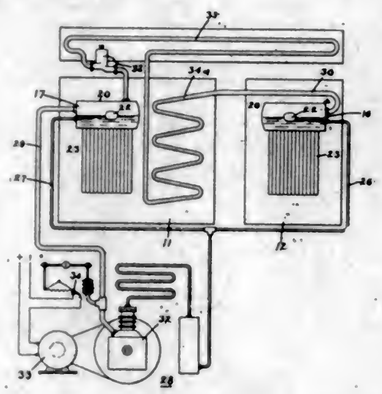
1. In a system for the amplification of radio frequency currents in combination a vacuum tube, a succeeding work circuit and coupling means connected in the output circuit of said vacuum tube and to the input of said succeeding work circuit for coupling said tube and said work circuit in cascade, said coupling means comprising, with the output capacity of vacuum tube and the input capacity of said work circuit, three tightly coupled cascaded resonant circuits, of which two have substantially the same resonant frequency and the other a substantially different resonant frequency, whereby with fixed adjustments of all elements thereof amplification may be secured over a wide band of frequencies.

1,867,747. TOILET STAND. WILLI LOHMANN, New York, N. Y. Filed Oct. 10, 1929, Serial No. 398,799. Renewed Dec. 12, 1931. 2 Claims. (Cl. 141—1.)



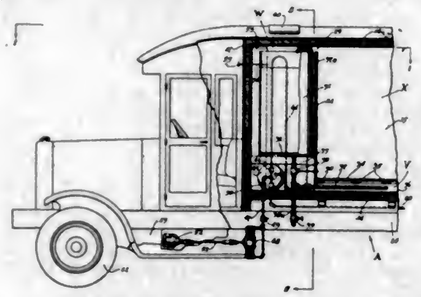
2. A toilet stand comprising in combination, a column, a support, a plurality of branches to said column above said support, fluid supply conduits through said column and branches, a valve controlling the supply of fluid to said branches, a hood member on each of said branches communicating with the conduit therein and adapted to individually cover and partially enclose a toothbrush, and means to drain fluid supplied to said hood members through said support and column.

1,867,748. REFRIGERATING APPARATUS. DAVID E. MACCABEE, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 31, 1928. Serial No. 296,492. 17 Claims. (Cl. 62—115.)



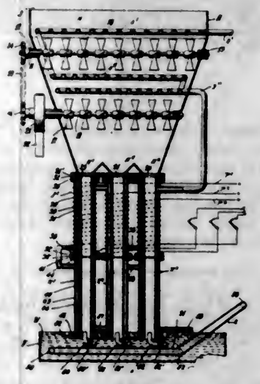
3. Refrigerating apparatus comprising in combination a pair of evaporators connected in series, means for circulating volatile refrigerant through the evaporators and means between the evaporators for condensing, at a pressure no greater than the evaporating pressure, refrigerant issuing from the first evaporator.

1,867,749. REFRIGERATING AND VENTILATING APPARATUS. CHARLES A. MOORE, Edina, Minn. Filed Sept. 12, 1930. Serial No. 481,426. 4 Claims. (Cl. 62—13.)



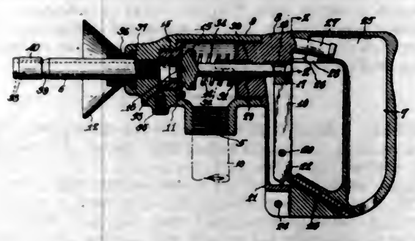
1. In combination, a train of vehicular structures, each providing a storage chamber and a compartment adjacent thereto, the chamber being in communication at its upper portion with the upper portion of the compartment and at its lower portion with the lower portion of said compartment, a unitary circulatory system within each structure, each system including an upright tank for a liquid refrigerant disposed within the compartment of its respective structure and spaced from the walls thereof and including a pipe for conveying the liquid from the lower portion of the tank along the bottom of said chamber and back to the upper portion of the tank, an air compressor carried and operated by one of the vehicular structures of the train, a storage tank for the compressed air carried by one of the vehicular structures, an air line in each structure adapted to be coupled at the ends thereof to the adjacent ends of the air lines of the adjacent structures, said air tank being connected with the air line of its respective vehicular structure, each of said unitary systems further including an air jet disposed within the liquid refrigerant conveying pipe thereof, said jet being connected with the air line of its respective vehicular structure, the air issuing from said jet causing the circulation of the liquid in said pipe, the liquid, in turn, washing and cooling the air, said air thereafter providing a cold freshening supply thereof for the storage chamber.

1,867,750. APPARATUS FOR HEATING AND TREATING SUBDIVIDED CARBONACEOUS MATERIAL AND THE LIKE. JOHN J. NAUGLE, Rye, N. Y. Original application filed Jan. 19, 1926, Serial No. 82,378. Divided and this application filed June 14, 1927. Serial No. 198,742. 5 Claims. (Cl. 13—7.)



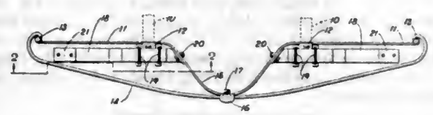
1. Apparatus for activating or revivifying carbonaceous material, such as carbonized lignin residues, which comprises a source of supply of such carbonaceous material, a water-cooled heating chamber in communication with such source of supply of carbonaceous material, and a cooling chamber for cooling material treated, in said heating chamber in communication with the latter.

1,867,751. GUN FOR CONDENSER CLEANING SLUGS. WILLIAM F. OBERHUBER, Lansdowne, Pa., assignor to Franklin Development Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 9, 1929. Serial No. 338,074. 6 Claims. (Cl. 15—104.06.)



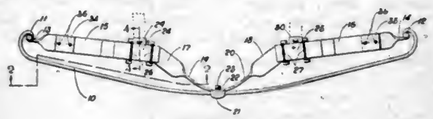
1. In a gun for directing a blast of fluid into a condenser tube, a nozzle for entry into the tube end, said nozzle having a head toward its forward end, a neck rearward thereof, and a rearwardly directed flare at the rearward end of the neck and rigid with respect to the neck, and a resilient tubular washer movably mounted upon said neck adapted to radial expansion if forced rearward upon the rearward flaring portion.

1,867,752. AUTOMOBILE CONSTRUCTION. CLYDE R. PATON, Birmingham, Mich., assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 28, 1930. Serial No. 498,707. 23 Claims. (Cl. 293—55.)



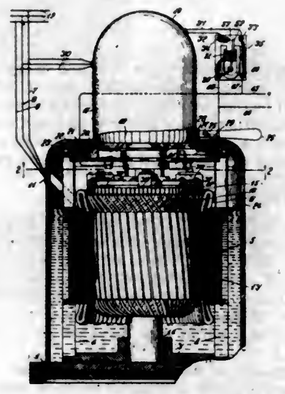
1. A bumper construction for use in motor vehicles comprising, a bumper adapted to be mounted on a vehicle and to form a part of a primary vibratory system, and means associated with the bumper adapted to vibrate in opposite phase relative to the vibrations of said primary system.

1,867,753. AUTOMOBILE CONSTRUCTION. CLYDE R. PATON, Birmingham, Mich., assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 28, 1930. Serial No. 498,708. 21 Claims. (Cl. 293—55.)



1. A bumper construction for use in motor vehicles comprising means for fastening the bumper in position on a vehicle, an impact bar, means mounted on the fastening means and having a portion thereof resilient in substantially a vertical plane when the bumper is mounted in position on the vehicle, and means for supporting the impact bar from said resilient means.

1,867,754. TRANSFORMER-CONVERTER. HARRY E. PATRICK, Ocoee, and IRVEN WILLIAM KURETH, Orlando, Fla., assignors of one-third to William F. Anderson, Wisconsin Rapids, Wis.; Lena M. Patrick executrix of said Harry E. Patrick, deceased. Filed June 14, 1930. Serial No. 461,153. 3 Claims. (Cl. 171—123.)



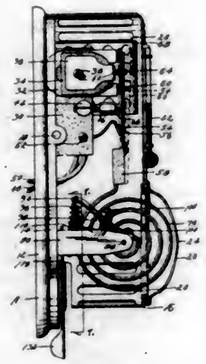
1. A transformer-converter comprising a primary element in the form of an annular alternating current field-stator and a secondary element in the form of an arma-

ture stator enclosed within the field stator both fixedly mounted about a vertical axis, a fixed commutator centered about this axis and mounted above the armature, the commutator comprising an annular series of segments with their contact faces presented upwardly in a horizontal plane, a synchronous motor mounted above the stator elements and comprising a member mounted for rotation about the vertical axis, a plurality of downwardly projecting brushes carried by the rotary member and engaging the commutator, and means comprising slip rings on the rotary member and fixed brushes for taking off direct current.

1,867,755. PRODUCTION OF BERYLLIUM AND BERYLLIUM COMPOUNDS AND ISOLATION OF BERYLLIUM SALTS. JOSEPH J. PELC, Chicago, Ill. Filed Feb. 9, 1931, Serial No. 514,691. Renewed Mar. 3, 1932. 24 Claims. (Cl. 23—18.)

1. The process of producing beryllium from salts containing the same which comprises reacting a beryllium salt with an organic carbon compound not containing oxygen, and treating the resulting organo-metallic beryllium compound to recover metallic beryllium therefrom.

1,867,756. ROOM THERMOSTAT. ALBERT PENN, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Filed Feb. 24, 1930. Serial No. 430,492. 9 Claims. (Cl. 200—139.)

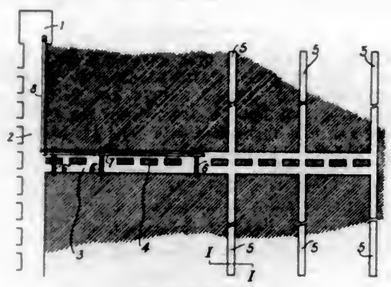


1. In a room thermostat, a movable contact carrying arm, a fixed contact, a thermostatic metal bar pivotally mounted and having said arm connected thereto, a control device for imparting rotary movement to said thermostatic metal bar, and a spring for resisting said control device and for holding the bar and control device in engagement.

1,867,757. METHOD OF DIGESTING NITROCELLULOSE. ARTHUR C. PRESTON, Wilbraham, and GEORGE C. GRESS, Springfield, Mass., assignors to The Fiberloid Corporation, Indian Orchard, Me., a Corporation of Massachusetts. Original application filed July 13, 1928, Serial No. 292,555. Divided and this application filed May 6, 1929. Serial No. 360,854. 4 Claims. (Cl. 260—148.)

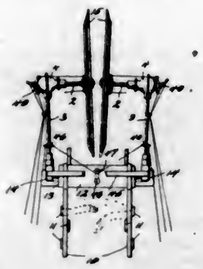
1. The method of digesting nitro-cellulose which consists in, confining the nitrocellulose in a closed system, circulating a digesting liquid therethrough, heating said liquid and in admitting air pressure to said system to bring the pressure therein above that at which the said liquid will flash into steam.

1,867,758. PROCESS OF DEGASIFYING COAL AND OTHER CARBONACEOUS MATERIAL IN SITU. LEO RANNEY, New York, N. Y. Filed July 10, 1931. Serial No. 550,609. 15 Claims. (Cl. 262—1.)



1. The process of extracting methane gas from coal deposits in situ which process consists in constructing a tunnel system consisting of one or more tunnels in the area of the coal deposit to be degasified, sealing said area against the infiltration of atmospheric air, placing the sealed area under partial vacuum and removing the occluded gas from the coal deposit.

1,867,759. AIRCRAFT. JEAN REHBOCK, Washington, D. C. Filed Aug. 19, 1930, Serial No. 476,375, and in France June 5, 1930. 12 Claims. (Cl. 244—19.)

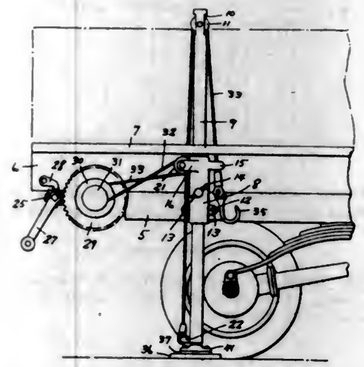


1. In an aerial craft, a pair of opposed wings each having the form and action of a helix, mounts for said wings adapted to swing them into horizontal co-incidence or in substantially parallel planes, means for oscillating said wing mounts to give the wings a forward or rearward pitch, and means for rotating the wings.

1,867,760. TRUCK HOIST. FRANCO RICHARDS, Pipecreek, Tex. Filed July 8, 1930. Serial No. 466,501. 2 Claims. (Cl. 254—86.)

1. In combination with a truck a vertically arranged barrel, located at each side of the truck body, a vertically arranged rod sliding through each barrel, a plate connected to the lower end of each rod, a pulley at the upper end of each rod, an eye formed on the front part of each barrel, a pulley carried by the rear part of each barrel, a shaft rotatably supported at the rear end of the body, a pair of drums connected to each end of the shaft, a cable connected to one drum of each pair and passing over the pulley at the upper end of each rod and then downwardly through the eye on each barrel, a stop on the end of the cable engaging the bottom part of the eye, a cable on the other drum of each pair and passing over the pulley carried by each barrel and having its other end connected to the lower end of each rod, the cables of one set being wound on their drum in an opposite direction from the

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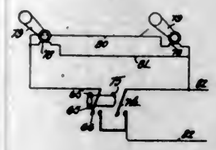


cables of the other set, and means for rotating the shaft to slack one set of cables, and exert a pull on the other set whereby the rods may be moved vertically.

1,867,761. AGE IMPROVER. ERICH RIETZ, Wuppertal-Sonnborn, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed June 8, 1931, Serial No. 543,017, and in Germany June 12, 1930. 6 Claims. (Cl. 18—50.)

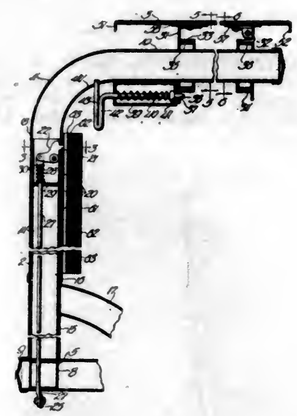
1. A method of treating rubber which comprises adding to a vulcanizable rubber composition a material obtained by heating artetrahydro-alpha-naphthylamine with a compound of the group consisting of acetaldehyde, croton-aldehyde and aldol in the presence of a small amount of an acid and of a water soluble alcohol, and vulcanizing the rubber.

1,867,762. ACTUATING DEVICE FOR COUNTERS. OSCAR CHARLES ROESEN, Brooklyn, N. Y., and ISIDOR TORNBERG, Plainfield, N. J., assignors to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 17, 1928. Serial No. 300,368. 2 Claims. (Cl. 235—92.)



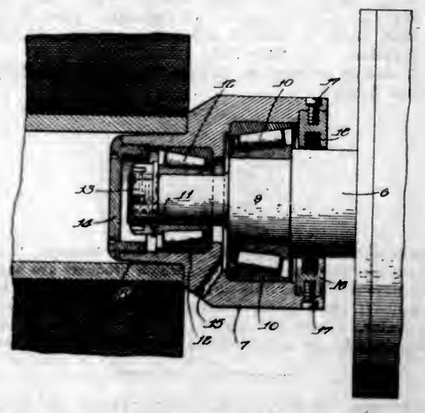
2. In a production controlling and counting device for a pair of machines, said device comprising a box, shafts operated by said machines and extending into the box and a differential connected with the two shafts and comprising gears supported in said box, the combination of an electric circuit having therein a contact, a pair of oppositely placed cams on the box for closing said contact twice during each revolution of the box, whereby electric impulses are imparted to the circuit, a single cam carried by the box, a contact parallel with the first-named contact in the circuit in position to be closed by the single cam once during each revolution, the single cam being arranged in the same relative position as one of the double cams so that normally the closing of its contact will not affect the number of impulses imparted to the circuit.

1,867,763. HOSPITAL TABLE. LAMAR ROSE, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 6, 1930. Serial No. 426,218. 14 Claims. (Cl. 45—111.)



1. In a hospital table, the combination of a tubular post, a base for supporting said post, said post extending upwardly from and being secured to said base at one end of the latter whereby the base is adapted to be disposed under a bed in transversely extending position relative thereto and with the post disposed adjacent one side of the bed, a table overlying said base, means for vertically adjustably mounting said table on said post, and disengageable means disposed inside of and adjacent the upper end of said post for locking said vertically adjustable mounting means in selected position of vertical adjustment.

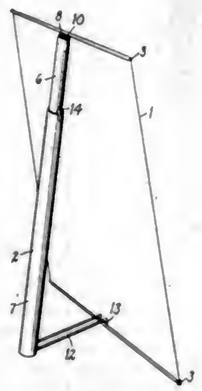
1,867,764. MAGAZINE REEL. JAMES E. RUST, Chicago, Ill., assignor, by mesne assignments, to Mary E. Kohler, Chicago, Ill. Filed July 21, 1926. Serial No. 123,850. 4 Claims. (Cl. 242—68.)



1. A magazine reel comprising a rotatable shaft and supports therefor, arms connected with said shaft between which rolls of paper are supported, spindles con-

nected with said support and projecting therefrom, a spindle head rotatably mounted upon the projecting portion of each spindle, said spindle head having a reduced portion which engages the roll of paper, and two sets of rollers on the interior of said head which engage said spindle and which are at different distances radially from the axis of said spindle.

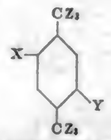
1,867,765. DISPLAY DEVICE. HENRY E. SAUNDERS, Toronto, Ontario, Canada, assignor to Kala Sign Company, Kalamazoo, Mich. Filed Aug. 19, 1931, Serial No. 558,019, and in Canada June 14, 1930. 11 Claims. (Cl. 40—125.)



1. The combination with a display sign having inwardly facing recesses at its ends, of a support comprising a mailing tube having a projection at its upper end adapted to be received in the upper recess; and a stretcher having one end connected with the lower end of said tube and its other end adapted to be received in the lower recess, said tube being formed of two parts adapted to be telescoped.

1,867,766. HALOGEN-TEREPHTHALIC-HEXAHALIDES AND PROCESS OF PREPARING SAME. HANS SCHINDHELM, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 9, 1928, Serial No. 318,314, and in Germany Nov. 11, 1927. 5 Claims. (Cl. 260—160.)

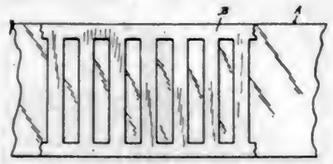
3. As new products the halogen-terephthalic-hexahalides of the formula:



wherein X means hydrogen, chlorine or bromine, Y and Z's means chlorine or bromine, which products are nearly colorless liquids crystallizing at lower temperatures, boiling under the ordinary pressure above 300° C., insoluble in water, soluble in organic solvents, capable of being saponified to the corresponding halogen-terephthalic acids.

1,867,767. TWO-TONE ORNAMENTATION OF STAINLESS IRON. FRED C. SCHLUDECKER, Massillon, Ohio. Filed Aug. 21, 1931. Serial No. 558,613. 1 Claim. (Cl. 41—39.)

The herein described method of producing designs, letters, etc., on stainless metal consisting in covering certain portions of the metal with a protective covering and then treating the other portions with a composition composed



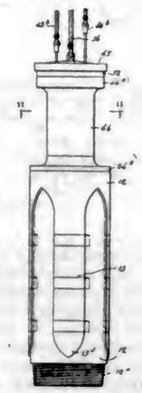
of powdered pumice, oil, lime and kerosene and working the surface so covered with the composition with a brush or buff.

1,867,768. IRON HOLDER. RICHARD F. SCHULZKE, Portland, Oreg. Filed Feb. 10, 1930. Serial No. 427,228. 5 Claims. (Cl. 68—27.)



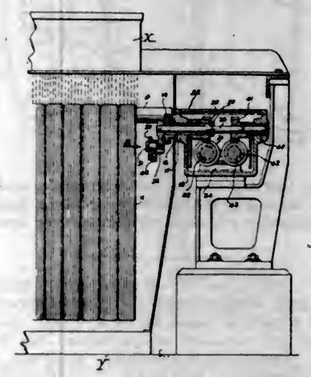
3. In an ironing board provided with a recess in one edge portion thereof, a metallic iron holder overlying said recess, means securing said holder to the upper face of said board adjacent the edges of said recess, said iron holder including a downwardly inclined flange extending over the edge of said board and spanning said recess, said flange terminating in an inturned portion engaging in clamping relation the under surface of said board at the sides of said recess.

1,867,769. WELL HOUSING APPARATUS. RICHARD P. SIMMONS, New York, N. Y. Filed Aug. 16, 1929. Serial No. 386,354. 20 Claims. (Cl. 255—1.)



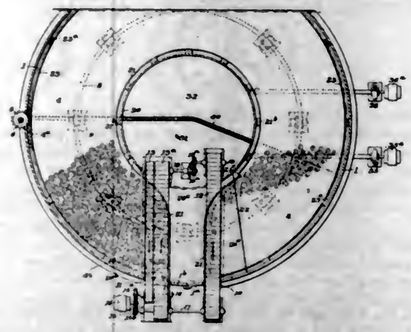
13. The combination with an oil well casing of a locking head insertable in the casing, said casing having recesses in its wall, and locking elements shiftable circumferentially in the locking head to engage and disengage with said recess.

1,867,770. APPARATUS FOR WET TREATMENT OF HANKS. FRANZ K. SIXTHOR, Whitinsville, Mass., assignor to Whittin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Dec. 10, 1930. Serial No. 501,321. 7 Claims. (Cl. 8—19.)



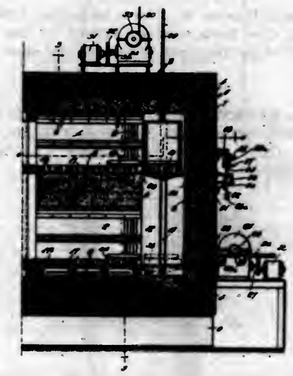
1. In an apparatus for wet treatment of hanks, having a spraying device and a plurality of cross rods for suspending hanks below said device, in combination, a series of rolls for supporting said cross rods, means to support said rolls in adjacent but spaced relation, means to rotate said rolls, and additional means rotatable concentric with said supporting means and effective to intermittently lift and advance said cross rods to positions for engagement by successive pairs of rolls.

1,867,771. PASTEURIZING APPARATUS. RICHARD SLAMA, Philadelphia, Pa., assignor of one-half to August R. Roesch, Geneva, N. Y. Filed Sept. 19, 1930. Serial No. 483,022. 11 Claims. (Cl. 126—272.)



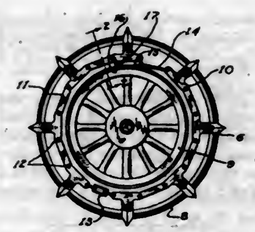
1 In a pasteurizing apparatus, the combination of a casing providing a pasteurizing chamber, a movable table or platform disposed within said chamber, means for rotating said table or platform, a belt for delivering bottles in an upright position to said table or platform, means for moving the bottles from said belt onto said table or platform, means for delivering streams of water at different temperatures to said bottles while they are being slowly moved by the table or platform, a plurality of belts for receiving said bottles from the moving table or platform and automatically discharging the same from the pasteurizing chamber, and means for synchronously driving said belts.

1,867,772. RECUPERATIVE COUNTERFLOW FURNACE. EDWIN L. SMALLEY, Whitefish Bay, Wis., assignor to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 5, 1929. Serial No. 368,646. 16 Claims. (Cl. 263—6.)



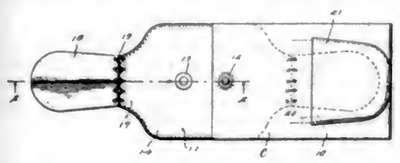
1. In a recuperative counter-flow furnace, a multiplicity of chambers disposed in horizontal rows in superimposed relation, means for passing articles of a charge under heat treatment through said chambers for subjecting the articles to a process of heat treatment in certain of said chambers, while preheating and cooling others of said articles in other chambers adjacent to the heat treatment chambers, and flues interconnecting said cooling and preheating chambers in superimposed relation for establishing directed convection air currents through said cooling and preheating chambers.

1,867,773. TIRE CHAIN. FRANK SPIDLA and FRANK J. HRABAL, Limerick, Saskatchewan, Canada. Filed Feb. 19, 1931. Serial No. 516,958. 8 Claims. (Cl. 152—14.)



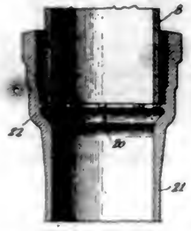
1. A tire chain including transverse tread members of angular form in cross section with the surface engaging edge rising in one direction across the tire tread and extended to form an angular extension at one side of the tire tread and near one end of said tread members; side tire chain structures for connecting the ends of said tread members on opposite sides of said tire; tensioning and locking means for the said side tire chain structures on opposite sides of the tire; and means for adjusting the said side tire chain structures on the opposite sides of the tire.

1,867,774. COMBINATION SHOE HORN AND CASE. ROBERT P. ELLIS STARR, Concordia, Kans. Filed Feb. 20, 1932. Serial No. 594,303. 3 Claims. (Cl. 132—7.)



1. The combination of a case including a flexible closure flap, a shoe horn member carried by the flap and a pocket carried by the case to receive the shoe horn.

1,867,775. EXPANSION MEANS FOR BELL AND SPIGOT PIPES. ALFRED E. STRINGER, Chicago, Ill. Filed Jan. 2, 1929. Serial No. 329,925. 5 Claims. (Cl. 285—115.)



1. A pipe stack including bell and spigot pipe sections arranged end to end, means within a bell portion of a pipe for supporting the end of an adjacent pipe section in spaced relation within the bell, said means including a plurality of inwardly extending projections for underlying the end of the supported pipe, said projections being movable out of the way of the supported pipe by said supported pipe when the same is moved axially by expansion.

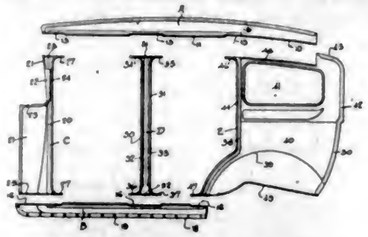
1,867,776. SLIDING WINDOW. FREDERICK JOSEPH STUART, Birmingham, England, assignor of one-half to Arthur Sam Cheston, Birmingham, England. Filed Mar. 5, 1931, Serial No. 520,273, and in Great Britain Apr. 16, 1930. 9 Claims. (Cl. 292—48.)



1. A rubber guide channel for a sliding window, a cam-bar enclosed within the one side of the rubber guide channel, a rigid housing containing the rubber guide channel and cam-bar, and means for operating the cam-bar so that it is caused to press the side of the rubber channel against the window and clamp the latter within the rubber channel.

1,867,777. VEHICLE BODY WALL CONSTRUCTION. JOHN P. TARBOX, Philadelphia, Pa., assignor to Edward G. Budd Mfg. Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 1, 1927. Serial No. 216,907. 6 Claims. (Cl. 296—28.)

1. In a vehicle body, a pressed metal door frame comprising a horizontal and a vertical member together serving as both framing and outer paneling, each of said members comprising a unitary stamping flanged inwardly around the doorway opening, to a depth substantially equal to the thickness of the body wall, the vertically extending member being flared at the end in which it joins the horizontal member, the inwardly extending flange thereof being formed on a generous curve to form a rounded cor-

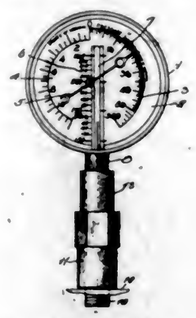


ner for the doorway opening and overlapping and directly secured at its end to the inwardly extending flange of the horizontal member extended beyond the door opening.

1,867,778. PROCESS OF PRODUCING SULPHONIC ACIDS AND SULPHONATES. JOHN B. TERRY, Berkeley, and RODERICK CRAIG, Oakland, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Feb. 17, 1928. Serial No. 255,178. 25 Claims. (Cl. 260—159.)

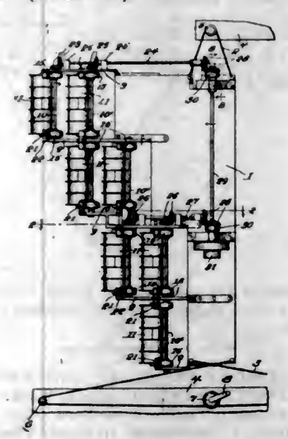
1. A process of treating petroleum oils to produce sulphonic acids comprising, forming an emulsion by bringing an oil containing sulphonatable constituents, such sulphonatable constituents not having been removed from such oil to an appreciable extent by prior treatment with a sulphonating agent, into intimate contact with sulphuric acid in quantity and strength adapted to sulphonate substantially all constituents amenable to sulphonation, adding water to stratify the unreacted sulphuric acid in dilute solution and then collecting the water soluble sulphonic acids.

1,867,779. GAUGE AND THERMOMETER FITTING. ORVILLE W. THOMPSON, Chicago, Ill., assignor, by mesne assignments, to Jas. P. Marsh Corporation, Chicago, Ill., a Corporation of Illinois. Filed June 26, 1924. Serial No. 722,556. 2 Claims. (Cl. 73—52.)



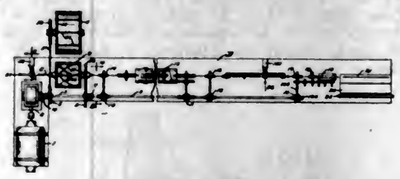
2. In a device of the class described, the combination of a fitting and a combined pressure gauge and thermometer, the fitting and gauge having means for holding the gauge and thermometer relatively to said fitting and having means for connecting said fitting with an element with which the gauge, and fitting are adapted to communicate, said fitting having a valve and means disposed therein for normally holding the valve closed, means providing a casing for the thermometer, said casing being simultaneously movable into functionally engaging position with said valve when said gauge is connected and held with relation to said fitting to thereby hold said valve open.

1,867,780. WAVE MOTOR. HUBERT TIDWELL, Green River, Utah. Filed Aug. 18, 1930. Serial No. 476,167. 4 Claims. (Cl. 253—5.)



1. A wave motor of the kind described comprising stationary supports, a float having a stepped portion and adjustably connected to the supports, a plurality of pontoons arranged at the stepped portion and correspondingly thereto in échelon fashion, and means for transmitting up and down movement to the pontoons under the action of waves to mechanism to be actuated from said motor, said means including ratchet means and overrun clutches.

1,867,781. MEANS FOR MAKING WELDING RODS. KLAS H. TERNSTEDT, Chicago, Ill., assignor to Ottmar M. Krembs, Chicago, Ill. Filed Nov. 2, 1928, Serial No. 316,762. Renewed Nov. 30, 1931. 33 Claims. (Cl. 29—33.)

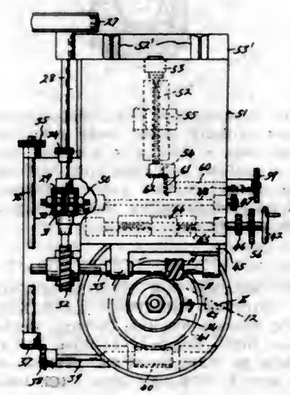


1. In a welding rod machine, a tape reel, a pair of rollers for pulling the tape from the reel, a core material feed hopper between the reel and the rollers, and a bar in the bottom of the hopper, the bar having a channel formed therein through which the tape is passed and thereby formed into a trough shape to receive the material as it passes through the hopper.

28. A welding rod machine comprising means for feeding two sheathing tapes in superposed relation, means for feeding loose core material onto the bottom tape, means for folding the bottom tape around the material, means for compressing the strip thus formed, means for folding the top tape around the compressed strip, driving and compressing rollers between said means, and means for chopping the finished strip without stopping its movement.

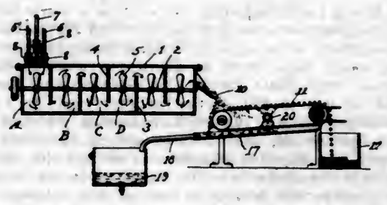
1,867,782. METHOD OF AND MACHINE FOR GENERATING WORM GEARS. NIKOLA TREBOJEVICH, Highland Park, Mich. Filed Nov. 19, 1928. Serial No. 320,492. 8 Claims. (Cl. 90—4.)

1. A method of generating worm gears consisting in rotating a hob of the solid worm cylindrical type capable of meshing with the gear to be cut in a conical fashion, in rotating the blank in a timed relation, in imparting to the hob a relative feed movement in a direction tangential to the said blank, the direction of the said feed intersecting the hob axis at a predetermined angle depending upon the degree of cutting clearance employed and in continuing the said feed movement until the hob traverses the blank from end to end and finishes all points of the possible contact with the blank.



8. A machine for hobbing worm gears comprising a work arbor, a hob arbor mounted in a slide and slidable in a plane perpendicular to the work arbor, means for rotating the two arbors in a timed relation, means for feeding the hob lengthwise tangentially relative to the work, a compensating gearing to compensate for the tangential feed, means for feeding the hob simultaneously away from the work in order to obtain cutting clearance and means for synchronizing the two feed motions in a predetermined ratio corresponding to the tangent of the clearance angle.

1,867,783. CONTINUOUS PROCESS OF PURIFYING MATERIALS. WALTER EDWIN TRENT, New York, N. Y., assignor to The Trent Process Corporation, a Corporation of Delaware. Filed July 7, 1927. Serial No. 204,069. 26 Claims. (Cl. 209—49.)



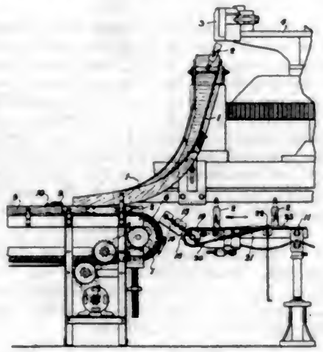
1. A process for purifying carbonaceous fuel, consisting in continuously flowing a body of water through a purifying receptacle, in introducing finely divided fuel to said flowing body, in subjecting such fuel particles to the action of an agent having an affinity for the carbonaceous fuel particles and in sufficient quantity to form with said particles separated amalgamated bodies substantially free of water and noncarbonaceous matter, in maintaining said bodies of a substantially uniform predetermined size and sufficiently small to flow in suspension in said body of water from said purifying receptacle, by controlling the water dilution of the materials, and the temperature of the bath, and in separating the formed bodies from said body of water after discharge from the purifying vessel.

1,867,784. FUSE PLUG. GEORGE R. TRUMBULL, Torrington, Conn., assignor to The Bulls-Eye Electric Manufacturing Company, Torrington, Conn., a Corporation of Connecticut. Filed May 12, 1930. Serial No. 451,649. 4 Claims. (Cl. 200—130.)



2. A fuse comprising a base, two conductors mounted therein and initially biased away from each other at their outer ends, a fuse strip normally connecting the ends and a resilient insulating strip held compressed between the conductors with portions adjacent said fuse strip and adapted to reduce the tendency to arc when the fuse strip blows.

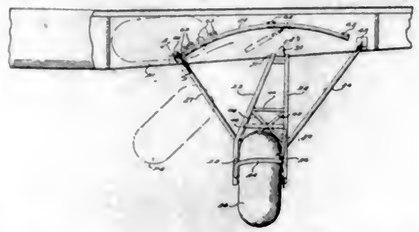
1,867,785. MEANS FOR TRANSFERRING BOTTLES FROM BOTTLE-FORMING MACHINES. ARTHUR DOWRICK RICHARD TUCKER, Oldbury, England, assignor to Albion Bottle Company Limited, Oldbury, England. Filed July 8, 1931, Serial No. 549,385, and in Great Britain Nov. 1, 1930. 5 Claims. (Cl. 198—22.)



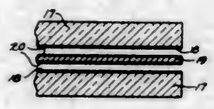
1. Means for transferring bottles from a bottle-forming machine, comprising a chute on to which the bottles are discharged in succession from the forming machine and down which they travel by gravity in a neck-foremost position, said chute having its delivery end disposed so as to deliver the bottles neck-foremost in a substantially horizontal direction, a moving conveyor disposed beneath the said delivery end of the chute and movable in a direction opposite to that in which the bottles leave the chute, a buffer device above the conveyor which brings the bottles to rest on the conveyor and causes them to be carried forward on their side bottom foremost, an angularly-movable tipping device on to which the successive bottles are delivered on their side by the conveyor, a delivery conveyor, and means for actuating the tipping device to cause the bottles to be raised into an upright position bottom downwards and transferred on to the delivery conveyor in such upright position at definite distances apart.

1,867,786. RETRACTABLE LANDING GEAR. GERARD VULTEE, Detroit, Mich. Filed July 28, 1930. Serial No. 471,212. 11 Claims. (Cl. 244—2.)

5. An aircraft having in combination a pair of spars, a landing gear unit mounted on said spars comprising three struts cooperatingly forming a tripod, a ground contacting portion on the apex of said tripod, spar engaging means at the base of said tripod for each strut, one of said spar engaging means comprising a curved sliding pair.

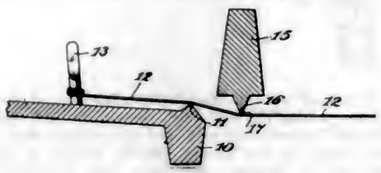


1,867,787. LAMINATED GLASS AND PROCESS OF PRODUCING THE SAME. GEORGE B. WATKINS, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 12, 1929. Serial No. 354,482. 4 Claims. (Cl. 49—81.)



1. As a new article of manufacture, a sheet of laminated glass comprising two sheets of glass and an interposed sheet of non-brittle material treated with a mixture of a synthetic resin and a polyglycol derivative.

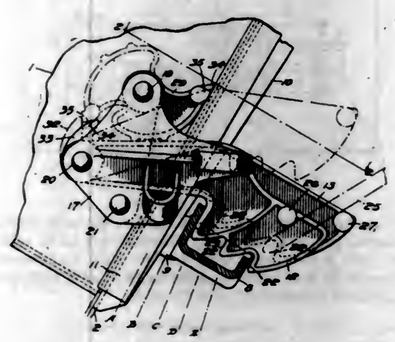
1,867,788. PIANO STRING-FRAME. STANLEY WEBER, Long Island City, N. Y., assignor to Steinway & Sons, New York, N. Y., a Corporation of New York. Filed Feb. 27, 1931. Serial No. 518,671. 4 Claims. (Cl. 84—188.)



1. A cast iron piano plate or string frame having a one piece rib with a ridge over which the strings are adapted to pass, the ridge being integral with the body of the frame and its surface only being hardened to non-graphitic structure to resist the action of the tension of the strings, the remaining parts of the rib and frame being untreated and of graphitic cast iron, said plate or frame being free from distortion in shape or levels and vibrational energy losses.

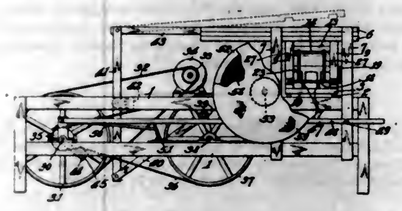
1,867,789. CAR DOOR MECHANISM. WILLIAM E. WINE, Toledo, Ohio, and BYERS W. KADEL, Baltimore, Md. Filed Sept. 25, 1930. Serial No. 484,437. 7 Claims. (Cl. 105—308.)

1. In a railway car having a lading discharge opening, the combination with a hinged door for closing the opening, said door being movable to open position under the influence of gravity, of mechanism for maintaining the door in a plurality of partial positions of closure for regulating the discharge of lading from the car, said mechanism involving pivotally mounted means and fixedly mounted means, one of said means being carried by the car body and the other by the door, said pivotally mounted means



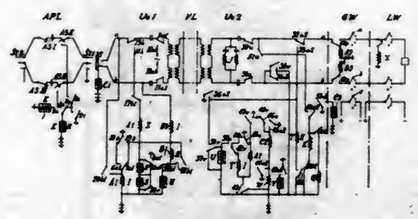
comprising a plurality of relatively movable members, and means for maintaining said members in elevated inoperative positions, said means having portions adapted to respectively overlappingly engage portions of said members, the overlapped portion of one of said members being greater than the overlapped portion of the other of said members.

1,867,790. MACHINE FOR FINISHING ARTICLES OF POTTERY-WARE. JOHN E. WRIGHT, Wheeling, W. Va., and GEORGE A. BENLINE, Martins Ferry, Ohio. Filed Aug. 18, 1930. Serial No. 476,002. 9 Claims. (Cl. 51—59.)



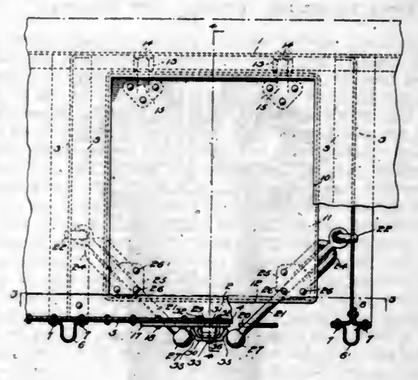
1. Apparatus for finishing closet tanks and the like comprising a stationary tank support, a carrier frame reciprocable relative to the tank which rests on said support, said frame including a plate-like part located for travel adjacent to the face of the tank, an abrasive sheet, a flexible resilient sheet forming a backing for said abrasive sheet, said sheets being attached intermediate their ends to said plate-like part of the carrier frame and being held by the latter in contact with the top face of said tank, resilient means between the ends of said sheets and the frame for maintaining the latter in conformably seated relation to the sides of said tank, and means applying inwardly directed pressure to said sheets.

1,867,791. AUTOMATIC TELEPHONE SYSTEM. GEORG ZAPF and ALFONS PEISSNER, Berlin, Germany, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Filed Jan. 24, 1931, Serial No. 510,895, and in Germany May 1, 1930. 12 Claims. (Cl. 179—16.)



1. In a telephone system, an impulse repeater, a trunk line incoming to the repeater, a trunk line outgoing from the repeater, means for transmitting a series of similar current impulses over the incoming trunk line, and means in the repeater for repeating each impulse except the last of the series over the outgoing trunk line.

1,867,792. CAR DOOR MECHANISM. EMIL C. ANDERSON, Downers Grove, Ill., assignor to Wine Railway Appliance Company, Toledo, Ohio, a Corporation of Ohio. Filed July 19, 1928. Serial No. 293,998. 23 Claims. (Cl. 105—308.)

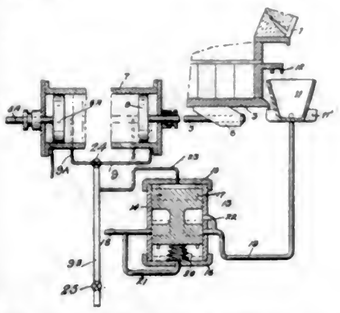


1. In a car door mechanism, the combination with a hinged door adapted to swing to open position under the influence of gravity, of a shouldered member rigidly secured to the car body adjacent the free edge of the door, and a unitary rigid member movably connected to the car body inwardly of the free edge of the door and cooperable with the shouldered member and the door to support the latter in closed position.

1,867,793. METHOD OF PRODUCING ALKALI SALTS OF IODOMETHYL SULPHONIC ACID. HANS-GEORG ALLARDT, Berlin-Reinickendorf-West, Germany, assignor to Schering-Kahlbaum A. G., Berlin, Germany. Filed May 28, 1931, Serial No. 540,626, and in Austria June 12, 1930. 7 Claims. (Cl. 260—159.)

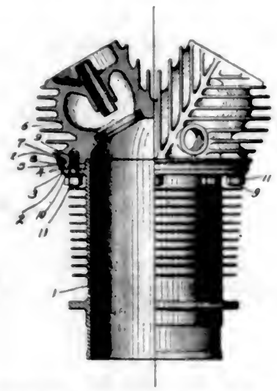
1. The method of producing alkali salts of iodomethyl sulphonic acid comprising heating a mixture of iodoform and an alkali sulfite and recovering the alkali salt of iodomethyl sulphonic acid formed in the reaction.

1,867,794. HOPPER. FRANK BERRY ALLEN, Lower Merion Township, Montgomery County, Pa., assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 25, 1926. Serial No. 90,628. 8 Claims. (Cl. 110—171.)



5. A hopper for receiving solid material and a liquid, a closure for controlling the discharge of the solid material therefrom, a trough for receiving the liquid from the hopper, and automatic means actuated upon the opening of said closure for flushing said trough.

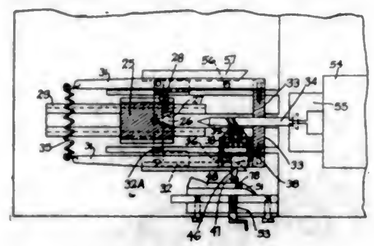
1,867,795. CYLINDER FOR INTERNAL COMBUSTION ENGINES. GLENN D. ANGLE, Cincinnati, Ohio, assignor to The Le Blond Aircraft Engine Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 11, 1930. Serial No. 474,466. 4 Claims. (Cl. 123—171.)



1. In combination, a cylinder with a laterally extending flange and a flange extending from the laterally extending flange toward the end of the cylinder, and a head to fit on said end of the cylinder, having an annular flange fitting inside the second mentioned flange of the cylinder, the two interfitting flange structures being of materials of different coefficients of expansion whereby the flanges of the head and cylinder draw more tightly together radially upon increased heating of the parts.

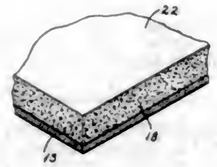
1,867,796. SCREW MACHINE (MOVABLE LATCH). JOHN A. ARENZ, Mount Vernon, N. Y., assignor to International Screw Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 18, 1930. Serial No. 503,268. 4 Claims. (Cl. 10—101.)

1. A screw pointing and threading machine comprising in combination, a movable slide, a cam for reciprocating said slide in a feed and return movement, a tool holder carried at one side of said slide and having an extension, a guide cam having a feed path and a return surface thereon along both of which the extension moves, means for forcing the extension off the feed surface path at the end thereof and on to said return surface, a yieldable latch



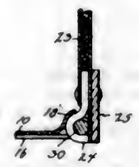
gate at the end of said return surface through which the extension passes for shunting the extension on to said feed path upon a feed movement of said slide, and means for reciprocating said latch longitudinally of said feed surface, at alternate reciprocations of the slide.

1,867,797. INSULATING BOARD. LOUIS E. ARMSTRONG, Fort Dodge, Iowa, assignor to Insulex Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 8, 1930. Serial No. 500,707. 8 Claims. (Cl. 154—45.9.)



5. A product of the type described, comprising in combination a base member of plaster board having a top facing of fibrous material, a layer of cellular material comprising gypsum as its principal ingredient and of much lighter form and greater thickness compared with the plaster board base and bonded to the outer surface of said top facing, and a facing of open-mesh fabric imbedded in said layer at its top surface.

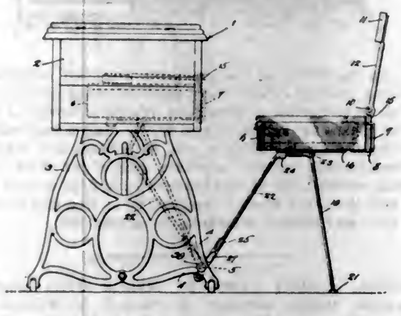
1,867,798. HINGE. ERNEST A. ARNDT, Sioux City, Iowa, assignor to The Gabriel Kari-Keen Company, Sioux City, Iowa, a Corporation of Delaware. Filed Apr. 14, 1930. Serial No. 444,021. 8 Claims. (Cl. 220—31.)



1. In a hinge, in combination with a pair of sheet metal walls to be hinged together at their edges, hinge loops formed in the metal of one of said walls and spaced by a slot cut in said metal, a hinge pin extended through said loops, the other wall when in one position being adapted to overlap the wall having the hinge loops, and a hinge

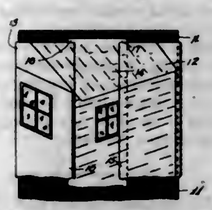
element secured to the second mentioned wall and provided with an open sided hook extended over the hinge pin, received in the slot, and closed by the overlapping portion of the second mentioned wall.

1,867,799. FOLDING CHAIR FOR SEWING MACHINES. EDWARD J. BALMOS, Devine, Tex. Filed Oct. 11, 1929. Serial No. 398,969. 3 Claims. (Cl. 155—80.)



1. In a device of the class described, a tubular member having shoulders, a bearing mounted to turn on the tubular member, between the shoulders, extensions held against rotation in the ends of the tubular member, latches affording a step-by-step longitudinal adjustment of the extensions in the ends of the tubular member, a guide mounted on the bearing and disposed approximately at right angles to the bearing, a link longitudinally adjustable in the guide, a means for holding the link in adjusted longitudinal positions in the guide, a seat and a leg, and means for connecting the leg and the link pivotally with the seat.

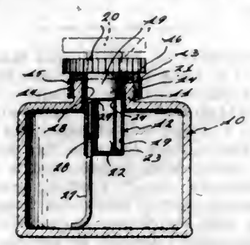
1,867,800. PHOTOGRAPHIC BACKGROUND. CHARLES WILLIAM BHOSYS, New York, N. Y. Original application filed Aug. 16, 1928, Serial No. 300,127. Divided and this application filed Dec. 21, 1929. Serial No. 415,805. 6 Claims. (Cl. 95—83.)



1. A background for use in photographic work, comprising an element having a non-actinic surface providing a photographically inactive field, and a field having a painted surface arranged in front thereof, said painted surface field being composed of sections adapted to cover or uncover corresponding portions of said non-actinic surface, independently of one another.

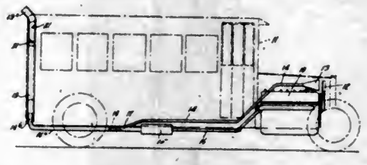
1,867,801. FOUNTAIN PEN FILLING ATTACHMENT FOR INK BOTTLES OR THE LIKE. ANDREAS BIENENSTEIN, Toledo, Ohio, and WILLIAM DOUGLAS, Port Angeles, Wash.; said Bienenstein assignor to The Conklin Pen Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 5, 1931. Serial No. 567,102. 6 Claims. (Cl. 125—69.)

1. The combination with a container, of a member fitting and normally fixed with the mouth of said container, said member presenting a cylindrical portion and further provided with a well, a feed tube depending into said container and having its upper end communicating with said



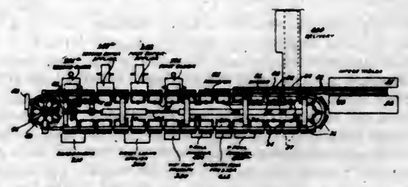
member at a point below the top of said well, and a closure member having a portion engageable with said cylindrical portion, for the purpose set forth.

1,867,802. EXHAUST GAS AND ODOR ELIMINATOR FOR MOTOR VEHICLES. CLARA BOGERT, Akron, Ohio. Filed May 17, 1930. Serial No. 453,246. 4 Claims. (Cl. 60—30.)



1. The combination with a motor vehicle driven by an internal combustion engine including the internal combustion engine, a radiator cooling fan driven thereby, a gas exhaust duct and a muffler to which the gas exhaust duct leads, of a funnel associated with said fan to receive air therefrom, an air duct leading from the funnel, a combined gas and air exhaust duct leading from the muffler to the rear of the vehicle said air duct being extended into said combined gas and air exhaust duct to deliver air thereto, said combined gas and air exhaust duct being larger in section than the exhaust gas duct by substantially the sectional area of the air duct and being unobstructed to permit free flow of mixed exhaust gas and air therethrough, a stack at the rear of the vehicle into which the combined gas and air exhaust duct empties, said stack being of greater sectional area than the combined air and gas exhaust duct and open at its bottom end whereby air will be drawn therein said stack having baffles therein, the top of the stack being directed rearwardly of the vehicle.

1,867,803. MANUFACTURE OF BOOKS. ALFRED BREDENBERG, Champlain, N. Y., assignor of one-half to The Sheridan Iron Works, a Corporation of New York, and one-half to T. W. & C. B. Sheridan Company, a Corporation of New York. Filed Sept. 15, 1927. Serial No. 219,712. 16 Claims. (Cl. 11—1.)



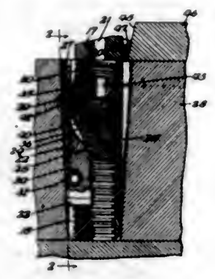
4. In a backlining machine for round back books, means for advancing the books, a reshaping means for compris-

ing a back plate along which the book back advances and opposite fixed shaping members adjacent thereto at each side of the book path for gradually shaping the book back as it advances.

1,867,804. METHOD OF PRODUCING MAGNETIC ALLOYS. VERE B. BROWNE, Brackenridge, Pa. Filed Feb. 20, 1930. Serial No. 430,140. 2 Claims. (Cl. 75—45.)

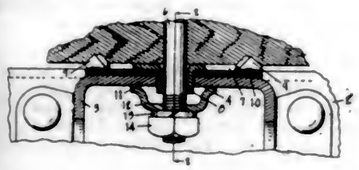
1. A method of producing magnetic alloys including suitably producing a molten body of low carbon iron substantially silicon-free, casting the same into suitable ingots, whereby the molten body solidifies and is cooled to atmospheric conditions, thereby expelling gases therefrom, rolling said ingots, further subdividing them, and remelting the same while simultaneously adjusting the silicon content to the desired amount by suitable additions to the remelted mass.

1,867,805. PRINTER'S REGISTER HOOK. WILLIAM F. BRÜGMANN, Evanston, Ill. Filed July 14, 1928. Serial No. 292,856. 14 Claims. (Cl. 101—385.)



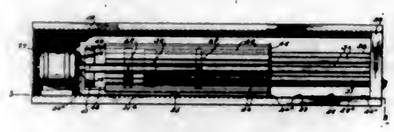
1. A printer's register hook embodying a body portion, a thrust member carried thereby, a member movable lengthwise of said body portion for engaging the said thrust member to bodily separate the said body portion and thrust member, the means for positively moving said member in both directions, the said thrust member having a single point contact with the second recited member.

1,867,806. MOTOR VEHICLE BODY MOUNTING. JAMES L. BROWNELL, Kalamazoo, Mich., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Filed Aug. 11, 1930. Serial No. 474,384. 2 Claims. (Cl. 296—35.)



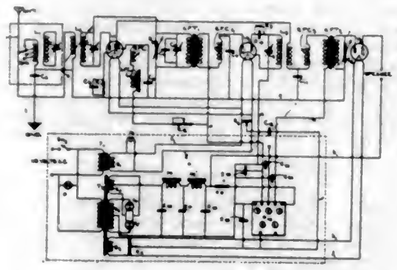
1. The combination of a body member having a bolt hole, a body supporting chassis element having a hole axially alined with the bolt hole in the said body member, a plate having a tubular stud engaged in said hole of said chassis element and provided with projecting lugs embedded in said body member, a securing bolt arranged through said stud and the bolt hole in said body member, a felt washer disposed around said stud between said plate and said chassis element, a cupped washer on said bolt engaging said chassis element in spaced relation to said stud, and a nut on said bolt clamping said elements in assembled relation.

1,867,807. HEATING APPARATUS. HARRY E. CAMPBELL, Baltimore, Md., assignor to Campbell Metal Window Corporation, Baltimore, Md., a Corporation of Maryland. Filed Aug. 2, 1930. Serial No. 472,733. 16 Claims. (Cl. 257—137.)



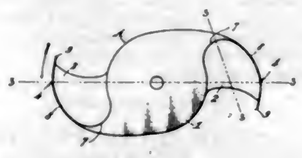
7. An apparatus of the character described comprising a casing having intake and outlet openings therein for the air to be heated, a cylindrical, revoluble blower in said casing, means for actuating said blower, and a longitudinal heating element including a pair of headers and a group of longitudinal tubular members secured at their ends to said headers; one of said headers being fixed to said casing and the other thereof free, and said free end extending into said blower, substantially as specified.

1,867,808. RADIO CIRCUIT. MELVIN JOHN CASTLE, Seattle, Wash., assignor of one-half to William H. Geraty, Seattle, Wash. Filed May 27, 1929. Serial No. 366,304. 6 Claims. (Cl. 250—20.)



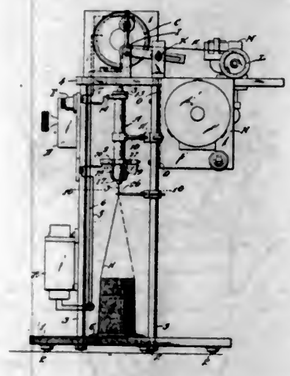
1. A radio receiving system comprising a tuned antenna circuit, a radio frequency amplifying circuit coupled thereto and including a screened grid tube, a detector circuit coupled to the output of said amplifying circuit and including a thermionic tube, and means for reflexing output currents of said detector circuit through said amplifying circuit, including a variable non-inductive resistance for controlling said reflexed currents.

1,867,809. PROPELLER ASSEMBLY FOR AIRSHIPS. HERBERT L. CHASE, Denver, Colo. Filed Sept. 9, 1930. Serial No. 480,702. 4 Claims. (Cl. 170—159.)



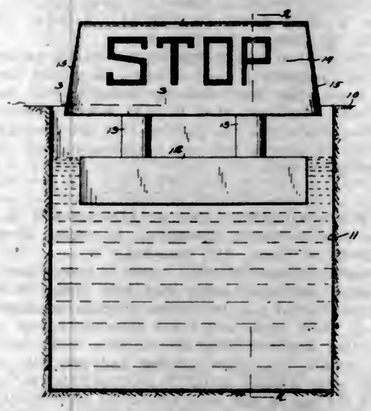
1 A propeller of the character described which is substantially S-shaped and comprises a hub and oppositely extending wings, said wings being in the form of compound curves in cross section, and being concaved on their front faces, the concavities disappearing near their advancing edges; the perimeters of said wings being rolled on their rear sides and tapered to thin resilient blades.

1,867,810. ELECTRIC ANNEALING APPARATUS. EDWARD A. COLBY, Maplewood, N. J., assignor, to Baker & Company, Inc., a Corporation of New Jersey. Filed Oct. 21, 1930. Serial No. 490,202. 4 Claims. (Cl. 219—11.)



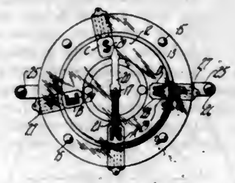
1. An apparatus for annealing long continuous pieces of material, comprising a heat insulating casing, a tube of electricity-conducting material suspended in insulated relation at its upper end substantially vertically in said casing and in spaced relation between its ends to the inner walls of said casing so as to provide a heat insulating air space between the casing and said tube with the lower end of said tube free for movement upon expansion and contraction of the tube, through which the material to be annealed is linearly passed, so that gravitational action tends to prevent buckling or bending of said tube and the tube is relieved of all friction resistance to expansion and contraction, and means for connecting the opposite ends of said tube in an electric circuit.

1,867,811. STOP SIGN. LE ROY N. CONNER, Blackwell, Okla. Filed Nov. 7, 1931. Serial No. 573,687. 5 Claims. (Cl. 40—125.)



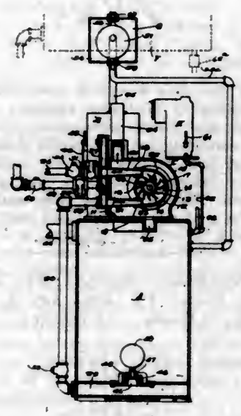
1. A traffic sign comprising a tank disposed in a roadway and depressed below the surface thereof, the tank having liquid therein, and a buoyant sign supported by said liquid in a position where it is displayed above the surface of the roadway, the sign being depressible into the liquid against its own buoyancy.

1,867,812. AUTOMOBILE COMPASS. WEST DODD, Des Moines, Iowa, and GRANT C. CAYWOOD, Omaha, Nebr. Filed Mar. 23, 1931. Serial No. 524,524. 3 Claims. (Cl. 33—222.)



2. A compass adapted to be mounted on the inside of a car on the roof thereof comprising a case having a transparent face and sides, a back member connected with and spaced from the case, and clips adapted to be mounted on the compass and having plate-like portions adapted to be projected into the space between the back member and the case and having indicating characters visible through the said transparent case face, said clips being separately adjustable around the compass.

1,867,813. DUAL PURPOSE PUMPING APPARATUS. LUCIAN F. EASTON, La Crosse, Wis. Filed Feb. 1, 1930. Serial No. 425,087. 20 Claims. (Cl. 103—6.)



1. In pumping apparatus of the class described, the combination of a fluid pump, including a rotor, a rotor casing provided with a block-off wall, and a surrounding shell furnishing an outer chamber, the casing being apertured to afford an air discharge port between the rotor casing and the outer chamber, inlet and discharge passages leading to and from the interior of the rotor casing, an air discharge passage leading from the outer chamber, and means responsive to variations in the water level in the outer chamber for opening and closing the discharge passage from the interior of the rotor casing, to transform the pump from a centrifugal water pump to a vacuum pump.

1,867,814. MOTOR SPIRIT CONTAINING METALLO ORGANIC CATALYZERS AND SELF-MADE ANTI-KNOCKING COMPOUNDS AND PROCESS OF MAKING SAME. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Sept. 29, 1924. Serial No. 740,622. 23 Claims. (Cl. 44—9.)

1. The process which comprises treating pressure still motor spirit with a nitrating agent whereby a portion

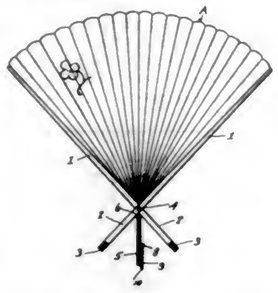
of the constituents thereof are nitrated and reducing at least a portion of the resulting nitro compounds to form amino or amido bodies whereby a motor spirit of modified combustion characteristics is secured.

9. The process which comprises refining pressure still oxidized motor spirit with sulphuric acid and nitric acid.

12. In the process of preparing motor spirit containing anti-knock compounds, wherein caustic soda solution has been used as a neutralizing and purifying wash, the step of adding zinc dust to the material containing caustic soda solution, whereby reduction is obtained.

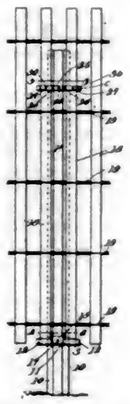
13. Pressure still motor spirits containing artificially prepared amino bodies of petroleum derivation.

1,867,815. FAN AND COMPACT. ARTEMIO ERMITAÑO, Manila, P. I. Filed Aug. 10, 1931. Serial No. 556,285. 1 Claim. (Cl. 230—268.)



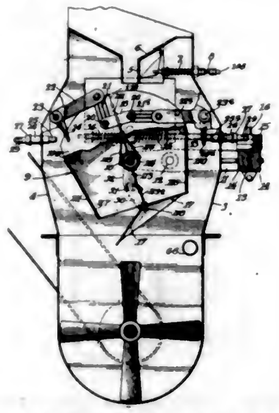
A device of the class described comprising a fan consisting of a plurality of blades pivotally connected together, the outermost blades having extensions at the lower end and each extremity having a notch therein, a member suspended from the pivot of the fan, a sliding member thereon, a bar connected with the sliding member and having its ends adapted to enter the notches when the fan is closed to hold the fan in closed position.

1,867,816. FENCE SUPPORTING DEVICE. DANIEL T. FINKBEINER, Beaver, Pa. Filed Aug. 8, 1931. Serial No. 555,995. 14 Claims. (Cl. 256—1.)



3. A fence supporting device of the character described comprising a stirrup member having parallel side walls, the middle portion of one wall having parts thereof bent back to provide adjacently positioned spaced apart abutment walls, the other side wall having a middle supporting portion.

1,867,817. APPARATUS FOR MIXING MATERIALS FOR MAKING ROADS. WALTER GUY FRAZEE, Cedar Rapids, Iowa, assignor to Iowa Manufacturing Company, Cedar Rapids, Iowa, a Corporation of Iowa. Filed May 31, 1930. Serial No. 457,837. 20 Claims. (Cl. 221—96.)



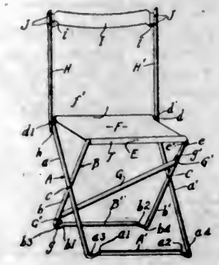
1. In apparatus for synchronously delivering proportioned charges of gravel and road oil to a common mixing device, a gravel-measuring device including a scale-beam, a two-chambered oscillating bucket pivotally supported on said scale beam, a rock-shaft journaled in the machine housing and rocked by the oscillating movement of said bucket, an oil-measuring device having a piston and a cylinder having opposite measuring chambers and a port leading to each chamber, supply and discharge pipes and a rotary four-way valve having inlet and outlet passages connected with said pipes and having passages for alternately first connecting one chamber with the inlet passage and simultaneously connecting the other chamber with the discharge passage and then reversing said connections, and a linkage connection between said rock-shaft and said rotary valve.

1,867,818. METHOD OF TREATING SILICON STEEL SHEETS. EDWARD M. FREELAND, Pittsburgh, Pa. Filed Apr. 2, 1929, Serial No. 352,051. Renewed Oct. 30, 1931. 10 Claims. (Cl. 148—12.)

2. The method of treating silicon steel to improve its electrical properties, which consists in rolling the steel at a temperature just below its lowest critical temperature, then annealing, then by cold working introducing sufficient strain into the steel so that after re-annealing its magnetic permeability will be increased, and then re-annealing the steel.

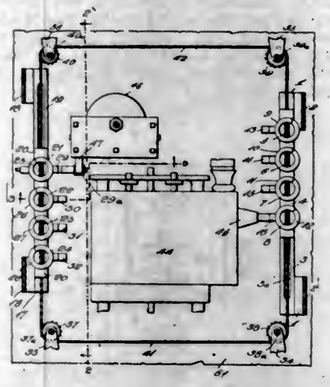
1,867,819. FOLDING CAMP CHAIR. ELMER E. FREY, Los Angeles, Calif. Filed Jan. 15, 1929. Serial No. 332,698. 1 Claim. (Cl. 155—147.)

A folding chair comprising a pair of rectangularly bent supporting members having oppositely inclinable legs at the sides thereof and transverse portions connecting the sides at their upper and lower extremities, one of said supporting members being shorter than and foldable entirely within the other member and pivotally secured to the other member at points intermediate the extremities of the legs so that when folded the corresponding legs and transverse portions of the supporting members will be parallel and in the same plane, a diagonal brace connected to the legs of the inner supporting member a fabric seat attached to the upper transverse portions of said supporting members, and a back composed of a pair of bars pivotally secured to and near the upper extremities of the legs of the outermost supporting member and transversely connected at a point remote from said supporting member, said back including a transverse connecting member near the upper ends of said bars having recesses formed therein inwardly of said bars for receiving the legs of said supporting members whereby when the supporting members are folded one within the other



said bars may be folded into the plane of said supporting members, as described and said connecting member being curved rearwardly so as to clear said diagonal brace when said supporting members are folded one within the other and said legs are received within said recesses.

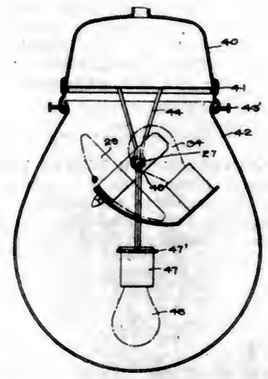
1,867,820. INDUCTANCE CHANGING SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 16, 1929. Serial No. 400,082. 13 Claims. (Cl. 171—242.)



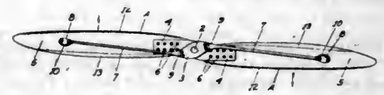
1. In inductance systems of the class described the combination of a ladder-like rack member, a plurality of inductance units carried by laterally extending portions of said rack member, flexible members operatively attached to said rack for moving said rack and said inductance units in a vertical plane, and stationary contacts supported adjacent to said rack, and contacts positioned upon said inductance units for engagement with said stationary contacts.

1,867,821. LIGHTING UNIT. HERBERT J. GRAHAM, Philadelphia, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 6, 1929. Serial No. 405,086. 7 Claims. (Cl. 240—25.)

1. In combination, an open-topped enclosure for a light source, said enclosure being provided with an internal annular groove surrounding the upper edge thereof, an inherently expansible ring adapted to be seated within said groove, means for contracting said ring for effecting its removal from said groove, a pair of opposed supporting members each having upwardly diverging arms secured to said ring, the convergent ends of said members terminating below the plane of said ring, and a flood-lighting reflector and lamp assembly adjustably supported between said supporting members.

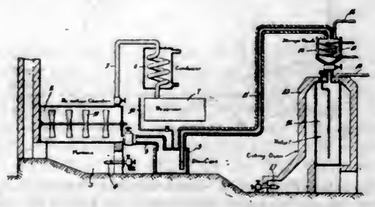


1,867,822. AIRPLANE PROPELLER. CHARLES H. GUNN, San Francisco, Calif., assignor to Aircraft Specialties Company, San Mateo, Calif., a Corporation. Filed Dec. 1, 1928. Serial No. 323,054. 2 Claims. (Cl. 170—169.)



1. An airplane propeller comprising a hub, short diametrally opposed arms radiating from one end of the hub and rigid therewith, a pair of diametrally disposed arms projecting from the other end of the hub in circumferentially offset relation to the first arms and disposed at opposed acute angles relative to each other and to the axis of the hub, blades secured on and projecting from the last named arms, and tension braces between the adjacent faces of the first named arms and the blades toward their outer ends.

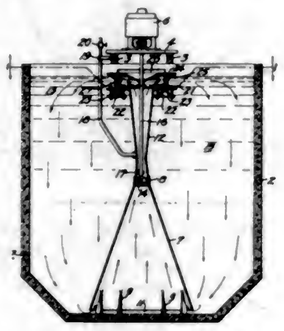
1,867,823. PROCESS OF FORMING COKE FROM MINERAL HYDROCARBONS. RALPH A. HALLORAN and WILLIAM H. SHIFFLER, Berkeley, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed June 1, 1927. Serial No. 195,648. 2 Claims. (Cl. 202—5.)



1. A process of making coke from the hot residuum of the process of treating mineral oil with anhydrous aluminum chloride for the production of lower boiling hydro-

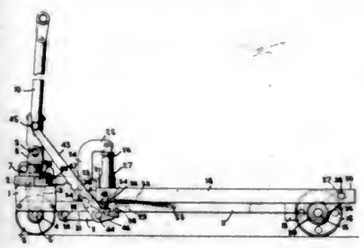
carbons from higher boiling hydrocarbons in a reaction zone, which comprises, withdrawing the residuum from said reaction zone shortly before the period at which the residuum would solidify, passing the residuum into a coking zone while still in a hot liquid state, the coking zone being preheated to a coking temperature before the introduction of the residuum, and holding the residuum in the coking zone at a high temperature sufficient to decompose the same into coke while deriving such chloride compounds therefrom.

1,867,824. APPARATUS FOR MIXING FLUIDS. FRED V. HAMMERLY, Berkeley, Calif., assignor of one-half to Georgia A. Hammerly and one-half to Carroll B. Abbott, Berkeley, Calif. Filed Aug. 18, 1930. Serial No. 475,928. 1 Claim. (Cl. 210—8.)



A sewage purification system comprising a basin-shaped tank for receiving the sewage, an inverted funnel arranged to admit the sewage from the tank, a Venturi tube connected with the neck of the funnel, an impeller positioned in the neck of the funnel for forcing a stream of the sewage thru the funnel and Venturi tube to circulate and agitate the sewage, and an air duct connected with the throat of the Venturi tube for introducing air into the moving stream of sewage.

1,867,825. PEDAL ACTUATED ELEVATING TRUCK. DANIEL E. HENNESSY, Watertown, Mass., assignor to Lewis-Shepard Company, Watertown, Mass., a Corporation of Massachusetts. Filed June 20, 1929. Serial No. 372,372. 15 Claims. (Cl. 254—10.)



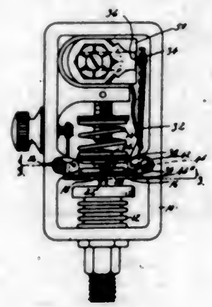
1. An elevating truck comprising a frame, load supporting means movable longitudinally relatively thereto, means operable upon longitudinal movement of said load supporting means to move the same vertically relatively to said frame and mechanism for moving said load supporting means longitudinally including a foot lever fulcrumed upon said frame having a pedal so positioned as to permit the operator to project his full weight upon it, and a pawl operable by the depression of said pedal having means detachably to engage said load supporting means and move the same longitudinally of the said frame.

1,867,826. PEDAL ACTUATED ELEVATING TRUCK. DANIEL E. HENNESSY, Watertown, Mass., assignor to Lewis-Shepard Company, Watertown, Mass., a Corporation of Massachusetts. Filed Feb. 7, 1930. Serial No. 426,509. 14 Claims. (Cl. 254—10.)



1. An elevating truck comprising a frame, load-supporting means, means operable to raise said load-supporting means upon longitudinal movement thereof, a pawl movable bodily with said load-supporting means, a foot lever fulcrumed on said frame, and pawl-actuating means operable by the depression of said foot lever to engage and move said pawl in a direction longitudinally of said frame and thereby to raise said load-supporting means.

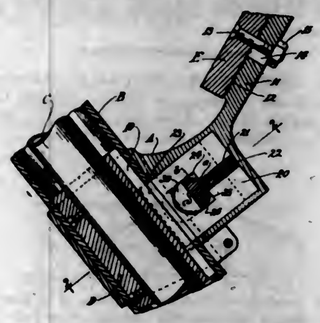
1,867,827. MECHANICAL LINKAGE FOR CONTROL DEVICES. MALCOLM E. HENNING, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Original application filed Jan. 27, 1930, Serial No. 423,677. Divided and this application filed May 11, 1931. Serial No. 536,430. 7 Claims. (Cl. 74—14.)



1. In a structure of the class described, a casing, a pair of movable elements within the casing and an operative connection between said elements comprising a ball having its ends pivoted to one element and its intermediate portion contacting with one surface of the other element and means to constrain the contacting parts toward such contact.

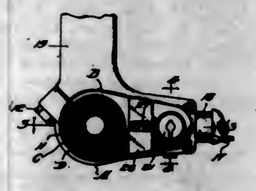
1,867,828. AUTOMOBILE LOCK. ORVILLE S. HERSHEY, Saginaw, Mich., assignor, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed Apr. 13, 1922. Serial No. 552,357. 16 Claims. (Cl. 70—127.)

7. Mechanism for locking a control member and for operating the ignition switch of a motor vehicle, said mechanism comprising a bolt, a member movable to operate said bolt, said member being provided with shoulders, a handle on said member for manual operation, means to lock said member to prevent effective movement of said bolt thereby while permitting limited move-



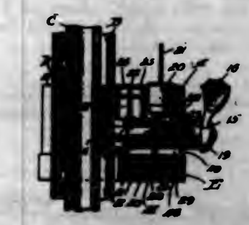
ment of said handle for switching the ignition alternately off and on, said means comprising key controlled locking means engageable with said shoulders.

1,867,829. AUTOMOBILE LOCK. ORVILLE S. HERSHEY, Chicago, Ill., assignor, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed May 20, 1927, Serial No. 192,931. Renewed Sept. 28, 1931. 22 Claims. (Cl. 70—127.)



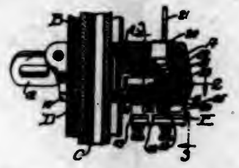
1. A coincidental lock in which is combined a slidable bolt, a switch having two fixed contacts offset with respect to the bolt axis and a member movable to make or break a circuit between the two fixed contacts, the movable switch member being both slidable in parallelism with the bolt and pivotal to swing obliquely thereto, an operative connection between the bolt and movable switch member, and control means for operating the same, substantially as described.

1,867,830. AUTOMOBILE LOCK. ORVILLE S. HERSHEY, Chicago, Ill., assignor, by mesne assignments, to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed Sept. 26, 1927, Serial No. 221,871. Renewed Jan. 15, 1932. 9 Claims. (Cl. 70—127.)



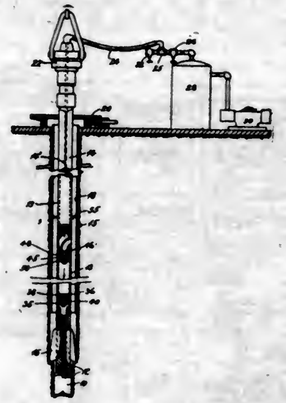
8. In combination with a movable element, a lock mechanism therefor including a part having a locking movement and another movement, an associated electrical switch in which is comprised a mounting for fixed contacts and a movable contact, and pin and slot connection between said part and said movable contact, said pin and slot connection permitting locking movement of said part independently of movement of said movable contact and adapted to cause shifting of the movable contact relative to the fixed contacts when said part executes its other movement.

1,867,831. AUTOMOBILE LOCK. ORVILLE S. HERSHEY, Oak Park, Ill., assignor to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed May 23, 1930. Serial No. 454,955. 4 Claims. (Cl. 70—127.)



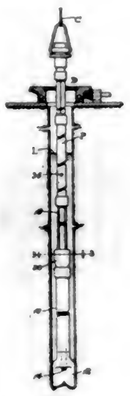
1. In combination with a lock mechanism, an electrical switch in which is comprised a housing furnishing an insulated mounting for fixed contacts, a conductor plate movable to a position for engaging the contacts, a drag plate for the conductor plate, spring means for urging the conductor plate away from the drag plate toward the contacts, a control in connection with the drag plate for operating the conductor plate, and means interconnecting the control and lock mechanism in a manner whereby the former is subject to operation of the latter.

1,867,832. SUBCIRCULATION FOR OIL WELL DRILLING. FRANK F. HILL, Los Angeles, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a Corporation of California. Filed May 22, 1928. Serial No. 279,745. 5 Claims. (Cl. 255—24.)



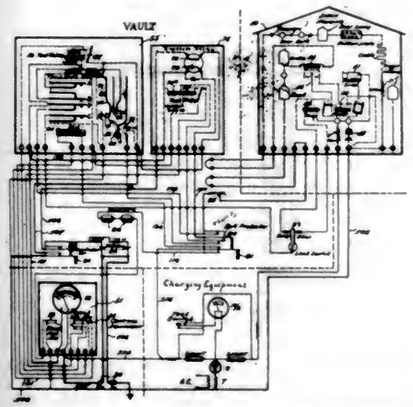
1. A method for sinking an oil well by means of a hollow drill stem having a drill on its lower end comprising advancing the drill through a formation, accumulating liquid in the hole under a head materially less than that represented by the depth of the hole, applying gas under pressure to one side of the drill stem to circulate the liquid past the drill and up the other side of the drill stem to vary the liquid level on the two sides of the drill stem, and releasing the gas pressure on the applied side to cause the liquid to pass from one side of the drill stem to the other at a point appreciably above the drill when the gas pressure is released and to allow the levels to balance.

1,867,833. SUBCIRCULATION OIL WELL DRILLING APPARATUS WITH SUCTION PUMPING. FRANK F. HILL, Los Angeles, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a Corporation of California. Filed June 6, 1928. Serial No. 283,282. 4 Claims. (Cl. 255—28.)



1. In a structure for drilling a deep well, a hollow drill stem comprising two telescoping sections, a drill on the lower end of the lower section, said drill having a water course therethrough, a driving connection between the two sections extending throughout the range of their telescopic engagement, and an upwardly opening valve in each section.

1,867,834. ELECTRIC PROTECTION SYSTEM FOR BANK VAULTS, ETC. RICHARD M. HOPKINS, Rutherford, N. J., and FREDERICK P. MCINTOSH, New York, N. Y., assignors to American District Telegraph Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 30, 1927. Serial No. 223,183. 3 Claims. (Cl. 177—314.)



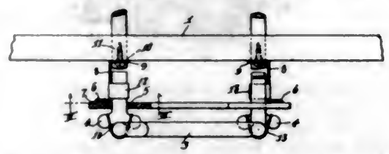
1. In a burglar alarm system, a closed protecting circuit and an alarm, means operable upon the opening of said circuit or an abnormal change in the resistance thereof for actuating said alarm, current responsive indicating means in said circuit, a plurality of protective means at least one of which is operative at all times and another of which may be rendered inoperative for predetermined periods, said protective means including contacts in said closed circuit, clock operated means for shunting and rendering inoperative said second mentioned protective means, said system including means cooperating with the protective means for changing the resistance of the circuit through said indicating means to indicate the proper or improper sequential operation of said protective means.

1,867,835. HUMIDIFIER. WILLIAM C. HOPSON, Grand Rapids, Mich., assignor to W. C. Hopson Company, Grand Rapids, Mich. Filed Jan. 10, 1931. Serial No. 507,797. 3 Claims. (Cl. 126—313.)



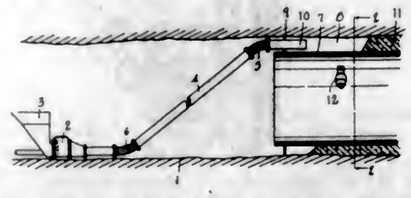
1. In a humidifier, the combination of a heating unit discharge flue, a downwardly tapered reservoir wall disposed on said flue, the lower end of the wall fitting and being secured to said flue so that the flue constitutes the inner wall of an annular downwardly tapered reservoir, a conical hood having a central opening to receive said flue, and brackets on said reservoir wall supporting the lower edge of said hood in spaced relation to the upper edge of said wall, the upper edge of the hood being adjacent to but spaced from the flue to provide an annular discharge around the flue.

1,867,836. SUPPORT FOR NEON SIGNS. RALPH C. HYDE and JOHN T. NORTHCOTT, Los Angeles, and ELLIS O. ERICKSON, Altadena, Calif., assignors to Claude Neon Electrical Products Corporation, Ltd., Wilmington, Del., a Corporation of Delaware. Filed June 26, 1931. Serial No. 547,034. 7 Claims. (Cl. 40—130.)



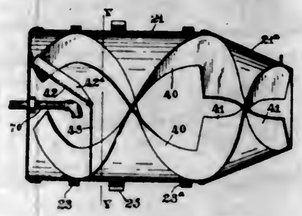
1. In a sign construction, a background member, a character comprising sign indicia formed from a relatively flat plate of suitable material, a perforation in said plate a support secured to said plate having an opening therein for receiving means for attaching the support to the background, said opening being aligned with the perforation in said plate, a tubular lamp for mounting on the exterior face of said plate and a support for said tubular lamp extending through said perforation.

1,867,837. METHOD FOR LINING TUNNELS, AQUEDUCTS, AND THE LIKE. CORWILL JACKSON, Chicago, Ill. Filed Jan. 10, 1929. Serial No. 331,666. 3 Claims. (Cl. 25—155.)



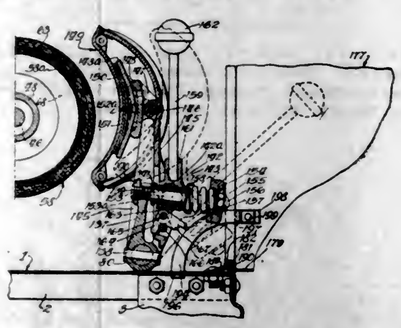
2. The method of lining tunnels, aqueducts and the like consisting of supporting an inner tubular form in spaced relation to the walls of the bore, introducing a dry non-flowing concrete mixture, and subjecting the form to high frequency vibrations whereby high frequency vibrations are set up in the concrete mixture and it is converted to a flowing condition in the space surrounding the form and fills such surrounding space.

1,867,838. TRUCK CONCRETE MIXER. GEBHARD JAEGER, Columbus, Ohio, assignor to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed Nov. 30, 1928. Serial No. 322,640. 7 Claims. (Cl. 83—73.)



1. A mixing drum for a truck concrete mixer having an open discharge end portion, a spiral blade in said drum having an increased width near said discharge end and a supplemental mixing blade at the opposite end of the drum.

1,867,839. IRONING MACHINE. RUDOLPH W. JANDA, Berwyn, Ill., assignor to Conlon Corporation, Cicero, Ill., a Corporation of Illinois. Filed Sept. 26, 1930. Serial No. 484,542. 19 Claims. (Cl. 68—9.)

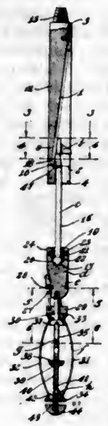


12. In combination, a rockably mounted shaft, an operating arm rigid with the shaft, a supporting arm loose on the shaft, means for coupling the supporting arm to and uncoupling it from the operating arm, said means including a member mounted on the supporting arm for relative rocking movement on an axis extending transversely of said supporting arm, and means holding said member against rocking movement relative to the supporting arm in coupling direction when the rockably mounted member has been swung into uncoupling position and for releasing said member from the supporting arm as said member approaches coupling position.

15. In an ironing machine, a roll, a lug adjacent one end of the roll, a feed board, a stud secured to the board and insertible through the lug, and means cooperating with the stud and the lug for holding the board against turning movement and in operative relation to the roll.

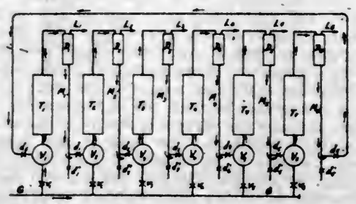
19. In an ironing machine, a roll, a rockably mounted shoe operating shaft, an operating arm rigid with the shaft for movement therewith, a shoe supporting arm rockably mounted for movement toward and away from the roll, a shoe carried by said supporting arm, and coupling means for coupling the two arms together, said coupling means including adjustable means for yieldingly urging the shoe toward the roll when said shoe is moved into operative relation to the roll, said adjustable means being readily accessible for adjustment from in rear of the shoe.

1,867,840. PERFORATOR. WINFIELD SCOTT JONES, Long Beach, Calif., assignor, by direct and mesne assignments, to Jones-Munn Tool Co., Ltd., a Corporation of California. Filed Sept. 19, 1930. Serial No. 482,921. 6 Claims. (Cl. 81—188.)



4. In a perforator for casing, a perforator body formed with an elongated inclined key slot, a knife formed with a key portion within said key slot, a head, slips therefor, and a mandrel connecting said head and said knife; a second mandrel secured to said head, a pair of friction means carried by said second mandrel, a trigger between said second mandrel and one of said friction means for holding said friction means against movement relative to said mandrel, and the other of said friction means being adapted for movement upon said second mandrel, and means therefor to release said trigger means to in turn permit movement of the slips of said head, and whereby when said slips engage casing, said first mandrel will hold the said knife while the perforator body is moved relative to the mandrel to project the said knife from the key slot.

1,867,841. PROCESS AND APPARATUS FOR THE CATALYTIC CRACKING OF PETROLEUM OILS, TAR, AND THE LIKE. ALFRED JOSEPH, Enghein, France, assignor, by mesne assignments, to Houdry Process Corporation, Dover, Del., a Corporation of Delaware. Filed Dec. 22, 1928, Serial No. 328,012, and in France Sept. 21, 1928. 4 Claims. (Cl. 196—52.)

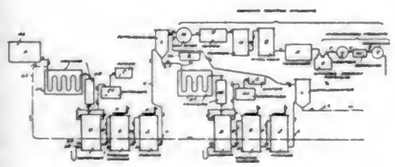


1. In apparatus of the class described, a plant comprising three or more treating units in series, each of said units comprising a vaporizer, a catalyzer, and a dephleg-

mator serially connected together in the order named, conduits connecting the condensate outlet of each of said dephlegmators with the vaporizer of the next unit, including a connection between the condensate outlet of the last unit and the vaporizer of the first unit of the plant, whereby a closed circuit is formed through said units, means whereby any of said units may be disconnected from the closed circuit leaving the remaining units connected together as an operating series, and a supply line external to said circuit and having a connection to each of said vaporizers.

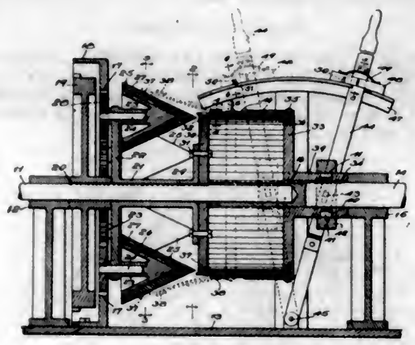
4. In a continuous process of cracking oils catalytically wherein oil vapors are conducted through a plurality of cracking units serially arranged to form a continuous vapor path, each unit containing a catalyst to crack the vapors, the activity of which catalyst decreases as the cracking continues, the steps of conducting the uncracked starting vapors over the catalyst of one unit, then dephlegmating the vapors and separating the useful cracked products from the others, then vaporizing the remaining products and passing them over the catalyst of a second unit having a higher degree of activity than the first one, dephlegmating and separating the useful cracked products, continuing the successive vaporizing, cracking, dephlegmating and separating operations in a plurality of serially connected units having catalysts of successively increasing activity, then conducting the uncracked starting vapors directly to the catalyst of the second unit in the series when the catalyst of the first unit therein becomes exhausted and simultaneously connecting a unit having a regenerated catalyst to the last unit of the previously operating series, and regenerating the exhausted catalyst of said first unit, thereby effecting a continuous cracking of said vapors by a cyclic permutation of said cracking units.

1,867,842. APPARATUS FOR THE MANUFACTURE OF LIGHT HYDROCARBONS BY CATALYTIC CRACKING OF PETROLEUM OILS, TARS, OR OTHER SIMILAR STARTING MATERIALS. ALFRED JOSEPH, Engbein, France, assignor, by mesne assignments, to Houdry Process Corporation, Dover, Del., a Corporation of Delaware. Filed Dec. 22, 1928, Serial No. 328,013, and in France Oct. 24, 1928. 4 Claims. (Cl. 196—52.)



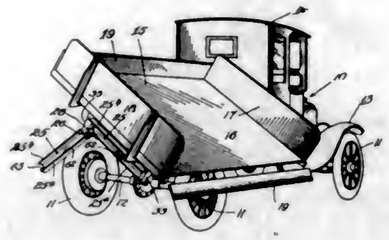
1. In apparatus for treating hydrocarbons, a plant comprising three or more treating units serially arranged, each of said units comprising vaporizing means, catalyzing means, and dephlegmating means serially connected together in the order named, means connecting all of said units together to form a continuous circuit therethrough comprising conduits connecting each dephlegmating means with the vaporizing means of the next unit, including a connection between the dephlegmating means of the last unit and the vaporizing means of the first unit of the plant, a supply line for each of said vaporizers to supply material to be treated to the circuit, means whereby any of said units may be disconnected from the continuous circuit leaving the remaining units connected as an operating series, conduits connected to each dephlegmating means for withdrawing material from the circuit, and a refining unit connected to each of said withdrawing means.

1,867,843. POWER TRANSMISSION APPARATUS. HAROLD L. JOYCE, Evanston, Ill. Filed Feb. 2, 1931. Serial No. 512,866. 33 Claims. (Cl. 74—34.)



1. In a device of the class described, the combination of a driving element, a driven element, a rotatable planetary member mounted on one of said elements and having its axis of rotation fixed with respect thereto, means for rotating said member, and means mounted on the other of said elements and movable with respect to said member and operatively related thereto for transmitting motion from said driving element to said driven element at variously increased or decreased speeds in one direction or another according to the position of said means with respect to said member.

1,867,844. DUMPING BODY FOR AUTOMOBILE TRUCKS. THÖGER GRÖNBORG JUNOERSEN, Lyngvy, near Copenhagen, Denmark. Filed Feb. 13, 1928. Serial No. 254,046. 21 Claims. (Cl. 298—13.)

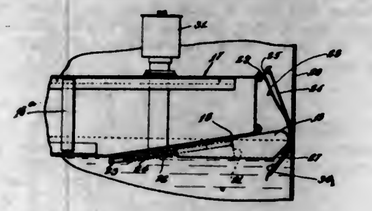


1. A dump car comprising a truck frame having wheels, a body movable laterally in either direction on said truck frame to a tilted dumping position, and a body underframe comprising a pair of side frame members deflected inwardly opposite said wheels to prevent interference with said wheels when said body is tilted and having their inwardly deflected parts connected together.

1,867,845. PONTOON SEAL FOR FLOATING DECKS. JAMES F. KIMBELL, Los Angeles, Calif., assignor, by mesne assignments, to Chicago Bridge & Iron Company, Chicago, Ill., a Corporation of Illinois. Filed July 11, 1928. Serial No. 291,887. 4 Claims. (Cl. 220—26.)

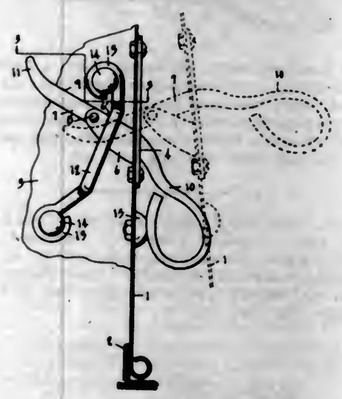
1. An oil storage tank having a floating deck therein with an inclined surface at its periphery; a plurality of radially movable members at the periphery of said deck normally urged outwardly toward the wall of the tank,

said radially movable members adapted to slide on said inclined surface; and sealing means carried by the deck lying between said radially movable members and the



wall of the tank, said sealing means being urged outwardly against the wall of the tank by said radially movable members.

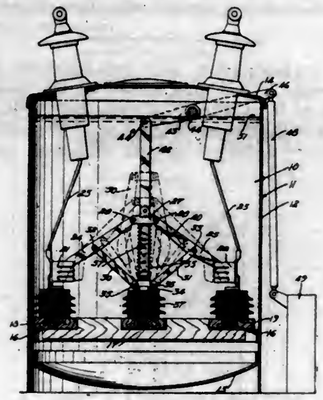
1,867,846. HOOD FASTENER. ISAAC S. KEELER, Grand Rapids, Mich., assignor to Keeler Brass Company, Grand Rapids, Mich. Filed Feb. 21, 1931. Serial No. 517,437. 6 Claims. (Cl. 292—113.)



1. In a structure of the class described, the combination with a swinging closure member, of a slotted latch plate mounted on said closure member and provided with an inwardly projecting catch having an outwardly and downwardly inclined keeper-engaging part, and a lever-like latching member pivotally mounted by means of a fixed pivot on the inner end of said catch and disposed through said slot in said latch plate, said latching member having a substantially flat keeper sliding surface and being curved upwardly at its inner end and constituting means for lifting and guiding a spring keeper into engagement with the inclined keeper engaging part of said catch as the closure member is swung to closed position, said keeper engaging said catch at the inner side of and below said latching member pivot when the parts are in latched position.

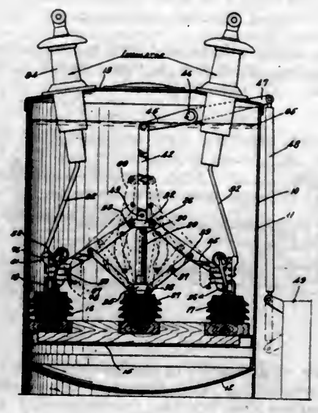
1,867,847. OPERATING MECHANISM FOR OIL SWITCHES. JOSEPH N. KELMAN, Los Angeles, Calif., assignor to Kelman Electric & Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Feb. 1, 1928. Serial No. 251,161. 5 Claims. (Cl. 200—150.)

1. In an electrical switch, the combination of: a pair of main contacts; blades adapted to bridge said main contacts; a movble connector to which said blades are pivotally connected; a stationary connector; links pivoted to said stationary connector and to said blades; a spring acting between said stationary connector and said movable connector to effect a quick separation of said blades and said main contacts; and a dash-pot acting between said sta-



tionary connector and said movable connector to check the movement of said movable connector, said dashpot acting as a guide for said movable connector.

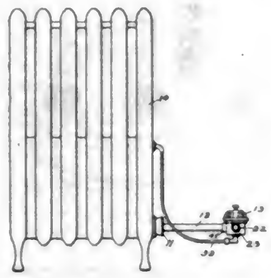
1,867,848. ARCING TIP FOR OIL SWITCHES. JOSEPH N. KELMAN, Los Angeles, Calif., assignor to Kelman Electric & Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Feb. 1, 1928. Serial No. 251,162. 3 Claims. (Cl. 200—150.)



1. In an electrical switch, the combination of: a contact support; a main contact on said contact support; a movable blade; means adapted to actuate said blade to make and break contact with said main contact; an arm on said contact support; legs pivoted to said arm, said legs extending to either side of said main contact; upper and lower cross members holding said legs in spaced relationship; a plate spring acting between said upper cross

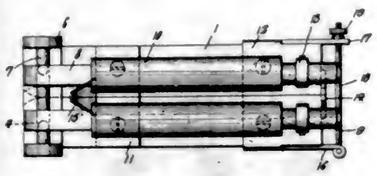
member and said arm; a primary arcing contact carried by said lower cross member; a secondary arcing contact by said blade; a stop member carried by said legs, said stop member engaging said arm to separate said primary and said secondary arcing contacts after said blade has been disengaged from said main contact; and a flexible conductor connecting said arm and said upper cross member.

1,867,849. REGULATOR FOR GAS-HEATED STEAM RADIATORS. OTTO JOHN KUENHOLD, Cleveland, Ohio, assignor to H. M. Sheer Company, Quincy, Ill., a Corporation of Illinois. Filed July 31, 1930. Serial No. 472,118. 15 Claims. (Cl. 236—22.)



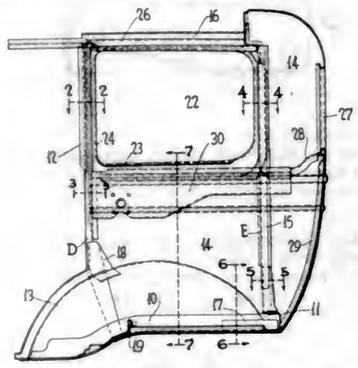
1. In a regulator for a gas-heated steam radiator, a pipe to carry gas to the radiator burner, a gas-supply pipe, two valves, one of which is controlled by pressure in the radiator due to combustion of gas that has traversed said burner pipe, and the other by the temperature of the air in the room containing the radiator, either of said valves being adapted to cut the gas off or reduce its flow from said supply pipe to the burner pipe, and a by-pass whereby a limited quantity of gas is passed from the supply pipe to the burner pipe, independent of said valves.

1,867,850. HAIR CURLING DEVICE. ROSE LANDRUM, El Paso, Tex. Filed Nov. 5, 1930. Serial No. 493,653. 2 Claims. (Cl. 132—33.)



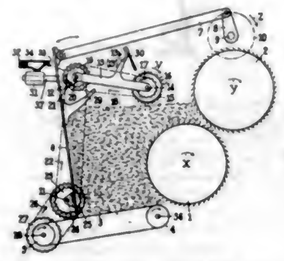
1. A hair curling device of the type described, two fibre spaced blocks having the confronting ends provided with spaced tongues and grooves, a substantially U-shaped bracket arranged on the blocks on one end thereof and to which bracket the blocks are pivoted, a transverse shaft carried by the bracket, longitudinal shafts journalled on the transverse shaft, means carried by the blocks for clamping the outer ends of the longitudinal shafts, curling cylinders removably journaled on the longitudinal shafts, spacer members carried by each of the blocks and designed for contacting engagement and to contact with and spread the longitudinal shafts when said shafts are brought thereagainst, and swingable means for locking the blocks together.

1,867,851. VEHICLE BODY TONNEAU CONSTRUCTION UNIT. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Jan. 9, 1926, Serial No. 80,166, and in Canada Jan. 7, 1927. Divided and this application filed Mar. 25, 1931. Serial No. 525,056. 4 Claims. (Cl. 296—28.)



1. In a pressed metal automobile body, a tonneau assembly including a transversely extending rear sill, a vertically extending rear body post of channel formation presenting rearwardly having its lower end terminating above said rear sill and a bracket member connecting said lower end of said body post with said rear sill.

1,867,852. MACHINE FOR MAKING CIGARETTES. OTTO LIED, Wandsbek, Germany, assignor to Firm Neuerburg'sche Verwaltungsgesellschaft G. m. b. H., Cologne-on-the-Rhine, Germany. Filed July 17, 1930, Serial No. 468,697, and in Germany Dec. 3, 1928. 4 Claims. (Cl. 131—39.)

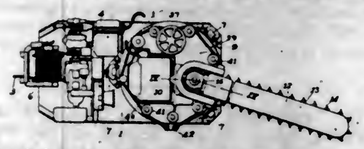


1. Means for supplying tobacco to cigarette making machines, comprising a rotary drum located above the tobacco being supplied and adapted to loosen said tobacco, and means for moving said drum across the surface of said tobacco substantially in a horizontal direction.

1,867,853. COAL CUTTING MACHINE. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Aug. 2, 1928. Serial No. 296,990. 5 Claims. (Cl. 262—28.)

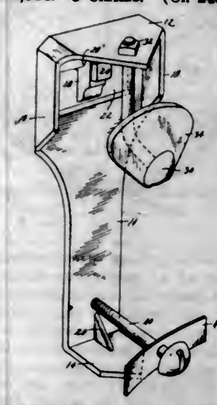
5. In a machine of the class described, the combination with a wheel supported truck, a turntable mounted thereon, and a cutter bar supported by the turntable in projecting relation thereto, of swinging means for the turntable comprising cable lengths guided about the turntable periphery from adjacent points closely adjacent

the turntable periphery to closely adjacent anchoring points external of the turntable, winding means on the turntable and engaging the lengths to simultaneously and



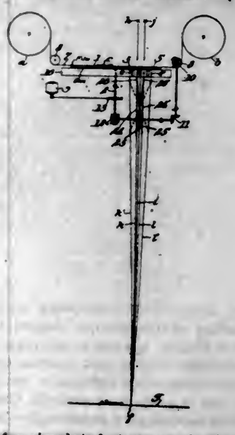
equally wind in one thereof and pay out the other, and means controllable at will for driving the drum in either direction.

1,867,854. ADJUSTABLE RADIATOR BRACKET. WALTER G. MADISON, Ames, Iowa. Filed July 13, 1931. Serial No. 550,544. 5 Claims. (Cl. 248—17.)



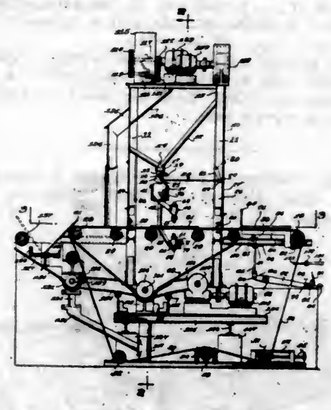
1. A hanger for radiators comprising a body plate formed with forwardly projecting lugs adapted to engage between adjacent radiator sections, means for supporting said plate on a wall, an hanger bolt carried by one of said lugs, said bolt adapted to extend between the radiator sections, and a hanger plate carried by said bolt for engaging beneath parts of both sections.

1,867,855. STEREOSCOPIC CINEMATOGRAPHY. GEORGE T. MALLETT, Elizabeth, N. J. Filed Apr. 24, 1930. Serial No. 447,054. 12 Claims. (Cl. 88—16.6.)



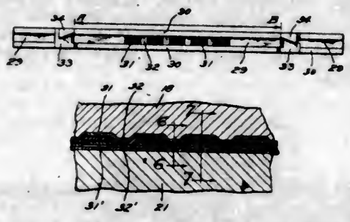
1. Apparatus for simulated stereoscopic cinematography, comprising means for continuously horizontally displacing a film, a shutter adapted to expose alternate predetermined portions of said film throughout an entire exposure period, a pair of objectives, and means operatively connected with the means for displacing the film and actuating the shutter for maintaining said objectives alternately in optical alignment with the portion of the film being exposed and continuously in optical convergence upon a predetermined fixed point.

1,867,856. APPARATUS FOR TREATING METAL SHEETS. HAROLD E. MCCREERY, Apollo, Pa., assignor, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Aug. 2, 1927. Serial No. 210,181. 5 Claims. (Cl. 51—14.)



2. Apparatus of the character described comprising a plurality of spaced conveyor belts having their upper runs substantially horizontally arranged and spaced from the remaining portions of the belts, an impacting device arranged above the upper runs of said belts, an impacting device arranged in the space beneath the upper runs of said belts, said nozzles being adapted to impact abrasive material against opposite faces of a sheet moving on the upper runs of said conveyor belts and being vertically offset from said belts, means for adjusting said impacting devices transversely of the direction of travel of the sheet; and means for shifting said belts transversely of their direction of travel.

1,867,857. MECHANISM AND METHOD FOR MAKING CANS. WALTER R. MEYERS, Baltimore, Md., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed June 23, 1928. Serial No. 287,859. 12 Claims. (Cl. 113—12.)



1. A method of forming side seams in can bodies, which consists in bending and loosely interengaging and hooking together the edges of a can body blank to provide a can body with a partially formed side seam and then bumping said side seam to provide air vents in the seamed area for the escape of the air during the subsequent soldering operation.

6. A lock and lap side seam for a container body which consists of interengaged hooked edges, and overlapped

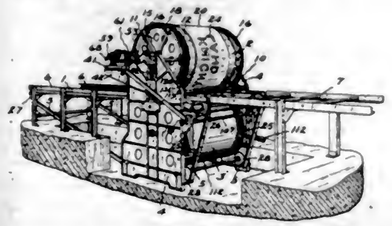
parts at the ends of the body, said edges being pressed together in greater and lesser degree at spaced intervals.

11. A mechanism in a can body making machine for providing vented side seams, comprising a die for producing tightly closed and loosely arranged portions of a side seam, the latter portions including air vents for the escape of air during the subsequent soldering operation, said die having transversely arranged and spaced apart bridge-members arranged in a channel between side walls.

1,867,858. PROCESS FOR PRODUCING AN ANTHRAQUINONE DYE. WALTER MIEG, Opladen, near Cologne, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 14, 1931, Serial No. 522,784, and in Germany Feb. 28, 1927. 3 Claims. (Cl. 260—58.)

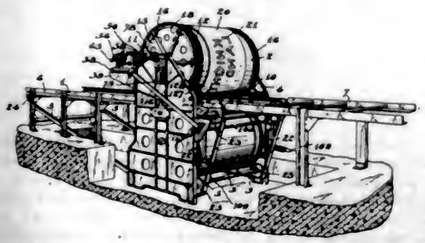
1. The process which comprises heating 1-hydroxyanthraquinone with an aluminium halogenide to a temperature above about 100° C. in the presence of a tertiary heterocyclic organic base.

1,867,859. PRINTING PRESS. SAMUEL J. MOLLET, Massillon, Ohio. Filed Feb. 28, 1929. Serial No. 343,523. 20 Claims. (Cl. 101—242.)



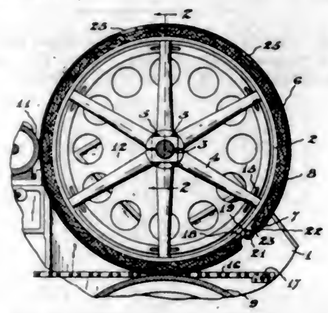
1. A printing press including a form cylinder and a compression cylinder, a feed table over which sheets may be advanced toward the cylinders, a stop device in front of the bight of the cylinders movable into and out of a position in the path of a sheet being moved toward the cylinders, grippers mounted for movement in a straight line through the bight of the cylinders, means for automatically actuating the grippers to grip a sheet positioned by the stop device and for simultaneously shifting the stop device to a position clear of the sheet, means for retaining the stop device in inoperative position, and independent means for returning the stop device to sheet-engaging position after the sheet engaged by the grippers has been moved to a position clear of the stop device.

1,867,860. PRINTING PRESS. SAMUEL J. MOLLET, Massillon, Ohio. Original application filed Feb. 28, 1929, Serial No. 343,523. Divided and this application filed June 27, 1930. Serial No. 464,277. 8 Claims. (Cl. 101—247.)



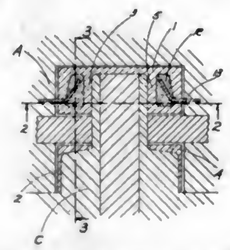
1. A printing press comprising supporting standards, bearing members mounted for vertical movement in said standards, a form cylinder journaled in the bearing members, eccentrics supporting said bearing members, gears fixed with respect to said eccentrics, actuating levers having gear segments engaging said gears, springs acting on said levers and tending to move the same in a direction to lower the cylinder, and a latch for holding the levers in a position in which the cylinder is held in elevated position.

1,867,861. PRINTING CYLINDER. SAMUEL J. MOLLET, Massillon, Ohio. Original application filed Feb. 28, 1929, Serial No. 343,523. Divided and this application filed June 27, 1930. Serial No. 464,157. 1 Claim. (Cl. 101—376.)



A form cylinder comprising spaced spiders and a peripheral portion formed of contiguous longitudinal wooden slats attached at their ends to said spiders, said slats being spaced apart at one portion of the periphery to provide a longitudinal gap, brackets carried by said spiders centrally of the gap, a shaft journaled in said brackets, said shaft having a squared portion between said brackets and an end projecting outwardly from one of said brackets adapted to receive a crank for turning the shaft, a form composed of a flexible composition body and a fabric backing, one end of which projects beyond the body and is adapted to be wound on the square portion of said shaft, the opposite end of the form being secured to the cylinder, and means for releasably locking said shaft against turning movement in a direction to unwind the fabric backing.

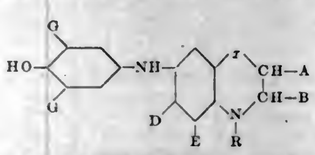
1,867,862. PISTON-SAND CORE. GEORGE L. MOORE, Cleveland, Ohio, assignor to Aluminum Co. of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 15, 1929. Serial No. 407,402. 12 Claims. (Cl. 22—126.)



2. Molding apparatus comprising a permanent mold having a casting cavity therein shaped to form the outer walls of a piston, a permanent core construction removably positioned within said casting cavity and spaced from the walls thereof to define the inner surface of the piston skirt and a pair of oppositely disposed piston pin bosses, said permanent core construction extending toward said mold to form a portion of the under surface of the piston head and being widely spaced from the side walls of said casting cavity between the piston pin bosses and the head to form the inner surfaces of a pair of webs extending from the head to the bosses, and a pair of oppositely disposed cores spaced from said mold and from said permanent core construction to define portions of the inner surface of the piston and the outer walls of the webs.

1,867,863. INDOPHENOL AZINE COMPOUNDS. FRIEDRICH MUTH, Elberfeld, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 23, 1930, Serial No. 504,412, and in Germany Feb. 14, 1927. 3 Claims. (Cl. 260—27.)

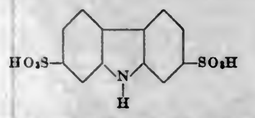
1. As new products compounds of the probable formula :—



wherein A and B signify hydrogen or methyl or jointly stand for the grouping $-CH_2-CH_2-CH_2-$, $-CH_2-CH_2-CH_2-CH_2-$ or $-CH_2-CH_2-CH_2-CH_2-CH_2-$, D and E stand for hydrogen or jointly for the grouping $-CH=CH-CH=CH-$ or $-CH_2-CH_2-CH_2-CH_2-$, G stands for hydrogen or chlorine, R represents hydrogen or methyl and ϖ means oxygen or sulfur, being generally light-greyish crystalline powders, soluble in warm water, alcohol and sulfuric acid, sparingly soluble in salt solutions, forming colorless solutions with aqueous alkalies, in which the leuco-indophenol is easily oxidized to the corresponding dark colored indophenol and producing in the polysulfide melt very valuable sulfur dyestuffs.

1,867,864. CARBAZOLE-2,7-DISULPHONIC ACID. WILHELM NEELMEIER and OTTO GOLL, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 19, 1931, Serial No. 538,632, and in Germany May 21, 1930. 1 Claim. (Cl. 260—46.)

As a new product the carbazole-2,7-disulphonic acid of the formula :



being a crystalline, colorless substance, soluble in water and being a valuable intermediate product for the manufacture of dyestuffs.

1,867,865. OPHTHALMIC MOUNTING. JOHN N. NELSON, Rochester, N. Y., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 17, 1930. Serial No. 444,982. 7 Claims. (Cl. 88—49.)

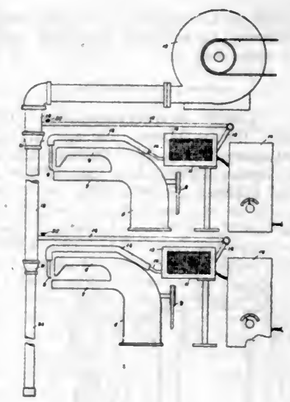


4. In an ophthalmic mounting, a nose guard having a body portion formed of a solid piece of non-metallic material, a bendable metallic blade imbedded and sealed within the walls of said body, and a separate bendable metallic arm having one end portion provided with locking means imbedded and anchored in said body.

1,867,866. PROCESS FOR MANUFACTURING MIXED FERTILIZER. BEVERLY OBER and EDWARD HYATT WIGHT, Baltimore, Md., assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md., a Corporation of Maryland. Filed Dec. 3, 1926. Serial No. 152,511. 6 Claims. (Cl. 71—7.)

1. A process of preparing mixed fertilizer comprising mixing unavailable phosphatic material with a strong mineral acid, passing the substantially unset mixture to a zone in which pressure may be maintained and the exothermic heats largely retained, digesting the mixture in said zone under controlled superatmospheric temperature and pressure while agitating the mass, relieving the pressure, adding a nitrogen containing fertilizing material to the mixture in said zone, continuing to agitate the mass and cooling to effect crystallization and drying of the mixture.

1,867,867. AIR SUPPLY SYSTEM. PHILIP L. O'DONNELL, Cincinnati, Ohio. Filed Nov. 22, 1930. Serial No. 497,617. 4 Claims. (Cl. 12—55.)

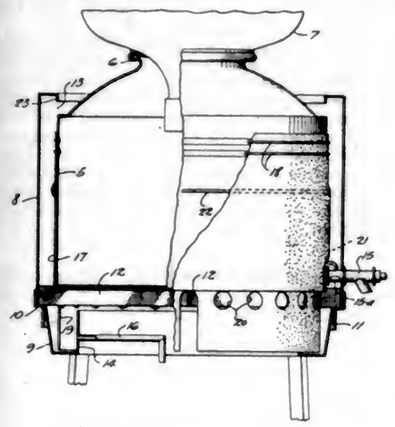


1. The combination with a series of machines utilizing a hot air supply, of air pressure means, a conduit line communicating therewith, said line composed of units of successively diminished capacity, a take-off conduit communicating with each unit, a plurality of air heating devices associated one each with one of said machines and receiving the air supply from one of said takeoff conduits, and a conduit directing the heated air to the associated machine.

1,867,868. DRINKING WATER COOLER. THOMAS O'FARRELL, Laguna Beach, Calif., assignor to Sparkletts Bottled Water Corporation, Los Angeles, Calif., a Corporation of Nevada. Filed Jan. 2, 1931. Serial No. 506,038. 4 Claims. (Cl. 62—154.)

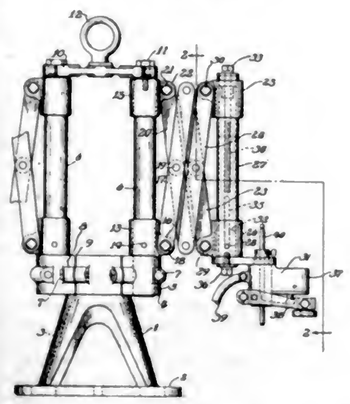
1. In a cooler, a vessel, a shell spaced from and surrounding the side of said vessel to provide a cooling jacket open at the top and bottom to form a flue for passage of air, said shell having a drip lip for condensate at the top, said shell having an annular reservoir at its lower end

with a hole at the center, and a coat of wick material wrapped about the side and bottom of said vessel and



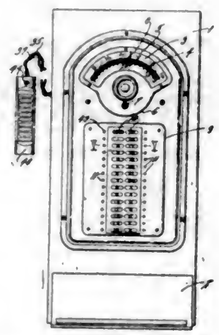
having a skirt with vent holes and depending into said reservoir whereby to maintain said coat saturated and subject to evaporation.

1,867,869. CLAMP MOUNTING FOR AUTOMATIC SHAPERS. OSCAR ONSRUD, Chicago, Ill., assignor to Onsrud Machine Works, Inc., Chicago, Ill., a Corporation of Illinois. Filed Aug. 24, 1931. Serial No. 559,087. 1 Claim. (Cl. 144—278.)



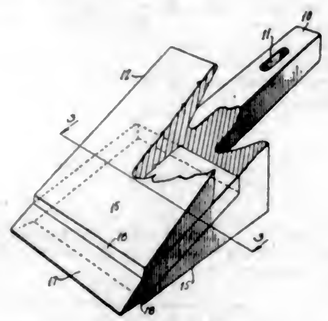
A clamp supporting structure of the class specified, comprising a rigidly mounted vertical post having one collar fixed thereto and another collar slidable thereon, links pivotally connected together intermediate their ends, each having one end pivoted to one of said collars, means connecting the opposite end of one of said links with the vertically extending clamp supporting post, a clamp on said post, a collar slidable on said post and operatively connected with the end of the other of said links, said second mentioned post being hollow, a shaft fitting within said hollow post, a clamp secured to said shaft, and mans for adjusting said shaft longitudinally within said post.

1,867,870. TELETHERMOMETER. WILLIAM A. BAKER and CARL H. KUHLMAN, Toledo, Ohio, assignors to The American Temperature Indicating Company, Toledo, Ohio, a Corporation of Ohio. Filed July 25, 1924. Serial No. 728,191. 11 Claims. (Cl. 73—32.)



7. A telethermometer embodying a Wheatstone bridge, including an energy source, a bridge terminal to which said energy source is connected on one side, a bus bar to which said energy source is connected on the other side, a second bridge terminal embodying a bus bar, and selective means for connection to said bridge, said means including a plurality of simultaneously movable terminals respectively shiftable to circuit closing position with said bus bars for a single circuit series selective connecting in of said bridge.

1,867,871. BUCKET TOOTH. EDWARD B. BIRKENBEUEL, Portland, Oreg. Filed Sept. 23, 1930. Serial No. 483,808. 1 Claim. (Cl. 37—142.)

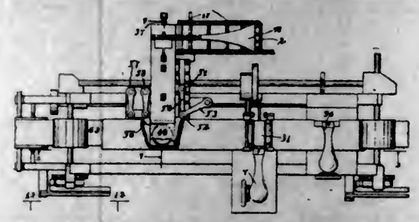


A bucket tooth consisting of a blunt point, wedge-shaped, steel casting of low grade steel having a high grade alloy steel insert along the median plane passing thru its blunt point to form an exposed cutting edge extending from side to side of said tooth, said insert having a plurality of laterally spaced countersunk holes formed therein near the cutting edge thru which the low grade metal can pass during the casting operation to join firmly the two portions of the casting adjacent its blunt edge.

1,867,872. BOX SPRING MECHANISM. EDWARD L. BRONSTEIN, St. Paul, Minn. Filed Oct. 5, 1929. Serial No. 397,572. 7 Claims. (Cl. 226—18.)

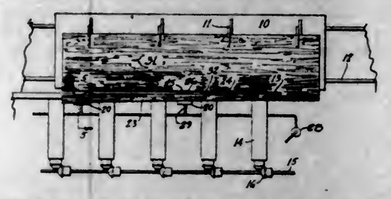
1. A machine of the class described for feeding a plurality of coil springs to a folded strip and sewing the strip to form containing pockets for the springs, com-

prising a spring containing hopper with a normally closed outlet gate, a conveyor, means actuated from the conveyor to successively open the gate of said hopper and permit the successive dropping of coil springs from said hopper onto said conveyor, a guide-way arranged in connection with said conveyor to receive and compress said springs, means for conveying a folded strip of material



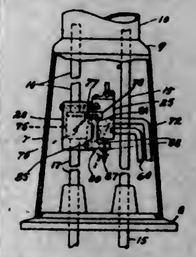
through the machine, means for delivering said springs from the compressing guide-way in compressed condition within the folded strip, a sewing mechanism operative in synchronization with the step by step travel of said strip to cross stitch said strip between adjacent springs, means for holding the strip and spring compressed during the sewing operation, and a sewing mechanism operative to stitch together the edges of said strip.

1,867,873. MECHANICAL OFF-BEARER. WILLIAM N. BROWNE, Port Angeles, Wash. Filed Nov. 18, 1930. Serial No. 496,421. 1 Claim. (Cl. 143—157.)



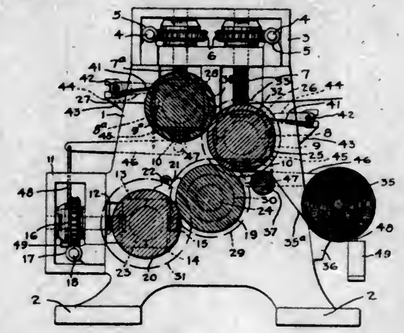
A mechanical offbearer comprising a set of live rolls in combination with means for turning a slab bark side up as it separates from the saw log and placing same on the rolls said means consisting of a plurality of wedges mounted alongside of said rolls in the path of the saw cut each of said wedges having its side nearest to said rolls curved tangentially to the top side of said rolls.

1,867,874. AUTOMATIC VALVE CONSTRUCTION. KNOLES C. BRYANT, Los Angeles, Calif. Filed Dec. 22, 1930. Serial No. 504,048. 7 Claims. (Cl. 221—100.)



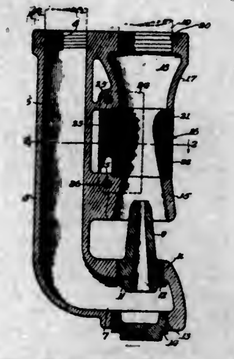
1. In a valve construction and operating means therefor, a liquid supply tank, air pressure supply means for said tank, a dispensing tank, a pipe to supply liquid to said dispensing tank from said supply tank, an overflow pipe to conduct overflow liquid from said dispensing tank, an air pipe communicating with said supply tank, a valve structure comprising a casing having an elongated air chamber with which said air pipe communicates, said chamber having air inlet means at one side and air outlet means at its other side, two valve elements connected to move as a unit lengthwise of said chamber one of which controls said air outlet means and one of which controls said air inlet means, and means for latching said valve elements in a position wherein said air inlet means are open and said air outlet means are closed, said latching means being releasable by the action of the overflow liquid thereon from said dispensing tank thus unlatching said valve, said valve being constructed and arranged when unlatched to close said air inlet means and open said air outlet means.

1,867,875. COATING AND DOUBLING APPARATUS. GEORGE W. BUCHANAN, Peekskill, N. Y. Filed July 10, 1929. Serial No. 377,112. 4 Claims. (Cl. 91—48.)



1. In a coating machine, the combination of a smearing roll mounted in a supporting frame at the lower front edge of the latter, a coating roll mounted in the frame centrally of the latter and above and to the rear of the smearing roll to produce a gutter, a third roll mounted above the coating roll and in rear of the latter near the rear of said frame, a fourth roll mounted above all the rolls at the front edge of the frame, means for driving the rolls, including master driving means mounted on the shaft of the coating roll, means for securing adjustments of the rolls relatively to each other, means for mounting two of the rolls yieldingly, and a guiding roll mounted adjacent the second and third rolls close to the junction of the latter with each other.

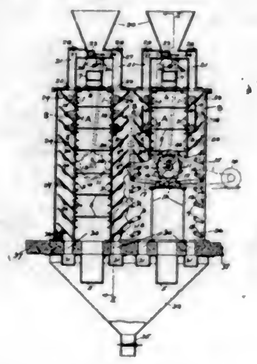
1,867,876. EDUCTOR. WILLIAM T. CLARK, Chicago, Ill., assignor to Whiting Corporation, Harvey, Ill., a Corporation of Illinois. Filed Nov. 22, 1929. Serial No. 409,105. 6 Claims. (Cl. 302—15.)



1. In an eductor, the combination of an elongated casing shaped to form a conduit for liquid under pressure

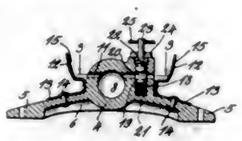
and provided at one end thereof with a nozzle for discharging the liquid in jet form, a body connected to the other end of the casing and having a suction mouth positioned to receive the jet of liquid and adapted to receive material to be conveyed by the jet, said body also having an outlet chamber for the material and the liquid, and a tubular throat having a liner of wear-metal between the mouth and the chamber, said throat being removable from the body transversely of the axis of the mouth.

1,867,877. RETORT. ENOCH CLIFTON and WILLIAM J. COOPER, Portland, Oreg. Filed Sept. 28, 1929. Serial No. 395,900. 11 Claims. (Cl. 202—124.)



1. In an apparatus for the distillation of solid material, having vertical retorts, means for supplying material thereto, a heating chamber, walls separating said chamber from said retorts, which retorts are positioned on opposite sides of the chamber; a vertically tiltable table mounted in a mentioned retort, with its lower edge normally engaging one of said separating walls, so as to adapt the table to retain a deposit in contact with the wall, and, after being tilted, automatically to recover its original position by gravity impulse.

1,867,878. LAWN SPRINKLER. ANTHONY COVIELLO, Denver, Colo. Filed Oct. 13, 1930. Serial No. 488,343. 1 Claim. (Cl. 299—76.)



A sprinkler comprising an elongated base having a central enlarged portion having an opening extending into it from one side thereof, the wall of the opening having a threaded section adapted to make connection with a hose, the wall of the enlarged portion having two openings extending in opposite directions and whose axes are substantially parallel with a plane contacting with the bottom of the base, a deflector located in front of each opening, said deflectors having base portions (13) which rest on the upper surface of the base and means for securing the deflectors to the base, those portions of the deflectors that are located directly in front of the openings being upwardly and outwardly inclined whereby the streams of water which issue from the opening will be deflected upwardly and outwardly on each side of the axis of the opening to which the hose is connected.

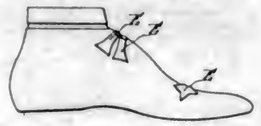
1,867,879. MANUFACTURE OF RUBBER FOOTWEAR. JAMES BARRET CROCKETT, Cambridge, Mass., assignor to Cambridge Rubber Company, Cambridge, Mass., a Corporation of Massachusetts. Filed May 14, 1929. Serial No. 363,093. 6 Claims. (Cl. 18—58.)

1. The process of making an article of rubber footwear which consists in first creating a sole portion by contacting a former with an aqueous rubber containing material, subsequently creating a body portion by contacting the former with an aqueous rubber containing material, removing the formed article and turning the same inside out to obtain the normal condition of use.

1,867,880. MANUFACTURE OF RUBBER FOOTWEAR. JAMES BARRET CROCKETT, Cambridge, Mass., assignor to Cambridge Rubber Company, Cambridge, Mass., a Corporation of Massachusetts. Filed May 14, 1929. Serial No. 363,095. 3 Claims. (Cl. 18—58.)

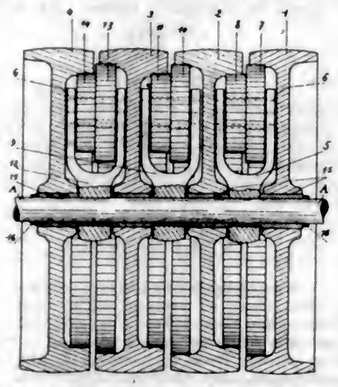
3. The process of making an article of rubber footwear which consists in temporarily applying a sheet of natural rubber crepe or other tread material to a former, dipping the former into an aqueous rubber containing material to deposit a coating of the aqueous rubber containing material over the former and assembled tread material, applying a sheet of fabric or other lining material to the exterior of the coating, drying the resultant product, removing the same from the last and turning the same inside out to properly position the tread portion on the exterior and the lining portion on the interior of the shoe.

1,867,881. MANUFACTURE OF RUBBER ARTICLES. JAMES BARRET CROCKETT, Cambridge, Mass., assignor to Cambridge Rubber Company, Cambridge, Mass., a Corporation of Massachusetts. Filed May 14, 1929. Serial No. 363,098. 8 Claims. (Cl. 18—58.)



1. The process of making rubber articles which consists in making a former with depressions, first filling the depressions with material unitable by contact with an aqueous rubber containing material and then contacting the former with an aqueous rubber containing material to coat the former and merge the filling with the coat.

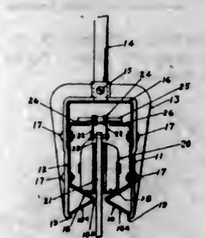
1,867,882. DIFFERENTIAL PULLEY. HENRI GAILLARD, Nanterre, France. Filed July 13, 1931, Serial No. 550,819, and in Germany Aug. 15, 1930. 3 Claims. (Cl. 74—21.)



1. A differential pulley comprising, in combination, a stationary straight shaft, a series of adjacent pulley-

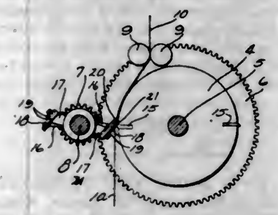
sections revolubly mounted independently on the shaft, said pulley-sections being of equal outer diameter for forming a substantially continuous cylindrical surface and being formed on the inner surface of their rims with differentiated numbers of gearing teeth, a plurality of rigid bifurcated yokes firmly held on the shaft and housed in the respective spaces between the successive pulley-sections, and a plurality of stepped gears revolubly mounted between the legs of the respective yokes and each composed of two contiguous pinions rigidly secured to each other and having differentiated diameters and differentiated numbers of teeth which permanently mesh with the associated teeth on the inner surface of the two adjacent pulley-sections housing the corresponding yoke, the gearing ratios between the pulley-sections and the corresponding gears being such as to cause the rotational speeds obtainable from said pulley-sections to increase progressively from one end of the pulley to the opposite end.

1,867,883. MONORAIL TRACK FOR CONVEYER SYSTEMS. CHARLES S. HADDLESAY, Elmhurst, Ill. Filed Mar. 10, 1931. Serial No. 521,494. 3 Claims. (Cl. 104—108.)



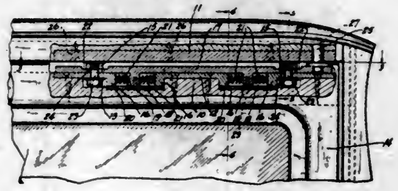
1. A monorail conveyer system comprising a flexible conveyer element provided with conveyer supporting devices extending laterally therefrom, cars propelled by said conveyer element, and a combined car track and conveyer supporting construction comprising two opposed side channel members and an upper channel member, the flanges of one side member extending toward the flanges of the other side member but being spaced to provide clearance between the upper flanges and also between the lower flanges, the upper flanges supporting the lateral extensions of the conveyer elements and the lower flanges supporting the cars, said upper channel member having its flanges extending downwardly and embracing the said channel members and serving as a housing for the flexible conveyer element, and spaced U-shaped supporting brackets having downwardly extending arms embracing and supporting said side sections.

1,867,884. WEB SHEARING APPARATUS. ERNEST HUFF, Milwaukee, Wis., assignor to American Lace Paper Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 18, 1931. Serial No. 545,204. 11 Claims. (Cl. 164—68.)



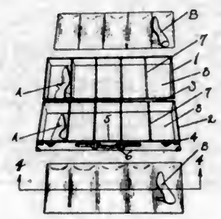
1. The combination with die blades and shear blades and shafts rotatably supporting the respective blades, of means for feeding a web between said shafts, and driving connections for the respective blades mechanically synchronizing their motion for co-operative inter-action of shear blades with die blades, said connections having a driving ratio productive of materially differing relative movement of said blades, whereby a shear blade will pass a co-operating die blade for the shearing of said web within a very limited distance of web advance.

1,867,885. VEHICLE DOOR HINGE. FRITZ LEMKE, Milwaukee, Wis. Filed Feb. 13, 1931. Serial No. 515,441. 3 Claims. (Cl. 16—128.)



1. A door hinge, comprising a bar for rigid securement to a door element, a recess being formed in said bar, a co-operating bar longitudinally movably secured against a face of said first-mentioned bar, a transverse rib formed on said cooperating bar and lodged in said recess, yielding members in said recess confined between said rib and wall portions of the recess, and a pivot stud projecting from an end portion of said cooperating bar.

1,867,886. TRAVELING DISPLAY CASE FOR SHOES. HORACE C. MAYERS, Cleveland, Ohio. Filed Aug. 27, 1930. Serial No. 478,146. 1 Claim. (Cl. 190—16.)

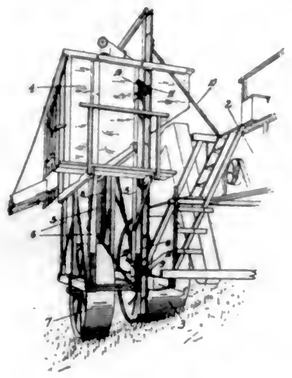


In combination with a sample shoe display case composed of hinged sections provided with partitions to form rectangular compartments, each for receiving sample shoes, insert trays having partitioned frames with flexible materials supported thereon to provide pockets corresponding to said partitioned compartments.

1,867,887. ROLLER ATTACHED BULK-HANDLING ATTACHMENT FOR HARVESTERS. LYMAN D. MORSE, Butte City, Calif. Filed Mar. 18, 1930. Serial No. 436,739. 2 Claims. (Cl. 56—122.)

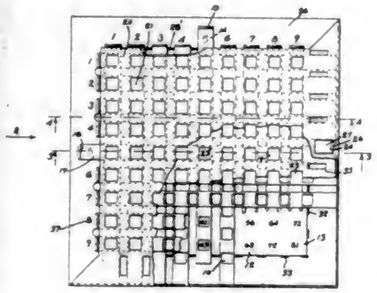
1. Connecting means between a thrasher and a bulk grain carrying attachment which has independent vertical movement relative to the thrasher such means including I-beams fixed rigidly to the thrasher frame and disposed vertically relative thereto with the opposed grooves of the beam facing fore and aft of the thrasher respectively, and the inner side faces of the grooves tapering toward each other, spaced clamps on the attachment having ears

straddling the I-beams, a spindle in each ear projecting into one groove of the beam, a tapered roller on each spindle having a close running fit with the tapered sides of the



groove, whereby a positive up and down movement of the attachment relative to the thrasher may be had without material side and end lash thereof.

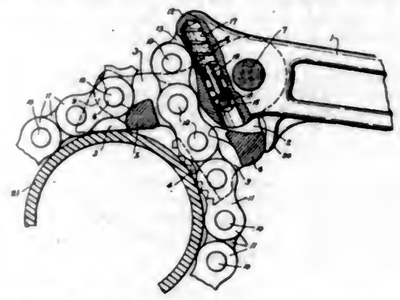
1,867,888. CALCULATING DEVICE. WLADIMIRE J. OBIDINE, Los Angeles, Calif. Filed May 14, 1930. Serial No. 452,302. 4 Claims. (Cl. 35—2.)



1. A calculating device having a flat sheet with a first series of numerals thereon, a structure having a horizontal and a vertical row of numerals, the numerals of the first series being the product of any two of the horizontal and vertical series, a horizontal series of slide strips, and a vertical series of slide strips, said strips overlapping and each having a plurality of perforations, there being a strip associated with each number of the horizontal and vertical series, means to slide said strips to register the openings and expose the numerals of the first series, an obscuring plate above said strips with a series of perforations therein, and means to move said plate to obscure the numerals or to expose the numerals through the perforations.

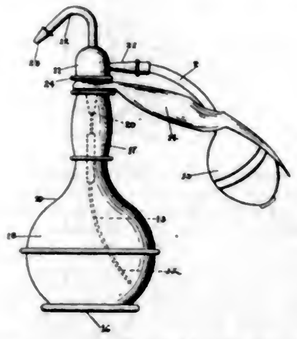
1,867,889. TONG. JOSEPH A. PETERSON and CARL E. OLSEN, Houston, Tex. Filed June 30, 1931. Serial No. 547,825. 2 Claims. (Cl. 81—64.)

1. A tong having a handle; a jaw pivotally mounted on said handle; a pipe-engaging chain connected to said jaw and to said handle; said handle having an arcuate slot; a pin carried by said jaw and movable in said slot; and a spring-pressed plunger carried by said handle and bearing against said pin to automatically cause relative movement of said jaw and handle to tighten said chain on the



pipe to which it is applied; said jaw and handle having engaging means to prevent contact between said pin and the end walls of said slot.

1,867,890. SPRAYER. WILBUR W. H. PYN, New York, N. Y. Filed May 17, 1930. Serial No. 453,132. 7 Claims. (Cl. 299—88.)

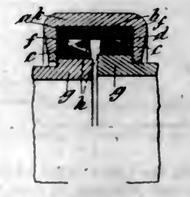


2. A sprayer, comprising a liquid container for resting upon some support, spraying means on said container and including a bent discharge nozzle directed downwards and a discharge bulb, a handle projecting from said container and extending adjacent said bulb so that the bulb may be squeezed and the container moved with one hand, and a supply tube extending from said container upwards to said nozzle and including a lower section movably supported so as to shake during moving of said container and cause siphonic flow of the liquid back into the container upon release of said bulb.

7. A sprayer, comprising a liquid container having a vertical neck, a hollow member threadedly engaged in said neck, spraying means on said hollow member and including a lateral branch connected with a tube connected with a bulb, and a handle clamped at its front between said neck and hollow member and formed with an aperture for the passage of said tube from said lateral branch to the bottom of the handle and formed with a curved rear end for engaging in one's palm so that the ends of one's fingers or one's thumb may compress said bulb.

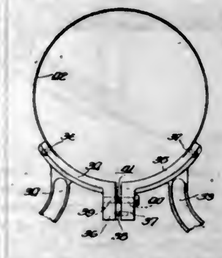
1,867,891. PIPE JOINT AND THE LIKE. DONALD HUGH BAILLIE REYNOLDS, St. Albans, England. Filed May 22, 1929, Serial No. 364,963, and in Great Britain May 26, 1928. 4 Claims. (Cl. 285—194.)

1. A packing for pipe joints of all kinds having in combination a deformable jointing element with two flanges each of which has two free margins, one pair of free margins being pressed into contact with the surfaces of the pipes being jointed by externally applied forces transmitted radially through the web connecting the said flanges



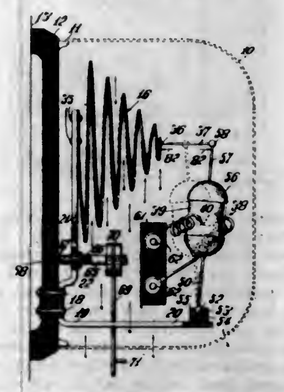
and one pair of free margins being pressed into contact with the surfaces of the pipes being jointed by external forces applied thereto directly; and a sheath for enclosing the exterior of said deformable jointing element and producing said forces.

1,867,892. PURIFYING APPARATUS. FRANK E. RICE, Detroit, Mich. Filed July 30, 1930. Serial No. 471,866. 5 Claims. (Cl. 248—11.)



1. A tank structure including in combination, a horizontally disposed cylindrical tank body, pairs of legs for supporting said tank body, each pair of legs consisting of separate leg members and bands attached to the ends of said leg members for surrounding said tank, and means associated with said leg members for drawing the same together to clamp the bands about the tank.

1,867,893. THERMOSTAT DEVICE. HARRIS C. ROTH, South Bend, Ind., assignor to Adiel Y. Dodge, South Bend, Ind. Filed Apr. 29, 1929. Serial No. 358,793. 5 Claims. (Cl. 297—16.)



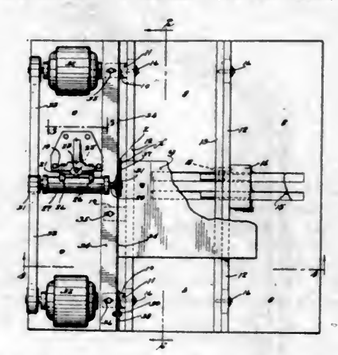
5. In a thermostat, a thermal sensitive element comprising a generally conical helix with the convolutions of the helix disposed generally edgewise in and substantially the same direction as the movement of the fluid to which said element is sensitive and with the convolutions disposed completely within the path of the fluid flow in said direction, a housing for said element provided with means allowing the normal movement of said fluid therethrough, and a device adapted to be actuated by said element and having a lower trunnion support whereby it is balanced and an upper portion operatively connected with said element.

1,867,894. INSULATION FOR POLE CLIMBING SPURS. GLEN O. RUSH, Oakland, Calif. Filed Apr. 7, 1930. Serial No. 442,365. 5 Claims. (Cl. 36—60.)



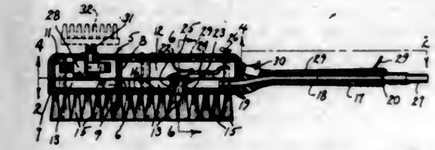
1. In a lineman's pole climbing spur having an insulated foot supporting and engaging member, a shield of insulation material arranged to extend laterally from said member to insulate a portion of the lineman's foot engaged by said member.

1,867,895. WOODWORKING MACHINE. FRIDOLIN SCHIMMEL, Faribault, Minn. Filed Dec. 14, 1929. Serial No. 414,155. 3 Claims. (Cl. 144—198.)



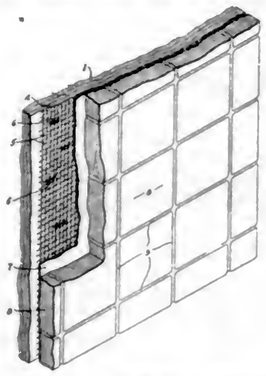
1. In a machine of the class described, a base having a horizontal work face, a rotary cutter, the axis of which is parallel to the work face of the base, a work support comprising a cross-head mounted on the base for movement parallel to the axis of the cutter, a lower horizontal rail and an upper horizontal rail set vertically edgewise with their inner edge portions in overlapping engagement, said rails extending transversely of the axis of the cutter with the lower rail slidably resting on the work face of the base and secured to the cross-head for movement therewith, cam acting devices securing the upper rail to the lower rail for raising or lowering parallel movements and operable to rigidly secure the upper rail to the lower rail in different vertical adjustments, and means for securing the cross-head in respect to the base with the work support different distances from the cutter.

1,867,896. SCRUBBING BRUSH. MARK SOSS, Spokane, Wash. Filed Sept. 2, 1931. Serial No. 560,733. 1 Claim. (Cl. 15—129.)



A scrubbing brush having in combination a cover member with a transverse partition, a bristle retaining member with a transverse partition having holes therethrough, a partition plate interposed horizontally between said cover and bristle retaining members forming a liquid soap containing compartment in the cover member and a water containing compartment in the bristle retaining member, said bristle retaining member having bristles connected to its bottom and small perforations extending through said bottom between the bristles, a handle extending integrally from said bristle retaining member and having a conduit therethrough, means for connecting said handle to a source of running water, a tube within the handle conduit having perforations in its inner end portion and extending into the water containing compartment, a conduit extending from the soap containing compartment through the water containing compartment and through the bottom of the bristle retaining member, valve control means for said conduit, and means disposed exteriorly of the cover member for operating said valve means.

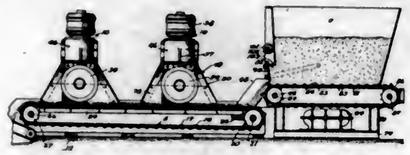
1,867,897. TILE BOARD. ROY G. STANBROUGH, Glendale, Calif., assignor of one-third to Harry J. McCoy, Inglewood, Calif., and one-third to Virgil K. Haldeman, Hollydale, Calif. Filed Apr. 7, 1930. Serial No. 442,114. 5 Claims. (Cl. 72—23.)



1. A wall structure comprising a panel formed of a non-expansible back, an expansible metallic sheet of material applied to a face thereof, a semi-plastic cement applied over said metallic sheet and a facing of tile attached to said cement.

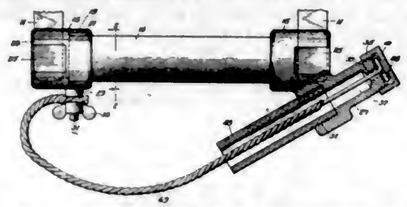
1,867,898. MULLING APPARATUS. NATHANIEL W. STRATFORD, Chicago, Ill., assignor to The Beardsley & Piper Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 15, 1930. Serial No. 428,585. 7 Claims. (Cl. 83—45.)

1. In a mulling apparatus of the character described, the combination of an elongated supporting frame, an endless conveyor supported on the frame so that it extends lengthwise thereof and comprising an upper reach for the material to be mulled movable in a substantially rectilinear path and a lower or return reach, a muller for the material positioned above, and adapted to operate



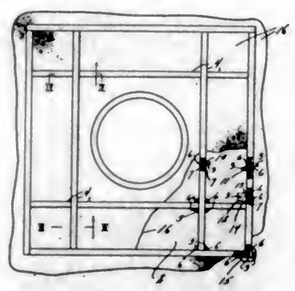
on the material on, the upper reach of the conveyor, and means for driving the conveyor to feed the material progressively under the muller and then to discharge it from the conveyor after it has been subjected to the operation of the muller.

1,867,899. EXPULSION FUSE. CYRIL H. THOMAS, Flossmoor, Ill. Filed Nov. 17, 1930. Serial No. 496,081. 10 Claims. (Cl. 200—127.)



1. A fuse support comprising an elongated support member, including two spaced apart members, insulating means between said members for maintaining their spaced relationship, said members being formed for connection to fuse support mounting elements, one of said members being formed with an explosion chamber opening at an angle with the axis of said support, said members being formed to connect with a fuse link through said opening.

1,867,900. DECORATIVE OUTLINING. WILLIS A. VOGEL, Toledo, Ohio. Filed Apr. 28, 1927. Serial No. 187,276. 2 Claims. (Cl. 94—18.)



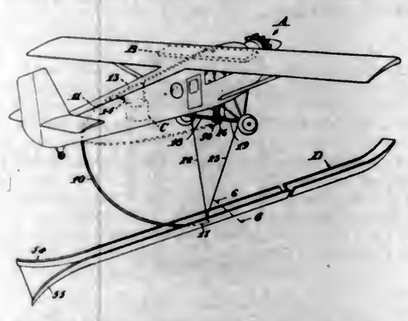
1. A cementitious material body having a finished cementitious material face, said body comprising a cementitious subcoat providing an intermediate cementitious material face, a clip resting on said intermediate face and having intermediate and lateral seats, driven anchoring means through said lateral seats and face and intermediate face entering into said subcoat to hold the clip against shifting relatively to the subcoat, and additional cementitious material having a finish receiving face and supported from the subcoat to extend beyond said clip, and a pre-set cementitious material seated in said clip intermediate seat and providing a finish face outline in the plane of said finish cementitious material face, said additional cementitious material being flowed to fully embed said anchoring means, fully embed said clip, and embed said pre-set cementitious material to approximate the finish face outline exposure only.

1,867,901. LIVE-WIRE DETECTOR. GEORGE FRED WALTER, Maplewood, N. J., assignor of one-half to Harvey P. Sleeper, Short Hills, N. J. Filed Nov. 12, 1928. Serial No. 318,617. 3 Claims. (Cl. 175—183.)



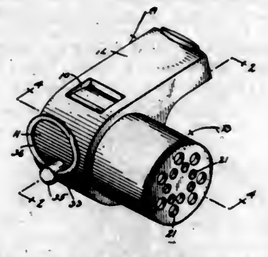
1. A live-wire detector comprising a first tubular member made of insulating material having a cut-away and non-tubular extension, a second tubular member made of insulating material and having a cut-away and non-tubular extension connected to said first tubular member, to form a tubular casing having an opening at one side thereof, a hood fitting over said second tubular member and connected thereto, said hood extending over the opening in said casing and being open at one end thereof, a supporting strip located within said first tubular member and carrying spaced supporting means adapted to engage and support the ends of a glow tube, and contact means connected to said tubular casing and adapted to contact with one of the ends of the glow tube.

1,867,902. METHOD AND MEANS FOR REFUELING AEROPLANES IN FLIGHT. CHARLES B. WEAVER, Los Angeles, Calif. Filed Jan. 18, 1930. Serial No. 421,713. 11 Claims. (Cl. 244—1.)



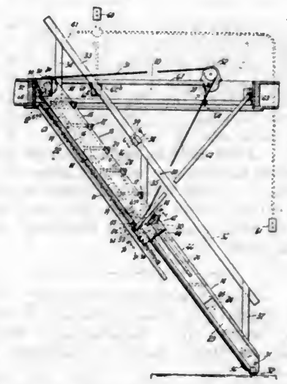
1. A means for refueling aircraft comprising a trough for containing liquid fuel and means controlled from the aircraft operable by forward motion of the latter to effect delivery of fuel from said trough to the aircraft, said means including a conduit, and means for confining flow of liquid through said conduit to one direction.

1,867,903. COMBINATION SIREN WHISTLE. FRANK WILCOX, Los Angeles, Calif. Filed Jan. 26, 1931. Serial No. 511,177. 8 Claims. (Cl. 46—46.)



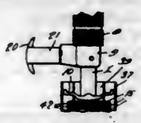
1. A combination siren whistle comprising: a casing having an air inlet and a whistle aperture; a siren mechanism, associated with said casing; and a valve in said casing operable to conduct air from said air inlet through said whistle aperture or through said siren mechanism.

1,867,904. DISAPPEARING STAIRWAY. FRANK E. BESSLER, Akron, Ohio, assignor to The Bessler Disappearing Stairway Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 3, 1929. Serial No. 329,988. 22 Claims. (Cl. 228—50.)



18. The combination in a disappearing stairway structure for use in a ceiling opening between lower and upper floors of a building, of a panel for closing said opening, said panel being hinged at one end of said opening, and a stair structure comprising telescoping sections mounted on the panel whereby such stair structure can be extended from the ceiling opening to the lower floor when the panel is open.

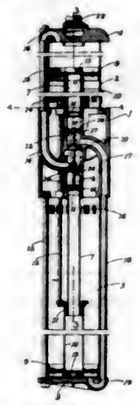
1,867,905. SHAVING EQUIPMENT. LEE S. CHADWICK, Shaker Heights, Ohio. Filed July 26, 1930. Serial No. 471,030. 40 Claims. (Cl. 30—12.)



1. A razor comprising a body portion incorporating a handle and a guard, an element slidably and swingably carried by the body portion and including a face plate that is movable with said element toward and from the guard in confronting relation thereto and is swingable with said element to one side and to the rear of the guard, actuating

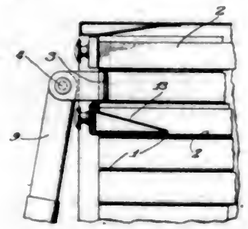
means incorporated in the handle of the razor for progressively sliding and swinging the element, and a blade adapted to be disposed between the face plate and guard when they are in confronting relation.

1,867,906. DOUBLE-ACTION PUMP. MARION A. CLARK, Tulare, Calif. Filed Mar. 1, 1932. Serial No. 596,035. 11 Claims. (Cl. 103—44.)



1. A double action pump comprising opposed cylinders, pistons slidable therein, means connecting the pistons as a unit, a liquid actuated reversible valve directly associated with the pump, a chamber in which said valve is movable, means to pump a liquid into the chamber to move the valve and alternately reverse the same, means whereby the liquid will act to move one of the pistons after it has moved the valve in one direction, an outlet from the chamber, and passage means between the valve chamber and cylinders arranged relative to the valve and outlet so that one piston will be forcing water through the outlet as the other one is on its suction stroke, and vice versa with the reversal of the valve.

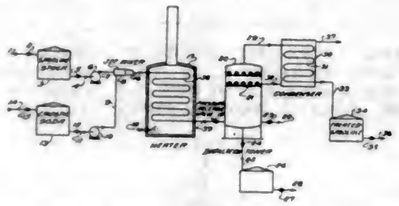
1,867,907. VISIBLE RECORD CABINET. GEORGE H. DAWSON, Cambridge, Mass., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Jan. 14, 1929. Serial No. 332,450. 2 Claims. (Cl. 45—2.)



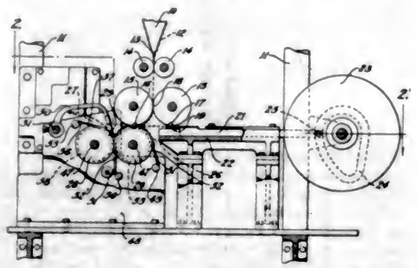
1. The combination with a cabinet having a drawer compartment, an anchor slidable in said compartment, a pair of bars pivoted to said anchor, a sheet metal member having folded loops for slidably engaging said bars, and means for providing a limited relative movement between said bars and sheet metal member.

1,867,908. METHOD OF PURIFYING PETROLEUM OILS. DAVID E. DAY, Los Angeles, Calif. Filed June 12, 1929. Serial No. 370,325. 10 Claims. (Cl. 196—41.)

1. A process of purifying naphtha stocks, comprising, commingling a naphtha stock with a substantially concentrated water solution of a caustic alkali, passing the commingled mixture through a heating coil at temperatures of approximately 350 to 500 degrees F., under a pressure sufficient to prevent substantial vaporization therein, then releasing the pressure and separating a purified naphtha stock by vaporization from products of reaction and excess caustic alkali.

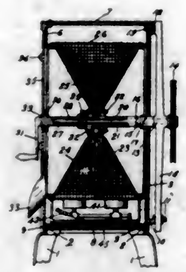


1,867,909. FOLDING MACHINE. THOMAS N. DELIGIANES and ANDREAS A. BOURDES, Chicago, Ill. Filed Mar. 3, 1931. Serial No. 519,771. 6 Claims. (Cl. 270—61.)



1. A folding machine of the class described including a pair of folding rollers, means for feeding a strip of material between said rollers, means associated with one of said rollers for preventing the said strip to wind itself upon said one of the rollers, a folding roller adapted to cooperate with one of said folding rollers for folding said strip upon itself at its opposite end portion, and means for feeding said strip between said folding roller and said one of the folding rollers.

1,867,910. POP-CORN MACHINE. HERBERT W. EAKINS, Springfield, Ohio. Filed Dec. 26, 1930. Serial No. 504,756. 16 Claims. (Cl. 53—4.)



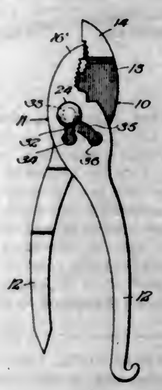
1. In a corn popper, a casing, a hopper therein having an operative and an inoperative position, means to heat said casing and said hopper, a discharge means from said hopper and doors adapted to close said casing and hopper without closing said discharge means and move and hold the hopper in operative position.

1,867,911. TIRE CHAIN HOOK. OLAF ARNFIN STAM ERIKSEN, Vestre Aker, Norway, assignor of one-half to Aktieselskapet Eureka Mekaniske Verksted, Skoyen, Norway, a Corporation; and one-half to Emil Tranaas, Milwaukee, Wis. Filed Apr. 8, 1932, Serial No. 604,079, and in Norway Jan. 20, 1931. 8 Claims. (Cl. 24—236.)



1. A fastening device of the character described, comprising a body portion terminating in attaching means for permanently attaching the device to a chain link, a hook adapted to releasably interlock with a second chain link, and means for releasably securing the said second link in position on the hook, the said means comprising a spring member formed with an end extending inwardly into the area defined by the said hook and having its edge formed into a cam acting surface against which the chain link engages upon insertion and removal thereof relative to the hook, the resilient member being thereby movable out of obstructing position for allowing manipulation of the said link into and out of contact with the hook.

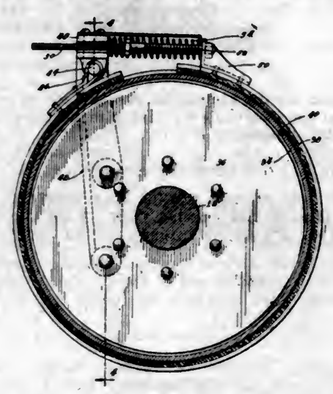
1,867,912. PLIERS. GEORGE E. EVEY, Torrance, Calif. Filed Feb. 5, 1931. Serial No. 513,680. 3 Claims. (Cl. 81—51.3.)



1. Adjustable pliers comprising a pair of crossed pivoted members having terminal cooperating jaws, one of the members having a longitudinal slot in its pivotal portion formed with a circular portion at each end and a transverse slot having one end intersecting the longitudinal slot intermediately and having a circular portion at its other end, and a pivot member on the pivotal portion of the other member having a head of greater width than said slots and circular portions and movable in said slots to permit adjustment of said jaws toward and away from each other and longitudinally of each other, said pivot being rotatable in said circular portions.

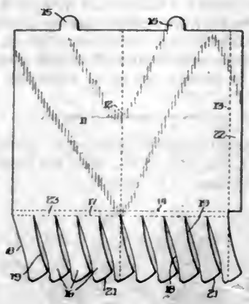
1,867,913. BRAKE MECHANISM. BURTON S. FLORADAY, Toledo, Ohio, assignor to Hydraulic Brake Company, Detroit, Mich., a Corporation of California. Filed Apr. 1, 1927. Serial No. 180,101. 1 Claim. (Cl. 188—77.)

A vehicle brake comprising a rotatable drum, a fixedly mounted bracket formed with a forked end overlying the periphery of said drum, said forked end having a depending bearing portion, a bearing pin affixed at one end to said bracket and adapted to extend through said depending bearing portion, a brake band encircling said drum and having at one of its ends a bifurcated looped portion for pivotally receiving said bearing pin thereby to anchor said end of the brake band, a flexible cable at-



tached to the opposite end of said brake band and received within the said forked end of the bracket thereby to guide it, a casing secured to said forked end of the bracket and extending toward the movable end of said brake band, and a spring shielded by said casing and surrounding said flexible cable to separate the ends of the brake band and thereby normally to disengage the brake elements.

1,867,914. COLLAPSIBLE CONTAINER. WILLIAM J. GEIST, Lockport, Ill. Filed Dec. 4, 1930. Serial No. 499,861. 9 Claims. (Cl. 229—21.)

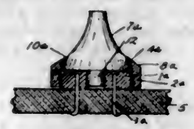


2. A flat container blank having a main body-portion and a series of flaps extended at an oblique angle from an edge thereof, each of said flaps having a rounded end of a curvature conforming substantially to that of the completed container, each of said flaps being of a length whereby such rounded end will bear against and conform to the opposite inner surface of the sidewall of the completed container.

1,867,915. CLEATED ATHLETIC SHOE AND CLEAT THEREFOR. HUGO GOLDSMITH, Cincinnati, Ohio, assignor to The P. Goldsmith Sons Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 30, 1930. Serial No. 448,762. 3 Claims. (Cl. 36—59.)

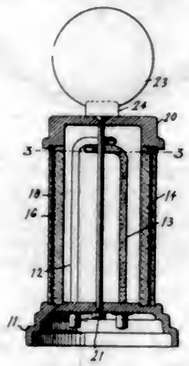
1. A demountable cleat for an athletic shoe comprising a circular base member having an exteriorly threaded periphery adapted to be secured to a shoe sole, a cleat of

conical conformation having an enlarged attachment portion, and a nut having interior threads to engage the threads of the base, with a tapering annular shoulder for



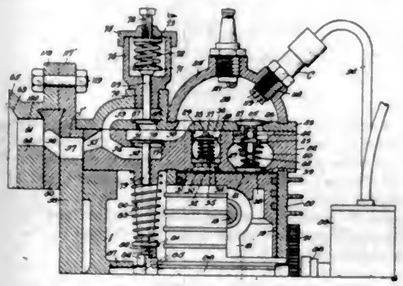
frictionally bearing against the enlarged end of said cleat, said cleat and base being provided with means for ensuring their axial alignment.

1,867,916. ELECTRIC COLOR RAY DEVICE. HANZABURO HABASE, Los Angeles, Calif. Filed Dec. 8, 1931. Serial No. 579,731. 7 Claims. (Cl. 40—133.)



7. Outer and inner tubular and longitudinally ribbed walls of transparent materials, means within the inner wall for illuminating the same, and an opaque screen interposed between said walls and having a series of apertures therein to expose luminous areas of the tubular walls.

1,867,917. COMBUSTION ROTARY ENGINE. OTTO LARSON, St. Louis, Mo. Filed Mar. 31, 1930. Serial No. 440,449. 6 Claims. (Cl. 60—41.)



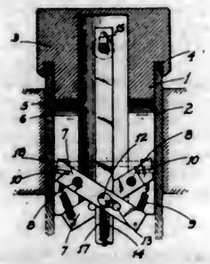
1. In an engine structure, in combination a pair of upright air compressors, a horizontally disposed power shaft from which said compressors are actuated, a pair of peripherally bladed rotors fixed to said shaft, a fixed ported partition between said rotors, a combustion chamber disposed above each compressor, a head member between each compressor and its respective combustion chamber, an air intake valve in said head member for each compressor, a valve for controlling the discharge of air from the compressors into the combustion chambers, means for admitting motive fuel under pressure into the combustion chambers subsequent to the discharge of compressed air into the combustion chambers from the compressors and at a greater pressure than the air pressure, means for regulating the amount of motive fuel delivered to the combustion chambers, means for igniting the fuel mixture in the combustion chambers, said head member having a combustion passage therein leading from each combustion chamber and merging with a branched pressure delivery passage which communicates with the blades of the rotors, opposed valves controlling communication between the combustion passage and the branched pressure delivery passages, one of said valves being an automatic pressure relief valve and the other valve being a mechanically opened valve for permitting burnt expanded gases to be discharged into the branched pressure delivery passage and against the bladed rotors for rotating the rotors by impact of the exploded gases liberated from the combustion chambers and said head member having an air storage chamber disposed between each compressor and its respective combustion chamber to trap a quantity of air under pressure as either combustion chamber is being charged with air, and a valve actuated by the air pressure trapped in either storage chamber when the pressure of burnt gases recedes in either combustion chamber to allow the trapped air to rush into the combustion chamber discharging its burnt gases for the purpose of scavenging the same.

1,867,918. TERMINAL CONNECTER. JOHN LOFGREN, Chicago, Ill., assignor to Raico Manufacturing Co., a Corporation of Illinois. Filed Mar. 7, 1927. Serial No. 173,266. 3 Claims. (Cl. 173—259.)



1. In a device of the character described, an electrically conductive bolt, an electrically conductive nut engageable therewith, and a member permanently secured to said nut, said member having a flange extending therefrom for positioning over a conductor previously positioned about said bolt, said bolt head and said member being formed to clampingly engage said conductor when said head enters the flange of said member upon relative movement between said bolt and said nut, said member being rotatable relatively to said nut to maintain a position of adjustment relative to said conductor until the same is engaged by said bolt head.

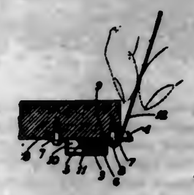
1,867,919. AUTOMATIC LOCK. WILLIAM P. LOWTHER, Merced, Calif. Filed Mar. 9, 1931. Serial No. 521,154. 7 Claims. (Cl. 70—90.)



1. A cap and lock structure for tubular outlets comprising a body to depend into and form a self-supporting cover over the outlet, opposed tongues to engage the inner wall of the outlet, means mounting the tongues on the body

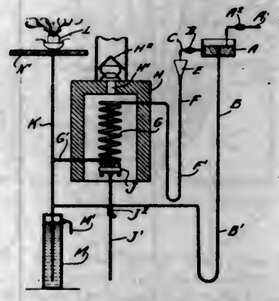
in a manner tending to cause them to move radially and outwardly of the body and to wedgingly engage the outlet when a pull away from the outlet is imparted to the body, and means to move the tongues inwardly at will.

1,867,920. DISPLAY CARD HOLDER. GEORGE S. MALCOLM, Auburn, Calif. Filed Mar. 29, 1932. Serial No. 601,754. 5 Claims. (Cl. 40—11.)



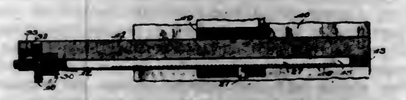
1. A card holder for use in connection with a shelf comprising a strip to extend under the shelf lengthwise thereof, an upstanding lip along the front edge of the strip adapted to overlap the front edge of the shelf, a depending lip along the back edge of the strip, compression springs extending transversely of and under the strip which at one end engage the forward side of said depending lip, and means for engaging the opposite end of each spring to cooperate with said lip to maintain the spring under compression and in a substantially fixed position in connection with the shelf.

1,867,921. HUMIDIFYING APPARATUS. JOSEPH ALEXANDER MAYERS, Cumberland, Md.; Taylor Morrison executor of said Joseph Alexander Mayers, deceased. Filed Sept. 19, 1928. Serial No. 306,864. 5 Claims. (Cl. 126—350.)



1. A humidifier comprising in combination a closed flash boiler, means for passing water at a constant rate to said boiler, a fluid fuel burner for heating said boiler, a steam discharge pipe connected to said boiler and having its discharge end opening to the space to be humidified, and a mixing nozzle surrounding the discharge end of said pipe for mixing air from said space with the steam before its discharge into said space.

1,867,922. GAUGE. CHRISTIAN B. NELSON, Chicago, Ill. Filed Mar. 19, 1929. Serial No. 348,264. 1 Claim. (Cl. 29—67.)



A gauge comprising a bar having an open longitudinal recess wholly in one side thereof providing upper, lower and rear walls, a slide member adjustable longitudinally between said walls of said recess and having teeth accessible through the longitudinal opening thereof, a stop member embracing said bar, a reciprocal spring resisted plunger carried by said stop at the side thereof remote from said recess, a member secured at one end to said plunger and having its opposite end disposed adjacent said recess, and a locking member secured to said last mentioned end for engagement with said upper wall of said recess for preventing vertical displacement of said stop member and engaging also said teeth under the action of said spring for locking said stop to said slide member.

1,867,923. METHOD OF PRODUCING ASPHALTIC EMULSION. FREDERIC QUECK, Monroe, Mich. Filed Mar. 20, 1931. Serial No. 524,216. 2 Claims. (Cl. 134—1.)

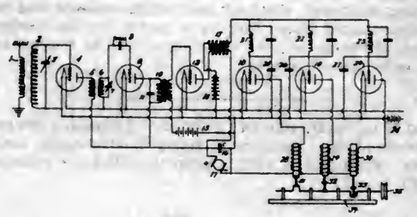
1. The method of forming an asphaltic emulsion comprising preparing first an emulsifying agent by mixing rosin soap and an albuminoid substance in an aqueous medium and adding an asphalt product thereto, the ratio by weight of the asphalt to the combined weight of the rosin soap and albuminoid substance being substantially 60 to 40.

1,867,924. FUSE. JOSEPH D. ROBERTS, Springfield, and CYRIL H. THOMAS, Chicago, Ill.; said Roberts assignor to said Thomas. Filed Mar. 22, 1929. Serial No. 349,048. 10 Claims. (Cl. 200—131.)



1. In a fuse, a current conducting fusible link having a reduced section, a film of insulating varnish coating said reduced section, a quantity of flash light powder arranged around said reduced portion and means including a celluloid housing enclosing said flash light powder to secure it about the restricted portion.

1,867,925. APPARATUS FOR MAINTAINING SYNCHRONISM. SAMUEL RUBEN, New Rochelle, N. Y. Filed Oct. 24, 1929. Serial No. 402,295. 3 Claims. (Cl. 250—2.)



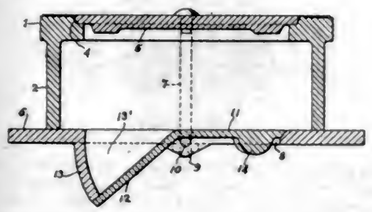
1. A system for obtaining remote control which comprises a transmitter for generating audio frequency oscillations at various frequencies, a rotating segment connected to and controlling the output of said transmitter, and a receiver means comprising a vacuum tube amplifier, the tubes in said amplifier system being selectively tuned to the respective frequencies generated in the transmitter, the outputs of said tubes being connected to and controlling the fields of a motor, the respective armatures of which are thereby actuated, so as to rotate a shaft of said motor to a position corresponding to that of the rotor segment controlling said transmitter.

1,867,926. DRAIN DEVICE. JOSEPH P. RUTH, Jr., Denver, Colo. Filed Jan. 16, 1928. Serial No. 247,162. 1 Claim. (Cl. 137—34.)



A drain for the settling compartment of a flotation machine comprising an elongated tubular member extending downwardly from the bottom of the compartment, the opening in the tubular member being in communication with the interior of the compartment, the lower end of the tubular member having a plurality of spaced lugs on its outside, said lugs forming a portion of a bayonet joint, and a closure for said member, said closure comprising a plug extending entirely through the opening in the member and a cup-like member attached to the lower end of the plug, the sides of the cup projecting over the lower end of the tubular member, the cup having internal slots for cooperating with the lugs on the tubular member for holding the parts in position.

1,867,927. SEWER DRAIN. JOHN E. SIMPSON, Portsmouth, Ohio. Filed Jan. 27, 1931. Serial No. 511,561. 1 Claim. (Cl. 182—25.)



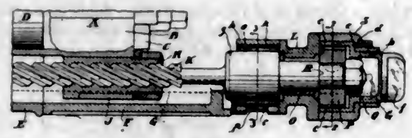
In a drain apparatus for sewers, the combination comprising a casing forming a chamber having inlet and outlet openings approximately oppositely disposed, a crescent-shaped flange extending down from the bottom plate of the chamber and a seat along another part, an angular closure for said outlet opening pivoted to said bottom plate to rotate, part of said closure being adapted to rest on said seat and another part of said closure being bent to engage the crescent-shaped flange, whereby the outlet opening is closed, the bent part of the closure and the crescent-shaped flange forming a pocket for the accumulation of sewage so that the closure may be tripped and the outlet opened thereby.

1,867,928. NAIL HOLDING TOOL. THOMAS A. SMITH, Overland, Mo., assignor to Harry J. Hagen, St. Louis, Mo. Filed Jan. 7, 1931. Serial No. 507,140. 3 Claims. (Cl. 1—47.)



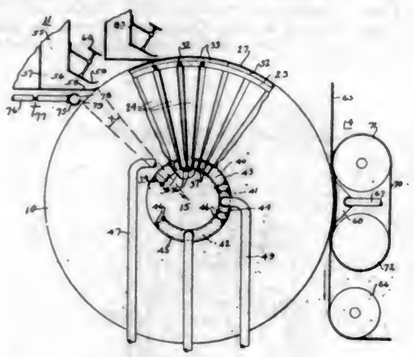
1. A nail holding tool comprising a solid cylindrical bar adapted for hammer impact on one end and recessed for a nail head on the other end, a plate slide having a slot mounted on the outside of the bar having one end bent at right angles and having a rigid forked end disposed at the nail engaging end of the slide opposite said recess, a fastening screw in said slot, and means to hold the slide in its adjusted position, substantially as described.

1,867,929. FEEDING DEVICE. WILLIAM A. SMITH, Sr., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 15, 1930. Serial No. 481,840. 9 Claims. (Cl. 255—45.)



1. In a feeding device, the combination with a motor and a support whereon said motor is slidably mounted, a reciprocatory hammer piston in the motor imparting jars thereto to move the motor relatively to the support, of recoil resistance means operatively connected to the motor and the support and comprising a pair of members in threaded engagement with each other and one of which members is adapted to be rotated by the motor upon movement of the motor on the support, and brake means adapted to contract on the rotatable member for controlling rotation thereof.

1,867,930. PAPER MANUFACTURE. JOHN TRAQUAIR, Chillicothe, Ohio, assignor, by mesne assignments, to The Mead Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 25, 1929. Serial No. 402,340. 21 Claims. (Cl. 92—43.)

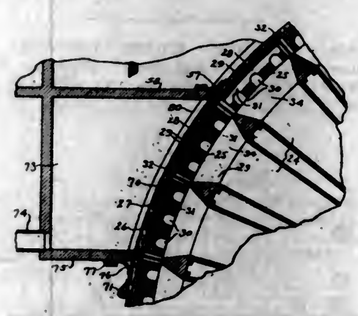


1. Paper making apparatus of the character described comprising a rotary forming roll, a continuous shrunk-on foraminous covering for said forming roll providing a paper forming surface thereon, means for supplying fibrous stock to said forming surface, and means for rotating said roll to form a traveling web of paper.

1,867,931. PAPER MANUFACTURE. JOHN TRAQUAIR and HERBERT A. KIDD, Chillicothe, Ohio, assignors, by mesne assignments, to The Mead Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 2, 1930. Serial No. 479,189. 19 Claims. (Cl. 92—43.)

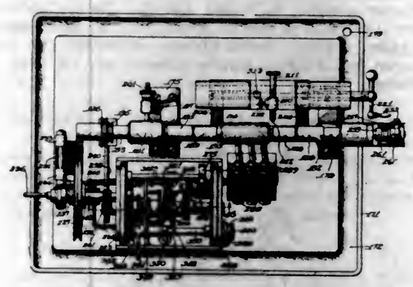
1. Apparatus of the character described for making a sheet of paper comprising a movable foraminous member providing a forming surface, a suction compartment positioned beneath said movable member and opening to atmosphere through said member, means for producing suction within said compartment, means for supplying fibrous stock to the forming surface of said movable member including an inlet adapted to flow a stream of fibrous stock onto the forming surface of the movable member

to form a web thereon, the suction being effective on said compartment prior to the position of stock supply, and means to maintain the suction in said compartment prior



to the position of stock supply, said means comprising an impervious blanket positioned to contact with the forming surface side of said movable member.

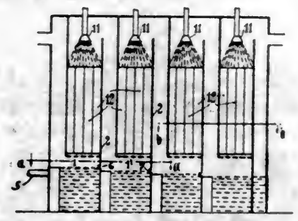
1,867,932. MEANS FOR MAKING PEN NIBS. JOHN E. WAHL, CARL W. GRONEMANN, and ARTHUR N. LUNGREN, Chicago, Ill., assignors to The Wahl Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 13, 1927. Serial No. 183,431. 7 Claims. (Cl. 51—93.)



1. A device for operating on nibs, comprising a nib holder, means for moving the holder relative to an abrasive means to cause the point of the nib to move on the surface of the abrasive means, stop means for limiting the movement of said holder, counter-balancing means for moving the holder toward the stop means, and means for turning the holder whereby different parts of the nib may be operated upon by the abrasive means.

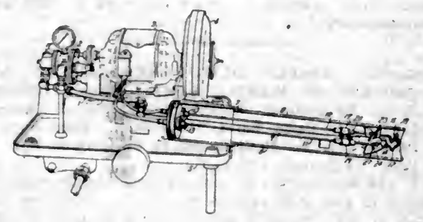
1,867,933. APPARATUS FOR TREATING GASES WITH LIQUIDS. THOMAS OWSTON WILTON, London, England, assignor to The Chemical Engineering and Wilton's Patent Furnace Company Limited, London, England. Filed Oct. 16, 1929. Serial No. 399,927. 7 Claims. (Cl. 261—111.)

1. An apparatus for treating gases with liquids consisting of a succession of chambers each comprising a packing and means for sprinkling on said packing the incoming liquid preferentially to the liquid already in any chamber, said means consisting in a small compartment in a corner of the bottom of each chamber, means for admitting into said compartment the fresher liquid from the preceding chamber, said compartment being separated from the remaining space at the bottom of the chamber by a partition with means for allowing some of the liquid collected at the bottom of that chamber to enter into the said compartment, and lifting devices circulating the



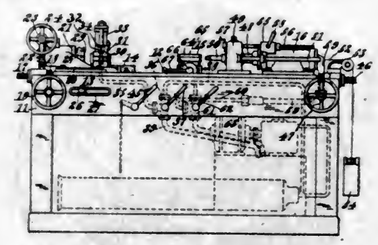
liquid in the said chamber the intake to which is near the opening of the inlet for the fresher liquid to the said compartment.

1,867,934. OIL BURNER. BERNARD B. ZAHNER, Kansas City, Mo. Filed Feb. 18, 1929. Serial No. 341,020. 4 Claims. (Cl. 158—28.)



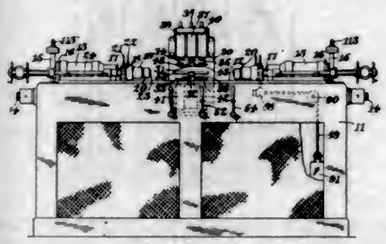
1. In combination with an oil supply nozzle, an air impeller and an electric circuit, electrodes having terminals adjacent the nozzle outlet and means including a base member relatively remote from the nozzle and a resilient member adjacent the nozzle for supporting the electrodes in the path of air from the impeller.

1,867,935. ELECTRIC UPSETTING APPARATUS. GIUSEPPE BENEDETTO, Novara, Italy, assignor to The Omes Holding Company Limited, London, England, a British Company. Filed Sept. 15, 1930, Serial No. 482,097, and in Italy Sept. 14, 1929. 10 Claims. (Cl. 219—3.)



1. In an electric upsetting apparatus the combination of an anvil, means to hold a workpiece so that one end thereof abuts upon the anvil, means to pass an electric current between the work piece and the anvil, means to feed the work piece and the anvil together to effect an upsetting operation and a mounting for the anvil such that the anvil face may be moved angularly about an axis transverse to the line of feed aforesaid.

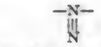
1,867,936. ELECTRIC UPSETTING APPARATUS. GIUSEPPE BENEDETTO, Novara, Italy, assignor to The Omes Holding Company Limited, London, England, a British Company. Filed Sept. 11, 1930, Serial No. 481,335, and in Italy Sept. 14, 1929. 16 Claims. (Cl. 219—3.)



1. In an electric upsetting apparatus the combination of two opposed anvils, means to hold a workpiece so that it extends between the anvils, means to pass an electric current through each anvil face where it is in contact with the work into or out of the work for the purpose of heating the same at both ends, and means to force the anvils closer together to upset the work at both ends simultaneously.

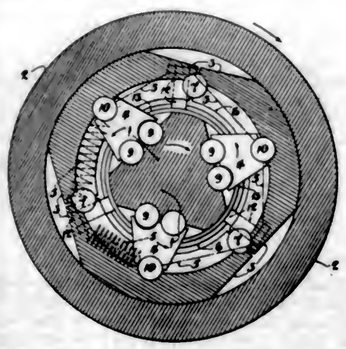
1,867,937. STABLE DIAZO PREPARATIONS AND PROCESS OF MAKING SAME. GERALD BONHOTE, Basel, Switzerland, assignor to Societe of Chemical Industry in Basle, Basel, Switzerland. Filed Nov. 10, 1927, Serial No. 232,482, and in Switzerland Nov. 18, 1926. 14 Claims. (Cl. 8—6.)

1. The manufacture of new dry diazo-preparations, consisting in adding to aqueous solutions of diazonium chlorides of such aromatic amines which contain as many amino groups as aromatic nuclei and in which every aromatic nucleus carries one amino group, alkali salts of naphthalene trisulfonic acids in the proportion of at the most two



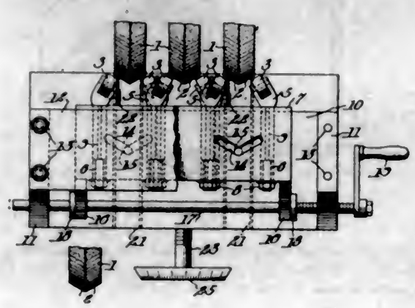
residues to three SO_3-Me-residues, and evaporating the mixture to dryness.

1,867,938. FREE WHEEL OR RATCHET CLUTCH. CHARLES DALTON, Leeds, England. Filed Dec. 12, 1931, Serial No. 580,674, and in Great Britain Dec. 15, 1930. 9 Claims. (Cl. 192—43.)



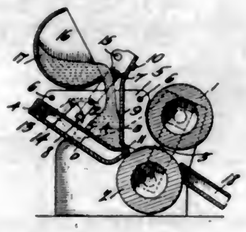
1. A free wheel or ratchet clutch comprising in combination, a driving member, a driven member, a shoe associated with one of said members, radially acting drive transmitting toggle struts which afford a wedging action in both directions of motion of the clutch to force the shoe into contact with the associated member, and means for suppressing drive in either direction at will.

1,867,939. GRINDING WHEEL DRESSER. JOHN ADRIAN DAVENPORT, Butte, Mont. Filed Jan. 3, 1931. Serial No. 506,475. 12 Claims. (Cl. 125—11.)



4. The device as set forth in claim 3, in combination with means for adjusting the said plate perpendicular to the ax's of the grinder.

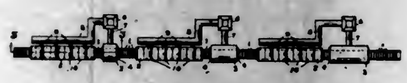
1,867,940. APPARATUS AND METHOD OF MANUFACTURING SHEET GLASS. LUCIEN DELLOYE, Paris, France, assignor to Société Anonyme des Manufactures des Glaces & Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France. Filed Dec. 13, 1928, Serial No. 325,806, and in France Dec. 13, 1927. 8 Claims. (Cl. 49—33.)



8. In an intermittent glass forming machine the combination with a pair of rolls, with a sheet forming pass between them, of an inclined glass receiver adjacent to the forming pass and feeding glass thereto, and a removable dam above the receiver and located in advance of the pass and adjacent thereto, with means for lowering the dam on the receiver in order to check the flow of glass poured on the receiver until the glass contacts with the dam through the width thereof and for raising the dam out of contact with the glass to permit the glass to flow freely to the forming pass, the face of the dam away from the forming pass being convex to permit the glass to spread more quickly to the lateral ends of the dam while lowered on the receiver.

1,867,941. APPARATUS FOR HEAT-TREATING. PAUL L. GEER, Bellevue, Pa., assignor to Amco, Incorporated, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 23, 1927. Serial No. 242,132. 17 Claims. (Cl. 25—142.)

1. In enameling apparatus, the combination of a drying oven, a burning furnace, said oven and said furnace being separated by an intervening open space, a continuous conveyer extending through said oven, said open space and said furnace, a recuperator receiving the waste gases from the furnace, an air passage connected at two spaced apart



points with the interior of the oven, and a preheated air connection between the recuperator and said passage, the air being withdrawn from the drying oven at one end of the passage and dried and then reintroduced into the drying oven at the other end of the passage.

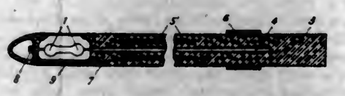
1,867,942. CELLULOSE ESTERS OF HIGH MOLECULAR ORGANIC ACIDS AND PROCESS OF MAKING THE SAME. MAX HAGEDORN and GEORG HINGST, Dessau in Anhalt, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 12, 1929, Serial No. 339,484, and in Germany Feb. 11, 1928. 8 Claims. (Cl. 260—101.)

7. Mixed cellulose esters containing the radicles of a higher fatty acid and of naphthenic acid, said mixed esters being soluble in aromatic hydrocarbons and chlorinated aliphatic hydrocarbons.

1,867,943. METHOD OF CONCENTRATING AQUEOUS SOLUTIONS OF ACETIC OR FORMIC ACID. WALTER NORMAN HAWORTH, Birmingham, England. Filed July 8, 1927, Serial No. 204,424, and in England Oct. 19, 1926. 10 Claims. (Cl. 260—122.)

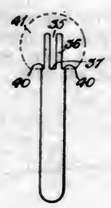
1. The process of concentrating a mixture containing water and a fatty acid miscible with water and containing a soluble salt of said acid, which comprises removing water by distillation therefrom while under an absolute pressure not greater than a few tens of millimeters and then removing concentrated acid by further distillation.

1,867,944. APPARATUS FOR INDICATING THE PRESENCE OF POTENTIAL OR CURRENT IN A CABLE OR OTHER METALLIC CONDUCTOR. HENDRIK AREND HIDDE NIJLAND, Zeist, Netherlands, assignor to Naamlooze Vennootschap Electro-Apparaten-Fabrieken Systeem Coq, Utrecht, Netherlands, a Limited Liability Company of the Netherlands. Filed Nov. 27, 1928, Serial No. 322,262, and in the Netherlands Dec. 10, 1927. 7 Claims. (Cl. 175—183.)



1. As a new article of manufacture, an apparatus for indicating the presence of potential or current in a cable or other metallic conductor consisting in a rod of insulating material with a central metallic core embedded therein entirely within the confines of the rod and extending over only a part of the length thereof, the metallic core being electrically connected with a gas or Geissler tube adapted to be ground.

1,867,945. CONFECTION HOLDER. ROBERT L. HUNTER, Norfolk, Va., assignor to H. B. Hunter Company, Norfolk, Va. Filed May 25, 1931. Serial No. 539,898. 11 Claims. (Cl. 99—16.)

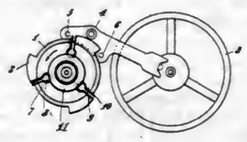


1. A device of the character described comprising a relatively wide thin paddle, said paddle being dished to provide a substantially concavo-convex cross section, and a guard having a slot to frictionally receive said paddle.

1,867,946. PRODUCTION OF ALIPHATIC ACIDS BY FERMENTATION. HENRY BROUGHAM HUTCHINSON, Harbenden, England. Filed Sept. 15, 1930, Serial No. 482,163, and in Great Britain Sept. 30, 1929. 10 Claims. (Cl. 260—120.)

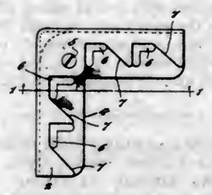
1. In the production of volatile fatty acids by fermentation of saccharine solutions with thermophilic organisms, establishing the fermentation in a relatively large bulk of sugar solution of relatively low concentration, and making gradual addition of sugar solution of relatively high sugar concentration.

1,867,947. ESCAPEMENT WHEEL FOR ANCHOR ESCAPEMENTS. ULRICH KOHLER, Bern, Switzerland, assignor to Hasler A.-G. vormals Telegraphenwerkstätte von G. Hasler, Bern, Switzerland, a Corporation of Switzerland. Filed Dec. 6, 1930, Serial No. 500,621, and in Switzerland Jan. 10, 1930. 4 Claims. (Cl. 58—117.)



1. An escapement wheel having a plurality of radial slots terminating each at the side of a tooth of the wheel, and a plurality of leaf springs, one in each slot, constituting each the side face of the adjacent tooth.

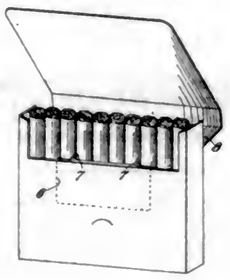
1,867,948. STOVE LEG. JEROME LEE, Cleveland, Tenn., assignor to Hardwick Stove Company, Cleveland, Tenn., a Firm composed of Christopher L. Hardwick and Cooksey E. Hardwick. Filed May 13, 1931. Serial No. 537,101. 3 Claims. (Cl. 126—304.)



1. A stove leg provided with an inwardly extending flange at its upper end, and an attaching plate secured to said flange and projecting beyond the inner edge thereof

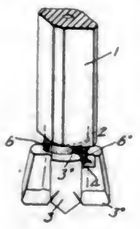
and having a plurality of bolt-receiving slots therein through which bolts may be passed to secure the leg to a stove body.

1,867,949. CARTON FOR CIGARETTES AND LIKE ARTICLES. WALTER EVERETT MOLINS, Deptford, London, England. Filed Feb. 6, 1931, Serial No. 513,975, and in Great Britain Feb. 18, 1930. 3 Claims. (Cl. 206—41.)



1. A cigarette carton in which a portion of the front panel of the cigarette containing member is bent over so that the same lies between the cigarette and the main portion of the panel, the bent over portion being folded to produce ridges which extend to the back panel of the carton, reinforce the same and simultaneously separate the cigarettes into small groups.

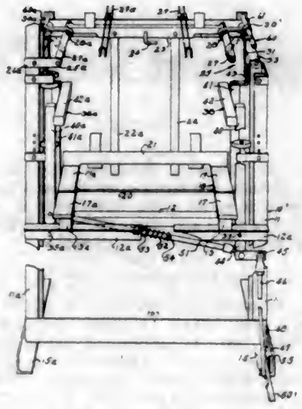
1,867,950. DRILL. HARRY CHARLES NORLEY, North Bay, Ontario, Canada, assignor to Canadian Atlas Steels Limited, Welland, Ontario, Canada, a Corporation of Canada. Filed Nov. 13, 1931. Serial No. 574,880. 4 Claims. (Cl. 255—64.)



4. The combination with a drill shank, of a bit having a recess into which the shank end turnably fits, a projection and coacting bayonet slot connection between the shank and bit, and a withdrawable stop in the slot for preventing disengagement of said projection and slot.

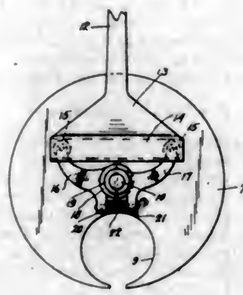
1,867,951. SHOOK CARRIAGE FOR BOX MAKING MACHINES. HALE PAXTON, Sanger, Calif. Filed Dec. 29, 1928. Serial No. 329,230. 11 Claims. (Cl. 1—10.)

1. In combination with a nailing machine having a nailing table adapted to be adjusted in operative position and in inoperative position, of a carriage adapted to be moved on a plane approximately parallel with the plane of said table when the nailing table is in operative position, stop means for said carriage, means for positioning said stop means for active relation with said carriage, and means



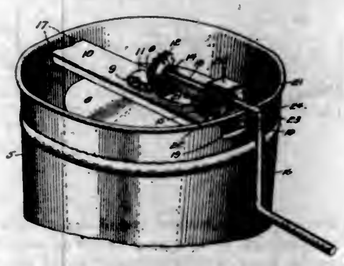
actuated by said nailing table adapted to place said stop means in inoperative relation with said carriage when said nailing table is in operative position as a nailing table.

1,867,952. DUPLEX DISK VALVE. HUDSON DONPHIAN RICE, Jr., and JAMES MADISON BABB, Dallas, Tex. Filed Sept. 4, 1931. Serial No. 561,278. 3 Claims. (Cl. 251—84.)



1. In a valve and operating structure of the class described, a pair of duplicate rotatable disks disposed in contact with each other, said disks having registrable marginal apertures, one disk being provided with an outstanding concentric solid stem, the other disk being provided with an outstanding concentric tubular stem, said solid stem extending through and beyond the tubular stem, a pair of operating arms, said arms being provided at their inner ends with collars, one collar being rigidly attached to the solid stem, and the other collar rigidly attached to the tubular stem, spring means associated with the collar equipped ends of said arms for urging the arms in one direction, the opposite ends of said arms being provided with cam and anti-friction rollers, and a reciprocatory pitman rod for moving said arms in the opposite direction against the action of said spring means having guide means with which said rollers cooperate.

1,867,953. ICE CREAM FREEZER. MICHAEL O. ROLLMAN, Mount Joy, Pa., assignor to New Standard Corporation, Mount Joy, Pa., a Corporation of Pennsylvania. Filed May 20, 1931. Serial No. 538,818. 1 Claim. (Cl. 259—53.)

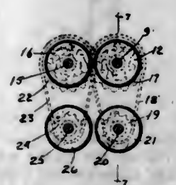


In combination with a bucket having a lock-hole in its body near its rim, a gearing-bridge removably mounted on the bucket and carrying a pair of upstanding journal brackets, a horizontal shaft journalled in said brackets, a yoke-like locking device slidably mounted on said shaft and having one of its legs provided with an outwardly extending locking lip and the lower end of its other leg being provided with a member extending through a hole in the bridge and slidingly engaging the underside of the bridge for the purpose set forth, and a coiled expansible spring arranged within the yoke around the shaft to normally force the yoke into locking position.

1,867,954. PROCESS FOR SULPHONATING FATTY ACIDS AND FATTY ACID DERIVATIVES. MEINDERT DANIUS ROZENBROEK, Delden, Netherlands. Filed June 21, 1928, Serial No. 287,352, and in the Netherlands July 9, 1927. 4 Claims. (Cl. 87—12.)

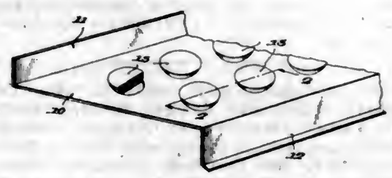
4. A process of sulphonating fatty acids and their esters, comprising sulphonating the material with sulphuric acid in the present of a dehydrating compound of phosphorus.

1,867,955. STRING BEAN HARVESTER. FRANK PITTIS RYDER, Niagara Falls, N. Y. Filed Nov. 9, 1927. Serial No. 232,119. 5 Claims. (Cl. 130—30.)



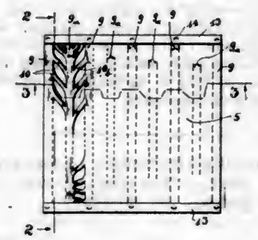
1. A machine for stripping string beans from the bushes on which they are grown comprising a pair of parallel elastic gripping rollers and means for rotating them in opposite directions so as to draw in between them bean pods and bushes, a pair of elastic stripping rollers arranged in line with the gripping rollers, and means for rotating the stripping rollers at a surface speed greater than the surface speed of the gripping rollers so that they will act to move the bean pods in the same direction in which they are moved by the gripping rollers.

1,867,956. BRIQUETTED INTERLOCKING FLASHING. ABRAHAM S. WEINSTEIN, Brighton, Mass. Filed Sept. 8, 1931. Serial No. 561,775. 11 Claims. (Cl. 72—127.)



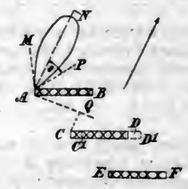
3. In a flashing including mortar interlocking means, a plurality of brick-like mortar-adhering briquettes built therein.

1,867,957. HEAT EQUALIZER FOR BURNERS. KURT O. WETZEL, Los Angeles, Calif. Filed Sept. 16, 1931. Serial No. 563,077. 3 Claims. (Cl. 126—215.)



1. In a heat equalizer of the class described, a body member of rectangular form having cuts made in certain rows spaced from one another slanting in opposite angles in pairs of rows so as to form uncut strips between such rows, every other uncut strip being raised above the remaining of said uncut strips and the ends of the raised strips being bent so that the terminations again become located in the same level with said remaining strips, and securing members applied over the end edges of all strips.

1,867,958. DIRECTIONAL AERIAL FOR TRANSMISSION AND RECEPTION OF ELECTROMAGNETIC WAVES. WILLIAM EWART WILLIAMS, Bromley, England, assignor, by mesne assignments, to British Radiostat Corporation, Limited, a Corporation of Canada. Filed Feb. 13, 1929, Serial No. 339,693, and in Great Britain Feb. 13, 1928. 9 Claims. (Cl. 250—11.)



1. A directional aerial system for the transmission or reception of electromagnetic waves comprising a plurality of similar aerial units individually possessing directional prop-

erties each unit having a predetermined lateral "displacement" with regard to the preceding unit perpendicular to the direction of the maximum radiation of each of said units, said "displacement" being of the order of one wave length of the transmitted or received radiation divided by the sine of the angle between the direction of the principal diffraction maximum of a unit and the direction of the first minimum.

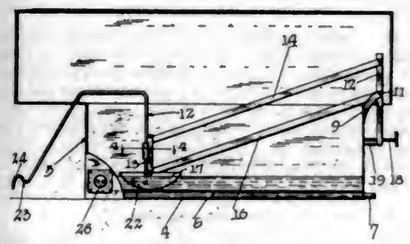
1,867,959. INCANDESCENT CATHODE FOR THERMIONIC TUBES AND METHOD OF MANUFACTURING SAME. ERNST WINTER, Nijmegen, Netherlands, assignor to Naamlooze Vennootschap Splendor Gloeilampenfabriek Splendor Lampworks, Nijmegen, Netherlands. Filed Aug. 28, 1929, Serial No. 389,102, and in the Netherlands Aug. 28, 1928. 4 Claims. (Cl. 250—27.5.)

3. A process for manufacturing incandescent cathodes comprising coating a core with tungsten selenide and barium, and heating the core in a non-oxidizing atmosphere to produce compounds of barium and selenium.

1,867,960. ACID-PROOF STRUCTURE. JOHANN KARL WIRTH, Berlin-Altglienicke, Germany. Filed June 16, 1927, Serial No. 199,412, and in Germany Jan. 5, 1927. 3 Claims. Cl. 72—13.)

1. An acid resisting structure comprising acid resisting building elements and a binder securing said elements together, comprising a mixture of phenolaldehyde condensation products and acids, said binder being mixed a short time before use so that a hardening automatically takes place at ordinary temperatures.

1,867,961. REAGENT FEEDER. JAMES ARTHUR ADAMS, Deming, N. Mex. Filed May 1, 1931. Serial No. 534,397. 2 Claims. (Cl. 137—20.)

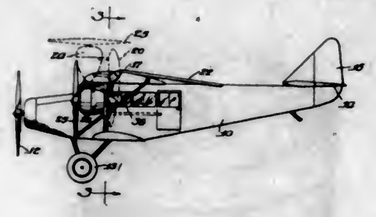


1. In a device of the character described, in combination with a tank, of a parallelogram supporting arrangement secured to said tank, a siphon carried by said parallelogram arrangement, and means associated therewith whereby said siphon may be adjustably positioned relative to the tank.

1,867,962. MANUFACTURE OF M-2-XYLIDINE. LEONARD JAMES ALLCHIN, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, Westminster, England. Filed Mar. 13, 1930, Serial No. 435,628, and in Great Britain Apr. 11, 1929. 2 Claims. (Cl. 260—130.5.)

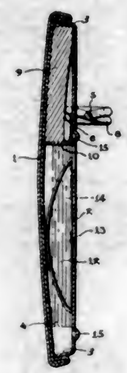
1. Process for the manufacture of m-2-xylidine from the residual mixture of isomerides technically obtained in removing the bulk of such isomerides from the reduction product of crude nitroxylenes which consists in treating this mixture with hydrochloric acid and zinc chloride in hot solution, cooling the solution, removing the double salt of m-2-xylidine which crystallizes, and liberating the m-2-xylidine by treating this salt with alkali.

1,867,963. AIRCRAFT. CHARLES J. BLAHNIK, West Allis, Wis. Filed June 5, 1931. Serial No. 542,426. 1 Claim. (Cl. 244—14.)



An air craft wing structure comprising a center panel fixed to the fuselage, tiltable wing panels at opposite sides of said center panel carrying propellers and power units therefor, and means for tilting said tiltable wing panels and propellers through an arc of 90° with respect to the fuselage, said means including a shaft rotatably mounted in the fuselage, screws, stub shafts rotative in said tiltable wings and provided with threaded bores to receive said screws, means for transmitting rotative movement of said shaft to said screws, and means for rotating said shaft from the pilot's compartment of the plane.

1,867,964. BADGE. JOSEPH BOTT, Rochester, N. Y., assignor to Bastian Brothers Company, Rochester, N. Y., a Corporation of New York. Filed July 25, 1931. Serial No. 553,177. 4 Claims. (Cl. 40—10.)



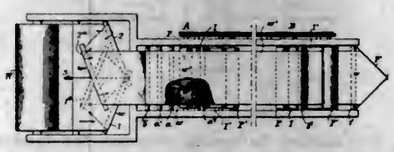
1. A badge of the character specified, comprising spaced front and back plates including an article receiving compartment, one of the plates being provided with a slot for the passage of an article, a deflecting lip at one side of the slot, and a guard adjacent the base of the deflecting lip to prevent casual displacement of the article contained within the receptacle.

1,867,965. CALCIUM CARBIDE CAKE AND METHOD OF MAKING THE SAME. JOSEPH GEORGE DAVIDSON, Yonkers, N. Y., and HAROLD FOSTER ROBERTSON, Coraopolis, Pa., assignors to Carbide & Carbon Chemicals Corporation, a Corporation of New York. Filed Jan. 24, 1930. Serial No. 423,258. 6 Claims. (Cl. 48—60.)

1. Method of forming carbide cakes containing a preponderance of carbide which comprises mixing calcium carbide with a solution of a polymerized vinyl ester, partially drying the mix, forming it into cakes and drying the cakes.

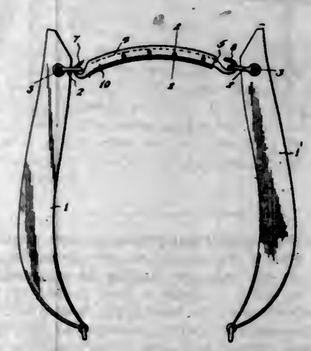
3. A coherent molded body adapted to be reacted upon by water to form acetylene gas, said body comprising calcium carbide in preponderating proporation and a binding agent comprising a polymerized vinyl ester.

1,867,966. WEB FEED FOR TWO PLATE WIDE ROTARY PRINTING PRESSES. EDMUND W. DEAN, Battle Creek, Mich., assignor to Duplex Printing Press Company, Battle Creek, Mich., a Corporation of Michigan. Filed June 13, 1931. Serial No. 544,191. 3 Claims. (Cl. 270—5.)



1. In combination with a printing press having narrow two page wide printing mechanisms arranged with the transverse centers of their cylinders in the same plane; means for supporting a wide web roll parallel with the cylinders of the printing mechanisms with its transverse center in line with the transverse centers of the cylinders, means for centrally slitting the wide web, deflecting devices interposed between the roll and the printing mechanisms whereby the divided sections of the web are first deflected inwardly toward each other and then again deflected into exact parallelism with their center longitudinal lines in alignment with the transverse centers of the web roll and the cylinders, and means for directing the aligned sections to their respective printing mechanisms.

1,867,967. ADJUSTABLE HAME FASTENER. VAN R. DEAN, Springfield, Mo. Filed Aug. 15, 1930. Serial No. 475,487. 1 Claim. (Cl. 54—26.)

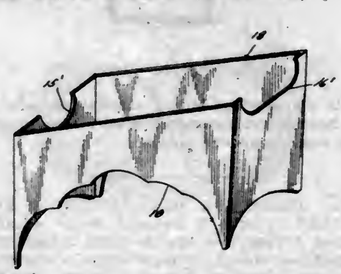


A hame connection comprising a tubular open-ended female member substantially elliptical in cross section and curved longitudinally to conform to the shape of a horse collar, said female member having its outer end cut diagonally and bent upwardly and inwardly in spaced relation to the diagonal cut to form a clevis engaging hook, there being uniformly spaced transverse openings formed in said female member and centered between the upper and lower faces thereof, and the outer walls of said female member being smooth and unobstructed throughout their entire extent, a correspondingly shaped male member adjustably fitted within the female member and having one end thereof provided with a clevis engaging hook and its other end formed with a single transverse opening adapted to register with any one of the openings in the female member, and a fastening device extending through registering openings in said members for holding the same in adjusted position.

1,867,968. HIGH TEMPERATURE LUBRICANT. HERBERT H. DOW, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 13, 1929. Serial No. 378,181. 3 Claims. (Cl. 87—9.)

1. A lubricant consisting of diphenylene oxide.

1,867,969. NURSING BOTTLE SUPPORT. STELLA MEYERS FIEGEL, Marshall, Tex. Filed Feb. 17, 1930. Serial No. 429,186. 1 Claim. (Cl. 248—65.)



A nursing bottle support of the class described comprising a substantially rectangular frame including vertical end and side walls with the top and bottom open, some of said walls having curved recesses therein forming projections at the corners of the device, the upper end of the rear wall having an elongated recess therein provided with a substantially flat bottom wall and the upper end of the front wall having a substantially semi-circular recess therein of less width than the other recess first mentioned for receiving the neck of the bottle, the recess in the rear wall receiving the base part of the bottle and said front wall being of less height than the rear wall for holding the bottle at an inclination.

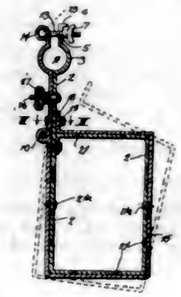
1,867,970. MEANS OF INTRODUCING CHEMICALS INTO RUBBER OR CELLULOSIC MATERIALS. ANTHONY JAMES HAILWOOD, WILLIAM JOHNSON SMITH NAUNTON, and ARNOLD SHEPHERDSON, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England. Filed Sept. 27, 1928, Serial No. 308,875, and in Great Britain Oct. 7, 1927. 2 Claims. (Cl. 204—1.)

1. The process of incorporating organic chemicals into a body of rubber deposited from its aqueous emulsion at an anode by cataphoresis, which comprises admixing sodium diethylthiocarbamate with rubber latex, imposing an electric potential on an anode in said admixture and thereby simultaneously codepositing at an anode the said body of rubber and tetraethylthiuramdisulphide whereby the deposited tetraethylthiuramdisulphide is uniformly and intimately distributed throughout the body of rubber.

1,867,971. CLINICAL WASTE-BAG SUPPORT. FRANK R. HART, Pacific Grove, Calif. Filed Mar. 7, 1930. Serial No. 434,045. 1 Claim. (Cl. 83—26.)

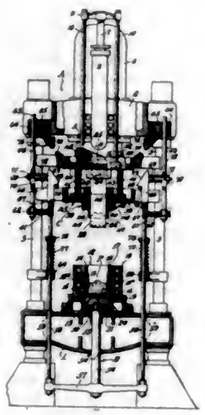
A bag holder comprising a loop-shaped frame adapted to receive the mouth of a bag, and having flat walls, one of which is provided with a horizontal extension carrying a clamping member for attachment to a support, a bag securing member, consisting of a loop-shaped band adapted

to embrace the said frame and the mouth portion of a bag and having a laterally projecting lug, adapted to abut against the said horizontal extension, said band being



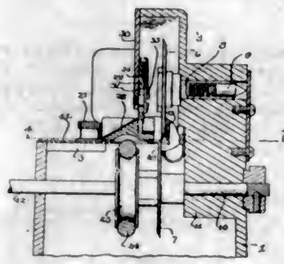
formed in two sections hinged together and one of said sections formed with a clamping member complementary to the first named clamping member.

1,867,972. PRESS FOR MANUFACTURING MOLDED ARTICLES. LESLIE S. HUBBERT, Mount Gilead, Ohio, and CARL J. ZUBE, Los Angeles, Calif., assignors to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed June 8, 1931. Serial No. 542,978. 4 Claims. (Cl. 18—19.)



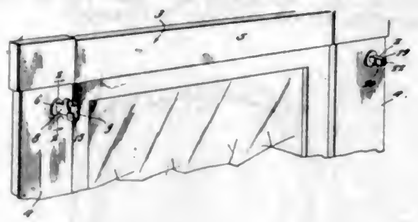
4. In a molding press, the combination with a mold support having an opening for receiving a mold; of a mold adapted to be removably positioned in said opening; a platen mounted for reciprocatory movements relative to said support; a die carried by said platen and adapted to enter said mold during a pressing stroke; a yieldable mold sealing device carried by said platen and engageable with said mold; mold ejecting means adapted to be engaged by said platen during a return stroke of the latter for rejecting said mold from the opening in said mold support after said mold sealing device has become disengaged from said mold; and means for disengaging said ejecting means from the platen when the latter has moved a predetermined distance from the mold.

1,867,973. LETTER OPENER. ARTHUR J. KRIEBE, Rochester, N. Y., assignor to Bircher Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Dec. 5, 1930. Serial No. 500,323. 5 Claims. (Cl. 164—61.)



1. In a machine for opening envelopes, the combination of a hollow base open at the top, upper and lower disk cutters, a table closing the top of the base and provided with an envelope guide and formed at one end with an opening, a pintle depending from the opposite end of the table, an element rotatably mounted upon an end of the base and having the said pintle in eccentric engagement therewith, a threaded stem projecting from the opposite end of the base through the opening of the table, a nut on the stem for securing the table in adjusted position, and a feeding mechanism housed in the base and operating through an opening formed in the table for advancing the envelopes to the cutting mechanism.

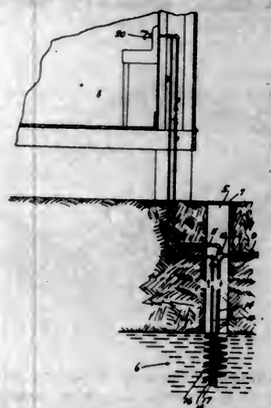
1,867,974. CURTAIN BRACKET. JOHN KROUGH, Philadelphia, Pa. Filed June 8, 1931. Serial No. 542,943. 4 Claims. (Cl. 156—24.)



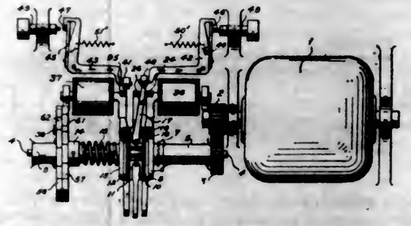
3. A curtain bracket comprising a base adapted to be fixed to a window frame, and an arm projecting from the outer face of said base and having its outer end portion increased in width to form a head projecting beyond a side edge of the arm, the head being formed with a transversely extending slot opening through the side edge of its extended side portion and with a longitudinally extending slot opening into the transverse slot adjacent the outer end thereof, and a tongue projecting transversely from a side edge of said head and bent to overlie a side face of the head and together with the head form a socket open at its ends.

1,867,975. NATURAL WATER COOLING DEVICE. JACKSON L. KILBOURN and ELBERT W. EASTERLING, Appalachia, Va. Filed Aug. 19, 1930. Serial No. 476,350. 1 Claim. (Cl. 62—141.)

In a natural water cooling device of the class described and in combination with a well, a vertically disposed coil located in the water in the well and the lower end of which is restricted and merges into a riser, means for connecting a water supply line with the upper end of the coil and a water feed line rising from said riser and connected thereto.

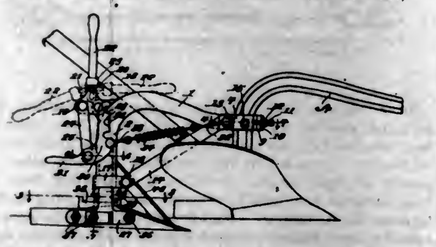


1,867,976. SYSTEM OF SIGNALING AND REPEATER THEREFOR. EDWARD E. KLEINSCHMIDT, Long Island City, N. Y., assignor, by mesne assignments, to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 22, 1924. Serial No. 687,774. 27 Claims. (Cl. 178—17.)



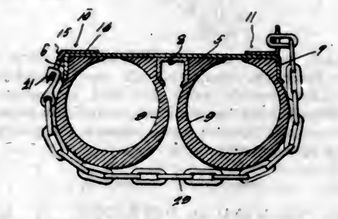
1. In a signaling system in which signal conditions made up of current and no-current intervals are utilized; a receiver comprising a continuously rotating motor; a rotary receiving member adapted to be driven by said motor; and means for causing said receiving member to be driven by said motor when current intervals are received and for arresting rotation of said receiving member during no-current intervals.

1,867,977. SUBSOILING ATTACHMENT FOR PLOWS. WILLIAM KRANZ, Jr., Little Rock, Ark. Filed Apr. 18, 1931. Serial No. 531,208. 2 Claims. (Cl. 97—79.)



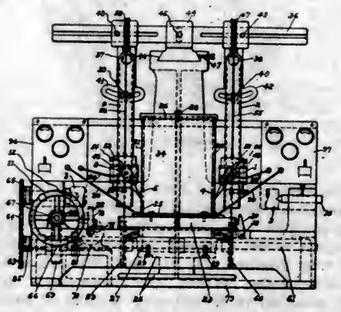
1. A subsoiler attachment for plows, comprising a beam curved upon itself to provide a hollow vertical end portion, means for pivotally securing the opposite end portion to a plow beam, said means being adjustable to accommodate plow beams of various diameters, a plow bracket including a shank mounted for a vertical movement in the hollow portion, a tongue formed with said shank, an operating member pivotally secured to the subsoiler beam, a link having one of its ends pivotally secured to the operating member and its other end pivoted to the tongue, a pivoted handle for the operating member, means for fixedly associating the handle with respect to the operating member, said operating member being adapted to adjust the plow bracket vertically through the medium of the handle, a foot operated latching means for securing the plow beam in any one of its adjusted positions, a plow adjustably secured to the plow bracket, and a root cutter having connection with the plow.

1,867,978. TIRE CHAIN. CLOYD A. LOWE, Dayton, Ohio. Filed May 23, 1931. Serial No. 539,575. 3 Claims. (Cl. 152—14.)



2. An anti-skid device for wheels comprising a chain section, means for securing one end of the chain section to the wheel, a flanged member on the wheel provided with an opening therein for receiving one end link of the chain section, a block, a pin projecting eccentrically from the block through the said end link, and spring means for securing the said block against movement.

1,867,979. WELDING MACHINE. FOR MACHINE CONSTRUCTIONS AND THE LIKE. FRANK H. MAYOH, Springfield, Mass. Filed Jan. 31, 1928. Serial No. 250,897. 16 Claims. (Cl. 219—8.)



1. In a welding machine a welding head, a holding device for the article to be welded, means for moving either said head or holding device with respect to the other to progressively present different portions of the article to the welding head and means to vary the line of operation between said welding head and holding device in a plurality of directions at different tangents.

1,867,980. SHAVING CREAM DISPENSING SAFETY RAZOR. CHARLES A. MELKA, Chicago, Ill. Filed Mar. 13, 1931. Serial No. 522,431. 8 Claims. (Cl. 30—12.)

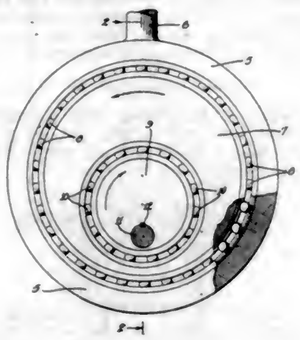
1. A safety razor comprising, a hollow handle adapted to contain a supply of shaving cream, a blade holder detachably connected with the inner end of the handle and

including a pair of resiliently connected plates, a lather spreading element interposed between the blade holder and handle and having a portion thereof spaced from the holder, means to provide a cream passageway from the handle to the space between the holder and lather spread-



ing element, means normally exerting pressure on the cream to force the same through said passageway, an automatically closable valve for said passageway normally preventing discharge of the cream, and means operable by the insertion of a blade between the plates of the holder for opening said valve.

1,867,981. MECHANICAL MOVEMENT. ORA C. MUDD, Edwardsville, Ill. Filed Aug. 18, 1930. Serial No. 476,137. 2 Claims. (Cl. 74—14.)

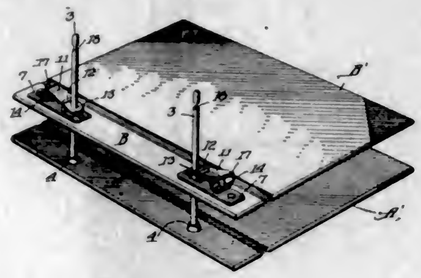


1. The combination of a reciprocable shaft, a rotatable shaft transversely positioned with respect to the reciprocable shaft, a ring member fixedly connected with the reciprocable shaft, a circular member rotatably mounted in the ring member and provided with an eccentrically positioned circular opening, and an eccentric member rotatably mounted in the circular opening of said circular member and fixedly mounted on the rotatable shaft, said circular member and eccentric member being rotatable in opposite directions when the shafts are in motion.

1,867,982. MORPHOLINE DERIVATIVES OF THIURAM TETRASULPHIDE AND THE PROCESS OF MAKING THE SAME. WILLIAM JOHNSON SMITH NAUNTON and JOSEPH BARON PAYMAN, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England. Filed July 6, 1928, Serial No. 290,878, and in Great Britain Aug. 31, 1927. 3 Claims. (Cl. 260—28.)

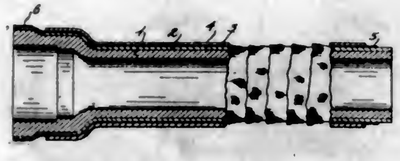
2. As a new product, morpholine derivatives of thiuram tetrasulphide.

1,867,983. BINDER. HENRY E. OLSEN, Chicago, Ill., assignor to W. G. Lloyd Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 23, 1931. Serial No. 510,798. 8 Claims. (Cl. 129—12.)



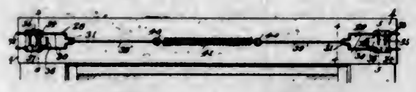
1. A post-binder comprising, a post, a clamping member movably fitted thereon, a locking member apertured at one end to receive said post, means for pivotally supporting said locking member, on said clamping member, spring means for urging said locking member into contact with said post, and a releasable spring catch adapted to hold said locking member out of engagement with said post.

1,867,984. PIPE-LINE COVERING. ADOLPH F. PISTOR, Newark, N. J. Filed Feb. 27, 1931. Serial No. 518,876. 4 Claims. (Cl. 171—316.)



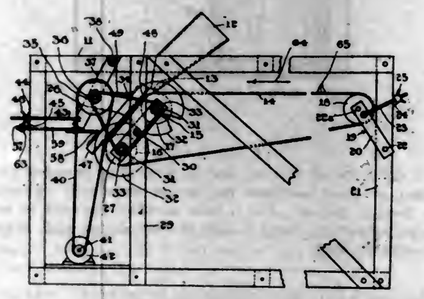
1. A protected pipe line comprising a metallic pipe, an inner coating of bituminous material, a continuous winding of wire mesh carrying conductors at convenient points along the line of progress of the said pipe line by means of which the said wire mesh windings are grounded, and an external coating of bituminous substance.

1,867,985. COMBINED CURTAIN AND SHADE FIXTURE. OMAR JOSEPH PREVOST and FORTUNAT TANGUAY, Rumford, Me. Filed June 24, 1929. Serial No. 373,878. 1 Claim. (Cl. 156—23.)



In a curtain shade fixture, a securing member, said securing member comprising a length of wire material bent intermediate its ends providing parallel arms, the intermediate portion of the securing member being extended at right angles providing a supporting loop, the free ends of the length of wire material being formed into hooks, a support slidably mounted on the securing member, said support comprising a length of sheet metal material, the ends of the length of sheet material being formed into loops for embracing the parallel legs of the securing member, and friction means held within the loops and engaging the parallel leg members to restrict movement of the support with respect to the securing member, and curtain supporting arms extending from the support.

1,867,986. SHELLING MACHINE. ANDREW RANKINE, Lachine, Quebec, Canada, assignor to Canada Malting Company, Limited, Montreal, Canada. Filed Sept. 20, 1929. Serial No. 394,061. 2 Claims. (Cl. 83—35.)



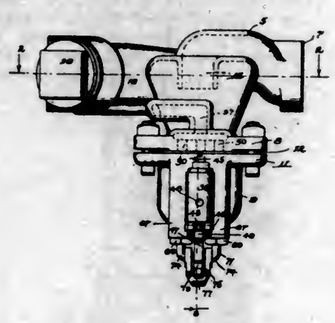
1. A shelling machine comprising a supporting structure, a frame carried by the supporting structure and mounted for swinging adjustment about a horizontal axis, pulleys mounted in the upper and lower portions of said frame above and below said axis, means for securing said frame in various positions of vertical inclination with the upper and lower pulleys disposed in relatively staggered relation, an adjustably mounted return pulley, a substantially horizontal endless carrier trained over said pulleys, the portion of the carrier passing from the upper to the lower of the first mentioned pulleys being inclined by the staggered arrangement of said pulleys to present a sloping surface the angle of which is dependent upon the adjustment of the swinging frame carrying said pulleys, an abrading surface adjustably supported in parallel relation with the sloping surface of said carrier, means for adjusting the abrading surface in the direction of said sloping surface to vary the intervening clearance and means for varying the angular adjustment of said abrading surface to correspond with variations in the angular adjustment of the sloping surface of the carrier.

1,867,987. RESILIENT COUPLING. CLEMENT RUEGG, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 20, 1928. Serial No. 294,302. 9 Claims. (Cl. 64—96.)



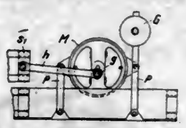
1. A resilient coupling comprising two concentric rotary elements and a substantially concentric arcuate spring, subtending an angle less than 360°, rigidly connected adjacent one end to one element and pivoted adjacent the other end directly to the other element on an axis parallel with the axis of the rotary elements.

1,867,988. COMBINED DUST COLLECTOR AND SHUT-OFF VALVE. LEWIS A. SAFFORD and WALTER D. TYLER, Watertown, N. Y., assignors to The New York Air Brake Company, a Corporation of New Jersey. Filed July 28, 1931. Serial No. 553,670. 8 Claims. (Cl. 303—88.)



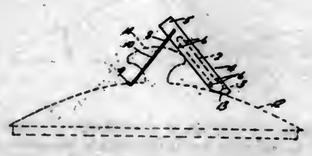
1. In an air brake system, an air cleaning device; fluid pressure operated means for controlling the supply of air to said device; a manually controlled discharge valve for said device; and means for causing said fluid pressure operated means to operate in definitely timed relation to the discharge valve.

1,867,989. METHOD OF AND MEANS FOR TRANSMITTING ENERGY IN THE FORM OF MECHANICAL OSCILLATIONS. GEORG HEINRICH SCHIEFERSTEIN, Berlin-Charlottenburg, Germany. Filed Jan. 25, 1928, Serial No. 249,471, and in Germany Jan. 29, 1927. 6 Claims. (Cl. 74—14.)



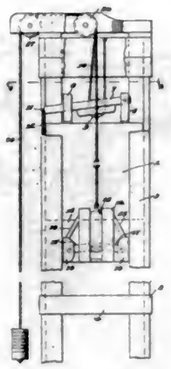
1. A device of the class described, comprising a resiliently supported mass to be oscillated, and mechanism to oscillate said mass, the said mechanism being floatingly mounted and connected to said mass.

1,867,990. THERMOMETER. GEORGE ADAMS SHAMBERGER, Shaw, Oreg. Filed Apr. 27, 1931. Serial No. 533,045. 1 Claim. (Cl. 73—52.)



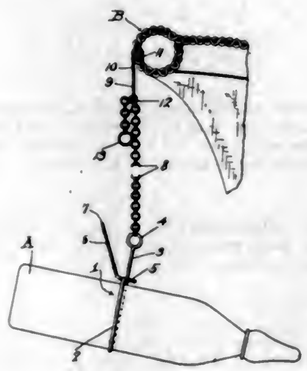
In a device of the kind described, a frame comprising spaced side members, a thermometer including a stem and bulb mounted between the said side members, the said side members being beveled off at their corners at one end flush with the surface of the bulb, a stand comprising a bight portion and spaced legs, the ends of the said legs being pivoted to the frame side members at the ends thereof opposite the thermometer bulb.

1,867,991. SAFETY DEVICE FOR ELEVATORS. JOSEPH F. SHINN, Hackensack, N. J. Filed Oct. 13, 1928. Serial No. 312,266. 4 Claims. (Cl. 187—85.)



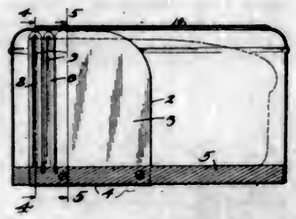
1. In an elevator structure including a lift and a plurality of guide rails, a safety device comprising a housing secured to said lift, a pair of brake-shoes adapted to be moved into engagement with said rails, brake-operating means connected to said brake-shoes and slidably mounted in said housing, and stops engageable with the brake-shoes to maintain the same in operative position with respect to the rails.

1,867,992. NURSING BOTTLE HOLDER. MAURICE S. SULLIVAN, Meriden, Conn. Filed July 9, 1928, Serial No. 291,437. Renewed Jan. 7, 1932. 1 Claim. (Cl. 248—65.)



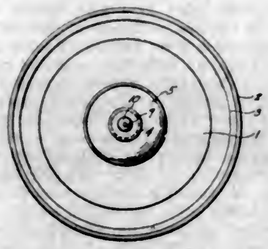
In a clamp of the class described, a single piece of wire bent to provide an intermediate member encircling loop, one end of the wire being bent upwardly, the other end of the wire being formed at its juncture with the free end of the loop with a laterally disposed U-shaped neck, an arm extending upwardly in an inclined manner from said U-shaped neck, said first mentioned upwardly disposed end of the wire adapted to be disposed against the outer face of the U-shaped neck portion that is removed from said upstanding portion to lock the loop in clamping engagement around a member.

1,867,993. BREAD SLICING DEVICE. HARVEY C. TUTTLE, Atlanta, Ga. Filed Dec. 18, 1928. Serial No. 326,821. 6 Claims. (Cl. 146—150.)



1. In a bread slicing device, a holding member composed of sheet material having its ends bent upwardly to form a channel, and a base member disposed in said bread receiving channel and extending the full length of said channel.

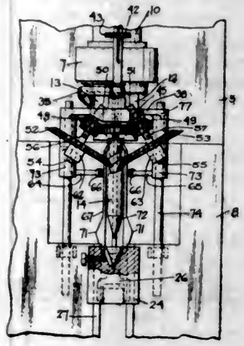
1,867,994. LID FOR COOKING UTENSILS. GERTRUDE C. WISENOR and LEMUEL H. WISENOR, Seattle, Wash. Filed Aug. 30, 1930. Serial No. 479,057. 2 Claims. (Cl. 53—1.)



1. A lid for cooking utensils having a relatively small central, circular opening, and a closure therefor centrally overlying the lid above the opening and substantially larger than the opening, a disk fixed centrally to the closure on its under side, and yieldable legs integral with the disk and projecting into the opening in yieldable holding contact with its edges for adjustably supporting the closure relative to the lid.

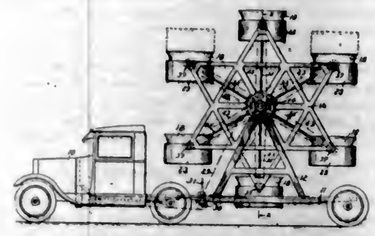
1,867,995. MACHINE FOR MILL CUTTING SINGLE POINT DOUBLE THREAD SCREWS. JOHN A. ARENZ, Mount Vernon, N. Y., assignor to International Screw Co., Wilmington, Del., a Corporation of Delaware. Filed Oct. 18, 1929, Serial No. 400,673, and in Canada Apr. 18, 1929. 1 Claim. (Cl. 10—101.)

In a screw pointing and threading machine, a work holder, means for revolving the holder, a cutter frame, a drive shaft in the cutter frame, guide rods in said cutter frame, means for revolving said drive shaft, a lever for reciprocating the shaft, the frame and the guide rods longitudinally, a cam for operating said lever, a plurality of rotary cutters, arms pivotally mounted on said guide rods and arranged to carry said cutters at the upper ends thereof, driving connections between the drive shaft and each of the cutters, said cutters being disposed at opposite sides of the work to be threaded, a fixed cam engaged by the lower ends of said arms and having a plurality of paths over which said ends travel during reciprocation of said frame to throw the cutters into and



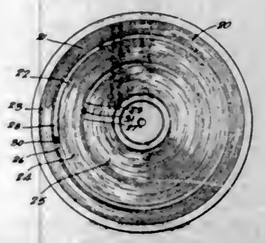
out of engagement with the work and gates in the fixed cam for shunting the lower ends of the arms on to some of said cam paths.

1,867,996. PORTABLE FERRIS WHEEL. JULIUS BAER, New York, N. Y. Filed Dec. 23, 1931. Serial No. 582,674. 9 Claims. (Cl. 272—29.)



1. An amusement device in form of a Ferris wheel, comprising a main horizontal shaft, a circular series of interconnected gondolas mounted to revolve about said shaft and means between said shaft and said gondolas to impart to said individual gondolas rotation in vertical direction so as to retain them in horizontal position while they rotate around said shaft.

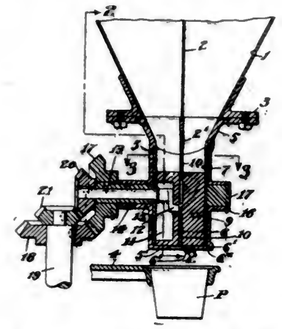
1,867,997. STARTING MARKER FOR PHONOGRAPH RECORDS. HERBERT M. BARUCH, Los Angeles, Calif. Filed Dec. 8, 1930. Serial No. 500,791. 15 Claims. (Cl. 274—42.)



1. A phonograph record of the character described including: a surface scored by an uninterrupted groove;

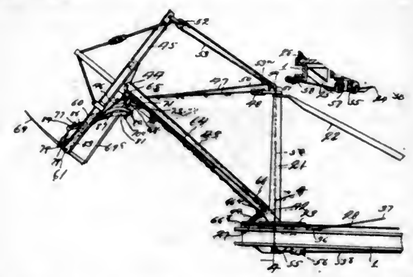
a plurality of groups of sound reproducing sequential indentations provided in said groove; and an indicia disposed in said surface intermediate each of said groups to indicate the beginnings thereof.

1,867,998. PACKAGE FILLING MACHINE. WILLIAM E. BENSON, Boston, Mass., assignor to Kalix Cup Company, West Chelmsford, Mass., a Corporation of Massachusetts. Filed June 26, 1930. Serial No. 463,935. 4 Claims. (Cl. 221—102.)



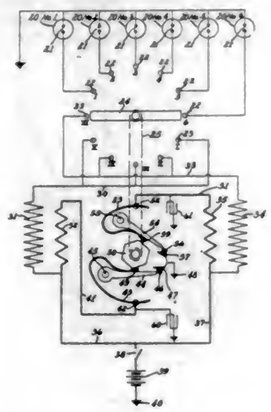
1. Means for dispensing material from a container comprising a rotatable member having a transverse bore, means for rotating said member to bring an end of said bore to a material receiving position and subsequently to a material discharging position, a piston reciprocable within said bore, and means operating in timed relationship to the means for rotating said member to retract the piston when the bore reaches the material receiving position to permit material to enter the bore and to project the piston to force material from the bore when the bore reaches the material discharging position, said piston operating means comprising a shaft coaxial with the axis of rotation of the member, and a crank on said shaft operatively connected with said piston.

1,867,999. LOADING DEVICE. GARRETT M. BRUGLER, Big Springs, Ohio. Filed June 19, 1929, Serial No. 372,102. Renewed Mar. 18, 1932. 5 Claims. (Cl. 214—138.)



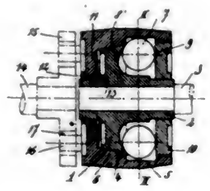
1. A manure loading fork comprising a supporting boom, a fork frame pivoted to said boom intermediate the ends of the fork frame, a fork shaft pivoted in the end of the fork frame, tines carried by the fork shaft, a rearwardly extending arm carried by the fork shaft, a pivoted bearing sleeve carried by the boom, a latch bar pivoted to the rearwardly extending arm of the shaft and slidably mounted in the pivoted bearing sleeve, a latch carried by the sleeve and cooperating with the latch bar, and means cooperating with the fork frame for pivotally moving the same.

1,868,000. IGNITION APPARATUS. CHARLES HALL DAVIS, Jr., Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed June 15, 1931. Serial No. 544,353. 5 Claims. (Cl. 123—148.)



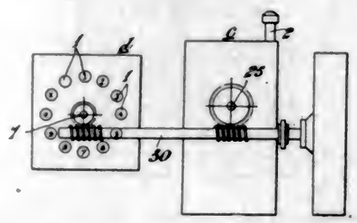
1. Ignition apparatus for a multi-cylinder internal combustion engine comprising in combination, engine controlled means for providing a series of sparking impulses in timed recurring sequence, and means for distributing said sparking impulses comprising a distributor head having a single circular row of terminal inserts or posts one-half of which, located in a continuous series, are connected with engine spark plugs, the remainder being connected with the sparking impulse producing means, said distributing means comprising also a diametrically disposed conductor for bridging diametrically opposite distributor inserts, said conductor being rotatable at one-half engine speed for a two cycle engine, or at one-fourth engine speed for a four cycle engine.

1,868,001. POWER TRANSMITTING MECHANISM. VICTOR JEAN DEFAYS and PAUL JOSEPH LEFEBVRE, Brussels, Belgium. Filed Dec. 26, 1928, Serial No. 328,523, and in Belgium Jan. 4, 1928. 3 Claims. (Cl. 192—105.)



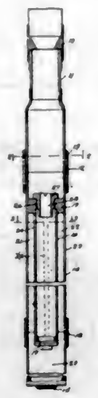
1. In a centrifugally controlled clutch device, a shaft, a plate keyed on the shaft, said plate being formed with a surface which, when intersected by a plane through the axis of rotation of the shaft, forms an angle toward the periphery, a pulley encircling the plate and formed with a surface at right angles to the axis of rotation and spaced from the angularly related surface of the plate, said plate and pulley being formed with cooperating clutch faces, and a plurality of balls arranged freely between the surfaces of the pulley and plate and responsive to centrifugal action in the rotation of either of said elements to compel relative movement between the pulley and plate, and clutching cooperation between said clutch faces of the pulley and plate.

1,868,002. ELECTRIC REMOTE CONTROL APPARATUS. GORDON DOUGLASS, Kensington, London, and STANLEY ROBERT WRIGHT, Bedford, England. Filed Oct. 22, 1928, Serial No. 314,258, and in Great Britain Oct. 24, 1927. 4 Claims. (Cl. 177—380.)



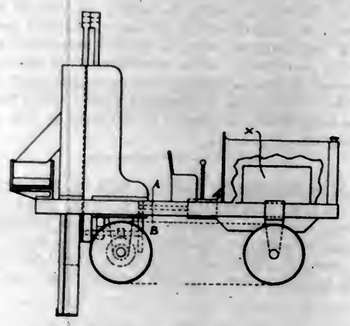
1. In a remote control apparatus, a revoluble transmitter, a motor, a clutch adapted to transmit power from said motor for driving said transmitter, means for starting said motor, preselecting means for stopping said transmitter at a preselected rotary position, whereupon said clutch is adapted to slip, a rotary controller adapted to be driven by said motor, a "transmission-start" switch having positions *a* and *b*, an electromagnetic main switch for said motor, means whereby movement of said "transmission-start" switch to position *b* effects energization of said main switch, means for establishing a maintaining circuit for said main switch upon closure thereof and means whereby upon arrival of said controller at a given position said maintaining circuit is short circuited only if said "transmission-start" switch has returned to position *a*.

1,868,003. SAND AND GAS SEPARATOR. WILLIAM J. DUNLAP, Long Beach, Calif. Filed Apr. 22, 1931. Serial No. 532,034. 3 Claims. (Cl. 103—220.)



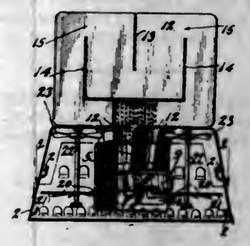
1. A sand and gas separator comprising an outer tube, an inner tube disposed therein, means providing a partition connecting the outer tube to the inner tube, means forming a closure between the top of the outer tube and the inner tube, there being an inlet to the outer tube adjacent its top arranged on one side of the partition, there being an inlet to the inner tube adjacent its top arranged on the opposite side of the partition, and a replaceable member removably mounted at the top of the inner tube having an orifice therethrough of a predetermined size, said replaceable member being relatively short as compared with the length of the inner tube so as to leave the major portion of the interior of the inner tube unobstructed.

1,868,004. DIGGING MACHINE. ANGEL ESPANTOSO, London, England. Filed Feb. 27, 1931, Serial No. 518,794, and in Great Britain Mar. 24, 1930. 5 Claims. (Cl. 37—80.)



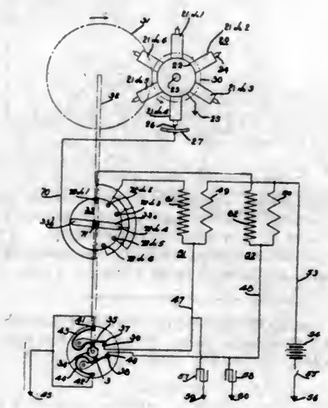
1. A digging machine comprising in combination a tractor, a mechanically operated box cutter mounted upon said tractor, a motor operative to reciprocate said cutter also mounted on said tractor, said cutter being constrained to reciprocate to and from a point below said tractor, a jaw coneting with said cutter and operative to take up a position such that it closes the cutting end of said box cutter when the latter is substantially at the end of its downward stroke and to maintain such a position substantially throughout the upward stroke of said cutter and a discharge conduit having its inlet end telescopically fitting said cutter in all positions of the latter, the length of said box cutter being at least as great as its stroke.

1,868,005. ELECTRICAL HEATER. EARL R. EVANS, Washington, D. C. Filed Dec. 11, 1930. Serial No. 501,731. 13 Claims. (Cl. 219—39.)



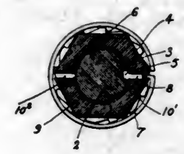
1. Electrical heating apparatus comprising a sheet metal heating element provided with passages therethrough, inductive means for generating currents in said element to heat the same and a fan for circulating fluid through said passages energized by the inductive means.

1,868,006. IGNITION APPARATUS. JOHN T. FITZSIMMONS, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Dec. 15, 1930. Serial No. 502,402. 4 Claims. (Cl. 123—148.)



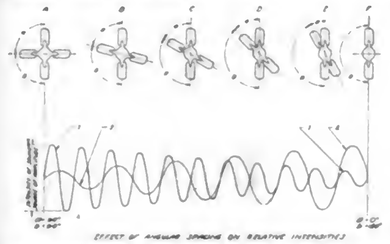
1. Ignition apparatus for a radial, rotating cylinder internal combustion engine, comprising in combination, spark plugs attached respectively to the cylinders and each having a terminal extending therefrom; a stationary segment past which the terminals rotate; sparking impulse generating means comprising a current source, a plurality of induction coils, circuit interrupters for connecting the coils with the current source and means for operating the interrupters alternately; and means for conducting the sparking impulses to the stationary segment.

1,868,007. LOCK NUT. HENRI JOSEPH FRELIN, Belfort, France, assignor to Société Anonyme "L'Ecrou Indesserable Rex," Belfort, France, a Limited Joint Stock Company of France. Filed June 7, 1929, Serial No. 369,247, and in France Aug. 25, 1928. 3 Claims. (Cl. 151—11.)



1. In a device for uniting two or more parts, a bolt, a nut adapted to be screwed on said bolt to insure the tightening of the said parts, said nut having notches in one of its faces, a stop-member in engagement with said bolt intermediate one of said parts and the bearing face of said nut, means opposing the free rotation of said stop-member, an elastic ring having a lug in engagement with one of the notches in said nut, said lug clearing said stop member upon the rotation of said nut in one direction, so as to permit the tightening of said nut, while upon the rotation of said nut in the other direction, said lug will abut against said stop-member thereby preventing the loosening of said nut.

1,868,008. FAN. ARCHIBALD D. GARDNER, Jackson, Mich., assignor to Automotive Fan & Bearing Co., a Corporation of Michigan. Filed Apr. 4, 1931. Serial No. 527,679. 2 Claims. (Cl. 170—159.)



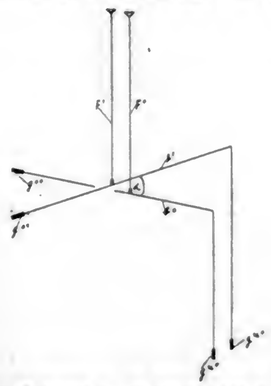
1. In combination, an engine having certain dominant sounds, a member rotated thereby and a plurality of fan blades attached to said member and positioned to produce dominant sounds combining with the first mentioned dominant sounds to produce minimum resultant noise.

1,868,009. SCREW HOLDING SCREW-DRIVER. PAUL GELINSKI, Pasadena, Calif. Filed Jan. 2, 1932. Serial No. 584,491. 5 Claims. (Cl. 145—51.)



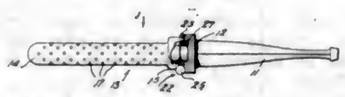
1. A combined screw-holder and driver comprising a shell having a bench end with a screw-head seat, and a driving mandrel tiltably mounted in the shell and having a nib to engage and drive an introduced screw.

1,868,010. TORSION BALANCE. HANS HAALCK, Berlin-Steglitz, Germany, assignor to the Firm: Exploration Bodenuntersuchungs & Veruertungs, G. m. b. H., Berlin, Germany. Filed July 31, 1926, Serial No. 126,187, and in Germany Dec. 22, 1925. 3 Claims. (Cl. 265—1.)



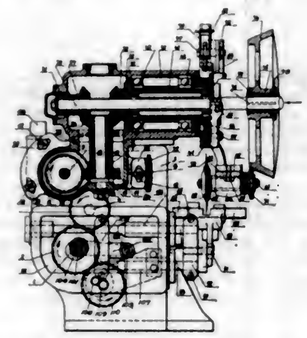
1. A torsional balance of the Eötvös type in which two relatively closely spaced and corresponding hanging beams, each of which is entirely independently suspended with respect to the other, are arranged at an angle to each other instead of being relatively parallel.

1,868,011. CIGAR AND CIGARETTE ASH PROTECTOR AND FIRE PREVENTER. ALPHONSE HAAS, San Bernardino, Calif. Filed Apr. 29, 1931. Serial No. 533,681. 9 Claims. (Cl. 131—51.)



1. A device as described, comprising in combination, a mouthpiece having a recess to receive an end of a cigar or cigarette, a tube closed at its outer end and having a series of perforations with a socket structure at one end having notches to allow contraction of such socket end, the end of the mouthpiece being shaped to fit in the end of the socket, and a clamping sleeve screw-threaded over the outside of the socket and clamping the mouthpiece therein.

1,868,012. CIGARETTE ROD CUTTING DEVICE FOR CIGARETTE MACHINES. MAX PAUL ERNST HOHN, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen Fabrik J. C. Muller & Co., Dresden, Germany. Filed June 20, 1929, Serial No. 372,387, and in Germany Feb. 20, 1929. 10 Claims. (Cl. 131—37.)



1. A cigarette rod cutting device for cigarette machines including a cutter shaft, a rotary cutter mounted on said shaft and planetary gearing for driving the cutter shaft, a spindle, a slide movable and adjustable with respect to said spindle, a plate for the cutter shaft secured to said slide, a second slide, a counter-weight movably and adjustably secured on said second slide and adjusting means for moving the two slides together.

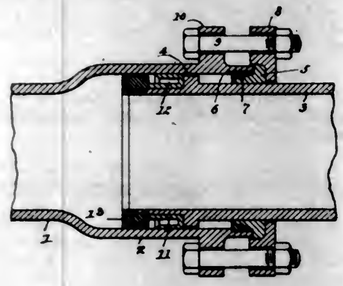
1,868,013. WALL TEXTURE SMOOTHING TROWEL. DAVID R. HUMPHREYS, Los Angeles, Calif. Filed Aug. 28, 1930. Serial No. 478,347. 3 Claims. (Cl. 72—136.)



1. A smoothing trowel comprising a plate of a material of uniform resiliency and uniform thickness, said plate being relatively wide at one end to provide a smoothing portion and relatively narrow at the other end to provide a handle, said plate having a neck of reduced width intermediate said ends to increase the flexibility thereof.

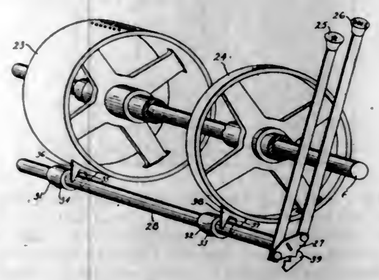
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1,868,014. EXPANSION JOINT. JOHN W. LUCAS, Los Angeles, Calif. Filed Mar. 20, 1929. Serial No. 348,449. 2 Claims. (Cl. 285—162.)



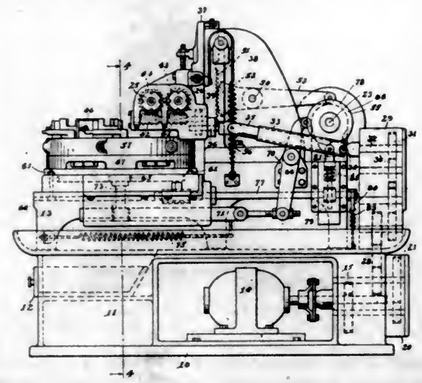
1. In an expansion joint, the combination of an outer pipe having a neck of enlarged diameter at one end, and an inner pipe having its end received within the neck to slide freely through the same and having a shoulder on the same on its outer side located within the neck, said neck having a counterbore at its end, a packing ring seating in the outer end of the neck at said counterbore, a clamping ring outside of the packing ring, an inner packing ring of cup-leather form on the inner end of the inner pipe on the side of said shoulder remote from the first named packing ring and operating to prevent leakage at the joint when the first named packing ring is being replaced, a removable follower ring for retaining the second named packing ring, said inner packing ring having its edges free and having its ends abutting against the shoulder and the follower ring.

1,868,015. CHECK-WRITING MACHINE. WEBSTER H. LULAND, Newark, N. J., assignor to Defiance Manufacturing Corporation, Orange, N. J., a Corporation of New York. Filed Jan. 29, 1930. Serial No. 424,364. 1 Claim. (Cl. 101—95.)



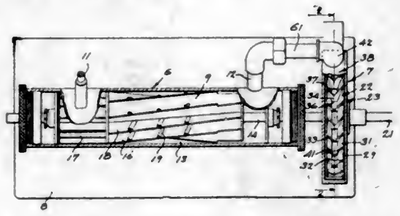
In a check writing machine or the like, the combination with a plurality of ordinal type-carrying members, each bearing type representing a double series of digits, from 00 to 99, and a hand wheel operatively connected with each member; of a type-carrying member located at the left of said first-named members and bearing type representing a single high order digit of the sum represented by said series, a two-position lever operatively connected with said last-named member, and two keys pivoted to said lever, the setting of one of which causes the raising of the other.

1,868,016. MILLING MACHINE. NEWMAN M. MARSILIUS, Bridgeport, and OSWALD A. OLSEN, Stratford, Conn., assignors to The Producto Machine Company, Bridgeport, Conn., a Corporation of Connecticut. Original application filed Nov. 30, 1927, Serial No. 236,647. Divided and this application filed July 9, 1931. Serial No. 549,648. 5 Claims. (Cl. 90—56.)



1. In a milling machine, a turret, means for indexing the turret, locking means for the turret including a bolt carrying rack teeth, to engage the turret, a shaft, a pinion on said shaft engaging said rack teeth, a second pinion on the shaft spaced from the first pinion, a rack engaging said second pinion, a cam for moving said rack to rotate the shaft to move the bolt and lock the turret.

1,868,017. TURBINE. ANTHONY C. MCGINTY, Los Angeles, Calif. Filed Aug. 13, 1931. Serial No. 556,779. 1 Claim. (Cl. 253—50.)

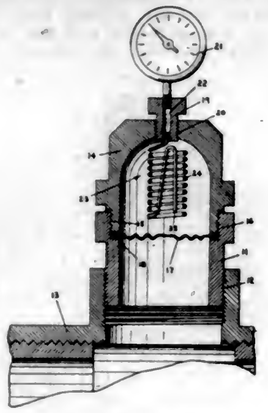


In a turbine, a housing having a circular chamber, a shaft journaled axially thereof, a rotor carried by said shaft and comprising a wheel having a rim and a pair of spaced flanges on the outer face of said rim, the inner faces of said flanges diverging radially outwards with respect to said wheel to define an annular groove between said flanges, said groove being wider at the top than at the bottom, and plates carried by said flange within said groove, each plate being inclined with respect to a true radius of such wheel, the direction of inclination being radially inwards and in the direction of the wheel's rotation, and each blade being also inclined from its associated flange in said direction of rotation and toward the other flange, each blade being disposed directly opposite and joined along its inner edge to a blade on the opposite flange.

1,868,018. PRESSURE OR GRAPHIC GAUGE PROTECTOR. EARL J. MINER, Los Angeles, Calif. Filed Oct. 9, 1929. Serial No. 398,430. 1 Claim. (Cl. 72—31.)

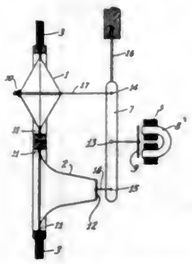
A gauge protector comprising a nipple and a cap, a diaphragm supported on the nipple and held in position there-

on by the cap, said nipple being adapted to be connected to a source of pressure, said cap providing an interior chamber above the diaphragm, a choke tube disposed



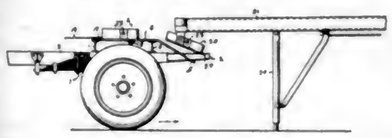
wholly within said chamber and leading to an outlet in the cap, a pressure gauge connected to the choke tube, and a fluid in the chamber and choke tube for transmitting pressures from the diaphragm to the gauge.

1,868,019. ACOUSTIC DEVICE. JOHN PRESTON MINTON, White Plains, and ABRAHAM S. RINGEL, Brooklyn, N. Y., assignors to Radio Corporation of America, a Corporation of Delaware. Filed July 20, 1925. Serial No. 44,735. 25 Claims. (Cl. 181—31.)



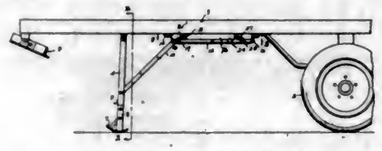
1. The method of reproducing oscillations of different frequencies which consists in impressing these oscillations upon elements having different natural responses and combining the responses thus produced whereby a constant response results and preventing the oscillations developed on both sides of the elements from intermingling.

1,868,020. LOAD CARRYING VEHICLE. WILLIAM C. NABORS, Mansfield, La. Filed Dec. 30, 1930. Serial No. 505,528. 5 Claims. (Cl .280—33.1.)



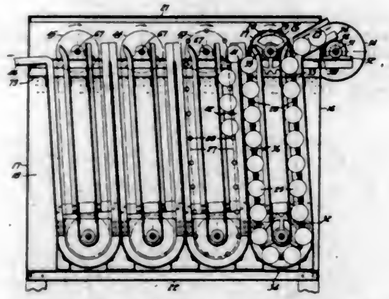
3. Coupling means for connecting a trailer to a tractor comprising means on the rear end of the tractor for elevating the forward end of the trailer when said tractor and trailer are relatively moved into position to be coupled together, releasable interlocking means carried by the tractor and trailer respectively adapted to interengage to couple the tractor to the trailer upon such relative movement, said interlocking means comprising interfitting parts, one of said parts being mounted to pivot on approximately a vertical axis on the tractor and the other part being mounted to pivot on approximately a horizontal axis of the trailer, yieldably mounted dogs on one of said parts, the other part having bearings to receive said dogs and coacting means effective to withdraw said dogs from said bearings upon the rotation of the dogs.

1,868,021. VEHICLE TRAILER. WILLIAM C. NABORS, Mansfield, La. Filed June 5, 1931. Serial No. 542,334. 4 Claims. (Cl. 280—33.1.)



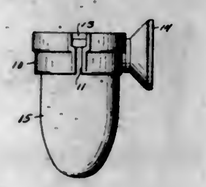
4. A trailer having a frame and supporting wheels therefor, supporting legs pivoted to the frame and arranged to support the forward end thereof, tracks on the frame, links pivoted at one end to the legs and having bearing means at their other ends which move on said tracks, pairs of dogs engageable with said bearing means to hold the latter at either end of the tracks and means movable along one of said tracks and engageable underneath one dog of either pair and effective to hold the dogs of said pair of dogs in inactive position out of engagement with said bearing means.

1,868,022. COOKER. JOHN J. NEVILLS, Oakland, Calif., assignor to Libby, McNeill & Libby, San Francisco, Calif., a Corporation of Maine. Filed Jan. 23, 1931. Serial No. 510,628. 6 Claims. (Cl. 198—82.)



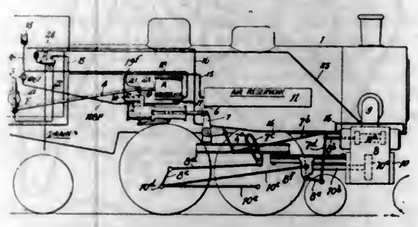
1. In a cooker of the class described, a plurality of endless conveyors each following an oval path, the paths of said conveyors lying in the same vertical plane with the longitudinal axis of each oval path inclined from the true vertical, each of said conveyors serving to convey cans delivered to the cooker first downwardly and then upwardly, a guide member associated with each conveyor for retaining the cans upon the conveyor during their upward travel, each of said guide members terminating at its upper end at a point which is below the upper extremity of the oval path followed by its associated conveyor, the inclination from the vertical of the upward travel of the cans being in such a direction that the cans fall away from the conveyor when the upper end of the guide member is reached and are caused to topple gravitationally over the end of the guide member into the downwardly moving side of the succeeding endless conveyor.

1,868,023. ASH OR CIGARETTE RECEPTACLE. ROY INNESS NORTH, Hoosick Falls, N. Y. Filed May 7, 1929. Serial No. 361,242. 1 Claim. (Cl. 206—19.5.)



A cup-shaped receptacle tapering toward its lower end and a stiff, resilient, annular support therefor having means for attachment to a wall, the support around the inner face of its upper edge being increased in internal and external diameter and being split at one point by a transversely extending slit, the slit being widened at its upper portion where it intersects that portion of the annulus having an increased diameter, the receptacle being insertible into the support and expanding it when so inserted, the upper margin of the receptacle being formed with a flange seating within the large upper portion of the support and being formed with a cigarette receiving notch, the sides of the notch being adapted to bind upon a cigarette and hold it against movement, and interengaging means on the support and on the flange of the receptacle locking the receptacle from rotary movement when fully inserted in the support and holding the receptacle with its cigarette notch in register with the enlarged upper portion of the slit extending across the support.

1,868,024. CUT-OFF CONTROLLING MECHANISM FOR AND METHOD OF OPERATING LOCOMOTIVES. EDWIN S. PEARCE, RAYMOND W. RETTERER, and EDMOND C. KARIDO, Indianapolis, Ind. Filed May 5, 1925. Serial No. 28,103. 3 Claims. (Cl. 121—142.)



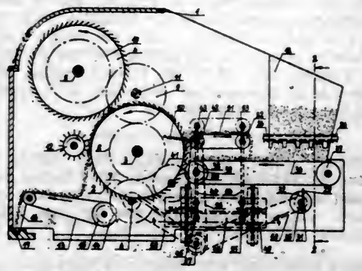
2. In a locomotive, an apparatus for maintaining either one of two predetermined back pressures substantially constant, one for maximum capacity and the other for maximum efficiency when less than maximum capacity is desired; said apparatus including in combination with the locomotive cylinders, pistons, valves, valve gear and exhaust; a power reverse gear, and a motor device for actuating said reverse gear having a member which is movable by changes in back pressure, means opposing and preventing said motion up to that predetermined back pressure which will produce maximum efficiency when less than maximum capacity is desired, and means for applying fluid pressure to said movable member to increase its effective opposition up to that predetermined back pressure which will result in maximum capacity, said motor device functioning to hook back the reverse gear when the back pressure rises above either of the two pressures for which the device may be set, and to advance it when the back pressure falls below said pressures.

1,868,025. FERTILIZER DISTRIBUTOR. JOHN F. RAVENCROFT, Union Mills, Ind. Filed May 9, 1931. Serial No. 536,124. 3 Claims. (Cl. 275—11.)



1. In a fertilizer distributor, a tubular body, an outwardly flaring base continuous with the body, a conical wall within the base spaced therefrom to provide an annular passage therearound for fertilizer, a cup within the body having an opening through its bottom of less diameter than that of the body receiving the apex of the conical wall therethrough, a funnel at the mouth of the body, and a tube within the body discharging into said cup from the funnel.

1,868,026. TOBACCO SPREADING DEVICE FOR CIGARETTE MACHINES. CONSTANTIN FRIEDRICH RÖBER, Dresden, Germany, assignor to Universelle Cigarettenmaschinen Fabrick J. C. Müller & Co., Dresden, Germany. Filed Apr. 6, 1928, Serial No. 267,894, and in Germany Apr. 25, 1927. 6 Claims. (Cl. 131—39.)

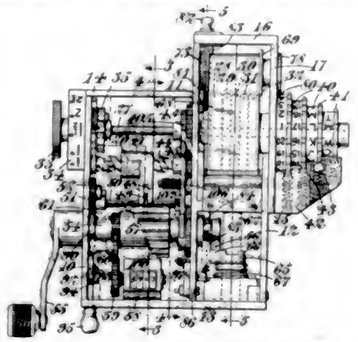


1. A tobacco spreading device for cigarette machines including in combination, a hopper for the tobacco, tobacco loosening means disposed within said hopper, a horizontal endless band constituting the bottom of said hopper, a take-up roller located adjacent the delivery side of the endless band to receive the tobacco from the endless band, and a presser roller disposed over the endless band and adapted to be pressed resiliently against said take-up roller substantially as and for the purpose set forth.

1,868,027. PORTABLE MACHINE FOR PRINTING TICKETS. HENRY ROY SETRIGHT, London, England. Filed Aug. 19, 1930, Serial No. 476,320, and in Great Britain Nov. 2, 1929. 3 Claims. (Cl. 101—66.)

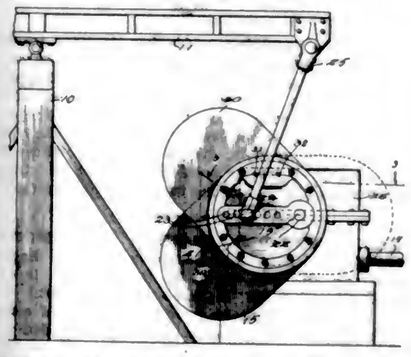
1. A portable machine for printing the value of a ticket and other variable data on ticket blanks intended to be manually inserted one at a time into the machine from the outside, comprising a casing having an opening through which a blank is to be manually inserted a plurality of settable type wheels with which an inserted blank is in operative relation and one of which is arranged

to print the value of a ticket on a blank, a plurality of nested setting shafts each having a separate one of the type wheels secured to it and reaching through the casing to the outside thereof, a setting member secured to each setting shaft outside the casing, a platen mounted to reciprocate in the casing towards and away from the type wheels, a spring pressing the platen towards the type-members, an actuating shaft which is mounted in the casing so that its axis extends substantially at right angles to the direction of movement of the platen and parallel to the axis of the nested setting shafts, an actuating handle secured to the actuating shaft, an abutment carried by the platen, a co-operating cam secured to the operating shaft and arranged to move the platen away



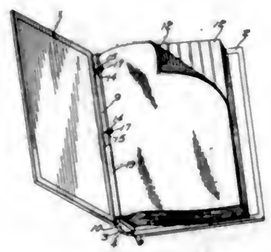
from the type-members and to release it suddenly as the handle is operated, a toothed wheel operatively connected to the setting shaft for the value type wheel so as to be adjusted to angular position in accordance with the setting of said shaft, a locking member movable between a locking position in which it engages and locks said toothed wheel against adjustment and a free position in which the toothed wheel is unlocked and a disc which is operatively connected to the actuating shaft to rotate therewith and the periphery of which engages and holds the locking member in its locking position and is formed with a recess into which the locking member can enter to move to its free position only when the actuating handle is in its initial position.

1,868,028. COUNTERBALANCE FOR WELL PUMPS. ALVA L. SKINNER, Bridgeport, Ill. Refiled for abandoned application Serial No. 322,467, filed Nov. 28, 1928. This application filed Feb. 17, 1930. Serial No. 429,168. 14 Claims. (Cl. 74—71.)



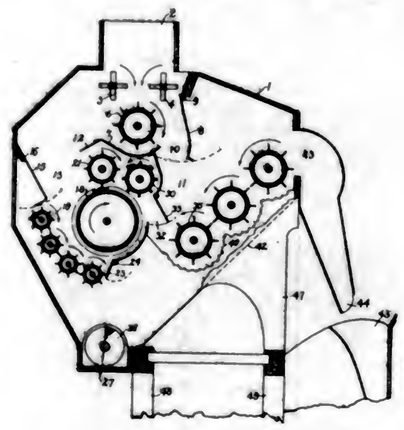
6. In a counterbalancing device for well pumping apparatuses, a shaft, an eccentric on the shaft, a plurality of weights mounted on the eccentric for movement in parallel planes, and means for simultaneously moving the weights in opposite directions.

1,868,029. BOOK. AUGUSTUS STEINTHAL, New York, N. Y. Filed Oct. 30, 1931. Serial No. 571,948. 6 Claims. (Cl. 281—19.)



4. In a book of the class described, a case, a leaf-carrier, a set of leaves having registering transverse holes formed therein, flexible attaching means extending through the holes in said leaves and releasably attached to said leaf-carrier, and means arranged in the back of said case for detachably mounting the leaf carried therein.

1,868,030. FEEDER FOR HULLY COTTON. JOHN ARNOLD STREUN, Sherman, Tex., assignor to Hardwicke Etter Company, Sherman, Tex. Filed Aug. 22, 1929. Serial No. 387,582. 10 Claims. (Cl. 19—37.)

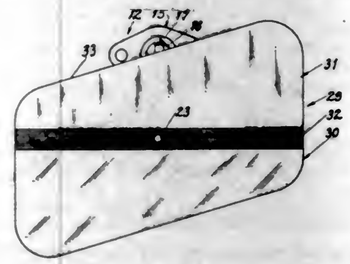


1. In a cotton huller and cleaner, means to selectively direct the cotton to a cleaner chamber or a huller chamber, and means to control the degree of treatment in said hulling chamber including adjustable baffles at the entrance and exit of said huller chamber.

1,868,031. GLARE SHIELD FOR VEHICLES. WILLIAM SUDBRINK, New York, N. Y. Filed May 7, 1931. Serial No. 535,692. 2 Claims. (Cl. 296—97.)

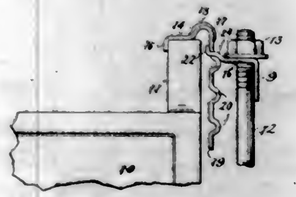
1. In a duplex glare shield adapted for diminishing oppositely-directed glares in a vehicle body, the combination with a support and means for adjusting the position of said duplex glare shield for simultaneous visibility through the windshield and rear window, one of said glare shields being of partially-transparent material for diminishing front view glares and being positioned below a narrow non-reflecting opaque spacing zone extending the full width of the duplex glare shield, and the other glare shield being of opaque and enameled material and forming a surface adapted to absorb the rear view glares

and causing only partial reflection of said glares and being positioned above said non-reflecting spacing zone, said glare shields serving to present two distinct and



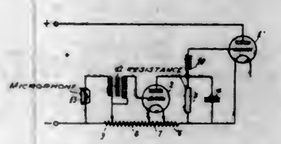
closely spaced and non-merging images of front and rear road conditions simultaneously visible to the operator at a glance.

1,868,032. BATTERY HOLD-DOWN. HENRY G. THOMPSON, Cleveland, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed May 27, 1929. Serial No. 366,487. 3 Claims. (Cl. 180—68.5.)



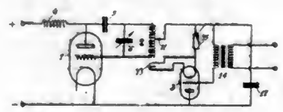
1. A battery hold-down comprising a bracket member adapted to engage a battery, said bracket member having a depending strap, a plurality of humps spaced along the length of said strap, and a hook member adapted to be engaged by a hold-down bolt, said hook member having a saddle adapted to seat upon any one of said humps, said hook member also having a slot therethrough in which said strap is adjustable up and down.

1,868,033. MODULATING ARRANGEMENT FOR TRANSMITTER TUBES. RUDOLF URTEL, Berlin, Germany, assignor to Telefunken Gesellschaft Für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 24, 1929, Serial No. 334,700, and in Germany Feb. 13, 1928. 6 Claims. (Cl. 179—171.)



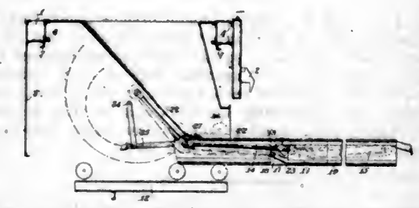
3. A thermionic discharge device comprising a cathode, an anode and a control electrode, a circuit connecting said anode and cathode including a source of current and a resistance in series, a second circuit connecting said control electrode and cathode, said second named circuit comprising a space current device and a portion of said resistance in series and means shunted across another portion of said resistance for controlling the value of the space current through said space current device.

1,868,034. MODULATING ARRANGEMENT FOR TRANSMITTER TUBES. RUDOLF URTEL, Berlin, Germany, assignor to Telefunken Gesellschaft Für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Feb. 6, 1929, Serial No. 337,776, and in Germany Feb. 13, 1928. 6 Claims. (Cl. 179—171.)



6. In a modulation system, a space discharge device having an anode, a cathode and a control electrode, a parallel resonant circuit comprising an inductance and a capacity connected between said anode and control electrode, a second capacity connected between said cathode and a point on said inductance, a second space discharge device having a cathode, an anode and a control electrode, the anode thereof being connected to one side of said second capacity and the cathode thereof to the other side of said second capacity and means for energizing to an electron emitting condition the cathode of said second space discharge device with oscillatory energy from said resonant circuit.

1,868,035. DEVICE FOR TRIMMING COAL AND LIKE MATERIAL IN SHIPS. DIRK VALSTAR, Rotterdam, Netherlands. Filed Sept. 6, 1930, Serial No. 480,114, and in the Netherlands Oct. 19, 1929. 5 Claims. (Cl. 214—15.)

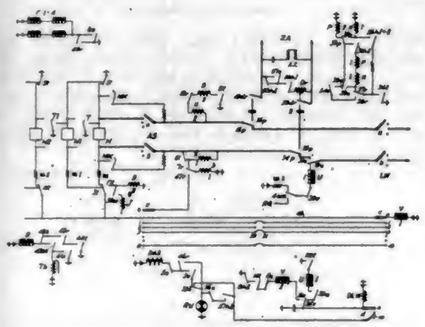


1. An apparatus for trimming and spreading granulous material in the hold of a ship combining a frame member adapted to be positioned adjacent the hatchway of a vessel; a hopper member carried by said frame and having its discharge end located below the hatchway; distributing mechanism carried by said frame for conveying the material delivered by the said hopper to places in said hold remote from the hatchway, said distributing mechanism comprising a multi-part hinged conveyor arranged to be foldable within said frame member or extensible laterally therefrom; and means for extending one or more of said sections laterally beyond said frame member.

1,868,036. TELEPHONE SYSTEM. ADOLF WASCHNACK, Neu-Finkenkrug, near Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Filed Sept. 12, 1931, Serial No. 562,478, and in Austria Aug. 23, 1930. 8 Claims. (Cl. 179—27.)

1. In a telephone system, a local exchange, a trunk extending from a main exchange to said local exchange, a finder connector link at said local exchange for estab-

lishing local connections, means for connecting the talking conductors of said trunk to the talking conductors of said link, and means for controlling a portion of said



link as a setting route and another portion of said link as a speaking route when incoming connections are set up over said trunk by said main exchange.

1,868,037. METHOD OF PRODUCING ANGLE FITTINGS. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Filed Apr. 13, 1927. Serial No. 183,369. 2 Claims. (Cl. 29—157.)

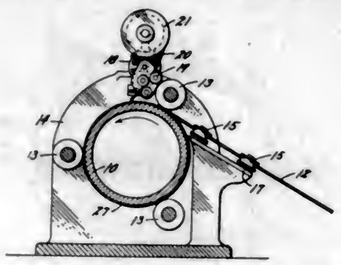
1. A method of producing angle fittings, consisting in forming a zone of increased thickness at one end of a tubular part; forming a passage with a counterbored entrance; channeling the annular wall of said counterbored entrance parallel with respect to the axis of said passage; and expanding the said end of said tubular part within said entrance with non-rotatable fluid-tight interlocking engagement with said wall.

1,868,038. METHOD OF MAKING LINOLEUM. WILLIAM E. WHITNEY and HARRY G. HASSENPLUG, Philadelphia, Pa., assignors, by mesne assignments, to Sloane-Blabon Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 4, 1928. Serial No. 323,784. 2 Claims. (Cl. 154—25.)

1. The process which consists in coating the hygroscopic fibrous backing of linoleum with a viscous aqueous emulsion containing finely comminuted cork, rendering the emulsion when solidified partially pervious to moisture.

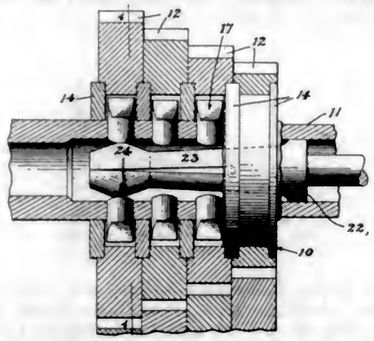
1,868,039. SPIRAL PIPE MACHINE. FRED L. WILLIAMS, Denver, Colo., assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Original application filed May 22, 1922, Serial No. 562,701. Divided and this application filed Aug. 18, 1930. Serial No. 475,920. 3 Claims. (Cl. 219—6.)

1. A machine for forming spiral, butt-welded pipe from a continuous strip of sheet metal comprising: a rotating mandrel; substantially as large as the internal diameter of the pipe to be formed; means for feeding a continuous strip of sheet metal onto said mandrel at an angle to the axis thereof so that the edge of the oncoming strip will lie in the same plane as the strip previously rolled; means for holding said metal to the surface of said mandrel, said means comprising rolls inter-



spaced about said mandrel and means for continuously welding the edge of the oncoming strip to the edge of the strip previously rolled as said spiral is formed.

1,868,040. CONSTANT MESH GEAR TRANSMISSION CLUTCH. ROY T. WISE, Berkeley, Calif., assignor to Wise Patent and Development Company, New York, N. Y., a Corporation of Delaware. Filed July 17, 1929. Serial No. 378,862. 15 Claims. (Cl. 192—78.)



1. A clutch of the character described comprising an inner and an outer member adapted to revolve concentrically, the outer member being formed with a bore having a slightly eccentric portion, clutch means arranged within this bore and adapted to be driven by the inner member, said clutch means normally revolving within the bore, and a resilient actuator rod for moving the clutch means into driving engagement with the outer member and arranged to assume a yielding and non-yielding position, said resilient actuator rod being contracted to its non-yielding position when the clutch means is in operative engagement with the outer member to provide a positive driving engagement between the inner and outer members and automatically take up wear between the parts.

1,868,041. SHOE FILLER PIECE. ALFRED H. AVERY, Malden, Mass., assignor to North American Chemical Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 13, 1927. Serial No. 212,747. 15 Claims. (Cl. 36—30.)

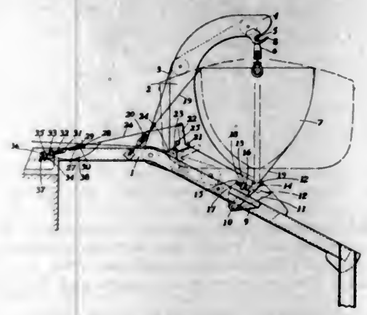


1. An article of manufacture, consisting of a shoe filler piece provided with a multilayer filler piece at least one layer of which is corrugated and another layer is spreadable.

1,868,042. IRRADIATION PROCESS. ISAY A. BALINKIN and CLIFFORD F. MUTH, Cincinnati, Ohio. Filed Mar. 23, 1929. Serial No. 349,512. 4 Claims. (Cl. 6—5.)

4. The process of treating a fertile queen bee which consists in irradiating it at around 39 inches distance with light poor in heat rays but rich in ultra violet rays up to 2750 Angstrom units, for three successive days, for increasing intervals of around one minute, two minutes and five minutes, for the purpose described.

1,868,043. CHOCK FOR SHIPS' BOATS. JOHN SYDNEY BARCLAY, London, England, assignor to Barclay Davit Company Limited, London, England, a Company of Great Britain. Filed Feb. 21, 1931, Serial No. 517,609, and in Great Britain Feb. 27, 1930. 14 Claims. (Cl. 9—22.)



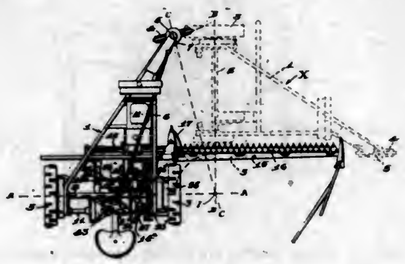
1. In combination with a davit arm for a boat, a chock, operating means associated with said davit arm, said operating means serving to actuate said chock when the boat is substantially in its inboard position so as to cause the said chock to engage with and support said boat, and gripes for securing said boat, a track for said davit arm, a lever pivotally mounted on said track, one end of said gripes being attached to said track, whilst the other end of said gripes is detachably connected to said lever after said gripes have been passed around said boat, and means for attaching said lever to a fixed point of said track, the arrangement being such that whilst the lever is attached to the fixed point release of the gripes and movement of the chock is prevented, whilst when the lever is released the weight of the boat acts on the chocks and initiates the outboard movement of the said davit arm.

1,868,044. METHOD OF PRODUCING IRONCARBONYL. LEOPOLD BRANDT, Dortmund-Horde, Germany, assignor to Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Sept. 5, 1929, Serial No. 390,649, and in Germany Sept. 22, 1928. 4 Claims. (Cl. 23—203.)

1. Process of producing iron carbonyl, comprising reducing iron compounds such as ores, mixing the metallic iron thus obtained with finely divided copper and causing carbon monoxide to act upon the mixture thus obtained for producing iron carbonyl.

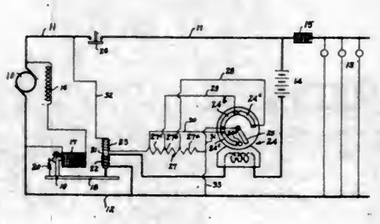
1,868,045. MOTOR AGRICULTURAL MACHINE. CHARLES S. BROWN, Syracuse, N. Y. Filed Mar. 28, 1928. Serial No. 265,339. 8 Claims. (Cl. 56—25.)

1. A motor agricultural machine comprising a frame, driving wheels supporting the rear end of the frame and arranged in transverse axial alinement, motor means carried by the frame for driving said wheels, operator controlled means for disconnecting one of the drive wheels from the motor mechanism, means for braking



said disconnected wheel, a steering wheel arranged at the front of the frame in line with one of the driving wheels and means for operating the steering wheel.

1,868,046. SYSTEM OF ELECTRICAL DISTRIBUTION. THEODORE S. COLE, New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Oct. 16, 1926. Serial No. 141,971. 6 Claims. (Cl. 171—313.)

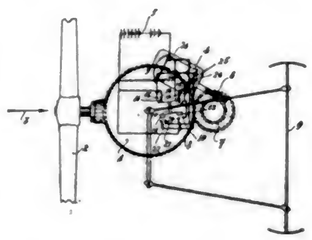


1. In a system of the character described, in combination, a generator, a storage battery connected to be charged thereby, an ampere hour-meter for determining the state of charge of said battery, regulating means for said generator, means including a coil responsive to current flowing to said battery for operating said regulating means, a coil for affecting the standard of operation of said regulating means, and a variable resistance under the control of said ampere hour-meter for varying the energization of said last-mentioned coil substantially proportionately to the state of charge of said battery, said second-mentioned coil having no regulating effect when said variable resistance has a value corresponding to substantially full charge indication by said ampere hour meter and said second-mentioned coil holding a constancy of current, when said ampere hour meter indicates substantially full charge, so low in value as to be substantially harmless to the battery.

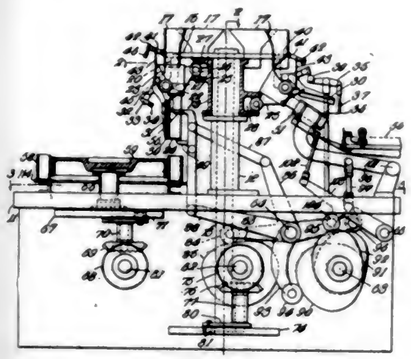
1,868,047. ORIENTING AND AUTOMATIC STOPPING DEVICE FOR WIND MOTORS. LOUIS CONSTANTIN, Paris, France, assignor of one-half to Paul Fortier-Beaulieu, Roanne, Loire, France. Filed Mar. 30, 1929, Serial No. 351,312, and in France Apr. 4, 1928. 8 Claims. (Cl. 170—57.)

1. A device for orienting wind motors having a rotatable head carrying said wind motor comprising, in com-

bination, a wind-vane having orienting surfaces mounted upon an articulated quadrilateral, an auxiliary wind motor and a double clutch controlled by said wind motor adapted to initiate by means of said auxiliary wind motor the rotation of said rotatable head.



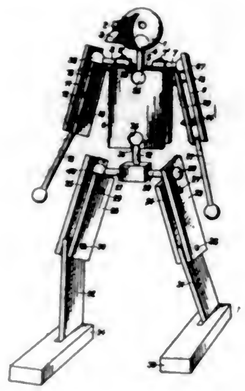
1,868,048. MACHINE FOR MAKING AND FILLING PACKETS. ALBERT DAY, Chapel Allerton, Leeds, and WILLIAM HENRY NAYLOR, Adel, Leeds, England. Filed Apr. 12, 1930, Serial No. 443,749, and in Great Britain May 1, 1929. 7 Claims. (Cl. 93—7.)



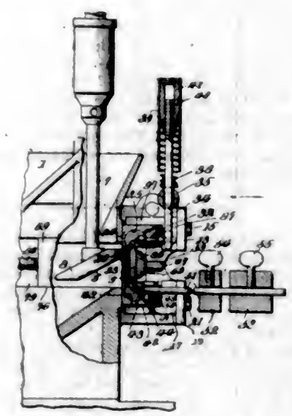
1. In a machine for making and filling packets, a member intermittently rotatable about a vertical axis, a series of charge receptacles surrounding and carried by said rotary member, a series of hollow formers each pivotally suspended from said rotary member, each of said formers being adapted to receive a charge from the associated receptacle, means to tilt each former consecutively, means to supply a sheet of wrapping material to the under side of the former when so tilted, means to fold said sheet into a tubular shape around the former with the overlapping edges of said sheet located on the side of the former which is turned away from the axis of rotation of said member, means to hold said sheet on the former during the subsequent part of its revolution, means to turn in the bottom of said sheet to form a bag, and means to strip said bag with the charge therein from the former.

1,868,049. JOINTED FIGURE WITH ADJUSTABLE LIMBS. ARTUR OTTO WILHELM DEICHMANN, Bad Godesberg, on-the-Rhine, Germany. Filed Dec. 17, 1930, Serial No. 503,027, and in Germany Oct. 9, 1930. 1 Claim. (Cl. 46—40.)

In a jointed figure of the class described, a member having a pin provided with a ball and a second member comprising a pair of plates of unequal length, the longer having an opening forming a seat for the reception of the outer side of the ball of the pin and the shorter bearing at one end against the inner side of the said ball and an adjusting screw passing transversely through and connecting said plates and serving to adjust said plates toward and from each other in order to increase or decrease friction between the plates and the ball.

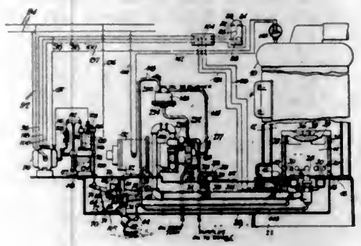


1,868,050. MACHINE FOR COATING STRIPS OF LUMBER. IRVIN F. DITTMAR, Williamsport, Pa., assignor to The Cromar Co., Williamsport, Pa., a Corporation of Pennsylvania. Filed Dec. 7, 1928. Serial No. 324,349. 23 Claims. (Cl. 91—46.)



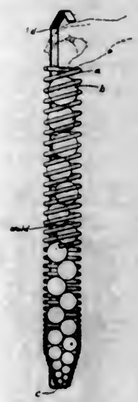
1. A semi-liquid applying receptacle for machines of the character described comprising a receptacle having a discharge opening in one side thereof, detachable supporting blocks secured to the receptacle around the discharge opening and oscillating guide members carried by the blocks.

1,868,051. HOUSE HEATING SYSTEM. HENRY L. DOHERTY, New York, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Original application filed Jan. 22, 1925, Serial No. 3,907. Divided and this application filed May 22, 1928. Serial No. 279,634. 8 Claims. (Cl. 158—11)



1. A combined oil and gas burner comprising a refractory cylinder, an atmospheric type gas burner adapted to form a ring of gas flame within said cylinder, and an oil burner arranged to project atomized oil within said ring of gas flame.

1,868,052. ANODE. GEORGE DUBPERNELL, Ann Arbor, Mich., assignor to Udylite Process Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 13, 1929. Serial No. 406,776. 4 Claims. (Cl. 204—4.)

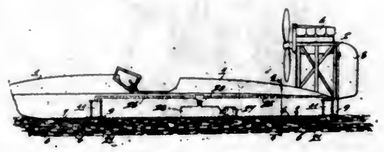


1. An anode for use in electrolytic baths comprising a heavy steel wire helix with varying spacing decreasing toward the bottom, and a plurality of balls substantially larger than pellets of the anode metal contained in the basket in a vertical stack and replenishable as they feed downwardly, the said balls as they become smaller arriving at a position in the cage where the spacing between the convolutions is smaller.

1,868,053. PROCESS FOR PREVENTING PREIGNITION IN INTERNAL COMBUSTION ENGINES. ALBERT JEAN DUCAMP, Versailles, France. Original application filed Mar. 9, 1929, Serial No. 345,878, and in France Mar. 24, 1928. Divided and this application filed Jan. 23, 1931. Serial No. 510,851. 3 Claims. (Cl. 87—9.)

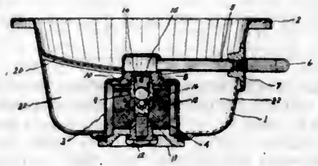
1. An anti-knock composition for use in internal combustion engines, consisting of a mercury cyanide dissolved in glycerine and suspended in the lubricating oil of the engine cylinders.

1,868,054. BOAT AND MEANS FOR OPERATING THE SAME. ERNEST EASTHOPE, Everett, Wash. Filed Dec. 3, 1930. Serial No. 499,774. 10 Claims. (Cl. 114—66.5.)



1. In boats, a hull, aerial propulsion means for moving said boat along, a set of aquaplanes hinged to the bottom of said hull on transverse axes and designed to lie up against the bottom of the hull, fluid means carried by the hull for swinging said planes downwardly to an angle to the bottom of the hull.

1,868,055. OIL BASE FOR INTERNAL COMBUSTION ENGINES. HENRY J. EDWARDS, Toledo, Ohio, assignor to The Willys Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed June 28, 1926. Serial No. 119,061. 11 Claims. (Cl. 184—6.)

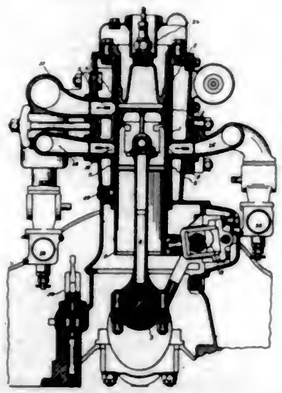


1. In an internal combustion engine oil base, the combination of an oil intake having an opening adjacent the bottom of said base, ad a longitudinal oil baffle therein having an opening adjacent said intake opening whereby oil passing through the baffle opening in either direction will flow toward said intake opening.

1,868,056. SINGLE SLEEVE ENGINE. HENRY J. EDWARDS, Toledo, Ohio, assignor to The Willys Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 26, 1926. Serial No. 150,774. 5 Claims. (Cl. 123—75.)

1. In an internal combustion engine, the combination of an exhaust manifold, an intake manifold heated by said exhaust manifold, an unheated intake manifold, said manifolds having separate discharge openings to said

engine, means for supplying fuel to each of said intake manifolds, and means for controlling the fuel supply of said engine comprising a single control for both intake

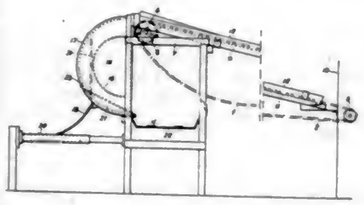


manifolds and adapted to open the heated manifold to the engine prior to the unheated manifold and to subquently open the unheated manifold to said engine.

1,868,057. PROCESS FOR THE MANUFACTURE OF A PLASTIC WATERPROOFING MEDIUM MADE OF CALF'S TALLOW OR FAT AND LIME. CHRISTIAN FLEISCH, Saarbrucken, France. Filed Feb. 13, 1931, Serial No. 515,651, and in Germany Feb. 17, 1930. 1 Claim. (Cl. 106—27.)

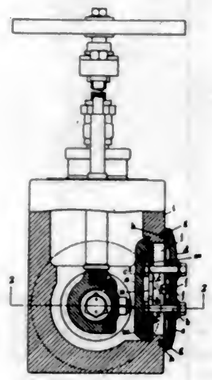
The herein described process of producing a plastic water proofing compound, consisting in confining water impregnated quick-lime together with disintegrated tallow in a confining space hermetically sealed and thereby causing the lime to be slaked and the heat evolved during the reaction process to melt the tallow and the pressure also resulting to promte the mixing of the melted tallow and the individual lime particles and stirring the mass during the slaking of the lime and the maintenance of the pressure to cause complete disintegration of the lime particles and complete mixing of the melted tallow therewith.

1,868,058. MACHINERY FOR MAKING BISCUITS AND LIKE BAKED PRODUCTS. HAROLD FURNESS, Carlisle, England, assignor to Carr & Company Limited, Carlisle, England. Filed Oct. 8, 1931, Serial No. 567,696, and in Great Britain Sept. 10, 1930. 6 Claims. (Cl. 214—1.1.)



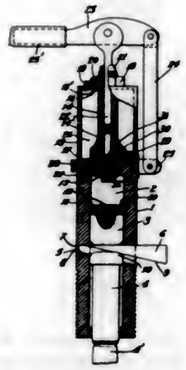
1. In a biscuit making machinery, means for the automatic removal of the biscuits from the pans, upon which they are baked, after the said pans have passed through the ovens, comprising a conveyor leading from the oven to a discharge point, means for inverting the said pans from the conveyor, means for inverting the said pans to remove the biscuits, said means comprising outer and inner substantially semi-circular guides between which the said pans are allowed to fall, and a chute adapted to receive said biscuits and guide them to the packing arrangements.

1,868,059. STEAM, HYDRAULIC, AND LIKE VALVE. TOM FREDERICK GRAY and EDGAR ANDREW BOLTON, Adswood, Stockport, England, assignors to Victory Valves Limited, Adswood, Stockport, England, a British Company. Filed Aug. 28, 1931, Serial No. 559,983, and in Great Britain Apr. 30, 1931. 3 Claims. (Cl. 220—25.)



1. In steam, hydraulic and like valves having an internal cover piece upon an aperture in the valve body, the arrangement wherein the cover piece is held in position by bolts passing through two external plates, each of the latter having a ridge or band of wedge shape in cross section and of a circular form projecting from one side thereof and entering a corresponding groove or recess in the valve body around the apertures closed by the cover piece whereby the valve body is strengthened at such aperture against both expansion and contraction.

1,868,060. WHEEL PULLER OF THE COMBINATION IMPACT AND COMPRESSOR TYPE. GEORGE W. GREBENSTEIN, Newtonville, Mass. Filed Oct. 21, 1930. Serial No. 490,247. 2 Claims. (Cl. 29—86.)



1. A wheel puller comprising a cylinder casing, a piston in said cylinder, a thrust plunger in said cylinder, means at one end of the casing for delivering a variable liquid pressure to the piston in said cylinder, to effect a gradually increasing pressure upon said thrust plunger, means

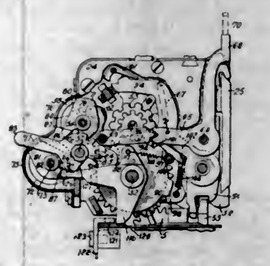
arranged to permit the application of an intense impactive force, independent of the pressure means upon the thrust plunger, said means including a wedge adapted to be driven between the piston and said thrust plunger.

1,868,061. CROSSING FOR RAILWAY TRACKS. PIERRE MARIUS GROSJEAN, Rosny-Sous-Bois, France. Filed July 7, 1930, Serial No. 466,331, and in France July 9, 1929. 12 Claims. (Cl. 246—416.)



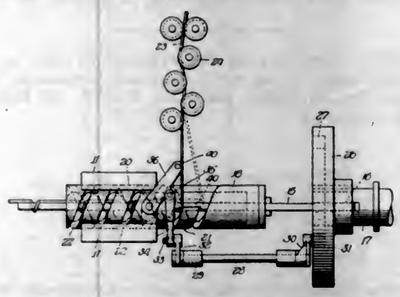
1. A railway frog for slip switches comprising a bent rail, a curved rail adapted to join switch rails of the slip switch two frog point rails, one at each end of said frog, chairs near the ends of the bent rail and of the curved rail, lugs located above said chairs adapted to engage the webs of the rails that are fixed upon them, said lugs providing a recess between them and the chairs for the flanges of the last mentioned rails, all these elements being cast in a single unit, and bosses on the chairs for preventing the rails from moving in the lateral direction.

1,868,062. COMPUTING MACHINE. FREDERICK A. HART, New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Jan. 27, 1928. Serial No. 249,883. 7 Claims. (Cl. 235—59.)



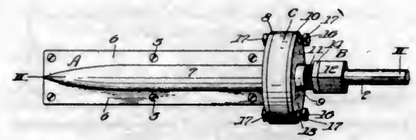
3. The combination of algebraic totalizing mechanism including means for inserting the fugitive 1, a traveling carriage and a lock for said carriage controlled by said inserting means.

1,868,063. FENCE MAKING MACHINE. NOAH S. HARTER, Waukegan, Ill. Filed Apr. 17, 1930. Serial No. 444,928. 11 Claims. (Cl. 140—71.)



1. A fence making machine comprising a stationary spiral member and a rotating arbor located within said member, said arbor being adapted to have a wire strand wound thereon and means for varying the location of the point of feed of the wire strand to said arbor to thereby impart a characteristic shape to the wire wound upon the arbor.

1,868,064. SHAFT-LOG AND STUFFING-BOX STRUCTURE. WILLIAM M. HORN, Hampton, Va., assignor to Horace E. Dodge Boat & Plane Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 29, 1930. Serial No. 499,012. 6 Claims. (Cl. 286—15.)



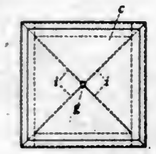
1. In a device of the character described, a shaft-log member, a stuffing-box, resilient means interposed between the shaft-log member and the stuffing-box, and yielding means connecting the aforesaid member and stuffing-box and clamping said resilient means in sealing relation with said member and stuffing box.

1,868,065. COLORLESS GLASS. GEORG JAECKEL, Berlin-Lichterfelde, Germany, assignor to Firm Sendlinger Optische Glaswerke G. m. b. H., Berlin-Zehlendorf, Germany. Filed Nov. 20, 1930, Serial No. 497,071, and in Germany Nov. 22, 1929. 2 Claims. (Cl. 49—14.)

1. A method of producing colorless glass, consisting in adding to the flux chemical materials capable of neutralizing discoloration arising from impurities entering the flux in the ordinary course of events, and preparing the flux in a crucible which has incorporated in the refractory material thereof decoloring agents serving to counteract discoloration arising from fusing of the crucible material.

2. A crucible for the production of colorless glass, characterized in that the refractory material thereof possesses incorporated therein a percentage of neutralized substances in a quantity dependent on the proportion of discoloring substance in the crucible, which neutralizing substances are adapted to withstand the high temperatures to which the crucible is subjected in use without vaporization.

1,868,066. CONTAINER FOR GRAMOPHONE NEEDLES. EDWARD WALTON KEESEY, Redditch, England, assignor of one-half to The British Needle Company Limited, Redditch, England. Filed July 30, 1930, Serial No. 471,775, and in Great Britain Mar. 11, 1930. 2 Claims. (Cl. 206—1.)



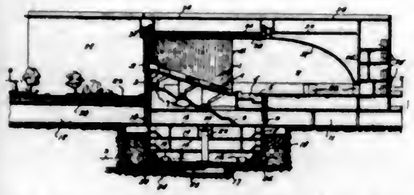
1. A container for talking machine needles, of tapering form, a delivery aperture in the apex of the container, a non-detachable partition dividing the interior into compartments for unused and used needles, and an aperture communicating with the used needle compartment, substantially as described.

1,868,067. MANUFACTURE OF CONDENSATION PRODUCTS. AUGUSTE VICTOR KELLER, Welwyn Garden City, England. Filed Dec. 6, 1929. Serial No. 412,291, and in Great Britain Nov. 13, 1929. 6 Claims. (Cl. 260—3.)

1. A process for the manufacture of urea-aldehyde condensation products in stable form, consisting in preparing

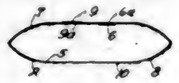
a dry mixture of a solid polymer of formaldehyde and urea with a very small percentage of an alkaline substance, injecting steam into the mixture, adding a small percentage of an acid phosphate, and maintaining the heat while stirring the mixture.

1,868,068. THEATER. ARTHUR J. MOULTON, Islip, N. Y. Filed May 4, 1929, Serial No. 360,516, and in France Oct. 31, 1928. 7 Claims. (Cl. 20—1.12.)



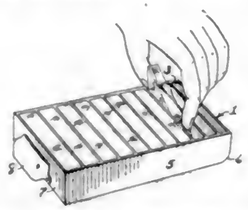
1. In a theater, a central floating rotatable auditorium surrounded by a stationary annular stage, a circular rotatable acoustic ceiling, a tank adapted to float the auditorium, a valve for controlling the flow of fluid to maintain the auditorium at a desired level, and means for rotating the circular ceiling.

1,868,069. COMPOSITE BAG. JOHN MITCHELL MUNSON, Lakewood, Ohio. Filed July 16, 1931. Serial No. 551,135. 6 Claims. (Cl. 229—53.)



1. A composite bag comprising a sheet of transparent cellulosic material treated to render it moisture-proof and joined at the front or back panel of the bag, and a reinforcing sheet of paper or like material secured to said cellulosic sheet at the sides of the front panel and forming a double wall around the remainder of the bag.

1,868,070. ICE TRAY. EDWIN P. S. NEWMAN, Washington, D. C. Filed Apr. 29, 1931. Serial No. 533,769. 2 Claims. (Cl. 62—108.5.)

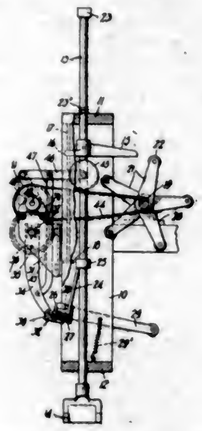


1. An ice tray comprising a cylindrical shaped wall, an end plate closing one end of said semi-cylindrical shaped wall and extending below the latter, a plurality of spaced semi-circular shaped partitions formed integrally with the inner faces of the semi-cylindrical shaped wall and one of the end partitions forming a closure for the other end of the semi-cylindrical shaped wall, said partitions, wall and plate cooperating to provide semi-circular shaped compartments to contain frozen blocks whereby pressure applied to any one of the blocks adjacent one edge will cause a sliding of said block within its respective compartment and position the opposite edge thereof outwardly of the compartment to be easily grasped, and side plates formed integrally with the side edges of the semi-cylindrical wall and the end plate to provide runners spaced from the semi-cylindrical wall and extending below the latter and providing a reinforcement to said semi-cylindrical wall.

1,868,071. MEAT STAMPING INK. LEVI SCOTT PADDOCK, Chicago, Ill., assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed June 8, 1929. Serial No. 369,526. 4 Claims. (Cl. 134—30.)

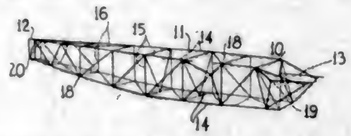
1. A brown ethyl alcohol ink consisting of yellow A B, methyl violet base, ether, and sufficient oleic acid to partially dissolve the methyl violet.

1,868,072. TAMPER CONTROL MECHANISM. HENRY C. PARKER, Maywood, N. J., assignor to Bergen Building Block Company, a Corporation of New Jersey. Filed Nov. 10, 1927. Serial No. 232,267. 9 Claims. (Cl. 25—41.)



1. The combination with a tamping machine comprising a tamping member, a power shaft, means carried by the shaft for intermittently lifting and releasing the tamping member, an arrestor for holding the tamping member clear of said means and a handle for disengaging the arrestor from the tamping member, of a spring tending to restore the arrestor to holding position, a disk non-positively rotated by said shaft and formed with a peripheral notch, and an arm connected to the handle and normally engaging the notch, whereby, on operation of the handle, the arm will be withdrawn from the notch to release the disk, and the arrestor will be held in disengaged position until the disk has rotated sufficiently to bring the notch again into position to receive the arm.

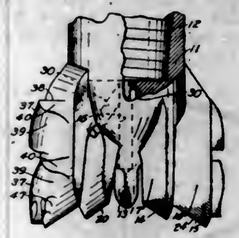
1,868,073. METHOD OF CONSTRUCTING AIRPLANE FUSELAGES. EARL J. W. RAGSDALE, Norristown, Pa. Filed Dec. 27, 1929. Serial No. 416,835. 13 Claims. (Cl. 244—31.)



1. The method of fabricating an aircraft fuselage whose longerons are of closed cross section which consists in first laying diagonal outwardly opening parts of the cross sections in planes of corresponding pairs of longerons,

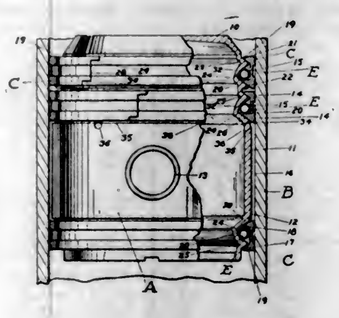
spot welding to the open section of the longerons the struts in the planes of the respective pairs, and thereafter joining the trusses so formed together by welding to the yet open sections the interplane struts of the pairs.

1,868,074. ROTARY DRILL BIT. JESSE C. REESE, Montebello, Calif., assignor to Reese Engineering Company Ltd., a Corporation of Nevada. Filed June 29, 1929. Serial No. 374,748. 1 Claim. (Cl. 255—61.)



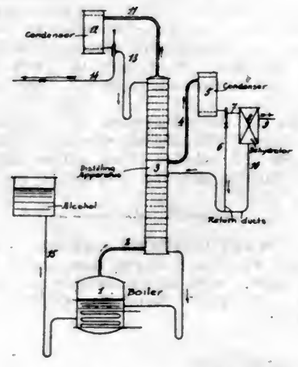
A bit of the character described, including: a body adapted for rotation on the end of a string of drill pipe, said body having a vertical duct extending through the center thereof; a plurality of central blade members projecting downwardly from said body, said central blade members having inner faces parallel with the cylindrical wall of said vertical duct; intermediate and outer blade members projecting downwardly from said body, the cutting edges of said intermediate and outer blade members being directed laterally at acute angles relative to their respective lines of movement when said bit is rotated; a set of reaming blades projecting laterally from said outer blade members, each set consisting of a plurality of helically disposed blade segments placed in upward progression; and an advance reaming tooth projecting downwardly from the lowermost blade of each set of reaming blades.

1,868,075. PISTON AND RING. ERNEST S. REILAND and PETER M. REILAND, St. Paul, Minn. Filed Oct. 29, 1926. Serial No. 145,066. 11 Claims. (Cl. 74—109.)



1. A piston including, a body portion having beveled surfaces extending parallelly, a piston ring adapted to engage said surfaces with complemental bearing surfaces extending at approximately the same bevel as the said beveled surfaces on said piston and spring means between said ring and said piston for holding said piston ring under spring tension, in contact with said bearing surfaces formed in said piston.

1,868,076. CONTINUOUS PROCESS FOR THE MANUFACTURE OF ALIPHATIC ETHERS. ELOI RICARD, Melle, France, assignor to Société Anonyme des Distilleries des Deux-Sevres, Melle, France. Filed Nov. 20, 1925, Serial No. 70,320½, and in Belgium Nov. 26, 1924. 5 Claims. (Cl. 260—151.)

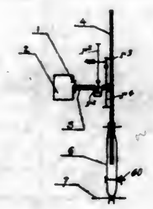


1. A process for the continuous manufacture of ethers which consists in adding to the mixture of alcohol and sulphuric acid a withdrawing body which forms with water an azeotropic mixture having a minimum boiling point, in heating the mixture of alcohol and acid whereby the azeotropic mixture will escape and the water formed during the ether producing operation will be eliminated.

1,868,077. PROCESS FOR PRODUCING LOW-BOILING DICHLORO-ETHYLENE. AUGUST RUPPERT, Frankfort-on-the-Main, WILHELM FISCHER, Ludwigshafen-on-the-Rhine, JULIUS VOIGT and BRUNO HENNIG, Bitterfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 14, 1929, Serial No. 363,110, and in Austria May 5, 1928. 3 Claims. (Cl. 260—166.)

1. Process for producing low-boiling dichloro-ethylene from acetylene and chlorine comprising treating a gas mixture, containing acetylene as prevailing constituent and chlorine, with activated carbon as transferrer at temperatures below 100° C.

1,868,078. BRAKING DEVICE FOR CINEMATOGRAPHIC SPOOLS. ETIENNE SAINTE-CLAIRE-DEVILLE, Paris, France, assignor to Societe des Etablissements Gaumont, Paris, France, a Corporation of France. Filed Apr. 19, 1929, Serial No. 356,584, and in France May 12, 1928. 7 Claims. (Cl. 242—55.)



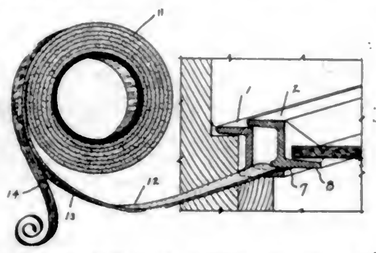
3. In a device for braking the spools of cinematographic projection apparatus, a plate provided with a spiral groove, a set of gears interposed between the said

plate and the spool, a clasp pivoted on a fixed point, and adapted to frictionally engage said plate, a finger on said clasp adapted to follow the groove, and means for varying the clamping action of the clasp upon the plate.

1,868,079. PROCESS FOR THE PURIFICATION OF PHENOL-ALDEHYDE RESINS. FRITZ SEEBACH, Erkner, near Berlin, Germany, assignor to Bakelite Gesellschaft mit beschrankter Haftung, Berlin-Charlottenburg, Germany. Filed July 10, 1929, Serial No. 377,344, and in Germany July 17, 1928. 3 Claims. (Cl. 260—4.)

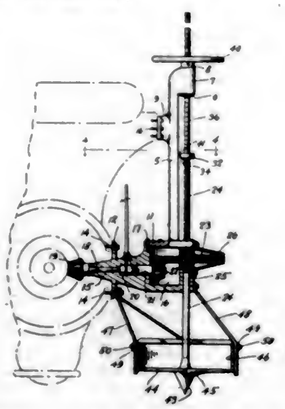
1. Process for the purification of a phenol-aldehyde resin containing a free phenol, which comprises dissolving the resin in a solution of an aniline salt, and distilling the solution for the purpose of removing free phenol.

1,868,080. WEATHERPROOF METAL CASEMENT WINDOW. FRAZEUR S. SLATER and AUSTIN J. MILLER, Detroit, Mich.; said Slater assignor to said Miller. Filed Nov. 24, 1930. Serial No. 497,647. 3 Claims. (Cl. 189—65.)



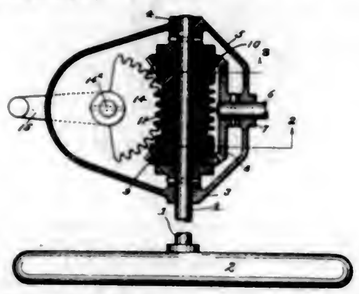
1. A weather strip for a casement window or the like comprising in combination of a strip of resilient rubber material having an adhesive face, a mandrel upon which the said resilient rubber material strip may be wound to form a roll and a non-adhesive strip contacting with the adhesive face of the resilient rubber material strip throughout its length whereby successive convolutions of the said weather strip are prevented from adhering one to the other.

1,868,081. POST HOLE DIGGER. SAMUEL E. STOOP, New Hope, Pa. Filed Apr. 7, 1931. Serial No. 528,399. 3 Claims. (Cl. 255—19.)



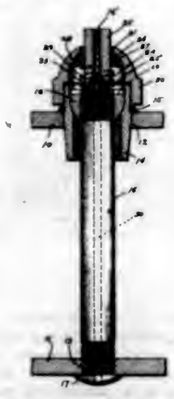
1. In combination with an apertured gear housing of a farm tractor, a bearing having an inner end extending into the housing through the aperture therein, a vertical member adjacent the outer end of the bearing and secured above the bearing to a fixed part of the tractor, a hood suspended from the bearing, a drilling device movable vertically through the hood, an adjusting screw swivelly connected with the drilling device and an internally threaded sleeve fixed on the vertical member and with which said screw is threadedly engaged, and means mounted in the bearing to provide a drive connection between the gears in said housing and said drilling device.

1,868,082. POWER STEERING MECHANISM FOR MOTOR VEHICLES. GEORGE A. SWARTZ, Westwood, N. J. Filed Sept. 13, 1930. Serial No. 481,673. 10 Claims. (Cl. 180—79.3.)



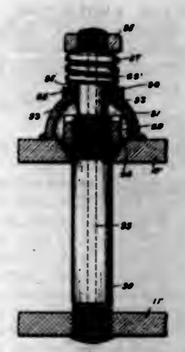
1. Steering mechanism for motor vehicles, comprising two driving gears adapted to be rotated respectively in opposite directions from the motor, a normally inactive rotary member adapted to be operatively connected with the steering ground wheels of the vehicle, clutches for driving said member from the respective gears alternately, and a clutch controlling means adapted to be operated by the steering hand-wheel and operable to either actuate the clutches alternately, or by a quick action, to actuate said rotary member to steer the vehicle independently of said clutches; whereby the steering ground wheels may be turned by the steering hand-wheel when the engine is not running, or when running too slowly to effect a quick turn of the steering wheels.

1,868,083. STAY BOLT. THOMAS S. WHEELWRIGHT, Richmond, Va., assignor to Old Dominion Iron & Steel Works, Belle Isle, Richmond, Va., a Corporation of Virginia. Filed Nov. 15, 1930. Serial No. 495,994. 4 Claims. (Cl. 85—1.5.)



1. In a staybolt structure, a casing comprising a sleeve and cap having outer and inner spherical seat surfaces, and said cap having an opening in its outer wall concentric with its seat surface, a bolt having an end portion disposed in said casing and provided with an inner head member having a spherical seat surface pivotally engaging the seat surface of the sleeve, an axial extension projecting beyond said inner head member and projecting outwardly through the opening in the cap, the bolt and its extension being provided with a tell-tale hole extending continuously from end to end thereof, an outer head member slidable on the bolt extension toward and from the inner head member and having a spherical seat surface pivotally engaging the seat surface of the cap, and resilient means acting to force the outer head member outward and away from the inner head member and against said seat surface of the cap.

1,868,084. STAY BOLT. THOMAS S. WHEELWRIGHT, Richmond, Va., assignor to Old Dominion Iron & Steel Works, Belle Isle, Richmond, Va., a Corporation of Virginia. Filed June 29, 1931. Serial No. 547,693. 2 Claims. (Cl. 85—1.5.)



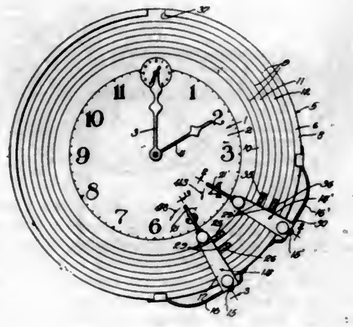
2. A staybolt construction for use in connection with a boiler sheet having a seat and a centrally apertured cap secured to the sheet over said seat and having an outer convex face, comprising a bolt having a head seated on said seat and provided with a stem extending beyond said head into said cap and through the aperture thereof, and a centrally apertured spring pressed bearing disk on the stem having a concave face snugly and slidably contracting with the said outer convex face of the cap.

1,868,085. PHOTOGRAPHIC PRINT. WILLIAM R. WHITEHORNE, Lewiston, Me. Filed Feb. 21, 1927. Serial No. 170,056. 2 Claims. (Cl. 95—88.)

1. The method of producing colored photographic prints consisting in converting the metallic detail to a salt, in producing an ammoniacal differentiation in the gelatine adjacent the loci of the detail and the rest of the gelatine film, and in dyeing with a dye of Alizarin type.

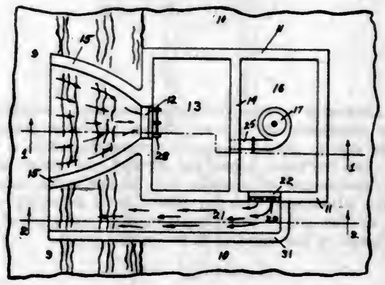
1,868,086. TIME SWITCH. ERNESTO ALBERTINI, Chicago, Ill. Filed May 11, 1931. Serial No. 536,502. 2 Claims. (Cl. 200—35.)

1. In combination with a clock mechanism including a dial and an hour hand, of a plurality of contact rings mounted on said dial, a pair of switches adjustably mounted on said dial, said switches having a pair of contacts adapted for engagement with certain of said rings, a pivot latch carried by one of said switches and adapted for operation by said hand whereby to close an electric



circuit, and a pivot latch carried by the other of said switches adapted for operation by the hour hand for opening an electric circuit at predetermined times.

1,868,087. WAVE MOTOR. ROBERT S. BLAIR, Stamford, Conn. Filed Aug. 8, 1922. Serial No. 580,898. 6 Claims. (Cl. 61—20.)

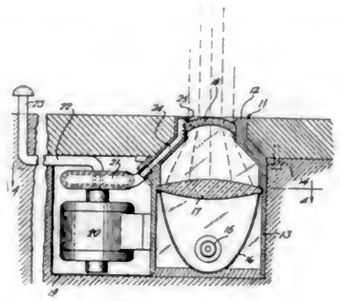


1. In apparatus of the general nature of that herein described, in combination, a reservoir positioned adjacent a body of water, a plurality of check valves exposed to waves upon said water and leading from said waves into said reservoir, a power utilizing device, means leading water from said reservoir through said power utilizing device and discharging at a point substantially below smooth water level in said body and adapted thereby to utilize the hydraulic head from the surface of the water in said reservoir to a point substantially below said smooth water level, and an outwardly opening check valve through which said discharged water passes and positioned substantially below said smooth water level.

1,868,088. ART AND APPARATUS FOR GAMES. ROBERT S. BLAIR, Stamford, Conn. Filed Aug. 25, 1928. Serial No. 302,007. 6 Claims. (Cl. 273—25.)

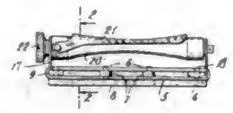
1. In apparatus for games and the like, in combination, an objective apparatus adjacent which projectiles

travel, means adapted to throw light in a direction to illuminate projectiles passing over said objective, and



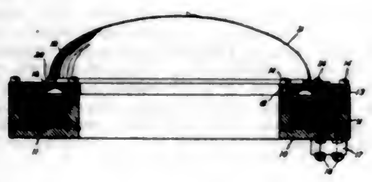
means adapted to confine said light into a pair of parallel beams vertically positioned at the lateral extremities of said objective.

1,868,089. HAIR WAVING APPARATUS. HARRY BONAT, New York, N. Y. Filed Aug. 2, 1930. Serial No. 472,552. 14 Claims. (Cl. 132—36.1.)



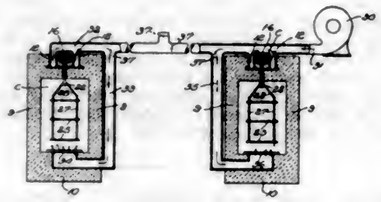
1. Apparatus of the character described comprising a clamp composed of opposed strips pivotally connected at one end to permit swinging movement about a common axis, resilient means on the opposed edges of the strips, and means at opposite ends of the strips to afford relative adjustment thereof, said axis of swinging movement of the strips being substantially perpendicular to the planes of the opposed edges of the strips.

1,868,090. SOUND TRANSLATING DEVICE. LEE G. BOSTWICK, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 10, 1930. Serial No. 480,848. 7 Claims. (Cl. 181—31.)



1. A large direct acting acoustic diaphragm having a substantially semi-elliptical cross-section perpendicular to its base.

1,868,091. CERAMIC KILN. FRANK W. BROOKE, Pittsburgh, Pa., assignor to William Swindell & Brothers, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 7, 1929. Serial No. 330,722. 17 Claims. (Cl. 25—142.)



1. In a ceramic kiln, a plurality of ceramic carriers, and means for suspending said carriers from points so located as to provide ware supporting portions inside and outside of the area defined by said suspending means.

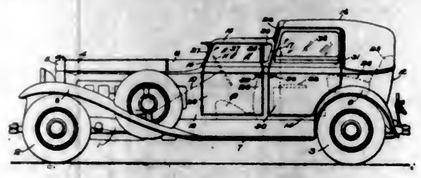
1,868,092. SEEPAGE PROTECTOR FOR MASONRY BUILDINGS. ALLAN CHENEY, Melrose, Mass. Filed Oct. 8, 1931. Serial No. 567,543. 11 Claims. (Cl. 108—26.)



1. In a seepage protector for masonry walls and the like, the combination of a continuous sheet metal flashing extending through said wall from side to side for embedding horizontally in a layer of mortar, and a flexible side for overlying a vertical portion of said wall and a portion of the roof, and means connecting said siding to said flashing.

1,868,093. AUTOMOBILE. ROGER S. CLAPP, Webster, Mass., assignor to Waterhouse Company, Webster, Mass., a Corporation of Massachusetts. Filed June 5, 1930. Serial No. 459,409. 2 Claims. (Cl. 296—24.)

1. The described body for automobiles, the same having a front compartment, the top of which is depressed to a sub-normal level, and with a windshield below its top; a rear compartment having the same floor level as the front compartment but with its top at a normal and higher level than the front compartment top and with a transom between said two tops; a seat in said rear compartment located to position a normal occupant at a normal distance from the floor thereof with a range of vision through said transom, a seat in said front compartment located relatively close to the floor thereof to position a normal occupant at a lower level than an occupant of the rear seat with his head below the top of said front compartment and with a range of vision through said windshield; said seats being in the rear portions of said compartments to leave combined foot and entrance areas across the front portions of said compartments; and side entrance doors for



and of substantially the full heights of the respective compartments, furnishing in each instance free side entrance and egress to and from said combined foot and entrance areas.

1,868,094. METHOD OF AND MACHINE FOR UPSETTING THE ENDS OF PIPE. JOHN U. DEVINE, Struthers, Ohio. Filed Oct. 1, 1929. Serial No. 396,502. 6 Claims. (Cl. 78—14.)



2. A machine of the class described, comprising a base, a carriage slidable on the base, means for reciprocating the carriage, pipe gripping means carried by the carriage and adapted to hold a pipe in operative position thereon, a solid forming die supported on the base and having a bore extending from one side to the other thereof and adapted to receive the end of the pipe when the pipe is supported in the gripping means and the carriage moved relatively toward the die, a plunger having a shoulder adapted to engage the end of the pipe when in the die and a nose adapted to enter the pipe, and means for forcing the shoulder of the plunger against the end of the pipe to thereby crowd the metal thereof against the nose of the plunger.

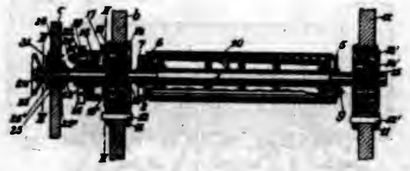
1,868,095. PROCESS FOR THE RECOVERY OF A HIGHLY PURIFIED HORMONE OF THE ANTERIOR LOBE OF THE PITUITARY GLAND. MAX DOHRN, Berlin-Charlottenburg, and WALTER HOHLWEG, Berlin-Hohenneuendorf, Germany, assignors to Schering-Kahlbaum A.-G., Berlin, Germany. Filed June 10, 1929, Serial No. 369,921, and in Germany June 19, 1928. 6 Claims. (Cl. 167—74.)

1. Process for the recovery of a highly purified hormone of the anterior lobe of the pituitary gland comprising treating aqueous solutions of the hormone with a water soluble compound of the metals belonging to the group of heavy metals and alkaline earth metals, separating the liquid from the deposit and precipitating the hormone in the liquid by means of an organic solvent miscible with water.

1,868,096. MANUFACTURE OF METHYL ALCOHOL. HENRY DREYFUS, London, England. Filed May 27, 1930, Serial No. 455,989, and in Great Britain June 5, 1929. 8 Claims. (Cl. 260—156.)

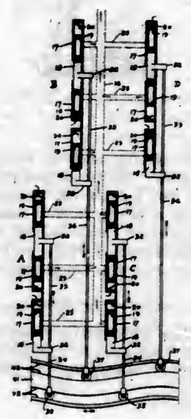
1. Process for the manufacture of methanol by subjecting a mixture of carbon monoxide and hydrogen to elevated temperatures and pressure in presence of catalysts, which comprises passing the reaction gases under the requisite temperature and pressure successively over at least one catalyst mass selected from the group consisting of zinc oxide and zinc oxide plus chromium oxide, and thereafter over at least one methanol catalyst sensitive to sulphur poisoning.

1,868,097. BEARING ARRANGEMENT FOR MULTI-COLOR PRINTING MACHINES. ARNOLD EGLI, Hamburg, Germany. Filed May 18, 1929, Serial No. 364,267, and in Germany May 19, 1928. 11 Claims. (Cl. 101—152.)



1. Multi color sheet intaglio printing machine comprising, in combination, an impression cylinder, printing cylinders movable towards the impression cylinder and away from it, each printing cylinder supported by a shaft, at least two bearings for supporting the shaft, a third bearing, and stops on the shaft at or next to the third bearing and adapted to secure the shaft against axial shifting.

1,868,098. PUMP AND DRIVING MECHANISM. EDWARD C. EKSTROMER, Redwood City, Calif., assignor of one-half to James F. Gallagher, Berkeley, Calif., Blanche Nash Gallagher executrix of said James F. Gallagher, deceased; said Ekstromer assignor of one-half to The Edward C. Ekstromer Corporation, a Corporation of Nevada. Filed May 21, 1930. Serial No. 454,300. 6 Claims. (Cl. 103—46.)

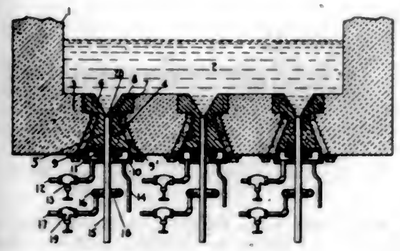


1. In a short stroke pump device the combination of, an elongated member having a central conduit extending axially therethrough and having a plurality of pump cylinders adjacent to and communicating with said conduit, a sleeve surrounding said member having ports communicating with said pump cylinders, pump pistons in said cylinders, check valves cooperating with said pistons and cylinders, and means for imparting a reciprocating movement to said pistons.

1,868,099. METHOD OF CASTING MOLTEN METALS. BYRON E. ELDRED, New York, N. Y. Filed June 3, 1930. Serial No. 459,040. 9 Claims. (Cl. 207—1.)

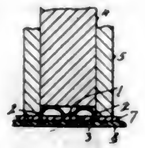
1. The method of casting metal shapes which consists in continuously supplying molten metal from a reservoir of molten metal to a forming chamber having congealed metal

in the lower portion, congealing additional metal thereabove by withdrawing heat therefrom substantially solely through the congealed metal, removing the congealed metal



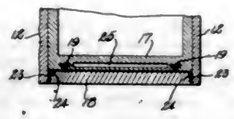
and cooling the walls of the forming chamber to maintain the said walls substantially at the same temperature as the adjacent metal in the chamber.

1,868,100. STAPLE AND METHOD OF DRIVING THE SAME. CHARLES B. GOODSTEIN, Brooklyn, N. Y., assignor to Bella Goodstein, New York, N. Y. Filed Jan. 19, 1929. Serial No. 333,701. 5 Claims. (Cl. 1—2.)



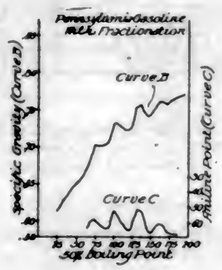
1. A method of driving staples, consisting of applying pressure to a staple having arched prongs to flatten a portion thereof on one side of the material and confining the lateral positions of said prongs to cause them to pierce the material to be stapled and to clench on the under side thereof, said several operations being performed exclusively from one side of the material being stapled.

1,868,101. DRAWER CONSTRUCTION FOR SHOW AND STOCK CASES. ARTHUR J. HECHT, New York, N. Y. Filed Dec. 11, 1929. Serial No. 413,159. 1 Claim. (Cl. 312—149.)



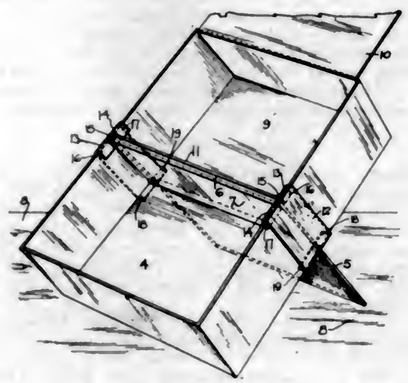
A device including a drawing, a casing, said casing having an opening and associated guide means for removably receiving the drawer, a dummy consisting of an additional wall of substantially the same height and length as the front wall of the drawer and having the appearance of a front wall of a drawer, means for removably securing the dummy to the front of the drawer, and means for removably securing the dummy in said casing opening upon removal of the drawer.

1,868,102. MOTOR FUEL AND ITS PRODUCTION. LAWRENCE M. HENDERSON, Narberth, and SEYMOUR W. FERRIS, Lansdowne, Pa., assignors to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 24, 1928. Serial No. 328,236. 11 Claims. (Cl. 196—94.)



1. The process of obtaining gasoline of high antidetonating quality, which comprises separating hydrocarbon oil containing gasoline-like components by subjecting said oil to fractional distillation into a series of fractions of irregularly varying antidetonating qualities, and combining those fractions of relatively high antidetonating quality.

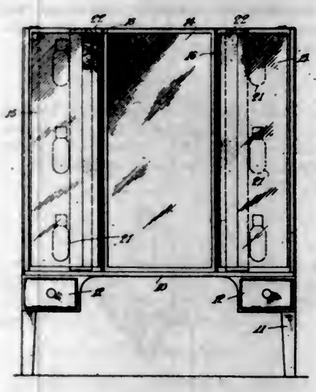
1,868,103. BOX-HOLDER CLAMP. JOHN HERLIHY, Albany, N. Y. Filed May 6, 1930. Serial No. 450,089. 7 Claims. (Cl. 206—44.)



1. A single-piece clamp for holding two boxes side to side as a unit comprising a flat body portion bearing exteriorly against both box ends and having depending hooks with their opposite inner edges to engage at right angles the abutting sides of the boxes in a surface-to-surface contact on the inner sides of said boxes, and arms inwardly extending at right angles from the lower portion of the body to engage the box bottoms adjacent their line of juncture.

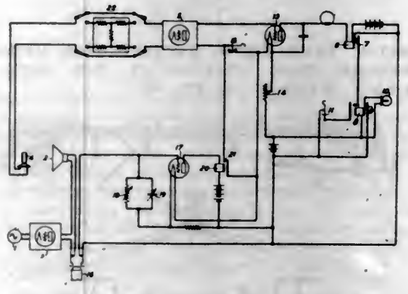
1,868,104. MIRROR DRESSER. JOSEPH A. HOEGGER, Jersey City, N. J. Filed Apr. 8, 1929. Serial No. 353,387. 7 Claims. (Cl. 45—99.)

1. As an improved article of manufacture, a dresser having a fixed base mirror, a main mirror rising from the rear portion of the base mirror and substantially perpendicular thereto, wing mirrors hingedly connected to the



main mirror and perpendicular to the base mirror said wing mirrors having light passages therethrough, and lighting means behind the wing mirrors.

1,868,105. APPARATUS FOR MEASURING REVERBERATION TIME. FRANCIS L. HOPPER, Pasadena, Calif., assignor to Electrical Research Products Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 10, 1931. Serial No. 529,274. 5 Claims. (Cl. 181—0.5.)



1. In a measuring device the combination with a source of sound energy, means for deenergizing said sound source, a sound detector for translating sounds from said source into electric currents, means in said detecting circuit operative when said currents have decayed to a predetermined value, said circuit being open during the period of measurement, and means operative to close said circuit at the same time that the currents have decayed to said predetermined level in order to operate said first operative means, said means comprising a time delay circuit.

1,868,106. PRODUCTION OF UREA. ERNST KUSS and MAX GUENTHER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 28, 1930, Serial No. 432,256, and in Germany Mar. 2, 1929. 3 Claims. (Cl. 260—125.)

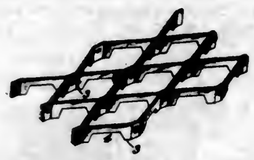
1. The process of producing urea, which comprises acting with carbon dioxide on ammonia, the latter being at least 4 times in excess over the amount stoichiometrically required, at a temperature of at least 150° C. and at a pressure above the critical pressure of ammonia.

1,868,107. GRATING. MAURICE LACHMAN, New York, and JOHN R. TENCH, White Plains, N. Y. Filed May 13, 1926. Serial No. 108,752. 2 Claims. (Cl. 94—30.)



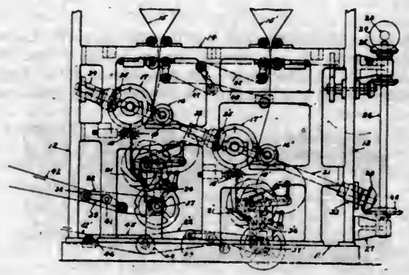
1. A composite metallic grating for sidewalks and the like comprising a plurality of rolled channel members arranged side by side and each provided with webs cut or stamped to provide openings and connecting members by the unremoved portions of the web the outer faces of the flanges of adjoining members being engaged directly with one another over substantially the whole extent of their surfaces and means for bolting or securing said flanges firmly together to hold the engaged surfaces in firm contact and prevent buckling or bending of the composite structure in a direction transverse to the longitudinal axis of the channel members while at the same time producing a composite reinforcing longitudinal intermediate supporting member of twice the thickness of the flanges at the external edges of the grating.

1,868,108. SKELETON REENFORCEMENT. MAURICE LACHMAN, New York, N. Y. Filed Dec. 28, 1929. Serial No. 417,054. 5 Claims. (Cl. 94—30.)



1. A skeleton grating or reenforcement built up of sections of a plate, each section being continuous or straight on one edge and having complemental projections and intervening recessions at its opposite edge, said plate sections being of general zigzag form throughout their length with the portions thereof having said projections arranged in substantially parallel planes connected by obliquely arranged portions of said plate provided with said recessions, the parallel portions of said plate being attached together.

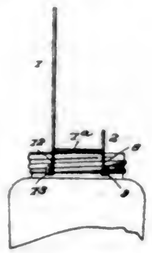
1,868,109. FOLDER FOR WEB PRINTING MACHINES. FREDERICK LAMATSCH, Grantwood, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 30, 1929. Serial No. 410,715. 7 Claims. (Cl. 270—42.)



1. In a double folder for a web printing machine, a first cutting and folding mechanism with a delivery, and a sec-

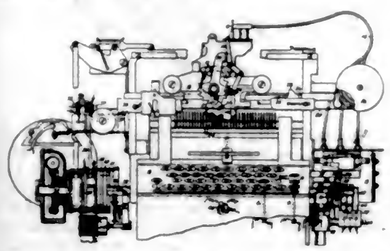
ond cutting and folding mechanism located beside the first mentioned mechanism and on a lower level, with a second delivery extending horizontally beneath the first delivery and separated therefrom.

1,868,110. DISPLAY CARD. LAWRENCE E. LANDON, Tacoma, Wash. Filed Oct. 16, 1931. Serial No. 569,341. 3 Claims. (Cl. 40—7.)



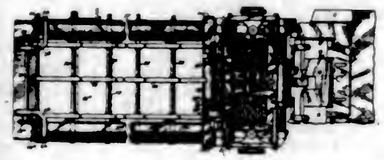
1. An advertising device, comprising a body portion formed with depending legs, a brace extending from the body portion, and legs depending from the opposite end of the brace.

1,868,111. PERFORATING MACHINE. WILLIAM W. LASKER, Brooklyn, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y., a Corporation of Delaware. Filed June 17, 1929. Serial No. 371,374. 14 Claims. (Cl. 164—112.)



1. In a machine of the class described comprising punch set-up mechanism, punching mechanism, set-up erasing mechanism, electrical contact means for causing functioning of said set-up erasing mechanism automatically subsequently to effecting punching; the combination therewith of key controlled electric means for moving said contact means out of contact making position, and means operated by the machine to automatically restore said contact means to functioning position during the second cycle of operation of the machine.

1,868,112. SORTING MACHINE. WILLIAM W. LASKER, Brooklyn, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y., a Corporation of Delaware. Filed Aug. 7, 1929. Serial No. 384,090. 8 Claims. (Cl. 209—110.)



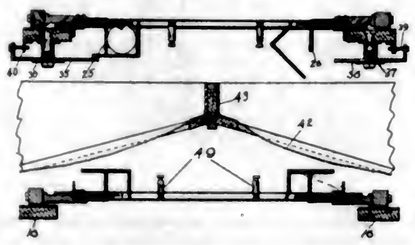
1. In a machine for sorting cards, the combination of an analyzer, a card supply magazine, means for feeding the cards from the supply magazine to the analyzer, a plurality of receptacles into which the cards are to be delivered, means under control of the analyzer for causing the cards to be directed into the proper receptacles, a helical conveyor for conveying the cards over said directing means, and means for feeding the cards from the analyzer to said conveyor.

1,868,113. FAN. FREDRIK LJUNGSTROM, Lidingo, Sweden, assignor to Aktiebolaget Spontan, Stockholm, Sweden, a Corporation of Sweden. Filed May 29, 1931, Serial No. 540,931, and in Sweden Sept. 22, 1930. 20 Claims. (Cl. 230—259.)



1. A fan comprising a rotatable member and a blade comprising a strip of pliable material mounted on said member in slack condition between spaced places thereon, said strip being bowed outwardly from said member between said spaced places due to centrifugal force on rotation of said member and being mounted so that portions thereof provide axially spaced air propelling surfaces.

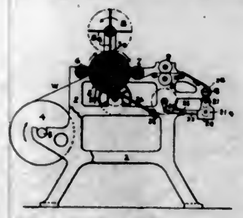
1,868,114. FRUIT SIZING MACHINE. FRED MATHEWS, Northport, Wash. Filed Mar. 11, 1930. Serial No. 434,944. 6 Claims. (Cl. 209—89.)



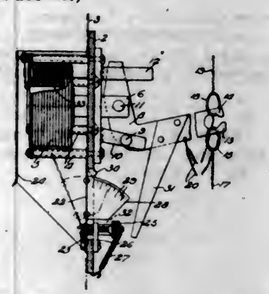
1. The combination, in a fruit sizing machine of the endless conveyer type, with a stepped-edge gage plate, of a carrier having a stationary wall, a pocket hinged in the carrier for coaction with the wall, said pocket having a free edge adapted to slide on the stepped gage plate, and resilient means on the carrier for drawing the pocket toward the wall.

1,868,115. MANUFACTURE OF PAPER ROLLS. PATRICK J. MULLIGAN, Glen Olden, Pa., assignor to Scott Paper Company, a Corporation of Pennsylvania. Filed Nov. 17, 1928. Serial No. 320,045. 2 Claims. (Cl. 242—55.)

1. In means for forming an integral core and roll of paper, the combination of a mandrel upon which a web of paper is wound into a roll, with adhesive applying means movable toward and from the mandrel and having means for holding the said adhesive applying means in position for applying adhesive to the web of paper being wound upon the mandrel, whereby a limited quantity of the web may be wound upon itself in adhering relation to form a multiply core and the remainder of the web continued to be wound without adhesive about the said core, and wherein further, the mandrel is provided with means for holding the beginning of the web to itself during the initial rotation movement prior to the application of the adhesive, whereby the mandrel is protected against being cemented to the paper.

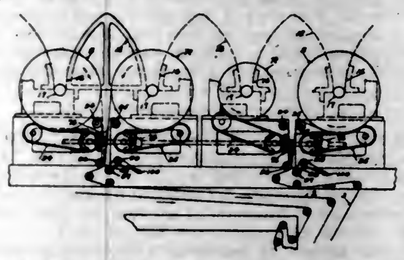


1,868,116. REGULATOR. ROBERT E. NEWELL, Irwin, Pa. Filed Jan. 15, 1930. Serial No. 420,967. 21 Claims. (Cl. 236—9.)



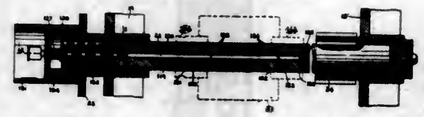
1. In a temperature regulator, a casing, temperature responsive means in said casing, said casing being constructed for the flow therethrough of a heating medium, and means for varying the effectiveness of such medium, said means including a manually operable control valve for admitting another medium at different temperature thereto, there being means normally out of operative engagement with said valve for automatically moving said valve when said temperature responsive means reaches a predetermined temperature.

1,868,117. WEB PASTING MECHANISM. GEORGE E. PANCOAST, Sea Bright, N. J. Original application filed Jan. 22, 1924, Serial No. 687,757, now Patent No. 1,669,837, dated May 15, 1928. Divided and this application filed Apr. 12, 1928. Serial No. 269,490. 2 Claims. (Cl. 242—58.)



1. In a web feeding and pasting mechanism, the combination of a support for a running web roll and a spare web roll, a pair of pasting rolls below the web rolls arranged horizontally, between which a spare web may be led directly either over or under from a web roll in either position, guides over which the end of a spare web may be suspended and located above the pasting rolls, and means for moving one only of the pasting rolls toward the other to join the new web to a web running to the press.

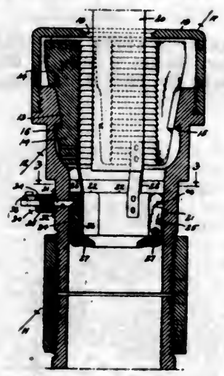
1,868,118. LUBRICATING DEVICE FOR BEARINGS ON A SHAFT. CARL A. RUPP, Los Angeles, Calif., assignor to Commercial Iron Works of Los Angeles, Los Angeles, Calif., a Corporation of California. Original application filed Feb. 26, 1929, Serial No. 342,694. Divided and this application filed Mar. 12, 1930. Serial No. 435,283. 13 Claims. (Cl. 308—101.)



1. A lubricating device comprising a shaft having a longitudinal bore with ducts extending therefrom outwardly, bearings to be lubricated by the said ducts, a closure means for said ducts shiftable longitudinally in the bore and adapted to selectively open or close any one of the ducts to transmit grease only through the duct which is open, and means to flow grease through the said tube, the ducts and ports being different distances apart

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1,868,119. AUTOMATIC SLIP HANDLER. AUGUST L. SEGELHORST, Huntington Beach, Calif. Filed Mar. 26, 1930. Serial No. 439,022. 22 Claims. (Cl. 24—263.)



1. A slip organization for use in supporting tubing embodying the combination of: a housing; slips slidably mounted in said housing, said slips and said housing being provided upon their engaging faces with transverse recesses producing inter-fitting parts whereby the slips are adapted to move outwardly to clear the tubing when elevated and to be locked against upward movement within the housing in the elevated position; and yieldable means associated with said slips and in continual pressure engagement with said tubing for moving said slips in said housing into an engaging or a non-engaging relation with said tubing during a downward or upward movement of said tubing through said slips.

1,868,120. ARRANGEMENT IN CONDENSERS. ERNST GUSTAV SIEVERT and HENNING SVENSSON, Sundbyberg, Sweden. Filed May 7, 1926, Serial No. 107,410, and in Sweden May 15, 1925. 1 Claim. (Cl. 175—41.)

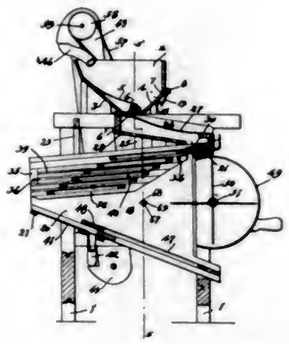
An electric condenser comprising a plurality of interconnected condenser units each consisting of metallic

foils and insulating layers spirally wound about a cylindrical core, said condenser units being arranged coaxially inside a cylindrical metallic casing which tightly encloses said units so as to transfer heat effectively from



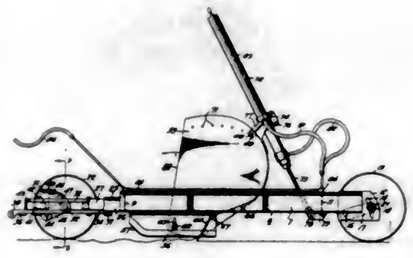
the interior of the condenser, and which serves at the same time as a common support for the condenser units and as an oil container in which the condenser units are placed immerged in oil.

1,868,121. GRAIN GRADER AND CLEANING MACHINE. JACOB SPENST, Munich, N. Dak. Filed Apr. 24, 1929. Serial No. 357,816. 1 Claim. (Cl. 209—245.)



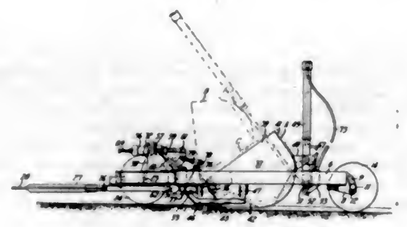
In a grain cleaning machine, the combination with a feed hopper having a discharge outlet at the bottom thereof, of a driven fluted roller extending lengthwise within the outlet, a plurality of gates hinged to the hopper at one side of the outlet, a cross shaft rotatably carried by the hopper, cranks extending downwardly from the cross shaft, springs interposed between the lower ends of the cranks and the gates and pressing the gates towards the rollers and manually operated means for turning the shaft and releasably fastening it in various turned positions.

1,868,122. LEVELER. CHARLES W. THARP, Watsonville, Calif. Filed Mar. 25, 1930. Serial No. 438,760. 8 Claims. (Cl. 37—131.)



5. A leveler comprising a framework, a scoop pivotally mounted on said framework; said scoop including a plate pivotally mounted thereon, and a hydraulically expansible chamber connected to said plate and to said framework.

1,868,123. LEVELER. CHARLES W. THARP, Watsonville, Calif. Filed Mar. 23, 1931. Serial No. 524,492. 6 Claims. (Cl. 37—131.)

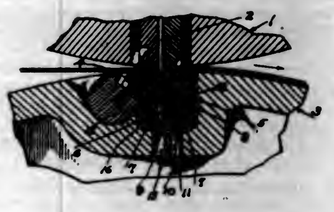


1. A leveler comprising a framework, a scoop, links pivoted to the forward end of said scoop and to said framework, hydraulic means for actuating said links for raising and lowering said scoop, a hydraulically expansible chamber interposed between the rear end of said scoop and said framework and a hydraulic conduit connecting said hydraulic means and said hydraulically expansible chamber.

1,868,124. PROCESS FOR THE MANUFACTURE OF MONOBENZOYLDIAMINOANTHRAQUINONES. PAUL E. THOMASCHEWSKI, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed June 16, 1928. Serial No. 286,066. 9 Claims. (Cl. 260—60.)

1. The process of preparing a monobenzoyldiaminoanthraquinone which comprises heating a diaminoanthraquinone with benzoyl chloride in the presence of sodium chloride.

1,868,125. CUTTING MECHANISM FOR PRINTING MACHINE FOLDERS. JOHN R. TOMLIN, Brooklyn, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed July 10, 1931. Serial No. 549,874. 5 Claims. (Cl. 164—67.)



1. In a cutting mechanism for printing machine folders, the combination of a cutter block composed of a plurality of adjacent resilient elements, the two outer elements having inner recessed faces to provide clearances through which paper strips, dirt, and the like are forced by the cutting blade to clear the block.

1,868,126. HINGE. WILLIAM J. WILSON, Pittsburgh, Pa., assignor to McKinney Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 20, 1929. Serial No. 415,466. 1 Claim. (Cl. 16—128.)



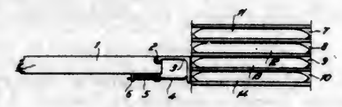
A hinge comprising pivotally connected leaves, at least one of such leaves having a shoulder between the pivotal connection of the leaves and the outer extremity of such leaf, such shoulder facing generally away from the pivotal connection of the leaves and being adapted to abut an edge of a door or jamb to assist in positioning the hinge, the material of the leaf being removed outwardly of the shoulder and the shoulder being discontinuous opposite the portion of the leaf projecting beyond the shoulder.

1,868,127. PRODUCTION OF VALUABLE HYDROCARBONS. FRITZ WINKLER and HANS HABUBER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 27, 1928, Serial No. 328,849, and in Germany Jan. 5, 1928. 10 Claims. (Cl. 260—171.)

1. In the production of valuable hydrocarbons by heating a mixture comprising an olefine and acetylene, the step of bringing the said initial materials, while in the hot state, only into contact with substances selected from the class consisting of carbon, silicon, lead, tin, zinc, aluminum and alloys containing substantial amounts of these metals.

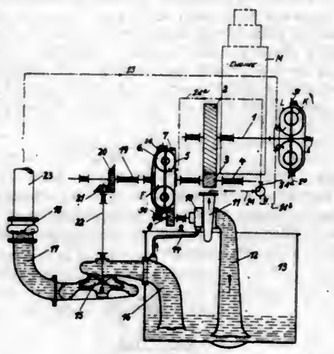
1,868,128. LOOM. JOSÉ MAS BADIA, Barcelona, Spain. Filed May 10, 1930, Serial No. 451,383, and in Spain Aug. 14, 1929. 4 Claims. (Cl. 139—116.)

1. In looms provided with shifting shuttle boxes, a plurality of shuttles, a device for ensuring the complete entry of shuttles into the shuttle boxes and comprising a member movably connected to the loom frame and means for supporting the said member resiliently in its initial position so that it presents a surface lying parallel to the axes of the shuttles in the path of a shuttle projecting



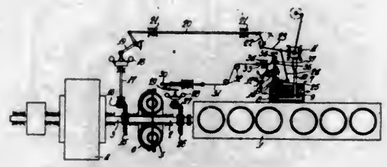
from the boxes which yields and takes up an inclined position to force the shuttle into its box in its continued downward movement.

1,868,129. HYDRAULIC GEAR AND COUPLING. GUSTAV BAUER, Hamburg, and JOHANN NIKOLAUS KIEP, Altona, Germany. Filed Apr. 5, 1929, Serial No. 352,764, and in Germany Mar. 27, 1928. 3 Claims. (Cl. 60—54.)



1. A power transmitting mechanism including a coupling of the Föttinger type, a collecting tank, a pump mounted outside of said tank for delivering liquid from said tank to said coupling for filling the latter to effect power transmission, a pump for supplying liquid to said coupling to overcome leakage, means for operatively connecting and disconnecting said first mentioned pump from the source of power, a vacuum pump maintaining the conduit connected to said first mentioned pump filled with liquid both when said first mentioned pump is running and when it is at rest, and a check valve for preventing return of liquid from the coupling to said first mentioned pump.

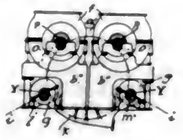
1,868,130. CONTROL DEVICE FOR ENGINES AND ROTORS DRIVEN THEREBY. GUSTAV BAUER and WALTER BROSE, Hamburg, Germany. Filed June 18, 1930, Serial No. 461,931, and in Germany June 1, 1929. 8 Claims. (Cl. 123—2.)



1. In combination, a prime mover, a driven rotor connected to said prime mover by a slippage coupling whereby speed variations between the two are possible, means

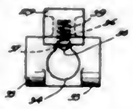
including a governor operable in accordance with the speed of the driven rotor for controlling the speed of the prime mover to maintain the speed of a driven rotor substantially constant, and means including the governor driven by the prime mover and effective only when the speed of said prime mover exceeds a predetermined limit.

1,868,131. TURBINE INSTALLATION. GUSTAV BAUER, Hamburg, Germany, assignor to Deutsche Schiff- und Maschinenbau Aktiengesellschaft, Bremen, Germany. Filed Nov. 6, 1930, Serial No. 493,743, and in Germany Dec. 3, 1929. 4 Claims. (Cl. 60—70.)



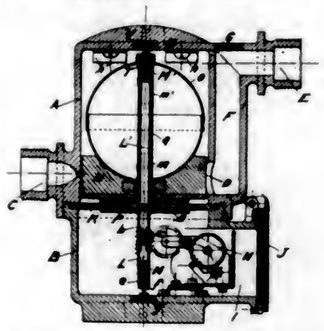
1. In a turbine installation, a shaft, a turbine, reduction gearing between said shaft and said turbine, a casing for said gearing, said casing being divided into an upper section and a lower section, a support member connected to the lower section of said gear casing, and adapted to support one end of said turbine, and means detachably connecting said support to the uper section of said gear casing.

1,868,132. DISTRIBUTING PANEL. HAROLD G. BAXTER, Baldwin, N. Y., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 3, 1929. Serial No. 352,090. 3 Claims. (Cl. 200—113.)



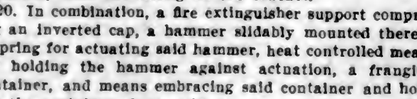
1. A fuse carrier comprising an insulating block having an integral portion provided with a transverse opening to receive a cartridge fuse and having yielding members for frictionally engaging the fuse for releasably retaining the fuse in operative position.

1,868,133. LIQUID METER. JEAN LOUIS BERTHET and GAYTAN MICHEL, San Sebastian, Spain, assignors to Compagnie pour la Fabrication des Compteurs et Material d'Usines a Gaz Société Anonyme Française, Montrouge, France. Filed Jan. 3, 1929, Serial No. 329,985, and in France Jan. 9, 1928. 4 Claims. (Cl. 73—37.)



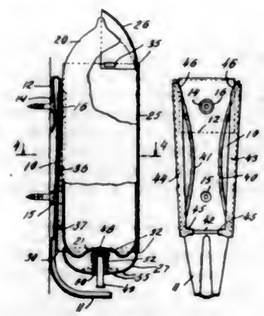
1. In a liquid meter, a casing having a chamber, a liquid-tight partition dividing the chamber of the casing into two superposed compartments an indicating mechanism in one compartment, said casing having an inlet and an outlet for the liquid in the other compartment, a shaft vertically extending through both compartments and fixedly carried by said partition, a turbine wheel rotatable upon said shaft in the said other compartment, a circular magnet rotatable on said shaft and fixed to said turbine wheel adjacent said partition, a very thin non-magnetized disc of tempered steel in said one compartment and adapted to be driven by said magnet, means surrounding said shaft for rotatably supporting said non-magnetized disc adjacent said partition, means connecting said supporting means to the indicating mechanism, and a float surrounding said shaft in the said other compartment, fixed to said turbine wheel and adapted to compensate for the weight of said rotor and the elements carried thereby to reduce the friction of rotation of said rotor and magnet.

1,868,134. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Feb. 26, 1931. Serial No. 518,431. 22 Claims. (Cl. 108—5.4.)



1. A car roof comprising roof sheets that are offset vertically lengthwise and are provided with an upstanding flange along the lower side and a downturned flange along the upper side, the downturned flanges of adjacent sheets being secured together flatwise and the upstanding flanges of adjacent sheets being secured together flatwise.

1,868,135. FIRE EXTINGUISHER AND SUPPORT THEREFOR. WILHELM B. BRONANDER, Montclair, N. J. Filed Oct. 10, 1927. Serial No. 225,060. 21 Claims. (Cl. 169—26.)

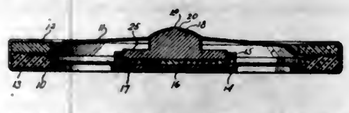


7. In combination, a frangible container, a casing surrounding said container, means for supporting said casing and container, a hammer carried by the casing and adapted to break the container, and a spring for forcing said hammer against the container, said casing having perforations adjacent the hammer for permitting the escape of liquid therefrom.

13. In combination a bracket, a casing having oppositely extending portions, a fire extinguisher container in the casing and compression springs carried by the bracket and engaging said portions of the casing so as to rigidly but releasably hold the casing on the bracket.

20. In combination, a fire extinguisher support comprising an inverted cap, a hammer slidably mounted therein, a spring for actuating said hammer, heat controlled means for holding the hammer against actuation, a frangible container, and means embracing said container and holding the container above said cap.

1,868,136. TEMPERATURE RESPONSIVE DEVICE. JOHN H. DERBY, Scarsdale, N. Y., assignor to American Fire Prevention Bureau, New York, N. Y., a Corporation of New York. Filed May 16, 1930. Serial No. 452,895. 14 Claims. (Cl. 200—142.)

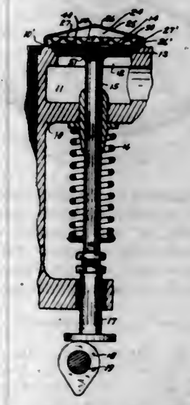


1. A temperature responsive device for closing an electrical circuit when a given temperature is reached which comprises a circuit terminal having a well thereon, a conductor adapted to fuse at the given temperature mounted in said well so that in its fused condition it will contact with said circuit terminal, a layer of insulating material substantially covering said fusible conductor but leaving a small space through which the conductor may, when fused, flow past said insulating layer, a second circuit terminal resiliently pressed against the insulating layer and toward the fusible conductor whereby to force the latter, when fused, through said space and into contact with said second circuit terminal, the second circuit terminal being recessed about said space whereby to avoid contact between the fusible conductor and the second circuit terminal in case of cold flow of the fusible conductor.

1,868,137. PRESSING UP OF RUBBER FOOTWEAR, GALOSHES, OR THE LIKE. HENRY CHRISTIAN LOUIS DUNKER, Helsingborg, Sweden. Filed Aug. 22, 1929, Serial No. 387,783, and in Germany Mar. 19, 1928. 2 Claims. (Cl. 18—56.)

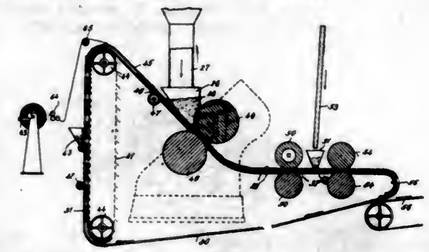
1. The herein described method of producing pressed rubber footwear, comprising a rubber sole and at least partially rubber covered sides, which method consists in forming a coherent inner lining portion comprising a sole and sides of at least partially rubber covered fabric, subjecting said lining portion to a preliminary vulcanization to prevent change of shape and folding thereof when said lining is subjected to pressure during the pressing process, drawing said preliminary vulcanized lining portion over a press last, applying pieces of roughly cut rubber to the exterior of said lining portion and applying heated molding pressure to the assembly to form the final article.

1,868,138. POPPET VALVE. EDWIN J. FISK, Cleveland, Ohio. Filed Apr. 10, 1930. Serial No. 443,078. 10 Claims. (Cl. 123—188.)



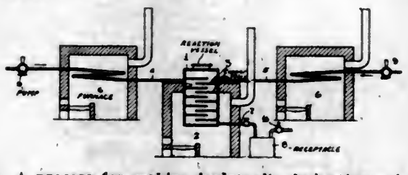
1. In combination with a valve for an internal combustion engine, the valve having a head and a stem, means mounted on the valve overlying the head and providing a continuous skirt lying outwardly from the seat of the head, to effect a closure in cooperation with the valve head.

1,868,139. APPARATUS FOR MAKING MOLDED PRODUCTS. DUNCAN DAVIDSON FORBES, Glen Head, N. Y., assignor to Lancaster Asphalt, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 12, 1929. Serial No. 392,163. 28 Claims. (Cl. 25—99.)



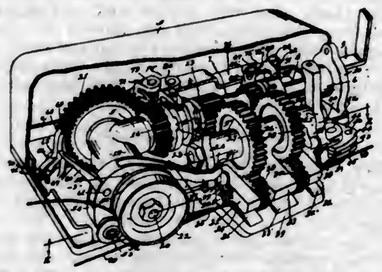
1. Apparatus for producing molded articles which comprises the combination of a trackway, a mold having supporting wheels running between upper and lower rails of spaced tracks forming the said trackway, means for introducing plastic material into said mold, and rotary elements between which said mold passes, said elements pressing the material in said mold and engaging the top and bottom of said mold.

1,868,140. EFFECTING ORGANIC REACTIONS IN AQUEOUS MEDIA AT HIGH TEMPERATURES. WILLIAM J. HALE, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Sept. 1, 1926. Serial No. 132,986. 23 Claims. (Cl. 260—154.)



1. A process for making hydroxylic derivatives of aromatic hydrocarbons, which includes bringing together under separate pressure supplies as reaction components a reactable aromatic hydrocarbon derivative and a compound of an alkali metal capable of effecting hydrolysis, at least one of such components having sufficient heat for the reaction.

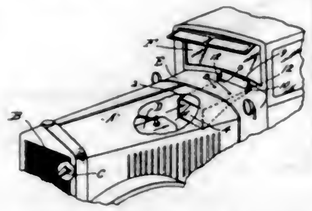
1,868,141. WIRE TYING MACHINE. HERBERT HARVEY, Los Angeles, Calif. Filed June 25, 1930. Serial No. 463,693. 22 Claims. (Cl. 140—93.)



1. In a wire tying machine, the combination of a rotatable operating member, a wire twisting means, a wire

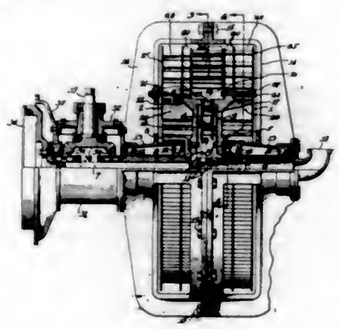
tensioning means, a gripping device for gripping and holding an end of said wire during a tying operation, and connections between said gripping device and said operating member automatically operable when the wire is tensioned to a predetermined extent, for rendering said tensioning means inoperative and said twisting means operative.

1,868,142. HEATING DEVICE FOR THE WINDSHIELDS OF MOTOR VEHICLES. WILLIAM H. HEATON, Shawnee, Kans. Filed Feb. 11, 1929. Serial No. 339,027. 5 Claims. (Cl. 20—40.5.)



1. In a device of the character described, means for collecting heated air from the engine of a motor vehicle, a deflector for directing the heated air so collected at an angle against the windshield of said vehicle, a lever fixedly secured to said deflector, and a second lever pivotally secured to the first lever for adjusting the deflector.

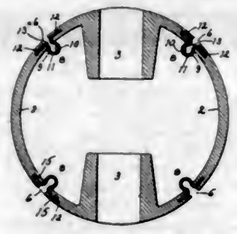
1,868,143. TURBINE. JOHN O. HEINZE, Detroit, Mich. Filed Aug. 24, 1928. Serial No. 301,779. 4 Claims. (Cl. 60—41.)



1. A turbine including opposed rotors forming between them a chamber, pairs of parallel spaced apart plates secured adjacent their inner edges to said rotors and forming the walls of said chamber, means forming air passages at the outer side of each wall, and blades extending from each wall across the chamber to adjacent the opposite wall, said plates of each pair and said means being formed with aligned openings within which the outer end portions of said blades are fixed with said outer end portions extending across said air passages.

1,868,144. PISTON. JOHN O. HEINZE, Detroit, Mich., assignor of one-half to Arthur L. Cash, Marine City, Mich. Filed May 2, 1931. Serial No. 534,516. 1 Claim. (Cl. 74—108.)

The combination with a piston having a skirt portion divided longitudinally by a plurality of open slits therein of temperature responsive means each comprising strips of metal placed face to face and united throughout their contacting areas, said strips being formed of metals having different coefficients of expansion and being bent to provide a longitudinally extending loop located centrally of the width of said strips with said loop extending laterally of said strips and with the edges of said loop spaced apart, the portions of the strips at opposite sides of said loop being substantially flat and formed with openings with por-

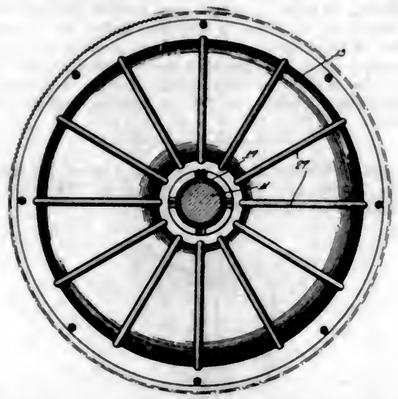


tions of said skirt at opposite sides of each of said slots engaged in said openings to secure said strips in place in said skirt across and closing said slits with said loops of said strips extending inwardly of said skirt through and closing said slots in said skirt throughout the length of each slit.

1,868,145. TREATMENT OF RUBBER. LOUIS H. HOWLAND, Passaic, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Mar. 31, 1930. Serial No. 440,629. 14 Claims. (Cl. 18—53.)

1. A process for vulcanizing rubber which comprises treating rubber with a vulcanizing agent and an amine acridine.

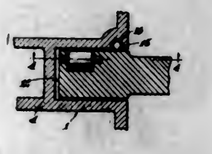
1,868,146. HYDRAULIC COUPLING. JOHANN NIKOLAUS, KIEP, Altona-Hochkamp, Germany. Filed July 7, 1931 Serial No. 549,306. 9 Claims. (Cl. 60—54.)



1. A hydraulic coupling of the Föttinger type, including driving and driven members conjointly defining a fluid operation circuit, each of said members including spaced walls and intervening vanes, one of said walls having a plurality of radial corrugations presenting grooves on the inside, receiving and circumferentially spacing said vanes.

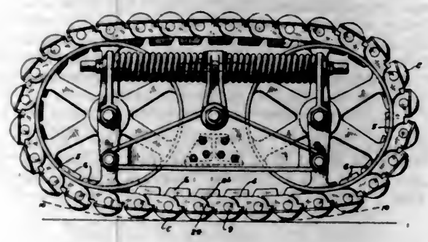
1,868,147. VALVE. OTTO V. KRAUSE, St. Davids, Pa., assignor to I. P. Morris and De La Vargne, Inc., a Corporation of Delaware. Filed Jan. 6, 1927. Serial No. 159,292. 5 Claims. (Cl. 251—167.)

1. In combination with a valve mechanism adapted to be interposed between up and down stream conduits and having a supporting structure and a linearly movable valve member associated therewith and adapted during movement and during existence of normal upstream pressure to control flow of fluid through said conduits, of anti-friction means associated with said structure and member to space adjacent surfaces of said member and structure, and means for preventing leakage through said space when



the valve is in its closed position, said latter means comprising a fluid pressure expansible element movable into said space to relieve pressure upon the anti-friction means, said expansible element upon release of fluid pressure therein permitting relatively free valve movement on said anit-friction means.

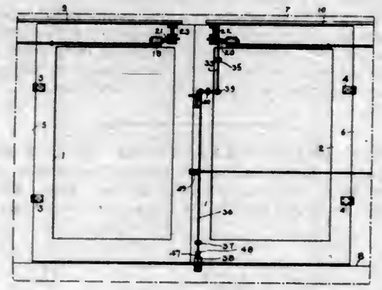
1,868,148. TRACK LINK. WESLEY K. MCMILLAN and JACOB S. WALCH, San Francisco, Calif., assignors, by direct and mesne assignments, to McMillan-Miller Road Machinery—Inc., a Corporation of California. Filed June 9, 1930. Serial No. 459,897. 1 Claim. (Cl. 305—10.)



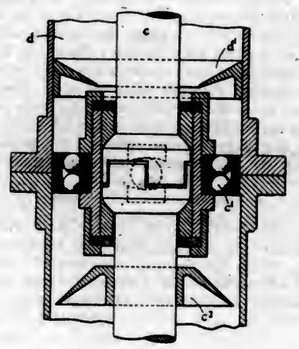
In a structure of the character described, a track consisting of a plurality of connected links, each of which comprises a pair of interspaced link bars, said bars terminating in bearing lugs at one end, a bearing sleeve formed integrally with and connecting the opposite ends of the link bars, a shoe extending crosswise of the link bars and extending outwardly beyond them, said shoe being formed integrally with the bars and the major portion of said shoe being curved, the common axis of said bearing lugs being the center of curvature, said shoes also being semi-cylindrical in contour between the said lugs to form a pocket for the reception of the bearing sleeve of an adjacent link positioned between the bearing lugs, a link pin pivotally connecting the bearing lugs of the link with the bearing sleeve of an adjacent link, stop means on each end of the link for engagement with adjacent links to limit rotative movement of the links about the link pins, and hollow lugs, adapted to be engaged by teeth of a driving sprocket wheel, formed integrally with the bearing lugs and the shoe adjacent the ends of said link pin.

1,868,149. AUTOMATIC DOOR OPENER AND CLOSER. FRANK M. NUNEZ, San Francisco, Calif. Filed Sept. 30, 1929. Serial No. 396,221. 6 Claims. (Cl. 268—33.)

1. In combination with a pair of hinged doors; arcuate rack segments fixed relative to the hinge centers of said doors; trips at the ends of said segments; an electric circuit, reversible motors on said doors engaging said segments, and a reversible switch in said circuit; a remote control for said switch; and clutches interposed between said motors and segments and engaging said trips.



1,868,150. DEEP WELL PUMP. ARTHUR CRAWLEY POTTER, Grantham, England, assignor to A. C. Potter & Co., Limited, Grantham, England. Filed Sept. 24, 1927, Serial No. 221,790, and in Great Britain Oct. 20, 1926. 1 Claim. (Cl. 103—102.)

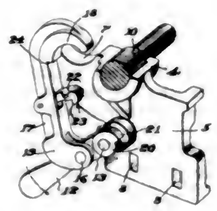


In a deep well pumping apparatus having a deep well pump, a sectional pump shaft, couplings connecting adjacent ends of contiguous sections and a shaft tube for the support of the pump driving shaft couplings in bearings, lubricating means comprising an outlet pipe for the lubricant connected at its upper end to the lower end of the said shaft tube and at its lower end to a reservoir for the lubricant, an air operated lubricant circulating pump set below the well pump, an oil admission pipe extending from the reservoir to the said air operated lubricant circulating pump, and an oil delivery pipe extending from the said air operated lubricant circulating pump to the well head, an air supply pipe extending from a source of air under pressure at the well head to the said air operated lubricant circulating pump, means for directing lubricant on to the couplings by which the sections of the pump driving shaft are respectively connected and on to the bearings by which the said couplings are respectively supported, and for directing the lubricant from the said couplings and bearings to the shaft tube, comprising pairs of deflecting flanges, the flanges of the respective pairs being mounted above and beneath the said couplings and bearings, substantially as hereinbefore described.

1,868,151. PROCESS FOR PREPARING SOLID OR HALF-SOLID SOLUTIONS OF ALKALINE HYPOCHLORITES. PETER SHESTAKOFF, Paris, France. Filed June 20, 1931, Serial No. 545,846, and in France June 27, 1930. 2 Claims. (Cl. 23—246.)

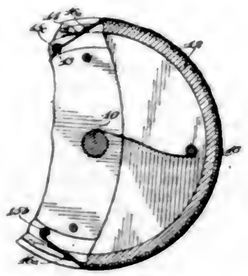
1. The process for preparing solid solutions of hypochlorite alkalis, which consists in adding to the aqueous solution of alkalis, alkaline salts of saturated fatty acids, heating the mixture until the entire dissolution of the soap is obtained and then saturating it with chlorine.

1,868,152. BEAM LOCK FOR LOOMS. HENRY N. SMITH, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Mar. 30, 1931. Serial No. 526,188. 1 Claim. (Cl. 308—24.)



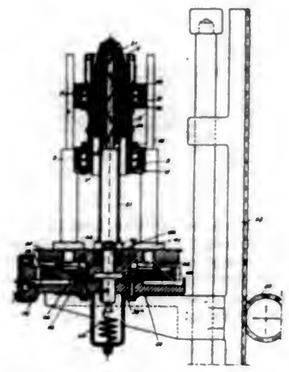
A beam lock for looms, comprising an open journal bearing, a journal retainer for closing the bearing, a manually operable lever pivotally connected to the loom frame, a pivotal connection between the journal retainer and said lever at a point between the ends of the lever so that when the lever is turned about its pivotal support it will draw the journal retainer lengthwise to close the open bearing and move the pivotal connection into locking position, and a safety catch, the members of which are mounted one on the lever and the other on the journal retainer to hold the parts in journal locking position.

1,868,153. RIBBON GUIDE. LLOYD A. TUPPER, Chicago, Ill., assignor to Chicago Manifold Products Company, Chicago, Ill., a partnership composed of Lloyd A. Tupper and David H. Jones. Filed Nov. 16, 1931. Serial No. 575,354. 11 Claims. (Cl. 101—336.)



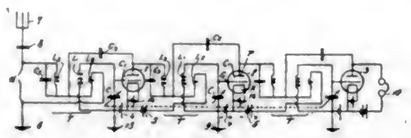
1. A guide for multigraph-cylinder ribbons comprising a pair of laterally-spaced strips adapted to be wrapped over the type form of the cylinder and positioned opposite the side edges of the ribbon, and guide elements carried by the strips to check the lateral deviation of the ribbon during its travel.

1,868,154. SPINNING MACHINE, TWISTING FRAME, REELING ON APPARATUS AND LIKE MACHINE FOR WINDING THREADS AND THE LIKE. GASTON VAN COPPENOLLE, Rochecorbon, France. Filed May 3, 1929, Serial No. 360,210, and in France May 21, 1928. 3 Claims. (Cl. 118—18.)



1. A spinning machine of the character described including a rotatable spindle supporting table, a plurality of spindles mounted upon said table, bobbin holders carried on said spindles, at least one driven flier for cooperating with any one of said spindles, means for lowering said spindles from a winding position to a doffing position, means for rotating said spindle supporting table when the spindles are in the doffing position, means for returning said spindles to the winding position after rotation of said spindle supporting table and means for automatically severing the end of the thread on the full bobbin.

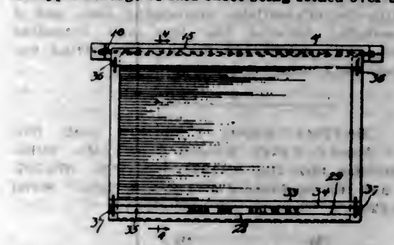
1,868,155. RADIO COUPLING SYSTEM. HAROLD A. WHEELER, Great Neck, N. Y., assignor to Hazeltine Corporation, a Corporation of Delaware. Filed June 20, 1929. Serial No. 372,275. 21 Claims. (Cl. 179—171.)



1. The combination with a thermionic tube having input and output sections, of an electrical coupling network having a secondary circuit tunable over a range in frequency connected to said input section, a primary circuit coupled with said secondary circuit and including an impedance capacitively reactive thruout said frequency range, and means independent of said impedance including a portion of said coupling network for reducing substantially to zero transfers of energy from the output to the input section of said tube during operation thereof, whereby a uniformly high degree of stable amplification is obtainable thruout said frequency range.

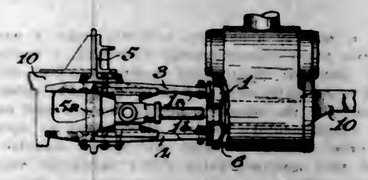
1,868,156. INDEX OR FILING SYSTEM. ZEMACH AUERBACH, New York, N. Y. Filed May 15, 1928, Serial No. 277,812. Renewed Dec. 8, 1931. 8 Claims. (Cl. 129—16.7.)

7. A holder for cards comprising a sheet folded upon itself at one edge to provide a loop, a hinge member extending through said loop, said folded edge of said sheet overlapping the main portion of said sheet to provide a pocket, the opposite edge of said sheet being folded over upon itself



to form a second pocket, said pockets being adapted to receive therein the opposite edges of a card placed parallel with the main portion of said sheet.

1,868,157. EXPANSION SUPPORT FOR LOCOMOTIVE CROSSHEAD GUIDES. JAMES G. BLUNT, Schenectady, N. Y., assignor of one-half to James W. Highleyman, Pocatello, Idaho. Filed July 28, 1928. Serial No. 295,956. 13 Claims. (Cl. 308—3.)



1. In a steam locomotive, the combination of a frame structure; a crosshead guide, supported thereon at its rear end; and means supporting the guide at its forward end for free longitudinal sliding movement of the guide at said forward end, said means confining said forward end, said means confining said forward end against vertical movement relative to said means.

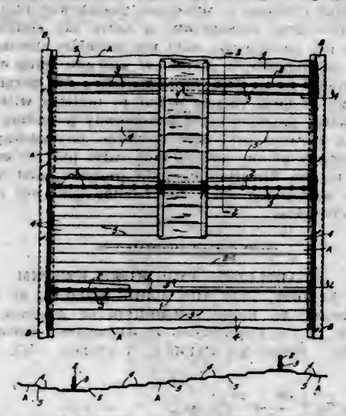
1,868,158. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Sept. 26, 1930. Serial No. 484,512. 16 Claims. (Cl. 108—5.4.)



1. A car roof comprising roof sheets adapted, arranged and secured together at their side margins by upstanding seams to constitute panels at one level alternating with panels at a different level, the edges of adjacent panels being connected by vertically disposed web portions, the side margins of adjacent sheets having upstanding flanges that abut and seam caps that straddle adjacent upstanding flanges and are rigidly secured thereto.

1,868,159. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed July 6, 1931. Serial No. 548,955. 6 Claims. (Cl. 108—5.4.)

1. A car roof comprising roof sheets whose longitudinal side portions are respectively above and below the level of the longitudinal middle portion, said side portions being provided with upstanding flanges, and the



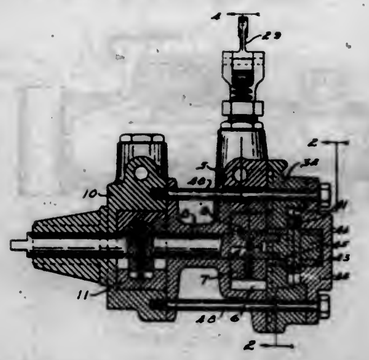
flanges at the lower sides of adjacent sheets being secured together flatwise, and the flanges at the higher sides of adjacent sheets being secured together flatwise.

1,868,160. MANICURING DEVICE. AMADEUS G. DALMAS, Oakland, Calif. Filed July 27, 1931. Serial No. 553,331. 6 Claims. (Cl. 132—73.)



1. In a manicuring device, a plate having a filing surface provided on a side thereof, a finger guide in opposed relation to said file surface and spaced therefrom to permit of a finger being inserted therebetween, and means securing said plate and guide together.

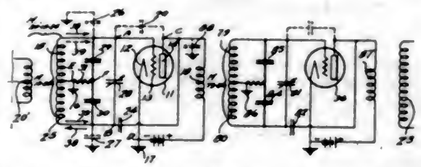
1,868,161. PUMP MECHANISM. EARL W. DILG, Detroit, Mich., assignor to Evans Appliance Company, a Corporation of Michigan. Filed Feb. 20, 1930. Serial No. 429,867. 5 Claims. (Cl. 123—139.)



1. In a fluid pump and distributing apparatus, the combination of a housing having a pumping cylinder therein, intake and discharge passageways in said housing com-

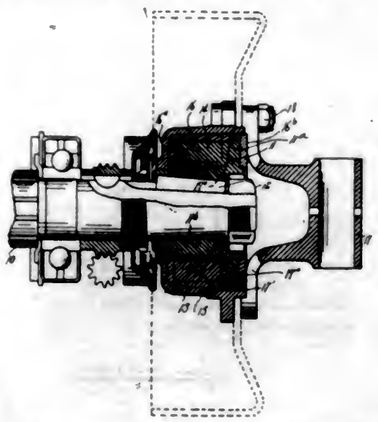
municating with said pumping cylinder, a shaft journaled in said housing, a rotor piston on said shaft for said pumping cylinder, a valve pin passageway intersecting said discharge passageway, a valve pin slidable in said valve pin passageway, said pin normally closing said discharge passageway, a portion of said pin being of less cross sectional area than the remainder for permitting the passage of fluid thereby when in registry with said fluid discharge passageway, a passageway providing communication between said fluid discharge passageway and the passageway at one end of said valve pin for moving said pin in one direction by fluid pressure, and a cam driven by said pump shaft for moving said pin in the opposite direction.

1,868,162. STABILIZED AMPLIFIER SYSTEM. HAROLD F. ELLIOTT, Palo Alto, Calif., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Oct. 10, 1928. Serial No. 311,491. 7 Claims. (Cl. 179—171.)



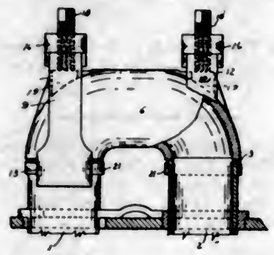
1. In an amplifier, the combination of an electron discharge device having input and output electrodes, a tuned input circuit for said device including inductance and capacity, one end of said inductance being connected to one of said input electrodes and an intermediate point on said inductance being connected to another of said input electrodes, a capacity connected in series between the other end of said inductance and one of said output electrodes, an impedance shunting said input circuit, and a non-reactive circuit including a damping resistance and connecting said intermediate point with a point on said impedance that is equi-potential therewith with respect to load currents in said input circuit.

1,868,163. SHOCK INSULATING DEVICE. EDWIN R. EVANS, Detroit, Mich. Filed Aug. 24, 1925. Serial No. 52,183. 12 Claims. (Cl. 64—96.)



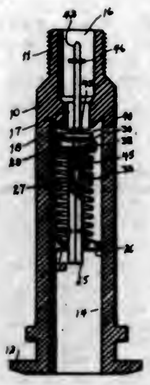
1. A shock insulating device for use in absorbing shocks or vibrations transmitted from the ground wheels of a motor vehicle through the propeller shaft comprising a hub member adapted to be driven by the vehicle engine the said hub member having an annular portion provided with a series of openings, and a casing member adapted to be driven by the hub member, said members being formed with circumferentially overlapping lugs, and a yielding material between the lugs and extending through the said openings and forming the driving medium between said members.

1,868,164. RETURN BEND FITTINGS FOR OIL STILLS. FRED C. FANTZ, Webster Groves, Mo. Original application filed Dec. 8, 1931, Serial No. 579,707. Divided and this application filed Feb. 3, 1932. Serial No. 590,629. 5 Claims. (Cl. 285—20.)



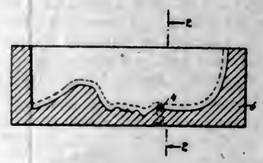
1. In a refinery apparatus, a return bend, a pair of shouldered tubes communicating therewith, a compound housing therefor, comprising complementary sections adapted to partially encircle the ends of said tubes and to be locked to the shoulders on the tubes, a boss on one of said complementary sections there being an aperture in the other section in which said boss is mounted, the walls of said aperture being flared outwardly whereby the lower portions of said sections can be swung outwardly and a set screw in said boss adapted to contact said return bend to hold said tubes and return bend in a tight joint.

1,868,165. TIRE VALVE. THEODORE A. HAMMOND, Montclair, N. J. Filed Nov. 2, 1927. Serial No. 230,420. 3 Claims. (Cl. 152—12.)



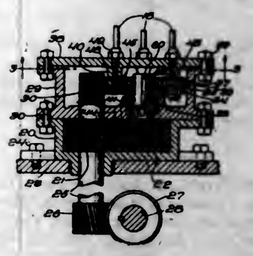
1. A tire valve comprising a unit casing, having a longitudinal bore, a portion of which, intermediate the ends of the casing, is of a reduced diameter for providing a valve seat at the upper end of the part of the bore therebelow, an apertured guide disc frictionally held within the bore below said seat, a valve stem reciprocable within said guide disc, a cup of non-yieldable material having an internal diameter greater than that of the aforesaid reduced portion of the bore, fixed to the upper end of said stem, a spring in bearing engagement with said apertured disc and said cup to urge said cup toward said valve seat, a disc of resilient material having a diameter corresponding to that of the interior of said cup, a pin extending through said latter disc and fixed thereto, whereby said resilient disc may be pressed through the reduced portion of said bore, substantially the entire area of said disc being deformable under contact with the wall of the reduced portion of the bore to facilitate its passage therethrough, said resilient disc being locatable within said cup to cooperate with said valve seat to seal said bore under the influence of said spring, said cup and said resilient disc providing a non-deformable valve having a yieldable surface presented for engagement with said valve seat.

1,868,166. DOLL. PERCIVAL HARRIS, Rockaway Park, N. Y. Filed July 23, 1929. Serial No. 380,436. 11 Claims. (Cl. 46—40.)



1. In the manufacture of heads for dolls, the method which includes cutting a slit partially through the wall of the head near the eye portion thereof, and cementing the base of an eye lash in the eye lash slit.

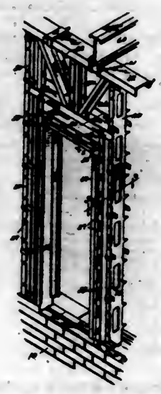
1,868,167. LUBRICATING MECHANISM. CHARLES C. HOWENSTINE, Detroit, Mich. Filed May 25, 1929. Serial No. 365,805. 18 Claims. (Cl. 184—35.)



1. In combination, a casing having an inlet and an outlet, a plurality of superposed cooperating rotatable discs in said casing one of which overlies said outlet, each of said discs having an opening therein, the path of travel of said openings intersecting the axial line of said outlet, and a common means directly engaging at least two of said discs for driving them at unequal rates of rotation.

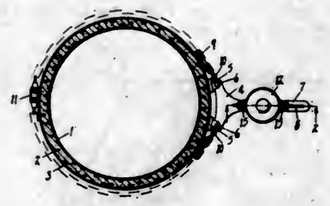
1,868,168. BUILDING CONSTRUCTION. ALVA M. HULL, Detroit, Mich., assignor to Hul-Lo-Wen Fireproof Everlasting Homes Company, Detroit, Mich., a Corporation of Michigan. Original application filed Aug. 30, 1926, Serial No. 132,340. Divided and this application filed Oct. 17, 1928. Serial No. 312,975. 3 Claims. (Cl. 189—34.)

3. In wall construction for buildings in which a plurality of similar wall units are used, a door unit comprising an outer frame similar in form to the frames of the units, a horizontal cross member inside and secured to said outer frame, a door frame within the outer frame and under the cross bar, and means engaging and connecting the door frame and the cross member to secure



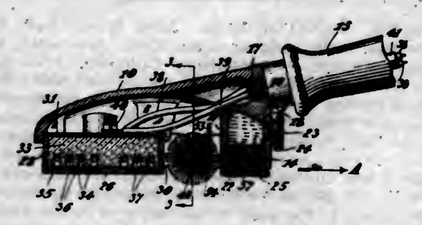
the former to the latter, the means being adjustable so that the position of the door frame in the outer frame may be varied as the former is suspended from the latter.

1,868,169. CONCRETE MOLDING APPARATUS. CORWILL JACKSON, Chicago, Ill. Filed Dec. 20, 1929. Serial No. 415,382. 7 Claims. (Cl. 259—72.)



1. The combination of a support provided with pivotally mounted form engaging feet, a cable attached to said support independently of said feet and adapted to embrace a form for clamping the support thereon, and a vibrating unit adjustably mounted on said support.

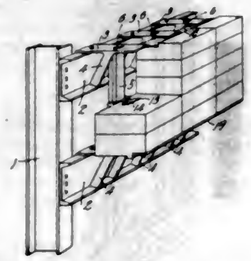
1,868,170. FABRIC TREATING DEVICE. SAMUEL JASGUR, Bronx, N. Y. Filed Feb. 5, 1932. Serial No. 591,131. 12 Claims. (Cl. 26—2.)



1. In a fabric treating device, in combination, a casing carrying a smooth heatable ironing element, means for heating said ironing element, a moistening element and a brush positioned between said ironing element and said

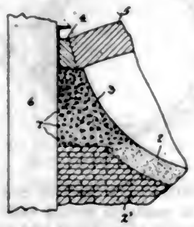
moistening element; said ironing, brushing and moistening elements being so positioned that they will all abut upon the surface of a fabric over which the device is moved.

1,868,171. FURNACE WALL. ANDREW L. KEELER, Troy, N. Y. Filed Oct. 11, 1928. Serial No. 311,916. 6 Claims. (Cl. 72—101.)



6. In a furnace wall construction, the combination with a metal frame including horizontally spaced, vertically extending members, of a refractory facing for said wall comprising blocks having comparatively shallow recesses in a horizontal face thereof, and anchors positively engaging said members and interfitting with said blocks in said recesses for tying the blocks to the frame.

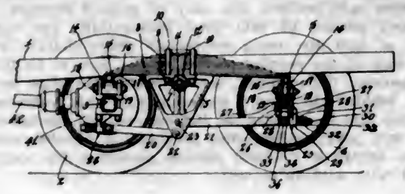
1,868,172. FURNACE CONSTRUCTION. ROY L. LEVENTRY, Youngstown, Ohio, assignor to Republic Iron and Steel Company, Youngstown, Ohio, a Corporation of Ohio. Filed Sept. 15, 1926. Serial No. 135,547. 2 Claims. (Cl. 263—46.)



1. An open-hearth furnace having a base, a roof substantially co-extensive with the area of the base, backstays, and a back wall between said base and said roof having a surface-retaining incline of refractory lump chrome iron ore held by a thickening of the wall in its lower portion, and by spaced billets, said billets engaging said backstays.

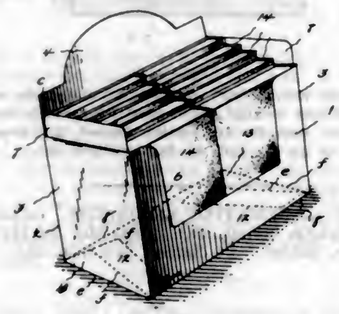
1,868,173. RUNNING GEAR. JOHN JUDSON LOW, Los Angeles, Calif., assignor to Six Wheel Corporation, Los Angeles, Calif., a Corporation of California. Filed Apr. 1, 1929. Serial No. 351,577. 2 Claims. (Cl. 280—124.)

1. A running gear including a frame, a bracket mounted on each of opposite sides thereof, a pair of springs, means for pivotally mounting one of said springs intermediate the ends thereof on each of said brackets, a pair of spaced axles, a first universal connecting means for each end of each of said springs for pivotally connecting the ends of said springs to the ends of said axles at points located above the axis of each connected axle, a pair of connecting rods for each axle, a second universal connecting means for connecting one end of each rod of each pair to one end of each of said axles at a point located below the axis of the connected axle, and means for pivotally connecting the other end of each of said rods at each side of the frame to one of said brackets at a point located below the axis of said spring mounting means substantially equal to the distance between the pivotal centers of said



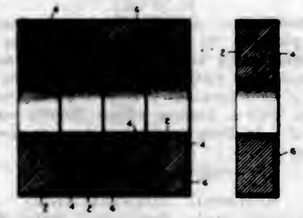
first and second universal connecting means between the outer ends of said rods and the adjacent ends of each connecting axle.

1,868,174. CONTAINER FOR PACKING AND DISPLAYING MERCHANDISE. FERDINAND REICHEL, New Haven, Conn., assignor to National Folding Box Company, New Haven, Conn., a Corporation of New Jersey. Filed Aug. 27, 1930. Serial No. 478,065. 11 Claims. (Cl. 206—44.)



1. A box having back, front and end walls, a bottom for said box, said bottom being adjustable to provide an angular or inclined supporting base for said box and said end walls having portions foldable to conform with the adjusted position of said bottom.

1,868,175. RECTIFIER. EMIL REISMAN, Brooklyn, N. Y., assignor to Technidyne Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 15, 1930. Serial No. 428,657. 11 Claims. (Cl. 175—366.)



1. In the manufacture of a dry rectifier having rectifier elements each including an element of high specific resistance, the method of making contact with said elements which includes coating the same with a liquid paint comprising finely divided metallic particles previously suspended and diffused in a liquid vehicle.

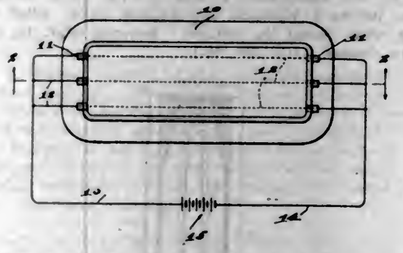
9. A copper oxide rectifier including copper discs each having an oxide surface coated with a metallic paint comprising finely divided silver particles suspended in a vehicle.

1,868,176. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 28, 1926. Serial No. 144,771. 12 Claims. (Cl. 180—14.)



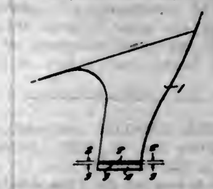
1. In a truck construction, the combination of a frame comprising a load bearing member and a traction member, a single pair of wheels for supporting each of said members, a pivotal connection having a vertical axis between said pairs of wheels for connecting said members together to permit one member to be positioned in angular relation to the other, said pairs of wheels and said pivotal connection co-operating to support said members in horizontal relation while permitting their relative pivotal movement about said vertical axis, one of said pairs of wheels being steerable, means for steering the steerable wheels, and means carried by one of said members for driving its supporting wheels in either direction and arranged to cooperate with said steering means to effect the movement and positioning of the other member into an angular relation thereto.

1,868,177. METHOD OF MANUFACTURING WIRED GLASS. FRED H. ROWE, Gloucester, Mass., assignor to The Clear View Wind Shield Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 20, 1928. Serial No. 327,407. 3 Claims. (Cl. 49—86.)



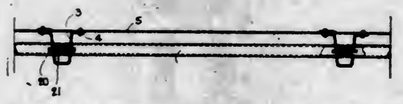
1. That improved method in the art of manufacturing wired glass which consists in pouring molten glass about a wire expanded by electrical energy, said wire being maintained at a temperature above the solidification point of the molten glass until said glass has fully solidified.

1,868,178. FASTENING DEVICE. BENJAMIN RUBIN, Philadelphia, Pa., assignor, by direct and mesne assignments, to Rubin Patents Corporation, a Corporation of Delaware. Filed June 27, 1929. Serial No. 374,197. 1 Claim. (Cl. 36—36.)



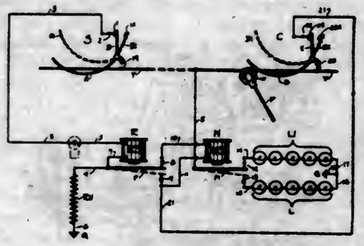
A fastening device comprising a plurality of plates, one of the plates having slots opening in grooves having a tapering space between the bottom of the grooves and the top of the plate therein, the other plate carrying tongues with their underlying faces tapered adapted to project through said slots to engage the space between the bottom of the groove and the top of the plate to effect a wedging engagement, said slots, grooves and the tongues being so arranged as to be brought into wedging engagement by rotation of one of the plates.

1,868,179. LOAD LIFTING BEAM FOR RAILWAY CARS. ARTHUR E. SMALL, Chicago, Ill., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed May 28, 1930. Serial No. 456,576. 3 Claims. (Cl. 108—5.4.)



1. In a railway car, the combination of spaced apart U-shaped carlines, each having substantially vertical walls with lateral flanges at the upper margins thereof, roofing secured to said flanges, a load lifting beam passing through and supported by the adjacent walls of adjacent carlines, and a flanged member at each end of the beam and having a threaded engagement therewith so as to be engaged with the respective walls of the carline so as to prevent the longitudinal movement of said beam.

1,868,180. TROLLEY RAILWAY SIGNAL SYSTEM. SAMUEL S. STOLP and FRANK H. RICHTERKESSING, Louisville, Ky., assignors to Nachod & United States Signal Co., Inc. Filed June 25, 1928. Serial No. 288,133. 16 Claims. (Cl. 246—84.)

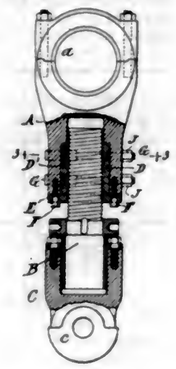


10. In an electrically operated signal system for an electric railway, comprising a trolley conductor, a current collector, normally closed circuit trolley contactors, and a circuit including a plurality of signal lamps arranged to display desired signal indications, said contactors being so arranged as to be mechanically engaged by a current collector, a control relay affected by the opening of the said trolley contactors, means whereby one signal indication is displayed when one contactor circuit is opened and retained displayed until another one of the said trolley contactor circuits is opened.

1,868,181. MACHINE ELEMENT. ROBERT W. STROUT, Brooklyn, N. Y., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of Delaware. Filed Sept. 30, 1930. Serial No. 485,340. 6 Claims. (Cl. 287—125.)

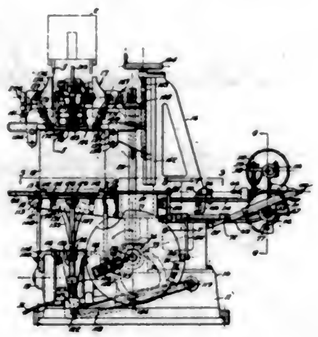
4. A machine element comprising a thrust-piece of adjustable length including two members, the one a tubular member and the other a threaded member entering it, characterized in that the tubular member is undivided and is provided with a divided threaded bushing, socketed within it into which bushing the threaded member is screwed, the aggregate circumferential dimension of the interior surfaces of the bushing divisions being less than the circumference of the threaded member, whereby the

divided bushing is adapted on compression to bind the threaded member, in combination with means passing through the tubular member and the bushing on each



side of the threaded member for contracting the bushing and for securing the bushing nonrotatably in the tubular member.

1,868,182. BOX BINDING MACHINE. ALBERT V. SULLIVAN, Oakland, Calif., assignor to Eagle Nailing Machine Co. Ltd., San Francisco, Calif., a Corporation of California. Filed Oct. 22, 1930. Serial No. 490,464. 17 Claims. (Cl. 219—4.)

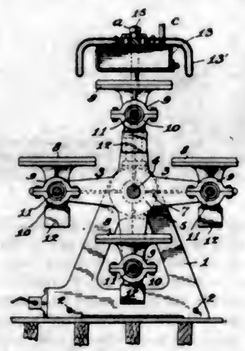


1. In a machine for binding boxes and the like, means for encompassing a box with a metallic binding element with the ends of the element in overlapping relationship directly against one side of the box, and means for welding together the overlapping portions of the element.

1,868,183. METHOD OF PREPARING FOODS. ALVIN H. SWEET, Los Angeles, Calif., assignor of one-third to Chauncey A. Alexander and one-third to Robert D. Pearson, Los Angeles, Calif. Filed Sept. 16, 1929. Serial No. 392,882. 4 Claims. (Cl. 99—11.)

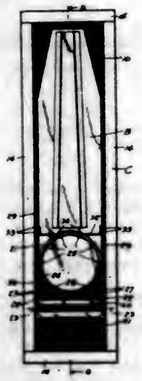
1. The method of preparing a food product of starchy material which consists in slicing, permitting the cut surface of the slices to adhere to each other, applying sufficient heat to said adhering slices to cause a part of the starch therein to exude from the surfaces cut in slicing, grinding the adhering slices, converting them after grinding to an attenuated form, then introducing the attenuated material into an oily liquid and further cooking it therein, and finally removing excess oily liquid therefrom.

1,868,184. MACHINE FOR PRESSING FABRICS. ROBERT N. WEST, Maplewood, N. J. Filed Mar. 4, 1931. Serial No. 520,017. 10 Claims. (Cl. 68—9.)



1. In a pressing machine, the combination comprising a rotatable pad carrying support, a plurality of swiveled pads carried thereby, gravity responsive means for continually maintaining said pads approximately in a horizontal position during the rotation of said support, a heated chest associated with said support and adapted to be brought into pressure engagement with an article to be pressed that is carried by a pad when the latter is positioned immediately beneath said chest, and means for moving and locating a pad carrying an article to be pressed beneath said chest.

1,868,185. FOLDING IRONING BOARD. JOHN WORLEY, Jr., and RALPH J. BURKE, Pico, Calif., assignors to Bertha I. Williams, Los Angeles, Calif. Filed Sept. 9, 1929, Serial No. 391,346. Renewed Mar. 14, 1932. 13 Claims. (Cl. 68—10.)

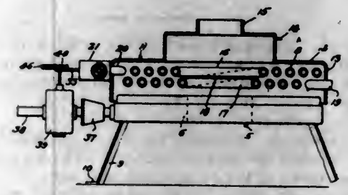


8. In a swiveling connection for an ironing board, an annulus, a pair of substantially tangential attachment arms extending in the same direction from substantially opposite sides of the outer periphery of said annulus, and a peripheral, radial bearing face on said annulus.

1,868,186. WATER HEATER. ALBERT ACKRON, Nashville, Tenn. Filed Oct. 17, 1930. Serial No. 489,446. 2 Claims. (Cl. 122—250.)

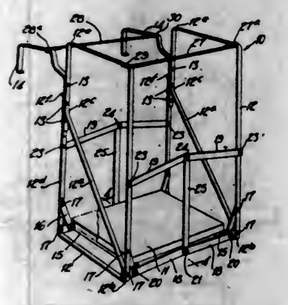
2. In a water heater of the type described, a heating coil composed of a plurality of superposed, continuous spiral pancake coils, and a gas burner of the short flame type having a multitude of jets arranged so as to impinge

the hot tip of the flame against said convolutions individually, said jets being arranged so as to follow the curvatures of said convolutions, the convolutions of any



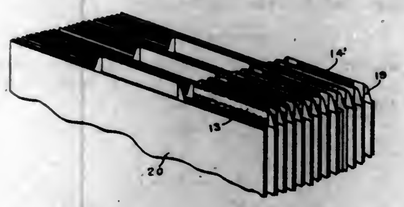
superposed pancake coil being arranged above the spaces between and separating adjacent convolutions of the next lower pancake.

1,868,187. SCAFFOLDING. MATTEO D. AVALLONE, East Boston, Mass. Filed Feb. 13, 1931. Serial No. 515,514. 6 Claims. (Cl. 304—24.)



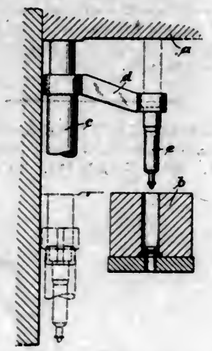
1. A window scaffold of the character described comprising a pair of spaced frames, means interconnecting said frames for collapsibly folding said scaffold when not in use, window sill engaging means extending from said frames, a platform and pivotal connections to mount said platform on said interconnecting means for swinging movement between said frames at a spaced distance from said engaging means.

1,868,188. INDEX DEVICE. HOWARD F. BARKER, Buffalo, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Feb. 13, 1931. Serial No. 515,595. 4 Claims. (Cl. 129—16.8.)



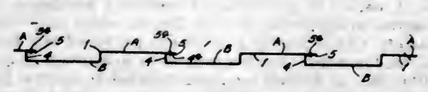
3. In combination with a guide member having an index tab extending therefrom, a rectangular label of sheet material having a printed section extending thereacross, and a second printed section spaced from the first section, both of said sections cooperating to define an index-receiving portion therebetween, said label being folded across the central portion and mounted to straddle the tab, and secured thereto, said first-named printed section defining the line of fold and extending around the top margin of the tab.

1,868,189. EXTRUSION PRESS. FRANK HERBERT BARNSLEY, Smethwick, Birmingham, England, assignor to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Apr. 23, 1931, Serial No. 532,305, and in Great Britain May 1, 1930. 3 Claims. (Cl. 207—6.)



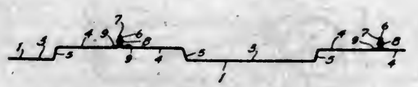
1. In an extrusion press provided with an extrusion plunger carried on a reciprocating head and a blank container containing a die and associated with a base plate, lifting means attached to said head, a rotary arm carried by and pivoted on said lifting means, and a cutting tool mounted on said rotary arm and thus adapted to be swung into or away from operating position beneath said extruding plunger and to be operated by it.

1,868,190. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1931. Serial No. 518,703. 13 Claims. (Cl. 108—5.4.)



1. A car roof comprising roof sheets adapted, arranged and secured together to form panels at one level alternating with the panels at a different level, adjacent sheets being connected by an upstanding flange along the side of the lower panel that is overlapped by the marginal portion of the adjacent upper panel and is provided at its top with a laterally projecting portion that overhangs said lower panel and is riveted flatwise to the underside of said marginal portion of said upper panel.

1,868,191. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1931. Serial No. 518,705. 4 Claims. (Cl. 108—5.4.)

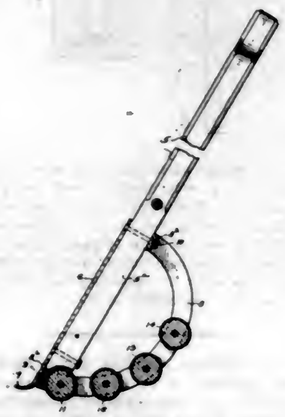


1. A car roof comprising roof sheets rigidly secured together at their side edges by upstanding seams, each sheet having its longitudinal middle portion at one level and its side portions at a higher level, the distance between such levels being such that the roof will act as a beam and the tensile strength of the lower portions being substantially commensurate with the compressive strength of the upper portions including the seam constructions.

1,868,192. METHOD OF MAKING DITHIOPHOSPHATES AND COMPOSITIONS CONTAINING SAME. GUY H. BUCHANAN, Westfield, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Feb. 18, 1930. Serial No. 429,270. 12 Claims. (Cl. 252—9.)

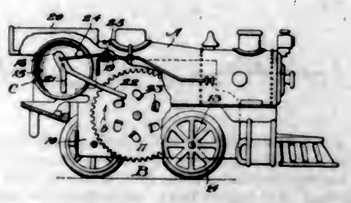
3. The process of preparing sodium salts of di-alkyl dithiophosphoric acids which comprises intimately mixing the acid with solid sodium carbonate in the proportion of not more than 200% in excess of that required for complete neutralization of the acid.

1,868,193. COMBINED LIFT JACK AND DOLLY. HENRY W. CHAMBERS and ANDREW JAKOBI, Phoenix, Ariz. Filed May 20, 1931. Serial No. 538,847. 3 Claims. (Cl. 280—49.)



1. A device of the character described comprising an elongated member the upper portion of which constitutes a handle, a plate secured to the lower portion of said member, the lower end of which terminates in a forwardly projecting toe, an arcuate mounting disposed at the rear side of said member of a length to extend from a point adjacent the forward end of said plate to a point adjacent the rear end thereof, and a plurality of transverse rollers carried by said arcuate mounting, said rollers being more than two in number and being substantially equi-distantly spaced from each other, the foremost of said rollers lying adjacent said toe and the last two of said rollers being disposed on opposite sides of the transverse center of said plate.

1,868,194. BELL RINGING DEVICE FOR TOY LOCOMOTIVES. JAMES E. CUFF, Hinsdale, Ill., assignor to American Flyer Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed June 29, 1931. Serial No. 547,744. 4 Claims. (Cl. 46—47.)

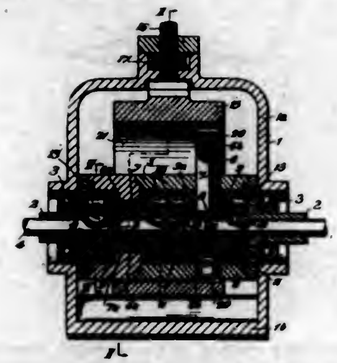


3. In a bell ringing device for toy locomotives, a bell, a cooperating clapper and a spring arm supporting said clapper for cooperation with said bell, said clapper including a portion bent upon itself, and said spring arm including a portion bent upon itself and clamped between the bent portions of the clapper whereby the latter is held in normal position in operative relation to the bell.

1,868,195. COMPOSITION OF MATTER FOR USE IN SEALING CRACKS IN METAL STRUCTURES. JOHN FREDERICK CUMMING and WILLIAM P. EKLUND, Morris, Minn. Filed Aug. 25, 1930. Serial No. 477,794. 1 Claim. (Cl. 134—17.5.)

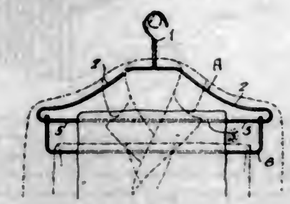
A composition of matter for use in the cooling liquid of an internal combustion engine for the purpose of repairing cracks in the engine block and head, consisting of a mixture of sodium or potassium silicate with petroleum carbon black in the proportions of substantially 95% of the silicate and substantially 5% of the petroleum carbon black.

1,868,196. CHANGE SPEED GEAR. LÉON JACOT-DESCOMBES, Tavannes, Switzerland. Filed June 11, 1931, Serial No. 543,707, and in Switzerland June 20, 1930. 4 Claims. (Cl. 74—53.)



1. In a change speed gear adapted for progressively varying the ratio of gearing, in combination, a hollow drive shaft and a coaxial driven shaft, an annular guideway adapted to be fixed in various eccentrical positions relatively to said drive shaft, at least one pair of rack rails interconnected at their ends to form opposite sides of a frame, guide means provided on the frame and adapted to cooperate with said fixed guideway, guide portions in said drive shaft for said frame to reciprocate transversely of said drive shaft by riding along said fixed guideway, gear wheels loosely mounted on said driven shaft, and adapted to cooperate with said rack rails, and gripping means interposed between said gear wheels and said driven shaft for actuating the latter.

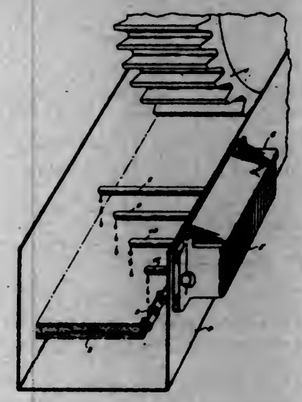
1,868,197. GARMENT HANGER. ROBERT A. DORRILL, Little Silver, N. J. Filed Dec. 3, 1930. Serial No. 499,615. 3 Claims. (Cl. 223—62.)



1. A garment hanger comprising a main portion including suspending means and parts extending in opposite directions at opposite sides of said suspending means and

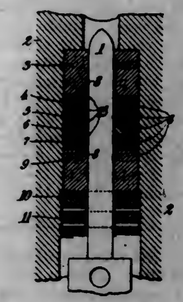
in a common vertical plane when the hanger is suspended, said parts being shaped to receive the shoulders of a coat or the like, the ends of said shoulder-receiving parts having tie-bar portions substantially in the plane of said shoulder-receiving parts, and an auxiliary portion including a trousers-supporting bar and horizontal supporting arms therefor extending inwardly from the ends of said trousers-supporting bar in spaced relation thereto and connected to said tie-bar portions, whereby said trousers-supporting bar is horizontally spaced from the plane of said main portion so that the edges of a coat or the like mounted on said shoulder-receiving parts may be arranged between said tie-bar portions and said trousers-supporting bar.

1,868,198. CHAIN OILING DEVICE. RICHARD F. DOW, Hartford, Conn., assignor to The Whitney Mfg. Co., Hartford, Conn., a Corporation of Connecticut. Filed Jan. 7, 1930. Serial No. 419,021. 8 Claims. (Cl. 184—15.)



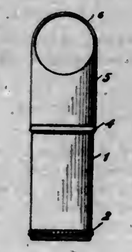
1. In an oiling device for a chain, an oil box disposed above the chain to be oiled, and at one side thereof, and a plurality of spouts projecting from said box and spaced apart lengthwise of the chain with the end of each spout disposed over the chain, said spouts being of different lengths, whereby oil dropping from their ends will strike different portions of the chain.

1,868,199. PACKING DEVICE. ROBERT ESNAULT PELTERIE, Paris, France. Filed Apr. 4, 1927, Serial No. 180,875, and in Great Britain Apr. 9, 1926. 8 Claims. (Cl. 286—26.)



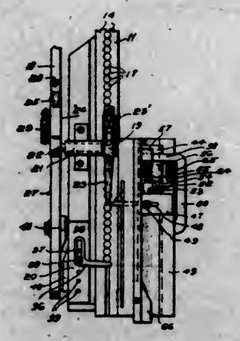
1. A packing device for pistons, plungers, and other sliding parts, said device comprising a packing ring made of a cellulose plastic, said ring being in the form of a conical annulus, and supporting elements for said packing, said elements having conical surfaces corresponding in form to the conicity of said packing, and being adapted to hold said packing ring in contact with the working surface which is sealed by the said packing device, whereby to present a sharp edge of cellulose plastic to said working surface.

1,868,200. LIP STICK HOLDER. BENJAMIN H. FREEDMAN, New York, N. Y., assignor to Hudson Holding Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 17, 1931. Serial No. 509,345. 6 Claims. (Cl. 206—56.)



1. A container of the character described having a removable cover and a finger-engaging part on said cover permitting said cover to be removed from the container and supported by a single finger of the user's hand.

1,868,201. COUNTER AND EJECTOR FOR PACKAGING MACHINES. BURPEE D. GREENLAW, Fitchburg, Mass., assignor to The Brown Bag Filling Machine Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed May 14, 1931. Serial No. 537,467. 7 Claims. (Cl. 10—165.)

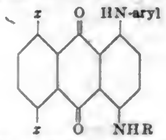


1. In a counting and discharge device for packaging machines and the like comprising a stock chute, a gate adjacent the delivery end of the chute, means to operate the gate intermittently for opening and closing the same, a carriage reciprocable parallel to the chute, a clearer thereon projectable to engage stock in the chute and retractable therefrom, means to adjust the gate longitudinally of the chute, means to retract the clearer at the outer limit of movement of the carriage, means including a member adjustable longitudinally of the chute to project the clearer to engage stock in the chute at any predetermined distance from the gate, and means to vary the extent of movement of the carriage.

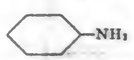
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1,868,202. PROCESS OF MAKING CONDENSATION PRODUCTS OF THE ANTHRAQUINONE SERIES AND NEW PRODUCTS OF THIS CLASS. PAUL GROSSMANN, Basel, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Dec. 20, 1929, Serial No. 415,601, and in Switzerland Dec. 22, 1928. 8 Claims. (Cl. 260—59.)

6. As new products the condensation products of the anthraquinone series of the general formula

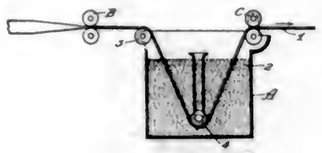


in which the aryl residue may carry substituents of a group of substituents consisting of OH, NH_2, alkyl, halogen, SO_3H,



R stands for alkyl or H, one *x* stands for OH, and the other *x* for NHR (R=H or alkyl), and in which three of the *β*-positions are occupied by H-atoms and the fourth is occupied by a further H-atom or by an SO_3H-group, which products form dark powders which dissolve in alcohol to blue to green-blue solutions, and in concentrated sulfuric acid to yellow to yellow-green solutions, which change to violet to blue-green on addition of boric acid, and which products yield blue to blue-green tints when printed or dyed on acetate silk.

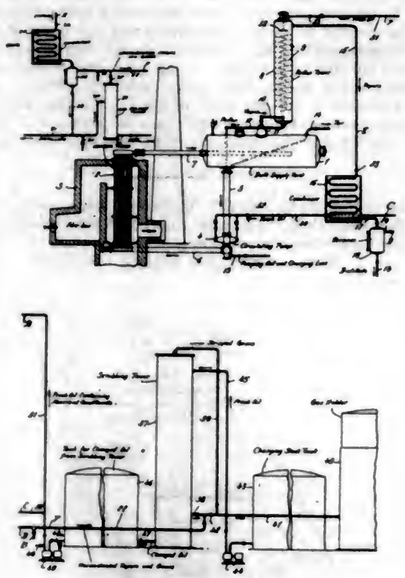
1,868,203. SAUSAGE CASING AND METHOD OF PREPARING THE SAME. WILLIAM F. HENDERSON and HAROLD E. DIETRICH, Chicago, Ill., assignors to The Visking Corporation, Chicago, Ill., a Corporation of Virginia. Original application filed Apr. 14, 1926, Serial No. 101,958. Divided and this application filed Aug. 12, 1926. Serial No. 128,886. 4 Claims. (Cl. 17—45.)



1. An animal intestine sausage-casing having incorporated therein, prior to removal of its natural water content, a hygroscopic agent to render said casing suitable for filling from a stuffer-horn without preliminary softening treatment.

1,868,204. OPERATION OF PRESSURE STILLS. EUGENE C. HERTHEL, Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Apr. 21, 1925. Serial No. 24,734. 5 Claims. (Cl. 196—48.)

1. In the pressure distillation of heavier hydrocarbon oils for the production of lighter hydrocarbon oils, subjecting the heavier oil to a cracking temperature and taking off under pressure the gas and vapor mixture generated thereby, subjecting the gas and vapor mixture to a condensing operation, separating condensed distillate from the remaining uncondensed vapors and gases at a pressure substantially lower than that at which the gas and vapor mixture is taken off from the cracking operation, scrubbing uncondensed vapors and gases from the separating operation with fresh heavier oil and introducing the heavier oil containing the constituents absorbed from the vapors and gases therein directly into the hot gas and vapor mixture generated in the cracking operation, separately discharging unabsorbed gases from the scrubbing operation and taking off together absorbed constituents liberated from the fresh heavier oil and the vapors of the cracked oil without again subjecting them to the cracking temperature.



1,868,205. CROSS HEAD GUIDE FOR ENGINES. JAMES W. HIGHLEYMAN, Pocatello, Idaho, assignor of one-half to James G. Blunt, Schenectady, N. Y. Filed Sept. 10, 1928. Serial No. 304,899. 3 Claims. (Cl. 308—3.)

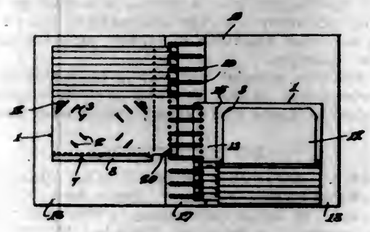


1. An expansion joint for a cross head guide, comprising fixed end supports therefor; a guide bar having a recess in its bearing face and elongated holes passing through said bar within the bounds of said recess; a plate provided with bolt holes perpendicular to its face and spaced to axially aline with the holes in the guide bar, said plate being shorter than the recess in said bar; and bolts seated in the bolt holes of the plate, passing through said plate, through the elongated openings in the bar, and secured in holes formed in the support, said bolts serving to maintain the plate in fixed position and to hold the plate and bar in close frictional contact, but to permit longitudinal movement of the bar relative to the plate to compensate for expansion and contraction of the bar.

1,868,206. TREATING ELECTRODES. RALPH M. HUNTER and LOUIS E. WARD, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 16, 1930. Serial No. 461,632. 4 Claims. (Cl. 204—4.)

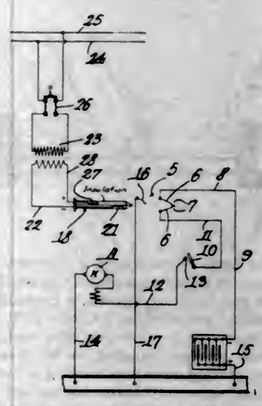
1. In a method of treating carbon or graphitized carbon electrodes, the steps which consist in impregnating said electrodes with a drying oil and then exposing the so impregnated electrodes to substantially dry chlorine gas.

1,868,207. INDEX DEVICE. LE ROI E. HUTCHINGS, Buffalo, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Nov. 9, 1928. Serial No. 318,219. 10 Claims. (Cl. 129—34.)



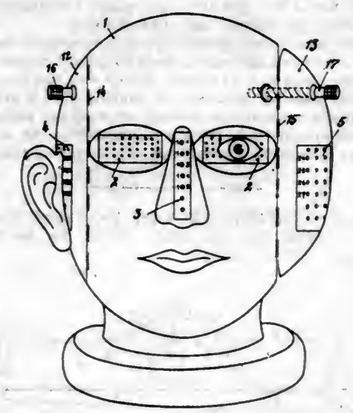
2. A card holder for visible indexes, comprising a holder portion, means hingedly connected to one marginal edge of said holder portion for releasably holding a record card, and means on an adjacent margin for attachment to a support.

1,868,208. AUTOMOBILE STARTING DEVICE. SETH N. JORDAN, Burlington, Iowa. Filed Apr. 9, 1929. Serial No. 353,787. 4 Claims. (Cl. 290—38.)



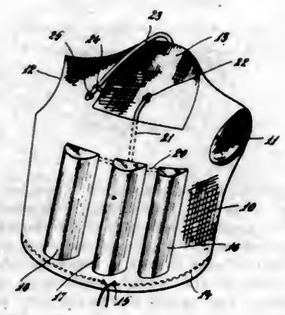
4. An auxiliary starting system for internal combustion engines having an electric starting motor normally operated by a battery, a switch for said starting motor, an electrical supply circuit, a secondary circuit including said starting motor and said switch but not including said battery, and a converter for transforming the current in said supply circuit into the form of current required in said secondary circuit to operate said starting motor.

1,868,209. MODEL FITTING HEAD FOR OPTICIANS. GEORG FRIEDRICH KÄPERNICK, Frankfort-on-the-Main, Germany. Filed Feb. 7, 1931, Serial No. 514,274, and in Germany Feb. 13, 1930. 9 Claims. (Cl. 35—16.)



1. A model fitting head for teaching and carrying out the fitting of spectacle and pince-nez frames, comprising in combination, a central portion of the head, an eye and a nose associated with said central portion, a side portion hinged to said central portion and an ear adjustable in position on said side portion.

1,868,210. LIFE SAVING VEST. ALBERT LEHMANN, Brooklyn, N. Y. Filed Nov. 20, 1929. Serial No. 408,471. 1 Claim. (Cl. 9—20.)

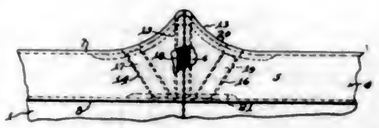


A device of the class described comprising a vest covering the upper portion of the body, a girdle string on said vest for tautening the open end of said vest about the waist of the wearer, longitudinal gas bags semi-cylindrical in cross-section arranged in sets at the front and rear of the vest projecting from the surface of said vest, said gas bags extending vertically on said vest, branch tubes connecting the individual gas bags of each set, an inflator tube communicating with one bag of said front set, a second inflator tube communicating with one bag of said rear set, means on said vest for retaining the open end of said rear inflator tube adjacent the shoulder of the vest when not in use, and closure valves on said inflator tubes.

1,868,211. PROCESS FOR THE MANUFACTURE OF LIGHTER COLORED PRODUCTS FROM EARTH OIL RESIDUES, ASPHALT, AND/OR SIMILAR SUBSTANCES. JACOBUS WILHELMUS LE NOBEL, Amsterdam, Netherlands, assignor to De Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Filed Nov. 2, 1928, Serial No. 316,885, and in the Netherlands June 11, 1928. 6 Claims. (Cl. 196—22.)

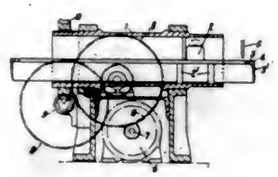
3. The process of producing lighter colored asphaltic products adapted for use in preparing light colored emulsions, gels, lacquers, varnishes, paints and the like, which comprises treating dark colored asphalt with a substance containing a mineral acid radical, whereby the asphaltenes are precipitated while the resins present in the asphaltic products remain unaffected, and concentrating the mass.

1,868,212. ATHLETIC TRUNKS. BEN LEWIS, New York, N. Y. Filed Dec. 28, 1931. Serial No. 583,539. 3 Claims. (Cl. 2—236.)



1. In a garment of the class described, the combination of a body portion, of leg portions, a belt formed of two wall members attached to the top of said body portion, the top edges of said belt turned inwardly towards one another, and reinforcing elements inserted between said inturned edges.

1,868,213. MANUFACTURE OF SHAPED METAL ARTICLES. WILLIAM MACKIE, Glasgow, Scotland. Filed Dec. 18, 1931, Serial No. 581,984, and in Great Britain June 17, 1931. 2 Claims. (Cl. 266—23.)



1. Apparatus for the production of shaped metallic articles from stock by flame-cutting comprising a rotary stock-carrier, means on said carrier for clamping the stock within said carrier, with part of the stock projecting beyond one end of said carrier, a torch movable over said projecting part of the stock, a reversible motor geared to said carrier, and switch means operable in given positions of said torch for controlling the direction of rotation of said motor.

1,868,214. BATH FOR METAL PICKLING PROCESSES. GEORGE L. MAGOUN, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 30, 1931. Serial No. 566,169. 20 Claims. (Cl. 148—8.)

4. A process of pickling iron and steel products which comprises subjecting the metal to be pickled to the action of a sulfuric acid solution containing a small proportion of a carbon bisulfide derivative of a reaction product of an aldehyde and a guanidine.

9. A process of pickling iron and steel products which comprises subjecting the metal to be pickled to the action of a sulfuric acid solution containing a small proportion of a carbon bisulfide derivative of a reaction product of formaldehyde and diphenylguanidine.

1,868,215. CARBOHYDRATE RESINOUS MATERIAL AND PROCESS OF MAKING SAME. JOSEPH V. MEIGS, Jersey City, N. J., assignor, by mesne assignments, to Plastix Corporation, a Corporation of Delaware. Filed Mar. 5, 1926. Serial No. 92,640. 5 Claims. (Cl. 260—2.)

1. The process of making a synthetic resin which comprises reacting by heat a phenol, a monose or monose yielding carbohydrate and an acid catalyst, and combining three molecular weights of the phenol for every molecular weight of monose.

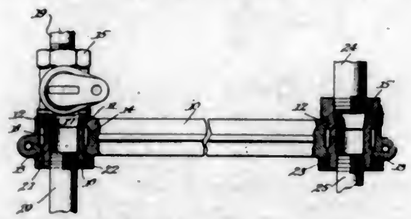
5. Resinous material resistant to the action of water, comprising the reaction products of furfural and hexamethylenetetramine with a carbohydrate-phenol resin.

1,868,216. RESINOUS PRODUCT AND PROCESS OF MAKING SAME. JOSEPH V. MEIGS, Jersey City, N. J., assignor, by mesne assignments, to Plastix Corporation, a Corporation of Delaware. Filed Jan. 15, 1927. Serial No. 161,468. 12 Claims. (Cl. 260—2.)

1. A resinous product, adapted to yield a strong hard, tough, heat-set product when heated with more than 10 per cent. of hexamethylenetetramine, comprising the resinous reaction product of a carbohydrate, a phenol and Chinese wood oil.

12. Method of making a hard, infusible resinous product which comprises condensing a phenol and dextrose to give a primary resin in which the retained phenol is substantially 950 parts to 445 parts dextrose and mixing with this resin hexamethylenetetramine in an amount between ten per cent and twenty per cent, by weight, of the resin.

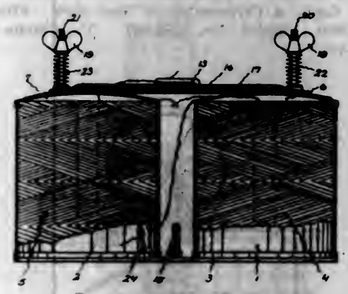
1,868,217. GAS METER HANGER. FRANK H. MUELLER, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed June 14, 1930. Serial No. 461,224. 8 Claims. (Cl. 285—3.)



1. A meter hanger comprising a bar member having at one end means for engaging a conduit element and provided at the other end with an opening, a bushing in said opening, said bushing provided at its ends with screw threads for direct connection to a service pipe and to a coupling nipple, a nut member adapted to be threaded on said bushing, one of said members having a bevelled portion and the other member formed to engage said bevelled portion to center the bushing in said opening.

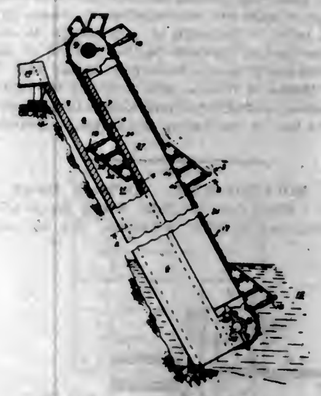
1,868,218. TWINE-HOLDER FOR SELF-BINDING HARVESTERS. JOHAN ANTON NILSSON, Malmo, Sweden, assignor to Svenska Bindgarnsfabrikens Aktiebolag, Malmo, Sweden, a Corporation of Sweden. Filed Sept. 29, 1930, Serial No. 485,260, and in Sweden Oct. 11, 1929. 4 Claims. (Cl. 242—146.)

1. In a twine-holder for self-binding harvesters, two separate twin-cans each adapted for the accommodation of one single twine ball, a lid on each can, a slot in each lid extending substantially from the center portion and entirely to the edge thereof, the open ends of the slots being positioned so as to face each other, and a twine



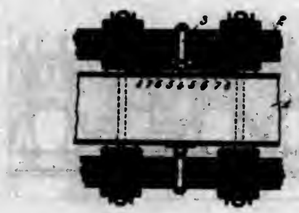
tensioning and guiding means common to both cans and mounted closely adjacent to said slots so as to be passed by the twine fed out through the same.

1,868,219. WATER ELEVATOR. ALEXANDER PARKER, Etna, Calif. Filed Sept. 12, 1930. Serial No. 481,410. 11 Claims. (Cl. 103—73.)



1. In an elevator, means providing a lift passage of uniform cross-section, a continuous chain conveyor longitudinally traversing said passage adjacent a passage wall, a lift element carried by a link structure of said conveyor and transversely partitioning said passage for raising material thereabove therewith, and brace members directly carried by succeeding said link structures and cooperatively coactive between said lift element and said passage wall to support said lift element in fixed angular relation to said wall while the said lift element operates in said passage.

1,868,220. AUTOMOBILE. GUSTAV ROHR, Oberramstadt, Germany. Filed Mar. 31, 1930, Serial No. 440,428, and in Germany Apr. 26, 1929. 5 Claims. (Cl. 280—124.)

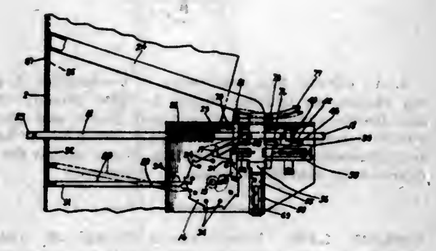


1. An automobile comprising a frame, superposed transverse front springs mounted on the frame, and means for individually adjusting at least one of said springs in its longitudinal direction relatively to the frame to adjust the set of the wheels.

1,868,221. ROAD COMPOSITION. SAMUEL S. SADTLER, Springfield Township, Montgomery County, Pa., assignor to Amiesite Asphalt Company of America, Philadelphia, Pa., a Corporation of New Jersey. Filed Mar. 24, 1926. Serial No. 97,142. 3 Claims. (Cl. 106—31.)

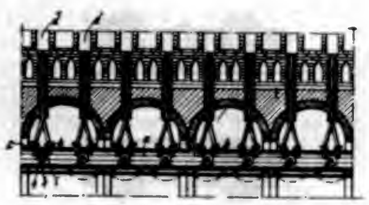
1. The process of forming a prepared bitumen for road compositions, which consists in forming a water-in-oil emulsion of naphtha containing calcium oleate and free hydrated lime in suspension, and mixing therewith a bitumen.

1,868,222. VENDING MACHINE. EGNAR SANDBERG, Minneapolis, Minn., assignor of one-third to Albert G. Sandberg and one-third to Mark D. Bohen, Minneapolis, Minn. Filed Nov. 13, 1929. Serial No. 406,814. 9 Claims. (Cl. 194—57.)



1. A coin operated mechanism including a ratchet wheel, an operating bar having means adapted to engage and rotate said ratchet wheel, a pawl normally positioned to prevent rotation of the ratchet wheel, a coin chute, means connected with said pawl and positioned adjacent to the coin chute, means adapted to be actuated by movement of said operating bar in one direction to cause a coin positioned in said chute to actuate the means connected with said pawl whereby said pawl will be moved out of locking engagement with the ratchet wheel to permit rotation thereof upon continued movement of the operating bar, and means for returning said coin engaging means to its normal position before said operating bar has completed its forward stroke.

1,868,223. REGENERATIVE COKE OVEN. JOSEF SCHAEFER, Dortmund, Germany. Filed Oct. 26, 1929. Serial No. 402,655, and in Germany Dec. 27, 1928. 2 Claims. (Cl. 202—151.)



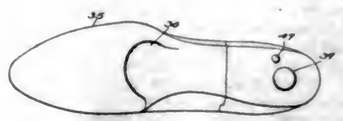
2. In a regenerative coke oven heating flue system, a three-way valve having its two outlets connected respectively to the flues and its inlet connected to the source of gas supply and including a rotatable plug having a passage therein for establishing communication between the inlet and the outlets alternatively, said plug having a supplemental passage for supplying fresh air alternatively to the heating flues upon the plug closing communication between the inlet and the alternative outlets.

1,868,224. ELECTRIC FUSE. JULIUS SCHÜRMANN, Berlin-Zehlendorf, Germany, assignor to Fabrik Elektrischer Zunder G. m. b. H., Cologne-Niehl, Germany. Filed Mar. 28, 1929, Serial No. 350,650, and in Germany Oct. 30, 1928. 18 Claims. (Cl. 102—10.)



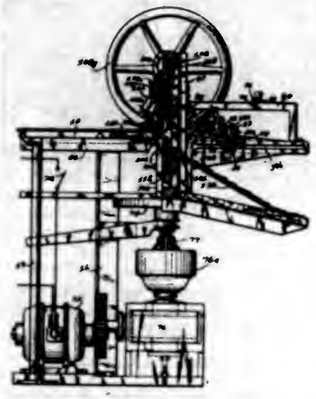
1. An electric fuse comprising in combination a priming charge, an ignition circuit for said priming charge and fusible shunt means connected across said ignition circuit exterior to said charge, said shunt means having such dimensions that said ignition circuit cannot fire said charge until said shunt means are destroyed.

1,868,225. LAST. ISIDORE SIMON, Chicago, Ill. Original application filed Oct. 12, 1927, Serial No. 225,763. Divided and this application filed Dec. 9, 1929. Serial No. 412,745. 4 Claims. (Cl. 12—133.)



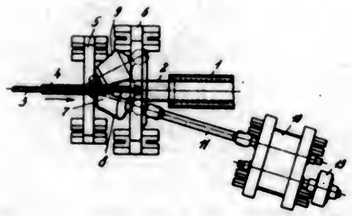
1. In a shoe last in combination, a depression in the shank thereof opposite the metatarsal bones, and the inner rear edge of the heel portion laterally of the median tubercle of the oscalcis being lowered a substantial predetermined amount with respect to the remaining portion of the heel.

1,868,226. BIAS STRIP CUTTING MACHINE. JOHN DRAHER and WILLIAM B. RUNK, Waterbury, Conn., assignors to Bias Cutting Machine Corporation, Waterbury, Conn., a Corporation of New York. Filed May 16, 1930. Serial No. 453,067. 11 Claims. (Cl. 164—48.)



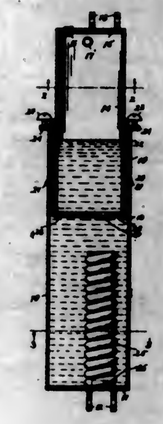
2. In a machine for cutting off short lengths from strips of flexible material, a table, a stationary cutter mechanism at one end of said table, means for intermittently pulling said strips along said table through said cutter mechanism, said strip pulling mechanism comprising a bar, strip clamps on said bar, rear stationary means extending across said table in the path of said clamps to close said clamps prior to the forward pulling motion of said bar, forward stationary means extending across said table to open said clamps to release said strips at the end of said forward motion, and stripper mechanism to hold said strips adjacent the line of cut during the cutting operation.

1,868,227. ROLLING MILL. HEINRICH ESSER, Hilden, Germany. Filed Oct. 23, 1929, Serial No. 401,787, and in Germany Jan. 7, 1929. 2 Claims. (Cl. 80—13.)



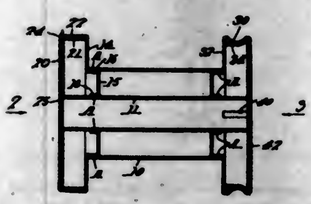
2. A rolling mill having three inclined rolls, a mandrel adapted to expand a tubular blank between said rolls and bearings for said rolls at either end, the arrangement of two of said rolls with their axes in a vertical plane at an angle to the axis of said mill in which said blank is fed, a pinion housing arranged in the extension of said vertical plane and driving mechanism extending in said vertical plane from said housing to said two rolls.

1,868,228. AIRCRAFT STRUT. LOUIS W. GREVE, Cleveland, Ohio, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 19, 1929. Serial No. 400,812. 9 Claims. (Cl. 267—34.)



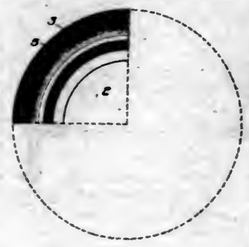
1. In a shock absorber, a cylinder and a piston adapted to be connected between the elements whose movements are to be cushioned, said cylinder having curved walls elongated at right angles to their length, said piston having a corresponding cross section, and means within the cylinder for cushioning the relative movements of the cylinder and piston.

1,868,229. METAL SPOOL. JOSEPH E. GROUSKO, Shrewsbury, Mass., assignor to Boston Pressed Metal Company, Worcester, Mass., a Corporation of Maine. Filed Nov. 8, 1930. Serial No. 494,356. 2 Claims. (Cl. 242—123.)



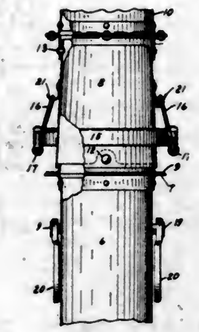
1. A sheet metal spool comprising a tubular barrel, a tubular bearing member, and sheet metal heads each having a portion axially displaced to provide an annular shoulder closely fitting in an end of said tubular barrel, with said displaced portion inwardly offset at its center to provide an annular sleeve closely fitting over said tubular bearing member, each head being formed of inner and outer discs spaced apart and provided with overlapping concentric peripheral flanges, one of said outer discs having radially extended slots and the corresponding end portion of the tubular bearing member having longitudinally extended driving slots aligned with said radially extended slots in the associated outer end disc.

1,868,230. METHOD OF ORNAMENTING CHINAWARE AND THE LIKE. EUGENE HARDESTY, New Brighton, Pa., assignor to Mayer China Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed Jan. 10, 1931. Serial No. 507,878. 5 Claims. (Cl. 41—26.)



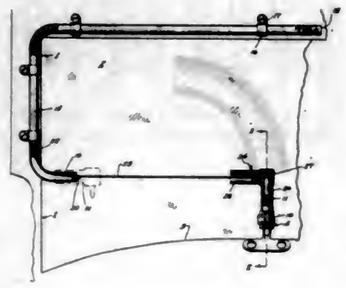
1. In the art of decorating china, glass or similar ware, the method consisting in applying a continuous solid uniform width band of color to the surface and then applying a spreading brush or the like to distribute the edge portion of the band in diminishing color value.

1,868,231. SILO FILLER. SHERMAN C. HETH, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Dec. 5, 1930. Serial No. 500,259. 3 Claims. (Cl. 302—64.)



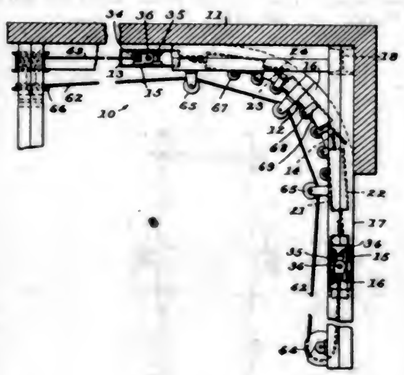
1. In a silo filler, a fan casing having a discharge outlet, a pipe adapted to discharge into a silo, an intermediate pipe section between said casing and discharge pipe, a collar loosely mounted on the intermediate section for connecting the latter to the outlet, and means for securing the collar, intermediate and outlet sections together and whereby the intermediate and outlet sections may be wholly disengaged and the intermediate section shifted on the edge of and sustained by the discharge outlet.

1,868,232. WINDSHIELD HEATER. ERWIN C. HORTON, Hamburg, and HENRY HUEBER, Buffalo, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y. Filed Dec. 9, 1929. Serial No. 412,812. 7 Claims. (Cl. 219—19.)



3. A windshield heater comprising an elongated housing, an elongated heating member withdrawable therefrom, and means acting to retract the heating member within the housing and to support the heating member inoperatively therein in a substantially extended and unfolded position.

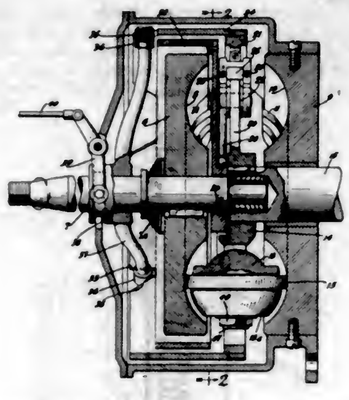
1,868,233. DOOR. DANIEL C. HUNGERFORD, Corning, N. Y. Filed Dec. 28, 1928. Serial No. 329,052. 12 Claims. (Cl. 20—20.)



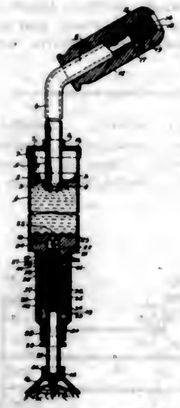
1. A door section which comprises a pair of reversed U-shaped flanged channels welded together along their contacting flanges, and closure plates wholly confined between the ends of the channels and welded thereto.

1,868,234. PLANETARY FRICTION TRANSMISSION. JOHN H. HUNT, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 10, 1931. Serial No. 569,731. 11 Claims. (Cl. 74—34.)

1. In a transmission gearing, a planetary torque transmitting roller and carrier therefor, the axis of said roller lying at an angle to the axis about which it has planetary motion, a balance wheel of such mass and moment of inertia capable of being rotated around the roller axis in an opposite direction to the roller with such angular velocity that it will develop an opposing gyroscopic torque counterbalancing the gyroscopic torque tending to tilt the roller in a plane passing through the center of the roller and containing the transmission axis.



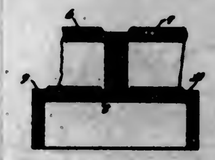
1,868,235. LIQUID DISPENSING GUN. FRED I. JADEN, Hastings, Nebr. Filed Mar. 14, 1931. Serial No. 522,621. 5 Claims. (Cl. 47—49.)



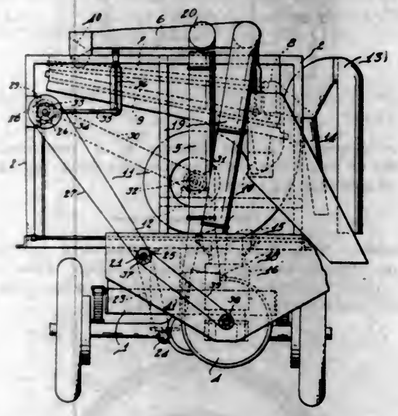
1. A dispensing gun comprising a cylindrical container, a tubular handle having a cap secured thereto to close one end of said container, a check valve at the outer end of said handle, a cylinder connected to the other end of said container, and check valve mechanism in said cylinder to control the discharge of liquid from said container in predetermined quantities.

1,868,236. GLASS BUILDING-STONE, TILE OR LIKE BUILDING ELEMENT. JETZE WILLIEM JANZEN, The Hague, Netherlands, assignor to Naamlooze Vennootschap: Glasfabriek "Leerdam", Voorheem Jeekel, Mijnssen & Co., Leerdam, The Netherlands. Filed Oct. 24, 1929. Serial No. 402,116. 5 Claims. (Cl. 72—39.)

1. A building block formed of vitreous material, and having a plurality of bearing surfaces on the top side, some of which bearing surfaces are visible when the blocks are placed in a wall, and some of which are invisible at such times, and elastic bearing material on the said surfaces which are invisible, for receiving the cooperating bearing surfaces of adjacent blocks to prevent fracture of the blocks.

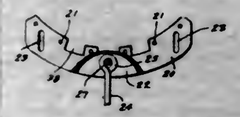


1,868,237. APPARATUS FOR CLEANING AND LOADING GRAIN. RUSSELL V. JUDSON, Detroit, Mich. Filed Aug. 20, 1929. Serial No. 387,218. 1 Claim. (Cl. 209—6.)



In combination with a hopper and a screen above said hopper, a conduit extending from said hopper to said screen for delivering the entire contents of said hopper to said screen, a blower at the intake end of said conduit for propelling the material through said conduit and for smashing weed seeds while passing grain seeds intact, another screen in said conduit at the outlet side of said blower for obstructing the smashed weed seeds and further smashing the weed seeds, and baffles at the outlet end of said conduit and over the first named screen for further smashing the weed seeds and distributing the grain seeds over the first named screen.

1,868,238. TENNIS RACKET. JACOB L. KLEINMAN, New York, N. Y. Filed July 6, 1929. Serial No. 376,387. 12 Claims. (Cl. 273—73.)



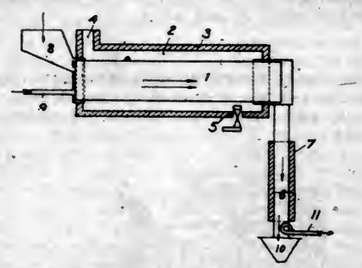
1. A tennis racket comprising a frame, strings within said frame, a handle, a rigid member, a string supporting member pivotally connected to said rigid member, and an extension forming part of said handle operatively connected to said rigid member, and an extension forming part of said handle operatively connected to said rigid member for operating the same to tighten or loosen the strings.

1,868,239. RAZOR. JACOB L. KLEINMAN, New York, N. Y. Filed May 9, 1932. Serial No. 610,240. 14 Claims. (Cl. 30—12.)



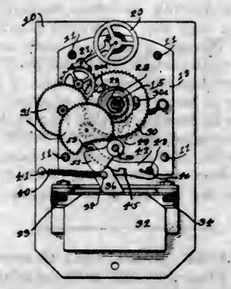
4. A razor blade holder comprising a top member and a plate member, a handle associated with said holder and provided with means to clamp said members together, a blade adapted to be received between said members, means operatively connected with said holder to adjust the inclination of the blade located between said top and plate members while the connection between the handle and said members remains substantially unaffected, means for spacing the edges of said top and plate members a distance greater than the thickness of said blade, thereby permitting the edges of said blade to move freely and be tilted.

1,868,240. PROCESS FOR THE MANUFACTURE OF CEMENT. Veuve GEORGES LEPINE, née MARIE-THÉRÈSE JOSÉPHINE ROUSSEL, Meaux, France. Filed July 11, 1930, Serial No. 467,376, and in France June 21, 1930. 7 Claims. (Cl. 222—3.)



1. A process for the manufacture of cement consisting in burning a charge of clay and lime in a medium simultaneously made slightly reducing, watery and alkaline, the clinker thus obtained being then crushed.

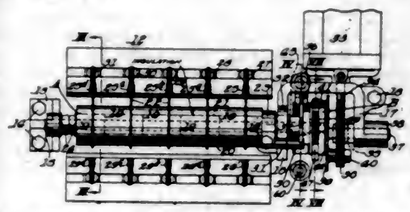
1,868,241. INTERVAL TIMER. FREDERICK LUX, Waterbury, Conn., assignor to The Lux Clock Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Oct. 6, 1928. Serial No. 310,832. 3 Claims. (Cl. 200—39.)



1. In a time-controlled mechanism, a switch-actuating lever, a constant-speed motor having a rotary lug, a lever-actuating member having a fork fitting about said

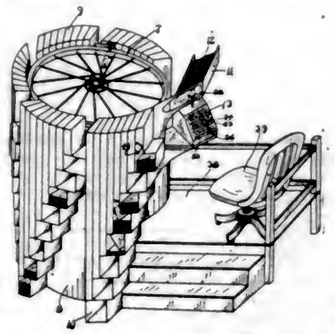
lug, a spring for urging said lever to one circuit, controlling position, a detent arm to hold said lever in the other circuit controlling position, and a pin on said detent arm in alinement with said member for causing said lever to be released after a predetermined interval of time, said member being adapted to be manually rotated in one direction to move said lever to said other circuit controlling position and to be automatically rotated in the reverse direction by said motor to release said detent arm.

1,868,242. EMERGENCY SWITCH MECHANISM AND LIGHTING SYSTEM. SEWARD W. MANN, Pittsburgh, Pa., assignor to Frank B. Smith, Jr., Pittsburgh, Pa. Filed Sept. 5, 1928. Serial No. 304,089. 12 Claims. (Cl. 200—15.)



1. In combination with means adapted to be turned, an electric motor, co-acting parts driven by said motor upon a fixed axis to effect such turning, one of said parts being eccentrically mounted with respect to said means to occupy a non-operating position relative to said means at the completion of the movement thereof, notwithstanding continued operation of said motor.

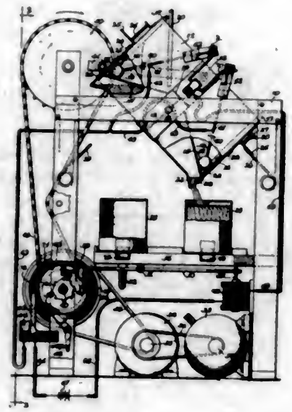
1,868,243. MAIL DISTRIBUTING MACHINE. HOWARD H. MILLER and JOSEPH MILLER, Cincinnati, Ohio. Filed Oct. 18, 1927. Serial No. 226,973. 2 Claims. (Cl. 214—11.)



1. A mail distributing machine comprising a carrier wheel, a series of mail boxes arranged about the wheel in spaced relation thereto, a door on each mail box, said doors forming a continuous wall spaced from the periphery of the wheel and intercepting the plane of the wheel periphery to form a letter-receiving passage, said passage receiving a letter in flexed condition longitudinally between the wall and the wheel periphery, a letter trough adjacent to the passage, and mechanism to cause the opening of any desired door simultaneously with the delivery of each letter from the trough to the passage.

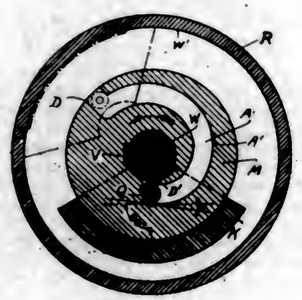
1,868,244. FILLING MACHINE. GARRETT W. MUDD, Chicago, Ill. Filed June 27, 1930. Serial No. 464,212. 19 Claims. (Cl. 221—98.)

1. In a filling machine, a shiftably mounted delivery tank provided with two discharge openings one of which is positioned to discharge a portion of the contents of the tank when the other is moved out of discharging position, positively actuated means for shifting the tank, and



means responsive to the delivery of a predetermined amount of liquid into the tank for controlling the operation of said shifting means.

1,868,245. ELECTRIC MOTOR STARTING CLUTCH. KARL OBERMOSER, Baden-Baden, Germany. Filed June 17, 1926, Serial No. 116,622, and in Germany June 18, 1925. 13 Claims. (Cl. 192—105.)

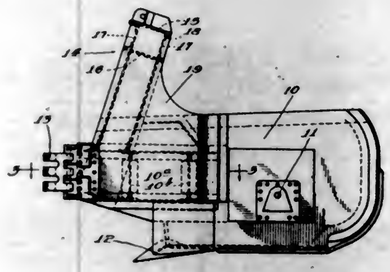


1. In a coupling device for coupling a motor to its load, an outer rotatable coupling member having friction surfaces and a fluid containing channel provided with an outlet, an inner coupling member rotatable within the outer coupling member, devices carried by and rotatable with the inner coupling member and movable in the channel of the outer coupling member for compressing the fluid therin, said devices being movable radially outward and having friction surfaces operative under centrifugal force for a progressive frictional binding action on the friction surfaces of the outer coupling member to progressively transmit motion thereto from the inner coupling member.

1,868,246. BUCKET. JOHN W. PAGE, Chicago, Ill. Filed Jan. 26, 1931. Serial No. 511,393. 5 Claims. (Cl. 37—135.)

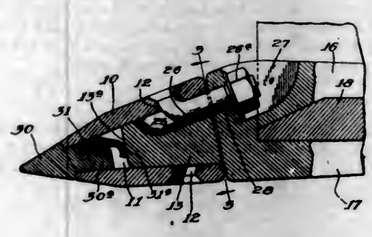
5. In combination with a bucket of the character referred to having a bottom and double spaced side walls,

an arch of box-like construction extending over the top of the bucket and joining the upper forward corners of the side walls, the lower ends of the arch merging into said



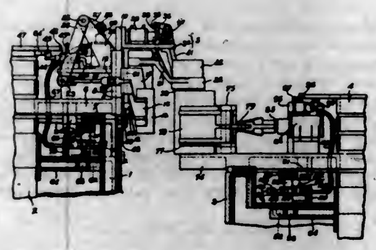
double spaced side walls, the inner and outer faces of the arch being substantially flush and coextensive with the inner and outer faces of said side walls respectively.

1,868,247. TOOTH POINT CONSTRUCTION. JOHN W. PAGE, Chicago, Ill. Filed July 3, 1931. Serial No. 548,669. 3 Claims. (Cl. 37—142.)



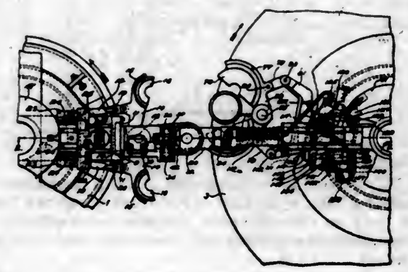
1. In combination with a tooth-supporting lug and a detachable tooth point mounted thereon, a detachable tip carried by the tooth point and held in position by a wedge having a part engaged by the lug when the point is mounted thereon.

1,868,248. CONTINUOUS TWO-TABLE FORMING MACHINE. SIDNEY F. PARHAM, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 16, 1929. Serial No. 363,523. 13 Claims. (Cl. 49—9.)



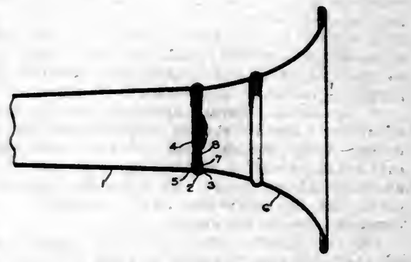
1. In a continuously rotating glassware forming machine including a table, a blank mold mounted on said table, a blow mold, means for transferring a blank from the blank mold to the blow mold, means for causing a dwell in the rotation of said blank mold and means controlled by said last-named means for opening the blank mold.

1,868,249. CONTINUOUS TWO-TABLE FORMING MACHINE. SIDNEY F. PARHAM, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Nov. 19, 1929. Serial No. 408,227. 19 Claims. (Cl. 49—9.)



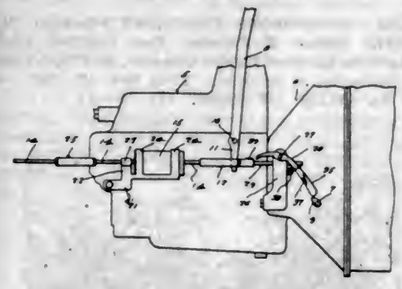
1. A glassware forming machine comprising two adjacent continuously rotating mold tables positioned laterally of each other, a blank mold unit on one table and including a neck mold and blank mold, a blow mold on the other table, means for causing said molds normally to rotate with their respective tables, and means for transferring a blank from the blank mold unit to the blow mold comprising means for rotating at least one of the molds on one of the tables in a direction opposite to the direction of rotation of its table to retard the rotation of said mold relative to its table in a transfer zone, a ware holder on the other table, means for normally rotating said ware holder with its table, means for rotating said ware holder in a direction opposite to that of its table, to retard the rotation of the ware holder relative to its table in the transfer zone simultaneously with the retardation of the mold on the other table, means for effecting the transfer of a blank between the retarded mold and retarded ware holder while the tables continue to rotate, and means for causing the normal rotation of the retarded mold and ware holder with their respective tables to be resumed.

1,868,250. HORN CONSTRUCTION. WILLIAM PAULUS, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed May 13, 1931. Serial No. 537,168. 3 Claims. (Cl. 116—137.)



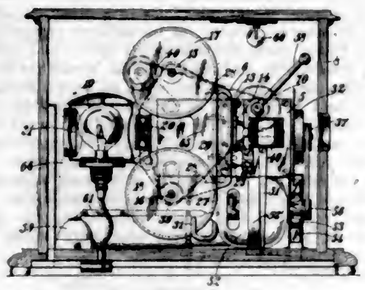
1. A horn comprising a horn body having a bead on one end thereof, a horn bell having a complementary bead, one of said beads being mounted in the other of said beads, and interengaging means on each of said beads to prevent relative movement of the beads.

1,868,251. BRAKE RELEASE. ROBERT S. PEARSON and JESSE B. PEEL, Lockport, N. Y. Filed July 28, 1931. Serial No. 553,614. 5 Claims. (Cl. 74—39.)



1. In combination, a handbrake lever, a clutch control including a cam, a connecting rod operated by the handlever, teeth on the rod, and a rockable pawl swingable by the cam and being adapted for engagement with the teeth on the rod.

1,868,252. CINEMATOGRAPHIC APPARATUS. HERBERT GEORGE PONTING, London, and GEORGE WILLIAM FORD, Kensington, London, England, assignors, by mesne assignments, to Kinatome Patents Corporation. Filed Mar. 11, 1922, Serial No. 542,898, and in Great Britain Mar. 30, 1921. 104 Claims. (Cl. 88—17.)

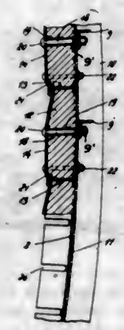


1. In film handling apparatus the combination of a film gate constructed in two separate portions, a front portion and a rear portion, a fixed support for one of said portions, a support for the other said portion movable relatively to said fixed support, a film spool on said movable support, driving means for said film spool on said fixed support, and means co-operating with said film spool to engage said driving means when the support is moved to close the gate and to be disengaged therefrom when the support is moved to open the gate.

91. In motion picture apparatus having means for advancing a film and take-up means for said film, common driving means for said film advancing mechanism and said take-up means, a clutch between said driving means and said take-up means, and means for necessarily rendering the film advancing means inoperative when the clutch is rendered inoperative.

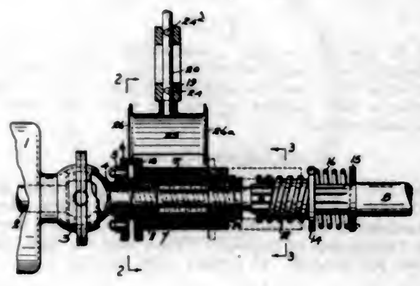
102. In a film handling apparatus, a supporting plate, an apertured gate, a source of light, a condensing lens, an objective lens, said source and said lenses cooperating with the aperture of said gate, and a member for engaging the film and feeding it through said gate past the aperture thereof, all of said parts being mounted upon said plate for the purpose of reducing unwanted relative movement therebetween.

1,868,253. HEAT-RESPONSIVE CLOSURE. HEINRICH RACKEBRANDT, Hannover-Linden, Germany. Filed Apr. 10, 1930, Serial No. 443,176, and in Germany Apr. 30, 1929. 7 Claims. (Cl. 189—46.)



5. A heat-responsive closure for structures in which the temperatures at the inner and outer faces of the closure are different, comprising a frame, an outer shell on said frame, an insulating layer on said shell on the side exposed to the higher temperature, a shell built up of over-lapping plates with one of their over-lapping edges beveled on the face of said insulating layer, and bolts extending through said insulating layer and said shells for securing said plates at their centres of gravity.

1,868,254. FREE WHEELING DRIVE FOR AUTOMOBILES. EARL J. REAVES, Detroit, Mich. Filed June 22, 1931. Serial No. 545,907. 7 Claims. (Cl. 192—47.)

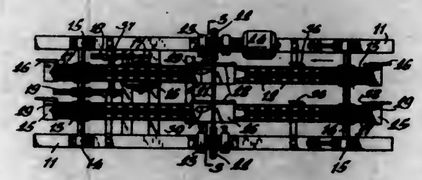


1. In an arrangement of the character described, the combination of a drive shaft having an externally threaded extension, a driven shaft having an axial alignment with said extension, a sleeve on said driven shaft rotatable with the latter and provided with an external thread similar to the thread on said extension, a nut in threaded engagement with said extension adapted also to engage said sleeve so that then the extension and driven shaft turn together, and means adapted to retain said nut in threaded engagement with both said extension and said sleeve.

1,868,255. FISH CUTTING MACHINE. OTTO G. RIESKE, Buffalo, N. Y. Filed Nov. 29, 1929. Serial No. 410,303. 7 Claims. (Cl. 17—4.)

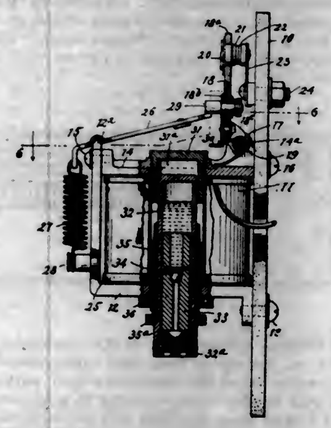
1. In a machine of the character described, a traveling carrier for the fish including a pair of relatively movable

walls for receiving a fish between them, one of said walls having an opening therein through which a portion of the fish is adapted to protrude and the other wall having



a part thereon for raising such portion through the companion wall-opening, and means for severing the protruded portion of the fish from its body.

1,868,256. TIME LIMIT OVERLOAD SWITCH. CHARLES H. RIPPL, East Cleveland, Ohio, assignor to The Clark Controller Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 11, 1929. Serial No. 362,269. 5 Claims. (Cl. 200—97.)



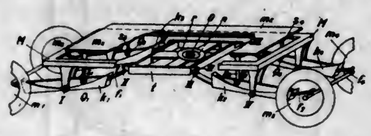
1. In a time limit switch, stationary and movable switch members, a magnet for operating the switch and provided with a hollow core of magnetic material, and a chamber adapted to extend into the core, the chamber containing a fluid and a plunger adapted to be moved toward the core by the action of the magnetic field.

1,868,257. FOUNTAIN PEN. SOLOMON M. SAGER, Evanston, Ill. Filed Apr. 24, 1930. Serial No. 446,807. 21 Claims. (Cl. 120—47.)



1. A fountain pen comprising a body section, a feed bar and a pen point engaged in one end thereof, a flexible filling tube extending from said feed bar into said body section, a plunger stem in said body section slidably engaged over said flexible tube, a plunger head engaged on said stem and surrounding said flexible tube, adjustable packing means in said plunger head surrounding said tube and adapted to be adjustably compressed with the adjustment of said stem into said plunger head, a closure cap adjustably engaged on one end of said plunger stem, and an adjustable packing in said cap engaged around said flexible stem when the plunger stem is in its innermost position and adapted to be compressed to provide a tight fit around said tube with the adjustment of said cap on said plunger stem.

1,868,258. METHOD OF AND MEANS FOR SUSPENSION OF VEHICLES. GEORG HEINRICH SCHIEFERSTEIN, Berlin-Charlottenburg, Germany. Filed Oct. 24, 1927, Serial No. 228,409, and in Germany Oct. 29, 1926. 5 Claims. (Cl. 280—104.)



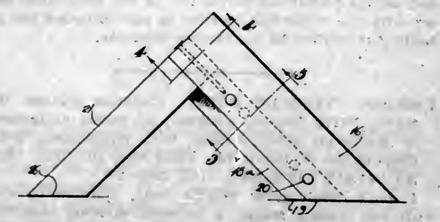
1. A spring suspension for vehicles, comprising a vehicle frame, springs on the frame on which the axles are mounted, means connected to the springs to transmit the movements of one axle to the other and produce oppositely acting pairs of forces mutually compensating one another, and means for carrying live loads movable independently of the main frame and mounted at nodal points of the aforesaid combination, whereby said live load carrying means remains approximately stationary.

1,868,259. LAMINATED LAMP CONSTRUCTION. JOHN F. SCHMIDT, Cincinnati, Ohio, assignor to The Corcoran-Brown Lamp Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 29, 1930. Serial No. 457,410. 7 Claims. (Cl. 88—1.)



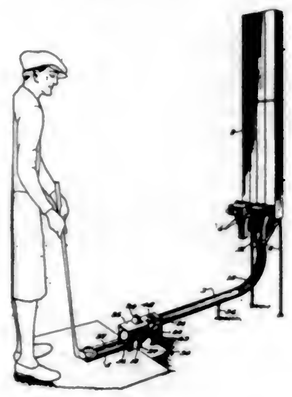
2. A lamp construction comprising a hollow laminated structure having a core of relatively stiff material, and a thinner lamina of more ductile material, the grain of the laminæ being crossed relatively to each other.

1,868,260. CHOCK BLOCK. CLIFFORD L. SNYDER, Detroit, Mich., assignor to Evans Products Company, Detroit, Mich., a Corporation of Delaware. Filed Aug. 10, 1931. Serial No. 556,214. 11 Claims. (Cl. 188—32.)



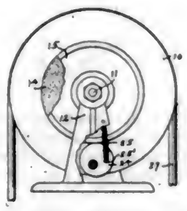
1. In a chock block, a tread wall including side bars, a central spacer bar and an inclined heel brace.

1,868,261. APPARATUS FOR DISPENSING AND TEEING GOLF BALLS. CLYDE CURTIS SPENCER, Belmont, Mass. Filed June 25, 1930. Serial No. 463,644. 15 Claims. (Cl. 273—33.)



1. In an apparatus of the character described, the combination of a chute for holding a series of golf balls in position to roll toward one end thereof, a flexible guide at the latter end of said chute for receiving said balls, a part at the end of said guide for positioning a ball for driving, said guide serving to conduct the balls one at a time by gravity to said driving position, and means for controlling the delivery of the balls to said guide.

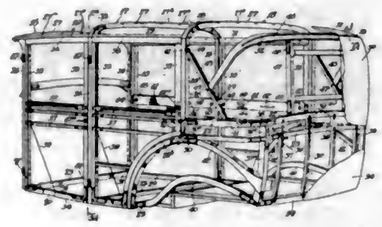
1,868,262. FRICTIONAL RESISTANCE DEVICE. JOSEPH H. STALEY, Columbus, Ind. Filed Jan. 16, 1931. Serial No. 509,090. 19 Claims. (Cl. 272—79.)



1. In a variable frictional resistance device, a revolvable pulley member, a frictional contacting disc member adjacent the revolvable member, means for varying the pressure between the revolvable and contacting members, and means permitting revolution of the contacting member with the revolvable member in one direction but preventing revolution in the reverse direction.

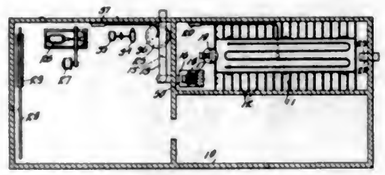
1,868,263. VEHICLE BODY. CHARLES TERRES WEYMANN, Paris, France, assignor, by mesne assignments, to Weymann Motor Bodies, Inc., Wilmington, Del., a Corporation of Delaware. Filed Dec. 20, 1927. Serial No. 241,416. 18 Claims. (Cl. 296—28.)

1. In a road motor vehicle body, adapted to weave with the chassis frame, a forward skeleton comprising transverse vertical frames and means for flexibly connecting said frames together, a tonneau structure comprising a frame of flexibly connected pieces with an upper horizontal U-shaped frame unit, means for flexibly connecting said tonneau structure to said forward skeleton, and a flexible covering around said skeleton frame and tonneau



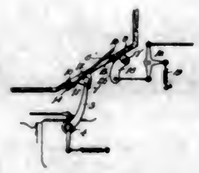
structure, and additional means supported by said upper frame unit for giving shape and support to said covering to shape the rear upper end of said body.

1,868,264. TEMPERATURE REGULATING AND HUMIDIFYING APPARATUS. CHARLES L. WHITAKER, Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed June 17, 1927. Serial No. 199,599. 2 Claims. (Cl. 257—8.)



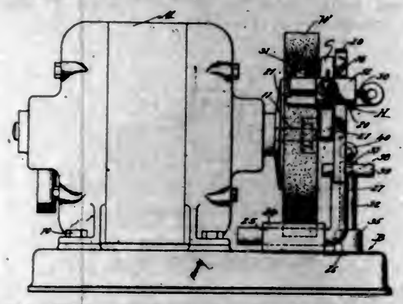
1. A storage chamber for fruits comprising a compartment, an air outlet from said compartment, a manually operable valve for controlling said outlet, an air inlet to said compartment, a casing in said compartment adjacent to and connected with said air inlet, air heating and air cooling means in said casing, and a fan in said casing for circulating air over said cooling and heating means, substantially as set forth.

1,868,265. PEDAL CONTROL FOR MOTOR CARS. GEORGE EDWARD WHITE and CHARLES NEIL HARDING WHITE, Doornfontein, Johannesburg, Transvaal, Union of South Africa. Filed Feb. 25, 1930, Serial No. 431,204, and in the Union of South Africa Jan. 14, 1930. 3 Claims. (Cl. 74—81.)



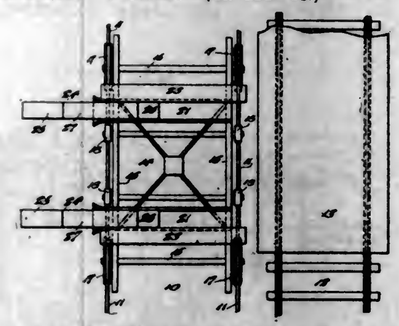
1. In a motor vehicle, the combination with a foot board having an aperture therein of a pivotally mounted pedal movable upwardly and downwardly relative to said aperture, the front end of the pedal overlapping the board above the same and the rear end of the pedal overlapping the board below the same, and a vehicle control means adapted for actuation upon forward tilting movement of said pedal.

1,868,266. WORK SUPPORTING ATTACHMENT FOR ABRADING MACHINES. LESLIE E. WOODSEND, Los Angeles, Calif. Filed Mar. 6, 1929. Serial No. 344,766. 7 Claims. (Cl. 51—98.)



1. An attachment of the character described comprising a body having non-circular socket, a cutter supporting stud having a non-circular portion on which a cutter is adapted to be mounted and a head against which the cutter is adapted to abut, the stud having a second non-circular portion fitting said socket, means for securing the stud to the body with a cutter on the stud clamped between the head of the stud and the body, and means for mounting the body for such movement with respect to an abrading element that a cutter carried by the body can be presented to the abrading element in a manner to effect sharpening of the cutter blade's cutting edge.

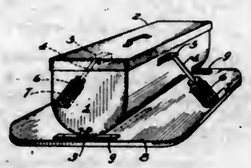
1,868,267. FREIGHT HANDLING SYSTEM. CHARLES D. YOUNG, Haverford, Pa. Filed Nov. 8, 1929. Serial No. 405,552. 5 Claims. (Cl. 214—38.)



1. In a loading and unloading system, a railroad track, a spotting truck arranged to travel beside said track to take a predetermined position beside a freight car on said track, vehicle receiving guide rails mounted transversely of said truck, means carried by said truck for supporting a container, and means associated with said guide rails for causing a vehicle to enter said guide rails with a variation in the height of its platform whereby a container is automatically deposited upon or removed from said supporting means.

1,868,268. DISHWASHER. ROSE ZREBIEC, Beaver Falls, Pa. Filed Dec. 13, 1930. Serial No. 502,127. 2 Claims. (Cl. 259—73.)

1. A dish washing apparatus consisting of a frame having fixed upright supports, springs attached near the top of the supports, a horizontally disposed metal ring of a size suitable to support a dish pan therein supported



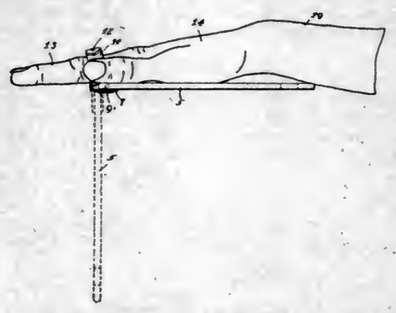
between the supports by means of the springs, and a resilient bumper secured to the frame in line with the ring when the apparatus is in use.

1,868,269. SACK HOLDER. EUGENE E. BEADLE, Waterbury, Conn. Filed May 20, 1930. Serial No. 456,897. 3 Claims. (Cl. 83—26.)



1. In a filtering apparatus, a U-shaped bracket having a vertical base and a pair of horizontal legs, the lower leg having a pair of open resilient jaws for embracing a filtrate receptacle, and the upper leg having a pair of open resilient jaws for embracing a pair of detachable filter-holding rings.

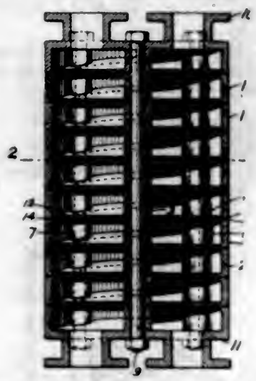
1,868,270. SWIMMING DEVICE. EDWARD L. BELLMAN, Rockford, Ill. Filed Mar. 11, 1931. Serial No. 521,707. 4 Claims. (Cl. 9—21.)



1. A swimming device comprising in combination a blade of thin rigid material supported to lie against and be supported by the palm of the hand and the wrist in the power stroke of swimming, and flexible means for pivotally connecting said blade at its forward edge to the hand of the swimmer, to move between an operative position against the palm and wrist and an inoperative position parallel to the movement of the swimmer's hand

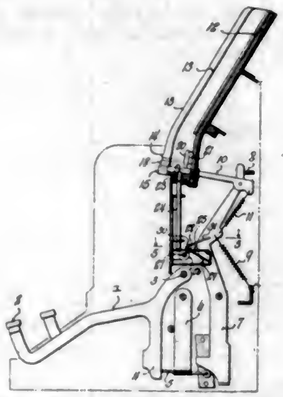
on the back stroke, whereby said blade will automatically present a maximum resistance to the water during the power stroke and a minimum resistance during the return stroke.

1,868,271. HEAT EXCHANGER. FREDERIK BOEHM, Philadelphia, Pa., assignor to Schutte & Koerting Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 10, 1931. Serial No. 543,284. 3 Claims. (Cl. 257—245.)



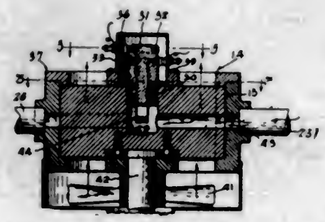
1. A polyplate heat exchanger comprising a series of duplicate disks arranged in facial contact and each having a ring wall and a hub and webs in the form of segments of the convolutions of at least two similarly directed spiral surfaces and providing ports disposed substantially perpendicular to the plane of the disk, stays passing through the hubs and ring walls, and end fittings having inlet and outlet connections for the spiral passages between the convolutions of the webs.

1,868,272. COIN DELIVERY MACHINE. EDWARD J. BRANDT, Watertown, Wis., assignor to Brandt Automatic Cashier Company, Watertown, Wis. Filed Dec. 10, 1928. Serial No. 325,063. 1 Claim. (Cl. 133—5.)



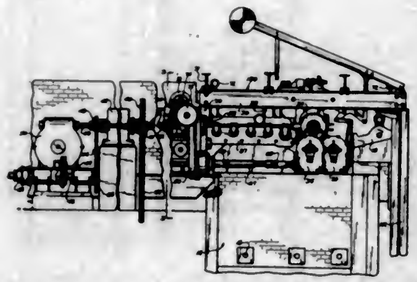
In a coin delivery machine, a coin tray having a coin channel, said channel having a notched base two ejectors located within the notch of said base and positioned at different heights, levers associated with each ejector, key controlled mechanism for actuating said levers to selectively operate the same, a slide carried by said channel for positively controlling the discharge of coins therefrom, means actuated by one of said ejectors for actuating said slide, said slide having a downwardly extending tongue, a rock shaft provided with a cam, mechanism operatively connecting said cam and said downwardly extending tongue, and means operatively connecting said rock shaft with the upper of said ejectors.

1,868,273. IGNITION MEANS FOR INTERNAL COMBUSTION ENGINES. PRESTON M. BRUNER, San Francisco, Calif. Filed Dec. 9, 1929. Serial No. 412,729. 5 Claims. (Cl. 123—143.)



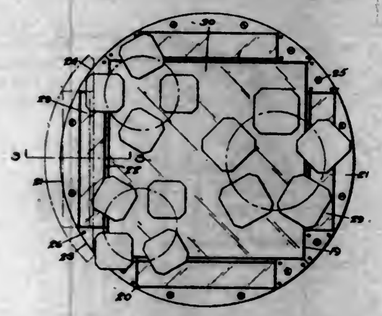
1. An ignition device for an internal combustion engine comprising a rotor having a central firing chamber electric ignition means projecting into said chamber and secured to said rotor, a circular casing for said rotor, a spider secured to the periphery of said casing, contacts carried by the spider and adapted to energize the ignition means, said casing having a series of openings therein spaced peripherally thereof, said rotor having a gas passage comprising two radial arms communicating with the firing chamber and adapted to establish communication between two adjacent openings upon rotation of the rotor and means for rotating the rotor.

1,868,274. SHEET GLASS ROLLING MACHINE. CARROLL CONE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 7, 1930. Serial No. 493,966. 10 Claims. (Cl. 49—33.)



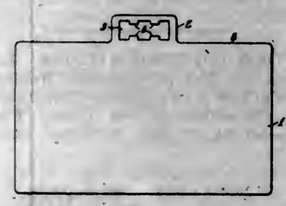
1. In combination in apparatus for producing sheet glass, a glass melting furnace including a working receptacle containing a mass of molten glass from which the sheet is adapted to be produced, a sheet glass rolling machine positioned above the working receptacle and including a plurality of forming rolls movable bodily into and out of operative relation with respect to said receptacle, means for driving the forming rolls when they are in operative relation with respect to the working receptacle in a manner to draw a relatively heavy body of glass upwardly from said receptacle and reduce it to sheet form, and auxiliary driving means for driving the forming rolls when the first-mentioned driving means has been disconnected therefrom and during movement of the said rolls into and out of operative relation with respect to said working receptacle.

1,868,275. GLASS SURFACING MACHINE. JOSEPH P. CROWLEY, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 28, 1925. Serial No. 53,026. 6 Claims. (Cl. 51—240.)



1. In sheet glass surfacing apparatus, a sheet glass supporting table having a central sheet receiving recess and a plurality of surrounding recesses for receiving individual sheets of glass, and means for varying the size of the central sheet receiving recess.

1,868,276. RECORD GUIDE. ELMER W. DAVIS, Newton, Mass., assignor, by mesne assignments, to Remington Rand Inc., Buffalo, N. Y., a Corporation of Delaware. Filed Apr. 13, 1929. Serial No. 354,782. 3 Claims. (Cl. 129—16.8.)



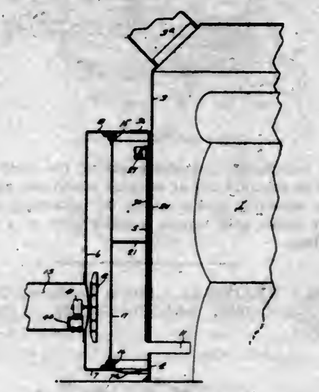
1. In combination with a guide, a tab comprising a piece of sheet material having a planar marginal portion, a central portion completely surrounded by said marginal portion offset therefrom and parallel thereto, and providing a label receiving pocket, and means extending from said marginal portion and in a plane therewith, over said central portion for retaining a label in said pocket.

1,868,277. CONDIMENT SHAKER. CHARLES F. DRONER, Chicago, Ill. Filed Apr. 22, 1932. Serial No. 606,817. 4 Claims. (Cl. 65—45.)



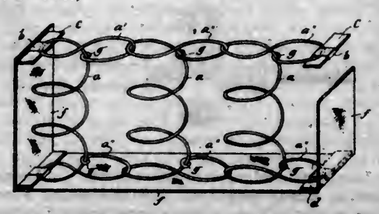
1. A condiment shaker formed as a tubular container perforated at its closed upper end to permit movement of the contents therethrough, and a removable plug closing the bottom end of the same to permit filling and replenishment of the container, the said container being constituted integrally of a plurality of sections of progressively reduced diameter, whereby there is produced upon the inside of the container a succession of annular shoulders at the ends of the adjoining sections, serving to break up a mass formed within the container.

1,868,278. AIR CONDITIONING DEVICE. WILLIAM C. DENISON, Cleveland Heights, Ohio. Original application filed Jan. 11, 1930, Serial No. 420,242. Divided and this application filed Aug. 30, 1930. Serial No. 479,028. 5 Claims. (Cl. 126—113.)



1. A combination heating unit and air conditioning appliance comprising a furnace having a fire box and a substantially annular air heating shell having one or more inlets for air and one or more outlets, a substantially annular air conditioning chamber encircling said heating shell and connected therewith, a substantially annular air filtering fabric disposed within said air conditioning chamber and through which the air to be conditioned must pass, means detachably securing said filtering fabric in place and a fan causing the air to be conditioned to pass therethrough, a sectional humidifying means including separate sections of fabric also disposed within said air conditioning chamber in close proximity to said filtering fabric whereby the air passing through said screen will impinge thereagainst, the humidifying fabric being of substantially the same aggregate size and shape as said filtering fabric, the said air conditioning chamber, filtering fabric and humidifying fabric being of relatively large area so that the air will be delivered therethrough at a relatively low velocity and effectively filtered and humidified.

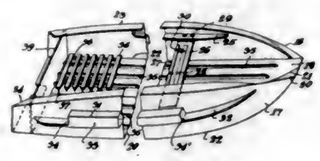
1,868,279. CUSHION OR INSERT FOR MATTRESSES OR THE LIKE CONSISTING OF SPIRAL SPRINGS. ALFRED EHLENBECK, Wuppertal-Vohwinkel, Germany. Filed Sept. 3, 1931. Serial No. 560,914. 5 Claims. (Cl. 5—246.)



1. An insert for mattresses or the like, composed of a number of vertically disposed spiral springs, arranged in longitudinal and transverse rows, each spring having at its upper and lower end a ring integral with the spring,

situated on the outer side of the spring axis, and serving as binding means for a plurality of adjacent springs, and to form with the springs substantially unbroken top and bottom surfaces.

1,868,280. FOLDABLE OR COLLAPSIBLE BOAT. WILLIAM E. ELLING, Long Island City, N. Y. Filed July 21, 1931. Serial No. 552,098. 19 Claims. (Cl. 9—2.)



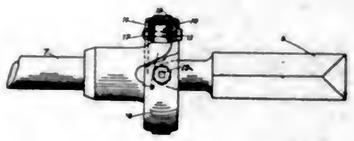
3. In collapsible, portable boats of the class described, continuous foldable fins of suitable width and rigid yet flat bendable material, and a means for attaching said fins to the boat walls, said means forming part of a continuous metal hinge.

1,868,281. HEADGEAR. ISIDOR FALKSON, Chicago, Ill. Filed Feb. 6, 1932. Serial No. 591,259. 4 Claims. (Cl. 2—175.)



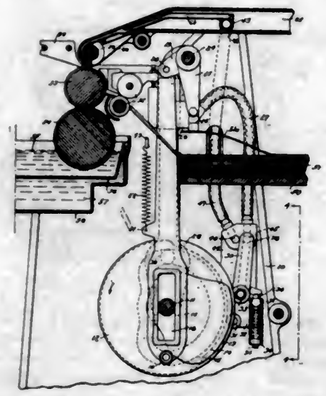
1. A headgear comprising an outer layer of pliable cloth and an intermediate layer of strong fabric material secured on the inner side thereof, said layers being arranged to provide a pleated upper portion of said headgear, and said intermediate layer being permeated with a stiffening material throughout said pleated upper portion, for preventing the pleat in said portion from unfolding, while the lower portion is retained pliable for comfort on the head.

1,868,282. FLEXIBLE COUPLING FOR SHAFTS. LEWIS E. FEIGHTNER, Elida, Ohio. Filed Mar. 29, 1930. Serial No. 439,876. 7 Claims. (Cl. 64—102.)



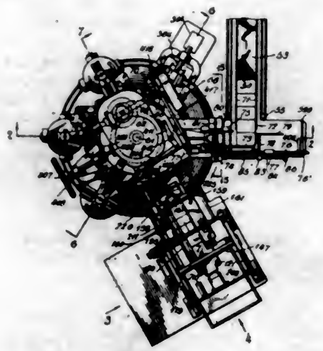
1. In a flexible joint for coupling shafts, the combination of bearing means associated with the shafts, a coupling member having bearing means complementary to the shaft bearing means, adjustable shaft aligning means operatively associated with said member and a shaft part, and a locking device for the aligning means interposed between said adjustable means and said shaft part.

1,868,283. SHEET REVERSING DEVICE FOR GUMMING MACHINES. PAUL WERNER FLEISCHER, Weehawken, N. J., assignor to New Jersey Machine Corporation, Hoboken, N. J., a Corporation of New Jersey. Filed Feb. 23, 1929. Serial No. 341,950. 6 Claims. (Cl. 91—50.)



1. The combination with a gumming machine having a gum applying roll and a suction conveyer to which the gummed sheets are delivered from said gumming machine, of a reversing roll about which said suction conveyer is trained, and a plurality of stationary suction hoods having their suction openings lying flush with the periphery of said reversing roll at a point adjacent to the said gum applying roll.

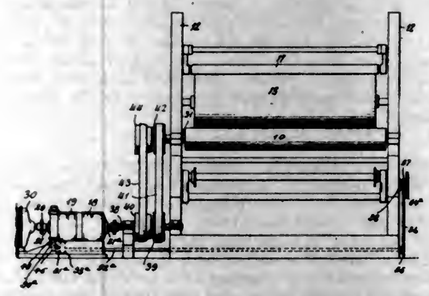
1,868,284. BOX COVERING MACHINE. PAUL WERNER FLEISCHER and MARTIN FEYBUSCH, Weehawken, N. J., assignors to New Jersey Machine Corporation, Hoboken, N. J., a Corporation of New Jersey. Filed Mar. 25, 1931. Serial No. 525,050. 8 Claims. (Cl. 93—54.)



1. A box-covering machine comprising a rotary carrier, cores mounted on said carrier at 60° from each other and adapted to support box bodies and covers therefor, means for giving said carrier intermittently partial rotations of 60° each, and six devices located adjacent to the periphery of the carrier at points corresponding to those at which the cores are temporarily stationary between said intermittent partial rotations, the first of said devices serving to feed box bodies to the cores, the second to feed box covers and apply them in a flat condition to said box bodies, the third to bend all the sides of the covers against the box bodies, the fourth to bend the projecting ends of

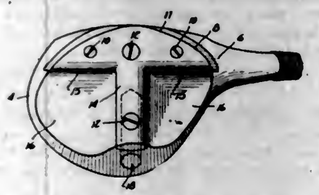
the cover sides first parallel to the bottom of the box body and then into the box body, the fifth to exert binding pressure on the covered box body, and the sixth to eject the covered box body.

1,868,285. WINDER DRIVE FOR PAPER MACHINES. DANIEL R. FRANCIS, Waterbury, Conn., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed Jan. 9, 1929. Serial No. 331,370. 2 Claims. (Cl. 242—66.)



1. The combination with a winder of a paper machine of the type wherein the roll of paper being wound is supported upon the periphery of a pair of winder rolls, of means for driving said winding rolls, for varying the speed thereof without interrupting breaks from zero to a predetermined maximum speed and for varying the speed of one of said winding rolls relatively to the other to cause a tension to be exerted for winding the paper roll into a hard center roll, said means comprising a fluid pressure actuated motor, a fluid pressure actuated pump for circulating fluid under pressure to said motor and power means for driving said pump, a driving connection of invariable effect between said motor and one of said winder rolls, and a driving connection of variable effect between said motor and the other of said winder rolls.

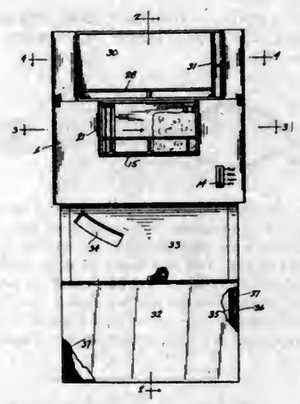
1,868,286. GOLF CLUB. FREDERICK W. GRIEVE, Crestwood, N. Y. Filed Apr. 11, 1930. Serial No. 443,311. 4 Claims. (Cl. 273—77.)



1. A golf club of the class described having a substantially T-shaped sole plate set into the bottom side of its head with the cross-bar of the plate forming the forward part of said bottom side and the other part of the plate extending centrally transversely of the head and arranged substantially horizontally, the remaining portions of the bottom side of the head being inclined upwardly and rearwardly from said cross-bar and upwardly and outwardly from said central part of the sole plate.

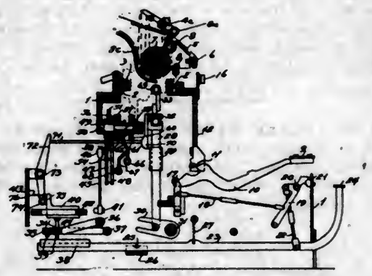
1,868,287. ELECTRIC BREAD TOASTER. JACQUES EDWARD HAEBINGER, Washington, D. C. Filed May 17, 1930. Serial No. 453,368. 5 Claims. (Cl. 219—19.)

1. An electric toaster comprising in combination, a toasting compartment, a bread receptacle positioned below the toasting compartment and having communication therewith through an opening provided in the bottom of the toasting compartment, spaced concentrically arranged electric heating elements arranged within the toasting compartment providing an annular toasting chamber therebetween, and a rotatable carrier for receiving slices of



bread operable within the toasting chamber between electric heating elements, the toasted slices of bread being automatically discharged from the toasting compartment into the bread receptacle through said opening.

1,868,288. TYPEWRITING MACHINE. ALEXANDRE HAVARD, Brussels, Belgium, assignor to La Mondiale Typolitho, Société Cooperative, a Company, Brussels, Belgium. Filed June 7, 1928, Serial No. 283,539, and in Belgium Mar. 15, 1928. 4 Claims. (Cl. 197—84.)



1. In a typewriting machine, in combination, a frame, a carriage adapted to receive a printing plate and sliding on the said frame, a striking surface provided on the said carriage, type bars, sets of typographical characters of varying thickness carried by said type bars, means whereby the said striking surface is adapted to be struck by the said types, means whereby the type bars are guided when struck against the striking surface, means whereby a lifting and lowering movement is given to the said carriage to bring the carriage into position for using a respective set of characters, a control key for each of the type bars, spacing bars for each set of characters and on which act the said control keys, stops of different heights, provided on the said spacing bars, whereby for one lowering of the key controlling the type bar, the spacing bar receives a movement of amplitude proportional to this stop, an escapement movement including a friction clutch whereby the movement of the spacing bar is transmitted to the carriage, a slider adapted to be interposed between the spacing bar corresponding to the type of character to be struck and the escapement movement, and adapted to be

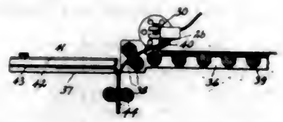
displaced automatically by the lifting and lowering movement of the carriage, whereby the selection of the spacing bar corresponding to the type of character to be struck is effected.

1,868,289. SPOON. WILLIAM LEIDEL, Elmhurst, N. Y. Filed May 22, 1930. Serial No. 454,656. 1 Claim. (Cl. 30—22.)



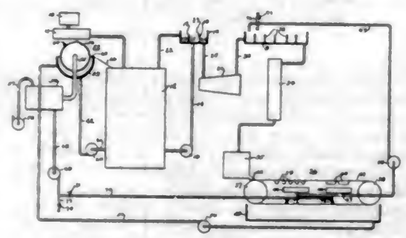
A spoon as characterized comprising a handle at one end, a bowl at the other end, said bowl being shaped at its forward end to substantially fit within a single row of corn on the cob, and the walls of said concave portion being flared outward and rounded to rest on adjacent rows of kernals, said concave portion being provided with a sharp edge adapted to remove the kernels from said cob without digging into and removing an unedible part of the cob.

1,868,290. COUNTER. JOHN LAWLER MORGAN, Camden, N. J., assignor to Jesse Satenstein, New York, N. Y. Filed Mar. 9, 1929. Serial No. 345,728. 3 Claims. (Cl. 235—98.)



1. In combination with means for conveying sheets of paper along a course having a turn therein, and means for causing the rear end of the sheets to kick up in making the turn, of a switch mechanism in circuit with counter operating means, said switch having terminals one of which is operated by the kick up of said sheets.

1,868,291. PAPER MANUFACTURE. JAMES J. O'CONNOR, Chillicothe, Ohio, assignor to The Mead Pulp and Paper Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 9, 1929. Serial No. 398,404. 6 Claims. (Cl. 92—20.)



1. In the manufacture of paper, the method which comprises introducing a fine-grained solid water insoluble material into fibrous stock, forming a paper web from the admixed suspension of fine-grained material and fibrous stock, collecting and filtering liquid and entrained solids drained and removed from the web during formation, and withdrawing a portion of the fibrous stock prior to the introduction of the fine-grained solid material thereto to form a filter mat composed practically entirely of fibers and relatively free of salted ingredients to assist in the filtering of the removed liquid.

1,868,292. AIR RIFLE. ERNEST S. ROE, Plymouth, Mich., assignor to King Manufacturing Company, Plymouth, Mich., a Corporation of Michigan. Filed Nov. 21, 1929. Serial No. 408,709. 12 Claims. (Cl. 124—10.)

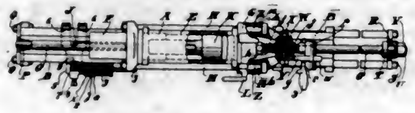


1. In a gun, a barrel, a plunger having a slotted plunger rod slidable therein, a power spring surrounding the plunger rod, a trigger, and means for sliding the plunger rod rearwardly against the tension of said spring into engagement with the trigger, the portion of the plunger rod contacting the trigger being bent back upon itself to form a portion of greater thickness than the remainder thereof.

1,868,293. ALLOYS. JOSEPH KENT SMITH, Detroit, Mich., assignor to Beryllium Development Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 27, 1931. Serial No. 511,648. 2 Claims. (Cl. 75—1.)

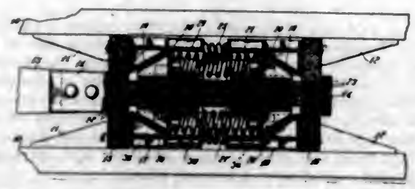
2. An alloy for machine parts, sheets and the like, wherein lightness combined with strength is desired, said alloy including approximately 70% beryllium and approximately 28.8% aluminum, and said alloy further including approximately .6% of manganese.

1,868,294. FEEDING DEVICE FOR ROCK DRILLS. WILLIAM A. SMITH, Sr., Easton, Pa., and WILLIAM A. SMITH, Jr., Phillipsburg, N. J., assignors to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 24, 1930. Serial No. 423,066. 6 Claims. (Cl. 255—45.)



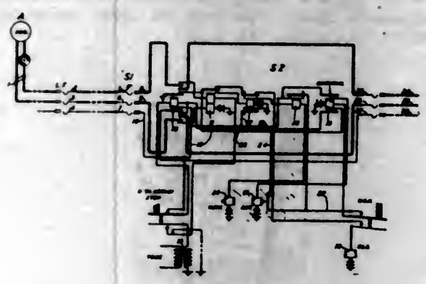
6. In a feeding device, the combination with a support and a percussive motor on the support and being subjected to jars incident to its operation tending to move the motor along the support, of recoil arresting means for the motor, and means on the support to shift the recoil arresting means for reversing the direction of movement of the motor relatively to the support.

1,868,295. DRAFT GEAR. DONALD F. SPROUL, Chicago, Ill., assignor to Union Draft Gear Co., a Corporation of Delaware. Filed Feb. 17, 1926, Serial No. 88,809. Renewed Mar. 26, 1928. 6 Claims. (Cl. 213—36.)



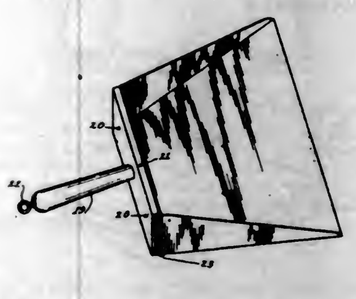
1. In a draft gear, in combination, a pair of opposed casings each having flaring forwardly facing wedge surfaces, wedge shoes cooperating with the several casing wedge surfaces, a group of intercalating plates interposed between the shoes on opposite sides of the gear, springs reacting between the casings, springs reacting between the shoes on corresponding sides of the gear, retracting bars engaging each set of plates, and retracting shoulders on the casings for engaging the bars on release.

1,868,296. AUTOMATIC TELEPHONE SYSTEM. RAY L. STOKELY, Floral Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 25, 1931. Serial No. 565,066. 13 Claims. (Cl. 179—18.)



1. In combination, a trunk, means for extending connections to said trunk, means for establishing a busy condition to guard the trunk against seizure, means for removing said condition, and means for reestablishing said condition in response to an attempted seizure of the trunk by said connective means.

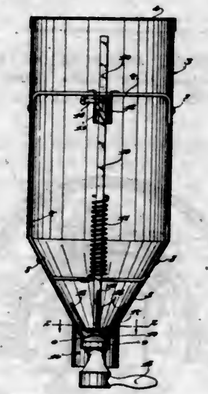
1,868,297. DUSTPAN. ROBERT WILLIAM TYSICK, Perth, Ontario, Canada, assignor of one-half to Frederick J. Publow, Perth, Ontario, Canada. Filed Aug. 11, 1930, Serial No. 474,445, and in Canada Apr. 25, 1930. 1 Claim. (Cl. 65—20.)



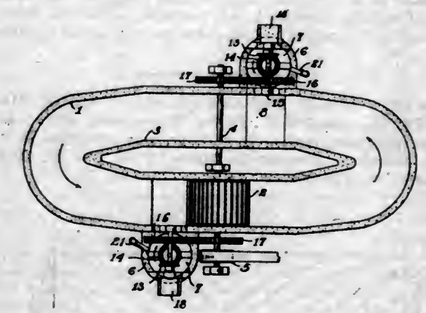
In a dust pan, a sheet metal body part formed of a flat bottom, a pair of sides, oppositely disposed, inwardly extending apertured lugs at the rear ends of the sides and an upwardly extending flange at the rear end of said bottom and opposing the forward faces of the lugs, a back wall positioned between the rear ends of the sides and having grooved sides and bottom edges, said lugs and flange being extended into said grooved edges, and holdfast devices for connecting the flange and lugs to said back wall.

1,868,298. POWDER-DISPENSING DEVICE. OLAV WALLO, Minneapolis, Minn. Filed Dec. 26, 1930. Serial No. 504,789. 2 Claims. (Cl. 221—66.)

1. A powder-dispensing device comprising a container having a discharge opening, a valve for closing the discharge opening, said valve having a stem mounted for compound turning and endwise movement to operate the valve, a relatively fixed sleeve through which the stem loosely extends axially, said sleeve having a spiral cam groove, a cam stud on the stem and extending into the cam groove, a coiled spring encircling the stem with one of its ends anchored and its other end connected to the stem and normally holding the valve closed, said spring being arranged to be tensioned by the opening of the valve, and means by which the valve stem may be turned to cause the cam stem to move in the cam slot in a direction to move the stem endwise and open the valve.



1,868,299. APPARATUS AND METHOD FOR MAKING PULP OR THE LIKE. DAVID B. WHISTLER, Dayton, Ohio, assignor to The Black-Clawson Company, Hamilton, Ohio. Filed May 31, 1928. Serial No. 281,633. 10 Claims. (Cl. 92—24.)

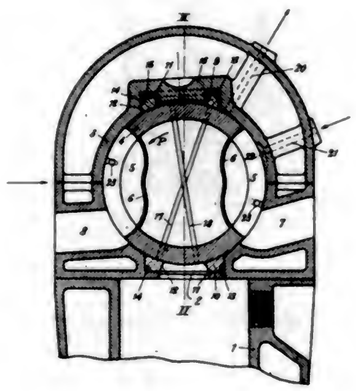


1. An apparatus for reducing pulp including in combination with a stock beater, a tank operably associated with the beater, means in the tank for breaking up and hydrating the raw stock before it enters the beater, and means operably associated with said tank for removing foreign substances separated from the stock incidental to said actions thereon.

1,868,300. DYEING, PRINTING, AND LIKE PROCESS. BIRKETT WYLAM and JAMES STEVENSON WILSON, Grangemouth, Stirling, Scotland, assignors to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Sept. 3, 1931, Serial No. 561,086, and in Great Britain Sept. 2, 1930. 14 Claims. (Cl. 8—6.)

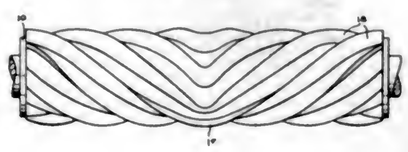
1. In process of coloring textile materials, the improvement which comprises applying an organic coloring matter to the materials in the presence of a sulphuric ester of cellulose.

1,868,301. INTERNAL COMBUSTION ENGINE. JAN ZEEMAN, Amsterdam, Netherlands. Filed Dec. 17, 1929. Serial No. 414,735. 4 Claims. (Cl. 123—190.)



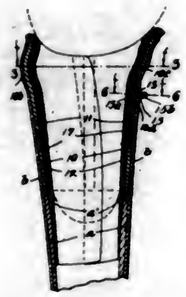
1. An internal combustion engine comprising a rotary valve, a housing in the cylinder head in which the valve rotates, ports in the valve each of which comprises two chambers arranged side by side, two packing rings mounted to have an axial movement under the gas pressure in the said housing at the end of the port leading to the combustion chamber, and two packing rings mounted in the housing on the diametrically opposite side of the valve, means for transmitting the gas pressure from the cylinder to act on the latter packing rings, so that both sets of rings are pressed by gas pressure against the valve, and springs normally pressing the packing piece towards the valve.

1,868,302. ROLLS FOR CORRUGATING SHEET MATERIAL. JOSEPH T. AUGER, Minneapolis, Minn., assignor of one-third to E. O. Voyer and one-third to R. H. Monahan, Minneapolis, Minn. Filed Oct. 24, 1931. Serial No. 570,795. 5 Claims. (Cl. 153—77.)



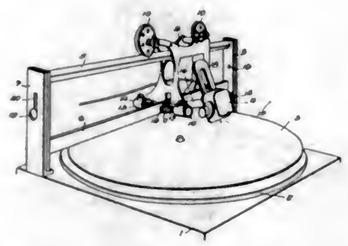
5. A device for corrugating sheet material comprising two similar rolls each of which has a plurality of spaced ribs thereon, each rib consisting of two portions in the form of right and left helical turns whose outer ends are located adjacent the outer ends respectively of the roll, and whose inner ends meet in apices between the ends of the roll, and means for causing said rolls to operate with the ribs of each roll mating in spaced relation with the depressions of the other roll.

1,868,303. PNEUMATIC SOCKET FOR ARTIFICIAL LIMBS. LUKE W. BALCH and EDWARD DE WAGENAERE, Minneapolis, Minn. Filed Sept. 19, 1929. Serial No. 393,707. 3 Claims. (Cl. 3—9.)



1. In artificial limb construction, a pneumatic socket having in combination a generally annular casing of relatively non-elastic material, and an inflatable cushioning bag comprising a sheet of non-elastic material which is adhesively secured throughout its exterior surface to the inner surface of said casing; and an inner sheet of elastic material secured to said outer sheet.

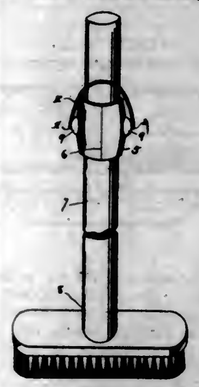
1,868,304. MOUNTING OF ELECTRIC PICK-UPS FOR GRAMOPHONES. ROBERT DOUGLAS CARGILL, Christchurch, New Zealand. Filed Aug. 27, 1929, Serial No. 388,697, and in New Zealand Sept. 3, 1928. 4 Claims. (Cl. 174—100.41.)



1. In a sound reproducing device having a turntable, mounting means for an electric pick-up, comprising a stationary track disposed above said turntable and extending thereacross parallel with a diametrical line of the turntable, a carriage having supporting wheels adapted to run upon said track, guide rollers carried by said carriage and rotatable in a horizontal plane with their peripheries in contact with opposite lateral sides of the track thereby to restrain the carriage from lateral swinging movement, and means carried by said carriage for supporting an electric pick-up.

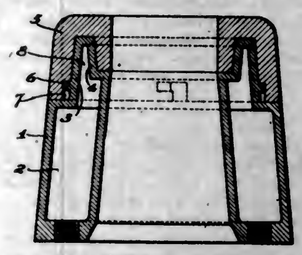
1,868,305. HANGER FOR BRUSHES, BROOMS, ETC. WILLIAM T. CRAVEN, Philadelphia, Pa. Filed June 26, 1928. Serial No. 288,523. 2 Claims. (Cl. 248—50.)

1. A device of the kind described comprising a rubber barrel open from end to end and split along a single line longitudinally to permit its application to or removal from the handle of an article, protuberances formed on the exterior of said barrel at diametrically opposite points



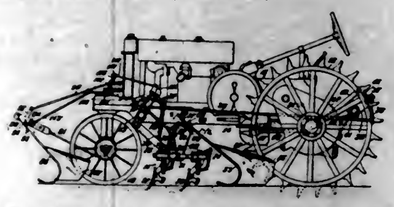
and ninety degrees on each side of the split, said protuberances having sockets therein and a resilient ball, the ends of which engage said sockets and assist in holding the barrel on the article handle.

1,868,306. BLAST FURNACE TUYÈRE. JEROME A. BOLAND, Belle Vernon, Pa. Filed Aug. 28, 1930. Serial No. 477,197. 2 Claims. (Cl. 266—41.)



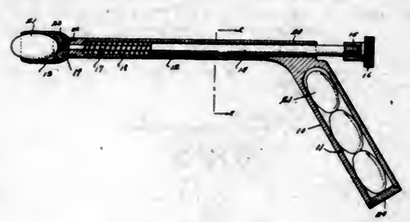
1. A blast furnace tuyère comprising a base of hollow-wall structure to contain an annular cooling chamber, and a refractory orifice tip demountably attached to the base, the base at the tip end being of reduced exterior diameter to provide an extension of the cooling chamber, and the tip being recessed to fit as a hood over the cooling chamber extension of the base for cooling the body of the separable refractory tip.

1,868,307. CULTIVATOR. THEOPHILUS BROWN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Oct. 13, 1930. Serial No. 488,238. 36 Claims. (Cl. 97—47.)



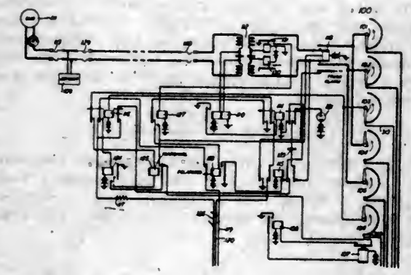
1. In combination, a tractor having driving wheels, an implement carried by said tractor, and vine lifting means carried by said implement to move vines growing in proximity to the ground out of the paths of said driving wheels, each comprising a pair of parallel members.

1,868,308. CAPSULE GUN. ROSS E. BRUMFIELD, Uvalde, Tex. Filed Feb. 1, 1930. Serial No. 425,262. 1 Claim. (Cl. 128—264.)



A capsule gun of the character described comprising a hollow handle adapted to receive a plurality of capsules, a removable plug in one end of said handle, an elongated barrel secured to said handle and obtusely inclined therefrom, a capsule chamber secured to one end of said barrel, an ejector shaft slidably mounted in said barrel and having one end projecting outwardly of one end of the barrel, the opposite end being reduced and forming a shoulder within the barrel, said reduced end extending into said capsule chamber, a concave injector head mounted on the reduced end of said ejector shaft and engaging against one end of a capsule in said capsule chamber, a spring disposed about the reduced portion of said ejector shaft and having one end engaged against said shoulder and the opposite end engaging against the outer end of said barrel for constantly urging the ejector head against the inner end of said chamber, and an operating member threadedly mounted on the projecting end of said shaft.

1,868,309. TELEPHONE SYSTEM. WARREN W. CARPENTER, Garden City, N. Y., and JACK F. DAHL, West Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 12, 1931. Serial No. 574,490. 15 Claims. (Cl. 179—27.)

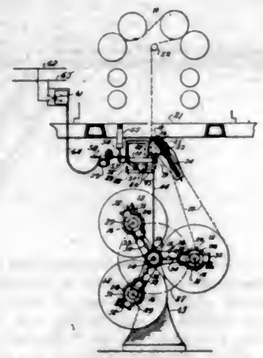


1. In a telephone system, a first plurality of trunk circuits, a second plurality of trunk circuits, a plurality of operators' positions, means to extend calls to said trunk circuits, means responsive to the extension of calls to said first plurality of trunk circuits for storing said calls, means to extend said calls to idle operators' positions in the order in which they are stored, and means responsive to the extension of a call to one of said second plurality of trunk circuits to suspend the extension of stored calls to operators' positions.

1,868,310. WEB TENSION DEVICE. ALLAN J. CLINE, Chicago, Ill. Filed Mar. 31, 1930. Serial No. 440,230. 12 Claims. (Cl. 242—75.)

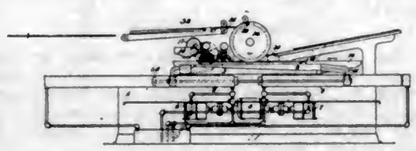
1. A web tension device comprising, in combination with a roll support and a machine to which the web is to

be supplied; brake mechanism for controlling the roll; means governed by the tension of the web for operating



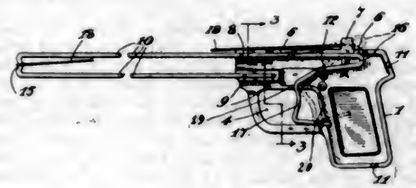
said brake mechanism; a counterweight for regulating said brake operating means; and a remote control device for adjusting said counterweight.

1,868,311. BED AND CYLINDER PRINTING PRESS. CALVERT B. COTTRELL, 3d, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed June 30, 1931. Serial No. 547,837. 18 Claims. (Cl. 101—357.)



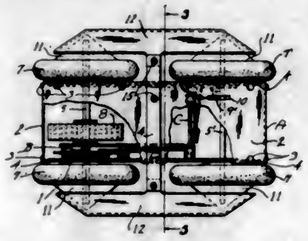
1. In a bed and cylinder printing press, a reciprocating form bed, an inking mechanism therefor including form rollers driven continuously in one direction only, and means controlled by the bed for causing the form rollers to travel at the surface speed of the form when in contact therewith.

1,868,312. TOY GUN. WILLIAM A. COVENTRY, Lancaster, Pa., assignor to Grey Iron Casting Company, Mount Joy, Pa., a Corporation of Pennsylvania. Filed Nov. 27, 1929. Serial No. 410,061. 10 Claims. (Cl. 124—14.)



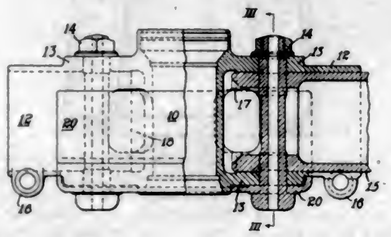
10. A band releasing device for a toy gun comprising a substantially resilient wire member, a trigger formed from said member, and a band releasing portion integral with said trigger adapted to be bent upwardly to release a band when said trigger is pulled and adapted to return to its normal position when the trigger is released, said releasing portion being normally out of engagement with the band.

1,868,313. TOY. ARMIN DAUBENDIEK, St. Louis, Mo. Filed Jan. 29, 1931. Serial No. 511,960. 4 Claims. (Cl. 46—48.)



1. A bodily reversible wheeled toy including a plurality of wheels, parallel axles connecting said wheels in pair relation, a body including top and bottom walls supported by said axles and disposed within the upper and lower peripheral plane of the wheels, wheel propelling mechanism disposed within said body and having driving connection with one of said axles, the toy being bodily reversible for selectively superposing the bottom wall over the top wall and vice versa and the wheels at their respective treads being exposed for ground engagement in either position of the body, and a brake mechanism comprising an operating lever having opposed arms accessibly disposed upon opposite sides of the body for selective manual engagement in either position of said body.

1,868,314. AIR COLLECTOR FOR PROPELLERS. THOMAS A. DICKS, Pittsburgh, Pa., assignor to Pittsburgh Screw & Bolt Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 23, 1931. Serial No. 532,201. 16 Claims. (Cl. 170—172.)



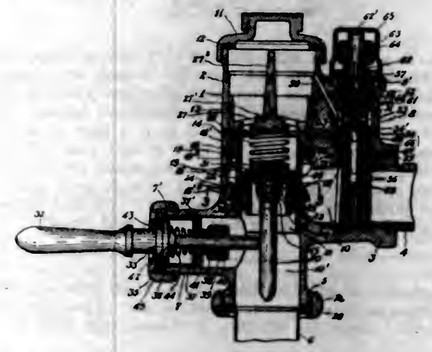
1. In a propeller, the combination with a hub having a series of annular blade receiving sockets extending radially therefrom, of a member secured to said sockets having an annular wall extending beyond said hub so as to direct air into said propeller through registering openings in said member and said sockets.

1,868,315. CONTINUOUSLY LOADED CONDUCTOR. WILLIAM C. ELLIS, Rockville Center, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 9, 1931. Serial No. 543,244. 10 Claims. (Cl. 178—45.)



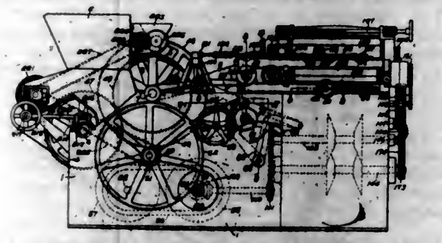
1. A process of manufacturing an article such as a continuously loaded submarine cable, comprising a central conductor and in wrapping or wrappings about the conductor of material which it is required to maintain relatively loosely on the conductor during a heating process, characterized by the application to the conductor and under or between the wrapping or wrappings of a volatile material substantially solid at room temperatures which vaporizes at temperatures around 300° C. or below.

1,868,316. FLUSH VALVE. CHARLES L. ESTERLY, East Cleveland, Ohio, assignor to The Wellman Bronze & Aluminum Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 12, 1929. Serial No. 370,386. 3 Claims. (Cl. 137—93.)



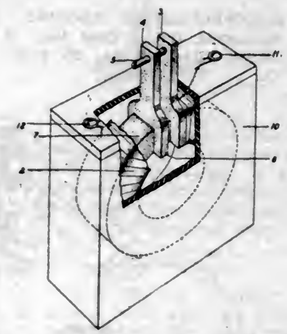
2. A flush valve including a casing formed with an inlet and an outlet and a guideway; a valve member formed with a guide portion operable in said guideway; a manually actuated relief valve whose opening relieves the pressure above the aforesaid valve member and permits the latter to move upwardly in said guide portion to open; means forming a by-pass from the inlet to the casing chamber above the valve member; an adjusting valve for regulating the fluid passage through the by-pass; an adjusting valve body member formed with a seat portion for the adjusting valve, said valve body member being also formed with a bottom open end chambered portion having an upper annular groove section; a screen housing threaded at its upper end into said chambered portion, said housing being formed with a lower annular groove section; and a cylindrical screen seated at its ends within said grooves, said housing being formed with a plurality of holes communicating with said inlet and forming a part of said by-pass.

1,868,317. METHOD AND MACHINE FOR SHEETING AND FOLDING PLASTIC MATERIALS. THOMAS LUTHER GREEN and CHARLES HERBERT WILLIAMS, Indianapolis, Ind.; said Williams assignor to said Green. Filed May 10, 1929. Serial No. 361,928. 30 Claims. (Cl. 107—12.)



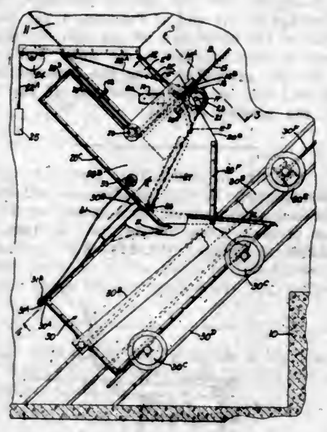
1. A machine for handling plastic materials containing in combination a hopper, a continuously traveling sheet delivery apron, and means providing a reciprocatory delivery loop in said apron, said loop having an intermittently traveling-dough-carrying apron section.

1,868,318. ADJUSTABLE INDUCTANCE. RALPH M. C. GREENIDGE, Arlington, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 9, 1930. Serial No. 466,663. 2 Claims. (Cl. 171—242.)



1. An inductance device comprising a toroidal core, a winding thereon and means to vary the inductance of said device comprising arms extending away from said core, a rod in contact with said arms, said arms and rod being of higher permeability than said core and means to vary the amount of contact between said rod and one of said arms.

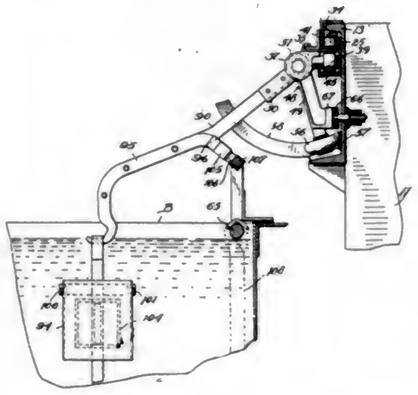
1,868,319. LOADER FOR SKIP HOIST BUCKETS. WILLIAM E. HALE, Chicago, Ill., assignor to Webster Manufacturing Company, Chicago, Ill., a Corporation of Ohio. Filed Sept. 9, 1929. Serial No. 391,285. 10 Claims. (Cl. 214—125.)



1. In material handling apparatus, and in combination, a material hopper, a discharge chute for said hopper, a gate for said chute, a pivotally mounted element, said element being a separate unit from said gate, a hoisting bucket, means operable by said hoisting bucket for moving said element into discharge position upon the descent of the bucket into loading position whereby said element will be caused to assume a position to bridge the space between said chute and the mouth of said bucket, and means interconnecting said element and said gate adapted upon the movement of said element into discharge position to open said gate to permit the material to flow by gravity from said chute over said element into said bucket, means on said bucket adapted to contact said element and move said element out of its path of travel upon its ascent,

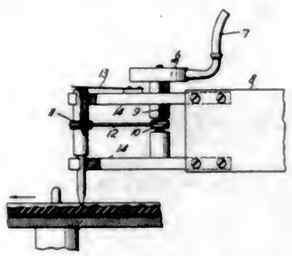
and gravity means operatively connected with said interconnecting means between said element and said gate adapted to close said gate upon the movement of said element out of discharge position by the ascending bucket.

1,868,320. ELECTROPLATING MACHINE. ALBERT H. HANNON, Springfield, Ohio. Filed Mar. 13, 1931, Serial No. 522,268. Renewed May 25, 1932. 7 Claims. (Cl. 204—5.)



1. In an electroplating machine, a plating tank, a work carrier arm extending over the tank, the arm being moved horizontally along the tank and pivotally supported to swing vertically, means for swinging the arm up as it is moved over the ends of the tank, the work being suspended on the end of the arm, a bar insulatingly mounted on the outer end of the arm for supporting an electrode in close relation to the work, and a current carrying bus bar extending along the tank slidably contacted by said bar in lowered position of the arm for supplying the plating current.

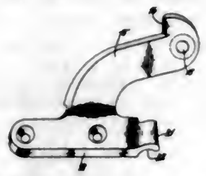
1,868,321. SOUND RECORDING. HENRY C. HARRISON, Port Washington, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 4, 1929. Serial No. 404,563. 9 Claims. (Cl. 274—1.)



1. The step in the method of producing a grooved phonograph record which consists in progressively subjecting all parts of the grooves of the original wax record to a reasonably constant pressure.

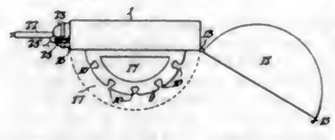
9. Apparatus for burnishing the grooves of high quality wax records including a vibration responsive system having an effective mass less than .006 gram cooperating with the record with a steady force less than 10 grams.

1,868,322. DOOR FOR STOVES. HERMAN HERRENBRUCK, Belleville, Ill., assignor to Orbon Stove Co., Belleville, Ill., a Corporation of Delaware. Filed Mar. 12, 1931. Serial No. 522,016. 8 Claims. (Cl. 126—191.)



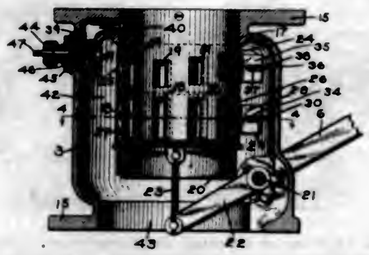
1. In a stove, a rigid door frame, a pair of hinge pins projecting outwardly and inwardly through said frame, means in connection with said pins and abutting the inner and outer surfaces of said frame and holding said pins approximately stationary, a door, a pair of spaced projections on said door for each of said pins and embracing the outer end of the corresponding pin between them, and a hinge pin extending through each pair of said projections and through each of said first named pins and thereby hinging said door to said frame.

1,868,323. ELECTRICALLY OPERATIVE STERILIZER. WILLIAM ROY HOOVEN, Brookline, Pa. Filed Aug. 14, 1930. Serial No. 475,165. 3 Claims. (Cl. 167—3.)



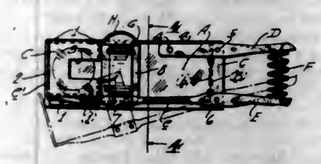
1. A sterilizer casing having a plurality of separate compartments, one of said compartments being open at the front of said casing and another of said compartments being open at the back of said casing; a heating coil in the compartment open at the front of said casing; an electric switch in the compartment open at the back of said casing and included in the circuit of said heating coil; a hollow door carried by said casing and adapted to inclose a sterilizing chamber at the front of said casing; and means in said chamber adapted to support articles to be sterilized; whereby said sterilizing chamber is readily accessible but said switch mechanism is rendered inaccessible regardless of the position of said door.

1,868,324. GAS REGULATOR VALVE MECHANISM. HOWARD R. HUGHES, Oakland, Calif., assignor to Associated Engineering and Supply Company, San Francisco, Calif., a Corporation of California. Filed July 28, 1931. Serial No. 553,547. 1 Claim. (Cl. 236—26.)



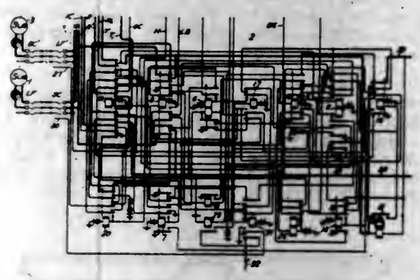
A fluid fuel regulating valve device comprising a cylinder provided with a plurality of tiers of fluid fuel flow openings, a piston valve mounted to reciprocate in said cylinder for controlling the opening and closing of said openings, means for automatically operating said valve, a separate ring valve for each tier of openings mounted to rotate on said cylinder and each ring valve independently movable to vary the flow areas of the corresponding tier of openings, and manually operated means for rotating each of said ring valves.

1,868,325. COMBINED COIN AND ARTICLE HOLDER. JAMES E. HUGHES, Dixon, Mo. Filed Apr. 4, 1930. Serial No. 441,677. 5 Claims. (Cl. 232—33.)



1. A combined holder for coins, articles, and the like adapted for manual disposition in a mail-box or the like, the same including a body-member, a receptacle having a receiving-opening, a fixed jaw on the body-member, a closure-member for removably closing said opening, a movable jaw for article gripping co-operation with the first jaw, and means for actuating the closure-member and the second jaw.

1,868,326. TELEPHONE SYSTEM. GERALD V. KING, St. Albans, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 1, 1930. Serial No. 417,840. 9 Claims. (Cl. 179—27.)

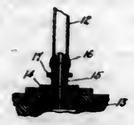


1. In a telephone system, two lines, an attendant's equipment, means for establishing a talking connection between the attendant's equipment and one of said lines, means operable by said attendant for establishing a talking connection between said lines, and means responsive to the operation of said last mentioned means for rendering said equipment ineffective and for preventing its reconnection to said line.

1,868,327. MASS CORE AND MEANS FOR, AND A METHOD OF MAKING IT. ERWIN KRAMER, Berlin, Germany, assignor to Firm Hartstoff-Metall Aktien-Gesellschaft (Hametag), Berlin, Copenick, Germany. Filed Jan. 2, 1931, Serial No. 506,320, and in Germany Jan. 2, 1930. 12 Claims. (Cl. 175—21.)

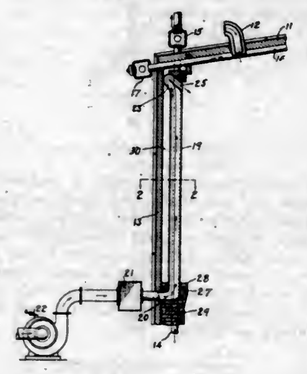
1. A pulverulent composition of matter to be used for the manufacture of mass cores, comprising a finely grained ferro-magnetic substance and a cementing medium containing as an admixture minutely disintegrated asbestos particles having a thickness of less than one thousandth of a millimeter.

1,868,328. BATTERY OVERCHARGE INDICATOR. HENRY J. KUBIAK, Madison, Wis. Filed July 9, 1931. Serial No. 549,615. 2 Claims. (Cl. 136—182.)



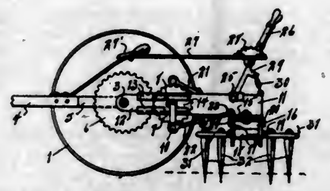
1. A battery overcharge indicator comprising in combination with a secondary battery cell, an indicating organization, a conduit from the battery to said organization, and means inherent in the organization operatively affected by pressure within the conduit, said conduit being provided with a bleeder interposed between said organization and cell.

1,868,329. FURNACE. WARNER LULOFS, Amsterdam, Netherlands, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Dec. 17, 1926, Serial No. 155,373, and in Great Britain Mar. 12, 1926. 10 Claims. (Cl. 122—235.)



1. In a furnace, metallic air heater ducts forming a substantially continuous wall surface exposed to the radiant heat in the furnace, said ducts having inlets to admit air to the bottom of the ducts and outlets to supply air from the upper portions of the ducts to the furnace chamber, and water tubes between said ducts and separate therefrom.

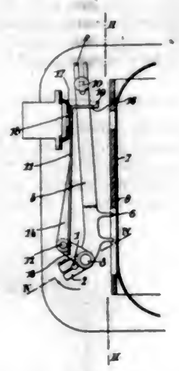
1,868,330. CULTIVATOR. WILLIAM A. MARTIN, Amarillo, Tex. Filed Jan. 7, 1932. Serial No. 585,299. 5 Claims. (Cl. 97—45.)



1. A cultivator comprising a wheeled truck, an axle rigidly connected to said wheels and driven thereby, a tongue journaled to said axle and provided with a rearwardly projecting bar, arms journaled to said axle and pro-

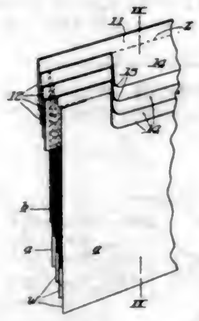
jecting rearwardly therefrom, a frame suspended from said bar and telescopically connected to said arms, a frame horizontally disposed and pivotally mounted on said frame, said last named frame being provided with stirring members, and gears driven by said axle for oscillating said last named frame.

1,868,331. MOTION PICTURE APPARATUS. ANDRÉ NOËL MERLE, Vincennes, France, assignor to Pathe Cinema, Anciens Etablissements Pathe Freres, Paris, France. Filed Nov. 28, 1930, Serial No. 498,527, and in France Jan. 7, 1930. 4 Claims. (Cl. 88—18.4.)



1. In a motion picture apparatus, a rotatable shaft, a crank secured on said shaft, two pivots carried by said crank and spaced from each other angularly with relation to said shaft, a claw-carrying link pivoted at one end on one of said pivots, guiding means adapted to engage the other end of said link, a plane shutter pivoted at one end on the other of said pivots, and guiding means provided on the other end of said shutter and adapted to engage slidingly said link.

1,868,332. LEAF MOUNTING DEVICE. JOSEPH M. MEYERS, Pittsburgh, Pa. Filed Feb. 19, 1931. Serial No. 516,860. 9 Claims. (Cl. 129—16.7.)

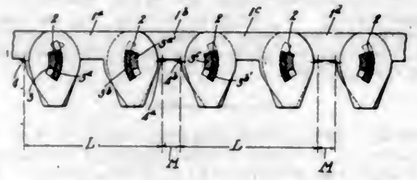


1. A leaf mounting device consisting of a flexible base strip having opposite insertion terminals and inwardly extending tongues both on the same plane as the base, and an intermediate rearwardly movable and slopingly disposable holding flap engageable over the upper edge of an adjacent similar strip.

1,868,333. REFINING OF HYDROCARBON OILS. JACQUE C. MORRELL and GUSTAV EGLOFF, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 5, 1931. Serial No. 542,459. 2 Claims. (Cl. 196—27.)

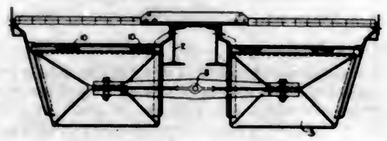
1. A method of refining hydrocarbon distillates containing sulphur and saturated and unsaturated hydrocarbons for the removal of sulphur therefrom which comprises treating the distillate with a quantity of liquid sulphur dioxide sufficient to dissolve said unsaturated hydrocarbons but insufficient to substantially affect said saturated hydrocarbons, separating the resultant solution of unsaturated hydrocarbons in sulphur dioxide from said saturated hydrocarbons, treating the separated saturated hydrocarbons with sulphuric acid to remove objectionable sulphur compounds therefrom, separating the dissolved unsaturated hydrocarbons from the sulphur dioxide solution, and combining the separated unsaturated hydrocarbons with the treated saturated hydrocarbons.

1,868,334. DRIVE CHAIN. FRANK L. MORSE, Ithaca, N. Y., assignor to Morse Chain Company, Ithaca, N. Y., a Corporation of New York. Filed Mar. 21, 1929. Serial No. 348,816. 3 Claims. (Cl. 74—32.)



1. In a chain for power transmission, the combination of links and joints connecting said links, said joints having centers of articulation differently located in different links to provide a variety of effective pitch lengths in the same chain.

1,868,335. RAILWAY CAR CONSTRUCTION. WALTER P. MURPHY, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Original application filed Jan. 14, 1929, Serial No. 332,326. Divided and this application filed Sept. 2, 1930. Serial No. 479,135. 6 Claims. (Cl. 105—280.)



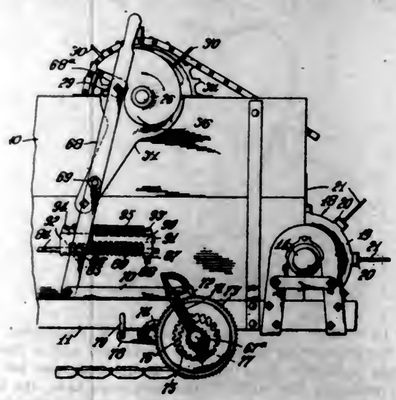
1. In a railway car, a pair of hinged dumping doors, each having a body portion with a flange adjacent its perimeter, and stiffeners extending between opposite corners of the door, a spreader having spaced apart portions, each loosely secured to said stiffeners adjacent their intersection, and a door operating mechanism attached to said spreaders adjacent the center thereof.

1,868,336. EGG SEPARATOR. CLINTON HENRY PARSONS, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 10, 1930. Serial No. 480,861. 1 Claim. (Cl. 210—57.)

In combination, a receptacle, a second receptacle removably mounted on the first mentioned receptacle, the latter being relatively shallow and having an opening in its bottom, an imperforate spout confined wholly within the second mentioned receptacle and being disposed over said opening to provide a passage from the second mentioned receptacle into the first mentioned receptacle and so as to convey the lighter specific gravities through the spout into the first mentioned receptacle and to permit collection of the heavier specific gravities in the second mentioned receptacle between the spout and the side walls of the second mentioned receptacle, and a baffle plate suspended from the second mentioned receptacle and located within the first mentioned receptacle and being of conical shape to cause the separated lighter specific gravities to strike the sides of the first mentioned receptacle while passing therein.



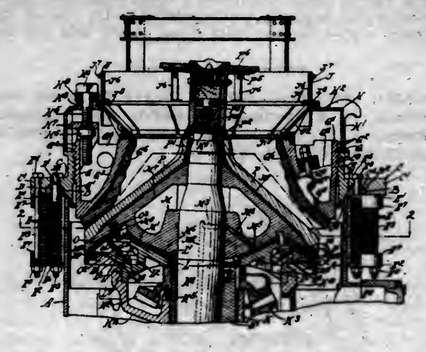
1,868,337. MANURE SPREADER. ALBION STORM, Sherkston, Ontario, Canada, assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Original application filed Mar. 21, 1925, Serial No. 17,321. Patent No. 1,724,379, dated Aug. 13, 1929. Divided and this application filed July 10, 1929. Serial No. 377,249. 25 Claims. (Cl. 275—6.)



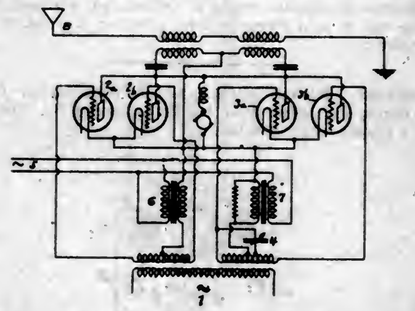
1. In a manure spreader of the type comprising a vehicle body having a rear axle, a rotatable beater, and conveying means in the bottom of the body for moving the manure rearwardly to said beater, driving mechanism for intermittently driving said conveying means, comprising a swinging lever mounted on the vehicle body, means actuated by the swinging of said lever in one direction for moving said conveying means rearwardly, and a single means for swinging said lever and driving said beater.

1,868,338. CRUSHING APPARATUS. EDGAR B. SYMONS, Hollywood, Calif., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed Feb. 20, 1929, Serial No. 341,336. Divided and this application filed July 11, 1930. Serial No. 467,237. 31 Claims. (Cl. 83—10.)

1. In a gyratory crusher including a cone and means for gyrating it, a concave spherical surfaced main bearing member, the under side of the cone being formed to conform thereto, a second bearing surface positioned exteriorly of and concentric with the main bearing surface and a closure ring member, mounted on said cone, in engagement with said second bearing surface, and means for thrusting said ring downwardly against said bearing surface.



1,868,339. ARRANGEMENT FOR THE ONE SIDED BAND MODULATION OF HIGH FREQUENCY VIBRATIONS. FRIEDRICH TRAUTWEIN, Berlin-Zehlendorf, Germany, assignor to the Firm Dr. Erich F. Huth Ges. m. b. H., Berlin, Germany. Filed Feb. 2, 1926, Serial No. 85,460, and in Germany Feb. 3, 1925. 7 Claims. (Cl. 179—171.)



1. A system of modulating carrier frequency with suppression of carrier wave and one of the side-bands comprising electron device arrangements, each one connected to suppress the carrier wave, separate input circuits for said arrangements, a common output circuit for said arrangements, means for shifting the phase by 90° at carrier frequency on one of said arrangements, and means for shifting the phase by 90° at modulating frequency on one of said arrangements.

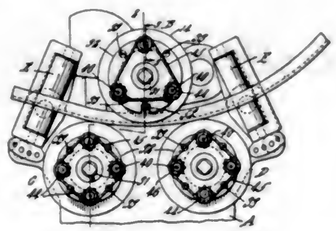
1,868,340. RAILWAY VEHICLE SUPPORTING STRUCTURE. WILLIAM E. WOODARD, Forest Hills, N. Y. Filed Nov. 6, 1928. Serial No. 317,509. 25 Claims. (Cl. 105—196.)



1. A railway vehicle supporting structure comprising a truck having longitudinally-extending side frame members, transoms, three axles and their wheels, a main

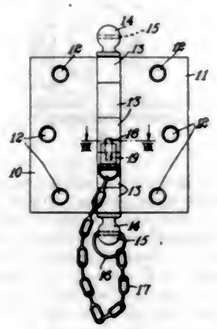
vehicle frame member positioned between said truck side frame members and substantially in their common horizontal plane, and a transverse bolster supported on the transoms and having a centre bearing and a pair of side bearings supporting the main frame in the said position.

1,868,341. BENDING ROLL. ARTHUR T. YATES, West Seneca, N. Y., assignor to Buffalo Forge Company, Buffalo, N. Y. Filed Nov. 29, 1930. Serial No. 498,996. 16 Claims. (Cl. 153—57.)



1. A composite roll for a bending machine, said roll being divided lengthwise of the axis thereof into a plurality of roll parts, at least two of said parts being adjustable lengthwise of the roll relatively to another part and to each other, to form annular grooves of varying widths, at least one of said roll parts having a portion of smaller diameter than the roll diameter and extending into an annular recess of an adjacent roll and movable out of said recess to form a bottom for one of said grooves.

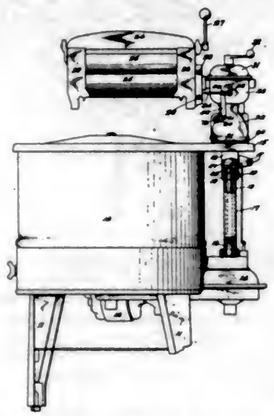
1,868,342. HINGE LOCK. ANTON YURKOVITCH, Pittsburgh, Pa. Filed Feb. 18, 1931. Serial No. 516,623. 8 Claims. (Cl. 16—144.)



1. In a device of the character described, two superposed relatively movable abutting hinge barrels having notches alignable to form a slot extending across the meeting surfaces thereof, and a member insertable into said slot for locking said hinge barrels in predetermined angular relation, said member including a hand piece with a projection thereon for reception in said slot.

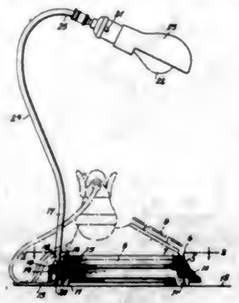
1,868,343. CONTROL MEANS FOR WASHING MACHINE ROLL WRINGER MECHANISM. ALPHEUS W. ALTORFER, Peoria, Ill. Filed May 6, 1932. Serial No. 609,583. 5 Claims. (Cl. 68—32.)

1. The combination of a roll wringing mechanism for a washing machine, means for driving the rolls of said mechanism, a clutch in the driving mechanism, power means for operating the clutch to control the movement of the wringer rolls, and a manually operated member for controlling the power operated clutch control means, said



member being readily accessible to the operator when the latter is operating the wringer, and being responsive to a comparatively slight pressure by the operator.

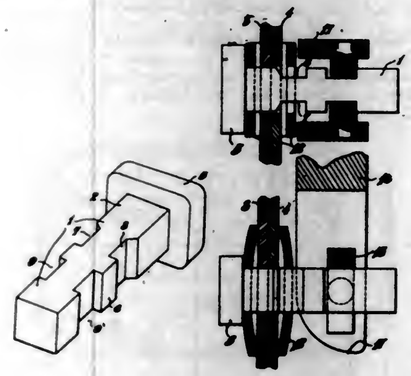
1,868,344. LIGHT FIXTURE FOR DIAL TELEPHONES. MICHAEL BLUM, New York, N. Y. Filed Aug. 1, 1931. Serial No. 554,546. 2 Claims. (Cl. 240—2.17.)



1. In a light fixture, a base having a horizontal portion for supporting a base of a telephone, and a rim extending upwardly from the first mentioned base for disposal adjacent the sides of the telephone base, the sides of the first mentioned base extending downwardly below its horizontal portion and having feet to raise the base above a support to permit wires to extend between the base and the support in any desired direction, the base having a horizontal extension beyond the rim, with the bottom of the extension communicating with the space below the said horizontal portion, there being a vertically extending aperture in the horizontal extension, a hollow standard having its bottom secured in the aperture, a lamp socket mounted on the hollow standard, and wires connected with the lamp socket, the wires extending in the hollow standard and being disposed in any desired direction from the bottom of the hollow standard below the horizontal portion of the base and beyond the sides of the base.

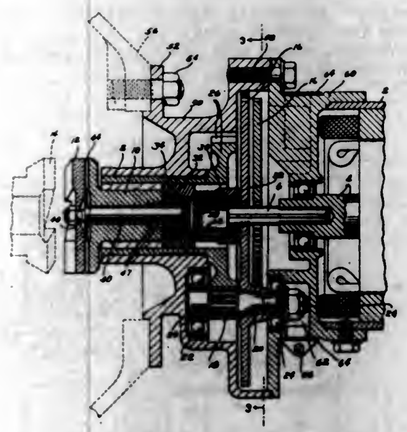
1,868,345. LOCKING DEVICE. EUGENE BRANDT, Geneva, Switzerland. Filed Apr. 10, 1931, Serial No. 529,267, and in France June 16, 1930. 4 Claims. (Cl. 29—84.)

1. In a clamping and locking device, in combination with a rod passing through registering openings in members to be clamped and provided with a bearing member on one side of said members and with a plurality of pairs of lateral grooves on the other side of said members, a fitting-up tool comprising a recessed member adapted to fit into one of said pairs of lateral grooves on the rod, a



handle section pivoted on said recessed member, and means on the handle section for moving the members to be clamped against said bearing member on the rod upon rotation of the handle section relative to the recessed member.

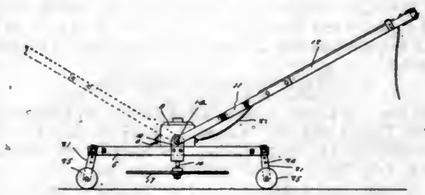
1,868,346. ENGAGING AND DRIVING MECHANISM FOR ROTARY PARTS. ROLAND CHILTON, Ridgewood, N. J. Filed Jan. 24, 1931. Serial No. 510,883. 15 Claims. (Cl. 74—7.)



1. In an engine starter, a driven shaft, a power shaft, reduction gearing for driving the driven shaft from the power shaft, an engine-engaging member, a clutch for connecting the engine-engaging member with the driven shaft constructed to enable said engine-engaging member to overrun the driven shaft, and automatic meshing means associated with said power shaft and tending to produce said overrun.

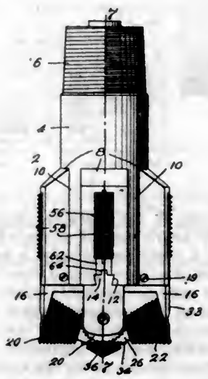
1,868,347. LAWN MOWER. ORVAL S. CLOUD, Kemblesville, Pa. Filed Sept. 15, 1931. Serial No. 562,970. 2 Claims. (Cl. 56—25.)

1. A lawn mower of the class described, including in combination, a frame comprising a pair of spaced parallel coextensive side bars, roller means for supporting said frame, an electric motor, means for mounting the motor upon said frame between the side bars thereof with its armature shaft extending downwardly from the frame and perpendicularly thereto, a cutting element on the armature shaft below the frame, a cross member under the



frame having integral upstanding ends the intermediate portions of which are fixed to the side bars, yoke members pivoted to the upper portions of the upstanding ends and a handle extending from the yoke members, said cross member having an opening in which said armature shaft is journalled.

1,868,348. CONVERTIBLE DRILLING TOOL. JOHN B. DE COSTA, Kansas City, Mo. Filed Feb. 28, 1930. Serial No. 432,163. 3 Claims. (Cl. 255—71.)



1. A device of the character described comprising a drill body having three or more radial dovetailed grooves in its lower end, reinforcing ribs arranged around said body and spaced apart to leave intervening channels, the undersides of said ribs having dovetailed grooves communicating with those in the body, brackets having dovetailed tongues for fitting into said grooves, bearings on said brackets, and rotary cutters mounted upon said bearings.

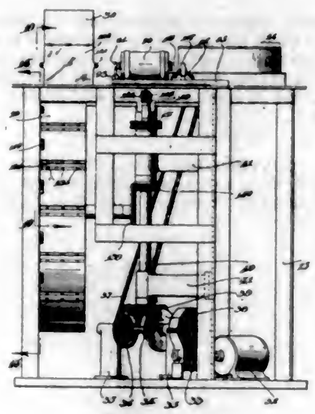
1,868,349. TREE TRIMMER. HARRY W. DITCH, Mason City, Iowa. Filed Sept. 22, 1931. Serial No. 564,399. 1 Claim. (Cl. 30—11.)



A tree trimmer comprising a handle, a resilient bow fixed to said handle, a blade pivoted at one end to the free end of said bow, blade tensioning means associated with the opposite end of said blade including a substantially U-shaped stationary bracket having its leg portions secured to said handle and its bight portion arranged in spaced relation to the handle and provided with a longi-

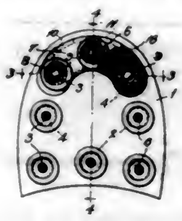
tudinal series of openings, a second bracket slidably and adjustably mounted upon the bight portion of said first-named bracket and having a projection selectively engageable in said openings for holding the adjustable bracket in different adjusted positions, and a lever having one end rockably mounted upon said adjustable bracket and pivotally connected at a point spaced from its rockably mounted end to one end of said blade, said lever having a longitudinal slot through which said blade is adapted to pass.

1,868,350. MACHINE FOR PRODUCING SELF-IGNITING CIGARETTES. WALTER L. DREW, Palmyra, N. J. Filed June 13, 1927. Serial No. 198,616. 34 Claims. (Cl. 131—39.)



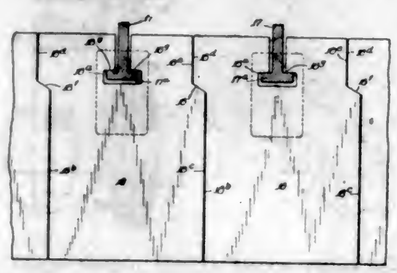
34. In a machine of the character described having a cigarette carrier, means for supplying cigarettes to the carrier including a chute connected to a source of supply, a normally closed trap door hinged over the end of the chute, a grooved cylinder rotatably mounted on the end of the chute, lugs on the cylinder adapted to momentarily open the trap door as the cylinder is revolved, means for rotating the cylinder, whereby cigarettes are transferred by the cylinder from the chute to the carrier, and means for positioning the cigarettes in the carrier.

1,868,351. RUBBER HEEL AND WEAR PLATE THEREFOR. ALBERT A. ESTERSON, Baltimore, Md., assignor to Holtite Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed Dec. 4, 1931. Serial No. 579,065. 6 Claims. (Cl. 36—75.)



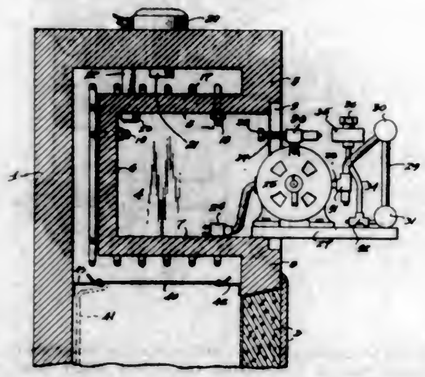
6. A wear plate for rubber heels adapted to be attached to and form the tread surface of the heel, said plate having a vertical attaching lug extending upwardly from said plate and adapted to be embedded in the heel rubber, said lug having a lateral projection at its upper end bent on a vertical line to extend inwardly over said plate, said lateral projection lying in a vertical plane and spaced above said plate to permit the heel rubber to flow entirely around the same, to minimize resistance to expansion and compression of the rubber relative to the plate.

1,868,352. FURNACE CONSTRUCTION. RAYMOND D. FOLTZ, South Orange, N. J., assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed May 4, 1929. Serial No. 360,335. 3 Claims. (Cl. 72—101.)



1. An element for furnace construction consisting of a refractory tile having its opposite side margins of complementary form and shaped at one side with a bearing shoulder offset diagonally outward and at the other side with a bearing shoulder offset diagonally inward, said side margins having parallel faces conjoining the inner and outer ends of said diagonal bearing shoulders.

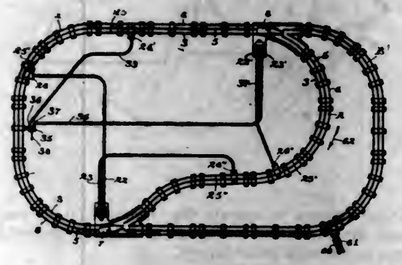
1,868,353. ARTIFICIAL REFRIGERATING APPARATUS AND CABINET THEREFOR. HOWARD L. FOSTER, Huntington Woods, Mich. Filed Aug. 23, 1928. Serial No. 301,453. 5 Claims. (Cl. 62—116.)



1. In artificial refrigerating apparatus, a cabinet having a compartment for the storage of food and a fixed reentrant chamber, the exterior of which is spaced from the wall of the cabinet and the interior of which is open to atmosphere through a wall of the cabinet, an artificial refrigerating apparatus adapted for introduction into or removal from said chamber through the opening and including an electric motor and circuit therefor, a compressor, a condenser and a heat dissipating element, said cabinet being further provided with a heat absorbing element within the space between the exterior of the chamber and the cabinet walls adapted for connection with the

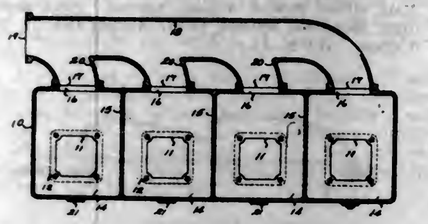
said apparatus when positioned in said chamber, and a control switch for the motor circuit actuated through variation in temperature of the refrigerated space of the cabinet.

1,868,354. AUTOMATIC SWITCHING SYSTEM FOR TOY RAILROADS. JOHN J. GRIGER, New York, N. Y. Filed Aug. 11, 1931. Serial No. 556,449. 4 Claims. (Cl. 246—232.)



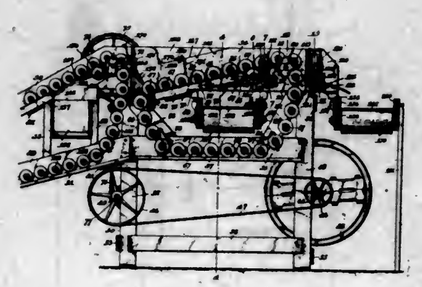
1. An automatic switch system for toy railways including a main trackage, an auxiliary trackage connected at certain points with the main trackage, a switch at the point of connection of the auxiliary trackage with the main trackage, electrically operated means for opening and closing said switches, means for supplying current to said electrically operated means, said means including insulated track sections over which the wheels of a train is adapted to pass and wiring connecting said sections to the respective means for actuating the switches and a train actuated switch for opening the circuit of one of said means so that the switch operating means associated with one of the switches will not function, thus causing the train to at one time pass around the main trackage and at another time to be switched on to the auxiliary trackage.

1,868,355. MANIFOLD CONSTRUCTION. MORRIS J. GOLDBERG, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 30, 1928. Serial No. 322,932. 8 Claims. (Cl. 60—29.)



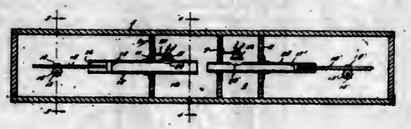
1. In an exhaust assembly for multi-cylinder engines, a casing carried by the engine in adjacence thereto and having an exhaust connection to each power cylinder, means forming distinct chambers in the casing for separating, entirely, the exhaust gases issued from the several cylinders, said chambers providing for free expansion and through gas passage, and means, connected to the casing, for conducting therefrom, the gases of each cylinder, in separate passages.

1,868,356. FRUIT SIZING MACHINE. GEORGE S. HELENBOLT, Middleport, N. Y., assignor to Niagara Sprayer and Chemical Co., Inc., Middleport, N. Y., a Corporation of New York. Filed June 28, 1929. Serial No. 374,354. 25 Claims. (Cl. 209—84.)



1. Sizing mechanism, comprising an endless series of sizing rollers having fruit sizing openings between adjacent rollers, and guard means formed of separable sections associated with said series of sizing rollers and serving to cause the fruit to be carried along with said sizing mechanism without being sized thereby.

1,868,357. RADIO TONING DEVICE. WARREN C. HILL, Evansville, Ind. Filed Nov. 9, 1931. Serial No. 574,009. 5 Claims. (Cl. 181—0.5.)

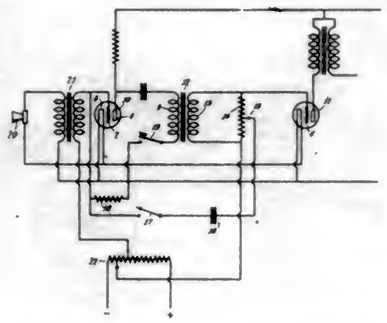


3. A toning device for radio receivers comprising a primary chamber, a secondary chamber, a resonance tube projecting into and terminating within the primary chamber, a second resonance tube projecting through the secondary chamber and terminating within the primary chamber, said first-mentioned tube being provided with an opening in the side thereof at a point within the primary chamber and provided with a transmitting diaphragm located thereover, the second-mentioned tube being provided with an opening in the side thereof, within the secondary chamber, a microphonic diaphragm located over the last-mentioned opening and closures for the ends of the tubes outwardly of the said chambers, said closures being slidably disposed in the said tubes, and means whereby the said closures can be set at adjusted positions.

1,868,358. RADIO TRANSMITTER. ALAN D'ARCY HODGSON, Slough, Bucks, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed July 18, 1931, Serial No. 551,641, and in Great Britain June 6, 1930. 2 Claims. (Cl. 250—19.)

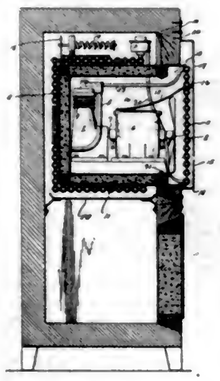
1. In wireless telegraphy or telephony transmitting apparatus including a modulator tube having a grid electrode and a speech amplifier tube having an anode and a grid electrode in combination with a coupling transformer having primary and secondary windings which connect the anode of the speech amplifier tube to the grid of the modulator tube, of a resistance connected across the secondary winding of the transformer, an adjustable

contact cooperating with said resistance, an electrical connection including a condenser between said contact and the grid of the speech amplifier tube, a switch in



said connection and a current interrupting device in the circuit of the primary winding of said coupling transformer.

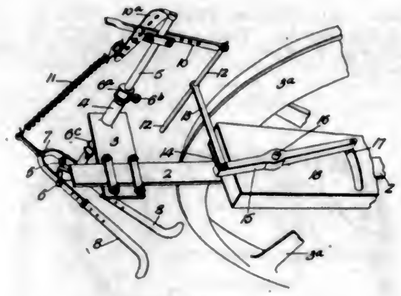
1,868,359. ARTIFICIAL REFRIGERATING APPARATUS. CLARENCE M. HOLLEY, Highland Park, and HOWARD L. FOSTER, Detroit, Mich.; said Holley assignor to said Foster. Filed Sept. 15, 1922. Serial No. 588,325. 29 Claims. (Cl. 62—116.)



1. The combination with a refrigerator having an opening, of an artificial refrigerating unit including expansion and compression coils and apparatus for causing circulation of a refrigerant in the coils, and a heat insulating casing carrying the unit insertible through the opening and closing the opening when positioned therein, the said casing having an open end permitting circulation of air therein when the unit is in operation.

1,868,360. AUTOMATIC STEERING APPARATUS. MAURICE GIBBONS EAGLE KNIGHT, Claremont, Hobart, Tasmania, Australia. Filed Jan. 4, 1932, Serial No. 584,682, and in Australia Dec. 31, 1930. 4 Claims. (Cl. 97—49.)

1. Improvements in or relating to automatic steering apparatus for tractors drawing ploughs or the like, consisting in an hydraulic device adapted to control and/or correct the steering gear of the tractor, means for electrically operating the hydraulic device, and a sensitive control guide device adapted to move along a guide fur-



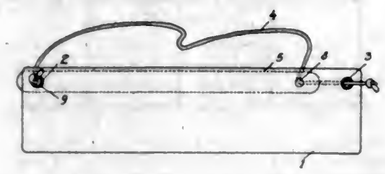
row and adapted to operate the electrical means synchronously with deviating movement of the said control guide device in the said guide furrow.

1,868,361. LEVEL. CLEMENT A. LEGER, Lincoln, Nebr. Filed May 29, 1931. Serial No. 540,976. 3 Claims. (Cl. 33—206.)



1. A device of the character described for measuring angles with the horizontal by gravity actuated means, comprising a base having a circular recess in one side near one end, a disk in the recess having a circumferential ball race, a ball in the race, and releasable spring means for normally positioning said disk so as to frictionally engage the ball with the base to prevent movement of the ball and operable to release the ball to permit it to fall and roll in said raceway to the lowest point thereof to indicate gravitationally the angularity of the base with the horizontal.

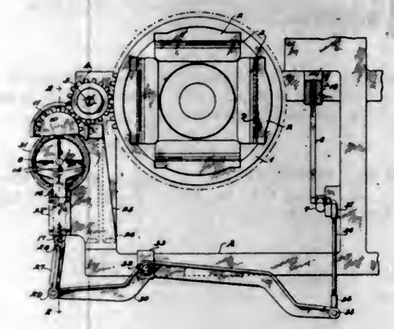
1,868,362. EYESHADE, GOGGLES, AND THE LIKE. KARL GEORG NOWAK, Vienna, Austria. Filed Sept. 1, 1931, Serial No. 560,614, and in Austria Oct. 27, 1930. 1 Claim. (Cl. 2—12.)



An eye shade or the like, comprising a rear strip intended to bear against the forehead and having holes at its ends, a front strip having holes at its ends spaced farther apart than the holes in the rear strip, an eyelet inserted through the holes at one end of the strips and pivotally connecting them at that end, and a cord passed through said eyelet and through the holes at the other

end of the strips and adapted to pass round the wearer's head, whereupon the front strip will be spaced from the rear strip between the ends and capable of being swung out of the field of vision when required.

1,868,363. TYPE SLUG CASTING MACHINE OR THE LIKE. ROBERT M. O'CONNOR and RUSSELL T. TODD, Warren, Ohio. Filed June 25, 1931. Serial No. 546,852. 8 Claims. (Cl. 199—52.)



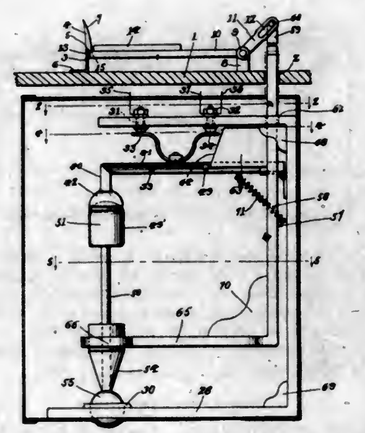
1. A type slug casting machine comprising a reciprocating mold disk, an axially slideable driving pinion geared to said mold disk and releasable from its driving shaft when moved axially outwardly, selectable ejector means for delivering the slugs from the molds in said disk, a selector mechanism for determining the ejector to be used, said selector mechanism comprising a rotatable perforated disk normally retained stationary, a gear driving connection for manually rotating said disk when said axially slidable pinion is brought into mesh with said gear driving connection to simultaneously rotate said mold disk and perforated disk, said driving pinion and gear driving connection being so proportioned that the mold disk and perforated disk are moved through corresponding angular distances, pins selectively secured in the perforations in said disk, and a linkage connection between said perforated disk and said selectable ejector means for actuating and retaining the latter by the engagement of said pins with a portion of the linkage mechanism.

1,868,364. PROCESS FOR DETERMINING THE QUANTITY OF POTASSIUM IN FERTILIZERS. EUGENE L. PARKER, Mount Pleasant, Tenn. Filed Mar. 26, 1931. Serial No. 525,624. 4 Claims. (Cl. 23—230.)

3. A method of removing calcium, lead, iron and aluminum salts from a sample of fertiliser which comprises converting said salts in a solution into hydroxides by ammonium hydroxide and then adding ammonium sulphide and precipitating the sulphides of calcium, lead, iron and aluminum with ammonium oxalate, then removing the precipitate from the solution.

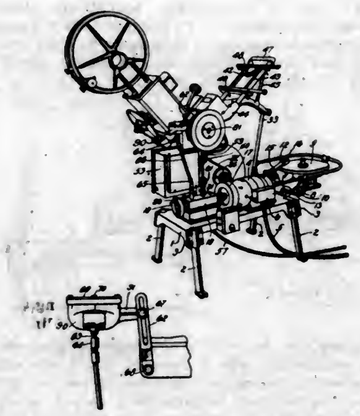
1,868,365. CURRENT SHUT-OFF MECHANISM. THOMAS M. PAUL, St. Joseph, Mo. Filed Jan. 15, 1932. Serial No. 586,793. 9 Claims. (Cl. 200—52.)

1. A current shut-off mechaniam for motor driven vehicles comprising a vertically movable combined retainer and shifter element, a tiltable, counter-balanced, universally shiftable holder element normally sustained in a perpendicular position, a pair of spaced contacts for interposition in the ignition circuit of the vehicle, and a spring controlled hinged circuit controlling device normally engaging with said contacts for closing such circuit, said holder element and device having coacting means for releasably sustaining the former in a perpendicular position and the latter in circuit closing position until the



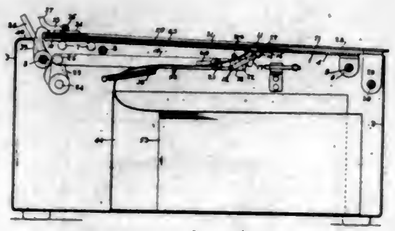
vehicle is jolted, and said retainer and shifting element having means for restoring said other elements to sustaining position.

1,868,366. DRIVING MECHANISM. HARRY PFANNENSTIEHL, Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 23, 1928. Serial No. 287,731. 4 Claims. (Cl. 64—91.)



1. A driving shaft comprising a middle and two end sections, two universal joints connecting the middle section with the end sections, mechanism driven from one of said end sections and a prime mover connected to the other end section, means to change the angular space relation between said prime mover and said driven mechanism, and an adjustable compensating device operable to maintain said end sections in axially parallel relation for any selected space relation of said prime mover and said driven mechanism.

1,868,367. AUTOGRAPHIC REGISTER. FRANK E. PFEIFFER, Dayton, Ohio, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 16, 1931. Serial No. 530,462. 27 Claims. (Cl. 282—12.)



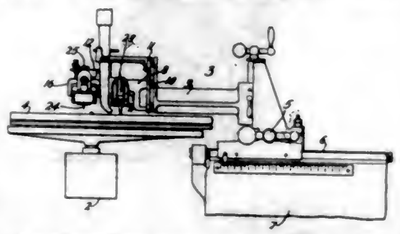
1. In an autographic register, a casing, a writing table therefor having a slot therein for the withdrawal of a strip of paper from the casing, and means in the casing adapted in one position, in cooperation with the table, to fold the strip to prevent its withdrawal and in another position to partially straighten the strip of paper so it can be withdrawn.

1,868,368. TOOTHBRUSH. WESTON R. REESE, Scranton, Pa. Filed July 25, 1931. Serial No. 553,155. 4 Claims. (Cl. 15—167.)



1. A tooth brush comprising a handle merging into a back, means on one face of said back carrying two rows of bristles, said rows of bristles facing and a plurality of bristles extending from the opposite face of said back, said back being divided centrally and between said pair of facing bristles.

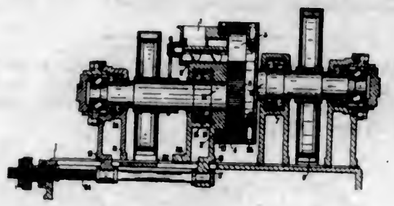
1,868,369. SOUND RECORDING MACHINE. JOHN H. SAILLIARD, Great Kills, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 19, 1929. Serial No. 333,731. 2 Claims. (Cl. 274—13.)



1. In a machine for cutting and reproducing sound records, the combination with a turntable and a carriage carrying a recording device, of means for reproducing without disturbing the recorder adjustment, a record cut by the recorder comprising a reproducer and a mounting therefor, the reproducer being pivotally connected to the mounting and the mounting being both rotatably and vertically adjustable with respect to the carriage independently of the recorder.

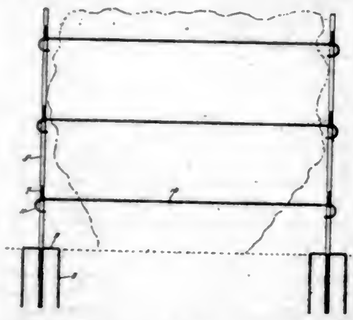
1,868,370. MACHINE FOR MOLDING PLASTIC SUBSTANCES. ALBERT WILLIAM SIZER, Heesle, England. Filed Mar. 19, 1931, Serial No. 523,909, and in Great Britain Feb. 18, 1931. 3 Claims. (Cl. 107—8.)

1. A machine for molding plastic substances comprising in combination an annular roller, a bearing for said roller, a second roller co-operating with the interior surface of the said annular roller, a bearing for said second



roller, and means to displace one of said rollers out of a plane coincident with the other roller to a plane spaced therefrom but parallel thereto.

1,868,371. PLANT STAKE. CLAUDE B. SMALTS, Winchester, Va. Filed Oct. 16, 1931. Serial No. 569,282. 1 Claim. (Cl. 47—45.)



An apparatus for supporting plants comprising a pair of spaced upright shanks, said uprights having spaced arms extending therefrom terminating in inwardly bent hooks, transversely extending side bars in said hooks having hooked ends for preventing lateral movement thereof, a plurality of prongs arranged at right angles to one another and about the lower ends of each of said shanks, having inwardly directed right angular extensions at their upper ends fixed to said shanks.

1,868,372. GYPSUM PLASTER PRODUCTS AND PLASTER-BASE MATERIAL. CLEMENT K. SWIFT, Brookline, Pa., assignor to MacAndrews & Forbes Company, Camden, N. J., a Corporation of New Jersey. Filed Aug. 31, 1931. Serial No. 560,519. 12 Claims. (Cl. 72—123.)



1. A gypsum plaster-base material containing at the surface thereof, a gypsum plaster accelerator capable of producing a rapid set of gypsum plaster at the plaster and plaster-base interface upon the application of gypsum plaster thereto.

1,868,373. ROCK DRILL SUPPORT. EDWARD F. TERRY, Jr., Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Mar. 28, 1929. Serial No. 350,691. 8 Claims. (Cl. 255—45.)



1. In a rock drill, the combination with a stationary feed cylinder having a spur on its lower end and a longitudinally disposed guide shell on its upper end, of a drilling motor slidable in the guide shell, a movable piston in the feed cylinder having connections with the drilling motor to slide it in the shell, and legs for supporting the cylinder and guide shell in an upstanding position, said legs being connected to the shell.

1,868,374. CHECK VALVE FOR FLUID LIFTS. FRED D. WACHSMUTH, Sanford, Tex. Filed Nov. 15, 1930. Serial No. 495,963. 2 Claims. (Cl. 103—229.)



1. In a check valve assembly for use in the fluid conduit of a well, a tubular body having a valve seat, a valve element to engage said seat and having a stem extending through the body, a dart carried by said stem and adapted to engage the lower portion of said body to limit unseating of said valve element, packing devices on said body to engage the surrounding fluid conduit, and retaining means for said packing devices and provided with an annular series of depending anchoring arms to engage the surrounding fluid conduit and being in protecting relation to said dart.

1,868,375. INK WELL. ADOLPH G. BASSI, Chicago, Ill. Filed Mar. 26, 1930. Serial No. 439,018. 1 Claim. (Cl. 120—57.)



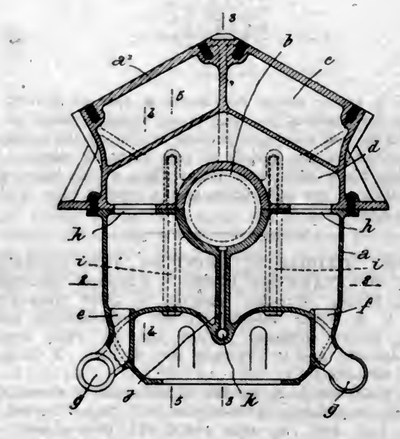
An ink well comprising a body providing a well including two walls intersecting on their external surfaces at substantially a right angle so that the well may be stood upon either of said walls and the inner surface of the one selected thus be the bottom of the well, one of the walls of said body other than the first-named walls having formed therein dip openings which extend axially into the well at an angle with respect to each other, and the inner surfaces of the first-named walls intersecting at an obtuse angle to direct the ink in the well along the bottom thereof toward one of the dip openings when the well is stood upon a corresponding one of the first-named walls.

1,868,376. TEXTILE TREATMENT LIQUID. HEINRICH BERTSCH, Chemnitz, Germany, assignor to H. Th. Bohme Aktiengesellschaft, Chemnitz, Germany, a Corporation of Germany. Filed Aug. 20, 1928, Serial No. 300,957, and in Germany Sept. 20, 1927. 5 Claims. (Cl. 8—20.)

1. A liquid treatment bath for use in treating fibrous materials comprising, in combination, a body of alkali metal hydroxide solution containing an aromatic sulphonic acid as a wetting agent and a phenol as an agent for maintaining said wetting agent in solution.

2. A wetting agent for use in treating fibrous materials with alkali metal hydroxides comprising, in combination, an aromatic sulphonic acid, a phenol, and an intensely sulphonated oil.

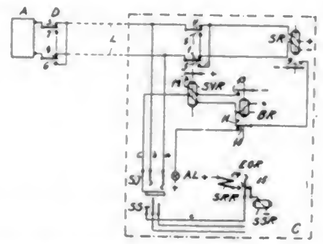
1,868,377. CRANK-SHAFT CASING. MARC BIRKIOT, Bois-Colombes, France. Filed June 10, 1929, Serial No. 369,745, and in Belgium Mar. 14, 1929. 4 Claims. (Cl. 308—76.)



1. In a crank shaft casing, a shaft housing including a pair of shells adapted to house a rotating shaft, a bearing positioned inside said shells and in spaced relation

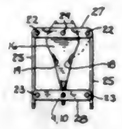
to the walls thereof, a supporting element extending between said bearing and said shells, said supporting element having a passage formed therethrough in proximity to said bearing and communicating with the atmosphere, whereby air may circulate through said passage and through the spaces between said bearing and said shells to cool said bearing.

1,868,378. SWITCHING ARRANGEMENT FOR TELEPHONE PLANTS. KNUT HUGO BLOMBERG, Appelviken, and STEN DANIEL VIGREN, Stockholm, Sweden, assignors to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed Mar. 13, 1931, Serial No. 522,462, and in Sweden Mar. 21, 1930. 6 Claims. (Cl. 179—6.3.)



1. A telephone system comprising a pay station, a wanted subscriber's station, an exchange, means for establishing a connection from the pay station to the wanted subscriber's station, means disposed in the exchange and associated with the connection for the unidirectional and automatic blocking of speech currents from the pay station to the wanted subscriber's station prior to payment and for the allowance of speech currents in both directions upon payment.

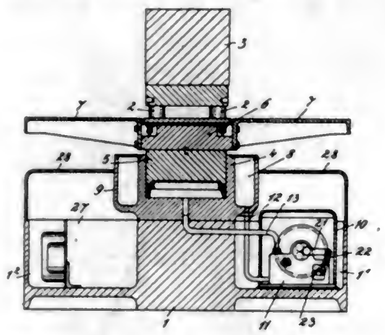
1,868,379. SAFETY RAZOR. JOSEPH BORNEMANN, Trenton, N. J. Filed Sept. 18, 1931. Serial No. 563,471. 3 Claims. (Cl. 30—12.)



3. In a safety device for razors, a pair of guards, a support for holding the guards at opposite sides of a razor blade, and a parallel linkage system on the support for maintaining the guards in free swinging relation to the razor blade with their lower edges at all times approximately in the same plane as the cutting edge of the razor blade.

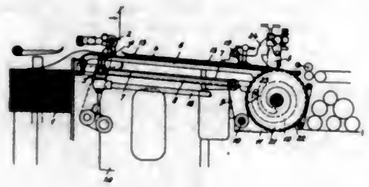
1,868,380. HYDRAULIC PRINTING AND IMPRESSING OR STAMPING PRESS. HERMANN BRANDENBURG, Berlin, Germany, assignor to Josef Gruenberg and F. A. Scheu Gesellschaft mit beschraenkter Haftung, Berlin, Germany. Filed Apr. 22, 1930, Serial No. 446,331, and in Germany May 6, 1929. 2 Claims. (Cl. 138—10.)

1. A hydraulic press for the manufacture of stereotype matrices, comprising in combination a frame having a middle part and two side parts, the middle part of the frame forming a support, a cylinder on said support, a piston in said piston, a liquid container surrounding said cylinder, the two side parts of said frame forming chambers beneath the working table, a pump arranged in one of said chambers, pipe connection within said chamber between said pump, said liquid container



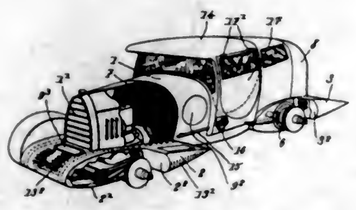
and said cylinder respectively, a driving motor coupled to said pump and also arranged in said chamber substantially as set forth.

1,868,381. SHEET-SUPPLYING DEVICE FOR PRINTING MACHINES. ARTUR BÜTTNER, Heidelberg, Germany, assignor to Schnellpressenfabrik Aktiengesellschaft Heidelberg, Heidelberg, Germany. Filed Feb. 17, 1931, Serial No. 516,425, and in Germany Feb. 25, 1930. 3 Claims. (Cl. 271—14.)



1. A sheet-supplying device for printing machines, comprising, in combination with a laying-on table and with suckers adapted to convey the sheets along over said table, a sucker rod to which said suckers are attached and which is arranged below the said table and adapted to be shifted rectilinearly below it; a plate forming the uppermost part of the laying-on table and consisting of a non-electric material and having longitudinal slots, the said suckers extending into these slots, for the purpose set forth.

1,868,382. AUTOMOBILE BODY. MARCEL COADOU, Trebeurden, France. Filed Feb. 27, 1930. Serial No. 431,880, and in Belgium Mar. 1, 1929. 3 Claims. (Cl. 296—1.)



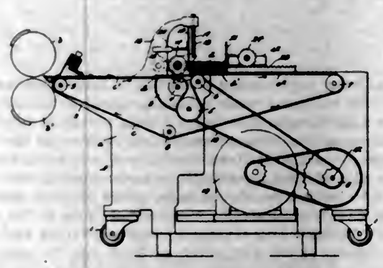
1. A closed body assembled to be mounted on a vehicle having an engine hood, said body assembly comprising two lateral walls extending below the top of said hood, a posterior wall and a roof, a rear section including the rear part of the lateral walls, the rear part of the roof and the posterior wall, said rear section being fixed relatively to the vehicle, and a rigid front section including the front part of the lateral walls and the front part of the roof, said front section being normally maintained in juxtaposition with said rear section and being slidable forwardly to permit access into said body.

1,868,383. FOUNTAIN ROLL FEEDING MEANS FOR PRINTING PRESSES. HENRY B. GREENWOOD, Glenarm, Md., assignor to F. X. Hooper Company, Inc., Glenarm, Md., a Corporation of Maryland. Filed Dec. 27, 1929. Serial No. 416,896. 2 Claims. (Cl. 101—350.)



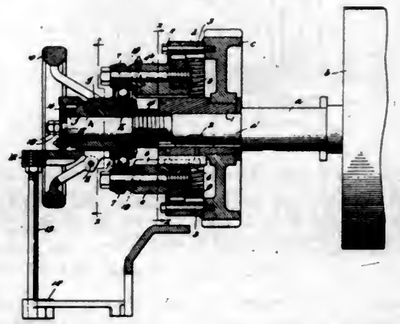
1. In a printing press, a fountain roll, an intermittent friction grip device on the shaft of said roll, a rocking frame pivoted to the press frame below said roll, means for oscillating said frame in timed relation to the movements of the printing cylinder, a threaded bar journaled in the rocking frame and extending laterally from the pivotal point of the frame, a nut threaded on to said bar, and a link pivoted to said nut and to the driving member of said intermittent grip device.

1,868,384. STACKER FOR BOX BLANKS. HENRY B. GREENWOOD, Glenarm, Md., assignor to F. X. Hooper Company, Inc., Glenarm, Md., a Corporation of Maryland. Filed Aug. 27, 1930. Serial No. 478,232. 1 Claim. (Cl. 271—87.)



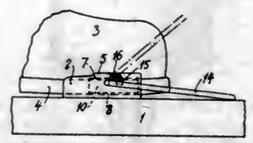
In a stacker for box blanks, an endless conveyer, pairs of horizontally spaced rollers over which said conveyer extends in front and rear stretches, the roller at the front end of the rear stretch being adjacent to and extending slightly above the roller at the rear end of the front stretch, an idle roller below the latter rollers and around which said conveyer extends in passing from the front to the rear stretch, a pressure roller above the front stretch and cooperating with the roller at the rear end thereof to feed the blanks to the rear stretch, and a stop over the rear stretch adapted to arrest the blanks with their rear ends overhanging the front face of the front roller of the rear stretch.

1,868,385. MEANS FOR ADJUSTING REGISTER OF MACHINE PARTS. HENRY B. GREENWOOD, Glenarm, Md. Filed Aug. 14, 1931. Serial No. 557,190. 5 Claims. (Cl. 74—7.)



1. The combination with a shaft and a driving gear journaled thereon, of means for adjusting the shaft angularly with respect to said gear comprising a sleeve rotatable with the shaft and axially movable thereon, two intermeshing spiral-toothed coupling members concentric with the shaft and one within the other, one of said spiral members being secured to the driving gear and the other secured to said sleeve, and means for adjusting said sleeve axially of the shaft.

1,868,386. SKI FASTENING DEVICE. AKSEL JOHAN GRESVIG, Oslo, Norway. Filed Feb. 21, 1931, Serial No. 517,614, and in Norway Mar. 1, 1930. 6 Claims. (Cl. 208—184.)

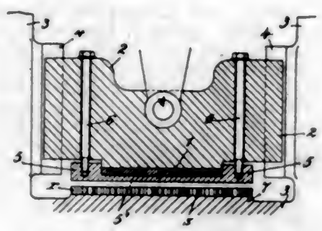


1. Ski fastening device comprising two spaced irons attached to the ski so as to constitute lateral guides for the shoe, an inturned portion forming an integral part of each iron and making contact with the upper side of the opposite shoe sole edge portions when the shoe is in position on the ski so as to guide the shoe horizontally and prevent its upward movement relatively to the ski when the shoe is pushed into the guides, in combination with spring-acted pins passing from outside through either iron into engagement with the shoe sole when the same is in position in the device.

1,868,387. PRINTING AND IMPRESSING PRESS. JOSEF GRÜNBERG, Berlin, Germany. Filed Dec. 30, 1929, Serial No. 417,531, and in Germany Feb. 14, 1929. 2 Claims. (Cl. 101—3.)

1. In a press of the class described, a bed and a traverse element, the one movable toward and from the other, a plate on the face of the traverse element opposed to the bed, means detachably securing said plate to the

traverse element, said means permitting movement of the plate toward and from the face of the traverse element and an abutment element of elastic material arranged be-



tween the plate and the traverse element and adapting the plate to adjust itself to exact parallel relationship to the bed when a working stroke is imparted.

1,868,388. EXPLOSIVE. ARTHUR HOUGH, Passaic, N. J. Filed Dec. 3, 1928. Serial No. 323,583. 3 Claims. (Cl. 260—144.)

2. The new compound diethylene glycol dinitrate, in a substantially pure state.

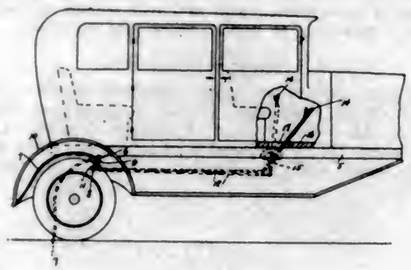
1,868,389. FUNNEL. NORMAN W. HOWARD, Bath, Me. Filed July 21, 1930. Serial No. 469,543. 5 Claims. (Cl. 226—29.)



1. A funnel having a bowl with a slow or gradually tapered base, with a spout depending from its apex, and combined supporting and spacing means carried by said spout, said means being step-shaped to adapt the device to fit moutha of different sizes.

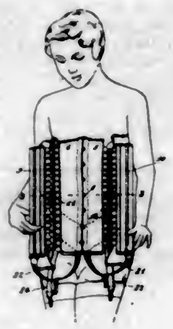
1,868,390. NONSKID APPARATUS FOR AUTOMOBILES. VINCENT JENDREJCZAK and THEODORE KOLACKI, Amsterdam, N. Y. Filed May 22, 1931. Serial No. 539,368. 3 Claims. (Cl. 188—5.)

1. In combination an automobile including a frame, rear wheels, and rear fenders, a shaft rockable across the rear portion of the frame forwardly of the center of the wheels, a pair of rods on each end of the shaft at the outside of the frame, one to each side of the adjacent wheel, and



means for rocking the shaft to cause the rods to be located up under the fender or to be swung downwardly into engagement with the ground.

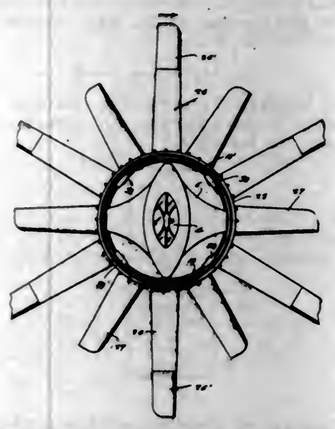
1,868,391. CORSET. JOSEPH J. KISPERT, New Haven, Conn., assignor to I. Newman & Sons, Inc., New Haven, Conn., a Corporation of Connecticut. Filed Jan. 17, 1931. Serial No. 509,510. 4 Claims. (Cl. 2—27.)



1. A front laced corset including a body open at the front with the front edges normally spaced an appreciable distance apart, each front edge having a row of apertures therein extending from the top to the bottom of the body and a vest coacting with said body, said vest being formed with a pair of disengageable inner sections extending from the top to the bottom of said body, a pair of outer sections, flexible members connecting the inner sections to the outer sections through said apertures, means covering said flexible members when the outer surfaces are in operative position and lacing coacting with outer sections for drawing two of the edges into a juxtaposed position so that the outer sections will act as continuations of the front edges of the body.

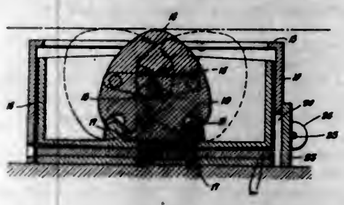
1,868,392. HELICOPTER. JULIUS LEFFERT, Hillsboro, Mo., assignor of one-half to Herbert A. Spreckelmeyer, St. Louis, Mo. Filed Apr. 15, 1931. Serial No. 530,876. 5 Claims. (Cl. 244—19.)

1. An aircraft of the class described comprising a fuselage, a supporting ring surrounding the same and supported therefrom for tilting movement about a horizontal axis, upper and lower rings rotatably supported by the supporting ring, outwardly extending radiating blades or



wings carried by each rotary ring, means for rotating the rotary rings and means for tilting the supporting ring about its horisontal axis.

1,868,393. SIDE BEARING FOR RAILROAD CARS. GEORGE S. MIDDLEHURST, Nampa, Idaho. Filed Nov. 4, 1929. Serial No. 404,721. 1 Claim. (Cl. 308—224.)

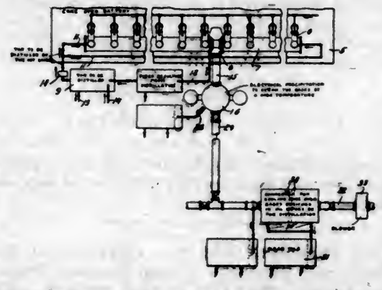


A side bearing comprising an open center casing provided at its upper edge with inwardly disposed flanges, a shim plate forming the bottom of the casing, a craddle having a bottom wall resting upon the shim plate, said bottom wall being thickest transversely at a point midway between its ends and gradually diminishing in transverse thickness toward its opposite ends whereby the bottom wall of the cradle tapers in transverse thickness from its transverse median dimension to its ends, said cradle having upper edges disposed under the flanges of the casing and spaced therefrom, the side walls of the cradle being provided with substantially triangular shaped openings, the cradle being provided upon its bottom wall with spaced lugs located between the ends of the tapered portions of the said wall, a roller member having pockets adapted to receive the lugs and an axle passing through the roller and having its ends received in the openings of the cradle.

1,868,394. METHOD FOR DISTILLATION OF TAR. STUART PARMELEE MILLER, Tenafly, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed June 4, 1927. Serial No. 196,486. 2 Claims. (Cl. 202—30.)

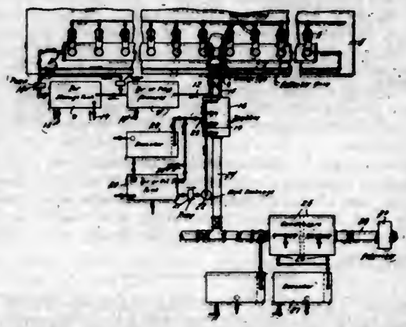
1. The method of operating the by-product recovery system of a coke oven battery to recover clean tar oils, which comprises collecting hot fresh coke oven gases from the ovens of the battery in a substantially horizontal gas collector main and conducting them through the gas collector main over a body of tar continuously moving over

the bottom thereof, thereby causing distillation of the tar from the surface thereof, withdrawing the gases and vapors resulting from the distillation without substantial condensation of desired tar oils, cleaning them in an electrical precipitator at a temperature above the dew point



of the desired tar oils by subjecting them to an electrical discharge therein to separate entrained solid and liquid particles therefrom, and cooling the resulting clean gases and vapors to produce clean tar oils comprising constituents originally present in the gases and constituents distilled from the tar in the collector main.

1,868,395. DISTILLATION OF TAR. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 15, 1928. Serial No. 254,356. 10 Claims. (Cl. 202—30.)

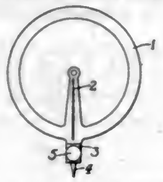


1. The method of producing pitch and oils at coal distillation plants, which comprises collecting gases from a plurality of the ovens or retorts and passing them through a common collecting main at a high temperature sufficiently high to bring about effective distillation of tar thereby, circulating through the collector main in direct contact with such gases a stream of hot thinly fluid tar and pitch, adding tar to the stream and effecting distillation of oils therefrom by direct contact with such gases, withdrawing the resulting stream of pitch from the main, withdrawing the gases from the main while still at a high temperature and scrubbing the gases while still at a high temperature with a hot scrubbing medium to separate suspended pitch particles therefrom and leave a large part of the oils in the form of vapors, and subsequently cooling the scrubbed gases and vapors to condense oils therefrom.

1,868,396. SOUND REPRODUCING MECHANISM. THOMAS HUGH PARKER, Bosham, England. Filed Jan. 20, 1930, Serial No. 422,198, and in Great Britain Jan. 21, 1929. 1 Claim. (Cl. 274—37.)

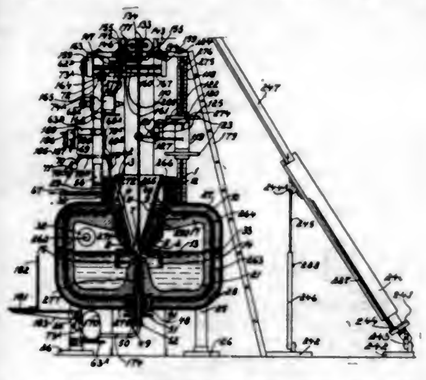
A vibration transmitting device, for use in sound reproducing mechanism, consisting in combination with a

sound box of a ring of thin flexible metal arranged in the sound box and having an arm extending both inwardly to the centre of the ring and outwardly for a short distance



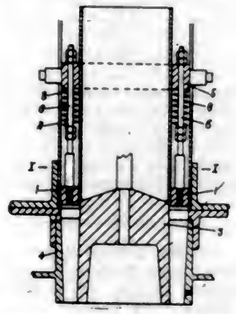
beyond the periphery of the ring and made in one piece with the ring, said ring being secured to the sound reproducing mechanism.

1,868,397. MACHINE FOR THE DRAWING OF GLASS INTO TUBES OR RODS. ROBERT SALOMON, Neuilly sur Seine, France. Filed July 14, 1928, Serial No. 292,743, and in France Oct. 11, 1927. 2 Claims. (Cl. 49—17.1.)



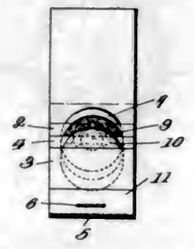
1. In a machine for drawing glass tubes and rods, including a crucible, a central boss within said crucible, a cooling jacket rotatable about a vertical axis and disposed above said boss, means for rotating said cooling jacket, said cooling jacket being adjustable axially with respect to said boss.

1,868,398. MACHINE FOR THE MANUFACTURE OF REENFORCED CONCRETE PILLARS, HIGHPRESSURE TUBES, AND THE LIKE. JAROSLAV SKORKOVSKY, Vinohrady, Prague, Czechoslovakia, assignor to John Fillans Barr, Drogheda, Irish Free State. Filed July 15, 1930, Serial No. 468,141, and in Czechoslovakia Oct. 9, 1929. 2 Claims. (Cl. 25—37.)



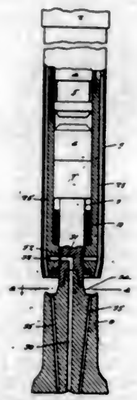
1. A machine for the manufacture of reenforced concrete tubes, pillars and the like comprising a number of sector shaped rammers, a cylindrical mould co-operating with said rammers and forming a guide therefor, a core bar inserted in said mould, a series of rods, one for each sector shaped rammer, a driving ring carrying and common to all said rods and resilient means supporting said rods on said driving ring.

1,868,399. COSMETIC CONTAINER. MARIE K. SLEZAK, Jamaica, N. Y. Filed May 18, 1931. Serial No. 538,344. 4 Claims. (Cl. 132—82.)



1. A container for cosmetics comprising a wrapper having partitions providing separate pockets, an apertured member secured to the inner face of the wrapper opposite a partition and providing a receptacle for a soft coherent cosmetic, said pockets being adapted to receive removable puffs impregnated with a powder cosmetic.

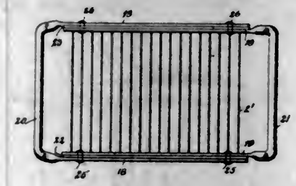
1,868,400. WELL DIGGING APPARATUS. FRED N. STOVER, New Matamoras, Ohio. Filed Sept. 17, 1929. Serial No. 393,279. 8 Claims. (Cl. 255—4.)



1. A method of excavating oil wells and the like wherein the excavation is carried out through an air-driven tool, consisting in delivering air under pressure for the operation of the tool, delivering water under pressure for the flotation of the separated material, diverting a portion of the air under pressure for mixing with the water, and thereafter delivering the combined air and water mixture to a position beneath the tool.

1,868,401. CUTTER FOR EGGS, VEGETABLES, AND THE LIKE. CLYDE W. STUART, New York, N. Y. Filed Nov. 26, 1930. Serial No. 498,450. 1 Claim. (Cl. 146—210.)

A cutter for eggs, vegetables and the like comprising a frame formed with a pair of upstanding handles, each handle having a pair of side plates extending therefrom said plates extending in a plane at right angles to said handles and in parallelism with the side plates of one handle and overlapping the plates of the other handle, a



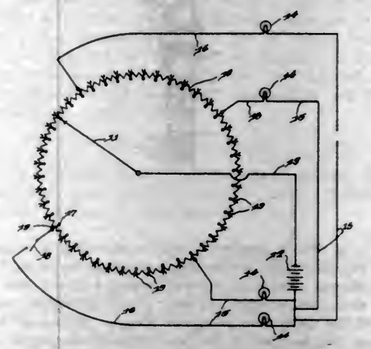
wire receiving plate positioned between the respective pairs of side plates and riveted thereto, and a plurality of cutting wires secured to said wire receiving plates.

1,868,402. HEDGE TRIMMER. THADDEAUS S. TERRY, McEwen, Tenn., assignor of one-half to Eddie J. Work, McEwen, Tenn. Filed Oct. 26, 1929. Serial No. 402,709. 1 Claim. (Cl. 30—11.)



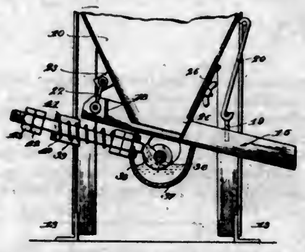
A hedge trimmer comprising a pair of facing flat blades, one of said blades being formed longer than the other blade and extending beyond one end of said other blade whereby the weight of the long blade will facilitate the cutting of the sides of a hedge when the hedge trimmer is held in a vertical position so as to cause the extending portion of the long blade to project above the short blade, said long blade being provided with longitudinally extending guide slots, guide bolts carried by the relatively short blade and slidably received in said slots, coacting cutting teeth formed on the forward longitudinal edges of the blades, a manipulating hand knob secured directly to the extended end of the long blade, and a second hand knob secured directly to the other blade, said knobs extending in the same direction from the outer faces of the blades and at substantially right angles thereto.

1,868,403. CONTROLLING DEVICE FOR ELECTRICAL CIRCUITS. HERBERT C. WELLER, Champaign, Ill. Filed Jan. 3, 1927. Serial No. 158,812. 2 Claims. (Cl. 177—346.)



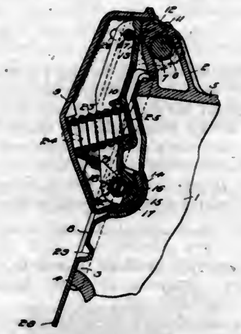
1. A controlling device for electrical translating devices comprising an endless metallic resistance unit having a plurality of connecting elements connected thereto at intervals thereabout, a rotatable contact arm movable over said unit and connected to one side of a source of current, a plurality of conducting members adapted to be detachably and selectively connected at one end with any one of said connecting elements and connected at their opposite ends to said current source with a translating device in circuit with each of said conducting members whereby said contact member may be rotated alternately to increase and decrease the potential delivered to said translating devices.

1,868,404. FEEDER FOR DRY CHEMICALS. WILLIAM LE VERNE ZEIGLER, Wallace, Idaho, assignor to Coeur d'Alene Hardware and Foundry Company, Wallace, Idaho, a Corporation of Idaho. Filed Sept. 7, 1929. Serial No. 391,089. 5 Claims. (Cl. 221—18.)



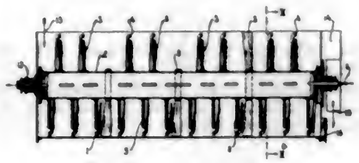
1. A feeder of the character described comprising a frame, a hopper mounted within said frame and having an inclined restricted open lower end, an outlet pan beneath the hopper capable of reciprocal movement in parallel relation to the inclined open end thereof, swinging supports for said pan at the forward and rear sides of said frame and hopper, a motor driven cam beneath said pan, a member adapted to be actuated by said cam to impart substantially rectilinear motion to said pan in one direction, spring means cooperative with said member for actuating said pan in a reversed direction, means cooperative with said member and said spring means for adjusting the working stroke of said pan, and an adjustable gate carried by the front wall of the hopper for regulating the volume of materials discharged from said pan.

1,868,405. JOURNAL BOX. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed July 8, 1926. Serial No. 121,130. 15 Claims. (Cl. 308—47.)



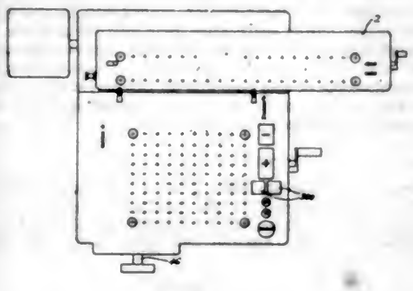
1. In combination, a journal box having a hinge lug thereon, an articulated lid including a cover, a hood and a lever universally connected each with respect to the other, spring means acting between said hood and lever to force said lever against said lug, and means pivotally connecting said lid to the lug.

1,868,406. APPARATUS FOR THE HEAT TREATMENT OF SUGAR SOLUTIONS EITHER COMPLETELY OR PARTLY CRYSTALLIZED. RICHARD BONATH, Bussum, the Netherlands, assignor to Werkspoor N. V. Filed Oct. 10, 1929, Serial No. 398,787, and in the Netherlands Oct. 11, 1928. 4 Claims. (Cl. 127—15.)



4. Apparatus for the treatment of sugar solutions comprising a receptacle, a revolving shaft in said receptacle, plates mounted in juxtaposition on said shaft substantially at right angles to the axis thereof, said plates being in the form of circular disks adapted to partially fill the cross sectional area of the receptacle so that consecutive plates fill up at least alternative halves thereof.

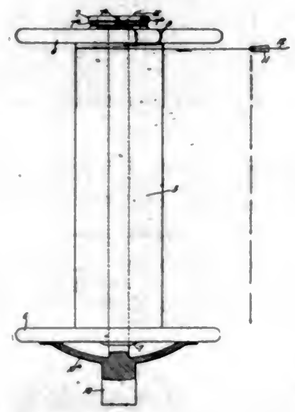
1,868,407. CALCULATING MACHINE. LEE R. BROWN, East Orange, and AUSTIN A. OVERBURY, West Orange, N. J., assignors to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Sept. 24, 1930, Serial No. 484,175, and in France Dec. 17, 1929. 4 Claims. (Cl. 235—63.)



2. In a calculating machine having a numeral wheel carriage, a motor, carriage shifting mechanism including a train of mechanism between said motor and said carriage, a main clutch in said train, releasing means for said clutch and direction-controlling clutches interposed in said train; two keys and means energized by said motor and controlled by said keys to engage the main clutch, to set the releasing means and to engage a direction-controlling clutch.

1,868,408. WARPING SPOOL. HARRY D. CLINTON, Johnson City, N. Y. Filed Oct. 31, 1928. Serial No. 316,211. 2 Claims. (Cl. 242—125.)

1. In a spool embodying a barrel having disc-like heads of a diameter substantially greater than its barrel, means of adapting the end of the innermost winding of yarn strand thereon to be extended outwardly to and fastened at the outer side of one of its heads without passing such end across the inside face of such head; said means including a narrow radial slot through said one of the heads from a point in the latter's periphery to a point of its juncture with the barrel, a short axial extension of the barrel beyond the face of said head, a peripheral groove in said extension close to the outer surface of said head, and paral-



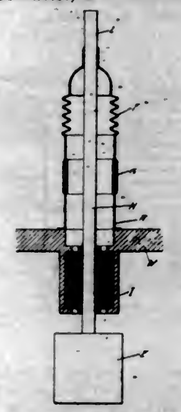
lel slits across the end of said extension extending to the deepest point of said groove on opposite sides of the spool axis.

1,868,409. SPRING RETRIEVING REEL. CLARENCE C. CRISPEN, Harrisburg, Pa. Filed May 26, 1931. Serial No. 540,145. 5 Claims. (Cl. 242—107.)



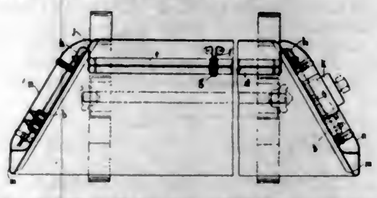
1. In a spring retrieving reel comprising a support, a shaft carried by the support, a hub rotatable on said shaft, a cup-shaped receptacle secured to said support, said receptacle and said support having alined openings, and one wall of the receptacle being cut away, a spiral spring having one end secured to the wall of said receptacle on the outside thereof and being coiled around said receptacle, a disk mounted on said hub, and a ring mounted between said disk and said support concentrically of said shaft, and being secured to said disk.

1,868,410. VACUUM DISCHARGE VESSEL. WALTER DÄLLENBACH, Zurich, Switzerland. Filed May 15, 1926, Serial No. 109,245, and in Germany May 27, 1925. 2 Claims. (Cl. 250—27.5.)



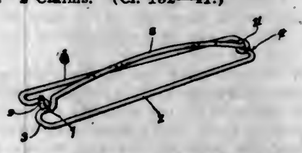
1. In combination with the metal wall of a vacuum discharge vessel and a leading-in conductor, means outside of the vessel supporting and insulating in a non vacuum-tight manner said conductor on said wall and means separate from said first means for insulating and resiliently connecting said conductor in a vacuum-tight manner to the metal wall of the vessel.

1,868,411. ELECTRIC RADIATOR FIRE. SEBASTIAN ZIANI DE FERRANTI, Hollinwood, England, assignor to Ferranti, Limited, Hollinwood, England. Filed May 29, 1928, Serial No. 281,529, and in Great Britain June 9, 1927. 2 Claims. (Cl. 219—34.)



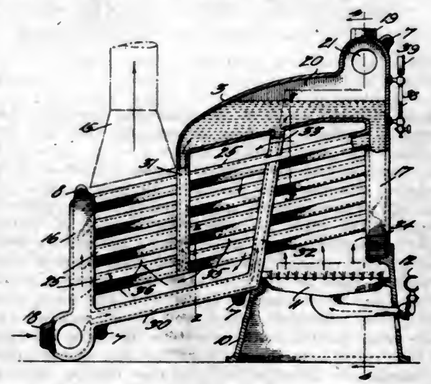
1. An electric radiator fire embodying a reflector comprising a rear surface having a uniform parabolic vertical cross section symmetrical about the axis of the parabola and two flat divergent sides disposed in vertical planes and joined to said rear surface, spring supports projecting with free clearance through slots in said reflector, and a resistance heating bar of small cross-sectional area disposed on the focal line of said rear reflector surface whereby a reflected heat beam is projected which diverges in horizontal planes but which does not diverge appreciably in vertical planes.

1,868,412. HAIR WAVER. KATHRYN MILLER FOOTE, Muskegon, Mich. Filed Oct. 29, 1931. Serial No. 571,907. 2 Claims. (Cl. 132—41.)



1. A hair waver comprising, a single length of material bent to provide a skeleton hair mount and a clamping tongue, said mount consisting of a pair of side parts, an end part formed of a single stretch of material connecting one end of one side part to the opposed end of the other side part and an end part formed of two oppositely disposed connected together sections, each extending inwardly from the other end of a side part, one of said sections having an eye at its inner end, the other of said sections having its inner end extending through said eye and merging into one end of said tongue, and said tongue having its other end of hook-like form for connection to that end part formed of a single stretch of material.

1,868,413. SECTIONAL FLUID HEATER. H. MITCHELL GODSEY, Salt Lake City, Utah. Filed May 5, 1930. Serial No. 449,997. 11 Claims. (Cl. 122—223.)

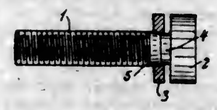


1. A fluid heater comprising one-piece fluid-circulating sections arranged side by side to form a complete heater, each of said sections embodying an integral steam drum of substantially the same width as the section and two vertical integral abutting baffles arranged to direct the flow of the products of combustion upward, downward and upward again across the sections of the heater.

1,868,414. METHOD OF RECOVERING COBALT. EUGEN ASSAR ALEXIS GRÖNWALL, Stockholm, Sweden. Filed Jan. 6, 1931, Serial No. 507,039, and in Sweden Sept. 17, 1929. 3 Claims. (Cl. 75—66.)

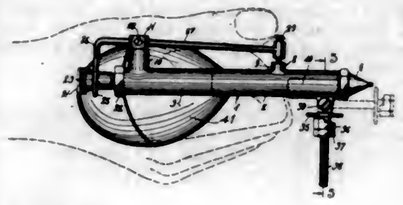
1. Method of recovering cobalt from cobalt containing copper sulphide ores, comprising roasting the sulphide ore, smelting the roasted ore, treating the matte thereby formed according to the Bessemer process and continuing the blowing until the greatest part of the cobalt content has been oxidized and in the form of cobalt oxide gone over into the slag, called Bessemer slag, melting the Bessemer slag in the presence of reducing agents and sulphur containing materials so as to transform the cobalt oxide into cobalt sulphide and recovering cobalt from said cobalt sulphide.

1,868,415. METHOD OF MANUFACTURING SCREWS WITH ONE OR TWO APPENDING WASHERS. EINAR GUNDERSEN and HARALD LAHN, Oslo, Norway. Filed Oct. 17, 1930, Serial No. 489,398, and in Germany Oct. 31, 1929. 4 Claims. (Cl. 10—27.)



1. The method of making a screw having a washer thereon, consisting in forming the stem of the screw with a surrounding collar integral therewith and then separating the collar from the stem to form a washer.

1,868,416. STRIPING PENCIL. BENJIMEN L. HILL, South Bend, Ind. Filed Apr. 16, 1929. Serial No. 355,544. 3 Claims. (Cl. 91—62.6.)



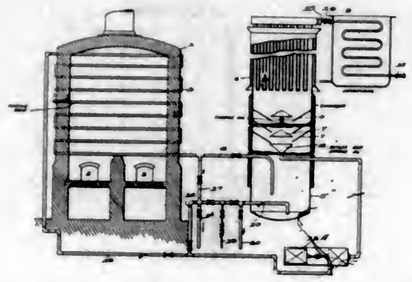
1. A striping pencil of the character described comprising a reservoir having a manually operable collapsible element adapted to supply coating material to the reservoir and discharge the same therefrom under pressure, said reservoir having a discharge orifice and a movable valve normally closing the same, a member for operating the valve to permit the passage of coating material from the pencil directly upon the surface being treated, said member and said collapsible element being located in close proximity to each other whereby an operator may simultaneously apply, with one hand, pressure to the collapsible element and to said member, said valve being movable with respect to the orifice provided by the reservoir to thereby vary the size of the orifice to change the quantity of discharge coating material whereby to form a stripe of predetermined width.

1,868,417. MEANS FOR ADJUSTING WINGS OF AIRCRAFT. GEOFFREY TERENCE ROLAND HILL, Yeovil, England, assignor to Petters Limited, Yeovil, Somerset, England. Filed Jan. 9, 1931, Serial No. 507,735, and in Great Britain Jan. 15, 1930. 13 Claims. (Cl. 244—12.)



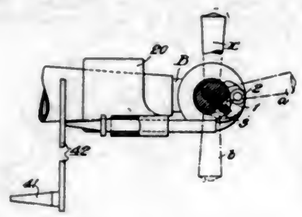
1. In aircraft having a fuselage, and wings, means adjustable at will during flight to shift the wings, means adjustable at will during flight to shift the wings to bring the center of pressure thereon into correspondence with changes in the position of the center of gravity of the aircraft as a whole, comprising in combination rigid hinges interconnecting the fuselage and the wings, located on opposite sides of the fuselage near one edge of each wing and extending substantially perpendicularly to the line of flight of the aircraft, at least one guide member mounted on the fuselage and adapted to prevent twisting movement with respect to the fuselage of the edges of the wings remote from the hinges, and an adjusting device anchored to the fuselage and operating on the wings at points adjacent to the guide member aforesaid, for effecting positive fore and aft adjustment of the wings about the hinges to equal extents and in the same fore and aft direction for each wing, said adjusting device being arranged to maintain the wings in any desired position of adjustment and positively to restrain unequal movement of the wings about their hinges.

1,868,418. PROCESS OF CRACKING PETROLEUM HYDROCARBONS. ALFRED M. HOUGHTON, Washington, D. C., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed May 3, 1927. Serial No. 188,490. 3 Claims. (Cl. 196—58.)



1. In an oil cracking process in which the oil is heated in one zone and delivered to a second zone from which heavy residue is withdrawn through a draw-off line, the step which comprises cleaning the draw off line by intermittently forcing therethrough into the second zone some of the cracked oil directly from the first zone.

1,868,419. VALVE ACTUATOR FOR A SWITCH. BERNARD HENRI JEANNERET, Le Locle, Switzerland, assignor to the Firm Electrogaz S. A., Le Locle, Switzerland. Filed Oct. 18, 1928, Serial No. 313,354, and in Switzerland Oct. 28, 1927. 2 Claims. (Cl. 200—53.)

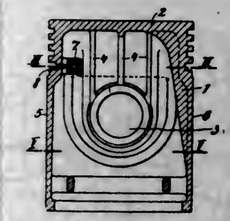


2. In a valve actuated switch, the combination with a rotatable fluid controlling valve plug, of a resilient contact operating member, a sliding rod abutting against said member, a pawl rotatably mounted on the valve plug and adapted to engage said sliding rod to move the rod in one direction and actuate said operating member upon rotation of the plug, and a spring urging the pawl into rod engaging position, said rod being adapted to be released by the pawl after a predetermined movement of rotation of the valve plug and to be moved in opposite direction by said resilient contact operating member when released to hold said pawl in inoperative position against the action of said spring.

1,868,420. LIGHT-METAL PISTON. LUDWIG KRAEMER, Cologne-Mannsfeld, Germany. Filed May 26, 1930, Serial No. 455,761, and in Germany Nov. 10, 1928. 1 Claim. (Cl. 74—108.)

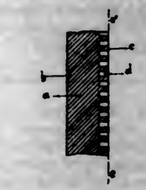
A piston of light metal having its wall, on the side thereof which bears against the cylinder under the lateral thrust produced by the obliquity of the connecting rod, thickened so as to form a mass of material exceeding that required for stiffening the wall of the piston and adapted to lead away the heat from the top of the piston directly to the cylinder wall, gudgeon pin bearings connected only to the top of the piston, a slot in the wall

of the piston for preventing the spread of heat from the thickened portion of the piston wall, a slot between the top of the piston and the lower part of the piston on the side thereof remote from the thickened portion of



the piston wall and bridges below the gudgeon pin extending transversely to the axis of the piston, connected to the wall of the piston only at their ends and having a small cross section at their ends for minimising the transfer of heat from the wall of the piston to the bridges.

1,868,421. MOLD FOR THE MANUFACTURE OF ARTICLES IN SILICA GLASS AND THE LIKE. PIERRE LA BURTHE, Nemours, France, assignor to Societé "Quartz & Silice", Paris, France, a Corporation of France. Filed Feb. 28, 1930, Serial No. 432,180, and in France Apr. 16, 1929. 15 Claims. (Cl. 49—65.)

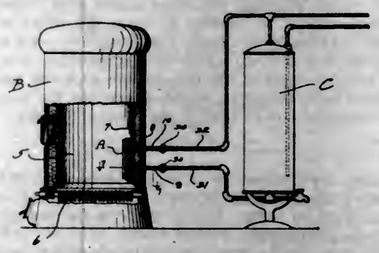


1. A mold for directly obtaining smooth faced articles of pure fused silica, said mold comprising a molding wall provided with substantially uniformly distributed cavities, of which at least one of the superficial dimensions is of the order of some millimeters.

1,868,422. PROCESS FOR CHEESE MANUFACTURE. FRANK M. G. LUECKE, Nixa, Mo. Filed Feb. 24, 1928. Serial No. 256,811. 11 Claims. (Cl. 99—11.)

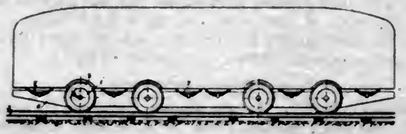
1. The process of cheese manufacture which consists in pasteurizing milk, coagulating the milk, separating the curd from the whey, and steaming the curd at a temperature within the range between 110° F. to 145° F. until the desired acidity is attained.

1,868,423. HOT WATER HEATER. JOHN F. MAYERHOFER, Brooklyn, N. Y. Filed Feb. 12, 1931. Serial No. 515,367. 3 Claims. (Cl. 122—20.)



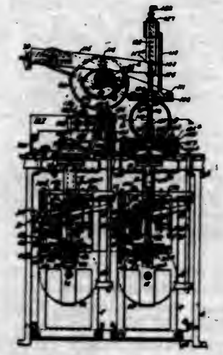
1. In combination with a furnace including a fire pot section having openings formed thru the wall thereof; a hollow water heater unit disposed in surface contact with the inner side of the fire pot wall and having hollow bosses snugly fitting into said openings, said bosses to receive inlet and outlet pipes extended thru the openings in the fire pot wall.

1,868,424. RAILWAY VEHICLE. ANDRÉ JULES MICHELIN, Paris, France, assignor to Michelin et Cie., Clermont-Ferrand, France, a Corporation of France. Filed Nov. 10, 1930, Serial No. 494,767, and in France Dec. 5, 1929. 9 Claims. (Cl. 105—211.)



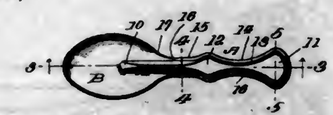
1. A railway vehicle comprising a rigid frame, more than two axles, wheels on said axles, pneumatic tires on said wheels, and means for separately connecting each of said axles to said frame adapted to keep the relative displacement of said two parts below a certain value.

1,868,425. METHOD OF AND APPARATUS FOR MANUFACTURING POTTERY WARE. WILLIAM J. MILLER, Swissvale, Pa. Filed May 5, 1928. Serial No. 275,395. 27 Claims. (Cl. 25—22.)



1. In apparatus of the class specified, a plurality of reciprocating chucks, molds adapted to be supported by said chucks, a conduit member disposed horizontally over said chucks and provided with upper dies having orifices in alinement therewith, means for progressing clay into said orifices, plungers mounted to reciprocate in said orifices, means for reciprocating said chucks and said plungers to feed the clay in measured charges to said molds, and means for applying a fluid medium to said charges.

1,868,426. SHEET METAL SPOON. WILLIAM G. MOMBERGER, Baltimore, Md., assignor to Ammidon and Company, Baltimore, Md., a Corporation of Maryland. Filed Nov. 5, 1928. Serial No. 317,380. 2 Claims. (Cl. 30—22.)



1. A spoon constructed of sheet metal comprising an integral bowl and handle, said handle having an arched portion leading upwardly and rearwardly from the interior of the bowl on a sharply curved line following an approximately true arc, the end of said handle which is distant from said bowl being widened and flattened, said

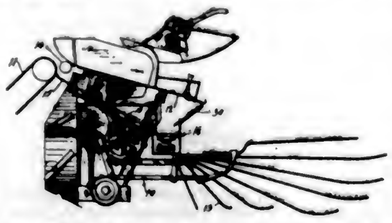
arched portion being of U-shape in cross section with unbroken top and sides, and proportioned to have approximately vertical sides, the flat top surface of the rest of said handle being merged into and forming an unbroken continuation of the rounded top surface of said arched portion, and having depending approximately vertical sides of less height than the sides of said arched portion, the sides of the arched portion and the sides of the rest of the handle being merged into and forming unbroken continuations of each other, and also extending around the free end of the handle, said handle being widened to provide a fulcrum bearing between its free end and the bowl, the top edge of said bowl and the bottom edges of the sides of said handle, as viewed in side elevation forming an approximately continuous unbroken line.

1,868,427. DOLL. GLADYS MOORE, Utica, N. Y., assignor to The Lamp Studio, Utica, N. Y., a Firm composed of Hazel M. Hokerk and Lynde D. Hokerk. Filed Dec. 8, 1930. Serial No. 500,752. 3 Claims. (Cl. 46—40.)



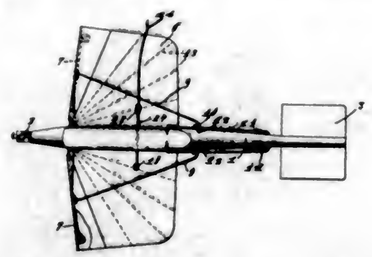
1. A toy doll comprising a flat doll figure having two headed projections extending from the front face thereof below but adjacent the shoulders of the figure and spaced apart transversely of the doll figure, and a costume simulating sheet provided with a neck recess at its top, and two socket devices passed therethrough on opposite sides of the neck recess, the socket devices being symmetrically arranged with reference to the neck recess, engaging the headed projections to secure the costume sheet directly to the doll figure and having exposed portions on the outer face of the costume simulating sheet to provide ornamentation for the costume simulating sheet.

1,868,428. GRAIN SAVING ATTACHMENT FOR BINDERS AND HARVESTERS. JACK OSTER, Greeley, Colo. Filed Dec. 27, 1930. Serial No. 505,160. 5 Claims. (Cl. 56—207.)



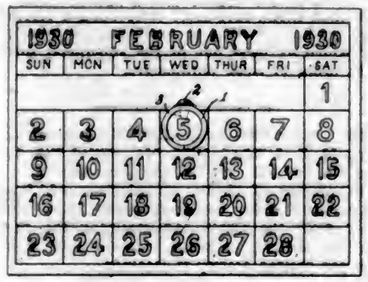
1. In a grain harvesting and binding machine, a grain saving attachment comprising a frame, a hopper disposed within the frame, and means for releasably securing the hopper in the frame.

1,868,429. TOY AEROPLANE. ALBERT V. PASLEY, Rhea, Ark. Filed May 22, 1931. Serial No. 539,351. 2 Claims. (Cl. 46—50.)



1. A device of the class described comprising a toy consisting of a body, a wing formed of foldable material, bars connected with the front edge of the wing and pivotally connected at their inner ends with the body, a pair of bars pivotally connected with certain of the first mentioned bars, a rod at each side of the body and the second mentioned bars having eyes through which the rods pass, said body having notches therein for receiving portions of the eyes to hold the parts with the wing in unfolded position, a horizontal tail piece fastened to the rear end of the body and a rudder hingedly connected with the tail piece whereby the rudder can be moved from a horizontal to a vertical position and vice versa.

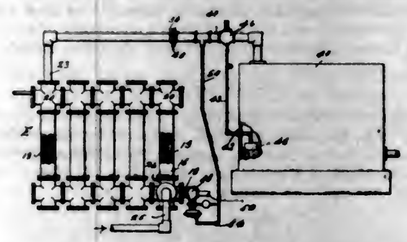
1,868,430. MONTHLY ALMANAC AND THE LIKE. JOSE MIGUEL PLA COSTA, Buenos Aires, Argentina. Filed Mar. 18, 1931, Serial No. 523,614, and in Argentina Mar. 20, 1930. 1 Claim. (Cl. 40—110.)



A calendar indicator, comprising a flat, annular ring adapted to frame the desired figure on the calendar, a triangular pin depending radially from the inner circumference of the ring, the pin being biased with respect to the ring so as to be adapted to enter the paper of the calendar, and means for gripping said indicator, said means consisting of a flat, circular, radial projection from the upper circumference of the ring in line with the pin, the projection being biased to provide a grip for the indicator on the side opposite to that of the point of the pin.

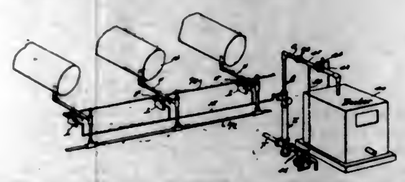
1,868,431. PROPORTIONING BLOWDOWN WATER WITH BOILER FEED WATER. CYRUS WILLIAM RICE, Pittsburgh, Pa. Filed Aug. 5, 1927. Serial No. 210,937. 6 Claims. (Cl. 122—1.)

1. In an apparatus of the class described, a boiler feed water pipe, a pipe for conducting boiler blowdown water to a point of discharge, means to regulate the flow through said last named pipe for continuously regulating and proportioning the flow of blowdown water with the feed water, and differential means responsive to the opposed effects of a force corresponding to pressure in said feed



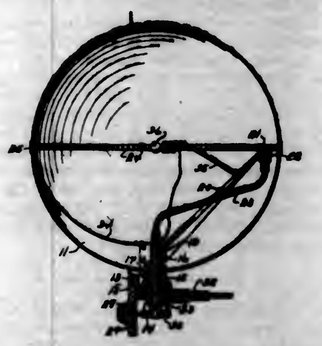
water pipe and an adjustable gravity controlled force, said regulating means being operated by the differential means.

1,868,432. CONTINUOUS AUTOMATIC CONTROL OF FEED AND BLOWDOWN WATER. CYRUS WILLIAM RICE, Pittsburgh, Pa. Filed Aug. 22, 1927. Serial No. 214,773. 1 Claim. (Cl. 122—1.)



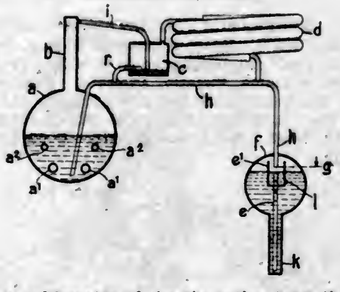
The method herein described, which consists in initially heating boiler feed water by boiler blow down water, conveying the feed water partially heated to secondary heating means, and automatically regulating the flow of blow down water toward a point of final discharge by variation in the pressure of the feed water after the initial heating thereof, said variation being in proportion to the demands of the secondary heating means for feed water.

1,868,433. RADIODIAL OR STATION SELECTOR. ALBERT L. C. RINGEL, Altoona, Pa. Filed Jan. 10, 1931. Serial No. 507,928. 9 Claims. (Cl. 116—124.4.)



1. A station selector for a radio receiving set, comprising a spherical, hollow translucent body having a mapped external surface, a wave length scale externally encircling the body, means rotatably supporting the body, a pointer within the body and visible from without the same for cooperation with the scale and a shadow casting means for the body to effect thereon the shadow of the pointer.

1,868,434. REFRIGERATOR OF THE ABSORPTION TYPE. ADOLF SILBERNAGEL, Basel, Switzerland. Filed Oct. 26, 1929, Serial No. 402,667, and in Switzerland Nov. 12, 1928. 3 Claims. (Cl. 62—120.5.)



3. In a refrigerator of the absorption type, the combination of an absorber-generator, a vaporizer, a condenser, and a tube connecting the absorber-generator to the vaporizer, the condenser being connected to said tube, a small open vessel within the vaporizer, within which the said tube ends, and being provided in its lower part with a small opening for the discharge of condensed refrigerant upon the liquid in the vaporizer, and a tube extension extending from said vessel to the lowest part of the vaporizer and projecting into and communicating at its upper end with said vessel, the portion thereof exterior of the vessel being freely exposed to the medium in said vaporizer so that, after the cessation of boiling and owing to the higher temperature prevailing in said medium than in said tube, a gas development takes place in said tube, producing a great, pump-like action on the contents within the tube and vessel.

1,868,435. COMPENSATING CENTER. ROBERT STUART SOWDEN, Easton, Pa., assignor to William Wharton, Jr., & Company, Incorporated, Easton, Pa., a Corporation of Pennsylvania. Filed May 9, 1930. Serial No. 451,025. 7 Claims. (Cl. 82—33.)



1. A compensating center, including a spindle, a housing, a block capable of self-adjustable eccentric positioning thereon, means whereby the block and housing may be relatively fixed, a block for engaging the work, and a universal connection between said blocks.

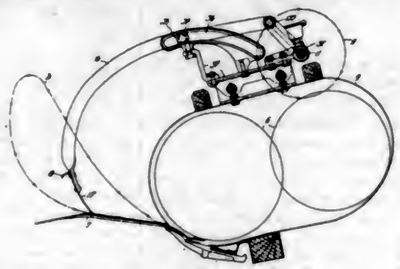
1,868,436. HEAT TRANSFER APPARATUS. CECIL WHEATLEY STANCLIFFE, Aldwych, London, England. Filed Sept. 10, 1930, Serial No. 481,009, and in Great Britain Sept. 20, 1929. 8 Claims. (Cl. 257—248.)



1. A rotor core and tube heat transfer apparatus of the type referred to, including a heat transfer tube of considerable length and small diameter, a core member rotatably mounted within the tube to provide an annular passage between it and the tube, a plurality of relatively short wipers carried by the core member and arranged

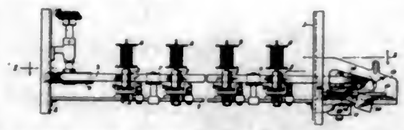
in and dividing said annular passage into a large number of small compartments, and independent spring means for holding each wiper in contact with the inner surface of the tube.

1,868,437. APPARATUS FOR GATHERING AND FEEDING IN CROPS. HEADLIE SHIPARD TAYLOR, Sunshine, Victoria, Australia, assignor to H. V. McKay Proprietary Limited, Sunshine, Victoria, Australia. Original application filed Oct. 5, 1928, Serial No. 310,603, and in Australia Dec. 23, 1927. Divided and this application filed Jan. 18, 1930. Serial No. 421,878. 2 Claims. (Cl. 56—219.)



1. In apparatus for gathering and feeding in crop to and over the combs of stripper harvesting and reaper thresher machines, a shaft rotatively mounted above and at the rear of a comb, cranks on the said shaft, arms having their rear ends pivotally mounted on the cranks, a batten fitted to the forward ends of the arms, rearwardly and downwardly curved guides located between the batten and the shaft, and pins on the arms engaged by the said guides.

1,868,438. AUTOMATIC BELT TAKE-UP. PACIFIC J. THOMAS, Wyoming, Pa., assignor to U. S. Textile Machine Company, Scranton, Pa., a Corporation of Pennsylvania. Filed Apr. 11, 1930. Serial No. 443,545. 2 Claims. (Cl. 118—48.)



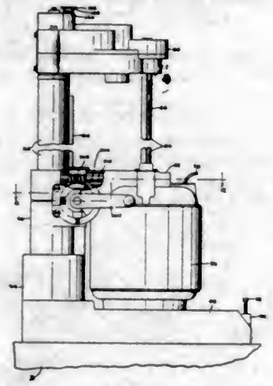
1. A belt tightener including a pulley, a driving member connected to said pulley, reciprocating supporting means for supporting said driving member, a stationary rack, a gear rotatably mounted on said supporting means, said gear meshing with said rack, said gear having clutch teeth on one face, a sleeve having clutch teeth at one end, a spring acting on said sleeve for normally holding the teeth of the sleeve in engagement with the teeth of said gear, and a weighted arm rigidly connected with said sleeve for giving the sleeve a tendency to rotate.

1,868,439. CURTAIN ROD. ALEX ZIELINSKI, Milwaukee, Wis. Filed July 5, 1924. Serial No. 724,450. 5 Claims. (Cl. 156—23.)



1. An adjustable curtain rod comprising a tubular casing having therein a longitudinal slot and a series of apertures, a rod arranged in one end of said casing, a spring arranged in said casing and tending to force said rod outwardly, a pin fixed in said rod and extending through said slot to limit the outward movement of said rod, a second rod arranged in the other end of said casing and having a longitudinal groove and a transverse bore, a catch arranged in said groove and said bore and having a cam faced head to engage any one of said apertures and hold said rod against movement inwardly of said casing but permitting said rod to be drawn outwardly of said casing, and an abutment arranged upon the outer end of each rod.

1,868,440. BORING MACHINE AND METHOD. EWALD A. ARP, Minneapolis, Minn., assignor, by mesne assignments, to Van Norman Machine Tool Company, Springfield, Mass., a Corporation. Filed July 29, 1929. Serial No. 381,697. 11 Claims. (Cl. 77—2.)



1. In a machine for reboring cylinders, the combination of a cutter shaft, a frame, a support for the shaft movable in the frame in a direction axially of the shaft, a cutter on the shaft, means for rotating the cutter shaft, a centering head carried by the support and having radially movable guide members therein and mounted coaxially with and closely adjacent to the cutter head so as to follow it during its cutting movement, means for feeding the cutter and the centering head in the direction of their common axis, means for holding the centering head against rotation, and means operable from a point outside the cylinder in all operative positions of the cutter head for adjusting the guide members radially during the cutting movement of the head, said last-named means including a manually operable member remote from the cylinder and positioned on said support.

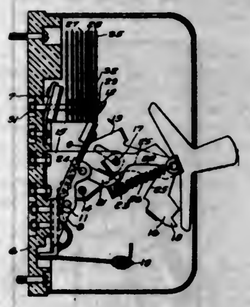
11. A method of boring with a minimum eccentricity and with a minimum of deviation in axial direction the cylinders of internal combustion motors or the like, which comprises carrying a cutting tool through a helical path, guiding the cutting tool from a point outside the cylinder during the initial portion of its travel so that it moves in a truly cylindrical surface, passing a guide member into the freshly cut portion of the cylinder, expanding the guide member into contact with the freshly cut portion of the cylinder without interrupting the continued helical motion of the cutting tool, and completing the boring of the cylinder with the tool guided by said guide member from the cut surface of the cylinder.

1,868,441. WRITING PAD FOR WRITING INSTRUMENTS. WILMA M. COLFELT, Portland, Oreg. Filed Aug. 14, 1931. Serial No. 557,112. 1 Claim. (Cl. 120—103.)



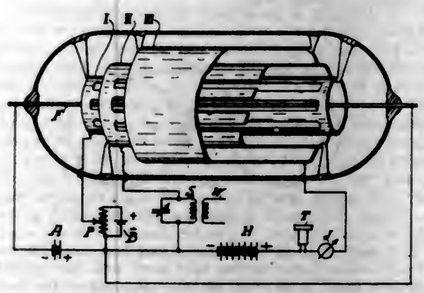
A new article of manufacture comprised of a thimble, composed of two parts threadably secured together, a shoulder outwardly and upwardly extending from the outer end of each of the thimble members, a compressible member disposed therebetween, with an air space disposed between the thimble and the inner central portion of the compressible body element, and means for increasing the diameter of the body element at its central portion.

1,868,442. ARC QUENCHER FOR CIRCUIT BREAKERS. ALFRED CORBETT, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 29, 1930. Serial No. 491,871. 2 Claims. (Cl. 200—144.)



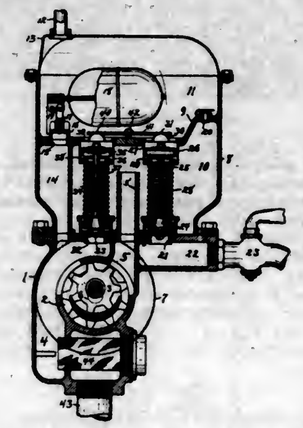
1. An arc-quenching device for circuit breakers comprising a plurality of superimposed spaced metal plates having aligned slots extending inwardly from the front edges thereof through which the movable contact of the circuit breaker is moved and in which the arc is drawn, each alternate plate having perforations therethrough between the inner end of the notches and the rear edges of the plates.

1,868,443. ELECTRIC DISCHARGE TUBE. GEORG SEIBT, Berlin-Schoneberg, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Original application filed Aug. 26, 1921, Serial No. 495,504, Patent No. 1,592,387, and in Germany Oct. 24, 1913. Divided and application filed Sept. 25, 1924, Serial No. 739,882. Patent No. 1,696,103. Again divided and this application filed Dec. 11, 1928, Serial No. 325,307. 8 Claims. (Cl. 179—171.) (Granted under the provisions of the act of Mar. 3, 1921, 41 Stat. L., 1313.)



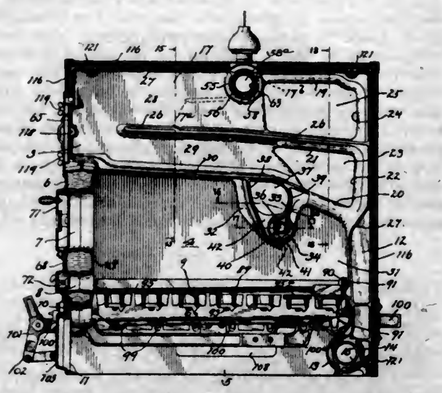
6. A high frequency circuit comprising an electron discharge device including a cathode, an anode, a plurality of control electrodes, means for impressing high frequency currents upon one of the control electrodes and connected to the cathode and said latter electrode, means for biasing another one of the control electrodes, and an output circuit connected to the anode and cathode.

1,868,444. AIR ELIMINATOR FOR LIQUID. REUBEN E. BECHTOLD, Fort Wayne, Ind., assignor to Tokheim Oil Tank and Pump Company, a Corporation of Indiana. Filed Nov. 16, 1931. Serial No. 575,204. 11 Claims. (Cl. 221—95.)



1. In an appliance of the class described a pump, a case having a receiving chamber and an overflow chamber, the partition between said chambers being provided with a restricted passageway therethrough, said case having also a duct affording communication between the overflow chamber and the suction inlet of said pump, a float-controlled valve mechanism in said overflow chamber controlling said duct, an outlet duct including a dispensing valve having communication with said receiving chamber, a spring-restrained regulating valve controlling communication between the receiving chamber and said outlet duct actuated by pressure created within the receiving chamber, and a spring-restrained by-pass valve controlling communication between said receiving chamber and the suction inlet of said pump actuated by pressure created within said receiving chamber, said regulating valve being operable at a pressure comparatively lower than that required to operate said by-pass valve.

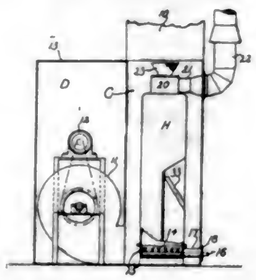
1,868,445. BOILER. CHARLES W. BRABBÉE, Bronxville, N. Y., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 16, 1927. Serial No. 213,231. 32 Claims. (Cl. 122—223.)



1. A boiler comprising a grate, a plurality of sections arranged side by side, certain of said sections each having a depending water member communicating therewith and

terminating at its lower end above the grate, each of said members having a transverse opening, said depending water members being arranged side by side and cooperating to form a depending baffle extending transversely of the normal plane of said sections and dividing the space above the grate into two chambers arranged one to the rear of the other, said transverse openings alining communicatively to form a duct extending through said baffle, and means at the lower portion of said baffle for discharging a combustion supporting gas from said duct.

1,868,446. HEAT RADIATOR. NELSON T. BRANCHE, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Dec. 18, 1931. Serial No. 581,934. 6 Claims. (Cl. 126—116.)



1. In a heat radiator, the combination of similar right and left members, each member comprising a plurality of relatively wide and narrow and hollow panels extending upwardly in spaced broadside relation from a common base, each panel having an outlet at its upper end, the panels of one member being arranged in spaced interdigitated relation with the panels of the other member, each base forming one half of a common chamber from which heating medium enters the respective panels, the panels from one base extending over the base from which the other panels extend.

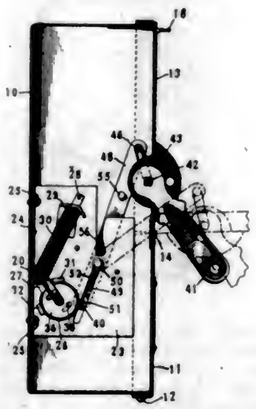
1,868,447. PURIFICATION OF TAR-ACID-BEARING OILS. SOLOMON CAPLAN, Brooklyn, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed Sept. 25, 1928. Serial No. 308,342. 5 Claims. (Cl. 196—145.)

1. In the treatment of tar-acid-bearing oil produced by the distillation of bituminous material and containing liquid products in a substantially primary and undecomposed form, which products are capable of producing color in the oil when the latter is employed in the manufacture of disinfectants and the like, to selectively eliminate such color producing compounds therefrom the step which comprises washing the oil with water at atmospheric pressure and approximately atmospheric temperature under conditions adapted to extract therefrom the said color-producing compounds while preventing material loss of valuable mono-hydroxy tar acids therefrom, and separating the aqueous extract from the residual oil.

1,868,448. RECOVERY OF RESIN FROM RESIDUAL OIL. SOLOMON CAPLAN, Brooklyn, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed Nov. 26, 1928. Serial No. 322,107. 5 Claims. (Cl. 196—13.)

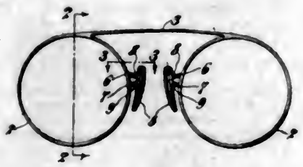
1. A method of recovering soluble and fusible resinous condensation products from a solution or colloidal suspension thereof in the hydrocarbon oil components of a tar distillate comprising, treating the solution with a volatile liquid which is a solvent for its neutral oil component and in which the resins are substantially insoluble under condition to avoid impairing the quality of the resinous condensation products and to prevent their conversion to the insoluble, infusible form, and thereafter separating the resins by gravity precipitation from the residual oil-volatile solvent solution.

1,868,449. INCLOSED SWITCH. HERMAN J. HAMMERLY, Wallingford, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Mar. 2, 1931. Serial No. 519,329. 10 Claims. (Cl. 200—50.)



1. An inclosed switch comprising a box having a hinged cover, a switch operating crank mounted in the box, an actuating handle hinged to said cover, snap action mechanism within the box, and means of connection with said handle including a jointed link and means for guiding the joint of the link whereby said cover may be opened or closed without disconnecting said handle from said snap action mechanism.

1,868,450. NOSE GRIP FOR EYEGLASSES. CHARLES F. WALL, Drexel Hill, Pa., assignor to Wall & Ochs, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 15, 1929. Serial No. 332,632. 2 Claims. (Cl. 88—48.)



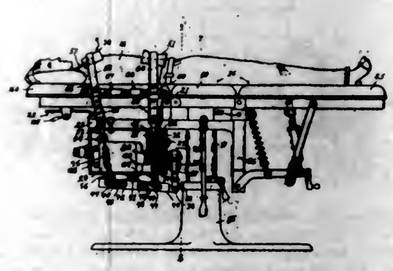
1. A pair of eyeglasses, comprising lens-receiving rims, a bridge directly connecting said rims, and nose gripping members directly secured to said rims below the points of attachment of the bridge to said rims, each nose gripping member comprising an approximately elliptical nose-bearing part and a pair of arms integrally connected directly and permanently with the rear edge of the nose-bearing part and with the respective rim, the arms of each pair diverging from the nose bearing parts to the respective rims, and being adjustable by bending them simultaneously or independently to adjust the nose bearing parts and the rims to fit the wearer.

1,868,451. PROTECTIVE REFRACTORY GLAZE AND METHOD OF APPLYING THE SAME TO REFRACTORY BODIES CONTAINING SILICON-CARBIDE. SAMUEL F. WALTON, Hamburg, N. Y., assignor to The Exolon Company, Blasdell, N. Y., a Corporation of Massachusetts. Filed Apr. 23, 1928. Serial No. 272,848. 7 Claims. (Cl. 91—72.)

1. The method of protecting clay-bonded silicon carbide bodies against corrosion which consists in fusing onto the body a refractory glaze composed of finely pulverized prefused aluminum silicate, and a raw or unburned or unfused aluminum silicate of substantially the same composition as the bond for the silicon carbide body in which mixture the pre-fused aluminum silicate exceeds the raw aluminum silicate which coating is fused on the silicon carbide body as an exterior practically integral skin.

5. The method of protecting clay bonded silicon carbide bodies against corrosion which consists in fusing onto the body as an exterior practically integral coating, a refractory glaze composed of a mixture of finely divided pre-fused aluminum silicate and raw aluminum silicate of substantially the same composition as the clay bond of the silicon carbide body whereby the union of the clay coating with the body is unaffected by unequal expansions of the coating and body.

1,868,452. VIBRATORY APPARATUS. KARL H. WHITNEY, Kirksville, Mo., assignor to Whitmanis Manufacturing Company, Inc., Kirksville, Mo., a Corporation of Missouri. Filed Aug. 20, 1929. Serial No. 387,168. 4 Claims. (Cl. 128—60.)



1. Vibratory apparatus comprising a support for the body of a patient, a motor driven centrally pivotally mounted rocker arm, lateral arms in pairs mounted upon opposite ends of said rocker arm and adjustable to and from the center of said rocker arm, a pair of pads engaging different portions of a patient, a harness member looped over one of said pads and connected at opposite ends to the pair of lateral arms at one end of said rocker arm, and a harness member looped over the other of said pads and connected at opposite ends to the pair of lateral arms at the opposite end of said rocker arm, said harness members being adapted to alternately apply pressure to one of said pads while the opposite harness member is reducing pressure upon the opposite of said pads.

1,868,453. CASTING EASILY OXIDIZABLE METALS. ROBERT T. WOOD, Lakewood, Ohio, assignor, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Filed Oct. 23, 1929. Serial No. 401,958. 13 Claims. (Cl. 22—188.)

11. A mold for casting magnesium and other easily oxidizable metals, made of a mixture containing sand and an organic borate.

1,868,454. CASTING EASILY OXIDIZABLE METALS. ROBERT THOMAS WOOD, Lakewood, Ohio, assignor, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Filed Oct. 23, 1929. Serial No. 401,959. 11 Claims. (Cl. 22—188.)

1. The method of casting magnesium and other easily oxidizable metals in sand molds, comprising mixing with sand a plurality of protective substances of variant vaporizing temperatures, including ammonium bisulfate, boric acid and an aqueous solution of a polyhydric alcohol; forming a mold of the mixture; and casting the metal in the mold.

1,868,455. CASTING EASILY OXIDIZABLE METALS. ROBERT THOMAS WOOD, Lakewood, Ohio, assignor, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Filed Oct. 23, 1929. Serial No. 401,960. 11 Claims. (Cl. 22—188.)

1. The method of casting magnesium and other easily oxidizable metals in sand molds, comprising mixing with sand a plurality of protective substances of variant vaporizing temperatures, including potassium sulfid, boric acid and an aqueous solution of a polyhydric alcohol; forming a mold of the mixture; and casting the metal in the mold.

1,868,456. CASTING EASILY OXIDIZABLE METALS. ROBERT THOMAS WOOD, Lakewood, Ohio, assignor, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Filed Oct. 23, 1929. Serial No. 401,961. 10 Claims. (Cl. 22—188.)

1. A sand mold tempered with a glycol containing an ethylene radical.

1,868,457. CASTING EASILY OXIDIZABLE METALS. ROBERT T. WOOD, Lakewood, Ohio, and FRANCIS C. FRARY, Oakmont, Pa., assignors, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Filed Oct. 23, 1929. Serial No. 401,962. 11 Claims. (Cl. 22—188.)

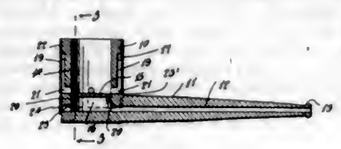
1. The method of casting magnesium and other easily oxidizable metals in sand molds, comprising incorporating in the molding material ammonium phosphate, forming a mold of the mixture, and casting the metal in the mold.

1,868,458. SHIRT ENVELOPE. LOUIS BLUMENSTOCK, Brooklyn, N. Y., assignor to Spear Box Company, New York, N. Y., a Corporation of New York. Filed June 5, 1931. Serial No. 542,344. 2 Claims. (Cl. 229—87.)



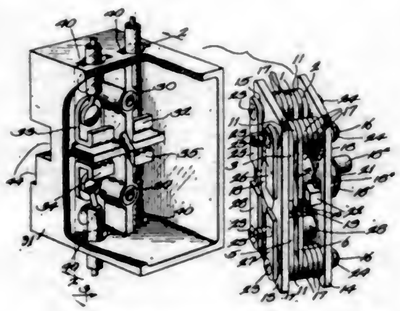
1. A shirt envelope having a front portion provided with an opening adapted to clear the collar of the shirt, means adjacent the bottom of said opening for engaging the top button of the shirt for preventing relative movement of said shirt and said envelope in any direction, and means in combination with that part of the front adjacent said opening for supporting the collar in a plane at an angle to the plane of said front portion.

1,868,459. SANITARY SMOKING APPLIANCE. JOHN B. CULLEN, Richmond Hill, N. Y. Filed Nov. 13, 1929. Serial No. 406,930. 1 Claim. (Cl. 131—12.)



A smoker's appliance of the class described comprising a holder having an upright bore closed at its lower end, a plate in said bore above said end forming upper and lower chambers, said holder having passages establishing communication between the chambers, a stem on the holder in communication with the lower chamber, one of said passages being continuous and located on the exterior of the holder and all of said passages being exposed on the exterior of the holder, a cover disposed over said holder to close the outside of all of the passages, said holder having a notch engaging said stem to aid in centering the cover, and the holder having a port in communication with the said continuous passage to aid in cleaning the lower chamber and stem, said port being closed by the cover.

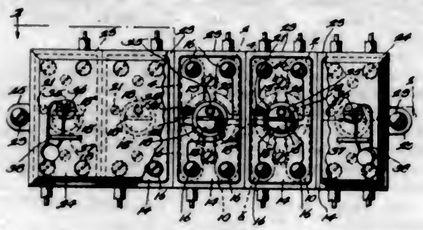
1,868,460. ELECTRIC SWITCH. STANLEY S. GREEN, La Fayette, Ind., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind., a Corporation of Illinois. Filed Aug. 1, 1929. Serial No. 382,644. 26 Claims. (Cl. 200—15.)



1. An electric switch including a turning member and a stationary member, one of said members having thereon a plurality of metallic contacting blades; a plurality of pairs of metallic contacting blades upon the other member with the blades thereof spaced apart to receive the first aforesaid blades therebetween, each of the first aforesaid blades having a pair of contacting blades individual thereto, the contacting blades upon both members of the switch being so proportioned and related that some one of the first aforesaid blades is received between the contacting blades of the pair individual to it in all positions of the turning member, whereby axial movement of the turning member is guarded against; and a support in which the turning member is journaled and formed to permit the turning member to be axially movable were it not for the interrelation of the contacting blades.

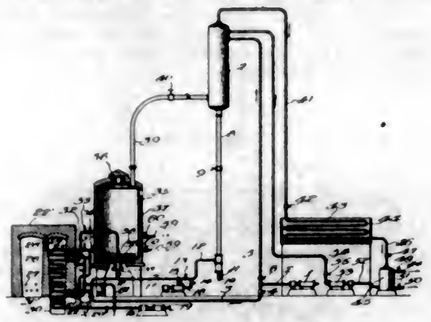
1,868,461. ELECTRIC SWITCH. STANLEY S. GREEN, La Fayette, Ind., assignor to Duncan Electric Manufacturing Company, La Fayette, Ind., a Corporation of Illinois. Filed Aug. 1, 1929, Serial No. 382,645. Renewed Feb. 23, 1932. 9 Claims. (Cl. 200—50.)

1. The combination with a plurality of independently operable interconnected electric switches, each switch having a manually operable switch member and a stationary switch member; of a member for holding the manually operable switch members in predetermined set positions, said holding member and each of said manually operable



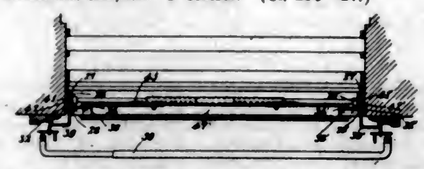
switch members having complemental pin and socket holding formations which are disposed to be adapted for interengagement when said manually operable switch members are in their predetermined set positions.

1,868,462. PROCESS FOR PRODUCING OIL GAS. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 15, 1925. Serial No. 37,120. 1 Claim. (Cl. 48—214.)



A process for producing oil gas, which comprises passing heavy hydrocarbon oil in a restricted stream and in admixture with superheated steam through a heating zone and heating the same therein to a decomposition temperature between 1200° F. to 1500° F., discharging the heated mixture into an enlarged separating zone and separating the vapor and gas from carbonaceous residue therein, dephlegmating said vapor and gas in a manner to separate the greater portion of the vapors from the gas by scrubbing the same with fresh oil being supplied to said heating zone, and repeatedly recycling the resultant reflux condensate through said heating zone in admixture with additional quantities of steam until the same has been substantially decomposed into gas.

1,868,463. WINDOW SHADE ADJUSTING DEVICE. SAMUEL JASGUR, Brooklyn, N. Y. Filed July 21, 1931. Serial No. 552,200. 2 Claims. (Cl. 156—27.)



1. In a device of the character described, in combination, a vertical channel-shaped guide, the base of said guide being opened inwardly toward a window frame, one side of said guide being narrower than the other side and spaced from said window frame and a curtain-carrier extending through the space between the narrow side of the guide and the window frame, allowing longitudinal movement of said carrier along said guide and preventing transverse movement thereof.

1,868,464. FUSE INDICATOR. FRANK C. LA MAR, New York, N. Y., assignor to Great Western Fuse Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 3, 1929. Serial No. 396,987. 4 Claims. (Cl. 200—121.)



1. In a cartridge fuse, in combination: an elongated hollow body of insulating material; two metallic ferrules, one attached to each end of the body, said ferrules each formed with a longitudinal groove opening on the outer circumferential surface thereof; a fusible wire of very low current carrying capacity having one end positioned in a groove of one ferrule and the other end positioned in a groove of the other ferrule; caps, one positioned on each of the ferrules and having a portion extending over and covering the groove therein whereby the ends of the fusible wire are held in place, and a fusible link within the body electrically connecting the ferrules.

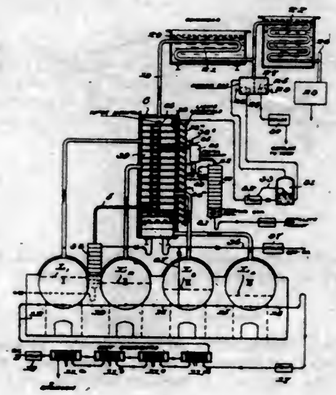
1,868,465. FUSE INDICATOR. FRANK C. LA MAR, New York, N. Y., assignor to Great Western Fuse Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 2, 1929. Serial No. 404,269. 4 Claims. (Cl. 200—121.)



1. As an indicator for a cartridge type fuse having metallic end ferrules, in combination: two metallic buttons, one on each ferrule, each button being slightly spaced from the ferrule; two metal fingers, each having two connecting orifices therein reversely positioned, one orifice of such diameter than the button may pass therethrough, the other of too small diameter for the button to pass therethrough; a transparent hollow body with metallic ends and a fuse wire inside connecting the ends, one end of the body connected to one finger and the other end to the other finger, all so arranged that the fingers may be placed over the buttons and then slid endwise to bring the small diameter orifices under the button.

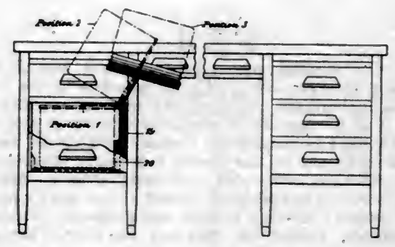
1,868,466. DISTILLING PROCESS AND APPARATUS. EUGENE H. LESLIE and EDWIN M. BAKER, Ann Arbor, Mich. Filed June 29, 1925. Serial No. 40,421. 3 Claims. (Cl. 196—72.)

1. Distilling apparatus comprising in combination, a plurality of stills, connected in series for flow of liquid through the entire series, a single rectifying or fractionating column, vapor lines arranged to conduct vapors from the several stills separately into different sections of said column adjacent the top and bottom of the column and at intermediate points thereof where the vapors are respectively substantially in equilibrium with the vapor and liquid of the column, condensing means into which vapors pass from said column, means for refluxing condensate to the upper part of the column, an auxiliary exhausting column connected at a point intermediate the



ends of the rectifying column for withdrawing a fraction of approximately desired composition, and means for returning to said rectifying column vapor from said exhausting column at a point in substantial equilibrium with the liquid and vapor in said rectifying system.

1,868,467. BOOKHOLDER. EDWARD J. SITHENS, Cynwyd, Va. Filed Aug. 4, 1930. Serial No. 472,941. 8 Claims. (Cl. 45—85.)

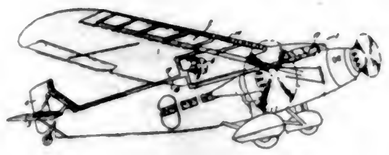


1. In a book holder, the combination of a housing for books and a bracket for supporting the books, said bracket including an inner arm fixed to said housing and an intermediate and outer arm hingedly connected together and being rotatable with respect to each other and with respect to said inner arm, the intermediate arm having a book pivotally connected therewith, and a stop formed on said housing to limit the outward swing of the intermediate arm.

1,868,468. HEATER FOR AIRPLANE WINGS. ARCHIE F. THOMPSON, Tulsa, Okla., assignor to Iceless Air Wing Corporation, Tulsa, Okla., a Corporation of Oklahoma. Filed Oct. 11, 1930. Serial No. 488,069. 8 Claims. (Cl. 244—31.)

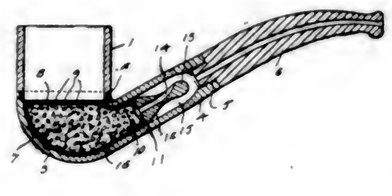
1. In combination with aircraft including a source of electrical energy, heating wires arranged on a selected surface of said craft, a layer of insulation between said surface and wires, feed wires leading from the source

of energy to the heating wires, means interposed in the feed wires for controlling the amount of current flowing through said wires, and a covering for said insulation



and heating wires substantially conforming in shape to said surface and spaced therefrom to form a dead air chamber.

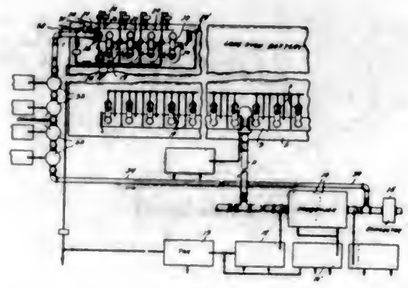
1,868,469. SMOKING APPARATUS. HERSHEL H. BROADWAY, Hattiesburg, Miss. Filed Apr. 19, 1930. Serial No. 445,745. 2 Claims. (Cl. 131—12.)



1. In a smoking pipe, a bowl having a heel, a stem integral with the heel and a bit attached to the stem, a coupling between the bowl and the heel whereby the bowl may be removed, a shell formed to fit in said heel and having a perforated top normally forming the bottom of the bowl and further having a laterally directed portion opening into the stem, said stem having a relatively large bore, an elongated tip formed at one end to receive said laterally directed portion and gradually decreasing in diameter toward the other end and further having a longitudinal passage therethrough opening at one end into the shell and at the other end opening through the side of the tip, and an absorbent material in said shell consisting of activated carbon.

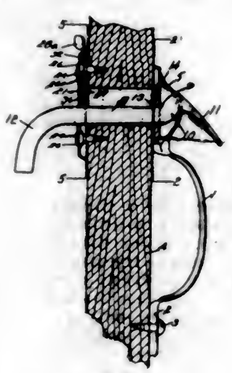
1,868,470. DISTILLATION OF TAR AND APPARATUS THEREFOR. LAURENCE RAYMOND FORREST, East Orange, N. J., and EARL BIDDLE CONKLIN, Syracuse, N. Y., assignors to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed May 10, 1927. Serial No. 190,320. 5 Claims. (Cl. 202—30.)

1. The method of distilling tar at a coke oven plant in the ovens of which coal is distilled which comprises passing the fresh hot distillation gases from the ovens through stills to a collector main, maintaining a stream of tar and pitch in the collector main by adding tar to one end of the main and withdrawing pitch from the other end of the main, withdrawing a part only of the stream from the main at each of a plurality of spaced intervals along the main at which the composition of the stream in the main is different and separately subjecting the material withdrawn at each interval to distilla-



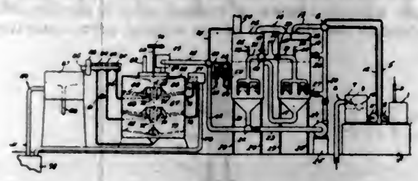
tion by contact with the hot gases in one of the stills, returning the distillation residue from the stills to the main, thereby gradually converting the tar to pitch.

1,868,471. DOOR LATCH. JAMES C. GRIFFIN, Erie, Pa., assignor to Griffin Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Jan. 2, 1929. Serial No. 329,883. 8 Claims. (Cl. 292—236.)



1. In a door latch, the combination of a latch bar; a handle plate over the latch bar; an actuating bar fulcrumed on the handle plate and having connection with and operating the latch bar, said connection compelling the latch bar to move with the actuating bar in both directions; an escutcheon adapted for attachment at the side of a door opposite the handle plate through which the actuating bar extends, said escutcheon having screw-receiving openings therein with a counter-sunk wall; and a locking finger pivotally mounted on the counter-sunk wall, said finger being adapted to be swung into and out of locking engagement with relation to the actuating bar,

1,868,472. MANUFACTURE OF SUGAR. ELMER R. RAMSEY, Denver, Colo., and ARTHUR W. BULL, Westport, Conn., assignors, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed May 8, 1926. Serial No. 107,579. 10 Claims. (Cl. 127—52.)



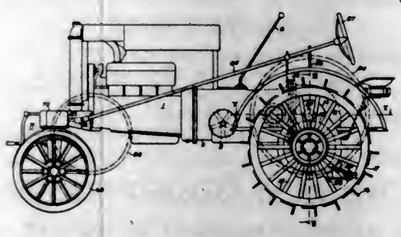
1. A method of treating juice in the manufacture of sugar which comprises continuously flowing together sugar juice and milk of lime, subjecting the body of limed juice to carbon dioxide gas, measuring the electrical resistance of a representative test portion taken from the body of limed juice undergoing carbon dioxide treatment at a point removed from the zone of chemical and dissolution reactions, and automatically controlling the amount of carbon dioxide gas passed into the body of limed juice as measured by said electrical resistance to bring the juice within predetermined limits of alkalinity.

1,868,473. GREEN BLOOM OIL. HERSCHEL G. SMITH, Port Arthur, Tex., assignor to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed July 26, 1929. Serial No. 381,398. 12 Claims. (Cl. 196—151.)

1. A green bloom lubricating oil containing residual oil formed in treating petroleum products with aluminum chlorid.

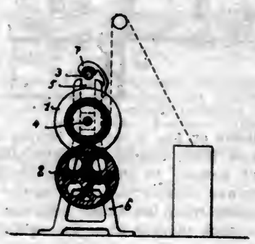
6. The process of imparting green bloom to lubricating oils which comprises producing a residual oil as a result of the treatment of petroleum hydrocarbons with aluminum chlorid, acid treating and neutralising lubricating oil, adding less than 1 per cent of said residual oil to the lubricating oil, and washing and brightening the lubricating oil.

1,868,474. TRACTOR. WALTER F. STREHLOW, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 24, 1930. Serial No. 497,854. 7 Claims. (Cl. 180—70.)



1. A tractor having in combination, a pair of traction wheels, a pair of alined drive shafts extending therebetween and disposed substantially above the axis of said traction wheels, a speed reducing driving connection between said drive shafts and said wheels, a differential gear associated with said shafts, a differential housing enclosing said differential gear, a casing associated with said differential housing and having oppositely disposed holes adapted to receive bearing means for a cross shaft parallel to said drive axles, and a power driven shaft member operatively connected to said differential gear and extending therefrom into said casing, said differential housing and said casing being designed to be used in a standard tractor having a pair of standard traction wheels coaxially connected to a pair of standard drive axles, a standard differential gear associated with said standard drive axles, and multiple speed changing means cooperating with said standard differential gear, said multiple speed changing means including a cross shaft mounted in bearings fitted to the oppositely disposed holes of said casing.

1,868,475. DYEING OR BLEACHING CARDING BANDS. BERNHARD THIES, Coesfeld, Germany. Filed Oct. 11, 1928, Serial No. 311,889, and in Germany July 15, 1926. 4 Claims. (Cl. 8—5.)



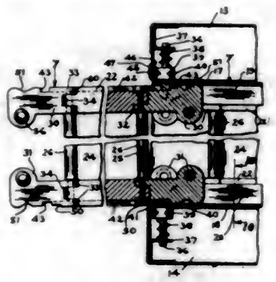
1. The process of changing the color of carding bands consisting in winding under pressure the dry carding band round a perforated warp beam, subjecting the carding band to a cold-wetting on the beam during said winding operation and then dyeing the material while on the warp beam.

1,868,476. DROP HAMMER. FRANK J. VLCHEK, Cleveland, Ohio, assignor to The Vlchek Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 30, 1929. Serial No. 351,306. 19 Claims. (Cl. 78—29.)



1. A drop hammer machine, comprising; a hammer unit, including a hammer; actuating means for elevating said hammer; a trip means operatively related to said actuating means and adjustable along the path of said hammer, adapted to be engaged by said hammer unit to operate said actuating means to permit said hammer to drop; power means operatively connected with said trip means for moving said trip means along such path and for holding said trip means in adjusted position therealong; and means under the control of the operator for actuating said power means.

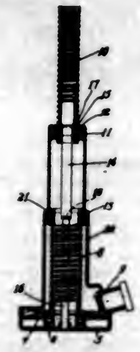
1,868,477. INDEX OR FILE. CHARLES S. CAMPBELL, New Haven, and WILLIAM H. DAY, East Haven, Conn., assignors, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 9, 1922. Serial No. 542,454. 11 Claims. (Cl. 45—2.)



11. In an index or file, a cabinet having an open end face, upper and lower frame members slidable in the cabinet, a leaf secured to the central portions of said frame members and slidable therewith in the cabinet, and means cooperating with the frame members to normally prevent detachment thereof from the cabinet.

1,868,478. LIFTING JACK. JOHN H. KOHLER, Pittsburgh, Pa., assignor, by mesne assignments, to Walker Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Apr. 25, 1928. Serial No. 272,641. 1 Claim. (254—102.)

A screw jack comprising in combination an exteriorly threaded hollow outer screw, an exteriorly threaded hollow inner screw adapted to telescope within the outer screw, a hollow connecting sleeve having a cylindrical outer portion and interiorly threaded at its upper end to engage with the inner screw and interiorly threaded at its lower end to engage the outer screw, a supporting housing in which the connecting sleeve is guided for free rotary and vertical movements, an annular bearing for supporting the outer screw from the bottom of the housing for rotary movement about a vertical axis, a driving shaft mounted in one side wall of the housing, gear connections



between the driving shaft and the lower portion of the outer screw, and means for preventing rotary movement of the inner screw comprising a rod fixed at its lower end to the bottom of the housing and extending centrally upward through the screws, a second sleeve telescopically but non-rotatably engaging over the rod and within the lower end of the inner screw, and stop members for preventing longitudinal separation of the inner screw and second sleeve, and the second sleeve and rod.

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Issue of July 26, 1932

Trade-Marks	91—No. 206,102 to No.	206,192, inclusive.
Labels	11—No. 40,962 to No.	40,972, inclusive.
Prints	14—No. 13,775 to No.	13,788, inclusive.
Reissues	9—No. 18,539 to No.	18,547, inclusive.
Designs	28—No. 67,424 to No.	67,451, inclusive.
Patents	874—No. 1,868,479 to No.	1,869,352, inclusive.
Total	1,027	

Adjudicated Patents

(C. C. A. W. Va.) Skelton patent, No. 914,678, for handle for shovels, spades, and other tools, claim 2 *Held* infringed. *Skelton* v. *Baldwin Tool Works*, 58 F.(2d) 221.

(C. C. A. W. Va.) Skelton patent, No. 1,240,503 for reinforced D-handle, claim 1 *Held* infringed. *Id.*

(C. C. A. Mo.) Wexler patent, No. 1,414,387, for dumbwaiter door, claims 1, 2, 3, 4, 7, 8, and 9 *Held* invalid. *Peele Co.* v. *Security Fire Door Co.*, 58 F.(2d) 230.

(D. C. Conn.) Dennedy patent, No. 1,520,936, for artificial refrigerating system, claims 3–5 and 7–13 Held invalid. *Central Hanover Bank & Trust Co.* v. *Setlow*, 58 F.(2d) 324.

(C. C. A. Conn.) Kath patent, No. 1 576,480, for clip-attaching machine, claim 3 *Held* valid and infringed. *Arthur Colton Co.* v. *McKesson & Robbins*, 58 F.(2d) 157.

(C. C. A. Mich.) Hutto patent, No. 1,692,661, for combined abrasive and carrier, *Held* invalid. *Hutto Engineering Co.* v. *Grinder Sales Co.*, 58 F.(2d) 233.

(C. C. A. N. Y.) Alexander patent, No. 1,701,940 for tire mirror, claims 1–4, *Held* not infringed. *McGrath Holding Corporation* v. *Ansell*, 58, F.(2d) 205.

(C. C. A. N. Y.) Alexander patent, No. 1,719,821, for rear view mirror bracket, claims 1 and 2 *Held* invalid. *Id.*

(D. C. N. Y.) Hertz patent No. 1,726,107, for electric discharge tube, *Held* not infringed. *Claude Neon Lights* v. *Rainbow Light*, 58, F.(2d) 384.

(C. C. A. Mich.) Teste and Malivert patent, No. 1,281,877, for automobile horn, claims 1–4, 6, 7, 10 *Held* invalid. *Rhamstine* v. *Sparks-Withington Co.*, 58 F.(2d) 583.

(D. C. Ill.) Chase patent, No. 1,617,148, for can opener *Held* not infringed. *Chase* v. *Reliable Mfg. Co.*, 58 F.(2d) 676.

(D. C. Ill.) Chase patent, No. 1,670,238, for can opener *Held* not infringed. *Id.*

NOTICE—CHANGES IN PATENT OFFICE FEES—EFFECTIVE JULY 31, 1932

The act of Congress approved June 30, 1932, amends section 4934, Revised Statutes (U. S. C. Title 35, Sec. 78) so as to provide that, except in design cases, the fee for filing each original application for patent and for each renewal application for patent, and the fee for issuing each original patent shall be $30.00 and $1.00 for each claim in excess of 20, instead of the present fee of $25.00 and $1.00 for each claim in excess of 20. These new fees are effective on and after July 31, 1932.

The act also provides that the fee for filing each petition to revive an abandoned application shall be $10.00. This fee is effective on and after June 30, 1932.

IN ALL APPLICATIONS IN WHICH THE FINAL FEE IS PAID PRIOR TO JULY 31, 1932, THE PATENT OFFICE RESERVES THE RIGHT TO DEFER THE ISSUANCE OF THE PATENT UNLESS, AT THE TIME THE FEE IS PAID, A SHOWING IS MADE OF THE NECESSITY OF HAVING THE PATENT ISSUE ON A SPECIFIED DATE.

Condition of Applications Under Examination at Close of Business July 9, 1932

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 77,058; Trade-Mark Division, 926. Oldest new case, Jan. 7, 1932; oldest amended, Jan. 5, 1932.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Mar. 28	Apr. 8	549
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Mar. 11	Mar. 14	1,014
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Mar. 21	Mar. 29	788
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Apr. 22	May 4	441
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Mar. 4	Mar. 7	456
4898 C	6. LEWERS, A. M., Carbon Chemistry	Jan. 7	Jan. 11	2,036
5725	7. JARBOE, C. G., Optics; Photography	Feb. 9	Feb. 9	1,537
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Feb. 10	Feb. 10	1,258
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Apr. 9	Apr. 9	869
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Feb. 3	Feb. 9	953
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Mar. 4	Mar. 4	636
7701	12. HENRY, C. C., Machine Elements	Mar. 22	Mar. 23	686
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Feb. 25	Feb. 25	1,173
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Mar. 18	Mar. 30	802
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Feb. 3	Feb. 3	2,060
5612	16. SPENCER, C. J., Telegraphy; Telephony	Mar. 9	Mar. 9	952
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Jan. 15	Jan. 15	1,385
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Mar. 9	Mar. 9	734
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Jan. 11	Jan. 13	1,684
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Mar. 18	Mar. 25	696
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Mar. 9	Mar. 9	906
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Mar. 12	Apr. 4	654
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Jan. 14	Jan. 13	937
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Mar. 10	Mar. 12	750
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Jan. 18	Jan. 23	1,497
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Jan. 11	Jan. 9	1,079
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Mar. 12	Mar. 12	1,064
4628	28. BENSON, A. R., Internal-Combustion Engines	Jan. 25	Jan. 5	1,315
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Jan. 9	Jan. 9	1,042
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Mar. 3	Mar. 16	906
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Jan. 11	Jan. 11	1,622
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Mar. 10	Mar. 14	940
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Jan. 11	Jan. 11	2,460
6625	34. SIMPSON, O. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Feb. 9	Feb. 10	917
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	May 6	May 6	511
7528	36. MORTON, O. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Jan. 14	Jan. 9	1,765
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Jan. 22	Jan. 27	1,333
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Apr. 22	Apr. 22	267
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Jan. 9	Jan. 9	1,585
7880	40. OBERLIN, J. J., Receptacles	Feb. 10	Feb. 10	2,161
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Apr. 11	Apr. 9	760
5882	42. CUTTING, H. O., Electric Signaling	Jan. 16	Jan. 21	1,379
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Feb. 23	Feb. 23	1,492
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Jan. 9	Jan. 9	1,930
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Mar. 9	Mar. 9	1,150
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Mar. 9	Mar. 10	718
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Feb. 17	Feb. 17	2,134
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Jan. 23	Jan. 23	931
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Jan. 9	Jan. 9	1,599
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Jan. 9	Jan. 9	2,226
5628	51. BACKUS, C. D., Radiant Energy	Feb. 9	Feb. 9	1,316
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Apr. 9	Apr. 12	853
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Apr. 25	Apr. 25	578
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Jan. 9	Jan. 9	1,180
6883	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	May 10	May 9	302
	Designs	June 15	June 22	231
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Jan. 19	Jan. 19	1,522
3629	57. NICOLSON, O. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Mar. 8	Mar. 8	694
5605	58. DOWELL, E. F., Abrading; Typewriting	Jan. 12	Jan. 12	1,251
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Jan. 7	Jan. 7	1,684
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Jan. 9	Jan. 9	1,520
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Jan. 13	Jan. 14	1,443
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Jan. 11	Jan. 11	1,871
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Jan. 9	Jan. 11	1,533
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Mar. 9	Mar. 9	625
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Jan. 10	Jan. 10	1,716
2099 B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND—Trade-Marks	June 3	June 16	799
	Labels and Prints	June 9	June 25	127

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE MODINE

No. 2,933. Decided April 4, 1932

PATENTABILITY—WATER COOLING SYSTEM.

Claims for a cooling device to be used in connection with internal-combustion motors *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Joseph H. Milans, Mr. Calvin T. Milans and *Messrs. Hill & Hill* for Modine.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

Appellant filed his claim in the United States Patent Office for a patent on certain claimed improvements in a radiator, such as is commonly used as a cooling device in connection with an internal-combustion motor. His device consists of an arrangement of the ordinary fluid-circulating radiator, with a series of horizontal air-conducting tubes extending through the radiator. These tubes have a centrally-located vane, comprising a thin flat strip of, preferably, sheet metal. Portions of this vane are severed or struck up from the body of the strip and bent laterally outwardly from the main body of the strip, forming alternately-projecting tongues. These tongues have the effect of directing the stream of entering air first to one side of the tube and then to the other, which effect, it is claimed in the specification, accelerates the flow of air along the walls of the tubes and thereby increases the efficiency of the radiator.

There is but one claim, which is as follows:

A water cooling system for automobiles including a radiator associated therewith for facilitating the chilling of the water of said system, said radiator comprising a liquid container having a plurality of tubular air passages therethrough, the inlet of the passages being positioned towards the front of the radiator, and a vertically extending deflector plate positioned in each of the air passages and extending longitudinally thereof to divide each passage into parallel longitudinally extending compartments, said deflector plates having a plurality of longitudinally spaced tongues struck therefrom and forming longitudinally spaced openings in the plate, alternate tongues being offset from the plate in opposite directions and extending diagonally from the plate with their outer ends terminating adjacent the walls of the passage and towards the inlet opening thereof to gather the air from the walls of the passage and direct the same through the openings in the plate alternately from one compartment of the passage to the other.

The Examiner rejected the claim upon the following references: Harrison, 1,336,136; Segelken, 1,056,375; (French) Chatelperron, 444,328.

The Board of Appeals differed with the Examiner as to the Harrison reference, but rejected the claim upon the other references cited.

The Segelken reference is a patent upon a device to be used in flue tubes in steam boilers. One form of the Segelken device is a thin strip of metal extending through the flue tube, with tongues to deflect the heated gases, in exactly the same way as appellant's device. Segelken states that his device is intended to retard the gases, so that they may more fully yield up their heat to the surrounding water in the boiler.

The Chatelperron reference shows a system of tubes for cooling automobile radiators, in which the air passing through horizontal tubes is deflected by a series of baffles in the tubes, so that it flows from one side of the tube to the other as it passes through. Chatelperron, also, alludes to his device as a retarder.

Both of these reference patents operate exactly as does appellant's device here, and hence there is nothing inventive in his conception. It is argued that appellant's idea is to accelerate the air, while the idea of the references is to retard. Whatever the respective theories of the parties may be, the devices and their operation are exactly the same. The Supreme Court, in *De Forest Radio Co.* v. *General Elec. Co.*, 283 U. S. 664, 685, 408 O. G. 283, said: "It is method and device which may be patented and not the scientific explanation of their operation." See, also, *In re Ebert*, 19 C. C. P. A., (Patents) ——, —— F. (2d) ——, decided concurrently herewith.

It has been well said that where a patent discloses means by which a novel and successful result is secured, it is immaterial whether the inventor understands or correctly states the theory or scientific principles upon which it operates. *Van Epps.* v. *United Box B. & P. Co.*, 143 Fed. 869.

We came to a similar conclusion in *In re Dickerman*, 18 C. C. P. A. (Patents) 766, 44 F. (2d) 876, 403 O. G. 513.

A suggestion is made that the Chatelperron patent, being foreign, must be strictly confined to its disclosure as a reference. We conclude, from an examination of that patent, that there is no error in treating it as a complete anticipation of appellant's device.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

SOUTHGATE *v.* GREENE

No. 2,942. Decided April 11, 1932

1. INTERFERENCE—PRIORITY—RIGHT TO MAKE THE CLAIMS.

Priority as to certain counts of the issue *Held* properly awarded to G. on the ground that the invention is disclosed in an earlier application of G. filed prior to S.'s date of invention.

2. SAME—SAME—ESTOPPEL.

Where, prior to the issuance of his patent, S. published a description of his invention and the claims of the patent were copied by G. more than two years after that publication, but less than two years after the issuance of the patent, *Held* that, if the rule as to estoppel by delay in copying claims can be applied to a printed publication, G. was not estopped because he had been continuously insisting upon claims to the invention from a date prior to the publication.

APPEAL from the Patent Office. Affirmed.

Mr. Charles H. Potter and *Mr. James F. Pierce* for Southgate.

Messrs. Pennie, Davis, Marvin & Edmonds, Mr. Merton W. Sage, and *Mr. Clarence M. Fisher* for Greene.

GRAHAM, *P. J.:*

A patent was issued to George T. Southgate, the appellant, by the United States Patent Office on June

1, 1926, No. 1,587,197, on an application filed May 7, 1924. After the issuance of the Southgate patent, the appellee, Albert E. Greene, filed his divisional application for a patent, Serial No. 121,137, on July 8, 1926, and copied 15 claims of the Southgate patent.

An interference was declared by the Patent Office between said application and said patent on two counts. The said application, Serial No. 121,137, was claimed to be a division of Greene's former application, Serial No. 254,224, filed September 16, 1918.

It is contended by Greene that said application, Serial No. 121,137, contained another invention than the one which is the subject matter of the interference, and thereafter, on January 7, 1927, Greene filed another divisional application, Serial No. 159,723, which was substituted in the interference. In this application were included the two claims which were originally in interference, and 12 others. The declaration was redeclared by the Examiner on December 1, 1928, on 14 counts, as represented by said 14 claims of the said application of Greene, Serial No. 159,723, and all of which came from the Southgate patent.

Neither party took testimony in the interference. The party Greene relied upon his application of September 16, 1918, as a complete disclosure of the subject matter of all of the counts of the interference, and placed no reliance upon his said application of July 8, 1926. As the Greene application of September 16, 1918, antedated the earliest date alleged by the appellant Southgate, it is apparent that Greene is entitled to priority, if the disclosure of his said application supports the counts of the interference.

It is unnecessary for the purposes of this decision to recite the various interlocutory motions and orders which were entered in this case in the Patent Office. It is sufficient to say that the right of Greene to make the counts of the interference has been challenged in the various tribunals of the Patent Office, but that the interference was permitted to proceed upon all counts.

The Examiner of Interferences, in an exhaustive consideration of the matter, awarded priority to Greene, although, in so doing, he expressed doubt as to some of the counts of the interference reading upon Greene's earlier disclosure. He felt, however, constrained to hold that they did so read because of the holdings of the Board of Appeals upon motions theretofore made to dissolve the interference.

Upon appeal, the Board held that the Greene disclosure of September 16, 1918, was sufficient upon which to base all of the counts of interference, except counts 11, 12, and 13. These the Board held did not read upon said disclosure; therefore, the Board awarded priority to Greene on all the counts except said counts 11, 12, and 13, and priority upon these was awarded to Southgate.

The following questions are raised by the appellant in his appeal to this court: first, that the counts of the interference, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 14 do not read upon the Greene disclosure of 1918. Second, Southgate claims Greene is estopped from making the counts of the interference because he failed to present claims to the subject matter thereof, before or within two years after the publication of an article by Southgate in Chemical and Metallurgical Engineering, which article was published on July 7, 1924, and is said to be a disclosure of the subject matter in issue here. Third, that Greene's refusal to permit access to the entire contents of his application of July 8, 1926, rendered the proffered application of September 16, 1918, inadmissible under the best evidence rule.

It is thought that counts 1, 2, 8, and 5 are fairly illustrative, which counts are as follows:

1. In heating by a combustion flame and an electric arc superposed on and extending longitudinally of the flame, the process which consists in establishing the stream of the flame and the arc from independent sources, and in directing the arc to and along the flame stream by a gaseous blast which is passed over the arcing portion of the electrode.

2. In apparatus for combined combustive and electric heating, a nozzle electrode comprising a nozzle having a bore therethrough for projecting fuel and oxidising matter into a stream of flame, and an electrode coaxial with said bore and having an arcing portion projecting beyond said nozzle.

3. In the process of heating by a combustion flame and a superposed arc originating at a source spaced from the source of a stream of flame, the step which comprises directing the arc to and along the flame stream by a blast passing over the arc source at such velocity that the arc cannot strike back to the blast-producing nozzle.

5. The process of heating mobile substances at high temperatures which comprises establishing a stream of flame and an arc from independent source, directing said arc upon and along said stream of flame by a gaseous blast, and blowing into said flame stream the mobile substances to be heated.

While the question is not entirely free from doubt as to some of the counts in issue, we are of the opinion that no reversible error can be found in the action of the Board of Appeals in finding that the counts of the interference read upon the disclosure of Greene's 1918 patent. The Greene device is shown and described in several different forms. As illustrated by Figure 1 of his drawing, his device consists of an electric-arc furnace in which air and combustible material, of combustible material alone, is forced into the furnace where the metal is melted, in connection with an electric arc, the combined heat of the arc and burning material furnishing the necessary heat for the melting of the metal in the furnace.

In the specification as well as in the drawings, notably in Figure 1 of the latter, a tuyère is shown in the lower part of the shaft of the furnace through which, as is stated repeatedly in the specification, "a blast of air is forced", and again, "powdered coal or other carbonaceous material is blown in with the air making a combustion flame which enters the shaft around the arc." Repeatedly Greene alludes in his specification to a "blast" entering the furnace around the electrode. From the end of this electrode or electrodes, as the case may be, the arc or arcs passes or pass to other electrodes in the bottom of the furnace, and with and along the stream of entering combustible material.

It is impossible to read Greene's 1918 application without coming to the conclusion that he had in mind and described exactly the same operation and process which is described by Southgate, and is included in the various counts of the interference.

It is contended by the appellant that Greene did not contemplate and did not describe the subject matter of counts 3, 4, 7, and 8, wherein the counts recite that the stream of combustible material was driven into the furnace around the electrode at velocity "such that the arc cannot strike back to the nozzle." The Board of Appeals called attention, properly, we think, to the fact that a high velocity of the entering gases around the electrode would not be necessary, and that a "blast" sufficient to carry pulverized coal or other combustible material would inherently have the effect of carrying the arc forward with the stream. This is not seriously controverted by the appellant. In fact, in his article in the Chemical and Metallurgical Journal of July 7, 1924, Southgate alludes to the velocity of gases necessary in such cases as a "mild blast action." We are not disposed to differ with the Board of Appeals in its conclusion in that respect, there being nothing apparent from the record to indicate that its conclusion was erroneous. The Examiner of Interferences called attention to the fact that because of the construction of Greene's furnace, the walls of the tuyère being nonconducting, the arc would not strike back in any event. This fact is a further inducement toward the correctness of the conclusion of the Board of Appeals.

It is argued by appellant that many of the counts call for a nozzle surrounding an electrode and that Greene's device is nothing more than a hole in the side of a furnace, through which an electrode is inserted. In support of this he cites *Speed* v. *Kirby*, 50 App. D. C. 263, 270 Fed. 699, 286 O. G. 415. The case cited is hardly authority here, inasmuch as the matters then being considered by the Court of Appeals consisted of two ports, which were simply holes in the side of a carburetor, through which the fluid ran by gravity. In this case Greene described the element through which his gases entered as a tuyère, which is described by Webster's New International Dictionary, 1932, as "A nozzle through which the air blast is delivered to a forge, blast furnace, etc."

Another contention is made by Southgate that claims 9 and 10 introduce an element which is not found in Greene, namely, a plurality of electrodes with the arcing portions thereof spaced from said nozzle and at different distances therefrom. The Board of Appeals was of opinion that the Southgate patent failed to show any such construction. On examination of the drawings accompanying the Southgate patent, we are unable to discern where any such construction is shown. In Figure 4 and in Figure 5 more than one nozzle is shown. However, whenever a multiplicity of nozzles and electrodes are shown, these are shown to converge to one point and into a common stream of flame. However, conceding that Southgate does disclose in his specification the subject matter of these counts, we are of opinion they are equally well shown by Greene in his application, both in the specification and drawings.

[1] To sum up, our conclusion is that no error was committed in finding that the counts of the interference now in the case, read upon the Greene disclosure of 1918.

[2] We also find no error in the decision of the Board of Appeals that no estoppel of Greene exists because of the publication of the article by Southgate in the Chemical and Metallurgical Journal of July 7, 1924. The Board of Appeals correctly calls attention to the fact that counts 5 and 6 contain the element of introducing or blowing into the stream of gas the mobile substances to be heated, and that a disclosure of this process is not disclosed in the aforesaid printed article.

Southgate's patent was issued June 1, 1926. Greene's first divisional application was filed July 8, 1926, and his second, upon which he entirely relies herein, on January 7, 1927. These were both within two years from the date of issuance of Southgate's patent. No intervening public use or sale of Southgate's device is shown by the record. Conceding that Southgate disclosed the subject matter of all the counts except said counts 5 and 6 in said publication, does that fact bar Greene's divisional applications as to the counts, the subject matter of which was so disclosed?

Appellee relies upon two authorities: *Westinghouse Elec. & Mfg. Co.* v. *Jeffrey-DeWitt Insulator Co.*, 22 F.(2d) 277, and *Dwight & Lloyd Sin. Co.* v. *Greenawalt*, 27 F.(2d) 823.

In the case first cited, the Circuit Court of Appeals of the Second Circuit, called attention to the fact that the Supreme Court, in *Chapman* v. *Wintroath*, 252 U. S. 126, 272 O. G. 913, had seemingly modified the rule previously obtaining about divisional applications having the full benefit of the filing date of the parent application, by applying any intervening statutory bar to such divisional applications. No question of prior publication was involved in the Westinghouse case, but the matter was decided upon proof of actual sale and public use more than two years prior to the date of the divisional application.

In the second case cited, which arose in the same circuit, the bar of public sale and use was interposed. The court, citing authorities in support thereof, said, among other things:

> It is now settled law, in spite of any doubts that may have been cast upon it by certain observations in *Chapman* v. *Wintroath*, 252 U. S. 126, 40 S. Ct. 234, 64 L. Ed. 491, that a divisional application is no more than an amendment in the parent application, at least unless "new matter" be introduced in the specification, which, whatever latitude it gives, was not the case here.

Prior to the decision in *Chapman* v. *Wintroath*, supra, it was the rule of the Patent Office, and the trend of judicial construction, to give to the divisional applicant the benefit of his original filing date, without the aplication of intervening statutory bars, insofar, at least, as no new matter was disclosed in the divisional application. After that decision, however, the courts and the Patent Office endeavored to conform to what they considered to be the effect of

that pronouncement by the Supreme Court, as is evidenced by the two cases above cited by appellee.

The Board of Appeals, in the case at bar, said, in part:

> • • • In our opinion, it would be an extension of the doctrine of *Wintroath* v. *Chapman* beyond anything yet sanctioned by the courts to apply it to the case of a mere printed publication.

In this respect, the Board followed its rule formerly announced in *Lee and Hogan* v. *Vreeland*, C. D. 1923, p. 94, 317 O. G. 233.

In *Webster Elec. Co.* v. *Splitdorf Elec. Co.*, 264 U. S. 463, 327 O. G. 219, the Supreme Court took the case on certiorari, for the express purpose of disposing of a claimed judicial misconstruction of the decision in *Chapman* v. *Wintroath*, supra, by the Circuit Court of Appeals of the Seventh Circuit in the same case, *Splitdorf Elec. Co.* v. *Webster Elec. Co.*, 283 Fed. 83, and by the District Court of the Northern District of New York, in *American Laundry M. Co.* v. *Prosperity Co.*, 294 Fed. 144.

The Supreme Court, in the case cited, called attention to the fact that *Chapman* v. *Wintroath* should not be so narrowly construed as to arbitrarily fix the period during which a divisional application might be filed at two years from the date of issuance of an interfering patent. In the course of the opinion by Mr. Justice Sutherland, the following statement is made, which may safely be taken as our guide here:

> If this were all, it might justify the conclusion that a hard and fast time limit of two years is to be applied in every case of a divisional application. But a reading of the entire opinion demonstrates that this conclusion is erroneous. The Court proceeds to say that divisional applications are not to be dealt with in a hostile spirit, but are to be "favored to the extent that where an invention clearly disclosed in an application • • • is not claimed therein but is subsequently claimed in another application, the original will be deemed a constructive reduction of the invention to practice and the later one will be given the filing date of the earlier, with all of its priority of right." Reference is made to *Wollensak* v. *Reiher*, supra, and other reissue cases, which, as we have seen, adopt the two-year time limit by analogy to the law of public use before application for patent; and, while it is not said in terms, the plain import of the citation of and reliance upon these cases is that the effect of the two years' delay, as recognized in those cases, may be overcome where it "is accounted for and excused by special circumstances, which show it to have been not unreasonable;" and, properly understood, there is nothing in the opinion to the contrary.

If we are to apply this rule to printed publications which might otherwise amount to a statutory bar, we are nevertheless convinced from this record that there are special circumstances appearing from this record which make the application of the rule here not only unnecessary, but inequitable. Greene fully discloses the subject matter of these counts in his application of September 16, 1918. He was continuously insisting upon claims to the invention, as evidenced by his amendments to his claims on November 24, 1919, and on January 13, 1921. As the result of a requirement for division on March 18, 1925, he filed his 1926 application, in which he again disclosed and claimed his invention. Through all the years since his 1918 application, his claims have been continuous and he has been active in their pursuit. We are not disposed to hold, under such circumstances, that the publication of Southgate's magazine article should cut off all his rights in the prosecution of his present application.

Finally, appellant insists that he had a right to inspect the whole of Greene's 1926 application. If this were a matter in which we might take jurisdiction, as to which we express no opinion, it would not be possible for us to do so, as appellant has assigned no error in that respect in his reasons for appeal.

Finding no error, the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE FISHER

No. 2,936. Decided April 4, 1932

PATENTABILITY—WATERPROOF MASTIC MATERIAL.

Certain claims for a waterproof mastic material *Held* properly rejected.

APPEAL from the Patent Office. Affirmed.

Mr. Albert F. Robinson for Fisher.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

Appellant's alleged invention, involved in this appeal, relates to a mastic substance for waterproofing and like purposes. It is said to be particularly adapted for roofing purposes where it is applied as a coating for saturated felt or fabric sheets. While all the claims do not specify a bituminous base, the invention seems to relate chiefly to a roofing mastic comprising a bituminous plastic body.

Claims 1 and 9 are regarded as typical and follow:

> 1. A mastic substance composed of a bituminous mass, a solvent for such mass having the quality of retarding setting of the mass and maintaining masticity thereof, and a filler of subdivided fibrous material thoroughly incorporated in the mass and lending body to the mass without destroying its masticity.
>
> 9. A waterproof mastic material comprising a mobile body, an adhesive incorporated in said body to impart adhering characteristics thereto, and a non-drying oil mixed with said adhesive to prolong the setting of said body.

The references relied on are: Johns, 76,773, April 14, 1868; Johns, 205,750, July 9, 1878; Warren, 248,072, Oct. 11, 1881.

The Examiner rejected claims 1, 2, and 7 to 12 inclusive. The Board of Appeals affirmed the Examiner's rejection of claims 1, 2, 7, 9, 10, and 11, and reversed his rejection of claims 8 and 12.

The Board rejected claims 1 and 2 for lack of disclosure in the application of a solvent of the kind called for in the claims. Claims 7, 9, 10, and 11 were rejected as defining nothing patentable over the patent to Warren. The Board concluded that there was no invention in merely adding to Warren's compound a filler such as asbestos or other substances, well known in the art, as disclosed by the Johns references. The Board held that claims 8 and 12, being limited to a jelly like substance which is a glue and glycerine combination, were disclosed in the application and allowable.

We agree with the conclusion of the Board of Appeals and the reasons assigned therefor, and its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE DAVIDSON

Nos. 2,838 and 2,839. Decided February 1, 1932

54 F.(2d) 956

PATENTABILITY—TRAFFIC SIGNALS OF THE REFLECTOR TYPE.

Claims for stationary traffic signals of the reflector type *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. White, Prost, Flehr & Lothrop, Mr. Charles M. Thomas, Mr. Francis D. Thomas, and *Mr. James P. Burns* for Davidson.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

The issues involved in these two appeals from decisions of the Board of Appeals of the United States Patent Office are so similar in their nature as that the cases were briefed and orally argued together. We, therefore, dispose of them in a single opinion.

Both applications relate to the subject matter of stationary traffic signals of the reflector type, designed to be placed at danger points on highways. In appeal No. 2,838, certain claims were allowed, but claims 16 to 21 were disallowed. In appeal No. 2,839, claims 1 to 4, inclusive, and 7 to 14, inclusive (being all the claims of the application), were disallowed.

Appellant quotes claims 16 and 19 of appeal No. 2,838 and claims 7, 11 and 12 of appeal No. 2,839 as illustrative of the claims of the respective applications.

> 16. A traffic signal adapted to reflect an acutely incident entering light beam back and substantially parallel to the entering beam and having a reflecting member formed of a plurality of facets joined together in groups of three at right angles to each other, at least one facet of each group having slight surface irregularities.
>
> 19. A traffic signal adapted to reflect an acutely incident entering light beam back and substantially parallel to the entering beam and having a reflecting member formed of a plurality of contiguous central triple reflectors, at least one surface of each of said reflectors having slight surface irregularities.
>
> 7. A signal reflector composed of a plurality of groups of surfaces, each group comprising three substantially flat reflecting surfaces fixed at right angles to each other and at least one of the surfaces of each group having slight irregularities in its reflecting surface.
>
> 11. A traffic signal adapted to reflect the light from a headlight of a vehicle and within the range of vision of a driver of said vehicle and comprising a plurality of groups of reflectors each of said reflectors having three reflecting surfaces positioned at right angles to each other and characterised by irregularities normally formed as produced, as and for the purposes set forth.
>
> 12. The method of traffic signaling to the driver of a vehicle approaching said signal at an angle acute to said signal, which consists in employing an incident beam of light from a headlight mounted on said vehicle and reflecting said incident beam as a conical reflected beam embracing a line of vision of the said driver.

The references relied on are: Ebeling (Design), 47,284, May 4, 1915; Wertz, 1,195,757, August 22, 1916; Scott, 1,287,464, December 10, 1918; Vanderbeek, 1,377,161, May 3, 1921; Grubb, (British), 21,856, of 1903; Zeiss (German), 179,474, December 11, 1906; Regener (German), 272,332, March 28, 1914.

In addition to being rejected upon the appropriate cited references, all the claims in appeal No. 2,838 were rejected also as being drawn to new matter, the Board saying:

> In our opinion no one reading the original specification would gain therefrom any idea that the molding of the reflector had any relation to the optical effect or was anything more than an obvious and cheap way of producing the reflector.
>
> Applicant appears to be attempting to avail himself of what would have been a defect in his originally disclosed device to distinguish from what he concedes is unpatentable in view of the prior art. We do not consider such a disclosure sufficient to support the claims.

In Appeal No. 2,839 claims 1, 2, 7, 8, 9, 10 and 11 were rejected both upon references and upon the ground of new matter; claims 3 and 4 upon references; and claims 12, 13 and 14 (which are method claims) upon references, and also upon the ground, as stated by the Examiner, that:

> The alleged method of claims 12, 13 and 14 is thought to cover nothing more than a use of the reflectors of the references for which they are obviously adapted without change in structure.

The application involved in appeal No. 2,838 appears to have been filed November 4, 1920, and that in appeal No. 2,839 December 13, 1921.

The latter application became involved in two interference proceedings, in both of which motions to dissolve were made and sustained by a Law Examiner, and, upon appeal, by the Board of Appeals, on the ground of unpatentability over prior art as disclosed in several of the references which are here relied upon as anticipations of the respective applications now before us.

It is the contention of appellant that the "issues of the two interferences were considerably broader than the claims now before this court on appeal"; that he seeks here "much narrower claims than those which constituted the broad issues of the interferences"; that he has endeavored to introduce limitations of his original disclosure in order to meet objections voiced by the Law Examiner in his decision in the interference cases, and that, because of the limitations, it is not proper now to reject the applications upon the same art which was then held to render the broader claims nonpatentable.

It does not appear to us that the adjudications in the interference proceedings have any legitimate bearing upon the issue to be determined in these ex parte cases.

There was no inconsistency in the holdings of the tribunals of the Patent Office there and here. There is no claim of res judicata or stare decisis. The tribunals merely held upon the issues, as there presented to them, that the count involved, whatever its breadth might have been, was anticipated. Now they hold that the same references, or some of them, also anticipate what are said to be narrower claims. Also, as to many of them, it is held that these so-called narrower or limited claims were not, in fact, justified or disclosed by the specifications, which were a part of the interference issue.

A careful examination of the record leads us to the conclusion that there was no error in the decisions appealed from. In the opinions of the two Examiners, and in those of the Board of Appeals, there is a full discussion of both grounds of rejection which it is deemed unnecessary to repeat or enlarge upon.

The decisions of the Board of Appeals in both appeals 2,838 and 2,839 are affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

PRIESS *v.* DUBILIER

No. 2,913. Decided April 11, 1932

INTERFERENCE—PRIORITY—RIGHT TO MAKE THE CLAIMS.

Record reviewed and *Held* that priority was properly awarded to D. on the ground that the invention was disclosed in his earlier application, not involved in the interference, prior to any date of invention claimed by P.

APPEAL from the Patent Office. Affirmed.

Mr. Philip Farnsworth, Messrs. Cushman, Bryant & Darby, and *Mr. Hyland R. Jones* for Priess.

Mr. Clifton V. Edwards, Mr. Frank A. Bower, and *Mr. Newman F. Presson* for Dubilier.

LENROOT, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner of Interferences, awarding priority of invention of the issue to appellee.

The counts in issue are three in number and constitute claims 1, 4 and 5 of Priess Patent No. 1,499,403, issued on July 1, 1924, on an application filed December 5, 1921. The said counts are also claims 1, 2 and 3 of the Dubilier application involved in this interference, being copied from said Priess patent, said application having been filed on September 6, 1924; said Dubilier application is a division of an original application filed May 24, 1921, upon which Patent No. 1,575,044 was issued to Dubilier on March 2, 1926.

In his preliminary statement, Priess alleged a date of conception of the invention involved in the counts as of "on or about the first day of July, 1921."

No serious contention is made by Priess here that Dubilier's application here involved is not a true division of his prior application; since Priess's date of conception set up in his preliminary statement is subsequent to the filing date of Dubilier's original application, the sole question before us is whether Dubilier can make the claims constituting the counts in issue.

These counts read as follows:

1. An electrical condenser comprising a plurality of stacks of sheets, a common metal casing for said plurality of stacks by which casing said stacks are connected in series; and a corresponding number of condenser terminals extending from the stacks through the casing and insulated therefrom.

2. In an electrical condenser, a plurality of stacks, a metal clamping member surrounding said stacks and electrically connecting them in series and terminals electrically connected to said stacks.

3. In an electrical condenser, a plurality of stacks, each comprising a number of sections connected in series, a metal clamping member surrounding said stacks and electrically connecting them in series at adjacent ends thereof and terminals electrically connected to the opposite ends of the stacks.

The invention relates to condensers consisting of what are called stacks, each stack being composed of a number of sections which are connected in series; these sections are constructed in the familiar manner, being composed of tinfoil and a dielectric such as mica. While it is not easy to present an adequate idea of the structures of the parties without the aid of drawings, the important features of them may be summarized as follows:

In the Priess structure there is a metallic casing which is divided through the center into two chambers. In each chamber there are two stacks, made up as hereinbefore indicated, the stacks in each chamber being positioned end to end, and the two stacks in one chamber being substantially parallel in position to those in the other. Between the stacks in each chamber is a central "pressure member", against which the stacks abut and to which they are electrically connected; these two pressure members are insulated from the metal casing, and into each there is threaded a terminal which is led through the outside casing, these two terminals being the means of connecting the condenser to an external circuit. The outermost ends of the four stacks, or those adjacent the walls of the metallic casing, are electrically connected to pressure plates, said plates being such that, by turning a screw, high pressure can be exerted on the stacks; these pressure plates are not insulated from the casing. The result of this construction is that, when an external circuit is connected to the terminals aforementioned, the four stacks are divided into two pairs, each pair being connected in series through the medium of the metal casing connecting them at their outer ends, and the two pairs themselves are connected in parallel. Thus there is obtained a series-parallel arrangement of the four stacks.

In the Dubilier structure, there are also four stacks, numbered 3, 4, 5 and 6, said stacks being in line in a single chamber casing of metal, The specification states that terminals, or taps, are connected between each pair of stacks, said terminals to be brought through the casing, as is the case in Priess. The outer ends of stacks 3 and 6 are connected to the casing; accordingly, when an external circuit is connected to the taps connected between stacks 3 and 4 and between 4 and 5, for example, the arrangement arrived at in the Dubilier structure is also a series-parallel circuit, stack 3 being connected through the casing in series with stacks 5 and 6, and stack 4 being in parallel with this series of three stacks.

Priess's contention is that the number of stacks which must be connected in series by the casing is the same number as are clamped by said casing; he argues that stack 4 is indispensable in Dubilier to obtain the clamping, and that, with said stack present, the structure does not respond to the counts since stack 4 is not in series with the others.

The tribunals of the Patent Office held that the counts call for a number of stacks clamped within a metal casing, which stacks are connected in series by means of the metal casing. It was held that there could not be a limitation read into the counts that *all* of the stacks within the chamber be connected in series, but that it is sufficient if a number, two or more, be so connected. The Board of Appeals held that the Dubilier original application discloses that stacks 3 and 6 are connected in series by means of the metal casing.

In accordance with the well-established rule, we have held that the counts of an interference should be given the broadest interpretation which they will reasonably support, and limitations may not be read into them for the purpose of changing the plain import of their terms. *Deibel* v. *Heise & Schumacher*, 18 C. C. P. A. (Patents) 907, 46 F.(2d) 570, 405 O. G. 845.

Appellant deliberately chose the language embodied in these counts, and it is fair to assume that, if he had intended that they should be limited as he now claims, he would have employed language that clearly accomplished such purpose.

We find no error in the finding of the Board of Appeals and other tribunals of the Patent Office that appellee had the right to make the claims constituting the counts in issue.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE NATIONAL STONE-TILE CORPORATION

No. 2,919. Decided April 4, 1932

TRADE-MARKS—INDENTATION IN THE EDGE OF A TILE.

A shallow indentation or groove in the edge of a tile *Held* not registrable as a trade-mark for tiles both because such indentation has a functional purpose and because it would not be recognized as a trade-mark.

APPEAL from the Patent Office. Affirmed.

Mr. Charles E. Townsend, Mr. Wm. A. Loftus, Mr. A. Donham Owen, and *Mr. Harry F. Riley* for National Stone-Tile Corporation.

Mr. T. A. Hostetler for the Commissioner of Patents.

LENROOT, *J.:*

This is an appeal from a decision of the Commissioner of Patents rejecting an application of appellant for the registration of a trade-mark consisting of a shallow indentation or groove formed in the edge of the webs and end walls of a hollow tile, and extending transversely thereof, the said indentation or groove occurring on one side only of the tile. No claim is made to the representation of the tile shown in the drawing.

Registration was refused upon the ground that the grooves upon the tile constituting the mark have a mechanical or useful function, and are an integral part of the tile, and also upon the further ground that the purchasing public would not look upon said grooves as constituting a trade-mark.

A patent to one Nelson, No. 1,572,305, issued February 9, 1926, was cited, which patent is found in the record and discloses a tile of the same general type as that shown by appellant, which tile includes grooves somewhat deeper than those shown by it, but in the same positions transversely of the webs and end walls of the tile.

The patentee describes the function of these grooves as follows:

* * * The groove 42 is left by the bar 17, and is a desirable feature in building blocks as it provides for horizontal ventilation when a wall is built of these blocks.

With respect to this patent the Commissioner in his decision stated:

* * * It is evident that if the appellant obtained registration of its alleged mark the patentee could not manufacture the tile disclosed in his patent without infringing this trade-mark. While the appellant claims to have adopted this form of tile long prior to the date the patentee filed his application yet if registration were granted, it is clear the appellant would in effect obtain a perpetual patent for a tile of this type, since a trade-mark registration may be renewed indefinitely.

The Commissioner further found that when tiles with such grooves are assembled in a wall, said grooves may be utilized for the passing of electric wires therethrough. Appellant vigorously denies that said grooves can serve any mechanical function, but we agree with the Commissioner that it is apparent that such grooves may serve a useful function.

Certainly makers of tile have the right to provide communication channels throughout a wall built of tile, and appellant has no right, based upon an alleged trade-mark, to exclude them from employing grooves, such as are used by appellant, for that purpose. It seems to us that by placing the grooved sides of appellant's tiles together, that is, one upon another, a useful communicating channel would clearly be secured.

Appellant argues, however, that in practice these grooves are filled with mortar, as the tiles are laid, and hence the grooves can serve no useful purpose. But even if they are so filled it would seem that the grooves would serve a useful purpose in that they, by means of the mortar filling them, would serve to bind the tiles more securely to each other.

It is well settled that the configuration of an article having utility is not the subject of trade-mark protection. *In re Dennison Manufacturing Company*, 17 C. C. P. A. (Patents) 987, 39 F.(2d) 720, 396 O. G. 350.

We also agree with the Commissioner that it is probable that the purchasing public would not look upon appellant's grooves in its tile as constituting a trade-mark; that is to say, we do not think the purchasing public would look upon tile containing such grooves as indicating origin of the tile, but would be likely to conclude that they were formed as a convenient process of manufacture, or to serve a useful function.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,063,076, O. G. Simmons, File, D. C., N. D. Ohio, E. Div., Doc. E 3127, *Heller Bros. Co.* v. *The Nolvex File Co.* Dismissed without prejudice May 19, 1932.

1,125,476, G. Claude, System of illuminating by luminescent tubes, D. C., N. D. Ohio, E. Div., Doc. E 3093, *Claude Neon Lights, Inc., et al.* v. *Cleveland Neon Co., Inc.* Dismissed without prejudice May 19, 1932.

1,135,391, C. A. Petersen, Shock absorber, D. C., N. D. Ohio, E. Div., Doc. E 3454, *Pre-Loading Prevention Devices, Inc.* v. *The Gabriel Co.* Dismissed without prejudice May 10, 1932.

1,262,860, S. B. Smith, Incubator, D. C. Minn., 4th Div., Doc. E 813, *S. B. Smith et al.* v. *H. A. Schimelpfenig.* Consent decree holding patent valid as to all claims June 4, 1932.

1,307,734, A. V. Gullborg, Lubricating means, D. C., S. D. Calif. (Los Angeles), Doc. E V–104–J, *Alemite Corp. v. H. C. Sommer (Comcel Equipment Co.)*. Claims 14 and 15 held valid and infringed June 7, 1932.

1,310,060, E. F. Collins, Electric resistance furnace, D. C., N. D. Ohio, E. Div., Doc. 3126, *General Electric Co.* v. *The Electric Furnace Co.* Dismissed without prejudice May 19, 1932.

1,332,793, L. Bloch, Combined waste and overflow, D. C., N. D. Ohio, E. Div., Doc. 4189, *The Republic Brass Co.* v. *L. Bloch et al.* Bill and counterclaim dismissed without prejudice June 10, 1932.

1,377,023, B. S. Nelson, Lubricating device, C. C. A., 2d Cir., Doc. ——, *Gat Gun Lubricating Corp. et al.* v. *Adams Grease Gun Corp.* Decree affirmed (notice June 9, 1932).

1,402,309, L. P. Mooers, Piston for internal combustion motor; 1,763,523, F. Jardine, Piston; 1,815,733, E. J. Gulick, same, D. C., N. D. Ohio, E. Div., Doc. 4106, *The Cleveland Trust Co.* v. *The Lawrence-Ohio Co.* Claims 1, 15, 22, 25 to 30, inclusive, 41, 42, and 43 of 1,815,733, claim 1 of 1,763,523, claims 3, 4, 8, and 11 of 1,402,309, held valid and infringed June 10, 1932.

1,470,524 (*a*), H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confection, filed May 21, 1932, D. C., S. D. N. Y., Doc. E 67/399, *Good Humor Corp. of America* v. *Marcel Bros. Ice Cream Co., Inc., et al.*

1,470,524 (*b*), H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confection; 1,505,592, F. W. Epperson, same, filed June 9, 1932, D. C. N. Mex. (Santa Fe), Doc. E 2499, *National Popsicle Corp. et al* v. *G. A. Ward (Ward Rainbow Sucker Co.)*.

1,505,592. (See 1,470,524 (*b*).)

1,523,678, Wheeler & Scott, Cheese treating apparatus, filed June 8, 1932, D. C., E. D. Wis. (Milwaukee), Doc. 3598, *Lakeshire Cheese Co.* v. *Shefford Cheese Co., Inc.*

1,533,858, L. A. Hazeltine, Method and means for neutralizing capacity coupling in audions, C. C. A., 2d Cir., Doc. ——, *Hazeltine Corp.* v. *Radio Corp. of America.* Decree affirmed (notice June 9, 1932).

1,540,628, Hurxthal & Hurxthal, Automatic temperature control for bread toasters, filed June 10, 1932, D. C., E. D. N. Y., Doc. E 6379, *Proctor & Schwartz Electric Co.* v. *Premier Brass & Electric Supply Co., Inc.*

1,618,953, A. Penn, Air service device; 1,632,618, E. M. Morley, Air-pressure regulator; 1,655,003, 1,664,719, J. C. Woodford, Apparatus for supplying air under pressure; Re. 18,016, same, Air service station, filed June 11, 1932, D. C., E. D. Wis. (Milwaukee), Doc. 3604, *Service Station Equipment Co. et al.* v. *G. A. Knaak (Air Specialties Co.)*.

1,632,618. (See 1,618,953.)

1,644,114, C. A. Dunham, Method of heating by steam, D. C., N. D. Ohio, E. Div., Doc. 3415, *C. A. Dunham Co.* v. *The Feldman Bros. Co. et al.* Dismissed without prejudice May 19, 1932.

1,655,003. (See 1,618,953.)

1,655,003, 1,664,719, J. C. Woodford, Apparatus for supplying air under pressure, filed June 11, 1932, D. C., E. D. Wis. (Milwaukee), Doc. 3603, *Service Station Equipment Co.* v. *Romort Mfg. Co. et al.*

1,664,719. (See 1,655,003 and 1,618,953.)

1,718,025, R. Bishinger, Hair curling appliance, D. C., N. D. Ohio, E. Div., Doc. 3608, *R. Bishinger et al v. The Herold Bros. Co.* Dismissed without prejudice May 19, 1932.

1,718,997. (See 1,470,524 (*a*) and (*b*).)

1,737,638, F. J. Carlson, Incinerator, D. C., S. D. Calif. (Los Angeles), Doc. E R–85–M, *A. E. Baird et al* v. *W. D. Dickinson (Out-A-Door Supply Co.) et al.* Patent held valid and infringed as to claim 1, May 13, 1932.

1,752,048. (See 1,618,953.) 1,763,523. (See 1,402,309.)

1,815,733. (See 1,402,309.)

1,830,572, J. P. Taylor, Blow distributing athletic protector, filed June 8, 1932, D. C., S. D. N. Y., Doc. E 68/320, *J. P. Taylor* v. *J. Golomb et al. (Everlast Sporting Goods Mfg. Co.)*.

1,836,405, H. M. Siemann, Flag holder, D. C. Colo. (Denver), Doc. 9829, *H. M. Siemann* v. *The H. H. Tammen Co.* Decree for plaintiff June 1, 1932.

1,858,316, R. E. Thompson, Safety razor, filed June 8, 1932, D. C., S. D. N. Y., Doc. E 68/321, *Gillette Safety Razor Co.* v. *Cooper Products Corp.*

1,858,714, W. L. Martin, Apparatus for therapeutic and other purposes; Re. 17,236, Re. 17,237, same, Drier, filed June 9, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4298, *The Martin Bros. Electric Co.* v. *Eugene, Ltd.*

Re. 16,518, R. A. Gorsuch, Shipping box for chicks, D. C., N. D. Ohio, E. Div., Doc. E 3731, *The Conger Mfg. Co.* v. *R. H. Vaughn et al.* Patent held valid and infringed June 8, 1932.

Re. 17,236. (See 1,858,714.) Re. 17,237. (See 1,858,714.)

Re. 17,955, F. A. Arbogast, Fish bait or lure, D. C., N. D. Ohio, E. Div., Doc. 3691, *F. A. Arbogast* v. *The Enterprise Mfg. Co.* Dismissed May 24, 1932.

Re. 18,016. (See 1,618,953.)

Des. 55,892, Scudder & Ward, Bottle, filed May 27, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4276, *Orange Crush Co.* v. *The Crystal Bottling Co.*

Des. 79,925, G. F. Gallagher, Bottle or similar article, D. C. Conn. (New Haven), Doc. 2186, *Krem-Ko Co.* v. *R. G. Miller & Sons, Inc.* Dismissed (notice June 10, 1932.)

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,744,374, W. M. Farnsworth, Manufacture of stainless iron, decided June 8, 1932, claim 1.

Pat. 1,785,163, Roy Wilkins, Well drilling equipment, decided June 6, 1932, claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, and 12.

Pat. 1,787,035, C. R. Davis, Shield for automobile radiator, decided June 29, 1932, claim 4.

Pat. 1,807,006, T. J. Osinga, Elevator door control, decided July 2, 1932, claims 2, 3, 4, and 5.

Reissue Pat. 16,870, F. H. Nakken, Means for transforming light impulses into electric current impulses, decided June 20, 1932, claim 30.

Design Pat. 78,001, Leo Alter, Design for tire, decided May 13, 1932, the claim as shown.

TRADE-MARKS

OFFICIAL GAZETTE, JULY 26, 1932

[VOL. 420. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 324,536. HERMAN C. LOCKE, doing business as Locke Nursery and Floral Co., New Braunfels, Tex. Filed Feb. 26, 1932.



The applicant disclaims the right to the use of the words "Trees, Shrubs, Plants" apart from the trade-mark as shown in the drawing.

For Seeds—Namely, Flower, Garden, Vegetable, Field, and Lawn; Bulbs and Plants.

Claims use since Nov. 1, 1931.

Ser. No. 326,234. SEABOARD SEED COMPANY, Philadelphia, Pa. Filed Apr. 18, 1932.



The words "Lawn Seed" are disclaimed except as shown.

For Grass and Field Seed.

Claims use since Feb. 1, 1931.

Ser. No. 327,269. BLACK DIAMOND COAL MINING COMPANY, Birmingham, Ala. Filed May 20, 1932. Under 10-year proviso.

WHITWELL

For Coal.

Claims use since 1884.

Ser. No. 328,078. THE SPONGE RUBBER PRODUCTS CO., Derby, Conn. Filed June 17, 1932.

Rub-a-glo

For Rubber Sponges.

Claims use since June 2, 1932.

Ser. No. 328,110. THE XYLOS RUBBER COMPANY, Akron, Ohio. Filed June 18, 1932.

XYLOS

For Reclaimed Rubber.

Claims use since Dec. 1, 1914.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 299,391. JABEZ CLIFF & CO. LTD., Walsall, England. Filed Apr. 24, 1930.



The term "Saddlery for All Nations" is disclaimed apart from the mark as shown on the drawing.

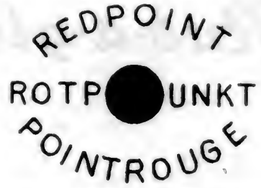
For Saddlery—Namely, Riding Saddles, Bridles, Rubber Handparts, Cavesson Nosebands, Girths, Stirrup Leathers, Martingales, Breastplates, Surcingles, Saddle Numnahs, Body Rollers or Body Bands for Horses, Ankle Boots, Head Collars, Bridle Reins, Polo Belts for Horses, Boot Top Straps for Horses, Spurs, Spur Straps, Lip Straps, Web Stirrup Holders, Stirrups, Stirrup Irons, Hunting Crops, Weight Cloths, Whips, Galloping Boots, Bits, Reins, Bridle Fronts, Bridle Butts, Hook Studs, Cheek Guards, Head Collars, Collar Shanks, Gag Bridles, Bridle Reins, Withers Pads, Mouth Rings, Bradoons, Curbs and Curb Hooks.

Claims use since Nov. 8, 1889.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 316,496. M. E. MAYER, Vienna, Austria. Filed June 30, 1931.



In the drawing the disk being in red color.

For Grindstones, Pumice-Stones; Polishing Powder for Metal, Glass, Wood, and Leather; Glass-Paper, Emery-Paper, Emery-Powder, Perfumed Soaps, and Soaps.

Claims use since Mar. 13, 1928.

Ser. No. 326,634. CLARK-DUNN MANUFACTURING COMPANY, St. Louis, Mo. Filed Apr. 30, 1932.

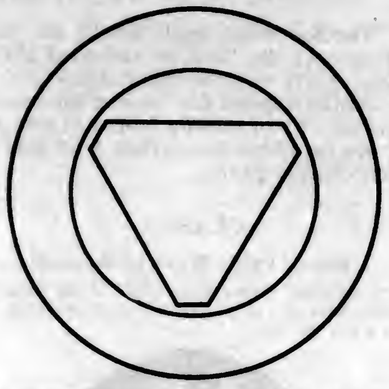


The signature appearing on the drawing is a facsimile of the signature of Will A. Clark, the president of the applicant corporation. No claim is made to the word "Product" apart from the mark as shown in the drawing.

For Shoe Dressing—Namely, Shoe Cleaner and Shoe Polish.

Claims use since Apr. 20, 1931.

Ser. No. 327,967. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y. Filed June 14, 1932.



For Corundum and Rouge for Grinding and Polishing Lenses.

Claims use since July, 1919.

Ser. No. 328,038. THE PROCTER & GAMBLE COMPANY, Cincinnati, Ohio. Filed June 16, 1932.



For Soap.

Claims use since Jan. 15, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 306,255. AMTORG TRADING CORPORATION, New York, N. Y. Filed Oct. 1, 1930.



No claim is made to the use of the word "Santoninum" and the abbreviation "U. S. S. R." apart from the mark shown on the drawing.

For Santonin.

Claims use since April, 1928.

Ser. No. 314,690. HARRY C. FOWLER, doing business as Weber Pharmacal Company, Salt Lake City, Utah. Filed May 18, 1931.



The representation of the hand applying the liquid to the cigarette is disclaimed apart from the mark as shown in the drawing.

For Liquid Chemicals to be Applied to Tobacco to Lessen Tobacco Irritation, to Assist in Correcting Tobacco Breath, and to Clarify the Passages of the Head.

Claims use since May 7, 1931.

Ser. No. 322,277. SUPERIOR LABORATORIES, INC., Cleveland, Ohio. Filed Dec. 18, 1931.



The representation of the male figure forming a feature of the mark is fanciful and the words "Price," "Quality," and "Service" are disclaimed apart from the mark as shown on the drawing.

For Analgesic Liniment, Preparations for Treatment of Colds and Catarrh, Liquid Tonic for the Blood, and Laxatives.

Claims use since Dec. 12, 1931.

Ser. No. 323,590. PHOFA ROUSSOS, doing business as Madam Roussos, Richmond Hill, N. Y. Filed Jan. 29, 1932.



No claim is made to the word "Milk" appearing on the drawing apart from the mark shown thereon.

For Facial Creams.

Claims use since Nov. 10, 1931.

Ser. No. 324,022. THE VIENNESE SCALP REMEDIES, INC., Baltimore, Md. Filed Feb. 9, 1932.



The drawing is lined for the color red.

For Preparation for the Scalp.

Claims use since Oct. 30, 1931.

Ser. No. 324,959. GABRIELEEN CO., INC., New York, N. Y. Filed Mar. 9, 1932.

GABRIELEEN

For Permanent Waving Lotion.

Claims use since Dec. 11, 1927.

Ser. No. 325,610. WORTHALL PRODUCTS COMPANY, New York, N. Y. Filed Mar. 28, 1932.

LUSTONE

For Tonic Treatment for the Hair and Scalp.

Claims use since Mar. 17, 1932.

Ser. No. 325,711. HUGH D. HART, doing business as Herba-Vita Company, Camden, N. J. Filed Apr. 1, 1932.

HERBA-VITA

For Tonic Laxative Medicine Formed from a Vegetable Blend of Herbs for the Treatment of Constipation.

Claims use since Aug. 22, 1931.

Ser. No. 326,005. UNIVERSAL CHEMICAL CORPORATION, Akron, Ohio. Filed Apr. 11, 1932.

ELDEE

For Shampoo.

Claims use since Jan. 26, 1932.

Ser. No. 326,233. S. M. LABORATORIES, INC., Seattle, Wash. Filed Apr. 18, 1932.

"SM" Rx

The lining shown in the drawing is for shading only, though the trade-mark is usually but not necessarily printed in red. The symbol "R" is disclaimed, apart from the mark as shown.

For Silver and Mercury in a Colloidal State Combined with a Soluble Protein Protective Colloid Used as a Germicide and Particularly as a Specific in the Treatment of Venereal Diseases, for a Prophylactic, for Internal Tablets Containing Hexamethylenamine Used as a Flushing Germicidal and Antiseptic Agent for Antiseptic Powder.

Claims use since Nov. 30, 1931.

Ser. No. 326,250. JEANNOT I. BERNITZ, doing business as Lu Laboratories, New York, N. Y. Filed Apr. 19, 1932.

LU

For Depilatory.

Claims use since Jan. 15, 1932.

Ser. No. 326,651. SOLUOL CORPORATION, Providence, R. I. Filed Apr. 30, 1932.

SOLUSCOUR

For Boil-Off, Scouring and Dyeing Oils for Textile Fibres and Fabrics.

Claims use since Feb. 1, 1932.

Ser. No. 326,895. ROYAL DICKINSON, Roselle, N. J. Filed May 9, 1932.

SUNICE

For Skin Ointment, Salves, Liquids and Creams, All for External Use in Protecting the Skin from Sunburn and for Softening the Skin and for Relieving Irritations Thereon; Skin Powders and Rouge.

Claims use since Mar. 18, 1931.

Ser. No. 326,999. C. EMMETT MATTHEWS, doing business as Matthews Chemical Co., Roanoke Rapids, N. C. Filed May 10, 1932.

KOLD-TONE

For Medicinal Preparation for a Treatment of Colds.

Claims use snce Nov. 21, 1930.

Ser. No. 327,012. G. C. HANFORD MFG. CO., Syracuse, N. Y. Filed May 12, 1932.

BALMUR CREAM

No exclusive use of the word "Cream" is claimed apart from the mark as shown in the drawing.

For Antiseptic Dressing.

Claims use since Feb. 1, 1932.

Ser. No. 327,156. MICHAEL JOSEPH WALSH, doing business as Kelp Laboratories, San Diego, Calif. Filed May 16, 1932.

KELTABS

For Dried Sea Plant Products for Use as a Dietary Supplement for Iodine Deficiency.

Claims use since Mar. 1, 1932.

Ser. No. 327,216. DUART MANUFACTURING CO., LTD., San Francisco, Calif. Filed May 18, 1932.



The shading on the drawing indicates the colors yellow or gold, red or pink, and blue, but no claim is made to any particular colors or color. The portrait appearing on the drawing is fanciful.

For Oils Used for Steamer Treatments, Oils for Use in Hair Waving, Hair Rinse Preparations, Finger Wave Lotions, and Shampoo Preparations.

Claims use since Oct. 1, 1928.

Ser. No. 327,243. WILLIAM BROMBERG, doing business as W. Bromberg Company, Bronx, N. Y. Filed May 19, 1932.

WILBYS

For Foot Powder Prepared for Relief of Burning, Sweating Feet and Minor Skin Irritations.

Claims use since May 16, 1932.

Ser. No. 327,258. ISRAEL PAUL, doing business as Russ Pharmaco Products, Philadelphia, Pa. Filed May 19, 1932.

Rutlac

For Medicinal Preparation Used as a Stomachic, Laxative, Stimulant, and Diuretic.

Claims use since June 15, 1915.

Ser. No. 327,276. WILLIAM S. GRAY & CO., New York, N. Y. Filed May 20, 1932.

GRAYSOL

For Chemical Products—Namely, Acetone, Methyl Alcohol, Denatured Alcohol, and Mixtures Thereof.

Claims use since Apr. 27, 1932.

Ser. No. 327,310. THE J. B. FORD COMPANY, Wyandotte, Mich. Filed May 21, 1932.

STERI-CHLOR

For Sterilizing Material.

Claims use since May 1, 1932.

Ser. No. 327,312. THE HARROWER LABORATORY, INC., Glendale, Calif. Filed May 21, 1932.

CHALOMEN

For Preparation for Use with an Endocrine Formula for the Treatment of Menorrhagia and Metrorrhagia.

Claims use since Apr. 27, 1932.

Ser. No. 327,331. AMERICAN HEALTH PRODUCTS CO., Washington, D. C. Filed May 23, 1932.

LUBRITONE

For Preparation Having Bowel Lubricating, Laxative, and Bowel Regulation Properties.

Claims use since Apr. 1, 1932.

Ser. No. 327,337. CHARLES R. BOWERS, doing business as The Ru-Win-Zo Co., Findlay, Ohio. Filed May 23, 1932.

RU-WIN-ZO

For Preparation for the Treatment and Relief of Rheumatism, Arthritis, Sciatica, Neuritis, Indigestion, Acidosis, High-Blood Pressure, Constipation, Biliousness, Diabetes, Jaundice, Headaches, Dizziness, Anemia, Catarrh, Asthma, Eczema, Acne, and Kindred Afflictions Arising from Accumulated Poisons and Improper Elimination.

Claims use since Oct. 6, 1931.

Ser. No. 327,402. MILAM, INC., Winston-Salem, N. C. Filed May 24, 1932.

MILAM

M I LAM A M

For Herb Compound Used as a Blood Tonic.

Claims use since May 7, 1932.

Ser. No. 327,415. FRANK C. REILLY, New York, N. Y. Filed May 24, 1932.

Strictly Dishonorable

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs; Skin

Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since June 6, 1931.

Ser. No. 327,425. CALIFORNIA CONCENTRATING COMPANY, San Jose, Calif. Filed May 25, 1932.

PRUDIET

For Laxative.
Claims use since Jan. 6, 1932.

Ser. No. 327,432. MCKINLEY GASSETT, Washington, D. C. Filed May 25, 1932.

RING-CIDE

For Germicide for External Use.
Claims use since Feb. 5, 1932.

Ser. No. 327,445. MECHLING BROTHERS CHEMICAL COMPANY, Camden, N. J. Filed May 25, 1932.

PYROTE

For Insecticides.
Claims use since May 11, 1932.

Ser. No. 327,448. PARKER RUST PROOF COMPANY, Detroit, Mich. Filed May 25, 1932.

PARCO

For Phosphoric Acid and Phosphate Compounds for Dissolving Rust from the Surface of Metal.
Claims use since Nov. 17, 1931.

Ser. No. 327,488. LEOPOLD VACCARO, doing business as The Visnova Company, Philadelphia, Pa. Filed May 26, 1932.

Visnova

For Pharmaceutical Preparation Used as a Tonic, Digestive, Eliminant, and Sedative.
Claims use since July, 1931.

Ser. No. 327,504. EYGLO COMPANY, INC., New York, N. Y. Filed May 27, 1932.



For Eye Wash.
Claims use since May 12, 1932.

Ser. No. 327,517. LOUVENIA L. KUNDTZ, doing business as Grozaire Laboratories, Lakewood, Ohio. Filed May 27, 1932.



For Scalp and Hair Tonic.
Claims use since Apr. 27, 1932.

Ser. No. 327,550. R. B. BURNETT, Beckley, W. Va. Filed May 28, 1932.



Pilgrimaid

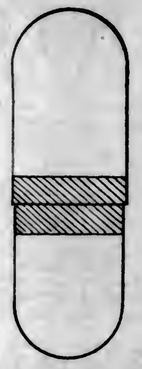
For Medicinal Preparation for the Treatment of Asthma and Lung Diseases.
Claims use since Jan. 1, 1932.

Ser. No. 327,592. MASTER LABORATORIES, INC., Omaha, Nebr. Filed May 31, 1932.

CRAZY

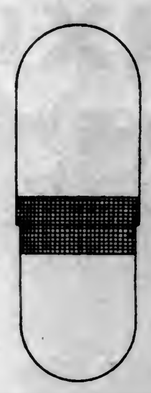
For Medicinal Preparation for the Treatment of Indigestion and for the Neutralization of Gastric Hyperacidity.
Claims use since Apr. 1, 1931.

Ser. No. 327,601. PARKE, DAVIS & CO., Detroit, Mich. Filed May 31, 1932.



The trade-mark consists in providing the capsule, which contains the medicine, with a green band. The drawing is lined to indicate the color green. The representation of the capsule is disclaimed.
For Digitalis.
Claims use since Sept. 8, 1931.

Ser. No. 327,602. PARKE, DAVIS & CO., Detroit, Mich. Filed May 31, 1932.



The trade-mark consists in providing the capsule, which contains the medicine, with a black band. The drawing is lined to indicate the color black. The representation of the capsule is disclaimed.
For Iron Citrate and Copper Nucleate.
Claims use since Sept. 28, 1931.

Ser. No. 327,613. FRANCIS C. NICHOLAS, Gambrills, Md. Filed May 27, 1932.

PETROLODYNE

For Antiseptic Medicinal Preparation for External Use.
Claims use since May 30, 1927.

Ser. No. 327,619. COFFEY-HUMBER, San Francisco, Calif. Filed May 31, 1932.

SUPRACORCIN

For Extracts of Biological Glands for the Treatment of Malignant Tissue Growths.
Claims use since Feb. 28, 1931.

Ser. No. 327,654. GLY-SER-DINE CHEMICAL COMPANY, Milwaukee, Wis. Filed June 2, 1932.

GLY-SER-DINE

For Solution Containing Iodine for External Application in the Treatment of Wounds, Bruises, Injuries, and Diseases of the Skin.
Claims use since Apr. 15, 1932.

Ser. No. 327,681. THE ESSAN-KAY COMPANY, Carlisle, Pa. Filed June 3, 1932.



For Preparation for the Relief of Contagious Abortion in Cattle.
Claims use since June, 1924.

Ser. No. 327,730. LAMBERT PHARMACAL COMPANY, Wilmington, Del. Filed June 4, 1932. Under 10-year proviso.

LAMBERT'S

For Medicinal Compound in the Nature of a Kidney Alterative and Anti-Lithic Indicated for the Elimination of Excess Uric Acid and the Treatment of Urinary Calculus, Gout, Rheumatism, Bright's Disease, Diabetes, Cystitis, Hæmaturia, Albuminuria, and Vesical Irritation.
Claims use since May 1, 1881.

Ser. No. 327,738. SYLVAIN ROSENGART, Paris, France. Filed June 4, 1932.

OPTRÆX

For Liquid Treatment for Diseases and Affections of the Eyes.
Claims use since Sept. 1, 1931.

Ser. No. 327,764. PARKE, DAVIS & CO., Detroit, Mich. Filed June 6, 1932.

ALKA-DEXTRO

For Preparation for the Treatment of Acidosis.
Claims use since May 16, 1932.

Ser. No. 327,858. TEXACO SALT PRODUCTS COMPANY, New York, N. Y. Filed June 9, 1932.

GOOD COOK'S

For Salt.
Claims use since Apr. 21, 1932.

Ser. No. 327,906. DIAMOND BRAND PRODUCTS, INC., Philadelphia, Pa. Filed June 11, 1932.

Blue Deth

For Insecticides.
Claims use since July, 1931.

Ser. No. 327,970. E. BILHUBER, INC., Jersey City, N. J. Filed June 14, 1932.

Dilaudid

For Medical Compound for the Alleviation of Pain and Cough.
Claims use since May 12, 1932.

Ser. No. 328,059. FERBO RESEARCH LABORATORIES, INC., Miami, Fla., and New York, N. Y. Filed June 17, 1932.

FALBRO

For Therapeutic Agent for the Control of Fermentation in the Human System and Adapted for Both Internal and External Use.
Claims use since June 3, 1932.

Ser. No. 328,102. WALDEMAR LARSEN & SIGURD J. HOFF, Brooklyn, N. Y. Filed June 18, 1932.

"MIRAVILLE"

For Medicinal Preparation Having Antiseptic Properties for the Treatment of Cuts, Wounds, Bruises, and Burns.
Claims use since June 7, 1932.

Ser. No. 328,134. THE WM. S. MERRELL COMPANY, Cincinnati, Ohio. Filed June 20, 1932.

KARICIN

For Medicinal Preparation Taken Internally for Treating Internal Infections and for Neutralizing Toxins Within the Body.
Claims use since Jan. 12, 1932.

CLASS 10

Fertilizers

Ser. No. 323,172. NEMICIDE COMPANY, LIMITED, Honolulu, Territory of Hawaii. Filed Jan. 19, 1932.

S & H NEMICIDE

For Fertilizers.
Claims use since Dec. 4, 1931.

Ser. No. 326,462. DIXIE MILLS COMPANY, East St. Louis, Ill. Filed Apr. 25, 1932.

DIXIE



The lining on the drawing is for purposes of shading only.
For Plant Ration.
Claims use since Mar. 3, 1932.

CLASS 11

Inks and Inking Materials

Ser. No. 318,203. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Writing Ink, Printer's Ink, and Colors.
Claims use since Sept. 24, 1930.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 327,579. CAMPBELL, WYANT & CANNON FOUNDRY COMPANY, Muskegon Heights, Mich. Filed May 31, 1932.

PROFERALL

For Iron Alloy Castings.
Claims use since Nov. 1, 1930.

CLASS 15

Oils and Greases

Ser. No. 325,694. JOHN P. PAULSON, Chicago, Ill. Filed Mar. 31, 1932.

PRE Rx SCRIBED

The drawing is lined to indicate that the prescription design is in red.
For Lubrication Oils and Greases.
Claims use since Mar. 16, 1932.

Ser. No. 325,743. BRADFORD OIL COMPANY, North Kansas City, Mo. Filed Apr. 2, 1932.

BENZOLUBE

For Quick Starting Anti-Knock Gasoline.
Claims use since July 1, 1930.

Ser. No. 327,523. PANHANDLE REFINING COMPANY, Wichita Falls, Tex. Filed May 27, 1932.

Octagne

The drawing is lined to indicate the color red. The word "Octagne" is disclaimed apart from the mark shown in the drawing.
For Gasoline.
Claims use since May 20, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 323,407. HOWE & FRENCH, INC., Boston, Mass. Filed Jan. 25, 1932.

Linol-Cote

No claim being made in this application to color as a specific feature of the trade-mark.
For Floor and Linoleum Finish in the Nature of Varnish.
Claims use since Dec. 11, 1931.

Ser. No. 324,984. CANTOR BROS., doing business as Grand Shellac Works, Brooklyn, N. Y. Filed Mar. 10, 1932.

GRAND

The drawing is lined conventionally for red and blue.
For Ready Mixed Paints.
Claims use since Feb. 1, 1928.

Ser. No. 327,394. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed May 24, 1932.

GOODYEAR

For Automobile Body Polish.
Claims use since Sept. 17, 1930.

Ser. No. 327,575. BERRY BROTHERS (INCORPORATED), Detroit, Mich. Filed May 31, 1932.

BERRYLOID TIRELAC

Applicant disclaims the word "Tirelac" apart from the mark as shown on the drawing.
For Lacquer Enamels.
Claims use since May 1, 1932.

Ser. No. 327,881. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y. Filed June 10, 1932.



For Rubber Paint.
Claims use since Mar. 23, 1932.

Ser. No. 328,003. GREAT LAKES VARNISH WORKS INC., Chicago, Ill. Filed June 15, 1932.

AAA1

For Varnish.
Claims use since Mar. 8, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 324,115. DALTON W. RIGGS, doing business as Duo-Tint Bulb & Battery Co., Chicago, Ill. Filed Feb. 12, 1932.



Applicant disclaims the words "Duo Tint" and the representation of an electric light bulb apart from the mark shown in the drawing.
For Electric Incandescent Lamp Bulbs and Batteries.
Claims use since Nov. 4, 1931.

Ser. No. 326,431. RCA VICTOR COMPANY, INC., Camden, N. J. Filed Apr. 23, 1932.



For Radio Receiving Sets, Television Receiving Sets, Kits for Radio Receiving Sets, Kits for Television Receiving Sets, Radio Transmitting Apparatus, Radio Receiving Apparatus Adapted for Combination with Electrically Operated Talking Machines, Public Address Systems, Centralized Radio and Audio Distribution Systems, and Accessories and Parts Consisting of Aerials, Battery Eliminators, Binding Posts, Choke Coils, Inductors, Capacitors, Grid Leaks, Jacks, Loudspeakers, Panels, Potentiometers, Sockets, Thermionic Detector Tubes, Amplifier Tubes, Oscillator Tubes, Rectifier Tubes, Ballast and Gaseous Glow Discharge Tubes, Photoelectric Cells, Photolytic Cells, Conduits, Baffles, Motor Generators, Inverters, Motors, Generators, Amplifier Racks, Rectifiers, Terminal Boards, Dials, Knobs, Volume Control Devices, Remote Control Devices, Tone Control Devices, Transformers, Switches, Cable, Fuses, Diaphragms for Loudspeakers, Plugs, Electric Pickups, Styli Especially Adapted for Microphones, Filter-Packs, Relay Assemblies, Rheostats, Radio Amplifying Units, Television Amplifying Units, Audio Amplifying Units, Shields, Electron Tubes, Tube Sockets, Tuning Units, and Wire.
Claims use since Mar. 13, 1931.

Ser. No. 327,495. ATLAS SUPPLY COMPANY, Newark, N. J. Filed May 27, 1932.

RIVAL

For Storage Batteries.
Claims use since May 15, 1931.

Ser. No. 327,562. A. RUSSELL NICOLAY, doing business as Nik-O-Life Battery Company, Indianapolis, Ind. Filed May 28, 1932.

NIK-O-LIFE

For Storage Batteries.
Claims use since Apr. 1, 1932.

Ser. No. 327,589. HYGRADE SYLVANIA CORPORATION, Salem, Mass. Filed May 31, 1932.

Par Value

For Electric Incandescent Lamps.
Claims use since May 2, 1932.

Ser. No. 327,614. GENERAL CABLE CORPORATION, New York, N. Y. Filed May 28, 1932.

SUPERTEX

For Insulated Electrical Wires and Cables.
Claims use since Apr. 22, 1932.

Ser. No. 327,671. AMERICAN CONTAINER CORPORATION, St. Paul, Minn. Filed June 3, 1932.

AKROLITE

For Boxes or Containers for Storage Batteries.
Claims use since May 10, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 315,706. STERN BROTHERS, New York, N. Y. Filed June 11, 1931.

Pamela

For Tennis Rackets and Balls; Golf Clubs, Balls, Tees, and Bags; Playing Cards, Bridge Card Sets, Table Board Games Played with Pieces, Card Games, Skates, Skis, Toboggans, and Hockey Sticks.
Claims use since Dec. 4, 1930.

Ser. No. 325,180. NEW YORK MERCHANDISE CO. INC., New York, N. Y. Filed Mar. 16, 1932.

BESTMAID

For Rubber Swimming Balls, Rubber Foot Balls, and Rubber Beach Balls.
Claims use since Feb. 1, 1930.

Ser. No. 326,094. GOLF BALL INC., Chicago, Ill. Filed Apr. 14, 1932.

ROYAL SCOT

For Golf Balls.
Claims use since Mar. 25, 1932.

Ser. No. 327,492. ALTON E. WHITNEY, North Kansas City, Mo. Filed May 26, 1932.

SPIN-O
TRADE MARK

No claim is made to the words "Trade Mark."
For Hand Operated Toy, Consisting of a Spinning Member and a Cord to Support the Same Having Handles at Each End.
Claims use since May 12, 1932.

Ser. No. 327,537. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed May 27, 1932.

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For Wood and Metal Golf Clubs.
Claims use since Feb. 7, 1932.

Ser. No. 327,630. GANS COMPANY, Los Angeles, Calif. Filed June 1, 1932.

GANSCO

For Coin-Controlled, Marble-Projecting Board Game.
Claims use since Jan. 15, 1932.

Ser. No. 327,818. DUNLOP RUBBER COMPANY, LIMITED, Birmingham, England. Filed June 8, 1932.

MAXPLY

The lining shown on the drawing is for the purpose of shading only.
For Tennis and Badminton Rackets.
Claims use since July, 1931.

Ser. No. 327,871. JACK GEISS, Cleveland, Ohio. Filed June 10, 1932.

CHECKERLINE

For Checker Game.
Claims use since Feb. 1, 1930.

Ser. No. 327,902. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed June 11, 1932.

Regent Junior

For Pocket Billiard Tables.
Claims use since June 1, 1932.

Ser. No. 327,936. JOHN H. DAVIS COMPANY, doing business as Sunset Line & Twine Company, San Francisco, Calif. Filed June 13, 1932.

PRIMO

For Fishing Lines.
Claims use since Feb. 18, 1932.

Ser. No. 328,121. GOLF BALL INC., Chicago, Ill. Filed June 20, 1932.

FLYING SCOT

For Golf Balls.
Claims use since June 3, 1932.

Ser. No. 328,122. GOLF BALL INC., Chicago, Ill. Filed June 20, 1932.

PRO-COUGAR

For Golf Balls.
Claims use since June 3, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 292,395. SOCIÉTÉ INTERNATIONALE DU CATALEX, Paris, France. Filed Nov. 14, 1929.

CATALEX

For Carbureters, Particularly Thermo-Chemical Carbureters, Carbureters for Explosion and Internal Combustion Engines, Catalyzing Apparatus for Effecting Catalytic Decomposition of Liquid and Gaseous Mixtures or Gaseous Hydrocarbons with Air, Steam, Etc., and Parts of Any of the Foregoing.
Claims use since Nov. 26, 1924.

Ser. No. 315,309. GARMENT ATTACHMENT CORPORATION, New York, N. Y. Filed June 2, 1931.

TRIPLEX

For Attachments for Sewing Machines and the Like for Forming Piping and the Like.
Claims use since Aug. 15, 1930.

Ser. No. 323,479. EDWARD G. CARR, Chicago, Ill. Filed Jan. 27, 1932.

SUBGRADER

Applicant disclaims all use of the word "Grader" apart from the mark "Subgrader" as shown.
For Road Machinery—Namely, Digging and Leveling Machinery for Preparing the Dirt Surface to Receive Cement and Like Materials.
Claims use since 1917.

Ser. No. 323,641. WORTHINGTON PUMP AND MACHINERY CORPORATION, New York, N. Y. Filed Jan. 30, 1932.

WORTHINGTON
GILMAN

No claim is made for the word "Gilman" apart from the mark as shown. Applicant claims ownership of the following trade-mark registrations: No. 153,081, issued Mar. 7, 1922; No. 155,130, issued May 16, 1922; No. 155,874, issued June 6, 1922; No. 156,788, issued July 11, 1922; No. 156,789, issued July 11, 1922; No. 156,790, issued July 11, 1922; No. 161,859, issued Nov. 21, 1922; No. 166,717, issued Apr. 10, 1923.
For Rock Drills, Rock Hammers, Sinkers, Drifters, Plug and Feather Drills, Foot Hole Drills, Tripod Drills, Self-Feeding Rock Drills, Channel Bar Drills, Broaching Drills, Pavement Breakers, Asphalt Cutters, Concrete Breakers, Shaft Sinkers, Block Holers, Self-Rotating Stopers, Hand-Rotated Stopers, Column and Bar Drills, Drill Bits, Moil Points, Chisels, Tampers, Air Line Manifolds, Tunnel Bars and Clamps, Columns and Arms and Clamps, Tripods, Quarry Bars, Roving Trucks, Drill Steel Heat Treating Machines, and Reaming Gauge Drill Bit Die Equipment.
Claims use since September, 1930.

Ser. No. 325,718. NATIONAL ALUMINATE CORPORATION, Chicago, Ill. Filed Apr. 1, 1932.

NALCO

For Pumps, Water-Motors, and Mechanisms for Proportioning Reagents Fed to a Water-Purifying System.
Claims use since Sept. 10, 1929.

Ser. No. 326,853. GRAHAM M. GORDON, Los Angeles, Calif. Filed May 7, 1932.

VIBER

For Machinery for Tamping, Vibrating, Placing, and Packing Wet Concrete Mixture in Molds and Forms.
Claims use since Mar. 15, 1932.

Ser. No. 327,618. THE BRISTOL AEROPLANE COMPANY LIMITED, Bristol, England. Filed May 31, 1932.

PHOENIX

For Aircraft Engines.
Claims use since May, 1931.

Ser. No. 327,691. CHARLES P. GRAY, West Chester, Pa. Filed June 3, 1932.

MECHANOCARD

For Mechanical Advertising Displays.
Claims use since May 10, 1932.

Ser. No. 327,722. THE ALLEN-SHERMAN-HOFF COMPANY, Philadelphia, Pa. Filed June 4, 1932.

HYDRO-SEAL

For Pumps and Parts Thereof, Particularly Centrifugal Pumps.
Claims use since Jan. 1, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 327,099. MAKINA CORPORATION, New York, N. Y. Filed May 14, 1932.

MAKINETTE

For Cameras, Sensitized Photographic Plates and Films, Photographic Camera Tripods, and Camera Plate-Holders.
Claims use since December, 1931.

Ser. No. 327,416. LOUIS H. SCADRON, New York, N. Y. Filed May 24, 1932.

STREAM-LINE
OPTICAL PRODUCTS

Applicant disclaims all words appearing in the drawing of the mark excepting the words "Stream-Line."
For Optical Products—Namely, Rough Lens Blanks, Bifocal Blanks, Bifocal Lenses, Ophthalmic Lenses, Eye Glass Frames and Mountings, Spectacle Frames and Mountings, Oxford Eye Glass Frames, Oxford Spectacle Frames, Spectacle Springs, Spectacle Temples or Bows, Spectacle Fronts, Spectacle Bridges, Eye Glass Bridges.
Claims use since Oct. 10, 1926.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 316,709. THE VIRGIN DIAMOND SYNDICATE, Kansas City, Mo. Filed July 7, 1931.

Cellinicraft

For Precious Stones, Finger Rings, Lockets, Bar Pins, Brooches, String Beads for Personal Wear, Bracelets, Neck and Watch Chains, Charms, Cuff Links, Scarf Pins, Necklaces; Silverware, Comprising Flat and Hollow Tableware, Toilet Ware (of Both Plated and Precious Metal); Emblems Made of or Plated with Precious Metal, Ring and Scarf Pin Mountings, and Earrings.
Claims use since May 1, 1931.

Ser. No. 327,211. ALPHA CHI SIGMA FRATERNITY, Indianapolis, Ind. Filed May 18, 1932.

ΑΧΣ

The mark consists of the Greek characters "Alpha Chi Sigma."
For Pins, Badges, and Keys, All Made or Plated with Precious Metal.
Claims use since 1903.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 318,223. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Tooth Brushes, Hair Brushes, Scrubbing Brushes, Toilet Brushes, Shoe Brushes, Clothes Brushes, Brooms and Mops, and Painters' Brushes.
Claims use since Sept. 24, 1930.

CLASS 31

Filters and Refrigerators

Ser. No. 326,383. MCKEE REFRIGERATOR COMPANY, Cobleskill, N. Y. Filed Apr. 22, 1932.

McKEE REFRIGERATORS

The drawing is lined for shading. The word "Refrigerators" is disclaimed except as in combination with the remaining part of the trade mark.
For Ice Boxes and Refrigerators.
Claims use since Jan. 12, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 327,624. BARCALO MANUFACTURING COMPANY, Buffalo, N. Y. Filed June 1, 1932.

SIX-WAY

For Pillows or Cushions for Beds, Couches, and the Like.
Claims use since Feb. 11, 1932.

CLASS 35

Belting, Hose, Machinery Packing, and Nonmetallic Tires

Ser. No. 314,961. THE PHARIS TIRE AND RUBBER COMPANY, Newark, Ohio. Filed May 23, 1931.

CUSHION CAPPED CARCASS

No claim is made to the word "Cushion" or the word "Carcass" apart from the words "Cushion Capped Carcass."
For Pneumatic Rubber Tires for Vehicles.
Claims use since May 1, 1930.

Ser. No. 324,398. RAYBESTOS-MANHATTAN, INCORPORATED, Passaic, N. J., and Bridgeport, Conn. Filed Feb. 23, 1932.

ROYAL

Applicant claims ownership of trade-mark registration #97,443 issued June 2, 1914.
For Brake Lining and Transmission Lining.
Claims use since 1914.

Ser. No. 325,952. THE LOEWENTHAL COMPANY, Akron, Ohio. Filed Apr. 9, 1932.

ELCO

For Pneumatic Rubber Tires, Rubber Inner Tubes, Portable Tube Repair Kits, Cemented Tire Fabric Patches, and Rubber Drop Center Rim Flaps.
Claims use since Sept. 1, 1930.

Ser. No. 326,494. PFEIFF BROTHERS, Brooklyn, N. Y. Filed Apr. 25, 1932.

ZEBRA-HAIRZON

For Leather Belting.
Claims use since December, 1931.

Ser. No. 327,284. PENN-JERSEY AUTO STORES, INC., Easton, Pa. Filed May 20, 1932.

Corona ALL-WAYS THE BEST

The words "All-Ways the Best" are disclaimed apart from the other features of the mark shown in the drawing.
For Portable Patching Repair Kits for Repairing Rubber Tubing (Including Auto Tire Tubes) and Automobile Tops and the Like.
Claims use since Mar. 1, 1931.

CLASS 37

Paper and Stationery

Ser. No. 326,904. WILLIAM J. V. MORRISSEY, doing business as The Vizabid Co., San Francisco, Calif. Filed May 9, 1932.

VIZABID

For Bridge Table Cover Made of Parchment Paper.
Claims use since Feb. 25, 1932.

Ser. No. 327,441. KRESGE DEPARTMENT STORE CORP., Newark, N. J. Filed May 25, 1932.

K·D·S·

For Account and Blank Books, Toilet Paper, Paper Napkins, Paper Towels, Writing Paper, Lead Pencils, Fountain Pens, Pencil Sharpeners of the Small Hand Type, Rubber Bands, Ink Stands, Wax and Tissue Paper Sheets, Crayons, Chalk, Diaries, Desk Calendars, Blotters, and Paper Fasteners.
Claims use since Feb. 1, 1927.

Ser. No. 327,838. THE SPENCERIAN PEN COMPANY, New York, N. Y. Filed June 8, 1932.

SPENCERIAN

For Writing Pens of All Kinds, Penholders, Paper Clips, and Fountain Pens and Parts Thereof.
Claims use since 1860 on writing pens of all kinds, penholders, paper clips; June 6, 1932, on fountain pens and parts thereof.

Ser. No. 327,860. GEORGE A. WHITING PAPER COMPANY, Menasha, Wis. Filed June 9, 1932.

Budget Bond

No claim is made to the word "Bond" apart from the mark as shown.
For Bond Paper.
Claims use since Jan. 22, 1926.

Ser. No. 327,880. MONTROSS & CLARKE COMPANY, INC., New York, N. Y. Filed June 10, 1932.

English & Co. Linen

No claim is made to exclusive use of the words "English Linen" apart from the mark shown on the drawing.
For Sheet Paper for Printing and Writing.
Claims use since May 15, 1932.

CLASS 38

Prints and Publications

Ser. No. 327,867. THE CLAYTON MAGAZINES, INC., New York, N. Y. Filed June 10, 1932.

COMPLETE *Mystery* NOVELETTES

For Periodical.
Claims use since December, 1931.

CLASS 39

Clothing

Ser. No. 300,765. TROJAN HOSIERY MILLS, INC., Indianapolis, Ind. Filed May 17, 1930.



The drawing is lined for the colors orange and black. The words "Dul" and "Chiffon" are claimed only in association with the other features of the trade-mark.
For Hosiery.
Claims use since May 3, 1930.

Ser. No. 314,413. LEVEL HAT CO., INC., South Norwalk, Conn. Filed May 11, 1931.



The words "Style Creators," "Hat," and "New York" are claimed only in association with the other features of the mark.
For Men's Hats.
Claims use since Dec. 20, 1927.

Ser. No. 325,728. SHOREWOOD MILLS, Milwaukee, Wis. Filed Apr. 1, 1932.

Shorewood ATHLETE

For Athletic Union Suits, Athletic Shirts, and Athletic Shorts of Knitted Fabric.
Claims use since Aug. 15, 1931.

Ser. No. 327,878. ROGER KENT, INC., New York, N. Y. Filed June 10, 1932.

Roger Kent RK "The Well Dressed Man"

For Men's Suits, Coats, and Overcoats.
Claims use since Apr. 4, 1930.

Ser. No. 328,062. GREENSBORO FULL FASHIONED HOSIERY MILLS, Greensboro, N. C. Filed June 17, 1932.



WOODMERE

For Ladies' Hosiery.
Claims use since May 10, 1932.

Ser. No. 328,094. IRVING FRIEDRICKS, doing business as Irving Friedricks Co., New York, N. Y. Filed June 18, 1932.

IRVANA

For Ladies' Sport Coats.
Claims use since Jan. 2, 1932.

Ser. No. 328,169. HASPEL BROTHERS, INC., New Orleans, La. Filed June 21, 1932.

LUZIANNE

For Men's and Boys' Summer Suits.
Claims use since May 25, 1932.

CLASS 43

Thread and Yarn

Ser. No. 326,659. I. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal-Oberbarman and Wuppertal-Elberfeld, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filed May 2, 1932.

CUPRAMOSE

For Thread and Yarn.
Claims use since July 7, 1924.

Ser. No. 326,663. I. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen and Wuppertal-Elberfeld, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filed May 2, 1932.

Menuett

For Thread and Yarn.
Claims use since June 26, 1929.

Ser. No. 326,664. I. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen and Wuppertal-Elberfeld, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filed May 2, 1932.

Bembergette

For Thread and Yarn.
Claims use since Dec. 13, 1929.

Ser. No. 327,949. SELLERS MANUFACTURING CO., Saxapahaw, N. C. Filed June 13, 1932.

Sheenko

For Cotton Yarns.
Claims use since May 10, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 322,687. THE DE LONG HOOK AND EYE COMPANY, Philadelphia, Pa. Filed Jan. 4, 1932.



Applicant disclaims the words "Product", "One Dozen", and "Regular Size" apart from the mark shown on the drawing—also makes no claim herein to the representation of a carton per se. The lining on the drawing is intended to denote the color green.
For Sanitary Napkins.
Claims use since October, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 305,434. FLORASYNTH LABORATORIES, INC., New York, N. Y. Filed Sept. 8, 1930.

F. Ritter & Co.



Ritter Supreme

For Nonalcoholic, Maltless Concentrates Used in the Preparation of Soft Drinks.
Claims use since May 17, 1930.

Ser. No. 318,214. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Mineral Waters, Non-Alcoholic, Maltless Beverages, Sold as Soft Drinks and Concentrates for Making the Same.
Claims use since Sept. 24, 1930.

Ser. No. 320,562. ALBERT L. WIDDIS, Long Beach, Calif. Filed Oct. 28, 1931.

MELL

For Non-Alcoholic, Maltless Fruit Beverages Sold as a Soft Drink.
Claims use since Oct. 22, 1931.

Ser. No. 326,695. THE VER-VAC PRODUCTS CO., INC., Baltimore, Md. Filed May 2, 1932.

SWIG

For Nonalcoholic, Maltless Beverages and Syrups for Making Same.
Claims use since Mar. 1, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 320,369. MYRO PATERMANN, doing business as Firma Gebr. Patermann, Teltow, near Berlin, Germany. Filed Oct. 23, 1931.

Mex

For Fruit Juices for Food Purposes, Cocoa and Chocolate and Malt Extracts for Food Purposes.
Claims use since Aug. 13, 1931.

Ser. No. 322,920. KELLOGG COMPANY, Battle Creek, Mich. Filed Jan. 11, 1932.



The trade-mark consists of two parallel lines colored red extending about the upper portion of the container for the goods.
For Cereal Breakfast Foods.
Claims use since Aug. 25, 1931.

Ser. No. 323,119. BIG CHIEF CANDY CO., INC., Wilkes-Barre, Pa. Filed Jan. 18, 1932.

WIN-OLA

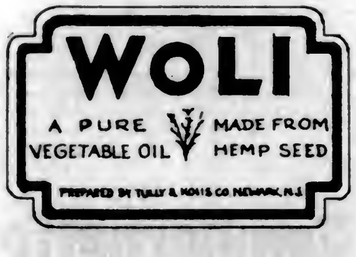
For Salted Peanuts and Candy Containing Chocolate, Cocoanut, and Peanuts, in Various Combinations.
Claims use since June 10, 1931.

Ser. No. 325,158. WASHINGTON CO-OPERATIVE EGG & POULTRY ASSOCIATION, Seattle, Wash. Filed Mar. 15, 1932.

Ovolo

For Egg Syrup for Cooking and Confectionery Purposes.
Claims use since Feb. 13, 1932.

Ser. No. 325,812. TULLY & KOLIS CO., Newark, N. J. Filed Apr. 2, 1932.



No claim is made to any of the wording, except "Woli" and the applicant's name, apart from the mark as shown in the drawing.
For Vegetable Oil Made from Hemp-Seed for Frying Purposes.
Claims use since Mar. 1, 1932.

Ser. No. 326,042. THE KINNEY & LEVAN COMPANY, Cleveland, Ohio. Filed Apr. 12, 1932.

KAYNELL

For Tinned, Bottled, or Packaged Foodstuffs—Namely, Preserved Fruits, Brandied Fruits, Fruits Packed in Wine, Tomato Juice, Catsup, Chili Sauce, Canned Shrimp, Mayonnaise and Salad Dressing, Pickles, Olives, Jellies, Peanut Butter, Dessert Sauce, Coffee and Popcorn in Its Natural State.
Claims use since Oct. 1, 1931.

Ser. No. 326,365. B. W. DOYLE, doing business as Doyle Packing Co., Los Angeles, Calif. Filed Apr. 22, 1932.



For Dog Food.
Claims use since Apr. 9, 1932.

Ser. No. 327,547. FRANK A. BARSANTI, Tulsa, Okla. Filed May 28, 1932.



All reading matter shown on the drawing except the notation "10-der" is disclaimed apart from the other features of the mark appearing in said drawing. Applicant also disclaims the pictorial representation of the goods.
For Dressed Baby Broiling Chickens.
Claims use since Jan. 1, 1931.

Ser. No. 327,641. THE UNITED STORES COMPANY, Abilene, Kans. Filed June 1, 1932.



The descriptive word "Cream" is disclaimed apart from the other features of the mark shown in the drawing.
For Butter.
Claims use since May 5, 1932.

Ser. No. 327,788. CHEZ FRANCOIS, INC., Miami, Fla. Filed June 7, 1932.



The right to the exclusive use of the words "Florida's Fruit in One Luscious Bar", "Miami-Florida", and "5¢" are disclaimed apart from the mark as shown in the drawing. No claim is made to the lining which indicates green color on the drawing.
For Confections—Namely, Candies and Crystallized Fruits.
Claims use since May 10, 1932.

Ser. No. 327,854. SANITARY GROCERY COMPANY, INCORPORATED, Washington, D. C. Filed June 9, 1932.

AFTERNOON

For Tea.
Claims use since 1914.

Ser. No. 328,036. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn. Filed June 16, 1932.

SNO SHEEN

For Cake Flour and Wheat Flour.
Claims use since Nov. 1, 1931.

Ser. No. 328,115. F. V. BIRBECK, Watsonville, Calif. Filed June 20, 1932.

WATAMAN

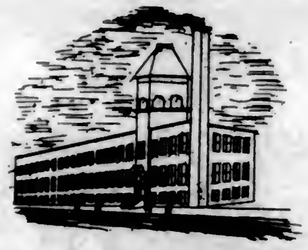
For Fresh Vegetables.
Claims use since May 19, 1932.

CLASS 48

Malt Beverages and Liquors

Ser. No. 324,900. "MUNICH BRANDS", Maspeth, N. Y. Filed Mar. 8, 1932.

"MUNICH"



No claim is made to the word "Munich" apart from the mark shown on the drawing.

For Malt Beverages Containing Less Than ½ of 1% Alcohol by Volume and Syrups for Making the Same. Claims use since Jan. 12, 1927.

Ser. No. 326,333. MONTGOMERIE & CO., LTD., Glasgow, Scotland. Filed Apr. 21, 1932.

"BERMALINE"

For Malt Beverages Containing Less Than ½ of 1% Alcohol by Volume and Extracts for Making the Same. Claims use since Aug. 24, 1894.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 327,826. LEM MOTLOW, doing business as Jack Daniel, Lynchburg, Tenn. Filed June 8, 1932. Under 10-year proviso.

JACK DANIEL

For Whiskey. Claims use since 1875.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 327,636. PARAMAT LIMITED, London, England. Filed June 1, 1932.

PARAMAT

For Paper Flongs for Making Printing Plates. Claims use since May 30, 1929.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JULY 26, 1932

296,102. CHESTS, CABINETS, AND ROLLS FOR SILVERWARE. ONEIDA COMMUNITY LIMITED, Oneida, N. Y.
Filed March 22, 1932. Serial No. 325,373. PUBLISHED MAY 10, 1932. Class 2.

296,103. LOCKS. CLOSURE LOCK CORPORATION, Chicago, Ill.
Filed March 16, 1932. Serial No. 325,161. PUBLISHED MAY 3, 1932. Class 25.

296,104. DRY PASTE FOR ADHESIVE PURPOSES. COOK PAINT AND VARNISH COMPANY, North Kansas City, Mo.
Filed March 12, 1932. Serial No. 325,062. PUBLISHED MAY 3, 1932. Class 5.

296,105. POULTRY AND STOCK FEEDING FOOD. WESTERN MARYLAND DAIRY CORPORATION, doing business as Fairfield Western Maryland Dairy, Baltimore, Md.
Filed March 11, 1932. Serial No. 325,053. PUBLISHED MAY 10, 1932. Class 46.

296,106. HOSIERY. NATIONAL DEPARTMENT STORES, INC., New York, N. Y.
Filed March 12, 1932. Serial No. 325,072. PUBLISHED MAY 3, 1932. Class 39.

296,107. [WITHDRAWN.]

296,108. LADIES' HOUSE DRESSES AND SILK UNDERWEAR. LAWNDALE GARMENT COMPANY, Chicago, Ill.
Filed March 15, 1932. Serial No. 325,147. PUBLISHED MAY 10, 1932. Class 39.

296,109. CORSETS, BRASSIÈRES, AND UNDERWEAR FOR WOMEN. F. P. HOY, INC., New York, N. Y.
Filed March 16, 1932. Serial No. 325,171. PUBLISHED MAY 3, 1932. Class 39.

296,110. COAL. THE CONSOLIDATION COAL COMPANY, New York, N. Y.
Filed March 19, 1932. Serial No. 325,283. PUBLISHED MAY 3, 1932. Class 1.

296,111. FLOUR MADE FROM WHEAT. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn.
Filed March 19, 1932. Serial No. 325,298. PUBLISHED MAY 10, 1932. Class 46.

296,112. HOSIERY. POHATCONG HOSIERY MILLS, INC., Washington, N. J.
Filed March 19, 1932. Serial No. 325,299. PUBLISHED MAY 10, 1932. Class 39.

296,113. WOMEN'S AND MISSES' WASH FROCKS. LORCH MANUFACTURING COMPANY, Dallas, Tex.
Filed March 21, 1932. Serial No. 325,335. PUBLISHED MAY 3, 1932. Class 39.

296,114. FLOUR MADE FROM WHEAT. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn.
Filed March 21, 1932. Serial No. 325,359. PUBLISHED MAY 3, 1932. Class 46.

296,115. FLOUR MADE FROM WHEAT. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn.
Filed March 21, 1932. Serial No. 325,343. PUBLISHED MAY 3, 1932. Class 46.

296,116. LIVE FOXES. GOLD STAR FUR RANCH, INC., Owatonna, Minn.
Filed March 25, 1932. Serial No. 325,468. PUBLISHED MAY 10, 1932. Class 1.

296,117. GELATINIZED WHEAT FLOUR USED AS AN ADHESIVE. CHAS. A. KRAUSE MILLING CO., Milwaukee, Wis.
Filed March 30, 1932. Serial No. 325,660. PUBLISHED MAY 10, 1932. Class 5.

296,118. OVERCOATS, TOPCOATS, CLOAKS AND CAPES, ETC. CONTINENTAL MILLS, INC., Philadelphia, Pa.
Filed March 31, 1932. Serial No. 325,682. PUBLISHED MAY 10, 1932. Class 39.

296,119. COAL. FRENCH COAL COMPANY, Bluefield, W. Va.
Filed March 31, 1932. Serial No. 325,684. PUBLISHED MAY 10, 1932. Class 1.

296,120. WOMEN'S AND MISSES' WASH FROCKS. LORCH MANUFACTURING COMPANY, Dallas, Tex.
Filed March 21, 1932. Serial No. 325,336. PUBLISHED MAY 3, 1932. Class 39.

296,121. BEACH AND SPORT PANTS (LACED AND CORSETTED WAISTBAND) FOR MEN, WOMEN, BOYS, AND GIRLS. NEUSTADTER BROS., San Francisco, Calif.
Filed March 21, 1932. Serial No. 325,341. PUBLISHED MAY 3, 1932. Class 39.

296,122. MEN'S SUITS AND OVERCOATS. LEON H. WOOLSEY, doing business as Leon Woolsey, Oakland, Calif.
Filed December 29, 1931. Serial No. 322,530. PUBLISHED MAY 10, 1932. Class 39.

296,123. HOSIERY. HANES HOSIERY MILLS CO., Winston-Salem, N. C.
Filed March 23, 1932. Serial No. 325,401. PUBLISHED MAY 3, 1932. Class 39.

296,124. WHEAT FLOUR. OKLAHOMA CITY MILL & ELEVATOR COMPANY, Oklahoma City, Okla.
Filed September 17, 1931. Serial No. 319,150. PUBLISHED MAY 10, 1932. Class 46.

296,125. WOMEN'S AND MISSES' DRESSES, COATS, SUITS, OVERCOATS, JACKETS, AND CLOAKS. GOLDRING NEIMAN CORPORATION, New York, N. Y.
Filed November 3, 1931. Serial No. 320,806. PUBLISHED MARCH 15, 1932. Class 39.

296,126. LADIES' HOSIERY. ROLLINS HOSIERY MILLS, INC., Des Moines, Iowa.
Filed December 17, 1931. Serial No. 322,232. PUBLISHED MAY 3, 1932. Class 39.

296,127. CERTAIN NAMED WEARING APPAREL. VANITY FAIR SILK MILLS, Reading, Pa.
Filed January 9, 1932. Serial No. 322,868. PUBLISHED MAY 3, 1932. Class 39.

296,128. COLLAR STIFFENING AND RETAINING DEVICES, SUCH AS SUPPORTS FOR SOFT COLLARS MADE OF FLEXIBLE MATERIALS, AND FOR COLLAR AND NECKTIE HOLDERS OR STAYS. W. O. DAILEY MANUFACTURING CO., Portland, Oreg.
Filed January 16, 1932. Serial No. 323,111. PUBLISHED MAY 10, 1932. Class 40.

296,129. MEN'S AND BOYS' DRESS, NEGLIGEE, AND WORK SHIRTS; WINDBREAKERS, BLOUSES, UNDERWEAR, PAJAMAS, NIGHT SHIRTS, WAISTS; SLIPOVERS MADE OF COTTON, LINEN, WOOL, WORSTED, FLANNEL, SILK, RAYON, OR COMBINATION OF THESE TEXTILES. H. D. BOB COMPANY, INC., New York, N. Y.
Filed January 29, 1932. Serial No. 323,563. PUBLISHED APRIL 12, 1932. Class 39.

296,130. DRESSES AND FROCKS FOR WOMEN, MISSES, AND CHILDREN. HARTMAN, HURVITZ & SCHAKNE, INC., New York, N. Y.
Filed February 8, 1932. Serial No. 323,940. PUBLISHED MAY 10, 1932. Class 39.

296,131. SETS OF ONION BULBS FOR PLANTING. LEONARD SEED CO., Chicago, Ill.
Filed February 13, 1932. Serial No. 324,144. PUBLISHED MAY 3, 1932. Class 1.

296,132. COAL. TRUAX-TRAER COAL COMPANY, Chicago, Ill.
Filed February 15, 1932. Serial No. 324,200. PUBLISHED MAY 10, 1932. Class 1.

296,133. CORSETS, CORSET BELTS; ABDOMINAL BELTS IN THE NATURE OF CORSET BELTS, BUST SUPPORTERS, AND BRASSIÈRES. LES CORSETS SIRENE PARIS, SOCIETE ANONYME, Paris, France.
Filed February 25, 1932. Serial No. 324,474. PUBLISHED MAY 3, 1932. Class 39.

296,134. CEMENTING MEDIUM IN SHEET FORM, PARTICULARLY SHEETS CARRYING ADHESIVE FOR MAKING COMPOUND LUMBER OR VENEERED WORK. TH. GOLDSCHMIDT A. G., Essen-on-the-Ruhr, Germany.
Filed March 1, 1932. Serial No. 324,665. PUBLISHED MAY 10, 1932. Class 5.

296,135. COTTON, RAYON, LINEN, AND SILK PIECE GOODS, COTTON SHEETS, AND PILLOW CASES. INDEPENDENT WHOLESALE DRY GOODS ASS'N. INC., New York, N. Y.
Filed December 11, 1931. Serial No. 322,017. PUBLISHED MAY 10, 1932. Class 42.

296,136. ALUMINUM COOKING UTENSILS. UTILITY PRODUCTS, INC., Rockford, Ill.
Filed January 15, 1932. Serial No. 323,073. PUBLISHED MAY 3, 1932. Class 13.

296,137. STOVES, HEATERS, BURNERS, ETC. STERNO CORPORATION, New York, N. Y.
Filed February 26, 1932. Serial No. 324,541. PUBLISHED MAY 10, 1932. Class 34.

296,138. WOMEN'S, MISSES', AND CHILDREN'S WEARING APPAREL—NAMELY, SUITS, COATS, DRESSES, SKIRTS, BLOUSES, AND JACKETS. GOLDFIELD & NEWMAN, New York, N. Y.
Filed March 4, 1932. Serial No. 324,787. PUBLISHED MAY 10, 1932. Class 39.

296,139. WOMEN'S AND MISSES' DRESSES, SMOCKS, AND HOOVER APRONS; AND WOMEN'S, MISSES, AND CHILDREN'S PYJAMAS. W. KOTKES & SON, New York, N. Y.
Filed March 8, 1932. Serial No. 324,891. PUBLISHED MAY 3, 1932. Class 39.

296,140. APPAREL FOR INFANTS AND CHILDREN. SAUTER BROTHERS, New York, N. Y.
Filed March 8, 1932. Serial No. 324,905. PUBLISHED MAY 10, 1932. Class 39.

296,141. ENAMELED DRAINBOARDS FOR KITCHEN AND RESTAURANT SINKS. THE YOUNGSTOWN PRESSED STEEL COMPANY, Warren, Ohio.
Filed February 6, 1932. Serial No. 323,925. PUBLISHED MAY 10, 1932. Class 13.

296,142. FANS AND BLOWERS, NOZZLES, ETC. J. H. MCCORMICK & Co., Williamsport, Pa.
Filed March 2, 1932. Serial No. 324,718. PUBLISHED MAY 3, 1932. Class 34.

296,143. DOMESTIC OIL RANGE BURNERS. PETROLEUM ENGINEERING CORPORATION, Springfield, Mass.
Filed March 7, 1932. Serial No. 324,851. PUBLISHED MAY 3, 1932. Class 34.

296,144. ABSORBENT PIECE GOODS IN THE NATURE OF GAUZE FOR CLEANING, POLISHING, AND GENERAL USE. CHICOPEE MANUFACTURING CORPORATION, New Brunswick, N. J.
Filed March 10, 1932. Serial No. 324,988. PUBLISHED MAY 10, 1932. Class 42.

296,145. FABRIC BAGS. GEORGE E. MULLIGAN, Albany, N. Y.
Filed March 7, 1932. Serial No. 324,850. PUBLISHED MAY 3, 1932. Class 2.

296,146. WOMEN'S HOSIERY. ARTCRAFT SILK HOSIERY MILLS, INC., Philadelphia, Pa.
Filed March 10, 1932. Serial No. 324,980. PUBLISHED MAY 3, 1932. Class 39.

296,147. LADIES' HOSIERY. GRIFFIN HOSIERY MILLS, Griffin, Ga.
Filed February 29, 1932. Serial No. 324,918. PUBLISHED MAY 3, 1932. Class 39.

296,148. FIFTH WHEELS AND TRAILER VEHICLES. MARTIN ROCKING FIFTH WHEEL AND TRAILER COMPANY, Westfield, Mass.
Filed December 12, 1931. Serial No. 322,054. PUBLISHED MAY 10, 1932. Class 19.

296,149. FRANKFURTER SANDWICHES, WEINERWURST SANDWICHES, HAMBURGER SANDWICHES, AND SAUSAGE SANDWICHES. REX LA PAYNE and C. F. BLAKE, Glendale, Calif., said La Payne assignor to said Blake.
Filed March 2, 1932. Serial No. 324,713. PUBLISHED MAY 10, 1932. Class 46.

296,150. POULTRY FEED CONSISTING OF A COMPOUND MIXTURE. FREDERICK P. GOODWIN, doing business as Sun Mix Corporation, Strawn, Ill.
Filed March 22, 1929. Serial No. 281,144. PUBLISHED MAY 10, 1932. Class 46.

296,151. CHILDREN'S DRESSES, COATS, AND SWEATER SUITS. L. BAMBERGER & Co., Newark, N. J.
Filed January 15, 1931. Serial No. 309,956. PUBLISHED MAY 10, 1932. Class 39.

296,152. SMOKING AND/OR CHEWING TOBACCO. THE GOVERNOR AND COMPANY OF ADVENTURERS OF ENGLAND TRADING INTO HUDSON'S BAY, doing business as Hudson's Bay Company, Winnipeg, Manitoba, Canada.
Filed January 15, 1931. Serial No. 309,973. PUBLISHED MAY 10, 1932. Class 17.

296,153. TRAYS OF FIBROUS COMPOSITION. ALBERT PICK-BARTH COMPANY, INC., New York, N. Y., and Chicago, Ill.
Filed January 30, 1931. Serial No. 310,575. PUBLISHED MAY 3, 1932. Class 2.

296,154. GAS PRESSURE REGULATORS. D & S GASAVER CO., Pittsburgh, Pa.
Filed February 24, 1931. Serial No. 311,374. PUBLISHED MAY 3, 1932. Class 13.

296,155. AUTOMATICALLY CONTROLLED LIQUID OR GASEOUS FUEL BURNING DEVICES. HART OIL BURNER CORPORATION, Peoria, Ill.
Filed March 23, 1931. Serial No. 312,429. PUBLISHED MAY 10, 1932. Class 34.

296,156. HAIR PINS OF THE "BOBBY" PIN TYPE. SCOLDING LOCKS CORPORATION, Appleton, Wis.
Filed April 2, 1931. Serial No. 312,864. PUBLISHED MAY 3, 1932. Class 40.

296,157. AEROPLANE SUPPLIES AND EQUIPMENT. AERO SUPPLY MANUFACTURING CO., INC., College Point, N. Y.
Filed May 4, 1931. Serial No. 314,135. PUBLISHED MAY 3, 1932. Class 13.

296,158. SHIRTS, BLOUSES, AND PAJAMAS. HENRY GLASS & Co., New York, N. Y.
Filed June 4, 1931. Serial No. 315,399. PUBLISHED MAY 3, 1932. Class 39.

296,159. PREPARED FLOURS FOR PIE CRUST AND BISCUITS. MILLIE B. PELHAM, Clinton, Iowa.
Filed June 6, 1931. Serial No. 315,498. PUBLISHED OCTOBER 20, 1931. Class 46.

296,160. AUTOMATIC CONSTANT DEMAND GAS-FIRED WATER HEATERS. SURFACE COMBUSTION CORPORATION, Toledo, Ohio.
Filed February 27, 1932. Serial No. 324,573. PUBLISHED MAY 10, 1932. Class 34.

296,161. METAL FENCE POSTS. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J.
Filed March 26, 1932. Serial No. 325,506. PUBLISHED MAY 10, 1932. Class 13.

296,162. PIPE COUPLINGS. VICTAULIC COMPANY OF AMERICA, Jersey City, N. J.
Filed March 24, 1932. Serial No. 325,445. PUBLISHED MAY 3, 1932. Class 13.

296,163. HOSE NOZZLES, PIPE NIPPLES, HOSE SUCTION STRAINERS, SIAMESE HOSE PARTS, METAL WASHERS, PIPE AND HOSE COUPLINGS AND EXTENSIONS, PLUMBING AND STEAM FITTING VALVES OF ALL DESIGNS AND SHAPES, AND SPRAYERS—NAMELY, SPRAYER NOZZLES, SHOWERS, FIRE PREVENTION SPRINKLER SYSTEMS, LAWN AND IRRIGATION SPRINKLERS. FENWICK-REDDAWAY MFG. CO., Newark, N. J.
Filed March 22, 1932. Serial No. 325,867. PUBLISHED MAY 10, 1932. Class 13.

296,164. CHILDREN'S WAISTS. AMAZON KNITTING COMPANY, Muskegon, Mich.
Filed March 29, 1932. Serial No. 325,632. PUBLISHED MAY 10, 1932. Class 39.

296,165. WOMEN'S AND MISSES' UNDERWEAR. THE MUNSINGWEAR CORPORATION, Minneapolis, Minn.
Filed March 28, 1932. Serial No. 325,593. PUBLISHED MAY 10, 1932. Class 39.

296,166. STOCKING FEET. RICHARD PAUL INC., Los Angeles, Calif.
Filed March 26, 1932. Serial No. 325,527. PUBLISHED MAY 10, 1932. Class 39.

296,167. WOMEN'S UNDERWEAR. JULIUS KAYSER & Co., New York, N. Y.
Filed March 25, 1932. Serial No. 325,472. PUBLISHED MAY 3, 1932. Class 39.

296,168. [WITHDRAWN.]

296,169. BLANKETS WOVEN FROM COTTON, WOOL OR OTHER FIBRES OR A COMBINATION OF COTTON, WOOL, OR OTHER FIBRES. PEPPERELL MANUFACTURING COMPANY, Boston, Mass.
Filed March 26, 1932. Serial No. 325,529. PUBLISHED MAY 10, 1932. Class 42.

296,170. YARNS OF SILK, WOOL, COTTON, AND ARTIFICIAL SILKS. HANES HOSIERY MILLS CO., Winston-Salem, N. C.
Filed March 30, 1932. Serial No. 325,651. PUBLISHED MAY 10, 1932. Class 43.

296,171. APPARATUS FOR ANALYSING METAL ALLOYS. ADAM HILGER, LIMITED, London, England.
Filed November 27, 1931. Serial No. 321,537. PUBLISHED JANUARY 26, 1932. Class 26.

296,172. OYSTERS IN THEIR NATURAL STATE. CEDAR ISLAND OYSTER COMPANY, Greenport, N. Y.
Filed February 26, 1932. Serial No. 324,506. PUBLISHED MAY 17, 1932. Class 46.

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

296,173. (CLASS 39. CLOTHING.) EDISON BROTHERS STORES, INC., St. Louis, Mo. Filed Aug. 28, 1930. Serial No. 304,945.

LEED'S

For Hosiery and Leather Shoes for Men, Women, and Children.
Claims use since July 15, 1930.

296,174. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PACIFIC MANUFACTURING CO., INC., Seattle, Wash. Filed Feb. 16, 1931. Serial No. 311,105.

Lemon Butter

For Fruit Butter.
Claims use since Oct. 13, 1930.

296,175. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) LESLIE T. HAND, Brooklyn, N. Y. Filed May 5, 1931. Serial No. 314,202.

SAFTMAT

For Floor Mats Composed Wholly or in Part of Paper.
Claims use since Apr. 17, 1931.

296,176. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) MIDWAY CHEMICAL COMPANY, Chicago, Ill. Filed May 14, 1931. Serial No. 314,571.

Kwik-brite

For Shoe Polish.
Claims use since Apr. 28, 1931.

296,177. (CLASS 37. PAPER AND STATIONERY.) SOCIETE ANONYME DES ETABLISSEMENTS KALAMAZOO, Paris, France. Filed Nov. 30, 1931. Serial No. 321,621.

DOUBLE FAST

For Binders for Loose Sheets, Cards, or the Like.
Claims use since Oct. 2, 1930.

296,178. (CLASS 3. BAGGAGE, ANIMAL EQUIPMENTS, PORTFOLIOS, AND POCKETBOOKS.) LEATHER PRODUCTS, INC., Sheboygan, Wis. Filed May 24, 1932. Serial No. 327,400.

FEATHER-WEIGHT

For Horse Boots, Track Harness, Pacing Hopples, Riding Saddles, and Riding Bridles.
Claims use since Jan. 1, 1925.

296,179. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) AVEDIS ZILDJIAN COMPANY, Norfolk Downs, Mass. Filed Apr. 26, 1932. Serial No. 326,533.

AVEDIS
ZILDJIAN CO.
GENUINE
TURKISH CYMBALS
MADE IN U.S.A.

For Cymbals.
Claims use since September, 1929.

296,180. (CLASS 16. PAINTS, AND PAINTERS' MATERIALS.) CHARLES E. PERKINS, Mount Dora, Fla., and Milford, Conn. Filed June 15, 1931. Serial No. 315,980.

"BRIDGEPORT BRONZE."

For Boat Bottom Paint.
Claims use since Sept. 1, 1898.

296,181. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) WILLARD H. REED, doing business as W. H. Reed & Co., Atlanta, Ga. Filed Apr. 23, 1930. Serial No. 299,339.

Golden
Pheasant

For Sanitary Rubber Protectors for the Prevention of Contagious Diseases.
Claims use since Oct. 1, 1929.

296,182. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SARA HARRIS, doing business as Harris Products Company, Inc., Miami, Fla. Filed May 12, 1932. Serial No. 327,084.

RAT
BUTTONS



KILL
RATS
AND
MICE

For Preparation for Killing Rats and Mice.
Claims use since December, 1926.

296,183. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE ISALY DAIRY COMPANY, Youngstown, Ohio. Filed May 5, 1932. Serial No. 326,786.

CUT-TUB

For Butter.
Claims use since Nov. 1, 1930.

296,184. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) VICTOR BALATA & TEXTILE BELTING CO., Easton, Pa. Filed May 2, 1932. Serial No. 326,697.

" WORKWELL "

For Solid Woven Belting.
Claims use since Oct. 6, 1930.

296,185. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE NEW IDEA SPREADER COMPANY, Coldwater, Ohio. Filed Mar. 11, 1932. Serial No. 325,046.

VARI-SPEED

For Internal Combustion Engines.
Claims use since Feb. 1, 1931.

296,186. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) EDGAR K. FRANK & CO., New York, N. Y. Filed Oct. 21, 1931. Serial No. 320,258.

STARCH-PRUF

For Woolen Piece Goods.
Claims use since June 22, 1931.

296,187. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) CALWIS INDUSTRIES, LTD., Beverly Hills, Calif. Filed July 13, 1931. Serial No. 316,876.

ORKIN *Craft*

For Toy Boats.
Claims use since June 10, 1931.

296,188. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROSENBERG BROS. & CO., San Francisco, Calif. Filed June 25, 1931. Serial No. 316,298.

SUGARIPE

For Dried Apricots.
Claims use since Apr. 7, 1931.

296,189. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) THE HUMP HAIRPIN MANUFACTURING COMPANY, Chicago, Ill. Filed May 20, 1931. Serial No. 314,799.

WAVESET

For Hairpins (Said Hairpins Being More Particularly Described as Composed and Made of Steel, Aluminite, and Various Other Metals, Alloys and Materials, But Said Hairpins Are Not Made of, Plated with, or Ornamented with Precious Metals).
Claims use since May 8, 1931.

296,190. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MOGACO LABORATORIES, Buffalo, N. Y. Filed May 8, 1931. Serial No. 314,340.

NORUST

For Fluid Treatment Preparation for Cleaning and Eliminating the Formation of Rust and Scale in Water Circulating Systems, Such as Automobile Radiators, Boilers, Boiler Tubes, and the Like.
Claims use since Mar. 28, 1931.

296,191. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) DICTOGRAPH PRODUCTS COMPANY, New York, N. Y. Filed May 8, 1931. Serial No. 314,324.

GRAND PRIZE

For Dry Cell Batteries.
Claims use since May 25, 1931.

296,192. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) JAMES JORDAN, doing business as Jordan Brothers, Yeadon, Pa. Filed May 1, 1931. Serial No. 314,056.

FERTLSOIL

For Soil.
Claims use since December, 1930.

LABELS

REGISTERED JULY 26, 1932

40,962.—*Title:* BROWN'S LOTION. For Lotion. THE AM-BRO CO., Lawton, Okla. Published April 1, 1932.

40,963.—*Title:* VIT-REX FOUR-HOUR ENAMEL. For Enamel. E. C. BENSON, Chicago, Ill. Published March 17, 1932.

40,964.—*Title:* FEAD REAL-RIB. For Hosiery. JOHN L. FEAD & SONS, Port Huron, Mich. Published April 12, 1932.

40,965.—*Title:* FEAD ALL-SPORT SOX. For Hosiery. JOHN L. FEAD & SONS, Port Huron, Mich. Published April 12, 1932.

40,966.—*Title:* "CARMEL" PALESTINE PURE BEE HONEY. For Pure Bee Honey. SAMUEL GELFAND, doing business as Palestine Products Company, New York, N. Y. Published February 9, 1932.

40,967.—*Title:* SEALED IVANHOE. For Mayonnaise. IVANHOE FOODS INC., Auburn, N. Y. Published May 10, 1932.

40,968.—*Title:* JEWEL TOOTH PASTE. For Tooth Paste. JEWEL TEA CO., INC., Central Valley, N. Y., and Barrington, Ill. Published March 14, 1932.

40,969.—*Title:* PHILLIP'S FAMOUS SALT WATER TAFFY. For Salt Water Taffy. LIPSON & SOLOMON, Atlantic City, N. J. Published April 1, 1932.

40,970.—*Title:* THE PHARIS FIRST LINE CERTIFICATE. For Tires. THE PHARIS TIRE AND RUBBER COMPANY, Newark, Ohio. Published April 1, 1932.

40,971.—*Title:* SUPREME. For Ice Cream. SUTHERLAND PAPER COMPANY, Kalamazoo, Mich. Published April 1, 1932.

40,972.—*Title:* WEBSTER BOILER PROTECTOR. For Boiler Protectors. WARREN WEBSTER & COMPANY, Camden, N. J. Published December 30, 1930.

PRINTS

REGISTERED JULY 26, 1932

13,775.—*Title:* THE WORLD'S MOST SUCCESSFUL TRILOGY—A LOVELY FACE . . . A SLENDER FIGURE . . . A CLEVER WARDROBE. For Illusion Powder, Rouge Amoretta, Eye Sha-Do, Eyelash Cosmetique and Lipsticks. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published May 30, 1932.

13,776.—*Title:* TRY THESE FEW SIMPLE TESTS WITH LIQ-UID-GLA-SS YOURSELF. For Automobile Varnish and Paint Enamel. NORMAN ANTHONY FISHER, doing business as Fisher Products Co., Detroit, Mich. Published May 15, 1932.

13,777.—*Title:* FISHER'S LIQ-UID-GLA-SS. For Automobile Varnish and Paint Enamel. NORMAN ANTHONY FISHER, doing business as Fisher Products Co., Detroit, Mich. Published May 15, 1932.

13,778.—*Title:* SPECIALIZED LUBRICATION CHART. For Lubricating Oils. THE PENNZOIL COMPANY, Oil City, Pa. Published March 12, 1932.

13,779.—*Title:* ANNE THRIFT SAYS . . . SAVE WITH GOOD-WILL THRIFT TICKETS . . . . For Thrift Tickets. CHESTER F. TOURNER, Bloomington, Ind. Published March 14, 1932.

13,780.—*Title:* ANNE THRIFT SAYS—I CAN RUN MY KITCHEN A MONTH ON . . . GOOD-WILL-THRIFT TICKETS. For Thrift Tickets. CHESTER F. TOURNER, Bloomington, Ind. Published April 2, 1932.

13,781.—*Title:* ANNE THRIFT SAYS—YOU CAN BUY YOUR FUEL AT THE REGULAR MARKET PRICES . . . . For Thrift Tickets. CHESTER F. TOURNER, Bloomington, Ind. Published March 30, 1932.

13,782.—*Title:* ANNE THRIFT SAYS—NICKELS MAKE DOLLARS . . . GOOD-WILL-THRIFT SAVES BOTH FOR YOU. For Thrift Tickets. CHESTER F. TOURNER, Bloomington, Ind. Published April 2, 1932.

13,783.—*Title:* ANNE THRIFT SAYS: GOOD-WILL-THRIFT IS EXCELLENT TRAINING FOR THE CHILDREN. For Thrift Tickets. CHESTER F. TOURNER, Bloomington, Ind. Published April 8, 1932.

13,784.—*Title:* ANNE THRIFT SAYS: LET EVERY MEMBER OF YOUR FAMILY CARRY A GOOD-WILL-THRIFT BOOK. For Thrift Tickets. CHESTER F. TOURNER, Bloomington, Ind. Published April 5, 1932.

13,785.—*Title:* ANNE THRIFT SAYS: GOOD-WILL THRIFT MEANS FREE GASOLINE FOR TWO MONTHS. For Thrift Tickets. CHESTER F. TOURNER, Bloomington, Ind. Published March 29, 1932.

13,786.—*Title:* ANNE THRIFT SAYS: NICKELS MAKE DOLLARS IN A HURRY ON THE GOOD-WILL-THRIFT PLAN. For Thrift Tickets. CHESTER F. TOURNER, Bloomington, Ind. Published March 30, 1932.

13,787.—*Title:* ANNE THRIFT SAYS: IT'S HARD TO TRAIN MEN TO BE THRIFTY. For Thrift Tickets. CHESTER F. TOURNER, Bloomington, Ind. Published April 2, 1932.

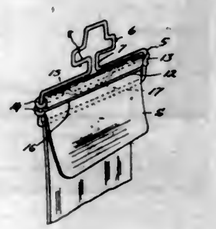
13,788.—*Title:* ANNE THRIFT SAYS—YOU CAN SAVE THOUSANDS OF PENNIES . . . . For Thrift Tickets. CHESTER F. TOURNER, Bloomington, Ind. Published March 28, 1932.

CARNEGIE LIBRARY OF ATLANTA

REISSUES

JULY 26, 1932

18,539. BUCKLE. BIRDORA H. WHITE, Chicago, Ill. Original No. 1,670,395, dated May 22, 1928, Serial No. 97,702, filed Mar. 26, 1926. Application for reissue filed May 14, 1930. Serial No. 452,416. 14 Claims. (Cl. 24—73.)



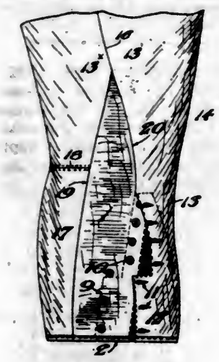
12. In a fastener, the combination with a frame, of a clamping device comprising a pair of bars slidably mounted on said frame, one of said bars being formed with an offset extending toward said other bar.

18,540. VALVE. LORAN F. DORN, Cleveland, Ohio, assignor to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Original No. 1,759,891, dated May 27, 1930, Serial No. 123,690, filed July 20, 1926. Application for reissue filed Jan. 15, 1932. Serial No. 587,079. 4 Claims. (Cl. 158—118.)



3. In a construction of the character described, the combination with a burner and mixer member adapted for mounting in a water heater or like device, of a union cock therefor, comprising a valve body threaded at one end for connection to a gas supply pipe and provided with a shut off valve member, a nozzle member adapted to enter an opening in the burner mixer, and a union connection between said nozzle member and valve body.

18,541. RIDING BREECHES. JOSEPH A. LIEBERMAN and SAMUEL CAPLIN, Philadelphia, Pa. Original No. 1,746,951, dated Feb. 11, 1930, Serial No. 359,236, filed Apr. 30, 1929. Application for reissue filed Nov. 7, 1931. Serial No. 573,706. 4 Claims. (Cl. 2—228.)

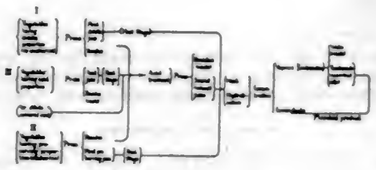


1. In a leg portion of riding breeches, an adjustment strip for the leg portion of riding breeches and the like, comprising an elongated body having a short, horizontal bottom edge, a continuous curved side edge extending upwardly from said bottom edge the entire length of said body, and an opposite, upper curved side edge extending downwardly to about the midlength of said body and merging into an offset, straight side edge joined at its lower extremity to said bottom edge, said curved edges converging upwardly to form an upper tapered terminus for said body, said strip being sewed to the juxtaposed portions of said leg along said curved edges, whereby said leg may be widened or narrowed by the location of the seam joining said continuous curved edge to the juxtaposed portion of said leg.

18,542. COMPOSITION OF VEGETABLE FOOD AND PROCESS OF MAKING THE SAME. EUSTACE HAMILTON MILES, London, and GERARD REILLY, Luton, England. Original No. 1,775,966, dated Sept. 16, 1930, Serial No. 121,229, filed July 8, 1926, and in Great Britain July 15, 1925. Application for reissue filed Jan. 11, 1932. Serial No. 585,981. 5 Claims. (Cl. 99—11.)

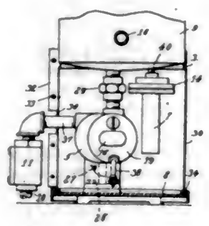
1. A process, throughout which the heat employed is not prolonged more than about 1 hour at the temperature specified and does not exceed about 80° C., for the manufacture of an alimentary preparation of vegetable material (I) having dietetic properties and a vegetable material (II) having also preservative properties, and vegetable material (III) having acid properties, comprising the following steps in any order: extracting from (I) a first dietetic juice, leaving a residue, extracting from (II) a first preservative juice, leaving a residue,

extracting from vegetable material (III) a first acid juice, treating a residue aforementioned with the acid



juice to obtain a second juice, heating a juice till hydrolyzation of the sucroses is well advanced, uniting the juices and concentrating the resulting product.

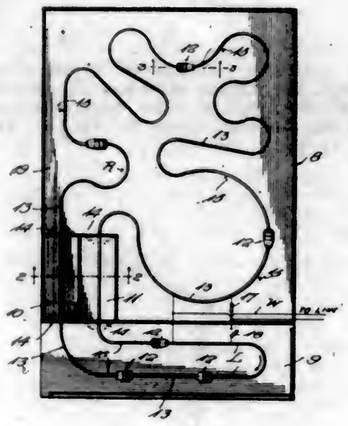
18,543. WATER SYSTEM PUMP UNIT. STANLEY H. HOBSON, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a Corporation of Illinois. Original No. 1,764,307, dated June 17, 1930, Serial No. 328,262, filed Dec. 24, 1928. Application for reissue filed Mar. 28, 1932. Serial No. 601,662. 8 Claims. (Cl. 103—25.)



1. In a pumping apparatus of the character described, the combination in a self-contained unit, of a supporting base, a pump mounted thereon, a storage tank disposed vertically directly above and connected at its bottom with the pump in close coupled relation therewith, the said connection serving to support the tank approximately centrally on the pump, a jacket enclosing the pump and extending from the base up to the tank so as to serve as an auxiliary support for the tank by engagement therewith circumferentially of the lower end thereof, and a motor mounted on the base and having a driving connection with the pump.

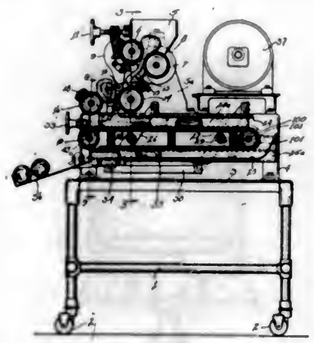
18,544. AMUSEMENT RAILWAY. LEON S. CASSIDY and MARVIN REMPFER, Bridgeton, N. J. Original No. 1,740,496, dated Dec. 24, 1929, Serial No. 340,550, filed Feb. 16, 1929. Application for reissue filed Apr. 14, 1931. Serial No. 530,114. 16 Claims. (Cl. 104—63.)

1. In an amusement railway, a floor, a track extending along the same, the upper side of said track being spaced above said floor, and a car over the track and provided with a passenger seat, said car embodying rear wheels supported by said floor in laterally spaced relation with said track, and a front wheel guided by said track and swiveled on a vertical pivot, said floor being substantially free of encumbrances which would prevent



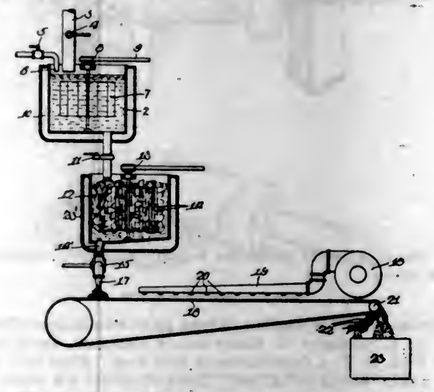
lashing of the rear portion of the car transversely of the track, said rear wheels being adapted to abut said track to limit such lashing of the car.

18,545. DOUGH-MOLDING DEVICE. ERNST J. STERNBERG, Chicago, Ill., assignor to Thomson Machine Company, Belleville, N. J., a Corporation of New Jersey. Original No. 1,658,864, dated Feb. 14, 1928, Serial No. 72,266, filed Nov. 30, 1925. Application for reissue filed Nov. 28, 1928. Serial No. 322,564. 8 Claims. (Cl. 107—9.)



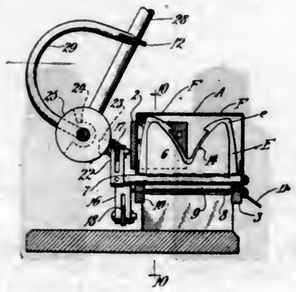
6. In a dough-molding device, an endless belt having the major portions thereof disposed in a horizontal plane, a plate disposed above the upper portion of the belt, a plate disposed below the lower portion of the belt a distance less than that between the upper portion of the belt and the corresponding plate, means for feeding a coil of dough to the upper portion of the belt, means for causing the travel of the belt, thereby bringing the dough into contact with the adjacent plate, means for guiding the dough into the space between the lower portion of the belt and the lower plate, and means for simultaneously adjusting both plates with respect to the adjacent portions of the belt to a proportional extent whereby the lower plate is maintained closer to the belt than is the upper plate.

18,546. PROCESS OF AND MEANS FOR FLAKING SOAP. BERTRAM W. COLTMAN, Chicago, Ill. Original No. 1,653,390, dated Dec. 20, 1927, Serial No. 492,214, filed Aug. 15, 1921. Application for reissue filed Aug. 22, 1929. Serial No. 387,752. 27 Claims. (Cl. 87—16.)



1. The method of flaking soap which comprises first spraying it while in liquid form into a thin film, next, operating upon the film to cause desiccation, and finally, disturbing the desiccated film to cause disintegration into flakes.

18,547. MACHINE FOR SETTING UP CARTONS. MARTIN BURGER, Morris, Ill. Original No. 1,738,034, dated Dec. 3, 1929, Serial No. 308,963, filed Sept. 28, 1928. Application for reissue filed Nov. 25, 1931. Serial No. 577,372. 33 Claims. (Cl. 93—37.)



1. In a machine of the character described, a series of pairs of grippers, means for supporting the grippers to permit those of each pair to move between a position in which they converge from the upper ends downwardly and a position in which they stand vertical in proximity to each other, and means for moving the grippers between said positions.

DESIGNS

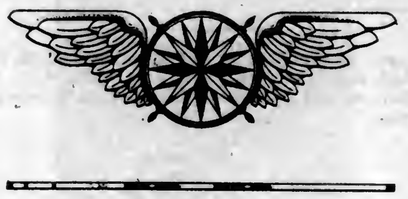
JULY 26, 1932

87,424. BOTTLE. FRANK ARENA, Watertown, Mass. Filed June 2, 1932. Serial No. 43,959. Term of patent 3½ years.



The ornamental design for a bottle, as shown.

87,425. MEDALLION OR SIMILAR ARTICLE. SAMUEL S. BRADLEY, New York, N. Y., assignor to Manufacturers Aircraft Association, Inc., a Corporation of New York. Filed Nov. 24, 1931. Serial No. 41,842. Term of patent 14 years.



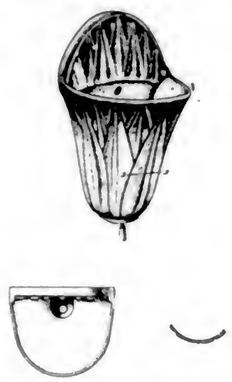
The ornamental design for a medallion or similar article, substantially as shown and described.

87,426. BOTTLE. MARSHALL T. BREKER, Scarsdale, N. Y., assignor to Northam Warren Corporation, New York, N. Y., a Corporation of New York. Filed May 11, 1932. Serial No. 43,769. Term of patent 14 years.



The ornamental design for a bottle substantially as shown.

87,427. WALL SCONCE. BERTRAM L. WATKIN, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Syracuse, N. Y., a Corporation of New York. Filed May 26, 1932. Serial No. 43,905. Term of patent 3½ years.



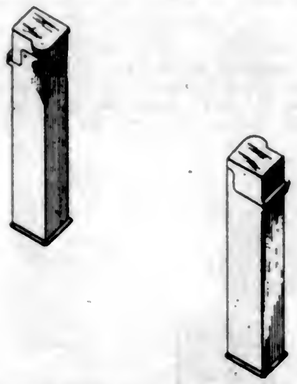
The ornamental design for a wall sconce substantially as shown.

87,428. ATTACHMENT PLUG RECEPTACLE OR SIMILAR ARTICLE. LEON J. CAHN, New York, N. Y. Filed Nov. 30, 1931. Serial No. 41,913. Term of patent 3½ years.



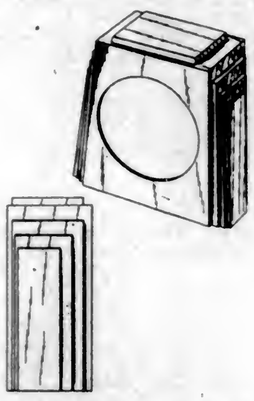
The ornamental design for an attachment plug receptacle or similar article, substantially as shown.

87,429. CIGAR AND CIGARETTE LIGHTER. PIERRE C. CARTIER, New York, N. Y., assignor to Cartier, Inc., New York, N. Y., a Corporation of New York. Filed May 14, 1932. Serial No. 43,807. Term of patent 8½ years.



The ornamental design for a cigar and cigarette lighter, as shown.

87,430. CLOCK CASE. MEYER F. CARTOUN, New York, N. Y., assignor to Heller-Deltah Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 21, 1931. Serial No. 41,801. Term of patent 3½ years.



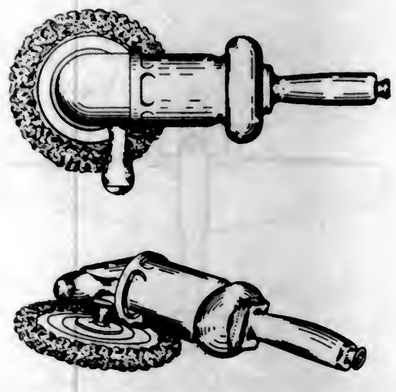
The ornamental design for a clock case as shown.

87,431. EMBLEM. BERNARD D. DE WEESE, Wayne, Mich., assignor to Stinson Aircraft Corporation, Wayne, Mich., a Corporation of Michigan. Filed Mar. 17, 1932. Serial No. 43,220. Term of patent 14 years.



The ornamental design for an emblem, as shown and described.

87,432. CASING FOR A PORTABLE ELECTRIC POLISHER. JARED BARTON FLEMING, Towson, Md., assignor to The Van Dorn Electric Tool Company, Towson, Md., a Corporation of Ohio. Filed Mar. 12, 1932. Serial No. 43,164. Term of patent 7 years.



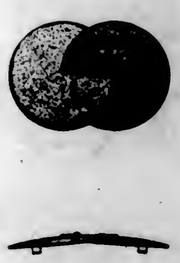
The ornamental design for a casing for a portable electric polisher as shown.

87,433. BUTTON. WILLIAM F. HAAS, Rockaway, N. Y. Filed June 6, 1932. Serial No. 44,002. Term of patent 3½ years.



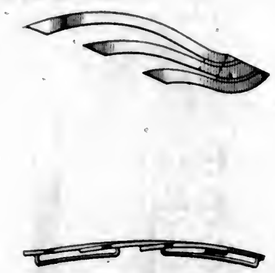
The ornamental design for a button, as shown.

87,434. CLASP. WILLIAM F. HAAS, Rockaway, N. Y. Filed June 6, 1932. Serial No. 44,003. Term of patent 3½ years.



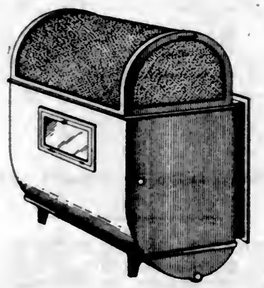
The ornamental design for a clasp, as shown.

87,435. CLASP. WILLIAM F. HAAS, Rockaway, N. Y. Filed June 6, 1932. Serial No. 44,005. Term of patent 3½ years.



The ornamental design for a clasp, as shown.

87,436. AIR CONDITIONING UNIT. EARL VERNON HILL, Chicago, Ill. Filed May 21, 1932. Serial No. 43,868. Term of patent 14 years.



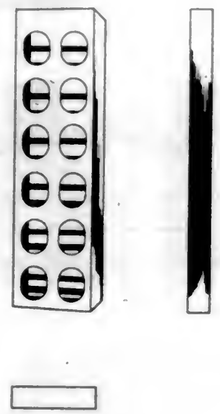
The ornamental design for an air conditioning unit, as shown and described.

87,437. CARPET. WILLIAM F. MCCABE, New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed June 6, 1932. Serial No. 43,988. Term of patent 7 years.



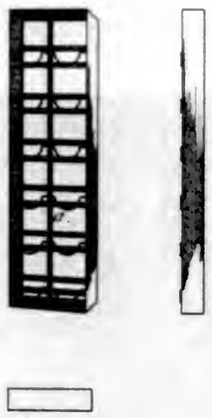
The ornamental design for a carpet substantially as shown and described.

87,438. DISPLAY RACK FOR BOTTLES. JOSEPH H. MCEACHERN, San Anselmo, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Apr. 25, 1932. Serial No. 43,592. Term of patent 14 years.



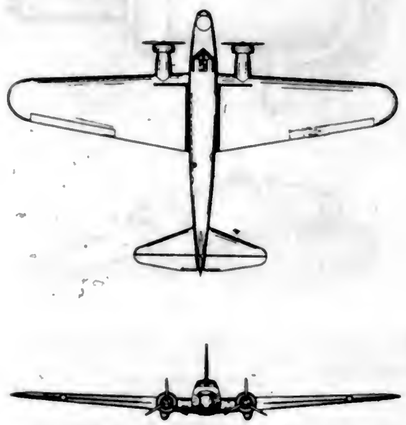
The ornamental design for a display rack for bottles, as shown.

87,439. DISPLAY RACK FOR BOTTLES. JOSEPH H. MCEACHERN, San Anselmo, Calif., assignor to Standard Oil Company, of California, San Francisco, Calif., a Corporation of Delaware. Filed Apr. 25, 1932. Serial No. 43,593. Term of patent 14 years.



The ornamental design for a display rack for bottles, as shown.

87,440. TRANSPORT AIRPLANE. CHARLES N. MONTEITH and FRANK R. CANNEY, Seattle, Wash., assignors to Boeing Airplane Company, Seattle, Wash., a Corporation of Washington. Filed June 7, 1932. Serial No. 44,012. Term of patent 3½ years.



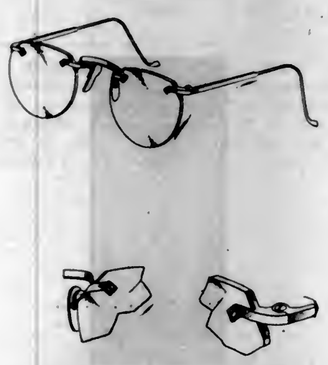
The ornamental design for a transport airplane, as shown.

87,441. OPHTHALMIC MOUNTING. GEORGE E. NERNEY, Attleboro, Mass., assignor to Bay State Optical Company, Attleboro, Mass., a Corporation of Maine. Filed Sept. 25, 1931. Serial No. 41,217. Term of patent 14 years.



The ornamental design for an ophthalmic mounting as shown.

87,442. PAIR OF SPECTACLES. GEORGE E. NERNEY, Attleboro, Mass., assignor to Bay State Optical Company, Attleboro, Mass., a Corporation of Maine. Filed May 13, 1932. Serial No. 43,795. Term of patent 14 years.



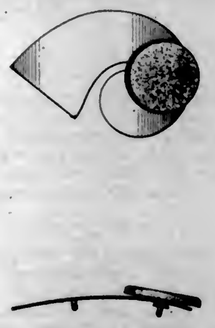
The ornamental design for a pair of spectacles as shown.

87,443. BUCKLE. SIDNEY ROSENTHAL, Cedarhurst, N. Y. Filed June 6, 1932. Serial No. 44,000. Term of patent 3½ years.



The ornamental design for a buckle as shown.

87,444. CLASP. SIDNEY ROSENTHAL, Cedarhurst, N. Y. Filed June 6, 1932. Serial No. 44,001. Term of patent 3½ years.



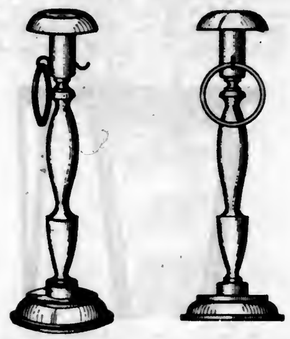
The ornamental design for a clasp as shown.

87,445. RING. ALBERT S. SAMUELS, San Francisco, Calif. Filed May 20, 1932. Serial No. 43,857. Term of patent 14 years.



The ornamental design for a ring substantially as shown and described.

87,446. HAT STAND. HENRY C. SCHIELD, Merrill, Wis. Filed May 20, 1932. Serial No. 43,858. Term of patent 7 years.



The ornamental design for a hat stand, as shown and described.

87,447. BUTTON. JOSEPH SHADLOWSKY, Passaic Park, N. J. Filed June 6, 1932. Serial No. 44,009. Term of patent 3½ years.



The ornamental design for a button, as shown.

87,448. BRACELET CHAIN. ALBERT E. R. SPEIDEL, Edgewood, R. I., assignor to Speidel Corporation, a Corporation of Rhode Island. Filed June 1, 1932. Serial No. 43,955. Term of patent 3½ years.



The ornamental design for a bracelet chain, substantially as shown.

87,449. UNDERGARMENT. SAMUEL TAIT, Philadelphia, Pa., assignor to The Vogue Silk Hosiery Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 18, 1931. Serial No. 40,263. Term of patent 14 years.



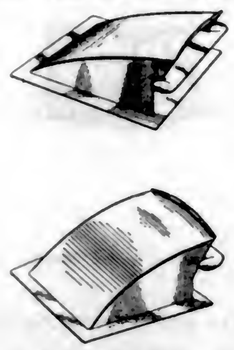
The ornamental design for an undergarment, as shown.

87,450. BAG OR SIMILAR CONTAINER. CHARLES P. THOMPSON, Westmont, N. J., assignor to William S. Scull Company, Camden, N. J., a Corporation of New Jersey. Filed Apr. 28, 1932. Serial No. 43,651. Term of patent 7 years.



The ornamental design for a bag or similar container as shown and described.

87,451. VENTILATOR FOR VEHICLES. CHARLES S. WARNOCK, Los Angeles, Calif. Filed July 8, 1931. Serial No. 40,460. Term of patent 7 years.

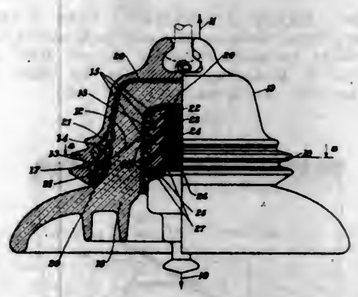


The ornamental design for a ventilator for vehicles as shown.

PATENTS

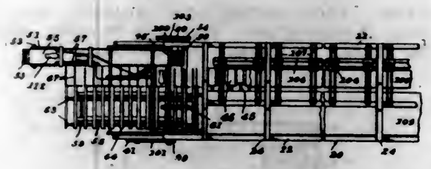
GRANTED JULY 26, 1932

1,868,479. COMPENSATING STRUT TYPE INSULATOR. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Apr. 5, 1930. Serial No. 441,871. 25 Claims. (Cl. 173—318.)



1. An insulator comprising a dielectric member, a fitting connected therewith, and a plurality of struts interposed between said member and fitting and spaced from one another in the direction of the load on said insulator.

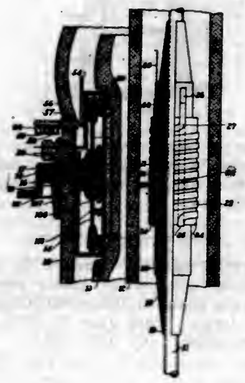
1,868,480. HANDLING GLASS ARTICLES. JAMES BAILEY, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed May 1, 1929. Serial No. 359,703. 13 Claims. (Cl. 49—47.)



13. In an apparatus for presenting articles to an annealing bath, article supporting rollers movable in a rectilinear path through the bath, roller supporting and advancing means wholly outside of the path of travel of the rollers and means for shielding the roller supporting and advancing means from the bath.

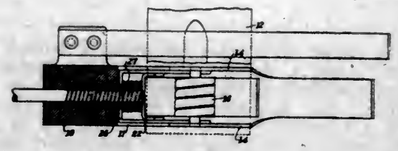
1,868,481. CURRENT TRANSFORMER. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Oct. 17, 1929. Serial No. 400,267. 21 Claims. (Cl. 171—119.)

1. A current transformer in which the total current in the primary circuit is substantially independent of the secondary circuit, said transformer having a plurality of primary turns, and automatically operated means for changing the number of turns included in the primary circuit



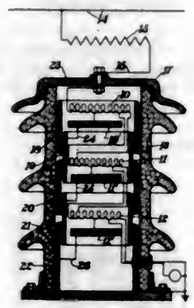
when the current flowing therein passes a predetermined value to restrict the ampere turns in the primary to prescribed limits.

1,868,482. ELECTRIC SWITCH. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Oct. 21, 1929. Serial No. 401,031. 17 Claims. (Cl. 200—162.)



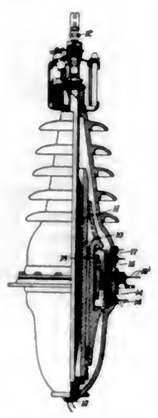
1. An electric switch comprising a pair of relatively movable contact members, a roller interposed between said members and having rolling contact thereon, and spring actuated means for moving said roller out of the path of one of said members when said switch is opened.

1,868,483. TRANSFORMER. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed June 7, 1930. Serial No. 459,706. 29 Claims. (Cl. 175—358.)



1. A plurality of transformers connected in series, an insulating support for said transformers, and capacitance members for controlling the voltage gradient of said series of transformers.

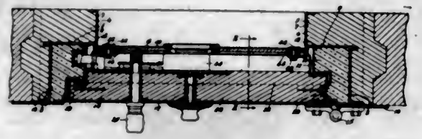
1,868,484. TRANSFORMER. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed June 27, 1931. Serial No. 547,257. 22 Claims. (Cl. 175—358.)



1. A current transformer comprising a primary conductor having a plurality of series turns disposed in planes transverse to the general direction of the conductor, a ring type magnetic core encircling said primary, a secondary winding on said core, and an additional secondary winding encircling said primary and disposed within the cylinder defined by said core.

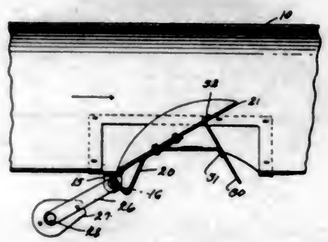
1,868,485. FIREPROOF JOINT CONSTRUCTION. CHARLES J. BATES, Jr., Englewood, N. J., assignor to The Mosler Safe Company, Hamilton, Ohio, a Corporation of New York. Filed May 6, 1931. Serial No. 535,469. 7 Claims. (Cl. 109—2.)

1. The combination with a positioned door having a channel along its bottom edge, of means positioned in said channel and normally permitting free swinging movement of the door, said means being adapted to



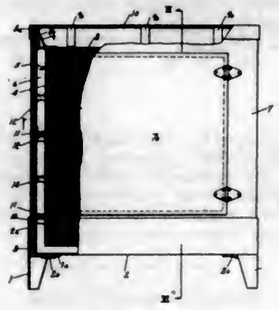
expand upon subjection to heat for sealing the space normally intervening between the door and the surface therebeneath.

1,868,486. DRAFT STABILIZER. LYNN C. BEADLE, Detroit, Mich., assignor, by mesne assignments, to Timken Silent Automatic Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 23, 1929. Serial No. 409,378. 4 Claims. (Cl. 236—45.)



1. An automatic check draft damper for furnaces or other heaters having a flue for combustion gases which flue is provided with an opening in its wall, a plate pivoted to said wall at that end of said opening nearest the furnace and lying within said flue and adapted to open and close said opening, a second plate mounted in upright position near the free end of said first plate on the outer surface thereof, said second plate increasing in width away from said first plate.

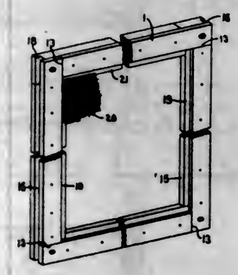
1,868,487. FOOD PRESERVING CABINET. JOHN S. BEALL, Portland, Oreg. Filed July 26, 1930. Serial No. 471,057. 2 Claims. (Cl. 45—132.)



1. In a cooling cabinet, a bottom pan member, vertical end and side members of the character described adapted to lock together and fit within said bottom pan member, a water containing upper pan member having locking

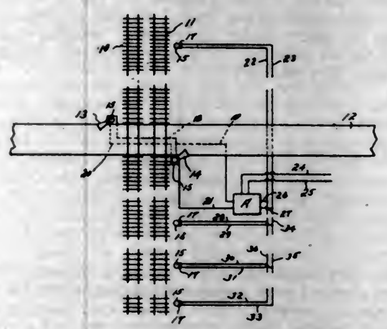
hooks on the ends thereof and a cover member having four locking edges, said hooks and said locking edges embracing the upper edges of said vertical members whereby all of the tops of the several vertical members are securely held in position.

1,868,488. FRAME FOR SCREENING AND THE LIKE. NELSON T. ASH, Saugus, Mass. Filed Oct. 30, 1930. Serial No. 492,212. 2 Claims. (Cl. 156—14.)



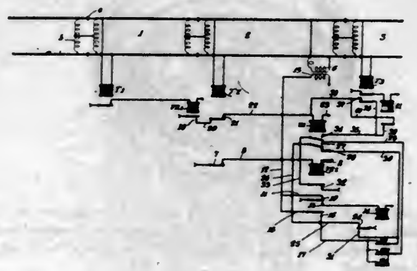
1. A knock-down frame for screening and the like comprising four similar assembled corner members, each corner member comprising a thick leg section and a thin leg section extending at right angles thereto one of which is cut to the length of the finished frame minus its own width and the other to the width of the frame minus its own width, means to secure adjacent end portions of the leg sections together in overlying relation and means to secure each thin leg section upon a thick leg section of an adjacent corner member in superposed relation with the end of each thin leg section abutting the inner face of a thin leg section of the adjacent corner member thereby to form a rigid laminated frame.

1,868,489. SIGNAL SYSTEM. GARRETT J. BARRY, Toledo, Ohio. Filed Aug. 15, 1931. Serial No. 557,323. 3 Claims. (Cl. 246—125.)



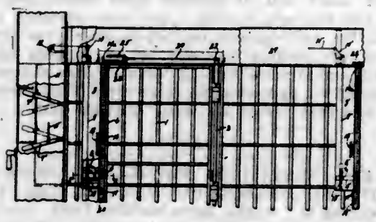
1. A protective device for use at intersections of highways and railways, comprising, an audible annunciative device at such intersection, a sound actuated mechanism positioned near such railway at a distance from such intersection, and connecting means between said device and said mechanism of such character that the latter when actuated causes the former to emit an audible sound, at such intersection, of the same character as the sound which actuates said mechanism.

1,868,490. METHOD AND MEANS FOR SUPPLYING CURRENT TO TRACK SECTIONS. GEORGE W. BAUGHMAN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 10, 1931. Serial No. 562,094. 5 Claims. (Cl. 246—37.)



1. A track circuit system including: a track section, circuit means including a coding device to supply any one of a plurality of coded currents to said track section, means controlled by traffic conditions of another section to determine which of the coded currents is to be impressed on the track section, a track relay for said section which when deenergized starts the coding device in operation, and means to prevent any but a certain coded current from being impressed on the track section if the track relay fails to pick up after being deenergized and before being shunted by the entry of a train into the track section.

1,868,491. SWING DOOR KEYLESS LOCKING DEVICE. RICHARD W. BRONSON, South Euclid, Ohio, assignor to The Van Dorn Iron Works Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 8, 1932. Serial No. 597,509. 4 Claims. (Cl. 189—7.)

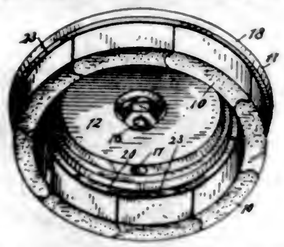


1. In combination with a jail door, a lock bolt for said door, a bar arranged for movement between a position masking said bolt to prevent its entry into said door, and a position uncovering said bolt to allow its entry into said door, said bar being balanced to said masking position, means providing for door actuation of said bar to move the latter to uncovering position as said door completes its closing movement, a stop bolt arranged to block the path of said bar to prevent movement of the latter from masking position to uncovering position, means associating said stop bolt with said door to cause withdrawal of said stop bolt from bar-blocking position only as the door closes, and means providing for operator control of said lock bolt subject to the control had by said bar.

1,868,492. GRINDING WHEEL. PAUL BUCHEISTER, Tiffin, Ohio, assignor to The Sterling Grinding Wheel Company, Tiffin, Ohio, a Corporation of Ohio. Filed Mar. 28, 1929. Serial No. 350,565. 1 Claim. (Cl. 51—209.)

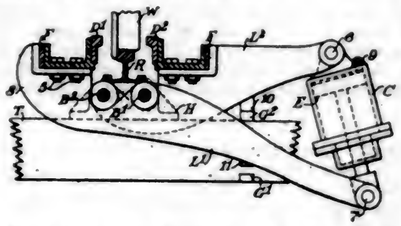
A sectional grinding wheel comprising a mount having a channel therein, a series of grinding sections in said

channel each being formed with an extension at one end and a recess at the opposite end, and spacers between adjacent sections of said series, each of said spacers being approximately equal in height to the depth of said channel



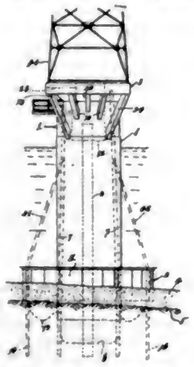
and having a recess at one end and an extension at the opposite end for interfitting engagement, respectively, with the extension and recess of the end portions of adjacent sections.

1,868,493. RAILWAY BRAKING APPARATUS. HAROLD C. CLAUSEN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 14, 1932. Serial No. 586,556. 3 Claims. (Cl. 188—62.)



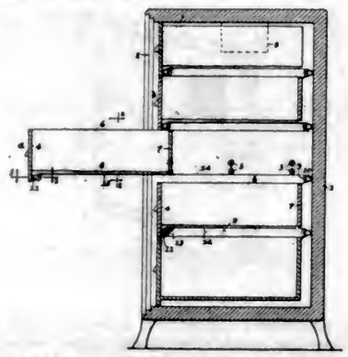
1. Railway braking apparatus comprising two levers pivoted below and at opposite sides respectively of a track rail and each having a first arm extending to the side of the rail opposite to that on which the lever is pivoted, two braking bars disposed on opposite sides of said rail and attached to said two lever arms respectively, and means for operating the other arms of said levers to move said bars toward and away from the rail.

1,868,494. STABILIZED FOUNDATION CONSTRUCTION AND METHOD OF ERECTING THE SAME. LAWRENCE B. COLLINS, Santa Barbara, Calif. Filed Dec. 9, 1930. Serial No. 501,033. 15 Claims. (Cl. 61—48.)



1. In a foundation construction the combination of a vertical concrete column provided with a well at its upper end, said column extending from above the water level to below normal ground surface, steel piles in said column, said piles extending into sound foundation bearing beneath said column, a concrete floor carried by the top of said column and extending horizontally beyond said column, horizontally disposed girder members in said floor and connected to steel piles in said column, and a vertical conduit in said column communicating with said well.

1,868,495. REFRIGERATOR. FREDERICK EINERMANN, Ramsey, N. J. Filed Oct. 14, 1931. Serial No. 568,661. 4 Claims. (Cl. 312—149.)



1. The combination of a drawer apertured at opposite sides thereof and having a front closure, a containing structure for the drawer having an opening through which the drawer is withdrawable and normally closed by the drawer, a roller journaled in the forward portion of the drawer, a flexible connection wound on the roller and connected to said structure and having the parts thereof embracing the roller forming a partition, and means normally urging the roller in the rotative direction to wind said connection thereon, said roller being arranged so that when the drawer is withdrawn and the partition unwinds the latter will obstruct flow of air through the projecting part of the drawer from one of its apertured sides to the other.

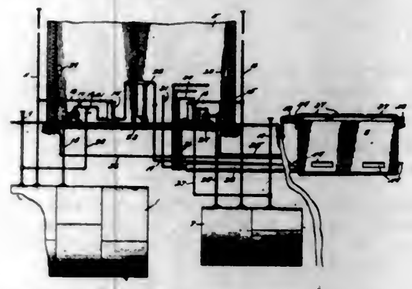
1,868,496. CONSTRUCTION TOY. ALFRED C. GILBERT, North Haven, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn. Original application filed May 26, 1927, Serial No. 194,874. Divided and this application filed Dec. 11, 1929. Serial No. 413,236. 1 Claim. (Cl. 46—35.)



In a toy construction set having a plurality of elements provided with perforations spaced apart at a standard spacing common to the elements and including a flat disk-like member having a central opening and a circular series of perforations spaced according to the standard spacing and disposed about said opening, means for mounting said flat disk-like member upon shafts of varying sizes comprising a pair of hub members, each of said hub members being provided with a plate portion having a circular series of perforations adapted to register with said first mentioned circular series of perforations, and each of said hub members having a hub element secured to the plate portion thereof, the hub element of one of said members being adapted to be set within said central opening when said hub member is placed in one relation

and secured to said disk-like member by bolts passing through the registering perforations, to reduce the size of said central opening, and said hub element being adapted to project away from said disk-like member when the hub member is placed in another relation and secured to said disk-like member by said bolts, and the other of said hub members being adapted to be abutted against the face of said disk-like member and the hub element thereof being provided with a bore of substantially the same size as the opening in said disk-like element and adapted to register therewith, the plate portions of the respective hub elements being adapted for simultaneous attachment to said disk-like member by fastening bolts common to the two elements.

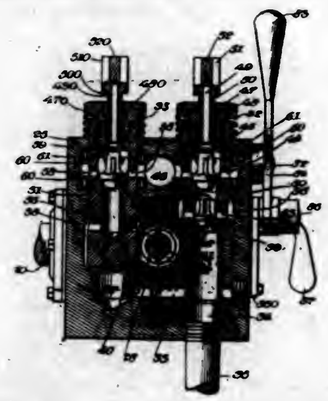
1,868,497. SERVICE EQUIPMENT FOR AVIATION FIELDS. CLEMENT P. GRIFFITH and CHARLES J. WORDEN, Fort Wayne, Ind., assignors to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed May 9, 1928. Serial No. 276,228. 9 Claims. (Cl. 221—67.)



9. In combination with an aeroplane landing field across which aeroplanes are adapted to taxi, a supply station adjacent said field, including a gasoline reservoir, and operating means for passing gasoline from said reservoir to a pit, a pit sunk in the ground of the landing field remote from said station, covering means for said pit adapted when closed to be substantially flush with the surface of the field so as to offer no obstruction to the free movement of an aeroplane taxiing over said field and over the cover, said covering means being adapted to be opened to give access to the pit, a gasoline dispensing apparatus permanently mounted in the pit normally below the cover level of the pit, said apparatus including a flexible hose having a dispensing nozzle, said flexible hose having pipe connections passing through the pit and through the ground to the gasoline forcing means, said hose nozzle and hose being constructed and arranged to be withdrawn from said pit for discharging gasoline to aeroplanes in various positions at said pit or relatively remote therefrom, and means associated with the dispensing apparatus at the pit and including means passing through the pit and ground and connected with the liquid forcing means in the supply station for starting and stopping the operating means for passing gasoline from the reservoir to the pit and whereby the dispensing operation may be controlled from the dispensing apparatus.

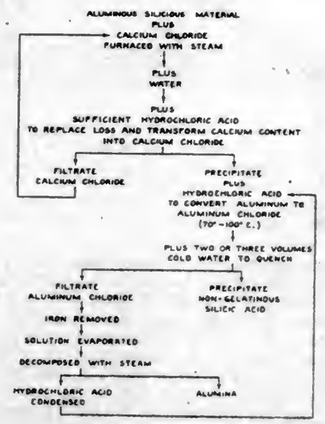
1,868,498. PUMP. LLOYD B. GRUMAN, Newark, N. J. Filed June 14, 1928. Serial No. 285,273. 14 Claims. (Cl. 103—42.)

1. In a pump including a main fluid supply port and a suitable discharge, the combination of high and low pressure chambers, hollow pistons simultaneously reciprocable in the respective chambers, the high pressure piston communicating with the interior of the low pressure piston, a suction valve for the high pressure piston, an inlet and outlet for the low pressure chamber, an outlet for the high pressure chamber, intercommunicating passages connected with the said supply port, one of said passages being communicable with the inlet and outlet of the low pressure chamber and with the discharge, and the other of said passages being communicable with the outlet of



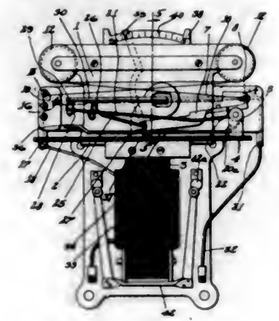
the high pressure chamber, and valve elements operable under the influence of pressure in the discharge to control the communication of the respective chambers with the discharge and also with the respective passages leading to the supply port.

1,868,499. PROCESS OF RECOVERING ALUMINA FROM SILICIOUS MATERIALS CONTAINING IT. WILLIAM M. GUERTLER, Berlin, Germany, assignor to The Electric Smelting & Aluminum Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 6, 1930, Serial No. 480,270, and in Germany June 7, 1929. 14 Claims. (Cl. 23—148.)



11. The process of recovering alumina from silicious material containing alumina, which consists in furnacing the material with calcium chloride in the presence of steam to cause a reversible reaction which forms calcium silicate, alumina and hydrochloric acid at high temperatures and treating the mixture at lower temperatures to transform the calcium silicate to calcium chloride and separating the calcium chloride from the solution to facilitate the extraction of the aluminum content, and recovering the hydrochloric acid evolved in the furnacing reaction for subsequent use in the process.

1,868,500. ELECTRICAL CIRCUIT CONTROLLING MECHANISM. CHARLES LUDWIG HANEL, Jackson Heights, N. Y., assignor to Signal Engineering and Manufacturing Company, New York, N. Y., a Corporation of Massachusetts. Filed July 9, 1928. Serial No. 291,441. 19 Claims. (Cl. 200—113.)



1. In a device of the class described, a pivotally mounted member carrying a contact arm having a yieldable portion deflected from the plane of the arm by said pivoted member to exert a force on the free end of the arm tending to maintain it in a predetermined position.

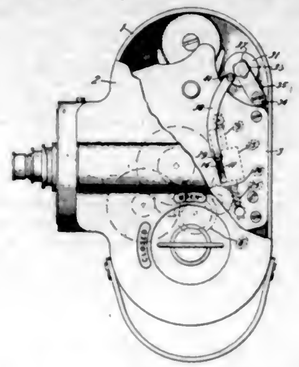
1,868,501. BAG FRAME FASTENER. WILLIAM C. HIERING, Newark, N. J., assignor to J. E. Mergott Co., Newark, N. J., a Corporation of Delaware. Filed May 5, 1930. Serial No. 449,929. 1 Claim. (Cl. 292—228.)



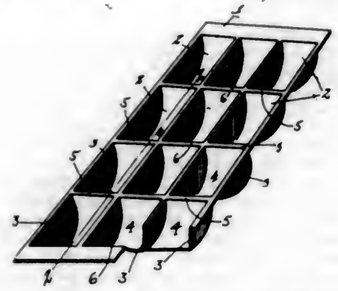
In a bag frame fastener, a tube of substantially uniform cross-section throughout its length, a pair of plugs inserted into opposite ends of said tube, each plug having a head of substantially the same cross-section as the tube, one of said plugs being internally threaded, a rod carried by the other plug, said rod being threaded at its end to engage the internally threaded plug, and elements attached to the plugs and abutting the ends of the tube, to snugly draw the plug heads in abutment with the opposite ends of said tube.

1,868,502. CALIBRATED ADJUSTING DEVICE. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Original application filed Apr. 4, 1929, Serial No. 352,390. Divided and this application filed Apr. 6, 1931. Serial No. 528,220. 6 Claims. (Cl. 116—116.)

1. In a device of the character described the combination of a movable adjusting member, and indicating means for predeterminately positioning said adjusting member comprising an index mark and a cooperating scale relatively movable with respect to said mark predeterminately with movement of said adjusting member, said scale comprising indicated spaces cooperating with said index mark to indicate ranges of adjustment of said adjusting member embracing corresponding adjustments of said adjusting member and adapted to have designations located within corresponding of said ranges thereof independently by individual test with respect thereto cooperate with said index mark to indicate predeterminately said corresponding adjustments of said adjusting member.



1,868,503. ICE TRAY FOR MECHANICAL REFRIGERATORS. GEORGE H. KENNEDY, Jr., Worcester, Mass. Filed Apr. 4, 1929. Serial No. 352,562. 14 Claims. (Cl. 62—108.5.)



1. As a new article of manufacture, an ice tray or receptacle for use in mechanical refrigerators, and formed with an ice space or cavity having substantially vertical sides, connected by a concave bottom in the form of a surface of revolution of sufficient angular extent to permit turning or rocking movement of the ice block formed in said space or cavity.

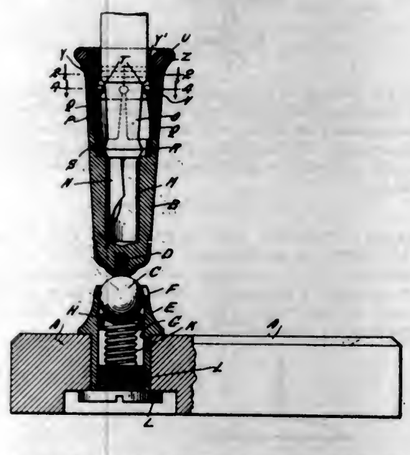
1,868,504. RELIEF VALVE. JOHN KUHL, Oakland, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Original application filed Nov. 25, 1924, Serial No. 752,276. Divided and this application filed July 5, 1927. Serial No. 203,346. 2 Claims. (Cl. 137—53.)

1. A relief valve adapted to be actuated by slight pressure variations, including a light valve head, a valve stem of light weight secured to and extending downwardly from the valve head, a dash pot surrounding the valve stem, guide means secured to the valve stem within the dash pot, the dash pot being filled with a liquid, an annular seat adapted to contain a sealing liquid to seal the relief valve in closed position, the valve head and stem being of relatively light weight and being operably connected with the dash pot, the valve head being held in sealing position in relation to the sealing liquid in the annular seat so as to permit relatively slight pressure variations to raise



the valve head from the valve seat without causing chattering of the valve head against the seat or the valve stem within the dash pot.

1,868,505. DESK SET FOUNTAIN PEN SLEEVE. SADAYOSHI NAKAHARA, New York, N. Y. Filed Sept. 30, 1931. Serial No. 565,965. 2 Claims. (Cl. 120—108.)



1. A desk set fountain pen sleeve comprising a socket for the nib of the pen, a counterbored socket portion in the sleeve above said nib socket, a plurality of spring fingers mounted within said counterbored socket portion, said spring fingers being provided at their upper ends with balls for point engagement with the stem of the pen, a rotatable mouth piece mounted at the upper end of the sleeve and provided with a cylindrical skirt portion extending into said counterbored socket portion and internal circumferential cams on said skirt portion cooperating with the ball ends of said spring fingers for varying the radial position of the balls by rotation of said mouth piece.

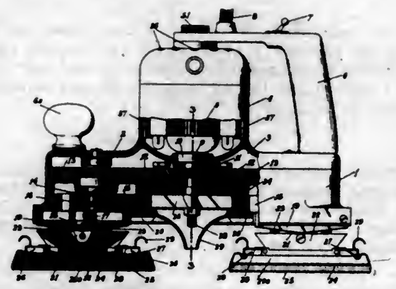
1,868,506. AEROPLANE. WILLIAM REICHENBACH, Chicago, Ill. Filed Aug. 1, 1931. Serial No. 554,555. 2 Claims. (Cl. 244—14.)



1. In an aeroplane of the class described a tailless body, a supporting frame arranged approximately in the center of the body and extending upwardly therefrom a plurality of motors supported on the forward end of said frame, an equal number of motors supported on the rearward end of the frame, a propeller for each motor, and

adapted to be driven thereby, a pair of other supporting frames one arranged adjacent the forward end and the other adjacent the rearward end of the body, a steering fin on each of said second frames, a rudder pivotally mounted on each of said fins, and means for actuating said rudders simultaneously but in opposite directions.

1,868,507. PORTABLE SANDER AND POLISHER. AXEL H. ROOS, Chico, Calif., assignor to A. Freed, San Francisco, Calif., trustee. Filed Jan. 25, 1930. Serial No. 423,345. 3 Claims. (Cl. 51—170.)



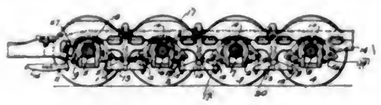
1. A sanding machine including a portable body, a carriage slidably mounted on the body, power means mounted on the body for reciprocating the carriage, a block adapted to support a rubbing sheet supported from the carriage, means mounted in connection with the body for directing an air blast onto the surface engaged by the rubbing sheet and additional means mounted in connection with the body for injecting drops of a liquid into the air blast.

1,868,508. SECTIONAL ROD AND COUPLING MEMBER THEREFOR. WILLIAM H. STEWART, Jacksonville, Fla. Filed Apr. 12, 1929. Serial No. 354,620. 3 Claims. (Cl. 287—103.)



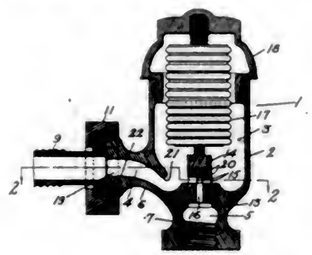
1. Coupling members for the sections of a sectional rod, one of said members having a transverse cylindrical bar and arms at the sides of the bar which connect it with the body of said coupling member, the other of said coupling members having a transverse cylindrical passage and a tongue upstanding in front of said passage and forming a wall thereof, said passage having a transverse entrance at the top thereof which is of less width than the diameter of said passage, one of said arms of said first named coupling member being of such reduced thickness behind said cylindrical bar as to enter said entrance whereby to permit the entrance of said cylindrical bar into said cylindrical passage by a transverse movement of one of said coupling members with respect to the other when the reduced section of said arm is in line with said entrance, said coupling members having cooperating flat broad transverse abutment faces which are located below said passage, one of said faces having a transverse tongue and the other of said faces having a transverse groove in which said tongue is removably received snugly, said tongue and groove being coextensive with said abutting faces and parallel with said bar constituting means which connect said coupling members together to transmit torsionally applied forces therebetween, and said tongue and groove having such configuration that they can be separated by a swinging movement of said coupling members about said cylindrical bar and means including a hook which connects said coupling members and holds said tongue releasably positioned in said groove.

1,868,509. RAILWAY ROLLING STOCK CONSTRUCTION. JAMES C. TRAVILLA, Jr., University City, Mo., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Dec. 26, 1929. Serial No. 416,628. 28 Claims. (Cl. 105—82.)



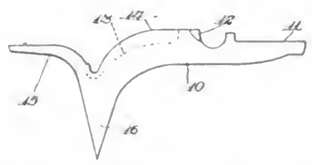
1. In combination, a railway vehicle frame including main side members, a wheeled axle, and a spring equalizing system for supporting said frame on said axle including a journal box carried on said axle and forming an element in said system.

1,868,510. STEAM RADIATOR TRAP. CHARLES R. WATTS, Berkeley, Calif., assignor of one-third to Edward L. Watts and one-third to Charles R. Watts, jr., Berkeley, Calif. Filed July 25, 1928. Serial No. 295,227. 4 Claims. (Cl. 236—56.)



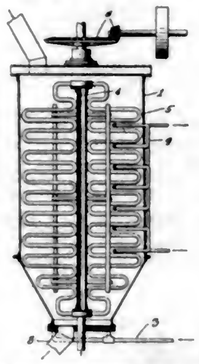
3. In a trap for condensate of a steam radiator, a body having a chamber provided with a steam and condensate inlet and having an outlet orifice at the lower extremity of said chamber, said orifice being disposed at a lower elevation than the highest point of the bottom of the inlet, and said inlet having a portion thereof intermediate said point and chamber disposed at a lower elevation than said orifice.

1,868,511. METHOD OF FORMING MOWER GUARDS. CARL R. WESTBERG, Hinsdale, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Feb. 21, 1930. Serial No. 430,207. 2 Claims. (Cl. 29—148.3.)



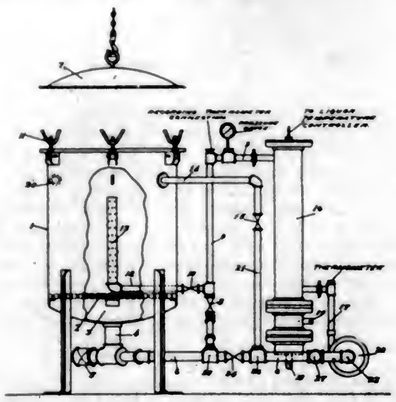
2. The method of forming a mower guard which comprises transforming a blank into a guard of conventional shape with the point thereof bent downwardly with respect to the body at substantially a right angle thereto and with the lip laid back to be in substantial alinement with the body, whereby to expose the ledger surface for forging, then forging said ledger surface, and finally finishing the guard by bending the point and lip to their normal conventional positions relative to the body.

1,868,512. ATTEMPERING FINELY DIVIDED SOLID MATERIAL. NIKOLAI AHLMANN, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed Apr. 15, 1930, Serial No. 444,518, and in Great Britain Apr. 16, 1929. 7 Claims. (Cl. 222—5.)



1. The method of attempering finely divided solid material which consists in stirring mechanically the material, simultaneously rendering the material fluent by the admixture of air, and subjecting the material in a fluent condition to the action of an attempering medium independent of the air.

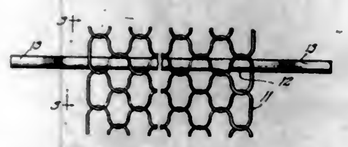
1,868,513. PROCESS AND APPARATUS FOR TREATING TEXTILE MATERIALS. THOMAS DOW AINSLIE, Metuchen, N. J., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, a Corporation of Delaware. Filed May 24, 1928. Serial No. 280,219. 11 Claims. (Cl. 8—18.)



1. Method of treating goods packed in a kier or the like which consists in forcing multiple streams of treating liquor under positive pump pressure into the mass of goods at a rate greater than that at which liquor is removed from the bottom of the kier while simultaneously removing treating liquor from the top and bottom of the kier.

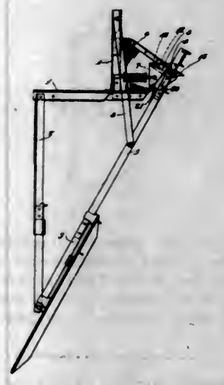
8. In combination with a kier or the like having a false bottom, a vertical pipe provided with substantially horizontal perforations therein within the kier above the false bottom for discharging liquor within the kier, an outlet from the kier below said false bottom and an outlet from said kier at a point above the top of said vertical pipe, means for circulating treating liquor, pipe means connecting the discharge of said circulating means with said vertical pipe, and pipe means connecting the intake of said circulating means with the outlets from the kier.

1,868,514. CONVEYER. GEORGE P. ANSTISS, Oak Park, Ill., assignor to G. S. Blakeslee & Co., Cicero, Ill., a Corporation of Illinois. Original application filed May 26, 1928, Serial No. 280,673. Divided and this application filed July 8, 1929. Serial No. 376,519. 4 Claims. (Cl. 198—193.)



1. A conveyer comprising side members, a web comprising a single strand of wire forming a mesh of continuous, reticulated construction including mutually interengaged loop portions, and cross rods inserted through the web and supported from said side members.

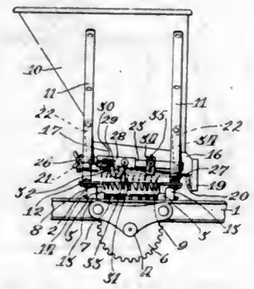
1,868,515. SCRAPER FOR DITCHING MACHINES. HARRY H. BARBER, Aurora, Ill., assignor to Barber Greene Company, Aurora, Ill., a Corporation of Illinois. Filed Dec. 9, 1929. Serial No. 412,679. 9 Claims. (Cl. 37—86.)



2. In a ditching machine, a scraper, means for supporting said scraper for upward movement, yielding means tending to resist such upward movement, and latching means for normally retaining said scraper at its work and adapted to be released upon an upward movement of said scraper.

1,868,516. DISPENSING MECHANISM. WILLIAM L. BEALL, Chattanooga, Tenn., assignor to International Harvester Company, a Corporation of New Jersey. Filed Dec. 20, 1929. Serial No. 415,397. 2 Claims. (Cl. 221—118.)

1. A distributing device comprising a frame, a hopper removably hinged to said frame, a delivery chute pivotally mounted on the bottom of said hopper for horizontal reciprocation, means for urging said delivery chute in one direction, an abutment positioned to limit the movement in said direction, a ratchet wheel below the chute and mounted on the frame, the teeth on said wheel being positioned in spaced relation around the periphery of the wheel, a pivoted ratchet dog depending downwardly from the chute into engagement with said ratchet teeth, said ratchet dog being mounted to give the chute horizontal reciprocating motion upon rotation of the ratchet wheel in one direction and so pivoted to permit its disengagement with the ratchet teeth when the ratchet wheel is moved in the reverse direction.



1,868,517. RAILWAY BRAKING APPARATUS. HERBERT L. BONE, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 8, 1930. Serial No. 442,509. 17 Claims. (Cl. 188—62.)

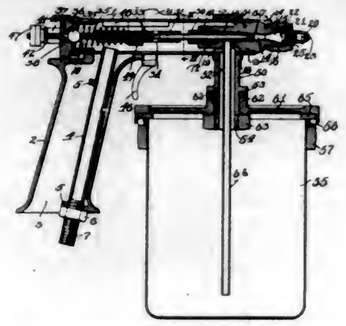


1. Railway braking apparatus comprising a fixed yoke extending transversely beneath a track rail and provided with an opening, a brake beam supported by said yoke and movable parallel with and transversely with respect to said track rail, and a hold down bar extending through the opening in said yoke and secured to said brake beam for limiting vertical displacement of said brake beam.

1,868,518. SPRAYER. ADAM A. BREUER, Chicago, Ill. Filed June 17, 1929. Serial No. 371,340. 11 Claims. (Cl. 91—45.)

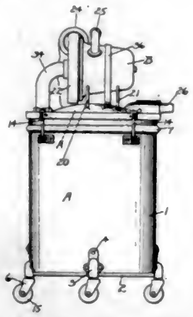
1. A sprayer including in combination, a nozzle tube, an apertured closure member at one end of said tube, an air admission pipe communicating with said tube adjacent said closure, a bored discharge plug at the other end of said tube, a tube slidable in said bore, a member extending through the aperture in said closure and connected to said slidable tube, said member carrying a valve for closing said aperture, means cooperating with said member for normally urging it in such direction as to space

said valve from said aperture and move said slidable tube to close the passageway through said plug bore, and a trigger for moving said member in a direction to move



said valve against said aperture to seal the same and to move said slidable tube away from closing engagement with said plug bore.

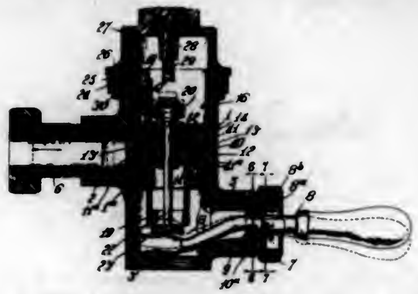
1,868,519. PORTABLE SUCTION CLEANER. ADAM A. BREUER, Chicago, Ill. Filed Oct. 21, 1929. Serial No. 401,119. 3 Claims. (Cl. 15—15.)



1. A portable suction cleaner comprising a vertical tank supported on wheels, a cover removably secured on said tank, an elongated suction producing mechanism mounted on the top of said cover and disposed centrally thereof, said mechanism including a motor and a fan, outlet conduit means extending through said cover and connected to the inlet of said suction producing mechanism, an inlet elbow on said cover having a portion thereof extending beyond the periphery of said cover to provide a hose connection in communication with the interior of said tank, said extending portion of said elbow being disposed away from said mechanism along the horizontal axis of said mechanism, said fan being disposed to rotate in a plane perpendicular to the horizontal axis of the mechanism, and to the axis about which the cleaner tends to tip when pull is exerted thereon by a hose connected to said hose connection.

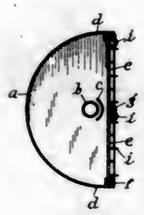
1,868,520. FLUSHING VALVE. ROBERT A. BROOKS, Chicago, Ill. Filed Sept. 1, 1927. Serial No. 216,792. 13 Claims. (Cl. 137—93.)

1. In a flushing valve of the character described, a casing formed with inlet and outlet passages and a partition between having a main valve seat and a retarding chamber in axial alignment therewith, a piston in said chamber and a main valve contiguous to said piston cooperating with said seat and a screw-threaded axial stem arranged to clamp said piston and valve together, said valve and piston being formed to provide an annular space therebetween forming a screen chamber, an annular screen forming a partition in said chamber said valve and



piston being severally orificed on opposite sides of said screen to permit free communication through said valve and restricted communication through said piston, and means for relieving pressure in said retarding chamber.

1,868,521. VIEWING BOX FOR OBSERVING TRANSLUCENT IMAGES. GUSTAV BUCKY, New York, N. Y., assignor to Roefinag, Aktiengesellschaft, a Corporation of Switzerland. Filed Mar. 3, 1932, Serial No. 596,435, and in Germany Aug. 8, 1930. 10 Claims. (Cl. 40—132.)



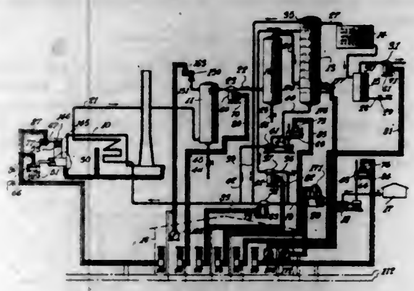
1. A viewing box for observing translucent images comprising a source of light of the mercury vapor type, a reflecting surface spaced therefrom, a pane of transparent glass in the path of the reflected light and means for preventing direct rays from the lamp passing through the glass pane.

1,868,522. RELIEF VALVE. CLARENCE GEARHART CRISPIN, Berwick, Pa. Filed May 2, 1930. Serial No. 449,136. 2 Claims. (Cl. 137—69.)



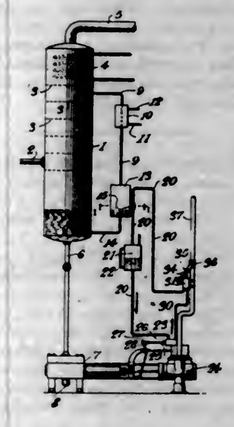
1. A relief valve for pipe lines to purge the latter of air and gas and afford a liquid tight seal when closed, said valve comprising a valve seat, a valve carrying lever, a collar member which is relatively adjustable in the lever, a valve member having a shouldered portion to engage the collar member and a reduced shank portion adapted to pass with clearance through the collar member, and a spring abutting the collar member and disposed around the reduced shank portion for the purpose described.

1,868,523. CONTROL SYSTEM. LUIS DE FLOREZ, Pomfret, Conn. Filed May 7, 1928. Serial No. 275,590. 2 Claims. (Cl. 196—132.)



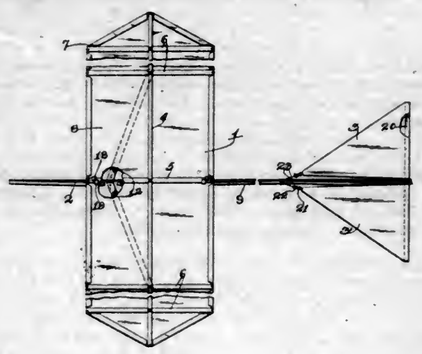
1. An oil plant, comprising in combination, a tubular heater, an evaporator, a pressure regulating valve between said heater and said evaporator, a control house, and means in said control house remote from said valve for manually controlling said valve from said control house, the remote manual control means comprising a manually operable member, an electrical torque conveying system comprising a transmitter and a receiver, a mechanical linkage directly connecting said manually operable member and said transmitter, and a mechanical linkage directly connecting said receiver and said valve, the electrical characteristics of said system being such that all of the power applied to said valve is derived from said manually operable member and that the resistance of said valve to adjustment is felt at said manually operable member, whereby the operator may determine the adjustment with reference to such resistance.

1,868,524. LIQUID LEVEL CONTROL. LUIS DE FLOREZ, Pomfret, Conn. Filed July 27, 1928. Serial No. 295,674. 7 Claims. (Cl. 103—11.)



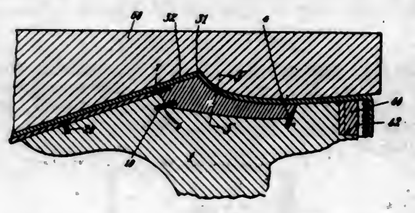
1. A device for controlling the level of liquid accumulating in a container comprising a receptacle positioned substantially at the level of the liquid to be controlled, a connection between said receptacle and said container below the liquid level to be controlled, a primary pump connected to said container below the level to be controlled, an auxiliary pump actuated by said primary pump, means for supplying liquid to said auxiliary pump, a discharge circuit from said auxiliary pump, means responsive to variations in level in said receptacle adapted to regulate the discharge from said auxiliary pump and thereby vary the pressure in said discharge circuit, and means for controlling the primary pump responsive to variations in pressure in said discharge circuit.

1,868,525. KITE. THERON W. DE MOTT, Chicago, Ill. Filed Feb. 4, 1931. Serial No. 513,328. 2 Claims. (Cl. 244—22.)



1. In an aeroplane kite, a horizontally disposed body wing including a frame consisting of a longitudinal center bar, a transverse bar attached to the central portion of the longitudinal bar, spaced transverse end bars attached to the longitudinal bar, a cover for said frame, a substantially vertical body frame, a covering for the body frame, means for detachably connecting the upper edge of the body frame to the central transverse bar, a vertical fin at one end of the body frame and lying in the same general plane, and horizontal tail rudders arranged upon opposite sides of the body frame, and means for detachably connecting the tail rudders to the body frame.

1,868,526. SOLE MOLDING FORM. MILTON L. DODGE, Newburyport, Mass. Filed Oct. 18, 1926. Serial No. 142,317. 9 Claims. (Cl. 12—123.)

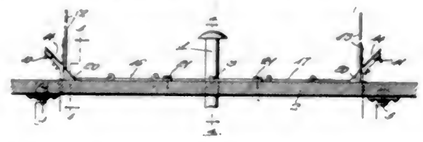


4. A molding form comprising a block of generally last shape having a recess in its shank portion, a shank form engaging in said recess, and a reversible plate shaped to the contour of the forepart of a shoe, said plate and block being formed complementally whereby said plate may be held in assembled relation to said block either side up and present a continuous surface with said shank form seated in said recess.

1,868,527. SIGNAL OPERATING SWITCH. ARTHUR J. GERHART, Lorain, Ohio. Filed May 19, 1930. Serial No. 453,598. 3 Claims. (Cl. 200—59.)

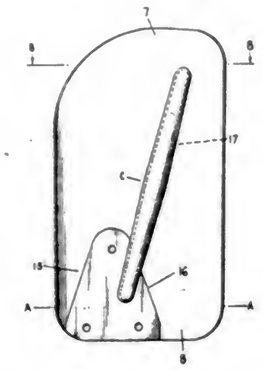
1. A signal operating switch comprising in combination with an automobile foot accelerator pedal, a pair of stationary contacts arranged on opposite sides of the

pedal in spaced relation thereto, movable foot engaging members mounted adjacent the respective stationary contacts, and contacts carried by the foot engaging members for selective engagement with the respective stationary



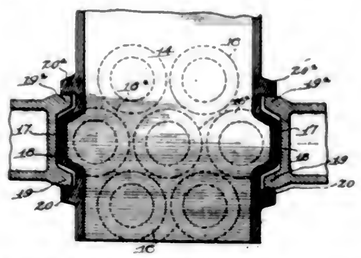
contacts, and co-acting means between the foot accelerator pedal and the foot engaging members for locking the latter against movement when the pedal is in its raised position.

1,868,528. FAN. ARCHIBALD D. GARDNER, Jackson, Mich., assignor to Automotive Fan & Bearing Co., a Corporation of Michigan. Filed July 8, 1930. Serial No. 466,485. 7 Claims. (Cl. 170—159.)



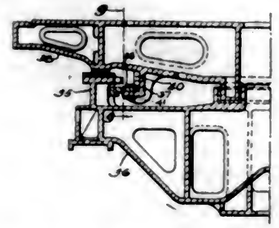
1. In fans, a rotatable center member and a plurality of blades secured thereto, each of said blades having a surface equivalent to a section of the surface of a frustum of a cone, with the base at the outer periphery of the fan and the radiating side boundary lines of which lie without any plane of the axis of the cone.

1,868,529. TRUCK SIDE FRAME. CLARENCE B. HARBISON, Lima, Ohio, assignor to The Ohio Steel Foundry Company, Lima, Ohio, a Corporation of Ohio. Filed Mar. 22, 1930. Serial No. 438,012. 3 Claims. (Cl. 105—197.)



1. In a truck, a side frame including a pair of upright columns, each having vertical channels formed in their opposite faces, a bolster extending between said columns and having a pair of projections fitting in said channels, a plurality of coil springs supporting said bolster, including two end springs, each of which is in partial supporting position beneath its respective projection, and a pair of lugs on said bolster spaced from said projections and engaging an exterior face of said columns to restrain relative lateral movement of said bolster and said side frame.

1,868,530. RAILWAY VEHICLE STRUCTURE. JOSEPH J. HARLEY, Granite City, and EDMUND S. BECKETTE, East St. Louis, Ill., assignors to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Apr. 18, 1931. Serial No. 531,164. 4 Claims. (Cl. 308—138.)



1. In combination, a railway vehicle body bolster, a truck bolster associated therewith, a downwardly facing side bearing member on said body bolster, an opposing upwardly facing side bearing member on said truck bolster, a hook-like device on said body bolster having an upwardly facing lip, and a hook-like device on said truck bolster having a downwardly facing lip at a higher level than said first mentioned lip, the adjacent edges of said lips being spaced apart longitudinally of the bolsters, and an element extending over said lip on said body bolster, and under said lip on said truck bolster and detachably secured to one of said lips.

1,868,531. OXIDATION OF DERIVATIVES OF FLUORENE. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Dec. 13, 1928. Serial No. 325,932. 19 Claims. (Cl. 260—131.)

1. A method of oxidizing dehydrogenated fluorenes, which comprises vaporizing them, admixing the vapors with an oxidizing gas and passing the mixture at 340–500° C. over an oxidation contact mass.

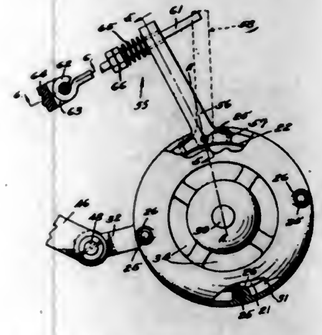
1,868,532. PRODUCTION OF ARYL KETONES. ALPHONS O. JAEGER, Mount Lebanon, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed July 31, 1931. Serial No. 554,377. 18 Claims. (Cl. 260—64.)

1. A process of producing ketones of the benzophenone type, which comprises heating a benzoylbenzoic acid in the presence of a small amount of a compound of a metal included in the group consisting of zinc, cadmium, silver, aluminum, titanium, zirconium, lead, thorium, vanadium, chromium, molybdenum, tungsten, manganese, to a temperature sufficiently high to cause liberation of carbon dioxide and maintaining the heating until evolution of the carbon dioxide ceases and then recovering the ketone formed.

1,868,533. MOTOR CONSTRUCTION. CARL E. JOHNSON, Pasadena, Calif. Filed July 1, 1929. Serial No. 375,143. 1 Claim. (Cl. 172—36.)

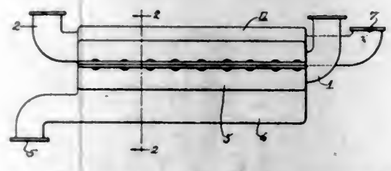
In a motor, the combination of: a plurality of stator laminations stacked so as to form a stator frame; ring members disposed on opposite sides of said stator frame; means for rigidly securing said ring members together; end shields disposed longitudinally outside said ring members; attaching rod members for retaining said end shields

in position; a drive shaft on said motor; means for pivotally supporting said motor from said end shields; belted drive means connecting said drive shaft to a driven shaft;



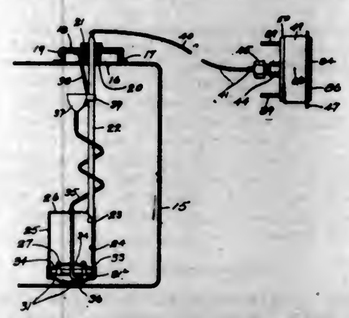
a removable arm secured to one of said attaching rod members; and means acting on said arm for pivoting said motor so as to tighten a belt of said belted drive means.

1,868,534. SUPERCHARGER AIR CLEANER. ROBERT E. LYFORD, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Feb. 7, 1930. Serial No. 426,574. 6 Claims. (Cl. 183—75.)



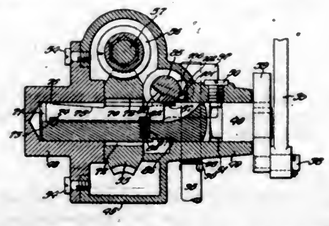
1. A device for cleaning a gas which comprises means for producing a flat stream of a cleaning gas at comparatively high velocity, means for directing a flat stream of the gas to be cleaned into contact with said stream, and means for subsequently separating the paths of travel of said gases thereby preventing substantial mixing.

1,868,535. LIQUID INDICATING DEVICE. JAMES MACCALLUM, Jr., and EDWARD R. POWELL, St. Louis, Mo.; said Powell assignor to said Maccallum. Filed July 14, 1922. Serial No. 574,876. 1 Claim. (Cl. 73—54.)



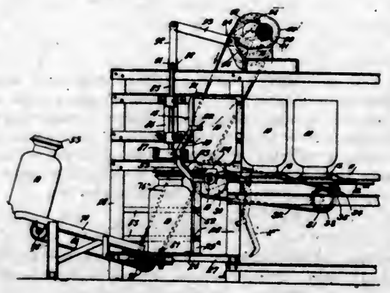
In a liquid quantity indicating device for containers having a variable quantity of liquid therein comprising the combination with a pressure gauge and its housing, a pressure chamber submerged in the liquid within the container and communicating with the liquid at the full depth to be measured, means adapted to receive liquid and air while liquid is being supplied to the container, said means adapted to conduct said air downward and deliver the same to the pressure chamber for maintaining a constant volume of air therein and a pressure transmitting conduit connecting said chamber and gauge housing, of a pressure responsive diaphragm located in said housing, means located in said housing for limiting the forward movement of said diaphragm when pressure passing through said conduit acts on said diaphragm, pervious means for controlling the rate of speed at which the pressure fluid from the pressure chamber can pass to and from said pressure responsive diaphragm, adjustable means for predetermining the density of said pervious means, and an indicating hand formed from a single piece of material and having a body portion substantially S shaped pivotally mounted in said housing, aligned bearings formed in the body portion of said hand, a pin located in the body portion of said hand and out of alignment with the axis of said bearings, and means for operatively connecting said pin to said diaphragm whereby said hand is moved on its bearings by said diaphragm.

1,868,536. CLUTCH-DEVICE FOR WIRE-STITCHING AND STAPLING MACHINES OR LIKE APPARATUS. ARTHUR H. MAYNARD, Warwick, R. I., assignor to Boston Wire Stitcher Company, Portland, Me., a Corporation of Maine. Filed Sept. 9, 1929. Serial No. 391,248. 13 Claims. (Cl. 192—28.)



1. A clutch comprising a rotary driving-member, a rotatable driven-member, a key extending axially of and sheathed in one of said members, said key pivoted to adapt it to be moved radially to engage the other member to effect rotary driving connection between said members, and a rackable element extending across the axis of the driving-member and movable into different positions to operate the key to effect the clutching and declutching action.

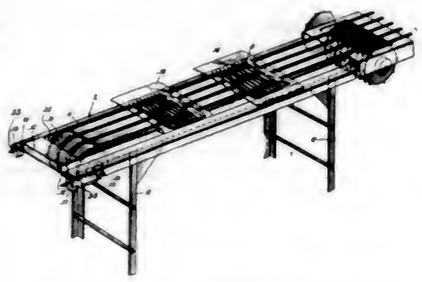
1,868,537. COVER REPLACING DEVICE FOR CAN WASHING MACHINES. JOHN M. MCCLATCHIE, New York, N. Y., assignor to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 20, 1930. Serial No. 429,925. 8 Claims. (Cl. 29—84.)



1. In a can washing machine in which the can is discharged from the washing zone in inverted position, can inverting means receiving the can from the washing zone,

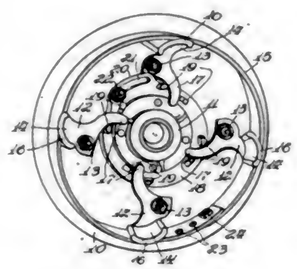
a support, can transferring means for receiving the can from the can inverting means and depositing it at a cover replacing position on said support with its open end uppermost, means for depositing a cover on the can in cover replacing position, a vertically movable plunger for forcing the cover into the can, and plunger controlling means for raising the plunger and controlling the downward movement thereof under the action of gravity until the plunger strikes the cover.

1,868,538. CONVEYER. HARRY H. MCKEE and NICKOLAS J. DZIEDZIC, Chicago, Ill., assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 30, 1931. Serial No. 553,983. 8 Claims. (Cl. 198—190.)



1. A conveyer device, comprising a conveyer table having a central raised portion, and conveyer elements movable over said raised portion.

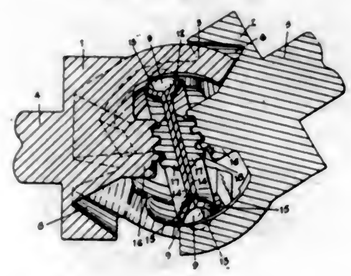
1,868,539. DISK FURROW OPENER. JAMES MORKOVSKI, Canton, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Sept. 24, 1931. Serial No. 564,781. 7 Claims. (Cl. 97—209.)



1. The combination with a tillage disk of a plurality of bracket members pivotally mounted on a face of the disk at circumferentially spaced points around its center and formed with angular extensions perpendicular to the disk face, a circular extensible gage band seated on said angular extensions, and means to simultaneously move the bracket members equally radial distances.

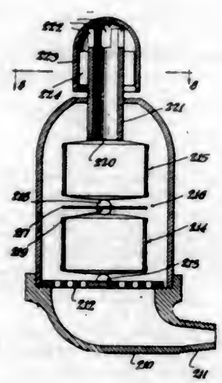
1,868,540. UNIVERSAL JOINT. HUBERT A. MYERS, Toledo, Ohio. Filed Mar. 24, 1930. Serial No. 438,280. 3 Claims. (Cl. 64—91.)

1. In a forked universal joint for connecting two rotatable members, the fingers of the forked members having opposed concentric grooves, a circular body having a peripheral groove located in the plane extending transverse to the fingers of the forked members, balls located in the grooves for interconnecting the parts, the body and the members having rolling contacting parts whose



surfaces operate to positively maintain given points on the axes of rotation of the members constant distances from the intersection of the axes of the members as the members are moved angularly relative to each other.

1,868,541. VALVE FOR STEAM RADIATORS AND THE LIKE. STANLEY A. W. OKELL, Cranford, N. J. Filed May 2, 1929. Serial No. 359,744. 3 Claims. (Cl. 236—63.)



2. In a valve for steam radiators for heating purposes and the like, a plurality of coacting thermal capsules each comprising a tubular body portion of polygonal cross section provided adjacent each end thereof with a flexible diaphragm sealed thereto in an airtight manner, in combination with spacing means interposed between said coacting thermal capsules to take up a part at least of the lost motion of said coacting thermal capsules during their expansion, said spacing means comprising a main body portion of similar cross sections to said capsules and at least one substantially centrally disposed projection thereon.

1,868,542. SCALE FOR DETERMINING COLOR OF EGG MEAT. MARY E. PENNINGTON, New York, N. Y., assignor to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed June 26, 1931. Serial No. 546,975. 4 Claims. (Cl. 88—14.)

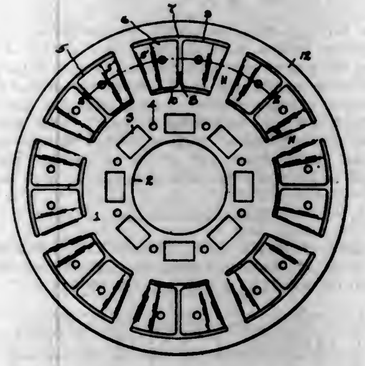
1. A device for determining the shade of color of egg meat comprising a strip of sheet metal having a white

coating of non-absorptive material thereon, one end of the device constituting a handle, and a series of colored



bands, each two adjacent colored bands being spaced apart by a strip of white, said colored bands ranging from light yellow to deep orange.

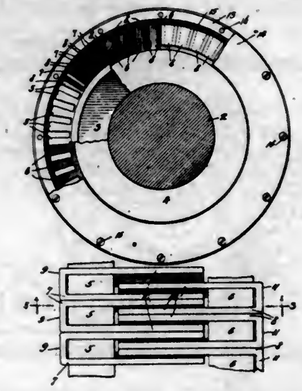
1,868,543. CLUTCH PLATE. GEORGE S. SALZMAN, Cleveland Heights, Ohio, assignor to The Monmouth Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 8, 1930. Serial No. 441,235. 9 Claims. (Cl. 192—107.)



1. A clutch plate comprising a plurality of pairs of tongues, each pair being defined by an H-shaped slot, said slot being disposed with the bar element of the H radial, said tongues being offset alternately on opposite sides of the plane of the plate.

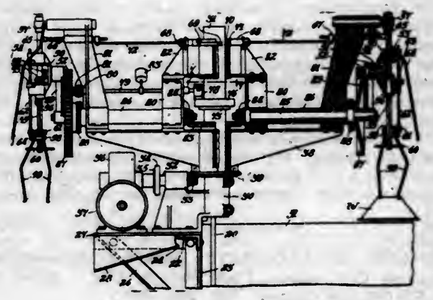
1,868,544. FLEXIBLE COUPLING. JOHN J. SERRELL, Elizabeth, N. J., assignor to Smith & Serrell, Mahwah, N. J., a Copartnership consisting of Robert A. Smith and John J. Serrell. Filed Nov. 26, 1930. Serial No. 498,208. 9 Claims. (Cl. 64—96.)

1. In a flexible coupling, the combination of two coupling members arranged side by side, and means for connecting said coupling members including a peripheral set of teeth on one of them, U-shaped springs embracing said teeth and arranged with their sides projecting toward



but not reaching the other coupling member, and means on said other coupling member to cooperate with said sides of the U-shaped members.

1,868,545. TINNING MACHINE. JOHN C. SLONNEGER, Milwaukee, Wis., assignor to International Harvester Company, a Corporation of New Jersey. Filed Dec. 5, 1929. Serial No. 411,743. 17 Claims. (Cl. 91—12.2.)

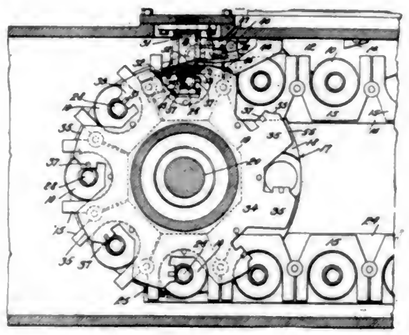


1. In a tinning machine arranged adjacent a tin pot, a tallow pot, and a cooling pot, the combination of means for holding a piece of work to be tinned, a substantially vertically disposed swingably mounted spindle carrying the holding means, means for successively moving the spindle and holding means and causing it to immerse the work in the pots in the order named, and means for causing said means to enter the work in the pots at an angle to the vertical and for retracting the work from said pots at an angle to the vertical, said work traveling in a cycloidal path in the direction of travel of the work holder.

1,868,546. DETECTOR MECHANISM. ALSON J. SPRAGUE, Middletown, N. Y., assignor to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed June 22, 1929. Serial No. 372,841. 7 Claims. (Cl. 113—14.)

1. In a machine for sealing cans each having a hole in one end, the combination with means for feeding cans in succession along a path including a sealing zone in

which the cans are sealed and a supply point at which a cap is placed over a corresponding can preparatory to sealing the can, of means for feeding caps to said sealing zone one by one and simultaneously with said cans including members normally movable in a path to engage



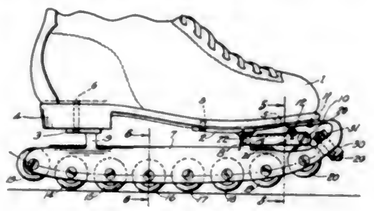
successive caps at a supply point and advance them with corresponding cans as the latter pass beneath the cap supply point, and means responsive to the absence of a can beneath said supply point to shift the corresponding member out of its normal path and thereby prevent the feeding of a cap.

1,868,547. MANUFACTURE OF CHEESE. ALBERT F. STEVENSON, Ridgewood, N. J., assignor to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 30, 1925. Serial No. 59,538. 7 Claims. (Cl. 99—11.)

1. The process of making cheese which consists in homogenizing the milk, converting the homogenized milk into curds, expressing the whey from the curds, enclosing the curds surrounded by an inert gas in an air-tight container from which the air has been extracted, and permitting the curds to remain in the container until they ripen to cheese.

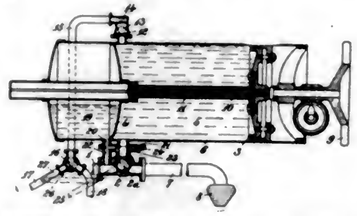
5. In the process of making cheese the step which consists in ripening the cheese while preventing the formation of a rind on its outer surface by excluding atmospheric air from the cheese during the ripening process.

1,868,548. ROLLER SKATE. JOSEPH C. TURNER, Oklahoma City, Okla. Filed Mar. 6, 1931. Serial No. 520,605. 4 Claims. (Cl. 208—173.)



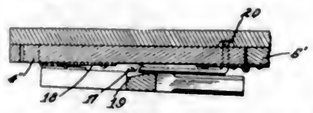
1. A device of the class described, comprising a U-shaped housing for a plurality of rollers, a plurality of rollers pivoted within said housing and alined in tandem or single file therein to simulate the shape and action of the steel runner of an ice skate, toe plate, heel plate and connecting means for attaching said housing to a shoe, said housing having rocker or bow-shaped lower edges, the curvature of said lower edges being such that only two of said rollers are in contact with the floor at any one time, thereby permitting quick turns and sudden changes of direction of the skater, a front roller retarded by a brake, adjustable brake means for said front roller, said brake controlled roller being adapted to retard the skater, especially when skating backwards, and prevent overbalancing of said skater.

1,868,549. METERING APPARATUS FOR MIXING MACHINES. PETER VOGLSAMER, Munich, Germany, assignor to Technik und Investment Aktiengesellschaft, Vaduz, Liechtenstein. Filed Feb. 25, 1930, Serial No. 431,325, and in Germany Mar. 1, 1929. 5 Claims. (Cl. 221—95.)



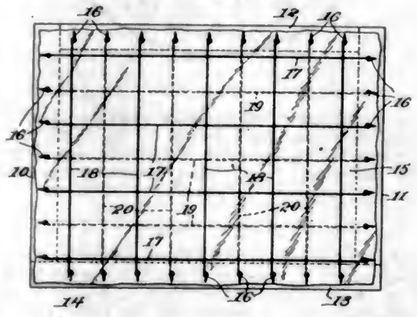
1. A metering apparatus for mixing machines, comprising a vessel having a metering chamber and an air chamber; and a valve housing and valve in communication with a liquid supply and to both chambers, the communication of the liquid supply through the valve housing in the air chamber being continuously open irrespective of the position of the valve.

1,868,550. TABLE. EDWARD BENTON WAGNER, Milton, Ind. Filed July, 19, 1930. Serial No. 469,242. 2 Claims. (Cl. 45—11.)



1. A table of the class described comprising a top, a pair of legs hinged to each end thereof, a cross bar connecting the legs of each pair together, a pair of brace bars hinged to an under part of the top at the center thereof, a U-shaped member pivoted to each cross bar and having its looped end bent upwardly to receive each brace bar therein and a plate on each brace bar having portions engaging the bent-up part of the U member when the free end of the brace bar is in engagement with the cross bar.

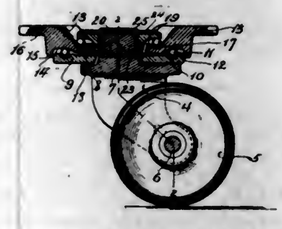
1,868,551. SCREEN FOR PROJECTING MACHINES. EMANUEL E. WAGNER, Lamar, Mo. Filed Jan. 20, 1930. Serial No. 422,119. 5 Claims. (Cl. 88—24.)



1. In a projection screen, a frame, a fabric extending across the frame, wires extending between opposite elements of the frame and adjacent to the surface of the

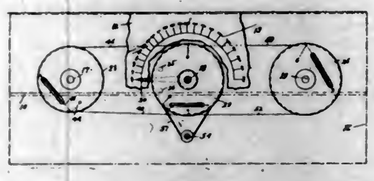
fabric, and devices for securing said fabric and wires, these devices comprising pins projecting into the frame and deflected toward adjacent outer edges of the frame, said pins including end portions producing direct crank action on the wires.

1,868,552. CASTER. KENT E. WALTER, Alliance, Ohio, assignor to Transue and William Steel Forging Corporation, Alliance, Ohio. Filed July 27, 1929. Serial No. 381,477. 4 Claims. (Cl. 16—21.)



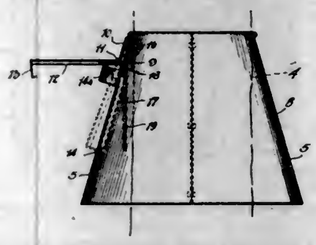
1. A caster including a fork having a shank, a race ring resting on the fork, rolling elements supported by the race ring, a second race ring carried by the rolling elements, rolling elements carried by the second race ring, and an adjustable member mounted on the shank and bearing against the last mentioned rolling elements.

1,868,553. UNITARY CONTROL FOR CONDENSERS. MAURICE B. WEST, Lima, and HARRY C. MAIBOHM, Sandusky, Ohio, assignors to The Simplex Radio Company, Sandusky, Ohio, a Corporation of Ohio. Filed Dec. 9, 1926, Serial No. 153,526. Renewed June 11, 1932. 13 Claims. (Cl. 74—7.)



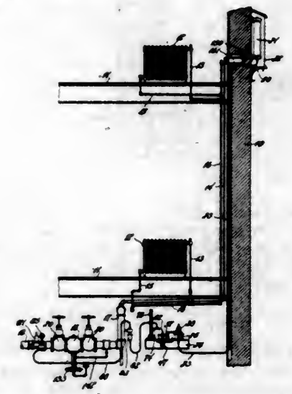
1. In a radio receiving apparatus, a plurality of variable condensers, rotary control members for each of said condensers disposed in the same horizontal plane and means interconnecting said rotary control members for varying the capacities of said condensers simultaneously, the capacity of one of said condensers being more rapidly varied than the others; said means being resiliently attached to each of said rotary control members for synchronously moving said condensers.

1,868,554. GUARD AND TRAP. EDWARD V. WILBERN, Saugerties-on-the-Hudson, N. Y. Filed July 16, 1930. Serial No. 468,396. 6 Claims. (Cl. 43—58.)



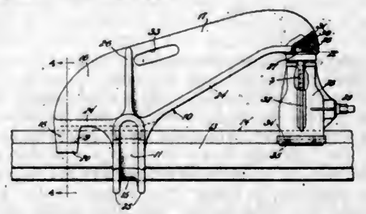
5. The combination with a substantially bell-shaped rodent baffle having means for securing its smaller end in a position encircling a tree or like support, said baffle having a passageway for the rodents through its wall and opening into the space within the bell and about the tree or support, of a trap jaw pivoted on the bell and operating in the passageway, a spring for operating the jaw, and a latch for holding the jaw against the action of the spring and including a trigger on the inside of the bell adjacent the passageway.

1,868,555. REGULATING APPARATUS FOR STEAM HEATING SYSTEMS. EDGAR C. WILEY, Lynchburg, Va., assignor to Simplex Heating Specialty Company, Inc., Lynchburg, Va., a Corporation of Virginia. Filed June 13, 1930. Serial No. 460,952. 32 Claims. (Cl. 236—80.)



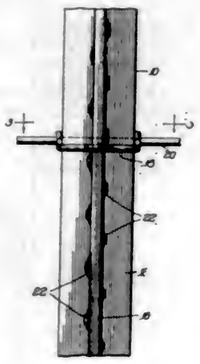
1. Regulating apparatus for steam heating systems for buildings comprising, in combination, a pipe filled with a fluid; means utilizing the temperature of the air to provide a varying fluid pressure within said pipe; means actuated by variations in fluid pressure within said pipe to regulate the steam pressure within the heating system; and means to proportion the fluid pressure, and hence the steam pressure, so as to deliver uniform quantities of steam through an orifice for each degree difference in the air temperature.

1,868,556. RAIL BENDER. HORACE G. WILLIAMS, Chicago, Ill. Filed June 18, 1929. Serial No. 371,923. 4 Claims. (Cl. 153—38.)



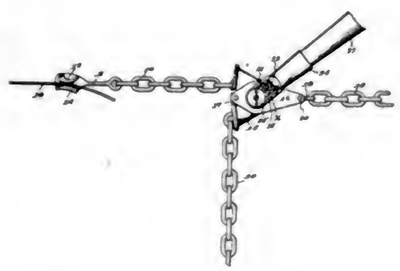
1. A rail bending device, comprising, in combination, a body having an abutment at one end for engaging one side of a rail head and having its other end spaced from the rail; said spaced end having a concave seat therein facing the rail; a lug on the abutment adapted to engage the face of the rail head; an intermediate extension formed integral with the body and extending across and engageable with the face of the rail head, said extension having a hook portion engageable with the opposite side of the rail head to provide a bending fulcrum; a jack interposed between the spaced end of the body and the rail and having a convex head adapted to fit in the concave seat; and a bearing plate at the other end of the jack to engage the rail head.

1,868,557. FENCE POST. WILLIAM D. WILLIAMS, Duluth, Minn. Filed Feb. 2, 1931. Serial No. 513,013. 2 Claims. (Cl. 256—37.)



1. A rolled section suitable for fence posts and the like, said section being approximately T-shaped in cross section, the stem of the T being formed with a bulb polygonal in cross section and the bulb having projections on its opposite sides.

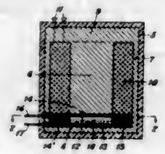
1,868,558. TENSION DEVICE. AUGUST ANDERSON, Shoshoni, Wyo.; Ida Anderson administratrix of said August Anderson, deceased. Filed Sept. 24, 1926. Serial No. 137,555. 1 Claim. (Cl. 254—164.)



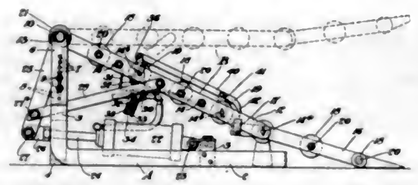
In a device of the class described, a housing, a rotatable device mounted therein and including a ratchet wheel, feeding pawls for engaging the ratchet wheel, devices for moving the pawls to operative position, means for moving either pawl to inoperative position, means carried by the rotatable device for engaging a plurality of adjacent links of a chain when the links are in different angular positions, a locking dog pivoted in the housing in position for retaining the rotatable device independently of the pawls, one end of the dog being released when the other end engages the rotatable element, and both ends being recessed, means for pivoting the dog between the recessed portion, and means adapted to engage either recess and throw the adjacent end of the dog into engagement with the rotatable element.

1,868,559. RELAY. HENRY M. BASCOM, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 17, 1930. Serial No. 461,756. 12 Claims. (Cl. 200—87.)

1. A unitary relay structure comprising a core and a coil associated therewith, parallel contact elements spaced one above the other and having a gap therebetween, said contact elements forming the terminals of an electrical circuit, and comminuted material responsive to the excitation of the coil for closing the gap between said contact elements.

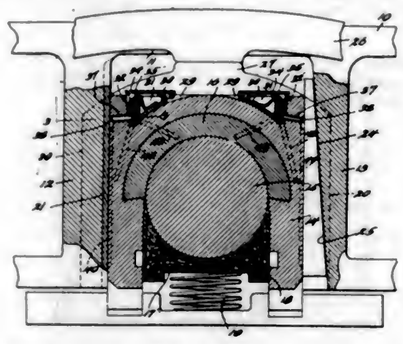


1,868,560. SHEET HANDLING APPARATUS. LETCHER L. BEACH and CARL GUSTAVE WRIGHT, Cambridge, Ohio, assignors to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed Dec. 23, 1929. Serial No. 416,116. 4 Claims. (Cl. 214—130.)



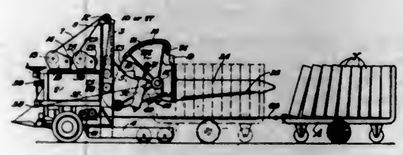
1. A portable sheet lifter and conveying mechanism for sheets and packs comprising an L-shaped frame, said frame having its vertical leg adjustable vertically, a normally inclined roller table having one end pivotally mounted on the upper end of said vertical leg and its other end free and adapted to rest on the mill floor, a fluid pressure cylinder pivotally mounted on said frame, means operatively connecting the piston of said cylinder and said table whereby operation of said cylinder will rock said table about its pivotal mounting on said frame so as to raise said table to a position horizontal with said mounting, a valve mounted on said table for controlling the flow of fluid to said cylinder, means operable by the sheets passing along said table for operating said valve to admit fluid to said cylinder and spring means for returning said operating mechanism to normal position to close said valve.

1,868,561. DRIVING SHOE BOX OILING MECHANISM. HARRY G. BECKER, Albany, N. Y. Filed Oct. 26, 1929. Serial No. 402,724. 2 Claims. (Cl. 308—79.)



2. The combination with a locomotive driving box having a shallow recess in the upper surface thereof, of a lubricant holding cup set in said recess and a conduit passing through said box and engaging said cup laterally.

1,868,562. COIL HANDLING APPARATUS. KENNETH A. CHUBB and HARLEY C. RALSTON, Cleveland, and THOMAS D. WILLIAMS, Garfield Heights, Ohio. Filed Dec. 17, 1931. Serial No. 581,738. 11 Claims. (Cl. 214—65.)



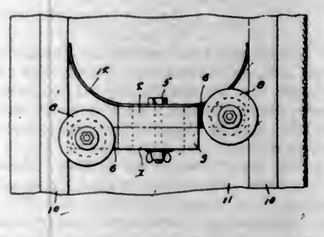
1. Apparatus for handling coils of strips, rods and the like comprising a support, a carriage movable vertically on said support, a ram pivotally mounted on said carriage for movement between approximately horizontal and vertical positions, means for moving said ram about its pivotal mounting, at least one arm pivotally mounted on said ram adjacent the base thereof, and means for moving said arm away from and toward said ram to engage and hold the coils being handled in alinement and to release said coils.

1,868,563. KEY COVER. JOSEPH CICOUREL, New York, N. Y. Filed Apr. 26, 1930. Serial No. 447,688. 2 Claims. (Cl. 40—2.)



1. A key cover of the kind described, comprising a normally contracted flat hollow substantially circular-shaped body of resilient material to fit a correspondingly shaped head of a key and adapted to be removably fitted thereover, said body having a peripheral opening normally of a size considerably less than the wider extent of said key head whereby when the body is stretched the opening will permit the insertion of the key head therethrough for snug embracing of the body upon the head.

1,868,564. TIRE SPREADER. CALVIN C. CLARK, Verona, Pa., assignor of one-half to Viola D. Bennett, Verona, Pa. Filed May 21, 1931. Serial No. 539,053. 2 Claims. (Cl. 152—27.)



1. A tire spreader comprising a pair of members adjustably secured together, arms on said members, pairs of rollers journalled to each of said arms to engage the beads of a tire, a guide flange formed on one roller of each pair of said rollers, and a resilient spreading member carried by one of the first named members and engaging the inner faces of the beads of a tire.

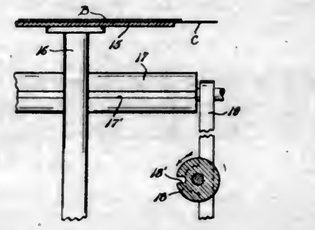
1,868,565. PROCESS OF PREPARING ADSORBENT MATERIALS. GERALD C. CONNOLLY, Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Nov. 22, 1930. Serial No. 497,606. 13 Claims. (Cl. 252—2.)

1. The process of preparing an adsorbent material consisting in incorporating activated carbon "fines" of a size finer than 300 mesh in an inorganic oxide gel forming mass, the amount of "fines" being such as to not exceed 25% of the oxide content of the gel forming mass, and then converting the said mass into a hard, porous gel.

1,868,566. PROCESS OF MANUFACTURING PHENOL-FORMALDEHYDE RESIN SHEETS AND FORMS. GEORGE J. CROSSMAN, Trenton, N. J., assignor to Panelyte Corporation, Trenton, N. J., a Corporation of New Jersey. Filed May 28, 1931. Serial No. 540,316. 7 Claims. (Cl. 92—21.)

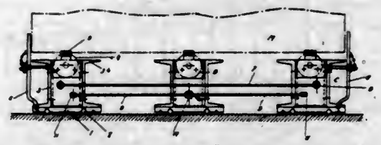
1. The process of impregnating phenol-formaldehyde resin sheets with mica or similar substances which comprises first finely dividing the mica, adding water thereto to form a colloidal paste, adding this paste to the paper stock, finishing the paper stock, impregnating these sheets with phenol-formaldehyde resin varnish and subjecting superimposed sheets to heat and pressure.

1,868,567. BOX FORMING AND WRAPPING MACHINE. RAYMOND C. CUNNINGHAM, Seattle, Wash., assignor to Hincher Paper Box Co., Seattle, Wash., a Corporation of Washington. Filed July 24, 1929. Serial No. 380,651. 12 Claims. (Cl. 93—54.)



1. In a machine for forming and wrapping boxes, the combination with a form block and a work supporting block, of a plunger mounted for vertical movement, individually and collectively with said blocks, laterally projecting arm elements secured to said plunger and disposed at diametrically opposite sides thereof, mountings secured at the ends of said arms, hangers pivotally depending therefrom, a compression spring carried between said hanger and said mounting and arranged to resiliently secure said hanger in a substantially vertical plane, and outwardly and downwardly tapering toe and a vertically arranged slide carried by said hanger, said slide being adapted to provide a yieldable downward thrust to a box blank inserted over said form block.

1,868,568. MOVABLE PLATFORM FOR CONVEYING GOODS CHIEFLY IN SHIP'S HOLDS. JEAN GONZALEZ DE ANDIA YRARRAZAVAL, Paris, France. Filed Dec. 26, 1930, Serial No. 504,878, and in France Dec. 26, 1929. 4 Claims. (Cl. 214—84.)



1. A goods conveyor comprising a plurality of beams, means allowing their rolling in all directions over a floor,

outer stops provided at different points of the length of the outer beams above the upper surface of said beams, windable flexible means adapted to bring the beams nearer to one another and allowing their spacing while remaining substantially parallel to each other.

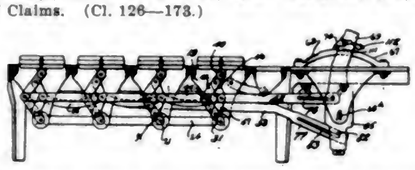
1,868,569. METHOD OF TREATING FIBERS FOR PAPER MAKING AND OTHER USES. LOGAN A. DILS, Chicago, Ill., assignor to Kellogg Dils, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 24, 1930, Serial No. 470,536. Renewed Dec. 12, 1931. 51 Claims. (Cl. 92—9.)

1. The method of treating woody materials, which consists in subjecting the same to the action of an aqueous solution of sodium borate, sodium hydroxide and trisodium phosphate.

1,868,570. PROCESS FOR TREATING WOODY MATERIALS TO OBTAIN FIBERS THEREFROM. LOGAN A. DILS, Chicago, Ill., assignor to Kellogg Dils, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 26, 1930, Serial No. 471,094. Renewed Dec. 12, 1931. 10 Claims. (Cl. 92—9.)

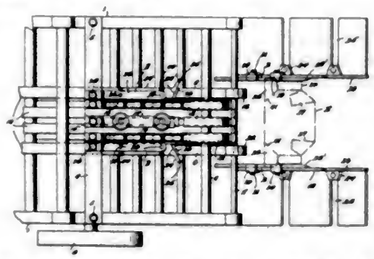
1. The method of treating woody materials to obtain fibers therefrom for paper making and other uses, which consists in subjecting said materials to the action of an aqueous solution containing approximately 50% of sodium hydroxide by weight.

1,868,571. GRATE CONSTRUCTION. JOHN A. FILBERT, Chicago, Ill. Filed Dec. 28, 1928. Serial No. 329,041. 7 Claims. (Cl. 126—173.)



1. A grate construction comprising a frame, a plurality of dumping members in said frame, said dumping members having longitudinally extending slots provided therein and branch slots extending therefrom, clinker breaker means normally disposed below said slots and movable relative to and through said slots, link constructions pivotally connected to said means, and means for imparting movement to said link constructions whereby said clinker breaker means will be moved through said openings in a substantially vertical plane.

1,868,572. GUIDING AND FOLDING ATTACHMENT FOR PAPER BOX MACHINES. HARRY G. HALL, Atlanta, Ga. Filed Apr. 11, 1931. Serial No. 529,471. 17 Claims. (Cl. 93—52.)



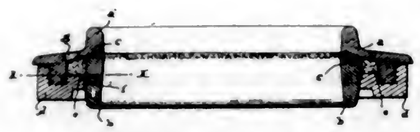
1. In combination with a box making machine for constructing foldable boxes from paper blanks and including feeding mechanism; of auxiliary guide means for guiding blanks having flap portions extending beyond their end edges to the feeding mechanism, folding means adapted to engage said flap portions to fold the same and means connected to said folding means for maintaining said portions in folded position during the travel of said blanks to the predetermined point in the machine.

1,868,573. MANUFACTURE OF FURNITURE. ALEXANDER HERMAN, Berlin, Germany. Filed Feb. 20, 1930, Serial No. 430,040, and in Germany Mar. 6, 1928. 5 Claims. (Cl. 312—140.)



2. A built up article of furniture comprising an outer frame having inclined surfaces, glass walls having bevelled edges bearing against the inclined surfaces of said frame, corner ledges permanently spaced from the frame and having bevelled portions engaging the glass walls, and means for drawing the ledges against the glass walls to press the bevelled edges of the latter against said frame.

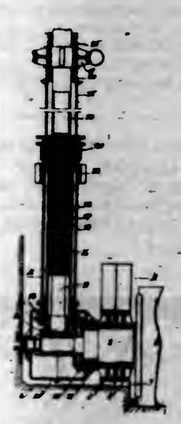
1,868,574. RING FOR SPINNING AND DOUBLING MACHINES. CARL FRITZ HOFMANN, Schonau, near Chemnitz, Germany. Filed Dec. 26, 1930, Serial No. 504,873. and in Germany Jan. 28, 1930. 3 Claims. (Cl. 118—59.)



1. A ring for spinning and doubling machines comprising in combination a plurality of ring parts forming a space for the reception of a lubricant and abutting with the formation of a slot between two ring parts at the place of contact of the internal surface of the ring by the traveler in its working position, the slot leading the lubricant to the place of contact of the internal surface by the traveler, extending over the periphery of the ring and communicating with the space for the reception of the lubricant.

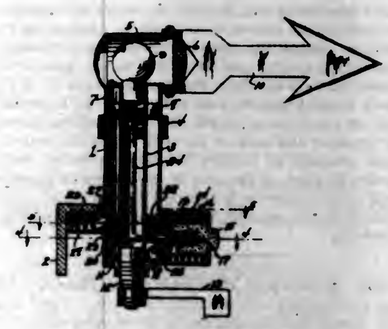
1,868,575. CLOSING DEVICE FOR LARGE OPENINGS WHICH ARE ESSENTIALLY HORIZONTAL AND ARE MADE WATER TIGHT IN ALL PARTS. ALBERT HUGUENIN, Paris, France. Filed July 10, 1928, Serial No. 291,667, and in France July 23, 1927. 1 Claim. (Cl. 137—139.)

In a device for closing large openings which are essentially horizontal and are made water-tight in all parts, the combination of a closing element adapted to rotate and to be displaced in a direction perpendicular to its axis of rotation, a hollow rotating shaft, held stationary in the direction of its axis and having two threads of different pitches on its inner and outer surfaces, a non-rotatable rod having a thread in engagement with the inner thread of the said hollow shaft, this rod being connected to the said closing element for moving it in a direction perpendicular to the axis of rotation of the latter, and a second hollow rotating shaft having a thread in engagement with the outer thread of the first hollow shaft, this second hollow shaft being connected, on the one hand, to the said rod for integrally following the axial displace-



ments of this rod, and, on the other hand, to the said closing element for transmitting its movement of rotation to the latter.

1,868,576. SIGNALING DEVICE. MANTON E. JOHNSON, St. Louis, Mo. Filed Feb. 11, 1928. Serial No. 253,752. 1 Claim. (Cl. 177—329.)

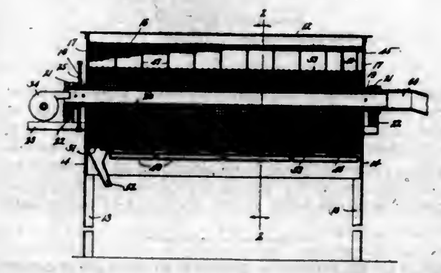


A signal of the class described comprising a signal including a casing, a lamp in the casing, means on the casing and cooperating with said lamp for giving a direction indication, a stem on said casing, a support means mounting said stem for rotation on said support, the latter including a casing surrounding said stem, an annular contact member having a peripheral recess on said stem within said casing, means electrically connecting said contact to one side of said lamp, means for rotating said signal casing and stem to either side of a central neutral position, a push button, means mounting a resilient contact on said push button, said push button including an insulating member, means mounting said member on said casing for movement toward and from said annular contact member, spring means for normally holding said member and contact spaced from the annular contact whereby a circuit may be closed to the lamp by manually pressing the push button when the signal element is in the central position, said circuit being automatically closed when the signal element is moved to the right or left of its central position.

1,868,577. PRECIPITATING BATH FOR MAKING THREADS OR THE LIKE FROM VISCOSE. ADOLF KÄMPF, Dessau-Ziebigk, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 28, 1928, Serial No. 329,078, and in Germany Jan. 5, 1928. 6 Claims. (Cl. 18—54.)

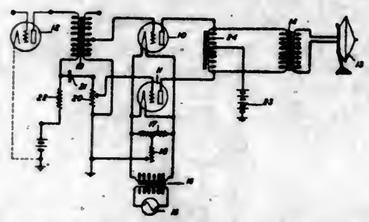
2. A process of producing threads, bands, films, from viscose, particularly unmatured viscose, which comprises the step of squirting the viscose into a coagulating bath containing, in a state of substantial saturation, sodium carbazolesulfonate.

1,868,578. MACHINE FOR POPPING CORN. EUSTACE R. KNOTT, Sharon, Mass. Filed Jan. 26, 1931. Serial No. 511,189. 4 Claims. (Cl. 53—4.)



1. A corn-popping machine having a straight slotted tube freely open at both ends, and a rotary foraminous cylinder surrounding the tube, a blower for forcing air through the tube, means for heating corn in said cylinder, and means for causing popped corn to pass from the cylinder through the slot of and into said tube, said tube having no openings other than said slot and open ends.

1,868,579. BROAD-BAND AUDIO-AMPLIFIER. ELMER Z. LANE, Mechanic Falls, Me., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed July 17, 1930. Serial No. 468,705. 6 Claims. (Cl. 179—171.)

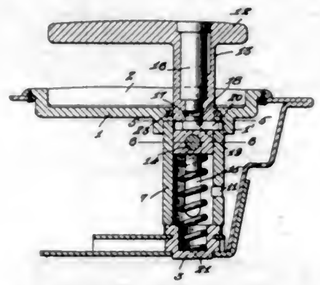


1. In a speech and music frequency amplifying system, a source of speech or music waves to be amplified, a pair of space discharge tubes operating in push-pull relation for amplifying the waves from said source, and means comprising a plurality of input couplings individual to said tubes and having different frequency characteristics covering broad bands within the speech and music frequency range for enabling the amplifier to operate effectively over a wider frequency band than is accommodated by either coupling circuit alone.

1,868,580. DOOR LOCK. EDWARD L. MCKINNEY, Indianapolis, Ind. Filed Aug. 4, 1930. Serial No. 472,877. 1 Claim. (Cl. 70—91.)

In combination, a recessed plate mounted within the outer face of a door and having an annular flange at its

inner side, a cup-shaped member rotatably arranged at the inner face of said door and having a cam, a sliding bolt within the door and engaged by said cam, a cylinder fitted within the annular flange and having notched ends and an intermediate hole, a handle having a shank passed through the plate and slidably fitted in said cylinder to

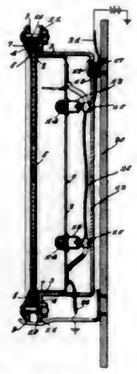


permit the handle to move into and out of the recess in said plate, a cross pin mounted in the shank and slidably engaged in the cylinder, a lock barrel in the shank, an operating lock bolt controlled by said lock barrel and engageable either in the hole or the notch at the outer end of the cylinder, and a lug on the cup-shaped member engageable with the notch in the inner end of the cylinder.

1,868,581. METHOD OF REVIVIFYING ADSORBENTS. ERNEST B. MILLER, Baltimore, Md., assignor to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Original application filed June 6, 1922, Serial No. 566,365, and in Sweden and Germany Mar. 10, 1923. Divided and this application filed June 12, 1928. Serial No. 284,876. 6 Claims. (Cl. 252—2.)

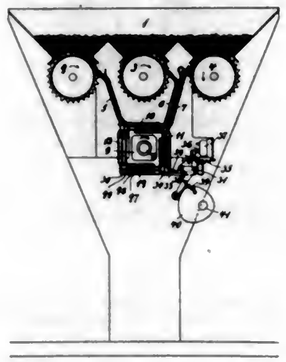
1. The method of revivifying a porous gel having pores of such size that it will adsorb not less than 10% of its own weight of water at 30° C. and at a partial pressure of 22 mm. of mercury which is charged with an adsorbate obtained in the refining of petroleum products consisting in contacting the gel without previous treatment with water for a sufficient time to cause an exchange of the water and adsorbate, thereby displacing the adsorbate from the gel.

1,868,582. SIGN. HORAN OHANIAN, Watervliet, N. Y. Filed June 24, 1931. Serial No. 546,604. 1 Claim. (Cl. 40—132.)



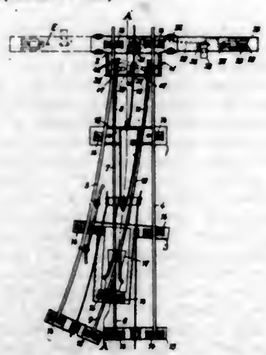
A sign comprising a casing, a character bearing panel carried by said casing, illuminating lamps in said casing, brackets for said casing and having slots, hook shaped elements engaging in said slots and secured to a vehicle and one of said elements connected to an electrical circuit, electrical means connecting the lamps, a contact plate carried by one of the brackets and electrically connected to one of said lamps and adapted to engage the hook shaped element connected in the electrical circuit, said electrical circuit connected to the casing to provide an electrical return for the circuit, and means secured to the vehicle and engaging the casing for cooperating with the hook shaped elements in securing the casing to the vehicle.

1,868,583. CONTROLLING DEVICE FOR CIGARETTE PACKAGING MACHINES. GUSTAF ÖRSTRÖM, Alsten, Sweden, assignor to Aktiebolaget Gerh, Arehns Mekaniska Verkstad, Stockholm, Sweden, a Company of Sweden. Filed July 1, 1930. Serial No. 465,204. 3 Claims. (Cl. 226—5.)



1. In a machine for packaging cigarettes and other staff-shaped articles in one or more rows in casings, boxes or the like, a controlling device comprising a number of chambers, adapted to contain the rows of cigarettes, before their introducing into the casings, each of the said chambers being provided with a movable wall closing the chamber at the one end of the row of cigarettes contained by the chamber and located parallel to the cigarettes, and members adapted to actuate the said movable walls respectively, so that, if the row of cigarettes is incomplete, the wall is moved inwards into the chamber and a motion is imparted to the member, which may be used for stopping the machine.

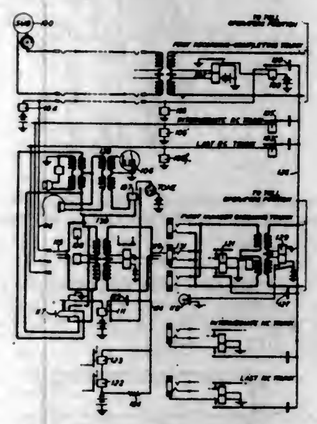
1,868,584. ELECTRIC TOY RAILWAY TRACK. FRIEDRICH OTTENSTEIN, Nuremberg, Germany. Filed June 5, 1931, Serial No. 542,439, and in Germany June 24, 1930. 4 Claims. (Cl. 238—10.)



1. For use at a turn-out of a toy railway track a switch comprising supports, switch blades, means adapted to be attached in an easily releasable manner on the right-hand

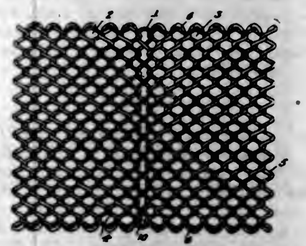
or left-hand side of the turn-out for changing over the said switch blades, rail pieces and members for fixing the said rail pieces to the supports, so as to be capable of being easily released.

1,868,585. TELEPHONE SYSTEM. HENRY E. PHELPS, Tuckahoe, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 6, 1932. Serial No. 585,097. 10 Claims. (Cl. 179—27.)



1. In a telephone system, a calling line having an identifying conductor, an operator's position, a first trunk line for extending said calling line to said operator's position, said trunk line having manually controlled means, a second trunk line capable of operative interconnection with said first trunk line through said manually controlled means, a source of tone, and means responsive to connections with said identifying conductor and with said second trunk line for applying said source of tone to said identifying conductor through said manually controlled means of said first trunk line.

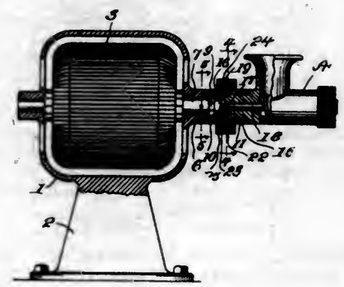
1,868,586. CONNECTER FOR WIRE FABRICS. CLARENCE E. PINK, Cambridge, Md. Filed Aug. 29, 1931. Serial No. 560,197. 9 Claims. (Cl. 245—6.)



4. A connecter for joining sections of right-hand woven and left-hand woven wire belting, comprising an element of a single length of material bent upon itself to provide parallel connected portions and said portions braided with each other to provide closed loops having the end strands of woven wire sections passed therethrough.

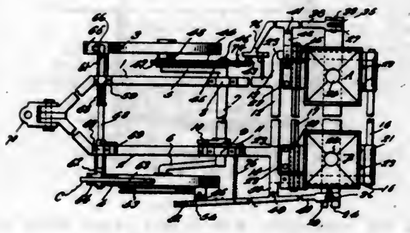
1,868,587. MEANS FOR CONNECTING AN IMPLEMENT TO A MOTOR. ALONZO RICHARDS, Pompton Lakes, N. J. Filed Dec. 26, 1928. Serial No. 328,543. 1 Claim. (Cl. 287—1.)

A two-part bearing for a pair of clutch connected shaft sections, one part of said bearing having a non-circular socket in which one part of the clutch is received, the other part of said bearing having a reduced portion positioned in said socket and of similar cross sectional contour, a socket projecting from the reduced portion of the second mentioned part of the bearing and forming a continuity thereof, and adapted to receive the other cooperating clutch member, the respective sockets of said parts of the bearing



being arranged in interfitting end to end contacting engagement, said second mentioned part of the bearing having opposed depressions, spring pressed plungers mounted on the first mentioned part of the bearing and adapted to be received by the depressions for holding the respective parts of the bearing together, a ring rotatably mounted on the first mentioned part of the bearing and having spaced cam surfaces for operating said plungers.

1,868,588. AUTOMATIC FERTILIZER DISTRIBUTING APPARATUS. MANUEL ROMERA, Castroville, Calif., assignor of one-third to Emilio Guiriato and one-third to Ettore Guiriato, Castroville, Calif. Filed Aug. 23, 1930. Serial No. 477,448. 5 Claims. (Cl. 275—2.)

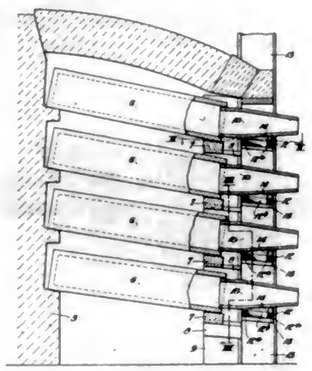


1. In an implement of the kind described arranged for traverse on ground-engaging supporting wheels, a structural frame, axially parallel frame members disposed rearwardly of the frame, transverse parallel bars bridging the rear frame members, plate supports slidable at their ends on the parallel bars, a hopper on each plate support, and means arranged to lock said plate supports to said bars at suitable points relative to the axis of the implement.

1,868,589. SPELTER FURNACE CONDENSER SUPPORT. MARION CHESTER SKINNER, Donora, Pa., assignor to The American Steel and Wire Company of New Jersey, a Corporation of New Jersey. Filed Dec. 24, 1930. Serial No. 504,591. 2 Claims. (Cl. 266—19.)

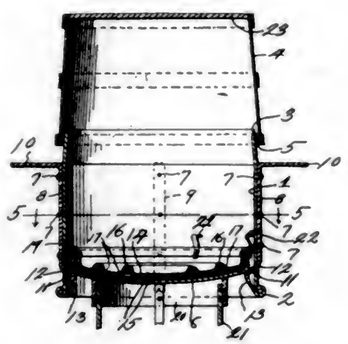
1. In a spelter furnace, the combination with pairs of retorts and condensers mounted in cooperative relation therewith, supporting shouldered pillars and reenforcing buckstays, a supporting plate for each pair of said re-

torts, said plate resting at its opposite extremities on the shoulders of said pillars with its outermost edge lying in substantially the same vertical plane as the ends of



the retorts, and a support for each pair of said condensers formed of spaced steel bars which rest at opposite extremities on lugs forming part of said buckstays.

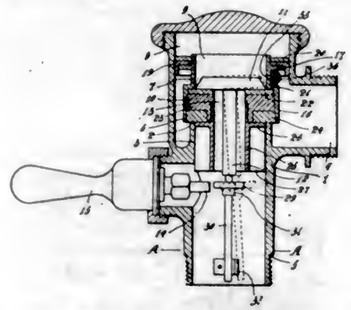
1,868,590. FRUIT BASKET PACKING DEVICE. HENRY B. SUTTER and KIRK GRUBER HASELTINE, Springfield, Mo. Filed Dec. 27, 1929. Serial No. 416,908. 6 Claims. (Cl. 226—17.)



6. The combination with a fruit basket filling device comprising a tub having means for supporting a basket thereon in inverted position, a removable bottom vertically movable through the tub, of interengaging means carried by the bottom and cooperating with the basket whereby when said basket is removed from the tub said bottom is attached to the basket.

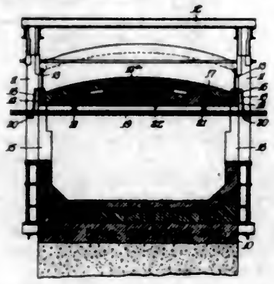
1,868,591. FLUSHING VALVE. WILLIAM CHARLES TANNER, Wellington, New Zealand. Filed Sept. 8, 1930, Serial No. 480,527, and in New Zealand Feb. 5, 1930. 6 Claims. (Cl. 137—93.)

1. A flushing valve including a casing having water inlet and outlet openings, a main valve with an opening for water therethrough, a release valve controlling the opening through said main valve, an actuating pin for the release valve, the stem of said release valve passing down through the opening of the release valve, a shoulder on said stem, a disc loosely and rotatably mounted on said stem and supported by said shoulder, said release valve being actuated by said actuating pin striking the periphery of the disc, the said disc being just sufficiently loose on its stem whereby as the release valve returns to its downward position should said disc contact with



said operating pin it will tilt just sufficiently so as not to interfere with the downward closing movement of the stem.

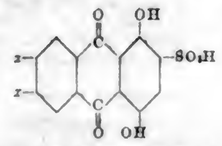
1,868,592. MEANS FOR REBUILDING FURNACE ROOFS. NORMAN THOMPSON and CARL JOHNSON, Duluth, Minn. Filed Dec. 26, 1929. Serial No. 416,641. 5 Claims. (Cl. 25—131.5.)



1. In a form work for furnace roofs and the like, in combination, a plurality of forms extending substantially the width of said furnace, cross supports for said forms, a plurality of rails for supporting said cross supports and said forms, and adjustable supporting means for said rails comprising a plurality of hooks having means for fastening to the furnace walls and a seating portion for a wedge, there being a recess in said hooks adapted to receive said rails.

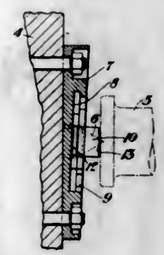
1,868,593. ALUMINUM LAKES OF 1,4-DIHYDROXY- AND 1-AMINO-4-HYDROXY-ANTHRAQUINONE-DISULPHONIC ACIDS. FRITZ BAUMANN, Leverkusen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 24, 1929, Serial No. 380,767, and in Germany July 31, 1928. 2 Claims. (Cl. 260—11.)

2. As new products the aluminum lakes of the compounds of the probable formula



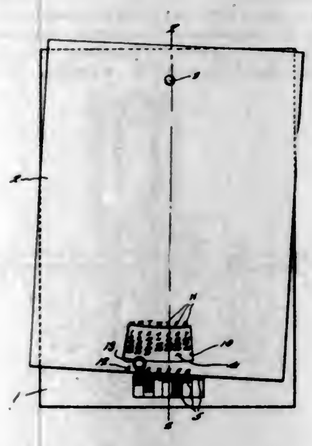
wherein one x stands for hydrogen and the other x for the sulphonic acid group, said products being violet pigment dyestuffs of excellent fastness properties especially to light.

1,868,594. DRIVE CONNECTION. PAUL T. BLACK, Dormont, and WILLIAM P. BOETTNER, McKees Rocks, Pa. Filed Aug. 28, 1931. Serial No. 560,004. 1 Claim. (Cl. 81—40.)



A work turning device comprising a body arranged at an angle to the end face of the work to be turned and having a flanged circular recessed bearing surface with a section of the flanged portion thereof enlarged to the full width of this bearing surface at a point most remote from the end face of the work, and a member having a smooth end and a roughened end with a reduced portion therebetween the smooth end thereof being insertable through the enlarged section of the flanged portion of said recessed bearing surface for sliding carriage on the latter.

1,868,595. CALENDAR. EDMUND S. DELANCY, Washington, D. C. Filed Dec. 10, 1931. Serial No. 580,192. 3 Claims. (Cl. 40—113.)

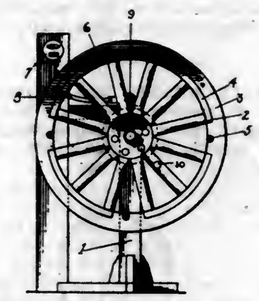


1. A calendar comprising a sheet having columns of numerals thereon representing the days of the months, another sheet pivotally mounted for swinging adjustment on the first named sheet having a window therein of a size to expose seven of the columns, the second named sheet further having characters thereon representing the days of the week located adjacent the window for disposition in alignment with the exposed columns, the first named sheet further having columns of months thereon, and a marker slidably mounted on the second named sheet for coaction with the month column for indicating when the second named sheet is in the correct position to align the day characters with the correct columns comprising the days of any month of a year.

1,868,596. PROCESS OF RECOVERING SULPHONIC ACIDS OR THEIR SALTS IN A PURIFIED CONDITION FROM IMPURE SULPHONATION PRODUCTS. EGON EICHWALD, Amsterdam, Netherlands, assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 13, 1931, Serial No. 522,508, and in Germany Mar. 10, 1930. 8 Claims. (Cl. 260—159.)

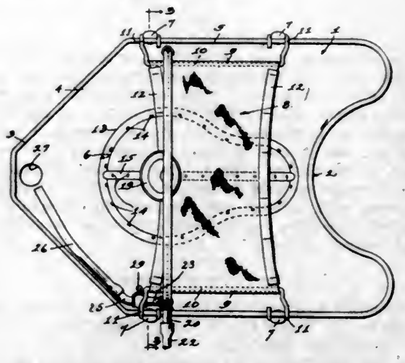
1. A process for the recovery of sulphonic acids in a purified condition from impure sulphonation products containing inorganic compounds which comprises extracting the sulphonic acids from the inorganic compounds by treating the impure sulphonation products with an alcohol substantially insoluble in water so as to dissolve the sulphonic acids contained therein, washing the alcoholic solution of sulphonic acids thus obtained with water, allowing the mass to stratify and the aqueous layer to separate from the alcoholic layer, and distilling the alcohol from the separated alcoholic solution of the purified sulphonic acids.

1,868,597. SIGHTOMETER. CLYDE T. ELDREDGE, Mill Valley, Calif. Filed Aug. 2, 1928. Serial No. 297,084. 1 Claim. (Cl. 88—14.)



A sightometer comprising a frame, a fully exposed wheel rotatably carried by the frame, one sighting object disposed at the rim of the wheel, and a speed indicating device operatively connected to the wheel for showing the speed of rim travel of the wheel and therefore the speed of the moving object, whereby the speed at which the object starts to lose its outline to an observer can be ascertained.

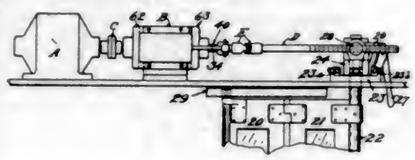
1,868,598. SHAMPOO APPARATUS. MARIE GOWER, Los Angeles, Calif. Filed May 16, 1931. Serial No. 537,895. 3 Claims. (Cl. 4—159.)



1. A shampoo apparatus comprising a basin, a head rest supported on and above the bottom of the basin,

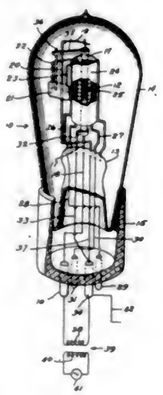
and a liquid spraying device including spraying elements disposed below and above the head rest, and means for directing a liquid to and for spraying the same from said elements, for the purpose described.

1,868,599. CLOSURE OPERATING DEVICE. PERCY M. GRIFFIN, Albany, N. Y. Filed Nov. 2, 1925. Serial No. 66,190. 12 Claims. (Cl. 268—65.)



1. In a door operating mechanism, a door shaft, a driving shaft therefor, a motor, means normally maintaining a driving connection between said driving shaft and said motor, and means operative during actuation of the driving shaft and while movement of the door shaft is prevented for imparting movement to said driving shaft in a direction to temporarily break said driving connection.

1,868,600. VACUUM TUBE. ROBERT HARDING, Jr., White Plains, N. Y., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed May 2, 1928. Serial No. 274,399. 1 Claim. (Cl. 250—27.5.)



In a vacuum tube, an envelope, a cylindrical cathode within said envelope, a single straight filament within said cylindrical cathode, anode and control electrode elements within said envelope, a base on said envelope, a terminal on said base, a connection between said terminal and one end of said filament, a second terminal on said base, a connection between said second terminal and the other end of said filament, and a separate connection between said cathode and one of said terminals, said cathode extending beyond both extremities of said anode and control electrode.

1,868,601. RIBBON PACK. ARTHUR J. HARRIS, Paterson, N. J. Filed June 5, 1931. Serial No. 542,316. 5 Claims. (Cl. 206—51.)

1. The hereindescribed package comprising an elongated mass of elongated material folded repeatedly on itself and a container of stiff sheet material snugly embracing the mass and comprising opposed panels substantially conforming in size and shape to the longitudinal profile of the mass and covering two opposite sides thereof and opposed



webs connecting the panels at opposite long sides of the mass and one being of less dimension lengthwise of the mass than the mass itself.

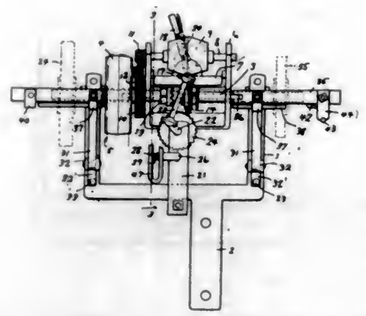
1,868,602. CONTRAST MEDIA FOR X-RAY PHOTOGRAPHY. GERHARD HECHT, Wuppertal-Elberfeld, ANTON OSSENBECK, Cologne-Mulheim, and ERNST TIETZE, Cologne, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 31, 1931, Serial No. 584,272, and in Germany July 8, 1930. 9 Claims. (Cl. 167—50.)

1. Contrast medium for X-ray photography, containing a water-soluble salt of an acid of the probable formula:

$$R—CI_3—SO_3H,$$

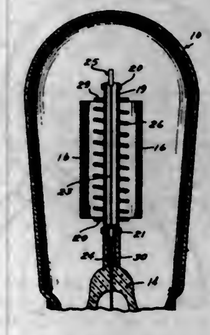
wherein R stands for hydrogen or an alkyl group.

1,868,603. MOWING MACHINE BLADE GRINDER. NELSON H. HENDERSON, Clarkedale, Ark., assignor of one-half to A. C. Parker, Clarkedale, Ark. Filed July 29, 1931. Serial No. 553,857. 4 Claims. (Cl. 51—74.)



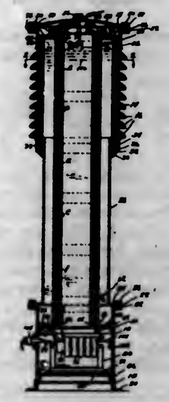
1. A blade grinder of the character described comprising a supporting frame, a shaft journaled on the frame, means for connecting the shaft to a source of power, a grinding stone supported on the shaft, means operatively connecting the grinding stone to the shaft for actuation thereby, blade supporting means mounted on the frame, blade shifting means mounted on the blade supporting means, and means operatively connecting the blade shifting means to the shaft for intermittent actuation thereby.

1,868,604. TUBE ELEMENT SUPPORT. CLARENCE A. HORN, Rahway, and ROBERT J. HEITZMAN, Union City, N. J., assignors to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Jan. 17, 1928. Serial No. 247,302. 5 Claims. (Cl. 250—27.5.)



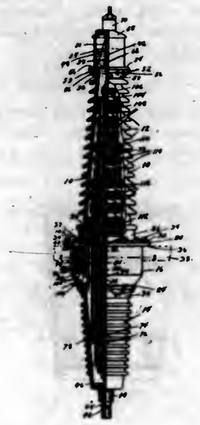
3. In a vacuum tube having a plurality of elements, one of which is a filament, an insulating sleeve adapted to space the lower end of said filament from the element adjacent to it, said sleeve having a shoulder cooperating with said element to maintain said sleeve at the lower end of said filament against upward longitudinal motion, and an insulating plate adapted to space the lower ends of the other elements from each other.

1,868,605. POTENTIAL TRANSFORMER. GUSTAV E. JANSSON, Atlantic, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Dec. 1, 1930. Serial No. 499,142. 15 Claims. (Cl. 175—358.)



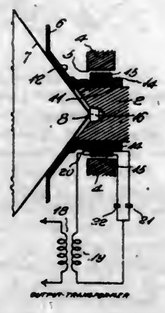
1. In a voltage transformer, the combination of an upstanding enclosing casing having a terminal at its upper end for connection to a high potential line, an insulating shell vertically extended in said casing having plates of conducting material within the insulating material thereof comprising serially connected condensers, means electrically connecting the uppermost plate with said casing terminal, means electrically connecting the lowermost plate of said shell to ground including the primary winding of an inductive transformer, and a secondary winding for said transformer having low tension terminals that are extended externally of said casing.

1,868,606. COMBINED INSULATING BUSHING AND TRANSFORMER. GUSTAV E. JANSSON, Atlantic, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Dec. 1, 1930. Serial No. 499,143. 16 Claims. (Cl. 175—358.)



1. A combined potential transformer and insulating bushing comprising an outer enclosing shell, a conducting stud extended through said shell, high tension terminals at the ends of said bushing, an axial insulating tube located within said shell, a plurality of reactance coils having central passages through which said tube extends surrounding and carried by and located in vertically spaced relation along the length of said tube, means electrically connecting said reactance coils in series between a high tension terminal of said bushing and ground, and a low tension lead extended exteriorly of said bushing deriving its power from a selected one of said reactance coils.

1,868,607. ELECTROMAGNETIC SOUND REPRODUCER SYSTEM. FREDERICK A. KOLSTER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Aug. 16, 1928. Serial No. 300,009. 6 Claims. (Cl. 179—115.5.)

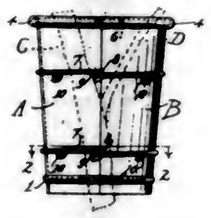


6. In an electromagnetic translating device, a plurality of windings each in series with an independent tuned circuit movable in a magnetic field and adapted to respond most efficiently to different bands of frequencies, and vibratory means actuated by said windings.

1,868,608. HALOGENATED DIBENZANTHRONE. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 27, 1930, Serial No. 439,586, and in Germany Mar. 30, 1929. 4 Claims. (Cl. 260—61.)

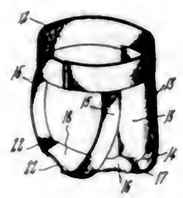
1. A process of producing halogenated derivatives of the dibenzanthrone series, which comprises treating a dibenzanthrone in phosphoric acid with a halogenating agent at a temperature above 60° C.

1,868,609. PLANT PROPAGATING DEVICE. WAH LAM, Honolulu, Territory of Hawaii. Filed June 14, 1929. Serial No. 370,899. 2 Claims. (Cl. 47—37.)



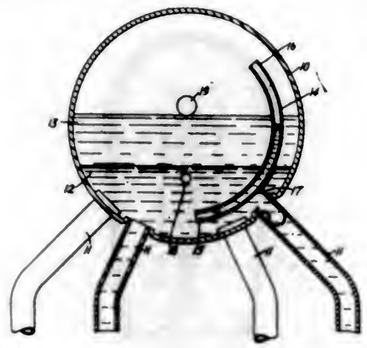
1. A plant propagating pot comprising a plurality of registering pot sections adapted for abutting engagement so as to present circumferential continuity, guide means for bringing the sections into registry, a split ring forming the bottom of the assembled pot, and ring-shaped members arranged in encircling relation with the pot sections for holding them together, each ring member having hook-shaped ends adapted to be engaged with each other and allowing the ends of the members to be spread apart.

1,868,610. ATHLETIC SUPPORTER. CHARLES K. LANE, Rockland, Mass. Filed Feb. 9, 1932. Serial No. 591,792. 2 Claims. (Cl. 128—160.)



1. An athletic supporter comprising an elastic waistband, an elastic pouch depending from the front portion of the waistband, elastic buttock straps depending from the side portions of said band, and an oblong crotch pad composed of a piece of flexible compressible sheet material having a narrow forward end portion attached to the lower end of the pouch, and a wide rear end portion attached by seams to the lower ends of the buttock straps, the arrangement being such that when the supporter is in use said rear portion bridges the lower portion of the wearer's rump crease, and the seams uniting said rear portion of the straps bear only on the buttocks, the upper side of the pad between said seams and the forward end of the pad presenting a smooth non-chafing surface to the crotch sides and to the lower and inner portions of the rump crease sides, the thigh receiving openings bounded by the waistband, the pouch, the crotch pad, and the buttock straps being expanded and the straps conforming naturally to the curvature of the buttocks without exerting uncomfortable indenting pressure thereon.

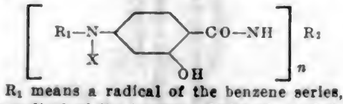
1,868,611. EBULLITION INITIATOR. LAWRENCE W. LARSEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Dec. 16, 1927. Serial No. 240,395. 2 Claims. (Cl. 62—126.)



2. In a refrigerating system, an evaporator header adapted to be partly filled with liquid, means providing a plurality of refrigerant passages communicating with the header, and a hollow member provided with securing means on its external surface, said securing means being adapted to cooperate with at least one of said refrigerant passages for securing the hollow member in position with one extremity above the liquid and the other below the liquid.

1,868,612. ARYLAMIDES OF 3-HYDROXY-PHENYL-ARYL-AMINE-CARBOXYLIC ACIDS AND PROCESS OF MAKING SAME. LEOPOLD LASKA and OSKAR HALLER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 20, 1930, Serial No. 430,130, and in Germany Feb. 27, 1929. 11 Claims. (Cl. 260—124.)

4. As new compounds the arylamides of arylamino-phenol-carboxylic acids corresponding to the probable general formula:

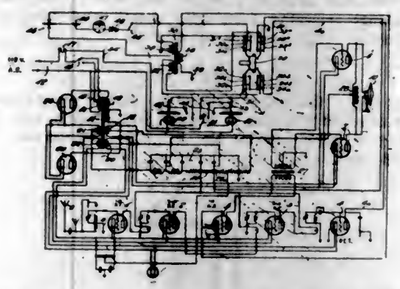


wherein R_1 means a radical of the benzene series, R_2 any aromatic radical of the bensene, diphenyl, naphthalene or anthraquinone series, X means hydrogen or an acyl-group and n the number 1 or 2 which are obtainable by treating the corresponding aryl-amino-phenols with carbonic acid, acylating advantageously the carboxylic acids thus produced and condensing with a corresponding arylamine, which compounds are amorphous or crystallized substances, having a definite melting point, difficultly soluble in organic solvents, easily soluble in alkalies, distinguished by a great affinity to the vegetable fiber.

1,868,613. COMBINED RADIORECEIVER, ELECTRICAL PHONOGRAPH, AND PUBLIC ADDRESS SYSTEM. HARRY C. MAISOHM, Sandusky, Ohio, assignor to The Simplex Radio Company, Sandusky, Ohio, a Corporation of Ohio. Filed Oct. 30, 1929. Serial No. 403,474. 2 Claims. (Cl. 179—100.11.)

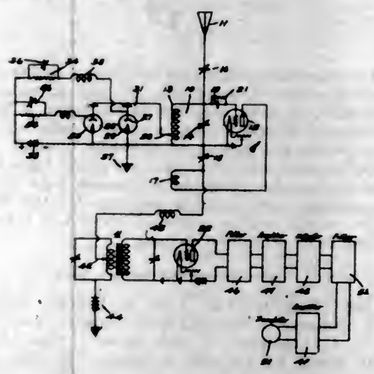
1. In a sound reproducing system, a radio receiver including a detector and an audio frequency amplifier, a sound reproducer connected to the output circuit of said audio frequency amplifier, a transformer having a secondary winding connected with the input circuit of said audio frequency amplifier and a pair of primary windings, a microphone circuit, an electric phonograph circuit,

a switching device common to all of said circuits, connections between said electric phonograph circuit and said switching device, said switching device operating to disconnect said detector from said audio frequency amplifier, and selectively complete connections between said



microphone circuit and one of said primary windings, or selectively complete connections between said electric phonograph circuit and the other of said primary windings for operation of said sound reproducer independent of the operation of said detector.

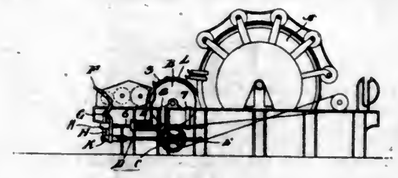
1,868,614. SIGNALING SYSTEM. HORACE E. OVERACKER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed May 21, 1928. Serial No. 279,291. 2 Claims. (Cl. 250—8.)



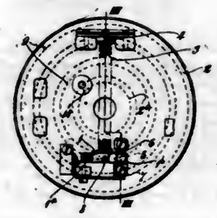
1. In a signaling system, a circuit coupled with a source of signal energy of carrier frequency, a gas discharge tube connected across points of different potential of said circuit, means for exciting said tube whereby its resistance is repeatedly broken down at a frequency differing from said carrier frequency, and filter means adapted to receive energy from said circuit tuned to pass the frequency with which energy is modulated by the breaking down of the resistance of said tube.

1,868,615. SAFETY DEVICE FOR CARDING MACHINES. LEE WOOD RADFORD, Cabarrus, N. C., assignor of three-fourths to Jonah L. Hartsell, Concord, N. C. Filed Sept. 10, 1927. Serial No. 218,685. 7 Claims. (Cl. 192—130.)

1. A safety device for carding machines including a doffer and stop mechanism, driving means normally operatively connteted to said doffer and arranged to be moved out of engagement therewith, movable guard means enclosing a part of said doffer, a slidable spring pressed rod normally urging said stop mechanism to a predetermined position and having a notch, a pivoted latch engageable with said notch to restrain the normal tendency of said rod and controlled by said guard means, and means operatively connecting said rod to said driving means for moving the latter out of engagement with said doffer upon the actuation of said movable guard means.

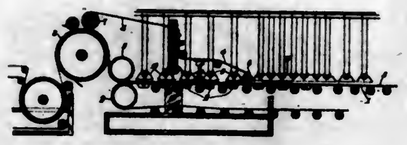


1,868,616. SPEED GOVERNOR. REGINALD DENNIS SALMON, Croydon, England, assignor to Creed & Company, Limited, Croydon, England. Filed Feb. 24, 1928, Serial No. 256,793, and in Great Britain Mar. 8, 1927. 15 Claims. (Cl. 200—80.)



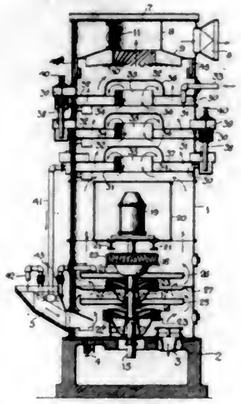
1. A speed governor, comprising a rotary member, a spring, a weight connected to said spring, adjusting means connected to said rotary member and to said spring and whereby the weight can, when the governor is at rest be caused to assume a position such that its centre of gravity will be co-axial with the axis of rotation of said member with the spring in an unstrained condition, an electric contact and a stop fixed to said member at different radial distances from the axis of rotation thereof and between which said weight is movably located with the spring in a strained condition, said weight being adapted to occupy any position when the governor is running at the speed at which it has been set to run and to rest against said stop or contact, whichever may be required when the speed departs from normal speed, so as to bring the speed back to the normal speed.

1,868,617. METHOD OF AND APPARATUS FOR MAKING PAPER. JOHN D. TOMPKINS, Valatie, N. Y. Filed Aug. 17, 1929. Serial No. 386,574. 29 Claims. (Cl. 92—38.)



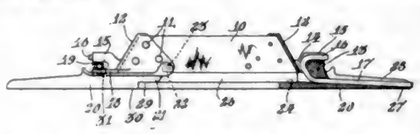
1. A paper making machine comprising a traveling member adapted to carry along a paper web prior to its passage to the drier rolls, and a radiant electrical heat generator located adjacent the path of travel of said member.

1,868,618. GAS AND LIQUID CONTACT APPARATUS. FREDERICK H. WAGNER, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Sept. 14, 1928. Serial No. 305,978. 4 Claims. (Cl. 261—89.)



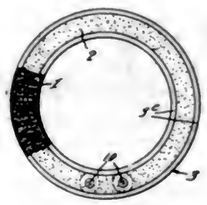
1. In a gas washer, the combination of a casing, a central rotatable shaft in the casing, means for driving said shaft, a liquid pumping and spraying element secured to the shaft to be driven thereby, a bubble washing element in the casing in spaced relation to said pumping and spraying element, and means for supplying liquid to said washing and spraying elements.

1,868,619. SECTION INSULATOR. CHARLES E. WATSON, Chicago, Ill., assignor to George W. Schroeder, Berwyn, Ill. Filed Feb. 11, 1929. Serial No. 339,059. 2 Claims. (Cl. 191—39.)



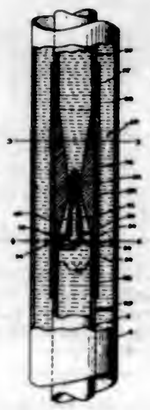
1. A section insulator comprising an insulated block, brackets secured to the opposite ends of said block, means for peening the terminal ends of two service wires to said brackets, metal conducting runners secured to and extending longitudinally of the lower side of said service wires and means whereby said metal runners may be removed separately from said section.

1,868,620. ELECTRICAL HEATING UNIT. EDWIN L. WIEGAND, Pittsburgh, Pa. Filed Aug. 6, 1928. Serial No. 297,612. 6 Claims. (Cl. 201—64.)



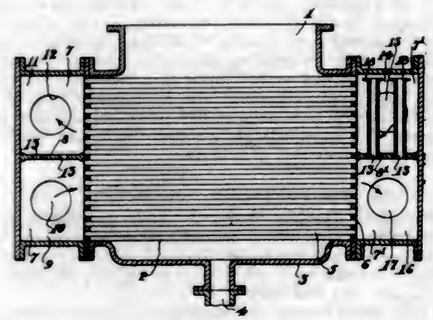
4. An electrical resistance heating unit of the character described having an exposed refractory face and comprising a sheath substantially channel-shaped in cross-section, a resistor arranged within said sheath, a homogeneous compacted mass of refractory insulating material enveloping said resistor, the opposite edges of said sheath being bent over toward each other and overlapping the adjacent edges of the refractory material and disposed substantially flush with the exposed face of the unit and terminals emerging from said sheath and adapted for connection with a source of current.

1,868,621. IMPACT EJECTOR PUMP. CHARLES J. WOLFF and WILLIAM W. COUCH, San Antonio, Tex. Filed Dec. 4, 1931. Serial No. 579,073. 10 Claims. (Cl. 103—261.)



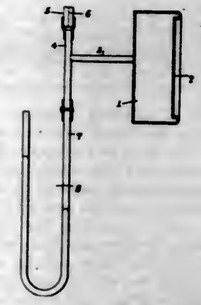
1. A well pumping apparatus including a tubing string, a coupling section forming part of said string and of substantially the same diameter as the latter, a Venturi tube arranged in said section, a nozzle member arranged in the section and having an upwardly directed nozzle terminating near the throat of the Venturi tube, a port in said section for admitting a pressure fluid into the nozzle member, and securing elements for the Venturi tube and nozzle member arranged above and below the latter and anchored to said section.

1,868,622. CONDENSER. PAUL A. BANCEL, Montclair, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 31, 1930. Serial No. 457,962. 6 Claims. (Cl. 257—43.)



1. In a surface condenser, a condenser shell having a steam inlet and a condensate outlet, water boxes at each end of said shell, water tubes in the shell connecting the water boxes, a partition in one water box dividing it into an upper inlet chamber and a lower outlet chamber, and tubes leading from the upper portion of the inlet chamber through the partition to the upper portion of the outlet chamber whereby air may be drawn from the inlet chamber to the outlet chamber.

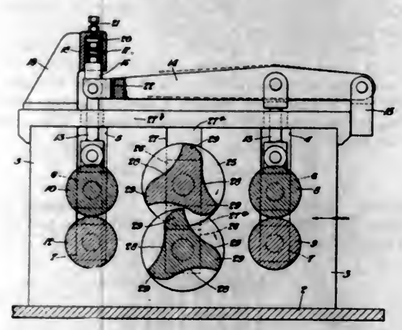
1,868,623. METHOD AND APPARATUS FOR THE MEASUREMENT OF HEAT. ALFRED BLACKIE, London, England. Filed May 19, 1926, Serial No. 110,055, and in Great Britain May 29, 1925. 8 Claims. (Cl. 73—184.)



1. In apparatus for the measurement of heat, the combination of a container which is entirely closed except for a restricted passage communicating with a space at constant pressure, said container originally enclosing a definite limited body of fluid, a portion of said container constituting a heat receiving surface, means for protecting the remainder of said container from the transmission of heat therethrough, and means for measuring the fluid pressure within said container.

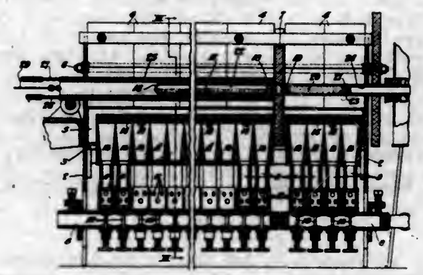
6. The method of measuring the rate of flow of heat, which includes, subjecting a body of fluid to changes produced therein by the heat-flow to be measured, said fluid body being completely inclosed, save for a restricted passage leading therefrom to a space having constant pressure, measuring the resulting pressure changes produced in the fluid and particularly noting the pressure when it remains substantially constant for an appreciable time.

1,868,624. PACK OPENING MACHINE. DARIO BUCCICONE, Gary, Ind. Filed Oct. 25, 1930. Serial No. 491,286. 3 Claims. (Cl. 29—17.)



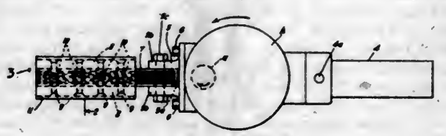
1. A pack opening machine comprising a base, a pair of spaced side housings, vertically disposed guideways in said housings adjacent the entering and discharge sides thereof, bearings in said guideways, at least the upper one of said bearings in each guideway being vertically slidable in said guideway, entering pinch-rollers journaled in the bearings mounted in said guideways adjacent the entering side of the machine, discharge pinch-rollers journaled in the bearings in the other pair of guideways adjacent the discharge side of the machine, means for automatically raising the top roller of said discharge pinch-rollers when a pack is entered between said entering pinch-rollers, said means comprising levers extending along the top of each of said housings and pivoted thereto adjacent the entering side of the machine, stiff links pivotally secured to said levers adjacent the pivotally mounted end thereof and suspendingly supporting the upper bearings for the upper entering pinch-roller, other stiff links pivotally secured to said levers adjacent the free ends thereof and suspendingly supporting the upper bearings for the upper discharge pinch-roller, spring means for normally biasing the said levers and upper pinch-rollers downwardly toward the lower pinch-rollers, and a pair of opening rolls journaled in said housings intermediate said pairs of pinch-rollers.

1,868,625. DISTILLING APPARATUS. STANTON I. CHARLESWORTH, ARCH W. HARRIS, and CARL P. LINDER, Cleveland, Ohio. Filed Jan. 15, 1929. Serial No. 332,716. 7 Claims. (Cl. 202—224.)



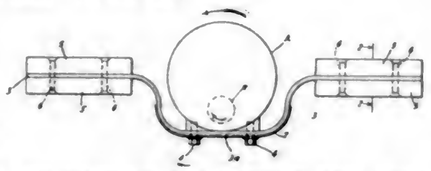
1. Laboratory apparatus for the progressive distillation of carbonaceous material comprising an elongated horizontal furnace having two sources of heat, a heat resisting and insulating partition wall intermediate the ends of said furnace and between said sources of heat, a transparent non-combustible tube in and extending longitudinally of said furnace above said sources of heat and passing through said wall, one end of said tube being closed and the other end of said tube being open to permit the material to be distilled to be charged therein, a jacket adapted to surround said tube from its closed end forwardly to said partition, and means for withdrawing said jacket to provide a progressive heating of the material in said tube.

1,868,626. SHOCK ABSORBING HANDLE. CHARLES B. COATES, Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 4, 1928. Serial No. 251,805. 3 Claims. (Cl. 121—36.)



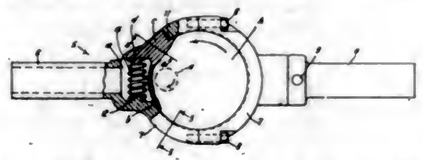
1. A spring handle for portable power tools comprising a base for attachment to the tool, said base having a recess, springs forming a laminated body seated in said recess and projecting therefrom, a bolt on said base extending across said recess and passing through aligned bores in said springs, and grip means upon the free ends of said springs securing the same together but permitting limited relative movement.

1,868,627. SHOCK ABSORBING HANDLE. CHARLES B. COATES, Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 13, 1928. Serial No. 253,804. 8 Claims. (Cl. 121—36.)



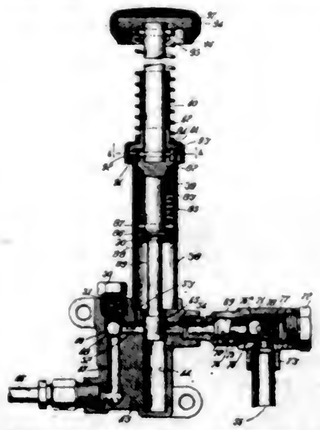
2. The combination with a portable device having a rotatable spindle, of a flat spring member stiffened at its central portion and having free ends, said central portion being fastened to said device, said member having bends to dispose said free ends on opposite sides of said device, said free ends providing grip portions yieldably relative to said device in a plane transverse to the axis of said spindle.

1,868,628. POWER TOOL AND HANDLE THEREFOR. CHARLES B. COATES, Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 13, 1928. Serial No. 253,803. 5 Claims. (Cl. 121—36.)



1. A portable power tool having a rotatable spindle, a yoke encircling said tool and having projecting handles for manually supporting and controlling the same, a projection on said tool cooperating with a recess in said yoke for limiting the relative movement of said members, and resilient means within said recess and engaging said projection for resisting the reaction of said tool when its spindle is suddenly stopped or retarded by the work.

1,868,629. FORCE FEED LUBRICATING SYSTEM. IRVING COWLES, Detroit, Mich., assignor to Union Bank of Chicago, Chicago, Ill., a Corporation of Illinois, trustee. Filed Mar. 31, 1926. Serial No. 98,886. 34 Claims. (Cl. 184—7.)



1. In a lubricating system, the combination with fluid pressure actuated devices associated with bearings for limiting the flow of lubricant thereto, of means for delivering the lubricant under pressure to said devices at intervals, said means including a device for determining the maximum limit of pressure of the lubricant, and means for preventing delivery of the lubricant to said first-named devices until the same is under the said maximum pressure.

1,868,630. METHOD OF ERECTING BRIDGES. JAMES L. DE VOU, Pittsburgh, Pa. Filed Nov. 6, 1929. Serial No. 405,196. 5 Claims. (Cl. 14—3.)

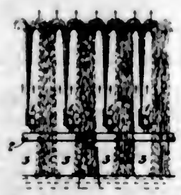


1. The method of erecting a bridge having piers, an anchor-arm and a cantilever arm extending in opposite directions from each pier, and a suspended span extending between said cantilever arms, which includes erecting the pier columns, mounting guy derricks on said pier columns, erecting rigid supporting bents spaced from said piers on the anchor side thereof, erecting the portion of said anchor-arms extending between said piers and said bents with the aid of said derricks, then erecting a portion of said cantilever arms with the aid of said derricks of a length sufficient to substantially counterbalance the portion of the anchor-arms previously erected, then placing guy derricks on suitable wheeled bases on said bridge structure previously completed, providing at least two additional guy derricks mounted on wheeled bases adapted to travel on said bridge structure previously completed, positioning one of said derricks adjacent the outer end of each of said anchor and cantilever arms, and then proceeding to progressively and simultaneously erect said anchor and cantilever arms with the aid of said derricks until said anchor-arms are complete, and then proceeding to erect the suspended span at least in part in cantilever form from each cantilever arm toward the middle until the ends of said span meet forming a simple suspended span, and moving said derricks along said bridge structure as the erecting proceeds.

1,868,631. MANUFACTURE OF GRAPHITIC COMPOSITIONS. RUSSELL MERVYN DOIDGE, Battersea, London, England, assignor to The Morgan Crucible Company Limited, Battersea, London, England. Filed Feb. 6, 1931, Serial No. 514,052, and in Great Britain Feb. 7, 1930. 15 Claims. (Cl. 18—47.5.)

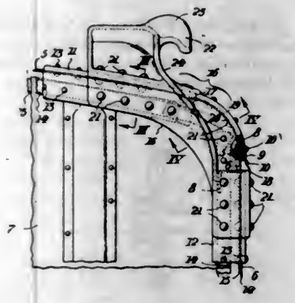
12. The manufacture of a graphitic composition which consists in forming into a cohesive mass a mixture comprising metallic silicon, a bonding vehicle containing sufficient bonding-agent to provide in the heated product an auxiliary bond, and graphitic carbon in quantity in excess over the silicon equivalent, and heating the mass to consolidate it and form therein a silicon carbide bond to the degree of producing an article substantially unalterable on further heating.

1,868,632. SPRAYING SYSTEM. DEXTER EDGE, Pittsburgh, Pa. Filed Apr. 28, 1930. Serial No. 448,155. 8 Claims. (Cl. 261—116.)



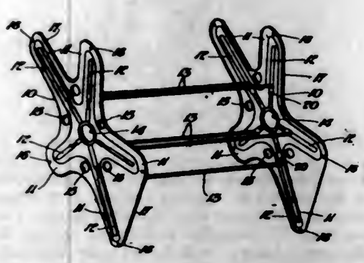
1. The method of conditioning fluids which consists in discharging liquid fluid upwardly along at least two parallel lines at a predetermined initial velocity in the form of flat sprays which have their broadest dimensions transverse to the lines along which the liquid is discharged, said sprays of each line being of sufficient breadth to overlap the spray of the next line and form continuous flat spray walls extending transversely of the lines of discharge of the liquid with channels between said flat spray walls admitting a gaseous fluid into said channels, said liquid serving to propel and promote circulation of the gaseous fluid through said channels and to force said gaseous fluid to pass through said sprays at points at which the imparted or initial velocity is expended.

1,868,633. SHIPPING CONTAINER. FREDERICK K. FILDES, Altoona, Pa. Filed Jan. 23, 1931. Serial No. 510,667. 4 Claims. (Cl. 220—80.)



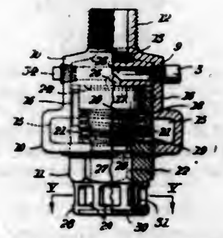
1. A shipping container of the character described having side walls, top and end walls of sheet metal, separate horizontal and vertical binding strips terminating short of the upper corners of the container and connecting its top and side walls with the end walls and corner pieces continuous with the horizontal and vertical binding strips aforesaid, connecting the top, side and end walls of the container and completely filling in the intervals between the binding strips, the said corner pieces being integrally formed with hooks for engagement by lifting tackle.

1,868,634. COLLAPSIBLE REEL. HENRY GREGORY, Houston, Tex., assignor to The American Steel and Wire Company of New Jersey, a Corporation of New Jersey. Filed Nov. 22, 1930. Serial No. 497,522. 4 Claims. (Cl. 242—115.)



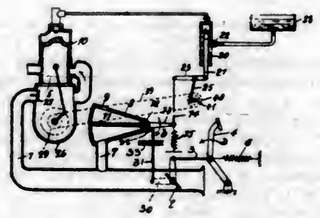
3. A collapsible reel comprising end members of sheet material and a plurality of center pieces yieldably attached to and detachably connecting the end members in spaced apart relation, said end members comprising a central body portion and a plurality of radially extending leg portions corresponding in number to the number of said center pieces, said end members having their marginal edges bent to form a marginal bead and having their body portion bent in to form a dished stiffening portion extending from the central body portion into each of said leg portions.

1,868,635. CYLINDER COCK AND THE LIKE. HARRY A. HOKE, Altoona, Pa. Filed Jan. 8, 1931. Serial No. 507,846. 5 Claims. (Cl. 121—134.)



1. In a cylinder cock or the like, a valve body having an extension thereon adapted to fit in a fixed position within a pressure chamber and having a projection defining a discharge passage with outlets to the atmosphere, a revolvable deflector at said outlets, and interlocking means on said deflector and said projection whereby said deflector is adapted to catch yieldingly in different positions at said outlets to control the direction of the discharge.

1,868,636. INTERNAL COMBUSTION ENGINE WITH POSITIVE FUEL FEEDS. HUGO JUNKERS, Dessau, Germany. Filed Nov. 25, 1927, Serial No. 235,703, and in Germany Mar. 10, 1927. 12 Claims. (Cl. 123—140.)

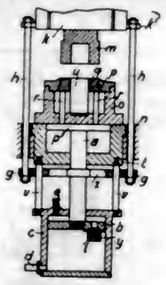


1. A fuel-supply system for internal combustion engines comprising means for supplying fuel to the engine, means for varying the fuel supply, a regulator adapted to automatically adjust said varying means for a predetermined speed of the engine, mechanism for adjusting said regulator for a different speed, and means operatively connected to said mechanism for limiting the response of said regulator to said mechanism when the latter is operated to adjust said regulator for a higher speed.

1,868,637. DIE CUSHION FOR PRESSES. OTTO KUHNER, Goppingen, Germany, assignor to the Firm L. Schuler A. G., Goppingen, Germany. Filed Nov. 2, 1929, Serial No. 404,493, and in Germany Apr. 3, 1929. 3 Claims. (Cl. 267—1.)

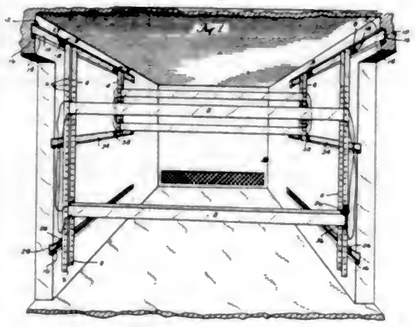
1. A die cushion for die presses comprising a cylinder, a piston in said cylinder, means connected to a movable

member of the press for effecting relative movement of said piston and said cylinder so as to compress air in said cylinder, a suction valve and a pressure-controlled relief



valve connected to one of the closed chambers into which the cylinder is subdivided by its piston, and a pipe connecting the other chamber to an air chamber.

1,868,638. ADJUSTABLE LOADING BRACE FOR RAILWAY CARS. ALBERT E. MACKEY, Batavia, N. Y. Filed Mar. 10, 1931. Serial No. 521,489. 24 Claims. (Cl. 105—369.)

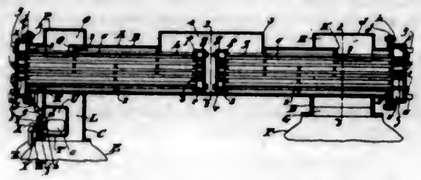


1. A flexible loading brace for railway cars comprising, in combination with the car, upright supports on opposite sides of the car for removable crossbars, said supports being bodily movable lengthwise of the car, and means for positively securing said supports in their different positions of bodily adjustment lengthwise of the car, comprising means for automatically retaining each support in its load bracing adjustment.

2. An adjustable loading brace for railway cars comprising, in combination with the car, upright supports on opposite sides of the car constructed to receive and confine the ends of removable crossbars against movement both lengthwise of the car and vertically, said supports being bodily movable lengthwise of the car, and means for securing said supports positively in their different positions of adjustment lengthwise of the car.

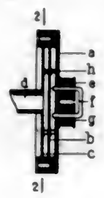
1,868,639. HEAT EXCHANGER. CHESTER W. METZOAR, Easton, Pa. assignor to Ingersoll-Rand Company Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 29, 1929. Serial No. 403,216. 8 Claims. (Cl. 257—240.)

1. A heat exchanger comprising a casing having inlet and outlet openings at the top thereof, means forming a passage to convey fluid around the casing from the bottom thereof to the inlet opening at the top, a plurality of complete cooling liquid conveying units in the casing and extending to an intermediate portion thereof, each unit comprising a plurality of rows of tubes through which said liquid flows from one to another alternately, means on the intermediate portion of the casing forming a passage to convey the fluid from one unit to the other,



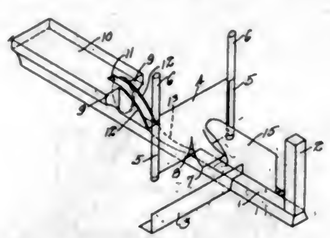
and means forming a passage to convey the fluid around the casing to the bottom thereof from the outlet opening at the top.

1,868,640. SOUND REPRODUCING APPARATUS. EMIL PODSZUS, Berlin-Friedrichshagen, Germany. Filed June 19, 1930, Serial No. 462,332 and in Germany June 26, 1929. 18 Claims. (Cl. 181—31.)



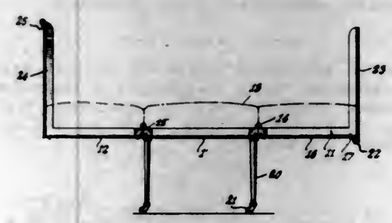
1. A sound reproducing device, comprising a diaphragm, means for vibrating said diaphragm in accordance with the sounds to be reproduced, and damping members in the form of bodies made from filaments of highly elastic hard material engaging said diaphragm at some parts of the surface thereof and leaving the other parts bare.

1,868,641. COIN RELEASE MECHANISM FOR VENDING MACHINES. SAM H. SABIT, Detroit, Mich. Filed Jan. 23, 1931, Serial No. 510,637. Renewed May 27, 1932. 2 Claims. (Cl. 194—92.)



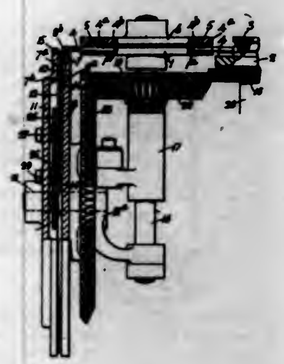
2. In a coin release mechanism for vending machines, a slide bar having a coin slot therein, a vertically movable partition mounted over the slide bar, a tongue extending from the partition and riding on the slide bar, the slide bar being provided with a pair of shoulders and the partition being provided with a pair of shoulders each side of the tongue adapted to be engaged by the shoulders of the slide bar to limit movement of the slide bar, the arrangement being such that upon positioning of a coin in the coin slot withdrawal of the slide bar will raise the partition to allow complete withdrawal of the slide bar beneath the partition.

1,868,642. FOLDABLE BED, TABLE, OR DESK. LOUIS SCHLESINGER, Newark, N. J. Filed Jan. 28, 1931. Serial No. 511,752. 1 Claim. (Cl. 5—4.)



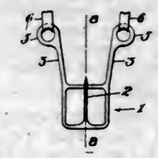
A combination bed, table and desk comprising a bed spring, a sectional frame therefor, means for supporting one of the frames, a riser at each outer corner of the spring frame and integral therewith cross-bars one at each end integrally connecting the upper ends of the two risers at that end of the frame, head and foot plates secured respectively to the frames formed at the ends by the risers and cross-bars, a locking hook pivoted to the upper end of one of said plates, a bead formed at the lower end of the other of said plates and engaged by said hook to hold the sections in folded position.

1,868,643. PATTERNING MECHANISM FOR CIRCULAR KNITTING MACHINES. GODFREY STIBBE, Leicester, England, assignor to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Aug. 9, 1927. Serial No. 211,703, and in Great Britain Aug. 12, 1926. 4 Claims. (Cl. 66—50.)



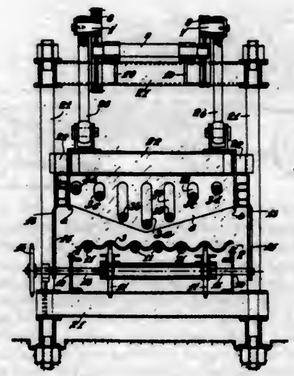
1. In a knitting machine organization having a series of independent knitting needles and having means to supply yarns thereto and having sinkers or like instrumentalities for engagement with the yarns for control thereof in the production of normal and reverse plating, pattern mechanism for controlling or selecting the sinkers or like instrumentalities said pattern mechanism comprising a pattern wheel, movable jacks therein for engaging said sinkers or like instrumentalities, a controlling travelling member, displaceable jack engaging bits therein, and movable means having pre-arranged formations for selecting the bits, thereby automatically to vary the operative arrangement of the jacks while the pattern wheel is working.

1,868,644. CLASP FOR BANDAGES AND LIKE WRAPPINGS. JAMES G. TOMPKINS, Venice, Calif. Filed Apr. 28, 1931. Serial No. 533,443. 6 Claims. (Cl. 24—163.)



1. In a clasp, a button portion, spaced arms carried by and extending from one end of said portion, a hook on said portion, and supporting means pivotally connected with the free ends of said arms and permitting of a complete revolution of the clasp on the axes of said pivotal connections.

1,868,645. APPARATUS FOR SIMULTANEOUSLY CORRUGATING AND TRIMMING SHEETS OF ASBESTOS-CEMENT AND THE LIKE IN A PLASTIC CONDITION. LÉON SCHEERDERS-VAN KERCHOVE, St. Nicolas-Waes, Belgium, assignor to Usines Reunies Scheerders-Van Kerchove, Societe Anonyme, St. Nicolas-Waes, Belgium. Filed Apr. 30, 1930, Serial No. 448,709, and in Belgium Oct. 26, 1929. 1 Claim. (Cl. 25—45.)

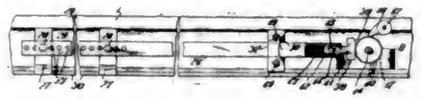


A machine for corrugating and trimming sheets of asbestos-cement when in plastic condition, comprising an open framework, a corrugated plate of steel forming a mould and supported by longitudinal bars, fixed knives arranged on both sides of and close to the pattern mould, a rectangular frame movable and guided along the uprights of the fixed frame, partitions arranged endwise of the movable frame and having substantially vertical slots of variable dimension to lodge a number of bars arranged parallel to the corrugations of the pattern mould, the slots being of increasing depth towards the central portion knives supported by the movable frame to shear the edges of the asbestos-cement sheet in cooperation with the fixed knives, the arrangement being such that said shearing action occurs before the outer bars will engage the corrugations of the mould, means to reciprocate the movable frame, a shaft underneath the pattern mould, chain wheels upon said shaft, means to lift the shaft so that its chain wheels engage the pattern mould when all the bars are released from same and carry the corrugated sheet and mould out of the machine.

1,868,646. FOUNDRY FACING. BENJAMIN F. WALLACE, Brooklyn, N. Y. Filed Aug. 13, 1929, Serial No. 385,693. Renewed Jan. 16, 1932. 8 Claims. (Cl. 22—189.)

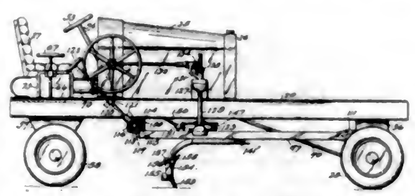
1. A slicking compound for facing green sand molds for casting metal, comprising a dry mixture of a refractory, difficultly oxidizable graphite, a substantially non-graphitic, lusterless carbon formed by the decomposition of gaseous hydrocarbons, the amount of the carbon ingredients substantially exceeding 10% each and a small amount, not exceeding 10% of a binder.

1,868,647. OPERATING MECHANISM FOR RAIL OILERS. HAROLD G. WARR, Park Ridge, Ill., assignor to Maintenance Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 20, 1930. Serial No. 422,125. 20 Claims. (Cl. 184—3.)



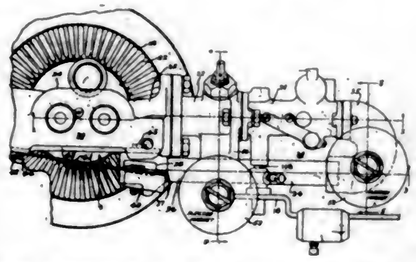
1. Mechanism for utilizing power derived from the wave motion of a railway rail caused by the passage of a load along the rail, comprising cooperating members supported by the rail and movable relative to one another as the rail flexes.

1,868,648. ROAD WORKING MACHINE. IRA M. WELLS, Oakland, and HOWARD A. OLDS, San Francisco, Calif. Filed Nov. 2, 1931. Serial No. 572,500. 2 Claims. (Cl. 37—159.)



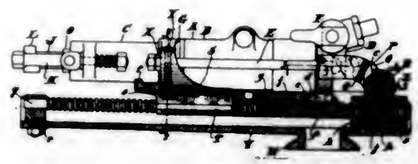
1. In combination, a frame, a power unit mounted on said frame, supporting brackets at each end of said frame, a rear axle housing fixedly secured to one of said brackets, a front axle housing transversely pivoted to the other bracket, a horizontally pivoted knuckle for each end of said fixed axle housing and controlling means therefore, a vertically pivoted knuckle for each end of said pivoted axle housing and controlling means therefore, wheels mounted on each of said knuckles and means for transmitting power from said power unit to all of said wheels.

1,868,649. ENGINE. WILLIAM C. WELLS, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 23, 1929. Serial No. 394,423. 4 Claims. (Cl. 123—122.)



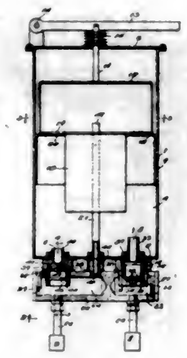
1. In combination, an internal combustion engine; a carburetor for the engine; a compartment forming a passageway for air having an admission end in intimate relation to the engine; a conduit interconnecting the carburetor with said compartment; a choker and an electrically operated mechanism therefor carried by said conduit; and an engine temperature responsive valve for controlling the admission end of said compartment.

1,868,650. MOUNTING FOR ROCK DRILLS. RUSSELL H. WILHELM, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 24, 1930. Serial No. 504,522. 2 Claims. (Cl. 255—45.)



1. A mounting for a rock drill, comprising in combination with a rock drill casing and a handle thereon, a saddle to support the drill, guide lugs on the saddle to loosely engage the casing, an abutment on the carriage having a groove to receive the handle and acting against the handle to prevent endwise movement of the rock drill in one direction with respect to the carriage, a rib on the saddle, and a hook on the casing adapted to engage the rib for limiting movement of the rock drill with respect to the casing in an opposite direction.

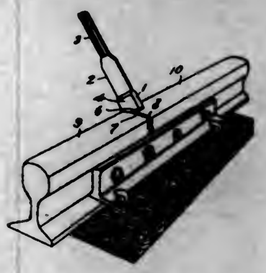
1,868,651. LIQUID ELEVATING APPARATUS. ANDREW C. WOOD, Chicago, Ill. Filed Oct. 24, 1927. Serial No. 228,309. 10 Claims. (Cl. 103—40.)



1. In a device of the kind described and in combination, a receptacle provided with an inlet and an outlet, and pumping means for drawing fluid into the receptacle through said inlet comprising a plunger consisting of an annular ring having a relatively movable top plate and float means operatively connected with the plate, said receptacle constructed to provide a well with walls closely fitting said plunger, and means for actuating the plunger.

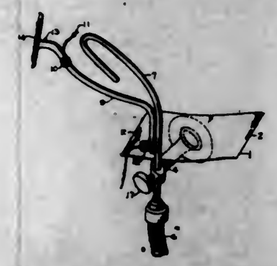
1,868,652. RAIL JOINT CHISEL. CYRIL H. ZENTMYER, Clifton Forge, Va. Filed May 9, 1929. Serial No. 361,786. 4 Claims. (Cl. 164—80.)

1. A tool for removing burs from between adjacent railroad rails comprising a cutting body having flat parallel faces intersecting an end face at right angles thereto to form cutting edges and adapted to be driven between the end faces of adjacent railroad rails, the flat parallel faces



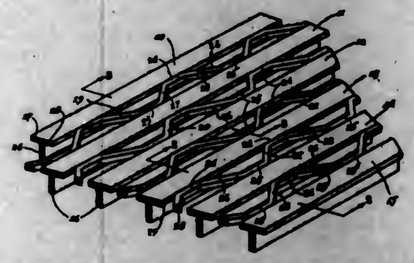
of said body being adapted by contact with the end faces of said rails to maintain the body in a position substantially parallel to said rail ends.

1,868,653. COMBINATION DENTAL APPLIANCE. SAMUEL ABRAHAM, New York, N. Y. Filed Mar. 9, 1929. Serial No. 345,708. 5 Claims. (Cl. 32—33.)



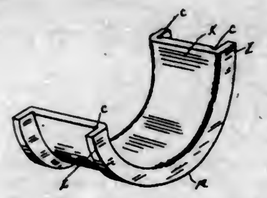
1. In a dental appliance of the class described, the combination of a mouth member comprising a tubular saliva ejector limb provided with openings to drain the saliva from the mouth, of a second tubular limb rigidly connected to the first named limb for a part of its length adapted to contain electric wires, receptacle means for leading the electric current into and therefrom the electric lighting limb and an electric light flexibly connected to the upper receptacle of the electric lighting limb; of a chin-plate for connecting the appliance to the head, of a bracket arm movably joined to the chin-plate adapted to movably support the mouth member and clamping means for fixedly positioning the mouth member.

1,868,654. GRATING. HANS J. ASLESON, Minneapolis, Minn. Filed Aug. 22, 1930. Serial No. 477,022. 7 Claims. (Cl. 94—30.)



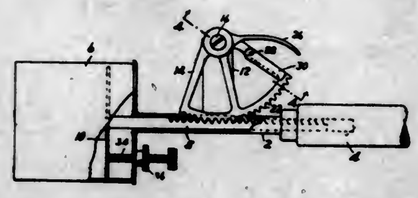
1. A grating comprising a plurality of spaced T bars having flanges, and spacer members secured to the flanges of said T bars for holding the same in spaced relation.

1,868,655. PROCESS OF FORMING HALF BEARING SHELLS AND RESULTANT ARTICLE. LOWELL C. BLOMSTROM, Detroit, Mich., assignor to Federal Mogul Corporation, Detroit, Mich., a Corporation of Michigan. Filed Sept. 10, 1928. Serial No. 304,984. 5 Claims. (Cl. 29—149.5.)



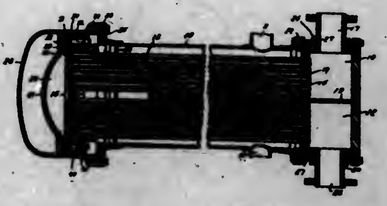
1. The process of forming a half-bearing shell, which consists in laterally flanging a plain blank of selected dimensions, forming grooves lengthwise of those lateral edges thereof next inside of the flanges as formed, positioning the flanged and machine blank over a semicircularly concaved receiving die, and subjecting the blank as thus positioned to the impact of a correspondingly contoured entering die.

1,868,656. DISPENSING DEVICE. JOSEPH BREZIN, Philadelphia, Pa., assignor to Philadelphia Ice Cream Cone Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 24, 1928. Serial No. 314,564. 4 Claims. (Cl. 107—48.)



1. A dispensing device comprising a form having an open end, a piston for ejecting plastic material from the open end of the form, and a member operative in one position to limit ejecting movement of the piston and pivotable to an inoperative position to permit removal of the piston from the form.

1,868,657. HEAT EXCHANGER. STANLEY BROWN, Garden City, and JOSEPH PRICE, West New Brighton, N. Y., assignors to The Griscom-Russell Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 14, 1931. Serial No. 580,942. 15 Claims. (Cl. 257—239.)



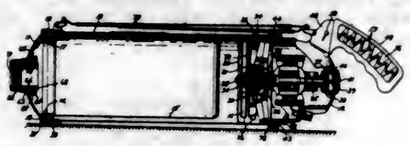
1. In a heat exchanger, the combination of a shell, a tube bundle therein, a tube sheet for one end of the tube bundle, a cap for said tube sheet having a rim engaging the outer face of the tube sheet, a sectional ring holding the tube sheet against the cap, a continuous ring encircling the sectional ring, and clamping means securing the tube sheet and rings to the cap.

1,868,658. CHIROPODY CHAIR. JOHN RUSSELL EMMERT, Berwyn, Ill., assignor to Emil J. Paidar Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 18, 1929. Serial No. 407,902. 5 Claims. (Cl. 155—171.)



5. In a chair, a chair frame including a depending swingable apron thereon, a pair of mountings independently and angularly adjustably mounted on the apron, pads slidably mounted in said mountings, and means for connecting said mountings to said apron for causing them to be swingable together with said apron as a single unit.

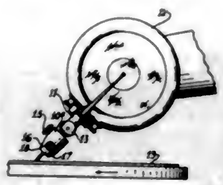
1,868,659. CLEANER. AXEL OLOF ENGBERG and TORD ERIK DANIEL BILDE, Stockholm, Sweden, assignors, by mesne assignments, to Electrolux Corporation, a Corporation of Delaware. Filed Dec. 29, 1927, Serial No. 243,423, and in Germany Dec. 29, 1926. 15 Claims. (Cl. 15—16.)



1. In a vacuum cleaner, a casing, a fan and motor housing, a ring connecting said housing to said casing, and feet integral with said ring.

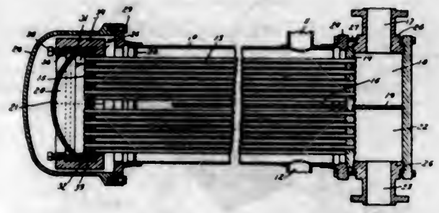
10. In a vacuum cleaner, a casing having an inlet opening and an outlet opening, a centrifugal fan in said casing for causing flow of air from said inlet opening to said outlet opening, a diaphragm between said fan and said outlet opening, said diaphragm being spaced from said casing and forming with said casing an annular passageway and vanes obliquely disposed on said diaphragm for directing the flow of air in axial direction toward said outlet opening.

1,868,660. SOUND REPRODUCING DEVICE. JOHN T. FITZSIMMONS, Hartford, Conn. Filed Aug. 16, 1930. Serial No. 475,671. 4 Claims. (Cl. 274—37.)



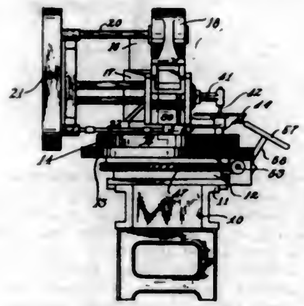
1. Means for transmitting vibrations caused by the record in a talking machine, comprising a cylindrical metallic body having an integral supporting stem extending axially from one end and having a needle opening extending longitudinally entirely through the body from the other end and a circular opening extending transversely through the body intermediate the ends of said needle opening, a needle thrust into said needle opening, and a clamp screw threaded transversely into the body to the needle opening.

1,868,661. HEAT EXCHANGER. OSCAR W. HEIMBERGER, West Brighton, Staten Island, N. Y., assignor to The Griscom-Russell Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 10, 1931. Serial No. 580,072. 15 Claims. (Cl. 257—239.)



1. In a heat exchanger, the combination of a shell, a tube bundle therein, a tube sheet for one end of the tube bundle, a cap for said tube sheet having a rim engaging the outer face of the tube sheet, an element embracing the peripheries of the tube sheet and cap rim, and means for securing the element in this position.

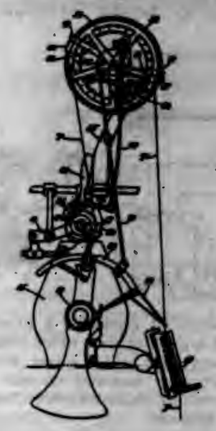
1,868,662. ENGRAVING MACHINE. JOHN C. JENNEJOHN, Cudahy, Wis., assignor to Utility Manufacturing Co., Cudahy, Wis., a Corporation of Wisconsin. Filed Nov. 1, 1926. Serial No. 145,486. 8 Claims. (Cl. 90—13.7.)



1. In a machine for engraving molds, a rotatable support, a rotatable profile disc, a support for said disc, means for rotating the work support and disc support in predetermined relationship, a tool support having a tilting mounting relatively to said work support, means for tilting said tool support, and a follower for said profile disc associated with the tilting means for controlling the tilting of said tool support.

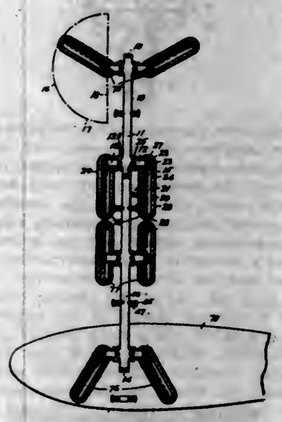
1,868,663. THREAD MEASURING MECHANISM. HENRY G. JOHNSON, East Hampton, Conn., assignor to Summit Thread Company, East Hampton, Conn., a Corporation of Maine. Filed Jan. 24, 1928. Serial No. 249,053. 3 Claims. (Cl. 33—132.)

3. A device of the class described comprising a shaft, a wheel mounted on said shaft and shaped to hold a turn of traveling thread for rotating the wheel, a member having a dial, an index arm, a train of gearing connecting said arm with said shaft whereby said arm may indicate on said dial the length of thread passing over said wheel, a brake wheel mounted on said shaft, a brake adapted to engage said brake wheel, a spring pressing said brake toward engagement with said brake wheel, a detent normally holding said brake away from said brake wheel, a pivoted catch member engageable with said detent to retain it in normal position, said catch member having a portion disposed in the path of said index arm and movable by engagement with said arm to rock the catch member and release said detent, and mechanism including



a member in contact with the thread, said last named member being connected to said catch member for rocking it in response to a breaking of said traveling thread.

1,868,664. AIRSHIP. GUSTAVE L. KAYDEN, New York, N. Y. Filed Aug. 23, 1930. Serial No. 477,275. 20 Claims. (Cl. 244—11.)



8. In an airship, a movable wing, and means for operating said wing continuously, through a downward rotation consisting of substantially a half turn and then bodily upwardly, including a pivot revoluble about a relatively fixed axis, and a member movable with the wing and in constant engagement with said pivot.

1,868,665. PLUMBING FIXTURE ADAPTER. FREDERICK C. KUHNLE, Chicago, Ill. Filed May 31, 1928. Serial No. 281,724. 10 Claims. (Cl. 251—155.)

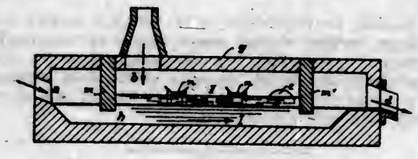
2. An outlet fixture for the purposes described wherein the supply pipes are concealed within a wall and a protruding portion therefrom extends through the wall, an end portion of said protruding portion having a bearing face, adjacent said bearing face and slightly spaced from the outer end of said protruding portion an annular groove,

adjacent said groove and on the opposite side thereof from the bearing face an annular flange or shoulder having a greater circumference than the bearing face, a longitudinal



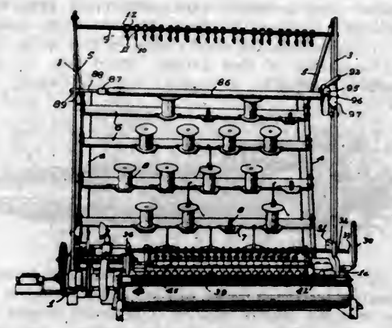
groove in the bearing face extending crosswise thereof bisecting the annular groove, and of substantially the same depth as the annular groove.

1,868,666. EXTRACTING OF IRON. ARTHUR LANGER, Vienna, Austria. Filed July 19, 1929, Serial No. 379,587, and in Austria May 3, 1929. 3 Claims. (Cl. 75—14.)



1. A process for the direct extraction of iron from its ores wherein an ore reducing mixture and an iron bath bow continuously in the same direction through a furnace, consisting in introducing an ore reduction mixture into an already flowing iron bath, causing a relative velocity of motion of said ore reduction mixture with regard to said iron bath to arise by the addition of further quantities of material, and increasing said relative velocity by causing the iron bath which is drawn off to flow repeatedly through the furnace.

1,868,667. COIL WINDING MACHINE. WILMER J. LEIDY and NICK KNUTH, Chicago, Ill., assignors to Chicago Transformer Corporation, Chicago, Ill., a Corporation of Illinois. Filed Jan. 5, 1931. Serial No. 506,518. 8 Claims. (Cl. 242—9.)

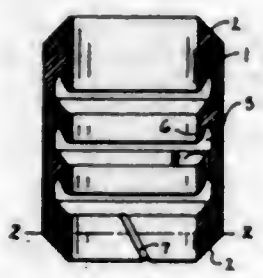


1. A coil winding machine including a winding spindle and a wire guide endwise movable along said spindle, two series of guide rollers carried by said guide which rollers

are supported thereon for adjustment relatively to one another and relatively to the spindle, one series of rollers consisting of separate individual rollers mounted for individual adjustment along said guide and also angularly with respect to the same.

7. A coil winding machine including, a winding spindle and a plurality of wire reels, tension means between the reels and the spindle, said tension means including a rotatable bar about which the wire strands are given a turn and then lead to the spindle, said rod rotating as said spindle winds the strands thereon, and means for retarding the rotation of said rod to tension said wire, said retarding means being adjustable to vary the retarding effect imparted to said rod.

1,868,668. GLAND PACKING. LEE HENRY MAHON, Liberty, Tex., assignor of one-half to H. H. Sloan, Houston, Tex. Filed Sept. 12, 1929. Serial No. 392,023. 1 Claim. (Cl. 288—1.)



A packing sleeve adapted to fit within a stuffing box, the inner surface of said sleeve having circumferential grooves undercut to form lips extending in from the body of the sleeve and in the direction of the fluid pressure, and passages from the fluid pressure end of said sleeve through said lips into said grooves.

1,868,669. COOKED GARBAGE LIQUOR SOLID AND PROCESS OF FORMING SAME. ERVIN W. MCCULLOUGH, Indianapolis, Ind. Original application filed Mar. 10, 1924, Serial No. 698,106. Divided and this application filed Mar. 25, 1929. Serial No. 349,740. 1 Claim. (Cl. 99—5.)

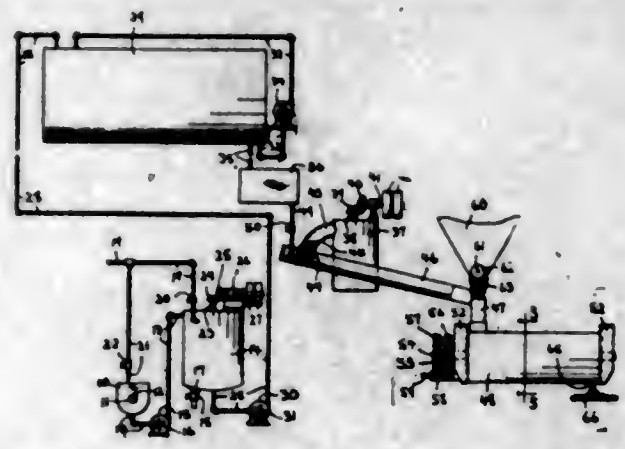
In a garbage treatment process for forming a molasses substitute for animal feed comprising the successive steps of forming a substantially greaseless cooked garbage liquor, evaporating the liquor to molasses-like consistency, applying the molasses-like product to a heated surface for dehydration to solidification, scraping the solidified product from the surface, grinding the solidified product, and then intimately mixing the ground product with the other feed producing products.

1,868,670. BACK HEAD CONSTRUCTION FOR ROCK DRILLS. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed July 15, 1930. Serial No. 468,071. 8 Claims. (Cl. 121—13.)



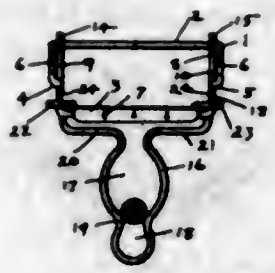
1. In a fluid pressure percussive tool having rotation mechanism for the working tool including a ratchet ring, a rear cylinder closure member, a centrally located bushing member within said closure member, and means utilising the reaction of said rotation mechanism on said ratchet ring to cause the latter securely to clamp said bushing member against longitudinal movement.

1,868,671. METHOD OF AND APPARATUS FOR MAKING GYPSUM BOARD. WILLIAM K. NELSON, Chicago, Ill., assignor to Universal Gypsum & Lime Co., Chicago, Ill., a Corporation of Delaware. Filed June 4, 1931. Serial No. 542,083. 13 Claims. (Cl. 83—73.)



1. In the method of producing a product of the gypsum wall board type, that step which comprises the floating of pre-formed foam into a mixer with the other ingredients of the body material through the medium of at least a part of the water employed for the production of the plastic mixture.

1,868,672. LOOP SLIDE BUCKLE. JESSUP SALISBURY, Hamden, Conn., assignor to The American Buckle Company, West Haven, Conn., a Corporation of Connecticut. Filed July 26, 1930. Serial No. 470,932. 4 Claims. (Cl. 24—13.)

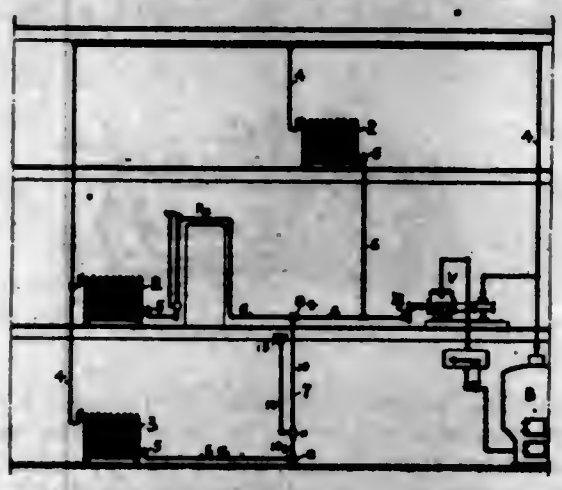


4. An adjustable strap-mounting comprising wire slide buckle frame members pivotally assembled, each member having side bars connected by a gripping bar flattened in the plane of its member and provided with inwardly directed teeth, each side bar of one member having a bent upper portion rearwardly extending, a lower portion having an undulated surface, and an intermediate portion relatively divergent to an intermediate portion of the adjacent side bar of the other member, and another portion of each side bar of one member being relatively convergent to another portion of the adjacent side bar of the other member, and a third member provided with looped extremities slidably mounted upon the side bars of both frame members and engageable with the undulated surfaces, the sliding member cooperating with the rearwardly extending portions.

1,868,673. VACUUM OPERATED WATER LIFTING APPARATUS. JOHN A. SERRELL, Passagrille, Fla., and JAMES L. FITTS, Pensauken Township, Merchantville, Camden County, N. J.; said Fitts assignor to Warren Webster & Company, a Corporation of New Jersey. Filed Feb. 5, 1925. Serial No. 6,939. 7 Claims. (Cl. 103—5.)

1. Means for lifting water from one level to a higher level, comprising a lift pipe, a pipe at the low level for supplying water to the bottom of the lift pipe, a pipe at the higher level in communication with the upper part of the lift pipe and in which a partial vacuum is maintained, a vacuum creating means for maintaining a partial vacuum in the pipe at the higher level and withdrawing water so lifted together with the associated air from said pipe at the higher level, and means for introducing

air into the water in the lower part of the lift pipe, the said means for admitting air to the lower part of the water lift pipe being provided with an upright air pipe



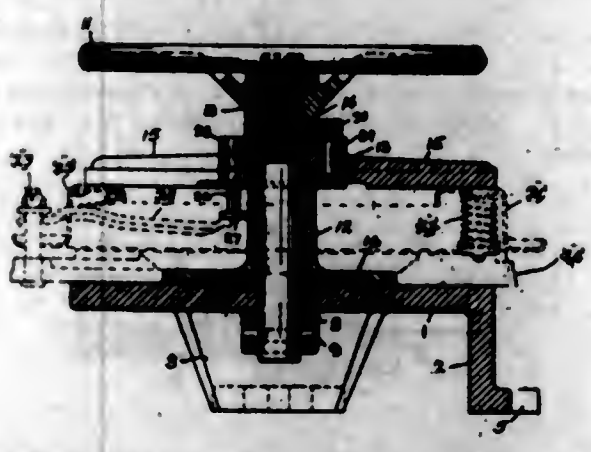
extending to approximately the upper part of the water lift pipe and having means at its upper end to admit air in restricted quantities.

1,868,674. NECKTIE HOLDER. EDWARD ST. JOHN SMITH, St. Louis, Mo. Filed Apr. 2, 1930. Serial No. 441,035. 1 Claim. (Cl. 24—49.)



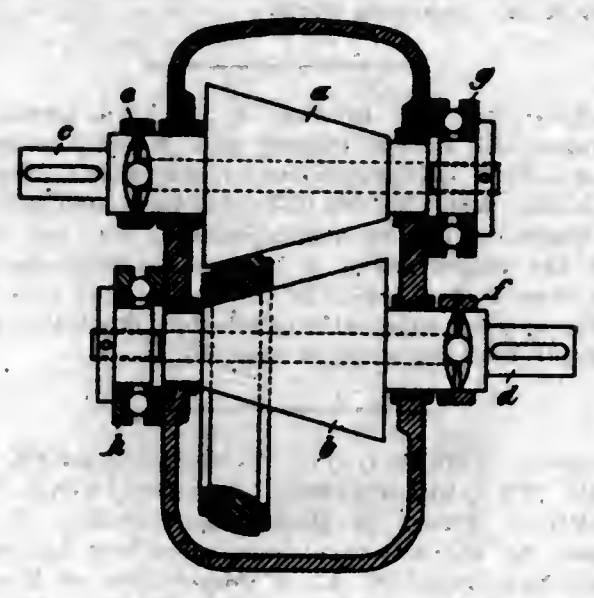
A tie holder of the class described, comprising a main body portion consisting of a narrow thin sheet of metal, a second narrow thin metal member attached at right-angles to the upper end of said first member, then turn upwardly so as to form a fork whose tines lay substantially parallel to each other, and a prick pin projecting from the first named portion adjacent its lower end and on the side opposite said second named member.

1,868,675. CLUTCH SERVICING FIXTURE. CHARLES B. SPASE, Syracuse, N. Y., assignor to Ira Saks, Cleveland, Ohio. Filed Nov. 27, 1931. Serial No. 577,481. 12 Claims. (Cl. 29—89.)



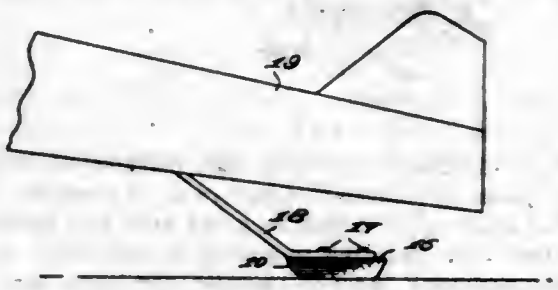
1. A device for servicing automotive clutches and the like having pressure springs and actuating levers, comprising the combination of means for simultaneously compressing said springs, and gauging means for indicating the alignment of said levers.

1,868,676. FRICTION ROLLER GEARING. WILHELM STOECKICHT, Munich, Germany. Filed Apr. 23, 1930, Serial No. 446,682, and in Germany May 3, 1929. 1 Claim. (Cl. 74—26.)



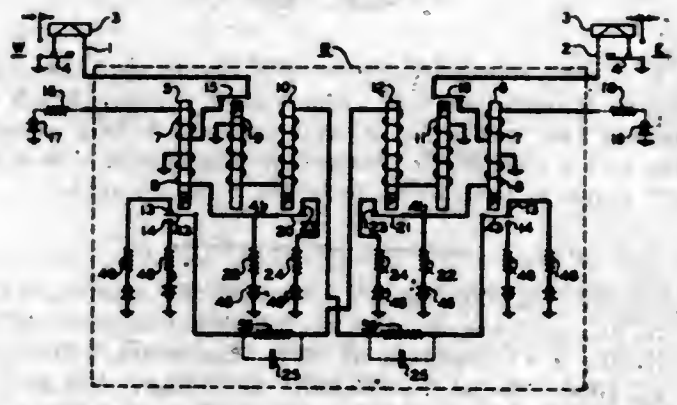
A friction roller gearing comprising a driving shaft, a driven shaft, means on the shafts for providing a drive connection therebetween, and an automatic thrust device mounted on each shaft to automatically provide the uniform axial force required to secure power transmission in the drive connection at any speed and direction of rotation.

1,868,677. AIRCRAFT SKID SHOE. RUSSELL B. TWEED and CLAYTON WATSON, St. Petersburg, Fla. Filed Nov. 25, 1930. Serial No. 498,136. 1 Claim. (Cl. 244—2.)



An aircraft skid shoe comprising a hollow holder open at its lower side and having interior side wall surfaces converging toward said open side and a filling of non-metallic material having metallic reinforcing binding elements fitting snugly against the converging wall surfaces of the shoe, the lower surfaces of the filling being flush with the lower edges of the body.

1,868,678. TELEGRAPH REPEATER. GILBERT S. VERNAM, River Edge, N. J., assignor to International Communications Laboratories, Inc. Filed June 12, 1930. Serial No. 460,657. 16 Claims. (Cl. 178—71.)



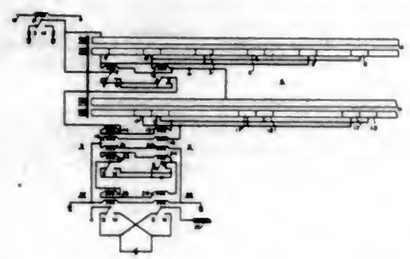
1. In a single line telegraph repeater connected to two loop circuits, a line relay in each loop circuit and responsive to incoming signals thereon, a biasing coil for

each line relay, a bias-reversal relay to control each said biasing-coil, and two re-transmitting relays each of which has a contact and armature in one loop circuit and a coil responsive to the operation of the line relay which is included in the other loop circuit.

1,868,679. ALLOY. RICHARD A. WILKINS, Rome, N. Y., assignor to Revere Copper and Brass Incorporated, Rome, N. Y., a Corporation of Maryland. Filed Mar. 24, 1932. Serial No. 601,055. 4 Claims. (Cl. 75—1.)

1. Alloys containing copper, silicon, tin, and zinc, in which the copper range is from 85 to 95%, the silicon range from 0.25 to 4%, the tin range from 0.25 to 1%, and the balance substantially all zinc, the latter in each particular instance being at least 1%.

1,868,680. THREE-UNIT, THREE-ELEMENT CODE AND ITS APPLICATION TO SUBMARINE TELEGRAPHY. MARION H. WOODWARD, Brooklyn, N. Y., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 6, 1931. Serial No. 506,879. 12 Claims. (Cl. 178—71.)



1. In a telegraph system, the method of translating from a three-unit three-element code of positive, negative and zero current impulses to a six-unit two-element code of positive and negative impulses by substituting a positive and negative current impulse for each zero current impulse.

1,868,681. ROPE. ERNEST V. WYATT, Somerville, Mass. Filed Mar. 5, 1930. Serial No. 433,279. 14 Claims. (Cl. 117—52.)



1. A rope or cable comprising a plurality of strands of flexible material and a rubber cushion about which said strands are laid, each of said strands having a rubber core and a plurality of yarns laid thereabout, and each of said yarns in turn being provided a rubber core.

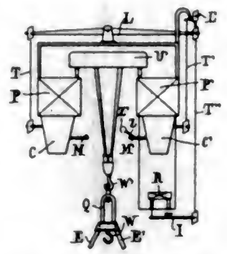
1,868,682. KNOT TYING. EDWARD J. ABBOTT, Wilton, N. H., assignor to Abbott Machine Company, Wilton, N. H., a Corporation of New Hampshire. Filed Aug. 16, 1930. Serial No. 475,665. 20 Claims. (Cl. 289—5.)

15. A device of the class described comprising a movable strand guide, a rotatable tying-bill for forming a loop, cutting the strands and holding the ends of the strands while allowing the loop to slide off the bill to form a knot, clamping means movable across the guide for clamping the strands and movable with the guide to pull the strands thereby to tighten the knot, an arm mounted pivotally with respect to the clamping means, a spring



for resisting pivotal movement of the arm, a finger on the arm disposed in position to lie within the loop during the formation thereof, and means for imparting a pivotal motion to the arm for withdrawing the finger from the loop before the latter is completely tightened.

1,868,683. WEIGHING DEVICE FOR USE IN TRAVELING CRANES. PIERRE JULES ARMAGNAT, Bethune, France. Filed Jan. 14, 1931, Serial No. 508,774, and in France Jan. 18, 1930. 2 Claims. (Cl. 265—52.)



1. In a weighing device for traveling cranes having girders, two scale bodies mounted under each girder and comprising each a casing, levers and an overhanging platform connected to said levers by means of a particular system in order that the weighing operation may take place independently of the location of the load on the platform, a weighing device, and a power rod engaging therewith, the scale bodies being connected together by lever systems by which the transmission of the sum of the forces applied onto both platforms is ensured without any other force after a suitable application onto the power rod engaging with the weighing device.

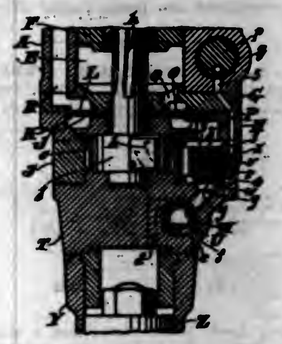
1,868,684. CLEANSING FLUID CONVEYING TUBE. LEWIS C. BAYLES, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 26, 1928. Serial No. 315,182. 5 Claims. (Cl. 121—10.)



1. In a fluid actuated rock drill, the combination of a cylinder and front and back heads, a hollow drill steel extending into the front head, a cleansing fluid conveying tube extending through the cylinder and spaced at its front end from the drill steel, means for securing the

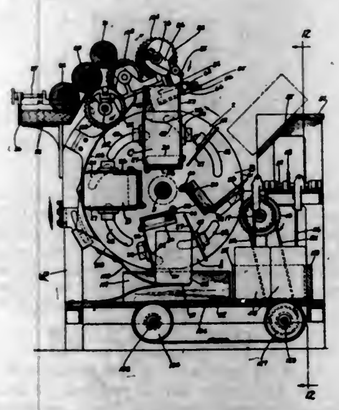
tube to the back head, a nozzle disposed slidably in the front end of the tube and spanning the space between the tube and the drill steel for conveying cleansing fluid from the tube to the said drill steel, and abutment means associated with the nozzle and the tube and cooperating to limit movement of the nozzle in one direction with respect to the tube and to effect a seal between the nozzle and the tube.

1,868,685. SAFETY DEVICE FOR ROCK DRILLS. LEWIS C. BAYLES, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 8, 1931. Serial No. 535,920. 9 Claims. (Cl. 121—35.)



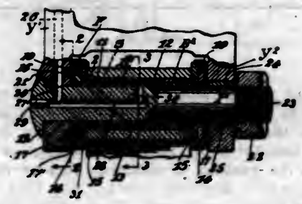
9. In a safety device, the combination of a rock drill and a feeding device therefor, a working implement for the rock drill, pressure actuated means for imparting rotary movement to the working implement, distributing means for distributing pressure fluid to the pressure actuated means, a rotation handle for the rock drill, at pressure actuated valve for controlling the supply of pressure fluid to the distributing means, and means associated with the rotation handle for controlling the pressure actuated valve.

1,868,686. METHOD OF AND APPARATUS FOR CLOSING AND SEALING CONTAINERS. DANIEL BELCHER, Minneapolis, Minn., assignor to Bemis Bro. Bag Co., Minneapolis, Minn., a Corporation of Missouri. Filed May 12, 1930. Serial No. 451,702. 24 Claims. (Cl. 93—7.)



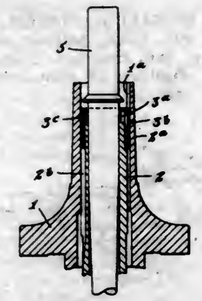
1. In an apparatus of the class described, a member provided with a compartment adapted to receive a filled container, means for moving a wall of the compartment to compress the body of a container supported therein, means for folding portions of the walls of the container mouth inwardly over the container body and then spreading other portions thereof outwardly beyond the container body, whereby opposite wall portions thereof will be disposed in overlapping relation, and means for folding said extended wall portions against the body of the bag to close the container mouth.

1,868,687. SPRING EYE SUSPENSION. JOSEPH BIJUR, New York, N. Y., assignor, by mesne assignments, to Auto Research Corporation, a Corporation of Delaware. Filed Oct. 8, 1924. Serial No. 742,283. 61 Claims. (Cl. 267—54.)



1. In combination, a bearing pin, a bearing member encircling said bearing pin, supporting elements rigid with said bearing pin and beyond said bearing member, dust excluding means associated with the ends of said bearing member, said means including a socket at each end, a separate annular compression plate element of substantially the internal diameter of said socket and associated with the open end thereof, and means for telescoping said plate into said socket, one element of each of said telescoping assemblies being rigid with the bearing, the other rigid with the bearing pin.

1,868,688. BEARING BOLSTER FOR SPINDLES. ERVIN BOWKER, Fall River, Mass. Filed Aug. 11, 1928. Serial No. 298,909. 6 Claims. (Cl. 308—150.)

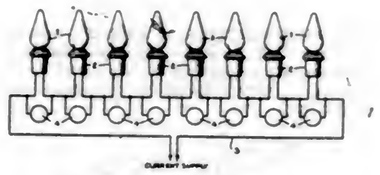


1. In a spinning spindle the combination with a hollow base, a tubular blade-containing bearing bolster adapted to be loosely supported in said base, an endwise detachable slip collar adapted to slip over the upper end of the bolster and having interlocking engagement exteriorly and interiorly with the base and with the bolster respectively to prevent rotation of the bolster.

1,868,689. MEANS FOR INDICATING THE DERANGEMENT OF ELECTRICAL ILLUMINATING APPARATUS. WILLIAM BRANDER, New York, N. Y. Filed June 25, 1929, Serial No. 373,681. Renewed Oct. 6, 1931. 7 Claims. (Cl. 177—311.)

7. The combination of a lamp socket, a casing in said socket having a body and a closure therefor, the body and the closure having openings with insulating bush-

ings therein for the passage of electric conductors, a disk in the body of the casing, metallic bushings passing through the disk, insulation for said bushings, a thermally responsive element on one side of said disk attached to one bushing, an insulating sleeve on said element, a resistance wire encircling said sleeve and connected at one



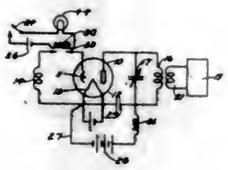
end to said element and at its opposite end to the other bushing, the disk having an opening, and a member connected to the other bushing, the ends of said element and said member being adapted to engage in said opening upon the passage of sufficient current through said wire.

1,868,690. ELASTIC THREAD AND FABRIC MADE THEREFROM. FREDERICK L. BRIGHAM, Upper Montclair, N. J. Filed Dec. 16, 1930. Serial No. 502,647. 6 Claims. (Cl. 66—190.)



1. As an article of manufacture a thread comprising an extensible core, a helical covering about said core throughout its entire length, and an outer covering braided over the said core and helical covering.

1,868,691. SIGNALING SYSTEM. ARCHIBALD S. BROWN, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Oct. 26, 1929. Serial No. 402,774. 4 Claims. (Cl. 250—17.)



1. In a relay system, a relay, a source of current, a resistance element having a positive temperature coefficient, and a keying device, all connected in series, said resistance element being so proportioned relative to the total circuit resistance as to be heated, in response to closure of said contact means, to a temperature at which its resistance constitutes a major proportion of the total circuit resistance.

1,868,692. LAMP SHADE WITH A FABRIC COVER. HEINRICH BRUCKMANN, Essen, Germany. Filed May 16, 1931, Serial No. 537,876, and in Germany May 21, 1930. 8 Claims. (Cl. 240—108.)

1. In a lamp shade of the type described a fabric cover comprising threads extending crosswise to one another, bent supporting wires holding the fabric in position and being inclined relative to the threads, and means adapted



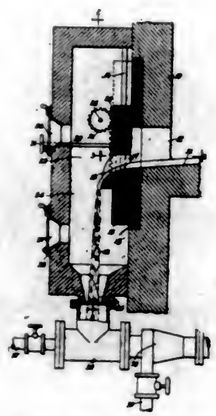
to subject the fabric to tension in the direction of the supporting wires and also perpendicular thereto.

1,868,693. SAFETY HOOK FOR SCREEN DOORS. BENEDETTO CAPRA, Sacramento, Calif. Filed Apr. 15, 1931. Serial No. 530,195. 5 Claims. (Cl. 292—108.)



1. A safety hook device comprising a shank, a hook on one end of the same and forming, with the adjacent portion of the shank, an open-bottomed slot, said hook being adapted to project into the eye of a staple or the like, a catch member disposed rearwardly of the hook and pivoted toward its forward upper end on to the device at the top of the slot, said member projecting into the plane of the slot below the top thereof and so as to project under the staple; the forward edge of the catch member below said projecting portion sloping down to the rear edge of the slot, and means to manually move said portion of the catch member clear of the slot at will.

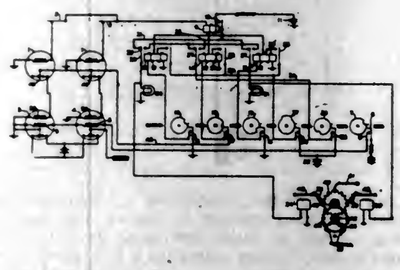
1,868,694. SLAG TAPPING AND DISPOSAL APPARATUS. THOMAS G. COGHLAN, Elizabeth, N. J. Filed May 24, 1930. Serial No. 455,179. 8 Claims. (Cl. 266—38.)



1. In a slag tapping and disposal system: a furnace having a vertical elongated opening extending from the bottom of the chamber to the maximum level of slag ac-

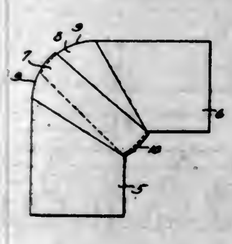
cumulating therein, a gate movably mounted in front of said outlet opening and provided with an opening adapted for partial registry therewith, and means to reciprocate said gate before said elongated outlet opening to vary the registry therewith of the gate opening and also to block said elongated opening, said gate opening being adapted to travel substantially to the bottom of the furnace chamber.

1,868,695. MEANS FOR INDICATING AND APPLYING ORIENTATION CORRECTION TO TELEGRAPH DISTRIBUTORS. ALDER F. CONNERY, Brooklyn, N. Y., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed July 11, 1930. Serial No. 467,247. 14 Claims. (Cl. 178—53.)



1. In a correcting device for telegraph distributors, three successively operable self locking relays, distributor contacts individually connected with said relays for timing their operation, and means for applying phase-correction with respect to a received signal when the latter over-laps less than three of said distributor contacts.

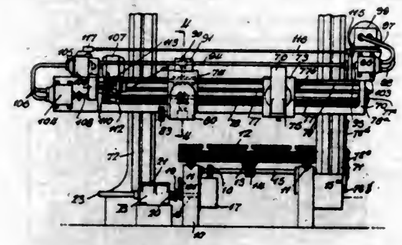
1,868,696. ELBOW. THOMAS F. CRARY, Middleport, Ohio. Filed Sept. 4, 1930. Serial No. 479,765. 1 Claim. (Cl. 285—97.)



An elbow comprising pipe sections constructed of sheet metal material, said pipe sections having bulged end portions interlocked to provide an elbow, the bulged portions being wider at the outer side of the elbow than at the inner side of the elbow to permit the sections to be disconnected when the free ends of the sections are moved outwardly in opposite directions.

1,868,697. MACHINE TOOL. ARTHUR L. ELLIS, New Rochelle, N. Y., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 4, 1930. Serial No. 441,450. 11 Claims. (Cl. 29—30.)

1. The combination, with a machine tool of the planer type having a reciprocating work table, of means for driving said table, said means comprising a fluid pressure pump having an adjustable device for varying the volume, or reversing the direction, of its output, a fluid pressure



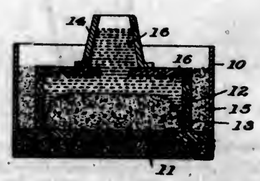
motor having a rotary driving shaft, and gearing connecting the driving shaft of said motor with said work table.

1,868,698. HEAT EXCHANGE DEVICE. HARVEY FELDMEIER, Little Falls, N. Y., assignor to Cherry-Burrell Corporation, Wilmington, Del., a Corporation of Delaware. Filed Sept. 16, 1930. Serial No. 482,173. 10 Claims. (Cl. 257—183.)



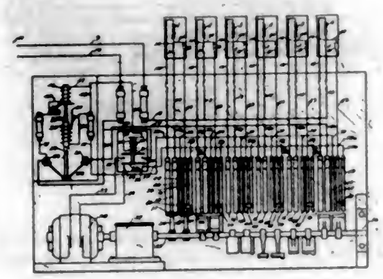
2. The combination with a main heat exchange element over which a liquid is adapted to flow in heat exchange relation to another medium, and a receiver below said element for receiving said liquid, of a supplemental heat exchange element arranged beneath said main element and comprising a plurality of tubes located within said receiver and connected to cause a heat exchange medium to flow through said tubes in succession and over which the liquid flows from said main element into the receiver, and fluid supply and discharge connections for said supplemental element coupled thereto externally of said receiver.

1,868,699. METHOD OF MAKING COMPOSITE REFRACTORY ARTICLES. GORDON S. FULCHER, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Oct. 15, 1928. Serial No. 312,659. 5 Claims. (Cl. 49—79.)



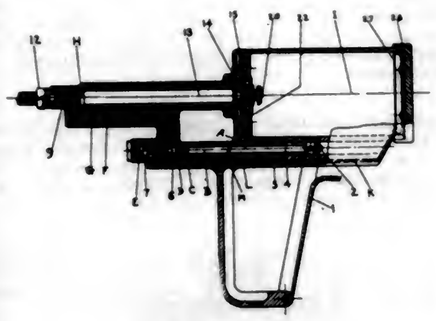
1. The herein described method of making refractory articles for use in contact with molten glass which includes placing an unburned refractory backing member in a mold and introducing into the mold molten aluminum silicate which due to its own heat will fuse with said backing member.

1,868,700. ELECTRIC CONTROL APPARATUS. JAMES E. GANNON and JOSEPH M. WINTER, Erie, Pa., assignors to American Electric Heating Company, Erie, Pa., a Corporation of Pennsylvania. Filed Aug. 26, 1929. Serial No. 388,390. 10 Claims. (Cl. 219—20.)



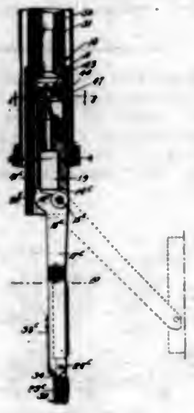
10. In an electric control apparatus, the combination of a plurality of electric heating units; a supply circuit leading to each unit; a control circuit leading to each unit; a motor circuit; a motor in the motor circuit; a main switch controlling the supply circuit; a motor controlling switch in the motor circuit; a selecting device for each unit comprising two brushes and a connecting plate for the supply circuit, two brushes and a connecting plate for the control circuit, and an auxiliary brush connecting the motor circuit and the control circuit through the control circuit brushes, said brush being connected with the control circuit brushes in unselected units and disconnected from the control brushes in selected units; means actuated by the motor selecting brushes of the different units and throwing out the connecting brush in the selected unit; and means responsive to conditions at the units controlling the control circuits.

1,868,701. HYDRAULIC LUBRICATING GUN. VILMUTH P. GOERLAND, Clawson, Mich. Filed Dec. 20, 1929. Serial No. 415,599. 24 Claims. (Cl. 221—47.3.)



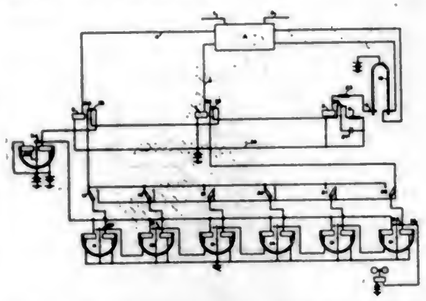
1. In a hydraulic device having means for receiving a hydraulic medium, means for initially displacing a portion of said medium at high pressure, means for utilizing the medium at said pressure to create a reduced pressure on another portion of the medium, means for directing said medium at reduced pressure to a point of utilization, and means for directly leading the portion of the medium at high pressure to said point of utilization when resistance is offered to displacement of the portion of the medium at said reduced pressure.

1,868,702. UNDERREAMING APPARATUS. BERNARD GRANVILLE, New York, N. Y., assignor to Granville Holding Corporation, a Corporation of New York. Filed July 21, 1923, Serial No. 652,906. Renewed Oct. 13, 1931. 12 Claims. (Cl. 255—76.)



2. An under-reamer, comprising a body containing a vertical cylindrical chamber having an inlet opening at its top end and an outlet opening at its bottom end, a plunger in said chamber containing a hole, a conical member fixed in said chamber so as to obstruct said hole to a greater and greater extent as the plunger is moved downwardly in the chamber, a cutter, and means actuated by downward movement of the plunger to force the cutter out from the axis of the body.

1,868,703. TELEGRAPH SYSTEM. RONALD GEORGE GRIFFITH, Croydon, England, assignor to International Communications Laboratories, Incorporated, New York, N. Y. Filed Oct. 20, 1930. Serial No. 489,953. 4 Claims. (Cl. 178—70.)

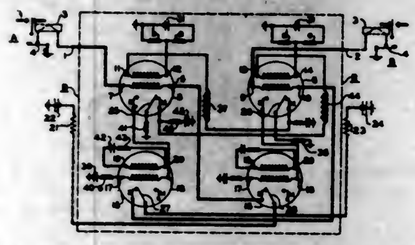


1. In a communication system, a repeater circuit, a pair of relays selectively operated thereby, a plurality of switches set to accord with a predetermined signal, and means operated by said relays through said switches for signalling an attendant.

1,868,704. METHOD OF CONTROLLING THE ACCUMULATION OF ALDEHYDES IN THE FORMATION OF ORGANIC ACIDS FROM PRIMARY ALCOHOLS. WILLIAM J. HALE, Midland, Mich., and WILLIAM S. HALEMAN, Monmouth, Ill. Filed June 9, 1928. Serial No. 284,271. 5 Claims. (Cl. 260—116.)

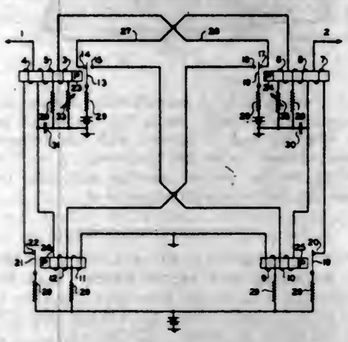
2. In the production of an organic acid from the corresponding alcohol by dehydrogenation and oxidation, the step which comprises mixing with the original alcohol a quantity of a material containing the corresponding aldehyde substantially equal to the proportion thereof existing in equilibrium with the produced acid in the final product.

1,868,705. SINGLE LINE REPEATER. FREDERICK G. HALLDEN, Jamaica, N. Y., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed June 6, 1930. Serial No. 459,598. 19 Claims. (Cl. 178—71.)



1. A telegraph repeater comprising two sets of relays, at least one relay of each set having a plural winding, a line connection with one of said plural windings in one set, another line connection with a corresponding winding in the other set, a connection between the line connected winding of each set and a relay contact of the opposite set, a connection between a relay contact of each set and a winding of another relay in the same set, a biasing circuit in each set reversibly controlled by the actuation of a relay in the opposite set, and a local source of energy for actuating the relays of said repeater in response to line transmitted signals.

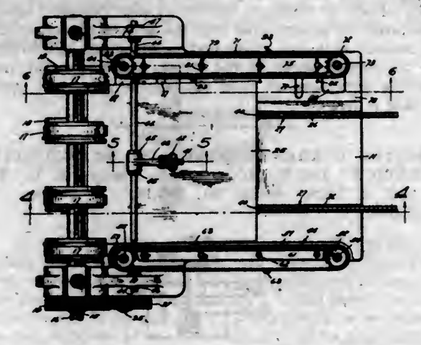
1,868,706. SINGLE LINE REPEATER. FREDERICK G. HALLDEN, Jamaica, N. Y., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed June 21, 1930. Serial No. 462,793. 23 Claims. (Cl. 178—71.)



1. In a single line telegraph repeater, polarized input relays having line windings and biasing windings, a retransmitting relay operable from each input relay, and means operable from one of said input relays to shift from one winding to another the magnetizing forces in the other input relay without moving the armature thereof.

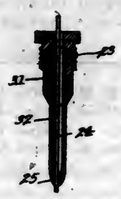
1,868,707. SHEET GAUGING DEVICE FOR SLITTING MACHINES. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 26, 1929. Serial No. 395,273. 8 Claims. (Cl. 164—59.)

1. In a sheet metal slitting machine, the combination of slitting elements, a table for supporting the sheets, feeding devices for moving the sheets over said table and into said slitting elements comprising two rear and one



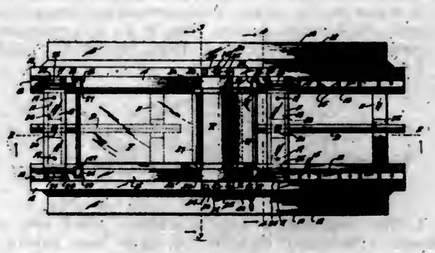
side gauging means moving in unison with said feeding devices for squaring the sheets upon said table prior to their entrance into said slitting elements.

1,868,708. AUTOMATIC FIRE SAFETY DEVICE. WILLIAM HUNT, Baltimore, Md., assignor to The C. M. Kemp Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed Mar. 27, 1930. Serial No. 439,453. 13 Claims. (Cl. 137—162.)



4. An anchoring device of the class described, comprising a hollow member having a threaded head portion, a relatively thin tubular section extending therefrom and having a contracted lower end, and an anchoring wire traversing said hollow member and connected by heat responsive means at one end to the contracted end of said plug, the other end of said wire projecting outwardly beyond the threaded head of said plug.

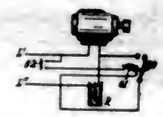
1,868,709. APPARATUS FOR PREPARING PHOTO STIPPLE INTAGLIO ENGRAVED PRINTING ROLLS. ALBERT D. LA POINTE, Newark, N. J. Filed Feb. 7, 1929. Serial No. 338,081. 8 Claims. (Cl. 95—73.)



1. A machine for photo-printing designs on printing rollers preparatory to etching the surfaces thereof, comprising means to rotatably mount a printing roller provided with a light sensitized surface including traction

wheels at opposite ends of the roller, a reciprocatory film carriage to support a design transfer film, said carriage having slide rails frictionally engaged by said traction wheels to transmit motion to said carriage whereby the latter is reciprocated and the film is caused to move in contact with the roller surface at speeds synchronized to the surface speed of the latter, and means for transmitting light through said film to the sensitized surface of said roller.

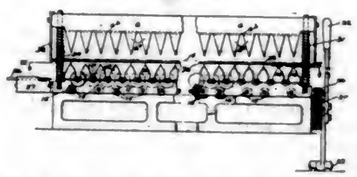
1,868,710. CURRENT CONTROLLING OR REGULATING DEVICE. LEE W. MCCULLOUGH, Yonkers, N. Y. Filed Aug. 2, 1929. Serial No. 383,102. 6 Claims. (Cl. 201—57.)



1. The method of increasing the positive temperature coefficient of conductivity of an electrolyte which comprises mixing small quantities of the electrolyte with a non-conducting viscous liquid.

3. In combination with a commercial power or lighting circuit, a resistor comprising a liquid container, a viscous conducting liquid therein having a negative temperature coefficient of resistance, and electrodes immersed in the electrolyte, whereby all current passing through the resistor passes through the electrolyte and heats it, causing its resistance to lessen as the temperature rises and whereby substantial variation in resistance is available with fixed area of contact between the electrodes and electrolyte.

1,868,711. FRINGE MAKING MACHINE. GEORGE F. MCDOUGALL, Portland, Oreg., assignor, by direct and mesne assignments, to Oregon Textile Machines, Inc., a Corporation of Oregon. Filed Nov. 4, 1929. Serial No. 404,598. 14 Claims. (Cl. 112—64.)



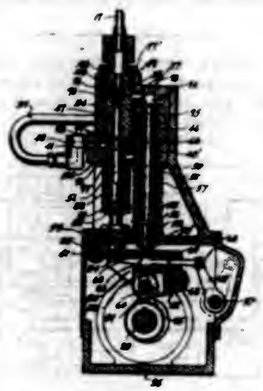
1. In a fringe making machine, a gathering comb of the character described, adapted to gather and divide warp threads into bundles to be twisted with a twister-element in position to receive each bundle of threads.

1,868,712. HANDLE FOR PORTABLE TOOLS. LEON F. MEUNIER, Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 4, 1928. Serial No. 251,804. 5 Claims. (Cl. 121—36.)



1. The combination with a portable power tool of a handle attachment therefor having a base fixedly secured to said tool, a handle pivotally mounted on said base for swinging movement, a securing member for said base extending therefrom to provide a fixed stop for said handle, and resilient means yieldingly maintaining said handle in contact with said stop.

1,868,713. FUEL INJECTION SYSTEM. STANLEY D. MILLER, Alameda, Calif. Filed Nov. 18, 1929. Serial No. 407,827. 7 Claims. (Cl. 123—139.)



1. A fuel injector for engines of the character described adapted for connection with a fuel oil supply and having a delivery channel for connection with the engine, an injecting means operable to forcibly deliver fuel charges through said channel to the engine and a valve member operable by an initial movement to cut off communication between the delivery channel and injecting means and by a farther movement to effect back suction in the channel immediately following the cutting off of communication with the injecting means.

1,868,714. TRAP SETTING DEVICE. FRANK C. MILLS, Lapland, S. Dak. Filed Feb. 10, 1931. Serial No. 514,820. 3 Claims. (Cl. 43—96.)



1. As a new article of manufacture, a trap setting device comprising a coiled spring for placement below the trigger of a trap and for contact with said trigger to hold the same against accidental movement, a convolution of the spring having means coacting with the trigger to maintain the device in applied position.

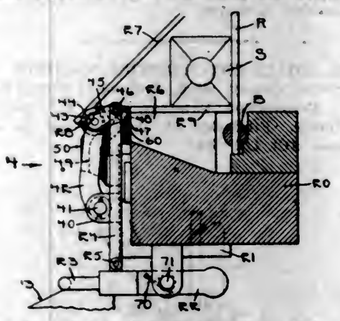
1,868,715. CONCENTRATED SULPHUR SUSPENSION AND PROCESS OF MAKING SAME. PAUL MOCHALLE, Durrjentsch, and JACOB MROCHEM, Breslau, Germany. Filed Sept. 23, 1930, Serial No. 483,968, and in Germany Sept. 30, 1929. 4 Claims. (Cl. 252—6.)

1. A process of making a concentrated sulphur suspension able to produce colloidal solutions with water, said process consisting in melting sulphur together with sugar and startch in the presence of air at a temperature of at least 160° C., and thereupon cooling the molten mass so obtained.

1,868,716. FILLING STOP MOTION. ALFRED F. MORRELL, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 14, 1930. Serial No. 495,710. 11 Claims. (Cl. 139—375.)

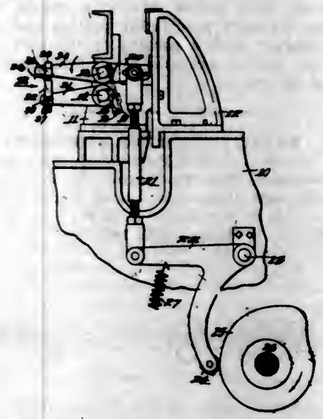
1. In a filling stop motion for a loom having a lay, a filling fork supported by the lay, and movable from detecting position to indicating position to initiate loom

stoppage if weft is absent, means to move the fork from a non-detecting to detecting position as the lay advances, and means dependent upon continued movement of the



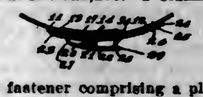
fork from detecting to indicating position and operative during the continued forward movement of the lay to move the fork forwardly relatively to the lay.

1,868,717. REED LOOM. GUSTAV E. NORDSTROM, Gardner, Mass., assignor to American Fibre Corporation, Gardner, Mass., a Corporation of Massachusetts. Filed July 24, 1930. Serial No. 470,865. 10 Claims. (Cl. 139—188.)



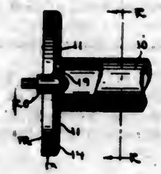
1. In a reed loom, a loom frame, weft reed guiding members mounted on said loom frame and held stationary during reed guiding operations, and means to separate said members transversely of the weft to release the inserted reed.

1,868,718. ADJUSTABLE FASTENER. JOHN S. NORTON, San Francisco, Calif., assignor of one-half to William F. Hollingsworth, San Francisco, Calif. Filed Feb. 28, 1931. Serial No. 519,130. 1 Claim. (Cl. 24—206.)



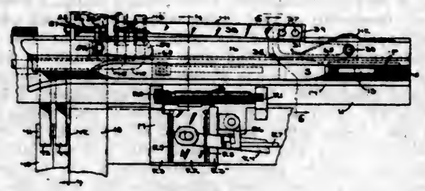
An adjustable fastener comprising a plate having guide lugs and a pivot pin, a pawl carried by the pin, a coiled spring mounted on the pin and having one end bearing against the pawl and the other end bearing against the plate with its end portion inclined away from the plate at an angle, a second plate, a channel-shaped member with serrations in its edges secured to the second plate, said second plate being slidably received by the first plate and guide lugs, the inclined spring end being received in the channel, and said pawl yieldingly engaging with the serrations.

1,868,719. YARN SPOOL. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 3, 1931. Serial No. 506,411. 4 Claims. (Cl. 242—118.)



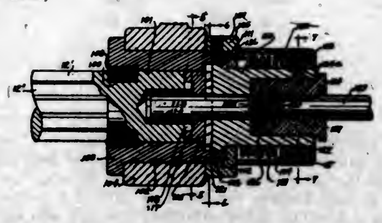
1. In a yarn carrying spool, a hollow metallic barrel, an integral radial extension projecting outwardly from the barrel, a spool head formed of sheet metal and having an inner yarn engaging surface having a recess therein which is non-circular in outline and of a depth equal substantially to the thickness of the extension, the latter substantially filling the recess and secured therein to the head.

1,868,720. SHUTTLE CHECK AND PROTECTOR MECHANISM. WILLIAM W. ROBERTSON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 4, 1931. Serial No. 520,034. 4 Claims. (Cl. 139—185.)



1. In a shuttle checking mechanism for a loom having a lay along which a shuttle travels into a shuttle box on the lay, a protector mechanism, a pair of shuttle checking members independent of each other and located one at the inner end of the box and the other at the outer end of the box, the protector mechanism being operatively related to the member near the inner end of the box to press the latter member against the shuttle, said latter member being ineffective to move the protector mechanism out of loom stopping position, and the other member near the outer end of the box being operatively connected to the protector mechanism and effective to move the latter out of loom stopping position when said outer member is engaged by the shuttle.

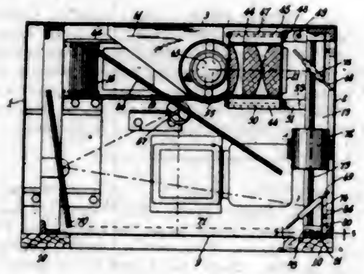
1,868,721. TOOL DRIVING MECHANISM FOR TAPPING MACHINES OR THE LIKE. BERNARD P. SCHILTZ, Cleveland, Ohio, assignor to The Foote-Burt Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 8, 1929. Serial No. 376,648. 13 Claims. (Cl. 10—134.)



1. In mechanism of the kind described, a cutting tool adapted to perform work by rotary motion, a chuck adapted to intermittently, drivingly engage the tool, means for

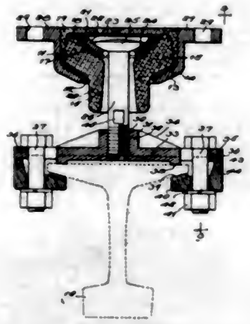
driving the chuck, and a yielding lost motion connection between the chuck and said driving means, whereby the period between actual engagement of the tool with the chuck and full driving engagement between these parts may allow such full driving engagement prior to imparting the rotational driving force of said first named means to the tool.

1,868,722. PROJECTOR. WILFRED T. BIRDSALL, Montclair, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed June 8, 1926. Serial No. 114,404. 4 Claims. (Cl. 88—24.)



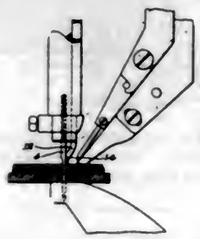
2. A projector comprising a rectangular casing, a screen in the front wall of said casing, an object disposed adjacent to the rear wall of the casing, a source of light to illuminate said object and also disposed adjacent said rear wall, a mirror in one of the rear corners of the casing and adapted to receive light from said object, a second mirror in one of the front corners of said casing on one side of said screen and adapted to receive light from said first mirror and to project it with one edge of the beam substantially parallel to the screen and adjacent thereto, and a third mirror disposed on the other side of the screen and adapted to receive the light from said second mirror and to project the light to a fourth mirror, said fourth mirror facing the screen and deflecting the light thereto.

1,868,723. INSULATING SUPPORT. WILLIAM HOWARD BOYCE, Chicago, Ill., assignor to The Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 13, 1928. Serial No. 312,387. 19 Claims. (Cl. 191—29.)



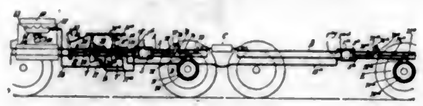
1. An insulating support, comprising in combination a supporting housing having a conical seat portion, an opening through the bottom of said housing, an insulator in said housing supported by said seat portion and having a weather shield extending through said opening, a socket in the upper side of said insulator, a passageway from said socket downwardly through said insulator, a bolt in said passageway having a head disposed within said socket, said bolt being arranged to suspend a conductor beneath said insulator, a washer engaged by said head, and relatively yielding gaskets arranged to prevent surface stresses on said insulator.

1,868,724. CHAIN STITCH SEWING MACHINE. DARIUS W. BUNKER, Quincy, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 11, 1930. Serial No. 488,038. 4 Claims. (Cl. 112—34.)



1. A chain stitch sewing machine having, in combination with the cast-off, a hook needle positioned to engage said cast-off, said needle having a shank relatively larger than its work penetrating portion and having a cast-off engaging surface parallel to the path of movement of the cast-off and extending above the lower extremity of the shank.

1,868,725. BRAKE SYSTEM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Sept. 1, 1928. Serial No. 303,413. 8 Claims. (Cl. 188—3.)



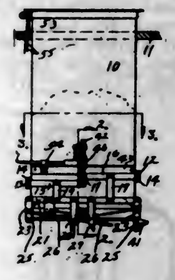
1. In a vacuum brake system for automotive vehicles, the combination with a plurality of independently operable brake mechanisms, a plurality of power actuators and sources of fluid pressure of different magnitude, each of said actuators being connected with certain of said brake mechanisms only, of a plurality of valve mechanisms, each being of different size from the other, each controlling certain of said actuators only, and each provided with relatively movable parts subjected to differentials of fluid pressures corresponding to those to which a movable part of an actuator which it controls, is exposed, and acting on the valve mechanism in a direction to prevent further increase in said differential of pressures, an operator operated part operatively connected with each of said valve mechanisms, yielding means acting upon each valve mechanism in opposition to the differential of fluid pressures thereon and in a different ratio with respect to the force exerted by said differential of fluid pressures as to each valve mechanism by virtue of the difference in size between said valves, each of said valve mechanisms being provided with means for connecting it with the relatively different sources of fluid pressures, whereby the operation of certain of said actuators or actuation thereof to a predetermined extent will be effected before the corresponding operation of another or other of said actuators.

1,868,726. CLOTHESPIN. DAVID H. COLLIER, Carbon, Ind. Filed Apr. 18, 1932. Serial No. 605,934. 2 Claims. (Cl. 24—137.)



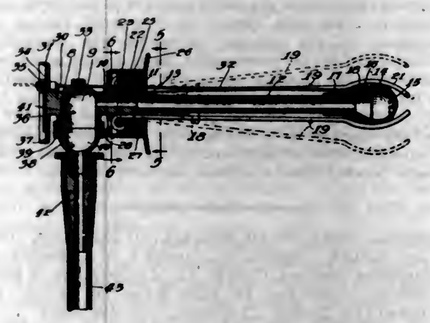
1. As an article of manufacture, a cleft moulded rubber fastener having substantially parallel resilient clamp arms yieldingly abutting each other.

1,868,727. WEIGHING HOPPER. CHARLES E. CONSTABLE, Cincinnati, Ohio, assignor to The National Marking Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 7, 1929. Serial No. 398,063. 11 Claims. (Cl. 265—27.)



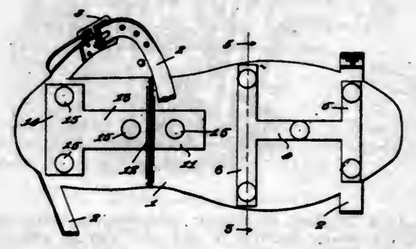
1. In combination, a hopper having its upper and lower ends open, doors for closing the lower end of said hopper, means yieldably supporting the doors to permit them to move toward and from the bottom end of said hopper when in a closed position, an electric switch device, and means actuated by the downward and upward movement of said doors for closing and opening said switch.

1,868,728. VAGINAL DOUCHE. MITCHELL S. CORBETT, Chicago, Ill. Filed July 20, 1931. Serial No. 551,863. 3 Claims. (Cl. 128—244.)



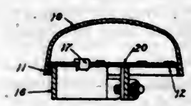
1. In a device of the class described, a body having a recess therein and including a fluid inlet, a nipple having a recess therein, means connecting said nipple to said body whereby said recesses form a chamber, a tube extending from said body and communicating with said chamber and having a discharge nozzle at the end thereof whereby a fluid passing through said inlet, chamber, and tube will flow from said discharge nozzle, distendable portions extending from said body substantially parallel with said tube and terminating adjacent said nozzle, and means for expanding said distendable portions away from said tube and said nozzle.

1,868,729. ICE SANDAL. WILLIAM H. CRAP, Phillipsburg, N. J. Filed July 22, 1931. Serial No. 552,480. 1 Claim. (Cl. 36—63.)



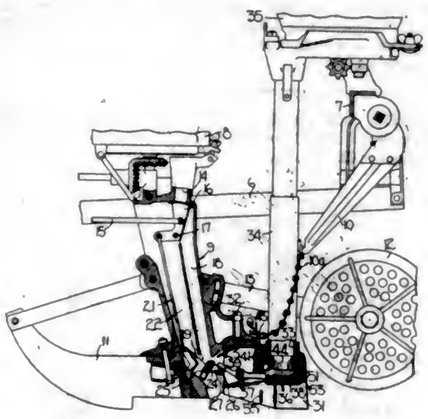
A sandal comprising a body of yieldable material having integrally formed front and rear attaching straps, reinforcing metal plates at the front and at the rear of the sandal, the rear plate having a central portion which is bent upwardly and from thence arranged at an angle to form the under face of the sandal with a shoulder and with an angle portion, the shoulder designed to be arranged against the heel of the shoe of the user and the angle portion designed to contact with the shoe adjacent said heel portion, rivets securing the reinforcing plates to the sandal, said rivets being double headed and having sockets entering from their outer heads, and said sockets designed to receive therein and to be frictionally engaged by shanks on the heads of calks.

1,868,730. VENT CAP. CHARLES F. DOWRIE, Detroit, Mich., assignor, by mesne assignments, to The Timken Silent Automatic Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 27, 1931. Serial No. 533,183. 1 Claim. (Cl. 220—44.)



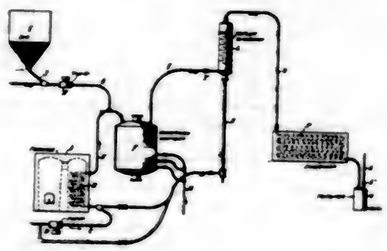
A vent cap comprising a dome portion, a spider fixed in the lower edge thereof and having a circular opening eccentrically located therein, integral tongues extending from the edges of the arms of said spider, a screen fixed to the inner face of said spider by means of said tongues, and an expanding clamp mounted over the said circular opening and substantially concentric therewith, said clamp having tongues bent to embrace the edge of said opening.

1,868,731. PLANTER. ORVILLE F. DRENNAN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed August 10, 1931, Serial No. 556,045. 7 Claims. (Cl. 111—80.)



1. In a fertilizer distributor comprising a valve boot, a valve pivotally mounted in said boot, and an upwardly turned fender at the rear end of the valve to prevent fertilizer being discharged from the end thereof.

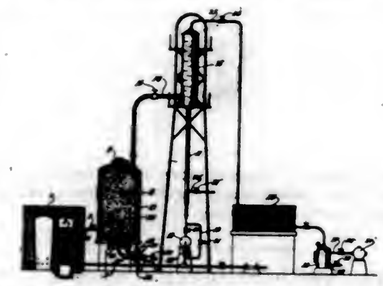
1,868,732. PROCESS FOR DISTILLING COALS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Oct. 27, 1924. Serial No. 745,951. 3 Claims. (Cl. 196—56.)



1. In the art of recovering values from hydrocarbon sources, raising hydrocarbon liquid to a cracking temperature, in then bringing the heated liquid into the presence of hydrocarbon solids capable of destructive distillation and transferring heat from the hydrocarbon liquid and its vapors to the solids to cause distillation of the volatiles contained therein.

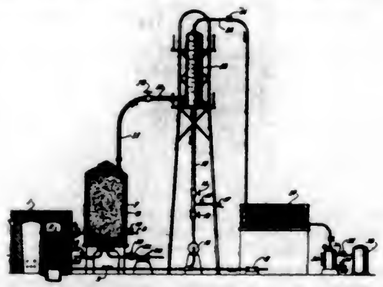
1,868,733. DISTILLING BITUMEN. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 18, 1925, Serial No. 76,170. Renewed Oct. 7, 1929. 5 Claims. (Cl. 196—56.)

1. A process for distilling bituminous materials of a solid or semi-solid nature which consists in charging a mass of the bituminous materials into an enlarged zone, maintaining a zone of combustion in said mass, in separately heating a supply of hydrocarbon liquids to a temperature of substantially 800 degrees F. under a superatmospheric pressure, admitting the liquid hydrocarbons while at such temperature into the zone of combustion in said mass of bituminous material, continuously supplying regulated quantities of air to the zone of combustion in said mass of bituminous material to effect a controlled



combustion thereof, in maintaining a sub-atmospheric pressure on said mass of bituminous material and in recovering the vaporous constituents evolved therefrom.

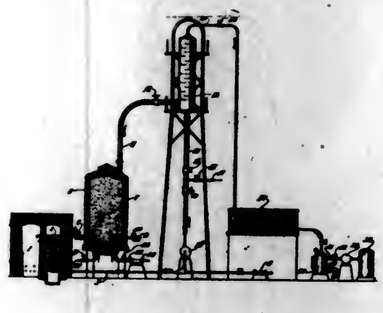
1,868,734. PROCESS OF DISTILLING BITUMEN. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 18, 1925, Serial No. 76,171. Renewed May 15, 1931. 2 Claims. (Cl. 196—56.)



1. A process for simultaneously heating a hydrocarbon liquid and a quantity of bituminous material, which comprises the maintaining of a mass of bituminous material in a closed chamber, the heating of the hydrocarbon liquid to a cracking temperature in a separate zone, subsequently bringing the heated hydrocarbon liquid into physical contact with the bituminous material by introducing it into the lower portion of said closure chamber, removing vaporous constituents generated from the oil and bituminous materials from said closed chamber and, during the operation of the process, subjecting the bituminous material and heated hydrocarbon liquid and in said closed chamber to the action of steam and controlled combustion by introducing thereto controlled quantities of steam and air, regulating the combustion in said closed chamber so that the temperature of the material therein is maintained in excess of 1000° F. and maintaining the material in said closed chamber under a superatmospheric pressure.

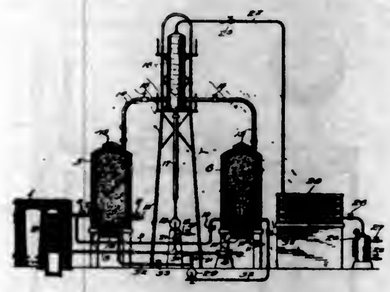
1,868,735. PROCESS OF DISTILLING BITUMEN. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 18, 1925, Serial No. 76,172. Renewed Oct. 7, 1929. 7 Claims. (Cl. 196—56.)

1. A process of treating solid bituminous material, consisting in passing petroleum oil through a heating zone where it is subjected to cracking conditions of temperature and pressure, passing the highly heated oil into a zone of combustion maintained in a chamber containing solid bituminous material, introducing steam and air into zone of combustion in said bituminous material, and maintaining the quantity of air and the temperature to which bi-



tumen is subjected sufficiently high to break down the steam and produce substantial quantities of hydrocarbon fixed gases, and maintaining a vacuum on the bitumen during such treatment.

1,868,736. CRACKING BITUMINOUS MATERIAL. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 30, 1925. Serial No. 78,294. 1 Claim. (Cl. 196—56.)

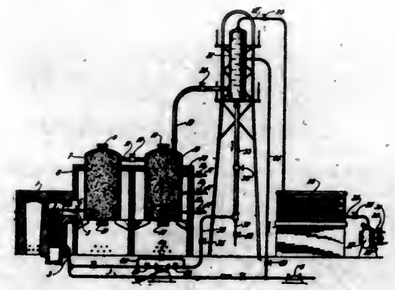


In the art of recovering values from hydrocarbon sources, charging a chamber with hydrocarbon solids capable of destructive distillation, imparting cracking temperature to hydrocarbon liquid, and discharging the heated liquid into the chamber and thereby raising the solids to distillation temperature.

1,868,737. PROCESS OF DESTRUCTIVELY DISTILLING BITUMEN. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 30, 1925, Serial No. 78,296. Renewed Apr. 24, 1928. 9 Claims. (Cl. 196—56.)

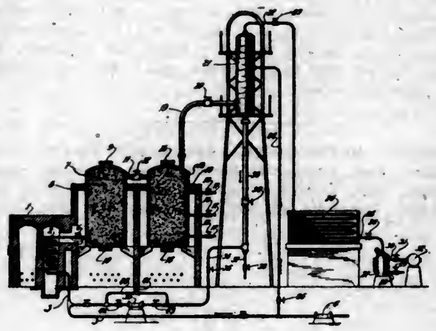
1. A process for distilling bitumen, consisting in subjecting petroleum oil to cracking conditions of temperature and pressure, passing the oil so treated to a chamber containing bituminous material, causing the heated oil to come into intimate contact with such bituminous material so as to dissolve out and distill off hydrocarbonaceous constituents of said bituminous material, passing the petroleum and the material so dissolved and distilled out, to a reaction chamber where the mixture is

subjected to cracking conditions, removing the vapors generated therefrom, and condensing and collecting them, and maintaining a superatmospheric pressure on the ma-



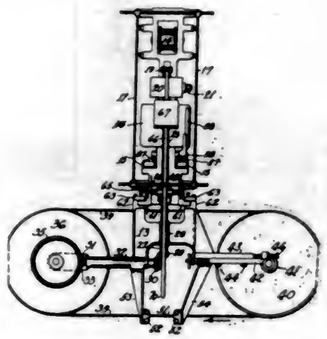
terial in the first mentioned chamber, and a lower pressure on the mixture of oil and hydrocarbonaceous constituents in said reaction chamber.

1,868,738. PROCESS OF DESTRUCTIVELY DISTILLING BITUMEN. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 30, 1925, Serial No. 78,297. Renewed Apr. 11, 1931. 3 Claims. (Cl. 196—56.)



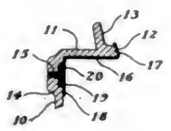
1. A continuous process for producing a low boiling point distillate from hydrocarbon liquids and solids capable of destructive distillation, comprising maintaining a mass of hydrocarbon solids, under cracking conditions of temperature and a superatmospheric pressure, in an enlarged zone, separately heating hydrocarbon liquids, substantially free from hydrocarbon solids, to a cracking temperature under a superatmospheric pressure, introducing the hydrocarbon liquids while at a cracking temperature, to said mass of hydrocarbon solids, to dissolve substantial portions of the carbonaceous material therefrom, removing the hydrocarbon liquids and the dissolved carbonaceous constituents separated from said mass of hydrocarbon solids from said enlarged zone, and subjecting such removed material, while in commingled form and at a high temperature, to the action of a vacuum which is adequate to effect a reduction in pressure sufficient to bring about substantial vaporization of said removed materials.

1,868,739. POWER OPERATED RAIL SAW. EDWARD A. EVERETT, New York, N. Y., assignor to Nande Corporation, New York, N. Y., a Corporation of New York. Filed May 11, 1927. Serial No. 190,567. 8 Claims. (Cl. 29—68.)



1. In a support for a material severing element, the combination with a frame of means bearing on material to be severed and supporting the frame and means for entirely preventing relative transverse movement of the frame and the material in one direction beyond a certain point and allowing limited resiliently controlled transverse movement in the other direction together with means for preventing longitudinal movement between the frame and the material to be severed; a material severing element supported by the frame; means for advancing the severing element to and through and retracting it from the material to be severed, and means for driving the severing element.

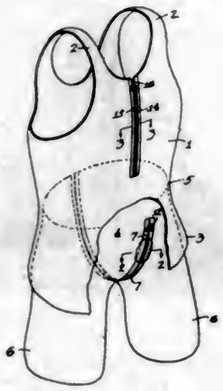
1,868,740. BRAKE DRUM. FREDERICK C. FRANK, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 16, 1930. Serial No. 461,340. 7 Claims. (Cl. 188—218.)



1. A brake drum comprising a head and a flange, a liner for the flange, said liner provided with a flange portion adapted to contact said head and interlocking means between the drum and the liner, said means comprising interfitting portions on said liner and brake drum head.

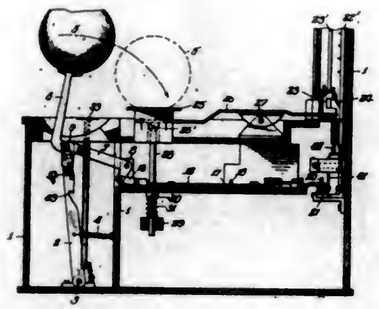
1,868,741. BATHING SUIT. GAVIL GASSEL, Highland Park, Mich., assignor to David Segal, Detroit, Mich. Filed June 29, 1931. Serial No. 547,480. 3 Claims. (Cl. 2—67.)

1. A bathing suit comprising a bodice portion and a trunk portion, said trunk portion including two legs and being slit therebetween from the front center to the rear center of the waistline, a slide-operated fastener at



said slit, and a skirt depending from said waistline over a portion of said trunk and concealing said slit and fastener.

1,868,742. AMUSEMENT MACHINE. RUDOLPH GATTER, Chicago, Ill., assignor to John F. Meyer, Chicago, Ill. Filed Nov. 15, 1928. Serial No. 319,710. 11 Claims. (Cl. 265—20.)



5. A machine of the class described comprising an upright support, an indicator adapted to travel alongside said support, means spaced apart on the support for sustaining the indicator at the limit of its upward travel, a lever for causing the indicator to travel upward, a bag normally in inoperative position and adapted to be moved to operative position and punched to engage and operate the lever means operated when said bag is moved into operative position for releasing the indicator from said supporting means to permit it to return to normal position, and means operating upon release of the indicator to prevent interference of said sustaining means with the return of the indicator to its initial position.

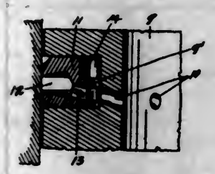
10. In a machine of the class described the combination of a frame, a punch bag, an arm supporting said bag, a spring for urging the bag and arm into inoperative position and connected to said arm and the frame, a lever for supporting the arm with the bag in operative position, and means operated when the bag is punched to release the arm from said lever to permit the spring to return the arm and bag to inoperative position.

1,868,743. AIR-HEATING APPARATUS. CHARLES W. GOOD, Erie, Pa., assignor to Weil-McLain Company, Michigan City, Ind., a Corporation of Delaware. Filed Sept. 11, 1930. Serial No. 481,114. 14 Claims. (Cl. 257—136.)



6. In an air-heating arrangement adapted to be disposed in a wall recess, the combination with a radiator section extending over the opening of the recess; of a fin unit adapted to be disposed within the recess behind the radiator section, said radiator section being so disposed that air currents may enter at the bottom of the wall recess, pass upwardly through the fin unit alongside the section and thence outwardly of the section.

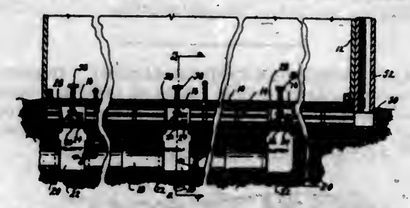
1,868,744. PISTON RING. GERALD M. M. GRANT, Los Angeles, Calif. Filed May 8, 1931. Serial No. 535,814. 3 Claims. (Cl. 74—109.)



1. In combination with a piston having a piston ring groove therein, of a piston ring adapted for said groove and provided in its inner, upper corner with a spring-receiving recess, the bottom wall of which is horizontal and supports a spring edgewise thereon, said ring having drain openings therethrough below said recess, and an undulating spring member set edgewise upon said bottom wall and bearing outwardly against the upper part of said piston ring, whereby the upper outer corner of said ring has increased pressure against the cylinder wall.

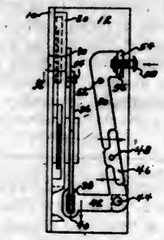
1,868,745. HEATING SYSTEM FOR BUILDINGS. BENJAMIN F. GREIMANN, Garner, Iowa. Filed Dec. 2, 1929. Serial No. 411,133. 4 Claims. (Cl. 237—1.)

2. In a heating system for buildings, an underfloor of hollow tiles arranged to serve as hot gas conductors throughout the length of the building, an upper floor superimposed on said underfloor and heated by hot gases flowing through the underfloor, said underfloor being broken to provide open spaces at intervals, said upper floor spanning such open spaces, a hot gas delivery pipe in communica-



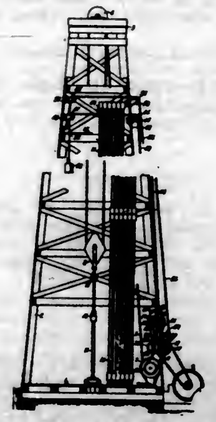
tion with said open spaces, a damper in said hot gas delivery pipe between said open spaces and a hot gas discharge flue communicating with one end of said underfloor.

1,868,746. DOORLOCK. FRANCIS D. HARDESTY, Ferndale, Mich. Filed Oct. 20, 1930. Serial No. 489,728. 12 Claims. (Cl. 292—166.)



1. In combination with a sliding bolt, and a rocker arm adapted to cause sliding retraction of the bolt, the rocker arm having a squared hole for the reception of a squared shaft which, when rotated, will cause rotation of the arm, mechanism to rotate the arm comprising a crank having a squared shaft fitting in the squared hole of the rocker arm, means to cause rotation of said crank, and a push button plunger projecting outwardly and perpendicularly from the plane of said door and connected to said means and operable to cause said means to rotate the crank.

1,868,747. DRILL PIPE RACKING APPARATUS. SAMUEL SPENCER HEMBREE, Oklahoma City, Okla., assignor to American Iron & Machine Works Company, Oklahoma City, Okla., a Corporation of Oklahoma. Filed Aug. 15, 1930. Serial No. 475,518. 9 Claims. (Cl. 214—1.)



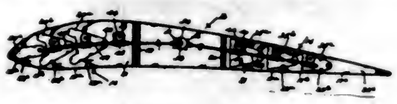
1. In combination with well drilling equipment including a derrick having means for supporting a pipe in vertical position, and a member moving during operation of the

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equipment, means including a drum adapted to be driven by said member for racking a pipe vertically within the derrick, and means for operably connecting said drum with said moving member at desired intervals.

1,868,748. VARIABLE CAMBER AIRFOIL. HERBERT J. HOGAN, Los Angeles, Calif. Refile of abandoned application Serial No. 310,575, filed Oct. 5, 1928. This application filed Nov. 28, 1931. Serial No. 577,799. 9 Claims. (Cl. 244—12.)

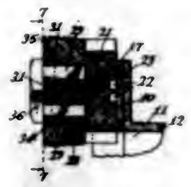


1. An airplane wing construction embodying: a fixed center section comprising longitudinal spars and transverse main center ribs; front and rear adjustable sections, each comprising a plurality of panels, said panels including transverse segmental ribs pivotally interconnected to form units, said units being pivotally attached to said main center ribs; and means for imparting unitary adjustment to said panels for varying the convexity of said front and rear sections relative to said center section, said segmental ribs being interconnected by means of plates rigidly mounted thereon and pivotally connected with adjacent segmental ribs.

1,868,749. PROCESS OF MAKING LAMINATED METAL. STEPHEN L. INGERSOLL, Chicago, Ill., assignor to Ingersoll Steel & Disc Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 21, 1931. Serial No. 582,375. 21 Claims. (Cl. 29—189.)

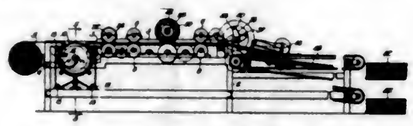
18. The method of forming a composite metallic article, which comprises forming a core of two juxtaposed slabs of a non-rusting alloy with a separating composition therebetween, welding the edges of said slabs to form an envelope for the composition, and casting metal about the core.

1,868,750. REVERSIBLE DIE HEAD. WILLIAM A. JENKINS, Wilmington, Calif. Filed Jan. 15, 1930. Serial No. 420,895. 12 Claims. (Cl. 10—122.)



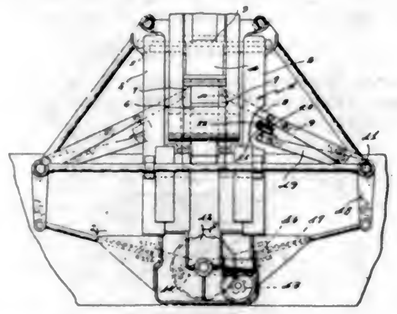
1. In a thread cutting die stock, a face plate, a member secured thereto, which member is provided with radial grooves, blocks arranged for sliding movement in said grooves, thread cutting dies carried by said blocks said blocks being reversibly mounted in their grooves so that the cutting dies carried thereby may be used for cutting left or right hand threads, grooves formed in the rear faces of said blocks, an adjusting ring arranged for rotation on the face plate to the rear of said blocks and lugs projecting from said adjusting ring into the grooves in said blocks.

1,868,751. PREPARED ROOFING AND MEANS FOR MAKING SAME. HENRY C. KOCH, Chicago, Ill. Filed Sept. 25, 1929. Serial No. 395,146. 6 Claims. (Cl. 91—14.5.)



1. In a machine for making shingles from a strip of roofing material comprising a rotary drum, a belt engaging said drum, means for feeding a strip of shingle material between said belt and drum, means for spraying a quick drying material through said drum and onto said strip and providing a shadow line of a pre-determined design on said strip, means inside of said drum and extending longitudinally thereof for wiping off the excess material from the inside walls of said drum, a tray under said wiping means and extending longitudinally of the drum for catching the excess material, and means for returning the material in said tray to the source of supply.

1,868,752. HIGH DENSITY COMPRESS. GEORGE W. LANGFORD and HAROLD L. HAINES, Ann Arbor, Mich., assignors to Economy Baler Company, Ann Arbor, Mich., a Corporation of Michigan. Filed Feb. 17, 1930. Serial No. 429,166. 4 Claims. (Cl. 100—9.)

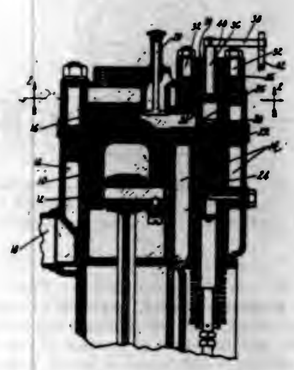


4. In a high density compress, a side platen, means for actuating the side platen including levers having their adjacent ends pivotally connected together and having their outer ends respectively pivotally connected to the platen and a fixed support forming a toggle, a cushioning device connected to the toggle at the point of connection between adjacent ends of the levers, a bell crank pivotally connected to the fixed pivot for said toggle and connected to the cushioning device, an actuating member, and means establishing an operative connection between the actuating member and bell crank.

1,868,753. ENGINE. HOWARD M. LEONARD, South Bend, Ind., assignor, by mesne assignments, to Bendix Aviation Corporation, a Corporation of Delaware. Filed June 3, 1926. Serial No. 113,361. 1 Claim. (Cl. 123—33.)

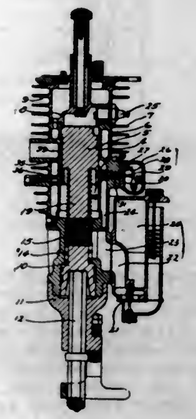
An engine of the injection type having, in combination, an engine cylinder and a cylinder head formed with coaxial openings at one side of the cylinder space, a sleeve in said openings forming a pump cylinder adjacent the

engine cylinder, a pump plunger reciprocated in the sleeve to compress and inject successive charges of fuel, a valve head projecting into the opening in the cylinder head and seated against the head of said sleeve and formed with a valve seat, a disk-like valve in said seat,



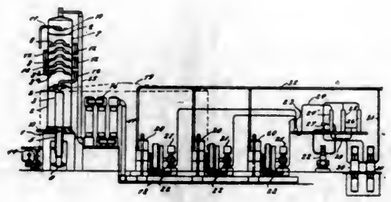
the valve and valve seat being formed with openings which register when the valve is in one angular position and which are out of registry when the valve is in other angular positions, and means for oscillating the valve in its seat to bring the openings into and out of registry.

1,868,754. TIMER. JAMES A. MOULD, Milwaukee, Wis., assignor to Gas Tool Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 11, 1931. Serial No. 550,185. 8 Claims. (Cl. 123—146.5.)



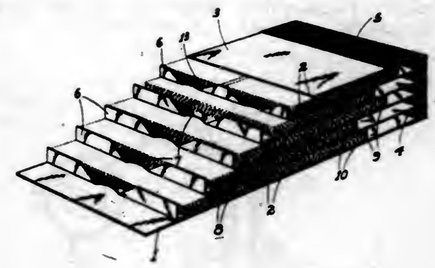
1. The combination with an engine cylinder and a piston having a relieved peripheral surface, of a timer deriving motion directly from the piston and comprising a fixed contact, a movable contact, and a cam follower connected with the movable contact and riding directly on the piston, whereby to maintain said contacts open pending registry with said cam follower of the relieved portion of the piston.

1,868,755. DEHYDRATOR. WILLIAM D. MOUNT, Lynchburg, Va. Filed Oct. 20, 1930. Serial No. 489,967. 9 Claims. (Cl. 62—121.)



3. The method of dehydrating carbon dioxide gas in the preparation of solid carbon dioxide which comprises mixing the gas to be dehydrated with cold gas taken from the expansion chamber, and separating the gas from the frozen moisture.

1,868,756. STATIONERY RACK. CLEMENT W. MULLER, Modesto, Calif. Filed Dec. 21, 1929. Serial No. 415,656. 4 Claims. (Cl. 129—43.)

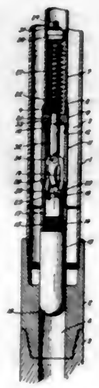


1. A stationery rack including a plurality of stationery supporting and separating members, means flexibly supporting said members at the back in fixedly spaced relation to each other in a common vertical plane, and flanges mounted on and projecting upwardly from said members intermediate their ends.

1,868,757. PIPE CUTTER. HOBART M. MYRACLE, Oklahoma City, Okla., assignor to American Iron and Machine Works Company, Oklahoma City, Okla., a Corporation of Oklahoma. Filed Jan. 19, 1931. Serial No. 509,865. 2 Claims. (Cl. 81—188.)

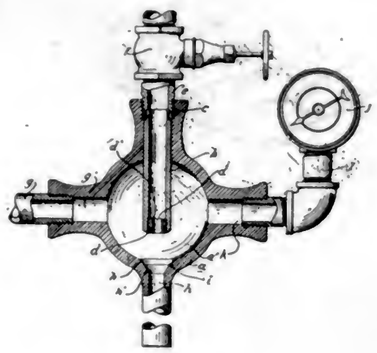
1. An internal cutter for a cylindrical member, a tubular body member having three lateral slots, an extended guide member threaded into the lower end of said body member, a head on the guide member extending upwardly into the body member, said head having notches in its end respectively aligning with said slots, a stem reciprocably mounted in the body member, three cutters pivotally mounted at one end on the end of said stem, the opposite ends of said cutters being provided with cutting edges and adapted to engage said notches to be directed

through the slots upon downward movement of the stem in the body member and have their cutting edges brought into cutting engagement with the interior of the cylin-



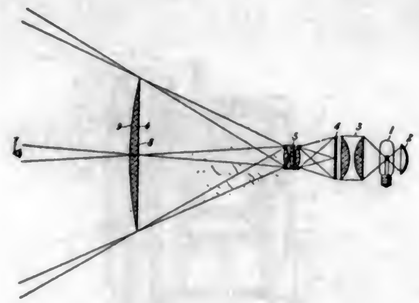
drical member and also maintaining said body member in concentric relation to said cylindrical member, and means for normally retracting said cutters into the body member.

1,868,758. SUCTION PRODUCING DEVICE. ANDREW C. NELSON, Portland, Oreg. Filed Nov. 15, 1928. Serial No. 319,702. 8 Claims. (Cl. 103—262.)



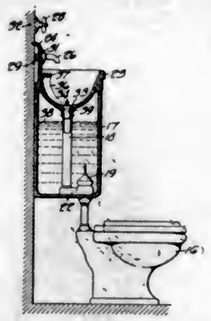
1. In a device of the character described comprising a casing defining a chamber, intake and discharge openings communicating with such chamber and entering thru the walls of such casing, and a liquid discharge nozzle also entering thru the walls of such casing and depending centrally into such chamber and alined with such discharge opening, an inwardly projecting relatively thin sharp-cornered, circularly bored flange located in the tip of such nozzle and adapted to contract the discharging stream emitted from such nozzle, the bore of such flange being of a size corresponding approximately to one-half of the thickness thereof and the bore of such discharge opening being spaced from the discharge opening a distance approximately four times the diameter of the aperture of the nozzle.

1,868,759. PROJECTION SCREEN. DAVID F. NEWMAN, Freeport, N. Y., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed July 21, 1926. Serial No. 123,842. 3 Claims. (Cl. 88—24.)



1. In a projection system, a source of light for illuminating an object from which images are to be projected, an objective lens traversed by a beam of light emanating from said source of light, and a screen with which said beam of light coacts, said screen being spaced a fixed distance from said source of light, having an area many times greater than that of said objective lens, and having light-diffusive characteristics in different sections thereof approximately proportional to the light intensity at the respective sections.

1,868,760. LAVATORY. ERNEST L. NORBERG, San Francisco, Calif. Filed Mar. 30, 1931. Serial No. 526,160. 2 Claims. (Cl. 4—3.)

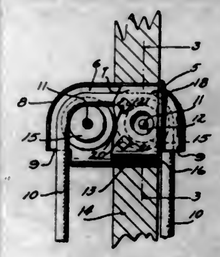


1. In a flush tank for a toilet bowl, an overflow pipe for precluding the water in the tank from exceeding a predetermined level, a cover for said flush tank, said cover being in the form of a basin, an outlet at the bottom of the basin, said outlet communicating directly with said overflow pipe, and said cover having an outline which presents at least one rectilinear edge making an acute angle with a vertical plane lying perpendicular to the front of the toilet bowl, whereby the toilet bowl does not interfere with the use of the basin.

1,868,761. SASH PULLEY. FREDERICK J. PEASE and HARLOW H. PEASE, Wauwatosa, Wis., assignors to Clum Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 30, 1930. Serial No. 492,109. 1 Claim. (Cl. 16—213.)

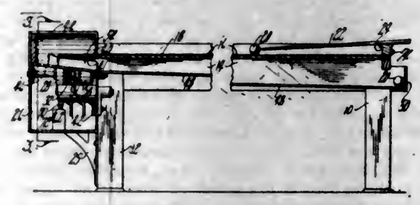
In a pulley adapted for insertion in a frame aperture, a pulley casing composed of complementary shells formed of

sheet metal and each comprising a side, top, bottom and ends, the bottom being cut away at each end to provide



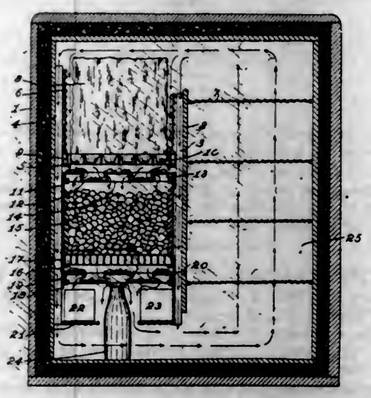
sash rope openings, and each shell having intermediate its ends and adjacent one of the openings a rib portion formed by pressing the walls of the casing outwardly.

1,868,762. GAME APPARATUS. EDWIN H. PLENGE, Memphis, Mo. Filed May 27, 1931. Serial No. 540,224. 10 Claims. (Cl. 273—41.)



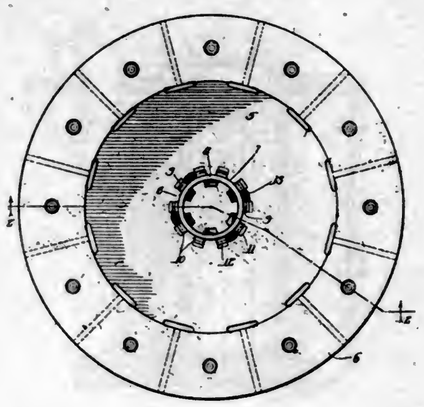
1. In a game apparatus, a projection table, a target belt forming a continuation of one end thereof, targets pivotally mounted on said belt, means for moving said belt transversely of said table, a back stop on the side of said belt opposite the projection table and a return trough from said back stop, through said belt to beneath said table, said return trough terminating adjacent the front end of the table.

1,868,763. REFRIGERATING DEVICE. HENRY S. RAYMOND, Waterloo, Iowa. Filed May 17, 1930. Serial No. 453,228. 6 Claims. (Cl. 62—51.)



1. In a refrigerator, a compartment open at top and bottom, vertically spaced grids of relatively wide crossbars therein, and pans supported removably below the grids to receive thereon broken fragments of ice dropped through the grids.

1,868,764. CLUTCH PLATE. HAROLD V. REED, Chicago, Ill., assignor to The Borg & Beck Company, Chicago, Ill., a Corporation of Illinois. Filed May 4, 1929. Serial No. 360,478. 2 Claims. (Cl. 192—68.)



1. A clutch plate comprising a hub having a plurality of spaced lugs thereon, a disk having an opening to receive the hub and notches to receive the lugs to effect a driving engagement between the disk and hub, flanges integral with said lugs and engaging one side of the disk, said lugs extending axially of the hub from the flanges to a greater distance than the thickness of the disk and having the extended ends deformed to engage the other side of the disk and to cooperate with the flanges for securing the disk against lateral displacement on the hub.

1,868,765. SHOE PLATE. FREDERICK D. REYNOLDS, St. Louis, Mo. Filed Aug. 11, 1930. Serial No. 474,617. 3 Claims. (Cl. 36—8.3.)

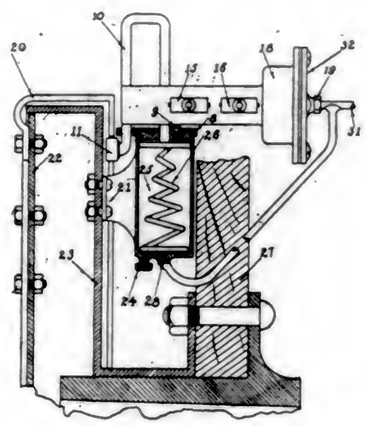


1. A shoe attachment comprising a retaining member having a cylindrical body portion open at both ends and flanged outwardly at its upper end and inwardly at its lower end, a movable member having a convex bottom disposed below the lower end of said cylindrical body portion and having an outwardly presented flanged upper end engaging the inwardly flanged lower end of said body portion, said movable member being revoluble and movable in a vertical plane with respect to said retaining member, and a closure plate closing the upper end of said cylindrical portion and engageable by said movable member upon the upward movement of the latter.

1,868,766. PNEUMATIC TIRE PUMP CONTROL. BENJAMIN F. REYNOLDS, Stockton, Calif. Filed Sept. 20, 1930. Serial No. 483,333. 8 Claims. (Cl. 230—14.)

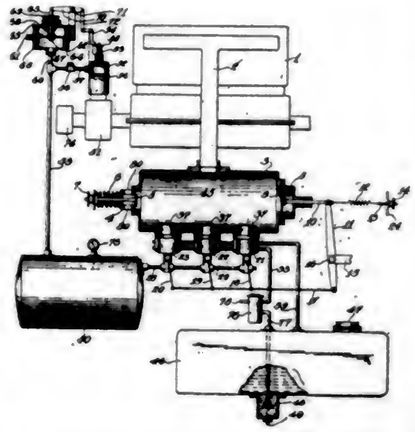
1. A tire pump control structure, said pump having a piston, said structure comprising means to depress the piston comprising a rod bearing on said piston, a roller supported by the rod to one side of the same, and a cam to engage the roller and depress the rod during the rela-

tive rotation of the pump and cam when said roller occupies a certain radial position relative to the pump; and



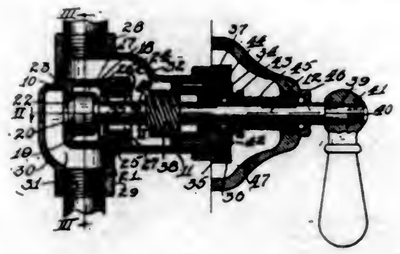
means actuated by air pressure in the tire in excess of a predetermined amount for rotating the rod to move the roller out of the path of the cam.

1,868,767. SYSTEM OF CARBURATION FOR HYDROCARBON MOTORS. OSCAR A. ROSS, New York, N. Y. Filed Dec. 16, 1925. Serial No. 75,856. 14 Claims. (Cl. 123—131.)



1. In a system for producing combustible mixtures for internal combustion motors, an internal combustion motor, a supply of liquid fuel therefor, a source of compressed air produced independently of the vacuum caused by the intake cycle of the motor, a plurality of jets through which the air may escape, a valve for each jet controlling the flow therethrough, means co-operating with each jet whereby the escaping air will disperse the fuel into the escaping air to form the combustible mixture, devices for delivering the fuel from the source to the dispersion means, devices for operating the valves in sequential order to increase or decrease to supply of combustible mixture, and connections for conducting the mixture from the dispersion means to the motor.

1,868,768. DIVERTER VALVE. WILLIAM SCHNEIDER, Erie, Pa., assignor to Hays Manufacturing Co., Erie, Pa., a Corporation of Pennsylvania. Filed Apr. 18, 1930. Serial No. 445,288. 1 Claim. (Cl. 251—22.)



A diverter valve of the class described, comprising the combination of a valve casing and a lateral extension thereon having a cylindrical bore, said casing having inlet openings, two outlets for said casing one of which branches from the lateral extension, a valve within said casing selectively controlling the two outlets, a removable seating ring for said valve mounted in said casing concentric with the valve, operating means for said valve including a handle the position of which indicates the outlet which is open, the operating means including a rotatable valve stem, a guide bushing for the valve stem in the extension bore at the outer end thereof, a threaded hub on the valve stem, the inner end of the guide bushing being threaded to receive said hub, said guide bushing being rotatable relative to the extension bore in the extension whereby to adjust the indicating handle position to compensate for wear or variations in assembly, and means for clamping said guide bushing in adjusted position in said extension bore.

1,868,769. PENDULUM FOR MEASURING TIME. MAX SCHULER, Gottingen, Germany. Filed Oct. 15, 1930. Serial No. 488,798. 5 Claims. (Cl. 58—129.)

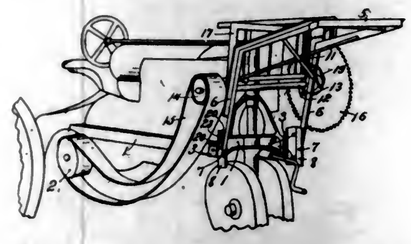


1. A pendulum for measuring time in which the pendulum body is weighted and suspended in such a manner that the distance of the axis of suspension of the pendulum from the centre of gravity of the same is equal to the radius of gyration of the pendulum body about its centre of gravity.

1,868,770. TRACTOR ATTACHMENT. HARVEY E. SEE, Bates City, Mo. Filed Apr. 27, 1931. Serial No. 533,068. 2 Claims. (Cl. 180—53.)

1. In a tractor attachment, the combination with the frame of a tractor having at its front and at opposite sides thereof two brackets provided each with two slots one extending upwardly from the lower end of the bracket, and the other extending downwardly from the upper end of the bracket, of two bars respectively bearing against said brackets, bolts respectively extending through said slots and engaging said bars for fastening the latter to said brackets, a support pivoted on a horizontal axis to said bars and adapted to swing from a lower operative

position to a raised position, means adapted to releasably fasten said support to one of said bars when said support is in the raised position, revoluble tool supporting means



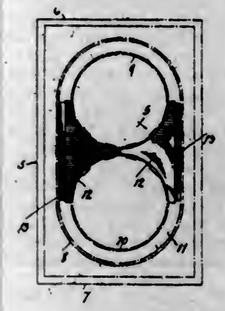
carried by said support, and means adapted to be connected with and driven by a rotary member of the tractor for revolving said tool supporting means.

1,868,771. ESCALATOR HAND RAILS. HAROLD W. SHONNARD, Montclair, N. J. Filed July 11, 1930. Serial No. 467,322. 10 Claims. (Cl. 198—16.)



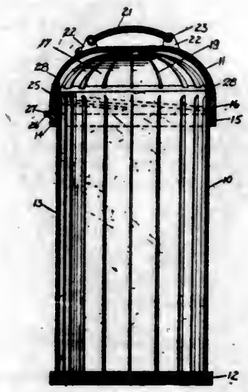
1. A movable endless body of flexible resilient material adapted to run on a guide, the inner part of the body being recessed to overlap the guide and its outer portion shaped to form a hand grip, and a continuous flexible metallic strip affixed to said body, having direct engagement with said guide to slidably support said body thereon.

1,868,772. SURFACE COVER FOR ICE CREAM CANS. ROBERT SINGER, New Rochelle, N. Y. Filed Nov. 13, 1929. Serial No. 406,949. 4 Claims. (Cl. 220—14.)



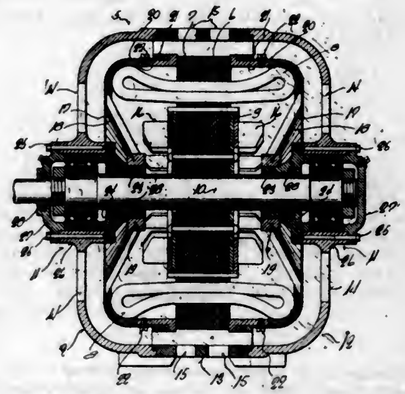
1. A surface cover of the class described comprising a substantially triangular plate, the sides of said plate being curved to conform to the curvature of the walls of two adjacent ice cream cans, dual clamping means along the sides of the plate for engaging the inner and outer walls of said cans and an adjustable, longitudinal plate carried by the bottom of the triangular plate.

1,868,773. RUBBER ICE CREAM SHIPPER. SPENCER O. STAAKE, Eau Claire, Wis., assignor of one-half to Ralph W. Hutchens, Eau Claire, Wis. Filed Oct. 3, 1929. Serial No. 396,973. 1 Claim. (Cl. 150—52.)



A shipping device for ice cream cans and the like, said device comprising an elongated container of yieldable rubber material having an integrally formed exterior flange adjacent its open end, said container having exterior screw-threads formed thereon intermediate the flange and the end of the container, a cover of yieldable rubber material for the container, said cover having a ring-like portion thereof provided with interior threads formed thereon and an inwardly directed integral flange, the screw-threads on said container and on said cover providing yieldable means for forcing said cover into sealing engagement with the exterior flange of the container and for forcing the flange of the cover into sealing engagement with the end of the container when the cover is rotated to close the container.

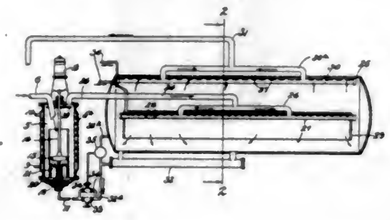
1,868,774. ELECTRIC MOTOR AND DYNAMO MACHINE. ARTHUR E. STENZEL, Detroit, Mich., assignor, by mesne assignments, to William F. Pabst, Milwaukee, Wis. Filed June 14, 1930. Serial No. 461,171. 6 Claims. (Cl. 172—36.)



1. In combination with a dynamo electric machine having a rotor mounted in a stationary supporting structure, a stationary approximately disc shaped cooling and protecting member formed of relatively thin bendable metal and folded to provide radially extending pleats to increase its internal and external surface areas, a hub carried by

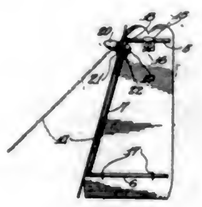
said member through which the rotor shaft extends, means forming an air-tight connection between the periphery of the member and a part of the stationary supporting structure, and means forming an air-tight connection between the hub and another part of said stationary supporting structure to prevent the passage of extraneous matter to the machine interior between the hub and the shaft.

1,868,775. SYSTEM OF TREATING HYDROCARBON DISTILLATES AND APPARATUS USED IN CONNECTION THEREWITH. CHARLES WALCOTT STRATFORD, Kansas City, Mo. Original application filed Nov. 26, 1926, Serial No. 150,678. Divided and this application filed Nov. 15, 1929. Serial No. 407,395. 8 Claims. (Cl. 210—51.)



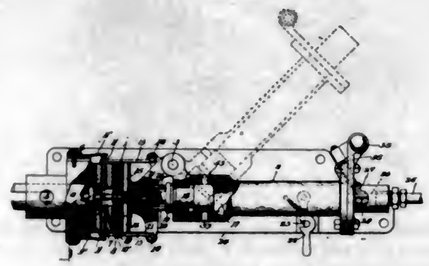
1. A device for separating from a liquid, constituents of relatively different specific gravity comprising a container having inlet and outlet pipes, a hood positioned in the container, manifolding and distributing means adapted to introduced the liquid to be separated beneath the hood at a progressively decreasing flow rate, a perforated pipe at the top of the container for collecting the separated liquid, and manifold discharge pipes for progressively increasing the flow rate of the liquid subsequent to settling whereby substantially equal liquid volumes are introduced and discharged, and separate means for removing the settled out material.

1,868,776. SECTIONAL LAMP-SHADE. GEORGE A. TATE, Chicago, Ill., assignor of one-half to Charles Paulsen, Chicago, Ill. Filed Apr. 18, 1931. Serial No. 531,030. 1 Claim. (Cl. 240—108.)



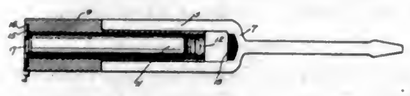
A lamp shade comprising a frame, a body section supported on said frame and having an opening therein, an inverted U-shaped clip on said frame, a panel supported by said clip swingable on said frame to close the opening, a threaded bolt entered in said clip and said panel, and a knob for said bolt providing manual means for the swinging of said panel to a desired position and cooperable with said bolt and said clip to clamp the panel in a desired position.

1,868,777. MAKING PUNCHES AND DIES FOR EMBOSSING PRINTING CHARACTERS IN METAL PLATES. HERBERT L. THOMPSON, Elgin, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed May 11, 1928. Serial No. 277,069. 16 Claims. (Cl. 219—8.)



1. In a device for making punches and dies for embossing printing characters on metal plates, the combination of a body, a master die supported in said body, a holder for moving a blank into, and for supporting the blank in operative relation to the master die, two electrodes disposed in said body to engage opposite sides of the end of the blank to be swaged to heat said end, an electric circuit including said electrodes and adapted to be rendered operative when said holder moves said blank into said operative relation, means for forcing said heated end against the master die with a swaging blow, and means for automatically withdrawing said electrodes from the blank prior to said swaging blow.

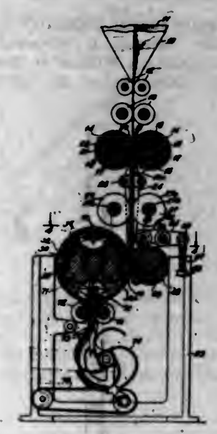
1,868,778. ILLUMINATED TOOL. CHARLES C. TOMNEY, New Brunswick, N. J. Filed May 22, 1930. Serial No. 454,599. 1 Claim. (Cl. 240—6.46.)



A handle to provide for the removable connection of tools therewith and to provide for the illumination of such tools, said handle comprising a member formed with an axial bore having a diameter corresponding to the external diameter of the conventional flashlight, the bore near one end being of reduced diameter to provide an interior shoulder to limit movement of the flashlight in one direction, the opposite end of the bore being circumferentially enlarged, and a washer removably secured within said enlargement and having a central opening less than the diameter of the bore, the washer serving to cooperate with one end of the flashlight when in place in the bore to prevent separation of the flashlight from the handle, said handle being formed with diametrically opposite undercut tool-receiving channels opening through one end of the handle and terminating short of the opposite end.

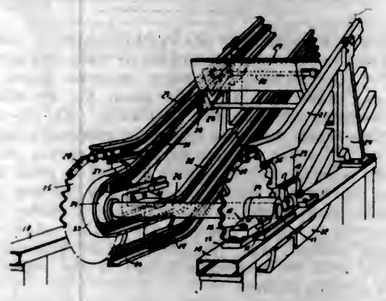
1,868,779. COLLECTING AND FOLDING MECHANISM FOR WEB PRESSES. ISIDOR TORNBERG, Plainfield, N. J., assignor to The Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Dec. 18, 1930. Serial No. 503,181. 23 Claims. (Cl. 270—42.)

1. In a web press the combination with a guide for leading a web to a folding cylinder, of means for introducing the web into the guide, said means comprising a pair of retaining members disposed respectively on opposite sides of the web and extending continuously



thereacross, and mechanism for moving said members into engagement with the web and advancing the members with the web to said guide.

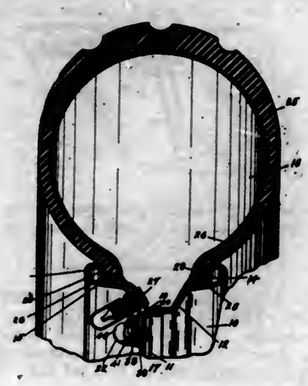
1,868,780. ESCALATOR. RALPH P. VALTIER, New York, N. Y., assignor to Harold W. Shonnard, Montclair, N. J. Filed June 25, 1930. Serial No. 463,672. 10 Claims. (Cl. 198—16.)



1. In combination with an escalator having a movable carriage, spaced supporting members at each end of the carriage, a pair of outer guide rails on each side of the carriage for the outer supporting members, chains connected with said outer supporting members, sprocket wheels interconnecting said outer guide rails, and adjustable bearings for the sprocket wheels, said bearings being positively retained in adjusted position.

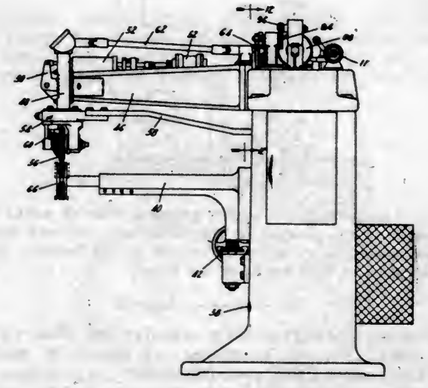
1,868,781. WHEEL. JOHN WILLIAM WHITE, Buffalo, N. Y., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Jan. 9, 1924. Serial No. 685,216. 1 Claim. (Cl. 301—19.)

The combination with a disk wheel having a rearwardly and outwardly inclined peripheral flange and a flat portion adjacent said peripheral flange, of bolts projecting through said flat portion, a demountable tire carrying rim having tire engaging flanges and a relatively deep inwardly projecting central portion, said relatively deep central portion being adapted to contact with the peripheral flange of the wheel body, clamps arranged upon said



bolts and maintaining said rim in contact with said peripheral flange and nuts upon said bolts for maintaining said clamps in locked position.

1,868,782. WELDING APPARATUS. STANLEY WHITWORTH and LELAND E. LONG, South Bend, Ind., assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 7, 1927. Serial No. 203,928. 22 Claims. (Cl. 219—4.)

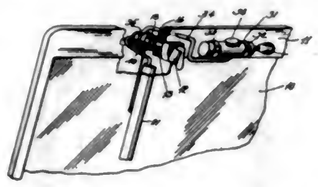


1. Welding apparatus comprising, in combination, a sectional electrode arranged to support rim and web members another electrode arranged to engage the rim member immediately opposite its point of engagement with the web member, and electrical connections for passing current from one electrode to the other to weld the web and rim together.

1,868,783. WINDSHIELD CLEANER. CLARENCE B. WILLIAMS, Santa Barbara, Calif. Filed May 6, 1930. Serial No. 450,116. 2 Claims. (Cl. 15—255.)

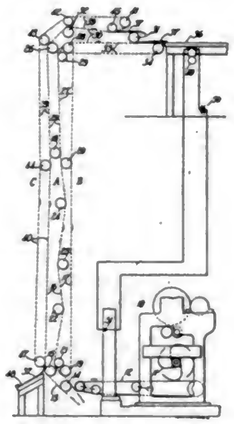
1. In a device of the character described, an externally threaded cylindrical body having an internal bore extending inwardly from its rear end and within which the exterior end of the drive shaft of a windshield wiper is adapted to be received, the end of said drive shaft coming against the inner end of said bore, there being reg-

istering drill holes through said body and drive shaft adapted to receive the arm of a windshield wiper, and a nut screw-threaded on the rear end of said body and



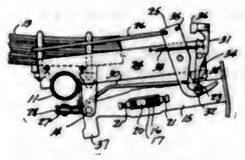
adapted to be set up against the wiper arm to clamp the wiper arm in position and to hold the body on the drive shaft.

1,868,784. INSPECTION SHEET CONVEYER FOR PRINTING PRESSES. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed July 3, 1931. Serial No. 548,552. 13 Claims. (Cl. 271—64.)



1. The combination with a printing press of means for delivering the product of the press to a delivery point, and means for returning a sample of the product from said point to the vicinity of the press.

1,868,785. LIFTING JACK MECHANISM FOR VEHICLES. WILLIAM W. WOLFF and ROBERT W. WOLFF, Los Angeles, Calif., assignors of one-third to Thomas E. Watson, Los Angeles, Calif. Filed Mar. 9, 1931. Serial No. 521,142. 10 Claims. (Cl. 254—94.)



1. In an automotive vehicle including a frame, an axle, and drive wheels capable of differential speed: a lifting jack mechanism comprising a jack prop pivotally supported in relation to said frame on an axis located adjacent a wheel and eccentric to the wheel axis whereby to enable swinging of the prop from carrying position to frame elevating position, and means on said wheel to engage said prop in frame elevating position and arrest rotation thereof in one direction and to swing said prop to carrying position on rotation of said wheel in the other direction.

1,868,786. COMBINATION FREIGHT CAR SIDE AND GRAIN DOOR. GEORGE A. WOODMAN, Chicago, Ill., assignor of one-half to William O. Belt, Chicago, Ill. Filed July 11, 1930. Serial No. 467,216. 7 Claims. (Cl. 189—46.)



3. A door of the character stated including a sheet metal plate having the marginal portions thereof corrugated to provide reenforcements, sections inwardly of said reenforcements bent to provide pockets outwardly of the inner face of the door, and a frame mounted on the inner face of said plate.

1,868,787. PROCESS OF MANUFACTURING A COMPOSITION CONTAINING MATTER OF THE CHARACTER OF CAOUTCHOUC. HEINRICH ZIEGNER, Hagen, Germany. Filed Apr. 17, 1930, Serial No. 445,208, and in Germany Apr. 25, 1929. 6 Claims. (Cl. 18—53.)

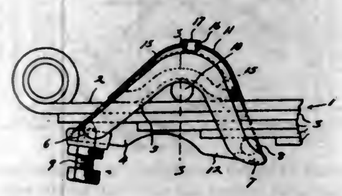
1. The herein described process of manufacturing compact bodies, which consists in imbuing porous particles of fibre material with a medium adapted to swell matter of the character of rubber, intermingling the said porous particles with matter of the character of rubber and a vulcanizing medium, causing vaporization of the said swelling medium, and vulcanizing under pressure sufficient to close the interstices caused by the vaporization of the swelling medium.

1,868,788. DIES AND PROCESS OF MAKING THE SAME. PAUL R. ZINSER, Chicago, Ill., assignor, by mesne assignments, to Woodall Industries, Incorporated, Detroit, Mich. Filed May 4, 1928. Serial No. 275,119. 3 Claims. (Cl. 101—28.)



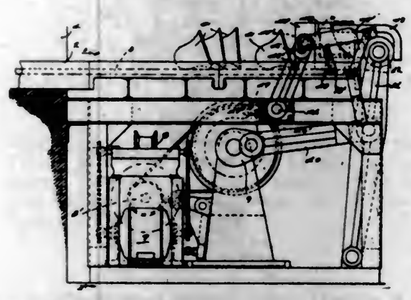
1. The combination with a die ring having an internal shoulder adjacent one edge and an inner wall sloping away from said shoulder, a shell mounted in said ring having an outstanding lip to rest on said shoulder in a plane below the plane of the ring edge, and a metal backing contained in said ring in intimate contact with the back of the shell and the sloping ring wall aforesaid.

1,868,789. DEVICE FOR LUBRICATING VEHICLE LEAF SPRINGS AND SHOCK ABSORBER THEREFOR. FLOYD E. BADGER, Detroit, Mich., assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 22, 1928. Serial No. 314,162. 7 Claims. (Cl. 184—1.)



1. The combination with a vehicle leaf spring and a shock absorber upon said spring, of means for lubricating the spring leaves including a lubricant receiving member and a housing and securing member for said lubricant receiving member engaging said shock absorber.

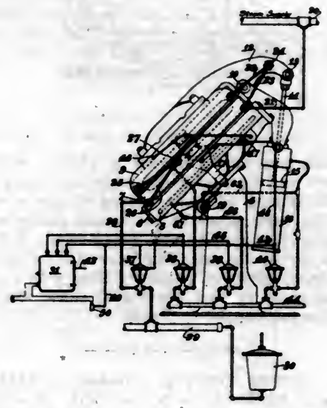
1,868,790. APPARATUS FOR ADVANCING ARTICLES THROUGH A FURNACE. JOSEPH B. BATIS, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Aug. 19, 1929. Serial No. 386,929. 10 Claims. (Cl. 214—18.)



10. In apparatus for advancing articles from one point to another, a member movable in forward and rearward directions and arranged to carry articles forward upon a corresponding movement thereof, an abutment movable forwardly upon initial forward movement of the member and engageable with the rear article on the member, and mechanism automatically operable upon movement of the abutment to its forwardmost position for positively holding said abutment against movement during rearward movement of the member.

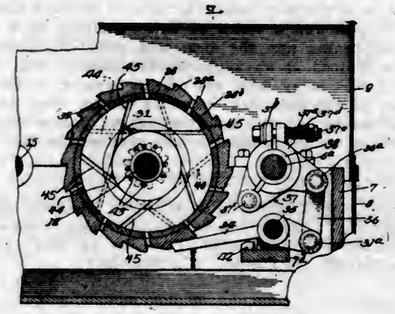
1,868,791. VULCANIZING SYSTEM. ROBERT D. CLEVELAND, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Nov. 20, 1931. Serial No. 576,312. 12 Claims. (Cl. 18—17.)

12. In a system of the class described, a vulcanizer including hollow mold sections arranged to be heated by steam, an outlet for each mold section, a conduit common to said outlets, a steam trap connectible to said conduit, a motor valve in one of its positions serving to connect said conduit to the atmosphere and in another of its positions to said steam trap, said valve being provided with two actuating diaphragms, a fluid-pressure controlled device for normally holding the mold sections in open relation, one of said diaphragms being supplied with fluid pressure in common with said device, a fluid pressure controlled device for locking said sections closed, said second diaphragm being supplied with fluid pressure



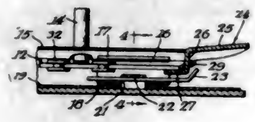
in common with said locking device, the application of fluid pressure to either of said diaphragms serving to close said conduit to the atmosphere, and means for controlling the application of fluid pressure to said devices and to said diaphragms.

1,868,792. MECHANICAL LOAD BRAKE. OSCAR L. COFFEY, Harvey, Ill., assignor to Whiting Corporation, Harvey, Ill., a Corporation of Illinois. Filed Sept. 20, 1928. Serial No. 307,272. 9 Claims. (Cl. 188—82.)



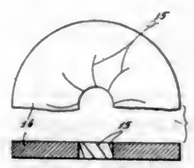
1. In a mechanical load brake, the combination of a shaft, mechanism for driving the shaft, hoisting means driven by the shaft, brake mechanism comprising a wheel and coacting brake members having friction-faces for gripping the wheel therebetween, one of said members being fixed to rotate with the shaft, and the other being movable axially to grip and release the brake wheel, means for forcing oil to the coacting faces between said members and the brake-wheel to effect lubrication and prevent overheating, one of the friction faces having a duct therein to circulate oil across two of the coacting faces, and an enclosing case for the second mentioned mechanism adapted to contain oil to supply the latter to the forcing means.

1,868,793. LOOSE LEAF BINDER. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Filed Feb. 28, 1931. Serial No. 519,134. 5 Claims. (Cl. 129—24.)



1. A loose leaf binder having a pair of articulated toggle plates bearing a plurality of paper-holding prongs arranged in mating pairs, an arched spring cover plate engaging the outer edges of the toggle plates and normally urging the prongs into engagement, and means including a spring clip extending beneath the toggle plates to cause the end pairs of prongs to close with a pressure at least as great as that tending to cause the engagement of those intermediately placed.

1,868,794. WIPER DEVICE. GEORGE L. FULLER and WILLIAM F. BREEN, Santa Maria, Calif. Filed Oct. 19, 1927. Serial No. 227,085. 4 Claims. (Cl. 288—1.)



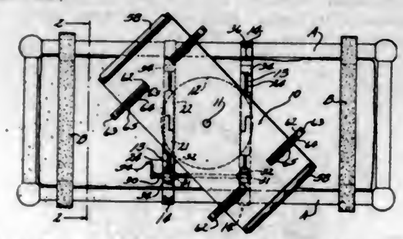
1. As a new article of manufacture, a wiper comprising a disk of soft rubber, having a centrally disposed opening in said disk and a series of cuts extending from said central opening into the disk, said cuts being made in planes inclined at an angle to the plane of said disk, passing part away from the central opening to the periphery of the disk, and operating to flex when an enlarged portion of the reciprocating rod passes through the wiper, without opening spaces through the disk.

1,868,795. ANTENNA. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 18, 1927. Serial No. 161,769. 10 Claims. (Cl. 250—33.)



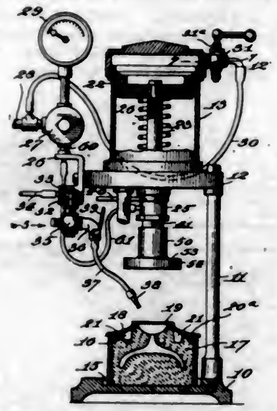
1. In combination, means to radiate high frequency energy including a simple linear oscillator, and a plurality of lead-in wires directly coupled thereto at points so spaced that the external impedance across which the lead-in wires are connected is equal to the characteristic impedance of the lead-in wires.

1,868,796. CASKET PLACER. HENRY J. HARDER, Beaver Dam, and HERBERT R. KOTENBERG, Waupun, Wis. Filed Aug. 10, 1931. Serial No. 556,136. 14 Claims. (Cl. 27—32.)



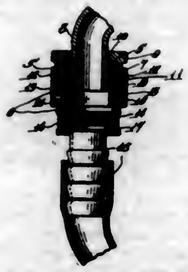
1. A device to facilitate delivery of a casket into position for interment, comprising the combination with a support adapted to be positioned above an open grave, of a vertically adjustable turntable mounting carried by said support, means for raising and lowering said mounting, and a casket receiving turntable on the mounting.

1,868,797. DENTAL CASTING MACHINE. WALTER G. E. HARVEY, Los Angeles, Calif. Filed Aug. 13, 1930. Serial No. 475,014. 7 Claims. (Cl. 22—69.)



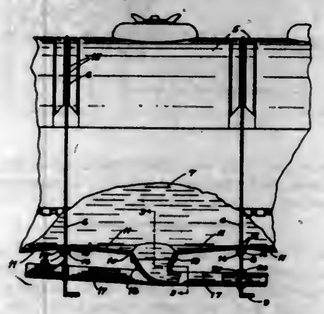
1. In a dental casting machine, a casting ring, a cover plate therefor, which cover plate is provided with a centrally arranged opening and lugs depending from the underside of said cover plate.

1,868,798. HOSE CONNECTION FOR FAUCETS. SAMUEL M. KASS, Philadelphia, Pa. Filed July 24, 1930. Serial No. 470,408. 4 Claims. (Cl. 285—164.)



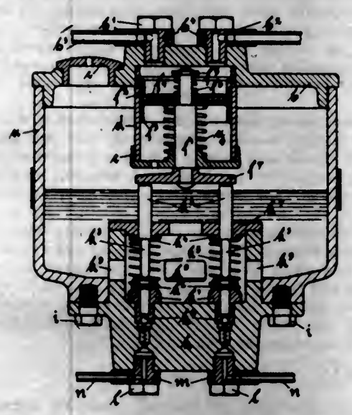
1. An auxiliary faucet outlet member comprising an externally threaded outlet for hose connection beyond the faucet and a body having an internally threaded shell adapted to surround the faucet, an annular stop member inside and rigidly connected to the shell and leaving an annular recess between it and the internally threaded shell, a counterbored externally threaded clamping sleeve to screw into the shell and adapted to extend into the recess and a rubber seal in the counterbore fitting between the two members.

1,868,799. COMPLETE DISCHARGE VEHICLE TANK. ANDREW A. KRAMER, Kansas City, Mo. Filed Mar. 1, 1929. Serial No. 343,661. 5 Claims. (Cl. 220—85.)



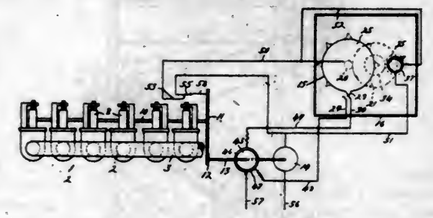
1. In a vehicle tank, a transversely curved shell portion and transverse wall portions dividing said tank into a plurality of compartments, said compartments being arranged in a row lengthwise of said tank, said shell portion having a downwardly depressed portion in the bottom thereof comprising a central sump portion spaced from said transverse wall portions and longitudinal extensions tapering in width and gradually decreasing in depth from said central sump portion to merge with the curved shell portion at points adjacent said transverse wall portions.

1,868,800. CENTRAL LUBRICATING DEVICE, ESPECIALLY FOR MOTOR DRIVEN VEHICLES. HANS KREIDEL, Wiesbaden, Germany. Filed Nov. 12, 1928, Serial No. 318,688, and in Germany May 3, 1928. 5 Claims. (Cl. 184—29.)



1. In a combination pump and reservoir installation for centralized lubricating systems, the combination of a reservoir having openings at its top and bottom, a cover secured at the top of said reservoir, a cylinder associated with said top, a piston reciprocable within said cylinder, a spring tending to move said piston in one direction, a plate, a piston rod fixed to said plate and having lost motion connection with said piston, a bottom cap secured in the bottom opening of said reservoir, a plurality of cylinders supported in said cap, a plurality of plungers each guided for reciprocable movement in one of said cylinders, a spring associated with each of said plungers for withdrawing it from its cylinders, means for guiding said plungers while completely withdrawn from said cylinders, stems formed integrally with said plungers and lying beneath said plate, and fluid pressure means for operating said piston, thereby to move said plate against said plunger stems and force said plungers into their respective cylinders to eject measured quantities of lubricant from said cylinders.

1,868,801. AUTOMATIC CONTROL FOR IRRIGATING SYSTEMS. ELMER G. MUNZ, Detroit, Mich. Filed Aug. 15, 1927. Serial No. 213,115. 4 Claims. (Cl. 161—7.)



1. In combination, a series of valves, means for operating said valves including a gear, a motor for rotating said gear, a timing device for controlling the operation of said motor, a switch in the motor circuit having a contact arm, and a pin projecting from said gear for engaging said arm to open the motor circuit once during the rotation of said gear.

1,868,802. BASIN FLOWER HOLDER. LUIS SOJI OKAI, Los Angeles, Calif. Filed Dec. 30, 1930. Serial No. 505,517. 4 Claims. (Cl. 47—41.)



1. A cut flower holder comprising a weighted base plate; pins having butts provided with heads; said heads and butts being embedded in the plate, and the bodies of the pins extending above the plate for engagement with cut flower stem; and a frame consisting of a band and a lattice crown or top of the band for receiving and supporting cut flower stems and allowing such stems to be stuck onto the pins.

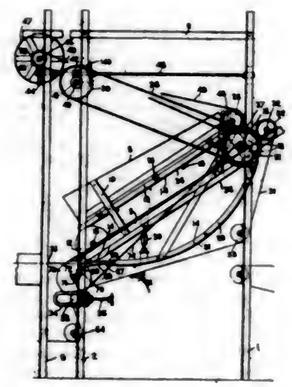
1,868,803. ROOFING TILE. FREDERCIK C. OVERBURY, Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed June 1, 1926. Serial No. 112,815. 2 Claims. (Cl. 108—7.)



1. A tile-shaped roofing element comprising a flexible head portion formed of a single layer of roofing felt, an upstanding butt portion made up of a plurality of layers of roofing felt, a shape-retaining member between certain of said layers for holding said butt portion in upstanding

position and confined to the butt portion whereby it does not interfere with the flexibility of said head portion, and a continuous coating of impervious material covering the exposed surface and edges of said element.

1,868,804. MACHINE FOR ASSEMBLING AND COATING A MULTIPLICITY OF ARTICLES. FORREST G. PURINTON, Waterbury, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Dec. 9, 1926. Serial No. 153,512. 15 Claims. (Cl. 91—45.)

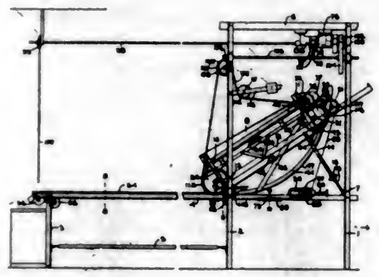


1. In a machine for coating a multiplicity of articles comprising a hopper, a traveling carrier passing therethrough having means for assembling in narrowly separated juxtaposition articles presenting like faces, from a mass of said articles, a travelling conveyer arranged progressively to receive the assembled articles therefrom in reversed position but in the same juxtaposition and pressure-actuated means for spraying liquid coating material upon said articles during the travelling movement of said conveyer.

15. In a machine for coating a multiplicity of articles, a travelling endless perforate conveyer to receive said articles, spraying means for projecting liquid coating material upon the articles supported upon said travelling conveyer, means for reciprocating said spraying means transversely of said conveyer a distance greater than the width of said conveyer, including means for causing a uniform movement of said spraying means throughout the width of the conveyer, and a constant acceleration from the respective edges of the conveyer to and from the position of reversal of movement, and means including an automatically operable valve for preventing the delivery of coating material from said spraying means during the accelerated movements of said spraying means.

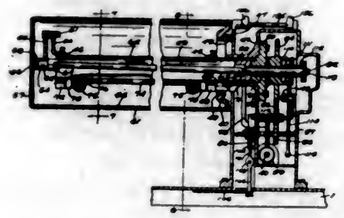
1,868,805. ARTICLE-ASSEMBLING AND CONVEYING MACHINE. FORREST G. PURINTON, Waterbury, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 2, 1927. Serial No. 230,654. 12 Claims. (Cl. 198—29.)

1. In an article assembling and conveying machine, assembling means comprising a hopper having a bottom comprising the upper lead of a travelling endless carrier provided with closely associated recesses shaped to receive and remove from a mass of articles in said hopper only such articles as are presented to said recesses in a predetermined position, a presser plate engaging the lower lead of said endless carrier and acting to maintain the same taut, and a travelling conveyer moving in synchronism with said travelling carrier arranged progressively to receive the assembled articles therefrom in the same juxta-



position and to travel with the lower lead of said endless carrier along said presser plate to a substantially horizontal position.

1,868,806. IRONING MACHINE. JOHN W. RACKLYEFT, Cleveland, Ohio, assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 10, 1927. Serial No. 167,314. 19 Claims. (Cl. 68—9.)



1. In an ironing machine, the combination with a frame, of a shoe pivotally mounted upon said frame, a roll adapted to cooperate with said shoe, and means for holding said shoe in predetermined position upon said frame and operable to release said shoe, said means comprising a lever terminating near the front of said frame and catches connected to said lever and engaging extensions of said shoe.

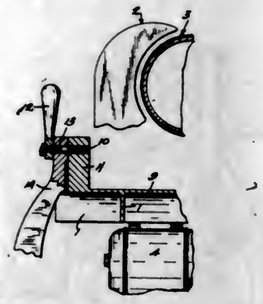
4. In an ironing machine, the combination with a rigid shoe, of a rigid member supported at one end and projecting alongside said shoe, a hollow roll surrounding and rotatably supported by said rigid member, and means inside said roll for compensating for unequal pressures exerted at the ends of said roll.

6. In an ironing machine, the combination with a shoe, of a hollow roll supported wholly at one end and movable toward and away from said shoe, mechanism located inside said roll for moving said roll toward and away from said shoe, and an electric motor operatively connected to said roll and to said mechanism, such connections including disconnectable elements.

1,868,807. IRONING MACHINE. JOHN W. RACKLYEFT, Cleveland, Ohio, assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Feb. 10, 1927, Serial No. 167,314. Divided and this application filed July 3, 1929. Serial No. 375,670. 1 Claim. (Cl. 68—9.)

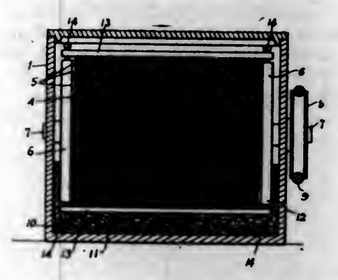
In an ironing machine, in combination, a frame, a shoe carried by said frame, a roll carried by said frame, an electric motor and driving connections carried by said

frame for operating said machine, a supporting element for said machine separate from said frame and comprising a vertical pedestal and floor-engaging feet carried



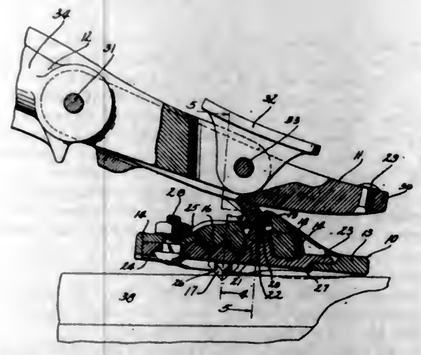
thereby, and a removable horizontal pivot screw securing said frame to said pedestal, said screw having a lever whereby said frame can be clamped tightly to said pedestal.

1,868,808. FILTER. WILLIAM H. ROBBINS, Springfield, Ohio, assignor to The Williams Company, London, Ohio, a Corporation of Ohio. Filed Feb. 7, 1927. Serial No. 166,474. 5 Claims. (Cl. 183—9.)



1. In combination a casing having inlet and exit openings for gases to be filtered, said casing being arranged to contain liquid therein, a frame consisting of a plurality of spaced members to form a drum through which the gases can pass and a steel strand wound on said drum with the loops of the strands side by side, said drum being arranged to substantially fill the casing.

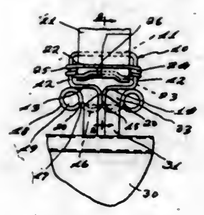
1,868,809. CAR MOVER. DUDLEY G. ROWELL, Appleton, Wis. Filed July 29, 1929. Serial No. 381,773. 6 Claims. (Cl. 254—36.)



1. In a device of the character described, the combination with a supporting frame provided with a trunnion

groove and apertured intermediate the ends of said groove, of a notched trunnion bearing receivable in the groove and a locking plate provided with a boss projecting upwardly through the trunnion groove aperture into the notch in the trunnion bearing whereby to prevent displacement of the bearing in the groove.

1,868,810. FASTENER. BIRDORA H. WHITE, Chicago, Ill., assignor to Parva Products Company, Hillsdale, Mich., a Corporation of Delaware. Filed June 3, 1929. Serial No. 368,000. 8 Claims. (Cl. 24—196.)



1. In a fastener, a frame member formed with extensions at one side thereof, said extensions being arranged in the same plane as said frame member and being bent to form a plurality of substantially closed loops, said loops cooperating with the side of said frame member to form a plurality of substantially closed pockets.

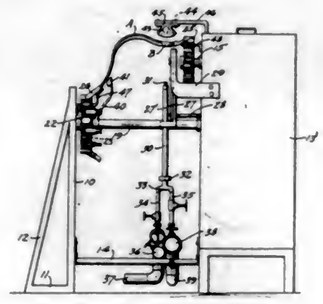
1,868,811. VALVE PLUNGER CONSTRUCTION. DAVID ROBERT YARNALL, Germantown, Pa., assignor to Yarnall-Waring Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 29, 1930. Serial No. 498,975. 5 Claims. (Cl. 251—80.)

3. A valve plunger comprising a case hardened plunger having a bore adapted to receive the valve operating screw and a counterbore above the bore, a head fitting within the counterbore and carrying an internal thread for receiving the screw and a fused connection between the plunger and head at the top of the counterbore.

1,868,812. HEAT TREATING MACHINE. JOSEPH BEHLE and CHRISTIAN W. HODDE, Dallas, Tex., assignors to The Murray Company, Dallas, Tex., a Corporation of Texas. Filed Jan. 16, 1931. Serial No. 509,119. 4 Claims. (Cl. 263—8.)

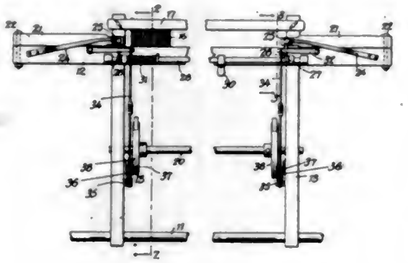
3. In a machine for heat treating the wear bosses of gin ribs, a plurality of burners successively arranged and each

having means for producing an elongated vertical needle-like flame, a conveyor having carrying elements for supporting gin ribs in an upright position and spaced so



that the wear bosses of the ribs will be located directly over the burners when said conveyor is stopped, and means for intermittently operating the conveyor.

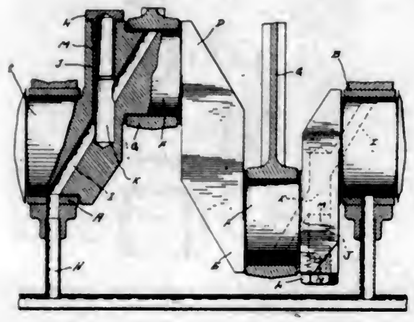
1,868,813. PROTECTOR MECHANISM FOR LOOMS. BENJAMAN W. BROWN, Hapeville, Ga., assignor of one-half to James Chapman and one-fourth to Laura Emily Scott Chapman, Atlanta, Ga. Filed June 18, 1930. Serial No. 462,042. 5 Claims. (Cl. 139—345.)



1. In a loom having a lay and protector mechanism including an oscillatory protector rod and a dagger fixed to the rod, the combination of a shuttle box, a shuttle binder for said box, a rock arm fixed to the protector rod, a protector finger pivoted on said rock arm, said finger having a lug and being connected to the shuttle binder for oscillation about its pivot on the rock arm, a lever pivoted on the lay, and means for oscillating said lever in timed relation with the movement of the lug to engage it wtih said lug if the shuttle is properly boxed thereby preventing operation of the protector mechanism to stop the loom, substantially as set forth.

1,868,814. PURIFIER FOR LUBRICATING SYSTEMS. ALANSON P. BRUSH, Detroit, Mich. Filed June 24, 1929. Serial No. 373,465. 3 Claims. (Cl. 184—6.)

1. The combination with an engine crank shaft having a main bearing and a crank pin with a crank throw cheek therebetween, of a lubricant passage extending diagonally from said main bearing to said crank pin and through said cheek and a radially extending chamber in said cheek in-



dependent of but intersecting said oblique passage in which chamber suspended impurities in the lubricant are separated by centrifugal action.

1,868,815. ENAMEL METALLIC TILE. NEAL J. BURGETT, Detroit, Mich., assignor to Joseph W. Hoebl, Detroit, Mich. Filed Mar. 31, 1930. Serial No. 440,595. 1 Claim. (Cl. 72—18.)

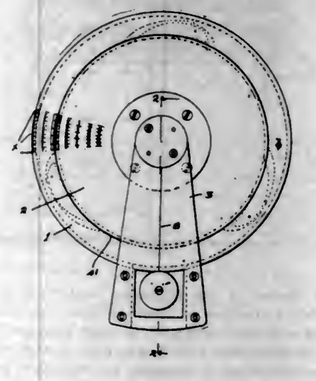


A tile comprising a sheet metal blank gored at the corners and pressed to form a front face and side flanges, said side flanges being of a depth greater than the depth of the gores to form a portion continuous around the corners, presenting an unbroken surface across the top, part way down the side flanges and around the corners for receiving the enamel finish, the gored portions of said blank being bent obliquely to converge towards the center of the tile to form inclined triangular-shaped openings at the corners, and said sheet metal structure having a vitreous enamel surface outside and inside.

1,868,816. DISK SLIDE RULE. JOHN R. DEMPSTER, Berkeley, Calif. Filed Sept. 24, 1928. Serial No. 307,970. 10 Claims. (Cl. 235—84.)

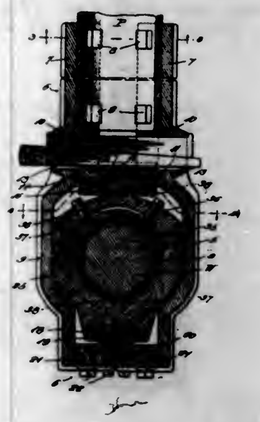
1. In a slide rule of the character described, adjacent slide rule members movable relatively to one another, a groove in the edge of one of the members, and a shoe

pivotally secured to the opposite member arranged to fit within said groove for splining the members together, said shoe positioned in a recess in its carrying member,



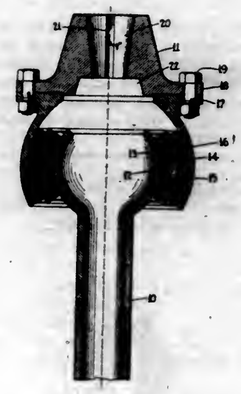
a spring arranged to resiliently force the shoe into the groove and means for adjusting the effective pressure of the spring.

1,868,817. PITMAN BEARING ASSEMBLY. OSSON W. DUNHAM, Webb City, Mo., assignor to Wertzberger Derrick Company. Filed Nov. 26, 1928. Serial No. 322,018. 7 Claims. (Cl. 308—23.)



1. A pitman bearing assembly comprising a bearing to receive a wrist pin, two elongated yoke sections receiving said bearing therebetween, said yoke sections having spaced arms at their upper ends projecting outwardly and adapted for securing to opposite sides of a pitman, a block received between the portions of said yoke sections at the inner ends of said arms for movement toward and from the other ends of the yoke sections, means for holding said block toward said other ends of said sections, a second block to which said other ends of said sections are secured, and alined means pivotally connecting said bearing with said blocks.

1,868,818. UNIVERSAL JOINT. CAROLUS L. EKSERGIAN, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 21, 1930. Serial No. 462,725. 3 Claims. (Cl. 64—96.)



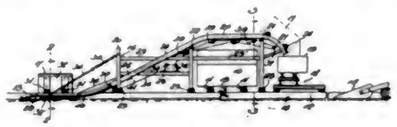
1. A shaft coupling comprising a male member, a female member, a torque transmitting member interposed between the male and female members and distortable members interposed between said torque transmitting member and said male and female members respectively, and held in distorted condition therebetween.

1,868,819. METHOD AND FORM FOR CONCRETE HIGHWAY CONSTRUCTION. BENJAMIN HARRISON FLYNN, Amarillo, Tex. Filed Feb. 5, 1930. Serial No. 426,076. 6 Claims. (Cl. 94—24.)



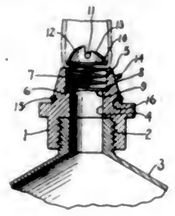
1. In concrete highway construction, the steps of laying and anchoring sectional parallel rails to form a track, positioning concrete forms at the inner sides of said rails and anchoring said forms to the ground independently of said rails, propelling a paving machine along the track and finishing the concrete between the forms, removing the rail sections and leaving said forms anchored to the ground to retain the concrete during setting, and re-laying and anchoring the removed rail sections in advance of the paver.

1,868,820. HIGHWAY CONSTRUCTION OVER-PASS. BENJAMIN H. FLYNN, Alexandria, La. Filed June 5, 1931. Serial No. 542,430. 16 Claims. (Cl. 94—39.)



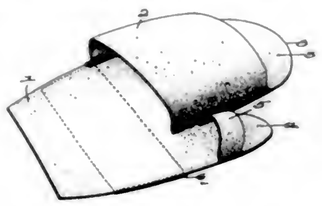
1. In highway construction equipment, a mobile machine which obstructs a highway grade to passage of road trucks, and means for receiving highway materials from road trucks in front of said machine and conveying said materials over the machine and on rearwardly beyond said machine to the required destination.

1,868,821. CLOSURE CONSTRUCTION. JERROLD C. FULLER, Chicago, Ill. Filed Jan. 11, 1932. Serial No. 586,033. 6 Claims. (Cl. 221—60.)



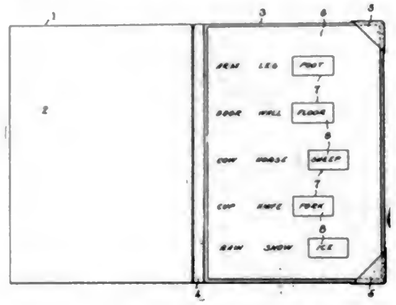
1. A collapsible tube device of the character described including a tubular member forming a section of said tube, a closure member, and a helical spring member connecting the tubular member with the closure member, the tubular member being provided with a central stepped bore having an outer portion and an inner portion, the outer portion of the bore being larger in diameter than the inner portion of the bore, the helical spring member being disposed within the outer portion and being adapted to hold the cover member tightly against the outer end portion of the bore.

1,868,822. ELEVATOR OPERATOR'S HAND SHIELD. MORDECAI GOLDKIND, Washington, D. C. Filed Aug. 26, 1931. Serial No. 559,564. 1 Claim. (Cl. 2—20.)



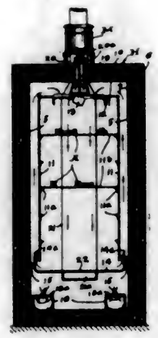
A hand shield, for use by elevator operators comprising a sheet of flexible material having a thumb portion adapted to cover the entire thumb of the operator, a finger portion of curved outline, the highest portion of the curve being adjacent to the longer fingers and the lowest portion being adjacent to the little finger so as to cover all but the tips of the fingers in one position of the hand to cover the tips of the fingers in another position of the hand, and a back portion covering the lower portion of the fingers to prevent wrinkling of the shield when the hand is arched and the tips of the fingers covered.

1,868,823. EDUCATIONAL MATERIAL. THOMAS V. GOODRICH, Lincoln, Nebr. Filed Jan. 25, 1930. Serial No. 423,399. 4 Claims. (Cl. 35—12.)



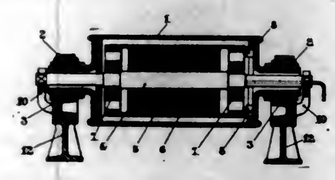
1. In a device of the character described, a stimulus card having a number of items printed thereon with an opening in said card adjacent to each item, said openings being of uniform size and shape, and on the reverse side of the card lines each crossing a respective intervening portion of the card between said openings, loose response cards of uniform size and shape so cut as to fit individually and interchangeably into said openings in the stimulus card, each response card having two faces, and bearing on one face an item related in a predetermined manner to a corresponding item on the stimulus card, and bearing on the other face a line, so drawn that when the response cards are placed in the correct position with reference to the stimulus card, the separate lines on the backs of the response cards will unite with the lines on the back of the stimulus card to form a single continuous line.

1,868,824. OVEN—CIRCULATING AIR TYPE. ALBERT E. GRAPP, Minneapolis, Minn. Filed Sept. 5, 1930. Serial No. 479,893. 5 Claims. (Cl. 263—2.)



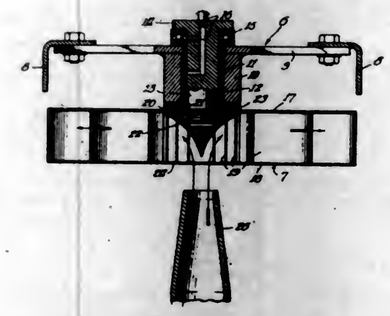
1. An oven comprising a heat insulated housing, a heating chamber disposed in said housing and spaced from one end thereof, air passages extending longitudinally and externally of said heating chamber and communicating with the two ends of said chamber, a fan mounted in an opening in one end of said heating chamber, a fan motor mounted externally upon the adjacent end of said housing with an extension of its armature shaft projected into said housing and carrying said fan and a relatively small air intake passage through said end of said housing and surrounding the extension of said shaft whereby fresh air will be drawn about the inner end and bearing of said motor impinging against said shaft.

1,868,825. CONVEYER ROLL. ANDRÉ GROSJEAN, Rueil, France. Filed Aug. 11, 1930, Serial No. 474,643, and in France Sept. 14, 1929. 5 Claims. (Cl. 198—127.)



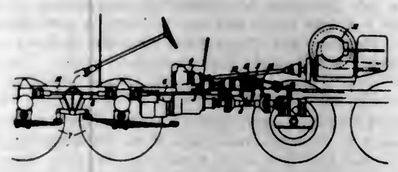
1. A conveyer assembly comprising a pair of journals, a conveyer roll rotatably supported in said journals, a rotor positioned inside of, and in spaced relation to, said conveyer roll, said roll and rotor being connected in driving and driven relation, a stator positioned inside said rotor and traversing said journals, said stator and rotor forming an electric motor adapted to drive said roll, and means for preventing rotation of said stator.

1,868,826. MILK TANK. WARD E. GUEST, Chicago, Ill., assignor to Kraft-Phenix Cheese Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 12, 1931. Serial No. 508,324. 7 Claims. (Cl. 183—2.6.)



3. In combination, a liquid storage tank, means for supplying liquid to said tank in a vertically directed stream, and means for breaking down foam formed in the tank, comprising an axially vertical rotor having its axis disposed substantially in line with and in the path of said stream, said rotor being actuated by said stream and serving to distribute the liquid thereof outwardly from its axis.

1,868,827. MOTOR VEHICLE. SYDNEY SLATER GUY, Wolverhampton, England. Filed June 24, 1930, Serial No. 463,456, and in Great Britain July 19, 1929. 5 Claims. (Cl. 180—24.)



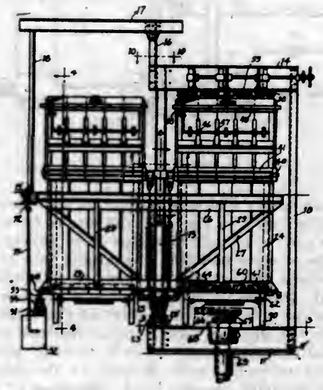
1. In motor vehicles having a plurality of pairs of road wheels capable of being driven, the combination of a variable speed gear, a power distribution gear, a front transmission comprising a cross-shaft and a longitudinal shaft at each side of the vehicle, a rear transmission, a power take-off, and a single gear lever for connecting and disconnecting either the front transmission, the rear transmission or the power take-off or any two of these mechanisms with the motor through the variable speed and power distribution gears.

1,868,828. BUCKLE FOR BELTS, STRAPS, OR THE LIKE. GEORGE E. HAINES, Philadelphia, Pa., assignor to L. H. Gilmer Company, a Corporation of New Jersey. Filed Nov. 20, 1931. Serial No. 576,390. 2 Claims. (Cl. 24—75.)



2. A buckle for belts and other straps or the like, comprising a pair of buckle members, one having a keeper opening and a spring tongue having an imperforate free end provided with a continuous transverse edge forming one of the walls of the opening, and adapted to be laterally displaced in opposite directions from a normal position to increase the size of the opening, and the other member having a stem freely movable through said opening and carrying a head provided with flattened sides and elongated in the direction of length of the buckle, the outer face of the head being convexly curved longitudinally, said head being movable into and out of the opening when the tongue is displaced and adapted to interlock with said tongue.

1,868,829. COTTON BALING PRESS. WILLIAM L. HANCOCK and BRONSON C. WOODFORD, Dallas, Tex., assignors to The Murray Company, Dallas, Tex., a Corporation of Texas. Filed June 4, 1928. Serial No. 282,753. 4 Claims. (Cl. 100—28.)

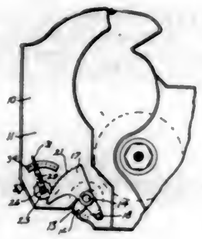


1. In a cotton press, a center post, transverse channel bars on each side of the post, press boxes having their ends secured to said bars, a spreader having opposite extensions engaging in said channel bars and surrounding said post, and a bearing member fastened on said post and engaging in said spreader for centering the press boxes.

1,868,830. ROLLER ADJUSTING DEVICE FOR COTTON GINS. WILLIAM L. HANCOCK, Dallas, Tex., assignor to The Murray Company, Dallas, Tex., a Corporation of Texas. Filed June 15, 1931. Serial No. 544,461. 2 Claims. (Cl. 19—48.)

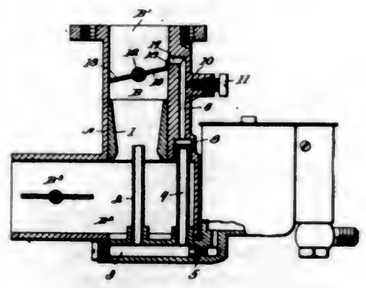
1. The combination with the breast of a cotton gin, and the huller roller thereof, of segmental gear brackets piv-

oted to each end of the breast and carrying the roller, a shaft journaled in the breast, pinions fastened on the shaft and meshing with the brackets, a lever carried by the shaft



for rocking the latter, a pin on the lever, and a boss on one end of the breast having apertures for receiving said pin.

1,868,831. CARBURETOR. FRANK H. HEITGER, Flint, Mich. Filed Mar. 3, 1928. Serial No. 258,740. 1 Claim. (Cl. 261—41.)



The combination with a carburetor, of a carbureting passage provided with an air inlet and means for connecting the upper end to the induction pipe of an internal combustion engine, a main fuel feed discharging into said carbureting passage, an auxiliary fuel passage, a throttle mounted in said carbureting passage having a member for closing the lower portion of the outlet of the auxiliary passage when the throttle valve is in an inclined position in substantially closed position, said throttle valve being mounted to move into open position on the side controlling said auxiliary passage in the direction of travel of fuel and air passing through said carbureting passage, said throttle valve having an opening in the side opposite to said member at substantially the lowest part when in angular position for feeding air posterior of said throttle valve to the fuel collected thereon when the throttle valve is closed or substantially closed.

1,868,832. AIRCRAFT. MATHIAS HENTER and ERNST KÄSER, West Allis, Wis. Filed Apr. 28, 1931, Serial No. 533,531, and in Germany July 27, 1929. 8 Claims. (Cl. 244—14.)

1. An arrangement to prevent the phenomenon of the flow breaking away from the upper side of a sustaining wing for aircraft and to increase the lift thereof comprising a plurality of propulsive airscrews of the pusher type mounted on the trailing edge of the aerofoil, a plurality of depressions formed in the upper side of the aerofoil, each depression leading to a corresponding airscrew in such



a manner, that preferably only air from the upper side of the aerofoil flows to said airscrews, substantially as described.

1,868,833. APPARATUS FOR INDICATING ANGULARITY OF CROOKED WELL HOLES. WYNES W. HESTER, Tulsa, Okla., assignor to Driftmeter, Incorporated, Tulsa, Okla., a Corporation of Oklahoma. Filed July 26, 1929. Serial No. 381,364. 9 Claims. (Cl. 177—351.)



1. In apparatus of the character described, a cylindrical housing, a resistance unit in the housing including a pivotally supported frame, a variable resistance coil on said frame, an arcuate commutator comprising a series of contacts connected with said coil, a pendulum pivotally supported on said frame on a common center with said arc of the commutator and including a contact rod normally and yieldingly urged to selective engagement with said commutator contacts, an ammeter in circuit with said coil and contacts for indicating flow of electric current therethrough, a secondary circuit including an electro-magnet on said pendulum for controlling engagement of said contact rod with said commutator contacts, and independently operable switches controlling said primary and secondary circuits.

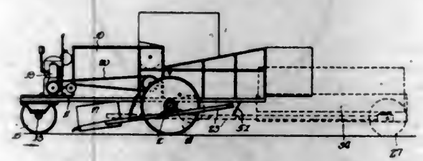
1,868,834. NONGLARE MOVING PICTURE SCREEN. ALBERT B. HURLEY, New York, N. Y. Original application filed Feb. 21, 1929, Serial No. 341,758. Divided and this application filed July 26, 1929. Serial No. 381,261. 3 Claims. (Cl. 88—24.)

1. A projection screen having a reflecting surface, and a color filter applied thereto consisting of pigment deposited thereon in circumscribed figures, uniformly distributed, leaving uniformly distributed parts of the surface exposed to reflect incident light unchanged, each unit comprising one pigment figure absorbing part and reflecting part of the incident light, and the related normal surface exposed and reflecting fully the incident rays, be-



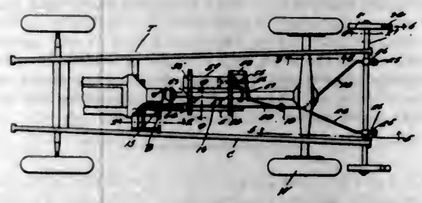
ing of such dimensions as to subtend to the eye of an observer at a distance of approximately twenty feet a visual angle of about 45 seconds to 2 minutes.

1,868,835. HARVESTING APPARATUS. FRANK N. G. KRANICH, Winnetka, Ill. Filed Aug. 6, 1927. Serial No. 211,056. 28 Claims. (Cl. 56—20.)



1. In a device of the character described, the combination of a wheeled operating machine carrying body, a movable track on said body, and wheeled operating means extending beyond said body and supported and revolvable on said track so that said means may be revolved to reduce the gauge of said device substantially to that of the body of said device.

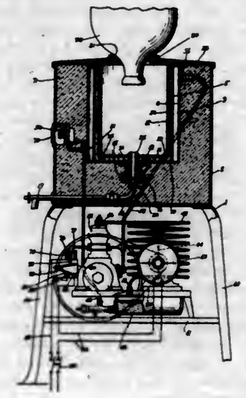
1,868,836. VEHICLE BRAKE. CHRISTIAN N. LIEB, Findlay, Ohio. Filed Apr. 5, 1930. Serial No. 442,002. 7 Claims. (Cl. 188—5.)



1. In a brake for vehicles, a rock shaft, means for rotatably supporting said shaft transversely of the vehicle, a plate member secured to said shaft for rotative movement with the shaft, a ground engaging brake shoe pivotally and eccentrically mounted on the said plate, and means for rocking said shaft for moving said shoe into and out of ground engaging position, said brake shoe being arranged directly rearwardly of a rear wheel of the vehicle for engagement with the ground in the tracks of said rear wheel, said last mentioned means including a rocker arm carried by said shaft, a member pivoted at one end to said rocker arm, and means operatively connecting said member with the brake pedal of the automobile for controlling movement of said rock shaft from said brake pedal.

1,868,837. DRINKING WATER COOLING AND DISPENSING APPARATUS. BENJAMIN MARKUS, Oak Park, Ill., assignor to Henry P. Watson, Minneapolis, Minn. Filed Jan. 16, 1929. Serial No. 332,966. 5 Claims. (Cl. 62—141.)

5. A device of the class described comprising a receptacle having a conducting liquid therein, and having double walls defining an expansion chamber, means connected with the expansion chamber for producing re-

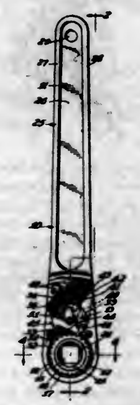


frigerating effects therein, and a non-metallic water reservoir within said receptacle and substantially submerged in said liquid.

1,868,838. SHAVING PREPARATION. JOHN MCINTYRE, Portobello, Scotland. Filed June 16, 1930, Serial No. 461,647, and in Great Britain Apr. 16, 1930. 1 Claim. (Cl. 87—5.)

An improved self-contained shaving preparation consisting of a mucilaginous, aqueous liquid composed of water containng those constituents of linseed which are soluble in boiling water, of such a consistency as to leave a thin liquid film on the face, and a small quantity of a free alkali selected from the class consisting of caustic soda, ammonia and mixtures thereof.

1,868,839. RATCHET LEVER. NORRIS F. MCNAUGHT and EDWARD H. PETERSON, Chicago, Ill., assignors to Duro Metal Products Company, Chicago, Ill., a Corporation of Illinois. Filed July 3, 1930. Serial No. 465,634. 2 Claims. (Cl. 81—63.)



2. In a ratchet lever, a body comprising a metal bar having one end formed with flat surfaces on the opposite sides and having the other end formed with a handle, said bar having a pair of transverse bores extending from one flat surface to the other parallel to each other and overlapping and communicating with each other, a ratchet member having a plurality of teeth of symmetrical shape,

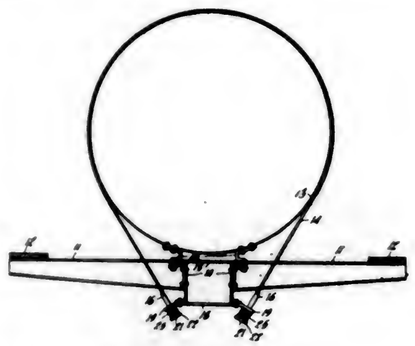
said ratchet member being located in the first and largest of said bores and having a pair of axially extending trunnions, a pawl comprising a substantially cylindrical metal member formed with flat ends adapted to be rotatably received in the second of said bores, said cylindrical member having a pair of teeth adapted to fit the teeth of said ratchet member, and a pin carried by said pawl and oppositively located with respect to said teeth, said bar having a tapering opening formed with a seat at one end for a spring, a coil spring having one end engaging said seat and the other seated about said pin, a pair of metal plates carried by said bar engaging said flat surfaces and confining said pawl and ratchet member in said bores, said plates having registering bores for receiving the trunnions of said ratchet member, and one plate having a bore coaxially located with the axis of said pawl, a pin having one end secured in said pawl and having the other end extending through said latter bore, said pin having a laterally bent end extending substantially longitudinally of said bar, said pin being arranged with the latter end symmetrically located with respect to the teeth on said pawl, whereby said pin is adapted to point toward the left or right of the axis of the handle to indicate the engagement of one tooth or the other of said pawl with said ratchet member.

1,868,840. RATCHET LEVER. NORRIS F. MCNAUGHT and EDWARD H. PETERSON, Chicago, Ill., assignors to Duro Metal Products Company, Chicago, Ill., a Corporation of Illinois. Filed July 3, 1930. Serial No. 465,635. 2 Claims. (Cl. 81—61.)



1. In a ratchet lever the combination of a supporting body comprising a metal bar having a plurality of transverse circular bores extending through said body and having a pair of metal plates for enclosing said bores, said plates having apertures forming bearings for a ratchet member, said ratchet member having trunnions in said bearings and located in the first of said bores, said bores communicating with each other, a pawl comprising an elongated member formed with a substantially cylindrical knob, said pawl member having its body located in the second of said bores, and having said knob located in the third of said bores, the third of said bores having its walls extending about said knob over more than half the periphery of said cylindrical knob to retain said pawl member in place, and a compression coil spring located in the second of said bores engaging the wall of said second bores and engaging the body of said pawl member to urge said pawl to resilient engagement with said ratchet member, said ratchet member being provided with a plurality of substantially equally spaced teeth located on a curved outer surface and forming flat shoulders for engagement with said pawl, and said pawl being provided with a serrated surface complementary in form to said ratchet teeth and comprising equally spaced teeth located on a concavely curved surface.

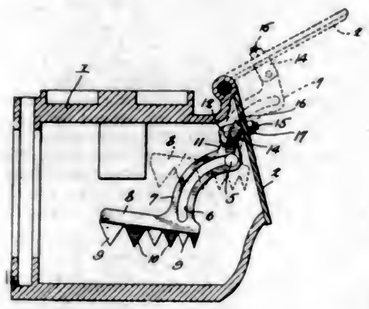
1,868,841. BAND ANCHORING MEANS FOR TANK CARS. CLAUDE C. MEADOWS, Tulsa, Okla., assignor of one-half to Starley F. Beasley, Tulsa, Okla. Filed Dec. 3, 1930. Serial No. 499,645. 6 Claims. (Cl. 105—362.)



1. In a tank car, the combination with the underframe structure of a car; of a tank supported on said underframe; abutment means on said underframe structure; a band extending over the top and about the sides of said tank and having the ends thereof extending through said abutment means; stop means fixed to the free ends of said band; and a spring member interposed between each stop means and the corresponding abutment means.

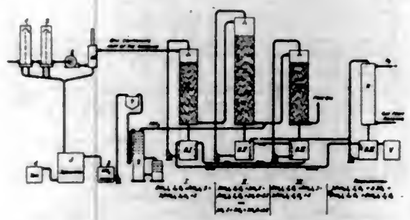
2. In a tank car, the combination with the underframe structure of a car; of a tank supported on said underframe; spaced abutment means on said underframe structure below said tank; a band extending about said tank and having the opposite ends thereof respectively extending through said spaced abutment means; a nut secured to each end of the band, said nut having a flange laterally projecting therefrom; a spring interposed between the flange of each nut and each of said abutment means, said springs being under initial compression.

1,868,842. JOURNAL BOX PACKING HOLDER. JEROME J. MILLER, Chadron, Nebr. Filed Apr. 21, 1931. Serial No. 531,825. 2 Claims. (Cl. 308—89.)



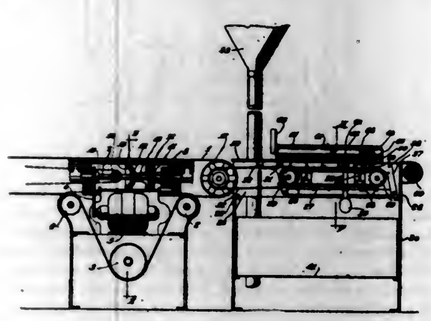
1. A journal box having a lid, a waste holder pivoted to the lid, and a guide on the journal box, the holder having a slot whereby the holder is slidably mounted on the guide.

1,868,843. PROCESS FOR REMOVING AMMONIA AND HYDROGEN SULPHIDE FROM GASES. FRITZ OVERNICK, Leverkusen/Wiesdorf, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed July 6, 1931, Serial No. 549,011, and in Germany July 10, 1930. 1 Claim. (Cl. 23—225.)



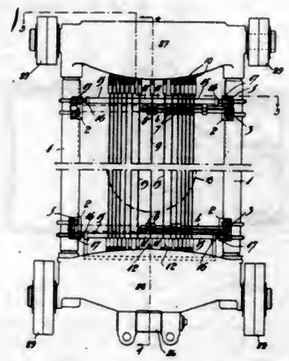
In the process for separating ammonia and hydrogen sulphide from gases containing same by washing the gases with liquors containing ammonium polythionate and ammonium thiosulphate, in which at least a part of the ammonia content of the gases is separated firstly, the residual gases are washed in several stages in such a manner that in the first stages such a part of the hydrogen sulphide content of the gases is separated that in the last stage for each molecule of hydrogen sulphide at least two molecules of ammonia are available by adding the separated ammonia to the last washing stage, the steps which comprise effecting regeneration of the used wash liquor by diverting only a portion of the stream of solution from the first washing stages in which an excess of hydrogen sulphide over the ammonia is present and in washing with the liquor returning from the regeneration firstly the gas which is free from ammonia in order to convert the free sulphurous acid and then after further use in the last washing stage returning the liquir to the first washing stage with the result that part of the washing solution goes through a cycle as described between the individual gas washers and the regeneration.

1,868,844. AUTOMATIC DELIVERY MECHANISM. PAUL NAEHER, Chicago, Ill., assignor to B. F. Gump Co., Chicago, Ill., a Corporation of Illinois. Filed May 24, 1929. Serial No. 365,634. 12 Claims. (Cl. 198—28.)



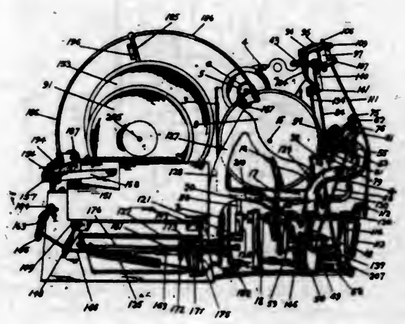
1. In an apparatus of the class described, an upwardly and downwardly movable platform, a plunger slidably mounted upon said platform, driving mechanism for said plunger including a member having relative movement with respect to said plunger and means for controlling said driving mechanism through the raising and lowering of said platform.

1,868,845. DEVICE FOR INSERTING SAW BLADES INTO SAW FRAMES. KARL ERIK RUDOLF ÖSTERBERG, Stockholm, Sweden, assignor to J. & C. G. Bolinders Mekaniska Verkstads Aktiebolag, Stockholm, Sweden, a Joint-Stock Company of Sweden. Filed July 14, 1931, Serial No. 550,737, and in Germany July 16, 1930. 12 Claims. (Cl. 143—156.)



1. Apparatus for effecting correct positioning of a series of blades in a saw frame, said frame comprising top and bottom members between which the blades are tensionable and side members joining the top and bottom members, said apparatus comprising cross rods secured to the side members of the frame on one side only of the latter whereby the blades are freely insertable and removable from the other side of the frame, the top and bottom portion of the blades upon insertion abutting the cross rods to determine the vertical position of the blades relative to the frame.

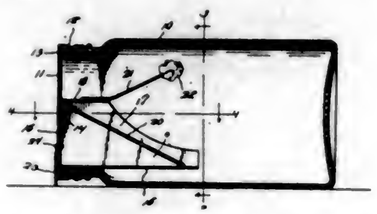
1,868,846. SOUND REPRODUCING APPARATUS. WILLIAM ROBERT OYSTON, North Melbourne, Victoria, Australia, assignor to Continuous Gramophones Limited, London, England. Filed Mar. 9, 1928, Serial No. 260,378, and in Australia Mar. 31, 1927. 29 Claims. (Cl. 274—10.)



10. Sound reproducing apparatus comprising a vertically-positioned turntable, a reproducer associated with said turntable, a vertically-positioned magazine for records adjacent said turntable, a movable platform adapted to receive records from the magazine and to position them relative to the turntable, means for securing the record to the turntable, a depressible shaft pivotally supporting the platform at one end thereof, a depressible rod normally supporting the platform in its upper position, posi-

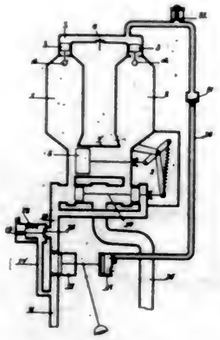
tive means for depressing the platform out of contact with the record after the latter has been secured in position on the turntable, and means for moving the reproducer into contact with the record when in playing position on the turntable.

1,868,847. MOUSE TRAP. LEE ROY PEARSON, Ranger, Tex. Filed July 8, 1931. Serial No. 549,474. 2 Claims. (Cl. 43—66.)



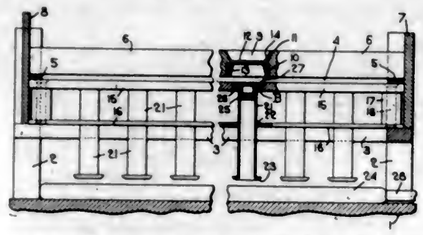
1. A trap comprising a receptacle open at one end, a removable closure therefor including a disk having an opening forming an entrance, a housing for said entrance extending into said receptacle, a normally closed inclined door pivoted within the housing, and a pair of supporting legs pivotally mounted on the disk at opposite sides of said entrance opening and normally folded within the confines of the disk, and slightly offset to be extended beyond the peripheral edge of the closure to prevent rolling of the receptacle in a horizontal position.

1,868,848. APPARATUS FOR DELIVERING MEASURED QUANTITIES OF LIQUID. RENÉ PORTE, Paris, France, assignor to Societe Hardoll, Etablissements Hariveau, Dolimier et Rene Porte & Cie. Reunis, Levallois-Perret, France. Filed Jan. 30, 1928, Serial No. 250,642, and in Belgium Feb. 2, 1927. 10 Claims. (Cl. 221—100.)



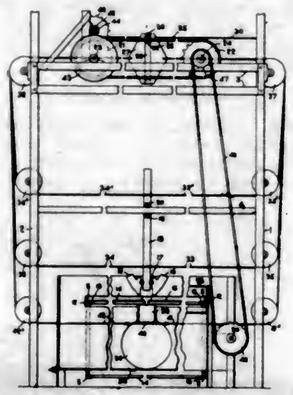
1. A liquid distributor comprising two measuring vessels, a filling pipe common to the two measuring vessels, a discharge pipe common to the two measuring vessels, a reversing member placed between said pipes and said vessels, means to lock the said reversing member controlled by the differences of pressure existing in said vessels, said filling pipe having a discharge passage branching off therefrom, a valve to close off said discharge passage, a supply pipe for admitting gas under pressure, said supply pipe having passages connecting with the two vessels, the pressure of the gases being such that the forces tending to maintain the reversing member in its locking position are greater than the pressure in the vessel on filling, and means to carry the said valve into its closure position.

1,868,849. PROCESS AND APPARATUS FOR DECORATING BUTTONS AND LIKE ARTICLES. FORREST G. PURINTON, Waterbury, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 20, 1930. Serial No. 496,957. 17 Claims. (Cl. 101—114.)



1. Apparatus for producing ornamental designs upon a multiplicity of small articles comprising a stencil carrier having a multiplicity of apertures therethrough, stencils secured in said apertures, means for supporting said stencil carrier, assembling means having a multiplicity of article-receiving recesses complementary to said stencil-containing apertures, means for so supporting said assembling means as to cause the articles supported thereby to register with the respective stencils, and simultaneously operable means for independently forcing each of said articles into firm engagement with the stencil therefor, whereby decorating material may be applied to the article through the design of the stencil.

1,868,850. MACHINE FOR COATING A MULTIPLICITY OF ARTICLES. FORREST G. PURINTON, Waterbury, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Dec. 3, 1930. Serial No. 499,718. 16 Claims. (Cl. 91—45.)

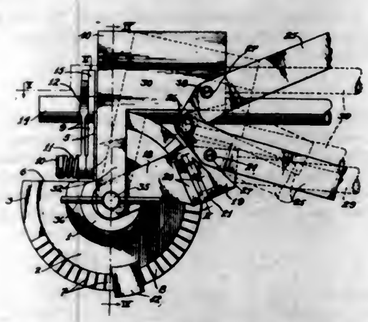


1. A painting machine comprising a travelling carrier, means for supporting thereupon a multiplicity of articles to be painted, paint-applying means, means for supporting said paint-applying means to permit reciprocation thereof transversely of the direction of movement of said travelling carrier, flexible members connected to the support for said paint-applying means, means for guiding said flexible members in opposite directions therefrom transversely of said carrier, means for actuating said flexible members alternately to produce a reciprocating uniform movement of said paint-applying means throughout the width of said travelling carrier, paint-receiving means reciprocably mounted below said paint-applying means and beneath the article-supporting means, and means for reciprocating said paint-receiving means in unison with the reciprocation of the paint-applying means.

1,868,851. CELLULOSE ESTER COMPOSITION. GEORGE ROCKER, Westfield, and EDMUND B. MIDDLETON, New Brunswick, N. J., assignors to Du Pont Viscoloid Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Oct. 8, 1931. Serial No. 567,760. 4 Claims. (Cl. 134—79.)

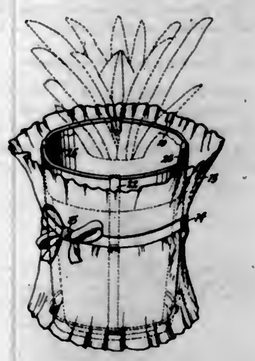
1. A composition of matter comprising a cellulose ester and a methyl ether of glycerol.

1,868,852. TUBE BENDING MACHINE. HENRY E. SCHNEIDER, Erie, Pa., assignor to Hays Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 4, 1930. Serial No. 472,826. 15 Claims. (Cl. 153—45.)



1. An article bending machine comprising a grooved forming block, spring-controlled holding clips pivotally mounted on the forming block for engaging and holding an article to be bent, a pair of members pivotally mounted on the forming block with one of said members formed to engage an article to be bent, and means connected with said members for holding one of said members against relative movement with respect to the forming block when the member engaging the article is advanced around the forming block to smooth out and bend the article.

1,868,853. FLOWERPOT HOLDER. WILLIAM H. SIEVERS, Buffalo, N. Y. Filed July 20, 1931. Serial No. 551,873. 2 Claims. (Cl. 47—34.)



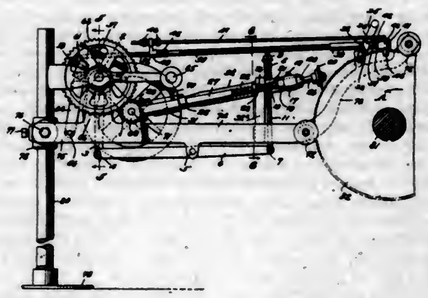
1. A flower pot holder comprising a drip pan in which the lower end of the pot is adapted to rest, and a plurality of attaching arms connected at their lower ends with said pan and adapted to be bent at their upper ends over the upper edge of said pot and provided between their lower and upper ends with laterally projecting shoulders for preventing downward movement of a tie band applied above said shoulders to the exterior of a jacket surrounding said holder and pot.

1,868,854. BATHING SUIT. MORRIS R. SMARR, Harrisburg, Pa. Filed Feb. 5, 1932. Serial No. 591,150. 6 Claims. (Cl. 66—175.)



1. In a bathing suit, bust and hip portions composed of a coarsely knitted fabric having a large factor of longitudinal expansion, trunks inside of the hip portion being partially composed of a similar coarsely knitted fabric also having a large factor of longitudinal expansion, waist and hem portions respectively connecting the bust and hip portions and bounding the free end of the hip portion, being composed of a finely knitted fabric having a small factor of longitudinal expansion, an upper waist terminal on the trunks composed of finely knitted fabric similar to said waist and hem portions, and means attaching said terminal to the place of connection of the waist and hip portions in substantial continuity with said waist portion, said attaching means occurring on a circumferential line substantially medially of the combined finely knitted waist fabrics.

1,868,855. GIN SAW GUMMING MACHINE. WILLIAM BUNION SMITH, Hartselle, Ala. Filed July 24, 1931. Serial No. 552,932. 4 Claims. (Cl. 76—32.)

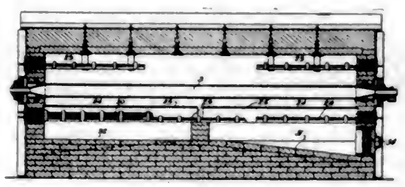


1. In a device of the class described, a support, first and second transverse shafts journaled on the support, means for connecting the shafts operatively, means for rotating one shaft, an eccentric on the first shaft, a cam on the first shaft and having a depression, a substantially straight radius arm mounted at its lower end to swing on the support and having a projection riding on the cam and entering the depression, a saw-feeding means connected to the radius arm and operated when the projection leaves the depression, a longitudinal arm mounted to swing on the second shaft, a longitudinal shaft journaled on the longitudinal arm, a saw-working tool driven by the longitudinal shaft, means for driving the longi-

tudinal shaft from the second shaft, a substantially straight lever fulcrumed intermediate its ends on the lower portion of the support, an eccentric rod pivoted directly to one end of the lever, a strap on the eccentric rod and cooperating with the eccentric, a second rod pivotally connected to the longitudinal arm and pivoted directly to the opposite end of the lever, the eccentric and the cam being so set with respect to each other, circumferentially of the first shaft, that the longitudinal arm will be actuated to dispose the saw-working tool in inoperative position whilst the projection is out of the depression and the radius arm and the feeding means are being actuated to present a new portion of the saw to the saw-working tool, and an adjustable member carried by the radius arm and cooperating with the first shaft to regulate the amount that the projection enters the depression of the cam.

2. In a device of the class described, a support, a saw-feeding rod, means for mounting the rod for reciprocation, means for imparting the reciprocation to the rod, a sleeve slidable on the rod, an abutment carried by the rod, a spring interposed between the sleeve and the abutment, saw-engaging grips mounted to swing on the sleeve and having crank arms, members of a predetermined length carried by the abutment and pivoted to the arms, a saw-working tool, and means for mounting the tool for movement toward and away from the saw in synchronism with the movement of the saw grips.

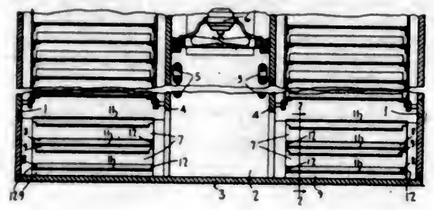
1,868,856. HEATING DEVICE FOR LEERS. JULIUS SYLVESTER, Washington, Pa., assignor to Simplex Engineering Company, Washington, Pa., a Corporation of Delaware. Original application filed Jan. 21, 1929, Serial No. 333,887. Divided and this application filed Jan. 4, 1930. Serial No. 418,577. 3 Claims. (Cl. 49—47.)



1. A leer having a heating chamber, a ware conveyor therein comprising transversely arranged longitudinally spaced rolls disposed between the top and bottom of the chamber, heating means at the top of the chamber and above the rolls comprising longitudinally spaced pairs of unitary electrical heaters, the heaters of each pair being jointly controlled and extending transversely of the leer chamber at opposite sides thereof and spaced from the center of the chamber, and heating means at the bottom of the chamber and below the conveyor comprising longitudinally spaced groups of unitary electrical heaters, each group consisting of three independently controlled heaters extending transversely of the leer chamber and arranged respectively at the center of the leer, between the center and one side of the leer, and between the center and the other side of the leer, whereby the sides of the leer at the top will be directly heated to substantially the same degree and the center and sides of the leer at the bottom may be controllably heated to the same or variable degrees, while the center of the chamber at the top will be heated by rising currents of heat from below.

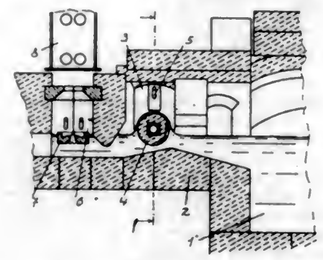
1,868,857. INCUBATOR. LA VERN C. STURGIS, Springfield, Ohio, assignor, by mesne assignments, to The Buckeye Incubator Manufacturing Company, Beachwood, Ohio, a Corporation of Ohio. Filed June 14, 1929. Serial No. 371,007. 5 Claims. (Cl. 119—35.)

1. A plurality of horizontal non-tiltable hatching trays each having an openwork bottom arranged in spaced relation one above another, a compartment for said trays open only at its ends, a horizontal baffle member between adjacent trays in spaced relation therewith, said baffle member



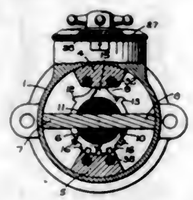
being formed as a separate element from the trays, and means for forcibly circulating air from one open end of said compartment to the other.

1,868,858. PROCESS FOR THE HOMOGENIZATION OF GLASS FLUX. RUDOLF THUM, Unterreichenau, Czechoslovakia, assignor to the Firm Montan- und Industrialwerke, vormals Joh. Dav. Starck, Prague, Czechoslovakia. Filed Dec. 6, 1929, Serial No. 412,082, and in Czecholslovakia Dec. 7, 1928. 2 Claims. (Cl. 49—54.)



1. A process for rendering glass homogeneous, in which a rotating body is dipped into a trough and extends nearly to the bottom thereof while a part of its length projects above the surface of the glass, and which is so set in rotation that the glass on its way from the smelting trough to the working trough is carried in the form of a thin layer across the portion of the rotating body which projects from the surface of the glass.

1,868,859. SHOCK ABSORBER. FRANK JOHN TIPPEN, Earlsdon, Coventry, England, assignor to Joseph Lucas Limited, Birmingham, England. Filed Apr. 12, 1930, Serial No. 443,759, and in Great Britain May 27, 1929. 10 Claims. (Cl. 188—89.)



1. A shock absorber comprising a chamber for fluid, an operating member movable in said chamber, means, associated with the operating member for forcing fluid through a restricted passage, and a valve controlling the cross sectional area of said passage, said valve being mounted to move on movement of said operating member and having a portion which moves out of said passage during movement of the operating member away from its normal position, but returns into said passage during return movement of the operating member to its normal position.

1,868,860. ROLLER CONVEYER FOR GLASS PLATES. LAMBERT VON REIS, Herzogenrath, Germany, assignor, by mesne assignments, to The American Bicheroux Company, a Corporation of Delaware. Filed Dec. 3, 1928, Serial No. 323,486, and in Germany Dec. 8, 1927. 4 Claims. (Cl. 198—127.)



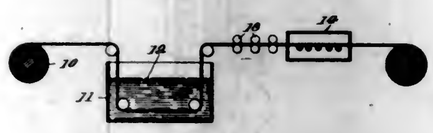
1. In a conveyer supporting system for hot sheet glass the combination with a hollow cylindrical roller, of bearings rigidly supporting the ends of the roller, a shaft projecting within the roller and having an enlarged portion therein, contacting with and supporting the inner surface of the roller intermediate of its length.

1,868,861. NUT LOCK. KARL VOSSLOH, Werdohl-in-Westphalia, Germany. Filed June 13, 1930, Serial No. 460,954, and in Germany Oct. 14, 1929. 2 Claims. (Cl. 151—36.)



1. A nut lock, consisting of a plurality of coils of a helical spring having the end-coils formed with chisel-shaped free ends, the said end-coils being bent out of the normal helical line in one direction only so as to form each an axially directed arch, the crowns of the said both arches in axial direction overtopping the chisel-shaped ends of the said arched coils and thereby not allowing the said chisel-shaped ends to engage the bearing surface and the nut respectively until the terminal tension of the screw connection has been approximately arrived by the compression of the spring.

1,868,862. DETERGENT TOWEL AND METHOD OF MAKING THE SAME. EDWARD W. WASHBURN, Washington, D. C. Filed Feb. 1, 1928. Serial No. 251,101. 3 Claims. (Cl. 87—23.)



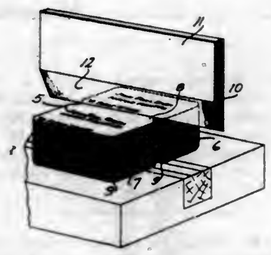
1. A detergent towel comprising toweling material slightly impregnated with a soap compound, the surfaces of said material being free of soap coating of any appreciable visibility and lather producing quantity, the proportions of soap to the toweling material being such that said toweling material possesses sufficient body and absorbent characteristics to dry as well as cleanse a moistened surface.

1,868,863. METHOD OF MANUFACTURING BIFOCAL LENSES. FRANK B. WATSON and EDWARD CULVER, London, England, assignors to United Kingdom Optical Company, Limited, London, England. Original application filed Feb. 26, 1927, Serial No. 171,217. Divided and this application filed Aug. 28, 1929. Serial No. 388,911. 3 Claims. (Cl. 49—82.1.)



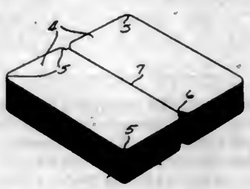
1. In a process of forming a button, joining flint and crown portions to one another, holding them in engagement with one another, mounting them on a corborundum slab covered with mica, fusing in a furnace at 620 degrees centigrade for fifteen minutes, allowing to cool in the furnace for fifteen hours, removing from the furnace, cutting the margins of the button to the desired configuration and finishing the sides thereof.

1,868,864. ART OF MANUFACTURING CARDS WITH ROUNDED CORNERS. GUSTAVE A. WILKE, Milwaukee, Wis., assignor to Leader Card Works, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 1, 1930. Serial No. 432,356. 4 Claims. (Cl. 281—43.)



1. The method of manufacturing round corners cards which consists in cutting said cards from a blank comprising a plurality of card units, each such unit having preformed rounded corners, and the respective units being spaced by intervening web portions of the blank, separating each of said units from its adjacent web portion by cutting upon a line tangent to the arcs of the rounded corners of said unit, and individually separating each next consecutive unit from the same intervening web portion by cutting upon a line tangent to the arcs of other corresponding corners.

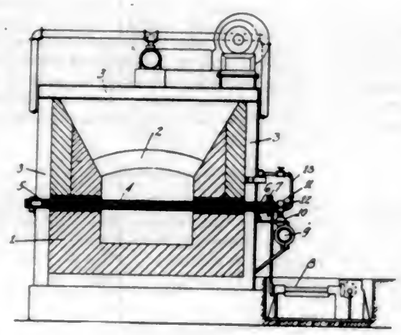
1,868,865. PROCESS FOR THE MANUFACTURE OF ROUND CORNERED CARDS. GUSTAVE A. WILKE, Milwaukee, Wis., assignor to Leader Card Works, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 20, 1931. Serial No. 538,761. 2 Claims. (Cl. 281—43.)



2. The process of manufacturing round cornered smooth edge cards which includes the forming of a blank comprising a plurality of card units having individually

rounded corners and integrally joined by an intervening web portion, the scoring of the web portion of the blank between the units, the subsequent separation of the units by breaking the blank upon its score line, and the subsequent trimming of the web portions from the units.

1,868,866. METAL HEATING FURNACE. MARION S. AMBURGEY, Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed July 30, 1928. Serial No. 296,166. 4 Claims. (Cl. 263—6.)



1. A metal treating furnace having a support for metal therein, which comprises a series of bare hollow tubes of constant diameter, said tubes having an outlet as large as the internal diameter of said tubes, and means for maintaining a flow of water through said tubes, in full contact with the interior walls of the said tubes.

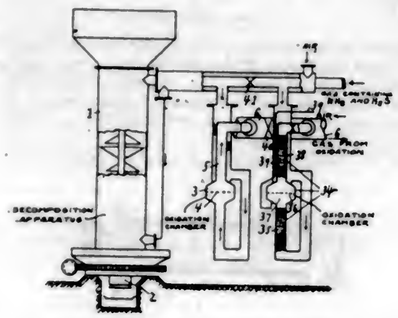
1,868,867. CLIP. CARL E. ANDERSON, East Orange, and CARL E. PETERSON, Upper Montclair, N. J., assignors to Eastern Tool & Mfg. Co., Bloomfield, N. J. Filed May 6, 1931. Serial No. 535,310. 1 Claim. (Cl. 24—265.)



A clip for garment slide, comprising a sheet of metal bent into a return bend to form opposed flat walls of greater width than length one of said walls being bent again at its end to form a flat inner wall spaced from the wall from which it is bent, the said flat spaced wall having spaced openings extending across its width, and spaced prongs extending inwardly from the opposed wall and arranged to pass through the openings and lie between the flat walls of the double wall when the clip is compressed.

1,868,868. PRODUCTION OF NITRIC AND SULPHURIC ACID. HANS BÄHR, Ludwigsbafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 21, 1928, Serial No. 248,506, and in Germany May 22, 1926. 7 Claims. (Cl. 23—168.)

1. A process for the simultaneous production of nitric acid and sulphuric acid which comprises treating a gas mixture containing ammonia and volatile sulphur compounds in mixture with gases containing oxygen with



the aid of oxidizing catalysts, converting the oxidation products into sulphuric and nitrosylsuphuric acid and decomposing the latter into nitric and sulphuric acid.

1,868,869. ADSORBENT MATERIAL AND METHOD OF PRODUCING THE SAME. JESSE B. BARNITT, Pittsburgh, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 28, 1928. Serial No. 322,589. 10 Claims. (Cl. 252—2.)

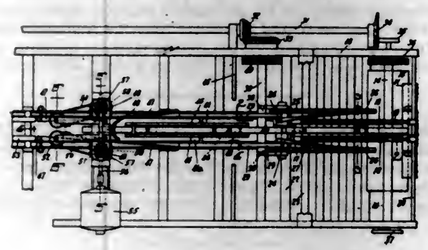
1. In preparing a moisture-adsorbent material by the partial calcination of aluminum trihydrate, the step of subjecting to the calcination, aluminum trihydrate which is in the form of a hard, stony, non-friable scale precipitated from an alkali aluminate solution, and producing thereby an adsorbent material having high adsorptive properties, permanent in form and size, and capable of repeated regeneration and re-use without disintegration or material impairment of its adsorptive properties.

1,868,870. APPARATUS FOR CHARGING FUEL. WALTER A. BARR, Fort Wayne, Ind., assignor to The Western Gas Construction Company, a Corporation of Indiana. Filed Feb. 5, 1930. Serial No. 426,071. 7 Claims. (Cl. 214—18.)



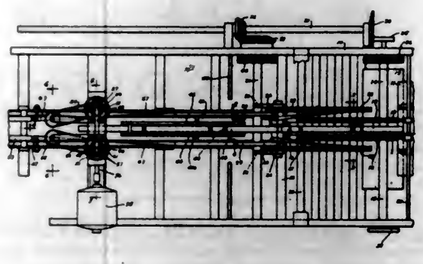
1. A charging device for a gas generator comprising a hopper adapted to be positioned over the charging opening of the gas generator, a charging valve disposed in said hopper and adapted to serve as a closure for said opening, means for lowering said charging valve into said generator, an inlet door in said hopper adapted to be closed when said charging valve is in other than a closed position in said charging opening, and a fuel-retaining valve located above said charging valve in said hopper and adapted to open when said inlet door is closed and said charging valve has been lowered into said generator.

1,868,871. MACHINE AND PROCESS FOR MAKING PAPER BOXES OR THE LIKE. SAMUEL BERGSTEIN, Cincinnati, Ohio. Filed Apr. 15, 1929, Serial No. 355,039. Renewed Mar. 7, 1932. 16 Claims. (Cl. 93—49.)



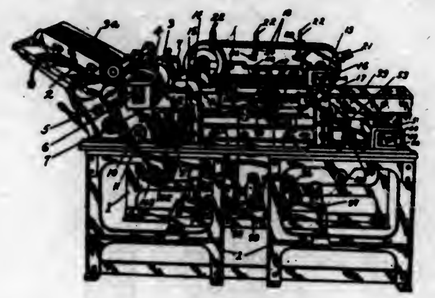
1. A machine for making paper boxes of blanks having front and rear end flaps and side flaps intermediate the end flaps, as the blanks are moved on said machine, including means for moving said blanks on said machine without pause for forming the boxes, means for folding over said intermediate side flaps, means along the plane of movement of the blanks for folding said end flaps diagonally over said side flaps for effecting adhesion between said end and side flaps.

1,868,872. PAPER BOX MAKING MACHINE. SAMUEL BERGSTEIN, Middletown, Ohio. Filed Aug. 5, 1929. Serial No. 383,679. 10 Claims. (Cl. 93—49.)



1. A machine for making paper boxes of blanks having front and rear end flaps and side flaps intermediate the end flaps, as the blanks are moved on said machine, including means for moving said blanks on said machine without pause for forming the boxes, means for folding over said side flaps, means along the plane of movement of the blanks common to the front and rear end flaps for folding the flaps diagonally over said side flaps for effecting adhesion between said end and side flaps.

1,868,873. MACHINE FOR OPENING CARTONS OR TRAYS. SAMUEL BERGSTEIN, Cincinnati, Ohio. Filed Oct. 28, 1930. Serial No. 491,736. 12 Claims. (Cl. 93—36.)



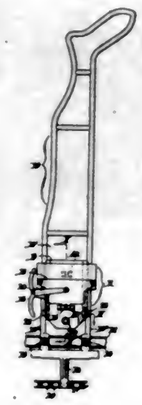
1. A machine for opening up knock down flatly folded containers, including a conveyor for feeding the containers through the machine, means for partially opening the containers, and means for folding in the ends of the containers during their transit through the machine, said last named means adjustable for various sized containers.

1,868,874. COMBINATION PUMP AND GAS LIFT. HUGH S. BERKEY, Huntington Beach, Calif., assignor of one-fourth to August L. Segelhorst, Huntington Beach, Calif. Filed Feb. 17, 1930. Serial No. 429,033. 38 Claims. (Cl. 103—46.)



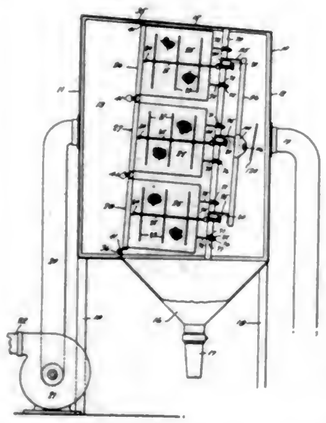
1. A pumping apparatus embodying the combination of: a power cylinder adapted to be suspended in a well; a piston in said power cylinder, said piston having a longitudinal passage therethrough; a liquid delivery tubing suspended in said well, and extending through the passage in said piston; means for alternately delivering a pressure fluid through said piston into said power cylinder at opposite ends thereof, for effecting reciprocation of said piston in said cylinder; means for alternately delivering exhaust pressure fluid through said piston into said delivery tubing; a plunger barrel in said well; a plunger in said barrel connected with said piston; and means for delivering liquid pumped by said plunger into said liquid delivery tubing.

1,868,875. DRYING AND SHAPING FORM FOR HOSIERY AND THE LIKE. WILHELM BOCK, Gwynedd, and HOWARD W. MATTHEWS, Lansdale, Pa., assignors to Dexdale Hosiery Mills, Lansdale, Pa., a Corporation of Pennsylvania. Filed June 26, 1930. Serial No. 463,902. 9 Claims. (Cl. 223—17.)



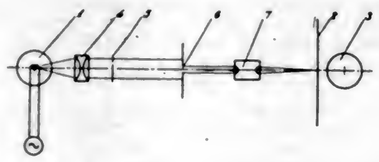
1. In a form for hosiery and the like, a vertical profiled frame member; a weighted tensioning member slidable up and down on the frame member; means for detachably securing the weighted tensioning member to a stocking mounted on the form; and adjustable means for frictionally-restraining the free movement of the weighted member in accordance with the tension desired in the stocking.

1,868,876. DUST COLLECTOR. GEORGE A. BOESGER, Fairview Village, Ohio, assignor to The W. W. Sly Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 21, 1931. Serial No. 517,457. 7 Claims. (Cl. 183—58.)



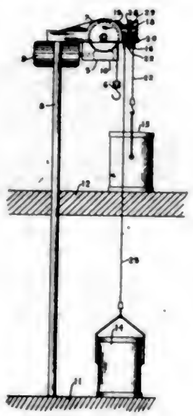
1. A dust collector including a casing, a retaining wall in said casing, a plurality of envelope-like screens secured in said wall adjacent each other, means for holding said screens in distended position, means for vibrating said screen including a flexible member extending therebetween carrying beaters adapted to strike the said screen, and means for vibrating said flexible member.

1,868,877. LIGHT SENSITIVE DEVICE. FRANCIS HUGH BRITTAIN, Pinner Wood, Pinner, England. Filed Dec. 16, 1930, Serial No. 502,872, and in Great Britain Dec. 27, 1929. 4 Claims. (Cl. 179—100.3.)



1. A method of reducing undesirable variations in the output current of a light sensitive device, the said variations being produced by the flicker of an illuminating incandescent source fed by alternating current, which method comprises the step of excluding from the said light sensitive device that part of the radiation from the said incandescent source which is of relatively short wavelength.

1,868,878. ASH HOIST AND LOWERING ATTACHMENT. MAURICE M. BOTNICK, Brooklyn, N. Y., assignor to Joseph W. Wunsch and Samuel Wunsch, co-partners doing business as Silent Hoist Winch & Crane Co., Brooklyn, N. Y. Filed Apr. 16, 1931. Serial No. 530,577. 6 Claims. (Cl. 254—142.)



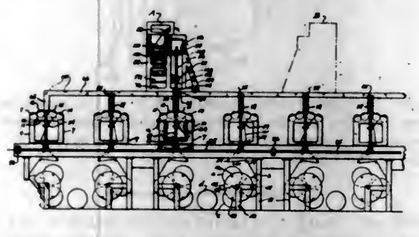
1. Ash handling apparatus comprising a hoist having a housing, a lowering device having a bracket with an end piece and an overhead arm, bars connecting said end piece to the housing, means for securing the arm to the housing, a reel rotatably supported between said end piece and said housing and a brake coacting with said reel.

1,868,879. TREATMENT OF TARS. CHARLES FREDERICK BROADHEAD, Toorak, and ROLAND STUART ANDREWS, Caulfield, Victoria, Australia, assignors of one-half to B. H. P. By-Products Proprietary Limited, Melbourne, Victoria, Australia, a Company of Victoria. Filed Oct. 31, 1929. Serial No. 403,906, and in Australia Nov. 29, 1928. 12 Claims. (Cl. 196—22.)

11. In the treatment of tar to convert it into a condition such that at normal temperatures it is similar to a plastic pitch, which comprises adding an aldehyde of the condensation type and a condensation catalyst to the tar and digesting the mixture at a temperature not exceeding 100° C. until there has been condensation of aldehyde with tar acids in the tar, adding a polymerizing accelerant to

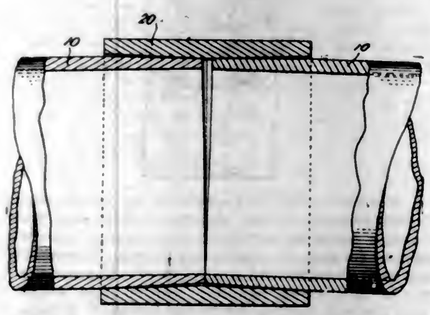
the product, raising the temperature of the product to between 100 and 200° C., and bringing an oxidizing gas into contact with the heated product so as to increase its viscosity.

1,868,880. PRINTING PRESS. MARTIN W. BRUESHABER, Chicago, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Aug. 17, 1926, Serial No. 129,689. Renewed June 11, 1931. 21 Claims. (Cl. 270—8.)



1. A web printing press including in combination a plurality of printing couples, a folder, and means for moving the folder relatively to the printing couples to bring it into various folding relations to the printing couples, said folder being positionally reversible relatively to the printing couples.

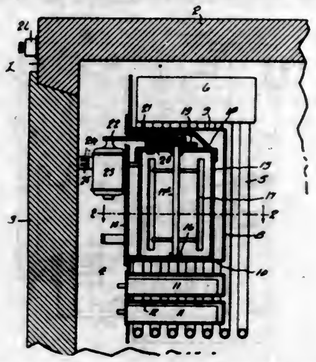
1,868,881. METHOD OF LAYING MULTIPLE FIBER CONDUIT. EDMUND BURKE, Portland, and JOHN C. SHERMAN, Gorham, Me., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Jan. 14, 1931. Serial No. 508,636. 2 Claims. (Cl. 247—34.)



2. A method of laying multiple conduit in curves, which comprises tapering the ends of single conduit sections, assembling single sections in parallel spaced relation to form multiple sections, joining multiple sections end to end with fiber coupling collars to form a continuous multiple conduit, some of the successive adjoining multiple sections being laid at an angle to each other to change the direction of the continuous conduit, and reinforcing the joints between the conduit sections and coupling collars with a plastic coating.

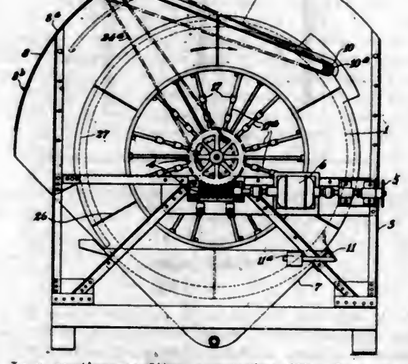
1,868,882. ICELESS REFRIGERATOR. LORN CAMPBELL, Jr., Lakewood, Ohio. Filed Sept. 11, 1929. Serial No. 391,762. 3 Claims. (Cl. 62—114.)

3. An iceless refrigerating apparatus comprising a casing having a refrigerating chamber therein, a freezer unit adapted to be inserted into and removed from said chamber, the said unit having a base, a cylindrical receptacle extending vertically upward from the base of said unit, a stirring shaft mounted in the cylinder and extending vertically upward from the base thereof, a cover for the top of the said receptacle through which the upper end of the said shaft extends, reduction gearing carried by said cover for driving the said shaft, the said unit having a front



wall forming a closure for the front of the refrigerating chamber, and a motor carried by the front wall of the said unit arranged to drive the said reduction gearing.

1,868,883. CONTINUOUS FILTER. ROBERT C. CAMPBELL, Millburn, N. J., assignor, by mesne assignments, to Oliver United Filters Inc., San Francisco, Calif., a Corporation of Nevada. Filed June 23, 1927. Serial No. 200,872. 14 Claims. (Cl. 210—201.)

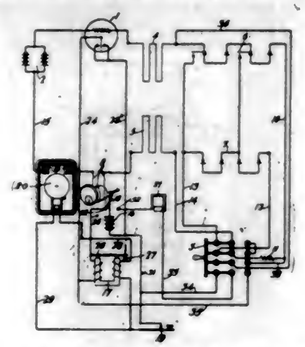


1. In a continuous filter, a rotating filter drum, means to form a filter cake on the surface thereof, and means to reduce cracking of the filter cake during drying thereof comprising a roller contacting with said cake and means to rotate said roller in the same direction as the rotation of the filter drum.

1,868,884. ALARM SYSTEM. LELAND H. CHASE, Northampton, Mass., assignor to Holmes Electric Protective Company, New York, N. Y., a Corporation of New York. Filed June 7, 1922. Serial No. 566,528. 8 Claims. (Cl. 177—314.)

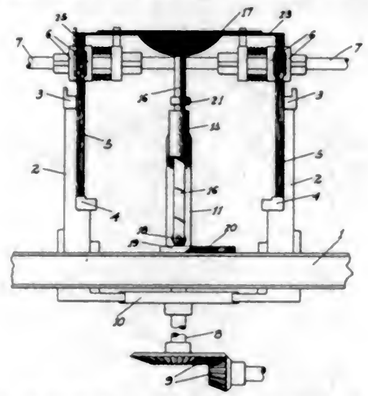
1. An alarm system comprising a closed protective circuit, a galvanometer relay in said circuit and operated by a change in the resistance of said circuit, a buzzer circuit for day operation, a gong circuit for night operation, said circuits being controlled at a normally open contact of said relay, a two position key controlled switch in one position closing a break in said buzzer circuit and the other position closing a break in said gong circuit, alarm traps,

a two position switch controlling said closed protective circuit and in one position including said traps in said network and in the other position excluding them while maintaining said protective circuit closed, a second circuit for



said buzzer, including the contact of said key switch connected to the buzzer, the buzzer and the contacts of the two position switch which are closed when said switch is in its position including said traps.

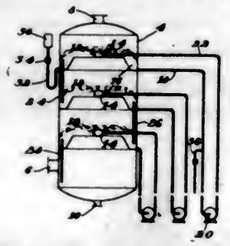
1,868,885. SHOOK STOP FOR BOX NAILING MACHINES. FRANK CHEKIAN, Modesto, Calif. Filed May 17, 1930. Serial No. 453,183. 7 Claims. (Cl. 1—10.)



1. A back-stop structure for the side shook of a box when assembling such shook in connection with the box ends in a nailing machine, said machine including supports for the box ends and a shaft revoluble through a predetermined partial revolution with each functioning of the nailing mechanism of the machine; said back-stop structure including a back-stop plate positioned for engagement with the back edge of the shook when resting on the supported box ends, means mounting said plate for vertical movement, and means functioning with a partial revolution of the shaft for moving said back-stop vertically and clear of the horizontal plane of the shook.

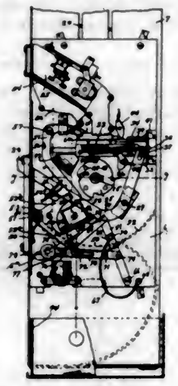
1,868,886. METHOD AND APPARATUS FOR PROMOTING CONTACT. RAYMOND R. COLLINS, Newton, Mass., assignor to The Lummus Company, a Corporation of Delaware. Filed Oct. 11, 1928. Serial No. 311,804. 5 Claims. (Cl. 261—111.)

1. An apparatus for rectification under high vacuum comprising a tower having a substantially unobstructed path for flow of vapors therethrough, an inlet for vapors below the top of the tower, a spray device in the tower for spraying liquid across the path of the vapors, a collecting trough for the liquid, and means for returning the collected liquid from the trough to the spray device including a pump external to the tower, and pipe leading



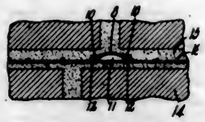
from the trough to the pump and from the pump to the spray device, the pump being located below the tower a distance approximating the length of a barometric column of the liquid.

1,868,887. COIN CONTROLLED APPARATUS. ARTHUR H. DU GRENIER, Haverhill, Mass. Original application filed July 13, 1929, Serial No. 377,946, and in Germany June 26, 1930. Divided and this application filed Feb. 24, 1931. Serial No. 517,816. 12 Claims. (Cl. 194—1.)



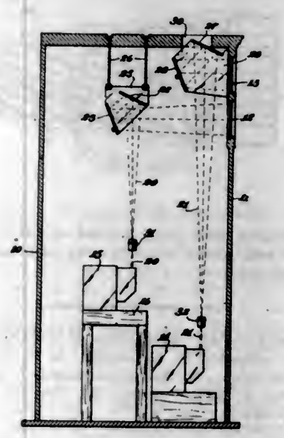
4. In a check controlled apparatus, an article dispenser, a locking device normally operative to hold said dispenser in article retaining position and movable to permit said dispenser to move to a delivering position, a check directing device normally held in a check rejecting position and movable to a check retaining position, and means controlled by said locking device for normally holding said check directing device in its check rejecting position when said locking device is in its normal position and for moving said check directing device to its check retaining position when said locking device is moved to permit said dispenser to be moved to its delivering position.

1,868,888. CAP FOR FLASHING. CHARLES A. EARLEY, Dorchester, Mass. Filed Dec. 26, 1931. Serial No. 583,219. 5 Claims. (Cl. 72—127.)



1. A cap of the character described comprising a strip of sheet material having an arch portion embodied therein and extending longitudinally thereof, and a plurality of other arch portions extending transversely of said strip and intersecting said longitudinal arch.

1,868,889. DUPLEX PROJECTION. AUGUST D. EITZEN, New York, N. Y., assignor to News Projection Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 26, 1929. Serial No. 350,113. 5 Claims. (Cl. 88—24.)

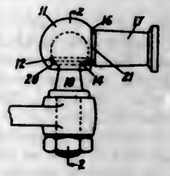


1. The combination with a housing having a wall, of a pair of display screens one above the other in said wall, a projecting device in said housing, a second projecting device in said housing between said wall and said first projecting device, each of said projecting devices including a light source adapted to project a beam of light in a direction substantially parallel to said wall, a reflecting means for transmitting the light beams from said first projecting device in substantially perpendicular directions onto said lower screen, and a second reflecting means for transmitting the light beams from said second projecting device in substantially perpendicular directions onto said upper screen whereby the distances traversed by the light beams to said screens may be made substantially equal, said second reflecting means extending up partly into the top of said housing and the upper portion of said first reflecting means extending up above the lower edge of said second reflecting means.

1,868,890. MIXED FERTILIZER. CARL EYER and FRIEDRICH KORN, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 12, 1930, Serial No. 451,838, and in Great Britain Apr. 14, 1930. 10 Claims. (Cl. 71—9.)

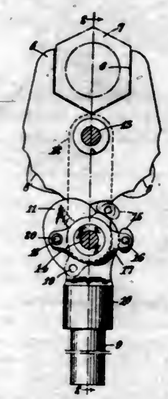
1. In the production of solid fertilizers by solidification of melts containing substantial amounts of ammonium nitrate, the step of adding to the melt a small amount of a water-soluble magnesium salt.

1,868,891. COUPLING. FRITZ FAUDI, Dusseldorf-Oberkassel, Germany. Filed Apr. 24, 1929, Serial No. 357,771, and in Germany Oct. 9, 1928. 3 Claims. (Cl. 287—90.)



1. In a ball and socket coupling where the ball is retained in its socket in working position by means of a wire expansion ring in a groove, securing means in said groove for holding said expansion ring in contracted position to prevent the inadvertent withdrawal of the ball from its socket.

1,868,892. WRENCH AND LIKE HAND TOOL. THOMAS LILLIE FYFFE, Dundee, Scotland, assignor to Fyffe & Company Limited, Dundee, Scotland, a British Company. Filed June 30, 1931, Serial No. 547,840, and in Great Britain Aug. 23, 1930. 6 Claims. (Cl. 81—59.)



1. A wrench comprising in combination a flat head, at least a portion of the periphery of which corresponds with an arc of a circle and is formed with a series of depressions, a handle, a link pivoted at one end of the head at the centre of the arc, and at the other end to the handle, a projection, rigid with the handle and extending towards the head and to one side of the pivot of the handle, for engaging said depressions, a wedge, and a link pivoting said wedge to the end of the handle aforesaid, said wedge being movable into a position between the end of the handle and the head to lock the two together.

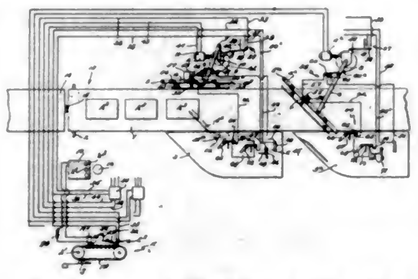
1,868,893. PORTABLE MASSAGE AND SPRAY APPARATUS. ROBERT BRUCE GENTLE, New York, N. Y. Filed Aug. 20, 1928. Serial No. 300,841. 1 Claim. (Cl. 128—173.)



A portable massage and spray apparatus for treating the mouth, throat and nose including a nozzle having an inlet end adapted to be detachably connected to the discharge end of a flexible hose, a control valve adjacent the inlet end of said nozzle arranged to normally close a passage therethrough, a pop-off valve interposed between said control valve and inlet end of said nozzle, a discharge end portion to said nozzle that is offset angularly to the main portion of said nozzle, a smooth ball

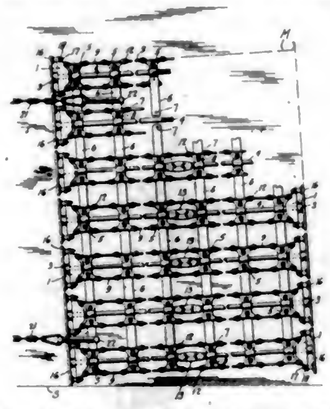
tip at the discharge end of said nozzle, and a soft rubber nipple detachably connected to said ball tip, said nipple having protuberances for massaging the gums while a treating mixture is discharged from said nozzle.

1,868,894. CONVEYER. OTTO M. GLAHN, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed May 3, 1929. Serial No. 360,184. 30 Claims. (Cl. 214—11.)



1. Apparatus of the class described comprising a conveyer, a normally inoperative switch device for diverting articles from the conveyer, a timing controller adapted to move said switch device to an operative position after a predetermined delay, means tending to retain the switch in operative position, release means actuable by an article diverted from the conveyer by said switch for restoring the switch to inoperative position, and means to prevent operation of said release means so long as any article is within range of operation of the switch.

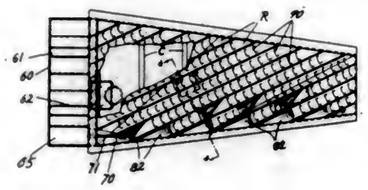
1,868,895. ROAD MAINTENANCE EQUIPMENT. CHARLES FRANKLIN GODDARD, Los Angeles, Calif., assignor to The Automobile Storage Elevator Company, Denver, Colo., a Corporation. Filed Dec. 19, 1930. Serial No. 503,454. 35 Claims. (Cl. 37—143.)



7. In a road maintenance device, parallel longitudinally extending rigid units and transversely extending springs rigidly attached to and joining adjacent units.

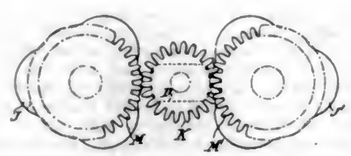
1,868,896. DRY CONCENTRATOR. HORACE A. GOOLD, Southgate, Calif., assignor of one-half to Michael L. Fogarty, Los Angeles, Calif. Filed Apr. 4, 1930. Serial No. 441,613. 6 Claims. (Cl. 209—467.)

5. A riffle provided with a riser of a wedge shape tapered in two directions, the thick side of said riser being positioned along one side of one of the riffle walls to discharge the gangue into the next riffle, said riser having a longitudinal groove adjacent the next riffle to



discharge values over the front end of the riser, thereby preventing said values from passing into the next riffle with the gangue.

1,868,897. CAN HEADING MACHINE. CHARLES GUERITEY, Passaic, N. J., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of Delaware. Filed Jan. 2, 1931. Serial No. 506,093. 3 Claims. (Cl. 113—24.)



1. A can heading machine of the described type, having a non-circular mandrel and seamers of contours complementary thereto, the seamers having a given radial movement toward and from the mandrel, and gearing for maintaining definite angular relations between the seamers and mandrel, characterized in that such gearing comprises a master gear having fixed relation to the mandrel and seamer gears fixed to the seamers, said gears having teeth of a depth greater than such radial movement, so as to remain in mesh during the movements of the seamers toward and from the mandrel.

1,868,898. ALLOY. CHARLES F. HAMMOND, New Haven, Conn., assignor to Winchester Repeating Arms Company, New Haven, Conn., a Corporation of Maryland. Filed May 20, 1932. Serial No. 612,639. 2 Claims. (Cl. 75—1.)

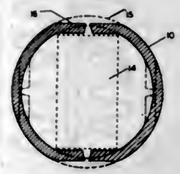
1. An alloy comprising the following ingredients in substantially the following proportions:

Silicon	0.15% to 1.00%
Manganese	0.17% to 1.00%
Zinc	4.0% to 6.00%
Copper	Balance.

1,868,899. PROCESS OF KNITTING. JOSEPH A. HARRON, Elkins Park, and JAMES J. DIAMOND and GUSTAV BLEY, Philadelphia, Pa., assignors to Harron Hosiery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 12, 1931. Serial No. 522,176. 6 Claims. (Cl. 66—125.)

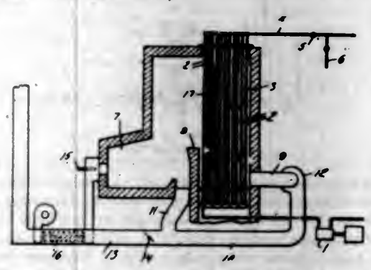
1. The process of knitting, comprising using a yarn package impregnated with a size to adhere the convolutions of yarn to each other to resist unwinding, where by means of such size a tension is applied to the yarn as it is fed between the package and needles.

1,868,900. CHAMFER SLOTTING PIPE. HARRY HAYES, Los Angeles, Calif., assignor to General Petroleum Corporation of California, a Corporation of Delaware. Filed Aug. 24, 1929. Serial No. 388,187. 3 Claims. (Cl. 29—163.5.)



1. The method of making chamfer-slotted pipe which comprises: forming in said pipe, while maintaining the pipe in rounded form, a slot having substantially parallel walls, thereafter applying pressure to that area of the pipe in which the slot is formed, until both the inner and outer walls of the said pipe in the region of the slot become substantially flat with consequent narrowing of the outer edges only of the said formed slot.

1,868,901. ART OF CRACKING HYDROCARBONS. EUGENE C. HERTHEL, Flossmoor, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Apr. 4, 1930. Serial No. 441,554. 2 Claims. (Cl. 196—116.)



1. In heating hydrocarbon oils to cracking temperatures, the improvement which comprises burning fuel in a combustion chamber, transmitting radiant heat from said combustion chamber directly to a heating chamber, passing hot gaseous products of combustion from said combustion chamber to said heating chamber and compelling them, in such passage, to pass along a path substantially longer than that along which radiant heat is transmitted to said heating chamber and long enough to avoid flame impingement upon heating tubes in said heating chamber by introduction between the combustion chamber and the heating chamber of a stream of recirculated heating gases withdrawn from the heating chamber, and circulating oil thru a plurality of heating tubes arranged in said heating chamber, thereby heating the oil to a cracking temperature in the heating tubes in said heating chamber both by sensible heat absorbed from the heating gases from the combustion chamber and by radiant heat transmitted directly from the combustion chamber.

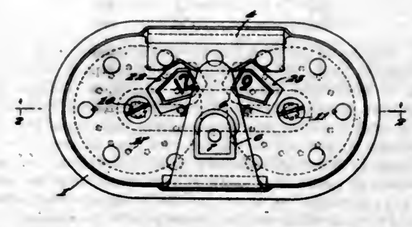
1,868,902. AUXILIARY AIR INTAKE AND MIXING DEVICE. THOMAS E. JACKSON, Youngstown, Ohio. Filed July 13, 1928. Serial No. 292,458. 1 Claim. (Cl. 48—180.)

In a device of the class described, the combination of a relatively thin plate adapted to be inserted between a carburetor and a manifold pipe, a central annular groove in said plate, a plurality of air inlets communicating from outer edge of said plate to said central annular groove, a plurality of lips formed within said central annular groove, said lips being curved and symmetrical and each lip being provided with a similar twisted curved edge, said inlets formed in said plate and leading inwardly to said annular groove and directly back of



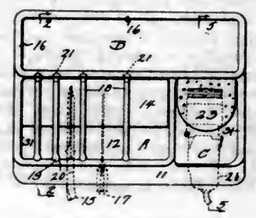
the base of each of said lips for the purpose of introducing air into a whirling and twisting explosive mixture in an oppositely whirling movement, substantially as described.

1,868,903. CARRIER FOR DISPATCH SYSTEMS. CHESTER S. JENNINGS, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Apr. 8, 1930. Serial No. 442,515. 14 Claims. (Cl. 40—70.)



1. A pneumatic dispatch carrier having a body and a hinged end closure, fastening means disposed at the central part of the closure, the closure having a window at each side of the fastening means, and a pair of index carriers mounted at the inner side of the end closure and having index characteristics which may be exposed through the respective windows.

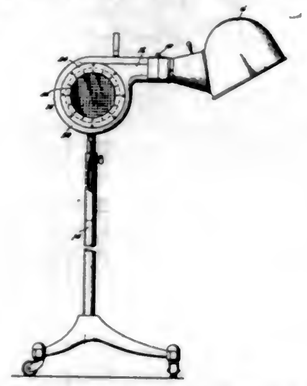
1,868,904. BARBER'S STERILIZER. IRA J. JOHNSTON, Sac City, Iowa. Filed Jan. 31, 1931. Serial No. 512,650. 5 Claims. (Cl. 167—3.)



3. A sterilizer of moulded material formed in a single body comprising a solid back portion and a wedge shaped forward wall connected by end walls and bottom wall to form an upwardly flaring shears or razor compartment, said forward wall being adapted to support a razor that has been opened to an angle approximating the cross-sectional angle of the wall in such a manner as to prevent

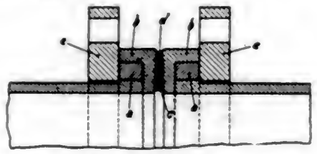
twisting of the blade of the razor relative to said wall, and a comb tray formed in said solid back portion and projecting above the level of the upper extremity of said forward wall.

1,868,905. DRIER OR BLOWER. JOHN E. KELLEY, Larchmont, N. Y., assignor to Eastern Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 13, 1930. Serial No. 502,021. 9 Claims. (Cl. 219—39.)



1. A drier of the type described, comprising a fan of the peripheral blade type having a central space within the ring of peripheral blades, a fan casing, a delivery tube connected to said casing and an electric heater said heater being located within said space within the ring of peripheral blades on the intake side of said fan, whereby the casing and tube on the delivery side of said fan are unobstructed by said heater and the work which said fan would have to perform to overcome the choking effect offered by a heater located in the delivery tube, is avoided.

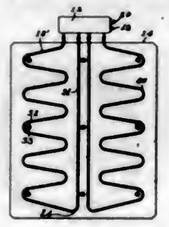
1,868,906. FLANGE PIPE CONNECTION. JAKOB KEULERS, Hilden, Germany. Filed Dec. 12, 1929, Serial No. 413,630, and in Germany May 16, 1928. 1 Claim. (Cl. 285—140.)



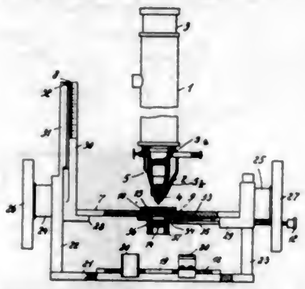
A flange connection for pipes comprising rings shrunk one on each pipe end a short distance behind the end of the pipe, and a portion of the pipe end projecting from the ring upset so that it is bent in U-shape around the corresponding ring, a loose flange on each pipe end bearing against the end of said upset U-shaped portion, the opposite surfaces of said U-shaped bent portions of the pipe ends inclined to the pipe wall forming between the abutting pipe ends a packing space of trapeziform cross section narrower towards the outer side, and a packing ring of corresponding trapeziform cross section in said packing space.

1,868,907. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 31, 1928. Serial No. 316,274. 9 Claims. (Cl. 62—95.)

4. A refrigerating element for cooling air flowing thereover, said element including header means for liquid refrigerant, a plurality of vertically extending serpentine evaporator chambers having the outlets thereof connected with the header means and having the inlets thereof at the lower ends, fin means below the header thermally connected with said chambers, and down flow duct means connecting the inlets with the header means, said duct means being disposed so as to be thermally protected from relatively warm circulating air.

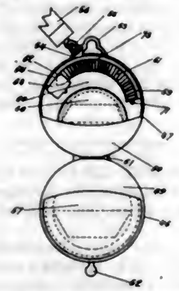


1,868,908. MICROSCOPE REFRACTOMETER. HENRY WILLIAM LINDLEY, Berlin-Lichterfelde, Germany. Filed Apr. 10, 1930, Serial No. 443,232, and in Germany Apr. 16, 1929. 12 Claims. (Cl. 88—14.)



1. A microscope refractometer comprising an ocular and an optical system below and coaxial with said ocular, said optical system being composed of two lens systems, one of said lens systems remaining stationary during operation and forming with said ocular a telescope adjusted for infinitely, the other lens system being removable and forming with said stationary lens system and said ocular a microscope, a refractometer table tiltably arranged below said optical system, a scale member for measuring the tilting angle of said table, optical illuminating means associated with said table and means arranged to shape the liquid to be refractometered as required for refractometration.

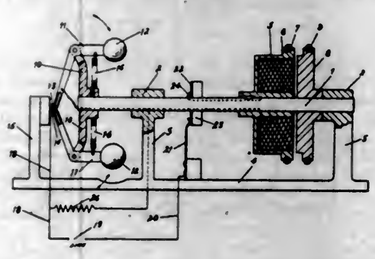
1,868,909. COMPACT AND VANITY SET. JOSEPH EUGÈNE BAPTISTE MAILLARD, Nogent-le-Roy, France. Filed Aug. 26, 1930, Serial No. 479,060, and in France Sept. 2, 1929. 9 Claims. (Cl. 132—83.)



1. A compact or vanity case comprising two circular members hinged together at their edges, said members being formed to provide a container, one of said members

having retaining means for a pad, said retaining means formed adjacent the edge of the last mentioned member with an arcuate recess for receiving a flexible pencil.

1,868,910. GOVERNOR. JOHN M. MILLER, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y. Filed Nov. 6, 1929. Serial No. 405,260. 4 Claims. (Cl. 192—84.)



1. A magnetic speed control mechanism, comprising a pulley armature mounted for rotation, an electromagnet mounted for rotation in proximity to said pulley and adapted to attract the same and to form therewith a motion transmitting clutch, means for supplying current to said electromagnet and including a normally closed main circuit and a shunt circuit, a resistance element in said shunt circuit, and means rotatable with said electromagnet for automatically opening said main circuit and causing the current to flow through said shunt circuit thereby to reduce the current supply to the electromagnet when the rotation thereof has reached a predetermined speed.

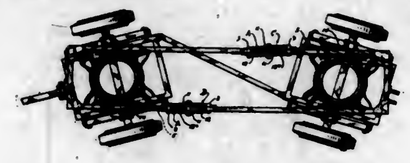
1,868,911. THERMOMETER. EDWARD M. PHELPS, Terre Haute, Ind., assignor to Terre Haute Advertising Company, Terre Haute, Ind., a Corporation of Indiana. Filed June 26, 1929. Serial No. 373,793. 4 Claims. (Cl. 73—52.)



3. As an article of manufacture, a tubular body of transparent material, a closure for the lower end thereof, an indicator card received within said body, said card being bent to form a part-cylindrical portion of a peripheral extent of more than 180 degrees and less than 360 degrees contacting the inner wall of said body, and said card being folded to form a pair of mutually reenforcing leaves subtending the arc defined by the opposite edges of said part-cylindrical portion, and a thermometer carried by one of said leaves.

1,868,912. STEERING MECHANISM STABILIZER. WALTER E. PLANK, San Francisco, Calif. Filed Mar. 16, 1931. Serial No. 522,942. 7 Claims. (Cl. 280—100.)

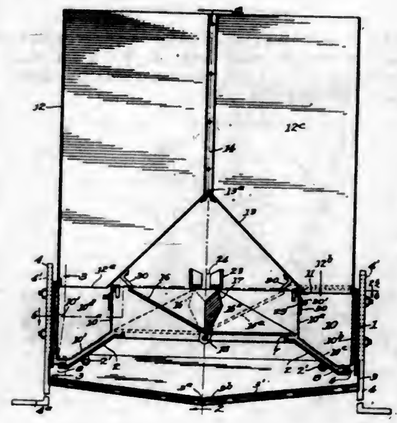
1. The combination with the steering wheels and the main frame of a trailer, of a cylinder, a universal support connecting the cylinder to the frame of the trailer, said cylinder being longitudinally movable in the universal support, spring means resisting longitudinal movement of the cylinder, a fluid resisted piston in the cylinder, and means connecting the piston with the steering wheels.



1,868,913. METHOD OF SUPPLYING SOLUBLE FERTILIZING AGENTS TO SOIL. EUGENE L. PRIZER, Solana Beach, and JOHN A. PRIZER, Fullerton, Calif., assignors of one-third to said Eugene L. Prizer, one-fourth to said John A. Prizer, one-fourth to Donald C. Jones, Fullerton, Calif., and one-sixth to Harry G. Nutt, Altadena, Calif. Filed Apr. 5, 1930. Serial No. 442,082. 5 Claims. (Cl. 47—58.)

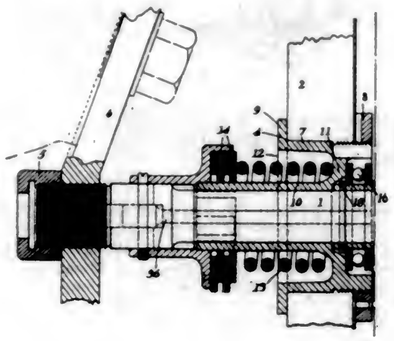
1. The method of supplying a soluble fertilizing agent to soil which comprises dissolving such fertilizing agent in irrigating water so as to provide a concentration thereof not exceeding 2000 parts per million, and then delivering such irrigating water containing said fertilizing agent in solution to the surface of the soil and causing the same to flow in contact therewith.

1,868,914. METHOD AND APPARATUS FOR SUPPLYING SOLUBLE AGENTS TO LIQUIDS. EUGENE L. PRIZER, Solana Beach, Calif., assignor of one-fourth to John A. Prizer and one-fourth to Donald C. Jones, Fullerton, Calif., and one-sixth to Harry G. Nutt, Altadena, Calif. Filed Oct. 5, 1931. Serial No. 567,115. 22 Claims. (Cl. 61—12.)



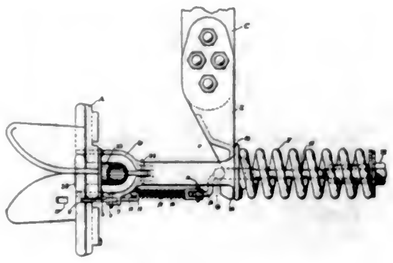
1. A method for supplying soluble agents to flowing liquids which comprises directing successive measured portions of liquid into dissolving contact with a body of soluble agent, so as to successively form thereby solution units of definite quantity and concentration of soluble agent, causing said solution units to be removed from contact with said soluble agent, and delivering said successive solution units to a flowing stream of liquid.

1,868,915. MOUNTING FOR CARRIERS FOR COILS OF FLEXIBLE STRIP MATERIAL IN TAPING AND OTHER MATERIAL. ARTHUR BRUCE FRASER GILLESPIE RICHARDSON, Belvedere, England. Filed Feb. 13, 1931, Serial No. 515,573, and in Great Britain Feb. 19, 1930. 2 Claims. (Cl. 242—75.)



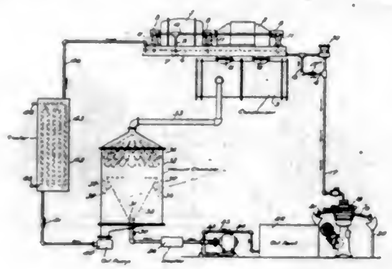
1. An arrangement for controlling by a braking device the tension on flexible material being withdrawn from a coil mounted on a spindle which itself revolves in space about an external axis, which comprises the spindle, a coil carrier rotatably mounted thereon, a fricton braking device also mounted on the spindle and controlling the freedom of relative movement of said carrier and spindle, a spring bearing against the carrier and applying pressure to the braking device, an anti-friction thrust washer mounted on and fixed in position axially relative to the spindle and a surface on the carrier in contact with that face of the washer which is the nearer to the external axis of revolution, whereby centrifugal force is prevented from producing substantial variation in the force exerted by the spring on the braking device.

1,868,916. AUTOMATIC TRAIN PIPE COUPLING. JOSEPH ROBINSON, New York, N. Y. Filed May 24, 1926, Serial No. 111,415. Renewed Mar. 15, 1930. 14 Claims. (Cl. 285—58.)



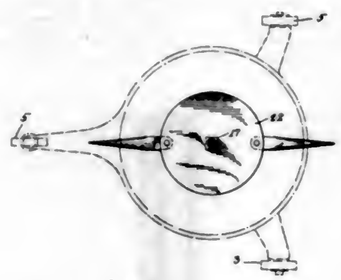
11. An automatic train pipe coupling comprising in combination a coupling head, a bracket, a member extending from the head past said bracket, a spring for supporting the head, a latch carried by said member for locking the head to a mating head, a support for said spring mounted on and extending rearwardly of said bracket for rocking movement thereon, and means carried by said support for actuating said latch.

1,868,917. METHOD AND APPARATUS FOR PURIFYING OIL. CLARENCE J. RODMAN and RUSSELL P. DUNMIRE, Alliance, Ohio, assignors to The Buckeye Twist Drill Company, Alliance, Ohio, a Corporation of Ohio. Filed Dec. 30, 1929. Serial No. 417,356. 6 Claims. (Cl. 184—6.)



1. In an oil distributing system for lubricating the bearings of an engine, the combination with a condenser connected to the engine, of a vacuum chamber connected to said condenser, a centrifugal separator, and means for conveying oil from the engine through the centrifugal separator and vacuum chamber and returning it to the engine.

1,868,918. LAWN MOWER. TAMIS C. SCHENK, Brooklyn, N. Y. Filed Feb. 26, 1931. Serial No. 518,354. 3 Claims. (Cl. 56—255.)



1. In a device of the class described, a shaft, spaced discs mounted on said shaft, knives pivotally mounted between the discs, and means for driving the discs at a high speed so that knives will be maintained in a radial position by centrifugal force.

1,868,919. PRODUCTION OF CARBON BLACK. OTTO SCHMIDT and OTTO GROSSKINSKY, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 26, 1928, Serial No. 328,613, and in Germany Dec. 31, 1927. 9 Claims. (Cl. 134—60.)

1. A process for the production of carbon black from unsaturated hydrocarbons, which comprises treating the said initial material in the gaseous phase and under an elevated pressure with a dehydrogenating catalyst comprising a metal of the iron group at a low to moderately elevated decomposing temperature.

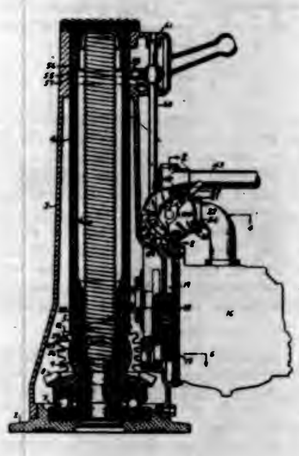
1,868,920. PRODUCTION OF CARBON BLACK. OTTO SCHMIDT and OTTO GROSSKINSKY, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Apr. 21, 1930, Serial No. 446,166, and in Germany Dec. 31, 1927. 10 Claims. (Cl. 134—60.)

1. A process for the production of carbon black from olefinic hydrocarbons, which comprises decomposing by dissociation the said initial material in a rarefied state in the gaseous phase with a dehydrogenating catalyst at a low to moderately elevated decomposing temperature.

1,868,921. PRODUCTION OF CARBON BLACK. OTTO SCHMIDT and OTTO GROSSKINSKY, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Apr. 21, 1930, Serial No. 446,167, and in Germany Dec. 31, 1927. 9 Claims. (Cl. 134—60.)

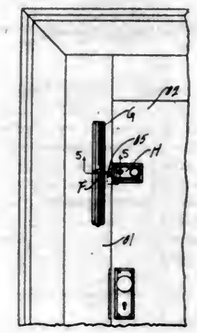
1. A process for the production of carbon black from olefinic hydrocarbons, which comprises decomposing by dissociation the said initial material in the gaseous phase with a dehydrogenating catalyst comprising a metal of the iron group and a further addition giving increased activity at a low to moderately elevated decomposing temperature not exceeding about 600° C.

1,868,922. AIR-MOTOR JACK. FRANK H. SCHWERIN and LOUIS HEBBELN, Bellevue, Pa., assignors to The Duff-Norton Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 17, 1930. Serial No. 453,136. 14 Claims. (Cl. 254—103.)



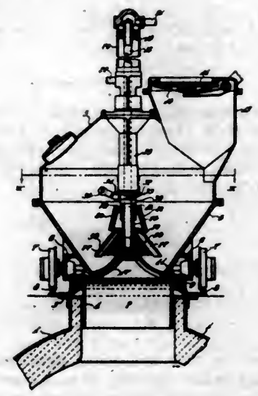
1. The combination with a lifting jack and an air-motor for operating the same, a conduit extending from the motor and containing two ducts for conducting air to said motor to operate the same to raise or lower the jack, a supply conduit, an oscillatory reversing valve interposed between said supply conduit and said ducts, a poppet valve in said supply conduit, a cam portion connected with said oscillatory valve and cooperating with the stem of said poppet valve so that the poppet valve closes when the reversing valve comes to neutral position and is opened when the oscillatory valve is turned in either direction from neutral position, a handle for turning said oscillatory valve, and means controlled by the jack for automatically turning the oscillatory valve to neutral position.

1,868,923. BURGLAR ALARM. ARTHUR F. SEMON, Kansas City, Mo. Filed Oct. 26, 1929. Serial No. 402,697. 2 Claims. (Cl. 116—88.)



1. In a burglar alarm of the class described a supporting frame having a cartridge supporting extension thereon, a firing pin slidable on the frame having means to urge it against a cartridge for exploding the same, and an L-shaped cartridge holding member detachably connected with the frame and including a bifurcated end engageable with the flange of a cartridge to hold it in position in said bore.

1,868,924. FUEL CHARGING DEVICE FOR GAS GENERATORS. THOMAS F. SPICKNALL, Baltimore, Md., assignor to The Western Gas Construction Company, a Corporation of Indiana. Filed Jan. 9, 1931. Serial No. 507,602. 8 Claims. (Cl. 214—18.)



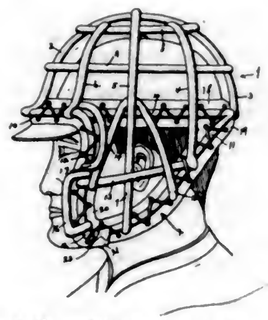
1. A charging device for gas generators comprising a hopper adapted to be positioned over the charging opening of a gas generator, a charging valve located in said hopper and constituting a door for said charging opening, and a collapsible fuel retaining device situated in said opening and adapted to collapse when said charging valve has been opened.

1,868,925. TEMPERATURE ACTUATED CIRCUIT CLOSING DEVICE. HARRY SPIRO, San Francisco, and WALDEMAR F. ANDERSON, Alameda, Calif.; said Spiro assignor to Ada Joel Spiro. Filed Dec. 8, 1930. Serial No. 500,778. 4 Claims. (Cl. 200—142.)



1. An electric current carrying flexible cable comprising a pair of conductors enclosed in insulating material and insulated with relation to each other, a portion of said insulating material being removed to expose the conductors, an elongated sleeve enclosing the exposed portions of the conductors, a contractable spring ring mounted within the sleeve and adapted during contraction to engage the conductors to close a circuit therethrough and temperature actuated means normally retaining the spring ring against retraction.

1,868,926. BATTER'S MASK AND THE LIKE. CARMINE TATORE and FRANK TATORE, New York, N. Y. Filed Apr. 6, 1932. Serial No. 603,472. 10 Claims. (Cl. 2—3.)



1. Batter's mask consisting of a frame covering the skull of the player having an outward flare over the forehead causing an impinging ball to be deflected away from the face, and provided with a downward extension covering one side of the head and face.

1,868,927. SHOE-BOTTOM FILLER. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 27, 1929. Serial No. 395,664. 6 Claims. (Cl. 106—3.)



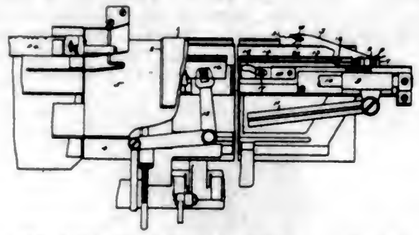
1. Shoe bottom filler comprising hard, high heat melting point body binder selected from the group consisting of asphalt, rosin, resin gums, bitumen and hard hydrocarbon, in the form of small, discrete, segregated units in a dry, hard state, mixed but not fused with soft, sticky, cementitious, low heat melting point binder, the mixture as a whole constituting a heat plastic filler mass capable of being sufficiently softened for spreading in a shoe bottom cavity by low heat adapted to soften the soft binder without softening the hard body binder, and the hard body binder being adapted to be softened and blended with the soft binder by the sudden, brief application of high heat.

1,868,928. METHOD OF MAKING SHOE-FILLER. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 27, 1929. Serial No. 395,665. 3 Claims. (Cl. 106—3.)



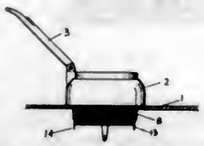
1. The art of making heat plastic, spreadable, shoe-bottom filler, which comprises melting a soft, sticky, cementitious, low-heat melting point binder, and mixing but not fusing with said melted low-heat melting point binder, hard high-heat melting point body binder selected from the group consisting of asphalt, rosin, resin gums, bitumen and hard hydrocarbon, in the form of small, discrete, segregated units in a dry, hard state thereby to produce a heat plastic filler mass capable of being sufficiently softened for spreading in a shoe bottom cavity by low heat adapted to soften the soft binder without softening the hard body binder, the hard body binder being adapted to be softened and blended with the soft binder by the sudden brief application of high heat.

1,868,929. BOOK SIGNATURE FEED. WALTER IRVING THOMPSON, East Hartford, Conn., assignor to The Smyth Manufacture Company, Hartford, Conn., a Corporation of Connecticut. Filed Sept. 28, 1931. Serial No. 565,541. 7 Claims. (Cl. 112—21.)



1. Mechanism for feeding signatures into a book stitching machine which comprises a saddle for receiving opened signatures, an arm for receiving signatures from the saddle and transferring them to the stitching mechanism, a tail stop and a heading gauge mounted on said arm, and a reciprocatory and oscillatory pusher having jaws shaped to grasp the signatures on the saddle by their heads and push them inward onto the arm until the bottom edges of the signatures engage the tail stop and then draw the signatures outward by their heads until the signature heads contact with the heading gauge.

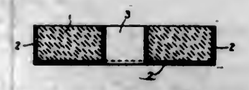
1,868,930. REMOVABLE PACKAGE MOUTHPIECE. WILLIAM J. THOMPSON, Detroit Mich. Filed Mar. 12, 1931. Serial No. 522,023. 2 Claims. (Cl. 221—23.)



1. An outlet fixture device for use in dispensing solid substance in relatively finely divided form, from containers of fiber board or the like, comprising a body of tubular form, the circular walls of which are closed and the ends of which are open, said body at one end having a portion which is threaded or roughened on its exterior surface, and having portions adjacent thereto of greater diameter whereby an abutment is formed adjacent the said threaded or roughened end, a piercing element means supporting the piercing element substantially on the axis of the hollow body so that the same projects beyond the said roughened end of the body, a cutting knife carried by

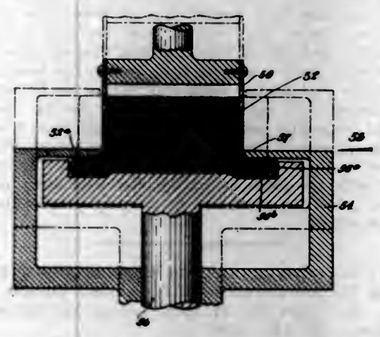
the body portion at the said roughened end and projecting in an axial direction therefrom, said piercing element being adapted to be inserted through the fiber board container and said body being adapted to be rotated whereby the knife severs a disk from the said container, said roughened end of the body being adapted to be inserted in the aperture left by the severed disk with the said abutment lying against adjacent parts of the container, and a movable closure member for closing the end of the hollow body opposite the end having the piercing element and knife.

1,868,931. PROCESS FOR MAKING ABRASIVE ARTICLES. EDWARD D. VANCE, Springfield, Ohio, assignor to The Safety Grinding Wheel & Machine Company, Springfield, Ohio, a Corporation of Ohio. Filed May 19, 1930. Serial No. 453,026. 5 Claims. (Cl. 51—278.)



4. The process of applying a supplemental binder in liquid form to a porous abrasive article which consists in coating the major portion of such article with a covering impervious to the binder, applying such supplemental binder to the exposed portion of such article, and removing the outer covering after the binder has set.

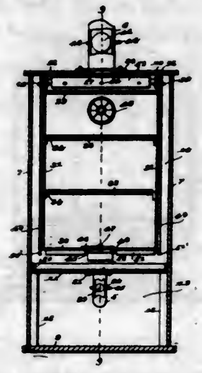
1,868,932. METHOD AND APPARATUS FOR FORMING RECEPTACLES FROM SPONGE RUBBER. WALDEMAR VERNET, New York, N. Y., assignor to Rubbersan Products Inc., New York, N. Y., a Corporation of New York. Filed Jan. 31, 1928. Serial No. 250,827. 9 Claims. (Cl. 164—61.)



1. A method of removing from a block of highly compressible and resilient spongious material an inner portion of substantially the same area of the body which comprises compressing the edges of said material around the central portion of the same and while so compressed severing the protruding uncompressed central portion of said material from the remainder of said block.

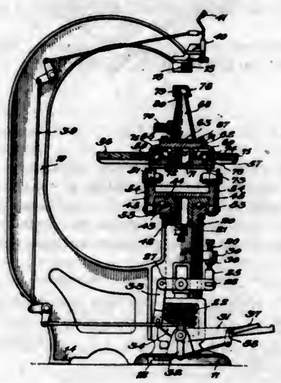
1,868,933. FOOD COOLER. ADOLPHE VEILLEUX, St. Maries, Idaho. Filed Apr. 25, 1930. Serial No. 447,232. 2 Claims. (Cl. 62—90.)

1. In a food cooler for interior use, a housing adapted to be disposed in a room, a drip pan partitioning off said housing into lower and upper chambers, a relatively small diameter air ingress and drip discharge pipe opening to the outer air and extending through said housing and being connected with said drip pan and adapted to deliver outer air substantially centrally through said drip pan to said upper chamber, a food containing cabinet mounted in spaced relation to the walls of said housing up said upper chamber thereof and overhanging said drip pan and adapted to spread the incoming air laterally for ascent thereof between the walls of said cabinet and housing, said cabinet having a moistening reservoir in the top thereof, evaporating fabric strips mounted on said cabinet and dipping into said reservoir and depending exteriorly of said cabinet and between the latter and the walls of said housing in the path of the ascending air



and adapted to discharge into said drip pan, a relatively enlarged egress pipe leading from the top of said housing to the outer air whereby a continuous circulation is afforded, and said cabinet having ingress and egress openings near the bottom and top thereof, respectively, whereby circulation may be afforded in said cabinet from and to said upper chamber.

1,868,934. SHOULDER AND ARM PRESS. EDWIN H. ZACHARIAS, Reading, Pa. Filed May 3, 1929. Serial No. 360,246. 11 Claims. (Cl. 68—9.)



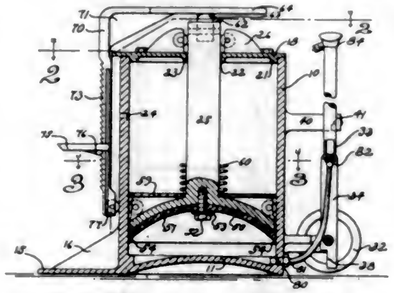
4. In a garment pressing machine, a steam heated iron, a steam heated buck for cooperation with said iron, means for moving the buck about a vertical axis, means for moving the buck about a second vertical axis, and means for moving the buck so as to bring said axes closer together or further apart.

5. In a garment pressing machine particularly adapted for the pressing of the shoulder seams, a stationary pressing iron, a steam heated buck having a top face, the front side of which is concave and slopes downwardly and forwardly toward the operator.

1,868,935. AIR JACK. MARVIN F. BRENEMAN, Detroit, Mich. Filed Oct. 12, 1928. Serial No. 312,016. 4 Claims. (Cl. 138—9.)

1. A device of the class described comprising a cylinder having a lateral flange formed on its base, a pair of

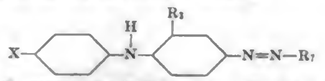
spaced ribs formed on said cylinder and extending vertically above said flange, a piston operable in said cylinder, a piston rod attached to said piston and extending above the top of said cylinder, a cover for said cylinder having an opening therein through which said piston rod extends, roller bearings attached to said piston and adapted to guide the same relative to the wall of said cylinder, roller bearings on said cover adapted to guide



said piston rod relative to the said opening therein, a bearing plate on said piston rod having an extension thereon extending down the outside of said cylinder above said lateral flange and adjacent said pair of spaced ribs, a second bearing plate adjustably secured to said extension, and a roller bearing secured to said extension and adapted to bear against said cylinder between said spaced ribs and be guided thereby.

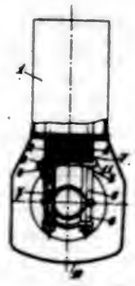
1,868,936. DYEING REGENERATED CELLULOSE RAYON. RAINALD BRIGHTMAN, Manchester, England, assignor to Imperial Chemical Industries Limited, London, England. Filed July 27, 1929, Serial No. 381,603, and in Great Britain Sept. 12, 1928. 19 Claims. (Cl. 8—5.)

6. Regenerated cellulose rayon material dyed by means of a dyestuff having the probable formula



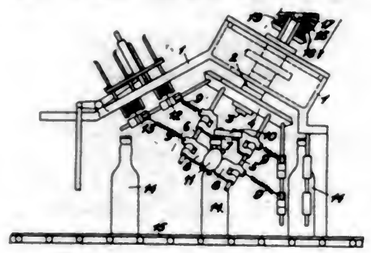
wherein R_3 represents hydrogen, an alkoxy or sulphonic group, R_7 represents the coupled residue of an aminonaphthol sulphonic acid and X represents hydrogen or the group $-N=N-R_7'$, wherein R_7' represents the coupled residue of an azo dye coupling component.

1,868,937. CRANK-SHAFT BEARING. ETTORE BUGATTI, Molsheim, France. Filed Nov. 14, 1929, Serial No. 407,165, and in France Nov. 16, 1928. 7 Claims. (Cl. 308—23.)



4. A crank-shaft bearing for internal combustion engines comprising in combination a cylinder block having a plurality of flat machined surfaces thereon, a plurality of separate bearings having each a U-shaped groove at its upper end and each provided with a plurality of flat surfaces adapted to fit the flat surfaces of the cylinder block, means for securing said bearings to said cylinder block, means for applying the corresponding surfaces of the cylinder block and the bearings in perfect contact with each other respectively, whereby all the bearings can be machined and completed separately and subsequently mounted on the cylinder block in perfect alignment.

1,868,938. MACHINE FOR ATTACHING LABELS TO BOTTLES, GLASSES, AND THE LIKE. CHRISTIAN ALBERT CHRISTENSEN, Copenhagen, Denmark. Filed Mar. 19, 1930, Serial No. 437,148, and in Denmark Mar. 20, 1929. 1 Claim. (Cl. 216—13.)



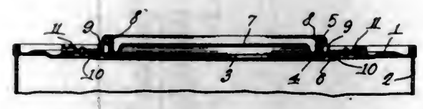
In machines for attaching labels to bottles, glasses and the like, in which there is arranged at the upper end of the machine frame a shaft carrying a head piece provided with four pairs of inclined, parallel supports to which the label holders are attached, and between which a transporter feeds the bottles to be labelled, a disc on the head piece carrying shaft formed as a Maltese cross by deep incisions towards the centre of the disc and having between two and two of these incisions shallow depressions in the edge thereof, a short shaft mounted in bearings on the frame and having segmental locking projections for engagement with said depressions, and having also outwardly extending arms attached thereto and crosswise to the aforesaid segmental projections, with rolls attached to their extreme ends and adjusted for engagement with the incisions of the disc, and bevel gearing at the end of the shaft, substantially as and for the purpose described.

1,868,939. CONNECTER FOR CONNECTING THE CABLE TO A BATTERY POST. ARTHUR CONRAD, Chester, Ill. Filed Feb. 27, 1931. Serial No. 518,842. 3 Claims. (Cl. 173—259.)



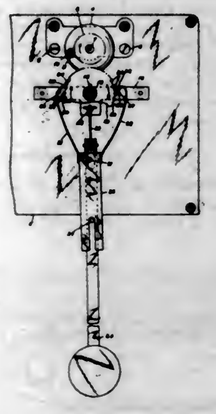
3. Means for connecting a cable to a battery post comprising a body part of elongated form and having a substantially semicircular jaw at one end thereof, a cable connected with the other end thereof, a movable jaw comprising a shank and a substantially semi-circular jaw part for cooperating with the other jaw part for engaging a post, a bolt passing through the body part and through the shank of the movable jaw, a lever having a hub formed with a threaded bore for receiving the threaded end of the bolt, the inner end of the hub contacting the shank of the movable jaw, a compensating lever pivoted to the body part and having a notch therein with a beveled side at each side of the notch for engaging the head of the bolt for forcing the bolt outwardly whereby the notch part will pass over the shank of the bolt adjacent the head.

1,868,940. COVER FOR SHIPPING DRUMS. JAMES M. COUGHLIN, Wilkes-Barre, Pa. Filed May 13, 1930. Serial No. 452,011. 2 Claims. (Cl. 220—55.)



1. A drum head having an opening and a groove concentric with the opening, a flange extending outwardly from the head and surrounding the opening, said flange projecting above the plane occupied by the marginal portion of the head, a cover insertable into the space defined by the flange and having an inverted annular channel for the reception of the flange, the marginal portion of the cover forming an annular flange adapted to rest flat on the head and surround the flange on the head, and means on said portion for seating in the groove.

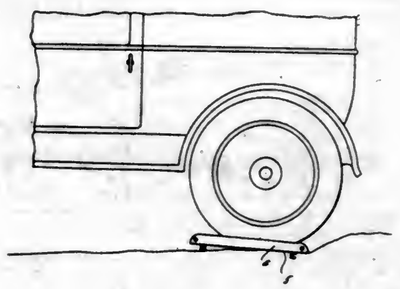
1,868,941. CLOCK. WALTER J. HERSCHEDE, WALTER EBERHARDT, and ALBERT HELLMUTH, Cincinnati, Ohio, assignors to The Herschede Hall Clock Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 14, 1930. Serial No. 443,998. 4 Claims. (Cl. 58—26.)



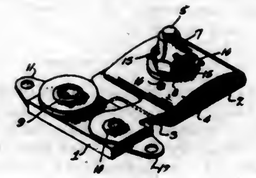
1. In combination with a time keeping device of the class described and comprising a constant speed power means, a pendulum swung by power from the constant speed power means, and yielding means cooperating with the pendulum and arranged to permit continued operation of the power means in the event that the pendulum be held against swinging movement.

1,868,942. SKID FOR MOTOR VEHICLES. DAVID E. HOFFMAN, Jackson, Mich. Filed Jan. 29, 1931, Serial No. 512,127. Renewed May 23, 1932. 2 Claims. (Cl. 238—14.)

1. A skid for an automobile or like vehicle comprising a channel element having a bottom and a pair of sides rising from the longitudinal edges thereof, and a plurality of cleats extending upwardly from the bottom and inwardly from the sides and having their free edges of arcuate formation and spaced apart for receiving a tread of a wheel between them.



1,868,943. ADJUSTABLE CONDENSER. CLINTON BROWN HYATT, Melrose Park, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 8, 1929. Serial No. 398,191. 1 Claim. (Cl. 175—41.5.)



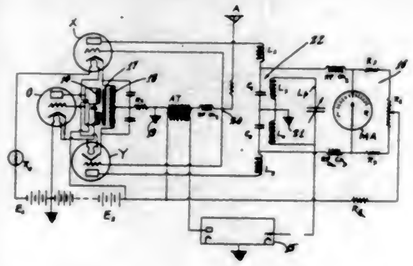
In a condenser, a relatively fixed element, an apertured movable element, a threaded stem projecting from the fixed element through the aperture in the movable element, a nut on the stem constituting a means for adjusting the movable element toward the fixed element, an insulating washer intermediate the nut and the movable member and having a stem-receiving aperture of lesser size than the aperture in the movable element, and means on the movable member cooperative with the washer for preventing transverse relative displacement of the said elements and consequent contact between the movable element and the stem.

1,868,944. DRAPERY HANGER. HELEN P. JONES, Port Washington, N. Y. Filed Oct. 19, 1931. Serial No. 569,738. 8 Claims. (Cl. 156—21.)



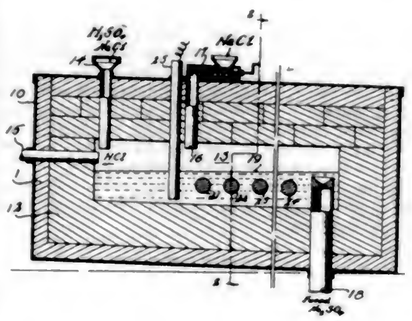
6. As an article of manufacture, a support for a drapery hanger formed of wire having a ring portion, a rearwardly and downwardly projecting hook portion for engaging a flat rod and a forwardly and upwardly projecting hook portion for engaging the hanger.

1,868,945. RADIO DIRECTION FINDER. GEOFFREY GOTTLIEB KRUESI, Alhambra, Calif., assignor, by mesne assignments, to Bendix Aviation Corporation, South Bend, Ind., a Corporation of Delaware. Filed Nov. 25, 1930. Serial No. 498,066. 21 Claims. (Cl. 250—11.)



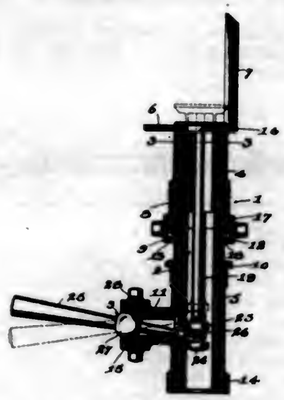
13. In a direction finding device, two means for receiving a transmitted radio frequency current one of which has a directional characteristic and which is relatively fixed with respect to the other of said means, means for locally producing a current having a known frequency, means for combining said locally produced current and said received current from both of said receivers to produce another current of the same frequency as said known frequency, the amplitude of which depends upon the deviation of the directional receiving apparatus from a straight line between the receiving means and the transmitting station, and means for indicating the amplitude of said last-named current as a function of said deviation.

1,868,946. MANUFACTURE OF HYDROCHLORIC ACID. FRANK S. LOW, Niagara Falls, N. Y., assignor to Westvaco Chlorine Products, Inc., New York, N. Y., a Corporation of West Virginia. Filed Sept. 14, 1928. Serial No. 306,071. 4 Claims. (Cl. 23—155.)



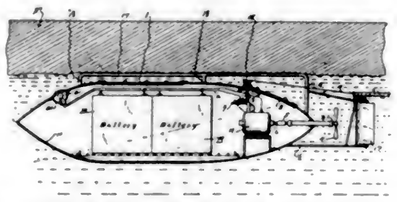
1. In the manufacture of HCl and neutral alkali metal sulfate from alkali metal chlorid and sulfuric acid, a process which comprises feeding the chlorid and the acid in about the proportions required to form the neutral sulfate into a stationary horizontally elongated chamber, heating the reacting materials in the chamber to temperatures increasing progressively along the length of the chamber with the maximum temperature within the chamber at or above the melting point of the neutral sulfate, the reacting materials being caused to move by liquid flow along the length of the chamber under the influence of said progressively increasing temperature, removing neutral sulfate from the chamber in molten form and removing HCl gas from the chamber.

1,868,947. QUICK FLUSHING VALVE FOR MILK PASTEURIZING MACHINES. EDWARD MANNING, Rutland, Vt., assignor to Manning Manufacturing Co., Rutland, Vt. Filed May 29, 1926. Serial No. 112,596. 1 Claim. (Cl. 137—21.)



Valve for milk pasteurizers and the like comprising a casing including coaxial conduit fittings having the same interior diameter and having co-operating self-centering sealing faces, quick detachable means for securing said fittings together at said sealing faces, a valve stem in said casing intersecting the plane of the intersection of said sealing faces and said coaxial conduit, a valve on said stem engaging a seat in one fitting, the other fitting having a lateral branch opening into said fitting opposite the other end of said valve stem, a valve operating handle extending through said lateral branch and having a yoke freely and removably engaging within a channel on said valve stem, means cooperating with said handle to form a quick detachable universal seat for said handle, the latter having a universal protuberance engaging said seat, said valve stem having a guiding feather engaging solely the inner surface of the fitting which is provided with the valve seat.

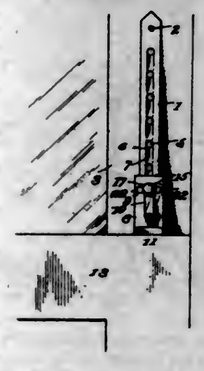
1,868,948. LOCOMOTOR. LEE M. PARRISH and FLOYD G. KELBSCH, Redfield, S. Dak. Filed Apr. 4, 1931. Serial No. 527,828. 1 Claim. (Cl. 114—16.)



A locomotor for use under an ice field comprising a buoyant body, propelling means therefor, and means projecting upwardly and laterally beyond the width of the body for contact from below with the ice field for maintaining the body on an even keel, said means extending fore and aft of the body.

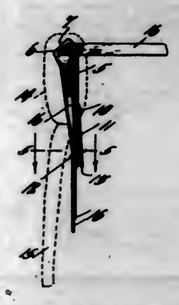
1,868,949. WINDOW FASTENER. LOUIS PAT, Chicago, Ill. Filed July 17, 1931. Serial No. 551,482. 2 Claims. (Cl. 292—87.)

1. A window locking means including a strip to be secured to the upper sash, a bracket to be secured to the lower sash, said bracket having edge flanges to form a guide for the strip, said strip being formed with a plurality of vertically spaced openings and with a channel leading to each opening and having a bottom inclined upwardly and outwardly with respect to the face of the strip, a pin operating through the bracket and having



an inclined terminal, a pivotally mounted spring engaging the pin for normally maintaining the terminal projected in position to engage with any of the openings in the strip, and means on the strip in which the pin may be laterally moved with the spring and locked to hold the pin out of cooperation with the strip.

1,868,950. NECKTIE HOLDER. LOUIS PAT, Chicago, Ill. Filed July 18, 1931. Serial No. 551,738. 4 Claims. (Cl. 2—150.)



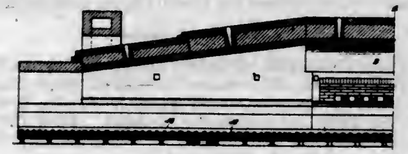
1. A tie form including a base from which forwardly extend relatively inclined spaced apart wings formed with slots near their upper ends, a band to be passed through the slots and the space between the wings, and means on the base below the slots to frictionally engage the ends of the band.

1,868,951. PENCIL. WILLIAM C. SANFORD, Jr., La Oroya, Peru. Filed Nov. 24, 1931. Serial No. 577,112. 2 Claims. (Cl. 120—21.)



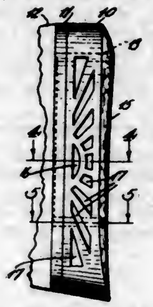
1. A pencil, comprising a tubular casing having a rearwardly tapering bore, and a barrel having a complementary taper to form a snug fit within the bore of the casing, said barrel being longer than the casing to normally project beyond the ends thereof and having an axial bore in its larger end to loosely receive the lead and a transverse slot; whereby the slotted end of the barrel will be compressed to grip the lead.

1,868,952. PRODUCTION OF SPONGE IRON. KENNETH M. SIMPSON, New York, N. Y., assignor to International Chromium Process Corporation, New York, N. Y., a Corporation of Delaware. Filed June 30, 1930. Serial No. 465,036. 6 Claims. (Cl. 75—14.)



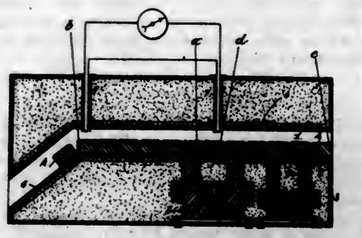
1. A process for the production of a dense, coherent sponge iron wherein a charge of iron ore and reducing agent in a finely divided state is introduced into an initial heating zone in which the ore is subjected to reduction conditions, introducing the ore so reduced into a second heating zone in which the reducted ore is subjected to a temperature sufficient to cause incipient fusion of the metal, for a period of time such that a coalescence of the individual reduced metallic particles will result, the period being insufficient to cause a general fusion of the reduced metal.

1,868,953. RECOIL PAD FOR GUNS. NESTOR F. SMITH, Ithaca, N. Y., assignor to Ithaca Gun Company, Ithaca, N. Y. Filed Jan. 19, 1932. Serial No. 587,577. 6 Claims. (Cl. 42—74.)



1. In a recoil pad for guns wherein the pad is formed of flexible material and said pad having a series of transversely extending openings therethrough arranged in fan-like formation radiating from the center of the pad and defining openings and spacing walls of gradually increasing lengths for the even distribution of pressure in the presence of recoil action.

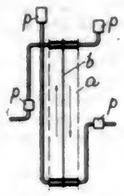
1,868,954. FURNACE. VICTOR SORREL and LOUIS ANDRÉ LAFONT, Grenoble, France, assignors to Ugine-Infra, Grenoble, France, a Corporation of France. Filed Oct. 18, 1929, Serial No. 400,633, and in France May 8, 1929. 4 Claims. (Cl. 263—6.)



1. The method of treating magnetic objects for purpose of demagnetization and heating which consists in causing said objects to pass in a contiguous series or chain

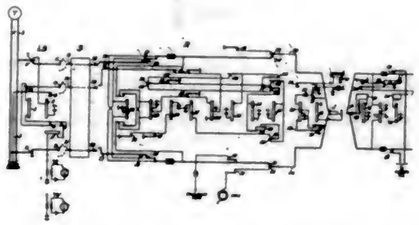
through a magnetic field within the heating zone of a furnace, said objects being advanced by the attraction of said magnetic field, the objects not yet demagnetized acting to push those in front of them, said magnetic field acting also to detain said objects until each is completely demagnetized and has reached the predetermined temperature.

1,868,955. PROCESS OF RECOVERING CAUSTIC SODA FROM WASTE LYE. SHOZO TACHIKAWA, Shiga, Japan, assignor to Asahi Kenshoku Kabushiki-Kaisha, Kitaku, Osaka, Japan, a Corporation of Japan. Filed Dec. 5, 1930, Serial No. 500,357, and in Japan Dec. 17, 1929. 4 Claims. (Cl. 23—184.)



1. A process of recovering caustic soda from waste lye by dialyzation wherein waste lye and water with or without an addition of a little quantity of alkali flow on each side of a membrane, in which a pressure effected by the difference of statical pressures and the difference of velocities of flow of the liquids is added to the liquids against the osmotic pressure acting on the membrane so as to have the membrane subjected to the least unbalanced pressure.

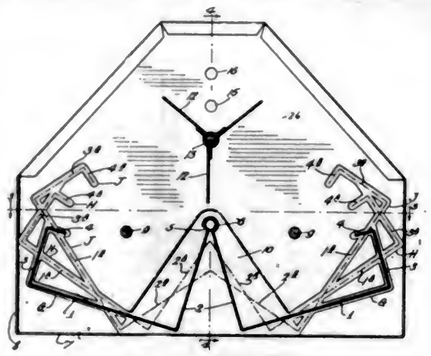
1,868,956. TELEPHONE SYSTEM. VICTOR S. THARP, Elmhurst, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 29, 1931. Serial No. 512,047. 12 Claims. (Cl. 179—27.)



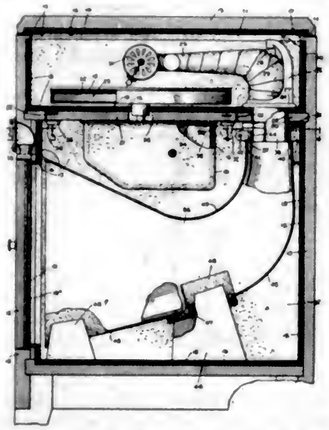
1. In a telephone system, a subscriber's line identified by a distinctive tone, a trunk line, means for extending a call from said subscriber's line to the trunk line, means for applying said tone to the trunk line, means for answering the call, and means responsive to the answering of the call for removing said tone from the trunk line after a predetermined interval.

1,868,957. FEEDER FOR CHICKS AND OLDER FOWLS. DONALD B. TOLLEY, Macomb, Ill., assignor to Globe American Corporation, Kokomo, Ind., a Corporation of Indiana. Filed July 3, 1930. Serial No. 465,632. 4 Claims. (Cl. 119—61.)

3. A poultry feeder comprising two parallel and adjacent troughs of equal length hingedly connected to each other at the upper edges of their adjacent trough sides, two risers respectively adjacent to the opposite ends of the troughs, and means operatively connecting the two risers to clamp the troughs between the risers; the troughs being open at both ends and the risers forming closures for the trough ends, and the risers having portions respectively disposed for effectively hooking over portions of the trough ends when the troughs are in any one of a plurality of positions with respect to each other and to the risers.



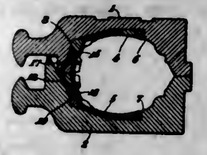
1,868,958. INTERFERENCE-FREE SOUND REPRODUCING DEVICE. OSCAR WENDEROTH, New York, N. Y. Filed July 30, 1929. Serial No. 382,163. 2 Claims. (Cl. 274—2.)



2. In a sound producing device embodying an actuated sound producing element and accessory parts for the support of the same, and a housing for said actuated part and said accessory parts, said housing being self-enclosed and formed of material normally set in vibration upon actuation of said sound producing element, and sound absorbing and sound insulating material disposed on substantially all the inner faces of said housing directed toward said accessory parts for precluding vibration by said accessory parts and said housing in interference of the vibrations produced by said actuated element.

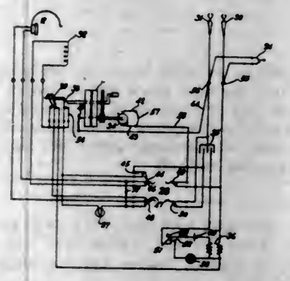
1,868,959. MOLD FOR TIRES AND ANNULAR ARTICLES. HARRY WILLSHAW and THOMAS NORCROSS, Erdington, Birmingham, England, assignors to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a Corporation of New York. Filed Dec. 26, 1930, Serial No. 504,736, and in Great Britain Jan. 23, 1930. 6 Claims. (Cl. 18—44.)

1. A mold for tires and annular articles having two complementary members a number of individual inserts the inner surface of said complementary members being formed with an integral shoulder forming an interlocking retaining groove for positioning and retaining said inserts.



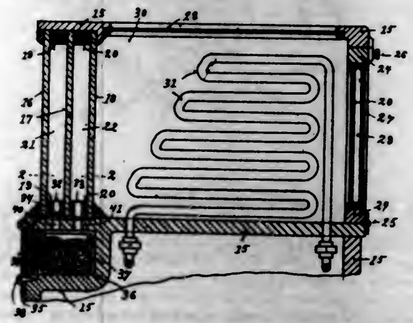
the shoulder being discontinuous at one or more places to form a gap permitting inserts to be inserted and moved into engagement with said shoulder, and means to secure a final insert in said gap.

1,868,960. TEST SET. CLARENCE A. ANDERSON, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 9, 1931. Serial No. 514,367. 31 Claims. (Cl. 179—175.)



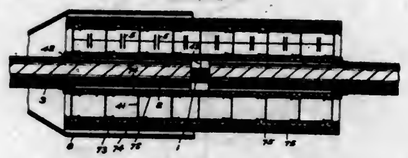
1. The combination with a portable test set for determining the direction of a fault on a line, of a calling device for transmitting impulses corresponding to numerical digits, and circuit connections for connecting the calling device with the test set.

1,868,961. REFRIGERATING APPARATUS. EDWIN J. AHRENS, Cincinnati, Ohio, assignor, by mesne assignments, to Rueben Eli Ottenheimer, Baltimore, Md. Filed Aug. 24, 1929. Serial No. 388,138. 3 Claims. (Cl. 183—4.)



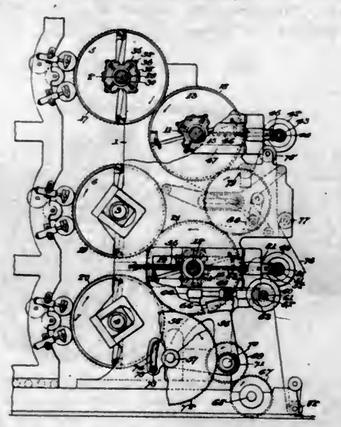
1. In a refrigerated show-case a casing enclosing a refrigerated chamber, a window to display the contents of said refrigerated chamber comprising a plurality of transparent panels defining an interposed substantially sealed air space, a chamber containing a dehydrating substance located in the wall of said casing having a port leading therefrom to said substantially sealed air spaces and an entrance from one face of the casing wall, a lid detachably attached to the face of said casing to close the entrance to said dehydrating chamber and readily releasable lever mechanism operable to hold said lid detachably in place, the port leading from said air space to said dehydrating chamber being of sufficient capacity to maintain a circulation of air to and fro from said air space to said dehydrating chamber.

1,868,962. HIGH VOLTAGE BUSHING. RALPH W. ATKINSON, Perth Amboy, N. J., assignor, by mesne assignments, to General Cable Corporation, a Corporation of New Jersey. Filed July 1, 1926. Serial No. 119,898. 20 Claims. (Cl. 173—268.)



2. In an electrical installation the combination of a conductor, a cylindrical sleeve of insulation surrounding the conductor, and means for distributing stress longitudinally of said sleeve, such means consisting of a succession of broad belts encircling, and spaced longitudinally along said sleeve and forming with the conductor the immediately opposed plates of a condenser, and additional condensers connected electrically to said belts and across the spaces established by such belts, the widths of the belts and the spaces therebetween being so proportioned that when a difference of potential exists between the conductor and a point on the exterior of the sleeve, substantially all lines of force originating on the conductor within said sleeve terminate either on the said belts or on the electrodes of the said additional condensers, and the said additional condensers being so adjusted as to provide substantially uniform variation in potential along the surface of the sleeve.

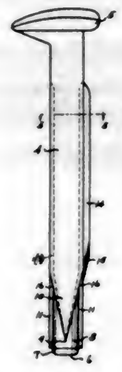
1,868,963. MULTICOLOR ROTARY PRINTING PRESS. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Feb. 7, 1930. Serial No. 426,577. 3 Claims. (Cl. 101—178.)



1. In a multicolor rotary printing press, plate and impression cylinders, the impression cylinders being the same diameter as the plate cylinders or a multiple thereof, each impression cylinder comprising a shaft member, a longitudinally divided shell member of a predetermined diameter, said shell member being provided with concentric flanges at its ends having holes therein, dowels carried by the shaft member adapted to enter said holes

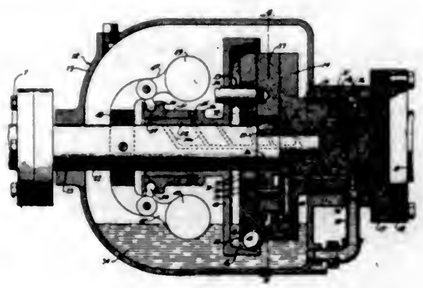
to position the shell member on the shaft member, and clamping bolts hinged to the shaft member and provided with shoes adapted to be engaged with said flanges for securing the shell member to the shaft member.

1,868,964. SPIKE. RAYMOND E. BEEGLE, East St. Louis, Ill. Filed Jan. 20, 1930. Serial No. 421,959. 3 Claims. (Cl. 85—19.)



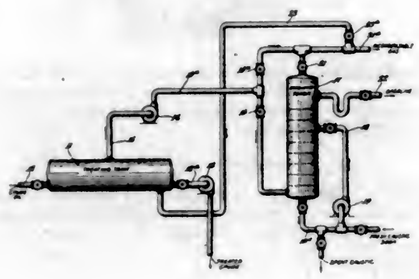
3. A spike having a head portion, a body portion, and a blunt pilot portion carrying anti-spiral means, the body portion being substantially polygonal in cross section, the pilot portion being of cylindrical form and tapered near its lower end to adapt it for guiding contact with the walls of a prebored hole, the anti-spiral means carried by the pilot portion comprising a longitudinal element, adapted to coact with the tapered cylindrical portion in the prevention of both directional and rotational displacement of the spike with respect to a prebored hole.

1,868,965. TRANSMISSION CLUTCH. HARRY H. BERRYMAN, Elmhurst, Ill. Filed Mar. 20, 1931. Serial No. 523,964. 7 Claims. (Cl. 192—60.)



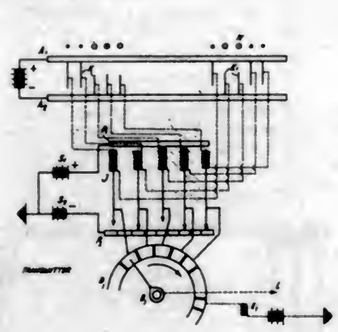
1. In a transmission clutch, the combination of a drive shaft, a driven shaft, a pump body rigid with one of said shafts and containing cylinder bores, valve controlled inlet and outlet conduits for said cylinder bores, the outlet conduit having a restricted discharge port, pistons reciprocating in said cylinder bores, an eccentric block on the other shaft, and an eccentric strap around said eccentric block connected to said pistons.

1,868,966. TREATMENT OF CRUDE PETROLEUM. BENJAMIN T. BROOKS, Sound Beach, Conn., and THOMAS T. GRAY, Elizabeth, N. J., assignors to Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Filed Apr. 18, 1928. Serial No. 271,090. 2 Claims. (Cl. 196—77.)



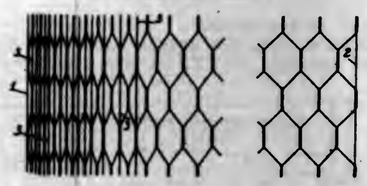
2. The process of purifying crude oil which comprises removing incondensible gases and hydrogen sulphide by subjecting a body of crude oil to sub-atmospheric pressure, separating hydrogen sulphide from incondensible gases and returning such incondensible gases into said body of oil to effect agitation thereof.

1,868,967. SECRET TELEGRAPHY SYSTEM. FRANÇOIS CARTIER, Paris, France. Filed Mar. 30, 1927, Serial No. 179,440, and in France Apr. 23, 1926. 3 Claims. (Cl. 178—22.)



1. In a system of telegraphic communication, a key board comprising a series of manually operated keys, a second key board having a series of automatically operated keys, a cipher strip for operating said second keys, a series of electromagnets connected in series relation with corresponding keys in each of said key series, a transmitting distributor having a series of collected segments, the keepers or armatures of said electromagnets being connected to a segment of each distributor, and a rotatively mounted brush connected to a line circuit for sweeping over the segments for transmitting electrical impulses resulting from the conjoint action of manual and automatic keys on the electromagnets, and additional means associated with said brush and segments for advancing said strip one step at the end of each revolution of said brush.

1,868,968. MACHINE FOR THE MANUFACTURE OF WIRE NETTING WITH HEXAGONAL MESHES OF VARIABLE WIDTH. ROSA ROS CASABLANCAS, Tarrasa, Spain. Filed Dec. 27, 1930, Serial No. 505,042, and in Spain July 16, 1930. 5 Claims. (Cl. 140—6.)



1. A machine for the manufacture of wire netting with hexagonal meshes of variable width, with or without longitudinal strengthening wires, including the combination of two horizontal rulers situated in the front of the machine, one above the other, of which the lower one carries a series of revolving heads which receive the wires from a feeding and tension mechanism and twist them, two at a time, forming a horizontal row of meshes, and the higher ruler carries a series of slotted pinions which impart to the wires a twist in both directions, forming a second row of meshes, these twisting means of both series being distributed upon their respective rulers in such manner that the distance separating two consecutive means, as well as the thickness or diameter of the revolving heads varies in the same proportion as determined by the desired width of the meshes of wire netting.

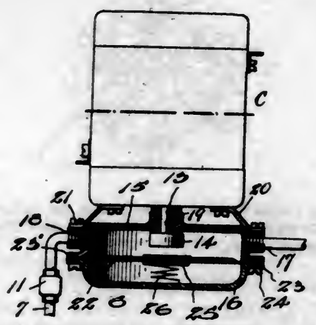
1,868,969. ELECTROMAGNETIC BRAKE. FLOYD O. CLIZBE, Chicago, Ill. Filed Feb. 13, 1929. Serial No. 339,598. 3 Claims. (Cl. 188—140.)



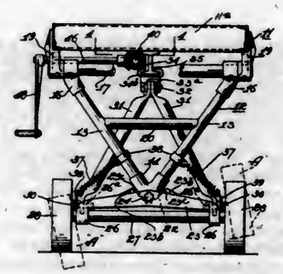
1. In combination, a wheel, a brake comprising a drum on the wheel and a shoe, electrically operated means for operating the shoe, a circuit for said means, and means for automatically opening and closing said circuit.

1,868,970. LIQUID FUEL FEEDING SYSTEM. DOUGLAS COLLINS, Salisbury, N. C., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Sept. 23, 1927. Serial No. 221,534. 3 Claims. (Cl. 123—139.)

1. In a fuel feeding system for internal combustion engines, the combination with the ignition circuit of the engine and the ignition coil unit including the casing and core, a pump casing mounted on the ignition coil unit and having a pumping member arranged for pumping movement toward and from the core, the core having a stem extending from the coil casing and a head carried by said stem within the pump casing, the pumping member having fixed to it an armature opposite the core head for cooperating magnetically with the core head for actuation of the pumping member.



1,868,971. AUXILIARY SUPPORT FOR SEMITRAILERS. DURBEL H. DAVIS, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed Feb. 6, 1931. Serial No. 513,807. 9 Claims. (Cl. 280—33.1.)

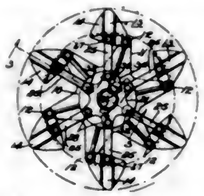


1. A temporary road support for a semi-trailer including a supporting structure movably connected to the semi-trailer frame, and a pair of transversely spaced ground engaging elements carried by said load supporting structure, said supporting structure being of triangular formation with the apex located adjacent the longitudinal central plane of the semi-trailer frame, and providing a pivotal connection whereby said ground engaging elements may swivel as a unit about said pivot for adapting themselves to roadbed irregularities.

1,868,972. COLLAPSIBLE CABLE REEL. NICHOLAI M. ERDAHL, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed July 19, 1929. Serial No. 379,362. 2 Claims. (Cl. 242—111.)

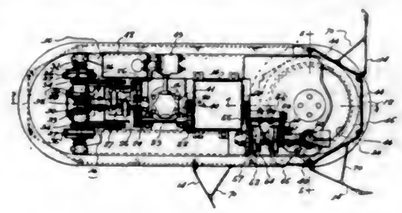
2. A reel for wire cable and the like comprising in combination with a spider arranged for mounting on a shaft for rotation thereby, laterally flanged arcuate reel heads pivoted at one end of their arcuate form to the spider arms at the outer ends of the latter; a control member mounted adjacent to and rotatable about the axis of said

spider, and operating connections from said control member for holding the reel heads with their arcuate seats in circumferential alignment, and adapted for swinging them



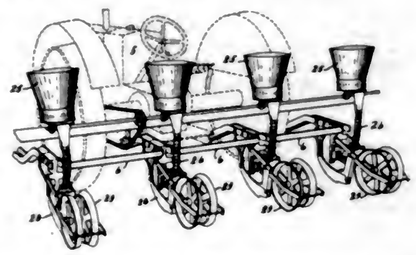
about their pivots inwardly to withdraw the flanges at least at one side within the circle of circumferential alignment of said arcuate seats.

1,868,973. APPARATUS FOR HANDLING LOOSE MATERIAL. ALFRED B. ESSELTINE, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 22, 1928. Serial No. 314,007. 7 Claims. (Cl. 198—7.)



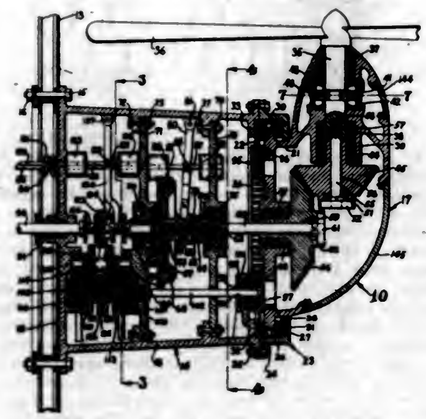
1. In an apparatus of the class described, a main frame, an endless chain device reciprocably movable about said main frame comprising a plurality of relatively wide plate members pivotally connected together at their ends, a plurality of material gathering paddles having pivotal connection with said endless chain device for a portion of its length, said paddles being wider than said plate members and engaging the mine bottom, and adapted to extend outwardly from said endless chain device when moving about said main frame in one direction, and fold against said endless chain device when moving about said main frame in an opposite direction, and means for limiting the outward movement of said material gathering paddles.

1,868,974. AGRICULTURAL IMPLEMENT. GERALD GERALDSON, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed June 29, 1931. Serial No. 547,607. 7 Claims. (Cl. 97—47.)



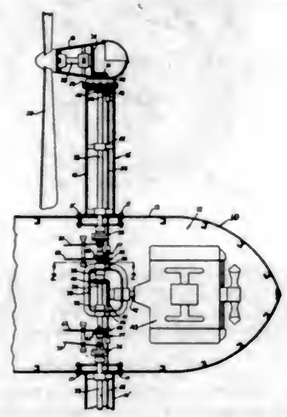
1. In a device for the attachment of agricultural implements to a tractor, a head, means for attaching the head to the implement, a bearing adjacent and positioned in transverse relation to the head for pivotally supporting an earth working tool connected therewith, means adjacent said bearing for supporting disk openers, a tool-holder adjacent the bearing having means for detachably connecting a tool thereto, and means on the device at the opposite side of the tool-holder for detachably securing a tool thereto.

1,868,975. PROPELLER DRIVE MECHANISM. CHARLES S. HALL, Los Angeles, Calif. Filed Nov. 14, 1930. Serial No. 496,977. 7 Claims. (Cl. 244—25.)



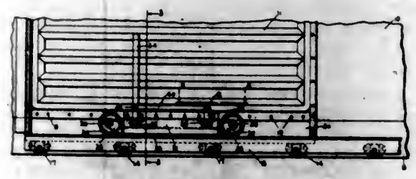
1. An aircraft including a body having a support thereon, a housing mounted to rotate on said support, a pair of spaced radial bearings in said housing, a thrust bearing in said housing disposed between said radial bearings, a propeller drive shaft engaging said bearings, a bevel gear engaging one of said radial bearings, means to connect said bevel gear to said propeller drive shaft, means to drive said bevel gear and means to rotate said housing.

1,868,975. PROPELLER DRIVE MECHANISM. CHARLES S. HALL, Los Angeles, Calif. Filed Apr. 15, 1931. Serial No. 530,365. 6 Claims. (Cl. 244—25.)



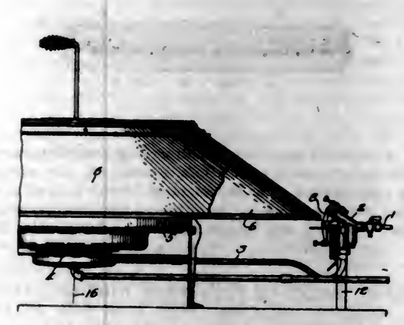
1. In an aircraft including a body portion, a hollow housing secured to said body, a casing rotatably mounted on said housing, a propeller supported by said casing, a prime mover, means to drive said propeller from said prime mover, a worm gear secured to said casing and extending into said housing, a shaft journaled in said housing, a worm pinion secured thereto and meshing with said worm gear and means to drive said shaft.

1,868,977. CAR DOOR CONSTRUCTION. FREDERICK C. HEINEN and KENNETH J. TOBIN, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed July 26, 1929. Serial No. 381,316. 6 Claims. (Cl. 16—99.)



1. In combination, a siding door, a relatively fixed track, a housing rigidly associated with said door, said housing comprising vertical side walls, a top wall, and an open bottom, a carriage retained in position during relative movement of the door by the side walls of said housing, rollers traveling on said track supporting said carriage, and means operative to support the weight of said door on said carriage comprising a manually operable lever fulcrumed on said carriage and having a cam portion for raising the door.

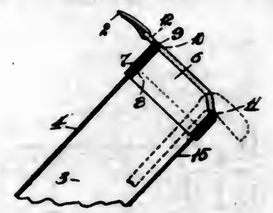
1,868,978. WAFER SHIELD FOR THERMOSTATICALLY CONTROLLED OIL BROODERS. DEWEY H. HILL, Macomb, Ill., assignor to Globe American Corporation, Kokomo, Ind., a Corporation of Indiana. Filed Mar. 16, 1931. Serial No. 522,930. 16 Claims. (Cl. 236—6.)



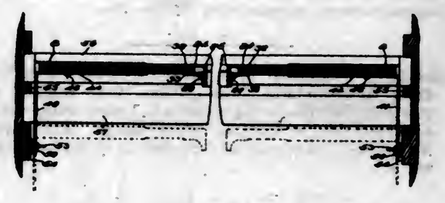
1. In an oil-burning brooder, a hover supported with its outer edge spaced from a floor, a burner within the hover, an oil-supply pipe leading to the burner; a thermostatic mechanism controlling the flow of oil through the said pipe and including a thermally responsive member disposed outside of and adjacent to and in non-heat conducting relation to the hover; and a substantially inperforate shield supported by the said mechanism having a portion thereof outward of and extending substantially parallel to the outer face of the said member, for shielding the said member against the cooling action of air moving toward the burner.

1,868,979. GOLF BAG. CHARLES HOTZE, St. Louis, Mo. Filed Dec. 30, 1929. Serial No. 417,315. 4 Claims. (Cl. 150—1.5.)

1. A mouth ring for a golf bag having a straightened portion disposed on a plane lower than the remaining portion of the ring straight downwardly inclined portions joining the ends of said straightened portion with the remaining portion of the ring, and strap securing means in the form of an eyelet formed on the ring opposite to said straightened portion.



1,868,980. VENTILATOR. HERMAN C. HUEGLIN, Chicago, Ill., assignor to Federal Merchandise Company, Chicago, Ill., a Corporation of Illinois. Filed July 22, 1929. Serial No. 380,003. 7 Claims. (Cl. 98—94.)



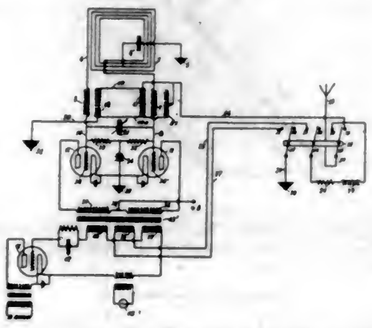
1. A ventilating means comprising a panel, means for adjusting the length of the panel to fit it into a window having upper and lower slidable sashes, and means for mounting the panel in the window, said mounting means including means for adjusting the panel through movements at right angles to the window into the plane of either sash and out of the planes of both and for supporting the panel while it is being moved.

1,868,981. MATRIX RETAINER. CHESTER S. IVORY, Philadelphia, Pa., assignor to the estate of J. W. Ivory, Philadelphia, Pa. Filed Apr. 27, 1931. Serial No. 533,043. 1 Claim. (Cl. 32—17.)



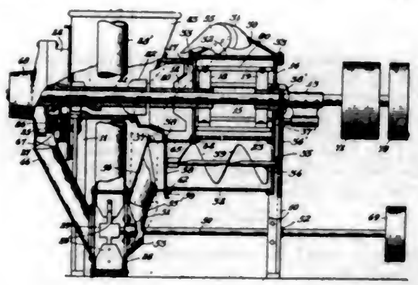
A matrix retainer of the character stated, comprising a U-shaped spring member having the limbs thereof formed into normally separated resilient prongs, a threaded element engaging said U-shaped member, toggle connections common to the end of said threaded elements and said prongs, lugs on the ends of said prongs for engaging an apertured matrix and clips adjacent said lugs for engaging the upper and lower edges of said matrix to prevent accidental disengagement of said matrix from said lugs, each of said clips comprising a vertical wall, a downwardly deflected flange integral with the upper edge of said vertical wall and an upwardly inclined flange integral with the lower edge of said vertical wall.

1,868,982. DIRECTION FINDER. FRED HUTTON KROGER, Brooklyn, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 29, 1927. Serial No. 187,553. 29 Claims. (Cl. 250—11.)



2. In an apparatus of the character described, a loop circuit, a receiving circuit coupled therewith, an antenna circuit, and means for alternatively introducing energy from said antenna circuit into said loop circuit or into said receiving circuit independently of the loop.

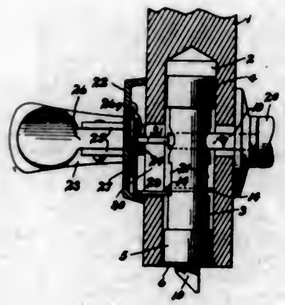
1,868,983. CUTTING AND GRINDING APPARATUS. JOHN HOLLAND-LETZ, Crown Point, Ind., assignor to The Letz Manufacturing Company, Crown Point, Ind., a Corporation of Indiana. Filed Apr. 1, 1927, Serial No. 180,085. Renewed Mar. 26, 1931. 41 Claims. (Cl. 83—8.)



1. A device of the class described, the combination with a cutter head, of a crushing and conveying mechanism positioned adjacent said cutter head for receiving the material cut by said cutter head, a grinding mechanism positioned adjacent said crushing and conveying mechanism for grinding the material fed thereto, and a suction mechanism having a conduit connected adjacent said cutter head and adjacent said grinding mechanism for withdrawing the pulverized material from said cutter head and simultaneously withdrawing the ground material from said grinding mechanism and mixing the same with said pulverized material.

1,868,984. LATCH. ALBERT F. LICKTEIG, Detroit, Mich., assignor to National Brass Co., Grand Rapids, Mich., a Corporation of Michigan. Filed Apr. 21, 1930. Serial No. 445,928. 9 Claims. (Cl. 292—165.)

1. In combination with a door, a latching bolt slidably mounted within said door between its sides and adapted to project outwardly at the edge of the door, spring means acting on said bolt to project its outer end a distance beyond the edge of the door, a housing plate secured to a side of the door, a lever pivotally mounted on and in front of the door to turn about a horizontal axis and having a portion thereof extending through the housing plate, an operating member having an opening therein with an inclined side located at the inner side of the plate, the end portion of said lever extending into said opening, means for pivotally mounting the operating member at its lower

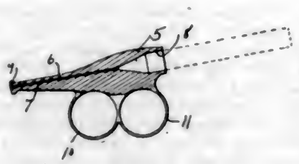


end on said housing plate, and a finger extending from the said operating member through the door to the latching bolt and engaging therewith to retract the same against said spring on downward operation of the outer end of said lever.

1,868,985. NAIL BUFFER. JAMES BERNARD LYON, New York, N. Y. Filed July 29, 1931. Serial No. 553,708. 10 Claims. (Cl. 132—78.)

1. A device of the character described comprising a case consisting of two sections hinged together for arrangement back to back, a buffer mounted in one section, a perforated tray mounted in the other section and forming a powder chamber, and means for closing the perforations.

1,868,986. CIGAR OR CIGARETTE HOLDER. ARTHUR C. MATTISON, Eau Claire, Wis. Filed Sept. 19, 1931. Serial No. 563,752. 4 Claims. (Cl. 131—10.)

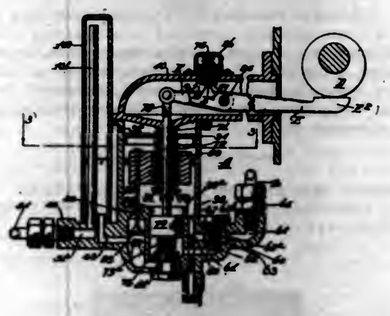


1. A cigar and cigarette holder comprising a body, a series of finger gripping members carried by the lower face of the body and arranged in closer proximity to the foward end of the body than the rear end of the body, the body being arranged at an angle to the finger gripping device whereby the cigar or cigarette held by the body will be disposed at an angle to the hand of the user with the lighted end uppermost.

1,868,987. DYEING PROCESS. WILLIAM ROY MOORHOUSE, New York, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 25, 1929. Serial No. 342,674. 23 Claims. (Cl. 8—5.)

1. In a process of dyeing with a vat dyestuff by the pad and jig method the improvement which comprises padding the material to be dyed with a padding liquor which contains the vat dyestuff in the unreduced form, a thickener and an alkali-metal salt whose aqueous solutions react alkaline.

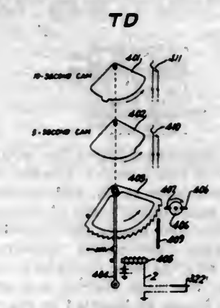
1,868,988. LIQUID-SEALED PUMPING SYSTEM. WILLIAM H. MUZZY, Evanston, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Jan. 19, 1929. Serial No. 333,576. 9 Claims. (Cl. 103—40.)



1. A pumping apparatus for supplying fuel to an internal combustion engine comprising a pumping chamber and a pumping member operating thereon, the chamber having inflow and outflow connection with the fuel supply line leading from a fuel source, an outflow connection leading to the carbureter; an auxiliary chamber having extent above the level of the pumping chamber and having communication with the outflow passage of the pumping chamber, and a drain port communicating with the inflow passage of the pumping chamber, a normally seated valve controlling said drain port, and a float in said auxiliary chamber connected with said drain port valve for opening the same upon accumulation of liquid in said auxiliary chamber above a predetermined level for controlling the level of said auxiliary chamber; a vacuum trap on the fuel supply line anterior to the drain port of the auxiliary chamber, said vacuum trap having at the upper part fuel inflow connection with the fuel supply line from the fuel source, and at the lower part a fuel outflow connection with the fuel line toward the pumping chamber and carbureter, said outflow connection being located at a substantial distance below the governed level of the auxiliary chamber, and said vacuum trap chamber having substantial liquid capacity above said outflow connection and below the governed level of the auxiliary chamber and additional capacity continuous with the first-mentioned above said governed level and below the level of the fuel inflow connection; said additional capacity being in excess of the fuel capacity of the inflow pipe back to the liquid level of the fuel source.

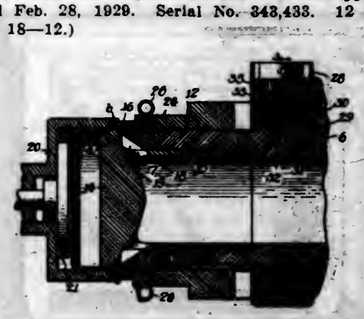
1,868,989. TIMING DEVICE. MARTIN L. NELSON, Park Ridge, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Jan. 9, 1926, Serial No. 80,167, Patent No. 1,729,854, dated Oct. 1, 1929. Divided and this application filed Aug. 29, 1929. Serial No. 389,169. 4 Claims. (Cl. 161—1.)

1. In a timing system, a toothed driving shaft having an untoothed portion, a toothed rotatable member out of reach of said toothed shaft, a clutch magnet for bringing said member into the reach of said shaft whereby said member is rotated, and a normally ineffective re-



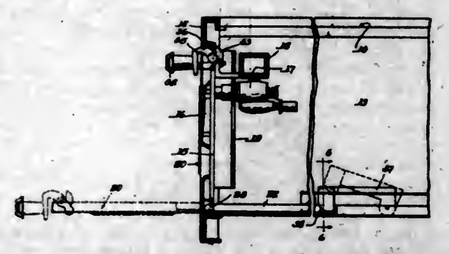
taining pawl for said member to retain the same in its attained rotary position and effective when said member is moved into reach of said shaft.

1,868,990. GASKET FORMING MACHINE. WILLIS J. PEELLE, Chicago, Ill. Original application filed June 7, 1926, Serial No. 114,224. Divided and this application filed Feb. 28, 1929. Serial No. 343,433. 12 Claims. (Cl. 18—12.)



2. A plastic ring extrusion device comprising, in combination, a tubular die member having an open end, a head having a metallic connection with the interior of said member and spaced from the end thereof to form an extrusion slot, and an electric heater encircling the tubular member and adapted to apply heat thereto for transmission to opposite walls of the slot, said connection between the head and the die member including a plurality of heat-conducting elements in closely spaced circumferential relation.

1,868,991. COOK STOVE. GEORGE E. PICKUP, Newark, Ohio, assignor to The Wehrle Company, Newark, Ohio, a Corporation of Ohio. Filed July 20, 1931. Serial No. 551,877. 12 Claims. (Cl. 126—41.)



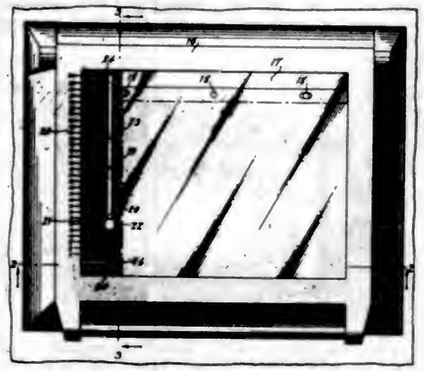
1. A cooking stove having a burner box with an open front, a closure for said open front, and a drip pan in said box pivotally supporting said closure.

1,868,992. RAIL JOINT. FREDERICK L. RE QUA, San Francisco, Calif., assignor to Welding Service, Inc., San Francisco, Calif., a Corporation of California. Filed Mar. 22, 1930. Serial No. 438,078. 9 Claims. (Cl. 238—227.)



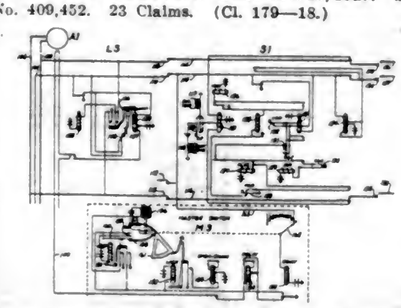
1. A rail joint comprising plates for securing together the adjacent ends of rail sections, a metal shim inserted between the opposed faces of the rail sections, the upper edge of said shim terminating short of the upper surfaces of the rail sections, and means for retaining said shim between said plates, said means including a portion formed integrally with the shim and bent to extend laterally to the planes of the faces thereof, said shim having a contour such that it can be inserted in the joint without removing said plates.

1,868,993. SYNCHRONIZING METHOD AND APPARATUS FOR MAKING SOUND-PICTURE FILMS. GEORGE H. RUFLE, Astoria, N. Y. Filed Jan. 3, 1930. Serial No. 418,291. 6 Claims. (Cl. 88—16.)



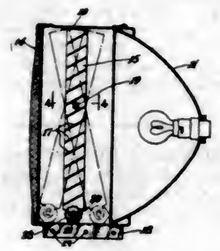
1. The combination with a cartoon registering and framing device, of a tempo indicating means adjustable on said device so as to be photographed together with a cartoon.

1,868,994. TELEPHONE SYSTEM. NORMAN H. SAUNDERS, Homewood, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 25, 1929. Serial No. 409,452. 23 Claims. (Cl. 179—18.)



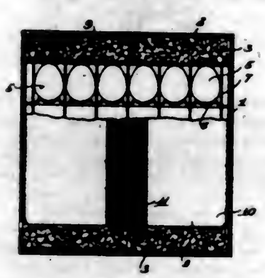
1. In a switch-control circuit for use in automatic switching apparatus, a line relay, a release relay, and a change-over-relay, and means for energizing said relays successively in the order named responsive to the seizure of the switch control circuit.

1,868,995. ANTIGLARE DEVICE FOR AUTOMOBILE HEADLIGHTS. ARNOLD F. SCHOEN, Saugerties, N. Y. Filed May 22, 1931. Serial No. 539,168. 3 Claims. (Cl. 240—45.)



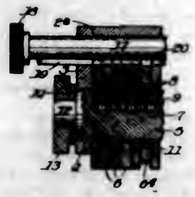
1. A device of the character described comprising a casing, a frame pivotally supported in said casing a stable equilibrium but adapted to swing freely when the casing is tilted, a plurality of shutter slats fixed to said frame, and a broken surface roller rotatably supported by said frame in engagement with said casing for damping swinging movement of said frame.

1,868,996. METHOD OF EGG PRESERVATION. PAUL FRANCIS SHARP, Ithaca, N. Y. Filed Apr. 14, 1930. Serial No. 444,136. 1 Claim. (Cl. 99—8.)



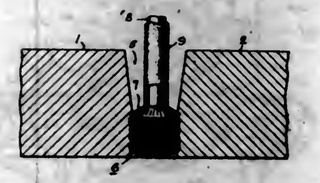
The method of preserving eggs which consists in enclosing them in a container permeable to moisture and relatively impermeable to carbon dioxide, and relying on the carbon dioxide released by the eggs themselves to increase the carbon dioxide content of the atmosphere around them to retard decomposition.

1,868,997. MARKING DEVICE. FRANK S. SPEICHER, Pittsburgh, Pa., assignor to M. E. Cunningham Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 22, 1929. Serial No. 387,658. 2 Claims. (Cl. 101—110.)



1. A stamping head having a body portion, a rotatable spindle carried by the body portion, a longitudinal slot in said spindle, a plurality of rectangular friction blocks resiliently mounted in said slot, a plurality of character-bearing members on the spindle each engaging a friction block, means for securing the character-bearing members in alinement, and means for individually releasing said members for rotation thereof by a rotation of the spindle.

1,868,998. METHOD OF ELECTRIC ARC WELDING. RICHARD STRESAU, Wauwatosa, Wis., assignor to A. O. Smith Corporation, Milwaukee Wis., a Corporation of New York. Filed May 13, 1929. Serial No. 362,714. 6 Claims. (Cl. 219—10.)

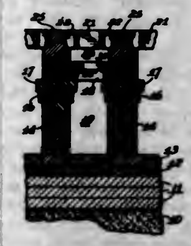


1. The method of electric arc welding, which comprises arranging the plates in welding proximity with a welding groove of substantially U-shape therebetween, employing a covered metallic weldrod and establishing an electric arc between the end of said weldrod and the metal to be welded, applying a welding current of high value to pool the fusing welding metal simultaneously for the full width of the groove and to heat treat the metal below the pool to refine the same, and passing the weldrod along the groove a plurality of times until the plates to be welded are united by a deposit of fused welding metal in unitary interfused layers of uniform metallic grain structure.

1,868,999. METHOD FOR THE EXTRACTION OF TEA AROMA. OTTO STROHACH and PAUL ALBERT WICKMANN, Leipzig, Germany. Filed Sept. 9, 1929, Serial No. 391,518, and in Germany June 25, 1929. 1 Claim. (Cl. 99—11.)

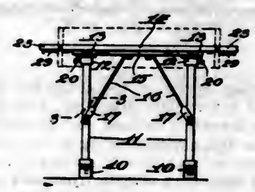
The process of preparing a tea-aroma from the leaves or other equivalent parts of plants similar thereto which comprises treating said leaves with an organic solvent, separating said solvent from said leaves, evaporating said solvent whereby the tea-aroma together with impurities remains behind as a pasty mass, treating said mass with slightly diluted alcohol to dissolve the aroma leaving the impurities as insolubles, separating the alcoholic solution from said impurities, evaporating the separated acoholic solution to pasty consistency and treating the residue with petroleum ether to dissolve the tea-aroma, leaving further impurities in the insoluble state, and recovering the tea-aroma from the petroleum ether by evaporating the latter whereby the tea-aroma remains as a pasty mass suitable for use as a flavoring material having the characteristic taste and aroma of tea.

1,866,000. FLUE CONSTRUCTION FOR KILNS. ROBERT H. YOUNGMAN and ROBERT H. H. PIERCE, Pittsburgh, Pa. Filed Aug. 14, 1930. Serial No. 475,144. 3 Claims. (Cl. 25—132.)



1. A kiln for burning bricks and like products, having an exhaust stack, continuous parallel passages extending across the kiln connected to the exhaust stack and formed by solid parallel walls beneath the floor, a floor structure supported on said walls comprising riddle tiles providing outlets therebetween for escape of hot gases, horizontally positioned spaced apart damper tiles dividing the space below said riddle tiles and forming retarding spaces or flues beneath the floor, the space below said damper tiles comprising secondary retarding spaces connected to the stack, and adjustable shutter tiles mounted on the damper tiles and each adapted to bridge the gap between two adjacent damper tiles, each of said shutter tiles being adapted when moved to control the passage between the two damper tiles by which it is supported.

1,869,001. ROOM SERVICE TABLE. JOHN W. ALLEN, Los Angeles, Calif. Filed Mar. 12, 1928. Serial No. 260,963. 4 Claims. (Cl. 45—17.)



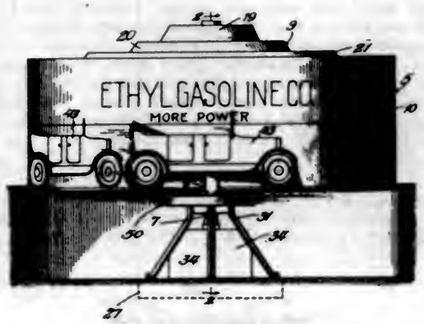
1. In a room service table, a table top, a pair of sockets arranged on the underside of said table top, said sockets being located adjacent to the end of the table top on the longitudinal center line thereof, legs having their upper ends detachably seated in said sockets, a transversely disposed block secured to the lower end of each leg, inclined braces having their upper ends detachably secured to the underside of the table top adjacent to its center, the lower outer ends of which braces are bifurcated and straddle the intermediate portions of the legs and means for detachably securing the bifurcated lower ends of said braces to said legs.

1,869,002. TREAD LINKAGE. ARTHUR P. ARMINGTON, Willoughby, Ohio, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio, a Corporation of Ohio. Filed Jan. 8, 1931. Serial No. 507,372. 2 Claims. (Cl. 305—10.)



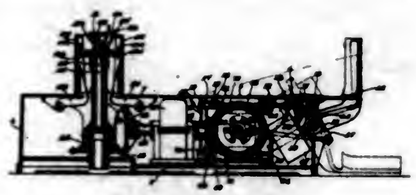
2. A tread linkage adapted to provide a track-forming ground-engaging stretch having beam characteristics for supporting a pair of vehicle wheels, and to extend in said stretch from a bend about the leading wheel, each link of said linkage comprising a shoe having a tread surface and end lugs, hinge pins in said lugs to connect the links, each shoe having a rail and one of said lugs extending forwardly thereof and bearing a forward extension thereof beyond the corresponding pin, whereby said linkage provides in effect a continuous rail for said wheels, in rail sections disposed end to end, with interruptions between said rail sections ahead of the joints between corresponding links, said linkage including truss-forming parts extending upwardly from said shoes beyond said rail and adapted to prevent upward bending of said stretch between wheels running thereon, the arrangement being such that a link will not assume the load of said leading wheel until its said truss-forming parts thereof are engaged by those of the adjacent link from which the wheel runs.

1,869,003. DISPLAY APPARATUS. JOHN A. ASHLEY, Chicago, Ill. Filed Oct. 12, 1931. Serial No. 568,283. 6 Claims. (Cl. 40—33.)



1. In a display device of the character described, the combination of a vertically extending, rotatably mounted mast, a drum extending around and connected to rotate with the mast and adapted to have advertising or like material applied to the outer face thereof, a horizontally extending arm projecting radially from and rotatable relatively to the mast, a member for additional advertising matter secured to the outer end of the arm and positioned so as to lap the outer face of the drum, mechanism for rotating the drum comprising motor-driven gearing connected to the mast, and mechanism for rotating the arm at a different rate of speed than the drum.

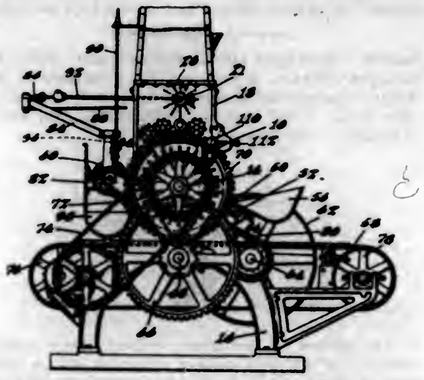
1,869,004. APPARATUS FOR REREELING STRIP METAL. CARL E. BEDELL, Sherrard, and ALFRED J. CASTLE, Wheeling, W. Va., assignors to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed Jan. 25, 1930. Serial No. 423,359. 6 Claims. (Cl. 242—78.)



1. In a machine for unreeling and rereeling coils of metal strip, the combination with a power driven rereeling reel fixedly arranged for rotation on a vertical axis, of a power driven unreeling reel arranged for rotation on a vertical axis and pivotally mounted to permit its being tilted at an angle thereto for loading coils upon it.

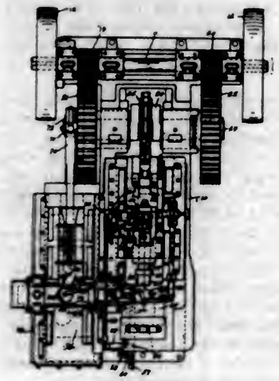
1,869,005. SUGAR MOLDING MACHINE. JOHN FRANKLIN CHARNOCK, Boston, Mass., assignor to Hersey Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 20, 1929. Serial No. 387,154. 1 Claim. (Cl. 25—75.)

In a sugar molding machine, a drum of cylindrical form, a multiplicity of separate molds mounted in said drum for removal independently of each other, said molds being arranged in a plurality of series with each series extending axially of the drum and the individual molds of each series being alined in the periphery of the drum, plungers associated, respectively, with said molds and each fitting the interior of its respective mold, operating bars for the plungers of the respective series of molds, each bar serving to operate all of the plungers for a single series of molds, a pressure bar cooperating with the peripheral surface of the drum to close the outer ends



simultaneously of a series of molds, and means for operating said bars successively to compress the sugar in the molds against said pressure bar.

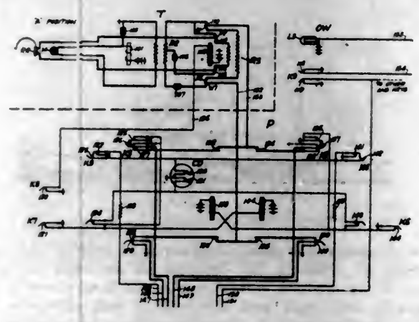
1,869,006. SOLID DIE HEADER. WILLIAM W. CRILEY, Cleveland, Ohio, assignor to The Ajax Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 11, 1930. Serial No. 443,490. 17 Claims. (Cl. 29—34.)



1. In a device of the class described, an anvil, a carriage slidable toward and away from said anvil, a solid headed plunger carried upon the forward end of said carriage and movable thereby into contact with said anvil, said plunger being slidable longitudinally of said carriage, means resiliently opposing movement of said plunger into said carriage, and latch means to hold said plunger against the tendency of said resilient means.

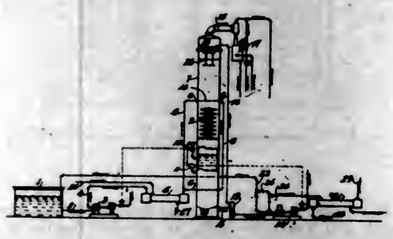
17. In a device of the class described, a frame, two carriages reciprocably mounted in said frame, coacting die members on said frame and on the first-named carriage, a shear element on said die member on said frame, a cam slot in the second said carriage, a third carriage mounted upon said frame, means for reciprocating said third carriage at right angles to said first and second carriages, a shear blade carried by said third carriage and adapted to coact with said first-named shear element, said third carriage reciprocating means comprising a roller in said cam slot, said roller being revoluble upon a journal, said journal being attached to said third carriage by an eccentric mounting, and means for securing said eccentric mounting in adjusted position.

1,869,007. TELEPHONE SYSTEM. THOMAS F. CROCKER, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 20, 1930. Serial No. 421,980. 25 Claims. (Cl. 29—27.)



1. In a telephone system, a toll line terminating in a manual switchboard, a local trunk terminating in an automatic switch, a link circuit at the switchboard individual to said line and said trunk for connecting the same, a branch of said trunk extending to a second manual switchboard, means for establishing a talking connection between said switchboards via said branch, and means controlled from said second switchboard over said branch for directly operating said switch to extend a connection.

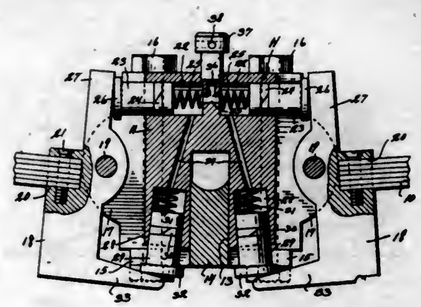
1,869,008. PROCESS AND APPARATUS FOR DEHYDRATING OILS. LLOYD L. DAVIS, Ponca City, Okla., assignor to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed Feb. 11, 1929. Serial No. 339,034. 1 Claim. (Cl. 196—5.)



A process for dehydrating petroleum oils which contain substantially no low boiling hydrocarbons including the steps of heating the oil to be dehydrated to a temperature not in excess of substantially 200° F., spraying the oil so heated into a zone maintained at sub-atmospheric pressure, said heating step being performed completely without said sub-atmospheric pressure zone, spreading the sprayed oil into a plurality of films within said zone, whereby the vacuum is adapted to rupture the film surfaces to liberate the moisture, withdrawing the moisture in the form of vapor separately from and out of contact with the oil being dehydrated, and separately withdrawing the oil being dehydrated.

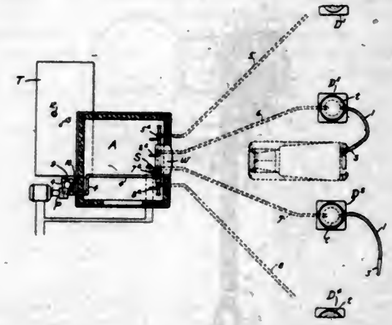
1,869,009. SHOCK ABSORBER. THOMAS J. HOBBS, Macon, Ga. Filed Jan. 12, 1932. Serial No. 586,218. 3 Claims. (Cl. 267—23.)

1. A shock absorber comprising a housing, means for securing the housing to a vehicle axle, spring engaging members, means for rockably securing said members in opposed relation one on each side of the housing, a pair of opposed upper cylinders formed with the housing, upper pistons slidable in said cylinders and having one end portion thereof projecting outwardly of the housing, piston operative members formed with said spring engaging members, and coacting means carried by said



spring engaging members and the lower portion of the housing to cushion the rocking movement of said spring engaging members in one direction.

1,869,010. METHOD OF AND MEANS FOR CONTROLLING AND MEASURING LIQUIDS FOR REMOTE DELIVERY. THOMAS B. JENKINS, Richmond, Ind., assignor to Jenkins Vulcan Spring Co., Richmond, Ind., a Corporation of Indiana. Filed June 14, 1930. Serial No. 461,238. 8 Claims. (Cl. 221—100.)

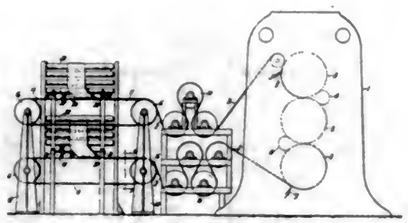


1. A system of distributing predetermined amounts of liquid from a source of supply to a plurality of dispensers, comprising a main supply tank; a plurality of auxiliary delivery tanks, one located at each of said dispensers; a control station; a pressure line extending from said main tank to said control station; a delivery conduit connecting said pressure line with each of said auxiliary tanks; a meter embodied in said pressure line and adapted to indicate to an attendant in said control station the amount of liquid passed therethrough; means in said control station selectively to connect said delivery conduits with said pressure line; and means to discontinue the flow of liquid through said delivery conduits.

1,869,011. APPARATUS FOR THE MANUFACTURE OF LAMINATED RUBBER SHEETING. OTTO J. KUHLKE, Akron, Ohio, assignor, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 8, 1927. Serial No. 211,322. 11 Claims. (Cl. 154—1.)

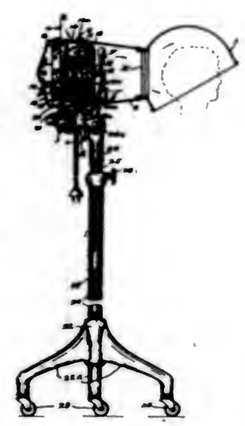
1. An apparatus for the manufacture of laminated rubber sheeting comprising a calender, means for cutting a plurality of parallel strips from the calender, a turning element disposed in the path of each of the strips and

in contact therewith throughout the turning area adapted to turn such strips without attenuation from their parallel paths to paths overlying one another, said overlying



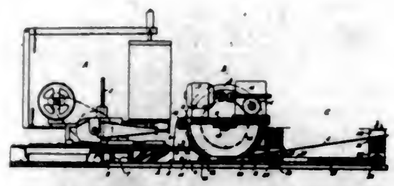
strips being in a plane substantially parallel to the plane of their original path, and means for uniting the strips after they are superimposed.

1,869,012. HAIR DRIER. PAUL KUNIAN, Minneapolis, and ARCHER M. DOUGLAS, St. Paul, Minn.; said Douglas assignor to said Kunian. Filed Dec. 14, 1929. Serial No. 414,033. 4 Claims. (Cl. 219—39.)



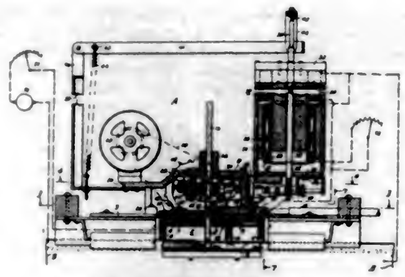
1. In a hair drier, a tubular casing having an air discharge passage at its forward end, and an open rear end, a fan or impeller for projecting air through said casing, a heating element arranged annularly within said casing, and a detachable mounting for said heating element comprising a vertical plate, a series of resilient arms connected with the upper portion of said plate and extending radially and forwardly thereof, said arms being connected with said heating element, a pair of forwardly extending electric terminals connected with said heating element and a pair of complementary electric terminals mounted in the rear of said casing and projecting rearwardly with which said first mentioned terminals may be detachably connected, the outer ends of said arms yieldingly engaging the interior of said casing and cooperating with the connection between said terminals to retain said heating element and mounting in operative position within said casing.

1,869,013. WELDING APPARATUS. JOHN C. LINCOLN, Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 25, 1928. Serial No. 256,841. 10 Claims. (Cl. 219—8.)



4. In portable welding apparatus, a welding unit comprising an electrode for drawing an arc with the seam to be welded and for movement along said seam and means movable with said unit for holding said electrode and also a welding strip in proper relation to the seam as the unit moves along the seam.

1,869,014. ARC WELDING ELECTRODE CONTROL MECHANISM. JOHN C. LINCOLN, Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 25, 1928, Serial No. 256,842. Renewed Oct. 28, 1931. 10 Claims. (Cl. 219—8.)

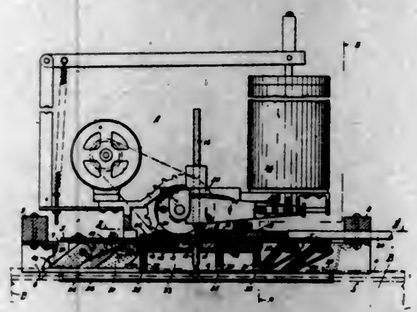


1. In welding apparatus, a body adapted to be placed on the work and having a guide, an electrode seated in said guide, a warpable frame made up of a threaded driving rod, longitudinal elements loosely pivoted on said rod and a cross member pivoted to the ends of said elements, each element having a wheel journalled therein, said wheels engaging opposite sides of said electrode, said wheels having driving relation with said rod, said cross member being pivoted to said body and means for warping said frame.

1,869,015. ARC WELDING APPARATUS. JOHN C. LINCOLN, Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 25, 1928. Serial No. 256,843. 20 Claims. (Cl. 219—8.)

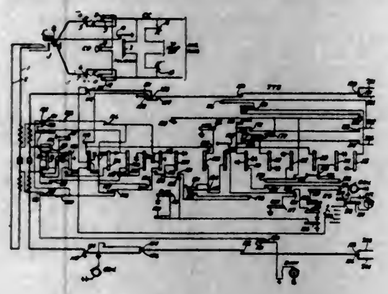
1. In a welding unit, a frame plate, longitudinal members depending therefrom having channels in their lower edges, soft tubes in said channels, strips in said tubes secured to said members, a plurality of sets of transverse front, soft, flexible, fireproof wipers connecting said members, a transverse refractory wall just behind said wipers, an electrode extending through said plate behind said wall, a transverse refractory wall behind said electrode, longitudinal refractory walls connecting said transverse walls, a transverse wall connecting said longitudinal walls

in front of said electrode, longitudinal rear, refractory walls for positioning on opposite sides of the seam a plurality of sets of sheet, wipers, each set being pivoted between said rear walls, a plurality of sets of transverse,



rear, soft, flexible fireproof wipers between said rear longitudinal walls and said longitudinal members on each side, said transverse walls having notches for positioning over the seam.

1,869,016. TELEPHONE SYSTEM. CLARENCE E. LOMAX, Oak Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 24, 1930. Serial No. 490,869. 27 Claims. (Cl. 179—27.)



1. A toll switch train comprising toll selectors each adapted to be positioned on its banks by two directive digits, and toll connectors arranged in groups according to the groups of subscribers' lines accessible thereto, all connectors of any one group being accessible in the same bank position of said selectors.

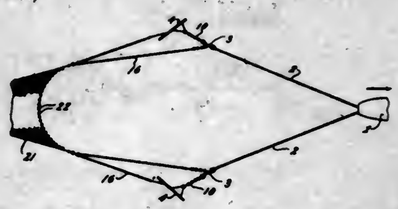
1,869,017. ELECTRICAL RECTIFIER. SAMUEL M. LUCAS, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 4, 1928. Serial No. 275,200. 12 Claims. (Cl. 175—366.)



1. A rectifier comprising a flat asymmetric unit made up of a metallic disk having one side provided with a coating of a compound of the metal, a lead sheet, means for clamping said sheet against said coating, and means for preventing said sheet from engaging said disk.

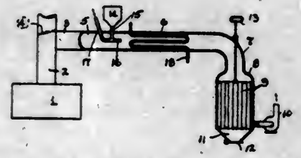
4. A rectifier comprising a flat circular asymmetric unit made up of a metallic disk having one side provided with a coating of a compound of the metal, a circular lead sheet adjacent the coating of the unit, a bolt extending through the lead sheet and the unit and provided on its shank with an insulating sleeve, a flat circular ring of insulating material encircling said sleeve and attached to the lead sheet on the side adjacent the coating, and a nut threaded on the bolt for clamping said sheet and said unit together.

1,869,018. TRAWLING GEAR. JOHN C. MALCOLM, Wollaston, Mass., assignor to Bay State Fishing Company, Boston, Mass., a Corporation of Massachusetts. Filed May 8, 1930. Serial No. 449,470. 5 Claims. (Cl. 43—9.)



1. Trawling gear comprising a net, a pair of hawsers, a tow line connected to each hawser and having its intermediate part connected to a side of the net, a panel associated with each hawser, each tow line having one end connected to the end of a panel nearer the net, and having an end connected to the hawser, and a connection between the inner face of each panel and a hawser.

1,869,019. METHOD FOR RECOVERY OF FLUORIDES FROM ENAMEL GLASS SMELTER GASES. GLENN H. MCINTYRE, East Cleveland, Ohio, assignor to Ferro Enameling Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 8, 1928. Serial No. 274,787. 8 Claims. (Cl. 23—88.)



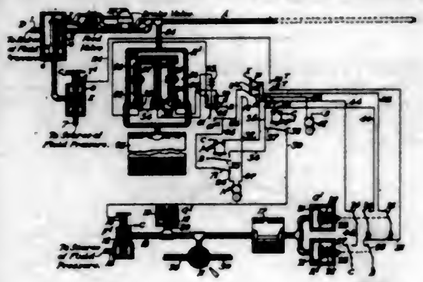
1. A method of producing solid non-volatile fluorides from volatile fluoride gases in the waste gas stream of enamel glass, and enamel glaze frit smelters, or the like, which includes the steps of bringing into contact with said waste gas stream finely divided particles of alkali metal or alkaline earth metal hydroxides, and thereafter separating the resultant non-volatile fluorides from said waste gas stream.

8. A method of producing non-volatile fluorides from boron trifluoride carried in the waste gas stream of an enamel glass, or an enamel glaze frit smelter, or the like, which includes the step of acting on the smelter gases with calcium hydroxide in powdered form and thereafter separating the resultant calcium fluorides from said gas stream.

1,869,020. SIGNALING APPARATUS AND METHOD. LEWIS L. NETTLETON, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 8, 1927. Serial No. 238,567. 4 Claims. (Cl. 177—352.)

2. In combination, a pipe containing a fluid under pressure, means for impressing periodic pressure impulses of a predetermined frequency upon the fluid in said pipe, a main relay responsive to such pressure impulses, a reservoir connected with atmosphere through a restricted orifice, means controlled by said relay for at times admitting fluid to the reservoir to charge the reservoir to a prede-

termined pressure, two pneumatic relays connected with said reservoir and arranged to be operated when the reservoir is charged but to return to their normal conditions successively as the pressure in the reservoir is dissipated



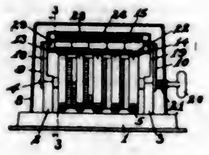
through said orifice, a signal, and means for operating said signal when said main relay is in operated condition provided one pneumatic relay is in normal condition and the other pneumatic relay is in operated condition.

1,869,021. EXPANSION JOINT OR COUPLING. GEORGE W. PERKS, Akron, Ohio, assignor of one-half to John R. Gammeter, Akron, Ohio. Filed May 5, 1927. Serial No. 188,934. 8 Claims. (Cl. 285—163.)



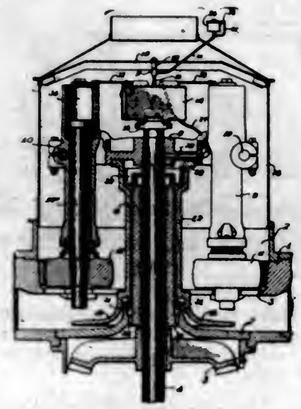
1. An expansion joint comprising outer and inner, relatively reciprocable, telescoping sleeves adapted to be connected to adjacent ends of a pipe line, said outer sleeve having a pair of internal circumferential grooves in its overlapping end defining an inner, circumferential rib, and a pair of pressure operated gaskets positioned on opposite sides of said rib in the grooves for free radial movement and having oppositely facing surfaces exposed to atmospheric pressure and to the pressure within the pipe line, respectively, whereby the joint may be effectively sealed about said rib with any degree of pressure or partial vacuum within the pipe line.

1,869,022. REGISTER. CLINTON J. PHARE, Cleveland, Ohio, assignor to Hoyt V. Bright, Cleveland, Ohio. Filed Aug. 27, 1930. Serial No. 478,104. 4 Claims. (Cl. 101—93.)



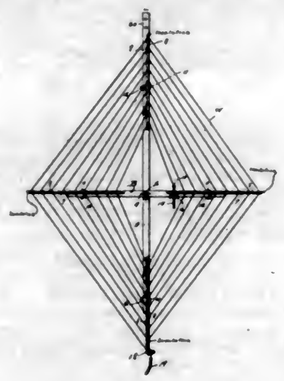
1. In a register, the combination of a plurality of discs, the discs having characters upon their faces, a rod, rollers supported by the rod, the rollers having openings larger than said rod, the rollers being adapted to press a single strip of paper against the faces of said discs, and a spring engaging the periphery of each of said rollers tending to press said rollers against said strip of paper for forcing same against the faces of said discs.

1,869,023. LUBRICATING MEANS FOR ROLLER PULVERIZERS AND THE LIKE. ARTHUR H. PRITCHARD, East Orange, N. J., assignor to Vacuum Oil Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 23, 1926. Serial No. 137,187. 3 Claims. (Cl. 184—6.)



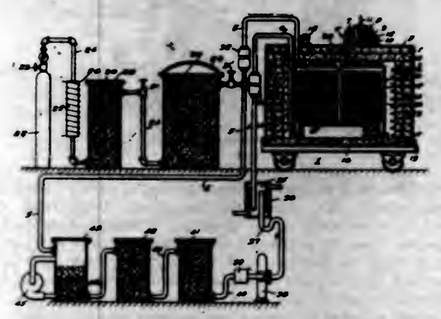
1. The combination, with a stationary member, a main shaft journalled therein,, and a bearing supported and revolved by said shaft, of an automatic power-driven lubricator having a casing carried by and rotatable with the main shaft, and a drive shaft, for actuating the mechanism of the lubricator, journalled in said casing said drive shaft being fixed against rotation by connection with said statonary member, and a duct through which the lubricator discharges lubricant to said bearing.

1,869,024. RADIO ANTENNA APPLIANCE. CHARLES M. SCOTT, Carrollton, Ky. Filed Oct. 29, 1929. Serial No. 403,232. 3 Claims. (Cl. 250—33.)



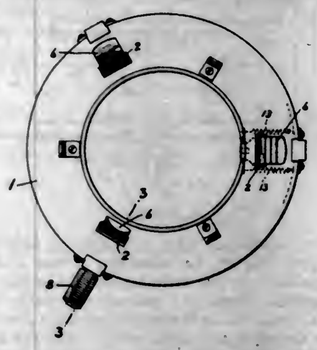
1. A radio antenna appliance comprising cross members in substantially perpendicular relation one with respect to the other, means for connecting said members one to the other, insulating strips carried by the opposite end portions of the members and disposed on an angle with respect thereto, said insulating strips converging towards the center of the appliance, said insulating strips being provided with openings for the passage of an antenna wire, one of the insulating strips having means for securing one end of the wire and for connecting a lead wire thereto, and means for engagement with the opposite end of the antenna wire and carried by one of the insulating strips to tauten the antenna wire, said wire being positioned in superposed loops decreasing in size from the outermost loop with each loop disposed in a different plane.

1,869,025. MAGNETIC MATERIAL AND METHOD OF PRODUCING SAME. JOHN B. SEASTONE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 26, 1931. Serial No. 540,148. 9 Claims. (Cl. 175—21.)



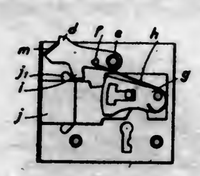
1. The procesa of treating ferromagnetic materials in an atmosphere of a purified and dehydrated reducing gas which comprises circulating the gas through a furnace containing said material while the dew-point in the furnace is maintained at not more than —20° C. and the temperature of the material is maintained at from 900° C. to 1400° C.

1,869,026. GLOBE HOLDER. ARTHUR B. SHAW, St. Louis, Mo., and JEAN L. LE GORRE, Philadelphia Pa., assignors to Pennsylvania Globe Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 26, 1931. Serial No. 540,068. 3 Claims. (Cl. 240—135.)



1. A globe holder comprising, in combination, a base, levers pivotally mounted on the base and arranged in spaced relation and in a circle and extending through the base providing clips at one face of the base and shanks at the other face of the base, pivotally mounted hand pieces having rigid arms operatable through the base, links pivoted to the shanks and to the arms, the elbow joints between the arms and the links adapted to break joint to one side of a line through the pivots of the hand pieces and the pivots between the shanks and the links and to straighten out on the opposite side of a line through said pivots, and tension springs interposed between the base and the shanks and effective in both positions of the clips.

1,869,027. LOCKING DEVICE. LAJOS SOLTI, Pecs, Hungary. Filed Apr. 26, 1930, Serial No. 447,628, and in Hungary Sept. 20, 1929. 3 Claims. (Cl. 70—14.)



1. A locking device including in combination a fixed lock casing having one end open and having an aperture in the top wall near the open end a lock insertable in the lock casing and including a lock body, a sliding latching bolt on the body, a tumbler plate associated with the latching bolt, a gib pivotally mounted on the lock body and adapted to project through the aperture in the top of the casing when the body is arranged in the casing, a spring connected to the tumbler plate and acting on the gib to hold it in an extended position, coacting extension pieces on the gib and on the latching bolt which in the retracted position of the bolt prevent depression of the gib so as to fix the lock body in the lock casing whilst in an extended but unlocking position of the latching bolt the gib can be depressed on the lock body whereupon the lock body can be drawn out by its latching bolt from the lock casing.

1,869,028. CRACKING OIL. BENJAMIN L. SOUTHER, Pittsburgh, and JOHN W. GREENE, Wilkinsburg, Pa., assignors to Gulf Refining Company, Pittsburgh Pa., a Corporation of Texas. Filed May 24, 1930. Serial No. 455,454. 2 Claims. (Cl. 196—65.)

2. In the process of heating and cracking corrosive oil while in transit, the method of reducing corrosion of the apparatus which comprises determining the quantity of H_2S normally generated, and supplying air to the oil while in transit in the ratio of not substantially less than 10 nor more than 15 volumes of air to every volume of hydrogen sulfid which would normally be produced in the cracking of the oil.

1,869,029. DOOR. GEORGE A. SPILLER and GEORGE T. JOHNSON, Columbus, Ohio, assignors to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Dec. 18, 1928. Serial No. 326,823. 16 Claims. (Cl. 105—280.)

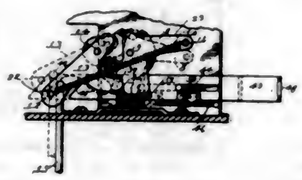


1. A one-piece metallic freight car door including a main web provided at its edge with an integral angular flange, whereby the edge of the door is of channel shape, the edge of said flange being inturned, said flange having continuations forming intermediate horizontal and vertical reinforcements for the web.

1,869,030. FLOAT-OPERATED ELECTRIC SWITCH. CLYDE H. TEESDALE, Grand Rapids, Mich., assignor to Teesdale Manufacturing Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Nov. 22, 1930. Serial No. 497,391. 9 Claims. (Cl. 200—84.)

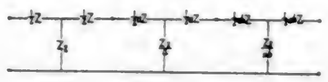
1. In an organization of the character described: a vessel adapted to contain liquid; an electric switch; upper and

lower floats in the vessel having operative connection with the switch including a vertical rod having a stop, the rod being movable upwardly to open the switch and downwardly to close the same, the upper float having a



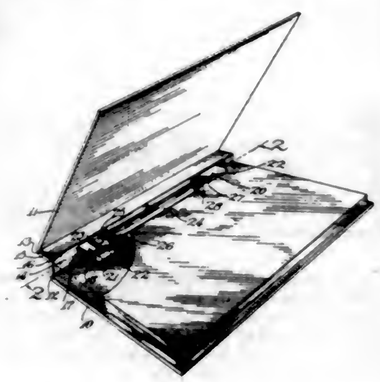
downwardly limited movement and a movement between the stop and the lower float, the combined buoyancy of the floats and the combined weight thereof acting on the rod being requisite for opening and closing the switch respectively.

1,869,031. ELECTRICAL VOICE TRANSMISSION NETWORK. TREVOR HUGH TURNEY, Liverpool, England, assignor to Automatic Electric Company, Liverpool, England, a British Company. Filed Mar. 7, 1930, Serial No. 433,871, and in Great Britain Mar. 8, 1929. 6 Claims. (Cl. 178—45.)



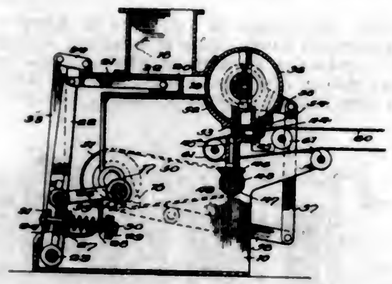
1. A transmission element for audio frequency or like electric circuits comprising a number of sections, each section consisting of a wave filter having a different cut-off frequency, the cut-off frequencies of adjacent sections increasing progressively from a certain frequency.

1,869,032. LOOSE LEAF HOLDER. CLYDE V. VAN BUREN, Chicago, Ill. Filed Feb. 20, 1931. Serial No. 517,228. 5 Claims. (Cl. 129—35.)



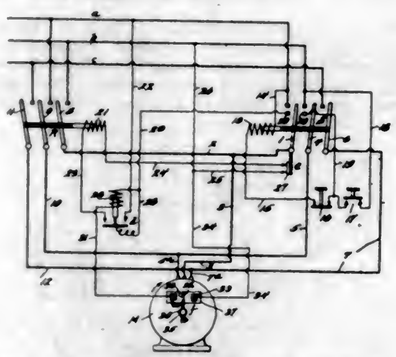
1. A loose leaf holder comprising an open sided receptacle for the marginal portions of the leaves to be held, one side of said receptacle comprising spaced flanged portions, and a normally bowed spring clamping element detachably and swingably supported at one end on one of said flange portions and detachably engageable at its opposite end under said other flange portion in cooperative clamping relation to different thicknesses of sheets in said receptacle.

1,869,033. DOUGH HANDLING APPARATUS. FRANK H. VAN HOUTEN, Beacon, N. Y., assignor to Dutchess Tool Company, Beacon, N. Y., a Corporation of New York. Filed July 14, 1931. Serial No. 550,784. 10 Claims. (Cl. 107—4.)



8. In a combined dough divider and rounder, the combination of a measuring head having a cavity therein, a compression box, means for depositing dough from said box in said cavity under pressure, a rounding-up surface spaced from the perimeter of said head, means for moving said head to position said cavity in registry with said surface, and a plate interposed between said surface and the perimeter of said head, said plate having an opening therein adapted to form a continuation of said cavity.

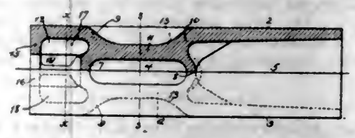
1,869,034. DISCONNECTING RELAY FOR REVERSE CURRENT BRAKING DEVICES. GEORGE H. WHITTINGHAM, Baltimore, Md., assignor to Monitor Controller Company, Baltimore, Md., a Corporation of Maryland. Filed Apr. 18, 1931. Serial No. 531,238. 2 Claims. (Cl. 172—179.)



1. The combination with a multiphase alternating current supply circuit, an induction motor and normally open main and reverse switches for connecting the motor to the supply circuit, of a magnet for closing the reverse switch, a circuit for said magnet including a switch adapted to be closed by the main switch when the latter opens and including also a normally open relay switch, a circuit for the relay magnet, means for closing the last mentioned circuit when the main switch closes and the rotor of the motor starts in one direction, said last mentioned means including a slip switch adapted to open the circuit of the relay magnet when the rotor starts to reverse.

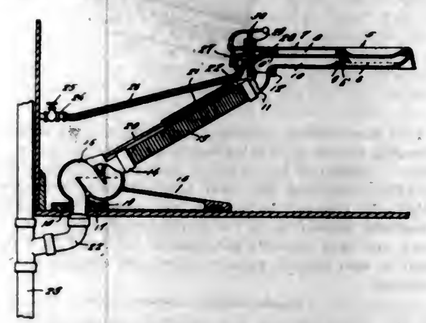
1,869,035. CAR COUPLER. HARRY H. WOLFE, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Apr. 10, 1929. Serial No. 354,001. 2 Claims. (Cl. 213—62.)

1. A coupler shank having top and bottom walls, and provided with a key slot having top and bottom walls, the top and bottom walls of the key slot forming continuations of the top and bottom walls of the shank, certain of said walls being provided with depressions adjacent



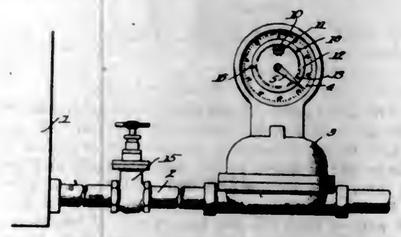
the key slot, and reinforcing ribs arranged in said depressions and integral with said walls of the shank and the walls of the key slot.

1,869,036. SANITARY BEDPAN. THEODORE ZINK, Noel, Mo. Filed Oct. 9, 1931. Serial No. 567,916. 2 Claims. (Cl. 4—112.)



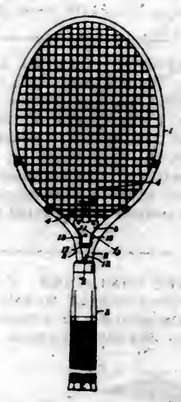
1. In combination with a bed pan having a water inlet passage and a discharge passage, a flexible pipe connecting the inlet passage with a water supply pipe, valves for controlling the flow of water thru the passage, a trap at the point of connection of the discharge passage with the pan, for holding a certain amount of water in the pan to seal the discharge passage, a trap connected with a sewer, a flexible pipe connecting the last mentioned trap with the discharge passage, a telescoping brace connecting the last-mentioned trap with a part of the pan, said brace paralleling the flexible pipe connected with the discharge when said flexible pipe is extended.

1,869,037. ATTACHMENT FOR FLUID METERS. GEORGE M. AGEE, Owensboro, Ky. Filed Sept. 2, 1930. Serial No. 479,353. 3 Claims. (Cl. 235—103.5.)



1. The combination with a fluid meter indicating means, comprising a relatively movable pointer and graduated dial, of a clock-driven shaft, a pinion on said shaft, a gear meshing with the pinion, the teeth of said gear corresponding in number to the graduations on the meter dial, and means carried by said gear adapted in cooperation with the pointer of the meter to indicate the relation between a desired predetermined quantity of fluid and the amount of fluid actually flowing through the meter in a definite interval of time.

1,869,038. TENNIS RACKET. SAMUEL C. ALLEN, Dayton, Ohio, assignor, by mesne assignments, to Dayton Racquet Company, Inc., Dayton, Ohio, a Corporation of Ohio. Filed Sept. 30, 1929. Serial No. 396,091. 8 Claims. (Cl. 273—73.)



1. A racket of the type described, comprising a frame having a throat portion, an anchor piece removably secured to the frame adjacent the throat portion, a resilient covering for said anchor piece, and a bridge piece floatingly secured at its lower end around the covered anchor piece.

1,869,039. GASKET. GLEN G. BARR, Union City, Ind., assignor to Backstay Welt Company, Union City, Ind., a Corporation of Indiana. Filed July 23, 1930. Serial No. 470,183. 5 Claims. (Cl. 20—69.)



1. A gasket adapted to be disposed between a door and its jamb having a fabric covering folded upon itself and enclosing a pair of fillers, one of said fillers being larger than the other and adapted to be compressed by closure of the door against the jamb to the thickness of the smaller filler.

1,869,040. PREPARATION OF CELLULOSE SOLUTIONS. HARRY P. BASSETT, Cynthiana, Ky. Filed Feb. 13, 1930. Serial No. 428,242. 4 Claims. (Cl. 106—40.)

2. The herein described process of preparing cuprammonium solutions of cellulose which comprises subjecting cellulose material in suspension in water to the action of a beater engine, impregnating the cellulose material with an alkali, slowly adding to the mass a compound of copper capable of reacting with the alkali to form copper hydroxide during the beating action, removing the excess liquid from the resulting cellulose material impregnated with copper hydroxide, thoroughly washing the resulting product to remove water-soluble material remaining in the cellulose material, and intimately mixing the washed product with ammonia to effect the solution of the cellulose material.

1,869,041. COATED ALUMINUM. HELMER BENGSTON, Indianapolis, Ind., assignor, by mesne assignments, to Aluminum Colors Incorporated, Indianapolis, Ind., a Corporation of Indiana. Filed June 11, 1930. Serial No. 460,543. 7 Claims. (Cl. 148—6.)

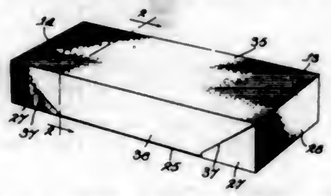
1. An article of aluminum or alloy thereof having formed thereon an integrally united coating containing Al_2O_3, SO_3 and H_2O, having a thickness of the order of a thousandth of an inch obtained by anodic oxidation of

said article in a bath of sulfuric acid between 1.5 and 1.7 specific gravity and being of glassy hardness next the metal with lessened hardness toward the surface, said coating being resistant to water and to wear, minutely porous, adsorptive, capable of being buffed and polished and capable of being dyed with level appearance.

1,869,042. PROCESS OF COATING ALUMINUM. HELMER BENGSTON, Indianapolis, Ind., assignor, by mesne assignments, to Aluminum Colors Incorporated, Indianapolis, Ind., a Corporation of Indiana. Filed June 23, 1930, Serial No. 463,351. Renewed May 10, 1932. 10 Claims. (Cl. 204—1.)

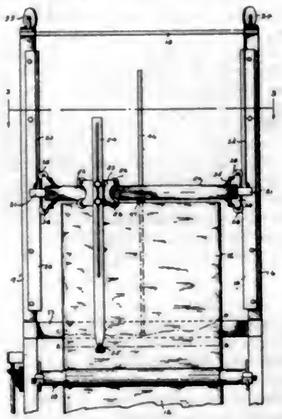
1. In electro-coating articles of aluminum and aluminum alloys, the process which comprises making such an article an anode in sulfuric acid diluted to about 64–65 per cent H_2SO_4.

1,869,043. TICKET CONTAINER. PAUL P. BEYER, Park Ridge, Ill., assignor to Rand McNally & Company, Chicago, Ill., a Corporation of Illinois. Filed May 17, 1930. Serial No. 453,331. 11 Claims. (Cl. 229—45.)



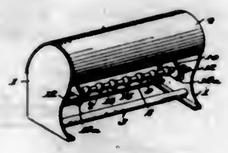
1. A theftproof packaging container having an enclosing portion including a first pair of flatwise opposed walls and a second pair of flatwise opposed walls disposed at an angle to the first mentioned pair, front and rear walls on said enclosing portion having tabs at their ends disposed within the container, extensions on said front and rear walls projecting into the container a sufficient distance to prevent withdrawal of the latter, and a tongue on the enclosing portion extending into the container past the second pair of walls and intermediate the walls of the first pair and in adhering relation to the innermost wall of the first pair.

1,869,044. GLASS CUTTING MECHANISM. JOHN A. BOUSH, Vincennes, Ind., assignor to Blackford Window Glass Company, Vincennes, Ind., a Corporation of Indiana. Filed Jan. 21, 1928. Serial No. 248,346. 8 Claims. (Cl. 33—32.)



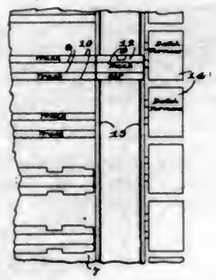
1. In a machine for cutting a moving sheet of glass, a pair of spaced apart guides, a transverse bar movable in advance of the moving sheet of glass, means for movably tracking the transverse bar on the guides, a carrier, means for movably supporting it on the transverse bar, a rule, means for adjustably supporting the rule from the carrier, a glass cutter supported by the rule, a stop-bar having a member to contact the oncoming glass, and means for supporting the stop-bar from the transverse bar.

1,869,045. FOOT CONTROL CONTACT. FRANK J. BRIDGEMAN, Cleveland, Ohio, assignor to The Lake Erie Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 23, 1931. Serial No. 532,327. 3 Claims. (Cl. 200—52.)



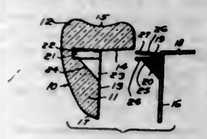
1. A foot control contact, comprising a rigid structure, swinging members, said swinging members having a horizontal connecting bar, locking means, a slidable element on said connecting bar, said locking means arranged to hold said element locked against accidental movement when said element is in the neutral position, electric contacts, and said contacts arranged to be closed by a movement of said slidable element after said element has been unlocked.

1,869,046. CAR PUSHER AND TRANSFER. HOMER W. BUCK, Alliance, Ohio, assignor to The Morgan Engineering Company, Alliance, Ohio, a Corporation. Filed Feb. 23, 1932. Serial No. 594,757. 14 Claims. (Cl. 104—48.)



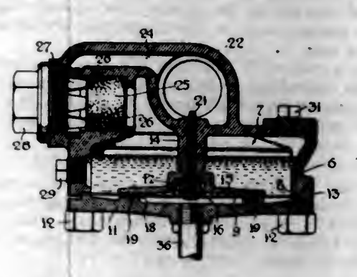
1. In combination, a first pair of tracks, transfer tracks arranged transversely thereto, a transfer car movable on said transfer tracks, a second pair of tracks on the transfer car arranged at the same elevation and being of the same gage as the first pair of tracks, an annealing car having supporting wheels adapted to roll on either the first pair of tracks or the second pair of tracks and provided with a connecting element, first rack car tracks extending parallel to said first tracks, second rack car tracks arranged on the transfer car, a rack car mounted on the transfer car and having supporting wheels for traveling either on the first rack car tracks or the second rack car tracks, means for shifting the rack car longitudinally of the transfer car, movable dogs on the rack car adapted to automatically engage the connecting element of the annealing car, and means for positively disengaging said dogs from the connecting element of the annealing car.

1,869,047. ARTIFICIAL TOOTH. JOHN F. CALDWELL, Houston, Tex. Filed Dec. 19, 1930. Serial No. 503,580. 1 Claim. (Cl. 32—9.)



An artificial tooth comprising a porcelain tooth element having a transverse recess and a longitudinal slot leading into one side of the recess, said recess increasing in diameter toward its closed end, a metal backing plate for the tooth element, an anchor pin fixedly secured to the backing plate and embodying a pair of substantially straight relatively stout spaced tines which diverge throughout their entire length toward their free ends whereby the space between the tines flares toward its free end, the flaring arrangement being maintained during the insertion of the pin into the recess, and a web rigidly secured to one tine and to the backing plate and extending longitudinally of the backing plate, the remaining tine being resilient, the arrangement being such that the tines are adapted for insertion within the transverse recess and the web for insertion within the slot, the ends of the diverging tines having clamping engagement with the walls of the transverse recess, and the forwardly flaring space between the tines being adapted to be completely filled with the cement.

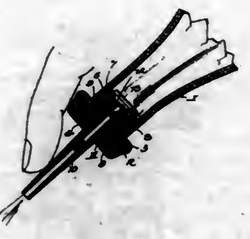
1,869,048. FLUID PRESSURE BRAKE. CHARLES ALBERT CAMPBELL, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Nov. 7, 1929. Serial No. 405,486. 7 Claims. (Cl. 137—72.)



2. The combination with a pneumatic brake system including as a part of the brake system two volumes arranged to receive air under pressures which vary relatively to one another as the system functions; of a pump including a nozzle and a liquid displacing diaphragm, the latter subject on its opposite sides to the pressures in the two volumes, said diaphragm acting to inject liquid into one of the volumes through said nozzle upon relative reduction of pressure in one of said volumes.

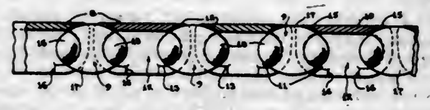
1,869,049. DISPENSING CLOSURE. JOHN L. CARD, Syracuse, N. Y. Filed June 10, 1931. Serial No. 543,474. 6 Claims. (Cl. 215—78.)

1. A dispensing closure for liquid container comprising in combination a resilient body adapted to engage the mouth of the container and to be held thereto by reason of its resiliency, said body having a bore extending longitudinally thereof and likewise having an enlarged chamber at its inner end in line with the bore; and a combined dispensing nozzle and sealing element comprising a tubular member mounted within and extending through the bore and chamber aforesaid and a valve carried by the inner end of said tubular member, said valve seating against the inner end of the resilient body



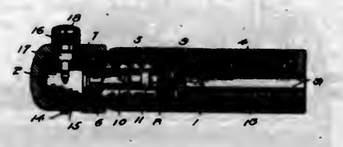
and normally closing the chamber aforesaid, there being an opening extending into the tubular member at a point in line with the enlarged chamber.

1,869,050. CONVEYER CHAIN. WILLIAM R. COPPAGE, Cherrydale, Va. Filed Apr. 6, 1932. Serial No. 603,626. 6 Claims. (Cl. 198—189.)



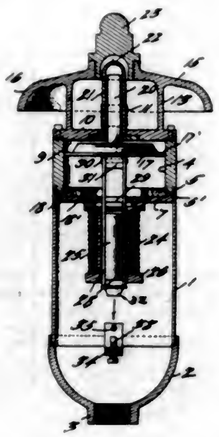
1. A conveyer chain comprising first and second links, each of the first links being of channel shape lengthwise and having side walls, said walls forming pockets in the end portions of each link, each of the second links including balls engaging a pair of pockets of adjacent first links, and a web joining the balls, the ends of the walls of each of the first links forming mouths through which the webs extend, each of said webs and each mouth being shaped to prevent rotation of the links relatively to one another lengthwise of the chain, each of the first links having a substantially flat plate forming the bottom of the channel, and each web having a surface forming a bridge and continuation of the outer surfaces of the plates of adjacent first links.

1,869,051. TIRE PRESSURE RELIEF VALVE. ROY CHANDLER DAVIS, Gloucester, Mass. Filed June 14, 1929. Serial No. 370,787. 4 Claims. (Cl. 137—53.)



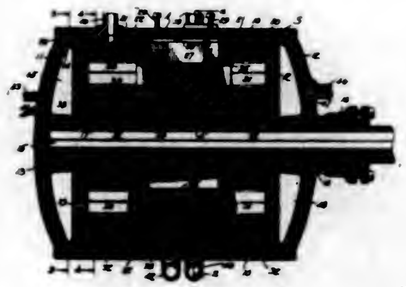
1. In a tire pressure relief valve, an inner barrel containing at its inner end a movable pressure responsive element provided with a blow-off valve and having at its outer end a fixed axial screw threaded opening, in combination with an outer barrel having a hollow axial screw engaged in the opening of the inner barrel, the inner end of the hollow screw having a portion adapted to actuate the blow-off valve, and pressure indicia provided on the outer surface of the inner barrel adapted to be uncovered by relative rotation of the barrels.

1,869,052. ELECTRICALLY OPERATED WHISTLE. CLARENCE R. DUERS, Glens Falls, N. Y., assignor to Duers Signal Company, Inc., Glens Falls, N. Y. Filed Nov. 23, 1929. Serial No. 409,278. 2 Claims. (Cl. 177—7.)



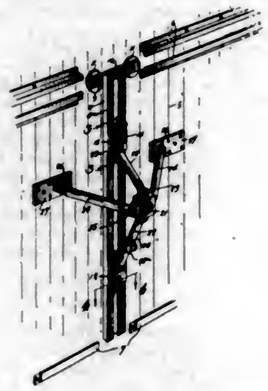
1. A self-contained signaling unit formed to provide a pressure chamber in the upper portion thereof, electrically operated means for creating pressure within said chamber, a signal chamber arranged above the pressure chamber and including an annular wall, a signal in the signal chamber and in communication with the pressure chamber to be sounded on the generation of pressure in said pressure chamber, the annular wall of the signal chamber being formed with an opening immediately adjacent the signal to form a restricted outlet for the sound waves from the signal, the signal chamber including a deflector extension projecting outwardly from the upper edge of the annular wall of the signal chamber, with the free edge of such deflector extending downwardly substantially parallel to the annular wall of the signal chamber and directly overlying the opening in the annular wall whereby the sound from the signal is directed only through the opening in the annular wall and the sound waves immediately thereafter deflected downwardly into substantial parallelism with the annular wall.

1,869,053. ROTARY PUMP OR MOTOR. EDMOND R. DUDLEY, Los Angeles, Calif. Filed Apr. 1, 1930. Serial No. 440,796. 2 Claims. (Cl. 103—143.)



1. A device of the character described comprising a cylindrical stator, a cylindrical rotor journaled axially in the stator and reduced in diameter intermediate its ends to define an annular passage between the stator and rotor having an inlet and an outlet, the rotor being of less diameter than the internal diameter of the stator, metallic liners interposed between the stator and the end portions of the rotor, a liner of yieldable material interposed between the stator and the intermediate portion of the rotor, co-acting means on said liners for securing the yieldable liner against displacement, and co-acting means on the stator and rotor, responsive to rotation of the rotor, to pump fluid from the inlet through the passage to the outlet.

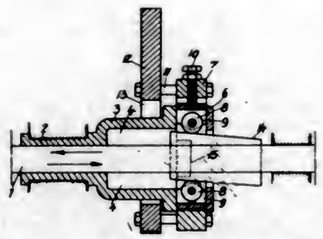
1,869,054. DECKING STRUCTURE. EDWARD S. EVANS, Detroit, Mich., assignor to Evans Products Company, Detroit, Mich., a Corporation of Delaware. Filed Apr. 9, 1931. Serial No. 528,935. 13 Claims. (Cl. 105—368.)



1. In a collapsible deck structure, a hanger, blocks adjustably carried by the hanger and movable thereover toward opposite ends of the hanger, and a deck head associated with the blocks

2. In a collapsible deck structure, a hanger, clamps adjustably carried by the hanger, a bracket arm carried by each clamp, a deck head carried by the free ends of the bracket arms and brace arms carried by the head.

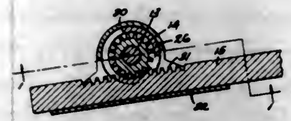
1,869,055. ADJUSTABLE CAM. ANTONIE JACOBUS ENGEL, Arnhem, Netherlands, assignor to Algemeene Kunstzijde Unie N.-V., Arnhem, Netherlands. Filed Apr. 23, 1931, Serial No. 532,386, and in the Netherlands Apr. 25, 1930. 2 Claims. (Cl. 74—1.)



1. A traverse varying device for the production of bobbins with conical ends, comprising a heart-shaped eccentric, an opening in the said eccentric, a shaft movable in a longitudinal direction and adapted to pass through the said opening, a member having inclined surfaces secured to the shaft, a bearing sleeve for the shaft, a sliding piece fixed to the heart-shaped eccentric, a slot in said sliding piece, the said member with inclined surfaces being adapted to fit into the said slot and impart movement to

the sliding piece, guides on the bearing sleeve for guiding the sliding piece, and rollers secured to the sliding piece, said rollers bearing on the member having the inclined surfaces.

1,869,056. GEARING. WALTER A. FRANTZ, Cleveland Heights, Ohio, assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 11, 1929. Serial No. 377,366. 6 Claims. (Cl. 74—14.)



1. In a mechanical movement, the combination with a rack-and-pinion of a hollow cage surrounding said pinion, and a stirrup movably mounted on said cage and having a part engaging said rack to hold the same against said pinion, said cage having portions of its wall formed to enable uninterrupted engagement between said rack and said pinion and having its exterior eccentric relatively to said pinion to enable adjustment of the distance between said rack and said pinion, said cage also having a prismatic portion projecting beyond said pinion at one end whereby it may be turned to effect such adjustment.

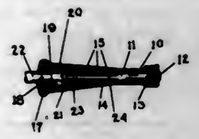
1,869,057. SHAVING AID. WALTER C. GATTON, Seattle, Wash. Filed Mar. 6, 1929. Serial No. 344,924. 1 Claim. (Cl. 87—5.)

A method for preparing human hair for shaving which comprises the step of applying to the hair, prior to the application of a shaving soap, an aqueous solution containing one-half to one percent of a hydrolyzable alkali metal salt chosen from the group consisting of sodium and potassium borate and carbonate.

1,869,058. ANODIC COATING OF ALUMINUM. CHARLES HUGH ROBERTS GOWER, London, England, assignor to Aluminum Colors Incorporated, Indianapolis, Ind., a Corporation of Indiana. Filed Oct. 29, 1931, Serial No. 571,945, and in Great Britain Oct. 20, 1927. 19 Claims. (Cl. 204—1.)

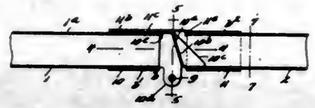
1. In the anodic coating of aluminum and aluminum alloy articles, the process which comprises treating such articles anodically with low working voltages in a bath of sulfuric acid having a low concentration of about 25 per cent by weight.

1,869,059. PIPE AND CIGAR AND CIGARETTE HOLDER CLEANER. ALFRED J. HANSON, Cle Elum, Wash. Filed Oct. 7, 1930. Serial No. 486,952. 2 Claims. (Cl. 131—13.)



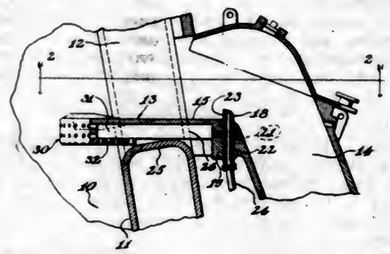
1. In a pipe cleaner adapted to receive air under pressure, the combination with a tubular stem, of a tubular receiver of flexible and elastic material secured to the stem and adapted to receive a pipe-stem, said receiver having a mouth and a lip at the mouth adapted to closely surround the pipe-stem, and a teat within the receiver against which the free end of the pipe-stem is adapted to abut.

1,869,060. CAMPING COT. NOAH S. HARTER, Waukegan, Ill., assignor to Champion Folding Furniture Company, Waukegan, Ill., a Corporation of Illinois. Filed July 8, 1929. Serial No. 376,554. 1 Claim. (Cl. 287—92.)



A side rail for a folding cot frame, composed of two sections of angular metal tubing and an upwardly breaking joint connecting said sections, said joint comprising sheet metal sleeves fitting around the adjacent ends of the sections, one sleeve having side and top walls extending beyond the section to which it is attached and adapted to fit around the sides and top of the sleeve on the opposing section, and the latter sleeve having projecting side walls adapted to enter the opposing section and rest on the bottom wall thereof, when the cot is set up, the extended side walls of both sections having depending ears and a hinge pin extending through said ears.

1,869,061. FLUID COOLED DISTRIBUTING MEMBER FOR STOKERS. ANDREW M. HUNT, New York, N. Y.; Crocker First Federal Trust Company, executor of said Andrew M. Hunt, deceased, assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed July 19, 1929. Serial No. 379,427. 7 Claims. (Cl. 110—101.)

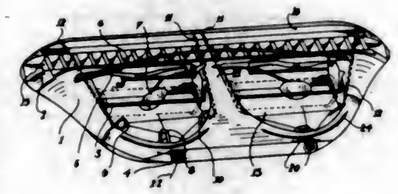


2. A fuel distributing table for stokers comprising a table top arranged to permit fuel to pass thereover for distribution, a forward wall and side walls depending from said table top, a bottom wall spaced apart from said table top and forming in conjunction with said table top, forward and side walls a chamber on the underside of said table top, said side walls being provided with a plurality of perforations, and said forward wall having a plurality of perforations spaced in a row extending substantially the full length of the wall and said bottom wall having a plurality of perforations therein spaced in a plurality of longitudinal and transverse rows.

1,869,062. MULTIPLE BOW-SHUTTLE. HUGO KLAHRE, Teaneck, N. J., assignor to Consolidated Trimming Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1929. Serial No. 403,257. 1 Claim. (Cl. 139—199.)

A bow-shuttle frame of the character described comprising a runner having a longitudinal groove on one side and a toothed rack on the other side, a nose having curved sides extending forwardly from adjacent the ends of the runner and formed integrally therewith, a front integrally formed with the sides and extending longitudinally of the runner in spaced relation thereto, a plurality of bobbin containing chambers provided between the sides and front of the nose and the runner, partitions of appreciable thickness extending between the front of

the nose and the runner and separating said chambers, the inner faces of the partitions corresponding to the length and curvature of the inner faces of the sides of the nose, conduits extending from corresponding points on the inner faces of the chambers through the sides of the nose and the partitions and transversely through the



runner, springs mounted through said conduits and having ends affixed at the rear of the runner, rings connected to the springs within each chamber at corresponding points on the said inner faces of the partitions and sides, spindles in each of the chambers, and communicating into each chamber at a corresponding point.

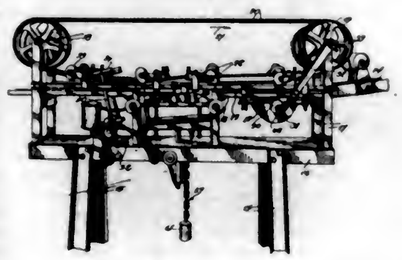
1,869,063. MANUFACTURE OF DISAZODYESTUFFS FOR DYING AND PRINTING WOOL. ADOLF KREBSER, Basel, Switzerland, assignor to the Firm of J. R. Geigy S. A., Basel, Switzerland. Filed Aug. 30, 1930, Serial No. 479,093, and in Germany Aug. 9, 1929. 3 Claims. (Cl. 260—77.)

1. A process for the manufacture of disazodyestuffs for dyeing and printing wool, consisting in coupling tetrazocompounds of diaminoditolylmethanedisulphonic acids with two molecules of a naphtholmonosulphonic acid.

1,869,064. MANUFACTURE OF DISAZODYESTUFFS FOR DYEING AND PRINTING WOOL. ADOLF KREBSER, Basel, Switzerland, assignor to the Firm of J. R. Geigy S. A., Basel, Switzerland. Filed Aug. 30, 1930, Serial No. 479,094, and in Germany Aug. 9, 1929. 3 Claims. (Cl. 260—77.)

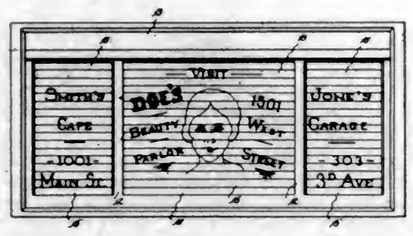
1. A process for the manufacture of disazodyestuffs for dyeing and printing wool, consisting in coupling tetrazocompounds of diaminoditolylmethanedisulphonic acids with two molecules of a pyrazolonesulphonic acid.

1,869,065. MECHANISM FOR APPLYING LABELS TO CYLINDRICAL CANS OR THE LIKE. ALBERT H. KYLER, Westminster, Md. Filed Apr. 7, 1930. Serial No. 442,213. 18 Claims. (Cl. 216—44.)



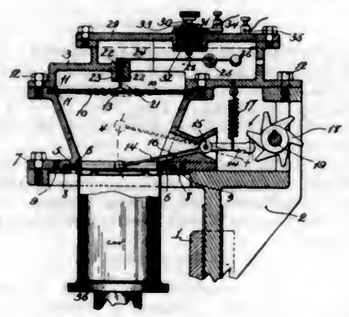
1. In a can labeling machine, a can runway, a label supporting platform mounted adjacent to the runway, a post supporting the platform, a sprocket wheel carried by the post, a sprocket chain having one of its ends anchored to a fixed point and engaging said sprocket wheel, a second sprocket wheel over which the chain passes, a weight suspended from the other end of said sprocket chain, and means for rotating the second sprocket wheel.

1,869,066. CHANGEABLE SIGN. ELAINE VON DER LIPPE-LIPSKI, Washington, D. C. Filed Mar. 22, 1930. Serial No. 438,073. 5 Claims. (Cl. 40—62.)



1. In a changeable sign exhibitor the combination with a housing having a central open-front compartment in which a sign is located and movable to the front and rear of said compartment, and compartments at opposite sides of said central compartment, sliding doors for closing off said central compartment in front of the sign when it is moved to the rear of the compartment, said doors being normally housed in the compartments at the sides of the center compartment.

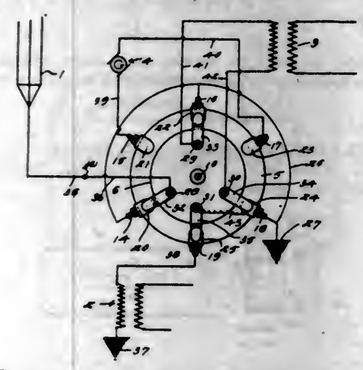
1,869,067. MACHINE FOR TESTING FILLED AND SEALED CANS AND CONTAINERS. EMIL K. MALMQUIST, South Bellingham, Wash. Filed Mar. 19, 1929. Serial No. 348,228. 15 Claims. (Cl. 73—51.)



1. An apparatus of the character described comprising can testing means, said testing means being adapted to cause the cans subjected to test to emit sound waves, and to detect the difference in pitch of the sound waves emitted by perfect and defective cans, and including means operated by the sound waves emitted to automatically signal the detection of defective cans.
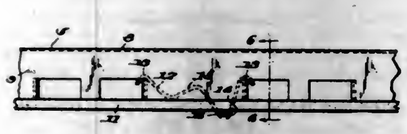
1,869,068. AUTOMATIC SAFETY SWITCH FOR RADIO APPARATUS. MAX T. MCCONNELL, Westfield, Pa., assignor of one-half to Arthur R. Rugaber, Westfield, Pa. Filed July 22, 1930. Serial No. 469,861. 3 Claims. (Cl. 250—16.)

1. In a radio receiving apparatus, an antenna, a radio frequency transformer, a power transformer and source of current therefor, and a switch adapted when in on position to connect the antenna to one terminal of the primary coil of said first transformer and to connect the terminals of the primary coil of said second transformer to said source of current and adapted when in



off position to disconnect the antenna and source of current from said terminals and connect the antenna and said terminals to the ground.

1,869,069. WALL CONSTRUCTION. GEORGE F. MCKENNEY, Cleveland, Ohio. Filed Oct. 15, 1930, Serial No. 488,905. Renewed May 4, 1932. 12 Claims. (Cl. 72—46.)

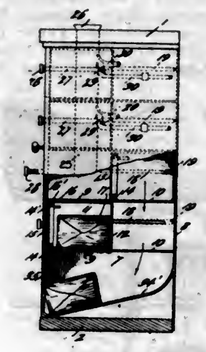


1. A wall construction including wallboard, a stud of channel cross section provided with a pair of spaced apart transverse bridges, a clip having end portions engaged with said bridges and an intermediate portion adapted to project between abutting edges of the wallboard, and an element engaged by said intermediate portion and supporting adjacent margins of the wallboard.

1,869,070. VENDING MACHINE. GERALD J. MCLAREN, Ballston Spa, N. Y., assignor to Gilbert J. Scofield Company, Inc., Watervliet, N. Y., a Corporation of New York. Filed Aug. 7, 1930. Serial No. 473,627. 4 Claims. (Cl. 312—92.)

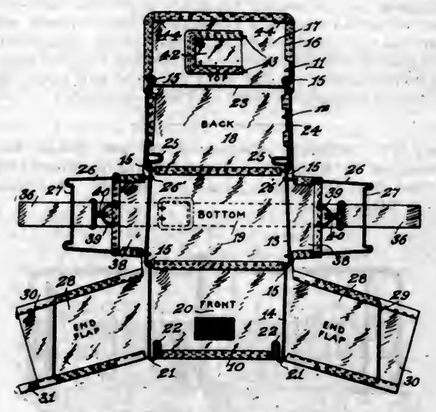
1. An article vender for coin controlled apparatus including a housing formed in the forward portion with a plurality of fixed, vertically superimposed shelves, that portion of the housing in rear of the shelves presenting a free, vertically unobstructed passage, and a bottomless carrier cooperating with each shelf and including a rear wall, side walls and an upstanding hinge guard at the forward portion, said carrier enclosing the articles supported on the shelf and operating when moved rearwardly with respect to the shelf to move the article in

line with the vertical unobstructed passage at the rear of the casing, means serving when free to act to move the carrier into the rear discharge position, and manually



operable means capable of selective release for normally holding the carrier in the forward article retaining position against the influence of the rearward moving means.

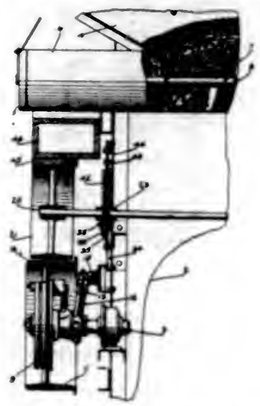
1,869,071. FOLDING FISH BASKET. ASA D. F. MCLEAN, Cowiche, Wash. Filed May 19, 1930. Serial No. 453,829. 2 Claims. (Cl. 150—49.)



1. A folding fish basket having rim frames hingedly connected together and carrying a covering to form the top, back, bottom and front of the basket, a locking frame hinged to the frame of said top and adapted to removably engage the frame of said front, lateral clamping frames hinged to the frame of said bottom and removably engaging said locking frame, end flaps carried by said front and extending over said clamping frames, straps for removably securing the end flaps together, and buckles for said straps, said locking frames being adapted to be folded inwardly upon said bottom, said back and said top being adapted to be folded upon each other with said locking frame therebetween, said folded back, top and locking frame being then adapted to be folded as a unit upon said bottom, said front being adapted to be then folded upon said back, said end flaps being adapted to

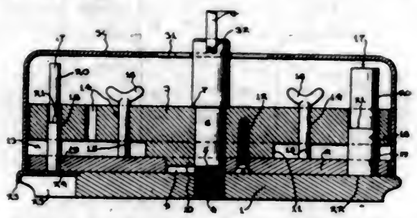
be then folded upon said bottom, said straps being adapted to be then buckled to confine said basket in a compact bundle for storing.

1,869,072. THRESHING APPARATUS. WALTER J. MCVICKER, Minneapolis, Minn., assignor, by mesne assignments, to Minneapolis-Moline Power Implement Company, a Corporation of Delaware. Filed Feb. 20, 1928. Serial No. 255,708. 3 Claims. (Cl. 74—21.)



1. In combination, a shaft, bearings supporting said shaft, one of said bearings being mounted for pivotal movement and the other for swinging movement, means to be driven operatively connected with said shaft adjacent to said pivotally mounted bearing, a pulley secured to the swingable end portion of the shaft, a driving member, a lever connected with said swingable bearing whereby said shaft may be operated to move said pulley into driving engagement with said driving member, and resilient means constantly acting on said shaft to move said pulley out of driving engagement with said driving member.

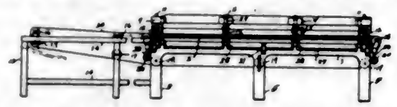
1,869,073. PUNCH. WILLIAM F. MILLER, Miami, Fla., assignor to Rellim Investment Company, Miami, Fla. Filed Oct. 12, 1929. Serial No. 399,280. 5 Claims. (Cl. 164—94.)



1. A gang punch comprising a die portion, a guide portion superposed on the same and fixedly spaced from the latter, guideways in said portions, punch pins slidably mounted in said guideways, the guide portion being provided with a multiplicity of gauge apertures, and gauge pins extending through said apertures obstructing the space between said portions and having their lower ends resting on the die portion, and heads for the gauge pins projecting above said guide portion.

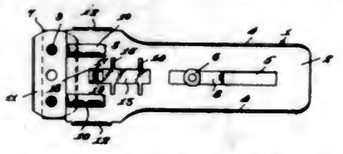
1,869,074. FLATWORK IRONER. CLIFFORD V. MILLIGAN, Houston, Tex. Filed Feb. 17, 1930. Serial No. 429,000. 1 Claim. (Cl. 68—9.)

A machine of the character described including a supporting bed, an endless feed apron movable over the bed, a flat iron above and adapted to cooperate with said bed, means normally holding the flat iron spaced above the bed, crank shafts, connecting rods connecting said shafts to the flat iron, on each side, means operable by



fluid under pressure for rocking said shafts whereby the flat iron may be moved into cooperating relation with said bed.

1,869,075. BLADE HOLDER. LEE T. OWENS, Tacoma, Wash. Filed Mar. 1, 1932. Serial No. 596,121. 2 Claims. (Cl. 30—9.)



1. A holder comprising a head having grooves opening outwardly through one edge thereof, a handle on said head, guide flanges on said head, a plate slidable on the head and retained in engagement therewith by the flanges, lugs on said plate and extending through a scraping blade into the grooves, and means whereby the plate may be adjusted relative to the head and secured in any of its adjusted positions.

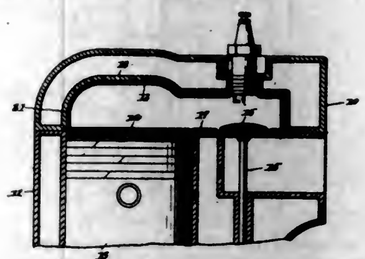
1,869,076. OIL SAVER. EDGAR W. PATTERSON, Los Angeles, Calif., assignor, by mesne assignments, to Clayton Severns and J. N. Hicks. Filed Dec. 5, 1930. Serial No. 500,364. 21 Claims. (Cl. 166—14.)



1. An oil saver comprising a nipple section adapted to be attached to the top of a well casing, a cap detachably mounted in said nipple section and having a packing for a cable to extend therethrough; resilient means mounted on said cap with inclined surfaces acting on inclined surfaces formed on said nipple section to yieldably secure said cap to said nipple section, a retainer disposed within and encompassed by said resilient means, said retainer being longitudinally movable and having spaced locking and unlocking portions either of which is registerable with said resilient means whereby either to lock said resilient means to said nipple section in cap securing position or to unlock said resilient means, said retainer being urged into locking position and arranged to have said cable pass therethrough whereby a swell in said cable may

engage said retainer and move the latter to unlocking position and thereby enable said cap to be detached from said nipple section.

1,869,077. INTERNAL COMBUSTION ENGINE. JAMES PRENTICE, Miami, Fla. Filed Dec. 4, 1928. Serial No. 323,671. 3 Claims. (Cl. 123—191.)

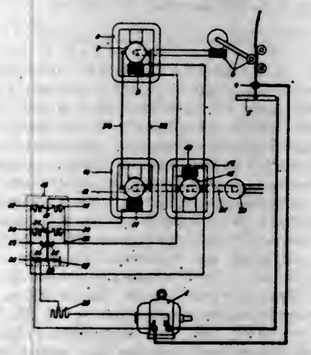


1. In combination with combustion chamber surfaces of an internal combustion engine, a covering substantially proof against carbon deposition, said covering being formed of a smooth, hard, non-catalytic and non-absorptive material of low corroding properties, said material consisting of an alloy comprising iron, chrome, copper and nickel in which the chrome content is less than 14%, the carbon content of the iron not exceeding 3/10% and the copper content is less than 2%.

1,869,078. METHOD OF PRODUCING LOW CORE LOSS MAGNETIC MATERIAL. ROBERT E. RENO, Jr., Follansbee, W. Va., assignor to Follansbee Brothers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 18, 1930. Serial No. 445,533. 11 Claims. (Cl. 175—21.)

1. The method of producing low core loss magnetic material which consists in reducing an alloy of iron and silicon to a sheet, annealing the sheet in a continuous annealing furnace at a temperature of about 1450° F. or higher and removing the sheet from the cooling zone of the furnace at a temperature of about 700° F., then annealing for about nine hours at a temperature of about 1650° F or higher in a carburizing and reducing atmosphere, then cooling the sheet in the furnace to a temperature of about 800° F. by removing the source of heat and then further cooling the sheet to about 300° F. in a reducing atmosphere.

1,869,079. DEVICE FOR MECHANICALLY-OPERATED WELDING. EMANUEL ROSENBERG, Weis, Austria. Filed May 17, 1929, Serial No. 364,010, and in Austria May 25, 1928. 6 Claims. (Cl. 219—8.)



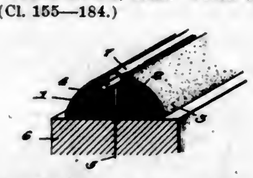
1. A device for mechanically operated arc welding consisting of a work piece, an electrode, an electric motor with an armature, means to feed and withdraw said electrode by movement of said armature, a generator with an armature, uninterrupted conductors between the armatures of the generator and motor, a field structure in said generator and means to vary automatically in size and direction the field in said structure dependent on the voltage between electrode and work piece.

1,869,080. FINISHING WELT. ROBERT C. SCHEMMEL, Union City, Ind. Filed June 14, 1930. Serial No. 461,209. 4 Claims. (Cl. 155—184.)



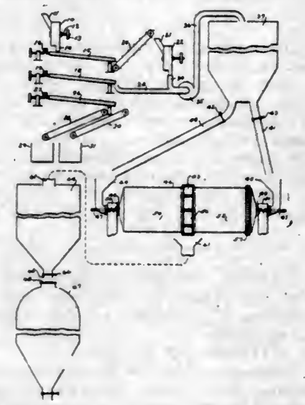
1. A finishing strip including a fabric body folded on itself to provide a tack receiving base and a tack concealing flap, said body having threads of woven fibrous material extending from edge to edge of the body and pliable metallic wire interwoven with the fibrous threads and extending only across an area of the body spaced inwardly from the edges thereof, said interwoven wire area extending across and slightly beyond the line of fold common to the base and flap portions of the finishing strip.

1,869,081. MOLDING. ROBERT C. SCHEMMEL, Union City, Ind. Filed Jan. 4, 1932. Serial No. 584,745. 9 Claims. (Cl. 155—184.)



1. A molding including a body provided with a longitudinal surface channel, a fabric covering enclosing the body, a portion of the fabric forming the floor of the channel, a bendable wire carried in the channel having fastening elements projecting therefrom through the fabric and the body and adapted to engage a support, and a split tubular metallic shell engaged over the wire in the channel.

1,869,082. PAPER MANUFACTURE. JOHN TRACUAIR and FRANCIS G. RAWLING, Chillicothe, Ohio, assignors to The Mead Research Engineering Company, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 18, 1930. Serial No. 445,337. 18 Claims. (Cl. 92—20.)



1. In the manufacture of pulp, the method which comprises subjecting uncooked fibrous material to a mechani-

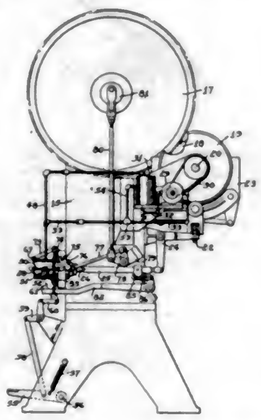
cal pounding and rubbing treatment, and then cooking the treated material with chemical cooking liquor.

14. Apparatus of the character described for the treatment of wood in the preparation of pulp, comprising in combination, a chipper for subdividing wood into chips, a rod mill for pounding and cracking the chips and for rubbing off and pounding down the rough edges thereof, and a digester for cooking the rod milled chips.

1,869,083. BINDER AND BRIQUETTE AND PROCESS OF PRODUCING SAME. ROBERT E. WILLARD, Minneapolis, Minn., assignor to The Briquet Engineering Company, Minneapolis, Minn., a Corporation of Delaware. Filed June 22, 1929. Serial No. 373,057. 2 Claims. (Cl. 44—19.)

1. The process of making briquettes which consists in mixing together liquid asphalt and sulphur and dissolving the sulphur into the asphalt and in thereafter commingling the resulting binder with ground briquette material at a temperature exceeding the melting point of the asphalt, but not high enough to carry off the volatile substance of the briquette material.

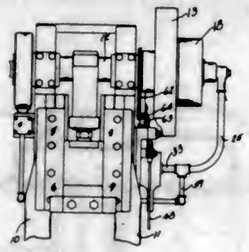
1,869,084. HYDRAULIC CONTROL FOR POWER TRANSMISSION MECHANISM. LARKIN R. WILLIAMSON, Toledo, Ohio, assignor to The Toledo Machine & Tool Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 6, 1930. Serial No. 486,639. 17 Claims. (Cl. 192—85.)



1. In a power press, the combination with mechanism to be operated, a drive shaft, a clutch for connecting the drive shaft to said mechanism, means operable by fluid pressure for shifting said clutch, manually actuated means for directing the fluid pressure, to connect the clutch, means for automatically reversing the effect of the fluid pressure to disconnect the clutch after a predetermined cycle of operation, and manually operable emergency means for rendering the fluid pressure ineffective and at the same time disconnecting the clutch.

1,869,085. FLUID PRESSURE CONTROL DEVICE. LARKIN R. WILLIAMSON, Toledo, Ohio, assignor to The Toledo Machine & Tool Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 18, 1931. Serial No. 531,066. 6 Claims. (Cl. 192—85.)

1. The combination with a rotatable member, of a clutch therefor, fluid pressure operable means for causing engagement of the clutch, a valve for controlling said fluid pressure, a member for shifting the valve to render the fluid pressure operative, means driven by said rotatable member to actuate said valve shifting member to shift the valve as stated after a predetermined operation of said rotatable member, and tripping



means for moving the valve shifting member to release the valve while said tripping means remains in its valve actuating position.

1,869,086. ADJUSTABLE GUNSTOCK. CHARLES S. ASH, Birmingham, Mich. Filed May 7, 1931. Serial No. 535,640. 6 Claims. (Cl. 42—73.)



1. In a gun having a barrel and a lock chamber to which said barrel is connected at its rear end, a grip stock integral with said lock chamber, a stock adjustably engaged with the rear end portion of said grip stock, said rear end portion of said grip stock and the forward end of said stock being transversely curved to permit swinging adjustment of said stock upon said grip stock laterally of the line of sight along said barrel, and means for securing said stock to said grip stock in the position to which it is adjusted.

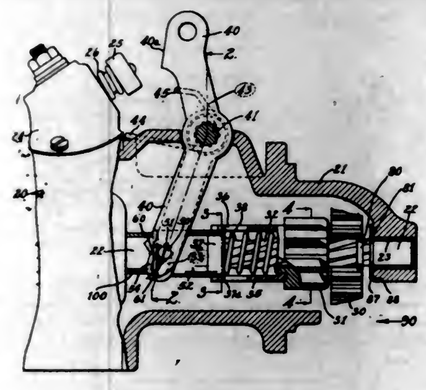
1,869,087. BASE EXCHANGE MATERIAL AND METHOD OF PREPARING SAME. ABRAHAM S. BEHRMAN, Chicago, Ill., assignor, by mesne assignments, to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 24, 1924. Serial No. 708,672. 3 Claims. (Cl. 23—113.)

3. In the process of preparing a base exchange material the step of treating the said material with a sufficient amount of an acid to neutralize substantially all the free alkali in the material.

1,869,088. ENGINE STARTER. RALPH BERTSCHE, Jr., Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Nov. 26, 1930. Serial No. 498,347. 3 Claims. (Cl. 74—7.)

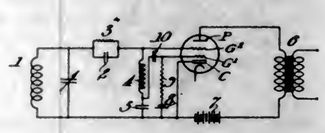
1. Engine starting apparatus, comprising, in combination, a motor; a shaft operated thereby; a pinion driven by the shaft and movable along the shaft into mesh with a gear of the engine to be started; a member movable along the shaft for shifting the pinion into mesh with the engine gear and rotatively connected with the pinion; means for causing the shifter to rotate in response to movement of the shifter along the shaft; and manually operable means for moving the shifter along the shaft, and comprising a sleeve supported by the shaft and frictionally rotatively connected therewith, a pin extending from the sleeve, an actuator having a part movable along the shaft and provided with a recess for receiving the pin, said recess being so shaped as to provide a surface

normally in the path of movement of the pin along the shaft, but so as to be relieved of the pin by partial rotation of the sleeve with the shaft, means limiting rota-



tion of the pin away from the recess, and means operated by return movement of the actuator for restoring the normal position of the pin with respect to the recess.

1,869,089. RECTIFIER CIRCUITS. KNOX CHARLTON BLACK, Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 23, 1930. Serial No. 446,755. 17 Claims. (Cl. 250—27.)

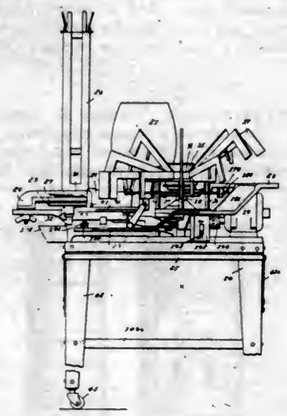


1. The combination with a vacuum tube having a cathode and a plurality of elements, of a circuit including a grid condenser and leak between said cathode and one of said elements, means for impressing a carrier wave signal upon said circuit, means for impressing the rectified voltage developed in said circuit between another element and said cathode, and an output circuit between said cathode and a third tube element.

1,869,090. CUTTING AND COATING MACHINE. FRED L. BORCHERT, Rockford, Ill. Filed May 10, 1930. Serial No. 451,261. 14 Claims. (Cl. 91—14.)

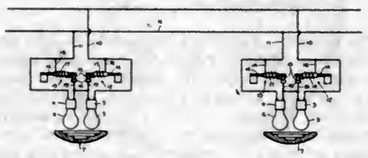
1. The combination, in a driving mechanism for cutting and coating machines, of cutting mechanism arranged to cut and feed a block of ice cream, work holders each equipped with impaling elements adapted to impale a block, the work holders being arranged to successively move said blocks from a loading position to a coating position and thence to a discharging position, means for coating each block at said coating position, a continuously driven shaft, means including a cam on said shaft for moving the work holders from position to position, a cam on said shaft adapted to actuate said cutting mechanism, and a cam on said shaft for effecting the coating operation, said cams being arranged to operate their respective parts in timed relation.

12. A machine as set forth in claim 10 wherein said last mentioned means includes a ratchet gear fixed to said work head, a cam fixed to said shaft, a cam slide interposed therebetween, and a pawl positioned upon said cam slide, said cam being arranged to move said cam slide outward to retract said impaling elements and draw said



cam slide inward whereby said pawl engages said ratchet wheel, to rotate said work head through a predetermined angularity.

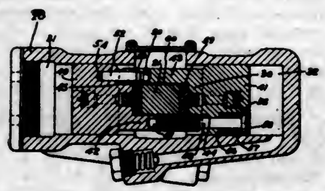
1,869,091. SIGNALING SYSTEM AND APPARATUS. WILLIAM BRANDER, New York, N. Y. Filed July 11, 1931. Serial No. 550,112. 11 Claims. (Cl. 177—311.)



1. A device comprising a plurality of lamp bulbs at a signal station, and circuit controlling means and conductors adapted to normally steadily illuminate the lamps and to cause one lamp to flash when current flow through another lamp is interrupted.

6. In a lighting system, a main circuit, a pair of lamps connected with said main circuit and at a single point, said pair of lamps being connected in series with one another, and thermoflasher means in association with the lamps normally permitting them to be steadily illuminated and acting when current flow through either lamp is interrupted to cause the other lamp to operate in a flashing manner.

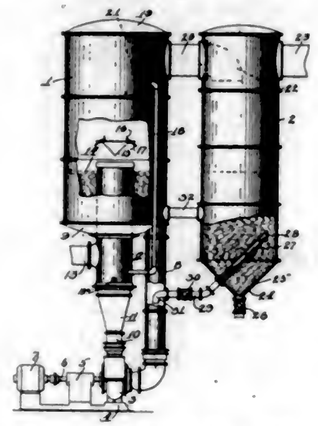
1,869,092. SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 8, 1931. Serial No. 549,424. 4 Claims. (Cl. 188—88.)



1. A fluid displacement member comprising, in combination, two plugs; a lug on each plug engaging the opposite plug to hold said plugs in spaced relation; a pilot

pin in aligned recesses of a plug and the engaging lug of the opposite plug; a screw extending through a smooth aperture in the last mentioned plug and threadedly engaging an interiorly threaded recess in the lug engaging said last mentioned plug; and a spring interposed between the screw and the plug through which said screw extends, yieldably urging the lugs against the opposite plugs.

1,869,093. EVAPORATOR. GEORGE G. CREWSON, Buffalo, N. Y., assignor to Swenson Evaporator Co., Harvey, Ill., a Corporation of Illinois. Filed May 31, 1929. Serial No. 367,225. 10 Claims. (Cl. 159—45.)

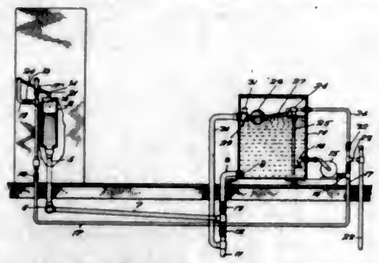


6. The method of precipitating solids from a body of liquid which consists in the steps of forcedly circulating a main body of the liquid in a main stream, freely discharging the liquid at a point in the main circulating system, diverting a small portion of the main stream into a secondary body of liquid at a point in said secondary body under hydrostatic pressure, and connecting said secondary body of liquid with the main stream to cause movement of liquid therethrough and thereby produce a secondary stream of liquid in parallel flow relation with a portion of the main stream.

9. In an apparatus for the precipitation of solids from liquids, in combination, a main vertical container containing a main body of liquid, means to forcedly circulate the liquid in a main stream comprising a pump, and suction and discharge conduits therefor connected to said container, the discharge conduit being positioned to discharge liquid freely above the liquid in the container, a secondary vertical container containing a relatively quiescent body of liquid, means to produce a secondary stream flow of liquid in parallel flow relation with a portion of the main stream, said means comprising conduit means connecting the main body of liquid and the secondary body of liquid at a point between the top and bottom of the liquid bodies in each container, and another conduit connecting said secondary container discharging into the suction conduit, the inlet for said other conduit being connected at a point where the fluid pressure is but slightly different from that at the point of discharge of the conduit connecting the secondary body with the main body of liquid.

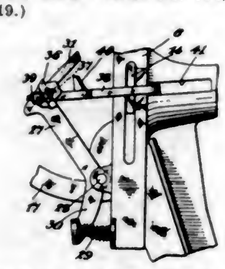
1,869,094. PHOTOGRAPHIC DEVELOPER TANK LIQUID CIRCULATING SYSTEM. MONROE H. DANIELS, Hewlett, and JOHN A. SLACK, New York, N. Y., assignors to Photomaton, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 20, 1929. Serial No. 348,399. 3 Claims. (Cl. 95—89.)

1. In apparatus of the character described, in combination with a developer tank having compartments for wash liquid and chemicals, of a reservoir tank, means for circulating liquid from the reservoir tank to the wash liquid compartments and thence back into the reservoir tank, means including cooling conduits for circulating liquid from the reservoir tank to the chemical compart-



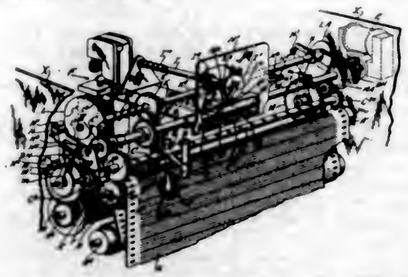
ments, and thence back into the reservoir tank, means for constantly withdrawing a predetermined amount of liquid from the reservoir tank, and means for constantly admitting a compensating amount of liquid to the reservoir tank.

1,869,095. CHERRY STONER. GEORGE S. EBERSOLE, Elizabethtown, Pa., assignor to Wrightsville Hardware Co., Wrightsville, Pa., a Corporation of Pennsylvania. Filed Apr. 12, 1929. Serial No. 354,462. 10 Claims. (Cl. 146—19.)



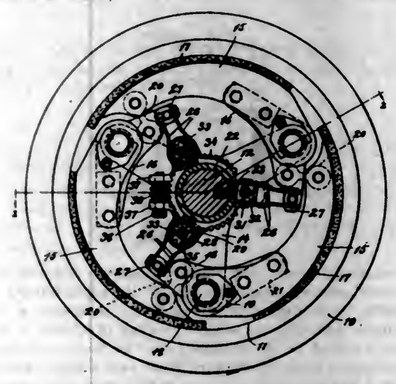
2. In a device of the class described, the combination of a receptacle for cherries and the like having an outlet adapted to pass a cherry, a member extending partially across said receptacle adjacent said outlet, a cam mechanism for moving said member toward said outlet to facilitate the feeding of an individual cherry therethrough, and resilient means for rapidly returning said member to agitate the cherries adjacent said outlet.

1,869,096. RELAY INSTRUMENT. IVAN I. EREMEEFF, Philadelphia, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 18, 1930. Serial No. 461,934. 19 Claims. (Cl. 74—14.)



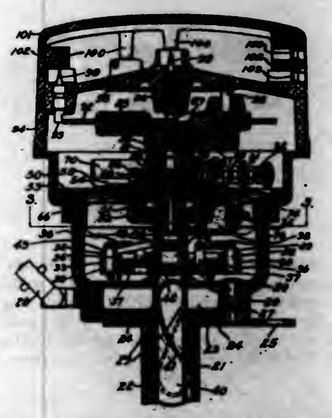
1. The combination with a deflecting element, of a member extending through the plane of deflection of said element and movable along the deflection path of a portion of said element into and out of engagement with said portion, means for periodically moving said member from a position at one end of said path into a position in which it engages and has its motion arrested by said portion, and mechanism subjected to a selective control effect dependent in magnitude and direction upon the position of said member when its motion is so arrested.

1,869,097. CLUTCH ADJUSTMENT. THOMAS L. FAWICK, Akron, Ohio, assignor to Fawick Manufacturihg Company, Waukesha, Wis., a Corporation of Wisconsin. Filed July 11, 1930. Serial No. 467,201. 8 Claims. (Cl. 192—111.)



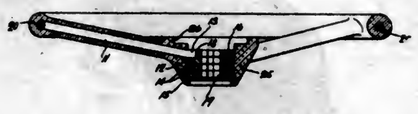
1. In a friction clutch, the combination of a driven shaft, friction members, an operating sleeve on said shaft, operating thrust links, gear pinions on said sleeve for moving the inner ends of said links away from and transversely of the axis of rotation, and a central adjusting gear on said sleeve parallel and meshing with said pinions.

1,869,098. IGNITION SYSTEM. JOHN T. FITZSIMMONS and JAMES L. ARTHUR, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 6, 1930. Serial No. 433,618. 14 Claims. (Cl. 64—90.5.)



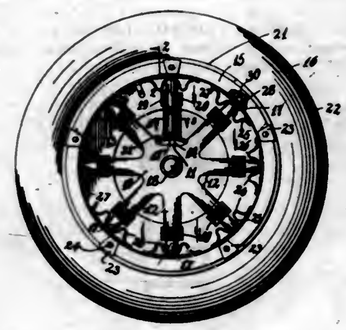
1. In an ignition device the combination comprising, a timer housing, a driven shaft and a cam shaft within the housing, speed responsive means differentially connecting the shafts, said cam shaft providing an oil reservoir, and means in communication with said reservoir, for conducting lubricant to the pivotally connected members of said speed responsive means.

1,869,099. STEERING WHEEL. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed May 2, 1930. Serial No. 449,208. 3 Claims. (Cl. 74—33.)



3. A molded composition handwheel having a reinforcing metal skeleton embedded therein, said skeleton comprising: a plurality of metal plates stacked and welded together forming a hub, the top plate of said hub having radial recesses therein, an endless metal rim ring, and spoke rods fixed to said rim ring at their outer ends and having their inner ends inserted in said radial recesses and welded to the next adjacent plate of said hub.

1,869,100. RESILIENT WHEEL FOR VEHICLES. MICHAEL GRALENSKI, Amherst, Mass. Filed July 5, 1930. Serial No. 465,802. 3 Claims. (Cl. 152—28.)

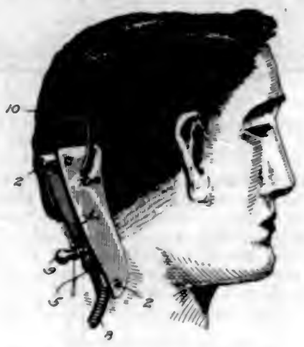


1. A resilient wheel, comprising a wheel hub for rotatively engaging upon an axle and formed with a circular hollow coaxial with said axle, hollow spoke inner sections radially projecting from said hub and communicating with said circular hollow, spoke outer sections telescopically engaging within said inner sections and having their inner ends terminating a short distance from the hollow in said hub, a wheel rim supporting a tire on its periphery, and means for resiliently connecting the outer ends of said spoke outer sections within said wheel rim so as to resiliently hold the spoke outer sections radially, said means for resiliently connecting the outer ends of said spoke outer sections within the wheel rim so as to resiliently hold the spoke outer sectons radially comprising a spring attached upon the outer end of each of the spoke outer sections and formed with transverse waved portions, and means for attaching the outer ends of the springs onto said rim and attaching the central portions of the springs upon said spoke outer sections.

1,869,101. HAIR CUTTING MACHINE. GEORGE N. HENDERSON, Philadelphia, Pa. Filed Mar. 31, 1930. Serial No. 440,537. 3 Claims. (Cl. 30—1.)

1. In hair-cutting apparatus, the combination of a frame consisting of a pair of side plates having curved edges to substantially fit the head, cross-bars connecting and holding said plates; in spaced relationship; said frame being freely portable and adapted to be held in fixed position against the head, guiding means disposed on the inner faces of said side plates, a cutting device movable with respect

to said side plates, supporting members carried by said cutting device and engaging the guiding means, means for operating said cutting device, and a member pivotally con-



nected to said side plates and movable to a position in front of the frame for holding down the hair in advance of the cutting operation.

1,869,102. ROTARY BRUSH. LAWRENCE C. HEROLD, Lakewood, Ohio. Filed May 20, 1931. Serial No. 538,677. 1 Claim. (Cl. 15—181.)



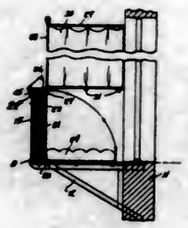
A rotary brush mounting comprising a substantially cylindrical, sheet metal, bristle supporting sleeve with inwardly extending tongues thereon at one end, a flange plate secured adjacent one end of the sleeve in contact with the outer side of said tongues, there being additional tongues at the ends of the supporting sleeve and openings in the flange plate receiving the additional tongues, said additional tongues beng bent over exteriorly of the plate to hold the plate in rigid relation to the said support, and means at the opposite end of the sleeve cooperating therewith and with said flange plate to form a bristle receiving and supporting annular channel.

1,869,103. LEGGING. ALOIS JANALIK, New York, N. Y. Filed Dec. 12, 1930. Serial No. 501,823. 5 Claims. (Cl. 36—2.)



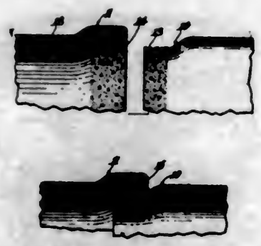
1. A legging, comprising a stiff sheet upper portion, a stiff sheet lower portion, and a flexible ankle portion connecting said upper and lower portions, said flexible ankle portion being in the form of a flexible sheet connected at its top edge upon the bottom edge of the said upper portion and at its bottom edge upon the top edge of said lower portion, and a plurality of scale members attached upon said flexible sheet, said scale members overlapping each other and being arranged on the scale formation, means being also provided for adjustably mounting the scale members so as to change their relative positions for the purpose described.

1,869,104. SLEEPING BALCONY. MARY RUTHERFURD JAY, New York, N. Y. Filed Jan. 6, 1930. Serial No. 418,729. 1 Claim. (Cl. 20—2.)



A combined porch and sleeping balcony adapted to be supported adjacent a window or the like comprising a substantially horizontal floor, vertical end members, a vertical outside imperforate member, means providing a pivot, a tray adapted to be supported on the floor and pivoted on said pivot a given distance from said outside member, said tray having an imperforate bottom and side members, a mattress in said tray, said tray being movable about said pivot so that the tray bottom is vertical and parallel to said outside member and provides a wall for the balcony when the latter is serving as a porch, and a lid adapted to hook over said tray when in vertical position, said outside member, end members, tray bottom and lid forming a water tight enclosure for the mattress.

1,869,105. JOINT FOR TUBULAR CONCRETE MEMBERS AND THE LIKE. NATHAN C. JOHNSON, Englewood, N. J. Filed June 30, 1928, Serial No. 289,488. Renewed Apr. 11, 1932. 1 Claim. (Cl. 72—53.)



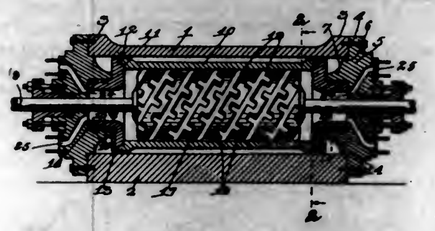
The method of sealing telescoped tubular members, which comprises, molding concrete tubular members, treating the surfaces to be sealed with a set delaying agent, removing the resulting unset cement of the concrete when the members are set, and sealing and interlocking said surfaces by introducing cement between the same.

1,869,106. ROTARY ENGINE. CHARLES J. MARCHANT, South Milwaukee, Wis. Filed June 12, 1931. Serial No. 543,862. 3 Claims. (Cl. 253—73.)

1. A rotary engine including a housing, bearing heads at each end thereof, a cylinder in the housing, supporting heads therefor, having rotative engagement with the bearing heads, a shaft passing through the supporting

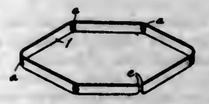
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heads and the cylinder, a rotor mounted upon the shaft, rounded end portions carried by the rotor to guide the fluid outwardly in the cylinder, spiral ribs on the rotor



having lateral projections and said bearing heads each having spaced openings converging at their inner ends toward the center of the cylinder.

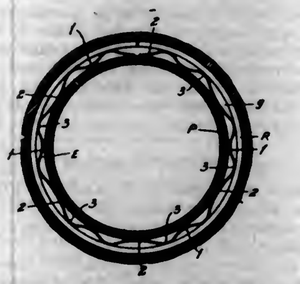
1,869,107. PISTON RING EXPANDER AND METHOD OF MAKING THE SAME. CHARLES A. MARIEN, St. Louis, Mo., assignor to Ramsey Accessories Manufacturing Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 24, 1930. Serial No. 504,598. 2 Claims. (Cl. 29—156.6.)



1. The method of manufacturing piston ring expanders which comprises forming a ribbon of spring metal into a polygonal shape with arcuate corners, the perimeter of said polygon bearing a definite relation to the circumference of the piston ring, and the radius defining the arc of said corners being one-ninth the diameter of a circle circumscribed around said polygon.

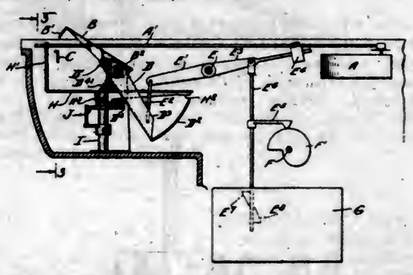
2. In combination with a piston ring, an expander therefor, said expander comprising a ribbon of spring metal formed in a general polygonal shape with arcuate corners, the perimeter of said polygon bearing a definite relation to the circumference of the ring, the radius defining the arc of said corners being one-ninth the diameter of a circle circumscribing said polygon.

1,869,108. PISTON RING. MELVIN W. MARIEN, St. Louis, Mo., assignor to Ramsey Accessories Manufacturing Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 3, 1931. Serial No. 554,729. 2 Claims. (Cl. 74—109.)



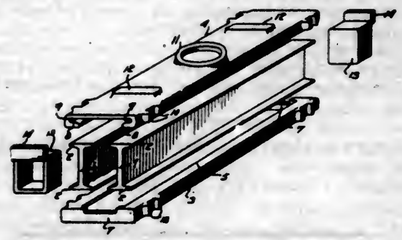
1. In combination with a piston having a ring groove, a piston ring in said groove, a spring expander disposed in the groove between the bottom thereof and the piston ring, said expander comprising a ribbon of steel of a general polygonal shape having a plurality of inwardly curved sides and substantially straight sides, said inwardly curved sides tending to become flattened under pressure when the expander is in the piston ring groove, and said straight sides tending to become inwardly curved when the expander is in the groove.

1,869,109. RELAY INSTRUMENT. ELWOOD S. MARIS, Upper Darby, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 21, 1930. Serial No. 462,732. 10 Claims. (Cl. 200—56.)



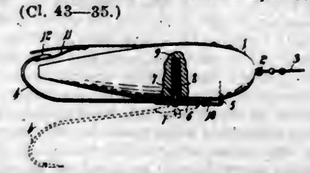
1. The combination with a deflecting element, of a member movable along the deflection path of a portion of said element into and out of engagement with said portion, means for periodically moving said member from a position at one end of said path into a position in which said member engages and has its motion arrested by said portion, and mechanism selectively controlled by and in accordance with the position of said member when its motion is so arrested, said mechanism including a part normally separated from said member but moved into engagement therewith when the motion of said member is arrested.

1,869,110. METAL STRUCTURAL UNIT. PETER F. MCCOOL, Hackensack, N. J. Filed June 28, 1929. Serial No. 374,438. 18 Claims. (Cl. 105—226.)



16. A bolster comprising a pair of webs having outwardly extending flanges, a plate having interior marginal recesses engaging said flanges, and a brace secured interiorly to adjacent ends of said webs and tending to spread the webs into seated relation in said recesses.

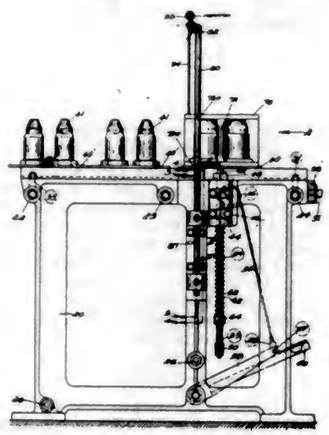
1,869,111. FISHING LURE. FRANK MCLAUGHLIN, Toronto, Ontario, Canada, assignor to William Crawford Goffatt, Toronto, Ontario, Canada. Filed Aug. 23, 1930, Serial No. 477,226, and in Canada Apr. 17, 1930. 4 Claims. (Cl. 43—35.)



4. In a fishing bait, the combination of a body, a hook having its shank rotatably mounted relative to the body; means tending to rotate the hook; and a retaining mem-

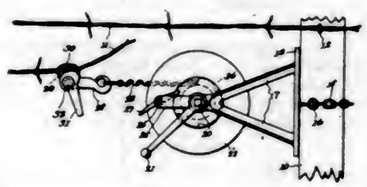
ber having one end connected with the body and its other end movable to and from the body but resistant to lateral movement relative to the body and adapted to be releasably engaged with the hook to hold the latter from rotation, said other end being forked, one portion of the said forked end being shaped to prevent rotation of the hook when the latter is engaged therewith the other part of the forked end overlying the first mentioned part to shield the point of the book.

1,869,112. APPARATUS FOR REMOVING CORES FROM CORE MOLDS. CHARLES A. NICHOLS, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Aug. 30, 1929. Serial No. 389,524. 6 Claims. (Cl. 22—10.)



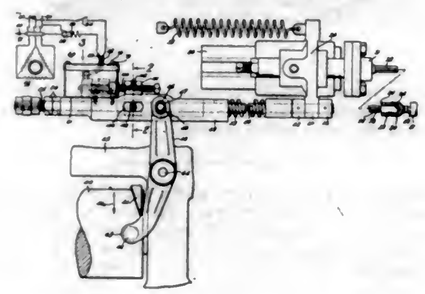
1. Apparatus for facilitating the removal of cores from core molds comprising, in combination, a table for supporting a core box and contents in inverted position, mechanism for elevating the core box above the table and means for vibrating only the core box while it is being elevated.

1,869,113. WIRE STRETCHER. HARRY C. NOELL, Weeping Water, Nebr. Filed Mar. 29, 1929. Serial No. 350,968. 1 Claim. (Cl. 254—163.)



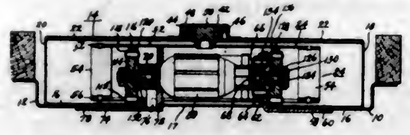
A wire stretcher comprising a base plate adapted to be seated against a post, a chain secured at one end to one edge portion of the plate and the plate having a hook for adjustably receiving the opposite end of the chain for holding the latter around the post, said base plate having three spaced apart outstanding bracket arms providing two spaces between the arms, a cross shaft carried through the outer ends of said arms, a drum mounted on the cross shaft between adjacent arms in one of the spaces, a chain carried by the drum adapted for clamping engagement with a wire, a ratchet wheel mounted on the shaft in the other space between the bracket arms adjacent thereto, a handle on the outer end of the shaft, the bracket arms at opposite sides of the ratchet wheel having registering extensions projecting beyond the arms, and a locking pawl pivotally mounted in said extensions for cooperation with the ratchet wheel to lock the shaft and drum in adjusted position.

1,869,114. STOPPING DEVICE FOR AUTOMATIC LATHES AND THE LIKE. ALVA W. PHELPS, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 441,159. 6 Claims. (Cl. 29—1.)



1. Apparatus for stopping a machine which removes material from a work piece, comprising: power means for operating the machine, a contactor for engaging the work, means for transmitting motion to the contactor to move the same against the work and including two members mounted for movement one relative to the other as well as movement together, and including means for yieldingly transmitting motion from one member to the other, a controller for the power means mounted on one of said members, and a controller actuator mounted on the other member.

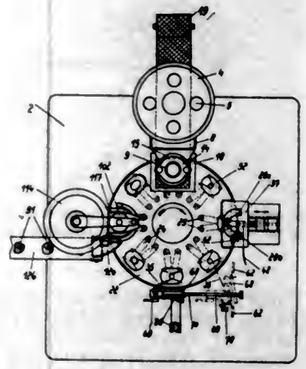
1,869,115. VENTILATING FAN. FRANK H. PRESCOTT, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Feb. 4, 1929. Serial No. 337,188. 8 Claims. (Cl. 230—117.)



1. A device for circulating a medium, comprising in combination, a fan, an electric motor, a friction wheel attached to one end of the armature shaft of said motor, an idler rotatably mounted adjacent the other end of said armature shaft, the idler and the friction wheel cooperating to support the weight of the fan, the friction wheel imparting motion from the motor to the fan.

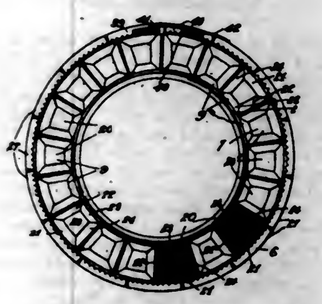
1,869,116. MACHINE FOR CLOSING LITTLE BAGS. ADOLF RAMBOLD, Dresden, Germany. Filed Mar. 26, 1930, Serial No. 439,193, and in Germany Dec. 31, 1929. 8 Claims. (Cl. 93—7.)

1. A machine for forming, filling and closing little bags containing portions of tea, coffee or other material to be lixiviated in boiling water, comprising in combination with a machine frame, a table plate, means for conveying a strip of suitable porous fabric, a cutting device for cutting a square piece off said strip and for conveying the same onto said table plate, a hollow ram adapted to convey a portion of tea onto said piece of fabric, devices for forming the piece of fabric into a bag at the return stroke of said hollow ram, means for conveying a metal band, means for cutting a short piece with inclined edges off said metal band, means for cutting off the projecting corners of the neck of the bag, means for



sucking off the cut off corners, means for bending said piece of metal band in ring-shape around the neck of said bag, means for feeding a holding thread to the neck of the bag under said metal ring, and means for feeding a ticket.

1,869,117. SECTIONAL TIRE CASING. GEORGE REINHARDT, Pleasant Plains, Staten Island, N. Y. Filed Mar. 13, 1931. Serial No. 522,287. 4 Claims. (Cl. 150—54.)

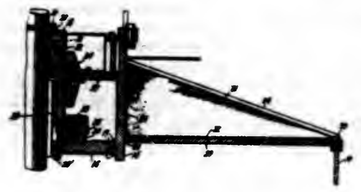


3. In a tire casing, an annular tire covering member consisting of an annular series of plates, the plates being provided on their adjacent ends with flanges bent back on the inner faces of said plates, and connecting strips each provided with a slot receiving the flanges of adjacent ends of adjacent plates to secure said plates together.

1,869,118. BEARING BRACKET FOR DYNAMO-ELECTRIC MACHINES AND THE METHOD OF MAKING THE SAME. HENRY G. REIST, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 24, 1930. Serial No. 447,059. 5 Claims. (Cl. 29—155.5.)

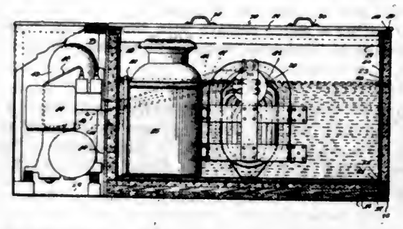
1. A bearing bracket for dynamo-electric machines including a central bearing support, a disk secured to said bearing support and extending outwardly therefrom, and a radially arranged triangular section of a structural shape having a flange and a web, said web being secured to said bearing support and to said disk.

4. The method of making a bearing bracket for dynamo-electric machines having a bearing support, a plate extending outwardly therefrom and radially arranged triangular members including, arranging the plate adjacent the bearing support, cutting triangular members from



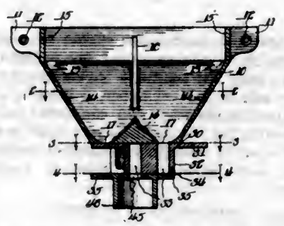
a flanged beam, and attaching the web portions of said triangular members to said bearing support and said plate respectively.

1,869,119. MECHANICALLY REFRIGERATED CABINET. JOHN R. REPLOGLE, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Sept. 8, 1927. Serial No. 218,174. 1 Claim. (Cl. 62—116.)



In a mechanically refrigerated food storage cabinet, a frame structure provided with a heat insulated storage chamber having an open top, an open top liquid containing receptacle in said chamber for storing removable food containers, a lid for closing the top opening in said frame structure, an evaporator in said receptacle for maintaining the liquid at a predetermined temperature, and means in said liquid receptacle for supporting said evaporator and for dividing the receptacle into a plurality of sections for the disposition of food containers.

1,869,120. DISPENSING DEVICE. WALTER L. THOEMING and OTTO M. SHANDER, Chicago Heights, Ill., assignors to Z-Ro Specialties Company, Chicago Heights, Ill., a Corporation of Illinois. Filed July 30, 1928. Serial No. 296,387. 6 Claims. (Cl. 221—108.)



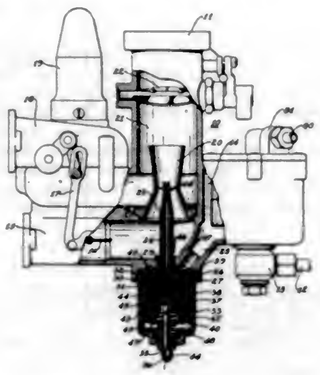
1. In a dispensing device for flowable solid material, a vertical chamber having side walls arranged to engage and hold the top of an inverted container for flowing material, stop means adapted to limit the downward movement of the container within the vertical chamber, another chamber of downwardly decreasing cross sectional area communicating with said first mentioned chamber, means at the bottom of said second mentioned cham-

ber for permitting the passage of predetermined quantities of material out of the chamber, and a projection attached to the wall of said second chamber and extending upwardly into the first chamber and being adapted to penetrate the dispensing side of the container and allow the material to flow into the second chamber, said projection being long and narrow, of upwardly decreasing cross section, and being positioned at an angle to the dispensing side of the container so that it will not block the opening which it causes in the side of the container and so that it will assist in holding the container in position in the vertical chamber.

1,869,121. METHOD AND MATERIAL FOR COATING METAL SURFACES. JOHN S. THOMPSON and ROBERT R. TANNER, Detroit, Mich., assignors to Parker Rust-Proof Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 21, 1931. Serial No. 517,633. 12 Claims. (Cl. 148—6.)

3. A method of coating metal of the group comprising magnesium, zinc, iron, and their alloys with a phosphate solution containing in solution a small amount of metal less basic than the metal to be coated, which comprises testing the solution for total acid and for free acid, neutralizing free acid if necessary to obtain a proportion of total acid to free acid of between 6 to 1 and 15 to 1, and treating a metal surface with the solution having a proportion of total acid to free acid within said range.

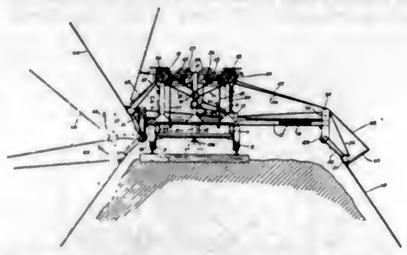
1,869,122. INTERNAL COMBUSTION ENGINE. JESSE G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 3, 1928. Serial No. 258,817. 10 Claims. (Cl. 123—119.)



1. In an internal combustion engine adapted to be supercharged by a blower arranged for connection to and disconnection from the engine, a carburetor having a mixing chamber and a float chamber, a nozzle for supplying fuel to the mixing chamber and connected with the float chamber, a valve for the nozzle, and a flexible member for operating the valve, said flexible member being responsive to pressure above atmospheric pressure applied to the float chamber.

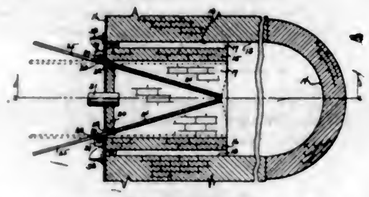
1,869,123. MOWING MECHANISM. WILLIAM R. WALTERS, Fairmont, Minn., assignor to Fairmont Railway Motors, Inc., Fairmont, Minn., a Corporation of Minnesota. Filed Mar. 15, 1929. Serial No. 347,886. 31 Claims. (Cl. 56—232.)

1. A device of the class described comprising a wheeled truck, an arm arranged to be extended laterally beyond the truck, a second arm and a pivot swingingly connecting it to the first arm, a cutter swingable upon the second arm, means for driving the cutter including a crank journaled on said laterally extending arm, in co-axial relation to the pivot, and a pitman connecting with the ter-



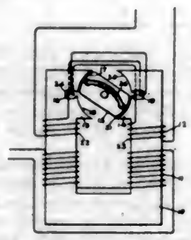
minal of the cutter and adapted to lie substantially within the plane of the second arm for all operative positions of the arm.

1,869,124. DEVICE FOR BURNING COMMINUTED FUEL DURING THE WATER SMOKING PERIOD OF THE FIRING OF CLAY PRODUCTS. DONALD J. WATSON, Sioux City, Iowa, assignor to Iowa State College of Agricultural and Mechanical Arts, Ames, Iowa, a Corporation of Iowa. Filed May 29, 1929. Serial No. 366,886. 4 Claims. (Cl. 110—28.)



1. In a device of the class described, a fire-box having an opening, a closing member for closing said opening, two vertical walls extending into said fire-box and spaced apart from the two sides of said fire-box, respectively, air passageways in said closing member communicating with the outside atmosphere and the space between said walls and said fire-box, respectively, vanes hinged on said closing member for closing or restricting said passageways, two vertical slots in said closing member, plate members extending through said slots capable of swinging movement between said two walls, a handle member on each of said plates to facilitate the movement of the same, and a fuel inlet pipe extending through said closing member and terminating between said two plates.

1,869,125. VARIABLE VOLTAGE TRANSFORMER. HARRY R. WEST, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 28, 1931. Serial No. 576,739. 3 Claims. (Cl. 171—119.)



1. A transformer including a magnetic core having a gap, primary and secondary windings on the core, a magnetic rotor in said gap, one of said windings having

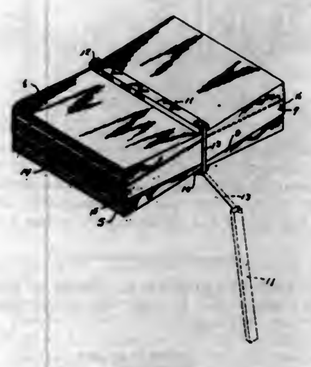
a section surrounding said gap and rotor, and a closed winding on said rotor to reduce the reactance of the surrounding winding section.

1,869,126. BUCKLE FASTENER. HERBERT G. WHITEHOUSE, Newark, N. J., assignor to The Riker Company, a Corporation of New Jersey. Filed Apr. 15, 1932. Serial No. 605,387. 3 Claims. (Cl. 24—178.)



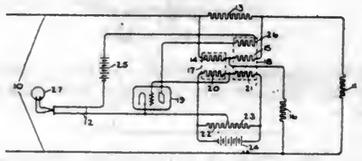
1. A buckle fastener of the class described comprising, an anchor member adapted to be attached to a strap or other support, said anchor member having hinge knuckles at its ends, one end portion of said anchor member being bifurcated for receiving a buckle tongue therewithin, a buckle frame hingedly connected to the hinge knuckles at the bifurcated end of said anchor member, said buckle frame having a buckle tongue pivotally mounted thereon intermediate the hinge knuckles of said anchor member, a keeper frame hingedly connected to the hinge knuckle at the other end of said anchor member, said buckle frame and said keeper frame being turnable outwardly about their hinged connections with said anchor member and away from said strap to enable a cooperating strap to be readily passed through said buckle and keeper frames as when fastening or unfastening said straps.

1,869,127. WRAPPER FOR PACKAGES. EVERETT B. ALLEN, Kenmore, and SMITH B. HOWE, Buffalo, N. Y., assignors to Weatherbest Stained Shingle Company, Inc., North Tonawanda, N. Y., a Corporation of New York. Filed Sept. 8, 1930. Serial No. 480,344. 1 Claim. (Cl. 206—60.)



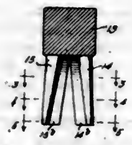
As an article of manufacture, a bundle of shingles, channel-shaped pieces of paper disposed above and below the bundle, each piece having a longitudinal dimension substantially equal to the length of the bundle, the sides of the pieces being of such dimension that they overlap at the sides of the bundle so that the top, bottom and sides of the bundle will be fully protected, and the ends fully exposed, a binder stick disposed on the outside of each piece on the top and bottom of the bundle, and a strap extending down each side of the bundle and having its ends secured to the ends of opposite sticks.

1,869,128. POWER MEASURING AND TELEMETERING APPARATUS. BURNICE D. BEDFORD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 10, 1931. Serial No. 521,503. 11 Claims. (Cl. 171—95.)



1. In combination with an electric circuit, thermal means responsive to electrical conditions of such circuit for producing a temperature difference proportional to some quantity of the circuit which it is desired to measure, electric control means responsive to the magnitude of such temperature difference, and vacuum tube means biased by said control means for producing a current proportional to such quantity, said thermal means being influenced by said current in such manner as to diminish the temperature difference which is produced therein in response to the electrical conditions of the circuit.

1,869,129. CLAW HAMMER. ROBERT S. BLAIR, Stamford, Conn. Filed Feb. 4, 1925. Serial No. 6,754. 13 Claims. (Cl. 254—26.)

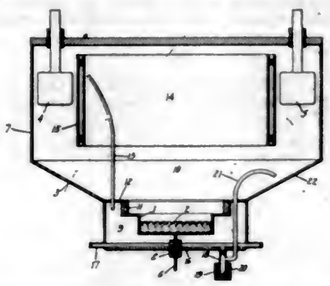


1. In construction for claw hammers and the like, a nail extracting claw having substantially rigid supporting parts and resilient nail engaging parts, said nail engaging parts being adapted upon nail extracting movement of said claw to move downwardly and inwardly toward each other relative to said rigid parts and into gripping engagement with said nail.

1,869,130. CATHODE MOUNTING FOR MERCURY VAPOR DEVICES. KARL BRABAND, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Dec. 10, 1930, Serial No. 501,408, and in Germany Dec. 9, 1929. 5 Claims. (Cl. 250—27.5.)

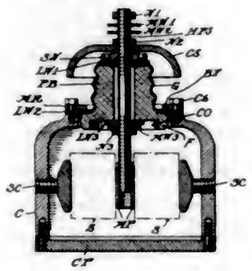
1. In an arc discharge device comprising a metallic evacuated vessel and a mercury cathode therein, means forming a vapor chamber within said vessel above said cathode, said vessel including a diaphragm, a metallic

container for said cathode, a current conductor connected to said container, an insulator associated with said current conductor, said insulator being mounted in said dia-



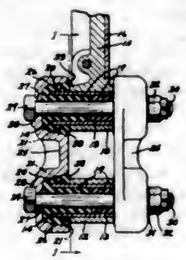
phragm to support said cathode container, and means to seal and insulate said container from said vapor chamber.

1,869,131. ELECTRICAL CONDENSER. BENJAMIN J. BUTLER, Somerville, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Dec. 6, 1927. Serial No. 238,076. 4 Claims. (Cl. 175—41.)



1. The combination with a capacitor stack provided with clamping means therefor, of a rigid terminal stud secured intermediate the ends of said stack, a casing for said stack, an insulating bushing closing a portion of the outer wall of said casing, said stud passing thru said bushing and having clearance between the stud and bushing whereby variation in clamping dangerous stresses on said stack transmits no stresses to said bushing.

1,869,132. SPRING SHACKLE. RALPH H. CHILTON, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 27, 1927. Serial No. 163,033. 8 Claims. (Cl. 267—54.)



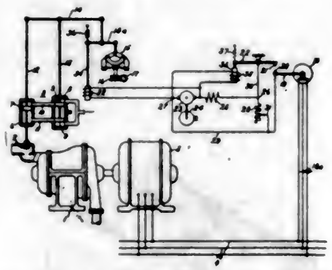
1. In combination with the spring and frame member of a vehicle, a shackle interconnecting said members comprising: metal sleeves fixed to the spring and frame respectively and having laterally projecting ends, two elastic rubber bushings inserted into each of said sleeves from opposite ends thereof, said bushings having enlarged heads which enclose the projecting ends of said sleeves, metal side links having end recesses receiving said enlarged heads, and pivot pins extending through said bushings and clamping said side links together, whereby said rubber bushings are compressed.

1,869,133. SPARK PLUG. PHILIP K. DEVERS, Lynn, and IRVIN F. HOOPER, Saugus, Mass., assignors to General Electric Company, a Corporation of New York. Filed Dec. 17, 1928. Serial No. 326,433. 2 Claims. (Cl. 123—169.)



1. A spark plug comprising an elongated insulator of vitreous silica, said insulator having a hollow bulbous enlargement and a hollow shaft integral therewith, a conductor extending longitudinally through said insulator, a tube of vitreous silica extending through said shaft and said enlargement closely surrounding said conductor, a casing for said insulator, and means for making a gas-tight seal between said insulator and said casing.

1,869,134. REGULATING ARRANGEMENT FOR PRIME MOVERS. RICHARD DIETZE, Berlin-Pankow, Germany, assignor to General Electric Company, a Corporation of New York. Filed Nov. 17, 1931, Serial No. 575,667, and in Germany Nov. 25, 1930. 5 Claims. (Cl. 290—40.)



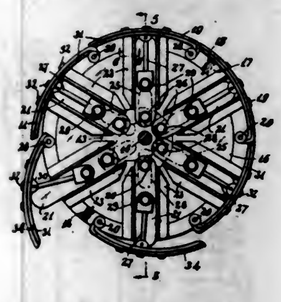
1. In combination with a prime mover, a device responsive to the demand for load output, a vibratory type regulator cooperating with the load responsive device and including an exciter, and an electromagnetic means connected to the exciter for regulating the prime mover.

1,869,135. INFLATABLE BALL. JACOB A. DUBOW, Chicago, Ill. Filed Jan. 4, 1930. Serial No. 418,475. 13 Claims. (Cl. 273—65.)



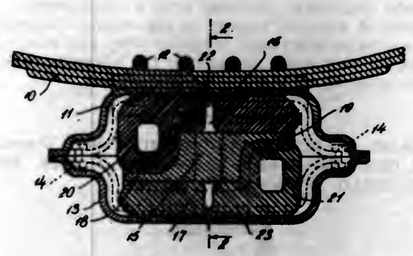
1. An inflatable ball comprising in combination a casing having a bladder insertion opening therein and an inflation aperture therethrough, a bladder, a stem in said bladder having a valve therein, and a resilient hooked member open at one side for the reception of the valve stem and secured to said casing at said aperture engaging the said valve stem.

1,869,136. MEANS FOR THE PROPULSION OF SHIPS OR THE LIKE. CARMELO M. FARRAGUTO, New York, N. Y. Filed Mar. 30, 1932. Serial No. 601,943. 7 Claims. (Cl. 115—49.)



1. Means for propulsion of ships and the like, comprising an element having a cam groove and for attachment upon the side of a ship or the like, a shaft through said element for connection with a source of rotation, a casing to the front side of said element and fixed upon said shaft and comprising spaced discs with peripheral rings and means for holding the rings in various rotative adjusted positions, blades in end to end relation arranged around said rings and pivotally mounted at their rear ends, slides radially mounted within said casing, pegs upon said slides projecting through openings in the casing and engaging into said cam groove, connecting rods pivotally mounted upon said slides, and means for connecting the outer ends of the connecting rods adjustably along the lengths of said blades.

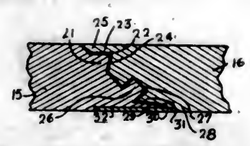
1,869,137. FLEXIBLE JOINT. GERHARD FLINTERMANN, West Orange, N. J. Filed Aug. 19, 1927. Serial No. 214,128. 7 Claims. (Cl. 267—30.)



1. A flexible joint comprising an elongated member, a support for the member, a plurality of resilient bodies disposed between the member and the support, said bodies having a greater degree of resiliency at one side of the member than at the opposite side thereof and permitting a limited relative movement between the member and the support.

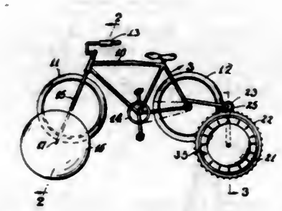
1,869,138. RAIL JOINT. JOSEPH FELIX EDOUARD FOREST, Joliette, Quebec, and ALZEARD FLORANT JOANISSE, Hawkesbury, Ontario, Canada. Filed June 19, 1931. Serial No. 545,412. 3 Claims. (Cl. 238—240.)

1. In rail joints, comprising a pair of rail ends abutting one another, an oblique groove in one rail end and a tongue on the other rail end, cavities in said tongue, bosses formed in said groove to correspond with the cavities in said tongue and adapted to register with one another when



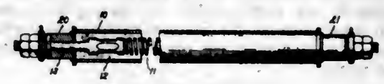
the rail ends are together, and a locking member on one rail end engaging a recess in the other rail end for locking the rails together.

1,869,139. HYDRO-CYCLE. RICHARD GARGIULO, New York, N. Y. Filed Feb. 11, 1932. Serial No. 592,278. 3 Claims. (Cl. 115—27.)



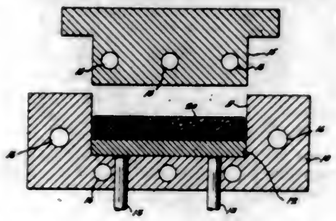
1. A hydrocycle, comprising a cycle having wheels, front and rear floats supported upon said wheels, the floats on the driver wheels of said cycle comprising spaced discs, rods holding said discs separated from each other, a water tight covering engaged over one of the discs and secured on the face of the other disc, paddles extended through the water tight covering and between said rods, holding rods hingedly mounted upon the covered disc and extending from the other disc and straddling said paddles to hold them rigidly in place, resiliently means urging said rods into operative positions, and cams mounted upon the frame of said cycle and operable against the rods to move them into inoperative positions whereby the paddles are free.

1,869,140. ELECTRIC HEATER. WILFRED F. GELINAS, Lanesborough, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 8, 1930. Serial No. 473,943. 2 Claims. (Cl. 201—67.)



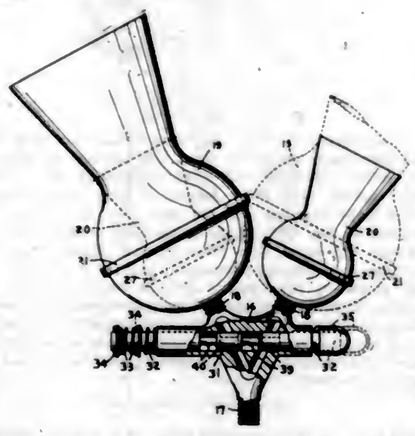
2. An electric heater of the sheathed type in which the sheath is reduced in cross-section to compact the insulating material, comprising in combination with a metallic sheath, powdered insulating material in said sheath, and a helically formed, ribbon-shaped resistance conductor embedded in said insulating material, said resistance conductor having a relatively large cross-sectional area to give a low resistance and being yieldable by reason of its ribbon shape to provide for a reduction in cross-section of said sheath to compact said insulating material to a hard dense mass without the impairment of the strength of said sheath resulting from the use of a resistance conductor having a round cross section and the same area.

1,869,141. COMPOSITE MOLDED ARTICLE AND METHOD OF MAKING SAME. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 274,049. 4 Claims. (Cl. 154—43.9.)



1. As an article of manufacture, a composite molded panel comprising: a premolded panel of fibrous bituminous compound having a relatively thin decorative finish coating of moldable nitrocellulose powder compound bonded thereto.

1,869,142. WARNING SIGNAL. ALEXIS F. GILLET, Omaha, Nebr., assignor to Jubilee Manufacturing Co., Omaha, Nebr., a Corporation of Nebraska. Filed Jan. 15, 1932. Serial No. 586,737. 9 Claims. (Cl. 116—138.)



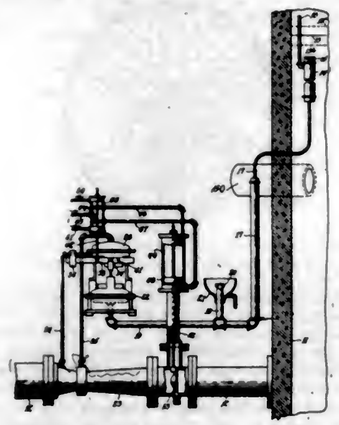
1. A sounding device, comprising a body portion adapted for connection with a source of suction and having independent passages therein, sound producing devices mounted on the body portion in independent communication with the passages, and a longitudinal slidable valve mounted in the body portion and having ports therein spaced lengthwise of the valve for registration with the passages in predetermined order during the movement of the valves.

1,869,143. SELF-ADJUSTING COLLAR BUTTON. MAX H. GOLDMAN, Chicago, Ill. Filed Jan. 6, 1932. Serial No. 584,991. 4 Claims. (Cl. 24—91.)



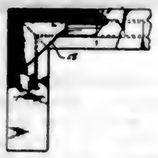
1. As a new article of manufacture, a collar button, made up of a single piece of spring-wire, coiled at one end to form a base, at the opposite end to form a head and between the base and head to form a coiled extendible and contractable shank, and the head end of the wire being turned down through the interior of the head and extending down within the interior of the shank.

1,869,144. LIQUID TREATMENT. WALTER H. GREEN and SAMUEL L. ADELSON, Chicago, Ill., assignor to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 20, 1928. Serial No. 300,774. 8 Claims. (Cl. 137—68.)



1. In a level control for a sedimentation basin, an inlet into the basin, an outlet from the basin, and a means for controlling the inflow through the inlet, said controlling means comprising a hydraulic valve on said inlet, an intake orifice within the basin below the normal variation in liquid level, an outlet orifice at a lower level than the inlet orifice of smaller diameter than the first mentioned orifice and communicating with said first mentioned orifice, the line connecting the orifices communicating with a diaphragm, a Venturi tube on the influent line, another diaphragm which is actuated by the pressure difference set up by the Venturi tube, a lever operatively connected to said diaphragms provided with a counterweight the moment of which is adapted to oppose said diaphragms, and a pilot valve actuated from said lever, said pilot valve supplying fluid under pressure to the hydraulic cylinder which actuates the valve in the influent line.

1,869,145. ELECTRIC CIRCUIT MOLDING. ALPHONSE M. GREIS, Hartsdale, N. Y. Filed Mar. 24, 1928. Serial No. 264,510. 2 Claims. (Cl. 247—3.)



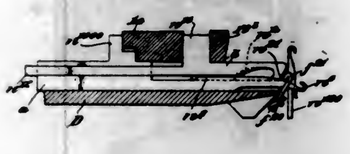
1. In an electric circuit molding, the combination of elongated non-conducting molding sections, each having spaced parallel uninterrupted open channels therein, uninterrupted conducting elements disposed in said channels, and plate bridging connectors adapted for disposition in the adjacent ends of said channels in said sections, whereby said sections may be permanently disposed in any desired angular arrangement to conform to the wall surfaces and corners of a room.

1,869,146. DISPLAY RACK. EDWARD W. HAMANN, Minneapolis, Minn. Filed July 6, 1931. Serial No. 548,806. 7 Claims. (Cl. 211—74.)



1. A display rack comprising a body having an annular lower shelf and an annular upper shelf, and means above each shelf for holding articles thereon in conical formation, the vertical spacing of the shelves being such that the tops of the articles on the lower shelf extend within and above the upper shelf, said body being further provided with a holder for holding one of the articles at the apex of the upper formation.

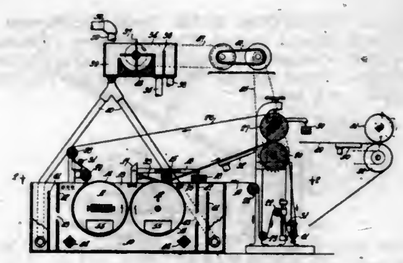
1,869,147. KNITTING MACHINE. ROSCOE HILL, Hamilton, Ontario, Canada, assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Mar. 1, 1932. Serial No. 596,026. 20 Claims. (Cl. 66—24.)



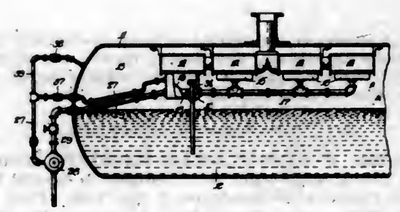
1. A knitting machine of the kind having two sets of instrumentalities adapted to cooperate for knitting ribbed fabric, means for transferring loops made by one set of said instruments to instruments of the other set, and means operative, upon failure of an instrument of the latter set to take a loop presented for transfer, to restore the loop which was removed from the instrument of the other set preparatory to such transfer.

1,869,148. APPARATUS FOR FORMING FIBROUS SHEET MATERIAL. HARRY E. HOLCOMB, Stratford, Conn., assignor to Fiberfraks Inc., New York, N. Y., a Corporation of New York. Filed May 11, 1929. Serial No. 362,231. 9 Claims. (Cl. 92—48.)

1. A machine of the class described including a vat adapted to receive fibrous pulp stock, a cylinder mold mounted for rotation therein, a reticulated belt passing around said mold for collecting a layer of fibrous material from the stock in the vat and carrying it out of the vat, a couch roll above the mold for pressing the belt and fibre layer directly onto the mold, and a sluice board closely adjacent to the couch roll for preventing return flow of water down along the belt counter to the path of movement of the fibre on the belt to the couch roll.

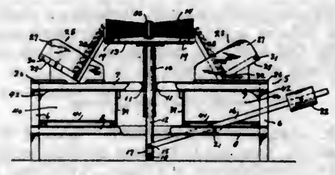


1,869,149. STEAM PURIFIER DISCHARGE. WALTER J. HUGHES, Chicago, Ill., assignor to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Filed May 2, 1927. Serial No. 188,105. 12 Claims. (Cl. 122—491.)



1. In combination with a boiler, a steam purifier within the steam space of a boiler, a collecting chamber below said purifier, a discharge line from said collecting chamber extending outside of the boiler, a valve on said discharge line outside of the boiler, and means inside of the boiler for controlling the opening and closing of said valve.

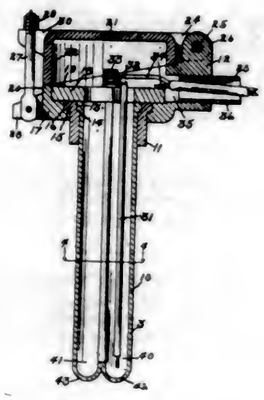
1,869,150. MEANS FOR HANDLING AND TREATING SHINGLES. ALEXANDER F. JACKSON, Mount Vernon, N. Y., assignor to Weatherbest Stained Shingle Company, Inc., North Tonawanda, N. Y., a Corporation of New York. Filed June 11, 1930. Serial No. 460,450. 3 Claims. (Cl. 209—123.)



1. A shingle inspection table, comprising a vertically reciprocating platform, and a shingle tray arranged at each side of the platform, each tray comprising side walls, an

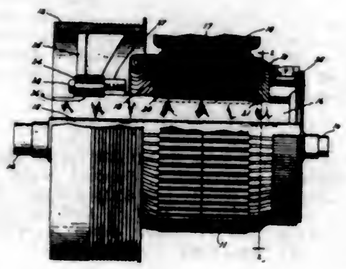
inclined bottom formed of flat interspaced bars, and a back arranged at an angle with the bottom and inclined inwardly from its lower edge toward the axis of the platform.

1,869,151. PYROMETER TUBE. JOSEPH A. JEFFERY and FRANK H. RIDDLE, Detroit, Mich., assignors to Champion Porcelain Company, Detroit, Mich., a Corporation of Michigan. Filed May 17, 1926. Serial No. 109,473. 5 Claims. (Cl. 136—4.)



1. A pyrometer tube having walls of substantially equal thickness throughout, and having therein two substantially cylindrical parallel channels communicating with each other on their adjacent sides.

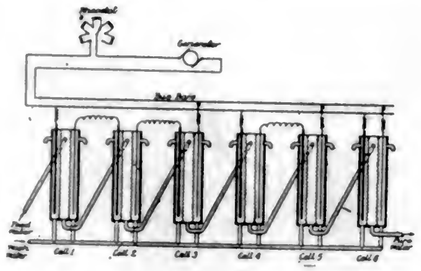
1,869,152. DYNAMO ELECTRIC MACHINE. LAURENCE D. JONES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 28, 1929. Serial No. 417,210. 6 Claims. (Cl. 172—36.)



1. A dynamo-electric machine including a shaft, axially extending webs on said shaft, a core structure mounted on said webs, and a driving member mounted on said webs adjacent said core structure.

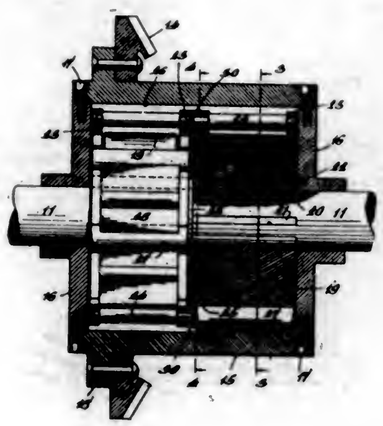
1,869,153. LIQUID TREATMENT. ROBERT H. KEAN, Chicago, Ill., assignor to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 17, 1928. Serial No. 300,393. 8 Claims. (Cl. 204—25.)

1. A process for the continuous electro-osmotic treatment of liquids which comprises maintaining electric potential gradients in bodies of the liquid being treated by means of positive and negative electrodes, separating said electrodes from said bodies of liquid by diaphragms and other bodies of liquid in contact with said electrodes and during periods of intermission maintaining electric potential



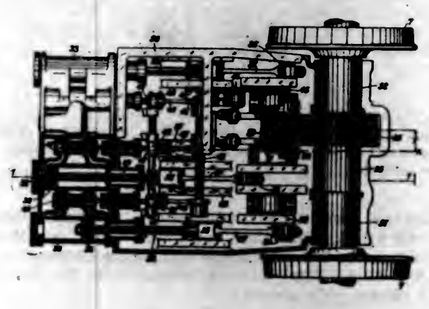
gradients in said bodies of liquid such that the concentrations of electrolyte in said respective bodies of liquid remain substantially unchanged during said period.

1,869,154. DIFFERENTIAL DRIVE MECHANISM FOR AUTOMOBILES. MANLY E. KING, Springville, N. Y. Filed Apr. 29, 1931. Serial No. 533,734. 7 Claims. (Cl. 74—7.)



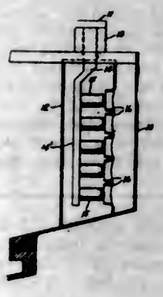
1. A vehicle drive mechanism of the character described, comprising alined axle-sections having hubs on their opposing inner ends, a driving member mounted on the axle-sections and enclosing their hubs in concentric spaced relation thereto, clutching rollers disposed in the space between said hubs and said driving member for releasable engagement therewith, roller-retaining cages applied to the hubs for independent circumferential movement relative thereto and to the drive member, said rollers being arranged for gripping engagement with said hubs and driving member in their direct driving position and to be released from engagement with such parts in their differential drive position, and means disposed between the opposing ends of the roller cages and fixed to said cages, respectively, for limiting their movement equally in both circumferential directions, said means consisting of substantially semi-circular sections terminating short of their meeting edges to permit a limited relative movement of the sections.

1,869,155. BOOSTER EQUIPPED LOCOMOTIVE. KURT KLUG, Berlin-Charlottenburg, Germany, assignor to Locomotive Booster Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 29, 1932, Serial No. 589,610, and in Germany Sept. 9, 1930. 2 Claims. (Cl. 105—115.)



1. In a locomotive equipped with a booster, a three-cylinder booster motor, a booster frame suspended in three points, a crank shaft driven by the booster motor, a trailing axle connected with the crank shaft by a gearing, the middle cylinder of the booster motor being moved laterally to one side and the gearing for the trailing axle to the opposite side of the central plane of the booster frame, the resulting distribution of weight being such as to bring the centre of gravity of the total mass of said frame and of the parts supported by it substantially into said central plane.

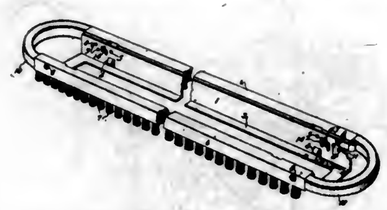
1,869,156. MERCURY ARC RECTIFIER. CHRISTIAN KRÄMER, Berlin-Pankow, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 4, 1929, Serial No. 397,398, and in Germany Jan. 30, 1929. 8 Claims. (Cl. 250—27.5.)



1. An anode structure for a rectifier including a stem, a plurality of anodes mounted one below the other upon said stem and projecting laterally therefrom, and a shield surrounding said stem and anodes and provided with openings registering with each of said anodes.

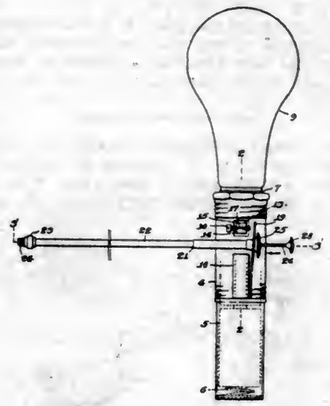
1,869,157. BRUSH FOR VACUUM CLEANERS AND THE LIKE. HENRY T. LANG, Cleveland, Ohio, assignor to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio, a Corporation of New York. Filed Aug. 10, 1931. Serial No. 556,068. 3 Claims. (Cl. 15—158.)

1. A brush for vacuum cleaners and the like comprising a frame, and a brush bar having openings to receive fastening screws and inwardly projecting flanges, said frame being provided with a plurality of sets of openings spaced different distances from a longitudinal edge of the frame, each set comprising an opening adapted to receive a brush bar flange and an opening to receive a screw whereby the brush bar may be adjusted relatively to the frame by uti-



lizing different sets of openings, and screws in openings of the brush bar and frame for fastening the brush bar to the frame.

1,869,158. PHOTOGRAPHER'S FLASH LIGHT APPARATUS. ALBERT E. LIPP, Philadelphia, Pa. Filed Feb. 15, 1932. Serial No. 593,071. 10 Claims. (Cl. 67—29.)

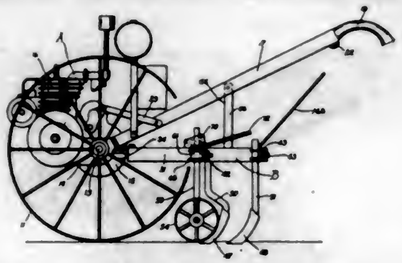


2. In a photographer's flash light apparatus, the combination of a support, an electrical contact part carried thereby, a spring contact arm electrically insulated from said part and having one end portion thereof fixedly related to the support and the other end portion thereof movable into contact with said part and provided with an opening extending therethrough, a tubular guide extending through said opening and having a head thereon adapted to engage the second named part and move it into contact with the first named part, a camera shutter operating member longitudinally movable within said guide and having an end portion projecting from the head thereon and provided with an operating head, a spring acting between a part of said guide and a part of said member and opposing movement of the last named head toward the first named head, an electric flash lamp, and an electric circuit including said parts and said lamp and normally open between said parts.

1,869,159. TOOL LIFT FOR CULTIVATORS. ALLEN E. LOOMIS, Minneapolis, Minn., assignor to American Farm Machinery Company, St. Paul, Minn., a Corporation of Minnesota. Filed Jan. 19, 1929. Serial No. 333,536. 11 Claims. (Cl. 97—48.)

1. In combination with a tool frame of a cultivator having a laterally disposed bar, a post frame slidable

laterally along said bar, a post slidable vertically along said post frame, means for locking said post frame from

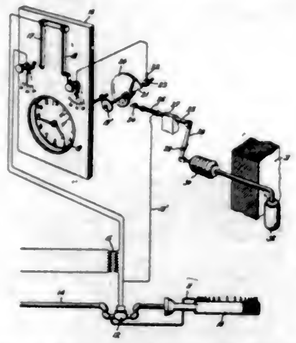


sliding movement upon said bar, and a lever pivoted to said post frame and post for moving said post and frame vertically with respect to one another.

1,869,160. PIEZO-ELECTRIC RESONATOR. WARREN A. MARRISON, Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 11, 1928. Serial No. 277,017. 6 Claims. (Cl. 252—1.)

1. The method of producing a quartz crystal element which comprises cutting the crystal element to the approximate size and dissolving a portion of said crystal element with hydrofluoric acid.

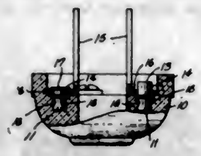
1,869,161. HEAT CONTROL APPARATUS. WILBUR L. MERRILL, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 12, 1931. Serial No. 522,150. 12 Claims. (Cl. 236—46.)



1. A temperature control apparatus for a heating system including a thermostat, a timing device for rendering said thermostat effective to control said heating system to maintain a predetermined temperature, said device including an adjustable cam, and a thermostatic device responsive to predetermined ambient temperatures above which said heating system is to be operated for determining the time at which said control apparatus is to be effective dependent upon said ambient temperatures.

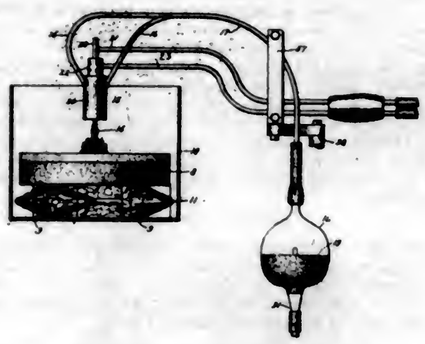
1,869,162. MOLDED INSERT FOR COMPOUNDS. ANSON W. MINER, Waterbury, Conn., assignor to The Waterbury Brass Goods Corporation, Waterbury, Conn., a Corporation of Connecticut. Filed Dec. 26, 1929. Serial No. 416,433. 4 Claims. (Cl. 85—40.)

1. An insert adapted to be anchored in a molded article comprising a round metal tube provided with one or more transverse indentations in its side wall, the circumferential extent of each indentation being limited by the wall of the tube so that the outer contour of the tube through the indentation is other than round, and the indentation



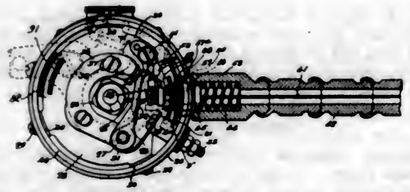
being adapted to receive the molding material to secure the insert in the material and hold it against turning in the material.

1,869,163. METHOD OF PRODUCING CLEAR VITREOUS SILICA. BERTHOLD F. NIEDERKORN, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 24, 1927. Serial No. 215,216. 8 Claims. (Cl. 49—78.1.)



8. The process of depositing silica upon a refractory support of extensive surface which consists in separately heating said support as a whole in a substantially enclosed space to a highly elevated temperature, uninterruptedly projecting fine particles of silica upon said support through a flame formed by combustible and combustion-supporting gases, and regulating the ratio and velocity of said gases to cause said particles to be deposited and fused by said flame upon said support.

1,869,164. IGNITION DEVICE. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 5, 1927. Serial No. 210,905. 12 Claims. (Cl. 200—19.)



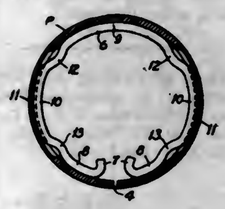
3. Theft preventing apparatus for automobiles comprising in combination, in an ignition timer, a cup-shaped housing enclosing timer contacts, a cover for the housing, means for securing the cover to the housing and requiring rotation of the cover upon the housing before the cover can be removed, and a lock controlled device comprising an armor case threadedly connected at one end with the timer housing and extending into the housing and enclosing a key controlled device having a part movable within the timer housing, means cooperating with the armor case end and the cover to prevent unscrewing the armor case unless the cover is turned into position permitting its removal from the housing, and devices cooperating with the key controlled device for rendering the timer inoperative and for preventing the turning of the cover into position permitting its removal from the timer housing.

1,869,165. NECKTIE HOLDER. JAMES A. PALMER, Taunton, Mass., assignor to Taunton Pearl Works, Inc., a Corporation of Massachusetts. Filed Aug. 7, 1931. Serial No. 555,677. 1 Claim. (Cl. 24—49.)



A necktie holder comprisign a length of wire doubled upon itself and then again folded upon itself providing opposed portions, one portion having the wires running parallel and in close adjacency, and the other portion being shorter and having the wires extending parallel and spaced a substantial distance apart with their extremities bent to extend toward each other; a sheet metal member provided at its middle with a bearing pivotally mounted on said inwardly extending portions and the portions of said member between the pivot and ends bent toward and in contact with the closely lying wires with the end turned away from said wires and presenting a longitudinally convex surface at the points of contact and providing a mouth for the insertion of material to be gripped therebetween, said convex surface being transversely concave at the point of contact.

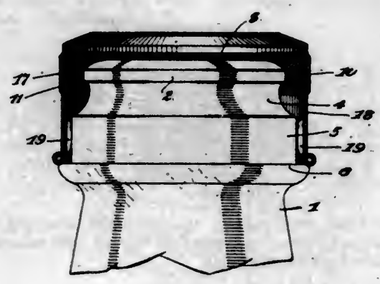
1,869,166. PISTON AND SKIRT EXPANDING RING THEREFOR. HAROLD F. PHILLIPS, Belmont, Mass. Filed Feb. 10, 1932. Serial No. 592,009. 2 Claims. (Cl. 74—108.)



1. In combination with a piston having wrist pin bosses and a longitudinally slotted skirt provided with transverse grooves formed in the inner peripheral surface of said skirt below said bosses, an expanding element disposed within said skirt, parts of said element having contact with and exerting pressure against said skirt and parts of said element expanding into said grooves to decrease the pressure on the skirt at these points.

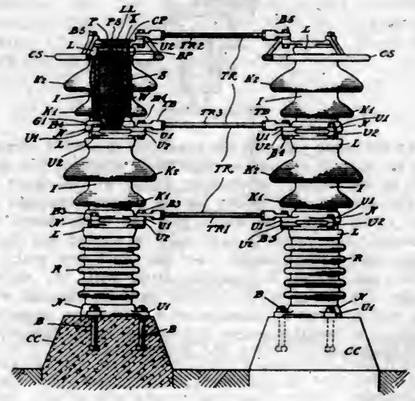
1,869,167. SEALED PACKAGE. ABRAHAM PODEL, New York, N. Y., assignor to Anchor Cap & Closure Corporation, New York, N. Y., a Corporation of New York. Filed May 16, 1927. Serial No. 191,613. 9 Claims. (Cl. 215—38.)

1. A sealed package comprising a container having a sealing zone in the form of an annular bead or ledge adjacent its mouth in combination with a closure cap, a gasket in the skirt thereof, an annular band of metal spun inwardly to constrict said gasket under and against said ledge, said band of metal being substantially



parallel with the side wall of the container throughout its height with a narrow flange at the bottom thereof to hold the gasket in place against said ledge.

1,869,168. ELECTRICAL CONDENSER. JOHN A. PROCTOR, Lexington, and WILLIAM M. BAILEY, Lynn, Mass., assignors, by mesne assignments, to General Electric Company, a Corporation of New York. Original application filed Jan. 23, 1925, Serial No. 4,150. Divided and this application filed Apr. 20, 1926. Serial No. 103,188. 11 Claims. (Cl. 175—41.)

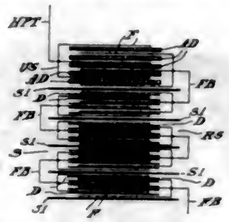


1. A high-tension condenser installation, comprising a plurality of stacks of insulation-sided metal-ended condenser units arranged end to end in the respective stacks; each metal end of each condenser unit being formed with laterally-extending securing means for electrically and mechanically connecting together the stacks and the units in each stack, the units in each stack being connected in series with one another, and the units in the different stacks being connected in parallel with one another.

1,869,169. ELECTRICAL CONDENSER. JOHN ALBERT PROCTOR, Lexington, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Dec. 21, 1927. Serial No. 241,473. 5 Claims. (Cl. 175—41.)

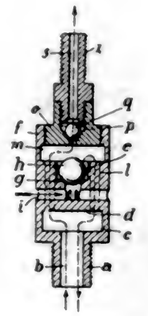
1. A high potential condenser comprising a stack of conducting and insulating elements, an insulating casing

therefor having an irregular surface, collars secured to the ends thereof and forming terminals for said condenser, said collars being adapted to form supporting



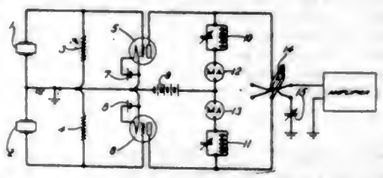
means for said casing, the dielectric elements of the condenser section connected to one of said collars being of increased thickness.

1,869,170. AIR PUMP VALVE. ALWIN RICHTER, Leipzig, Germany. Filed May 27, 1931, Serial No. 540,377, and in Germany Mar. 13, 1930. 1 Claim. (Cl. 277—61.)



An air pump valve of the character described, comprising an upright casing; a supporting nipple at the lower end of the casing; a delivery nipple at the upper end of the casing; said casing having a valve chamber and two valve seats, one above and the other below said chamber; ball valves in said seats, a smaller one for the upper seat and a larger one for the lower seat; the upper seat being in communication with the delivery nipple, the casing having vertical passages through which the valve member communicates with the supporting nipple, and radial passages through which the lower valve seat communicates with the atmosphere.

1,869,171. OSCILLATION GENERATOR. CHARLES F. P. ROSE, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 10, 1930. Serial No. 460,258. 3 Claims. (Cl. 250—36.)

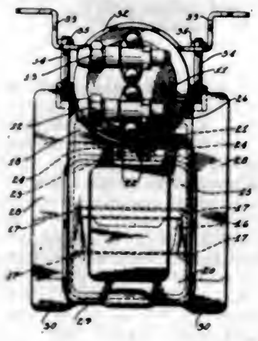


3. A crystal controlled oscillation generator, a spare crystal therefor, means for maintaining said spare crystal in vribation, and means for switching said spare crystal into the circuit of said generator without affecting the amplitude of vibration of the crystal.

1,869,172. COMPOUNDING RUBBER. BRUCE F. SCHWALM, Pittsburgh, Pa., assignor, by mesne assignments, to The Neville Company, a Corporation of Pennsylvania. Filed July 24, 1930. Serial No. 470,541. 4 Claims. (Cl. 106—23.)

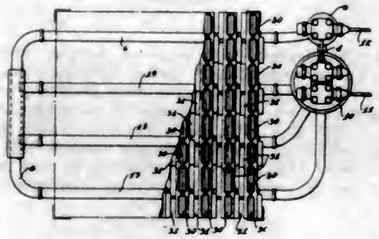
1. In the process of compounding rubber the herein described step of expediting and improving the dispersion of filling material through rubber stock by mixing the rubber stock and filling material with a softening mixture comprising a still residue resulting from the acid purification of the lighter coal tar oils and an oily coal tar distillate.

1,869,173. EVAPORATOR FOR MECHANICAL REFRIGERATION. FRANKLIN G. SLAGEL, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed July 29, 1929. Serial No. 381,974. 3 Claims. (Cl. 62—95.)



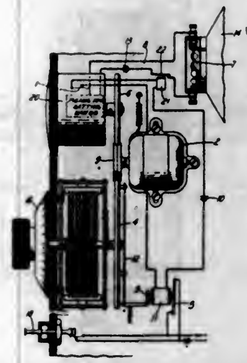
2. An evaporator comprising a closed cylindrical liquid refrigerant containing vessel having inlet and outlet ports, a cast metal structure formed with an interior compartment and a top wall complementary to and coextensive with the vessel, said vessel seating in the recess in the top wall, and detachable means clamping the vessel to the metal structure, said means including straps formed with ends extending above the vessel adapted to be secured to a supporting wall.

1,869,174. HEAT TRANSFER DEVICE. FRANKLIN G. SLAGEL, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Apr. 17, 1930. Serial No. 445,120. 5 Claims. (Cl. 257—256.)



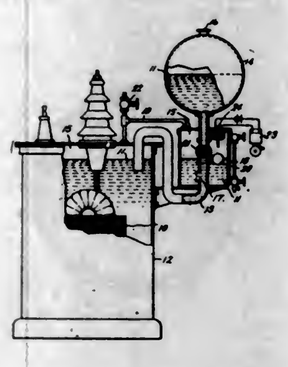
1. A fin for indirectly transferring heat comprising a sheet of metal having two parallel intermediate portions provided with spaced slits and bent outwardly therefrom alternately on opposite sides forming parallel flues, and having opposite edges bent outwardly therefrom on the same side, the fin portion between the parallel portions having a tube opening therethrough.

1,869,175. RADIO CLOCK REGULATION. CLARENCE A. SPRAGUE, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 25, 1928. Serial No. 249,313. 5 Claims. (Cl. 250—2.)



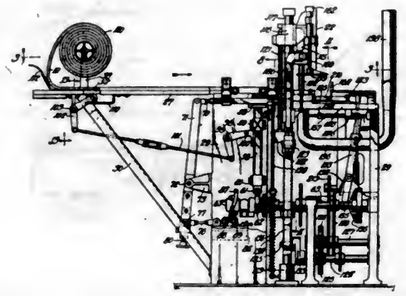
1. In a radio receiving system, a clock, a circuit controlled thereby including a motor, means actuated by said motor to tune said radio receiving system to a predetermined wave length and to wind said clock, and means responsive to a received wave to set the hands of said clock.

1,869,176. ELECTRICAL INDUCTION APPARATUS. ZOLTAN O. ST. PALLEY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 2, 1931. Serial No. 512,997. 2 Claims. (Cl. 220—85.)



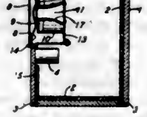
1. The combination with electrical apparatus immersed in a liquid within a casing, and a gas cushion above the liquid in said casing, of a conservator partially filled with liquid and communicating with the liquid in said casing below said gas cushion, a compartment partially filled with liquid communicating with the liquid in the casing, the space above the liquid in said compartment being filled with gas communicating with said gas cushion, whereby the level of the liquid in said compartment is always the same as that of the liquid in said casing, a float on the liquid in said compartment, and means controlled by said float for preventing liquid from the conservator from entering said casing after the liquid in the casing and compartment has risen to a predetermined level.

1,869,177. SANITARY NAPKIN AND MACHINE FOR MAKING SAME. OSCAR T. THOMPSON, Neenah, Wis., assignor, by mesne assignments, to International Cellucotton Products Co., Chicago, Ill., a Corporation of Delaware. Filed Feb. 18, 1928. Serial No. 255,246. 21 Claims. (Cl. 223—15.)



1. In a machine for making sanitary napkins, the combination of a support for supporting a strip of wadding, means for intermittently gripping and moving the wadding strip forwardly, said gripping means having gripping engagement with portions of the wadding strip intermediate its marginal edge portions, a cutter for cutting the forward end portion of said strip from the strip so as to form a pad, and means for enclosing the pad in a wrapper.

1,869,178. SOUND TRANSLATING DEVICE. ALBERT L. THURAS, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 15, 1930. Serial No. 475,468. 27 Claims. (Cl. 181—31.)

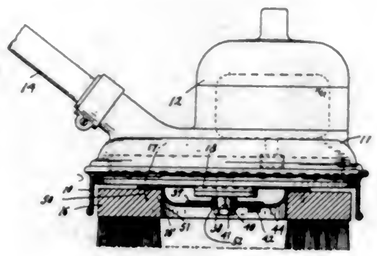


1. A sound translating device comprising a diaphragm, means defining an acoustic stiffness adjacent one surface of said diaphragm, the other surface of said diaphragm being open to the atmosphere, and means defining an acoustic mass providing an acoustic path between the two surfaces of said diaphragm, said acoustic mass and stiffness proportioned so that over a portion of the frequency range the sound vibrations translated by the opposite surfaces of said diaphragm have their magnitude and phase so related that they act to effectively reenforce each other whereby the amplitude of the translated vibrations is increased.

1,869,179. FLOOR MACHINE. FRED W. YUTZLER and GORDON E. KENT, Rome, N. Y., assignors to The Kent Company Inc., Rome, N. Y., a Corporation of New York. Original application filed Oct. 8, 1927, Serial No. 224,814. Divided and this application filed Nov. 21, 1930. Serial No. 497,156. 3 Claims. (Cl. 15—49.)

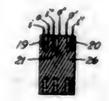
8. In a machine of the character described, the combination of a casing, a driving shaft projecting through the bottom wall of said casing and having a driving flange thereon, a rotatable working member, a centrally dished plate secured to said member and having a central opening

through which said shaft projects, and means for clamping said plate to said flange to form a driving connection therebetween and to close said central opening so that



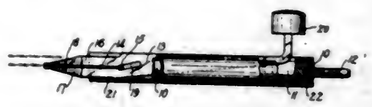
lubricant which accumulates in the dished portion of said plate will be prevented from leaking through said opening onto the surface on which said member operates.

1,869,180. TRANSFORMER. SIDNEY E. ANDERSON, Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Dec. 24, 1923, Serial No. 682,418. Patent No. 1,743,701, dated Jan. 14, 1930. Divided and this application filed Aug. 24, 1929. Serial No. 388,058. 2 Claims. (Cl. 175—359.)



1. A radio frequency transformer having a primary winding and a secondary winding, said secondary winding comprising a coil of disc shape having a large depth compared with its width of winding, said primary winding comprising two coils symmetrically located with respect to said secondary winding, said primary windings being wound in opposite directions and having one end of one of said coils of said primary winding connected to the closest end of the other of said coils of said primary winding.

1,869,181. ELECTRIC TEST CONNECTER. WILLIAM O. BECK, Ridgefield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,673. 4 Claims. (Cl. 173—273.)



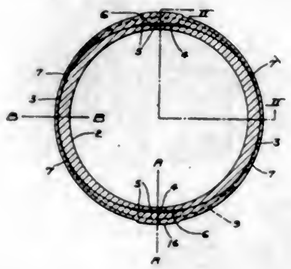
1. An electrical connecter comprising a slotted shaft, an insulating shell mounted thereon, a flat blade fitting the slot of said shaft and having a key at one end and a pair of normally closed jaw members at the other end, and means on said shaft whereby the movement of the key is effective to flex said blade to open said jaws.

1,869,182. PROPELLER. WERNER J. BLANCHARD, Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Jan. 24, 1929. Serial No. 334,674. 28 Claims. (Cl. 170—160.)



1. A propeller including a hub portion and attached thereto a blade adjustable both axially and rotatably in its relation to said hub, said blade at its inner end having longitudinally extending notches disposed radially about its circumference, means for locking said blade in its axially adjusted position, and means let thru said hub to engage with one or another of said notches to lock said blade in its rotatably adjusted position.

1,869,183. REENFORCED CONCRETE PIPE. CHARLES F. BUENTE, Pittsburgh, Pa., assignor to Concrete Products Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 16, 1927. Serial No. 199,195. 8 Claims. (Cl. 72—53.)

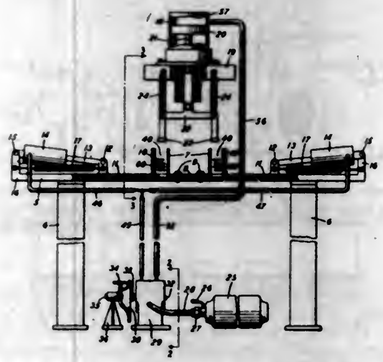


7. A reenforcing cage comprising a helix having a plurality of turns, truss members secured thereto at their ends, said truss members extending substantially parallel to said turns, and a longitudinal member lying between the truss members and the turns and secured thereto.

1,869,184. JIG. GEORGE W. BURR, Long Island City, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 14, 1930. Serial No. 461,210. 4 Claims. (Cl. 29—84.)

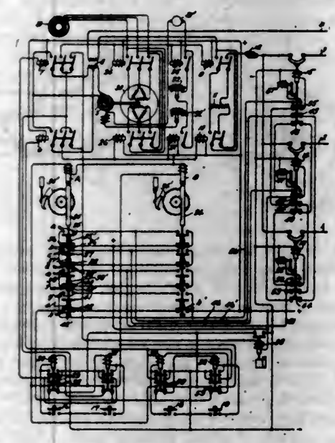
1. A jig for aligning the elements of a spring pile-up comprising a stationary wall and a laterally movable wall

between which the spring elements are placed, a vertically movable member, and means for causing said laterally



movable wall and said vertically movable member to be actuated in sequence to effect a rigid alignment of said spring elements against said stationary wall.

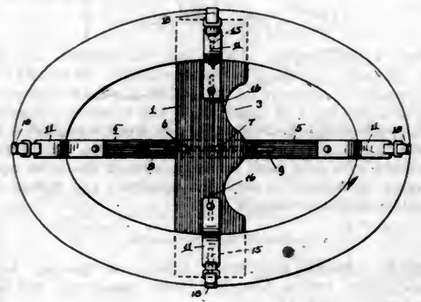
1,869,185. REMOTE CONTROL SYSTEM. HARRY R. CRAGO, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 23, 1930. Serial No. 463,199. 7 Claims. (Cl. 171—97.)



1. In a remote control system, the combination of a source of control electromotive force, a plurality of circuits, a plurality of switches one of said switches being associated with each of said circuits and arranged to connect said source of electromotive force thereto and a control device for operating said switches in succession, said control device comprising means for operating each of said switches to the closed position in succession for a predetermined time interval and means for operating each of said switches to the closed position in succession for a different time interval.

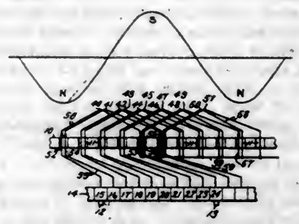
7. In a remote control system, the combination of a source of control electromotive force, a plurality of circuits, a plurality of switches one of said switches being associated with each of said circuits and arranged to connect said source of electromotive force thereto, means for operating each of said switches to the closed position in succession for a predetermined time interval, means for operating each of said switches to the closed position in succession for a different time interval, and means for selectively controlling said last two means thereby to operate said switches in succession for either of said time intervals.

1,869,186. FLOAT. ABRAHAM E. DAVIDSON, Rochester, N. Y. Filed July 20, 1931. Serial No. 551,930. 4 Claims. (Cl. 9—11.)



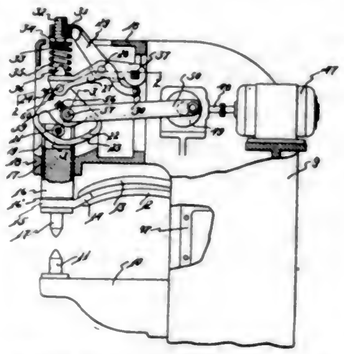
1. A float for amusement purposes including a seat, a pair of straps adjustably mounted on said seat, a longitudinal bracket carried by said seat and an endless buoyant element extending around said bracket and the straps of said seat.

1,869,187. COMMUTATOR TYPE DYNAMO ELECTRIC MACHINE. HERBERT DREGHORN, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Feb. 26, 1930, Serial No. 431,598, and in Great Britain Mar. 5, 1929. 2 Claims. (Cl 171—228.)



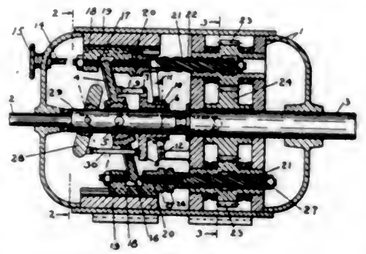
1. In a dynamo electric machine, the combination with an armature core and a commutator having all of its segments insulated from each other, of an armature winding comprising a plurality of separate coils having a plurality of different pitches, said winding being mounted on said core so that the axes of coils with different pitches follow each other in consecutive order around said core, means for connecting together a corresponding end of each of said coils, and means for connecting the remaining ends of said coils to consecutive commutator segments in the order in which the axes of the coils are located around said core.

1,869,188. SPOT WELDER. MERIL LESTER ECKMAN, Warren, Ohio. Filed Dec. 8, 1930. Serial No. 500,812. 7 Claims. (Cl. 219—4.)



1. In a welding mechanism, of the class described, a reciprocating head; a swingable cam member, operatively connected with said head for reciprocating the same upon swinging movement of said cam member; and means for swinging said cam member.

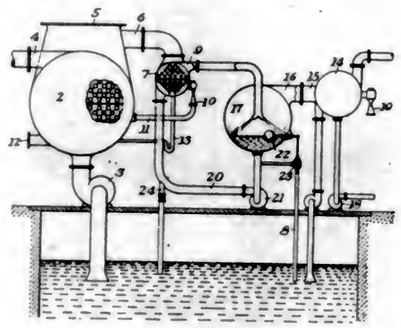
1,869,189. TRANSMISSION. GUSTAV B. EGGERT, Saginaw, Mich. Filed Sept. 20, 1929. Serial No. 393,949. 10 Claims. (Cl. 74—53.)



1. In a transmission the combination of a frame, a driving shaft and a driven shaft journaled in said frame in axial alignment with each other and adapted for independent rotation, a driving disc on said driving shaft adapted to be tilted in angular relation to said driving shaft, means for tilting said driving disc, a counter-balance on said driving shaft adapted to be tilted at an equal and opposite angle to said driving disc by said tilting means, a plurality of ways fixed to said frame, crossbeads in said ways, said crossbeads operatively connected to the rim of said driving disc, clutch members on said crossbeads, shafts secured to said crossbeads, tranmission rods rotatably mounted on said shafts, clutch members on said transmission rods adapted to engage said first-named clutch members, circumvolutions on said transmission rods, pinions having internal circumvolutions engaging the circumvolutions on said transmission rods, and a gear on said driven shaft in mesh with said pinions, for the purposes set forth.

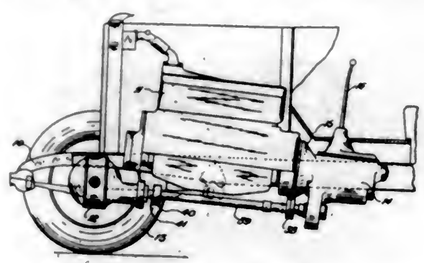
1,869,190. APPARATUS FOR EVAPORATING LIQUIDS. RAYMOND N. EHRHART, Edgewood, Pa., assignor to Elliott Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 2, 1927. Serial No. 195,925. 8 Claims. (Cl. 257—30.)

1. In a heat exchange apparatus, a relatively large tube nest, a relatively small tube nest, means for supplying low-level vapor to said nests, a gas offtake from the relatively small nest to the relatively large nest, constructed to maintain a lower pressure in the relatively small tube nest than in the relatively large tube nest, a flash chamber, means for delivering water from said relatively small nest to said flash chamber, means maintaining a lower pressure in the



flash chamber than the pressure in said relatively large nest, and means for recirculating at least a portion of the water from said flash chamber to said relatively small nest.

1,869,191. FRONT WHEEL DRIVE AUTOMOBILE. DONALD M. FERGUSON, Highland Park, and EDWIN R. MAURER, Detroit, Mich., assignors to Wilcox-Rich Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 12, 1931. Serial No. 556,531. 4 Claims. (Cl. 180—43.)

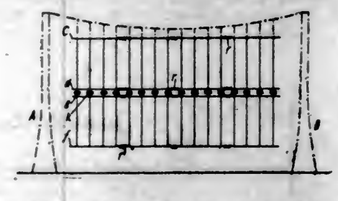


1. In a front-wheel-drive automobile, the combination of a front driving axle, a motor, a shaft driven by the motor, a hollow counter shaft having change-speed gears thereon and driven from the first-mentioned shaft, a splined shaft arranged in axial alignment with the first-mentioned shaft and having sliding gears thereon adapted to be selectively meshed with the gears on said counter shaft so that said splined shaft may be driven at different speeds relative to the first-mentioned shaft, a driven shaft extending through said counter shaft and on which the latter is supported, a pair of gears whereby said driven shaft is driven from said splined shaft, a stub shaft arranged below said driven shaft and driven therefrom by a pair of gears, and a propeller shaft extending forwardly from said stub shaft and operatively connected with said axle.

1,869,192. AERIAL FOR USE IN WIRELESS SIGNALING. CHARLES SAMUEL FRANKLIN, Buckhurst Hill, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 12, 1924, Serial No. 719,486, and in Great Britain June 21, 1923. Renewed Jan. 5, 1931. 28 Claims. (Cl. 250—11.)

26. In an arrangement for directional radio communication the combination with a main antenna arrangement comprising at least three antennæ tuned to a given frequency and positioned in an approximately straight line

and at equal distances from one another; of a deflecting screen built up of a plurality of antennæ tuned to the same frequency and arranged at one side of the said antenna ar-

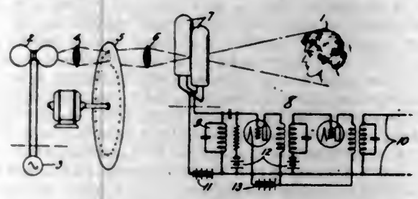


rangement and in parallel to the row of main antennæ; and high frequency apparatus connected to the said main antenna arrangement.

1,869,193. PRODUCTION OF ESTERS FROM ALCOHOLS AND THE SALTS OF ORGANIC ACIDS. GEORGE D. GRAVES, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 16, 1928. Serial No. 312,771. 8 Claims. (Cl. 260—106.)

1. The process of producing ethyl acetate which comprises distilling an aqueous solution containing ethyl alcohol with one mol of sulfuric acid and two mols of sodium acetate, collecting the resulting ethyl acetate until substantially one mol of it has been removed, and thereafter passing the still vapors into ethyl alcohol containing an amount of sulfuric acid sufficient to catalyze the reaction between the still vapors and the ethyl alcohol, and distilling of the resulting ethyl acetate by heating the acetic acid-ethyl alcohol-sulfuric acid mixture.

1,869,194. ELECTROOPTICAL SYSTEM. FRANK GRAY, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 25, 1930. Serial No. 428,295. 5 Claims. (Cl. 178—6.)

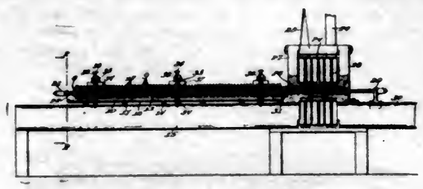


1. A transmitter for an electro-optical system comprising an induction lamp, means for energizing said lamp with composite current including components of high and line carrier frequencies, a light sensitive device, and means for controlling by elemental areas of a subject to be transmitted the light supplied from said source to said sensitive device.

1,869,195. METHOD AND APPARATUS FOR ASSEMBLING DISKS OR FINS ON TUBES. WILLIAM F. HEALY, Boston, Mass., assignor to B. F. Sturtevant Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 14, 1926. Serial No. 141,593. 15 Claims. (Cl. 153—80.5.)

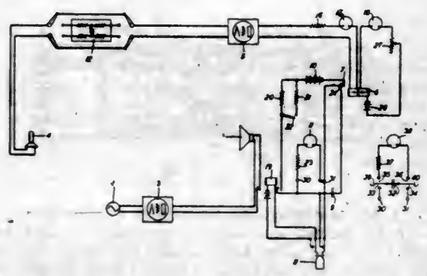
1. A method of assembling apertured disks or fins which consists in mounting a plurality of disks in axial and angular alinement upon a tube, clamping the disks in fixed spaced relation lengthwise of the tube, clamping the tube at intervals throughout its length, and forcing an expanding tool through the tube.

2. An apparatus for assembling apertured integral disks on tubes having, in combination, means for alining the disks axially, opposed rows of combined positioning and clamping means to loosely receive and position the disks



at spaced intervals and to clamp the disks in their initial position, and devices for positively actuating said last mentioned means.

1,869,196. METHOD OF AND APPARATUS FOR MEASURING REVERBERATION TIME. FRANK H. HIBBARD, Mountain Lakes, N. J., assignor to Electrical Research Products Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 10, 1931. Serial No. 507,907. 7 Claims. (Cl. 181—0.5.)



1. The method of determining the average time of decay of residual sound from one level to a lower level which consists in storing energy in a condenser during repeated decay periods transferring said energy at the end of each period to an auxiliary condenser and measuring the total quantity of energy stored in said auxiliary condenser.

1,869,197. INSTRUMENT FOR REMOVING CORNS AND CALLOSITIES WITHOUT DANGER. JOSEF HOLZ, Pforzheim, Germany. Filed Nov. 29, 1929, Serial No. 410,476, and in Germany Dec. 4, 1928. 1 Claim. (Cl. 30—23.)



In an instrument of the character described in combination, a holder, a divided head, said divided head consisting of two shell like parts, said shell-like parts being screwed into a threaded opening in said holder, and held together, and a milling tool rotatably mounted and partially enclosed in said divided head-parts, said divided head having a cut away part to expose a portion of said milling tool.

1,869,198. MECHANICAL PENCIL. CHARLES R. KEERAN, Evanston, Ill. Filed July 2, 1929. Serial No. 375,430. 8 Claims. (Cl. 120—18.)

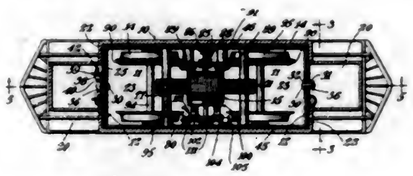
1. In a mechanical pencil, a barrel having an axial bore with a longitudinal guideway, an externally accessible member rotatably associated with the barrel, an openly coiled helix connected with said member, and removably

telescoped into the barrel for rotation therein, and a plunger in the bore adapted to be disposed in said helix, said plunger having a lead engaging end and the other end having a laterally projecting lug extending through the space between the coils engaging in the guideway, a portion of said plunger intermediate the lead engaging end and the lug being sprung out of axial alignment whereby to increase the frictional drag between the lug and the coiled helix.



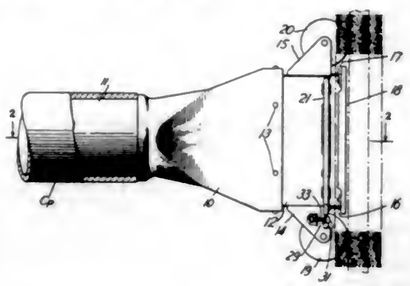
4. In a mechanical pencil, a barrel having a bore and a plurality of spaced longitudinally extending ribs therein and a guide tube having laterally offset portions adapted for engaging said ribs for securing said tube against rotation in the barrel.

1,869,190. TOY VEHICLE. JOHN C. KOERBER, South Orange, N. J. Filed Feb. 17, 1928. Serial No. 255,072. 32 Claims. (Cl. 105—49.)



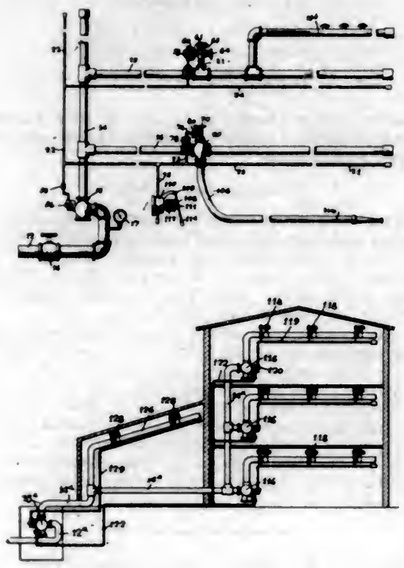
1. A toy motor vehicle comprising a body portion, a motor for moving said vehicle, positioned in said body portion and said motor being readily removable from said body portion, and insertable into said body portion, and a catch accessible for operation from outside said body portion for releasably securing the motor in such position.

1,869,200. VACUUM CLEANER ATTACHMENT. GRANT LINTON, Mineola, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 27, 1930. Serial No. 431,842. 1 Claim. (Cl. 15—155.)



In a vacuum cleaner attachment, a tubular member having an air inlet opening, a guiding member mounted on said tubular member on the front of said opening, a pair of wheels mounted on said tubular member at each end of said opening for permitting free longitudinal movement of said device on the surface to be cleaned, plates supported by said casing adapted to form an air path on each side of said opening, said plates normally occupying a position at right angles to the length of said tubular member, and retracting means for each of said plates.

1,869,201. AUTOMATIC AND MANUAL REMOTE CONTROL FIRE EXTINGUISHING SYSTEM. ERNEST A. LOWE, Plainfield, N. J., assignor to Automatic Sprinkler Company of America, Cleveland, Ohio, a Corporation of Delaware. Filed Nov. 11, 1925. Serial No. 68,283. 18 Claims. (Cl. 169—17.)

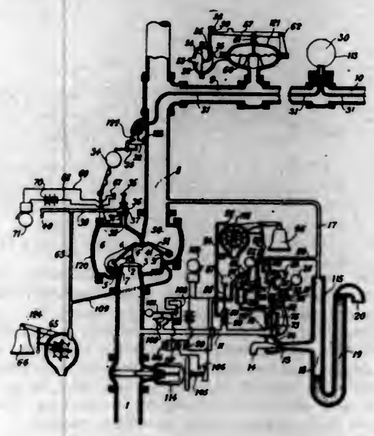


2. A fire extinguishing apparatus including a supply pipe, control mechanism for controlling the admission of fire extinguishing fluid to said pipe and including a control valve, means for controlling said control mechanism, and including a pressure responsive device operatively associated with said valve, a pressure producing device in a fire area and a pneumatically controlled pressure relaying mechanism intermediate said pressure responsive and pressure producing devices for building up and transmitting a renewed pressure to said pressure responsive device, and conduits for conveying pressures from said pressure producing device to said relaying mechanism and from said relaying mechanism to said pressure responsive device.

3. In a dry-pipe fire extinguishing system, the combination of a supply pipe normally dry, a pneumatically controlled valve controlling the admission of the fire extinguishing fluid to said supply pipe, branch pipes from said supply pipe, each having a secondary control valve normally closed, pneumatically controlled means for causing said secondary valve to open and means operated by the secondary control valve mechanism for transmitting a pneumatic impulse to the main valve to cause the latter to open when the secondary valve is opened.

7. In a dry-pipe fire extinguishing system, the combination with a main valve normally closed, a supplemental air conduit containing air at atmospheric pressure and extending from the main valve to a fire area and provided with means for compensating for atmospheric changes of temperature to maintain an interior pressure at all times which is substantially that of the atmosphere, a collapsible element at the fire area capable of being collapsed and producing a pneumatic impulse in said conduit and means at the main valve, responsive to said pneumatic impulse, for producing a hammer blow at said main valve for causing the same to be opened.

1,869,202. FLUID CONTROLLED SYSTEM. ERNEST A. LOWE, Plainfield, N. J., and JOHN R. HAMILTON, Yonkers, N. Y., assignors to Automatic Sprinkler Company of America, Cleveland, Ohio, a Corporation of Delaware. Filed Apr. 20, 1926. Serial No. 103,189. 23 Claims. (Cl. 169—17.)



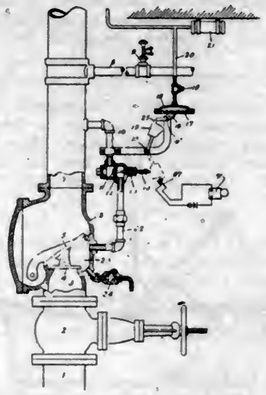
1. In a dry-pipe system containing air under pressure in the distributing pipes, the combination with means responsive to a diminution of air pressure in said system, of an air compressor controlled by said means and adapted to supply air to the system upon diminution of pressure to a predetermined degree, means for giving a signal responsive to a further diminution of pressure to a predetermined degree consequent upon failure of the compressor to bring the pressure back to normal and independent thermally controlled means operable independently of the pressure condition in said system for controlling the admission of fire extinguishing fluid to said pipes.

19. In a fire extinguishing system of the character described, the combination of a main valve normally held closed by by-pass pressure, a valve normally holding said by-pass pressure intact, a weighted member adapted to strike and open said valve a diaphragm actuated catch normally holding the weighted member out of action, a diaphragm chamber, piping having a compensating vent determining the rate of change of tension which must take place in the medium in said piping to actuate the diaphragm and a container interposed in said piping for increasing the tension of air in said piping through heating of the air in said container at a rate predetermined by the size of the compensating vent to bring about the operation of the diaphragm.

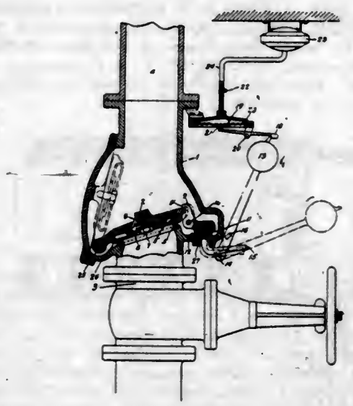
21. In a fire extinguishing system, the combination of a main valve and means for automatically causing the same to open under control of a thermostat in the fire area, of thermostatically controlled means for giving a signal at a supervisory point in advance of the operation of said main valve, the thermostatic control of the signal means being independent of the main valve thermostat and being located in the same fire area.

1,869,203. AUTOMATIC THERMAL VALVE ACTUATOR. ERNEST A. LOWE and JOHN R. HAMILTON, Cleveland Heights, Ohio, assignors to Automatic Sprinkler Company of America, Cleveland, Ohio, a Corporation of Delaware. Filed Feb. 7, 1927. Serial No. 166,294. 12 Claims. (Cl. 169—17.)

10. In a dry pipe fire extinguishing system, the combination with a control valve controlling the supply of fire extinguishing medium to the system and normally maintained in closed position by the pressure of fluid in the system but adapted to open automatically upon decrease of the fluid pressure therein thermo-responsive means in the fire zone for automatically decreasing said pressure, a supplemental system of air piping extending from the area to be protected to the control valve, means for causing the main valve to be unseated by the application of fluid under pressure operating in opposition to the pressure acting to normally maintain the valve closed, a valve controlling the passage of the unseating fluid and means for bringing the latter valve into operation through the expansion of air in said supplemental system produced by heat in the fire zone wherein the said thermo-responsive means are located.



1,869,204. DELUGE VALVE. ERNEST A. LOWE and JOHN R. HAMILTON, Cleveland Heights, Ohio, assignors to Automatic Sprinkler Company of America, Cleveland, Ohio, a Corporation of Delaware. Filed Dec. 29, 1927. Serial No. 243,276. 4 Claims. (Cl. 169—19.)



1. In a fire extinguishing apparatus, the combination with a valve disk normally holding back the water or other fire extinguishing medium under pressure, of a valve facing of flexible material having an inturned edge adapted to engage the valve seat and providing a space within which the retained pressure of the medium may hold it against the valve seat independently of the position of the valve itself.

3. In a fire extinguishing apparatus, the combination of a control valve normally tending to unseat itself by pressure of the fire extinguishing medium, a catch en-

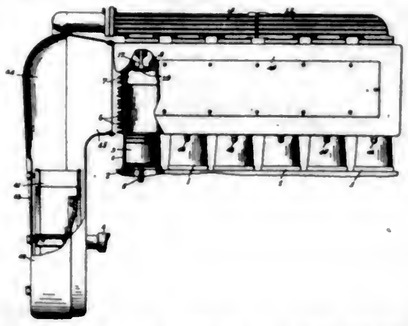
gaging directly with and holding the same seated, a member extending through an opening in the casing and having said catch mounted directly on it, said member carrying also means for sealing said opening in its catch releasing position, a weighted lever normally sustained above said member and adapted to strike the same directly, a catch normally sustaining said lever and a diaphragm carrying said catch and subject to change of air pressure in a piping terminating in the diaphragm chamber and adapted to operate the catch upon change of such pressure.

1,869,205. FOLDING BABY CARRIAGE. JULIUS A. MAHR, Minneapolis, Minn., assignor to Inventors' Patent Holding Company, Minneapolis, Minn., a Corporation of South Dakota. Filed Dec. 12, 1928. Serial No. 325,411. 14 Claims. (Cl. 280—36.)



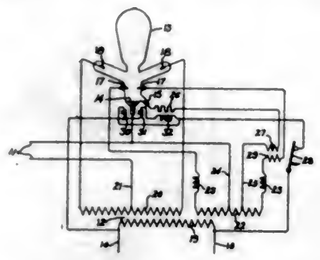
1. A folding chassis comprising a pair of longitudinally extended side bars, couplings on the ends of the side bars and having fixed spindles, wheels journaled on the spindles, body supports attached to the couplings, and toggle-acting cross-tie bars pivotally attached to the body supports and operable to either spread the side bars or fold the same.

1,869,206. LINE AIR COOLED INTERNAL COMBUSTION ENGINE. EDWARD S. MARKS, Syracuse, N. Y., assignor, by mesne assignments, to Franklin Development Corporation, Syracuse, N. Y., a Corporation of New York. Filed Jan. 30, 1929. Serial No. 336,242. 4 Claims. (Cl. 123—171.)



1. In a line multiple cylinder air cooled engine, the combination of a plurality of cylinders provided with transverse heat radiating flanges, an air conduit extending lengthwise of one side of the line of cylinders and open on its side toward the cylinders and means for creating a current of air through the air conduit, whereby the air is blown crosswise of the cylinders from one side of the line of cylinders to the other side, the flanges being rectangular in outline in plan view.

1,869,207. ELECTRIC DISCHARGE DEVICE. HAROLD M. MARTIN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 28, 1929. Serial No. 417,208. 8 Claims. (Cl. 175—354.)



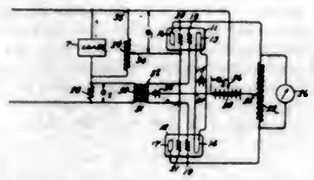
1. The combination of an electric discharge device provided with a liquid electrode, a starting electrode, an exciting electrode and a main anode, means for producing a magnetic field whereby said cathode is rotated and brought into contact with said starting electrode, means responsive to said contact for deenergizing said magnetic field producing means, and means responsive to the current of said exciting electrode for preventing reenergization of said magnetic field producing means.

1,869,208. COMPOSITE STEEL PLATE AND BAR. RUSSELL H. MCMILLEN, Pittsburgh, Pa., assignor to Crucible Steel Company of America, a Corporation of New Jersey. Filed Jan. 22, 1929. Serial No. 334,307. 2 Claims. (Cl. 29—181.)



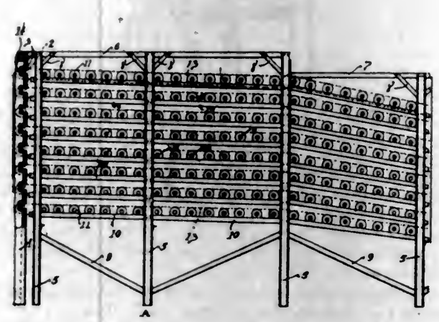
1. A heat-treated composite steel plate or bar, including two pieces of steel welded together face to face, one piece having a carbon content of less than 0.25 per cent, and containing from about 0.50 per cent. to about two per cent. of manganese, and the other piece having a carbon content of not less than 0.50 per cent.

1,869,209. THERMIONIC MEASURING DEVICE. MILTON S. MEAD, Jr., Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 16, 1931. Serial No. 569,288. 8 Claims. (Cl. 171—34.)



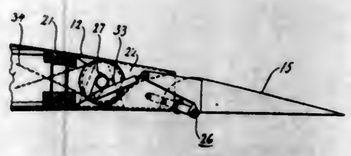
1. In an instrument responsive to the product of two quantities, a four-element vacuum tube comprising a cathode, a plate, and a pair of grids, means for causing the potentials of said grids to vary in accordance with variations in the magnitudes of said measured quantities respectively, means for energizing said tube, and means responsive to the output thereof to provide an indication of the product of said quantities.

1,869,210. AUTOMATIC UNLOADER FOR DRIERS. RICHARD C. MOORE, Painesville, Ohio, assignor to The Coe Manufacturing Company, Painesville, Ohio, a Corporation of Ohio. Filed Feb. 16, 1929. Serial No. 340,521. 9 Claims. (Cl. 198—76.)



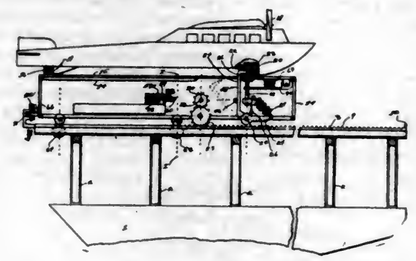
2. An unloading device adapted to be arranged at the discharge end of a multiple deck drier through which the pieces of work move in continuous succession respectively on a plurality of vertically spaced horizontal conveyors comprising, means adjacent each deck for receiving the work from each conveyor and conveying the same away from the drier in continuous succession at substantially the same speed that the work moves therethrough, and means for receiving the work from the said first named means and conveying it to another conveyor at a substantially increased speed.

1,869,211. AEROFOIL OPERATING MECHANISM. ROBERT R. OSBORN, Garden City, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 436,951. 7 Claims. (Cl. 244—29.)



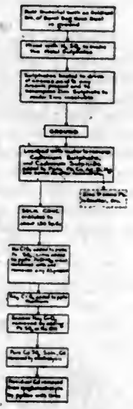
1. In an airplane, a main wing, a trailing edge flap attached to said main wing, means for moving said trailing edge flap from a position in which it is a substantial continuation of the main wing to a position in which it is inclined downward therefrom said means comprising a link pivotally attached to said trailing edge flap, a shoulder formed thereon, a pivoted element to which said link is also pivotally attached, a cable for moving said last named element, and an element incapable of relative bodily displacement with which said shoulder at times contacts, whereby the loads imposed by the air forces upon said trailing edge flap are prevented from acting upon said cable.

1,869,212. LAUNCHING MEANS. ADOLPHE C. PETERSON, Minneapolis, Minn. Filed June 16, 1927. Serial No. 199,376. 20 Claims. (Cl. 244—2.)



1. In a launching means, an air-plane accelerating and propelling means adapted to rapidly accelerate an air-plane from zero to flying speed, in combination with governor controlled means preventing the air-plane from leaving the air-plane accelerating and propelling means until a predetermined speed has been attained.

1,869,213. PROCESS OF SEPARATING METALS. ROSCOE TEATS, Denver, Colo., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 6, 1926. Serial No. 100,044. 14 Claims. (Cl. 23—117.)

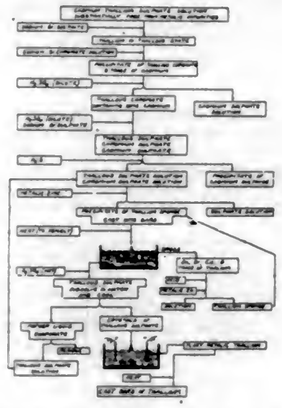


1. The process of separating metals from ores and like material containing cadmium, zinc, lead, arsenic, tellurium and similar metals, consisting in mixing said material with sulphuric acid to make the metal sulphates, heating the sulphates to decompose zinc sulphate to render the zinc material insoluble, leaching with water to remove cadmium sulphate, adding cadmium sulphide to precipitate any lead, copper, silver, bismuth, mercury or arsenic present, and separating the cadmium sulphate solution from the precipitated materials.

1,869,214. PROCESS OF RECOVERING THALLIUM. STANLEY HUGHES and ROSCOE TEATS, Denver, Colo., assignors to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed July 29, 1927, Serial No. 209,886. Renewed Jan. 23, 1932. 21 Claims. (Cl. 23—117.)

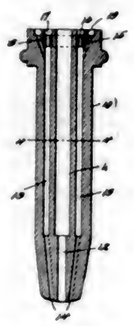
1. The process of recovering thallium as purified thallous sulphate, which comprises forming a thallic sulphate

solution substantially free from metallic impurities, such as copper, silver, bismuth, lead, mercury, arsenic and iron, treating the said thallic sulphate solution with a reducing agent whereby to form thallous sulphate, reacting the so-formed thallous sulphate solution with a soluble chromate to form a precipitate of thallous chromate, filtering said precipitate and washing with dilute sulphuric acid to remove residual cadmium values, reacting said washed precipitate with dilute sulphuric acid and a reducing agent to form thallous sulphate in solution, precipitating residual cadmium values by means of a sulfide treatment, and filtering off the solution of purified thallous sulphate.



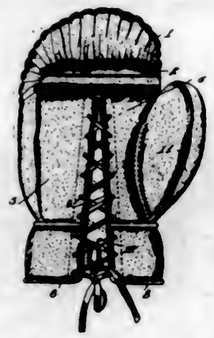
10. The process of recovering thallium as thallous sulphate which comprises the steps of forming a thallic sulphate solution substantially free from metallic impurities such as copper, silver, bismuth, lead, mercury, arsenic and iron, reacting the thallic sulphate with a reducing agent and sodium chromate in solution whereby to form thallous chromate, separating the thallous chromate from the solution, treating the chromate with dilute acid to form soluble cadmium compounds, and treating the residual thallous chromate with sulphur dioxide under conditions adapted to form thallous sulphate.

1,869,215. OXY-ACETYLENE TORCH. ALEXANDER F. JENKINS, Baltimore, Md. Filed Feb. 1, 1929. Serial No. 336,810. 3 Claims. (Cl. 158—27.4.)



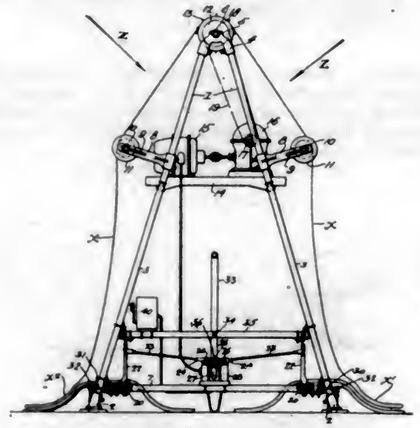
1. A tip for a torch of the character described having a plurality of bores of relatively large diameter with restricted outlets, the base of the tip having seated therein a ring provided with restricted perforations communicating with the rear of said bores and having additional restricted perforations communicating with said bores below the ring.

1,869,216. BOXING GLOVE. ALLEN E. KENNEDY, Utica, N. Y. Filed Feb. 7, 1930, Serial No. 426,630. Renewed May 26, 1932. 2 Claims. (Cl. 2—18.)



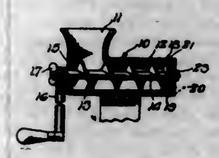
1. A boxing glove having a palm portion horizontally divided and separated at its upper finger end to provide upper and lower portions spaced apart, a palm traversing grip strip spanning and joining the spaced palm portions on their external faces, and a flexible lining underlying said palm portions and said grip strip and secured to the edges of the palm portions and said strip providing a filling retaining pocket to form the grip.

1,869,217. DISPLAY STAND. MARTIN KENNEDY, Freehold, N. J., assignor to A. & M. Karagheusian, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 10, 1930. Serial No. 481,063. 6 Claims. (Cl. 40—53.)



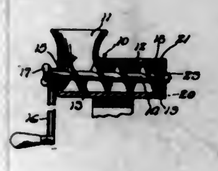
1. In an apparatus for displaying a strip of carpet and the like, the combination of a frame comprising substantially A-shaped end members, a roller disposed in a relatively fixed position on said frame at the vertices of said A frames, a second roller disposed in a predetermined position relative to the first said roller to support a portion of the strip in a predetermined plane therebetween, a bracket carried by and adjustably mounted on the side leg of each A frame, and means for adjustably mounting the second said roller on said bracket affording variations in the plane of the said supported portion of the strip relative to light rays impinging upon said supported portion of the strip to bring out the color and design of the strip to the best advantage for display purposes.

1,869,218. CUTTING MEMBER AND HOLDER THEREFOR. JOHN A. KLOD, Chicago, Ill. Filed May 27, 1929. Serial No. 366,462. 3 Claims. (Cl. 146—189.)



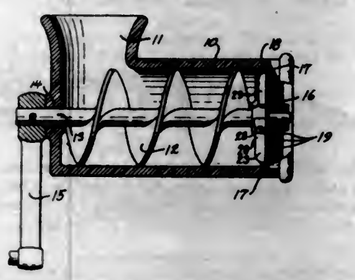
1. In a device of the character stated, a member embodying a hub portion, arms extending diametrically from said hub portion with opposite edges thereof aligned, other arms extending diametrically from said hub portion at right angles to said first named arms with opposite edges thereof aligned, said arms having grooves in corresponding faces thereof extending longitudinally therethrough adjacent the edges opposite said aligned edges, said arms having notches formed therein communicating with said grooves in said arms and aligned with the grooves in the arm extending at right angles to the arms in which said notches are disposed, blades including portions disposed in said grooves, and means for retaining said blades from displacement from said grooves.

1,869,219. CUTTING MEMBER AND HOLDER THEREFOR. JOHN A. KLOD, Chicago, Ill. Filed May 27, 1929. Serial No. 366,463. 1 Claim. (Cl. 146—189.)



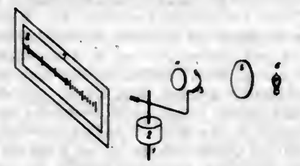
In a meat grinder, cutting blades each provided with a notch and a lug at one end thereof whereby when the blades are disposed at right-angles with respect to each other, the lug of one blade will be disposed in the notch of the other blade.

1,869,220. MEAT CUTTER. JOHN A. KLOD, Chicago, Ill. Filed May 3, 1930. Serial No. 449,592. 2 Claims. (Cl. 146—189.)



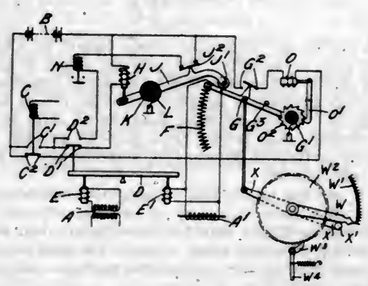
1. In a meat grinder or the like, a rotatable member including a hub and arms extending from the hub with the advancing side edges of the arms in substantial alignment with respect to the sides of the hub whereby said advancing side edges of the arms are disposed in advance of a transverse line through the hub, and said arms adjacent said advancing edges being provided with grooves, and cutting elements mounted in said grooves and having cutting edges disposed forwardly of the said advancing edges of the said arms, the inner end of each of said elements being arranged in overlapping relation with the arm of said arms in advance of each element.

1,869,221. INDICATING AND RECORDING APPARATUS. JOHANN LATZKO, Vienna, and OTTO PLECHL, Pfaffstatten, Austria, assignors to Oesterreichische Brown-Boveri-Werke A. G., Vienna, Austria. Filed Nov. 21, 1928, Serial No. 321,022, and in Austria Nov. 22, 1927. 17 Claims. (Cl. 88—24.)



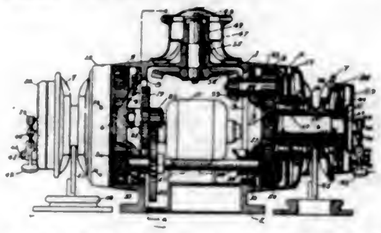
13. In a measuring arrangement, a source of light, a scale, a rotating system, and an opaque screen coupled with said rotating system and adapted to be placed between said source of light and said scale, said screen being of sufficient length to cast a shadow stripe on the entire length of said scale.

1,869,222. ELECTRIC PROTECTIVE RELAY. HENRY LEBEN, Harrow, England, assignor to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England, a Company of Great Britain. Filed Nov. 21, 1929, Serial No. 408,884, and in Great Britain Dec. 27, 1928. 19 Claims. (Cl. 175—294.)



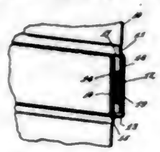
1. An electric relay arrangement for the protection of an electric circuit including in combination contacts controlling the protected circuit, an electro-magnetic system comprising windings supplied with currents derived from the protected circuit and a movable member electro-magnetically controlled thereby, a regulating member controlling the electro-magnetic system, means for driving the regulating member from an initial position to an operative position, an energy-storing device, a time delay mechanism associated with such device, means whereby the movement of the regulating member causes energy to be stored in the device, means whereby the movable member of the electro-magnetic system acts when the regulating member reaches the operative position to release the energy stored in the device, and means whereby such released energy under the control of the time-delay mechanism acts to operate the relay contacts after a time interval dependent on the amount of energy stored in the device.

1,869,223. ELECTRICALLY-OPERATED WINDLASS AND THE LIKE. HERBERT ALLEN PECK, Glenside, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 11, 1928, Serial No. 291,891. Renewed June 2, 1932. 10 Claims. (Cl. 74—7.)



1. In a windlass or the like, the combination with a housing, of end plates secured in and closing the ends of said housing, said housing having end portions projecting outwardly beyond said plates, cylindrical extensions on said plates, rotary heads journaled on said extensions, a motor in the interior of the housing, and transmission gearing connecting the motor with the said rotary heads and including elements located in the space between the housing end plates and said rotary heads and enclosed by the projecting extremities of the housing.

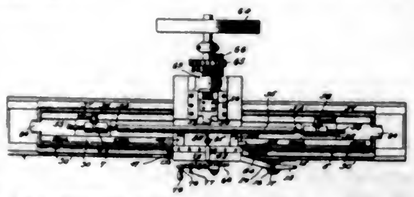
1,869,224. RECEPTACLE AND METHOD OF MAKING THE SAME. WINTHROP T. SCARRITT, Utica, N. Y., assignor to The Pratt Chuck Co., Frankfort, N. Y., a Corporation of New York. Filed Dec. 11, 1929. Serial No. 413,413. 10 Claims. (Cl. 113—120.)



1. A receptacle, comprising a body formed by a spirally formed strip of material, the adjacent edges of the helixes of which include interlocking members comprising return bends adapted to interlock with the return bend of the edge of the next adjacent helix, and a strip of solder fused between said return bend portions adapted to retain said portions in interlocking relation and to provide a seal therebetween.

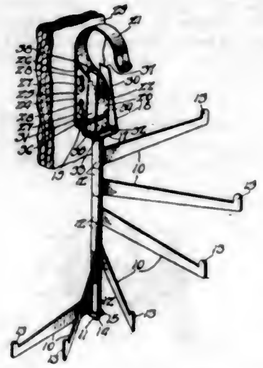
10. A method of forming a receptacle comprising the bending of a strip into a spiral, uniting adjacent edges of the helixes of said spiral strip in interlocked relation with a strip of solder fused between the interlocked portions, and rolling the interlocked portions into closed position.

1,869,225. MACHINE FOR STRAIGHTENING MACHINE PARTS. LOUIS SIRCOULOMB, Torrington, Conn. Filed Nov. 3, 1930. Serial No. 493,147. 3 Claims. (Cl. 153—53.)



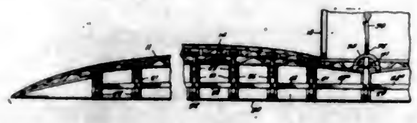
1. In a machine of the class described, a base having uprights, a slide longitudinally adjustable upon the base, relatively spaced work supporting and centering units mounted upon the slide, pressure-exerting heads mounted upon the uprights of the base in position to engage opposite sides of a part to be straightened, the heads engageable with one side of the said part being in staggered relation to a head engageable with the other side of the work, means for moving a head into and out of position to exert pressure against the work, the said means comprising a rotatable shaft, manually operable means for rotating the shaft, a relatively long gear upon the shaft, a shaft mounted parallel to the first mentioned shaft and movable longitudinally, the second mentioned shaft having a worm thereon, a bearing member upon the base having threads meshing with the worm upon the second mentioned shaft, a gear upon the second mentioned shaft meshing with the relatively long gear upon the first mentioned shaft in all positions of longitudinal adjustment of the second mentioned shaft, and operative connection between the said second mentioned shaft and the last mentioned pressure-exerting head.

1,869,226. SUPPORTING AND DISPLAY RACK. GEORGE SUBICK, Chicago, Ill. Filed Sept. 12, 1930. Serial No. 481,503. 1 Claim. (Cl. 248—23.)



A device of the class described, comprising a bracket structure including a hook for supporting the device from a support, arms hinged to said bracket structure, having knife edges, and adapted to be spread apart and engage said support, and a resilient member for normally retaining said arms in collapsed position on opposite sides of said hook.

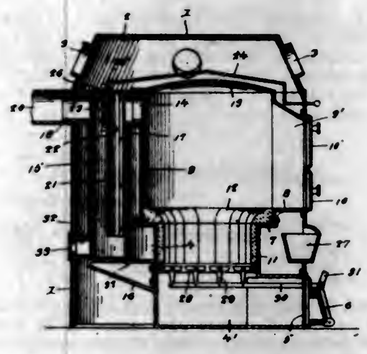
1,869,227. COLLAPSIBLE WING. ALBERT J. ROBERTS, Cleveland, Ohio, assignor of seventeen per cent to I. R. Whan, Cleveland, Ohio. Filed July 19, 1930. Serial No. 469,194. 12 Claims. (Cl. 244—12.)



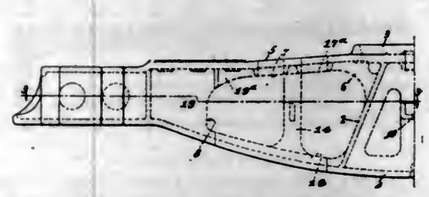
5. An airplane wing comprising a hollow body having flexing and non-flexing planes, the flexing plane being lowermost and normally straight and adapted to flex toward the other plane throughout the extent of the same.

1,869,228. FURNACE. JOHN C. SUBER, Deshler, Ohio. Filed July 26, 1930. Serial No. 470,931. 1 Claim. (Cl. 126—99.)

The combination of nipples formed on a heat trap and combustion drum of a furnace, one nipple being provided with spaced double flanges receiving the other nipple therebetween, lugs on the nipples, and each provided with an aperture, each lug on the trap nipple passing through the aperture of the adjacent lug on the combustion drum nipple, keys passing through the apertures of the lugs on the heat trap and securely retaining the lugs of the combustion drum nipple, and supports for the trap.

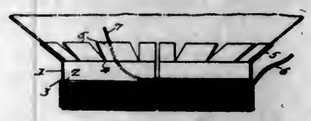


1,869,229. TRUCK BOLSTER. ALBERT H. THOMAS and HARRY H. WOLFE, Columbus, Ohio, assignors to The Buckeye Steel Castings Company, Columbus, Ohio. Filed May 29, 1930. Serial No. 457,308. 6 Claims. (Cl. 105—230.)



4. A car truck bolster of hollow form, having an internal center post and openings in its top and bottom arranged between the center post and the end of the bolster, vertical posts connecting the top and bottom where said openings are located, a tie joining said vertical posts, and other ties joining said posts to the sides of the bolster.

1,869,230. ELECTRICAL ELEMENT. JOHN S. TIMMONS, Wyncote, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 16, 1929. Serial No. 386,382. 2 Claims. (Cl. 179—115.5.)

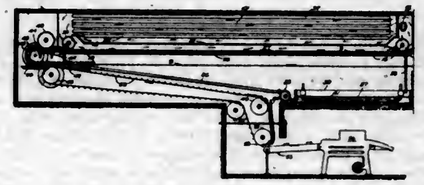


2. A voice coil for electrodynamic speakers comprising a thin substantially annular strip and a continuous coil in a plurality of layers, two of which layers respectively engage the inner and outer faces of said annular strip, said strip extending beyond one end of the coil to constitute means for operatively connecting the coil to a diaphragm.

1,869,231. PROCESS FOR PREPARING VALUABLE COMPOUNDS FROM THE REFINING WASTES OF CRACKED PRODUCTS, PARTICULARLY CRACKED BENZINES. WACLAW VON PIOTROWSKI and JÓZEF WINKLER, Drohobycz, Poland, assignors to Galicyjskie Towarzstwo Naftowe "Galicja" S. A., Drohobycz, Poland, a Corporation of Poland. Filed Oct. 29, 1928, Serial No. 315,011, and in Poland Sept. 24, 1927. 4 Claims. (Cl. 196—148.)

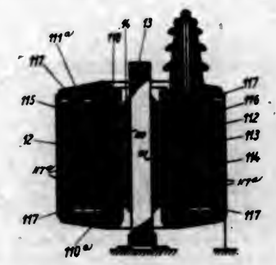
1. A method of producing an insecticide from the waste sludge of cracked mineral oils which comprises mixing the waste acid-containing sludge with water and a weak alkaline solution, allowing the mixture to separate into two layers, removing the upper layer, subjecting the same to steam distillation, thereby producing a plurality of fractions collecting the fractions coming over between 50° C. and 200° C. condensing and combining the fractions to form a condensate and refining the condensate by treating it with lye and sodium plumbite and finally rectifying the refined condensate, thereby producing the insecticide.

1,869,232. MOLDING APPARATUS. JOHN ALVIN WEILAND, Phoenixville, Pa., assignor to Weiland Packing Company Inc., Phoenixville, Pa., a Corporation of Pennsylvania. Filed Apr. 23, 1930. Serial No. 446,574. 10 Claims. (Cl. 107—8.)



1. In apparatus for processing food products, the combination with a chamber adapted to receive the product in a semi-fluid condition, a plurality of molds, means for conducting said molds in proximity to the chamber, mechanism associated with the chamber and operating in timed relation with said mold-conducting means for discharging predetermined quantities of the semi-fluid product from the chamber into the molds, mechanism operative in advance of the said discharge mechanism for introducing into said molds predetermined quantities of grease, cooling apparatus through which the molds are passed and in which the semi-fluid product is chilled to solidity, and means for warming the molds and for immediately thereafter inverting the molds to discharge the solidified contents.

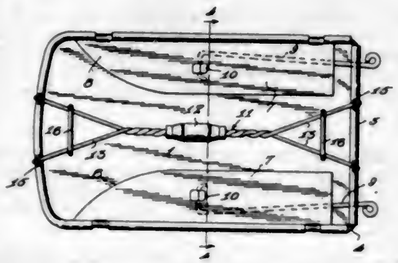
1,869,233. HIGH POTENTIAL TRANSFORMER. EDUARD WELTER, Dresden, Germany, assignor to Koch & Sterzel Aktiengesellschaft, Dresden, Germany, a German Company. Filed July 22, 1930, Serial No. 469,812, and in Germany July 27, 1929. 5 Claims. (Cl. 175—356.)



1. In a high potential transformer particularly of the class used in the measurement of high potentials, a high potential layerwise winding, a spool on which said wind-

ing is fitted, the winding extending over the entire axial length of the spool in such manner that its potential increases from the outer lying initial potential towards the core surrounded thereby, said spool comprising a pair of preferably tubular members each provided at one end with a flange, said members being telescoped one within the other to form said spool, their engaging surfaces being secured together.

1,869,234. PAN. ANDREW J. APP, Louisville, Ky., assignor of one-half to L. Birkel and Sons, Louisville, Ky. Filed Mar. 29, 1930. Serial No. 440,108. 1 Claim. (Cl. 220—94.)

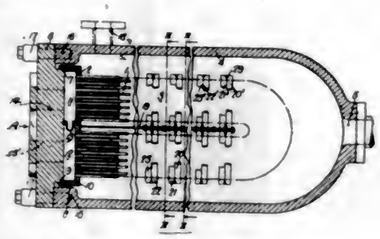


A handle for ash pans of furnaces comprising a pair of members twisted about each other to provide a hand grip receiving portion with diverging arm portions at each end thereof and having the free ends bent downwardly and rearwardly to provide hooks for engagement with eyes of an ash pan, a hand grip having a bore to receive the hand grip portion and held against endwise movement thereon by the twisting of said members, and loop members slidable on the arm portions to move said arm portions toward and from each other for increasing and decreasing the binding action on the hooks on the eyes of the pan.

1,869,235. PROCESS FOR THE CONSERVATION OF UNSTABLE, HYGROSCOPIC OR VOLATILE GRANULAR MASSES. FRIEDRICH BARTLING, Hugifing, Germany. Filed Mar. 25, 1930, Serial No. 438,860, and in Germany Mar. 26, 1929. 2 Claims. (Cl. 23—243.)

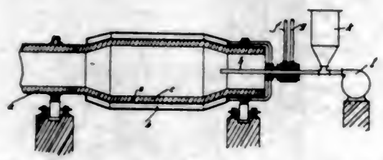
1. A process for stabilizing ammonium bicarbonate which comprises subjecting the said ammonium bicarbonate in crystalline form to the influence of a physically dispersed solution of sodium chloride, whereby a thin protective covering of sodium bicarbonate is formed on the said crystals.

1,869,236. EVAPORATOR FOR GENERATING HIGH PRESSURE STEAM. KARL BAUMANN, Urmston, England. Filed Sept. 27, 1930, Serial No. 484,908, and in Great Britain Nov. 21, 1929. 13 Claims. (Cl. 257—221.)



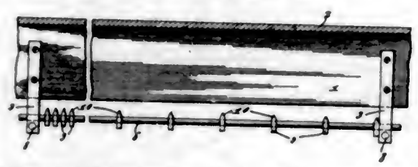
1. An evaporator comprising in combination a casing adapted to contain the liquid to be evaporated, a nest of tubes in said casing through which heating fluid may flow, a tube plate in which the nest of tubes is mounted, a cover of plug form for the casing and a shrink ring shrunk on to both the tube plate and the cover.

1,869,237. METHOD OF PRODUCING A LINING FOR A ROTARY FURNACE. BRUNO BRUHN, Bethlehem, Pa., assignor to the Firm of G. Polysius, Aktiengesellschaft, Dessau, Germany. Filed Aug. 3, 1927, Serial No. 210,431, and in Germany Mar. 28, 1925. 3 Claims. (Cl. 222—7.)



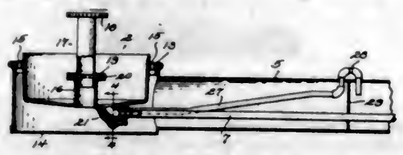
1. The method of producing a lining for the melting zone of a metallic rotary kiln consisting in operating the kiln with its normal charge of ingredients, reducing said ingredients to a molten state so that they flow over the unlined inner surface of the kiln within said zone, and applying cooling fluid to said zone from the exterior thereof to cause said molten material to harden and adhere to the inner surface to form a lining therefor of the same chemical characteristics as the material treated in the kiln.

1,869,238. LAUNDRY HANGER DRIER. WILLIAM COUTTS, Pittsburgh, Pa. Filed Nov. 5, 1930. Serial No. 493,678. 1 Claim. (Cl. 211—113.)



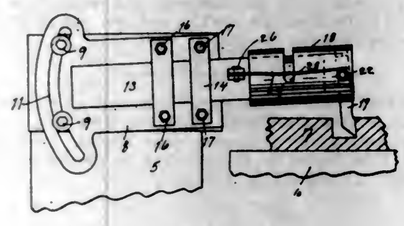
A laundry drier comprising spaced hanger members, each having a longitudinally disposed kerf leading in from the lower end thereof and provided at opposite sides of the kerf with registering depressions, a clamping bolt passing through each hanger member below the depressions and bridging the lower portion of the kerf, a rod received within the depressions of opposite hanger members and clamped in the depressions by the bolt, and slats loosely mounted upon the rod between the hanger members, said slats being V-shaped in transverse section along their upper edges and the rod passing transversely through the lower portions of the slats.

1,869,239. OIL BURNING APPARATUS. HAROLD B. DONLEY, AUGUSTUS J. FRAME, and JACKSEN G. GILMORE, Columbus, Ohio, assignors to Franklin Oil Heating, Incorporated, Columbus, Ohio, a Corporation of Ohio. Filed Sept. 4, 1928. Serial No. 303,673. 5 Claims. (Cl. 158—91.)



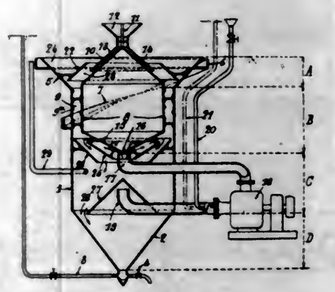
1. In oil burning apparatus, an open topped burner vessel, an oil line leading thereto, a valve in said line operable when open to permit full oil flow through the line and when in closed position to permit a slight oil flow therethrough for a pilot light, an air supply conduit for said vessel, means for constantly maintaining air under pressure in said conduit, and a supplemental air supply line communicating at one end with the interior of said conduit and at its other end with the interior of said oil line and connected at a point immediately below the oil level which is maintained for pilot light operation.

1,869,240. TOOL HOLDING DEVICE. ARTHUR EDSON, Elk, Calif. Filed Mar. 12, 1930. Serial No. 435,254. 2 Claims. (Cl. 90—52.)



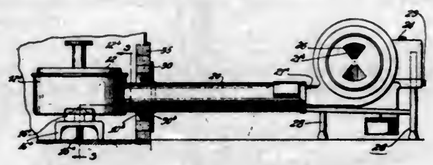
1. A tool holder for planing machines comprising a tool holding arm adjustably mounted on the planer, a tubular tool holder rotatably secured on the end of said arm, means for supporting a tool in said holder, said means comprising a pair of oppositely disposed set screws, a cone positioned on each of said set screws, a circumferential slot formed in said tool holder, a pin held in said arm and having one end extending into said slot, said pin being slidable to either side of said arm to cooperate with the end of said slot when said tool holder is rotated in either direction, and a spring carried by said arm for causing the end of said slot in said tool holder to engage said pin.

1,869,241. SEPARATION OF SOLID SUBSTANCES. ALEXIS DÉSIRÉ JOSEPH ELIE, Tananarive, Madagascar. Filed Jan. 24, 1930, Serial No. 423,279, and in France Mar. 29, 1929. 11 Claims. (Cl. 209—166.)



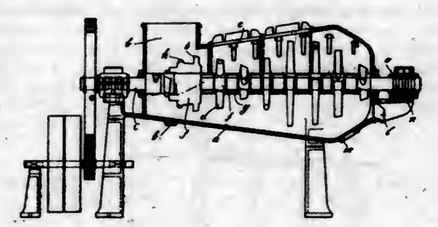
1. A plant for the separation of solid substances from a raw material by the emulsion process, comprising a receptacle, an impervious central structure coaxial with said receptacle and leaving an annular space, between both, a conical top member above said structure, a loading funnel above the apex of said top member, means for delivering an emulsion below said structure, a settling chamber below said annular space, means for withdrawing clear liquid from said settling chamber, and emulsifying means between said delivering means and said withdrawing means.

1,869,242. OIL BURNER CONSTRUCTION. AUGUSTUS J. FRAME, Columbus, Ohio, assignor to Franklin Oil Heating, Inc., Columbus, Ohio, a Corporation of Ohio. Filed Jan. 22, 1930. Serial No. 422,510. 10 Claims. (Cl. 158—2.)



1. In combination with heating apparatus including a wall enclosing a chamber and having an aperture therein, a pot located in said chamber, a duct leading thereto, a supporting member locatable within said chamber, said pot being movably supported in said chamber by said member, and an adjustable closure for said aperture, said closure being apertured, said duct extending through said aperture in said closure and rotatable relative thereto.

1,869,243. PULPING MACHINE. WILLIAM GROUNDWATER FRASER, Fulham, London, England. Filed Mar. 24, 1931, Serial No. 525,002, and in Great Britain Mar. 9, 1931. 3 Claims. (Cl. 92—20.)

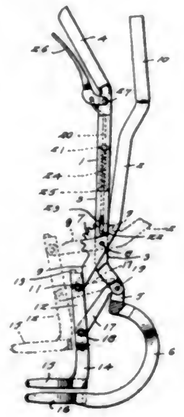


1. A machine for the preparation of paper pulp comprising a substantially conical body, a rotatable shaft disposed longitudinally therein, helically arranged blades on said shaft, stationary blades within said casing coacting with the first mentioned blades to shred material, a worm shaped boss on said shaft to feed material from the smaller end toward the larger end of the conical body, and material shredding means on said boss coacting with the worm thread and operable in a plane substantially transverse to the longitudinal axis of the worm.

1,869,244. TIRE TOOL. FRANK MORRIS GABLER, Monument, Oreg. Filed Sept. 1, 1931. Serial No. 560,596. 7 Claims. (Cl. 157—6.)

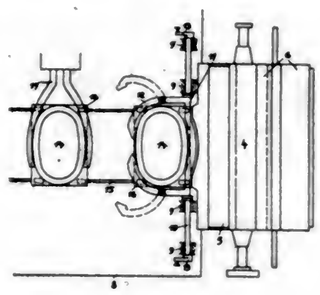
1. A tire tool of the character described, comprising a fixed arm, an oscillatable arm having pivotal connection adjacent one end with and extending across the fixed arm, a pair of arcuate members each secured to the end of the fixed arm adjacent the pivot point of the oscillatable arm therewith and extending forwardly from the fixed arm in divergent relation, an elongated jaw member carried by said arcuate members at their other ends, a

second jaw member disposed before the concave sides of said arcuate members and adjacent the first jaw, and means connecting the said second jaw with the oscil-



latable arm and with the fixed arm whereby movement of the oscillatable arm will shift the second mentioned jaw relative to the first mentioned jaw.

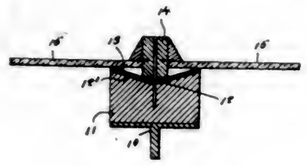
1,869,245. DEVICE FOR HANDLING AND EMPTYING GLASS MELTING POTS. RICHARD GENENGER, Aachen-Forst, Germany, assignor to N. V. Maatschappij tot Beheer en Exploitatie Van Octrooien, The Hague, Netherlands. Filed May 29, 1930, Serial No. 457,061, and in Germany June 3, 1929. 1 Claim. (Cl. 49—39.)



In a device to manufacture a sheet glass, the combination with a plate forming machine comprising a glass receiver and a pair of forming rollers, of a pot handling device comprising a horizontal shaft mounted for rotation in bearings having a fixed relation to the receiver and gripping members on the shaft for receiving and holding a glass pot, and means for delivering a glass pot into position to be engaged by said gripping members to permit the pot to be removed from the delivering device and to be tilted over the receiver.

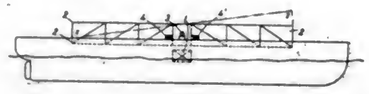
1,869,246. RAFTER FOR GREENHOUSES, ETC. PHILIP E. GEORGE, South Fork, Pa. Filed May 9, 1930. Serial No. 451,112. 3 Claims. (Cl. 108—16.)

1. A roof construction comprising rafters having open gutters in the uppermost exposed portions thereof and extended rectilinearly thereof, parting strips carried by the rafters centrally of the gutters and spaced from the median portion of the latter, and roof coverings abutting



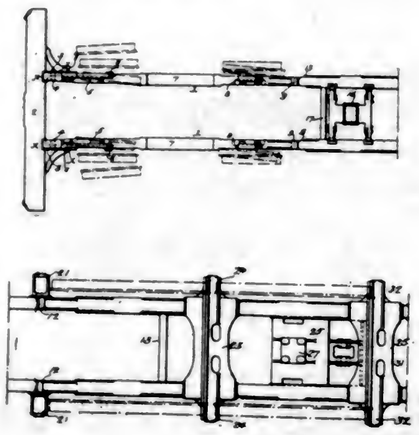
opposite sides of the parting strips and spaced from the gutters to facilitate the catching and carrying off of condensation dropping therefrom.

1,869,247. VESSEL ADAPTED FOR USE AS LANDING PLACE FOR AIR LINES CROSSING THE SEA. PAUL NICOLAS LUCAS-GIRARDVILLE, Paris, France. Filed Dec. 26, 1930, Serial No. 504,870, and in France Dec. 27, 1929. 2 Claims. (Cl. 114—0.5.)



1. An arrangement for vessels adapted for the landing and starting of aeroplanes, and comprising for this purpose a hull, a gyroscopic stabilizer for stabilizing said hull against rolling motion, a cradle structure rotatable relatively to the hull about a transverse axis, a gyroscopic stabilizer for stabilizing said cradle structure against pitching motion, a platform rolling inside said cradle structure, and a gyroscopic stabilizer for stabilizing said platform against rolling motion.

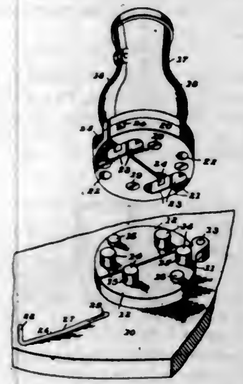
1,869,248. LOCOMOTIVE FRAME. HARRY GLAENZER, Philadelphia, Pa. Filed Apr. 13, 1931. Serial No. 529,838. 9 Claims. (Cl. 105—172.)



1. The combination in a locomotive frame, of two side members; a rear frame welded to the said side members; a bumper with rearwardly extending angle flanges; and

plugs extending through the flanges and through the ends of the frame, the said plugs being welded on the ends, and the flanges being also welded to the frames.

1,869,249. MOLD ATTACHING DEVICE FOR GLASS WORKING MACHINES. DAVID E. GRAY and DONALD W. STRAIT, Corning, N. Y., assignors to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed June 30, 1930. Serial No. 464,980. 4 Claims. (Cl. 49—41.)



1. In a glass working machine, in combination with a mold having recesses in its bottom, a mold carrier, studs carried by the carrier and cooperating with the walls of the recesses in locating and holding the mold on the carrier, means engaging the studs and the mold bottom for locking the mold to the carrier and means on the locking means for preventing its accidental removal.

1,869,250. TORCH. FRANK SUMNER GRIFFIN, West Palm Beach, Fla. Filed Sept. 4, 1931. Serial No. 561,238. 5 Claims. (Cl. 158—83.)



1. A torch comprising a barrel forming a storage chamber for fuel, a head on one end of the barrel provided with a supply chamber in communication with the barrel, the head having a mixing chamber, a valve controlled fuel inlet port between the mixing chamber and the supply chamber, a tube located axially of the barrel, one end of the tube projecting from the barrel, a burner on said end of the tube, the other end of the tube being in communication with the mixing chamber, the mixing chamber having ports connecting said chamber with the atmosphere, a nozzle projecting into the mixing chamber adjacent the fuel inlet port and connected with a source of compressed air.

1,869,251. TIE ATTACHMENT. JACOB R. HAAS, Chicago, Ill. Filed Dec. 21, 1931. Serial No. 582,425. 2 Claims. (Cl. 24—56.)

2. A device for attaching a tie which includes a tie-encircling band, to a collar, comprising, a plate and an arm projecting from the plate for penetration under said band, and an arm projecting from said plate in the direction of the first-named arm offset laterally from a plane passed longitudinally through the plate and first-named arm so that the band may be embraced between said arms, said plate and second-named arm being provided with a slot for the reception of the shank of a collar button, said



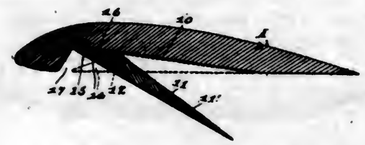
slot having a bayonet notch at one end thereof formed in the second-named arm for the reception of the shank of the button.

1,869,252. CRUDE OIL BURNER. ARNIM E. HADEN, Galveston, Tex. Filed May 5, 1927. Serial No. 189,006. 6 Claims. (Cl. 299—140.)



1. An oil burner comprising a hollow body member having a hollow tip extending longitudinally therefrom and provided approximately medially of its height with an elongated transversely extending flat mouth with the lips thereof arranged opposite each other and the space between them constricted at one point and gradually increasing in width from said point in opposite directions to form a spread out fan-like flame, means for discharging a thin blade-like jet of steam into contact with the oil at the rear of said mouth whereby the oil is atomized and combined with the steam, said means including a flared steam discharge nozzle within said tip and in horizontal alignment with said mouth, and a steam supply pipe communicating with said steam discharge nozzle, a source of oil supply under atmospheric pressure below the level of said mouth, and an oil supply pipe communicating with said supply and with said hollow body member at a point below the level of said mouth.

1,869,253. AIRPLANE. RANDOLPH F. HALL, Rochester, N. Y. Filed Aug. 21, 1931. Serial No. 558,593. 7 Claims. (Cl. 244—29.)



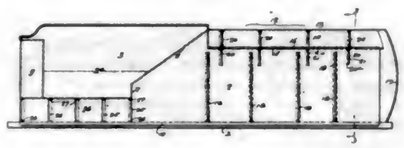
1. An airplane wing formed with a recess in the under side thereof, a wing flap pivotally mounted for vertical swinging to and from position within said recess forming a portion of the wing under surface, said flap provided with a forwardly extending balance portion disposed within the recess with its leading edge spaced rearwardly from the forward end of the recess to form an air space therebetween.

1,869,254. ANNEALING PROCESS. CHESTER S. HEATH, South Charleston, W. Va., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Oct. 12, 1928. Serial No. 312,211. 5 Claims. (Cl. 148—21.)

1. The process of treating an alloy which is initially in a hard state, and which alloy is adapted, by its com-

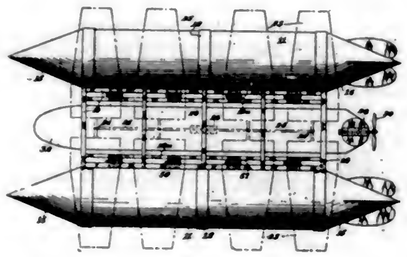
position, to be softened by bringing it to a high temperature and then quenching it; which process comprises heating the alloy to and quenching it from a temperature adapted to give substantially the maximum softening effect which can be obtained by a single quench; and then repeating the heating and quenching several times, the alloy being brought to substantially the same temperature in all the heating steps; the total time required for said process being materially less than that required to secure the same degree of softening of like material by a single quench preceded by a sustained heating of said material at said temperature.

1,869,255. TENDER TANK. ELMER E. HICKEN, Collingswood, N. J. Filed Apr. 7, 1931. Serial No. 528,390. 6 Claims. (Cl. 105—236.)



1. The combination in a tender tank, of side plates; a top plate greater in height than the side plates and less in width than the tender, and having a depressed portion at each side secured to the side plates; and flanges formed at the junction of the top plate and side plates, the depressed portions of the top plate forming the running board of the tender.

1,869,256. COMBINATION FLYING MACHINE AND AIRSHIP. MARTIN HINES, Brooklyn, N. Y., assignor of one-fourth to Michael J. Ward, one-fourth to Albert F. Purser and one-fourth to Margaret E. Hines, Brooklyn, N. Y. Filed Apr. 24, 1931. Serial No. 532,595. 3 Claims. (Cl. 244—6.)



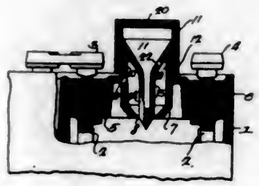
1. An airship comprising a body, shafts extending longitudinally of the body on opposite sides, a plurality of standards arranged in pairs with the pairs disposed at uniformly spaced distances along the body and on opposite sides thereof, a semi-circular gear mounted between and journalled in the units of each pair of standards, a propeller carrying motor mounted on the flat side of each semi-circular gear, pinions in mesh with the gears, transverse shafts on which said pinions are carried, operative connections between the transverse shafts and the first said shafts and a cross belt connecting both of the first said shafts to provide for synchronous movement of all of the shafts to swing the semi-circular gears and tilt the propeller ends of the motors up or down but at corresponding angles.

1,869,257. INSOLE. THEODOR HITZLER, Leonberg, Germany. Filed Dec. 10, 1930, Serial No. 501,403, and in Germany Dec. 10, 1929. 1 Claim. (Cl. 36—3.)



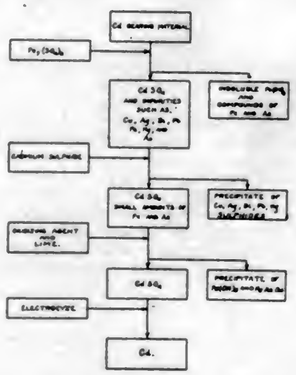
A removable insole adapted to be placed in a shoe comprising a top wall, a bottom wall, and a plurality of hollow webs interconnecting the two walls together thereby forming air cushions between the walls and the insole permitting the passage of air therethrough by means of the webs.

1,869,258. BATTERY VENT CONSTRUCTION. WALTER E. HOLLAND, Philadelphia, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 11, 1925. Serial No. 8,462. 10 Claims. (Cl. 136—177.)



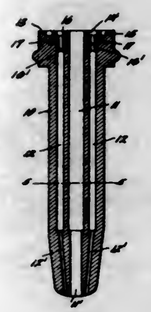
1. An electric battery container comprising a cover element including an annular depending flange the lower edges of which form a restricted opening, said flange being apertured near its upper end, and a funnel part having its lower attenuated end extending down into the space surrounded by said flange and into the restricted opening at the bottom, said funnel part comprising also a port extending from the inner face thereof to the space surrounded by said flange.

1,869,259. PROCESS FOR EXTRACTING AND SEPARATING CADMIUM. STANLEY HUGHES and ROSCOE TEATS, Denver, Colo., assignors to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed July 29, 1927, Serial No. 209,387. Renewed Sept. 30, 1931. 9 Claims. (Cl. 23—117.)



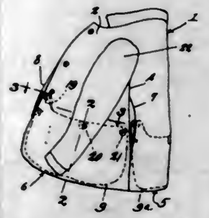
1. The process of extracting cadmium from its oxy-compounds which comprises leaching said compounds with ferric sulphate to produce cadmium sulphate solution, removing the insoluble impurities by filtration and recovering cadmium therefrom.

1,869,260. METHOD OF FABRICATING TIPS FOR TORCHES. ALEXANDER F. JENKINS, Baltimore, Md. Filed Dec. 4, 1931. Serial No. 579,032. 2 Claims. (Cl. 29—157.)



1. The method of fabricating a tip for a torch which comprises forming a plurality of substantially parallel ducts in the body thereof, forming a groove in the end of the tip which intersects said ducts, pressing a member into said groove, said member having a plurality of ducts formed therein which register, when said member is finally positioned, with the ducts formed in the body of the tip, the ducts in said member being of less cross-sectional area than the corresponding ducts of the body, and removing by a cutting operation a portion of the outer end of said member until its outer end surface occupies a predetermined relationship to the adjacent end surface of the tip body.

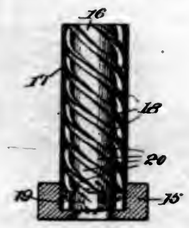
1,869,261. POCKET. RUBY SKELTON JENNINGS, Butler, Ind. Filed Dec. 10, 1931. Serial No. 580,198. 1 Claim. (Cl. 2—94.)



The combination with a garment having a body and a lining and provided with an opening leading to the space between the body and the lining, of a sack in said space and including side walls, the side walls being provided upon their upper edges with upstanding tabs located at the end of the sack, and there being a downwardly extended slit in the end of the sack, between the side walls, the tabs being located at the edge of the opening in the garment, releasable fasteners connecting the tabs, respectively, with the lining and with the body of the coat, and a releasable fastener connecting the walls of the sack together at the slit and extended between.

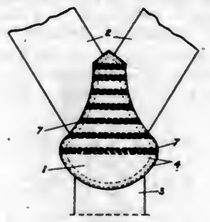
1,869,262. GASOLINE SAVER. MARTIN D. KENNEDY, Dunedin, Fla., assignor of one-third to Hartridge D. Kennedy, Dunedin, Fla. Filed Nov. 3, 1930. Serial No. 493,117. 1 Claim. (Cl. 48—180.)

A device for conducting gas from the crank case into the intake manifold of an internal combustion engine comprising a gasket having an opening with a recess at one end of the opening, spaced sleeves nested one within the other and resting at their ends upon the bottom wall of the recess, said sleeves adapted to be housed in the manifold, means for admitting fluid from the crank case into the recess and within the outer sleeve and at the outer surface of the inner sleeve, the inner sleeve being in



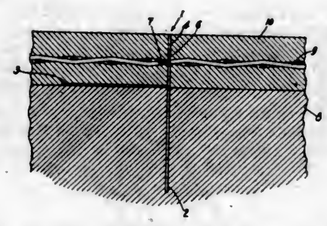
alignment with the opening in the gasket and spirally disposed partition ribs interposed between the inner and outer sleeves, the lower ends of the partition ribs being spaced above the inlet opening of the gasket.

1,869,263. BRACE FOR PERSONAL WEAR. ALFRED LAURAIN, Paris, France. Filed Feb. 18, 1931, Serial No. 516,720, and in France Feb. 20, 1930. 6 Claims. (Cl. 241—19.)



1. A garment suspender including shoulder and back straps, and back pad interconnecting the same, said back pad having means projecting from the surface of the same for frictionally engaging a contiguous garment to prevent creeping and wrinkling of the latter incident to movements of the wearer.

1,869,264. SPACING DEVICE. WILLIS LERICHE, Allentown, Pa., and IRA V. BEASLEY, Yukon, Okla., assignors to Cement-Gun Contracting Company, a Corporation of Delaware. Filed Mar. 28, 1931. Serial No. 526,046. 7 Claims. (Cl. 94—8.)



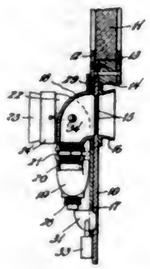
1. A spacing device for use in cement and concrete work containing plies of reinforcing material, including a shank to be driven into a support, an offset to limit the extent of driving, and an extension to gauge the thickness of the cement or concrete on said support, said extension having provisions for positioning a ply of reinforcing material intermediate the offset and the outer edge of the extension.

1,869,265. LINING DITCHES AND THE LIKE. WILLIS LERICHE, Allentown, Pa., and IRA V. BEASLEY, Yukon, Okla., assignors to Cement-Gun Contracting Company, a Corporation of Delaware. Filed Mar. 28, 1931. Serial No. 526,047. 8 Claims. (Cl. 61—14.)



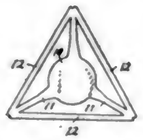
1. The method of forming on a backing a layer of cementitious material or the like containing a reinforcement of openwork sheet material, which includes stretching the reinforcement over said backing, holding it stretched, moving a spacing device between the reinforcement and the backing, and securing the reinforcement in adjusted position behind the spacing device as the latter is advanced preparatory to the application of the cementitious material to the area vacated by the traveling spacing device.

1,869,266. COMMUNICATION DEVICE FOR JAILS. HOWARD P. MANLY, Dalton, Ga., assignor to Manly Jail Works, Dalton, Ga., a Partnership composed of Frank Manly, Howard P. Manly and W. Judson Manly. Filed Jan. 8, 1932. Serial No. 585,576. 6 Claims. (Cl. 189—5.)



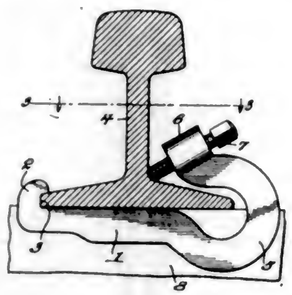
2. A speaking device for jails comprising, in combination, a partition having a window therein and a sound conducting passage adjacent to the window; a speaking tube composed of a series of pipe fittings communicating with the passage in the partition; a plate carrying the speaking tube; and means to lock the plate on one side of the partition.

1,869,267. METHOD OF MAKING STEERING WHEEL INSERTS. EDWARD R. MARBACH and GERALD F. CAVANAGH, Cleveland, Ohio, assignors to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 5, 1930. Serial No. 479,902. 15 Claims. (Cl. 29—159.)



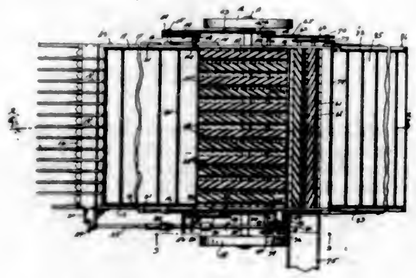
5. The method of forming a steering wheel insert, which comprises cutting out equal symmetrical internal areas of a polygonal blank between the margin and the center thereof and centered with respect to the sides of the blank, cupping the central portion of the blank, and curving the margin of said blank to form a rim portion.

1,869,268. RAIL ANCHOR. MIKE MARTZ, Harrisburg, Pa. Filed May 18, 1931. Serial No. 538,296. 1 Claim. (Cl. 238—329.)



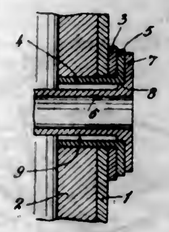
A rail anchor designed to contact with a tie to hold the rail from longitudinal creeping, said anchor comprising a metal spring member which includes a substantially rectangular body portion to underlie and to contact with the base of a rail for a distance greater than one-half of the length of the base of said rail, said body plate having both of its ends reduced in width and one of said ends being formed with an upstanding lug which is notched to receive one edge of the base flange of the rail therein, the second end of the plate being substantially C-shaped and receiving therein the second edge of the base flange of the rail, the outer and upper end of C-shaped portion being formed with a boss which is arranged at an angle with respect to the body plate and which boss has a threaded bore and a headed bolt screwed through said bore to contact with the rail at the juncture of the base flange and web thereof and said bolt also designed to expand the upper arm of the C-shaped end of the plate to force the body plate into tight gripping engagement with the under face of the rail.

1,869,269. CORN HARVESTER. JACOB A. MILLER, Genoa, Colo. Filed Jan. 31, 1931. Serial No. 512,695. 5 Claims. (Cl. 56—64.)



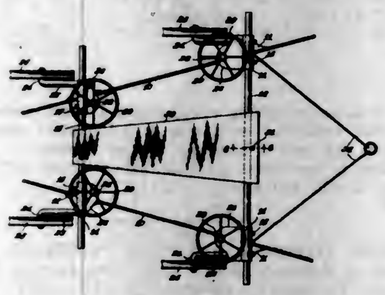
1. In a harvester for short corn, a main wheeled frame, a plurality of longitudinal stripping rolls mounted on the frame, a cutter supporting frame mounted on said main frame in advance of said stripping rolls and extending downward and forward, a reciprocatable cutter mounted upon the lower end of the cutter supporting frame, fingers carried thereby and coacting with the cutter, an upwardly and rearwardly extending conveyor mounted on the cutter supporting frame and discharging on to said stripping rolls, manually controlled means for raising or lowering the forward end of said cutter supporting frame, and means for driving said stripping rolls, said elevator and the cutter.

1,869,270. STEAM INTAKE SLEEVE FOR SULPHITE PULP DIGESTERS. EINAR MORTERUD, Oslo, Norway. Filed Oct. 20, 1931, Serial No. 569,969, and in Norway Nov. 19, 1930. 1 Claim. (Cl. 92—7.)



Improvement in steam intake sleeves for passing steam through the wall of a sulphite pulp digester or the like provided with interior brick lining, characterized by that the steam intake sleeve is surrounded by an auxiliary sleeve, passing from the exterior surface of the digester shell through the brick lining thereof and serving as a support for the brick lining, the steam intake sleeve proper and the auxiliary sleeve being separated by means of an annular space, which is in direct communication with the interior of the digester and which extends outwards at least as far as to the digester shell, so that the two sleeves are in direct heat transmitting connection with each other only at their exterior ends, with the object of preventing stresses being transmitted to the brick lining owing to the heat expansion of the steam inlet tube.

1,869,271. TERRACING AND DITCHING MACHINE. HOYT M. MURPHY, Hermleigh, Tex. Filed Feb. 3, 1932. Serial No. 590,713. 5 Claims. (Cl. 37—154.)

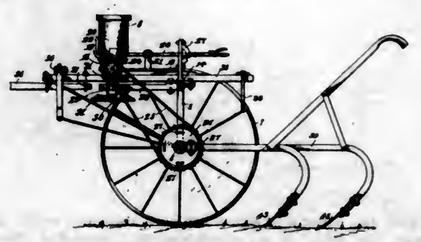


1. In a machine of the kind described, spaced fore and aft rods, blocks adjustably connected to the rods, crank hangers swingingly mounted in the blocks, traction wheels on the crank hangers, gathering blades swingingly supported from the blocks, and means for vertically swinging the crank hangers.

1,869,272. METHOD OF PREPARING AND AMMONIATING ACID PHOSPHATE. BEVERLY OBER and EDWARD H. WIGHT, Baltimore, Md., assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md., a Corporation of Maryland. Filed Apr. 19, 1927. Serial No. 185,066. 10 Claims. (Cl. 71—7.)

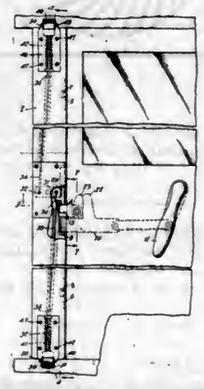
8. A method of treating acid phosphate fertilizer to incorporate nitrogen values therein comprising subjecting a mass of the acid phosphate fertilizer to a reduced pressure in a confined space to render the material more receptive to the action of ammonia, and introducing ammonia into said confined space while under reduced pressure.

1,869,273. AGRICULTURAL MACHINE. ELEMUEL I. OLINGER, Pollock, Mo. Filed Jan. 31, 1930. Serial No. 425,010. 2 Claims. (Cl. 275—8.)



1. An attachment for cultivators, comprising a frame including spaced horizontal bars, bearings on the frame, a shaft mounted in the bearings, a pinion mounted on the shaft and disposed intermediate the ends thereof, a grain box pivotally mounted on the frame, a grain delivering disk having a pinion, operating within the grain box, a pinion on the grain delivery disk and meshing with the first mentioned pinion to receive rotary motion therefrom, a vertical shaft under the grain box, and carrying a pinion meshing with the first mentioned pinion, a rotary broadcasting member on the vertical shaft and adapted to broadcast material disposed thereon, and means for transmitting movement to the first mentioned shaft.

1,869,274. AUTOMOBILE DOOR LOCK AND POST. FRANK F. PHILLIPS, Ironton, Ohio. Filed July 21, 1931. Serial No. 552,216. 9 Claims. (Cl. 296—44.)



1. The combination of an automobile of the sedan type provided with a substantially centrally positioned door post and doors coacting therewith, means for removably connecting said post to the other parts of the automobile, means carried by the door for releasing the first mentioned means and means carried by the door for holding the post on the door so that it will swing outwardly with the door and back inwardly to its original position.

1,869,275. PROCESS OF PROJECTING BRIGHT BACKGROUNDS BY OBLIQUE PROJECTIONS. PAUL PLANER, Vienna, Austria. Filed Mar. 28, 1929, Serial No. 350,736, and in Austria Apr. 7, 1928. 1 Claim. (Cl. 88—24.)

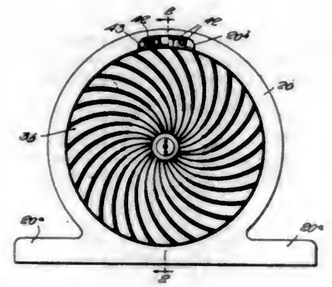
A method of obtaining brilliant backgrounds for cinematographic objects consisting in taking a plurality of groups of distorted photographs of the object from different angles, and subsequently obliquely projecting simul-

taneously the images of the same group so obtained on to a screen from angles under geometrically similar conditions as those observed during the taking of said photo-



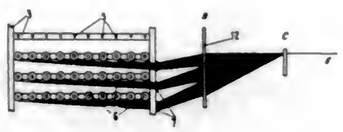
graphs, and using a separate projection apparatus for each image, the total of all simultaneously projected images thus resulting in a very brilliant picture.

1,869,276. ADVERTISING DEVICE. ERNEST WALTER PRECOURT, Phillipsburg, N. J. Filed Apr. 11, 1932. Serial No. 604,568. 16 Claims. (Cl. 40—77.)



1. An advertising device comprising a plurality of relatively rotatable translucent members having flutings thereon and means for providing light for the flutings.

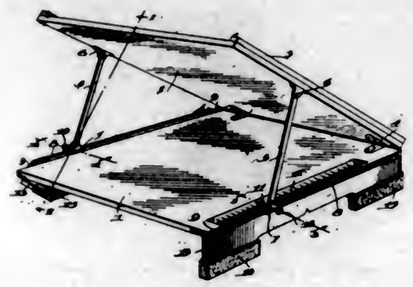
1,869,277. IMPROVED WARPING FRAME. JOSE MARIA BAHIMA PUIG and SALVADOR JACAS GASCON, Barcelona, Spain. Filed Dec. 18, 1928, Serial No. 326,781, and in Spain Sept. 12, 1928. 3 Claims. (Cl. 28—54.)



1. In a device of the character described, a thread guiding frame comprising a support, a plurality of bars carried by said support and having alternately disposed holes and slots formed throughout said bars, said holes and slots receiving and guiding the threads, and means associated with said bars for varying the respective positions of the threads received through the holes and slots of said bars.

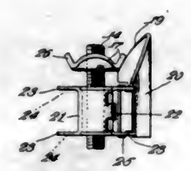
1,869,278. ANGLE BLOCK. ANDREW D. RAMELLI, New Orleans, La. Filed Mar. 8, 1928. Serial No. 260,098. 1 Claim. (Cl. 250—34.)

An angle block comprising a base, a platform, hinges by which the platform is movably connected at one edge of the base, a bar affixed along an adjacent edge of the base, a scale carried by the base adjacent to the bar, a slide riding upon the bar and having an indicator movable over the



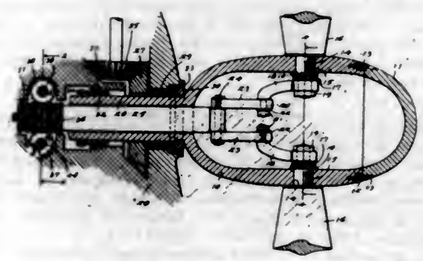
scale, a rod having ends movably attached to the platform and slide, and a thumb screw carried by the slide for holding the slide at various adjustments along the bar.

1,869,279. CASTER. EDWARD A. REED, Brookfield, Ill., assignor to Harris and Reed Manufacturing Company, a Corporation of Illinois. Filed Jan. 12, 1931. Serial No. 508,035. 9 Claims. (Cl. 16—39.)



1. A caster comprising a base having a wheel thereon, a structure associated with said base to swivel about a vertical axis and a gripping member pivoted to said structure to turn about a vertical axis eccentric with reference to said first axis.

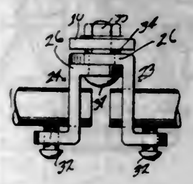
1,869,280. CONTROLLABLE PITCH PROPELLER. JOSEPH A. ROEMISCH, Seguin, Tex. Filed June 16, 1931. Serial No. 544,811. 4 Claims. (Cl. 170—163.)



1. A propeller having a hollow hub, blades extending radially therefrom and having shanks extending radially into the hub and axially rotatable therein, a tubular shaft

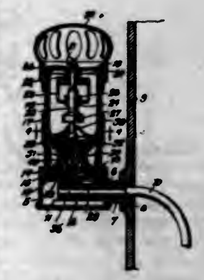
carrying the hub, a longitudinally movable controlling member mounted within the tubular shaft, crank arms on the shanks of the blades, links connecting the crank arms to the controlling member, and means for operating the controlling member including a series of circular gear teeth extending around the controlling member, opposed gear wheels engaging the said teeth, shafts upon which the gear wheels are mounted, and a single manually operable means having engagement with said shafts whereby they may be rotated in opposite directions.

1,869,281. CURTAIN ROD HOLDER. HERMAN RUMPF and IRWIN J. RUMPF, San Francisco, Calif. Filed Sept. 13, 1929. Serial No. 392,408. 2 Claims. (Cl. 156—22.)



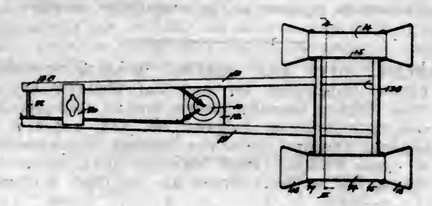
1. In combination with the horizontal sliding arm of a curtain bracket, a curtain rod holder connected to said bracket and comprising a substantially inverted U-shaped member having a rod receiving opening in each side thereof and means carried by said member for fixedly securing the member to the curtain rod positioned in the openings of said member said means being in the same plane as the plane of the openings of said member.

1,869,282. RADIATOR VALVE. LOUIS SCHWARTZ, Brooklyn, N. Y., assignor to Minnie Schwartz, Brooklyn, N. Y. Filed Feb. 4, 1930. Serial No. 425,872. 2 Claims. (Cl. 236—64.)



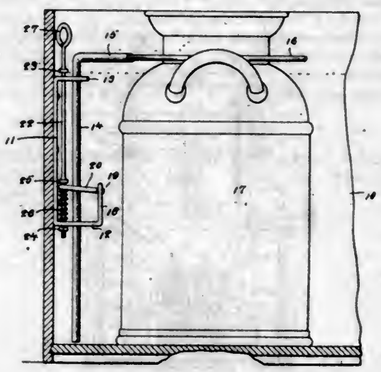
1. A radiator valve including a casing having a venting outlet and an inlet communicating with the radiator, a vertically movable needle valve in the upper portion of the casing for controlling the venting outlet, a fixed ring in the casing constituting a guide through which the needle valve is movable, a pin extending through said valve for engaging the ring to limit the downward movement of the valve, said valve having an enlarged lower end constituting a weight for normally effecting the movement of the needle valve to an open position with respect to the venting opening, a support in the lower portion of the casing and means normally resting upon said support and spaced from the enlarged lower end of the valve, said means permitting air to escape around the same and movable by pressure of the heating fluid to engage with and move the valve to a closed relation to the venting outlet.

1,869,283. TABLE FOR VEHICLE LIFTS. LOUIS C. STUKENBORG, Memphis, Tenn. Filed June 9, 1930. Serial No. 459,985. 6 Claims. (Cl. 254—93.)



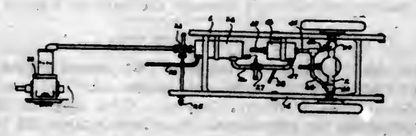
1. In a table for a vehicle lift, a pair of elongated rails, spaced to lie longitudinally between the wheels of a vehicle to be raised, a pair of short channels spaced to conform to the vehicle wheel tread, disposed along said rails opposite one end thereof, transverse supports one at each end of said channels, supporting same from said rails, and approach channels, at the ends of said short channels.

1,869,284. CREAM CAN HOLDER. WALFRED GERHARD SWANSON, Swanville, Minn. Filed May 21, 1930. Serial No. 454,465. 1 Claim. (Cl. 220—85.)



In combination with a water tank and a can, means for holding the can in upright position in the tank when immersed in the water therein comprising a guide mounted upon the wall of the tank, a rod slidably mounted in the guide and having at its upper end a hoop adapted to engage over the shoulder of the can, means mounted upon the guide for locking the rod and hoop at a lowered position and means within the tank for releasing the rod locking means.

1,869,285. VEHICLE BODY SUSPENSION. GEORGE H. TABER, Binghamton, N. Y. Filed Feb. 9, 1931. Serial No. 514,406. 7 Claims. (Cl. 267—31.)



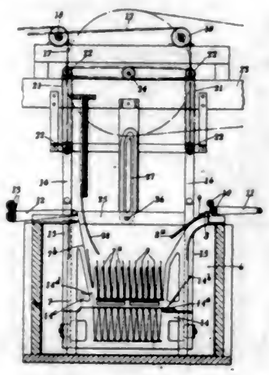
1. In combination with a vehicle frame, and an axle, a suspension for the frame embodying resilient means interposed between the frame and the axle including a

yielding air containing chamber, and a compression chamber having communication with said yielding air containing chamber to prevent excessive pressure in the yielding air containing chamber, and means for varying the effective cubical contents of the compression chamber.

1,869,286. DYES AND DYEING. WILLIAM WYNDHAM TATUM, Manchester, England, and WILLIAM MILLAN TODD, Falkirk, LEONARD JOSEPH HOOLEY, Grangemouth, and JOHN THOMAS, Polmont, Scotland, assignors to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Mar. 23, 1931, Serial No. 524,762, and in Great Britain Mar. 28, 1930. 8 Claims. (Cl. 8—5.)

1. As new articles of manufacture, cellulose ether and ester materials dyed in green to blue-green shades, fast to light, said materials being dyed with a dihydroxydimercaptoanthraquinone compound, said compound having both the hydroxyl and mercapto groups in alpha positions and containing less than two sulphonic groups in the anthraquinone nucleus.

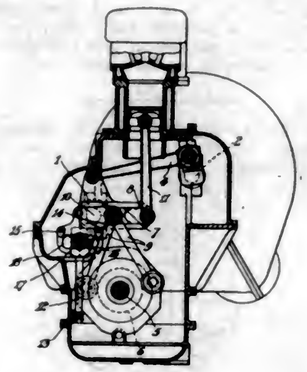
1,869,287. CONVEYER FOR PLATES AND OTHER ARTICLES. HUBERT SPENCE THOMAS and WILLIAM ROBERT DAVIES, Whitchurch, Wales. Filed July 21, 1931, Serial No. 552,096, and in Great Britain July 31, 1930. 5 Claims. (Cl. 198—218.)



1. A means for passing plates, sheets, bars or other articles through acid treatment baths, furnaces, or the like incorporating a racked stationary member disposed within the bath or furnace, a movable transfer member, means for moving the said transfer member about the stationary member in a closed path and in a cycle involving successive upward, forward, downward and rearward movements, a feeding point, means carried by the movable transfer member for lifting the articles to be dealt with from said feeding point, a delivery mechanism and a lifting means forming part of the movable transfer member for lifting the longest treated articles to the delivery mechanism, the successive upward, forward, downward and rearward movements imparted to the movable transfer member serving to progress the articles to be treated progressively through the bath or furnace.

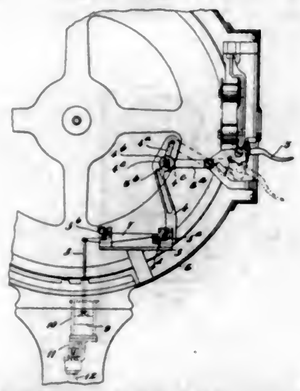
1,869,288. POWER TRANSMITTING MECHANISM IN PRIME MOVERS. WALTER FREDERICK THOMAS, St. Helens, Isle of Wight, England. Filed July 29, 1929, Serial No. 381,865, and in Great Britain Aug. 15, 1928. 6 Claims. (Cl. 74—53.)

1. In an engine, reciprocating pistons, a crank shaft operatively connected to said pistons, a separate power shaft, one way clutch devices for driving said power shaft, variable throw oscillating members connected to and actuated by said pistons and connected to and actuating said clutch devices, and means for varying the throw of said oscillating members, comprising means



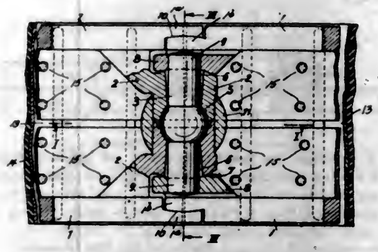
including friction clutch devices connected to and driven by said crank shaft for actuating said last named means, and means for engaging and disengaging said friction clutch devices.

1,869,289. IMPROVEMENT RELATING TO WEIGHING APPARATUS. WILLIAM TIMSON, Soho Foundry, Birmingham, England, assignor to W. & T. Avery, Limited, Birmingham, England. Filed Aug. 25, 1930, Serial No. 477,602, and in Great Britain Sept. 4, 1929. 4 Claims. (Cl. 265—5.)



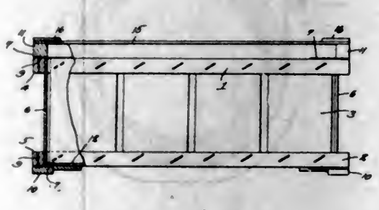
1. A means for use in conjunction with the printing mechanism of weighing apparatus for preventing a printing operation being effected except when the apparatus is in equilibrium comprising an actuating member for the printing mechanism, a locking means for said member, a dashpot one part whereof is connected to and movable with a moving member of the weighing mechanism and the other part whereof is connected to and movable with the aforesaid locking means, whereby when the apparatus is out of equilibrium the movement of one part of the dashpot influences the other part of the dashpot and causes the said means to be moved into an obstructing position relatively to the actuating member and thereby preventing the operation of the said member.

1,869,290. ENDLESS TRACTION BELT. RICHARD R. W. VENZLAFF and OTTO F. BUCK, Berlin, Germany. Filed Jan. 16, 1929, Serial No. 332,975, and in Germany Jan. 21, 1928. 7 Claims. (Cl. 305—10.)



4. In a device of the character described, the combination with two link-members having tread members of pivoting means transversely mounted in one of said link members, a spherical portion on said pivoting means, and spherical internally hollowed bearing means on the other link member engaging the pivoting means, longitudinally extending bars on the tread members connected to the bearing means, and lengthwise projecting, curved, spherical engaging means at the ends of said bars.

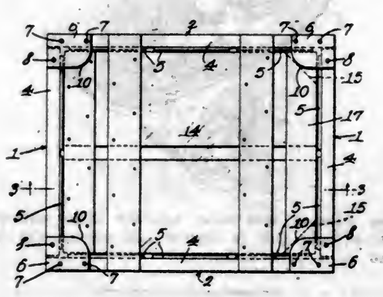
1,869,291. FOLDING PACKAGE. OKKNEY P. WILSON, Humboldt, Tenn., assignor to N. B. Rooks, Humboldt, Tenn. Filed Feb. 3, 1930. Serial No. 425,614. 1 Claim. (Cl. 217—48.)



A container comprising sides and ends, hinge members secured to the upper and lower edges of the sides and overlapped on the upper and lower edges of the ends, upper and lower pivot elements passing through the hinge members and entering the ends, supporting pieces secured to the lower edges of the ends and extended inwardly beyond the inner surfaces of the ends, the supporting pieces covering the lower pivot elements to hold them in place, spacing pieces secured to the upper edges of the ends, the spacing pieces covering the upper pivot elements to hold them in place, a top secured to the spacing pieces, and a bottom carried by the supporting pieces.

1,869,292. FOLDING PACKAGE. OKKNEY P. WILSON and NOLAN B. ROOKS, Humboldt, Tenn.; said Wilson assignor to said Rooks. Filed May 4, 1931. Serial No. 534,960. 1 Claim. (Cl. 217—48.)

A foldable container comprising sides and ends disposed at right angles to each other, upper and lower hinge plates disposed respectively on the upper and lower surfaces of the sides and the ends, the hinge plates being of approximately rectangular form and having their outer edges disposed substantially flush with the outer edges of the sides and ends, to form corner protectors, pivot elements passing through the hinge plates into the upper and lower edges of the ends, a bottom resting on the inner corners of the lower hinge plates, a top engaged at one end beneath the upper hinge plates at one end of the container, the top being cut away at its corners, at its opposite end, to clear the inner corners of the upper hinge plates at the opposite end of the container, and a locking strip extended across the said opposite end of



the top, the locking strip being engaged at its ends beneath the last-specified upper hinge plates, and means for securing the hinge plates fixedly, and against swinging movement, to the sides, said fixed mounting of the hinge plates preventing the ends from moving inwardly, bodily, in a direction transverse to their length, and the approximately rectangular form of the plates preventing relative vertical sagging of the sides and the ends.

1,869,293. FISHHOOK. RILEY B. WOLFORD, Johnstown, Pa. Filed July 31, 1931. Serial No. 554,318. 1 Claim. (Cl. 43—38.)

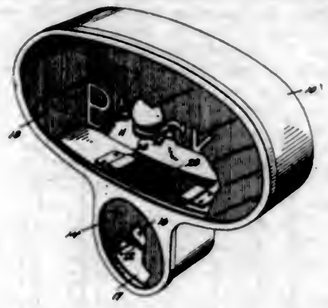


A fishing hook comprising a shank, a bill on said shank and having a pointed free end curved outwardly and interally of the shank, a movable barb including a flexible portion and an attaching portion and said attaching portion engaging the shank and secured thereto, said flexible portion extending diagonally from the shank and having the free end pointed and curved towards the bill to engage said bill inwardly of the free end thereof, said barb between said flexible and attaching portions coiled to urge the pointed end of the flexible portion into engagement with the bill.

1,869,294. AUTOMOBILE TAIL AND STOP LIGHT. GEORGE BRADLEY WRIGHT, South Norwalk, Conn. Filed Jan. 3, 1929. Serial No. 330,109. 9 Claims. (Cl. 177—329.)

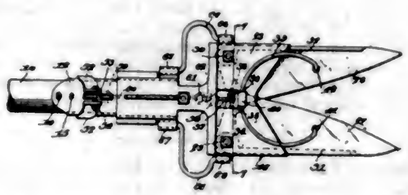
1. In a signal device, in combination, a casing having two compartments, a translucent cover for one compartment, said cover being colored and having indicia thereon of a different color, a light source for said compartment adapted when lighted to cause the cover to show

its color and the indicia its color, a source of light in the other compartment and a screen separating said compartments, said screen being of a color complementary



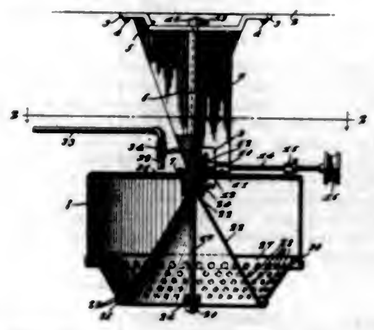
to the color of said cover whereby when said second source of light only is lighted said indicia will appear lighted on a dark background.

1,869,295. GRASS SHEARS. OSCAR W. ATTERBURY, San Antonio, Tex. Filed Feb. 18, 1931. Serial No. 516,750. 4 Claims. (Cl. 30—11.)



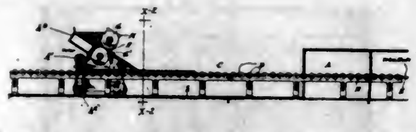
1. In a device of the character described, a handle member, an angularly disposed shank carried by the lower end of said handle, a blade holder having a socket received on said shank and a pair of pivoted cooperating cutting blades carried by said holder.

1,869,296. MOLASSES DISTRIBUTOR. CHRISTIAN S. EMILER, Gordonville, Pa. Filed Dec. 23, 1931. Serial No. 582,842. 4 Claims. (Cl. 299—63.)



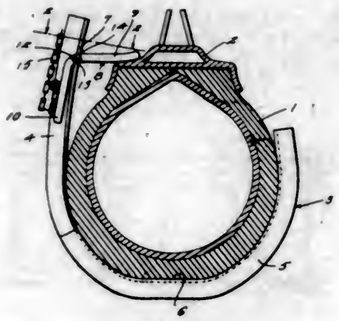
3. A distributor of the class described comprising a hanger, a housing supported upon said hanger, means for supplying liquid to said housing, a distributor cone suspended within said housing and provided with an outflared distributing plate having a plurality of graduated apertures formed therein, and means for rotating said distributor cone.

1,869,297. PROCESS AND APPARATUS FOR THE MANUFACTURE AND LEERING OF GLASS SHEETS. MAX BICHEROUX, Aachen, Germany, assignor, by mesne assignments, to The American Bicheroux Company, a Corporation of Delaware. Filed Aug. 6, 1928, Serial No. 297,666, and in Germany Apr. 7, 1928. 9 Claims. (Cl. 49—3.)



2. Apparatus for making a sheet of glass, comprising a leer having continuously operating forwarding means, a runway at the entrance end of the leer also having continuously operating forwarding means constituting an extension of the forwarding means in the leer, a car mounted for movement back and forth along the runway, means for moving the car, a pair of sizing rolls carried by the car above the runway, and means for rotating the sizing rolls as the car is moved back along the runway at a rate of peripheral speed which is greater than the speed of movement of said forwarding means and which is also greater than the rate of movement of the car.

1,869,298. MUD SHOE FOR MOTOR VEHICLE WHEELS. WILHELM M. BORGSTROM and OLOF E. HAGLUND, Minneapolis, Minn. Filed Oct. 27, 1931. Serial No. 571,384. 4 Claims. (Cl. 152—14.)



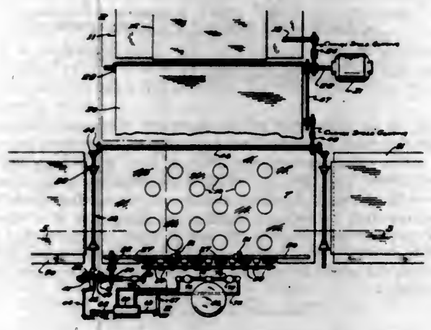
1. A vehicle tire mud shoe comprising a body having a portion formed to receive the tread of the tire and a portion arranged to extend across the side of the tire, and a locking element carried by the last mentioned portion and designed to engage the adjacent wheel rim, said locking member being so designed for connection with the shoe as to constantly tend to more tightly secure the shoe to the tire.

1,869,299. PANCAKE TURNER. HAROLD E. BRACHT, Everett, Pa., assignor to Joseph De Bracht, Bedford, Pa. Filed Mar. 2, 1931. Serial No. 519,622. 9 Claims. (Cl. 294—8.)



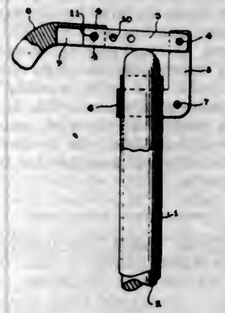
1. A pancake turner comprising a handle, a shaft having a blade at one end and its other end mounted for revolving movement in said handle, and a circular thumb piece mounted on said shaft for imparting motion thereto when actuated.

1,869,300. SHEET INSPECTING APPARATUS. ALBERT BROADMEYER, Harrisburg, Pa., assignor to W. O. Hickok Manufacturing Company, Harrisburg, Pa., a Corporation of Pennsylvania. Filed Feb. 11, 1929. Serial No. 339,102. 45 Claims. (Cl. 214—11.)



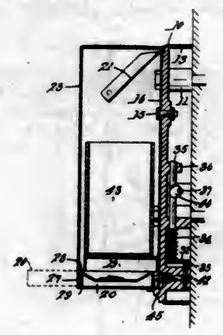
1. In apparatus of the character set forth, the combination with an inspection field, of means for delivering sheets successively thereto, periodically operating suction means for moving the sheets from the inspection field, and means operable by an inspector viewing the sheets on the field for controlling said operation.

1,869,301. VEHICLE CONTROL LEVER. HOWARD D. BROWNING, South Kingstown, R. I. Filed May 2, 1931. Serial No. 534,499. 1 Claim. (Cl. 74—39.)



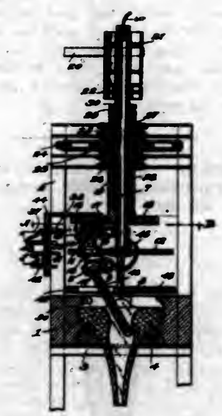
The combination with a control lever and a latch releasing rod therein and projecting beyond the end thereof, of a mount comprising a clamp encircling the lever adjacent its upper end and having spaced similarly formed integral standards extending upwardly therefrom beyond the extremity of the releasing rod and to one side thereof, a bolt connecting the said standards adjacent the encircling portion of the clamp to secure the latter upon the lever in its desired adjusted position, a hand lever provided with openings at one end and pivoted at its other end between the upper ends of the standards and extending across and over the projecting end of the releasing rod, and a curved adjustable grip having its inner end recessed and provided on both sides of the recess with aligned openings to engage the end of the hand lever having the openings therein, the openings in the grip being arranged to register with the openings in the hand lever thereby enabling the grip to be secured in its desired leverage adjusted position by passing retaining means through the openings in the grip and the end of the handle.

1,869,302. STRONG BOX. JOHN J. BROSNAN, Worcester, Mass. Filed June 11, 1931. Serial No. 543,646. 7 Claims. (Cl. 232—4.)



1. In a strong box, the combination of a base having an integral flange around it at the back to fit against a wall or the like and means for securing said base to said wall, of an inner casing secured to said base on the front, an outer casing slidable over said inner casing, a member closing the bottom of the inner casing and adapted to engage the outer casing to lock it in closed position, and means within the area of the flanges of the base for controlling said locking member.

1,869,303. PROCESS AND APPARATUS FOR THE MANUFACTURE OF RODS OR TUBES OF GLASS OR OTHER MATERIALS. JEAN ALEXANDRE CARDOT, Bagneaux sur Loing, France, assignor to Societe Anonyme Le Pyrex, Paris, France. Filed Feb. 15, 1930, Serial No. 428,717, and in France Feb. 19, 1929. 7 Claims. (Cl. 49—17.1.)



7. In an apparatus for drawing glass tubes, the combination with a container for molten glass having an aperture in the bottom thereof, a member projecting below the level of the glass and having an axis displaced in respect to the vertical axis of the aperture, means for revolving the member in respect to the vertical axis of the aperture, and means for varying the inclination of said member.

1,869,304. METHOD OF MAKING HOSIERY AND PRODUCT THEREOF. JOHN C. DECKER, Abington, and HARRY AULL, Philadelphia, Pa., assignors to Frieberger-Aaron Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 10, 1932. Serial No. 598,010. 11 Claims. (Cl. 66—178.)



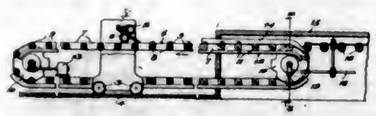
1. The method of making hosiery which consists in forming the leg section of the hose in a flat condition by loosely knitting over a single set of knitting needles in straight alignment with each other and operating in unison with each other, longitudinal rows of non-inter-knit chain stitches, as well as longitudinal rows of inter-knit chain stitches;— each row of inter-knit chain stitches being inter-knit, alternately, with the two similar adjacent rows on either side thereof at suitable intervals and in a staggered order, and said non-inter-knit rows of chain stitches being interlaced with said inter-knit rows of chain stitches to bind the latter, thereby forming a highly elastic, net-like, open-mesh structure of loose chain stitches; sizing the resultant knit structure and setting it in a flat condition, cutting from said flat, sized, knit structure a leg section of a stocking including the instep portion of the foot of the stocking, uniting the longitudinal edges of said leg section to each other, and uniting to the upper end of said leg section a closely knit top section having a single ply where union is made with the leg section, and uniting with the lower free edges of the leg section a closely knit and seamless sole section, and removing the sizing from the leg section.

1,869,305. SINKER. LOUIS ALOYSIUS DOCKMAN, Baltimore, Md. Filed Dec. 15, 1930. Serial No. 502,586. 1 Claim. (Cl. 43—52.)



Sinker comprising an elongated body convergent toward the ends and having eye extensions at both ends, said body and eye extensions being integrally cast under pressure whereby the density and homogeneity and consequently, the tensile strength of the eye rims is enhanced.

1,869,306. RECEIVING GLASS SHEETS. VERNON M. DORSEY, Chevy Chase, Md., assignor, by mesne assignments, to The American Bicheroux Company, Wilmington, Del. Filed June 13, 1930. Serial No. 461,024. 4 Claims. (Cl. 49—3.)



1. In an apparatus of the character described, the combination with a forming machine, of a belt conveyor having a series of glass-receiving rollers, and having an upper and lower run, one of which runs receives glass sheets from the forming machine, and means for moving the forming machine rearwardly during the formation of a sheet, for continuously driving the belt in such direction that its sheet-receiving run moves rearwardly and for rotating the rollers on such run so that their upper surfaces move forwardly.

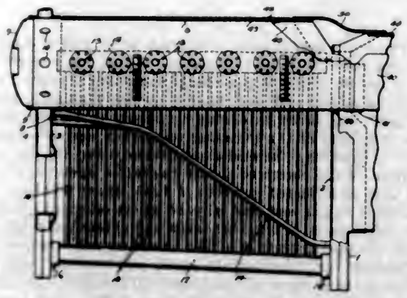
1,869,307. TREATMENT OF CELLULOSE PRIOR TO ESTERIFICATION. HENRY DREYFUS, London, England. Original application filed Apr. 18, 1923, Serial No. 633,016, and in Great Britain May 24, 1922. Divided and this application filed July 28, 1927. Serial No. 209,191. 13 Claims. (Cl. 260—101.)

1. A process for pretreating cellulose, which comprises subjecting it to the action of formic acid in the absence of a condensing agent, thereby rendering the cellulose capable of rapid esterification.

1,869,308. PROCESS FOR IMPREGNATING INSULATING MATERIALS. LUIGI EMANUELI, Milan, Italy, assignor to Società Italiana Pirelli, Milan, Italy. Filed Aug. 15, 1927, Serial No. 213,173, and in Italy Aug. 31, 1926. 9 Claims. (Cl. 91—68.)

1. In a process of impregnating electric cables with liquid insulating compounds, the steps of extracting the air from the interior of a cable, washing the evacuated interior of the cable with a gas which is highly soluble in the insulating compound to be used, removing such gas by vacuum action, degasifying the insulating compound, and thereafter introducing the degasified insulating compound into the cable.

1,869,309. SINGLE DRUM LOCOMOTIVE BOILER. GEORGE H. EMERSON, Baltimore, Md. Filed Jan. 14, 1931. Serial No. 508,768. 21 Claims. (Cl. 122—94.)



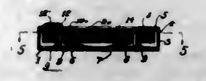
1. In a locomotive, a back flue sheet, a fire-box, a barrel, a drum in the fire-box having the upper portion of its forward end cut away at a downward and forward angle and forming a reduced partly cylindrical lower portion extending through said back flue sheet into the barrel, the rear end of the barrel jacket being similarly cut away at a downward and rearward angle, and means fastened to the flue sheet, barrel jacket and drum and covering the gap between the cut away parts of the two last-named elements.

1,869,310. CARBON REMOVER. JOHN HOWARD ESSICK, Erie, Pa. Filed Apr. 4, 1931. Serial No. 527,853. 2 Claims. (Cl. 87—5.)

2. A carbon remover for internal combustion engines, consisting of the following ingredients taken in the appended approximate proportions for the production of a 50-gallon batch:

Benzol (90 proof)	18½
Acetone (dimethyl ketone)	16½
Alcohol (denatured—188 proof)	12
Oil of cedar wood (grade—U. S. P.)	1
Camphorated oil (grade—U. S. P.)	1
Turpentine	1

1,869,311. BLADE PACKAGE. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed July 3, 1928. Serial No. 290,214. 10 Claims. (Cl. 206—16.)



9. A casing for perforated blades, means within the casing in position to engage the blade perforations to hold the edges of blades out of contact with the casing, and an ejector slidable along the casing, said means being spaced from the ejector to permit the latter to slide clear of said means to eject the outermost blade through said space from the casing.

1,869,312. PHOSPHORIC ESTERS OF TAR ACIDS AND METHOD FOR PRODUCING THE SAME. FREDERICK S. GRANGER, Elizabeth, N. J., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed Dec. 13, 1928. Serial No. 325,930. 12 Claims. (Cl. 260—98.)

1. The process for producing organic phosphates containing a cyclic nucleus which comprises the steps of heating a mixture of a coal tar distillate and a hydrated phosphating agent to a temperature sufficient to cause a reaction between the said substances and the formation of water vapor and gaseous products of reaction, removing the said water vapor and gaseous products of reaction as rapidly as formed, and subsequently fractionally distilling the remaining materials in undiluted form under high vacuum.

1,869,313. PROTECTIVE WRAPPER. JOSEPH T. MACKAY, Brooklyn, N. Y., assignor to United Fruit Company, New York, N. Y., a Corporation of New Jersey. Filed July 3, 1929. Serial No. 375,633. 3 Claims. (Cl. 229—88.)



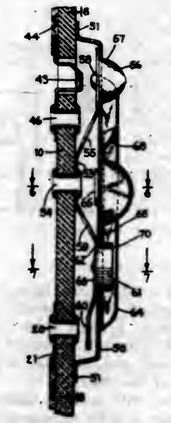
1. A package comprising a bunch of bananas and a paper bag enwrapping said bunch, said bag enclosing a quantity of air with the bunch for the respiration of the fruit and having an opening in one end adapted to permit extension of the stalk of said bunch therethrough and to permit the passage of sufficient air to carry on the respiration of the bananas, said bag being adapted to be closed at its opposite end around the end of the bunch.

1,869,314. INTERCHANGEABLE CHARACTER OR SYMBOL AND HOLDER THEREFOR. PHILIPPE PATINOT, Brooklyn, N. Y., assignor to Display Price Corporation, a Corporation of New York. Filed Apr. 22, 1931. Serial No. 532,005. 2 Claims. (Cl. 40—140.)



1. An interchangeable character or symbol and holder therefor embodying, in combination, a base member having a body portion provided with a plurality of independent grooves, and characters having foot portions adapted to seat within such independent grooves, said grooves and foot portions of the characters having interengaging portions.

1,869,315. FLASH LIGHT SWITCH. GOODRICH B. PRATT, Grantwood, N. J., assignor to Bond Electric Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Dec. 26, 1930. Serial No. 504,845. 13 Claims. (Cl. 200—60.)

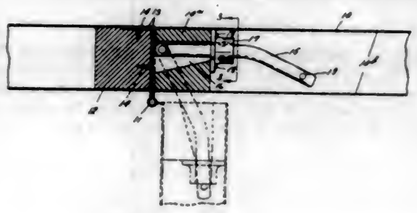


1. A safety switch comprising resilient main and auxiliary circuit closers adapted for series connection in an electric circuit and movable means movable in one direction to move said closers to circuit closing position and movable in an opposite direction to move said closers to circuit opening position as a result of their inherent resiliency, cooperative locking means being provided between one of said circuit closers and said movable means to lock the same in circuit opening position.

1,869,316. DOORCHECK. ISAAC W. ROBERTSON, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 31, 1929. Serial No. 403,747. 3 Claims. (Cl. 16—82.)

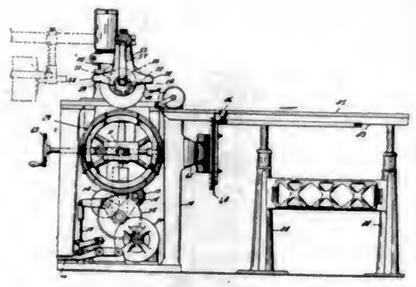
1. In a door check, a door jamb member, a door member hinged thereto, resilient cushion means fixed in one

of said members, a bar pivotally connected to the other of said members, said bar extending through registered slots in said first member and in said resilient cushion



means, and a stop on the free end of said bar engageable with said resilient cushion means to limit the opening movement of the door with a cushioning action.

1,869,317. TIRE MAKING MACHINE. HORACE D. STEVENS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 31, 1927. Serial No. 243,865. 3 Claims. (Cl. 154—10.)

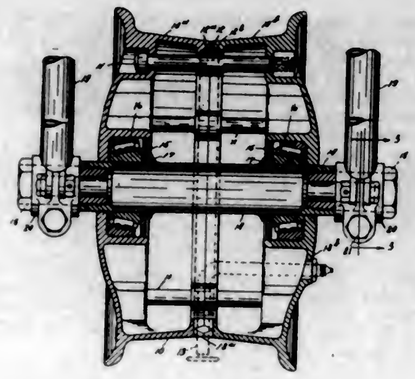


1. In combination with a rotatable tire building drum, a stitcher roll carriage pivoted about a vertical axis to swing over said drum, a shaft eccentrically journaled in said carriage, a stitcher roll mounted on said shaft and adapted to be raised and lowered with respect to said drum by rotation of the shaft.

3. In combination with a tire building machine including a rotatable drum, a shaft arranged to move into parallel relation to the axis of said drum, a plurality of rotatable thin edged annular discs journaled on said shaft and having individual freedom of motion transversely of the shaft, and means for moving the plurality of annular members as a whole toward said drum, said discs being independently actuated by gravity to compact a narrow circumferential area of tire building materials applied about the drum.

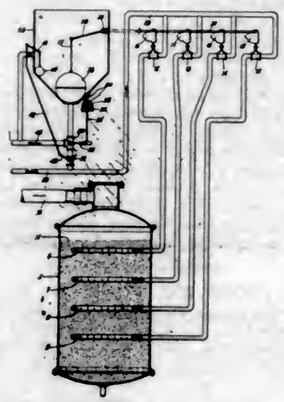
1,869,318. AIRPLANE WHEEL. JOSEPH G. SWAIN, Akron, Ohio, assignor to The Firestone Steel Products Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 16, 1929. Serial No. 386,349. 1 Claim. (Cl. 301—63.)

An airplane wheel construction including in combination, a wheel split circumferentially into two parts, the abutting edges of said wheel parts being provided with inwardly extending radial flanges, said flanges being formed with opposed annular grooves and with a series of aligned apertures radially inwardly of said grooves, a ring adapted to lie in said opposed grooves to hold said parts in axial



alignment, and means extending through said aligned apertures for clamping said parts together and for maintaining said parts in circumferential alignment.

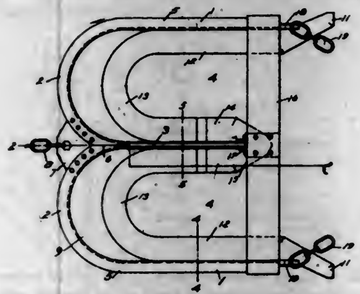
1,869,319. FIRE EXTINGUISHING APPARATUS AND METHOD. LEWIS G. MORRIS TIMPSON, Plainfield, N. J., assignor to Pyrene-Minimax Corporation, a Corporation of Delaware. Filed July 14, 1928. Serial No. 292,721. 11 Claims. (Cl. 169—15.)



8. In apparatus of the character described, a timing device comprising a float tank arranged to be filled gradually, a float therein and means controlled by the float operating during upward movement thereof for opening, holding open for a predetermined time and then closing a valve, substantially as described.

9. The method of charging a stream with powdered material which comprises maintaining a charge of powder in a tank, flowing a stream of water to and from said charge of powder while periodically changing the point of ingress of said stream to maintain the same at a point relatively near the receding surface of the powder as the powder is exhausted, a predetermined quantity of water being introduced at each point.

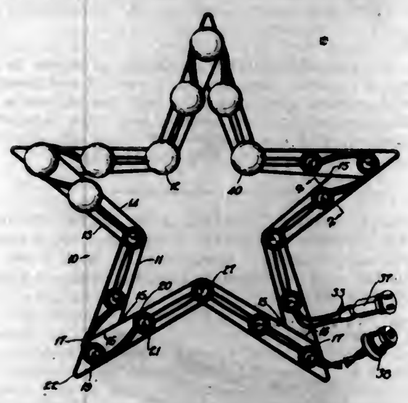
1,869,320. POWER SCRAPER. LEWIS E. YOUNIE, Portland, Oreg., assignor to Electric Steel Foundry Company, Portland, Oreg., a Corporation of Oregon. Filed Apr. 10, 1930. Serial No. 443,177. 11 Claims. (Cl. 37—147.)



2. A power scraper having side walls and a connecting rear wall, said scraper being open at its bottom; and a dividing plate extending from the rear wall between the side walls and dividing the scraper into two compartments.

4. A power scraper having side walls and a connecting rear wall, said scraper being open at its bottom; and laterally extending shoes projecting inwardly from the lower edges of the side walls, said shoes terminating in forwardly and laterally outwardly extending points at their forward ends.

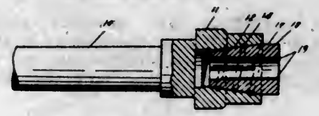
1,869,321. DECORATIVE ILLUMINATING DEVICE. JOSEPH BLOCK, Brooklyn, N. Y., assignor to Noma Electric Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 17, 1929. Serial No. 414,653. 2 Claims. (Cl. 240—10.)



1. A decorative device of the character described comprising a frame formed of a pair of parallel members, rings fixed to and interconnecting said members, and lamp sockets mounted on said rings, said rings being split for tightly gripping said sockets.

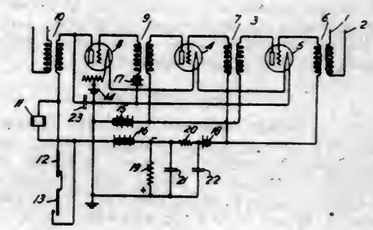
1,869,322. CHUCK. ALBERT A. BUSH, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 28, 1930. Serial No. 432,011. 4 Claims. (Cl. 279—46.)

1. In combination in a chuck, a spindle, a socket fixed at the end of said spindle, said socket having a tapered bore with a half round spiral groove therein, a coiled spring of round wire of a diameter equal to that of the groove received in the spiral groove, and a tapered collet having a half round spiral groove adapted to cooperate with the spring received in the socket, said collet having a



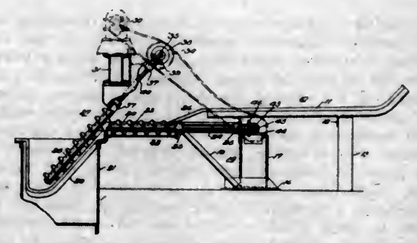
plurality of longitudinal slots therein extending from opposite ends and terminating short of the end of the collet whereby the collet may be radially compressed to clamp on a tool when it is screwed into the socket.

1,869,323. COMMUNICATION SYSTEM. PORTER H. EVANS, Brooklyn, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Sept. 24, 1923, Serial No. 664,432, now Patent No. 1,736,852, and in Germany Aug. 15, 1924. Divided and this application filed Oct. 19, 1929. Serial No. 400,840. Renewed Mar. 25, 1932. 12 Claims. (Cl. 179—171.)



1. In a repeater system, a plurality of space discharge repeaters arranged in tandem, an anode-cathode circuit for one of said repeaters including a resistance, said resistance being included in the grid cathode circuit of a second one of said repeaters for controlling the gain of the second repeater, and means for shunting said resistance element to adjust the time constant of the gain control circuit.

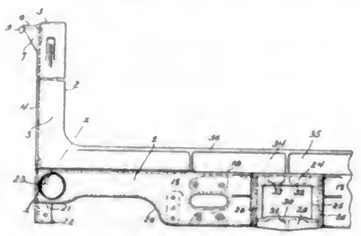
1,869,324. MECHANICAL FEED FOR PIPE GALVANIZING MACHINES. JOHN W. FREE, Aliquippa, Pa., assignor to Jones and Laughlin Steel Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 19, 1929. Serial No. 393,615. 4 Claims. (Cl. 91—12.6.)



1. In a pipe-galvanizing apparatus, the combination with a receiving table for supporting a plurality of pipe lengths, and a horizontal screw conveyor, of a galvanizing bath, guides immersed in said bath, and an inclined

screw conveyor cooperating therewith for receiving pipe lengths from said horizontal conveyor and passing them laterally through said bath while engaged by said guides, and common driving means for said conveyors.

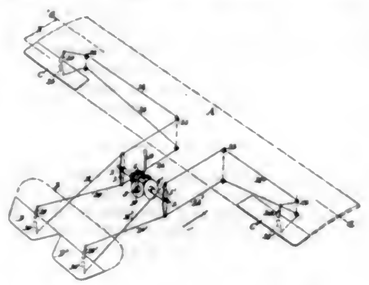
1,869,325. RAILWAY CAR. GEORGE T. JOHNSON, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Nov. 27, 1928. Serial No. 322,284. 25 Claims. (Cl. 105—406.)



1. A car end formed of a substantially U-shaped integral metal casting consisting of a cross bar and corner posts, said posts forming continuations of the cross bar.

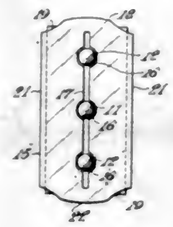
2. A car end formed of a substantially U-shaped metal casting, providing a cross bar and corner posts, each post being angular shaped in cross section and forming an integral continuation of said cross bar.

1,869,326. CONTROL SYSTEM FOR AIRPLANES AND THE LIKE. ISRAEL LUDLOW, Mineola, N. Y., assignor of one-eighth to Arthur C. Fraser, Ridgefield, Conn., one-eighth to Eugene V. Myers, East Orange, N. J., one-eighth to Louis E. Giles, New York, N. Y., and one-eighth to Bryan M. Battey, Ascawana, N. Y. Filed Aug. 19, 1929. Serial No. 386,832. 2 Claims. (Cl. 244—29.)



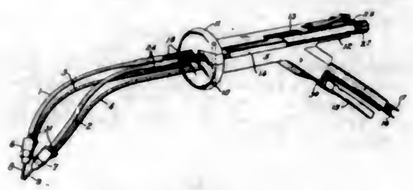
1. In an airplane having a fixed main sustaining surface and a horizontal stabilizing surface to the rear thereof, a movable equilibrium controlling surface toward each end of said sustaining surface and acting at a distance from the vertical transverse plane passing through the center of gravity of the airplane, a movable equilibrium controlling surface on each side of said stabilizing surface, and actuating means adapted when moved in one plane to simultaneously adjust all the said equilibrium controlling surfaces in such manner that each contributes a moment of force tending to cause the airplane to pitch about a transverse axis, said actuating means being adapted, when moved in a plane at right angles to said first-mentioned plane, to oppositely adjust the equilibrium controlling surfaces on one side of the airplane relative to those on the other, in such manner that each contributes a moment of force tending to cause the airplane to roll about its longitudinal axis.

1,869,327. SAFETY RAZOR BLADE. JOSEPH MOLKENTHIN, Jr., Glen Ridge, N. J., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Oct. 14, 1930. Serial No. 488,624. 1 Claim. (Cl. 30—12.)



A safety razor blade adapted to be flexed transversely by the clamping action of a holder and having two outer cutting edge portions separated longitudinally by a slot and connected at their ends by flexing hinges which are located beyond the cutting edge portions.

1,869,328. WELDING TORCH. HARRY W. TOBEY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 27, 1931. Serial No. 540,394. 5 Claims. (Cl. 219—8.)



1. An arc welding torch comprising a handle, a plurality of electrode tubes having downward and inwardly curved portions projecting from said handle, means for feeding electrodes through each of said tubes into arcing engagement with one another, and means for connecting a source of electricity to each of said tubes.

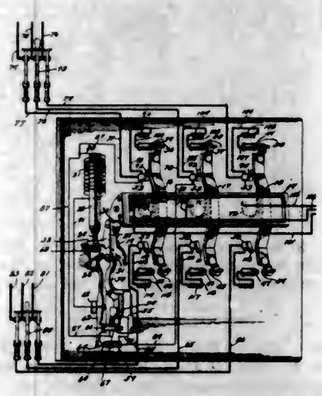
1,869,329. FRAME SYSTEM FOR SHIPS OF IRON CONSTRUCTION. GUSTAV FRIEDRICH KARL WROBBEL, Hamburg, Germany. Filed June 17, 1926, Serial No. 116,743, and in Germany June 20, 1925. 2 Claims. (Cl. 114—79.)



1. An iron ship construction comprising a frame work constituting the bottom, the sides, and the deck of the ship, said frame work consisting of a lattice-girder-system of diagonal braces adapted to withstand by itself the stresses, especially the torsional stresses.

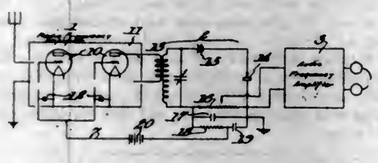
1,869,330. EMERGENCY SWITCH. CARL J. ANDERSON, Chicago, Ill. Filed Dec. 21, 1928. Serial No. 327,546. 11 Claims. (Cl. 171—97.)

2. In an apparatus of the class described, a magnet serving to connect a load to a source of power, a second magnet serving to lock the connection made and to break the circuit for the connecting magnet, automatically operating means for connecting the load to a second source upon a failure of the first source and for connecting the first magnet to the failed source, and automatically operating means for disconnecting the second source upon a revival of the first source.



5. In a device of the class described, an electric circuit, a magnet connected to said circuit and serving to move a body in one direction against a retracting force, a second magnet having an independent connection to the same circuit, said second magnet when energized serving to lock the moved body in the moved position and to break the circuit connection for the first magnet, and means effective upon the de-energizing of the second magnet to remake the connection broken for the first magnet.

1,869,331. AUTOMATIC CONTROL FOR AUDION AMPLIFIERS. STUART BALLANTINE, Mountain Lakes, N. J., assignor to Boonton Research Corporation, Boonton, N. J., a Corporation of New Jersey. Filed Nov. 5, 1927. Serial No. 231,273. 12 Claims. (Cl. 250—20.)

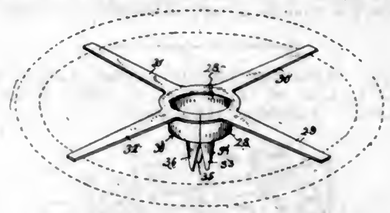


1. An audion amplifier including an audion for signal wave amplification, an output circuit, and means suppressing fluctuations in said output circuit due to variations in the strength of an incoming signal, said means comprising a rectifier for incoming signal energy, and means for impressing upon the grid of said audion a direct current bias voltage derived from said rectifier, said rectifier being of the type having an approximately linear relation between direct current output and radio frequency input above a critical input voltage.

1,869,332. METHOD OF MAKING STEERING WHEELS. BUDD BRONSON and EDWARD R. MARBACH, Cleveland, Ohio, assignors to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 18, 1929. Serial No. 407,988. 12 Claims. (Cl. 29—159.)

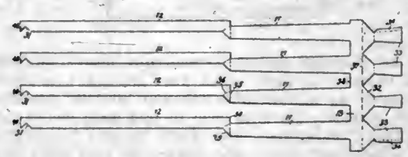
1. A sheet metal blank for a steering wheel spider, comprising a transverse band, relatively long projections from one edge of said band adapted to form spokes of the wheel, and relatively short projections from the other edge of said band adapted to form the hub of the wheel.

6. In a method of forming a spider for a steering wheel, steps which consist in forming from a single piece of sheet metal a band portion with hub portions projecting



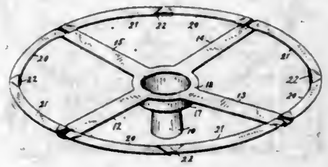
from one side thereof, offsetting said hub portions with respect to said band, and rolling the stamped blank into the form of a tube.

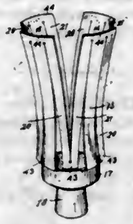
1,869,333. METHOD OF MAKING STEERING WHEEL INSERTS. BUDD BRONSON and EDWARD R. MARBACH, Cleveland, Ohio, assignors to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 18, 1929. Serial No. 407,984. 19 Claims. (Cl. 29—159.)



1. A blank for forming a steering wheel comprising a plurality of elongated spoke portions and an elongated rim portion integral with each spoke portion, said rim portions being offset with respect to their spoke portions.

1,869,334. METHOD OF MAKING STEERING WHEELS. BUDD BRONSON and EDWARD R. MARBACH, Cleveland, Ohio, assignors to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 18, 1930. Serial No. 436,717. 12 Claims. (Cl. 29—159.)

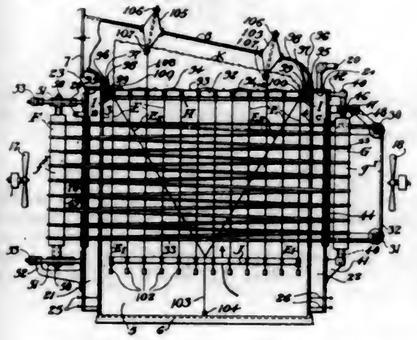




10. The method of forming a sheet metal insert for a steering wheel, which comprises cutting a tube to divide the same into as many portions as there are spokes

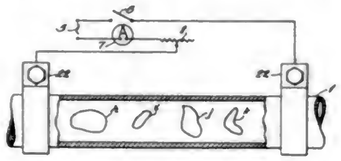
in the finished wheel, further cutting each of said portions to divide the same into spoke portions and rim portions integral with the ends thereof, bending down said spoke portions, and forcing said rim portions outwardly to form a continuous integral element.

1,869,335. ELECTRIC PRECIPITATOR. LEONARD DAY, New York, N. Y. Filed Dec. 13, 1926. Serial No. 154,605. 13 Claims. (Cl. 183—7.)



1. An electrical collector comprising means forming a main chamber through which dust laden gas is adapted to pass in an upward direction and laterally positioned pocket chambers partially open to said main chamber but partitioned therefrom; outer walls for said pocket chambers completing an air-tight closure for said main chamber; pendant charging electrodes in said main chamber adapted to be charged electrically with a potential difference from the walls of said chamber; movable collector screens occupying substantially vertical planes and movable laterally through the outer walls of said chambers and conductively connected with the walls of all said chambers.

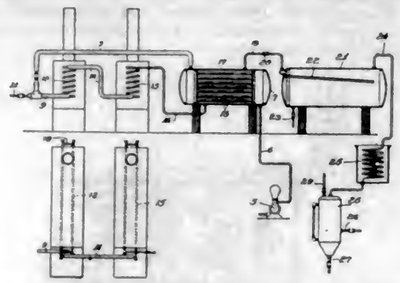
1,869,336. THERMAL METHOD OF TESTING METALLIC BODIES. ALFRED V. DE FOREST, Southport, Conn. Filed May 29, 1930. Serial No. 456,909. 23 Claims. (Cl. 175—183.)



1. The method of testing the homogeneity of a metallic object, which consists in coating a surface of said object with a fusible material, passing an electric current through said object, and noting variations in the state of such fusible material as the result of temperature changes.

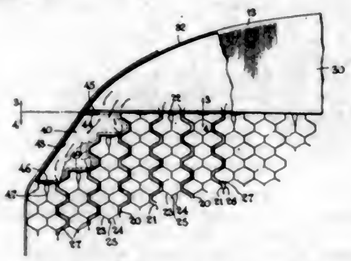
1,869,337. ART OF CONVERTING OIL. FRANK A. HOWARD and NATHANIEL E. LOOMIS, Elizabeth, N. J., assignors, by mesne assignments, to Gasoline Products Company, Inc., Newark, N. J., a Corporation of Delaware. Filed May 23, 1921, Serial No. 471,736, and in the Netherlands Jan. 12, 1921. 12 Claims. (Cl. 196—51.)

1. In the process of effecting the pyrogenetic conversion of a heavy hydrocarbon oil, continuously moving a body of said oil in succession, first through a heating zone in which the oil is raised rapidly to a temperature at which cracking takes place at a substantial rate, and thereupon, with undiminished velocity and without substantial separation of vapors through and out of a zone,



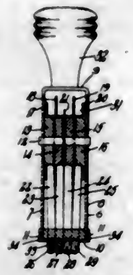
in which it is heated slowly to maintain its cracking temperature while maintaining pressure on the oil sufficient to maintain it substantially in the liquid phase.

1,869,338. RADIATOR CORNER CONSTRUCTION. AUGUST F. IHDE, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Filed Mar. 13, 1930. Serial No. 435,558. 6 Claims. (Cl. 257—125.)



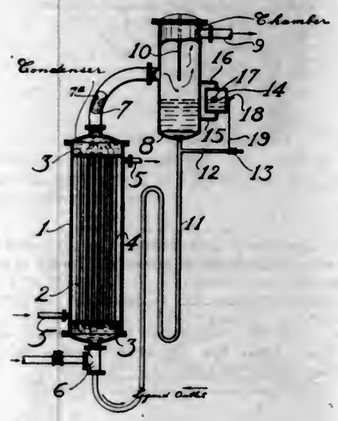
1. A radiator comprising a honeycomb structure including a plurality of water passages, a tank in direct communication with certain of said passages, and spaced from others of said passages, said spaced passages presenting an irregular contour, and a hollow shell interposed between said tank and said spaced passages to provide communication between said tank and said spaced passages and formed with marginal portions continuously engaging said tank on one side and said irregular contour on the other.

1,869,339. STAMP. JOSEPH LEVY, Brookline, Mass. Filed Sept. 29, 1930. Serial No. 485,002. 3 Claims. (Cl. 101—111.)



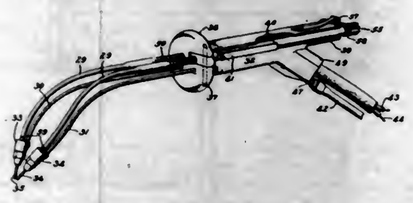
1. A stamp having, in combination, a frame, a plurality of pulleys positioned adjacent to each other and rotatably mounted upon said frame, a flange upon each of said pulleys, said flanges being of different diameters and corrugated on the face thereof from which its respective pulley projects, an endless band with characters thereon mounted on each of said pulleys respectively, and a guide for said bands parallel to and spaced apart from said pulleys.

1,869,340. METHOD AND APPARATUS FOR HEAT TRANSFER. MATTHEW D. MANN, Jr., Roselle, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Dec. 17, 1929. Serial No. 414,621. 11 Claims. (Cl. 257—51.)



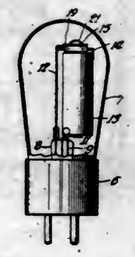
1. The method of effecting heat transfer which comprises bubbling gas through liquid of a different temperature than the gas and disposed in a plurality of communicating columns whereby circulation of the liquid is effected, and returning the liquid to substantially its initial temperature.

1,869,341. WELDING TORCH. HAROLD V. MAY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 27, 1931. Serial No. 540,393. 9 Claims. (Cl. 219—8.)



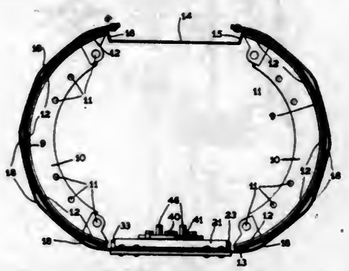
1. An arc welding torch comprising a plurality of curved convergent electrode tubes, means for pivoting one of said tubes for movement relative to another of said tubes, means for feeding electrodes through said tubes into arcing engagement with one another, means for connecting a source of electricity to each of said tubes, means constituting a handle for said torch for electrically insulating adjacent portions of said tubes, and means for biasing said tubes relative to one another to a predetermined position.

1,869,342. PHOTO-ELECTRIC TUBE. ARCHIE J. MCMASTER and CHARLES E. PARSON, Chicago, Ill., assignors to G-M Laboratories, Inc., Chicago, Ill., a Corporation of Illinois. Filed June 14, 1930. Serial No. 461,119. 8 Claims. (Cl. 250—27.5.)



1. A method of producing a light sensitive surface on the cathode of a photoelectric tube which consists of forming a solution of an oxygen compound, applying the solution to the cathode, applying heat to evaporate the solvent, and allowing an oxide to remain on the cathode, and depositing an alkali metal upon said oxide.

1,869,343. BRAKE SHOE RELINER. ELMER E. PARKER, Grand Rapids, Mich. Filed July 17, 1931. Serial No. 551,323. 8 Claims. (Cl. 29—84.)

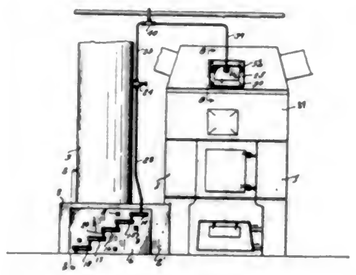


1. In combination, a flexible band of metal having a straight portion and curved portion at either end thereof, said curved portions being adapted to receive brake shoes therein, said brake shoes having linings at their outer faces but said lining being not fastened thereto, abutment means at the ends of the band and expanding means fastened to the straight portion of the band, said expanding means consisting of a cam disc revolubly mounted upon said straight portion and slides actuated by said cam discs, said slides engaging against the adjacent ends of the brake shoes.

1,869,344. COMBINATION AIR CLEANER AND HUMIDIFIER. WILLIAM F. SCHONBEIN, Portland, Oreg. Filed Dec. 23, 1929. Serial No. 416,167. 5 Claims. (Cl. 261—114.)

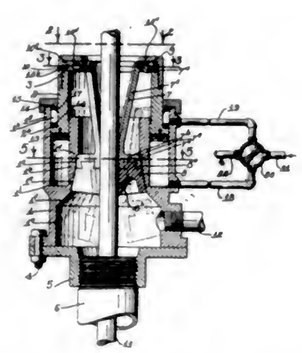
1. A device of the character set forth, comprising a pair of spaced side plates, said plates having a plurality

of corresponding apertures, elongated pans projecting through corresponding apertures, said apertures being so designed that said pans are arranged in stepped formation



in horizontal planes one above the other, and said pans being constructed to allow a continuous flow of water from one to the other commencing with the uppermost.

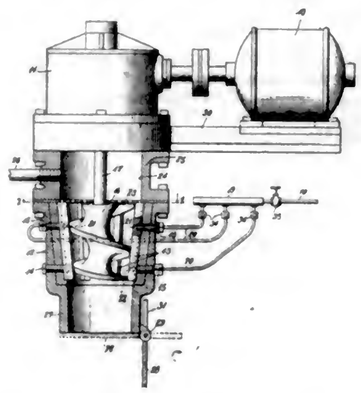
1,869,345. WELL SEALING HEAD. MAX L. VALLENDOR and PAUL C. FLY, Ventura, Calif. Filed Mar. 13, 1930. Serial No. 435,473. 18 Claims. (Cl. 166—15.)



1. In a means of the class described, the combination, of an enclosure to be mounted at the upper end of a well casing, the upper portion of the enclosure being of smaller diameter than the lower portion, a support surrounding the upper portion of the enclosure and movable vertically thereon, sealing members carried by the support and projecting into the enclosure and sealing portions on the lower ends of the members located normally in the enlarged lower end of the enclosure and adapted to be forced into the upper smaller portion of the enclosure when said support is drawn upwardly therefrom.

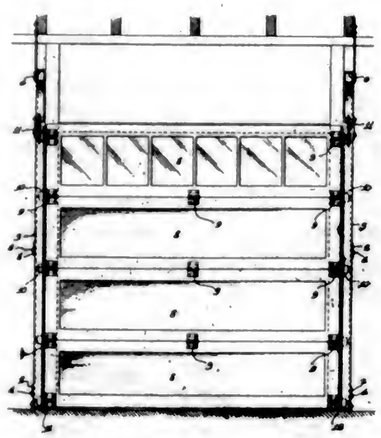
1,869,346. APPARATUS FOR CONTINUOUS PRODUCTION OF CARBON DIOXIDE ICE. WILLIAM T. COMER, Atlanta, Ga., assignor to Crystal Carbonic Laboratory, Atlanta, Ga., a Corporation of Georgia. Filed Dec. 28, 1929. Serial No. 417,153. 5 Claims. (Cl. 62—121.)

1. Apparatus for producing carbon dioxide ice which comprises, in combination, a chamber inwardly tapering toward an outlet, alternate elongated projections and depressions upon the inner surface of said chamber substantially parallel with the axis thereof, a jet for introduction of liquid carbon dioxide into the chamber opening through the crest of one of said projections, screw means



revolubly mounted in said chamber the edge of the thread thereof revolving closely adjacent the crests of said projections.

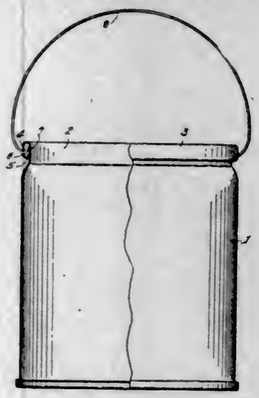
1,869,347. DOOR. CLARENCE G. JOHNSON, Hartford City, Ind. Filed Apr. 12, 1928. Serial No. 269,473. 20 Claims. (Cl. 20—20.)



1. In a door structure, a door frame, a door slidable over said frame, track sections adapted to guide said door and slidably supported by said frame for movement to and from said frame, and means operable by said door for moving said sections towards said frame when the door comes to closed position.
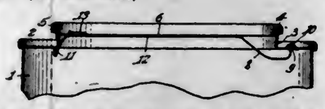
1,869,348. SHEET METAL CONTAINER. CHARLES H. ROLLASON, Wheeling, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed June 14, 1930. Serial No. 461,087. 6 Claims. (Cl. 220—91.)

5. In a receptacle, a hollow terminal rim roll having its outer wall provided with diametrically opposite eyes, and a bail having terminal hooks directed inwardly through said eyes and movable within said hollow rim roll,



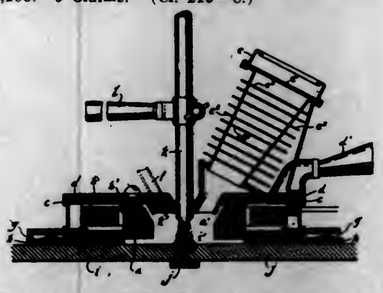
the arrangement being such that the level of fluid in the receptacle may extend above the eyes without danger of leakage through the eyes.

1,869,349. SHEET METAL CONTAINER. CHARLES H. ROLLASON, Wheeling, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed Oct. 3, 1930. Serial No. 486,078. 6 Claims. (Cl. 220—35.)



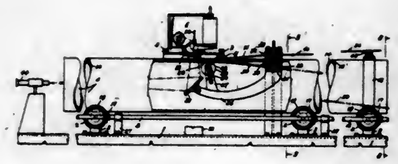
1. A sheet metal container comprising a body having a head, said head being provided with an opening defined by a neck of flange form, a cover for said opening having a seating flange, a resilient member mounted on the under side of and wholly supported by said cover, said member having an end portion thereof extended into underlying relation to an adjacent portion of said head and having an angularly disposed terminal portion disposed in underlying seated engagement with said head, said member constituting a hinge-like connection between said cover and said head and being adapted to exert a yielding force tending to retain said cover against movement from either its seated or its upright position.

1,869,350. METHOD OF AND APPARATUS FOR WELDING. JOHN C. LINCOLN, Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 20, 1928. Serial No. 307,105. 6 Claims. (Cl. 219—8.)



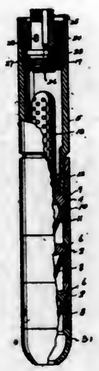
1. In apparatus of the class described, the combination with the arc-forming electrode, of a solenoid wherein the extremity of the electrode extends, and centering means for positioning the electrode to produce its arc approximately in the axis of the solenoid, substantially as set forth.

1,869,351. METHOD AND APPARATUS FOR MAKING PIPE. JOHN C. LINCOLN, Cleveland, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 25, 1928. Serial No. 256,840. 13 Claims. (Cl. 219—6.)



1. In apparatus for welding pipe, a welding unit, means for squeezing the edges of the seam of the pipe to be welded together at said unit, an outer guide in front of said unit outside said pipe for an outer welding strip, an inner guide inside said pipe for an inner welding strip, a mirror within said pipe at said unit, and means for moving said pipe relatively to said unit, guides and mirror.

1,869,352. WELL BOTTOM. GEORGE BENJAMINE SCHNEIDER and ELSWORTH STROWBRIDGE NOWERY, Beaumont, Tex. Filed July 5, 1929. Serial No. 376,198. 1 Claim. (Cl. 166—20.)



In a well bottom the combination with a casing of an annular bushing fixed therein and having internal threads and an upwardly flared seat, a plug having threads on its lower end adapted to intermesh with the threads of said bushing said plug being shaped to fit closely against said seat, the upper end of the plug being tubular and having a wall port, and also having external threads pitched reversely with respect to the lower end threads.

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LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Accurate Parts Manufacturing Company, The, Cleveland, Ohio. Clutch plates and discs. Serial Nos. 326,601–2; Aug. 2. Class 23.

Aitken and McDonald Company, Beaumont, Tex. Gasoline. Serial No. 325 382; Aug. 2. Class 15.

American Bemberg Corporation, New York, N. Y. Thread and yarn. Serial No. 328,205; Aug. 2. Class 43.

American Bemberg Corporation, New York, N. Y. Thread and yarn. Serial No. 328,207; Aug. 2. Class 43.

American Oil Company, The, Baltimore, Md. Oils, greases and gasoline. Serial No. 327,964; Aug. 2. Class 15.

Archers Company, The, Pineburst, N. C. Bows, arrows, quivers, etc. Serial No. 327,623; Aug. 2. Class 22.

Ayer Company, The, Lowell, Mass. Irradiated medicated salve. Serial No. 326,572; Aug. 2. Class 6.

Banister, James A., Company, Inc., Newark, N. J. Shoes. Serial No. 321,742; Aug. 2. Class 39.

Bearman, S., Shoe Company, St. Louis, Mo. Leather shoes and boots. Serial No. 327,574; Aug. 2. Class 39.

Biggs, John L., Chicago, Ill. Electrical cooking devices. Serial No. 323,120; Aug. 2. Class 21.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 315,781; Aug. 2. Class 42.

Boston Gear Works, Inc., North Quincy, Mass. Chains. Serial No. 327,726; Aug. 2. Class 13.

Bruckmann Co., The, Cincinnati, Ohio. Malt beverage. Serial No. 326,933; Aug. 2. Class 48.

Brunswick-Balke-Collender Company, The, doing business as Phoenix Slate Company, Wilmington, Del., and Chicago, Ill. Construction materials. Serial No. 327,040; Aug. 2. Class 12.

Burton Brothers & Co. Inc., New York, N. Y. Cotton piece goods. Serial No. 328,300; Aug. 2. Class 42.

Crinoline Candies, Fort Wayne, Ind. Candies. Serial No. 327,133; Aug. 2. Class 46.

Crosley Radio Corporation, The, Cincinnati, Ohio. Electrically operated sadirons. Serial No. 315,633; Aug. 2. Class 21.

D. C. A. Drug Stores Inc., Portland, Oreg. Antiseptic, deodorant, and prophylactic. Serial No. 327,626; Aug. 2. Class 6.

Daché, Lilly, New York, N. Y. Ladies' hats. Serial No. 323,191; Aug. 2. Class 39.

Daily Graphic, Inc., New York, N. Y. Newspaper column. Serial No. 327,389; Aug. 2. Class 38.

Damrow, George E., Brooklyn, N. Y. Paper cartons. Serial No. 326,178; Aug. 2. Class 2.

Diamond "E" Orchards. (See Ewens Bros.)

Drake, Harrington E., Newark, N. J. Coin-controlled ball projecting amusement devices. Serial No. 327,215; Aug. 2. Class 22.

Electric Auto-Lite Company, The, Toledo, Ohio. Storage batteries. Serial No. 299,653; Aug. 2. Class 21.

Electric Mfg. Co., The, San Francisco, Calif. Electric hair dryers. Serial No. 328,270; Aug. 2. Class 44.

Estate Stove Company, The, Hamilton, Ohio. Heating apparatus or appliances. Serial No. 316,089; Aug. 2. Class 34.

Ewens Bros., doing business as Diamond "E" Orchards, Sutherlin, Oreg. Fresh fruits. Serial No. 323,653; Aug. 2. Class 46.

F. & M. Importing Co. Inc., Los Angeles, Calif. Canned fish, canned fruits, etc. Serial No. 317,032; Aug. 2. Class 46.

Fairbanks, E. and T., and Company, St. Johnsbury, Vt. Weighing machines and parts thereof. Serial No. 323,214; Aug. 2. Class 26.

Fake, Warren H., Ephrata Borough, Pa. Hosiery and underwear. Serial No. 327,760; Aug. 2. Class 39.

Felco Products & Mfg., Co. (See Feldman, Jack.)

Feldman, Jack, doing business as Felco Products & Mfg. Co., New York, N. Y. Liquid wax. Serial No. 326,313; Aug. 2. Class 16.

Firestone Tire & Rubber Company, The, Akron, Ohio. Brake testing machines. Serial No. 328,091; Aug. 2. Class 26.

Firestone Tire & Rubber Company, Akron, Ohio. Brake testing machines. Serial No. 328,093; Aug. 2. Class 26.

Fleischer, I., & Sons, Cincinnati, Ohio. Thread. Serial No. 315,197; Aug. 2. Class 48.

Foster, Charles M., Dayton, Ohio. Ladies' shoes. Serial No. 325,202; Aug. 2. Class 39.

Friendly Shoe Company, Milford, Mass. Men's shoes. Serial No. 327,275; Aug. 2. Class 39.

General Electric Company, Schenectady, N. Y. Charts for recording instruments. Serial No. 328,082; Aug. 2. Class 26.

Glazo Company, Inc., The, New York, N. Y. Nail polish and enamel, etc. Serial No. 324,285; Aug. 2. Class 6.

Golden West Brewing Company, Oakland, Calif. Malt beverage packed in cartons. Serial No. 322,213; Aug. 2. Class 48.

Goody-Goody Manufacturing Company. (See Grigsby, Harry E.)

Gottschalk, John W., Mfg. Co., doing business as Metal Sponge Sales Corporation, Philadelphia, Pa. Abradants consisting of a metallic wire. Serial No. 326,012; Aug. 2. Class 4.

Grigsby, Harry E., doing business as Goody-Goody Manufacturing Company, Oklahoma City, Okla. Maltless fruit juices. Serial No. 325,909; Aug. 2. Class 45.

H & W Company, Inc., The, Newark, N. J. Bandeaus, bandettes, and corsettes. Serial No. 327,631; Aug. 2. Class 39.

Hardwick & Magee Company, Philadelphia, Pa. Textile carpets. Serial No. 328,305; Aug. 2. Class 42.

Hatch, Osborne F., doing business as Lee Products Co., Lee, Mass. Cleanser for general household and laundry uses. Serial No. 327,657; Aug. 2. Class 4.

Hecht Co., The, doing business as The Hub, Washington, D. C., and Baltimore, Md. Women's apparel. Serial No. 327,313; Aug. 2. Class 39.

Hecht, George J., New York, N. Y. Monthly publication. Serial No. 327,873; Aug. 2. Class 38.

Hickok Oil Corporation, Toledo, Ohio. Batteries, cables for electric circuits, etc. Serial No. 326,899; Aug. 2. Class 21.

Histomap, Inc., Chicago, Ill. Charts. Serial No. 311,189; Aug. 2. Class 38.

Holliston Mills, Inc., The, Norwood, Mass. Cotton piece goods. Serial No. 327,439; Aug. 2. Class 42.

Horton Manufacturing Company, The, Bristol, Conn. Fishing lines. Serial No. 328,273; Aug. 2. Class 22.

Hub, The. (See Hecht Co., The.)

Keystone Steel & Wire Company, Peoria, (South Bartonville), Ill. Fence stays. Serial No. 327,695; Aug. 2. Class 13.

Kirby, Block & Fischer, Inc., New York, N. Y. Textile diapers. Serial No. 327,910; Aug. 2. Class 42.

Kirchbach'sche Werke Kirchbach & Co., Coswig, Germany. Brake and clutch bands, discs, cones, etc. Serial No. 325,431; Aug. 2. Class 35.

Klein, Milton H., doing business as Tipona Company, Cleveland, Ohio. Medicinal preparation for reducing weight. Serial No. 327,591; Aug. 2. Class 6.

Leather Equipment Company, Inc., Chicago, Ill. Toggles and frames for use in stretching hides and leather. Serial No. 327,800; Aug. 2. Class 23.

Lee Products Co. (See Hatch, Osborne F.)

Levine, H., doing business as H. Levine Cooperage, Los Angeles, Calif. Barrels and kegs. Serial No. 324,292; Aug. 2. Class 2.

Mackenzie, Leon R., Des Moines, Iowa. Soap. Serial No. 328,131; Aug. 2. Class 4.

Mayflower Mills, Fort Wayne, Ind. Pancake flour. Serial No. 328,336; Aug. 2. Class 46.

Metal Sponge Sales Corporation. (See Gottschalk, John W.)

Micro Machine Company, Bettendorf, Iowa. Pistons and packing rings. Serial No. 326,019; Aug. 2. Class 35.

Morten Milling Company, Dallas, Tex. Biscuit flour. Serial No. 328,031; Aug. 2. Class 46.

Munsingwear Corporation, The, Minneapolis, Minn. Swim suits or bathing suits. Serial No. 328,366; Aug. 2. Class 39.

Naugatuck Chemical Company, The, New York, N. Y. Rubber adhesive. Serial No. 327,883; Aug. 2. Class 5.

Norge Corporation, Detroit, Mich. Refrigerator units. Serial No. 326,757; Aug. 2. Class 31.

Nu-Know-U-Well Medicine Company. (See Rice, Edward E.)

Ohio Farm Bureau Service Company, The, Columbus, Ohio. Dairy feeds. Serial No. 319,729; Aug. 2. Class 46.

Ottawa Products Company, Toledo, Ohio. Novelty article containing an element capable for cleaning glass. Serial No. 326,492; Aug. 2. Class 4.

Pennzoil Company, The, Oil City, Pa. House organ. Serial No. 328,369; Aug. 2. Class 38.

Phoenix Slate Company. (See Brunswick-Balke-Collender Company.)

Planters Edible Oil Company, Suffolk, Va., and Wilkes-Barre, Pa. Vegetable oil shortening compound. Serial No. 327,765; Aug. 2. Class 46.

Planters Edible Oil Company, Suffolk, Va., and Wilkes-Barre, Pa. Vegetable oil shortening compound. Serial No. 327,767; Aug. 2. Class 46.

Planters Nut & Chocolate Co., Wilkes-Barre, Pa. Crushed peanut confection. Serial No. 327,414; Aug. 2. Class 46.

Price Battery Corporation, Philadelphia, Pa. Storage batteries. Serial No. 314,248; Aug. 2. Class 21.

Providence Fittings Company, Inc., Lockport, N. Y. Pipe fittings. Serial No. 327,706; Aug. 2. Class 13.

Pure Cheese Corporation, Chicago, Ill. Pasteurized cheese. Serial No. 322,710; Aug. 2. Class 46.

Rafsky, Alex, New York, N. Y. Razor blades. Serial No. 327,663; Aug. 2. Class 23.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Ray Fuel Company, Detroit, Mich. Charcoal. Serial No. 327,945; Aug. 2. Class 1.
Red Head Products Co. (See Sharp, Joseph A.)
Rice, Edward E., doing business as Nu-Know-U-Well Medicine Company, Elmira, N. Y. Liniment. Serial No. 318,115; Aug. 2. Class 6.
Richardson, Davenport B., New York, N. Y. Protectors in the shape of half-overalls. Serial No. 327,476; Aug. 2. Class 39.
Royal Canadian Distributing Company, Columbus, Ohio. Malt syrup. Serial No. 325,806; Aug. 2. Class 46.
St. Louis Basket & Box Corporation, St. Louis, Mo. Fiberboard boxes. Serial No. 327,775; Aug. 2. Class 2.
Schuhmann, Ernest E., El Paso, Tex. Photographic prints. Serial No. 328,309; Aug. 2. Class 38.
Selig Company, The, Atlanta, Ga. Liquid wax. Serial No. 327,990; Aug. 2. Class 16.
Sharp, Joseph A., doing business as Red Head Products Co., Cleveland, Ohio. Boiler repair plugs. Serial No. 313,805; Aug. 2. Class 13.
Sims, B., Corporation, New York, N. Y. Women's and children's hats and caps. Serial No. 324,803; Aug. 2. Class 39.
Société Générale Aéronautique, Paris, France. Automobiles, bicycles, tricycles, airplanes, etc. Serial No. 327,032; Aug. 2. Class 19.
Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton thread. Serial Nos. 328,138–9; Aug. 2. Class 43.
Steam Pressing Iron Company, Chicago, Ill. Steam pressing irons. Serial No. 327,809; Aug. 2. Class 24.
Stettner Corporation, New York and Brooklyn, N. Y. Radio cabinets. Serial No. 301,524; Aug. 2. Class 32.
Strauss Stores Corporation, Brooklyn, N. Y. Lubricating oils. Serial No. 328,140; Aug. 2. Class 15.
Sullivan, John J., Norfolk, Va. Sweaters, leather coats, etc. Serial No. 327,376; Aug. 2. Class 39.
Tipona Company. (See Klein, Milton H.)
United Elastic Corporation, Easthampton, Mass. Elastic fabrics. Serial No. 308,143; Aug. 2. Class 42.
U. S. Slicing Machine Company, La Porte, Ind. Meat and bread slicing machines and parts thereof. Serial Nos. 325,351–2; Aug. 2. Class 23.
U. S. Slicing Machine Company, La Porte, Ind. Meat and bread slicing machines and parts thereof. Serial No. 325,355; Aug. 2. Class 23.
Van-Sen, Inc., New York, N. Y. Bandeaux and girdles. Serial No. 327,811; Aug. 2. Class 39.
Venice Maid Company, Vineland, N. J. Spaghetti sauce. Serial No. 327,174; Aug. 2. Class 46.
Vertex Hosiery Mills, Inc., Weissport, Pa. Hosiery. Serial No. 319,711; Aug. 2. Class 39.
Wachusett Shirt Company, Leominster, Mass. Dress and negligee shirts. Serial No. 327,490; Aug. 2. Class 39.
Wagner, H., & Adler Co., New York, N. Y. Billiard cloth. Serial Nos. 327,925–7; Aug. 2. Class 42.
Waldes Koh-I-Noor, Inc., Long Island City, N. Y. Slide fasteners. Serial No. 327,327; Aug. 2. Class 13.
Wolverine-Empire Refining Company, Wilmington, Del., and New York, N. Y. Lubricating oils. Serial No. 325,963; Aug. 2. Class 15.
Wrigley, Wm., jr. Company, Chicago, Ill. Chewing gum. Serial No. 325,540; Aug. 2. Class 46.
York Refrigerator Company, York, Pa. Refrigerator display cases, etc. Serial No. 327,642; Aug. 2. Class 31.
Youngblood, William H., Santa Rosa, Tex. Grapefruit juice, grapefruit extract, etc. Serial No. 316,065; Aug. 2. Class 45.
Zotos Corporation, New York, N. Y. Hair waving pads. Serial No. 328,111; Aug. 2. Class 44.

LIST OF REGISTRANTS OF TRADE-MARKS

Ackerman, J. R., Corporation, Philadelphia, Pa. Electrical water heaters. 296,325; Aug. 2; Serial No. 325,545; published May 17, 1932. Class 21.
Adams, S. W. & Co., Philadelphia, Pa. Japan drier and varnish. 296,218; Aug. 2; Serial No. 324,418; published May 17, 1932. Class 16.
Adrema Maschinenbauges, m. b. H., Berlin, Germany. Addressing machines, printing machines, impressing machines, and parts. 296,270; Aug. 2; Serial No. 318,498; published May 3, 1932. Class 23.
Alladin Company, The. (See North American Construction Company, assignor.)
Allis-Chalmers Manufacturing Company, Milwaukee and West Allis, Wis. Power transmission machinery. 296,364; Aug. 2; Serial No. 325,934; published May 17, 1932. Class 23.
Allison, J. H., doing business as Allison's Drug Store, Wichita Falls, Tex. Perfume, rouge, skin cream, etc. 296,286; Aug. 2; Serial No. 324,277; published May 10, 1932. Class 6.
Ambrosia Chocolate Company to Ambrosia Chocolate Company, Milwaukee, Wis., successor. Chocolate confection. 89,084; renewed Nov. 12, 1932.
American Bemberg Corporation, New York, N. Y. Fabrics. 296,214; Aug. 2; Serial No. 324,978; published May 17, 1932. Class 42.
American Brake Materials Corporation, New York, N. Y. and Detroit, Mich. Composition frictional elements for brakes. 296,390; Aug. 2. Class 35.
American Crayon Company, The, Sandusky, Ohio. Paste. 296,302; Aug. 2; Serial No. 325,311; published May 17, 1932. Class 5.
American Glanzstoff Corporation, New York, N. Y. Threads and yarns. 296,372; Aug. 2; Serial No. 325,671; published May 17, 1932. Class 43.
American Slicing Machine Company, Chicago, Ill. Slicing machines. 296,340; Aug. 2; Serial No. 325,031; published May 3, 1932. Class 23.
Arden, Elizabeth, Inc., New York, N. Y. Bath salts. 296,387–8; Aug. 2. Class 6.
Aronoff, Morris, doing business as Sinapine Prod. Co., Hoboken, N. J. Preparation for the treatment of headaches, etc. 296,383; Aug. 2. Class 6.
Arrow-Hart & Hegeman Electric Company, The, Hartford, Conn. Sockets, plugs, receptacles, etc. 296,254; Aug. 2; Serial No. 324,502; published May 10, 1932. Class 21.
Associated Farmers' Exchanges, Inc., Worcester, Mass. Food for stock and poultry. 296,395; Aug. 2. Class 46.
Asta Aktiengesellschaft, Brackwede, Germany. Preparations for sleeplessness, exhaustion, etc. 296,280; Aug. 2; Serial No. 323,736; published May 10, 1932. Class 6.
Atlantic Pharmacal Company, Boston, Mass. Insecticides. 296,229; Aug. 2; Serial No. 324,771; published May 17, 1932. Class 6.
Atlas Supply Company, Newark, N. J. Anti-freeze, cleaning, sealing compound and rust preventative. 296,241; Aug. 2; Serial No. 324,942; published May 10, 1932. Class 6.
Atlas Supply Company, Newark, N. J. Spark plugs, flashlights, flashlight batteries, etc. 296,265; Aug. 2; Serial No. 324,944; published May 10, 1932. Class 21.
Aviator Spark Plug Co. (See Healey, James E.)
Auto-Prime Pump Company, The, Cleveland, Ohio, assignor to Westco Pump Corporation, Davenport, Iowa. Pumps and parts thereof. 296,203; Aug. 2; Serial No. 313,025; published May 10, 1932. Class 23.
Baltimore Radio Corporation, New York, N. Y. Radio receiving sets and parts. 296,249; Aug. 2; Serial No. 321,794; published May 3, 1932. Class 21.
Beaton, Daniel P., doing business as Parachute Confection Company, Winnipeg, Manitoba, Canada. Candy. 296,245; Aug. 2; Serial No. 317,823; published May 17, 1932. Class 46.
Berndt & Co., Baltimore, Md. South American tea (Ilex Paraguayensis). 88,832; renewed Oct. 29, 1932.
Bernheimer, Jacob S., & Bro., New York, N. Y. Cotton piece goods. 89,088; renewed Nov. 12, 1932. Class 42.
Best Electric Corporation, New York, N. Y. Electric batteries. 296,248; Aug. 2; Serial No. 319,856; published May 17, 1932. Class 21.
Bigelow, Doane, Mount Washington, Ohio. Electric lamp bulbs. 296,260; Aug. 2; Serial No. 322,479; published May 10, 1932. Class 21.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 296,310; Aug. 2; Serial No. 326,047; published May 17, 1932. Class 42.
Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Chemical substances. 296,237; Aug. 2; Serial No. 324,872; published May 10, 1932. Class 6.
Booth, John S., Dallas, Tex. Refrigeration units. 296,273; Aug. 2; Serial No. 320,568; published May 17, 1932. Class 31.
Bosch, Robert, Aktiengesellschaft, Stuttgart, Germany. Magneto-electric ignition systems. 296,379; Aug. 2. Class 21.
Brennerei und Presshefe-Fabrik Tornesch Gesellschaft mit beschrankter Haftung, Tornesch, Germany. Varnishes, shellac and lacquers, etc. 296,275; Aug. 2; Serial No. 321,746; published May 17, 1932. Class 16.
British American Razors Limited, Toronto, Ontario, Canada. Razors and razor blades. 296,201; Aug. 2; Serial No. 312,543; published May 3, 1932. Class 23.
Brown, R. J., Company, The, St. Louis, Mo. Oils, greases, kerosene, and gasoline. 296,342; Aug. 2; Serial No. 325,058; published May 3, 1932. Class 15.
Browne, E. T., Drug Co. Inc., New York, N. Y. Soap. 296,319; Aug. 2; Serial No. 325,868; published May 17, 1932. Class 4.
Brundage Bros. Co., The, Toledo, Ohio. Insecticide. 296,345; Aug. 2; Serial No. 325,086; published May 17, 1932. Class 6.
Brunswick Tablet Co. (See Colvin, George A., assignor.)
Buhach Producing and Manufacturing Company, Stockton, Calif. Insect-powder. 88,055; renewed Aug. 27, 1932.

Bullen, Joseph W., doing business as The Bullen Chemical Company, Fulcroft, Pa. Cleanser. 296,324; Aug. 2; Serial No. 325,560; published May 17, 1932. Class 4.
Burkhardt, George F., doing business as The Pylo Co., Hazleton, Pa. Ointment. 296,226; Aug. 2; Serial No. 323,388; published May 17, 1932. Class 6.
Calafo Company, Los Angeles, Calif. Medicinal compound. 296,234; Aug. 2; Serial No. 324,818; published May 3, 1932. Class 6.
Cando Corporation, The, Cambridge, Mass. Deodorizers. 296,394; Aug. 2. Class 6.
Cattaraugus Cutlery Company, Little Valley, N. Y. Pocket knife. 296,295; Aug. 2; Serial No. 322,927; published May 10, 1932. Class 23.
Celanese Corporation of America, New York, N. Y. Fabrics. 296,323; Aug. 2; Serial No. 325,745; published May 17, 1932. Class 42.
Charter Oak Citrus Association, Charter Oak, Calif. Oranges. 86,880; renewed June 11, 1932.
Chemisch-Pharmazeutische A.-G. Bad-Homburg Werk Frankfurt A. M., Frankfort-on-the-Main, Germany. Hair shampoo. 296,281; Aug. 2; Serial No. 323,740; published May 3, 1932. Class 6.
Chemisch-Pharmazeutische A.-G. Bad-Homburg, Bad Homburg vor der Hohe, Germany. Cream for the skin. 296,289; Aug. 2; Serial No. 323,739; published May 3, 1932. Class 6.
Collins, W. P., & Co., assignor to W. P. Collins Oil Company Incorporated, Chicago, Ill. Lubricating oils and greases. 83,143; renewed Aug. 22, 1931.
Colvin, George A., assignor to Brunswick Tablet Co., Chicago, Ill. Tonic laxative. 88,062; renewed Aug. 27, 1932.
Compagnie Francaise des Marques et Produits Charles Henry, Paris, France. Pharmaceutical, antiseptic, etc. product. 296,211; Aug. 2; Serial No. 316,694; published May 17, 1932. Class 6.
Compagnie Francaise des Marques et Produits Charles Henry, Paris, France. Pharmaceutical product. 296,212; Aug. 2; Serial No. 316,695; published May 17, 1932. Class 6.
Compagnie Francaise des Marques et Produits Charles Henry, Paris, France. Pharmaceutical antiseptic product. 296,213; Aug. 2; Serial No. 316,696; published May 17, 1932. Class 6.
Cooper Products Corporation, New York, N. Y. Razor blades. 296,231; Aug. 2; Serial No. 324,780; published May 3, 1932. Class 23.
Country Gentleman Products Co. (See Stoneman, William H.)
County Chemical Company Limited, The, Birmingham, England. Hair cream. 296,391; Aug. 2; Class 6.
Dabrowski, Frank, doing business as Tip-Top Laboratories, Rochester, N. Y. Laxative medicine. 296,235; Aug. 2; Serial No. 324,839; published May 3, 1932. Class 6.
Daroff, H., & Sons, Inc., Philadelphia, Pa. Outer suits. 296,320; Aug. 2; Serial No. 325,780; published May 17, 1932. Class 39.
Defiance Spark Plugs, Inc., Toledo, Ohio. Cables for electrical systems. 296,264; Aug. 2; Serial No. 324,783; published May 3, 1932. Class 21.
Difco Laboratories, Detroit, Mich. New bacteriological peptone. 296,341; Aug. 2; Serial No. 325,035; published May 10, 1932. Class 6.
Draper-Maynard Company, The, Plymouth, N. H. Foot, basket, volley, and soccer balls. 296,318; Aug. 2; Serial No. 325,903; published May 17, 1932. Class 22.
Duro Test Corporation, New York, N. Y. Incandescent electric lamps. 296,374; Aug. 2; Serial No. 325,427; published May 10, 1932. Class 21.
Dyaline, Inc., Collinsville, Ill. Antiseptic socket dressing, pyorrhea treatment, etc. 296,347; Aug. 2; Serial No. 325,137; published May 17, 1932. Class 6.
Eagle Pencil Company, New York, N. Y. Compasses and dividers. 296,346; Aug. 2; Serial No. 325,089; published May 3, 1932. Class 26.
Eastman Kodak Company, Rochester, N. Y. Photographic shutters. 296,336; Aug. 2; Serial No. 325,366; published May 3, 1932. Class 26.
Electric Steam Heating Corporation. (See Landerman, John D.)
Emery, Erle E., doing business as Erle E. Emery Co., Los Angeles, Calif. Fresh vegetables and cantaloupes. 296,359; Aug. 2; Serial No. 310,332; published May 17, 1932. Class 46.
Engineers Publishing Company. (See Shirk, Wesley H.)
Essex Rubber Company, Trenton, N. J. Toy building blocks. 296,305; Aug. 2; Serial No. 325,398; published May 17, 1932. Class 22.
Ethyl Gasoline Corporation, Wilmington, Del., and New York, N. Y. Compression pressure gauges. 296,367; Aug. 2; Serial No. 325,904; published May 17, 1932. Class 26.
Evr-Klean Seat Pad Company, St. Louis, Mo. Tailored seat covers, seat pads, seat shields, etc. 296,282; Aug. 2; Serial No. 324,159; published May 10, 1932. Class 32.
Evr-Klean Seat Pad Company, St. Louis, Mo. Tailored seat covers and pads. 296,283; Aug. 2; Serial No. 324,161; published May 10, 1932. Class 32.
Farastan Company, The, Philadelphia, Pa. Antiseptic. 296,350; Aug. 2; Serial No. 325,165; published May 17, 1932. Class 6.
Fischbein Company, Inc., Minneapolis, Minn. Sewing machine fans, and air cut-off. 296,252; Aug. 2; Serial No. 324,312; published May 10, 1932. Class 21.
Fisher Scientific Company, Pittsburgh, Pa. Burette clamps and clamp holders and parts thereof. 296,362; Aug. 2; Serial No. 325,948; published May 17, 1932. Class 26.
Fred, Walter, Hosiery Mills, Inc., Nashville, Tenn. Hosiery. 296,303; Aug. 2; Serial No. 325,324; published May 17, 1932. Class 39.
Freeman, William B. (See Haltiwanger-Taylor Drug Co., assignor.)
Fucini, E., & Co. Inc., New York, N. Y. Tonic. 296,242; Aug. 2; Serial No. 324,958; published May 17, 1932. Class 6.
Full Measure Gas Company. (See Markstein, Bernard M.)
Gemloid Corporation, New York, N. Y. Imitation precious stones. 296,263; Aug. 2; Serial No. 323,398; published May 10, 1932. Class 28.
General Control Corporation, Wilmington, Del., and Minneapolis, Minn. Electric generator control apparatus parts thereof etc. 296,259; Aug. 2; Serial No. 321,642; published May 10, 1932. Class 21.
Gold Seal Manufacturing Company, Inc., East Newark, N. J. Radio vacuum tubes and receiving sets. 296,393; Aug. 2. Class 21.
Goldstein, Harry W., assignor to Southland Importing Company, Inc., Houston, Tex. Laxative tonic. 296,205; Aug. 2; Serial No. 314,028; published May 17, 1932. Class 6.
Great Falls Orange Crush Bottling Company. (See Newman, H. E.)
Green, Clarence A., doing business as The Indian Remedy Co., Paris, Tex. Medicinal product. 296,290; Aug. 2; Serial No. 317,808; published May 10, 1932. Class 6.
Grocers & Producers Co., The, doing business as Clover Farm Stores, Cleveland, Ohio. Jar rubbers. 296,278; Aug. 2; Serial No. 323,291; published May 17, 1932. Class 35.
Grotta, Joseph E., New York, N. Y. Blouses. 296,215; Aug. 2; Serial No. 324,939; published May 17, 1932. Class 39.
H. H. S. Products Company, The. (See Headland, Robert S.)
Haltiwanger-Taylor Drug Co., assignor to William B. Freeman, doing business as Haltiwanger-Taylor Drug Company, Atlanta, Ga. Remedy for the alleviation of affections of the bowels. 85,810; renewed Mar. 19, 1932. Class 6.
Handy Parts Stores, Los Angeles, Calif. Replacement parts for automobiles, trucks, etc. 296,385; Aug. 2. Class 23.
Hansa Chemical Co. (See Levine, Leo.)
Hartman-Leddon Co., Inc., Philadelphia, Pa. Dyes. 296,287; Aug. 2; Serial No. 324,286; published May 3, 1932. Class 6.
Headland, Robert S., doing business as The H. H. S. Products Company, Butler, Pa. Preparation for the treatment of hemorrhoids. 296,332; Aug. 2; Serial No. 308,692; published Jan. 12, 1932. Class 6.
Healey, James E., doing business as Aviator Spark Plug Co., Oakland, Calif. Spark plugs. 296,250; Aug. 2; Serial No. 324,254; published May 3, 1932. Class 21.
Healey, James E., doing business as Aviator Spark Plug Co., Oakland, Calif. Spark plugs. 296,266; Aug. 2; Serial No. 324,256; published May 3, 1932. Class 21.
Heller, William, Inc., New York, N. Y. Knitted textiles. 296,392; Aug. 2. Class 42.
Hofco Pump Ltd., Long Beach, Calif. Oil well pumps and parts therefor. 296,349; Aug. 2; Serial No. 325,145; published May 3, 1932. Class 23.
Holeproof Hosiery Co., Milwaukee, Wis. Hosiery. 296,223; Aug. 2; Serial No. 323,600; published May 17, 1932. Class 39.
Ho-Mo-Lo Corporation, Detroit, Mich. Medicinal compounds. 296,216; Aug. 2; Serial No. 324,741; published May 17, 1932. Class 6.
Howards & Sons Limited, Ilford, England. Perfumery. 296,230; Aug. 2; Serial No. 322,774; published May 17, 1932. Class 6.
Hudnut, Richard, New York, N. Y. Perfumes and sachet-powder. 88,878; renewed Oct. 29, 1932.
Hudnut, Richard, New York, N. Y. Perfumes, sachet-powders, face-powder, and tooth-powder. 88,882; renewed Oct. 29, 1932.
Hupman Herbalist Company, Binghamton, N. Y. Medicinal compound. 296,360; Aug. 2; Serial No. 309,047; published May 17, 1932. Class 6.
Indian Remedy Co., The. (See Green, Clarence A.)
International Devices Corporation, Chicago, Ill. Weighing machines. 296,240; Aug. 2; Serial No. 324,919; published May 3, 1932. Class 26.
International Silver Company, Meriden, Conn. Prize cups, symbolic figures, and trophies. 296,358; Aug. 2; Serial No. 325,328; published May 17, 1932. Class 28.
International Stamping & Enameling Corporation, now by change of name International Enamelware Corporation, Brooklyn, N. Y. Bed pans, irrigators, nasal douche, etc. 296,246; Aug. 2; Serial No. 318,361; published May 17, 1932. Class 44.
International Stamping & Enameling Corporation, now by change of name International Enamelware Corporation, Brooklyn, N. Y. Bed pans and douche pans. 296,247; Aug. 2; Serial No. 318,362; published May 17, 1932. Class 44.

International Stamping & Enameling Corporation, now by change of name International Enamelware Corporation, Brooklyn, N. Y. Bed pans. 296,268–9; Aug. 2; Serial Nos. 318,363–4; published May 17, 1932. Class 44.

Iows Manufacturing Company, Cedar Rapids, Iowa. Road material handling equipment. 296,276; Aug. 2; Serial No. 321,881; published May 10, 1932. Class 23.

Irwin, James W. to Paul L. McConomy, Philadelphia, Pa., successor. Embalming fluid. 87,539; renewed July 23, 1932.

Johns-Manville Corporation, New York, N. Y. Electric insulating compounds and panels and plates made therefrom. 296,206; Aug. 2; Serial No. 314,054; published May 10, 1932. Class 21.

Johnson & Johnson, New Brunswick, N. J. Adhesive denture powder. 296,288; Aug. 2; Serial No. 324,611; published May 3, 1932. Class 6.

Joseph & Feiss Company, The, Cleveland, Ohio. Suits. 296,271; Aug. 2; Serial No. 319,144; published May 17, 1932. Class 39.

Judah, Mansfield D., Long Beach, Calif. Oven implements. 296,285; Aug. 2; Serial No. 324,258; published Apr. 12, 1932. Class 23.

Kalle & Co. Aktiehgesellschaft, Wiesbaden-Biebrich, Germany. Desizing agent. 296,352; Aug. 2; Serial No. 325,261; published May 17, 1932. Class 6.

Kanouse, Peter A., Los Angeles, Calif. Hydrous cement and impression material. 296,328; Aug. 2; Serial No. 284,945; published May 17, 1932. Class 44.

Katolox Laboratories, Inc., East Orange, N. J. Compounds and/or solutions of organic iodine. 296,238; Aug. 2; Serial No. 324,890; published May 10, 1932. Class 6.

Kaufherr & Co., Newark, N. J. Calfskins, hides, and skins. 296,317; Aug. 2; Serial No. 325,828; published May 17, 1932. Class 1.

Kavalco Products Inc., Nitro, W. Va. Tricresyl phosphate. 296,307; Aug. 2; Serial No. 325,523; published May 17, 1932. Class 6.

Keegan, Mary E., doing business as The Lovelle Products Co., Minneapolis, Minn. Hand lotion. 296,199; Aug. 2; Serial No. 311,738; published May 10, 1932. Class 6.

Ker & Co., London, England, Glasgow, Scotland, and Manila, P. I., to Ker & Co., Manila, P. I. Cotton piece goods and cotton yarn. 39,116–18; renewed Oct. 28, 1932.

Keystone Driller Company, Beaver Falls, Pa. Machinery and tools. 88,893; renewed Oct. 29, 1932.

Keystone Steel & Wire Company, Peoria (South Bartonville), Ill. Wire fence. 296,396; Aug. 2. Class 13.

Killian Manufacturing Co., The, Akron, Ohio. Prophylactic rubber articles. 296,311; Aug. 2; Serial No. 326,043; published May 17, 1932. Class 44.

Kroma Color Company, Sandusky, Ohio. Paste. 296,304; Aug. 2; Serial No. 325,333; published May 17, 1932. Class 5.

Lamp Time Corporation, Milwaukee, Wis. Electric lamps. 296,255; Aug. 2; Serial No. 324,748; published May 10, 1932. Class 21.

Landerman, John D., assignor to Electric Steam Heating Corporation, Brookline, Mass. Electric steam generators, portable electric house heaters, and parts thereof. 296,207; Aug. 2; Serial No. 314,060; published May 10, 1932. Class 21.

Langdale, Charles W., Ottumwa, Iowa. Cleaner and a preparation for cleaning. 296,274; Aug. 2; Serial No. 320,785; published May 17, 1932. Class 4.

Letherby, John A., Midland, Ontario, Canada. Preparation for use in treatment of colds, bronchitis, and tubercular troubles. 296,361; Aug. 2; Serial No. 322,486; published May 3, 1932. Class 6.

Levine, Leo, doing business as Hansa Chemical Co., Boston, Mass. Antiseptic lotion for the hair and scalp and a pomade and hair dressing. 296,376; Aug. 2; Serial No. 325,475; published May 17, 1932. Class 6.

Lovelle Products Co., The. (See Keegan, Mary E.)

Mackenzie's, Duncan, Sons Co., Inc., Fieldsboro and Trenton, N. J. Electric laboratory and industrial furnaces. 296,202; Aug. 2; Serial No. 312,702; published May 17, 1932. Class 21.

Mallinson, H. R., & Co., Inc., New York, N. Y. Silk piece goods. 296,309; Aug. 2; Serial No. 326,057; published May 17, 1932. Class 42.

Markstein, Bernard M., doing business as Full Measure Gas Company, Cincinnati, Ohio. Gasoline. 296,253; Aug. 2; Serial No. 324,476; published May 10, 1932. Class 15.

McConomy, Paul L. (See Irwin, James W.)

McCune, Gladys V., New York, N. Y. Beauty creams, lotions, and powders. 296,284; Aug. 2; Serial No. 324,214; published May 10, 1932. Class 6.

McIntire, William C., Charlotte, N. C. Liniment. 296,331; Aug. 2; Serial No. 299,615; published May 17, 1932. Class 6.

Meyer, Arnold O., Hamburg, Germany. Textile fabrics. 86,541; renewed May 14, 1932.

Meyer, Arnold O., Hamburg, Germany. Cutlery. 86,609; renewed May 21, 1932.

Meyrowitz, E. B., Inc., New York, N. Y. Goggles and eye-protectors. 296,354; Aug. 2; Serial No. 325,264; published May 17, 1932. Class 26.

Mica Insulator Company, New York, N. Y. Electrical insulators. 39,410–11; renewed Dec. 2, 1932.

Mica Insulator Company, New York, N. Y. Electric insulators. 39,449; renewed Dec. 9, 1932.

Midway Chemical Company, Chicago, Ill. Insecticide. 296,204; Aug. 2; Serial No. 313,574; published Sept. 29, 1931. Class 6.

Myers Paper Company, Memphis, Tenn. Toilet paper, bathroom tissue, and skin cleansing tissue. 296,370; Aug. 2; Serial No. 325,829; published May 17, 1932. Class 37.

National Battery Company, St. Paul, Minn. Storage batteries. 296,338; Aug. 2; Serial No. 325,339; published May 10, 1932. Class 21.

National Sales Service, Salt Lake City, Utah. Savings certificates. 296,224; Aug. 2; Serial No. 324,448; published May 17, 1932. Class 38.

Naugatuck Chemical Company, The, New York, N. Y. Chemicals. 296,353; Aug. 2; Serial No. 325,265; published May 17, 1932. Class 6.

Naugatuck Chemical Company, The, New York, N. Y. Chemicals for the treatment of rubber. 296,355; Aug. 2; Serial No. 325,266; published May 17, 1932. Class 6.

Neuss, Hesslein & Co., Inc., New York, N. Y. Grey cotton piece goods. 296,222; Aug. 2; Serial No. 323,869; published May 17, 1932. Class 42.

Newark Paraffine & Parchment Paper Co., Newark, N. J. Wax paper. 296,366; Aug. 2; Serial No. 325,916; published May 17, 1932. Class 37.

Newman, H. E., doing business as Great Falls Orange Crush Bottling Company, Great Falls, Mont. Mineral water, beverages, syrups, etc. 296,316; Aug. 2; Serial No. 325,093; published May 17, 1932. Class 45.

North American Construction Company, assignor to The Alladin Company, Bay City, Mich. Knockdown houses. 89,135; renewed Nov. 12, 1932.

Northern Limeshell Products, Seattle, Wash. Poultry food. 296,272; Aug. 2; Serial No. 319,434; published May 17, 1932. Class 46.

Northern Paper Mills, Green Bay, Wis. Paper towels. 296,333; Aug. 2; Serial No. 325,385; published May 17, 1932. Class 37.

Oak Rubber Company, The, Ravenna, Ohio. Toy rubber balloons. 296,313–15; Aug. 2; Serial Nos. 326,020–2; published May 17, 1932. Class 22.

Ohio Farm Bureau Service Company, The, Columbus, Ohio. Hog feeds. 296,389; Aug. 2. Class 46.

Oil Creek Refining Co., Titusville, Pa. Gasoline, naphtha, oil and paraffine wax. 296,261; Aug. 2; Serial No. 322,725; published May 17, 1932. Class 15.

Okonite Company, The, Passaic, N. J. Insulated wires and cables. 296,335; Aug. 2; Serial No. 325,372; published May 17, 1932. Class 21.

Omnium de Specialities & Produits Chimiques, Societe Anonyme, Paris, France. Laxative and treatment for intestinal affections. 296,375; Aug. 2; Serial No. 325,296; published May 17, 1932. Class 6.

Oneida Community, Limited, Oneida, N. Y. Silver plated knives and forks. 296,197; Aug. 2; Serial No. 310,944; published May 3, 1932. Class 28.

Onondaga Silk Company, Inc., Syracuse, N. Y. Silk fabrics. 296,380–2; Aug. 2. Class 42.

Ontario Knife Company, Franklinville, N. Y. Knives, forks, spoons, etc. 296,228; Aug. 2; Serial No. 324,755; published May 17, 1932. Class 28.

Otco's Pure Food Products Company, Atlanta, Ga. Fruit cereal. 296,196; Aug. 2; Serial No. 310,877; published May 17, 1932. Class 46.

Owl Drug Co., The, San Francisco, Calif. Medicines and pharmaceutical preparations. 87,475; renewed July 16, 1932.

Pacific Products, Inc., San Francisco, Calif. Carbonated beverages of lime flavor. 296,193; Aug. 2; Serial No. 322,223; published May 17, 1932. Class 45.

Parachute Confection Company. (See Beston, Daniel P.)

Paraffine Companies, Inc., The, San Francisco, Calif. Type cleaner. 296,330; Aug. 2; Serial No. 297,771; published May 17, 1932. Class 4.

Paristyle Novelty Co. Inc., New York, N. Y. Creams, lotions, rouges, etc. 296,344; Aug. 2; Serial No. 325,083; published May 10, 1932. Class 6.

Pennzoil Company, The, Los Angeles, Calif. Lubricating oils and greases. 296,257; Aug. 2; Serial No. 324,937; published May 17, 1932. Class 15.

Pepperell Manufacturing Company, Boston, Mass. Blankets. 296,308; Aug. 2; Serial No. 325,528; published May 17, 1932. Class 42.

Peroxide Chemical Co., The, St. Louis, Mo. Hydrogen peroxide. 296,279; Aug. 2; Serial No. 323,354; published May 17, 1932. Class 6.

Perrault, Joseph S., Nashua, N. H. Pie pan lifters and the like. 296,210; Aug. 2; Serial No. 316,569; published May 3, 1932. Class 23.

Phoenix Oil Company, The, Cleveland, Ohio. Cleaning compound. 296,306; Aug. 2; Serial No. 325,439; published May 17, 1932. Class 4.

Pierce, F. O., Co., New York, to F. O. Pierce Co., Brooklyn, N. Y. Paint. 86,731; renewed May 28, 1932.

Plowright, Claribel A., Manchester, England. Lipstick. 296,378; Aug. 2; Serial No. 325,374; published May 17, 1932. Class 6.

Potter & Moore Limited, London, England. Soap. 296,321; Aug. 2; Serial No. 325,756; published May 17, 1932. Class 4.

"Pride of Ridgeway" Growers Association, The, Norlina, N. C. Fresh cantaloupes. 296,221; Aug. 2; Serial No. 324,114; published May 17, 1932. Class 46.

Protein Mineral Co., Inc., New York, N. Y. Concentrated preparation of protein calcium phosphate, lactose, etc. 296,232; Aug. 2; Serial No. 324,800; published May 3, 1932. Class 6.

Prybrands, Inc., Long Island City, N. Y. Razors and razor blades. 296,356; Aug. 2; Serial No. 325,269; published May 3, 1932. Class 28.

Pure Oil Company, The, Chicago, Ill. Fuel oils, lubricating oils and greases, etc. 296,258; Aug. 2; Serial No. 324,972; published May 10, 1932. Class 15.

Pylo Co., The. (See Burkhardt, George F.)

RCA Photophone, Inc., New York, N. Y. Sound recording mechanisms, sound reciprocating mechanisms, etc. 296,194; Aug. 2; Serial No. 310,658; published May 17, 1932. Class 36.

RCA Victor Company, Inc., Camden, N. J. Cathode ray and thermionic tubes. 296,195; Aug. 2; Serial No. 310,817; published May 17, 1932. Class 21.

Reading Batteries, Inc., Reading, Pa. Storage batteries. 296,256; Aug. 2; Serial No. 324,830; published May 3, 1932. Class 21.

Richel Company, Inc., Upper Darby, Pa. Astringent liquids and creams, eyelash growers, hand lotions, etc. 296,293; Aug. 2; Serial No. 322,522; published May 3, 1932. Class 6.

Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Parchment paper. 296,365; Aug. 2; Serial No. 325,919; published May 17, 1932. Class 37.

Rinshed-Mason Company, Detroit, Mich. Paint, paint enamel, lacquers, etc. 296,297–300; Aug. 2; Serial Nos. 325,113–16; published May 17, 1932. Class 16.

Roseth Corporation, Brooklyn, N. Y. Paper garment bags. 296,386; Aug. 2. Class 2.

Rossie Velvet Company, Mystic, Conn. Pile fabrics. 296,301; Aug. 2; Serial No. 325,151; published May 17, 1932. Class 42.

Royal Battery Corporation, New Brunswick, N. J., and New York, N. Y. Electric storage batteries. 296,377; Aug. 2; Serial No. 325,413; published May 10, 1932. Class 21.

Royce Chemical Company, Carlton Hill, N. J. Hydrosulphite. 296,239; Aug. 2; Serial No. 324,903; published May 10, 1932. Class 6.

Sander, A., Packing Company, The, Cincinnati, Ohio. Foods. 89,506; renewed Dec. 17, 1932.

Schaub, Eugene J., Corona, N. Y. Reels for motion picture films. 296,397; Aug. 2. Class 26.

Schering Corporation, New York, N. Y. Laxative preparation. 296,363; Aug. 2; Serial No. 326,163; published May 24, 1932. Class 6.

Schlitz Brewing Company, Milwaukee, Wis. Hops. 296,225; Aug. 2; Serial No. 323,422; published May 17, 1932. Class 1.

Schneider Brothers Incorporated, Chicago, Ill. Manicure implements, sets, and kits. 296,327; Aug. 2; Serial No. 325,533; published May 17, 1932. Class 44.

Scott, Henry L., Company, Providence, R. I. Machines for testing strength or stretch of material. 296,334; Aug. 2; Serial No. 325,376; published May 3, 1932. Class 26.

Sedgewick Machine Works, assignor to Sedgewick Machine Works, Incorporated, New York, N. Y. Lifting apparatus and elevators. 89,299; renewed Dec. 3, 1932.

Shaw, T. A., and Co. to T. A. Shaw & Company, Chicago, Ill., successor. Cotton piece goods. 88,792; renewed Oct. 22, 1932.

Sherwin-Williams Company, The, Cleveland, Ohio. Insecticides and fungicides. 296,351; Aug. 2; Serial No. 325,243; published May 17, 1932. Class 6.

Shirk, Wesley H., doing business as Engineers Publishing Company, Philadelphia, Pa. Books, charts, magazines, etc. 296,227; Aug. 2; Serial No. 324,331; published May 17, 1932. Class 38.

Siekmeier, Edward L., Oak Park, Ill. Publication. 296,277; Aug. 2; Serial No. 322,115; published May 17, 1932. Class 38.

Simpson, Orville, Company, The, Cincinnati, Ohio. Lawns, sizers, screens, etc. 296,200; Aug. 2; Serial No. 312,350; published May 17, 1932. Class 23.

Simpine Prod. Co. (See Aronoff, Morris.)

Skinner, William, & Sons, New York, N. Y. Silk crepes. 296,312; Aug. 2; Serial No. 326,030; published May 17, 1932. Class 42.

Smith, F. A. Manufacturing Company, The, Rochester, N. Y. Electric fans. 296,343; Aug. 2; Serial No. 325,078; published May 3, 1932. Class 21.

Smith Power Transmission Company, The, Cleveland, Ohio. Composition flexible couplings. 296,329; Aug. 2; Serial No. 294,947; published May 10, 1932. Class 23.

"Société Anonyme Solex", The, Neuilly-sur-Seine, France. Measuring tools. 296,219; Aug. 2; Serial No. 324,269; published May 17, 1932. Class 26.

Socony-Vacuum Corporation, New York, N. Y. Petroleum and products of petroleum, mineral wax, candles, etc. 296,244; Aug. 2; Serial No. 318,692; published May 17, 1932. Class 15.

Soden, G. A. & Co., Chicago, Ill. Diamonds and jewelry. 296,267; Aug. 2; Serial No. 324,762; published May 17, 1932. Class 28.

Southland Importing Company, Inc. (See Goldstein, Harry W., assignor.)

Squibb, E. R., & Sons, New York, N. Y. Local anesthetics. 296,357; Aug. 2; Serial No. 325,271; published May 17, 1932. Class 6.

Stahl, H. K., Company, St. Paul, Minn. Petroleum products. 296,251; Aug. 2; Serial No. 323,834; published May 10, 1932. Class 15.

Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton thread and yarn. 296,208; Aug. 2; Serial No. 316,139; published May 17, 1932. Class 43.

Standard Trading Mills, New York, N. Y. Cotton pillow cases, sheets, bed spreads, cotton and silk curtains, and cotton and wool blankets. 296,220; Aug. 2; Serial No. 324,233; published May 17, 1932. Class 42.

Steiner, Ernest, & Co., Inc., New York, N. Y. Bracelets, necklaces, etc. 296,339; Aug. 2; Serial No. 325,022; published May 17, 1932. Class 28.

Stewart-Warner Corporation, Chicago, Ill. Cameras, projectors, and motion picture apparatus. 296,337; Aug. 2; Serial No. 325,350; published May 3, 1932. Class 26.

Stoneman, William H., doing business as Country Gentleman Products Co., Albany, N. Y. Paints, paint enamels, and varnishes. 296,217; Aug. 2; Serial No. 324,673; published May 17, 1932. Class 16.

Sunspray Beverages, Inc., Brooklyn, N. Y. Beverages and cocoa drinks. 296,322; Aug. 2; Serial No. 325,606; published May 17, 1932. Class 45.

Tip-Top Laboratories. (See Dabrowski, Frank.)

Tissue Company, The, Saugerties, N. Y. Paper napkins and handkerchiefs. 296,371; Aug. 2; Serial No. 325,730; published May 17, 1932. Class 37.

Triangle Mechanical Laboratories Corp., Brooklyn, N. Y. Razor blades. 296,368–9; Aug. 2; Serial Nos. 325,885–6; published May 17, 1932. Class 23.

Tru-Fit Dress Co. Inc., New York, N. Y. Piece goods in the nature of cut-out dresses. 296,384; Aug. 2. Class 39.

Tulon Products Incorporated, New York, N. Y. Medicinal preparation. 296,243; Aug. 2; Serial No. 324,973; published May 10, 1932. Class 6.

United American Bosch Corporation, Springfield, Mass. Generators. 296,373; Aug. 2; Serial No. 325,492; published May 17, 1932. Class 21.

United Elastic Corporation, East Hampton, Mass. Electric conductors. 296,262; Aug. 2; Serial No. 324,767; published May 17, 1932. Class 21.

Utility Blade Corporation, Irvington, N. J. Safety razors and safety razor blades. 296,290; Aug. 2; Serial No. 322,977; published May 17, 1932. Class 23.

Van Raalte Company, New York, N. Y. Hosiery. 296,326; Aug. 2; Serial No. 325,537; published May 17, 1932. Class 39.

Virginia Craftsmen Inc., Harrison, Va., New York, N. Y., and Chicago, Ill. Reproductions of antique furniture. 296,292; Aug. 2; Serial No. 322,010; published May 17, 1932. Class 32.

Vitascope Corporation, The, Providence, R. I. Cameras, motion picture projectors, parts thereof and photographic supplies. 296,209; Aug. 2; Serial No. 316,513; published May 17, 1932. Class 26.

Vollrath, Otto, St. Paul, Minn. Ointment. 296,283; Aug. 2; Serial No. 324,810; published May 3, 1932. Class 6.

Walgreen Co., Chicago, Ill. Tooth paste. 296,294; Aug. 2; Serial No. 322,719; published May 3, 1932. Class 6.

West Disinfecting Company, Long Island City, N. Y. Air purifying preparations, antiseptics, deodorants, disinfectants, etc. 296,198; Aug. 2; Serial No. 311,635; published May 3, 1932. Class 6.

Westco Pump Corporation. (See Auto-Prime Pump Company, The, assignor.)

Wilson Products, Inc., Reading, Pa. Ophthalmic and protection lenses. 296,347; Aug. 2; Serial No. 325,130; published May 3, 1932. Class 26.

Windsor Pharmacal Company, St. Louis, Mo. Tablets for headaches, colds, etc. 296,236; Aug. 2; Serial No. 324,863; published May 10, 1932. Class 6.

Zeiss Ikon Aktiengesellschaft, Dresden, Germany. Photographic apparatus. 296,291; Aug. 2; Serial No. 321,409; published May 10, 1932. Class 26.

LIST OF REGISTRANTS OF LABELS

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Luster-mints. For Peppermints. 40,973; Aug. 2.

Centennial Flouring Mills Company, Seattle, Wash. Centennial. For Calf Meal. 40,974; Aug. 2.

Centennial Flouring Mills Company, Seattle, Wash. Centennial. For Cake Flour. 40,975; Aug. 2.

Centennial Flouring Mills Company, Seattle, Wash. Centennial. For Pancake and Waffle Flour. 40,976; Aug. 2.

Card. For Toy Flying Monoplanes. 13,790; Aug. 2.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Calfskins, hides, and skins. Kaufherr & Co. 296,317; Aug. 2; Serial No. 325,828; published May 17, 1932.
Hops. Schlitz Brewing Company. 296,225; Aug. 2; Serial No. 323,422; published May 17, 1932.

CLASS 2

Bags, Paper garment. Roseth Corporation. 296,386; Aug. 2.

CLASS 4

Cleaner and preparation for cleaning. C. W. Langdale. 296,274; Aug. 2; Serial No. 320,785; published May 17, 1932.
Cleaner, Type. Paraffine Companies. 296,330; Aug. 2; Serial No. 297,771; published May 17, 1932.
Cleaning compound. Phoenix Oil Company. 296,306; Aug. 2; Serial No. 325,265; published May 17, 1932.
Cleanser. J. W. Bullen. 296,324; Aug. 2; Serial No. 325,560; published May 17, 1932.
Soap. E. T. Browne Drug Co. Inc. 296,319; Aug. 2; Serial No. 325,868; published May 17, 1932.
Soap. Potter & Moore Limited. 296,321; Aug. 2; Serial No. 325,756; published May 17, 1932.

CLASS 5

Paste. American Crayon Company. 296,302; Aug. 2; Serial No. 325,311; published May 17, 1932.
Paste. Kroma Color Company. 296,304; Aug. 2; Serial No. 325,333; published May 17, 1932.

CLASS 6

Air purifying preparations, antiseptics, deodorants, disinfectants, etc. West Disinfecting Company. 296,198; Aug. 2; Serial No. 311,635; published May 3, 1932.
Anesthetics, Local. E. R. Squibb & Sons. 296,357; Aug. 2; Serial No. 325,271; published May 17, 1932.
Antiseptic. Farastan Company. 296,350; Aug. 2; Serial No. 325,165; published May 17, 1932.
Antiseptic socket dressing, pyorrhea treatment, etc. Dyaline, Inc. 296,348; Aug. 2; Serial No. 325,137; published May 17, 1932.
Astringent liquids and creams, eyelash growers, hand lotions, etc. Richel Company. 296,293; Aug. 2; Serial No. 322,522; published May 3, 1932.
Bacteriological peptone, New. Difco Laboratories. 296,341; Aug. 2; Serial No. 325,035; published May 10, 1932.
Chemical substances. H. Th. Böhme Aktiengesellschaft. 296,237; Aug. 2; Serial No. 324,872; published May 10, 1932.
Chemicals. Naugatuck Chemical Company. 296,353; Aug. 2; Serial No. 325,265; published May 17, 1932.
Chemicals for the treatment of rubber. Naugatuck Chemical Company. 296,355; Aug. 2; Serial No. 325,266; published May 17, 1932.
Compound, and rust preventative, Anti-freeze, cleaning, sealing. Atlas Supply Company. 296,241; Aug. 2; Serial No. 324,942; published May 10, 1932.
Compounds and/or solutions of organic iodine. Katolox Laboratories, Inc. 296,238; Aug. 2; Serial No. 324,890; published May 10, 1932.
Cream for the skin. Chemisch-Pharmazeutische A.-G. Bad-Homburg. 296,289; Aug. 2; Serial No. 323,739; published May 3, 1932.
Cream, Hair. County Chemical Company Limited. 296,391; Aug. 2.
Creams, lotions, and powders, Beauty. G. V. McCune. 296,284; Aug. 2; Serial No. 324,214; published May 10, 1932.
Creams, lotions, rouges, etc. Parisiyle Novelty Co. Inc. 296,344; Aug. 2; Serial No. 325,083; published May 10, 1932.
Deodorizers. Cando Corporation. 296,304; Aug. 2.
Desizing agent. Kalle & Co. Aktiengesellschaft. 296,352; Aug. 2; Serial No. 325,261; published May 17, 1932.
Dyes. Hartman-Leddon Co. 296,287; Aug. 2; Serial No. 324,286; published May 3, 1932.
Embalming fluid. J. W. Irwin. 87,539; renewed July 23, 1932.
Hydrogen peroxide. Peroxide Chemical Co. 296,279; Aug. 2; Serial No. 323,354; published May 17, 1932.
Hydrosulphite. Royce Chemical Company. 296,239; Aug. 2; Serial No. 324,903; published May 10, 1932.
Insect powder. Bubach Producing and Manufacturing Company. 88,055; renewed Aug. 27, 1932.
Insecticide. Brundage Bros. Co. 296,345; Aug. 2; Serial No. 325,086; published May 17, 1932.
Insecticide. Midway Chemical Company. 296,204; Aug. 2; Serial No. 313,574; published Sept. 29, 1931.
Insecticides. Atlantic Pharmacal Company. 296,229; Aug. 2; Serial No. 324,771; published May 17, 1932.
Insecticides and fungicides. Sherwin-Williams Company. 296,351; Aug. 2; Serial No. 325,243; published May 17, 1932.
Laxative and treatment for intestinal affections. Omnium de Specialites & Produits Chimiques, Societe Anonyme. 296,375; Aug. 2; Serial No. 325,296; published May 17, 1932.
Laxative preparation. Schering Corporation. 296,363; Aug. 2; Serial No. 326,163; published May 24, 1932.
Liniment. W. C. McIntire. 296,331; Aug. 2; Serial No. 299,615; published May 17, 1932.
Lipstick. C. A. Plowright. 296,378; Aug. 2; Serial No. 325,374; published May 17, 1932.
Lotion for scalp and hair and a pomade and hair dresser, Antiseptic. L. Levine. 296,376; Aug. 2; Serial No. 325,475; published May 17, 1932.
Lotion, Hand. M. E. Keegan. 296,199; Aug. 2; Serial No. 311,738; published May 10, 1932.
Medicinal compound. Calafo Company. 296,234; Aug. 2; Serial No. 324,818; published May 3, 1932.
Medicinal compound. Hupman Herbalist Company. 296,360; Aug. 2; Serial No. 309,047; published May 17, 1932.
Medicinal compounds. Ho-Mo-Lo Corporation. 296,216; Aug. 2; Serial No. 324,741; published May 17, 1932.
Medicinal preparation. Tulon Products Incorporated. 296,243; Aug. 2; Serial No. 324,973; published May 10, 1932.
Medicinal product. C. A. Green. 296,290; Aug. 2; Serial No. 317,868; published May 10, 1932.
Medicine, Laxative. F. Dabrowski. 296,235; Aug. 2; Serial No. 324,829; published May 3, 1932.
Medicines and pharmaceutical preparations. Owl Drug Co. 87,475; renewed July 16, 1932.
Ointment. G. F. Burkhardt. 296,226; Aug. 2; Serial No. 323,388; published May 17, 1932.
Ointment. O. Vollrath. 296,233; Aug. 2; Serial No. 324,810; published May 3, 1932.
Preparation of protein calcium phosphate lactose, etc. Protein Mineral Co. 296,282; Aug. 2; Serial No. 324,800; published May 3, 1932.
Preparations for sleeplessness, exhaustion, etc. Asta Aktiengesellschaft. 296,280; Aug. 2; Serial No. 323,736; published May 10, 1932.
Remedy for the alleviation of affections of the bowels. Haltiwanger-Taylor Drug Co. 85 810; renewed Mar. 19, 1932.
Salts, Bath. Elizabeth Arden, Inc. 296,387–8; Aug. 2.
Shampoo, Hair. Chemisch-Pharmazeutische A.-G. Bad-Homburg. 296,281; Aug. 2; Serial No. 323,740; published May 3, 1932.
Tablets for headaches, colds, etc. Windsor Pharmacal Company. 296,236; Aug. 2; Serial No. 324,863; published May 10, 1932.
Tonic. E. Fucini & Co. Inc. 296,242; Aug. 2; Serial No. 324,958; published May 17, 1932.
Tonic laxative. G. A. Colvin. 88,062; renewed Aug. 27, 1932.
Tonic, Laxative. H. W. Goldstein. 296,205; Aug. 2; Serial No. 314,028; published May 17, 1932.
Tooth paste. Walgreen Co. 296,294; Aug. 2; Serial No. 322,719; published May 3, 1932.
Tricresyl phosphate. Karaleo Products Inc. 296,307; Aug. 2; Serial No. 325,523; published May 17, 1932.

CLASS 12

Houses, Knockdown. North American Construction Company. 89,135; renewed Nov. 12, 1932.

CLASS 13

Fence, Wire. Keystone Steel & Wire Company. 296,396; Aug. 2.

CLASS 15

Gasoline. B. M. Markstein. 296,253; Aug. 2; Serial No. 324,476; published May 10, 1932.
Gasoline, naphtha, oil and paraffine wax. Oil Creek Refining Co. 296,261; Aug. 2; Serial No. 322,725; published May 17, 1932.
Oils and greases, Lubricating. W. P. Collins & Co. 83,143; renewed Aug. 22, 1931.
Oils and greases, Lubricating. Pennzoil Company. 296,257; Aug. 2; Serial No. 324,937; published May 17, 1932.
Oils, greases, kerosene and gasoline. R. J. Brown Company. 296,342; Aug. 2; Serial No. 325,058; published May 3, 1932.
Oils, lubricating oils and greases, etc., Fuel. Pure Oil Company. 296,258; Aug. 2; Serial No. 324,972; published May 10, 1932.
Petroleum and products of petroleum, mineral wax, candles, etc. Socony-Vacuum Corporation. 296,244; Aug. 2; Serial No. 318,692; published May 17, 1932.
Petroleum products. H. K. Stahl Company. 296,251; Aug. 2; Serial No. 323,834; published May 10, 1932.

CLASS 16

Drier and varnish, Japan. S. W. Adams & Co. 296,218; Aug. 2; Serial No. 324,418; published May 17, 1932.
Paint. F. O. Pierce Co. 86,731; renewed May 28, 1932.
Paint, paint enamel, lacquers, etc. Ringhed-Mason Company. 296,297–300; Aug. 2; Serial Nos. 325,113–16; published May 17, 1932.
Paints, paint enamels, and varnishes. W. H. Stoneman. 296,217; Aug. 2; Serial No. 324,673; published May 17, 1932.
Varnishes, shellac and lacquers, etc. Brennerei und Presshefe-Fabrik Tornesch Gesellschaft mit beschrankter Haftung. 296,275; Aug. 2; Serial No. 321,746; published May 17, 1932.

CLASS 21

Batteries, Electric. Best Electric Corporation. 296,248; Aug. 2; Serial No. 319,856; published May 17, 1932.
Electric lamps. Lamp Time Corporation. 296,255; Aug. 2; Serial No. 324,748; published May 10, 1932.
Electric lamps, Incandescent. Duro Test Corporation. 296,374; Aug. 2; Serial No. 325,427; published May 10, 1932.
Electric steam generators, portable electric house heaters, and parts thereof. J. D. Landerman. 296,207; Aug. 2; Serial No. 314,060; published May 10, 1932.
Electrical insulators. Mica Insulator Company. 39,410–11; renewed Dec. 2, 1932.
Electrical water heaters. J. R. Ackerman Corporation. 296,325; Aug. 2; Serial No. 325,545; published May 17, 1932.
Fans and air cut-off, Sewing machine. Fischbein Company. 296,252; Aug. 2; Serial No. 324,312; published May 10, 1932.
Fans, Electric. F. A. Smith Manufacturing Company. 296,343; Aug. 2; Serial No. 325,078; published May 3, 1932.
Generators. United American Bosch Corporation. 296,373; Aug. 2; Serial No. 325,492; published May 17, 1932.
Magneto-electric ignition systems. R. Bosch Aktiengesellschaft. 296,379; Aug. 2.
Plugs, flashlights, flashlight batteries, etc., Spark. Atlas Supply Company. 296,265; Aug. 2; Serial No. 324,944; published May 10, 1932.
Plugs, Spark. J. E. Healey. 296,250; Aug. 2; Serial No. 324,254; published May 3, 1932.
Plugs, Spark. J. E. Healey. 296,266; Aug. 2; Serial No. 324,256; published May 3, 1932.
Radio receiving sets and parts. Baltimore Radio Corporation. 296,249; Aug. 2; Serial No. 321,704; published May 3, 1932.
Radio vacuum tubes and receiving sets. Gold Seal Manufacturing Company. 296,393; Aug. 2.
Sockets, plugs, receptacles, etc. Arrow-Hart & Hegeman Electric Company. 296,254; Aug. 2; Serial No. 324,502; published May 10, 1932.
Wires and cables, Insulated. Okonite Company. 296,335; Aug. 2; Serial No. 325,372; published May 17, 1932.

CLASS 22

Balls, Foot, basket, volley, and soccer. Draper-Maynard Company. 296,318; Aug. 2; Serial No. 325,903; published May 17, 1932.
Toy building blocks. Essex Rubber Company. 296,305; Aug. 2; Serial No. 325,398; published May 17, 1932.
Toy rubber balloons. Oak Rubber Company. 296,313–15; Aug. 2; Serial Nos. 326,020–2; published May 17, 1932.

CLASS 23

Couplings, Composition flexible. Smith Power Transmission Company. 296,329; Aug. 2; Serial No. 294,947; published May 10, 1932.
Cutlery. A. O. Meyer. 86,609; renewed May 21, 1932.
Knife, Pocket. Cattarangus Cutlery Company. 296,295; Aug. 2; Serial No. 322,927; published May 10, 1932.
Knives, forks, spoons, etc. Ontario Knife Company. 296,228; Aug. 2; Serial No. 324,755; published May 17, 1932.
Lawns, sizers, screens, etc. Orville Simpson Company. 296,200; Aug. 2; Serial No. 312,350; published May 17, 1732.
Lifters, and the like, Pie pan. J. S. Perrault. 296,210; Aug. 2; Serial No. 316,569; published May 3, 1932.
Lifting apparatus and elevators. Sedgwick Machine Works. 89,299; renewed Dec. 3, 1932.
Machinery and tools. Keystone Driller Company. 88,893; renewed Oct. 29, 1932.
Machines and parts thereof, Addressing, printing, impressing. Adrema Maschinenbauges. m. b. H. 296,270; Aug. 2; Serial No. 318,498; published May 3, 1932.

Oven implements. M. D. Judah. 296,285; Aug. 2; Serial No. 324,258; published Apr. 12, 1932.
Parts for automobiles, trucks, etc., Replacement. Handy Parts Stores. 296,385; Aug. 2.
Power transmission machinery. Allis-Chalmers Manufacturing Company. 296,364; Aug. 2; Serial No. 325,934; published May 17, 1732.
Pumps and parts thereof. Auto-Prime Pump Company. 296,203; Aug. 2; Serial No. 313,025; published May 10, 1932.
Pumps and parts therefor, Oil well. Hofco Pump Ltd. 296,349; Aug. 2; Serial No. 325,145; published May 3, 1932.
Razor blades. Cooper Products Corporation. 296,231; Aug. 2; Serial No. 324,780; published May 3, 1932.
Razor blades. Triangle Mechanical Laboratories Corp. 296,368–9; Aug. 2; Serial Nos. 325,885–6; published May 17, 1932.
Razors and razor blades. British American Razors Limited. 296,201; Aug. 2; Serial No. 312,543; published May 3, 1932.
Razors and razor blades. Prybrands, Inc. 296,356; Aug. 2; Serial No. 325,269; published May 3, 1932.
Razors and safety razor blades, Safety. Utility Blade Corporation. 296,296; Aug. 2; Serial No. 322,777; published May 17, 1932.
Road material handling equipment. Iowa Manufacturing Company. 296,276; Aug. 2; Serial No. 321,881; published May 10, 1932.
Slicing machines. American Slicing Machine Company. 296,340; Aug. 2; Serial No. 325,031; published May 3, 1932.

CLASS 26

Cameras, motion picture projectors, parts thereof and photographic supplies. Vitascope Corporation. 269 209; Aug. 2; Serial No. 316,513; published May 17, 1932.
Cameras, projectors, and motion picture apparatus. Stewart-Warner Corporation. 296,337; Aug. 2; Serial No. 325,350; published May 3, 1932.
Clamps and clamp holders and parts thereof. Burette. Fisher Scientific Company. 296,362; Aug. 2; Serial No. 325,948; published May 17, 1932.
Compasses and dividers. Eagle Pencil Company. 296,346; Aug. 2; Serial No. 325,089; published May 3, 1932.
Gauges, Compression pressure. Ethyl Gasoline Corporation. 296,367; Aug. 2; Serial No. 325 904; published May 17, 1932.
Goggles and eye-protectors. E. B. Meyrowitz, Inc. 296,354; Aug. 2; Serial No. 325,264; published May 17, 1932.
Lenses, Ophthalmic and protection. Willson Products, Inc. 296,347; Aug. 2; Serial No. 325,130; published May 3, 1932.
Machines for testing strength or stretch of material. Henry L. Scott Company. 296,334; Aug. 2; Serial No. 325,376; published May 3, 1932.
Measuring tools. "Société Anonyme Solex." 296,219; Aug. 2; Serial No. 324,209; published May 17, 1932.
Photographic apparatus. Zeiss Ikon Aktiengesellschaft. 296,291; Aug. 2; Serial No. 321,409; published May 10, 1932.
Photographic shutters. Eastman Kodak Company. 296,336; Aug. 2; Serial No. 325,306; published May 3, 1932.
Reels for motion picture films. E. J. Schaub. 296,397; Aug. 2.
Weighing machines. International Devices Corporation. 296,240; Aug. 2; Serial No. 324,919; published May 3, 1932.

CLASS 28

Bracelets, necklaces, etc. Ernest Steiner & Co. 296,339; Aug. 2; Serial No. 325,022; published May 17, 1932.
Cups, symbolic figures and trophies, Prize. International Silver Company. 296,358; Aug. 2; Serial No. 325,328; published May 17, 1932.
Diamonds and jewelry. G. A. Soden & Co. 296,267; Aug. 2; Serial No. 324,762; published May 17, 1932.
Knives and forks. Oneida Community, Limited. 296,197; Aug. 2; Serial No. 310,944; published May 3, 1932.
Stones, Imitation precious. Gemloid Corporation. 296,263; Aug. 2; Serial No. 323,398; published May 10, 1932.

CLASS 31

Refrigeration units. J. S. Booth. 296,273; Aug. 2; Serial No. 320,568; published May 17, 1932.

CLASS 32

Covers and pads. Evr-Klean Seat Pad Company. 296,283; Aug. 2; Serial No. 324,161; published May 10, 1932.
Covers, seat pads, seat shields, etc., Tailored seat. Evr-Klean Seat Pad Company. 296,282; Aug. 2; Serial No. 324,159; published May 10, 1932.
Furniture, Reproductions of antique. Virginia Craftsmen Inc. 296,292; Aug. 2; Serial No. 322,010; published May 17, 1932.

CLASS 35

Elements for brakes, Composition frictional. American Brake Materials Corporation. 296,390; Aug. 2.
Rubbers, Jar. Grocers & Producers Co. 296,278; Aug. 2; Serial No. 323,291; published May 17, 1932.

CLASS 36

Sound recording mechanisms, sound reproducing mechanisms, etc. RCA Photophone, Inc. 296,194; Aug. 2; Serial No. 310,658; published May 17, 1932.

CLASS 37

Paper and tissue. Myers Paper Company. 296,370; Aug. 2; Serial No. 325,829; published May 17, 1932.
Paper napkins and handkerchiefs. Tissue Company. 296,371; Aug. 2; Serial No. 325,730; published May 17, 1932.
Paper, Parchment. Riegel Paper Corporation. 296,365; Aug. 2; Serial No. 325,919; published May 17, 1932.
Paper towels. Northern Paper Mills. 296,333; Aug. 2; Serial No. 325,385; published May 17, 1932.
Paper, Wax. Newark Paraffine & Parchment Paper Co. 296,366; Aug. 2; Serial No. 325,916; published May 17, 1932.

CLASS 38

Books, charts, magazine, etc. W. H. Shirk. 296,227; Aug. 2; Serial No. 324,331; published May 17, 1932.
Certificates, Savings. National Sales Service. 296,224; Aug. 2; Serial No. 324,443; published May 17, 1932.
Publicat'on. E. L. Sickmeier. 296,277; Aug. 2; Serial No. 322,115; published May 17, 1932.

CLASS 39

Blouses. J. E. Grotta. 296,215; Aug. 2; Serial No. 324,939; published May 17, 1932.
Hosiery. Holeproof Hosiery Co. 296,223; Aug. 2; Serial No. 223,600; published May 17, 1932.
Hosiery. Van Raalte Company. 296,326; Aug. 2; Serial No. 325,537; published May 17, 1932.
Hosiery. Walter Fred Hosiery Mills, Inc. 296,303; Aug. 2; Serial No. 325,324; published May 17, 1932.
Piece goods in the nature of cut-out dresses. Tru-Fit Dress Co. Inc. 296,384; Aug. 2.
Suits. Joseph & Feiss Company. 296,271; Aug. 2; Serial No. 319,144; published May 17, 1932.
Suits, Outer. H. Daroff & Sons, Inc. 296,320; Aug. 2; Serial No. 325,780; published May 17, 1932.

CLASS 42

Blankets. Peperell Manufacturing Company. 296,308; Aug. 2; Serial No. 325,528; published May 17, 1932.
Cotton piece goods. Jacob S. Bernheimer & Bro. 89,088; renewed Nov. 12, 1932.
Cotton piece goods. T. A. Shaw and Co. 88,792; renewed Oct. 22, 1932.
Cotton piece goods and cotton yarn. Ker & Co. 39,116–18; renewed Oct. 28, 1932.
Cotton piece goods, Grey. Neuss, Hesslein & Co. 296,222; Aug. 2; Serial No. 323,869; published May 17, 1932.
Fabrics. American Bemberg Corporation. 296,214; Aug. 2; Serial No. 324,978; published May 17, 1932.
Fabrics. Celanese Corporation of America. 296,323; Aug. 2; Serial No. 325,745; published May 17, 1932.
Knitted textiles in the piece. William Heller, Inc. 296,392; Aug. 2.
Pile fabrics. Sidney Blumenthal & Co. Inc. 296,310; Aug. 2; Serial No. 326,047; published May 17, 1932.
Pile fabrics. Rossie Velvet Company. 296,301; Aug. 2; Serial No. 325,151; published May 17, 1932.
Pillow cases, sheets, curtains, etc. Standard Trading Mills. 296,220; Aug. 2; Serial No. 324,233; published May 17, 1932.
Silk crepes. William Skinner & Sons. 296,312; Aug. 2; Serial No. 326 030; published May 17, 1932.
Silk fabrics. Onondaga Silk Company. 296,380–2; Aug. 2.
Silk piece goods. H. R. Mallinson & Co. 296,309; Aug. 2; Serial No. 326,057; published May 17, 1932.
Textile fabrics. A. O. Meyer. 86,541; renewed May 14, 1932.

CLASS 43

Thread and yarn, Cotton. Standard-Coosa-Thatcher Company. 296,208; Aug. 2; Serial No. 316,139; published May 17, 1932.
Threads and yarns. American Glanzatoff Corporation. 296,372; Aug. 2; Serial No. 325,671; published May 17, 1932.

CLASS 44

Bed pans. International Stamping & Enameling Corporation. 296,268–9; Aug. 2; Serial Nos. 318,363–4; published May 17, 1932.
Bed pans and douche pans. International Stamping & Enameling Corporation. 296,247; Aug. 2; Serial No. 318,362; published May 17, 1932.
Bed pans, Irrigators, nasal douche, etc. International Stamping & Enameling Corporation. 296,246; Aug. 2; Serial No. 318,361; published May 17, 1932.
Cement and impression material for dental impressions, Hydrous. P. A. Kanouse. 296,328; Aug. 2; Serial No. 284,945; published May 17, 1932.

Manicure implements, sets, and kits. Schneider Brothers Incorporated. 296,327; Aug. 2; Serial No. 325,533; published May 17, 1932.
Prophylactic rubber articles. Killian Manufacturing Co. 296,311; Aug. 2; Serial No. 326,043; published May 17, 1932.

CLASS 45

Beverages and cocoa drinks. Sunspray Beverages. 296,322; Aug. 2; Serial No. 325,606; published May 17, 1932.
Beverages of lime flavor, Carbonated. Pacific Products, Inc. 296,193; Aug. 2; Serial No. 322,223; published May 17, 1932.
Water, beverages, syrups, etc., Mineral. H. E. Newman. 296,310; Aug. 2; Serial No. 325,993; published May 17, 1932.

CLASS 46

Candy. D. P. Beaton. 296,245; Aug. 2; Serial No. 317,823; published May 17, 1932.
Cantaloupes, Fresh. "Pride of Ridgeway" Growers Association. 296,221; Aug. 2; Serial No. 324,114; published May 17, 1932.
Chocolate confection. Ambrosia Chocolate Company. 89,084; renewed Nov. 12, 1932.
Feeds, Hog. Ohio Farm Bureau Service Company. 296,389; Aug. 2.
Food for stock and poultry. Associated Farmers' Exchanges, Inc. 296,395; Aug. 2.
Food, Poultry. Northern Limeshell Products. 296,272; Aug. 2; Serial No. 319,434; published May 17, 1932.
Foods. A. Sander Packing Company. 89,506; renewed Dec. 17, 1932.
Fruit cereal. Otco's Pure Food Products Company. 296,196; Aug. 2; Serial No. 310,877; published May 17, 1932.
Oranges. Charter Oak Citrus Association. 86,880; renewed June 11, 1932.
Tea, South American. Berndt & Co. 88,832; renewed Oct. 29, 1932.
Vegetables and cantaloupes. E. E. Emery. 296,359; Aug. 2; Serial No. 310,332; published May 17, 1932.

LIST OF LABELS

Beech-nut Luster-Mints. For Peppermints. Beech-Nut Packing Company. 40,973; Aug. 2.
Centennial. For Cake Flour. Centennial Flouring Mills Company. 40,975; Aug. 2.
Centennial. For Calf Meal. Centennial Flouring Mills Company. 40,974; Aug. 2.
Centennial. For Pancake and Waffle Flour. Centennial Flouring Mills Company. 40,976; Aug. 2.
Chocolate Covered Corn Crunch. For a Pop Corn Confection. C. W. Eaton. 40,980; Aug. 2.
Dr. Means' Pills. For Pills. W. B. Means. 40,984; Aug. 2.
Garden Patch. For Canned Corn. Cokato Canning Company. 40,979; Aug. 2.
Garden Patch. For Canned Peas. Cokato Canning Company. 40,978; Aug. 2.
Garden Patch. For Vacuum Packed Canned Corn. Cokato Canning Company. 40,977; Aug. 2.
Heavy Bodied Waterproof Exterior Paint. For Exterior Paint. W. Rice. 40,987; Aug. 2.
Pediforme Shoe Company. For Shoes. Wholgemuth Paper Box Co. 40,989; Aug. 2.
Rénou Dry Cleaner. For Fluid Used for Cleaning Purposes. Rénou Chemical Corporation. 40,986; Aug. 2.
The Secret of Fast Accurate Tennis. For Tennis Rackets. H. W. Hall. 40,982; Aug. 2.
The Suite of a Thousand Springs. For Spring Products. Nachman Spring-Filled Corporation. 40,985; Aug. 2.
Thompson's Tampa Cigars. For Cigars. Thompson & Company. 40,988; Aug. 2.
Tip Top. For Cigarette Paper. Liggett & Myers Tobacco Company. 40,983; Aug. 2.
Verachina Washing Fluid. For Washing Fluid. J. Fraschetti. 40,981; Aug. 2.

LIST OF PRINTS

How Lively Wool Leads Customers into your Store. For Rugs. Bigelow-Sanford Carpet Co. 13,789; Aug. 2.
Lucky Lindy Trade Card. For Toy Flying Monoplanes. Burns Laboratory. 13,790; Aug. 2.
P-K. For License Plate Fasteners. Parker-Kalon Corporation. 13,791; Aug. 2.
Rotella's. For Beverages. F. Rotella. 13,792; Aug. 2.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 2D DAY OF AUGUST, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abbott Laboratories. (See Raizise, G. W., and Clemence, assignor.)
Abendroth, Wilhelm, Berlin-Charlottenburg, assignor to Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung, Siemenstadt, Germany. High pressure steam plant with multistage power engine. 1,869,361; Aug. 2.
Abrams, Victor R., Brunswick, Ga. Device for measuring, regulating, and metering supply or distribution of fluids. 1,870,188; Aug. 2.
Acco Products, Inc. (See Kline, Fred J., assignor.)
Accounting & Tabulating Corporation of Great Britain Limited, The. (See Thomas, A., and Craig, assignors.)
Ackerman, Frank, St. Louis, assignor to Curtis Manufacturing Company, Wellston, Mo. Lubricating system for piston machines. 1,869,362; Aug. 2.
Acme Steel Company. (See MacChesney, Chester M., assignor.)
Actiengesellschaft C. P. Goerz Optische Anstalt, Actiova Spolecnost K. P. Goerz, Opticky Ustav. (See Grunberg, Otto, assignor.)
Actiengesellschaft C. P. Goerz Optische Anstalt Actiova Spolecnost K. P. Goerz Opticky Ustav. (See Raaber, H., Petschenig, Pechan, and Eichwalder, assignors.)
Adams, Mathias J., Turkey River, Iowa. Vehicle. 1,869,993; Aug. 2.
Adler, Oscar, and R. Adler, Karlshad, Czechoslovakia. Purification of water. 1,869,643; Aug. 2.
Adler, Rudolf. (See Adler, Oscar and R.)
Aickelin, Hans., and F. Teller, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Purification of aluminum chloride solutions. 1,870,214; Aug. 2.
Air Reduction Company. (See Anderson, James L., assignor.)
Air Reduction Company. (See Helmkamp, Richard F., assignor.)
Aktiebolaget Ljungstroms Angturbin. (See Lysholm, A., and Wahlsten, assignors.)
Aktiengesellschaft C. P. Goerz Optische Anstalt Akciova Spolecnost K. P. Goerz Opticky Ústav. (See Petschenig, Karl, assignor.)
Aktiengesellschaft C. P. Goerz Optische Anstalt, Actiova Spolecnost K. P. Goerz Opticky Ustav. (See Von Hofe, C., and Schier, assignors.)
Albright, N., et al, executors. (See Zifferer, Lothar R.)
Aldrich, John P., and H. A. Morris, assignors to The Automat Molding & Folding Company, Toledo, Ohio. Print forming machine. 1,869,644; Aug. 2.
Alemite Corporation. (See Thomas, George F., assignor.)
Alexander, Robert L., and J. R. McCallum, assignors to The Climax Engineering Company, Clinton, Iowa. Refrigeration unit. 1,869,835; Aug. 2.
Allen-Bradley Company. (See Bradley, Harry L., assignor.)
Allen, Edward B., Newton, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Shuttle race for sewing machines. 1,869,402; Aug. 2.
Allen, Howard [illegible]. (See Bliss, H. R., and Allen.)
Allgrunn, Carl [illegible]. (See Knapp, E. and Allgrunn.)
Allison, Leslie [illegible] Wilkinsburg, assignor to The Union Switch & [illegible] Company, Swissvale, Pa. Reactor. 1,869,364; Aug. 2.
Allman, John H., Butler, assignor of one-third to F. J. King, Monaca, and one-third to W. F. Faber, Rochester, Pa. Blade sharpener. Des. 87,452; Aug. 2.
Aluminum Company of America. (See Bossert, Theodore W., assignor.)
Aluminum Company of America. (See Bungay, George W., assignor.)
Aluminum Company of America. (See Derr, Ralph B., assignor.)
Aluminum Company of America. (See De Vore, Francis E., assignor.)
Aluminum Company of America. (See Taylor, C. S., and Edwards, assignors.)
Aluminum Cooking Utensil Company, The. (See Matter, J. K., and Towne, assignors.)
American Air Filter Company. (See Hegan, Chester P., assignor.)
American Bank Note Company. (See Cary, Alexander C., 3d, assignor.)
American Casting and Manufacturing Corporation. (See Dietze, Emil, assignor.)
American Fabrics Company, The. (See Page, Samuel H., assignor.)
American Glanzstoff Corporation. (See Gollong, Richard, assignor.)
American Glanzstoff Corporation. (See Gollong, R. J., and Carter, assignors.)
American Manufacturing Company. (See Brown, Robert B., assignor.)
American Metal Company, Limited, The. (See Weinig, Arthur J., assignor.)
American Monorail Company, The. (See Harris, Frank C., assignor.)
American Optical Company. (See Wrighton, William J., assignor.)
American Platinum Works. (See Ledig, Kurt K., assignor.)
American Propeller Company, The. (See Heath, Spencer, assignor.)
American Smelting & Refining Company. (See Wagstaff, Richard A., assignor.)
American Steel and Wire Company, The. (See Peterson, Carl H., assignor.)
American Steel Foundries. (See Oelkers, Alfred H., assignor.)
American Telephone and Telegraph Company. (See Bickelhaupt, C. O., and Penuel, assignors.)
American Telephone and Telegraph Company. (See Bostwick, Lee G., assignor.)
American Telephone and Telegraph Company. (See Shanck, Roy B., assignor.)
American Thermos Bottle Company, The. (See Wetmore, Miner P., assignor.)
American Throttle Company. (See McKee, Neal T., assignor.)
American Valve and Enameling Corporation. (See Wulf, Charles A., assignor.)
American Woolen Company. (See Jealous, Madeleine C., assignor.)
Anderson, David L., assignor, by mesne assignments, to The Oberphos Company, Baltimore, Md. Preparing phosphatic fertilizer. 1,869,952; Aug. 2.
Anderson, Ernst G. K., Evanston, Ill., assignor to Appleton Electric Company. Swivel fixture. 1,869,645; Aug. 2.
Anderson, Ernst G. K., Evanston, Ill., assignor to Appleton Electric Company. Switch box. 1,869,646; Aug. 2.
Anderson, Howard P., Erie, Pa., assignor to The Standard Stoker Company, Incorporated. Locomotive tender. 1,870,189; Aug. 2.
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Cutting torch machine. 1,869,836; Aug. 2.
Anderson, John, Portland, Conn. Lawn rake. 1,869,647; Aug. 2.
Anderson, Oscar P., Aurora, Ill. Tempering machine. 1,870,159; Aug. 2.
Anderson Stove Company. (See Olsen, J. C., jr., and Bottle, assignors.)
Andren, Birger T., assignor to A. O. Smith Corporation, Milwaukee, Wis. Swivel stool. 1,869,535; Aug. 2.
Antle, John S., Bexley, Ohio. Apparatus for cleaning tubes. 1,869,730; Aug. 2.
Apple, Vincent G., Dayton, Ohio. Variable condenser. 1,870,084; Aug. 2.
Apple, Vincent G., Dayton, Ohio. Laminated core. 1,870,085; Aug. 2.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Electromagnetic automotive vehicle brake. 1,869,876; Aug. 2.
Appleton Electric Company. (See Anderson, Ernst G. K., assignor.)
Arcturus Radio Tube Company. (See Horn, Clarence A., assignor.)
Arcturus Radio Tube Company. (See Krahl, Walter L., assignor.)
Armitage, Harold, Brookline, assignor to Universal Winding Company, Boston, Mass. Supply holder. 1,869,731; Aug. 2.
Armstrong Appliance Corporation. (See Atkinson, George E., assignor.)
Ashworth, Harry E., assignor to The Union Switch & Signal Company, Swissvale, Pa. Contact spring supporting and adjusting structure. 1,869,648; Aug. 2.
Asselstine, William J., assignor of one-half to D. L. Pitt, Premier, British Columbia, Canada. Apparatus for the concentration of ores. 1,869,732; Aug. 2.
Atkinson, George E., Proctorville, Ohio, assignor, by mesne assignments, to Armstrong Appliance Corporation. Reversible electric range. 1,869,649; Aug. 2.
Atkinson, Spencer R., Pasadena, Calif. Orthodontic appliance. 1,869,733; Aug. 2.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Pole fitting. 1,869,877; Aug. 2.

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Current transformer. 1,869,878; Aug. 2.
Automat Molding & Folding Company, The. (See Aldrich, J. P., and Morris, assignors.)
Automatic Fire Extinguisher & Alarm Co. (See Pohl, Ernest F., assignor.)
Automatic Projector-Operator Inc. (See Fenner, H. H., and Silvis, assignors.)
Axe, Roy T., assignor to The O. M. Edwards Company, Inc., Syracuse, N. Y. Sash holder with anti rattler means. 1,869,650; Aug. 2.
Ayres, Eugene E., jr., Swarthmore, assignor to The B. A. S. Company, Philadelphia, Pa. Esterification. 1,869,837; Aug. 2.
Ayres, Eugene E., jr., Swarthmore, assignor to The B. A. S. Company, Philadelphia, Pa. Producing alcohols from gasoline. 1,869,928; Aug. 2.
B. A. S. Company, The. (See Ayres, Eugene E., jr., assignor.)
Baars, Ernst S. H., assignor to The Vilter Manufacturing Company, Milwaukee, Wis. Cooling and ice tank coils. 1,869,792; Aug. 2.
Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)
Babcock & Wilcox Company, The. (See Kerr, Howard, jr., assignor.)
Babcock & Wilcox Company, The. (See Lucke, Charles E., assignor.)
Backstay Welt Company. (See Jansen, Stanley W., assignor.)
Badger, Walter L., Ann Arbor, Mich., assignor to Swenson Evaporator Company, Harvey, Ill. Evaporator. 1,869,651; Aug. 2.
Baer, Jean, Basel, Switzerland. Manufacture of elastic-plastic material. 1,869,834; Aug. 2.
Bailey, Harvey W., Portland, Oreg. Buffer. 1,869,793; Aug. 2.
Baird, John L., assignor to Television Limited, London, England. Television and like apparatus. 1,869,735; Aug. 2.
Baker, Harold H., Milwaukee, Wis. Kit bag. 1,869,652; Aug. 2.
Baker, James N., Towson, Md. Printing telegraph system. 1,869,994; Aug. 2.
Baker-Raulang Company, The. (See Remde, Edward H., assignor.)
Balz, Otto, and W. Wagner, Ludwigshafen-on-the-Rhine, Germany. Decomposition of crude phosphates. 1,869,879; Aug. 2.
Bandonill, Placido H., Vigan, Ilocos Sur, Philippine Islands. Combination call bell and blotter holder. 1,870,160; Aug. 2.
Bankert, Fred H., Ottawa, assignor to Chicago Retort and Fire Brick Company, Chicago, Ill. Brick press. 1,869,995; Aug. 2.
Barber-Colman Company. (See Edgar, John, assignor.)
Barbiers, Ferdinand S., assignor to The Hocking Glass Company, Lancaster, Ohio. Glass pail. Des. 87,453; Aug. 2.
Bard, Francis N., Highland Park, Ill. Reverse gear mechanism. 1,869,363; Aug. 2.
Barney, Edwin E., New Rochelle, assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,870,086; Aug. 2.
Barret Company The. (See Emery, Harry A., assignor.)
Barron, Joseph P., Knoxville, Pa. Combined traffic indicator and advertising device. 1,870,161; Aug. 2.
Barry William O., Columbus, Ohio. Glass tumbler. Des. 87,454; Aug. 2.
Barthels Manufacturing Company. (See Buschhaus, Adolf, assignor.)
Bartlett Hayward Company, The. (See Thoman, Walter C., assignor.)
Bauer, Edward G., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Can feeding apparatus. 1,869,653; Aug. 2.
Bauer Ignition Company, The. (See Herbster, George, assignor.)
Bausch & Lomb Optical Company. (See Bausch, William, assignor.)
Bausch & Lomb Optical Company. (See Foster, Leon V., assignor.)
Bausch & Lomb Optical Co. (See Schnabl, Franz, assignor.)
Bausch, William, assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Rear vision mirror. 1,869,456; Aug. 2.
Bean, William H., Oakland, Calif. Automatic work gripper. 1,869,654; Aug. 2.
Beck, Henry P. C., San Francisco, Calif. Toothpick holder. 1,870,162; Aug. 2.
Beck, Nelson P., Rochester, N. Y. Deck of playing cards. Des. 87,455; Aug. 2.
Beckwith, Louis I., Dorchester, Mass. Supporting structure. 1,870,087; Aug. 2.
Beckwith, Louis I., Brookline, Mass. Refrigerating apparatus. 1,870,088; Aug. 2.
Beebe, John D., Akron, Ohio., assignor to The B. F. Goodrich Company, New York, N. Y. Impeller blade. 1,869,655; Aug. 2.
Behling, William G., North Bergen, N. J. Lift cart. 1,870,163; Aug. 2.
Belber Trunk & Bag Company, The. (See Snellow, E. O., and Meidl, assignors.)
Bell, Joseph D., San Francisco, Calif. Storage building for automobiles. 1,869,794; Aug. 2.
Bell, Kenneth G. (See Rosenstein, L., and Bell.)
Bell Telephone Laboratories, Incorporated. (See Cole, Ira E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Curtis, Austen M., assignor.)
Bell Telephone Laboratories, Incorporated. (See Knoop, William A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Stevenson, George H., assignor.)
Belluche, Frank R., Racine, Wis. Sheet transfer mechanism. 1,869,403; Aug. 2.
Bendix Brake Company. (See Apple, Vincent G., assignor.)
Bendix Brake Company. (See Hofer, Alfred H., assignor.)
Bennis, Alfred W., Bolton, England. Turbulent burner. 1,870,164; Aug. 2.
Benoit, Leon, Chicago, Ill. Apparatus for handling eggs. 1,869,457; Aug. 2.
Bens, Samuel J., assignor to Chain Saw Corporation, New York, N. Y. Chain or link belt. 1,870,165; Aug. 2.
Berenbruch, Albert, Neurossen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Apparatus for carrying out exorthermic catalytic gas reactions. 1,869,736; Aug. 2.
Bernfeld, Maurice M., St. Paul, Minn., assignor, by mesne assignments, to himself and Clarence C. Maskowitz, New York, N. Y. Splitting wood. 1,870,190; Aug. 2.
Bickel, Henry F., Plainfield, N. J., assignor to The New York Air Brake Company. Air brake. 1,870,191; Aug. 2.
Bickelhaupt, Carroll O., New York, N. Y., and C. E. Pennel, Atlanta, Ga., assignors to American Telephone and Telegraph Company. Communication system. 1,869,558; Aug. 2.
Bienert, Karl, Berlin-Spandau, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y. Typographical composing and line casting machine. 1,869,353; Aug. 2.
Billick, August. (See Marsh, A. C., and Billick.)
Binnie, Robert T., Glasgow, assignor of one-half to W. Miller, Edinburgh, Scotland. Apparatus for extracting liquid from solid or semi-solid matter by pressure. 1,870,033; Aug. 2.
Binns, Edward H., Pittsburgh, Pa. Paving tile. 1,869,880; Aug. 2.
Black, John C., Destrehan, Louisiana, assignor to Gasoline Products Company, Inc., Wilmington, Del. Process and apparatus for heating oil. 1,869,838; Aug. 2.
Black, Joseph J., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Tire building apparatus. 1,869,656; Aug. 2.
Black, Knox C., Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Control apparatus. 1,869,536; Aug. 2.
Blair Strip Steel Company. (See Lewis, Lester L., assignor.)
Blakeslee, Arthur L., assignor to Kalamazoo Stove Company, Kalamazoo, Mich. Cooking stove or similar article. Des. 87,456; Aug. 2.
Blaw-Knox Company. (See Miscampbell, Hugh, assignor.)
Blaw-Knox Company. (See Venable, William M., assignor.)
Bleiso, Bruce N., Cleveland Heights, and W. V. Magee, Lakewood, Ohio. Rod bundle transfer mechanism. 1,869,354; Aug. 2.
Bliss, Herbert R., and H. G. Allen, assignors to H. R. Bliss Co., Inc., Niagara Falls, N. Y. Drum container. 1,869,929; Aug. 2.
Bliss, H. R., Co. (See Bliss, H. R., and Allen, assignors.)
Block, Leon, Cleveland Heights, Ohio. Waste pipe fitting. 1,879,089; Aug. 2.
Blue, Joseph N., Big Spring, Tex. Box and bearing for railway vehicles. 1,869,795; Aug. 2.
Boissonnault, Gaston, Valley Stream, assignor to C. P. Kimmey, trustee, New York, N. Y. Lock protection. 1,869,404; Aug. 2.
Bolton, William J., Oakmont, Pa. Valve apparatus. 1,870,090; Aug. 2.
Bond, Samuel C., Holly Oak, Del., assignor to The Henry P. Scott Company, as trustee. Preparing comminuted cork. 1,870,166; Aug. 2.
Bossert, Theodore W., New Kensington, assignor to Aluminum Company of America, Pittsburgh, Pa. Controlling grain growth in aluminum manganese alloys. 1,869,996; Aug. 2.
Bostwick, Lee G., Chatham, N. J., assignor to American Telephone and Telegraph Company. Amplifying system. 1,869,459; Aug. 2.
Bottle, Harry L. (See Olsen, J. C., jr., and Bottle.)
Boulard, Constance, New York, N. Y. Making plaques and the like. 1,869,839; Aug. 2.
Bowers, Frank. (See Snow, N. L., Bowers, and Howse.)
Bowers, Harold E., Chicago, Ill., assignor to The B. F. Goodrich Company, New York, N. Y. Rubber composition and preserving rubber. 1,869,657; Aug. 2.
Bowman, William F., Ocean Park, Calif. Rocker bearing for walking beam end-connections. 1,869,405; Aug. 2.
Boyajian, Aram, and E. V. De Bileux, Pittsfield, Mass., assignors to General Electric Company. Electrical regulator. 1,870,093; Aug. 2.
Boyd, Clarence A., Barnesville, assignor to The Watt Car and Wheel Company, Barnesville, Ohio. Mine car. 1,870,167; Aug. 2.

Boykow, Johann M., assignor to Messgerate Boykow, G. m. b. H., Berlin-Lichterfelde-West, Germany. Stabilizing apparatus. 1,869,840; Aug. 2.
Bradbury, Walter S., and A. L. Lowe, Ilion, N. Y., assignors to Remington Arms Company, Inc. Firearm. 1,869,537; Aug. 2.
Bradley, Harry L., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis. Rheostat. 1,869,538; Aug. 2.
Brand, Achill W., Morro Bay, Calif. Exercise and massage cushion. 1,869,400; Aug. 2.
Brand, Harry R., New York, N. Y. Food preparing machine. 1,869,539; Aug. 2.
Brand, Harry R., New York, N. Y. Food handling mechanism for cooking machines. 1,869,540; Aug. 2.
Brand, Harry R., New York, N. Y. Food preparing machine. 1,869,541; Aug. 2.
Branda, Baptistin, Marseille, France. Machine for cracking and sorting nuts. 1,869,658; Aug. 2.
Braunlich, Friedrich, Aussig A/E, Czechoslovakia, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Preparation of new mouth washes and dentifrices. 1,869,406; Aug. 2.
Brenizer, Orson W., assignor of three-eighths to Andrew V. Groupe, Philadelphia, Pa. Cable support. 1,869,407; Aug. 2.
Breuer, Adam A., Chicago, Ill. Portable heat blower. 1,869,737; Aug. 2.
Bridgers, Burke H., Wilmington, N. C. Game apparatus. 1,870,168; Aug. 2.
Briechle, Ambrosius, assignor to Fairchild Aerial Camera Corporation, New York, N. Y. Film positioning device for aerial cameras. 1,870,091; Aug. 2.
Briggs & Stratton Corporation. (See Jacobi, Edward N., assignor.)
Brightman, Rainald, Manchester, assignor to Imperial Chemical Industries Limited, Westminster, England. Azo dyestuffs and preparing same. 1,869,930; Aug. 2.
Brill, J. G., Company. (See Rosebrook, Guy L., assignor.)
Brittain, Richard J., jr., Bloomfield, N. J., assignor to General Motors Corporation, Detroit, Mich. Journal box. 1,869,931; Aug. 2.
Broertjes, Willem, Amsterdam, Netherlands. Maintaining secrecy in the transmission of wireless telegraphic messages. 1,869,659; Aug. 2.
Brophy, Gerald R., Schenectady, N. Y., and Guiseppe Scorzoni, East Lynn, Mass., assignors to General Electric Company. Refractory lining for melting pots. 1,870,034; Aug. 2.
Brown, Anna L., Tulsa, Okla. Hanger. 1,870,169; Aug. 2.
Brown, Louis S., Los Angeles, Calif. Strip gasket. 1,869,932; Aug. 2.
Brown, Robert B., Great Neck, assignor to American Manufacturing Company, Brooklyn, N. Y. Doormat. Des. 87,457; Aug. 2.
Brownell Company, The. (See Little, C. B., and Hang, assignors.)
Browning, George, Wilmette, assignor to Chicago Flexible Shaft Company, Chicago, Ill. Automatically timed electric toaster. 1,870,035; Aug. 2.
Browning, George, Wilmette, assignor to Chicago Flexible Shaft Company, Chicago, Ill. Automatically timed apparatus for heat treatment. 1,870,170; Aug. 2.
Bruce, Alexander D., E. A. Russell, and T. H. Manchester, assignors to Vapor Car Heating Company, Inc., Chicago, Ill. Thrust bearing for flexible pipe joints. 1,870,036; Aug. 2.
Buchanan, Paul H. (See Jones, Hilton I., assignor.)
Buchanan, Stephen N., assignor to The Thomas & Betts Co., Elizabeth, N. J. Floor box. 1,869,841; Aug. 2.
Buckley, James R., Parlin, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Alkyl ether ethylene glycol esters of fatty acids. 1,869,660; Aug. 2.
Buckley, Leo J., Binghamton, N. Y. Sound board. 1,870,171; Aug. 2.
Buda Company, The. (See Miller, Claud T., assignor.)
Budd, Edward G. (See Eksergian, C. L., and Budd.)
Budd Wheel Company. (See Eksergian, Carolus L., assignor.)
Budd Wheel Company. (See Eksergian, C. L., and Budd, assignors.)
Budd Wheel Company. (See Eksergian, C. L., and Gaensle, assignors.)
Buebee, Lucian W., jr., assignor, by mesne assignments, to Continental Optical Manufacturing Company, Indianapolis, Ind. Multifocal lens. 1,869,461; Aug. 2.
Bumbaugh, Harold L., assignor to Standard Oil Company of California, San Francisco, Calif. Lightning protection system and method. 1,869,661; Aug. 2.
Bungay, George W., Plainfield, N. J., assignor to Aluminum Company of America, Pittsburgh, Pa. Spool. 1,869,408; Aug. 2.
Burheim, Olav, Trondhjem, Norway. Stretching and fastening device for ropes. 1,869,462; Aug. 2.
Burkart, William, and R. M. Parsons, Denver, said Parsons assignor of one-half of his entire right to William C. Candler, Littleton, Colo. Variable speed reducer. 1,869,662; Aug. 2.
Burns, Joseph C. (See Grove, D. C., and Burns.)
Buschhaus, Adolf, Wuppertal-Barmen, Germany, assignor to Barthels Manufacturing Company, Glendale, N. Y. Fastening device. 1,870,172; Aug. 2.
Butler, Charles R., et al. (See Dean, C. L., and Hilton, assignors.)
Butler, Clyde G. (See Harris, C., and Butler.)
Butler, Clyde G., assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio. Submerged pump. 1,870,192; Aug. 2.
Butterick Publishing Company, The. (See Yohns, Paul, assignor.)
Byles, Frank A., Schenectady, N. Y., assignor to General Electric Company. Power system. 1,870,037; Aug. 2.
Byles, Frank A., Schenectady, N. Y., assignor to General Electric Company. Power system. 1,870,092; Aug. 2.
Caldwell, Charles H., Brockton, Mass., assignor to Geo. E. Keith Company, Campello, Mass. Shoe. Des. 87,458; Aug. 2.
Caldwell, Charles H., Brockton, assignor to Geo. E. Keith Company, Campello, Mass. Shoe. Des. 87,459; Aug. 2.
Calicel Products, Inc. (See Dean, William T., assignor.)
California and Hawaiian Sugar Refining Corporation, Limited. (See Iacobitti, Giuseppe, assignor.)
Calton, Robert G., Nashville, Tenn., assignor to Tennessee Enamel Manufacturing Co. Metal furniture fastening. 1,870,173; Aug. 2.
Calton, Robert G., Nashville, Tenn., assignor to Tennessee Enamel Manufacturing Co. Metal furniture. 1,870,174; Aug. 2.
Cameron, William McC. (See Dreyfus, C., Cameron, and Schneider.)
Campbell, Charles H., Aspinwall, Pa. Preparing glue stocks. 1,869,881; Aug. 2.
Canadian Atlas Steels Limited. (See Norley, Harry C., assignor.)
Candler, William C. (See Burkart, W., and Parsons, assignors.)
Caprotti, Arturo, Milan, Italy. Poppet valve for steam distributing gears. 1,869,463; Aug. 2.
Carbonaro, Mario C., Paris, assignor to Société Anonyme pour Tous Appareillages Mécaniques, Levallois-Perret, Seine, France. Measuring and feeding device for liquids. 1,869,953; Aug. 2.
Carlin, Joseph C., assignor to Tennessee Products Corporation, Nashville, Tenn. Treating slag wool. 1,870,094; Aug. 2.
Carlson, Wendell L., Schenectady, N. Y., assignor to General Electric Company. Amplifying system. 1,870,038; Aug. 2.
Carnarius, Edwin H., and V. D. Charleston, assignors to Commercial Solvents Corporation, Terre Haute, Ind. Decolorizing ester distillation fractions. 1,869,954; Aug. 2.
Carrier Engineering Company Limited. (See Fowler, A., and Robertson, assignors.)
Carrier Engineering Company Limited. (See Robertson, Kenneth J. R., assignor.)
Carrier Engineering Corporation. (See LeGrand, Joseph M., assignor.)
Carter, Chapel S., Orange, and J. H. Duncan, New Haven, assignors to The H. C. Cook Company, Ansonia, Conn. Signal or clip. 1,869,997; Aug. 2.
Carter, Ralph H. (See Gollong, R. J., and Carter.)
Cartier, Marcel E., New Rochelle, N. Y. Thermostatic mixing means. 1,869,663; Aug. 2.
Cartum, Paul O., Cleveland Heights, Ohio, assignor to General Electric Company. Incandescent lamp. 1,869,998; Aug. 2.
Cary, Alexander C., 3d, Larchmont, assignor to American Bank Note Company, New York, N. Y. Automatic stop mechanism control. 1,869,999; Aug. 2.
Casablancas, Fernando, Sabadell, Spain. Reducing device for slivers for drawing mechanisms for textile slivers. 1,870,095; Aug. 2.
Castle, Verle A., Delta, Iowa, assignor of one-half to M. S. Levine. Sanitary appliance. 1,869,664; Aug. 2.
Catterlin, F. J. (See Worthington, George E., assignor.)
Celanese Corporation of America. (See Dreyfus, C., Cameron, and Schneider, assignors.)
Celanese Corporation of America. (See Moss, W. H., and Crutchfield, assignors.)
Chain Belt Company. (See Roblee, M. A., and Kunz, assignors.)
Chain Saw Corporation. (See Bens, Samuel J., assignor.)
Chamberlain, Theron T., assignor of one-half to C. T. Hanley, Chicago, Ill. Casement window and hinge therefor. 1,869,542; Aug. 2.
Champion, Harry E., et al., executors. (See Zifferer, Lothar R.)
Chandler, Edwin, Lisbon, Ohio. Cart. 1,869,355; Aug. 2.
Chapp, Thomas, New York, N. Y. Loud speaker. 1,869,665; Aug. 2.
Chase Companies, The. (See Cornell, Edward S., jr., assignor.)
Chaux, René, and C. Dufraisse, Paris, assignors to Compagnie de Bethune, Bully-les-Mines, France. Δ2-cyclopenten barbituric acids. 1,869,666; Aug. 2.
Chester, Frank R., New York, N. Y., assignor to Chesterfield Control Company, Dover, Del. Game. 1,869,842; Aug. 2.
Chesterfield Control Company. (See Chester, Frank R., assignor.)
Cheswright, Leonard K., Swansea, Ontario, Canada. Transmission mechanism. 1,869,543; Aug. 2.
Chicago Flexible Shaft Company. (See Browning, George, assignor.)

Chicago Retort and Fire Brick Company. (See Bankert, Fred H., assignor.)
Churchward, Jack, New Haven, Conn. Aluminum arc welding. 1,869,667; Aug. 2.
Cincinnati Ball Crank Company, The. (See Butler, Clyde G., assignor.)
Cincinnati Ball Crank Company, The. (See Harris, C., and Butler, assignors.)
Clark, Paul Wesley, Los Angeles, Calif. Confection. 1,869,464; Aug. 2.
Clarry, Harold E., East Orange, N. J., assignor to Westinghouse Lamp Company. Cleaning up gases. 1,869,544; Aug. 2.
Claude, Georges, assignor to Société l'Air Liquide Société Anonyme pour l'Etude et l'Exploitation des Procédés Georges Claude, Siège Social, Paris, France. Manufacture of hydrogen by the partial liquefaction of gaseous mixtures containing the same. 1,870,096; Aug. 2.
Clausen, Harold C., Swissvale, and J. W. Logan, jr., Edgewood, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway braking apparatus. 1,869,409; Aug. 2.
Claussen, Edward, Walla Walla, Wash. Slip-on bed brace. 1,869,796; Aug. 2.
Cleaver, John M., Los Angeles, Calif. Separation of materials. 1,869,797; Aug. 2.
Clemence, Le Roy W. (See Raizlss, G. W., and Clemence.)
Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Wired broadcast distributing system. 1,869,356; Aug. 2.
Cleveland Pneumatic Tool Company. (See De Mooy, John, assignor.)
Cleveland Tractor Company, The. (See Jones, George D., assignor.)
Climax Engineering Company. (See Alexander, R. L., and McCallum, assignors.)
Clinch, Duncan L. (See Millar, K. A., and Clinch.)
Cochrane Corporation. (See Fowler, Joseph B., assignor.)
Coe Laboratories, Inc. (See Thompson, Nat, assignor.)
Cohan, Morris J., Brooklyn, assignor to Reliance Specialties Mfg. Co., Inc., New York, N. Y. Traveling advertising sign. 1,869,465; Aug. 2.
Cohen, Joseph E., and H. Godoy, Philadelphia, Pa., and R. Miehling, New York, N. Y., assignors to Sentry Safety Control Corporation, Philadelphia, Pa. Combined motion picture projector and sound reproducing machine. 1,869,882; Aug. 2.
Cole, Ira E., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Voltage limiter. 1,869,466; Aug. 2.
Cole, William P., Long Beach, Calif. Self guiding drilling bit. 1,869,843; Aug. 2.
Coleman, Arthur, Kansas City, Kans. Carburetor. 1,869,798; Aug. 2.
Colladay, Edward F. (See Clement, Edward E., assignor.)
Coller, Merwin R., North Hollywood, Calif. Device for lifting and moving transformers. 1,870,097; Aug. 2.
Collins, Arnold M., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Synthetic drying oils and making them. 1,869,668; Aug. 2.
Collins, Douglas, Salisbury, N. C. Carburetor. 1,869,467; Aug. 2.
Columbia Malleable Castings Corp. (See Zifferer, Lothar R., assignor.)
Commercial Solvents Corporation. (See Carnarius, E. H., and Charleston, assignors.)
Commercial Solvents Corporation. (See Martin, J., and Krchma, assignors.)
Commercial Solvents Corporation. (See Swallen, Lloyd C., assignor.)
Compagnie de Bethune. (See Chaux, R., and Dufraisse, assignors.)
Condit Electrical Manufacturing Corporation. (See Edsall, William S., assignor.)
Condit Electrical Manufacturing Corporation. (See MacNeil, Frederick H., assignor.)
Conlon Corporation. (See Janda, Rudolph W., assignor.)
Conn, C. G., Ltd. (See Smith, Alfred L., assignor.)
Conrad, Joshua C., Fort Worth, Tex. Cotton impaling and cleaning machine for harvesters. 1,870,039; Aug. 2.
Continental Optical Manufacturing Company. (See Bugbee, Lucian W., jr., assignor.)
Continuous Gramophones Limited. (See Oyston, William R., assignor.)
Cook, H. C., Company, The. (See Carter, C. S., and Duncan, assignors.)
Cook Laboratories, Inc. (See Stocklin, Clifford L., assignor.)
Cook, Peter T., Sausalito, Calif. Bird house. Des. 87,460; Aug. 2.
Cooke Electric Refrigeration Company. (See Cooke, George J., assignor.)
Cooke, George J., assignor to Cooke Electric Refrigeration Company, Chicago, Ill. Seal for rotating shafts. 1,869,933; Aug. 2.
Cope, Frank T., and A. H. Vaughan, assignors to The Electric Furnace Company, Salem, Ohio. Handling arrangement for furnaces. 1,869,468; Aug. 2.
Corduan, Gustave F., assignor to Corduan Manufacturing Company, Chicago, Ill. Chair. 1,869,365; Aug. 2.
Corduan Manufacturing Company. (See Corduan, Gustave F., assignor.)
Cornell, Edward S., jr., Watertown, assignor to The Chase Companies, Incorporated, Waterbury, Conn. Underground storage-tank installation. 1,869,669; Aug. 2.
Cox, Harry W., and D. H. Moore; said Moore assignor to said Cox, Weston-super-Mare, England. Antitobacco confection. 1,870,098; Aug. 2.
Crafts, Curtis S., Oak Park, Ill., assignor to Goss Printing Press Company. Web roll supporting mechanism. 1,869,545; Aug. 2.
Craig, George. (See Thomas, A., and Craig.)
Cramp, David L., Kirkland Lake, Ontario, Canada. Brake rubbing rotor. 1,869,546; Aug. 2.
Cramp, David L., Kirkland Lake, Ontario, Canada. Gate valve for runways. 1,869,547; Aug. 2.
Crane Co. (See Jones, Robert M., assignor.)
Croan, Walter B., Chicago, Ill. Atomizer. 1,870,099; Aug. 2.
Crosser, David H., Chicago, Ill., assignor to R. E. Gebhardt Company. Candlestick. 1,870,208; Aug. 2.
Crown Stove Works. (See Rogers, Walter F., assignor.)
Crutchfield, Kenneth H. (See Moss, W. H., and Crutchfield.)
Cunningham, Arthur B., and A. F. Spitzglass, assignors to Republic Flow Meters Company, Chicago, Ill. Multiple draft and pressure gauge. 1,870,000; Aug. 2.
Currie, Gilbert, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company. Safety device for circuitous elevators. 1,869,883; Aug. 2.
Curtis, Austen M., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Testing device. 1,869,884; Aug. 2.
Curtis Companies. (See Madsen, Sern, assignor.)
Curtis Manufacturing Company. (See Ackerman, Frank, assignor.)
Curtiss, George E., assignor to Landers, Frary & Clark, New Britain, Conn. Sadiron. 1,870,200; Aug. 2.
Curzon, John S., Peerless, Utah, assignor of one-half to Ace Miner, Helper, Utah. Vending machine. 1,870,100; Aug. 2.
Cutler-Hammer, Inc. (See Schmidt, Edwin X., assignor.)
Dallos, Josef, Budapest, Hungary, assignor to Carl Zeiss, Jena, Germany. Contact glass. 1,869,366; Aug. 2.
Daly Manufacturing Company, The. (See Snow, Arthur E., assignor.)
Danner, Philip S., Point Richmond, assignor, by mesne assignments, to Standard Oil Company of California, San Francisco, Calif. Converting heavy hydrocarbons. 1,869,799; Aug. 2.
Darrah, William A., Chicago, Ill. Fuel fired furnace. 1,869,670; Aug. 2.
Daugherty, Charles E., Wayne, Pa. Dredging or like pump. 1,869,955; Aug. 2.
Davey, William J., Takoma Park, Md. Wall and ceiling structure. 1,870,101; Aug. 2.
David, Irwin W., New York, N. Y. Footwear and making the same. 1,869,410; Aug. 2.
Davies, James D., Martins Ferry, Ohio. Building brick. 1,870,102; Aug. 2.
Davis, Louis, jr., assignor of one-eighth to D. Hulett and A. J. Stuckey, Galveston, Tex. Machine-gun. 1,869,738; Aug. 2.
Davis, William N., Oakland, and W. H. Hampton, Berkeley, assignors to Standard Oil Company of California, San Francisco, Calif. Making motor fuel. 1,869,885; Aug. 2.
Dawson, Edwin S. (See Randolph, A., and Dawson.)
Dayton Steel Foundry, The. (See Walther, George, assignor.)
Dean, Charles L., Denver, Colo., and L. D. Hilton, San Antonio, Tex., assignors, by mesne assignments, to W. A. Trout, Los Angeles, C. R. Butler, and C. A. Rasmussen, Long Beach, Calif. Control head for oil wells. 1,869,739; Aug. 2.
Dean, William T., Gary, assignor to Calicel Products, Inc., Hammond, Ind. Sound absorbing material and making the same. 1,869,367; Aug. 2.
De Blieux, Earl V. (See Boyajian A., and De Blieux.)
Deere & Company. (See Paradise, L. A., and Huddle, assignors.)
Deere & Company. (See Paradise, Louis A., assignor.)
De Iongh, Johan H., Wassenaar, assignor to Naamlooze vennootschap Maatschappij tot Vervaardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands. Weighing apparatus. 1,869,740; Aug. 2.
De Lal, John. (See Rubini, E., and De Lal.)
Delco-Light Company. (See Wells, W. C., and Wendt, assignors.)
Del Purgatorio, Antonio, Jersey City, N. J. Floor lamp or like article. Des. 87,483; Aug. 2.
DeMattia, Barthold, Clifton, N. J., assignor to National Rubber Machinery Company. Vulcanizing mold. 1,869,671; Aug. 2.
Deming Company, The. (See Randolph, A., and Dawson, assignors.)
DeMooy, John, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio. Automatic coupling valve. 1,869,411; Aug. 2.
Dennison Manufacturing Company. (See Maish, Ralph A., assignor.)
Der Bruck, Gerhard V. (See Nicolai, F., Schoenburg, and der Bruck.)

De Rienzo, Frank, and R. Muzzipapa, Summit, N. J. Radiator dustguard. 1,869,548; Aug. 2.
Derr, Ralph B., Oakmont, assignor to Aluminum Company of America, Pittsburgh, Pa. Recovery of metal from coated metal foils. 1,869,844; Aug. 2.
Derr, Ralph B., Oakmont, assignor to Aluminum Company of America, Pittsburgh, Pa. Recovery of metal from coated metal foils. 1,869,886; Aug. 2.
Deutsch, Hans. (See Friedmann, L., and Deutsch.)
Deutsche Versuchsanstalt fur Luftfahrt, E. V. (See Seewald, F., and Ebert, assignors.)
DeVore, Francis E., Washington, D. C., assignor to Aluminum Company of America, Pittsburgh, Pa. Bearing. 1,869,412; Aug. 2.
Dewandre, Albert, assignor to Servo Frein Dewandre, Societe Anonyme, Liege, Belgium. Servo-brake. 1,869,956; Aug. 2.
Diamond Power Specialty Corporation. (See Snow, N. L., Bowers, and Howse, assignors.)
Di Bona, Anthony. (See Jellow, T., and Di Bona.)
Diedrich, Paul. (See Dohrn, M., and Diedrich.)
Diescher, Samuel E., Pittsburgh, Pa. Method of reducing and elongating tubular blanks. 1,870,209; Aug. 2.
Dietmann, Paul W., Jönköping, Sweden. Apparatus for arranging boxes. 1,870,201; Aug. 2.
Dietze, Emil, Richmond Hill, assignor to American Casting and Manufacturing Corporation, Brooklyn, N. Y. Pipe union housing. 1,870,040; Aug. 2.
Diggs, Sterling H., Casper, Wyo., assignor to Standard Oil Company, Whiting, Ind. Lubricating oil. 1,869,800; Aug. 2.
Dike, Theodore W., New Westminster, British Columbia, Canada, assignor to I. F. Laucks, Inc., Seattle, Wash. Method and apparatus for the formation of plywood. 1,869,957; Aug. 2.
Dike, Theodore W., New Westminster, British Columbia, Canada, assignor to I. F. Laucks, Inc., Seattle, Wash. Method and apparatus for the formation of plywood and the like. 1,870,041; Aug. 2.
Dina, Augusto, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y. Clutch operating mechanism. 1,869,887; Aug. 2.
Dina, Augusto, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y. Locking and clamping mechanism for motion picture projector machine parts. 1,869,888; Aug. 2.
Ditto, Incorporated. (See Pederson, John P., assignor.)
Divine, Robert E., Bogota, N. J. Preventing rancidity in soaps and product. 1,869,469; Aug. 2.
Dobson, Harry E., New York, N. Y. Liquid dispensing apparatus. 1,870,103; Aug. 2.
Dobson, William A., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,870,001; Aug. 2.
Dodgem Corporation. (See Markey, Fred L., assignor.)
Doherty-Brehm Company. (See Doherty, George D., assignor.)
Doherty, George D., assignor to Doherty-Brehm Company, Minneapolis, Minn. Air humidifier. 1,869,549; Aug. 2.
Dohrn, Max, Berlin-Charlottenburg, and P. Diedrich, Finkenkrug-Osthavelland, assignors to Schering-Kahlbaum A. G., Berlin, Germany. Production of diiodochelidamic acid. 1,869,672; Aug. 2.
Donato, Anthony, Schenectady, N. Y. Hatband. 1,869,801; Aug. 2.
Dore, Joseph P., assignor to Holland Furnace Company, Holland, Mich. Fan blade attachment. 1,869,802; Aug. 2.
Dorfan, Morton I., assignor to Pangborn Corporation, Hagerstown, Md. Coal cleaning air treatment method and apparatus. 1,870,042; Aug. 2.
Dorogi, Dr., Es Tarsa Gummigyar R. T. (See Dorogi, Istvan and L., assignors.)
Dorogi, Istvan, and L. Dorogi, Budapest, assignors of one-half to Dr. Dorogi Es Tarsa Gummigyar R. T., Budapest-Albertfalva, Hungary. Pressing and cutting template for the production of articles composed of crude rubber sheets. 1,869,550; Aug. 2.
Dorogi, Lajos. (See Dorogi, Istvan, and L.)
Doser, Albert J., assignor to Taylor Instrument Companies, Rochester, N. Y. Pressure responsive instrument. 1,869,934; Aug. 2.
Dreyfus, Camille, New York, N. Y. Elastic fabric. 1,869,938; Aug. 2.
Dreyfus, Camille, Basel, Switzerland, W. McC. Cameron, New York, N. Y., and G. Schneider, Mountain Lakes, N. J., assignors to Celanese Corporation of America. Manufacture of compositions and articles from cellulose derivatives. 1,870,175; Aug. 2.
Dreyfus, Henry, London, England. Production of oxygenated aliphatic compounds. 1,870,104; Aug. 2.
Dries, James A., Emaus, Pa. Supporting means for sliding door track rails. 1,869,368; Aug. 2.
Dri-Steam Valve Corporation. (See Pascale, Pasquale, assignor.)
Drouve, G., Company. (See Hawes, Harold B., assignors.)
Du Bois, Virgil L., assignor to The Stough Tank Erecting Company, Tulsa, Okla. Valve. 1,869,741; Aug. 2.
Duff, Charles L., Columbus, Ohio. Exercising machine. 1,869,673; Aug. 2.
Duffy, Francis, Hamilton, Ontario, Canada. Fabric dyeing machine. 1,869,674; Aug. 2.
Dufraisse, Charles. (See Chaux, R., and Dufraisse.)
Dugger, George F., assignor of one-half to James Garland, Allen, Tex. Cultivator shovel. 1,870,105; Aug. 2.
Duncan, John H. (See Carter, C. S., and Duncan.)
Dunham, C. A., Company. (See Randel, Bo F., assignor.)
Dunn, Hillis C., East McKeesport, Pa. Differentiating brake. 1,869,470; Aug. 2.
Du Pont, E. I., de Nemours & Co. (See Buckley, James R., assignor.)
Du Pont, E. I., de Nemours & Company. (See Collins, Arnold M., assignor.)
Du Pont, E. I., de Nemours & Company. (See Scharff, Godfrey E., assignor.)
Dye, Harry W. (See Tower, M. L., Dye, and McDonough.)
Earl, Harley J., assignor to General Motors Corporation, Detroit, Mich. Windshield wiper. 1,869,551; Aug. 2.
Easley, Curran S., assignor to Truline, Inc., Lagrange, Ga. Self moistenng smoothing iron. 1,869,675; Aug. 2.
Eaton, Wilfred A., Edgewood, Pa. Air spring. 1,869,676; Aug. 2.
Ebert, Heinrich. (See Seewald, F., and Ebert.)
Ecker, Will J., jr., St. Louis, Mo. Cardcase and manufacture. 1,869,803; Aug. 2.
Eckert, Fritz, Berlin, Germany, assignor of one-fourth to W. A. Morton and one-fourth to P. L. Geer, Pittsburgh, Pa. Method of and apparatus for producing sheet glass. 1,870,002; Aug. 2.
Eclipse Aviation Corporation. (See Vastano, Frederick A., assignor.)
Edgar, John, assignor to Barber-Colman Company, Rockford, Ill. Workholder. 1,869,413; Aug. 2.
Edgren, Fred E., Chicago, Ill. Trimming device. 1,869,369; Aug. 2.
Edmunds, Louis L., Crockett, Calif. Carton. 1,869,742; Aug. 2.
Edsall, William S., assignor to Condit Electrical Manufacturing Corporation, Boston, Mass. Platen-mounted electric switch. 1,869,889; Aug. 2.
Edwards, Junius D. (See Taylor, C. S., and Edwards.)
Edwards, O. M. Company, The. (See Axe, Roy T., assignor.)
Eggan, Alfred J., assignor to Livingston Engineering Company, Chicago, Ill. Cable equalizer. 1,869,471; Aug. 2.
Egry Register Company, The. (See Pfeiffer, Frank E., assignor.)
Eichwalder, Ernst. (See Raaber, H., Petschenig, Pechan, and Eichwalder.)
Eksergian, Carolus L., assignor to Budd Wheel Company, Philadelphia, Pa. Apparatus for welding wheels to rims. 1,869,804; Aug. 2.
Eksergian, Carolus L., Detroit, Mich., and E. G. Budd, assignors to Budd Wheel Company, Philadelphia, Pa. Method and apparatus for rolling disks. 1,869,959; Aug. 2.
Eksergian, Carolus L., and P. W. Gaenssle, Detroit, Mich., assignors to Budd Wheel Company, Philadelphia, Pa. Artillery steel wheel. 1,869,960; Aug. 2.
Electric Furnace Company, The. (See Cope, F. T., and Vaughan, assignors.)
Electrolux Servel Corporation. (See Knight, Donald B., assignor.)
Elliott-Fisher Company. (See Pitman, Henry L., assignor.)
Ellis, Delbert, Turtle Creek, Pa., assgnor to Westinghouse Electric & Manufacturing Company. Arc box. 1,869,552; Aug. 2.
Ellis, Lockwood B., Birmingham, assignor to General Motors Corporation, Detroit, Mich. Thermostatically controlled crankcase ventilating inlet. 1,869,553; Aug. 2.
Ellis, Owen W., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Alloy. 1,869,554; Aug. 2.
Elsey, Howard M., Oakmont, and A. T. Krogh, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Coating for thermionic devices. 1,870,003; Aug. 2.
Emery, Harry A., Roselle Park, N. J., assignor to The Barrett Company, New York, N. Y. Sheet forming apparatus. 1,869,677; Aug. 2.
Engelke, Henry. (See Natkiel, Harry, assignor.)
Enzlisch, Otto B., et al. (See Hard, Merrill W., assignor.)
Ensign Carburetor Co. (See Ensign, Orville H., assignor.)
Ensign, Orville H., Pasadena, assignor to Ensign Carburetor Co., Ltd., Huntington Park, Calif. Fuel injection for internal combustion engines. 1,869,805; Aug. 2.
Epstein & Harris. (See Sternberg, Woldemar M., assignor.)
Epstein, David, Passaic, N. J. Cabinet. Des. 87,461; Aug. 2.
Erickson, Peter, East Glen Lake, Minn. Plant planter. 1,870,043; Aug. 2.
Evans Case Company. (See Reilly, Alfred F., assignor.)
Evans, Frederick H., Rochester, N. Y. Wheel aligner for vehicles. 1,870,106; Aug. 2.
Eyster, Lewis A. (See Hand, L. R., and Eyster.)
Faber, Walter F., et al. (See Allman, John H., assignor.)
Fairchild Aerial Camera Corporation. (See Briechle, Ambrosius, assignor.)
Farber, Louis. (See Willmott, John J., assignor.)
Felimeth, Jacob W. Danville, Ill. Dipper tooth. 1,870,044; Aug. 2.

Felt & Tarrant Manufacturing Company. (See Turck, Joseph A. V., assignor.)
Fenner, Howard H., and R. E. Silvis, Mill City, assignors to Automatic Projector Operator, Inc., Portland, Oreg. Circuit controller for motion picture films. 1,869,678; Aug. 2.
Fester, Tillie, Cleveland, Ohio. Shoulder strap holder. 1,869,935; Aug. 2.
Finley, Dozier, Berkeley, Calif., assignor, by mesne assignments, to Toledo Scale Manufacturing Co., Toledo, Ohio. Weighing machine. 1,869,370; Aug. 2.
Flintkote Corporation, The. (See Kirschbraun, Lester, assignor.)
Ford Motor Company. (See Stout, William B., assignor.)
Forstner Chain Corporation. (See Forstner, William, assignor.)
Forstner, William, assignor to Forstner Chain Corporation, Irvington, N. J. Flexible metallic strap. Des. 87,462; Aug. 2.
Foster, Leon V., Irondequoit, assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Sound reproducing apparatus. 1,869,414; Aug. 2.
Foster-Wheeler Corporation. (See Keenan, Walter F., jr., assignor.)
Fowler, Alexander, and K. J. R. Robertson, assignors to Carrier Engineering Company Limited, London, England. Cleaning of articles. 1,869,845; Aug. 2.
Fowler, Joseph B., assignor to Cochrane Corporation, Philadelphia, Pa. Receiver separator. 1,869,371; Aug. 2.
Frank, Herbert. (See Stein, R., and Frank.)
Frank, Leo C., McKeesport, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system for farm lighting plants. 1,869,555; Aug. 2.
Frank, Leo C., McKeesport, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system for farm lighting plants. 1,869,846; Aug. 2.
Franklin Development Corporation. (See Murphy, R., and Marks, assignors.
Franz, Michael. (See Matzner, H., and Franz.)
Frederick, Alton K., assignor to Southwestern Portland Cement Company. Osborn, Ohio. Machine for unloading cement. 1,869,679; Aug. 2.
Freeman, Walter B., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Method and apparatus for removing treads from tires. 1,869,680; Aug. 2.
Freudenberg, Hans, Weinheim, Germany. Method of and machine for operating upon hides, skins and leather. 1,869,472; Aug. 2.
Friedmann, Firm Alex. (See Friedmann, L., and Deutsch, assignors.)
Friedmann, Louis, and H. Deutsch, assignors to the Firm Alex Friedmann, Vienna, Austria. Feeding device for the boilers of locomotives. 1,869,473; Aug. 2.
Frigidaire Corporation. (See Holbrook, William C., assignor.)
Frigidaire Corporation. (See Reeves, Donald H., assignor.)
Frigidaire Corporation. (See Schmieding, Warren H. F., assignor.)
Frolich, Per K., Elizabeth, N. J., assignor to Standard Oil Development Company. Production of normally liquid hydrocarbons from gaseous or lower boiling hydrocarbon materials. 1,869,681; Aug. 2.
Fuller, Henry C., Washington, D. C. Medicated ointment composition. 1,870,107; Aug. 2.
Fuller, Louis W., assignor to The Howe Scale Company, Rutland, Vermont. Weighing-scale. 1,869,357; Aug. 2.
Fulton, William B., Walnut Park, Calif. Door check. 1,869,415; Aug. 2.
Gaenssle, Paul W. (See Eksergian, C. L., and Gaenssle.)
Gail, John F., Evanston, Ill., assignor to Simmons Company, New York, N. Y. Edge for mattresses or cushions. 1,870,045; Aug. 2.
Gale, Roy B., Frisco, Colo. Cabinet. 1,869,806; Aug. 2.
Gardner-Denver Company. (See Katterjohn, August H., assignor.)
Garland, James. (See Dugger, George F., assignor.)
Gasoline Products Company. (See Black, John C., assignor.)
Gatchell, Helen C., assignor to Visible Night-and-Day Street-Name Signs, Incorporated, Chicago, Ill. Street sign. 1,869,474; Aug. 2.
Gatti, Joseph. (See Mursch, John, assignor.)
Gay, André M., West Newton, Mass. Tool for giving a permanent wave to hair. 1,869,682; Aug. 2.
Gay, Vincent B. (See Rogers, F. C., and Gay.)
Gebhardt, R. E., Company. (See Crosser, David H., assignor.)
Geer, Paul L., et al. (See Eckert, Fritz, assignor.)
Geiger, Ernst, Irvington, N. J. Parking garage. 1,869,743; Aug. 2.
Gemex Company. (See Prestinari, Eugen, assignor.)
General Electric Company. (See Boyajian, A., and De Bleux, assignors.)
General Electric Company. (See Brophy, G. R., and Scorzoni, assignors.)
General Electric Company. (See Byles, Frank A., assignor.)
General Electric Company. (See Carlson, Wendell L., assignor.)
General Electric Company. (See Cartun, Paul O., assignor.)
General Electric Company. (See Hill, Charles H., assignor.)
General Electric Company. (See Nickle, Clifford A., assignor.)
General Electric Company. (See Prince, David C., assignor.)
General Electric Company. (See Sabbah, Camil A., assignor.)
General Electric Company. (See Young, A. P., and Griffiths, assignors.)
General Motors Corporation. (See Brittain, Richard J., jr., assignor.)
General Motors Corporation. (See Earl, Harley J., assignor.)
General Motors Corporation. (See Ellis, Lockwood B., assignor.)
General Motors Corporation. (See Gibbons, Harold R., assignor.)
General Motors Corporation. (See Lenz, Arnold, assignor.)
General Motors Corporation. (See Nyland, Edward R., assignor.)
General Register Company. (See Heisel, Reuben H., assignor.)
Gesellschaft für Drahtlose Telegraphie m. b. H. (See Michelssen, Fritz, assignor.)
Gesellschaft für Linde's Eismaschinen A. G. (See Schuftan, Paul, assignor.)
Gibbons, Harold R., Chatham, N. J., assignor to General Motors Corporation, Detroit, Mich. Antifriction bearing. 1,869,890; Aug. 2.
Glebe, Erich, and A. Scheibe, Berlin, Germany, assignors to Radio Corporation of America. Vibrating crystals. 1,869,556; Aug. 2.
Giesl-Gieslingen, Adolf, New York, N. Y. Self-cleaning locomotive draft appliance. 1,869,891; Aug. 2.
Gildemeister, Walther. (See Tideman, Wilhelm, assignor.)
Gillespie, Kingsley A., assignor to The Stamford Rubber Supply Company, Stamford, Conn. Rubber substitute. 1,869,557; Aug. 2.
Gillette Safety Razor Company. (See Testi, Nicholas, assignor.)
Glasier, Harold H., Los Angeles, Calif. Power driven spader. 1,869,961; Aug. 2.
Glynn, Thomas J., Pittsburgh, Pa. Mechanism for sawing tubes from ingots. 1,870,108; Aug. 2.
Goddard, Charles F., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automobile storage elevator. 1,870,046; Aug. 2.
Godoy, Humbert. (See Cohen, E. J., Godoy, and Miehling.)
Goforth, Archie S., Decatur, Ala. Service tray. 1,870,109; Aug. 2.
Golden, Charles F., Denver, Ind. Drafting instrument. 1,869,358; Aug. 2.
Golden, Robert F., South Orange, assignor to The National Lock Washer Company, Newark, N. J. Speed indicator. 1,869,962; Aug. 2.
Goldenstar, Arthur L., Duluth, Minn. Fence post anchor. 1,869,744; Aug. 2.
Gollong, Richard, Johnson City, Tenn., assignor to American Glanzstoff Corporation, New York, N. Y. Twisting cap. 1,870,202; Aug. 2.
Gollong, Richard J., and R. H. Carter, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y. Locking device. 1,869,558; Aug. 2.
Goodrich, B. F., Company, The. (See Beebe, John D., assignor.)
Goodrich, B. F., Company, The. (See Black, Joseph J., assignor.)
Goodrich, B. F., Company, The. (See Bowers, Harold E., assignor.)
Goodrich, B. F., Company, The. (See Freeman, Walter B., assignor.)
Goodrich, B. F., Company, The. (See Homier, O. F., and Young, assignors.)
Goodrich, B. F., Company, The. (See Hopkins, Ethan C., assignor.)
Goodrich, B. F., Company, The. (See Leguillon, Charles W., assignor.)
Goodrich, B. F., Company, The. (See Merrill, Allan B., assignor.)
Goodrich, B. F., Company, The. (See Rogers, F. C., and Gay, assignors.)
Goodrich, B. F., Company, The. (See Whitcomb, J. H., and Wagner, assignors.)
Goss Printing Presa Company. (See Crafts, Curtis S., assignor.)
Goss Printing Press Company. (See Lang, Hubert, assignor.)
Grahame, James H., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Method of and apparatus for distillation of hydrocarbon oils. 1,870,193; Aug. 2.
Grayson, Ralph V., Atlanta, Ga. Refrigerant generator and circulator. 1,869,683; Aug. 2.
Green, Charles W., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,870,004; Aug. 2.
Green, George H., Leicester, England. Support for sliding members in knitting machines. 1,869,416; Aug. 2.
Greenstein, Morris W., New York, N. Y. Applique gingham effect chintz. Des. 87,463; Aug. 2.
Greenstreet, Oliver P., Owensville, Mo. Antifreezing liquid. 1,869,684; Aug. 2.
Griffiths, Leonard. (See Young, A. P., and Griffiths.)
Griffiths, Septimus H., Wheeling, W. Va. Air and gas burner. 1,869,359; Aug. 2.

Griswold, Andrew E., assignor to Trumbull Electric Manufacturing Company, Pacific Division, Seattle, Wash. Electric switch. 1,869,936; Aug. 2.
Grondahl, Lars O., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,869,847; Aug. 2.
Groupe, Andrew V. (See Breniser, Orson W., assignor.)
Grove, Donald C., and J. C. Burns, Big Springs, Tex. Well drill. 1,869,892; Aug. 2.
Grünberg, Otto, Vienna, Austria, assignor to Actiengesellschaft C. P. Goerz Optische Anstalt, Actiova Spolecnost K. P. Goerz Opticky Ustav, Bratislava, Czechoslovakia. Range finder. 1,869,417; Aug. 2.
Guest, Alfred W. F., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical composing machine. 1,869,360; Aug. 2.
Gusdorf, Harold M., Indianapolis, Ind. Dispensing device. 1,869,685; Aug. 2.
Gustin, Daniel S., East Orange, N. J., assignor to Westinghouse Lamp Company. Filament mounting for incandescent lamps. 1,869,559; Aug. 2.
Guth, Edwin F., Webster Groves, Mo. Reflector for lighting fixtures. Des. 87,464; Aug. 2.
Guth, Edwin F., Webster Groves, Mo. Lighting fixture. 1,870,194; Aug. 2.
Gutsch, Alice, Milwaukee, Wis. Clay model protector. 1,870,005; Aug. 2.
Haag, Walter J. (See Little, C. B., and Haag.)
Haas, William F., Rockaway, N. Y. Buckle. Des. 87,465; Aug. 2.
Haddlesay, Charles S., Elmhurst, Ill. Car for monorail systems. 1,869,893; Aug. 2.
Hale, John C., Bound Brook, N. J., assignor to Research Corporation, New York, N. Y. Cable terminal. 1,869,475; Aug. 2.
Hall, William A., Marignane, France. Protective paper for agricultural or horticultural uses. 1,870,110; Aug. 2.
Hallgren, Arthur G., Montclair, N. J., assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 87,466; Aug. 2.
Hamann, William, Irondequoit, N. Y., assignor to United Shoe Machinery Corporation, Paterson, N. J. Stitch indenting machine. 1,869,476; Aug. 2.
Hamilton, Francis F., Indianapolis, Ind. Sound damped muffler. 1,869,419; Aug. 2.
Hamlin, Benjamin M., assignor to Wheary Trunk Company, Racine, Wis. Luggage carrier. 1,869,418; Aug. 2.
Hamlin, Guy E., assignor to McMillan Book Company, Syracuse, N. Y. Loose leaf binder. 1,869,937; Aug. 2.
Hammer, Samuel, assignor to United Metal Box Co., Inc., Brooklyn, N. Y. Wall cabinet. 1,869,807; Aug. 2.
Hammond, George F. (See Tapie, Joseph F., assignor.)
Hampton, William H. (See Davis, W. N., and Hampton.)
Hanaoka, Yoshisuke, Honolulu, Hawaii. Washboard. 1,870,111; Aug. 2.
Hancock, William T., Long Beach, Calif. Dispensing tube. 1,869,808; Aug. 2.
Hand, Leon R., Hummels Wharf, and L. A. Eyster, Sunbury, Pa. Bolt and clamp. 1,870,112; Aug. 2.
Handtrag, Martin. (See Regerbis, W., and Handtrag.)
Hanley, Chester T. (See Chamberlain, Theron T., assignor.)
Hard, Malcolm, Flushing, assignor to The Superheater Company, New York, N. Y. Exhaust steam injector. 1,870,006; Aug. 2.
Hard, Merrill W., assignor of one-fourth to L. E. Richey, Los Angeles, Calif., and one-fourth to O. B. Englisch, Chicago, Ill. Vehicle support. 1,869,420; Aug. 2.
Hargraves, Albert, Akron, Ohio. Tire. Des. 87,467; Aug. 2.
Hargreaves, Robert, assignor to Whitin Machine Works, Whitinsville, Mass. Motor drive for spinning or twisting machines. 1,869,686; Aug. 2.
Harrington & King Perforating Company. (See Lapteff, Alexis V., assignor.)
Harris, Cleo, and C. G. Butler, assignors to The Cincinnati Ball Crank Company, Cincinnati, Ohio. Lubricating apparatus. 1,870,195; Aug. 2.
Harris, Frank C., Cleveland, Ohio, assignor to The American Monorail Company. Overhead conveyor system. 1,869,421; Aug. 2.
Harris, Frank C., Cleveland, Ohio, assignor to The American Monorail Company. Drip frame trolley. 1,869,422; Aug. 2.
Harrison, Charles. (See Snarck, Jack, assignor.)
Hart, Osco E., Colorado Springs, Colo. Tool for removing wheels from automobile axles. 1,869,687; Aug. 2.
Hartford-Empire Company. (See Rowe, George E., assignor.)
Hartnell, Willard L. (See Johnson, W. D., and Hartnell, assignors.)
Hartnell, Willard L., assignor to Yates-American Machine Company, Beloit, Wis. Feeding device for woodworking machines and the like. 1,869,592; Aug. 2.
Hauk, Joseph, assignor to Hauk Manufacturing Company, Milwaukee, Wis. Can-turning machine. 1,869,477; Aug. 2.
Hauk Manufacturing Company. (See Hauk, Joseph, assignor.)
Hawes, Harold B., assignor to G. Drouve Co., Fairfield, Conn. Glass structure. 1,869,963; Aug. 2.
Hawkins, William A., Ensley, and G. W. Lathem, Bessemer, Ala. Separating machine. 1,870,113; Aug. 2.
Hawley, John B., jr. (See Strand, A., and Hawley.)
Hazeltine Corporation. (See Hazeltine, Louis A., assignor.)
Hazeltine, Louis A., Hoboken, N. J., assignor to Hazeltine Corporation. Radio receiving system. 1,869,804; Aug. 2.
Hazenfield, Ernie F., assignor to Williams Sealing Corporation, Decatur, Ill. Safety device for pressea. 1,869,895; Aug. 2.
Heath, Spencer, Elkridge, assignor to The American Propeller Company, Baltimore, Md. Forming a propeller. 1,869,478; Aug. 2.
Heddon's, James, Sons. (See Welch, Jack T., assignor.)
Hegan, Chester P., assignor to American Air Filter Company, Inc., Louisville, Ky. Air filter. 1,870,196; Aug. 2.
Heimann, Heinrich, Dessau in Anhalt, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacturing mixed fertilizers. 1,869,688; Aug. 2.
Hein, Hermann, Bremen, Germany. Landing sail for aircraft. 1,870,115; Aug. 2.
Hein, Hermann, Bremen, Germany. Aircraft landing sail. 1,870,116; Aug. 2.
Heller, Edwin H., Sikeston, Mo. Shoe ventilating device. 1,870,114; Aug. 2.
Helmkamp, Richard F., Jersey City, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Multiple cutting torch apparatus. 1,869,848; Aug. 2.
Heisel, Reuben H., Long Island City, assignor to General Register Corporation, Brooklyn, N. Y. Check punching and issuing machine. 1,869,849; Aug. 2.
Hendersen, Carl, Oak Park, Ill. Printing press. 1,870,117; Aug. 2.
Henderson, Herbert V., Detroit, Mich. Radiator cap. Des. 87,468; Aug. 2.
Hennecke, Joseph W., Los Angeles, Calif. Lathing hammer. 1,869,850; Aug. 2.
Herbster, George, assignor to The Bauer Ignition Company, Cleveland, Ohio. Automatic gas lighter. 1,870,007; Aug. 2.
Hercules Cement Corporation. (See Kind, Morris, assignor.)
Hermsdorf-Schomburg Isolatoren, G. m. b. H. (See Regerbis, W., and Handtrag, assignors.)
Heuer, Emil G., Dresden, Germany. Automobile body. 1,869,423; Aug. 2.
Hewlett, John M., Schenectady, N. Y. Liquid atomizing device. 1,869,809; Aug. 2.
Heyman, Horace W., Maplewood, N. J. Draft regulator. 1,869,964; Aug. 2.
Hickok Manufacturing Company. (See Sachs, Morris, assignor.)
Hicks, Linzy, Lexington, Ky. Making chilled food products. 1,869,810; Aug. 2.
Hill, Charles H., Drexel Hill, Pa., assignor to General Electric Company. Electrical switchgear. 1,870,047; Aug. 2.
Hill, Hermann, Detroit, Mich., assignor to Syracuse Washing Machine Corporation, Syracuse, N. Y. Ironing machine. 1,869,745; Aug. 2.
Hill, Leland H., Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Flow indicator. 1,869,811; Aug. 2.
Hilton, Lewis D. (See Dean, C. L., and Hilton.)
Hocking Glass Company, The. (See Barbiers, Ferdinand S., assignor.)
Hodgkins, Charles H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermal relay. 1,870,176; Aug. 2.
Hofer, Alfred H., Dayton, Ohio, assignor to Bendix Brake Company, Chicago, Ill. Brake for landing gear wheels of airplanes. 1,869,479; Aug. 2.
Hoke, John L., New Carlisle, Ind. Tractor. 1,869,746; Aug. 2.
Holbrook, William C., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,869,812; Aug. 2.
Holland Furnace Company. (See Dore, Joseph P., assignor.)
Holland Furnace Company. (See Nystrom, O. P., and Jaarda, assignors.)
Holland, James, Los Angeles, Calif. Doorlock. 1,869,689; Aug. 2.
Holm, Melvin M. (See Shiffler, W. H., Holm, and Miller.)
Holt, Earl E. (See Shipley, B. M., and Holt.)
Holtson, James B., Towson, Md., assignor to The Huffman Manufacturing Company, Dayton, Ohio. Slip-joint fill box. 1,870,118; Aug. 2.
Homier, Otto F., and H. L. Young, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Method and machine for splicing rubber tubes. 1,869,690; Aug. 2.
Hopkins, Ethan C., Belmont, Mass., assignor to The B. F. Goodrich Company, New York, N. Y. Coating apparatus. 1,869,691; Aug. 2.
Hopwood, John M., Pittsburgh, Pa. Fuel-air ratio control system. 1,869,372; Aug. 2.
Hormes, William T., Baltimore, Md. Pilaster. 1,870,048; Aug. 2.
Horn, Clarence A., Elizabeth, N. J. Electron device. 1,869,896; Aug. 2.
Horn, Clarence A., Rahway, assignor to Arcturus Radio Tube Company, Newark, N. J. Multiple filament rectifier. 1,869,560; Aug. 2.

Horn, Clarence A., Rahway, assignor to Arcturus Radio Tube Company, Newark, N. J. Double plate rectifier. 1,869,561; Aug. 2.
Horner, Leon H., assignor to Whitin Machine Works, Whitinsville, Mass. Spindle drive for spinning or twisting machines. 1,869,692; Aug. 2.
Horowitz, Robert, Bronx, N. Y. Light control mechanism for projectors. 1,869,965; Aug. 2.
Hough, Clinton W., assignor to Wired Radio, Inc., New York, N. Y. Motion picture television system. 1,869,424; Aug. 2.
Hourd, Arthur R. C., London, Ontario, Canada. Folding table. 1,869,693; Aug. 2.
Howard, William S., New York, N. Y., assignor, by mesne assignments, to Utility Products Company. Automobile truck derrick. 1,869,747; Aug. 2.
Howe Scale Company, The. (See Fuller, Louis W., assignor.)
Howse, Curtis L. (See Snow, N. L., Bowers, and Howse.)
Huebner-Bleistein Patents Company. (See Huebner, William C., assignor.)
Huebner, William C., Chicago, Ill., assignor to Huebner, Bleistein Patents Company, Buffalo, N. Y. Negative holder for photographic printing machines. 1,870,068; Aug. 2.
Hubbell, Harvey, Incorporated. (See Wells, Burling D., assignor.)
Huck, Louis C., Detroit, Mich. Adjusting means for lever arms. 1,869,562; Aug. 2.
Huddle, Edwin F. (See Paradise, L. A., and Huddle.)
Hudson, David W., Green Bay, Wis. Web folder. 1,869,694; Aug. 2.
Huet, André, Paris, France, assignor to The Superheater Company, New York, N. Y. Waste heat boiler. 1,870,009; Aug. 2.
Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Device for recirculating highly heated gases. 1,870,010; Aug. 2.
Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Treating petroleum oil. 1,870,049; Aug. 2.
Huffman Manufacturing Company, The. (See Holston, James B., assignor.)
Hughes, George A., Havelock, Nebr. Airplane. 1,970,119; Aug. 2.
Hulett, Delbert, et al. (See Davis, Louis, jr., assignor.)
Huling, John E., Buffalo, N. Y. Signaling device. 1,869,748; Aug. 2.
Hulse, Delbert T. (See Williams, William E., assignor.)
Humes, James T., Harrisonburg, Va. Sound muffling device for typewriters and other machines. 1,870,120; Aug. 2.
Hunt, Albert P. (See MacLachlan, John C., assignor.)
Hunt, Francis H., Leonia, N. J., assignor to Raymond Concrete Pile Company, New York, N. Y. Excavating bucket. 1,870,050; Aug. 2.
Hurt, Samuel N., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,869,425; Aug. 2.
Husted, H. A., Company, The. (See Kraft, Herman T., assignor.)
Hyman, Henry. (See Seuffert, Joseph F., assignor.)
Hymer, Herbert A., Detroit, Mich. Method of and apparatus for combustion of fuels. 1,869,897; Aug. 2.
I. G. Farbenindustrie Aktiengesellschaft. (See Aickelin, H., and Teller, assignors.)
I. G. Farbenindustrie, Aktiengesellschaft. (See Berenbruch, Albert, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Heimann, Heinrich, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Klein, R., and Ulrich, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Nicolai, F., Schoenburg, and der Bruck, assignors.)
I. G. Farbenindustrie, Aktiengesellschaft. (See Orthner, Ludwig, assignor.)
Iacobitti, Giuseppe, Crockett, assignor to California and Hawaiian Sugar Refining Corporation, Limited, San Francisco, Calif. Dispensing carton. 1,869,751; Aug. 2.
Illinois Tool Works. (See Swanson, Andrew W., assignor.)
Imperial Chemical Industries Limited. (See Brightman, Rainald, assignor.)
Indestro Mfg. Co. (See Rice, Harold G., assignor.)
Individual Drinking Cup Company. (See Stone, Henry A., assignor.)
Industrial Waste Eliminators, Limited. (See Jackson, James, assignor.)
Ingram, Harry, Wheeling, W. Va. Closure cap for tumblers, jars, and other receptacles. 1,869,938; Aug. 2.
Insley Manufacturing Company. (See Schmid, Carl G., assignor.)
International Combustion Engineering Corporation. (See Rosencrants, Fay H., assignor.)
International Industrial and Chemical Company, Limited. (See Wittouck, Serge, assignor.)
International Patents Development Company. (See Sovereign, Clarence L., assignor.)
International Precipitation Company. (See Jakosky, J. J., and Knight.)
International Projector Corporation. (See Dina, Augusto, assignor.)
International Projector Corporation. (See Kindelmann, Albert, assignor.)
International Silver Company. (See Stark, Frederick W., assignor.)
International Spotlight Corporation. (See Sklarek, Clifford, assignor.)
Irgens, Finn T., assignor to Outboard Motors Corporation, Milwaukee, Wis. Exhaust tube for internal combustion engines. 1,869,749; Aug. 2.
Isselhardt, Louis L., assignor to Superior Paper Products Co., Marion, Ind. Feeding device. 1,869,750; Aug. 2.
Jaarda, Gerrit. (See Nystrom, O. P., and Jaarda.)
Jackson, James, Birmingham, assignor to Industrial Waste Eliminators Limited, London, England. Treatment of vegetable refuse for obtaining useful products therefrom. 1,870,121; Aug. 2.
Jacobi, Edward N., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Lock. 1,869,426; Aug. 2.
Jacobus, David S., Montclair, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boiler. 1,870,177; Aug. 2.
Jähne, Ernst H., assignor to Firm "Universelle" Cigarettemaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Apparatus for aligning match strips having staggered matches. 1,869,373; Aug. 2.
Jähne, Ernst H., assignor to Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Machine for applying sealing strips to cigarette containers. 1,869,374; Aug. 2.
Jakosky, John J., Los Angeles, and A. W. Knight, South Pasadena, assignors to International Precipitation Company, Los Angeles, Calif. Time switch. 1,869,752; Aug. 2.
Janda, Rudolph W., Berwyn, assignor to Conlon Corporation, Cicero, Ill. Caster mounting. 1,869,966; Aug. 2.
Jansen, Stanley W., Detroit, Mich., assignor to Backstay Welt Company, Union City, Ind. Automobile antisqueak welt. 1,870,122; Aug. 2.
Jauch, Robert J., and H. L. Mitchell, assignors to Wayne Company, Fort Wayne, Ind. Dispensing apparatus. 1,869,375; Aug. 2.
Jealous, Madeleine C., Wellesley Hills, assignor to American Woolen Company, Boston, Mass. Textile fabric. Des. 87,469; Aug. 2.
Jegge, Emil G. (See Ward, E. H., and Jegge.)
Jellow, Timothy, and A. Di Bona, Quincy, Mass. Forming designs in surfaces. 1,869,695; Aug. 2.
Jennings, Irving C., South Norwalk, Conn. Turbine and motor driving mechanism for rotary pumps. 1,869,696; Aug. 2.
Jennings, Oliver S., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Circuit breaker. 1,869,563; Aug. 2.
Jenson, James B., Salt Lake City, Utah. Guard finger and ledger plate for mowing machines. 1,869,898; Aug. 2.
Johannesen, Johan E., Brooklyn, N. Y. Suspenderless uniform. Des. 87,470; Aug. 2.
Johnson, A., & Co. (See Kalling, B. M. S., and von Delwig, assignors.)
Johnson, Bryan G., et al. (See Thomas, William H., assignor.)
Johnson, Gustav, West Roxbury, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Snap fastener member and making the same. 1,870,051; Aug. 2.
Johnson, John A., Woodhaven, N. Y. Apparatus for assembling receptacle closures. 1,869,480; Aug. 2.
Johnson, John C., North Easton, Mass. Erecting strip for building materials. 1,870,011; Aug. 2.
Johnson, Olaf A., and R. E. Lingren, assignors to Storm Manufacturing Co., Inc., Minneapolis, Minn. Cylinder finishing tool. 1,869,377; Aug. 2.
Johnson, Wallace D., Beloit, Wis., and W. L. Hartnell, New York, N. Y., assignors to Yates-American Machine Company, Beloit, Wis. Feeder for woodworking machines. 1,869,593; Aug. 2.
Johnston, David R., Detroit, Mich. Polishing tool. 1,869,564; Aug. 2.
Johnston, James G., Attleboro, Mass. Collapsible tube. 1,869,594; Aug. 2.
Jones, George D., assignor to The Cleveland Tractor Company, Cleveland, Ohio. Implement. 1,869,376; Aug. 2.
Jones, Hilton I., Wilmette, Ill., assignor of one-half to Paul H. Buchanan, trustee for The National Selected Morticians of Washington, D. C. Embalming fluid. 1,870,123; Aug. 2.
Jones, Horatio S., Kansas City, Mo. Tourniquet. 1,870,052; Aug. 2.
Jones, Marshall E., St. Cloud, Minn. Process and apparatus for producing convex and concave surfaces in stone. 1,869,427; Aug. 2.
Jones, Robert M., assignor to Crane Co., Chicago, Ill. Valve wrench. 1,869,813; Aug. 2.
Jordan, Hans. (See Schoeller, W., Schwenk, and Jordan.)
Jordan, O. F. Company. (See Protzeller, Harry W., assignor.)
Jorgensen, Olaf K. (See Jorgensen, Thorvald J. and O. K.)
Jorgensen, Svend M., Elizabeth, N. J., assignor to The Superheater Company, New York, N. Y. Desuperheater. 1,869,967; Aug. 2.
Jorgensen, Thorvald J., Franklin Square, and O. K. Jorgensen, Garden City, N. Y. Sled. 1,869,968; Aug. 2.
Joy, Charles H., sr. (See Sauer, Louis J., assignor.)
Kahl, Leopold, Berlin-Wilmersdorf, Germany. Producing pure anthracene. 1,869,481; Aug. 2.
Kalamazoo Stove Company. (See Blakeslee, Arthur L., assignor.)

Kalling, Bo M. S., and C. Von Delwig, Avesta, assignors to A. Johnson & Co., Stockholm, Sweden. Electric rotary furnace. 1,870,053; Aug. 2.
Kamm, Richard, Chicago, Ill. Brush preserving case. 1,869,753; Aug. 2.
Karkau, Albert G., assignor to J. A. Williams, Cleveland, Ohio. Igniter. 1,869,814; Aug. 2.
Karmazin, John, Detroit, Mich. Radiator construction. 1,870,012; Aug. 2.
Kasper, Alvin F., Potter, Wis. Trap. 1,870,124; Aug. 2.
Katterjohn, August H., assignor to Gardner-Denver Company, Denver, Colo. Fluid operated tool. 1,869,595; Aug. 2.
Katz, Alexander S., Brooklyn, N. Y. Striker for door-locks. 1,869,815; Aug. 2.
Keenan, Walter F., jr., Pelham, assignor to Foster-Wheeler Corporation, New York, N. Y. Fuel burner. 1,870,013; Aug. 2.
Keith, Geo. E., Company. (See Caldwell, Charles H., assignor.)
Kelchner, Myrtle R., New York, N. Y. Cigarette holder. 1,869,851; Aug. 2.
Kellenberger, Leonhard, St. Gallen, Switzerland. Combined single-standard milling machine and counter-arm braces. 1,870,054; Aug. 2.
Kelley, Ervin L., Kansas City, Mo. Water well screen. 1,869,754; Aug. 2.
Kemp, Charles and I., New York, N. Y. Lock. 1,869,596; Aug. 2.
Kemp, Irving. (See Kemp, Charles and I.)
Kennedye, Charles B., University City, Mo., assignor to The Kennedye Corporation, Wilmington, Del. Rotary drilling tool. 1,869,969; Aug. 2.
Kennedye Corporation, The. (See Kennedye, Charles B., assignor.)
Kerr, Howard J., El Mora, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boiler water level indicating device. 1,869,428; Aug. 2.
Ketcham, Alonzo R., Detroit, Mich. Molding forming tool. 1,869,755; Aug. 2.
Kimball, George Cook, Pittsburgh, Pa. Normalizing furnace. 1,869,597; Aug. 2.
Kimmey, Charles P., trustee. (See Boissonnault, Gaston, assignor.)
Kinard, Alman A., Memphis, Tex. Cooling jacket for milk and other cans. 1,869,756; Aug. 2.
Kind, Morris, Bryn Mawr, assignor to Hercules Cement Corporation, Philadelphia, Pa. Apparatus for handling cement or like material in bulk. 1,869,970; Aug. 2.
Kindelmann, Albert, Floral Park, assignor to International Projector Corporation, New York, N. Y. Aperture plate. 1,869,852; Aug. 2.
King, Alexander H., and E. A. Ryder, West Hartford, assignors to The Pratt & Whitney Aircraft Company, Hartford, Conn. Internal combustion engine. 1,869,429; Aug. 2.
King, Alexander H., and E. A. Ryder, West Hartford, assignors to The Pratt & Whitney Aircraft Company, Hartford, Conn. Internal combustion engine. 1,869,430; Aug. 2.
King, Alexander H., and E. A. Ryder, West Hartford, assignors to The Pratt & Whitney Aircraft Company, Hartford, Conn. Internal combustion engine. 1,869,431; Aug. 2.
King, Alexander H., and E. A. Ryder, West Hartford, assignors to The Pratt & Whitney Aircraft Company, Hartford, Conn. Internal combustion engine. 1,869,432; Aug. 2.
King, Frank J., et al. (See Allman, John H., assignor.)
Kingery Manufacturing Company, The. (See Stewart, Geary F., assignor.)
Kinney, Fay D., Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Method of and apparatus for preparing closed uppers. 1,869,482; Aug. 2.
Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Making bituminous emulsions and products thereof. 1,869,697; Aug. 2.
Kirschbraun, Lester, Leonia, N. J., assignor to Universal Oil Products Company, Chicago, Ill. Cracking oil. 1,870,178; Aug. 2.
Klein, Richard, Heidelberg, and H. Ulrich, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Soaking of hides. 1,870,179; Aug. 2.
Kline, Fred J., Bayville, N. Y. Paper perforating device. 1,870,055; Aug. 2.
Kline, Fred J., Bayville, assignor to Acco Products, Inc., Long Island City, N. Y. Apparatus for attaching paper fasteners. 1,869,971; Aug. 2.
Kline, Fred J., Bayville, assignor to Acco Products, Inc., Long Island City, N. Y. Filing device. 1,869,972; Aug. 2.
Knapp, Edgar, and C. G. Allgrunn, assignors to Niagara Sprayer Company, Middleport, N. Y. Dust gun. 1,869,483; Aug. 2.
Knight, Alfred W. (See Jakosky, J. J., and Knight.)
Knight, Donald B., Brooklyn, assignor to Electrolux Servel Corporation, New York, N. Y. Absorption type refrigerating apparatus. 1,869,853; Aug. 2.
Knoop, William A., Hempstead, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Peak voltage limiter. 1,869,484; Aug. 2.
Koehring Company. (See Lichtenberg, Erich H., assignor.)
Koenig, Werner, assignor to Landis & Gyr, A.-G., Zug, Switzerland. Resonant mechanism. 1,869,565; Aug. 2.
Kolstad, Gilbert S., Spring Valley, Minn. Roost. 1,870,125; Aug. 2.
Komfala, Steve, Denver, Colo. Steering mechanism for automobiles. 1,869,698; Aug. 2.
Konigsberg, Joseph H., assignor to Standard Rolling Mills, Inc., Brooklyn, N. Y. Brittannia metal or pewter alloy. 1,869,378; Aug. 2.
Kraft, Herman T., Akron, Ohio, assignor to The H. A. Husted Company, Detroit, Mich. Steering wheel. 1,869,816; Aug. 2.
Krahl, Walter L., Harrison, assignor to Arcturus Radio Tube Company, Newark, N. J. Vacuum tube. 1,869,566; Aug. 2.
Krahl, Walter L., Montclair, assignor to Arcturus Radio Tube Company, Newark, N. J. Full wave rectifier. 1,869,567; Aug. 2.
Krahl, Walter L., Montclair, assignor to Arcturus Radio Tube Company, Newark, N. J. Pentode tube. 1,869,568; Aug. 2.
Krchma, Ignace J. (See Martin, J., and Krchma.)
Kreidler, Earl M. (See Weymouth, H. G., and Kreidler.)
Krick, Vincent, Los Angeles, Calif. Right and left full-fashioned foot hosiery. Re18,548; Aug. 2.
Krogh, Alvin T. (See Elsey, H. M., and Krogh.)
Kromschröder, Friedrich, assignor to G. Kromschroder Aktiengesellschaft, Osnabruck, Germany. Gas meter. 1,869,485; Aug. 2.
Kromschroder, G., Aktiengesellschaft. (See Kromschröder, Friedrich, assignor.)
Kropff, Ludwig, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Rotor for turbogenerators. 1,870,056; Aug. 2.
Kuckel, Herbert, New Orleans, La. Oven. 1,869,899; Aug. 2.
Kuhl, Paul E. (See Nichols, H. J., jr., and Kuhl.)
Kuhni, Hans, Basel, Switzerland, assignor to l'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procédés George Claude, Saint-Lazare, Paris, France. Apparatus for contacting liquids and gases. 1,869,757; Aug. 2.
Kunz, George H. (See Roblee, M. A., and Kunz.)
Lafferty, Wheeler. (See Mennell, L. D., and Lafferty.)
L'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procédés George Claude. (See Kuhni, Hans, assignor.)
Lambert Pharmacal Company. (See Nash, Ben, assignor.)
Landenberger, William H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motor control system. 1,869,900; Aug. 2.
Landers, Frary & Clark. (See Curtiss, George E., assignor.)
Landis & Gyr, A.-G. (See Koenig, Werner, assignor.)
Landis & Gry, A.-G. (See Pudelko, Riccard, assignor.)
Lang, Hubert, Chicago, Ill., assignor to Goss Printing Press Company. Web roll supporting and controlling mechanism. 1,869,569; Aug. 2.
Lang, Hubert, Chicago, Ill., assignor to Goss Printing Press Company. Web roll supporting mechanism. 1,869,570; Aug. 2.
Lange, Richard, Leonia, N. J. Strip feeding machine. 1,869,854; Aug. 2.
Lantz, Vernon, Berkeley, assignor to Standard Oil Company of California, San Francisco, Calif. Motor fuel. 1,869,486; Aug. 2.
Lapteff, Alexis V., Detroit, Mich., assignor to Harrington & King Perforating Company, Chicago, Ill. Grille panel. Des. 87,472; Aug. 2.
Lathem, Guy W. (See Hawkins, W. A., and Lathem.)
Latimer, Roy S., Troy, N. Y. Heating apparatus. 1,869,939; Aug. 2.
Laucks, I. F., Inc. (See Dike, Theodore W., assignor.)
Laughton, George A., Birmingham, England. Clasp for lingerie, hair, and like purpose. 1,870,014; Aug. 2.
Lea Fabrics, Inc. (See Ward, E. H., and Jegge, assignors.)
Leas, William E. (See Lefevre, W. E., and Leas.)
Ledig, Kurt K., assignor to American Platinum Works, Newark, N. J. Making dental pins. 1,869,817; Aug. 2.
Lee, Fred W., et al. (See Thomas, William M., assignor.)
Le Fever, John E., Tionaga, Ontario, Canada. Animal feeding device. 1,869,901; Aug. 2.
Lefevre, Leon, and W. E. Leas, Chicago, Ill. Fuel supplying apparatus for aircrafts. 1,869,487; Aug. 2.
Le Grand, Joseph M., New York, N. Y., assignor to Carrier Engineering Corporation, Newark, N. J. Rotary heat exchanger. 1,869,855; Aug. 2.
Leguillon, Charles W., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Vulcanizing apparatus. 1,869,598; Aug. 2.
Lenz, Arnold, Saginaw, assignor to General Motors Corporation, Detroit, Mich. Cupola charging equipment. 1,869,571; Aug. 2.
Levin, Ben J., New York, N. Y. Combination polishing brush. 1,870,057; Aug. 2.
Levine, Meyer S. (See Castle, Verle A., assignor.)
Levine, Samuel, Passaic, assignor, by mesne assignments, to S. H. Levine, Passaic, N. J. Gauge device. 1,870,058; Aug. 2.
Levine, Sol H. (See Levine, Samuel, assignor.)

Levitt, Lenoard, Missoula, Mont., assignor of forty one-hundredths to M. K. Yacorzynski, Spokane, Wash., and thirty one-hundredths to F. J. Roberts, San Diego, Calif. Illuminated sign. 1,869,699; Aug. 2.

Lewis, Lester L., New Castle, Pa. Circuit control apparatus. 1,870,127; Aug. 2.

Lewis, Lester L., assignor of Blair Strip Steel Company, New Castle, Pa. Annealing metal work. 1,870.126; Aug. 2.

Lewis, Richard W., Montclair, N. J. Emulsions and materials, methods, and processes for the preparation thereof. 1,869,379; Aug. 2.

Lewis, Richard W., Montclair, N. J. Dispersions and the production thereof. 1,869,380; Aug. 2.

Lewis, Richard W., Montclair, N. J. Dispersions and the production thereof. 1,869,381; Aug. 2.

Lewis, Richard W., Montclair, and A. Saunders, Maplewood, N. J. Bituminous dispersions and making the same. 1,869,382; Aug. 2.

Lewis, Wilbur S., Lakewood, Ohio, assignor to The Nestle-Le Mur Company, New York, N. Y. Electric heater. 1,869,599; Aug. 2.

Lewis, Wilfred, Haverford, assignor to The Tabor Manufacturing Company, Philadelphia, Pa. Cushion for molding machine. 1,869,818; Aug. 2.

Lichtenberg, Erich H., assignor to Koehring Company, Milwaukee, Wis. Concrete mixing, spreading, and finishing machine. 1,869,902; Aug. 2.

Lichtenberg, Erich H., assignor to Koehring Company, Milwaukee, Wis. Siphon water tank. 1,869,903; Aug. 2.

Lima Locomotive Works, Incorporated. (See Niegemann, George F., assignor.)

Lindemann, A. J., & Hoverson Company. (See Schmidt, Adolph T., assignor.)

Lingren, Rollie E. (See Johnson, O. A., and Lingren, assignors.)

Lion Brothers Company. (See Marzak, Joseph S., assignor.)

Little, Clarence B., and W. J. Haag, assignor to The Brownell Company, Dayton, Ohio. Boiler. 1,870,059; Aug. 2.

Livingston Engineering Company. (See Eggan, Alfred J., assignor.)

Livingston, Leon. (See Smith, Emory E., assignor.)

Logan, John W., jr. (See Clausen, H. C., and Logan, assignors.)

Long, Walter S., Jeffers, Mont. Pump rig. 1,870,180; Aug. 2.

Loomis, Crawford C., Ilion, N. Y., assignor to Remington Arms Company, Inc. Air-gun. 1,869,800; Aug. 2.

Lowe, Aubrey L. (See Bradbury, W. S., and Lowe.)

Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Combined condenser and heater. 1,869,973; Aug. 2.

Lunati, Peter J., Memphis, Tenn. Automobile servicing lift. 1,870,128; Aug. 2.

Lungstras Dyeing and Cleaning Company. (See Lungstras, Paul, assignor.)

Lungstras, Paul, Clayton, assignor to Lungstras Dyeing and Cleaning Company, St. Louis, Mo. Scrubber. 1,869,758; Aug. 2.

Lynch, Patrick H. (See McKay, John A., assignor.)

Lynch, Theodore L., Oxnard, Calif. Tubing anchor. 1,869,759; Aug. 2.

Lysholm, Alf, and Gösta L. B. Wahlsten, assignors to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden. Conducting means for steam in radial flow steam turbines. 1,870,212; Aug. 2.

MacChesney, Chester M., assignor to Acme Steel Company, Chicago, Ill. Floor block and fastener therefor. 1,869,702; Aug. 2.

Macey Company, The. (See Tobey, Fred W., assignor.)

Mackenzie, Joseph W., Jackson, Mich. Valve mechanism for internal combustion engines. 1,869,383; Aug. 2.

MacLachlan, John C., Chicago, Ill. Distributing head for liquid or semiliquid material. 1,869,384; Aug. 2.

MacLachlan, John C., assignor, by mesne assignments, to A. P. Hunt, Chicago, Ill. Process and apparatus for dehydrating liquid material. 1,869,703; Aug. 2.

MacNeil, Frederick H., Boston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch and racking device therefor. 1,869,856; Aug. 2.

Madsen, Sern, assignor to Curtis Companies, Incorporated, Clinton, Iowa. Weatherproof window construction. 1,869,760; Aug. 2.

Magee, Walter V. (See Bletso, B. N., and Magee.)

Maish, Ralph A., assignor to Dennison Manufacturing Company, Framingham, Mass. Reenforcing tab. 1,869,385; Aug. 2.

Mallory, Edward B., Tenafly, N. J., assignor to Westinghouse Electric & Manufacturing Company. Protective system. 1,870,181; Aug. 2.

Mammes, Raymond J., Los Angeles, assignor to Metro-Goldwyn-Mayer Corporation, Culver City, Calif. Forming composite motion picture film. 1,869,819; Aug. 2.

Manchester, Thomas H. (See Bruce, A. D., Russell, and Manchester.)

Mandaville, Gurney L., Fort Pierce, Fla. Attachment for ophthalmometers. 1,867,700; Aug. 2.

Mann, Ned H., Hollywood, Calif. Animated motion picture. 1,869,904; Aug. 2.

Markey, Fred L., assignor to Dodgem Corporation, Lawrence, Mass. Building. Des. 87,473; Aug. 2.

Marks, Edward S. (See Murphy, R., and Marks.)

Marsden, William H. R., Pittsburgh, and L. E. Osborne, deceased, Allegheny County, by Z. G. Osborne, executrix, Bellevue, Pa., assignors, by mesne assignments, to The Standard Stoker Company, Inc., New York, N. Y. Stoker. 1,870,015; Aug. 2.

Marsh, Austin G., and A. Billek, Springfield, Ill. Bending tool. 1,869,905; Aug. 2.

Marshall, Charles O. (See Reeves, O. C., and Marshall.)

Martens, Rose H., Copley, Ohio. Lingerie clasp. 1,869,601; Aug. 2.

Martin, Jerome, Terre Haute, Ind., and I. J. Krchma, Baltimore, Md., assignors to Commercial Solvents Corporation, Terre Haute, Ind. Catalyst for the preparation of esters. 1,869,761; Aug. 2.

Martin, Jerome, Terre Haute, Ind., and I. J. Krchma, Baltimore, Md., assignors to Commercial Solvents Corporation, Terre Haute, Ind. Catalyst for the preparation of esters. 1,869,762; Aug. 2.

Martin, Otto V., Tulsa, Okla., assignor, by mesne assignments, to Texaco Salt Products Company, New York, N. Y. Preparing calcium chloride. 1,869,906; Aug. 2.

Marzak, Joseph S., assignor to Lion Brothers Company, Inc., Baltimore, Md. Embroidery method and fabrication. 1,869,386; Aug. 2.

Mashek, Frank. (See Sherman, O. G., and Mashek.)

Maskowitz, Clarence C. (See Bernfeld, Maurice M., assignor.)

Mason, Benjamin F., Ocean Park, Calif. Ore agitator. 1,869,488; Aug. 2.

Mason, Vaden W., Brookneal, Va. Steam generating plant. 1,869,602; Aug. 2.

Massie, Arnold C., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Mount assembly for high wattage lamps. 1,869,572; Aug. 2.

Masters, Alexander H., Greensboro, N. C. Combination ash tray and cigar lighter. Des. 87,474; Aug. 2.

Masters, Irvin W., assignor to National Lock Washer Company, The, Newark, N. J. Speed indicating means. 1,869,974; Aug. 2.

Mather, Alonzo C., Chicago, Ill. Refrigerator car. 1,869,701; Aug. 2.

Matsusaki, Jiro, Onomachi, Katogun, Japan. Device for automatically changing phonographic needles. 1,869,907; Aug. 2.

Matter, James K., and C. G. Towne, assignors to The Aluminum Cooking Utensil Company, New Kensington, Pa. Coffeepot. Des. 87,475; Aug. 2.

Mattison, Arthur C., Eau Claire, Wis. Cigar and cigarette holder. Des. 87,476; Aug. 2.

Matzner, Hyman, and M. Franz, New York, N. Y. Engraving machine. 1,870,127; Aug. 2.

Mautz, William P., Lebanon, and F. B. Oren, Effingham, Ill. Expansion joint form. 1,870,130; Aug. 2.

Maxmoor Corporation. (See Moore, Arlington, assignor.)

McCabe, Ira E., Chicago, Ill. Electric switch of the mercury tube type. 1,869,603; Aug. 2.

McCafferty, Robert H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Section insulator. 1,870,060; Aug. 2.

McCallum, James R. (See Alexander, R. L., and McCallum.)

McClintock, O. B., Co. (See McClintock, Oliver B., assignor.)

McClintock, Oliver B., assignor to O. B. McClintock Co., Minneapolis, Minn. Bullet-resisting partition. Des. 87,477; Aug. 2.

McConway & Torley Company, The. (See Regan, William J., assignor.)

McCray, Wilbur D. (See White, W. C., and McCray.)

McDonough, Frank L. (See Tower, M. L., Dye, and McDonough.)

McFadden, George H., assignor to The Ohio Foundry & Manufacturing Company, Steubenville, Ohio. Gas heater. 1,869,763; Aug. 2.

McFarland, Francis W., Martinez, Calif. Freight car lock and seal. 1,869,387; Aug. 2.

McGill, William J. (See Sullivan, F. W., jr., and McGill.)

McKay, John A., and P. H. Lynch, Dunn, N. C. Fertilizer distributor. 1,869,820; Aug. 2.

McKee, Neal T., Bronxville, assignor to American Throttle Company, Inc., New York, N. Y. Throttle. 1,870,016; Aug. 2.

McMeans, William, Scranton, Pa. Combination weed grubber and hoe. 1,869,573; Aug. 2.

McMillan Book Company. (See Hamlin, Guy E., assignor.)

McWane Cast Iron Pipe Company. (See McWane, James R., assignor.)

McWane Cast Iron Pipe Company. (See Sample, James D., assignor.)

McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Apparatus for molding cast iron pipe and the like. 1,869,908; Aug. 2.

McWhirter, William C., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Buffing device for railway switches and the like. 1,869,604; Aug. 2.

McWhirter, William C., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Buffing device for railway switches and the like. 1,869,605; Aug. 2.

Meader, Roy, Springfield, Mass., assignor to The A. Nash Company, Cincinnati, Ohio. Display device. 1,869,433; Aug. 2.

Meidl, John. (See Suelflow, E. O., and Meidl.)

Meier, August, Munich, Germany. Process for the production of a mixed fertilizer consisting of ammonium bicarbonate and ammonium sulphate. 1,870,131; Aug. 2.

Meilink, Charles F., Toledo, Ohio. Loaded safe. 1,869,704; Aug. 2.

Mennell, Lee D., Cleveland, and W. Lafferty, Lakewood, Ohio. Flowerpot. 1,869,606; Aug. 2.

Mergenthaler Linotype Company. (See Bienert, Karl, assignor.)

Mergenthaler Linotype Company. (See Guest, Alfred W. F., assignor.)

Mergenthaler Linotype Company. (See Morrison, Luther E., assignor.)

Merrick, Frank W., Dorchester, Mass. Edge trimmer and the like. 1,869,434; Aug. 2.

Merrill, Allan B., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Grafting and budding tape. 1,869,607; Aug. 2.

Merritt, Arthur A., Edgewood, R. I., assignor to Willcox & Gibbs Sewing Machine Co., New York, N. Y. Sewing machine. 1,869,489; Aug. 2.

Messgerate Boykow, G. m. b. H. (See Boykow, Johann M., assignor.)

Methudy Automatic Lighter Company. (See Methudy, Eugene R., assignor.)

Methudy, Eugene R., Clayton, Mo., assignor, by mesne assignments, to Methudy Automatic Lighter Company, East St. Louis, Ill. Gas range. 1,869,764; Aug. 2.

Metro-Goldwyn-Mayer Corporation. (See Mammes, Raymond J., assignor.)

Meyer, Harold W., Brooklyn, N. Y. Fishhook snelling machine. 1,869,857; Aug. 2.

Meyer, Harold W., Brooklyn, N. Y. Apparatus for snell hook manufacture. 1,869,858; Aug. 2.

Michelssen, Fritz, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Photoelectric relay. 1,870,017; Aug. 2.

Miehling, Rudolph. (See Ellis, J., Godoy, and Miehling.)

Milar, Karl A., Chicago, and D. L. Clinch, Hubbard Woods, assignors, by mesne assignments, of one-half to D. L. Clinch, Hubbard Woods, and one-half to K. A. Milar, Chicago, Ill. Spraying apparatus. 1,869,975; Aug. 2.

Miller, Clarke C., assignor to Standard Oil Company, Whiting, Ind. Preparing lubricating oil. 1,869,608; Aug. 2.

Miller, Claud T., assignor to The Buda Company, Harvey, Ill. Carstop. 1,869,976; Aug. 2.

Miller, H. H., Industries Company, The. (See Morrow, Clifford, assignor.)

Miller, John C., Lakewood, Ohio. Metal corner. 1,870,132; Aug. 2.

Miller, Marvin F. (See Shiffler, W. H., Holm, and Miller.)

Miller, Robert E., Bronxville, N. Y. Caster. 1,869,574; Aug. 2.

Miller Rubber Company Inc., The. (See Warner, Raymond M., assignor.)

Miller, William. (See Binnie, Robert T., assignor.)

Mills Novelty Company. (See Radtke, Bruno, assignor.)

Minardi, Francisco. (See Strocchi, N., and Minardi.)

Miner, Ace. (See Curzon, John S., assignor.)

Miner, W. H., Inc. (See O'Connor, John F., assignor.)

Miner, W. H., Inc. (See Olander, Roland J., assignor.)

Miscampbell, Hugh, Duluth, Minn., assignor, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa. Kiln. 1,869,705; Aug. 2.

Mitchell, Harry L. (See Jauch, R. J., and Mitchell.)

Mitchell, Robert, Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass. Fastener construction. 1,870,061; Aug. 2.

Mitchell, Thomas W., Brussels, Ontario, Canada. Adjustable headrest. 1,869,765; Aug. 2.

Modin, Ben C., Brooklyn, N. Y. Propeller guard. 1,869,977; Aug. 2.

Moffett, Frank E. (See Sewrey, U. R., and Moffett.)

Moore, Arlington, New York, N. Y. Flanged reenforced paper article and making same. 1,870,062; Aug. 2.

Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Charge supplying and mixing method and apparatus for internal combustion engines. 1,869,821; Aug. 2.

Moore, Donald H. (See Cox, Harry W., assignor.)

Morales, Matias, Tampa, Fla. Sandwich holder. 1,869,609; Aug. 2.

Morrell, Jacque C., assignor to Universal Oil Products Company, Chicago, Ill. Refining of petroleum oils. 1,870,063; Aug. 2.

Morris, Howard A. (See Aldrich, J. P., and Morris.)

Morrison, Luther E., New York, N. Y., assignor to Mergenthaler Linotype Company. Typographical composing and casting machine. 1,869,940; Aug. 2.

Morrow, Clifford, assignor to The H. H. Miller Industries Company, Canton, Ohio. Liquid treating apparatus. 1,869,706; Aug. 2.

Morrow, Clifford, assignor to The H. H. Miller Industries Company, Canton, Ohio. Pasteurizer. 1,869,766; Aug. 2.

Morrow, Clifford, assignor to The H. H. Miller Industries Company, Canton, Ohio. Driving mechanism. 1,869,859; Aug. 2.

Morton, William A., et al. (See Eckert, Fritz, assignor.)

Moss, William H., and K. H. Crutchfield, Cumberland, Md., assignors to Celanese Corporation of America. Laminated glass and making the same. 1,870,018; Aug. 2.

Motor Development Corporation. (See Vang, Alfred, assignor.)

Muller, Johann C. (See Stelzer, Franz H. B., assignor.)

Murphy, Ralph, and E. S. Marks, assignors, by mesne assignments, to Franklin Development Corporation, Syracuse, N. Y. Crank case ventilating means for internal combustion engines. 1,869,575; Aug. 2.

Mursch, John, Teaneck, N. J., assignor to J. Gatti, New York, N. Y. Producing moldable compound. 1,869,400; Aug. 2.

Mursch, John, Teaneck, N. J., assignor to J. Gatti, New York, N. Y. Producing sheeted compounds. 1,869,491; Aug. 2.

Muzzipapa, Rosario. (See De Rienzo, F., and Muzzipapa.)

Myers, Oran, Sacramento, Calif. Tongs or pliers. 1,870,133; Aug. 2.

Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines Volgens van Berkel's patent en van Andere Werktuigen. (See de Iongh, Johan H., assignor.)

Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines volgens van Berkel's Patent en van Andere Werktuigen. (See van Duyn, Adrianus, assignor.)

Nagel, Wilhelm. (See Panzerbieter, T., and Nagel.)

Nagle, Clyde, and R. W. Niver, Elmira, N. Y. Leer stacker. 1,869,767; Aug. 2.

Nash, A., Company. (See Meader, Roy, assignor.)

Nash, Ben, Short Hills, N. J., assignor to Lambert Pharmacal Company, Wilmington, Del. Flask. Des. 87,478; Aug. 2.

National Cash Register Company, The. (See Green, Charles W., assignor.)

National Cash Register Company, The. (See Shipley, B. M., and Holt, assignors.)

National Cash Register Company, The. (See Von Pein, Edward J., assignor.)

National Lock Washer Company, The. (See Golden, Robert F., assignor.)

National Rubber Machinery Company. (See De Mattia, Irvin W., assignor.)

National Rubber Machinery Company. (See DeMattia, Barthold, assignor.)

National Rubber Machinery Company. (See Williams, Thomas H., assignor.)

National Selected Morticians of Washington, D. C., The. (See Jones, Hilton I., assignor.)

Natkiel, Harry, assignor, by mesne assignments, of one-half to H. Engelke, New York, N. Y. Adjustable container for safety razors. 1,869,860; Aug. 2.

Nelson, Clarence E., Terrace, Minn. Platform canvas attachment. 1,869,707; Aug. 2.

Nestle and Anglo-Swiss Condensed Milk Company. (See Raymond, Max, assignor.)

Nestle-Le Mur Company, The. (See Lewis, Wilbur S., assignor.)

Neureuther, Andrew H., assignor to Western Clock Company, Peru, Ill. Electric switch. 1,869,610; Aug. 2.

Newcomb, Clyde R., Orchards, Wash. Silent gear shift for automobile engines. 1,870,134; Aug. 2.

New York Air Brake Company, The. (See Bickel, Henry F., assignor.)

Niagara Sprayer Company. (See Knapp, E., and Allgrunn, assignors.)

Niagara Sprayer Company. (See Tower, M. L., Dye, and McDonough, assignors.)

Nichols, Harold J., jr., and C. R. Wise, Roselle, N. J., assignors to Standard Oil Development Company. Regenerating solutions used in the purification of hydrocarbon gas. 1,869,435; Aug. 2.

Nichols, Henry J., jr., and P. E. Kuhl, Roselle, N. J., assignor to Standard Oil Development Company. Apparatus for absorbing gas. 1,869,611; Aug. 2.

Nickle, Clifford A., Schenectady, N. Y., assignor to General Electric Company. Electrical regulator. 1,870,064; Aug. 2.

Nicolai, Fritz, Ludwigshafen-on-the-Rhine, and C. Schoenburg, and G. V. Der Bruck, Bitterfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of phosphoric esters. 1,869,768; Aug. 2.

Niegemann, George F., Hartford, Wash., assignor to Lima Locomotive Works, Incorporated, New York, N. Y. Locomotive. 1,870,019; Aug. 2.

Niver, Raymond W. (See Nagle, C., and Niver.)

Norley, Harry C., North Bay, Ontario, assignor to Canadian Atlas Steels Limited, Welland, Ontario, Canada. Drill. 1,870,135; Aug. 2.

Norwood, Harry Y., West Rush, assignor to Taylor Instrument Companies, Rochester, N. Y. Recorder. 1,869,909; Aug. 2.

Nowell, Bailey, Venice, Calif. Center stock guide for printing presses. 1,869,708; Aug. 2.

Nusser, Michael W., Detroit, Mich. Heel construction. 1,870,065; Aug. 2.

Nyland, Edward R., assignor to General Motors Corporation, Detroit, Mich. Steering gear. 1,869,576; Aug. 2.

Nystrom, Oscar P., and G. Jaarda, assignors to Holland Furnace Company, Holland, Mich. Furnace radiator. 1,869,709; Aug. 2.

O'Bannon, Walter A., Tulsa, Okla. Sucker rod fishing tool. 1,869,861; Aug. 2.

Ober, Beverly, and E. H. Wight, assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md. Manufacturing acid phosphate. 1,869,941; Aug. 2.

Oberhuber, William F., Lansdowne, Pa. Composite disk seal. 1,869,577; Aug. 2.

Oberle, Alfred, assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for converting hydrocarbons. 1,869,978; Aug. 2.

Oberphos Company, The. (See Anderson, David L., assignor.)

Oberphos Company, The. (See Ober, B., and Wight, assignors.)

Ochse, William, San Antonio, Tex. Portable sample case. 1,869,710; Aug. 2.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Shock absorbing mechanism. 1,869,578; Aug. 2.

O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Shock absorbing mechanism. 1,869,579; Aug. 2.

O'Dowd, Henry W., Jersey City, N. J., assignor to Standard Gas Equipment Corporation. Burner unit for gas heating apparatus. 1,869,942; Aug. 2.

Oelkers, Alfred H., assignor to American Steel Foundries, Chicago, Ill. Wheel and axle assembly. 1,870,136; Aug. 2.

O'Halloran, John A., Clinton, Iowa. Compressing and molding machine. 1,869,492; Aug. 2.

Ohio Brass Company, The. (See Austin, Arthur O., assignor.)

Ohio Foundry & Manufacturing Company, The. (See McFadden, George H., assignor.)

Olander, Roland J., assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,869,580; Aug. 2.

Oleston, A. M. (See Worden, James A., assignor.)

Olsen, James C., jr., and H. L. Bottle, assignors to Anderson Stove Company, Anderson, Ind. Stove. 1,869,711; Aug. 2.

Olson, Louis, Enumclaw, Wash. Oil burner. 1,870,066; Aug. 2.

Omegna, Arturo, Santiago, Chile. Hand rest. 1,869,910; Aug. 2.

Oren, Fred B. (See Mautz, W. P., and Oren.)

Orthner, Ludwig, Leverkusen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Vulcanization accelerator. 1,869,862; Aug. 2.

Osborg, Hans, Frankfort-on-the-Main, Germany. Lithium alloys and producing the same. 1,869,493; Aug. 2.

Osborg, Hans, Frankfort-on-the-Main, Germany. Composition containing lithium and silicon and producing same. 1,869,494; Aug. 2.

Osborg, Hans, Frankfort-on-the-Main, Germany. Treating molten metals and alloys with compositions containing lithium and products resulting from such treatment. 1,869,495; Aug. 2.

Osborg, Hans, Frankfort-on-the-Main, Germany. Treating metals. 1,869,496; Aug. 2.

Osborg, Hans, Frankfort-on-the-Main, Germany. Treating molten ferrous metals and alloys with compositions containing "lithium-alkali" alloys and products resulting from such treatments. 1,869,497; Aug. 2.

Osborg, Hans, Frankfort-on-the-Main, Germany. Treating molten copper and copper alloys with compositions containing "lithium-alkali" alloys and products resulting from such treatments. 1,869,498; Aug. 2.

Osborg, Hans, Frankfort-on-the-Main, Germany. Treating molten nickel and nickel alloys with compositions containing "lithium-alkali" alloys and products resulting from such treatments. 1,969,499; Aug. 2.

Osborg, Hans, Frankfort-on-the-Main, Germany. Treating metals. 1,869,979; Aug. 2.

Osborg, Hans, Frankfort-on-the-Main, Germany. Treating molten metals and alloys with compositions containing lithium and products resulting from such treatment. 1,869,980; Aug. 2.

Osborne, Lonnie E. (See Marsden, W. H. R., and Osborne.)

Osborne, Zollie G., executrix. (See Marsden, W. H. R., and Osborne.)

Outboard Motors Corporation. (See Irgens, Finn T., assignor.)

Overton, Alan M., Cincinnati, assignor to The Richardson Company, Lockland, Ohio. Box for refrigerated shipments and the like. 1,869,769; Aug. 2.

Owens-Illinois Glass Company. (See Soubier, Leonard D., assignor.)

Oyston, William R., Parkville, Victoria, Australia, assignor to Continuous Gramophones Limited, London, England. Sound reproducing apparatus. 1,869,770; Aug. 2.

Pacific Alkali Company. (See Rosenstein, L., and Bell, assignors.)

Padgett, Joseph I., Jacksonville, Fla. Skate. 1,869,612; Aug. 2.

Page, Robert M., Washington, D. C. Relaxation circuit oscillator. 1,869,500; Aug. 2.

Page, Samuel H., Stratford, assignor to The American Fabrics Company, Bridgeport, Conn. Lace. Des. 87,479; Aug. 2.

Palmer, Horace Fitz W., Bennettsville, S. C. Attachment for can covers. 1,869,712; Aug. 2.

Pangborn Corporation. (See Dorfan, Morton I., assignor.)

Panzerbieter, Theodor, Berlin-Charlottenburg, and W. Nagel, Berlin, Germany, assignors to Westinghouse Electric & Manufacturing Company, New York, N. Y. Transmission system switch. Re18,553; Aug. 2.

Paradise, Louis A., assignor to Deere & Company, Moline, Ill. Cutter bar. 1,869,981; Aug. 2.

Paradise, Louis A., and E. F. Huddle, assignors to Deere & Company, Moline, Ill. Grain storage tank for threshers. 1,869,581; Aug. 2.

Paraffine Companies, The. (See Rosener, Leland S., assignor.)

Parker, Ira J., Coffeyville, Kans. Pump. 1,870,137; Aug. 2.

Parker, Oliver L., Greeley, Colo. Toy football game. 1,870,138; Aug. 2.

Parks, Paul B., Oak Park, assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Heating and ventilating system. 1,870,020; Aug. 2.

Parson, Ralph M. (See Burkart, W., and Parsons, assignors.)

Pascale, Pasquale, New York, N. Y., assignor to Dri-Steam Valve Corporation. Apparatus for separating liquids from saturated fluids. 1,869,771; Aug. 2.

Paterniti, Salvatore, Detroit, Mich. Smoke precipitating apparatus. 1,869,772; Aug. 2.

Pearmain, William J., assignor to The Twin Disc Clutch Company, Racine, Wis. Clutch. 1,869,982; Aug. 2.

Pechan, Ignaz. (See Raaber, Petschenig, Pechan, and Eichwalder.)

Pederson, John P., assignor to Ditto, Incorporated, Chicago, Ill. Gearing for hektograph machines. 1,869,436; Aug. 2.

Pennsylvania State College, The. (See Sinden, James W., assignor.)

Penuel, Cecil E. (See Bickelhaupt, C. O., and Penuel, assignors.)

Peter, Kurt, New York, N. Y. Game. 1,869,388; Aug. 2.

Peterson, Carl H., Worcester, Mass., assignor to The American Steel Wire Company of New Jersey. Apparatus for and method of manufacturing springs. 1,869,501; Aug. 2.

Peterson, George C., Co. (See Stille, Laurence C., assignor.)

Peterson, Horton J., Eveleth, Minn. Cable terminal shield. 1,869,863; Aug. 2.

Petschenig, Karl. (See Raaber, H., Petschenig, Pechan, and Eichwalder.)

Petschenig, Karl, Vienna, Austria, assignor to the Firm: Aktiengesellschaft C. P. Goerz Optische Anstalt Akcova Spolecnost K. P. Goerz opticky ústav, Bratislava, Czechoslovak Republic. Apparatus for mechanically solving rectangular triangles. 1,869,502; Aug. 2.

Pfeiffer, Frank E., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,869,613; Aug. 2.

Pfizer, Charles, & Company. (See Smith, John L., assignor.)

Phelps, Anne F. (See Strand, A., and Hawley, assignors.)

Phelps, Barton P., Topeka, Kans. Boiler washing blow-off connection. 1,869,389; Aug. 2.

Phillips, Arthur B., Lynbrook, N. Y. Tessellate puzzle. 1,869,864; Aug. 2.

Phillips, John E., Chicago, Ill., assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 87,480; Aug. 2.

Phillips, John E., Chicago, Ill., assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 87,481; Aug. 2.

Phillips, John H., Jackson, Mich. Flexible conduit structure. 1,870,021; Aug. 2.

Pierotti, Angelo, Perth, Western Australia, Australia. Internal combustion engine. 1,870,139; Aug. 2.

Piette, Pierre F. E., Clamart, France. Apparatus for detecting and measuring vibrations. 1,870,140; Aug. 2.

Pitman, Henry L., Westfield, N. J., assignor, by mesne assignments, to Elliott-Fisher Company. Combined typewriting and computing machine. 1,869,582; Aug. 2.

Pitt, Dale L. (See Asselstine, William J., assignor.)

Pittsburgh Equitable Meter Company. (See Weymouth, H. G., and Kreidler, assignors.)

Pohl, Ernest F., assignor to Automatic Fire Extinguisher & Alarm Co., St. Louis, Mo. Combined automatic fire extinguisher and alarm. 1,869,503; Aug. 2.

Pomerantz, Samuel L., Brooklyn, N. Y. Loose powder sifter box. Des. 87,482; Aug. 2.

Poppenhusen, Herman A., Hammond, Ind. Dispensing machine. 1,869,773; Aug. 2.

Pratt & Whitney Aircraft Company, The. (See King, A. H., and Ryder, assignors.)

Prestinari, Eugen, Irvington, N. J., assignor to Gemex Company. Expansion bracelet. 1,869,615; Aug. 2.

Price, Harold W., Toronto, Ontario, Canada, assignor, by mesne assignments, to G. W. Ryan, New York, N. Y. Thermostatic gas control. 1,869,943; Aug. 2.

Prince, David C., Schenectady, N. Y., assignor to General Electric Company. Electric translating circuit. 1,870,022; Aug. 2.

Priori, Marino, Indianapolis, Ind. Detachable safety straight razor. 1,869,504; Aug. 2.

Proctor & Schwartz, Incorporated. (See Wanamaker, Harry F., assignor.)

Pretzeller, Harry W., assignor to O. F. Jordan Company, East Chicago, Ind. Railroad spreader. 1,869,774; Aug. 2.

Pudelko, Riccard, assignor to Landis & Gyr A.-G., Zug, Switzerland. Intermittently recording device especially in electrical apparatus. 1,869,583; Aug. 2.

Puening, Frans, Pittsburgh, Pa. Liquid fuel for metallurgical furnaces. 1,869,775; Aug. 2.

Purcell, John, Chicago, Ill. Wheel hub wear plate. 1,869,390; Aug. 2.

Pythian, Thomas E., Headingley, Leeds, England. Web tensioning apparatus. 1,869,614; Aug. 2.

Quintina, Paolo, Brooklyn, N. Y. Instrument to aid in vocal tone culture. 1,869,391; Aug. 2.

Raaber, Hans, K. Petschenig, I. Pechan, and E. Eichwalder, Vienna, Austria, assignors to Actiengesellschaft C. P. Goerz Optische Anstalt Actiova Spolecnost K. P. Goerz Opticky Ustav, Bratislava, Czechoslovakia. Sound location device. 1,869,505; Aug. 2.

Radio Corporation of America. (See Black, Knox C., assignor.)

Radio Corporation of America. (See Giebe, E., and Scheibe, assignors.)

Radio Corporation of America. (See Round, Henry J., assignor.)

Radtke, Bruno, Libertyville, Ill., assignor to Mills Novelty Company, Chicago, Ill. Coin mechanism. 1,869,616; Aug. 2.

Raisiss, George W., and L. W. Clemence, Philadelphia, Pa., assignors to Abbott Laboratories, North Chicago, Ill. Iodized oil for roentgenographic work. 1,870,023; Aug. 2.

Ramsden, John T., assignor to The Tabor Manufacturing Company, Philadelphia, Pa. Jarring rollover, pattern drawing, moulding machine. 1,869,865; Aug. 2.

Ramsey, Charles A., Paterson, N. J. Change mechanism for looms. 1,869,822; Aug. 2.

Randel, Bo F., San Diego, Calif., assignor to C. A. Dunham Company, Marshalltown, Iowa. Heating with water. 1,870,024; Aug. 2.

Randolph, Alfred, and E. S. Dawson, assignors to The Deming Company, Salem, Ohio. Automatic oiling system. 1,869,776; Aug. 2.

Raney, William J., Memphis, Tenn. Sanitary carton holder. 1,869,944; Aug. 2.

Rangnow, Albert H., Los Angeles, Calif. Anti-vibration device. 1,869,437; Aug. 2.

Rasmussen, Chester A., et al. (See Dean, G. L., and Hilton, assignors.)

Räth, Curt, Opladen, assignor to the Firm Schering-Kahlbaum, A. G., Berlin, Germany. Compounds of the pyridine series. 1,870,203; Aug. 2.

Rauh, Frederic H., South Orange, assignor to J. Wiss & Sons Co., Newark, N. J. Scissors. 1,870,025; Aug. 2.

Raymond Concrete Pile Company. (See Hunt, Francis H., assignor.)

Raymond Concrete Pile Company. (See Watt, Elihu D., assignor.)

Reader, Julius F., Oak Park, assignor of one-half to Walter G. Warren & Co. and one-half to J. C. Root, Chicago, Ill. Lamp. 1,869,823; Aug. 2.

Ready, William A., Brookline, Mass. D-Handle for shovels and the like. 1,869,777; Aug. 2.

Reeves, Donald H., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,869,617; Aug. 2.

Reeves, Orwell C., and C. O. Marshall, assignors to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,869,438; Aug. 2.

Regan, William J., Wilkinsburg, assignor to The McConway & Torley Company, Pittsburgh, Pa. Car coupler. 1,869,713; Aug. 2.

Regerbis, Wilhelm, Hermsdorf, and M. Handtrag, Berlin-Friedenau, assignor to Hermsdorf-Schomburg Isolatoren, G. m. b. H., Hermsdorf, Germony. High tension condenser. 1,870,141; Aug. 2.

Reh, Maxwell W., New York, N. Y. Candelabra. Des. 87,484; Aug. 2.

Reilly, Alfred F., Attleboro, assignor to Evans Case Company, North Attleboro, Mass. Vanity case. 1,869,983; Aug. 2.

Reising, Eugene G., Hartford, Conn. Firearm. 1,869,618; Aug. 2.

Reising, Eugene G., East Hartford, Conn., assignor of one-fourth to Alva C. Washburne, Pittsfield, Mass. Firearm. 1,869,911; Aug. 2.

Reliance Specialties Mfg. Co. (See Cohan, Morris J., assignor.)

Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,870,067; Aug. 2.

Remington Arms Company. (See Bradbury, W. S., and Lowe, assignors.)

Remington Arms Company. (See Loomis, Crawford C., assignor.)

Remington Rand Inc. (See Sibley, Edward W., assignor.)

Remington Typewriter Company. (See Barney, Edwin E., assignor.)

Republic Flow Meters Company. (See Cunningham, A. B., and Spitzglass, assignors.)

Resca, Salvatore, Brooklyn, N. Y. Sash holder. 1,869,866; Aug. 2.

Research Corporation. (See Hale, John C., assignor.)

Reymond, Max, La Tour De Peils, assignor to Nestle and Anglo-Swiss Condensed Milk Company, Cham, Switzerland. Inclosing certain articles in wrappers. 1,869,584; Aug. 2.

Rice, Harold G., assignor to Indestro Mfg. Co., Chicago, Ill. Holder for socket wrench sets. 1,869,945; Aug. 2.

Richardson Company, The. (See Overton, Alan M., assignor.)

Richardson, Holden C., Cleveland, Ohio. Method of and apparatus for mooring an airplane while in flight to another aircraft. 1,869,506; Aug. 2.

Richey, Lebanon E., et al. (See Hard, Merrill W., assignor.)

Richter, Hans, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Pump. 1,869,524; Aug. 2.

Rife, William H., Chicago, Ill. Duplex envelope. 1,869,946; Aug. 2.

Ritter, Gerhard, Oggersheim, and E. Ufer, Neuroessen, Germany, assignors, by mesne assignments, to Standard-L. G. Company, Linden, N. J. Recovery of pure hydrogen. 1,869,825; Aug. 2.

Roberts, Charles L., Reno, Nev. Apparatus for coupling pipes. 1,869,778; Aug. 2.

Roberts, Edward N., Casper, Wyo., assignor to Standard Oil Company, Whiting, Ind. Lubricating oil. 1,869,779; Aug. 2.

Roberts, Frederick J., et al. (See Levitt, Leonard, assignor.)

Roberts, Samuel S., Pittsburgh, Pa. Lubricating valve. 1,870,068; Aug. 2.

Robertson, Kenneth J. R. (See Fowler, A., and Robertson.)

Robertson, Kenneth J. R., assignor to Carrier Engineering Company Limited, London, England. Separating plant for solutions in volatile solvents. 1,869,826; Aug. 2.

Robin, Marcel A., Port-au-Prince, Haiti. Puncture proof cushion wheel. 1,870,142; Aug. 2.

Roblee, Milton A., and G. H. Kunz, assignors to Chain Belt Company, Milwaukee, Wis. Apparatus for handling cement and other pulverulent materials. 1,869,619; Aug. 2.

Rodack, James W., Chicago, Ill., assignor, by mesne assignments, to Woodall Industries, Incorporated, Detroit, Mich. Panel support. 1,869,714; Aug. 2.

Rogers, Francis C., and V. B. Gay, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Tire and making the same. 1,869,620; Aug. 2.

Rogers, Walter F., assignor to Crown Stove Works, Cicero, Ill. Coal stove. 1,869,392; Aug. 2.

Rogers, Walter F., assignor to Crown Stove Works, Cicero, Ill. Hinged top for stoves. 1,869,393; Aug. 2.

Rogers, William C., Chicago, Ill. Safety razor blade. 1,869,912; Aug. 2.

Rohm, Josef, Wiener-Neustadt, Austria. Brake for railroad vehicles. 1,870,204; Aug. 2.

Root, John W., et al. (See Reader, Julius F., assignor.)

Rosebrook, Guy L., Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa. Service building. Des. 87,485; Aug. 2.

Rosebrook, Guy L., Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa. Service building. Des. 87,486; Aug. 2.

Rosebrook, Guy L., Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa. Service building. Des. 87,487; Aug. 2.

Rosebrook, Guy L., Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa. Service building. Des. 87,488; Aug. 2.

Rosenberg, Sandor, New York, N. Y. Flying machine. 1,869,867; Aug. 2.

Rosenbluth, Edwin M., Wallingford, Pa. Plant labeling device. 1,869,913; Aug. 2.

Rosencrants, Fay H., London, England, assignor to International Combustion Engineering Corporation, New York, N. Y. Pulverized fuel burner. 1,870,026; Aug. 2.

Rosendorf, Samuel S. (See Selden, Louis P., assignor.)

Rosener, Leland S., assignor to The Paraffine Companies, Inc., San Francisco, Calif. Coupling. 1,869,780; Aug. 2.

Rosenstein, Ludwig, San Francisco, and K. G. Bell, Bartlett, assignors to Pacific Alkali Company, Los Angeles, Calif. Recovery of sodium carbonate from brine. 1,869,621; Aug. 2.

Rosenthal China Corporation, The. (See Hallgren, Arthur G., assignor.)

Rosenthal China Corporation, The. (See Phillips, John E., assignor.)

Round, Henry J., Muswell Hill, London, England, assignor to Radio Corporation of America. Radio transformer. 1,869,914; Aug. 2.

Roux, Grace E., Hanford, Calif. Ice bag. 1,870,143; Aug. 2.

Rowe, George E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for handling glassware. 1,869,622; Aug. 2.

Rozinek, Arthur. (See Szikla, G., and Rozinek.)

Rubber Service Laboratories Co., The. (See Scott, Winfield, assignor.)

Rubini, Eligio, and J. De Lai, Toronto, Ontario, Canada. Electric heating apparatus. 1,869,623; Aug. 2.

Rugg, Walter S., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Auto-parking and storage system. 1,870,069; Aug. 2.

Rugg, Walter S., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automobile storage building. 1,870,070; Aug. 2.

Ruggles-Klingemann Mfg. Co. (See Tobin, Arthur L., assignor.)

Russell, Edward A. (See Bruce, A. D., Russell, and Manchester.)

Ryan, Georgie W. (See Price, Harold W., assignor.)
Ryder, Earle A. (See King, A. H., and Ryder.)
Rynveld, Herman, New York, N. Y. Package carton or similar article. Des. 87,489; Aug. 2.
Sabbah, Camil A., Schenectady, N. Y., assignor to General Electric Company. Electric power converting apparatus. 1,870,027; Aug. 2.
Sabin, Ford L., Cleveland Heights, assignor to The Wellman Engineering Company, Cleveland, Ohio. Coke oven door handling machine. 1,870,213; Aug. 2.
Sachs, Hugo, Leipzig, Germany. Electromagnetic pick-up. 1,870,205; Aug. 2.
Sachs, Morris, assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt. Des. 87,490; Aug. 2.
Salisbury, Winfield W., Berkeley, Calif. Wave filter impedance-coupled amplifier. 1,869,715; Aug. 2.
Sample, James D., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Pipe joint. 1,869,915; Aug. 2.
Sauer, Louis J., Oak Park, assignor to C. H. Joy, sr., Chicago, Ill. Duplicating machine. 1,869,507; Aug. 2.
Sauer, Louis J., Oak Park, assignor to C. H. Joy, sr., Chicago, Ill. Duplicator feeding and aligning device. 1,869,508; Aug. 2.
Sauer, Louis J., Oak Park, assignor to C. H. Joy, sr., Chicago, Ill. Duplicator. 1,869,509; Aug. 2.
Saunders, Albert. (See Lewis, R. W., and Saunders.)
Saunders, Leslie O., Hampton Wick, assignor to R. Vernon Limited. London, England. Washing machine. 1,869,510; Aug. 2.
Scharff, Godfrey E., Stevenston, England, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Rancidity retardant. 1,869,439; Aug. 2.
Scheibe, Adolf. (See Giebe, E., and Scheibe.)
Schering-Kahlbaum A. G. (See Dohrn, M., and Diedrich, assignors.)
Schering-Kahlbaum A. G. (See Rath, Curt, assignor.)
Schering-Kahlbaum A.-G. (See Schoeller, W., Schwenk, and Jordan, assignors.)
Schier, Johann. (See Von Hofe, C., and Schier.)
Schimelfenig, Charles A., U. S. Army. Index for loose leaf binders. 1,870,206; Aug. 2.
Schlenker, Charles E., Lakewood, Ohio, assignor to Western Reserve Air Motors Corporation. Internal combustion engine. 1,869,440; Aug. 2.
Schmid, Carl G., assignor to Insley Manufacturing Company, Indianapolis, Ind. Shoulder grading machine. 1,869,916; Aug. 2.
Schmidt, Adolph T., Milwaukee, Wis., assignor to A. J. Lindemann & Hoverson Company. Vapor stove. 1,869,827; Aug. 2.
Schmidt, Edwin X., Whitefish Bay, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Calorimetry for burning gases of relatively low heating value. 1,869,585; Aug. 2.
Schmidt, Ernst, Berlin, Germany. Sheet metal container. 1,869,511; Aug. 2.
Schmieding, Warren H. F., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigeration apparatus. 1,869,917; Aug. 2.
Schnabl, Franz, Jena, Germany, assignor to Bausch & Lomb Optical Co., Rochester, N. Y. Optical square. 1,869,512; Aug. 2.
Schneider, George. (See Dreyfus, C., Cameron, and Schneider.)
Schoeller, Walter, E. Schwenk, and H. Jordan, assignors to Schering-Kahlbaum A.-G., Berlin, Germany. Production of piperidine. 1,870,071; Aug. 2.
Schoenburg, Curt. (See Nicolai, F., Schoenburg, and der Bruck.)
Schoenfeld, Walter, St. Paul, Minn. Pipe cleaner. 1,869,716; Aug. 2.
Schrank, Max C., Bridgeton, N. J. Pajamas. 1,869,918; Aug. 2.
Schuftan, Paul, Hollriegelskreuth, near Munich, assignor to Gesellschaft fü Linde's Eismaschinen A. G., Munich, Germany. Process for the preparation of hydrogen from gas mixtures containing hydrocarbons. 1,870,144; Aug. 2.
Schwenk, Erwin. (See Schoeller, W., Schwenk, and Jordan.)
Scorzoni, Guiseppe. (See Brophy, G. R., and Scorzoni.)
Scott, Henry P., Company, The, as trustee. (See Bond, Samuel C., assignor.)
Scott, Winfield, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Rubber vulcanization process. 1,869,624; Aug. 2.
Seabrook Motor Corporation. (See Seabrook, William H., assignor.)
Seabrook, William H., Detroit, Mich., assignor to Seabrook Motor Corporation, Fitzgerald, Ga. Internal combustion engine valve. 1,869,919; Aug. 2.
Seaholm, Nils, Mount Vernon, N. Y. Surgeon's knife. 1,869,586; Aug. 2.
Seewald, Fritz, Berlin-Johannisthal, and H. Ebert, Berlin-Adlershof, assignors to the Firm Deutsche Versuchanstalt für Luftfahrt, E. V., Berlin-Adlershof, Germany. Torque-measuring instrument. 1,869,513; Aug. 2.
Seitz, Frederick L., Gary, Ind. Drilling and reaming device. 1,869,514; Aug. 2.
Selden, Louis P., assignor to S. S. Rosendorf, Richmond, Va. Rubber printing stamp. 1,869,868; Aug. 2.
Sentry Safety Control Corporation. (See Cohen, J. E., Godoy, and Miebling, assignors.)
Servo Frein Dewandre Societe Anonyme. (See Dewandre, Albert, assignor.)
Seuffert, Joseph F., New York, assignor to H. Hyman, Brooklyn, N. Y. Snap switch. 1,870,072; Aug. 2.
Sewrey, Irsen R., La Salle, and F. E. Moffett, Ladd, assignors to Western Clock Company, Peru, Ill. Toy outboard motor driving and steering mechanism. 1,869,625; Aug. 2.
Shakespeare Company. (See Shakespeare, William, jr., assignor.)
Shakespeare, William, jr., assignor to Shakespeare Company, Kalamazoo, Mich. Fishing reel. 1,869,441; Aug. 2.
Shanck, Roy B., Douglas Manor, N. Y., assignor to American Telephone and Telegraph Company. Measurement of attenuation and noise. 1,869,515; Aug. 2.
Sharp, Alice, Red Bluff, Calif. Writing guide for the blind. 1,870,145; Aug. 2.
Sharpe, Joseph W., St. Louis, Mo. Automatic brake. 1,870,146; Aug. 2.
Sheaffer, W. A. Pen Company. (See Waldron, Harry E., assignor.)
Sherman, Ozro G., deceased, Chicago, Ill., by F. Mashek, assignee, Chicago, Ill. Buckle. Re18,549; Aug. 2.
Shiffler, William H., M. M. Holm, and M. F. Miller, Berkeley, assignors to Standard Oil Company of California, San Francisco, Calif. Treating oils. 1,869,781; Aug. 2.
Shipley, Bernis M., and E. E. Holt, assignors to The National Cash Register Company, Dayton, Ohio. Cash register. 1,870,073; Aug. 2.
Shook, Alvin L., Kelseyville, Calif. Safety belt. 1,869,947; Aug. 2.
Shrader, James E., Drexel Hill, Pa. Device for measuring and recording vibrations in three directions simultaneously. 1,869,828; Aug. 2.
Sibley, Edward W., Kenmore, assignor to Remington Rand Inc., Buffalo, N. Y. Paper feed mechanism. 1,870,197; Aug. 2.
Sicard, Hugh C. (See Turnbull, Robert, assignor.)
Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung. (See Abendroth, Wilhelm, assignor.)
Siemienski, Waclaw, Dubidze P. Brzeznica, Poland. Agricultural implement. 1,869,516; Aug. 2.
Sikma, William H., Oakglen, Ill. Cutting machine. 1,869,394; Aug. 2.
Silver, Henry B., New York, N. Y. Bottle holder. 1,869,717; Aug. 2.
Silvis, Robert E. (See Fenner, H. H., and Silvis.)
Simmons Company. (See Gall, John F., assignor.)
Sinden, James W., assignor to The Pennsylvania State College, State College, Pa. Mushroom spawn and making same. 1,869,517; Aug. 2.
Singer Manufacturing Company, The. (See Allen, Edward B., assignor.)
Skellett, Albert M., St. Louis, Mo., and V. K. Zworykin, Swissvale, Pa., assignors to The Westinghouse Electric & Manufacturing Company. Frequency-responsive crystal relay. 1,869,829; Aug. 2.
Sklarek, Clifford, assignor to International Spotlight Corporation, Chicago, Ill. Mounting for dirigible lights. 1,869,984; Aug. 2.
Smally, Emanuel C., Canton, Ohio. Illuminating device. 1,870,147; Aug. 2.
Smith, A. O., Corporation. (See Andren, Birger T., assignor.)
Smith, Alfred L., assignor to C. G. Conn, Ltd., Elkhart, Ind. Tuning device for wind musical instruments. 1,870,211; Aug. 2.
Smith, D. B., & Company. (See Smith, Myron H., assignor.)
Smith, Emory E., assignor to L. Livingston, San Francisco, Calif. Viscosity indicating device. 1,869,718; Aug. 2.
Smith, George C., Stevenson, Minn. Track switch control. 1,869,985; Aug. 2.
Smith, J Amory, Los Angeles, Calif. Electrical time switch. 1,870,028; Aug. 2.
Smith, John L., Brooklyn, assignor to Charles Pfizer & Company, Inc., New York, N. Y. Alkali metal iodide composition. 1,869,518; Aug. 2.
Smith, Myron H., assignor to D. B. Smith & Company, Inc., Utica, N. Y. Portable fire extinguisher and sprayer. 1,869,869; Aug. 2.
Smith, Raymond D., Pleasantville, N. Y., assignor, by mesne assignments, to Tremont Products Corporation, Boston, Mass. Limit timing mechanism. 1,869,519; Aug. 2.
Smith, Robert C., Chicago, Ill. Motor piston control apparatus. 1,869,587; Aug. 2.
Smith, Rose J. B., Cleveland, Ohio. Foot appliance. 1,870,029; Aug. 2.
Snarck, Jack, New York, N. Y., assignor of one-half to C. Harrison, Brooklyn, N. Y. Fagoting embroidery and manufacturing same. Re18,550; Aug. 2.
Snow, Arthur E., assignor to The Daly Manufacturing Company, Cincinnati, Ohio. Garment or ironing press. 1,869,520; Aug. 2.
Snow, Norman L., New Canaan, Conn., and F. Bowers, and C. L. Howse, assignors to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,870,182; Aug. 2.
Société Anonyme pour Tous Appareillages Mécaniques. (See Carbonaro, Mario C., assignor.)

Société l'Air Liquide Société Anonyme pour l'Etude et l'Exploitation des Procédés Georges Claude Siège Social. (See Claude, Georges, assignor.)
Society of Chemical Industry in Basle. (See Bräunlich, Friedrich, assignor.)
Sonoco Products Company. (See Wynder, James C., assignor.)
Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Machine for forming hollow glassware. 1,869,920; Aug. 2.
Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Feeding molten glass. 1,869,921; Aug. 2.
Soubier, Leonard D., Alton, Ill., assignor to Owens-Illinois Glass Company. Apparatus for feeding molten glass. 1,870,210; Aug. 2.
Soucek, George, Prague-Letnany, Czechoslovakia. Luminous signaling device. 1,867,922; Aug. 2.
Southwestern Portland Cement Company. (See Frederick, Alton K., assignor.)
Southworth, Edward, Portland, Me. Humidifier. 1,869,719; Aug. 2.
Souviron, Pierre J. F., Tarbes, France. Manufacture of copper sulphate. 1,869,521; Aug. 2.
Sovereign, Clarence L., Riverside, Ill., assignor to International Patents Development Company, Wilmington, Del. Crystallizing. 1,870,030; Aug. 2.
Sparkletts Bottled Water Corporation. (See Washburne, Arthur L., assignor.)
Spencer, Alexander C., Sarnia, Ontario, Canada, assignor to Standard Oil Development Company. Control of heat in the distillation of oil. 1,869,626; Aug. 2.
Sperry, Elmer A., deceased, Brooklyn, N. Y., by Sperry Products, Inc., Brooklyn, N. Y., assignee. Fissure detector for metals. Re18,555; Aug. 2.
Sperry Products, Inc. (See Sperry, Elmer A., assignor.)
Spitzglass, Albert F. (See Cunningham, A. B., and Spitzglass.)
Sprague, Frank J., assignor to Sprague Safety Control & Signal Corporation, New York, N. Y. Apparatus for controlling the movement of vehicles on railroads. 1,869,627; Aug. 2.
Sprague Safety Control & Signal Corporation. (See Sprague, Frank J., assignor.)
Sprague-Sells Corporation. (See Bauer, Edward G., assignor.)
Stader, Florence M., Plymouth, Mich. Educational appliance. 1,869,522; Aug. 2.
Stamford Rubber Supply Company, The. (See Gillespie, Kingsley A., assignor.)
Standard Gas Equipment Corporation. (See O'Dowd, Henry W., assignor.)
Standard-I. G. Company. (See Ritter, G., and Ufer, assignors.)
Standard Oil Company. (See Diggs, Sterling H., assignor.)
Standard Oil Company. (See Miller, Clarke C., assignor.)
Standard Oil Company. (See Roberts, Edward N., assignor.)
Standard Oil Company. (See Sullivan, F. W., jr., and McGill, assignors.)
Standard Oil Company of California. (See Bumbaugh, Harold L., assignor.)
Standard Oil Company of California. (See Danner, Philip S., assignor.)
Standard Oil Company of California. (See Davis, W. N., and Hampton, assignors.)
Standard Oil Company of California. (See Lantz, Vernon, assignor.)
Standard Oil Company of California. (See Shiffler, W. H., Holm, and Miller, assignors.)
Standard Oil Company (Indiana). (See Voorhees, Vanderveer, assignor.)
Standard Oil Development Company. (See Frolich, Per K., assignor.)
Standard Oil Development Company. (See Nichols, H. J., jr., and Kuhl, assignors.)
Standard Oil Development Company. (See Nichols, H. J., and Wise, assignors.)
Standard Oil Development Company. (See Spencer, Alexander C., assignor.)
Standard Oil Development Company. (See Zaikowsky, Wladimir M., assignor.)
Standard Rolling Mills, Inc. (See Konigsberg, Joseph H., assignor.)
Standard Stoker Company, The. (See Anderson, Howard P., assignor.)
Standard Stoker Company, The. (See Marsden, W. H. R., and Osborne, assignors.)
Standard Stoker Company, The. (See Turner, Edwin A., assignor.)
Standard Stoker Company, The. (See Wenrich, Martin L., assignor.)
Stark, Frederick W., assignor to International Silver Company, Meriden, Conn. Dish or other similar article of hollow-ware. Des. 87,491; Aug. 2.
Steele, Lawrence C., Youngstown, Ohio. Manufacturing sheet metal. Re18,551; Aug. 2.
Stein, Richard, Kassel and H. Frank, Kassel-Wilhelmshohe, Germany, assignors to The Superheater Company, New York, N. Y. Superheater header. 1,869,986; Aug. 2.
Steinbart, Alfred, Pittsburgh, Pa. Furnace pressure regulator. 1,869,442. Aug. 2.
Stelzer, Franz H. B., assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Tobacco spreader. 1,869,395; Aug. 2.
Stelzer, Franz H. B., assignor to J. C. Muller, Dresden, Germany. Producing cigar fillers by arranging the tobacco from which they are to be made between profiled dies. 1,869,396; Aug. 2.
Stephens, Bradford E., Needham, Mass. Pamphlet and book cover. 1,870,183; Aug. 2.
Sternberg, Woldemar M., Oak Park, assignor of one-half to Epstein & Harris, Chicago, Ill. Lip stick. 1,869,782; Aug. 2.
Stevens, Joseph J., Dalton, Kans. Attachment for listers. 1,869,923; Aug. 2.
Stevenson, George H., Sound Beach, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Filtering circuits. 1,869,870; Aug. 2.
Stevenson, Walter N. (See Swangren, Edwin V., assignor.)
Stewart, Geary F., Norwood, assignor to The Kingery Manufacturing Company, Cincinnati, Ohio. Popcorn popper. Des. 87,492; Aug. 2.
Stille, Laurence C., Valparaiso, Ind., assignor, by mesne assignments, to George C. Peterson Co., Chicago, Ill. Adhesive. 1,869,783; Aug. 2.
Stock, Arthur J., jr., Lakewood, Ohio. Nonsegregating conveyer chute. 1,869,628; Aug. 2.
Stocklin, Clifford L., assignor to Cook Laboratories, Inc., Chicago, Ill. Administration of therapeutic agents. 1,869,443; Aug. 2.
Stone, Henry A., assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Coating machine. 1,869,630; Aug. 2.
Storm Manufacturing Co. (See Johnson, O. A., and Lingren, assignors.)
Stough Tank Erecting Company, The. (See DuBois, Virgil L., assignor.)
Stout, William B., Detroit, assignor to Ford Motor Company, Highland Park, Mich. Airplane. 1,869,871; Aug. 2.
Strand, Andrew, and J. B. Hawley, jr., assignors to A. F. Phelps, Minneapolis, Minn. Beverage making machine 1,869,720; Aug. 2.
Stranszky, Emil, Warren, Pa. Electric resistance heating element. 1,869,629; Aug. 2.
Strattner, Frederick, Philadelphia, and W. C. Magner, Ardmore, Pa. Constant speed testing device for watthour meters. 1,869,588; Aug. 2.
Strnad, Louis G., Chicago, Ill. Curtain bracket. 1,870,148; Aug. 2.
Strocchi, Natale, and F. Minardi, Ravenna, Italy. Lifeboat. 1,869,523; Aug. 2.
Stromberg-Carlson Telephone Manufacturing Company, The. (See Worthington, Everett, assignor.)
Stroup, Charles L., Oak Park, Ill. Insulator. 1,869,397; Aug. 2.
Stuckey, A. J., et al. (See Davis, Louis, jr., assignor.)
Suelflow, Emil O., and J. Meidl, Oshkosh, Wis., assignors, by mesne assignments, to The Belber Trunk & Bag Company, Woodbury, N. J. Drawer locking mechanism for trunks. 1,870,149; Aug. 2.
Suelflow, Emil O., and J. Meidl, Oshkosh, Wis., assignors, by mesne assignments, to The Belber Trunk & Bag Company, Woodbury, N. J. Drawer locking mechanism for trunks. 1,870,150; Aug. 2.
Sullivan, Frederick W., jr., Whiting, Ind., and W. J. McGill, Wood River, Ill., assignors to Standard Oil Company, Whiting, Ind. Low cold test lubricating oil. 1,870,074; Aug. 2.
Superheater Company, The. (See Hard, Malcolm, assignor.)
Superheater Company, The. (See Huet, André, assignor.)
Superheater Company, The. (See Jorgensen, Svend M., assignor.)
Superheater Company, The. (See Stein, R., and Frank, assignors.)
Superior Paper Products Co. (See Isselhardt, Louis L., assignor.)
Sure, Barnett, Fayetteville, Ark. Extraction and concentration of vitamins. 1,869,721; Aug. 2.
Sutter, Josiah H., Wichita, Kans. Starting motor. 1,870,075; Aug. 2.
Swallen, Lloyd C., assignor to Commercial Solvents Corporation, Terre Haute, Ind. Separation and recovery of products produced by the alkaline fusion of cellulosic materials. 1,869,948; Aug. 2.
Swangren, Edwin V., Maywood, assignor of one-half to W. N. Stevenson, Evanston, Ill. Cap-lining machine. 1,870,151; Aug. 2.
Swanson, Andrew W., assignor to Illinois Tool Works, Chicago, Ill. Work holding vise. 1,869,631; Aug. 2.
Sweet, Bertram R., assignor to Whitin Machine Works, Whitinsville, Mass. Spinning or twisting spindle. 1,869,632; Aug. 2.
Swenson Evaporator Company. (See Badger, Walter L., assignor.)
Syracuse Washing Machine Corporation. (See Hill, Hermann, assignor.)
Szikla, Géza, and A. Rozinek, Budapest, Hungary. Gasifying and distilling coal dust. 1,869,949; Aug. 2.
Tabor Manufacturing Company, The. (See Lewis, Wilfred, assignor.)

Tabor Manufacturing Company, The. (See Ramsden, John T., assignor.)
Takamine Corporation. (See Thompson, Olof, assignor.)
Tapie, Joseph F., assignor of one-half to G. F. Hammond, Santa Barbara, Calif. Apparatus for treatment of ore. 1,869,830; Aug. 2.
Taylor, Cyril S., New Kensington, and J. D. Edwards, Oakmont, Pa., assignors to Aluminum Company of America, Pittsburgh, Pa. Aluminum alloy. Re18,552; Aug. 2.
Taylor, George N., East Providence, R. I., assignor to Universal Winding Company, Boston, Mass. Slub catcher and yarn cleaner. 1,870,152; Aug. 2.
Taylor Instrument Companies. (See Doser, Albert J., assignor.)
Taylor Instrument Companies. (See Norwood, Harry Y., assignor.)
Taylor, James S., assignor of one-half to E. B. Young, Albuquerque, N. Mex. Battery post. 1,869,524; Aug. 2.
Television Limited. (See Baird, John L., assignor.)
Teller, Fritz. (See Aickelin, H., and Teller.)
Tennessee Enamel Manufacturing Co. (See Calton, Robert G., assignor.)
Tennessee Products Corporation. (See Carlin, Joseph C., assignor.)
Testi, Nicholas, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,869,924; Aug. 2.
Texaco Salt Products Company. (See Martin, Otto V., assignor.)
Texas Company, The. (See Grahame, James H., assignor.)
Theiss, Harry W., Louisville, Ohio. Metal coating. 1,869,784; Aug. 2.
Thoman, Walter C., assignor to The Bartlett Hayward Company, Baltimore, Md. Flexible shaft coupling. 1,870,153; Aug. 2.
Thomas, Arthur, and G. Craig, Thornton Heath, assignors to The Accounting & Tabulating Corporation of Great Britain Limited, London, England. Machine for perforating statistical cards. 1,870,184; Aug. 2.
Thomas & Betts Co., The. (See Buchanan, Stephen N., assignor.)
Thomas, Edward G., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Testing device. 1,869,398; Aug. 2.
Thomas, George F., Berwyn, assignor to Alemite Corporation, Chicago, Ill. Lubricant compressor. 1,869,722; Aug. 2.
Thomas, William M., assignor of one-fourth to F. W. Lee and one-fourth to B. G. Johnson, Albuquerque, N. Mex. Carburetor. 1,869,785; Aug. 2.
Thompson, Nat, assignor to Coe Laboratories, Inc., Chicago, Ill. Dental furnace. 1,869,831; Aug. 2.
Thompson, Olof, assignor to Takamine Corporation, Long Island City, N. Y. Automatic control system. 1,869,399; Aug. 2.
Thomson, Hedley J., Woodford Green, England. Variable speed gearing. 1,870,076; Aug. 2.
Thornton, Frank, jr., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Time switch. 1,870,185; Aug. 2.
Tideman, Wilhelm, assignor of one-half to W. Gildemeister, Bremen, Germany. Daylight film viewing pocket apparatus. 1,869,525; Aug. 2.
Tischer, Max, Augsburg, Germany. Filter for liquids and gases. 1,869,589; Aug. 2.
Tobey, Fred W., assignor to The Macey Company, Grand Rapids, Mich. Tablet for armchairs. 1,869,444; Aug. 2.
Tobin, Arthur L., assignor to Ruggles-Klingemann Mfg. Co., Salem, Mass. Throttling valve. 1,869,832; Aug. 2.
Toledo Scale Manufacturing Co. (See Finley, Dozier, assignor.)
Toledo Scales Manufacturing Company. (See Hurt, Samuel N., assignor.)
Toledo Scale Manufacturing Company. (See Reeves, O. C., and Marshall, assignors.)
Toledo Scale Manufacturing Company. (See Thomas, Edward G., assignor.)
Tomkins, Harold A., Jackson, Mich. Pneumatic chuck. 1,869,445; Aug. 2.
Tower, Max L., H. W. Dye, and F. L. McDonough, assignor to Niagara Sprayer Company, Middleport, N. Y. Parasiticide. 1,869,526; Aug. 2.
Towne, Carlton G. (See Matter, J. K., and Towne.)
Tracy, Michael J., St. Louis County, Mo. Window screen and support therefor. 1,869,786; Aug. 2.
Trbojevich, Nikola, Detroit, Mich. Differential gearing. 1,869,528; Aug. 2.
Tremont Products Corporation. (See Smith, Raymond D., assignor.)
Trout, William A., et al. (See Dean, C. L., and Hilton, assignors.)
Truline, Inc. (See Easley, Curran S., assignor.)
Trumble, John T., Lansing, Mich. Supercharger. 1,869,787; Aug. 2.
Trumbull Electric Manufacturing Company, Pacific Division. (See Griswold, Andrew E., assignor.)
Trumbull, Frank S., Providence, R. I. Spoon or similar article. Des. 87,493; Aug. 2.
Turck, Joseph A. V., Wilmette, assignor to Felt & Tarrant Manufacturing Company, Chicago, Ill. Calculating machine. 1,869,872; Aug. 2.
Turnbull, Robert, Toronto, Ontario, Canada, assignor, by mesne assignments, to Hugh C. Sicard, New York, N. Y. Article for introducing materials in a metallurgical bath. 1,869,925; Aug. 2.
Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Stoker mechanism. 1,870,198; Aug. 2.
Turner, Edwin A., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Locomotive cab underframe. 1,870,199; Aug. 2.
Twin Disc Clutch Company, The. (See Pearmain, William J., assignor.)
Ufer, Edwin. (See Ritter, G., and Ufer.)
Ulrich, Heinrich. (See Klein, R., and Ulrich.)
Ulrich, Otto, Cronbert-on-the-Taunus, Germany. Advertising device. 1,870,077; Aug. 2.
Underwood, Clarence A., East Chicago, Ind. Measurement of pressure differentials. 1,869,400; Aug. 2.
Underwood Elliott Fisher Company. (See Dobson, William A., assignor.)
Union Switch & Signal Company, The. (See Ashworth, Harry E., assignor.)
Union Switch & Signal Company, The. (See Clausen, H. C., and Logan, jr., assignors.)
Union Switch & Signal Company, The. (See Grondahl, Lars O., assignor.)
Union Switch & Signal Company, The. (See McWhirter, William C., assignor.)
United-Carr Fastener Corporation. (See Johnson, Gustav, assignor.)
United-Carr Fastener Corporation. (See Mitchell, Robert, assignor.)
United Metal Box Co. Inc. (See Hammer, Samuel, assignor.)
United Shoe Machinery Corporation. (See Hamann, William, assignor.)
United Shoe Machinery Corporation. (See Kinney, Fay D., assignor.)
Universal Oil Products Company. (See Huff, Lyman C., assignor.)
Universal Oil Products Company. (See Kirschbraun, Lester, assignor.)
Universal Oil Products Company. (See Morrell, Jacque C., assignor.)
Universal Oil Products Company. (See Oberle, Alfred, assignor.)
Universal Switch & Signal Company, The. (See Allison, Leslie R., assignor.)
Universal Winding Company. (See Armitage, Harold, assignor.)
Universal Winding Company. (See Taylor, George N., assignor.)
"Universelle" Cigarettemaschinen-Fabrik J. C. Muller & Co. (See Jähne, Ernst H., assignor.)
"Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co. (See Stelzer, Franz H. B., assignor.)
Urschel, William E., Valparaiso, Ind. Harvesting instrumentality. 1,869,529; Aug. 2.
Usun, Serge, Sao Paulo, Brazil. Film controlling mechanism. 1,869,527; Aug. 2.
Utility Products Company. (See Howard, William S., assignor.)
Van Denburg, John W., White Plains, N. Y. Separator. 1,869,987; Aug. 2.
Van Duyn, Adrianus, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines volgens van Berkel's Patent en van andere Werktugen, Rotterdam, Netherlands. Weighing scale. 1,869,723; Aug. 2.
Vang, Alfred, Detroit, Mich., assignor, by mesne assignments, to Motor Development Corporation. Internal combustion engine. 1,869,633; Aug. 2.
Vapor Car Heating Company. (See Bruce, A. D., Russell, and Manchester, assignors.)
Vapor Car Heating Company. (See Parks, Paul B., assignor.)
Vastano, Frederick A., Paterson, assignor, by mesne assignments, to Eclipse Aviation Corporation, East Orange, N. J. Starter for internal-combustion motors. Re18,554; Aug. 2.
Vaughan, Arthur H. (See Cope, F. T., and Vaughan.)
Vellner, Stephen, Philadelphia, Pa. Heel and sole protector. 1,869,988; Aug. 2.
Venable, William M., assignor to Blaw-Knox Company, Pittsburgh, Pa. Adjustment means for bucket lines. 1,869,989; Aug. 2.
Verbyla, Albert E., Newark, N. J. Preparing pigment compositions. 1,870,186; Aug. 2.
Vernon R., Limited. (See Saunders, Leslie O., assignor.)
Vilter Manufacturing Company, The. (See Baars, Ernst S. H., assignors.)
Visible Night-and-Day Street-Name Signs, Incorporated. (See Gatchell, Helen C., assignor.)
Von Delwig, Carl. (See Kalling, B. M. S., and von Delwig.)
Von Hofe, Christian, and J. Schier, Vienna, Austria, assignors to Aktiengesellschaft C. P. Goerz Optische Anstalt, Actiova Spolecnost K. P. Goerz Opticky Ustav, Bratislava, Czechoslovakia. Range finder with an invariable direction of the optical axis of the eyepiece. 1,869,530; Aug. 2.
Von Pein, Edward J., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,869,873; Aug. 2.

Voorhees, Vanderveer, Hammond, Ind., assignor to Standard Oil Company (Indiana), Chicago, Ill. Surge pump. 1,869,874; Aug. 2.
Voss, Walter K., Davenport, Iowa. Agitator. 1,869,590; Aug. 2.
Wagner, Norman V. (See Whitcomb, J. H., and Wagner.)
Wagner, Walter C. (See Strattner, F., and Wagner.)
Wagner, Wilhelm. (See Bals, O., and Wagner.)
Wagstaff, Richard A., Salt Lake City, Utah, assignor to American Smelting & Refining Company, New York, N. Y. Center wall furnace. 1,869,591; Aug. 2.
Wahlsten, Gosta L. B. (See Lysholm, A., and Wahlsten.)
Waldron, Harry E., assignor to W. A. Sheaffer Pen Company, Fort Madison, Iowa. Pen. 1,869,950; Aug. 2.
Wallace, Charles P., Lockport, N. Y. Folding paper box. 1,869,724; Aug. 2.
Walther, George, Dayton, Ohio. Wheel. 1,869,634; Aug. 2.
Walther, George, assignor to The Dayton Steel Foundry Company, Dayton, Ohio. Wheel. 1,869,635; Aug. 2.
Walworth, Arthur C., Newton, Mass. Radiator. 1,869,637; Aug. 2.
Wanamaker, Harry F., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Stripping mechanism for hosiery driers. 1,870,187; Aug. 2.
Wanderwell, Walter, Miami, Fla. Automobile. Des. 87,404; Aug. 2.
Ward, Ernest H., East Orange, and E. G. Jegge, Montclair, assignors to Lea Fabrics Inc., Newark, N. J. Making cemented pile fabrics. 1,869,531; Aug. 2.
Warner, Raymond M., Barberton, Ohio, assignor, by mesne assignments, to The Miller Rubber Company Inc., Wilmington, Del. Cementing rubber to metal and product. 1,869,636; Aug. 2.
Warner, Raymond M., Barberton, Ohio, assignor, by mesne assignments, to The Miller Rubber Company Inc., Wilmington, Del. Rubber cement and producing the same. 1,869,638; Aug. 2.
Warren, Edward J., Denver, Colo. Power operated rock drill. 1,869,875; Aug. 2.
Warren, Walter G. & Co., et al. (See Reader, Julius F., assignor.)
Washburne, Alva C. (See Reising, Eugene G., assignor.)
Washburne, Arthur L., assignor to Sparkletts Bottled Water Corporation, Los Angeles, Calif. Conveyer tilting section. 1,869,639; Aug. 2.
Washburne, Arthur L., Los Angeles, Calif. Stacker. 1,870,207; Aug. 2.
Watkins, Charles W., Kingston, Pa. Draft gauge. 1,869,727; Aug. 2.
Watt Car and Wheel Company, The. (See Boyd, Clarence A., assignor.)
Watt, Ehihu D., LaGrange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y. Concrete pile shell. 1,869,990; Aug. 2.
Wayne Company. (See Jauch, R. J., and Mitchell, assignors.)
Wehr, George G., Philadelphia, Pa. Dike construction. 1,870,154; Aug. 2.
Weikel, William A., Pottsville, Pa. Road machine. 1,869,446; Aug. 2.
Weinberg, Bennett, Butte, Mont. Mattress protector. 1,869,450; Aug. 2.
Weinig, Arthur J., Golden, Colo., assignor to The American Metal Company, Limited, New York, N. Y. Separating ore. 1,869,532; Aug. 2.
Welch, Jack T., assignor to James Heddon's Sons, Dowagiac, Mich. Reel seat for fishing rods. 1,870,078; Aug. 2.
Wellman Engineering Company, The. (See Sabin, Ford L., assignor.)
Wells, Burling D., Danbury, assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn. Candle socket. 1,869,451; Aug. 2.
Wells, William C., and W. E. Wendt, assignors to Delco-Light Company, Dayton, Ohio. Electrical apparatus. 1,869,640; Aug. 2.
Wendt, Wesley E. (See Wells, W. C., and Wendt, assignors.)
Wenrich, Martin L., Altoona, Pa., assignor to The Standard Stoker Company, Incorporated. Stoker. 1,870,031; Aug. 2.
West, Lawrence B., Chattanooga, Tenn. Thermocouple pocket. 1,869,788; Aug. 2.
Western Clock Company. (See Neureuther, Andrew H., assignor.)
Western Clock Company. (See Sewrey, U. R., and Moffett, assignors.)
Western Reserve Air Motors Corporation. (See Schlenker, Charles E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Currie, Gilbert, assignor.)
Westinghouse Electric & Manufacturing Company. (See Ellis, Delbert, assignor.)
Westinghouse Electric & Manufacturing Company. (See Ellis, Owen W., assignor.)
Westinghouse Electric and Manufacturing Company. (See Elsey, H. M., and Krogh, assignors.)
Westinghouse Electric & Manufacturing Company. (See Frank, Leo C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Goddard, Charles F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hill, Leland H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hodgkins, Charles H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jennings, Oliver S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kropff, Ludwig, assignor.)
Westinghouse Electric & Manufacturing Company. (See Landenberger, William H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Mallory, Edward B., assignor.)
Westinghouse Electric & Manufacturing Company. (See McCafferty, Robert H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Panzerbieter, T., and Nagel, assignors.)
Westinghouse Electric & Manufacturing Company. (See Richter, Hans, assignor.)
Westinghouse Electric & Manufacturing Company. (See Rugg, Walter S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Skellett, A. M., and Zworykin, assignors.)
Westinghouse Electric & Manufacturing Company. (See Thornton, Frank, jr., assignor.)
Westinghouse Electric & Manufacturing Company. (See Woodson, James C., assignor.)
Westinghouse Lamp Company. (See Clarry, Harold E., assignor.)
Westinghouse Lamp Company. (See Gustin, Daniel S., assignor.)
Westinghouse Lamp Company. (See Massie, Arnold C., assignor.)
Wetmore, Miner P., assignor to The American Thermos Bottle Company, Norwich, Conn. Vacuum bottle sealing machine. 1,869,533; Aug. 2.
Weymouth, Harry G., and E. M. Kreidler, assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Gasoline meter. 1,870,155; Aug. 2.
Wheary, George H., assignor to Wheary Trunk Company, Racine, Wis. Hand luggage. 1,869,447; Aug. 2.
Wheary Trunk Company. (See Hamlin, Benjamin M., assignor.)
Wheary Trunk Company. (See Wheary, George H., assignor.)
Wheeler, William L., Walnut Grove, Mo. Road culvert. 1,870,156; Aug. 2.
Whitcomb, John H., Lakewood, and N. V. Wagner, Rocky River, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Hot water bottle. Des. 87,495; Aug. 2.
White, John W., Buffalo, N. Y. Hydraulic brake system. 1,869,452; Aug. 2.
White, William C., and W. D. McCray, Los Angeles, Calif. Toothbrush. 1,869,991; Aug. 2.
Whitin Machine Works. (See Hargreaves, Robert, assignor.)
Whitin Machine Works. (See Horner, Leon H., assignor.)
Whitin Machine Works. (See Sweet, Bertram R., assignor.)
Wight, Edward H. (See Ober, B., and Wight.)
Wilbur, Peter L., Tuckahoe, N. Y., assignor to Wil-X-M'f'g Corporation. Spraying device. 1,869,992; Aug. 2.
Willcox & Gibbs Sewing Machine Co. (See Merritt, Arthur A., assignor.)
Williams, Frank M., Watertown, N. Y. Suction box dresser. 1,869,789; Aug. 2.
Williams, Joseph A. (See Karkau, Albert G., assignor.)
Williams, Rees K., Baltimore, Md. Helicopter. 1,869,453; Aug. 2.
Williams Sealing Corporation. (See Hazenfield, Ernie F., assignor.)
Williams, Thomas H., Cuyahoga Falls, assignor to National Rubber Machinery Company, Akron, Ohio. Masticator. 1,869,833; Aug. 2.
Williams, William E., Harrisonville, Mo., assignor of one-half to D. T. Hulse, De Queen, Ark. Corner fastening means. 1,870,157; Aug. 2.
Willmott, John J., Montclair, N. J., assignor to L. Farber, Yonkers, N. Y. Holder. Des. 87,496; Aug. 2.
Wilson, Ernest H., Hastings, Fla. Mechanism for attaching potato diggers to a tractor. 1,869,641; Aug. 2.
Wil-X-M'f'g Corporation. (See Wilbur, Peter L., assignor.)
Wired Radio, Inc. (See Hough, Clinton W., assignor.)
Wise, Clarence R. (See Nichols, H. J., and Wise.)
Wiss, J., & Sons Co. (See Rauh, Frederic H., assignor.)
Wittouck, Serge, Paris, France, assignor to International Industrial and Chemical Company, Limited, Montreal, Quebec, Canada. Manufacture of barium compounds. 1,869,454; Aug. 2.
Wolf, Walter F., New York, N. Y. Loose leaf binder and lock. 1,869,790; Aug. 2.
Woodall Industries, Incorporated. (See Rodack, James W., assignor.)
Woodall Industries, Incorporated. (See Zinser, Paul R., assignor.)
Woodring, William R., Los Angeles, Calif. Electrical soldering apparatus. 1,869,448; Aug. 2.
Woodson, James C., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Electric furnace. 1,870,079; Aug. 2.
Woodson, James C., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Slot closure. 1,870,080; Aug. 2.
Woolman, Claude, San Diego, Calif. Golf drive registering device. 1,869,642; Aug. 2.

Worden, James A., assignor of one-half to A. M. Oleston, Antigo, Wis. Fluid clutch. 1,869,449; Aug. 2.
Worthington, Everett, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radiocabinet or the like. Des. 87,497; Aug. 2.
Worthington, Everett, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radiocabinet or the like. Des. 87,498; Aug. 2.
Worthington, Everett, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radiocabinet or the like. Des. 87,499; Aug. 2.
Worthington, Everett, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radiocabinet or the like. Des. 87,500; Aug. 2.
Worthington, George E., North Hollywood, assignor to F. J. Catterlin, Los Angeles, Calif. Pendulum toy. 1,869,951; Aug. 2.
Wright, Orville C., St. Louis, Mo. Electrical control of fluid pressure. 1,869,791; Aug. 2.
Wrighton, William J., assignor to American Optical Company, Southbridge, Mass. Process and product for covering a metallic article with an unworkable alloy. 1,870,081; Aug. 2.
Wulf, Charles A., assignor to American Valve and Enameling Corporation, Indianapolis, Ind. Sheet metal elbow and producing. 1,869,926; Aug. 2.
Wurzburg, Reginald, Memphis, Tenn. Box. 1,869,927; Aug. 2.
Wynder, James C., assignor to Sonoco Products Company, Hartsville, S. C. Winding device. 1,870,158; Aug. 2.
Yacorzynski, Marie K., et al. (See Levitt, Leonard, assignor.)
Yates-American Machine Company. (See Hartnell, Willard L., assignor.)
Yates-American Machine Company. (See Johnson, W. D., and Hartnell, assignors.)
Yohns, Paul, New York, N. Y., assignor to The Butterick Publishing Company. Printing compound and making same. 1,870,082; Aug. 2.
Yoshioka, Kuni, Minami Ku, Osaka, Japan. Preparing gold compound of cystine. 1,869,834; Aug. 2.
Young, Arthur P., Kenilworth, and L. Griffiths, Coventry, England, assignors to General Electric Company. Electric contact breaker. 1,870,032; Aug. 2.
Young, Earl B. (See Taylor, James S., assignor.)
Young, Fred M., Racine, Wis. Air heater. 1,869,534; Aug. 2.
Young, Harvey L. (See Homler, O. F., and Young.)
Youngren, Earl E., San Francisco, Calif. Hydraulic brake. 1,869,725; Aug. 2.
Youngren, Earl E., San Francisco, Calif. Surgical apparatus. 1,869,726; Aug. 2.
Zalkowsky, Wladimir M., Pasadena, Calif., assignor to Standard Oil Development Company. Internal combustion engine and operating the same. 1,869,455; Aug. 2.
Zeiss, Carl. (See Dallos, Josef, assignor.)
Zifferer, Lothar R., deceased, by M. C. Zifferer and N. Albright, Columbia, Pa., and H. E. Champion, Blue Point, Long Island, N. Y., executors, assignors to Columbia Malleable Castings Corp., Columbia, Pa. Pipe hanger. 1,870,083; Aug. 2.
Zifferer, Mabel C., et al., executors. (See Zifferer, Lothar R.)
Zinser, Paul R., Chicago, Ill., assignor, by mesne assignments, to Woodall Industries, Incorporated, Detroit, Mich. Making metallic boxes. 1,869,728; Aug. 2.
Zuckerman, Roscoe C., Stockton, Calif. Adhesive tape container and cutter. 1,869,729; Aug. 2.
Zwemer, Edward J., Holland, Mich. Ash tray. Des. 87,471; Aug. 2.
Zwermann, Carl H., Robinson, Ill. Combination closet bowl and tank structure. 1,869,401; Aug. 2.
Zworykin, Vladimir K. (See Skellett, A. M., and Zworykin.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 2D DAY OF AUGUST, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Acid phosphate, Manufacturing. B. Ober and E. H. Wight. 1,869,941; Aug. 2.
Acid, Production of diodo-chelidamic. M. Dohrn and P. Diedrich. 1,869,672; Aug. 2.
Acids, Δ2-cyclopenten barbituric. R. Chaux and C. Dufraisse. 1,869,666; Aug. 2.
Adhesive. L. C. Stille. 1,869,783; Aug. 2.
Advertising device. O. Ulrich. 1870,077; Aug. 2.
Agitator. W. K. Voss. 1,869,590; Aug. 2.
Agricultural implement. W. Siemienski. 1,869,516; Aug. 2.
Air and gas burner. S. H. Griffiths. 1,869,359; Aug. 2.
Air brake. H. F. Bickel. 1,870,191; Aug. 2.
Air gun. C. C. Loomis. 1,869,600; Aug. 2.
Air heater. F. M. Young. 1,869,534; Aug. 2.
Air humidifier. G. D. Doherty. 1,869,549; Aug. 2.
Airplane. G. A. Hughes. 1,970,119; Aug. 2.
Airplane. W. B. Stout. 1,869,871; Aug. 2.
Airplane while in flight to another aircraft, Method and apparatus for mooring an. H. C. Richardson. 1,869,506; Aug. 2.
Air spring. W. A. Eaton. 1,869,676; Aug. 2.
Alcohols from gasoline, Producing. E. E. Ayres, jr. 1,869,928; Aug. 2.
Aliphatic compounds, Production of oxygenated. H. Dreyfus. 1,870,104; Aug. 2.
Alkali metal iodide composition. J. L. Smith. 1,869,518; Aug. 2.
Alkyl ether ethylene glycol esters of fatty acids. J. R. Buckley. 1,869,660; Aug. 2.
Alloy. O. W. Ellis. 1,869,554; Aug. 2.
Aluminum alloy. C. S. Taylor and J. D. Edwards. Re18,552; Aug. 2.
Aluminum arc welding. J. Churchward. 1,869,667; Aug. 2.
Aluminum chloride solutions, Purification of. H. Aichkelin and F. Teller. 1,870,214; Aug. 2.
Amplifier, Wave filter impedance-coupled. W. W. Salisbury. 1,869,715; Aug. 2.
Amplifying system. L. G. Bostwick. 1,869,459; Aug. 2.
Amplifying system. W. L. Carlson. 1,870,038; Aug. 2.
Anchor, Fence post. A. L. Goldenstar. 1,869,744; Aug. 2.
Anchor, Tubing. T. L. Lynch. 1,869,759; Aug. 2.
Anthracene, Producing pure. L. Kahl. 1,869,481; Aug. 2.
Anti-tobacco confection. H. W. Cox and D. H. Moore. 1,870,098; Aug. 2.
Anti-vibration device. A. H. Rangnow. 1,869,437; Aug. 2.
Apparatus for mechanically solving rectangular triangles. K. Petschenig. 1,869,502; Aug. 2.
Arc box. D. Ellis. 1,869,552; Aug. 2.
Article for introducing materials in a metallurgical bath. R. Turnbull. 1,869,925; Aug. 2.
Article with an unworkable alloy, Process and product for covering a metallic. W. J. Wrighton. 1,870,081; Aug. 2.
Articles, Cleaning of. A. Fowler and K. J. R. Robertson. 1,869,845; Aug. 2.
Articles in wrappers, Inclosing certain. M. Reymond. 1,869,584; Aug. 2.
Artillery steel wheel. C. L. Eksergian and P. W. Gaenssle. 1,869,960; Aug. 2.
Atomizer. W. B. Croan. 1,870,099; Aug. 2.
Autoparking and storage system. W. S. Rugg. 1,870,069; Aug. 2.
Autographic register. F. E. Pfeiffer. 1,869,613; Aug. 2.
Automatic brake. J. W. Sharpe. 1,870,146; Aug. 2.
Automobile. W. Wanderwell. Des. 87,494; Aug. 2.
Automobile anti-squeak welt. S. W. Jansen. 1,870,122; Aug. 2.
Automobile body. E. G. Heuer. 1,869,423; Aug. 2.
Automobile servicing lift. P. J. Lunati. 1,870,128; Aug. 2.
Automobile storage elevator. C. F. Goddard. 1,870,046; Aug. 2.
Bag: *See*—
Ice bag.
Bar: *See*—
Cutter bar.
Barium compounds, Manufacture of. S. Wittouck. 1,869,454; Aug. 2.
Battery post. J. S. Taylor. 1,869,524; Aug. 2.
Bearing. F. E. De Vore. 1,869,524; Aug. 2.
Bearing, Antifriction. H. R. Gibbons. 1,869,890; Aug. 2.
Bearing for flexible pipe joints, Thrust. A. D. Bruce, E. A. Russell, and T. H. Manchester. 1,870,036; Aug. 2.
Bearing for walking beam end-connections, Rocker. W. F. Bowman. 1,869,405; Aug. 2.
Bed brace, Slip-on. E. Clausen. 1,869,796; Aug. 2.
Bell and blotter holder, Combination call. P. H. Bandonill. 1,870,160; Aug. 2.
Belt. M. Sachs. Des. 87,490; Aug. 2.
Belt, Chain or link. S. J. Bens. 1,870,165; Aug. 2.
Beverage making machine. A. Strand and J. B. Hawley, jr. 1,869,720; Aug. 2.
Binder and lock, Loose leaf. W. B. Wolf. 1,869,790; Aug. 2.
Binder, Loose leaf. G. E. Hamlin. 1,869,937; Aug. 2.
Bird house. P. T. Cook. Des. 87,460; Aug. 2.
Bit: *See*—
Drill bit.
Bituminous dispersions and making the same. B. W. Lewis and A. Saunders. 1,869,382; Aug. 2.
Bituminous emulsions and products thereof, Making. L. Kirschbraun. 1,869,697; Aug. 2.
Blade, Impeller. J. D. Beebe. 1,869,655; Aug. 2.
Blanks, Reducing and elongating tubular. S. E. Diescher. 1,870,209; Aug. 2.
Blower, Portable heat. A. A. Breuer. 1,869,737; Aug. 2.
Board: *See*—
Sound board.
Boiler: *See*—
Waste heat boiler.
Boiler. D. S. Jacobus. 1,870,177; Aug. 2.
Boiler. C. B. Little and W. J. Haag. 1,870,059; Aug. 2.
Boiler cleaner. N. L. Snow, F. Bowers, and C. L. Howse. 1,870,182; Aug. 2.
Bolt and clamp. L. R. Hand and L. A. Eyster. 1,870,112; Aug. 2.
Bolt, Safety. A. L. Shook. 1,869,947; Aug. 2.
Bottle, Hot water. J. H. Whitcomb and N. V. Wagner. Des. 87,495; Aug. 2.
Bottle sealing machine, Vacuum. M. P. Wetmore. 1,869,533; Aug. 2.
Bowl and tank structure, Combination closet. C. H. Zwermann. 1,869,401; Aug. 2.
Box: *See*—
Arc box.
Floor box.
Journal box.
Paper box.
Slip-joint fill box.
Switch box.
Box. R. Wurzburg. 1,869,927; Aug. 2.
Box and bearing for railway vehicles. J. N. Blue. 1,869,795; Aug. 2.
Box for refrigerated shipments and the like. A. M. Overton. 1,869,769; Aug. 2.
Boxes, Apparatus for arranging. P. W. Dietmann. 1,870,201; Aug. 2.
Boxes, Making metallic. P. R. Zinser. 1,869,728; Aug. 2.
Brace: *See*—
Bed brace.
Bracelet, Expansion. E. Prestinari. 1,869,615; Aug. 2.
Bracket: *See*—
Curtain bracket.
Brake: *See*—
Air brake.
Automatic brake.
Differentiating brake.
Hand brake.
Hydraulic brake.
Servo-brake.
Brake for landing gear wheels of airplanes. A. H. Hofer. 1,869,479; Aug. 2.
Brake for railroad vehicles. J. Rohm. 1,870,204; Aug. 2.
Brake system, Hydraulic. J. W. White. 1,869,452; Aug. 2.
Braking apparatus, Railway. H. C. Clausen and J. W. Logan, jr. 1,869,409; Aug. 2.
Brick, Building. J. D. Davies. 1,870,102; Aug. 2.
Brick press. F. H. Bankert. 1,869,995; Aug. 2.
Broadcast distributing system, Wired. E. E. Clement. 1,869,356; Aug. 2.
Brush, Combination polishing. B. J. Levin. 1,870,057; Aug. 2.
Brush preserving case. R. Kamm. 1,869,753; Aug. 2.
Bucket, Excavating. F. H. Hunt. 1,870,050; Aug. 2.
Bucket lines, Adjustment means for. W. M. Venable. 1,869,989; Aug. 2.
Buckle. W. F. Haas. Des. 87,465; Aug. 2.
Buckle. O. G. Sherman. Re18,549; Aug. 2.
Buffer. H. W. Bailey. 1,869,793; Aug. 2.
Buffing device for railway switches and the like. W. C. McWhirter. 1,869,604–5; Aug. 2.
Building. F. L. Markey. Des. 87,473; Aug. 2.
Building, Automobile storage. W. S. Rugg. 1,870,070; Aug. 2.
Building for automobiles, Storage. J. D. Bell. 1,869,794; Aug. 2.
Building, Service. G. L. Rosebrook. Des. 87,485–8; Aug. 2.
Burner: *See*—
Air and gas burner.
Fuel burner.
Oil burner.
Turbulent burner.
Burner unit for gas heating apparatus. H. W. O'Dowd. 1,869,942; Aug. 2.

Cabinet. D. Epstein. Des. 87,461; Aug. 2.
Cabinet. R. B. Gale. 1,869,806; Aug. 2.
Cabinet, Wall. S. Hammer. 1,869,807; Aug. 2.
Cable equalizer. A. J. Eggan. 1,869,471; Aug. 2.
Cable support. O. W. Brenizer. 1,869,407; Aug. 2.
Cable terminal. J. C. Hale. 1,869,475; Aug. 2.
Calcium chloride, Preparing. O. V. Martin. 1,869,906; Aug. 2.
Calculating machine. J. A. V. Turck. 1,869,872; Aug. 2.
Calorimetry for burning gases of relatively low heating value. E. X. Schmidt. 1,869,585; Aug. 2.
Can feeding apparatus. E. G. Bauer. 1,869,653; Aug. 2.
Can turning machine. J. Hauk. 1,869,477; Aug. 2.
Candelabra. M. W. Reh. Des. 87,484; Aug. 2.
Candlestick. D. H. Crosser. 1,870,208; Aug. 2.
Canvas attachment, Platform. C. E. Nelson. 1,869,707; Aug. 2.
Cap lining machine. E. V. Swangren. 1,870,151; Aug. 2.
Cap, Twisting. R. Gollong. 1,870,202; Aug. 2.
Car coupler. W. J. Regan. 1,869,713; Aug. 2.
Car for monorail systems. C. S. Haddlesay. 1,869,893; Aug. 2.
Car, Lift. W. G. Behling. 1,870,163; Aug. 2.
Car, Mine. C. A. Boyd. 1,870,167; Aug. 2.
Car, Refrigerator. A. C. Mather. 1,867,701; Aug. 2.
Carburetor. A. Coleman. 1,869,798; Aug. 2.
Carburetor. D. Collins. 1,869,467; Aug. 2.
Carburetor. W. M. Thomas. 1,869,785; Aug. 2.
Cards, Deck of playing. N. P. Beck. Des. 87,455; Aug. 2.
Cart. E. Chandler. 1,869,355; Aug. 2.
Carton. L. L. Edmunds. 1,869,742; Aug. 2.
Carton, Dispensing. G. Iacobitti. 1,869,751; Aug. 2.
Carton or similar article, Package. H. Rynveld. Des. 87,489; Aug. 2.
Carrier: *See*—
Luggage carrier.
Case: *See*—
Brush preserving case. Vanity case.
Sample case.
Case and manufacture, Card. W. J. Ecker. 1,869,803; Aug. 2.
Cash register. C. W. Green. 1,870,004; Aug. 2.
Cash register. B. M. Shipley and E. E. Holt. 1,870,073; Aug. 2.
Cash register. E. J. Von Pein. 1,869,873; Aug. 2.
Caster. R. E. Miller. 1,869,574; Aug. 2.
Catalyst for the preparation of esters. J. Martin and I. J. Krchma. 1,869,761–2; Aug. 2.
Cement and other pulverulent materials, Apparatus for handling. M. A. Roblee and G. H. Kunz. 1,869,619; Aug. 2.
Cement and producing the same, Rubber. R. M. Warner. 1,869,638; Aug. 2.
Cement or like material in bulk, Apparatus for handling. M. Kind. 1,869,970; Aug. 2.
Clasp: *See*—
Lingerie clasp.
Cleaner: *See*—
Boiler cleaner. Pipe cleaner.
Center wall furnace. R. A. Wagstaff. 1,869,591; Aug. 2.
Chair. G. F. Corduan. 1,869,365; Aug. 2.
Charge supplying and mixing method and apparatus for internal combustion engines. A. Moore. 1,869,821; Aug. 2.
Check punching and issuing machine. R. H. Helsel. 1,869,849; Aug. 2.
Chintz, Applique gingham effect. M. W. Greenstein. Des. 87,463; Aug. 2.
Chuck, Pneumatic. H. A. Tomkins. 1,869,445; Aug. 2.
Chute, Nonsegregating conveyer. A. J. Stock, jr. 1,869,628; Aug. 2.
Cigar fillers by arranging the tobacco from which they are to be made between profiled dies, Producing. F. H. B. Stelzer. 1,869,396; Aug. 2.
Circuit breaker. O. S. Jennings. 1,869,563; Aug. 2.
Circuit control apparatus. L. L. Lewis. 1,870,127; Aug. 2.
Circuit controller for motion picture films. H. H. Fenner and R. E. Silvis. 1,869,678; Aug. 2.
Circuit, Electric translating. D. C. Prince. 1,870,022; Aug. 2.
Circuit oscillator, Relaxation of. R. M. Page. 1,869,500; Aug. 2.
Circuits, Filtering. G. H. Stevenson. 1,869,870; Aug. 2.
Clasp for lingerie, hair, and like purpose. G. A. Laughton. 1,870,014; Aug. 2.
Closure cap for tumblers, jars, and other receptacles. H. Ingram. 1,869,938; Aug. 2.
Clutch. W. J. Pearmain. 1,869,982; Aug. 2.
Clutch, Fluid. J. A. Worden. 1,869,449; Aug. 2.
Clutch, operating mechanism. A. Dina. 1,869,887; Aug. 2.
Coal cleaning air treatment method and apparatus. M. I. Dorfan. 1,870,042; Aug. 2.
Coal dust, Gasifying and distilling. G. Szikla and A. Rozinek. 1,869,949; Aug. 2.
Coating apparatus. E. C. Hopkins. 1,869,691; Aug. 2.
Coating for thermionic devices. H. M. Elsey and A. T. Krogh. 1,870,003; Aug. 2.
Coating machine. H. A. Stone. 1,869,630; Aug. 2.
Coffeepot. J. K. Matter and C. G. Towne. Des. 87,475; Aug. 2.
Coils, Cooling and ice tank. E. S. H. Baars. 1,869,792; Aug. 2.
Coin mechanism. B. Radtke. 1,869,616; Aug. 2.
Collapsible tube. J. G. Johnston. 1,869,594; Aug. 2.
Communication system. C. O. Bickelhaupt and C. E. Pennel. 1,869,458; Aug. 2.
Composition containing lithium and silicon and producing same. H. Osborg. 1,869,494; Aug. 2.
Compositions and articles from cellulose derivatives, Manufacture of. C. Dreyfus, W. McC. Cameron, and G. Schneider. 1,870,175; Aug. 2.
Compound, Producing moldable. J. Mursch. 1,869,490; Aug. 2.
Compounds of the pyridine series. C. Rath. 1,870,203; Aug. 2.
Compounds, Producing sheeted. J. Mursch. 1,869,491; Aug. 2.
Compressing and molding machine. J. A. O'Halloran. 1,869,492; Aug. 2.
Compressor, Lubricant. G. F. Thomas. 1,869,722; Aug. 2.
Concrete mixing, spreading and finishing machine. E. H. Lichtenberg. 1,869,902; Aug. 2.
Condenser and heater, Combined. C. E. Lucke. 1,869,973; Aug. 2.
Condenser, High tension. W. Regerbis and M. Handtrag. 1,870,141; Aug. 2.
Condenser, Variable. V. G. Apple. 1,870,084; Aug. 2.
Conducting means for steam in radial flow steam turbines. A. Lysholm and G. L. B. Wahlsten. 1,870,212; Aug. 2.
Conduit structure, Flexible. J. H. Phillips. 1,870,021; Aug. 2.
Confection. P. W. Clark. 1,869,464; Aug. 2.
Connection, Boiler-washing blow-off. B. P. Phelps. 1,869,389; Aug. 2.
Contact breaker, Electric. A. P. Young and L. Griffiths. 1,870,032; Aug. 2.
Contact glass. J. Dallos. 1,869,366; Aug. 2.
Container and cutter, Adhesive tape. R. C. Zuckerman. 1,869,729; Aug. 2.
Container, Drum. H. R. Bliss and H. G. Allen. 1,869,929; Aug. 2.
Container for safety razors, Adjustable. H. Natkiel. 1,869,860; Aug. 2.
Container, Sheet metal. E. Schmidt. 1,869,511; Aug. 2.
Control apparatus. K. C. Black. 1,869,536; Aug. 2.
Control, Automatic stop mechanism. A. C. Cary, 3d. 1,869,999; Aug. 2.
Control head for oil wells. C. L. Dean and L. D. Hilton. 1,869,739; Aug. 2.
Control of heat in the distillation of oil. A. C. Spencer. 1,869,626; Aug. 2.
Control system, Automatic. O. Thompson. 1,869,399; Aug. 2.
Control system for farm lighting plants. L. C. Frank. 1,869,555; Aug. 2.
Control system for farm lighting plants. L. C. Frank. 1,869,846; Aug. 2.
Controlling the movement of vehicles on railroads, Apparatus for. F. J. Sprague. 1,869,627; Aug. 2.
Conveyer system, Overhead. F. C. Harris. 1,869,421; Aug. 2.
Conveyer tilting section. A. L. Washburne. 1,869,639; Aug. 2.
Cooling jacket for milk and other cans. A. A. Kinard. 1,869,756; Aug. 2.
Copper and copper alloys with compositions containing "lithium-alkali" alloys and products resulting from such treatments, Treating molten. H. Osborg. 1,869,498; Aug. 2.
Copper sulphate, Manufacture of. P. J. F. Souviron. 1,869,521; Aug. 2.
Core, Laminated. V. G. Apple. 1,870,085; Aug. 2.
Cork, Preparing comminuted. S. C. Bond. 1,870,166; Aug. 2.
Corner fastening means. W. E. Williams. 1,870,157; Aug. 2.
Corner, Metal. J. C. Miller. 1,870,132; Aug. 2.
Cotton impaling and cleaning machine for harvesters. J. C. Conrad. 1,870,039; Aug. 2.
Coupling. L. S. Rosener. 1,869,780; Aug. 2.
Cover, Pamphlet and book. B. E. Stephens. 1,870,183; Aug. 2.
Covers, Attachment for can. H. F. W. Palmer. 1,869,712; Aug. 2.
Crankcase ventilating inlet, Thermostatically controlled. L. B. Ellis. 1,869,553; Aug. 2.
Crank case ventilating means for internal combustion engines. R. Murphy and E. S. Marks. 1,869,575; Aug. 2.
Crystallizing. C. L. Sovereign. 1,870,030; Aug. 2.
Crystals, Vibrating. E. Giebe and A. Scheibe. 1,869,556; Aug. 2.
Cultivator shovel. G. F. Dugger. 1,870,105; Aug. 2.
Culvert, Road. W. L. Wheeler. 1,870,156; Aug. 2.
Cupola charging equipment. A. Lenz. 1,869,571; Aug. 2.
Current transformer. A. O. Austin. 1,869,878; Aug. 2.
Curtain bracket. L. G. Strnad. 1,870,148; Aug. 2.
Cushion: *See*—
Exercise and massage cushion.
Cushion for molding machines. W. Lewis. 1,869,818; Aug. 2.
Cushion wheel, Puncture proof. M. A. Robin. 1,870,142; Aug. 2.
Cutter bar. L. A. Paradise. 1,869,981; Aug. 2.
Cutting machine. W. H. Sikma. 1,869,394; Aug. 2.
D-handle for shovels and the like. W. A. Ready. 1,869,777; Aug. 2.

Dental furnace. N. Thompson. 1,869,831; Aug. 2.
Derrick, Automobile truck. W. S. Howard. 1,869,747; Aug. 2.
Designs in surfaces, Forming. T. Jellow and A. Di Bona. 1,869,695; Aug. 2.
Desuperheater. S. M. Jorgensen. 1,869,967; Aug. 2.
Device for lifting and moving transformers. M. R. Coller. 1,870,097; Aug. 2.
Device for measuring and recording vibrations in three directions simultaneously. J. E. Shrader. 1,869,828; Aug. 2.
Differentiating brake. H. C. Dunn. 1,869,470; Aug. 2.
Diggers to a tractor, Mechanism for attaching potato. E. H. Wilson. 1,869,641; Aug. 2.
Dike construction. G. G. Wehr. 1,870,154; Aug. 2.
Dipper tooth. J. Fellmeth. 1,870,044; Aug. 2.
Dish or other similar article of hollow-ware. F. W. Stark. Des. 87,491; Aug. 2.
Disks, Method and apparatus for rolling. C. L. Eksergian and E. G. Budd. 1,869,959; Aug. 2.
Dispensing apparatus. R. J. Jauch and H. L. Mitchell. 1,869,375; Aug. 2.
Dispensing device. H. M. Guedorf. 1,869,685; Aug. 2.
Dispensing machine. H. A. Poppenhusen. 1,869,773; Aug. 2.
Dispensing tube. W. T. Hancock. 1,869,808; Aug. 2.
Dispersions and the production thereof. R. W. Lewis. 1,869,380–1; Aug. 2.
Display device. R. Meader. 1,869,438; Aug. 2.
Distributing head for liquid or semi-liquid material. J. C. MacLachlan. 1,869,384; Aug. 2.
Distributor, Fertilizer. J. A. McKay and P. H. Lynch. 1,869,820; Aug. 2.
Door check. W. B. Fulton. 1,869,415; Aug. 2.
Door handling machine, Coke oven. F. L. Sabin. 1,870,213; Aug. 2.
Doorlock. J. Holland. 1,869,689; Aug. 2.
Doormat. R. B. Brown. Des. 87,457; Aug. 2.
Draft and pressure gauge, Multiple. A. B. Cunningham and A. F. Spitzglass. 1,870,000; Aug. 2.
Draft gauge. C. W. Watkins. 1,869,727; Aug. 2.
Draft regulator. H. W. Heyman. 1,869,964; Aug. 2.
Drafting instrument. C. F. Golden. 1,869,358; Aug. 2.
Drill: *See*—
Rock drill. Well drill.
Drill. H. C. Norley. 1,870,135; Aug. 2.
Drilling and reaming device. F. L. Seitz. 1,869,514; Aug. 2.
Drilling bit, Self guiding. W. P. Cole. 1,869,843; Aug. 2.
Driving mechanism. C. Morrow. 1,869,859; Aug. 2.
Driving mechanism for rotary pumps, Turbine and motor. I. C. Jennings. 1,869,696; Aug. 2.
Duplicating machine. L. J. Sauer. 1,869,507; Aug. 2.
Duplicator. L. J. Sauer. 1,869,509; Aug. 2.
Duplicator feeding and aligning device. L. J. Sauer. 1,869,508; Aug. 2.
Dust gun. E. Knapp and C. G. Allgrunn. 1,869,483; Aug. 2.
Dyestuffs and preparing same, Azo. R. Brightman. 1,869,930; Aug. 2.
Edge for mattresses or cushions. J. F. Gail. 1,870,045; Aug. 2.
Educational appliance. F. M. Stader. 1,869,522; Aug. 2.
Eggs, Apparatus for handling. L. Benoit. 1,869,457; Aug. 2.
Elastic fabric. C. Dreyfus. 1,869,958; Aug. 2.
Elbow and producing, Sheet metal. C. A. Wulf. 1,869,926; Aug. 2.
Electric furnace. J. C. Woodson. 1,870,079; Aug. 2.
Electric heater. W. S. Lewis. 1,869,599; Aug. 2.
Electric heating apparatus. E. Rubini and J. De Lai. 1,869,623; Aug. 2.
Electric rotary furnace. B. M. S. Kalling and C. von Delwig. 1,870,053; Aug. 2.
Electric switch. A. E. Griswold. 1,869,936; Aug. 2.
Electric switch. A. H. Neureuther. 1,869,610; Aug. 2.
Electric switch, Platen-mounted. W. S. Edsall. 1,869,889; Aug. 2.
Electrical apparatus. W. C. Wells and W. E. Wendt. 1,869,640; Aug. 2.
Electrical control of fluid pressure. O. C. Wright. 1,869,791; Aug. 2.
Electrical regulator. A. Boyajian and E. V. De Blieux. 1,870,093; Aug. 2.
Electrical regulator. C. A. Nickle. 1,870,064; Aug. 2.
Electron device. C. A. Horn. 1,869,896; Aug. 2.
Elevator: *See*—
Automobile storage elevator.
Embroidery method and fabrication. J. S. Marzak. 1,869,386; Aug. 2.
Emulsions and materials, Methods and processes for the preparation thereof. R. W. Lewis. 1,869,379; Aug. 2.
Engine: *See*—
Internal-combustion engine.
Engine and operating the same, Internal combustion. W. M. Zaikowsky. 1,869,455; Aug. 2.
Engines, Fuel injection for internal combustion. O. H. Ensign. 1,869,805; Aug. 2.
Engraving machine. H. Matzner and M. Franz. 1,870,129; Aug. 2.
Envelope, Duplex. W. H. Rife. 1,869,946; Aug. 2.
Ester distillation fractions, Decolorizing. E. H. Carnarius and V. D. Charleston. 1,869,954; Aug. 2.
Esterification. E. E. Ayres, jr. 1,869,837; Aug. 2.
Esters, Production of phosphoric. F. Nicolai, C. Schoenburg, and G. v. der Bruck. 1,869,768; Aug. 2.
Evaporator. W. L. Badger. 1,869,651; Aug. 2.
Exercise and massage cushion. A. W. Brand. 1,869,460; Aug. 2.
Exercising machine. C. L. Duff. 1,869,673; Aug. 2.
Fabric: *See*—
Elastic fabric.
Fabric dyeing machine. F. Duffy. 1,869,674; Aug. 2.
Fagoting embroidery and manufacturing same. J. Snarck. Re18,550; Aug. 2.
Fan blade attachment. J. P. Dore. 1,869,802; Aug. 2.
Fastener construction. R. Mitchell. 1,870,061; Aug. 2.
Fasteners, Apparatus for attaching paper. F. J. Kline. 1,869,971; Aug. 2.
Fastening device. A. Buschbaus. 1,870,172; Aug. 2.
Fastening, Metal furniture. R. G. Galton. 1,870,173; Aug. 2.
Feeder for woodworking machines. W. D. Johnson and W. L. Hartnell. 1,869,593; Aug. 2.
Feeding device. L. L. Isselhardt. 1,869,750; Aug. 2.
Feeding device, Animal. J. E. Le Fever. 1,869,901; Aug. 2.
Feeding device for the boilers of locomotives. L. Friedmann and H. Deutsch. 1,869,473; Aug. 2.
Feeding device for woodworking machines and the like. W. L. Hartnell. 1,869,592; Aug. 2.
Fertilizer consisting of ammonium bicarbonate and ammonium sulphate, Production of a mixed. A. Meier, 1,870,131; Aug. 2.
Fertilizer, Preparing phosphatic. D. L. Anderson. 1,869,952; Aug. 2.
Fertilizers, Manufacturing mixed. H. Heimann. 1,869,688; Aug. 2.
Filing device. F. J. Kline. 1,869,972; Aug. 2.
Film controlling mechanism. S. Usun. 1,869,527; Aug. 2.
Film positioning device for aerial cameras. A. Briechle. 1,870,091; Aug. 2.
Film viewing pocket apparatus, Daylight. W. Tideman. 1,869,525; Aug. 2.
Films, Forming composite motion picture. R. J. Mammes. 1,869,819; Aug. 2.
Filter, Air. C. P. Hegan. 1,870,196; Aug. 2.
Filter for liquids and gases. M. Tischer. 1,869,589; Aug. 2.
Firearm. W. S. Bradbury and A. L. Lowe. 1,869,537; Aug. 2.
Firearm. E. G. Reising. 1,869,618; Aug. 2.
Firearm. E. G. Reising. 1,869,911; Aug. 2.
Fire extinguisher and alarm, Combined automatic. E. F. Pohl. 1,869,503; Aug. 2.
Fire extinguisher and sprayer, Portable. M. H. Smith. 1,869,869; Aug. 2.
Fishhook snelling machine. H. W. Meyer. 1,869,857; Aug. 2.
Fissure detector for metals. E. A. Sperry. Re18,555; Aug. 2.
Fitting, Water pipe. L. Block. 1,870,089; Aug. 2.
Flask. B. Nash. Des. 87,478; Aug. 2.
Floor block and fastener therefor. C. M. MacChesney. 1,869,702; Aug. 2.
Floor box. S. N. Buchanan. 1,869,841; Aug. 2.
Flow indicator. L. H. Hill. 1,869,811; Aug. 2.
Flowerpot. L. D. Mennell. 1,869,606; Aug. 2.
Fluid, Embalming. H. I. Jones. 1,870,123; Aug. 2.
Fluids. Device for measuring, regulating, and metering supply or distribution of. V. R. Abrams. 1,870,188; Aug. 2.
Flying machine. S. Rosenberg. 1,869,867; Aug. 2.
Folder, Web. D. W. Hudson. 1,869,694; Aug. 2.
Folding table. A. R. C. Hourd. 1,869,693; Aug. 2.
Food handling mechanism for cooking machines. H. R. Brand. 1,869,540; Aug. 2.
Food preparing machine. H. R. Brand. 1,869,539; Aug. 2.
Food preparing machine. H. R. Brand. 1,869,541; Aug. 2.
Food products, Making chilled. L. Hicks. 1,869,810; Aug. 2.
Foot appliance. R. J. B. Smith. 1,870,029; Aug. 2.
Footwear and making the same. I. W. David. 1,869,410; Aug. 2.
Form. Expansion joint. W. P. Mautz and F. B. Oren. 1,870,130; Aug. 2.
Fuel air-ratio control system. J. M. Hopwood. 1,869,372; Aug. 2.
Fuel burner. W. F. Keenan, jr. 1,870,013; Aug. 2.
Fuel burner, Pulverized. F. H. Rosencrants. 1,870,026; Aug. 2.
Fuel fired furnace. W. A. Darrah. 1,869,670; Aug. 2.
Fuel for metallurgical furnaces, Liquid. F. Puening. 1,869,775; Aug. 2.
Fuel, Making motor. W. N. Davis and W. H. Hampton. 1,869,885; Aug. 2.
Fuel, motor. V. Lantz. 1,869,486; Aug. 2.
Fuel supplying apparatus for aircraft. L. Lefevre and W. E. Leas. 1,869,487; Aug. 2.
Fuels, Method of and apparatus for combustion of. H. A. Hymer. 1,869,897; Aug. 2.
Furnace: *See*—
Center wall furnace. Electric rotary furnace.
Dental furnace. Fuel fired furnace.
Electric furnace. Normalizing furnace.
Furnace pressure regulator. A. Steinbart. 1,869,442; Aug. 2.
Furniture, Metal. R. G. Calton. 1,870,174; Aug. 2.

Game. F. R. Chester. 1,869,842; Aug. 2.
Game. K. Peter. 1,869,388; Aug. 2.
Game apparatus. B. H. Bridgers. 1,870,168; Aug. 2.
Garage, Parking. E. Geiger. 1,869,743; Aug. 2.
Garment or ironing press. A. E. Snow. 1,869,520; Aug. 2.
Gas, Apparatus for absorbing. H. J. Nichols, jr., and P. E. Kuhl. 1,869,611; Aug. 2.
Gas control, Thermostatic. H. W. Price. 1,869,943; Aug. 2.
Gas heater. G. H. McFadden. 1,869,763; Aug. 2.
Gas meter. F. Kromschröder. 1,869,485; Aug. 2.
Gas reactions, Apparatus for carrying out exothermic catalytic. A. Berenbruch. 1 869,736; Aug. 2.
Gases, Cleaning up. H. E. Clarry. 1,869,544; Aug. 2.
Gases, Device for recirculating highly heated gases. L. C. Huff. 1,870,010; Aug. 2.
Gasket, Strip. L. S. Brown. 1,869,932; Aug. 2.
Gasoline meter. H. G. Weymouth and F. M. Kreidler. 1,870,155; Aug. 2.
Gauge: *See*—
Draft and pressure gauge. Draft gauge.
Gauge device. S. Levine. 1,870,058; Aug. 2.
Gear mechanism, Reverse. F. N. Bard. 1,869,363; Aug. 2.
Gear shift for automobile engines, Silent. C. R. Newcomb. 1,870,134; Aug. 2.
Gear, Steering. E. R. Nyland. 1,869,576; Aug. 2.
Gearing, Differential. N. Trbojevich. 1,869,528; Aug. 2.
Gearing for hektograph machines. J. P. Pederson. 1,869,436; Aug. 2.
Gearing, Variable speed. H. J. Thomson. 1,870,076; Aug. 2.
Glass: *See*—
Contact glass.
Glass and making the same, Laminated. W. H. Moss and K. H. Crutchfield. 1,870,018; Aug. 2.
Glass, Apparatus for feeding molten. L. D. Soubier. 1,870,210; Aug. 2.
Glass, Feeding molten. L. D. Soubier. 1,869,921; Aug. 2.
Glass, Method of and apparatus for producing sheet. F. Eckert. 1,870,002; Aug. 2.
Glass structure. H. B. Hawes. 1,869,963; Aug. 2.
Glassware, Apparatus for handling. G. E. Rowe. 1,869,622; Aug. 2.
Glue stocks, Preparing. C. H. Campbell. 1,869,881; Aug. 2.
Gold compound of cystine, Preparing. K. Yoshioka. 1,869,834; Aug. 2.
Golf drive registering device. C. Woolman. 1,869,642; Aug. 2.
Grading machine, Shoulder. C. G. Schmid. 1,869,916; Aug. 2.
Grain growth in aluminum manganese alloys, Controlling. T. W. Bossert. 1,869,996; Aug. 2.
Grille panel. A. V. Lapteff. Des. 87,472; Aug. 2.
Grubber and hoe, Combination weed. W. McMeans. 1,869,573; Aug. 2.
Guard, Propeller. B. C. Modin. 1,869,977; Aug. 2.
Guide for the blind, Writing. A. Sharp. 1,870,145; Aug. 2.
Gun, Machine. L. Davis, jr. 1,869,738; Aug. 2.
Hammer, Lathing. J. W. Hennecke. 1,869,850; Aug. 2.
Hand brake. R. J. Olander. 1,869,580; Aug. 2.
Hand rest. A. Omegna. 1,869,910; Aug. 2.
Handling arrangement for furnaces. F. T. Cope and A. H. Vaughan. 1,869,468; Aug. 2.
Hanger: *See*—
Pipe hanger.
Hanger. A. L. Brown. 1,870,160; Aug. 2.
Harvesting instrumentality. W. E. Urschel. 1,869,529; Aug. 2.
Hatband. A. Donato. 1,869,801; Aug. 2.
Hat, Kit. H. H. Baker. 1,869,652; Aug. 2.
Headrest, Adjustable. T. W. Mitchell. 1,869,765; Aug. 2.
Heat exchanger, Rotary. J. M. LeGrand. 1,869,855; Aug. 2.
Heat treatment, Automatically timed apparatus for. G. Browning. 1,870,170; Aug. 2.
Heating and ventilating system. P. B. Parks. 1,870,020; Aug. 2.
Heating apparatus. R. S. Latimer. 1,869,939; Aug. 2.
Heating element, Electric resistance. E. Stranszky. 1,869,629; Aug. 2.
Heating with water. B. F. Randel. 1,870,024; Aug. 2.
Heel construction. M. W. Nusser. 1,870,065; Aug. 2.
Heater: *See*—
Air heater. Gas heater.
Helicopter. R. K. Williams. 1,869,453; Aug. 2.
Hides, Soaking of. R. Klein and H. Ulrich. 1,870,179; Aug. 2.
Hides, skins and leather, Method of and machine for operating upon. H. Freudenberg. 1,869,472; Aug. 2.
Holder. J. J. Willmott. Des. 87,496; Aug. 2.
Holder, Bottle. H. B. Silver. 1,869,717; Aug. 2.
Holder, Cigar and cigarette. A. C. Mattison. Des. 87,476; Aug. 2.
Holder, Cigarette. M. R. Kelchner. 1,869,851; Aug. 2.
Holder for photographic printing machines, Negative. W. C. Huebner. 1,870,008; Aug. 2.
Holder for rocket wrench sets. H. G. Rice. 1,869,945; Aug. 2.
Holder, Sandwich. M. Morales. 1,869,609; Aug. 2.
Holder, Sanitary carton. W. J. Raney. 1,869,944; Aug. 2.
Holder, Sash. S. Resca. 1,869,866; Aug. 2.
Holder, Shoulder strap. T. Fester. 1,869,933; Aug. 2.
Holder, Supply. H. Armitage. 1,869,731; Aug. 2.
Holder, Toothpick. H. P. C. Beck. 1,870,162; Aug. 2.
Holder with antirattler means, Sash. R. T. Axe. 1,869,650; Aug. 2.
Hosiery, Right and left full-fashioned foot. V. Krick. Re18,548; Aug. 2.
Housing, Pipe union. E. Dietze. 1,870,040; Aug. 2.
Hub wear plate, Wheel. J. Purcell. 1,869,390; Aug. 2.
Humidifier. E. Southworth. 1,869,719; Aug. 2.
Hydraulic brake. E. E. Youngren. 1,869,725; Aug. 2.
Hydrocarbons, Converting heavy. P. S. Danner. 1,869,799; Aug. 2.
Hydrocarbons from gaseous or lower boiling hydrocarbon materials, Production of normally liquid. P. K. Frolich. 1,869,681; Aug. 2.
Hydrocarbons, Process and apparatus for converting. A. Oberle. 1,869,978; Aug. 2.
Hydrogen by the partial liquefaction of gaseous mixtures containing the same, Manufacture of. G. Claude. 1,870,096; Aug. 2.
Hydrogen from gas mixtures containing hydrocarbons, Preparation of. P. Schuftan. 1,870,144; Aug. 2.
Hydrogen, Recovery of pure. G. Ritter. 1,869,825; Aug. 2.
Ice bag. G. E. Roux. 1,870,143; Aug. 2.
Igniter. A. G. Karkau. 1,869,814; Aug. 2.
Illuminating device. E. C. Smally. 1,870,147; Aug. 2.
Implement. G. D. Jones. 1,869,376; Aug. 2.
Index for loose leaf binders. C. A. Schimelfenig. 1,870,206; Aug. 2.
Indicator: *See*—
Flow indicator. Speed indicator.
Instrument to aid in vocal tone culture. P. Quintina. 1,869,391; Aug. 2.
Insulator. C. L. Stroup. 1,869,397; Aug. 2.
Insulator, Section. R. H. McCafferty. 1,870,060; Aug. 2.
Internal combustion engine. A. H. King and E. A. Ryder. 1,869,429–32; Aug. 2.
Internal combustion engine. A. Pierotti. 1,870,139; Aug. 2.
Internal combustion engine. C. E. Schlenker. 1,869,440; Aug. 2.
Internal combustion engine. A. Vang. 1,869,633; Aug. 2.
Iron: *See*—
Smoothing iron.
Ironing machine. H. Hill. 1,869,745; Aug. 2.
Jarring rollover, pattern drawing, molding machine. J. T. Ramsden. 1,869,865; Aug. 2.
Joint: *See*—
Pipe joint.
Journal box. R. J., Brittain, jr. 1,869,931; Aug. 2.
Kiln. H. Miacampbell. 1,869,705; Aug. 2.
Knife, Surgeon's. N. Seaholm. 1,869,586; Aug. 2.
Lace. S. H. Page. Des. 87,479; Aug. 2.
Lamp. J. F. Reader. 1,869,823; Aug. 2.
Lamp, Incandescent. P. O. Cartun. 1,869,998; Aug. 2.
Lamp or like article, Floor. A. Del Purgatorio. Des. 87,483; Aug. 2.
Lawn rake. J. Anderson. 1,869,647; Aug. 2.
Leer stacker. C. Nagle and R. W. Niver. 1,869,767; Aug. 2.
Lens, Multifocal. L. W. Bugbee, jr. 1,869,461; Aug. 2.
Lever arms, Adjusting means for. L. C. Huck. 1,869,562; Aug. 2.
Life boat. N. Strocchi and F. Minardi. 1,869,523; Aug. 2.
Light control mechanism for projectors. R. Horowitz. 1,869,965; Aug. 2.
Lighter, Automatic gas. G. Herbster. 1,870,007; Aug. 2.
Lighting fixture. E. F. Guth. 1,870,194; Aug. 2.
Lightning protection system and method. H. L. Bumbaugh. 1,869,661; Aug. 2.
Lingerie clasp. R. H. Martens. 1,869,601; Aug. 2.
Lining for melting pots, Refractory. G. R. Brophy and G. Scorzoni. 1,870,034; Aug. 2.
Lip stick. W. M. Sternberg. 1,869,782; Aug. 2.
Liquid, Antifreezing. O. P. Greenstreet. 1,869 684; Aug. 2.
Liquid atomizing device. J. M. Hewlett. 1,869,809; Aug. 2.
Liquid dispensing apparatus. H. E. Dobson. 1,870,103; Aug. 2.
Liquid from solid or semisolid matter by pressure, Apparatus for extracting. R. T. Binnie. 1,870,033; Aug. 2.
Liquid material, Process and apparatus for dehydrating. J. C. MacLachlan. 1,869,703; Aug. 2.
Liquid treating apparatus. C. Morrow. 1,869,706; Aug. 2.
Liquids and gases, Apparatus for contacting. H. Kuhni. 1,869,757; Aug. 2.
Liquids from saturated fluids, Apparatus for separating. P. Pascale. 1,869,771; Aug. 2.
Listers, Attachment for. J. J. Stevens. 1,869,923; Aug. 2.
Lithium alloys and producing the same. H. Osborg. 1,869,493; Aug. 2.
Lock: *See*—
Door lock.
Lock. E. N. Jacobi. 1,869,426; Aug. 2.
Lock. C. and I. Kemp. 1,869,596; Aug. 2.
Lock and seal, Freight car. F. W. McFarland. 1,869,387; Aug. 2.
Lock protection. G. Boissonnault. 1,869,404; Aug. 2.
Locking and clamping mechanism for motion picture projector machine parts. A. Dina. 1,869,888; Aug. 2.

Locking device. R. J. Gollong and R. H. Carter. 1,869,558; Aug. 2.
Locking mechanism for trunks, Drawer. E. Suelflow and J. Meidl. 1,870,149–50; Aug. 2.
Locomotive. G. F. Niegemann. 1,870,019; Aug. 2.
Locomotive cab underframe. E. A. Turner. 1,870,199; Aug. 2.
Locomotive draft appliance, Self cleaning. A. Giesl-Gieslingen. 1,869,891; Aug. 2.
Locomotive tender. H. P. Anderson. 1,870,189; Aug. 2.
Looms, Change mechanism for. C. A. Ramsey. 1,869,822; Aug. 2.
Loud speaker. T. Chann. 1,869,665; Aug. 2.
Lubricating apparatus. C. Harris and C. G. Butler. 1,870,195; Aug. 2.
Lubricating system for piston machines. F. Ackerman. 1,869,362; Aug. 2.
Luggage carrier. B. M. Hamlin. 1,869,418; Aug. 2.
Luggage, Hand. G. H. Wheary. 1,869,447; Aug. 2.
Machine for applying sealing strips to cigarette containers. E. H. Jähne. 1,869,374; Aug. 2.
Machine for cracking and sorting nuts. B. Branda. 1,869,658; Aug. 2.
Machine for forming hollow glassware. L. D. Soubier. 1,869,920; Aug. 2.
Machine for perforating statistical cards. A. Thomas and G. Craig. 1,870,184; Aug. 2.
Machine for unloading cement. A. K. Frederick. 1,869,679; Aug. 2.
Masticator. T. H. Williams. 1,869,833; Aug. 2.
Match strips having staggered matches, Apparatus for aligning. E. H. Jähne. 1,869,373; Aug. 2.
Material, Manufacture of elastic-plastic. J. Baer. 1,869,734; Aug. 2.
Materials, Separation of. J. M. Cleaver. 1,869,797; Aug. 2.
Measurement of attenuation and noise. R. B. Schanck. 1,869,515; Aug. 2.
Measurement of pressure differentials. C. A. Underwood. 1,869,400; Aug. 2.
Measuring and feeding device for liquids. M. C. Carbonaro. 1,869,953; Aug. 2.
Metal coating. H. W. Theiss. 1,869,784; Aug. 2.
Metal from coated metal foils, Recovery of. R. B. Derr. 1,869,844; Aug. 2.
Metal from coated metal foils, Recovery of. R. B. Derr. 1,869,886; Aug. 2.
Metal, Manufacturing sheet. L. C. Steele. Re18,551; Aug. 2.
Metal or pewter alloy, Britannia. J. H. Konigsberg. 1,869,378; Aug. 2.
Metal work, Annealing. L. L. Lewis. 1,870,126; Aug. 2.
Metallic strap, Flexible. W. Forstner. Des. 87,462; Aug. 2.
Metals and alloys with compositions containing lithium and products resulting from such treatment, Treating molten. H. Osborg. 1,869,495; Aug. 2.
Metals and alloys with compositions containing "lithium-alkali" alloys and products resulting from such treatments, Treating molten ferrous. H. Osborg. 1,869,497; Aug. 2.
Metals and alloys with compositions containing lithium products resulting from such treatment, Treating molten. H. Osborg. 1,869,980; Aug. 2.
Metals, Treating. H. Osborg. 1,869,496; Aug. 2.
Metals, Treating. H. Osborg. 1,869,979; Aug. 2.
Meter: *See*—
Gas meter. Gasoline meter.
Milling machine and counter-arm braces, Combined single-standard. L. Kellenberger. 1,870,054; Aug. 2.
Mirror, Rear vision. W. Bausch. 1,869,456; Aug. 2.
Mold: *See*—
Vulcanizing mold.
Motor: *See*—
Current motor. Starting motor.
Motor control system. W. H. Landenberger. 1,869,900; Aug. 2.
Motor drive for spinning or twisting machines. R. Hargreaves. 1,869,686; Aug. 2.
Motor piston control apparatus. R. C. Smith. 1,869,587; Aug. 2.
Mount assembly for high wattage lamps. A. C. Massie. 1,869,572; Aug. 2.
Mounting, Caster. R. W. Janda. 1,869,966; Aug. 2.
Mounting for dirigible lights. C. Sklarek. 1,869,984; Aug. 2.
Mounting for incandescent lamps, Filament. D. S. Gustin. 1,869,559; Aug. 2.
Mouth washes and dentifrices, Preparation of new. F. Braunlich. 1,869,406; Aug. 2.
Mowing machines, Guard finger and ledger plate for. J. B. Jenson. 1,869,898; Aug. 2.
Muffler, Sound damped. F. F. Hamilton. 1,869,419; Aug. 2.
Mushroom spawn and making same. J. W. Sinden. 1,869,517; Aug. 2.
Nickel and nickel alloys with compositions containing "lithium-alkali" alloys and products resulting from such treatments, Treating molten. H. Osborg. 1,869,499; Aug. 2.
Normalizing furnace. G. C. Kimball. 1,869,597; Aug. 2.
Oil burner. L. Olson. 1,870,066; Aug. 2.
Oil, Cracking. L. Kirschbraun. 1,870,178; Aug. 2.
Oil, Low cold test lubricating. F. W. Sullivan, jr., and W. J. McGill. 1,870,074; Aug. 2.
Oil, Lubricating. S. H. Diggs. 1,869,800; Aug. 2.
Oil, Lubricating. E. N. Roberts. 1,869,779; Aug. 2.
Oil, Preparing lubricating. C. C. Miller. 1,869,608; Aug. 2.
Oil, Process and apparatus for heating. J. C. Black. 1,869,838; Aug. 2.
Oiling system, Automatic. A. Randolph and E. S. Dawson. 1,869,776; Aug. 2.
Oils and making them, Synthetic drying. A. M. Collins. 1,869,668; Aug. 2.
Oils for roentgenographic work, Iodized. G. W. Raiziss and Le R. Clemence. 1,870,023; Aug. 2.
Oils, Method of and apparatus for distillation of hydrocarbon. J. H. Grahame. 1,870,193; Aug. 2.
Oils, Treating. W. H. Shiffler, M. M. Holm, and M. F. Miller. 1,869,781; Aug. 2.
Ointment composition, Medicated. H. C. Fuller. 1,870,107; Aug. 2.
Ophthalmometers, Attachment for. G. L. Mandaville. 1,869,700; Aug. 2.
Optical square. F. Schnabl. 1,869,512; Aug. 2.
Ore agitator. B. F. Mason. 1,869,488; Aug. 2.
Ore, Apparatus for treatment of. J. F. Tapie. 1,869,830; Aug. 2.
Ore, Separating. A. J. Weinig. 1,869,532; Aug. 2.
Ores, Apparatus for the concentration of. W. J. Asselstine. 1,869,732; Aug. 2.
Orthodontic appliance. S. R. Atkinson. 1,869,733; Aug. 2.
Oven. H. Kuckel. 1,869,899; Aug. 2.
Pail, Glass. F. S. Barbiers. Des. 87,453; Aug. 2.
Pajama. M. C. Schrank. 1,869,918; Aug. 2.
Panel support. J. W. Rodack. 1,869,714; Aug. 2.
Paper article and making same, Flanged reenforced. A. Moore. 1,870,062; Aug. 2.
Paper box, Folding. C. P. Wallace. 1,869,724; Aug. 2.
Paper feed mechanism. E. W. Sibley. 1,870,197; Aug. 2.
Paper for agricultural or horticultural uses, Protective. W. A. Hall. 1,870,110; Aug. 2.
Paper perforating device. F. J. Kline. 1,870,055; Aug. 2.
Parasiticide. M. L. Tower, H. W. Dye, and F. L. McDonough. 1,867,526; Aug. 2.
Partition, Bullet resisting. O. B. McClintock. Des. 87,477; Aug. 2.
Pasteurizer. C. Morrow. 1,869,766; Aug. 2.
Pen. H. E. Waldron. 1,869,950; Aug. 2.
Pentode tube. W. L. Krahl. 1,869,568; Aug. 2.
Petroleum oil, Treating. L. C. Huff. 1,870,049; Aug. 2.
Petroleum oils, Refining of. J. C. Morrell. 1,870,063; Aug. 2.
Phonographic needles, Device for automatically changing. J. Matsusaki. 1,869,907; Aug. 2.
Phosphates, Decomposition of crude. O. Balz and W. Wagner. 1,869,879; Aug. 2.
Pick-up, Electric-magnetic. H. Sachs. 1,870,205; Aug. 2.
Pictures, Animated motion. N. H. Mann. 1,869,904; Aug. 2.
Picture projector and sound reproducing machine, Combined motion. J. E. Cohen, H. Godoy, and R. Miehling. 1,869,882; Aug. 2.
Pigment compositions, Preparing. A. E. Verbyla. 1,870,186; Aug. 2.
Pilaster. W. T. Hormes. 1,870,048; Aug. 2.
Pile fabrics, Making cemented. E. H. Ward and E. G. Jegge. 1,869,531; Aug. 2.
Pile shell, Concrete. E. D. Watt. 1,869,990; Aug. 2.
Pins, Making dental. K. K. Ledig. 1,869,817; Aug. 2.
Pipe and the like, Apparatus for molding cast iron. J. R. McWane. 1,869,908; Aug. 2.
Pipe cleaner. W. Schoenfeld. 1,869,716; Aug. 2.
Pipe hanger. L. R. Zifferer. 1,870,083; Aug. 2.
Pipe joint. J. D. Sample. 1,869,915; Aug. 2.
Piperidine, Production of. W. Schoeller, E. Schwenk, and H. Jordan. 1,870,071; Aug. 2.
Pipes, Apparatus for coupling. C. L. Roberts. 1,869,778; Aug. 2.
Plant labeling device. E. M. Rosenbluth. 1,869,913; Aug. 2.
Planter, Plant. P. Erickson. 1,870,043; Aug. 2.
Plaques and the like, Making. C. Boulard. 1,869,839; Aug. 2.
Plate, Aperture. A. Kindelmann. 1,869,852; Aug. 2.
Plate or similar article. A. G. Hallgren. Des. 87,466; Aug. 2.
Plate or similar article. J. E. Phillips. Des. 87,480–1; Aug. 2.
Plywood and the like, Method and apparatus for the formation of. T. W. Dike. 1,870,041; Aug. 2.
Plywood, Method and apparatus for the formation of. T. W. Dike. 1,869,957; Aug. 2.
Pole fitting. A. O. Austin. 1,869,877; Aug. 2.
Popper, Popcorn. G. F. Stewart. Des. 87,492; Aug. 2.
Post: *See*—
Battery post.
Powder sifter box, Loose. S. L. Pomerantz. Des. 87,482; Aug. 2.
Power converting apparatus, Electric. C. A. Sabbah. 1,870,027; Aug. 2.
Power system. F. A. Byles. 1,870,037; Aug. 2.
Power system. F. A. Byles. 1,870,092; Aug. 2.
Press: *See*—
Brick press. Printing press.
Garment or ironing press.
Pressure responsive instrument. A. J. Doser. 1,869,934; Aug. 2.

Print forming machine. J. P. Aldrich and H. A. Morris. 1,869,644; Aug. 2.
Printing compound and making same. P. Yohns. 1,870,082; Aug. 2.
Printing press. C. Henderson. 1,870,117; Aug. 2.
Printing presses, Center stock guide for. B. Nowell. 1,869,708; Aug. 2.
Products produced by the alkaline fusion of cellulosic materials, Separation and recovery of. L. C. Swallen. 1,869,948; Aug. 2.
Propeller, Forming a. S. Heath. 1,869,478; Aug. 2.
Protective system. E. B. Mallory. 1,870,181; Aug. 2.
Protector, Clay model. A. Gutsch. 1,870,005; Aug. 2.
Protector, Heel and sole. S. Vellner. 1,869,988; Aug. 2.
Protector, Mattress. B. Weinberg. 1,869,450; Aug. 2.
Pump. I. J. Parker. 1,870,137; Aug. 2.
Pump. H. Richter. 1,869,824; Aug. 2.
Pump, Dredging or like. C. E. Daugherty. 1,869,955; Aug. 2.
Pump rig. W. S. Long. 1,870,180; Aug. 2.
Pump, Submerged. C. G. Butler. 1,870,192; Aug. 2.
Pump, Surge. V. Voorhees. 1,869,874; Aug. 2.
Puzzle, Tessellate. A. B. Phillips. 1,869,864; Aug. 2.
Radiator. A. C. Walworth. 1,869,637; Aug. 2.
Radiator cap. H. V. Henderson. Des. 87,468; Aug. 2.
Radiator construction. J. Karmazin. 1,870,012; Aug. 2.
Radiator dust guard. F. DeRienzo and R. Muzzipapa. 1,869,548; Aug. 2.
Radiator, Furnace. O. P. Nystrom and G. Jaarda. 1,869,709; Aug. 2.
Radiocabinet or the like. E. Worthington. Des. 87,497–500; Aug. 2.
Radio receiving system. L. A. Hazeltine. 1,869,894; Aug. 2.
Radio transformer. H. J. Round. 1,869,914; Aug. 2.
Railroad spreader. H. W. Protzeller. 1,869,774; Aug. 2.
Rake: *See*—
Lawn rake.
Rancidity in soaps and product, Preventing. R. E. Divine. 1,869,469; Aug. 2.
Rancidity retardant. G. W. Scharff. 1,869,430; Aug. 2.
Range finder. O. Grunberg. 1,869,417; Aug. 2.
Range finder with an invariable direction of the optical axis of the eye piece. C. Von Hofe and J. Schier. 1,869,530; Aug. 2.
Range, Gas. E. R. Methudy. 1,869,764; Aug. 2.
Range, Reversible electric. G. E. Atkinson. 1,869,649; Aug. 2.
Razor blade, Safety. W. C. Rogers. 1,869,912; Aug. 2.
Razor, Detachable safety straight. M. Priori. 1,869,504; Aug. 2.
Razor, Safety. N. Testi. 1,869,924; Aug. 2.
Reactor. L. R. Allison. 1,869,364; Aug. 2.
Receiver separator. J. B. Fowler. 1,869,371; Aug. 2.
Receptacle closures, Apparatus for assembling. J. A. Johnson, 1,869,480; Aug. 2.
Recorder. H. Y. Norwood. 1,869,909; Aug. 2.
Recording device especially in electrical apparatus, Intermittently. R. Pudelko. 1,869,583; Aug. 2.
Rectifier, Double plate. C. A. Horn. 1,869,561; Aug. 2.
Rectifier, Full wave. W. L. Krahl. 1,869,567; Aug. 2.
Rectifier, Multiple filament. C. A. Horn. 1,869,560; Aug. 2.
Reducing device for slivers for drawing mechanisms for textile slivers. F. Casablancas. 1,870,095; Aug. 2.
Reel, Fishing. W. Shakespeare, jr. 1,869,441; Aug. 2.
Reel seat for fishing rods. J. T. Welch. 1,870,078; Aug. 2.
Reflector for lighting fixtures. E. F. Guth. Des. 87,464; Aug. 2.
Refrigerant generator and circulator. R. V. Grayson. 1,869,683; Aug. 2.
Refrigerating apparatus. L. I. Beckwith. 1,870,088; Aug. 2.
Refrigerating apparatus. W. C. Holbrook. 1,869,812; Aug. 2.
Refrigerating apparatus. D. H. Reeves. 1,869,617; Aug. 2.
Refrigerating apparatus, Absorption type. D. B. Knight. 1,869,853; Aug. 2.
Refrigeration apparatus. W. H. F. Schmieding. 1,869,917; Aug. 2.
Refrigeration unit. R. L. Alexander and J. R. McCallum. 1,869,835; Aug. 2.
Register: *See*—
Autographic register. Cash register.
Regulator: *See*—
Draft regulator. Furnace pressure regulator.
Electrical regulator.
Relay, Frequency-responsive crystal. A. M. Skellett and V. K. Zworykin. 1,869,829; Aug. 2.
Relay, Photoelectric. F. Michelssen. 1,870,017; Aug. 2.
Relay, Thermal. C. H. Hodgkins. 1,870,176; Aug. 2.
Resonant mechanism. W. Koenig. 1,869,565; Aug. 2.
Rheostat. H. L. Bradley. 1,869,538; Aug. 2.
Road machine. W. A. Welkel. 1,869,446; Aug. 2.
Rock drill, Power operated. E. J. Warren. 1,869,875; Aug. 2.
Rod bundle transfer mechanism. B. N. Bletso and W. V. Magee. 1,869,354; Aug. 2.
Roost. G. S. Kolstad. 1,870,125; Aug. 2.
Rotor, Brake rubbing. D. L. Cramp. 1,869,546; Aug. 2.
Rotor for turbogenerator. L. Kropff. 1,870,056; Aug. 2.
Rubber composition and preserving rubber. H. E. Bowers. 1,869,657; Aug. 2.
Rubber substitute. K. A. Gillespie. 1,869,557; Aug. 2.
Rubber to metal and product, Cementing. R. M. Warner. 1,869,636; Aug. 2.
Rubber vulcanization process. W. Scott. 1,869,624; Aug. 2.
Sadiron. G. E. Curtiss. 1,870,200; Aug. 2.
Safe, Loaded. C. F. Meilink. 1,869,704; Aug. 2.
Safety device for circuitous elevators. G. Currie. 1,869,883; Aug. 2.
Safety device for presses. E. F. Hazenfield. 1,869,895; Aug. 2.
Sail, Aircraft landing. H. Hein. 1,870,116; Aug. 2.
Sail for aircraft, Landing. H. Hein. 1,870,115; Aug. 2.
Sample case, Portable. W. Ochse. 1,869,710; Aug. 2.
Sanitary appliance. V. A. Castle. 1,869,664; Aug. 2.
Scale, Weighing. L. W. Fuller. 1,869,357; Aug. 2.
Scale, Weighing. S. N. Hurt. 1,869,425; Aug. 2.
Scale, Weighing. O. C. Reeves and C. O. Marshall. 1,869,438; Aug. 2.
Scale, Weighing. A. van Duyn. 1,869,723; Aug. 2.
Scissors. F. H. Raub. 1,870,025; Aug. 2.
Screen: *See*—
Water well screen.
Screen and support therefor, Window. M. J. Tracy. 1,869,786; Aug. 2.
Scrubber. P. Lungstras. 1,869,758; Aug. 2.
Seal, Composite disc. W. F. Oberhuber. 1,869,577; Aug. 2.
Seal for rotating shafts. G. J. Cooke. 1,869,933; Aug. 2.
Separating machine. W. A. Hawkins and G. W. Lathem. 1,870,113; Aug. 2.
Separating plant for solutions in volatile solvents. K. J. R. Robertson. 1,869,826; Aug. 2.
Separator: *See*—
Receiver separator.
Separator. J. W. Van Denburg. 1,869,987; Aug. 2.
Servo-brake. A. Dewandre. 1,869,956; Aug. 2.
Sewing machine. A. A. Merritt. 1,869,489; Aug. 2.
Shaftcoupling, Flexible. W. C. Thoman. 1,870,153; Aug. 2.
Sharpener, Blade. J. H. Allman. Des. 87,452; Aug. 2.
Sheet forming apparatus. H. A. Emery. 1,869,677; Aug. 2.
Sheet transfer mechanism. F. R. Belluche. 1,869,403; Aug. 2.
Shield, Cable terminal. H. J. Peterson. 1,869,863; Aug. 2.
Shock absorbing mechanism. J. F. O'Connor. 1,869,578–9; Aug. 2.
Shoe. C. H. Caldwell. Des. 87,458–9; Aug. 2.
Shoe ventilating device. E. H. Heller. 1,870,114; Aug. 2.
Shovel: *See*—
Cultivator shovel.
Shuttle race for sewing machines. E. B. Allen. 1,869,402; Aug. 2.
Sign, Illuminated. L. Levitt. 1,869,699; Aug. 2.
Sign, Street. H. C. Gatchell. 1,869,474; Aug. 2.
Sign, Traveling advertising. M. J. Cohan. 1,869,465; Aug. 2.
Signal or clip. C. S. Carter and J. H. Duncan. 1,869,997; Aug. 2.
Signaling device. J. E. Huling. 1,869,748; Aug. 2.
Signaling device, Luminous. G. Soucek. 1,869,922; Aug. 2.
Skate. J. I. Padgett. 1,869,612; Aug. 2.
Sled. T. J. Jorgensen and O. K. Jorgensen. 1,869,960; Aug. 2.
Slip-joint fill box. J. B. Holtson. 1,870,118; Aug. 2.
Slotclosure. J. C. Woodson. 1,870,080; Aug. 2.
Slub-catcher and yarn-cleaner. G. N. Taylor. 1,870,152; Aug. 2.
Smoke precipitating apparatus. S. Paterniti. 1,869,772; Aug. 2.
Smoothing iron, Self moistening. C. S. Easley. 1,869,675; Aug. 2.
Snap fastener member and making the same. G. Johnson. 1,870,051; Aug. 2.
Snap switch. J. F. Seuffert. 1,870,072; Aug. 2.
Snell hook manufacture, Apparatus for. H. W. Meyer. 1,869,858; Aug. 2.
Socket, Candle. B. D. Wells. 1,869,451; Aug. 2.
Sodium carbonate from brine, Recovery of. L. Rosenstein and K. G. Bell. 1,869,621; Aug. 2.
Soldering apparatus, Electrical. W. R. Woodring. 1,869,448; Aug. 2.
Solutions in the purification of hydrocarbon gas, Regenerating. H. J. Nichols, jr., and C. R. Wise. 1,869,435; Aug. 2.
Sound absorbing material and making the same. W. T. Dean. 1,869,367; Aug. 2.
Sound board. L. J. Buckley. 1,870,171; Aug. 2.
Sound location device. H. Raaber, K. Petschnig, I. Pechan, and E. Eichwalder. 1,869,505; Aug. 2.
Sound muffling device for typewriters and other machines. J. T. Humes. 1,870,120; Aug. 2.
Sound reproducing apparatus. L. V. Foster. 1,869,414; Aug. 2.
Sound reproducing apparatus. W. R. Oyston. 1,869,770; Aug. 2.
Spader, Power driven. H. H. Glasier. 1,869,961; Aug. 2.
Speed indicating means. I. W. Masters. 1,869,974; Aug. 2.
Speed indicator. R. F. Golden. 1,869,962; Aug. 2.

Speed reducer, Variable. W. Burkart and R. M. Parsons. 1,869,662; Aug. 2.
Speed testing device for watthour meters, Constant. F. Strattner and W. C. Wagner. 1,869,588; Aug. 2.
Spindle drive for spinning or twisting machines. L. H. Horner. 1,869,692; Aug. 2.
Spindle, Spinning or twisting. B. R. Sweet. 1,869,632; Aug. 2.
Spool. G. W. Bungay. 1,869,408; Aug. 2.
Spoon or similar article. F. S. Trumbull. Des. 87,493; Aug. 2.
Spraying apparatus. K. A. Milar and D. L. Clinch. 1,869,975; Aug. 2.
Spraying device. P. L. Wilbur. 1,869,992; Aug. 2.
Spring: *See*—
Air spring.
Spring supporting and adjusting structure, Contact. H. E. Ashworth. 1,869,648; Aug. 2.
Springs, Apparatus for and method of manufacturing. C. H. Peterson. 1,869,501; Aug. 2.
Stabilizing apparatus. J. M. Boykow. 1,869,840; Aug. 2.
Stacker. A. L. Washburne. 1,870,207; Aug. 2.
Stamp, Rubber printing. L. P. Selden. 1,869,868; Aug. 2.
Starter for internal combustion motors. F. A. Vastano. Re18,554; Aug. 2.
Starting motor. J. H. Sutter. 1,870,075; Aug. 2.
Steam generating plant. V. W. Mason. 1,869,602; Aug. 2.
Steam injector, Exhaust. M. Hard. 1,870,006; Aug. 2.
Steam plant with multistage power engine, High pressure. W. Abendroth. 1,869,361; Aug. 2.
Steering mechanism for automobiles. S. Komfala. 1,869,698; Aug. 2.
Steering wheel. H. T. Kraft. 1,869,816; Aug. 2.
Stitch indenting machine. W. Hamann. 1,869,476; Aug. 2.
Stoker. W. H. R. Marsden and L. E. Osborne. 1,870,015; Aug. 2.
Stoker. M. L. Wenrich. 1,870,031; Aug. 2.
Stoker mechanism. E. A. Turner. 1,870,198; Aug. 2.
Stool, Swivel. B. T. Andren. 1,869,535; Aug. 2.
Stop, Car. C. T. Miller. 1,869,976; Aug. 2.
Stove. J. C. Olsen, jr., and H. L. Bottle. 1,869,711; Aug. 2.
Stove, Coal. W. F. Rogers. 1,869,392; Aug. 2.
Stove or similar article, Cooking. A. L. Blakeslee. Des. 87,456; Aug. 2.
Stove, Vapor. A. T. Schmidt. 1,869,827; Aug. 2.
Stretching and fastening device for ropes. O. Burheim. 1,869,462; Aug. 2.
Striker for door locks. A. S. Katz. 1,869,815; Aug. 2.
Strip feeding machine. R. Lange. 1,869,854; Aug. 2.
Strip for building materials, Erecting. J. C. Johnson. 1,870,011; Aug. 2.
Stripping mechanism for hosiery driers. H. F. Wanamaker. 1,870,187; Aug. 2.
Suction box dresser. F. M. Williams. 1,869,789; Aug. 2.
Supercharger. J. T. Trumble. 1,869,787; Aug. 2.
Superheater header. R. Stein and H. Frank. 7,869,986; Aug. 2.
Support for sliding members in knitting machines. G. H. Green. 1,869,416; Aug. 2.
Support, Vehicle. M. W. Hard. 1,869,420; Aug. 2.
Supporting means for sliding door track rails. J. A. Dries. 1,869,368; Aug. 2.
Supporting structure. L. I. Beckwith. 1,870,087; Aug. 2.
Surfaces in stone, Process and apparatus for producing convex and concave. M. E. Jones. 1,869,427; Aug. 2.
Surgical apparatus. E. E. Youngren. 1,869,726; Aug. 2.
Switch: *See*—
Electric switch. Time switch.
Snap switch. Transmission switch.
Switch and racking device therefor, Electric. F. H. MacNeil. 1,869,856; Aug. 2.
Switch box. E. G. K. Anderson. 1,869,646; Aug. 2.
Switch control, Track. G. C. Smith. 1,869,986; Aug. 2.
Switch gear, Electrical. C. H. Hill. 1,870,047; Aug. 2.
Switch of the mercury tube type, Electric. I. E. McCabe. 1,869,603; Aug. 2.
Swivel fixture. E. G. K. Anderson. 1,869,645; Aug. 2.
Tab, Reenforcing. R. A. Maish. 1,869,385; Aug. 2.
Table: *See*—
Extension table. Folding table.
Tablet for arm chairs. F. W. Tobey. 1,869,444; Aug. 2.
Tank: *See*—
Water tank.
Tank for threshers, Grain storage. L. A. Paradise and E. F. Huddle. 1,869,581; Aug. 2.
Tank installation, Underground storage. E. S. Cornell. 1,869,669; Aug. 2.
Tape, Grafting and budding. A. B. Merrill. 1,869,607; Aug. 2.
Telegraph system, Printing. J. N. Baker. 1,869,994; Aug. 2.
Telegraphic messages, Maintaining secrecy in the transmission of wireless. W. Broertjes. 1,869,659; Aug. 2.
Television and like apparatus. J. L. Baird. 1,869,735; Aug. 2.
Television system, Motion picture. C. W. Hough. 1,869,424; Aug. 2.
Tempering machine. O. P. Anderson. 1,870,159; Aug. 2.
Template for the production of articles composed of crude rubber sheets, Pressing and cutting. I. and L. Dorigi. 1,869,550; Aug. 2.
Testing device. A. M. Curtis. 1,869,884; Aug. 2.
Testing device. E. G. Thomas. 1,869,398; Aug. 2.
Textile fabric. M. C. Jealous. Des. 87,4659; Aug 2.
Therapeutic agents, Administration of. A. L. Stocklin. 1,869,443; Aug. 2.
Thermocouple pocket. L. B. West. 1,869,788; Aug. 2.
Thermostatic mixing means. M. E. Cartier. 1,869,663; Aug. 2.
Throttle. N. T. McKee. 1,870,016; Aug. 2.
Tile, Paving. E. H. Binns. 1,869,880; Aug. 2.
Time switch. J. J. Jakosky and A. W. Knight. 1,869,752; Aug. 2.
Time switch. F. Thornton, jr. 1,870,185; Aug. 2.
Time switch, Electrical. J. A. Smith. 1,870,028; Aug. 2.
Timing mechanism, Limit. R. D. Smith. 1,869,519; Aug. 2.
Tire. A. Hargraves. Des. 87,467; Aug. 2.
Tire and making the same. F. C. Rogers and V. B. Gay. 1,869,620; Aug. 2.
Tire building apparatus. J. J. Black. 1,869,656; Aug. 2.
Toaster, Automatically timed electric. G. Browning. 1,879,935; Aug. 2.
Tobacco spreader. F. H. B. Stelzer. 1,869,395; Aug. 2.
Tongs or pliers. O. Myers. 1,870,133; Aug. 2.
Tool, Bending. A. G. Marsh and A. Billek. 1,869,905; Aug. 2.
Tool, Cylinder finishing. O. A. Johnson and R. E. Lingren. 1,869,377; Aug. 2.
Tool, Fluid operated. A. H. Katterjohn. 1,869,595; Aug. 2.
Tool for giving a permanent wave to hair. A. M. Gay. 1,869,682; Aug. 2.
Tool for removing wheels from automobile axles. O. E. Hart. 1,869,687; Aug. 2.
Tool, Molding forming. A. R. Ketcham. 1,869,755; Aug. 2.
Tool, Polishing. D. R. Johnston. 1,869,564; Aug. 2.
Tool, Rotary drilling. C. B. Kennedye. 1,869,969; Aug. 2.
Tool, Sucker rod fishing. W. A. O'Bannon. 1,869,861; Aug. 2.
Toothbrush. W. C. White and W. D. McCray. 1,869,991; Aug. 2.
Top for stoves, Hinged. W. F. Rogers. 1,869,393; Aug. 2.
Torch apparatus, Multiple cutting. R. F. Helmkamp. 1,869,848; Aug. 2.
Torch machine, Cutting. J. L. Anderson. 1,869,836; Aug. 2.
Torque-measuring instrument. F. Seewald and H. Ebert. 1,869,513; Aug. 2.
Tourniquet. H. S. Jones. 1,870,052; Aug. 2.
Toy football game. O. L. Parker. 1,870,138; Aug. 2.
Toy outboard motor driving and steering mechanism. U. R. Sewrey and F. E. Moffett. 1,869,625; Aug. 2.
Toy, Pendulum. G. E. Worthington. 1,869,951; Aug. 2.
Tractor. J. L. Hoke. 1,869,746; Aug. 2.
Traffic controlling apparatus, Railway. L. O. Grondahl. 1,869,847; Aug. 2.
Traffic indicator and advertising device, Combined. J. P. Barron. 1,870,161; Aug. 2.
Transmission mechanism. L. K. Cheswright. 1,869,543; Aug. 2.
Transmission system switch. T. Panzerbieter and W. Nagel. Re18,553; Aug. 2.
Trap. A. F. Kasper. 1,879,124; Aug. 2.
Tray and cigar lighter, Combination ash. A. H. Masters. Des. 87,474; Aug. 2.
Tray, Ash. E. J. Zwemer. Des. 87,471; Aug. 2.
Tray, Service. A. S. Goforth. 1,870,109; Aug. 2.
Treads from tires, Method and apparatus for removing. W. B. Freeman. 1,869,680; Aug. 2.
Trimmer and the like, Edge. F. W. Merrick. 1,869,434; Aug. 2.
Trimming device. F. E. Edgren. 1,869,369; Aug. 2.
Trolley, Drip frame. F. C. Harris. 1,869,422; Aug. 2.
Truck, Industrial. E. H. Remde. 1,870,067; Aug. 2.
Tube: *See*—
Collapsible tube. Pentode tube.
Dispensing tube. Vacuum tube.
Tube for internal combustion engines, Exhaust. F. T. Irgens. 1,869,749; Aug. 2.
Tubes, Apparatus for cleaning. J. S. Antle. 1,869,730; Aug. 2.
Tubes from ingots, Mechanism for sawing. T. J. Glynn. 1,870,108; Aug. 2.
Tubes, Method and machine for splicing rubber. O. F. Homier and H. L. Young. 1,869,690; Aug. 2.
Tumbler, Glass. W. O. Barry. Des. 87,454; Aug. 2.
Tuning device for wind musical instruments. A. L. Smith. 1,870,211; Aug. 2.
Turbulent burner. A. W. Bennis. 1,870,164; Aug. 2.
Typewriting and computing machine, Combined. H. L. Pitman. 1,869,582; Aug. 2.
Typewriting machine. E. E. Barney. 1,870,086; Aug. 2.
Typewriting machine. W. A. Dobson. 1,870,001; Aug. 2.
Typographical composing and casting machine. L. E. Morrison. 1,869,940; Aug. 2.
Typographical composing and line casting machine. K. Bienert. 1,869,353; Aug. 2.
Typographical composing machine. A. W. F. Guest. 1,869,360; Aug. 2.
Uniform, Suspenderless. J. E. Johannesen. Des. 87,470; Aug. 2.
Uppers, Method of and apparatus for preparing closed. F. D. Kinney. 1,869,482; Aug. 2.
Vacuum tube. W. Krahl. 1,869,566; Aug. 2.

Valve. V. L. Du Bois. 1,869,741; Aug. 2.
Valve apparatus. W. J. Bolton. 1,870,090; Aug. 2.
Valve, Automatic coupling. J. De Mooy. 1,869,411; Aug. 2.
Valve for runways, Gate. D. L. Cramp. 1,869,547; Aug. 2.
Valve for steam distributing gears, Poppet. A. Caprotti. 1,869,463; Aug. 2.
Valve, Internal combustion engine. W. H. Seabrook. 1,869,919; Aug. 2.
Valve, Lubricating. S. S. Roberts. 1,870,068; Aug. 2.
Valve mechanism for internal combustion engines. J. W. Mackenzie. 1,869,383; Aug. 2.
Valve, Throttling. A. L. Tobin. 1,869,832; Aug. 2.
Valve wrench. R. M. Jones. 1,869,813; Aug. 2.
Vanity case. A. E. Reilly. 1,869,083; Aug. 2.
Vegetable refuse for obtaining useful products therefrom, Treating. J. Jackson. 1,870,121; Aug. 2.
Vehicle. M. J. Adams. 1,869,993; Aug. 2.
Vehicle brake, Electro magnetic automotive. V. J. Apple. 1,869,870; Aug. 2.
Vending machine. J. S. Curzon. 1,870,100; Aug. 2.
Vibrations, Apparatus for detecting and measuring. P. F. E. Piette. 1,870,140; Aug. 2.
Viscosity indicating device. E. E. Smith. 1,869,718; Aug. 2.
Vise, Workholding. A. W. Swanson. 1,869,631; Aug. 2.
Vitamins, Extraction and concentration of. B. Sure. 1,869,721; Aug. 2.
Voltage limiter. I. E. Cole. 1,869,466; Aug. 2.
Voltage limiter, Peak. W. A. Knoop. 1,869,484; Aug. 2.
Vulcanization accelerator. L. Orthner. 1,869,862; Aug. 2.
Vulcanizing apparatus. C. W. Leguillon. 1,869,598; Aug. 2.
Vulcanizing mold. B. De Mattia. 1,869,671; Aug. 2.
Wall and ceiling structure. W. J. Davey. 1,870,101; Aug. 2.
Washboard. Y. Hanaoka. 1,870,111; Aug. 2.
Washing machine. L. O. Saunders. 1,869,510; Aug. 2.
Waste heat boiler. A. Huet. 1,870,009; Aug. 2.
Water level indicating device, Boiler. H. J. Kerr. 1,869,428; Aug. 2.
Water purification. O. Adler and R. Adler. 1,869,643; Aug. 2.
Water tank, Siphon. E. H. Lichtenberg. 1,869,903; Aug. 2.
Water well screen. E. L. Kelley. 1,869,754; Aug. 2.
Web roll supporting and controlling mechanism. H. Lang. 1,869,569; Aug. 2.
Web roll supporting mechanism. C. S. Crafts. 1,869,545; Aug. 2.
Web roll supporting mechanism. H. Lang. 1,869,570; Aug. 2.
Web tensioning apparatus. T. E. Pythian. 1,869,614; Aug. 2.
Weighing apparatus. J. F. De Iongh. 1,869,740; Aug. 2.
Weighing machine. D. Finley. 1,869,370; Aug. 2.
Well drill. D. C. Grove and J. C. Burns. 1,869,982; Aug. 2.
Wheel; *See*—
Artillery steel wheel. Steering wheel.
Cushion wheel.
Wheel. G. Walther. 1,869,634–5; Aug. 2.
Wheel aligner for vehicles. F. H. Evans. 1,870,106; Aug. 2.
Wheel and axle assembly. A. H. Oelkers. 1,870,136; Aug. 2.
Wheels to rims, Apparatus for welding. C. L. Eksergian. 1,869,804; Aug. 2.
Winding device. J. C. Wynder. 1,870,158; Aug. 2.
Window and hinge therefor, Casement. T. T. Chamberlain. 1,869,542; Aug. 2.
Window construction, Weatherproof. S. Madsen. 1,869,760; Aug. 2.
Wiper, Windshield. H. J. Earl. 1,869,551; Aug. 2.
Wood, Splitting. M. M. Bernfeld. 1,870,190; Aug. 2.
Wool, Treating slag. J. C. Carlin. 1,870,094; Aug. 2.
Work gripper, Automatic. W. H. Bean. 1,869,654; Aug. 2.
Work holder. J. Edgar. 1,869,413; Aug. 2.
Wrench; *See*—
Valve wrench.

CLASSIFICATION OF PATENTS

ISSUED AUGUST 2, 1932

NOTE.—First number=class, second number=subclass, third number=patent number

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360: 1,870,045
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221— 47.4: 1,869,722
60: 1,869,594
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74: 1,870,195
93: 1,869,712
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102: 1,870,188
222— 3: 1,869,705
223— 20.3: 1,870,187
64: 1,870,169
226— 14: 1,869,457
129: 1,869,717
229— 5.7: 1,869,929
17: 1,869,751
22: 1,869,609
33: 1,869,724
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72: 1,869,946
230— 96: 1,869,891
117: 1,870,010
119: 1,869,802
233— 21: 1,870,113
234— 1: 1,869,951
5.5: 1,869,583
11: 1,869,909
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235— 3: 1,869,873
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94: 1,870,155
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78: 1,870,194
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410: 1,869,985
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6: 1,869,475
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19: 1,869,841
248— 2: 1,870,088
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31: 1,870,083
33: 1,869,407
47: 1,869,888
250— 20: 1,869,894
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27.5: 1,869,544
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254— 88: 1,869,420
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270— 73: 1,869,694
271— 1: 1,869,750
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61: 1,869,705
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273— 35: 1,869,642
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102: 1,869,388
132: 1,870,168
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153: 1,870,122
281— 15: 1,870,183
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91: 1,869,645
161: 1,869,558
166: 1,869,915
286— 7: 1,869,933
287—52.02: 1,869,562
89: 1,869,984
288— 1: 1,869,577
290— 30: 1,869,555
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296— 107: 1,869,423
298— 2: 1,869,355
299— 63: 1,869,384
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13: 1,869,635
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303— 20: 1,869,409
306— 42: 1,869,850
308— 21: 1,869,405
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95: 1,869,993
165: 1,869,390
180: 1,869,931
212: 1,869,890
241: 1,869,412
312— 42: 1,869,944
51: 1,870,100
78: 1,870,162
107: 1,870,005
112: 1,869,807
145: 1,870,048

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. & J. Manufacturing Co., The, Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill. Kitchen tools and utensils. Serial Nos. 317,292–3; Aug. 9. Class 23.

Abell, Arthur, doing business as Old Meadow Creamery, Cleveland, Ohio. Milk, cream, butter, etc. Serial No. 327,928; Aug. 9. Class 46.

Akron Rubber Supply Company. (See Wyant, Willis W.)

Alpha Milk Laboratories. (See Voorhies, Grantland B.)

American Bemberg Corporation, New York, N. Y. Textile fabrics. Serial No. 327,572; Aug. 9. Class 42.

American Biochemical Corporation, Cleveland, Ohio. Combination of mineral salts. Serial No. 326,997; Aug. 9. Class 6.

American Hebrew Publishing Company, New York, N. Y. Periodical. Serial No. 326,802; Aug. 9. Class 38.

American Oil Company, The, Baltimore, Md. Petroleum solvent and cleaning naphtha. Serial No. 327,965; Aug. 9. Class 4.

American Pop Corn Company, Sioux City, Iowa. Pop corn. Serial No. 328,151; Aug. 9. Class 46.

American Sales Book Company, Limited, Toronto, Ontario, Canada, and Niagara Falls and Elmira, N. Y. Paper and stationery. Serial No. 328,258; Aug. 9. Class 37.

Amtorg Trading Corporation, New York, N. Y. Insecticide, vermicide and animal dip. Serial No. 327,816; Aug. 9. Class 6.

Anderson, Etnel G., Chicago, Ill. Perfumes, facial creams, rouges, etc. Serial No. 327,124; Aug. 9. Class 6.

Atlas Supply Company, Newark, N. J. Storage batteries, storage battery chargers, electric fuses, etc. Serial No. 327,494; Aug. 9. Class 21.

Atlas Supply Company, Wilmington, Del., and Newark, N. J. Storage batteries. Serial Nos. 328,152–3; Aug. 9 Class 21.

Barker Bros. Incorporated, Los Angeles, Calif. Furniture. Serial No. 325,455; Aug. 9. Class 32.

Barker Bros. Incorporated, Los Angeles, Calif. Refrigerators. Serial No. 326,924; Aug. 9. Class 31.

Becton, Dickinson & Co., Rutherford, N. J. Syringes, hypodermic needles, and clinical thermometers. Serial No. 327,301; Aug. 9. Class 44.

Benedikt, H. S., Company, Inc., New York, N. Y. Dry cleaning fluid for clothes, upholstery, etc. Serial No. 328,518; Aug. 9. Class 4.

Bianchini, Férier, Lyon, France. Piece goods. Serial No. 327,969; Aug. 9. Class 42.

Birk Bros. Malt Products, Inc., Chicago, Ill. Malt syrup. Serial No. 327,933; Aug. 9. Class 46.

Block, H. & L., Ltd., San Francisco, Calif. Coats and leather coats, leather vests, neckties, gloves, etc. Serial Nos. 327,212–13; Aug. 9. Class 39.

Bloomingdale Bros., Inc., New York, N. Y. Spirits of champhor, spirits of nitre, tincture of iodine, etc. Serial No. 327,336; Aug. 9. Class 6.

Boga, Frank E., doing business as Du-Best Family Remedy Co., Brooklyn, N. Y. Salve and ointment. Serial No. 327,384; Aug. 9. Class 6.

Boston Gear Works, Inc., North Quincy, Mass. Spur gears, worm gears, miter gears, etc. Serial No. 327,723; Aug. 9. Class 23.

Brantferger, Ernest F., Denver, Colo. Dispensing booths. Serial No. 327,787; Aug. 9. Class 12.

Bria-Shaps Company, The, Whitinsville, Mass. Leggings and overall protectors for nether garments. Serial No. 327,863; Aug. 9. Class 39.

Brigman, R. H., Company, Olin, N. C. Pneumonia salve. Serial No. 324,128; Aug. 9. Class 6.

Brunswick-Balke-Collender Company, The, doing business as Phoenix Slate Company, Wilmington, Del., and Chicago, Ill. Quarried slate. Serial No. 327,041; Aug. 9. Class 1.

Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Cue balls for pocket-billiards. Serial No. 327,900; Aug. 9. Class 22.

Bu-Cu-Mint Company, Binghamton, N. Y. Medicine. Serial No. 327,577; Aug. 9. Class 6.

Calmec Mfg. Co. Ltd., Los Angeles, Calif. Oil field equipment. Serial No. 327,578; Aug. 9. Class 23.

Campbell-Harris Battery Corporation, Kansas City, Mo. Storage batteries. Serial No. 319,978; Aug. 9. Class 21.

Carlson, Carl A., Peoria, Ill. Tart-like pastry confection. Serial No. 326,769; Aug. 9. Class 46.

Carthage Mills Incorporated, Cincinnati, Ohio. Floor coverings. Serial Nos. 326,778–80; Aug. 9. Class 20.

Cassidy Company, Incorporated, Long Island City, N. Y. Electric lighting fixtures. Serial No. 325,208; Aug. 9. Class 21.

Chum Razor Blade Corporation, Detroit, Mich. Razor bladea. Serial No. 318,047; Aug. 9. Class 28.

Clay Cough Drop Co. (See Haeseler, Loren M.)

Clayton Magazines, Inc., The, New York, N. Y. Periodical. Serial No. 317,161; Aug. 9. Class 38.

Colonial Radio Corporation, Buffalo, N. Y. Radio receiving sets and parts. Serial No. 321,378; Aug. 9. Class 21.

Corticine Floor Covering Company Limited, London, England. Linoleum and oil cloth. Serial No. 327,343; Aug. 9. Class 20.

Crane, Z. & W. M., Inc., Dalton, Mass. Writing paper and envelopes. Serial No. 328,414; Aug. 9. Class 37.

D C A Drug Stores Inc., Portland, Oreg. Face cream and powder. Serial No. 327,625; Aug. 9. Class 6.

D C A Drug Stores Inc., doing business as D. C. A. Laboratories, Portland, Oreg. Tonic. Serial No. 327,627; Aug. 9. Class 6.

Dahliadel Nurseries. (See Maytrott, Warren W.)

Dan-Gon Manufacturers, The. (See Kloeppinger, Peter F.)

Del Turco, L., & Bros., Inc., Harrison, N. J. Steps, flooring sections, etc. Serial No. 327,091; Aug. 9. Class 12.

Deutsche, Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Laundry driers. Serial No. 318,219; Aug. 9. Class 24.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Glass in all forms, table and flat glassware, plate glass, etc. Serial No. 318,226; Aug. 9. Class 33.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Paints and pigments. Serial No. 318,232; Aug. 9. Class 16.

Diana Manufacturing Company, Green Bay, Wis. Sanitary pads. Serial No. 328,265; Aug. 9. Class 44.

Diehl, Charles P. (See Stevens, Carl, assignor.)

Du-Best Family Remedy Co. (See Boga, Frank E.)

Du Pont, E. I., de Nemours and Company, Wilmington, Del. Repellent of moths, peach tree borers, and other insects. Serial No. 326,936; Aug. 9. Class 6.

Duty Lumber Co., The, Wheeling, W. Va. Lumber and wood shingles. Serial No. 328,269; Aug. 9. Class 12.

Enterprise Manufacturing Company, The, Akron, Ohio. Artificial bait. Serial No. 328,596; Aug. 9. Class 22.

Fairchild-Wood Visaphone Corporation, New York, N. Y. Sensitized photographic film. Serial Nos. 327,648–9; Aug. 9. Class 26.

Fairchild-Wood Visaphone Corporation, New York, N. Y. Phonograph records. Serial No. 327,650; Aug. 9. Class 36.

Flatelle Company, The. (See Gaugler, Joseph P.)

Fidalgo Island Packing Company, Anacortes, Wash. Canned salmon. Serial No. 310,333; Aug. 9. Class 46.

Firestone Tire & Rubber Company, The, Akron, Ohio. Tire repair vulcanizing apparatus. Serial No. 328,092; Aug. 9. Class 23.

Fisher Brothers Company, The, Cleveland, Ohio. Coffee and tea. Serial No. 318,944; Aug. 9. Class 46.

Foamo Kleanzit Company, Waseca, Minn. Cleaners for fabrics, as rugs, upholstery, etc. Serial No. 327,585; Aug. 9. Class 4.

Franklin Oil & Gas Company, The, Bedford, Ohio. Preparation for prevention and elimination of rust. Serial No. 325,945; Aug. 9. Class 6.

Friedricks, Irving, doing business as Irving Friedricks Co., New York, N. Y. Ladies' sport coats. Serial No. 328,095; Aug. 9. Class 39.

Gallagher, Mary, New York, N. Y. Cream used as a tissue builder. Serial No. 317,380; Aug. 9. Class 6.

Gaugler, Joseph P., doing business as The Flatelle Company, New York, N. Y. Color display card. Serial No. 326,014; Aug. 9. Class 26.

Gaylord, Robert, Incorporated, St. Louis, Mo. Fiberboard boxes. Serial No. 327,938; Aug. 9. Class 2.

Gen-O-San Co., The. (See Stevens, Carl.)

Gensh, Otto, New York, N. Y. Medicinal teas. Serial No. 324,102; Aug. 9. Class 6.

Germantown Rendering Company, The, Cincinnati, Germantown, and Dayton, Ohio. Stock and poultry feeds. Serial No. 322,385; Aug. 9. Class 46.

Gibson Canning Company, Gibson City, Ill. Canned corn. Serial No. 325,095; Aug. 9. Class 46.

Gift Shop Necessities Co., Kansas City, Mo. Decorative base metal boxes, cans, baskets, etc., and lids and covers therefor. Serial No. 321,711; Aug. 9. Class 2.

Godchaux Sugars, Inc., New Orleans, La. Sugar. Serial No. 324,103; Aug. 9. Class 46.

Goldenberg, D., Inc., Philadelphia, Pa. Candy. Serial No. 328,165; Aug. 9. Class 46.

Goodier, Elwood J., doing business as The Goodier Company, Dallas, Tex. Hand lotion. Serial No. 327,054; Aug. 9. Class 6.

Granat, Joseph, doing business as Granat Bros., San Francisco, Calif. Finger rings. Serial No. 325,142; Aug. 9. Class 28.

H. S. M. Clothing Co. Inc., New York, N. Y. Men's and boys' outer clothing. Serial No. 327,820; Aug. 9. Class 39.

Haeseler, Loren M., doing business as Clay Cough Drop Co., Chicago, Ill. Syrup for coughs, cough drops, etc. Serial No. 322,463; Aug. 9. Class 6.
Hall, Horace W., Newton, Mass. Tennis rackets. Serial No. 325,097; Aug. 9. Class 22.
Hampden Paint & Chemical Company, Springfield, Mass. Water-proofing chemicals. Serial No. 327,221; Aug. 9. Class 6.
Hatheway & Company, Inc., New York, N. Y. Non-metallic flexible electric conduit. Serial No. 328,298; Aug. 9. Class 21.
Haynie, Raymond L., Reedville, Va. Canned vegetables and canned tomato juice. Serial No. 327,555; Aug. 9. Class 46.
Herbaria Herb Co., Chicago, Ill. Mixtures of herbs. Serial No. 327,297; Aug. 9. Class 6.
Hoffmann-Hayman Coffee Co., San Antonio, Tex. Empty glass jars. Serial No. 327,191; Aug. 9. Class 33.
Horn, A. C. Company, Long Island City, N. Y. Integral waterproofing for concrete, cement, etc. Serial No. 321,565; Aug. 9. Class 12.
Hut Neckwear Co. Inc., New York, N. Y. Neckties and cravats. Serial No. 328,126; Aug. 9. Class 39.
Hygienic Products Company, The, Canton, Ohio. Cleaning powder for automobile radiators. Serial Nos. 327,755–6; Aug. 9. Class 6.
Hygrade Nut Co. Inc., New York, N. Y. Maltless beverage. Serial No. 327,875; Aug. 9. Class 45.
Hyland, George H., doing business as Standard Homeopathic Company, Los Angeles, Calif. Laxative preparation. Serial No. 327,794; Aug. 9. Class 6.
Jackson, Byron, Co., Los Angeles, Calif. Centrifugal and turbine pumps and parts. Serial No. 328,321; Aug. 9. Class 23.
Johnson & Johnson, New Brunswick, N. J. Diapers. Serial No. 327,909; Aug. 9. Class 42.
Kane, Kennedy. (See Madden, Harry T.)
Keepaway Laboratory, London, England. Veterinary or sanitary preparation. Serial No. 324,712; Aug. 9. Class 6.
Kelly-Springfield Tire Company, New York, N. Y. Tires. Serial No. 328,332; Aug. 9. Class 35.
King Cotton Mills Corporation, Richmond, Va. Cotton yarns. Serial Nos. 328,431–2; Aug. 9. Class 43.
Kingsbury Packing Co., Chicago, Ill. Pickles. Serial No. 328,274; Aug. 9. Class 46.
Kistner, F. N. Co., Chicago, Ill. Chemically treated polishing cloths. Serial No. 328,008; Aug. 9. Class 4.
Kloeppinger, Peter F., doing business as The Dan-Gon Manufacturers, Denver, Colo. Liquid dandelion killer. Serial No. 327,362; Aug. 9. Class 6.
Kohn, Bernhard, doing business as The Medicinal Products Co., Long Island City, N. Y. Medicinal preparation. Serial No. 327,850; Aug. 9. Class 6.
Krause, Chas. A., Milling Co., Milwaukee, Wis. Paper hangers' size. Serial No. 328,493; Aug. 9. Class 5.
Kress, S. H., & Co., New York, N. Y. Threads and yarns. Serial No. 328,435; Aug. 9. Class 43.
Kreymer, Gertrude A., Spokane, Wash. Furniture and automobile polish. Serial No. 327,797; Aug. 9. Class 16.
Lam Laboratories. (See Liebman, Abraham M.)
Lambert Marketing Company, Sacramento, Calif. Fresh grapes, deciduous fruits, and vegetables. Serial No. 328,531; Aug. 9. Class 46.
Larry's, Dr., Food Products Laboratories, New York, N. Y. Cookies and crackers. Serial No. 327,980; Aug. 9. Class 46.
Lawrenceburg Roller Mills Co., Lawrenceburg, Ind. Wheat flour. Serial No. 328,532; Aug. 9. Class 46.
Leea, Mona, Ltd., New York, N. Y. Cosmetic creams to induce perspiration. Serial No. 318,406; Aug. 9. Class 6.
Lever Brothers Company, Cambridge, Mass. Vegetable shortening. Serial No. 324,615; Aug. 9. Class 46.
Levering Coffee Company, The, Baltimore, Md. Tea. Serial No. 328,384; Aug. 9. Class 46.
Liberty Bottling Co., Inc., Chicago, Ill. Maltless beverages, syrups, and waters. Serial No. 328,494; Aug. 9. Class 45.
Liebman, Abraham M., doing business as Lam Laboratories, Philadelphia, Pa. Cream for the treatment of colds, neuralgia, skin troubles, etc. Serial No. 327,267; Aug. 9, 1932. Class 6.
Loeser, Frederick, & Co., Inc., Brooklyn, N. Y. Radio receiving sets. Serial No. 327,851; Aug. 9. Class 21.
Lonsdale Company, Providence, R. I. Cotton piece goods. Serial No. 327,226; Aug. 9. Class 42.
Lorch Manufacturing Company, Dallas, Tex. Silk frocks. Serial No. 325,334; Aug. 9. Class 39.
Luntz, Joseph, Brooklyn, N. Y. Laxative tonic. Serial No. 326,826; Aug. 9. Class 6.
Mac-Roh Sales & Manufacturing Co., Bettendorf, Iowa. Bread slicing machinery. Serial Nos. 328,402–3; Aug. 9. Class 23.
Madden, Harry T., doing business as Kennedy Kane, Brooklyn, N. Y. Column or section of daily newspaper. Serial No. 328,132; Aug. 9. Class 38.
Marine Chemicals Company, Ltd., South San Francisco and San Francisco, Calif. Pharmaceutical preparation. Serial No. 324,688; Aug. 9. Class 6.
Massachusetts Chocolate Company, Boston, Mass. Sweet chocolate. Serial No. 328,496; Aug. 9. Class 46.
Maytrott, Warren W., doing business as Dahliadel Nurseries, Vineland, N. J. Catalogs. Serial Nos. 284,477–8; Aug. 9. Class 38.
McCallum, D. & J., Ltd., Edinburgh, Scotland. Scotch whisky. Serial No. 326,948; Aug. 9. Class 49.
Medicinal Products Co. (See Kohn, Bernhard.)
Meyrowitz, E. B., Inc., New York, N. Y. Spectacle frames. Serial No. 327,913; Aug. 9. Class 26.
Midway Chemical Company, Chicago, Ill. Polish for furniture, automobiles, etc. Serial No. 322,024; Aug. 9. Class 16.
Midwest Hardware Company, Chicago, Ill. Lawn sprinklers. Serial No. 327,914; Aug. 9. Class 13.
Mille Fleurs, Inc., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. Serial No. 326,978; Aug. 9. Class 6.
Mission Dry Corporation, Ltd., Los Angeles, Calif. Beverage dispensers. Serial No. 327,164; Aug. 9. Class 23.
Missouri Casket Company, Kansas City, Mo. Burial caskets and vaults. Serial No. 327,916; Aug. 9. Class 2.
Modishform Brassiere Co. Inc., New York, N. Y. Brassières, bandeaus, and girdles, etc. Serial No. 315,863; Aug. 9. Class 39.
Morton, Charles D., Chicago, Ill. Vending machines for paper articles. Serial No. 328,445; Aug. 9. Class 23.
Motor Wheel Corporation, Lansing, Mich. Air circulating oil burning furnaces. Serial No. 327,734; Aug. 9. Class 34.
Naamlooze Vennootschap Eau De Cologne Fabriek J. C. Boldoot, Amsterdam, Netherlands. Perfumery, eau-de-cologne, etc. Serial No. 320,366; Aug. 9. Class 6.
National Automotive Fibres, Inc., Oakland, Calif. Cotton wadding and batting. Serial No. 327,804; Aug. 9. Class 1.
National Cash Register Company, The, Dayton, Ohio. Paper slitting and stacking machines. Serial No. 323,109; Aug. 9. Class 23.
Newark Wholesale Grocery Co., Newark, N. J. Coffee. Serial No. 328,248; Aug. 9. Class 46.
New York Merchandise Co. Inc., New York, N. Y. Abrasive pot cleaners made of metallic wire. Serial No. 328,070; Aug. 9. Class 4.
North American Radium Corporation, New York, N. Y. Appliance for charging water and/or other fluids with radium emanation. Serial No. 313,623; Aug. 9. Class 44.
Odin Stove Manufacturing Company, Erie, Pa. Gas stoves and ranges. Serial No. 324,264; Aug. 9. Class 34.
Old Meadow Creamery. (See Abell, Arthur.)
Onondaga Silk Company, Inc., Syracuse and New York, N. Y. Silk fabrics. Serial Nos. 328,499–503; Aug. 9. Class 42.
Palmer Brothers Co., The, New London, Conn. Mattresses. Serial No. 326,869; Aug. 9. Class 32.
Para Thread Company, Inc., Woonsocket, R. I. Rubber thread. Serial No. 327,773; Aug. 9. Class 43.
Parfumerie St. Denis, New York, N. Y. Astringents, bleach creams, beauty creams, etc. Serial No. 327,407; Aug. 9. Class 6.
Parker Pen Company, The, Jamesville, Wis. Pencils, fountain pens, desk sets, and the component parts thereof. Serial No. 322,399; Aug. 9. Class 37.
Paul, Henry A., doing business as Paul's Pharmacy Inc., Daytona Beach, Fla. Skin lotion. Serial No. 315,412; Aug. 9. Class 6.
Pecan Krisp Company, Inc., Dallas, Tex. Flavoring material in granular form for ice cream. Serial No. 327,421; Aug. 9. Class 46.
Penn-Jersey Auto Stores, Inc., Easton, Pa. Liquid radiator stop leak compound. Serial No. 327,286; Aug. 9. Class 6.
Phillips Petroleum Company, Bartlesville, Okla. Gas for commercial and domestic purposes. Serial No. 327,703; Aug. 9. Class 6.
Phoenix Slate Company. (See Brunswick-Balke-Collender, Company, The.)
Plymouth Laboratories. (See Towns & James, Inc.)
Pond's Extract Company, New York, N. Y. Face powder. Serial No. 327,770; Aug. 9. Class 6.
Printz-Biederman Company, The, Cleveland, Ohio. Woolen textile fabrics. Serial No. 327,771; Aug. 9. Class 42.
Procter & Gamble Company, The, Cincinnati, Ohio. Cooking-fats. Serial No. 328,279; Aug. 9. Class 46.
Prosthetic Products, Inc., New York, N. Y. Plastic resin. Serial No. 328,537; Aug. 9. Class 44.
Reavis, Mrs. L. O., Kansas City, Kans. Noodles. Serial No. 324,399; Aug. 9. Class 46.
Reiss, Dr. Rudolf, Rheumasan- und Lenicet-Fabrik, Berlin-Charlottenburg, Germany. Medicine. Serial No. 309,144; Aug. 9. Class 6.
Reiss, Dr. Rudolf, Rheumasan- und Lenicet-Fabrik, Berlin-Charlottenburg, Germany. Suppositories, medicines, etc. Serial No. 309,150; Aug. 9. Class 6.
Rialto Co-Operative Citrus Association, Rialto, Calif. Fresh citrus fruits. Serial No. 310,947; Aug. 9. Class 46.

Richfield Oil Corporation of New York, New York, N. Y. Petroleum products. Serial No. 327,068; Aug. 9. Class 15.
Riley, A. Landis, doing business as Landis Manufacturing Company, Atlantic City, N. J. Battery water level indicator. Serial No. 328,371; Aug. 9. Class 26.
Robinson, Wallace W., Portland, Me. Emergency devices for first aid treatment. Serial No. 327,664; Aug. 9. Class 44.
Robnett, T. W., Portland, Oreg. Pharmaceutical preparation. Serial No. 326,242; Aug. 9. Class 6.
Rodes-Rapier Co., Inc., Louisville, Ky. Coats, vests, trousers, etc. Serial No. 328,449; Aug. 9. Class 39.
Royal Baking Powder Company, New York, N. Y. Gelatin dessert and aspic. Serial No. 327,709; Aug. 9. Class 46.
Royal Laboratories, Inc., Newark, N. J., and New York, N. Y. Germicidal preparation. Serial No. 327,806; Aug. 9. Class 6.
Royal Laboratories, Inc., Newark, N. J., and New York, N. Y. Preparation for the treatment of the gums. Serial No. 327,807; Aug. 9. Class 6.
Royal Laboratories, Inc., Newark, N. J. Preparation for the treatment of athlete's foot and impetigo. Serial No. 327,835; Aug. 9. Class 6.
Rutherford, Edward E., Toronto, Ontario, Canada. Medical preparation. Serial No. 326,966; Aug. 9. Class 6.
Scott-Ballantyne Company, Omaha, Nebr. Air conditioning equipment. Serial No. 328,019; Aug. 9. Class 34.
Scott Paper Company, Chester, Pa. Tissue, creped, and absorbent papers. Serial No. 328,592; Aug. 9. Class 37.
Shell Oil Company, San Francisco, Calif. Petroleum pitch. Serial No. 317,382; Aug. 9. Class 1.
Smith, Alice C., Madison, N. J. Hair tonic, grower, straightening oil, and restorer. Serial No. 326,166; Aug. 9. Class 6.
Smith, Landon P., Inc., Irvington, N. J. Glazier scrapers for surfaces of glass, wood, etc. Serial No. 325,759; Aug. 9. Class 23.
Snyder & Black, Inc., New York, N. Y. Bridge game package. Serial No. 328,412; Aug. 9. Class 22.
Solescope Incorporated, Boston, Mass. Picture projecting apparatus and slides therefor. Serial No. 328,042; Aug. 9. Class 26.
Southern Dairies, Inc., Washington, D. C. Ice cream. Serial No. 328,339; Aug. 9. Class 46.
Southern Dairies, Inc., Washington, D. C., and Savannah, Ga. Maltless beverages and sirups therefor. Serial No. 328,567; Aug. 9. Class 45.
Sozonian Vault Company, The, Bucyrus, Ohio. Burial vaults. Serial Nos. 328,106–7; Aug. 9. Class 2.
Standard Homeopathic Company. (See Hyland, George H.)
Standard Statistics Company, Inc., The, New York, N. Y. Publications. Serial No. 328,051; Aug. 9. Class 38.
Stearns & Foster Co., The, Cincinnati, and Lockland, Ohio. Mattresses. Serial No. 322,564; Aug. 9. Class 32.
Stearns & Foster Co., The, Cincinnati and Lockland, Ohio. Spring cushion construction. Serial No. 322,565; Aug. 9. Class 32.
Stevens, Carl, doing business as The Gen-O-San Co., assignor to Charles P. Diehl, Los Angeles, Calif. Antiseptic and prophylactic preparation. Serial No. 311,452; Aug. 9. Class 6.
Stewart-Warner Corporation, Chicago, Ill. Refrigerating apparatus. Serial No. 326,434; Aug. 9. Class 31.
Sultana Hosiery Mills, Inc., New York, N. Y. Hosiery and lingerie. Serial No. 325,665; Aug. 9. Class 39.
Tabulating Machine Company, The, New York, N. Y. Tabulating machines, card punching machines, card sorting machines, etc. Serial No. 316,672; Aug. 9. Class 26.
Towns & James, Inc., doing business as Plymouth Laboratories, Brooklyn, N. Y. Pharmaceutical and medicinal preparations. Serial No. 326,835; Aug. 9. Class 6.
Trattner, Rosa K., Los Angeles, Calif. Herbal preparation. Serial No. 326,696; Aug. 9. Class 6.
Ulmann, Bernhard, Co. Inc., New York, N. Y. Worsted yarns. Serial No. 328,407; Aug. 9. Class 43.
Vaughn-Gillette, Bay City, Mich. Cakes and pies. Serial No. 326,347; Aug. 9. Class 46.
Victor Manufacturing & Gasket Company, Chicago, Ill. Gaskets. Serial No. 313,397; Aug. 9. Class 35.
Vince Laboratories, Inc., New York, N. Y. Mouth-wash. Serial No. 314,828; Aug. 9. Class 6.
Voorhies, Grantland B., doing business as Alpha Milk Laboratories, Sacramento, Calif. Dried lacteal baby food. Serial No. 312,725; Aug. 9. Class 46.
Wahl Company, The, Chicago, Ill. Fountain pens and pencils. Serial No. 320,882; Aug. 9. Class 37.
Western Bottle Mfg. Co., doing business as The Western Company, Chicago, Ill. Handkerchiefs. Serial No. 328,044; Aug. 9. Class 42.
Western Garment Mfg. Co., Wichita Falls, Tex. Boys' pants, shirts, and play suits. Serial No. 300,384; Aug. 9. Class 39.
Worthington Pump and Machinery Corporation, New York, N. Y. Rock drills, rock hammers, sinkers, etc. Serial Nos. 323,644–5; Aug. 9. Class 23.
Wrigley, Norman J., Atlanta, Ga. Children's play suits. Serial No. 328,045; Aug. 9. Class 39.
Wyant, Willis W., doing business as Akron Rubber Supply Company, Akron, Ohio. Prophylactic rubber or tissue articles. Serial No. 290,359; Aug. 9. Class 44.
York and Company, Grand Rapids, Mich. Salt. Serial No. 327,268; Aug. 9. Class 6.
Young, Henry, Clarion, Pa. Numerical puzzles run as a column in newspapers and magazines. Serial No. 327,721; Aug. 9. Class 38.
Zeman, Ethel, Los Angeles, Calif. Medicinal preparation for cleaning the teeth, etc. Serial No. 328,023; Aug. 9. Class 6.
Zupanski, James, Philadelphia, Pa. Preparation for the treatment of scalp diseases. Serial No. 324,206; Aug. 9. Class 6.

LIST OF REGISTRANTS OF TRADE-MARKS

Abilene Flour Mills Company, The, Abilene, Kans. Flour. 296,412; Aug. 9; Serial No. 323,647; published May 24, 1932. Class 46.
Actona Research Laboratories, Inc., Philadelphia, Pa. Laxatives. 296,564; Aug. 9; Serial No. 325,863; published May 31, 1932. Class 6.
Alcolite Inc., Philadelphia, Pa. Denture cream. 296,568; Aug. 9; Serial No. 326,318; published May 31, 1932. Class 6.
All-Steel-Equip Company, Aurora, Ill. Baskets, boxes, pans, etc. 296,469; Aug. 9; Serial No. 319,683; published May 17, 1932. Class 2.
Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Preparations for treating fluids for use in boilers. 296,565; Aug. 9; Serial No. 325,933; published May 24, 1932. Class 6.
Alperin, Strauss Co., Inc., New York, N. Y. Blouses and shirts. 296,445; Aug. 9; Serial No. 326,278; published May 31, 1932. Class 39.
Amalgamated Leather Companies, Inc., Wilmington, Del.; Philadelphia, Pa.; New York, N. Y.; Boston, Mass.; Rochester, N. Y.; Chicago, Ill.; and St. Louis, Mo. Kid, glazed kid, and other leathers. 296,417; Aug. 9; Serial No. 326,249; published May 31, 1932. Class 1.
American Bemberg Corporation. (See Bemberg, I. P., Aktiengesellschaft, assignor.)
American Hard Rubber Company, Hempstead and New York, N. Y. Hard rubber combs. 296,579; Aug. 9. Class 40.
American Institute of Banking, New York, N. Y. Booklets. 296,581; Aug. 9. Class 38.
American Rubber Products Corporation, New York, N. Y. Rubber tiles, flooring, and accessories, etc. 296,541; Aug. 9; Serial No. 325,672; published May 31, 1932. Class 12.
American Steel & Wire Company of New Jersey, The, Hoboken, N. J., assignor to The American Steel and Wire Company of New Jersey, Cleveland, Ohio. Barb-wire. 89,079; renewed Nov. 12, 1932.
American Woolen Company, Jersey City, N. J., and Boston, Mass., assignor to American Woolen Company, New York, N. Y. Woolen cloth. 87,028; renewed June 25, 1932.
Ammon & Person, assignors, by mesne assignments to Eckerson Company, Jersey City, N. J. Oleomargarin. 87,838; renewed Aug. 13, 1932.
Appleton, Louis B., doing business as Buzzy, New York, N. Y. Periodical. 296,550; Aug. 9; Serial No. 326,199; published May 31, 1932. Class 38.
Astoria & Puget Sound Canning Co., South Bellingham, Wash. Canned salmon. 89,432; renewed Dec. 17, 1932.
Atkins & Durbrow, Inc. (See Durbrow, Walter, assignor.)
Atlantic Refining Company, The, Philadelphia, Pa. Coke. 296,409–11; Aug. 9; Serial Nos. 323,648–50; published May 31, 1932. Class 1.
Atlas Mineral Products Company, The, Mertztown, Pa. Acid resisting binding and lining materials. 296,554; Aug. 9; Serial No. 325,032; published May 17, 1932. Class 12.
Atlas Supply Company, Newark, N. J. Anti-skid chains. 296,426; Aug. 9; Serial No. 325,775; published May 17, 1932. Class 12.
Austin Manufacturing and Sales Corp., Syracuse, N. Y. Air-circulating blowers. 296,497; Aug. 2; Serial No. 314,224; published May 17, 1932. Class 34.
Badger Paper Mills, Inc., Peshtigo, Wis. Waxed paper lunch rolls. 296,494; Aug. 9; Serial No. 300,258; published May 31, 1932. Class 37.

CARNEGIE LIBRARY OF ATLANTA

Barnett, I. H. & Bro., New York, N. Y. Shirts. 296,473; Aug. 9; Serial No. 321,190; published May 24, 1932. Class 39.
Bay State Belting Company, Boston, Mass. Leather belting. 87,314; renewed July 9, 1932.
Bemberg, I. P., Aktiengesellschaft, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Thread and yarn. 296,517; Aug. 9; Serial No. 326,054; published May 24, 1932. Class 43.
Berkwits & Bloomfield, Inc., New York, N. Y. Woolen cloth in the piece. 296,399; Aug. 9; Serial No. 321,798; published May 24, 1932. Class 42.
Billings & Spencer Company, The, Hartford, Conn. Golf clubs. 296,507; Aug. 9; Serial No. 312,596; published May 24, 1932. Class 22.
Bishop & Company, Los Angeles, Calif., assignor to National Biscuit Company, New York, N. Y. Candy figs. 88,833; renewed Oct. 29, 1932
Boake, A., Roberts & Co. Ltd., Stratford, England. Fruit extracts. 89,437; renewed Dec. 17, 1932.
Bob, H. D., Company Inc., New York, N. Y. Collars, shirts, pajamas, etc. 296,428; Aug. 9; Serial No. 325,890; published May 31, 1932. Class 39.
Borgfeldt, Geo., & Co., New York, N. Y. Toy figures. 296,463; Aug. 9; Serial No. 326,411; published May 31, 1932. Class 22.
Boston Gear Works, Inc., North Quincy, Mass. Chains for sprocket wheels. 296,584; Aug. 9. Class 13.
Bourjois, Inc. (See Wertheimer, E., & Cie., assignor.)
Brauer Bros., Inc., St. Louis, Mo. Toy cowboy accessories. 296,404; Aug. 9; Serial No. 321,718; published May 24, 1932. Class 22.
British Columbia Lumber and Shingle Manufacturers Limited, The, Vancouver, British Columbia, Canada. Wooden beams, doors, laths, planks, etc. 296,538; Aug. 9; Serial No. 325,207; published May 17, 1932. Class 12.
Bullard, E. D., Company, San Francisco, Calif. First aid and protective equipment. 296,502; Aug. 9; Serial No. 306,084; published May 24, 1932. Class 44.
Buston, Jameson G., North Tazewell, Va. Beverage, sirup, and extract. 296,529; Aug. 9; Serial No. 326,412; published May 31, 1932. Class 45.
Buzzy. (See Appleton, Louis B.)
Byrnes, Eugene, New York, N. Y. Series of cartoons or comic strips. 296,553; Aug. 9; Serial No. 326,413; published May 31, 1932. Class 38.
C-R-C Law List Company, The, New York, N. Y. Attorney's directory. 296,544; Aug. 9; Serial No. 325,816; published May 24, 1932. Class 38.
Celanese Corporation of America, New York, N. Y. Fabrics. 296,526; Aug. 9; Serial No. 326,176; published May 24, 1932. Class 42.
Cellized Oak Flooring, Inc., Memphis, Tenn. Wood blocks for floors and the like. 296,545; Aug. 9; Serial No. 325,892; published May 24, 1932. Class 12.
Cement Marketing Company, Limited, The, London, England. Preparation for mixing with cement, lime, and plaster, etc. 296,542; Aug. 9; Serial No. 325,707; published May 31, 1932. Class 12.
Chicago Rotoprint Company, Chicago, Ill. Publication. 296,552; Aug. 9; Serial No. 326,362; published May 31, 1932. Class 38.
Chipman Chemical Company, Inc., Bound Brook, N. J. Cnemical preparation. 296,442; Aug. 9; Serial No. 324,881; published May 31, 1932. Class 6.
Christopher, L. J., assignor to Christopher Candy Company, Los Angeles, Calif. Candies. 88,844; renewed Oct. 29, 1932.
Colgate & Co., Jersey City, N. J., and New York, N. Y., assignor to Colgate-Palmolive-Peet Company, Chicago, Ill. Perfumes. 89,226; renewed Dec. 3, 1932.
Collins Company, The, Collingsville, Conn. Cutlery, machinery, and tools. 89,537; renewed Dec. 24, 1932.
Collins Company, The, Collinsville, Conn. Cutlery and tools. 89,538; renewed Dec. 24, 1932.
Collins, Warren E., Inc., Boston, Mass. Artificial respirators. 296,430; Aug. 9; Serial No. 326,080; published May 31, 1932. Class 44.
Columbian Rope Company, Auburn, N. Y. Manila and sisal rope and cordage. 87,854; renewed Aug. 13, 1932.
Compañia Cervecera Internacional, S. A., Habana, Cuba. Malt beverages and extracts. 296,447; Aug. 9; Serial No. 325,423; published May 24, 1932. Class 48.
Consolidated Displays, Inc., Chicago, Ill. Plant of the cactus family. 296,413; Aug. 9; Serial No. 320,633; published May 31, 1932. Class 1.
Contos, Vasilios, Chicago, Ill. Cocoanut candy. 89,569; renewed Dec. 30, 1932.
Co-Operative Grange League Federation Exchange, Inc., Ithaca, N. Y. Flour. 296,434; Aug. 9; Serial No. 325,567; published May 31, 1932. Class 46.
Cornish Mining Co., Cornish, Me. Preparation for cleaning and polishing aluminum, etc. 296,422; Aug. 9; Serial No. 325,424; published May 24, 1932. Class 4.
Cosmetic Research Laboratories, The, Wilkes-Barre, Pa. Line of toilet preparations. 296,558; Aug. 9; Serial No. 325,401; published May 24, 1932. Class 6.
Crane, Clarence A., deceased, assignor to B. M. Crane, executor of Estate of Clarence A. Crane. Candy. 89,340; renewed Dec. 10, 1932.
Crawford, McGregor and Canby Company, The, Dayton, Ohio. Golf clubs. 296,406; Aug. 9; Serial No. 318,052; published May 24, 1932. Class 22.
D. A. W. Laboratories. (See Wuster, Doris A.)
Daner Co. (See Danerhirsch, Joseph.)
Danerhirsch, Joseph, doing business as Daner Co., New York, N. Y. Shirts. 296,503; Aug. 9; Serial No. 304,496; published Oct. 6, 1931. Class 39.
Daroff, H., & Sons, Inc., Philadelphia, Pa. Outer suits. 296,427; Aug. 9; Serial No. 325,781; published May 24, 1932. Class 39.
Davis Welding & Manufacturing Company, The, Cincinnati, Ohio. Truck tank, trailer tank, etc. 296,477; Aug. 9; Serial No. 324,593; published May 17, 1932. Class 19.
Deane Plaster Co., The, Yonkers, N. Y. Medicated adhesive bandage dressing. 296,559; Aug. 9; Serial No. 325,569; published May 24, 1932. Class 6.
Delmel Linen-Mesh System Company, The, San Francisco, Calif. Suspensories, abdominal bands, and surgical bandages. 89,345; renewed Dec. 10, 1932.
Dennison & Sons, Inc., Long Island City, N. Y. Banknotes, checks, drafts, etc. 296,466; Aug. 9; Serial No. 324,785; published May 24, 1932. Class 37.
Denny, Hilborn & Rosenbach, assignor to Denny, Hilborn & Rosenbach, Inc., Philadelphia, Pa. Paints. 86,890–2; renewed June 11, 1932.
Denny, Hilborn & Rosenbach, assignor to Denny, Hilborn & Rosenbach, Inc., Philadelphia, Pa. Paints and painters' materials. 87,049; renewed June 25, 1932.
Detroit Sulphite Pulp & Paper Co., Detroit, Mich. Wrapping paper. 296,547; Aug. 9; Serial No. 326,082; published May 24, 1932. Class 37.
De Vilbiss Manufacturing Company, The, by change of name, to The De Vilbiss Company, Toledo, Ohio. Atomizers and nebulizers. 87,733; renewed Aug. 6, 1932.
Diamond Crystal Salt Company, St. Clair, Mich., to Diamond Crystal Salt Company, New York, N. Y. Salt. 38,626; renewed July 15, 1932.
Dosch-Kircher Organization, The, Chicago, Ill. Publication. 296,489; Aug. 9; Serial No. 323,394; published May 31, 1932. Class 38.
Doshi Trading Co. Ltd., New York, N. Y. Textile fabrics. 296,525; Aug. 9; Serial No. 326,131; published May 24, 1932. Class 42.
Ducharne, F., Silk Co. Inc., New York, N. Y. Piece goods. 296,533–4; Aug. 9; Serial Nos. 326,519–20; published May 31, 1932. Class 42.
Dugan, Annie, Estate of. (See Weinfeld, Annie E.)
Dunn, Richard T., doing business as J. S. Merrell Drug Company, St. Louis, Mo. Cough balsam. 296,557; Aug. 9; Serial No. 325,426; published May 24, 1932. Class 6.
Durbrow, Walter, assignor to Atkins & Durbrow, Inc., New York, N. Y. Poultry litter. 89,449; renewed Dec. 17, 1932.
Eckerson Company. (See Ammon & Person, assignors.)
Eday Fabrics, Incorporated, West New York, N. J. Knitted fabrics. 296,524; Aug. 9; Serial No. 326,083; published May 24, 1932. Class 42.
Electric Knitting Co. Inc., Cohoes, N. Y. Textile dish cloths. 296,527; Aug. 9; Serial No. 326,284; published May 31, 1932. Class 42.
Electro-Magnetic Belt Company. (See Markwood, Jacob D.)
Evans, Edwin M., Bloomington, Ill. Coupons. 296,546; Aug. 9; Serial No. 325,005; published May 31, 1932. Class 38.
Examiner Printing Company, San Francisco, Calif. Nom de plume for articles or writings. 296,464; Aug. 9; Serial No. 324,687; published May 31, 1932. Class 38.
Examiner Printing Company, San Francisco, Calif. Articles or writings. 296,491–3; Aug. 9; Serial Nos. 324,684–6; published May 24, 1932. Class 38.
Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, etc. 296,471; Aug. 9; Serial No. 320,497; published May 24, 1932. Class 39.
Federal Mill, Inc., Lockport, N. Y. Flour. 296,439; Aug. 9; Serial No. 326,207; published May 24, 1932. Class 46.
Felters Company, The, Boston, Mass. Weather strip felt. 296,571; Aug. 9. Class 12.
Fisher Flouring Mills Company, to Fisher Flouring Mills Co., Harbor Island, Seattle, Wash. Wheat flour. 89,350; renewed Dec. 10, 1932.
Foltz, Edith, Portland, Oreg. Wearing apparel. 296,424; Aug. 9; Serial No. 325,618; published May 24, 1932. Class 39.
Forbriger, Paul R., doing business as German American Import Co., New York, N. Y. Cheese. 296,512–15; Aug. 9; Serial Nos. 314,528–31; published May 31, 1932. Class 46.
Freedman, Jack, doing business as Freedman Beverage Co. and Glen Cove Bottling Co., Glen Cove, N. Y. Beverages. 296,574; Aug. 9. Class 45.
Gehe & Co., Aktiengesellschaft, Dresden, Germany. Calcium compound with saponin. 296,482; Aug. 9; Serial No. 319,878; published May 24, 1932. Class 6.
General Mills, Inc. (See Washburn Crosby Company, assignor.)
General Printing Ink Corporation. (See Ullman, Sigmund, assignor.)
German American Import Co. (See Forbriger, Paul R.)
Gladding, McBean & Co., Los Angeles, Calif. Fire brick, refractory brick, tile, etc. 296,501; Aug. 9; Serial No. 307,714; published Sept. 1, 1931. Class 12.

Glebeas Importation Co. Inc., doing business as Glebeas Importing Co., New York, N. Y. Cosmetics and facial preparations. 296,486; Aug. 9; Serial No. 324,556; published May 31, 1932. Class 6.
Glen Cove Bottling Co. (See Freedman, Jack.)
Golf Ball Inc., Chicago, Ill. Golf balls. 296,454–7; Aug. 9; Serial Nos. 326,088–91; published May 24, 1932. Class 22.
Golf Ball Inc., Chicago, Ill. Golf balls. 296,458; Aug. 9; Serial No. 326,093; published May 24, 1932. Class 22.
Golf Ball Inc., Chicago, Ill. Golf balls. 296,459; Aug. 9; Serial No. 326,099; published May 24, 1932. Class 22.
Gray, Frank A., Kansas City, Mo. Hair remedies. 89,250; renewed Dec. 3, 1932.
Grigsby-Grunow Company, Chicago, Ill. Electric refrigerators and parts thereof. 296,451; Aug. 9; Serial No. 325,787; published May 24, 1932. Class 31.
Grossman, Alex., & Co. Inc., New York, N. Y. Eggs and butter. 296,418; Aug. 9; Serial No. 326,256; published May 31, 1932. Class 46.
Gudebrod Brothers Silk Company, Philadelphia, Pa. Threads. 296,400; Aug. 9; Serial No. 321,317; published May 24, 1932. Class 43.
Hardesty Milling Co., The, Canal Dover, to The Hardesty Milling Co., Dover, Ohio. Wheat flour. 87,445; renewed July 16, 1932.
Harlan-Wallins Coal Corporation, Verda, Ky. Coal. 296,438; Aug. 9; Serial No. 326,143; published May 24, 1932. Class 1.
Harris Clothing Company, Baltimore, Md. Suits, overcoats, etc. 296,475; Aug. 9; Serial No. 323,661; published May 24, 1932. Class 39.
Hart, Edward E., New York, N. Y. Malt beverages. 296,415; Aug. 9; Serial No. 326,473; published May 31, 1932. Class 48.
Hartwig & Vogel Aktiengesellschaft, Dresden, Germany. Cocoa, chocolate, candy. 89,029; renewed Nov. 5, 1932.
Hat Trade Publishing Company, The, New York, N. Y. Publication. 296,537; Aug. 9; Serial No. 325,170; published May 24, 1932. Class 38.
Hercules Powder Company, Wilmington, Del. Synthetic resin. 296,562; Aug. 9; Serial No. 325,824; published May 31, 1932. Class 6.
Hickey-Freeman Company, Rochester, N. Y. Men's apparel. 296,444; Aug. 9; Serial No. 326,258; published May 31, 1932. Class 39.
Hitt Fireworks Company, doing business as Hitt Manufacturing Company, Seattle, Wash. Photographic flashes. 296,460; Aug. 9; Serial No. 326,102; published May 24, 1932. Class 9.
Hoard, W. D. & Sons Company, Fort Atkinson, Wis. Periodical. 296,551; Aug. 9; Serial No. 326,354; published May 31, 1932. Class 38.
Horst, E. Clemens, Co., San Francisco, Calif. Hops. 296,572; Aug. 9. Class 1.
Houghton, Joseph H., New York, to Joseph H. Houghton, Brooklyn, N. Y. Portland cement. 86,804; renewed June 4, 1932.
Hudnut, Richard, New York, N. Y. Toilet preparations. 88,880; renewed Oct. 29, 1932.
Hudnut, Richard, New York, N. Y. Perfumes, sachet-powder, toilet water, etc. 88,881; renewed Oct. 29, 1932.
Hudnut, Richard, New York, N. Y. Toilet preparations. 88,883; renewed Oct. 29, 1932.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Artificial resins and plastic masses. 296,407; Aug. 9; Serial No. 324,737; published May 24, 1932. Class 1.
Ideal Novelty & Toy Co., Brooklyn, N. Y. Dolls. 296,462; Aug. 9; Serial No. 326,287; published May 24, 1932. Class 22.
Illinois Iron and Bolt Co., Carpentersville, Ill. Steel warehouse trucks. 87,342; renewed July 9, 1932.
Independence Plan Company, The. (See Mayers Company, Inc., The.)
International Business Machines Corporation, New York, N. Y. Publications. 296,505; Aug. 9; Serial No. 312,051; published May 24, 1932. Class 38.
Ischerland, Frederick E., Flint, Mich. Liquid shampoo preparation. 296,484; Aug. 9; Serial No. 323,664; published May 31, 1932. Class 6.
Jacob & Schey, New York, N. Y. Hosiery. 296,429; Aug. 9; Serial No. 325,984; published May 24, 1932. Class 39.
Johnson, Ross H., doing business as Johnson Products, Inc., Indianapolis, Ind. Golf tees. 296,509; Aug. 9; Serial No. 312,919; published May 12, 1931. Class 22.
Kansas City Southern Railway Company, The, Kansas City, Mo. Periodicals and descriptive bulletins. 296,506; Aug. 9; Serial No. 312,523; published May 24, 1932. Class 38.
Kemkit Chemical Corporation, Brooklyn, N. Y. Chemical outfit for educational purposes. 296,405; Aug. 9; Serial No. 320,437; published May 24, 1932. Class 22.
Keyston Bros, San Francisco, Calif. Juvenile play apparel. 296,428; Aug. 9; Serial No. 325,503; published May 31, 1932. Class 39.
Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth, Budweis, Czechoslovakia. Pencils. 296,575; Aug. 9. Class 37.
Kress, S. H., & Co., New York, N. Y. Ice cream scoops. 296,576; Aug. 9. Class 23.
Krueger, Juliana. (See U-Va-Jee Manufacturing Co., assignor.)
Kueter, Marie B., Oakland, Calif. Pastries. 296,419; Aug. 9; Serial No. 326,202; published May 31, 1932. Class 46.
Kull, William T., doing business as Rheumatox Company, Cleveland, Ohio. Preparations for lumbago, etc. 296,483; Aug. 9; Serial No. 321,770; published May 24, 1932. Class 6.
Lageman, Clemens. (See Trommsdorf, H.)
Lamac Process Company, Erie, Pa. Adhesive cement. 296,436; Aug. 9; Serial No. 325,794; published May 24, 1932. Class 5.
Lambert Pharmacal Company. (See Voegli Bros. Drug Co., The, assignor.)
Levinson, Maxwell, Philadelphia, Pa. Periodicals. 296,549; Aug. 9; Serial No. 326,150; published May 31, 1932. Class 38.
Lewis, David W., & Co. Inc., New York, N. Y. Creamery butter. 296,582; Aug. 9.
Mac-Col Manufacturing Company, Inc., St. Louis, Mo. Rowing machine body builder and reducing exerciser. 296,448; Aug. 9; Serial No. 325,433; published May 24, 1932. Class 22.
MacDonald & Muir, Leith, Scotland. Whisky. 296,461; Aug. 9; Serial No. 326,111; published May 24, 1932. Class 49.
Madden, Johanna H., doing business as Skinit Co., Minneapolis, Minn. Salve. 296,567; Aug. 9; Serial No. 326,382; published May 31, 1932. Class 6.
Markwood, Jacob D., doing business as Electro-Magnetic Belt Company, Minneapolis, Minn. Electro-magnetic belt. 296,421; Aug. 9; Serial No. 325,178; published May 24, 1932. Class 44.
Master Oil Burner, Inc., Worcester, Mass. Oil burners. 296,468; Aug. 9; Serial No. 318,244; published May 17, 1932. Class 34.
Maxwell Chemical Company. (See Weintraub, Maxwell.)
Mayers Company, Inc., The, doing business as The Independence Plan Company, Los Angeles, Calif. Pass-books and check-book covers. 296,519; Aug. 9; Serial No. 325,476; published May 31, 1932. Class 37.
McCarthy, James E., Notre Dame, Ind. Pharmaceutical preparation. 296,500; Aug. 9; Serial No. 308,897; published May 24, 1932. Class 6.
Meillier Company, Perfumer. (See Wright, Alfred, Perfumer Inc., assignor.)
Merlon Sporting Goods Mfg., Corpn., Philadelphia, Pa. Golf tees. 296,453; Aug. 9; Serial No. 325,956; published May 24, 1932. Class 22.
Messenger & Montgomery. (See Montgomery, Lester.)
Mission Dry Corporation, Ltd., Los Angeles, Calif. Beverages, concentrates, and extracts. 296,449; Aug. 9; Serial No. 325,479; published May 31, 1932. Class 45.
Modern Supply Company, Chicago, Ill. Semi-liquid adhesive. 296,416; Aug. 9; Serial No. 326,227; published May 31, 1932. Class 5.
Montgomery, Lester, doing business as Messenger & Montgomery, Santa Barbara, Calif. Metal boats. 296,570; Aug. 9. Class 19.
Monument Bottling Company, Indianapolis, Ind. Beverages. 296,450; Aug. 9; Serial No. 325,691; published May 24, 1932. Class 45.
Mossler, Leo, New York, N. Y. Hosiery. 296,474; Aug. 9; Serial No. 323,112; published May 24, 1932. Class 39.
Mother Brown's Pure Orange Juice Company, North Arlington, N. J. Beverages. 296,508; Aug. 9; Serial No. 312,660; published May 24, 1932. Class 45.
Mueth, Eugene, doing business as Toil-Glen Products Co., St. Louis, Mo. Toilet bowl cleaner. 296,478; Aug. 9; Serial No. 324,796; published May 31, 1932. Class 4.
National Aluminate Corporation, Chicago, Ill. Water treatment compound for the prevention of incrustation in the feed water of boilers, etc. 296,556; Aug. 9; Serial No. 325,295; published May 24, 1932. Class 6.
National Biscuit Company. (See Bishop & Company, assignor.)
National Consumers Paper Corporation, New York, N. Y. Designers' marking paper in the roll. 296,528; Aug. 9; Serial No. 326,337; published May 31, 1932. Class 37.
National Home Library Foundation, Washington, D. C. Books, magazines, and pamphlets. 296,518; Aug. 9; Serial No. 325,179; published May 31, 1932. Class 38.
Neisner Brothers, Inc., Rochester, N. Y. Shirts, blouses, underwear, and caps. 296,481; Aug. 9; Serial No. 319,783; published Dec. 1, 1931. Class 39.
Neptune Meter Company, Jersey City, N. J., and New York, N. Y., to Neptune Meter Company, New York, N. Y. Water and other fluid meters and parts. 88,779–80; renewed Oct. 22, 1932.
Neuss, Hesslein & Co., Inc., New York, N. Y. Cotton piece goods. 296,398; Aug. 9; Serial No. 323,763; published May 24, 1932. Class 42.
Nurre Companies, Incorporated, The, Bloomington, Ind. Slabs and tiles of glass. 296,467; Aug. 9; Serial No. 324,827; published May 17, 1932. Class 12.
Oesterle, Mrs., & Son, Milmay, N. J. Meat and gravy seasoning. 26,578; Aug. 9. Class 46.
Old Ben Coal Corporation, Chicago, Ill. Coal. 296,420; Aug. 9; Serial No. 326,429; published May 31, 1932. Class 1.
Onlibest Hosiery Mills, Inc., Berlin, N. J. Hosiery. 296,432; Aug. 9; Serial No. 326,158; published May 24, 1932. Class 39.

Oxygen Therapy Service, Inc., New York, N. Y. Hospital and sick room apparatus. 296,483; Aug. 9; Serial No. 326,159; published May 24, 1932. Class 44.
Palmer Products, Inc., Waukesha, Wis. Soap paste. 296,583; Aug. 9. Class 4.
Paraffine Companies, Inc., The, San Francisco, Calif. Mulch paper. 296,504; Aug. 9; Serial No. 297,765; published May 24, 1932. Class 37.
Park Publishing Company, Chicago, Ill. Publication. 296,488; Aug. 9; Serial No. 318,563; published Oct. 13, 1931. Class 38.
Parker Brothers, Inc., Portland, Me., and Salem, Mass. Board game. 296,452; Aug. 9; Serial No. 325,917; published May 31, 1932. Class 22.
Pep Manufacturing Company, New York, N. Y. Sealing compounds. 296,408; Aug. 9; Serial No. 324,722; published May 31, 1932. Class 5.
Plastergon Wall Board Company, Buffalo, N. Y. Thermal and sound insulating wall board. 296,535; Aug. 9; Serial No. 325,047; published May 17, 1932. Class 12.
Plastergon Wall Board Company, Buffalo, N. Y. Thermal and sound insulating wall board. 296,536; Aug 9; Serial No. 325,149; published May 17, 1932. Class 12.
Plough, Inc., doing business as The St. Joseph's Laboratories, Memphis, Tenn. Medicinal preparation. 296,485; Aug. 9; Serial No. 324,132; published May 24, 1932. Class 6.
Practical Mechanics Publishing Co., Chicago, Ill. Publication. 296,465; Aug. 9; Serial No. 324,750; published May 31, 1932. Class 38.
Primrose House, Inc., Dover, Del., and New York, N. Y. Skin and toilet preparations. 296,479; Aug. 9; Serial No. 318,565; published May 31, 1932. Class 6.
Prodermatect Company, The, Scottdale, Pa. Cosmetic preparations. 296,441; Aug. 9; Serial No. 322,267; published May 31, 1932. Class 6.
Proracform Company, The, Chicago, Ill. Periodical. 296,548; Aug. 9; Serial No. 326,115; published May 24, 1932. Class 38.
Proteo Foods, Incorporated, Chicago, Ill. Bread. 296,437; Aug. 9; Serial No. 325,918; published May 24, 1932. Class 46.
Pure Orange Juice Company of America, The, Chicago, Ill. Orange juice. 296,516; Aug. 9; Serial No. 300,142; published May 24, 1932. Class 45.
Reeves Pulley Company, Columbus, Ind. Board game. 296,401; Aug. 9; Serial No. 324,083; published May 24, 1932. Class 22.
Reiss, Dr. Rudolf, Rheumasan- und Lenicet-Fabrik, Berlin-Charlottenburg, Germany. Antiseptics, hemostatics, styptics, etc. 296,498; Aug. 9; Serial No. 309,142; published May 24, 1932. Class 6.
Reiss, Dr. Rudolf, Rheumasan- und Lenicet-Fabrik, Berlin-Charlottenburg, Germany. Medicines. 296,499; Aug. 9; Serial No. 309,145; published May 24, 1932. Class 6.
Rheumatox Company. (See Kull, William T.)
Ridgway, Edward F., to John Wilson (Sheffield) Limited, Sheffield, England, successor. Knives, cleavers, choppers, etc. 87,657; renewed July 30, 1932.
Rostone, Incorporated, Lafayette, Ind. Composite structural materials. 296,539; Aug. 9; Serial No. 325,412; published May 17, 1932. Class 12.
Rubinger Sportswear, Corp., New York, N. Y., and West New York, N. J. Dresses and suits. 296,476; Aug. 9; Serial No. 324,487; published May 24, 1932. Class 39.
St. Joseph's Laboratories, The. (See Plough, Inc.)
Sauter Brothers, New York, N. Y. Textiles. 296,521; Aug. 9; Serial No. 325,882; published May 31, 1932. Class 42.
Scharkopf, Frederick J., Richmond Hill, N. Y. Topical preparation. 296,569; Aug. 9; Serial No. 326,194; published May 31, 1932. Class 6.
Schneider, Ph., Brewing Co., Trinidad, Colo. Malt beverages. 296,487; Aug. 9; Serial No. 269,429; published Nov. 25, 1930. Class 48.
Selnsheimer, H. A., Company, The, Cincinnati, Ohio. Students' clothing. 296,472; Aug. 9; Serial No. 320,646; published Dec. 15, 1931. Class 42.
Shaw, Alex. D. & Co., New York, N. Y. Sherry-wine. 87,012; renewed June 18, 1932.
Simon, Jacob, doing business as Sun Bleach Products Company, Chicago, Ill. Washing fluid. 296,480; Aug. 9; Serial No. 319,039; published May 24, 1932. Class 6.
Simson & Frey, Inc., New York, N. Y. Violins. 88,966; renewed Oct. 29, 1932.
Skinit Co. (See Madden, Johanna H.)
Spielman, Hermann, & Sohn, Vienna, Austria. Neckties. 296,495–6; Aug. 2; Serial Nos. 312,962–3; published May 24, 1932. Class 39.
Spring Mountain Vineyard Co., Inc., New York, N. Y. Grape juice. 296,522; Aug. 9; Serial No. 325,884; published May 24, 1932. Class 45.
Stedman Manufacturing Company, Asheboro, N. C. Handkerchiefs. 296,523; Aug. 9; Serial No. 326,040; published May 24, 1932. Class 42.
Stoller, Joseph, New York, N. Y. Eggs. 296,435; Aug. 9; Serial No. 325,696; published May 24, 1932. Class 46.
Stone, Louis C., New York, N. Y. Title for a column in a magazine. 296,520; Aug. 9; Serial No. 325,544; published May 31, 1932. Class 38.
Stroock, S., & Co. Inc., New York, N. Y. Cloth. 296,532; Aug. 9; Serial No. 326,448; published May 31, 1932. Class 42.
Sun Bleach Products Company. (See Simon, Jacob.)
Talenti, Saverio, Long Island City, N. Y. Olive oil. 296,573; Aug. 9. Class 46.
Thoma, Leo, jr., doing business as Leo Thoma Bottling Co., Kansas City, Mo. Beverages and syrups and extracts. 296,530–1; Aug. 9; Serial Nos. 326,435–6; published May 31, 1932. Class 45.
Thompson, Eleanor G., Kansas City, Mo. Scotch short bread. 296,443; Aug. 9; Serial No. 325,377; published May 24, 1932. Class 46.
Tobin & Edelman, Philadelphia, Pa. Children's dresses. 296,425; Aug. 9; Serial No. 325,666; published May 17, 1932. Class 39.
Toil-Glen Products Co. (See Mueth, Eugene.)
Triner, Joseph, Company, Chicago, Ill. General tonic having a wine base. 296,555; Aug. 9; Serial No. 325,124; published May 31, 1932. Class 6.
Triple "XXX" Company, Galveston, Tex. Non-alcoholic soft drink, syrups, and concentrates. 296,402; Aug. 9; Serial No. 323,070; published May 31, 1932. Class 45.
Trommsdorf, H., Erfurt and Aix-la-Chapelle, to Clemens Lageman, doing business as the Firm of H. Trommsdorf, Aachen, Germany. Medicinal preparations. 88,484; renewed May 7, 1932.
U-Va-Jee Manufacturing Co., assignor, by mesne assignments, to Juliana Krueger, doing business as U-Va-Jee Manufacturing Co., Watertown, Wis. Medicinal salve. 86,841; renewed June 4, 1932.
Ullman, Sigmund, Co., assignor to General Printing Ink Corporation, New York, N. Y. Printing Inks. 38,689; renewed July 29, 1932.
U. S. Oil Company, East Providence, R. I. Hydrosulphite products or compounds. 296,560; Aug. 9; Serial No. 325,731; published May 24, 1932. Class 6.
United States Playing Card Company, The, East Norwood, Cincinnati, Ohio. Playing cards. 296,414; Aug. 9; Serial No. 326,438; published May 31, 1932. Class 22.
United States Playing Card Company, The, East Norwood, Cincinnati, Ohio. Playing cards. 296,446; Aug. 9; Serial No. 325,155; published May 31, 1932. Class 22.
Uptown Card and Paper Company, New York, N. Y. Bond paper. 296,490; Aug. 9; Serial No. 324,678; published May 24, 1932. Class 37.
Vine-Glo Corporation of New York, New York, N. Y. Grape juice. 296,403; Aug. 9; Serial No. 322,194; published May 24, 1932. Class 45.
Voegeli Bros. Drug Co., The, Minneapolis, Minn., assignors, by mesne assignments, to Lambert Pharmacal Company, Wilmington, Del. Liquid antiseptic or antizymatic wash. 39,452; renewed Dec. 9, 1932.
Voss, Johann H. H., doing business as J. H. H. Voss, Inc., New York, N. Y. Valves. 296,577; Aug. 9. Class 23.
Wakefield, C. C., & Company, assignor to C. C. Wakefield and Company Limited, London, England. Oils for heating, lighting, and lubricating. 89,589; renewed Dec. 24, 1932.
Wallingford Laboratories, Inc., The, Wallingford, Conn. Cream, lipsticks, rouge, etc. 296,566; Aug. 9; Serial No. 326,035; published May 24, 1932. Class 6.
Wampole & Co., Henry K., assignor to Henry K. Wampole and Company, Incorporated, Philadelphia, Pa. Medicinal and chemical preparations. 39,521; renewed Dec. 23, 1932.
Ward, Samuel, Manufacturing Company, Boston, Mass. Record books and diaries. 296,543; Aug. 9; Serial No. 325,767; published May 24, 1932. Class 37.
Washburn Crosby Company, assignor to General Mills, Inc., Minneapolis, Minn. Wheat-flour. 39,328; renewed Nov. 25, 1932.
Waterman, Arthur, Boston, Mass. Skillets or frying pans. 296,470; Aug. 9; Serial No. 317,652; published May 17, 1932. Class 13.
Waterman & Company, New York, N. Y. Food products. 296,510; Aug. 9; Serial No. 312 076; published May 31, 1932. Class 46.
Weinfeld, Annie E., Trustee of the Estate of Annie Dugan, deceased, Chicago, Ill. Stone patcher material. 296,580; Aug. 9. Class 12.
Weintraub, Maxwell, doing business as Maxwell Chemical Company, Brooklyn, N. Y. Liquid carbon remover. 296,440; Aug. 9; Serial No. 324,450; published May 24, 1932. Class 6.
Wertheimer, E., & Cie., Paris, France, assignor, by mesne assignments, to Bourjois, Inc., New York, N. Y. Toilet powders. 89,313; renewed Dec. 3, 1932.
Western Brick Company, Danville, Ill. Bricks. 296,540; Aug. 9; Serial No. 325,609; published May 17, 1932. Class 12.
White's, S. R., Sons, assignor to S. R. White's Sons, Inc., Norfolk, Va. Agricultural implements and parts. 88,040; renewed Aug. 20, 1932.
Wilson, John, (Sheffield) Limited. (See Ridgway, Edward F.)
Wohl Shoe Company, St. Louis, Mo. Polishing and cleaning preparations and dressings. 296,431; Aug. 9; Serial No. 326,122; published May 24, 1932. Class 4.
Wolff Bros. Milling Co. Inc., Paterson, N. J. Cereal foods and buckwheat flour. 296,511; Aug. 9; Serial No. 313,520; published May 31, 1932. Class 46.
Wright, Alfred, Perfumer Inc., Philadelphia, Pa., assignor to Mellier Company, Perfumer, St. Louis, Mo. Perfumery. 88,990; renewed Oct. 29, 1932.

Wuster, Doris A., doing business as D. A. W. Laboratories, Baltimore, Md. Drawing and healing salve. 296,561; Aug. 9; Serial No. 325,735; published May 24, 1932. Class 6.
Yanni, A., & Son, McKeesport, Pa. Washing fluid. 296,563; Aug. 9; Serial No. 325,861; published May 24, 1932. Class 6.

LIST OF REGISTRANTS OF LABELS

Anestex Laboratories (De-Ce Products Co. of N. Y.). (See Curtis, David.)
Bouzeanes, Steven C., doing business as Honey Blossom Candy Co., Tampa, Fla. Honey Blossom Bar. For Cocoanut toasted bars. 40,990; Aug. 9.
Corzol Chemical Co. (See Graebner, Walter W.)
Curtis, David, doing business as Anestex Laboratories (De-Ce Products Co. of N. Y.), New York, N. Y. Anestex Neotubes. For Local Anesthetic. 40,991; Aug. 9.
Douglas, Herbert P., doing business as Douglas Auto Polish Company, Pittsburgh, Pa. O-Boy. For Preparation for Cleaning and Polishing Automobiles. 40,992; Aug. 9.
Duofold Inc., Mohawk, N. Y. Du-Ons. For Underwear. 40,993; Aug. 9.
Dwinell-Wright Company, Boston, Mass. Vacuum Packed Coffee. For Coffee. 40,994; Aug. 9.
General Mills, Inc., Minneapolis, Minn. Wheaties. For Whole Wheat Flakes. 40,995; Aug. 9.
Goldenberg, D., Inc., Philadelphia, Pa. Goldenberg's Walnut Chews. For Candy. 40,996; Aug. 9.
Graebner, Walter W., doing business as Corzol Chemical Co., Philadelphia, Pa. Corzol. For Salve for Head and Chest Colds. 40,997; Aug. 9.
Hoague-Sprague Corporation, Lynn, Mass. Rosa Lee. For Boxes. 40,998; Aug. 9.
Hoague-Sprague Corporation, Lynn, Mass. Betsy Perkins. For Boxes. 40,999; Aug. 9.
Hoague-Sprague Corporation, Lynn, Mass. Hunter's Five. For Boxes. 41,000; Aug. 9.
Hoague-Sprague Corporation, Lynn, Mass. The Hyde Park. For Boxes. 41,001; Aug. 9.
Hoberg Paper & Fibre Company, Green Bay, Wis. Fashion. For Bathroom Tissue. 41,002; Aug. 9.
Honey Blossom Candy Co. (See Bouzeanes, Steven C.)
Jackson, Henry J., Chicago, Ill. Henry J. Havana Smokers. For Cigars. 41,003; Aug. 9.
Kolorkraft Company. (See Wilson, W. E.)
Krim, Max, doing business as Krim Beverage Company, Lebanon, Pa. Krim's Ju-C-Orange. For Carbonated Orangeade. 41,004; Aug. 9.
Lindley, Clint C., doing business as Southwest Flavoring Company, San Antonio, Tex. Cremello. For Ice Cream Powder. 41,005; Aug. 9.
Morgan Sabalol Products, Inc., New York, N. Y. Morgan's Sabalol Spray. For Nose and Throat Spray. 41,006; Aug. 9.
Pabst Corporation, Milwaukee, Wis. Pasteurized Process Cheese. For Cheese. 41,007; Aug. 9.
Package Paper Company, Holyoke, Mass. Famous 'Planes. For Candy. 41,008; Aug. 9.
Porter Chemical Company, The, Hagerstown, Md. Cartoon Lessons. For Cartoon Lessons. 41,009; Aug. 9.
Sacks-Sons Carton Co., Inc., Brooklyn, N. Y. Wear-Rite Brassières & Girdles. For Brassières and Girdles. 41,010; Aug. 9.
Southwest Flavoring Company. (See Lindley, Clint C.)
Standard Brands Incorporated, New York, N. Y. Break O'Morn. For Coffee. 41,011; Aug. 9.
Streamberg, Arthur L., Swampscott, Mass. Kwix-A-Wink Time Table. For Combination Time Tables and General Business Advertisements. 41,012; Aug. 9.
Streamberg, Arthur L., Swampscott, Mass. The "Jiffy" Time Table. For Combination Time Tables and General Business Advertisements. 41,013; Aug. 9.
Wilson, Walter E., doing business as Kolorkraft Company, Detroit, Mich. Kopy-Kat, Draw and Color Pictures. For Colors. 41,014; Aug. 9.
Wilson, Walter E., doing business as Kolorkraft Company, Detroit, Mich. Kopy-Kat. Color Pictures. For Assorted Colors. 41,015; Aug. 9.

LIST OF REGISTRANTS OF PRINTS

B. V. D. Company, Inc., The, New York, N. Y. Penny for Penny. For Athletic Underwear. 13,793; Aug. 9.
B. V. D. Company, Inc., The, New York, N. Y. Evening Gown Backs. For Bathing Suits. 13,794; Aug. 9.
B. V. D. Company, Inc., The, New York, N. Y. The 1932 B. V. D. Surf Suits. For Bathing Suits. 13,795; Aug. 9.
Barrett Company, The, New York, N. Y. Nitrate of Soda. For Nitrate of Soda. 13,796; Aug. 9.
Crystal Corporation, New York, N. Y. Outdoor Girl Beautygram. For Lipstick, Face Rouge, and Face Powder. 13,797; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Wheat-Tone Contains Both Malt and Milk for Health! For Bread. 13,798; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Wheat-Tone is a Compact All-Food Bread. For Bread. 13,799; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Wheat Germ, Malt, Milk, Cracked Wheat, Honey, Potatoes—A Meal in Itself! For Bread. 13,800; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Found One Bread Wheat-Tone for All Who Like Graham, Bran, Cracked Wheat or any Dark Bread. For Bread. 13,801; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Wheat-Tone Blended from Ingredients that make a Loaf to Satisfy All Dark Bread Tastes! For Bread. 13,802; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. A Whole Meal in Itself! For Bread. 13,803; Aug. 9.
Long, W. E. Co., The, Chicago, Ill. Biggest Food Value in the World! For Bread. 13,804; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Wheat-Tone Toast! All the Breakfast You Need! For Bread. 13,805; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Wheat-Tone Makes Food Dollars Go Farther! For Bread. 13,806; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Old Home Asks Your Inspection before You Buy! For Bread. 13,807; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Why Choose Your Bread Blindly? For Bread. 13,808; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Naturally Aged Flour—Cellophane Wrapper—Ready to Serve. For Bread. 13,809; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Now Enjoy All That Any Dark Bread Can Give You in Wheat-Tone. For Bread. 13,810; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. If You Like Graham or Bran Bread Try Wheat-Tone. For Bread. 13,811; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Wheat Tone Bread. For Bread. 13,812; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Here is Bread Value Plus Wheat-Tone. For Bread. 13,813; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Wheat-Tone Has Replaced Two or More Dark Breads in Many Homes! For Bread. 13,814; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Over 100 Women Helped Us to Perfect Wheat-Tone. For Bread. 13,815; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Wheat-Tone Amazes Guests by Giving Each Her Preferred Taste. For Bread. 13,816; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Praise from Hundreds!—Read What They Say About Wheat-Tone. For Bread. 13,817; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. Where Fine Foods Are Sold—Transparent Packages Let You See Before You Buy! For Bread. 13,818; Aug. 9.
Long, W. E., Co., The, Chicago, Ill. More Mineral Salts—More Food Value—More Flavor in—Wheat-Tone. For Bread. 13,819; Aug. 9.
McVittie Waffle House, Inc., doing business as McVittie's, Denver, Colo. "Twin Dinner." For Dinners. 13,820; Aug. 9.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Harlan-Wallins Coal Corporation. 296,438; Aug. 9; Serial No. 326,143; published May 24, 1932.
Coal. Old Ben Coal Corporation. 296,420; Aug. 9; Serial No. 326,429; published May 31, 1932.
Coke. Atlantic Refining Company. 296,409–11; Aug. 9; Serial Nos. 323,648–50; published May 31, 1932.
Hops. E. Clemens Horst Co. 296,572; Aug. 9.
Kid, glazed kid, and other leathers. Amalgamated Leather Companies. 296,417; Aug. 9; Serial No. 326,249; published May 31, 1932.

Plant of the cactus family. Consolidated Displays, Inc. 296,413; Aug. 9; Serial No. 320,633; published May 31, 1932.
Poultry litter. W. Durbrow. 89,449; renewed Dec. 17, 1932.
Resins and plastic masses, Artificial. I. G. Farbenindustrie Aktiengesellschaft. 296,407; Aug. 9; Serial No. 324,737; published May 24, 1932.

CLASS 2

Baskets, boxes, pans, etc. All-Steel-Equip Company. 296,469; Aug. 9; Serial No. 329,683; published May 17, 1932.

CLASS 4

Cleaner, Toilet bowl. E. Mueth. 296,478; Aug. 9; Serial No. 324,796; published May 31, 1932.
Polishing and cleaning preparations and dressings. Wohl Shoe Company. 296,431; Aug. 9; Serial No. 326,122; published May 24, 1932.
Preparation for cleaning and polishing aluminum, etc. Cornish Mining Co. 296,422; Aug. 9; Serial No. 325,424; published May 24, 1932.
Soap paste. Palmer Products, Inc. 296,583; Aug. 9.

CLASS 5

Adhesive. Modern Supply Company. 296,416; Aug. 9; Serial No. 326,227; published May 31, 1932.
Adhesive cement. Lamac Process Company. 296,436; Aug. 9; Serial No. 325,794; published May 24, 1932.
Sealing compounds. Pep Manufacturing Company. 296,408; Aug. 9; Serial No. 324,722; published May 31, 1932.

CLASS 6

Antiseptics, hemostatics, styptics, etc. Dr. Rudolf Reiss Rheumasan- und Lenicet-Fabrik. 296,498; Aug. 9; Serial No. 309,142; published May 24, 1932.
Balsam, Cough. R. T. Dunn. 296,557; Aug. 9; Serial No. 325,426; published May 24, 1932.
Calcium compound with saponin. Gebe & Co., Aktiengesellschaft. 296,482; Aug. 9; Serial No. 319,878; published May 24, 1932.
Carbon remover, Liquid. M. Weintraub. 296,440; Aug. 9; Serial No. 324,450; published May 24, 1932.
Chemical preparation. Chipman Chemical Company. 296,442; Aug. 9; Serial No. 324,881; published May 31, 1932.
Compound for the prevention of incrustation in the feed water of boilers, etc. National Aluminate Corporation. 296,550; Aug. 9; Serial No. 325,295; published May 24, 1932.
Cosmetic preparations. Prodermatect Company. 296,441; Aug. 9; Serial No. 322,267; published May 31, 1932.
Cosmetics and facial preparations. Glebeas Importation Co. Inc. 296,486; Aug. 9; Serial No. 324,556; published May 31, 1932.
Cream, Denture. Alcolite Inc. 296,568; Aug. 9; Serial No. 326,318; published May 31, 1932.
Cream, lipsticks, rouge, etc. Wallingford Laboratories, Inc. 296,566; Aug. 9; Serial No. 326,035; published May 24, 1932.
Fluid, Washing. J. Simon. 296,480; Aug. 9; Serial No. 319,039; published May 24, 1932.
Hair remedies. F. A. Gray. 89,250; renewed Dec. 3, 1932.
Hydrosulphite products. U. S. Oil Company. 296,560; Aug. 9; Serial No. 325,731; published May 24, 1932.
Laxatives. Actona Research Laboratories, Inc. 296,564; Aug. 9; Serial No. 325,863; published May 31, 1932.
Liquid antiseptic or antizymatic wash. Voegeli Bros. Drug Co. 39,452; renewed Dec. 9, 1932.
Liquid shampoo preparation. F. E. Ischerland. 296,484; Aug. 9; Serial No. 323,664; published May 31, 1932.
Medicated adhesive bandage dressing. Deane Plaster Co. 296,559; Aug. 9; Serial No. 325,569; published May 24, 1932.
Medicinal and chemical preparations. Henry K. Wampole & Co. 39,521; renewed Dec. 23, 1932.
Medicinal preparation. Plough, Inc. 296,485; Aug. 9; Serial No. 324,132; published May 24, 1932.
Medicinal preparations. H. Trommsdorf. 86,484; renewed May 7, 1932.
Medicines. Dr. Rudolf Reiss Rheumasan- und Lenicet-Fabrik. 296,499; Aug. 9; Serial No. 309,145; published May 24, 1932.
Perfumery. Alfred Wright Perfumer Inc. 88,990; renewed Oct. 29, 1932.
Perfumes. Colgate & Co. 89,226; renewed Dec. 3, 1932.
Perfumes, sachet-powder, toilet water, etc. R. Hudnut. 88,881; renewed Oct. 29, 1932.
Pharmaceutical preparation. J. E. McCarthy. 296,500; Aug. 9; Serial No. 308,897; published May 24, 1932.
Preparation, Topical. F. J. Scharkopf. 296,569; Aug. 9; Serial No. 326,194; published May 31, 1932.
Preparations for lumbago, etc. W. T. Kull. 296,483; Aug. 9; Serial No. 321,770; published May 24, 1932.
Preparations for treating fluids for use in boilers. Allis-Chalmers Manufacturing Company. 296,565; Aug. 9; Serial No. 325,933; published May 24, 1932.
Resin, Synthetic. Hercules Powder Company. 296,562; Aug. 9; Serial No. 325,824; published May 31, 1932.
Salt. Diamond Crystal Salt Company. 38,626; renewed July 15, 1932.
Salve. J. H. Madden. 296,567; Aug. 9; Serial No. 326,382; published May 31, 1932.
Salve, Drawing and healing. D. A. Wuster. 296,561; Aug. 9; Serial No. 325,735; published May 24, 1932.
Salve, Medicinal. U-Va- Jee Manufacturing Co. 86,841; renewed June 4, 1932.
Skin and toilet preparations. Primrose House, Inc. 296,479; Aug. 9; Serial No. 318,565; published May 31, 1932.
Toilet powders. E. Wertheimer & Cie. 89,313; renewed Dec. 3, 1932.
Toilet preparations. R. Hudnut. 88,880; renewed Oct. 29, 1932.
Toilet preparations. R. Hudnut. 88,883; renewed Oct. 29, 1932.
Toilet preparations, Line of. Cosmetic Research Laboratories. 296,558; Aug. 9; Serial No. 325,461; published May 24, 1932.
Tonic having a wine base, General. J. Triner Co. 296,555; Aug. 9; Serial No. 325,124; published May 31, 1932.
Washing fluid. A. Yanni & Son. 296,563; Aug. 9; Serial No. 325,861; published May 24, 1932.

CLASS 7

Rope and cordage. Columbian Rope Company. 87,854; renewed Aug. 13, 1932.

CLASS 9

Photographic flashes. Hitt Fireworks Company. 296,460; Aug. 9; Serial No. 326,102; published May 24, 1932.

CLASS 11

Inks, Printing. Sigmund Ullman Co. 38,689; renewed July 29, 1932.

CLASS 12

Beams, doors, laths, planks, etc., Wooden. British Columbia Lumber and Shingle Manufacturers Limited. 296,538; Aug. 9; Serial No. 325,207; published May 17, 1932.
Binding and lining materials, Acid resisting. Atlas Mineral Products Company. 296,554; Aug. 9; Serial No. 325,032; published May 17, 1932.
Board, Thermal and sound insulating wall. Plastergon Wall Board Company. 296,535; Aug. 9; Serial No. 325,047; published May 17, 1932.
Board, Thermal and sound insulating wall. Plastergon Wall Board Company. 296,536; Aug. 9; Serial No. 325,149; published May 17, 1932.
Brick, refractory brick, tile, etc., Fire. Gladding, McBean & Co. 296,501; Aug. 9; Serial No. 307,714; published Sept. 1, 1931.
Bricks. Western Brick Company. 296,540; Aug. 9; Serial No. 325,609; published May 17, 1932.
Cement, Portland. J. H. Houghton. 86,804; renewed June 4, 1932.
Chains, Anti-skid. Atlas Supply Company. 296,426; Aug. 9; Serial No. 325,775; published May 17, 1932.
Preparation for mixing with cement, lime, and plaster, etc. Cement Marketing Company. 296,542; Aug. 9; Serial No. 325,707; published May 31, 1932.
Slabs and tiles of glass. Nurre Companies. 296,467; Aug. 9; Serial No. 324,827; published May 17, 1932.
Stone patcher material. A. E. Weinfeld. 296,580; Aug. 9.
Structural materials, Composite. Rostone, Incorporated. 296,539; Aug. 9; Serial No. 325,412; published May 17, 1932.
Tiles, flooring, and accessories, etc., Rubber. American Rubber Products Corporation. 296,541; Aug. 9; Serial No. 325,672; published May 31, 1932.
Weather strip felt. Felters Company. 296,571; Aug. 9.
Wood blocks for floors and the like. Cellized Oak Floor ing, Inc. 296,545; Aug. 9; Serial No. 325,892; published May 24, 1932.

CLASS 13

Chains for sprocket wheels. Boston Gear Works, Inc. 296,584; Aug. 9.
Skillets or frying pans. A. Waterman. 296,470; Aug. 9; Serial No. 317,652; published May 17, 1932.
Wire, Barb. American Steel & Wire Company of New Jersey. 89,079; renewed Nov. 12, 1932.

CLASS 15

Oils for heating, lighting, and lubricating. C. C. Wakefield & Company. 89,589; renewed Dec. 24, 1932.

CLASS 16

Paints. Denny, Hilborn & Rosenbacb. 86,890–2; renewed June 11, 1932.
Paints and painters' materials. Denny, Hilborn & Rosenbach. 87,049; renewed June 25, 1932.

CLASS 19

Boats, Metal. L. Montgomery. 296,570; Aug. 9.
Truck tank, trailer tank, etc. Davis Welding & Manufacturing Company. 296,477; Aug. 9; Serial No. 324,593; published May 17, 1932.
Trucks, Steel warehouse. Illinois Iron and Bolt Co. 87,342; renewed July 9, 1932.

CLASS 22

Cards, Playing. United States Playing Card Company. 296,414; Aug. 9; Serial No. 326,438; published May 31, 1932.

Cards, Playing. United States Playing Card Company. 296,446; Aug. 9; Serial No. 325,155; published May 31, 1932.
Chemical outfit for educational purposes. Kemkit Chemical Corporation. 296,405; Aug. 9; Serial No. 320,437; published May 24, 1932.
Dolls. Ideal Novelty & Toy Co. 296,462; Aug. 9; Serial No. 326,287; published May 24, 1932.
Game, Board. Parker Brothers, Inc. 296,452; Aug. 9; Serial No. 325,917; published May 31, 1932.
Game, Board. Reeves Pulley Company. 296,401; Aug. 9; Serial No. 324,083; published May 24, 1932.
Golf balls. Golf Ball Inc. 296,454–7; Aug. 9; Serial Nos. 326,088–91; published May 24, 1932.
Golf balls. Golf Ball Inc. 296,458; Aug. 9; Serial No. 326,093; published May 24, 1932.
Golf balls. Golf Ball Inc. 296,459; Aug. 9; Serial No. 326,099; published May 24, 1932.
Golf clubs. Billings & Spencer Company. 296,507; Aug. 9; Serial No. 312,596; published May 24, 1932.
Golf clubs. Crawford, McGregor and Canby Company. 296,406; Aug. 9; Serial No. 318,052; published May 24, 1932.
Golf tees. R. H. Johnson. 296,509; Aug. 9; Serial No. 312,919; published May 12, 1931.
Golf tees. Merion Sporting Goods Mfg., Corpn. 296,453; Aug. 9; Serial No. 325,956; published May 24, 1932.
Rowing machine body builder and reducing exerciser. Mac-Col Manufacturing Company. 296,448; Aug. 9; Serial No. 325,433; published May 24, 1932.
Toy cowboy accessories. Brauer Bros., Inc. 296,404; Aug. 9; Serial No. 321,718; published May 24, 1932.
Toy figures. Geo. Borgfeldt & Co. 296,463; Aug. 9; Serial No. 326,411; published May 31, 1932.

CLASS 23

Agricultural implements and parts. S. R. White's Sons. 88,040; renewed Aug. 20, 1932.
Cutlery and tools. Collins Company. 89,538; renewed Dec. 24, 1932.
Cutlery, machinery, and tools. Collins Company. 89,537; renewed Dec. 24, 1932.
Knives, cleavers, choppers, etc. E. F. Ridgway. 87,657; renewed July 30, 1932.
Scoops, Ice cream. S. H. Kress & Co. 296,576; Aug. 9.
Valves. J. H. H. Voss. 296,577; Aug. 9.

CLASS 26

Meters and parts, Water and other fluid. Neptune Meter Company. 88,779–80; renewed Oct. 22, 1932.

CLASS 31

Refrigerators and parts thereof, Electric. Grigsby-Grunow Company. 296,451; Aug. 9; Serial No. 325,787; published May 24, 1932.

CLASS 34

Blowers, Air-circulating. Austin Manufacturing and Sales Corp. 296,497; Aug. 9; Serial No. 314,224; published May 17, 1932.
Burners, Oil. Master Oil Burner, Inc. 296,468; Aug. 9; Serial No. 318,244; published May 17, 1932.

CLASS 35

Belting, Leather. Bay State Belting Company. 87,314; renewed July 9, 1932.

CLASS 36

Violins. Simson & Frey, Inc. 88,966; renewed Oct. 29, 1932.

CLASS 37

Banknotes, checks, drafts, etc. Dennison & Sons, Inc. 296,466; Aug. 9; Serial No. 324,785; published May 24, 1932.
Books and diaries, Record. Samuel Ward Manufacturing Company. 296,543; Aug. 9; Serial No. 325,767; published May 24, 1932.
Paper. Detroit Sulphite Pulp & Paper Co. 296,547; Aug. 9; Serial No. 326,082; published May 24, 1932.
Paper. Uptown Card and Paper Company. 296,490; Aug. 9; Serial No. 324,678; published May 24, 1932.
Paper in the roll, Designer's marking. National Consumers Paper Corporation. 296,528; Aug. 9; Serial No. 326,337; published May 31, 1932.
Paper lunch rolls, Waxed. Badger Paper Mills, Inc. 296,494; Aug. 9; Serial No. 300,258; published May 31, 1932.
Paper, Mulch. Paraffine Companies. 296,504; Aug. 9; Serial No. 297,765; published May 24, 1932.
Pass-books and check-book covers. Mayers Company. 296,519; Aug. 9; Serial No. 325,476; published May 31, 1932.
Pencils. Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth. 296,575; Aug. 9.

CLASS 38

Articles or writings. Examiner Printing Company. 296,491–3; Aug. 9; Serial Nos. 324,684–6; published May 24, 1932.
Booklets. American Institute of Banking. 296,581; Aug. 9.
Books, magazines, and pamphlets. National Home Library Foundation. 296,518; Aug. 9; Serial No. 325,179; published May 31, 1932.
Coupons. E. M. Evans. 296,546; Aug. 9; Serial No. 325,905; published May 31, 1932.
Directory, Attorney's. C-R-C Law List Company. 296,544; Aug. 9; Serial No. 325,816; published May 24, 1932.
Nom de plume for articles or writings. Examiner Printing Company. 296,464; Aug. 9; Serial No. 324,687; published May 24, 1932.
Periodical. L. B. Appleton. 296,550; Aug. 9; Serial No. 326,199; published May 31, 1932.
Periodical. W. D. Hoard & Sons Company. 296,551; Aug. 9; Serial No. 326,354; published May 31, 1932.
Periodical. Proracform Company. 296,548; Aug. 9; Serial No. 326,115; published May 24, 1932.
Periodicals. M. Levinson. 296,549; Aug. 9; Serial No. 326,150; published May 31, 1932.
Periodicals and descriptive bulletins. Kansas City Southern Railway Company. 296,506; Aug. 9; Serial No. 312,523; published May 24, 1932.
Publication. Chicago Rotoprint Company. 296,552; Aug. 9; Serial No. 326,362; published May 31, 1932.
Publication. Dosch-Kircher Organization. 296,489; Aug. 9; Serial No. 323,394; published May 31, 1932.
Publication. Hat Trade Publishing Company. 296,537; Aug. 9; Serial No. 325,170; published May 24, 1932.
Publication. Park Publishing Company. 296,488; Aug. 9; Serial No. 318,563; published Oct. 13, 1931.
Publication. Practical Mechanics Publishing Co. 296,465; Aug. 9; Serial No. 324,759; published May 31, 1932.
Publications. International Business Machines Corporation. 296,505; Aug. 9; Serial No. 312,051; published May 24, 1932.
Series of cartoons or comic strips. E. Byrnes. 296,553; Aug. 9; Serial No. 326,413; published May 31, 1932.
Title for a column in a magazine. L. C. Stone. 296,520; Aug. 9; Serial No. 325,544; published May 31, 1932.

CLASS 39

Apparel, Juvenile play. Keyston Bros. 296,423; Aug. 9; Serial No. 325,503; published May 31, 1932.
Apparel, Men's. Hickey-Freeman Company. 296,444; Aug. 9; Serial No. 326,258; published May 31, 1932.
Apparel, Wearing. E. Foltz. 296,424; Aug. 9; Serial No. 325,618; published May 24, 1932.
Blouses and shirts, Boys'. Alperin, Strauss Co. 296,445; Aug. 9; Serial No. 326,278; published May 31, 1932.
Clothing, Students'. H. A. Seinsheimer Company. 296,472; Aug. 9; Serial No. 320,646; published Dec. 15, 1931.
Coats, vests, pants, etc. Fashion Park Associates, Inc. 296,471; Aug. 9; Serial No. 320,497; published May 24, 1932.
Collars, shirts, pajamas, etc. H. D. Bob Company Inc. 296,428; Aug. 9; Serial No. 325,899; published May 31, 1932.
Dresses and suits. Rubinger Sportwear, Corp. 296,476; Aug. 9; Serial No. 324,487; published May 24, 1932.
Dresses, Children's. Tobin & Edelman. 296,425; Aug. 9; Serial No. 325,666; published May 17, 1932.
Hosiery. Jacob & Schey. 296,429; Aug. 9; Serial No. 325,984; published May 24, 1932.
Hosiery. L. Mossler. 296,474; Aug. 9; Serial No. 323,112; published May 24, 1932.
Hosiery. Onlibest Hosiery Mills, Inc. 296,432; Aug. 9; Serial No. 326,158; published May 24, 1932.
Neckties. Hermann Spielman & Sohn. 296,495–6; Aug. 9; Serial Nos. 312,962–3; published May 24, 1932.
Shirts. I. H. Barnett & Bro. 296,473; Aug. 9; Serial No. 321,196; published May 24, 1932.
Shirts. J. Danerbirsch. 296,503; Aug. 9; Serial No. 304,496; published Oct. 6, 1931.
Shirts, blouses, underwear, and caps. Neisner Brothers, Inc. 296,481; Aug. 9; Serial No. 319,783; published Dec. 1, 1931.
Suits, Outer. H. Daroff & Sons, Inc. 296,427; Aug. 9; Serial No. 325,781; published May 24, 1932.
Suits, overcoats, etc. Harris Clothing Company. 296,475; Aug. 9; Serial No. 323,661; published May 24, 1932.

CLASS 40

Combs, Hard rubber. American Hard Rubber Company. 296,579; Aug. 9.

CLASS 42

Cloth. S. Stroock & Co. Inc. 296,532; Aug. 9; Serial No. 326,448; published May 31, 1932.
Cotton piece goods, Grey. Neuss, Hesslein & Co. 296,398; Aug. 9; Serial No. 323,763; published May 24, 1932.
Fabrics. Celanese Corporation of America. 296,526; Aug. 9; Serial No. 326,176; published May 24, 1932.
Fabrics, Knitted. Eday Fabrics, Incorporated. 296,524; Aug. 9; Serial No. 326,083; published May 24, 1932.
Handkerchiefs. Stedman Manufacturing Company. 296,523; Aug. 9; Serial No. 326,040; published May 24, 1932.
Piece goods. F. Ducharne Silk Co. Inc. 296,533–4; Aug. 9; Serial Nos. 326,519–20; published May 31, 1932.
Textile dish cloths. Electric Knitting Co. Inc. 296,527; Aug. 9; Serial No. 326,284; published May 31, 1932.

Textile fabrics. Doshi Trading Co. Ltd. 296,525; Aug. 9; Serial No. 326,131; published May 24, 1932.
Textiles. Sauter Brothers. 296,521; Aug. 9; Serial No. 325,882; published May 31, 1932.
Woolen cloth. American Woolen Company. 87,028; renewed June 25, 1932.
Woolen cloth in the piece. Berkwits & Bloomfield, Inc. 296,399; Aug. 9; Serial No. 321,798; published May 24, 1932.

CLASS 43

Thread and yarn. I. P. Bemberg Aktiengesellschaft. 296,517; Aug. 9; Serial No. 325,054; published May 24, 1932.
Threads. Gudebrod Brothers Silk Company. 296,400; Aug. 9; Serial No. 321,317; published May 24, 1932.

CLASS 44

Atomizers and nebulizers. De Vilbiss Manufacturing Company. 87,733; renewed Aug. 6, 1932.
Electro-magnetic belt. J. D. Markwood. 296,421; Aug. 9; Serial No. 325,178; published May 24, 1932.
First aid and protective equipment. E. D. Bullard Company. 296,502; Aug. 9; Serial No. 306,084; published May 24, 1932.
Hospital and sick room apparatus. Oxygen Therapy Service, Inc. 296,433; Aug. 9; Serial No. 326,159; published May 24, 1932.
Respirators, Artificial. Warren E. Collins, Inc. 296,430; Aug. 9; Serial No. 326,080; published May 31, 1932.
Suspensories, abdominal bands, and surgical bandages. Deimel Linen-Mesh System Company. 89,345; renewed Dec. 10, 1932.

CLASS 45

Beverage, sirup, and extract. J. G. Buston. 296,520; Aug. 9; Serial No. 326,412; published May 31, 1932.
Beverages. J. Freedman. 296,574; Aug. 9.
Beverages. Monument Bottling Company. 296,450; Aug. 9; Serial No. 325,691; published May 24, 1932.
Beverages. Mother Brown's Pure Orange Juice Company. 296,508; Aug. 9; Serial No. 312,660; published May 24, 1932.
Beverages, concentrates, and extracts. Mission Dry Corporation. 296,449; Aug. 9; Serial No. 325,479; published May 31, 1932.
Beverages, syrups, and extracts. L. Thoma, jr. 296,530–1; Aug. 9; Serial Nos. 326,435–6; published May 31, 1932.
Drink, syrup, and concentrates for making same. Triple "XXX" Company. 296,402; Aug. 9; Serial No. 323,070; published May 31, 1932.
Grape juice. Spring Mountain Vineyard Co. Inc. 296,522; Aug. 9; Serial No. 325,884; published May 24, 1932.
Grape juice. Vine-Glo Corporation of New York. 296,403; Aug. 9; Serial No. 322,194; published May 24, 1932.
Orange juice. Pure Orange Juice Company of America. 296,516; Aug. 9; Serial No. 300,142; published May 24, 1932.

CLASS 46

Bread. Proteo Foods, Incorporated. 296,437; Aug. 9; Serial No. 325,918; published May 24, 1932.
Bread, Scotch short. E. G. Thompson. 296,443; Aug. 9; Serial No. 325,377; published May 24, 1932.
Butter, Creamery. David W. Lewis & Co. Inc. 296,582; Aug. 9.
Candies. L. J. Christopher. 88,844; renewed Oct. 29, 1932.
Candy. C. A. Crane. 89,340; renewed Dec. 10, 1932.
Candy, Cocoanut. V. Contos. 39,569; renewed Dec. 30, 1932.
Canned salmon. Astoria & Puget Sound Canning Co. 89,432; renewed Dec. 17, 1932.
Cheese. P. R. Forbriger. 296,512–15; Aug. 9; Serial Nos. 314,528–31; published May 31, 1932.
Cocoa, chocolate, candy. Hartwig & Vogel Aktiengesellschaft. 89,029; renewed Nov. 5, 1932.
Eggs. J. Stoller. 296,435; Aug. 9; Serial No. 325,696; published May 24, 1932.
Eggs and butter. Alex. Grossmann & Co. Inc. 296,418; Aug. 9; Serial No. 326,256; published May 31, 1932.
Extracts, Fruit. A. Boake, Roberts & Co. Ltd. 89,437; renewed Dec. 17, 1932.
Figs, Candy. Bishop & Company. 88,833; renewed Oct. 29, 1932.
Flour. Abilene Flour Mills Company. 296,412; Aug. 9; Serial No. 323,647; published May 24, 1932.
Flour. Co-Operative Grange League Federation Exchange, Inc. 296,434; Aug. 9; Serial No. 325,567; published May 31, 1932.
Flour, Wheat. Federal Mills, Inc. 296,439; Aug. 9; Serial No. 326,207; published May 24, 1932.
Flour, Wheat. Fisher Flouring Mills Company. 89,350; renewed Dec. 10, 1932.
Flour, Wheat. Hardesty Milling Co. 87,445; renewed July 16, 1932.
Flour, Wheat. Washburn Crosby Company. 39,328; renewed Nov. 25, 1932.
Food products. Waterman & Company. 296,510; Aug. 9; Serial No. 312,076; published May 31, 1932.
Foods and buckwheat flour, Cereal. Wolff Bros. Milling Co. Inc. 296,511; Aug. 9; Serial No. 313,520; published May 31, 1932.
Oleomargarin. Ammon & Person. 87,838; renewed Aug. 13, 1932.
Olive oil. S. Talenti. 296,573; Aug. 9.
Pastries. M. B. Kueter. 296,419; Aug. 9; Serial No. 326,262; published May 31, 1932.
Seasoning, Meat and gravy. Mrs. Oesterle & Son. 296,578; Aug. 9.

CLASS 47

Wine, Sherry. Alex. D. Shaw & Co. 87,012; renewed June 18, 1932.

CLASS 48

Malt beverages. E. E. Hart. 296,415; Aug. 9; Serial No. 326,473; published May 31, 1932.
Malt beverages. Ph. Schneider Brewing Co. 296,487; Aug. 9; Serial No. 269,429; published Nov. 25, 1930.
Malt beverages and extracts. Compañia Cervecera Internacional, S. A. 296,447; Aug. 9; Serial No. 325,423; published May 24, 1932.

CLASS 49

Whisky. MacDonald & Muir. 296,461; Aug. 9; Serial No. 326,111; published May 24, 1932.

LIST OF LABELS

Anestex Neotubes. For Local Anesthetic. D. Curtis. 40,991; Aug. 9.
Betsy Perkins. For Boxes. Hoague-Sprague Corporation. 40,999; Aug. 9.
Break O' Morn. For Coffee. Standard Brands Incorporated. 41,011; Aug. 9.
Cartoon Lessons. For Cartoon Lessons. Porter Chemical Company. 41,009; Aug. 9.
Corzol. For Salve for Head and Chest Colds. W. W. Graebner. 40,997; Aug. 9.
Cremello. For Ice Cream Powder. C. C. Lindley. 41,005; Aug. 9.
Du-Ons. For Underwear. Duofold Inc. 40,993; Aug. 9.
Famous 'Planes. For Candy. Package Paper Company. 41,008; Aug. 9.
Fashion. For Bathroom Tissue. Hoberg Paper & Fibre Company. 41,002; Aug. 9.
Goldenberg's Walnut Chews. For Candy. D. Goldenberg, Inc. 40,996; Aug. 9.
Henry J. Havana Smokers. For Cigars. H. J. Jackson. 41,003; Aug. 9.
Honey Blossom Bar. For Cocoanut Toasted Bars. S. C. Bouzeanes. 40,990; Aug. 9.
Hunter's Five. For Boxes. Hoague-Sprague Corporation. 41,000; Aug. 9.
Kopy-Kat, Color Pictures. For Assorted Colors. W. E. Wilson. 41,015; Aug. 9.
Kopy-Kat. Draw and Color Pictures. For Colors. W. E. Wilson. 41,014; Aug. 9.
Krim's Ju-C-Orange. For Carbonated Orangeade. M. Krim. 41,004; Aug. 9.
Kwix-A-Wink Time Table. For Combination Time Tables and General Business Advertisements. A. L. Streamberg. 41,012; Aug. 9.
Morgan's Sabalol Spray. For Nose and Throat Spray. Morgan Sabalol Products, Inc. 41,006; Aug. 9.
O-Boy. For Preparation for Cleaning and Polishing Automobiles. H. P. Douglas. 40,992; Aug. 9.
Pasteurized Process Cheese. For Cheese. Pabst Corporation. 41,007; Aug. 9.
Rosa Lee. For Boxes. Hoague-Sprague Corporation. 40,998; Aug. 9.
The Hyde Park. For Boxes. Hoague-Sprague Corporation. 41,001; Aug. 9.
The "Jiffy" Time Table. For Combination Time Tables and General Business Advertisements. A. L. Streamberg. 41,013; Aug. 9.
Vacuum Packed Coffee. For Coffee. Dwinell-Wright Company. 40,994; Aug. 9.
Wear-Rite Brassières & Girdles. For Brassières and Girdles. Sacks-Sons Carton Co. 41,010; Aug. 9.
Wheatles. For Whole Wheat Flakes. General Mills, Inc. 40,995; Aug. 9.

LIST OF PRINTS

A Whole Meal in Itself! For Bread. W. E. Long Co. 13,803; Aug. 9.
Biggest Food Value in the World! For Bread. W. E. Long Co. 13,804; Aug. 9.
Evening Gown Backs. For Bathing Suits. B. V. D. Company. 13,794; Aug. 9.
Found One Bread Wheat-Tone for all who Like Graham, Bran, Cracked Wheat, or any Dark Bread. For Bread. W. E. Long Co. 13,801; Aug. 9.
Here is Bread Value Plus Wheat-Tone. For Bread. W. E. Long Co. 13,813; Aug. 9.
If you Like Graham or Bran Bread Try Wheat-Tone. For Bread. W. E. Long Co. 13,811; Aug. 9.
More Mineral Salts—More Food Value—More Flavor in—Wheat-Tone. For Bread. W. E. Long Co. 13,819; Aug. 9.
Naturally Aged Flour—Cellophane Wrapper—Ready to Serve. For Bread. W. E. Long Co. 13,809; Aug. 9.
Nitrate of Soda. For Nitrate of Soda. Barrett Company. 13,796; Aug. 9.
Now Enjoy All that Any Dark Bread Can Give you in Wheat-Tone. For Bread. W. E. Long Co. 13,810; Aug. 9.
Old Home Asks Your Inspection Before You Buy! For Bread. W. E. Long Co. 13,807; Aug. 9.
Outdoor Girl Beautygram. For Lipstick, Face Rouge, and Face Powder. Crystal Corporation. 13,797; Aug. 9.
Over 100 Women Helped Us to Perfect Wheat-Tone. For Bread. W. E. Long Co. 13,815; Aug. 9.
Penny for Penny. For Athletic Underwear. B. V. D. Company. 13,793; Aug. 9.
Praise From Hundreds!—Read What They Say About Wheat-Tone. For Bread. W. E. Long Co. 13,817; Aug. 9.
The 1932 B. V. D. Surf Suits. For Bathing Suits. B. V. D. Company. 13,795; Aug. 9.
"Twin Dinner". For Dinners. McVittie Waffle House, Inc. 13,820; Aug. 9.
Wheat Germ, Malt, Milk, Cracked Wheat, Honey, Potatoes—A Meal in Itself! For Bread. W. E. Long Co. 13,800; Aug. 9.
Wheat-Tone Amazes Guests by Giving Each her Preferred Taste. For Bread. W. E. Long Co. 13,816; Aug. 9.
Wheat-Tone Blended From Ingredients that Make a Loaf to Satisfy All Dark Bread Tastes! For Bread. W. E. Long Co. 13,802; Aug. 9.
Wheat Tone Bread. For Bread. W. E. Long Co. 13,812; Aug. 9.
Wheat-Tone Contains Both Malt and Milk for Health! For Bread. W. E. Long Co. 13,798; Aug. 9.
Wheat-Tone Has Replaced Two or More Dark Breads in Many Homes! For Bread. W. E. Long Co. 13,814; Aug. 9.
Wheat-Tone is a Compact All-Food Bread. For Bread. W. E. Long Co. 13,799; Aug. 9.
Wheat-Tone Makes Food Dollars Go Farther! For Bread. W. E. Long Co. 13,806; Aug. 9.
Wheat-Tone Toast! All the Breakfast You Need! For Bread. W. E. Long Co. 13,805; Aug. 9.
Where Fine Foods are Sold—Transparent Packages Let you See Before you Buy! For Bread. W. E. Long Co. 13,818; Aug. 9.
Why Choose Your Bread Blindly? For Bread. W. E. Long Co. 13,808; Aug. 9.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 9TH DAY OF AUGUST, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abraham, Leonard G., Madison, and E. M. Staples, Hohokus, N. J., assignors to American Telephone and Telegraph Company. Telephone signaling system. 1,870,396; Aug. 9.

Abt, Louis, assignor to W. Paddor, Chicago, Ill. Skylight construction. 1,870,549; Aug. 9.

Adams, Daniel G. (See Muhlhauser, J., and Adams.)

Adams, Daniel G., New York, and A. C. Hansmann, Winfield, assignors to Adams Grease Gun Corporation, New York, N. Y. Dispensing device. 1,871,291; Aug. 9.

Adams, Daniel G., assignor to Adams Grease Gun Corporation, New York, N. Y. Lubricating means. 1,871,399; Aug. 9.

Adams, Edward M., Lexington, Ky., and W. C. Gangloff, and G. G. Spencer, assignors to The Drackett Chemical Company, Cincinnati, Ohio. Cleaning oil wells. 1,870,320; Aug. 9.

Adams Grease Gun Corporation. (See Adams, Daniel G., assignor.)

Adams Grease Gun Corporation. (See Adams, D. G., and Hansmann, assignors.)

Adams Grease Gun Corporation. (See Muhlhauser, J., and Adams, assignors.)

Adams Industries, Inc. (See Jacques, Raynaldo P., assignor.)

Adams, William H., Kenyon, R. I. Seat pad or cushion. 1,870,275; Aug. 9.

Adler, Charles, jr., Baltimore, Md. Traffic signal. Des. 87,501; Aug. 9.

Adelson, Samuel L., assignor to General Zeolite Company, Chicago, Ill. Filtration plant control. 1,870,321; Aug. 9.

Aeppli, Albert, Zurich, Switzerland, assignor to H. S. Otto and H. Escher, New York, N. Y. Helical gear grinder. 1,870,764; Aug. 9.

Agfa Ansco Corporation. (See Brunken, Johannes, assignor.)

Agfa Ansco Corporation. (See Klaus, Rudolf, assignor.)

Aikman, Burton S., assignor to National Brake & Electric Co., Milwaukee, Wis. Compressor cooling system. 1,870,219; Aug. 9.

Air-O-Gas Generators, Incorporated. (See Carroll, Manly E., assignor.)

Aktiengesellschaft Brown, Boveri and Cie. (See Kern, Erwin, assignor.)

Aktiengesellschaft Brown, Boveri & Cie. (See Seitz, Oskar, assignor.)

Albertine, Herman, Rutherford, N. J., assignor to Rogers Products Company, Inc. Portable grease gun. 1,871,400; Aug. 9.

Alcorn, James S. (See Nash, A. E., and Alcorn.)

Alcorn Combustion Company. (See Nash, Arthur E., assignor.)

Alcorn Combustion Company. (See Nash, A. E., and Alcorn, assignors.)

Alden, Milton, Springfield, Mass., assignor, by mesne assignments, to Radio Inventions, Inc. Tube socket. 1,871,292; Aug. 9.

Alden, Milton, Springfield, Mass. Tuning mechanism for radio reception, etc. 1,871,293; Aug. 9.

Alemite Corporation. (See Zerk, Oscar U., assignor.)

Aiesen, Andrew, West Hollywood, Calif. Lawn mower attachment. 1,870,979; Aug. 9.

Algemeene Kunstzijde Unie N. V. (See Nolet, Hendrik, assignor.)

Allingham, John, Los Angeles, Calif. Metallurgical process. 1,870,703; Aug. 9.

Almond, Lester L., North Troy, assignor to Cluett, Peabody & Co., Inc., Troy, N. Y. Button strip. 1,871,355; Aug. 9.

Alsaker, Alfred. (See Sumpter, J. E., and Alsaker.)

Alsop, Samuel, New York, N. Y. Filtering apparatus. 1,870,885; Aug. 9.

Altwegg, Jean, Lyon, France, assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del. Manufacturing cellulose acetate. 1,870,980; Aug. 9.

Aluminum Company of America. (See Barnitt, J. B., and Derr, assignors.)

Aluminum Company of America. (See Derr, Ralph B., assignor.)

Aluminum Company of America. (See Heiser, Harold W., assignor.)

Aluminum Company of America. (See Hurley, Charles P., assignor.)

Aluminum Company of America. (See Norton, Allen B., assignor.)

Aluminum Company of America. (See Palmer, R. D., and Jeffers, assignors.)

Alva Carpet & Rug Company. (See Keys, Jeremiah, assignor.)

Amann, John, St. Louis, Mo. Stair structure. 1,870,598; Aug. 9.

American Aluminum Ware Co. (See Brucker, Henry, assignor.)

American Can Company. (See Hothersall, John M., assignor.)

American Can Company. (See Strickler, John C., assignor.)

American Lace Mfg. Co., The. (See Hucknall, Hage W., assignor.)

American Laundry Machinery Company, The. (See Balzer, Fred, assignor.)

American Optical Company. (See Laabs, Max, assignor.)

American Potash & Chemical Corporation. (See Gale, W. A., and Ritchie, assignors.)

American Reenforced Paper Company. (See Anderson, Herbert, assignor.)

American Rubber Company. (See Williamson, Stanley J., assignor.)

American Sales Book Company. (See Bottle, Edward K., assignor.)

American Sales Book Company. (See Caton, William D., assignor.)

American Sales Book Company. (See Hagemann, Louis F., assignor.)

American Swiss Company, The. (See Rightmyer, Holden W., assignor.)

American Telephone and Telegraph Company. (See Abraham, L. G., and Staples, assignors.)

American Telephone and Telegraph Company. (See Watson, Edward F., assignor.)

Anaconda Sales Company. (See Macan, Harry C., assignor.)

Anaconda Sales Company. (See Shakespeare, William M., assignor.)

Anaconda Sales Company. (See Yates, C. E., and Macan, assignors.)

Anderson, Andrew P., Brooklyn, assignor to The Lamson Company, Syracuse, N. Y. Conveyer. 1,871,354; Aug. 9.

Anderson, Arvid E., Lansdowne, Pa., assignor to General Electric Company. System of electric distribution. 1,871,401; Aug. 9.

Anderson, Carl E., East Orange, assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Display rack. 1,871,294; Aug. 9.

Anderson, Herbert A., Chicago, Ill., assignor to American Reenforced Paper Company, Attleboro, Mass. Reenforced building paper. 1,870,215; Aug. 9.

Andres, Paul G., La Grange, and Fred W. Temple, St. Charles, assignors to Temple Corporation, Chicago, Ill. Loud speaker construction. 1,871,107; Aug. 9.

Anklam, Otto, Minneapolis, Minn. Street lamp cable securing device. 1,871,023; Aug. 9.

Apfelbaum, Frederick A., New York, N. Y. Display. 1,871,252; Aug. 9.

Appleton Wire Works, Inc. (See Buchanan, William E., assignor.)

Apps, Charles H., East Orange, N. J. Locomotive. 1,871,295; Aug. 9.

Aquatone Corporation. (See John, Robert, assignor.)

Archer, Thomas P. (See Heintz, E. E., and Archer.)

Arden Box Toe Company. (See Lovell, Stanley P., assignor.)

Arnold, Edwin E., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Pipe welding machine. 1,870,475; Aug. 9.

Arnold, Edwin E., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Buffer. 1,870,827; Aug. 9.

Arnold, Edwin E., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Multicar door operator. 1,870,828; Aug. 9.

Art Metal Construction Company. (See Bullen, Ralph F., assignor.)

Art Metal Construction Company. (See Skoogh, Harry L., assignor.)

Ashworth, Fred, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel machine. 1,870,353; Aug. 9.

Associated Electric Laboratories, Inc. (See Burgener, John A., assignor.)

Associated Electric Laboratories, Inc. (See Gohorel, Fernand, assignor.)

Associated Electrical Industries Limited. (See Ollard, E. A., and Robinson, assignors.)

Associated Ice & Dairies Limited. (See Wilson, Cyril J., assignor.)

Associated Telephone and Telegraph Company. (See Ostline, John E., assignor.)

Associated Telephone & Telegraph Company. (See Stehlik, Rudolph F., assignor.)
Astrom, Carl P., East Orange, N. J., assignor to M. H. Treadwell Company, New York, N. Y. Hot metal car. 1,870,220; Aug. 9.
Athey Truss Wheel Co. (See Kuchar, Joseph, assignor.)
Atlas Electric Devices Co. (See Jameson, Clarence W., assignor.)
Atlas Manufacturing Company. (See Gaines, Eugene F., assignor.)
Audibert, Etienne, assignor to Societe Nationale de Recherches sur le Traitement des Combustibles, Senlis, France. Device for producing exothermic reactions between gases by contact with a solid catalyzer. 1,870,665; Aug. 9.
Austin, Dwight E., Los Angeles, Calif. Automobile. Des. 87,502; Aug. 9.
Automotive Engineering Corporation. (See Fageol, Rollie B., assignor.)
Automotive Fan & Bearing Co. (See Gardner, Archibald D., assignor.)
Auzin, John M., Warwick, R. I. Spark plug for internal combustion engines. 1,870,981; Aug. 9.
Babcock, George H., assignor to Rayner Decalcomania Company, Chicago, Ill. Applying sign characters. 1,870,221; Aug. 9.
Babcock, Richard J., Los Angeles, Calif. Rotary cooker. 1,870,476; Aug. 9.
Bachelet, Albert E. (See Entz, F. S., and Bachelet.)
Bacon, Raymond F., Bronxville, and I. Bencowitz, New York, N. Y.; said Bencowitz assignor to said Bacon. Recovery of sulphur. 1,870,477; Aug. 9.
Bacon, Raymond F., Bronxville, and I. Bencowitz, New York, N. Y.; said Bencowitz assignor to said Bacon. Recovery of sulphur. 1,870,478; Aug. 9.
Bacon, Raymond F., Bronxville, and I. Bencowitz, New York, N. Y.; said Bencowitz assignor to said Bacon. Recovery of sulphur. 1,870,479; Aug. 9.
Badger, E. B., & Sons Company. (See Lord, Lyman L., assignor.)
Baker, George R., and J. C. Paterson, Willesden, London, England, assignors to Baker Perkins Company Inc., Saginaw, Mich. Apparatus for making or baking wafers and the like. 1,870,480; Aug. 9.
Baker, John A., Westport, Conn., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y. Adjustable overflow lip for sedimentation apparatus. 1,870,435; Aug. 9.
Baker Perkins Company Inc. (See Baker, G. R., and Paterson, assignors.)
Baker Perkins Company. (See Eggert, Gustav B., assignor.)
Baker Perkins Company, Inc. (See Engels, Eugene O., assignor.)
Baker Perkins Company. (See Harber, L. S., and Pointon, assignors.)
Baker Perkins Company. (See Klenk, Willy, assignor.)
Baker Perkins Company. (See MacFarlane, R. F., and Prescott, assignors.)
Baker Perkins Company. (See Paterson, J. C., and Wilson, assignors.)
Baker Perkins Company. (See Savy, Robert, assignor.)
Baker Perkins Company. (See Thurm, Richard, assignor.)
Baker-Raulang Company, The. (See Remde, Edward H., assignor.)
Baker, Roy C., Wollaston, assignor of one-fifth to L. A. Jones, Belmont, Mass. Method of and apparatus for producing matrices. 1,870,481; Aug. 9.
Baker, Roy C., Wollaston, assignor of one-fifth to L. A. Jones, Belmont, Mass. Bookbinding. 1,870,482; Aug. 9.
Baker, William J., Newport, and H. A. Konen, Clifton, assignors to W. J. Baker Company, Newport, Ky. Roll-screen holding device. 1,871,141; Aug. 9.
Baker, W. J. Company. (See Baker, W. J., and Konen, assignors.)
Bakken, Andrew H., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Bushing structure. 1,871,356; Aug. 9.
Baldwin Company, The. (See Knoblaugh, Armand F., assignor.)
Baldwin, Wayne A., Watertown, N. Y., assignor to The New York Air Brake Company. Dust separator. 1,870,216; Aug. 9.
Ball, Ivan J., and S. H. Ingram, assignors of one-third to Smith-Emery Company, Los Angeles, Calif. Device for sampling liquid. 1,870,436; Aug. 9.
Ballard, Foscoe F. (See Warner, A. W., and Ballard.)
Balschuweit, Wilhelm, New York, N. Y. Extension table. 1,870,222; Aug. 9.
Balzer, Fred, assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Unloading net for extractors. 1,871,402; Aug. 9.
Bantly, Mossi B., Los Angeles, Calif. Draft protector. 1,870,483; Aug. 9.
Barber Asphalt Company, The. (See Hayden, Harold P., assignor.)
Barber, George B., Sparks, assignor of one-half to Melvin E. Jepson, Reno, Nev. Brood frame. 1,870,704; Aug. 9.
Barber, George H., New Rochelle, assignor to Bond Electric Corporation, New York, N. Y. Flash light. 1,870,829; Aug. 9.
Barber Manufacturing Company. (See Jones, Roy S., assignor.)
Barber, William, Brooklyn, N. Y. Dust bag and coupling for vacuum cleaners. 1,871,024; Aug. 9.
Barbieri, Cesare, New York, N. Y., assignor to Vortex Cup Company, Chicago, Ill. Cup and blank therefor. 1,870,223; Aug. 9.
Barendse, Simon, Paris, and L. Garreau, Maisons Laffitte, France. Sheath crayon holder. 1,870,941; Aug. 9.
Barnard, Arthur E., Norristown, Pa., assignor to Dispersions Process, Inc., Dover, Del. Process of reclaiming vulcanized rubber and product of same. 1,870,886; Aug. 9.
Barnitt, Jesse B., Pittsburgh, and R. B. Derr, Oakmont, assignors to Aluminum Company of America, Pittsburgh, Pa. Heat insulator. 1,870,437; Aug. 9.
Barone, Russell J., Rochester, N. Y. Lamp. Des. 87,503; Aug. 9.
Barr and Stroud, Limited. (See French, James W., assignor.)
Barrett Company, The. (See Eckert, Clarence R., assignor.)
Barrow, George M. (See Miller, F. H., and Barrow.)
Barrow, George M., Derry, Pa., assignor to Westinghouse Electric & Manufacturing Company. Connecter. 1,870,790; Aug. 9.
Bartlett, C. O., & Snow Company, The. (See Snow, Karl F., assignor.)
Bartlett Hayward Company, The. (See Santos, John R. L., assignor.)
Bartlett Hayward Company, The. (See Strobridge, William, assignor.)
Bartlett Hayward Company, The. (See Wagner, Frederick H., assignor.)
Basta, James O., Oak Park, Ill. Twin tire pressure control means. 1,870,484; Aug. 9.
Batcheller, Hugh W., Worcester, Mass. Electric switch. 1,870,599; Aug. 9.
Battin, Harold T., Ridgewood, N. J., assignor to Morgan & Wright, Detroit, Mich. Endless mandrel. 1,871,296; Aug. 9.
Baudry, René A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Mfg. Company. Thrust bearing. 1,870,830; Aug. 9.
Bauer, Gustav F. C., Tonawanda, assignor to National Police Signal Company, Buffalo, N. Y. Sound reproducing apparatus. 1,871,253; Aug. 9.
Bauer Ignition Company, The. (See Herbster, George, assignor.)
Baumann, John F., North Bergen, N. J. Combined screen and awning. 1,870,765; Aug. 9.
Baumgartner, Fred, Chicago, Ill., assignor to Westinghouse Electric Elevator Company. Safety device. 1,870,217; Aug. 9.
Baynard, William H., Boston, assignor to H. H. Beckwith, Brookline, Mass. Counter heater. 1,870,666; Aug. 9.
Beardslee Chandelier Manufacturing Company. (See Ohm, Albert J. D., assignor.)
Beatty, Dana C., assignor to Gynex Corporation, New York, N. Y. Syringe. 1,870,942; Aug. 9.
Beck, Koller & Company. (See Hönel, Herbert, assignor.)
Beckwith, Harry H. (See Baynard, William H., assignor.)
Beckwith, Harry H. (See Jennings, Melvin O., assignor.)
Becraft, Frank W., Denver, Colo., assignor, by mesne assignments, to The Door Company, Inc., New York, N. Y. Multiplex rotary drum filter. 1,870,485; Aug. 9.
Behr, Leo, assignor to Leeds & Northrup Company, Philadelphia, Pa. Method of and apparatus for electrical measurement control. 1,870,982; Aug. 9.
Behrman, Abraham S., Chicago, Ill. Manufacture of hydrobromic acid. 1,870,308; Aug. 9.
Bellock, David, New York, N. Y. Toothbrush holder. 1,870,276; Aug. 9.
Beistle, Martin L., Shippensburg, Pa. Camera mounting. 1,870,766; Aug. 9.
Bell, Harvey W., Ardsley-on-Hudson, assignor to The Beloyt Corporation, New York, N. Y. Vehicle suspension means. 1,871,025; Aug. 9.
Bell Telephone Laboratories, Incorporated. (See Butterfield, Joseph T., assignor.)
Bell Telephone Laboratories, Incorporated. (See Curtis, Austen M., assignor.)
Bell Telephone Laboratories, Incorporated. (See Entz, F. S., and Bachelet, assignors.)
Bell Telephone Laboratories, Incorporated. (See Gray, Frank, assignor.)
Bell Telephone Laboratories, Incorporated. (See Miller, Robert A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Smythe, Edwin H., assignor.)
Bell Telephone Laboratories, Incorporated. (See Stoller, Hugh M., assignor.)
Bell Telephone Laboratories, Incorporated. (See Wagel, Raymond L., assignor.)
Bell Telephone Laboratories, Incorporated. (See Wentz, Jesse F., assignor.)
Belli, Augusto, near Santa Cruz, Calif. Machine for disposing of artichoke plants. 1,871,026; Aug. 9.
Bellville, James R., Kansas City, Mo. Carburetor. 1,870,438; Aug. 9.
Beloit Iron Works. (See Berry, Earl E., assignor.)
Beloit Iron Works. (See Hornbostel, Lloyd, assignor.)
Beloyt Corporation, The. (See Bell, Harvey W., assignor.)
Bencowitz, Isaac. (See Bacon, R. F., and Bencowitz.)

Bendix Aviation Corporation. (See Smith, Marshall A., jr., assignor.)
Bendix Brake Company. (See Delahaye, Walter H., assignor.)
Bendix Brake Company. (See Dodge, Adiel Y., assignor.)
Bendix Brake Company. (See Frank, Frederick C., assignor.)
Bentley, Percival A., C. F. Manger, and C. H. Wainwright, Leicester, England. Circular knitting machine. 1,870,550; Aug. 9.
Berger, Samuel I., Newark, N. J. Toy tank. 1,871,297; Aug. 9.
Bergquist, Carl, New York, N. Y., assignor to International Patents Development Company, Wilmington, Del. Thin boiling starch and making same. 1,871,027; Aug. 9.
Berman, Harry, Brooklyn, N. Y. Baby carriage. 1,870,983; Aug. 9.
Bernhard, Fred, New York, N. Y. Vacuum cleaner. 1,870,887; Aug. 9.
Bernstein, Edward, New York, N. Y. Combined heating and cooking stove. 1,870,600; Aug. 9.
Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Apparatus for handling rolls. 1,870,224; Aug. 9.
Berry, Earl E., assignor to Beloit Iron Works, Beloit, Wis. Paper winding apparatus. 1,870,225; Aug. 9.
Berthold, Rudolf G., Berlin-Siemensstadt, Germany, assignor to Westinghouse Electric & Manufacturing Company. Control method and apparatus. 1,870,888; Aug. 9.
Bianchi, Dante, and H. De Vriese, Hawthorne, N. J. Doorstop. 1,871,142; Aug. 9.
Bichler, Charles H., Paris, France. Apparatus for the prevention of fire by back-firing in internal combustion engines, and for preventing the obstruction of the suction conduits by frost. 1,870,486; Aug. 9.
Bickel, Henry F., Plainfield, N. J., assignor to The New York Air Brake Company. Air brake. 1,870,218; Aug. 9.
Bicknell, George M., St. Louis, Mo. Combustion chamber for internal combustion engines. 1,870,397; Aug. 9.
Birdsey, Charles R., Hinsdale, assignor to United States Gypsum Company, Chicago, Ill. Plaster board and making same. 1,870,439; Aug. 9.
Birtley Iron Company, The. (See Holmes, Colin W. H., assignor.)
Bishop, Joseph W., Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Clutch. 1,870,226; Aug. 9.
Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Structural unit. 1,870,487; Aug. 9.
Black Products Company. (See Lorimer, George W., assignor.)
Black, S. Duncan, et al., executors. (See Brogan, Graham W.)
Black, William M., Fresno, Calif. Calculating mcahine. 1,870,705; Aug. 9.
Blackball, John R., Highland Park, and H. S. Pardee, Ravinia, Ill.; said Pardee assignor to said Blackball. Railway car. 1,870,227; Aug. 9.
Blakeman, Arthur C., North Arlington, N. J., assignor to Westinghouse Lamp Company. Electrode spacer member for electron discharge devices. 1,870,943; Aug. 9.
Blakey, David T. (See Gottschalk, C., and Blakey.)
Blaw-Knox Company. (See Moler, Harry A., assignor.)
Bleustein, Ben, New York, N. Y. Infant's folding bathtub. 1,870,488; Aug. 9.
Blood, Howard E., and R. G. Nelson, Detroit, Mich., assignors to Norge Corporation. Direct connected motor and compressor. 1,870,228; Aug. 9.
Blunt, James G., Schenectady, N. Y. Locomotive. 1,871,028; Aug. 9.
Boesé, Quincy W., New York, N. Y., assignor to Stapling Machine Co. Wire joining tool. 1,871,029; Aug. 9.
Bohn, August W., assignor to Wagner Electric Corporation, St. Louis, Mo. Alternating current motor. 1,870,229; Aug. 9.
Bolt, Joseph C., Boston, and C. I. Johnson, Worcester, Mass., assignors to The Tabulating Machine Company, Endicott, N. Y. Distance control device. 1,870,230; Aug. 9.
Bommer, Emil, Brooklyn, N. Y. Doorcheck and closer. 1,871,030; Aug. 9.
Bommer, Emil. (See Bommer, Gustav, assignor.)
Bommer, Gustav, assignor to E. Bommer, Brooklyn, N. Y. Hinge construction. 1,871,031; Aug. 9.
Bond Electric Corporation. (See Barber, George H., assignor.)
Bonham, Guy L., West Hartford, Conn. Game apparatus. 1,871,143; Aug. 9.
Bonsall, Charles D., Pittsburgh, assignor to P. H. Murphy Company, New Kensington, Pa. Car roof. 1,870,398; Aug. 9.
Boos, August N. E., New York, N. Y. Recording apparatus. 1,871,032; Aug. 9.
Booth, Earl C. (See Noblitt, Q. C., and Booth.)
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Vehicle wheel. 1,871,144; Aug. 9.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Vehicle wheel. 1,871,145; Aug. 9.
Borden, Charles R. C., Boston, Mass. Ventilator. 1,871,298; Aug. 9.
Borm, Ferdinand H., Chicago, Ill. Razor stropper. 1,870,667; Aug. 9.
Boaler, George A., Chicago, Ill. Brush handle. 1,871,146; Aug. 9.
Bott, George R., assignor to Norma-Hoffmann Bearings Corporation. Stamford, Conn. Antifriction bearing. 1,871,033; Aug. 9.
Bottle, Edward K., Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada. Record strip easel and deflector for autographic registers. 1,870,231; Aug. 9.
Bottle, Edward K., Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada. Manifolding device. 1,870,277; Aug. 9.
Bouchard, Frank M., St. Elmo, Ala. Oil stick wiper. 1,871,208; Aug. 9.
Boucherot, Paul, and G. Claude, Paris France. Submarine water-duct. 1,871,034; Aug. 9.
Bown, Lewis H., East Aurora, N. Y., assignor to Buffalo Pottery, Buffalo, N. Y. Plate or similar article. Des. 87,504; Aug. 9.
Bown, Lewis H., East Aurora, N. Y., assignor to Buffalo Pottery, Buffalo, N. Y. Plate or similar article. Des. 87,505; Aug. 9.
Bown, Lewis H., East Aurora, N. Y., assignor to Buffalo Pottery, Buffalo, N. Y. Plate or similar article. Des. 87,506; Aug. 9.
Boyce, William S., Chicago, Ill. Tie-plate. 1,870,440; Aug. 9.
Boye Needle Company, The. (See Hall, George F., assignor.)
Brace, Porter H., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Photoelectric tube. 1,871,357; Aug. 9.
Braden Steel & Winch Company. (See Schuetz, Thomas J., assignor.)
Bradley, Linn, Montclair, N. J., and E. P. McKeefe, Plattsburg, assignors to Bradley-McKeefe Corporation, New York, N. Y. Production of pulp, etc. 1,870,944; Aug. 9.
Bradley-McKeefe Corporation. (See Bradley, L., and McKeefe, assignors.)
Bradshaw, Grant D., Beaver, Pa. Feed water regulator. 1,870,706; Aug. 9.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Power actuator. 1,871,299; Aug. 9.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Brand, Harry R., New York, N. Y. Dispensing mechanism. 1,870,889; Aug. 9.
Brannon, Roy E., and N. W. Kenison, Bexley, Ohio. Hair curling device. 1,870,496; Aug. 9.
Braselton, Chester H., New York, and F. B. MacLaren, Malba, N. Y. Inertia pump. 1,870,707; Aug. 9.
Braun, Herman F. (See Smith, W. J., and Braun.)
Bray, Roy H., Cuyahoga Falls, Ohio. Nozzle or end for push type grease guns. 1,870,890; Aug. 9.
Brendlin, Herman J. (See Hayward, J., and Brendlin.)
Brennan, Harry. (See Crosthwait, D. N., jr., and Brennan.)
Brettmon, Jacques, Paris, France. Luminescent discharge device. 1,870,831; Aug. 9.
Brewster, Oswald C., Casper, Wyo., assignor to Standard Oil Company, Whiting, Ind. Distillation of hydrocarbon oils. 1,871,148; Aug. 9.
Brewster, Oswald C. (See Cooke, T. S., and Brewster.)
Bridgeport Brass Company. (See Monroe, Kenneth C., assignor.)
Brim, Hiller A., Chicago, Ill. Rotary scrubbing machine. 1,870,232; Aug. 9.
Brindley, William E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Radio-control system. 1,870,832; Aug. 9.
Briquet Engineering Company. (See Willard, Robert E., assignor.)
Bristol, Edward S., assignor to Leeds & Northrup Company, Philadelphia, Pa. Control system. 1,870,984; Aug. 9.
Bristow, Owen R., and S. D. Bundy, San Bernardino, Calif.; said Bundy assignor to said Bristow. Lawn and garden implement. 1,870,891; Aug. 9.
Britton, Edgar C., and W. R. Reed, assignors to The Dow Chemical Company, Midland, Mich. Hydrolysis of methyl chloroform. 1,870,601; Aug. 9.
Broadfield, Mack D., Valdosta, Ga. Acidulating unit. 1,870,278; Aug. 9.
Broadfield, Mack D., Valdosta, Ga. Producing superphosphate. 1,871,416; Aug. 9.
Brogan, Graham W., deceased, Towson, S. Duncan Black and The Safe Deposit and Trust Company, executors, assignors to William W. Varney, Baltimore, Md. Testing brakes. 1,871,147; Aug. 9.
Bronander, Wilhelm B., Montclair, N. J., assignor to J. G. Denny, jr., Philadelphia, Pa. Roller bearing. Re18,562; Aug. 9.
Brothers, John T., Birmingham, Ala., assignor, by mesne assignments, to H. B. Floyd, Chicago, Ill. Corner joint for metal beds. 1,870,708; Aug. 9.
Brotz, Frank G. (See Kohler, H. V., and Brotz.)

Brown, Charles J., Donora, Pa. Apparatus for annealing. 1,870,551; Aug. 9.
Brown, Charles S., Syracuse, N. Y. Roller bearing construction. 1,871,149; Aug. 9.
Brown, Charles S., Syracuse, N. Y. Roller bearing. 1,871,150; Aug. 9.
Brown, Charles S., Syracuse, N. Y. Roller bearing construction. 1,870,892; Aug. 9.
Brown Company. (See Hill, Roger B., assignor.)
Brown Company. (See Richter, George A., assignor.)
Brown Company. (See Schur, Milton O., assignor.)
Brown, Herbert D., and C. A. Sabbah, Schenectady, N. Y., assignor to General Electric Company. Space discharge device. 1,871,403; Aug. 9.
Brown, John E., Elyria, assignor to The Enterprise Manufacturing Company, Akron, Ohio. Artificial bait. 1,870,767; Aug. 9.
Brown, John L., Verona, Pa., assignor to Westinghouse Electric & Manufacturing Company. Sealed sleeve bearing. 1,870,791; Aug. 9.
Brown, John L., Catonsville, assignor of one-half to W. W. Varney, Baltimore, Md. Product relating to smoking substances and making the same. 1,871,151; Aug. 9.
Brown, Laurel H., Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for indicating speed. 1,871,404; Aug. 9.
Brown, Le Roy O., assignor to Justrite Manufacturing Company, Chicago, Ill. Gas burner. 1,870,668; Aug. 9.
Brown, Raymond F., New York, N. Y. Hose rack. 1,870,322; Aug. 9.
Brown, Roger S., Chicago, Ill. Tube for boilers, heat exchangers, and the like. 1,870,669; Aug. 9.
Brown, Roger S., Chicago, Ill. Tube for boilers, heat exchangers, and the like. 1,870,670; Aug. 9.
Browning, J. M. & M. S., Company. (See Browning, John, assignor.)
Browning, John, assignor to J. M. & M. S. Browning Company, Ogden, Utah. Single trigger mechanism. 1,870,552; Aug. 9.
Brucker, Henry, Maplewood, assignor to American Aluminum Ware Co., Newark, N. J. Pouring spout and container. 1,870,489; Aug. 9.
Brunken, Johannes, Dessau in Anhalt, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Photographic gelatine layer. 1,870,354; Aug. 9.
Brunswick-Balke-Collender Company, The. (See Bishop, Joseph W., assignor.)
Brunswick-Balke-Collender Company, The. (See Matteson, Jesse O., assignor.)
Brush, Don D., Detroit, Mich. Windshield wiper. 1,871,152; Aug. 9.
Bryan, James E., Newark, N. J. Liquid separator. 1,871,254; Aug. 9.
Bryant, Frank L., assignor, by mesne assignments, to Cellufoam Corporation, Chicago, Ill. Making layers of distended fibrous material. 1,870,279; Aug. 9.
Bryant, Lawrence R. (See Scott, F. E., and Bryant.)
Bryce, James W., Bloomfield, N. J., assignor to Dayton Scale Company, Dayton, Ohio. Weighing scale. 1,870,233; Aug. 9.
Bryce, James W., Bloomfield, N. J., assignor to Dayton Tabulating Machine Company, Endicott, N. Y. Tabulating machine. 1,870,234; Aug. 9.
Buchanan, Charles C., assignor to Meese, Inc., Madison, Ind. Shipping jacket. 1,871,153; Aug. 9.
Buchanan, William E., assignor to Appleton Wire Works, Inc., Appleton, Wis. Loom apparatus. 1,871,255; Aug. 9.
Buel, Hillhouse, New York, N. Y., assignor, by mesne assignments, of one-half to L. L. Hammond and W. P. Hammond, jr. Concentrated beam light. 1,870,671; Aug. 9.
Buettner, Rudolph W. (See Zoerb, H. M., and Buettner.)
Buffalo Pottery. (See Bown, Lewis H., assignor.)
Builders Iron Foundry. (See Kuen, Joseph, assignor.)
Bulkeley, Claude A., Kenmore, assignor to Niagara Blower Company, Buffalo, N. Y. Welded heater assembly of aluminum or the like. 1,871,256; Aug. 9.
Bullen, Ralph F., assignor to Art Metal Construction Company, Jamestown, N. Y. Work support for articles of furniture. 1,870,553; Aug. 9.
Bundick, Clarkson U. (See Foster, W. D., and Bundick.)
Bundick, Clarkson U. (See Proctor, B. A., Foster, and Bundick.)
Bundy, Samuel D. (See Bristow, O. R., and Bundy.)
Burdick, Charles L., London, England. Wage paying machine. 1,870,554; Aug. 9.
Burgener, John A., Hinsdale, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,871,300; Aug. 9.
Burk, William W., Forest, assignor to J. F. Kemmerling, Cleveland, Ohio. Roofing bracket. 1,871,154; Aug. 9.
Burks, Arthur W., Decatur, Ill. Pump. 1,871,209; Aug. 9.
Burnett, Charley, Washington C. H., Ohio. Oil burning mechanism. 1,871,108; Aug. 9.
Burnett, Richard W., Chicago, Ill. Housing for hand brake winding mechanism. 1,870,985; Aug. 9.
Burns, Fred J., assignor to The Columbia Mills, Incorporated, Saginaw, Mich. Transom blind. 1,871,035; Aug. 9.
Burns, Jabez & Sons, Inc. (See Burns, W. G., and Greene, assignors.)
Burns, Robert L. (See Stone, N. S., and Burns.)
Burns, William G., New York, and R. A. Greene, Brooklyn, assignors to Jabez Burns & Sons, Inc., New York, N. Y. Apparatus for cooling coffee, etc. 1,870,355; Aug. 9.
Burr, Gordon A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Terminal device. 1,870,833; Aug. 9.
Burton, George, Klamath Falls, Oreg. Band saw guide. 7,870,555; Aug. 9.
Buab, Vannevar, Belmont, assignor to General Plate Company, Attleboro, Mass. Thermostat. 1,870,235; Aug. 9.
Buss, Carl, West Pittston, Pa. Emblem. Des. 87,507; Aug. 9.
Butler, Reginald A., and A. T. Matthews, Thomaston, Ga., assignors to The B. F. Goodrich Company, New York, N. Y. Package and making the same. 1,870,390; Aug. 9.
Butterfass, Carl W., Young American, assignor of one-half to Edward Williamson, Bongard, Minn. Combination screen and window construction for vehicles. 1,870,400; Aug. 9.
Butterfield, Joseph T., Hawthorne, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrical contact. 1,871,358; Aug. 9.
Buxton, Warner R., Longmeadow, Mass. Flexible pocket receptacle. 1,870,893; Aug. 9.
Cadwell, Charles A., Cleveland Heights, assignor to The Electric Railway Improvement Company, Cleveland, Ohio. Welding electrode. 1,871,257; Aug. 9.
Cadwell, Sidney M., Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treating rubber and products obtained thereby. 1,871,036; Aug. 9.
Cadwell, Sidney M., Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treatment of rubber. 1,871,037; Aug. 9.
Cadwell, Sidney M., Grosse Pointe Park, Mich., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Vulcanization of rubber and similar materials. 1,871,038; Aug. 9.
Cady, John E., assignor to G. & J. Tire Company, Indianapolis, Ind. Apparatus for continuously weighing strip material. 1,871,039; Aug. 9.
Caldwell, Frank W., Pittsburgh, assignor, by mesne assignments, to Hamilton Standard Propeller Company, Homestead, Pa. Hub for small propellers. 1,870,401; Aug. 9.
Camel Company. (See Tobin, K. J., and Darrow, assignors.)
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Valve for air brakes. 1,871,109; Aug. 9.
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Automotive brake system. 1,871,110; Aug. 9.
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Air cleaner. 1,871,111; Aug. 9.
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Air-brake. 1,871,210; Aug. 9.
Campbell, Norman R., Watford, England. Manufacture of photo-electric tubes. 1,870,280; Aug. 9.
Campbell, Samuel J., assignor to Hudson-Sharp Machine Company, Green Bay, Wis. Roll for interfolding paper. 1,871,301; Aug. 9.
Card, John L., Syracuse, assignor to United States Hoffmann Machinery Corporation, New York, N. Y. Garment press. 1,870,894; Aug. 9.
Carlson, Wendell L., Schenectady, N. Y., assignor to General Electric Company. Radio apparatus. 1,871,405; Aug. 9.
Carmichael, Mead S., Sparta, Wis. Blanching and cleaning device. 1,871,359; Aug. 9.
Carpenter, Charles E., Hopewell Junction, N. Y. Motor control system. 1,871,112; Aug. 9.
Carroll, Ellsworth W. (See Pike, Robert D., and Carroll.)
Carroll, Manly E., assignor to Air-O-Gas Generators, Incorporated, Miami, Fla. Apparatus for generating gaseous mixtures. 1,871,302; Aug. 9.
Carroll, Stewart J., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose acetate composition. 1,870,556; Aug. 9.
Carson, William W., jr., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Regulator. 1,870,895; Aug. 9.
Carter, Andrew G., Grand Rapids, Mich. Band-saw guide wheel. 1,870,402; Aug. 9.
Carter, William C., Flint, Mich. Pump. 1,871,040; Aug. 9.
Cartin, James D., Watertown, N. Y., assignor to The New York Air Brake Company. Air brake. 18,71,155; Aug. 9.
Case, Albert H., Short Hills, N. J. Manufacture of acid phosphate. 1,870,602; Aug. 9.
Case, J. I., Company. (See Davies, David P., assignor.)
Cassell, Joseph L., assignor to Wired Radio, Inc., New York, N. Y. Secret wired radio transmission system. 1,870,490; Aug. 9.
Carton, William D., Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada. Interchangeable record strip control. 1,870,281; Aug. 9.

Cattaneo, Giustino, Milan, Italy. Manufacture of insulating material. 1,870,323; Aug. 9.
Cavanaga, John F., Robbinsdale, Minn. Knockdown scaffolding. 1,871,041; Aug. 9.
Cavicchi, Ercole, Quincy, Mass. Pressure applying device for rotary power operated surfacing tools. 1,871,042; Aug. 9.
Celanese Corporation of America. (See Dickie, William A., assignor.)
Celanese Corporation of America. (See Dreyfus, C., Miles, and Platt, assignors.)
Celanese Corporation of America. (See Dreyfus, C., and Platt, assignors.)
Celanese Corporation of America. (See Platt, Herbert, assignor.)
Celanese Corporation of America. (See Rivat, George, assignor.)
Celanese Corporation of America. (See Walton, C. D., and Small, assignors.)
Cellufoam Corporation. (See Bryant, Frank L., assignor.)
Cerro de Pasco Copper Corporation. (See Smith, Walter C., assignor.)
Chain Products Company, The. (See Olmstead, Frederick A., assignor.)
Chalmers, Charles H., Minneapolis, Minn. Oil burner regulating and relief device. 1,871,043; Aug. 9.
Chambers, L. C. (See Rasco, Charles A., assignor.)
Champion Company, The. (See Seely, John M., assignor.)
Chance Vaught Corporation. (See Watter, Michael, assignor.)
Chase Companies, The. (See Recker, Adolph C., assignor.)
Cheney Company, The. (See Merryman, Arthur N., assignor.)
Chervenka, George R., assignor to Wagner Electric Corporation, St. Louis, Mo. Collector ring assembly and making same. 1,870,236; Aug. 9.
Chervenka, George R., assignor to Wagner Electric Corporation, St. Louis, Mo. Dynamo electric machine. 1,870,237; Aug. 9.
Chesick, Sanford C., Hartford, Conn. Lock. 1,871,303; Aug. 9.
Chicago Pneumatic Tool Company. (See Collins, Lester L., assignor.)
Christman, John M., assignor to Packard Motor Car Company, Detroit, Mich. Gear generating machine. 1,870,709; Aug. 9.
Church, Arthur P., Santa Barbara, Calif. Roof for toy structures. 1,870,491; Aug. 9.
Churchill, Adelaide L., executrix. (See Churchill, Winston G., assignor.)
Churchill, Winston G., Denver, Colo., deceased, Adelaide L. Churchill, executrix. Placer-mining machine. 1,870,710; Aug. 9.
Cicilioni, Alfred, Peckville, Pa. Movable stair. 1,870,603; Aug. 9.
Cincinnati Bickford Tool Company, The. (See Klausmeyer, David C., assignor.)
Clark, Edgar M., New York, N. Y., assignor to Standard I. G. Company. Method and apparatus for hydrogenation and distillation of low-sulfur petroleum oils. 1,870,792; Aug. 9.
Clark, Lucien C., Brighton, Mass. Combined canvas stretcher and picture frame. 1,870,492; Aug. 9.
Clark Manufacturing Company, The. (See Strong, Leslie P., assignor.)
Clark Tructractor Company. (See Contois, Ely J., assignor.)
Clarke, Crichton. (See Sever, Alfredo, assignor.)
Claude, Georges. (See Boucherot, P., and Claude.)
Clause, Robert L., Sewickley, Pa., assignor to Pittsburgh Plate Glass Company. Making plate glass. 1,871,156; Aug. 9.
Clayton, Walter, Belmar, N. J. Animal trap. 1,871,157; Aug. 9.
Clement, Lewis M., Mountain Lakes, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. System of space discharge tubes. 1,871,304; Aug. 9.
Cleveland Punch & Shear Works Company. (See Pardee, Robert J., assignor.)
Cleveland Steel Products Corporation, The. (See Smith, W. J., and Braun, assignors.)
Clifford, Bertram. (See Comfort, I., and Clifford.)
Climax Engineering Company. (See Waters, Harry H., assignor.)
Cluett, Peabody & Co. (See Almond, Lester L., assignor.)
Coahran, Jesse M., Smethport, Pa., assignor to Olean Sales Corporation, Olean, N. Y. Extraction or other countercurrent treatment. 1,870,834; Aug. 9.
Cobb, Henry Z., Providence, R. I., assignor to Revere Rubber Company, Chelsea, Mass. Making wheels. 1,870,986; Aug. 9.
Coe, Harrison S., La Cygne, Kans. Decantation apparatus. 1,870,441; Aug. 9.
Coffey, Joseph M., H. H. France, and J. J. Piekney, Schenectady, assignors to Mica Insulator Company, New York, N. Y. Process of mica splitting and machine therefor. 1,870,835; Aug. 9.
Coffing, Fredrich W., Danville, Ill. Collapsible handle. 1,870,403; Aug. 9.
Cold Metal Process Company, The. (See Lamb, Howard S., assignor.)
Coles, Clarence, assignor to Rawlings Manufacturing Company, St. Louis, Mo. Football, basket ball, and the like. 1,870,604; Aug. 9.
Coles, Walter H., and B. J. Nelson, assignors to The Skinner Irrigation Company, Troy, Ohio. Sprinkler. 1,871,258; Aug. 9.
Coley, Francis B., Westport, Conn., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y. Application of liquid to filter cakes. 1,870,442; Aug. 9.
Colley, George F., Memphis, Tenn. Automatic spark retarder for automobiles. 1,871,360; Aug. 9.
Collingbourne, Albert B., Elgin, Ill. Package of tape and sewing thread. Des. 87,508; Aug. 9.
Collingbourne, Albert B., Elgin, Ill. Sewing set package. Des. 87,509; Aug. 9.
Collingbourne, Albert B., Elgin, Ill. Combination box blank and cutout card. Des. 87,510; Aug. 9.
Collins, Lester L., Franklin, Pa., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Speed regulation of engines. 1,870,793; Aug. 9.
Collins, Lester L., Franklin, Pa., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Apparatus for the speed regulation of engines. 1,870,794; Aug. 9.
Columbia Mills, Incorporated, The. (See Burns, Fred J., assignor.)
Columbia Phonograph Company. (See Prescott, John O., assignor.)
Columbian Rope Company. (See Stephenson, Robert J., assignor.)
Comfort, Irwin, and B. Clifford, Brooklyn, N. Y. Race starting apparatus. 1,870,768; Aug. 9.
Compter, Otto L., and Julio Ménard, Buenos Aires, Argentina. Cup, adherent through mechanical pressure. 1,871,113; Aug. 9.
Conaway, Charles W., Great Neck, N. Y. Shoe model. 1,870,945; Aug. 9.
Conlon, William B., Minneapolis, and L. Hayes, Robbinsdale, Minn. Brake drum spacer. 1,870,605; Aug. 9.
Conover Company, The. (See Stoddard, Edgar S., assignor.)
Conover Company, The. (See Stoddard, E. S., and Rykert, assignors.)
Constantinovitch, Serge V., Prince Wiasemsky, London, England. Motor unit for bicycles, tricycles, and the like. 1,870,761; Aug. 9.
Continental Oil Company. (See Griswold, E. H., and Nicklos, assignors.)
Continental Steel Corporation. (See Kellogg, C. A., and Williams, assignors.)
Contois, Ely J., Battle Creek, assignor to Clark Tructractor Company, Buchanan, Mich. Coupler. 1,870,606; Aug. 9.
Cook, Henry W., assignor to A. E. Nettleton Company, Syracuse, N. Y. Shoe and manufacturing same. 1,871,211; Aug. 9.
Cooke, Allen B., Daville, Ill., assignor to United Autographic Register Co. Autographic register. 1,871,212; Aug. 9.
Cooke, Norman. (See Leben, H., and Cooke.)
Cooke, Thomas S., New York, N. Y., and O. C. Brewster, Casper, Wyo., assignors to Standard Oil Company, Whiting, Ind. Distillation of hydrocarbon oils. 1,871,114; Aug. 9.
Cooley, William J., Jefferson, Ga. Aeroplane. 1,870,493; Aug. 9.
Cooney, David C., Easthampton, Mass. Pulley remover. 1,870,711; Aug. 9.
Cooper, Charles, and D. M. Henshaw, assignors to W. C. Holmes and Company, Limited, Huddersfield, England. Dehydration of fuel gases. Re18,563; Aug. 9.
Cornell Bag Corporation. (See Cornell, John E., assignor.)
Cornell, John E., Chicago, Ill., assignor, by mesne assignments, to Cornell Bag Corporation. Bag. 1,870,672; Aug. 9.
Cornwell, Arthur L., Wellsville, N. Y. Wheel puller. Re18,556; Aug. 9.
Corozone Company, The. (See Evans, Albert E., assignor.)
Coultas, Wilbur J. (See Paradise, L. A., and Coultas.)
Cover, Owen, Goshen, Ind. Oil testing device. 1,870,282; Aug. 9.
Cowardin, Harry A. (See Cowardin, Samuel P. and H. A.)
Cowardin, Samuel P., and H. A. Cowardin, Richmond, Va. Method of operating internal combustion engines. 1,871,115; Aug. 9.
Crane, Charles A., jr., assignor to Templeton, Kenly & Co., Limited, Chicago, Ill. Pipe pushing jack. 1,870,607; Aug. 9.
Crawford, Frederick C., Detroit, Mich., assignor to Thompson Products, Inc., Cleveland, Ohio. Adjustable tierod. 1,870,283; Aug. 9.
Cromwell, John C., Columbus, assignor to The Steel Sanitary Company, Alliance, Ohio. Bathtub. 1,870,836; Aug. 9.
Crop Protection Institute. (See Hartzell, A., and Lathrop.)
Crosby, Edwin L., and A. E. Rhoads, assignors to Detroit Electric Furnace Company, Detroit, Mich. Melting metal borings. 1,871,305; Aug. 9.
Cross, Walter M., Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del. Treating hydrocarbons. 1,871,431; Aug. 9.

Crosthwait, David N., jr., and H. Brennan, assignors to C. A. Dunham Company, Marshalltown, Iowa. Automatic discharge valve. 1,871,044; Aug. 9.
Crowley, John C., assignor to Electrical Research Products Inc., New York, N. Y. Disk record groove indicator. 1,871,259; Aug. 9.
Crowley, Joseph P., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Surfacing plate glass. 1,870,238; Aug. 9.
Crown, George S., Bakersfield, Calif. Insect trap. 1,870,712; Aug. 9.
Cumfer, Donald A., Nutley, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Apparatus for assembling roofing elements. 1,870,443; Aug. 9.
Cummings, Lloyd A., assignor to Marlin-Rockwell Corporation, Jamestown, N. Y. Shaft mounting. 1,871,116; Aug. 9.
Cummiskey, Frederick, New York, N. Y. Combined stool and stepladder. 1,870,300; Aug. 9.
Curd, John P., Louisville, Ky. Screw plug slide valve. 1,870,557; Aug. 9.
Curtis, Austen M., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Indicating device. 1,871,361; Aug. 9.
Cutler, Eli N., assignor to Scovill Manufacturing Company, Waterbury, Conn. Vanity case. 1,870,946; Aug. 9.
Cutler-Hammer, Inc. (See Fritz, Earl A., assignor.)
Cutler-Hammer, Inc. (See Seeger, Edwin W., assignor.)
Dahlgren, Sven A. B., Alsten, Sweden, assignor to The DeLaval Separator Company, New York, N. Y. Apparatus for separating liquids of different specific gravities. 1,870,608; Aug. 9.
Daigle, Gillis A., Port Arthur, Tex. Folding bed. 1,871,158; Aug. 9.
Dake, Charles W., assignor to The Pyle-National Company, Chicago, Ill. Lamp stand. 1,870,609; Aug. 9.
Damrow Brothers Company. (See Damrow, Edward C., assignor.)
Damrow, Edward C., assignor to Damrow Brothers Company, Fond du Lac, Wis. Centrifugal friction clutch. 1,870,494; Aug. 9.
Damrow, Edward C., assignor to Damrow Brothers Company, Fond du Lac, Wis. Centrifugal friction clutch. 1,870,495; Aug. 9.
Daniels, C. R., Inc. (See Waltz, John W., assignor.)
Danner, Albert C., assignor of one-half to R. J. Hocker, Indianapolis, Ind. Automatic circuit breaking switch. 1,870,896; Aug. 9.
Darby, Adela N., San Diego, Calif. Device for treating nasal and pulmonary afflictions. 1,870,558; Aug. 9.
Darrow, William W. (See Tobin, K. J., and Darrow.)
Dath, Charles E., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,871,362; Aug. 9.
Davidson, Glenn. (See Laucks, I. F., and Davidson.)
Davies, David P., assignor to J. I. Case Company, Racine, Wis. Power transmission for agricultural machines. 1,871,306; Aug. 9.
Davis, Edwin W., assignor to Wood Conversion Company, Cloquet, Minn. Insulated wall construction. 1,870,838; Aug. 9.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Pressing machine (pressure operated buck). 1,870,610; Aug. 9.
Davis, John B., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Piston meter. 1,870,897; Aug. 9.
Davis, John F. A., Wenham, Mass. Buffing wheel. 1,870,239; Aug. 9.
Davis, Neville R., Ashton-on-Mersey, and G. A. Wood, Sheffield, England, assignors to Westinghouse Electric and Manufacturing Company. Induction-furnace lining. 1,871,159; Aug. 9.
Davis, Paul W., and J. M. Booth, Kansas City, Mo. Truss. 1,870,356; Aug. 9.
Davis, Robert L., assignor to Westinghouse Electric & Manufacturing Company. Control means for transmitting systems. 1,870,795; Aug. 9.
Davis, William R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator. 1,871,307; Aug. 9.
Day, Allan R., Ardmore, Pa. Catalyst for vapor phase oxidation of organic compounds. 1,871,117; Aug. 9.
Day, J. H., Company, The. (See Kirchhoff, William G., assignor.)
Dayton Scale Company. (See Bryce, James W., assignor.)
Dean, Wilbur R., Bandon, Oreg. Lifeboat securing means. 1,870,714; Aug. 9.
De Bourg, Albin, Bonner, Mont. Anvil for fuel hoggers. 1,870,898; Aug. 9.
Dee-Hy Products Company. (See Washburn, Robert M., assignor.)
Deere & Company. (See Johnson, Christian E., assignor.)
Deere & Company. (See Paradise, L. A., and Coultas, assignors.)
De Jong, Hendrik, Eindhoven, Netherlands, assignor to Radio Corporation of America. Wire coil and making same. 1,870,713; Aug. 9.
Delahaye, Walter H., Ottawa, Ontario, Canada, assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,871,260; Aug. 9.
De Lancey, Warren H., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Liquid dispensing apparatus. 1,870,890; Aug. 9.
De Lancey, Warren H., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Liquid dispensing apparatus. 1,870,900; Aug. 9.
Delany, Edward L., Brooklyn, N. Y. Method of assembling and hinging toilet seats and covers. 1,870,715; Aug. 9.
DeLaval Separator Company, The. (See Dahlgren, Sven A. B., assignor.)
Del Sonno, Michael R., New York, N. Y. Tuning device. 1,870,769; Aug. 9.
Delta-Star Electric Company. (See Sumpter, J. E., and Alsaker, assignors.)
Demming, Agnes M., administratrix. (See Demming, William J.)
Demming, William J., deceased, by A. M. Demming, administratrix, Lakewood, Ohio, assignor to Multigraph Company, Wilmington, Del. Casting machine. 1,871,045; Aug. 9.
Denmire, Harold A., assignor to The General Tire & Rubber Company, Akron, Ohio. Watchcase heater. 1,871,118; Aug. 9.
Denmire, Harold A., assignor to The General Tire & Rubber Company, Akron, Ohio. Fabric measuring and cutting device for bead flipper machines. 1,871,119; Aug. 9.
Denmire, Harold A., assignor to The General Tire & Rubber Company, Akron, Ohio. Apparatus for and method of vulcanizing tire casings and inner tubes. 1,871,120; Aug. 9.
Denmire, Harold A., assignor to The General Tire & Rubber Company, Akron, Ohio. Watchcase heater. 1,871,160; Aug. 9.
Denny, Joseph G., jr. (See Bronander, Wilhelm B., assignor.)
Derby, Ira H., assignor to P. C. Reilly, Indianapolis, Ind. Retort. 1,870,901; Aug. 9.
Derr, Ralph B. (See Barnitt, J. B., and Derr.)
Derr, Ralph B., Oakmont, assignor to Aluminum Company of America, Pittsburgh, Pa. Treating water. 1,870,404; Aug. 9.
De Schebeko, Alex, Chicago, Ill. Wrench. 1,870,612; Aug. 9.
Detrick, Forrest R., Worthington, Ohio. Road scraper. 1,870,673; Aug. 9.
Detrick, M. H., Company. (See Ellman, Louis, assignor.)
Detrick, M. H., Company. (See Foltz, Raymond D., assignor.)
Detrick, M. H., Company. (See Hosbein, Louis H., assignor.)
Detroit Electric Furnace Company. (See Crosby, E. L., and Rhoads, assignors.)
Detroit and Security Trust Co., executor. (See Johnson, Chester F.)
De Turk, Jeremiah A., La Grange, and E. D. Hanson, Westmont, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Molding apparatus. 1,871,406; Aug. 9.
De Vrieze, Harry. (See Bianchi, D., and De Vrieze.)
De Witt, Clinton, Berkeley, assignor to Taper Tube Pole Co., San Francisco, Calif. Steel pole. 1,870,770; Aug. 9.
De Witt, Clinton, San Francisco, Calif. Joint for connecting tubular sections of poles and the like. 1,870,771; Aug. 9.
De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Shoe form. 1,870,839; Aug. 9.
Dexter Folder Company. (See Lincoln, Edwin S., assignor.)
Dickie, William A., Spondon, near Derby, England, assignor to Celanese Corporation of America. Manufacture or treatment of textile products. 1,871,046; Aug. 9.
Dickson, Sidney M., Pittsburgh, Pa. Ventilator. 1,871,161; Aug. 9.
Dierichs, Alfred, Leverkusen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. New catalyst. 1,870,357; Aug. 9.
Diglovine, Camillo, New Geneva, Pa. Car replacer. 1,871,162; Aug. 9.
Dils, Logan A., assignor to Kellogg-Dils, Inc., Chicago, Ill. Treating printed paper for use as paper making stock. 1,870,358; Aug. 9.
Dilworth, Richard M., Lakewood, assignor to The Electro-Motive Company, Cleveland, Ohio. Electropneumatic throttle control. 1,871,163; Aug. 9.
Dispersions Process, Inc. (See Barnard, Arthur E., assignor.)
Dispersions Process, Inc. (See Pratt, W. B., and Halstead, assignors.)
Dodge, Adiel Y., assignor to Bendix Brake Company, South Bend, Ind. Brake mechanism. 1,871,407; Aug. 9.
Dodge, Sherwood O., Medford, and H. J. Malafey, Dorchester, assignors to Guaranteed Parts, Inc., Allston, Mass. Harness cord for looms. 1,871,308; Aug. 9.
Doe, Thomas B., New York, N. Y. Fuse for antiaircraft projectiles. 1,870,405; Aug. 9.
Domaica, Angel L., Las Rosas, Argentina. Cereal weighing and transporting device. 1,870,240; Aug. 9.
Domzalski, Casimir A., Detroit, Mich. Motor vehicle testing apparatus. 1,870,716; Aug. 9.
Dorey, William A., Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y. Luminair. 1,870,241; Aug. 9.

Dorneth, Julius, Konradshohe, near Tegel-Berlin, assignor to Typograph, G. m. b. H., Berlin, Germany. Ring spacer for matrix setting and type line casting machines. 1,870,717; Aug. 9.
Dorr Company, The. (See Baker, John A., assignor.)
Dorr Company, The. (See Becraft, Frank W., assignor.)
Dorr Company, The. (See Coley, Francis B., assignor.)
Dorr Company, The. (See Finney, J. H. V., assignor.)
Dorr Company, The. (See Marriott, Alexander D., assignor.)
Dorr Company, The. (See Maust, Ernest J., assignor.)
Dorr Company, The. (See Piper, William E., assignor.)
Dorr Company, The. (See Shimmin, John T., assignor.)
Douglas, John G., Leagrave, Luton, assignor to George Kent, Limited, London, England. Producing worms or cylindrical cams. 1,870,825; Aug. 9.
Douteur, Mathieu, La Plaine, St. Denis, near Paris, France. Molding machine for the production of a continuous ingot. 1,870,406; Aug. 9.
Dow Chemical Company, The. (See Britton, E. C., and Reed, assignors.)
Dow Chemical Company, The. (See Gann, John A., assignor.)
Dow Chemical Company. (See Heath, Sheldon B., assignor.)
Dow Chemical Company, The. (See Smith, Albert K., assignor.)
Drackett Chemical Company, The. (See Adams, E. M., Gangloff, and Spencer, assignors.)
Drackett Chemical Company, The. (See Gangloff, Wilmer C., assignor.)
Drake, Alden M., West Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Relieved screw thread grinding machine. 1,870,718; Aug. 9.
Drake, Harcourt C., Hempstead, assignor, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y. Rail flaw detector. 1,870,796; Aug. 9.
Drake, Harry F., Milwaukee, Wis. Artificial bait. 1,870,559; Aug. 9.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass furnace. 1,870,242; Aug. 9.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Laminated glass apparatus. 1,870,284; Aug. 9.
Drake, Lem P., assignor to Jadson Motor Products Company, Bell, Calif. Apparatus for upsetting articles of manufacture. 1,870,987; Aug. 9.
Draper, Ernest E., Scarsdale, assignor to The Perser Corporation, New York, N. Y. Plate holder for stereoscopic cameras. 1,870,611; Aug. 9.
Dreyfus, Camille, New York, N. Y. Treating textile material containing cellulose derivatives and product thereof. 1,871,047; Aug. 9.
Dreyfus, Camille, New York, N. Y., G. W. Miles, Boston, Mass., and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Delustering of textile material. 1,870,407; Aug. 9.
Dreyfus, Camille, New York, N. Y., G. W. Miles, Boston, Mass., and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Coloring of textile materials. 1,870,408; Aug. 9.
Dreyfus, Camille, New York, N. Y., and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Differentially colored fabric and producing the same. 1,870,837; Aug. 9.
Drumgold, Leland J., assignor of one-half to V. A. Neher, Oakland, Calif. Dust collector. 1,870,947; Aug. 9.
Dryice Equipment Corporation. (See Killeffer, David H., assignor.)
Dryice Equipment Corporation. (See Lockwood, Edwin J., assignor.)
Dryice Corporation of America. (See Rust, R. R., and Jones, assignors.)
Dubilier Condenser Corporation. (See Dubilier, William, assignor.)
Dubilier Condenser Corporation. (See Fried, Joseph A., assignor.)
Dubilier Condenser Corporation. (See Nyman, A., and Dubilier, assignors.)
Dubilier Condenser Corporation. (See Nyman, A., and Peck, assignors.)
Dubilier, William. (See Nyman, A., and Dubilier.)
Dubilier, William, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,870,797; Aug. 9.
Dubilier, William, New Rochelle, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser unit. 1,870,948; Aug. 9.
Dubilier, William, New Rochelle, assignor to Dubilier Condenser Corporation, New York, N. Y. Rolled condenser. 1,870,949; Aug. 9.
Dubilier, William, New Rochelle, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,870,950; Aug. 9.
Dubilier, William, New Rochelle, assignor to Dubilier Condenser Corporation, New York, N. Y. Adjustable condenser. 1,871,048; Aug. 9.
Duncan Electric Manufacturing Company. (See Fryer, Roy C., assignor.)
Duncan, James, Waterville, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn. Lavatory and shower valve handle. Des. 87,611; Aug. 9.
Dungan, John E., Chicago, Ill., assignor, by mesne assignments, of one-half to Remington Rand Inc., Buffalo, N. Y. Folding credit register. 1,870,444; Aug. 9.
Dunham, C. A., Company. (See Crosthwait, D. N., jr., and Brennan, assignors.)
Dunker, Henry C. L., Helsingborg, Sweden. Making galoshes, shoes with rubber soles, or the like by pressing. 1,870,359; Aug. 9.
Dunlap, Emmett A., Fort Worth, Tex., assignor to Reliance Machine & Stamping Works, Inc., New Orleans, La. Pressure grease gun. 1,870,497; Aug. 9.
Dunlop, James, Park Ridge, Ill., assignor, by mesne assignments, to Westinghouse Electric Elevator Company. Brake for elevators. 1,871,164; Aug. 9.
Dunlop, James, Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company. Overspeed brake at terminals. 1,871,213; Aug. 9.
Dunlop Rubber Company Limited. (See Twiss, D. F., Purkis, and Murphy, assignors.)
Duplate Corporation. (See Sherts, James H., assignor.)
Dupont Cellophane Company. (See Wright, Henry H., assignor.)
Du Pont, E. I., de Nemours & Company. (See Altwegg, Jean, assignor.)
Du Pont, E. I., de Nemours and Company. (See Grillet, Nicolas B., assignor.)
Du Pont, E. I., de Nemours & Company. (See Gubelmann, I., Goodrich, and Rintelman, assignors.)
Du Pont, E. I., de Nemours & Company. (See Henke, Clyde O., assignor.)
Du Pont, E. I., de Nemours & Company. (See Theumann, Max J., assignor.)
Du Pont, Francis I., Wilmington, Del. Separating coal from impurities. 1,870,613; Aug. 9.
Du Pont Rayon Company. (See Frey, Severn M., assignor.)
Du Pont Rayon Company. (See Guenther, A. E., and Toole, assignors.)
Dura Company, The. (See Floraday, Burton S., assignor.)
Durbin, Vernon, Newton, assignor to Holtzer-Cabot Electric Company, Roxbury, Mass. Fire alarm system and repeater. 1,870,988; Aug. 9.
Duston, Ernest W., Salem, Ohio, assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Collapsible spool or block. 1,870,243; Aug. 9.
D'Yarmett, Edward C., assignor to The Fractionator Company, Kansas City, Mo. Apparatus for heat treating liquids. 1,870,445; Aug. 9.
Eames, William F., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator gate system. 1,870,772; Aug. 9.
Eames, William F., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Double-coil inductor relay. 1,870,840; Aug. 9.
Eastern Tool & Mfg. Co. (See Anderson, Carl E., assignor.)
Eastman Kodak Company. (See Carroll, Stewart J., assignor.)
Eastman Kodak Company. (See Fuerst, Carl C., assignor.)
Eastman Kodak Company. (See Hopkins, Roy S., assignor.)
Eastman Kodak Company. (See Malm, Carl J., assignor.)
Eastman Kodak Company. (See Staud, C. J., and Gray, assignors.)
Eastman Kodak Company. (See Wells, Jackson B., assignor.)
Eckert, Clarence R., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Pipe coating apparatus. 1,870,841; Aug. 9.
Eclipse Machine Company. (See Kearney, Daniel P., assignor.)
Edison Electric Appliance Company. (See Shroyer, Jacob L., assignor.)
Eggert, Gustav B., assignor to Baker Perkins Company, Inc., Saginaw, Mich. Dough divider. 1,871,261; Aug. 9.
Eggert, Gustav B., assignor to Baker Perkins Company, Inc., Saginaw, Mich. Ejector mechanism for dough dividers. 1,871,264; Aug. 9.
Egy, Willard L., assignor to W. & L. E. Gurley, Troy, N. Y. Surveying instrument. 1,871,165; Aug. 9.
Ehrhart, Josef, St. Poelten, Austria, assignor to J. M. Voith, Heidenheim-on-the-Brenz, Germany. Propelling and steering mechanism for ships. 1,870,674; Aug. 9.
Eibner, Alexander, Munich, assignor to the Firm Theodor Kotthoff, Cologne, Radertal, Germany. Drying oil. 1,870,614; Aug. 9.
Ellersgaard, Asger, assignor to Link-Belt Company, Chicago, Ill. Double acting auxiliary clutch. 1,871,049; Aug. 9.
Elnson-Freeman Co. (See Elnson, Morris M., assignor.)
Elnson, Morris M., Yonkers, assignor to Elnson-Freeman Co., Inc., Long Island City, N. Y. Easel or support for posters and the like. 1,870,798; Aug. 9.
Elnson, Morris M., Yonkers, assignor to Elnson-Freeman Co., Inc., Long Island City, N. Y. Display device. 1,870,799; Aug. 9.
Elder, Charles W., Roy, Washington. Composition roller. 1,870,773; Aug. 9.
Elder, Charles W., Roy, Wash. Motor driven paper dispenser. 1,870,800; Aug. 9.
Eldred, Byron E., New York, N. Y. Electrical transmission of messages. 1,870,989; Aug. 9.

Eldredge, Murray C. (See Parks, R. C., and Eldredge.)
Electric Railway Improvement Company, The. (See Cadwell, Charles A., assignor.)
Electrical Research Products Inc. (See Crowley, John C., assignor.)
Electro-Motive Company, The. (See Dilworth, Richard M., assignor.)
Elektrotechnische Fabrik Schmidt & Co., Gesellschaft m. b. H. (See Rathmann, Paul, assignor.)
Ellingson, William M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermal relay. 1,871,262; Aug. 9.
Ellison, John C., Chicago, Ill. Hood lock. 1,870,360; Aug. 9.
Ellman, Louis, Pittsburgh, Pa., assignor to M. H. Detrick Company, Chicago, Ill. Furnace construction. 1,870,615; Aug. 9.
Eliner, Hans, Stuttgart, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Concentrated solutions for dyeing purposes. 1,870,498; Aug. 9.
Elston, Arthur E., Denver, Colo. Lifting jack. 1,870,244; Aug. 9.
Emmett, Milton W., Los Angeles, Calif., assignor to Emmett Wrench Company. Wrench. 1,870,326; Aug. 9.
Emmett Wrench Company. (See Emmett, Milton W., assignor.)
Emsco Derrick & Equipment Company. (See Rawson, Leslie A., assignor.)
Emsco Derrick and Equipment Company. (See Stevenson, Edward E., assignor.)
Endsley, Louis J., Chicago, Ill. Cigarette snubber. 1,870,327; Aug. 9.
Engels, Eugene O., assignor to Baker Perkins Company, Saginaw, Mich. Flue system for hot gas heated bake ovens. 1,871,309; Aug. 9.
Engle, Clara A. (See Longletz, C. K., and Engle.)
Engstrom, Ernest P., assignor to J. R. Gammeter, Akron, Ohio. Sprocket and chain construction. 1,870,801; Aug. 9.
Enterprise Manufacturing Company, The. (See Brown, John E., assignor.)
Enterprise Manufacturing Company, The. (See Khoenle, Herman F., assignor.)
Enterprise Manufacturing Company, The. (See Pflueger, Charles T., assignor.)
Entz, Ferdinand S., and A. E. Bachelet, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Communication system. 1,871,310; Aug. 9.
Equipment Specialties Company. (See Hull, George A., assignor.)
Ernst, Walter, assignor to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Hydraulically operated drop hammer. 1,870,499; Aug. 9.
Ernst, Walter, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Plural pressure pump control for hydraulic presses. 1,870,501; Aug. 9.
Ernst, Walter and H. F. MacMillan, assignors to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Hydraulic press. 1,870,500; Aug. 9.
Escher, Henry, et al. (See Aeppli, Albert, assignor.)
Evans, Albert E., Cleveland, Ohio, assignor, by mesne assignments, to The Corozone Company, Wilmington, Del. Ozonizer. 1,870,616; Aug. 9.
Evans, Earle W., Linden, N. J., assignor to Standard Oil Development Company. Temperature control in force feed lubricating oil systems. 1,870,675; Aug. 9.
Evans, Ralph R., Watertown, assignor to Simplex Wire and Cable Company, Boston, Mass. Insulation of wire. 1,870,990; Aug. 9.
Eveland, Samuel S., Philadelphia, Pa. Mulching. 1,871,950; Aug. 9.
Everlasting Memorial Association. (See Koch, Robert R., assignor.)
Ezbelent Fils. (See Ezbelent, Georges and R., assignors.)
Ezbelent, Georges and R., Paris, France, assignors to Ezbelent Fils. Plaiting machine. 1,870,617; Aug. 9.
Ezbelent, Roger. (See Ezbelent, Georges and R.)
Fagan, James M., Maplewood, N. J., assignor to Westinghouse Lamp Company. Making mercury switches. 1,871,311; Aug. 9.
Fageol, Rollie B., Los Angeles, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation. Multiple wheel road vehicle. 1,871,432; Aug. 9.
Fahrbach, Harry, Riga, Latvia. Regenerator. 1,871,166; Aug. 9.
Fain, Walter C., assignor to Wainslo Manufacturing Corporation, Norfolk, Va. Concealable furnishing. 1,870,719; Aug. 9.
Farley, Cyrus H., Portland, Me. Ventilator. 1,870,720; Aug. 9.
Farley, Frank, St. Paul, Minn. Letter bundle binder and carrier. 1,871,263; Aug. 9.
Farmer, Fred R., Wilmette, Ill. Lighting fixture. 1,870,618; Aug. 9.
Farrel-Birmingham Company. (See Lewis, R. C., and Schnuck, assignors.)
Farrell, Michael J., and L. Staffaroni, Scranton, Pa. Railroad crossing gate. 1,871,167; Aug. 9.
Favorite Stove and Range Company, The. (See Ross, William S., assignor.)
Federal Merchandise Company. (See Hueglin, Herman C., assignor.)
Fehr, Charles M., assignor to Sterling Products Company, Easton, Pa. Detergent material and making the same. 1,870,560; Aug. 9.
Feldman, Abraham G., Chicago, Ill. Playpen. 1,870,285; Aug. 9.
Fellers, Carl R., Amherst, Mass., assignor to The Hills Brothers Company, New York, N. Y. Treating dried fruits. 1,870,802; Aug. 9.
Felt & Tarrant Manufacturing Company. (See Turck, Joseph A. V., assignor.)
Ferguson, William, Flint, Mich. Method of and tool for removing indentations. 1,871,312; Aug. 9.
Ferro Enamel Corporation, The. (See McIntyre, G. H., and Stuart, assignors.)
Field, Russell M., Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Tap changing system. 1,871,168; Aug. 9.
Filmtone Corporation. (See Foley, Earl H., assignor.)
Finney, John H. V. and A. D. Marriott, Denver, Colo., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y. Classifier. 1,870,409; Aug. 9.
First Trust & Savings Bank of Pasadena, trustee. (See Key, James F., assignor.)
Fisher, Harry C., Norwood, assignor to The Richardson Company, Lockland, Ohio. Molded product similar to stoneware and making the same. 1,870,245; Aug. 9.
Fitch, Benjamin F., Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del. Apparatus for lifting a vehicle body. 1,870,991; Aug. 9.
Fitz-Gerald, Arthur G., Brookline, Mass. Pneumatic tube and making same. 1,870,561; Aug. 9.
Flanzer, Joseph A., Brooklyn, assignor, by mesne assignments, of one-half to Technidyne Corporation, and one-half to M. James, New York, N. Y. Roaster. 1,870,619; Aug. 9.
Flett, Lawrence H., Hamburg, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Production of diazo-nitroaryl compounds. 1,870,842; Aug. 9.
Floraday, Burton S., assignor to The Dura Company, Toledo, Ohio. Handle. 1,871,169; Aug. 9.
Floyd, Henry B. (See Brothers, John T., assignor.)
Foley, Earl H., Seattle, Wash., assignor to Filmtone Corporation. Sound recording device. 1,870,446; Aug. 9.
Foley, Earl H., Astoria, N. Y., assignor to Filmtone Corporation. Sound recording and record. 1,870,447; Aug. 9.
Foltz, Raymond D., South Orange, N. J., assignor to M. H. Detrick Company, Chicago, Ill. Furnace construction. 1,870,721; Aug. 9.
Forbes, Thomas C., Hopkins, Minn., assignor to Max McGraw, Chicago, Ill. Bread toaster. 1,870,562; Aug. 9.
Ford, Robert J., assignor to National India Rubber Company, Bristol, R. I. Manufacturing bias fabric. 1,870,843; Aug. 9.
Ford, Robert J., assignor to National India Rubber Company, Bristol, R. I. Manufacturing footwear. 1,871,313; Aug. 9.
Forrow, Elwin W., assignor to Byron Jackson Co., Los Angeles, Calif. Drilling bit. 1,870,563; Aug. 9.
Foster, Edith D. (See Proctor, B. A., Foster, and Bundick.)
Foster, Warren D., Washington Township, Bergen County, N. J., assignor, by mesne asignments, to Kinatome Patents Corporation, New York, N. Y. Container for films and handling the same. 1,871,232; Aug. 9.
Foster, Warren D., Washington Township, Bergen County, N. J., and C. U. Bundick, White Plains, assignors, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y. Carrier for material and spindle therefor. 1,871,230; Aug. 9.
Foster, Warren D., Washington Township, Bergen County, N. J., and C. U. Bundick, White Plains, assignors, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y. Carrier for material and spindle therefor. 1,871,231; Aug. 9.
Fowler, Alfred B., deceased; M. F. Fowler, Beverly, Mass., administratrix, assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,870,844; Aug. 9.
Fowler, Mary F., administratrix. (See Fowler, Alfred B.)
Fractionator Company, The. (See D'Yarmett, Edward C., assignor.)
France, Henry H. (See Coffey, J. M., France and Pickney.)
Frank, Frederick C., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,871,314; Aug. 9.
Franke, Robert. (See Spröngerts, E. W., and Franke.)
Franklin, Charles R., Dover, and E. Goldsworthy, Wharton, N. J. Packing case. 1,870,676; Aug. 9.
Franklin Railway Supply Company. (See Titus, H. J., and Wallis assignors.)
Franzen, Hans, Mannheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Distillation. 1,871,051; Aug. 9.
Fratesi, Basilio L., jr., Tribbett, Miss. Paper bag holder. 1,870,722; Aug. 9.
Fredenburgh, Mark N., East Orange, N. J., assignor to Westinghouse Lamp Company. Electron emission material. 1,870,951; Aug. 9.
Frederick John, Edwin China, and Burt, Boulton & Haywood, Limited. (See Nester, Samuel K., assignor.)
Frelin, Fritjof, Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Fuel distributor for internal combustion engines. 1,871,265; Aug. 9.

French, James W., Anniesland, Glasgow, assignor to Barr and Stroud, Limited, Glasgow, Scotland. Antivibration means for the support of optical observation instruments. 1,870,310; Aug. 9.
Freud, Joseph, and C. H. Koebler, Chicago, Ill. Motor operated mechanism. 1,870,246; Aug. 9.
Freuler, Arthur L., assignor of 90 per cent to J. Maas, and 10 per cent to C. E. Myers, St. Louis, Mo. Ventilation regulating apparatus. 1,870,992; Aug. 9.
Frey, Severn M., Buffalo, assignor to Du Pont Rayon Company, New York, N. Y. Liquid applying machine. 1,870,952; Aug. 9.
Fried, Joseph A., Flushing, assignor to Dubilier Condenser Corporation, New York, N. Y. Condenser. 1,870,803; Aug. 9.
Friedman, John H., assignor to The National Machinery Co., Tiffin, Ohio. Handling cut blanks for forgings. 1,870,723; Aug. 9.
Fritz, Earl A., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electrode construction. 1,871,363; Aug. 9.
Froget, André, Paris, France, assignor to Holophane Company, Inc., New York, N. Y. Luminair. 1,870,247; Aug. 9.
Frosted Foods Company. (See Tressler, Donald K., assignor.)
Fryer, Roy C., Cincinnati, Ohio, assignor to Duncan Electric Manufacturing Company, Lafayette, Ind. Electric current consumption system. 1,871,170; Aug. 9.
Fuerst, Carl C., assignor to Eastman Kodak Company, Rochester, N. Y. Self-erecting front mechanism for cameras. 1,870,620; Aug. 9.
Fuerst, Edwin W., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Jar. Des. 87,512; Aug. 9.
Fuhrman, Albert C., Canton, Ohio. Fifth wheel construction. 1,870,502; Aug. 9.
Fuld, William A., Baltimore, Md. Amusement device. 1,870,677; Aug. 9.
Fulton Sylphon Company. (See Carson, William W., jr., assignor.)
Fulton Sylphon Company, The. (See Giesler, Jean V., assignor.)
G. & J. Tire Company. (See Cady, John E., assignor.)
Gafney, James, New York, N. Y. Magnetic brake shoe for aeroplanes. 1,870,286; Aug. 9.
Gahn, Joseph J. (See Yoder, C. B., Gahn, and Wilkes, jr.)
Gaines, Eugene F., assignor to Atlas Manufacturing Company, Philadelphia, Pa. Power meat saw. 1,870,774; Aug. 9.
Gale, William A., and C. F. Ritchie, Trona, Calif., assignors, by mesne assignments, to American Potash & Chemical Corporation, New York, N. Y. Detergent and water softening product. 1,870,804; Aug. 9.
Gammeter, John R. (See Engstrom, Ernest P., assignor.)
Gammeter, John R., Akron, Ohio. Method of vulcanizing, stripping, and finishing dipped rubber goods. 1,870,775; Aug. 9.
Gammeter, John R., Akron, Ohio. Method and apparatus for curing solid tires. 1,870,805; Aug. 9.
Gangloff, Wilmer C. (See Adams, E. M., Gangloff, and Spencer.)
Gangloff, Wilmer C., assignor to The Drackett Chemical Company, Cincinnati, Ohio. Cleanser for aluminum. 1,870,311; Aug. 9.
Gangloff, Wilmer C., assignor to The Drackett Chemical Company, Cincinnati, Ohio. Cleanser for household use. 1,870,312; Aug. 9.
Gann, John A., assignor to The Dow Chemical Company, Midland, Mich. Casting readily oxidizable metals. 1,871,315; Aug. 9.
Gann, John A., assignor to The Dow Chemical Company, Midland, Mich. Purifying light metal. 1,871,316; Aug. 9.
Gardiner, Paul C., Oakland, Calif., assignor to General Electric Company. Grid connection for electric discharge devices. 1,871,409; Aug. 9.
Gardner, Archibald D., Jackson, Mich., assignor to Automotive Fan & Bearing Co. Automotive fan bearing. 1,870,993; Aug. 9.
Gardner, John E., Clarendon Hills, Ill. Automatic telephone system. 1,870,621; Aug. 9.
Garreau, Louis. (See Barendse, S., and Garreau.)
Gasoline Products Company. (See Cross, Walter M., assignor.)
Gaudin, James T., Birmingham, Ala. Belt fastening. 1,870,622; Aug. 9.
Gay, Fraser W., Newark, N. J. Alternating current machine and starting means therefor. 1,870,287; Aug. 9.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Radio transmitter. 1,870,678; Aug. 9.
Geller, Leon W., Hamburg, assignor to National Aniline & Chemical Co. Inc., New York, N. Y. Azo coloring matter soluble in benzene. 1,870,806; Aug. 9.
Gem Doughnut Machine Co. (See Schoel, Clifford R., assignor.)
General Aniline Works, Inc. (See Eliner, Hans, assignor.)
General Aniline Works, Inc. (See Kunz, M. A., and Teller, assignors.)
General Aviation Corporation. (See Thaden, Herbert V., assignor.)
General Electric Company. (See Anderson, Arvid E., assignor.)
General Electric Company. (See Brown, H. D., and Sabbah, assignors.)
General Electric Company. (See Carlson, Wendell L., assignor.)
General Electric Company. (See Gardiner, Paul C., assignor.)
General Electric Company. (See Hardy, C. V., and Johnston, assignors.)
General Electric Company. (See Mansur, Clarence W., assignor.)
General Electric Company. (See Pringle, William A., assignor.)
General Electric Company. (See Watts, Noble H., assignor.)
General Plate Company. (See Bush, Vannevar, assignor.)
General Tire & Rubber Company, The. (See Denmire, Harold A., assignor.)
General Zeolite Company. (See Adelson, Samuel L., assignor.)
Geophysical Research Corporation. (See Rosaire, Esme E., assignor.)
George, James S., assignor to Scovill Manufacturing Company, Waterbury, Conn. Street marker. 1,870,994; Aug. 9.
Gerstadt, Anton, Berlin-Charlottenburg, Germany. Multiple spindle automatic screw machine. 1,870,724; Aug. 9.
Gibbons, Willis A., Montclair, N. J., assignor to Morgan & Wright, Detroit, Mich. Method and apparatus for manufacturing rubber articles. 1,871,364; Aug. 9.
Gibson, Milne, Lyrup, River Murray, South Australia, Australia, assignor to The Guardian Trust Company, Cleveland, Ohio, as trustee for Gibson Patent Containers, Ltd. Carton or container. 1,870,679; Aug. 9.
Gibson, Milne, Lyrup, River Murray, South Australia, Australia, assignor to The Guardian Trust Company, Cleveland, Ohio, trustee for Gibson Patent Containers, Ltd. Cardboard box and carton. 1,870,680; Aug. 9.
Gibson Patent Containers, Ltd. (See Gibson, Milne, assignor.)
Gibson Patent Containers, Ltd. (See Page, John E., assignor.)
Giesler, Jean V., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Expansion absorber. 1,870,902; Aug. 9.
Giesler, Jean V., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Dispensing tube. 1,870,903; Aug. 9.
Giesler, Jean V., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Attachment of heads to bellows. 1,870,904; Aug. 9.
Gilbert, A. C., Company, The. (See Lanz, John, assignor.)
Gilbert & Barker Manufacturing Company. (See Davis, Joan B., assignor.)
Gilbert & Barker Manufacturing Company. (See De Lancey, Warren H., assignor.)
Gilbert & Barker Manufacturing Company. (See Logan, Joseph A., assignor.)
Gill, Stanley. (See McGary, S. U., Rogers, and Gill.)
Gillette Rubber Company. (See Krause, A. R., and Hutchens, assignors.)
Gillis, Randall, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Magnetic core and making the same. 1,871,317; Aug. 9.
Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Drop door for railway cars. 1,870,905; Aug. 9.
Gohorel, Fernand, Paris, France, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Automatic telephone system. 1,870,448; Aug. 9.
Goldfinger, Hyman, Brooklyn, N. Y. Mop. 1,870,845; Aug. 9.
Goldsmith, Max S., assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio. Concrete floor construction. 1,870,808; Aug. 9.
Goldsmith Metal Lath Company, The. (See Goldsmith, Max S., assignor.)
Goldsmith Metal Lath Company, The. (See Goldsmith, William M., assignor.)
Goldsmith, William M., assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio. Tile and soffit means for concrete floor construction. 1,870,807; Aug. 9.
Goldsworthy, Edward. (See Franklin, C. R., and Goldsworthy.)
Goodman Manufacturing Company. (See Lindgren, Frank A., assignor.)
Goodman Manufacturing Company. (See McCarty, Frank L., assignor.)
Goodrich, B. F., Company, The. (See Butler, R. A., and Matthews, assignors.)
Goodrich, B. F., Company, The. (See Leguillon, Charles W., assignor.)
Goodrich, Robert J. (See Gubelmann, I., Goodrich, and Rintelman.)
Goodyear's India Rubber Glove Mfg. Company, The. (See Randall, Chester J., assignor.)
Goodyear India Rubber Glove Manufacturing Company, The. (See Rice, Harold D., assignor.)
Gorbutt, Sidney B., Portland, Oreg. Frame for flat screens. 1,870,846; Aug. 9.
Gorton, Roy H. (See Stallings, E. O., and Gorton.)
Goss, Edward L., and Henry Mueller, Waterloo, Iowa. Violin. 1,870,623; Aug. 9.

Gottschalk, Charles, and D. T. Blakey, Evansville, Ind.; said Blakey assignor to said Gottschalk. Wheeled mine crane. 1,870,906; Aug. 9.
Gottschalk, John J., Taunton, Mass. Shaving brush. 1,870,847; Aug. 9.
Gould & Eberhardt. (See Zimmermann, William F., assignor.)
Gould, William S., New York, and W. B. Osborne, Buffalo, N. Y. Making separators. 1,871,171; Aug. 9.
Grant, John. (See Santiago, James J., assignor.)
Grant, William D., Vancouver, British Columbia, Canada. Drilling equipment. 1,870,725; Aug. 9.
Graves, George D., Casper, Wyo., assignor to Standard Oil Company, Whiting, Ind. Recovery of wax from oils. 1,871,172; Aug. 9.
Gray, Frank, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrooptical transmission. 1,871,266; Aug. 9.
Gray, Harry L. (See Staud, C. J., and Gray.)
Graybar Electric Company, Inc. (See Reddig, Charles E., assignor.)
Greenbaum, Leo. (See Gustavson, C., Van Hoofstadt, and Greenbaum.)
Greene, Arthur R., Fort Dodge, Iowa. Windshield heater. 1,870,726; Aug. 9.
Greene, Richard A. (See Burns, W. G., and Greene.)
Greenwood, Richard F., New York, N. Y. Precast concrete structural unit. 1,871,318; Aug. 9.
Greenwood, Wallace W., assignor to Norton Company, Worcester, Mass. Segmental grinding wheel. 1,870,449; Aug. 9.
Greer, Willard N., assignor to Leeds & Northrup Company, Philadelphia, Pa. Electric control system. 1,870,995; Aug. 9.
Greiner, Harvey R. (See Wilcox, S. S., jr., and Greiner.)
Griesbach, Walter, Montreal, Quebec, Canada. Method and apparatus for building retaining walls, piers, etc. 1,870,248; Aug. 9.
Grigsby-Grunow Company. (See Kenney, Mahlon W., assignor.)
Grillet, Nicolas B., Neuilly-sur-Seine, France, assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del. Protection of apparatus against acids. 1,870,953; Aug. 9.
Griswold, Edward H., assignor of one-half to J. A. Hudson, Ponca City, Okla. Tobacco pipe. 1,871,365; Aug. 9.
Griswold, Edward H., and J. C. Nicklos, assignors to Continental Oil Company, Ponca City, Okla. Oil well flow control device. 1,871,319; Aug. 9.
Groomes, Reister R., and P. A. Laddon, Washington, D. C. Box. 1,870,907; Aug. 9.
Gross, Arthur. (See Nathan, M., and Gross.)
Grossman, Lester E., Brooklyn, N. Y. Tie. 1,871,173; Aug. 9.
Gruenewald, Eugene J., assignor to Ross Gear & Tool Company, Lafayette, Ind. Machine for cutting spirally grooved cams. 1,871,174; Aug. 9.
Gruetter, John R., Cleveland, Ohio, assignor to The Liquid Carbonic Corporation, Chicago, Ill. Bottle cleaning apparatus. 1,870,503; Aug. 9.
Gruetter, John R., Cleveland, Ohio, assignor to The Liquid Carbonic Corporation, Chicago, Ill. Bottle handling mechanism. 1,870,504; Aug. 9.
Grunwald, Albert C., Chicago, Ill. Dispensing device. 1,871,175; Aug. 9.
Guaranteed Parts, Inc. (See Dodge, S. O., and Malafey, assignors.)
Guardian Trust Company, The, trustee. (See Gibson, Milne, assignor.)
Guardian Trust Company, The, trustee. (See Page, John E., assignor.)
Gubelmann, Ivan, and R. J. Goodrich, South Milwaukee, and W. L. Rintelman, Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company. Anthraquinone body and preparing same. 1,870,249; Aug. 9.
Guenther, Arthur E., and H. S. Toole, Buffalo, assignors, by mesne assignments, to Du Pont Rayon Company, New York, N. Y. Adjustable cake holder. 1,870,954; Aug. 9.
Guilmette, Joseph, St. Felicien, Quebec, Canada. Differential. 1,871,052; Aug. 9.
Gulf Production Company. (See McGary, S. U., Rogers, and Gill, assignors.)
Gurley, W. & L. E. (See Egy, Willard L., assignor.)
Gustavson, Charles, Woodside, E. Van Hoofstadt, and L. Greenbaum, assignors to Lion Match Co., New York, N. Y. Machine and method for making book matches. 1,870,955; Aug. 9.
Gustin, Daniel S., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Electrical vacuum device. 1,871,366; Aug. 9.
Gynex Corporation. (See Beatty, Dana C., assignor.)
Haas, Louis W., and H. O. Renner, assignors, by mesne assignments, to J. R. Short Milling Company, Chicago, Ill. Improving and removing the odor and/or flavor of legumes. 1,870,450; Aug. 9.
Haeberle, Henry C., and C. T. Harrington, San Jose, Calif. Speedometer testing machine. 1,871,053; Aug. 9.
Hageman, Aaron M., Bloomfield, and A. F. Lindstrom, Nutley, N. J., assignors to Westinghouse Lamp Company. Coating hollow bodies. 1,871,367; Aug. 9.
Hagemann, Louis F., Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada. Collating device for autographic registers. 1,870,451; Aug. 9.
Haglund, Gustaf, assignor to Patentaktiebolaget Grondal-Ramen, Stockholm, Sweden. Reducing the contents of resins and fatty acids in cellulose produced by means of sulphite digestion. 1,870,452; Aug. 9.
Hahn, Seung K., Philadelphia, Pa. Envelope. 1,870,908; Aug. 9.
Hall, George F., Newark, N. J., assignor to The Boye Needle Company, Chicago, Ill. Combination bevel, squaring, and leveling device. 1,871,176; Aug. 9.
Halstead, Ralph T. (See Pratt, W. B., and Halstead.)
Hamersley, Carl S., New York, N. Y., assignor to The Hamersley Manufacturing Co., Garfield, N. J. Paper. 1,870,681; Aug. 9.
Hamersley Manufacturing Co. (See Hamersley, Carl S., assignor.)
Hamilton Beach Manufacturing Company. (See Nielsen, Emanuel, assignor.)
Hamilton Standard Propeller Company. (See Caldwell, Frank W., assignor.)
Hamilton Standard Propeller Company. (See Hamilton, Thomas F., assignor.)
Hamilton, Thomas F., Milwaukee, Wis., assignor, by mesne assignments, to Hamilton Standard Propeller Company, West Homestead, Pa. Propeller hub and blade mounting. 1,870,361; Aug. 9.
Hammant, Edward W. (See von Webern, G., and Hamant.)
Hammerl, Jacob, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,870,250; Aug. 9.
Hammond, John Hays, jr. (See Purington, Ellison S., assignor.)
Hammond, Lillian L., et al. (See Buel, Hillhouse, assignor.)
Hammond, William P., jr., et al. (See Buel, Hillhouse, assignor.)
Handy, John C., Berkeley, assignor to Standard Oil Company of California, San Francisco, Calif. System for lubricating machinery. 1,870,809; Aug. 9.
Hannum, William A., Grand Lake, Colo. Automatic draft controlling device. 1,870,505; Aug. 9.
Hansmann, Anton C. (See Adams, D. G., and Hansmann.)
Hanson, Estyle D. (See De Turk, J. A., and Hanson.)
Happel, Otto, Bochum, in Westphalia, Germany. Hothouse installation. 1,870,329; Aug. 9.
Harber, Laurence S., and J. E. Pointon, Peterborough, England, assignors to Baker Perkins Company, Incorporated, New York, N. Y. Variable speed driving or transmitting gear. 1,871,320; Aug. 9.
Hardman, Coy H., Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Leer loader. 1,870,506; Aug. 9.
Hardy, Clyde V., and P. J. Johnston, Schenectady, N. Y., assignors to General Electric Company. Liquid pressure measuring apparatus. 1,871,410; Aug. 9.
Harrington & King Perforating Company, The. (See Pirola, Louis, assignor.)
Harrington, Clarence T. (See Haeberle, H. C., and Harrington.)
Harris, Carl C., Orange, Mass. Swimming float. 1,870,507; Aug. 9.
Harris, Harry, Miami, Fla. Glazier's point driver. 1,870,330; Aug. 9.
Hart, Paul B., Houston, Tex. Depth indicator. 1,870,362; Aug. 9.
Hartley, John J., assignor to Link-Belt Company, Chicago, Ill. Mold conveyer. 1,871,054; Aug. 9.
Hartmann Trunk Company. (See Ritter, Julius, jr., assignor.)
Hartzell, Albert, Yonkers, and F. H. Lathrop, Geneva, N. Y., assignors to Walter C. O'Kane, Durham, N. H., and P. Moore. Process and apparatus for making colloidal substances. 1,870,727; Aug. 9.
Hasbrouck, Stephen A., New Haven, assignor to Pratt & Whitney Aircraft Company, East Hartford, Conn. Liquid supplying means for aircraft engines. 1,871,055; Aug. 9.
Haseltine, Stacy B., Chicago, Ill., assignor, by mesne assignments, to W. H. Miner, Inc. Friction shock absorbing mechanism. 1,870,508; Aug. 9.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,871,368; Aug. 9.
Hatch, Meredith R. (See Seidel, A., and Hatch.)
Hauck, John F., Tyndall, S. Dak. Animal trap. 1,870,331; Aug. 9.
Hayden, Harold P., Woodbridge, N. J., assignor to The Barber Asphalt Company, Philadelphia, Pa. Treating impregnated fabrics. 1,870,564; Aug. 9.
Hayes, Lloyd. (See Conlon, W. B., and Hayes.)
Hayford, Walter S., Morristown, and C. R. Moore, Maplewood, N. J., assignors, by mesne assignments, to Western Electric Company, Incorporated. Forming tool. 1,871,321; Aug. 9.
Haywood Company, The. (See Hayward, J., and Brendlin, assignors.)
Hayward, Judson, Hackensack, N. J., and H. J. Brendlin, assignors to The Hayward Company, New York, N. Y. Excavating bucket. 1,870,288; Aug. 9.
Hazel-Atlas Glass Co. (See Hardman, Coy H., assignor.)
Heath, Marian B., Meadville, Pa. Box or similar receptacle. Des. 87,513; Aug. 9.

Heath, Sheldon B., assignor to The Dow Chemical Company, Midland, Mich. Preparing partially dehydrated magnesium chloride. 1,871,411; Aug. 9.
Heath, Sheldon B., assignor to The Dow Chemical Company, Midland, Mich. Preparing partially dehydrated magnesium chloride. 1,871,435; Aug. 9.
Heddon's, James, Sons. (See Welch, Jack T., assignor.)
Helden, John A., Pittsburgh, Pa. Rolling mill. 1,870,509; Aug. 9.
Heil Co., The. (See Thwaits, Frederick G., assignor.)
Heintz, Ernest E., and T. P. Archer, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Remote control lock. 1,870,565; Aug. 9.
Heintz Manufacturing Company. (See Lambert, Albert L., assignor.)
Heiser, Harold W., East St. Louis, Ill., assignor to Aluminum Company of America, Pittsburgh, Pa. Production of barium aluminate. 1,871,056; Aug. 9.
Heising, Raymond A., Millburn, and J. P. Kendall, Cranford, N. J. Direction indicating system. 1,870,682; Aug. 9.
Heitritter, Edward G., Sioux City, Iowa. Mouth closing device. 1,870,566; Aug. 9.
Held, Siegfried, Chicago, Ill. Mercury switch and the like. 1,871,177; Aug. 9.
Hellige, Paul A. E., Jackson Heights, N. Y. Colorimeter. 1,870,624; Aug. 9.
Hellwig, Emil C., Aurora, assignor to The Pyle-National Company, Chicago, Ill. Arcless receptacle and plug connecter. 1,870,625; Aug. 9.
Henke, Clyde O., Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. Wetting and penetrating agent and preparing the same. 1,870,251; Aug. 9.
Henshaw, Daniel M. (See Cooper, C., and Henshaw.)
Herbster, George, assignor to The Bauer Ignition Company, Cleveland, Ohio. Temperature regulator. 1,871,267; Aug. 9.
Herbster, George, assignor to The Bauer Ignition Company, Cleveland, Ohio. Thermostatic switch. 1,871,369; Aug. 9.
Hespeler, Max, Neckarsulm, Germany. Device for carrying power lines. 1,870,510; Aug. 9.
Hewitt, Ellis E., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid compressor controlling valve. 1,870,848; Aug. 9.
Heyner, Fritz. (See Kruckenberg, F., and Heyner.)
Higbee, Ray P., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic elevator control system. 1,870,410; Aug. 9.
Hildebrand, Reinhard, Webster Groves, Mo. Lead control for Diesel engines. 1,871,268; Aug. 9.
Hill, C. V., & Co. (See Morley, Louis W., assignor.)
Hill, Roger B., assignor to Brown Company, Berlin, N. H. Artificial leather manufacture. 1,870,567; Aug. 9.
Hills Brothers Company, The. (See Fellers, Carl B., assignor.)
Hillyard, Newton S., St. Joseph, Mo. Book cover. Des. 87,514; Aug. 9.
Hoard, Bert V., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transmission line stability system. 1,870,810; Aug. 9.
Hobrock, Raymond H., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Drying materials. 1,871,269; Aug. 9.
Hocker, Robert J. (See Danner, Albert C., assignor.)
Hodgins, William A., Ottawa, Ontario, Canada. Heat saver. 1,871,322; Aug. 9.
Hodgson, John L., near Leighton, Buzzard, England. Flow quantity meter. 1,870,849; Aug. 9.
Hoern, Joseph H., Saginaw, Mich., assignor to Wilcox-Rich Corporation. Machine for sawing piston rings. 1,870,996; Aug. 9.
Hoffmann, Edward J., Cincinnati, Ohio. Sales or advertising letter. 1,870,909; Aug. 9.
Hoffman, Morris J., Chicago, Ill. Coupon ticket printing machine. 1,871,058; Aug. 9.
Hoffman, Morris J., Chicago, Ill. Printing machine. 1,871,059; Aug. 9.
Hoffman, Morris J., Chicago, Ill. Printing device. 1,871,060; Aug. 9.
Hoffman, Roscoe C., Detroit, Mich. Automobile. Des. 87,515; Aug. 9.
Hoffman, Roscoe C., Detroit, Mich. Automobile. Des. 87,516; Aug. 9.
Hoffman, Roscoe C., Detroit, Mich. Automobile. Des. 87,517; Aug. 9.
Hoffman, Roscoe C., Detroit, Mich. Automobile. Des. 87,518; Aug. 9.
Hoffman, Roscoe C., Detroit, Mich. Automobile. Des. 87,519; Aug. 9.
Hoffman, Roscoe C., Detroit, Mich. Automobile. Des. 87,520; Aug. 9.
Holding, L. W., Corporation. (See Wynn, Samuel J., assignor.)
Holmes, Colin W. H., Low Fell, assignor of one-half to The Birtley Iron Company, Limited, Birtley, England. Separation of particles of different densities by means of liquids. 1,871,121; Aug. 9.
Holmes, W. C., and Company. (See Cooper, C., and Henshaw, assignors.)
Holophane Company. (See Dorey, William A., assignor.)
Holophane Company. (See Froget, André, assignor.)
Holtzer-Cabot Electric Company. (See Durbin, Vernon, assignor.)
Hönel, Herbert, Vienna, Austria, assignor to Beck, Koller & Company, Inc., Detroit, Mich. Artificial mass and making the same. 1,870,453; Aug. 9.
Hönel, Herbert, Vienna, Austria, assignor to Beck, Koller & Company, Inc., Detroit, Mich. Mixed ester composition and making the same. 1,870,454; Aug. 9.
Hönel, Herbert, Vienna, Austria, assignor to Beck, Koller & Company, Inc., Detroit, Mich. Artificial mass and making the same. 1,870,455; Aug. 9.
Hook, Charles H., Pittsburgh, and N. L. Mercur, McKeesport, Pa. Valve mechanism. 1,871,057; Aug. 9.
Hookless Fastener Company. (See Statham, Noel, assignor.)
Hopkins, John C., Lakewood, Ohio. Tuyère. 1,870,511; Aug. 9.
Hopkins, Roy S., assignor to Eastman Kodak Company, Rochester, N. Y. Apparatus for flattening prints. 1,870,626; Aug. 9.
Hopkinson, Ernest, New York, N. Y. Manufacturing rubberized cords. 1,871,412; Aug. 9.
Horger, Oscar J., assignor to The Timken Roller Bearing Company, Canton, Ohio. Split axle housing. 1,871,061; Aug. 9.
Hornbostel, Lloyd, assignor to Beloit Iron Works, Beloit, Wis. Synchronous motor driven shake. 1,870,242; Aug. 9.
Horscroft, Theodore, assignor of eleven-twentieth to John L. McDowall, Perth Amboy, N. J. Auxiliary air inlet. 1,870,411; Aug. 9.
Horton, William J., Winnipeg, Manitoba, Canada. Attachment to cultivating machines. 1,870,850; Aug. 9.
Hosbein, Louis H., Winnetka, assignor to M. H. Detrick Company, Chicago, Ill. Furnace construction. 1,870,568; Aug. 9.
Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Apparatus for making lever opener container parts. 1,870,728; Aug. 9.
Howey, Walter. (See Woodward, Benjamin W., assignor.)
Hubbard, Beverly R., Melrose, assignor to Submarine Signal Company, Boston, Mass. Acoustic compensator. 1,870,569; Aug. 9.
Hubbard, Rowland, Philadelphia, Pa. Flange lubricator. 1,871,270; Aug. 9.
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 87,521; Aug. 9.
Hudson, James A. (See Griswold, Edward H., assignor.)
Hudson-Sharp Machine Company. (See Campbell, Samuel J., assignor.)
Hudson, William H., Detroit, Mich. Template. 1,871,178; Aug. 9.
Huebscher, J. J. (See Smith, Elmer H.)
Hueglin, Herman C., assignor to Federal Merchandise Company, Chicago, Ill. Ventilating means. 1,870,570; Aug. 9.
Hughes, Joseph E., Battle Creek, Nebr. Raising and lowering shields of tractor supported cultivators. 1,870,910; Aug. 9.
Hull, George A., assignor to Equipment Specialties Company, Chicago, Ill. Refrigerating car. 1,870,911; Aug. 9.
Hulseberg, Herman H. A., Chicago, Ill. Tie rack. 1,870,729; Aug. 9.
Hunt, Charles W. (See Wadsten, S., and Hunt.)
Hunter, Percy E., Pittsburgh, Pa. Highway guard. 1,871,062; Aug. 9.
Huntress, Ernest H., Cambridge, Mass., assignor to Swann Research, Inc. Preparation of tetranitrodiphenyl. 1,870,627; Aug. 9.
Hurley, Charles P., Caldwell, N. J., assignor to Aluminum Company of America, Pittsburgh, Pa. Container for poison syrup and the like. 1,870,628; Aug. 9.
Hutchens, Ralph W. (See Krause, A. R., and Hutchens.)
Hyanes, Bert, Baltimore, Md., assignor to The New York Air Brake Company. Combined dust collector and shut-off cock. 1,871,214; Aug. 9.
Hydraulic Press Manufacturing Company, The. (See Ernst, Walter, assignor.)
Hydraulic Press Manufacturing Company. (See Ernst, W., and MacMillin, assignors.)
Hyland, John L., New York, N. Y. Shade hanger and adjuster. 1,870,730; Aug. 9.
I. G. Farbenindustrie Aktiengesellschaft. (See Dierichs, Alfred, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Franzen, Hans, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pungs, Wilhelm, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Ripke, Otto, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schneevoight, A., and Nowak, assignors.)
Indge, Herbert S., Westboro, assignor to Norton Company, Worcester, Mass. Lapping machine. 1,870,328; Aug. 9.
Indiana Condensed Milk Company. (See Mott, Samuel B., assignor.)
Industrial Patents Corporation. (See McKee, Harry H., assignor.)
Industrial Patents Corporation. (See Ostrom, David S., assignor.)
Ingersoll-Rand Company. (See Frelin, Fritjof, assignor.)
Ingersoll-Rand Company. (See McAllister, Raymond C., assignor.)

Ingersoll-Rand Company. (See Smith, William A., jr., assignor.)
Ingraham, Charles C., Minneapolis, Minn. Grain-cleaning and separating machine. 1,870,629; Aug. 9.
Ingram, Stuart H. (See Ball, I. J., and Ingram.)
Inman, Donovan E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Synchronous motor control. 1,870,456; Aug. 9.
Insulex Corporation. (See Nelson, William K., assignor.)
International Motor Company. (See Masury, Alfred F., assignor.)
International Patent Development Company. (See Bergquist, Carl, assignor.)
Isaacson, Fred A., Topeka, Kans. Placard board holder. 1,870,731; Aug. 9.
Iytaka, Ityro, Sugamo-Machi, Kitatoshima-Gun, assignor to Mitsubishi Zosen Kabushiki Kaisha, Tokyo, Japan. Anticorrosive aluminium light alloy. 1,870,732; Aug. 9.
Jackson, Byron, Co. (See Forrow, Elwin W., assignor.)
Jackson, Ray P., Berkeley, Calif., assignor to Westinghouse Electric & Manufacturing Company. Solder joint structure. 1,871,371; Aug. 9.
Jacques, Raynaldo P., Woonsocket, R. I., assignor to Adams Industries, Inc., New York, N. Y. Coupling terminal for conduits. 1,871,370; Aug. 9.
Jadson Motor Products Company. (See Drake, Lem P., assignor.)
Jagschitz, Konrad, Mainz, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Nuremberg, Germany. Telescoping gasometer. 1,870,683; Aug. 9.
James, Henry D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Garage elevator. 1,871,372; Aug. 9.
James, Maxwell, et al. (See Flanzer, Joseph A., assignor.)
James, Maxwell, et al. (See Jones, Lester L. and J., assignors.)
Jameson, Clarence W., assignor to Atlas Electric Device Co., Chicago, Ill. Apparatus for testing the effect of weather upon objects. 1,870,512; Aug. 9.
Jansseh, Oscar, St. Louis, Mo. Package. 1,870,912; Aug. 9.
Jargstorff, George W. (See Smith, O. H., and Jargstorff.)
Jargstorff, George W., Glen Rock, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Making styrols. 1,870,852; Aug. 9.
Jeffers, Roland L. (See Palmer, R. D., and Jeffers.)
Jenkins, Addison, assignor to D. C. Jenkins Glass Company, Kokomo, Ind. Making fish bowls. 1,870,363; Aug. 9.
Jenkins, D. C., Glass Company. (See Jenkins, Addison, assignor.)
Jenkins, D. C., Glass Company. (See Newman, Edward J., assignor.)
Jennings, Irving C., South Norwalk, Conn., and L. W. Southgate, Washington, D. C.; said Southgate assignor to said Jennings. Steam heating system. 1,870,733; Aug. 9.
Jennings, Irving C., South Norwalk, Conn. Vacuum steam heating apparatus. 1,870,734; Aug. 9.
Jennings, Melvin O., Lexington, assignor to H. H. Beckwith, Brookline, Mass. Heater unit. 1,871,271; Aug. 9.
Jepson, Melvin E. (See Barker, George B., assignor.)
Jimmis, John E., Waukau, Wis. Pump operating mechanism. 1,871,063; Aug. 9.
Jipp, August, Berlin-Spandau, E. Rossberg, Berlin-Siemensstadt, F. Simon and A. Scheunert, Berlin-Charlottenburg, and W. Skawran, Berlin-Niederschonhausen, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany. Printing telegraph exchange system. 1,870,997; Aug. 9.
John, Robert, Long Branch, N. J., assignor to Aquatone Corporation, Chicago, Ill. Device for washing or treating plates. 1,871,374; Aug. 9.
Johns, Francis J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Squirrel-cage pump motor or the like. 1,870,776; Aug. 9.
Johns, Francis J., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Reversible squirrel-cage motor having low plugging torque. 1,870,777; Aug. 9.
Johnson, Arthur B., Minneapolis, Minn. Feed chain sprocket mounting and drive therefor. 1,870,630; Aug. 9.
Johnson, Chester F., deceased, by Detroit and Security Trust Co., Detroit, Mich., executor. Thermostatic control. 1,870,253; Aug. 9.
Johnson, Christian E., assignor to Deere & Company, Moline, Ill. Cultivating implement. 1,870,913; Aug. 9.
Johnson, Curt I. (See Bolt, J. C., and Johnson.)
Johnson, Edward D., assignor to Wagner Electric Corporation, St. Louis, Mo. Hydraulic brake mechanism. 1,870,289; Aug. 9.
Johnson, Gustav, West Roxbury, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Making attaching members. 1,871,373; Aug. 9.
Johnson, Harry. (See Lamb, Walter T., assignor.)
Johnson, Walter E. (See Smith, Elmer H., assignor.)
Johnston, Philip J. (See Hardy, C. V., and Johnston.)
Jokubaitis, Damian, Detroit, Mich. Ventilating window lock. 1,870,332; Aug. 9.
Jolly, William W., Minneapolis, Minn. Combination ash tray and paper weight. Des. 87,522; Aug. 9.
Jones, Charles L. (See Rust, R. R., and Jones.)
Jones, Ernest B., South Weymouth, assignor to National Fireworks, Inc., West Hanover, Mass. Release for aerial flares. 1,831,375; Aug. 9.
Jones, George L., Garden City, assignor to Sperry Products, Inc., Brooklyn, N. Y. Rail flaw detector. 1,870,811; Aug. 9.
Jones, Joseph. (See Jones, Lester L., and J.)
Jones, Lester L., Oradell, and J. Jones, Westwood, N. J., assignors, by mesne assignments, of one-half to Technidyne Corporation and one-half to M. James, New York, N. Y. Roasting edibles. 1,870,735; Aug. 9.
Jones, Louis A. (See Baker, Roy C., assignor.)
Jones, Roy S., assignor to Barber Manufacturing Company, Anderson, Ind. Apparatus for and process of making spring cushion frames. 1,870,364; Aug. 9.
Jones, Vivian B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,870,851; Aug. 9.
Jones, William A., West New Brighton, N. Y. Recirculating tube for water tube boilers. 1,870,812; Aug. 9.
Jongedyk, Ralph, Hinsdale, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Material handling apparatus. 1,871,272; Aug. 9.
Joyce, Lyndon W., Greensboro, N. C. Display stand cabinet. 1,871,179; Aug. 9.
Jungk, Herbert G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Finger plate. 1,870,813; Aug. 9.
Justrite Manufacturing Company. (See Brown, Le Roy O., assignor.)
Kadavy, Godfrey J., Omaha, Nebr. Boot cleaner. 1,870,333; Aug. 9.
Kadzik, Otto, Vienna, Austria. Machine for the spherical grinding of billiard balls and other blanks. 1,870,571; Aug. 9.
Kahn, David, Woodcliff, assignor to David Kahn, Inc., North Bergen, N. J. Fountain pen. Des. 87,523; Aug. 9.
Kahn, David, Woodcliff, assignor to David Kahn, Inc., North Bergen, N. J. Fountain pen. Des. 87,524; Aug. 9.
Kahn, David, Woodcliff, assignor to David Kahn, Inc., North Bergen, N. J. Pencil. Des. 87,525; Aug. 9.
Kahn, David, Inc. (See Kahn, David, assignor.)
Kalif Corporation. (See Pike, Robert D., assignor.)
Kalif Corporation. (See Pike, R. D., and Carroll, assignors.)
Kalle & Co. Aktiengesellschaft. (See Sprongerts, E. W., and Franke, assignors.)
Kantor, James, assignor to The Liquid Carbonic Corporation, Chicago, Ill. Automatic control mechanism. 1,870,998; Aug. 9.
Kantor, James, assignor to The Liquid Carbonic Corporation, Chicago, Ill. Crowning mechanism. 1,870,999; Aug. 9.
Kapiklan, Peter R., Astoria, N. Y. Ash tray. Des. 87,526; Aug. 9.
Karl, Charles, Peoria, Ill. Detachment mechanism for cutter bars. 1,871,323; Aug. 9.
Kauffman, Edmund J., Girard, assignor to Valley Mould & Iron Corporation, Hubbard, Ohio. Ingot and mold for making the same. 1,870,365; Aug. 9.
Kauffman, Edmund J., Girard, assignor to Valley Mould and Iron Corporation, Hubbard, Ohio. Ingot mold. 1,871,324; Aug. 9.
Kawneer Company, The. (See Liebetrau, Ernest J., assignor.)
Kearney, Daniel P., Detroit, Mich., assignor to Eclipse Machine Company, Elmira, N. Y. Starting mechanism. 1,870,366; Aug. 9.
Kearney, Daniel P., Detroit, Mich., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starting mechanism. 1,870,367; Aug. 9.
Keech, Vernon L., Duluth, Minn. Rail and tie fastener. 1,870,631; Aug. 9.
Keen, Alexis W., New York, N. Y., assignor to Morgan & Wright, Detroit, Mich. Temperature indicator for rotating bodies. 1,871,325; Aug. 9.
Kégresse, Adolphe, Courbevoie, France. Trailing carriage for motor-car trailers. 1,971,180; Aug. 9.
Keller, Charles W., and A. F. Siferte, Portland, Oreg. Machine for making waves. 1,871,215; Aug. 9.
Keller, Joseph F., New York, N. Y., assignor, by mesne assignments, to Pratt & Whitney Company, Hartford, Conn. Flexible shaft machine attachment. 1,870,736; Aug. 9.
Kelley-Koett Manufacturing Company, The. (See Werner, Wilbur S., assignor.)
Kellogg, Chester A., and G. N. Williams, assignors to Continental Steel Corporation, Kokomo, Ind. Coloring woven wire fences. 1,871,181; Aug. 9.
Kellogg-Dills, Inc. (See Dills, Logan A., assignor.)
Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)
Kemmerling, Jacob F. (See Burk, William W., assignor.)
Kendall, James P. (See Helsing, R. A., and Kendall.)
Kenison, Nat W. (See Drannon, R. E., and Kenison.)
Kennedy, Harvey T., Rochester, N. Y. Measuring the viscosities of liquids. 1,870,412; Aug. 9.
Kennedy, Louis F., Mankato, Minn. Tractor. 1,870,632; Aug. 9.
Kenney, Mahlon W., Elmhurst, Ill., assignor, by mesne assignments, to Grigsby-Grunow Company. Refrigerating apparatus. 1,870,457; Aug. 9.

Kenney, Mahlon W., Elmhurst, Ill., assignor, by mesne assignments, to Grigsby-Grunow Company. Refrigeration apparatus. 1,870,458; Aug. 9.
Kent, Limited, George. (See Douglas, John G., assignor.)
Kern, Erwin, Wettingen, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Metal vapor rectifier. 1,870,513; Aug. 9.
Key, James F., assignor to First Trust & Savings Bank of Pasadena, as trustee, Pasadena, Calif. Valve for tire inflators. 1,870,574; Aug. 9.
Keys, Jeremiah, Philadelphia, Pa., assignor to Alva Carpet & Rug Company. Thread clamp. 1,870,814; Aug. 9.
Keys, Walter C., Detroit, Mich., assignor to The Mechanical Rubber Company, Cleveland, Ohio. Mounting bracket. 1,871,376; Aug. 9.
Khoenle, Herman F., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Trolling spoon. 1,871,377; Aug. 9.
Kiesel, William F., jr., Hollidaysburg, Pa. Freight car. 1,870,575; Aug. 9.
Killeffer, David H., Yonkers, assignor to Dryice Equipment Corporation, New York, N. Y. Heat exchange method and apparatus. 1,870,684; Aug. 9.
Kimbell, Arthur W., Newton Center, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Slide fastener. 1,871,378; Aug. 9.
Kinatone Patents Corporation. (See Foster, Warren D., assignor.)
Kinatone Patents Corporation. (See Foster, W. D., and Bundick, assignors.)
Kinatone Patents Corporation. (See Proctor, Barton A., assignor.)
Kinatone Patents Corporation. (See Proctor, B. A., Foster, and Bundick, assignors.)
King, Horace W., assignor to King-Seeley Corporation, Ann Arbor, Mich. Liquid depth indicating device. 1,871,182; Aug. 9.
King, Jesse C. (See Wood, S. K., and King.)
King, Louise C., Cleveland, Ohio. Spectacles. 1,871,183; Aug. 9.
King-Seeley Corporation. (See King, Horace W., assignor.)
Kipper, Allen F., and H. H. Thayer, Los Angeles, Calif. Locking device. 1,871,064; Aug. 9.
Kircher, Ralph N., and R. H. Wentorf, assignors to West Bend Aluminum Company, West Bend, Wis. Coffee and tea maker. 1,870,254; Aug. 9.
Kirchoff, William G., assignor to The J. H. Day Company, Cincinnati, Ohio. Twin loaf assembler. 1,871,216; Aug. 9.
Klaus, Rudolf, Dessau-Ziebigk in Anhalt, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Film pack casing. 1,871,217; Aug. 9.
Klausmeyer, David C., assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Worktable and mount therefor. 1,870,413; Aug. 9.
Klenk, Willy, Stuttgart-Cannstatt, Germany, assignor to Baker Perkins Company, Inc., Saginaw, Mich. Device for steaming bread in bake ovens. 1,870,459; Aug. 9.
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Klostermann, Curt W., assignor to Mechanical Vending Corporation, Chicago, Ill. Vending machine. 1,871,000; Aug. 9.
Knoblaugh, Armand F., assignor to The Baldwin Company, Cincinnati, Ohio. Electric device for musical instruments. 1,870,576; Aug. 9.
Koch, Gustav H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Arc welding machine. 1,871,326; Aug. 9.
Koch, Robert R., Ramsey, assignor to Everlasting Memorial Association, Ridgewood, N. J. Monument mold. 1,871,413; Aug. 9.
Kochs, Robert E., assignor to Theo. A. Kochs Company, Chicago, Ill. Reclining chair. 1,871,184; Aug. 9.
Kochs, Theo. A. Company. (See Kochs, Robert E., assignor.)
Koehler, Charles H. (See Freud, J., and Koehler.)
Koehler, Frank G., St. Louis, Mo. Truck. 1,870,633; Aug. 9.
Kohler Company. (See Kohler, H. V., and Brotz, assignors.)
Kohler, Herbert V., Sheboygan, and F. G. Brotz, Kohler, assignors to Kohler Company, Kohler, Wis. Flushing tank. Des. 87,527; Aug. 9.
Kohler, Max N., New Orleans, La. Lapel protector. 1,870,737; Aug. 9.
Kohler, William, assignor to Norge Corporation, Detroit, Mich. Water cooler or similar article. Des. 87,528; Aug. 9.
Konen, Harry A. (See Baker, W. J., and Konen.)
Konoff, Alexander, Brooklyn, assignor, by mesne assignments to Margon Corporation, New York, N. Y. Doll's eyes. 1,870,572; Aug. 9.
Kontos, Emanuel G., Chicago, Ill. Wing. 1,870,514; Aug. 9.
Kotlars, John S., Elizabeth, N. J. Football game indicator. 1,870,515; Aug. 9.
Kotthoff, Theodor, the Firm. (See Eibner, Alexander, assignor.)
Koupal, Walter G., Tarentum, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making plate glass. 1,871,218; Aug. 9.
Krause, Arnold R., and R. W. Hutchens, assignors to Gillette Rubber Company, Eau Claire, Wis. Inner tube and tire mold. 1,870,255; Aug. 9.
Kraut Machinery Company, The. (See Sharpe, Ira G., assignor.)
Kretzschmar, Alfred, Breslau, Germany. Filter for liquids. 1,871,122; Aug. 9.
Kruckenberg, Franz, and F. Heyner, Heidelberg, Germany, said Heyner, assignor to said Kruckenberg. High speed railway with propeller driven streamline vehicles. 1,870,738; Aug. 9.
Kuchar, Joseph, assignor to Athey Truss Wheel Co., Chicago, Ill. Vehicle and removable body therefor. 1,870,573; Aug. 9.
Küchenmeister, Heinrich J., Berlin, Germany. Selenium cell. 1,870,313; Aug. 9.
Kuen, Joseph, Glenside, Pa., assignor to Builders Iron Foundry, Providence, R. I. Automatic valve shut-off. 1,871,327; Aug. 9.
Kunz, Frank G., Houston, Tex. Sample taking device. 1,871,328; Aug. 9.
Kunz, Max A., Mannheim, and F. Teller, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Printing on textile fabrics. 1,870,516; Aug. 9.
Kushnier, Paul, Warneford, Ontario, Canada. Track aligning and tie tamping device. 1,871,135; Aug. 9.
Laabs, Max A., assignor to American Optical Company, Southbridge, Mass. Surfacing process and apparatus for same. 1,871,123; Aug. 9.
Lacey, Ernest G., Abbotsford, Victoria, Australia. Veneer press. 1,870,517; Aug. 9.
Laddon, Philip A. (See Groomes, R. R., and Laddon.)
L'Air Liquide, Société Anonyme pour l'Etude et l'Exploitation des Procédés Georges Claude. (See Lantz, Henri, assignor.)
Lamb, Howard S., assignor to The Cold Metal Process Company, Youngstown, Ohio. Heat treating strip material. 1,870,577; Aug. 9.
Lamb, Walter T., Alpine, assignor of one-half to H. Johnson, San Diego, Calif. Holder for roadway pavement expansion means. 1,871,065; Aug. 9.
Lambert, Albert L., Narberth, Pa., assignor to Heintz Manufacturing Company. Air cooling cabinet and preventing condensation of moisture thereon. 1,870,460; Aug. 9.
Lambert, John W., Anderson, Ind. Lawn broom. 1,870,739; Aug. 9.
Lamson Company, The. (See Anderson, Andrew P., assignor.)
Landrum, John P., assignor of one-half to P. R. McCormack, Birmingham, Ala. Variable pitch propeller. 1,871,124; Aug. 9.
Lane, Frank, Mansfield, Ohio. Sheet metal structure. 1,870,914; Aug. 9.
Lang, George W., Medford, Mass., assignor to Westinghouse Electric & Manufacturing Company. Sound recording method. 1,870,778; Aug. 9.
Lantz, Henri, assignor to L'Air Liquide, Société Anonyme pour l'Etude et l'Exploitation des Procédés Georges Claude, Paris, France. Extraction of ethylene from gaseous mixtures. 1,870,334; Aug. 9.
Lanz, John, assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn. Fan base. 1,871,001; Aug. 9.
Larmuth, John H., Upper Colwyn Bay, North Wales. Stranding and laying machine. 1,870,290; Aug. 9.
Larsen, Carl J. (See Mutscheller, A., and Larsen.)
Lassagne, Theodore H., Oakland, Calif. Fountain pen. 1,870,853; Aug. 9.
Lathrop, Frank H. (See Hartzell, A., and Lathrop.)
Laucks, I. F., Incorporated. (See Laucks, I. F., and Davidson, assignors.)
Laucks, Irving F., and G. Davidson, assignors to I. F. Laucks, Incorporated, Seattle, Wash. Glue and method of making. 1,871,329; Aug. 9.
Lauterbur, Edward J. (See Lauterbur, Frank X. and E. J.)
Lauterbur, Frank X. and E. J., Sidney, Ohio. Dough molding machine. 1,870,256; Aug. 9.
Lauterbur, Frank X. and E. J., Sidney, Ohio. Dough molding apparatus. 1,870,257; Aug. 9.
Layne, Leslie A., and A. L. Roco, Houston, Tex.; said Roco assignor to said Layne. Setting tool. 1,870,779; Aug. 9.
Leary, Eugene A., Cincinnati, Ohio. Support structure. 1,870,915; Aug. 9.
Leben, Henry, Newcastle-upon-Tyne, and N. Cooke, Sunderland, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England. Electric protective system. 1,870,518; Aug. 9.
Lebo, Robert B., Elizabeth, N. J., assignor to Standard Oil Development Company. Purification of alcohol. 1,870,815; Aug. 9.
Leeds & Northrup Company. (See Behr, Leo, assignor.)
Leeds & Northrup Company. (See Bristol, Edward S., assignor.)
Leeds & Northrup Company. (See Greer, Willard N., assignor.)
Legg, Esther L., administratrix. (See Legg, Joseph W.)
Legg, Joseph W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Oscillograph. 1,871,379; Aug. 9.

Legg, Joseph W., deceased, Wilkinsburg, Pa., by E. L. Legg, Worcester, Mass., administratrix, assignor to Westinghouse Electric and Manufacturing Company. High speed recorder. 1,871,380; Aug. 9.

Leguillon, Charles W., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Package and making the same. 1,870,519; Aug. 9.

Leiter, Burton, Edmore, Mich. Cultivator. 1,870,740; Aug. 9.

Lemoine, Paul L., Paris, France. Carburetor for internal combustion engines. 1,870,578; Aug. 9.

Levene, Louis L., Merrick, N. Y. Partition wall edge construction. 1,870,579; Aug. 9.

Leverone, Louis M., Allston, Mass. Shoe. Des. 87,529; Aug. 9.

Leverone, Louis M., Allston, Mass. Shoe. Des. 87,530; Aug. 9.

Leverone, Louis M., Allston, Mass. Shoe. Des. 87,531; Aug. 9.

Leverone, Louis M., Allston, Mass. Shoe. Des. 87,532; Aug. 9.

Leverone, Louis M., Allston, Mass. Shoe. Des. 87,533; Aug. 9.

Leverone, Louis M., Allston, Mass. Shoe ornament. Des. 87,534; Aug. 9.

Levin, Harold L. Nutley, N. J., and F. H. Neher, Cambridge, assignors, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Roofing strip. 1,870,414; Aug. 9.

Levy, Aaron W., et al., executors. (See Wise, Nathan.)

Lewis, Emerson K., and E. Wenz, Pittsburgh, Pa. Cast iron roll. 1,870,580; Aug. 9.

Lewis, Guy V., Laredo, Tex. Well testing device. 1,870,634; Aug. 9.

Lewis, Richard C., Ansonia, and C. F. Schnuck, New Haven, assignors to Farrel-Birmingham Company, Inc., Ansonia, Conn. Roll grinder. 1,871,002; Aug. 9.

Lewis, Robert B., assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa. Hardness testing machine. 1,870,415; Aug. 9.

Lewis, Warren K., Newton, Mass., assignor to Standard Oil Development Company. Process for partial oxidation of gaseous hydrocarbons. 1,870,816; Aug. 9.

Lewis, Warren K., Newton, Mass., assignor to Standard Oil Development Company. Separating mixtures of substances only partially miscible. 1,870,854; Aug. 9.

Libbey-Owens-Ford Glass Company. (See Crowley, Joseph P., assignor.)

Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)

Liebetrau, Ernest J., assignor to The Kawneer Company, Niles, Mich. Window construction. 1,870,335; Aug. 9.

Liggett & Myers Tobacco Company. (See Scott, F. E., and Bryant, assignors.)

Lincoln, Edwin S., Scarsdale, assignor to Dexter Folder Company, New York, N. Y. Method and apparatus for feeding sheets. 1,870,314; Aug. 9.

Lincoln, Edwin S., Scarsdale, assignor to Dexter Folder Company, New York, N. Y. Sheet feeding apparatus. 1,870,336; Aug. 9.

Lincoln, Edwin S., Scarsdale, assignor to Dexter Folder Company, New York, N. Y. Sheet feeding apparatus. 1,870,337; Aug. 9.

Lincoln, Edwin S., Scarsdale, assignor to Dexter Folder Company, New York, N. Y. Sheet feeding apparatus. 1,870,338; Aug. 9.

Lincoln, Edwin S., Scarsdale, assignor to Dexter Folder Company, New York, N. Y. Sheet feeding apparatus. 1,870,339; Aug. 9.

Lindberg, Arvid, Lima, Ohio. Smoke shade for fireplaces. 1,870,916; Aug. 9.

Lindgren, Frank A., Western Springs, assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,871,186; Aug. 9.

Lindsay, James D., assignor to Standard Oil Company, Whiting, Ind. Wax containing composition. 1,871,187; Aug. 9.

Lindstrom, Albert F. (See Hageman, A. M., and Lindstrom.)

Link-Belt Company. (See Ellersgaard, Asger, assignor.)

Link-Belt Company. (See Hartley, John J., assignor.)

Link-Belt Company. (See Oldroyd, Gerald J., assignor.)

Lion Match Co. (See Gustavson, C., Van Hoofstadt, and Greenbaum, assignors.)

Liquid Carbonic Corporation, The. (See Gruetter, John R., assignor.)

Liquid Carbonic Corporation, The. (See Kantor, James, assignor.)

Liss, August S., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Feeding device. 1,871,414; Aug. 9.

Litomy, John L., Glen Ridge, N. J., assignor of one-third to J. A. Taferner, and one-third to L. J. Schlitzer, New York, N. Y. Eye mounting for dolls. 1,870,368; Aug. 9.

Little, Earl W., Indianapolis, Ind. Carton. 1,870,917; Aug. 9.

Lockwood, Edwin J., Peekskill Village, assignor to Dryice Equipment Corporation, New York, N. Y. Refrigerator truck body. 1,870,685; Aug. 9.

Lockwood, Ralph G. (See Stallings, E. O., and Gorton, assignors.)

Loehr, Miles E., Claypool, Ind. Fishline float. 1,870,520; Aug. 9.

Logan, Joseph A., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Liquid dispensing apparatus. 1,870,918; Aug. 9.

Longletz, Claudia K., near Dayton, and C. A. Engle, Dayton, Ohio. Combination pillow and coverlet. 1,871,003; Aug. 9.

Lopez, Francesco, assignor to Società Anonima Industria Ammoniaca, Padova, Italy. Catalyzer for gaseous reactions. 1,871,004; Aug. 9.

Lord, Lyman L., assignor to E. B. Badger & Sons Company, Boston, Mass. Expansion joint and constructing the same. 1,871,219; Aug. 9.

Lorimer, George W., Troy, Ohio, assignor, by mesne assignments, to Black Products Company, Chicago, Ill. Gas generation. 1,871,415; Aug. 9.

Lottrup, Jorgen S., Copenhagen, Denmark. Apparatus for accommodating objects to be delivered or handed out. 1,870,340; Aug. 9.

Lovell, Joseph W., Detroit, Mich. Lubricant control mechanism. 1,870,416; Aug. 9.

Lovell, Stanley P., Newton, assignor to Arden Box Toe Company, Watertown, Mass. Shoe stiffener. 1,871,273; Aug. 9.

Lubell, Abraham P., New York, N. Y. Garter or the like. 1,871,066; Aug. 9.

Ludeke, Henry A., Garner, Iowa. Cultivator. 1,870,919; Aug. 9.

Lunsford, Louis, Muskegon, assignor to Lunsford Manufacturing Company, Muskegon, Mich. Windshield wiper. 1,870,369; Aug. 9.

Lunsford Manufacturing Company. (See Lunsford, Louis, assignor.)

Luster, Eric W., Westfield, N. J., assignor to Standard Oil Development Company. Operating cracking coil installations. 1,870,855; Aug. 9.

Lynn, Ewing K., East McKeesport, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Control valve device. 1,870,856; Aug. 9.

Lyon, George A., Allenhurst, assignor to Lyon Incorporated, Asbury Park, N. J. Tire cover with peripheral stiffening means. 1,871,188; Aug. 9.

Lyon, Incorporated. (See Lyon, George A., assignor.)

Maag, Max, Zurich-Schwamendingen, Switzerland, and R. Salomon, Neuilly-sur-Seine, assignors to Societe d'Etude de Machines a Affuter, Paris, France. Manufacture of knives. 1,870,817; Aug. 9.

Maag, Max, Schwamendingen, Switzerland, and R. Salonmon, Neuilly-sur-Seine, assignors to Société d'Etudes de Machines à Affuter, Paris, France. Grinding machine. 1,870,818; Aug. 9.

Maag, Max, Schwamendingen, near Zurich, Switzerland, and R. Salomon, Valdole near Belfordt, assignors to Societe d'Etudes de Machines a Affuter, Paris, France. Cutting blade. 1,870,819; Aug. 9.

Maas, Julian, et al. (See Freuler, Arthur L., assignor.)

Macan, Harry C. (See Yates, C. E., and Macan.)

Macan, Harry C., Rutherford, N. J., assignor to Anaconda Sales Company, New York, N. Y. Reenforced roofing. 1,871,067; Aug. 9.

Macan, Harry C., Rutherford, N. J., assignor to Anaconda Sales Company, New York, N. Y. Roofing material. 1,871,068; Aug. 9.

MacFarlane, Robert F., Fulham, London, and W. E. Prescott, Willesden, London, England, assignors to Baker Perkins Company, Inc., Saginaw, Mich. Collecting and arranging biscuits and the like. 1,871,332; Aug. 9.

MacLaren, Fred B. (See Braselton, C. H., and MacLaren.)

MacMillan, Daniel J., Brooklyn, N. Y. Pneumatic dispatch carrier. 1,870,258; Aug. 9.

MacMillan, Howard F. (See Ernst, W., and MacMillan.)

Maher, James M., Fremont, Nebr. Blade holder. 1,871,069; Aug. 9.

Malafey, Herman J. (See Dodge, S. O., and Malafey.)

Mallina, Rudolph F., Atlantic City, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Diaphragm. 1,870,417; Aug. 9.

Mallory, P. R., & Co. (See Shoemaker, Harry, assignor.)

Malm, Carl J., assignor to Eastman Kodak Company, Rochester, N. Y. Treatment of cellulose acetate. 1,870,635; Aug. 9.

Manger, Charles F. (See Bentley, P. A., Manger, and Wainwright.)

Manker, Forrest W., Detroit, Mich., assignor to The Surface Combustion Corporation, Toledo, Ohio. Soaking-pit furnace. Re18,557; Aug. 9.

Mansur, Clarence W., Malden, Mass., assignor to General Electric Company. Nonmetallic wheel. 1,871,417; Aug. 9.

Marchaut, Pierre J., Enghien, France. Automatically supplied mold with controlled release for the production of ice blocks. 1,870,370; Aug. 9.

Marcus, Benjamin H., Brooklyn, N. Y. Buckle-purse. 1,870,820; Aug. 9.

Margon Corporation. (See Konoff, Alexander, assignor.)

Marriott, Alexander D. (See Finney, J. H. V., and Marriott.)

Marks, Herbert E., assignor to M. H. Marks, Sewickley, Pa. Paper lath. 1,870,461; Aug. 9.

Marks, Mary H. (See Marks, Herbert E., assignor.)

Marlatt, George E., Pasadena, Calif. Typographical slug-casting machine. 1,871,330; Aug. 9.

Marlin-Rockwell Corporation. (See Cummings, Lloyd A., assignor.)

Marriott, Alexander D., Denver, Colo., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y. Classifier. 1,870,871; Aug. 9.

Marvin, Walter S., deceased, by The Metal Ware Corporation, Two Rivers, Wis., assignee. Electric percolator. Re18,564; Aug. 9.

Maschinenfabrick Augsburg-Nurenberg A. G. (See Jagschits, Konrad, assignor.)

Maschinenfabrik Augsburg-Nurenberg A. G. (See Pielstick, Gustav, assignor.)

Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Bumper. 1,871,331; Aug. 9.

Mathewson, Maxwell I. (See Brown and Sharpe Manufacturing Company, assignor.)

Mathewson, Maxwell I., Providence, R. I., assignor to Brown and Sharpe Manufacturing Company. Grinding machine. 1,870,857; Aug. 9.

Matson, Carl A., Lynnfield, Mass., assignor to The Matson Company, Concord, N. H. Reverse brake. 1,870,686; Aug. 9.

Matson Company, The. (See Matson, Carl A., assignor.)

Matteson, Jesse O., Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Billiard table. Des. 87,535; Aug. 9.

Matthews, Albert T. (See Butler, R. A., and Matthews.)

Maurel, Henry F., Providence, R. I., assignor to Maurel Investment Corporation. Apparatus for carbonization of fuel briquettes. 1,870,521; Aug. 9.

Maurel, Henry F., assignor to Maurel Investment Corporation, Providence, R. I. Manufacture of fuel briquettes from waste wood. 1,870,522; Aug. 9.

Maurel, Henry F., assignor to Maurel Investment Corporation, Providence, R. I. Apparatus for the carbonization of coals. 1,870,523; Aug. 9.

Maurel Investment Corporation. (See Maurel, Henry F., assignor.)

Maust, Ernest J., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y. Slurry filtration. 1,870,872; Aug. 9.

Maximoff, Alexander T., Vercelli, Italy, assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Production of ethylene glycols and ethylene hydrocarbons. 1,870,858; Aug. 9.

Maximoff, Alexander T., Vercelli, Italy, assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Production of ethylene hydrocarbons. 1,870,859; Aug. 9.

Maybach, Karl, assignor to Maybach-Motorenbau, G. m. b. H., Friedrichshafen, Germany. Change speed gear. 1,870,341; Aug. 9.

Maybach-Motorenbau G. m. b. H. (See Maybach, Karl, assignor.)

Mayer, Daniel J., Belleville, assignor to Metal Textile Corporation, West Orange, N. J. Mounting for antifriction bearings. 1,870,860; Aug. 9.

Mayer, William G., Pittsburgh, Pa. Shock insulated truck body. 1,870,418; Aug. 9.

McAllister, Raymond C., Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Clearance unloader for compressors. 1,870,956; Aug. 9.

McCandless, Byron, U. S. Navy. Portable lamp. 1,870,687; Aug. 9.

McCarty, Frank L., Rock Springs, Wyo., assignor, by mesne assignments, to Goodman Manufacturing Company, Chicago, Ill. Loading attachment for conveyer mechanism. 1,870,201; Aug. 9.

McCormack, Perry R. (See Landrum, John P., assignor.)

McCormick, Bradley, assignor to Wagner Electric Corporation, St. Louis, Mo. Dynamo electric machine. 1,870,292; Aug. 9.

McCullough, Neel, et al. (See Tumulty, Charles L., and F. H., assignors.)

McCune, Frank B., Hamilton, Ontario, Canada. Hot metal ladle. 1,871,333; Aug. 9.

McCune, Joseph C., Edgewood, assignor to The Westinghouse Electric & Manufacturing Company, Wilmerding, Pa. Brake and door interlock. 1,870,861; Aug. 9.

McDonough, John, Chicago, and D. D. Rock, Cicero, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Workholding fixture. 1,871,408; Aug. 9.

McDowall, John L. (See Horscroft, Theodore, assignor.)

McGahey, Robert E., Alexandria, Va., assignor to Reliance Machine & Stamping Works, Incorporated, New Orleans, La. Grease gun. 1,870,524; Aug. 9.

McGary, Stanton U., W. F. Rogers, and S. Gill, assignors to Gulf Production Company, Houston, Tex. Protective means for buried metallic surfaces. 1,871,125; Aug. 9.

McGowen, William R., assignor to The McKay Company, Pittsburgh, Pa. Table. Des. 87,536; Aug. 9.

McGowen, William R., assignor to The McKay Company, Pittsburgh, Pa. Table. Des. 87,537; Aug. 9.

McGraw, Max. (See Forbes, Thomas C., assignor.)

McIntyre, Glenn H., and R. W. Stuart, assignors to The Ferro Enamel Corporation, Cleveland, Ohio. Apparatus for making glass and vitreous enamels. 1,870,636; Aug. 9.

McKay Company, The. (See McGowen, William R., assignor.)

McKee, Harry H., Chicago, assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Bacon treating method. 1,870,581; Aug. 9.

McKee, Ralph H., Jersey City, N. J. Paper and manufacturing the same. 1,870,259; Aug. 9.

McKee, Ralph H., Jersey City, N. J. Humidor. 1,871,418; Aug. 9.

McKee, Ralph H., Jersey City, N. J. Pliable humidifying sheet material. 1,871,419; Aug. 9.

McKeefe, Edward P. (See Bradley, L., and McKeefe.)

McKinnon, Allen G., Cranston, assignor to Revere Rubber Company, Providence, R. I. Golf ball. 1,870,862; Aug. 9.

McLeod, John D., Oakmont, Pa., assignor to Pittsburgh Plate Glass Company. Glass cutting table. 1,871,220; Aug. 9.

McNally, Hugh F. (See Stout, A. D., and McNally.)

McNeill, George K., assignor to Morgan & Wright, Detroit, Mich. Cutting machine. 1,871,334; Aug. 9.

McNulty, Thomas E., Alameda, Calif. Curtain guide. 1,870,920; Aug. 9.

McWeeny, John L., assignor, by mesne assignments, to The Muter Company, Chicago, Ill. Pretesting device. 1,870,462; Aug. 9.

Mead-Morrison Manufacturing Company. (See Snow, Frederick O., jr., assignor.)

Mechanical Rubber Company. (See Keys, Walter C., assignor.)

Mechanical Rubber Company. (See Reynolds, Elmer E., assignor.)

Mechanical Vending Corporation. (See Klostermann, Curt W., assignor.)

Meehan, Paul A., Cleveland, Ohio, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa. Kiln car. 1,871,070; Aug. 9.

Meese, Inc. (See Buchanan, Charles C., assignor.)

Menard, Julio. (See Compter, O. L., and Menard.)

Mercur, Nathan L. (See Hook, C. H., and Mercur.)

Mercur, Nathan L., McKeesport, Pa. Electroresponsive valve mechanism. 1,871,071; Aug. 9.

Meriaux, Lucien, Culver City, Calif. Animal hutch. 1,870,957; Aug. 9.

Merle, André N., Vincennes, assignor to Pathe Cinema, Anciens Etablissements Pathe Freres, Paris, France. Stopping device for cinematographic apparatus. 1,871,335; Aug. 9.

Merryman, Arthur N., Woburn, assignor to The Cheney Company, Winchester, Mass. Apparatus for bending sheet metal. 1,870,260; Aug. 9.

Metal Textile Corporation. (See Mayer, Daniel J., assignor.)

Metal Ware Corporation, The. (See Marvin, Walter S.)

Meyer, Geo. J., Manufacturing Company. (See Meyer, George J., assignor.)

Meyer, George J., Milwaukee, assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis. Bottle corking machine. 1,870,373; Aug. 9.

Meyer Mineral Separation Company. (See Meyer, Ralph F., assignor.)

Meyer, Peter, Newark, N. J., assignor to Westinghouse Lamp Company. Article ejector mechanism. 1,871,381; Aug. 9.

Meyer, Peter, Newark, N. J., assignor to Westinghouse Lamp Company. Pin detector for base feeding mechanism. 1,871,382; Aug. 9.

Meyer, Ralph F., Freeport, assignor to Meyer Mineral Separation Company, Pittsburgh, Pa. Metallurgical process. 1,870,863; Aug. 9.

Mica Insulator Company. (See Coffey, J. M., France, and Piekney, assignors.)

Michell, Anthony G. M., Melbourne, Victoria, Australia, assignor, by mesne assignments, to Michell-Crankless Engines Corporation, New York, N. Y. Air cooling means for internal combustion engines. Re18,558; Aug. 9.

Michell-Crankless Engines Corporation. (See Michell, Anthony G. M.)

Michigan Wire Goods Company. (See Murray, Norris F., assignor.)

Mihallak, Edward G., Brookfield, Ill. Automobile heater. 1,870,374; Aug. 9.

Milburn, Richard P., Newark, N. J., assignor to Standard Oil Development Company. Tube and bulb device. 1,870,780; Aug. 9.

Miles, George W. (See Dreyfus, C., Miles, and Platt.)

Miles, James C., Cleveland, Ohio. Heating and ventilating apparatus. 1,870,261; Aug. 9.

Miller, Frank W., Chicago, Ill. Locomotive refilling method. 1,870,582; Aug. 9.

Miller, Frederic H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transmission line device. 1,870,781; Aug. 9.

Miller, Frederic H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Suspension clamp. 1,870,821; Aug. 9.

Miller, Frederic H., Edgewood, and G. M. Barrow, Derry, Pa., assignors to Westinghouse Electric & Manufacturing Company. Cable support. 1,871,336; Aug. 9.

Miller, Hans, Berlin Lichterfelde, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Steam valve. 1,870,293; Aug. 9.

Miller, James S., Trenton, N. J. Towel holder. 1,871,189; Aug. 9.

Miller, James S., Trenton, N. J. Dental chair attachment. 1,871,221; Aug. 9.

Miller, John, Crafton, Pittsburgh, Pa. Valve. 1,871,072; Aug. 9.

Miller, Max C., Cumberland Hill, R. I. Knitting machine. 1,871,190; Aug. 9.

Miller, Robert A., Plainfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound reproducing system. 1,871,383; Aug. 9.

Miller, Walter A., assignor to United Air Cleaner Co., Chicago, Ill. Air cleaner. 1,871,384; Aug. 9.
Milligan, Albert J., San Francisco, Calif. Automatic gas valve. 1,871,191; Aug. 9.
Mills, Fred L., Oak Park, assignor to Mills Novelty Company, Chicago, Ill. Selective vending machine. 1,870,637; Aug. 9.
Mills Novelty Company. (See Mills, Fred L., assignor.)
Miner, W. H., Inc. (See Dath, Charles E., assignor.)
Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)
Miner, W. H., Inc. (See Miner, William H., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Miner, W. H., Inc. (See Schulz, Ernest R., assignor.)
Miner, W. H., Inc. (See Van Dorn, William E., assignor.)
Miner, William D. (See Scofield, T. J., and Miner.)
Miner, William H., Chazy, N. Y., assignor to W. H. Miner, Inc., Chicago, Ill. Shock absorbing mechanism. 1,871,420; Aug. 9.
Minutilli, Frank, Harrisville, R. I. Trap for ice fishing. 1,870,782; Aug. 9.
Mi subishi Zosen Kabushiki Kaisha. (See Iytaka, Ityro, assignor.)
Moler, Harry A., Detroit, Mich., assignor to Blaw-Knox Company, Pittsburgh, Pa. Safety zone. 1,870,638; Aug. 9.
Monheim, Elsie B., now by marriage Elsa B. Walker, Seattle, Wash. Illuminating apparatus for display purposes. 1,871,073; Aug. 9.
Monroe, Kenneth C., assignor to Bridgeport Brass Company, Bridgeport, Conn. Apparatus for metal plating. 1,870,958; Aug. 9.
Montrose-Oster, Louis-Eugéne-Widolt, Karlsbad, Czechoslovakia, assignor to Suddeutsche Eisenbahngesellschaft, Essen, Germany. Electric street-vehicle. 1,871,074; Aug. 9.
Moody, Charles E., Lind, Wash. Rod weeder. 1,871,192; Aug. 9.
Moore, Charles R. (See Hayford, W. S., and Moore.)
Moore, Paul, et al. (See Hartzell, A., and Lathrop, assignors.)
Morgan & Wright. (See Battin, Harold T., assignor.)
Morgan & Wright. (See Gibbons, Willis A., assignor.)
Morgan & Wright. (See Keen, Alexis W., assignor.)
Morgan & Wright. (See McNeill, George K., assignor.)
Morgan & Wright. (See Turnbull, Ira J., assignor.)
Morley, Louis W., assignor to C. V. Hill & Co., Inc., Trenton, N. J. Hinge. 1,871,126; Aug. 9.
Morrison, Montford, Chicago, Ill., assignor, by mesne assignments, to Westinghouse X-Ray Company, Inc. X-Ray apparatus. 1,870,959; Aug. 9.
Morton, Amsler, Company. (See Morton, William A., assignor.)
Morton, William A., assignor to Amsler Morton Company, Pittsburgh, Pa. Muffle furnace leer. 1,870,202; Aug. 9.
Mosinee Paper Mills Company. (See Stone, N. S., and Burns, assignors.)
Motor Terminals Company. (Fitch, Benjamin F., assignor.)
Mott, Chester, Denver, Colo., assignor, by mesne assignments, to Union Carbide and Carbon Research Laboratories, Inc. Filling tanks with compressed gas. 1,871,076; Aug. 9.
Mott, Chester, and G. G. Spencer, Denver, Colo., assignors, by mesne assignments, to Union Carbide and Carbon Research Laboratories, Inc. Apparatus for measuring the contents of gas containers. 1,871,075; Aug. 9.
Mott, Samuel B., Noblesville, assignor to Indiana Condenser Milk Company, Indianapolis, Ind. Conveyer for changing groups of articles into single file. 1,870,375; Aug. 9.
Moulding, Thomas G., assignor to United Air Cleaner Corporation, Chicago, Ill. Air cleaner. 1,871,337; Aug. 9.
Mowat, Oliver M., Youngstown, Ohio. Apparatus for serving tube finishing machines. 1,871,077; Aug. 9.
Mueller Brass Co. (See Robinson, W. M., and Rader, assignors.)
Mueller, Henry. (See Goss, E. L., and Mueller.)
Mueller, John, Cleveland, Ohio. Guard for safety zones. 1,870,639; Aug. 9.
Muhlhauser, Jacob, and D. G. Adams, assignors to Adams Grease Gun Corporation, New York, N. Y. High pressure coupler. 1,871,421; Aug. 9.
Multigraph Company. (See Demming, William J., assignor.)
Municipal Sanitary Service Corporation. (See Raisch, William, assignor.)
Munk, Max M., Washington, D. C. Impulse fan. 1,870,342; Aug. 9.
Murka, Vernon, Dayton, Ohio. Crutch. 1,870,921; Aug. 9.
Murphy, Edward A. (See Twiss, D. F., Purkis, and Murphy.)
Murphy, P. H., Company. (See Bonsall, Charles D., assignor.)
Murray, Norris F., Hinsdale, Ill., assignor to Michigan Wire Goods Company, Niles, Mich. Wire scoop. 1,870,376; Aug. 9.
Mustard, Fred, et al. (See Tumulty, C. L. and F. H.)
Muter Company, The. (See McWeeny, John L., assignor.)
Mutscheller, Arthur, New York, N. Y., and C. J. Larsen, East Orange, N. J., assignors to Wappler Electric Company, Inc., Long Island City, N. Y. Cystoscopic X-ray table. 1,871,005; Aug. 9.
Myers, Chester E., et al. (See Freuler, Arthur L., assignor.)
Nagamatsu, Ikugoro, Las Vegas, Nev. Steering wheel brake. 1,870,525; Aug. 9.
Nash, Arthur E., assignor to Alcorn Combustion Company, Philadelphia, Pa. Furnace wall structure. 1,870,783; Aug. 9.
Nash, Arthur E., Philadelphia, and J. S. Alcorn, Cynwyd, assignors to Alcorn Combustion Company, Philadelphia, Pa. Radiation combustion chamber. 1,870,640; Aug. 9.
Nash, Ben, Short Hills, N. J., assignor to Revere Rubber Company, Providence, R. I. Color matching apparatus. 1,871,078; Aug. 9.
Nastrom, Nels, Elk Mountain, Wyo. Egg breaker. 1,870,741; Aug. 9.
Nathan, Max, and A. Gross, New York, N. Y. Mourning ring. 87,538; Aug. 9.
National Aniline & Chemical Company. (See Flett, Lawrence H., assignor.)
National Aniline & Chemical Co. Inc. (See Geller, Leon W., assignor.)
National Brake & Electric Co. (See Aikman, Burton S., assignor.)
National Brief Case Manufacturing Co. (See Plotkin, Joseph H., assignor.)
National Fireworks, Inc. (See Jones, Ernest B., assignor.)
National India Rubber Company. (See Ford, Robert J., assignor.)
National Machinery Co. (See Friedman, John H., assignor.)
National Police Signal Company. (See Bauer, Gustav F. C., assignor.)
National Radiator Corporation. (See Teague, Walter D., assignor.)
Naugatuck Chemical Company, The. (See Cadwell, Sidney M., assignor.)
Naugatuck Chemical Company, The. (See Jargstorff, George W., assignor.)
Naugatuck Chemical Company, The. (See Maximoff, Alexander T., assignor.)
Naugatuck Chemical Company, The. (See Smith, Omar H., assignor.)
Naugatuck Chemical Company, The. (See Smith, O. H., and Jarstorff, assignors.)
Naugatuck Chemical Company, The. (See ter Horst, William P., assignor.)
Neave, Andrew A., assignor to Treadwell Engineering Company, Easton, Pa. Flexible coupling. 1,870,343; Aug. 9.
Neff, Abner R., Long Beach, Calif. Submarine. 1,870,263; Aug. 9.
Neher, Frank H. (See Levin, H. L., and Neher.)
Neher, Van A. (See Drumgold, Leland J., assignor.)
Nelson, Bert J. (See Coles, W. H., and Nelson.)
Nelson, Franklin C., Roselle, N. J., assignor to Standard Oil Development Company. Spray device. 1,870,822; Aug. 9.
Nelson, Herman, Corporation, The. (See Shurtleff, Wilfred, assignor.)
Nelson, Royal G. (See Blood, H. E., and Nelson.)
Nelson, Waldo P., Salt Lake City, Utah. Framing light shutter lifter. 1,870,463; Aug. 9.
Nelson, William K., assignor to Insulex Corporation, Chicago, Ill. Composition construction or heat insulating material. 1,871,193; Aug. 9.
Ness, George B., Seattle, Wash. Necktie crease remover. 1,871,222; Aug. 9.
Nester, Samuel K., Geneva, N. Y., assignor, by mesne assignments, to Frederick John, Edwin China, and Burt, Boulton & Haywood, Limited, London, England. Disintegrating mill. 1,871,127; Aug. 9.
Nettleton, A. E., Company. (See Cook, Henry W., assignor.)
Neumann, Frank, Washington, D. C. Balance. 1,870,344; Aug. 9.
Newman, Edward J., assignor to D. C. Jenkins Glass Company, Kokomo, Ind. Guard for service pitchers and making same. 1,870,377; Aug. 9.
New York Air Brake Company, The. (See Baldwin, Wayne A., assignor.)
New York Air Brake Company, The. (See Bickel, Henry F., assignor.)
New York Air Brake Company, The. (See Campbell, Charles A., assignor.)
New York Air Brake Company, The. (See Cartin, James D., assignor.)
New York Air Brake Company, The. (See Hyanes, Bert, assignor.)
Niagara Blower Company. (See Bulkeley, Claude A., assignor.)
Nicklos, John C. (See Griswold, E. H., and Nicklos.)
Nielsen, Emanuel, assignor to Hamilton Beach Manufacturing Company, Racine, Wis. Motor speed regulator. 1,871,274; Aug. 9.
Noblitt, Quintin G., and E. C. Booth, assignors to Noblitt-Sparks Industries, Inc., Indianapolis, Ind. Mounting for automobile heaters. 1,870,378; Aug. 9.
Noblitt-Sparks Industries, Inc. (See Noblitt, Q. G., and Booth, assignors.)
Nolet, Hendrik, assignor to Algemeene Kunstzijde Unie N. V., Arnhem, Netherlands. Apparatus for treating cheeses with liquids. 1,870,922; Aug. 9.

Nordberg Manufacturing Company. (See Zoerb, H. M., and Buettner, assignors.)
Nordhem, Tric N., Chicago, Ill. High tension cut-out and the like. 1,871,194; Aug. 9.
Norge Corporation. (See Blood, H. E., and Nelson, assignors.)
Norge Corporation. (See Kohler, William, assignor.)
Norma-Hoffmann Bearings Corporation. (See Bott, George R., assignor.)
Norma-Hoffmann Bearings Corporation. (See Smith, Charles H., assignor.)
Norton, Allen B., Cleveland, Ohio, assignor to Aluminum Company of America. Semipermanent mold and making the same. 1,871,422; Aug. 9.
Norton, Clifford, South Orange, N. J., assignor, by mesne assignments, to Otis Elevator Company. Door operator. 1,871,338; Aug. 9.
Norton, Clifford, South Orange, N. J., assignor, by mesne assignments, to Otis Elevator Company. Electric door mechanism. 1,871,433; Aug. 9.
Norton Company. (See Greenwood, Wallace W., assignor.)
Norton Company. (See Indge, Herbert S., assignor.)
Nowak, Alfred. (See Schneevoigt, A., and Nowak.)
Noyes, Raymond E., Kansas City, Mo. Comb. 1,870,641; Aug. 9.
Nyman, Alexander, and G. V. Peck, assignors to Dubilier Condenser Corporation, New York, N. Y. Energizing filaments. 1,870,960; Aug. 9.
Nyman, Alexander, Dobbs Ferry, and W. Dubilier, New Rochelle, assignors to Dubilier Condenser Corporation, New York, N. Y. Condenser. 1,870,961; Aug. 9.
Oakes, Robert H., Springfield, and J. R. Tindal, West Springfield, assignors to Package Machinery Company, Springfield, Mass. Wrapping machine. 1,870,345; Aug. 9.
Ober, Beverly, and E. H. Wight, assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md. Production of phosphatic fertilizer. 1,871,195; Aug. 9.
Oberphos Company, The. (See Ober, B., and Wight, assignors.)
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,871,385; Aug. 9.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,871,423; Aug. 9.
Ogden, J. Edward, Company. (See Prescott, Arthur T., assignor.)
Ogden, J. Edward, Company. (See Tomkinson, Charles C., assignor.)
Ohm, Albert J. D., Oak Park, assignor to Beardslee Chandelier Manufacturing Company, Chicago, Ill. Lighting fixture. 1,870,652; Aug. 9.
O'Kane, Walter C., et al. (See Hartzell, Albert, and Lathrop, assignors.)
Oldroyd, Gerald J., Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill. Skip hoist. 1,870,962; Aug. 9.
Olean Sales Corporation. (See Coahran, Jesse M., assignor.)
Ollard, Eric A., London, and E. Y. Robinson, Manchester, England, assignors, by mesne assignments, to Associated Electrical Industries Limited. Vacuum electric tube. 1,871,275; Aug. 9.
Olmstead, Frederick A., Cleveland Heights, assignor to The Chain Products Company, Cleveland, Ohio. Anti-skid device. 1,871,424; Aug. 9.
Olson, Samuel, Oak Park, assignor to Samuel Olson & Company Inc., Chicago, Ill. Selective unloader mechanism for elevators. 1,870,583; Aug. 9.
Olson, Samuel, & Company Inc. (See Olson, Samuel, assignor.)
Osborne, Willard B. (See Gould, W. S., and Osborne.)
Ostline, John E., Liverpool, England, assignor to Associated Telephone and Telegraph Company, Kansas City, Mo. Telephone system. 1,871,079; Aug. 9.
Ostrom, David S., Kansas City, Kans, assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Comb hanger straightening method and device. 1,870,584; Aug. 9.
Otis Elevator Company. (See Norton, Clifford, assignor.)
Ottenstein, Friedrich, Nuremberg, Germany. Electric toy railway. 1,870,526; Aug. 9.
Otto, Albert T., & Sons. (See Ter Meer, Gustav, assignor.)
Otto, Henry S., et al. (See Aeppli, Albert, assignor.)
Owens-Illinois Glass Company. (See Fuerst, Edwin W., assignor.)
Oxford Varnish Corporation. (See von Webern, G., and Hammant, assignors.)
Package Machinery Company. (See Oakes, R. H., and Tindal, assignors.)
Packard Motor Car Company. (See Christman, John M., assignor.)
Packard Motor Car Company. (See Hammerl, Jacob, assignor.)
Paddor, William. (See Abt, Louis, assignor.)
Paden, William L., Saginaw, Mich. Combined cash register and adding machine. 1,871,006; Aug. 9.
Page, John E., Sydney, Australia, assignor, by mesne assignments, to The Guardian Trust Company, Cleveland, Ohio, trustee for Gibson Patent Containers, Ltd. Paper-board box. 1,870,688; Aug. 9.
Palmer, Roy D., Oakmont, and R. L. Jeffers, Parnassus, assignors to Aluminum Company of America, Pittsburgh, Pa. Drawbench. 1,870,419; Aug. 9.
Paradise, Louis A., and W. J. Coultas, assignors to Deere & Company, Moline, Ill. Corn harvester. 1,870,420; Aug. 9.
Pardee, Harvey S. (See Blackball, J. R., and Pardee.)
Pardee, Robert J., Cleveland Heights, assignor to The Cleveland Punch & Shear Works Company, Cleveland, Ohio. Hydraulic connection for presses. 1,870,527; Aug. 9.
Parker, Walter H., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Pumping apparatus. 1,871,128; Aug. 9.
Parks, Ralph C., and M. C. Eldredge, Chicago, Ill. Cutting or marking tool. 1,870,585; Aug. 9.
Parsons, John S., East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company. Alternating current distribution system. 1,870,784; Aug. 9.
Patent and Licensing Corporation, The. (See Cumfer, Donald A., assignor.)
Patent and Licensing Corporation, The. (See Levin, H. L., and Neher, assignors.)
Patent and Licensing Corporation, The. (See Snyder, Gilbert J., assignor.)
Patentaktiebolaget Grondal-Ramen. (See Haglund, Gustaf, assignor.)
Paterson, John C. (See Baker, G. R., and Paterson.)
Paterson, John C., and G. D. Wilson, Willesden, London, England, assignor to Baker Perkins Company, Inc., Saginaw, Mich. Mechanism for discharging biscuits or the like from conveyers. 1,871,276; Aug. 9.
Pathe Cinema, Anciens Etablissements Pathe Freres. (See Merle, André N., assignor.)
Paulsen, William R., Pittsburgh, Pa. Regulator. 1,870,264; Aug. 9.
Pearson, Albert, Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for drying parts. 1,871,339; Aug. 9.
Peck, Gordon V. (See Nyman, A., and Peck.)
Peissner, Alfons, Berlin, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Telephone system. 1,871,080; Aug. 9.
Perkett, Louis F., Traverse City, Mich. Humidifier. 1,871,277; Aug. 9.
Perser Corporation, The. (See Draper, Ernest E., assignor.)
Peruzzini, Carlo, Milan, Italy. Weighing machine. 1,870,379; Aug. 9.
Peter, Andrew H. (See Stokes, W. E., and Peter.)
Peters, Dick C. (See Peters, Edward C. and D. C.)
Peters, Edward C. and D. C., Graffham, Petworth, England. Nut. 1,870,380; Aug. 9.
Peterson, Charles A., assignor to The Peterson Nut Company, Cleveland, Ohio. Display device for confections and the like. 1,870,643; Aug. 9.
Peterson Nut Company, The. (See Peterson, Charles A., assignor.)
Pflueger, Charles T., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Fishing reel. 1,871,386; Aug. 9.
Pflueger, Charles T., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Wooden bait and manufacturing same. 1,871,387; Aug. 9.
Pflueger, Charles T., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Special package. 1,871,388; Aug. 9.
Pickens, Russell A., Fair Lawn, N. J., assignor to Servel Inc., New York, N. Y. Cabinet. Des. 87,539; Aug. 9.
Picker, Sidney I., New York, N. Y. Tray. Des. 87,540; Aug. 9.
Picker, Sidney I., New York, N. Y. Tray. Des. 87,541; Aug. 9.
Pickett, Glen V. (See Rentz, Frank B., assignor.)
Piekney, Joseph J. (See Coffey, J. M., France, and Piekney.)
Pielstick, Gustav, assignor to Maschinenfabrik Augsburg-Nurnberg, A. G., Augsburg, Germany. Fuel valve. 1,871,340; Aug. 9.
Pierce, Amy S., Los Angeles, Calif. Inflation indicator for tires. 1,870,742; Aug. 9.
Pierce, George W., et al. (See Tumulty, C. L. and F. H.)
Pierce, Maurice C., Madison, Wis. Automatic collapsing wheel elevating device. 1,871,129; Aug. 9.
Pierce, Raymond T., Millburn, N. J., assignor to Westinghouse Electric & Manufacturing Company. Relay. 1,870,865; Aug. 9.
Pierose, Nicholas P., Los Angeles, Calif. Roof construction. 1,870,903; Aug. 9.
Piersol, Robert J., assignor to United States Chromium Corporation, Pittsburgh, Pa. Electroplating. 1,870,743; Aug. 9.
Pierson, Winferd M., La Grande, Oreg. Storing of airplanes. 1,870,744; Aug. 9.
Pike, Robert D., Piedmont, assignor to Kalif Corporation, Emeryville, Calif. Apparatus for centrifugal casting of dual metal bushings. 1,870,866; Aug. 9.
Pike, Robert D., Diablo, and E. W. Carroll, San Francisco, assignors to Kalif Corporation, Emeryville, Calif. Casting dual metal bearings. 1,870,867; Aug. 9.
Piper, William E., New Canaan, Conn., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y. Filter blowback. 1,870,381; Aug. 9.
Pirola, Louis, assignor to The Harrington & King Perforating Company, Chicago, Ill. Grille panel. Des. 87,542; Aug. 9.

Pitcher, Elmer C., Hayward, Calif. Tie wire fastener and key. 1,871,196; Aug. 9.
Pitrella, Frank, Seneca Falls, N. Y. Windshield heating device. 1,870,923; Aug. 9.
Pitter Trust, The. (See Pitter, Walter C., assignor.)
Pitter, Walter C., Epping, Essex, England, assignor to The Pitter Trust, Chicago, Ill. Clutch mechanism. 1,870,644; Aug. 9.
Pitter, Walter C., Epping, Essex, England, assignor to The Pitter Trust, Chicago, Ill. Rotary clutch mechanism. 1,870,645; Aug. 9.
Pitter, Walter C., Epping, Essex, England, assignor to The Pitter Trust, Chicago, Ill. Spring clutch device. 1,870,646; Aug. 9.
Pittsburgh Equitable Meter Company. (See Parker, Walter H., assignor.)
Pittsburgh Plate Glass Company. (See Clause, Robert L., assignor.)
Pittsburgh Plate Glass Company. (See Koupal, Walter G., assignor.)
Pittsburgh Plate Glass Company. (See McLeod, John D., assignor.)
Pittsburgh Plate Glass Company. (See Raleigh, Walter P., assignor.)
Platakis, Peter, Minneapolis, Minn. Mechanical toy. 1,870,586; Aug. 9.
Platt, Herbert. (See Dreyfus, C., and Platt.)
Platt, Herbert. (See Dreyfus, C., Miles, and Platt.)
Platt, Herbert, Cumberland, Md., assignor to Celanese Corporation of America. Sizing of dyed yarn. 1,870,868; Aug. 9.
Platzer, Karl, Innsbruck, Tyrol, Austria. Stand attachment for fountain pens. 1,870,924; Aug. 9.
Plotkin, Joseph H., assignor to National Brief Case Manufacturing Co., Chicago, Ill. Traveling case. 1,871,197; Aug. 9.
Pointon, John E. (See Harber, L. S., and Pointon.)
Poix, G. M., Inc. (See Yerkes, Gabrielle M. P., assignor.)
Polakes, Bruce S., Westville, Ill. Tire chain. 1,871,198; Aug. 9.
Pope, Daniel K., Cleveland, Ohio. Spring cover. 1,871,341; Aug. 9.
Potter, Charles P. (See Wulfert, O., and Potter.)
Potter, Myron P., Cleveland Heights, Ohio. Access door. 1,871,342; Aug. 9.
Powell, Raymond E., Westfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Finishing the edge of a material. 1,871,278; Aug. 9.
Power, Thomas J., Syracuse, assignor to United States Hoffman Machinery Corporation, New York, N. Y. Cylinder for washing machines and the like. 1,870,925; Aug. 9.
Pratt & Whitney Aircraft Company. (See Hasbrouck, Stephen A., assignor.)
Pratt & Whitney Company. (See Drake, Alden M., assignor.)
Pratt & Whitney Company. (See Keller, Joseph F., assignor.)
Pratt & Whitney Company. (See Shaw, J. C. and R. D.)
Pratt, William B., Wellesley, and R. T. Halstead, Boston, Mass., assignors to Dispersions Process, Inc., Dover, Del. Dissolving and dispersing nitrocellulose. 1,870,864; Aug. 9.
Prescott, Arthur T., assignor to J. Edward Ogden Company, Inc., East Orange, N. J. Door construction and operating mechanism therefor. 1,871,081; Aug. 9.
Prescott, John O., Glenbrook, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Subway announcing apparatus. 1,870,294; Aug. 9.
Prescott, William E. (See MacFarlane, R. F., and Prescott.)
Pringle, William A., Fort Wayne, Ind., assignor to General Electric Company. Adjustable synchronous apparatus. 1,871,425; Aug. 9.
Proctor, Barton A., Pelham Manor, assignor, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y. Carrier for material and apparatus for use therewith. 1,871,233; Aug. 9.
Proctor, Barton A., Pelham Manor, assignor, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y. Container for films and handling the same. 1,871,234; Aug. 9.
Proctor, Barton A., Pelham Manor, assignor, by assignments, to Kinatome Patents Corporation, New York, N. Y. Container for films and handling the same. 1,871,236; Aug. 9.
Proctor, Barton A., Pelham Manor, N. Y., assignor, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y. Container for film and handling the same. 1,871,237; Aug. 9.
Proctor, Barton A., Pelham Manor, N. Y., E. D. Foster, Ridgewood, N. J., and C. U. Bundick, White Plains, assignors, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y. Carrier for material and apparatus for use therewith. 1,871,235; Aug. 9.
Prosperity Company Inc. (See Davis, Ernest, assignor.)
Prout, Herbert L., Villa Park, Ill. System of friction gearing. 1,870,421; Aug. 9.
Pungs, Wilhelm, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Bleaching artificial fatty acids. 1,871,082; Aug. 9.
Purington, Ellison S., Gloucester, Mass., assignor to J. Hays Hammond, jr. Synchronization for facsimile transmission. 1,870,745; Aug. 9.
Purkis, Frank T. (See Twiss, D. F., Purkis, and Murphy.)
Purmort, Joseph, administrator. (See Van Anken, Clarence E.)
Pyle-National Company, The. (See Dake, Charles W., assignor.)
Pyle-National Company, The. (See Hellwig, Emil C., assignor.)
Pyle, Paul E., assignor to The Schwab Safe Company, La Fayette, Ind. Automatic safe doorlock. 1,870,746; Aug. 9.
Rader, Harold K. (See Robinson, W. M., and Rader.)
Radio Corporation of America. (See De Jong, Hendrik, assignor.)
Radio Corporation of America. (See Mallina, Rudolph F., assignor.)
Radio Corporation of America. (See van der Pol, Balthasar, assignor.)
Radio Corporation of America. (See Zworykin, Vladimir K., assignor.)
Radio Inventions, Inc. (See Alden, Milton, assignor.)
Rado, Leopold, Berlin-Wannsee, Germany. Corner holder for pictures or the like. 1,870,528; Aug. 9.
Rainier, Harry, Los Angeles, Calif. Connecting means for side rails and posts of bedsteads. 1,871,199; Aug. 9.
Raisch, William, Forest Hills, assignor to Municipal Sanitary Service Corporation, New York, N. Y. Rotary brush. 1,871,007; Aug. 9.
Raleigh, Walter P., Ames, Iowa, assignor to Pittsburgh Plate Glass Company. Disinfecting corn and like seed and disinfectant used therein. 1,871,200; Aug. 9.
Ralston, Robert P., New Concord, Ohio. Attachment for barber chairs. 1,870,747; Aug. 9.
Ramage, John H., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Heater element for electron emission devices. 1,871,343; Aug. 9.
Ramey, Nancy I., Salem, Oreg. Swing. 1,870,748; Aug. 9.
Ramsey, George, Brooklyn, N. Y. Light meter and view scope for cameras. 1,870,464; Aug. 9.
Randall, Chester J., Woonsocket, assignor to The Goodyear's India Rubber Glove Mfg. Company, Naugatuck, Conn. Vulcanization of rubber. 1,871,083; Aug. 9.
Ranney, Leo, New York, N. Y., and L. C. Uren, assignors to Standard Oil Development Company. Developing impermeable barriers in porous media. 1,870,869; Aug. 9.
Rasco, Charles A., assignor of one-half to L. C. Chambers, San Francisco, Calif. Mechanical movement. 1,870,749; Aug. 9.
Rathbun, John B., assignor of one-half to F. C. Wellman, Chicago, Ill. System of television. 1,870,465; Aug. 9.
Rathmann, Paul, assignor to the Firm Elektrotechnische Fabrik Schmidt & Co., Gesellschaft m. b. H., Bodenbach, Czechoslovakia. Electric pocket or hand lamp. 1,871,389; Aug. 9.
Raun, George, El Campo, Tex. Electrically operated lawn mower. 1,870,382; Aug. 9.
Rawlings Manufacturing Company. (See Coles, Clarence, assignor.)
Rawson, Leslie A., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Crown construction for derricks. 1,870,587; Aug. 9.
Rawson, Leslie A., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Double leg construction for derricks with equalizing means. 1,871,130; Aug. 9.
Rawson, Leslie A., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Double leg construction for derricks. 1,871,131; Aug. 9.
Rawson, Leslie A., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Derrick having fluid load-equalizing means. 1,871,132; Aug. 9.
Rawson, Leslie A., assignor to Emcso Derrick & Equipment Company, Los Angeles, Calif. Eccentric equalizer for derricks. 1,871,133; Aug. 9.
Rawson, Louis W., assignor to Worcester Polytechnic Institute, Worcester, Mass. Centrifugal clutch. 1,870,647; Aug. 9.
Rawson, Louis W., assignor to Worcester Polytechnic Institute, Worcester, Mass. Accelerating clutch. 1,870,648; Aug. 9.
Rawson, Louis W., assignor to Worcester Polytechnic Institute, Worcester, Mass. Centrifugal clutch. 1,870,649; Aug. 9.
Rayner Decalcomania Company. (See Babcock, George H., assignor.)
Reach, Milton B., Springfield, Mass., assignor to A. G. Spalding & Bros., New York, N. Y. Rubber exercising strap. 1,870,750; Aug. 2.
Reach, Milton B., Chicopee, Mass., assignor to A. G. Spalding & Bros., New York, N. Y. Golf shoe. 1,870,751; Aug. 9.
Reading Dyeing Co. (See Thus, Max, assignor.)
Recker, Adolph C., Oakville, assignor to The Chase Companies, Incorporated, Waterbury, Conn. Portable electric lamp. Des. 87,543; Aug. 9.
Reddig, Charles E., Kew Gardens, assignor to Graybar Electric Company, Inc., New York, N. Y. Washing machine. 1,870,785; Aug. 9.
Redman, Herbert L., Forest Hills, assignor to Saks & Company, New York, N. Y. Handbag or the like. Des. 87,544; Aug. 9.

Redman, Herbert L., Forest Hills, assignor to Saks & Company, New York, N. Y. Handbag or the like. Des. 87,545; Aug. 9.
Redman, Herbert L., Forest Hills, assignor to Saks & Company, New York, N. Y. Lady's handbag or the like. Des. 87,546; Aug. 9.
Reed, William R. (See Britton, E. C., and Reed.)
Reel, Herbert W., Hinsdale, Ill., assignor to United States Gypsum Company, Chicago, Ill. Building construction. 1,870,422; Aug. 9.
Reese, Eva M., Canton, Ohio. Pack carrying harness. 1,871,223; Aug. 9.
Reid, John, Oil City, Pa. Lubricating system. 1,871,201; Aug. 9.
Reihing, Anthony, Toledo, Ohio. Toy. 1,870,752; Aug. 9.
Reilly, Peter C. (See Derby, Ira H., assignor.)
Reiter, Charles F., Minneapolis, Minn. Self-cleaning rake attachment. 1,871,084; Aug. 9.
Reliance Machine & Stamping Works, Inc. (See Dunlap, Emmett A., assignor.)
Reliance Machine & Stamping Works, Incorporated. (See McGahey, Robert E., assignor.)
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,870,689; Aug. 9.
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,870,690; Aug. 9.
Remington Rand Inc. (See Dungan, John E., assignor.)
Renner, Herbert O. (See Haas, L. W., and Renner.)
Rentschler, Harvey C., East Orange, N. J., assignor to Westinghouse Lamp Company. Glow relay tube. 1,871,279; Aug. 9.
Rentschler, Harvey C., East Orange, N. J., assignor to Westinghouse Lamp company. Photo-electric tube. 1,871,280; Aug. 9.
Rentschler, Harvey C., East Orange, N. J., assignor to Westinghouse Lamp Company. Electron discharge device. 1,871,344; Aug. 9.
Rentz, Frank B., assignor to G. V. Pickett, Yankton, S. Dak. Heater for liquid cooling systems of internal combustion engines. 1,871,008; Aug. 9.
Republic Flow Meters Company. (See Spitzglass, Albert F., assignor.)
Revere Rubber Company. (See Cobb, Henry Z., assignor.)
Revere Rubber Company. (See McKinnin, Allen G., assignor.)
Revere Rubber Company. (See Nash, Ben, assignor.)
Reynolds, Edwin, Vineland, N. J. Temple member for spectacles. Des. 87,547; Aug. 9.
Reynolds, Elmer E., Detroit, Mich., assignor to The Mechanical Rubber Company, Cleveland, Ohio. Shock reducing device. 1,871,390; Aug. 9.
Reyrolle, A., & Company Limited. (See Leben, H., and Cooke, assignors.)
Rhoads, Albert E. (See Crosby, E. L., and Rhoads, assignors.)
Rice, Harold D., Bristol, R. I., assignor to The Goodyear India Rubber Glove Manufacturing Company, Naugatuck, Conn. Footwear and making same. 1,870,870; Aug. 9.
Rich, Chester A., Cincinnati, Ohio. Ironing board or stand. 1,871,202; Aug. 9.
Richard, Clement C., assignor of one-half to O. K. Richard, Detroit, Mich. Shock absorber. 1,870,871; Aug. 9.
Richard, Otis K. (See Richard, Clemence C., assignor.)
Richards, John A., Kalamazoo, Mich. Combination saw planer and planer for printers' use. 1,870,466; Aug. 9.
Richards, William F., assignor to S. M. A. Corporation, Mason, Mich. Milk evaporating means. 1,870,423; Aug. 9.
Richardson Company, The. (See Fisher, Harry C., assignor.)
Richter, George A., assignor to Brown Company, Berlin, N. H. Chemical modification of cellulose fiber. 1,870,650; Aug. 9.
Rigante, Giuseppe, Westerleigh, Staten Island, N. Y. Coil unit. 1,871,345; Aug. 9.
Righter, Walter H., Glendale, Calif. Welding and soldering appliance. 1,871,009; Aug. 9.
Rightmyer, Holden W., assignor to The American Swiss Company, Toledo, Ohio. Door latch. 1,871,085; Aug. 9.
Rintelman, William L. (See Gubelmann, I., Goodrich, and Rintelman.)
Ripke, Otto, Elberfeld, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Decomposition product of urea as or in fertilizers. 1,870,346; Aug. 9.
Ritchie, Charles F. (See Gale, W. A., and Ritchie.)
Ritter, Julius, jr., assignor to Hartmann Trunk Company, Racine, Wis. Drawer locking device. 1,870,467; Aug. 9.
Rivat, George, Paterson, N. J., assignor to Celanese Corporation of America. Differentially colored fabric and making the same. 1,870,786; Aug. 9.
Roart, Alphonse, Philadelphia, Pa. Box wrap. Des. 87,548; Aug. 9.
Robb, Andrew, New Britain, Conn. Safety razor. 1,871,010; Aug. 9.
Robbins & Myers, Inc. (See Seaman, F. F., and Schirmer, assignors.)
Roberts, Thomas M., Washington, D. C. Mass-movement detector. 1,870,347; Aug. 9.
Robinson, Ernest Y. (See Ollard, E. A., and Robinson.)
Robinson, Ward M., and Harold K. Rader, assignors to Mueller Brass Co., Port Huron, Mich. Hanger. 1,870,651; Aug. 9.
Robson, Duer C., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Strand working machine. 1,871,891; Aug. 9.
Rock, Darrell D. (See McDonough, J., and Rock.)
Rockwell, Edward A., Long Island City, N. Y. Depth testing and indicating device. 1,870,652; Aug. 9.
Roco, Albert L. (See Layne, L. A., and Roco.)
Roepke Container Corporation. (See Roepke, William J., assignor.)
Roepke, William J., Dayton, Ohio, assignor, by mesne assignments, to Roepke Container Corporation, Baltimore, Md. Plaited corner-fold pan and the art of and blank for making the same. 1,870,295; Aug. 9.
Roesen, Oscar C., Brooklyn, assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Paste drying device for a printing web. 1,870,529; Aug. 9.
Roessler & Hasslacher Chemical Company, The. (See Walker, Frederic, assignor.)
Roessner, William L., assignor of one-third to E. Wheeler and one-third to V. C. Smedley, Denver, Colo. Fire extinguisher. 1,870,872; Aug. 9.
Rogers Products Company. (See Albertine, Herman, assignor.)
Rogers, Walter F. (See McGary, S. U., Rogers, and Gill.)
Rome Company, The. (See Thomas, Joseph R., assignor.)
Rooker, William A., and V. E. Speas, assignors to Speas Mfg. Co., Kansas City, Mo. Fruit product. 1,870,588; Aug. 9.
Rosaire, Esme E., Houston, Tex., assignor to Geophysical Research Corporation, New York, N. Y. Determining the straightness of drill holes in the earth. Re18,565; Aug. 9.
Rose, Bennie A. (See Ross, M. D., and Rose.)
Rosenthal, Arthur, Grand Rapids, Mich. Automatic label printing, cutting, folding, and packing machine. 1,870,424; Aug. 9.
Rosenthal China Corporation, The. (See Wesp, George, assignor.)
Ross, David E., La Fayette, Ind. Cam and lever steering gear. 1,871,134; Aug. 9.
Ross Gear & Tool Company. (See Gruenewald, Eugene J., assignor.)
Ross, Malcolm D., Pittsburgh, and B. A. Rose, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Dynamo-electric machine. 1,871,238; Aug. 9.
Ross, Oscar A., New York, N. Y. System of reflecting mirrors or the like. 1,870,468; Aug. 9.
Ross, Oscar A., New York, N. Y. Musical directing apparatus. 1,870,823; Aug. 9.
Ross, William S., assignor to The Favorite Stove and Range Company, Piqua, Ohio. Articulated top cover for gas ranges. 1,870,653; Aug. 9.
Rossberg, Ehrhard. (See Jipp, A., Rossberg, Simon, Scheunert, and Skawran.)
Roswurm, Arthur F., Lakewood, Ohio. Socket. 1,870,589; Aug. 9.
Rousseau, Seifert W., Baldwin, N. Y. Door operating mechanism. 1,870,964; Aug. 9.
Rousseau, Seifert W., Baldwin, N. Y. Door operating mechanism. 1,870,965; Aug. 9.
Royal Baking Powder Company. (See Stokes, W. E., and Peter, assignors.)
Rubinstein, Wilton, St. Louis, Mo. Adjustable collar band for shirts. 1,870,966; Aug. 9.
Rust, Robert R., Garden City, and C. L. Jones, Pelham, assignors to Dryice Corporation of America, New York, N. Y. Method of and apparatus for making and shaping solid carbon dioxide. 1,870,691; Aug. 9.
Rutherford, Eugene W., New Haven, assignor to The Shoe Hardware Company, Waterbury, Conn. Fastener element. 1,870,873; Aug. 9.
Rutledge, George E., assignor to Vassar Swiss Underwear Company, Chicago, Ill. Undergarment. 1,871,086; Aug. 9.
Rykert, Willard C. (See Stoddard, E. S., and Rykert.)
S. M. A. Corporation. (See Richards, William F., assignor.)
Sabbah, Camil A. (See Brown, H. D., and Sabbah.)
Sachs, Hugo, Leipzig, Germany. Magnet unit. 1,870,753; Aug. 9.
Safe Deposit and Trust Company, The, et al., executors. (See Brogan, Graham W.)
Saks & Company. (See Redman, Herbert L., assignor.)
Salomon, Robert. (See Maag, M., and Salomon.)
Sanders, George E., New York, N. Y. Dusting powder and manufacturing same. 1,870,383; Aug. 9.
Santiago, James J., assignor to J. Grant, Los Angeles, Calif. Flow control head. 1,870,590; Aug. 9.
Santos, John R. L., assignor to The Bartlett Hayward Company, Baltimore, Md. Gas holder. 1,870,315; Aug. 9.
Santos, John R. L., assignor to The Bartlett Hayward Company, Baltimore, Md. Gas holder. 1,870,316; Aug. 9.
Sarrablo y Clavero, Manuel, Paris, France. Mute for stringed musical instruments. 1,870,324; Aug. 9.
Sause, Richard, New York, N. Y. System for controlling refrigeration. 1,870,874; Aug. 9.
Savage, Lawrence F., London, England. Stereoscopic photography. 1,871,281; Aug. 9.
Savy, Robert, Paris, France, assignor to Baker Perkins Company, Inc., Saginaw, Mich. Apparatus for cooling molded confections. 1,871,346; Aug. 9.

Sawyer, Ben M., Cleveland, Ohio. Semi-automatic bolt nutting machine. 1,870,530; Aug. 9.
Sawyer, Frank McM., Richmond, Va. Wall construction. 1,870,926; Aug. 9.
Saxon, Frank, Worthington, Minn. Snowplow. 1,870,501; Aug. 9.
Schaake, William, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Current collector. 1,871,239; Aug. 9.
Scheller, Carl, Leipzig, Germany. Thread guide holder. 1,871,240; Aug. 9.
Schettler, Gustav A., Leeds, England, assignor to The Turner Tanning Machinery Company, Portland, Me. Fluid pressure applying apparatus. 1,870,384; Aug. 9.
Scheuer, Prosper, Ghent, Belgium. Speed reducing transmission device. 1,870,875; Aug. 9.
Scheunert, Alfred. (See Jipp, A., Rossberg, Simon, Scheunert, and Skawran.)
Schinkez, Albert. (See Smith, E. R., and Schinkez.)
Schirmer, Carl E. (See Seaman, F. F., and Schirmer.)
Schlitzer, Leo J., et al. (See Litomy, John L., assignor.)
Schmitt-Murphy Laboratories, Inc. (See Schmitt, Otto G., assignor.)
Schmitt, Otto G., assignor to Schmitt-Murphy Laboratories, Inc., Omaha, Nebr. Merchandise carton. 1,871,426; Aug. 9.
Schneevoigt, Alwin, and A. Nowak, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of effects on textiles. 1,871,087; Aug. 9.
Schnell, Steve, assignor to Wagner Electric Corporation, St. Louis, Mo. Brake mechanism. 1,870,296; Aug. 9.
Schnuck, Carl F. (See Lewis, R. C., and Schnuck.)
Schoel, Clifford R., assignor to Gem Doughnut Machine Co., Inc., Waterloo, Iowa. Dough dispensing device. 1,870,654; Aug. 9.
Schoene, Kurt, Hamburg, Germany. Valve especially for pumps and compressors. 1,870,927; Aug. 9.
Schooler, John G., San Angelo, Tex. Fire extinguisher. 1,870,692; Aug. 9.
Schroeder, Wilhelm G., Lubeck, Germany. Refrigerating process and apparatus for cooling fat emulsions such as margarine and the like. 1,870,531; Aug. 9.
Schuerman, Martin, Maywood, Calif. Core drill. 1,870,592; Aug. 9.
Schuetz, Thomas J., assignor to Braden Steel & Winch Company, Tulsa, Okla. Friction brake. 1,870,532; Aug. 9.
Schulz, Ernest R., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,871,427; Aug. 9.
Schulz, Otto C., Chicago, Ill. Apparatus for folding sheet material. 1,870,754; Aug. 9.
Schur, Milton O., assignor to Brown Company, Berlin, N. H. Computation rule. 1,870,655; Aug. 9.
Schwab Safe Company, The. (See Pyle, Paul E., assignor.)
Scofield, Giles T., Rochester, N. Y. Ironing machine. 1,870,297; Aug. 9.
Scofield, Theodore J., assignor to The Sparks-Withington Co., Jackson, Mich. Electrolytic condenser and holder therefor. 1,871,012; Aug. 9.
Scofield, Theodore J., and W. D. Miner, Jackson, Mich., assignors to Sparks-Withington Company. Control apparatus for gang condensers. 1,871,011; Aug. 9.
Scott, Fitzhugh E., and L. R. Bryant, Richmond, Va., assignors to Liggett & Myers Tobacco Company, New York, N. Y. Method of and machine for packaging cigarettes. 1,870,533; Aug. 9.
Scott & Williams, Incorporated. (See Swinglehurst, Harry, assignor.)
Scovill Manufacturing Company. (See Cutler, Eli N., assignor.)
Scovill Manufacturing Company. (See Duncan, James, assignor.)
Scovill Manufacturing Company. (See George, James S., assignor.)
Scull, James P., assignor to Whitall-Tatum Company, Millville, N. J. Glass working machine. 1,870,755; Aug. 9.
Seaman, Frank F., and C. E. Schirmer, assignors to Robbins & Myers, Inc., Springfield, Ohio. Hoisting mechanism. 1,870,385; Aug. 9.
Sears, Edward W., Kansas City, Mo. Label blank. Des. 87,540; Aug. 9.
Seeger, Edwin W., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Controller for induction motors. 1,871,392; Aug. 9.
Seely, John M., near New Carlisle, assignor to The Champion Company, Springfield, Ohio. Burial vault. Des. 87,552; Aug. 9.
Seely, John M., near New Carlisle, assignor to The Champion Company, Springfield, Ohio. Catafalque. Des. 87,558; Aug. 9.
Seidel, Adolph, and M. R. Hatch, assignors to The Toledo Machine & Tool Company, Toledo, Ohio. Triple action power press. 1,871,088; Aug. 9.
Seitz, Oskar, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Electric current rectifier. 1,871,434; Aug. 9.
Seligmann, Arthur, Dusseldorf, Germany. Refrigerating process and the apparatus applicable thereto. 1,870,265; Aug. 9.
Sell, Emma O. (See Sell, John C. F., assignor.)
Sell, John C. F., assignor to E. O. Sell, Chicago, Ill. Coupling mechanism. 1,871,241; Aug. 9.
Seneca Falls Machine Company. (See Smith, E. R., and Schinkez, assignors.)
Servel Inc. (See Pickens, Russell A., assignor.)
Sever, Alfredo, assignor of one-fifth to C. Clarke, New York, N. Y. Novelty envelope. 1,870,386; Aug. 9.
Seykora, Eduard, Vienna, Austria. Shaving brush. 1,870,756; Aug. 9.
Shafer, Ira, San Diego, Calif. Confection coating apparatus. 1,871,089; Aug. 9.
Shakespeare, William M., South Orange, N. J., assignor to Anaconda Sales Company, New York, N. Y. Apparatus for applying coatings. 1,871,013; Aug. 9.
Shakespeare, William M., South Orange, N. J., assignor to Anaconda Sales Company, New York, N. Y. Building product. 1,871,090; Aug. 9.
Shand, Errol B., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Anode cooling for rectifiers. 1,871,282; Aug. 9.
Sharpe, Ira G., Liberty Center, Ohio, assignor to The Kraut Machinery Company, Pittsburgh, Pa. Article trimming and slicing machine. 1,871,091; Aug. 9.
Shauer, Louis S. and R., Los Angeles, Calif. Refrigerator shelf appliance. 1,870,593; Aug. 9.
Shauer, Rose. (See Shauer, Louis S. and R.)
Shaw, John C., and R. D. Shaw, Brooklyn, N. Y., assignors, by mesne assignments, to Pratt & Whitney Company, Hartford, Conn. Electrical control of the feed of planers and like machine tools. 1,871,224; Aug. 9.
Shepard, Francis H., New Rochelle, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Locomotive control system. 1,870,469; Aug. 9.
Shepard, Francis H., jr., New Rochelle, N. Y. Hydraulic transmission mechanism. 1,870,824; Aug. 9.
Sheridan, T. W. & C. B., Company. (See Sieb, Henry, assignor.)
Sherts, James H., Brackenridge, Pa., assignor to Duplate Corporation. Making composite glass. 1,870,693; Aug. 9.
Shimmin, John T., Tonopah, Nev., assignor to The Dorr Company, Inc., New York, N. Y. Multiplex filter. 1,870,387; Aug. 9.
Shipley, Grant B., Pittsburgh, Pa., assignor to The Wood Preserving Corporation. Manufacture of wooden shims. 1,870,656; Aug. 9.
Shoe Form Co. (See De Witt, William J., assignor.)
Shoe Hardware Company, The. (See Rutherford, Eugene W., assignor.)
Shoemaker, Harry, Jersey City, N. J., assignor, by mesne assignments, to P. R. Mallory & Co., Incorporated, Indianapolis, Inc. Electrode elements for rectifiers and manufacturing the same. 1,870,425; Aug. 9.
Short, J. R., Milling Company. (See Haas, L. W., and Renner, assignors.)
Shroyer, Jacob L., Oak Park, assignor to Edison Electric Appliance Company, Chicago, Ill. Oven. 1,871,393; Aug. 9.
Shurtleff, Wilfred, assignor to The Herman Nelson Corporation, Moline, Ill. Heating and ventilating unit. 1,871,225; Aug. 9.
Sieb, Henry, Hammond, Ind., assignor, by mesne assignments, to T. W. & C. B. Sheridan Company, New York, N. Y. Machine for applying strips to books. 1,870,348; Aug. 9.
Siemens & Halske, Aktiengesellschaft. (See Jipp, A., Rossberg, Simon, Scheunert, and Skawran, assignors.)
Siemens & Halske, Aktiengesellschaft. (See Pelssner, Alfons, assignor.)
Siemens & Halske, Aktiengesellschaft. (See Winter, Carl, assignor.)
Siemens-Schuckertwerke, Aktiengesellschaft. (See Miller, Hans, assignor.)
Siferte, Albert F. (See Keller, C. W., and Siferte.)
Simon, Franz. (See Jipp, A., Rossberg, Simon, Scheunert, and Skawran.)
Simons, Walter R., Los Angeles, Calif. Building construction. 1,870,967; Aug. 9.
Simplex Wire and Cable Company. (See Evans, Ralph R., assignor.)
Simpson, John M., Muncie, Ind. Transmission gear. 1,871,014; Aug. 9.
Sinden, Roger H., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Heater element. 1,870,968; Aug. 9.
Sipe, Denmire T. (See Snyder, F. S., and Sipe, assignors.)
Skala, Ljubomir W., assignor to Skala Research Laboratories, Inc., Cicero, Ill. Separating and purifying gases. 1,871,226; Aug. 9.
Skala Research Laboratories, Inc. (See Skala, Ljubomir W., assignor.)
Skawran, Willy. (See Jipp, A., Rossberg, Simon, Scheunert, and Skawran.)
Skinner Irrigation Company, The. (See Coles, W. H., and Nelson, assignors.)
Skinner Motors, Inc. (See Skinner, Ralph L., assignor.)
Skinner Motors, Inc. (See Walrath, Percy C., assignor.)
Skinner, Ralph L., assignor to Skinner Motors, Inc., Detroit, Mich. Inner cylinder construction for internal combustion engines. 1,871,242; Aug. 9.
Skipwith, Lee, Bronxville, N. Y. Playing card. Des. 87,550; Aug. 9.
Skoogh, Harry L., Olean, assignor to Art Metal Construction Company, Jamestown, N. Y. Display case or cabinet. 1,870,534; Aug. 9.
Small, Frederick T. (See Walton, C. D., and Small.)
Smedley, Victor C., et al. (See Roessner, William L., assignor.)

Smith, Albert K., Shaker Heights Village, Ohio, assignor to The Dow Chemical Company, Midland, Mich. Flake magnesium chloride and making same. 1,871,428; Aug. 9.
Smith, Charles H., Wildcroft, Danbury, England, assignor to Norma-Hoffman Bearings Corporation, Stamford, Conn. Device for securing sleeves, collars, or the like on cylindrical shafts. 1,871,092; Aug. 9.
Smith, Edwin R., and A. Schinkez, assignors to Seneca Falls Machine Company, Seneca Falls, N. Y. Work handling mechanism for machine tools. Re18,550; Aug. 9.
Smith, Elmer H., trustee. (See Smith, Elmer H., assignor.)
Smith, Elmer H., Minneapolis, Minn., assignor, by mesne assignments, to E. H. Smith, as trustee for himself and W. E. Johnson and J. J. Huebscher. Bread toaster. Re18,566; Aug. 9.
Smith-Emery Company. (See Ball, I. J., and Ingram, assignors.)
Smith, Gerald D., Toronto, Ontario, Canada. Horizontally rotatable winged rotor for aircraft. 1,870,928; Aug. 9.
Smith, Joseph W., Cambridge, Ohio. Multifocal eye-testing device. 1,871,394; Aug. 9.
Smith, Marshall A., jr., assignor to Bendix Aviation Corporation, South Bend, Ind. Propeller. 1,871,203; Aug. 9.
Smith, Omar H., West Englewood, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Making styrols. 1,870,876; Aug. 9.
Smith, Omar H., West Englewood, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Production of styrols. 1,870,878; Aug. 9.
Smith, Omar H., West Englewood, and G. W. Jargstorff, Glen Rock, N. J., assignors to The Naugatuck Chemical Company, Naugatuck, Conn. Production of styrols. 1,870,877; Aug. 9.
Smith, Robert H., Brisbane, Queensland, Australia. Laminated spring for motor vehicles. 1,870,787; Aug. 9.
Smith, Walter C., Maplewood, N. J., assignor to Cerro de Pasco Copper Corporation, New York, N. Y. Refining bismuth. 1,870,388; Aug. 9.
Smith, Walter C., Maplewood, N. J., assignor to Cerro de Pasco Copper Corporation, New York, N. Y. Concentration of bismuth alloy. 1,870,470; Aug. 9.
Smith, Walter S., Brooklyn, N. Y. Scale. 1,870,929; Aug. 9.
Smith, William A., sr., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Oiling device. 1,871,429; Aug. 9.
Smith, William A., jr., Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J. Feeding device for percussive motors. 1,870,389; Aug. 9.
Smith, William J., and H. F. Braun, Lakewood, assignors to The Cleveland Steel Products Corporation, Cleveland, Ohio. Flexible coupling. 1,871,227; Aug. 9.
Smythe, Edwin H., Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,871,243; Aug. 9.
Snow, Frederick O., jr., Winchester, assignor to Mead-Morrison Manufacturing Company, East Boston, Mass. Tractor. 1,870,969; Aug. 9.
Snow, Karl F., Brecksville, assignor to The C. O. Bartlett & Snow Company, Cleveland, Ohio. Upsetting device for barrels and like articles. 1,871,395; Aug. 9.
Snow, Karl F., Brecksville, assignor to The C. O. Bartlett & Snow Company, Cleveland, Ohio. Mechanism for use in coating barrels and like articles. 1,871,430; Aug. 9.
Snyder, Frederick S., and C. H. Sipe, Beaver Falls, assignors to Demmie T. Sipe, Latrobe, Pa. Furnace roll or shaft. 1,870,657; Aug. 9.
Snyder, Gilbert J., South Bend, Ind., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Coating machine for shingles. 1,870,426; Aug. 9.
Società Anonima Industria Ammoniaca. (See Lopez, Francesco, assignor.)
Société d'Etudes de Machines à Affuter. (See Maag, M., and Salomon, assignors.)
Societe Nationale de Recherches sur le Traitement des Combustibles. (See Audibert, Etienne, assignor.)
Southgate, Louis W. (See Jennings, I. C., and Southgate.)
Spalding, A. G., & Bros. (See Reach, Milton B., assignor.)
Sparks-Withington Co., The. (See Scofield, Theodore J., assignor.)
Sparks-Withington Company. (See Scofield, T. J., and Miner, assignors.)
Speas Mfg. Co. (See Rooker, W. A., and Speas, assignors.)
Speas, Victor E. (See Rooker, W. A., and Speas.)
Speidel, Albert E. R., Edgewood, R. I., assignor to Speidel Corporation. Bracelet chain. Des. 87,551; Aug. 9.
Speidel Corporation. (See Speidel, Albert E. R., assignor.)
Spencer, Gerald G. (See Mott, C., and Spencer.)
Spencer, Grace G. (See Adams, E. M., Gangloff, and Spencer.)
Sperry Products, Inc. (See Drake, Harcourt C., assignor.)
Sperry Products, Inc. (See Jones, George L., assignor.)
Spitzglass, Albert F., assignor to Republic Flow Meters Company, Chicago, Ill. Pen. 1,870,266; Aug. 9.
Sprague, Carl C., Westboro, Mass. Printing on inflatable articles. 1,870,825; Aug. 9.
Sprigings, David A., Providence, R. I., assignor to Stickney & Poor Spice Co., Boston, Mass. Receptacle cover. 1,870,390; Aug. 9.
Sprongerts, Eduard W., deceased; J. Sprongerts, administratrix, and R. Franke, assignors to Kalle & Co. Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Light-sensitive layer. 1,870,930; Aug. 9.
Sprongerts, Johanna, administratrix. (See Sprongerts, E. W., and Franke.)
Squier, Ralph A., Tieton, Wash. Adjustable box form. 1,871,283; Aug. 9.
Squires, John, Detroit, Mich. Airplane. 1,871,015; Aug. 9.
Staffaroni, Lally. (See Farrell, M. J., and Staffaroni.)
Stalker, Edward A., Ann Arbor, Mich. Reducing the fluid resistance of automobile bodies. 1,871,396; Aug. 9.
Stallings, Edmund O., and R. H. Gorton, assignors, by mesne assignments, to Ralph G. Lockwood, Indianapolis, Ind. Lock. 1,870,427; Aug. 9.
Standard I. G. Company. (See Clark, Edgar M., assignor.)
Standard Oil Company. (See Brewster, Oswald C., assignor.)
Standard Oil Company. (See Cooke, T. S., and Brewster, assignors.)
Standard Oil Company. (See Graves, George D., assignor.)
Standard Oil Company. (See Lindsay, James D., assignor.)
Standard Oil Company (Indiana). (See Whitman, Walter G., assignor.)
Standard Oil Company of California. (See Handy, John C., assignor.)
Standard Oil Development Company. (See Evans, Earle W., assignor.)
Standard Oil Development Company. (See Lebo, Robert B., assignor.)
Standard Oil Development Company. (See Lewis, Warren K., assignor.)
Standard Oil Development Company. (See Luster, Eric W., assignor.)
Standard Oil Development Company. (See Milburn, Richard P., assignor.)
Standard Oil Development Company. (See Nelson, Franklin C., assignor.)
Standard Oil Development Company. (See Ranney, L., and Uren, assignors.)
Standard Oil Development Company. (See Winning, Carl, assignor.)
Staples, Earle I., San Francisco, Calif. Oil burner and draft control mechanism. 1,870,931; Aug. 9.
Staples, Elliot S., Glenview, Ill. Airplane gig. 1,870,757; Aug. 9.
Staples, Elliot M. (See Abraham, L. G., and Staples.)
Stapling Machine Co. (See Boesé, Quincy W., assignor.)
Statham, Noel, Irvington-upon-Hudson, N. Y., assignor to Hookless Fastener Company, Meadville, Pa. Flexible fastening device. 1,870,658; Aug. 9.
Staud, Cyril J., and H. LeB. Gray, assignors to Eastman Kodak Company, Rochester, N. Y. Making chloroform insoluble cellulose acetate and the product thereof. 1,870,594; Aug. 9.
Steel Sanitary Company, The. (See Cromwell, John C., assignor.)
Stéen, Karl E. (See Sundstrom, E. F., and Stéen.)
Steenbock, Harry, Madison, Wis., assignor to Wisconsin Alumni Research Foundation. Antirachitic product and process. 1,871,135; Aug. 9.
Steenbock, Harry, Madison, Wis., assignor to Wisconsin Alumni Research Foundation. Antirachitic product essence and process. 1,871,136; Aug. 9.
Steblik, Rudolph F., assignor to Associated Telephone & Telegraph Company, Chicago, Ill. Telephone system. 1,870,471; Aug. 9.
Stellmacher, Max, Berlin, Germany. Swimming belt. 1,870,535; Aug. 9.
Stem, Russell W., Bethlehem, Pa. Heating furnace control. 1,871,093; Aug. 9.
Stephenson, Robert J., assignor to Columbian Rope Company, Auburn, N. Y. Article holder. 1,870,659; Aug. 9.
Sterling Products Company. (See Fehr, Charles M., assignor.)
Sternemann, Adolf, Berlin-Friedenau, Germany. Potato tops destroyer. 1,870,932; Aug. 9.
Steuart, Arthur B., Baltimore, Md. Air conditioning system. 1,871,244; Aug. 9.
Stevenson, Edward E., assignor to Emsco Derrick and Equipment Company, Los Angeles, Calif. Making blind cage sleeves with ball guide integral. 1,870,970; Aug. 9.
Stickney & Poor Spice Co. (See Sprigings, David A., assignor.)
Stimpson, Edwin B., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y. Tubular rivet drilling machine. 1,870,391; Aug. 9.
Stimpson, Edwin B., assignor to E. B. Stimpson Company, Brooklyn, N. Y. Noise eliminator. 1,870,428; Aug. 9.
Stimpson, Edwin B., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y. Rivet drilling machine. 1,870,429; Aug. 9.

Stimpson, Edwin B., Company. (See Stimpson, Edwin B., assignor.)
Stoddard, Edgar S., Berwyn, assignor to The Conover Company, Chicago, Ill. Dishwashing. 1,870,318; Aug. 9.
Stoddard, Edgar S., Berwyn, and W. C. Rykert, Chicago, assignors to The Conover Company, Chicago, Ill. Dishwashing machine. 1,870,317; Aug. 9.
Stokes, William E., Rockville Center, and A. H. Peter, assignors to Royal Baking Powder Company, New York, N. Y. Conversion of carbohydrates to products of higher oxidation. 1,870,472; Aug. 9.
Stoller, Hugh M., Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Constant speed motor. 1,871,347; Aug. 9.
Stone, Max, New York, N. Y. Coiffure retaining cap. 1,870,298; Aug. 9.
Stone, Norman S., and R. L. Burns, Mosinee, assignors to Mosinee Paper Mills Company, Mosinee, Wis. Method and apparatus for making reenforced paper. 1,870,267; Aug. 9.
Stout, Alfred D., and H. F. Mc Nally, Richland Center, Wis. Globe valve reseating tool. 1,871,228; Aug. 9.
Strelitz, Arthur V., Milwaukee, Wis. Packaging cigarettes. 1,870,299; Aug. 9.
Strickler, John C., San Francisco, Calif., assignor to American Can Company, New York, N. Y. Suction cup. 1,870,694; Aug. 9.
Strobridge, William, assignor to The Bartlett Hayward Company, Baltimore, Md. Sequence controlling device. 1,870,933; Aug. 9.
Strobridge, William, Syracuse, assignor to United States Hoffman Machinery Corporation, New York, N. Y. Pad for garment pressing machines. 1,870,934; Aug. 9.
Strong, Leslie P., Lakewood, assignor to The Clark Manufacturing Company, Cleveland, Ohio. Steam trap. 1,870,660; Aug. 9.
Stuart, Robert W. (See McIntyre, G. H., and Stuart.)
Submarine Signal Company. (See Hubbard, Beverly R., assignor.)
Suddeutsche Eisenbahngesellschaft. (See Montrose-Oster, Louis-Eugéne-Widolt, assignor.)
Sumpter, John E., Minneapolis, Minn., and A. Alsaker, Chicago, assignors to Delta-Star Electric Company, Chicago, Ill. Rigid stud compression connecter. 1,871,094; Aug. 9.
Sundström, Einar F., and K. E. Stéen, Sundsvall, Sweden. Process and apparatus for preparing webs from fibrous materials. 1,870,971; Aug. 9.
Surface Combustion Corporation. (See Manker, Forrest W., assignor.)
Sutton, Harry G., Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y. Garment press. 1,870,935; Aug. 9.
Swann Research, Inc. (See Huntress, Ernest H., assignor.)
Swindell-Dressler Corporation. (See Meehan, Paul A., assignor.)
Swinglehurst, Harry, Orange, N. J., assignor to Scott & Williams, Incorporated, New York, N. Y. Fabric take-up and stop motion device for knitting machines. 1,870,879; Aug. 9.
Sylvan, Benjamin M., New York, N. Y. Safety razor. 1,870,695; Aug. 9.
Synchrome Corporation. (See Wright, Walter L., assignor.)
Tabulating Machine Company, The. (See Bolt, J. C., and Johnson, assignors.)
Tabulating Machine Company, The. (See Bryce, James W., assignor.)
Taferner, Joseph A., et al. (See Litomy, John L., assignor.)
Takayama, Yoshitaro, Tokyo, Japan. Separating betaine hydrochloride and potassium chloride from waste molasses. 1,870,319; Aug. 9.
Tallman, Harry A., Fort Scott, Kans. Arch support. 1,870,758; Aug. 9.
Taper Tube Pole Co. (See De Witt, Clinton, assignor.)
Taylor, John E. S., assignor to Universal Power Tool Company, Alexandria, Va. Shoe brushing apparatus. 1,870,349; Aug. 9.
Taylor, Thomas G., Shawnee, Okla. Self cooling, drilling, and coring bit. 1,870,696; Aug. 9.
Taylor, Thomas G., Roswell, N. Mex. Apparatus for holding rotary drilling power units in a well against rotation. 1,870,697; Aug. 9.
Teague, Walter D., New York, N. Y., assignor to National Radiator Corporation, Johnstown, Pa. Cover for boilers, heating furnaces, water heaters, or the like. Des. 87,553; Aug. 9.
Technidyne Corporation et al. (See Flanzer, Joseph A., assignor.)
Technidyne Corporation et al. (See Jones, Lester L. and J., assignors.)
Teichman, John G., Durand, Mich. Combination lamp stand and radiocabinet. Des. 87,554; Aug. 9.
Teller, Fritz. (See Kuns, M. A., and Teller.)
Temple Corporation. (See Andres, P. G., and Temple, assignors.)
Temple, Fred W. (See Andres, P. G., and Temple.)
Templeton, Kenly & Co. Limited. (See Crane, Charles A., jr., assignor.)
Ter Horst, William P., Packanack Lake, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treatment of rubber. 1,870,880; Aug. 9.
Ter Meer, Gustav, Munich, Germany, assignor to Albert T. Otto & Sons, New York, N. Y. Centrifugal separator for the treatment of fluids or sludges. 1,871,284; Aug. 9.
Ternstedt Manufacturing Company. (See Heintz, E. E., and Archer, assignors.)
Terrey, Arthur, London, England. Rotary printing press. 1,870,759; Aug. 9.
Thaden, Herbert V., Mount Lebanon, Pa., assignor, by mesne assignments, to General Aviation Corporation, New York, N. Y. Aeroplane structure. 1,870,595; Aug. 9.
Thayer, Reuel H. (See Kipper, A. F., and Thayer.)
Theumann, Max J., Lyon, France, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Cellulose compositions of matter. 1,870,972; Aug. 9.
Thibodeau, Christopher G., Arlington, assignor of one-half to F. W. Zinn, Boston, Mass. Radiator valve. 1,870,300; Aug. 9.
Thomas, Joseph R., Fort Madison, Iowa, assignor of one-half to The Rome Company, Inc. Spring construction for furniture. Re18,560; Aug. 9.
Thompson Products, Inc. (See Crawford, Frederick C., assignor.)
Thomsen, Alfred M., San Francisco, Calif. Treatment of white water produced in pulp and paper making. 1,870,881; Aug. 9.
Thurm, Richard, assignor to Baker Perkins Company, Inc., Saginaw, Mich. Making viscose. 1,871,245; Aug. 9.
Thus, Max, assignor to Reading Dyeing Co., Reading, Pa. Yarn dyeing spindle. 1,871,246; Aug. 9.
Thwaits, Frederick G., Wauwatosa, assignor to The Heil Co., Milwaukee, Wis. Closure. 1,870,973; Aug. 9.
Timken Roller Bearing Company. (See Horger, Oscar J., assignor.)
Tindal, John R. (See Oakes, R. H., and Tindal.)
Tinius Olsen Testing Machine Company. (See Lewis, Robert B., assignor.)
Tipton, John J., Kansas City, Mo. Pipe line dolly. 1,870,760; Aug. 9.
Titus, Hubert J., Paterson, N. J., and J. S. Wallis, assignors to Franklin Railway Supply Company, New York, N. Y. Steam engine. 1,870,303; Aug. 9.
Tobin, Kenneth J., and W. W. Darrow, assignors to Camel Company, Chicago, Ill. Car door construction. 1,870,268; Aug. 9.
Toledo Machine & Tool Company, The. (See Seidel, A., and Hatch, assignors.)
Toledo Metal Furniture Company, The. (See Uhl, Clement R., assignor.)
Tomkinson, Charles C., Plainfield, assignor to J. Edward Ogden Company, Inc., East Orange, N. J. Spring actuating and control mechanism. 1,871,016; Aug. 9.
Tomkinson, Charles C., Plainfield, N. J., assignor, by mesne assignments, to J. Edward Ogden Company, New York, N. Y. Door closure and operating mechanism. 1,871,095; Aug. 9.
Toole, Harry S. (See Guenther, A. E., and Toole.)
Torseth, Oscar, Coeur d'Alene, Idaho. Apparatus for extinguishing forest fires. 1,871,096; Aug. 9.
Transue and Williams Steel Forging Corporation. (See Williams, George E., assignor.)
Transue, Rudolph A., Brooklyn, N. Y., assignor to Westinghouse Lamp Company. Advertising device. 1,870,974; Aug. 9.
Treadwell Engineering Company. (See Neave, Andrew A., assignor.)
Treadwell, M. H., Company. (See Astrom, Carl P., assignor.)
Tressler, Donald K., Gloucester, Mass., assignor to Forsted Foods Company, Inc., Dover, Del. Egg product and producing the same. 1,870,269; Aug. 9.
Trigwell, Alfred J., Salinas, and C. H. Trubschenck, Oakland, Calif. Tractor attachment. 1,871,097; Aug. 9.
Trogner, Arthur M., East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Piezo electric crystal holder. 1,870,698; Aug. 9.
Trost, Henry, Union City, N. J. Game. 1,871,247; Aug. 9.
Trubschenck, Carl H. (See Trigwell, A. J., and Trubschenck.)
Tumulty, Charles L. and F. H., assignors of seventeen per cent to N. McCullough, seventeen per cent to G. W. Pierce, and seventeen per cent to F. Mustard, Anderson, Ind. Process of and apparatus for continuously forming a bias corrugated strip. 1,870,473; Aug. 9.
Tumulty, Forrest H. (See Tumulty, C. L., and F. H.)
Tunnel and Mine Machinery Company. (See Warner, A. W., and Ballard, assignors.)
Turck, Joseph A. V., Wilmette, Ill., assignor to Felt & Tarrant Manufacturing Company, Chicago, Ill. Calculating machine. 1,870,699; Aug. 9.
Turnbull, Ira J., New Haven, Conn., assignor to Morgan and Wright, Detroit, Mich. Apparatus for treating rubber. 1,871,848; Aug. 9.
Turner Tanning Machinery Company, The. (See Schettler, Gustav A., assignor.)
Tursky, Charles M., Philadelphia, Pa. Fluid compressor. 1,871,285; Aug. 9.
Twiss, Douglas F., Wylde Green, F. T. Purkis, Moseley, and E. A. Murphy, Wylde Green, assignors to Dunlop Rubber Company Limited, Birmingham, England. Manufacturing rubber articles. 1,870,788; Aug. 9.
Typograph, G. m. b. H. (See Dorneth, Julius, assignor.)

Uhl, Clement R., assignor to The Toledo Metal Furniture Company, Toledo, Ohio. Caster. 1,871,098; Aug. 9.
Ulrey, Clayton T., East Orange, N. J., assignor to Westinghouse Lamp Company. Cathode ray oscillograph. 1,870,975; Aug. 9.
Underdahl, Birger, Portland, Oreg. Denture press. 1,871,137; Aug. 9.
Union Carbide and Carbon Research Laboratories, Inc. (See Mott, Chester, assignor.)
Union Carbide and Carbon Research Laboratories, Inc. (See Mott, C., and Spencer, assignors.)
Union Metal Products Company. (See Gilpin, Garth G., assignor.)
Union Steel Products Company. (See Bitney, Dewey H., assignor.)
Union Trust Company, The. (See Willsie, Henry E., assignor.)
United Air Cleaner Co. (See Miller, Walter A., assignor.)
United Air Cleaner Corporation. (See Moulding, Thomas G., assignor.)
United Autographic Register Co. (See Cooke, Allen B., assignor.)
United-Carr Fastener Corporation. (See Johnson, Gustav, assignor.)
United-Carr Fastener Corporation. (See Kimbell, Arthur W., assignor.)
United Engineering & Foundry Company. (See Duston, Ernest W., assignor.)
United Metal Hose Co. Inc. (See White, Jonathan N., assignor.)
United Shoe Machinery Corporation. (See Ashworth, Fred, assignor.)
United Shoe Machinery Corporation. (See Fowler, Alfred B., assignor.)
United States Chromium Corporation. (See Piersol, Robert J., assignor.)
United States Gypsum Company. (See Birdsey, Charles R., assignor.)
United States Gypsum Company. (See Reel, Herbert W., assignor.)
United States Gypsum Company. (See Witter, Earl W., assignor.)
United States Hoffman Machinery Corporation. (See Card, John L., assignor.)
United States Hoffman Machinery Corporation. (See Power, Thomas J., assignor.)
United States Hoffman Machinery Corporation. (See Strobridge, William, assignor.)
United States Hoffman Machinery Corporation. (See Sutton, Harry G., assignor.)
Universal Power Tool Company. (See Taylor, John E. S., assignor.)
Uren, Lester C. (See Ranney, L., and Uren.)
Vaccaro, Steven L., jr., New Orleans, La. Game apparatus. 1,870,536; Aug. 9.
Valley Mould & Iron Corporation. (See Kauffman, Edmund J., assignor.)
Van Auken, Clarence E., deceased, Chicago, Ill., by J. Purmort, administrator, assignor to C. F. Van Auken. System for indicating liquid levels. 1,870,936; Aug. 9.
Van Auken, Cora F. (See Van Auken, Clarence E., assignor.)
Vanderoy Advertising System, Inc. (See Vandewater, Steven R., assignor.)
Van der Pol, Balthasar, Eindhoven, Netherlands, assignor to Radio Corporation of America, New York, N. Y. Depriving electric devices of occluded gases. 1,871,017; Aug. 9.
Vandewater, Steven R., assignor to Vanderoy Advertising System, Inc., St. Louis, Mo. Automatic stereopticon changing device. 1,870,301; Aug. 9.
Van Dorn, William E., Altadena, Calif., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,870,537; Aug. 9.
Van Hoofstadt, Edward. (See Gustavson, C., Van Hoofstadt, and Greenbaum.)
Van Norman, Frederick D., assignor to Van Norman Machine Tool Company, Springfield, Mass. Adjustable boring head. 1,870,350; Aug. 9.
Van Norman Machine Tool Company. (See Van Norman, Frederick D., assignor.)
Varney, William W. (See Brogan, Graham W., assignor.)
Varney, William W. (See Brown, John L., assignor.)
Vassar Swiss Underwear Company. (See Rutledge, George E., assignor.)
Vernon, Aaron K., Flushing, N. Y. Advertising clock. 1,871,204; Aug. 9.
Vitoux, Marcel, Troyes, France. Needle-holding handle. 1,871,099; Aug. 9.
Vogt, Benedict F., Louisville, Ky. Printer's roller and making the same. 1,870,661; Aug. 9.
Voith, J. M. (See Ehrhart, Josef, assignor.)
Von Kando, Kalman, Budapest, Hungary, assignor to Westinghouse Electric & Manufacturing Company. Oil seal for dynamo-electric machines. 1,871,286; Aug. 9.
Von Webern, Guido, and E. W. Hamant, Dayton, Ohio, assignors to Oxford Varnish Corporation, Detroit, Mich. Graining mechanism. 1,870,700; Aug. 9.
Voorwinde, Willem, Rotterdam, Netherlands. Automatic gripper. 1,870,538; Aug. 9.
Vortex Cup Company. (See Barbieri, Cesare, assignor.)
Wadsten, Sten, Bloomfield, N. J., assignor to Westinghouse Lamp Company. Adjustable holder for coil-winding dies. 1,871,349; Aug. 9.
Wadsten, Sten, Bloomfield, and C. W. Hunt, Wyoming, N. J., assignors to Westinghouse Lamp Company. Coiled lamp filament. 1,871,018; Aug. 9.
Wagner Electric Corporation. (See Bohn, August W., assignor.)
Wagner Electric Corporation. (See Chervenka, George R., assignor.)
Wagner Electric Corporation. (See Johnson, Edward D., assignor.)
Wagner Electric Corporation. (See McCormick, Bradley, assignor.)
Wagner Electric Corporation. (See Schnell, Steve, assignor.)
Wagner Electric Corporation. (See Weichsel, Hans, assignor.)
Wagner Electric Corporation. (See Wulfert, O., and Potter, assignors.)
Wagner, Frederick H., assignor to The Bartlett Hayward Company, Baltimore, Md. Dust condenser. 1,870,351; Aug. 9.
Wahlberg, Nils A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Suspension clamp. 1,871,350; Aug. 9.
Wainslo Manufacturing Corporation. (See Fain, Walter C., assignor.)
Wainwright, Carlyle H. (See Bentley, P. A., Manger, and Wainwright.)
Waite Carpet Company. (See Waite, Philip C., assignor.)
Waite, Harry F., New York, N. Y. X-ray system. 1,871,248; Aug. 9.
Waite, Philip C., assignor to Waite Carpet Company, Oshkosh, Wis. Rug and manufacturing the same. 1,871,249; Aug. 9.
Walker, Elsa B. (See Monheim, Elsie B.)
Walker, Frederic, New Brighton, Staten Island, N. Y., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company. Concentrating formaldehyde solutions. 1,871,019; Aug. 9.
Wallis, John S. (See Titus, H. J., and Wallis.)
Walrath, Percy C., assignor to Skinner Motors, Inc., Detroit, Mich. Internal combustion engine sealing ring locating means. 1,871,250; Aug. 9.
Walton, Charles D., and F. T. Small, Cumberland, Md., assignors to Celanese Corporation of America. Process and apparatus for manipulating textile materials. 1,871,100; Aug. 9.
Waltz, John W., Ridgefield, N. J., assignor to C. R. Daniels Inc., New York, N. Y. Fastener for tarpaulins. 1,871,101; Aug. 9.
Wappler Electric Company. (See Nutscheller, A., and Larsen, assignors.)
Ward, Ashley F., assignor to Ashley F. Ward, Inc., Cincinnati, Ohio. Making pie crust. 1,870,882; Aug. 9.
Ward, Ashley F., Inc. (See Ward, Ashley F., assignor.)
Ward, Hugh H., jr., Chester, Pa. Insulated lid or cover. 1,871,138; Aug. 9.
Warner, Arthur W., Media, and R. F. Ballard, Chester, assignors to Tunnel and Mine Machinery Company, Philadelphia, Pa. Tunnel wall block. 1,870,539; Aug. 9.
Washburn, Robert M., Evanston, assignor to Dee-Hy Products Company, Chicago, Ill. Preparation of dry nonhygroscopic crude lactose. 1,870,270; Aug. 9.
Waters, Harry H., assignor to Climax Engineering Company, Clinton, Iowa. Neutral brake. Re18,561; Aug. 9.
Watson, Edward F., Larchmont, N. Y., assignor to American Telephone and Telegraph Company. Telegraph system. 1,870,352; Aug. 9.
Watson, Edward F., Larchmont, N. Y., assignor to American Telephone and Telegraph Company. Telegraph printer. 1,870,392; Aug. 9.
Watter, Michael, New York, N. Y., assignor to Chance Vaught Corporation, Hartford, Conn. Landing chassis for aircraft. 1,870,826; Aug. 9.
Watts, Noble H., Alameda, Calif., assignor, by mesne assignments, to General Electric Company, Schenectady, N. Y. Electrical connecting apparatus. 1,871,397; Aug. 9.
Wean Engineering Company, The. (See Wean, Raymond J., assignor.)
Wean, Raymond J., assignor to The Wean Engineering Company, Inc., Warren, Ohio. Method and apparatus for making sheets. 1,871,102; Aug. 9.
Wegel, Raymond L., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,870,271; Aug. 9.
Weichsel, Hans, assignor to Wagner Electric Corporation, St. Louis, Mo. Alternating current motor. 1,870,272; Aug. 9.
Weichsel, Hans, assignor to Wagner Electric Corporation, St. Louis, Mo. Alternating current motor. 1,870,302; Aug. 9.
Welch, Jack T., assignor to James Heddon's Sons, Dowagiac, Mich. Fishing rod. 1,870,976; Aug. 9.
Welch, Jack T., assignor to James Heddon's Sons, Dowagiac, Mich. Fishing rod. 1,871,229; Aug. 9.
Wellman, Fred C. (See Rathbun, John B., assignor.)
Wells, Jackson B., assignor to Eastman Kodak Company, Rochester, N. Y. Color backed motion picture film. 1,870,662; Aug. 9.
Wells, Lennie, Long Beach, Calif. Rotary jar. 1,870,540; Aug. 9.
Wensley, Roy J., South Orange, and V. K. Zworykin, Haddonfield, N. J., assignors to Westinghouse Electric and Manufacturing Company. Traffic supervisor. Re18,567; Aug. 9.

Wentorf, Robert H. (See Kircher, R. N., and Wentorf.)
Wentz, Jesse F., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Entrance die for tanks. 1,871,351; Aug. 9.
Wentzel, Wilhelm, Frankfort-on-the-Main, Germany. Direction indicator for motor cars. 1,870,304; Aug. 9.
Wenz, Eugene. (See Lewis, E. K., and Wenz.)
Werner, Oscar, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Lighting unit. 1,871,205; Aug. 9.
Werner, Wilbur S., Fort Mitchell, assignor to The Kelley-Koett Manufacturing Company, Covington, Ky. Electrical rectifying and stabilizing apparatus. 1,870,937; Aug. 9.
Wescott Hosiery Mills. (See Williams, James C., assignor.)
Wesp, George, assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 87,556; Aug. 9.
Wesp, George, assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 87,555; Aug. 9.
Wesp, George, assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 87,557; Aug. 9.
West Bend Aluminum Company. (See Kircher, R. N., and Wentorf, assignors.)
Westcott, Orville M., Charleston, S. C. Puzzle. 1,871,206; Aug. 9.
Western Electric Company. (See Brown, Laurel H., assignor.)
Western Electric Company. (See Clement, Lewis M., assignor.)
Western Electric Company. (See De Turk, J. A., and Hanson, assignor.)
Western Electric Company. (See Gillis, Randall, assignor.)
Western Electric Company. (See Hayford, W. S., and Moore, assignors.)
Western Electric Company. (See Hobrock, Raymond H., assignor.)
Western Electric Company. (See Jongedyk, Ralph, assignor.)
Western Electric Company. (See Liss, August S., assignor.)
Western Electric Company. (See McDonough, J., and Rock, assignors.)
Western Electric Company. (See Pearson, Albert, assignor.)
Western Electric Company. (See Powell, Raymond E., assignor.)
Western Electric Company. (See Robson, Duer C., assignor.)
Westinghouse Air Brake Company, The. (See Hewitt, Ellis E., assignor.)
Westinghouse Air Brake Company, The. (See Lynn, Ewing K., assignor.)
Westinghouse Air Brake Company. (See McCune, Joseph C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Arnold, Edwin E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bakken, Andrew H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Barrow, George M., assignor.)
Westinghouse Electric & Mfg. Company. (See Baudry, Rene A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Berthold, Rudolf, assignor.)
Westinghouse Electric and Manufacturing Company. (See Brace, Porter H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Brindley, William E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Brown, John L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Burr, Gordon A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Davis, Robert L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Davis, William R., assignor.)
Westinghouse Electric and Manufacturing Company. (See Davis, N. R., and Wood, assignors.)
Westinghouse Electric & Manufacturing Company. (See Eames, William F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Ellingson, William M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Field, Russell M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Higbee, Ray P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hoard, Bert V., assignor.)
Westinghouse Electric & Manufacturing Company. (See Inman, Donovan E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jackson, Ray P., assignor.)
Westinghouse Electric & Manufacturing Company. (See James, Henry D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Johns, Francis J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jones, Vivian B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jungk, Herbert G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Koch, Gustav H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Lang, George W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Legg, Joseph W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Miller, Frederic H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Miller, F. H., and Barrow, assignors.)
Westinghouse Electric & Manufacturing Company. (See Parson, John S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Pierce, Raymond T., assignor.)
Westinghouse Electric and Manufacturing Company. (See Ross, M. D., and Rose, assignors.)
Westinghouse Electric & Manufacturing Company. (See Schaake, William, assignor.)
Westinghouse Electric & Manufacturing Company. (See Shand, Errol B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Shepard, Francis H., assignor.)
Westinghouse Electric & Manufacturing Company. (See von Kando, Kalman, assignor.)
Westinghouse Electric & Manufacturing Company. (See Wahlberg, Nils A., assignor.)
Westinghouse Electric and Manufacturing Company. (See Wensley, R. J., and Zworykin, assignors.)
Westinghouse Electric & Manufacturing Company. (See Werner, Oscar, assignor.)
Westinghouse Electric & Manufacturing Company. (See Whittaker, Charles C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Williams, Harold W., assignor.)
Westinghouse Electric Elevator Company. (See Baumgartner, Fred, assignor.)
Westinghouse Electric Elevator Company. (See Dunlop, James, assignor.)
Westinghouse Lamp Company. (See Blakeman, Arthur C., assignor.)
Westinghouse Lamp Company. (See Fagan, James M., assignor.)
Westinghouse Lamp Company. (See Fredenburgh, Mark N., assignor.)
Westinghouse Lamp Company. (See Gustin, Daniel S., assignor.)
Westinghouse Lamp Company. (See Hageman, A. M., and Lindstrom, assignors.)
Westinghouse Lamp Company. (See Meyer, Peter, assignor.)
Westinghouse Lamp Company. (See Ramage, John H., assignor.)
Westinghouse Lamp Company. (See Rentschler, Harvey C., assignor.)
Westinghouse Lamp Company. (See Sinden, Roger H., assignor.)
Westinghouse Lamp Company. (See Transue, Rudolph A., assignor.)
Westinghouse Lamp Company. (See Ulrey, Clayton T., assignor.)
Westinghouse Lamp Company. (See Wadsten, Sten, assignor.)
Westinghouse Lamp Company. (See Wadsten, S., and Hunt, assignors.)
Westinghouse Lamp Company. (See Widell, Emil G., assignor.)
Westinghouse X-Ray Company. (See Morrison, Montford, assignor.)
Wheary, George H., assignor to Wheary Trunk Company, Racine, Wis. Baggage carrier. 1,870,305; Aug. 9.
Wheary Trunk Company. (See Wheary, George H., assignor.)
Wheeler, Emma, et al. (See Roessner, William L., assignor.)
Whitall-Tatum Company. (See Scull, James P., assignor.)
White, Edward F., Rutherford, N. J. Combination furniture set. 1,870,789; Aug. 9.
White, Jonathan N., assignor to United Metal Hose Co. Inc., New York, N. Y. Nozzle. 1,871,103; Aug. 9.
Whitlock, Ralph G., Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev. Drive for a printing member, inking device and guard. 1,870,430; Aug. 9.
Whitlock, Ralph G., Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev. Printing press. 1,870,474; Aug. 9.
Whitlock, Ralph G., Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev. Meter press. 1,870 541; Aug. 9.
Whitlock, Ralph G., Patents, Inc. (See Whitlock, Ralph G., assignor.)
Whitman, Walter G., Whiting, Ind., assignor to Standard Oil Company (Indiana), Chicago, Ill. Filtering process and apparatus. 1,871,207; Aug. 9.
Whitney, John G., Elyria, Ohio. Display device. 1,871,288; Aug. 9.
Whittaker, Charles C., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Hydraulic escapement device. 1,871,287; Aug. 9.
Wiasemsky, Prince. (See Constantinovitch, Serge V.)
Widell, Emil G., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Cathode for electron discharge devices. 1,870,306; Aug. 9.

Widell, Emil G., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Electron discharge device and manufacture. 1,871,352; Aug. 9.
Wiggins, John H., Tulsa, Okla. Floating roof for liquid storage tanks. 1,871,251; Aug. 9.
Wiggins, John H., Tulsa, Okla. Floating roof for liquid storage tanks. 1,871,289; Aug. 9.
Wight, Edward H. (See Ober, B., and Wight.)
Wilcox-Rich Corporation. (See Hoern, Joseph H., assignor.)
Wilcox, Starling S., jr., and H. R. Greiner, Columbus, Ohio. Golf ball washing machine. 1,871,139; Aug. 9.
Wilkes, Charles B., jr. (See Yoder, C. B., Gahn, and Wilkes, jr.)
Willard, Robert E., assignor, by mesne assignments, to Briquet Engineering Company, Minneapolis, Minn. Making briquettes. 1,871,104; Aug. 9.
Williams, George E., assignor to Transue and Williams Steel Forging Corporation, Alliance, Ohio. Conveyer chain. 1,871,140; Aug. 9.
Williams, George N. (See Kellogg, C. A., and Williams.)
Williams, Harold W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator control system. 1,871,353; Aug. 9.
Williams, James C., assignor to Westcott Hosiery Mills, Dalton, Ga. Process and machine for making knitted fabrics. 1,870,701; Aug. 9.
Williamson, Edward. (See Butterfass, Carl W., assignor.)
Williamson, Peter, jr., Everett, Mass. Measuring device. 1,870,393; Aug. 9.
Williamson, Stanley J., Belmont, assignor to American Rubber Company, East Cambridge, Mass. Rubberized fabrics. 1,870,883; Aug. 9.
Willinger, John J., St. Paul, Minn. Fishing bait. 1,870,273; Aug. 9.
Willsie, Henry E., New York, N. Y., assignor to The Union Trust Company, Cleveland, Ohio. Refrigerating apparatus and control therefor. 1,870,431; Aug. 9.
Wilson, Cyril J., Edgbaston, Birmingham, assignors to Associated Ice & Dairies Limited, Manchester, England. Production of paper or like cartons or receptacles. 1,870,977; Aug. 9.
Wilson, George D. (See Paterson, J. C., and Wilson.)
Winans, Daniel M., assignor to Daniel M. Winans Corporation, Binghamton, N. Y. Can opener. 1,870,938; Aug. 9.
Winans, Daniel M., Corporation. (See Winans, Daniel M., assignor.)
Winning, Carl, Elizabeth, N. J., assignor to Standard Oil Development Company. Gauge device. 1,870,884; Aug. 9.
Winter, Carl, Dresden, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Plug-in device. 1,870,762; Aug. 9.
Wired Radio, Inc. (See Cassell, Joseph L., assignor.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wired Radio, Inc. (See Trogner, Arthur M., assignor.)
Wisconsin Alumni Research Foundation. (See Steenbock, Harry, assignor.)
Wise, Nathan, deceased, Mount Vernon, N. Y., P. L. Wise, and A. W. Levy, executors. Automatic telephone dialing and recording apparatus. 1,870,547; Aug. 9.
Wise, Pearl L., et al., executors. (See Wise, Nathan.)
Witt, Wiley T., Moody, Tex. Trailer. 1,870,939; Aug. 9.
Witter, Earl W., New Brighton, Staten Island, N. Y., assignor to United States Gypsum Company, Chicago, Ill. Conveyer device. 1,870,432; Aug. 9.
Wittouck, Adolfo G. (See Wittouck, Enrique and A. G.)
Wittouck, Enrique, and A. G., Buenos Aires, Argentina. Coupling of agricultural machines. 1,870,548; Aug. 9.
Wolfe, Everett K., New York, N. Y. Toy building unit. 1,870,978; Aug. 9.
Wood Conversion Company. (See Davis, Edwin W., assignor.)
Wood, George A. (See Davis, N. R., and Wood.)
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Paper guide for folding blades. 1,870,542; Aug. 9.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Paper piercing device. 1,870,543; Aug. 9.
Wood, Henry A., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Folding blade. 1,870,544; Aug. 9.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Web feeding and slitting mechanism. 1,870,545; Aug. 9.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Press drive. 1,870,546; Aug. 9.
Wood Newspaper Machinery Corporation. (See Roesen, Oscar C., assignor.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Wood Preserving Corporation, The. (See Shipley, Grant B., assignor.)
Wood, Straud K., Denver, and J. C. King, La Junta, Colo. Carburetor. 1,870,663; Aug. 9.
Woodward, Benjamin W., Brooklyn, assignor to W. Howey, New York, N. Y. Multiple plate photo electric tube. 1,870,596; Aug 9.
Worcester Polytechnic Institute. (See Rawson, Louis W., assignor.)
Wright, Daniel T., Washington, D. C. Heater attachment. 1,871,290; Aug. 9.
Wright, Henry H., Passaic, N. J., assignor, by mesne assignments, to Dupont Cellophane Company, Inc., New York, N. Y. Making cellulose articles. 1,870,307; Aug. 9.
Wright, Walter L., Santa Monica, assignor to Synchrome Corporation, Los Angeles County, Calif. Optical system. 1,870,664; Aug. 9.
Wulfert, Otto and C. P. Potter, assignors to Wagner Electric Corporation, St. Louis, Mo. Clamping device. 1,870,274; Aug. 9.
Wynn, Samuel J., Norwalk, Conn., assignor to L. W. Holding Corporation, New York, N. Y. Multiple fuse. 1,870,597; Aug. 9.
Wyzenbeek, Andrew, Chicago, Ill. Reciprocating tool. 1,871,020; Aug. 9.
Yates, Charles E., East Rutherford, and H. C. Macan, Rutherford, N. J., assignors to Anaconda Sales Company, New York, N. Y. Coating process and apparatus. 1,871,105; Aug. 9.
Yeager, Frank, Port Huron, Mich. Lock joint for sectional concrete pipes. 1,871,398; Aug. 9.
Yerkes, Gabrielle M. P., Hartsdale, assignor to G. M. Poix, Inc., New York, N. Y. Brassière. 1,871,106; Aug. 9.
Yoder, Charles B., Webster Groves, and J. J. Gahn, and C. B. Wilkes, jr., assignors to Yogaw Press, Inc., St. Louis, Mo. Apparatus for printing circular letters and the like. 1,870,394; Aug. 9.
Yogaw Press, Inc. (See Yoder, C. B., Gahn, and Wilkes, jr., assignors.)
Zachrison, Einar T., Chicago, Ill. Mechanism for playing stringed instruments. 1,871,021; Aug. 9.
Zarin, George, New York, N. Y. Advertising novelty. 1,870,395; Aug. 9.
Zellweger, Walter, St. Louis, Mo. Apparatus for removing solid matter from air and gases. 1,871,022; Aug. 9.
Zerk, Oscar U., assignor to Alemite Corporation, Chicago, Ill. Lubricating appliance. 1,870,433; Aug. 9.
Zimmermann, William F., Maplewood, assignor to Gould & Eberhardt, Newark, N. J. Worktable guide for shaping machines. 1,870,434; Aug. 9.
Zinn, Frank W. (See Thibodeau, Christopher G., assignor.)
Znidersic, Anton, Fiume, Italy. Cabinet particularly bookcase. 1,870,763; Aug. 9.
Zoerb, Howard M., and R. W. Buettner, assignors to Nordberg Manufacturing Company, Milwaukee, Wis. Felting machine. 1,870,940; Aug. 9.
Zworykin, Vladimir K. (See Wensley, R. J., and Zworykin.)
Zworykin Vladimir K., Haddonfield, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Television apparatus. 1,870,702; Aug. 9.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 9TH DAY OF AUGUST, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Absorber, Expansion. J. V. Giesler. 1,870,902; Aug. 9.
Acid, Manufacture of hydrobromic. A. S. Behrman. 1,870,308; Aug. 9.
Acid phosphate, Manufacture of. A. H. Case. 1,870,602; Aug. 9.
Acids, Bleaching artificial fatty. W. Pungs. 1,871,082; Aug. 9.
Acids, Protection of apparatus against. N. B. Grillet. 1,870,953; Aug. 9.
Acidulating unit. M. D. Broadfield. 1,870,278; Aug. 9.
Acoustic compensator. B. R. Hubbard. 1,870,569; Aug. 9.
Acoustic device. E. H. Smythe. 1,871,243; Aug. 9.
Acoustic device. R. L. Wegel. 1,870,271; Aug. 9.
Adjustable tie-rod. F. C. Crawford. 1,870,283; Aug. 9.
Advertising device. R. A. Transue. 1,870,974; Aug. 9.
Air and gases, Apparatus for removing solid matter from. W. Zellweger. 1,871,022; Aug. 9.
Aeroplane. W. J. Cooley. 1,870,493; Aug. 9.
Aeroplane structure. H. V. Thaden. 1,870,595; Aug. 9.
Air brake. H. F. Bickel. 1,870,218; Aug. 9.
Air brake. C. A. Campbell. 1,871,210; Aug. 9.
Air brake. J. D. Cartin. 1,871,155; Aug. 9.
Air cleaner. C. A. Campbell. 1,871,111; Aug. 9.
Air cleaner. W. A. Miller. 1,871,384; Aug. 9.
Air cleaner. T. G. Moulding. 1,871,337; Aug. 9.
Air conditioning system. A. B. Steuart. 1,871,244; Aug. 9.
Air cooling means for internal combustion engines. A. G. M. Mitchell. Re18,558; Aug. 9.
Air inlet, Auxiliary. T. Horscroft. 1,870,411; Aug. 9.
Airplane. J. Squires. 1,871,015; Aug. 9.
Airplane gig. E. S. Staples. 1,870,757; Aug. 9.
Airplanes, Storing of. W. M. Pierson. 1,870,744; Aug. 9.
Alarm system and repeater, Fire. V. Durbin. 1,870,988; Aug. 9.
Alcohol, Purification of. R. B. Lebo. 1,870,815; Aug. 9.
Aluminium light alloy, Anticorrosive. I. Iytaka. 1,870,732; Aug. 9.
Amusement device. W. A. Fuld. 1,870,677; Aug. 9.
Animal trap. W. Clayton. 1,871,157; Aug. 9.
Animal trap. J. F. Hauck. 1,870,331; Aug. 9.
Annealing, Apparatus for. C. J. Brown. 1,870,551; Aug. 9.
Anode cooling for rectifiers. E. B. Shand. 1,871,282; Aug. 9.
Anthraquinone body and preparing same. I. Gubelmann, R. J. Goodrich, and W. L. Rintelman. 1,870,249; Aug. 9.
Antirachitic product and process. H. Steenbock. 1,871,135; Aug. 9.
Antirachitic product essence and process. H. Steenbock. 1,871,136; Aug. 9.
Anti-skid device. F. A. Olmstead. 1,871,424; Aug. 9.
Antivibration means for the support of optical observation instruments. J. W. French. 1,870,310; Aug. 9.
Anvil for fuel hoggers. A. De Bourg. 1,870,898; Aug. 9.
Article ejector mechanism. P. Meyer. 1,871,381; Aug. 9.
Article trimming and slicing machine. I. G. Sharpe. 1,871,091; Aug. 9.
Articles of manufacture, Apparatus for upsetting. L. P. Drake. 1,870,987; Aug. 9.
Ash tray. P. R. Kapiklan. Des. 87,526; Aug. 9.
Ash tray and paper weight, combination. W. W. Jolly. Des. 87,522; Aug. 9.
Attaching members, Making. G. Johnson. 1,871,373; Aug. 9.
Autographic register. A. B. Cooke. 1,871,212; Aug. 9.
Automobile. D. E. Austin. Des. 87,502; Aug. 9.
Automobile. R. C. Hoffman. Des. 87,515–20; Aug. 9.
Automobile heater. E. G. Mihaliak. 1,870,374; Aug. 9.
Bacon treating method. H. H. McKee. 1,870,581; Aug. 9.
Bag. J. E. Cornell. 1,870,672; Aug. 9.
Baggage carrier. G. H. Wheary. 1,870,305; Aug. 9.
Bait, Artificial. J. E. Brown. 1,870,767; Aug. 9.
Bait, Artificial. H. F. Drake. 1,870,559; Aug. 9.
Bait, Fishing. J. J. Willinger. 1,870,273; Aug. 9.
Bait and manufacturing same, Wooden. C. T. Pfueger. 1,871,387; Aug. 9.
Balance. F. Neumann. 1,870,344; Aug. 9.
Ball: *See*—
Golf ball.
Barium aluminate, Production of. H. W. Heiser. 1,871,056; Aug. 9.
Barrels and like articles, Mechanism for use in coating. K. F. Snow. 1,871,430; Aug. 9.
Barriers in porous media, Developing impermeable. L. Ranney and L. C. Uren. 1,870,869; Aug. 9.
Bathtub. J. C. Cromwell. 1,870,836; Aug. 9.
Bathtub, Infant's folding. B. Bleustein. 1,870,488; Aug. 9.
Beam light, Concentrated. H. Buel. 1,870,671; Aug. 9.
Bearing, Antifriction. G. R. Bott. 1,871,033; Aug. 9.
Bearing, Automotive fan. A. D. Gardner. 1,870,993; Aug. 9.
Bearing construction, Roller. C. S. Brown. 1,870,892; Aug. 9.
Bearing construction, Roller. C. S. Brown. 1,871,149; Aug. 9.
Bearing, Roller. W. B. Bronander. Re18,562; Aug. 9.
Bearing, Roller. C. S. Brown. 1,871,150; Aug. 9.
Bearing, Sealed sleeve. J. L. Brown. 1,870,791; Aug. 9.
Bearing, Thrust. R. A. Baudry. 1,870,830; Aug. 9.
Bearings, Casting dual metal. R. D. Pike and E. W. Carroll. 1,870,867; Aug. 9.
Bed, Folding. G. A. Daigle. 1,871,158; Aug. 9.
Bellows, Attachment of heads to. J. V. Giesler. 1,870,904; Aug. 9.
Belt, Swimming. M. Stellmacher. 1,870,535; Aug. 9.
Bench: *See*—
Draw bench.
Betaine hydrochloride and potassium chloride from waste molasses, Separating. Y. Takayama. 1,870,319; Aug. 9.
Bevel, squaring and leveling device, Combination. G. F. Hall. 1,871,176; Aug. 9.
Billiard table. J. O. Matteson. Des. 87,535; Aug. 9.
Binder and carrier, Letter bundle. F. Farley. 1,871,263; Aug. 9.
Biscuits and the like, Collecting and arranging. R. F. MacFarlane and W. E. Prescott. 1,871,332; Aug. 9.
Biscuits or the like from conveyers, Mechanism for discharging. J. C. Paterson and G. D. Wilson. 1,871,276; Aug. 9.
Bismuth alloy, Concentration of. W. C. Smith. 1,870,470; Aug. 9.
Bismuth, Refining. W. C. Smith. 1,870,388; Aug. 9.
Bit: *See*—
Drilling bit.
Self cooling, drilling and coring bit.
Blade, Cutting. M. Maag and R. Salomon. 1,870,819; Aug. 9.
Blade, Folding. H. A. W. Wood. 1,870,544; Aug. 9.
Blanching and cleaning device. M. S. Carmichael. 1,871,359; Aug. 9.
Blanks for forgings, Handling cut. J. H. Friedman. 1,870,723; Aug. 9.
Blind, Transom. F. J. Burns. 1,871,035; Aug. 9.
Block: *See*—
Tunnel wall block.
Board or stand, Ironing. C. A. Rich. 1,871,202; Aug. 9.
Boat securing means, Life. W. R. Dean. 1,870,714; Aug. 9.
Bolt nutting machine, Semi-automatic. B. M. Sawyer. 1,870,630; Aug. 9.
Bookbinding. R. C. Baker. 1,870,482; Aug. 9.
Boot cleaner. G. J. Kadavy. 1,870,333; Aug. 9.
Boring head, Adjustable. F. D. VanNorman. 1,870,350; Aug. 9.
Borings, Melting metal. E. L. Crosby and A. E. Rhoads. 1,871,305; Aug. 9.
Bottle cleaning apparatus. J. R. Gruetter. 1,870,503; Aug. 9.
Bottle corking machine. G. J. Meyer. 1,870,373; Aug. 9.
Bottle handling mechanism. J. R. Gruetter. 1,870,504; Aug. 9.
Bowls, Making fish. A. Jenkins. 1,870,363; Aug. 9.
Box: *See*—
Paper board box.
Box. R. R. Groomes and P. A. Laddon. 1,870,907; Aug. 9.
Box and carton, Cardboard. M. Gibson. 1,870,680; Aug. 9.
Box blank and cutout card, Combination. A. B. Collingbourne. Des. 87,510; Aug. 9.
Box or similar receptacle. M. B. Heath. Des. 87,513; Aug. 9.
Box wrap. A. Roart. Des. 87,548; Aug. 9.
Bracelet chain. A. E. R. Speidel. Des. 87,551; Aug. 9.
Bracket: *See*—
Mounting bracket. Roofing bracket.
Brake: *See*—
Air brake. Reverse brake.
Friction brake. Steering wheel brake.
Neutral brake.
Brake. W. H. Delahaye. 1,871,260; Aug. 9.
Brake. F. C. Frank. 1,871,314; Aug. 9.
Brake at terminals, Overspeed. J. Dunlop. 1,871,213; Aug. 9.
Brake drum spacer. W. B. Conlon and L. Hayes. 1,870,605; Aug. 9.
Brake for elevators. J. Dunlop. 1,871,164; Aug. 9.
Brake mechanism. A. Y. Dodge. 1,871,407; Aug. 9.

Brake mechanism. S. Schnell. 1,870,296; Aug. 9.
Brake mechanism, Hydraulic. E. D. Johnson. 1,870,289; Aug. 9.
Brake shoe for aeroplanes, Magnetic. J. Gafney. 1,870,286; Aug. 9.
Brake system, Automotive. C. A. Campbell. 1,871,110; Aug. 9.
Brakes, Testing. G. W. Brogan. 1,871,147; Aug. 9.
Brassière. G. M. P. Yerkes. 1,871,106; Aug. 9.
Bread in bake ovens, Device for steaming. W. Klenk. 1,870,459; Aug. 9.
Briquettes, Making. R. E. Willard. 1,871,104; Aug. 9.
Brood frame. G. B. Barker. 1,870,704; Aug. 9.
Broom, Lawn. J. W. Lambert. 1,870,739; Aug. 9.
Brush handle. G. A. Bosler. 1,871,146; Aug. 9.
Brush, Rotary. W. Raisch. 1,871,007; Aug. 9.
Brush, Shaving. J. J. Gottschalk. 1,870,847; Aug. 9.
Brush, Shaving. E. Seykora. 1,870,756; Aug. 9.
Bucket, Excavating. J. Hayward and H. J. Brendlin. 1,870,288; Aug. 9.
Buffer. E. E. Arnold. 1,870,827; Aug. 9.
Buffing wheel. J. F. A. Davis. 1,870,239; Aug. 9.
Building construction. H. W. Beel. 1,870,422; Aug. 9.
Building construction. W. R. Simons. 1,870,967; Aug. 9.
Building product. W. M. Shakespeare. 1,871,090; Aug. 9.
Bumper. A. F. Masury. 1,871,331; Aug. 9.
Burner: *See*—
Gas burner.
Burner and draft control mechanism, Oil. E. I. Staples. 1,870,931; Aug. 9.
Burner regulating and relief device, Oil. C. H. Chalmers. 1,871,043; Aug. 9.
Bushing structure. A. H. Bakken. 1,871,356; Aug. 9.
Button strip. L. L. Almond. 1,871,355; Aug. 9.
Cabinet. R. A. Pickens. Des. 87,539; Aug. 9.
Cabinet and preventing condensation of moisture thereon, Air cooling. A. L. Lambert. 1,870,460; Aug. 9.
Cabinet, Display stand. L. W. Joyce. 1,871,179; Aug. 9.
Cabinet particularly bookcase. A. Znidersic. 1,870,763; Aug. 9.
Cage sleeves with ball guide integral, Making blind. E. E. Stevenson. 1,870,970; Aug. 9.
Calculating machine. W. M. Black. 1,870,705; Aug. 9.
Calculating machine. J. A. V. Turck. 1,870,699; Aug. 9.
Cameras, Plate holder for stereoscopic. E. E. Draper. 1,870,611; Aug. 9.
Cameras, Self-erecting front mechanism for. C. C. Fuerst. 1,870,620; Aug. 9.
Cap, Coiffure retaining. M. Stone. 1,870,298; Aug. 9.
Car, Freight. W. F. Kiesel, jr. 1,870,575; Aug. 9.
Car, Hot metal. C. P. Astrom. 1,870,220; Aug. 9.
Car, Kiln. P. A. Meehan. 1,871,070; Aug. 9.
Car, Railway. J. R. Blackhall and H. Pardee. 1,870,227; Aug. 9.
Car, Refrigerator. G. A. Hull. 1,870,911; Aug. 9.
Car replacer. C. Digiovine. 1,871,162; Aug. 9.
Carbohydrates to products of higher oxidation, Conversion of. W. H. Stokes and A. H. Peter. 1,870,472; Aug. 9.
Carbon dioxide, Method of and apparatus for making and shaping solid. R. R. Rust and C. L. Jones. 1,870,691; Aug. 9.
Carburetor. J. R. Bellville. 1,870,438; Aug. 9.
Carburetor. S. K. Wood and J. C. King. 1,870,663; Aug. 9.
Carburetor for internal combustion engines. P. L. Lemoine. 1,870,578; Aug. 9.
Card, Playing. L. Skipwith. Des. 87,550; Aug. 9.
Carriage, Baby. H. Berman. 1,870,983; Aug. 9.
Carriage for motor car trailers, Trailing. A. Kégresse. 1,871,180; Aug. 9.
Carrier: *See*—
Baggage carrier. Pneumatic dispatch carrier.
Carrier for material and apparatus for use therewith. B. A. Proctor. 1,871,233; Aug. 9.
Carrier for material and apparatus for use therewith. B. A. Proctor, E. D. Foster, and C. U. Bundick. 1,871,235; Aug. 9.
Carrier for material and spindle therefor. W. D. Foster and C. U. Bundick. 1,871,230–1; Aug. 9.
Carton. E. W. Little. 1,870,917; Aug. 9.
Carton, Merchandise. O. G. Schmitt. 1,871,426; Aug. 9.
Carton or container. M. Gibson. 1,870,679; Aug. 9.
Cartons or receptacles. Production of paper or like. C. J. Wilson. 1,870,977; Aug. 9.
Case: *See*—
Packing case. Vanity case.
Traveling case.
Case or cabinet, Display. H. L. Skoogh. 1,870,534; Aug. 9.
Cash register and adding machine, Combined. W. L. Paden. 1,871,006; Aug. 9.
Caster. C. R. Uhl. 1,871,098; Aug. 9.
Casting machine. W. J. Demming. 1,871,045; Aug. 9.
Casting of dual metal bushings, Apparatus for centrifugal. R. D. Pike. 1,870,866; Aug. 9.
Catafalque. J. M. Seely. Des. 87,558; Aug. 9.
Catalyst for vapor phase oxidation of organic compounds A. R. Day. 1,871,117; Aug. 9.
Catalyzer for gaseous reactions. F. Lopez. 1,871,004; Aug. 9.
Cathode for electron discharge devices. E. G. Widell. 1,870,306; Aug. 9.
Cellulose acetate and the product thereof, Making chloroform insoluble. C. J. Staud and H. L. Gray. 1,870,594; Aug. 9.
Cellulose acetate composition. S. J. Carroll. 1,870,556; Aug. 9.
Cellulose acetate, Manufacturing. J. Altwegg. 1,870,980; Aug. 9.
Cellulose acetate, Treatment of. C. J. Malm. 1,870,635; Aug. 9.
Cellulose articles, Making. H. H. Wright 1,870,307; Aug. 9.
Cellulose compositions of matter. M. J. Theumann. 1,870,972; Aug. 9.
Chain, Conveyer. G. E. Williams. 1,871,140; Aug. 9.
Chain, Tire. B. S Polakes. 1,871,198; Aug. 9.
Chair: *See*—
Reclining chair.
Chair attachment, Dental. J. S. Miller. 1,871,221; Aug. 9.
Chairs, Attachment for barber. R. P. Ralston. 1,870,747; Aug. 9.
Chassis for aircraft, Landing. M. Watter. 1,870,826; Aug. 9.
Cheeses with liquids, Apparatus for treating. H. Nolet. 1,870,922; Aug. 9
Chemical modification of cellulose fiber. G. A. Richter. 1,870,650; Aug. 9.
Cigarette snubber. L. J. Endsley. 1,870,327; Aug. 9.
Cigarettes, Method of and machine for packaging. F. E. Scott and L. R. Bryant. 1,870,533; Aug. 9.
Cigarettes, Packaging. A. V. Streiltz. 1,870,299; Aug. 9.
Circuit breaking switch, Automatic. A. C. Danner. 1,870,896; Aug. 9.
Clamp: *See*—
Suspension clamp. Thread clamp.
Clamping device. O. Wulfert and C. P. Potter. 1,870,274; Aug. 9.
Classifier. J. H. V. Finney and A. D. Marriott. 1,870,409; Aug. 9.
Classifier. A. D. Marriott. 1,870,371; Aug. 9.
Cleaner: *See*—
Air cleaner. Vacuum cleaner.
Boot cleaner.
Cleanser for aluminum. W. C. Gangloff. 1,870,311; Aug. 9.
Cleanser for household use. W. C. Gangloff. 1,870,312; Aug. 9.
Clock, Advertising. A. K. Vernon. 1,871,204; Aug. 9.
Closure. F. G. Thwaits. 1,870,973; Aug. 9.
Clutch. J. W. Bishop. 1,870,226; Aug. 9.
Clutch, Accelerating. L. W. Rawson. 1,870,648; Aug. 9.
Clutch, Centrifugal. L. W. Rawson. 1,870,647; Aug. 9.
Clutch, Centrifugal. L. W. Rawson. 1,870,649; Aug. 9.
Clutch, Centrifugal friction. E. C. Damrow. 1,870,494–5; Aug. 9.
Clutch device, Spring. W. C. Pitter. 1,870,646; Aug. 9.
Clutch, Double acting auxiliary. A. Ellersgaard. 1,871,049; Aug. 9.
Clutch mechanism. W. C. Pitter. 1,870,644; Aug. 9.
Clutch mechanism, Rotary. W. C. Pitter. 1,870,645; Aug. 9.
Coal from impurities, Separating. F. I. du Pont. 1,870,613; Aug. 9.
Coals, Apparatus for the carbonization of. H. F. Maurel. 1,870,523; Aug. 9.
Coating hollow bodies. A. M. Hageman and A. F. Lindstrom. 1,871,367; Aug. 9.
Coating machine for shingles. G. J. Snyder. 1,870,426; Aug. 9.
Coating process and apparatus. C. E. Yates and H. C. Macan. 1,871,105; Aug. 9.
Coatings, Apparatus for applying. W. M. Shakespeare. 1,871,013; Aug. 9.
Coffee and tea maker. R. N. Kircher and R. H. Wentorf. 1,870,254; Aug. 9.
Coil and making same, Wire. H. de Jong. 1,870,713; Aug. 9.
Coil installations, Operating cracking. E. W. Luster. 1,870,855; Aug. 9.
Coil unit. G. Rigante. 1,871,345; Aug. 9.
Collapsible handle. F. W. Coffing. 1,870,403; Aug. 9.
Collar band for shirts, Adjustable. W. Rubinstein. 1,870,966; Aug. 9.
Collating device for autographic registers. L. F. Hagemann. 1,870,451; Aug. 9.
Colloidal substances, Process and apparatus for making. A. Hartzell and F. H. Lathrop. 1,870,727; Aug. 9.
Color matching apparatus. B. Nash. 1,871,078; Aug. 9.
Colorimeter. P. A. E. Heilige. 1,870,624; Aug. 9.
Coloring matter soluble in benzene, Azo. L. W. Geller. 1,870,806; Aug. 9.
Coloring of textile materials. C. Dreyfus, G. W. Miles, and H. Platt. 1,870,408; Aug. 9.
Comb. R. E. Noyes. 1,870,641; Aug. 9.
Comb hanger straightening method and device. D. S. Ostrom. 1,870,584; Aug. 9.
Combustion chamber for internal combustion engines. G. M. Bicknell. 1,870,397; Aug. 9.
Communication system. F. S. Entz and A. E. Bachelet. 1,871,310; Aug. 9.
Composition construction or heat insulating material. W. K. Nelson. 1,871,193; Aug. 9.
Composition roller. C. W. Elder. 1,870,773; Aug. 9.
Compressor cooling system. B. S. Aikman. 1,870,219; Aug. 9.

Compressor, Fluid. C. M. Tursky. 1,871,285; Aug. 9.
Concrete floor construction. M. S. Goldsmith. 1,870,808; Aug. 9.
Concrete structural unit, Precast. R. F. Greenwood. 1,871,318; Aug. 9.
Condenser. J. A. Fried. 1,870,803; Aug. 9.
Condenser. A. Nyman and W. Dubilier. 1,870,961; Aug. 9.
Condenser, Adjustable. W. Dubilier. 1,871,048; Aug. 9.
Condenser and holder therefor, Electrolytic. T. J. Scofield. 1,871,012; Aug. 9.
Condenser, Dust. F. H. Wagner. 1,870,351; Aug. 9.
Condenser, Electrical. W. Dubilier. 1,870,797; Aug. 9.
Condenser, Electrical. W. Dubilier. 1,870,950; Aug. 9.
Condenser, Rolled. W. Dubilier. 1,870,949; Aug. 9.
Condenser unit, Electrical. W. Dubilier. 1,870,948; Aug. 9.
Confection coating apparatus. I. Shafer. 1,871,089; Aug. 9.
Confections, Apparatus for cooling molded. R. Savy. 1,871,346; Aug. 9.
Connecter. G. M. Barrow. 1,870,790; Aug. 9.
Connecter, Arcless receptacle and plug. E. C. Hellwig. 1,870,625; Aug. 9.
Connecting apparatus, Electrical. N. H. Watts. 1,871,397; Aug. 9.
Connecting means for side rails and posts of bedsteads. H. Rainier. 1,871,199; Aug. 9.
Connection for presses, Hydraulic. R. J. Pardee. 1,870,527; Aug. 9.
Constant speed motor. H. M. Stoller. 1,871,347; Aug. 9.
Container for film and handling the same. B. A. Proctor. 1,871,237; Aug. 9.
Container for films and handling the same. W. D. Foster. 1,871,232; Aug. 9.
Container for films and handling the same. B. A. Proctor. 1,871,234; Aug. 9.
Container for films and handling the same. B. A. Proctor. 1,871,236; Aug. 9.
Container for poison syrup and the like. C. P. Hurley. 1,870,628; Aug. 9.
Control apparatus for gang condensers. T. J. Scofield and W. D. Miner. 1,871,011; Aug. 9.
Control device, Oil well flow. E. H. Griswold and J. C. Nicklos. 1,871,319; Aug. 9.
Control for Diesel engines, Lead. R. Hildebrand. 1,871,268; Aug. 9.
Control means for transmitting systems. R. L. Davis. 1,870,795; Aug. 9.
Control mechanism, Automatic. J. Kantor. 1,870,998; Aug. 9.
Control mechanism, Lubricant. J. W. Lovell. 1,870,416; Aug. 9.
Control method and apparatus. R. G. Berthold. 1,870,888; Aug. 9.
Control system. E. S. Bristol. 1,870,984; Aug. 9.
Control system. V. B. Jones. 1,870,851; Aug. 9.
Controller for induction motors. E. W. Seeger. 1,871,392; Aug. 9.
Conveyer. A. P. Anderson. 1,871,354; Aug. 9.
Conveyer device. E. W. Witter. 1,870,432; Aug. 9.
Conveyer for changing groups of articles into single file. S. B. Mott. 1,870,375; Aug. 9.
Conveyer, Mold. J. J. Hartley. 1,871,054; Aug. 9.
Cooker, Rotary. R. J. Babcock. 1,870,476; Aug. 9.
Cooler and similar article, Water. W. Kohler. Des. 87,528; Aug. 9.
Cooling coffee, etc., Apparatus for. W. G. Burns and R. A. Greene. 1,870,355; Aug. 9.
Cords, Manufacturing rubberized. E. Hopkinson. 1,871,412; Aug. 9.
Core and making the same, Magnetic. R. Gillis. 1,871,317; Aug. 9.
Core drill. M. Schuerman. 1,870,592; Aug. 9.
Corn and like seed and disinfectant used therein, Disinfecting. W. P. Raleigh. 1,871,200; Aug. 9.
Corner holder for pictures or the like. L. Rado. 1,870,528; Aug. 9.
Counter heater. W. H. Baynard. 1,870,666; Aug. 9.
Coupler. E. J. Contois. 1,870,606; Aug. 9.
Coupler, High pressure. J. Muhlbauser and D. G. Adams. 1,871,421; Aug. 9.
Coupling: *See*—
Flexible coupling.
Coupling mechanism. J. C. F. Sell. 1,871,241; Aug. 9.
Coupling of agricultural machines. E. Wittouck and A. G. Wittouck. 1,870,548; Aug. 9.
Coupling terminal for conduits. R. P. Jacques. 1,871,370; Aug. 9.
Coupon ticket printing machine. M. J. Hoffman. 1,871,058; Aug. 9.
Cover, Book. N. S. Hillyard. Des. 87,514; Aug. 9.
Cover for boilers, heating furnaces, water heaters, or the like. W. D. Teague. Des. 87,553; Aug. 9.
Cover for gas ranges, Articulated top. W. S. Ross. 1,870,653; Aug. 9.
Cover, Receptacle. D. A. Sprigings. 1,870,390; Aug. 9.
Cover, Spring. D. K. Pope. 1,871,341; Aug. 9.
Cover with peripheral stiffening means, Tire. G. A. Lyon. 1,871,188; Aug. 9.
Covers, Assembling and hinging toilet seats and. E. L. Delany. 1,870,715; Aug. 9.
Crane, Wheeled mine. C. Gottschalk and D. T. Blakey. 1,870,906; Aug. 9.
Credit register, Folding. J. E. Dungan. 1,870,444; Aug. 9.
Crossing gate, Railroad. M. J. Farrell and L. Staffaroni. 1,871,167; Aug. 9.
Crown construction for derricks. L. A. Rawson. 1,870,587; Aug. 9.
Crowning mechanism. J. Kantor. 1,870,999; Aug. 9.
Crutch. V. Murka. 1,870,921; Aug. 9.
Cultivating implement. C. E. Johnson. 1,870,913; Aug 9.
Cultivating machines, Attachment to. W. J. Horton. 1,870,850; Aug. 9.
Cultivator. B. Leiter. 1,870,740; Aug. 9.
Cultivator. H. A. Ludeke. 1,870,919; Aug. 9.
Cup, adherent through mechanical pressure. O. L. Compter and J. Menard. 1,871,118; Aug. 9.
Cup and blank therefor. C. Barbieri. 1,870,223; Aug. 9.
Current collector. W. Schaake. 1,871,239; Aug 9.
Current consumption system, Electric. R. C. Fryer. 1,871,170; Aug. 9.
Current distribution system, Alternating. J. S. Parsons. 1,870,784; Aug. 9.
Current machine and starting means therefor, Alternating. F. W. Gay. 1,870,287; Aug 9.
Current motor, Alternating. A. W. Bohn. 1,870,229; Aug. 9.
Current motor, Alternating. H. Weichsel. 1,870,272; Aug. 9.
Current motor, Alternating. H. Weichsel. 1,870,302; Aug. 9.
Cut-out and the like, High tension. E. N. Nordhem. 1,871,194; Aug. 9.
Cutter bars, Detachable mechanism for. C. Karl. 1,871,323; Aug. 9.
Cutting machine. G. K. McNeill. 1,871,334; Aug. 9.
Cup: *See*—
Suction cup.
Cylinder construction for internal combustion engines, Inner. R. L. Skinner. 1,871,242; Aug. 9.
Cylinder for washing machines and the like. T. J. Power. 1,870,925; Aug. 9
Decantation apparatus. H. S. Coe. 1,870,441; Aug. 9.
Decomposition product of urea as or in fertilizers. O. Ripke. 1,870,346; Aug. 9.
Denture press. B. Underdahl. 1,871,137; Aug. 9.
Depth indicator. P. B Hart. 1,870,362; Aug. 9.
Depth testing and indicating device. E. A. Rockwell. 1,870,652; Aug. 9.
Derrick having fluid load-equalizing means. L. A. Rawson. 1,871,132; Aug. 9.
Detector: *See*—
Mass movement detector. Rail flaw detector.
Detergent and water softening product. W. A. Gale and C. F. Ritchie. 1,870,804; Aug. 9.
Detergent material and making the same. C. M. Fehr. 1,870,560; Aug. 9.
Determining the straightness of drill holes in the earth. E. Rosaire. Re18,565; Aug. 9.
Diaphragm. R. F. Mallina. 1,870,417; Aug. 9.
Diazo-nitroaryl compounds, Production of. L. H. Flett. 1,870,842; Aug. 9.
Die for tanks, Entrance. J. F. Wentz. 1,871,351; Aug. 9.
Differential. J. Guilmette. 1,871,052; Aug. 9.
Direction indicating system. R. A. Heising and J. P. Kendall. 1,870,682; Aug. 9.
Direction indicator for motor cars. W. Wentzel. 1,870,304; Aug. 9.
Discharge device, Space. H. D. Brown and C. A. Sabbah. 1,871,403; Aug. 9.
Discharge device, Luminescent. J Brettmon. 1,870,831; Aug. 9.
Dishwashing. E. S. Stoddard. 1,870,318; Aug. 9.
Dishwashing machine. E. S. Stoddard and W. C. Rykert. 1,870,317; Aug. 9.
Disintegrating mill. S. K. Nester. 1,871,127; Aug. 9.
Disk record groove indicator. J. C. Crowley. 1,871,259; Aug. 9.
Dispenser, Motor driven paper. C. W. Elder. 1,870,800; Aug. 9.
Dispensing device. D. G. Adams and A. C. Hansmann. 1,871,291; Aug. 9.
Dispensing mechanism. H. R. Brand. 1,870,889; Aug. 9.
Dispensing device. A. C. Grunwald. 1,871,175; Aug. 9.
Dispensing tube. J. V. Giesler. 1,870,903; Aug. 9.
Display. F. A. Apfelbaum. 1,871,252; Aug. 9.
Display device. M. M. Elnson. 1,870,799; Aug. 9.
Display device. J. G. Whitney. 1,871,288; Aug. 9.
Display device for confections and the like. C. A. Peterson. 1,870,643; Aug. 9.
Display rack. C. F. Anderson. 1,871,294; Aug. 9.
Distance control device. J. C. Bolt and C. I. Johnson. 1,870,230; Aug. 9.
Distillation. H. Franzen. 1,871,051; Aug. 9.
Distillation of hydrocarbon oils. O. C. Brewster. 1,871,148; Aug. 9.
Doll's eyes. A. Konoff. 1,870,572; Aug. 9.
Door, Access. M. P. Potter. 1,871,342; Aug. 9.
Doorcheck and closer. E. Bommer. 1,871,030; Aug. 9.
Door closure and operating mechanism. C. C. Tomkinson. 1,871,095; Aug. 9.
Door construction, Car. K. J. Tobin and W. W. Darrow. 1,870,268; Aug. 9.
Door construction and operating mechanism therefor. A. T. Prescott. 1,871,081; Aug. 9.
Door for railway cars, Drop. G. G. Gilpin. 1,870,905; Aug. 9.

Door lock, Automatic safe. P. E. Pyle. 1,870,746; Aug. 9.
Door operating mechanism. S. W. Rousseau. 1,870,964–5; Aug. 9.
Door operator. C. Norton. 1,871,338; Aug. 9.
Door operator, Multicar. E. E. Arnold. 1,870,828; Aug. 9.
Dough dispensing device. C. R. Schoel. 1,870,654; Aug. 9.
Dough divider. G. B. Eggert. 1,871,261; Aug. 9.
Dough molding apparatus. F. X. and E. J. Lauterbur. 1,870,257; Aug. 9.
Dough molding machine. F. X. and E. J. Lauterbur. 1,870,256; Aug. 9.
Draft controlling device, Automatic. W. A. Hannum. 1,870,505; Aug. 9.
Draft protector. M. B. Bantly. 1,870,483; Aug. 9.
Draft rigging, Railway. C. E. Dath. 1,871,362; Aug. 9.
Draft rigging, Railway. J. F. O'Connor. 1,871,385; Aug. 9.
Draft rigging, Railway. J. F. O'Connor. 1,871,423; Aug. 9.
Drawbench. R. D. Palmer and R. L. Jeffers. 1,870,419; Aug. 9.
Drill: *See*—
Core drill.
Drilling bit. E. W. Forrow. 1,870,563; Aug. 9.
Drilling equipment. W. D. Grant. 1,870,725; Aug. 9.
Drive for a printing member, inking device and guard. R. G. Whitlock. 1,870,430; Aug. 9.
Drive, Press. H. A. W. Wood. 1,870,546; Aug. 9.
Drying parts, Apparatus for. A. Pearson. 1,871,339; Aug. 9.
Dust bag and coupling for vacuum cleaners. W. Barber. 1,871,024; Aug. 9.
Dust collector. L. J. Drumgold. 1,870,947; Aug. 9.
Dust collector and shut-off cock, Combined. B. Hyanes. 1,871,214; Aug. 9.
Dust separator. W. A. Baldwin. 1,870,216; Aug. 9.
Easel or support for posters and the like. M. M. Elnson. 1,870,798; Aug. 9.
Edge of a material, Finishing the. R. E. Powell. 1,871,278; Aug. 9.
Edibles, Roasting. L. L. and J. Jones. 1,870,735; Aug. 9.
Egg breaker. N. Nastrom. 1,870,741; Aug. 9.
Egg product and producing the same. D. K. Tressler. 1,870,269; Aug. 9.
Ejector mechanism for dough dividers. G. B. Eggert. 1,871,264; Aug. 9.
Electric control system. W. N. Greer. 1,870,995; Aug. 9.
Electric current rectifier. O. Seitz. 1,871,434; Aug. 9.
Electric device for musical instruments. A. F. Knoblaugh. 1,870,576; Aug. 9.
Electric devices of occluded gases, Depriving. B. Van der Pol. 1,871,017; Aug. 9.
Electric distribution, System of. A. E. Anderson. 1,871,401; Aug. 9.
Electric door mechanism. C. Norton. 1,871,433; Aug. 9.
Electric machine, Dynamo. G. R. Chervenka. 1,870,237; Aug. 9.
Electric machine, Dynamo. B. McCormick. 1,870,292; Aug. 9.
Electric machine, Dynamo. M. D. Ross and B. A. Rose. 1,871,238; Aug. 9.
Electric switch. H. W. Batcheller. 1,870,599; Aug. 9.
Electrical contact. J. T. Butterfield. 1,871,358; Aug. 9.
Electrical control of the feed of planers and like machine tools. J. C. and R. D. Shaw. 1,871,224; Aug. 9.
Electrical rectifying and stabilizing apparatus. W. S. Werner. 1,870,937; Aug. 9.
Electrical vacuum device. D. S. Gustin. 1,871,366; Aug. 9.
Electrode construction. E. A. Fritz. 1,871,363; Aug. 9.
Electrode elements for rectifiers and manufacturing the same. H. Shoemaker. 1,870,425; Aug. 9.
Electrode spacer member for electron discharge devices. A. C. Blakeman. 1,870,943; Aug. 9.
Electrode, Welding. C. A. Cadwell. 1,871,257; Aug. 9.
Electron discharge device. H. C. Rentschler. 1,871,344; Aug. 9.
Electron discharge device and manufacture. E. G. Widell. 1,871,352; Aug. 9.
Electron emission material. M. N. Fredenburgh. 1,870,951; Aug. 9.
Electroplating. R. J. Piersol. 1,870,743; Aug. 9.
Elevator: *See*—
Garage elevator.
Elevator. W. R. Davis. 1,871,307; Aug. 9.
Elevator control system. H. W. Williams. 1,871,353; Aug. 9.
Elevator control system, Automatic. R. P. Higbee. 1,870,410; Aug. 9.
Emblem. C. Buss. Des. 87,507; Aug. 9.
Engine: *See*—
Steam engine.
Engine sealing ring locating means, Internal combustion. P. C. Walrath. 1,871,250; Aug. 9.
Engines, Operating internal combustion. S. P. and H. A. Cowardin. 1,871,115; Aug. 9.
Envelope. S. K. Hahn. 1,870,906; Aug. 9.
Envelope, Novelty. A. Sever. 1,870,386; Aug. 9.
Equalizer for derricks, Eccentric. L. A. Rawson. 1,871,133; Aug. 9.
Ester composition and making the same, Mixed. H. Hönel. 1,870,454; Aug. 9.
Ethylene from gaseous mixtures, Extraction of. H. Lantz. 1,870,334; Aug. 9.
Exothermic reactions between gases by contact with a solid catalyzer, Device for producing. E. Audibert. 1,870,665; Aug. 9.
Extension table. W. Balschuweit. 1,870,222; Aug. 9.
Extraction or other countercurrent treatment, Method of. J. M. Coabran. 1,870,884; Aug. 9.
Extractors, Unloading net for. F. Balzer. 1,871,402; Aug. 9.
Eye mounting for dolls. J. L. Litomy. 1,870,368; Aug. 9.
Eye testing device, Multi-focal. J. W. Smith. 1,871,394; Aug. 9.
Fabric: *See*—
Rubberized fabric.
Fabric and making the same, Differentially colored. G. Rivat. 1,870,786; Aug. 9.
Fabric and producing the same, Differentially colored. C. Dreyfus and H. Platt. 1,870,837; Aug. 9.
Fabric, Manufacturing bias. R. J. Ford. 1,870,843; Aug. 9.
Fabric measuring and cutting device for bead flipper machines. H. A. Denmire. 1,871,119; Aug. 9.
Fabric take-up and stop motion device for knitting machines. H. Swinglehurst. 1,870,879; Aug. 9.
Fabrics, Process and machines for making knitted. J. C. Williams. 1,870,701; Aug. 9.
Fabrics, Treating impregnated. H. P. Hayden. 1,870,564; Aug. 9.
Fan base. J. Lanz. 1,871,001; Aug. 9.
Fan, Impulse. M. M. Munk. 1,870,842; Aug. 9.
Fastener and key, Tie wire. E. C. Pitcher. 1,871,196; Aug. 9.
Fastener element. E. W. Rutherford. 1,870,873; Aug. 9.
Fastener for tarpaulins. J. W. Waltz. 1,871,101; Aug. 9.
Fastener, Rail and tie. V. L. Keech. 1,870,631; Aug. 9.
Fastener, Slide. A. W. Kimbell. 1,871,378; Aug. 9.
Fastening, Belt. J. T. Gaudin. 1,870,622; Aug. 9.
Fastening device, Flexible. N. Statham. 1,870,658; Aug. 9.
Feed water regulator. G. D. Bradshaw. 1,870,706; Aug. 9.
Feeding device. A. S. Liss. 1,871,414; Aug. 9.
Feeding device for percussive motors. W. A. Smith, jr. 1,870,389; Aug. 9.
Felting machine. H. M. Zoerb and R. W. Buettner. 1,870,940; Aug. 9.
Fences, Coloring woven wire. C. A. Kellogg and G. N. Williams. 1,871,181; Aug. 9.
Fertilizer, Production of phosphatic. B. Ober and E. H. Wight. 1,871,195; Aug. 9.
Fibrous material, Making layers of distended. F. L. Bryant. 1,870,279; Aug. 9.
Filaments, Energizing. A. Nyman and G. V. Peck. 1,870,960; Aug. 9.
Film, Color backed motion picture. J. B. Wells. 1,870,662; Aug. 9.
Film pack casing. R. Klaus. 1,871,217; Aug. 9.
Filter blowback. W. E. Piper. 1,870,381; Aug. 9.
Filter for liquids. A. Kretzschmar. 1,871,122; Aug. 9.
Filter, Multiplex. J. T. Shimmin. 1,870,387; Aug. 9.
Filter, Multiplex rotary drum. F. W. Becraft. 1,870,485; Aug. 9.
Filtering apparatus. S. Alsop. 1,870,885; Aug. 9.
Filtering process and apparatus. W. G. Whitman. 1,871,207; Aug. 9.
Filtration plant control. S. L. Adelson. 1,870,321; Aug. 9.
Finger plate. H. G. Jungk. 1,870,813; Aug. 9.
Fire by backfiring in internal combustion engines and for preventing the obstruction of the suction conduits by frost, Apparatus for the prevention of. C. H. Bichler. 1,870,486; Aug. 9.
Fire extinguisher. W. L. Roessner. 1,870,872; Aug. 9.
Fire extinguisher. J. G. Schooler. 1,870,692; Aug. 9.
Fires, Apparatus for extinguishing forest. O. Torseth. 1,871,096; Aug. 9.
Fishing reel. C. T. Pflueger. 1,871,386; Aug. 9.
Fishing rod. J. T. Welch. 1,870,976; Aug. 9.
Fishing rod. J. T. Welch. 1,871,229; Aug. 9.
Fixture, Work holding. J. McDonough and D. D. Rock. 1,871,408; Aug. 9.
Flange lubricator. R. Hubbard. 1,871,270; Aug. 9.
Flashlight. G. H. Barber. 1,870,829; Aug. 9.
Flexible coupling. A. A. Neave. 1,870,343; Aug. 9.
Flexible coupling. W. J. Smith and H. F. Braun. 1,871,227; Aug. 9.
Float, Fish line. M. E. Loehr. 1,870,520; Aug. 9.
Float, Swimming. C. C. Harris. 1,870,507; Aug. 9.
Flow control head. J. J. Santiago. 1,870,590; Aug. 9.
Flow quantity meter. J. L. Hodgson. 1,870,849; Aug. 9.
Flue system for hot gas heated bake ovens. E. O. Engels. 1,871,809; Aug. 9.
Fluid pressure applying apparatus. G. A. Schettler. 1,870,384; Aug. 9.
Fluid resistance of automobile bodies, Reducing the. E. A. Stalker. 1,871,396; Aug. 9.
Flushing tank. H. V. Kohler and F. G. Brotz. Des. 87,527; Aug. 9.
Football, basket ball, and the like. C. Coles. 1,870,604; Aug. 9.
Footwear and making same. H. D. Rice. 1,870,870; Aug. 9.
Footwear, Manufacturing. R. J. Ford. 1,871,313; Aug. 9.

Form, Adjustable box. R. A. Squier. 1,871,283; Aug. 9.
Form, Shoe. W. J. De Witt. 1,870,839; Aug. 9.
Formaldehyde solutions, Concentrating. F. Walker. 1,871,019; Aug. 9.
Frame: *See*—
Broad frame.
Frame for flat screens. S. B. Gorbutt. 1,870,846; Aug. 9.
Frames, Apparatus for and process of making spring cushion. R. S. Jones. 1,870,864; Aug. 9.
Fuel distributor for internal combustion engines. F. Frelin. 1,871,265; Aug. 9.
Furnace lining, Induction. N. R. Davis and G. A. Wood. 1,871,159; Aug. 9.
Friction brake. T. J. Schuetz. 1,870,532; Aug. 9.
Fruit product. W. A. Rooker and V. E. Speas. 1,870,588; Aug. 9.
Fruits, Treating dried. C. R. Fellers. 1,870,802; Aug. 9.
Fuel briquettes, Apparatus for carbonization of. H. F. Maurel. 1,870,521; Aug. 9.
Fuel briquettes from waste wood, Manufacture of. H. F. Maurel. 1,870,522; Aug. 9.
Furnace: *See*—
Glass furnace. Soaking pit furnace.
Furnace construction. L. Ellman. 1,870,615; Aug. 9.
Furnace construction. R. D. Foltz. 1,870,721; Aug. 9.
Furnace construction. L. H. Hosbein. 1,870,568; Aug. 9.
Furnace control, Heating. R. W. Stem. 1,871,093; Aug. 9.
Furnace leer, Muffle. W. A. Morton. 1,870,262; Aug. 9.
Furnace roll or shaft. F. S. Snyder and C. H. Sipe. 1,870,657; Aug. 9.
Furnace wall structure. A. E. Nash. 1,870,783; Aug. 9.
Furnishing, Concealable. W. C. Fain. 1,870,719; Aug. 9.
Furniture set, Combination. E. F. White. 1,870,789; Aug. 9.
Fuse for antiaircraft projectiles. T. B. Doe. 1,870,405; Aug. 9.
Fuse, Multiple. S. J. Wynn. 1,870,597; Aug. 9.
Galoshes, shoes with rubber soles or the like by pressing, Making. H. C. L. Dunker. 1,870,359; Aug. 9.
Game. H. Trost. 1,871,247; Aug. 9.
Game apparatus. G. L. Bonham. 1,871,143; Aug. 9.
Game apparatus. S. L. Vaccaro. 1,870,536; Aug. 9.
Game indicator, Football. J. S. Kotlarz. 1,870,515; Aug. 9.
Garage elevator. H. D. James. 1,871,372; Aug. 9.
Garment press. J. L. Card. 1,870,894; Aug. 9.
Garment press. H. G. Sutton. 1,870,935; Aug. 9.
Garter or the like. A. P. Lubell. 1,871,066; Aug. 9.
Gas burner. L. O. Brown. 1,870,668; Aug. 9.
Gas generation. G. W. Lorimer. 1,871,415; Aug. 9.
Gases, Dehydrating of fuel. C. Cooper and D. M. Henshaw. Re18,563; Aug. 9.
Gases, Separating and purifying. L. W. Skaia. 1,871,226; Aug. 9.
Gaseous mixtures, Apparatus for generating. M. E. Carroll. 1,871,302; Aug. 9.
Gasometer, Telescoping. K. Jagschitz. 1,870,683; Aug. 9.
Gate: *See*—
Crossing gate.
Gate system, Elevator. W. F. Eames. 1,870,772; Aug. 9.
Gauge device. C. Winning. 1,870,884; Aug. 9.
Gear, Cam and lever steering. D. E. Ross. 1,871,134; Aug. 9.
Gear, Change speed. K. Maybach. 1,870,841; Aug. 9.
Gear generating machine. J. M. Christman. 1,870,709; Aug. 9.
Gear, Transmission. J. M. Simpson. 1,871,014; Aug. 9.
Gear, Variable speed driving or transmitting. L. S. Harber and J. E. Pointon. 1,871,320; Aug. 9.
Gearing, System of friction. H. L. Prout. 1,870,421; Aug. 9.
Glass and vitreous enamels, Apparatus for making. G. H. McIntyre and R. W. Stuart. 1,870,636; Aug. 9.
Glass, Apparatus for making plate. W. G. Koupal. 1,871,218; Aug. 9.
Glass apparatus, Laminated. J. L. Drake. 1,870,284; Aug. 9.
Glass cutting table. J. D. McLeod. 1,871,220; Aug. 9.
Glass furnace. J. L. Drake. 1,870,242; Aug. 9.
Glass, Making composite. J. H. Sherts. 1,870,693; Aug. 9.
Glass, Making plate. R. L. Clause. 1,871,156; Aug. 9.
Glass, Surfacing plate. J. P. Crowley. 1,870,238; Aug. 9.
Glass working machine. J. P. Scull. 1,870,755; Aug. 9.
Glow relay tube. H. C. Rentschler. 1,871,279; Aug. 9.
Glue and method of making. I. F. Laucks and G. Davidson. 1,871,329; Aug 9.
Glycols and ethylene hydrocarbons, Production of ethylene. A. T. Maximoff. 1,870,858; Aug. 9.
Golf ball. A. G. McKinnin. 1,870,862; Aug. 9.
Golf ball washing machine. S. S. Wilcox, jr., and H. R. Greiner. 1,871,130; Aug. 9.
Grain cleaning and separating machine. C. C. Ingraham. 1,870,629; Aug. 9.
Graining mechanism. G. von Webern and E. W. Hamant. 1,870,700; Aug. 9.
Grease gun. R. E. McGahey. 1,870,524; Aug. 9.
Grease gun, Portable. H. Albertine. 1,871,400; Aug. 9.
Grease gun, Pressure. E. A. Dunlap. 1,870,497; Aug. 9.
Grid connection for electric discharge devices. P. C. Gardiner. 1,871,409; Aug. 9.
Grille panel. L. Pirola. Des. 87,542; Aug. 9
Grinder, Helical gear. A. Aeppli. 1,870,764; Aug. 9.
Grinder, Roll. R. C. Lewis and C. F. Schnuck. 1,871,002; Aug. 9.
Grinding machine. M. Maag and R. Salomon. 1,870,818; Aug. 9.
Grinding machine. M. I. Mathewson. 1,870,857; Aug. 9.
Grinding machine, Relieved screw thread. A. M. Drake. 1,870,718; Aug. 9.
Grinding wheel, Segmental. W. W. Greenwood. 1,870,449; Aug. 9.
Gripper, Automatic. W. Voorwinde. 1,870,538; Aug. 9.
Guard for safety zones. J. Mueller. 1,870,639; Aug. 9.
Guard for service pitchers and making same. E. J. Newman. 1,870,377; Aug. 9.
Guard, Highway. P. E. Hunter. 1,871,062; Aug. 9.
Guide, Band saw. G. Burton. 1,870,555; Aug. 9.
Guide, Curtain. T. E. McNulty. 1,870,920; Aug. 9.
Guide for folding blades, Paper. H. A. W. Wood. 1,870,542; Aug. 9.
Guide for shaping machines, Worktable. W. F. Zimmermann. 1,870,434; Aug. 9.
Hair curling device. R. E. Drannon and N. W. Kenison. 1,870,496; Aug. 9.
Hammer, Hydraulically operated drop. W. Ernst. 1,870,499; Aug. 9.
Handbag or the like. H. L. Redman. Des. 87,544–5; Aug. 9.
Handbag or the like, Lady's. H. L. Redman. Des. 87,546; Aug. 9.
Handle: *See*—
Brush handle. Needle holding handle.
Collapsible handle.
Handle. B. S. Floraday. 1,871,169; Aug. 9.
Hanger. W. M. Robinson and H. K. Rader. 1,870,651; Aug. 9.
Hardness testing machine. R. B. Lewis. 1,870,415; Aug. 9.
Harness, Pack carrying. E. M. Reese. 1,871,223; Aug. 9.
Harvester, Corn. L. A. Paradise and W. J. Coultas. 1,870,420; Aug. 9.
Heat exchange method and apparatus. D. H. Killeffer. 1,870,684; Aug. 9.
Heat saver. W. A. Hodgins. 1,871,322; Aug. 9.
Heat treating strip material. H. S. Lamb. 1,870,577; Aug. 9.
Heater: *See*—
Automobile heater. Watchcase heater.
Counter heater. Windshield heater.
Heater assembly of aluminum or the like, Welded. C. A. Bulkeley. 1,871,256; Aug. 9.
Heater attachment. D. T. Wright. 1,871,290; Aug. 9.
Heater element. R. H. Sinden. 1,870,968; Aug. 9.
Heater element for electron emission devices. J. H. Ramage. 1,871,343; Aug. 9.
Heater for liquid cooling systems of internal combustion engines. F. B. Rentz. 1,871,008; Aug. 9.
Heater unit. M. O. Jennings. 1,871,271; Aug. 9.
Heating and ventilating apparatus. J. C. Miles. 1,870,261; Aug. 9.
Heating and ventilating unit. W. Shurtleff. 1,871,225; Aug. 9.
Heating device, Windshield. F. Pitrella. 1,870,923; Aug. 9.
Heel machine. F. Ashworth. 1,870,353; Aug. 9.
High speed recorder. J. W. Legg. 1,871,380; Aug. 9.
Hinge. L. W. Morley. 1,871,126; Aug. 9.
Hinge construction. G. Bommer. 1,871,031; Aug. 9.
Hoist, Skip. G. J. Oldroyd. 1,870,962; Aug. 9.
Hoisting mechanism. F. F. Seaman and C. E. Schirmer. 1,870,385; Aug. 9.
Holder, Adjustable cake. A. E. Guenther and H. S. Toole. 1,870,954; Aug. 9.
Holder, Article. R. J. Stephenson. 1,870,659; Aug. 9.
Holder, Blade. J. M. Maaer. 1,871,069; Aug. 9.
Holder for coil-winding dies, Adjustable. S. Wadsten. 1,871,349; Aug. 9.
Holder for roadway pavement expansion means. W. T. Lamb. 1,871,065; Aug. 9.
Holder, Gas. J. R. L. Santos. 1,870,815–16; Aug. 9.
Holder, Paper bag. B. L. Fratesi, jr. 1,870,722; Aug. 9.
Holder, Piezo electric crystal. A. M. Trogner. 1,870,698; Aug. 9.
Holder, Placard board. F. A. Isaacson. 1,870,731; Aug. 9.
Holder, Sheath crayon. S. Barendse and L. Garreau. 1,870,941; Aug. 9.
Holder, Thread guide. C. Scheller. 1,871,240; Aug. 9.
Holder, Toothbrush. D. Bellock. 1,870,276; Aug. 9.
Holder, Towel. J. S. Miller. 1,871,189; Aug. 9.
Hood lock. J. C. Ellison. 1,870,360; Aug. 9.
Hose rack. R. F. Brown. 1,870,322; Aug. 9.
Hothouse installation. O. Happel. 1,870,329; Aug. 9.
Housing for hand brake winding mechanism. R. W. Burnett. 1,870,985; Aug. 9.
Housing, Split axle. O. J. Horger. 1,871,061; Aug. 9.
Hub for small propellers. F. W. Caldwell. 1,870,401; Aug. 9.
Humidifier. L. F. Perkett. 1,871,277; Aug. 9.
Humidor. R. H. McKee. 1,871,418; Aug. 9.
Hutch, Animal. L. Meriaux. 1,870,957; Aug. 9.
Hydraulic escapement device. C. C. Whittaker. 1,871,287; Aug. 9.
Hydraulic press. W. Ernst and H. F. MacMillan. 1,870,500; Aug. 9.
Hydrocarbons, Partial oxidation of gaseous. W. K. Lewis. 1,870,816; Aug. 9.

Hydrocarbons, Production of ethylene. A. T. Maximoff. 1,870,859; Aug. 9.
Hydrocarbons, Treating. W. M. Cross. 1,871,481; Aug. 9.
Hydrolysis of methyl chloroform. E. C. Britton and W. R. Reed. 1,870,601; Aug. 9.
Illuminating apparatus for display purposes. E. B. Monheim. 1,871,073; Aug. 9.
Indentations, Method of and tool for removing. W. Ferguson. 1,871,312; Aug. 9.
Indicating device. A. M. Curtis. 1,871,361; Aug. 9.
Indicator: *See*—
Depth indicator. Game indicator.
Inflation indicator for tires. A. S. Pierce. 1,870,742; Aug. 9.
Ingot and mold for making the same. E. J. Kauffman. 1,870,365; Aug. 9.
Ingot mold. E. J. Kauffman. 1,871,824; Aug. 9.
Insect trap. G. S. Crown. 1,870,712; Aug. 9.
Insulating material, Manufacture of. G. Cattaneo. 1,870,323; Aug. 9.
Insulator, Heat. J. B. Barnitt and R. B. Derr. 1,870,437; Aug. 9.
Interlock, Brake and door. J. C. McCune. 1,870,861; Aug. 9.
Ironing machine. G. T. Scofield. 1,870,297; Aug. 9.
Jack: *See*—
Lifting jack. Pipe pushing jack.
Jacket, Shipping. C. C. Buchanan. 1,871,153; Aug. 9.
Jar: *See*—
Rotary jar.
Jar. E. W. Fuerst. Des. 87,512; Aug. 9.
Joint and constructing the same, Expansion. L. L. Lord. 1,871,219; Aug. 9.
Joint for connecting tubular sections of poles and the like. C. de Witt. 1,870,771; Aug. 9.
Joint for metal beds, Corner. J. T. Brothers. 1,870,708; Aug. 9.
Knitting machine. M. C. Miller. 1,871,190; Aug. 9.
Knitting machine, Circular. P. A. Bentley, F. Manger, and C. H. Wainwright. 1,870,550; Aug. 9.
Knives, Manufacture of. M. Maag and R. Salomon. 1,870,817; Aug. 9.
Label blank. E. W. Sears. Des. 87,549; Aug. 9.
Label printing, cutting, folding, and packing machine, Automatic. A. Rosenthal. 1,870,424; Aug. 9.
Lace. H. W. Hucknall. Des. 87,521; Aug. 9.
Lactose, Preparation of dry monhygroscopic crude. R. M. Washburn. 1,870,270; Aug. 9.
Ladle, Hot metal. F. B. McCune. 1,871,333; Aug. 9.
Lamp. R. J. Barone. Des. 87,503; Aug. 9.
Lamp cable securing device, Street. O. Anklam. 1,871,023; Aug. 9.
Lamp, Electric pocket or hand. P. Rathmann. 1,871,389; Aug. 9.
Lamp filament, Coiled. S. Wadsten and C. W. Hunt. 1,871,018; Aug. 9.
Lamp, Portable. B. McCandless. 1,870,687; Aug. 9.
Lamp, Portable electric. A. C. Recker. Des. 87,543; Aug. 9.
Lamp stand. C. W. Dake. 1,870,609; Aug. 9.
Lapping machine. H. S. Indge. 1,870,328; Aug. 9.
Latch, Door. H. W. Rightmyer. 1,871,085; Aug. 9.
Lath, Paper. H. E. Marks. 1,870,461; Aug. 9.
Lawn and garden implement. O. B. Bristow and S. D. Bundy. 1,870,891; Aug. 9.
Leather manufacture, Artificial. R. B. Hill. 1,870,567; Aug. 9.
Leer loader. C. H. Hardman. 1,870,506; Aug. 9.
Leg construction for derricks, Double. L. A. Rawson. 1,871,131; Aug. 9.
Leg construction for derricks with equalizing means, Double. L. A. Rawson. 1,871,130; Aug. 9.
Letter, Sales or advertising. E. J. Hoffmann. 1,870,909; Aug. 9.
Letters and the like, Apparatus for printing circular. C. B. Yoder, J. J. Gahn, and C. B. Wilkes, jr. 1,870,394; Aug. 9.
Lever opener container parts, Apparatus for making. J. M. Hothersall. 1,870,728; Aug. 9.
Lid or cover, Insulated. H. H. Ward, jr. 1,871,138; Aug. 9.
Lifter: *See*—
Shutter lifter.
Lifting jack. A. E. Elston. 1,870,244; Aug. 9.
Light: *See*—
Beam light.
Light meter and view scope for cameras. G. Ramsey. 1,870,464; Aug. 9.
Lighting fixture. F. R. Farmer. 1,870,618; Aug. 9.
Lighting fixture. A. J. D. Ohm. 1,870,642; Aug. 9.
Lighting unit. O. Werner. 1,871,205; Aug. 9.
Light-sensitive layer. E. W. Sprongerts and R. Franke. 1,870,930; Aug. 9.
Liquid applying machine. S. M. Frey. 1,870,952; Aug. 9.
Liquid depth indicating device. H. W. King. 1,871,182; Aug. 9.
Liquid, Device for sampling. I. J. Ball and S. H. Ingram. 1,870,436; Aug. 9.
Liquid dispensing apparatus. W. H. De Lancey. 1,870,899–900; Aug. 9.
Liquid dispensing apparatus. J. A. Logan. 1,870,918; Aug. 9.
Liquid levels, System for indicating. C. E. Van Auken. 1,870,936; Aug. 9.
Liquid pressure measuring apparatus. C. V. Hardy and P. J. Johnston. 1,871,410; Aug. 9.
Liquid separator. J. E. Bryan. 1,871,254; Aug. 9.
Liquid supplying means for aircraft engines. S. A. Hasbrouck. 1,871,055; Aug. 9.
Liquid to filter cakes, Application of. F. B. Coley. 1,870,442; Aug. 9.
Liquids, Apparatus for heat treating. E. C. D'Yarmett. 1,870,445; Aug. 9.
Liquids, Measuring the viscosities of. H. T. Kennedy. 1,870,412; Aug. 9.
Liquids of different specific gravities, Apparatus for separating. S. A. B. Dahlgren. 1,870,608; Aug. 9.
Loading attachment for conveyer mechanism. F. L. McCarty. 1,870,291; Aug. 9.
Loaf assembler, Twin. W. G. Kirchhoff. 1,871,216; Aug. 9.
Lock: *See*—
Door lock. Remote control lock.
Hood lock. Window lock.
Lock. S. C. Chesick. 1,871,303; Aug. 9.
Lock. E. O. Stallings and R. H. Gorton. 1,870,427; Aug. 9.
Lock joint for sectional concrete pipes. F. Yeager. 1,871,398; Aug. 9.
Locking device. A. F. Kipper and R. H. Thayer. 1,871,064; Aug. 9.
Locking device, Drawer. J. Ritter, jr. 1,870,467; Aug. 9.
Locomotive. C. H. Apps. 1,871,295; Aug. 9.
Locomotive. J. G. Blunt. 1,871,028; Aug. 9.
Locomotive control system. F. H. Shepard. 1,870,469; Aug. 9.
Locomotive refilling method. F. W. Miller. 1,870,582; Aug. 9.
Loom apparatus. W. E. Buchanan. 1,871,255; Aug. 9.
Looms, Harness cord for. S. O. Dodge. 1,871,308; Aug. 9.
Loud-speaker construction. P. G. Andres and F. W. Temple. 1,871,107; Aug. 9.
Lubricating appliance. O. U. Zerk. 1,870,433; Aug. 9.
Lubricating means. D. G. Adams. 1,871,399; Aug. 9.
Lubricating system. J. Reid. 1,871,201; Aug. 9.
Lubricator: *See*—
Flange lubricator.
Luminair. W. A. Dorey. 1,870,241; Aug. 9.
Luminair. A. Froget. 1,870,247; Aug. 9.
Machine and method for making book matches. C. Gustavson, E. van Hoofstadt and L. Greenbaum. 1,870,955; Aug. 9.
Machine for applying strips to books. H. Sieb. 1,870,348; Aug. 9.
Machine for cutting spirally grooved cams. E. J. Gruenewald. 1,871,174; Aug. 9.
Machine for disposing of artichoke plants. A. Belli. 1,871,026; Aug. 9.
Machine for making waves. C. W. Keller and A. F. Siferte. 1,871,215; Aug. 9.
Machine for sawing piston rings. J. H. Hoern. 1,870,996; Aug. 9.
Machine for the spherical grinding of billiard balls and other blanks. O. Kadzik. 1,870,571; Aug. 9.
Machinery, System for lubricating. J. C. Handy. 1,870,809; Aug. 9.
Magnesium chloride and making same, Flake. A. K. Smith. 1,871,428; Aug. 9.
Magnesium chloride, Preparing partially dehydrated. S. B. Heath. 1,871,411; Aug. 9.
Magnesium chloride, Preparing partially dehydrated. S. B. Heath. 1,871,435; Aug. 9.
Magnet unit. H. Sachs. 1,870,735; Aug. 9.
Mandrel, Endless. H. T. Battin. 1,871,296; Aug. 9.
Manifolding device. E. K. Bottle. 1,870,277; Aug. 9.
Marker, Street. J. S. George. 1,870,994; Aug. 9.
Mass and making the same, Artificial. H. Hönel. 1,870,453; Aug. 9.
Mass and making the same, Artificial. H. Hönel. 1,870,455; Aug. 9.
Mass movement detector. T. M. Roberts. 1,870,347; Aug. 9.
Material, Apparatus for folding sheet. O. C. Schulz. 1,870,754; Aug. 9.
Material handling apparatus. R. Jongedyk. 1,871,272; Aug. 9.
Materials, Drying. R. H. Hobrock. 1,871,269; Aug. 9.
Matrices, Method of and apparatus for producing. R. C. Baker. 1,870,481; Aug. 9.
Measurement control, Method of and apparatus for. L. Behr. 1,870,982; Aug. 9.
Measuring device. P. Williamson, jr. 1,870,393; Aug. 9.
Measuring the contents of gas containers, Apparatus for. C. Mott and G. G. Spencer. 1,871,075; Aug. 9.
Mechanical movement. C. A. Rasco. 1,870,749; Aug. 9.
Metal, Apparatus for bending sheet. A. N. Merryman. 1,870,260; Aug. 9.
Metal plating, Apparatus for. K. C. Monroe. 1,870,958; Aug. 9.
Metal, Purifying light. J. A. Gann. 1,871,316; Aug. 9.
Metal structure, Sheet. F. Lane. 1,870,914; Aug. 9.
Metallurgical process. J. Allngham. 1,870,703; Aug. 9.
Metallurgical process. R. F. Meyer. 1,870,863; Aug. 9.
Metals, Casting readily oxidizable. J. A. Gann. 1,871,315; Aug. 9.
Meter: *See*—
Flow quantity meter. Piston meter.
Meter press. R. G. Whitlock. 1,870,541; Aug. 9.
Mica splitting and machine therefor. J. M. Coffey, H. H. France, and J. J. Pickney. 1,870,835; Aug. 9.

Milk evaporating means. W. F. Richards. 1,870,423; Aug. 9.
Mill: *See*—
Disintegrating mill. Rolling mill.
Mining machine. F. A. Lindgren. 1,871,186; Aug. 9.
Mirrors or the like, System of reflecting. O. A. Ross. 1,870,468; Aug. 9.
Mixtures of substances only partialy miscible, Separating. W. K. Lewis. 1,870,854; Aug. 9.
Model, Shoe. C. W. Conaway. 1,870,945; Aug. 9.
Mold: *See*—
Ingot mold. Tube and tire mold.
Monument mold.
Mold and making the same, Semi-permanent. A. B. Norton. 1,871,422; Aug. 9.
Mold with controlled release for the production of ice blocks, Automatically supplied. P. J. Marchaut. 1,870,370; Aug. 9.
Molded product similar to stoneware and making the same. H. C. Fisher. 1,870,245; Aug. 9.
Molding apparatus. J. A. De Turk and E. D. Hanson. 1,871,406; Aug. 9.
Molding machine for the production of a continuous ingot. M. Douteur. 1,870,400; Aug. 9.
Monument mold. R. R. Koch. 1,871,413; Aug. 9.
Mop. H. Goldfinger. 1,870,845; Aug. 9.
Motor: *See*—
Constant speed motor. Current motor.
Motor and compressor, Direct connected. H. E. Blood and R. G. Nelson. 1,870,228; Aug. 9.
Motor control, Synchronous. D. E. Inman. 1,870,456; Aug. 9.
Motor control system. C. E. Carpenter. 1,871,112; Aug. 9.
Motor having low plugging torque, Reversible squirrel-cage. F. J. Johns. 1,870,777; Aug. 9.
Motor operated mechanism. J. Freud and C. H. Koehler. 1,870,246; Aug. 9.
Motor or the like, Squirrel-cage pump. F. J. Johns. 1,870,776; Aug. 9.
Motor unit for bicycles, tricycles, and the like. S. V. Constantinovitch, Prince Wiasenisky. 1,870,761; Aug. 9.
Mounting and drive therefor, Feed chain sprocket. A. B. Johnson. 1,870,630; Aug. 9.
Mounting bracket. W. C. Keys. 1,871,376; Aug. 9.
Mounting, Camera. M. L. Beistle. 1,870,766; Aug. 9.
Mounting for anti-friction bearings. D. J. Mayer. 1,870,860; Aug. 9.
Mounting for automobile heaters. Q. G. Noblitt and E. C. Booth. 1,870,378; Aug. 9.
Mounting, Propeller hub and blade. T. F. Hamilton. 1,870,361; Aug. 9.
Mounting, Shaft. L. A. Cummings. 1,871,116; Aug. 9.
Mourning ring. M. Nathan and A. Gross. Des. 87,538; Aug. 9.
Mouth closing device. E. G. Heitritter. 1,870,566; Aug. 9.
Mower attachment, Lawn. A. Alesen. 1,870,979; Aug. 9.
Mower, Electrically operated lawn. G. Raun. 1,870,382; Aug. 9.
Mulching. S. S. Eveland. 1,871,050; Aug. 9.
Musical directing apparatus. O. A. Ross. 1,870,823; Aug. 9.
Mute for stringed musical instruments. M. Sarrabio y Clavero. 1,870,324; Aug. 9.
Nasal and pulmonary afflictions, Device for treating. A. N. Darby. 1,870,558; Aug. 9.
Necktie crease remover. G. B. Ness. 1,871,222; Aug. 9.
Needle holding handle. M. Vitoux. 1,871,099; Aug. 9.
Neutral brake. H. H. Waters. Re18,561; Aug. 9.
New catalysts. A. Bierichs. 1,870,357; Aug. 9.
Nitrocellulose, Dissolving and dispersing. W. B. Pratt and R. T. Halstead. 1,870,864; Aug. 9.
Noise eliminator. E. B. Stimpson. 1,870,428; Aug. 9.
Nonmetallic wheel. C. W. Mansur. 1,871,417; Aug. 9.
Novelty, Advertising. G. Zarin. 1,870,395; Aug. 9.
Nozzle. J. N. White. 1,871,103; Aug. 9.
Nozzle or end for push type grease guns. H. H. Bray. 1,870,890; Aug. 9.
Nut. E. C. Peters and D. C. Peters. 1,870,380; Aug. 9.
Objects to be delivered or handed out, Apparatus for accommodating. J. S. Lottrup. 1,870,340; Aug. 9.
Odor and/or flavor of legumes, Improving and removing the. L. W. Haas and H. O. Renner. 1,870,450; Aug. 9.
Oil burning mechanism. C. Burnett. 1,871,108; Aug. 9.
Oil, Drying. A. Elbner. 1,870,614; Aug. 9.
Oil testing device. O. Cover. 1,870,282; Aug. 9.
Oil wells, Cleaning. E. M. Adams, W. C. Gangloff, and G. G. Spencer. 1,870,320; Aug. 9.
Oiling device. W. A. Smith, sr. 1,871,429; Aug. 9.
Oils, Distillation of hydrocarbon. T. S. Cooke and O. C. Brewster. 1,871,114; Aug. 9.
Opener, Can. D. M. Winans. 1,870,938; Aug. 9.
Optical system. W. L. Wright. 1,870,664; Aug. 9.
Ornament, Shoe. L. M. Leverone. Des. 87,534; Aug. 9.
Oscillograph. J. W. Legg. 1,871,379; Aug. 9.
Oscillograph, Cathode ray. C. T. Ulrey. 1,870,973; Aug. 9.
Oven. J. L. Shroyer. 1,871,393; Aug. 9.
Overflow lip for sedimentation apparatus, Adjustable. J. A. Baker. 1,870,435; Aug. 9.
Ozonizer. A. E. Evans. 1,870,616; Aug. 9.
Package. O. Janssen. 1,870,912; Aug. 9.
Package and making the same. R. A. Butler and A. T. Matthews. 1,870,399; Aug. 9.
Package and making the same. C. W. Leguillon. 1,870,519; Aug. 9.
Package of tape and sewing thread. A. B. Collingbourne. Des. 87,508; Aug. 9.
Package, Special. C. T. Pflueger. 1,871,388; Aug. 9.
Packing case. C. R. Franklin and E. Goldsworthy. 1,870,676; Aug. 9.
Pad for garment pressing machines. W. Strowbridge. 1,870,934; Aug. 9.
Pad or cushion, Seat. W. H. Adams. 1,870,275; Aug. 9.
Pan and the art of and blank for making the same, Plaited corner-fold. W. J. Roepke. 1,870,295; Aug. 9.
Paper. C. S. Hamersley. 1,870,681; Aug. 9.
Paper and manufacturing the same. R. H. McKee. 1,870,259; Aug. 9.
Paper board box. John E. Page. 1,870,688; Aug. 9.
Paper for use as paper making stock, Treating printed. L. A. Dils. 1,870,358; Aug. 9.
Paper, Method and apparatus for making reenforced. N. S. Stone and R. L. Burns. 1,870,267; Aug. 9.
Paper piercing device. H. A. W. Wood. 1,870,543; Aug. 9.
Paper, Reenforced building. H. A. Anderson. 1,870,215; Aug. 9.
Paper winding apparatus. E. E. Berry. 1,870,225; Aug. 9.
Particles of different densities by means of liquids, Separation of. C. W. H. Holmes. 1,871,121; Aug. 9.
Partition wall edge construction. L. L. Levene. 1,870,579; Aug. 9.
Paste drying device for a printing web. O. C. Roesen. 1,870,529; Aug. 9.
Pen. A. F. Spitzglass. 1,870,266; Aug. 9.
Pen, Fountain. D. Kahn. Des. 87,523–4; Aug. 9.
Pen, Fountain. T. H. Lassagne. 1,870,853; Aug. 9.
Pencil. D. Kahn. Des. 87,525; Aug. 9.
Percolator, Electric. W. S. Marvin. Re18,564; Aug. 9.
Petroleum oils, Method and apparatus for hydrogenation and distillation of low-sulfur. E. M. Clark. 1,870,792; Aug. 9.
Photo-electric tube. P. H. Brace. 1,871,357; Aug. 9.
Photo-electric tube. H. C. Rentschler. 1,871,280; Aug. 9.
Photo-electric tubes, Manufacture of. N. R. Campbell. 1,870,280; Aug. 9.
Photographic gelatine layer. J. Brunken. 1,870,354; Aug. 9.
Photography, Stereoscopic. L. F. Savage. 1,871,281; Aug. 9.
Pie crust, Making. A. F. Ward. 1,870,882; Aug. 9.
Pillow and coverlet, Combination. C. K. Longletz and C. A. Engle. 1,871,003; Aug. 9.
Pin detector for base feeding mechanism. P. Meyer. 1,871,382; Aug. 9.
Pipe: *See*—
Tobacco pipe.
Pipe coating apparatus. C. R. Eckert. 1,870,841; Aug. 9.
Pipe line dolly. J. J. Tipton. 1,870,760; Aug. 9.
Pipe pushing jack. C. A. Crane, jr. 1,870,607; Aug. 9.
Pipe welding machine. E. E. Arnold. 1,870,475; Aug. 9.
Piston meter. J. B. Davis. 1,870,897; Aug. 9.
Pitch propeller, Variable. J. P. Landrum. 1,871,124; Aug. 9.
Placer mining machine. W. G. Churchill. 1,870,710; Aug. 9.
Plaiting machine. G. and R. Ezbelent. 1,870,617; Aug. 9.
Plasterboard and making same. C. R. Birdsey. 1,870,439; Aug. 9.
Plate or similar article. L. H. Brown. Des. 87,504–6; Aug. 9.
Plate or similar article. G. Wesp. 87,555–7; Aug. 9.
Plate photo electric tube, Multiple. B. W. Woodward. 1,870,596; Aug. 9.
Plates, Device for washing or treating. R. John. 1,871,374; Aug. 9.
Playpen. A. G. Feldman. 1,870,285; Aug. 9.
Plug for internal combustion engines, Spark. J. M. Auzin. 1,870,981; Aug. 9.
Plug-in device. C. Winter. 1,870,762; Aug. 9.
Pneumatic dispatch carrier. D. J. MacMillan. 1,870,258; Aug. 9.
Point driver, Glazier's. H. Harris. 1,870,330; Aug. 9.
Pole, Steel. C. De Witt. 1,870,770; Aug. 9.
Potato tops destroyer. A. Sternemann. 1,870,932; Aug. 9.
Powder and method of manufacturing same, Dusting. G. E. Sanders. 1,870,383; Aug. 9.
Power actuator. C. S. Bragg and V. W. Kliesrath. 1,871,299; Aug. 9.
Power lines, Device for carrying. M. Hespeler. 1,870,510; Aug. 9.
Power press, Triple action. A. Seidel and M. R. Hatch. 1,871,088; Aug. 9.
Power transmission for agricultural machines. D. P. Davies. 1,871,306; Aug. 9.
Power units in a well against rotation, Apparatus for holding rotary drilling. T. G. Taylor. 1,870,697; Aug. 9.
Press: *See*—
Denture press. Power press.
Garment press. Printing press.
Hydraulic press. Veneer press.
Meter press.
Pressing machine (pressure operated buck). E. Davis. 1,870,610; Aug. 9.
Pressure applying device for rotary power operated surfacing tools. E. Cavicchi. 1,871,042; Aug. 9.

Pretesting device. J. L. McWeeny. 1,870,462; Aug. 9.
Printing device. M. J. Hoffman. 1,871,060; Aug. 9.
Printing machine. M. J. Hoffman. 1,871,059; Aug. 9.
Printing on inflatable articles. C. C. Sprague. 1,870,825; Aug. 9.
Printing on textile fabrics. M. A. Kunz and F. Teller. 1,870,516; Aug. 9.
Printing press. R. G. Whitlock. 1,870,474; Aug. 9.
Printing press, Rotary. A. Terrey. 1,870,759; Aug. 9.
Prints, Apparatus for flattening. R. S. Hopkins. 1,870,626; Aug. 9.
Propeller. M. A. Smith, jr. 1,871,203; Aug. 9.
Propelling and steering mechanism for ships. J. Ehrhart. 1,870,674; Aug. 9.
Protective means for buried metallic surfaces. S. U. McGary, W. F. Rogers and S. Gil. 1,871,125; Aug. 9.
Protective system, Electric. H. Leben and N. Cooke. 1,870,518; Aug. 9.
Protector, Lapel. M. N. Kohler. 1,870,737; Aug. 9.
Puller: *See*—
Wheel puller.
Pulley remover. D. C. Cooney. 1,870,711; Aug. 9.
Pulp, etc., Production of. L. Bradley and E. P. McKeefe. 1,870,944; Aug. 9.
Pump. A. W. Burks. 1,871,209; Aug. 9.
Pump. W. C. Carter. 1,871,040; Aug. 9.
Pump control for hydraulic presses, Plural pressure. W. Ernst. 1,870,501; Aug. 9.
Pump, Inertia. C. H. Braselton and F. B. MacLaren. 1,870,707; Aug. 9.
Pump operating mechanism. J. E. Jimmis. 1,871,063; Aug. 9.
Pumping apparatus. W. H. Parker. 1,871,128; Aug. 9.
Purse, Buckle. B. H. Marcus. 1,870,820; Aug. 9.
Puzzle. O. M. Westcott. 1,871,206; Aug. 9.
Race starting apparatus. I. Comfort and B. Clifford. 1,870,768; Aug. 9.
Rack: *See*—
Display rack. Tie rack.
Hose rack.
Radiation combustion chamber. A. E. Nash and J. S. Alcorn. 1,870,640; Aug. 9.
Radio apparatus. W. L. Carlson. 1,871,405; Aug. 9.
Radio control system. W. E. Brindley 1,870,832; Aug. 9.
Radio transmission system, Secret wired. J. L. Cassell. 1,870,490; Aug. 9.
Radio transmitter. L. A. Gebhard. 1,870,678; Aug. 9.
Rail flaw detector. H. C. Drake. 1,870,796; Aug. 9.
Rail flaw detector. G. L. Jones. 1,870,811; Aug. 9.
Railway draft rigging. E. R. Schulz. 1,871,427; Aug. 9.
Railway with propeller driven streamline vehicles, High speed. F. Kruckenberg and F. Heyner. 1,870,738; Aug. 9.
Rake attachment, Self-cleaning. C. F. Reiter. 1,871,084; Aug. 9.
Razor, Safety. A. Robb. 1,871,010; Aug. 9.
Razor, Safety. B. M. Sylcan. 1,870,695; Aug. 9.
Receptacle, Flexible pocket. W. R. Buxton. 1,870,893; Aug. 9.
Reclining chair. R. E. Kochs. 1,871,184; Aug. 9.
Record strip control, Interchangeable. W. D. Caton. 1,870,281; Aug. 9.
Record strip easel and deflector for autographic registers. E. K. Bottle. 1,870,231; Aug. 9.
Recording apparatus. A. N. E. Boos. 1,871,032; Aug. 9.
Rectifier, Metal vapor. E. Kern. 1,870,513; Aug. 9.
Reel: *See*—
Fishing reel.
Refrigerating apparatus. M. W. Kenney. 1,870,457; Aug. 9.
Refrigerating apparatus and control therefor. H. E. Willsie. 1,870,431; Aug. 9.
Refrigerating process and apparatus for cooling fat emulsions such as margarine and the like. W. G. Schroeder. 1,870,531; Aug. 9.
Refrigerating process and the apparatus applicable thereto. A. Seligmann. 1,870,265; Aug. 9.
Refrigeration apparatus. M. W. Kenney. 1,870 458; Aug. 9.
Refrigeration. System for controlling. R. Sause. 1,870,874; Aug. 9.
Regenerator. H. Fabrbach. 1,871,166; Aug. 9.
Register: *See*—
Autographic register. Credit register.
Regulator: *See*—
Feed water regulator. Temperature regulator.
Speed regulator.
Regulator. W. W. Carson, jr. 1,870,895; Aug. 9.
Regulator. W. R Paulsen. 1,870,264; Aug 9.
Relay. R. T. Pierce. 1,870,865; Aug. 9.
Relay, Double coil inductor. W. F. Eames. 1,870,840; Aug. 9.
Relay, Thermal. W. M. Ellingson. 1,871,262; Aug. 9.
Release for aerial flares. E. B. Jones. 1,871,375; Aug. 9.
Remote control lock. E. E. Heintz and T. P. Archer. 1,870,565; Aug. 9.
Resins and fatty acids in cellulose produced by means of sulphite digestion. Reducing the contents of. G. Haglund. 1,870,452; Aug. 9.
Retort. I. H. Derby. 1,870,901; Aug. 9.
Reverse brake. C. A. Matson. 1,870,686; Aug. 9.
Ring assembly and making same, Collector. G. R. Chervenka. 1,870,236; Aug. 9.
Ring spacer for matrix setting and type line casting machines. J. Dorneth. 1,870,717; Aug. 9.
Rivet drilling machine. E. B. Stimpson. 1,870,429; Aug. 9.
Rivet drilling machine, Tubular. E. B.. Stimpson. 1,870,391; Aug. 9.
Roaster. J. A. Flanzer. 1,870,619; Aug. 9.
Rod: *See*—
Adjustable tie rod. Fishing rod.
Roll, Cast iron. E. K. Lewis and E. Wenz. 1,870,580; Aug. 9.
Roll for interfolding paper. S. J. Campbell. 1,871,301; Aug. 9.
Roll-screen holding device. W. J. Baker and H. A. Konen. 1,871,141; Aug. 9.
Roller: *See*—
Composition roller.
Roller and making same, Printer's. B. F. Vogt. 1,870,661; Aug. 9.
Rolling mill. J. A. Helden. 1,870,509; Aug. 9.
Rolls, Apparatus for handling. E. E. Berry. 1,870,224; Aug. 9.
Roof, Car. C. D. Bonsall. 1,870,398; Aug. 9.
Roof construction. N. P. Pierose. 1,870,963; Aug. 9.
Roof for liquid storage tanks, Floating. J. H. Wiggins. 1,871,251; Aug. 9.
Roof for liquid storage tanks, Floating. J. H. Wiggins. 1,871,289; Aug. 9.
Roof for toy structures. A. P. Church. 1,870,491; Aug. 9.
Roofing bracket. W. W. Burk. 1,871,154; Aug. 9.
Roofing elements, Apparatus for assembling. D. A. Cumfer. 1,870,443; Aug. 9.
Roofing material. H. C. Macan. 1,871,068; Aug. 9.
Roofing, Reinforced. H. C. Macan. 1,871,067; Aug. 9.
Roofing strip. H. J. Levin and F. H. Neher. 1,870,414; Aug. 9.
Rotary jar. L. Wells. 1,870,540; Aug. 9.
Rotor for aircraft, Horizontally rotatable winged. G. D. Smith. 1,870,928; Aug. 9.
Rubber and product obtained thereby, Treating. S. M. Cadwell. 1,871,036; Aug. 9.
Rubber and product of same, Reclaiming vulcanized. A. E. Barnard. 1,870,886; Aug. 9.
Rubber and similar materials, Vulcanization of. S. M. Cadwell. 1,871,038; Aug. 9.
Rubber, Apparatus for treating. I. J. Turnbull. 1,871,348; Aug. 9.
Rubber articles, Manufacturing. D. F. Twiss, F. T. Purkis, and E. A. Murphy. 1,870,788; Aug. 9.
Rubber articles, Method and apparatus for manufacturing. W. A. Gibbons. 1,871,364; Aug. 9.
Rubber exercising strap. M. B. Reach. 1,870,750; Aug. 9.
Rubber goods, Vulcanizing, stripping, and finishing dipped. J. R. Gammeter. 1,870,775; Aug. 9.
Rubber treatment. W. P. ter Horst. 1,870,880; Aug. 9.
Rubber, Treatment of. S. M. Cadwell. 1,871,037; Aug. 9.
Rubber vulcanization. C. J. Randall. 1,871,083; Aug. 9.
Rubberized fabric. S. J. Williamson. 1,870,883; Aug. 9.
Rug and manufacturing the same. P. C. Waite. 1,871,249; Aug. 9.
Rule, Computation. M. O. Schur. 1,870,655; Aug. 9.
Safety device. F. Baumgartner. 1,870,217; Aug. 9.
Safety zone. H. A. Moler. 1,870,638; Aug. 9.
Sample taking device. F. G. Kunz. 1,871,328; Aug. 9.
Saw guide wheel, Band. A. G. Carter. 1,870,402; Aug. 9.
Saw planer and planer for printers' use, Combination. J. A. Richards. 1,870,466; Aug. 9.
Saw, Power meat. E. F. Gaines. 1,870,774; Aug. 9.
Scaffolding, Knockdown. J. F. Cavanagh. 1,871,041; Aug. 9.
Scale. W. S. Smith. 1,870,929; Aug. 9.
Scale, Weighing. J. W. Bryce. 1,870,233; Aug. 9.
Scoop, Wire. N. F. Murray. 1,870,376; Aug. 9.
Scraper, Road. F. R. Detrick. 1,870,673; Aug. 9.
Screen and awning, Combined. J. F. Baumann. 1,870,765; Aug. 9.
Screen and window construction for vehicles, Combination. C. W. Butterfass. 1,870,400; Aug. 9.
Screw machine, Multiple-spindle automatic. A. Gerstadt. 1,870,724; Aug. 9.
Scrubbing machine, Rotary. H. A. Brim. 1,870,232; Aug. 9.
Seal for dynamo-electric machines, Oil. K. Von Kando. 1,871,286; Aug. 9.
Selenium cell. H. J. Küchenmeister. 1,870,313; Aug. 9.
Self cooling, drilling, and coring bit. T. G. Taylor. 1,870,696; Aug. 9.
Separator: *See*—
Dust separator. Liquid separator.
Separator for the treatment of fluids or sludges, Centrifugal. G. Ter Meer. 1,871,284; Aug. 9.
Separators, Making. W. S. Gould and W. B. Osborne. 1,871,171; Aug. 9.
Sequence controlling device. W. Strobridge. 1,870,933; Aug. 9.
Sewing machine. A. B. Fowler. 1,870,844; Aug. 9.
Sewing set package. A. B. Collingbourne. Des. 87,509; Aug. 9.
Shade for fireplaces, Smoke. A. Lindberg. 1,870,916; Aug. 9.
Shade hanger and adjuster. J. L. Hyland. 1,870,730; Aug. 9.
Shaft machine attachment, Flexible. J. F. Keller. 1,870,736; Aug. 9.
Shake, Synchronous motor driven. L. Hornbostel. 1,870,252; Aug. 9.

Sheet feeding apparatus. E. S. Lincoln. 1,870,336–9; Aug. 9.
Sheet material, Pliable humidifying. R. H. McKee. 1,871,419; Aug. 9.
Sheets, Method and apparatus for feeding. E. S. Lincoln. 1,870,314; Aug. 9.
Sheets, Method and apparatus for making. R. J. Wean. 1,871,102; Aug. 9.
Shelf appliance, Refrigerator. L. S. and R. Shauer. 1,870,593; Aug. 9.
Shields of tractor supported cultivators, Raising and lowering. J. E. Hughes. 1,870,910; Aug. 9.
Shims, Manufacture of wooden. G. B. Shipley. 1,870,656; Aug. 9.
Shock absorber. C. C. Richard. 1,870,871; Aug. 9.
Shock absorbing mechanism. W. H. Miner. 1,871,420; Aug. 9.
Shock absorbing mechanism, Friction. S. B. Haseltine. 1,870,508; Aug. 9.
Shock absorbing mechanism, Friction. S. B. Haseltine. 1,871,368; Aug. 9.
Shock absorbing mechanism, Friction. W. E. Van Dorn. 1,870,537; Aug. 9.
Shock reducing device. E. E. Reynolds. 1,871,390; Aug. 9.
Shoe. L. M. Leverone. Des. 87,529–33; Aug. 9.
Shoe and manufacturing same. H. W. Cook. 1,871,211; Aug. 9.
Shoe brushing apparatus. J. E. S. Taylor. 1,870,849; Aug. 9.
Shoe, Golf. M. B. Reach. 1,870,751; Aug. 9.
Shoe stiffener. S. P. Lovell. 1,871,273; Aug. 9.
Shutter lifter, Framing light. W. P. Nelson. 1,870,463; Aug. 9.
Sign characters, Applying. G. H. Babcock. 1,870,221; Aug. 9.
Sizing of dyed yarn. H. Platt. 1,870,868; Aug. 9.
Skylight construction. L. Abt. 1,870,549; Aug. 9.
Sleeves, collars, or the like on cylindrical shafts, Device for securing. C. H. Smith. 1,871,092; Aug. 9.
Slurry filtration. E. J. Maust. 1,870,372; Aug. 9.
Smoking substance and making the same, Product relating to. J. L. Brown. 1,871,151; Aug. 9.
Snowplow. F. Saxon. 1,870,591; Aug. 9.
Soaking pit furnace. F. W. Manker. Re18,557; Aug. 9.
Socket. A. F. Roswurn. 1,870,589; Aug. 9.
Socket, Tube. M. Alden. 1,871,292; Aug. 9.
Solder joint structure. R. P. Jackson. 1,871,871; Aug. 9.
Solutions for dyeing purposes, Concentrated. H. Ellner. 1,870,498; Aug. 9.
Sound recording and records. E. H. Foley. 1,870,447; Aug. 9.
Sound recording device. E. H. Foley. 1,870,446; Aug. 9.
Sound recording method. G. W. Lang. 1,870,778; Aug. 9.
Sound reproducing apparatus. G. F. C. Bauer. 1,871,253; Aug. 9.
Sound reproducing system. R. A. Miller. 1,871,383; Aug. 9.
Spark retarder for automobiles, Automatic. G. F. Colley. 1,871,360; Aug. 9.
Spectacles. L. C. King. 1,871,183; Aug. 9.
Speed, Method of and apparatus for indicating. L. H. Brown. 1,871,404; Aug. 9.
Speed regulation of engines. L. L. Collins. 1,870,793; Aug. 9.
Speed regulation of engines, Apparatus for the. L. L. Collins. 1,870,794; Aug. 9.
Speed regulator, Motor. E. Nielsen. 1,871,274; Aug. 9.
Speedometer testing machine. H. C. Haeberle and C. T. Harrington. 1,871,053; Aug. 9.
Spindle, Yarn dyeing. M. Thus. 1,871,246; Aug. 9.
Spool or block, Collapsible. E. W. Duston. 1,870,243; Aug. 9.
Spoon, Trolling. H. F. Kboenle. 1,871,377; Aug. 9.
Spout and container, Pouring. H. Brucker. 1,870,489; Aug. 9.
Spray device. F. C. Nelson. 1,870,822; Aug. 9.
Spring actuating and control mechanism. C. C. Tomkinson. 1,871,016; Aug. 9.
Spring construction for furniture. J. R. Thomas. Re18,560; Aug. 9.
Spring for motor vehicles, Laminated. R. H. Smith. 1,870,787; Aug. 9.
Sprinkler. W. H. Coles and B. J. Nelson. 1,871,258; Aug. 9.
Sprocket and chain construction. E. P. Engstrom. 1,870,801; Aug. 9.
Stair, Movable. A. Cicilioni. 1,870,603; Aug. 9.
Stair structure. J. Amann. 1,870,598; Aug. 9.
Stand: *See*—
Lamp stand.
Stand and radiocabinet, Combination lamp. J. G. Telchman. Des. 87,554; Aug. 9.
Stand attachment for fountain pens. K. Platzer. 1,870,924; Aug. 9.
Starch and making same, Thin boiling. C. Bergquist. 1,871,027; Aug. 9.
Starting mechanism. D. P. Kearney. 1,870,366; Aug. 9.
Starting mechanism, Engine. D. P. Kearney. 1,870,367; Aug. 9.
Steam engine. H. J. Titus and J. S. Wallis. 1,870,303; Aug. 9.
Steam heating apparatus, Vacuum. I. C. Jennings. 1,870,734; Aug. 9.
Steam heating system. I. C. Jennings. 1,870,733; Aug. 9.
Steam trap. L. P. Strong. 1,870,660; Aug. 9.
Steering wheel brake. I. Nagamatsu. 1,870,525; Aug. 9.
Stereopticon changing device, Automatic. S. R. Vandewater. 1,870,301; Aug. 9.
Stool and stepladder, Combined. F. Cummiskey. 1,870,309; Aug. 9.
Stop, Door. D. Bianchi and H. De Vrieze. 1,871,142; Aug. 9.
Stopping device for cinematographic apparatus. A. N. Merle. 1,871,335; Aug. 9.
Stove, Combined heating and cooking. E. Bernstein. 1,870,600. Aug. 9.
Strand working machine. D. C. Robson. 1,871,391; Aug. 9.
Stranding and laying machine. J. H. Larmuth. 1,870,290; Aug. 9.
Strap: *See*—
Rubber exercising strap.
Stretcher and picture frame, Combined canvas. L. C. Clark. 1,870,492; Aug. 9.
Stringed instruments, Mechanism for playing. E. T. Zacharison. 1,871,021; Aug. 9.
Strip material, Apparatus for continuously weighing. J. E. Cady. 1,871,039; Aug. 9.
Strip, Process of and apparatus for continuously forming a bias corrugated. C. L. and F. H. Tumulty. 1,870,473; Aug. 9.
Stropper, Razor. F. H. Borm. 1,870,667; Aug. 9.
Structural unit. D. H. Bitney. 1,870,487; Aug. 9.
Stud compression connector, Rigid. J. E. Sumpter and A. Alsaker. 1,871,004; Aug. 9.
Styrols, Making. G. W. Jargstorff. 1,870,852; Aug. 9.
Styrols, Making. O. H. Smith. 1,870,876; Aug. 9.
Styrols, Production of. O. H. Smith and G. W. Jargstorff. 1,870,877; Aug. 9.
Styrols, Production of. O. H. Smith. 1,870,878; Aug. 9.
Submarine. A. R. Neff. 1,870,263; Aug. 9.
Submarine water-duct. P. Boucherot and G. Claude. 1,871,034; Aug. 9.
Subway announcing apparatus. J. D. Prescott. 1,870,294; Aug. 9.
Suction cup. J. C. Strickler. 1,870,694; Aug. 9.
Sulphur, Recovery of. R. F. Bacon and I. Bencowitz. 1,870,477–9; Aug. 9.
Superphosphate, Producing. M. D. Broadfield. 1,871,416; Aug. 9.
Support, Arch. H. A. Tallman. 1,870,758; Aug. 9.
Support, Cable. F. H. Miller and G. M. Barrow. 1,871,336; Aug. 9.
Support for articles of furniture, Work. R. F. Bullen. 1,870,553; Aug. 9.
Support structure. E. A. Leary. 1,870,015; Aug. 9.
Surfacing process and apparatus for same. M. A. Laabs. 1,871,123; Aug. 9.
Surveying instrument. W. L. Egy. 1,871,165; Aug. 9.
Suspension clamp. F. H. Miller. 1,870,821; Aug. 9.
Suspension clamp. N. A. Wahlberg. 1,871,350; Aug. 9.
Swing. N. I. Ramey. 1,870,748; Aug. 9.
Switch: *See*—
Conduit breaking switch. Thermostatic switch.
Electric switch.
Switch and the like, Mercury. S. Held. 1,871,177; Aug. 9.
Switches, Making mercury. J. M. Fagan. 1,871,311; Aug. 9.
Synchronization for facsimile transmission. E. S. Purrington. 1,870,745; Aug. 9.
Synchronous apparatus, Adjustable. W. A. Pringle. 1,871,425; Aug. 9.
Syringe. D. C. Beatty. 1,870,942; Aug. 9.
Table: *See*—
Extension table. X-ray table.
Glass cutting table.
Table. W. R. McGowen. Des. 87,536–7; Aug. 9.
Tabulating machine. J. W. Bryce. 1,870,234; Aug. 9.
Tap changing system. R. M. Field. 1,871,168; Aug. 9.
Tank: *See*—
Toy tank.
Tanks with compressed gas, Filling. C. Mott. 1,871,076; Aug. 9.
Telegraph exchange system, Printing. A. Jipp, E. Rossberg, F. Simon, A. Scheunert, and W. Skawran. 1,870,997; Aug. 9.
Telegraph printer. E. F. Watson. 1,870,392; Aug. 9.
Telegraph system. E. F. Watson. 1,870,352; Aug. 9.
Telephone dialing and recording apparatus, Automatic. N. Wise. 1,870,547; Aug. 9.
Telephone signaling system. L. G. Abraham and E. M. Staples. 1,870,390; Aug. 9.
Telephone system. J. A. Burgener. 1,871,300; Aug. 9.
Telephone system. J. E. Ostline. 1,871,079; Aug. 9.
Telephone system. A. Peissner. 1,871,080; Aug. 9.
Telephone system. R. F. Stehlik. 1,870,471; Aug. 9.
Telephone system, Automatic. J. E. Gardner. 1,870,621; Aug. 9.
Telephone system, Automatic. F. Gohorel. 1,870,448; Aug. 9.
Television apparatus. V. K. Zworykin. 1,870,702; Aug. 9.
Television system. J. B. Rathbun. 1,870,465; Aug. 9.
Temperature control in force feed lubricating oil systems. E. W. Evans. 1,870,675; Aug. 9.

Temperature indicator for rotating bodies. A. W. Keen. 1,871,325; Aug. 9.
Temperature regulator. G. Herbster. 1,871,267; Aug. 9.
Template. W. H. Hudson. 1,871,178; Aug. 9.
Temple member for spectacles. E. Reynolds. Des. 87,547; Aug. 9.
Terminal device. G. A. Burr. 1,870,833; Aug. 9.
Testing the effect of weather upon objects, Apparatus for. C. W. Jameson. 1,870,512; Aug. 9.
Tetranitrodiphenyl, Preparation of. E. H. Huntress. 1,870,627; Aug. 9.
Textile material containing cellulose derivatives and product thereof, Treating. C. Dreyfus. 1,871,047; Aug. 9.
Textile material, Delustering of. C. Dreyfus, G. W. Miles and H. Platt. 1,870,407; Aug. 9.
Textile materials, Coloring of. C. Dreyfus, G. W. Miles, and H. Platt. 1,870,408; Aug. 9.
Textile materials, Process and apparatus for manipulating. C. D. Walton and F. T. Small. 1,871,100; Aug. 9.
Textile products, Manufacture or treatment of. W. A. Dickie. 1,871,046; Aug. 9.
Textiles, Production of effects on. A. Schneevoigt and A. Nowak. 1,871,087; Aug. 9.
Thermostat. V. Bush. 1,870,285; Aug. 9.
Thermostatic control. C. F. Johnson. 1,870,253; Aug. 9.
Thermostatic switch. G. Herbster. 871,369; Aug. 9.
Thread clamp. J. Keys. 1,870,814; Aug. 9.
Throttle control, Electropneumatic. R. M. Dilworth. 1,871,103; Aug. 9.
Tie. L. E. Grossman. 1,871,173; Aug. 9.
Tie plate. W. S. Boyce. 1,870,440; Aug. 9.
Tie rack. H. H. A. Hulseberg. 1,870,729; Aug. 9.
Tile and soffit means for concrete floor construction. W. M. Goldsmith. 1,870,807; Aug. 9.
Tire casings and inner tubes, Apparatus for and method of vulcanizing. H. A. Denmire. 1,871,120; Aug. 9.
Tire pressure control means, Twin. J. O. Basta. 1,870,484; Aug. 9.
Tires, Method and apparatus for curing solid. J. R. Gammeter. 1,870,505; Aug. 9.
Toaster, Bread. T. C. Forbes. 1,870,562; Aug. 9.
Toaster, Bread. E. H. Smith. Re18,566; Aug. 9.
Tobacco pipe. E. H. Griswold. 1,871,365; Aug. 9.
Tool, Cutting or marking. R. C. Parks and M. C. Eldredge. 1,870,585; Aug. 9.
Tool, Forming. W. S. Hayford and C. R. Moore. 1,871,321; Aug. 9.
Tool, Globe valve reseating. A. D. Stout and H. F. McNally. 1,871,228; Aug. 9.
Tool, Reciprocating. A. Wyzenbeek. 1,871,020; Aug. 9.
Tool, Setting. L. A. Layne and A. L. Roco. 1,870,779; Aug. 9.
Tool, Wire joining. Q. W. Boesé. 1,871,029; Aug. 9.
Toy. A. Reibing. 1,870,752; Aug. 9.
Toy building unit. E. K. Wolfe. 1,870,978; Aug. 9.
Toy, Mechanical. P. Platakis. 1,870,586; Aug. 9.
Toy railway, Electric. F. Ottenstein. 1,870,526; Aug. 9.
Toy tank. S. I. Berger. 1,871,297; Aug. 9.
Track aligning and tie tamping device. P. Kushnier. 1,871,185; Aug. 9.
Tractor. L. F. Kennedy. 1,870,632; Aug. 9.
Tractor. F. O. Snow, jr. 1,870,969; Aug. 9.
Tractor attachment. A. J. Trigwell and C. H. Trubschenck. 1,871,097; Aug. 9.
Traffic signal. C. Alder, jr. Des. 87,501; Aug. 9.
Traffic supervisor. R. J. Wensley and V. K. Zworykin. Re18,567; Aug. 9.
Trailer. W. T. Witt. 1,870,939; Aug. 9.
Transmission device, Speed reducing. P. Scheuer. 1,870,875; Aug. 9.
Transmission, Electro optical. F. Gray. 1,871,266; Aug. 9.
Transmission line device. F. H. Miller. 1,870,781; Aug. 9.
Transmission line stability system. B. V. Hoard. 1,870,810; Aug. 9.
Transmission mechanism, Hydraulic. F. H. Shepard, jr. 1,870,824; Aug. 9.
Transmission of messages, Electrical. B. E. Eldred. 1,870,989; Aug. 9.
Trap: *See*—
Animal trap. Steam trap.
Insect trap.
Trap for ice fishing. F. Minutilli. 1,870,782; Aug. 9.
Traveling case. J. H. Plotkin. 1,871,197; Aug. 9.
Tray. S. I. Picker. Des. 87,540–1; Aug. 9.
Trigger mechanism, Single. J. Browning. 1,870,552; Aug. 9.
Truck. F. G. Koehler. 1,870,633; Aug. 9.
Truck body, Refrigerator. E. J. Lockwood. 1,870,685; Aug. 9.
Truck body, Shock insulated. W. G. Mayer. 1,870,418; Aug. 9.
Truck, Industrial. E. H. Remde. 1,870,689–90; Aug. 9.
Truss. P. W. Davis and J. M. Booth. 1,870,356; Aug. 9.
Tube: *See*—
Dispensing tube. Photo electric tube.
Glow relay tube. Vacuum electric tube.
Tube and bulb device. R. P. Milburn. 1,870,780; Aug. 9.
Tube and making same, Pneumatic. A. G. Fitz Gerald. 1,870,561; Aug. 9.
Tube and tire mold, Inner. A. R. Krause and R. W. Hutchens. 1,870,255; Aug. 9.
Tube finishing machines, Apparatus for serving. O. M. Mowat. 1,871,077; Aug. 9.
Tube for boilers, heat exchangers, and the like. R. S. Brown. 1,870,669–70; Aug. 9.
Tube for water tube boilers, Recirculating. W. A. Jones. 1,870,812; Aug. 9.
Tubes, System of space discharge. L. M. Clement. 1,871,304; Aug. 9.
Tuning device. M. R. Del Sonno. 1,870,769; Aug. 9.
Tuning mechanism for radio reception, etc. M. Alden. 1,871,293; Aug. 9.
Tunnel wall block. A. W. Warner and R. F. Ballard. 1,870,539; Aug. 9.
Tuyère. J. C. Hopkins. 1,870,511; Aug. 9.
Typographical slug casting machine. G. E. Mariatt. 1,871,330; Aug. 9.
Undergarment. G. E. Rutledge. 1,871,086; Aug. 9.
Unloader for compressors, Clearance. R. C. McAllister. 1,870,956; Aug. 9.
Unloader mechanism for elevators, Selective. S. Olson. 1,870,583; Aug. 9.
Upsetting device for barrels and like articles. K. F. Snow. 1,871,395; Aug. 9.
Vacuum cleaner. F. Bernhard. 1,870,887; Aug. 9.
Vacuum electric tube. E. A. Ollard and E. Y. Robinson. 1,871,275; Aug. 9.
Valve. J. Miller. 1,871,072; Aug. 9.
Valve, Automatic discharge. D. N. Crosthwait, jr., and H. Brennan. 1,871,044; Aug. 9.
Valve, Automatic gas. A. J. Milligan. 1,871,191; Aug. 9.
Valve device, Control. E. K. Lynn. 1,870,856; Aug. 9.
Valve especially for pumps and compressors. K. Schoene. 1,870,927; Aug. 9.
Valve, Fluid compressor controlling. E. E. Hewitt. 1,870,848; Aug. 9.
Valve for air brakes. C. A. Campbell. 1,871,109; Aug. 9.
Valve for tire inflators. J. F. Key. 1,870,574; Aug. 9.
Valve, Fuel. G. Pielstick. 1,871,340; Aug. 9.
Valve handle, Lavatory and shower. J. Duncan. Des. 87,511; Aug. 9.
Valve mechanism. C. H. Hook and N. L. Mercur. 1,871,057; Aug. 9.
Valve mechanism, Electroresponsive. N. L. Mercur. 1,871,071; Aug. 9.
Valve, Radiator. C. G. Thibodeau. 1,870,300; Aug. 9.
Valve, Screw plug slide. J. P. Curd. 1,870,557; Aug. 9.
Valve shut-off, Automatic. J. Kuen. 1,871,327; Aug. 9.
Valve, Steam. H. Miller. 1,870,293; Aug. 9.
Vanity case. E. N. Cutler. 1,870,946; Aug. 9.
Vault, Burial. J. M. Seely. Des. 87,552; Aug. 9.
Vehicle and removable body therefor. J. Kuchar. 1,870,573; Aug. 9.
Vehicle body, Apparatus for lifting a. B. F. Fitch. 1,870,991; Aug. 9.
Vehicle, Electric street. L. E. W. Montrose-Oster. 1,871,074; Aug. 9.
Vehicle, Motor. J. Hammerl. 1,870,250; Aug. 9.
Vehicle, Multiple wheel road. R. B. Pageol. 1,871,432; Aug. 9.
Vehicle suspension means. H. W. Bell. 1,871,025; Aug. 9.
Vehicle testing apparatus, Motor. C. A. Domzalski. 1,870,716; Aug. 9.
Vehicle wheel. W. N. Booth. 1,871,144–5; Aug. 9.
Vending machine. C. W. Klostermann. 1,871,000; Aug. 9.
Vending machine, Selective. F. L. Mills. 1,870,637; Aug. 9.
Veneer press. E. G. Lacey. 1,870,517; Aug. 9.
Ventilating means. H. C. Hueglin. 1,870,570; Aug. 9.
Ventilation regulating apparatus. A. L. Freuler. 1,870,992; Aug. 9.
Ventilator. C. R. C. Borden. 1,871,298; Aug. 9.
Ventilator. S. M. Dickson. 1,871,161; Aug. 9.
Ventilator. C. H. Farley. 1,870,720; Aug. 9.
Violin. E. L. Goss and H. Mueller. 1,870,623; Aug. 9.
Viscose, Making. R. Thurm. 1,871,245; Aug. 9.
Wafers and the like, Apparatus for making or baking. G. R. Baker and J. C. Paterson. 1,870,480; Aug. 9.
Wage paying machine. C. L. Burdick. 1,870,554; Aug. 9.
Wall construction. F. M. Sawyer. 1,870,926; Aug. 9.
Wall construction, Insulated. E. W. Davis. 1,870,838; Aug. 9.
Walls, piers, etc., Method and apparatus for building retaining-. W. Griesbach. 1,870,248; Aug. 9.
Washing machine. C. E. Reddig. 1,870,785; Aug. 9.
Watchcase heater. H. A. Denmire. 1,871,118; Aug. 9.
Watchcase heater. H. A. Denmire. 1,871,160; Aug. 9.
Water produced in pulp and paper making, Treatment of white. A. M. Thomsen. 1,870,881; Aug. 9.
Water, Treating. R. B. Derr. 1,870,404; Aug. 9.
Wax containing composition. J. D. Lindsay. 1,871,187; Aug. 9.
Wax from oils, Recovery of. G. D. Graves. 1,871,172; Aug. 9.
Web feeding and slitting mechanism. H. A. W. Wood. 1,870,545; Aug. 9.
Webs from fibrous materials, Process and apparatus for preparing. E. F. Sundström and K. E. Stéen. 1,870,971; Aug. 9.
Weeder, Rod. C. E. Moody. 1,871,192; Aug. 9.
Weighing and transporting device, Cereal. A. L. Domaica. 1,870,240; Aug. 9.
Weighing machine. C. Peruzzini. 1,870,379; Aug. 9.

Welding and soldering appliance. W. H. Righter. 1,871,009; Aug. 9.
Welding machine, Arc. G. H. Koch. 1,871,326; Aug. 9.
Well testing device. G. V. Lewis. 1,870,634; Aug. 9.
Wetting and penetrating agents and preparing the same. C. O. Henke. 1,870,251; Aug. 9.
Wheel: See—
Buffing wheel.
Grinding wheel.
Non-metallic wheel.
Saw-guide wheel.
Vehicle wheel.
Wheel construction, Fifth. A. C. Furrman. 1,870,502; Aug. 9.
Wheel elevating device, Automatic collapsing. M. C. Pierce. 1,871,129; Aug. 9.
Wheel puller. A. L. Cornwell. Re18,556; Aug. 9.
Wheels, Making. H. Z. Cobb. 1,870,986; Aug. 9.
Window construction. E. J. Liebetrau. 1,870,335; Aug. 9.
Window lock, Ventilating. D. Jokubaitis. 1,870,332; Aug. 9.
Windshield heater. A. R. Greene. 1,870,726; Aug. 9.
Wing. E. G. Kontos. 1,870,514; Aug. 9.
Wiper, Oil stick. F. M. Bouchard. 1,871,208; Aug. 9.
Wiper, Windshield. D. D. Brush. 1,871,152; Aug. 9.
Wiper, Windshield. L. Lunsford. 1,870,369; Aug. 9.
Wire insulation. R. R. Evans. 1,870,090; Aug. 9.
Work handling mechanism for machine tools. E. R. Smith and A. Shinkez. Re18,559; Aug. 9.
Worktable and mount therefor. D. C. Klausmeyer. 1,870,413; Aug. 9.
Worms or cylindrical cams, Producing. J. G. Douglas. 1,870,325; Aug. 9.
Wrapping machine. R. H. Oakes and J. R. Tindal. 1,870,345; Aug. 9.
Wrench. M. W. Emmett. 1,870,326; Aug. 9.
Wrench. A. de Schebeko. 1,870,612; Aug. 9.
X-ray apparatus. M. Morrison. 1,870,959; Aug. 9.
X-ray system. H. F. Waite. 1,871,248; Aug. 9.
X-ray table, Cystoscopic. A. Mutscheller and C. J. Larsen. 1,871,005; Aug. 9.

CLASSIFICATION OF PATENTS

ISSUED AUGUST 9, 1932

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5— 25: R. 18,560
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45: 1,871,120
47.5: 1,870,245
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208: 1,870,219
259: 1,870,342
233— 46: 1,870,608
234— 1: 1,871,380
1.5: 1,870,796
1,870,975
5.5: 1,871,361
1,871,379
235— 7: 1,871,006
61: 1,870,655
92: 1,870,234
1,870,705
145: 1,870,699
236— 9: 1,871,093
26: 1,870,931
1,870,984
45: 1,870,505
62: 1,870,300
99: 1,870,895
101: 1,870,253
237— 12.3: 1,870,374
67: 1,870,733
238— 10: 1,870,526
298: 1,870,440
331: 1,870,631
240— 10.1: 1,871,073
10.66: 1,870,829
10.69: 1,871,389
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41.1: 1,870,671
41.3: 1,870,247
44.2: 1,870,609
53: 1,870,687
63: 1,871,023
78: 1,870,618
1,870,642
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242— 55.3: 1,871,179
58: 1,870,529
66: 1,870,224
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72: 1,870,243
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244— 1: 1,870,757
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19: 1,870,928
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16: 1,871,001
30: 1,870,310
31: 1,870,651
1,870,821
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1,871,350
33: 1,870,510
39: 1,871,113
47: 1,870,766
250— 8: 1,871,304
14: 1,871,048
17: 1,870,678
1,870,795
19: 1,870,832
20: 1,871,405
27: 1,870,960
1,871,409
27.5: 1,870,280
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1,870,951
1,870,968
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250— 27.5: 1,871,343
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265— 1: 1,870,344
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27: 1,871,039
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39: 1,871,301
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273— 32: 1,870,536
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33.4: 1,871,180
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140: 1,870,534

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Abell, Wallace T., doing business as Abell Laboratories, Alhambra, Calif. Surgical appliances for the treatment of prostate disorders. Serial No. 328,052; Aug. 16. Class 44.

Advance Paint Company, Indianapolis, Ind. Anti-knock compounds. Serial No. 327,963; Aug. 16. Class 6.

Alymp-Ol Soap Works, Taunton, Mass. Diamond cleaner, gold and silver polish, hand soap, etc. Serial No. 328,318; Aug. 16. Class 4.

American Oil Company, The, Baltimore, Md. Insecticide, disinfectant, and deodorant. Serial No. 327,966; Aug. 16. Class 6.

American Rotary Tools Company, Inc., New York, N. Y. Rotary drills, cutters, files, etc. Serial No. 324,979; Aug. 16. Class 23.

American Seed Company, Detroit, Mich. Vegetable and flower seeds. Serial No. 328,679; Aug. 16. Class 1.

American Textiles, Inc., Bay City, Mich. Underwear. Serial No. 321,088; Aug. 16. Class 39.

American Wringer Company, Inc., Woonsocket, R. I. Printing plates. Serial No. 327,815; Aug. 16. Class 50.

Amico Laboratories, Inc., Chicago, Ill. Sulpho ichthyolate of ammonium and medicinal compounds containing the same. Serial No. 326,884; Aug. 16. Class 6.

An-Ti-Po Laboratories, The. (See Griffith, Harry W.)

Artcraft Silk Hosiery Mills, Inc., Philadelphia, Pa. Hosiery. Serial No. 328,773; Aug. 16. Class 39.

Associated Attleboro Mfrs., Inc., Attleboro, Mass. Small parts for spinning and twisting machines. Serial No. 328,113; Aug. 16. Class 23.

Athleve Company, The. (See Cohn, Aaron B.)

Avery, Winnie, doing business as Madam W. Avery Company, Dallas, Tex. Hair dressing pomade. Serial No. 321,931; Aug. 16. Class 6.

Bander, Abe J., doing business as Rednab Co., Dallas, Tex. Preparation for constipation, sluggish liver, etc. Serial No. 328,573; Aug. 16. Class 6.

Bard & Margolies, Inc., Brooklyn, N. Y. Candy. Serial No. 328,654; Aug. 16. Class 46.

Bell, Louise, Sacramento, Calif. Preparation for the treatment of hemorrhoids. Serial No. 326,442; Aug. 16. Class 6.

Bianchini, Férier, Lyon, France. Piece goods. Serial Nos. 328,656–7; Aug. 16. Class 42.

Bloom-Rosenblum-Klein Company, The, doing business as The Golden Treat Malt Extract Company, Youngstown, Ohio. Malt syrup. Serial No. 317,702; Aug. 16. Class 46.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 309,671; Aug. 16. Class 42.

Booth, Walter, Shoe Co., Milwaukee, Wis. Boots, shoes, and oxfords. Serial No. 327,576; Aug. 16. Class 39.

Borden Quality, Inc., New York, N. Y. Cheese, butter, dressed poultry, and eggs. Serial No. 317,500; Aug. 16. Class 46.

Borden Quality, Inc., New York, N. Y. Dressed poultry and eggs. Serial No. 317,969; Aug. 16. Class 46.

Boston Leather Specialties, Inc., Everett, Mass. Baby hammocks, hammock stands, suspended seats, etc. Serial No. 328,593; Aug. 16. Class 32.

Bragg-Kliesrath Corporation, South Bend, Ind. Automatic clutch operators. Serial No. 319,606; Aug. 16. Class 23.

Brown, F. C., & Company, Chicago, Ill. Gelatine preparation. Serial No. 327,866; Aug. 16. Class 46.

Burton-Dixie Corporation, Chicago, Ill. Pillows. Serial No. 328,520; Aug. 16. Class 32.

Cabot, Samuel, Incorporated, Boston, Mass. Fire proof insulating and sound deadening materials. Serial No. 328,158; Aug. 16. Class 12.

Carder-Martin, New Orleans, La. Carved wood plaques and silhouettes. Serial No. 311,820; Aug. 16. Class 50.

Cast-R-Ette Mfg. Co. (See Duncan, Thomas P., jr.)

Champion Coated Paper Company, The, Hamilton, Ohio. Mineral coated paper. Serial No. 316,192; Aug. 16. Class 37.

Chemical Corporation of America, Minneapolis, Minn. Sweeping compound. Serial No. 328,548; Aug. 16. Class 4.

Cohn, Aaron B., doing business as The Athleve Company, Toledo, Ohio. Powder for treatment of epidermophyton, etc. Serial No. 328,050; Aug. 16. Class 6.

Condon, Peggy, doing business as Naturalway Labs, Yonkers, N. Y. Manicuring preparations. Serial No. 326,890; Aug. 16. Class 6.

Consolidated Products Co. (See Friscia, Americo B.)

Craddock-Terry Co., Lynchburg, Va. Shoes. Serial No. 328,161; Aug. 16. Class 39.

Debenedetti, J. L., San Francisco, Calif. Fresh vegetables. Serial No. 327,134; Aug. 16. Class 46.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Spices, dietetical patent foods, malt, etc. Serial No. 318,216; Aug. 16. Class 46.

Devo, William P., New York, N. Y. Horseradish. Serial No. 328,264; Aug. 16. Class 46.

Diacin Chemical Company. (See Stern, Harold H.)

Dick, A. B., Company, Chicago, Ill. Stencils and stencil sheets. Serial No. 326,130; Aug. 16. Class 37.

Di Fiore, Joseph E., doing business as Jedco Products Co., Brooklyn, N. Y. Cement and plaster mixtures. Serial No. 327,186; Aug. 16. Class 12.

Dolge, C. B., Company, The, Westport, Conn. Preparation for exterminating moles. Serial No. 327,391; Aug. 16. Class 6.

Du Bois, H. A., & Sons, Inc., Cobden, Ill. Insecticides and fungicides. Serial No. 328,728; Aug. 16. Class 6.

Duncan, Thomas P., jr., doing business as Cast-R-Ette Mfg. Co., Newport News, Va. Furniture casters. Serial No. 328,418; Aug. 16. Class 13.

Du Pont, E. I., de Nemours and Company, Wilmington, Del. Smokeless shotgun powder. Serial No. 328,482; Aug. 16. Class 9.

Eagle Pencil Company, New York, N. Y. Lead pencils. Serial No. 328,552; Aug. 16. Class 37.

Eaton, George S., New York, N. Y. Mothproofing compound. Serial No. 327,868; Aug. 16. Class 6.

Etablissements Rene Besiers, Douarnenez, France. Canned fish. Serial No. 324,272; Aug. 16. Class 46.

Exhibit Supply Company, The. (See Meyer, John F.)

Ferdinand, Lorrin W., Waltham, Mass. Marine glues. Serial No. 328,553; Aug. 16. Class 5.

Fireside Games, Chicago, Ill. Game. Serial No. 328,060; Aug. 16. Class 22.

Flexible Steel Lacing Company, Chicago, Ill. Wrenches, boring bits, and punches. Serial No. 328,524; Aug. 16. Class 23.

Flis Laboratories. (See Lantieri, A. Gabriel.)

Ford, P. A., San Francisco, Calif. Canned fish, vegetables, fruits, etc. Serial No. 328,578; Aug. 16. Class 46.

Four Square Products, Inc., Dover, Del. Aspirin, cascara, and soda mint tablets, zinc ointment, etc. Serial No. 327,431; Aug. 16. Class 6.

Friscia, Americo B., doing business as Consolidated Products Co., New York, N. Y. Flavoring for maltless beverages. Serial No. 327,311; Aug. 16. Class 45.

Gale Shoe Manufacturing Co., Boston, Mass., and Manchester, N. H. Shoes. Serial No. 326,421; Aug. 16. Class 39.

Gentry, Elsie R., Newark, N. J. Maltless beverages, sirups, and extracts. Serial No. 328,638; Aug. 16. Class 45.

Gibson Electric Refrigerator Corporation, Greenville, Mich. Refrigerating apparatus. Serial No. 323,046; Aug. 16. Class 31.

Gilbert Paper Co., Menasha, Wis. Safety paper. Serial No. 326,086; Aug. 16. Class 37.

Glatzer, Gustave, New York, N. Y. Manicure kits, implements, sets, etc. Serial No. 328,744; Aug. 16. Class 44.

Golden Treat Malt Extract Company, The. (See Bloom-Rosenblum-Klein Company.)

Goodyear Rubber Company, San Francisco, Calif. High pressure rubber hose. Serial No. 326,610; Aug. 16. Class 35.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Hub assemblies. Serial No. 328,423; Aug. 16. Class 19.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Hose. Serial No. 328,485; Aug. 16. Class 35.

Goodyear Tire & Rubber Company, The, Akron, Ohio. Automobile top dressing. Serial No. 328,605; Aug. 16. Class 4.

Graton & Knight Company, Worcester, Mass. Leather belting. Serial No. 328,527; Aug. 16. Class 35.

Griffith, Harry W., doing business as The An-Ti-Po Laboratories, Edinburg, Tex. Medicinal preparation. Serial No. 328,486; Aug. 16. Class 6.

Guerlain Perfumery Corporation of Delaware, Wilmington, Del., and New York, N. Y. Perfumes. Serial No. 327,978; Aug. 16. Class 6.

High Chemical Co., Philadelphia, Pa. Solution of metallic citrates. Serial No. 310,126; Aug. 16. Class 6.

Hildreth, H. L., Co., Boston, Mass. Confectionery. Serial No. 328,411; Aug. 16. Class 46.

Hildreth, H. L., Co., Boston, Mass. Confectionery. Serial No. 328,528; Aug. 16. Class 46.

Hinkle, Mrs. Z. B., doing business as Pep Laboratories, Atlanta, Ga. Talcum powder, hair dressing, skin cream, rouge, lipstick, etc. Serial No. 326,052; Aug. 16. Class 6.

Hollingsworth & Whitney Company, Boston, Mass. Wrapping paper. Serial No. 328,610; Aug. 16. Class 37.

Horn, A. C., Company, Long Island City, N. Y. Waterproofing compound. Serial No. 321,567; Aug. 16. Class 12.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Independent Grocers' Alliance Distributing Co., Chicago, Ill. Canned asparagus, beans, chile, soup, etc. Serial No. 315,838; Aug. 16. Class 46.
Jedco Products Co. (See Di Fiore, Joseph E.)
Johansen Bros. Shoe Company, St. Louis, Mo. Shoes. Serial No. 327,876; Aug. 16. Class 39.
Kistner, F. N., Co., Chicago, Ill. Chemically treated polishing cloth. Serial No. 328,007; Aug. 16. Class 4.
Kroger Grocery & Baking Company, The, doing business as Wesco Foods Company, Cincinnati, Ohio. Soap flakes. Serial No. 328,220; Aug. 16. Class 4.
La Compagnie Pharmaceutique Desbergers, Montreal, Quebec, Canada. Liver powder. Serial No. 325,004; Aug. 16. Class 6.
Lantieri, A. Gabriel, doing business as Flis Laboratories, Chicago, Ill. Permanent waving solutions. Serial No. 327,941; Aug. 16. Class 6.
La Rosa, Jos., & Sons, Modesto, Calif. Fresh grapes. Serial No. 322,320; Aug. 16. Class 46.
Law, Charles A., Los Angeles, Calif. Blank forms. Serial No. 328,177; Aug. 16. Class 37.
Lederer, Henry, & Co., Chicago, Ill. Non-electric signs. Serial No. 327,021; Aug. 16. Class 50.
Lever Brothers Company, Cambridge, Mass. Vegetable shortening. Serial No. 328,064; Aug. 16. Class 46.
Lux Clock Mfg. Company, Inc., The, Waterbury, Conn. Combined clocks and temperature indicating devices. Serial No. 319,492; Aug. 16. Class 27.
Markell, Maurice J., Brooklyn, N. Y. Shoes. Serial No. 327,732; Aug. 16. Class 39.
Maxim Silencer Company, The, Hartford, Conn. Silencers for quieting gas flow noises at exhausts, etc. Serial No. 321,774; Aug. 16. Class 23.
McGowan, Frank J., New York, N. Y. Wool, worsteds, cheviot, and cashmere suitings and coatings. Serial No. 327,959; Aug. 16. Class 42.
McLaren, L. M., Yuma, Ariz. Fresh vegetables. Serial No. 327,159; Aug. 16. Class 46.
Merrimac Paper Company, Lawrence, Mass. Index and memorandum cards, record sheets, etc. Serial No. 327,559; Aug. 16. Class 37.
Meyer, John F., doing business as The Exhibit Supply Company, Chicago, Ill. Coin controlled amusement machines. Serial No. 323,416; Aug. 16. Class 22.
Michaels Bros., Brooklyn, N. Y. Refrigerators. Serial No. 328,694; Aug. 16. Class 31.
Mission Dry Corporation, Ltd., Los Angeles, Calif. Maltless beverages, syrups, extracts, etc. Serial No. 323,142; Aug. 16. Class 45.
Monagas, John A., doing business as Monagas Trading Company, New York, N. Y. Paper, envelopes, pens, etc. Serial No. 327,403; Aug. 16. Class 37.
Moore, Levi G., Lancaster, Pa. Milk, butter, eggs, and cottage cheese. Serial No. 326,958; Aug. 16. Class 46.
Morgan Sabalol Products, Inc., New York, N. Y. Nose and throat medication. Serial No. 328,223; Aug. 16. Class 6.
Morrell, John, & Co., Ottumwa, Iowa. Coffee. Serial No. 328,277; Aug. 16. Class 46.
National Broadcasting Company, Inc., New York, N. Y. Motion picture film. Serial Nos. 322,857–8; Aug. 16. Class 26.
Naturalway Labs. (See Condon, Peggy.)
Neiman-Marcus Co., Dallas, Tex. Cream for reducing the body. Serial No. 327,596; Aug. 16. Class 6.
Nobirca Beauty Preparations, Inc., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. Serial No. 328,644; Aug. 16. Class 6.
Noonan, James L., Cleveland, Ohio. Breath deodorizing tablets. Serial No. 327,522; Aug. 16. Class 6.
Odence, Charles, Company, Boston, Mass. Cigars. Serial No. 326,720; Aug. 16. Class 17.
Pabst Corporation, Milwaukee, Wis. Wort. Serial No. 328,071; Aug. 16. Class 48.
Papyrus Company, The, Kenilworth, N. J. Wrapping paper, tissue, etc. Serial No. 316,566; Aug. 16. Class 37.
Patricia Petticoat Co. Inc., The, New York, N. Y. Underwear. Serial No. 328,504; Aug. 16. Class 39.
Pep Laboratories. (See Hinkle, Mrs. Z. B.)
Pond's Extract Company, New York, N. Y. Paper handkerchiefs. Serial No. 328,583; Aug. 16. Class 37.
Raymond, J. Harvey, San Francisco, Calif. Insecticide and deodorizer. Serial No. 325,112; Aug. 16. Class 6.
Rednab Co. (See Bander, Abe J.)
Regina Art Embroidery Company, Lynn, Mass. Furniture scarfs, buffet sets, luncheon cloths, etc. Serial No. 326,508; Aug. 16. Class 42.
Reynolds-Schier Co., Inc., The, Chicago, Ill. Hectograph machines. Serial No. 327,233; Aug. 16. Class 37.
Riess Manufacturing Company, Dayton, Ohio. Testing apparatus, gauges, and equipment. Serial No. 328,507; Aug. 16. Class 26.
Roberts, Powell T., doing business as Roberts Manufacturing Co., Alexandria, Va. Carbonated maltless beverages. Serial No. 327,478; Aug. 16. Class 45.
Rothkopf, S., & Sons, New York, N. Y. Hosiery. Serial No. 328,740; Aug. 16. Class 39.
Scharner, Julius F., Jersey City, N. J. Parlor game. Serial No. 327,987; Aug. 16. Class 22.
Schlesinger, B. F., & Sons, Inc., Baltimore, Md., San Francisco and Oakland, Calif., Portland, Oreg., and Tacoma, Wash. Shoes. Serial No. 328,186; Aug. 16. Class 39.
Sheffield Steel Corporation, Kansas City, Mo. Iron and steel sheets, barb wire, merchant steel bars, etc. Serial No. 324,724; Aug. 16. Class 14.
Shunk, L. E., Latex Products, Inc., Akron, Ohio. Pessaries. Serial No. 327,569; Aug. 16. Class 44.
Sky Specialties Corporation, Detroit, Mich. Air compression starters and parts thereof. Serial No. 299,523; Aug. 16. Class 23.
Snuggle Rug Co., Goshen, Ind. Infants' garments. Serial No. 328,312; Aug. 16. Class 39.
Société Anonyme des Etablissements André Gillier, Troyes, France. Clothing. Serial No. 323,548; Aug. 16. Class 39.
Société Anonyme: Louiseboulanger, Paris, France. Wearing apparel. Serial No. 320,516; Aug. 16. Class 39.
Southland Chemical Co. (See Tippey, Jesse M.)
Spinella Brothers Bakery, Waterbury, Conn. Bread. Serial No. 328,189; Aug. 16. Class 46.
Squibb, E. R., & Sons, New York, N. Y. Germicidal preparations. Serial No. 327,856; Aug. 16. Class 6.
Squibb, E. R., & Sons, New York, N. Y. Laxatives. Serial No. 328,741; Aug. 16. Class 6.
Stamm, Benjamin I., doing business as Trans-Ray-Flex Glass Co., St. Paul, Minn. Mechanical advertising signs and the like. Serial No. 327,857; Aug. 16. Class 50.
Standard Brands Incorporated, New York, N. Y. Coffee. Serial No. 302,261; Aug. 16. Class 46.
Stern, Harold H., doing business as Diacin Chemical Company, Detroit, Mich. Pharmaceutical preparation. Serial No. 325,121; Aug. 16. Class 6.
Sunbeam Products Company. (See Toledo Shoe Finding Company.)
Takahashi, Kotaro, Tokyo Fu, Japan. Maltless syrup. Serial No. 320,379; Aug. 16. Class 45.
Tippey, Jesse M., doing business as Southland Chemical Co., St. Petersburg, Fla. Insecticide. Serial No. 328,255; Aug. 16. Class 6.
Toledo Shoe Finding Company, doing business as Sunbeam Products Company, Toledo, Ohio. Dyes, dressings, polishes, etc. Serial No. 327,545; Aug. 16. Class 4.
Trans-Ray-Flex Glass Co. (See Stamm, Benjamin I.)
Trees Candy Company. (See Zimetbaum, Samuel.)
Troy Blanket Mills, Troy, N. H. Piece goods and blankets. Serial No. 328,341; Aug. 16. Class 42.
Tuttman, Louis, New York, N. Y. Dresses. Serial No. 327,533; Aug. 16. Class 39.
United States Rubber Company, New York, N. Y. Belts. Serial No. 316,458; Aug. 16. Class 35.
United States Rubber Company, New York, N. Y. Golf balls. Serial No. 327,895; Aug. 16. Class 22.
Vanity Fair Silk Mills, Reading, Pa. Knitted underwear and hosiery. Serial No. 327,859; Aug. 16. Class 39.
Varnol Chemical Corporation, Long Island City, N. Y. Synthetic resins. Serial No. 328,674; Aug. 16. Class 6.
Viavi Company, The, San Francisco, Calif. Capsules. Serial No. 322,339; Aug. 16. Class 6.
Viavi Company, The, San Francisco, Calif. Cerate. Serial No. 322,340; Aug. 16. Class 6.
Viavi Company, The, San Francisco, Calif. Medicine. Serial No. 322,341; Aug. 16. Class 6.
Viavi Company, The, San Francisco, Calif. Rectal suppositories. Serial No. 322,342; Aug. 16. Class 6.
Viuda De Fernandez, Rosaura L., Jalapa, Vera Cruz, Mexico. Coffee. Serial No. 316,769; Aug. 16. Class 46.
Wag Foods, Inc., Syracuse, N. Y. Wheat flour, canned soup, evaporated milk, etc. Serial No. 327,535; Aug. 16. Class 46.
Warren, Northam, Corporation, New York, N. Y. Nail polish. Serial No. 327,066; Aug. 16. Class 6.
Warwick Chemical Co., West Warwick, R. I. Chemical products. Serial No. 327,896; Aug. 16. Class 6.
Washington, G., Coffee Refining Company, Morris Plains, N. J. Coffee. Serial No. 326,120; Aug. 16. Class 46.
Webb, C. B., Company, New York, N. Y. Play balls. Serial No. 324,689; Aug. 16. Class 22.
Welch Grape Juice Company, The, Westfield, N. Y. Grape juice. Serial No. 328,512; Aug. 16. Class 45.
Wesco Foods Company. (See Kroger Grocery & Baking Company.)
West Disinfecting Company, Long Island City, N. Y. Chemical preparation used to prevent rust and corrosion. Serial No. 328,232; Aug. 16. Class 6.
Whiterock Quarries, Inc., Bellefonte, Pa. Agricultural lime. Serial No. 326,036; Aug. 16. Class 10.
Wilson, Andrew, Inc., Springfield, N. J. Fungicides. Serial No. 328,513; Aug. 16. Class 6.
Wohl Shoe Company, St. Louis, Mo. Shoes, boots, overshoes. Serial No. 327,079; Aug. 16. Class 39.
Yardley & Co., Limited, London, England. Toilet soap. Serial No. 328,380; Aug. 16. Class 4.
Zimetbaum, Samuel, doing business as Trees Candy Company, Newark, N. J. Chocolate syrup. Serial No. 324,729; Aug. 16. Class 46.

LIST OF REGISTRANTS OF TRADE-MARKS

A. & J. Manufacturing Co., Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill. Spoons, cake turners, cake whips, etc. 296,711; Aug. 16; Serial No. 303,085; published Sept. 1, 1931. Class 23.
A/S Sardinfabrikken Norrig to A/S Hermetikfabriken Norrig, Stravanger, Norway, successor. Kippered herrings, herrings, and smoked sardines. 87,304; renewed July 9, 1932.
Aerofin Corporation. (See Carrier Manufacturing Corporation, assignor.)
Aiken-Lambert Company, New York, N. Y. Fountain pens and parts thereof. 89,597; renewed Dec. 31, 1932.
Air-way Electric Appliance Corporation, Toledo, Ohio. Blower and radiator unit heaters, steam and hot water heating elements, etc. 296,724; Aug. 16; Serial No. 300,319; published May 31, 1932. Class 34.
Aktiebolaget Södertelje Tändsticksfabrik, Örgryte, near Gottenborg, assignors, by mesne assignments, to Jonkopings och Vulcans Tandsticksfabriksaktiebolag, Jonkoping, Sweden. Matches. 87,138; renewed July 2, 1932.
Albee Shoe Company Limited, Montreal, Quebec, Canada. Shoes. 296,692; Aug. 16; Serial No. 324,920; published May 10, 1932. Class 39.
All-American Mohawk Corporation, Chicago, Ill. Radio receiving sets and component parts thereof. 296,754; Aug. 16. Class 21.
Ambrosia Chocolate Company, Milwaukee, Wis. Candy. 296,656; Aug. 16; Serial No. 314,482; published May 24, 1932. Class 46.
American Agricultural Chemical Company. (See Patapsco Guano Co., assignor.)
American Agricultural Chemical Company, assignor to The American Agricultural Chemical Company, New York, N. Y. Fertilizers. 87,140; renewed July 2, 1932.
American Agricultural Chemical Company, assignor to The American Agricultural Chemical Company, New York, N. Y. Fertilizers. 87,518; renewed July 23, 1932.
American Chicle Company. (See Autosales Gum & Chocolate Company, assignor.)
American Kitchen Products Company, New York, N. Y. Beef broth preparations. 89,627; renewed Dec. 24, 1932.
American Steel Foundries, Chicago, Ill. Railway equipment. 296,593; Aug. 16; Serial No. 325,552; published May 31, 1932. Class 19.
American Stores Company, Philadelphia, Pa. Salad dressing. 296,641; Aug. 16; Serial No. 326,045; published May 24, 1932. Class 46.
Apex Manufacturing Co. Inc., Syracuse, N. Y. Rock, sand, etc., screens. 296,712; Aug. 16; Serial No. 301,776; published May 24, 1932. Class 23.
Appleton Produce Company. (See Tugel, Fred F.)
Astoria & Puget Sound Canning Co., South Bellingham, Wash. Canned salmon. 89,605; renewed Dec. 31, 1932.
Autosales Gum & Chocolate Company, New York, assignor, by mesne assignments, to American Chicle Company, Long Island City, N. Y. Chewing gum. 89,609; renewed Dec. 31, 1932.
Baldwin Company, The, Cincinnati, Ohio. Autopneumatic player pianos. 89,434; renewed Dec. 17, 1932.
Barrett Company, The. (See Warren Chemical & Manufacturing Company.)
Barrett Manufacturing Company, assignor to The Barrett Company, New York, N. Y. Construction materials. 87,311; renewed July 9, 1932.
Barrett Manufacturing Company, assignor to The Barrett Company, New York, N. Y. Prepared tar, pitch, and asphalt for roofing construction. 87,312; renewed July 9, 1932.
Barrett Manufacturing Company, assignor to The Barrett Company, New York, N. Y. Tar distillates for use as detergents. 88,049; renewed Aug. 27, 1932.
Barrett Manufacturing Company, assignor to The Barrett Company, New York, N. Y. Specially prepared pitch for construction purposes. 88,452; renewed Sept. 24, 1932.
Barrett Manufacturing Company, assignor to The Barrett Company, New York, N. Y. Roofing felts and papers. 88,659; renewed Oct. 1, 1932.
Baumann, C. Ludwig, & Company, Brooklyn, N. Y. Mattresses and box springs. 296,677; Aug. 16; Serial No. 325,677; published May 31, 1932. Class 32.
Bedin, Albert Godde, Inc. (See Mondon, L.)
Bendix Aviation Corporation, Chicago, Ill., and South Bend, Ind. Shock struts. 296,592; Aug. 16; Serial No. 325,705; published May 24, 1932. Class 19.
Berkwits & Bloomfield, Inc., New York, N. Y. Ladies' hats. 296,700; Aug. 16; Serial No. 321,197; published May 31, 1932. Class 39.
Berkwits & Bloomfield, Inc., New York, N. Y. Hats. 296,746; Aug. 16. Class 39.
Binney & Smith Company, New York, N. Y. Crayons. 89,531; renewed Dec. 24, 1932.
Birbeck, F. V., Watsonville, Calif. Fresh vegetables. 296,616; Aug. 16; Serial No. 326,007; published May 24, 1932. Class 46.
Bon Ami Company, assignor to The Bon Ami Company, New York, N. Y. Scouring soap. 88,548; renewed Oct. 1, 1932.
Borden's Farm Products Co., Inc., Wassaic and New York, N. Y. Fruit juices. 296,661; Aug. 16; Serial No. 312,898; published June 7, 1932. Class 45.
Bordow Silk Co., New York, N. Y. Yarns, and particularly for yarn of artificial silk. 296,699; Aug. 16; Serial No. 322,089; published May 3, 1932. Class 43.
Bosson, George C., jr., Cambridge, Mass. Waterproof clothing. 296,755; Aug. 16. Class 39.
Boston Gear Works, Inc., North Quincy, Mass. Spur gears, worm and miter gears, etc. 296,762; Aug. 16. Class 23.
Bradley Lumber Company of Arkansas, Warren, Ark. Flooring material. 296,665; Aug. 16; Serial No. 306,127; published May 24, 1932. Class 12.
Bradley, Milton, Company, Springfield, Mass. Toys. 296,657; Aug. 16; Serial No. 313,768; published June 7, 1932. Class 22.
British Pens, Limited. (See Mitchell, William, (Pens) Limited, assignor.)
Browning, Hiram B., doing business as The Elimino Company, West Toledo, Ohio. Radio aerial eliminator. 296,623; Aug. 16; Serial No. 325,615; published May 31, 1932. Class 21.
Buckingham & Hecht, San Francisco, Calif. Boots and shoes. 296,694; Aug. 16; Serial No. 324,816; published May 10, 1932. Class 39.
Buffalo Rock Co., Birmingham, Ala. Carbonated, maltless beverages. 296,768; Aug. 16. Class 45.
Butterfield, Fred, & Co. (See Hyde, A. G., & Sons.)
California Perfume Company, Inc., New York, N. Y. Shaving cream, a dry cleaning preparation in powder form, silver polish, etc. 296,760; Aug. 16. Class 4.
Carrier Manufacturing Corporation, assignor to Aerofin Corporation, Newark, N. J. Heating, cooling, and air conditioning units. 296,732; Aug. 16; Serial No. 323,607; published May 31, 1932. Class 34.
Chatfield Paper Corporation, The, Cincinnati, Ohio. Bond paper. 296,761; Aug. 16. Class 37.
Chemung Foundry Corporation, Elmira, N. Y. Curb valve, roadway and meter boxes, manhole frames and covers, and valve vaults. 296,590; Aug. 16; Serial No. 325,779; published May 24, 1932. Class 13.
Citizens' Wholesale Supply Company, The, Columbus, Ohio. Talcum powder, perfume, toilet water, sachet-power, and cold cream. 89,338; renewed Dec. 10, 1932.
Clemenson Bros., Inc., Middletown, N. Y. Saws and saw blades. 296,680; Aug. 16; Serial No. 325,514; published May 24, 1932. Class 28.
Cleveland Milling Co., assignor to Fairchild Milling Company, Cleveland, Ohio. Flour. 89,816; renewed Jan. 14, 1933.
Clover Farm Stores Company. (See Grocers & Producers Co., The.)
Continental Mills, Inc., Philadelphia, Pa. Woolen and worsted fabrics, jersey cloths, elderdowns, etc. 296,645; Aug. 16; Serial No. 325,681; published May 10, 1932. Class 42.
Continental Oil Company, Ponca City, Okla. Lubricating oil. 296,634; Aug. 16; Serial No. 321,007; published May 31, 1932. Class 15.
Continental Scale Works, Chicago, Ill. Weighing scales. 296,729; Aug. 16; Serial No. 322,164; published Mar. 1, 1932. Class 26.
Craddock-Terry Company, Lynchburg, Va. Women's leather shoes. 296,706; Aug. 16; Serial No. 317,889; published May 3, 1932. Class 39.
Criswell, Francis M., Washington, D. C. Preparation for certain ailments. 87,046; renewed June 25, 1932.
Curtiss Candy Company, The, Chicago, Ill. Chewing gum. 296,662; Aug. 16; Serial No. 308,859; published May 31, 1932. Class 46.
Dannemiller Grocery Company, The, Canton, Ohio. Coffee. 296,666; Aug. 16; Serial No. 305,779; published May 31, 1932. Class 46.
Darnee, Inc. (See Owl Drug Company, The, assignor.)
Dayton Abstract & Land Title Company, The, Dayton, Ohio. Maps. 296,748; Aug. 16. Class 38.
De Land, C. M., New York, N. Y. Cotton, rayon, silk, and woolen piece goods. 296,652; Aug. 16; Serial No. 326,672; published June 7, 1932. Class 42.
Detroit Creamery Company, Detroit, Mich. Butter. 87,326; renewed July 9, 1932.
Dewitt-Seitz Company, Augusta, Me., and Duluth, Minn. Bed-frames, springs, mattresses, and pillows. 89,822; renewed Jan. 14, 1933.
Dictograph Products Company, Inc. (See Hutchison Acoustic Co., assignor.)
Dietz, R. E., Company, New York, N. Y. Portable fire extinguishers. 296,686; Aug. 16; Serial No. 325,425; published May 3, 1932. Class 23.
Disston, Henry, & Sons, Incorporated, Philadelphia, Pa. Cutlery and tools. 89,631; renewed Dec. 31, 1932.
Dominion Fabrics Corporation, Boston, Mass. Sleeping bags. 296,653; Aug. 16; Serial No. 325,818; published May 24, 1932. Class 39.

Domzalski, Casimir A., Detroit, Mich. Tire patches. 296,675; Aug. 16; Serial No. 325,817; published May 31, 1932. Class 35.
Dryer, Clark & Dryer Oil Co., Oklahoma City, Okla. Motor lubricating oil. 296,632; Aug. 16; Serial No. 324,064; published May 24, 1932. Class 15.
Durham Bros. & Co., Inc., Roanoke, Va. Coffee. 296,660; Aug. 16; Serial No. 313,235; published May 31, 1932. Class 46.
Eastern Fruit Distributors, Inc., Los Angeles and Fresno, Calif. Fresh vegetables, deciduous fruits, grapes, etc. 296,659; Aug. 16; Serial No. 313,336; published May 31, 1932. Class 46.
Economy Silo & Mfg. Co., The, Frederick, Md. Silos. 296,730; Aug. 16; Serial No. 322,576; published May 24, 1932. Class 2.
Elimino Company, The. (See Browning, Hiram B.)
Elizabeth City Hosiery Co., Elizabeth City, N. C. Hosiery. 87,437; renewed July 16, 1932.
Ellis, A. D., Mills Incorporated, Monson, Mass. Woolen piece goods. 296,695; Aug. 16; Serial No. 324,157; published May 31, 1932. Class 42.
Ellis Silver Company Inc., New York, N. Y. Silver plated hollow ware and flatware. 296,621; Aug. 16; Serial No. 325,683; published May 31, 1932. Class 28.
El Rey Products Co., Los Angeles, Calif. Composition shingles. 296,658; Aug. 16; Serial No. 313,497; published May 24, 1932. Class 12.
El Sol Products Company. (See Jenkins, George H.)
Elsworth, J. & J. W., Co., New York, N. Y. Oysters. 296,600; Aug. 16; Serial No. 325,573; published May 31, 1932. Class 46.
Empire Gum Company, New York, N. Y. Candy. 296,629; Aug. 16; Serial No. 324,821; published May 24, 1932. Class 46.
Empire Knitting Mills, Chicago, Ill. Footwear. 296,702; Aug. 16; Serial No. 319,649; published Dec. 29, 1931. Class 39.
Empire State Flour Mills, Syracuse, assignor to Hecker-Jones-Jewell Milling Company, New York, N. Y. Wheat flour. 89,636; renewed Dec. 31, 1932.
Excelsior Tobacco Co. Inc., St. Louis, Mo. Cigar scraps. 296,758; Aug. 16. Class 17.
Fairchild Milling Company. (See Cleveland Milling Co.)
Farbwerke vorm. Meister Lucius & Brüning, Hochst-on-the-Main, Germany, assignor, by mesne assignments, to H. A. Metz Laboratories, Inc., New York, N. Y. Remedy for diseases. 88,862; renewed Oct. 29, 1932.
Feldman, Nathan, doing business as Feiko Supply Company, New Brunswick, N. J. Malt syrup. 296,642; Aug. 16; Serial No. 326,180; published May 24, 1932. Class 46.
Feiko Supply Company. (See Feldman, Nathan.)
Filecraft, Inc., Cleveland, Ohio. Files. 296,646; Aug. 16; Serial No. 326,418; published May 31, 1932. Class 23.
Florida Citrus Exchange, Tampa, Fla. Fresh and canned citrus fruits and juices. 296,708; Aug. 16; Serial No. 304,047; published Oct. 14, 1930. Class 46.
Foot, S. B., & Co., Red Wing, Minn. Side leathers. 89,640; renewed Dec. 31, 1932.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 296,655; Aug. 16; Serial No. 315,736; published June 7, 1932. Class 42.
Frank and Company, Milwaukee, Wis. Smoked meats. 296,624; Aug. 16; Serial No. 325,577; published May 31, 1932. Class 46.
Freeman Shoe Corporation, Beloit, Wis. Shoes. 296,637; Aug. 16; Serial No. 325,094; published May 24, 1932. Class 39.
Frigivend Corporation, Dayton, Ohio. Ice cream. 296,735; Aug. 16; Serial No. 323,894; published May 17, 1932. Class 46.
Furniture Stylists Inc., Chicago, Ill. Trays. 296,722; Aug. 16; Serial No. 311,270; published Apr. 14, 1931. Class 2.
Gamewell Company, The, Newton Upper Falls, Newton, Mass. Fire alarm boxes and switchboards. 296,622; Aug. 16; Serial No. 325,650; published May 31, 1932. Class 21.
Gebruder Siemens & Co., Charlottenberg, assignors to Siemens-Planiawerke A. G. fur Kohlefabrikate, Berlin-Lichtenberg, Germany. Carbons. 39,050. renewed Oct. 14, 1932.
Gerstendorfer Bros., assignor to Sapolin Co. Inc., New York, N. Y. Bronze and gold paints and powders. 39,288; renewed Nov. 18, 1932.
Godman, H. C., Company, The, Columbus, Ohio. Shoes. 296,696; Aug. 16; Serial No. 323,400; published May 24, 1932. Class 39.
Godman, H. C., Company, The, Columbus, Ohio. Shoes. 296,752–3; Aug. 16. Class 39.
Goldberg, Bowen & Co., San Francisco, Calif. California wine. 87,204; renewed July 2, 1932.
Goldsmith, P., Sons Co., The, Cincinnati, Ohio. Bats, golf clubs, baseballs, etc. 296,606; Aug. 16; Serial No. 326,141; published June 7, 1932. Class 22.
Gotham Silk Hosiery Company, Inc. (See Lord & Taylor.)
Grant, W. T., Company, Lynn, Mass., and New York, N. Y. Wash suits, blouses, knickers, etc. 296,693; Aug. 16; Serial No. 324,822; published May 10, 1932. Class 39.
Gray Telephone Pay Station Company, The, Hartford, Conn. Telephone pay stations. 89,651; renewed Dec. 31, 1932.
Greene, Marion, Montclair, N. J. Dolls. 296,612; Aug. 16; Serial No. 326,748; published June 7, 1932. Class 22.
Grigsby-Grunow Company, Chicago, Ill. Electric ironing machines and parts thereof. 296,690; Aug. 16; Serial No. 317,600; published May 31, 1932. Class 24.
Grocers & Producers Co., The, doing business as The Clover Farm Stores Company, Cleveland, Ohio. Coffee. 296,674; Aug. 16; Serial No. 326,422; published May 31, 1932. Class 46.
Grocers & Producers Co., The, doing business as The Clover Farm Stores Company, Cleveland, Ohio. Coffee. 296,682–3; Aug. 16; Serial Nos. 326,470–1; published May 31, 1932. Class 46.
Gulf States Steel Company, Birmingham, Ala. Nails. 296,595; Aug. 16; Serial No. 326,245; published May 31, 1932. Class 13.
H-O (Hornby's Oatmeal) Company, The, Buffalo and New York, assignors to Hecker-H-O Company, Inc., Buffalo, N. Y. Cereal food products. 39,374; renewed Dec. 2, 1932.
Hahn Department Stores, Inc., Wilmington, Del. Coffee, tea, and cocoa. 296,627; Aug. 16; Serial No. 325,143; published May 31, 1932. Class 46.
Harvel Corporation, The, Newark, N. J. Electrical insulation compounds and fabrics, etc. 296,709; Aug. 16; Serial No. 287,071; published May 31, 1932. Class 21.
Hawaiian Pineapple Company, Ltd., Honolulu, Hawaii, and San Francisco, Calif. Canned pineapple. 296,633; Aug. 10; Serial No. 321,106; published May 31, 1932. Class 46.
Hecker-H-O Company, Inc. (See H-O (Hornby's Oatmeal) Company, The, assignor.)
Hecker-Jones-Jewell Milling Company. (See Empire State Flour Mills, assignor.)
Hemmeter Cigar Company, Bay City and Detroit, Mich. Cigars, smoking and chewing tobacco. 88,488; renewed Sept. 24, 1932.
Hercules Novelty Company, Chicago, Ill. Coin-controlled ball-projecting amusement device. 296,611; Aug. 16; Serial No. 326,680; published June 7, 1932. Class 22.
Hoffmann, John, & Sons Co., Milwaukee, Wis. Coffee. 296,601; Aug. 16; Serial No. 325,655; published May 24, 1932. Class 46.
Holland Bros. Sandwich Co., Converse, S. C. Peanut-butter sandwiches. 296,721; Aug. 16; Serial No. 309,381; published Apr. 14, 1931. Class 46.
Holtite Manufacturing Company, Baltimore, Md. Wear plates for rubber heels. 296,589; Aug. 16; Serial No. 325,851; published May 31, 1932. Class 13.
Honeymoon Beverage Company, River Rouge, Mich. Malt-less beverages. 296,701; Aug. 16; Serial No. 320,124; published Apr. 26, 1932. Class 46.
Hopp Press, Inc., The, New York, N. Y. Price ticket holders. 296,591; Aug. 16; Serial No. 325,713; published May 24, 1932. Class 13.
Horlick's Malted Milk Corporation. (See Maltechocia Company, The, assignor.)
Horton Manufacturing Company, Fort Wayne, Ind. Laundry washing machines. 296,734; Aug. 16; Serial No. 323,865; published May 31, 1932. Class 24.
Hudnut, Richard, New York, N. Y. Soap, solid and liquid. 89,112; renewed Nov. 12, 1932.
Hutchinson Acoustic Co., New York, assignor, by mesne assignments, to Dictograph Products Company, Inc., Jamaica, N. Y. Telephonic apparatus. 39,409; renewed Dec. 2, 1932.
Hyde, A. G., & Sons, assignor to Fred Butterfield & Co., Inc., New York, N. Y. Cotton piece goods. 87,841; renewed July 9, 1932.
Hy-Flash Gas & Oil Co., Inc., Toledo, Ohio. Petroleum products. 296,608; Aug. 16; Serial No. 326,039; published May 31, 1932. Class 15.
Hygrade Water & Soda Co., St. Louis, Mo. Distilled and carbonated water, flavored beverages, etc. 89,365; renewed Dec. 10, 1932.
I. T. S. Company, The, Elyria, Ohio. Rubber heels and taps. 296,703; Aug. 16; Serial No. 319,408; published May 24, 1932. Class 39.
I-X-L Printing Company, New York, N. Y. Board games. 296,615; Aug. 16; Serial No. 326,639; published June 7, 1932. Class 22.
Ideal Linen Mesh Company, Poughkeepsie, N. Y. Elastic fabric. 296,671 Aug. 6; Serial No. 326,218; published June 7, 1932. Class 42.
Independent Fireworks Manufacturing Company, Bridgewater, Mass. Fireworks, firecrackers, and explosives. 296,608; Aug. 16; Serial No. 326,244; published June 7, 1932. Class 9.
Ingersoll & Bro., Robt. H., New York, N. Y., assignor to Waterbury Clock Company, Waterbury, Conn. Watches and clocks. 89,265–6; renewed Dec. 3, 1932.
Jenkins, George H., doing business as El Sol Products Company, Camden, N. J. Polish. 296,603; Aug. 16; Serial No. 326,147; published May 31, 1932. Class 16.
Jewel Cotton Mills, Thomasville, N. C. Cotton yarns. 89,669; renewed Dec. 31, 1932.
Jönköpings och Vulcans Tändstickfabriksaktiebolag. (See Aktiebolaget Södertelje Tändstivkfabrik, assignor.)
Jönköpings och Vulcans Tändstickfabriksaktiebolag, Jonkoping, Sweden. Matches. 87,216–17; renewed July 2, 1932.
Jordeau, Jean, Inc. (See Levy, Berthé E., assignor.)

Kaletsch, Paul, Monaca, Pa. Razor blades. 296,740; Aug. 16; Serial No. 324,563; published May 24, 1932. Class 23.
Karfunkle, Phil, Chicago, Ill. Handkerchiefs. 296,670; Aug. 16; Serial No. 326,070; published June 7, 1932. Class 42.
Kaumagraph Company, New York, N. Y. Transfers and roll holders for transfers, for embroidery designs, etc. 296,698; Aug. 16; Serial No. 322,391; published May 24, 1932. Class 40.
Keith, Geo. E., Company. (See Mayer, Solomon, assignor.)
Kellogg, M. W., Co., The, Jersey City, N. J., and New York, N. Y. Plastic heat insulation material. 296,607; Aug. 16; Serial No. 326,188; published May 31, 1932. Class 12.
Kelly-Clarke Co., Seattle, Wash. Canned salmon. 88,307; renewed Sept. 10, 1932.
Kimble Glass Company, Vineland, N. J. Chemical, scientific, and laboratory glassware. 296,681; Aug. 16; Serial No. 325,583; published May 24, 1932. Class 26.
Kinney & Levan Company, The, Cleveland, Ohio. Silverware. 296,669; Aug. 16; Serial No. 326,041; published May 31, 1932. Class 28.
Klein, Mathias, & Sons, assignor to Mathias Klein & Sons, Chicago, Ill. Tools. 89,563; renewed Dec. 24, 1932.
Klein, Mathias, & Sons, assignor to Mathias Klein & Sons, Chicago, Ill. Tools and parts of machinery. 89,564; renewed Dec. 24, 1932.
Krements & Company, Newark, N. J. Buttons, brooches, buckles, etc. 296,618; Aug. 16; Serial No. 325,793; published May 31, 1932. Class 28.
Krem-Ko Company, Chicago, Ill. Chocolate milk food beverage. 296,691; Aug. 16; Serial No. 317,561; published May 24, 1932. Class 46.
Kress, S. H., & Co., New York, N. Y. Dolls. 296,613; Aug. 16; Serial No. 326,750; published June 7, 1932. Class 22.
Lamport Mfg. Supply Co., Inc., The, New York, N. Y. Piece goods for sheets and pillow cases. 296,704; Aug. 16; Serial No. 318,786; published June 7, 1932. Class 42.
Lane Company, Inc., The, Altavista, Va. Cedar chests. 296,689; Aug. 16; Serial No. 317,719; published May 31, 1932. Class 32.
Langer, Carl, Inc., Detroit, Mich. Lubricating oil. 296,631; Aug. 16; Serial No. 324,290; published May 31, 1932. Class 15.
Layton Pure Food Company, East St. Louis, Ill., assignor to Rumford Chemical Works, Rumford, R. I. Baking powder and baking soda. 89,672; renewed Dec. 31, 1932.
Levy, Berthé E., New York, N. Y., assignor to Jean Jordeau, Inc., South Orange, N. J. Hair eradicator. 88,502; renewed Sept. 24, 1932.
Lewis, Edgar P., & Sons, Inc., Boston, Mass. Candy. 296,725; Aug. 16; Serial No. 320,467; published May 31, 1932. Class 46.
Libby, McNeill & Libby, Chicago, Ill. Canned salmon. 296,672–3; Aug. 16; Serial Nos. 326,379–80; published May 31, 1932. Class 46.
Libby, McNeill & Libby, Chicago, Ill. Canned salmon. 296,676; Aug. 16; Serial No. 326,378; published May 31, 1932. Class 46.
Libby, McNeill & Libby, Chicago, Ill. Canned fruits, vegetables, tomato juice, etc. 296,684; Aug. 16; Serial No. 325,294; published May 24, 1932. Class 46.
Long I Vine Glo, Inc., Brooklyn, N. Y. Grape juice. 296,597; Aug. 16; Serial No. 326,715; published June 7, 1932. Class 45.
Lord & Taylor, assignor, by mesne assignments, to Gotham Silk Hosiery Company, Inc., New York, N. Y. Hosiery. 88,097; renewed Aug. 27, 1932.
Lucullus Bakery, Inc., Brooklyn, N. Y. Cake, muffins, pies, etc. 296,713; Aug. 16; Serial No. 290,370; published May 17, 1932. Class 46.
Ludlam, James E., Belleville, N. J. Shoes. 296,649; Aug. 16; Serial No. 325,370; published May 17, 1932. Class 39.
Luxor, Limited. (See Stork Company, The, assignor.)
Maltechocia Company, The, assignor, by mesne assignments, to Horlick's Malted Milk Corporation, Racine, Wis. Breakfast food-beverages. 39,371; renewed Dec. 2, 1932.
Manning, John W., Albany, to John W. Manning, Fort Worth, Tex. Foot powder. 38,729; renewed Aug. 5, 1932.
Martocello, Joseph A., sr., doing business as Jos. A. Martocello & Co., Philadelphia, Pa. Rust and corrosion preventive liquid in the nature of a paint or varnish. 296,726; Aug. 16; Serial No. 320,571; published May 31, 1932. Class 16.
Mashek, Frank, Chicago, Ill. Buckles. 296,697; Aug. 16; Serial No. 323,140; published Apr. 5, 1932. Class 40.
Mathushek Piano Mfg. Company, New York, N. Y. Pianos. 296,745; Aug. 16. Class 36.
Mayer, Solomon, Boston, Mass., assignor, by mesne assignments, to Geo. E. Keith Company, Brockton, Mass. Foot-measuring charts. 88,011; renewed Aug. 20, 1932.
Medart, Fred, Manufacturing Co., St. Louis, Mo. Lockers. 296,737; Aug. 16; Serial No. 324,478; published May 24, 1932. Class 32.
Merkin, M. J., Paint Co. Inc., New York, N. Y. Inside paint. 296,604; Aug. 16; Serial No. 326,224; published May 24, 1932. Class 16.
Metz, H. A., Laboratories, Inc. (See Farbwerke vorm. Meister Lucius & Brüning, assignor.)
Meyer Bros., Joseph H., New York, to Joseph H. Meyer Brothers, Brooklyn, N. Y. Artificial pearls. 89,282; renewed Dec. 8, 1932.
Mezögazdasági Termény És Terméktorgalmi Intézet, Budapest, Hungary. Flour, onions, garlic, etc. 296,684; Aug. 16; Serial No. 306,739; published May 31, 1932. Class 46.
Miami Holliday Steel Company, Dayton, Ohio. Tool steel. 296,744; Aug. 16. Class 14.
Miller, Fred W., Jackson, Mich. Furniture. 296,720; Aug. 16; Serial No. 310,653; published May 31, 1932. Class 32.
Mitchel, William, (Pens) Limited, assignor to British Pens, Limited, Birmingham, England. Steel and metallic pens. 87,787; renewed Aug. 6, 1932.
Mo-An-Mo Products Co. (See Virginia Sweet Foods Inc.)
Modica, Frank M., New York, N. Y. Food products. 296,715; Aug. 16; Serial No. 316,161; published May 24, 1932. Class 46.
Mondon, L., assignor to Albert Godde Bedin, Inc., New York, N. Y. Piece goods. 89,409; renewed Dec. 10, 1932.
Monroe Drug Co., assignor to Monroe Chemical Company, Quincy, Ill. Chemical preparation for cleaning garments. 89,130; renewed Nov. 12, 1932.
Morris & Company, assignor to The North American Provision Company, Chicago, Ill. Foods. 89,284; renewed Dec. 8, 1932.
Moss, Vernon H., Lynn, Mass. Boots and shoes. 296,749; Aug. 16. Class 39.
National Enameling & Stamping Company, Milwaukee, Wis. Refrigerator pans. 296,585; Aug. 16; Serial No. 325,992; published May 31, 1932. Class 13.
North American Provision Company, The. (See Morris & Company, assignor.)
Norwine Coffee Company, St. Louis, Mo. Tea, cocoa, coffee, etc. 296,714; Aug. 16; Serial No. 266,040; published Nov. 27, 1926. Class 46.
Oberfelder, Eugene A., New Rochelle, N. Y. Silk chiffon in the piece. 296,654; Aug. 16; Serial No. 326,314; published June 7, 1932. Class 42.
Ocaena Canning Co., Shelby, Mich. Canned fruits. 89,872; renewed Jan. 14, 1933.
O'Connor, James J., doing business as Jas. J. O'Connor Coffee Co., St. Louis, Mo. Coffee. 296,630; Aug. 16; Serial No. 323,418; published May 24, 1932. Class 46.
Ogden-Utah Knitting Company. (See Utah Knitting Co.)
Owensboro Wagon Company, Owensboro, Ky. Trailers, vehicle bodies and chassis, and structural parts thereof. 296,733; Aug. 16; Serial No. 323,672; published May 31, 1932. Class 19.
Owl Drug Company, The, San Francisco, Calif., assignor, by mesne assignments, to Darnee, Inc., New York, N. Y. Toilet preparations. 87,560; renewed July 23, 1932.
Pacific Bone Coal & Fertilizer Company, San Francisco, Calif. Fertilizer. 89,494; renewed Dec. 17, 1932.
Pacific Fisheries & Packing Company, Aberdeen, assignor to Pioneer Packing Company, Seattle, Wash. Canned salmon. 89,495; renewed Dec. 17, 1932.
Paraffine Companies, Inc., The, San Francisco, Calif. Roofing nails. 296,707; Aug. 16; Serial No. 297,773; published May 24, 1932. Class 13.
Patapsco Guano Co., Baltimore, Md., assignor, by mesne assignments, to The American Agricultural Chemical Company, New York, N. Y. Fertilizers. 88,353; renewed Sept. 10, 1932.
Patterson-Sargent Company, The, Cleveland, Ohio. Paints and painters' materials. 87,252; renewed July 2, 1932.
Patterson-Sargent Company, The, Cleveland, Ohio. Paints, paint enamels, stains, etc. 296,588; Aug. 16; Serial No. 325,855; published May 24, 1932. Class 16.
Paxton & Gallagher Company, Omaha, Nebr. Canned fruits, canned vegetables, canned fish, etc. 296,719; Aug. 16; Serial No. 311,281; published May 5, 1931. Class 46.
Peerless Steel Equipment Company, Philadelphia, Pa. Steel office furniture. 296,717; Aug. 16; Serial No. 312,265; published May 24, 1932. Class 32.
Pennsylvania Flexible Metallic Tubing Company, Philadelphia, Pa. Metal hose. 87,919; renewed Aug. 13, 1932.
Pennsylvania Lubricating Company, assignor to Pennsylvania Lubricating Company, Pittsburgh, Pa. Lubricating-greases. 87,796; renewed Aug. 6, 1932.
Pichel Products Co., Inc., New York, N. Y. Flavoring. 296,602; Aug. 16; Serial No. 325,798; published June 7, 1932. Class 45.
Pickard, Incorporated, Chicago, Ill. Chinaware and pottery. 296,648; Aug. 16; Serial No. 325,279; published May 24, 1932. Class 30.
Pioneer Packing Company. (See Pacific Fisheries & Packing Company, assignor.)
Pitts, J. O., Atlanta, Ga. Fresh eggs. 296,751; Aug. 16. Class 46.
Popsicle Corporation of the United States, The, New York, N. Y. Sticks or handles for suckers. 296,747; Aug. 16. Class 13.
Prentice, G. E., Manufacturing Company, New Britain, Conn. Base metal buckles. 296,756; Aug. 16. Class 40.

Productos Selectos Del Cerdo, S. A., Manlleu, Spain. Foods derived from pork. 296,599; Aug. 16; Serial No. 325,411; published May 3, 1932. Class 46.

Puffer-Hubbard Mfg. Co., Minneapolis, Minn. Humidifying units. 296,594; Aug. 16; Serial No. 325,077; published May 31, 1932. Class 34.

Pugh, William T., Jr., Dallas, Tex. Barbecued peanuts. 296,617; Aug. 16; Serial No. 325,800; published May 31, 1932. Class 46.

Quaker State Oil Refining Company, Oil City, Pa. Mechanical device on which to record oil servicing for vehicles. 296,586; Aug. 16; Serial No. 325,959; published May 24, 1932. Class 19.

Quaker State Oil Refining Co., Oil City, Pa. Mechanical device upon which to record oil servicing for vehicles. 296,596; Aug. 16; Serial No. 326,301; published May 31, 1932. Class 19.

Railway Locomotor Company, Chicago, Ill. Oil burner. 296,628; Aug. 16; Serial No. 325,998; published May 24, 1932. Class 34.

Ranlville, F., Company, Grand Rapids, Mich. Belting. 296,640; Aug. 16; Serial No. 325,999; published May 24, 1932. Class 35.

Raub, S., & Company, New York, N. Y. Shoes. 296,644; Aug. 16; Serial No. 325,530; published May 24, 1932. Class 39.

Remington Rand Inc., Buffalo, N. Y. Chairs. 296,639; Aug. 16; Serial No. 325,830; published May 24, 1932. Class 32.

Remington Typewriter Company, Ilion and New York, N. Y., assignee. Typewriting machines. 88,701; renewed Oct. 15, 1932.

Ridgewood Fruit Growers, Inc., doing business as The Ridgewood Orchards, Ridgewood Orchards, Winchester, Va. Candy. 296,663; Aug. 16; Serial No. 307,507; published May 24, 1932. Class 46.

Robinson Manufacturing Company, Everett, Wash. Sheets of wood veneer. 296,705; Aug. 16; Serial No. 318,567; published May 24, 1932. Class 12.

Rockne Motors Corporation, Detroit, Mich. Hub caps. 296,738–9; Aug. 16; Serial Nos. 324,485–6; published May 31, 1932. Class 19.

Rosen, A. W., & Co., New York, N. Y. Glass mirrors. 296,736; Aug. 16; Serial No. 324,009; published May 24, 1932. Class 32.

Rumford Chemical Works. (See Layton Pure Food Company, assignor.)

Sapolin Co. Inc. (See Gerstendorfer Bros., assignor.)

Schattner, Herman, New York, N. Y. Shoes. 296,650; Aug. 16; Serial No. 325,486; published May 31, 1932. Class 39.

Scherman, E. H., & Co., New York, N. Y. Hats. 296,647; Aug. 16; Serial No. 325,188; published May 24, 1932. Class 39.

Scott, E. H., Radio Laboratories, Inc., Chicago, Ill. Radio receiving sets and apparatus. 296,757; Aug. 16. Class 21.

Shell Oil Company, San Francisco, Calif. Furniture and automobile polish. 296,723; Aug. 16; Serial No. 309,444; published May 24, 1932. Class 16.

Sherwin-Williams Company, The, Cleveland, Ohio. Oil paint used as a wall and ceiling finish. 89,155; renewed Nov. 12, 1932.

Siemens-Planiawerke A. G. fur Kohlefabrikate. (See Bebruder Siemens & Co., assignor.)

Simonds Manufacturing Company, Fitchburg, Mass.; Chicago, Ill.; New York and Lockport, N. Y.; New Orleans, La.; Portland, Oreg.; Seattle, Wash.; San Francisco, Calif.; Montreal, Quebec, and St. John, New Brunswick, Canada; and London, England, assignor to Simonds Saw and Steel Company, Fitchburg, Mass. Saws. 89,509; renewed Dec. 17, 1932.

Smith, Kline & French Co., assignor to Smith, Kline & French Laboratories, Philadelphia, Pa. Medicine. 39,522; renewed Dec. 23, 1932.

Snug-Fit Brassiere Co., New York, N. Y. Corsets, brassières, and combinations thereof. 296,636; Aug. 16; Serial No. 325,049; published May 24, 1932. Class 39.

Snyder, W. H., & Sons, Windsor, Pa. Cigars. 296,759; Aug. 16. Class 17.

Société Anonyme Pour La Décoration Intérieure Moderne, Paris, France. Bed-frames, beds, cupboards, etc. 296,710; Aug. 16; Serial No. 307,745; published May 24, 1932. Class 32.

Societe Genevoise D'instruments de Physique, Geneva, Switzerland. Drawing and astronomical instruments, micrometers, etc. 296,687; Aug. 16; Serial No. 318,999; published May 24, 1932. Class 26.

Socony-Vacuum Corporation. (See Standard Oil Co. of New York.)

Solvay Process Company, The, Solvay, N. Y., to The Solvay Company, New York, N. Y. Chemicals and pharmaceutical preparations. 88,968; renewed Oct. 29, 1932.

Specialty Device Co., The. (See Standard Earth Auger Co., assignor.)

Speidel Corporation, Providence, R. I. Jewelry. 296,620; Aug. 16; Serial No. 325,761; published May 31, 1932. Class 28.

Standard Brands Incorporated, New York, N. Y. Salad dressing. 296,742; Aug. 16; Serial No. 324,854; published May 31, 1932. Class 46.

Standard Earth Auger Co., Chicago, Ill., assignor, by mesne assignments, to The Specialty Device Co., Cincinnati, Ohio. Earth-augers. 88,030; renewed Aug. 20, 1932.

Standard Oil Co. of New York, by change of name to Socony-Vacuum Corporation, New York, N. Y. Illuminating oils. 88,529; renewed Sept. 24, 1932.

Standard Pulp Products Co., Inc., New York, N. Y. Pulp plates. 296,587; Aug. 16; Serial No. 325,859; published May 24, 1932. Class 2.

Standard Varnish Works, New York, N. Y. Liquid filler. 89,514; renewed Dec. 17, 1932.

Standard Varnish Works, New York and Port Richmond, to Standard Varnish Works, New York, N. Y. Enamels, paints, varnishes, and varnish removers. 89,711; renewed Dec. 31, 1932.

Stark & Waddell Packing Corporation, Strathmore, Calif. Fresh citrus fruits. 296,625–6; Aug. 16; Serial Nos. 325,534–5; published May 31, 1932. Class 46.

Stork Company, The, Boston, Mass., assignor, by mesne assignments, to Luxor, Limited, Chicago, Ill. Soap. 88,531; renewed Sept. 24, 1932.

Storkline Furniture Corporation, Chicago, Ill. Juvenile furniture. 296,743; Aug. 16; Serial No. 320,141; published May 31, 1932. Class 32.

Ströher, Franz, A. G. (See Wella Waving Corporation, assignor.)

Superior Machine Tool Company, Kokomo, Ind. Machine tools. 296,688; Aug. 16; Serial No. 318,083; published May 24, 1932. Class 23.

Superior Packing Corp., New York, N. Y. Powdered deserts and malted milk. 296,679; Aug. 16; Serial No. 325,625; published May 31, 1932. Class 46.

Supreme Golf Ball Co., Chicago, Ill. Golf balls. 296,614; Aug. 16; Serial No. 325,975; published June 7, 1932. Class 22.

Things Shoe Stores, Inc., Boston, Mass. Shoes. 296,635; Aug. 16; Serial No. 325,024; published May 17, 1932. Class 39.

Thompson's Spa Inc., Boston, Mass. Candy. 296,643; Aug. 16; Serial No. 326,310; published May 24, 1932. Class 46.

Tidy Products, Inc., New York, N. Y. Containers or holders and paper liners for same. 296,727; Aug. 16; Serial No. 321,224; published May 24, 1932. Class 2.

Tilit-Laboratorium, Carol Bernardi Nachfolger, Leispic, to Tilit-Laboratorium Gesellschaft mit beschrankter Haftung, Dresden, Germany, successor. Mouth wash. 39,458; renewed Dec. 9, 1932.

Timme, E. F., & Son, New York, N. Y. Pile fabrics in the piece. 296,651; Aug. 16; Serial No. 326,563; published June 7, 1932. Class 42.

Tone Bros., Des Moines, Iowa. Coffee. 296,605; Aug. 16; Serial No. 326,044; published May 24, 1932. Class 46.

Triple "XXX" Company, Galveston, Tex. Syrup concentrate and flavor. 296,598; Aug. 16; Serial No. 325,126; published June 7, 1932. Class 45.

Tubular Rivet & Stud Company, Boston, Mass. Rivets. 38,557; renewed July 1, 1932.

Tugel, Fred F., doing business as Appleton Produce Company, Watsonville, Calif. Fresh deciduous fruits, dried fruits, fresh vegetables. 296,667; Aug. 16; Serial No. 326,034; published May 24, 1932. Class 46.

U. S. Duplicator Co., Chicago, Ill. Electric gelatine duplicating machines and parts. 296,741; Aug. 16; Serial No. 324,727; published May 24, 1932. Class 23.

Utah Knitting Co. to Odgen-Utah Knitting Company, Odgen, Utah, successor. Cotton and woolen knitted underwear. 88,980; renewed Oct. 29, 1932.

Utica Cutlery Company, Utica, N. Y. Knives and table cutlery. 296,678; Aug. 16; Serial No. 325,766; published May 31, 1932. Class 23.

Virginia Sweet Foods Inc., doing business as Mo-An-Mo Products Co., Indianapolis, Ind. Flour. 296,718; Aug. 16; Serial No. 311,942; published May 24, 1932. Class 46.

Voelk, Ottomar, Berlin, Germany. Unfilled cream-pots. 296,731; Aug. 16; Serial No. 322,608; published May 24, 1932. Class 2.

Wallace & Co., New York and Brooklyn, to Wallace & Co., Brooklyn, N. Y. Candies and chocolates. 89,722–4; renewed Dec. 31, 1932.

Walman Optical Co., The, Minneapolis, Minn. Optical frames, mountings, and lenses. 296,716; Aug. 16; Serial No. 313,570; published May 24, 1932. Class 26.

Wanamaker, John, Philadelphia, Philadelphia, Pa. Corsets. 296,638; Aug. 16; Serial No. 325,157; published May 10, 1932. Class 39.

Warren Chemical & Manufacturing Company to The Barrett Company, New York, N Y., successor. Roofing-felt. 87,385; renewed July 9, 1932.

Waterbury Clock Company. (See Ingersoll, Robt. H., & Bro.)

Wedler-Shuford Co., The, St. Louis, Mo. Vehicle seat covers and pads. 296,685; Aug. 16; Serial No. 325,357; published May 31, 1932. Class 32.

Wella Waving Corporation, New York, N. Y., assignor to Franz Ströher A. G., Rothenkirchen, Germany. Electric hair waving machines and parts thereof, electric hair curling irons, etc. 296,728; Aug. 16; Serial No. 322,120; published Mar. 1, 1932. Class 44.

West India Oil Company, Bayonne, to West India Oil Company, Newark, N. J. Refined petroleum for illuminating, heating, and power purposes. 88,392; renewed Sept. 10, 1932.

West India Oil Company, Bayonne, to West India Oil Company, Newark, N. J. Gasolene, benzine, naphtha, etc. 88,607; renewed Oct. 1, 1932.

Winter Haven Citrus Growers Association, Winter Haven, Fla. Fresh citrus fruits. 296,619; Aug. 16; Serial No. 325,771; published May 24, 1932. Class 46.

Wolf and Koch, St. Louis, Mo. Beverage and syrups therefor. 296,609; Aug. 16; Serial No. 326,407; published June 7, 1932. Class 45.

Wrigley, Wm., Jr., Company, Chicago, Ill. Chewing gum. 296,610; Aug. 16; Serial No. 325,416; published May 24, 1932. Class 46.

Yorke Shirt Co., The, Glen Falls and New York, N. Y. Outer shirts. 89,729; renewed Dec. 31, 1932.

Zollinger & Schroth Inc., New York, N. Y. Silk piece goods. 296,750; Aug. 16. Class 42.

LIST OF REGISTRANTS OF LABELS

Arcturus Radio Tube Company, Newark, N. J. Sirian Ultra-Violet Lamp. For Ultra-Violet Lamps. 41,016; Aug. 16.

Beaufont Co., Inc., The, Richmond, Va. Climax. For Ginger Ale. 41,017; Aug. 16.

Cappello, Joseph, Detroit, Mich. Cajoma Cleanser. For Liquid Cleansing Compound. 41,018; Aug. 16.

College Inn Food Products Co., Chicago, Ill. Spaghetti A La Mussolini. For Canned Spaghetti. 41,019; Aug. 16.

College Inn Food Products Co., Chicago, Ill. College Inn Rice Dinner. For Spanish Style Rice Dinners. 41,020; Aug. 16.

Cosmos Corporation, Newark, N. J. Cosmos Ultra-Violet. For Lamps. 41,021; Aug. 16.

Cuppies Company, Manufacturers, St. Louis, Mo. Nu-Wax. For Waxed Paper. 41,022; Aug. 16.

D. M. Distillery Co., S. A., Juarez, Mexico. Juarez Whiskey Straight American. For Whiskey. 41,023; Aug. 16.

Fokes, Ernest C., doing business as Kold Lax Laboratories, La Grange, Ga. Kold-Lax. For Liquid Cold Preparation. 41,024; Aug. 16.

Halferty, G. P., & Co., Seattle, Wash. Smart Set Salmon for Salad. For Salmon. 41,025; Aug. 16.

Hanson & Choate Co., Los Angeles, Calif. Hanson's. For Orange Juice. 41,026; Aug. 16.

Harmon Pharmaceutical Co., Inc., Philadelphia, Pa. Ex-Lo. For a Preparation for Keeping the Skin Smooth, Soft, and Free from Irritations. 41,027; Aug. 16.

Honoroff, David, Gary, Ind. In Diana Dyrat. For Powdered Rat Poison. 41,028; Aug. 16.

Huntley & Palmers, Limited, Reading and London, England. Romanoff Caviar Toasties. For Caviar Toasties. 41,029; Aug. 16.

Kahn's, E., Sons Company, The, Cincinnati, Ohio. Poplar. For Bacon. 41,030; Aug. 16.

Kold Lax Laboratories. (See Fokes, Ernest C.)

Kroeger Grocery & Baking Company, The, Cincinnati, Ohio. Avalon. For Soap Powder. 41,031; Aug. 16.

Lightning Cleanser Co., Primos, Del. Lightning Cleanser. For Cleansing Compound. 41,032; Aug. 16.

Mantell, Herman, New York, N. Y. Glad Nest. For Hosiery. 41,033; Aug. 16.

Miller, D. L., doing business as Millerine Company, Seattle, Wash. Millerine. For Treatment for the Hair. 41,034; Aug. 16.

Millerine Company. (See Miller, D. L.)

Northwestern Oil Company, Superior, Wis. Whif. For Household Insecticide. 41,035; Aug. 16.

Paalhar, W. E., doing business as Vitono Medicine Company, Los Angeles, Calif. Nervotol. For Reconstructive Stimulant and Tonic. 41,036; Aug. 16.

Pecos Cantaloupe Association, Pecos, Tex. Famous Pecos Valley Cantaloupes. For Cantaloupes. 41,037; Aug. 16.

Selma Press, Inc., Chicago, Ill. Keyno Card-O. For Game. 41,038; Aug. 16.

Southern California Fish Corporation, Terminal Island, Calif. Italy. For Tuna Fish. 41,039; Aug. 16.

Trojan Company, Fort Dodge, Iowa. Trojan Tablets. For Tablets. 41,040; Aug. 16.

Union Oil Company of California, Los Angeles, Calif. 76 Lustre Wax. For Lustre Wax for Tile, Woodwork, Automobiles, Linoleum, and Floors. 41,041; Aug. 16.

Virginia Fireworks Co., Inc., The, Peterburg, Va. Auto Whistling Bombs. For Auto Whistling Bombs. 41,042; Aug. 16.

Vitono Medicine Company. (See Paalhar, W. E.)

Waller, Julian L., San Francisco, Calif. Peri Skin Repairer. For Toilet Preparation. 41,043; Aug. 16.

Ward Baking Company, New York, N. Y. Ward's Rye Bread—Sliced. For Bread. 41,044; Aug. 16.

LIST OF REGISTRANTS OF PRINTS

B. V. D. Company, Inc., The, New York, N. Y. Stop Riding the "U. S. Males!" For Athletic Underwear. 13,822; Aug. 16.

Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Lively Wool Is Blended From Prize Carpet Wools. For Rugs. 13,823; Aug. 16.

Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Lively Wool Stays Young Longer. For Rugs. 13,824; Aug. 16.

Bigelow-Sanford Carpet Co., Inc., New York, N. Y. And Only Lively Wool Could Give Your Rugs Such Richness In Tones. For Rugs. 13,825; Aug. 16.

Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Here's an 8-Point Merchandising Policy. For Rugs and Carpets. 13,826; Aug. 16.

Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Bounding Over The Bounding Seas. For Carpets. 13,827; Aug. 16.

Carroccio, T. A., & Sons, New York, N. Y. Carroccio's Grated Cheese. For Grated Cheese. 13,828; Aug. 16.

Col-Tex Refining Company, Wilmington, Del., and Oklahoma City, Okla. Col-Tex Gasoline. For Gasoline. 13,829; Aug. 16.

Cream of Wheat Corporation, The, Minneapolis, Minn. Babies No Longer . . . Yet They Face Grave Dangers! For Wheat Breakfast Food. 13,830; Aug. 16.

Elizabeth Arden Inc., doing business as Elizabeth Arden, New York, N. Y. The Correct Make-Up Could Have Saved a Fallen Star. For Lipsticks. 13,821; Aug. 16.

La Mode Garment Company, Chicago, Ill. Hotcha. For Dresses. 13,831; Aug. 16.

Phillips Co., Dr. P., Orlando, Fla. Demand Dr. P. Phillips—Stamped—Tree Ripe—Fresh From My Groves Oranges Grapefruit Tangerines. For Oranges Grapefruit and Tangerines. 13,832; Aug. 16.

Russell See, Rahway, N. J. Infected Golf Clubs. For Chemical Preparation in Powder Form for Use Upon the Hands of Athletes. 13,833; Aug. 16.

St. Louis Cooperage Company, St. Louis, Mo. Look For the Stars—The Guarantee of a Quality Barrel or Keg. For Barrels and Kegs. 13,834; Aug. 16.

United American Bosch Corporation, Springfield, Mass. Vibro Power. For Radio Apparatus. 13,835; Aug. 16.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Carbons. Gebruder Siemens & Co. 39,050; renewed Oct. 14, 1932.

Leathers, Side. S. B. Foot & Co. 89,640; renewed Dec. 31, 1932.

CLASS 2

Containers or holders and paper liners for same. Tidy Products, Inc. 296,727; Aug. 16; Serial No. 321,224; published May 24, 1932.

Plates, Pulp. Standard Pulp Products Co. 296,587; Aug. 16; Serial No. 325,859; published May 24, 1932.

Pots, Unfilled cream. O. Voelk. 296,731; Aug. 16; Serial No. 322,608; published May 24, 1932.

Silos. Economy Silo & Mfg. Co. 296,730; Aug. 16; Serial No. 322,576 published May 24, 1932.

Trays. Furniture Stylists Inc. 296,722; Aug. 16; Serial No. 311,270; published Apr. 14, 1931.

CLASS 4

Chemical preparation. Monroe Drug Co. 89,130; renewed Nov. 12, 1932.

Shaving cream, a dry cleaning preparation in powder form, silver polish, etc. California Perfume Company. 296,760; Aug. 16.

Soap. R. Hudnut. 89,112; renewed Nov. 12, 1932.

Soap. Stork Company. 88,531; renewed Sept. 24, 1932.

Soap, Scouring. Bon Ami Company. 88,548; renewed Oct. 1, 1932.

Tar distillates. Barrett Manufacturing Company. 88,049; renewed Aug. 27, 1932.

CLASS 6

Baking powder and baking soda. Layton Pure Food Company. 89,672; renewed Dec. 31, 1932.
Chemicals and pharmaceutical preparations. Solvay Process Company. 88,968; renewed Oct. 29, 1932.
Hair eradicator. B. E. Levy. 88,502; renewed Sept. 24, 1932.
Medicine. Smith, Kline & French Co. 39,522; renewed Dec. 23, 1932.
Mouth wash. Tilit-Laboratorium. 39,458; renewed Dec. 9, 1932.
Powder, Foot. J. W. Manning. 38,729; renewed Aug. 5, 1932.
Powder, perfume, toilet water, etc., Talcum. Citizens' Wholesale Supply Company. 89,338; renewed Dec. 10, 1932.
Preparation for certain ailments. F. M. Criswell. 87,046; renewed June 25, 1932.
Remedy for diseases. Farbwerke vorm, Meister Lucius & Brüning. 88,862; renewed Oct. 29, 1932.
Toilet preparations. Owl Drug Company. 87,560; renewed July 23, 1932.

CLASS 9

Fireworks, firecrackers, and explosives. Independent Fireworks Manufacturing Company. 296,608; Aug. 16; Serial No. 326,244; published June 7, 1932.
Matches. Aktiebolaget Södertelje Tändsticksfabrik. 87,138; renewed July 2, 1932.
Matches. Jönköpings Och Vulcans Tändsticksfabriksaktiebolag. 87,216–17; renewed July 2, 1932.

CLASS 10

Fertilizer. Pacific Bone Coal & Fertilizer Company. 89,494; renewed Dec. 17, 1932.
Fertilizers. American Agriculture Chemical Company. 87,140; renewed July 2, 1932.
Fertilizers. American Agricultural Chemical Company. 87,513; renewed July 23, 1932.
Fertilizers. Patapsco Guano Co. 88,353; renewed Sept. 10, 1932.

CLASS 12

Construction materials. Barrett Manufacturing Company. 87,311; renewed July 9,1932.
Flooring material. Bradley Lumber Company of Arkansas. 296,665; Aug. 16; Serial No. 306,127; published May 24, 1932.
Pitch. Barrett Manufacturing Company. 88,452; renewed Sept. 24, 1932.
Plastic heat insulation material. M. W. Kellogg Co. 296,607; Aug. 16; Serial No. 326,188; published May 31, 1932.
Roofing-felt. Warren Chemical & Manufacturing Company. 87,385; renewed July 9, 1932.
Roofing felts and papers. Barrett Manufacturing Company. 88,659; renewed Oct. 1, 1932.
Shingles, Composition. El Rey Products Co. 296,658; Aug. 16; Serial No. 313,497; published May 24, 1932.
Tar, pitch, and asphalt for roofing construction, Prepared. Barrett Manufacturing Company. 87,312; renewed July 9, 1932.
Wood veneer, Sheets of. Robinson Manufacturing Company. 296,705; Aug. 16; Serial No. 318,567; published May 24, 1932.

CLASS 13

Holders, Price ticket. Hopp Press, Inc. 296,591; Aug. 16; Serial No. 325,713; published May 24, 1932.
Nails. Gulf States Steel Company. 296,595; Aug. 16; Serial No. 326,245; published May 31, 1932.
Nails, Roofing. Paraffine Companies. 296,707; Aug. 16; Serial No. 297,773; published May 24, 1932.
Pans, Refrigerator. National Enameling & Stamping Company. 296,585; Aug. 16; Serial No. 325,992; published May 31, 1932.
Plates for rubber heels, Wear. Holtite Manufacturing Company. 296,589; Aug. 16; Serial No. 325,851; published May 31, 1932.
Rivets. Tubular Rivet & Stud Company. 33,557; renewed July 1, 1932.
Sticks or handles for suckers. Popsicle Corporation of the United States. 296,747; Aug. 16.
Valve, roadway and meter boxes, manhole frames and covers, and valve vaults, Curb. Chemung Foundry Corporation. 296,590; Aug. 16; Serial No. 325,779; published May 24, 1932.

CLASS 14

Steel, Tool. Miami Holliday Steel Company. 296,744; Aug. 16.

CLASS 15

Gasolene, benzin, naphtha, etc. West India Oil Company. 88,607; renewed Oct. 1, 1932.
Greases, Lubricating. Pennsylvania Lubricating Company. 87,796; renewed Aug. 6, 1932.
Oil, Lubricating. Continental Oil Company. 296,634; Aug. 16; Serial No. 321,007; published May 31, 1932.
Oil, Lubricating. Carl Langer Inc. 296,631; Aug. 16; Serial No. 324,290; published May 31, 1932.
Oil, Motor lubricating. Dryer, Clark & Dryer Oil Co. 296,632; Aug. 16; Serial No. 324,064; published May 24, 1932.
Oils, Illuminating. Standard Oil Co. of New York. 88,529; renewed Sept. 24, 1932.
Petroleum for illuminating, heating, and power purposes, Refined. West India Oil Company. 88,302; renewed Sept. 10, 1932.
Petroleum products. Hy-Flash Gas & Oil Co. 296,668; Aug. 16; Serial No. 326,039; published May 31, 1932.

CLASS 16

Enamels, paints, varnishes, and varnish removers. Standard Varnish Works. 89,711; renewed Dec. 31, 1932.
Liquid filler. Standard Varnish Works. 89,514; renewed Dec. 17, 1932.
Paint, Inside. M. J. Merkin Paint Co. Inc. 296,604; Aug. 16; Serial No. 326,224; published May 24, 1932.
Paint, Oil. Sherwin-Williams Company. 89,155; renewed Nov. 12, 1932.
Paint or varnish, Rust and corrosion preventive liquid in the nature of a. J. H. Martocello, sr. 296,726; Aug. 16; Serial No. 320,571; published May 31, 1932.
Paints and painters' materials. Patterson-Sargent Company. 87,252; renewed July 2, 1932.
Paints and powders, Bronze and gold. Gerstendorfer Bros. 39,288; renewed Nov. 18, 1932.
Paints, paint enamels, stains, etc. Patterson-Sargent Company. 296,588; Aug. 16; Serial No. 325,855; published May 24, 1932.
Polish. G. H. Jenkins. 296,603; Aug. 16; Serial No. 326,147; published May 31, 1932.
Polish, Furniture and automobile. Shell Oil Company. 296,723; Aug. 16; Serial No. 309,444; published May 24, 1932.

CLASS 17

Cigar scraps. Excelsior Tobacco Co. Inc. 296,758; Aug. 16.
Cigars. W. H. Snyder & Sons. 296,759; Aug. 16.
Cigars, smoking and chewing tobacco and cigarettes. Hemmeter Cigar Company. 88,488; renewed Sept. 24, 1932.

CLASS 19

Hub caps. Rockne Motors Corporation. 296,738–9; Aug. 16; Serial Nos. 324,485–6; published May 31, 1932.
Mechanical device on which to record oil servicing for vehicles. Quaker State Oil Refining Company. 296,586; Aug. 16; Serial No. 325,959; published May 24, 1932.
Mechanical device upon which to record oil servicing. Quaker State Oil Refining Co. 296,596; Aug. 16; Serial No. 326,301; published May 31, 1932.
Railway equipment. American Steel Foundries. 296,593; Aug. 16; Serial No. 325,552; published May 31, 1932.
Shock struts. Bendix Aviation Corporation. 296,592; Aug. 16; Serial No. 325,705; published May 24, 1932.
Trailers, vehicle bodies and chassis, and structural parts thereof. Owensboro Wagon Company. 296,733; Aug. 16; Serial No. 323,672; published May 31, 1932.

CLASS 21

Electrical insulation compounds and fabrics, etc. Harvel Corporation. 296,709; Aug. 16; Serial No. 287,071; published May 31, 1932.
Fire alarm boxes and switchboards. Gamewell Company. 296,622; Aug. 16; Serial No. 325,650; published May 31, 1932.
Radio aerial eliminator. H. B. Browning. 296,623; Aug. 16; Serial No. 325,615; published May 31, 1932.
Radio receiving sets and apparatus. E. H. Scott Radio Laboratories, Inc. 296,757; Aug. 16.
Radio receiving sets and component parts thereof. All-American Mohawk Corporation. 296,754; Aug. 16.
Telephone pay stations. Gray Telephone Pay Station Company. 89,651; renewed Dec. 31, 1932.

CLASS 22

Amusement device, Coin controlled ball projecting. Hercules Novelty Company. 296,611; Aug. 16; Serial No. 326,680; published June 7, 1932.
Bats, golf clubs, baseballs, etc. P. Goldsmith Sons Co. 296,606; Aug. 16; Serial No. 326,141; published June 7, 1932.
Dolls. M. Greene. 296,612; Aug. 16; Serial No. 326,748; published June 7, 1932.
Dolls. S. H. Kress & Co. 296,613; Aug. 16; Serial No. 326,750; published June 7, 1932.
Games, Board. I-X-L Printing Company. 296,615; Aug. 16; Serial No. 326,639; published June 7, 1932.
Golf balls. Supreme Golf Ball Co. 296,614; Aug. 16; Serial No. 325,975; published June 7, 1932.
Toys. Milton Bradley Company. 296,657; Aug. 16; Serial No. 313,768; published June 7, 1932.

CLASS 23

Augers, Earth. Standard Earth Auger Co. 88,030; renewed Aug. 20, 1932.
Cutlery and tools. Henry Disston & Sons, Incorporated. 89,631; renewed Dec. 31, 1932.
Duplicating machines and parts, Gelatine, Electric. U. S. Duplicator Co. 296,741; Aug. 16; Serial No. 324,727; published May 24, 1932.
Files. Filecraft, Inc. 296,646; Aug. 16; Serial No. 326,418; published May 31, 1932.

Fire extinguishers, Portable. R. E. Diets Company. 296,686; Aug. 16; Serial No. 325,425; published May 3, 1932.
Gears, worm and miter gears, etc., Spur. Boston Gear Works, Inc. 296,762; Aug. 16.
Knives, and table cutlery. Utica Cutlery Company. 296,678; Aug. 16; Serial No. 325,766; published May 31, 1932.
Razor blades. P. Kaletsch. 296,740; Aug. 16; Serial No. 324,563; published May 24, 1932.
Saws. Simonds Manufacturing Company. 89,509; renewed Dec. 17, 1932.
Saws and saw blades. Clemson Bros., Inc. 296,680; Aug. 16; Serial No. 325,514; published May 24, 1932.
Screens, Rock, sand, etc. Apex Manufacturing Co. Inc. 296,712; Aug. 16; Serial No. 301,776; published May 24, 1932.
Spoons, cake turners, cake whips, etc. A. & J. Manufacturing Co. 296,711; Aug. 16; Serial No. 303,085; published Sept. 1, 1932.
Tools. Mathias Klein & Sons. 89,563; renewed Dec. 24, 1932.
Tools and parts of machinery. Mathias Klein & Sons. 89,564; renewed Dec. 24, 1932.
Tools, Machine. Superior Machine Tool Company. 296,688; Aug. 16; Serial No. 318,083; published May 24, 1932.
Typewriting machines. Remington Typewriter Company. 88,701; renewed Oct. 15, 1932.

CLASS 24

Ironing machines and parts thereof, Electric. Grigsby-Grunow Company. 296,690; Aug. 16; Serial No. 317,600; published May 31, 1932.
Laundry washing machines. Horton Manufacturing Company. 296,734; Aug. 16; Serial No. 323,865; published May 31, 1932.

CLASS 26

Charts, Foot-measuring. S. Mayer. 88,011; renewed Aug. 20, 1932.
Chemical, scientific, and laboratory glassware. Kimble Glass Company. 296,681; Aug. 16; Serial No. 325,583; published May 24, 1932.
Drawing and astronomical instruments, micrometers, etc. Societe Genevoise D'instruments de Physique. 296,687; Aug. 16; Serial No. 318,999; published May 24, 1932.
Optical frames, mountings, and lenses. Walman Optical Co. 296,716; Aug. 16; Serial No. 313,570; published May 24, 1932.
Scales, Weighing. Continental Scale Works. 296,729; Aug. 16; Serial No. 322,164; published Mar. 1, 1932.

CLASS 27

Watches and clocks. Robt. H. Ingersoll & Bro. 89,265–6; renewed Dec. 3, 1932.

CLASS 28

Buttons, brooches, buckles, etc. Krements & Company. 296,618; Aug. 16; Serial No. 325,793; published May 31, 1932.
Jewelry. Speidel Corporation. 296,620; Aug. 16; Serial No. 325,761; published May 31, 1932.
Pearls, Artificial. Joseph H. Meyer Bros. 89,282; renewed Dec. 3, 1932.
Silver plated hollow ware and flatware. Ellis Silver Company Inc. 296,621; Aug. 16; Serial No. 325,683; published May 31, 1932.
Silverware. Kinney & Levan Company. 296,669; Aug. 16; Serial No. 326,041; published May 31, 1932.

CLASS 30

Chinaware and pottery. Pickard, Incorporated. 296,648; Aug. 16; Serial No. 325,279; published May 24, 1932.

CLASS 32

Bed-frames, beds, cupboards, etc. Société Anonyme Pour La Décoration Intérieure Moderne. 296,710; Aug. 16; Serial No. 307,745; published May 24, 1932.
Bed-frames, springs, mattresses, and pillows. Dewitt-Seitz Company. 89,822; renewed Jan. 14, 1933.
Chairs. Remington Rand Inc. 296,639; Aug. 16; Serial No. 325,830; published May 24, 1932.
Chests, Cedar. Lane Company. 296,689; Aug. 16; Serial No. 317,719; published May 31, 1932.
Furniture. F. W. Miller. 296,720; Aug. 16; Serial No. 310,653; published May 31, 1932.
Furniture, Juvenile. Storkline Furniture Corporation. 296,743; Aug. 16; Serial No. 320,141; published May 31, 1932.
Furniture, Steel office. Peerless Steel Equipment Company. 296,717; Aug. 16; Serial No. 312,265; published May 24, 1932.
Lockers, Metal. Fred Medart Manufacturing Company. 296,727; Aug. 16; Serial No. 324,478; published May 24, 1932.
Mattresses and box springs. S. Ludwig Baumann & Company. 296,677; Aug. 16; Serial No. 325,677; published May 31, 1932.
Mirrors, Glass. A. W. Rosen & Co. 296,736; Aug. 16; Serial No. 324,009; published May 24, 1932.
Seat covers and pads, Vehicle. Wedler-Shuford Co. 296,685; Aug. 16; Serial No. 325,357; published May 31, 1932.

CLASS 34

Burner, Oil. Railway Locomotor Company. 296,628; Aug. 16; Serial No. 325,998; published May 24, 1932.
Heaters, steam and hot water heating elements, etc., Blower and radiator unit. Air-way Electric Appliance Corporation. 296,724; Aug. 16; Serial No. 300,319; published May 31, 1932.
Heating, cooling, and air conditioning units. Carrier Manufacturing Corporation. 296,732; Aug. 16; Serial No. 323,607; published May 31, 1932.
Humidifying units. Puffer-Hubbard Mfg. Co. 296,594; Aug. 16; Serial No. 325,077; published May 31, 1932.

CLASS 35

Belting. F. Raniville Company. 296,640; Aug. 16; Serial No. 325,999; published May 24, 1932.
Hose, Metal. Pennsylvania Flexible Metallic Tubing Company. 87,919; renewed Aug. 13, 1932.
Tire patches. C. A. Domzalski. 296,675; Aug. 16; Serial No. 325,817; published May 31, 1932.

CLASS 36

Pianos. Mathushek Piano Mfg. Company. 296,745; Aug. 16.
Pianos, Player. Baldwin Company. 89,434; renewed Dec. 17, 1932.

CLASS 37

Crayons. Binney & Smith Company. 89,531; renewed Dec. 24, 1932.
Paper, Bond. Chatfield Paper Corporation. 296,761; Aug. 16.
Pens and parts thereof, Fountain. Aiken-Lambert Company. 89,597; renewed Dec. 31, 1932.
Pens, Steel and metallic. William Mitchell (Pens) Limited. 87,787; renewed Aug. 6, 1932.

CLASS 38

Maps. Dayton Abstract & Land Title Company. 296,748; Aug. 16.

CLASS 39

Bags, Sleeping. Dominion Fabrics Corporation. 296,653; Aug. 16; Serial No. 325,818; published May 24, 1932.
Boots and shoes. Buckingham & Hecht. 296,694; Aug. 16; Serial No. 324,816; published May 10, 1932.
Boots and shoes. V. H. Moss. 296,749; Aug. 16.
Clothing, Waterproof. G. C. Bosson, jr. 296,755; Aug. 16.
Corsets. John Wanamaker Philadelphia. 296,638; Aug. 16; Serial No. 325,157; published May 10, 1932.
Corsets, brassières, and combinations thereof. Snug-Fit Brassiere Co. 296,636; Aug. 16; Serial No. 325,049; published May 24, 1932.
Footwear. Empire Knitting Mills. 296,702; Aug. 16; Serial No. 319,649; published Dec. 29, 1931.
Hats. Berkwitz & Bloomfield, Inc. 296,746; Aug. 16.
Hats. E. H. Scherman & Co. 296,647; Aug. 16; Serial No. 325,188; published May 24, 1932.
Hats, Ladies'. Berkwits & Bloomfield, Inc. 296,700; Aug. 16; Serial No. 321,197; published May 31, 1932.
Heels and taps, Rubber. I. T. S. Company. 296,703; Aug. 16; Serial No. 319,408; published May 24, 1932.
Hosiery. Elizabeth City Hosiery Co. 87,437; renewed July 16, 1932.
Hosiery. Lord & Taylor. 88,097; renewed Aug. 27, 1932.
Shirts. Yorke Shirt Co. 89,729; renewed Dec. 31, 1932.
Shoes. Albee Shoe Company Limited. 296,692; Aug. 16; Serial No. 324,920; published May 10, 1932.
Shoes. Freeman Shoe Corporation. 296,637; Aug. 16; Serial No. 325,094; published May 24, 1932.
Shoes. H. C. Godman Company. 296,696; Aug. 16; Serial No. 323,400; published May 24, 1932.
Shoes. H. C. Godman Company. 296,752–3; Aug. 16.
Shoes. H. Schattner. 296,650; Aug. 16; Serial No. 325,486; published May 31, 1932.
Shoes. J. E. Ludlam. 296,649; Aug. 16; Serial No. 325,370; published May 17, 1932.
Shoes. S. Rauh & Company. 296,644; Aug. 16; Serial No. 325,530; published May 24, 1932.
Shoes. Things Shoe Stores, Inc. 296,635; Aug. 16; Serial No. 325,024; published May 17, 1932.
Shoes, Women's. Craddock-Terry Company. 296,706; Aug. 16; Serial No. 317,889; published May 3, 1932.
Suits, blouses, knickers, etc., Wash. W. T. Grant Company. 296,693; Aug. 16; Serial No. 324,822; published May 10, 1932.
Underwear. Utah Knitting Co. 88,980; renewed Oct. 29, 1932.

CLASS 40

Buckles. F. Mashek. 296,697; Aug. 16; Serial No. 323,140; published Apr. 5, 1932.
Buckles, Base metal. G. E. Prentice Manufacturing Company. 296,756; Aug. 16.
Transfers and roll holders for transfers, for embroidery designs, etc. Kaumagraph Company. 296,698; Aug. 16; Serial No. 322,391; published May 24, 1932.

CLASS 42

Cotton piece goods. A. G. Hyde & Sons. 87,341; renewed July 9, 1932.

Cotton, rayon, silk, and woolen piece goods. C. M. De Land. 296,652; Aug. 16; Serial No. 326,672; published June 7, 1932.
Elastic fabric. Ideal Linen Mesh Company. 296,671; Aug. 16; Serial No. 326,218; published June 7, 1932.
Handkerchiefs. P. Karfunkle. 296,670; Aug. 16; Serial No. 326,070; published June 7, 1932.
Piece goods. L. Mondon. 89,409; renewed Dec. 10, 1932.
Piece goods and pillow cases. Lamport Mfg. Supply Co. 296,704; Aug. 16; Serial No. 318,786; published June 7, 1932.
Pile fabrics in the piece. E. F. Timme & Son. 296,651; Aug. 16; Serial No. 326,563; published June 7, 1932.
Silk chiffon in the piece. E. A. Oberfelder. 296,654; Aug. 16; Serial No. 326,314; published June 7, 1932.
Silk piece goods. Zollinger & Schroth Inc. 296,750; Aug. 16.
Woolen and worsted fabrics, jersey cloths, elderdowns, etc. Continental Mills, Inc. 296,645; Aug. 16; Serial No. 325,681; published May 10, 1932.
Woolen piece goods. A. D. Ellis Mills Incorporated. 296,695; Aug. 16; Serial No. 324,157; published May 31, 1932.
Woolen piece goods. Forstmann & Huffmann. 296,655; Aug. 16; Serial No. 315,736; published June 7, 1932.

CLASS 43

Yarns, and particularly for artificial silk. Bordow Silk Co. 296,699; Aug. 16; Serial No. 322,089; published May 3, 1932.
Yarns, Cotton. Jewel Cotton Mills. 89,669; renewed Dec. 31, 1932.

CLASS 44

Hair waving machines and parts thereof, hair curling irons, etc., Electric. Wella Waving Corporation. 296,728; Aug. 16; Serial No. 322,120; published Mar. 1, 1932.
Telephonic apparatus. Hutchison Acoustic Co. 89,409; renewed Dec. 2, 1932.

CLASS 45

Beverage and syrups therefor. Wolf and Koch. 296,609; Aug. 16; Serial No. 326,407; published June 7, 1932.
Beverages, Carbonated, maltless. Buffalo Rock Co. 296,763; Aug. 16.
Beverages, Maltless. Honeymoon Beverage Company. 296,701; Aug. 16; Serial No. 320,124; published Apr. 26, 1932.
Flavoring. Pichel Products Co. 296,602; Aug. 16; Serial No. 325,798; published June 7, 1932.
Fruit juices. Borden's Farm Products Co. 296,661; Aug. 16; Serial No. 312,898; published June 7, 1932.
Grape juice. Long I Vine Glo, Inc. 296,597; Aug. 16; Serial No. 326,715; published June 7, 1932.
Syrup concentrate and flavor. Triple "XXX" Company. 296,598; Aug. 16; Serial No. 325,126; published June 7, 1932.
Water, etc., Distilled and carbonated. Hydrade Water & Soda Co. 89,365; renewed Dec. 10, 1932.

CLASS 46

Beef broth preparations. American Kitchen Products Company. 89,527; renewed Dec. 24, 1932.
Butter. Detroit Creamery Company. 87,326; renewed July 9, 1932.
Cake, muffins, pies, etc. Lucullus Bakery, Inc. 296,713; Aug. 16; Serial No. 290,370; published May 17, 1932.
Candies and chocolates. Wallace & Co. 89,722–4; renewed Dec. 31, 1932.
Candy. Ambrosia Chocolate Company. 296,656; Aug. 16; Serial No. 314,482; published May 24, 1932.
Candy. Empire Gum Company. 296,629; Aug. 16; Serial No. 324,821; published May 24, 1932.
Candy. Edgar P. Lewis & Sons, Inc. 296,725; Aug. 16; Serial No. 320,467; published May 31, 1932.
Candy. Ridgewood Fruit Growers, Inc. 296,663; Aug. 16; Serial No. 307,507; published May 24, 1932.
Candy. Thompson's Spa Inc. 296,643; Aug. 16; Serial No. 326,310; published May 24, 1932.
Canned fruits. Oceana Canning Co. 89,872; renewed Jan. 14, 1933.
Canned fruits, vegetables, fish, etc. Paxton & Gallagher Company. 296,719; Aug. 16; Serial No. 311,281; published May 5, 1931.
Canned fruits, vegetables, tomato juice, etc. Libby, McNeill & Libby. 296,684; Aug. 16; Serial No. 325,294; published May 24, 1932.
Canned pineapple. Hawaiian Pineapple Company. 296,633; Aug. 16; Serial No. 321,106; published May 31, 1932.
Canned salmon. Astoria & Puget Sound Canning Co. 89,605; renewed Dec. 31, 1932.
Canned salmon. Kelly-Clarke Co. 88,307; renewed Sept. 10, 1932.
Canned salmon. Libby, McNeill & Libby. 296,672–3; Aug. 16; Serial Nos. 326,379–80; published May 31, 1932.
Canned salmon. Libby, McNeill & Libby. 296,676; Aug. 16; Serial No. 326,378; published May 31, 1932.
Canned salmon. Pacific Fisheries & Packing Company. 89,495; renewed Dec. 17, 1932.
Cereal food products. H–O (Hornby's Oatmeal) Company. 39,374; renewed Dec. 2, 1932.
Coffee. Dannemiller Grocery Company. 296,666; Aug. 16; Serial No. 305,779; published May 31, 1932.
Coffee. Durham Bros. & Co. 296,660. Aug. 16; Serial No. 313,235; published May 31, 1932.
Coffee. Grocers & Producers Co. 296,674; Aug. 16; Serial No. 326,422; published May 31, 1932.
Coffee. Grocers & Producers Co. 296,682–3; Aug. 16; Serial Nos. 326,470–1; published May 31, 1932.
Coffee. John Hoffmann & Sons Co. 296,601; Aug. 16; Serial No. 325,055; published May 24, 1932.
Coffee. J. J. O'Connor. 296,630; Aug. 16; Serial No. 323,418; published May 24, 1932.
Coffee. Tone Bros. 296,605; Aug. 16; Serial No. 326,044; published May 24, 1932.
Coffee, tea, and cocoa. Hahn Department Stores, Inc. 296,627; Aug. 16; Serial No. 325,143; published May 31, 1932.
Desserts and malted milk, Powdered. Superior Packing Corp. 296,679; Aug. 16; Serial No. 325,625; published May 31, 1932.
Eggs, Fresh. J. O. Pitts. 296,751. Aug. 16.
Flour. Cleveland Milling Co. 89,816; renewed Jan. 14, 1933.
Flour. Virginia Sweet Foods Inc. 296,718; Aug. 16; Serial No. 311,942; published May 24, 1932.
Flour, onions, garlic, etc. Mezogazdasagi Termeny Es Termékforgalmi Intézet. 296,664; Aug. 16; Serial No. 306,739; published May 31, 1932.
Flour, Wheat. Empire State Flour Mills. 89,636; renewed Dec. 31, 1932.
Food beverage, Chocolate milk. Krem-Ko Company. 296,691; Aug. 16; Serial No. 317,561; published May 24, 1932.
Food-beverages. Matechocla Company. 39,371; renewed Dec. 2, 1932.
Food products. F. M. Modica. 296,715; Aug. 16; Serial No. 316,161; published May 24, 1932.
Foods, Morris & Company. 89,284; renewed Dec. 3, 1932.
Foods derived from pork. Productos Selectos Del Cerdo, S. A. 296,599; Aug. 16; Serial No. 325,411; published May 3, 1932.
Fruits and juices, Fresh and canned citrus. Florida Citrus Exchange. 296,708; Aug. 16; Serial No. 304,047; published Oct. 14, 1930.
Fruits, dried fruits, fresh vegetables, Fresh deciduous. F. F. Tugel. 296,667; Aug. 16; Serial No. 326,034; published May 24, 1932.
Fruits, Fresh citrus. Stark & Waddell Packing Corporation. 296,625–6; Aug. 16; Serial Nos. 325,534–5; published May 31, 1932.
Fruits, Fresh citrus. Winter Haven Citrus Growers Association. 296,619; Aug. 16; Serial No. 325,771; published May 24, 1932.
Gum, Chewing. Autosales Gum & Chocolate Company. 89,609; renewed Dec. 31, 1932.
Gum, Chewing. Curtiss Candy Company. 296,662; Aug. 16; Serial No. 308,859; published May 31, 1932.
Gum, Chewing. Wm. Wrigley Jr. Company. 296,610; Aug. 16. Serial No. 325,416; published May 24, 1932.
Herrings and smoked sardines, Kippered. A/S Sardinfabrikken Norrig. 87,304; renewed July 9, 1932.
Ice cream. Frigivend Corporation. 296,735; Aug. 16; Serial No. 323,894; published May 17, 1932.
Meats, Smoked. Frank and Company. 296,624; Aug. 16; Serial No. 325,577; published May 31, 1932.
Oysters. J. & J. W. Elsworth Co. 296,600; Aug. 16; Serial No. 325,573; published May 31, 1932.
Peanuts, Barbecued. W. T. Pugh, jr. 296,617; Aug. 16; Serial No. 325,800; published May 31, 1932.
Salad dressing. American Stores Company. 296,641; Aug. 16; Serial No. 326,045; published May 24, 1932.
Salad dressing. Standard Brands Incorporated. 296,742; Aug. 16; Serial No. 324,854; published May 31, 1932.
Sandwiches, Peanut-butter. Holland Bros. Sandwich Co. 296,721; Aug. 16; Serial No. 309,381; published Apr. 14, 1931.
Syrup, Malt. N. Feldman. 296,642; Aug. 16; Serial No. 326,180; published May 24, 1932.
Tea, cocoa, coffee, etc. Norwine Coffee Company. 296,714; Aug. 16; Serial No. 266,040; published Nov. 27, 1928.
Vegetables, deciduous fruits, grapes, etc., Fresh. Eastern Fruit Distributors, Inc. 296,659; Aug. 16; Serial No. 313,336; published May 31, 1932.
Vegetables, Fresh. F. V. Birbeck. 296,616; Aug. 16; Serial No. 326,007; published May 24, 1932.

CLASS 47

Wine, California. Goldberg, Bowen & Co. 87,204; renewed July 2, 1932.

LIST OF LABELS

Auto Whistling Bombs. For Auto Whistling Bombs. Virginia Fireworks Co. 41,042; Aug. 16.
Avalon. For Soap Powder. Kroger Grocery & Baking Company. 41,031; Aug. 16.
Cajoma Cleanser. For Liquid Cleansing Compound. J. Cappello. 41,018; Aug. 16.
Climax. For Ginger Ale. Beaufont Co. 41,017; Aug. 16.
College Inn Rice Dinner. For Spanish Style Rice Dinners. College Inn Food Products Co. 41,020; Aug. 16.
Cosmos Ultra-Violet. For Lamps. Cosmos Corporation. 41,021; Aug. 16.
Ex-Lo. For a Preparation for Keeping the Skin Smooth, Soft, and Free from Irritations. Harmon Pharmaceutical Co. 41,027; Aug. 16.
Famous Pecos Valley Cantaloupes. For Cantaloupes. Pecos Cantaloupe Association. 41,037; Aug. 16.
Glad Nest. For Hosiery. H. Manteli. 41,033; Aug. 16.
Hanson's. For Orange Juice. Hanson & Choate Co. 41,026; Aug. 16.
In Diana Dyrat. For Powdered Rat Poison. D. Honoroff. 41,028; Aug. 16.
Italy. For Tuna Fish. Southern California Fish Corporation. 41,039; Aug. 16.
Juarez Whiskey Straight American. For Whiskey. D. M. Distillery Co., S. A. 41,023; Aug. 16.
Keyno Card-O. For Game. Selma Press, Inc. 41,038; Aug. 16.
Kold-Lax. For Liquid Cold Preparation. E. C. Fokes. 41,024; Aug. 16.
Lightning Cleanser. For Cleansing Compound. Lightning Cleanser Co. 41,032; Aug. 16.
Millerine. For Treatment for the Hair. D. L. Miller. 41,034; Aug. 16.
Nervotol. For Reconstructive Stimulant and Tonic. W. E. Paalhar. 41,036; Aug. 16.
Nu-Wax. For Waxed Paper. Cupples Company, Manufacturers. 41,022; Aug. 16.
Peri Skin Repairer. For Toilet Preparation. J. L. Waller. 41,043; Aug. 16.
Poplar. For Bacon. E. Kahn's Sons Company. 41,030; Aug. 16.
Romanoff Caviar Toasties. For Caviar Toasties. Huntley & Palmers, Limited. 41,029; Aug. 16.
76 Lustre Wax. For Lustre Wax for Tile, Woodwork, Automobiles, Linoleum, and Floors. Union Oil Company of California. 41,041; Aug. 16.
Sirian Ultra-Violet Lamp. For Ultra-Violet Lamps. Arcturus Radio Tube Company. 41,016; Aug. 16.
Smart Set Salmon for Salad. For Salmon. G. P. Halferty & Co. 41,025; Aug. 16.
Spaghetti A La Mussolini. For Canned Spaghetti. College Inn Food Products Co. 41,019; Aug. 16.
Trojan Tablets. For Tablets. Trojan Company. 41,040; Aug. 16.
Ward's Rye Bread—Sliced. For Bread. Ward Baking Company. 41,044; Aug. 16.
Whif. For Household Insecticide. Northwestern Oil Company. 41,035; Aug. 16.

LIST OF PRINTS

And Only Lively Wool Could Give Your Rug Such Richness In Tones. For Rugs. Bigelow-Sanford Carpet Co. 13,825; Aug. 16.
Babies No Longer . . . Yet They Face Grave Dangers! For Wheat Breakfast Food. Cream of Wheat Corporation. 13,830; Aug. 16.
Bounding Over The Bounding Seas. For Carpets. Bigelow-Sanford Carpet Co. 13,827; Aug. 16.
Carroccio's Grated Cheese. For Grated Cheese. T. A. Carroccio & Sons. 13,828; Aug. 16.
Col-Tex Gasoline. For Gasoline. Col-Tex Refining Company. 13,829; Aug. 16.
Demand Dr. P. Phillips—Stamped—Tree Ripe—Fresh From My Groves Oranges Grapefruit Tangerines. For Oranges, Grapefruit, and Tangerines. Dr. P. Phillips Co. 13,832; Aug. 16.
Here's An 8-Point Merchandising Policy. For Rugs and Carpets. Bigelow-Sanford Carpet Co. 13,826; Aug. 16.
Hotcha. For Dresses. La Mode Garment Company. 13,831; Aug. 16.
Infected Golf Clubs. For Chemical Preparation in Powder Form for Use Upon the Hands of Athletes. Russell See. 13,833; Aug. 16.
Lively Wool Is Blended From Prize Carpet Wools. For Rugs. Bigelow-Sanford Carpet Co. 13,823; Aug. 16.
Lively Wool Stays Young Longer. For Rugs. Bigelow-Sanford Carpet Co. 13,824; Aug. 16.
Look For The Stars—The Guarantee of a Quality Barrel or Keg. For Barrels and Kegs. St. Louis Cooperage Company. 13,834; Aug. 16.
Stop Rifling The "U. S. Males!" For Athletic Underwear. B. V. D. Company. 13,822; Aug. 16.
The Correct Make-Up Could Have Saved a Fallen Star. For Lipsticks. Elizabeth Arden Inc. 13,821; Aug. 16.
Vibro Power. For Radio Apparatus. United American Bosch Corporation. 13,835; Aug. 16.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 16TH DAY OF AUGUST, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Duffendack, O. S., and Rabezzana, assignors.)

A C Spark Plug Company. (See Helgeby, Ralph O., assignor.)

A C Spark Plug Company. (See Rabezzana, Hector, assignor.)

Aalborg, Christian, Pittsburgh, and J. B. MacNeil, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company. High speed circuit interrupter. 1,872,382; Aug. 16.

Aarskog, Alv, and K. Svendsen, Stavanger, Norway, and P. Ebel, Magdeburg, Germany, assignors to the Firm Aktieselskabet Lilleborg Fabriker, Stavanger, Norway. Machine for molding and pressing oil seed cakes or the like. 1,871,575; Aug. 16.

Abbott, Adrian O., jr., assignor to Morgan and Wright, Detroit, Mich. Manufacturing tire casings. 1,871,438; Aug. 16.

Abbott Company, The. (See Wiggin, Daniel W., assignor.)

Abbott, William G., jr., Milford, N. H. Refrigerating machine. 1,871,645; Aug. 16.

Abraham, Herbert, assignor to The Ruberoid Co., New York, N. Y. Shingle. 1,871,646; Aug. 16.

Absmeier, Carl, Maywood, assignor to United States Gypsum Company, Chicago, Ill. Board transfer device. 1,871,832; Aug. 16.

Accounting & Tabulating Corporation of Gt. Britain, The. (See Brougham, Leslie E., assignor.)

Accounting & Tabulating Corporation of Gt. Britain Limited, The. (See English, Francis G. S., assignor.)

Accounting & Tabulating Corporation of Gt. Britain Limited, The. (See Thomas, Arthur, assignor.)

Adaire, William R., Fox Chase, assignor to North American Lace Company, Philadelphia, Pa. Lace. Des. 87,559; Aug. 16.

Adams, Elmer W., assignor to Standard Oil Company, Whiting, Ind. Drawing lubricants. 1,871,939; Aug. 16.

Adams, Elmer W., Hammond, assignor to Standard Oil Company, Whiting, Ind. Emulsion. 1,871,940; Aug. 16.

Addressograph Company. (See Hubbard, Henry E., assignor.)

Addressograph Company. (See Paschall, Jaques C., assignor.)

Adlake Company, The. (See Larson, Carl H., assignor.)

Agfa Ansco Corporation. (See Bincer, H., and Wendt, assignors.)

Agfa Ansco Corporation. (See Goldhammer, Leo, assignor.)

Agfa Ansco Corporation. (See Tarbin, William T., assignor.)

Aircraft Improvement Corporation. (See Medvedeff, Nicholas J., assignor.)

Aktiengesellschaft, Brown, Boveri and Cie. (See Uyttenbroeck, Hubert, assignor.)

Aktieselskabet Lilleborg Fabriker. (See Aarskog, A., Svendsen, and Ebel, assignors.)

Alden, Gardner R., assignor to Dennison Manufacturing Company, Framingham, Mass. Making colored crepe paper with insoluble dyes and resulting product. 1,871,647; Aug. 16.

Alden, Gardner R., assignor to Dennison Manufacturing Company, Framingham, Mass. Coloring crepe paper and resulting product. 1,871,769; Aug. 16.

Alder, Jacques J. (See Klein, Nathan, assignor.)

Alexander, Earl C., Glen Ellyn, assignor to Massey Concrete Products Corporation, Chicago, Ill. Cribbing. 1,871,439; Aug. 16.

Alexander, Earl C., Glen Ellyn, assignor to Massey Concrete Products Corporation, Chicago, Ill. Cribbing. 1,871,488; Aug. 16.

All American Mohawk Corporation. (See Woods, Alvoni A., assignor.)

Allen, Arthur A., Bellerose, assignor to The Peelle Company, Brooklyn, N. Y. Elevator door. 1,872,054; Aug. 16.

Allen, Arthur J., Lakewood, Ohio. Steaming tube. 1,872,549; Aug. 16.

Allen, Horace E., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass drawing apparatus. 1,872,550; Aug. 16.

Allen, Lavont C. (See Cowley, J. T., and Allen.)

Allendale Manufacturing Company. (See Sherwood, R. H., and Stewart, assignors.)

Aluminum Company of America. (See Horsfield, Basil T., assignor.)

Aluminum Company of America. (See Koenigshofer, Victor, assignor.)

Aluminum Company of America. (See Lloyd, Charles G., assignor.)

Aluminum Company of America. (See Morrow, John E., assignor.)

Aluminum Company of America. (See Templin, Richard L., assignor.)

Alvord, Charles C., Worcester, Mass., assignor to Worcester Loom Works, Worcester County, Mass. Transfer comb. 1,872,023; Aug. 16.

American Art Metal Works, Inc. (See Hartmann, John, assignor.)

American Bank Note Company. (See Marquardt, Frank C., assignor.)

American Bemberg Corporation. (See Kempf, Hubert, assignor.)

American Bemberg Corporation. (See zur Löwen, Waldemar, assignor.)

American Can Company. (See Hathersall, John M., assignor.)

American Cyanamid Company. (See Collins, Charles D., assignor.)

American Cyanamid Company. (See Williams, Audley O., assignor.)

American Hammered Piston Ring Company, The. (See Morton, A. W., assignor.)

American Hardware Corporation, The. (See Stone, Elmer B., assignor.)

American Laundry Machinery Company. (See Carroll, Emil J., assignor.)

American Laundry Machinery Company, The. (See Waream, Charles E., assignor.)

American Lime and Stone Company. (See Keller, Charles W., assignor.)

American Metal Products Company et al. (See Matthael, F. C., and Shanahan, assignors.)

American Mine Door Company, The. (See Gurney, Albert J., assignor.)

American Ore Reclamation Company. (See Klugh, Bethune G., assignor.)

American Reenforced Paper Company. (See Eldred, Merritt G., assignor.)

American Reenforced Paper Company. (See Gibbs, George E., assignor.)

American Reenforced Paper Company. (See Weber, Lester N., assignor.)

American Sales Book Company. (See Hagemann, Louis F., assignor.)

American Sales Book Company. (See Wiswall, William J., assignor.)

American Sealcone Corporation. (See Jones, Ellis L., assignor.)

American Sealcone Corporation. (See Seifert, John O., assignor.)

American Steel Foundries. (See Hedgcock, William C., assignor.)

American Telephone and Telegraph Company. (See Best, Fred H., assignor.)

American Telephone and Telegraph Company. (See Cordeman, Roy C., assignor.)

American Telephone and Telegraph Company. (See Edwards, P. G., and Henneberger, assignors.)

American Telephone and Telegraph Company. (See Hamilton, Harold S., assignor.)

American Telephone and Telegraph Company. (See Inglis, A. H., Goodale, and Dietze, assignors.)

American Telephone and Telegraph Company. (See Niles, E. W., and Edwards, assignors.)

American Telephone and Telegraph Company. (See Nyquist, Harry, assignor.)

American Telephone and Telegraph Company. (See Pierce, Ralph E., assignor.)

American Telephone and Telegraph Company. (See Singer, F. J., and Gardner, assignors.)

American Telephone and Telegraph Company. (See Watson, Edward F., assignor.)

Ammon, Charles D., Lincoln, Nebr. Combination hammer and cutter for hammer mills. 1,871,489; Aug. 16.

Anderau, Walter. (See Straub, F., and Anderau.)

Anderson, Charles H., Chicago, Ill. Damper control mechanism. 1,872,218; Aug. 16.

Anderson, John A., Edson, Alberta, Canada. Child's vehicle or similar article. 87,560; Aug. 16.

Anderson, Martin A., Indianapolis, Ind. Coupler. 1,872,551; Aug. 16.

Anderson, Raymond T., Berea, assignor to The V. D. Anderson Company, Cleveland, Ohio. Pellet making machine. 1,871,833; Aug. 16.

Anderson, V. D., Company, The. (See Anderson, Raymond T., assignor.)
Anderson, William B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automatic vacuum valve. 1,872,383; Aug. 16.
André, Henri J., Paris, France. Rectifying apparatus. 1,872,214; Aug. 16.
Andren, Birger T., assignor to A. O. Smith Corporation, Milwaukee, Wis. Straightening pipe. 1,872,384; Aug. 16.
Andren, Birger T., assignor to A. O. Smith Corporation, Milwaukee, Wis. Connecting parts. 1,872,385; Aug. 16.
Andren, Birger T., assignor to A. O. Smith Corporation, Milwaukee, Wis. Automobile frame. 1,872,386; Aug. 16.
Andren, Birger T., assignor to A. O. Smith Corporation, Milwaukee, Wis. Connecting metal plate. 1,872,616; Aug. 16.
Andren, Birger T., Milwaukee, W. F. Heineman, Shorewood, and W. E. Crawford, Wauwatosa, assignors to A. O. Smith Corporation, Milwaukee, Wis. Welding tubular articles. 1,872,065; Aug. 16.
Angelus, Louis, New York, and D. L. Baylis, Long Island, N. Y.; said Baylis assignor to said Angelus. Hat ironing machine. 1,872,631; Aug. 16.
Antich, Anton M., Asbury Park, N. J., assignor of 40% to Thomas S. Skroza, Hartford, Conn. Riveting holderon. 1,872,215; Aug. 16.
Antol, George. (See Park, G. J., and Antol.)
Appleby, William H., London, Ontario, Canada. Child's vehicle. 1,872,216; Aug. 16.
Apps, Charles H., East Orange, N. J. Smoke box construction for locomotives. 1,872,217; Aug. 16.
Argard, Lillian, near Atlanta, Ga. Shoe and stocking protector. 1,871,576; Aug. 16.
Armistead, George. (See Repschleger, W. E., Armistead, Talbot, and Placette.)
Arms, Merton H., assignor to Bryant Chucking Grinder Company, Springfield, Vt. Grinding machine or the like. 1,872,552; Aug. 16.
Arrow-Hart & Hageman Electric Company, The. (See Guett, Monroe, assignor.)
Art Metal Works, Inc. (See Clark, E. F., and Rogers, assignors.)
Art Metal Works, Inc. (See Rogers, James F., assignor.)
Art Metal Works, Inc. (See Rogers, J. F., and Clark, assignors.)
Arveson, Maurice H. (See Sullivan, F. W., jr., and Arveson.)
Arveson, Maurice H., assignor to Standard Oil Company, Whiting, Ind. Lubricating compound. 1,871,941; Aug. 16.
Arveson, Maurice H., Hammond, Ind., assignor to Standard Oil Company (Indiana), Chicago, Ill. Lead mahogany soap lubricant and preparing same. 1,871,942; Aug. 16.
Asplund, George E., Beverly Hills, Calif. Signal holding device. 1,872,218; Aug. 16.
Associated Apparel Industries, Inc. (See Cunningham, Katherine E., assignor.)
Associated Electric Laboratories, Inc. (See Bellamy, John I., assignor.)
Associated Electric Laboratories, Inc. (See Lomax, Clarence E., assignor.)
Associated Electric Laboratories, Inc. (See Stonebridge, George E., assignor.)
Associated Electrical Industries Limited. (See Robinson, Ernest Y., assignor.)
Associated Electrical Industries Limited. (See Robinson, E. Y., and Burch, assignors.)
Astrom, Carl P., East Orange, N. J., assignor to M. H. Treadwell Company, New York, N. Y. Quick opening and closing door for retorts and the like. 1,871,834; Aug. 16.
Atlas Conveyor Company. (See Reed, Percival K., assignor.)
Atwater Kent Manufacturing Company. (See Miller, John M., assignor.)
Atwell, Harold V., Hammond, Ind., assignor to Standard Oil Company (Indiana), Chicago, Ill. Seal. 1,871,943; Aug. 16.
Avery, William L., assignor to The India Rubber Gutta Percha and Telegraph Works Company Limited, London, England. Fluid operated friction brake. 1,872,615; Aug. 16.
Ayers, Bert M., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Laminated glass and producing the same. 1,872,553; Aug. 16.
B. E. G. Z. Company. (See East, W. H., and H. F. and W. H. Zent, assignors.)
Baash, Lawrence F., E. Burns, Los Angeles, and G. B. Garrard, Long Beach, Calif. Packer for casing heads. 1,872,219; Aug. 16.
Babcock & Wilcox Company, The. (See Daniels, George H., assignor.)
Babin, Maurice J., New York, N. Y. Lift pump. 1,871,577; Aug. 16.
Bacheldor, William. (See Cahoon, S. E., and Bacheldor.)
Bacheldor, William H. (See Wood, W. E., and Bacheldor.)
Backes, Peter. (See Hentrich, W., Tietze, Ossenbeck, and Backes.)
Badger, Walter L., Ann Arbor, Mich., assignor to Swenson Evaporator Company, Harvey, Ill. Entrainment separator. 1,872,554; Aug. 16.
Bair, George L., Hanover, Pa. Floor construction. 1,872,101; Aug. 16.
Bakelite Corporation. (See Swan, H., and Higgins, assignors.)
Baker, Benjamin P., Turtle Creek, and R. C. Dickinson, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Circuit breaker. 1,872,387; Aug. 16.
Baker Perkins Company. (See Thurm, Richard, assignor.)
Baker, Robert E. (See Frick, C. A., and Baker.)
Baker, Russell A., Toronto, Ontario, Canada. Display sign. 1,871,648; Aug. 16.
Ball, Frederick O. and T. M., Detroit, Mich. Carburetor. 1,872,555; Aug. 16.
Ball, Joseph A., Los Angeles, Calif., assignor, by mesne assignments, to Technicolor, Inc., New York, N. Y. Three-color cinematographic camera. 1,871,649; Aug. 16.
Ball & Socket Manufacturing Company, The. (See Jeralds, George L., assignor.)
Ball, Thomas M. (See Ball, Frederick O. and T. M.)
Ballard, Bernard T. (See McNeil, W. M., and Ballard.)
Bancroft, William, Pawtucket, R. I. Tennis racket frame. 1,871,578; Aug. 16.
Barber-Colman Company. (See Peterson, Burt A., assignor.)
Barber, Franklin L., and E. W. Webb, assignors to Standard Car Truck Company, Chicago, Ill. Lateral motion freight car truck. 1,872,102; Aug. 16.
Barbour, Perley E., Quincy, Mass. Welting and its manufacture. 1,872,220; Aug. 16.
Barnard, Dean S., Hinsdale, Ill., assignor to The Rome Company, Inc. Means to secure coiled springs to a support. 1,871,440; Aug. 16.
Barr, Harry, Ironwood, Mich. Fish lock. 1,872,556; Aug. 16.
Barrett Company, The. (See Elms, Edward H., assignor.)
Barrett Company, The. (See McCloskey, G. E., and Wingert, assignors.)
Barrett Company, The. (See Miller, Stuart P., assignor.)
Barrett, Harold G., Wilmette, assignor to Pyratone Products Corporation, Chicago, Ill. Apparatus for tapering tubular shafts for golf clubs and the like. 1,871,490; Aug. 16.
Barrow, George M., Derry, Pa., assignor to Westinghouse Electric & Manufacturing Company. Article of manufacture. 1,872,557; Aug. 16.
Bart, Blasius, East Orange, N. J., assignor to The Frink Corporation, Long Island City, N. Y. Depositing on chromium. 1,871,770; Aug. 16.
Bart, Blasius, East Orange, N. J., assignor to The Frink Corporation, Long Island City, N. Y. Method and apparatus for forming molds and articles produced thereby. 1,872,221; Aug. 16.
Bartelme, Ferdinand M., Chicago, Ill. Gear shifting mechanism. 1,871,771; Aug. 16.
Barthelemy, Paul P., St. Paul, Minn., assignor to Universal Draft Gear Attachment Company. Car axle protector. 1,872,222; Aug. 16.
Bartlett, Edwin S. (See Jeppsson, I., and Bartlett.)
Bartley, Charles B., Pittsburgh, Pa. Signaling mechanism. 1,871,650; Aug. 16.
Bashara, Samuel F., Houston, Tex. Float valve. 1,871,579; Aug. 16.
Bassick Company, The. (See Moore, Raymond G., assignor.)
Batchelder, James W., Brookline, Mass. Gearless speed change mechanism. 1,871,835; Aug. 16.
Bates, Harry R., Atlanta, Ga., assignor to International Agricultural Corporation, New York, N. Y. Producing fertilizing material. 1,872,024; Aug. 16.
Baur, Ottmar, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Oil pump. 1,871,872; Aug. 16.
Bausch & Lomb Optical Company. (See McCabe, Joseph J., assignor.)
Baxter, Harold G., Baldwin, N. Y., and G. G. Shannonhouse, Wilmington, Del., assignors to Westinghouse Electric & Manufacturing Company. Oil immersed power panel. 1,871,651; Aug. 16.
Baylis, Daniel L. (See Angelus, L., and Baylis.)
Baynard, William H., Boston, and H. G. McMurray, Wakefield, assignors to Beckwith Manufacturing Company, Boston, Mass. Safety box toe and protector. 1,872,025; Aug. 16.
Bayrer, Orson D., assignor to The Travelers Insurance Company, Hartford, Conn. Safety device for printing presses. 1,871,772; Aug. 16.
Bazzoni, Lewis J., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for grooving heels. 1,871,873; Aug. 16.
Bazzoni, Lewis J., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for use in covering heels. 1,871,874; Aug. 16.
Bazzoni, Lewis J., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating upon heels. 1,872,388; Aug. 16.
Beadle, John J., Corydon, Iowa. Closure fastener. 1,871,580; Aug. 16.
Bear, Paul S., Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Mercury switch. 1,872,223; Aug. 16.

Beck, Leo L., Jackson Heights, assignor to Claude Neon Lights, Inc., New York, N. Y. Discharge tube. 1,872,567; Aug. 16.
Beckwith Manufacturing Company. (See Baynard, W. H., and McMurray, assignors.)
Beckwith Manufacturing Company. (See Jennings, Melvin O., assignor.)
Begtrup, Edward F., Jersey City, N. J. Crucible for alumino-thermic reactions. 1,872,391; Aug. 16.
Bellamore, David H., New York, N. Y., assignor, by mesne assignments, to Bendix Brake Company, Chicago, Ill. Disk wheel. 1,872,224; Aug. 16.
Bellamy, John I., Brookfield, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,872,558; Aug. 16.
Bellaschi, Peter L. (See Hodnette, J. K., and Bellaschi.)
Belier, Oscar, assignor of one-half to S. Deich, New York, N. Y. Air pump. 1,872,225; Aug. 16.
Benbow, James D., and J. B. Green, assignors to Western Wheeled Scraper Company, Aurora, Ill. Dump wagon door. 1,871,652; Aug. 16.
Bendix Aviation Corporation. (See Calvignac, Germain, assignor.)
Bendix Aviation Corporation. (See Hay, John D., assignor.)
Bendix Brake Company. (See Bellamore, David H., assignor.)
Bendix Brake Company. (See Bendix, Vincent, assignor.)
Bendix Brake Company. (See Lyman, Kenneth E., assignor.)
Bendix Brake Company. (See McDonald, Eugene G., assignor.)
Bendix Brake Company. (See Van Buskirk, Robert N., assignor.)
Bendix Brake Company. (See Watts, William S., assignor.)
Bendix Carbureter Company. (See Dienner, John A., assignor.)
Bendix-Cowdrey Brake Tester, Inc. (See Dodge, Adiel Y., assignor.)
Bendix Cowdrey Brake Tester, Inc. (See Wilkes, Don Q., assignor.)
Bendix Stromberg Carburetor Company. (See Hobbs, Leonard S., assignor.)
Bendix Stromberg Carburetor Company. (See Mock, Frank C., assignor.)
Bendix Stromberg Carburetor Company. (See Mock, F. C., Gustafson, and Chandler, assignors.)
Bendix, Vincent, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake mechanism. 1,871,441; Aug. 16.
Bendix, Vincent, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Braking system. 1,872,226; Aug. 16.
Bennett, Charles A., Washington County, Miss., assignor to The Government and the People of the United States of America. Apparatus for drying seed-cotton. 1,871,773; Aug. 16.
Bennett, Nicholas, Appleton, H. Dodd, Glazebrook, Manchester, W. C. Sprent, Cressington, and F. Holt, Weybridge, England, assignors to Imperial Chemical Industries Limited. Manufacture of benzyl chloride. 1,872,227; Aug. 16.
Benowitz, Aaron, assignor, by mesne assignments, to Synthetic Fur Mills Corp., New York, N. Y. Manufacturing a trimming material or cloth. 1,872,389; Aug. 16.
Benzee, Karl A., assignor of one-half to B. A. Keeler, Toledo, Ohio. Locking mechanism for doors. 1,871,442; Aug. 16.
Bergen Point Iron Works. (See Massa, William J., assignor.)
Bergen Point Iron Works. (See Smith, Augustus, assignor.)
Bergmann, Christian N., assignor to Bergmann Packaging Machine Company, Pittsburgh, Pa. Plunger valve for receptacle filling apparatus. 1,872,103; Aug. 16.
Bergmann Packaging Machine Company. (See Bergmann, Christian N., assignor.)
Berthold, Rudolf G., Berlin-Siemensstadt, Germany, assignor to Westinghouse Electric & Manufacturing Company. Space current device. 1,871,443; Aug. 16.
Berry, George P., assignor to General Motors Corporation, Detroit, Mich. Vacuum servo brake. 1,872,390; Aug. 16.
Best, Fred H., Westfield, N. J., assignor to American Telephone and Telegraph Company. Transmission measuring system. 1,871,944; Aug. 16.
Best, Millard W., Hamilton, Ontario, Canada. Stoker feeding mechanism. 1,871,653; Aug. 16.
Bettendorf, Company, The. (See Clasen, Claus J. W., assignor.)
Bettendorf Company, The. (See Hammett, Merton H., assignor.)
Bicknell, George M., assignor to Carter Carburetor Corporation, St. Louis, Mo. Carburetor. 1,872,559; Aug. 16.
Bielecky, Conrad, Elmhurst, N. Y. Chair. 1,872,056; Aug. 16.
Bigelow, George E. et al. (See Weis, Arthur R., assignor.)
Bincer, Hans. (See Wendt, B., and Bincer.)
Binks Manufacturing Company. (See Bramsen, S., Hersleb, and Wahlin, assignors.)
Binmore, Thomas V., Long Island City, N. Y., and Harold de B. Rice, Bristol, assignors to National India Rubber Company, Bristol, R. I. Making insulated wire and product obtained thereby. 1,872,228; Aug. 16.
Bishman, Walter A., and H. G. Lien, Minneapolis, Minn. Wrench for automobile hub caps. 1,872,392; Aug. 16.
Bishop, Hugh E., Udell, Iowa. Check row planter. 1,872,393; Aug. 16.
Black, Lee J., Beaumont, Tex. Control head for oil or gas wells. 1,872,104; Aug. 16.
Black, Lee J., Beaumont, Tex. Pressure control head. 1,872,105; Aug. 16.
Blackmore, Lloyd, assignor to General Motors Corporation, Detroit, Mich. Oil filter. 1,872,229; Aug. 16.
Blake, Thomas E., Santa Monica, Calif. Water sled. 1,872,230; Aug. 16.
Blanch, Eric A., Strand, London, England, assignor to Williams Sealing Corporation, Decatur, Ill. Cap for closing bottles, jars and other containers. 1,871,945; Aug. 16.
Blanchard, Leonard S. (See Willshaw, H., and Blanchard.)
Bleicher, Clarence E., assignor to Chrysler Corporation, Detroit, Mich. Projection welding. 1,872,394; Aug. 16.
Blier, Isaak F., New York, N. Y. Roasting apparatus. 1,871,654; Aug. 16.
Blum, Charles, Advertising Corporation. (See Blum, C., and Moore, assignors.)
Blum, Charles, and E. C. Moore, jr., assignors to Charles Blum Advertising Corporation, Philadelphia, Pa. Advertising folder. 1,871,774; Aug. 16.
Bobroff, Bornett L., Racine, Wis. Switch construction for signaling systems. 1,872,395; Aug. 16.
Boegehold, Alfred L., assignor to General Motors Research Corporation, Detroit, Mich. Cupola furnace. 1,872,057; Aug. 16.
Boegehold, Alfred L., assignor to General Motors Research Corporation, Detroit, Mich. Operating a cupola furnace. 1,872,569; Aug. 16.
Bol, Cornelis, Klaas Posthumus, J. M. Unk and C. H. Morel, Eindhoven, Netherlands, assignors to Radio Corporation of America. Wireless receiving set. 1,872,231; Aug. 16.
Bolen, Frank J., Van Hook, N. Dak. Tractor hitch. 1,872,106; Aug. 16.
Bond, Charles L., Los Angeles, Calif. Nondrip liquid dispenser. 1,871,655; Aug. 16.
Bond Manufacturing Corporation. (See Bond, Samuel C., assignor.)
Bond, Samuel C., Holly Oak, assignor to Bond Manufacturing Corporation, Wilmington, Del. Gun wad. 1,872,107; Aug. 16.
Bone, Evan P., Cincinnati, Ohio, assignor to The National Colortype Company, Bellevue, Ky. Light reflecting device. 1,872,643; Aug. 16.
Bonhôte, Gérald, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Azo-dyestuffs and making same. 1,871,946; Aug. 16.
Bonhôte, Gérald, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Azo-dyestuffs and making same. 1,871,947; Aug. 16.
Bonhôte, Gérald, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Azo dyestuff and making the same. 1,871,948; Aug. 16.
Bontempi, Giuseppe. (See Guidetti, F., and Bontempi.)
Boody, Erwin H. (See Parsons, W. E., and Boody.)
Booth, George E. (See Green, G., Booth, and De Nault.)
Bopf, Edward C., assignor to Deere & Company, Moline, Ill. Disk harrow. 1,872,108; Aug. 16.
Borchert, William, assignor to The Tagit Company, Rockford, Ill. Clip. 1,872,232; Aug. 16.
Borins, Paul, Paris, France. Multistage amplifiers. 1,872,109; Aug. 16.
Borton, George W., New Lisbon, N. J., assignor to Pennsylvania Crusher Company, Philadelphia, Pa. Hammer crusher. 1,872,233; Aug. 16.
Bosch, Robert, Aktiengesellschaft. (See Baur, Ottmar, assignor.)
Bottrell, Henry T., Sydney, Australia, assignor to Repulso, Inc. Rodent repellant and insecticidal composition and process of producing the same. 1,871,949; Aug. 16.
Boughton, Willis A., Cambridge, assignor to New England Mica Co., Waltham, Mass. Colored composite insulating material. 1,872,234; Aug. 16.
Bourbonnais, Joseph A., Holyoke, Mass. Air supply control means for oil burners. 1,872,396; Aug. 16.
Bouton, Edgar M., Chicago, Ill., and W. F. Eames, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Elevator control system. 1,871,656; Aug. 16.
Boyd, Peter, Beaver, Pa., assignor to National Tube Company. Apparatus for making butt-weld pipe. 1,872,235; Aug. 16.
Bradbury, Tennyson F. (See Hall, H. C., and Bradbury.)
Bradford, William G., Torrance, assignor to J. E. Oliver, Fullerton, Calif. Oil saver. 1,871,836; Aug. 16.
Bradford, Zerbe C., assignor to Delco Products Corporation, Dayton, Ohio. Motor control. 1,871,875; Aug. 16.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake system for automotive vehicles. 1,872,397; Aug. 16.

Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Bramsen, Svend, W. Hersleb, and F. Wahlin, assignors to Binks Manufacturing Company, Chicago, Ill. Car washer gun. 1,872,058; Aug. 16.
Brand, Harry R., New York, N. Y. Dispensing apparatus. 1,872,110; Aug. 16.
Brandt, Lewis, assignor to Pittsburgh Steel Company, Pittsburgh, Pa. Plaster and stucco ground. 1,871,491; Aug. 16.
Brehany, Charles J., Middletown, Ohio. One knob control for radio receiving sets. 1,871,876; Aug. 16.
Breisky, John V., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrical protective system. 1,872,560; Aug. 16.
Breitenstein, Albert F., assignor to The Geometric Tool Company, New Haven, Conn. Self-opening die head. 1,872,059; Aug. 16.
Breitenstein, Albert F., assignor to The Geometric Tool Company, New Haven, Conn. Adjustable die head. 1,872,060; Aug. 16.
Brennecke, Robert A., Chicago, Ill. Forming molded articles. 1,871,492; Aug. 16.
Breth, Walter, assignor to The General Tire & Rubber Company, Akron, Ohio. Valve holder for tube vulcanizers. 1,871,581; Aug. 16.
Bricken, John, West Orange, assignor to E. F. Britten, jr., Maplewood, N. J. Submersible pump set. 1,872,111; Aug. 16.
Brill, J. G., Company, The. (See Latshaw, Elmer, assignor.)
Brill, J. G., Company, The. (See Rosebrook, G. L., assignor.)
Brindley, James W., Johannesburg, Transvaal Province, Union of South Africa. Valve, cock, and the like. 1,872,632; Aug. 16.
Brindley, William E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Sound amplifying system. 1,872,239; Aug. 16.
Britten, E. F., jr. (See Bricken, John, assignor.)
Britton, Roy. (See Rich, William E., assignor.)
Brougham, Leslie E., Thornton Heath, assignor to The Accounting & Tabulating Corporation of Gt. Britain, Limited, London, England. Card perforating machine or the like. 1,871,582; Aug. 16.
Brown, Arthur E., Brentwood, assignor to Universal Rubber Paviors Limited, Audenshaw, near Manchester, England. Composition and manufacture of bituminous mixtures for use in road construction and like purposes. 1,872,112; Aug. 16.
Brown, Arthur L., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Emulsified fluid lubricant. 1,872,617; Aug. 16.
Brown, Boveri & Cie. (See Widmer, Stefan, assignor.)
Brown, Hugh A., assignor to Board of Trustees of the University of Illinois, Urbana, Ill. Suppressed wave radio carrier system. 1,872,398; Aug. 16.
Brown, Lorenzo D., Concord, N. H. Machine for inserting edible filler into a roll or the like. 1,871,837; Aug. 16.
Brown, Roy L. (See Cole, H. L., Dann, and Brown.)
Brown, Theophilus, assignor to Deere & Company, Moline, Ill. Power lift cultivator. 1,872,236; Aug. 16.
Brown, Theophilus, assignor to Deere & Company, Moline, Ill. Tractor cultivator. 1,872,237; Aug. 16.
Brown, Theophilus, assignor to Deere & Company, Moline, Ill. Agricultural implement. 1,872,238; Aug. 16.
Brown, Wilbur F., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,872,399; Aug. 16.
Brown, Willard C. (See Falge, R. N., and Brown.)
Brown, William H., Shaker Heights, assignor to Spicer Airfilter, Inc., Cleveland, Ohio. Low pressure signal. 1,872,068; Aug. 16.
Bruder, Charles S. (See Marks, C., and Bruder.)
Bryant Chucking Grinder Company. (See Arms, Merton H., assignor.)
Buchanan, Stephen N., assignor to The Thomas & Betts Co., Elizabeth, N. J. Conduit support. 1,872,061; Aug. 16.
Buckman, Henry H., Jacksonville, Fla., assignor of one-half to R. L. O'Brien, Buffalo, N. Y. Apparatus for correlating spaced points of observation. 1,871,877; Aug. 16.
Bucyrus-Erie Company. (See Lehman, Werner, assignor.)
Budd, Edward G., Manufacturing Co. (See Ledwinka, Joseph, assignor.)
Buhr, Joseph F., Detroit, Mich. Drilling machine. 1,872,400; Aug. 16.
Bull Dog Electric Products Company. (See Messing, Joseph, assignor.)
Bunce, Earl H., Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Condenser for zinc vapors. 1,871,657; Aug. 16.
Burch, Cecil R. (See Robinson, E. Y., and Burch.)
Burke, Ralph, Springfield, assignor to The Ohio Steel Foundry Company, Lima, Ohio. Roll for heat treating furnaces. 1,872,062; Aug. 16.
Burmeister, Erich, Zurich, Switzerland, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Condensing locomotive. 1,871,493; Aug. 16.
Burnett, Richard W., Chicago, Ill. Hand brake for flat cars and similar cars. 1,872,113; Aug. 16.
Burnham, Larry L., Youngstown, Ohio. Carrier. 1,872,069; Aug. 16.
Burnish, Howard J., assignor to A. O. Smith Corporation, Milwaukee, Wis. Method of and apparatus for welding pipe joints. 1,872,114; Aug. 16.
Burnish, Howard J., assignor to A. O. Smith Corporation, Milwaukee, Wis. Spacer strip for electric welding. 1,872,240; Aug. 16.
Burnish, Howard J., assignor to A. O. Smith Corporation, Milwaukee, Wis. Apparatus for arc welding. 1,872,241; Aug. 16.
Burns, Erwin. (See Baash, L. F., Burns, and Garrard.)
Burnside, Edgehill T., Shelbyville, Ind. Gravel washing machine. 1,871,583; Aug. 16.
Butler, Leland K., Manchester, N. H., assignor, by mesne assignments, to Excel Taping Machine Co., Lynn, Mass. Machine for applying tape to sheet units. 1,871,658; Aug. 16.
Butte, Paul C., San Francisco, Calif. Electric switch. 1,872,618; Aug. 16.
Büttner, Artur, assignor to Schnellpressenfabrik Aktiengesellschaft Heidelberg, Heidelberg, Germany. Cylinder printing press. 1,871,838; Aug. 16.
Butzbach, Otto, Chicago, Ill. Laundry apparatus. 1,872,401; Aug. 16.
Byerlein, Arthur A., Detroit, Mich., assignor to General Machinery Corporation, Hamilton, Ohio. Press. 1,872,115; Aug. 16.
Byerlein, Arthur A., Detroit, Mich., assignor to General Machinery Corporation, Hamilton, Ohio. Press. 1,872,242; Aug. 16.
Byers Machine Company. (See Lotte, Charles H., assignor.)
Byron-Jackson Co. (See Smith, N. K., assignor.)
C. H. & E. Manufacturing Company. (See Macdonald, Jason H., assignor.)
Cadgene, Ernest. (See Rivat, G., Cadgene, and Dreyfus.)
Cahoon, Sidney E., and W. Bacheldor, Wood River, Ill., assignors to Standard Oil Company, Whiting, Ind. Precouting device. 1,871,878; Aug. 16.
Caldwell, John F., Houston, Tex. Artificial tooth. 1,872,071; Aug. 16.
California Chemical Corporation. (See Seaton, Max Y., assignor.)
Callsen, Jürgen, Elberfeld, near Cologne-on-the-Rhine, Germany, assignor to Winthrop Chemical Company, Inc. Thetrichloro ethyl urethane salt of 4-dimethyl amino-1-phenyl-2.3-dimetnyl pyrazolone. 1,871,950; Aug. 16.
Calvignac, Germain, Mannheim, Germany, assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y. Brake drum. 1,872,116; Aug. 16.
Cameron, Hugh M., Woodhaven, assignor to John Chatillon & Sons, New York, N. Y. Weighing scale. 1,871,659; Aug. 16.
Camp, Percy B., Maywood, Ill., assignor to Universal Draft Gear Attachment Co. Hand brake. 1,872,063; Aug. 16.
Canadian Electro Products Company. (See Matheson, Howard W., assignor.)
Candee, Zenas P., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Transfer mechanism. 1,872,402; Aug. 16.
Cannon, Guy L., East Cleveland, Ohio. Vibrator device. 1,872,403; Aug. 16.
Cannon, John W., Providence, R. I. System for burning liquid fuel. 1,871,660; Aug. 16.
Capezio, Salvatore, East Paterson, N. J. Ballet slipper and the manufacture of same. 1,872,641; Aug. 16.
Card, Charles, Merced, Calif. Stuffing box. 1,872,117; Aug. 16.
Carey, Charles A., Arlington, assignor to Dewey and Almy Chemical Company, Cambridge, Mass. Soda-lime and preparing same. 1,872,026; Aug. 16.
Caridis, Marius, Los Angeles, Calif. Necktie. 1,872,118; Aug. 16.
Carlson, Elof L., assignor to The E. Ingraham Company, Bristol, Conn. Clock. Des. 87,561; Aug. 16.
Carlson, Gustave A., Detroit, Mich. Grinding and polishing machine. 1,871,494; Aug. 16.
Carlson, John A. E., assignor to Jacobsen Mfg. Company, Racine, Wis. Lawn-mower. 1,872,119; Aug. 16.
Carrier Engineering Corporation. (See Carrier, Willis H., assignor.)
Carrier Engineering Corporation. (See Lea, Edward S., assignor.)
Carrier Engineering Corporation. (See Le Grand, Joseph M., assignor.)
Carrier, Willis H., Essex Fells, assignor to Carrier Engineering Corporation, Newark, N. J. Sealing and thrust device. 1,871,661; Aug. 16.
Carrier, Willis H., Essex Fells, assignor to Carrier Engineering Corporation, Newark, N. J. Lubricating compressors and the like. 1,871,662; Aug. 16.
Carroll, Emil J., assignor to The American Laundry Machinery Company, Norwood, Ohio. Laundry system. 1,871,663; Aug. 16.
Carter Carburetor Corporation. (See Bicknell, George M., assignor.)
Carter Carburetor Corporation. (See Ericson, George R., assignor.)
Carter Carburetor Corporation. (See Schweiss, Joseph, assignor.)
Carter Carburetor Corporation. (See Weed, Hugh H. C., assignor.)
Carter, Clarence F., Danville, Ill. Electrical connecter. 1,871,839; Aug. 16.

Carter, Charles E., assignor to Sterling Manufacturing Company, Fort Wayne, Ind. Sanitary milk pail. 1,871,584; Aug. 16.
Case Research Lab. Inc. (See Case, Theodore W., assignor.)
Case, Theodore W., assignor to Case Research Lab. Inc., Auburn, N. Y. Camera shutter. 1,872,404; Aug. 16.
Caskey, August, Jamaica, Iowa. Wheel scraper for automotive vehicles. 1,872,120; Aug. 16.
Caster, John E., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machinery. 1,872,405; Aug. 16.
Castro, Manuel, Canton, Ohio. Cargo handling apparatus for aircraft and the like. 1,871,495; Aug. 16.
Cave, Henry, assignor to The Fuller Brush Company, Hartford, Conn. Brush element and process. 1,871,775; Aug. 16.
Celanese Corporation of America. (See Dreyfus, C., and Schneider, assignors.)
Celanese Corporation of America. (See Ellis, G. H., and Olpin, assignors.)
Celanese Corporation of America. (See Moss, William H., assignor.)
Celanese Corporation of America. (See Rivat, G., Cadgene, and Dreyfus, assignors.)
Celanese Corporation of America. (See Whitehead, William, assignor.)
Chadwick, Lee S., Shaker Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio. Refrigeration apparatus. 1,871,879; Aug. 16.
Chadwick, Lee S., Shaker Heights, and M. Resek, Cleveland Heights, assignors to Perfection Stove Company, Cleveland, Ohio. Fuel oil burning apparatus. 1,871,951; Aug. 16.
Chadwick, Lee S., Shaker Heights, M. Resek, Cleveland Heights, and J. A. Dahlstrom, Bay Village, assignors to Perfection Stove Company, Cleveland, Ohio. Oil burning apparatus. 1,871,952; Aug. 16.
Chain Products Company, The. (See Hodell, Frederick G., assignor.)
Chandler, Milton E. (See Mock, F. C., Gustafson, and Chandler.)
Chapleau, Louis A., assignor to South Bend Bait Company, South Bend, Ind. Fishing lure. 1,872,406; Aug. 16.
Chappell, Marvin L. (See Halloran, R. A., Chappell, and Osmer.)
Charles, Robert F. (See Kallander, E. L., and Charles.)
Chatillon, George E., assignor to John Chatillon & Sons, New York, N. Y. Device for determining the resistance of bodies to deflection. 1,871,776; Aug. 16.
Chatillon, John, & Sons. (See Cameron, Hugh M., assignor.)
Chatillon, John, & Sons. (See Chatillon, George E., assignor.)
Chemical Construction Corporation. (See Hechenbleikner, Ingenuin, assignor.)
Chemical Works formerly Sandoz, the Firm of. (See Peter, Albin, assignor.)
Cheney, Allan, Melrose, Mass. Metal flashing. 1,871,585; Aug. 16.
Chesebro, Whitman Co. Inc. (See Huck, Joseph, assignor.)
Chibnik, Harry, assignor of one-half to W. S. Reese, Sioux Falls, S. Dak. Auxiliary cultivator shovel. 1,872,072; Aug. 16.
Chicago Pneumatic Tool Company. (See Meunier, Leon F., assignor.)
Chicago Flexible Shaft Company. (See Jeppsson, Ivar, assignor.)
Chicago Flexible Shaft Company. (See Jeppsson, I., and Bartlett, assignors.)
Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)
Chicago Pneumatic Tool Company. (See Reed, Clarence E., assignor.)
Chicago Pneumatic Tool Company. (See Stevens, E. W., and Young, assignors.)
Chilton, Ralph H., assignor to The Inland Manufacturing Company, Dayton, Ohio. Making V-type transmission belts. 1,871,953; Aug. 16.
Christensen, William, assignor to Deere & Company, Moline, Ill. Rod weeder. 1,872,121; Aug. 16.
Christy, Sam, Des Moines, Iowa. Heating element and support therefor. 1,872,407; Aug. 16.
Chrysler Corporation. (See Bleicher, Clarence E., assignor.)
Chrysler Corporation. (See Foster, George W., assignor.)
Chrysler Corporation. (See Goode, G. C., Selje, and Miller, assignors.)
Chrysler Corporation. (See Hadley, N. F., and Franzen, assignors.)
Chrysler Corporation. (See Harness, J. K., and Hann, assignors.)
Chrysler Corporation. (See Kulka, Leo, assignor.)
Chrysler Corporation. (See Lee, Roger K., assignor.)
Chrysler Corporation. (See Miller, C. W., and Goode, assignors.)
Chrysler Corporation. (See Pfeiffer, Karl, assignor.)
Chrysler Corporation. (See Sage, Frederick L., assignor.)
Chrysler Corporation. (See Saunders, S. C., and Williams, assignors.)
Chrysler Corporation. (See Werdehoff, Albert B., assignor.)
Chrysler Corporation. (See White, Jay E.)
Chrysler Corporation. (See Wilson, William, assignor.)
Chrysler Corporation. (See Woolson, Harry T., assignor.)
Chrysler Corporation. (See Zeder, James C., assignor.)
Caryst, William A., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,871,954; Aug. 16.
Chryst, William A., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,871,955; Aug. 16.
Chryst, William A., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,871,956; Aug. 16.
Chryst, William A., assignor to Delco Products Corporation, Dayton, Ohio. Oscillating pivot joint. 1,871,957; Aug. 16.
Chryst, William A., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,871,958; Aug. 16.
Church, Harold D., assignor to The White Motor Company, Cleveland, Ohio. Lubricating engine governors. 1,871,496; Aug. 16.
Church, Harold D., Cleveland, Ohio, assignor to General Motors Corporation, Detroit, Mich. Friction clutch. 1,872,027; Aug. 16.
Church, Walter L. (See Pearce, Louis M., and Pearce.)
Churcher, Brian A. G., Bowden, England, assignor to Westinghouse Electric & Manufacturing Company. Electrical indicating, measuring, relay and like arrangements responsive to frequency. 1,872,243; Aug. 16.
Cincinnati Grinders Incorporated. (See Caster, John E., assignor.)
Cincinnati Grinders Incorporated, The. (See Einstein, S., and Nenninger, assignors.)
Cincinnati Grinders Incorporated. (See Volz, George A., assignor.)
Cincinnati Milling Machine Company, The. (See Ernst, H., and Goodrich, assignors.)
Cincinnati Milling Machine Company, The. (See Ernst, H., and Martellotti, assignors.)
Cincinnati Milling Machine Company, The. (See Ernst, H., and Nenninger, assignors.)
Clapp, William H. (See Minor, B. S., and Clapp.)
Clarin Mfg. Co. (See Hambrook, G. W., and Clarin, assignors.)
Clarin, Werner E. (See Hambrook, G. W., and Clarin.)
Clark, Augustus M., assignor to Whitall Tatum Company, Millville, N. J. Glass working machine. 1,871,497; Aug. 16.
Clark, Edward F. (See Rogers, J. F., and Clark.)
Clark, Edward F., Rangeley, Me., and J. F. Rogers, North Attleboro, Mass., assignors, by mesne assignments, to Art Metal Works, Inc., Newark, N. J. Pyrophoric pocket lighter. 1,872,244. Aug. 16.
Clark, George D., Sharpsville, Pa., assignor to Westinghouse Electric & Manufacturing Company. Expansion system for a gaseous medium. 1,872,245; Aug. 16.
Clark, Ira J., Fort Morgan, Colo. Valve lifter. 1,871,498; Aug. 16.
Clark Tructractor Co. (See Contois, E. J., and Williams, assignors.)
Clarke, John A., jr., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Notching relay. 1,871,777; Aug. 16.
Clary, Jan. P. (See Hegenberger, William H., assignor.)
Clasen, Claus J. W., Davenport, assignor to The Bettendorf Company, Bettendorf, Iowa. Railway car track. 1,871,778; Aug. 16.
Claude Neon Lights, Inc. (See Beck, Leo L., assignor.)
Clayton, Weaver R. (See Gerstmyer, W. A., and Clayton.)
Cleveland Heater Company, The. (See Friedman, Arthur, assignor.)
Cleveland Rock Drill Company, The. (See Rauberstrauch, George, assignor.)
Cline, Earl E. (See Holmes, E. W., and Cline.)
Cobb, Charles H., Newton, assignor to Filing Bureau, Incorporated, Boston, Mass. Index. 1,871,840; Aug. 16.
Cobb, Charles, jr., Marshall, Tex. Casting car wheels. 1,871,586; Aug. 16.
Cobb, Roy L., Spencer, Iowa. Sheet metal casket box. 1,871,453; Aug. 16.
Coberly, Clarence J., Los Angeles, assignor to Kobe, Inc., Huntington Park, Calif. Cutting torch structure. 1,872,408; Aug. 16.
Coberly, Clarence J., Los Angeles, assignor to Kobe, Inc., Huntington Park, Calif. Torch tip. 1,872,409; Aug. 16.
Coberly, Clarence J., Los Angeles, assignor to Kobe, Inc., Huntington Park, Calif. Controlling scale in gas cutting of metals. 1,872,410; Aug. 16.
Coberly, Clarence J., Los Angeles, assignor to Kobe, Inc., Huntington Park, Calif. Torch tip with deflectors. 1,872,619; Aug. 16.
Codrington, George W., Lakewood, Ohio. Fuel injection means for internal combustion engines. 1,871,444; Aug. 16.
Cohee, Charles C., Indianapolis, Ind. Device for reducing carbon monoxide in hydrocarbon engines. 1,872,411; Aug. 16.
Cohen, Louis, Washington, D. C. Radio signaling. 1,872,246; Aug. 16.
Cohen, Ralph, assignor to Perfection Steel Body Co., Gallon, Ohio. Burial vault. Des. 87,562; Aug. 16.
Colborne Manufacturing Company. (See Smith, Dennis W., assignor.)
Cole, Don, Evanston, Ill. Choke valve for carburetor. 1,872,412; Aug. 16.

Cole, Horace L., W. M. Dann, and R. L. Brown, Sharon, Pa., assignors to Westinghouse Electric and Manufacturing Company. Winding for electrical apparatus. 1,872,247; Aug. 16.

Coleman, Gerald H. (See Grether, E. F., and Coleman.)

Collins, Charles D., assignor to American Cyanamid Company, New York, N. Y. Blower dusting apparatus. 1,872,028; Aug. 16.

Colstad, Charles N. (See Romano, M., and Colstad.)

Columbia Engineering and Management Corporation. (See Gerstmyer, W. A., and Clayton, assignors.)

Compagnie Generale de Telegraphie Sans Fil. (See de Regnauld de Bellescize, Henri J. J. M., assignor.)

Compagnie Generale de Telegraphie Sans Fil. (See Perroux, Georges E. M., assignor.)

Conant, David J. (See Frank, L. C., and Conant.)

Condit Electrical Manufacturing Corporation. (See Wood, Joseph D., assignor.)

Connor, Roger, N. S. Welk, and D. R. Zenner, assignors to The McBee Binder Company, Athens, Ohio. Loose-leaf binder. 1,872,248; Aug. 16.

Constantine, Maria, New York, N. Y. Hat. Des. 87,563; Aug. 16.

Continental Diamond Fibre Company. (See Frederick, Louis T., assignor.)

Continental Diamond Fibre Company. (See Haroldson, Arthur H., assignor.)

Continental Diamond Fibre Company. (See Howard, Leonard L., assignor.)

Contois, Ely J., and A. O. Williams, assignors to Clark Tructractor Co., Battle Creek, Mich. Coupler. 1,871,841; Aug. 16.

Cook, Hyacinth O., Philadelphia, Pa. Folding sweater stretcher. 1,871,587; Aug. 16.

Cook, Joel R., Cleveland, Ohio, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Electric switch. 1,872,122; Aug. 16.

Cooper, John J., London, England, assignor to Underwood Elliott Fisher Company, New York, N. Y. Paper feeding and retaining arrangement for typewriters. 1,871,445; Aug. 16.

Corbett, Alfred, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,872,249; Aug. 16.

Corderman, Roy C., Chevy Chase, Md., assignor to American Telephone and Telegraph Company. Transmission regulator system. 1,871,959; Aug. 16.

Corelli, Victor. (See Perroux, G. E. M., and Corelli.)

Cotal, Jean, assignor to Societe d'Exploitation des Brevets Cotal, Paris, France. Electromagnetic clutch. 1,871,960; Aug. 16.

Coughtry, William R., Flint, assignor to General Motors Corporation, Detroit, Mich. Clutch. 1,872,250; Aug. 16.

Cousins, Alfred H., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Finishing tool. 1,871,880; Aug. 16.

Cowan, F. L., et al. (See Masterson, William E., assignor.)

Cowdrey Brake Tester Organization, Incorporated, The. (See Cowdrey, Charles F.)

Cowdrey, Charles F., assignor to The Cowdrey Brake Tester Organization, Incorporated, Fitchburg, Mass. Automobile brake testing machine. 1,872,123; Aug. 16.

Cowin, Stuart H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Bearing assembly. 1,872,251; Aug. 16.

Cowley, James T., North Scituate, Mass., and L. C. Allen, assignors to The Lamson Company, Syracuse, N. Y. Conveying apparatus. 1,872,620; Aug. 16.

Crafts, Otis T., Manchester, N. H. Heel base and making the same. 1,872,124; Aug. 16.

Crago, Harry R., Schenectady, N. Y., assignor to General Electric Company. Electric control system. 1,871,499; Aug. 16.

Cram, Leroy V., and J. F. Wilson, assignors to General Motors Corporation, Detroit, Mich. Hood catch. 1,871,779; Aug. 16.

Cramer, Jacob, Philadelphia, and M. Sherr, Germantown, assignors to I. J. Williams and J. T. Manning, jr., Philadelphia, Pa., receivers for Perkiomen Trunk and Bag Company, Inc. Pocket. 1,872,570; Aug. 16.

Crawford, Howard H., Detroit, Mich., assignor to Pines Winterfront Company, Chicago, Ill. Cooling apparatus. 1,871,588; Aug. 16.

Crawford, James M., assignor to General Motors Corporation, Detroit, Mich. Steering wheel lighting switch. 1,871,780; Aug. 16.

Crawford, William E. (See Andren, B. T., Heineman, and Crawford.)

Crawford, William E., Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Electric flash welding. 1,872,125; Aug. 16.

Creo-Dipt Company Inc. (See Gosch, Harry E., assignor.)

Crow, Waller, and H. Dittlinger, assignors to Dittlinger-Crow Process Company, New Braunfels, Tex. Gel production utilization. 1,871,781; Aug. 16.

Crowley, Joseph P., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass handling apparatus. 1,872,413; Aug. 16.

Crowley, Joseph P., and J. C. Gipe, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for producing molten glass. 1,872,414; Aug. 16.

Crowley, Joseph P., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Grinding sheet glass. 1,872,415; Aug. 16.

Crowley, Joseph P., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for grinding sheet glass. 1,872,416; Aug. 16.

Crown Cork & Seal Company. (See Olt, Leonard, assignor.)

Crown Cork & Seal Company, Inc. (See Goebel, George, assignor.)

Crown Cork & Seal Company, Inc. (See Sinz, L. P., assignor.)

Cunningham, Katherine E., assignor to Associated Apparel Industries, Inc., Chicago, Ill. Combination garment. 1,871,664; Aug. 16.

Cunningham, Orin D. (See Hess, Raymond W., and Cunningham.)

Cuthbert, William R., assignor to W. A. Sheaffer Pen Co., Fort Madison, Iowa. Cap construction. 1,872,064; Aug. 16.

Cutler-Hammer, Inc. (See Tregoning, William C., assignor.)

Dahlstrom, John A. (See Chadwick, L. S., Resek, and Dahlstrom.)

Daine, Robert L., New York, N. Y., and R. Guyé, Neuchatel, Switzerland, assignors to The Teleregister Corporation, New York, N. Y. Quotation board or the like apparatus. 1,872,126; Aug. 16.

Dainton, Francis M., assignor of one-half to A. St. James, New York, N. Y. Internal combustion engine. 1,871,589; Aug. 16.

Dallas, Charles D., assignor to Revere Copper & Brass Incorporated, Chicago, Ill. Coiling machine. 1,871,665; Aug. 16.

Dallas, Charles D., Chicago, Ill., assignor to Revere Copper & Brass Incorporated, Rome, N. Y. Air ring. 1,871,666; Aug. 16.

Dalldorf, Lloyd, and F. Mason, Southgate, assignors, to William H. Maxwell, Los Angeles, Calif. Stopcock. 1,872,417; Aug. 16.

Dalton, Hubert K., Stamford, Conn. Signal flag and lamp stand device. 1,871,667; Aug. 16.

Daniels, George H., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Water tube boiler. 1,871,500; Aug. 16.

Dann, Walter M. (See Cole, H. L., Dann, and Brown.)

D'Annunzio, Ugo V., New York, N. Y., and G. Finzi, Milan, Italy. Apparatus for extracting juice from fruits. 1,871,590; Aug. 16.

Dap, Jean, Puteaux, France, and E. Roggatz, Essen, assignors to Arthur Lange, Cologne-Holweide, Siedlung Iddelsfeld, Germany. Change speed gear. 1,871,961; Aug. 16.

Darnell, Rex C., assignor to The Willys-Overland Company, Toledo, Ohio. Spark advance control. 1,872,252; Aug. 16.

Dary, James A., Hartford, Kans. Hair steamer and drier. 1,871,591; Aug. 16.

Davis, John B., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Liquid dispensing apparatus. 1,872,418; Aug. 16.

Davis, Robert L., Grand Rapids, Mich., assignor to Westinghouse Electric & Manufacturing Company. Rectifier system. 1,872,253; Aug. 16.

Dawson, George H., Boston, assignor to Service Bureau, Inc., Cambridge, Mass. Transfer binder. 1,871,668; Aug. 16.

Decker, Stiles M., Leonia, N. J. Electric hammer. 1,871,446; Aug. 16.

De Coriolis, Ernest G., assignor to Surface Combustion Corporation, Toledo, Ohio. Conveyer for furnaces. 1,871,501; Aug. 16.

De Croce, Gennero, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company. Polarity responsive neutral relay selector. 1,871,669; Aug. 16.

Deere & Company. (See Bopf, Edward C., assignor.)

Deere & Company. (See Brown, Theophilus, assignor.)

Deere & Company. (See Christensen, William, assignor.)

Deere & Company. (See Paradise, Louis A., assignor.)

Deere, John, Tractor Company. (See McCormick, Elmer, assignor.)

De Golyer, Anthony G., New York, N. Y. Welding. 1,872,254; Aug. 16.

De Golyer, Anthony G., New York, N. Y. Welding. 1,872,255; Aug. 16.

Deich, Sol. (See Beller, Oscar, assignor.)

De Iongh, Johan H., Wassenaar, assignor to Naamloose Vennootschap Maatschappij tot Veraardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands. Counterbalancing mechanism for weighing apparatus. 1,872,420; Aug. 16.

Delco-Light Company. (See Dick, Herman J., assignor.)

Delco-Light Company. (See Dickey, Ernest, assignor.)

Delco-Light Company. (See Starr, F. F., assignor.)

Delco Products Corporation. (See Bradford, Zerbe C., assignor.)

Delco Products Corporation. (See Chryst, William A., assignor.)

Delco Products Corporation. (See Elsey, George W., assignor.)

Delco Products Corporation. (See Parsons, Jay C., assignor.)

Delco Products Corporation. (See Rossman, Edwin F., assignor.)

Delco Products Corporation. (See Walters, Herbert C., assignor.)

Delco-Remy Corporation. (See Dyer, J. B., and Lawson, assignors.)

Delco-Remy Corporation. (See Emmert, Rodger J., assignor.)

Delco-Remy Corporation. (See Hardman, Frederick J., assignor.)

Delco-Remy Corporation. (See Kuhls, Ernest R., assignor.)

Delco-Remy Corporation. (See Norviel, Harry E., assignor.)

Delco-Remy Corporation. (See Parker, Leslie O., assignor.)

Delco-Remy Corporation. (See Phelps, Alva W., assignor.)

De Loach, Douglas D., assignor to Foss-De Loach Company, Savannah, Ga. Rotary valve. 1,871,502; Aug. 16.

Dempster Mill Manufacturing Company. (See Schlachter, Henry, assignor.)

De Nault, Joseph T. (See Green, G., Booth, and De Nault.)

Denney, Fred, Olympia, Wash. Exercising apparatus. 1,872,256; Aug. 16.

Dennison Manufacturing Company. (See Alden, Gardner R., assignor.)

Dennison Manufacturing Company. (See Kallander, E. L., and Charles.)

De Regnauld de Bellescize, Henri J. J. M., assignor to Compagnie Generale de Telegraphie Sans Fil, Paris, France. Receiving apparatus. 1,872,634; Aug. 16.

Derryberry, Romulus L., and J. E. Johnson, Stone, Ky. Brake testing apparatus. 1,872,073; Aug. 16.

Deutsche Celluloid-Fabrik. (See Weihe, A., Leuchs, and Dörr, assignors.)

Dewey and Almy Chemical Company. (See Carey, Charles A., assignor.)

Dewey and Almy Chemical Company. (See Shanklin, Dunbar L., assignor.)

De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Display device. 1,872,074; Aug. 16.

Dexter Folder Company. (See Mentges, John, assignor.)

Dick, Herman J., assignor to Delco-Light Company, Dayton, Ohio. Electrical apparatus. 1,871,962; Aug. 16.

Dickey, Ernest, assignor to Delco-Light Company, Dayton, Ohio. Electrical apparatus. 1,871,881; Aug. 16.

Dickinson, Robert C. (See Baker, B. P., and Dickinson.)

Dienner, John A., Evanston, assignor to Bendix Stromberg Carbureter Company, Chicago, Ill. Vacuum tank. 1,872,419; Aug. 16.

Dieterich, Ludwig M., New Brunswick, N. J. Power transmission means. 1,871,782; Aug. 16.

Dietze, Eginhard. (See Inglis, A. H., Goodale, and Dietze.)

Dill, Edward J., assignor to The Inland Mfg. Co., Dayton, Ohio. Flexible connecter. 1,871,963; Aug. 16.

Dils, L. A., assignor to Kellog-Dils, Inc., Chicago, Ill. Rendering paper moisture, grease and acid proof and solution therefor. 1,871,842; Aug. 16.

Dittlinger-Crow Process Company. (See Crow, W., and Dittlinger, assignors.)

Dittlinger, Hippolyt. (See Crow, W., and Dittlinger.)

Doane, Harry C., Flint, assignor to General Motors Corporation, Detroit, Mich. Battery support. 1,872,621; Aug. 16.

Dodd, Herbert. (See Bennett, N., Dodd, Sprent, and Holt.)

Dodge, Adiel Y., assignor to Bendix-Cowdrey Brake Tester, Inc., South Bend, Ind. Adjustment of brakes. 1,872,127; Aug. 16.

Dodge, Milton L., and H. A. Jordan, Newburyport, Mass.; said Jordan assignor to said Dodge. Making shoes. 1,872,571; Aug. 16.

Dolza, John, Flint, assignor to General Motors Corporation, Detroit, Mich. Air cleaner and muffler. 1,872,075; Aug. 16.

Donahue, Elbert S., Chicago Heights, Ill., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Apparatus for surfacing roofing. 1,872,622; Aug. 16.

Donaldson, Alfred S., Newark, N. J., assignor to Du Pont Viscoloid Company, Wilmington, Del. Hand mirror or similar toilet article. Des. 87,564; Aug. 16.

Doody, John A., Tracy, Calif. Vehicle. 1,871,592; Aug. 16.

Dopyera, Rudolph, Los Angeles, Calif. Stringed musical instrument. 1,872,633; Aug. 16.

Dorr Company, The. (See Maust, Ernest J., assignor.)

Dörr, Eduard. (See Weihe, A., Leuchs, and Dörr.)

Dow Chemical Company, The. (See Gann, John A., assignor.)

Dow Chemical Company, The. (See Grether, Ernest F., assignor.)

Dow Chemical Company, The. (See Grether, E. F., and Coleman, assignors.)

Dow Chemical Company, The. (See Grether, E. F., and Mills, assignors.)

Doyle, Edward D., Kansas City, Mo. Ruling and printing machine. 1,872,421; Aug. 16.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass surfacing apparatus. 1,872,422; Aug. 16.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for forming sheet glass. 1,872,423; Aug. 16.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for conveying and transferring glass sheets or plates. 1,872,424; Aug. 16.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for producing sheet glass. 1,872,425; Aug. 16.

Drake, John L., and L. L. Handy, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Surfacing machine. 1,872,426; Aug. 16.

Draper, Thomas B., Oakland, Calif. Folding bed. 1,871,593; Aug. 16.

Dreibuss, Harry C., and P. J. McCullough, assignors to Scullin Steel Company, St. Louis, Mo. Car journal box. 1,872,427; Aug. 16.

Dreyfus, Camille. (See Rivat, G., Cadgene, and Dreyfus.)

Dreyfus, Camille, New York, N. Y. Surgical dressing. 1,872,076; Aug. 16.

Dreyfus, Camille, New York, N. Y., and G. Schneider, East Orange, N. J., assignors to Celanese Corporation of America. Uniting articles and product thereof. 1,871,670; Aug. 16.

Dreyfus, Henry, London, England. Manufacture of aliphatic anhydrides. 1,872,029; Aug. 16.

Dreyfus, Henry, London, England. Manufacture of aliphatic anhydrides. 1,872,030; Aug. 16.

Drieman, Franciscus A., et al. (See Prins, Peter L., assignor.)

Driscoll, Hugh D., Tulsa, Okla. Nonslipping attachment for shoes. 1,871,964; Aug. 16.

Dronkas, Peter K., Brockton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel machine. 1,871,882; Aug. 16.

Drury, William P., assignor of one-half to F. Hotchner, Los Angeles, Calif. Luminous tube sign letter. 1,872,428; Aug. 16.

Dryice Equipment Corporation. (See Weinstein, J., assignor.)

Drying Systems, Inc. (See Thompson, Dell., assignor.)

Du Bois, Virgil L., assignor to The Stough Tank Erecting Company, Tulsa, Okla. Gate valve. 1,871,965; Aug. 16.

Duchscher, Bernard, Cleveland, Ohio. Metal reenforcement for structural reenforced concrete members. 1,871,594; Aug. 16.

Dudley, Charles H., Hanover, N. H. Head of a cane or similar article. Des. 87,566; Aug. 16.

Duesberg, Louis T., Hoxie, Kans. Cleaner for rollers of elevating graders. 1,871,503; Aug. 16.

Duffendack, Ora S., Ann Arbor and H. Rabezzana, assignors to A C Spark Plug Company, Flint, Mich. Spark plug electrode and other electron emitting device. 1,872,065; Aug. 16.

Dunlop Rubber Company Limited. (See Willshaw, H., and Blanchard, assignors.)

Dunlop Rubber Company Limited. (See Willshaw, H., Goodhall, and Folliss, assignors.)

Duplex Electric Company. (See Ellithorpe, Clarence D., assignor.)

Du Pont, E. I., de Nemours & Company. (See Ensminger, George R., assignor.)

Du Pont, E. I., de Nemours & Company. (See Picton, Norman, assignor.)

Du Pont Viscoloid Company. (See Donaldson, Alfred S., assignor.)

Durkee, James D., Washington, D. C. Radio alarm system. 1,872,257; Aug. 16.

Duro Metal Products Company. (See Peterson, E. H., and Odlum, assignors.)

Dyer, John B., and J. W. Lawson, Anderson, Ind., assignors to Delco-Remy Corporation, Dayton, Ohio. Engine starting apparatus. 1,871,966; Aug. 16.

Dykstra, James. (See McCuen, C. L., Dykstra, Smith, and Wolfram.)

Eaglesfield, Frederick R., assignor to The Kawneer Company, Niles, Mich. Shelf support. 1,872,429; Aug. 16.

Eames, William F. (See Bouton, E. M., and Eames.)

Eames, William F., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator control system. 1,872,128; Aug. 16.

East, William H., H. F., and W. H. Zent, assignors to B. E. G. Z. Company, Inc., Indianapolis, Ind. Cultivator sweep. 1,872,623; Aug. 16.

Ebel, Peter. (See Aarskog A., Svendsen, and Ebel.)

Ecremeuses Melotte Societe Anonyme. (See Henrard, Fernand, assignor.)

Edson, Bert, Pawtucket, R. I., assignor to New England Lace Mills Inc., New York, N. Y. Lace. Des. 87,565; Aug. 16.

Edwards, James H., assignor to Pines Winterfront Company, Chicago, Ill. Thermostatic radiator shutter control. 1,871,671; Aug. 16.

Edwards, Paul G., and T. C. Henneberger, Bloomfield, N. J., assignors to American Telephone and Telegraph Company. Electrical testing system. 1,871,967; Aug. 16.

Edwards, William H. (See Niles, E. W., and Edwards.)

Ege, Alfred, assignor of one-half to S. Schiro, Chicago, Ill. Paperhanger's knife attachment. 1,871,968; Aug. 16.

Eggert, Joseph, assignor to The Jaeger Machine Company, Columbus, Ohio. Truck mixer. 1,872,624; Aug. 16.

Ellersgaard, Asger, assignor to Link-Belt Company, Chicago, Ill. Excavating machine. 1,872,129; Aug. 16.
Einstein, Sol, and L. F. Nenninger, assignors, by mesne assignments, to The Cincinnati Grinders Incorporated, Cincinnati, Ohio. Truing device for the wheels of grinding machines. 1,871,504; Aug. 16.
Elberty, Robert S., jr., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Photoelectric device for classifying laundry materials. 1,872,258; Aug. 16.
Eldred, Merritt G., Ontarioville, Ill., assignor to American Reenforced Paper Company, Attleboro, Mass. Beehive cover. 1,871,595; Aug. 16.
Eldridge, Jess G., Detroit, Mich., assignor to The Mechanical Rubber Company, Cleveland, Ohio. Yielding connection. 1,872,259; Aug. 16.
Electric Railway Improvement Company, The. (See White, William A., assignor.)
Electroblacks, Inc. (See Jakosky, John J., assignor.)
Ellinger, Albert E., Snyder, assignor to Morris Goldstein, Buffalo, N. Y. Mechanism for selectively controlling the angular movement of a shaft. 1,871,672; Aug. 16.
Elliott, Harmon P., Watertown, Mass. Stencil making method and apparatus. 1,872,130; Aug. 16.
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Oxidized resinous product and making same. 1,872,568; Aug. 16.
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Ellis, George H., and H. C. Olpin, Spondon, near Derby, England, assignors to Celanese Corporation of America. Coloring of cellulose derivatives. 1,871,673; Aug. 16.
Ellithorpe, Clarence D., Springfield Gardens, Long Island, assignor to Duplex Electric Company, New York, N. Y. Metal refinisher. 1,871,674; Aug. 16.
Elims, Edward H., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Dehydration and distillation of tar. 1,871,596; Aug. 16.
Elmendorf, Armin, Chicago, Ill., assignor to The Flexwood Company. Flattening flexible sheets faced with wood. 1,871,447; Aug. 16.
Elsenhans, Albert, Essen, Germany. Tool for dressing the grindstones in wood grinders. 1,871,448; Aug. 16.
Elsey, George W., Anderson, Ind., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Valve mechanism. 1,871,969; Aug. 16.
Elzey, Charles I., Baltimore, Md. Shirt guard. 1,872,260; Aug. 16.
Emmert, Rodger J., Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Armature winding machine. 1,871,970; Aug. 16.
Enzel, Edward, Bloomington, Ill., assignor to Mullins Manufacturing Corporation, Salem, Ohio. Wringer. 1,872,625; Aug. 16.
Engholm, Bernard A., Lakewood, assignor to The Rola Company, Cleveland, Ohio. Making loud-speakers. 1,872,261; Aug. 16.
English, Francis G. S., West Croydon, assignor to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Apparatus for punching holes in statistical or like record cards. 1,871,597; Aug. 16.
Ensminger, George R., New Brunswick, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Applying decorations. 1,872,131; Aug. 16.
Eppich, Frederick E., Norwood, Mass. Fish lure. 1,871,971; Aug. 16.
Erdman, Theodore J., assignor to The Van Brunt Manufacturing Company, Horicon, Wis. Hitch connection for plows with seeders. 1,872,066; Aug. 16
Ericson, George R., Maplewood, assignor to Carter Carburetor Corporation, St. Louis, Mo. Oil filter. 1,872,430; Aug. 16.
Ericson, Richard, assignor to United States Gypsum Company, Chicago, Ill. Apparatus for manufacturing tile board. 1,871,563; Aug. 16.
Ericson, Richard, assignor to United States Gypsum Company, Chicago, Ill. Manufacturing tile board. 1,871,843; Aug. 16.
Ermold, Edward, New York, N. Y. Feed mechanism for labeling machines. 1,871,675; Aug. 16.
Ermold, Edward, New York, N. Y. Feed mechanism for labeling machines. 1,871,676; Aug. 16.
Ermold, Edward, New York, N. Y. Bottle labeling machine. 1,871,677; Aug. 16.
Ermold, Edward, New York, N. Y. Machine for removing tin foil from bottles. 1,871,678; Aug. 16.
Ernst, Hans, and M. Martelliotti, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling machine. 1,872,431; Aug. 16.
Ernst, Hans, and C. W. Goodrich, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Hydraulic valve. 1,872,626; Aug. 16.
Ernst, Hans, and L. F. Nenninger, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling machine. 1,872,627; Aug. 16.
Ernst, Otto, and O. Nicodemus, Frankfort-on-the-Main-Hochst, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Separating condensation products of acetylene and ammonia. 1,872,432; Aug. 16.
Esch, Joseph F., Port Neches, Tex., assignor to The Texas Company, New York, N. Y. Material coating apparatus. 1,872,628; Aug. 16.
Eschholz, Otto H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Gas filled tank. 1,871,449; Aug. 16.
Eskimo Pie Corporation. (See Watts, Warren S., assignor.)
Essential Products Co. (See Noetzel, Gustav A., assignor.)
Evans, Harold A., assignor to Parco Specialty Co., Lynn, Mass. Binding of sheet articles. 1,871,679; Aug. 16.
Evans, Vincent J., Lakewood, assignor to The Patrol Valve Company, Cleveland, Ohio. Control system for gas burning appliances. 1,872,433; Aug. 16.
Evans, Wilmont R., trustee. (See Wolfe, Walter G., assignor.)
Evans, Wilson, assignor to The National Aluminate Corporation, Chicago, Ill. Treating liquids. 1,872,262; Aug. 16.
Evans, Wilson, assignor to National Aluminate Corporation, Chicago, Ill. Treating liquids. 1,872,263; Aug. 16.
Everson, Franklin E., Scarsdale, N. Y. Display device. 1,871,598; Aug. 16.
Excel Taping Machine Co. (See Butler, Leland K., assignor.)
Faas, Henry R. (See Wirshing, R. J., and Faas.)
Fahrenwald, Frank A., Chicago, Ill. Heat resisting damper assembly. 1,872,434; Aug. 16.
Fahrenwald, Frank A., Chicago, Ill. Work supporting bar for enameling furnaces. 1,872,629; Aug. 16.
Falge, Robert N., Birmingham, Mich., and W. C. Brown, East Cleveland, Ohio, assignors to General Electric Company. Vehicle head lamp. 1,871,505; Aug. 16.
Falk Corporation, The. (See Frentzel, Herman E., assignor.)
Falleson, John A., Rochester, N. Y., assignor to Union Tool Company. Nonrepeat mechanism for power presses. 1,872,132; Aug. 16.
Feldman, J. M., Company. (See Holdeman, Harry R., assignor.)
Feldtkeller, Richard, Berlin-Charlottenburg, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Amplifier system. 1,872,264; Aug. 16.
Fenstermaker, Lloyd H., Milwaukee, Wis. Metal shelving. 1,871,972; Aug. 16.
Ferrell, Dent. (See Helmholtz, A. W., and Ferrell.)
Fetner, Stephen R., Jacksonville, Fla. Inner liner for tire casings. 1,872,265; Aug. 16.
Fidelity Trust Company. (See Parsons, W. E., and Boody, assignors.)
Fidelity Trust Company. (See Williamson, Bert R., assignor.)
Field, Charles F., and Z. E. Flick, assignors to The Charles F. Field Manufacturing Company, Kansas City, Mo. Apparatus for the manufacture of tubular packing. 1,872,266; Aug. 16.
Field, Charles F., Manufacturing Company, The. (See Field, C. F., and Flick, assignors.)
Field, Herbert C., Windsor, Ontario, Canada, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Lift pin assembly for a window regulator. 1,871,844; Aug. 16.
Filing Equipment Bureau, Incorporated. (See Cobb, Charles H., assignor.)
Finke, Herman A., St. Louis, Mo. Lubricating system. 1,871,973; Aug. 16.
Finzi, Gino. (See d'Annunzio, Ugo V., assignor.)
Fischer, Franz J., assignor to the Firm Koch & Stersel Aktiengesellschaft, Dresden, Germany. Transforming device. 1,872,435; Aug. 16.
Fischer, Michael. (See Mino, E., McCann, Fischer, and Radcliffe.)
Fisher, Walter S., assignor to The Willys-Overland Company, Toledo, Ohio. Head cooling means. 1,872,267; Aug. 16.
Fisk Rubber Company, The. (See Maynard, Charles E., assignor.)
Fisk Rubber Company, The. (See Pratt, Benjamin H., assignor.)
Flanagan, Thomas J., New Haven, Conn. Stretcher. 1,871,680; Aug. 16.
Flauder, Alfred J., Trumbull, assignor to The Weidlich Bros. Mfg. Co., Bridgeport, Conn. Bottle opener. Des. 87,567; Aug. 16.
Flexwood Company, The. (See Elmendorf, Armin, assignor.)
Flick, Zeno E. (See Field, C. F., and Flick.)
Flower, Arthur H., and J. C. Housekeeper, assignors to The Inland Manufacturing Company, Dayton, Ohio. Cellular heat insulation material. 1,871,674; Aug. 16.
Flynn, Benjamin H., Alexandria, La. Transmission mechanism. 1,871,975; Aug. 16.
Flynn and Emrich Company. (See Huber, Charles J., assignor.)
Fogwell, Harrison H., and C. H. Judd, Los Angeles, Calif. Safety speed controller. 1,872,133; Aug. 16.
Folliss, Charles. (See Willshaw, H., Goodhall, and Folliss.)
Forbes, Nelson H., Detroit, Mich. Closure hinge. 1,872,077; Aug. 16.
Ford, James G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Refining oils. 1,871,681; Aug. 16.
Ford, James G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Refining paraffin and naphthene base oils. 1,871,682; Aug. 16.

Ford Motor Company. (See McCarroll, R. H., and Vennerholm, assignors.)
Foss-De Loach Company. (See De Loach, Douglas D., assignor.)
Foster, George W., assignor to Chrysler Corporation, Detroit, Mich. Work feeding apparatus. 1,872,436; Aug. 16.
Fraber, Thomas J., Washington, D. C. Sheet metal form and sheet metal lath. 1,871,976; Aug. 16.
Frank, Leo C., McKeesport, and D. J. Conant, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company. Time-limit engine-choking valve. 1,872,268; Aug. 16.
Frankignoul, Edgard, Brussels, Belgium. Sinking molding tubes for concrete piles molded in the ground. 1,872,635; Aug. 16.
Franklin, Frederick M., New York, N. Y. Doorchecking device. 1,872,561; Aug. 16.
Franzen, Tore. (See Hadley, N. F., and Franzen.)
Fraser, Frank, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Continuous tank furnace. 1,872,437; Aug. 16.
Frederick, Louis T., Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, N. J. Method and apparatus for assembling disks. 1,872,134; Aug. 16.
Frederick, Louis T., Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del. Composite article and making same. 1,872,269; Aug. 16.
Fredrich, Joseph, Tyndall, S. Dak. Manure loader. 1,871,599; Aug. 16.
Frentzel, Herman E., assignor to The Falk Corporation, Milwaukee, Wis. Slotting machine. 1,872,270; Aug. 16.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 87,568; Aug. 16.
Frick, Chester A., and R. E. Baker, assignors to Glascock Brothers Manufacturing Company, Muncie, Ind. Display refrigerator. 1,871,784; Aug. 16.
Frick, Chester A., and R. E. Baker, assignors to Glascock Brothers Mfg. Co., Muncie, Ind. Bottle refrigerator. 1,872,031; Aug. 16.
Frick, Chester A., and R. E. Baker, assignors to Glascock Brothers Mfg. Co., Muncie, Ind. Bottle dispensing refrigerator. 1,872,032; Aug. 16.
Frickey, Royal E., assignor to Welding Service Inc., San Francisco, Calif. Rail joint. 1,871,977; Aug. 16.
Friden, Carl M. F., Oakland, assignor to Marchant Calculating Machine Company, Emeryville, Calif. Calculating machine. 1,872,438; Aug. 16.
Friden, Carl M. F., Oakland, assignor to Marchant Calculating Machine Company, Emeryville, Calif. Calculating machine. 1,872,439; Aug. 16.
Fried. Krupp Aktiengesellschaft. (See Burmeister, Erich, assignor.)
Friedländer, Erich. (See Ollendorff, F., and Friedländer.)
Friedländer, Erich. (See Rüdenberg, R., and Friedländer.)
Friedman, Arthur, assignor to The Cleveland Heater Company, Cleveland, Ohio. Dual gas burner. 1,871,783; Aug. 16.
Friedrichs, Wilhelm, Reinickendorfost, near Berlin, Germany. Mail stamping machine and the like. 1,871,506; Aug. 16.
Frink Corporation, The. (See Bart, Blasius, assignor.)
Fritz-Cross Company, The. (See Goenen, L. E., and Garrow, assignors.)
Frost, Charles L., and H. E. Frost, Grand Rapids, Mich. Latch or lock bolt. 1,872,440; Aug. 16.
Frost, Horace E. (See Frost, Charles L., and H. E.)
Frost, William M., Spokane, Wash. Insect electrocutor. 1,871,978; Aug. 16.
Fuller Brush Company, The. (See Cave, Henry, assignor.)
Fuller, Tillie, Madison, S. Dak. Garment hanger. 1,871,600; Aug. 16.
Furrer, Rudolph, Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Apparatus for forming beads on tubular articles. 1,872,067; Aug. 16.
Furrer, Rudolph, Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Pipe joint. 1,872,271; Aug. 16.
Furrer, Rudolph, Whitefiesh Bay, assignor to A. O. Smith Corporation, Milwaukee, Wis. Railway tank car. 1,872,272; Aug. 16.
Galloway Engineering Company Limited. (See Greening, H. B., and Galloway, assignors.)
Galloway, James W. (See Greening, H. B., and Galloway.)
Gann, John A., assignor to The Dow Chemical Company, Midland Mich. Metallic powder and making. 1,871,450; Aug. 16.
Gardner, George D., San Jose, assignor to Gardner Manufacturing Company, Ltd., Sunnyvale, Calif. Fruit processor. 1,871,507; Aug. 16.
Gardner, Henry A., Washington, D. C. Metallic conduit. 1,871,508; Aug. 16.
Gardner, Leland A. (See Singer, F. J., and Gardner.)
Gardner Manufacturing Company. (See Gardner, George D., assignor.)
Gargano, Frank J., Brooklyn, N. Y. Envelope opener. 1,871,509; Aug. 16.
Garrard, George B. (See Baash, L. F., Burns, and Garrard.)
Garrow, James A. (See Goenen, L. E., and Garrow.)
Gaskins, Ernest, City Point, Hopewell, Va., assignor to United States Gypsum Company, Chicago, Ill. Chemical printing. 1,871,683; Aug. 16.
Gaty, Lee S., Columbus, Ohio. Method of and apparatus for making holes in the ground. 1,871,601; Aug. 16.
Gaupholm, Emil O. E., Bellevue, Wash. Fuel briquette. 1,872,135; Aug. 16.
Gayan, John, Baltimore, Md. Braking system. 1,871,979; Aug. 16.
Gayan, John, Baltimore, Md. Safety harger for brake beams. 1,871,980; Aug. 16.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,871,451; Aug. 16.
General Aniline Works, Inc. (See Henle, F., and Lanz, assignors.)
General Aniline Works, Inc. (See Hentrich, W., and Knoche, assignors.)
General Aniline Works, Inc. (See Hentrich, W., Tietze, Ossenbeck, and Backes, assignors.)
General Aniline Works, Inc. (See Kalischer, G., and Honold, assignors.)
General Aniline Works, Inc. (See Nawiasky, P., and Krause, assignors.)
General Electric Company. (See Crago, Harry R., assignor.)
General Electric Company. (See Falge, R. N., and Brown, assignors.)
General Electric Company. (See Kellogg, Edward W., assignor.)
General Electric Company. (See Rhea, T. R., Tear, and Green, assignors.)
General Electric Company. (See Sawyer, Robert T., assignor.)
General Electric Company. (See Turnpenny, William H.)
General Electric Company. (See Winne, Harry A., assignor.)
General Glass Corporation. (See Thomas, Robert W., assignor.)
General Machinery Corporation. (See Byerlein, Arthur A., assignor.)
General Motors Corporation. (See Blackmore, Lloyd, assignor.)
General Motors Corporation. (See Church, Harold D., assignor.)
General Motors Corporation. (See Coughtry, William R., assignor.)
General Motors Corporation. (See Cram, L. V., and Wilson, assignors.)
General Motors Corporation. (See Crawford, James M., assignor.)
General Motors Corporation. (See Doane, Harry C., assignor.)
General Motors Corporation. (See Dolza, John, assignor.)
General Motors Corporation. (See Gibson, George F., assignor.)
General Motors Corporation. (See Hunt, Ormond E., assignor.)
General Motors Corporation. (See Hutchison, Robert R., assignor.)
General Motors Corporation. (See Le Jeune, Frank H., assignor.)
General Motors Corporation. (See Lewellen, Albert R., assignor.)
General Motors Corporation. (See Manning, William H., assignor.)
General Motors Corporation. (See McCuen, C. L., Dykstra, Smith, and Wolfram, assignors.)
General Motors Corporation. (See Ragsdale, Edward T., assignor.)
General Motors Corporation. (See Schittke, Robert, assignor.)
General Motors Corporation. (See Stallsmith, Marion E., assignor.)
General Motors Corporation. (See Summers, Caleb E., assignor.)
General Motors Corporation. (See Taub, Alex, assignor.)
General Motors Research Corporation. (See Berry, George P., assignor.)
General Motors Research Corporation. (See Boegehold, Alfred L., assignor.)
General Motors Research Corporation. (See Hallett, George E. A., assignor.)
General Motors Research Corporation. (See Mougey, Harry C., assignor.)
General Motors Research Corporation. (See Underwood, Arthur F., assignor.)
General Motors Research Corporation. (See Wirshing, R. J., and Faas, assignors.)
General Tire & Rubber Company, The. (See Breth, Walter, assignor.)
General Tire & Rubber Company, The. (See Graham, Robert M., assignor.)
General Tire & Rubber Company, The. (See Hallinan, Edward L., assignor.)
General Tire & Rubber Company, The. (See Kraft, Herman T., assignor.)
General Tire & Rubber Company, The. (See Remark, Isidore J., assignor.)
Geometric Tool Company, The. (See Breitenstein, Albert F., assignor.)
George, Achilles K., Haverhill, Mass. Leather article and making the same. 1,871,785; Aug. 16.

Gerstmyer, William A., and W. R. Clayton, Baltimore, Md., assignors to Columbia Engineering and Management Corporation, New York, N. Y. Production of propylene. 1,871,786; Aug. 16.

Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Casing for universal joints. 1,871,883; Aug. 16.

Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Spring shackle. 1,871,981; Aug. 16.

Geyer, Harvey D., assignor to The Inland Manufacturing Company, Dayton, Ohio. Apparatus and method for molding composite structures. 1,871,982; Aug. 16.

Giamberteni, Andrea, Milan, assignor to the Firm Societa Costruzione Apparecchi Elettrodomestici Marelli, Mailand, Italy. Fan. 1,872,078; Aug. 16.

Gibbons, William J., Philadelphia, Pa. Locking device for screws and the like. 1,871,684; Aug. 16.

Gibbs, George E., assignor to American Reenforced Paper Company, Attleboro, Mass. Waterproofed reenforced paper. 1,871,602; Aug. 16.

Gibbs, Walter A., Chester, Pa. Animal trap. 1,871,510; Aug. 16.

Gibson, George F., Luton, England, assignor to General Motors Corporation, Detroit, Mich. Vibration damper. 1,872,136; Aug. 16.

Gilbert & Barker Manufacturing Company. (See Davis, John B., assignor.)

Gilbert, William L., Clock Company. (See Thompson, N. F., jr., and Williams, assignors.)

Ginter, Claud D., Fresno, Calif. Automatic hoist boom. 1,871,603; Aug. 16.

Gipe, John C. (See Crowley, J. P., and Gipe.)

Glascock Brothers Manufacturing Company. (See Frick, C. A., and Baker, assignors.)

Glass, Perley R., Wayland, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastener-inserting machine. 1,872,441; Aug. 16.

Goebel, George, Catonsville, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y. Transfer mechanism for production of printing plates. 1,872,273; Aug. 16.

Goenen, Leo E., and J. A. Garrow, assignors to The Fritz-Cross Company, St. Paul, Minn. Chair. 1,872,137; Aug. 16.

Goff, Mont, Stone, Ky. Mine track and switch construction. 1,871,511; Aug. 16.

Goldfisher, Fred, assignor to Pines Winterfront Company, Chicago, Ill. Radiator shutter. 1,871,685; Aug. 16.

Goldhammer, Leo, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Attachment of moving picture film to the film spool. 1,871,983; Aug. 16.

Goldman, Morris, Bridgeport, Conn. Decorative lighting device. Des. 87,569; Aug. 16.

Goldsborough, Shirley L., East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company. Overload relay. 1,871,787; Aug. 16.

Goldsborough, Thaddeus R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermionic tube. 1,872,274; Aug. 16.

Goldsborough, Thaddeus R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Sound recording system. 1,872,630; Aug. 16.

Goldstei., Morris. (See Ellinger, Albert E., assignor.)

Goodale, Walter D., jr. (See Inglis, A. H., Goodale, and Dietze.)

Goode, Gilbert C. (See Miller, C. W., and Goode.)

Goode, Gilbert C., Birmingham, F. A. Selje, and C. W. Miller, assignors to Chrysler Corporation, Detroit, Mich. Automotive vehicle chassis. 1,872,442; Aug. 16.

Goodhall, Sydney N. (See Willshaw, H., Goodhall, and Folliss.)

Goodman Manufacturing Company. (See Vodoz, Frederick W., assignor.)

Goodrich, Charles W. (See Ernst, H., and Goodrich.)

Goodyear's India Rubber Glove Mfg. Co. (See Patten, Ernest L., assignor.)

Gosch, Harry E., assignor to Creo-Dipt Company Inc., North Tonawanda, N. Y. Locking device for the covers of impregnating tanks, etc. 1,872,443; Aug. 16.

Government and the People of the United States of America. (See Bennett, Charles A., assignor.)

Gowie, William, assignor to The Harvard Company, Canton, Ohio. Auxiliary foot rest. 1,872,444; Aug. 16.

Grabowski, Anton F., and A. L. Grabowski, Chicago, Ill. Apparatus and method for making sausages. 1,871,788; Aug. 16.

Grabowski, Anton L. (See Grabowski, A. F. and A. L.)

Grady, Charles B., West Orange, N. J., assignor to Metropolitan Engineering Company. Steam producing unit. 1,872,138; Aug. 16.

Graef, John M., Neenah, assignor to Valley Iron Works Company, Appleton, Wis. Positive shuttle drive for looms. 1,872,275; Aug. 16.

Graham, Robert M., assignor to The General Tire & Rubber Company, Akron, Ohio. Bead placing ring. 1,871,604; Aug. 16.

Graham, William T., assignor to A. O. Smith Corporation, Milwaukee, Wis. Apparatus for and method of forming tubular blanks. 1,872,276; Aug. 16.

Granger, Gordon T. (See Turk, A. B., and Granger.)

Grant, John, assignor to Byron Jackson Co., Los Angeles, Calif. Well elevator. 1,871,845; Aug. 16.

Grant, Milton B. (See Sherwan, A. C., Grant, and Hedderick.)

Graves, Lewis. (See Thompson, R. H., and Graves.)

Gray, Ellsworth, and R. A. Mueller, assignors to Gray Tool Company, Houston, Tex. Safety valve for well casings. 1,872,139; Aug. 16.

Gray Tool Company. (See Gray, E., and Mueller, assignors.)

Great Western Electro-Chemical Company. (See Hirschkind, Wilhelm, assignor.)

Green, Charles F. (See Rhea, T. R., Tear, and Green.)

Green, Charles W., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,871,846; Aug. 16.

Green, Frederick H., Cheltenham, England. Safety razor. 1,871,789; Aug. 16.

Green, Gilbert, G. E. Booth, and J. T. De Nault, Long Beach, Calif. Clamp support for globes. 1,871,847; Aug. 16.

Green, James B. (See Benbow, J. D., and Green.)

Greening, Herald B., Hamilton, Ontario, Canada, and J. W. Galloway, Detroit, Mich., assignors to Galloway Engineering Company Limited, Hamilton, Ontario, Canada. Two-cycle engine. 1,872,277; Aug. 16.

Greening, Herald B., and J. W. Galloway, assignors to Galloway Engineering Company Limited, Hamilton, Ontario, Canada. Variable speed transmission. 1,872,636; Aug. 16.

Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Azo dyes derived from naphthylaryl ethers. 1,871,512; Aug. 16.

Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Azo-(2.3 hydroxy-naphthoyl) aromatic diamines and azo dyestuffs derived therefrom. 1,871,513; Aug. 16.

Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Dye intermediates and derived azo-dyes. 1,871,515; Aug. 16.

Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Fast azo dye. 1,872,033; Aug. 16.

Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Azo dye from diphenyloxide derivatives. 1,872,034 Aug. 16.

Grether, Ernest F., and G. H. Coleman, assignor to The Dow Chemical Company, Midland, Mich. Azo-dyes from ether-arylides of amino-hydroxydiaryls. 1,871,514; Aug. 16.

Grether, Ernest F., and L. E. Mills, assignors to The Dow Chemical Company, Midland, Mich. Azo dye from substituted anilides of 2.3 hydroxy-naphthoic acid. 1,872,035; Aug. 16.

Grossenbach, Walter F., Ogden, Utah. Fishing rod ferrule. 1,871,985; Aug. 16.

Guett, Monroe, assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Switch handle. 1,871,605; Aug. 16.

Guidetti, Ferruccio, Elmhurst, Long Island, and G. Bontempi, New York, assignors to The Watairway Manufacturing Corporation, New York, N. Y. Flushing arm for sanitary water closet attachments. 1,872,278; Aug. 16.

Gurney, Albert J., assignor to The American Mine Door Company, Canton, Ohio. Feed wheel. 1,871,516; Aug. 16.

Gustafson, Charles J. (See Mock, F. C., Gustafson, and Chandler.)

Gustafsson, Emil G. T., Stockholm, Sweden. Producing metal sponge. 1,871,848; Aug. 16.

Guyé, René. (See Daine, R. L., and Guyé.)

Hacker, Horace W., La Grange, Ill. Producing printing plate blocks. 1,872,572; Aug. 16.

Haddad, Saleem J., Tenafly, N. J. Portable trimming device. 1,871,606; Aug. 16.

Hadley, Newton F., Beverly Hills, and T. Fransen, Grosse Park Pointe, assignors to Chrysler Corporation, Detroit, Mich. Front spring. 1,872,445; Aug. 16.

Hagemann, Louis F., Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada. Manifold record machine. 1,872,140; Aug. 16.

Hagg, Charles, and E. C. Lager, Prentice, Wis. Trackman's arch support and shoe protector. 1,872,573; Aug. 16.

Hale, Edwin D., Oak Park, assignor to The Liquid Carbonic Corporation, Chicago, Ill. Carbon dioxide drum valve. 1,872,574; Aug. 16.

Hall, Allen E., Newport News, Va. Motor vehicle direction indicator signal. Des. 87,570; Aug. 16.

Hall, Horace C., Littleover Derby, and T. F. Bradbury, Derby, assignors to Rolls Royce Limited, Derby, England. Aluminum alloy. 1,871,807; Aug. 16.

Hallett, George E. A., assignor to General Motors Research Corporation, Detroit, Mich. Hydraulic valve operating mechanism. 1,872,141; Aug. 16.

Hallett, George E. A., assignor to General Motors Research Corporation, Detroit, Mich. Lubricating system. 1,872,279; Aug. 16.

Hallinan, Edward L., assignor to The General Tire & Rubber Company, Akron, Ohio. Tire casing conveyer. 1,871,608; Aug. 16.

Halliwell, George P., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Alloy. 1,872,280; Aug. 16.

Halloran, Ralph A., Berkeley, M. L. Chappell, Los Angeles, and J. H. Osmer, El Segundo, assignors to Standard Oil Company of California, San Francisco, Calif. Producing low boiling point oils or motor fuel from hydrocarbon oils by the employment of metallic halides. 1,872,446; Aug. 16.

Halperin, Herman, and K. W. Miller, Chicago, Ill. Transformer. 1,872,575; Aug. 16.

Hambrook, George W., and W. E. Clarin, assignors to Clarin Mfg. Co., Chicago, Ill. Table leg lock. 1,871,686; Aug. 16.

Hamersley, Carl S., New York, N. Y. Waxing of paper and wrapping of articles therein. 1,871,687; Aug. 16.

Hamilton, Harold S., White Plains, N. Y., assignor to American Telephone and Telegraph Company. Reducing distortion of vacuum tube amplifiers. 1,871,986; Aug. 16.

Hamilton, Harry A., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt for personal wear. Des. 87,571; Aug. 16.

Hamilton, Harry A., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt for personal wear. Des. 87,572; Aug. 16.

Hammett, Merton H., Davenport, assignor to The Bettendorf Company, Bettendorf, Iowa. Side frame. 1,872,576; Aug. 16.

Hammett, Merton H., Davenport, assignor to The Bettendorf Company, Bettendorf, Iowa. Side frame. 1,872,577; Aug. 16.

Hammond, Cowper S., St. Louis, Mo. Sheet metal roofing. 1,872,447; Aug. 16.

Hampton, Albert A., Los Angeles, Calif. Sketching instrument. 1,872,578; Aug. 16.

Handy, Le Roy L. (See Drake, J. L., and Handy.)

Hann, William E. (See Harness, J. K., and Hann.)

Hannin, Michael P. (See Pohl, Charles J., assignor.)

Hansen, A. L., Mfg. Company. (See Hansen, Augie L., assignor.)

Hansen, Augie L., assignor to A. L. Hansen Mfg. Company, Chicago, Ill. Weaving ring. 1,872,281; Aug. 16.

Hansen, Herbert I., and J. A. Hinrichs, Paterson, N. J.; said Hinrichs assignor to said Hansen. Warp let-off attachment. 1,871,517; Aug. 16.

Hansen, Sinius M., assignor, by mesne assignments, to Parco Specialty Co., Lynn, Mass. Coating ribbons, tapes, and other strips. 1,871,790; Aug. 16.

Hansen, Vigfus S., Lorah, Iowa. Spring tool. 1,872,579; Aug. 16.

Haralson, Cull C., Electra, Tex. Operating means for gate valves. 1,872,282; Aug. 16.

Hardinge Company. (See Hardinge, Harlowe, assignor.)

Hardinge, Harlowe, assignor to Hardinge Company, Incorporated, York, Pa. Grinding mill. 1,872,036; Aug. 16.

Hardman, Frederick J., Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind. Windshield wiper. 1,871,987; Aug. 16.

Hardman, Frederick J., Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind. Windshield wiper. 1,871,988; Aug. 16.

Harer, Auguste, Vienne Le Chateau, France. Circular knitting machine. 1,871,609; Aug. 16.

Harm, George O., Warren, assignor to The Stevens Metal Products Company, Niles, Ohio. Cement loading device. 1,872,283; Aug 16.

Harness, J. King, and W. E. Hann, assignors to Chrysler Corporation, Detroit, Mich. Motor mounting. 1,872,580; Aug. 16.

Haroldson, Arthur H., Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, N. J. Resistor material and making the same. 1,872,581; Aug. 16.

Harrigan, Harold W., Melrose, assignor to Hersey Manufacturing Company, Boston, Mass. Method of and mechanism for conditioning starch. 1,872,284; Aug. 16.

Harris, Clifford G., Stockton-on-Tees, assignor to Imperial Chemical Industries Limited, London, England. Separating gases or vapors. 1,872,080; Aug. 16.

Harris, John D., Larchmont, N. Y. Rug. 1,871,849; Aug. 16.

Harris, Neal C., Guide Rock, Nebr. Traction wheel. 1,872,079; Aug. 16.

Harshaw Chemical Company, The. (See Hines, Apul R., assignor.)

Hartford-Empire Company. (See Peiler, Karl E., assignor.)

Hartmann, John, assignor to American Art Metal Works, Inc., Detroit, Mich. Windshield. 1,872,582; Aug. 16.

Hartmann, Joseph, Garfield, N. J. Embroidered textile fabric or similar article. Des. 87,573; Aug. 16.

Harvard Company, The. (See Gowie, William, assignor.)

Harvey Spring & Forging Co. (See Jensen, Alfred M., assignor.)

Havemeyer, Henry O., jr., Mahwah, N. J., and J. E. Muhlfeld, Scarsdale, N. Y. End play liner for locomotive driving boxes. 1,871,518; Aug. 16.

Haverstick, Earl J., Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company. Short circuiting device. 1,872,285; Aug. 16.

Havey, Richard B., Beechview, Pa. Fuse. 1,872,448; Aug. 16.

Hawkins, Paul, Los Angeles, Calif. Cabinet for a drink mixer. 1,872,637; Aug. 16.

Hawley, Jesse B., St. Charles, Ill. Sound radiator. 1,872,081; Aug. 16.

Hawley, Jesse B., Geneva, Ill. Sound producing diaphragm and making same. 1,872,583; Aug. 16.

Hawley, Kent A., assignor to Locke Insulator Corporation, Baltimore, Md. Insulator suspension yoke. 1,871,519; Aug. 16.

Hay, John D., South Bend, Ind., assignor, by mesne assignments, to Bendix Aviation Corporation. Injection engine. 1,871,452; Aug. 16.

Hayden, George D., Detroit, Mich. Lubricator. 1,872,584; Aug. 16.

Heacock, Foster J., Clearville, Pa. Shipping container. 1,871,610; Aug. 16.

Headland, Harvey S., Pittsburgh, Pa. Illuminated canopy for casket illumination. 1,871,611; Aug. 16.

Hechenbleikner, Ingenuin, Charlotte, N. C., assignor, by mesne assignments, to Chemical Construction Corporation. Manufacture of nitric acid from ammonia. 1,872,638; Aug. 16.

Heckel, Herman, and W. T. Reddish, Cincinnati, Ohio, assignors to The Kontol Company, Dallas, Tex. Process of and reagent for treating petroleum emulsions. 1,872,286; Aug. 16.

Hedberg, Charles, Chicago, Ill. Snow and ice remover. 1,872,082; Aug. 16.

Hedderick, Herman F. (See Sherwan, A. C., Grant, and Hedderick.)

Hedgcock, William C., Wilmette, assignor to American Steel Foundries, Chicago, Ill. Brake lever bracket. 1,872,449; Aug. 16.

Hedin, Gustaf V. (See Mellgren, G. E., Sjöström, Swalas, and Hedin.)

Hedman, Herbert R., Winnetka, assignor to The Hedman Manufacturing Company, Chicago, Ill. Check writer. Des. 87,574; Aug. 16.

Hedman Manufacturing Company, The. (See Hedman, Herbert R., assignor.)

Heft, William F., assignor to McAdoo & Allen Welting Company, Quakertown, Pa. Goodyear welting. 1,871,612; Aug. 16.

Hegenberger, William H., assignor of one-fourth to J. P. Clary, Hartford, Conn. Can. 1,872,585; Aug. 16.

Heile, Harriet, Chicago, Ill., assignor to Ward Baking Company, New York, N. Y. Cake box. Des. 87,575; Aug. 16.

Heineman, Warren F. (See Andren, B. T., Heineman, and Crawford.)

Heineman, Warren F., Shorewood, assignor to A. O. Smith Corporation, Milwaukee, Wis. Manufacturing electrically welded tubular articles. 1,872,287; Aug. 16.

Heintz & Kaufman, Ltd. (See Scofield, Philip F., assignor.)

Heisey, A. H., Company. (See Heisey, Thomas C., assignor.)

Heisey, Thomas C., assignor to A. H. Heisey Company, Newark, Ohio. Goblet or similar article of glassware. Des. 87,576; Aug. 16.

Heitger, Frank H., assignor to The Marvel Carbureter Company, Flint, Mich. Pumping mechanism for fuel feeding systems for motor vehicles. 1,871,989; Aug. 16.

Helfinstine, R. E. (See Paff, W. J., assignor.)

Helgeby, Ralph O., assignor to A C Spark Plug Company, Flint, Mich. Instrument drive. 1,872,288; Aug. 16.

Heller, Edgar W., Newark, N. J. Liquid heating device. 1,871,688; Aug. 16.

Helmholtz, Arthur W., Harrisburg, and D. Ferrell, Marion, Ill. Separation device for pipe lines. 1,872,586; Aug. 16.

Hemphill Company. (See Lawson, John and R. H., assignors.)

Henderson, John C., Elizabeth, N. J., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,872,587; Aug. 16.

Henle, Franz, and V. Lanz, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparing 2.3-aminonaphthoic acid. 1,871,990; Aug. 16.

Henneberger, Thomas C. (See Edwards, P. G., and Henneberger.)

Henneuse, Clarence A., Bucyrus, Ohio. Traction apparatus. 1,872,450; Aug. 16.

Henrard, Fernand, Brussels, assignor to Ecremeuses Melotte Societe Anonyme, Remicourt, Belgium. Milking machine. 1,871,520; Aug. 16.

Hentrich, Winfrid, Leverkusen-Wiesdorf, E. Tietze, Cologne-Rhine, A. Ossenbeck, Cologne-Mulheim, and P. Backes, Gladbach-Rheydt, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New diazo-amino compounds. 1,871,850; Aug. 16.

Hentrich, Winfrid, Wiesdorf-on-the-Rhine, and R. Knoche, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New azo dyestuffs. 1,871,991; Aug. 16.

Hersey Manufacturing Company. (See Harrigan, Harold W., assignor.)

Hersleb, William. (See Bramsen, S., Hersleb, and Wahlin.)

Hess, Raymond W., Buffalo, N. Y., and O. D. Cunningham, Indianapolis, Ind., assignors to National Aniline & Chemical Company, Inc., New York, N. Y. Making carbazole indophenols. 1,871,791; Aug. 16.

Hester, James E., Pittsburgh, Pa. Toy vehicle. 1,872,289; Aug. 16.

Heuze, Charles, Auvelais, Belgium. Grinding, smoothing and polishing apparatus. 1,871,992; Aug. 16.

Hickok Manufacturing Company. (See Hamilton, Harry A., assignor.)
Higbee, Ray P., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator control system. 1,871,689; Aug. 16.
Higgins, Sigfried. (See Swan, H., and Higgins.)
Higgs, Roy M., Cleveland, Ohio. Table top. 1,871,884; Aug. 16.
Hill, Edward M., Brookline, assignor to Whiting-Adams Company, Boston, Mass. Making a brush. 1,872,037; Aug. 16.
Hindahl, David, assignor to Rodger Ballast Car Company, Chicago, Ill. Dump car. 1,872,451; Aug. 16.
Hines, Paul R., Parma Village, assignor to The Harshaw Chemical Company, Cleveland, Ohio. Manufacture of chromium trioxide. 1,872,588; Aug. 16.
Hinrichs, John A. (See Hansen, H. I., and Hinrichs.)
Hirschkind, Wilhelm, Pittsburgh, assignor to Great Western Electro-Chemical Company, San Francisco, Calif. Manufacturing alkali metal xanthates. 1,872,452; Aug. 16.
Hitner, John K., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Corrugated or threaded anode. 1,872,290; Aug. 16.
Hitzler, Franz, Lauenburg-on-the-Elbe, Germany. Rudder arrangement. 1,872,038; Aug. 16.
Hobart Manufacturing Company, The. (See Ratalczak, T. F., and Slager, assignors.)
Hobbs, Leonard S., assignor to Bendix Stromberg Carburetor Company, Chicago, Ill. Carburetor. 1,872,291; Aug. 16.
Hochwalt, Carroll A., and J. B. Wallushs, Dayton, Ohio, assignors to Morton Salt Company, Chicago, Ill. Manufacture of ammonium bromide. 1,872,292; Aug. 16.
Hodell, Frederick G., Cleveland Heights, assignor to The Chain Products Company, Cleveland, Ohio. Stock tire chain. 1,871,521; Aug. 16.
Hodnette, John K., and P. L. Bellaschi, Sharon, Pa., assignors to Westinghouse Electric and Manufacturing Company. Transformer. 1,872,293; Aug. 16.
Hoey, Eugenia M., San Francisco, Calif. Combination bed and divan. Des. 87,577; Aug. 16.
Hoey, Eugenia M., San Francisco, Calif. Combination bed and divan. Des. 87,578; Aug. 16.
Hoey, Eugenia M., San Francisco, Calif. Combination bed and divan. Des. 87,579; Aug. 16.
Hoff, Chester A., assignor to The Kristee Manufacturing Company, Akron, Ohio. Cleaner. 1,872,589; Aug. 16.
Hoffman, George D., Pasadena, Calif., assignor to Hoffman Specialty Company, Waterbury, Conn. Check valve. 1,871,984; Aug. 16.
Hoffman Specialty Company. (See Hoffman, George D., assignor.)
Hogan, George F., Chicago, Ill. Display device. 1,871,690; Aug. 16.
Holdeman, Harry R., assignor to J. M. Feldman Company, Inc., Los Angeles, Calif. Lighting fixture. 1,872,453; Aug. 16.
Hollopeter, Roy R., Richmond, Ind. Sectional container. 1,872,590; Aug. 16.
Holmes, Ernest, Company. (See Holmes, E. W., and Cline, assignors.)
Holmes, Ernest W., and E. E. Cline, assignors to Ernest Holmes Company, Chattanooga, Tenn. Oil draining station. 1,871,522; Aug. 16.
Holt, Fred. (See Bennett, N., Dodd, Sprent, and Holt.)
Holtzman, John, New York, N. Y. Combined bicycle and scooter. 1,872,142; Aug. 16.
Homan, Walter A., assignor to I-O Separator Company, Denver, Colo. Ionic separator. 1,872,591; Aug. 16.
Honold, Ernst. (See Kallscher, G., and Honold.)
Horn, Peter, and F. Zipp, Brooklyn, N. Y. Game. 1,872,454; Aug. 16.
Horsfield, Basil T., Badin, N. C., assignor to Aluminum Company of America, Pittsburgh, Pa. Treatment of metallic oxides. 1,871,792; Aug. 16.
Horsfield, Basil T., Badin, N. C., assignor to Aluminum Company of America, Pittsburgh, Pa. Purified metallic oxide. 1,871,793; Aug. 16.
Horton, Gustave A., assignor of one-half to A. G. Swygart, St. Paul, Minn. Combine filler and primer and making the same. 1,872,455; Aug. 16.
Hotchner, Fred. (See Drury, William P., assignor.)
Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Container forming machine. 1,872,294; Aug. 16.
Hott, Ion von K., assignor to The Joyce-Cridland Company, Dayton, Ohio. Lifting mechanism. 1,872,592; Aug. 16.
Houck, Ira C., trustee. (See Terry, Wallace F., assignor.)
Hough, Clinton W., assignor to Wired Radio, Inc., New York, N. Y. System for projecting light in variant colors. 1,871,794; Aug. 16.
Hough, William S., Kokomo, Ind. Electrode housing. 1,872,593; Aug. 16.
House, Thomas M., Richmond, Va. Wardrobe traveling case. 1,872,084; Aug. 16.
Housekeeper, Jacob C. (See Flower, A. H., and Housekeeper.)
Howard, Jacob V., Indianapolis, Ind. Syringe. 1,871,523; Aug. 16.
Howard, Leonard L., Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del. Molded mica product and making same. 1,872,143; Aug. 16.
Howard, Leslie E., Lockport, N. Y., assignor to Simonds Saw and Steel Company, Fitchburg, Mass. Method of and apparatus for controlling temperatures and the like. 1,871,691; Aug. 16.
Howard, Leslie E., Lockport, N. Y., assignor to Simonds Saw and Steel Company, Fitchburg, Mass. Cam operating mechanism. 1,871,692; Aug. 16.
Howard, Willis V., Leavenworth, Kans. Tier mechanism for hay presses. 1,871,885; Aug. 16.
Howe Folding Furniture, Inc. (See Howe, Harold, assignor.)
Howe, Harold, assignor to Howe Folding Furniture, Inc., New York, N. Y. Folding chair. 1,871,524; Aug. 16.
Howle, Kenneth, assignor to Wildman Mfg. Co., Norristown, Pa. Machine for inserting elastic in knit fabric. 1,871,851; Aug. 16.
Hubbard, Henry E., assignor to Addressograph Company, Chicago, Ill. Snapping platen for printing and addressing machines. 1,871,993; Aug. 16.
Hubbell, Clarence W., Naugatuck, Conn., assignor to Revere Rubber Company, Providence, R. I. Inflatable toy. Des. 87,580; Aug. 16.
Huber, Charles J., assignor of one-half to Flynn and Emrich Company, Baltimore, Md. Furnace. 1,871,454; Aug. 16.
Huck, Joseph, Cresskill, N. J., assignor to Chesebro, Whitman Co., Inc., Long Island City, N. Y. Stepladder. 1,871,693; Aug. 16.
Hudson, Arthur, Clifton, N. J. Rotary pump. 1,871,525; Aug. 16.
Hudson, John, Brooklyn, N. Y. Separator. 1,871,526; Aug. 16.
Hunicker, Karl. (See McCabe, I. E., and Hunicker.)
Hunt, Ormond E., assignor to General Motors Corporation, Detroit, Mich. Brake. 1,872,144; Aug. 16.
Hunt, Warren T., East Orange, N. J., assignor to The Willys-Overland Company, Toledo, Ohio. Sleeve valve engine lubrication system. 1,872,295; Aug. 16.
Hurford, Ebenezer B., New York, N. Y. Sign. 1,872,145; Aug. 16.
Hurley, Roy T., Dobbs Ferry, assignor to Motometer Gauge & Equipment Corporation, Long Island City, N. Y. Motor heat indicator. 1,871,527; Aug. 16.
Hutchison, Robert R., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Valve adjusting mechanism. 1,872,083; Aug. 16.
I. G. Farbenindustrie Aktiengesellschaft. (See Ernst, O., and Nicodemus, assignors.)
I-O Separator Company. (See Homan, Walter A., assignor.)
Iams, Harley A. (See Zworykin, V. K., and Iams.)
Iams, Harley A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Light-sensitive device. 1,871,994; Aug. 16.
Ihrig, Harry K., Pittsburgh, Pa. Producing aromatic hydrocarbons. 1,871,694; Aug. 16.
Imperial Chemical Industries Limited. (See Bennett, N., Dodd, Sprent, and Holt, assignors.)
Imperial Chemical Industries Limited. (See Harris, Clifford G., assignor.)
India Rubber Gutta Percha and Telegraph Works Company Limited, The. (See Avery, William L., assignor.)
Inglis, Alfred H., Upper Montclair, W. D. Goodale, jr., East Orange, and Eginhard Dietze, Westfield, N. J., assignors to American Telephone and Telegraph Company, Sound measuring system. 1,871,886; Aug. 16.
Ingraham, E., Company, The. (See Carlson, Elof L., assignor.)
Inland Manufacturing Company, The. (See Chilton, Ralph H., assignor.)
Inland Mfg. Co., The. (See Dill, Edward J., assignor.)
Inland Manufacturing Company, The. (See Flower, A. H., and Housekeeper, assignors.)
Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)
Inland Manufacturing Company, The. (See Short, Charles R., assignor.)
Insley Manufacturing Company. (See Schmid, C. G., and Rasmussen, assignors.)
International Agricultural Corporation. (See Bates, Harry R., assignor.)
International Combustion Engineering Corporation. (See Marshall, Leonard J., assignor.)
Isermann, Max, New York, N. Y., and E. Ohlsson, Jersey City, N. J.; said Ohlsson assignor to said Isermann. Lighting system for motor vehicles. 1,871,695; Aug. 16.
Jackson, Byron, Co. (See Grant, John, assignor.)
Jackson, Joseph W., Woodhaven, assignor to Solomon Slatkin, Fort Lee, N. J. Brake mechanism for baby carriages. 1,872,146; Aug. 16.
Jackson, Ray P., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,871,696; Aug. 16.
Jacobsen Mfg. Company. (See Carlson, John A. E., assignor.)
Jaeger Machine Company, The. (See Eggert, J., assignor.)
Jakosky, John J., Los Angeles, assignor to Electroblacks, Inc., Culver City, Calif. Apparatus for producing carbon black. 1,872,297; Aug. 16.

James, Henry D., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,871,697; Aug. 16.
James, Henry D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Automobile storage elevator. 1,871,795; Aug. 16.
James, Henry D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Storage building. 1,872,594; Aug. 16.
James, Henry D., Edgewood, and H. W. Williams, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company. Motor control system. 1,871,698; Aug. 16.
James, Richard H., East Hartford, assignor to Veeder-Root Incorporated, Hartford, Conn. Odometer drive. 1,872,039; Aug. 16.
Jasinski, Andrew, Chicago, Ill. Imitation walling. 1,871,887; Aug. 16.
Jennings, Chester S., assignor to The Lamson Company, Syracuse, N. Y. Conveyer mechanism. 1,871,996; Aug. 16.
Jennings, Chester S., assignor to The Lamson Company, Syracuse, N. Y. Pneumatic dispatch system. 1,871,997; Aug. 16.
Jennings, Chester S., and F. W. MacMartin, assignors to The Lamson Company, Syracuse, N. Y. Carrier dispatch system. 1,871,995; Aug. 16.
Jennings, Melvin O., Lexington, assignor to Beckwith Manufacturing Company, Boston, Mass. Coating machine. 1,871,998; Aug. 16.
Jennings, Oliver S., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Panel circuit breaker. 1,872,296; Aug. 16.
Jensen, Alfred M., assignor to Harvey Spring & Forging Co., Racine, Wis. Shock absorber. 1,872,460; Aug. 16.
Jeppson, Ivar, assignor to Chicago Flexible Shaft Company, Chicago, Ill. Therapeutic arc lamp. 1,871,699; Aug. 16.
Jeppson, Ivar, Chicago, and E. S. Bartlett, Forest Park, assignors to Chicago Flexible Shaft Company, Chicago, Ill. Shearing machine. 1,871,700; Aug. 16.
Jeralds, George I., assignor to The Ball & Socket Manufacturing Company, West Cheshire, Conn. Garment supporter loop. 1,872,461; Aug. 16.
Johnson, Frank E. (See Johnson, Gustaf A. and F. E.)
Johnson, Gustaf A. and F. E., assignors to John I. Paulding, Inc., New Bedford, Mass. Electric lamp receptacle. 1,871,613; Aug. 16.
Johnson, Harvey L., and J. E. Treanor, Los Angeles, Calif. Pressure booster tank for carbonating systems. 1,872,462; Aug. 16.
Johnson, Joseph. (See Wilson, L. A., and Johnson.)
Johnson, Joseph E. (See Derryberry, R. L., and Johnson.)
Johnson, Roy W., Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Automatic control device for gas burners. 1,872,147; Aug. 16.
Johnson, Walter E., Clovis, N. Mex. Christmas greeting cigar wrapper. 1,871,888; Aug. 16.
Johnston, William V., Casper, Wyo. Incinerator. 1,871,614; Aug. 16.
Joline, Emmet A., Drexel Hill, Pa., assignor to The S. S. White Dental Manufacturing Company. Flexible shaft and casing assembly. 1,871,528; Aug. 16.
Jones, Charles C., Meridian, Miss. Automobile mirror. 1,871,615; Aug. 16.
Jones, Ellis L., Long Island City, assignor, by mesne assignments, to American Sealcone Corporation, New York, N. Y. Receptacle closing and sealing means. 1,871,701; Aug. 16.
Jones, Irvin H., Pittsburgh, Pa., assignor to The Koppers Company of Delaware. Treating hydrocarbons. 1,872,463; Aug. 16.
Jordan, Hugh A. (See Dodge, M. L., and Jordan.)
Jordan, Richard H., Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company. Starting an induction motor. 1,871,455; Aug. 16.
Joyce-Cridland Company, The. (See Hott, Ion V. K., assignor.)
Judd, Charles H. (See Fogwell, H. H., and Judd.)
Kallscher, Georg, Frankfort-on-the-Main, and E. Honold, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Wool dyestuffs and making same. 1,871,852; Aug. 16.
Kallander, Ernest L., Framingham, and R. F. Charles, Concord, assignors to Dennison Manufacturing Company, Framingham, Mass. Parchmentized crepe paper and making. 1,871,702; Aug. 16.
Kan, Daniel M., et al. (See Prins, Peter L., assignor.)
Kan, Marinus L., et al. (See Prins, Peter L., assignor.)
Karlovitch, Thomas, and J. Sebes, Mount Carmel, Pa. Classifying apparatus. 1,871,703; Aug. 16.
Karshner, George C., Detroit, Mich. Automatic fertilizer. 1,871,529; Aug. 16.
Katz, Russell S., Hamilton, Ohio. Illuminating device. 1,871,999; Aug. 16.
Kawneer, Company, The. (See Eaglesfield, Frederick R., assignor.)
Kawneer Company, The. (See Liebetrau, Ernest J., assignor.)
Kay Manufacturing Co. (See Levine, Mac, assignor.)
Keeler, Burrell A. (See Benzee, Karl A., assignor.)
Kehoe, Arthur H., Rutherford, N. J., and L. W. McCullough, New York, N. Y., assignors, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,872,298; Aug. 16.
Keller, Charles W., assignor to American Lime and Stone Company, Bellefonte, Pa. Producing hydrated lime. 1,871,530; Aug. 16.
Keller, Henry C., Syracuse, N. Y., and M. Van Billiard, Philadelphia, Pa., assignors to The Lamson Company, Syracuse, N. Y. Conveyer system. 1,872,000; Aug. 16.
Kellogg-Dils, Inc. (See Dils, Logan A., assignor.)
Kellogg, Edward W., Moorestown, N. J., assignor to General Electric Company. Sound distribution system for auditoriums. 1,871,531; Aug. 16.
Kelly, William W., Cleveland Heights, assignor to The Nut Products Company, Cleveland, Ohio. Preparing and distributing nuts. 1,872,456; Aug. 16.
Kemp, C. M., Manufacturing Company, The. (See Van Horn, William H., assignor.)
Kempf, Hubert, Barmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Apparatus for the production of strong filaments of artificial silk by the stretch spinning process. 1,871,704; Aug. 16.
Kenna, Mary D., New York, N. Y. Driving and parking guide for vehicles. 1,871,532; Aug. 16.
Kennedy, Joseph E., New York, N. Y. Pneumatic transporting and distributing of pulverized material. 1,871,853; Aug. 16.
Kenney, George M. (See Kenney, William C., and G. M.)
Kenney Manufacturing Company. (See Kenney, William C., assignor.)
Kenney Manufacturing Company. (See Kenney, William C. and G. M., assignors.)
Kenney, William C., assignor to Kenney Manufacturing Company, Cranston, R. I. Drapery rod or the like. 1,871,796; Aug. 16.
Kenney, William C., and G. M. Kenney, Cranston, assignors to Kenney Manufacturing Company, Auburn, R. I. Curtain fixture. 1,871,797; Aug. 16.
Kent, Paul. (See Rebner, F., and Kent.)
Kern, Fred T., Milwaukee, Wis. Storage system. 1,872,457; Aug. 16.
Kern, Fred T., Milwaukee, Wis. Storage system. 1,872,458; Aug. 16.
Kerr, Andrew R., Great Falls, Mont. Tool. 1,871,616; Aug. 16.
Kerrigan, John, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company. Variable reactor. 1,872,299; Aug. 16.
Keul, Gottfried, Dover, Ohio. Heated tray. 1,871,705; Aug. 16.
Keyser, Johann J., Aarau, Switzerland. Spindle rail. 1,871,533; Aug. 16.
Keystone Reamer & Tool Co. (See Seiler, Michael I., assignor.)
Kilgore Mfg. Company, The. (See Peake, Edward S., assignor.)
Kimball, A., Company. (See Van Norden, Ericcson B., assignor.)
Kimball, Donald E., assignor to The Safety Equipment Service Company, Cleveland, Ohio. Eye goggles. 1,871,534; Aug. 16.
King, George A., and F. Troske, assignors to Scovill Manufacturing Company, Waterbury, Conn. Carpet fastener. 1,872,001; Aug. 16.
King, Harry W., Philadelphia, Pa. Separator for cards in a box. 1,871,617; Aug. 16.
King, Louise C., Cleveland, Ohio. Spectacles. 1,872,562; Aug. 16.
King Sanitary Pipe Cleaner Company. (See King, Sereno F., assignor.)
King, Sereno F., Southbury, assignor to King Sanitary Pipe Cleaner Company, Sandy Hook, Conn. Sectional sanitary pipe cleaner. 1,871,798; Aug. 16.
Kingston, Frederick S., assignor to The Sunlight Electrical Manufacturing Company, Warren, Ohio. Electric motor. 1,872,595; Aug. 16.
Kinnard, Luther J., Chicago, Ill., assignor to Westinghouse Electric Elevator Company. Elevator control system. 1,872,300; Aug. 16.
Kinney, Ansel M., Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind. Textile oil. 1,871,889; Aug. 16.
Kinney, Fay D., Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N J. Making rubber shoes. 1,871,890; Aug. 16.
Kinnison, William E., Casper, Wyo., assignor to Standard Oil Company of Indiana, Whiting, Ind. Filtration. 1,871,891; Aug. 16.
Kivley, Ray C., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for treating materials. 1,871,456; Aug. 16.
Klein, Arnold O., et al. (See LeFevre, John S., assignor.)
Klein, Nathan, Newark, assignor to Jacques J. Alder, North Bergen, doing business as J. J. Alder & Co., Union City, N. J. Neckpiece for a woman's garment or similar article. Des. 87,581; Aug. 16.
Klein, Nathan, Newark, assignor to Jacques J. Alder, North Bergen, doing business as J. J. Alder & Co., Union City, N. J. Neckpiece for a woman's garment or similar article. Des. 87,582; Aug. 16.

Klein, Nathan, Newark, assignor to Jacques J. Alder, North Bergen, doing business as J. J. Alder & Co., Union City, N. J. Lace yoke for a neckpiece for woman's garment or similar article. Des. 87,583; Aug. 16.

Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)

Kline, Edward C., Streator, Ill. Steam boiler. 1,872,464; Aug. 16.

Klopp, Henry G., Spokane, Wash. Window frame. 1,871,618; Aug. 16.

Klugh, Bethune G., Chicago, Ill., assignor to American Ore Reclamation Company, New York, N. Y. Screening and moistening apparatus. 1,872,301; Aug. 16.

Klupmeyer, Edward E., and A. A. Maxwell, Joliet, Ill., assignors to The Ruberoid Co., New York, N. Y. Material handling apparatus. 1,871,707; Aug. 16.

Knauer, William A., Philadelphia, Pa. Air inflated bladder. 1,872,459; Aug. 16.

Knoche, Rudolf. (See Hentrich, W., and Knoche.)

Knowles, Dewey D., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Glow discharge device. 1,872,302; Aug. 16.

Kobe, Inc. (See Coberly, Clarence J., assignor.)

Koch & Sterzel Aktiengesellschaft, the Firm. (See Fischer, Franz J., assignor.)

Koenigshofer, Victor, Union City, N. J., assignor to Aluminum Company of America, Pittsburgh, Pa. Collapsible tube capping machine. 1,871,799; Aug. 16.

Kontol Company, The. (See Heckel, H., and Reddish, assignors.)

Kontol Company, The. (See Peirce, J. O., and Reddish, assignors.)

Kopp, Reinhold A., assignor to The W. M. Welch Mfg. Co., Chicago, Ill. Scale beam. 1,872,465; Aug. 16.

Koppers Company of Delaware, The. (See Jones, Irvin H., assignor.)

Koppers Company of Delaware, The. (See van Ackeren, Joseph, assignor.)

Korsmo, Torbjorn C., assignor to Madison-Kipp Corporation, Madison, Wis. Die casting machines. 1,872,085; Aug. 16.

Kosters, Clements B., Buffalo, N. Y. Shoe stretcher. 1,871,854; Aug. 16.

Koyen, Albert, Fremont, Nebr. Attachment for hubs. 1,871,619; Aug. 16.

Kraft, Herman T., assignor to The General Tire & Rubber Company, Akron, Ohio. Watchcase heater. 1,871,620; Aug. 16.

Krantz, Hubert K., Rockville Center, assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,872,303; Aug. 16.

Krause, Artur. (See Nawiasky, P., and Krause.)

Krause, Richard F., Massillon, Ohio. Drip coffee maker. 1,872,466; Aug. 16.

Kraut, Samuel B., East Pittsburgh, and C. E. Margerum, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company. Copper hemisulphide rectifier. 1,872,304; Aug. 16.

Krebs, William R., Baltimore, Md. Foldable paper box. 1,871,706; Aug. 16.

Kristee Manufacturing Company, The. (See Hoff, Chester A., assignor.)

Kroger, Fred H., Ridgewood, N. J., assignor to Radio Corporation of America. Interlocking apparatus for direction finders. 1,871,800; Aug. 16.

Kuhls, Ernest R., Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind. Engine starter. 1,871,892; Aug. 16.

Kulka, Leo, assignor to Chrysler Corporation, Detroit, Mich. Hood rest. 1,872,467; Aug. 16.

Kurz, Hermann W., assignor to the Firm Voigt & Haeffner, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of electric heating bodies. 1,872,148; Aug. 16.

Lager, Erick C. (See Hagg, C., and Lager.)

Lait, Arthur E. (See Lane, P., and Lait.)

Lampert, Lydia, assignor to Universal Form Clamp Co., Chicago, Ill. Bar support and spacer. 1,871,809; Aug. 16.

Lamson Company, The. (See Cowley, J. T., and Allen, assignors.)

Lamson Company, The. (See Jennings, Chester S., assignor.)

Lamson Company, The. (See Jennings, C. S., and MacMartin, assignors.)

Lamson Company, The. (See Keller, H. C., and Van Billiard, assignors.)

Lamson Company, The. (See Marcy, Willard A., assignor.)

Lamson Company, The. (See Regan, John E., assignor.)

Lane, Percy, and A. E. Lait, Birmingham, England. Windscreen for vehicles. 1,872,468; Aug. 16.

Lang, Franz, assignor to W. A. Riddell Company, Bucyrus, Ohio. Grinder. 1,872,469; Aug. 16.

Lange, Arthur. (See Dap, J., and Roggatz, assignors.)

Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Tight center bar. Re18,568; Aug. 16.

Lanz, Valentin. (See Henle, F., and Lanz.)

Larsh, Everett P., Vandalia, assignor to The Master Electric Company, Dayton, Ohio. Short circuiter. 1,871,893; Aug. 16.

Larson, Carl H., Elkhart, Ind., assignor to The Adlake Company. Electric hand lantern. 1,872,305; Aug. 16.

Larson, Louis J., assignor to A. O. Smith Corporation, Milwaukee, Wis. Electric arc welding. 1,872,306; Aug. 16.

Latshaw, Elmer, assignor to The J. G. Brill Company, Philadelphia, Pa. Braking apparatus. 1,871,621; Aug. 16.

Lattner, Emert J., Cedar Rapids, Iowa. Valve. 1,871,535; Aug. 16.

Lawshe, Allison R., Trenton, N. J. Making colored photographic positives. 1,871,622; Aug. 16.

Lawson, John and R. H., Pawtucket, assignors to Hemphill Company, Central Falls, R. I. Jacquard pattern mechanism for knitting machines and method of patterning effected thereby. 1,872,596; Aug. 16.

Lawson, John and R. H., Pawtucket, assignors to Hemphill Company, Central Falls, R. I. Jacquard pattern mechanism for knitting machines. 1,872,597; Aug. 16.

Lawson, John and R. H., Pawtucket, assignors to Hemphill Company, Central Falls, R. I. Jacquard pattern mechanism for knitting machines and patterning effected thereby. 1,872,598; Aug. 16.

Lawson, John W. (See Dyer, J. B., and Lawson.)

Lawson, Robert H. (See Lawson, John and R. H.)

Lea, Edward S., Morrisville, Pa., assignor to Carrier Engineering Corporation, Newark, N. J. Machine mounting. 1,871,708; Aug. 16.

Le Bus, Frank L., Electra, Tex. Well drilling appliance. 1,871,536; Aug. 16.

Lederer, Ernest A., East Orange, N. J., assignor to Westinghouse Lamp Company. Electron discharge device. 1,871,537; Aug. 16.

Ledwinka, Joseph, assignor to E. G. Budd Manufacturing Co., Philadelphia, Pa. Device for attaching molding. 1,872,149; Aug. 16.

Lee, Knute, J., Shevlin, Minn. Checkrow attachment for potato planters. 1,872,470; Aug. 16.

Lee, Roger K., assignor to Chrysler Corporation, Detroit, Mich. Fastening means. 1,872,471; Aug. 16.

Lees, William H., Lowell, Mass. Method of making an embossed fabric. 1,871,855; Aug. 16.

Le Fevre, John S., assignor of one-fourth to W. L. Scott, and one-fourth to A. O. Klein, El Centro, Calif. Valve oiler. 1,871,623; Aug. 16.

Legg, Joseph W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Recording system. 1,871,709; Aug. 16.

Le Grand, Joseph M., assignor to Carrier Engineering Corporation, Newark, N. J. Louver or damper device. 1,872,599; Aug. 16.

Lehman, Werner, South Milwaukee, assignor to Bucyrus-Erie Company, South Milwaukee, Wis. Combined digging lip and dipper tooth. 1,872,307; Aug. 16.

Leibert, Richard W., Pittsburgh, Pa. Sign plate for an automotive signal. Des. 87,584; Aug. 16.

Le Jeune, Frank H., Jackson, assignor to General Motors Corporation, Detroit, Mich. Tire carrier. 1,872,150; Aug. 16.

Leneban, Bernard E., Bloomfield, N. J., assignor to Westinghouse Electric & Manufacturing Company. Metering system. 1,871,710; Aug. 16.

Lester, Francis L., Los Angeles, Calif. Faucet connector for fire hose. 1,871,810; Aug. 16.

Leuchs, Otto. (See Weihe, A., Leuchs, and Dörr.)

Leupold, Mathias, Jamaica, N. Y. Airplane. 1,871,538; Aug. 16.

Leverone, Louis M., Allston, Mass. Shoe. Des. 87,585; Aug. 16.

Levine, Mac, Malden, Mass., assignor to Kay Manufacturing Co., Brooklyn, N. Y. Spring construction for chair seats or the like. 1,872,472; Aug. 16.

Lewellen, Albert R., assignor to General Motors Corporation, Detroit, Mich. Head lamp. 1,871,801; Aug. 16.

Lewellen, Albert R., assignor to General Motors Corporation, Detroit, Mich. Heat indicator. 1,871,802; Aug. 16.

Lewis, Frank E., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Door operating apparatus. 1,871,711; Aug. 16.

L'Helice Metallique Brevets Paulhan-Pillard, Societe Anonyme. (See Pillard, Marcel, assignor.)

Libby-Owens-Ford Glass Company. (See Allen, Horace G., assignor.)

Libbey-Owens-Ford Glass Company. (See Ayers, Bert M., assignor.)

Libbey-Owens-Ford Glass Company. (See Brown, Wilbur F., assignor.)

Libbey-Owens-Ford Glass Company. (See Crowley, Joseph P., assignor.)

Libbey-Owens-Ford Glass Company. (See Crowley, J. P., and Gipe, assignors.)

Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)

Libbey-Owens-Ford Glass Company. (See Drake, J. L., and Handy, assignors.)

Libbey-Owens-Ford Glass Company. (See Fraser, Frank, assignor.)

Libbey-Owens-Ford Glass Company. (See Henderson, John C., assignor.)

Libbey-Owens-Ford Glass Company. (See Mambourg, Leopold, assignor.)

Libbey-Owens-Ford Glass Company. (See Schutz, H. R., and Robinson, assignors.)

Libbey-Owens-Ford Glass Company. (See Swope, Charles W., assignor.)

Libbey-Owens-Ford Glass Company. (See Wilcox, Allen C., assignor.)

Licht, Martin, Cassel, Germany. Potato harvesting machine. 1,872,639; Aug. 16.

Lichtenstein, Irwin, San Francisco, Calif. Cross street vision warning signal. 1,871,894; Aug. 16.

Liebetrau, Ernest J., assignor to The Kawneer Company, Niles, Mich. Window construction. 1,872,473; Aug. 16.

Lien, Harold G. (See Bishman, W. A., and Lien.)

Lindemon, William H., assignor to W. A. Sheaffer Pen Company, Fort Madison, Iowa. Tip for mechanical pencils. 1,872,151; Aug. 16.

Lindgren, Bror J., assignor to Niagara Machine and Tool Works, Buffalo, N. Y. Automatic punch press. 1,872,474; Aug. 16.

Link-Belt Company. (See Ellersgaard, Asger, assignor.)

Llewellyn, Fredrick, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Tank structure. 1,872,308; Aug. 16.

Lloyd, Charles G., La Grange, Ill., assignor to Aluminum Company of America, Pittsburgh, Pa. Electric sheet-welding. 1,871,712; Aug. 16.

Locke Insulator Corporation. (See Hawley, Kent A., assignor.)

Locke, William S., Portland, Oreg. Pan lifter. 1,871,811; Aug. 16.

Loebel, Zanvil C., Shorewood, assignor to A. O. Smith Corporation, Milwaukee, Wis. Window construction. 1,872,309; Aug. 16.

Loewinsohn, Joseph A., Atlanta, Ga. Vacuum cleaner. 1,871,624; Aug. 16.

Lomax, Clarence E., Oak Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Signaling system. 1,871,457; Aug. 16.

Long, Archie O. (See Melchert, Charles A., assignor.)

Lonza Elektrizitätswerke und Chemische Fabriken Aktiengesellschaft. (See Lüscher, Emil, assignor.)

Loos, Christopher E., Ben Avon, and O. F. Troeger, Fair Oaks, Pa. Structural steel cutting machine. 1,872,086; Aug. 16.

Lotte, Charles H., Massillon, assignor to Byers Machine Company, Ravenna, Ohio. Excavating machine. 1,871,539; Aug. 16.

Lotz, Albert, Berlin-Siemensstadt, Germany, assignor to Westinghouse Electric & Manufacturing Company. Interrupting electric circuits. 1,872,310; Aug. 16.

Loveland, Lawrence R., Washington, D. C. Receptacle with automatic closure therefor. 1,872,475; Aug. 16.

Loveland, Lawrence R., Washington, D. C. Pencil sharpener. 1,872,476; Aug. 16.

Lowenthal, Mark, Elizabeth, N. J. Meat holding device. 1,871,713; Aug. 16.

Luff, Arthur S., New Orleans, La. Support. 1,871,625; Aug. 16.

Lüscher, Emil, Basel, assignor to the Firm: Lonza Elektrizitätswerke und Chemische Fabriken Aktiengesellschaft, Gampel and Basel, Switzerland. Nitrophosphates. 1,871,895; Aug. 16.

Luttrell, James G., assignor to McCormick & Co., Incorporated, Baltimore, Md. Counter service teapot. Des. 87,586; Aug. 16.

Lyder, Ernest E. (See Strout, A. L., and Lyder.)

Lyman, Kenneth E., Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,871,458; Aug. 16.

Lyman, Kenneth E., Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Spring suspension. 1,872,311; Aug. 16.

Lyon, Jesse D., Cincinnati, Ohio. Ball marker. 1,871,812; Aug. 16.

Macdonald, Jason H., assignor to C. H. & E. Manufacturing Company, Inc., Milwaukee, Wis. Trenching machine. 1,871,856; Aug. 16.

Macholda, Joseph E., North Redwood, Minn. Hitch for automobile tractors and the like. 1,871,540; Aug. 16.

MacMartin, Frank W. (See Jennings, C. S., and MacMartin.)

MacNeil, Paul H., Huntington, N. Y. Photo-electric tube. 1,871,626; Aug. 16.

MacNeill, John B. (See Aalborg, C., and MacNeill.)

Madison-Kipp Corporation. (See Korsmo, Torojorn C., assignor.)

Maine Steel Products Company. (See Soule, G. C., and Woodbury, assignors.)

Maloney, James A., New York, N. Y. Thermostatic cut-off for domestic gas burners. 1,872,040; Aug. 16.

Maltby, Sidney T., assignor to Stone Straw Corporation, Washington, D. C. Mechanism for forming spirally wound multi-sided tubes. 1,872,152; Aug. 16.

Mambourg, Leopold, Lancaster, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Furnace construction. 1,872,477; Aug. 16.

Manheimer, Arthur E., assignor to Manheimer Watch Company, Chicago, Ill. Wrist watch. 1,871,896; Aug. 16.

Manheimer, Arthur E., Chicago, Ill., assignor to Manheimer Watch Company. Strap watch. 1,871,897; Aug. 16.

Manheimer, Arthur E., assignor to Manheimer Watch Company, Chicago, Ill. Watch mounting. 1,871,898; Aug. 16.

Manheimer Watch Company. (See Manheimer, Arthur E., assignor.)

Manning, J. T., jr., et al., receivers. (See Cramer, J., and Sherr, assignors.)

Manning, William H., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Bearing liner design. 1,872,600; Aug. 16.

Mantle Lamp Company of America, The. (See Schwarz, E., assignor.)

Marchant Calculating Machine Company. (See Friden, Carl M. F., assignor.)

Marcy, Willard A., assignor to The Lamson Company, Syracuse, N. Y. Vertical conveyer. 1,871,714; Aug. 16.

Margerum, Charles E. (See Kraut, S. B., and Margerum.)

Marks, Charles, and C. S. Bruder, Philadelphia, Pa. Writing guiding machine. 1,871,541; Aug. 16.

Marks, James H., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,872,478; Aug. 16.

Marquardt, Frank C., Brooklyn, assignor to American Bank Note Company, New York, N. Y. Ink mixer. 1,872,312; Aug. 16.

Marsh, Robert, Buffalo, N. Y. Automobile signal switch. 1,872,153; Aug. 16.

Marshall, Charles O., assignor to The Willys-Overland Company, Toledo, Ohio. Balancing device. 1,871,899; Aug. 16.

Marshall, Leonard J., Leonia, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y. Bent tube boiler. 1,872,094; Aug. 16.

Martellotti, Mario E. (See Ernst, H., and Martellotti.)

Martin-Decker Corporation. (See Martin, Walter R., assignor.)

Martin, Walter R., assignor to Martin-Decker Corporation, Long Beach, Calif. Tension indicator. 1,872,087; Aug. 16.

Martois, Arthur E., Compton, Calif. Pipe uncoupling mechanism. 1,871,857; Aug. 16.

Marvel Carbureter Company, The. (See Heitger, Frank H., assignor.)

Marvel Carbureter Company. (See Molony, D. P., assignor.)

Masek, James C., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Theater lighting control mechanism. 1,872,154; Aug. 16.

Masek, James C., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control mechanism. 1,872,155; Aug. 16.

Masek, James C., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Theater-switchboard apparatus. 1,872,156; Aug. 16.

Mason, Frank. (See Dalldorf, L., and Mason.)

Massa, William J., New York, N. Y., assignor to Bergen Point Iron Works, Bayonne, N. J. Expansion joint for flue sections and the like. 1,871,627; Aug. 16.

Massey Concrete Products Corporation. (See Alexander, Earl C., assignor.)

Mastenbrook, Henry J., assignor to The Swartwout Company, Cleveland, Ohio. Valve cage. 1,872,157; Aug. 16.

Master Electric Company, The. (See Larsh, Everett P., assignor.)

Masterson, William E., assignor of one-third to F. L. Cowan and one-third to J. F. Roberts, Borger, Tex. Magnetic motor. 1,872,313; Aug. 16.

Matheson, Howard W., assignor to Canadian Electro Products Company, Limited, Montreal, Quebec, Canada. Producing acetic anhydride from ethylidene diacetate. 1,872,479; Aug. 16.

Mathews, Wallace B. (See Watts, G. W., and Mathews.)

Matthael, Frederick C., and G. D. Shanahan, Detroit, Mich., assignors of one-half to American Metal Products Company and one-half to Motors Metal Manufacturing Company. Brake cross shaft assembly and making same. 1,871,727; Aug. 16.

Maust, Ernest J., assignor to The Dorr Company, Inc., New York, N. Y. Making cement-asbestos products. 1,872,480; Aug. 16.

Maxwell, Aura A. (See Klupmeyer, E. E., and Maxwell.)

Maxwell, William H. (See Dalldorf, L., and Mason, assignors.)

May, Russell P., Haddonfield, N. J., assignor to Radio Corporation of America. Film take-up. 1,871,715; Aug. 16.

May, Russell P., Haddonfield, N. J., assignor to Radio Corporation of America. Talking motion picture projector. 1,871,716; Aug. 16.

Mayer, Bruno, Nuremberg, Germany. Photographic camera. 1,871,717; Aug. 16.

Maynard, Charles E., Northampton, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Apparatus for vulcanizing annular articles. 1,872,158; Aug. 16.

McAdoo & Allen Welting Company. (See Heft, William F., assignor.)

McArdle, Michael W., Chicago, Ill. Combined household food mixer and juice extractor. Des. 87,587; Aug. 16.

McBee Binder Company, The. (See Connor, R., Welk, and Zenner, assignors.)

McCabe, Ira E., and K. Hunciker, Chicago, Ill. Manufacture of electric mercury bulb switches. 1,872,070; Aug. 16.

McCabe, Joseph J., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Lens blocking device. Re18,569; Aug. 16.

McCallum, John S., Goldfield, Iowa. Road maintenance machine. 1,871,542; Aug. 16.

McCann, James. (See Mino, E., McCann, Fischer, and Radcliffe.)

McCarroll, Russell H., and G. Vennerholm, assignors to Ford Motor Company, Dearborn, Mich. Malleabilizing iron. 1,871,543; Aug. 16.
McCarroll, Russell H., and G. Vennerholm, assignors to Ford Motor Company, Dearborn, Mich. Cast iron article and manufacturing thereof. 1,871,544; Aug. 16.
McCarroll, Russell H., and G. Vennerholm, assignors to Ford Motor Company, Dearborn, Mich. Manufacturing cast iron and cast iron articles. 1,871,545; Aug. 16.
McClafferty, Edward R., Pittsburgh, Pa. Automatic oil separator. 1,871,546; Aug. 16.
McCloskey, Gregory E., South Orange, N. J., and W. B. Wingert, Detroit, Mich., assignors to The Barrett Company, New York, N. Y. Production of pitch and apparatus therefor. 1,871,628; Aug. 16.
McCormick & Co. (See Luttrell, James G., assignor.)
McCormick, Elmer, assignor to John Deere Tractor Company, Waterloo, Iowa. Power lift cultivator. 1,872,314; Aug. 16.
McCreary, William C., Chicago, Ill. Shield or protector device. 1,872,159; Aug. 16.
McCuen, Charles L., J. Dykstra, E. H. Smith, and J. F. Wolfram, Lansing, assignors to General Motors Corporation, Detroit, Mich. Brake cross shaft. 1,872,160; Aug. 16.
McCullough, Lee W. (See Kehoe, A. H., and McCullough.)
McCullough, Paul J. (See Dreibuss, H. C., and McCullough.)
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car control equipment. 1,872,481; Aug. 16.
McDonald, Eugene G., assignor to Bendix Brake Company, South Bend, Ind. Connection. 1,872,315; Aug. 16.
McGavack, John, Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Preservation of latex. 1,872,161; Aug. 16.
McGrew, Earl E., assignor to McGrew Machine Company, Lincoln, Nebr. Poultry feeder. 1,871,804; Aug. 16.
McGrew Machine Company. (See McGrew, Earl E., assignor.)
McHale, John P., Dormont, Pa. Road scraping or grading apparatus. 1,872,601; Aug. 16.
McKee, John F., assignor to Yarnall-Waring Company, Philadelphia, Pa. Expansion joint. 1,872,088; Aug. 16.
McKee, John F., Lansdowne, assignor to Yarnall-Waring Company, Philadelphia, Pa. Expansion joint. 1,872,089; Aug. 16.
McKenna Process Company of Illinois. (See Langford, George, assignor.)
McLain, Leslie E., Peterson, Iowa. Clothes support for ironing boards. 1,871,813; Aug. 16.
McMenamin, Joseph B., Port Kennedy, Pa. Headlight. 1,871,629; Aug. 16.
McMurray, Harry G. (See Baynard, W. H., and McMurray.)
McNeil, William M., Chicago, Ill., and B. T. Ballard, Fort Dodge, Iowa, assignors to United States Gypsum Company, Chicago, Ill. Strip labeler. 1,871,718; Aug. 16.
Meader, Ralph L., Lynbrook, N. Y. Desk clip for holding blanks. 1,871,719; Aug. 16.
Mechanical Rubber Company, The. (See Eldridge, Jess G., assignor.)
Medvedeff, Nicholas J., Larchmont, assignor to Aircraft Improvement Corporation, New York, N. Y. Auxiliary wings for airplanes. 1,872,163; Aug. 16.
Meeker, Charles H., Riverside, Calif. Applying reenforcing to film. 1,872,316; Aug. 16.
Meeker, Charles H., Riverside, Calif. Apparatus for applying reenforcing to film. 1,872,317; Aug. 16.
Meissner, Alexander, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Convertible band pass receiver. 1,872,318; Aug. 16.
Meister, Robert J., Cincinnati, Ohio. Soap saver. 1,871,814; Aug. 16.
Melchert, Charles A., assignor, by mesne assignments, to Archie O. Long, Kansas City, Mo. Coin mechanism for vending machines. 1,871,901; Aug. 16.
Melchionna, Frank A., Cincinnati, Ohio. Shoe structure. 1,871,547; Aug. 16.
Meligren, Gunnar E., Tidaholm, J. G. Sjöström, Jonkoping, A. R. Swälas, and G. V. Hedin, Tidaholm, Sweden. Manufacturing match boxes. 1,872,162; Aug. 16.
Mengel Company, The. (See Turner, Joseph O., assignor.)
Mentges, John. Sidney, Ohio, assignor, by mesne assignments, to Dexter Folder Company, New York, N. Y. Paper folding machine. 1,871,900; Aug. 16.
Mercier, Warren C., Danbury, Conn. Rear window shade for automobiles. 1,872,164; Aug. 16.
Messing, Joseph, assignor to Bull Dog Electric Products Company, Detroit, Mich. Bending laminated sheets. 1,872,482; Aug. 16.
Meston, Archibald F., East Bound Brook, and H. A. Wintermute, Plainfield, N. J., assignors to Research Corporation, New York, N. Y. Cleaning gases. 1,871,815; Aug. 16.
Metropolitan Engineering Company. (See Grady, Charles B., assignor.)
Metropolitan Engineering Company. (See Murray, Thomas E., assignor.)
Metropolitan Engineering Company. (See Phelps, George H., assignor.)
Meunier, Leon F., Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Attachment for driving spindles. 1,871,729; Aug. 16.
Meunier, Leon F., Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Packing for fluid pressure motors. 1,871,803; Aug. 16.
Meyer, Henry, Rhineland, Mo. Hog ring. 1,871,548; Aug. 16.
Meyer, William, Chicago, Ill. Impeller. 1,872,483; Aug. 16.
Michael, Walter J., Bucyrus, Ohio. Burial vault. Des. 87,588; Aug. 16.
Michael, Walter J., Bucyrus, Ohio. Burial vault. Des. 87,589; Aug. 16.
Milhon, Charles A., Garfield, Kans. Highway snowplow. 1,872,484; Aug. 16.
Miller, Clarence E., Beallsville, Pa. Multicylinder pump. 1,871,816; Aug. 16.
Miller, Clarence W. (See Goode, G. C., Selje, and Miller.)
Miller, Clarence W., Detroit, and G. C. Goode, Birmingham, assignors to Chrysler Corporation, Detroit, Mich. Bus chassis construction. 1,872,485; Aug. 16.
Miller, Clarence W., Detroit, and G. C. Goode, Birmingham, assignors to Chrysler Corporation, Detroit, Mich. Bus wheel driving unit. 1,872,486; Aug. 16.
Miller, Elsie F., New York, N. Y. Hand bag. 1,871,549; Aug. 16.
Miller Henry, assignor to A. O. Smith Corporation, Milwaukee, Wis. Making a spring hanger. 1,872,319; Aug. 16.
Miller, Henry B., Honey Creek, Wis. Scaffold bracket. 1,871,721; Aug. 16.
Miller, John M., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Radio receiving system. 1,872,487; Aug. 16.
Miller, Kenneth W. (See Halperin, H., and Miller.)
Miller, Lloyd E., Cleveland Heights, assignor to The Reliance Electric and Engineering Company, Cleveland, Ohio. Control means for sheet feeding or delivering or the like. 1,871,450; Aug. 16.
Miller, Stuart P., Tenafly, N. J., assignor to The Barrett Company, New York, N. Y. Apparatus for distillating tar. 1,871,550; Aug. 16.
Miller, William E., Gobles, Mich. Wrapping machine. 1,872,488; Aug. 16.
Mills, Lindley E. (See Grether, E. F., and Mills.)
Miner, W. H., Inc. (See Geiger, William A., assignor.)
Minneapolis-Honeywell Regulator Company. (See Bear, Paul S., assignor.)
Minneapolis-Honeywell Regulator Company. (See Johnson, Roy W., assignor.)
Mino, Emil, Albany, J. McCann and M. Fischer, Richmond, Calif., and T. D. Radcliffe, Brookville, Pa., assignors to Standard Oil Company of California, San Francisco, Calif. Arc welding electrode. 1,872,320; Aug. 16.
Minor, Burt S., San Pedro, and W. H. Clapp, Pasadena, Calif. Thrust bearing. 1,871,630; Aug. 16.
Mitchell, Jethro, Cincinnati, Ohio, assignor to Moeschl-Edwards Corrugating Company, Inc., Covington, Ky. Door. 1,872,489; Aug. 16.
Mock, Frank C., assignor to Bendix Stromberg Carburetor Company, Chicago, Ill. Airplane carburetor. 1,871,460; Aug. 16.
Mock, Frank C., C. J. Gustafson and M. E. Chandler, Chicago, Ill., assignors to Bendix Stromberg Carburetor Company, South Bend, Ind. Carburetor. 1,872,490; Aug. 16.
Moeckel, Clarence S., assignor to Southern Spring Bed Company, Atlanta, Ga. Sofa bed. 1,871,817; Aug. 16.
Moeschl-Edwards Corrugating Company. (See Mitchell, Jethro, assignor.)
Mohawk Asphalt Heater Company. (See Van Vorst, J., assignor.)
Mojonnier Bros. Co. (See Mojonnier, Julius J., assignor.)
Mojonnier, Julius J., Oak Park, Ill., assignor to Mojonnier Bros. Co. Selecting conveyer. 1,871,902; Aug. 16.
Molins, Walter E., Deptford, London, England. Packing machinery. 1,872,090; Aug. 16.
Molony, Donald P., assignor to Marvel Carbureter Company, Flint, Mich. Intake manifolding for multiple cylinder internal combustion engines. 1,871,818; Aug. 16.
Monaco, John, East Orange, N. J. Signal light casing. Des. 87,590; Aug. 16.
Monro, Donald A., Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill. Fractionating system. 1,871,819; Aug. 16.
Moody, Lewis F., Philadelphia, Pa. Regulating system for hydraulic turbines. 1,872,165; Aug. 16.
Moore Company, The. (See Wunderlich, William E., assignor.)
Moore, Eugene C., jr. (See Blum, C., and Moore, jr.)
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Hood catch. 1,872,321; Aug. 16.
Moore, William G., London, England. Arc lamp electrode. 1,872,322; Aug. 16.
Moraine Products Company, The. (See Patch, Earl S., assignor.)
More, Fred, Hobart, N. Y. Antiglare device for automobile drivers. 1,871,461; Aug. 16.
Morel, Cornelis H. (See Bol, C. Posthumus, Unk, and Morel.)
Morgan, Charles A., Grand Rapids, Mich. Windshield warmer. 1,871,722; Aug. 16.
Morgan and Wright. (See Abbott, Adrian O., assignor.)
Morrow, John E., East St. Louis, Ill., assignor to Aluminum Company of America, Pittsburgh, Pa. Recovery of cryolite. 1,871,723; Aug. 16.

Morse, William E., Rapid City, S. Dak. Rotary motor. 1,871,462; Aug. 16.
Morton, Allen W., assignor to The American Hammered Piston Ring Company, Baltimore, Md. Packing. 1,871,820; Aug. 16.
Morton Salt Company. (See Hochwalt, C. A., and Waliuszis, assignors.)
Moss, Charles McL., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Multifrequency circuit breaker control system and protective system. 1,871,724; Aug. 16.
Moss, William H., Cumberland, Md., assignor to Celanese Corporation of America. Laminated glass and making same. 1,871,725; Aug. 16.
Motometer Gauge & Equipment Corporation. (See Hurley, Roy T., assignor.)
Moto Meter Gauge & Equipment Corporation. (See Padesky, John R., assignor.)
Motors Metal Manufacturing Company et al. (See Matthael, F. C., and Shanahan, assignors.)
Mougey, Harry C., assignor to General Motors Research Corporation, Detroit, Mich. Cleaning metal. 1,872,091; Aug. 16.
Mueller, Robert A. (See Gray, E., and Mueller.)
Muhlfeld, John E. (See Havemeyer, H. O., jr., and Muhlfeld.)
Mühlig, Ludwik, Bielsko, Poland. Screw. 1,872,166; Aug. 16.
Mullins Manufacturing Corporation. (See Engel, Edward, assignor.)
Murray, John F., et al, executors. (See Murray, Thomas E.)
Murray, Joseph B., et al., executors. (See Murray, Thomas E.)
Murray, Thomas E., jr., et al., executors. (See Murray, Thomas E.)
Murray, Thomas E., deceased, Brooklyn, N. Y.; J. B. Murray, T. E. Murray, jr., and J. F. Murray, executors, assignors to Metropolitan Engineering Company. Boiler. 1,872,167; Aug. 16.
Naamlooze Vennootschap Maatschappij tot Veraardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen. (See De Iongh, Johan H., assignor.)
Nanfeldt, Ernest, New Haven, Conn., assignor to Respro, Inc., Cranston, R. I. Circular loom. 1,872,168; Aug. 16.
National Aluminate Corporation, The. (See Evans, Wilson, assignor.)
National Aniline & Chemical Company. (See Hess, R. W., and Cunningham, assignors.)
National Aniline & Chemical Company. (See Ogilvie, J., and Rogers, assignor.)
National Brass Company. (See Ter Meer, Herman, assignor.)
National Bread Wrapping Machine Company. (See Sévigné, Henri A., assignor.)
National Cash Register Company, The. (See Green, Charles W., assignor.)
National Colortype Company, The. (See Bone, Evan P., assignor.)
National India Rubber Company. (See Binmore, T. V., and Rice, assignors.)
National Kellastone Company. (See Techmer, Ewald F., assignor.)
National Tube Company. (See Boyd, Peter, assignor.)
Naugatuck Chemical Company, The. (See McGavack, John, assignor.)
Naugatuck Chemical Company, The. (See Teague, Merwyn C., assignor.)
Nawinsky, Paul, and A. Krause, Ludwigshafen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Dyestuff of the anthraquinone series. 1,871,821; Aug. 16.
Needham, Russell E. (See Porter, P. W., and Needham.)
Neldner, Edward E., Milwaukee, Wis. Mop wringer. 1,871,903; Aug. 16.
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Fluid pressure tool. 1,871,726; Aug. 16.
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company. Slip rotation apparatus. 1,871,728; Aug. 16.
Nenninger, Lester F. (See Einstein, S., and Nenninger.)
Nenninger, Lester F. (See Ernst, H., and Nenninger.)
Neverman, August W., Green Bay, Wis. Electric gas tank lock. 1,872,082; Aug. 16.
New England Lace Mills Inc. (See Edson, Bert, assignor.)
New England Mica Co. (See Boughton, Willis A., assignor.)
New Jersey Zinc Company. (See Bunce, Earl H., assignor.)
Newmann, John, Brooklyn, N. Y. Crank connection for radial motors. 1,871,729; Aug. 16.
Niagara Machine and Tool Works. (See Lindgren, Bror J., assignor.)
Nichols, Arthur A. and W. H., Waltham, Mass. Grinding machine. 1,872,041; Aug. 16.
Nichols, Henry G., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Outdoor switch box. 1,872,323; Aug. 16.
Nichols, William H. (See Nichols, Arthur A., and W. H.)
Nicodemus, Otto. (See Ernst, O., and Nicodemus.)
Niles, Eliot W., Bloomfield, N. J., and W. H. Edwards, Bayside, N. Y., assignors to American Telephone and Telegraph Company. Frequency converter. 1,871,904; Aug. 16.
Noetzel, Gustav A., Waukesha, assignor to Essential Products Co., Milwaukee, Wis. Card table tray. 1,872,491; Aug. 16.
North American Lace Company. (See Adaire, William R., assignor.)
Norton, Charles L., Boston, Mass. Structural material. 1,871,730; Aug. 16.
Norton Company. (See Smith, George H., assignor.)
Norviel, Harry E., assignor to Delco-Remy Corporation, Anderson, Ind. Switch. 1,871,858; Aug. 16.
Norviel, Harry E., assignor to Delco-Remy Corporation, Anderson, Ind. Coincidental lock. 1,871,905; Aug. 16.
Nut Products Company, The. (See Kelly, William W., assignor.)
Nutt, William H., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for use in the manufacture of covered heels. 1,872,324; Aug. 16.
Nyquist, Harry, Millburn, N. J., assignor to American Telephone and Telegraph Company. Concentric shield for cables. 1,871,906; Aug. 16.
O'Brien, George W., Jersey City, N. J. Headlight. 1,871,551; Aug. 16.
O'Brien, Roland L. (See Buckman, Henry H., assignor.)
O'Connell and Sweeney. (See Sweeney, J. R., and Roberts, assignors.)
Odlum, William H. (See Peterson, E. H., and Odlum.)
Offutt, James S., assignor to United States Gypsum Company, Chicago, Ill. Plaster-board manufacture. 1,871,731; Aug. 16.
Ogilvie, James, Buffalo, and D. G. Rogers, Hamburg, assignors to National Aniline & Chemical Company, Inc., New York, N. Y. Preparing leuco-1.4-dihydroxy-anthraquinones. 1,872,492; Aug. 16.
Ohio Steel Foundry Company, The. (See Burke, Ralph, assignor.)
Ohlsson, Ernst. (See Isermann, M., and Ohlson.)
Oliver, J. E. (See Bradford, William G., assignor.)
Ollendorff, Franz, Berlin-Wilmersdorf, and E. Friedländer, Spandau, near Berlin, Germany, assignors to Westinghouse Electric & Manufacturing Company. Alternating current protective relay. 1,871,822; Aug. 16.
Olmstead, Harvey M., Denver, Colo. Portable threading device. 1,871,732; Aug. 16.
Olpin, Henry C. (See Ellis, G. H., and Olpin.)
Olsen, Ludwig A., Brooklyn, N. Y. Polisher. 1,872,602; Aug. 16.
Olson, John A., Cleveland, Ohio. Chuck operating device. 1,871,463; Aug. 16.
Olt, Leonard, assignor to Crown Cork & Seal Company, Baltimore, Md., Metal cap for closing paper containers. 1,871,907; Aug. 16.
Oppenheimer Casing Company. (See Oppenheimer, Seymour, assignor.)
Oppenheimer, Seymour, assignor to Oppenheimer Casing Company, Chicago, Ill. Sausage casing. 1,871,464; Aug. 16.
Orem, Frederick S., Baltimore, Md. Air cleaner. 1,871,908; Aug. 16.
Osborne, Harold A., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Making shoes. 1,872,325; Aug. 16.
Osmer, James H. (See Halloran, R. A., Chappell, and Osmer.)
Ossenbeck, Anton. (See Hentrich, W., Tietze, Ossenbeck, and Backes.)
Otto, August, Sandwich, Ill. Milk stirrer. 1,872,326; Aug. 16.
Overbury, Frederick C., Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Method of and apparatus for making strip shingles. 1,872,603; Aug. 16.
Owens, George C. (See Smithson, C. F., and Owens.)
Pacific Pump Works et al. (See Weis, Arthur R., assignor.)
Packard Motor Car Company. (See Marks, James H., assignor.)
Packard Motor Car Company. (See Tibbetts, Milton, assignor.)
Padesky, John R., La Crosse, Wis., assignor to Moto Meter Gauge & Equipment Corporation, New York, N. Y. Instrument panel board. 1,871,552; Aug. 16.
Paff, Walter J., assignor to R. H. Heilmstine, Dayton, Ohio. Base for a telephone instrument. Des. 87,591; Aug. 16.
Pallotta, Sandy, Youngstown, Ohio. Airplane. 1,871,909; Aug. 16.
Palmer, Chester U., New York, N. Y. Aircraft. 1,872,170; Aug. 16.
Panitzsch, Martin, Forest Park, Ill. Push pin. 1,872,171; Aug. 16.
Paradise, Louis A., assignor to Deere & Company, Moline, Ill. Agricultural implement. 1,872,042; Aug. 16.
Paradise, Louis A., assignor to Deere & Company, Moline, Ill. Wear plate for harvester knife bars. 1,872,172; Aug. 16.
Parco Specialty Co. (See Evans, Harold A., assignor.)
Parco Specialty Co. (See Hansen, Sinius M., assignor.)
Park, Gene J., and G. Antol, New York, N. Y. Airplane wing. 1,871,465; Aug. 16.

Parker, Leslie O., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Contact plug for combination lamps. 1,871,910; Aug. 16.
Parker, William G., Lakeland, Fla. Cooling the head of one having a permanent wave. 1,871,553; Aug. 16.
Parsons, Jay C., Chicago, Ill., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,871,911; Aug. 16.
Parsons, Wallace E., Waterville, and E. H. Boody, assignors, by mesne assignments, to Fidelity Trust Company, Portland, Me. Packaging. 1,871,805; Aug. 16.
Paschall, Jacques C., Chicago, Ill., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,872,173; Aug. 16.
Paschall, Jacques C., Chicago, Ill., assignor to Addressograph Company, Wilmington, Del. Printing plate and method of making. 1,872,174; Aug. 16.
Patch, Earl S., assignor to The Moraine Products Company, Dayton, Ohio. Operating piston for liquid meters. 1,871,912; Aug. 16.
Patent and Licensing Corporation, The. (See Donahue, Elbert S., assignor.)
Patent and Licensing Corporation, The. (See Overbury, Frederick C., assignor.)
Patent and Licensing Corporation, The. (See Reade, Ralph W. B., assignor.)
Patrol Valve Company, The. (See Evans, Vincent J., assignor.)
Patten, Ernest L., New Haven, Conn., assignor to The Goodyear's India Rubber Glove Mfg. Co., Naugatuck, N. H. Stripping machine. 1,872,327; Aug. 16.
Patterson, Alfred B., Tulsa, Okla. Steel building construction. 1,871,913; Aug. 16.
Paul, Edwin F., Manchester, Kans. Brooder attachment. 1,871,554; Aug. 16.
Paulding, John I., Inc. (See Johnson, Gustaf A. and F. E., assignors.)
Peake, Edward S., assignor to The Kilgore Mfg. Company, Westerville, Ohio. Toy pistol. 1,872,093; Aug. 16.
Pearce, Harry A., El Paso, Tex. Electrically heated branding iron. 1,871,555; Aug. 16.
Pearce, Louis M., and W. L. Church, Houston, Tex. Drill. 1,872,328; Aug. 16.
Peelle Company, The. (See Allen, Arthur A., assignor.)
Peelle Company, The. (See Peelle, Robert S., assignor.)
Peelle Company, The. (See Saurer, Paul R., assignor.)
Peelle, Robert S., Hollis, assignor to The Peelle Company, New York, N. Y. Door operator. 1,872,043; Aug. 16.
Peelle, Robert S., Hollis, assignor to The Peelle Company, Brooklyn, N. Y. Operator for counterbalanced elevator doors. 1,872,175; Aug. 16.
Peelle, Robert S., Hollis, assignor to The Peelle Company, Brooklyn, N. Y. Operator for elevator gates. 1,872,176; Aug. 16.
Peelle, Robert S., Hollis, assignor to The Peelle Company, Brooklyn, N. Y. Operator for canopy type doors. 1,872,177; Aug. 16.
Peelle, Robert S., Hollis, assignor to The Peelle Company, Brooklyn, N. Y. Electrical interlock. 1,872,329; Aug. 16.
Peelle, Robert S., Hollis, assignor to The Peelle Company, Brooklyn, N. Y. Power fixture for elevator door operators. 1,872,330; Aug. 16.
Peelle, Robert S., Hollis, assignor to The Peelle Company, Brooklyn, N. Y. Operator for bi-part slideup doors. 1,872,331; Aug. 16.
Peelle, Robert S., Hollis, assignor to The Peelle Company, Brooklyn, N. Y. Operator for counterbalanced elevator doors. 1,872,332; Aug. 16.
Peik, Louis D., Mishawaka, Ind. Sand blast machine. 1,872,178; Aug. 16.
Peiler, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Glass gathering and forming machine. 1,871,556; Aug. 16.
Peirce, Joseph O., and W. T. Reddish, Cincinnati, Ohio, assignors to The Kontol Company, Dallas, Tex. Emulsion breaking. 1,872,333; Aug. 16.
Pennsylvania Crusher Company. (See Borton, George W., assignor.)
Perfection Steel Body Co. (See Cohen, Ralph, assignor.)
Perfection Steel Body Co. (See Wegner, Clarence J., assignor.)
Perfection Stove Company. (See Chadwick, Lee S., assignor.)
Perfection Stove Company. (See Chadwick, L. S., and Resek, assignors.)
Perfection Stove Company. (See Chadwick, L. S., Resek, and Dahlstrom, assignors.)
Perfection Stove Company. (See Resek, Marc, assignor.)
Perkiomen Trunk & Bag Company. (See Cramer, J., and Sherr, assignors.)
Perroux, Georges E. M., and V. Corelli; said Perroux assignor to Compagnie Generale de Telegraphie Sans Fil, Paris, France. High frequency amplifier. 1,872,334; Aug. 16.
Peter, Albin, assignor to the Firm of Chemical Works formerly Sandoz, Basel, Switzerland. Manufacture of 1-aminoanthraquinone-2-sulphonic acid. 1,871,466; Aug. 16.
Petersen, Edgar G., assignor to Pines Winterfront Company, Chicago, Ill. Engine-shutter apparatus. 1,871,733; Aug. 16.
Petersen, Edgar G., assignor to Pines Winterfront Company, Chicago, Ill. Radiator shutter units. 1,871,914; Aug. 16.
Petersen, John D., Detroit, Mich. Making radiator cores. 1,872,494; Aug. 16.
Peterson, Burt A., assignor to Barber-Colman Company, Rockford, Ill. Warping apparatus. 1,872,179; Aug. 16.
Peterson, Edward H., and W. H. Odlum, assignors to Duro Metal Products Company, Chicago, Ill. Brake lining tool. 1,872,493; Aug. 16.
Peterson, Julius C., Chicago, Ill. Internal combustion engine. 1,872,180; Aug. 16.
Petroleum Conversion Corporation. (See Sachs, Albert P., assignor.)
Pfeiffer, Edward, New York, N. Y. Figurette. Des. 87,592; Aug. 16.
Pfeiffer, Karl, Highland Park, assignor to Chrysler Corporation, Detroit, Mich. Brake testing machine. 1,872,495; Aug. 16.
Phelps, Alva W., assignor to Delco-Remy Corporation, Anderson, Ind. Apparatus for contracting a ring about a body. 1,871,915; Aug. 16.
Phelps, George H., Warehouse Point, Conn., assignor, by mesne assignments, to Metropolitan Engineering Company. Radiator and making the same. 1,872,044; Aug. 16.
Picton, Norman, Stevenston, Scotland, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Making nitrocellulose. 1,872,181; Aug. 16.
Pierce, George L., Brooklyn, assignor to A. G. Spalding & Bros., New York, N. Y. Shoe sole. 1,872,604; Aug. 16.
Pierce, Ralph E., Larchmont, N. Y., assignor to American Telephone and Telegraph Company. Signal monitoring device. 1,871,916; Aug. 16.
Pillard, Marcel, assignor to L'Helice Metallique, Brevets Paulhan-Pillard, Societe Anonyme, Marseilles, France. Air screw with automatically variable pitch. 1,872,337; Aug. 16.
Pines Winterfront Company. (See Crawford, Howard H., assignor.)
Pines Winterfront Company. (See Edwards, James H., assignor.)
Pines Winterfront Company. (See Goldfisher, Fred, assignor.)
Pines Winterfront Company. (See Petersen, Edgar G., assignor.)
Pink, Berry, Passaic, N. J., assignor to The Rosenthal Company, New York, N. Y. Compartment bag for marbles or the like. 1,873,640; Aug. 16.
Pittsburgh Asphalt Vault Company. (See Shafer, William B., assignor.)
Pittsburgh Steel Company. (See Brandt, Lewis, assignor.)
Placette, Joseph G. (See Repschleger, W. E., Armistead, Talbot, and Placette.)
Plexico, Robert S., Muncie, Ind. Transmission gearing. 1,872,338; Aug. 16.
Pohl, Charles J., assignor to M. P. Hannin, Los Angeles, Calif. Packing device for use in casing heads, or the like. 1,872,182; Aug. 16.
Pohlhausen, Karl, Berlin-Halensee, Germany, assignor to Westinghouse Electric & Manufacturing Company. Transmission line device. 1,872,605; Aug. 16.
Pomerantz, Herman. (See Silverman, M., and Pomerantz.)
Porter, Percy W., Wilmington, and R. E. Needham, Los Angeles, Calif. Making colloidal silica. 1,872,183; Aug. 16.
Posthumus, Klaas. (See Bol, C., Posthumus, Unk, and Morel.)
Power, Claude E., Huntington Park, Calif. Delinting machine for cotton seed and process. 1,872,002; Aug. 16.
Pratt, Benjamin H., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Cross link for tire chains. 1,872,003; Aug. 16.
Preisner, Jacob S., New Haven, Conn. Fret-bar for use in playing stringed instruments. Des. 87,593; Aug. 16.
Prins, Peter L., Amsterdam, Netherlands. Six wheel motor chassis. 1,871,735; Aug. 16.
Prins, Leter L., Bussum, assignor to D. M. Kan, Hilversum, F. A. Drieman, M. L. Kan, and F. J. J. van Schaardenburg, Amsterdam, Netherlands. Motor car frame. 1,871,734; Aug. 16.
Prosser, Joseph G., Chicago, Ill. Obtaining work from a vapor motor. 1,872,606; Aug. 16.
Putman, Robert A., Kewaunee, Wis. Airplane hoop. 1,872,339; Aug. 16.
Pyratone Products Corporation. (See Barrett, Harold G., assignor.)
Queneau, Augustin L. J., New York, N. Y. Separation of component constituents of a complex metalliferous dust. 1,872,169; Aug. 16.
Rabezzana, Hector. (See Duffendack, O. S., and Rabezzana.)
Rabezzana, Hector, assignor to A C Spark Plug Company, Flint, Mich. Spark plug and making the same. 1,872,496; Aug. 16.
Rabezzana, Hector, assignor to A C Spark Plug Company, Flint, Mich. Method of forming mica-insulated spark plugs. 1,872,497; Aug. 16.
Racy, Gabor, South Norwalk, Conn. Combined screen and shutters. 1,871,557; Aug. 16.
Radcliffe, Thomas D. (See Mino, E., McCann, Fischer, and Radcliffe.)
Radio Corporation of America. (See Bol, C., Posthumus, Unk, and Morel, assignors.)

Radio Corporation of America. (See Kroger, Fred H., assignor.)
Radio Corporation of America. (See May, Russell P., assignor.)
Radio Corporation of America. (See Ringel, Abraham, assignor.)
Radio Corporation of America. (See Roberts, Walter Van B., assignor.)
Radio Corporation of America. (See Rodwin, George, assignor.)
Radio Corporation of America. (See Van Dyck, Arthur F., assignor.)
Radio Corporation of America. (See Weinberger, Julius, assignor.)
Ragsdale, Edward T., Flint, assignor to General Motors Corporation, Detroit, Mich. Hood catch. 1,872,184; Aug. 16.
Rasmussen, Alvin C. (See Schmid, C. G., and Rasmussen.)
Rasmussen, Chester A., Long Beach, and W. A. Trout, Los Angeles, Calif. Blowout preventer. 1,872,498; Aug. 16.
Rataiczak, Thomas F., Troy, and J. C. Slager, Dayton, assignors to The Hobart Manufacturing Company, Troy, Ohio. Food handling apparatus. 1,872,004; Aug. 16.
Rauberstrauch, George, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Drill tool retainer. 1,872,499; Aug. 16.
Raule, Clifford T., Brookline, Pa. Internal grinder control. 1,871,468; Aug. 16.
Reade, Ralph W. B., Newton Center, assignor to The Patent and Licensing Corporation, Boston, Mass. Building material. 1,872,185; Aug. 16.
Reade, Ralph W. B., Newton Center, assignor to The Patent and Licensing Corporation, Boston, Mass. Building material. 1,872,186; Aug. 16.
Rebner, Frans, New York, N. Y., and Paul Kent, Hartford, Conn. Studio camera film replacing device. 1,872,500; Aug. 16.
Reddish, Warren T. (See Heckel, H., and Reddish.)
Reddish, Warren T. (See Peirce, J. O., and Reddish.)
Redwitz, Oscar, Sharon, Pa. Noodle press. 1,871,558; Aug. 16.
Reed, Clarence E., Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Tooth formation and arrangement for rotary drilling. 1,871,736; Aug. 16.
Reed, Frederick J., Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Bushing clamp. 1,872,340; Aug. 16.
Reed, George F., assignor, by mesne assignments, to The Web-Lite Company, Inc., Pittsburgh, Pa. Changeable exhibitor. 1,872,607; Aug. 16.
Reed, Percival K., Llanerch, assignor to Atlas Conveyor Company, Philadelphia, Pa. Skip hoist. 1,871,559; Aug. 16.
Reese, W. S. (See Chibnik, Harry, assignor.)
Regan, John E., assignor to The Lamson Company, Syracuse, N. Y. Conveyer. 1,872,005; Aug. 16.
Regan, John E., assignor to The Lamson Company, Syracuse, N. Y. Disk deflector. 1,872,006; Aug. 16.
Regan Safety Devices Company, The. (See Shaver, Archibald G., assignor.)
Rehländer, Paul, Berlin-Charlottenburg, Germany. Optical system for photography. 1,872,501; Aug. 16.
Rehrig, William J., Los Angeles, Calif., assignor to Sta-On Garment Hanger Company. Slotting garment hangers. 1,871,823; Aug. 16.
Reid, Raymond A., Cedar Rapids, Iowa. Sanding machine. 1,872,502; Aug. 16.
Reilly, Frank C., New York, N. Y. Elevator ventilation. 1,872,007; Aug. 16.
Reiter, Lues, Providence, R. I. Fastener. 1,872,187; Aug. 16.
Reliance Electric and Engineering Company. (See Miller, Lloyd E., assignor.)
Remark, Isadore J., assignor to The General Tire & Rubber Company, Akron, Ohio. Rubber stock feeding device. 1,871,560; Aug. 16.
Rens, Dick, Waupun, Wis. Hen's nest. 1,872,608; Aug. 16.
Renshaw, David E. (See Schaake, W., and Renshaw.)
Repschleger, William E., G. Armistead, jr., B. B. Talbot, and J. G. Placette, Port Arthur, Tex., assignors to The Texas Company, New York, N. Y. Proportional pumping apparatus. 1,872,503; Aug. 16.
Repulso, Inc. (See Bottrell, Henry T., assignor.)
Research Corporation. (See Meston, A. F., and Wintermute, assignors.)
Resek, Marc. (See Chadwick, L. S., and Dahlstrom.)
Resek, Marc. (See Chadwick, L. S., and Resek.)
Resek, Marc, Cleveland Heights, assignor to Perfection Stove Company, Cleveland, Ohio. Steam generating apparatus. 1,871,859; Aug. 16.
Respro, Inc. (See Nanfeldt, Ernest, assignor.)
Revere Copper & Brass Incorporated. (See Dallas, Charles D., assignor.)
Revere Rubber Company. (See Hubbell, Clarence W., assignor.)
Rhea, Thomas R., and J. D. Tear, Schenectady, N. Y., and C. F. Green, Urbana, Ill., assignors to General Electric Company. Control system for moving objects. 1,871,469; Aug. 16.
Rice, Harold DeB. (See Binmore, T. V., and Rice.)
Rice, Henry W., East Boothbay, Me. Rudder and propeller gear drive for motor boats. 1,871,561; Aug. 16.
Rich, William E., Bradley, Ark., assignor of one-half to R. Britton, Cotton Valley, La. Pipe clamp. 1,871,562; Aug. 16.
Richards, William F., Mason, Mich., assignor to S. M. A. Corporation, Cleveland, Ohio. Spray drier. 1,871,737; Aug. 16.
Richards, William F., Mason, Mich., assignor to S. M. A. Corporation, Cleveland, Ohio. Baffle. 1,871,738; Aug. 16.
Richardson, Rodney G., Chicago, Ill. Vibrating device. 1,872,341; Aug. 16.
Richburg, George W., Ellenville, N. Y. Oil-can attachment. 1,871,824; Aug. 16.
Richter, Walther, assignor to A. O. Smith Corporation, Milwaukee, Wis. Electric arc welding. 1,872,008; Aug. 16.
Riddell Company, W. A. (See Stuckey, Robert B., assignor.)
Riddell, W. A., Company. (See Lang, Frans, assignor.)
Riley, Lynn G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control apparatus. 1,872,342; Aug. 16.
Ringel, Abraham, Brooklyn, N. Y., assignor to Radio Corporation of America. Driving unit for sound reproducers. 1,871,739; Aug. 16.
Rivat, George, Paterson, and E. Cadgene, Englewood Cliffs, N. J., and C. Dreyfus, New York, N. Y., assignors to Celanese Corporation of America. Dyeing of cellulose derivatives. 1,871,470; Aug. 16.
Roberts, Edmund W. (See Sweeney, J. R., and Roberts.)
Roberts, J. F., et al. (See Masterson, William E., assignor.)
Roberts, Walter V., Bronxville, N. Y., assignor to Radio Corporation of America. Receiving radio signals and apparatus therefor. 1,871,740; Aug. 16.
Roberts, Walter V., Princeton, N. J., assignor to Radio Corporation of America. Coupling system. 1,872,343; Aug. 16.
Roberts, Walter V., Princeton, N. J., assignor to Radio Corporation of America. Amplifier tube control. 1,872,347; Aug. 16.
Robin, Paul. (See Trimbach, F. E. L., Robin, assignor, and Steinmetz.)
Robinson, Ernest Y., Enfield, England, assignor to Associated Electrical Industries, Limited. Vacuum electric tube device. 1,872,010; Aug. 16.
Robinson, Ernest Y., Bush Hill Park, Enfield, England, assignor to Associated Electrical Industries, Limited. Vacuum electric tube device. 1,872,344; Aug. 16.
Robinson, Ernest Y., Lymm, and C. R. Burch, Stretford, Manchester, England, assignors to Associated Electrical Industries Limited. Thermionic rectifier system. 1,872,009; Aug. 16.
Robinson, Harry E. (See Schutz, H. R., and Robinson.)
Roby, Frank M., Cleveland, Ohio. Low water alarm. 1,872,563; Aug. 16.
Rocca, Agostino, Dalmine, Italy. Apparatus for covering the outside surface of metal pipes with a mixture of fibrous substances and hydraulic cement substances. 1,871,917; Aug. 16.
Rodger Ballast Car Company. (See Hindahl, David, assignor.)
Rodwin, George, New York, N. Y., assignor to Radio Corporation of America. Constant beat frequency system. 1,871,741; Aug. 16.
Rogers, C. E., Company. (See Rogers, Charles E., assignor.)
Rogers, Charles E., assignor to C. E. Rogers Company, Detroit, Mich. Machine for extracting the juice of citrus fruits. 1,871,860; Aug. 16.
Rogers, Cullen R., Graham, Tex. Electrical geological disturbance detector. 1,872,504; Aug. 16.
Rogers, Donald G. (See Ogilvie, J., and Rogers.)
Rogers, James F. (See Clark, E. F., and Rogers.)
Rogers, James F., North Attleboro, Mass., assignor, by mesne assignments, to Art Metal Works, Inc., Newark, N. J. Cigar lighter. 1,872,346; Aug. 16.
Rogers, James F., North Attleboro, Mass., and E. F. Clark, Rangeley, Me., assignors, by mesne assignments, to Art Metal Works, Inc., Newark, N. J. Cigar lighter. 1,872,345; Aug. 16.
Roggatz, Ernst. (See Dap, J., and Roggatz.)
Rola Company, The. (See Engholm, Bernard A., assignor.)
Rolier-Smith Company. (See Wood, Joseph D., assignor.)
Rolls Royce Limited. (See Hall, H. C., and Bradbury, assignors.)
Romano, Michaël, Providence, R. I., and C. N. Colstad, Attleboro, Mass.; said Colstad assignor to said Romano. Windshield cleaner device. 1,872,095; Aug. 16.
Rome Company, The. (See Barnard, Dean S., assignor.)
Ronning, Adolph, Minneapolis, Minn. Ellipsograph. 1,872,505; Aug. 16.
Roos, Carlisle K., assignor to United States Gypsum Company, Chicago, Ill. Acoustic plaster. 1,871,806; Aug. 16.
Rose, Bert R. (See Rose, M. C., B. R., and H. L.)
Rose, Henry L. (See Rose, M. C., B. R., and H. L.)
Rose, Merritt C., B. R., and H. L., Parma, Idaho. Sorter. 1,871,471; Aug. 16.
Rosebrook, Guy L., Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa. Service building. Des. 87,594; Aug. 16.

Rosenberg, Heyman, New York, N. Y. Screw bolt or similar article. Des. 87,595; Aug. 16.
Rosenthal Company, The. (See Pink, Berry, assignor.)
Rossman, Edwin F., assignor to Delco Products Corporation, Dayton, Ohio. Oscillating joint. 1,871,861; Aug. 16.
Rossman, Edwin F., assignor to Delco Products Corporation, Dayton, Ohio. Oscillating joint. 1,871,918; Aug. 16.
Rubber Latex Research Corporation. (See Wescott, William B., assignor.)
Ruberoid Co., The. (See Abraham, Herbert, assignor.)
Ruberoid Co., The. (See Klupmeyer, E. E., and Maxwell.)
Ruberoid Co., The. (See Street, Edward T., assignor.)
Rüdenberg, Reinhold, Berlin-Grunewald, and E. Friedländer, Berlin-Spandau, Germany, assignors to Westinghouse Electric and Manufacturing Company. Voltage regulation of alternating-current long distance lines. 1,872,348; Aug. 16.
Runshang, Anton M., Little Rock, Ark. Blade sharpening machine. 1,872,096; Aug. 16.
Russell, Robert P., Baton Rouge, La., assignor to Standard-I. G. Company. Treating hydrocarbons. 1,872,011; Aug. 16.
S. M. A. Corporation. (See Richards, William F., assignor.)
Sabath, Albert, Chicago, Ill. Aquarium. 1,871,742; Aug. 16.
Sachs, Albert P., assignor to Petroleum Conversion Corporation, New York, N. Y. Removing sulphur from oils. 1,872,349; Aug. 16.
Safety Equipment Service Company, The. (See Kimball, Donald E., assignor.)
Sage, Frederick L., Birmingham, Mich., assignor to Chrysler Corporation, Detroit, Mich. Vehicle chassis frame. 1,872,506; Aug. 16.
St. James, Alfred. (See Dainton, Francis M., assignor.)
Salkeld, Howard B. (See Von Hilderbrandt, Paul G., assignor.)
Sanford Mills. (See Senior, John C., assignor.)
Sangamo Electric Company. (See Wilmeth, Roscoe H., assignor.)
Saunders, Seymour C., Birmingham, and C. C. Williams, assignors to Chrysler Corporation, Detroit, Mich. Rust proofing apparatus. 1,872,507; Aug. 16.
Saurer, Paul R., Floral Park, assignor to The Peelle Company, Brooklyn, N. Y. Pass type elevator door. 1,872,350; Aug. 16.
Sawyer, Clinton H., New York, N. Y. Apparatus for making columns and the like. 1,871,743; Aug. 16.
Sawyer, Robert T., Erie, Pa., assignor to General Electric Company. Power system. 1,871,472; Aug. 16.
Saylor-Beall Manufacturing Company. (See Stahl, Rudolphe, assignor.)
Schaadt, Thomas D., Fullerton, Pa. Cabinet. Des. 87,596; Aug. 16.
Schnake, William, Pittsburgh, and D. E. Renshaw, Forest Hills, Pa., assignors to Westinghouse Electric & Manufacturing Company. Third-rail shoe. 1,872,351; Aug. 16.
Schauer, Stephen, Dearborn, Mich. Combined latch and actuating mechanism for swinging closures. 1,871,744; Aug. 16.
Schenkel, Moritz, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Mercury arc rectifier. 1,871,745; Aug. 16.
Schenkel, Moritz, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Vapor electric device. 1,871,746; Aug. 16.
Schiro, Saverio. (See Ege, Alfred, assignor.)
Schittke, Robert, Lansing, assignor to General Motors Corporation, Detroit, Mich. Crankcase ventilation. 1,872,609; Aug. 16.
Schjolin, Eric O., Birmingham, assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich. Steering gear. 1,872,012; Aug. 16.
Schjolin, Eric O., assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich. Six wheel vehicle. 1,872,013; Aug. 16.
Schjolin, Eric O., Birmingham, assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich. Connecter. 1,872,014; Aug. 16.
Schlachter, Henry, Beatrice, Nebr., assignor to Dempster Mill Manufacturing Company. Impeller for centrifugal pumps. 1,871,747; Aug. 16.
Schlenker, Max, La Salle, assignor to Western Clock Company, Peru, Ill. Clock. Des. 87,597; Aug. 16.
Schlosser, Harry C. and William H. Schlosser, San Jose, Calif. Forming marked surfacing. 1,872,352; Aug. 16.
Schlosser, William H. (See Schlosser, Harry C., and W. H.)
Southwark Foundry & Machine Company. (See Smith,
Schmid, Carl G., and A. C. Rasmussen, assignors to Insley Manufacturing Company, Indianapolis, Ind. Spring loaded strut for shoulder finishing machines. 1,871,473; Aug. 16.
Schneider, George. (See Dreyfus, C., and Schneider.)
Schnellpressenfabrik Aktiengesellschaft Heidelberg. (See Büttner, Artur, assignor.)
Schoch, Eugene P., Austin, Tex. Dehydrated and charred lump lignite and producing the same. 1,871,802; Aug. 16.
Schramm, Walter H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Switchboard indicating lamp. 1,871,748; Aug. 16.
Schubert, Fred V., Boston, Mass. Form for concrete columns. 1,871,919; Aug. 16.
Schulz, Walter A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Film gate. 1,872,353; Aug. 16.
Schutz, Harold K., and H. E. Robinson, assignors, by mesne assignments, to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Cutting device. 1,872,508; Aug. 16.
Schwabe, Rolf, Batavia, N. Y. Sketching camera. 1,871,807; Aug. 16.
Schwartz, Bennie, Brooklyn, N. Y. Shade roller. 1,872,188; Aug. 16.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,598; Aug. 16.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,599; Aug. 16.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,600; Aug. 16.
Schweiss, Joseph, assignor to Carter Carburetor Corporation, St. Louis, Mo. Carburetor. 1,872,509; Aug. 16.
Schweitzer, Edmund O., Chicago, Ill. Lightning arrester. 1,872,510; Aug. 16.
Scofield, Philip F., Palo Alto, assignor to Heintz & Kaufman, Ltd., San Francisco, Calif. Condenser assembly. 1,872,511; Aug. 16.
Scott, Howard, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Composite conductor. 1,872,354; Aug. 16.
Scott, Walter L., et al. (See Le Fevre, John S., assignor.)
Scovill Manufacturing Company. (See King, G. A., and Troske, assignors.)
Scullin Steel Company. (See Dreibuss, H. C., and McCullough, assignors.)
Seaton, Max Y., Palo Alto, assignor to California Chemical Corporation, Newark, Calif. Preparation of high plastic lime. 1,872,512; Aug. 16.
Sebes, John. (See Karlovitch, T., and Sebes.)
Sebesta, Edward F., Minneapolis, Minn. Signaling device. 1,872,097; Aug. 16.
Seifert, John O., Flushing, assignor, by mesne assignments, to American Sealcone Corporation, New York, N. Y. Apparatus for closing and sealing receptacles. 1,871,749; Aug. 16.
Seiler, Michael I., assignor to Keystone Reamer & Tool Co., Millersburg, Pa. Reamer. 1,871,474; Aug. 16.
Selje, Frederick A. (See Goode, G. C., Selje, and Miller.)
Senior, John C., assignor to Sanford Mills, Sanford, Me. Textile web dyeing process. 1,871,920; Aug. 16.
Service Bureau, Inc. (See Dawson, George H., assignor.)
Sévigné, Henri A., Winthrop, assignor to National Bread Wrapping Machine Company, Springfield, Mass. Web-feeding and cutting machines. 1,872,513; Aug. 16.
Shafer, William B., Pittsburgh, Pa., assignor to Pittsburgh Asphalt Vault Company. Hinge mechanism for grave vaults. 1,872,514; Aug. 16.
Shanahan, George D. (See Matthael, F. C., and Shanahan.)
Shanklin, Dunbar L., Waverly, assignor to Dewey and Almy Chemical Company, Cambridge, Mass. Drying method. 1,872,015; Aug. 16.
Shannon, Richard A. (See Varble, J. M., and Shannon.)
Shannonhouse, George G. (See Baxter, H. G., and Shannonhouse.)
Shatkin, Aaron, Brooklyn, N. Y. Making sheet metalware joints. 1,872,189; Aug. 16.
Shaver, Archibald G., Chicago, Ill., assignor to The Regan Safety Devices Company, Inc., New York, N. Y. Train control system. 1,872,515; Aug. 16.
Shaw, George R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Speed regulating system. 1,871,750; Aug. 16.
Sheaffer, W. A., Pen Co. (See Cuthbert, William R., assignor.)
Sheaffer, W. A., Pen Company. (See Lindemon, William H., assignor.)
Sherman, August C., M. B. Grant, and H. F. Hedderick, St. Louis, Mo., assignors to Westinghouse Electric and Manufacturing Company. Cage making machine. 1,871,751; Aug. 16.
Sherr, Max. (See Cramer, J. and Sherr.)
Sherwood, Robert H., Indianapolis, and W. H. Stewart, Linton, assignors to Allendale Manufacturing Company, Inc., Indianapolis, Ind. Surface mining. 1,872,016; Aug. 16.
Shoe Form Co. (See De Witt, William J., assignor.)
Short, Charles R., Detroit, Mich., assignor to The Inland Manufacturing Company, Dayton, Ohio. Flexible connecter. 1,871,921; Aug. 16.
Siemens & Halske, Aktiengesellschaft. (See Feldtkeller, Richard, assignor.)
Silverman, Max, and H. Pomerantz, New York, N. Y. Expansible apparel belt. Des. 87,601; Aug. 16.
Simmons, Ralph C., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine and method for use in shoemaking. 1,871,922; Aug. 16.
Simmons Saw and Steel Company. (See Simonds, Gifford K., assignor.)
Simonds, Gifford K., Boston, assignor to Simonds Saw and Steel Company, Fitchburg, Mass. Control apparatus. 1,871,752; Aug. 16.

Simonds Saw and Steel Company. (See Howard, Leslie E., assignor.)
Simplicity System Company. (See West, L. B., and Wall, assignors.)
Sindl, Otto, Berlin, Germany. Capsuling machine. 1,872,190; Aug. 16.
Singer, Fred J., Rockville Center, N. Y., and L. A. Gardner, Maplewood, N. J., assignors to American Telephone and Telegraph Company. Printing telegraph system. 1,871,923; Aug. 16.
Sinz, Lawrence P., Huntington Park, Calif., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md. Capping machine. 1,871,924; Aug. 16.
Sippel, John J., Upper Darby, Pa., assignor to Wicaco Machine Corporation. Locking mechanism for swirls. 1,871,564; Aug. 16.
Sjöström, John G. (See Mellgren, G. E., Sjöström, Swalas, and Hedin.)
Skinner Motors, Inc. (See Skinner, Ralph L., assignor.)
Skinner, Ralph L., assignor to Skinner Motors, Inc., Detroit, Mich. Internal combustion engine sealing-ring construction. 1,872,516; Aug. 16.
Skroza, Thomas S. (See Antich, Anton M., assignor.)
Slager, John C. (See Rataiczak, T. F., and Slager.)
Slaten, Albert, Minneapolis, Minn. Butter cutter. 1,872,517; Aug. 16.
Slatkin, Solomon. (See Jackson, Joseph W., assignor.)
Smith, A. O., Corporation. (See Andren, Birger T., assignor.)
Smith, A. O., Corporation. (See Andren, B. T., Heineman, and Crawford, assignors.)
Smith, A. O., Corporation. (See Burnish, Howard J., assignor.)
Smith, A. O., Corporation. (See Crawford, William E., assignor.)
Smith, A. O., Corporation. (See Furrer, Rudolph, assignor.)
Smith, A. O., Corporation. (See Graham, William T., assignor.)
Smith, A. O. Corporation. (See Heineman, Warren F., assignor.)
Smith, A. O., Corporation. (See Larson, Louis J., assignor.)
Smith, A. O., Corporation. (See Loebel, Zanvil C., assignor.)
Smith, A. O., Corporation. (See Miller, Henry, assignor.)
Smith, A. O., Corporation. (See Richter, Walther, assignor.)
Smith, A. O., Corporation. (See Straty, Stephen, assignor.)
Smith, A. O., Corporation. (See Stresau, Richard, assignor.)
Smith, Augustus, Reselle, assignor to Bergen Point Iron Works, Bayonne, N. J. Floating wharf. 1,871,475; Aug. 16.
Smith, Dennis W., Wilmette, Ill., assignor to Colborne Manufacturing Company, Chicago, Ill. Pie crust roller. 1,871,753; Aug. 16.
Smith, Dennis W., Wilmette, assignor to Colborne Manufacturing Co., Chicago, Ill. Pie separator and trimmer for pie making machinery. 1,871,754; Aug. 16.
Smith, Dennis W., Wilmette, assignor to Colborne Manufacturing Co., Chicago, Ill. Pie separating and trimming mechanism. 1,871,755; Aug. 16.
Smith, Earl H. (See McCuen, C. L., Dykstra, Smith, and Wolfram.)
Smith, Frank H., assignor to Southwark Foundry & Machine Company, Philadelphia, Pa. Plate bending machine. 1,872,355; Aug. 16.
Smith, George H., assignor to Norton Company, Worcester, Mass. Feeding mechanism for grinding machines. 1,872,191; Aug. 16.
Smith, Nelson K., assignor to Byron-Jackson Co., Los Angeles, Calif. Elevator latch. 1,871,825; Aug. 16.
Smith, Nelson K., assignor to Byron-Jackson Co., Los Angeles, Calif. Well pipe elevator trunnion. 1,871,925; Aug. 16.
Smithson, Charles F., Elkridge, and G. C. Owens, Relay, Md. Figure toy. 1,872,192; Aug. 16.
Smitmans, John A., assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Apparatus for uncoiling coils of metal strip. 1,872,045; Aug. 16.
Societa Costruzione Apparecchi Elettrodomestici Marelli, the Firm. (See Giambertoni, Andrea, assignor.)
Societe d'Exploitation des Brevets Cotal. (See Cotal, Jean, assignor.)
Society of Chemical Industry in Basle. (See Bonhôte, Gérald, assignor.)
Society of Chemical Industry in Basle. (See Straub, F., and Anderau, assignors.)
Soule, George C., and J. B. Woodbury, South Portland, assignors to Maine Steel Products Company, Portland, Me. Snowplow nose and cutter bar therefor. 1,871,565; Aug. 16.
South Bend Bait Company. (See Chapleau, Louis A., assignor.)
Southern Spring Bed Company. (See Moeckel, C. S., assignor.)
Southwark Foundry & Machine Company. (See Smith, Frank H., assignor.)
Spalding, A. G. & Bros. (See Pierce, George L., assignor.)
Späth, Wilhelm, Barmen, Germany. Means for examining structures. 1,871,756; Aug. 16.
Spencer, Richard, Fort Worth, Tex. Horoscope. Des. 87,602; Aug. 16.
Sperry Development Company. (See Sperry, Elmer A., assignor.)
Sperry, Elmer A., Brooklyn, N. Y., assignor to Sperry Development Company, Dover, Del. Marine aircraft. 1,871,476; Aug. 16.
Spicer Airfilter, Inc. (See Brown, William H., assignor.)
Sprent, William C. (See Bennett, N., Dodd, Sprent, and Holt.)
Stahl, Rudolphe, Detroit, Mich., assignor to Saylor-Beall Manufacturing Company. Compressor. 1,871,826; Aug. 16.
Stallsmith, Marion E., assignor to General Motors Corporation, Detroit, Mich. Vehicle shipping device. 1,871,808; Aug. 16.
Standard Car Truck Company. (See Barber, F. L., and Webb, assignors.)
Standard-I. G. Company. (See Russell, Robert P., assignor.)
Standard Oil Company. (See Adams, Elmer W., assignor.)
Standard Oil Company. (See Arveson, Maurice H., assignor.)
Standard Oil Company. (See Cahoon, S. E., and Bacheldor, assignors.)
Standard Oil Company. (See Kinney, Ansel M., assignor.)
Standard Oil Company. (See Monro, D. A., assignor.)
Standard Oil Company. (See Sullivan, F. W., jr., and Arveson, assignors.)
Standard Oil Company. (See Sullivan, Frederick W., jr., assignor.)
Standard Oil Company. (See Watts, G. W., and Mathews, assignors.)
Standard Oil Company. (See Wood, W. E., and Bacheldor, assignors.)
Standard Oil Company of California. (See Halloran, R. A., Chappell, and Osmer, assignors.)
Standard Oil Company of California. (See Mino, E., McCann, Fischer, and Radcliffe, assignors.)
Standard Oil Company of California. (See Strout, A. L., and Lyder, assignors.)
Standard Oil Company (Indiana). (See Arveson, Maurice H., assignor.)
Standard Oil Company (Indiana). (See Atwell, Harold V., assignor.)
Standard Oil Company of Indiana. (See Kinnison, William E., assignor.)
Standard Oil Company (Indiana). (See Wilson, Robert E., assignor.)
Stansfield, Alfred, Westmount, Quebec, Canada. Furnace. 1,871,863; Aug. 16.
Sta-On Garment Hanger Company. (See Rehrig, W. J., assignor.)
Starr, Frank F., assignor to Delco-Light Company, Dayton, Ohio. Electrical apparatus. 1,871,926; Aug. 16.
Steinmetz, Georg. (See Trimbach, F. E. L., Robin, and Steinmetz, assignors.)
Stephens, Edwarde E., Charleston, W. Va. Doorcheck. 1,871,566; Aug. 16.
Stephens, Fred J., Cambridge, Mass., assignor to United States Gypsum Company, Chicago, Ill. Bag filling machine. 1,872,017; Aug. 16.
Stephenson, Clement L., assignor of one-half to Wegman-Walsh Press, Inc., Rochester, N. Y. Toy building. Des. 87,603; Aug. 16.
Sterling Manufacturing Company. (See Carter, Charles E., assignor.)
Stevens, Edward W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Fluid pressure tool. 1,871,758; Aug. 16.
Stevens, Edward W., and D. A. Young, Detroit, Mich., assignors to Chicago Pneumatic Tool Company, New York, N. Y. Support for power tools. 1,871,757; Aug. 16.
Stevens Metal Products Company, The. (See Harm, George O., assignor.)
Stevenson, Winfield, W., jr., Steinman, Virginia. Ash receiver. 1,872,356; Aug. 16.
Stewart, William H. (See Sherwood, R. H., and Stewart.)
Stimpson Company, Edwin B. (See Stimpson, Edwin B., assignor.)
Stimpson, Edwin B., assignor to E. B. Stimpson Company, Brooklyn, N. Y. Slotting machine. 1,872,564; Aug. 16.
Stone, Elmer B., assignor to The American Hardware Corporation, New Britain, Conn. Suitcase lock. 1,871,759; Aug. 16.
Stone Straw Corporation. (See Maltby, Sidney T., assignor.)
Stonebridge, George E., New York, N. Y., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Lineswitch equipment. 1,871,518; Aug. 16.
Stonch Tank Erecting Company, The. (See Du Bois, Virgil L., assignor.)
Straty, Stephen, assignor to A. O. Smith Corporation, Milwaukee, Wis. Forged manway construction for pressure vessels. 1,872,357; Aug. 16.
Straub, Fritz, and W. Anderau, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Azo-dyestuffs containing metal and making same. 1,871,477; Aug. 16.
Street, Edward T., Bound Brook, N. J., assignor to The Ruberoid Co., New York, N. Y. Automatic roll winding machine. 1,872,018; Aug. 16.
Stresau, Richard, Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Embossing metal plates. 1,872,193; Aug. 16.

Strout, Archie L., and E. E. Lyder, Berkeley, Calif., assignors to Standard Oil Company of California, San Francisco, Calif. Process and apparatus for manufacturing finely divided carbon. 1,872,519; Aug. 16.
Stuart, Clyde W., New York, N. Y. Fibre container. 1,871,567; Aug. 16.
Stuckey, Robert B., assignor to W. A. Riddell Company, Bucyrus, Ohio. Mold feeding device for brick presses. 1,872,520; Aug. 16.
Stuckey, Robert B., assignor to The W. A. Riddell Company, Bucyrus, Ohio. Mechanism for feeding dissimilar material to molds in brick presses. 1,872,521; Aug. 16.
Stuckey, Robert B., assignor to W. A. Riddell Company, Bucyrus, Ohio. Making artificial stone brick. 1,872,522; Aug. 16.
Sturtevant Mill Company. (See Sturtevant, Thomas J., assignor.)
Sturtevant, Thomas J., Wellesley, assignor to Sturtevant Mill Company, Boston, Mass. Air separator. 1,872,565; Aug. 16.
Styer, Charles A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulating material. 1,872,358; Aug. 16.
Sullivan, Frederick W., jr., assignor to Standard Oil Company, Whiting, Ind. Textile oil. 1,871,927; Aug. 16.
Sullivan, Frederick, W., jr., and M. H. Arveson, Hammond, Ind., assignors to Standard Oil Company, Chicago, Ill. Lubricating grease. 1,871,864; Aug. 16.
Summers, Caleb E., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Self-cleaning connecting rod bearing. 1,872,194; Aug. 16.
Sunlight Electrical Manufacturing Company, The. (See Kingston, Frederick S., assignor.)
Surface Combustion Corporation. (See De Coriolis, Ernest G., assignor.)
Sutherlin, Lee, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermionic rectifier. 1,872,359; Aug. 16.
Svendsen, Karsten. (See Aarskog, Svensen, and Ebel.)
Swalas, Anders R. (See Melgren, G. E., Sjöoströ, Swalas, and Hedin.)
Swan, Hylton, Upper Montclair, and S. Higgins, Verona, N. J., assignors to Bakelite Corporation, New York, N. Y. Printing plate and manufacturing it. 1,871,565; Aug. 16.
Swartwout Company, The. (See Mastenbrook, Henry J., assignor.)
Sweeney, Joseph R., and E. W. Roberts, assignors to O'Connell and Sweeney, Cincinnati, Ohio. Earth piercing device. 1,872,523; Aug. 16.
Swenson Evaporator Company. (See Badger, Walter L., assignor.)
Swope, Charles W., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Producing sheet glass. 1,872,524; Aug. 16.
Swygart, Anne G. (See Horton, Gustave A., assignor.)
Sykes, Wilfred, Chicago, Ill., assignor to Westinghouse Electric & Manufacturing Company. Motor control system. 1,872,360; Aug. 16.
Synthetic Fur Mills Corp. (See Benowitz, A., assignor.)
Tackman, John, New York, N. Y. Rotary engine. 1,872,361; Aug. 16.
Tagit Company, The. (See Borchert, William, assignor.)
Talbot, Bryan B. (See Repschleger, W. E., Armistead, Talbot, and Placette.)
Tanberg, Ragnar, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. High voltage testing system. 1,872,362; Aug. 16.
Tannehill, Otis A., Crane, Tex. Nonvacuum razor. 1,871,631; Aug. 16.
Tappan Stove Company, The. (See Taylor, Thomas E., assignor.)
Tarbin, William T., Eccles, Manchester, England, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y. Color photography. 1,871,478; Aug. 16.
Tarbin, William T., Eccles, Manchester, England, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y. Color photography. 1,871,479; Aug. 16.
Taub, Alex, assignor to General Motors Corporation, Detroit, Mich. Lubricating system. 1,871,760; Aug. 16.
Taylor, Cyrus, Hartford, Conn. Machine for manufacturing tubes. 1,871,865; Aug. 16.
Taylor, Howard M., Baltimore, Md. Combined advertising stand and mattress support. Des. 87,604; Aug. 16.
Taylor, Roy F., Richmond, Inc. Furniture construction. 1,872,525; Aug. 16.
Taylor, Thomas E., assignor to The Tappan Stove Company, Mansfield, Ohio. Top frame and grid construction for open-top gas ranges. 1,872,019; Aug. 16.
Taylor, Thomas E., assignor to The Tappan Store Company, Mansfield, Ohio. Oven door construction. 1,872,020; Aug. 16.
Teague, Merwyn C., Jackson Heights, N. Y., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Closure for containers. 1,872,046; Aug. 16.
Tear, James D. (See Rhea, T. R., Tear, and Green.)
Techmer, Ewald F., assignor, by mesne assignments, to National Kellastone Company, Chicago, Ill. Wall construction. 1,872,526; Aug. 16.
Techmer, Ewald F., assignor, by mesne assignments, to National Kellastone Company, Chicago, Ill. Wall construction. 1,872,527; Aug. 16.
Technicolor, Inc. (See Ball, Joseph A., assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Meissner, Alexander, assignor.)
Teleregister Corporation, The. (See Daine, R. L., and Guye, assignors.)
Temple, Paul D., Chicago, Ill. Extension cord electric iron holder. 1,872,528; Aug. 16.
Templin, Richard L., Parnassus, assignor to Aluminum Company of America, Pittsburgh, Pa. Testing machine. 1,872,047; Aug. 16.
Terman, Frederick E., Stanford University, Calif., assignor to Wired Radio, Inc., New York, N. Y. Oscillation system. 1,871,632; Aug. 16.
Ter Meer, Herman, assignor to National Brass Company, Grand Rapids, Mich. Spring bolt latch. 1,871,633; Aug. 16.
Ternstedt Manufacturing Company. (See Field, Herbert C., assignor.)
Terry, Wallace F., Pittsburgh, Pa., assignor to I. C. Houck, trustee for H. S. Harrop, F. G. Bishoff, R. W. Williams, and W. F. Terry. Marker for aviation fields or the like. Des. 87,605; Aug. 16.
Texas Company, The. (See Esch, Joseph F., assignor.)
Texas Company, The. (See Repschleger, W E., Armistead, Talbot, and Placette, assignors.)
Than, Max F., Los Angeles, Calif. Roaster. 1,872,050; Aug. 16.
Thomas, Arthur, Thornton Heath, assignor to The Accounting & Tabulating Corporation of Great Britain Limited, London, England. Apparatus for winding paper or a like web. 1,872,098; Aug. 16.
Thomas & Betts Co., The. (See Buchanan, Stephen N., assignor.)
Thomas & Betts Co. (See Thomas, George C., jr., assignor.)
Thomas, Cyril H., Flossmoor, Ill. Expulsion fuse. 1,872,021; Aug. 16.
Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Threadless pipe coupler. 1,872,048; Aug. 16.
Thomas, Robert W., assignor to General Glass Corporation, Lancaster, Ohio. Mug or similar article. 87,606; Aug. 16.
Thompson, Allison J., Cleveland, Ohio. Connection for lamp hanger contactors. 1,872,529; Aug. 16.
Thompson, Dell, Detroit, Mich., assignor to Drying Systems, Inc., Chicago, Ill. Air conditioning apparatus. 1,872,195; Aug. 16.
Thompson, Norman F., jr., Colebrook, and O. G. Williams, assignors to William L. Gilbert Clock Company, Winsted, Conn. Clock casing construction. 1,872,610; Aug. 16.
Thompson, Robert H., and L. Graves, New York, N. Y.; said Graves assignor to said Thompson. Time stamp. 1,872,049; Aug. 16.
Thurm, Richard, Saginaw, Mich. Heating tube. 1,872,363; Aug. 16.
Thurm, Richard, assignor to Baker Perkins Company, Inc., Saginaw, Mich. Making potassium metal or sodium-potassium metal alloy. 1,872,611; Aug. 16.
Tibbetts, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,871,480; Aug. 16.
Tietze, Ernst. (See Hentrich, W., Tietze, Ossenbeck, and Backes.)
Tingle, William R., Morganton, N. C. Folding article of furniture. 1,871,634; Aug. 16.
Travelers Insurance Company. (See Bayrer, Orson D., assignor.)
Treadwell, M. H., Company. (See Astrom, Carl P., assignor.)
Treanor, John E. (See Johnson, H. L., and Treanor.)
Tregoning, William C., Wauwautosa, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc. Molded hollow insulating article. 1,871,635; Aug. 16.
Trimbach, Frederic E. L., Luneville, P. Robin, Paris, France, and G. Steinmets, Pfungstadt, Germany; said Robin assignor to said Trimbach and said Steinmetz. Wedge. 1,871,481; Aug. 16.
Troeger, Otto F. (See Loos, C. E., and Troeger.)
Trogner, Arthur M., Maplewood, N. J., assignor to Wired Radio, Inc., New York, N. Y. Time service system. 1,871,636; Aug. 16.
Troske, Frederick. (See King, G. A., and Troske.)
Trouant, Virgil E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Radio transmitting system. 1,872,364; Aug. 16.
Trout, William A. (See Rasmussen, C. A., and Trout.)
Turk, Alonzo B., and G. T. Granger, Okmulgee, Okla. Direction indicator. 1,871,467; Aug. 16.
Turner, Joseph O., Winston-Salem, N. C., assignor to The Mengel Company, Louisville, Ky. Crate fastener. 1,871,482; Aug. 16.
Turnpenny, William H., Albany, N. Y., assignor to General Electric Company. High tension circuit interrupter. 1,872,530; Aug. 16.
Ultendaal, Cornelius, New Canaan, Conn. Garden reel. 1,871,483; Aug. 16.
Ulrey, Clayton T., East Orange, N. J., assignor to Westinghouse Lamp Company. Dental X-ray tube. 1,872,335; Aug. 16.
Ulrey, Dayton, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Vacuum tube device. 1,872,336; Aug. 16.
Underwood, Arthur F., assignor to General Motors Research Corporation, Detroit, Mich. Lubricating system. 1,872,365; Aug. 16.

Underwood Elliott Fisher Company. (See Cooper, John J., assignor.)
Union Tool Company. (See Falleson, John A., assignor.)
United Engineering & Foundry Company. (See Smitmans, John A., assignor.)
United Shoe Machinery Corporation. (See Bassoni, Lewis J., assignor.)
United Shoe Machinery Corporation. (See Cousins, Alfred H., assignor.)
United Shoe Machinery Corporation. (See Droukas, Peter, K., assignor.)
United Shoe Machinery Corporation. (See Glass, Perley R., assignor.)
United Shoe Machinery Corporation. (See Kinney, Fay D., assignor.)
United Shoe Machinery Corporation. (See Nutt, William H., assignor.)
United Shoe Machinery Corporation. (See Osborne, Harold A., assignor.)
United Shoe Machinery Corporation. (See Simmons, Ralph C., assignor.)
United States Gypsum Company. (See Absmeier, Carl, assignor.)
United States Gypsum Company. (See Ericson, Richard, assignor.)
United States Gypsum Company. (See Gaskins, Ernest, assignor.)
United States Gypsum Company. (See McNeil, W. M., and Ballard, assignors.)
United States Gypsum Company. (See Offutt, James S., assignor.)
United States Gypsum Company. (See Roos, Carlisle K., assignor.)
United States Gypsum Company. (See Stephens, Fred J., assignor.)
Universal Draft Gear Attachment Company. (See Barthelemy, Paul P., assignor.)
Universal Draft Gear Attachment Co. (See Camp, Percy B., assignor.)
Universal Draft Gear Attachment Co. (See Wrigley, Henry I., assignor.)
Universal Form Clamp Co. (See Lampert, Lydia, assignor.)
Universal Rubber Paviors Limited. (See Brown, Arthur E., assignor.)
University of Illinois, Board of Trustees of the. (See Brown, Hugh A., assignor.)
Unk, Jacob M. (See Bol, C., Posthumus, Unk, and Morel.)
Urschel, Bertis H., Bowling Green, assignor to Urschel Engineering Company, Toledo, Ohio. Link. 1,872,099; Aug. 16.
Urschel, Bertis H., Bowling Green, assignor to Urschel Engineering Company, Toledo, Ohio. Tubular axle. 1,872,196; Aug. 16.
Urschel Engineering Company. (See Urschel, Bertis H., assignor.)
Uyttenbroeck, Hubert, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Photoelectric printing apparatus. 1,871,484; Aug. 16.
Valladoa, Frank B., New Bedford, Mass. Window screen fixture. 1,871,928; Aug. 16.
Valley Iron Works Company. (See Graef, John M., assignor.)
Van Ackeren, Joseph, Pittsburgh, Pa., assignor to The Koppers Company of Delaware. Intermittent vertical coking retort oven. 1,872,531; Aug. 16.
Van Ackeren, Joseph, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware. Coking retort oven. 1,872,532; Aug. 16.
Van Ackeren, Joseph, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware. Coking retort oven. 1,872,612; Aug. 16.
Van Billiard, Maynard. (See Keller, H. C., and Van Billiard.)
Van Brunt Manufacturing Company, The. (See Erdman, Theodore J., assignor.)
Van Buskirk, Robert N., Detroit, Mich., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,872,197; Aug. 16.
Vance, Charles F., Winston-Salem, N. C. Woodworking machine. 1,871,637; Aug. 16.
Van Dyck, Arthur F., Yonkers, N. Y., assignor to Radio Corporation of America. Phonograph control. 1,872,366; Aug. 16.
Van Emden, Aaron L., Turtle Creek, Pa., assignor to Westinghouse Electric & Manufacturing Company. Bus-line-jumper connecter. 1,872,367; Aug. 16.
Van Horn, William H., assignor to The C. M. Kemp Manufacturing Company, Baltimore, Md. Back fire preventer. 1,872,368; Aug. 16.
Van Hülst, Laurens, Merseburg, Germany. Bag consisting of two layers of paper. 1,871,827; Aug. 16.
Van Norden, Ericcson B., Jackson Heights, assignor to A. Kimball Company, New York, N. Y. Marking tag. 1,872,613; Aug. 16.
Van Rixel, William, jr., Green Bay, Wis. Gun cleaning device. 1,872,198; Aug. 16.
Van Schaardenburg, Frans J. J., et al. (See Prins, Peter L., assignor.)
Van Sickle, Roswell C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Coil for circuit breakers. 1,872,369; Aug. 16.
Van Vorst, John, assignor to Mohawk Asphalt Heater Company, Scenectady, N. Y. Trailer. 1,871,828; Aug. 16.
Varble, John M., and R. A. Shannon, Canton, Ohio; said Shannon assignor to said Varble. Car retarder. 1,871,929; Aug. 16.
Veeder-Root Incorporated. (See James, Richard H., assignor.)
Vennerholm, Gosta. (See McCarroll, R. H., and Vennerholm.)
Vodoz, Frederick W., Wilmette, assignor to Goodman Manufacturing Company, Chicago, Ill. Drilling mechanism. 1,871,638; Aug. 16.
Voigt & Haeffner Aktiengesellschaft. (See Kurz, Hermann W., assignor.)
Volz, George A., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machinery. 1,871,866; Aug. 16.
Von Hilderbrandt, Paul G., assignor to H. B. Salkeld, Pittsburgh, Pa. Making wood fiber insulating material. 1,872,533; Aug. 16.
Vos, George W., New Rochelle, N. Y. Gasoline dispensing pump. Des. 87,607; Aug. 16.
Wagner Electric Corporation. (See Weichsel, Hans, assignor.)
Wahlin, Fritz. (See Bramsen, S., Hersleb, and Wahlin.)
Waite, Charles M., Woodhaven, N. Y. Stall for starting race horses. 1,871,639; Aug. 16.
Waite, Griffin G., Toronto, Ontario, Canada, assignor to Westinghouse Electric & Manufacturing Company. Demand totalizer. 1,872,370; Aug. 16.
Waliuszis, John B. (See Hochwalt, C. A., and Waliuszis.)
Walker, Arthur W., Seminole, Okla. Pump. 1,871,867; Aug. 16.
Wall, Marion P. (See West, L. B., and Wall.)
Wallace, Halbert C., Fargo, N. Dak. Tractor mounting for grain blowers. 1,871,930; Aug. 16.
Wallgren, August G. F., assignor to Aktiebolaget Nomy, Stockholm, Sweden. Bearing. 1,871,485; Aug. 16.
Wallgren, August G. F. (See Aktiebolaget Nomy, assignor.)
Wallin, Fredd, New York, N. Y. Handle attaching means for brooms and the like. 1,872,534; Aug. 16.
Walters, Herbert C., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,871,931; Aug. 16.
Ward Baking Company. (See Heile, Harriet, assignor.)
Wardwell, Frank W., assignor to The Wardwell Manufacturing Company, Cleveland, Ohio. Saw making machinery. 1,872,535; Aug. 6.
Wardwell Manufacturing Company, The. (See Wardwell, Frank W., assignor.)
Waream, Charles E., Norwood, assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Pressing and ironing machine. 1,871,436; Aug. 16.
Warner Gear Company. (See White, Samuel O.)
Warshaw, Nathan, Brooklyn, N. Y. Card filing case. 1,871,569; Aug. 16.
Watairway Manufacturing Corporation. (See Guidetti, F., and Bontempi, assignors.)
Waterbury Farrel Foundry and Machine Company, The. (See Candee, Zenas P., assignor.)
Watson, Edward F., Larchmont, N. Y., assignor to American Telephone and Telegraph Company. Telegraph printer. 1,871,933; Aug. 16.
Watts, George W., Whiting, Ind., and W. B. Matthews, Chicago, Ill., assignors to Standard Oil Company, Chicago, Ill. Coke puller. 1,871,932; Aug. 16.
Watts, Warren S., Montclair, N. J., assignor to Eskimo Pie Corporation, New York, N. Y. Dispensing cabinet. Des. 87,608; Aug. 16.
Watts, William S., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,872,051; Aug. 16.
Way, Arthur H., Canton, S. Dak. Pipe cutting device. 1,872,199; Aug. 16.
Weatherhead, Albert J., jr., Cleveland, Ohio. Pipe coupling. 1,872,536; Aug. 16.
Weaver, Samuel M., Shaker Heights, Ohio. Closure structure for tubes or the like. 1,871,640; Aug. 16.
Webb, Edwin W. (See Barber, F. L., and Webb.)
Web-Lite Company, The. (See Reed, George F., assignor.)
Weber, Henry C. P., Edgewood, Pa. Condensation product. 1,871,641; Aug. 16.
Weber, Lester N., Chicago, Ill., assignor to American Reenforced Paper Company, Attleboro, Mass. Tarpaulin. 1,871,570; Aug. 16.
Weber, Lester N., Chicago, Ill., assignor to American Reenforced Paper Company, Attleboro, Mass. Tarpaulin. 1,871,571; Aug. 16.
Weed, Hugh H. C., Clayton, assignor to Carter Carburetor Corporation, St. Louis, Mo. Carburetor. 1,872,537; Aug. 16.
Wegman-Walsh Press, Inc. (See Stephenson, Clement L., assignor.)
Wegner, Clarence J., assignor to Perfection Steel Body Co., Galion, Ohio. Burial vault. Des. 87,609; Aug. 16.
Weichsel, Hans, assignor to Wagner Electric Corporation, Aug. 16.
St. Louis, Mo. Alternating current motor. 1,872,371;
Weidlich Bros. Mfg. Co., The. (See Flauder, Alfred J., assignor.)

Weihe, Adolf, Ellenburg, and O. Leuchs and E. Dörr, Elberfeld-Sonnborn, assignors to Deutsche Celluloid-Fabrik, Ellenburg I. Sa., Germany. Nitrated cellulose ether. 1,871,868; Aug. 16.
Weinberger, Julius, New York, N. Y., assignor to Radio Corporation of America. Paper roll phonograph record. 1,871,761; Aug. 16.
Weinstein, Joseph, Brooklyn, assignor to Dryice Equipment Corporation, New York, N. Y. Refrigeratory container. 1,871,829; Aug. 16.
Weis, Arthur R., assignor of one-half to Pacific Pump Works, and one-half to George E. Bigelow, Huntington Park, Calif. Intermediate bearing construction. 1,872,538; Aug. 6.
Weiss, Carl W., Brooklyn, N. Y. Universal joint. Re18,570; Aug. 16.
Weiss, Leo L., New York, N. Y. Toy house or similar article. Des. 87,610; Aug. 16.
Welch, W. M., Mfg. Co. (See Kopp, Reinhold A., assignor.)
Welding Service Inc. (See Frickey, Royal E., assignor.)
Welk, Nelson S. (See Connor, R., Welk, and Zenner.)
Welsh, Katherine, Brooklyn, N. Y. Beauty mask. 1,872,642; Aug. 16.
Wendt, Bruno, Dessau-in-Anhalt, and H. Bincer, Dessau-Ziebigk, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y. Fixing photographic bleaching-out layers. 1,871,830; Aug. 16.
Wensley, Roy J., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Advertising device. 1,872,372; Aug. 16.
Werdehoff, Albert B., Orion, assignor to Chrysler Corporation, Detroit, Mich. Hood lacing. 1,872,539; Aug. 16.
Wescott, William B., Dover, assignor to Rubber Latex Research Corporation, Boston, Mass. Reenforced rubber and making the same. 1,871,572; Aug. 16.
West, Lawrence B., and M. P. Wall, assignors, by direct and mesne assignments, to The Simplicity System Company, Chattanooga, Tenn. Process and apparatus for drying material. 1,871,934; Aug. 16.
Western Clock Company. (See Schlenker, Max, assignor.)
Western Electric Company. (See Kivley, Ray C., assignor.)
Western Wheeled Scraper Company. (See Benbow, J. D., and Green, assignors.)
Westinghouse Air Brake Company, The. (See McCune, Joseph C., assignor.)
Westinghouse Electric Elevator Company. (See Kinnard, Luther J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Aalborg, C., and MacNeil, assignors.)
Westinghouse Electric & Manufacturing Company. (See Anderson, William B., assignor.)
Westinghouse Electric and Manufacturing Company. (See Baker, Benjamin P., and Dickinson, assignors.)
Westinghouse Electric & Manufacturing Company. (See Barrow, George M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Baxter, H. G., and Shannonhouse, assignors.)
Westinghouse Electric & Manufacturing Company. (See Berthold, Rudolf G., assignor.)
Westinghouse Electric and Manufacturing Company. (See Bouton, E. M., and Eames, assignors.)
Westinghouse Electric & Manufacturing Company. (See Breisky, John V., assignor.)
Westinghouse Electric & Manufacturing Company. (See Brindley, William E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Brown, Arthur L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Churcher, Brian A. G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Clark, George D., assignor.)
Westinghouse Electric & Manufacturing Company, The. (See Clarke, John A., jr.)
Westinghouse Electric and Manufacturing Company. (See Cole, H. L., Dann, and Brown, assignors.)
Westinghouse Electric & Manufacturing Company. (See Cook, Joel R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Corbett, Alfred, assignor.)
Westinghouse Electric & Manufacturing Company. (See Cowin, Stuart H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Davis, Robert L., assignor.)
Westinghouse Electric & Manufacturing Company. (See De Croce, Gennero, assignor.)
Westinghouse Electric & Manufacturing Company. (See Eames, William F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Elberty, Robert S., jr., assignor.)
Westinghouse Electric & Manufacturing Company. (See Eschholz, Otto H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Ford, James G., assignor.)
Westinghouse Electric and Manufacturing Company. (See Frank, L. C., and Conant, assignors.)
Westinghouse Electric & Manufacturing Company, The. (See Goldsborough, Shirley L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Goldsborough, Thaddeus R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Halliwell, George P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Haverstick, Earl J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Higbee, Ray P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hitner, John K., assignor.)
Westinghouse Electric and Manufacturing Company. (See Hodnette, J. K., and Bellaschi, assignors.)
Westinghouse Electric & Manufacturing Company. (See Iams, Harley A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jackson, Ray P., assignor.)
Westinghouse Electric & Manufacturing Company. (See James, Henry D., assignor.)
Westinghouse Electric and Manufacturing Company. (See James, H. D., and Williams, assignors.)
Westinghouse Electric & Manufacturing Company. (See Jennings, Oliver S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jordan, Richard H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kehoe, A. H., and McCullough, assignors.)
Westinghouse Electric & Manufacturing Company. (See Kerrigan, John, assignor.)
Westinghouse Electric & Manufacturing Company. (See Knowles, Dewey D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kranta, Hubert K., assignor.)
Westinghouse Electric and Manufacturing Company. (See Kraut, S. B., and Margerum, assignors.)
Westinghouse Electric & Manufacturing Company. (See Legg, Joseph W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Lenehan, Bernard E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Lewis, Frank E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Llewellyn, Fredrick, assignor.)
Westinghouse Electric & Manufacturing Company. (See Lotz, Albert, assignor.)
Westinghouse Electric & Manufacturing Company. (See Masek, James C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Moss, Charles M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Nichols, Henry G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Ollendorff, F., and Friedländer, assignors.)
Westinghouse Electric & Manufacturing Company. (See Pohlhausen, Karl, assignor.)
Westinghouse Electric & Manufacturing Company. (See Reed, Frederick J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Riley, Lynn G., assignor.)
Westinghouse Electric and Manufacturing Company. (See Rüdenberg, R., and Friedländer, assignors.)
Westinghouse Electric & Manufacturing Company. (See Schaake, W., and Renshaw, assignors.)
Westinghouse Electric & Manufacturing Company. (See Schenkel, Moritz, assignor.)
Westinghouse Electric & Manufacturing Company. (See Schramm, Walter H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schulz, Walter A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Scott, Howard, assignor.)
Westinghouse Electric & Manufacturing Company. (See Shaw, George R., assignor.)
Westinghouse Electric and Manufacturing Company. (See Sherwan, A. C., Grant, and Hedderick, assignors.)
Westinghouse Electric & Manufacturing Company. (See Styer, Charles A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Sutherlin, Lee, assignor.)
Westinghouse Electric & Manufacturing Company. (See Sykes, Wilfred, assignor.)
Westinghouse Electric & Manufacturing Company. (See Tanberg, Ragnar, assignor.)
Westinghouse Electric & Manufacturing Company. (See Trouant, Virgil E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Ulrey, Dayton, assignor.)
Westinghouse Electric & Manufacturing Company. (See Van Emden, Aaron L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Van Sickle, Roswell C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Waite, Griffin G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wensley, Roy J., assignor.)
Westinghouse Electric & Manufacturing Company. (See White, Thomas U., assignor.)
Westinghouse Electric & Manufacturing Company. (See Whittaker, Charles C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wolf, Lester J., assignor.)
Westinghouse Electric and Manufacturing Company. (See Zworykin, V. K., and Iams, assignors.)
Westinghouse Lamp Company. (See Lederer, Ernest A., assignor.)
Westinghouse Lamp Company. (See Ulrey, Clayton T., assignor.)
Whitacre, Donald D., Waynesburg, Ohio. Building construction. 1,872,200; Aug. 16.
Whitall Tatum Company. (See Clark, Augustus M., assignor.)

White, Jay E., assignor to Chrysler Corporation, Detroit, Mich. Ferrule. 1,872,540; Aug. 16.
White, Lovette G., Goddard, Kans. Internal combustion motor. 1,871,809; Aug. 16.
White Motor Company, The. (See Church, Harold D., assignor.)
White, Rollin H., Cleveland Heights, Ohio. Transmission and steering mechanism. 1,872,541; Aug. 16.
White, Samuel O., assignor to Warner Gear Company, Muncie, Ind. Transmission gear shifter. 1,872,566; Aug. 16.
White, William A., assignor to The Electric Railway Improvement Company, Cleveland, Ohio. Rail bonding. 1,872,022; Aug. 16.
White, S. S., Dental Manufacturing Company, The. (See Joline, Emmet A., assignor.)
White, Thomas U., Chicago, Ill., assignor to Westinghouse Electric & Manufacturing Company. Supervisory control system. 1,871,762; Aug. 16.
Whitehead, Arthur S., Seattle, Wash. Spark arrester and silencer. 1,872,373; Aug. 16.
Whitehead, William, Cumberland, Md., assignor to Celanese Corporation of America. Dyeing textile yarns. 1,871,486; Aug. 16.
Whitehouse, John N., New York, N. Y. Fountain pen or similar article. Des. 87,611; Aug. 16.
Whitehurst, Shepard W., Fort Worth, Tex. Carburetor. 1,872,374; Aug. 16.
Whiting-Adams Company. (See Hill, Edward M., assignor.)
Whitney, Marcus B., Darien, Conn. Pad. 1,871,573; Aug. 16.
Whittaker, Charles C., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Protective means for railway vehicle motors. 1,872,375; Aug. 16.
Wicaco Machine Corporation. (See Sippel, John J., assignor.)
Widmer, Stefan, assignor to Brown, Boveri & Cie, Baden, Switzerland. Mercury vapor rectifier. 1,872,376; Aug. 16.
Wiegner, Simon P., Los Angeles, Calif. Door control mechanism. 1,872,201; Aug. 16.
Wieshuber, Frank X., Chicago, Ill. Toy whistle. Des. 87,612; Aug. 16.
Wiggin, Daniel W., assignor to The Abbott Company, Yarmouth, Me. Moccasin. 1,871,763; Aug. 16.
Wiggin, Daniel W., assignor to The Abbott Company, Yarmouth, Me. Moccasin construction. 1,871,764; Aug. 16.
Wilcox, Allen C., Bridgeport, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass drawing apparatus. 1,872,542; Aug. 16.
Wildman Mfg. Co. (See Howie, Kenneth, assignor.)
Wilkes, Don Q., Pueblo, Colo., assignor to Bendix Cowdrey Brake Tester, Inc., South Bend, Ind. Automobile brake testing device. 1,872,543; Aug. 16.
Williams, Alfred O. (See Contois, E. J., and Williams.)
Williams, Audley O., Niagara Falls, Ontario, Canada, assignor to American Cyanamid Company, New York, N. Y. Making calcium carbide. 1,872,202; Aug. 16.
Williams, Charles C. (See Saunders, S. C., and Williams.)
Williams, Davis S., Los Angeles, Calif. Toy. 1,872,544; Aug. 16.
Williams, Elizabeth T., executrix. (See Williams, George A.)
Williams, George A., deceased; E. T. Williams, executrix, assignor to Williams Sealing Corporation, Decatur, Ill. Cap for receptacle. 1,871,831; Aug. 16.
Williams, George A., and F. T. Eales, assignors to Williams Sealing Corporation, Decatur, Ill. Testing machine. 1,871,935; Aug. 16.
Williams, Harold W. (See James, H. D., and Williams.)
Williams, Ira J., et al., receivers. (See Cramer, J., and Sherr, assignors.)
Williams, Othneil G. (See Thompson, N. F., jr., and Williams.)
Williams Sealing Corporation. (See Blanch, Eric A., assignor.)
Williams Sealing Corporation. (See Williams, G. A., and Eales, assignors.)
Williams Sealing Corporation. (See Williams, George A., assignor.)
Williamson, Bert R., Waterville, Me., assignor, by mesne assignments, to Fidelity Trust Company, Portland, Me. Machine for packaging pie plates and similar articles. 1,871,765; Aug. 16.
Willshaw, Harry, Sutton Coldfield, and L. S. Blanchard, Hamstead, Birmingham, England, assignors to Dunlop Rubber Company Limited. Apparatus for removing flexible cores such as air-bags from tire covers. 1,871,642; Aug. 16.
Willshaw, Harry, Wylde Green, S. N. Goodhall, Marston Green, and C. Follils, Birmingham, assignors to Dunlop Rubber Company Limited, Erdington, Birmingham, England. Method and apparatus for treating strings or strands. 1,871,766; Aug. 16.
Willys-Overland Company, The. (See Darnell, Rex C., assignor.)
Willys-Overland Company, The. (See Fisher, Walter S., assignor.)
Willys-Overland Company, The. (See Hunt, Warren T., assignor.)
Willys-Overland Company, The. (See Marshall, Charles O., assignor.)
Wilmeth, Roscoe H., assignor to Sangamo Electric Company, Springfield, Ill. Electric clock. 1,872,377; Aug. 16.
Wilsdorf, Hans, Geneva, Switzerland. Winding and setting device for timepieces. 1,871,936; Aug. 16.
Wilson, John F. (See Cram, L. V., and Wilson.)
Wilson, Lyman A., and J. Johnson, New York, N. Y. Apparatus for sound reproduction with articulate motion picture films. 1,871,643; Aug. 16.
Wilson, Robert E., assignor to Standard Oil Company (Indiana), Chicago, Ill. Furnace structure. 1,871,937; Aug. 16.
Wilson, William, assignor to Chrysler Corporation, Detroit, Mich. Prevent reverse rotation of rotary members. 1,872,545; Aug. 16.
Wily, James H., Bethlehem, Pa. Top. 1,872,203; Aug. 16.
Wily, James H., Bethlehem, Pa. Roller coaster toy. 1,872,204; Aug. 16.
Winger, Stover C., Los Angeles, Calif. Quick acting mechanism. 1,872,205; Aug. 16.
Wingert, William B. (See McCloskey, G. E., and Wingert.)
Winkley, Erastus E., Lynn, Mass. Speed controlling mechanism. 1,872,378; Aug. 16.
Winne, Harry A., Schenectady, N. Y., assignor to General Electric Company. Control system for rolling mills. 1,871,437; Aug. 16.
Wintermute, Harry A. (See Meston, A. F., and Wintermute.)
Winthrop Chemical Company. (See Callsen, Jurgen, assignor.)
Wired Radio, Inc. (See Hough, Clinton W., assignor.)
Wired Radio, Inc. (See Terman, Frederick E., assignor.)
Wired Radio, Inc. (See Trogner, Arthur M., assignor.)
Wirshing, Ralph J., and H. R. Faas, assignors to General Motors Research Corporation, Detroit, Mich. Coating for ferrous metals. 1,872,614; Aug. 16.
Wiswall, William J., Portland, Oreg., assignor to American Sales Book Company, Limited. Carbon manifolding apparatus. 1,872,206; Aug. 16.
Witham, George S., jr., Hudson Falls, N. Y. Imprint machine. 1,872,207; Aug. 16.
Wolf, Lester J., South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Frequency changer. 1,872,379; Aug. 16.
Wolfe, Walter G., Greenwood, assignor to Wilmot R. Evans, trustee, Boston, Mass. Method and apparatus for combined projection. 1,871,767; Aug. 16.
Wolfram, Jack F. (See McCuen, C. L., Dykstra, Smith, and Wolfram.)
Wood, Joseph D., Bethlehem, Pa., assignor to Roller-Smith Company. Operating mechanism for circuit breakers. 1,871,768; Aug. 16.
Wood, Joseph D., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Thermoresponsive apparatus. 1,872,208; Aug. 16.
Wood, Myron W., Wichita, Kans. Gas heater stove. 1,871,574; Aug. 16.
Wood, William E., Alton, and W. H. Bacheldor, Woodriver, assignors to Standard Oil Company, Whiting, Ind. Filter construction. 1,871,870; Aug. 16.
Woodbury, John B. (See Soule, G. C., and Woodbury.)
Woods, Alvoni A., assignor to All-American Mohawk Corporation, Chicago, Ill. Radiocontrol. 1,872,380; Aug. 16.
Woods, Hazel H., Beaver, Pa. Automobile construction. 1,871,871; Aug. 16.
Woodworth, Leon B., Johannesburg, Transvaal, Union of South Africa. Junction box system for electric power cable installations. 1,871,938; Aug. 16.
Woolson, Harry T., assignor to Chrysler Corporation, Detroit, Mich. Oil pan. 1,872,546; Aug. 16.
Worcester Loom Works. (See Alvord, Charles C., assignor.)
Wright, Arthur, Upper Montclair, and Frank W. Young, Verona, N. J. Valve for filtering devices. 1,872,209; Aug. 16.
Wrigley, Henry L., assignor to Universal Draft Gear Attachment Co., Chicago, Ill. Handwheel for car brakes. 1,872,052; Aug. 16.
Wulf, Frank F., Omaha, Nebr. Draft regulator. 1,871,644; Aug. 16.
Wunderlich, William F., assignor to The Moore Company, Muncie, Ind. Object heating furnace. 1,872,210; Aug. 16.
Yarnall, David R., assignor to Yarnall-Waring Company, Philadelphia, Pa. Greaser valve for alemite fitting connections. 1,872,211; Aug. 16.
Yarnall-Waring Company. (See McKee, John F., assignor.)
Yarnall-Waring Company. (See Yarnall, David R., assignor.)
Yellow Truck & Coach Manufacturing Company. (See Schjolin, Eric O., assignor.)
Young, Donald A. (See Stevens, E. W., and Young.)
Young, Frank W. (See Wright, A., and Young.)
Zahradlan, Ghougas, Syracuse, N. Y. Device for locating sunken vessels. 1,872,212; Aug. 16.
Zeder, James C., assignor to Chrysler Corporation, Detroit, Mich. Brake shoe. 1,872,547; Aug. 16.
Zeidler Corporation, The. (See Zeidler, William A., assignor.)

Zeidler, William A., assignor to The Zeidler Corporation, New York, N. Y. Garment press. 1,872,100; Aug. 16.
Zenner, David R. (See Connor, R., Welk, and Zenner.)
Zent, Howard F. (See East, W. H., and H. F. and W. H. Zent.)
Zent, Walter H. (See East, W. H., and H. F. and W. H. Zent.)
Zimmerman, Frank M., Aurora, Ill. Shelf and label holder. 1,872,053; Aug. 16.
Zipp, Frank. (See Horn, P., and Zipp.)
Zucker, George L., East Orange, N. J. Fuel economizer and heat control. 1,871,487; Aug. 16.
Zur Löwen, Waldemar, Wuppertal-Barmen, Germany, assignor to American Bemberg Corporation, Elizabethton, Tenn. Clearing fibers out of a vessel. 1,872,548; Aug. 16.
Zworykin, Vladimir K., Collingswood, N. J., and H. A. Iams, San Diego, Calif., assignors to Westinghouse Electric and Manufacturing Company. Photocell amplifier. 1,872,381; Aug. 16.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 16TH DAY OF AUGUST, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acid from ammonia, Manufacture of nitric. I. Hechenbleikner. 1,872,638; Aug. 16.
Acid, Manufacture of 1-aminoanthraquinone-2-sulphonic. A. Peter. 1,871,466; Aug. 16.
Acid, Preparing 2,3-aminonaphthonic. F. Henle and V. Lanz. 1,871,990; Aug. 16.
Advertising device. R. J. Wensley. 1,872,372; Aug. 16.
Agricultural implement. T. Brown. 1,872,238; Aug. 16.
Agricultural implement. L. A. Paradise. 1,872,042; Aug. 16.
Air cleaner. F. S. Orem. 1,871,908; Aug. 16.
Air cleaner and muffler. J. Dolza. 1,872,075; Aug. 16.
Air conditioning apparatus. D. Thompson. 1,872,195; Aug. 16.
Aircraft. C. U. Palmer. 1,872,170; Aug. 16.
Aircraft, Marine. E. A. Sperry. 1,871,476; Aug. 16.
Airplane. M. Leupold. 1,871,538; Aug. 16.
Airplane. S. Pallotta. 1,871,909; Aug. 16.
Airplane hoop. R. A. Putman. 1,872,839; Aug. 16.
Airplane wing. E. J. Park and G. Antol. 1,871,465; Aug. 16.
Air ring. C. D. Dallas. 1,871,666; Aug. 16.
Air screw with automatically variable pitch. M. Pillard. 1,872,337; Aug. 16.
Air separator. T. J. Sturtevant. 1,872,565; Aug. 16.
Air supply control means for oil burners. J. A. Bourbonnais. 1,872,396; Aug. 16.
Alarm: *See*—
  Low water alarm.
Alkali metal xanthates, Manufacturing. W. Hirschkind. 1,872,452; Aug. 16.
Alloy. G. P. Halliwell. 1,872,280; Aug. 16.
Aluminum alloy. H. C. Hall and T. F. Bradbury. 1,871,607; Aug. 16.
Ammonium bromide, Manufacture of. C. A. Hochwalt and J. B. Wallusziis. 1,872,292; Aug. 16.
Amplifier, High frequency. G. E. M. Perroux and V. Corelli. 1,872,334; Aug. 16.
Amplifier, Multistage. P. Borias. 1,872,109; Aug. 16.
Amplifier, Photocell. V. K. Zworykin and H. A. Iams. 1,872,381; Aug. 16.
Amplifier system. R. Feldtkeller. 1,872,264; Aug. 16.
Amplifier tube control. W. van B. Roberts. 1,872,347; Aug. 16.
Anhydride from ethylidene diacetate, Producing acetic. H. W. Matheson. 1,872,479; Aug. 16.
Anhydrides, Manufacture of aliphatic. H. Dreyfus. 1,872,029; Aug. 16.
Anhydrides, Manufacture of aliphatic. H. Dreyfus. 1,872,030; Aug. 16.
Animal trap. W. A. Gibbs. 1,871,510; Aug. 16.
Anode, Corrugated or threaded. J. K. Hitner. 1,872,290; Aug. 16.
Antiglare device for automobile drivers. F. More. 1,871,461; Aug. 16.
Apparatus for correlating spaced points of observation. H. H. Buckman. 1,871,877; Aug. 16.
Aquarium. A. Sabath. 1,871,742; Aug. 16.
Armature winding machine. R. J. Emmert. 1,871,970; Aug. 16.
Article and making same, Composite. L. T. Frederick. 1,872,269; Aug. 16.
Article of furniture, Folding. W. R. Tingle. 1,871,634; Aug. 16.
Article of manufacture. G. M. Barrow. 1,872,557; Aug. 16.
Articles and product thereof, Uniting. C. Dreyfus and G. Schneider. 1,871,670; Aug. 16.
Articles, Forming molded. R. A. Brennecke. 1,871,492; Aug. 16.
Articles, Manufacturing electrically welded tubular. W. F. Heineman. 1,872,267; Aug. 16.
Ash receiver. W. W. Stevenson, jr. 1,872,856; Aug. 16.
Automobile construction. H. H. Woods. 1,871,871; Aug. 16.
Automobile frame. B. T. Andren. 1,872,386; Aug. 16.
Axle, Tubular. B. H. Urschel. 1,872,196; Aug. 16.
Azo-dyestuffs and making same. G. Bonhôte. 1,871,946–8; Aug. 16.
Azo-dyestuffs containing metal and making same. F. Straub and W. Anderau. 1,871,477; Aug. 16.
Back fire preventer. W. H. Van Horn. 1,872,368; Aug. 16.
Baffle. W. F. Richards. 1,871,738; Aug. 16.
Bag consisting of two layers of paper. Van Hülst. 1,871,827; Aug. 16.
Bag filling machine. F. J. Stephens. 1,872,017; Aug. 16.
Bag for marbles or the like, Compartment. B. Pink. 1,873,640; Aug. 16.
Balancing device. C. O. Marshall. 1,871,899; Aug. 16.
Band pass receiver, Convertible. A. Meissner. 1,872,318; Aug. 16.
Bar: *See*—
  Tight center bar.
Base for a telephone instrument. W. J. Paff. Des. 87,591; Aug. 16.
Battery support. H. C. Doane. 1,872,621; Aug. 16.
Bead placing ring. R. M. Graham. 1,871,604; Aug. 16.
Beads on tubular articles, Apparatus for forming. R. Furrer. 1,872,067; Aug. 16.
Bearing. A. G. F. Wallgren. 1,871,485; Aug. 16.
Bearing assembly. S. H. Cowin. 1,872,251; Aug. 16.
Bearing construction, Intermediate. A. R. Weis. 1,872,538; Aug 16.
Bearing liner design. W. H. Manning. 1,872,600; Aug. 16.
Bearing, Self cleaning connecting rod. C. E. Summers. 1,872,194; Aug. 16.
Bearing, Thrust. B. S. Minor. 1,871,630; Aug. 16.
Bed, Folding. T. B. Draper 1,871,593; Aug. 16.
Bed, Sofa. C. S. Moeckel. 1,871,817; Aug. 16.
Belt. H. A. Hamilton. Des. 87,571–2; Aug. 16.
Belt, Expansible apparel. M. Silverman and H. Pomerantz. Des. 87,601; Aug. 16.
Belts, Making V-type transmission. R. H. Chilton. 1,871,953; Aug. 16.
Bent tube boiler. L. J. Marshall. 1,872,094; Aug. 16.
Benzyl chloride, Manufacture of. N. Bennett, H. Dodd, W. C. Sprent, and F. Holt. 1,872,227; Aug. 16.
Bicycle and scooter, Combined. J. Holtzman. 1,872,142; Aug. 16.
Binder, Loose-leaf. R. Connor, N. S. Welk, and D. R. Zenner. 1,872,248; Aug. 16.
Binder, Transfer. G. H. Dawson. 1,871,668; Aug. 16.
Binding of sheet articles. H. A. Evans. 1,871,679; Aug. 16.
Blade sharpening machine. A. M. Runshang. 1,872,096; Aug. 16.
Bladder, Air inflated. W. A. Knauer. 1,872,459; Aug. 16.
Blanks, Apparatus for and method of forming tubular. W. T. Graham. 1,872,276; Aug. 16.
Blocks, Producing printing plate. H. W. Hacker. 1,872,572; Aug. 16.
Blower dusting apparatus. C. D. Collins. 1,872,028; Aug. 16.
Blowout preventer. C. A. Rasmussen and W. T. Trout. 1,872,498; Aug. 16.
Board: *See*—
  Instrument panel board.
Board transfer device. C. Absmeier. 1,871,832; Aug. 16.
Boiler: *See*—
  Bent tube boiler. Water tube boiler.
  Steam boiler.
Boiler. T. E. Murray. 1,872,167; Aug. 16.
Bolt: *See*—
  Latch or lock bolt.
Boom, Automatic hoist. C. D. Ginter. 1,871,603; Aug. 16.
Bottle labeling machine. E. Ermold. 1,871,677; Aug. 16.
Bottle opener. A. J. Flauder. Des. 87,567; Aug. 16.
Box: *See*—
  Car journal box. Stuffing box.
  Casket box. Switch box.
  Paper box.
Boxes, Manufacturing match. G. E. Mellgren, J. G. Sjöström, A. R. Swalas, and G. V. Hedin. 1,872,162; Aug. 16.
Bracket: *See*—
  Brake lever bracket. Scaffold bracket.
Brake: *See*—
  Friction brake. Vacuum servo brake.
  Hand brake.
Brake. O. E. Hunt. 1,872,144; Aug. 16.
Brake. K. E. Lyman. 1,871,458; Aug. 16.
Brake. R. N. Van Buskirk. 1,872,197; Aug. 16.
Brake. W. S. Watts. 1,872,051; Aug. 16.
Brake adjustment. A. Y. Dodge. 1,872,127; Aug. 16.
Brake cross shaft. C. L. McCuen, J. Dykstra, E. H. Smith, and J. F. Wolfram. 1,872,160; Aug. 16.
Brake cross shaft assembly and making same. F. C. Matthaei and G. D. Shanahan. 1,871,727; Aug. 16.
Brake drum. G. Calvignac. 1,872,116; Aug. 16.
Brake for flat cars and similar cars, Hand. R. W. Burnett. 1,872,113; Aug. 16.
Brake lever bracket. W. C. Hedgcock. 1,872,449; Aug. 16.
Brake mechanism. V. Bendix. 1,871,441; Aug. 16.
Brake mechanism for baby carriages. J. W. Jackson. 1,872,146; Aug. 16.
Brake shoe. J. C. Zeder. 1,872,547; Aug. 16.
Brake system for automotive vehicles. C. S. Bragg and V. W. Kliesrath. 1,872,397; Aug. 16.

Brake testing apparatus. R. L. Derryberry and J. E. Johnson. 1,872,073; Aug. 16.
Brake testing device, Automobile. D. Q. Wilkes. 1,872,543; Aug. 16.
Brake testing machine. K. Pfeiffer. 1,872,495; Aug. 16.
Brake testing machine, Automobile. C. F. Cowdrey. 1,872,123; Aug. 16.
Braking apparatus. E. Latshaw. 1,871,621; Aug. 16.
Braking system. V. Bendix. 1,872,226; Aug. 16.
Braking system. J. Gayan. 1,871,979; Aug. 16.
Branding iron, Electrically heated. H. A. Pearce. 1,871,555; Aug. 16.
Brooder attachment. E. F. Paul. 1,871,554; Aug. 16.
Brush element and process. H. Cave. 1,871,775; Aug. 16.
Brush, Making a. E. M. Hill. 1,872,037; Aug. 16.
Building construction. D. D. Whitacre. 1,872,200; Aug. 16.
Building material. R. W. B. Reade. 1,872,185–6; Aug. 16.
Building, Storage. H. D. James. 1,872,594; Aug. 16.
Burner: *See*—
Gas burner.
Bus wheel driving unit. C. W. Miller and G. C. Goode. 1,872,486; Aug. 16.
Bushing clamp. F. J. Reed. 1,872,340; Aug. 16.
Butter cutter. A. Slaten. 1,872,517; Aug. 16.
Cabinet. T. D. Schaadt. Des. 87,596; Aug. 16.
Cabinet, Dispensing. W. S. Watts. Des. 87,608; Aug. 16.
Cabinet for a drink mixer. P. Hawkins. 1,872,637; Aug. 16.
Cage making machine. A. C. Sherman, M. B. Grant, and H. F. Hedderick. 1,871,751; Aug. 16.
Cake box. H. Helle. Des. 87,575; Aug. 16.
Calcium carbide, Making. A. O. Williams. 1,872,202; Aug. 16.
Calculating machine. C. M. F. Friden. 1,872,438–9; Aug. 16.
Cam operating mechanism. L. E. Howard. 1,871,692; Aug. 16.
Camera film replacing device, Studio. F. Rebner and P. Kent. 1,872,500; Aug. 16.
Camera, Photographic. B. Mayer. 1,871,717; Aug. 16.
Camera shutter. T. W. Case. 1,872,404; Aug. 16.
Camera, Sketching. R. Schwabe. 1,871,807; Aug. 16.
Camera, Three-color cinematographic. J. A. Ball. 1,871,649; Aug. 16.
Can. W. H. Hegenberger. 1,872,585; Aug. 16.
Can attachment, Oil. G. W. Richburg. 1,871,824; Aug. 16.
Canopy for casket illumination, Illuminated. H. S. Headland. 1,871,611; Aug. 16.
Cap construction. W. R. Cuthbert. 1,872,064; Aug. 16.
Cap for closing bottles, jars, and other containers. E. A. Blanch. 1,871,945; Aug. 16.
Cap for closing paper containers, Metal. L. Olt. 1,871,907; Aug. 16.
Cap for receptacles. G. A. Williams. 1,871,831; Aug. 16.
Capping machine. L. P. Sinz. 1,871,924; Aug. 16.
Capsuling machine. O. Sindl. 1,872,190; Aug. 16.
Car control equipment, Safety. J. C. McCune. 1,872,481; Aug. 16.
Car, Dump. D. Hindahl. 1,872,451; Aug. 16.
Car frame, Motor. P. L. Prins. 1,871,734; Aug. 16.
Car journal box. H. C. Dreibuss and P. J. McCullough. 1,872,427; Aug. 16.
Car, Railway tank. R. Furrer. 1,872,272; Aug. 16.
Car retarder. J. M. Varble and R. A. Shannon. 1,871,929; Aug. 16.
Carbazole indophenols, Making. R. W. Hess and O. D. Cunningham. 1,871,791; Aug. 16.
Carbon black, Apparatus for producing. J. J. Jakosky. 1,872,297; Aug. 16.
Carbon manifolding apparatus. W. J. Wiswall. 1,872,206; Aug. 16.
Carbon monoxide in hydrocarbon engines, Device for reducing. C. C. Cohee. 1,872,411; Aug. 16.
Carbon, Process and apparatus for manufacturing finely divided. A. L. Strout and E. E. Lyder. 1,872,519; Aug. 16.
Carburetor. F. O. and T. M. Ball. 1,872,555; Aug. 16.
Carburetor. G. M. Bicknell. 1,872,559; Aug. 16.
Carburetor. L. S. Hobbs. 1,872,291; Aug. 16.
Carburetor. F. C. Mock, C. J. Gustafson, and M. E. Chandler. 1,872,490; Aug. 16.
Carburetor. J. Schwelss. 1,872,509; Aug. 16.
Carburetor. H. H. C. Weed. 1,872,537; Aug. 16.
Carburetor. S. W. Whitehurst. 1,872,374; Aug. 16.
Carburetor, Airplane. F. C. Mock. 1,871,460; Aug. 16.
Card filing case. N. Warshaw. 1,871,569; Aug. 16.
Card perforating machine or the like. L. E. Brougham. 1,871,582; Aug. 16.
Cargo handling apparatus for aircraft and the like. M. Castro. 1,871,495; Aug. 16.
Carrier: *See*—
Tire carrier.
Carrier. L. L. Burnham. 1,872,069; Aug. 16.
Carrier dispatch system. C. S. Jennings and F. W. MacMartin. 1,871,995; Aug. 16.
Case: *See*—
Card filing case. Traveling case.
Cash register. C. W. Green. 1,871,846; Aug. 16.
Casing for universal joints. H. D. Geyer. 1,871,883; Aug. 16.
Casing, Sausage. S. Oppenheimer. 1,871,464; Aug. 16.
Casings, Manufacturing tire. A. O. Abbott, jr. 1,871,438; Aug. 16.
Casket box, Sheet metal. R. L. Cobb. 1,871,453; Aug. 16.
Catch, Hood. L. V. Cram and J. F. Wilson. 1,871,779; Aug. 16.
Catch, Hood. R. G. Moore. 1,872,321; Aug. 16.
Catch, Hood. E. T. Ragsdale. 1,872,184; Aug. 16.
Cellulose derivatives, Dyeing of. G. Ilvat, E. Cudgene, and C. Dreyfus. 1,871,470; Aug. 16.
Cellulose ether, Nitrated. A. Weihe, O. Leuchs, and E. Dörr. 1,871,868; Aug. 16.
Cement asbestos products, Making. E. J. Maust. 1,872,480; Aug. 16.
Cement loading device. G. O. Harm. 1,872,283; Aug. 16.
Chain, Stock tire. F. G. Hodell. 1,871,521; Aug. 16.
Chair: *See*—
Folding chair.
Chair. C. Bielecky. 1,872,056; Aug. 16.
Chair. L. E. Goenen and J. A. Garrow. 1,872,137; Aug. 16.
Chassis, Automotive vehicle. G. C. Goode, F. A. Selje, and C. W. Miller. 1,872,442; Aug. 16.
Chassis construction, Bus. C. W. Miller and G. C. Goode. 1,872,485; Aug. 16.
Chassis, Six wheel motor. P. L. Prins. 1,871,735; Aug. 16.
Check writer. H. R. Hedman. Des. 87,574; Aug. 16.
Chemical printing. E. Gaskins. 1,871,683; Aug. 16.
Chromium, Depositing on. B. Bart. 1,871,770; Aug. 16.
Chromium trioxide, Manufacture of. P. R. Hines. 1,872,588; Aug. 16.
Chuck operating device. J. A. Olson. 1,871,463; Aug. 16.
Cigar wrapper, Christmas greeting. W. E. Johnson. 1,871,888; Aug. 16.
Circuit breaker. B. P. Baker and R. C. Dickinson. 1,872,387; Aug. 16.
Circuit breaker control system and protective system, Multi-frequency. C. M. Moss. 1,871,724; Aug. 16.
Circuit breaker, Panel. O. S. Jennings. 1,872,206; Aug. 16.
Circuit breakers, Operating mechanism for. J. D. Wood. 1,871,768; Aug. 16.
Circuit interrupter, High speed. C. Aalborg and J. B. MacNeill. 1,872,382; Aug. 16.
Circuit interrupter, High tension. W. H. Turnpenny. 1,872,530; Aug. 16.
Circuits, Interrupting electric. A. Lotz. 1,872,310; Aug. 16.
Clamp: *See*—
Bushing clamp. Pipe clamp.
Clamp support for globes. G. Green, G. E. Booth, J. T. De Nault. 1,871,847; Aug. 16.
Classifying apparatus. T. Karlovitch and J. Sebes. 1,871,703; Aug. 16.
Cleaner: *See*—
Air cleaner. Vacuum cleaner.
Pipe cleaner.
Cleaner. C. A. Hoff. 1,872,589; Aug. 16.
Cleaner for rollers of elevating graders. L. T. Duesberg. 1,871,503; Aug. 16.
Clip. W. Borchert. 1,872,232; Aug. 16.
Clip for holding blanks, Desk. R. I. Meader. 1,871,719; Aug. 16.
Clock. E. L. Carlson. Des. 87,561; Aug. 16.
Clock. M. Schlenker. Des. 87,597; Aug. 16.
Clock casing constructon. N. F. Thompson, jr., and O. G. Williams. 1,872,610; Aug. 16.
Clock, Electric. R. H. Wilmeth. 1,872,377; Aug. 16.
Closure for containers. M. C. Teague. 1,872,046; Aug. 16.
Closure structure for tubes or the like. S. M. Weaver. 1,871,640; Aug. 16.
Clutch. W. Coughtry. 1,872,250; Aug. 16.
Clutch, Electromagnetic. J. Cotal. 1,871,960; Aug. 16.
Clutch, Friction. H. D. Church. 1,872,027; Aug. 16.
Coating for ferrous metals. R. J. Wirshing and H. R. Faas. 1,872,614; Aug. 16.
Coating machine. M. O. Jennings. 1,871,998; Aug. 16.
Cock, Stop. L. Daildorf and F. Mason. 1,872,417; Aug. 16.
Coffee maker, Drip. R. F. Krause. 1,872,466; Aug. 16.
Coil for circuit breakers. R. C. Van Sickle. 1,872,369; Aug. 16.
Coiling machine. C. D. Dallas. 1,871,665; Aug. 16.
Coils of metal strip, Apparatus for uncoiling. J. A. Smitmans. 1,872,045; Aug. 16.
Coin mechanism for vending machines. C. A. Melchert. 1,871,901; Aug. 16.
Coincidental lock. H. E. Norviel. 1,871,905; Aug. 16.
Coke puller. G. W. Watts and W. B. Matthews. 1,871,932; Aug. 16.
Coloring of cellulose derivatives. G. H. Ellis and H. C. Olpin. 1,871,673; Aug. 16.
Columns and the like, Apparatus for making. C. H. Sawyer. 1,871,743; Aug. 16.
Comb: *See*—
Transfer comb.
Combination bed and divan. E. M. Hoey. Des. 87,577–9; Aug. 16.
Combined advertising stand and mattress support. H. M. Taylor. Des. 87,604; Aug. 16.
Combined household food mixer and juice extractor. M. W. McArdle. Des. 87,587; Aug. 16.

Composition and manufacture of bituminous mixtures for use in road construction and like purposes. A. E. Brown. 1,872,112; Aug. 16.
Compressor. R. Stahl. 1,871,826; Aug. 16.
Compressors and the like, Lubricating. W. H. Carrier. 1,871,662; Aug. 16.
Condensation product. H. C. P. Weber. 1,871,641; Aug. 16.
Condensation products of acetylene and ammonia, Separating. O. Ernst and O. Nicodemus. 1,872,432; Aug. 16.
Condenser assembly. P. F. Scofield. 1,872,511; Aug. 16.
Condenser for zinc vapors. E. H. Bunce. 1,871,657; Aug. 16.
Conductor, Composite. H. Scott. 1,872,354; Aug. 16.
Conduit, Metallic. H. A. Gardner. 1,871,508; Aug. 16.
Conduit support. S. N. Buchanan. 1,872,061; Aug. 16.
Connecter. E. O. Schjolin. 1,872,014; Aug. 16.
Connecter, Bus line jumper. A. L. Van Emden. 1,872,367; Aug. 16.
Connecter, Electrical. C. F. Carter. 1,871,839; Aug. 16.
Connecter, Flexible. E. J. Dill. 1,871,963; Aug. 16.
Connecter, Flexible. C. R. Short. 1,871,921; Aug. 16.
Connecting parts. B. T. Andren. 1,872,385; Aug. 16.
Connection. E. G. McDonald. 1,872,315; Aug. 16.
Connection for lamp hanger contactors. A. J. Thompson. 1,872,529; Aug. 16.
Connection, Yielding. J. G. Eldridge. 1,872,259; Aug. 16.
Container, Fiber. C. W. Stuart. 1,871,567; Aug. 16.
Container forming machine. J. M. Hothersall. 1,872,294; Aug. 16.
Container, Refrigeratory. J. Weinstein. 1,871,829; Aug. 16.
Container, Sectional. R. W. Hollopeter. 1,872,590; Aug. 16.
Container, Shipping. F. J. Heacock. 1,871,610; Aug. 16.
Control apparatus. L. G. Riley. 1,872,342; Aug. 16.
Control apparatus. G. K. Simonds. 1,871,752; Aug. 16.
Control device for gas burners, Automatic. R. W. Johnson. 1,872,147; Aug. 16.
Control for radio receiving sets, One knob. C. J. Brehany. 1,871,876; Aug. 16.
Control head for oil or gas wells. L. J. Black. 1,872,104; Aug. 16.
Control means for sheet feeding or delivering or the like. L. E. Miller. 1,871,459; Aug. 16.
Control mechanism. J. C. Masek. 1,872,155; Aug. 16.
Control system. R. P. Jackson. 1,871,696; Aug. 16.
Control system. H. D. James. 1,871,697; Aug. 16.
Control system for gas burning appliances. V. J. Evans. 1,872,433; Aug. 16.
Control system for moving objects. T. R. Rhea, J. D. Tear, and C. F. Green. 1,871,469; Aug. 16.
Control system for rolling mills. H. A. Winne. 1,871,437; Aug. 16.
Control system, Supervisory. T. U. White. 1,871,762; Aug. 16.
Controlling the angular movement of a shaft, Mechanism for selectively. A. E. Ellinger. 1,871,672; Aug. 16.
Conveyer. J. E. Regan. 1,872,005; Aug. 16.
Conveyer for furnaces. E. G. De Coriolis. 1,871,501; Aug. 16.
Conveyer mechanism. C. S. Jennings. 1,871,996; Aug. 16.
Conveyer, Selecting. J. J. Mojonnier. 1,871,902; Aug. 16.
Conveyer system. H. C. Keller and M. Van Billiard. 1,872,000; Aug. 16.
Conveyer, Tire casing. E. L. Hallinan. 1,871,608; Aug. 16.
Conveyer, Vertical. W. A. Marcy. 1,871,714; Aug. 16.
Conveying apparatus. J. T. Cowley and L. C. Allen. 1,872,620; Aug. 16.
Cooling apparatus. H. H. Crawford. 1,871,588; Aug. 16.
Cooling the head of one having a permanent wave. W. G. Parker. 1,871,553; Aug. 16.
Cores such as air bags from tire covers, Apparatus for removing flexible. H. Willshaw and L. S. Blanchard. 1,871,642; Aug. 16.
Counterbalancing and indicating mechanism for weighing apparatus. J. H. de Iongh. 1,872,420; Aug. 16.
Coupler. M. A. Anderson. 1,872,551; Aug. 16.
Coupler. E. J. Contois and A. O. Williams. 1,871,841; Aug. 16.
Coupling: *See*—
Pipe coupling.
Coupling system. W. V. Roberts. 1,872,343; Aug. 16.
Cover, Beehive. M. G. Eldred. 1,871,595; Aug. 16.
Crank connection for radial motors. J. Newmann. 1,871,729; Aug. 16.
Crankcase ventilation. R. Schittke. 1,872,609; Aug. 16.
Cribbing. E. C. Alexander. 1,871,439; Aug. 16.
Cribbing. E. C. Alexander. 1,871,488; Aug. 16.
Crucible for alumino-thermic reactions. E. F. Begtrup. 1,872,391; Aug. 16.
Crusher: *See*—
Hammer crusher.
Cryolite, Recovery of. J. E. Morrow. 1,871,723; Aug. 16.
Cultivator, Power lift. T. Brown. 1,872,236; Aug. 16.
Cultivator, Power lift. E. McCormick. 1,872,314; Aug. 16.
Cultivator shovel, Auxiliary. H. Chibnik. 1,872,072; Aug. 16.
Cultivator sweep. W. H. East, H. F. and W. H. Zent. 1,872,623; Aug. 16.
Cultivator, Tractor. T. Brown. 1,872,237; Aug. 16.
Cupola furnace. A. L. Boegehold. 1,872,057; Aug. 16.
Current device, Space. R. G. Berthold. 1,871,443; Aug. 16.
Current motor, Alternating. H. Weichsel. 1,872,371; Aug. 16.
Current protective relay, Alternating. F. Ollendorff and E. Friedländer. 1,871,822; Aug. 16.
Curtain fixture. W. C. and G. M. Kenney. 1,871,797; Aug. 16.
Cut-off for domestic gas burners, Thermostatic. J. A. Maloney. 1,872,040; Aug. 16.
Cutter: *See*—
Butter cutter.
Cutting device. H. R. Schutz and H. E. Robinson. 1,872,508; Aug. 16.
Cylinder printing press. A. Büttner. 1,871,838; Aug. 16.
Damper assembly, Heat resisting. F. A. Fahrenwald. 1,872,434; Aug. 16.
Damper control mechanism. C. H. Anderson. 1,872,218; Aug. 16.
Damper, Vibration. G. F. Gibson. 1,872,136; Aug. 16.
Decorations, Applying. G. R. Ensminger. 1,872,131; Aug. 16.
Delinting machine for cotton seed and process. C. E. Power. 1,872,002; Aug. 16.
Dental X-ray tube. C. T. Ulrey. 1,872,335; Aug. 16.
Device for determining the resistance of bodies to deflection. G. A. Chatillon. 1,871,776; Aug. 16.
Diamines and azo dyestuffs derived therefrom, Azo-(2.3 hydroxy-naphthoyl)-aromatic. E. F. Grether. 1,871,513; Aug. 16.
Diaphragm and making same, Sound producing. J. B. Hawley. 1,872,583; Aug. 16.
Diazo-amino compounds, New. W. Hentrich, E. Tietze, A. Ossenbeck, and P. Backer. 1,871,850; Aug. 16.
Die casting machine. T. C. Kersmo. 1,872,085; Aug. 16.
Die head, Adjustable. A. F. Breitenstein. 1,872,060; Aug. 16.
Die head, Self opening. A. F. Breitenstein. 1,872,059; Aug. 16.
Digging lip and dipper tooth, Combined. W. Lehman. 1,872,307; Aug. 16.
Direction indicator. A. B. Turk and G. T. Granger. 1,871,467; Aug. 16.
Discharge tube. L. L. Beck. 1,872,567; Aug. 16.
Disk deflector. J. E. Regan. 1,872,006; Aug. 16.
Disk harrow. E. C. Bopf. 1,872,108; Aug. 16.
Disk wheel. D. H. Bellamore. 1,872,224; Aug. 16.
Disks, Method and apparatus for assembling. L. T. Frederick. 1,872,134; Aug. 16.
Dispensing apparatus. H. R. Brand. 1,872,110; Aug. 16.
Display device. W. J. De Witt. 1,872,074; Aug. 16.
Display device. F. E. Everson. 1,871,598; Aug. 16.
Display device. G. F. Hogan. 1,871,690; Aug. 16.
Distortion of vacuum tube amplifiers, Reducing. H. S. Hamilton. 1,871,986; Aug. 16.
Door. J. Mitchell. 1,872,489; Aug. 16.
Door check. E. E. Stephens. 1,871,566; Aug. 16.
Door checking device. F. M. Franklin. 1,872,561; Aug. 16.
Door construction, Oven. T. E. Taylor. 1,872,020; Aug. 16.
Door control mechanism. S. P. Wiegner. 1,872,201; Aug. 16.
Door, Dump wagon. J. D. Benbow and J. B. Green. 1,871,652; Aug. 16.
Door, Elevator. A. A. Allen. 1,872,054; Aug. 16.
Door for retorts and the like, Quick opening and closing. C. P. Astrom. 1,871,834; Aug. 16.
Door operating apparatus. F. E. Lewis. 1,871,711; Aug. 16.
Door operator. R. S. Peelle. 1,872,043; Aug. 16.
Door, Pass type elevator. P. R. Saurer. 1,872,350; Aug. 16.
Draft regulator. F. F. Wulf. 1,871,644; Aug. 16.
Draft rigging, Railway. W. A. Geiger. 1,871,451; Aug. 16.
Drier: *See*—
Spray drier.
Drill. L. M. Pearce and W. L. Church. 1,872,328; Aug. 16.
Drilling machine. J. F. Buhr. 1,872,400; Aug. 16.
Drilling mechanism. F. W. Vodoz. 1,871,638; Aug. 16.
Drive for looms, Positive shuttle. J. M. Graef. 1,872,275; Aug. 16.
Driving unit for sound reproducers. A. Ringel. 1,871,739; Aug. 16.
Drying method. D. L. Shanklin. 1,872,015; Aug. 16.
Dye, Fast azo. E. F. Grether. 1,872,033; Aug. 16.
Dye from diphenyloxide, derivatives, Azo. E. F. Grether. 1,872,034; Aug. 16.
Dye from substituted anilides of 2.3 hydroxynaphthoic acids, Azo. E. F. Grether and L. E. Mills. 1,872,035; Aug. 16.
Dye intermediates and derived azo-dyes. E. F. Grether. 1,871,515; Aug. 16.
Dyes derived from naphthyl-aryl ethers, Azo. E. F. Grether. 1,871,512; Aug. 16.
Dyes from ether-arylides of amino-hydroxy-diaryls, Azo. E. F. Grether and G. H. Coleman. 1,871,514; Aug. 16.
Dyestuff and making same, Azo. G. Bonhôte. 1,871,948; Aug. 16.
Dyestuffs and making same, Wool. G. Kalischer and E. Honold. 1,871,852; Aug. 16.
Dyestuffs of the anthraquinone series. P. Nawiasky and A. Krause. 1,871,821; Aug. 16.

Dyestuffs, New azo. W. Hentrich and R. Knoche. 1,871,991; Aug. 16.
Earth piercing device. J. R. Sweeney and E. W. Roberts. 1,872,523; Aug. 16.
Electric control system. H. R. Crago. 1,871,499; Aug. 16.
Electric heating bodies, Manufacture of. H. W. Kurz. 1,872,148; Aug. 16.
Electric motor. F. S. Kingston. 1,872,595; Aug. 16.
Electric switch. P. C. Butte. 1,872,618; Aug. 16.
Electric switch. J. R. Cook. 1,872,122; Aug. 16.
Electrical apparatus. H. J. Dick. 1,871,962; Aug. 16.
Electrical apparatus. E. Dickey. 1,871,881; Aug. 16.
Electrical apparatus. F. F. Starr. 1,871,926; Aug. 16.
Electrical indicating, measuring, relay and like arrangements responsive to frequency. B. A. G. Churcher. 1,872,243; Aug. 16.
Electrical interlock. R. S. Peelle. 1,872,329; Aug. 16.
Electrical testing system. P. G. Edwards and T. C. Henneberger. 1,871,967; Aug. 16.
Electrode and other electron emitting device, Spark plug. O. S. Duffendack and H. Rabezzana. 1,872,065; Aug. 16.
Electrode, Arc welding. E. Mino, J. McCann, M. Fischer, and T. D. Radcliffe. 1,872,320; Aug. 16.
Electron discharge device. E. A. Lederer. 1,871,537; Aug. 16.
Elevator: *See*—
Storage elevator. Well elevator.
Elevator control system. E. M. Bouton and W. F. Eames. 1,871,656; Aug. 16.
Elevator control system. W. F. Eames. 1,872,128; Aug. 16.
Elevator control system. R. P. Higbee. 1,871,689; Aug. 16.
Elevator control system. L. J. Kinnard. 1,872,300; Aug. 16.
Ellipsograph. A. Ronning. 1,872,505; Aug. 16.
Emulsion. E. W. Adams. 1,871,940; Aug. 16.
Emulsion breaking. J. O. Peirce and W. T. Reddish. 1,872,333; Aug. 16.
Engine: *See*—
Injection engine. Rotary engine.
Internal combustion engine. Two cycle engine.
Engine sealing ring construction, Internal combustion. R. L. Skinner. 1,872,516; Aug. 16.
Engine shutter apparatus. E. G. Petersen. 1,871,733; Aug. 16.
Entrainment separator. W. L. Badger. 1,872,554; Aug. 16.
Excavating machine. A. Ellersgaard. 1,872,129; Aug. 16.
Excavating machine. C. H. Lotte. 1,871,539; Aug. 16.
Exercising apparatus. F. Denney. 1,872,256; Aug. 16.
Exhibitors, Changeable. G. F. Reed. 1,872,607; Aug. 16.
Expansion joint. J. F. McKee. 1,872,088–9; Aug. 16.
Expansion system for a gaseous medium. G. D. Clark. 1,872,245; Aug. 16.
Fabric, Making embossed. W. H. Lees. 1,871,855; Aug. 16.
Fan. A. Giambertoni. 1,872,078; Aug. 16.
Fastener. L. Reiter. 1,872,187; Aug. 16.
Fastener, Carpet. G. A. King and F. Troske. 1,872,001; Aug. 16.
Fastener, Closure. J. J. Beadle. 1,871,580; Aug. 16.
Fastener, Crate. J. O. Turner. 1,871,482; Aug. 16.
Fastener-inserting machine. P. R. Glass. 1,872,441; Aug. 16.
Fastening means. R. K. Lee. 1,872,471; Aug. 16.
Faucet connecter for fire hose. F. L. Lester. 1,871,810; Aug. 16.
Feed wheel. A. J. Gurney. 1,871,516; Aug. 16.
Feeder, Poultry. E. E. McGrew. 1,871,804; Aug. 16.
Ferrule. J. E. White. 1,872,540; Aug. 16.
Ferrule, Fishing rod. W. F. Grossenbach. 1,871,985; Aug. 16.
Fertilizer, Automatic. G. C. Karshner. 1,871,529; Aug. 16.
Fertilizing material, Producing. H. R. Bates. 1,872,024; Aug. 16.
Fibers out of a vessel, Clearing. W. zur Löwen. 1,872,548; Aug. 16.
Figurette. E. Pfeiffer. Des. 87,592; Aug. 16.
Filaments of artificial silk by the stretch spinning process, Apparatus for the production of strong. H. Kempf. 1,871,704; Aug. 16.
Filler and primer and making the same, Combine. G. A. Horton. 1,872,455; Aug. 16.
Film, Apparatus for applying reinforcing to. C. H. Meeker. 1,872,317; Aug. 16.
Film, Applying reenforcing to. C. H. Meeker. 1,872,316; Aug. 16.
Film gate. W. A. Schulz. 1,872,353; Aug. 16.
Film take-up. R. P. May. 1,871,715; Aug. 16.
Film to the film spool, Attachment of moving picture. L. Goldhammer. 1,871,983; Aug. 16.
Filter construction. W. E. Wood and W. H. Bacheldor. 1,871,870; Aug. 16.
Filter, Oil. L. Blackmore. 1,872,229; Aug. 16.
Filter, Oil. G. R. Ericson. 1,872,430; Aug. 16.
Filtration. W. E. Kinnison. 1,871,891; Aug. 16.
Fish lock. H. Barr. 1,872,556; Aug. 16.
Fish lure. F. E. Eppich. 1,871,971; Aug. 16.
Fishing lure. L. A. Chapleau. 1,872,406; Aug. 16.
Flag and lamp stand device, Signal. H. K. Dalton. 1,871,667; Aug. 16.
Floor construction. G. L. Bair. 1,872,101; Aug. 16.
Flushing arm for sanitary water closet attachments. F. Guidetti and G. Bontempi. 1,872,278; Aug. 16.
Folder, Advertising. C. Blum and E. C. Moore, jr. 1,871,774; Aug. 16.
Folding chair. H. Howe. 1,871,524; Aug. 16.
Food handling apparatus. T. F. Rataiczak and J. C. Slager. 1,872,004; Aug. 16.
Foot rest, Auxiliary. W. Gowie. 1,872,444; Aug. 16.
Form and sheet metal lath, Sheet metal. T. J. Fraber. 1,871,976; Aug. 16.
Form for concrete columns. F. V. Schubert. 1,871,919; Aug. 16.
Fractionating system. D. A. Monro. 1,871,819; Aug. 16.
Frame: *See*—
Automobile frame. Tennis racket frame.
Car frame. Vehicle chassis frame.
Side frame. Window frame.
Frequency changer. L. J. Wolf. 1,872,379; Aug. 16.
Frequency converter. E. W. Niles and W. H. Edwards. 1,871,904; Aug. 16.
Frequency system, Constant beat. G. Rodwin. 1,871,741; Aug. 16.
Fret-bar for use in playing stringed instruments. J. S. Preisner. Des. 87,593; Aug. 16.
Friction brake, Fluid operated. W. L. Avery. 1,872,615; Aug. 16.
Front spring. N. F. Hadley and T. Franzen. 1,872,445; Aug. 16.
Fruit processer. G. D. Gardner. 1,871,507; Aug. 16.
Fuel briquette. E. O. E. Gaupholm. 1,872,135; Aug. 16.
Fuel economizer and heat controls. G. L. Zucker. 1,871,487; Aug. 16.
Fuel injection means for internal combustion engines. G. W. Codrington. 1,871,444; Aug. 16.
Fuel oil burning apparatus. L. S. Chadwick and M. Resek. 1,871,951; Aug. 16.
Fuel, System for burning liquid. J. W. Cannon. 1,871,660; Aug. 16.
Furnace: *See*—
Cupola furnace. Tank furnace.
Heating furnace.
Furnace. C. J. Huber. 1,871,454; Aug. 16.
Furnace. A. Stansfield. 1,871,863; Aug. 16.
Furnace construction. L. Mambourg. 1,872,477; Aug. 16.
Furnace, Operating a cupola. A. L. Boegehold. 1,872,509; Aug. 16.
Furnace structure. R. E. Wilson. 1,871,937; Aug. 16.
Furnaces, Work supporting bar for enameling. F. A. Fahrenwald. 1,872,629; Aug. 16.
Furniture construction. R. F. Taylor. 1,872,525; Aug. 16.
Fuse. R. B. Havey. 1,872,448; Aug. 16.
Fuse, Explosion. C. H. Thomas. 1,872,021; Aug. 16.
Game. P. Horn and F. Zipp. 1,872,454; Aug. 16.
Garden reel. C. Uitendaal. 1,871,483; Aug. 16.
Garment, Combination. K. E. Cunningham. 1,871,664; Aug. 16.
Garment hanger. T. Fuller. 1,871,600; Aug. 16.
Garment press. W. A. Zeidler. 1,872,100; Aug. 16.
Gas burner, Dual. A. Friedman. 1,871,783; Aug. 16.
Gas filled tank. O. H. Eschholz. 1,871,449; Aug. 16.
Gas tank lock, Electric. A. W. Neverman. 1,872,092; Aug. 16.
Gases, Cleaning. A. F. Meston and H. A. Wintermute. 1,871,815; Aug. 16.
Gases or vapors, Separating. C. G. Harris. 1,872,080; Aug. 16.
Gear, Change speed. J. Dap and E. Roggatz. 1,871,961; Aug. 16.
Gear drive for motor boats, Rudder and propeller. H. W. Rice. 1,871,561; Aug. 16.
Gear shifter, Transmission. S. O. White. 1,872,566; Aug. 16.
Gear shifting mechanism. F. M. Bartelme. 1,871,771; Aug. 16.
Gear, Steering. E. O. Schjolin. 1,872,012; Aug. 16.
Gearing, Transmission. R. S. Plexico. 1,872,338; Aug. 16.
Gel production utilization. W. Crow and H. Dittlinger. 1,871,781; Aug. 16.
Geological disturbance detector, Electrical. C. R. Rogers. 1,872,504; Aug. 16.
Glass and making same, Laminated. W. H. Moss. 1,871,725; Aug. 16.
Glass and producing the same, Laminated. B. M. Ayers. 1,872,553; Aug. 16.
Glass, Apparatus for grinding sheet. J. P. Crowley. 1,872,416; Aug. 16.
Glass apparatus, Sheet. W. F. Brown. 1,872,399; Aug. 16.
Glass apparatus, Sheet. J. C. Henderson. 1,872,587; Aug. 16.
Glass drawing apparatus. A. C. Wilcox. 1,872,542; Aug. 16.
Glass drawing apparatus, Sheet. H. E. Allen. 1,872,550; Aug. 16.
Glass gathering and forming machine. K. E. Peiler. 1,871,556; Aug. 16.
Glass handling apparatus. J. P. Crowley. 1,872,413; Aug. 16.
Glass, Grinding sheet. J. P. Crowley. 1,872,415; Aug. 16.
Glass, Process and apparatus for forming sheet. J. L. Drake. 1,872,423; Aug. 16.
Glass, Process and apparatus for producing. J. L. Drake. 1,872,425; Aug. 16.
Glass, Process and apparatus for producing molten. J. P. Crowley and J. C. Gipe. 1,872,414; Aug. 16.

Glass, Producing sheet. C. W. Swope. 1,872,524; Aug. 16.
Glass sheets or plates, Apparatus for conveying and transferring. J. L. Drake. 1,872,424; Aug. 16.
Glass surfacing apparatus, Sheet. J. L. Drake. 1,872,422; Aug. 16.
Glass working machine. A. M. Clark. 1,871,497; Aug. 16.
Glow discharge device. D. D. Knowles. 1,872,302; Aug. 16.
Goblet or similar article of glassware. T. C. Heisey. Des. 87,576; Aug. 16.
Goggles, Eye. D. E. Kimball. 1,871,534; Aug. 16.
Goodyear welting. W. F. Heft. 1,871,612; Aug. 16.
Governors, Lubricating engine. H. D. Church. 1,871,496; Aug. 16.
Gravel washing machine. E. T. Burnside. 1,871,583; Aug. 16.
Grease, Lubricating. F. W. Sullivan, jr., and M. H. Arveson. 1,871,864; Aug. 16.
Grinder. F. Lang. 1,872,469; Aug. 16.
Grinder control, Internal. C. T. Raule. 1,871,468; Aug. 16.
Grinding and polishing machine. G. A. Carlson. 1,871,494; Aug. 16.
Grinding machine. A. A. and W. H. Nichols. 1,872,041; Aug. 16.
Grinding machine or the like. M. H. Arms. 1,872,552; Aug. 16.
Grinding machines, Feeding mechanism for. G. H. Smith. 1,872,191; Aug. 16.
Grinding machinery. J. E. Caster. 1,872,405; Aug. 16.
Grinding machinery. G. A. Volz. 1,871,866; Aug. 16.
Grinding mill. H. Hardinge. 1,872,036; Aug. 16.
Grinding, smoothing and polishing apparatus. C. Heuze. 1,871,992; Aug. 16.
Guide for vehicles, Driving and parking. M. D. Kenna. 1,871,532; Aug. 16.
Gun, Car washer. S. Bramsen, W. Hersleb, and F. Wahlin. 1,872,058; Aug. 16.
Gun cleaning device. W. Van Rixel, jr. 1,872,198; Aug. 16.
Gun wad. S. C. Bond. 1,872,107; Aug. 16.
Hair steamer and drier. J. A. Dary. 1,871,591; Aug. 16.
Hat ironing machine. L. Angelus and D. L. Baylis. 1,872,631; Aug. 16.
Hammer and cutter for hammer mills, Combination. C. D. Ammon. 1,871,489; Aug. 16.
Hammer crusher. G. W. Borton. 1,872,233; Aug. 16.
Hammer, Electric. S. M. Decker. 1,871,446; Aug. 16.
Handbag. E. F. Miller. 1,871,549; Aug. 16.
Hand brake. P. B. Camp. 1,872,063; Aug. 16.
Handle: *See*—
Switch handle.
Handle attaching means for brooms and the like. F. Wallin. 1,872,534; Aug. 16.
Hanger: *See*—
Garment hanger.
Hanger for brake beams, Safety. J. Gayan. 1,871,980; Aug. 16.
Hangers, Slotting garment. W. J. Rehrig. 1,871,823; Aug. 16.
Harvester knife bars, Wear plate for. L. A. Paradise. 1,872,172; Aug. 16.
Hat. M. Constantine. Des. 87,563; Aug. 16.
Head cooling means. W. S. Fisher. 1,872,267; Aug. 16.
Headlamp. A. R. Lewellen. 1,871,801; Aug. 16.
Headlamp, Vehicle. R. N. Falge and W. C. Brown. 1,871,505; Aug. 16.
Headlight. J. B. McMenamin. 1,871,629; Aug. 16.
Headlight. G. W. O'Brien. 1,871,551; Aug. 16.
Head of a cane or similar article. C. H. Dudley. Des. 87,566; Aug. 16.
Heat indicator. A. R. Lewellen. 1,871,802; Aug. 16.
Heat indicator, Motor. R. T. Hurley. 1,871,527; Aug. 16.
Heat insulation material, Cellular. A. H. Flower and J. C. Housekeeper. 1,871,974; Aug. 16.
Heater: *See*—
Watchcase heater.
Heating element and support therefor. S. Christy. 1,872,407; Aug. 16.
Heating furnace, Object. W. E. Wunderlich. 1,872,210; Aug. 16.
Heating tube. R. Thurm. 1,872,363; Aug. 16.
Heel base and making the same. O. T. Crafts. 1,872,124; Aug. 16.
Heel machine. P. K. Droukas. 1,871,882; Aug. 16.
Hinge, Closure. N. H. Forbes. 1,872,077; Aug. 16.
Hinge mechanism for grave vaults. W. B. Shafer. 1,872,514; Aug. 16.
Hitch connection for plows with seeders. T. J. Erdman. 1,872,066; Aug. 16.
Hitch for automobile tractors and the like. J. E. Machelda. 1,871,540; Aug. 16.
Hog ring. H. Meyer. 1,871,548; Aug. 16.
Hoist, Skip. P. K. Reed. 1,871,559; Aug. 16.
Holder, Extension cord electric iron. P. D. Temple. 1,872,528; Aug. 16.
Holder, Shelf and label. F. M. Zimmerman. 1,872,053; Aug. 16.
Holes in statistical or like record cards, Apparatus for punching. F. G. S. English. 1,871,597; Aug. 16.
Holes in the ground, Method of and apparatus for making. L. S. Gaty. 1,871,601; Aug. 16.
Hood lacing. A. B. Werdehoff. 1,872,539; Aug. 16.
Hood rest. L. Kulka. 1,872,467; Aug. 16.
Hook: *See*—
Airplane hoop.
Horoscope. R. Spencer. Des. 87,602; Aug. 16.
Housing, Electrode. W. S. Hough. 1,872,593; Aug. 16.
Hubs, Attachment for. A. Koyen. 1,871,619; Aug. 16.
Hydrocarbons, Producing aromatic. H. K. Ibrig. 1,871,694; Aug. 16.
Hydrocarbons, Treating. I. H. Jones. 1,872,463; Aug. 16.
Hydrocarbons, Treating. R. P. Russell. 1,872,011; Aug. 16.
Illuminating device. R. S. Katz. 1,871,999; Aug. 16.
Impeller. W. Meyer. 1,872,483; Aug. 16.
Impeller for centrifugal pumps. H. Schlachter. 1,871,747; Aug. 16.
Imprint machine. G. S. Witham, jr. 1,872,207; Aug. 16.
Incinerator. W. V. Johnston. 1,871,614; Aug. 16.
Index. C. H. Cobb. 1,871,840; Aug. 16.
Indicator: *See*—
Direction indicator. Tension indicator.
Heat indicator.
Injection engine. J. D. Hay. 1,871,452; Aug. 16.
Ink mixer. F. C. Marquardt. 1,872,312; Aug. 16.
Insect electrocutor. W. M. Frost. 1,871,978; Aug. 16.
Instrument drive. R. O. Helgeby. 1,872,288; Aug. 16.
Instrument panel board. J. R. Padesky. 1,871,552; Aug. 16.
Instrument, Sketching. A. A. Hampton. 1,872,578; Aug. 16.
Insulated wire and product obtained thereby, Making. T. V. Binmore and H. de B. Rice. 1,872,228; Aug. 16.
Insulating article, Molded hollow. W. C. Tregoning. 1,871,635; Aug. 16.
Insulating material. C. A. Styer. 1,872,358; Aug. 16.
Insulating material, Colored composite. W. A. Boughton. 1,872,234; Aug. 16.
Insulating material, Making wood fiber. P. G. von Hilderbrandt. 1,872,533; Aug. 16.
Insulator suspension yoke. K. A. Hawley. 1,871,519; Aug. 16.
Interlocking apparatus for direction finders. F. H. Kroger. 1,871,800; Aug. 16.
Internal combustion engine. F. M. Dainton. 1,871,589; Aug. 16.
Internal combustion engine. J. H. Marks. 1,872,478; Aug. 16.
Internal combustion engine. J. C. Peterson. 1,872,180; Aug. 16.
Internal combustion engine. M. Tibbetts. 1,871,480; Aug. 16.
Internal combustion motor. L. G. White. 1,871,869; Aug. 16.
Ionic separator. W. A. Homan. 1,872,591; Aug. 16.
Iron: *See*—
Branding iron.
Iron and cast iron articles, Manufacturing cast. R. H. McCarroll and G. Vennerholm. 1,871,545; Aug. 16.
Iron article and manufacturing thereof, Cast. R. H. McCarroll and G. Vennerholm. 1,871,544; Aug. 16.
Iron, Malleableizing. R. H. McCarroll and G. Vennerholm. 1,871,543; Aug. 16.
Joint: *See*—
Expansion joint. Pivot point.
Oscillating joint. Rail joint.
Pipe joint. Universal joint.
Joint for flue sections and the like, Expansion. W. J. Massa. 1,871,627; Aug. 16.
Joints, Making sheet metalware. A. Shatkin. 1,872,189; Aug. 16.
Juice from fruits, Apparatus for extracting. U. V. d'Annunzio and G. Finzi. 1,871,590; Aug. 16.
Junction box system for electric power cable installations. L. B. Woodworth. 1,871,938; Aug. 16.
Knife attachment, Paperhanger's. A. Ege. 1,871,968; Aug. 16.
Knitting machine, Circular. A. Harer. 1,871,609; Aug. 16.
Labeling machines, Feed mechanism for. E. Ermold. 1,871,675–6; Aug. 16.
Lace. W. R. Adaire. Des. 87,559; Aug. 16.
Lace. B. Edson. Des. 87,565; Aug. 16.
Lace yoke for a neck piece for a woman's garment or similar article. N. Klein. Des. 87,583; Aug. 16.
Lamp electrode, Arc. W. G. Moore. 1,872,322; Aug. 16.
Lamp, Switchboard indicating. W. H. Schramm. 1,871,748; Aug. 16.
Lamp, Therapeutic arc. I. Jeppsson. 1,871,699; Aug. 16.
Lantern, Electric hand. C. H. Larson. 1,872,305; Aug. 16.
Latch and actuating mechanism for swinging closures, Combined. S. Schauer. 1,871,744; Aug. 16.
Latch, Elevator. N. K. Smith. 1,871,825; Aug. 16.
Latch or lock bolt. C. L. and H. E. Frost. 1,872,440; Aug. 16.
Latch, Spring bolt. H. Ter Meer. 1,871,633; Aug. 16.
Latex, Preservation of. J. McGavack. 1,872,161; Aug. 16.
Laundry apparatus. O. Butzbach. 1,872,401; Aug. 16.
Laundry system. E. J. Carroll. 1,871,663; Aug. 16.
Leather article and making the same. A. K. George. 1,871,785; Aug. 16.
Lens blocking device. J. J. McCabe. Re18,569; Aug. 16.
Leuco-1.4-dihydroxy-anthraquinones, Preparing. J. Ogilvie and D. G. Rogers. 1,872,492; Aug. 16.

Lift pin assembly for a window regulator. H. C. Field. 1,871,844; Aug. 16.
Lifter: *See*—
Pan lifter. Valve lifter.
Lifting mechanism. I. von K. Hott. 1,872,592; Aug. 16.
Light in variant colors, System for projecting. C. W. Hough. 1,871,794; Aug. 16.
Light reflecting device. E. P. Bone. 1,872,643; Aug. 16.
Light-sensitive device. H. A. Iams. 1,871,994; Aug. 16.
Lighter, Cigar. J. F. Rogers. 1,872,346; Aug. 16.
Lighter, Cigar. J. F. Rogers and E. F. Clark. 1,872,345; Aug. 16.
Lighter, Pyrophoric pocket. E. F. Clark and J. F. Rogers. 1,872,244; Aug. 16.
Lighting control mechanism, Theater. J. C. Masek. 1,872,154; Aug. 16.
Lighting device, Decorative. M. Goldman. Des. 87,569; Aug. 16.
Lighting fixture. H. R. Holdeman. 1,872,453; Aug. 16.
Lighting system for motor vehicles. M. Isermann and E. Ohlsson. 1,871,695; Aug. 16.
Lightning arrester. E. O. Schweitzer. 1,872,510; Aug. 16.
Lignite and producing the same, Hydrated and charred lump. E. P. Schoch. 1,871,862; Aug. 16.
Lime, Preparation of high plastic. M. Y. Seaton. 1,872,512; Aug. 16.
Lime, Producing hydrated. C. W. Keller. 1,871,530; Aug. 16.
Liner for locomotive driving boxes, End play. H. O. Havemeyer, jr. and J. E. Muhlfeld. 1,871,518; Aug. 16.
Liner for tire casings, Inner. S. R. Fetner. 1,872,265; Aug. 16.
Link. B. H. Urschel. 1,872,099; Aug. 16.
Link for tire chains, Cross. B. H. Pratt. 1,872,003; Aug. 16.
Liquid dispenser, Nondrip. C. L. Bond. 1,871,655; Aug. 16.
Liquid dispensing apparatus. J. B. Davis. 1,872,418; Aug. 16.
Liquid heating device. E. W. Heller. 1,871,688; Aug. 16.
Liquids, Treating. W. Evans. 1,872,262–3; Aug. 16.
Loader, Manure. J. Fredrich. 1,871,599; Aug. 16.
Lock: *See*—
Coincidental lock. Suitcase lock.
Fish lock. Table leg lock.
Gas tank lock.
Locking device for screws and the like. W. J. Gibbons. 1,871,684; Aug. 16.
Locking device for the covers of impregnating tanks, etc. H. E. Gosch. 1,872,443; Aug. 16.
Locking mechanism for doors. K. A. Benzee. 1,871,442; Aug. 16.
Locking mechanism for swifts. J. J. Sippel. 1,871,564; Aug. 16.
Locomotive, Condensing. E. Burmeister. 1,871,493; Aug. 16.
Loom, Circular. E. Nanfeldt. 1,872,168; Aug. 16.
Loud-speakers, Making. B. A. Engholm. 1,872,261; Aug. 16.
Louver or damper device. J. M. Le Grand. 1,872,599; Aug. 16.
Low pressure signal. W. H. Brown. 1,872,068; Aug. 16.
Low water alarm. F. M. Roby. 1,872,563; Aug. 16.
Lubricants, Drawing. E. W. Adams. 1,871,939; Aug. 16.
Lubricants, Emulsified fluid. A. L. Brown. 1,872,617; Aug. 16.
Lubricating compound. M. H. Arveson. 1,871,941; Aug. 16.
Lubricating system. H. A. Finke. 1,871,973; Aug. 16.
Lubricating system. G. E. A. Hallett. 1,872,279; Aug. 16.
Lubricating system. A. Taub. 1,871,760; Aug. 16.
Lubricating system. A. F. Underwood. 1,872,365; Aug. 16.
Lubrication system, Sleeve valve engine. W. T. Hunt. 1,872,295; Aug. 16.
Lubricator. G. D. Hayden. 1,872,584; Aug. 16.
Machine and method for use in shoemaking. R. C. Simmons. 1,871,922; Aug. 16.
Machine for applying tape to sheet units. L. K. Butler. 1,871,658; Aug. 16.
Machine for extracting the juice of citrus fruits. C. E. Rogers. 1,871,860; Aug. 16.
Machine for grooving heels. L. J. Bazzoni. 1,871,873; Aug. 16.
Machine for inserting edible filler into a roll or the like. L. D. Brown. 1,871,837; Aug. 16.
Machine for inserting elastic in knit fabric. K. Howie. 1,871,851; Aug. 16.
Machine for manufacturing tubes. C. Taylor. 1,871,865; Aug. 16.
Machine for molding and pressing oil seed cakes or the like. A. Aarskog, K. Svendsen, and P. Ebel. 1,871,575; Aug. 16.
Machine for operating upon heels. L. J. Bazzoni. 1,872,388; Aug. 16.
Machine for packaging pie plates and similar articles. B. R. Williamson. 1,871,765; Aug. 16.
Machine for removing tin foil from bottles. E. Ermold. 1,871,678; Aug. 16.
Machine for use in covering heels. L. J. Bazzoni. 1,871,874; Aug. 16.
Machine for use in the manufacture of covered heels. W. H. Nutt. 1,872,324; Aug. 16.
Magnetic motor. W. E. Masterson. 1,872,313; Aug. 16.
Mail stamping machine and the like. W. Friedrichs. 1,871,506; Aug. 16.
Manifold for multiple cylinder internal combustion engines, Intake. D. P. Molony. 1,871,818; Aug. 16.
Manifold record machine. L. F. Hagemann. 1,872,140; Aug. 16.
Manway construction for pressure vessels, Forged. S. Straty. 1,872,357; Aug. 16.
Marker, Ball. J. D. Lyon. 1,871,812; Aug. 16.
Marker for aviation fields or the like. W. F. Terry. Des. 87,605; Aug. 16.
Mask, Beauty. K. Welsh. 1,872,642; Aug. 16.
Material coating apparatus. J. F. Esch. 1,872,628; Aug. 16.
Material handling apparatus. E. E. Klupmeyer and A. A. Maxwell. 1,871,707; Aug. 16.
Material or cloth, Manufacturing a trimming. A. Benowitz. 1,872,389; Aug. 16.
Material, Process and apparatus for drying. L. B. West and M. P. Wall. 1,871,934; Aug. 16.
Material, Structural. C. L. Norton. 1,871,730; Aug. 16.
Material to molds in brick presses, Mechanism for feeding dissimilar. R. B. Stuckey. 1,872,521; Aug. 16.
Materials Method and apparatus for treating. R. C. Kivley. 1,871,456; Aug. 16.
Meat holding device. M. Lowenthal. 1,871,713; Aug. 16.
Mercury bulb switches, Manufacture of electric. I. E. McCabe and K. Hunciker. 1,872,070; Aug. 16.
Mercury switch. P. S. Bear. 1,872,223; Aug. 16.
Metal, Cleaning. H. C. Mougey. 1,872,091; Aug. 16.
Metal flashing. A. Cheney. 1,871,585; Aug. 16.
Metal plates, Connecting. B. T. Andren. 1,872,616; Aug. 16.
Metal plates, Embossing. R. Stresau. 1,872,193; Aug. 16.
Metal reenforcement for structural reenforced concrete members. B. Duchscher. 1,871,594; Aug. 16.
Metal refinisher. C. D. Ellithorpe. 1,871,674; Aug. 16.
Metering system. B. E. Lenehan. 1,871,710; Aug. 16.
Mica product and making same, Molded. L. L. Howard. 1,872,143; Aug. 16.
Milk stirrer. A. Otto. 1,872,326; Aug. 16.
Milking machine. F. Henrard. 1,871,520; Aug. 16.
Mill: *See*—
Grinding mill.
Milling machine. H. Ernst and M. Martellotti. 1,872,431; Aug. 16.
Milling machine. H. Ernst and L. F. Nenninger. 1,872,627; Aug. 16.
Mining, Surface. R. H. Sherwood and W. H. Stewart. 1,872,016; Aug. 16.
Mirror, Automobile. C. C. Jones. 1,871,615; Aug. 16.
Mirror or similar toilet article, Hand. A. S. Donaldson. Des. 87,564; Aug. 16.
Mixer: *See*—
Truck mixer.
Moccasin. D. W. Wiggin. 1,871,763; Aug. 16.
Moccasin construction. D. W. Wiggin. 1,871,764; Aug. 16.
Mold feeding device for brick presses. R. B. Stuckey. 1,872,520; Aug. 16.
Molding, Device for attaching. J. Ledwinka. 1,872,149; Aug. 16.
Molding tubes for concrete piles molded in the ground, Sinking. E. Frankignoul. 1,872,635; Aug. 16.
Molds and articles produced thereby, Method and apparatus for forming. B. Bart. 1,872,221; Aug. 16.
Mop wringer. E. E. Neldner. 1,871,903; Aug. 16.
Motor: *See*—
Current motor. Magnetic motor.
Internal combustion motor. Rotary motor.
Motor control. Z. C. Bradford. 1,871,875; Aug. 16.
Motor control system. H. D. James and H. W. Williams. 1,871,698; Aug. 16.
Motor control system. W. Sykes. 1,872,360; Aug. 16.
Motor, Obtaining work from a vapor. J. G. Prosser. 1,872,606; Aug. 16.
Motor, Starting and induction. R. H. Jordan. 1,871,455; Aug. 16.
Mounting, Machine. E. S. Lea. 1,871,708; Aug. 16.
Mounting, Motor. J. K. Harness and W. E. Hann. 1,872,580; Aug. 16.
Mower, Lawn. J. A. E. Carlson. 1,872,119; Aug. 16.
Mug or similar article. R. W. Thomas. Des. 87,606; Aug. 16.
Musical instrument, Stringed. R. Dopyera. 1,872,633; Aug. 16.
Neckpiece for a woman's garment or similar article. N. Klein. Des. 87,581–2; Aug. 16.
Necktie. M. Caridis. 1,872,118; Aug. 16.
Nest, Hen's. D. Rens. 1,872,608; Aug. 16.
Nitrocellulose, Making. N. Picton. 1,872,181; Aug. 16.
Nitrophosphates. E. Lüscher. 1,871,895; Aug. 16.
Noodle press. O. Redwitz. 1,871,558; Aug. 16.
Nuts, Preparing and distributing. W. W. Kelly. 1,872,456; Aug. 16.
Odometer drive. R. H. James. 1,872,039; Aug. 16.
Oil burning apparatus. L. S. Chadwick, M. Resek and J. A. Dahlstrom. 1,871,952; Aug. 16.
Oil draining station. E. W. Holmes and E. E. Cline. 1,871,522; Aug. 16.
Oil pan. H. T. Woolson. 1,872,546; Aug. 16.
Oil saver. W. G. Bradford. 1,871,836; Aug. 16.
Oil separator, Automatic. E. R. McClafferty. 1,871,546; Aug. 16.

Oil, Textile. A. M. Kinney. 1,871,880; Aug. 16.
Oil, Textile. F. W. Sullivan, jr. 1,871,927; Aug. 16.
Oiler, Valve. J. S. LeFevre. 1,871,623; Aug. 16.
Oils or motor fuel from hydrocarbon oils by the employment of metallic halides, Low boiling point. R. A. Halloran, M. L. Chappell, and J. H. Osmer. 1,872,446; Aug. 16.
Oils, Refining. J. G. Ford. 1,871,681; Aug. 16.
Opener, Envelope. F. J. Gargano. 1,871,509; Aug. 16.
Operator for bi-part slide up doors. R. S. Peelle. 1,872,331; Aug. 16.
Operator for canopy type doors. R. S. Peelle. 1,872,177; Aug. 16.
Operator for counterbalanced elevator doors. R. S. Peelle. 1,872,175; Aug. 16.
Operator for counterbalanced elevator doors. R. S. Peelle. 1,872,332; Aug. 16.
Operator for elevator gates. H. S. Peelle. 1,872,176; Aug. 16.
Optical system for color photography. P. Rehländer. 1,872,501; Aug. 16.
Oscillating joint. E. F. Rossman. 1,871,861; Aug. 16.
Oscillating joint. E. F. Rossman. 1,871,918; Aug. 16.
Oscillation system. F. E. Terman. 1,871,632; Aug. 16.
Oven, Coking retort. J. van Ackeren. 1,872,532; Aug. 16.
Oven, Coking retort. J. van Ackeren. 1,872,612; Aug. 16.
Oven, Intermittent vertical coking retort. J. van Ackeren. 1,872,531; Aug. 16.
Oxide, Purified metallic. B. T. Horsfield. 1,871,793; Aug. 16.
Oxides, Treatment of metallic. B. T. Horsfield. 1,871,792; Aug. 16.
Packaging. W. E. Parsons and E. H. Boody. 1,871,805; Aug. 16.
Packer for casing heads. L. F. Baash, E. Burns, and G. B. Garrard. 1,872,219; Aug. 16.
Packing. A. W. Morton. 1,871,820; Aug. 16.
Packing, Apparatus for the manufacture of tubular. C. F. Field and Z. E. Flick. 1,872,266; Aug. 16.
Packing device for use in casing heads or the like. C. J. Pohl. 1,872,182; Aug. 16.
Packing for fluid pressure motors. L. F. Meunier. 1,871,803; Aug. 16.
Packing machinery. W. E. Molins. 1,872,090; Aug. 16.
Pad. M. B. Whitney. 1,871,573; Aug. 16.
Pail, Sanitary milk. C. E. Carter. 1,871,584; Aug. 16.
Pan: *See*—
Oil pan.
Pan lifter. W. S. Locke. 1,871,811; Aug. 16.
Paper and method of making, Parchmentized crepe. E. L. Kallander and R. F. Charles. 1,871,702; Aug. 16.
Paper and resulting product, Coloring crepe. G. R. Alden. 1,871,769; Aug. 16.
Paper and wrapping of articles therein, Waxing of. C. S. Hamersley. 1,871,687; Aug. 16.
Paper box, Foldable. W. R. Krebs. 1,871,706; Aug. 16.
Paper folding machine. J. Mentges. 1,871,900; Aug. 16.
Paper moisture, grease and acid proof and solutions therefor, Rendering. L. A. Dils. 1,871,842; Aug. 16.
Paper or a like web, Apparatus for winding. A. Thomas. 1,872,098; Aug. 16.
Paper, Waterproofed reenforced. G. E. Gibbs. 1,871,602; Aug. 16.
Paper with insoluble dyes and resulting product, Making colored crepe. G. R. Alden. 1,871,647; Aug. 16.
Paraffin and naphthene base oils, Refining. J. G. Ford. 1,871,682; Aug. 16.
Pattern mechanism for knitting machines and patterning effected thereby, Jacquard. J. and R. H. Lawson. 1,872,596; Aug. 16.
Pattern mechanism for knitting machines and patterning effected thereby, Jacquard. J. and R. H. Lawson. 1,872,598; Aug. 16.
Pattern mechanism for knitting machines, Jacquard. J. and R. H. Lawson. 1,872,597; Aug. 16.
Pellet making machine. R. T. Anderson. 1,871,833; Aug. 16.
Pen or similar article, Fountain. J. N. Whitehouse. Des. 87,611; Aug. 16.
Petroleum emulsions, Process of and reagent for treating. H. Heckel and W. T. Reddish. 1,872,286; Aug. 16.
Phonograph control. A. F. Van Dyck. 1,872,366; Aug. 16.
Phonograph record, Paper roll. J. Weinberger. 1,871,761; Aug. 16.
Photo-electric device for classifying laundry materials. R. S. Elberty, jr. 1,872,258; Aug. 16.
Photo-electric tube. P. H. MacNeil. 1,871,626; Aug. 16.
Photographic bleaching-out layers, Fixing. B. Wendt and H. Bincer. 1,871,830; Aug. 16.
Photographic positives, Making colored. A. R. Lawshe. 1,871,622; Aug. 16.
Photographic printing apparatus. H. Uyttenbroeck. 1,871,484; Aug. 16.
Photography, Color. W. T. Tarbin. 1,871,478–9; Aug. 16.
Picture projector, Talking motion. R. P. May. 1,871,716; Aug. 16.
Pie crust roller. D. W. Smith. 1,871,753; Aug. 16.
Pie separating and trimming mechanism. D. W. Smith. 1,871,755; Aug. 16.
Pie separator and trimmer for pie making machinery. D. W. Smith. 1,871,754; Aug. 16.
Pin: *See*—
Push pin.
Pipe, Apparatus for making butt-weld. P. Boyd. 1,872,235; Aug. 16.
Pipe clamp. W. E. Rich. 1,871,562; Aug. 16.
Pipe cleaner, Sectional sanitary. S. F. King. 1,871,798; Aug. 16.
Pipe coupler, Threadless. G. C. Thomas, jr. 1,872,048; Aug. 16.
Pipe coupling. A. J. Weatherhead, jr. 1,872,536; Aug. 16.
Pipe cutting device. A. H. Way. 1,872,199; Aug. 16.
Pipe elevator trunnion, Well. N. K. Smith. 1,871,925; Aug. 16.
Pipe joint. R. Furrer. 1,872,271; Aug. 16.
Pipe joints, Method of and apparatus for welding. H. J. Burnish. 1,872,114; Aug. 16.
Pipe, Straightening. B. T. Andren. 1,872,384; Aug. 16.
Pipe uncoupling mechanism. A. E. Martois. 1,871,857; Aug. 16.
Pipes with a mixture of fibrous substances and hydraulic cement substances, Apparatus for covering the outside surface of metal. A. Rocca. 1,871,917; Aug. 16.
Piston for liquid meters, Operating. E. S. Patch. 1,871,912; Aug. 16.
Pitch and apparatus therefor, Production of. G. E. McCloskey. 1,871,628; Aug. 16.
Pivot joint, Oscillating. W. A. Chryst. 1,871,957; Aug. 16.
Planter, Check row. H. E. Bishop. 1,872,393; Aug. 16.
Planters, Check row attachment for potato. K. J. Lee. 1,872,470; Aug. 16.
Plaster, Acoustic. C. K. Roos. 1,871,806; Aug. 16.
Plaster and stucco ground. L. Brandt. 1,871,491; Aug. 16.
Plaster board manufacture. J. S. Offutt. 1,871,731; Aug. 16.
Plate bending machine. F. H. Smith. 1,872,355; Aug. 16.
Platen for printing and addressing machines, Snapping. H. E. Hubbard. 1,871,993; Aug. 16.
Plug and making the same, Spark. H. Rabezzana 1,872,496; Aug. 16.
Plug for combination lamps, Contact. L. O. Parker. 1,871,910; Aug. 16.
Plug and making the same, Spark. H. Rabezzana. 1,872,497; Aug. 16.
Pneumatic dispatch system. C. S. Jennings. 1,871,997; Aug. 16.
Pocket. J. Cramer and M. Sherr. 1,872,570; Aug. 16.
Polisher. L. A. Olsen. 1,872,602; Aug. 16.
Potassium metal or sodium potassium metal alloy. R. Thurm. 1,872,611; Aug. 16.
Potato harvesting machine. M. Licht. 1,872,639; Aug. 16.
Powder and method of making, Metallic. J. A. Gann. 1,871,450; Aug. 16.
Power fixture for elevator door operators. R. S. Peelle. 1,872,330; Aug. 16.
Power panel, Oil immersed. H. G. Baxter and G. G. Shannonhouse. 1,871,651; Aug. 16.
Power presses, Nonrepeat mechanism for. J. A. Falleson. 1,872,132; Aug. 16.
Power system. R. T. Sawyer. 1,871,472; Aug. 16.
Power transmission means. L. M. Dieterich. 1,871,782; Aug. 16.
Precoating device. S. E. Cahoon and W. Bacheldor. 1,871,878; Aug. 16.
Press: *See*—
Cylinder printing press Noodle press.
Garment press. Punch press.
Press. A. A. Byerlein. 1,872,115; Aug. 16.
Press. A. A. Byerlein. 1,872,242; Aug. 16.
Pressing and ironing machine. C. E. Waream. 1,871,436; Aug. 16.
Pressure control head. L. J. Black. 1,872,105; Aug. 16.
Printing device. J. C. Paschall. 1,872,173; Aug. 16.
Printing plate and manufacturing it. H. Swan and S. Higgins. 1,871,568; Aug. 16.
Printing plates and method of making. J. C. Paschall. 1,872,174; Aug. 16.
Projection, Method and apparatus for combined. W. G. Wolfe. 1,871,767; Aug. 16.
Projection welding. C. E. Bleicher. 1,872,394; Aug. 16.
Propylene, Production of. W. A. Gerstmyer and W. R. Clayton. 1,871,786; Aug. 16.
Protective means for railway vehicle motors. C. C. Whittaker. 1,872,375; Aug. 16.
Protective system, Electrical. J. V. Breisky. 1,872,560; Aug. 16.
Protector. Car axle. P. P. Barthelemy. 1,872,222; Aug. 16.
Protector, Shoe and stocking. L. Argard. 1,871,576; Aug. 16.
Puller: *See*—
Coke puller.
Pulverized material, Pneumatic transporting and distributing of. J. E. Kennedy. 1,871,853; Aug. 16.
Pump. A. W. Walker. 1,871,867; Aug. 16.
Pump, Air. O. Beller. 1,872,225; Aug. 16.
Pump, Gasoline dispensing. G. W. Vos. Des. 87,607; Aug. 16.
Pump, Lift. M. J. Babin. 1,871,577; Aug. 16.

Pump, Multicylinder. C. E. Miller. 1,871,816; Aug. 16.
Pump, Oil. O. Baur. 1,871,872; Aug. 16.
Pump, Rotary. A. Hudson. 1,871,525; Aug. 16.
Pump set, Submersible. J. Bricken. 1,872,111; Aug. 16.
Pumping apparatus, Proportional. W. E. Repschleger, G. Armistead, jr., B. B. Talbot, and J. G. Placette. 1,872,503; Aug. 16.
Pumping mechanism for fuel feeding systems for motor vehicles. F. H. Heltger. 1,871,989; Aug. 16.
Punch press, Automatic. B. J. Lindgren. 1,872,474; Aug. 16.
Push pin. M. Panitzach. 1,872,171; Aug. 16.
Quick acting mechanism. S. C. Winger. 1,872,205; Aug. 16.
Quotation board or the like apparatus. R. L. Daine and R. Guye. 1,872,126; Aug. 16.
Radiator and making the same. G. H. Phelps. 1,872,044; Aug. 16.
Radiator cores, Making. J. D. Petersen. 1,872,494; Aug. 16.
Radiator shutter. F. Goldfisher. 1,871,685; Aug. 16.
Radiator shutter control, Thermostatic. J. H. Edwards. 1,871,671; Aug. 16.
Radiator shutter units. E. G. Petersen. 1,871,914; Aug. 16.
Radiator, Sound. J. B. Hawley. 1,872,081; Aug. 16.
Radio alarm system. J. D. Durkee. 1,872,257; Aug. 16.
Radio carrier system, Suppressed wave. H. A. Brown. 1,872,398; Aug. 16.
Radiocontrol. A. A. Woods. 1,872,380; Aug. 16.
Radio receiving system. J. M. Miller. 1,872,487; Aug. 16.
Radio signaling. L. Cohen. 1,872,246; Aug. 16.
Radio signals and apparatus therefor, Receiving. W. van B. Roberts. 1,871,740; Aug. 16.
Radiotransmitting system. V. E. Trouant. 1,872,364; Aug. 16.
Rail bonding. W. A. White. 1,872,022; Aug. 16.
Rail joint. R. E. Frickey. 1,871,977; Aug. 16.
Rail shoe, Third. W. Schaake and D. E. Renshw. 1,872,351; Aug. 16.
Razor, Nonvacuum. O. A. Tannehill. 1,871,631; Aug. 16.
Razor, Safety. F. H. Green. 1,871,789; Aug. 16.
Reactor, Variable. J. Kerrigan. 1,872,299; Aug. 16.
Reamer, M. I. Sieler. 1,871,474; Aug. 16.
Receiving apparatus. H. J. M. de Regnauld de Bellescize. 1,872,634; Aug. 16.
Receptacle closing and sealing means. E. L. Jones. 1,871,701; Aug. 16.
Receptacle, Electric lamp. G. A. and F. E. Johnson. 1,871,613; Aug. 16.
Receptacle with automatic closure therefor. L. R. Loveland. 1,872,475; Aug. 16.
Receptacles, Apparatus for closing and sealing. J. O. Seifert. 1,871,749; Aug. 16.
Recording system. J. W. Legg. 1,871,709; Aug. 16.
Rectifier, Copper hemisulphide. S. B. Kraut and C. E. Margerum. 1,872,304; Aug. 16.
Rectifier, Mercury arc. M. Schenkel. 1,871,745; Aug. 16.
Rectifier, Mercury vapor. S. Widmer. 1,872,376; Aug. 16.
Rectifier system. R. L. Davis. 1,872,253; Aug. 16.
Rectifier system, Thermionic. E. Y. Robinson and C. R. Burch. 1,872,009; Aug. 16.
Rectifier, Thermionic. L. Sutherlin. 1,872,359; Aug. 16.
Rectifying apparatus. H. J. André. 1,872,214; Aug. 16.
Reel: *See*—
Garden reel.
Refrigerating machine. W. G. Abbott, jr. 1,871,645; Aug. 16.
Refrigeration apparatus. L. S. Chadwick. 1,871,879; Aug. 16.
Refrigerator, Bottle. C. A. Frick and R. E. Baker. 1,872,031; Aug. 16.
Refrigerator, Bottle dispensing. C. A. Frick and R. E. Baker. 1,872,032; Aug. 16.
Refrigerator, Display. C. A. Frick and R. E. Baker. 1,871,784; Aug. 16.
Register: *See*—
Cash register.
Regulating system for hydraulic turbines. L. F. Moody. 1,872,165; Aug. 16.
Regulator: *See*—
Draft regulator.
Relay, Notching. J. A. Clarke, jr. 1,871,777; Aug. 16.
Relay, Overload. S. L. Goldsborough. 1,871,787; Aug. 16.
Relay selector, Polarity responsive neutral. G. DeCroce. 1,871,669; Aug. 16.
Repellant and insecticidal composition and producing the same, Rodent. H. T. Bottrell. 1,871,949; Aug. 16.
Resinous product and making same, Oxidized. C. Ellis. 1,872,568; Aug. 16.
Resistor material and making the same. A. H. Haroldson. 1,872,581; Aug. 16.
Ribbons, tapes, and other strips, Coating. S. M. Hansen. 1,871,790; Aug. 16.
Ring: *See*—
Air ring. Hog ring.
Bead placing ring. Weaving ring.
Ring about a body, Apparatus for contracting a. A. W. Phelps. 1,871,915; Aug. 16.
Riveting holder-on. A. M. Antich. 1,872,215; Aug. 16.
Road maintenance machine. J. S. McCallum. 1,871,542; Aug. 16.
Road scraping or grading apparatus. J. P. McHale. 1,872,601; Aug. 16.
Roaster. M. F. Thau. 1,872,050; Aug. 16.
Roasting apparatus. I. Blier. 1,871,654; Aug. 16.
Rod or the like, Drapery. W. C. Kenney. 1,871,796; Aug. 16.
Rod weeder. W. Christensen. 1,872,121; Aug. 16.
Roll for heat treating furnaces. R. Burke. 1,872,062; Aug. 16.
Roll winding machine, Automatic. E. T. Street. 1,872,018; Aug. 16.
Roller: *See*—
Pie crust roller. Shade roller.
Roofing, Apparatus for surfacing. E. S. Donahue. 1,872,622; Aug. 16.
Roofing, Sheet metal. C. S. Hammond. 1,872,447; Aug. 16.
Rotary engine. J. Tackman. 1,872,361; Aug. 16.
Rotary motor. W. E. Morse. 1,871,462; Aug. 16.
Rotation of rotary members, Means to prevent reverse. W. Wilson. 1,872,545; Aug. 16.
Rubber and making the same, Reenforced. W. B. Wescott. 1,871,572; Aug. 16.
Rubber stock feeding device. I. J. Remark. 1,871,560; Aug. 16.
Rudder arrangement. F. Hitzler. 1,872,038; Aug. 16.
Rug. J. D. Harris. 1,871,849; Aug. 16.
Ruling and printing machine. E. D. Doyle. 1,872,421; Aug. 16.
Rust proofing apparatus. S. C. Saunders and C. C. Williams. 1,872,507; Aug. 16.
Safety box toe and protector. W. H. Baynard and H. G. McMurray. 1,872,025; Aug. 16.
Safety device for printing presses. O. D. Bayrer. 1,871,772; Aug. 16.
Sand blast machine. L. D. Peik. 1,872,178; Aug. 16.
Sanding machine. R. A. Reid. 1,872,502; Aug. 16.
Sausages, Apparatus and making. A. F. and A. L. Grabowski. 1,871,788; Aug. 16.
Saw making machinery. F. W. Wardwell. 1,872,535; Aug. 16.
Scaffold bracket. H. B. Miller. 1,871,721; Aug. 16.
Scale beam. R. A. Kopp. 1,872,465; Aug. 16.
Scale in gas cutting of metals, Controlling. C. J. Coberly. 1,872,410; Aug. 16.
Scale, Weighing. H. M. Cameron. 1,871,659; Aug. 16.
Scraper for automotive vehicles, Wheel. A. Caskey. 1,872,120; Aug. 16.
Screen and shutters, Combined. G. Racy. 1,871,557; Aug. 16.
Screen fixture, Window. F. B. Valladoa. 1,871,928; Aug. 16.
Screening and moistening apparatus. B. G. Klugh. 1,872,301; Aug. 16.
Screw. L. Muhlig. 1,872,166; Aug. 16.
Screw bolt or similar article. H. Rosenberg. Des. 87,595; Aug. 16.
Seal. H. V. Atwell. 1,871,943; Aug. 16.
Sealing and thrust device. W. H. Carrier. 1,871,661; Aug. 16.
Seed cotton, Apparatus for drying. C. A. Bennett. 1,871,778; Aug. 16.
Separation device for pipe lines. A. W. Helmholtz and D. Ferrell. 1,872,586; Aug. 16.
Separation of component constituents of a complex metalliferous dust. A. L. J. Queneau. 1,872,169; Aug. 16.
Separator: *See*—
Air separator. Ionic separator.
Entrainment separator. Oil separator.
Separator. J. Hudson. 1,871,526; Aug. 16.
Separator for cards in a box. H. W. King. 1,871,617; Aug. 16.
Service building. G. L. Rosebrook. Des. 87,594; Aug. 16.
Shade, Lamp. E. Schwarz. Des. 87,598–600; Aug. 16.
Shade roller. B. Schwartz. 1,872,188; Aug. 16.
Shades for automobiles, Rear window. W. C. Mercier. 1,872,164; Aug. 16.
Shaft and casing assembly, Flexible. E. A. Joline. 1,871,528; Aug. 16.
Shafts for golf clubs and the like, Apparatus for tapering tubular. H. G. Barrett. 1,871,490; Aug. 16.
Sharpener, Pencil. L. R. Loveland. 1,872,476; Aug. 16.
Shearing machine. I. Jeppsson and E. S. Bartlett. 1,871,700; Aug. 16.
Sheets, Bending laminated. J. Messing. 1,872,482; Aug. 16.
Sheets faced with wood, Flattening flexible. A. Elmendorf. 1,871,447; Aug. 16.
Shelving, Metal. L. H. Fenstermaker. 1,871,972; Aug. 16.
Shield for cables, Concentric. H. Nyquist. 1,871,906; Aug. 16.
Shield or protector device. W. C. McCreary. 1,872,159; Aug. 16.
Shingle. H. Abraham. 1,871,646; Aug. 16.
Shingles, Method of and apparatus for making strip. F. C. Overbury. 1,872,603; Aug. 16.
Shirt guard. C. I. Elsey. 1,872,260; Aug. 16.
Shock absorber. W. A. Chryst. 1,871,954–6; Aug. 16.
Shock absorber. W. A. Chryst. 1,871,958; Aug. 16.
Shock absorber. A. M. Jensen. 1,872,460; Aug. 16.
Shock absorber. J. C. Parsons. 1,871,911; Aug. 16.
Shock absorber. H. C. Walters. 1,871,931; Aug. 16.
Shoe. L. M. Leverone. Des. 87,585; Aug. 16.

Shoe sole. G. L. Pierce. 1,872,604; Aug. 16.
Shoe structure. F. A. Melchionna. 1,871,547; Aug. 16.
Shoes, Making. M. L. Dodge and H. A. Jordan. 1,872,571; Aug. 16.
Shoes, Making. H. A. Osborne. 1,872,325; Aug. 16.
Shoes, Making rubber. F. D. Kinney. 1,871,890; Aug. 16.
Shoes, Nonslipping attachment for. H. D. Driscoll. 1,871,964; Aug. 16.
Short circuiter. E. P. Larsh. 1,871,893; Aug. 16.
Short circuiting device. E. J. Haverstick. 1,872,285; Aug. 16.
Shovel: *See*—
Cultivator shovel.
Side frame. M. H. Hammett. 1,872,576–7; Aug. 16.
Sign. E. B. Hurford. 1,872,145; Aug. 16.
Sign, Display. R. A. Baker. 1,871,648; Aug. 16.
Sign letter, Luminous tube. W. P. Drury. 1,872,428; Aug. 16.
Sign plate for an automotive signal. R. W. Leibert. Des. 87,584; Aug. 16.
Signal: *See*—
Low pressure signal. Warning signal.
Signal holding device. G. E. Asplund. 1,872,218; Aug. 16.
Signal light casing. J. Monaco. Des. 87,590; Aug. 16.
Signal monitoring device. R. E. Pierce. 1,871,916; Aug. 16.
Signal switch, Automobile. R. Marsh. 1,872,153; Aug. 16.
Signaling device. E. F. Sebesta. 1,872,097; Aug. 16.
Signaling mechanism. C. B. Bartley. 1,871,650; Aug. 16.
Signaling system. C. E. Lomax. 1,871,457; Aug. 16.
Silica, Making colloidal. P. W. Porter and R. E. Needham. 1,872,183; Aug. 16.
Sled, Water. T. E. Blake. 1,872,230; Aug. 16.
Slip rotation apparatus. G. M. Nell. 1,871,728; Aug. 16.
Slipper and manufacture of same, Ballet. S. Capezio. 1,872,641; Aug. 16.
Slotting machine. H. E. Frentsel. 1,872,270; Aug. 16.
Slotting machine. E. B. Stimpson. 1,872,564; Aug. 16.
Smoke box construction for locomotives. C. H. Apps. 1,872,217; Aug. 16.
Snow and ice remover. C. Hedberg. 1,872,082; Aug. 16.
Snowplow, Highway. C. A. Milhon. 1,872,484; Aug. 16.
Snowplow nose and cutter bar therefor. G. C. Soule and J. B. Woodbury. 1,871,565; Aug. 16.
Soap lubricant and preparing same, Lead mahogany. M. H. Arveson. 1,871,942; Aug. 16.
Soap saver. R. J. Meister. 1,871,814; Aug. 16.
Soda lime and preparing same. C. A. Carey. 1,872,026; Aug. 16.
Sorter. M. C. Rose, B. R. Rose and H. L. Rose. 1,871,471; Aug. 16.
Sound amplifying system. W. E. Brindley. 1,872,239; Aug. 16.
Sound distribution system for auditoriums. E. W. Kellogg. 1,871,531; Aug. 16.
Sound measuring system. A. H. Inglis, W. D. Goodale, jr., and E. Dietze. 1,871,886; Aug. 16.
Sound recording system. T. R. Goldsborough. 1,872,630; Aug. 16.
Sound reproduction with articulate motion picture films, Apparatus for. L. A Wilson and J. Johnson. 1,871,643; Aug. 16.
Spacer strip for electric welding. H. J. Burnish. 1,872,240; Aug. 16.
Spark advance control. R. C. Darnell. 1,872,252; Aug. 16.
Spark arrester and silencer. A. S. Whitehead. 1,872,373; Aug. 16.
Spectacles. L. C. King. 1,872,562; Aug. 16.
Speed change mechanism, Gearless. J. W. Batchelder. 1,871,835; Aug. 16.
Speed controller, Safety. H. H. Fogwell and C. H. Judd. 1,872,133; Aug. 16.
Speed controlling mechanism. E. E. Winkley. 1,872,378; Aug. 16.
Speed regulating system. G. R. Shaw. 1,871,750; Aug. 16.
Speed transmission, Variable. G. B. Greening and J. W. Galloway. 1,872,636; Aug. 16.
Spindle rail. J. J. Keyser. 1,871,533; Aug. 16.
Spindles, Attachment for driving. L. F. Meunier. 1,871,720; Aug. 16.
Sponge, Producing metal. E. G. T. Gustafsson. 1,871,848; Aug. 16.
Spray drier. W. F. Richards. 1,871,737; Aug. 16.
Spring: *See*—
Front spring
Spring construction for chair seats or the like. M. Levine. 1,872,472; Aug. 16.
Spring hanger, Making a. H. Miller. 1,872,319; Aug. 16.
Spring shackle. H. D. Geyer. 1,871,981; Aug. 16.
Spring suspension. K. E. Lyman. 1,872,311; Aug. 16.
Springs to a support, Means to secure coiled. D. S. Barnard. 1,871,440; Aug. 16.
Stall for starting race horses. C. M. Waite. 1,871,639; Aug. 16.
Stamp, Time. R. H. Thompson and L. Graves. 1,872,049; Aug. 16.
Starch, Method of and mechanism for conditioning. H. W. Harrigan. 1,872,284; Aug. 16.
Starter, Engine. E. R. Kuhls. 1,871,892; Aug. 16.
Starting apparatus, Engine. J. B. Dyer and J. W. Lawson. 1,871,966; Aug. 16.
Steam boiler. E. C. Kline. 1,872,464; Aug. 16.
Steam generating apparatus. M. Resek. 1,871,859; Aug. 16.
Steam producing unit. C. B. Grady. 1,872,138; Aug. 16.
Steaming tube. A. J. Allen. 1,872,549; Aug. 16.
Steel building construction. A. B. Patterson. 1,871,913; Aug. 16.
Steel cutting machine, Structural. C. E. Loos and O. F. Troeger. 1,872,086; Aug. 16.
Stencil making method and apparatus. H. P. Elliott. 1,872,130; Aug. 16.
Stepladder. J. Huck. 1,871,693; Aug. 16.
Stoker feeding mechanism. M. W. Best. 1,871,653; Aug. 16.
Stone brick, Making artificial. R. B. Stuckey. 1,872,522; Aug. 16.
Storage elevator, Automobile. H. D. James. 1,871,795; Aug. 16.
Storage system. F. T. Kern. 1,872,457–8; Aug. 16.
Stove, Gas heater. M. W. Wood. 1,871,574; Aug. 16.
Stretcher. T. J. Flanagan. 1,871,680; Aug. 16.
Stretcher, Folding sweater. H. O. Cook. 1,871,587; Aug. 16.
Stretcher, Shoe. C. B. Kosters. 1,871,854; Aug. 16.
Strings or strands, Method and apparatus for stringing. H. Willshaw, S. N. Goodhall, M. Green, and C. Folliss. 1,871,766; Aug. 16.
Strip labeler. W. M. McNeil and B. T. Ballard. 1,871,718; Aug. 16.
Stripping machine. E. L. Patten. 1,872,327; Aug. 16.
Structures, Apparatus and method for molding composite. H. D. Geyer. 1,871,982; Aug. 16.
Structures, Examining. W. Späth. 1,871,756; Aug. 16.
Strut for shoulder finishing machine, Spring loaded. C. G. Schmid and A. C. Rasmussen. 1,871,473; Aug. 16.
Stuffing box. C. Card. 1,872,117; Aug. 16.
Suitcase lock. E. B. Stone. 1,871,759; Aug. 16.
Sulphur from oils, Removing. A. P. Sachs. 1,872,349; Aug. 16.
Support. A. S. Luff. 1,871,625; Aug. 16.
Support and shoe protector, Trackman's arch. C. Hagg and E. C. Lager. 1,872,573; Aug. 16.
Support and spacer, Bar. L. Lampert. 1,871,809; Aug. 16.
Support for ironing boards, Clothes. L. E. McLain. 1,871,818; Aug. 16.
Support for power tools. E. W. Stevens and D. A. Young. 1,871,757; Aug. 16.
Support, Shelf. F. R. Eaglesfield. 1,872,429; Aug. 16.
Supporter loop, Garment. G. I. Jeralds. 1,872,461; Aug. 16.
Surfacing, Forming marked. H. C. and W. H. Schlosser. 1,872,352; Aug. 16.
Surfacing machine. J. L. Drake and L. L. Handy. 1,872,426; Aug. 16.
Surgical dressing. C. Dreyfus. 1,872,076; Aug. 16.
Switch: *See*—
Electric switch. Signal switch.
Mercury switch.
Switch. H. E. Norviel. 1,871,858; Aug. 16.
Switchboard apparatus, Theater. J. C. Masek. 1,872,156; Aug. 16.
Switch box, Outdoor. H. G. Nichols. 1,872,323; Aug. 16.
Switch construction for signaling systems. B. L. Bobroff. 1,872,395; Aug. 16.
Switch equipment, Line. G. E. Stonebridge. 1,872,518; Aug. 16.
Switch handle. M. Guett. 1,871,605; Aug. 16.
Switch mechanism. A. Corbett. 1,872,249; Aug. 16.
Switch mechanism. A. H. Kehoe and L. W. McCullough. 1,872,298; Aug. 16.
Switch mechanism. H. K. Krantz. 1,872,303; Aug. 16.
Syringe. J. V. Howard. 1,871,523; Aug. 16.
Table leg lock. G. W. Hambrook and W. E. Clarin. 1,871,686; Aug. 16.
Table top R. M. Higgs. 1,871,884; Aug. 16.
Tag, Marking. E. B. Van Norden. 1,872,613; Aug. 16.
Tank: *See*—
Gas filled tank.
Tank for carbonating systems, Pressure booster. H. L. Johnson and J. E. Treanor. 1,872,462; Aug. 16.
Tank furnace, Continuous. F. Fraser. 1,872,437; Aug. 16.
Tank structure. F. Llewellyn. 1,872,308; Aug. 16.
Tar, Apparatus for distillating. S. P. Miller. 1,871,550; Aug. 16.
Tar, Dehydration and distillation of E. H. Elms. 1,871,596; Aug. 16.
Tarpaulin. L. N. Weber. 1,871,570–1; Aug. 16.
Teapot, Counter service. J. G. Luttrell. Des. 87,586; Aug. 16.
Telegraph printer. E. F. Watson. 1,871,933; Aug. 16.
Telephone system. J. I. Bellamy. 1,872,558; Aug. 16.
Telegraph system, Printing. F. J. Singer and L. A. Gardner. 1,871,923; Aug. 16.
Temperatures and the like, Method and apparatus for controlling. L. E. Howard. 1,871,691; Aug. 16.
Tennis racket frame. W. Bancroft. 1,871,578; Aug. 16.
Tension indicator. W. R. Martin. 1,872,087; Aug. 16.
Testing machine. R. L. Templin. 1,872,047; Aug. 16.
Testing machine. G. A. Williams and F. T. Eales. 1,871,935; Aug. 16.

Textile fabric or a similar article, Embroidered. E. W. Freudenberg. Des. 87,568; Aug. 16.
Textile fabric or similar article, Embroidered. J. Hartmann. Des. 87,573; Aug. 16.
Textile web dyeing process. J. C. Senior. 1,871,920; Aug. 16.
Thermionic tube. T. R. Goldsborough. 1,872,274; Aug. 16.
Thermoresponsive apparatus. J. D. Wood. 1,872,208; Aug. 16.
Threading device, Portable. H. M. Olmstead. 1,871,732; Aug. 16.
Tier mechanism for hay presses. W. V. Howard. 1,871,885; Aug. 16.
Tight center bar. G. Langford. Re18,568; Aug. 16.
Tile board, Apparatus for manufacturing. R. Ericson. 1,871,563; Aug. 16.
Tile board, Manufacturing. R. Ericson. 1,871,843; Aug. 16.
Timepieces, Winding and setting device for. H. Wilsdorf. 1,871,936; Aug. 16.
Time service system. A. M. Trogner. 1,871,636; Aug. 16.
Tip for mechanical pencils. W. H. Lindemon. 1,872,151; Aug. 16.
Tire carrier. F. H. Le Jeune. 1,872,150; Aug. 12.
Tool. A. R. Kerr. 1,871,616; Aug. 16.
Tool, Brake lining. E. H. Peterson and W. H. Odlum. 1,872,493; Aug. 16.
Tool, Finishing. A. H. Cousins. 1,871,880; Aug. 16.
Tool, Fluid pressure. G. M. Nell. 1,871,726; Aug. 16.
Tool, Fluid pressure. E. W. Stevens. 1,871,758; Aug. 16.
Tool for dressing the grindstones in wood grinders. A. Eisenhans. 1,871,448; Aug. 16.
Tool retainer, Drill. G. Rauberstrauch. 1,872,499; Aug. 16.
Tool, Spring. V. S. Hansen. 1,872,579; Aug. 16.
Tooth, Artificial. J. F. Caldwell. 1,872,071; Aug. 16.
Tooth formation and arrangement for rotary drilling. C. E. Reed. 1,871,736; Aug. 16.
Top. J. H. Wily. 1,872,203; Aug. 16.
Top frame and grid construction for open-top gas ranges. T. E. Taylor. 1,872,019; Aug. 16.
Torch structure, Cutting. C. J. Coberly. 1,872,408; Aug. 16.
Torch tip. C. J. Coberly. 1,872,409; Aug. 16.
Torch tip with deflectors. C. J. Coberly. 1,872,619; Aug. 16.
Totalizer, Demand. G. G. Waite. 1,872,370; Aug. 16.
Toy. D. S. Williams. 1,872,544; Aug. 16.
Toy building. C. L. Stephenson. Des. 87,603; Aug. 16.
Toy, Figure. C. F. Smithson and G. C. Owens. 1,872,192; Aug. 16.
Toy house or similar article. L. L. Weiss. Des. 87,610; Aug. 16.
Toy, Inflatable. C. W. Hubbell. Des. 87,580; Aug. 16.
Toy pistol. E. S. Peake. 1,872,093; Aug. 16.
Toy, Roller coaster. J. H. Wily. 1,872,204; Aug. 16.
Toy vehicle. J. E. Hester. 1,872,289; Aug. 16.
Toy whistle. F. X. Wieshaber. Des. 87,612; Aug. 16.
Track and switch construction, Mine. M. Goff. 1,871,511; Aug. 16.
Track, Railway car. C. J. W. Clasen. 1,871,778; Aug. 16.
Traction apparatus. C. A. Henneuse. 1,872,450; Aug. 16.
Traction wheel. N. C. Harris. 1,872,079; Aug. 16.
Tractor hitch. F. J. Bolen. 1,872,106; Aug. 16.
Traitor mounting for grain blowers. H. C. Wallace. 1,871,930; Aug. 16.
Trailer. J. Van Vorst. 1,871,828; Aug. 16.
Train control system. A. G. Shaver. 1,872,515; Aug. 16.
Transfer comb. C. C. Alvord. 1,872,023; Aug. 16.
Transfer mechanism. Z. P. Candee. 1,872,402; Aug. 16.
Transfer mechanism for production of printing plates. G. Goebel. 1,872,273; Aug. 16.
Transformer. H. Halperin and K. W. Miller. 1,872,575; Aug. 16.
Transformer. J. K. Hodnette and P. L. Bellaschi. 1,872,293; Aug. 16.
Transforming device. F. J. Fischer. 1,872,435; Aug. 16.
Transmission and steering mechanism. R. H. White. 1,872,541; Aug. 16.
Transmission line device. K. Pohlhausen. 1,872,605; Aug. 16.
Transmission measuring system. F. H. Best. 1,871,944; Aug. 16.
Transmission mechanism. B. H. Flynn. 1,871,975; Aug. 16.
Transmission regulator system. R. C. Cordeman. 1,871,959; Aug. 16.
Trap: *See*—
Animal trap.
Traveling case, Wardrobe. T. M. House. 1,872,084; Aug. 16.
Tray, Card table. G. A. Noetzel. 1,872,491; Aug. 16.
Tray, Heated. G. Keul. 1,871,705; Aug. 16.
Trenching machine. J. H. Macdonald. 1,871,856; Aug. 16.
Trichloro ethyl urethane salt of 4-dimethyl amino-1-phenyl-2.3-dimethyl pyrazolone. J. Callsen. 1,871,950; Aug. 16.
Trimming device, Portable. S. J. Haddad. 1,871,606; Aug. 16.
Truck, Lateral motion freight car. F. L. Barber and E. W. Webb. 1,872,102; Aug. 16.
Truck mixer. J. Eggert. 1,872,624; Aug. 16.
Truing device for the wheels of grinding machines. S. Einstein and L. F. Nenninger. 1,871,504; Aug. 16.
Tube: *See*—
Dental X-ray tube. Photo-electric tube.
Discharge tube. Steaming tube.
Heating tube. Thermionic tube.
Tube capping machine, Collapsible. V. Koenigshofer. 1,871,799; Aug. 16.
Tubes, Mechanism for forming spirally wound multi-sided. S. T. Maltby. 1,872,152; Aug. 16.
Tubular articles, Welding. B. T. Andren, W. F. Heineman, and W. E. Crawford. 1,872,055; Aug. 16.
Two cycle engine. H. B. Greening and J. W. Galloway. 1,872,277; Aug. 16.
Typewriters, Paper feeding and retaining arrangement for. J. J. Cooper. 1,871,445; Aug. 16.
Universal joint. C. W. Weiss. Re18,570; Aug. 16
Vacuum cleaner. J. A. Loewinsohn. 1,871,624; Aug. 16.
Vacuum electric tube device. E. Y. Robinson. 1,872,010; Aug. 16.
Vacuum electric tube device. E. Y. Robinson. 1,872,344; Aug. 16.
Vacuum servo brake. G. P. Berry. 1,872,390; Aug. 16.
Vacuum tank. J. A. Dienner. 1,872,419; Aug. 16.
Vacuum tube device. D. Ulrey. 1,872,336; Aug. 16.
Valve. E. J. Lattner. 1,871,535; Aug. 16.
Valve adjusting mechanism. R. R. Hutchison. 1,872,083; Aug. 16.
Valve, Automatic vacuum. W. B. Anderson. 1,872,383; Aug. 16.
Valve cage. H. J. Mastenbrook. 1,872,157; Aug. 16.
Valve, Carbon dioxide drum. E. D. Hale. 1,872,574; Aug. 16.
Valve, Check. G. D. Hoffman. 1,871,984; Aug. 16.
Valve, cock, and the like. J. W. Brindley. 1,872,632; Aug. 16.
Valve, Float. S. F. Bashara. 1,871,579; Aug. 16.
Valve for alemite fitting connections, Greaser. D. R. Yarnall. 1,872,211; Aug. 16.
Valve for carburetor, Choke. D. Cole. 1,872,412; Aug. 16.
Valve for filtering devices. A. Wright and F. W. Young. 1,872,209; Aug. 16.
Valve for receptacle filling apparatus, Plunger. C. N. Bergmann. 1 872,103; Aug. 16.
Valve for well casings, Safety. E. Gray and R. A. Mueller. 1,872,139; Aug. 16.
Valve, Gate. V. L. Du Bois. 1,871,965; Aug. 16.
Valve holder for tube vulcanizers. W. Breth. 1,871,581; Aug. 16.
Valve, Hydraulic. H. Ernst and C. W. Goodrich. 1,872,626; Aug. 16.
Valve lifter. I. J. Clark. 1,871,498; Aug. 16.
Valve mechanism. G. W. Elsey. 1,871,969; Aug. 16.
Valve operating mechanism, Hydraulic. G. E. A. Hallett. 1,872,141; Aug. 16.
Valve, Rotary. D. D. De Loach. 1,871,502; Aug. 16.
Valve, Time-limit engine-choking. L. C. Frank and D. J. Conant. 1,872,268; Aug. 16.
Valves, Operating means for gate. C. C. Haralson. 1,872,282; Aug. 16.
Vapor electric device. M. Schenkel. 1,871,746; Aug. 16.
Vault, Burial. R. Cohen. Des. 87,562; Aug. 16.
Vault, Burial. W. J. Michael. Des. 87,588–9; Aug. 16.
Vault, Burial. C. J. Wegner. Des. 87,609; Aug. 16.
Vehicle. J. A. Doody. 1,871,592; Aug. 16.
Vehicle chassis frame. F. L. Sage. 1,872,506; Aug. 16.
Vehicle, Child's. W. H. Appleby. 1,872,216; Aug. 16.
Vehicle direction indicator signal, Motor. A. E. Hall. Des. 87,570; Aug. 16.
Vehicle or similar article, Child's. J. A. Anderson. Des. 87,560; Aug. 16.
Vehicle shipping device. M. E. Stallsmith. 1,871,808; Aug. 16.
Vehicle, Six wheel. E. O. Schjolin. 1,872,013; Aug. 16.
Ventilation, Elevator. F. C. Reilly. 1,872,007; Aug. 16.
Vessels, Device for locating sunken. G. Zahrajian. 1,872,212; Aug. 16.
Vibrating device. R. G. Richardson. 1,872,341; Aug. 16.
Vibrator device. G. L. Cannon. 1,872,403; Aug. 16.
Voltage regulation of alternating current long distance lines. R. Rüdenberg and E. Friedländer. 1,872,848; Aug. 16.
Voltage testing system, High. R. Tanberg. 1,872,362; Aug. 16.
Vulcanizing annular articles, Apparatus for. C. R. Maynard. 1,872,158; Aug. 16.
Wall construction. E. F. Techmer. 1,872,526–7; Aug. 16.
Walling, Imitation. A. Jasinski. 1,871,887; Aug. 16.
Warmer, Windshield. C. A. Morgan. 1,871,722; Aug. 16.
Warning signal, Cross street vision. I. Lichtenstein. 1,871,894; Aug. 16.
Warp let-off attachment. H. I. Hansen and J. A. Hinrichs. 1,871,517; Aug. 16.
Warping apparatus. B. A. Peterson. 1,872,179; Aug. 16.
Watchcase heater. H. T. Kraft. 1,871,620; Aug. 16.
Watch mounting. A. E. Manheimer. 1,871,898; Aug. 16.
Watch, Strap. A. E. Manheimer. 1,871,897; Aug. 16.
Watch, Wrist. A. E. Manheimer. 1,871,896; Aug. 16.
Water tube boiler. G. H. Daniels. 1,871,500; Aug. 16.
Weaving ring. A. L. Hansen. 1,872,281; Aug. 16.

Web-feeding and cutting machine. H. A. Sévigné. 1,872,513; Aug. 16.
Wedge. F. E. L. Trimbach, P. Robin, and G. Steinmetz. 1,871,481; Aug. 16.
Welding. A. G. de Golyer. 1,872,254–5; Aug. 16.
Welding, Apparatus for arc. H. J. Burnish. 1,872,241; Aug. 16.
Welding, Electric arc. L. J. Larson. 1,872,306; Aug. 16.
Welding, Electric arc. W. Richter. 1,872,008; Aug. 16.
Welding, Electric flash. W. E. Crawford. 1,872,125; Aug. 16.
Welding, Electric sheet. C. G. Lloyd. 1,871,712; Aug. 16.
Well drilling appliance. F. L. Le Bus. 1,871,536; Aug. 16.
Well elevator. J. Grant. 1,871,845; Aug. 16.
Welting and its manufacture. P. E. Barbour. 1,872,220; Aug. 16.
Wharf, Floating. A. Smith. 1,871,475; Aug. 16.
Wheel: *See*—
Disk wheel. Traction wheel.
Feed wheel.
Wheel lighting switch, Steering. J. M. Crawford. 1,871,780; Aug. 16.
Wheels, Casting car. C. Cobb, jr. 1,871,586; Aug. 16.
Wheels for car brakes, Head. H. I. Wrigley. 1,872,052; Aug. 16.
Winding for electrical apparatus. H. L. Cole, W. M. Dann, and R. L. Brown. 1,872,247; Aug. 16.
Window construction. E. J. Liebetrau. 1,872,473; Aug. 16.
Window construction. Z. C. Loebel. 1,872,309; Aug. 16.
Window frame. H. G. Klopp. 1,871,618; Aug. 16.
Windshield. J. Hartmann. 1,872,582; Aug. 16.
Windshield cleaner device. M. Romano and C. N. Colstad. 1,872,095; Aug. 16.
Windscreen for vehicles. P. Lane and A. E. Lait. 1,872,468; Aug. 16.
Wings for airplanes, Auxiliary. N. J. Medvedeff. 1,872,163; Aug. 16.
Wiper, Windshield. F. J. Hardman. 1,871,987–8; Aug. 16.
Wireless receiving set. C. Bol, K. Posthumus, J. M. Unk, and C. H. Morel. 1,872,231; Aug. 16.
Woodworking machine. C. F. Vance. 1,871,637; Aug. 16.
Work feeding apparatus. G. W. Foster. 1,872,436; Aug. 16.
Wrapping machine. W. E. Miller. 1,872,488; Aug. 16.
Wrench for automobile hub caps. W. A. Bishman and H. G. Lien. 1,872,392; Aug. 16.
Wringer: *See*—
Mop wringer.
Wringer. E. Engel. 1,872,625; Aug. 16.
Writing guiding machine. C. Marks and C. S. Bruder. 1,871,541; Aug. 16.
Yarns, Dyeing textile. W. Whitehead. 1,871,486; Aug. 16.

CLASSIFICATION OF PATENTS

ISSUED AUGUST 16, 1932

NOTE.—First number—class, second number—subclass, third number—patent number

1— 32: 1,871,922
2— 10: 1,871,461
14: 1,871,534
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213: 1,872,001
243: 1,872,047

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U. S. GOVERNMENT PRINTING OFFICE: 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. & J. Manufacturing Company, Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill. Bowl and mechanical mixer for salads and the like. Serial No. 303,078; Aug. 23. Class 23.

A. & J. Manufacturing Company, Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill. Spoons, spatulas, knives, etc. Serial No. 317,294; Aug. 23. Class 23.

Advance Pattern Co., Inc., New York, N. Y. Patterns. Serial No. 325,205; Aug. 23. Class 26.

Aktiengesellschaft der Osterreichischen Fezfabriken, Vienna, Austria. Hats and knitted and woven caps. Serial No. 316,800; Aug. 23. Class 39.

Albermarle Paper Manufacturing Company, The, Richmond, Va. Blotting paper. Serial No. 328,517; Aug. 23. Class 37.

Aluminum Cooking Utensil Company, The, New Kensington, Pa. Aluminum and aluminum alloy cooking hollow ware. Serial Nos. 328,388–9; Aug. 23. Class 13.

American Molasses Co. of New York, New York, N. Y. Special bread sugar. Serial No. 327,386; Aug. 23. Class 46.

American Sales Book Company, Limited, Toronto, Canada, and Niagara Falls and Elmira, N. Y. Paper and stationery. Serial No. 327,546; Aug. 23. Class 37.

American Stationery Mfg. Co., New York, N. Y., and Habana, Cuba. Lubricating oils and greases. Serial No. 325,864; Aug. 23. Class 15.

American Tissue Mills, Holyoke, Mass. Paper, paper napkins, and handkerchiefs. Serial No. 328,807; Aug. 23. Class 37.

Ansonia O & C Company, The, Ansonia, Conn. Elastic fabrics. Serial No. 328,184; Aug. 23. Class 42.

Arcadia Food Co., New York, N. Y. Maltless powder. Serial No. 328,470; Aug. 23. Class 46.

Armstrong Cork Company, Lancaster, Pa. Polishing preparation for hard surface floor covering. Serial No. 328,572; Aug. 23. Class 16.

Artcraft Silk Hosiery Mills, Inc., Philadelphia, Pa. Women's hosiery. Serial No. 328,774; Aug. 23. Class 39.

Bair & Edgerton Boat Works, Glen Cove, Long Island, N. Y. Portable folding rowboats. Serial No. 328,114; Aug. 23. Class 19.

Beatrice Creamery Company, Chicago, Ill. Frozen custard and sherbert. Serial No. 327,299; Aug. 23. Class 46.

Bechtol and Tratsch, Chicago, Ill. Coin controlled ball-projecting amusement device. Serial No. 327,241; Aug. 23. Class 22.

Belmet Products, Inc., Brooklyn, N. Y. Portable shoulder shower. Serial No. 328,465; Aug. 23. Class 13.

Berger, Robins & Freyman, Inc., New York, N. Y. Clothing. Serial No. 328,568; Aug. 23. Class 39.

Berman-Lurie, Inc., New York, N. Y. Sportswear. Serial No. 327,548; Aug. 23. Class 39.

Bianchini, Ferier, Lyon, France. Piece goods. Serial No. 328,658; Aug. 23. Class 42.

Birk Bros. Malt Products, Inc., Chicago, Ill. Malt syrup. Serial No. 328,259; Aug. 23. Class 46.

Birk Bros. Malt Products, Inc., Chicago, Ill. Malt syrup. Serial Nos. 328,347–8; Aug. 23. Class 46.

Blacktop Equipment Corporation, Johnstown, Pa. Aggregate for road building. Serial No. 328,155; Aug. 23. Class 12.

Block, H. & L., Ltd., San Francisco, Calif. Coats and leather coats, leather jackets, leather vests, etc. Serial No. 327,496; Aug. 23. Class 39.

Blum, Fannie, doing business as Fanna Polishine Co., Brooklyn, N. Y. Cleanser and polish. Serial No. 326,778; Aug. 23. Class 4.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabric. Serial No. 328,519; Aug. 23. Class 42.

Bossert Corporation, The, Utica, N. Y. Sinks. Serial No. 328,084; Aug. 23. Class 13.

Brady, Frank C., Seattle, Wash. Stereopticon slide. Serial No. 327,843; Aug. 23. Class 26.

Brittains Limited, Cheddleton, near Leek, England. Tissue papers. Serial No. 326,667; Aug. 23. Class 37.

Brittains Limited, Cheddleton, near Leek, England. Tissue papers. Serial No. 327,388; Aug. 23. Class 37.

Brokaw, Lee M., doing business as Metab-O-Lisor Co., Glendale, Calif. Therapy apparatus. Serial No. 328,320; Aug. 23. Class 44.

Brunswick-Balke-Collender Company, doing business as Phoenix Slate Company, Wilmington, Del., and Chicago, Ill. Billiard tables and parts of billiard tables composed of slate. Serial No. 327,042; Aug. 23. Class 22.

Brunswick-Balke-Collender Company, Wilmington, Del., and Chicago, Ill. Carom balls for billiards. Serial No. 327,901; Aug. 23. Class 22.

Canter Marvin, doing business as Continental Asbestos & Refining Co., New York, N. Y. Composition flooring material. Serial No. 328,659; Aug. 23. Class 12.

Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. Serial Nos. 328,776–7; Aug. 23. Class 42.

Champion Spark Plug Company, Toledo, Ohio. Spark plug testers. Serial No. 327,678; Aug. 23. Class 26.

Checker Beverage Co., Chicago, Ill. Maltless beverage, syrups, etc. Serial No. 328,160; Aug. 23. Class 45.

Chein, J., & Company, Harrison, N. J. Toy pistols. Serial No. 328,521; Aug. 23. Class 22.

Chester-Pollard Amusement Co. Inc., New York, N. Y. Table billiards-golf game, table baseball game, etc. Serial No. 328,237; Aug. 23. Class 22.

Clayton Magazines, Inc., The, New York, N. Y. Periodical. Serial No. 327,461; Aug. 23. Class 38.

Continental Asbestos & Refining Co. (See Canter, Marvin.)

Courtaulds, Limited, London, England. Piece goods. Serial Nos. 328,725–6; Aug. 23. Class 42.

Creme Orange Products Co. Ltd., Los Angeles, Calif. Powder for manufacture of fruit juice beverages. Serial No. 319,599; Aug. 23. Class 46.

Curran, Alton F., doing business as A. F. Curran Co., Malden, Mass. Liquid soaps and cleaners. Serial No. 325,322; Aug. 23. Class 4.

Dell 'Omo, Joseph, Brooklyn, N. Y. Canned olive oil. Serial No. 317,030; Aug. 23. Class 46.

Deutsche Gold- & Silber Scheideanstalt Frankfort-on-the-Main, Germany. Paper. Serial No. 318,206; published Aug. 23. Class 37.

Dewitt & Herz, Inc., New York, N. Y. Surgical instruments. Serial No. 328,392; Aug. 23. Class 44.

Dick, A. B., Company, Chicago, Ill. Sheet feeding and impression rollers for rotary duplicating and like machines. Serial No. 324,550; Aug. 23.

Dixon, Joseph, Crucible Company, Jersey City, N. J. Pencils. Serial No. 328,838; Aug. 23. Class 37.

Drew, Irving, Co., The, Portsmouth, Ohio. Women's shoes. Serial No. 327,584; Aug. 23. Class 39.

Edgar, John C., doing business as Mid-States Oil Company, Special lubricating oils. Serial No. 327,846; Aug. 23. Class 15.

Electric Auto-Lite Company, The, Toledo, Ohio. Electric generating, storage and ignition systems, engine electric starting systems, and parts thereof, etc. Serial No. 312,906; Aug. 23. Class 21.

Electric Storage Battery Company, Philadelphia, Pa. Storage batteries, parts, connectors, etc. Serial No. 327,629; Aug. 23. Class 21.

Electro Products Company. (See Stewart, Patterson O.)

Enterprise Manufacturing Company, The, Akron, Ohio. Fishing reels. Serial No. 328,783; Aug. 23. Class 22.

Fanna Polishine Co. (See Blum, Fannie.)

Fashion Park Associates, Inc., Rochester, N. Y. Sweaters, hats, caps, neckties, etc. Serial No. 328,394; Aug. 23. Class 39.

Field and Flint Co., Brockton, Mass. Boots and shoes. Serial No. 328,599; Aug. 23. Class 39.

Flameking Company, Inc., New York, N. Y. Burners for solid carbonaceous fuel. Serial No. 327,929; Aug. 23. Class 34.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. Serial No. 317,928; Aug. 23. Class 42.

Frigie Corporation of America, Chicago, Ill. Frozen flavored and sweetened water known as water ice, frozen bar with milk base and chocolate coating, etc. Serial No. 326,420; Aug. 23. Class 46.

Frost Lumber Industries, Inc., Shreveport, La. Lumber. Serial No. 328,601; Aug. 23. Class 12.

Gantner & Mattern Company, San Francisco, Calif. Swimming suits, swimming trunks, sweaters, and underwear. Serial No. 326,815; Aug. 23. Class 39.

Gibbons, Floyd, New York, N. Y. Shirts. Serial No. 328,328; Aug. 23. Class 39.

Gillette, Lewis W., doing business as Gillette Shaving Cream Co., Pittsburgh, Pa. Shaving cream. Serial No. 317,082; Aug. 23. Class 4.

Goodrich, B. F., Company, doing business as Miller Rubber Company Inc., New York, N. Y., and Akron, Ohio. Surgeons' gloves. Serial No. 317,553; Aug. 23. Class 44.

Grainger, W. B., Packing Company, Salinas, Calif. Fresh vegetables. Serial No. 327,396; Aug. 23. Class 46.

Harding, Mary, Utica, N. Y. French dressing. Serial No. 325,275; Aug. 23. Class 46.

Harpham, Julius V., doing business as Payne Glove Co., Lincoln, Nebr. Gloves and mittens. Serial No. 315,141; Aug. 23. Class 39.

Hoberg Paper & Fibre Company, Green Bay, Wis. Toilet paper, paper towels and napkins. Serial Nos. 328,487–9; Aug. 23. Class 37.

Hoberg Paper & Fibre Company, Green Bay, Wis. Toilet paper. Serial No. 328,490; Aug. 23. Class 37.

Horn, A. C., Company, Long Island City, N. Y. Plastic roof coating. Serial No. 321,563; Aug. 23. Class 12.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Illinois Paper Company, Chicago, Ill. Stencils and stencil correction varnish. Serial No. 304,375; Aug. 23. Class 37.
Jewelers Syndicate. (See Piper, Warren.)
Johnson, S. C., & Son, Racine, Wis. Paint enamels. Serial No. 326,682; Aug. 23. Class 16.
Johnson, S. C., & Son, Racine, Wis. Paint enamels and undercoats. Serial No. 326,683; Aug. 23. Class 16.
Johnson, S. C., & Son, Inc., Racine, Wis. Mops and dusters. Serial No. 327,222; Aug. 23. Class 29.
Kay, Frank, Bolton, England. Metal pipe-joints. Serial No. 328,792; Aug. 23. Class 13.
Keeling, Mary M., Bristol, Va. Preparation for the treatment of catarrh, asthma and hay fever. Serial No. 323,471; Aug. 23. Class 6.
Kleinert, I. B., Rubber Company, New York, N. Y. Garters. Serial No. 328,612; Aug. 23. Class 39.
Kolster Radio, Inc., Newark, N. J. Radio receiving sets, transformers, coils and condensers, etc. Serial No. 328,242; Aug. 23. Class 21.
Krause, Earnest J., doing business as Radiobar Company of America, Beverly Hills, Calif. Cabinets for radio receiving sets. Serial No. 326,374; Aug. 23. Class 32.
Larkwood Silk Hosiery Mills, Inc., Charlotte, N. C. Hosiery. Serial No. 321,385; Aug. 23. Class 39.
Leo, Beniamino, Chicago, Ill. Maltless beverage. Serial No. 328,533; Aug. 23. Class 45.
Les Compagnies Reunies des Glaces & Verres Speciaux du Nord de la France. Boussois-sur-Sambre (Nord), France. Plate glass and glass for mirrors. Serial No. 327,824; Aug. 23. Class 33.
Little Bear Specialties Co., Inc., Kansas City, Mo. Top of the bandalore type and parts therefor. Serial No. 328,438; Aug. 23. Class 22.
Lowe, Joe, Corporation, Brooklyn, N. Y. Blend of pure dehydrated egg yolk, etc. Serial Nos. 327,557–8; Aug. 23. Class 46.
Lubri-Graph Corporation, The, Cleveland, Ohio. Lubricating oils and greases. Serial No. 328,275; Aug. 23. Class 15.
Lyndonville Canning Company, Inc., Lyndonville, N. Y. Canned applesauce and peas. Serial No. 327,633; Aug. 23. Class 46.
Lyons Fertilizer Company, Tampa, Fla. Soil conditioner. Serial No. 326,687; Aug. 23. Class 10.
Mayers & Schiller, Inc., New York, N. Y. Ladies' undergarments. Serial No. 324,145; Aug. 23. Class 39.
McCarty Aniline & Extract Co. Inc., New York, N. Y. Preparation for coating, sizing and stiffening rugs. Serial No. 315,972; Aug. 23. Class 6.
McLellan, Wm. L., Company, The, Norwalk, Conn. Boiler compounds for removing scale and preventing corrosion. Serial No. 323,900; Aug. 23. Class 6.
Melville Shoe Corporation, New York, N. Y. Shoes. Serial No. 328,360; Aug. 23. Class 39.
Metab-O-Lizor Co. (See Brokaw, Lee M.)
Michaels Bros., Brooklyn, N. Y. Refrigerators. Serial No. 328,695; Aug. 23. Class 31.
Michel, Dr. G. H., and Company, Cleveland, Ohio. Preparations for preparing and preserving dead bodies for burial. Serial No. 323,583; Aug. 23. Class 6.
Mid-States Oil Company. (See Edgar, John C.)
Miller Rubber Company Inc. (See Goodrich, B. F., Company.)
Mutual Grocery Co., Inc. (See Wilkinson, Gaddis & Company.)
Naamlooze Vennootschap Vereenigde Chemische Fabrieken, Utrecht, Netherlands. Manure. Serial No. 317,525; Aug. 23. Class 10.
Nathan, Jean, New York, N. Y. Skin lotion. Serial No. 328,446; Aug. 23. Class 6.
National Refining Company, Seattle, Wash. Motor lubricating oils. Serial No. 324,185; Aug. 23. Class 15.
Nu-Set Specialty Co., Inc., New York, N. Y. Gelatine. Serial No. 328,367; Aug. 23. Class 46.
Orange-Crush Company, Chicago, Ill. Candy and ice cream. Serial No. 322,648; Aug. 23. Class 46.
Orlandella, Felice, Boston, Mass. Laxative salt. Serial No. 328,368; Aug. 23. Class 6.
Payne Glove Co. (See Harpham, Julius V.)
Penny, J. C., Company, Wilmington, Del., and New York, N. Y. Shoes. Serial No. 328,582; Aug. 23. Class 39.
Perez, Marcelino, & Company, Tampa, Fla. Cigars. Serial No. 328,029; Aug. 23. Class 17.
Pernice, Joseph T., New York, N. Y. Financial publication. Serial No. 326,449; Aug. 23. Class 38.
Perry, E. S., Limited, London, England. Penpoints, penholders, and inkstands. Serial No. 324,757; Aug. 23. Class 37.
Phoenix Slate Company. (See Brunswick-Balke-Collender Company.)
Piper, Warren, doing business as Jewelers Syndicate, Chicago, Ill. Bulletins and pamphlets, etc. Serial No. 323,252; Aug. 23. Class 38.
Poster Products, Inc., Chicago, Ill. Games comprising felt pieces assembled to form puzzles, pictures, words, etc. Serial No. 328,536; Aug. 23. Class 22.
Radiobar Company of America. (See Krause, Earnest J.)
Ripley, Harold A., Washington, D. C. Newspaper column. Serial No. 327,528; Aug. 23. Class 38.
Ripley, Harold A., Washington, D. C. Section of magazines and newspapers. Serial No. 327,774; Aug. 23. Class 38.
Rosenau Bros. Inc., Philadelphia, Pa. Children's dresses, suits, and rompers. Serial No. 327,921; Aug. 23. Class 39.
Rubber Shock Insulator Corporation, Bridgeport, Conn. Rubber vibration eliminating supports for machinery. Serial No. 284,746; Aug. 23. Class 28.
Safe-T-Lite, Inc., Minneapolis, Minn. Glare deflector for automobile headlights. Serial No. 326,914; Aug. 23. Class 19.
Scheidt, Adam, Brewing Company, Norristown, Pa. Malt syrup. Serial No. 328,372; Aug. 23. Class 46.
Schnackel's, C., Son, Inc., Rochester, N. Y. Oil filters and pads. Serial No. 327,836; Aug. 23. Class 23.
Service Glass Company, Evansville, Ind. Glass. Serial No. 328,040; Aug. 23. Class 33.
Sichel, Ferdinand, Kommanditgesellschaft, Hanover-Limmer, Germany. Colours and paints. Serial No. 306,375; Aug. 23. Class 16.
Signal Oil and Gas Company, Los Angeles, Calif. Gasoline. Serial No. 322,972; Aug. 23. Class 15.
Simonds Saw and Steel Company, Fitchburg, Mass. Files. Serial No. 328,041; Aug. 23. Class 23.
Societe Anonyme des Eaux Minerales d'Evian-les-Bains, Paris, France. Mineral waters. Serial No. 327,111; Aug. 23. Class 45.
Sponge Rubber Products Co., The, Derby, Conn. Sponge rubber. Serial No. 328,079; Aug. 23. Class 1.
Stafford, S. S., Inc., New York, N. Y. Bottles of writing ink. Serial No. 314,661; Aug. 23. Class 11.
Stewart, Patterson O., doing business as Electro Products Company, New York, N. Y. Ignition devices. Serial No. 327,638; Aug. 23. Class 21.
Strathmore Paper Company, Mittineague, Mass. Writing and printing paper. Serial No. 325,604; Aug. 23. Class 37.
Strutwear Knitting Company, Minneapolis, Minn. Hosiery and underwear. Serial No. 328,707; Aug. 23. Class 39.
Sun Radio, Inc., Akron, Ohio. Golf balls. Serial No. 328,821; Aug. 23. Class 22.
Tennessee Eastman Corporation, Kingsport, Tenn. Denaturant for alcohol. Serial No. 328,376; Aug. 23. Class 6.
Timken-Detroit Axle Company, Detroit, Mich. Differential gearing. Serial No. 317,861; Aug. 23. Class 23.
Urruela, Manuel, New York, N. Y. Weekly publication. Serial No. 327,035; Aug. 23. Class 38.
Vanderbilt, R. T., Company, Inc., New York, N. Y. Clay. Serial Nos. 327,176–7; Aug. 23. Class 1.
Veldown Company, Inc., New York, N. Y. Sanitary pads. Serial No. 328,804; Aug. 23. Class 44.
Viscose Company, Marcus Hook, Pa. Rayon yarn. Serial No. 328,854; Aug. 23. Class 43.
W-W Manufacturers, Abilene, Tex. Maltless soft drink powder. Serial No. 317,786; Aug. 23. Class 45.
Wassell, William S., doing business as The Wassell Pie Bakery, Philadelphia, Pa. Pastries. Serial No. 320,653; Aug. 23. Class 46.
Wilkinson, Gaddis & Company, doing business as Mutual Grocery Co., Inc., Newark, N. J. Tea, coffee, eggs, cocoa, bread, etc. Serial No. 326,348; Aug. 23. Class 46.
Wood Parts, Incorporated, West Helena, Ark. Toys, toy vehicles, etc. Serial Nos. 322,150–51; Aug. 23. Class 22.
Young, L. A., Company, Detroit, Mich. Wood and metal golf clubs. Serial No. 328,901; Aug. 23. Class 22.
Youngs Rubber Corporation, Inc., New York, N. Y. Prophylactic rubber articles. Serial No. 326,879; Aug. 23. Class 44.
Zbinden, H. & H., Brooklyn, N. Y. Metal polish. Serial No. 328,653; Aug. 23. Class 4.
Zeller, Louis W., doing business as Zeller Products Company, New York, N. Y. Cleaning and scouring powders, soaps, etc. Serial No. 327,608; Aug. 23. Class 4.

LIST OF REGISTRANTS OF TRADE-MARKS

Accurate Parts Manufacturing Company, The, Cleveland, Ohio. Screws, bolts, nuts, etc. 296,766; Aug. 23; Serial No. 319,190; published June 7, 1932. Class 13.
Acme Staple Company, Camden, N. J. Stapling machines, binding machines, and tacking machines using metal staples. 296,915; Aug. 23; Serial No. 325,547; published June 7, 1932. Class 23.
Actien-Gesellschaft für Anilin-Fabrikation, Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Pharmaceutical products. 89,367; renewed Nov. 25, 1932.
Actien-Gesellschaft für Anilin-Fabrikation, Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Solvents. 89,595; renewed Dec. 31, 1932.
Adams Bag Company, The, Chagrin Falls, Ohio. Heavy paper shipping sacks. 296,937; Aug. 23. Class 2.
Alaska Livestock & Packing Company, Seattle, Wash. Dog food. 296,507; Aug. 23; Serial No. 326,006; published May 24, 1932. Class 46.
Albermarle Paper Manufacturing Company, The, Richmond, Va. Blotting paper. 296,935; Aug. 23. Class 37.
Al-Oys, Inc., Chicago, Ill. Asphalt and an asphaltic preparation for the protection of structural surfaces. 296,774; Aug. 23; Serial No. 325,549; published June 7, 1932. Class 12.
American Crayon Company, The, Sandusky, Ohio. Ink. 296,776; Aug. 23; Serial No. 325,312; published May 17, 1932. Class 11.
American Oak Preserving Company, The. (See Vorm, Charles.)
American Printing Ink Co., The, Cincinnati, Ohio. Printing ink. 87,587; renewed July 30, 1932.
American Trust Company, San Francisco, Calif. Fresh vegetables. 296,782; Aug. 23; Serial No. 326,702; published June 7, 1932. Class 46.
Animal Foods Company. (See Coan, N. C.)
Ansted & Burk Co., The, Springfield, Ohio. Wheat flour. 88,043; renewed Aug. 27, 1932.
Atlantic Macaroni Co., assignor to The Atlantic Macaroni Co., Inc., Long Island City, N. Y. Macaroni. 89,798; renewed Jan. 14, 1933.
Atlantic Macaroni Co., The, assignor to The Atlantic Macaroni Co., Inc., Long Island City, N. Y. Macaroni. 89,803; renewed Jan. 14, 1933.
Atlantic Macaroni Co., The, assignor to The Atlantic Macaroni Co., Inc., Long Island City, N. Y. Macaroni. 89,805; renewed Jan. 14, 1933.
Atlantic Macaroni Co., The, assignor to The Atlantic Macaroni Co., Inc., Long Island City, N. Y. Macaroni. 89,807; renewed Jan. 14, 1933.
Atlas Supply Company, Newark, N. J. Automobile goggles. 296,799; Aug. 23; Serial No. 324,947; published June 7, 1932. Class 26.
Austral Window Company, Augusta, Me., and New York, N. Y. Doors and sliding and folding partitions. 296,778; Aug. 23; Serial No. 325,133; published June 7, 1932. Class 12.
B. & B. Shoe Company, Chicago, Ill. Slippers. 296,809; Aug. 23; Serial No. 325,776; published June 7, 1932. Class 39.
Bach, Valentin, doing business as Peck-O-Egg Mfg. Co., Manhattan Beach, Calif. Bird biscuit. 296,806; Aug. 23; Serial No. 326,075; published June 7, 1932. Class 46.
Badische Anilin- & Soda-Fabrik, Ludwigshafen-on-the-Rhine, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Leather preservatives, finishing and tanning agents. 89,611; renewed Dec. 31, 1932.
Bastian-Blessing Company, The, Chicago, Ill. Welding metals. 296,773; Aug. 23; Serial No. 325,896; published May 17, 1932. Class 14.
Beardslee Chandelier Manufacturing Company, assignor to Beardslee Chandelier Manufacturing Company, Chicago, Ill. Lighting appliances and apparatus. 89,329; renewed Dec. 10, 1932.
Bechstein, C., Pianofortefabrik Aktiengesellschaft, Berlin, Germany. Stringed musical instruments. 296,868; Aug. 23; Serial No. 328,983; published June 7, 1932. Class 36.
Beech-Nut Packing Company, Canajoharie, N. Y. Foods. 89,613; renewed Dec. 31, 1932.
Benal Hosiery Co., New York, N. Y. Hosiery. 296,860; Aug. 23; Serial No. 326,204; published June 7, 1932. Class 39.
Bergmann & Simons, G. m. b. H., Mülheim-on-the-Rhine, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. White lead, red lead, orange mineral, and oxid of zinc. 89,087, renewed Nov. 12, 1932.
Binney & Smith Co., New York, N. Y. Adhesive paste. 296,868; Aug. 23; Serial No. 323,773; published June 7, 1932. Class 5.
Blue Grass-Elmendorf Grain Corporation, Lexington, Ky. Dairy feeds and fattening mash. 296,843; Aug. 23; Serial No. 325,614; published June 7, 1932. Class 46.
Boehringer, Albert, Nieder-Ingelheim, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Baking powder. 89,335; renewed Dec. 10, 1932.
Bonita Company, The, Fond du Lac, Wis. Candy. 296,926; Aug. 23; Serial No. 305,846; published Dec. 16, 1930. Class 46.
Boston Fresh Tripe Co., Brighton, Boston, Mass. Pigs' feet, tripe, lambs' tongues, etc. 296,924; Aug. 23; Serial No. 314,551; published June 7, 1932. Class 46.
Bourjois, Inc. (See Gabilla, Henriette, assignor.)
Brambach Piano Company, by change of name to Kohler-Brambach Piano Company, Inc., New York, N. Y. Pianos. 89,433; renewed Dec. 17, 1932.
Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Billiard cue tips. 296,835; Aug. 23; Serial No. 326,975; published June 14, 1932. Class 22.
Burgess Battery Company, Madison, Wis. Electric batteries. 296,905; Aug. 23; Serial No. 326,008; published June 7, 1932. Class 21.
Burgess Cellulose Company, Madison, Wis. Stereotype mats. 296,832; Aug. 23; Serial No. 326,584; published June 7, 1932. Class 37.
Cam Syndicate Limited, London, England. Photographic films, cameras, parts thereof, and photographic projectors. 296,821; Aug. 23; Serial No. 326,077; published June 7, 1932. Class 26.
Cerro de Pasco Copper Corporation, New York, N. Y. Fusible alloys. 296,775; Aug. 23; Serial No. 325,209; published May 24, 1932. Class 14.
Cerro de Pasco Copper Corporation, New York, N. Y. Copper bullion, lead bullion, zinc concentrates, etc. 296,923; Aug. 23; Serial No. 313,420; published May 24, 1932. Class 14.
Champion Shoe Manufacturing Corporation, New York, N. Y. Shoes. 296,810; Aug. 23; Serial No. 325,566; published June 7, 1932. Class 39.
Charter Oak Citrus Association, Charter Oak, Calif. Oranges. 87,423–4; renewed July 16, 1932.
Chemical Foundation, Incorporated, The. (See Actien-Gesellschaft für Anilin-Fabrikation, assignor.)
Chemical Foundation, Incorporated, The. (See Badische Anilin- & Soda-Fabrik, assignor.)
Chemical Foundation, Incorporated, The. (See Bergmann & Simons, G. m. b. H., assignor.)
Chemical Foundation, Incorporated, The. (See Boehringer, Albert, assignor.)
Chemical Foundation, Incorporated, The. (See Deutsche Nährmittel-Werke, Berlin, Ges. Besch. Haftg., assignor.)
Chemical Foundation, Incorporated, The. (See Farbwerke vorm. Meister Lucius & Brüning, assignor.)
Chemical Foundation, Incorporated, The. (See Heseklel, Adolf, assignor.)
Chemical Foundation, Incorporated, The. (See Kalle & Co., Aktiengesellschaft, assignor.)
Chemical Foundation, Incorporated, The. (See Knoll & Co., assignor.)
Chemical Foundation, Incorporated, The. (See Lederer, Ervin, assignor.)
Chemical Foundation, Incorporated, The. (See Schaal, Dr. Eugen, assignor.)
Chemical Foundation, Incorporated, The. (See Valentiner & Schwarz, assignor.)
Chemical Foundation, Incorporated, The. (See Vereinigte Chininfabriken, Zimmer & Co., Ges. mit beschränkter Haftung, assignor.)
Chicopee Manufacturing Corporation, New Brunswick, N. J. Cleaning and polishing fabrics of the hand-receiving or mitt type. 296,815; Aug. 23; Serial No. 326,078; published May 24, 1932. Class 29.
Coan, N. C., doing business as Animal Foods Company, San Jose, Calif. Canned food for dogs, cats, etc. 296,831; Aug. 23; Serial No. 326,457; published June 7, 1932. Class 46.
Collins-Kirk, Inc., Chicago, Ill. Paper dolls. 296,840; Aug. 23; Serial No. 326,459; published June 14, 1932. Class 22.
Commonwealths Collieries, Incorporated, Cincinnati, Ohio. Coal. 296,830; Aug. 23; Serial No. 326,460; published June 7, 1932. Class 1.
Continental Manufacturing Company, Chicago, Ill. Portable power propelled roller equipped vehicle. 296,803; Aug. 23; Serial No. 324,989; published June 7, 1932. Class 23.
Cordes, Henry A., doing business as The H-B Co., Jersey City, N. J. Medicine. 296,786; Aug. 23; Serial No. 324,032; published June 14, 1932. Class 6.
Coules, James D., Boston, Mass. French pastries and ice cream. 296,889; Aug. 23; Serial No. 326,282; published June 7, 1932. Class 46.
Cowles, George P., Waterbury, Conn. Electric clocks. 296,788; Aug. 23; Serial No. 324,221; published May 24, 1932. Class 27.
Cracker Jack Co., The, Chicago, Ill. Popcorn confection. 296,906; Aug. 23; Serial No. 326,071; published June 7, 1932. Class 46.

Creco Company, Inc., Long Island City, N. Y. Liquid soap. 296,765; Aug. 23; Serial No. 318,550; published June 7, 1932. Class 4.

Crofoot, J. B., Co., Chicago, Ill. Stapling machines. 296,904; Aug. 23; Serial No. 325,983; published June 7, 1932. Class 23.

Cupples Company, Manufacturers, St. Louis, Mo. Jar rings. 296,769; Aug. 23; Serial No. 317,841; published Apr. 5, 1932. Class 35.

Daniels, Jay V., assignor to Dearborn Supply Company, Chicago, Ill. Ointment or cream for the complexion. 89,231; renewed Dec. 3, 1932.

Dearborn Supply Company. (See Daniels, Jay V., assignor.)

Deutsche Nährmittel-Werke, Berlin, Ges. Besch. Haftg., Berlin and Saegen, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Dietetic preparations and admixtures thereof with food products and beverages. 39,598; renewed Dec. 30, 1932.

Dick, A. B., Company, Chicago, Ill. Lettering and drafting guides and rulers. 296,811; Aug. 23; Serial No. 325,384; published June 7, 1932. Class 26.

Digest-O-Rem Company. (See Jackovic, John.)

Disston, Henry, & Sons, Incorporated, Philadelphia, Pa. Measuring instruments and indicators. 89,630; renewed Dec. 31, 1932.

Domestic Stoker Company, New York, N. Y. Coal burners and stokers. 296,922; Aug. 23; Serial No. 313,333; published June 7, 1932. Class 34.

Domestic Toiletries, Inc., Cleveland, Ohio. Shaving cream and the like. 296,890; Aug. 23; Serial No. 325,942; published June 7, 1932. Class 4.

Dunton, M. W., Company, The, assignor, by mesne assignments, to The M. W. Dunton Company, Providence, R. I. Friction tape. 86,980; renewed June 18, 1932.

Dunton, M. W., Company, The, assignor, by mesne assignments, to The M. W. Dunton Company, Providence, R. I. Friction tape. 87,436; renewed July 16, 1932.

Du Pont Viscoloid Company, New York, N. Y. Cellulosic plastic in sheets. 296,772; Aug. 23; Serial No. 325,616; published May 17, 1932. Class 50.

E. A. Laboratories, Inc., Brooklyn, N. Y. Electrical warning signals of the acoustical type. 296,928; Aug. 23; Serial No. 295,890; published June 7, 1932. Class 21.

Eaton, Albert M., Waltham, assignor to A. M. Eaton Paper Company, Boston, Mass. Paper. 89,634; renewed Dec. 31, 1932.

Elimar Company, Inc., New York, N. Y. Knickers, trousers, suits, etc. 296,901; Aug. 23; Serial No. 326,137; published June 7, 1932. Class 39.

Empire Bloomer Co., New York, N. Y. Underwear. 296,911; Aug. 23; Serial No. 325,748; published June 7, 1932. Class 39.

Empire State Flour Mills, Syracuse, assignor to The Southwestern Milling Company, Inc., New York, N. Y. Wheat flour. 89,637; renewed Dec. 31, 1932.

Ethical Products Company, The, Waco, Tex. Laxative tablets. 296,853; Aug. 23; Serial No. 325,253; published June 7, 1932. Class 6.

Eureka Water Heater Company, Chicago, Ill. Hot water heaters and gas burners for heating purposes. 86,521; renewed May 14, 1932.

Farbwerke vorm, Meister Lucius & Brüning, Höchst-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Antipyretic, antineuralgic, and sedative. 88,562–4; renewed Oct. 1, 1932.

Farbwerke vorm. Meister Lucius & Brüning, Höchst-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Anti-arthriticum for treating and preventing arthritis and predisposition to lithuria. 89,100; renewed Nov. 12, 1932.

Farbwerke vorm. Meister Lucius & Brüning, Hochst-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Efficacious tonic for heart and uterus. 89,101; renewed Nov. 12, 1932.

Felton Chemical Company, Inc., Brooklyn, N. Y. Natural vanilla, artificial vanilla, and compounds of the same. 296,885; Aug. 23; Serial No. 326,466; published June 7, 1932. Class 46.

Field, John, New York, N. Y. Recording reproducing phonographs and records therefor. 296,785; Aug. 23; Serial No. 319,888; published June 7, 1932. Class 36.

Filter Condenser Corporation, Detroit, Mich. Converters and filters. 296,880; Aug. 23; Serial No. 323,135; published June 7, 1932. Class 21.

Fit Rite Book Cover Company. (See Herz, Jacob.)

Fox, E., Novelty Co., Inc., New York, N. Y. Teething rings. 296,900; Aug. 23; Serial No. 325,973; published June 7, 1932. Class 44.

Fraser, Allen, Philadelphia, Pa. Base metal trays. 296,781; Aug. 23; Serial No. 326,467; published June 7, 1932. Class 13.

Freezette Company. (See Sorino, Ben M.)

Friedland, I. J., doing business as Specialty Sales Company, Atlanta, Ga. Prophylactic rubber articles. 296,894; Aug. 23; Serial No. 326,140; published June 7. 1932. Class 44.

Fries, Harold H., doing business as Fries Bros., New York, N. Y. Emulsifying agent in the nature of a wax. 296,914; Aug. 23; Serial No. 325,465; published June 14, 1932. Class 6.

Fudo Psyllium Corp. (See Lichtenstein, William.)

Fullsong Products Co. (See McGraw, Harvey B.)

Furst-McNess Company, Freeport, Ill. Food flavoring extracts. 296,890; Aug. 23; Serial No. 326,085; published June 7, 1932. Class 46.

Gabilla, Henriette, Paris, France, assignor, by mesne assignments, to Bourjois, Inc., New York, N. Y. Toilet cosmetics. 87,746; renewed Aug. 6, 1932.

Goldring-Neiman Corporation, New York, N. Y. Ladies' coats, suits, dresses, etc. 296,939; Aug. 23. Class 39.

Goldtree, Liebes & Co., San Salvador, Santa Ana, and Sonsonate, Salvador. Wheat flour. 296,897; Aug. 23; Serial No. 325,908; published June 7, 1932. Class 46.

Goodbar Manufacturing Corporation, New York, N. Y. Shoulder straps and stays therefor. 296,938; Aug. 23. Class 40.

Grady-Travers Company, Incorporated, The, New York, N. Y. Polishing and dusting cloths. 296,817; Aug. 23; Serial No. 326,013; published May 31, 1932. Class 29.

Grand Rapids Store Equipment Corporation, Portland, Oreg. Store fixtures. 296,796; Aug. 23; Serial No. 324,887; published June 7, 1932. Class 32.

Great Atlantic & Pacific Tea Company, The, New York, N. Y. Fresh oysters. 296,883; Aug. 23; Serial No. 326,320; published June 7, 1932. Class 46.

Grimm, A. P., Foundry Company, Inc., Bound Brook, N. J. Aluminum alloys. 296,800; Aug. 23; Serial No. 324,901; published May 17, 1932. Class 14.

Growers' Co-Operative Grape Juice Company, Inc., Westfield, N. Y. Grape juice. 296,838; Aug. 23; Serial No. 326,939; published June 14, 1932. Class 45.

H-B Co., The. (See Cordes, Henry A.)

Harris, John D., Co. Inc., New York, N. Y. Felt rugs. 296,770; Aug. 23; Serial No. 325,634; published May 31, 1932. Class 50.

Hartmann Trunk Company, Racine, Wis. Suitcases and hat boxes. 296,886; Aug. 23; Serial No. 326,183; published June 7, 1932. Class 3.

Helbok, Albert, Bronxville, N. Y. Rolls having each a Frankfurter contained and entirely enclosed therein; rolls having each a frankfurter and a portion of sauerkraut contained and enclosed therein; etc. 296,881; Aug. 23; Serial No. 325,470; published June 7, 1932. Class 46.

Hershey Baking Company, York, Pa. Milk biscuits. 296,927; Aug. 23; Serial No. 308,334; published Apr. 28, 1931. Class 46.

Herz, Jacob, doing business as Fit Rite Book Cover Company, New York, N. Y. Temporary book covers. 296,941; Aug. 23. Class 37.

Gabilla, Henriette, Paris, France, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Preparation for treatment of photographic plates. 39,473; renewed Dec. 16, 1932.

Holeproof Hosiery Co., Milwaukee, Wis. Hosiery. 296,845–7; Aug. 23; Serial Nos. 326,587–9; published June 7, 1932. Class 39.

Hoover Conditioner, Inc., New York, N. Y. Rowing machines. 296,833; Aug. 23; Serial No. 326,859; published June 14, 1932. Class 22.

Hound Packing Company, Chicago, Ill. Metallic machinery packings. 296,921; Aug. 23; Serial No. 312,008; published June 7, 1932. Class 35.

Howe & French, Inc., Boston, Mass. Adhesive liquid cement. 296,943; Aug. 23. Class 5.

Hoyt & Worthen Tanning Corporation, Haverhill, Mass. Chamois. 296,892; Aug. 23; Serial No. 326,107; published June 7, 1932. Class 1.

Huff, Frederic J., Binghamton, N. Y. Beverage, and syrups, concentrates, and extracts for making the same. 296,836; Aug. 23; Serial No. 325,876; published June 14, 1932. Class 45.

Hunt, Rodney, Machine Co., Orange, Mass. Mechanical dye kettle. 296,812; Aug. 23; Serial No. 325,172; published June 7, 1932. Class 23.

Hunton, Logan A., doing business as The Hunton Company, New York, N. Y. Paper sheets used as advertising circulars. 296,917; Aug. 23; Serial No. 310,604; published June 7, 1932. Class 38.

Hunton, Logan A., doing business as The Hunton Company, New York, N. Y. Paper sheets used as advertising circulars. 296,918; Aug. 23; Serial No. 310,606; published June 7, 1932. Class 38.

Huston, Tom, Corporation, Columbus, Ga. Aspirin. 296,848; Aug. 23; Serial No. 326,590; published June 14, 1932. Class 6.

Hy'ne Co., The, Chicago, Ill. Vaginal suppositories. 296,916; Aug. 23; Serial No. 325,580; published June 14, 1932. Class 6.

Ideal Trading Co. (See Lichtenstein, William.)

India Rubber, Gutta Percha & Telegraph Works Company, Limited, The, London, England. Golf balls. 296,839; Aug. 23; Serial No. 327,017; published June 14, 1932. Class 22.

Infantamilk Corporation, Rochester, N. Y. Infant food. 296,891; Aug. 23; Serial No. 326,108; published June 7, 1932. Class 46.

Irso Products Company. (See Smith, Isador A.)

Jackovic, John, doing business as Digest-O-Rem Company, Canonsburg, Pa. Medical preparation. 296,919; Aug. 23; Serial No. 311,504; published June 7, 1932. Class 6.

Jay Gee Hat Co., Inc., New York, N. Y. Hat linings, and hats. 296,823; Aug. 23; Serial No. 326,146; published June 7, 1932. Class 39.

Jico Laboratories. (See Lachoff, Joseph.)

Jones, John W., doing business as John Wiley Jones Co., Le Roy, N. Y. Chemical preparation. 296,856; Aug. 23; Serial No. 326,425; published June 14, 1932. Class 6.

Justchew Company, The, Pasadena, Calif. Laxative chewing gum. 296,936; Aug. 23. Class 6.

Kalle & Co., Aktiengesellschaft, Biebrich-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Preparation for the treatment of wounds. 89,119; renewed Nov. 12, 1932.

Kauffman, Le Roy, San Francisco, Calif. Aluminum alloy and aluminum solder. 296,925; Aug. 23; Serial No. 316,205; published Aug. 4, 1931. Class 14.

Kayon Company, The, Milwaukee, Wis. Shoe presses and parts thereof. 296,827; Aug. 23; Serial No. 326,328; published June 7, 1932. Class 23.

Keuffel and Esser Company, Hoboken, N. J. Draftsmen's tools and appliances. 89,272; renewed Dec. 3, 1932.

Keuffel & Esser Company, Hoboken, N. J. Sensitized positive black print paper and cloth. 296,878; Aug. 23; Serial No. 322,258; published June 7, 1932. Class 26.

Kimberly-Clark Corporation, Neenah, Wis. Wood pulp insulating material. 296,768; Aug. 23; Serial No. 325,791; published June 7, 1932. Class 12.

Kimberly-Clark Corporation, Neenah, Wis. Sheet insulating material. 296,771; Aug. 23; Serial No. 325,790; published June 7, 1932. Class 12.

King Features Syndicate, Inc., New York, N. Y. Comic strips and cartoons. 296,828; Aug. 23; Serial No. 326,330; published June 7, 1932. Class 38.

Knoll & Co., Ludwigshafen-on-the-Rhine, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Remedy for diseases of the skin. 88,894; renewed Oct. 29, 1932.

Knoll & Co., Ludwigshafen-on-the-Rhine, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Remedy for sleeplessness. 89,121; renewed Nov. 12, 1932.

Kocher, Erwin R., Los Angeles, Calif. Water and oil colors. 296,871; Aug. 23; Serial No. 321,431; published June 7, 1932. Class 16.

Kohler-Brambach Piano Company, Inc. (See Brambach Piano Company.)

Krementz & Company, Newark, N. J. Metal alloy. 296,814; Aug. 23; Serial No. 326,149; published May 24, 1932. Class 14.

Kress, S. H., & Co., New York, N. Y. Rubber crib sheets. 296,813; Aug. 23; Serial No. 326,261; published May 31, 1932. Class 50.

Lachoff, Joseph, doing business as Jico Laboratories, Chicago, Ill. Furniture and automobile polish. 296,801; Aug. 23; Serial No. 324,966; published June 7, 1932. Class 16.

Landers, Frary & Clark, New Britain, Conn. Electrically heated goods. 296,934; Aug. 23. Class 21.

Langer, Friedrich J., Cleveland, Ohio. Musical novelties in the nature of finger tip tappers. 296,789; Aug. 23; Serial No. 324,291; published June 7, 1932. Class 36.

Lautmann, Alfred J., Detroit, Mich. After-shaving powder. 296,870; Aug. 23; Serial No. 321,074; published June 7, 1932. Class 6.

Lederer, Ervin, Budapest, Austria-Hungary, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Remedy for diabetes. 88,896; renewed Oct. 29, 1932.

Lichtenstein, William, doing business as Ideal Trading Co., and Fudo Psyllium Corp., New York, N. Y. Psyllium seed, lactose, and dextrins. 296,902; Aug. 23; Serial No. 326,151; published June 7, 1932. Class 6.

Lovell & Covel Co., Cambridge, Mass. Candy. 296,942; Aug. 23. Class 46.

Lowe, Joe, Corporation, Brooklyn, N. Y. Insect powders, baking powder, etc. 296,798; Aug. 23; Serial No. 324,898; published June 14, 1932. Class 6.

Ludlum Steel Co., Watervliet, N. Y. Ferrous alloys. 296,783; Aug. 23; Serial No. 326,290; published May 31, 1932. Class 14.

Magnolia Paper Co., Houston, Tex. Wrapping paper. 89,932; renewed Jan. 21, 1933.

Magnum Products, Inc., New York, N. Y. Fabric pads. 296,777; Aug. 23; Serial No. 325,042; published May 17, 1932. Class 29.

Magnuson Products Corporation, New York, N. Y. Soaps. 296,893; Aug. 23; Serial No. 326,112; published June 7, 1932. Class 4.

Maiden Form Brassiere Co. Inc., New York, N. Y. Brassières and girdles. 296,822; Aug. 23; Serial No. 326,118; published June 7, 1932. Class 39.

Marks, Walter K., Inc., New York, N. Y. Hats. 296,826; Aug. 23; Serial No. 326,291; published June 7, 1932. Class 39.

Marshall Field & Company, Chicago, Ill. Hosiery. 296,857; Aug. 23; Serial No. 326,584; published June 7, 1932. Class 39.

Marvel Products Co., The, Cleveland, Ohio. Upper motor lubricator. 296,787; Aug. 23; Serial No. 324,107; published June 7, 1932. Class 23.

Marxuach, Aciscio, San Juan, P. R. Medicinal preparation. 296,858; Aug. 23; Serial No. 326,154; published June 7, 1932. Class 6.

Marxuach, Aciscio, San Juan, P. R. Medicinal preparation for the treatment of malaria and other intermittent fevers. 296,903; Aug. 23; Serial No. 326,153; published June 7, 1932. Class 6.

Maurer, Martin R., Riverhead, N. Y. Dressed poultry and live ducks. 296,767; Aug. 23; Serial No. 318,066; published June 7, 1932. Class 46.

McGraw, Harvey B., doing business as Fullsong Products Co., Cortland, N. Y. Animal preparations. 296,790; Aug. 23; Serial No. 324,318; published June 14, 1932. Class 6.

McNeil, Robert, Philadelphia, Pa. Tampons. 296,855; Aug. 23; Serial No. 326,389; published June 14, 1932. Class 44.

Merrell, Wm. S., Company, The, Cincinnati, Ohio. Anæsthetic. 296,850; Aug. 23; Serial No. 326,983; published June 14, 1932. Class 6.

Meyers, A., & Sons Corp., New York, N. Y. Pins, snap-fasteners, hooks and eyes. 296,873–5; Aug. 23; Serial Nos. 321,544–6; published June 7, 1932. Class 40.

Meza, Albert, doing business as Tia Juana Products, Venice, Calif. Malt syrup. 296,841; Aug. 23; Serial No. 325,478; published June 7, 1932. Class 46.

Midvale Company, The, Nicetown, Philadelphia, Pa. High speed steel. 296,929; Aug. 23; Serial No. 297,315; published May 24, 1932. Class 14.

Miller Bros., Galveston, Tex. Jumpers and work-shirts. 89,570; renewed Dec. 24, 1932.

Minit-Rub Corporation, St. Louis, Mo. Lotion. 296,865; Aug. 23; Serial No. 323,302; published June 7, 1932. Class 6.

Modern Tissues Corporation, New York, N. Y. Toilet and facial tissue. 296,808; Aug. 23; Serial No. 325,915; published June 7, 1932. Class 37.

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 89,487; renewed Dec. 17, 1932.

National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 89,490; renewed Dec. 17, 1932.

North Bro's M'F'G Co., Philadelphia, Pa. Ice breakers. 296,854; Aug. 23; Serial No. 326,265; published June 7, 1932. Class 23.

Pabst Corporation, Milwaukee, Wis. Malt syrup. 296,884; Aug. 23; Serial No. 326,430; published June 7, 1932. Class 46.

Palmyra Springs, Inc., Palmyra, Wis. Maltless beverages. 296,837; Aug. 23; Serial No. 326,870; published June 14, 1932. Class 45.

Papier Poudré, Limited, London, England. Nail polish. 296,932; Aug. 23; Serial No. 325,110; published June 14, 1932. Class 6.

Peck-O-Egg Mfg. Co. (See Bach, Valentin.)

Peerless-Union Explosive Corporation, Philadelphia, Pa. Explosive powder. 296,933; Aug. 23. Class 9.

Peoples Drug Stores, Inc., Washington, D. C. Antiseptic and astringent preparation. 296,909; Aug. 23; Serial No. 325,958; published June 14, 1932. Class 6.

Phoenix Hosiery Company, Milwaukee, Wis. Hosiery. 296,794; Aug. 23; Serial No. 324,799; published June 7, 1932. Class 39.

Pitts, Reginald S., doing business as R. S. Pitts Mfg. Co., Hanover, Pa. Amusement and educational kit. 296,779; Aug. 23; Serial No. 325,184; published May 31, 1932. Class 50.

Playskool Institute, Inc., Milwaukee, Wis. Toy construction outfits. 296,802; Aug. 23; Serial No. 324,971; published June 14, 1932. Class 22.

Prodermatect Company, The, Scottdale, Pa. Shaving cream. 296,791; Aug. 23; Serial No. 324,322; published June 7, 1932. Class 4.

Protectome Sales Co. (See Smith, Thomas, Company.)

Pure Oil Company, The, Chicago, Ill. Oils and greases. 296,931; Aug. 23; Serial No. 299,083; published June 7, 1932. Class 15.

Putman, Charles E., Seattle, Wash. Wooden shingles. 296,930; Aug. 23; Serial No. 298,660; published June 7, 1932. Class 12.

Ramirez, C., & Co., Nogales, Ariz. Fresh vegetables. 296,864; Aug. 23; Serial No. 323,208; published June 7, 1932. Class 46.

Robinson Engineering Corporation, The, New York, N. Y. Heating radiators. 296,876; Aug. 23; Serial No. 321,617; published June 7, 1932. Class 34.

Sabel, Isadore, Philadelphia, Pa. Corrective shoes. 296,764; Aug. 23; Serial No. 318,431; published June 14, 1932. Class 44.

Schaal, Dr. Eugen, Feuerbach, near Stuttgart, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Substitute for gum copal and amber. 39,158; renewed Oct. 28, 1932.

Schmid, Julius, New York, N. Y. Prophylactic rubber and membraneous articles. 296,895; Aug. 23; Serial No. 326,164; published June 7, 1932. Class 44.

Schnefel Bros., Inc., Newark, N. J. Manicure tweezers, blackhead extractors, etc. 296,898; Aug. 23; Serial No. 325,921; published June 7, 1932. Class 44.

Sears, Roebuck and Co., Chicago, Ill. Field seeds. 296,851; Aug. 23; Serial No. 325,348; published June 7, 1932. Class 1.

Sharp & Dohme, Incorporated, Baltimore, Md. Medicated antiseptic lozenges. 296,852; Aug. 23; Serial No. 326,235; published June 7, 1932. Class 6.

Sinclair, T. M., & Company, Limited, Cedar Rapids, Iowa. Lard. 89,586; renewed Dec. 24, 1932.

Sintering Machinery Corporation, Netcong, N. J., and New York, N. Y. Ore sintering machines, continuous calcining and drying machines, gratebars and pallets for said machines, etc. 296,907; Aug. 23; Serial No. 325,832; published June 7, 1932. Class 23.

Smith, Isador A., doing business as Irso Products Company, Philadelphia, Pa. Preparation for the finger and water waving of the hair. 296,797; Aug. 23; Serial No. 324,889; published June 7, 1932. Class 6.

Smith, Joseph, Sloan, N. Y. Prophylactic rubber articles. 296,842; Aug. 23; Serial No. 325,601; published May 24, 1932. Class 44.

Smith, Thomas, Company, doing business as Protectome Sales Co., Worcester, Mass. Electrical fire alarm system apparatus and parts thereof. 296,910; Aug. 23; Serial No. 325,602; published June 7, 1932. Class 21.

Söderfors Bruks Aktiebolag, assignor to Stora Kopparbergs Bergslags Aktiebolag, Falun, Sweden. High speed tool steel. 86,099; renewed Apr. 9, 1932.

Söderfors Bruks Aktiebolag, assignor to Stora Kopparbergs Bergslags Aktiebolag, Falun, Sweden. Tool steel. 86,100–101; renewed Apr. 9, 1932.

Söderfors Bruks Aktiebolag, assignor to Stora Kopparbergs Bergslags Aktiebolag, Falun, Sweden. Tool steel and anvils. 86,102; renewed Apr. 9, 1932.

Söderfors Bruks Aktiebolag, assignor to Stora Kopparbergs Bergslags Aktiebolag, Falun, Sweden. Tool steel. 86,103; renewed Apr. 9, 1932.

Söderfors Bruks Aktiebolag, assignor to Stora Kopparbergs Bergslags Aktiebolag, Falun, Sweden. Anvils. 86,104; renewed Apr. 9, 1932.

Sorino, Ben M., doing business as Freezette Company, New York, N. Y. Ice boxes and refrigerators. 296,872; Aug. 23; Serial No. 321,506; published Jan. 19, 1932. Class 31.

Southwestern Milling Company, Jersey City, N. J., and Kansas City, Mo., assignor to The Southwestern Milling Company, Inc., New York, N. Y. Wheat flour. 89,587; renewed Dec. 24, 1932.

Southwestern Milling Company, Inc., The. (See Empire State Flour Mills, assignor.)

South Western Stone Co. Ltd., London, England. Polished stone. 296,816; Aug. 23; Serial No. 326,032; published June 7, 1932. Class 12.

South Western Stone Co. Ltd., London, England. Stone. 296,896; Aug. 23; Serial No. 326,031; published June 7, 1932. Class 1.

Specialty Sales Company. (See Friedland, I. J.)

Squier, George O., Washington, D. C. Empty boxes. 296,866; Aug. 23; Serial No. 323,314; published June 7, 1932. Class 2.

Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Automobile top dressing. 296,879; Aug. 23; Serial No. 322,405; published May 24, 1932. Class 4.

Stewart, A. L., & Sons, Cherryfield and Calais, Me. Canned berries. 296,882; Aug. 23; Serial No. 326,618; published June 7, 1932. Class 46.

Stonega Coke & Coal Company, Philadelphia, Pa. Coal. 296,844; Aug. 23; Serial No. 325,894; published June 7, 1932. Class 1.

Stora Kopparbergs Bergslags Aktiebolag. (See Söderfors Bruks Aktiebolag, assignor.)

Strunz, S., & Son, Inc., Pittsburgh, Pa. Detergent. 296,888; Aug. 23; Serial No. 326,272; published June 7, 1932. Class 4.

Surface Combustion Corporation, Toledo, Ohio. Furnaces. 296,867; Aug. 23; Serial No. 323,637; published June 7, 1932. Class 34.

Tennessee Coal, Iron & Railroad Company, Birmingham, Ala. Ground open hearth basic slag used as a fertilizer. 296,780; Aug. 23; Serial No. 325,191; published May 17, 1932. Class 10.

Tex-O-Kan Flour Mills Co., Dallas, Tex. Wheat flour. 296,824–5; Aug. 23; Serial Nos. 326,168–9; published June 7, 1932. Class 46.

Thompson's Dairy, Washington, D. C. Milk, cream, butter, cheese, and eggs. 296,829; Aug. 23; Serial No. 326,437; published June 7, 1932. Class 46.

Tia Juana Products. (See Meza, Albert.)

Towns & James Inc., Brooklyn, N. Y. External medicinal preparations. 296,908; Aug. 23; Serial No. 325,926; published June 7, 1932. Class 6.

Trico Products Corporation, Buffalo, N. Y. Automobile accessories. 296,818–9; Aug. 23; Serial Nos. 325,895–6; published June 7, 1932. Class 19.

29th Division Association, Inc., The, Newark, N. J. Association emblems, lapel buttons, badges, etc. 296,784; Aug. 23; Serial No. 319,792; published June 7, 1932. Class 28.

Underwood Elliott Fisher Company, New York, N. Y. Typewriter ink-ribbons and coated transfer sheets. 296,792; Aug. 23; Serial No. 324,576; published May 3, 1932. Class 11.

United Publishers Corporation, New York, N. Y. Cooperative discount coupons. 296,804; Aug. 23; Serial No. 326,063; published June 7, 1932. Class 38.

United Publishers Corporation, New York, N. Y. Books. 296,805; Aug. 23; Serial No. 326,062; published June 7, 1932. Class 38.

United States Playing Card Company, The, East Norwood, Cincinnati, Ohio. Playing cards. 296,834; Aug. 23; Serial No. 326,874; published June 14, 1932. Class 22.

United States Rubber Company, New York, N. Y. Electrical insulating tape. 296,913; Aug. 23; Serial No. 325,304; published June 7, 1932. Class 21.

Valentine & Company, New York, N. Y. Paint enamels, stains, and varnishes. 296,887; Aug. 23; Serial No. 326,243; published June 7, 1932. Class 16.

Valteniner & Schwarz, Leipsic-Plagwitz, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Remedy for pulmonary consumption and inflammation of the lungs. 39,022; renewed Oct. 14, 1932.

Vereinigte Chininfabriken, Zimmer & Co., Ges. mit beschränkter Haftung, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Cotoin compound. 39,523; renewed Dec. 23, 1932.

Vereinigte Chininfabriken, Zimmer & Co., Ges. mit beschränkter Haftung, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Derivatives of vanillin and phenetidin. 39,577; renewed Dec. 30, 1932.

Vitrefrax Corporation, Los Angeles, Calif. Ceramic batches. 296,861; Aug. 23; Serial No. 323,836; published June 7, 1932. Class 1.

Vi-Zor-Tena Company, Kansas City, Mo. Radio antenna in form of automobile windshield visor. 296,795; Aug. 23; Serial No. 324,860; published June 7, 1932. Class 21.

Vorm, Charles, doing business as The American Oak Preserving Company, North Judson, Ind. Preserved leaves, foliage, grasses, and growths of field and forest. 296,862; Aug. 23; Serial No. 323,879; published June 7, 1932. Class 1.

W. and M. Stoker Company, The, Denver, Colo. Stokers. 296,920; Aug. 23; Serial No. 311,808; published June 7, 1932. Class 34.

Wallace & Co., New York, and Brooklyn, to Wallace & Co., Brooklyn, N. Y. Candies and chocolates. 89,897; renewed Jan. 14, 1933.

Ward-Love Pump Corporation, Rockford, Ill. Apparatus for purifying, filtering, and softening of water. 296,869; Aug. 23; Serial No. 320,770; published June 14, 1932. Class 31.

Washington Laboratories, Inc., New York, N. Y. Razor blades. 296,859; Aug. 23; Serial No. 326,197; published June 7, 1932. Class 23.

Weber Electric Co., Schenectady, N. Y. Switches and electric light sockets. 296,793; Aug. 23; Serial No. 324,637; published June 7, 1932. Class 21.

Weston, Byron, Company, Dalton, Mass. Ledger and bond paper. 296,877; Aug. 23; Serial No. 322,012; published June 7, 1932. Class 37.

White, S. S., Dental Manufacturing Company, The, Philadelphia, Pa. Dental alloys. 296,912; Aug. 23; Serial No. 325,770; published June 14, 1932. Class 44.

White, Wilbur, Chemical Company, The, Owego, N. Y. Wax emulsion for fruit and other edibles. 296,849; Aug. 23; Serial No. 326,699; published June 14, 1932. Class 6.

Whitman, Clarence, & Co., assignor to Clarence Whitman & Sons, Inc., New York, N. Y. Flannel goods. 88,143; renewed Aug. 27, 1932.

Wimelbacher & Rice, New York, N. Y. Leather and fabric gloves. 296,940; Aug. 23. Class 39.

Yocum Brothers, Reading, Pa. Cigars. 296,820; Aug. 23; Serial No. 325,888; published May 24, 1932. Class 17.

Young, Wilbur F., assignor to W. F. Young Inc., Springfield, Mass. Liniment. 89,786; renewed Jan. 7, 1933.

LIST OF REGISTRANTS OF LABELS

Axton-Fisher Tobacco Co., Inc., The, Louisville, Ky. Twenty Grand Cigarettes. For Cigarettes. 41,045; Aug. 23.

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Beechies. For Chewing Gum. 41,046–7; Aug. 23.

Billows, John W., Portland, Oreg. The Tel-A-Scor For Contract Bridge. For Bridge Scoring Devices. 41,048; Aug. 23.

Borden Sales Company, Inc., The, New York, N. Y. Silver Cow. For Evaporated Milk. 41,049; Aug. 23.

Chafin Optical Co., Inc., Boston, Mass. Worlds Finest Wide-Vue Corrected Lens. For Corrected Lenses. 41,050; Aug. 23.

Collier, Robert, New York, N. Y. E-Lixir. For Germ Meal Containing the Kernels or Germ of the Grains Richest in Vitamin E Content. 41,051; Aug. 23.

Collins, John G., doing business as The Solene Co., Little Rock, Ark. Solene. For Preparation for Preserving and Prolonging the Life of Shoe Soles. 41,053; Aug. 23.

Cribari, B., & Sons, San Jose, Calif. Sonnie Boy. For Prunes. 41,052; Aug. 23.

Dolly Madison Cakes, Ltd., Los Angeles, Calif. Dolly Madison Cakes. For Cakes. 41,054; Aug. 23.

Esmond Mills, The, Esmond, Smithfield, R. I. Warmth Certificate. For Textile Blankets. 41,055; Aug. 23.

French, Walter, Chicago, Ill. Tassel Corn. For Popcorn and Peanuts. 41,056; Aug. 23.

Gabrieleen Co., Inc., New York, N. Y. Gabrieleen. For Permanent Wave Lotion. 41,057; Aug. 23.

General Baking Company, New York, N. Y. Grocers Special. For Bread. 41,058; Aug. 23.

Hart Drug Corporation, Miami, Fla. Cute–Asepto. For Powder. 41,059; Aug. 23.

O-Cedar Corp'n, Chicago, Ill. O-Cedar. For Wax Cream for Cleaning and Polishing Furniture and Woodwork. 41,060; Aug. 23.

Parfumerie Roger et Gallet, Société Anonyme, Paris, France. Feu-Follet. For Soaps. 41,061; Aug. 23.

Physicians & Surgeons Laboratories, The. (See Regelson, Morris.)

Radbill Oil Company, Inc., Philadelphia, Pa. Super Motor Oil Guaranteed 100% Pure Pennsylvania. For Motor Oil. 41,062; Aug. 23.

Regelson, Morris, doing business as The Physicians & Surgeons Laboratories, New York, N. Y. Neon. For Preparation for Treating the Eyes. 41,063; Aug. 23.

Regelson, Morris, doing business as The Physicians & Surgeons Laboratories, New York, N. Y. Nopaine. For Preparation for External Application for the Relief of Pain. 41,064; Aug. 23.

Regelson, Morris, doing business as The Physicians & Surgeons Laboratories, New York, N. Y. Ethereal Lava. For Preparation for Skin Eruptions, Pimples, Cold Sores, Poison Ivy, Itchings. 41,065; Aug. 23.

Regelson, Morris, doing business as The Physicians & Surgeons Laboratories, New York, N. Y. Penetrex. For Preparation for the Relief of Pain and Swelling of the Joints. 41,066; Aug. 23.

Shef, Irving, doing business as Shef Manufacturing Company, Union City, N. J. Nulustre Furniture Polishing Cloth. For Chemical Treated Cloth for Polishing Furniture and Automobiles. 41,067; Aug. 23.

Shef, Irving, doing business as Shef Manufacturing Company, Union City, N. J. Nulustre Metal Polishing Cloth. For Chemical Treated Cloth for Polishing All Metals. 41,068; Aug. 23.

Smith, G., & Sons, Inc., Seelyville, Pa. Smith's Limburger Type Cheese. For Cheese. 41,069; Aug. 23.

Solene Co., The. (See Cullins, John G.)

Thoro Bread Company, The, Cincinnati, Ohio. Thoro Bread. For Canned Cat Food. 41,070; Aug. 23.

Wagner, Lawrence J., Rochester, N. Y. Cinch. For Soft Soap. 41,071; Aug. 23.

Weber Baking Company, Irvington, N. J. Paramount Sliced. For Bread. 41,072; Aug. 23.

LIST OF REGISTRANTS OF PRINTS

Hills Bros., San Francisco, Calif. Hills Bros Coffee Never Varies in Flavor . . . That's Why You'll Never Switch. For Coffee. 13,836; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros Made Coffee-Roasting an Exact Science When They Invented Controlled Roasting. For Coffee. 13,837; Aug. 23.

Hills Bros., San Francisco, Calif. You'll Never Know What a Wealth of Flavor Coffee has, Until You Taste Hills Bros. For Coffee. 13,838; Aug. 23.

Hills Bros., San Francisco, Calif. Take a Deep Breath of that Rich Aroma Floating up From a Cup of Hills Bros Coffee. For Coffee. 13,839; Aug. 23.

Hills Bros., San Francisco, Calif. A Cupful of Hills Bros Coffee Proves that Controlled Roasting Makes a Finer Flavor. For Coffee. 13,840; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros Changed Coffee-Roasting From a Guessing-Game to a Science. For Coffee. 13,841; Aug. 23.

Hills Bros., San Francisco, Calif. You'll Never get any Sad Surprises in Hills Bros Coffee. For Coffee. 13,842; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros' Patented Process Puts the Finishing Touches on the Job that Nature Begins. For Coffee. 13,843; Aug. 23.

Hills Bros., San Francisco, Calif. You can Bank on the Same Exquisite Flavor in Every Pound of Hills Bros Coffee. For Coffee. 13,844; Aug. 23.

Hills Bros., San Francisco, Calif. Controlled Roasting Puts Exclusive Goodness Into Every Cup of Hills Bros Coffee. For Coffee. 13,845–6; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros Coffee Never Varies in Flavor . . . That's Why You'll Never Switch. For Coffee. 13,847; Aug. 23.

Hills Bros., San Francisco, Calif. Here's why Hills Bros Banished "Batch-and-Bulk" Methods of Roasting Coffee. For Coffee. 13,848; Aug. 23.

Hills Bros., San Francisco, Calif. Take a Deep Breath of the Rich Aroma Floating up from a Cup of Hills Bros Coffee. For Coffee. 13,849; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros Made Coffee-Roasting an Exact Science When They Invented Controlled Roasting. For Coffee. 13,850; Aug. 23.

Hills Bros., San Francisco, Calif. You Can Bank on the Same Exquisite Flavor in Every Pound of Hills Bros Coffee. For Coffee. 13,851; Aug. 23.

Hills Bros., San Francisco, Calif. You'll have a New Idea of Coffee Values, When You Taste Hills Bros. For Coffee. 13,852; Aug. 23.

Hills Bros., San Francisco, Calif. A Cupful of Hills Bros Coffee Proves That Controlled Roasting Makes a Finer Flavor. For Coffee. 13,853; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros Changed Coffee-Roasting From a Guessing-Game to a Science. For Coffee. 13,854; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros' Patented Process Puts the Finishing Touches on the Job that Nature Begins. For Coffee. 13,855; Aug. 23.

Hills Bros., San Francisco, Calif. Take a Deep Breath of that Rich Aroma Floating up From a Cup of Hills Bros Coffee. For Coffee. 13,856; Aug. 23.

Hills Bros., San Francisco, Calif. You Can Bank on the Same Exquisite Flavor in Every Pound of Hills Bros Coffee. For Coffee. 13,857; Aug. 23.

Hills Bros., San Francisco, Calif. You'll Never Know What a Wealth of Flavor Coffee Has Until You Taste Hills Bros. For Coffee. 13,858; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros Made Coffee-Roasting an Exact Science When They Invented Controlled Roasting. For Coffee. 13,859; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros Coffee Never Varies in Flavor . . . That's Why You'll Never Switch. For Coffee. 13,860; Aug. 23.

Hills Bros., San Francisco, Calif. Controlled Roasting Puts Exclusive Goodness Into Every Cup of Hills Bros Coffee. For Coffee. 13,861; Aug. 23.

Hills Bros., San Francisco, Calif. A Cupful of Hills Bros Coffee Proves That Controlled Roasting Makes a Finer Flavor. For Coffee. 13,862; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros Changed Coffee-Roasting From a Guessing-Game to a Science. For Coffee. 13,863; Aug. 23.

Hills Bros., San Francisco, Calif. You'll Never Know What a Wealth of Flavor Coffee Has, Until You Taste Hills Bros. For Coffee. 13,864; Aug. 23.

Hills Bros., San Francisco, Calif. You'll Never Get Any Sad Surprises in Hills Bros Coffee. For Coffee. 13,865; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros' Patented Process Puts the Finishing Touches on the Job That Nature Begins. For Coffee. 13,866; Aug. 23.

Hills Bros., San Francisco, Calif. You'll Have a New Idea of Coffee Values, When You Taste Hills Bros. For Coffee. 13,867; Aug. 23.

Hills Bros., San Francisco, Calif. Here's Why Hills Bros Banished 'Batch and Bulk' Methods of Roasting Coffee. For Coffee. 13,868; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros Made Coffee-Roasting An Exact Science When They Invented Controlled Roasting. For Coffee. 13,869; Aug. 23.

Hills Bros., San Francisco, Calif. Here's Why Hills Bros Banished 'Batch-and Bulk' Methods of Roasting Coffee. For Coffee. 13,870; Aug. 23.

Hills Bros., San Francisco, Calif. You'll Have a New Idea of Coffee Values, When You Taste Hills Bros. For Coffee. 13,871; Aug. 23.

Hills Bros., San Francisco, Calif. You Can Bank on the Same Exquisite Flavor In Every Pound of Hills Bros Coffee. For Coffee. 13,872; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros' Patented Process Puts the Finishing Touches On the Job That Nature Begins. For Coffee. 13,873; Aug. 23.

Hills Bros., San Francisco, Calif. You'll Never Get Any Sad Surprises In Hills Bros Coffee. For Coffee. 13,874; Aug. 23.

Hills Bros., San Francisco, Calif. Take a Deep Breath of That Rich Aroma Floating Up From a Cup of Hills Bros Coffee. For Coffee. 13,875; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros Changed Coffee-Roasting From a Guessing-Game To a Science. For Coffee. 13,876; Aug. 23.

Hills Bros., San Francisco, Calif. You'll Have a New Idea of Coffee Values, When You Taste Hills Bros. For Coffee. 13,877; Aug. 23.

Hills Bros., San Francisco, Calif. Here's Why Hills Bros Banished "Batch-and -Bulk" Methods of Roasting Coffee. . . For Coffee. 13,878; Aug. 23.

Hills Bros., San Francisco, Calif. Controlled Roasting Puts Exclusive Goodness Into Every Cup of Hills Bros Coffee. For Coffee. 13,879; Aug. 23.

Hills Bros., San Francisco, Calif. Hills Bros Coffee Never Varies in Flavor . . . That's Why You'll Never Switch. For Coffee. 13,880; Aug. 23.

Hills Bros., San Francisco, Calif. You'll Never Know What a Wealth of Flavor Coffee Has, Until You Taste Hills Bros. For Coffee. 13,881; Aug. 23.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Ceramic batches. Vitrefrax Corporation. 296,861; Aug. 23; Serial No. 323,836; published June 7, 1932.

Chamois. Hoyt & Worthen Tanning Corporation. 296,892; Aug. 23; Serial No. 326,107; published June 7, 1932.

Coal. Commonwealths Collieries, Incorporated. 296,830; Aug. 23; Serial No. 326,460; published June 7, 1932.

Coal. Stonega Coke & Coal Company. 296,844; Aug. 23; Serial No. 325,894; published June 7, 1932.

Leaves, foliage, grasses, and growths of field and forest, Preserved. C. Vorm. 296,862; Aug. 23; Serial No. 323,879; published June 7, 1932.

Seeds, Field. Sears, Roebuck and Co. 296,851; Aug. 23; Serial No. 325,348; published June 7, 1932.

Stone. South Western Stone Co. Ltd. 296,896; Aug. 23; Serial No. 326,031; published June 7, 1932.

CLASS 2

Boxes, Empty. G. O. Squier. 296,866; Aug. 23; Serial No. 323,314; published June 7, 1932.

Sacks, Heavy paper shipping. Adams Bag Company. 296,937; Aug. 23.

CLASS 3

Suitcases, and hat boxes. Hartmann Trunk Company. 296,886; Aug. 23; Serial No. 326,183; published June 7, 1932.

CLASS 4

Detergent. S. Strunz & Son, Inc. 296,888; Aug. 23; Serial No. 326,272; published June 7, 1932.

Dressing, Automobile top. Standard Oil Company of California. 296,879; Aug. 23; Serial No. 322,405; published May 24, 1932.

Shaving cream. Prodermatect Company. 296,791; Aug. 23; Serial No. 324,322; published June 7, 1932.

Shaving cream and the like. Domestic Toiletries, Inc. 296,899; Aug. 23; Serial No. 325,942; published June 7, 1932.

Soap, Liquid. Creco Company. 296,765; Aug. 23; Serial No. 318,550; published June 7, 1932.

Soaps. Magnuson Products Corporation. 296,893; Aug. 23; Serial No. 326,112; published June 7, 1932.

CLASS 5

Adhesive paste. Binney & Smith Co. 296,868; Aug. 23; Serial No. 323,773; published June 7, 1932.

Cement. Howe & French, Inc. 296,943; Aug. 23.

CLASS 6

Anaesthetic. Wm. S. Merrell Company. 296,850; Aug. 23; Serial No. 326,983; published June 14, 1932.

Animal preparations. H. B. McGraw. 296,790; Aug. 23; Serial No. 324,318; published June 14, 1932.

Anti-arthriticum for treating and preventing arthritis and predisposition to lithuria. Farbwerke vorm. Meister Lucius & Brüning. 89,100; renewed Nov. 12, 1932.

Antipyretic, antineuralgic, and sedative. Farbwerke vorm. Meister Lucius & Brüning. 88,562–4; renewed Oct. 1, 1932.

Antiseptic and astringent preparation. Peoples Drug Stores, Inc. 296,909; Aug. 23; Serial No. 325,958; published June 14, 1932.

Aspirin. Tom Huston Corporation. 296,848; Aug. 23; Serial No. 326,590; published June 14, 1932.

Baking powder. A. Boehringer. 89,335; renewed Dec. 10, 1932.

Chemical preparation. J. W. Jones. 296,856; Aug. 23; Serial No. 326,425; published June 14, 1932.

Cosmetics, Toilet. H. Gabilla. 87,746; renewed Aug. 6, 1932.

Cotoin compound. Vereinigte Chininfabriken, Zimmer & Co., Ges. mit beschränkter Haftung. 39,523; renewed Dec. 23, 1932.

Derivates of vanillin and phenetidin. Vereinigte Chininfabriken Zimmer & Co., Ges. mit beschränkter Haftung. 39,577; renewed Dec. 30, 1932.

Emulsifying agent in the nature of a wax. H. A. Fries. 296,914; Aug. 23; Serial No. 325,465; published June 14, 1932.

Laxative chewing gum. Justchew Company. 296,936; Aug. 23.

Laxative tablets. Ethical Products Company. 296,853; Aug. 23; Serial No. 326,253; published June 7, 1932.

Lotion. Minit-Rub Corporation. 296,865; Aug. 23; Serial No. 323,302; published June 7, 1932.

Lozenges, Medicated antiseptic. Sharp & Dohme, Incorporated. 296,852; Aug. 23; Serial No. 326,235; published June 7, 1932.

Medical preparation. J. Jackovic. 296,919; Aug. 23; Serial No. 311,504; published June 7, 1932.

Medicinal preparation. A. Marxuach. 296,858; Aug. 23; Serial No. 326,154; published June 7, 1932.

Medicinal preparation. A. Marxuach. 296,903; Aug. 23; Serial No. 326,153; published June 7, 1932.

Medicinal preparations, External. Towns & James Inc. 296,908; Aug. 23; Serial No. 325,926; published June 7, 1932.

Medicine. H. A. Cordes. 296,786; Aug. 23; Serial No. 324,032; published June 14, 1932.

Nail polish. Papier Poudré, Limited. 296,932; Aug. 23; Serial No. 325,110; published June 14, 1932.

Ointment or cream for the complexion. J. V. Daniels. 89,231; renewed Dec. 3, 1932.

Pharmaceutical products. Actien-Gesellschaft für Anilin-Fabrikation. 39,367; renewed Nov. 25, 1932.

Powder, After-shaving. A. J. Lautmann. 296,870; Aug. 23; Serial No. 321,074; published June 7, 1932.

Powders, baking powder, etc., Insect. Jow Lowe Corporation. 296,798; Aug. 23; Serial No. 324,898; published June 14, 1932.

Preparation for the finger and water waving of the hair. I. A. Smith. 296,797; Aug. 23; Serial No. 324,889; published June 7, 1932.

Preparation for treatment of photographic plates. A. Hasekiel. 39,473; renewed Dec. 16, 1932.

Preparation for treatment of wounds. Kalle & Co., Aktiengesellschaft. 89,119; renewed Nov. 12, 1932.

Preservatives, Leather. Badische Anilin- & Soda-Fabrik. 89,611; renewed Dec. 31, 1932.

Psyllium seed, lactose, and dextrins. W. Lichtenstein. 296,902; Aug. 23; Serial No. 326,151; published June 7, 1932.

Remedy for diabetes. E. Léderer. 88,896; renewed Oct. 29, 1932.

Remedy for diseases of the skin. Knoll & Co. 88,894; renewed Oct. 29, 1932.

Remedy for pulmonary consumption and inflammation of the lungs. Valentiner & Schwarz. 39,022; renewed Oct. 14, 1932.

Remedy for sleeplessness. Knoll & Co. 89,121; renewed Nov. 12, 1932.

Solvents. Actien-Gesellschaft für Anilin-Fabrikation. 89,595; renewed Dec. 31, 1932.

Substitute for gum copal and amber. Dr. E. Schaal. 39,153; renewed Oct. 28, 1932.

Suppositories, Vaginal. Hy'ne Co. 296,916; Aug. 23; Serial No. 325,580; published June 14, 1932.

Tonic for heart and uterus, Efficacious. Farbwerke vorm. Meister Lucius & Brüning. 89,101; renewed Nov. 12, 1932.

Wax emulsion for fruit and other edibles. Wilbur White Chemical Company. 296,849; Aug. 23; Serial No. 326,699; published June 14, 1932.

CLASS 9

Powder, Explosive. Peerless-Union Explosive Corporation. 296,933; Aug. 23.

CLASS 10

Slag used as a fertilizer, Ground open hearth basic. Tennessee Coal, Iron & Railroad Company. 296,780; Aug. 23; Serial No. 325,191; published May 17, 1932.

CLASS 11

Ink. American Crayon Company. 296,776; Aug. 23; Serial No. 325,312; published May 17, 1932.

Ink, Printing. American Printing Ink Co. 87,587; renewed July 30, 1932.

Ink-ribbons and coated transfer sheets, Typewriter. Underwood Elliott Fisher Company. 296,792; Aug. 23; Serial No. 324,576; published May 3, 1932.

CLASS 12

Asphalt and asphaltic preparation for the protection of structural surfaces. Al-Oys, Inc. 296,774; Aug. 23; Serial No. 325,549; published June 7, 1932.

Doors and sliding and folding partitions. Austral Window Company. 296,778; Aug. 23; Serial No. 325,133; published June 7, 1932.

Insulating material, Sheet. Kimberly-Clark Corporation. 296,771; Aug. 23; Serial No. 325,790; published June 7, 1932.

Insulating material, Wood pulp. Kimberly-Clark Corporation. 296,768; Aug. 23; Serial No. 325,791; published June 7, 1932.

Shingles, Wooden. C. E. Putman. 296,930; Aug. 23; Serial No. 298,660; published June 7, 1932.

Stone, Polished. South Western Stone Co. Ltd. 296,816; Aug. 23; Serial No. 326,032; published June 7, 1932.

CLASS 13

Screws, bolts, nuts, etc. Accurate Parts Manufacturing Company. 296,766; Aug. 23; Serial No. 319,190; published June 7, 1932.

Trays, Base metal. A. Fraser. 296,781; Aug. 23; Serial No. 326,467; published June 7, 1932.

CLASS 14

Alloys, Ferrous. Ludlum Steel Co. 296,783; Aug. 23; Serial No. 326,290; published May 31, 1932.

Alloys, Fusible. Cerro de Pasco Copper Corporation. 296,775; Aug. 23; Serial No. 325,209; published May 24, 1932.

Aluminum alloy and aluminum solder. Le R. Kauffman. 296,925; Aug. 23; Serial No. 316,205; published Aug. 4, 1931.

Aluminum alloys. A. P. Grim Foundry Company. 296,800; Aug. 23; Serial No. 324,961; published May 17, 1932.

Anvils. Söderfors Bruks Aktiebolag. 86,104; renewed Apr. 9, 1932.

Copper bullion, lead bullion, zinc concentrates, etc. Cerro de Pasco Copper Corporation. 296,928; Aug. 23; Serial No. 313,420; published May 24, 1932.

Metal alloy. Krements & Company. 296,814; Aug. 23; Serial No. 326,149; published May 24, 1932.

Metals, Welding. Bastian-Blessing Company. 296,773; Aug. 23; Serial No. 325,396; published May 17, 1932.

Steel and anvils, Tool. Söderfors Bruks Aktiebolag. 86,102; renewed Apr. 9, 1932.

Steel, High speed. Midvale Company. 296,929; Aug. 23; Serial No. 297,315; published May 24, 1932.

Steel, High speed tool. Söderfors Bruks Aktiebolag. 86,099; renewed Apr. 9, 1932.

Steel, Tool. Söderfors Bruks Aktiebolag. 86,100–01; renewed Apr. 9, 1932.

Steel, Tool. Söderfors Bruks Aktiebolag. 86,103; renewed Apr. 9, 1932.

CLASS 15

Oils and greases. Pure Oil Company. 296,931; Aug. 23; Serial No. 299,083; published June 7, 1932.

CLASS 16

Colors, Water and oil. E. R. Kocher. 296,871; Aug. 23; Serial No. 321,431; published June 7, 1932.

Lead, red lead, orange mineral, and oxid of zinc, White. Berkmann & Simons, G. m. b. H. 88,087; renewed Nov. 12, 1932.

Paint enamels, stains, and varnishes. Valentine & Company. 296,887; Aug. 23; Serial No. 326,248; published June 7, 1932.

Polish, Furniture and automobile. J. Lachoff. 296,801; Aug. 23; Serial No. 324,966; published June 7, 1932.

CLASS 17

Cigars. Yocum Brothers. 296,820; Aug. 23; Serial No. 325,888; published May 24, 1932.

CLASS 19

Automobile accessories. Trico Products Corporation. 296,818–9; Aug. 23; Serial Nos. 325,895–6; published June 7, 1932.

CLASS 21

Converters and filters. Filter Condenser Corporation. 296,880; Aug. 23; Serial No. 323,135; published June 7, 1932.

Electric batteries. Burgess Battery Company. 296,905; Aug. 23; Serial No. 326,008; published June 7, 1932.

Electrical fire alarm system apparatus and parts thereof. Thomas Smith Company. 296,910; Aug. 23; Serial No. 325,602; published June 7, 1932.

Electrical insulating tape. United States Rubber Company. 296,913; Aug. 23; Serial No. 325,304; published June 7, 1932.

Electrical warning signals of the acoustical type. E. A. Laboratories, Inc. 296,928; Aug. 23; Serial No. 295,890; published June 7, 1932.

Electrically heated goods. Landers, Frary & Clark. 296,934; Aug. 23.

Friction tape. M. W. Dunton Company. 86,980; renewed June 18, 1932.

Friction tape. M. W. Dunton Company. 87,436; renewed July 16, 1932.

Radio antenna in form of automobile windshield visor. Vi-Zor-Tena Company. 296,795; Aug. 23; Serial No. 324,860; published June 7, 1932.

Switches and electric light sockets. Weber Electric Company. 296,793; Aug. 23; Serial No. 324,637; published June 7, 1932.

CLASS 22

Billiard cue tips. Brunswick-Balke-Collender Company. 296,835; Aug. 23; Serial No. 326,975; published June 14, 1932.

Cards, Playing. United States Playing Card Company. 296,884; Aug. 23; Serial No. 326,874; published June 14, 1932.

Dolls, Paper. Collins-Kirk, Inc. 296,840; Aug. 23; Serial No. 326,459; published June 14, 1932.

Golf balls. India Rubber, Gutta Percha & Telegraph Works Company. 296,839; Aug. 23; Serial No. 327,017; published June 14, 1932.

Rowing machines. Hoover Conditioner, Inc. 296,883; Aug. 23; Serial No. 326,859; published June 14, 1932.

Toy construction outfits. Playskool Institute, Inc. 296,802; Aug. 23; Serial No. 324,971; published June 14, 1932.

CLASS 23

Ice breakers. North Bro's M'f'g Co. 296,854; Aug. 23; Serial No. 326,265; published June 7, 1932.

Kettle, Mechanical dye. Rodney Hunt Machine Co. 296,812; Aug. 23; Serial No. 325,172; published June 7, 1932.

Motor lubricator, Upper. Marvel Products Co. 296,787; Aug. 23; Serial No. 324,107; published June 7, 1932.

Ore sintering machines, continuous calcining and drying machines, gratebars and pallets for said machines, etc. Sintering Machinery Corporation. 296,907; Aug. 23; Serial No. 325,882; published June 7, 1932.

Razor blades. Washington Laboratories, Inc. 296,859; Aug. 23; Serial No. 326,197; published June 7, 1932.

Shoe presses and parts thereof. Kayon Company. 296,827; Aug. 23; Serial No. 326,328 published June 7, 1932.

Stapling machines. J. B. Crofoot Co. 296,904; Aug. 23; Serial No. 325,983; published June 7, 1932.

Stapling machines, binding machines and tacking machines using metal staples. Acme Staple Company. 296,915; Aug. 23; Serial No. 325,547; published June 7, 1932.

Vehicle, Power propelled roller equipped. Continental Manufacturing Company. 296,803; Aug. 23; Serial No. 324,989; published June 7, 1932.

CLASS 26

Films, photographic cameras, and parts thereof and photographic projectors, Photographic. Cam Syndicate Limited. 296,821; Aug. 23; Serial No. 326,077; published June 7, 1932.

Goggles, Automobile. Atlas Supply Company. 296,799; Aug. 23; Serial No. 324,947; published June 7, 1932.

Lettering and drafting guides and rulers. A. B. Dick Company. 296,811; Aug 23; Serial No. 325,884; published June 7, 1932.

Measuring instruments and indicators. Henry Disston & Sons. 89,630; renewed Dec. 31, 1932.

Sensitized positive black print paper and cloth. Keuffel & Esser Company. 296,878; Aug. 23; Serial No. 322,258; published June 7, 1932.

Tools and appliances, Draftmen's. Keuffel and Esser Company. 89,272; renewed Dec. 3, 1932.

CLASS 27

Clocks, Electric. G. P. Cowles. 296,788; Aug. 23; Serial No. 324,221; published May 24, 1932.

CLASS 28

Emblems, lapel buttons, badges, etc., Association. 29th Division Association, Inc. 296,784; Aug. 23; Serial No. 319,792; published June 7, 1932.

CLASS 29

Cleaning and polishing fabrics of the hand-receiving or mitt type. Chicopee Manufacturing Corporation. 296,815; Aug. 23; Serial No. 326,078; published May 24, 1932.

Cloths, Polishing and dusting. Grady-Travers Company. 296,817; Aug. 23; Serial No. 326,013; published May 31, 1932.

Pads, Fabric. Magnum Products, Inc. 296,777; Aug. 23; Serial No. 325,042; published May 17, 1932.

CLASS 31

Ice Boxes and refrigerators. B. M. Sorino. 296,872; Aug. 23; Serial No. 321,506; published Jan. 19, 1932.

Filters and zeolite softeners and parts thereof. Ward-Love Pump Corporation. 296,869; Aug. 23; Serial No. 320,770; published June 14, 1932.

CLASS 32

Store fixtures. Grand Rapids Store Equipment Corporation. 296,796; Aug. 23; Serial No. 324,887; published June 7, 1932.

CLASS 34

Burners and stokers, Coal. Domestic Stoker Company. 296,922; Aug. 23; Serial No. 313,333; published June 7, 1932.

Furnaces. Surface Combustion Corporation. 296,867; Aug. 23; Serial No. 323,637; published June 7, 1932.

Heaters and gas burners for heating purposes. Hot water. Eureka Water Heater Company. 86,521; renewed May 14, 1932.

Lighting appliances and apparatus. Beardslee Chandelier Manufacturing Company. 89,329; renewed Dec. 10, 1932.

Radiators, Heating. Robinson Engineering Corporation. 296,876; Aug. 23; Serial No. 321,617; published June 7, 1932.

Stokers. W. and M. Stoker Company. 296,920; Aug. 23; Serial No. 311,808; published June 7, 1932.

CLASS 35

Packings, Metallic machinery. Hound Packing Company. 296,921; Aug. 23; Serial No. 312,008; published June 7, 1932.

Rings, Jar. Cupples Company, Manufacturers. 296,760; Aug. 23; Serial No. 317,841; published Apr. 5, 1932.

CLASS 36

Musical instruments, Stringed. C. Bechstein Pianofortefabrik Aktiengesellschaft. 296,863; Aug. 23; Serial No. 323,983; published June 7, 1932.

Musical novelties in the nature of finger tip tappers. F. J. Langer. 296,789; Aug. 23; Serial No. 324,291; published June 7, 1932.

Pianos. Brambach Piano Company. 89,438; renewed Dec. 17, 1932.

Recording reproducing apparatus and records therefor. J. Field. 296,785; Aug. 23; Serial No. 319,888; published June 7, 1932.

CLASS 37

Book covers, Temporary. J. Herz. 296,941; Aug. 23.

Paper. A. M. Eaton. 89,634; renewed Dec. 31, 1932.

Paper, Blotting. Albermarle Paper Manufacturing Company. 296,935; Aug. 23.

Paper, Ledger and bond. Byron Weston Company. 296,877; Aug. 23; Serial No. 322,012; published June 7, 1932.

Paper, Wrapping. Magnolia Paper Co. 89,932; renewed Jan. 21, 1933.

Stereotype mats. Burgess Cellulose Company. 296,832; Aug. 23; Serial No. 326,534; published June 7, 1932.

Tissue and facial tissue, Toilet. Modern Tissues Corporation. 296,808; Aug. 23; Serial No. 325,915; published June 7, 1932.

CLASS 38

Advertising circulars, Paper sheets used as. L. A. Hunton. 296,917; Aug. 23; Serial No. 310,604; published June 7, 1932.

Advertising circulars, Paper sheets used as. L. A. Hunton. 296,918; Aug. 23; Serial No. 310,606; published June 7, 1932.

Books. United Publishers Corporation. 296,805; Aug. 23; Serial No. 326,062; published June 7, 1932.

Comic strips and cartoons. King Features Syndicate, Inc. 296,828; Aug. 23; Serial No. 326,330; published June 7, 1932.

Coupons, Cooperative discount. United Publishers Corporation. 296,804; Aug. 23; Serial No. 326,063; published June 7, 1932.

CLASS 39

Brassières and girdles. Maiden Form Brassiere Co. Inc. 296,822; Aug. 23; Serial No. 326,113; published June 7, 1932.

Coats, suits, dresses, etc. Goldring-Neiman Corporation. 296,939; Aug. 23.

Gloves. Wimelbacher & Rice. 296,940; Aug. 23.

Hat linings and hats. Jay Gee Hat Co. 296,823; Aug. 23; Serial No. 326,146; published June 7, 1932.

Hats. Walter K. Marks, Inc. 296,826; Aug. 23; Serial No. 326,291; published June 7, 1932.

Hosiery. Benal Hosiery Co. 296,860; Aug. 23; Serial No. 326,204; published June 7, 1932.

Hosiery. Holeproof Hosiery Co. 296,845–7; Aug. 23; Serial Nos. 326,587–9; published June 7, 1932.

Hosiery. Marshall Field & Company. 296,857; Aug. 23; Serial No. 326,584; published June 7, 1932.

Hosiery. Phoenix Hosiery Company. 296,794; Aug. 23; Serial No. 324,799; published June 7, 1932.

Jumpers and work-shirts. Miller Bros. 89,570; renewed Dec. 24, 1932.

Knickers, trousers, suits, etc. Elmar Company. 296,901; Aug. 23; Serial No. 326,137; published June 7, 1932.

Shoes. Champion Shoe Manufacturing Corporation. 296,810; Aug. 23; Serial No. 325,566; published June 7, 1932.

Shoes, Corrective. I. Sabel. 296,764; Aug. 23; Serial No. 318,431; published June 14, 1932.

Slippers. B. & B. Shoe Company. 296,809; Aug. 23; Serial No. 325,776; published June 7, 1932.

Underwear. Empire Bloomer Co. 296,911; Aug. 23; Serial No. 325,748; published June 7, 1932.

CLASS 40

Pins, snap-fasteners, hook and eyes. A. Meyers & Sons Corp. 296,873–5; Aug. 23; Serial Nos. 321,544–6; published June 7, 1932.

Straps and stays, Shoulder. Goodbar Manufacturing Corporation. 296,938; Aug. 23.

CLASS 42

Flannel goods. Clarence Whitman & Co. 88,143; renewed Aug. 27, 1932.

CLASS 44

Dental alloys. S. S. White Dental Manufacturing Company. 296,912; Aug. 23; Serial No. 325,770; published June 14, 1932.

Prophylactic rubber and membraneous articles. J. Schmid. 296,895; Aug. 23; Serial No. 326,164; published June 7, 1932.

Prophylactic rubber articles. I. J. Friedland. 296,894; Aug. 23; Serial No. 326,140; published June 7, 1932.

Prophylactic rubber articles. J. Smith. 296,842; Aug. 23; Serial No. 325,601; published May 24, 1932.

Tampons. R. McNeil. 296,855; Aug. 23; Serial No. 326,389; published June 14, 1932.

Teething rings. E. Fox Novelty Co. Inc. 296,900; Aug. 23; Serial No. 325,973; published June 7, 1932.

Tweezers, blackhead extractors, etc., Manicure. Schnefel Bros. 296,898; Aug. 23; Serial No. 325,921; published June 7, 1932.

CLASS 45

Beverage, and syrups, concentrates, and extracts for making the same, Maltless. F. J. Huff. 296,836; Aug. 23; Serial No. 325,876; published June 14, 1932.

Beverages, Maltless. Palmyra Springs, Inc. 296,837; Aug. 23; Serial No. 326,870; published June 14, 1932.

Grape juice. Growers' Co-Operative Grape Juice Company. 296,838; Aug. 23; Serial No. 326,939; published June 14, 1932.

CLASS 46

Biscuit. National Biscuit Company. 89,487; renewed Dec. 17, 1932.

Biscuit. National Biscuit Company. 89,490; renewed Dec. 17, 1932.

Biscuit, Bird. V. Bach. 296,806; Aug. 23; Serial No. 326,075; published June 7, 1932.

Biscuits. Hershey Baking Company. 296,927; Aug. 23; Serial No. 308,334; published Apr. 28, 1931.

Candies and chocolates. Wallace & Co. 89,897; renewed Jan. 14, 1933.

Candy. Bonita Company. 296,926; Aug. 23; Serial No. 305,846; published Dec. 16, 1930.

Candy. Lovell & Covel Co. 296,942; Aug. 23.

Canned berries. A. L. Stewart & Sons. 296,882; Aug. 23; Serial No. 326,618; published June 7, 1932.

Canned food for dogs, cats, etc. N. C. Coan. 296,831; Aug. 23; Serial No. 326,457; published June 7, 1932.

Dietetic preparations and admixtures thereof with food products and beverages. Deutsche Nährmittel-Werke, Berlin, Ges. Besch. Haftg. 39,598; renewed Dec. 30, 1932.

Feeds and fattening mash, Dairy. Blue Grass-Elmendorf Grain Corporation. 296,843; Aug. 23; Serial No. 325,614; published June 7, 1932.

Flour, Wheat. Ansted & Burk Co. 88,043; renewed Aug. 27, 1932.

Flour, Wheat. Empire State Flour Mills. 89,637; renewed Dec. 31, 1932.

Flour, Wheat. Goldtree, Liebes & Co. 296,897; Aug. 23; Serial No. 325,908; published June 7, 1932.

Flour, Wheat. Southwestern Milling Company. 89,587; renewed Dec. 24, 1932.

Flour, Wheat. Tex-O-Kan Flour Mills Co. 296,824–5; Aug. 23; Serial No. 326,168–9; published June 7, 1932.

Food, Dog. Alaska Livestock & Packing Company. 296,807; Aug. 23; Serial No. 326,006; published May 24, 1932.

Food flavoring extracts. Furst-McNess Company. 296,890; Aug. 23; Serial No. 326,085; published June 7, 1932.

Food, Infant. Infantamilk Corporation. 296,891; Aug. 23; Serial No. 326,108; published June 7, 1932.

Foods. Beech-Nut Packing Company. 89,613; renewed Dec. 31, 1932.

Lard. T. M. Sinclair & Company. 89,586; renewed Dec. 24, 1932.

Macaroni. Atlantic Macaroni Co. 89,798; renewed Jan. 14, 1933.

Macaroni. Atlantic Macaroni Co. 89,803; renewed Jan. 14, 1933.

Macaroni. Atlantic Macaroni Co. 89,805; renewed Jan. 14, 1933.

Macaroni. Atlantic Macaroni Co. 89,807; renewed Jan. 14, 1933.

Milk, cream, butter, cheese, and eggs. Thompson's Dairy. 296,829; Aug. 23; Serial No. 326,437; published June 7, 1932.

Oranges. Charter Oak Citrus Association. 87,423–4; renewed July 16, 1932.

Oysters, Fresh. Great Atlantic & Pacific Tea Company. 296,883; Aug. 23; Serial No. 326,320; published June 7, 1932.

Pastries and ice cream, French. J. D. Coules. 296,889; Aug. 23; Serial No. 326,282; published June 7, 1932.

Pig's feet, tripe, tongues, etc. Boston Fresh Tripe Co. 296,924; Aug. 23; Serial No. 314,551; published June 7, 1932.

Popcorn confection. Cracker Jack Co. 296,906; Aug. 23; Serial No. 326,071; published June 7, 1932.

Poultry and live ducks, Dressed. M. R. Maurer. 296,767; Aug. 23; Serial No. 318,066; published June 7, 1932.

Rolls having each a frankfurter, contained and entirely enclosed therein; rolls having each a frankfurter and a portion of sauerkraut contained and enclosed therein; etc. A. Helbok. 296,881; Aug. 23; Serial No. 325,470; published June 7, 1932.

Syrup, Malt. A. Meza. 296,841; Aug. 23; Serial No. 325,478; published June 7, 1932.

Syrup, Malt. Pabst Corporation. 296,884; Aug. 23; Serial No. 326,430; published June 7, 1932.

Vanilla, Artificial vanilla, and compounds of the same, Natural. Felton Chemical Company. 296,885; Aug. 23; Serial No. 326,466; published June 7, 1932.

Vegetables, Fresh. American Trust Company. 296,782; Aug. 23; Serial No. 326,702; published June 7, 1932.

Vegetables, Fresh. C. Ramirez & Co. 296,864; Aug. 23; Serial No. 323,208; published June 7, 1932.

CLASS 50

Amusement and educational kit. R. S. Pitts. 296,779; Aug. 23; Serial No. 325,184; published May 31, 1932.

Cellulosic plastic, in sheets. Du Pont Viscoloid Company. 296,772; Aug. 23; Serial No. 325,616; published May 17, 1932.

Rubber crib sheets. S. H. Kress & Co. 296,813; Aug. 23; Serial No. 326,261; published May 31, 1932.

Rugs, Felt. John D. Harris Co. Inc. 296,770; Aug. 23; Serial No. 325,634; published May 31, 1932.

LIST OF LABELS

Beech-Nut Beechies. For Chewing Gum. Beech-Nut Packing Company. 41,046–7; Aug. 23.

Cinch. For Soft Soap. L. J. Wagner. 41,071; Aug. 23.

Cute-Asepto. For Powder. Hart Drug Corporation. 41,059; Aug. 23.

Dolly Madison Cakes. For Cake. Dolly Madison Cakes, Ltd. 41,054; Aug. 23.

E-Lixir. For Germ Meal Containing the Kernels or Germ of the Grains Richest in Vitamin E Content. R. Coll.er. 41,051; Aug. 23.

Ethereal Lava. For Preparation for Skin Eruptions, Pimples, Cold Sores, Poison Ivy, Itchings. M. Regelsen. 41,065; Aug. 23.

Feu-Follet. For Soaps. Parfumerie Roger et Gallet, Société Anonyme. 41,061; Aug. 23.

Gabrieleen. For Permanent Wave Lotion. Gabrieleen Co. 41,057; Aug. 23.

Grocers Special. For Bread. General Baking Company. 41,058; Aug. 23.

Neon. For Preparation for Treating the Eyes. M. Regelson. 41,063; Aug. 23.

Nopaine. For Preparation for External Application for the Relief of Pain. M. Regelson. 41,064; Aug. 23.

Nulustre Furniture Polishing Cloth. For Chemical Treated Cloth for Polishing Furniture and Automobiles. I. Shef. 41,067; Aug. 23.

Nulustre Metal Polishing Cloth. For Chemical Treated Cloth for Polishing All Metals. I. Shef. 41,068; Aug. 23.

O-Cedar. For Wax Cream for Cleaning and Polishing Furniture and Woodwork. O-Cedar Corp'n. 41,060; Aug. 23.

Paramount Sliced. For Bread. Weber Baking Company. 41,072; Aug. 23.

Penetrex. For Preparation for the Relief of Pain and Swelling of the Joints. M. Regelson. 41,066; Aug. 23.

Silver Cow. For Evaporated Milk. Borden Sales Company. 41,049; Aug. 23.

Smith's Limburger Type Cheese. For Cheese. G. Smith & Sons, Inc. 41,069; Aug. 23.

Solene. For Preparation for Preserving and Prolonging the Life of Shoe Soles. J. G. Cullins. 41,053; Aug. 23.

Sonnie Boy. For Prunes. B. Cribari & Sons. 41,052; Aug. 23.

Super Motor Oil Guaranteed 100% Pure Pennsylvania. For Motor Oil. Radbill Oil Company. 41,062; Aug. 23.

Tassel Corn. For Popcorn and Peanuts. W. French. 41,056; Aug. 23.

The Tel-a-Scor for Contract Bridge. For Bridge Scoring Devices. J. W. Billows. 41,048; Aug. 23.

Thoro Bread. For Canned Cat Food. Thoro Bread Company. 41,070; Aug. 23.

Twenty Grand Cigarettes. For Cigarettes. Axton-Fisher Tobacco Co. 41,045; Aug. 23.

Warmth Certificate. For Textile Blankets. Esmond Mills. 41,055; Aug. 23.

World's Finest Wide-Vue Corrected Lens. For Corrected Lenses. Chaffin Optical Co. 41,050; Aug. 23.

LIST OF PRINTS

A Cupful of Hills Bros. Coffee Proves that Controlled Roasting Makes a Finer Flavor. For Coffee. Hills Bros. 13,840; Aug. 23.

A Cupful of Hills Bros. Coffee Proves that Controlled Roasting Makes a Finer Flavor. For Coffee. Hills Bros. 13,853; Aug. 23.

A Cupful of Hills Bros. Coffee Proves that Controlled Roasting Makes a Finer Flavor. For Coffee. Hills Bros. 13,862; Aug. 23.

Controlled Roasting Puts Exclusive Goodness Into Every Cup of Hills Bros. Coffee. For Coffee. Hills Bros. 13,845–6; Aug. 23.

Controlled Roasting Puts Exclusive Goodness Into Every Cup of Hills Bros. Coffee. For Coffee. Hills Bros. 13,861; Aug. 23.

Controlled Roasting Puts Exclusive Goodness Into Every Cup of Hills Bros. Coffee. For Coffee. Hills Bros. 13,879; Aug. 23.

Here's Why Hills Bros Banished 'Batch-and-Bulk' Methods of Roasting Coffee. For Coffee. Hills Bros. 13,848; Aug. 23.

Here's Why Hills Bros Banished 'Batch-and-Bulk' Methods of Roasting Coffee. For Coffee. Hills Bros. 13,868; Aug. 23.

Here's Why Hills Bros Banished 'Batch-and-Bulk' Methods of Roasting Coffee. For Coffee. Hills Bros. 13,870; Aug. 23.

Here's Why Hills Bros Banished 'Batch-and-Bulk' Methods of Roasting Coffee. For Coffee. Hills Bros. 13,878; Aug. 23.

Hills Bros Changed Coffee-Roasting From a Guessing-Game to a Science. For Coffee. Hills Bros. 13,841; Aug. 23.

Hills Bros Changed Coffee-Roasting from a Guessing-Game to a Science. For Coffee. Hills Bros. 13,854; Aug. 23.

Hills Bros Changed Coffee-Roasting From a Guessing-Game to a Science. For Coffee. Hills Bros. 13,863; Aug. 23.

Hills Bros Changed Coffee-Roasting From a Guessing-Game To a Science. For Coffee. Hills Bros. 13,876; Aug. 23.

Hills Bros Coffee Never Varies in Flavor . . . That's Why You'll Never Switch. For Coffee. Hills Bros. 13,836; Aug. 23.

Hills Bros Coffee Never Varies in Flavor . . . That's Why You'll Never Switch. For Coffee. Hills Bros. 13,847; Aug. 23.

Hills Bros Coffee Never Varies in Flavor . . . That's Why You'll Never Switch. For Coffee. Hills Bros. 13,860; Aug. 23.

Hills Bros Coffee Never Varies in Flavor . . . That's Why You'll Never Switch. For Coffee. Hills Bros. 13,880; Aug. 23.

Hills Bros Made Coffee-Roasting an Exact Science When They Invented Controlled Roasting. For Coffee. Hills Bros. 13,837; Aug. 23.

Hills Bros Made Coffee-Roasting an Exact Science When They Invented Controlled Roasting. For Coffee. Hills Bros. 13,850; Aug. 23.

Hills Bros Made Coffee-Roasting an Exact Science When They Invented Controlled Roasting. For Coffee. Hills Bros. 13,859; Aug. 23.

Hills Bros Made Coffee-Roasting an Exact Science When They Invented Controlled Roasting. For Coffee. Hills Bros. 13,869; Aug. 23.

Hills Bros' Patented Process Puts the Finishing Touches From a Cup of Hills Bros. Coffee. For Coffee. Hills Bros. 13,843; Aug. 23.

Hills Bros' Patented Process Puts the Finishing Touches on the Job That Nature Begins. For Coffee. Hills Bros. 13,855; Aug. 23.

Hills Bros' Patented Process Puts the Finishing Touches on the Job That Nature Begins. For Coffee. Hills Bros. 13,866; Aug. 23.

Hills Bros' Patented Process Puts the Finishing Touches on the Job That Nature Begins. For Coffee. Hills Bros. 13,873; Aug. 23.

Take a Deep Breath of That Rich Aroma Floating Up From a Cup of Hills Bros Coffee. For Coffee. Hills Bros. 13,839; Aug. 23.

Take a Deep Breath of the Rich Aroma Floating Up From a Cup of Hills Bros Coffee. For Coffee. Hills Bros. 13,849; Aug. 23.

Take a Deep Breath of That Rich Aroma Floating Up From a Cup of Hills Bros Coffee. For Coffee. Hills Bros. 13,856; Aug. 23.

Take a Deep Breath of That Rich Aroma Floating Up From a Cup of Hills Bros Coffee. For Coffee. Hills Bros. 13,875; Aug. 23.

You Can Bank On the Same Exquisite Flavor in Every Pound of Hills Bros Coffee. For Coffee. Hills Bros. 13,844; Aug. 23.

You Can Bank on the Same Exquisite Flavor in Every Pound of Hills Bros Coffee. For Coffee. Hills Bros. 13,851; Aug. 23.

You Can Bank on the Same Exquisite Flavor in Every Pound of Hills Bros Coffee. For Coffee. Hills Bros. 13,857; Aug. 23.

You Can Bank on the Same Exquisite Flavor in Every Pound of Hills Bros Coffee. For Coffee. Hills Bros. 13,872; Aug. 23.

You'll Have a New Idea of Coffee Values, When You Taste Hills Bros. For Coffee. Hills Bros. 13,852; Aug. 23.

You'll Have a New Idea of Coffee Values, When You Taste Hills Bros. For Coffee. Hills Bros. 13,867; Aug. 23.
You'll Have a New Idea of Coffee Values, When You Taste Hills Bros. For Coffee. Hills Bros. 13,871; Aug. 23.
You'll Have a New Idea of Coffee Values, When You Taste Hills Bros. For Coffee. Hills Bros. 13,877; Aug. 23.
You'll Never Get any Sad Surprises in Hills Bros Coffee. For Coffee. Hills Bros. 13,842; Aug. 23.
You'll Never Get any Sad Surprises in Hills Bros Coffee. For Coffee. Hills Bros. 13,865; Aug. 23.
You'll Never Get any Sad Surprises in Hills Bros Coffee. For Coffee. Hills Bros. 13,874; Aug. 23.
You'll Never Know What a Wealth of Flavor Coffee Has, Until You Taste Hills Bros. For Coffee. Hills Bros. 13,838; Aug. 23.
You'll Never Know What a Wealth of Flavor Coffee Has, Until You Taste Hills Bros. For Coffee. Hills Bros. 13,858; Aug. 23.
You'll Never Know What a Wealth of Flavor Coffee Has, Until You Taste Hills Bros. For Coffee. Hills Bros. 13,864; Aug. 23.
You'll Never Know What a Wealth of Flavor Coffee Has, Until You Taste Hills Bros. For Coffee. Hills Bros. 13,881; Aug. 23.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 23D DAY OF AUGUST, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Kamrath, Herbert G., assignor.)
A C Spark Plug Company. (See McDougal, Taine G., assignor.)
Abbott, Albert L., assignor to Diebold Safe & Lock Company, Canton, Ohio. Safe. 1,873,246; Aug. 23.
Abbott, Albert L., assignor to The Diebold Safe & Lock Company, Canton, Ohio. Heat resisting protective structure. 1,873,523; Aug. 23.
Abbott, Albert L., W. C. Miller, and C. E. Miller, assignors to The Diebold Safe & Lock Company, Canton, Ohio. Disappearing door structure. 1,873,247; Aug. 23.
Abbott, Albert L., and W. C. Miller, assignors to The Diebold Safe & Lock Company, Canton, Ohio. Disappearing door safe and the like. 1,873,522; Aug. 23.
Abbott Laboratories. (See Adams, Roger, assignor.)
Abegg, Walter A., Los Angeles, assignor to Wieman Kammerer Wright Co., Incorporated. Hollydale, Calif. Making a connection. 1,873,245; Aug. 23.
Abronski, Alexander F., Philadelphia, Pa. Skylight construction. 1,872,868; Aug. 23.
Achterberg, Friedrich. (See Finkelstein, H., and Achterberg.)
Adamis, Athas. (See Curas, James.)
Adams, Daniel, Ann Arbor, Mich., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Laminated glass and producing the same. 1,873,248; Aug. 23.
Adams, Daniel G., assignor to Adams Grease Gun Corporation, New York, N. Y. High pressure coupler. 1,873,914; Aug. 23.
Adams Grease Gun Corporation. (See Adams, Daniel G., assignor.)
Adams, Henry T., Chicago, Ill. Magazine holder. 1,873,524; Aug. 23.
Adams, Roger, Urbana, assignor to Abbott Laboratories, North Chicago, Ill. Bactericide applicable to acid-fast bacteria. 1,873,732; Aug. 23.
Adams, Walter L. (See Pflueger, C. T., and Adams.)
Adirondack Steel Foundries Corporation. (See Sherman, Clifton W., assignor.)
Adjusta Company. (See Hirsh, Fred, assignor.)
Adolph, Walter J., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Bushing extractor. 1,873,250; Aug. 23.
Advance Pattern & Foundry Company. (See Burlin, Leslie H., assignor.)
Aerovox Wireless Corporation. (See Cole, Samuel I., assignor.)
Agasote Millboard Company, The. (See Harvey, Harold C., assignor.)
Agfa Ansco Corporation. (See Goldhammer, Leo, assignor.)
Ahlers, Robert H., assignor to Delco Products Corporation, Dayton, Ohio. Connecting link for shock absorbers. 1,873,172; Aug. 23.
Aid, William F., Cleveland, Ohio. Guard rail. 1,873,915; Aug. 23.
Albert, Chester B. (See Mueller, R. H., and Albert.)
Allabough, Ellsworth B., Evanston, Ill. Toy merry-go-round. 1,873,916; Aug. 23.
Allan, Allen C., assignor to Kant Slip Plier & Tool Company, Chicago, Ill. Pliers or the like. 1,873,805; Aug. 23.
Allbright, Edward W., Los Angeles, Calif. Seat construction for sedan type automobiles. 1,873,525; Aug. 23.
Allen, Clile C., assignor to American Optical Company, Southbridge, Mass. Locating prescriptive characteristics of a lens. 1,873,249; Aug. 23.
Allen, Clile C., assignor to American Optical Company, Southbridge, Mass. Lens testing device. 1,873,526; Aug. 23.
Allen, Edward L. O., Oakland, Calif. Shock absorber. 1,873,100; Aug. 23.
Allen, Frank B., Lower Merion Township, Montgomery County, assignor to The Allen-Sherman-Hoff Company, Philadelphia, Pa. Furnace dust handling apparatus. 1,873,806; Aug. 23.
Allen, Grosvenor N., M. G. Parker, and L. E. Ressegger, assignors to Oneida Community, Limited, Oneida, N. Y. Spoon or similar article. Des. 87,659; Aug. 23.
Allen, William H., F. MacDonald and W. A. Gale, assignors to American Potash & Chemical Corporation, Trona, Calif. Method and apparatus for separating salts and liquors. 1,873,251; Aug. 23.
Allen-Sherman-Hoff Company, The. (See Allen, Frank B., assignor.)
Allen-Sherman-Hoff Company, The. (See Hormel, Charles C., assignor.)
Allxemeine Elektricitats Gesellschaft. (See Wiegand, Erich. assignor.)
All Metal Products Company. (See Brethen, Charles A., assignor.)
Allsop, Thomas, Mount Airy, assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa. Apron conveyer. 1,873,865; Aug. 23.
Altgelt, Herman E., South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company. Air cleaner. 1,873,252; Aug. 23.
Altgelt, Rudolph J., and C. H. Genberling, South Bend, Ind., assignors to Oliver Farm Equipment Company. Power life mechanism for plows. 1,873,253; Aug. 23.
Altvater, Otto L., Milliken, Colo. Safety razor. 1,872,869; Aug. 23.
Aluminum Company of America. (See Morrow, John E., assignor.)
Aluminum Company of America. (See Smith, Earl D., assignor.)
Aluminum Company of America. (See Varney, Theodore. assignor.)
Aman, Frank A. (See Fischer, Edward J., assignor.)
American Bank Note Company. (See Webster, Albert S., assignor.)
American Brake Shoe and Foundry Company, The. (See Pogue, Robert B., assignor.)
American Brake Shoe and Foundry Company, The. (See Trainer, Maurice N., assignor.)
American Can Company. (See Ballettl, John C., assignor.)
American Can Company. (See Doyle, George W., assignor.)
American Can Company. (See Hothersall, John M., assignor.)
American Can Company. (See Miller, George F., assignor.)
American Cast Iron Pipe Company. (See Moore, James W., assignor.)
American Coach & Body Company. (See Larsen, Neil P., assignor.)
American Fork & Hoe Company, The. (See Fifield, Albert F., assignor.)
American Hair & Felt Company. (See Bettison, Percy R., assignor.)
American Hair & Felt Company. (See Johnson, Reginald H., assignor.)
American Manganese Steel Company. (See Rorabeck, Claude, assignor.)
American Manganese Steel Company. (See Young, Donald H., assignor.)
American Optical Company. (See Allen, Clile C., assignor.)
American Optical Company. (See Stimson, R. L., and Boutelle, assignors.)
American Optical Company. (See Tillyer, Edgar D., assignor.)
American Potash & Chemical Corporation. (See Allen, W. H., MacDonald, and Gale, assignors.)
American Potash & Chemical Corporation. (See Ritchie, C. F., and Gale.)
American Rolling Mill Company. (See Hudson, Edwin B., assignor.)
American Rolling Mill Company, The. (See Moon, Alva H., assignor.)
American Rolling Mill Company, The. (See Murphy, A. F., and Jones, assignors.)
American Steel Foundries. (See Blakeslee, Jerome K., assignor.)
American Steel Foundries. (See Lorenz, Frederick A., jr., assignor.)
American Steel Foundries. (See Oelkers, Alfred H., assignor.)
American Steel Foundries. (See Street, Clement F., assignor.)
American Thermos Bottle Company, The. (See Ball, George E., assignor.)
Andersen, Frederick E. (See Decker, B. H., and Andersen.)
Anderson, Charlie W. (See Larson, A. F., and Anderson.)
Anderson, Olof B., Marquette, Mich., assignor to E. J. Longyear Manufacturing Co., Minneapolis, Minn. Cushion diamond drill chuck. 1,873,173; Aug. 23.
Andres, William J., assignor to Bendix Brake Company, South Bend, Ind. Lever. 1,872,870; Aug. 23.
Anfinnsen, Arnfinn S., Bergen, and J. Oftedal, Sandnæs, Norway. Electrical switch. 1,873,527; Aug. 23.
Angell, Edward C., New York, N. Y. Container forming mechanism. 1,873,254; Aug. 23.
Annin, Douglas H., Glendale, Calif., assignor, by mesne assignments, to Neilan Co., Ltd., Boston, Mass. Remote control pilot valve. 1,872,871; Aug. 23.

Anstine, James W., York, Pa. Adjustable lock keeper. 1,873,528; Aug. 23.
Apex Electrical Manufacturing Company, The. (See Seyfried, Arthur W., assignor.)
Apexeon Company. (See Haskell, Frederick F., assignor.)
Armstrong Cork Company. (See Grupe, William F., assignor.)
Armstrong Cork Company. (See Humphreys, C. F., and Prentis, assignors.)
Armstrong Cork Company. (See McCarthy, J. C., assignor.)
Armstrong Cork Company. (See Schrader, Charles C., assignor.)
Armstrong Cork Company. (See Smith, D. F., Pieper, and Vogt, assignors.)
Armstrong Cork Company. (See Stewart, Hercules D., assignor.)
Armstrong Cork Company. (See Wiley, John, assignor.)
Armstrong Cork Company. (See Young, Paul R., assignor.)
Armstrong, Frank H., assignor to Safety Mining Company, Chicago, Ill. Self-retaining cartridge. 1,873,858; Aug. 23.
Arnold, Charles H., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,873,733; Aug. 23.
Arnold, Edwin E., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator buffer. 1,873,807; Aug. 23.
Arnold, Heinrich. (See Steinhart, H., and Arnold.)
Arnold, Henry B., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Power line carrier telephone system. 1,873,255; Aug. 23.
Arthur, James L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition apparatus. 1,873,174; Aug. 23.
Arthur, James L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition apparatus. 1,873,175; Aug. 23.
Artistic Bronze Company, The. (See Bridgewater, Horace M., assignor.)
Asch, Abraham B. (See Laughlin, W. C., and Asch.)
Aseltine, Fred E., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,873,256; Aug. 23.
Ashby, Cassius J., Evansville, Ind. Embroidery or rug machine. 1,873,257; Aug. 23.
Ashley, Lucy C., Oklahoma City, Okla. Aerial mail exchange. 1,873,917; Aug. 23.
Associated Dyers & Cleaners Limited. (See Crick, Harry J., assignor.)
Associated Electric Laboratories, Inc. (See Belliveau, Alfred H., assignor.)
Associated Telephone & Telegraph Company. (See Flenley, Alfred E., assignor.)
Atlas Manufacturing Company. (See Bleam, Edgar W., assignor.)
Attias, Isidor, New York, N. Y. Dumbwaiter doorlock. 1,873,918; Aug. 23.
Avedon, William C., New York, N. Y., assignor to D. Dyresen, Somerville, Mass. Closure for garments and other purposes. Re18,571; Aug. 23.
Bacigalupi, Joseph M., Oakland, Calif., assignor to Marchant Calculating Machine Company. Work feeding device. 1,873,922; Aug. 23.
Bailey, Adelbert D., Hammond, Ind. Packing ring. 1,873,859; Aug. 23.
Bailey, Edgar L., Detroit, Mich. Heating a conductive body. 1,873,808; Aug. 23.
Bailey, Edwin W. M., Amesbury, Mass. Lubricated window glass runway. 1,873,529; Aug. 23.
Baker Brothers, Inc. (See Hallenbeck, George E., assignor.)
Baldwin, Edward N., Chicago, Ill., assignor to Westinghouse Electric Elevator Company. Safety device for elevators. 1,873,809; Aug. 23.
Baldwin, Elnora E., Denver, Colo. Hair curler. 1,872,644; Aug. 23.
Ball, Frederick O., and T. M. Ball, Detroit, Mich. Carburetor. 1,873,919; Aug. 23.
Ball, George E., Cranston, R. I., assignor to The American Thermos Bottle Company, Norwich, Conn. Jug. Des. 87,613; Aug. 23.
Ball, George E., Cranston, R. I., assignor to The American Thermos Bottle Company, Norwich, Conn. Jug. Des. 87,614; Aug. 23.
Ball, Joseph A., Los Angeles, Calif., assignor, by mesne assignments, to Technicolor, Inc., New York, N. Y. Achromatic optical system and method. 1,873,258; Aug. 23.
Ball, Joseph A., Los Angeles, Calif., assignor, by mesne assignments, to Technicolor, Inc., New York, N. Y. Color cinematographic apparatus. 1,873,259; Aug. 23.
Ball, Thomas M. (See Ball, F. O., and Ball.)
Ballantine, Stuart, and L. M. Hull, Mountain Lakes, N. J., assignors, by mesne assignments, to Radio Corporation of America, New York, N. Y. Demodulator and method of demodulation. Re18,579; Aug. 23.
Balletti, John C., assignor to American Can Company, San Francisco, Calif. Tin plate sorting machine. 1,873,860; Aug. 23.
Banning, Thomas A., Jr., Wilmette, Ill., assignor to Dryice Equipment Corporation, New York, N. Y. Refrigeration and the like. 1,873,101; Aug. 23.
Barbet, Emile A., Paris, France. Apparatus for the fractionation of heavy oils. 1,873,734; Aug. 23.
Barce, John O., Chicago, Ill. Valve. 1,873,260; Aug. 23.
Barclay, Robert E., assignor to Federal Electric Company, Chicago, Ill. Sign. 1,873,261; Aug. 23.
Barcy-Nicholson Company. (See Wood, Joseph, assignor.)
Barker, Harry J., Chicago, Ill. Poultry fount and feeder. 1,872,645; Aug. 23.
Barker, William T., jr., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Obtaining variegated glass. 1,873,866; Aug. 23.
Barnes Drill Company. (See Johnson, Albert M., assignor.)
Barnhart, Robert M., Spokane, Wash. Front wheel drive. 1,873,810; Aug. 23.
Barr, Clarence D., Birmingham, Ala., assignor to Sand Spun Patents Corporation, Wilmington, Del. Flask. 1,873,176; Aug. 23.
Barrett Company. (See Downs, Charles R., assignor.)
Barrett Company, The. (See Miller, Stuart P., assignor.)
Bassick Company. (See Herold, Walter F., assignor.)
Bath, John. (See Bath, Stanley W., assignor.)
Bath, Stanley W., assignor to John Bath, Worcester, Mass. Truing mechanism for grinding machines. 1,873,530; Aug. 23.
Batterman, Herman, Chicago, Ill., assignor of one-half to A. P. Hunt. Preparing bentonite compositions. 1,873,262; Aug. 23.
Bausher, Jeremiah L., assignor to Infant Socks, Inc., Reading, Pa. Stocking. 1,873,811; Aug. 23.
Bay-Caram Co. (See Dyer, James E., assignor.)
Beard, Lawrence O., Lancaster, Pa. Reamer. 1,873,177; Aug. 23.
Beardsley and Wolcott Manufacturing Company, The. (See Lucia, Louis V., assignor.)
Bechman, Henry F., assignor to Duplex Printing Press Company, Battle Creek, Mich. Paper folding machine. 1,873,102; Aug. 23.
Beck, Carl, Springfield, and R. B. Burton, Longmeadow, assignors to Rolls Royce of America, Inc., Springfield, Mass. Sub-frame for automobile bodies. 1,872,671; Aug. 23.
Becker, Heinrich, assignor to Maschinenfabrik Augsburg-Nürnberg A. G., Augsburg, Germany. Pump. 1,873,812; Aug. 23.
Beebe, Ernest W. (See Kittel, John J., assignor.)
Beers, Burton B. (See Labadie, H. H., and Beers.)
Behneman, F. J. (See Rexworthy, Harold S., assignor.)
Behrens, Henry J., Lowville, N. Y. Scale. 1,872,646; Aug. 23.
Beiger, John W., assignor to The Carrom Company, Ludington, Mich. Folding card table. 1,873,263; Aug. 23.
Bell Telephone Laboratories, Incorporated. (See Adolph, Walter J., assignor.)
Bell Telephone Laboratories, Incorporated. (See Arnold, Henry B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Bjoronson, Bjorn G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Burton, Everett T., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gray, Frank, assignor.)
Bell Telephone Laboratories, Incorporated. (See Ives, H. E., and Gray, assignors.)
Bell Telephone Laboratories, Incorporated. (See Knoop, William A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Locke, George A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Peek, R. L., jr., and Hippensteel, assignors.)
Bell Telephone Laboratories, Incorporated. (See Quarles, Donald A., assignor.)
Bell Telephone Laboratories, Incorporated. (See St. John, Everett, assignor.)
Bell Telephone Laboratories, Incorporated. (See Sarros, James D., assignor.)
Bell Telephone Laboratories, Incorporated. (See Siegmund, Humphreys O., assignor.)
Belliveau, Alfred H., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Remote control system. 1,872,647; Aug. 23.
Bemis, Albert F., Newton, assignor to Bemis Industries, Incorporated, Boston, Mass. Building frame. 1,873,264; Aug. 23.
Bemis Industries, Incorporated. (See Bemis, Albert F., assignor.)
Bemis Industries, Incorporated. (See Brown, Horatio, assignor.)
Bemis Industries, Incorporated. (See Litchfield, Isaac W., assignor.)
Bemis, Ken E., Los Angeles, Calif., assignor, by mesne assignments, to Fountain Products Corporation. Sandwich assembling device. 1,873,920; Aug. 23.
Bendix Aviation Corporation. (See Leonard, Howard M., assignor.)
Bendix Aviation Corporation. (See Perrot, H., and Calvignac, assignors.)
Bendix Brake Company. (See Andres, William J., assignor.)
Bendix Brake Company. (See Bendix, Vincent, assignor.)
Bendix Brake Company. (See Dodge, Adiel Y., assignor.)
Bendix Brake Company. (See House, Bryan E., assignor.)
Bendix Brake Company. (See Kohr, Robert F., assignor.)
Bendix Brake Company. (See La Brie, Ludger E., assignor.)

Bendix Brake Company. (See Norton, Raymond J., assignor.)
Bendix Brake Company. (See Ring, W. A., and Laddon, assignors.)
Bendix Brake Company. (See Sanford, Bert J., assignor.)
Bendix Brake Company. (See Starr, Albert C., assignor.)
Bendix Brake Company. (See Taylor, Cecil H., assignor.)
Bendix Brake Company. (See Watts, William S., assignor.)
Bendix-Cowdrey Brake Tester, Inc. (See Semmes, Harry H., assignor.)
Bendix Research Corporation. (See Haas, Harold, assignor.)
Bendix Stromberg Carburetor Company. (See Mock, F. C., Gustafson, and Chandler, assignors.)
Bendix, Vincent, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Support. 1,872,872; Aug. 23.
Bendix, Vincent, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake-operating connection. 1,872,873; Aug. 23.
Bendix, Vincent, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. 1,872,874; Aug. 23.
Bendix, Vincent, assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,873,103; Aug. 23.
Benningfield, Leonard, Okmulgee, Okla. Top lift fastening means for shoe heels. 1,872,648; Aug. 23.
Benson, Bernhart A., assignor to Chicago Electric Manufacturing Co., Chicago, Ill. Latch for duplex waffle iron. 1,873,104; Aug. 23.
Bent, Lawrence A., Janesville, Wis. Sterilizer. 1,873,265; Aug. 23.
Bentz, Frank J., Miami, Fla. Store front. Des. 87,615; Aug. 23.
Berg, Erdman W., Fraser, Mich. Jewelry tray. 1,872,649; Aug. 23.
Berger, Waldemar, Frankfort-on-the-Main-Hochst, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Device for measuring liquids. 1,872,650; Aug. 23.
Bergmann, Charles H., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Program service system. 1,873,813; Aug. 23.
Berkowitz, Eugene B., Kansas City, Mo. Savings bank envelope. 1,872,651; Aug. 23.
Bernstein, Emil, Kosice, Czechoslovakia. Sign holder. 1,873,178; Aug. 23.
Bertsch, Johann A. (See Jaeger, A. O., and Bertsch.)
Best, Norman A., Shreveport, La. Cabinet inclosure. 1,872,652; Aug. 23.
Best, Richard C., assignor of one-half to H. Sweeney, Newark, N. J. Attachment for lawn mowers. 1,873,266; Aug. 23.
Bethel, Claude, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Integral mining locomotive. 1,872,875; Aug. 23.
Better Packages, Inc. (See Hebig, Henry C., assignor.)
Bettison, Percy R., assignor to American Hair & Felt Company, Chicago, Ill. Floor covering. 1,872,653; Aug. 23.
Bhagwat, Madhav R., Brooklyn, assignor to Combustion Utilities Corporation, New York, N. Y. Precipitation of resin from residual oils. 1,873,105; Aug. 23.
Bicknell, George M., assignor to Carter Carburetor Corporation, St. Louis, Mo. Carburetor. 1,872,654; Aug. 23.
Biederman, Frank A., Chicago, Ill., assignor to Paper Patents Company, Neenah, Wis. Article for display. 1,873,867; Aug. 23.
Bigelow, George E., and A. R. Weis, assignors of one-half to Pacific Pump Works, Huntington Park, Calif. Cooling arrangement for packing boxes. 1,873,267; Aug. 23.
Bigelow Sanford Carpet Co. (See Moffat, John B., assignor.)
Bitterli, Emile V. (See McNeil, R. S., and Bitterli.)
Bixby, Edward C., Salina, N. Y. Timer mechanism. 1,873,531; Aug. 23.
Bjorkstedt, William G., Jamaica, assignor to Doherty Research Company, New York, N. Y. Zircon refractory. 1,872,876; Aug. 23.
Bjornson, Bjorn G., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmission control circuits. 1,873,268; Aug. 23.
Black, James E., East Orange, N. J., assignor to Black Systems, Inc., Chicago, Ill. Building covering. 1,873,944; Aug. 23.
Black Systems, Inc. (See Black, James E., assignor.)
Blackhawk Manufacturing Company, The. (See Pfauser, Edward M., assignor.)
Blaich, John F., assignor to Fountain Advertising Service Company, Inc., Miami, Fla. Drinking fountain. Des. 87,616; Aug. 23.
Blakeslee, George R. (See Noll, Joseph C., assignor.)
Blakeslee, Jerome K., assignor to American Steel Foundries, Chicago, Ill. Pin lock. 1,872,655; Aug. 23.
Blalock, James E., Pacific Palisades, Calif. Liquid meter. 1,873,106; Aug. 23.
Blashfield, Floyd A., assignor to Scanlon-Morris Company, Madison, Wis. Electric switch. 1,873,269; Aug. 23.
Blazer, Earl H., Merriam, Kans. Pin fastener. 1,873,270; Aug. 23.
Bleam, Edgar W., Philadelphia, Pa., assignor to Atlas Manufacturing Company. Meat sawing apparatus. 1,872,656; Aug. 23.
Bletz, Edward, Lexington, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Thermal relay. 1,873,271; Aug. 23.
Bliss, Elmer J., Boston, assignor to Regal Shoe Company, Whitman, Mass. Device for measuring cubic capacity of shoes. 1,873,532; Aug. 23.
Bliss, E. W., Company. (See Kruse, Peter, assignor.)
Blosser, John B., Cooks, Mich. Stepladder. 1,873,107; Aug. 23.
Bodendieck, Henry W., assignor to Tips' Tool Company, Inc., Taylorville, Ill. Disconnecting switch. 1,873,272; Aug. 23.
Bohner, Sarah E., San Francisco, Calif. Eyelid guard. 1,873,928; Aug. 23.
Bollweg, Bernhard. (See Kramer, E., Bollweg and Zeh.)
Bonhôte, Gérald, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Azo-dyestuffs and making same. 1,873,533; Aug. 23.
Boosey, Edward W. N., Detroit, Mich. Drainage fitting and valve construction therefor. 1,873,273; Aug. 23.
Boosey, Edward W. N., Detroit, Mich. Adjustable test connection for plumbing systems. 1,873,274; Aug. 23.
Boosey, Edward W. N., Detroit, Mich. Drainage fitting. 1,873,275; Aug. 23.
Booth, Earl C. (See Noblitt, O. G., and Booth.)
Borden Company, The. (See McClatchie, John M., assignor.)
Borden Company, The. (See Mitton, William E., assignor.)
Borroughs, Joseph N. (See McCormick, Herbert S., assignor.)
Bosch, Robert, Aktiengesellschaft. (See Steinhart, H. and Arnold, assignors.)
Boston Gear Works, Inc. (See Schumb, M. T., and Tougas, assignors.)
Boutelle, William H. (See Stimson, R. L., and Boutelle.)
Bowers, Frank E., Drexel Hill, Pa., assignor to Wall & Oehs, Incorporated, Philadelphia, Pa. Ophthalmic mounting. Des. 87,617; Aug. 23.
Bowers, Frederick M., Chester, Pa. Sand-blaster's helmet. 1,872,877; Aug. 23.
Bowman, Archibald M., G. Graham, and J. D. Nixon, assignors to The Texas Iron Works Sales Corporation, Houston, Tex. Standing valve. 1,873,735; Aug. 23.
Boyd, Richard N. (See Snelling, W. O., and Boyd.)
Boyd, Thompson, assignor to Whitin Machine Works, Whitinsville, Mass. Cotton distributing mechanism. 1,873,179; Aug. 23.
Boye Needle Company, The. (See Carlson, Gustav A., assignor.)
Boye Needle Company, The. (See Davis, Edward D., assignor.)
Bradford, Zerbe C., assignor to Delco Products Corporation, Dayton, Ohio. Centrifugal switch. 1,873,180; Aug. 23.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake system for automotive vehicles. 1,872,657; Aug. 23.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake system for automotive vehicles. 1,872,658; Aug. 23.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake system for automotive vehicles. 1,872,659; Aug. 23.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, South Bend, Ind., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Power actuator. 1,872,660; Aug. 23.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Bragg, Philip R., Neptune, N. J. Oil gauge wiper and record holder. 1,872,878; Aug. 23.
Bramball, William A. jr., Washington, D. C. Display device. 1,872,661; Aug. 23.
Brandenburg, Francis C., assignor to The Wood Shovel and Tool Company, Piqua, Ohio. Method and apparatus for bending wood. 1,873,276; Aug. 23.
Brandt, David G., Westfield, N. J., assignor to Doherty Research Company, New York, N. Y. Constant pressure and temperature distillation. 1,872,879; Aug. 23.
Bratring, Kurt, Berckem, Antwerp, Belgium, assignor to Julius E. Kiefer, Milwaukee, Wis. Transparent paper, making the same, and composition for rendering the same transparent. 1,872,662; Aug. 23.
Braunlich, William E., Pittsburgh, Pa. Chain or ornament holding unit. 1,873,736; Aug. 23.
Breisky, John V., Pittsburgh, and T. Draper, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company. Fuel burner control system. 1,872,880; Aug. 23.
Brethen, Charles A., assignor to All Metal Products Company, Wyandotte, Mich. Hinge construction. 1,873,534; Aug. 23.
Brewster, Harry C., Shreveport, La. Coupling for drill bits. 1,873,814; Aug. 23.
Bridgewater, Horace M., Stratford, Conn., assignor to The Artistic Bronze Company, Bridgeport, Conn. Combination bottle opener and dispensing apparatus. Des. 87,618; Aug. 23.
Brier, John C., and G. B. Watkins, Ann Arbor, Mich., and W. F. Brown, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Laminated glass. 1,872,663; Aug. 23.

Brightman, Rainald, Blackley, Manchester, assignor to Imperial Chemical Industries Limited, Westminster, England. Azo dyes adapted for dyeing regenerated cellulose materials. 1,873,277; Aug. 23.

Brightman, Rainald, Blackley, Manchester, assignor to Imperial Chemical Industries Limited, London, England. Dyeing of regenerated cellulose materials. 1,873,278; Aug. 23.

Brill, J. G., Company, The. (See Rosebrook, Guy L., assignor.)

British Cotton Industry Research Association, The. (See Fargher, R. G., Galloway, and Probert, assignors.)

British Dyestuffs Corporation Limited. (See Shepherdson, Arnold, assignor.)

Broadwell, Bartley E., Lewiston, assignor to The Republic Carbon Company, Niagara Falls, N. Y. Heating molds for molding thermo-plastic materials. 1,873,535; Aug. 23.

Brockhaus Sohne, The firm. (See Kuhenne, Fritz, assignor.)

Brooks, Chester K., Mentor, and H. L. Spence, assignors to National Malleable and Steel Castings Company, Cleveland, Ohio. Shock absorbing mechanism. 1,872,881; Aug. 23.

Brooks, William H., Oconomowoc, Wis., and W. Page, New York, N. Y. Loading or boxing apparatus. 1,873,868; Aug. 23.

Brouner, Benjamin N., Takoma Park, Md. Electric wire conduit. 1,873,815; Aug. 23.

Brown, Charles W., San Diego, Calif. Closet flushing device. 1,873,181; Aug. 23.

Brown, Clyde E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft detecting mechanism for drop box looms. 1,873,108; Aug. 23.

Brown, Clyde E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft detecting mechanism for double shuttlelooms. 1,873,182; Aug. 23.

Brown, Clyde E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft detecting mechanism for pick and pick looms. 1,873,183; Aug. 23.

Brown, Horatio W., Concord, assignor to Bemis Industries, Incorporated, Boston, Mass. Apparatus for manufacture of sheet material. 1,873,279; Aug. 23.

Brown, James H., Baltimore, Md. Cigarette rolling device. 1,873,816; Aug. 23.

Brown, Ralph L., Pittsburgh, Pa., and W. W. Odell, Minneapolis, Minn. Producing reaction products from hydrocarbons and water. 1,873,536; Aug. 23.

Brown, Ralph L., and W. W. Odell, Pittsburgh, Pa. Synthesizing ethers. 1,873,537; Aug. 23.

Brown, Ralph L., and W. W. Odell, Pittsburgh, Pa. Producing oxygenated organic compounds. 1,873,538; Aug. 23.

Brown, Wilbur F. (See Brier, J. C., Watkins, and Brown.)

Brown, Wilbur F., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass apparatus. 1,872,664; Aug. 23.

Brown, Wilbur F., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Laminated glass. 1,873,280; Aug. 23.

Brown, William, New Haven, Conn. Signal lamp for automobiles. Des. 87,619; Aug. 23.

Brownell, Barnett M., University City, Mo., assignor to Diamond Metal Products Company. Swivel pipe coupling. 1,872,665; Aug. 23.

Brownell, Barnett M., University City, Mo., assignor to Diamond Metal Products Company. Swivel coupling. 1,872,666; Aug. 23.

Brownell, James L., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Meter control. 1,873,539; Aug. 23.

Bruback, Theodore M., Du Bois, Pa. Soot cleaner for boilers. 1,873,282; Aug. 23.

Brunner, Ludwig, Los Angeles, Calif. Connection. 1,873,281; Aug. 23.

Bryant Chucking Grinder Company. (See Bryant, William J., assignor.)

Bryant, William J., assignor to Bryant Chucking Grinder Company, Springfield, Vt. Work sizing. 1,872,667; Aug. 23.

Buckius, Albert O., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Side frame. 1,872,882; Aug. 23.

Buckius, Albert O., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Shock absorbing mechanism. 1,873,540; Aug. 23.

Buckius, Albert O., assignor to National Malleable Steel Castings Company, Cleveland, Ohio. Roller bearing journal box. 1,873,541; Aug. 23.

Buddenhagen, Charles F., Providence, R. I., assignor to C. G. Buddenhagen, Atlantic, Mass. Sprayer. 1,873,817; Aug. 23.

Buddenhagen, Cletus G. (See Buddenhagen, Charles F., assignor.)

Bull, Arthur A., Detroit, assignor to Chrysler Corporation, Highland Park, Mich. Apparatus for forming and controlling the circulation of air in internal combustion engines. 1,872,668; Aug. 23.

Bulldog Electric Products Company. (See Frank, Harrison J. L., assignor.)

Bunbury, Hugh Mills, Manchester, assignor to Imperial Chemical Industries Limited, Westminster, England. Producing thermoplastic products. 1,873,542; Aug. 23.

Bunce, Earl H., Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Condensing zinc vapor. 1,873,861; Aug. 23.

Burlin, Leslie H., Oak Park, assignor to Advance Pattern & Foundry Company, Chicago, Ill. Combination tray and table. 1,872,669; Aug. 23.

Burns, Raymond W., Poughkeepsie, N. Y. Clamp machine. 1,873,818; Aug. 23.

Burns, Wilfred E., Burlingame, Calif., assignor to M. J. B. Co. Can body blank folding machine. 1,872,670; Aug. 23.

Burst-Webster Engineering and Sales Company. (See Smith, Charles P., assignor.)

Burton, Charles S. (See Edwards, William A., assignor.)

Burton, Everett T., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telegraph repeater. 1,873,283; Aug. 23.

Burton, Robert B. (See Beck, C. and Burton.)

Busch, John, Berlin, Germany, assignor to General Electric Company. Construction of the voltage electromagnet of induction disk meter devices. 1,873,737; Aug. 23.

Bush Manufacturing Company, The. (See Mason, A. J., and Tancred, assignors.)

Bush Manufacturing Company, The. (See Seward, Owen L., assignor.)

Bushey, Donald H., asignor to Crompton & Knowles Loom Works, Worcester, Mass. Electrical detector mechanism for drop box looms. 1,873,109; Aug. 23.

Butler, William L., assignor to Weber Electric Company, Schenectady, N. Y. Snap switch. 1,873,110; Aug. 23.

Butte, Paul C. (See Champlin, S. H., Cutter, Kasten, and Butte.)

Butterworth, Josephine M., et al. (See Butterworth, Samuel D., asignor.)

Butterworth, Samuel D., assignor of one-half to J. M. Butterworth, Detroit, Mich., and one-half to C. P. Gable, Gable, South Carolina. Clamping apparatus. 1,873,819; Aug. 23.

Byrne, John F., Pittsburgh, Pa., assignor to The Koppers Company of Delaware. Manufacturing gas and carbonized fuel. 1,872,883; Aug. 23.

Cadwell, Harold W. (See Harris, C. C., and Cadwell.)

California Cap Company. (See Hammond, John A, assignor.)

California Chemical Corporation. (See Woodward, Henry T., assignor.)

California Packing Corporation. (See Goranson, Hjalmar, and D., assignors.)

Calvani, Fulvio, Newark, N. J. Saxophone. 1,873,184; Aug. 23.

Calvignac, Germain. (See Perrot, H., and Calvignac.)

Camel Company. (See Treptow, George R., assignor.)

Campbell, Oliver F., Whiting, Ind., and E. C. Herthel, Chicago, Ill., assignors to Sinclair Refining Company, New York, N. Y. Coking heavy oils. 1,872,884; Aug. 23.

Canadian Electro Products Company. (See Skirrow, Frederick W., assignor.)

Cannard, William H., Green Bay, Wis. Apparatus for making paper. 1,873,111; Aug. 23.

Capehart Corporation, The. (See Erbe, Ralph R., assignor.)

Capehart Corporation. (See Small Thomas W., assignor.)

Capper, Arthur M., Emsworth, Pa., assignor to Continental Roll & Steel Foundry Company, East Chicago, Ind. Slack adjuster for railway car brakes. 1,872,885; Aug. 23.

Capps, Frank L., Milford, Conn., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Sound reproducer. 1,872,672; Aug. 23.

Caprio, Amerigo F. (See Walsh, J. F., and Caprio.)

Caram, Edward D. (See Dyer, James E., assignor.)

Carbonara, Victor E., assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y. Take-up device. 1,873,284; Aug. 23.

Carborundum Company, The. (See Kirchner, Henry P., assignor.)

Carborundum Company, The. (See Tone, Frank J., assignor.)

Carlson, Gustav A., Chicago, Ill., assignor to The Boye Needle Company. Decorative hair pin. 1,873,543; Aug. 23.

Carpenter, Webster I., Norfolk, Va. Fluid warmer. 1,873,820; Aug. 23.

Carpentier, Melbourne L., Detroit, and J. B. Macauley, Jr., Grosse Point Village, assignors to Chrysler Corporation, Detroit, Mich. Manifold. 1,872,673; Aug. 23.

Carr, Fred S., Newton, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Fastening installation. 1,873,869; Aug. 23.

Carr, James M., Pittsburgh, Pa. Sanding apparatus. 1,872,886; Aug. 23.

Carr, Moses F., Lexington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass. Fastener socket. 1,873,870; Aug. 23.

Carr, Moses F., Lexington, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Snap fastener stud and installation thereof. 1,873,871; Aug. 23.

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Carr, Moses F., Lexington, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Connecting member for continuous fasteners. 1,873,872; Aug. 23.

Carroll, Charles, Chicago, Ill. Portable device to aid hearing. 1,872,674; Aug. 23.

Carrom Company, The. (See Belger, John W., assignor.)

Carter Carburetor Corporation. (See Bicknell, George M., assignor.)

Carter Carburetor Corporation. (See Ericson, George R., assignor.)

Carter, Raymond, New York, assignor to Edward J. McNamara, Great Neck, N. Y. School pendant or similar article. Des. 87,658; Aug. 23.

Case, Lynn B., assignor to John Waldon Corporation, New Brunswick, N. J. Coating machine. 1,873,821; Aug. 23.

Case Research Laboratory Incorporated. (See Case, Theodore W., assignor.)

Case, Theodore W., assignor to Case Research Laboratory Incorporated, Auburn, N. Y. Cell and making the same. 1,872,675; Aug. 23.

Case, Frederick S., San Francisco, Calif. Scraper. 1,872,887; Aug. 23.

Cassé, Marcel, Essonnes, France. Hat-shaping machine. 1,873,285; Aug. 23.

Castonguay, William Y., Detroit, Mich. Destroying moth worms, etc. 1,872,676; Aug. 23.

Castro, Manuel, Canton, Ohio. Hook for aircraft cargo handling apparatus. 1,873,822; Aug. 23.

Catron, Robert Lee, assignor to The Joseph H. Hill Company, Richmond, Ind. Rose. Pl. Pt. 23; Aug. 23.

Cawley, Aloysius J., Pittston, Pa. Sound recording process. 1,872,677; Aug. 23.

Cecil, Frank A., Detroit, Mich. Combination tire carrier and reflecting body. 1,873,823; Aug. 23.

Cederquist, Nils H., Alhambra, Calif. Tile panel alignment. 1,872,888; Aug. 23.

Celanese Corporation of America. (See Dreyfus, C., and Whitehead, assignors.)

Celanese Corporation of America. (See Moss, William H., assignor.)

Celanese Corporation of America. (See Moss, W. H., and White, assignors.)

Celluloid Corporation. (See Walsh, J. F., and Caprio, assignors.)

Centeno V., Melchor, Caracas, Venesuela. Television apparatus. 1,873,696; Aug. 23.

Centeno V., Melchor, Boston, Mass. Television apparatus. 1,873,926; Aug. 23.

Chamberlain, George L., Chicago, Ill. Sectional plug structure. 1,872,678; Aug. 23.

Chamberlin Metal Weather Strip Company. (See Olson, J. M., and Nelson, assignors.)

Chamberlin Metal Weatherstrip Co. (See Seide, Max, assignor.)

Champlin, Silas H., P. A. Cutter, F. Kasten, and P. C. Butte, assignors to Golden State Asparagus Co., San Francisco, Calif. Asparagus grader and cutter. 1,872,889; Aug. 23.

Chandler, Milton E. (See Mock, F. C., Gustafson, and Chandler.)

Chapal-Donner Corporation, The. (See Plass, Robert H., assignor.)

Chase, Charles C., St. Joseph, Mo. Candy package. 1,873,286; Aug. 23.

Chase-Shawmut Company, The. (See Wood, Morris B., assignor.)

Chebotaref, Leo P., assignor to The Texas Company, New York, N. Y. Refining petroleum distillates. 1,872,679; Aug. 23.

Checker Cab Manufacturing Corporation. (See Brownell, James L., assignor.)

Chevrette, Augustin J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle changer loom. 1,872,890; Aug. 23.

Chevrette, Augustin J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle changer loom. 1,873,112; Aug. 23.

Chicago Electric Manufacturing Co. (See Benson, Bernhart A., assignor.)

Chiles, George S., assignor to Scullin Steel Company, St. Louis, Mo. Ladder for freight cars. 1,872,680; Aug. 23.

Chilton, Ralph H., Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich. Freezing container. 1,873,287; Aug. 23.

Chrysler Corporation. (See Bull, Arthur A., assignor.)

Chrysler Corporation. (See Carpentier, M. L., and Macauley, assignors.)

Chrysler Corporation. (See Couture, Allan B., assignor.)

Chrysler Corporation. (See Lee, Roger K., assignor.)

Chrysler Corporation. (See Mulhern, William A., assignor.)

Chrysler Corporation. (See Paton, Roy W., assignor.)

Church, John W., Rosslyn Farms, Pa., and H. G. Elledge, Painesville, Ohio, assignors to Pure Calcium Products Company, Pittsburgh, Pa. Making precipitated calcium carbonate. 1,872,891; Aug. 23.

Cincinnati Grinders Incorporated. (See Kern, Fred M., assignor.)

Cincinnati Milling Machine Company, The. (See Ernst, Hans, assignor.)

Citizens National Trust & Savings Bank. (See Pendleton, Charles B., assignor.)

Clanton, Richard, assignor of one-half to P. Kramer, North Hollywood, Calif. Mechanical sand washer. 1,872,892; Aug. 23.

Clark, Charles H., Washington, D. C. Lifting device. 1,873,288; Aug. 23.

Clark, Earl K., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, Pittsburgh, Pa. Thermostatic switch. 1,873,544; Aug. 23.

Clark Equipment Company. (See Mogford, E. C., and Spatta, assignors.)

Clark, John M., assignor to Universal Button Fastening & Button Company, Detroit, Mich. Button. 1,873,545; Aug. 23.

Clark, Louis F., Milwaukee, Wis. Centrifuge. 1,873,185; Aug. 23.

Clark, William E., La Porte, Ind. Artificial bait. 1,873,289; Aug. 23.

Classon, Eric R., Flushing, N. Y. Weatherstrip. 1,873,546; Aug. 23.

Clausen, Harold. (See Robinson, G., and Clausen.)

Clemmons, Herbert D., assignor to Scovill Manufacturing Company, Sturgis, Mich. Ball cock body. Des. 87,620; Aug. 23.

Clemmons, Herbert D., assignor to Scovill Manufacturing Company. Ball cock body. Des. 87,621; Aug. 23.

Cleveland Pneumatic Tool Company, The. (See DeMooy, John, assignor.)

Cleveland Trust Company, The. (See Franquist, Gustave E., assignor.)

Coals and Chemicals Ltd. (See Trumble, Milon J., assignor.)

Cobb, Frederick G., Lancaster, S. C., assignor to Veeder-Root Incorporated. Controlling and indicating mechanism for looms. 1,872,893; Aug. 23.

Coca-Cola Company, The. (See Vassos, John, assignor.)

Cockle, James E., Elizabeth, N. J. Collapsible display device. 1,872,682; Aug. 23.

Coe, Paul E., New Orleans, La. Battery terminal clamp. 1,872,683; Aug. 23.

Coffey, Oscar L., assignor to Whiting Corporation, Harvey, Ill. Foundry ladle. 1,873,549; Aug. 23.

Coffey, Samuel, Blackley, Manchester, assignor to Imperial Chemical Industries Limited, Westminster, England, Manufacture of triarylcarbinols. 1,873,290; Aug. 23.

Cohen, Joseph E., assignor to Sentry Safety Control Corporation, Philadelphia, Pa. Safety device for motion picture projecting machines. 1,873,738; Aug. 23.

Cohen, Joseph H., Bridgeport, Conn. Fender apron. Des. 87,622; Aug. 23.

Cohen, Joseph H., Bridgeport, Conn. Fender apron. Des. 87,623; Aug. 23.

Cole, George H., Milwaukee, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Lighting fixture. 1,873,291; Aug. 23.

Cole, Horace L. (See Mercereau, J. T., and Cole.)

Cole, Horace L., Sharon, and H. H. Wagner, Pittsburgh, Pa., assignors to Westinghouse Electric & Manufacturing Company. Variable-reactance transformer. 1,873,824; Aug. 23.

Cole, Samuel I., Brooklyn, N. Y., assignor to Aerovox Wireless Corporation. Condenser. 1,873,548; Aug. 23.

Collier, David R., and H. W. Sheldrick, assignors to Collier-Keyworth Company, Gardner, Mass. Chair iron. 1,872,894; Aug. 23.

Collier-Keyworth Company. (See Collier, D. R., and Sheldrick, assignors.)

Collier-Keyworth Company. (See Sheldrick, Henry W., assignor.)

Collins, George M. (See Modglin, Sheldon A., assignor.)

Collins, Timothy, assignor of one-half to A. W. Nash, Los Angeles, Calif. Plaster board stud and lock. 1,873,292; Aug. 23.

Collon, Albin M. M., Lyon, France. Warp stop motion for looms for weaving. 1,873,739; Aug. 23.

Columbia Phonograph Company. (See Capps, Frank L., assignor.)

Combustion Utilities Corporation. (See Bhagwat, Madhav R., assignor.)

Combustion Utilities Corporation. (See Doherty, Henry L., assignor.)

Combustion Utilities Corporation. (See Johnson, Alfred, assignor.)

Commercial Shearing and Stamping Company, The. (See Galanot, Camille P., assignor.)

Conard, Frederick U., Stratford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,873,293; Aug. 23.

Condit Electrical Manufacturing Corporation. (See Greenwood, Talma T., assignor.)

Cone, Carroll, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for producing sheet glass. 1,872,684; Aug. 23.

Congoleum-Nairn, Inc. (See McConoughey, Merle S., assignor.)

Connery, Alder F., Brooklyn, assignor to International Communications Laboratories, Inc., New York, N. Y. Eight unit code telegraph system. 1,872,895; Aug. 23.

Conrad, Frank, Penn Township, Allegheny County, Pa., assignor to Westinghouse Electric & Manufacturing Company. Constant frequency generator. 1,872,896; Aug. 23.

Consolidated Machine Tool Corporation of America. (See Forward, Worthy J. F., assignor.)

Consolidated Machine Tool Corporation of America. (See Forward, W. J. F., and Roberts, assignors.)
Consolidated Machine Tool Corporation of America. (See Trosch, Alfred, assignor.)
Consolidated Packaging Machinery Corp. (See Cundall, Robert N., assignor.)
Consolidated Patentees Corporation. (See Epstein, Albert A., assignor.)
Container Corporation of America. (See Halladay, J. F., and Holy, assignors.)
Continental Diamond Fibre Company. (See Frederick, Louis T., assignor.)
Continental-Diamond Fibre Company. (See Vacher, Fernand, assignor.)
Continental Roll & Steel Foundry Company. (See Capper, Arthur M., assignor.)
Cook, Bernard, Roanoke County, Va. Pedestal binder for locomotive frames. 1,872,897; Aug. 23.
Cooke, Allen B., Danville, assignor to United Autographic Register Co., Chicago, Ill. Autographic register. 1,873,550; Aug. 23.
Copeland, Robert J., Toronto, Ontario, Canada. Holder for loose-leaf binders. 1,873,921; Aug. 23.
Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Cooling chamber for a mechanical refrigerating unit. 1,872,685; Aug. 23.
Corey, Fred B., Barberton, Ohio. Forming tapered holes in metal castings. 1,872,899; Aug. 23.
Cornock, Edward F., assignor to Package Machinery Company, Springfield, Mass. Wrapping machine. 1,872,898; Aug. 23.
Cory, Chas., Corporation. (See Jones, Joseph S., assignor.)
Cosgrove, John T., Kansas City, Mo. Puller. 1,873,294; Aug. 23.
Coultas, Wilbur J., assignor to Deere & Company, Moline, Ill. Shaft bearing for corn harvesters. 1,873,295; Aug. 23.
Coulter, Samuel N., Los Angeles, Calif. Clasp for garment supports. 1,873,551; Aug. 23.
Council, John M., Wananish, N. C. Device for removing bark from logs. 1,873,697; Aug. 23.
Court, Frank T., assignor to Deere & Company, Moline, Ill. Rod weeder. 1,873,552; Aug. 23.
Couture, Allan B., assignor to Chrysler Corporation, Detroit, Mich. Automobile wheel. Re18,578; Aug. 23.
Crago, Harry R., Schenectady, N. Y., assignor to General Electric Company. Electric regulator. 1,872,681; Aug. 23.
Crane Co. (See Kanter, Jerome J., assignor.)
Creamery Package Mfg. Company, The. (See North, Charles E., assignor.)
Crick, Harry J., assignor of one-half to Associated Dyers & Cleaners Limited, London, England. Dye jigger machine. 1,873,740; Aug. 23.
Crocker, Bertram E., Los Angeles, Calif. Petroleum smelting process. 1,872,900; Aug. 23.
Crocker, Harold A., London, assignor to J. Stone & Company Limited, Deptford, England. Side-light, side-scuttle or port opening for ships. 1,873,186; Aug. 23.
Crompton & Knowles Loom Works. (See Brown, Clyde E., assignor.)
Crompton & Knowles Loom Works. (See Bushey, Donald H., assignor.)
Crompton & Knowles Loom Works. (See Chevrette, Augustin J., assignor.)
Crompton & Knowles Loom Works. (See Gordon, Albert A., assignor.)
Crompton & Knowles Loom Works. (See Holmes, Eldridge R., assignor.)
Crompton & Knowles Loom Works. (See Kronoff, Clarence R., assignor.)
Crompton & Knowles Loom Works. (See Lundgren, William E., assignor.)
Crompton & Knowles Loom Works. (See Payne, Oscar V., assignor.)
Crompton & Knowles Loom Works. (See Robertson, William W., assignor.)
Crompton & Knowles Loom Works. (See Turner, R. G., and Jennings, assignors.)
Crompton & Knowles Loom Works. (See Turner, Richard G., assignor.)
Crompton & Knowles Loom Works. (See Wakefield, Walter H., assignor.)
Crompton & Knowles Loom Works. (See Wattie, William M., assignor.)
Cross, Roy, assignor to Silica Products Company, Kansas City, Mo. Improving clay. 1,873,296; Aug. 23.
Crowell, Alvin B., San Antonio, Tex. Ported shoe guide. 1,873,741; Aug. 23.
Crowley, Henry L., & Co. Inc. (See Crowley, Henry L., assignor.)
Crowley, Henry L., assignor to H. L. Crowley & Co. Inc., East Orange, N. J. Insulator for heaters for electron discharge devices. 1,872,901; Aug. 23.
Crowley, Henry L., assignor to H. L. Crowley & Co. Inc., East Orange, N. J. Producing molded bodies and the product. 1,872,902; Aug. 23.
Crown Cork & Seal Company. (See Darling, Frank L., assignor.)
Crumrine, Chester W. (See Thompson, R. G., and Crumrine.)
Crumrine, Chester W., assignor to Electromatic Typewriters, Inc., Rochester, N. Y. Typewriting machine. 1,873,553; Aug. 23.
Crumrine, Chester W., assignor to Electromatic Typewriters, Inc., Rochester, N. Y. Perforating machine. 1,873,554; Aug. 23.
Crumrine, Chester W., assignor to Electromatic Typewriters, Inc., Rochester, N. Y. Paper feed roller. 1,873,555; Aug. 23.
Crumrine, Chester W., assignor to Electromatic Typewriters, Inc., Rochester, N. Y. Typewriting machine. 1,873,556; Aug. 23.
Cundall, Robert N., Blasdell, N. Y., assignor, by mesne assignments, to Consolidated Packaging Machinery Corp. Machine for filling containers. 1,872,686; Aug. 23.
Cunningham, Orin D. (See Derby, I. H., and Cunningham.)
Curas, James, and A. Adamis, Stamford, Conn. Automatic train signal. 1,873,698; Aug. 23.
Cutter, Parker A. (See Champlin, S. H., Cutter, Kasten, and Butte.)
Cutter, Parker A., assignor of three-fourths to Golden State Asparagus Co., San Francisco, Calif. Vegetable and fruit grading apparatus. 1,872,903; Aug. 23.
Daae, Reinhardt, Youngstown, Ohio. Billet furnace. 1,872,904; Aug. 23.
Dahl, Conrad, Chicago, Ill., assignor of one-half to M. A. Pardieck and one-half to Selected Products Corporation. Amusement swing. Re18,572; Aug. 23.
Dahlstrom, John J., New Orleans, La. Crate. 1,873,187; Aug. 23.
Dain Manufacturing Company of Iowa. (See Jones, F. D., and Moschel, assignors.)
Dallas, Ronald H., Long Beach, Calif. Refrigerator bottle. Des. 87,624; Aug. 23.
Danenberg, Alexander, Brooklyn, N. Y. Eyelet for clasps. 1,873,699; Aug. 23.
Darling, Frank L., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md. Bottle closure applying means. 1,873,113; Aug. 23.
Darling, Roland A., Buffalo, N. Y. Rear vision mirror. 1,872,905; Aug. 23.
Davenport, Sherman H., Watertown, N. Y. Dish holder. 1,873,297; Aug. 23.
Davidson, Alfred, W. W. Tatum, and G. E. Watts, Blackley, Manchester, assignors to Imperial Chemical Industries, Limited, London, England. Manufacture of sulphonated amino anthraquinone. 1,873,300; Aug. 23.
Davidson, Edward C., Detroit, Mich. Collapsible tube. 1,872,687; Aug. 23.
Davis, Arthur B., Springfield, Ohio. Roll for printing presses and coating the surfaces of the same. 1,873,873; Aug. 23.
Davis, Charles H., jr., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition apparatus. 1,873,188; Aug. 23.
Davis, Charles H., jr., assignor to Delco-Remy Corporation, Anderson, Ind. Condenser. 1,873,298; Aug. 23.
Davis, Charles Hall, jr., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition timer. 1,873,114; Aug. 23.
Davis, Edward D., assignor to The Boye Needle Company, Chicago, Ill. Commodity cabinet. 1,873,557; Aug. 23.
Davis Engineering Corporation. (See Davis, Howard C., assignor.)
Davis, Ernest, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Booster actuating mechanism for pressing machines. 1,873,299; Aug. 23.
Davis, Howard C., Elizabeth, N. J., assignor to Davis Engineering Corporation. Expansion joint. 1,873,825; Aug. 23.
Davisson, Delos W., and F. G. Welke, assignors to Shell Development Company, San Francisco, Calif. Lubricator. 1,873,189; Aug. 23.
Davitt, Michael A., Hempstead, N. Y. Sewing cabinet. Des. 87,625; Aug. 23.
Dawn Mfg. Corp. (See Decker, B. H., and Andersen, assignors.)
Dayton Malleable Iron Company, The. (See Lucker, Millard B., assignor.)
Dealy, John M., Astoria, N. Y., assignor to MacArthur Concrete Pile Corporation, New York, N. Y. Apparatus for the formation of concrete piles in situ. 1,872,688; Aug. 23.
Dean, Edmund W., assignor to Duplex Printing Press Company, Battle Creek, Mich. Printing press and fudge attachment. 1,873,301; Aug. 23.
Debrie, André L. V. C., Paris, France. Device for controlling the soft focus device in cinematographic view taking apparatus. 1,873,742; Aug. 23.
Decker, Benjamin H., and F. E. Andersen, assignors to Dawn Mfg. Corp., Chicago, Ill. Food beater. Des. 87,626; Aug. 23.
Decker, George, assignor to Philad Company, Cleveland, Ohio. Apparatus for hair waving. 1,873,874; Aug. 23.
Decker, George, assignor to Philad Company, Cleveland, Ohio. Apparatus for hair waving. 1,873,875; Aug. 23.
Deere & Company. (See Coultas, Wilbur J., assignor.)
Deere & Company. (See Court, Frank T., assignor.)
Deere & Company. (See Livesay, Robert C., assignor.)
Deere & Company. (See Strandlund, Carl G., assignor.)
Deere & Company. (See White, Charles H., assignor.)

Deere, John, Tractor Company. (See McCray, Harold E., assignor.)
DeForest, Lee, Hollywood, Calif., assignor to General Talking Pictures Corporation, New York, N. Y. Gaseous discharge device. 1,873,558; Aug. 23.
DeFrancisco, Marshall, Brooklyn, N. Y. Color photographic machine. 1,873,302; Aug. 23.
DeLangie, Emma L. (See DeLangie, Godfrey A., assignor.)
DeLangie, Godfrey A., assignor to E. L. DeLangie, Newport, R. I. Pressure control mechanism. 1,873,303; Aug. 23.
Delco-Light Company. (See Wendt, Wesley E., assignor.)
Delco Products Corporation. (See Ahlers, Robert H., assignor.)
Delco Products Corporation. (See Aseltine, Fred E., assignor.)
Delco Products Corporation. (See Bradford, Zerbe C., assignor.)
Delco-Products Corporation. (See Kindl, C. H., and Funston, assignors.)
Delco Products Corporation. (See Kunkle, B. D., and Kindl, assignors.)
Delco Products Corporation. (See Werner, Calvin J., assignor.)
Delco-Remy Corporation. (See Arthur, James L., assignor.)
Delco-Remy Corporation. (See Davis, Charles H., jr., assignor.)
Delco-Remy Corporation. (See Fitzsimmons, John T., assignor.)
Delco-Remy Corporation. (See Hartzell, Herman L., assignor.)
Delco-Remy Corporation. (See Holmes, J. Q., and Phelps, assignors.)
Delco-Remy Corporation. (See Johnson, Sigurd N., assignor.)
Delco-Remy Corporation. (See Keller, Clarence J., assignor.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
Delco-Remy Corporation. (See Norviel, H. E., and Ecoff, assignors.)
Delco-Remy Corporation. (See Phelps, A. W., and Keller, assignors.)
Delco-Remy Corporation. (See Shippy, L. C., and Holmes, assignors.)
Delco-Remy Corporation. (See Shippy, L. C., and Phelps, assignors.)
De Moe Engineering Laboratories, The. (See McKnight, R. R., and Webber, assignors.)
De Mooy, John, Shaker Heights, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio. Hose coupling. 1,873,304; Aug. 23.
Dempster, John T. H., Schenectady, N. Y., assignor to General Electric Company. Circular saw. 1,873,700; Aug. 23.
Derby, Irah H. and O. D. Cunningham, assignors to Peter C. Reilly, Indianapolis, Ind. Ore flotation. 1,873,115; Aug. 23.
Dessaint, Georges, Paris, France. Jack attached to the axles of vehicles. 1,873,116; Aug. 23.
Deutsch-Atlantische Telegraphengesellschaft. (See Schnarnow, Bernhard, assignor.)
Devecis, Michael, Budapest, Hungary, assignor to Societe Anonyme Waldberg, Paris, France. Apparatus for the electrolytic deposition of metals. 1,873,826; Aug. 23.
De Vilbiss Company, The. (See Mutschel, Oscar J., assignor.)
De Vilbiss Company, The. (See Schmitt, Joy B., assignor.)
DeVille, Edward J., Dayton, Ohio, assignor to The Permutit Company, New York, N. Y. Water softening apparatus. 1,873,305; Aug. 23.
DeVille, Edward J., Dayton, Ohio, assignor to The Permutit Company, New York, N. Y. Water softening apparatus and multiway valve for same. 1,873,306; Aug. 23.
Dewend, William D., South Bend, Ind., assignor to Oliver Farm Equipment Company. (Disk harrow scraper. 1,873,307; Aug. 23.
Dewey and Almy Chemical Company. (See Wescott, William B., assignor.)
Diamond Metal Products Company. (See Brownell, Barnett M., assignor.)
Dibner, Abraham B., Peekskill, N. Y. Electrical connecter. 1,873,559; Aug. 23.
Dick, A. B., Company. (See Gestetner, David, assignor.)
Dickson, George F., assignor to G. A. Pearson, and L. Muter, Chicago, Ill. Refrigerating ice cream containers and the like. 1,872,689; Aug. 23.
Diebold Safe & Lock Company, The. (See Abbott, Albert L., assignor.)
Diebold Safe & Lock Company, The. (See Abbott, A. L., and Miller, assignors.)
Diebold Safe & Lock Company, The. (See Abbott, A. L., Miller, W. C., and C. E., assignors.)
Diits Machine Works, Inc. (See Haskell, John D., assignor.)
Doane, Leroy C., assignor to The Miller Company, Meriden, Conn. Inclosed lighting unit. 1,873,308; Aug. 23.
Doane, Leroy C., assignor to The Miller Company, Meriden, Conn. Lamp. 1,873,309; Aug. 23.
Doane, Leroy C., assignor to The Miller Company, Meriden, Conn. Collapsible reflector. 1,873,310; Aug. 23.
Dodge, Adiel Y., assignor to Dendix Brake Company, South Bend, Ind. Expanding clutch. 1,872,690; Aug. 23.
Doering, Charles, Chicago, Ill. Liquid merchandise dispenser. 1,873,929; Aug. 23.
Doering, Charles, and H. H., Chicago, Ill. Automatic butter forming and cutting machine. 1,873,311; Aug. 23.
Doering, Charles and H., Chicago, Ill. Butter cutting machine. 1,873,923; Aug. 23.
Doering, Henry H. (See Doering, Charles and H.)
Doherty, Henry L., New York, N. Y. Developing oil fields. 1,872,906; Aug. 23.
Doherty, Henry L., assignor to Combustion Utilities Corporation, New York, N. Y. Burning fluid fuel. 1,872,907; Aug. 23.
Doherty, Henry L., assignor to Doherty Research Company, New York, N. Y. Distilling hydrocarbon oils. 1,872,908; Aug. 23.
Doherty Research Company. (See Bjorkstedt, William G., assignor.)
Doherty Research Company. (See Brandt, D. and G., assignor.)
Doherty Research Company. (See Doherty, Henry L.)
Doherty Research Company. (See Goldsborough, Winder E., assignor.)
Doherty Research Company. (See Griswold, Robert G., assignor.)
Doherty Research Company. (See Merley, Sylvan R., assignor.)
Doherty Research Company. (See Morgan, John D., assignor.)
Doherty Research Company. (See Saathoff, George W., assignor.)
Doller, Joseph F., St. Louis, Mo. Armrest. 1,873,190; Aug. 23.
Doran, John H., Scotia, N. Y., assignor to General Electric Company. Elastic fluid turbine. 1,873,743; Aug. 23.
Douglas, Harry A., Bronson, Mich. Electric lamp. 1,873,312; Aug. 23.
Douglas, Harry A., Bronson, Mich. Electric switch. 1,873,313; Aug. 23.
Douglass, Napoleon B., Berkeley, Calif., assignor to The Rome Company, Inc., Rome, N. Y. Wall bed. 1,872,909; Aug. 23.
Downs, Charles R., Bronxville, N. Y., assignor to The Barrett Company. Apparatus for controlling temperatures in chemical reactions. 1,873,876; Aug. 23.
Doyle, George W., Rome, assignor to American Can Company, New York, N. Y. Clutch. 1,872,910; Aug. 23.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for producing sheet glass. 1,872,691; Aug. 23.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for making laminated glass. 1,872,692; Aug. 23.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for making laminated glass and method of operating the same. 1,872,693; Aug. 23.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for surfacing sheet glass. 1,872,694; Aug. 23.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Process and apparatus for producing sheet glass. 1,872,695; Aug. 23.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,872,696; Aug. 23.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass surfacing apparatus. 1,872,697; Aug. 23.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Method and apparatus for producing sheet glass. 1,872,698; Aug. 23.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,872,699; Aug. 23.
Drake, Lewis F. V., assignor to Salvage Process Corporation, New York, N. Y. Pumping apparatus. 1,873,314; Aug. 23.
Draper, Thomas. (See Breisky, J. V., and Draper.)
Draxler, Karl, Los Angeles, Calif. Reading support. 1,872,911; Aug. 23.
Dreyer, Charles F., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Ganging apparatus. 1,873,315; Aug. 23.
Dreyfus, Camille, New York, N. Y. Carrying out organic chemical reactions in improved reaction media. 1,872,700; Aug. 23.
Dreyfus, Camille, New York, N. Y. Making articles. 1,872,912; Aug. 23.
Dreyfus, Camille, New York, N. Y. Pile fabric containing derivatives of cellulose. 1,873,862; Aug. 23.
Dreyfus, Camille, New York, N. Y. Pile fabric. 1,873,863; Aug. 23.
Dreyfus, Camille, New York, N. Y., and W. Whitehead, Cumberland, Md., assignors to Celanese Corporation of America. Textile materials and preparing the same. 1,872,913; Aug. 23.
Dreyfus, Henry, London, England. Cellulose esters and making the same. 1,872,701; Aug. 23.
Dreyfus, Henry, London, England. Manufacture of aliphatic acid anhydrides. 1,872,914; Aug. 23.

Droitcour, Michael A., Providence, R. I., assignor to Harris-Seybold-Potter Company, Cleveland, Ohio. Delivery mechanism. 1,873,316; Aug. 23.
Dryice Corporation of America. (See Jones, Charles L., assignor.)
Dryice Corporation of America. (See Josephson, Walter S., assignor.)
Dryice Equipment Corporation. (See Banning, Thomas A., jr., assignor.)
Dryice Equipment Corporation. (See Jones, C. L., and Small, assignors.)
Dryice Equipment Corporation. (See Taylor, Henry M., assignor.)
Dubois, Ernest J., Lowell, Mass. Copyholder. 1,873,744; Aug. 23.
Du Grenier, Arthur H., Haverhill, Mass. Dispensing machine. 1,873,317; Aug. 23.
Duncklee, Lester A., Lockport, N. Y., assignor to Jefferson Union Company, Lexington, Mass. Range boiler coupling. 1,872,702; Aug. 23.
Dunham, Henry V., Bainbridge, N. Y. Making plywood. 1,873,827; Aug. 23.
Dunlop, James, Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company. Snubber for elevators. 1,873,828. Aug. 23.
Dunlop, James, Park Ridge, Ill., assignor to Westinghouse Electric & Manufacturing Company. Elevator car safety device. 1,873,829; Aug. 23.
Dunn William G., Clarinda, Iowa. Abrasive holder. Des. 87,627; Aug. 23.
Duplex Printing Press Company. (See Bechman, Henry E., assignor.)
Duplex Printing Press Company. (See Dean, Edmund W., assignor.)
Dupont, John, Comstock, N. Y. Nonrefillable bottle. 1,873,830; Aug. 23.
Dura Company, The. (See Rettich, Kurt, assignor.)
Duro Company, The. (See Eisenhauer, Charles P., assignor.)
Dyer, James E., assignor to E. D. Caram, doing business as Bay-Caram Co., Los Angeles, Calif. Shoe sole. Des. 87,628; Aug. 23.
Dyresen, Didrick. (See Avedon, William C., assignor.)
Eames, William F., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator control system. 1,872,915; Aug. 23.
Eason, Ernest L., jr., Whittier, Calif. Self-cleaning slush pump valve. 1,873,318; Aug. 23.
Eckhard, William K., Dunellen, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y. Printing machine having automatic feeders. 1,872,916; Aug. 23.
Eclipse Aviation Corporation. (See Maurer, Paul H., assignor.)
Ecott, Vance. (See Norvle, H. E., and Vance.)
Edel, Walter L., New Haven, Conn., assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating system. 1,873,319; Aug. 23.
Edgerton, Israel V., assignor to North American Car Corporation, Chicago, Ill. Stock car. 1,872,703; Aug. 23.
Edmonson, Arthur, Cleveland, Ohio, assignor to M. Matsen, Oregon, Wis. Electrical terminal. 1,873,930; Aug. 23.
Edwards, William A., assignor of one-half to C. S. Burton, Chicago, Ill. Suction-producing means for suction-operated motors. 1,873,320; Aug. 23.
Eisenhauer, Charles P., assignor to The Duro Company, Dayton, Ohio. Automatic water softener. 1,872,704; Aug. 23.
Ekman, Andrew, Grand Rapids, Mich. Latch. 1,873,560; Aug. 23.
Elder, Donald, Berkeley, Calif. Hose spray nozzle. 1,873,321; Aug. 23.
Elder, John G., Harrisville, W. Va. Hub puller. 1,873,322; Aug. 23.
Electric Service Supplies Company. (See McFarlin, John R., assignor.)
Electric Smelting & Aluminum Company, The. (See Guertler, William M., assignor.)
Electroacustic Gesellschaft mit beschränkter Haftung. (See Hecht, Heinrich, assignor.)
Electrolux Servel Corporation. (See Lenning, Alvar, assignor.)
Electromatic Typewriters, Inc. (See Crumrine, Chester W., assignor.)
Electromatic Typewriter, Inc. (See Thompson, Russell G., assignor.)
Electromatic Typewriters Inc. (See Thompson, R. G., and Crumrine, assignors.)
Electrons, Inc. (See Von Wedel, Carl J. R. H., assignor.)
Elledge, Harvey G. (See Church, J. W., and Elledge.)
Elliott, Benjamin L., Berry Township, Brown County, Ohio. Parachute. 1,872,705; Aug. 23.
Ellis, Charles E., jr. (See Hughes, D. W., and Ellis.)
Ellis, Harold E. (See Williams, F. T., and Ellis.)
Ellis, Joseph P. (See Nohr, Allen, assignor.)
Ellis, Walter J., Indianapolis, Ind. Suspenders. 1,873,831; Aug. 23.
Else Harry D., and C. R. Libby, Springfield, Mass., assignors to Westinghouse Electric & Manufacturing Company. Clutch quieting means. 1,873,561; Aug. 23.
Ely, Hiram B., New York, N. Y. Ear mask. 1,873,864; Aug. 23.
Emery, Alexander A., Cincinnati, Ohio. Shear sharpening device. 1,873,636; Aug. 23.
Emmet, William L. R., Schenectady, N. Y., assignor to General Electric Company. Liquid boiler. 1,873,637; Aug. 23.
Empire Oil and Refining Company. (See Walker, John C., assignor.)
Enderlin, John F., and J. E. Ogles, Paducah, Ky. Metallic packing. 1,873,745; Aug. 23.
Endicott Johnson Corporation. (See Shaw, Estle H., assignor.)
English, William S., Newark, N. J. Apparatus for enriching fuel mixture for internal combustion engines. 1,873,746; Aug. 23.
Epstein, Albert A., asignor to Consolidated Patentees Corporation, New York, N. Y. Hypodermic needle kit. 1,872,917; Aug. 23.
Epstein, Charles. (See Epstein, Selig and C.)
Epstein, Selig and C., New York, N. Y. Water heater boiler attachment. 1,873,638; Aug. 23.
Erbe, Ralph R., Tacoma, Wash., assignor by mesne assignments to The Capehart Corporation, Fort Wayne, Ind. Record changing mechanism for phonographs. 1,872,706; Aug. 23.
Erbe, Ralph R., Bridgeport, Conn., assignor, by mesne assignments, to The Capehart Corporation, Fort Wayne, Ind. Phonograph. 1,872,707; Aug. 23.
Ericson, George R., Maplewood, assignor to Carter Carburetor Corporation, St. Louis, Mo. Carburetor. 1,872,708; Aug. 23.
Ernsberger, Paul W., Ada, Ohio. Bag holder. 1,872,918; Aug. 23.
Ernst, Hans, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Gasket. 1,782,709; Aug. 23.
Ersland, Amos K., Manhattan Beach, Calif. Wrench. 1,872,710; Aug. 23.
Essig, Gottlieb F., Philadelphia, Pa. Hangar for dirigibles. 1,873,562; Aug. 23.
Estate Stove Company, The. (See Kahn, Bertrand B., assignor.)
Euth, John E., assignor to United Autographic Register Co., Chicago, Ill. Duplicating machine. 1,873,563; Aug. 23.
Evans, Charles H., Newfane, assignor to Niagara Sprayer & Chemical Co. Inc., Middleport, N. Y. Fruit sizer. 1,873,323; Aug. 23.
Evans, James C., Detroit, Mich. Internal combustion engine. 1,873,324; Aug. 23.
Everlastik, Inc. (See Winton, Harry C., assignor.)
Fabrey, William H., assignor to Weber Electric Company, Schenectady, N. Y. Interchangeable electrical socket. 1,873,191; Aug. 23.
Fahrenwald, Frank A., Chicago, Ill. Furnace conveyor shaft with disks. 1,872,711; Aug. 23.
Fahrenwald, Frank A., Chicago, Ill. Lead pan. 1,872,712; Aug. 23.
Fahrenwald, Frank A., Chicago Heights, Ill. Apparatus for heat treating objects. 1,872,713; Aug. 23.
Fairweather, David A. W., and R. F. Thomson, assignors to Imperial Chemical Industries Limited, Stirling, Scotland. Production of 2-Aminoanthrahydroquinone 9:10-disulphuric ester and its salts. 1,873,564; Aug. 23.
Fargher, Robert G., Leslie Galloway and M. E. Probert, Manchester, assignors to The British Cotton Industry Research Asociation, Didsbury, England. Proofing or like treatment of materials to protect them from mildew and other fungoid growths. 1,873,365; Aug. 23.
Farley, John W., Cleveland, Ohio. Cup plate for protecting ends of pipe coverings. 1,873,747; Aug. 23.
Farley, Otis N., Lynden, Wash. Power steering mechanism for automobiles. 1,872,714; Aug. 23.
Farley, Tremle, Selah, assignor of one-half to W. McGonagle, Yakima, Wash. Fruit cleaning apparatus. 1,873,832; Aug. 23.
Farrington, Bruce B. (See Hampton, W. H., and Farrington.)
Farrow, Tom, Ashton-under-Ryne, England. Machine for forming the ends of paper tubes. 1,873,366; Aug. 23.
Faultless Manufacturing Company, The. (See Hargreaves, John F., assignor.)
Favreau, Walter, Tompkinsville, assignor to W. H. Smith, New York, N. Y. Model for illustrating office buildings and the like. 1,873,748; Aug. 23.
Federal Electric Company. (See Barclay, Robert E., assignor.)
Federal Telegraph Company. (See Kolster, Frederick A., assignor.)
Federal Telegraph Company. (See Litton, Charles V., assignor.)
Federal Telegraph Company. (See Overacker, Horace E., assignor.)
Federal Telegraph Company. (See Romander, Hugo, assignor.)
Federal Telegraph Company. (See Sollie, Sigurd A., assignor.)
Fell, Hugh P., New York, N. Y. Cylinder drying machine. 1,873,833; Aug. 23.
Ferguson, Reginald, Montreal, Quebec, Canada, assignor, by mesne assignments, to Simmons Company, New York, N. Y. Spring structure. 1,872,715; Aug. 23.
Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Latch lock. 1,873,565; Aug. 23.
Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Ball bearing hinge. 1,873,566; Aug. 23.

Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Door or window. 1,873,867; Aug. 23.
Fickinger, Joseph, assignor to Oakland Foundry Company, Belleville, Ill. Stove. Des. 87,629; Aug. 23.
Field, Edward A., jr. (See Field, E. A., and Field.)
Field, Edward A. and E. A., jr., Chicago, Ill. Draft stabilizer. 1,873,567; Aug. 23.
Fifield, Albert F., St. Catharines, Ontario, Canada, assignor to The American Fork & Hoe Company, Cleveland, Ohio. Rail anchor. 1,873,192; Aug. 23.
Filkins, Arthur J., Riverside, Ill. Ventilator. 1,873,368; Aug. 23.
Filtration Equipment Corporation. (See Laughlin, W. C., and Asch, assignors.)
Filkelstein, Hans, and F. Achtenberg, Uerdingen, assignors to I. G. Farnebindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of compounds containing aluminum and fluorine. 1,872,716; Aug. 23.
Firsching, Joseph A., Utica, N. Y. Apparatus for dyeing textile fabrics. 1,872,717; Aug. 23.
Fischer, Edward J., Covington, Ky., assignor of one-half to F. A. Aman. Hydraulic spring and shock absorbing device. 1,872,919; Aug. 23.
Fischer, Georg, et al. (See Kugler, Heinrich, assignor.)
Fisher, Frank C., Toledo, Ohio. Adjustable fulcrum support for weighing scales. 1,872,920; Aug. 23.
Fisher, Harmon F. (See Worthington, J. T., and Fisher.)
Fisher, Harry J. (See Henderson, E. W., and Fisher.)
Fisher Hosiery Co., Inc. (See Katzenmoyer, Harry E., assignor.)
Fitzpatrick, Jeremiah, Weymouth, Mass. Foot measuring device. 1,872,921; Aug. 23.
Fitzsimmons, John T., assignor to Delco-Remy Corporation, Anderson, Ind. Motor starting circuit. 1,873,117; Aug. 23.
Flanagan, John F., Napa, Calif., assignor of one-half to C. E. Thurston, Montclair, N. J. Plow attachment for tractors. 1,873,749; Aug. 23.
Flanigan, John J., Oak Park, assignor to Vivid, Incorporated, Chicago, Ill. Duplicating machine. 1,872,718; Aug. 23.
Flanigan, John J., Oak Park, assignor to Vivid, Incorporated, Chicago, Ill. Duplicating machine. 1,872,719; Aug. 23.
Fleckenstein, Florian, Pankow, and G. W. Müller, Charlottenburg, Germany, assignors to General Electric Company. Support for electric discharge devices. 1,873,834; Aug. 23.
Flenley, Alfred E., Liverpool, England, assignor to Associated Telephone & Telegraph Company, Chicago, Ill. Telephone system. 1,872,720; Aug. 23.
Flesche, Mabel. (See Townnes, Thomas P., assignor.)
Fliegel, Hubert H., Merrick, N. Y. Hatch construction for upper decks. 1,873,639; Aug. 23.
Forbes Lithograph Manufacturing Company, The. (See Ring, Raymond M., assignor.)
Ford, Albert F., Calcutta, British India. Safety razor blade and razor. 1,872,721; Aug. 23.
Ford, Henry assignor to Ford Motor Company, Dearborn, Mich. Ignition system. 1,873,869; Aug. 23.
Ford, Henry assignor to Ford Motor Company, Dearborn, Mich. Machine for manufacturing brake drums. 1,873,568; Aug. 23.
Ford, Henry assignor to Ford Motor Company, Dearborn, Mich. Engine valve. 1,873,569; Aug. 23.
Ford, Ira D., Roseland, Ontario, Canada, assignor to Universal Button Fastening & Button Company, Detroit, Mich. Securing means. 1,873,870; Aug. 23.
Ford, Ira D., Roseland, Ontario, Canada, assignor to Universal Button Fastening & Button Company, Detroit, Mich. Slide buckle. 1,873,871; Aug. 23.
Ford, Ira D., Roseland, Ontario, Canada, assignor to Universal Button Fastening & Button Company, Detroit, Mich. Button. 1,873,872; Aug. 23.
Ford, Ira D., Roseland, Ontario, Canada, assignor to Universal Button Fastening & Button Company, Detroit, Mich. Button. 1,873,873; Aug. 23.
Ford Motor Company. (See Ford, Henry, assignor.)
Ford Motor Company. (See Galamb, Joseph, assignor.)
Ford Motor Company. (See Lefevre, Emil B. G., assignor.)
Forshee, Frank F., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Temperature indicator. 1,873,874; Aug. 23.
Fortescue, Charles Le G., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Insulator structure. 1,873,750; Aug. 23.
Forward, Worthy J. F., and R. E. Roberts, assignors to Consolidated Machine Tool Corporation of America, Rochester, N. Y. Machine tool. 1,873,875; Aug. 23.
Forward, Worthy J. F., assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y. Machine tool. 1,873,876; Aug. 23.
Foster Brothers Manufacturing Company. (See Foster, William B., assignors.)
Foster, William B., assignor to Foster Brothers Manufacturing Company. Utica, N. Y. Spring cushion construction. 1,872,922; Aug. 23.
Fountain Advertising Service Company. (See Blaich, John F., assignor.)
Fountain Products Corporation. (See Bemis, Ken E., assignor.)
Fountaine, Philiza, Dahlen, assignor of one-half to Ingman Swinland, Lakota, N. D. Oil can. 1,873,835; Aug. 23.
Fouts, Horace A., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Cracking oils. 1,872,722; Aug. 23.
Fox Case Corporation. (See Whiting, Donald F., assignor.)
Francke, Paul, New Brunswick, N. J. Baby carriage sled. 1,873,836; Aug. 23.
Frank, Harrison J. L., assignor to Bulldog Electric Products Company, Detroit, Mich. Metering panel. 1,872,723; Aug. 23.
Franquist, Gustave E., deceased, by M. L. Franquist, executrix, Rochester, N. Y., assignor to The Cleveland Trust Company, Cleveland, Ohio. Piston. 1,872,724; Aug. 23.
Franquist, Margaret L., executrix. (See Franquist, Gustave E.)
Frantz Manufacturing Co. (See Ferris, William D., assignor.)
Frantz, Peter, Sterling, Ill. Heating furnace. 1,873,570; Aug. 23.
Fraser Warren F., Westboro, Mass. Grinding machine. 1,873,751; Aug. 23.
Fraser Warren F., Westboro, Mass. Grinding machine. 1,873,752; Aug. 23.
Frayer, Lee A., assignor to R. H. Smith, Kent, Ohio. Hopper feed apparatus. 1,873,377; Aug. 23.
Frederick, Louis T., Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del. Making composite mica plates. 1,873,753; Aug. 23.
Frederics, E., Inc. (See Frederics, Ernest O., assignor.)
Frederics, Ernest O., Bronxville, assignor to E. Frederics, Inc., New York, N. Y. Closing clip. 1,873,378; Aug. 23.
Frenell, Per, Gottenborg, Sweden. System for reciprocating electric motors. 1,873,193; Aug. 23.
Frentsel, Herman C., jr., Milwaukee, Wis. Engine heating and cooling system. 1,873,379; Aug. 23.
Fried, Armin, Los Angeles, Calif. Focusing device for motion picture cameras. 1,873,571; Aug. 23.
Friedrich, Hermann. (See Lommel, W., Goost, and Friedrich.)
Frigidaire Corporation. (See Edel, Walter L., assignor.)
Frigidaire Corporation. (See Hainsworth, William R., assignor.)
Frigidaire Corporation. (See King, Jesse G., assignor.)
Fuchs, Henry, assignor to W. H. Miner, Inc., Chicago, Ill. Side bearing for railway cars. 1,873,702; Aug. 23.
Fuller, Frederic B. (See Smith, E. L., and Fuller.)
Fuller, Frederick L., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,873,701; Aug. 23.
Fuller, Frederick L., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,873,754; Aug. 23.
Fulton, Robert B., Pittsburgh, Pa., assignor to The Koppers Company of Delaware. Preparing hydrocyanic acid. 1,872,923; Aug. 23.
Fulton Sylphon Company. (See Giesler, Jean V., assignor.)
Funston, Frederick D. (See Kindl, C. H., and Funston.)
Gable, C. P., et al. (See Butterworth, Samuel D., assignor.)
Gage, Richard C. (See Whitfield, C. M., and Gage.)
Galamb, Joseph, Detroit, assignor to Ford Motor Company, Dearborn, Mich. Refrigerator vehicle. 1,873,572; Aug. 23.
Galanot, Camille P., assignor, by mesne assignments, to The Commercial Shearing and Stamping Company, Youngstown, Ohio. Power take-off mechanism. 1,872,924; Aug. 23.
Gale, William A. (See Allen, W. H., MacDonald, and Gale.)
Gale, William A. (See Ritchie, C. F., and Gale.)
Gallahan, Walter, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Kerr cell. 1,872,925; Aug. 23.
Galloway, Leslie D. (See Fargher, R. G., Galloway, and Probert.)
Galvin Bros. Steel Wool and Manufacturing Company. (See Galvin, George B., assignor.)
Galvin, George B., assignor to Galvin Bros. Steel Wool and Manufacturing Company, Louisville, Ky. Dust catcher air filter. 1,873,573; Aug. 23.
Gartner, Owen J. (See McMaster, C. L., and Gartner.)
Gas Industries Company. (See Levin, Isaac H., assignor.)
Gault, Joseph H., Sapulpa, Okla. Cuspidor for automobiles. 1,872,725; Aug. 23.
Gay, Asel, assignor to Multipost Company, Rochester, N. Y. Envelope handling machine. 1,872,726; Aug. 23.
Gay, Fraser W., Newark, N. J. Auxiliary motor control system. 1,872,926; Aug. 23.
Gay, Fraser W., Newark, N. J. Peak load generating station. 1,872,927; Aug. 23.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Transmitting system. 1,873,837; Aug. 23.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Temperature regulating apparatus for signaling device. 1,873,838; Aug. 23.
Gedat, Curt R. (See Schimmel, P., and Gedat,)
Gemberling, Cameron H. (See Altgelt, R. J., and Gemberling.)
General Aniline Works, Inc. (See Kramer, E., Bollweg, and Zeb, assignors.)

General Aniline Works, Inc. (See Kunz, M. A., and Koeberle, assignors.)
General Aniline Works, Inc. (See Lange W., and Raeck, assignors.)
General Aniline Works, Inc. (See Matzdorf, Georg, assignor.)
General Aniline Works, Inc. (See Ohlendorf, Heinrich, assignor.)
General Aniline Works, Inc. (See Reddelien, G., and Ohlendorf, assignors.)
General Aniline Works, Inc. (See Virck, P., and Matzdorf, assignors.)
General Aniline Works, Inc. (See Wilke, Karl, assignor.)
General Electric Company. (See Busch, John, assignor.)
General Electric Company. (See Crago, Harry R., assignor.)
General Electric Company. (See Dempster, John T. H., assignor.)
General Electric Company. (See Doran, John H., assignor.)
General Electric Company. (See Emmet, William L. R., assignor.)
General Electric Company. (See Fleckenstein, F., and Müller, assignors.)
General Electric Company. (See Hehlgans, Friedrich, assignor.)
General Electric Company. (See Kellogg, Edward W., assignor.)
General Electric Company. (See Lord, Harold W., assignor.)
General Electric Company. (See McNeil, R. S., and Bitterli, assignors.)
General Electric Company. (See Mechau, Emil, assignor.)
General Electric Company. (See Prince, David C., assignor.)
General Electric Company. (See Rankin, William K., assignor.)
General Electric Company. (See Sabbah, C. A., and Whitney assignors.)
General Electric Company. (See Steenstrup, Christian, assignor.)
General Electric Company. (See Turner, Harold R., assignor.)
General Electric Company. (See Willis, Clodius H., assignor.)
General Engineering Company. (See MacDonald, William T., assignor.)
General Motors Corporation. (See Chilton, Ralph H., assignor.)
General Motors Corporation. (See Thompson, Earl A., assignor.)
General Talking Pictures Corporation. (See De Forest, Lee, assignor.)
Gernandt, Waldo G., Hayward, Calif. Diesel engine. 1,873,877; Aug. 23.
Gestetner, David, Tottenham Hale, London, England, assignor, by mesne assignments, to A. B. Dick Company, Chicago, Ill. Duplicating machine. 1,872,727; Aug. 23.
Giard, Napoléon, Rougemont, Quebec, Canada. Table. 1,873,195; Aug. 23.
Gibson, Granville F., Shreveport, La. Coin handling mechanism for vending machines, telephones, etc. 1,873,755; Aug. 23.
Gibson, Granville F., Shreveport, La. Automatic changeable sign exhibiting machine. 1,873,756; Aug. 23.
Gibson, Jesse G., Bradford, Pa. Power mechanism for wells. 1,873,380; Aug. 23.
Giesler, Jean V., assignor to The Fulton Syphon Company, Knoxville, Tenn. Expansion joint. 1,873,703; Aug. 23.
Gifford, William A., Lansing, Mich. Valve. 1,872,928; Aug. 23.
Gilkey, Earl Y., East Syracuse, N. Y. Closure operator. 1,873,381; Aug. 23.
Gillett, Glenn W., assignor to Novo Engine Company, Lansing, Mich. Bearing for engine crankshafts. 1,873,382; Aug. 23.
Gilman, George H., Belmont, Mass., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Drill bit. 1,873,757; Aug. 23.
Ginsberg, Abraham J., New York, N. Y. Camera lens and filter mount. 1,873,758; Aug. 23.
Glenwood Range Company. (See Wilde, Samuel A., assignor.)
Globar Corporation. (See Shaw, Harold N., assignor.)
Globe American Corporation. (See Hill, Dewey H., assignor.)
Globe Automatic Sprinkler Company. (See Rowley, Arthur C., assignor.)
Globe Oil Tools Co.. (See Wright, Jesse C., assignor.)
Gloekler, Bernard, Company. (See Gloekler, Martin A., assignor.)
Gloekler, Martin A., Erie, assignor to Bernard Gloekler Company, Pittsburgh, Pa. Refrigerating cabinet. 1,872,728; Aug. 23.
Glover, Albert G., Brookline, Mass. Detergent composition. 1,873,383; Aug. 23.
Glowacki, John B., Chicago, Ill. Combination stem, insulation joint and hickey. 1,873,384; Aug. 23.
Glowacki, John B., Chicago, Ill. Split supporting loop for fixtures. 1,873,385; Aug. 23.
Gluud, Wilhelm, and Konrad Keller, Dortmund-Eving, Germany. Producing ferricyanides. 1,872,929; Aug. 23.
Godin, Arsène, Springfield, Mass. Barber's mirror. Des. 87,630; Aug. 23.
Gogol, John, Northampton, Mass. Automatic track sander and air brake. 1,873,640; Aug. 23.
Goldberg, Max W., assignor, by mesne assignments, to Modern Equipment Company, Port Washington, Wis. Swivel supporting means for electrically operated devices. 1,872,729; Aug. 23.
Goldblatt, Henry J., assignor to Vidrio Products Corporation, Chicago, Ill. Table lighter. Des. 87,631; Aug. 23.
Goldblatt, Henry J., assignor to Vidrio Products Corporation, Chicago, Ill. Table lighter. Des. 87,632; Aug. 23.
Golden State Asparagus Co. (See Champlin, S. H., Cutter, Kasten, and Butte, assignors.)
Golden State Asparagus Co. (See Cutter, Parker A., assignor.)
Goldisch, Philip A., assignor to Laboratory Construction Company, Kansas City, Mo. Electric heater. 1,872,730; Aug. 23.
Goldhammer, Leo, Munich, Germany, assignor to Agfa Ansco Corporation, Binghampton, N. Y. Folding camera. 1,873,927; Aug. 23.
Goldsborough, Thaddeus R. (See McCullouch, T. C., and Goldsborough.)
Goldsborough, Winder E., South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y. Combined gas and oil burner. 1,872,930; Aug. 23.
Goldsborough, Winder E., South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y. Fuel supply for internal combustion engines. 1,872,931; Aug. 23.
Goldsborough, Winder E., South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y. Infrigidation for gas compressors. 1,872,932; Aug. 23.
Goldsborough, Winder E., South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y. Rotary transmission. 1,872,933; Aug. 23.
Goldsborough, Winder E., South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y. Gas seal for compression apparatus. 1,872,934; Aug. 23.
Goldsborough, Winder E., South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y. High temperature adiabatic compressor. 1,873,878; Aug. 23.
Goldthwaite, George R., Readville, assignor to B. F. Sturtevant Company, Hyde Park, Mass. Fan casing and assembling the same. 1,873,386; Aug. 23.
Golon, Frank M., Springfield, Mass. Direction indicator. 1,873,576; Aug. 23.
Gooley, Clarence A., and E. L. Gooley, jr., Harrington, Wash. Windshield wiper. 1,873,118; Aug. 23.
Gooley, Edward L., jr. (See Gooley, Clarence A. and E. L., jr.)
Goost, Theodor. (See Lommel, W., Goost, and Friedrich.)
Goranson, David. (See Goranson, Hjalmar and D.)
Goranson, Hjalmar, and D. Goranson, San José, assignors to California Packing Corporation, San Francisco, Calif. Fruit peeling machine. 1,872,731; Aug. 23.
Goranson, Hjalmar, and D. Goranson, Sunnyvale, assignors to California Packing Corporation, San Francisco, Calif. Fruit peeling machine. 1,872,732; Aug. 23.
Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Center selvage motion. 1,872,935; Aug. 23.
Gordon, Albert A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Lock knife for looms. 1,873,194; Aug. 23.
Gosch, William H., assignor to The Nolde and Horst Company, Reading, Pa. Hosiery package. 1,872,936; Aug. 23.
Grable, Hugh R., Canton, Ohio. Elevator door. 1,873,574; Aug. 23.
Graham, Guy. (See Bowman, A. M., Graham, and Nixon.)
Graham, Virgil M., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Variable capacitor test. 1,873,704; Aug. 23.
Graham, Virgil M., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Combined mechanical and electrical radio station selector. 1,873,879; Aug. 23.
Gralnick Bros. Inc. (See Lish, Nathan, assignor.)
Grathwol, Frank J. and J. E., Sandusky, Ohio. Beater engine. 1,873,839; Aug. 23.
Grathwol, John E. (See Grathwol, Frank J. and J. E.)
Grau, Ernst, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Regulating system. 1,873,641; Aug. 23.
Gray, Frank. (See Ives, H. E., and Gray.)
Gray, Frank, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrooptical system. 1,873,387; Aug. 23.
Great Western Electro-Chemical Co. (See Hirschkind, Wilhelm, assignor.)
Great Western Electro-Chemical Company. (See Rosenstein, Ludwig, assignor.)
Green, Charles W., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Store counter fixture. 1,873,705; Aug. 23.
Green, Charles W., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,873,759; Aug. 23.
Green, Charles W., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,873,760; Aug. 23.

Greene, Fred E., Berkeley, assignor to A. B. Humphrey Co., Perkins, Calif. Method and apparatus for precooling refrigerator cars. 1,872,937; Aug. 23.
Greenfield Tap & Die Corporation. (See Judge, Franklin, assignor.)
Greenfield Tap & Die Corporation. (See Plantinga, Peter, assignor.)
Greenwald, Colon W., assignor to Independent Stove Company, Owosso, Mich. Slidable oven and broiler rack. 1,872,733; Aug. 23.
Greenwald, Willard F., assignor to Weiaberg & Greenwald, Inc., New York, N. Y. Preparing synthetic resins. 1,873,575; Aug. 23.
Greenwood, Talma T., East Templeton, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch. 1,873,388; Aug. 23.
Greiner, E. E. (See Johnson, Ben P., assignor.)
Greve, Herman L., Hollis, assignor to International Mailing Tube and Wrapper Co., Brooklyn, N. Y. Metal clip fastening means. 1,872,734; Aug. 23.
Griswold, Robert G., Westfield, N. J., assignor to Doherty Research Company, New York, N. Y. Air cooled valve and valve seat. 1,873,119; Aug. 23.
Grove, Chester L., Frederick, Md. Artificial bait. 1,873,577; Aug. 23.
Grupe, William F., Lyndhurst, N. J., assignor to Armstrong Cork Company, Lancaster, Pa. Cork padding for ironing machines. 1,873,578; Aug. 23.
Guertler, William M., Berlin, Germany, assignor to The Electric Smelting & Aluminum Company, Cleveland, Ohio. Recovering alumina from coal and its ashes. 1,873,642; Aug. 23.
Guide Lamp Corporation. (See Turnquist, Edward, assignor.)
Guilbert, Louis P. (See Lemaire, M. H., and Guilbert, assignors.)
Gullette, Willis S., Highland, Ind., assignor to Sinclair Refining Company, New York, N. Y. Coking heavy oils. 1,872,938; Aug. 23.
Gulliksen, Finn H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Grid-glow tube regulator. 1,873,761; Aug. 23.
Gunn, Earl G., Racine, assignor to The Nash Motors Company, Kenosha, Wis. Brake. 1,873,389; Aug. 23.
Günther, Fred, Peru, Ill. Silo seal. 1,872,735; Aug. 23.
Günther, Fritz, and J. Hetzer, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Sulphonated condensation products of polyhydrid alcohols and aromatic hydrocarbons and producing same. 1,872,736; Aug. 23.
Gustafson, Charles J. (See Mock, F. C., Gustafson, and Chandler.)
Gyro Process Company. (See Harnsberger, A. E., and Smith, assignors.)
Haas, Harold, Arlington, assignor to Bendix Research Corporation, East Orange, N. J. Aircraft control apparatus. 1,873,579; Aug. 23.
Haddican, William W., Springfield, Mass. Commutator undercutting tool. 1,872,939; Aug. 23.
Hailwood, Anthony J., A. Shepherdson, and A. Stewart of Blackley, Manchester, assignors to Imperial Chemical Industries Limited, Westminster, England. Manufacture of emulsions. 1,873,580; Aug. 23.
Hainsworth, William R., New Haven, Conn., assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,873,390; Aug. 23.
Haish, Louis, St. Paul, and F. M. Henry, Minneapolis, Minn. Counterbalanced vehicle storage elevator. 1,873,391; Aug. 23.
Hall, Benjamin H., Parkersburg, W. Va. Ash tray. 1,873,120; Aug. 23.
Hall, Benjamin J., London, England. Vapor lamp apparatus. 1,873,392; Aug. 23.
Hall, Charles L., Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass. Conduit holding device. 1,873,881; Aug. 23.
Hall, Charles L., and R. F. Walters, Detroit, Mich., assignors to United-Carr Fastener Corporation, Cambridge, Mass. Separable snap fastener and installation thereof. 1,873,880; Aug. 23.
Halladay, John F., and M. E. Holy, assignors to Container Corporation of America, Chicago, Ill. Carton. 1,873,882; Aug. 23.
Hallam, Cecil A., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for separating materials. 1,873,393; Aug. 23.
Hallam, Cecil A., Westfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for separating materials. 1,873,394; Aug. 23.
Hallam, Cecil A., and R. Palmer, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for separating materials. 1,873,395; Aug. 23.
Halliden, Frederick G. (See Vernam, G. S., and Halden.)
Halliden, Frederick G., Jamaica, assignor to International Communications Laboratories, Inc., New York, N. Y. Relay receiving circuit for carrier telegraph signals. 1,872,940; Aug. 23.
Halliden, Frederick G., Jamaica, assignor to Postal Telegraph-Cable Company, New York, N. Y. Telegraph system. 1,873,883; Aug. 23.
Hallenbeck, George E., assignor to Baker Brothers, Inc., Toledo, Ohio. Control maintenance in hydraulic transmission. 1,873,396; Aug. 23.
Haller, Arthur C. (See Root, Harry F., assignor.)
Hamel, L. H., Leather Co. (See Klaucke, Hermann, assignor.)
Hammers, Morgan J., Stamford, Conn., assignor to Petroleum Heat and Power Company, New York, N. Y. Oil burning apparatus. 1,873,581; Aug. 23.
Hammond Clock Company, The. (Se Hammond, Laurens, assignor.)
Hammond, John A., Albany, assignor to California Cap Company, Oakland, Calif. Explosive. 1,872,941; Aug. 23.
Hammond, Laurens, Evanston, assignor to The Hammond Clock Company, Chicago, Ill. Making stator and rotor plates. 1,873,397; Aug. 23.
Hampton, William H. and B. B. Farrington, Berkeley, assignors, by mesne assignments, to Standard Oil Company of California, San Francisco, Calif. Improved petroleum product and art of wood preservation. 1,873,582; Aug. 23.
Hansen, Fred E., assignor to The Hansen Manufacturing Company, Cleveland, Ohio. Spraying device. 1,873,398; Aug. 23.
Hansen Manufacturing Company, The. (See Hansen, Fred E., assignor.)
Hanson, Albert J., Arlington, Mass. Electric furnace. 1,872,942; Aug. 23.
Harbert, Victor H., assignor to Illinois Railway Equipment Company, Chicago, Ill. Locking means. 1,873,643; Aug. 23
Harbert, Victor H., assignor to Illinois Railway Equipment Company, Chicago, Ill. Locking means. 1,873,644; Aug. 23.
Harbert, Victor H., assignor to Illinois Railway Equipment Company, Chicago, Ill. Hatch cover locking means. 1,873,645; Aug. 23.
Harbert, Victor H., Chicago, Ill., assignor, by mesne assignments to Transerv Corporation. Hand brake pawl. 1,873,706; Aug. 23.
Hargreaves, John F., assignor to The Faultless Manufacturing Company, Baltimore, Md. Band for garments. 1,873,583; Aug. 23.
Harnsberger, Audley E., and C. L. Smith, Chicago, Ill., assignors to Gyro Process Company, Detroit, Mich. Catalytic core. 1,873,707; Aug. 23.
Harris, Carl C., Orange, Mass. Swimming float. 1,873,197; Aug. 23.
Harris, Carl C., and H. W. Cadwell, Orange, Mass.; said Cadwell assignor to said Harris. Bathing trolley. 1,873,196; Aug. 23.
Harris, Frank W., New Bedford, Mass. Humidifying apparatus. 1,873,884; Aug. 2.
Harris, John W., Los Angeles, Calif., assignor to Claude Neon Electrical Products Corporation, Ltd., Wilmington, Del. Illuminated sign construction. 1,873,584; Aug. 23.
Harris-Seybold-Potter Company. (See Droitcour, Michael A., assignor.)
Harshaw Chemical Company. (See Hines, Paul R., assignor.)
Hartford-Empire Company. (See Barker, William T., jr., assignor.)
Hartford-Empire Company. (See Miller, William J., assignor.)
Hartford-Empire Company. (See Peiler, Karl E., assignor.)
Hartzell, Herman L., assignor to Delco-Remy Corporation, Anderson, Ind. Testing apparatus. 1,873,121; Aug. 23.
Hartzell, Herman L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition coil. 1,873,122; Aug. 23.
Hartzell, Herman L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition device. 1,873,123; Aug. 23.
Hartzell, Herman L., assignor to Delco-Remy Corporation, Anderson, Ind. Circuit interrupter. 1,873,198; Aug. 23.
Harvey, Harold C., Trenton, assignor to The Agasote Millboard Company, Ewing Township, N. J. Making toilet seats of pulp material. 1,873,585; Aug. 23.
Harvey, Henry R., San Francisco, Calif. Half-tone process and type. 1,872,943; Aug. 23.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Yoke. 1,873,708; Aug. 23.
Haskell, Frederick F., assignor to Apexeon Company, Jamaica Plain, Mass. Casement window and screen therefor. 1,873,399; Aug. 23.
Haskell, John D., assignor to Diits Machine Works, Inc., Fulton, N. Y. Jordan engine. 1,873,199; Aug. 23.
Hauf, George F., Chicago, Ill. Metal lattice walls. 1,873,762; Aug. 23.
Hausken, Hans J., Myers, Mont. Rail bond. 1,873,400; Aug. 23.
Hawk, Ruby R., Chicago, Ill. Journal box for railway cars. 1,873,885; Aug. 23.
Hazeltine Corporation. (See Wheeler, Harold A., assignor.)
Heaney, John G., Oakland, Calif. Sewer rod. 1,872,944; Aug. 23.
Heat Treating Company. (See Laird, Wilbur G., assignor.)
Hebig, Henry C., assignor to Better Packages, Inc., New York, N. Y. Tape serving machine. 1,872,945; Aug. 23.

Hecht, Heinrich, Kiel, Germany, assignor to Electro-acustic Gesellschaft mit beschränkter Haftung, Kiel, Germany. Arrangement of sound transmitters and sound receivers on ships. 1,872,946; Aug. 23.
Hedstrom, Ludvig J., Kansas City, Kans. Power transmission. 1,873,200; Aug. 23.
Heenan & Froude Limited. (See Walker, George H., assignor.)
Hehlgans, Friedrich, Berlin-Hermsdorf, Germany, assignor to General Electric Company. Apparatus for photographically recording sound. 1,873,646; Aug. 23.
Heimann, Heinrich, Dessau in Anhalt, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparation of a non-hygroscopic mixed fertilizer. 1,873,401; Aug. 23.
Heinz, H. J., Company. (See Kuerschner, W., and Higerd, assignors.)
Hemphill Company. (See Lawson, John and R. H., assignors.)
Henderson, E. W., and H. J. Fisher, assignor to The Reliance Electric & Engineering Company, Cleveland, Ohio. Roll conveyor system. 1,873,940; Aug. 23.
Hengstenberg, Paul M., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Copper oxide rectifier. 1,872,947; Aug. 23.
Hennell, Charles, Inglewood, Calif. Cushion filling machine. 1,873,586; Aug. 23.
Henrite Products Corporation. (See Henry, Albert C., assignor.)
Henry, Albert C., assignor to Henrite Products Corporation, Inc., Ironton, Ohio. Commutator brush with lifting member. 1,872,948; Aug. 23.
Henry, Francis M. (See Haish, L., and Henry.)
Heppes, George P., Chicago, Ill., assignor, by mesne assignments to The Patent and Licensing Corporation, Boston, Mass. Roofing. 1,873,886; Aug. 23.
Heppes, Otto A., La Grange, Ill., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Composite board. 1,873,887; Aug. 23.
Herold, Walter F., Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn. Caster. 1,873,888; Aug. 23.
Herthel, Eugene C. (See Campbell, O. F., and Herthel.)
Herthel, Eugene C., Flossmoor, Ill., assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,872,949; Aug. 23.
Herzberg, Wilhelm, Berlin-Wilmersdorf, and H. Lange, Berlin-Friedenau, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing methylamines substituted in the methyl group by a cyclic radicle. 1,873,402; Aug. 23.
Heston, Allen L. (See Shook, J., and Heston.)
Hetzer, Joseph. (See Günther, F., and Hetzer.)
Hiering, William C., assignor to J. E. Mergott Co., Newark, N. J. Bag frame. 1,872,950; Aug. 23.
Higerd, Floyd A. (See Kuerschner, W., and Higerd.)
Higgins, John C., San Diego, Calif. Air and vacuum relief valve for pipe lines. 1,873,403; Aug. 23.
Hild, Frederic W., Los Angeles, Calif. Single motor drive. 1,873,404; Aug. 23.
Hill, Dewey H., assignor to Globe American Corporation, Kokomo, Ind. Thermostatically controlled fluid valve. 1,873,124; Aug. 23.
Hill, E. G., Company. (See Mann, Earl H., assignor.)
Hill, Joseph H., Company, The. (See Catron, Robert Lee, assignor.)
Hillebrand, Hermann, Berlin, Germany. Producing water gas from pulverized coal and steam. 1,873,941; Aug. 23.
Hilton, Calvin E., Hamburg, Iowa. Sanitary pivoted roost structure. 1,873,763; Aug. 23.
Hilton, Seaverns W., Weld, Me., assignor to Interwoven Stocking Company, New Brunswick, N. J. Display stand. Des. 87,633; Aug. 23.
Hilton, Seaverns W., Weld, Me., assignor to Interwoven Stocking Company, New Brunswick, N. J. Display stand. Des. 87,634; Aug. 23.
Hilton, Seaverns W., Weld Me., assignor to Interwoven Stocking Company, New Brunswick, N. J. Display stand. Des. 87,635; Aug. 23.
Hines, Paul R., Elyria, assignor to The Harshaw Chemical Company, Cleveland, Ohio. Preparation of chromium trioxide. 1,873,889; Aug. 23.
Hippensteel, Claude L. (See Peek, R. L., jr., and Hippensteel.)
Hirschkind, Wilhelm, Antioch, assignor to Great Western Electro-Chemical Co., San Francisco, Calif. Paper pulp bleaching process. 1,873,924; Aug. 23.
Hirsh, Fred, New York, N. Y., assignor to Adjusta Company, Apparel buckle. Des. 87,636; Aug. 23.
Hitt, Parker, assignor to International Communications Laboratories, Incorporated, New York, N. Y. Printing telegraph system. 1,872,951; Aug. 23.
Hitt, Ray C., Seattle, Wash. Pyrotechnic display. 1,873,201; Aug. 23.
Hitt, Thomas G., Seattle, Wash. Manufacture of firecrackers. 1,873,202; Aug. 23.
Hodgkins, Charles H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electromagnetic valve-actuating device. 1,873,405; Aug. 23.
Hoe, R., & Co. (See Eckhard, William K., assignor.)
Hoeft & Company, Inc. (See Lindgren, Waldemar L., assignor.)
Hoeme, Fred W. (See Mapp, J. B., and Hoeme.)
Hoffman, Charles, Tuckahoe, assignors to Ward Baking Company, New York, N. Y. Food product. 1,873,709; Aug. 23.
Hokanson, Otto A., assignor to Woodstock Typewriter Company, Woodstock, Ill. Repeat mechanism for typewriters. 1,873,406; Aug. 23.
Hoke, William E., Baltimore, Md. System of lapping taper rollers. 1,873,647; Aug. 23.
Holland Hitch Company. (See Ketel, Henry, assignor.)
Holland, Lyman F., Mobile, Ala. Ice cream freezer. 1,873,407; Aug. 23.
Holmberg, Einar O. (See Nilson, E., Mulke, and Holmberg.)
Holmes, Elbridge R., assignor to Crompton-Knowles Loom Works, Worcester, Mass. Weft detecting mechanism for loom shuttle. 1,872,952; Aug. 23.
Holmes, George A., Newton, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Snap fastener attaching machine. 1,873,890; Aug. 23.
Holmes, George R., Hennessey, Okla. Sport timing clock. 1,873,408; Aug. 23.
Holmes, John Q. (See Shippy, L. C., and Holmes.)
Holmes, John. Q., and A. W. Phelps, assignors to Delco-Remy Corporation, Anderson, Ind. Apparatus for forming and attaching a terminal clip. 1,873,125; Aug. 23.
Holy, Mitchel E. (See Halladay, J. F., and Holy.)
Hope, Robert De V., Fanwood, and H. Ruegg, Paterson, N. J., said Ruegg assignor to said Hope. Method and apparatus for finishing cloth. 1,873,635; Aug. 23.
Hopkins, Robert C., Alliance, Ohio. Rotary cutting, mixing and attrition mill. 1,873,409; Aug. 23.
Hopkins, Stanley. (See Schinke, Erich, assignor.)
Hopkins, Thomas D., Montgomery, Ala. Inkstand and bottle. 1,873,203; Aug. 23.
Horák, Václav, Prague, Czechoslovakia. Filter insertion. 1,873,410; Aug. 23.
Hormel, Charles C., Denver, Colo., assignor to The Allen-Sherman-Hoff Company. (Grab bucket and skip hoist. 1,873,764; Aug. 23.
Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Nozzle. 1,873,840; Aug. 23.
House, Bryan E., assignor to Bendix Brake Company, South Bend, Ind. Brake-operating connection. 1,872,953; Aug. 23.
House, Horace, Oroville, Calif. Illuminated chart reading device. 1,872,737; Aug. 23.
Hudson, Edwin B., Butler, Pa., assignor to The American Rolling Mill Company, Middletown, Ohio. Roller bearing working roll chuck. 1,873,710; Aug. 23.
Hugershoff, Reinhard, Dresden, assignor to the Firm Ikarus Internationale Patentverwertungs-Aktien-Gesellschaft-Vaduz, Liechtenstein, Germany. Apparatus for continuously recording the path of flight of aircraft. 1,873,126; Aug. 23.
Hughes, David W., Bronxville, and C. E. Ellis, jr., New York, N. Y., assignors, by mesne assignments, to Westinghouse Electric Elevator Company, Chicago, Ill. Elevator car signal device. 1,873,765; Aug. 23.
Hull, Lewis M. (See Ballantine, S., and Hull.)
Hulley, Albert, and W. J. Hulley, City Island, N. Y. Tail gate control device. 1,872,738; Aug. 23.
Hulley, William J. (See Hulley, Albert and W. J.)
Humphrey, A. B., Co. (See Greene, Fred E., assignor.)
Humphrey, William G., Toronto, Ontario, Canada. Ductor roll timer. 1,872,739; Aug. 23.
Humphreys, Charles F. and H. W. Prentis, Jr., assignors to Armstrong Cork Company, Lancaster, Pa. Linoleum. 1,873,587; Aug. 23.
Hunkins, Harold R., Brooklyn, assignor to International Communications Laboratories, Incorporated, New York, N. Y. Variable attenuator. 1,872,954; Aug. 23.
Hunt, A. P. (See Betterman, Herman, assignor.)
Hunt, Allan F., Burlingame, Calif. Card index. 1,873,841; Aug. 23.
Hunter, David E., assignor to The Shaw-Walker Company, Muskegon, Mich. Metal desk construction. 1,873,932; Aug. 23.
Hunter, David E., assignor to The Shaw-Walker Company, Muskegon, Mich. Metal desk construction. 1,873,933; Aug. 23.
Hyland, Lawrence A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. High frequency stabilizer. 1,873,842; Aug. 23.
I. G. Farbenindustrie Aktiengesellschaft. (See Berger, Waldemar, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Finkelstein, H., and Achterberg, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Günther, F., and Hetzer, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Heimann, Heinrich, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hersberg, W., and Iange, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Kraenzlein, G., and Müller, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Lommel, W., Goost, and Friedrich, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Luther, M., and Klein, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Müller, W., and Michel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pokorny, Ernst, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Schulze, Rudolf, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Specketer, H., and Soll, assignors.)
Igleheart, George P., Boonton, and A. L. Rosenmund, Rockaway, N. J., assignors to Stapling Machines Co. Box and crate. 1,873,589; Aug. 23.
Ikarus Internationale Patentverwertungs-Aktiengesellschaft. (See Hugershoff, Reinhard, assignor.)
Illinois Railway Equipment Company. (See Harbert, Victor H., assignor.)
Imperial Chemical Industries Limited. (See Brightman, Rainald, assignor.)
Imperial Chemical Industries Limited. (See Bunbury, Hugh M., assignor.)
Imperial Chemical Industries Limited. (See Coffey, Samuel, assignor.)
Imperial Chemical Industries Limited. (See Davidson, A., Tatum, and Watts, assignors.)
Imperial Chemical Industries Limited. (See Fairweather, D. A. W., and Thomson, assignors.)
Imperial Chemical Industries Limited. (See Hailwood, A. J., Shepherdson, and Stewart, assignors.)
Independent Stove Company. (See Greenwald, Colon W., assignor.)
Industrial Patents Corporation. (See McKee, H. H., and Walters, assignors.)
Infant Socks, Inc. (See Bausher, Jeremiah L., assignor.)
Inland Manufacturing Company, The. (See Scott, Alva W., assignor.)
Inland Steel Company. (See Murton, Crawford B., assignor.)
Inokuty, Haruhisa, Tokyo, Japan. Apparatus for measuring capacity of a refrigerating machine. 1,873,127; Aug. 23.
International Communications Laboratories, Inc. (See Connery, Alder F., assignor.)
International Communications Laboratories, Inc. (See Hallden, Frederick G., assignor.)
International Communications Laboratories, Incorporated. (See Hitt, Parker, assignor.)
International Communications Laboratories, Incorporated. (See Hunkins, Harold R., assignor.)
International Communications Laboratories, Inc. (See Miller, H. P., and Ports, assignors.)
International Communications Laboratories, Inc. (See Rosenberger, Harold J., assignor.)
International Communications Laboratories, Inc. (See Vernam, G. S., and Hallden, assignors.)
International Mailing Tube and Wrapper Co. (See Greve, Herman L., assignor.)
Interwoven Stocking Company. (See Hilton, Seaverns W., assignor.)
Ishikawa, Seichi, Labaina, assignor of one-half to F. K. Makino, Honolulu, Territory of Hawaii. Typewriter. 1,873,766; Aug. 23.
Isom, Edward W. (See Taber, G. H., and Isom.)
Isom, Edward W., Scarsdale, assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,872,955; Aug. 23.
Ives, Herbert E., Montclair, N. J., and F. Gray, New York, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Television. 1,873,411; Aug. 23.
Jackson, Corwill, Chicago, Ill. Molding machine. 1,873,412; Aug. 23.
Jackson, Corwill, Chicago, Ill. Apparatus and method for covering pipes or conduits with concrete. 1,873,413; Aug. 23.
Jacobs, Charles C. (See Wanner, Albert J., assignor.)
Jaeger, Alphons O., and J. A. Bertach, St. Louis, Mo.; said Jaeger assignor to The Selden Company, Pittsburgh, Pa. Catalytic process and apparatus. 1,872,956; Aug. 23.
James, Edward, Cleveland, assignor to H. E. Smith, Cleveland Heights, Ohio. Pipe connection. 1,873,590; Aug. 23.
James, Edward, Cleveland, assignor, by mesne assignments, to H. E. Smith, Cleveland, Ohio. Radiator connection. 1,873,591; Aug. 23.
James, Edward, Cleveland, assignor, by mesne assignments, to H. E. Smith, Cleveland, Ohio. Pipe connection. 1,873,592; Aug. 23.
James, Wathen M., Denver, Colo. Serving tray. 1,872,740; Aug. 23.
Jane, Robert S., Shawinigan Falls, Quebec, assignor to Shawinigan Chemicals Limited, Montreal, Quebec, Canada. Apparatus for dry generation of acetylene. 1,872,741; Aug. 23.
Jarvis, Charles F., Portland, Me. Demountable arm-rest for motor vehicles. 1,873,414; Aug. 23.
Jarvis, Walter D., Pittsburgh, assignor, by mesne assignments, to Mary Haines Marks, Sewickley, Pa. Paper lath. 1,872,957; Aug. 23.
Jefferson Union Company. (See Dunckiee, Lester A., assignor.)
Jennings, Victor H. (See Turner, R. G., and Jennings.)
Jensen, Louis, and F. C. Reucker, assignors to United Autographic Register Co., Chicago, Ill. Variable speed mechanism. 1,873,415; Aug. 23.
Jensen, Louis, assignor to United Autographic Register Co., Chicago, Ill. Autographic register. 1,873,593; Aug. 23.
Jewell, John F., Laconia, N. H. Rug. 1,872,742; Aug. 23.
Johanson, Gustav H., assignor to C. Wilhjelm, as trustee, Philadelphia, Pa. Gas and air valve. 1,872,961; Aug. 23.
John, Hans, Appleton, assignor to Paper Patents Company, Neenah, Wis. Bleaching process. 1,872,743; Aug. 23.
Johnson, Albert M., assignor to Barnes Drill Company, Rockford, Ill. Honing machine. 1,872,746; Aug. 23.
Johnson, Alfred, Westerleigh, assignor to Combustion Utilities Corporation, New York, N. Y. Selective separation of liquids. 1,872,958; Aug. 23.
Johnson, Ben P., assignor to E. E. Greiner, Springfield, Ohio. Furrow opener. 1,873,128; Aug. 23.
Johnson, Charles H., and A. E. Miller, Sacramento, Calif. Automobile jack. 1,872,959; Aug. 23.
Johnson, Elmo W., Hicksville, assignor to Syracuse Called Plow Company, Inc., Syracuse, N. Y. Potato digging machine. 1,872,744; Aug. 23.
Johnson, Gustav, West Roxbury, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Slide fastener Corporation, Cambridge, Mass. Slide fastener and installation thereof. 1,872,960; Aug. 23.
Johnson, Gustav, West Roxbury, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Snap fastener member. 1,873,891; Aug. 23.
Johnson, Gustav, West Roxbury, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener. 1,873,892; Aug. 23.
Johnson, Marvea, Forest City, Iowa. Spoon or similar article. Des. 87,637; Aug. 23.
Johnson, Oscar W., assignor to Ward-Love Pump Corporation, Rockford, Ill. Water softener. 1,873,594; Aug. 23.
Johnson, Reginald H., Maplewood, N. J., assignor to American Hair & Felt Company, Chicago, Ill. Making gun wad material. 1,872,745; Aug. 23.
Johnson, Ruben E., Seattle, Wash. Balancing machine. 1,873,416; Aug. 23.
Johnson, Rudolph, Chicago, Ill. Utilizing thermionic tubes having open filaments. 1,873,711; Aug. 23.
Johnson, Sigurd N., assignor to Delco-Remy Corporation, Anderson, Ind. Abrading apparatus. 1,873,129; Aug. 23.
Johnson, William E., assignor to Rand McNally & Company, Chicago, Ill. Star finder. 1,873,595; Aug. 23.
Jones, Arthur E. (See Kerr, P. W., and Jones.)
Jones, Arthur E., Tonawanda, N. Y., assignor to Henry Weis Manufacturing Company, Inc. Construction unit. 1,873,417; Aug. 23.
Jones, Charles L., Pelham, and J. D. Small, Douglaston, N. Y., assignors to Dryice Equipment Corporation, New York, N. Y. Contact freezing apparatus and method. 1,873,130; Aug. 23.
Jones, Charles L., Pittsburgh, Pa., assignor to Dryice Corporation of America, New York, N. Y. Method and apparatus for making dry carbon dioxide products. 1,873,418; Aug. 23.
Jones, Emory E., assignor to Winding Gulf Collieries, Bluefield, W. Va. Coal briquetting machine. 1,873,596; Aug. 23.
Jones, Frank D. and H. Moschel, assignors to Dain Manufacturing Company of Iowa, Ottumwa, Iowa. Cornstalk cutter. 1,872,747; Aug. 23.
Jones, Joseph S., Brooklyn, assignor, by mesne assignments, to Chas. Cory Corporation, New York, N. Y. Annunciator. 1,873,419; Aug. 23.
Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Centrifugal machine. 1,872,962; Aug. 23.
Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Separating substances. 1,872,963; Aug. 23.
Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Separation of oil from mixtures thereof with water. 1,873,597; Aug. 23.
Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Separation of mixtures of subatances. 1,873,598; Aug. 23.
Jones, Walter I., Arlington, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Self-locking snap fastener stud. 1,873,893; Aug. 23.
Jones, Williiam. (See Murphy, A. F., and Jones.)
Jorgensen, Auge L., Jersey City, N. J. Match book. 1,873,420; Aug. 23.
Josephson, Walter S., assignor to Dryice Corporation of America, New York, N. Y. Refrigerating apparatus. 1,873,181; Aug. 23.
Judge, Franklin, assignor to Greenfield Tap & Die Corporation, Greenfield, Mass. Die stock. 1,873,182; Aug. 23.
Kahn, Bertrand B., Cincinnati, assignor to The Estate Stove Company, Hamilton, Ohio. Heating stove. 1,873,767; Aug. 23.
Kaliebe, William J., assignor to George Seelman & Sons Co., Milwaukee, Wis. Bill fold. 1,872,748; Aug. 23.
Kamrath, Herbert G., assignor to A C Spark Plug Company, Flint, Mich. Muffler and air cleaner. 1,872,752; Aug. 23.
Kant Slip Plier & Tool Company. (See Allan, Allen C., assignor.)
Kanter, Jerome J., assignor to Crane Co., Chicago, Ill. Method and apparatus for controlling temperatures. 1,873,421; Aug. 23.

Kappeler, Hans, assignor to Society of Chemical Industry, in Basle, Basel, Switzerland. Aldehyde condensation products and the process of making same. 1,873,599; Aug. 23.
Karageorge, James, Chicago, Ill. Fan blade. 1,872,749; Aug. 23.
Kasten, Ferdinand. (See Champlin, S. H., Cutter, Kasten, and Butte.)
Katzenmoyer, Harry E., Rosedale, assignor to Fisher Hosiery Co. Inc., Reading, Pa. Seamless stocking and making the same. 1,872,964; Aug. 23.
Kay-Brunner Steel Products Inc. (See Kay, Lloyd D., assignor.)
Kay, Lloyd D., Los Angeles, Calif., assignor to Kay-Brunner Steel Products Inc. Truck wheel. 1,873,600; Aug. 23.
Kayness Corporation. (See Scollard, R. L., and Ketchbaw, assignors.)
Kearfott Engineering Company. (See Kraemer, Waldo L., assignor.)
Keinath, Erwin, New York, N. Y. Collar tip holder. 1,873,648; Aug. 23.
Keller, Clarence J. (See Phelps, A. W., and Keller.)
Keller, Clarence J., assignor to Delco-Remy Corporation, Anderson, Ind. Wire unreeling and tensioning device. 1,873,422; Aug. 23.
Keller, Konrad. (See Gluud, W., and Keller.)
Kellogg, Edward W., Moorestown, N. J., assignor to General Electric Company. Translating apparatus employing reflected light. 1,872,965; Aug. 23.
Kennedy, Charles H., Swampscott, assignor to Walter M. Lowney Company, Boston, Mass. Convertible box. 1,872,966; Aug. 23.
Kennedy, Harry E., et al. (See Walker, Brooks, assignor.)
Kent, James W., Brooklyn, N. Y. Adjusting device for roller mills. 1,872,967; Aug. 23.
Kerlin, Thomas F., Solvay, N. Y. Frame unit for scaffolding, shorings, concrete forms and the like. 1,873,204; Aug. 23.
Kern, Fred M., Detroit, Mich, assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machine. 1,873,423; Aug. 23.
Kerr, Paul W., and A. E. Jones, assignors to Henry Weis Manufacturing Company, Inc., Elkhart, Ind. Shower bath construction. 1,873,424; Aug. 23.
Kessler, Johan, et al. (See Kugler, Heinrich, assignor.)
Ketchbaw, Thomas D. (See Scollard, R. L., and Ketchbaw.)
Ketel, Henry, assignor to Holland Hitch Company, Holland, Mich. Safety hitch. 1,872,750; Aug. 23.
Kiefer, Julius E. (See Bratring, Kurt, assignor.)
Kienzle, Lester C., Syracuse, N. Y. Curtain fixture. 1,873,205; Aug. 23.
Killefer Manufacturing Corporation. (See Stuck, William H., assignor.)
Kimbell, Arthur W., Newton Center, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener, fastener installation and attaching the same. 1,872,968; Aug. 23.
Kimbell, Arthur W., Newton Center, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Nut and nut and screw fastened installation. 1,873,894; Aug. 23.
Kimbell, Arthur W., Newton Center, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Nut and nut and screw fastened installation. 1,873,895; Aug. 23.
Kincaid, Frank J., Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,872,751; Aug. 23.
Kindl, Carl H. (See Kunkle, B. D., and Kindl.)
Kindl, Carl H., and F. D. Funston, assignors to Delco-Products Corporation, Dayton, Ohio. Shock absorber. 1,873,133; Aug. 23.
King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,873,425; Aug. 23.
King, John H., Cleveland, Ohio. Portable drill. 1,872,969; Aug. 23.
King, Peter J., Detroit, Mich. Ornamental stand. 1,872,970; Aug. 23.
Kingdon, Ralph H., assignor to Square D Company, Detroit, Mich. Electrical apparatus. 1,873,426; Aug. 23.
Kingman, Russell B., Orange, assignor to Metal Textile Corporation, West Orange, N. J. Preparing all metal gimped material. 1,872,971; Aug. 23.
Kirchner, Henry P., assignor to The Carborundum Company, Niagara Falls, N. Y. Boiler furnace construction. 1,872,972; Aug. 23.
Kirk, William J., Wellsburg, W. Va. Dilator. 1,873,427; Aug. 23.
Kirschstein, Morris. (See Oskow, Louis, assignor.)
Kittel, John J., St. Albans, N. Y., assignor of one-half to E. W. Beebe, East Orange, N. J. Ellipsograph. 1,872,973; Aug. 23.
Klaucke, Hermann, Worcester, assignor, by mesne assignments, to L. H. Hamel Leather Co., Haverhill, Mass. Conveyer system for manipulating flat articles. 1,873,428; Aug. 23.
Klein, Hans. (See Luther, M., and Klein.)
Kleinschmidt, Edward E., assignor to Teletype Corporation, Chicago, Ill. Selective system and apparatus. 1,873,206; Aug. 23.
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Knickerbocker Case Company. (See Labadie, H. H., and Beers, assignors.)
Knoop, William A., Hempstead, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electric current distributing device. 1,873,429; Aug. 23.
Knopf, Gertrude, Rye, N. Y. Electrically heated mat. 1,873,601; Aug. 23.
Knorr, Angelo, Berlin, and A. Weissenborn, Potsdam, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Aldehydes of the cyclohexane series. 1,873,430; Aug. 23.
Knott, Eustace R., Sharon, Mass. Vending machine. 1,873,649; Aug. 23.
Knowlton, Theodore F., New York, N. Y. Method and apparatus for preventing offset in printing. 1,873,207; Aug. 23.
Koch, John C. (See Randall, R. W., and Koch.)
Kocher, Jacques J., Chicago, Ill. Sound deadening device. Re18,573; Aug. 23.
Koeberle, Karl. (See Kunz, M. A., and Koeberle.)
Kohr, Robert F., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,872,974; Aug. 23.
Koister, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Navigation system and method. 1,872,975; Aug. 23.
Koppers Company of Delaware, The. (See Byrne, John F., assignor.)
Koppers Company of Delaware, The. (See Fulton, Robert R., assignor.)
Koppers Company of Delaware, The. (See Ramsburg, Charles J., assignor.)
Koppers Company of Delaware, The. (See Shoeld, Mark, assignor.)
Koppers Company of Delaware, The. (See Sperr, Frederick W., jr., assignor.)
Koppers Company of Delaware. (See Van Ackeren, Joseph, assignor.)
Kraemer, Waldo L., Brooklyn, N. Y., assignor to Kearfott Engineering Company, Inc. Watertight ship's window. 1,872,976; Aug. 23.
Kraenzlein, Georg, Frankfort-on-the-Main, Hochst, and R. K. Müller, Bad Soden-on-the-Taunus, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Materials coated with lacquers, lacquers, and a process of producing coatings. 1,873,945; Aug. 23.
Krakau, Harry T., Bratenahl, assignor to National Malleable & Steel Castings Company, Cleveland, Ohio. Draft gear operation recorder. 1,872,977; Aug. 23.
Krakau, Harry T., assignor to National Malleable & Steel Castings Company, Cleveland, Ohio. Shock absorbing mechanism. 1,872,978; Aug. 23.
Kramer, Erwin, Cologne-Deutz, Bernhard Bollweg, Leverkusen-on-the-Rhine, and Ludwig Zeh, Wiesdorf-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Manufacture of substituted sulphur dyestuffs in substance or on the fiber. 1,873,046; Aug. 23.
Kramer, Erwin, Cologne-Deutz, Bernhard Bollweg, Leverkusen-on-the-Rhine, and L. Zeh, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacture of substituted sulphur dyestuffs in substance or on the fiber. 1,873,047; Aug. 23.
Kramer, Erwin, Cologne-Deutz, B. Bollweg, Leverkusen-on-the-Rhine, and L. Zeh, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Dyeing with substituted sulphur dyestuffs. 1,873,048; Aug. 23.
Kramer, Paul. (See Clanton, Richard, assignor.)
Krastin, August, assignor to W. E. Milestone, Cleveland, Ohio. Helicopter toy device. 1,873,896; Aug. 23.
Krebs, Anthony, Roselle Park, N. J. Clothespin holder. 1,872,753; Aug. 23.
Kreuser, John A., and J. Willerscheidt, Chicago, Ill. Generator and heater. 1,872,754; Aug. 23.
Krissiep, Max, assignor to Textile Machine Works, Wyomissing, Pa. Braiding carrier. 1,872,980; Aug. 23.
Kronoff, Clarence R., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Selvage trimmer for box looms. 1,872,979; Aug. 23.
Kruse, Peter, Brooklyn, assignor to E. W. Bliss Company, New York, N. Y. Can testing machine. 1,873,602; Aug. 23.
Kuehn, Harry E., Albany, N. Y. Seat. 1,873,603; Aug. 23.
Kuerschner, William, Pittsburgh, and F. A. Higerd, Bellevue, Pa., assignors to H. J. Heinz Company. Container. 1,872,981; Aug. 23.
Kugler, Heinrich, assignor to J. Kessler and G. Fischer, Zurich, Switzerland. Guiding means for the carrier plates in match-making machines. 1,873,604; Aug. 23.
Kuhenne, Fritz, Oesterau, assignor to the Firm Brockhaus Sohne, Westfalen, Germany. Vise. 1,872,755; Aug. 23.
Kuhl, Ferdinand F., Beatrice, Nebr. Automatic doorcheck or closer. 1,873,050; Aug. 23.
Kunkle, Bayard D., and C. H. Kindl, assignors to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,873,208; Aug. 23.
Kunz, Max A., Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacture of ms-anthradianthrones. 1,872,756; Aug. 23.
Kutnar, Virgil, Greeley, Colo. Aeroplane. 1,873,651; Aug. 23.

Kux, Albert S., Chicago, Ill., assignor, by mesne assignments, to Stakmore Co. Inc. Folding chair. 1,873,768; Aug. 23.
Kyle, William D., assignor to Line Material Company, Milwaukee, Wis. Insulator. 1,873,605; Aug. 23.
L. & R. Manufacturing Company. (See Regero, Frank, assignor.)
L. C. L. Corporation, The. (See Woodruff, Graham C., assignor.)
Labadie, Harry H., and B. B. Beers, assignors to Knickerbocker Case Company, Chicago, Ill. Combined sample case and display stand. 1,873,431; Aug. 23.
Labbé, Ludger, Chicopee Falls, Mass. Nonskid tire chain. 1,872,757; Aug. 23.
Laboratory Construction Company. (See Goldfisch, Philip A., assignor.)
LaBrie, Ludger E., assignor, by mesne assignments, to Bendix Brake Company, Chicago, Ill. Vehicle wheel. 1,872,983; Aug. 23.
LaBrie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake operating means. 1,872,982; Aug. 23.
LaBrie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Fluid-power operating means. 1,873,134; Aug. 23.
Lacy, Roy. (See McClintock, W., and Lacy.)
Laddon, Isaac M. (See Ring, W. A., and Laddon.)
Laber Auto Spring Co. (See Marco, Fred W., assignor.)
Laird, Wilbur G., assignor to Heat Treating Company, New York, N. Y. Process and apparatus for the fractional distillation of oil. 1,873,135; Aug. 23.
Laird, Wilbur G., assignor to Heat Treating Company, New York, N. Y. Preventing corrosion in oil refining equipment. 1,873,136; Aug. 23.
Laird, Wilbur G., assignor to Heat Treating Company, New York, N. Y. Bubbler cap construction. 1,873,137; Aug. 23.
Lancaster Asphalt, Inc. (See Robinson, Thomas, assignor.)
Land, George E., Pittsburgh, assignor, by mesne assignments, to Mary H. Marks, Sewickley, Pa. Building construction. 1,872,984; Aug. 23.
Land, George E., Pittsburgh, assignor, by mesne assignments, to Mary H. Marks, Sewickley, Pa. Reenforcing base for plastic material. 1,872,985; Aug. 23.
Lane, George S., Passaic, N. J., assignor to Raybestos-Manhattan, Inc. Clutch. 1,872,986; Aug. 23.
Lang, Harry J., Adrian, Mich. Fluid temperature control. 1,873,769; Aug. 23.
Lange, Hans. (See Herseberg, W., and Lange.)
Lange, Werner, and M. Raeck, Dessau-Ziebigk in Anhalt, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Secondary disazo dyes. 1,873,606; Aug. 23.
Langer, Harry C., Milwaukee, Wis. Shoe insole. 1,872,987; Aug. 23.
Langsdorf, Alexander S. (See Messick, C., and Langsdorf, assignors.)
Larsen, Neil P., assignor to The American Coach & Body Company, Cleveland, Ohio. Crane. 1,873,433; Aug. 23.
Larson, Axel F., and C. W. Anderson, assignors to Western Electric Piano Company, Chicago, Ill. Talking machine. 1,873,432; Aug. 23.
Laskowitz, Isidor B., Brooklyn, N. Y. Variable thrust mechanism. 1,872,758; Aug. 23.
Laughlin, William C., Kew Gardens, and A. B. Asch, Brooklyn, assignors to Filtration Equipment Corporation, New York, N. Y. Cleaning device for sewage filter beds. 1,872,759; Aug. 23.
Laurencich, Arthur, Washington, D. C. Carburetor attachment. 1,872,762; Aug. 23.
Lava Crucible Company of Pittsburgh. (See White, Harold E., assignor.)
Lawrence, Franklin, assignor to Portland Stove Foundry Co., Portland, Me. Controlling device for alternative fluid supply. 1,873,897; Aug. 23.
Lawson, John and R. H. Lawson, Pawtucket, assignors to Hemphill Company, Central Falls, R. I. Mechanism and process for producing knitted fabric having lap stripes. 1,872,760; Aug. 23.
Lawson, Robert H. (See Lawson, John, and R. H.)
Ledbetter, James C., Jackson Heights, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Garment or ironing press. 1,873,608; Aug. 23.
Lederer, Erwin R., Fort Worth, Tex. Reactivating clay. 1,872,988; Aug. 23.
Lee, Charles L., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,873,770; Aug. 23.
Lee, Hughie R. (See Searles, Burt, assignor.)
Lee, Roger K., Detroit, assignor to Chrysler Corporation, Highland Park, Mich. Vibration damper. 1,872,763; Aug. 23.
Lee, Roger K., Highland Park, assignor to Chrysler Corporation, Detroit, Mich. Radiator cap. 1,872,764; Aug. 23.
Lee, Roger K., Highland Park, assignor to Chrysler Corporation, Detroit, Mich. Motor mounting. 1,872,765; Aug. 23.
Lee, Roger K., Highland Park, assignor to Chrysler Corporation, Detroit, Mich. Motor mounting. 1,872,766; Aug. 23.
Lee, Roger K., Highland Park, assignor to Chrysler Corporation, Detroit, Mich. Motor mounting. 1,872,767; Aug. 23.
Lee, Roger K., Highland Park, assignor to Chrysler Corporation, Detroit, Mich. Motor mounting. 1,872,768; Aug. 23.
Lefevre, Emil B. G., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Upholstery button chain clip. 1,873,607; Aug. 23.
Lehman, Edward H., assignor to W. H. Miner, Inc., Chicago, Ill. Hinge. Des. 87,638; Aug. 23
Lemaire, Maurice H Valenciennes, and L. P. Guilbert, Paris, France. Lifting apparatus. 1,873,712; Aug. 23.
Lemont, Clarence J., assignor to Line Material Company, South Milwaukee, Wis. Supporting fixture. 1,873,434; Aug. 23.
Lenning, Alvar, assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,873,435; Aug. 23.
Leonard, Howard M., South Bend, Ind., assignor, by mesne assignments, to Bendix Aviation Corporation. Engine. 1,872,761; Aug. 23.
Levin, Isaac H., assignor, by mesne assignments, to Gas Industries Company, Pittsburgh, Pa. Method and apparatus for fractional distillation. 1,873,771; Aug. 23.
Levine, Morris, Woodcliff, N. J. Table. Des. 87,639; Aug. 23.
Levis, John H., jr., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Metering system. 1,873,772; Aug. 23.
Lewis, Griffith M., Watervliet, assignor to Willcox & Gibbs Sewing Machine Co., New York, N. Y. Sewing machine tape guiding means. 1,872,769; Aug. 23.
Libbey-Owens-Ford Glass Company. (See Adams, Daniel, assignor.)
Libbey-Owens-Ford Glass Company. (See Brier, J. C., Watkins, and Brown, assignors.)
Libbey-Owens-Ford Glass Company. (See Brown, Wilbur F., assignor.)
Libbey-Owens-Ford Glass Company. (See Cone, Carroll, assignor.)
Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)
Libbey-Owens-Ford Glass Company. (See Kincaid, Frank J., assignor.)
Libbey-Owens-Ford Glass Company. (See Mambourg, Luke C., assignor.)
Libbey-Owens-Ford Glass Company. (See Neorr, Harry M., assignor.)
Libbey-Owens-Ford Glass Company. (See Watkins, George B., assignor.)
Libby, Clarence R. (See Else, H. D., and Libby.)
Lilly, Eli, and Company. (See Major, Ralph H., assignor.)
Lindgren, Waldemar L., Waukegan, Ill., assignor to Hoeft & Company, Inc., North Chicago, Ill. Thermostatically controlled switch. 1,873,436; Aug. 23.
Lindner, Edward, Philadelphia, Pa. Traffic signal. 1,873,713; Aug. 23.
Lindstrom, Frank L., Bridgeport, Conn. Toy scroll saw. 1,872,989; Aug. 23.
Lindstrom, Nils O., Nutley, N. J., assignor to A. B. See Elevator Company, Inc. Elevator door system. 1,872,770; Aug. 23.
Line Material Company. (See Cole, George H., assignor.)
Line Material Company. (See Kyle, William D., assignor.)
Line Material Company. (See Lemont, Clarence J., assignor.)
Line Material Company. (See Steinmayer, Alwin G., assignor.)
Linfesty, Charles W., Highland, assignor to Stebler Parker Co., Riverside, Calif. Roller cleaning and oiling device for driers. 1,873,437; Aug. 23.
Link-Belt Company. (See Miller, Edgar C., assignor.)
Linnhoff, Frans, Eberswalde, Germany. Induction electric furnace. 1,872,990; Aug. 23.
Lish, Nathan, assignor to Gralnick Bros. Inc., Philadelphia, Pa. Traveling bag. 1,873,778; Aug. 23.
Listrat, Jean J., Clamart Seine, France. Producing antimony oxides. 1,873,774; Aug. 23.
Litchfield, Isaac W., assignor to Bemis Industries, Incorporated, Boston, Mass. Mixer. 1,873,438; Aug. 23.
Little, Ernest L., Toronto, Ontario, Canada. Container. 1,872,771; Aug. 23.
Litton, Charles V., Redwood City, assignor to Federal Telegraph Company, San Francisco, Calif. Vacuum tube. 1,872,991; Aug. 23.
Livesay, Robert C., assignor to Deere & Company, Moline, Ill. Automatically adjustable divider and grain wheel. 1,873,439; Aug. 23.
Locke, George A., Glenwood, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Rotary distributor phasing circuit. 1,873,440; Aug. 23.
Locke, George A., Glenwood, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Synchronous signaling system. 1,873,609; Aug. 23.
Lommel, Wilhelm, Wiesdorf-on-the-Rhine, T. Goost, Leverkusen-on-the-Rhine, and H. Friedrich, Wiesdorf-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Vulcanization accelerator. 1,873,934; Aug. 23.
Lommel, Wilhelm, Wiesdorf-on-the-Rhine, T. Goost, Leverkusen-on-the-Rhine, and H. Friedrich, Wiesdorf-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Accelerator for vulcanization processes. 1,873,935; Aug. 23.

Lommel, Wilhelm, Wiesdorf-on-the-Rhine, T. Goost, Leverkusen-on-the-Rhine and H. Friedrich, Wiesdorf-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Accelerator for vulcanization purposes. 1,873,936; Aug. 23.

Lommel, Wilhelm, Wiesdorf-on-the-Rhine, T. Goost, Leverkusen-on-the-Rhine, and H. Friedrich, Wiesdorf-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Accelerator for vulcanizing rubber compounds. 1,873,937; Aug. 23.

Long, Elmer C., Quincy, Ill., assignor, by mesne assignments, to Security Trust Company, Detroit, Mich. Piston for internal combustion motors. 1,872,772; Aug. 23.

Longyear, E. J., Manufacturing Co. (See Anderson, Olof B., assignor.)

Lopez, Jose L., Philadelphia, Pa. Bag or similar container. Des. 87,640; Aug. 23.

Lord, Harold W., Schenectady, N. Y., assignor to General Electric Company. Electric valve rectifying system. 1,873,652; Aug. 23.

Lorenz, C., Aktiengesellschaft. (See Schmidt, Karl, assignor.)

Lorenz, C., Aktiengesellschaft. (See Zodtner, Heinrich, assignor.)

Lorenz, Frederick A., jr., assignor to American Steel Foundries, Chicago, Ill. Grate. 1,872,773; Aug. 23.

Loring, Caleb. (See Nelson, Charles S., assignor.)

Louden Machinery Company. (See Scott, Bertram D., assignor.)

Lowney, Walter M., Company. (See Kennedy, Charles H., assignor.)

Luce, Hans, assignor to Rheinische Metallwaaren- und Maschinenfabrik Sommerda Aktiengesellschaft, Sommerda, Germany. Machine for producing slits in type bars. 1,872,992; Aug. 23.

Lucia, Louis V., Hartford, assignor to The Beardsley and Wolcott Manufacturing Company, Waterbury, Conn. Toaster. 1,873,898; Aug. 23.

Lucker, Millard B., Benton Harbor, Mich., assignor, by mesne assignments, to The Dayton Malleable Iron Company, Dayton, Ohio. Lifting jack. 1,873,714; Aug. 23.

Lundgren, William E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Take-up for looms. 1,872,993; Aug. 23.

Lundgren, William E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Knock-off mechanism for looms. 1,872,994; Aug. 23.

Luther, Martin, and H. Klein, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Catalytic oxidation of organic compounds. 1,872,774; Aug. 23.

Lyles, George D., and J. M., assignors of one-half to said G. D. Lyles and one-half to H. H. Yount, Statesville, N. C. Closure fastener. 1,873,653; Aug. 23.

Lyles, Jesse M. (See Lyles, George D., and J. M.)

Lyon, James B., New York, N. Y. Tissue packet. 1,873,610; Aug. 23.

M. J. B. Co. (See Burns, Wilfred E., assignor.)

MacArthur Concrete Pile Corporation. (See Dealy, John M., assignor.)

Macauley, John B., jr. (See Carpentier, M. L., and Macauley, jr.)

MacDonald, Chester R., Monroe, Mich., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Method of and machine for coating roofing units. 1,873,209; Aug. 23.

MacDonald, Francis. (See Allen, W. H. MacDonald, and Gale.)

MacDonald, William T., Douglas, Ariz., assignor to The General Engineering Company. Salt Lake City, Utah. Porous medium for aerating apparatus. 1,873,843; Aug. 23.

Mack, Robert A., Washington, D. C., assignor to Woodstock Typewriter Company, Woodstock, Ill. Repeat mechanism for typewriters. 1,873,441; Aug. 23.

Mackenzie-Kennedy, Chesseborough, J. H., New York, N. Y. Toilet article. 1,873,890; Aug. 23.

Mahoney, William H., Hingham, Mass. Pedestal. Des. 87,642; Aug. 23.

Major, Ralph H., Kansas City, Kans., assignor to Eli Lilly and Company, Indianapolis, Ind. Blood-pressure-lowering substance and of producing it. 1,872,775; Aug. 23.

Makino, Fred K. (See Ishikawa, Seichi, assignor.)

Malcolm, George S., Auburn, Calif. Display card holder. 1,873,611; Aug. 23.

Malke, Sven. (See Nilson, E., Malke, and Holmberg.)

Mambourg, Luke C., Lancaster, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for forming sheet glass. 1,872,776; Aug. 23.

Mann, Earl H., assignor to E. G. Hill Company, Richmond, Ind. Yellow rose. Pl. Pt. 20; Aug. 23.

Mann, Earl H., assignor to E. G. Hill Company, Richmond, Ind. Cerise rose. Pl. Pt. 21; Aug. 23.

Mannick, Andrew M., Hazleton, Pa. Automatic camera. 1,873,654; Aug. 23.

Manzel, Adolph W. F., assignor to Manzel Bros. Co., Buffalo, N. Y. Oil pump. 1,873,442; Aug. 23.

Manzel Bros. Co. (See Manzel, Adolph W. F., assignor.)

Mapp, J. B., Tyrone, and F. W. Hoeme, Hooker, Okla. Supporting means for disk plow shafts. 1,873,655; Aug. 23.

Marchant Calculating Machine Company. (See Bacignlupi, Joseph M., assignor.)

Marco, Fred W., Berkeley, assignor to Laher Auto Spring Co., Inc., San Francisco, Calif. Luggage carrier. 1,872,995; Aug. 23.

Marks, Mary H. (See Land, George E., assignor.)

Marks, Mary Haines. (See Jarvis, Walter D., assignor.)

Marr, Arthur N., Leeds, England. Machine for drying yarn or other textile materials in hanks and loops. 1,872,777; Aug. 23.

Martell, Albert A., assignor to Martell Manufacturing Company, Woonsocket, R. I. Grinding device. 1,873,612; Aug. 23.

Martell Manufacturing Company. (See Martell, Albert A., assignor.)

Maschinenfabrik Augsburg-Nürnberg A. G. (See Becker, Heinrich, assignor.)

Mason, Arthur J., West Hartford, and W. L. Tancred, assignors to The Bush Manufacturing Company, Hartford, Conn. Tube bending machine. 1,873,939; Aug. 23.

Mason, William H., assignor to Masonite Corporation, Laurel, Miss. Making paper pulp. 1,872,996; Aug. 23.

Masonite Corporation. (See Mason, William H., assignor.)

Massey-Harris Co. (See Maul, Christian, assignor.)

Mathieson Alkali Works, Inc., The. (See Tressler, Donald K., assignor.)

Matsen, Morris. (See Edmonson, Arthur, assignor.)

Matsen, Morris, Oregon, Wis. Storage battery connecter and making the same. 1,873,931; Aug. 23.

Matzdorf, Georg. (See Virck, P., and Matzdorf.)

Matzdorf, Georg, Dessau in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y. N-hydroxyethylated derivatives of 1-amino-or 2-amino-5-hydroxynaphthalene-7-sulphonic acid. 1,873,443; Aug. 23.

Maul, Christian, assignor to The Massey-Harris Co., Inc., Batavia, N. Y. Running gear for manure spreaders or other vehicles. 1,873,444; Aug. 23.

Maurer, Paul H., Hillside, assignor to Eclipse Aviation Corporation, East Orange, N. J. Electrical apparatus. 1,873,613; Aug. 23.

Mayer Manufacturing Corporation. (See Smith, Jacob A., assignor.)

McCarthy, J. C., Lancaster, assignor to Armstrong Cork Company, Pittsburgh, Pa. Linoleum and making the same. 1,872,998; Aug. 23.

McCarthy, J. C., Lancaster, assignor to Armstrong Cork Company, Pittsburgh, Pa. Ornamentation of hard surface covering materials. 1,872,999; Aug. 23.

McCarthy, J. C., Lancaster, assignor to Armstrong Cork Company, Pittsburgh, Pa. Ornamentation of surface covering materials. 1,873,000; Aug. 23.

McCarthy, J. C., Lancaster, assignor to Armstrong Cork Company, Lancaster, Pa. Embossed floor covering. 1,873,001; Aug. 23.

McCarthy, J. Clarence, assignor to Armstrong Cork Company, Lancaster, Pa. Surface decoration. 1,872,997; Aug. 23.

McClatchie, John M., assignor to The Borden Company, New York, N. Y. Air nozzle. 1,873,002; Aug. 23.

McClintic, Howard H., assignor to McClintic-Marshall Company, Pittsburgh, Pa. Apparatus for positioning structural members for drilling and like operations. 1,873,547; Aug. 23.

McClintic-Marshall Company. (See McClintic, Howard H., assignor.)

McClintock, William, and R. Lacy, assignors to Pacific Clay Products, Los Angeles, Calif. Apparatus for making interlocking multiple duct conduits. 1,873,445; Aug. 23.

McClintock, William, and F. Y. Pearne, assignors to Pacific Clay Products, Los Angeles, Calif. Balanced valve assembly. 1,873,446; Aug. 23.

McConoughey, Merle S., Tucson, Ariz., assignor to Congoleum-Nairn, Inc. Making linoleum. 1,873,844; Aug. 23.

McCormick, Herbert S., Alameda, assignor to J. N. Boroughs, Oakland, Calif. Towel cabinet. 1,873,139; Aug. 23.

McCray, Harold E., assignor to John Deere Tractor Company, Waterloo, Iowa. Steering mechanism for tractors. 1,873,447; Aug. 23.

McCulloch, Theodore C., New York, N. Y., and T. R. Goldsborough, Forest Hills, Pa., assignors to Westinghouse Electric & Manufacturing Company. Film gate. 1,873,448; Aug. 23.

McDougal, Taine G., assignor to A C Spark Plug Company, Flint, Mich. Spark plug. 1,872,778; Aug. 23.

McEnery, Joseph P., Flushing, N. Y. Pencil holder. 1,873,614; Aug. 23.

McFarlin, John R., assignor to Electric Service Supplies Company, Philadelphia, Pa. Lightning arrester. 1,873,449; Aug. 23.

McFarlin, John R., assignor to Electric Service Supplies Company, Philadelphia, Pa. Lightning arrester and making the same. 1,873,450; Aug. 23.

McGaugh, Calvin C., Elk City, Okla. Hosiery display cabinet. 1,873,140; Aug. 23.

McGonagle, William. (See Farley, Treffle, assignor.)

McIntosh, Robert J., Toledo, Ohio. Nozzle directing device. 1,873,615; Aug. 23.

McKee, Harry H., and C. T. Walter, assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Display device for refrigerator installation. 1,872,779; Aug. 23.

McKibbon, Joe S., Columbia, Tenn. Wrench. 1,872,780; Aug. 23.

McKnight, Rufus R., and A. Webber, assignors to The De Moe Engineering Laboratories, Inc., Chicago, Ill. Tool for forming tube connections. 1,873,451; Aug. 23.

McLeod, Roderick G., London, England. Vehicle direction and movement signaling device. 1,873,003; Aug. 23.

McMaster, Carlos L., and O. J. Gartner, Cleveland Heights, Ohio. Cable terminal. 1,873,775; Aug. 23.

McNamara, Edward J. (See Carter, Raymond, assignor.)

McNeil, Roderick S., Newark, N. J., and E. V. Bitterli, Paris, France, assignors to General Electric Company. Basing vacuum tubes and similar articles. 1,873,776; Aug. 23.

McWane Cast Iron Pipe Company. (See McWane, James R., assignor.)

McWane, James R., assignor to McWane Case Iron Pipe Company, Birmingham, Ala. Bell and spigot joint. 1,872,781; Aug. 23.

Meachem, Harry, Teaneck, N. J., assignor to Todd Dry Dock, Engineering & Repair Corporation, Brooklyn, N. Y. Damper control means for furnaces. 1,873,656; Aug. 23.

Meade, Archie H., Laredo, Mont. Animal trap. 1,873,616; Aug. 23.

Mechau, Emil, Sudende, Brunswick, Germany, assignor to General Electric Company. Film feeding mechanism. 1,873,778; Aug. 23.

Mehl, Charles, Philadelphia, Pa. Diving tank. 1,873,617; Aug. 23.

Meilink, Charles F., Toledo, Ohio. Spindle lock. 1,873,452; Aug. 23.

Meinig, E. Richard, Co. (See Meinig, Ernst R., assignor.)

Meinig, Ernst R., Wyomissing, assignor to E. Richard Meinig Co., Inc., Reading, Pa. Dyeing process and apparatus. 1,873,004; Aug. 23.

Meisel, Benjamin W. (See Shaver, A. G., and Meisel.)

Meissner, Alexander, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Piezo-electric acoustic device. 1,873,715; Aug. 23.

Melin, André, Paris, France. Box covering. Des. 87,641; Aug. 23.

Mercereau, James T., and H. L. Cole, assignors to Westinghouse Electric and Manufacturing Company. Tap changing system. 1,873,777; Aug. 23.

Mercier y Solé, Isidro, Barcelona, Spain. Box loom. 1,873,159; Aug. 23.

Mergott, J. E., Co. (See Hiering, William C., assignor.)

Merley, Sylvan R., Dover, N. J., assignor to Doherty Research Company, New York, N. Y. Dehydrating alcohols and other organic compounds. 1,873,005; Aug. 23.

Merley, Sylvan R., Dover, N. J., assignor to Doherty Research Company, New York, N. Y. Alcohol recovery. 1,873,006; Aug. 23.

Messick, Charlton and A. S. Langsdorf, St. Louis, Mo. Registering device. 1,872,782; Aug. 23.

Metal Textile Corporation. (See Klingman, Russell B., assignor.)

Aug. 23.

Meyer, Christian F., assignor to Textile Machine Works, Wyomissing, Pa. Variable speed drive mechanism. 1,873,007; Aug. 23.

Meyer, Geo. J., Manufacturing Company. (See Meyer, George J., assignor.)

Meyer, George J., Milwaukee, assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis. Loading means for bottle cleaning machines. 1,873,845; Aug. 23.

Meyer, George J., Milwaukee, assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis. Unloading means for bottle cleaning machines. 1,873,846; Aug. 23.

Meyerink, Henry, Clymer, N. Y. Scale balance corrector. 1,873,657; Aug. 23.

Michel, Josef M. (See Müller, W., and Michel.)

Milestone, Walter E. (See Krastin, August, assignor.)

Miller, Arthur E. (See Johnson, C. H., and Miller.)

Miller, Charles E. (See Abbott, A. L., Miller, W. C., and C. E.)

Miller Company, The. (See Doane, Leroy C., assignor.)

Miller Company. (See Williams, F. T., and Ellis, assignors.)

Miller, Edgar C., Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill. Loading machine. 1,873,008; Aug. 23.

Miller, Ernest B., Baltimore, Md. Adsorption system. 1,872,783; Aug. 23.

Miller, George F., Brooklyn, assignor to American Can Company, New York, N. Y. Spool and protector therefor. 1,873,618; Aug. 23.

Miller, Herman P., jr., East Orange, N. J., and E. G. Ports, Woodside, N. Y., assignors to International Communications Laboratories, Inc., New York, N. Y. Radiotransmitter mounting. 1,873,009; Aug. 23.

Miller, Samuel W., Hollis, N. Y., assignor to Union Carbide & Carbon Research Laboratories, Inc. Welding rod. 1,873,847; Aug. 23.

Miller, Stuart P., assignor to The Barrett Company, New York, N. Y. Removal of phenols from waste and other liquors. 1,873,900; Aug. 23.

Miller, Stuart P., assignor to The Barrett Company, New York, N. Y. Elimination of phenols and other liquors. 1,873,901; Aug. 23.

Miller, William C. (See Abbott, A. L., and Miller.)

Miller, William C. (See Abbott, A. L., Miller, W. C., and C. E.)

Miller, William J., Swissvale, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for and method of producing mold charges. Re18,581; Aug. 23.

Miner, W. H., Inc. (See Fuchs, Henry, assignor.)

Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)

Miner, W. H., Inc. (See Lehman, Edward H., assignor.)

Miner, W. H., Inc. (See O'Connor, John F., assignor.)

Mitchell, James M., Flushing, N. Y. Valve structure. 1,873,138; Aug. 23.

Mitterer, Albert R. (See Rorrer, C. E., and Mitterer.)

Mitton, William E., New London, Wis., assignor to The Borden Company, New York, N. Y. Apparatus for taking samples of milk. 1,873,010; Aug. 23.

Miyata, Rishiro, Ichino-Macai, Sakai, Osaka-Fu, Japan. Device for the warp stop motion. 1,872,784; Aug. 23.

Mock, Frank C., C. J. Gustafson, and M. E. Chandler, assignors to Bendix Stromberg Carburetor Company, Chicago, Ill. Carburetor. 1,872,786; Aug. 23.

Modern Equipment Company. (See Goldberg, Max W., assignor.)

Modglin, Sheldon A., assignor of one-half to G. M. Collins, San Francisco, Calif. Electric surfacer. 1,873,011; Aug. 23.

Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heat exchange device. 1,872,785; Aug. 23.

Modine Manufacturing Company. (See Modine, Arthur B., assignor.)

Moffat, John B., Bronxville, N. Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 87,643; Aug. 23.

Mogford, Edmund C., and G. Spatta, assignors to Clark Equipment Company, Buchanan, Mich. Making a front axle. 1,873,453; Aug. 23.

Mojonnier Bros. Co. (See Mojonnier, Harry G., assignor.)

Mojonnier Bros. Co. (See Mojonnier, Oliver W., assignor.)

Mojonnier, Harry G., Oak Park, Ill., assignor to Mojonnier Bros. Co. Liquid treating apparatus. 1,873,588; Aug. 23.

Mojonnier, Oliver W., River Forest, Ill., assignor to Mojonnier Bros. Co. Chain manufacture. 1,873,619; Aug. 23.

Molins, Walter E., Deptford, London, England. Cigarette making machine. 1,873,779; Aug. 23.

Moon, Alva H., assignor to The American Rolling Mill Company, Middletown, Ohio. Package and method for the shipment of metal pieces. 1,873,780; Aug. 23.

Moore, James W., assignor to American Cast Iron Pipe Company, Birmingham, Ala. Pipe joint. 1,873,620; Aug. 23.

Moore, James W., assignor to American Cast Iron Pipe Company, Birmingham, Ala. Pipe joint. 1,873,621; Aug. 23.

Moore, William F., Jackson Heights, assignor to The Texas Company, New York, N. Y. Distilling oils. 1,873,454; Aug. 23.

Moraine Products Company. (See Patch, Earl S., assignor.)

Moran, Joseph F., assignor to Scovill Manufacturing Company, Waterbury, Conn. Lawn sprinkler. 1,873,622; Aug. 23.

Moran, Michael J., Morristown, N. J. Gas engine valve. 1,873,012; Aug. 23.

Morgan, John D., South Orange, N. J., assignor to Doherty Research Company, New York, N. Y. High temperature transfer material. 1,873,013; Aug. 23.

Morgan, John D., South Orange, N. J., assignor to Doherty Research Company, New York, N. Y. Making high temperature insulating products. 1,873,014; Aug. 23.

Morral, Samuel E. (See Morral William W., and S. E.)

Morral, William W. and S. E., Morral, Ohio. Butt removing and husking mechanism for green corn. 1,873,455; Aug. 23.

Morrison, Cornelius F., assignor of one-half to T. F. Vance, Jr., Pawtucket, R. I. Valve. 1,873,623; Aug. 23.

Morrow, Frank C., Wellston, Ohio. Conveyer guide. 1,873,456; Aug. 23.

Morrow, John E., Oakmont, assignor to Aluminum Company of America, Pittsburgh, Pa. Production of sodium aluminum fluorides. 1,873,210; Aug. 23.

Moschel, Herman. (See Jones, F. D., and Moschel.)

Moss, William H., Cumberland, Md., assignor to Celanese Corporation of America. Synthetic resin and making same. 1,873,849; Aug. 23.

Moss, William H. and B. B. White, Cumberland, Md., assignors to Celanese Corporation of America. Synthetic resin and making same. 1,873,848; Aug. 23.

Moxey, John G., Philadelphia, Pa. Measuring and dispensing device. 1,873,624; Aug. 23.

Mueller Co. (See Mueller, R. H., and Albert, assignors.)

Mueller, Robert H., and C. B. Albert, assignors to Mueller Co., Decatur, Ill. Faucet. 1,872,787; Aug. 23.

Mulhern, William A., assignor to Chrysler Corporation, Detroit, Mich. Lubricant seal. 1,872,788; Aug. 23.

Müller, Gustav W. (See Fleckenstein, F., and Müller.)

Müller, Richard K. (See Krnenzlein, G., and Müller.)

Müller, Wilhelm, and J. M. Michel, Bitterfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of chemically pure phosphoric acid. 1,873,457; Aug. 23.

Multipost Company. (See Gay, Azel, assignor.)

Munz, Ernest Z., Springfield, Ohio. Spraying device. 1,873,625; Aug. 23.

Murdock, Charles M., Maywood, Calif. Tuning coil shifter. 1,873,658; Aug. 23.

Murnane, Cornelius, Melbourne, Victoria, assignor of one-half to Thompsons Engineering & Pipe Company Limited, Castelmaine, Victoria, Australia. Farm tractor. 1,873,458; Aug. 23.
Murphy, Alphonsus F. and W. Jones, Zanesville, assignors to The American Rolling Mill Company, Middletown, Ohio. Treating silicon steel. 1,873,659; Aug. 23.
Murton, Crawford B., Chicago Heights, assignor to Inland Steel Company, Chicago, Ill. Making metal bar and fence posts. 1,872,789; Aug. 23.
Mutschel, Oscar J., assignor to The De Vilbiss Company, Toledo, Ohio. Atomizer. 1,873,459; Aug. 23.
Myers, Herman A., Whittier, Calif. Tool holder. 1,872,790; Aug. 23.
Naamlooze Vennootschap Anton Jurgens Margarinefabrieken. (See Van Loon, Christiaan, assignor.)
Naamlooze Vennootschap Maatschappij tot Veraardiging van Snijmachines volgens van Berkel's Patent en van andere Werktuigen. (See Van Weenen, Franciscus L., assignor.)
Nadeau, Paul. (See Roulean, A., and Nadeau.)
Nash, Arthur W., (See Collins, Timothy, assignor.)
Nash Motors Company, The (See Gun, Earl G., assignor.)
National Blank Book Company. (See Schade, Frank S., assignor.)
National Blank Book Company. (See Schade, John, assignor.)
National Cash Register Company, The. (See Arnold, Charles H., assignor.)
National Cash Register Company. (See Fuller, Frederick L., assignor.)
National Cash Register Company. (See Green, Charles W., assignor.)
National Cash Register Company, The. (See Lee, Charles L., assignor.)
National Cash Register Company. (See Robertson, William H., assignor.)
National Cash Register Company, The. (See Sheeler, Harry E., assignor.)
National Lock Co. (See North, Edwin W., assignor.)
National Malleable and Steel Castings Company. (See Brooks, C. K., and Spence.)
National Malleable and Steel Castings Company. (See Buckius, Albert O., assignor.)
National Malleable & Steel Castings Company. (See Krakau, Harry T., assignor.)
National Malleable and Steel Castings Company. (See Willison, John, assignor.)
National Malleable and Steel Castings Company. (See Woody, W. L., and Thompson, assignors.)
National Rubber Machinery Company. (See Shook, F. J., and Heston, assignors.)
Neely, William J., assignor to The W. T. Rawleigh Company, Freeport, Ill. Toothbrush trimming machine. 1,873,660; Aug. 23.
Nellan Co. (See Annin, Douglas H., assignor.)
Nekuda, Raymond F., Kansas City, Mo. Game. 1,873,211; Aug. 23.
Nelson, Charles S., Brooklyn, N. Y., assignor to C. Loring, Boston, Mass. Mop. 1,872,791; Aug. 23.
Nelson, Jabez C., assignor to Syracuse Washing Machine Corporation, Syracuse, N. Y. Utility table. 1,873,902; Aug. 23.
Nelson, Louis E. (See Olson, J. M., and Nelson.)
Neon, Claude, Electrical Products Corporation, Ltd. (See Harris, John W., assignor.)
Neorr, Harry M., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Valve. 1,872,792; Aug. 23.
New Jersey Zinc Company. (See Bunce, Earl H., assignor.)
Newton, John M., Sioux Falls, S. Dak. Storage battery holder. 1,873,460; Aug. 23.
Niagara Sprayer & Chemical Co, Inc. (See Evans, Charles H., assignor.)
Nickerson, Effie O., Indianapolis, Ind. Making and packaging pie crust dough. 1,873,716; Aug. 23.
Nightingale, Harry, Union City, N. J., assignor to Todd Drydock Engineering & Repair Corporation, New York, N. Y. Liquid fuel burner and variable supply means therefor. 1,873,781; Aug. 23.
Nigro, Arthur C. (See Nigro, Michel and A. C.)
Nigro, Michel, assignor to Sleeper & Hartley, Inc., Worcester, Mass. Spring cutting and hooking machine. 1,873,626; Aug. 23.
Nigro, Michel, and A. C. Nigro, assignors to Sleeper & Hartley, Inc., Worcester, Mass. Wire knotting machine. 1,873,461; Aug. 23.
Nilson, Eric, and Sven Malke, Milwaukee, and E. O. Holmberg, Wauwatosa, assignors to A. O. Smith Corporation, Milwaukee, Wis. Flash welding machine. 1,872,793; Aug. 23.
Nixon, Jeddy D. (See Bowman, A. M., Graham, and Nixon.)
Nixon, Jeddy D., Houston, Tex. Pump valve mechanism. 1,873,782; Aug. 23.
Noblitt, Quintin G., and E. C. Booth, assignors to Noblitt-Sparks Industries, Inc., Indianapolis, Ind. Adjustable deflector for automobile heaters. 1,872,794; Aug. 23.
Noblitt-Sparks Industries, Inc. (See Noblitt, Q. G., and Booth, assignors.)
Nohr, Allen, assignor of one-half to J. P. Ellis, Milwaukee, Wis. Sterilizer. 1,873,627; Aug. 23.
Nolde and Horst Company, The. (See Gosch, William H., assignor.)
Noll, Joseph C., assignor, by mesne assignments, to George R. Blakeslee, Cicero, Ill. Slicing machine. 1,873,903; Aug. 23.
Nordberg Manufacturinig Co. (See Symons, Edgar B., assignor.)
North, Charles E., Montclair, N. J., assignor to The Creamery Package Mfg. Company, Chicago, Ill. Heating milk. 1,872,795; Aug. 23.
North, Edwin W., assignor to National Lock Co., Rockford, Ill. Sliding door lock. 1,873,462; Aug. 23.
North American Car Corporation. (See Edgerton, Israel V., assignor.)
North Shore Coke & Chemical Company. (See Patton, Walter D., assignor.)
Norton, Raymond J., Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind. Brake structure. 1,872,796; Aug. 23.
Norviel, Harry E., assignor to Delco-Remy Corporation, Anderson, Ind. Switch. 1,873,142; Aug. 23.
Norviel, Harry E., and V. Ecoff, assignors to Delco-Remy Corporation, Anderson, Ind. Switch. 1,873,141; Aug. 23.
No-Stud-Shirt & Collar Co. Limited. (See Packett, John A., assignor.)
Novo Engine Company. (See Gillett, Glenn W., assignor.)
Oakland Foundry Company. (See Fickinger, Joseph, assignor.)
Oberhaensli, Friedrich, Bregenz-Lochau, Austria, assignor to "Omo" Aktiengesellschaft, Zurich, Switzerland. Internal combustion engine and operating the same. Re18,575; Aug. 23.
O'Brien, John O. (See Thornton, John E., assignor.)
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Antifriction bearing. 1,873,717; Aug. 23.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,873,718; Aug. 23.
Odell, William W. (See Brown, R. L., and Odell.)
Oehmichen, Etienne, Valentigney, France. Device for reducing the tension of the film in cinematographic apparatus. 1,873,403; Aug. 23.
Oelkers, Alfred H., assignor to American Steel Foundries, Chicago, Ill. Eugine truck. 1,872,797; Aug. 23.
Oelkers, Alfred H., assignor to American Steel Foundries, Chicago, Ill. Truck. 1,872,798; Aug. 23.
Oftedal, Jakob. (See Anfinnsen, Arnfinn S.)
Ogles, Joseph E. (See Enderlin, J. F., and Ogles.)
Ohio Power Shovel Company. (See Rauch, John D., assignor.)
Ohlendorf, Heinrich. (See Reddelien, G., and Ohlendorf.)
Ohlendorf, Heinrich, Dessau in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Monoazo dye. 1,873,628; Aug. 23.
Oliver Farm Equipment Company. (See Altgelt, Herman E., assignor.)
Oliver Farm Equipment Company. (See Altgelt, R. J., and Gemberling, assignors.)
Oliver Farm Equipment Company. (See Dewend, William D., assignor.)
Olivetti, Camillo, Ivrea, Italy. Typewriter marginator. 1,873,661; Aug. 23.
Olsen, Rolf L., Jamaica, N. Y. Automotive demountable wheel. 1,873,464; Aug. 23.
Olson, John M., and L. E. Nelson, Fargo, N. Dak., assignors to Chamberlin Metal Weather Strip Company, Detroit, Mich. Metal threshold. 1,873,143; Aug. 23.
O'Malley, John F., New York, N. Y. Supplemental adjustable wing for aircraft. 1,873,662; Aug. 23.
"Omo" Aktiengesellschaft. (See Oberhaensli, Friedrich, assignor.)
Omo, Frank J., New York, N. Y. Internal combustion engine. 1,873,015; Aug. 23.
Oneida Community, Limited. (See Allen, G. N., Parker, and Ressegger, assignors.)
Oplinger, Kirk A., Pittsburgh, and W. O. Osbon, Edgewood, Pa., assignors to Westinghouse Electric and Manufacturing Company. Motion-picture apparatus. 1,873,016; Aug. 23.
Ortega, Carlos, New York, N. Y. Cooking plant for cafeteria. 1,873,144; Aug. 23.
Osbon, William O. (See Oplinger, K. A., and Osbon.)
Oskow, Louis, assignor of one-half to M. Kirschstein, Brooklyn, N. Y. Wheeled toy. 1,873,719; Aug. 18.
Osterstrom, Rudolph C., Chicago, Ill., and R. T. Tucker, Muskogee, Okla., assignors to The Pure Oil Company, Chicago, Ill. Treating oil. 1,873,783; Aug. 23.
Ostroff, Banjamin, Gardner, Mass. Cushion. 1,873,212; Aug. 23.
Ottawa River Paper Company. (See Richards, Ralph N., assignor.)
Overacker, Horace E., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radioreceiving system. 1,873,017; Aug. 23.
Overbury, Frederick C., Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Method of and apparatus for finishing roofing elements. 1,873,213; Aug. 23.
Pacific Clay Products. (See McClintock, W., and Lacy, assignors.)
Pacific Clay Products. (See McClintock, W., and Pearne, assignors.)
Pacific Pump Works. (See Bigelow, G. E., and Weis, assignors.)

Package Machinery Company. (See Cornock, Edward F., assignor.)
Package Machinery Company. (See Smith, Elmer L., assignor.)
Package Machinery Company. (See Smith, E. L., and Fuller, assignors.)
Packett, John A., Hove, assignor to The No-Stud-Shirt & Collar Co. Limited, Brighton, England. Attaching detachable collars to shirts. 1,873,145; Aug. 23.
Page, Walter. (See Brooks, William H., assignor.)
Palmer, Roy. (See Hallam, C. A., and Palmer.)
Paper Patents Company. (See Biederman, Frank A., assignor.)
Paper Patents Company. (See John, Hans, assignor.)
Pardieck, Myron A., et al. (See Dahl, Conrad, assignor.)
Paré, Victor T., Long Beach, Ind. Electrical apparatus. 1,872,799; Aug. 23.
Parker, Mary G. (See Allen, G. N., Parker, and Ressegger.)
Parker Rust-Proof Company. (See Tanner, Robert R., assignor.)
Patch, Earl S., assignor to Moraine Products Company, Dayton, Ohio. Engine cooling system. 1,873,146; Aug. 23.
Patent and Licensing Corporation. (See Heppes, George P., assignor.)
Patent and Licensing Corporation, The. (See Heppes, Otto A., assignor.)
Patent and Licensing Corporation, The. (See MacDonald, Chester R., assignor.)
Patent and Licensing Corporation, The. (See Overbury, Frederick C., assignor.)
Paton, Roy W., Detroit, assignor to Chrysler Corporation, Highland Park, Mich. Internal combustion engine. 1,872,800; Aug. 23.
Patterson, Julius W., Bucyrus, Ohio. Scoop structure. 1,873,018; Aug. 23.
Patton, Walter D., assignor to North Shore Coke & Chemical Company, Waukegan, Ill. Apparatus for treatment of ammonia still waste. 1,873,629; Aug. 23.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Warp stop motion contact bar and drop wire. 1,873,019; Aug. 23.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Tube frame for axminster looms. 1,873,020; Aug. 23.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Electrical warp stop motion. 1,873,147; Aug. 23.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Separator for electrical warp stop motions. 1,873,214; Aug. 23.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Knock-off for electrical warp stop motions. 1,873,465; Aug. 23.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Drop wire. 1,873,466; Aug. 23.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Electrical warp stop motion. 1,873,467; Aug. 23.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft detector and bobbin therefor. 1,873,468; Aug. 23.
Pearce, Solomon, Elizabeth, Ill. Hay rack. 1,873,469; Aug. 23.
Pearne, Frank Y. (See McClintock, W., and Pearne.)
Pearson, George A., et al. (See Dickson, George F., assignor.)
Pedranti, Eugene T., Petaluma, Calif. Tube tester. 1,873,148; Aug. 23.
Peek, Robert L., jr., Elizabeth, and C. L. Hippensteel, Bloomfield, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Cable armor. 1,873,470; Aug. 23.
Peerless Handcuff Company. (See Wesson, H., and Pomeroy, assignors.)
Peller, Karl E., West Hartford, Conn., assignor, by mesne assignments, to Hartford-Empire Company. Method of and apparatus for feeding molten glass. 1,873,021; Aug. 23.
Peller, Karl E., West Hartford, Conn., assignor, by mesne assignments, to Hartford-Empire Company. Method of and apparatus for feeding molten glass. 1,873,022; Aug. 23.
Peirce, John R., New York, N. Y. Coffee brewing device. 1,873,023; Aug. 23.
Pelzer, Harry L., Highland, Ind., assignor to Sinclair Refining Company, New York, N. Y. Cracking and coking hydrocarbons. 1,873,024; Aug. 23.
Pendleton, Charles B., assignor to Citizens National Trust & Savings Bank, Los Angeles, Calif. Automatic fluid pressure displacement pump. 1,872,801; Aug. 23.
Perez, Fernando, Rome, Italy. Microscope for examining pictures with rasant lateral lighting. 1,873,149; Aug. 23.
Perlman, Edward, Chicago, Ill. Filtering device. 1,872,802; Aug. 23.
Permutit Company, The. (See DeVille, Edward J., assignor.)
Perrot, Henri, Paris, France, and G. Calvignac, Mannheim, Germany, assignors, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y. Brake shoe. 1,873,025; Aug. 23.
Persson, Lars G., New York, N. Y., assignor to A. B. See Elevator Company, Inc. Elevator car guide. 1,872,803; Aug. 23.
Peters, Douglas Z., Ida Grove, Iowa. Jewelry display device. 1,872,804; Aug. 23.
Petersen, Nicolaus. (See Zetsche, J., Petersen, and Sinclair-Ross.)
Peterson, Harold O., Riverhead, New York, assignor to Radio Corporation of America. Screen grid tube. 1,873,026; Aug. 23.
Peterson, Holly C., Toledo, Ohio. Christmas tree holder. 1,873,471; Aug. 23.
Peterson, John A., Hingham Center, Mass. Auxiliary storage tank and condenser for motor vehicle cooling systems. 1,873,632; Aug. 23.
Peterson, John T., Chicago, Ill. Air compressor. 1,872,805; Aug. 23.
Petroleum Conversion Corporation. (See Sachs, Albert P., assignor.)
Petroleum Heat and Power Company. (See Hammers, Morgan J., assignor.)
Petroleum Rectifying Company of California. (See Worthington, J. T., and Fisher, assignors.)
Pfannenstiel, Adolf, Berlin-Lichtenrade, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Manufacture of a vanillin and 3-ethoxy-4-hydroxybenzaldehyde. 1,873,630; Aug. 23.
Pfauser, Edward M., assignor to The Blackhawk Manufacturing Company, Milwaukee, Wis. Socket wrench. 1,873,472; Aug. 23.
Pfauser, Edward M., assignor to Blackhawk Manufacturing Company, Milwaukee, Wis. Hydraulic jack. 1,873,473; Aug. 23.
Pfiffner, Emil, Fribourg, Switzerland, assignor, by mesne assignments, to Radio Patents Corporation, New York, N. Y. Producing films or the like, particularly for use in electric condensers. 1,873,474; Aug. 23.
Pfister, Arnold, Clifton, N. J. Manufacture of vegetable gum solutions. 1,873,631; Aug. 23.
Pfanze, Charles F., Webster Groves, Mo. Gumming mechanism for envelope-making machines. 1,873,850; Aug. 23.
Pfueger, Charles T., and W. L. Adams, Akron, Ohio. Salt water reel. Re18,580; Aug. 23.
Phelps, Alva W. (See Holmes, J. Q., and Phelps.)
Phelps, Alva W. (See Shippy, L. C., and Phelps.)
Phelps, Alva W., and C. J. Keller, assignors to Delco-Remy Corporation, Anderson, Ind. Assembling apparatus. 1,873,150; Aug. 23.
Philad Company. (See Decker, George, assignor.)
Philadelphia Drying Machinery Company. (See Allsop, Thomas, assignor.)
Pieper, Ernest J. (See Smith, D. F., Pieper and Vogt.)
Pierce, George L., Brooklyn, assignor to A. G. Spalding & Broz., New York, N. Y. Shoe cleat. 1,873,904; Aug. 23.
Pietzuch, Joseph, St. Louis, Mo. Foot measuring device. 1,873,663; Aug. 23.
Piker, Louis M., Hamilton, assignor to Sidney Piker, St. Bernard, Ohio. Metal container. 1,873,720; Aug. 23.
Piker, Sidney. (See Piker, Louis M., assignor.)
Pinaud, Inc. (See Quinn, John J., assignor.)
Pioneer Instrument Company. (See Carbonara, Victor E., assignor.)
Pioneer Instrument Company. (See Urfer, Adolf, assignor.)
Pitter Trust. (See Pitter, Walter C., assignor.)
Pitter, Walter C., Epping, England, assignor to The Pitter Trust, Chicago, Ill. Intermittent clutch. 1,873,633; Aug. 23.
Plantinga, Peter, assignor to Greenfield Tap & Die Corporation, Greenfield, Mass. Control mechanism for grinding machines. 1,873,151; Aug. 23.
Plantinga, Peter, assignor to Greenfield Tap & Die Corporation, Greenfield, Mass. Splash guard mechanism for grinding machines. 1,873,152; Aug. 23.
Plass, Robert H., Upper Montclair, assignor to The Chapal-Donner Corporation, Newark, N. J. Fur cutting machine. 1,873,027; Aug. 23.
Pogue, Robert B., Chicago, Ill., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del. Brake shoe. 1,872,806; Aug. 23.
Pokorny, Ernst, Leipzig, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing calcium molybdate. 1,873,475; Aug. 23.
Pollei, Harold O., assignor to A. O. Smith Corporation, Milwaukee, Wis. Electric welding of pressure vessels. 1,873,905; Aug. 23.
Pomeroy, Edward S. (See Wesson, H., and Pomeroy.)
Poock, John, Woodcliff, N. J. Interiorly swinging window and frame. 1,873,784; Aug. 23.
Pormann, Bertha, Union City, N. J. Combination curtain and shade holder. 1,873,028; Aug. 23.
Portland Stove Foundry Co. (See Lawrence, Franklin, assignor.)
Ports, Earl G. (See Miller, H. P., and Ports.)
Posner, Jennie, Plainfield, N. J. Bookmarker. 1,872,807; Aug. 23.
Postal Telegraph-Cable Company. (See Halliden, Frederick G., assignor.)
Postley, Sanford, Los Angeles, Calif. Tile scoring and breaking device. 1,873,721; Aug. 23.
Potdevin, Adolph, Garden City, assignor to Potdevin Machine Company, Brooklyn, N. Y. Bag making machine. 1,873,634; Aug. 23.

Potdevin Machine Company. (See Potdevin, Adolph, assignor.)
Prentis, Henning W., jr. (See Humphreys, C. F., and Prentis.)
Price, Sidney L., London, England. Sound reproducing device. 1,873,153; Aug. 23.
Prince, David C., Schenectady, N. Y., assignor to General Electric Company. Mercury arc rectifier. 1,873,722; Aug. 23.
Probert, Maurice E. (See Fargher, R. G., Galloway, and Probert.)
Procunier, Harry G., assignor to Procunier Safety Chuck Company, Chicago, Ill. Tap holder. 1,873,476; Aug. 23.
Procunier Safety Chuck Company. (See Procunier, Harry G., assignor.)
Prosperity Company, The. (See Davis, Ernest, assignor.)
Prosperity Company, The. (See Ledbetter, James C., assignor.)
Pure Calcium Products Company. (See Church, J. W., and Elledge, assignors.)
Pure Oil Company, The. (See Osterstrom, R. C., and Tucker, assignors.)
Pure Oil Company, The. (See Wagner, Cary R., assignor.)
Putterman, Benjamin, Brooklyn, N. Y., assignor to Yankee Metal Products Corp. Smoker's receptacle. 1,873,029; Aug. 23.
Pyatt, Vaidis M., Great Falls, Mont. Garden implement. 1,873,215; Aug. 23.
Quarles, Donald A., Englewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Coaxial conductor transmission line. 1,873,477; Aug. 23.
Quigg, Murray T. (See Volf, Christian A., jr., assignor.)
Quinn, John J., Scarsdale, N. Y., assignor to Pinaud, Inc., New York, N. Y. Powder puff. 1,873,030; Aug. 23.
Radio Corporation of America. (See Ballantine, S., and Hull, assignors.)
Radio Corporation of America. (See Peterson, Harold O., assignor.)
Radio Corporation of America. (See Ranger, Richard H., assignor.)
Radio Patents Corporation. (See Pfiffner, Emil, assignor.)
Raeck, Max. (See Lange, W., and Raeck.)
Ramsburg, Charles J., Edgeworth, Pa., assignor to The Koppers Company. Recovering light oils, motor fuel and the like. 1,872,808; Aug. 23.
Rand McNally & Company. (See Johnson, William E., assignor.)
Randall Company, The. (See Randall, Howard D., assignor.)
Randall, George W., Washington, D. C. Bedpan. 1,872,809; Aug. 23.
Randall, Howard D., Cincinnati, Ohio, assignor to The Randall Company. Runway for sliding panes. 1,873,031; Aug. 23.
Randall, Richard W., and J. C. Koch, Stockton, Calif. Tube cleaner. 1,873,478; Aug. 23.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Tube commutator. 1,873,785; Aug. 23.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Selective channeling system. 1,873,786; Aug. 23.
Rankin, William K., Lansdowne, Pa., assignor to General Electric Company. Electric switch operating mechanism. 1,873,787; Aug. 23.
Rapeln, Robert, Chemaze, Mayenne, assignor to Société à Responsabilité Limitée Consortium General de l'Industrie Foraine, Paris, France. Amusement apparatus. 1,873,216; Aug. 23.
Ratigan, James P., Los Angeles, Calif. Shock absorbing connecter. 1,873,325; Aug. 23.
Ratigan, James P., Los Angeles, Calif. Pump rein. 1,873,326; Aug. 23.
Rauch, John D., assignor to The Ohio Power Shovel Company, Lima, Ohio. Clutch. 1,873,479; Aug. 23.
Rawleigh, W. T., Company, The. (See Neely, William J., assignor.)
Raybestos-Manhattan, Inc. (See Lane, George S., assignor.)
Raymond, Gwynne, Kansas City, Mo. Method of and apparatus for assembling metal sections. 1,872,810; Aug. 23.
Reddelien, Gustav, Leipzig, and H. Ohlendorf, Dessa in Anhalt, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Naphthophenazine dye. 1,873,938; Aug. 23.
Reed, Earl A., Tulsa, Okla. Drill cutter. 1,873,327; Aug. 23.
Reel, Gordon, New York, N. Y. Aeroplane. 1,872,811; Aug. 23.
Regal Shoe Company. (See Bliss, Elmer J., assignor.)
Regan Safety Devices Company, The. (See Shaver, A. G., and Meisel, assignors.)
Regero, Frank, Macon, Ga., assignor to L. & R. Manufacturing Company. Watch cleaning machine. 1,872,812; Aug. 23.
Reid, Thomas H., Brooklyn, N. Y. Collapsible tube squeezer. 1,873,217; Aug. 23.
Reiland, Frank D., Chicago, Ill. Adjustable shelf-angle support for building construction. 1,872,813; Aug. 23.
Reilly, Peter C. (See Derby, J. H., and Cunningham, assignors.)
Reliance Electric & Engineering Company, The. (See Henderson, E. W., and Fisher, assignors.)
Republic Carbon Company. (See Broadwell, Bartley E., assignor.)
Ressegger, Lloyd E. (See Allen, G. N., Parker, and Ressegger.)
Rettich, Kurt, assignor to The Dura Company, Toledo, Ohio. Bottle cap remover. Des. 87,644; Aug. 28.
Reucker, Frederick C. (See Jensen, L., and Reucker.)
Rexworthy, Harold S., Sunnyvale, assignor to F. J. Behneman, San Francisco, Calif. Rod mill. 1,873,032; Aug. 23.
Reynolds, Arthur W., Leonardsville, N. Y. Automobile signaling device. 1,873,033; Aug. 23.
Reynolds, Frederick D., St. Louis, Mo. Shoe plate. 1,873,328; Aug. 23.
Rheinische Metallwaaren-und Maschinenfabrik Sommerda Aktiengesellschaft. (See Luce, Hans, assignor.)
Riblet, Robert M., assignor to The Timken Roller Bearing Company, Canton, Ohio. Spring shackle. 1,872,814; Aug. 23.
Rice, Milo E., Kansas City, Mo. Artificial ankle joint. 1,872,815; Aug. 23.
Richards, Ralph N., assignor to Ottawa River Paper Company, Toledo, Ohio. Device for catching and stacking sheet material. 1,873,480; Aug. 23.
Richter, Emil, assignor to Textile Machine Works, Wyomissing, Pa. Movement control mechanism for straight knitting machines. 1,873,034; Aug. 23.
Richter, Emil, assignor to Textile Machine Works, Wyomissing, Pa. Mechanism for knitting full fashioned hosiery. 1,873,035; Aug. 23.
Richter, Emil, Wyomissing, and M. Richter, West Reading, assignors to Textile Machine Works, Wyomissing, Pa. Cam shaft shift control means. 1,873,481; Aug. 23.
Richter, Max. (See Richter, Emil and M.)
Rickard, Chet E., Anaconda, Mont. Air foil. 1,873,664; Aug. 23.
Rigante, Giuseppe, Westerleigh, Staten Island, N. Y. Coil unit. 1,873,665; Aug. 23.
Ring, Raymond M., Rochester, N. Y., assignor to The Forbes Lithograph Manufacturing Company, Boston, Mass. Display stand. 1,873,036; Aug. 23.
Ring, William A., and I. M. Laddon, Buffalo, N. Y., assignors to Bendix Brake Company, South Bend, Ind. Operating mechanism. 1,873,906; Aug. 23.
Ringgenberg, Herman I., Hammond, Ind., assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,873,037; Aug. 23.
Ringland, Frank G., Des Moines, Iowa. Device for holding and dispensing soap bars. 1,872,816; Aug. 23.
Ritchie, Charles F., and W. A. Gale, assignors to American Potash & Chemical Corporation, Trona, Calif. Evaporative cooling. 1,873,329; Aug. 23.
Ritz Woller, Oliver C., Chicago, Ill. Mirror and accessories therefor. 1,873,943; Aug. 23.
Roberts, Roland R. (See Forward, W. J. F., and Roberts.)
Robertson, William H., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,873,723; Aug. 23.
Robertson, William W., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Needle motion for Axminster looms. 1,873,038; Aug. 23.
Robinson, Guy, Dinuba, and H. Clausen, Alameda, Calif. Hanger. 1,873,039; Aug. 23.
Robinson, Thomas, assignor to Lancaster Asphalt, Inc., New York, N. Y. Apparatus for making sheet material. 1,873,040; Aug. 23.
Robinson, Thomas, assignor to Lancaster Asphalt, Inc., New York, N. Y. Molding apparatus. 1,873,041; Aug. 23.
Rocatchoff, Theodore, Baltimore, Md. Adjustable crosshead. 1,873,482; Aug. 23.
Rocatchoff, Theodore, Baltimore, Md. Crosshead adjuster. 1,873,483; Aug. 23.
Rohrdanz, Harold, Inglewood, Calif. Swivel electrical connecter. 1,873,042; Aug. 23.
Roirant, Emile, assignor to Societe Anonyme d'Etudes et de Constructions d'Appareils Mecaniques pour la Verrerie, Paris, France. Machine for working glass. 1,873,788; Aug. 23.
Rolls Royce of America, Inc. (See Beck, C., and Burton, assignors.)
Romander, Hugo, Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radio transmitting system. 1,873,043; Aug. 23.
Romano, Michael, Providence, R. I. Windshield cleaner structure. 1,873,907; Aug. 23.
Rome Company, The. (See Douglass, Napoleon B., assignor.)
Root, Harry F., assignor of one-third to Arthur C. Haller, Buffalo, N. Y. Cutting grooves in bushings. 1,872,817; Aug. 23.
Roper, Denney W., Chicago, Ill. Impregnated paper insulated, lead covered cable. 1,872,818; Aug. 23.
Rorabeck, Claude, Chicago Heights, assignor to American Manganese Steel Company, Chicago, Ill. Tractor link. 1,872,819; Aug. 23.
Rorabeck, Claude, assignor, to American Manganese Steel Company, Chicago Heights, Ill. Closing chain. 1,872,820; Aug. 23.

Rorrer, Charles E. and A. R. Mitterer, assignors to Stadium Stores, Inc., Denver, Colo. Store. 1,873,852; Aug. 23.
Rosebrook, Guy L., Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa. Service building. Des. 87,645; Aug. 23.
Rosenberger, Harold J., Brooklyn, assignor to International Communications Laboratories, Inc., New York, N. Y. Interpolating circuit for submarine cable operation. 1,873,044; Aug. 23.
Rosenmund, Alfred L. (See Igleheart, G. P., and Rosenmund.)
Rosenstein, Ludwig, assignor to Great Western Electro-Chemical Company, San Francisco, Calif. Producing alkali metal xanthates. 1,872,821; Aug. 23.
Rosine, Conrad, Chicago, Ill. Combination lock switch. 1,873,484; Aug. 23.
Rossberg, Ehrhard. (See Storch, P., and Rossberg.)
Rottler, Clarence T., Seattle, Wash. Cylinder bone. 1,873,330; Aug. 23.
Rouleau, Alphie, and P. Nadeau, Barre Town, Vt. Vehicle spring. 1,872,822; Aug. 23.
Rowe, Alvin V., assignor to Rowe Manufacturing Company, Galesburg, Ill. Doorlock. 1,873,485; Aug. 23.
Rowe Manufacturing Company. (See Rowe, Alvin V., assignor.)
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Fire extinguishing apparatus. 1,873,724; Aug. 23.
Roy, William O., Montreal, Quebec, Canada. Packing flowers. 1,873,666; Aug. 23.
Ruegg, Henry. (See Hope, R. De V. and Ruegg.)
Ruess, Charles. (See Stewart, Ralph E., assignor.)
Rundell, Raymond R., Waterbury, Conn. Combined corkscrew and bottle decapper. 1,873,331; Aug. 23.
Rupertus, Chester C., Washington, D. C. Skylight joint. 1,873,789; Aug. 23.
Russell, Frederick T., assignor to Savage Arms Corporation, Utica, N. Y. Ironing machine. 1,873,332; Aug. 23.
Ruzicka, Leopold, De Bilt, near Utrecht, Netherlands, assignor to Societe Anonyme M. Naef & Cie., Geneva, Switzerland. Preparation of cyclic nonsaturated ketones with more than nine ring members. 1,873,154; Aug. 23.
Saathoff, George W., South Orange, N. J., assignor to Doherty Research Company, New York, N. Y. Fluid transportation system. 1,873,045; Aug. 23.
Sabbah, Camil A., Schenectady, and C. F. Whitney, Scotia, N. Y., assignors to General Electric Company. Measurement of rectifier voltages. 1,873,667; Aug. 23.
Sachs, Albert P., assignor to Petroleum Conversion Corporation, New York, N. Y. Preventing corrosion by sulphur compounds during conversion of hydrocarbons. 1,873,851; Aug. 23.
Safety Mining Company. (See Armstrong, Frank H., assignor.)
St. John, Everett, Westport, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Grade clamp. 1,873,357; Aug. 23.
Salcedo, Ferdinand G., Quantico, Va. Sound reproducing apparatus for advertising purposes. 1,873,790; Aug. 23.
Salvage Process Corporation. (See Drake, Lewis F. V., assignor.)
Samphere, Orin C., West Allis, Wis. Necktie. 1,873,333; Aug. 23.
Sand Spun Patents Corporation. (See Barr, Clarence D., assignor.)
Sand Spun Patents Corporation. (See Smith, Murphy D., assignor.)
Sanford, Bert J., assignor to Bendix Brake Company, South Bend, Ind. Trailer truck. 1,872,823; Aug. 23.
Sanford, George D., Clinton, N. C. Signaling device for automobiles. Des. 87,646; Aug. 23.
Sarros, James D., Long Island City, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Power line carrier telephone system. 1,873,334; Aug. 23.
Savage Arms Corporation. (See Russell, Frederick T., assignor.)
Scanlon-Morris Company. (See Blasbfield, Floyd A., assignor.)
Scarponi, Rene U., Brooklyn, N. Y. Combined ash receiver, cigar and cigarette holder. Des. 87,647; Aug. 23.
Schade, Arthur. (See Voss, J., and Schade.)
Schade, Frank S., assignor to National Blank Book Company, Holyoke, Mass. Loose leaf book. 1,872,824; Aug. 23.
Schade, John, assignor to National Blank Book Company, Holyoke, Mass. Loose leaf binder. 1,872,825; Aug. 23.
Schaelchlin, Walter, Wilkinsburg, Pa., assignor to Westinghouse Electric Manufacturing Company. Load balancing equipment. 1,873,046; Aug. 23.
Scharnow, Bernhard, Berlin-Charlottenburg assignor to Deutsch-Atlantische Telegraphengesellschaft. Berlin, Germany. Ferromagnetic materials. 1,873,155; Aug. 23.
Shaw Walker Company, The. (See Hunter, David E., assignor.)
Schimmel, Paul, Bloomfield, N. J., and C. R. Gedat, New York, N. Y. Velocipede. 1,873,047; Aug. 23.
Schinke, Erich, Berlin, Germany, assignor to Stanley Hopkins, London, England. Diesel engine. 1,873,908; Aug. 23.
Schmidt, Hans, Jena, Germany. Diaphragm for sound receiving, reproducing, amplifying, and transmitting instruments. 1,873,335; Aug. 23.
Schmidt, Hans, Wuppertal-Vohwinkel, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Stable solutions of metal complex compounds. 1,873,668; Aug. 23.
Schmidt, Henry F., Conroy, Iowa. Self loading fuse box. 1,873,488; Aug. 23.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Propeller type fluid translating apparatus. 1,873,336; Aug. 23.
Schmidt, Karl, Berlin-Lichtenrade, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Energy absorption means for switching contacts. 1,873,048; Aug. 23.
Schmitt, Joy B., assignor to The De Vilbiss Company, Toledo, Ohio. Spraying device. 1,873,337; Aug. 23.
Schönfeld, Paul, Chemnitz, Germany. Transferring method. 1,873,486; Aug. 23.
Schönfeld, Paul, Chemnitz, Germany. Elastic top in hosiery or the like. 1,873,487; Aug. 23.
Schönhöfer, Fritz. (See Schulemann, W., Schönhöfer, and Wingler.)
Schrader, Carl, Berlin-Halensee, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. High tension transformer. 1,873,049; Aug. 23.
Schrader, Charles C., assignor to Armstrong Cork Company, Lancaster, Pa. Cork board insulation and erecting the same. 1,873,050. Aug. 23.
Schroeder, Bernard A., assignor to United Autographic Register Co., Chicago, Ill. Duplicating machine and stationery for use therein. 1,873,489; Aug. 23.
Schulemann, Werner, Elberfeld-Vohwinkel, F. Schönhöfer, Elberfeld, Germany, and A. Wingler, Westfield, N. J., assignors to Winthrop Chemical Company, Inc., New York, N. Y. Soluble salts of organic bases and the process of preparing the same. 1,872,826; Aug. 23.
Schulze, Rudolf, Bitterfeld, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Separating potassium phosphate from potassium aluminate in solutions. 1,873,490; Aug. 23.
Schumb, Martin T., Milton, and E. E. Tougas, Wollaston, assignors to Boston Gear Works, Inc., Norfolk Downs, Mass. Variable speed motor. 1,873,491; Aug. 23.
Schwab, Isaac M., Savannah, Ga. Eyeglasses. 1,873,338; Aug. 23.
Schwantes, William C., Manitowoc, Wis. Kitchen cabinet. 1,873,492; Aug. 23.
Schweitzer, Edmund O., Chicago, Ill. Fuse. 1,873,339; Aug. 23.
Scollard, Robert L., and T. D. Ketchbaw, assignors, by mesne assignments, to Kayness Corporation, Chicago, Ill. Cast iron welding electrode and composition for coating same. 1,873,340; Aug. 23.
Scott, Alva W., assignor to The Inland Manufacturing Company, Dayton, Ohio. Freezing tray. 1,873,218; Aug. 23.
Scott, Bertram D., assignor to The Louden Machinery Company, Fairfield, Iowa. Stall for animals. 1,873,493; Aug. 23.
Scovill Manufacturing Company. (See Clemmons, Herbert D., assignor.)
Scovill Manufacturing Company. (See Moran, Joseph F., assignor.)
Scullin Steel Company. (See Chiles, George S., assignor.)
Searles, Burt, East San Gabriel, assignor of one-half to H. R. Lee, Monterey Park, Calif. Individual brush keep and shaper. 1,872,827; Aug. 23.
Security Trust Company. (See Long, Elmer C., assignor.)
Sedgley, Reginald F., Philadelphia, Pa. Method of and apparatus for making coils. Re18,576; Aug. 23.
See, A. B., Elevator Company. (See Lindstrom, Nils O., assignor.)
See, A. B., Elevator Company. (See Persson, Lars G., assignor.)
Seelman, George, & Sons Co. (See Kaliebe, William J., assignor.)
Selbert, William D., Brooklyn, N. Y. Buckle. 1,873,219; Aug. 23.
Selde, Max, assignor to Chamberlin Metal Weatherstrip Co., Detroit, Mich. Roller screen. 1,873,156; Aug. 23.
Selden Company, The. (See Jaeger, Alphons O., assignor.)
Selected Products Corporation. (See Dahl, Conrad, assignor.)
Sells, Ogden S., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Machine for grading globular articles. 1,873,220; Aug. 23.
Semmes, Harry H., Chevy Chase, Md., assignor, by mesne assignments, to Bendix-Cowdrey Brake Tester, Inc., New York, N. Y. Brake testing structure. 1,873,051; Aug. 23.
Senn, George, Green Bay, Wis. Baseball. 1,873,221; Aug. 23.
Sentry Safety Control Corporation. (See Cohen, Joseph E., assignor.)
Serrurier, Iwan, Los Angeles, Calif. Film-viewing machine. 1,873,341; Aug. 23.
Serrurier, Iwan, Hollywood, Calif. Apparatus for examining and selecting motion picture films. 1,873,342; Aug. 23.
Servel Inc. (See Tanger, Chelton H., assignor.)

Service, Henry H., Topeka, Kans. Coupler. 1,873,494; Aug. 23.
Seward, Owen L., Newington Junction, assignor to The Bush Manufacturing Company, Hartford, Conn. Radiator. 1,873,052; Aug. 23.
Seyfried, Arthur W., Cleveland Heights, assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio. Motor mounting. 1,873,343; Aug. 23.
Sharples Specialty Company, The. (See Jones, Leo D., assignor.)
Shaver, Archibald G., Chicago, Ill., and B. W. Meisel, Crestwood, assignor to The Regan Safety Devices Company, Inc., New York, N. Y. Train control system. 1,872,828; Aug. 23.
Shaw, Claude C., Camden, S. C. Rocker-shaft bearing for looms. 1,873,791; Aug. 23.
Shaw, Estle H., Johnson City, assignor to Endicott Johnson Corporation, Endicott, N. Y. Shoe lining. 1,873,322; Aug. 23.
Shaw, Harold N., assignor to Globar Corporation, Niagara Falls, N. Y. Electrical heating apparatus. 1,873,058; Aug. 23.
Shawinigan Chemicals Limited. (See Jane, Robert S., assignor.)
Shaw-Walker Company, The. (See Hunter, David E., assignor.)
Sheeler, Harry E., assignor to The National Cash Register Company, Dayton, Ohio. Paper slitting and stacking device. 1,873,792; Aug. 23.
Sheldrick, Harry W., assignor to Collier-Keyworth Company, Gardner, Mass. Chair iron. 1,873,054; Aug. 23.
Sheldrick, Henry W. (See Collier, D. R., and Sheldrick.)
Shell Development Company. (See Davisson, D. W., and Welke, assignors.)
Shepherdson, Arnold. (See Hallwood, A. J., Shepherdson, and Stewart.)
Shepherdson, Arnold, Blackley, Manchester, England, assignors to British Dyestuffs Corporation Limited. Manufacture of anthraquinone derivatives. 1,873,344; Aug. 23.
Shepherdson, Arnold, Blackley, Manchester, assignor to British Dyestuffs Corporation Limited, Manchester, England. Manufacture of anthraquinone derivatives. 1,873,345; Aug. 23.
Sherbondy, Ray E. (See Sherbondy, Roy H., and R. E.)
Sherbondy, Roy H., and R. E. Sherbondy, Akron, Ohio. Lawn sprinkler. Des. 87,648; Aug. 23.
Sherman, Clifton W., Hamilton, Ontario, Canada, assignor to Adirondack Steel Foundries Corporation, Watervliet, N. Y. Car truck bolster. 1,873,055; Aug. 23.
Sherwood, Charles F., Highland Park, Mich., assignor to Sherwood Patents, Ltd. Porous metal and forming the same. 1,873,223; Aug. 23.
Sherwood Patents Limited. (See Sherwood, Charles F., assignor.)
Shippy, Leo C., and A. W. Phelps, assignors to Delco-Remy Corporation, Anderson, Ind. Automatic lathe. 1,873,157; Aug. 23.
Shippy, Leo C., and J. Q. Holmes, assignors to Delco-Remy Corporation, Anderson, Ind. Cam grinding fixture. 1,873,224; Aug. 23.
Shoeld, Mark, Mt. Lebanon Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware. Method and apparatus for the manufacture of concentrated ammonia liquor. 1,872,829; Aug. 23.
Shoemaker, Alvin H., Seattle, Wash. Tire. Des. 87,649; Aug. 23.
Shook, Florain J., Akron, and A. L. Heston, Columbiana, assignors, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio. Apparatus for manufacturing tires. 1,872,830; Aug. 23.
Siegmund, Humphreys O., West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Producing switching apparatus parts. 1,873,346; Aug. 23.
Siemens & Halske Aktiengesellschaft. (See Schrader, Carl, assignor.)
Siemens & Halske Aktiengesellschaft. (See Storch, P., and Rossberg, assignors.)
Siems, Herman B., assignor to Swift and Company, Chicago, Ill. Device for controlling pressure of volatile liquids. 1,872,831; Aug. 23.
Signal Engineering & Manufacturing Company. (See Wheelock, John H., assignor.)
Silex Company, The. (See Wolcott, Frank E., assignor.)
Silica Products Company. (See Cross, Roy, assignor.)
Silverberg, Simon, Baltimore, Md. Dental device. 1,872,832; Aug. 23.
Silverman, Joseph, Chicago, Ill. Folding table. 1,872,833; Aug. 23.
Simmons Company. (See Ferguson, Reginald, assignor.)
Simmons, Oliver G., Lakewood, Ohio. Hobbing cutter and making same. 1,873,158; Aug. 23.
Simon, Miriam T., Natchez, Miss. Protector for toilet seats. 1,873,225; Aug. 23.
Simplex Engineering Company. (See Wilson, John N., assignor.)
Sinclair Refining Company. (See Campbell, O. F., and Herthel, assignors.)
Sinclair Refining Company. (See Guilette, Willis S., assignor.)
Sinclair Refining Company. (See Herthel, Eugene C., assignor.)
Sinclair Refining Company. (See Isom, Edward W., assignor.)
Sinclair Refining Company. (See Pelzer, Harry L., assignor.)
Sinclair Refining Company. (See Ringgenberg, Herman I., assignor.)
Sinclair Refining Company. (See Taber, G. H., jr., and Isom, assignors.)
Sinclair Refining Company. (See Tifft, Thomas DeC., assignor.)
Sinclair-Ross, James. (See Zetsche, J., Petersen, and Sinclair-Ross.)
Skirrow, Frederick W., Shawinigan Falls, Quebec, assignor to Canadian Electro Products Company, Limited, Montreal, Quebec, Canada. Making reaction products of vinyl esters and aldehydes. 1,872,834; Aug. 23.
Sleeper & Hartley, Inc. (See Nigro, Michel, assignor.)
Sleeper & Hartley, Inc. (See Nigro, Michel and A. C., assignors.)
Small, John D. (See Jones, C. L., and Small.)
Small, Thomas W., Huntington, assignor, by mesne assignments, to Capehart Corporation, Fort Wayne, Ind. Automatic phonograph. 1,872,835; Aug. 23.
Smart, Willard R., Los Angeles, Calif. Furniture. 1,873,347; Aug. 23.
Smith, A. O., Corporation. (See Nilson, E., Malke, and Holmberg, assignors.)
Smith, A. O., Corporation. (See Pollel, Harold O., assignor.)
Smith, Charles P., Tulsa, Okla., assignor to Burst-Webster Engineering and Sales Company, St. Louis, Mo. Powder dispenser. 1,872,836; Aug. 23.
Smith, Clyde L. (See Harnsberger, A. E., and Smith.)
Smith, Dillon F., Pensacola, Fla., E. J. Pieper and C. C. Vogt, Lancaster, assignors to Armstrong Cork Company, Lancaster, Pa. Manufacture of fibrous articles. 1,873,056; Aug. 23.
Smith, Earl D., Kenvil, N. J., assignor to Aluminum Company of America, Pittsburgh, Pa. Making basic aluminum sulphate. 1,873,348; Aug. 23.
Smith, Elmer L., Longmeadow, assignor to Package Machinery Company, Springfield, Mass. Paper registering device. 1,873,057; Aug. 23.
Smith, Elmer L., Longmeadow, assignor to Package Machinery Company, Springfield, Mass. Automatic feed for wrapping machines. 1,873,058; Aug. 23.
Smith, Elmer L., Longmeadow, and F. B. Fuller, assignors to Package Machinery Company, Springfield, Mass. Carton opening and filling machine. 1,873,059; Aug. 23.
Smith, Elmer L., Longmeadow, assignor to Package Machinery Company, Springfield, Mass. Wrapping machine. 1,873,060; Aug. 23.
Smith, Harold E. (See James, Edward, assignor.)
Smith, Jacob A., assignor to Mayer Manufacturing Corporation, Chicago, Ill. Paper sheet holder. 1,873,220; Aug. 23.
Smith, Joseph J., Philadelphia, Pa. Dispensing device. 1,872,837; Aug. 23.
Smith, Lorne C., Chicago, assignor to Zouri Drawn Metals Company, Chicago Heights, Ill. Device for securing glass. 1,873,349; Aug. 23.
Smith, Lorne C., Chicago, assignor to Zouri Drawn Metals Company, Chicago Heights, Ill. Glass securing device. 1,873,350; Aug. 23.
Smith, Murphy D., Birmingham, Ala., assignor to Sand Spun Patents Corporation, New York, N. Y. Body pattern extractor. 1,873,227; Aug. 23.
Smith, Ralston, Oakland, Calif. Ice shaving machine. 1,873,351; Aug. 23.
Smith, Ray E., Dallas, Tex. Fountain shaving brush. 1,873,660; Aug. 23.
Smith, Roy D., Wesson, Miss. Indicating device. 1,872,838; Aug. 23.
Smith, Roy D., Pleasant Valley, Iowa. Vegetable harvester. 1,873,352; Aug. 23.
Smith, Roy H. (See Frayer, Lee A., assignor.)
Smith, William H. (See Favreau, Walter, assignor.)
Smittle, Walter R., St. Louis, Mo. Flexible pipe joint. 1,873,495; Aug. 23.
Snelling, Walter O., and J. A. Wyler, Allentown, Pa., assignors to Trojan Powder Company, New York, N. Y. Denitration of spent acids. 1,873,793; Aug. 23.
Snelling, Walter O., and R. N. Boyd, Allentown, Pa., assignors to Trojan Powder Company. Treating carbohydrate esters. 1,873,061; Aug. 23.
Snyder, Charles E., Silver Lake, Kans. River revetment. 1,873,496; Aug. 23.
Snyder, Frederick T., Boston, Mass. Hydrogenation of hydrocarbons and apparatus therefor. 1,872,839; Aug. 23.
Société à Responsabilité Limitée Consortium General de l'Industrie Foraine. (See Rapein, Robert, assignor.)
Societe Anonyme d'Etudes et de Constructions d'Appareils Mecaniques pour la Verrerie. (See Roirant, Emile, assignor.)
Societe Anonyme M. Naef & Cie. (See Ruzicka, Leopold, assignor.)
Societe Anonyme Waldberg. (See Devecis, Michael, assignor.)
Society of Chemical Industry. (See Kappeler, Hans, assignor.)
Society of Chemical Industry in Basle. (See Bonhôte, Gérald, assignor.)

Söll, Julius. (See Specketer, H., and Söll.)
Sollie, Sigurd A., Palo Alto, asignor to Federal Telegraph Company, San Francisco, Calif. Sound reproducer; 1,873,062; Aug. 23.
Solon, Léon V., New York, N. Y., assignor to United States Quarry Tile Company, Parkersburg, W. Va. Tile. Des. 87,650; Aug. 23.
Somers, Elward B., Darby, Pa. Spring tension device for ribboners. 1,873,063; Aug. 23.
Spalding, A. G., & Bros. (See Pierce, George L., assignor.)
Sparkes, Harry P., and F. S. Stickney, West Orange, N. J., assignors to Westinghouse Electric and Manufacturing Company. Casing for temperature indicators. Des. 87,651; Aug. 23.
Spatta, George. (See Mogford, E. C., and Spatta.)
Specketer, Heinrich, Frankfort-on-the-Main-Griesheim, and J. Söll, Frankfort-on-the-Main-Schwanheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Double aluminum alkali fluoride compounds. 1,873,727; Aug. 23.
Speidel, Albert E. R., Edgewood, R. I., assignor to Speidel Corporation. Bracelet chain. Des. 87,652; Aug. 23.
Speidel Corporation. (See Speidel, Albert E. R., assignor.)
Spence, Hubert L. (See Brooks, C. K., and Spence.)
Speno, Frank, Ithaca, N. Y. Railroad ballast scraper. 1,873,794; Aug. 23.
Sperling, Jacob, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Combustion apparatus. 1,873,353; Aug. 23.
Sperr, Frederick W., jr., Pittsburgh, Pa., assignor to The Koppers Company of Delaware. Gas and liquid contact apparatus. 1,873,064; Aug. 23.
Sprague-Sells Corporation. (See Sells, Ogden S., assignor.)
Square D Company. (See Kingdon, Ralph H., assignor.)
Stadium Stores, Inc. (See Rorrer, C. E., and Mitterer, assignors.)
Stakmore Co. Inc. (See Kux, Albert S., assignor.)
Standard Oil Company of California. (See Hampton, W. H., and Farrington, assignors.)
Stapling Machines Co. (See Igleheart, G. P., and Rosenmund, assignors.)
Starr, Albert C., Nephi, Utah, assignor to Bendix Brake Company, South Bend, Ind. Brake connection. 1,873,065; Aug. 23.
Stebler Parker Co. (See Linfesty, Charles W., assignor.)
Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Condenser for refrigerating machines. 1,873,670; Aug. 23.
Steinhart, Hermann, Stuttgart, and H. Arnold, Waiblingen, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Switch control means for vehicle lamps. 1,873,909; Aug. 23.
Steinmayer, Alwin G., Milwaukee, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Pot head. 1,873,497; Aug. 23.
Steinmayer, Alwin G., Milwaukee, assignor to Line Material Company, South Milwaukee, Wis. Fuse. 1,873,498; Aug. 23.
Steinmayer, Alwin G., Milwaukee, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Lightning arrester. 1,873,499; Aug. 23.
Steinmayer, Alwin G., Milwaukee, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Lighting fixture. 1,873,500; Aug. 23.
Steinmayer, Alwin G., Milwaukee, assignor to Line Material Company, South Milwaukee, Wis. Lamp socket. 1,873,501; Aug. 23.
Steinmüller, Max, Chemnitz, Germany. Circular knitting machine. 1,873,502; Aug. 23.
Stevenson, Robert A., Lancaster, Ohio. Battery hand lamp. 1,872,840; Aug. 23.
Stewart, Alexander. (See Hallwood, A. J., Shepherdson, and Stewart.)
Stewart, Hercules D., assignor to Armstrong Cork Company, Lancaster, Pa. Running board. 1,873,504; Aug. 23.
Stewart, John R., Columbus, Ohio. Window sash mounting. 1,873,066; Aug. 23.
Stewart, Ralph E., assignor of one-half to C. Ruess, Los Angeles, Calif. Core construction for magnetic circuits. 1,873,354; Aug. 23.
Stewart, Robert, Ozone Park, N. Y. Wash rag. 1,873,503; Aug. 23.
Stickney, Burnham C., Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,873,355; Aug. 23.
Stickney, Fernald S. (See Sparkes, H. P., and Stickney.)
Stimson, Russell L., San Francisco, Calif., and W. H. Bouteille, Sturbridge, assignors to American Optical Company, Southbridge, Mass. Eye testing device. 1,873,356; Aug. 23.
Stipa, Luigi, Rome, Italy. Propellers for aeroplanes and the like. 1,873,505; Aug. 23.
Stockton, Jack P., Spring Lake, N. J., assignor to Stromberg-Carlson Telephone Manufacturing Company. Phonograph. 1,873,358; Aug. 23.
Stolle, Frank C., St. Louis, Mo. Material spreader. 1,872,841; Aug. 23.
Stone, J., & Company Limited. (See Crocker, Harold A., assignor.)
Storch, Paul, Berlin-Charlottenburg, and E. Rossberg, Berlin-Siemensstadt, assignors to Siemens & Halske Aktiengesellschaft, Wernerwerk Siemensstadt, bei Berlin, Germany. Call recording and charging system. 1,872,842; Aug. 23.
Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Cultivator. 1,872,843; Aug. 23.
Street, Clement F., Greenwich, Conn., assignor to American Steel Foundries, Chicago, Ill. Grate. 1,872,844; Aug. 23.
Strohacker, Louis, assignor to Structo Manufacturing Company, Freeport, Ill. Heddle frame. 1,873,726; Aug. 23.
Stromberg-Carlson Telephone Manufacturing Company, The. (See Bergmann, Charles H., assignor.)
Stromberg-Carlson Telephone Manufacturing Company, The. (See Graham, Virgil M., assignor.)
Stromberg-Carlson Telephone Manufacturing Company, The. (See Levis, John H., jr., assignor.)
Stromberg-Carlson Telephone Manufacturing Company. (See Stockton, Jack P., assignor.)
Stromgren, Charles D., Los Angeles, Calif. Valve stem fitting fixture. 1,873,067; Aug. 23.
Structo Manufacturing Company. (See Strohacker, Louis, assignor.)
Stuck, William H., Ventura, assignor to Kliefer Manufacturing Corporation, Ltd., Los Angeles, Calif. Offset implement. 1,873,359; Aug. 23.
Sturtevant, B. F., Company. (See Goldthwaite, George R., assignor.)
Sturtevant, Harold V., Scranton, Pa. Breathing apparatus. 1,873,160; Aug. 23.
Sullivan, Edward E., Fall River, Mass. Window shade and curtain fixture. 1,873,506; Aug. 23.
Sullivan, George C., El Paso, Tex. Aeroplane. 1,872,845; Aug. 23.
Sunnen, Joseph, St. Louis, Mo. Portable grinder stand. 1,873,507; Aug. 23.
Swallow, Joseph, Berwyn, assignor to Temple Corporation, Chicago, Ill. Loud-speaker construction 1,873,360; Aug. 23.
Sweeney, Hugh. (See Best, Richard C., assignor.)
Sweetland, Ernest J., Piedmont, Calif. Oil filter construction. 1,873,795; Aug. 23.
Swift and Company. (See Siems, Herman B., assignor.)
Swinland, Ingman. (See Fountaine, Philisa, assignor.)
Switow, Samuel J., Louisville, Ky. Store front. Des. 87,653; Aug. 23.
Sykes, Wilfred, Chicago, Ill. Apparatus for manufacturing plates. 1,837,361; Aug. 23.
Symons, Edgar B., Hollywood, Calif. assignor to Nordberg Manufacturing Co., Milwaukee, Wis. Yielding release for crusher bowls. 1,873,671; Aug. 23.
Syracuse Chilled Plow Company. (See Johnson, Elmo W., assignor.)
Syracuse Washing Machine Corporation. (See Nelson, Jabez C., assignor.)
Taber, George H., jr., Rye, and E. W. Isom, Scarsdale, assignors to Sinclair Refining Company, New York, N. Y. Cracking and cooking hydrocarbons. 1,873,068; Aug. 23.
Tanberg, Ragnar, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Porous lightning arrester. 1,873,362; Aug. 23.
Tancred, William I. (See Mason A. J., and Tancred.)
Tanger, Chelton H., Evansville, Ind., assignor to Servel Inc., New York, N. Y. Refrigeration. 1,873,508; Aug. 23.
Tanner, Robert R., assignor to Parker Rust-Proof Company, Detroit Mich. Coated iron or steel article and making the same. 1,873,363; Aug. 23.
Tatum, William W. (See Davidson, A., Tatum, and Watts.)
Taucher, Urban, Rock Springs, Wyo. Dust barrier. 1,873,161; Aug. 23.
Taylor, Cecil H., Detroit, Mich., assignor to Bendix Brake Company, South Bend, Ind. Vehicle brake. 1,873,069; Aug. 23.
Taylor, Henry M., Cleveland, Ohio, assignor to Dryice Equipment Corporation, New York, N. Y. Refrigerating apparatus and method. 1,873,364; Aug. 23
Technicolor, Inc. (See Ball, Joseph A., assignor.)
Telefunken Gesellschaft für Drahtlose Teleg aphie m. b. H. (See Meissner, Alexander, assignor.)
Teletype Corporation. (See Kleinschmidt, Edward E., assignor.)
Temple Corporation. (See Swalloe, Joseph, assignor.)
Terry, Trent B. (See Waldron, Lewis.)
Texas Company, The. (See Chebotaref, Leo P., assignor.)
Texas Company, The. (See Fouts, Horace A., assignor.)
Texas Company, The. (See Moore, William F., assignor.)
Texas Iron Works Sales Corporation. (See Bowman, A. M., Graham, and Nixon, assignors.)
Textile Machine Works. (See Krissiep, Max, assignor.)
Textile Machine Works. (See Meyer, Christian F., assignor.)
Textile Machine Works. (See Richter, Emil, assignor.)
Textile Machine Works. (See Richter, Emil and M., assignors.)
Textile Machine Works. (See Zwicky, Melchior, assignor.)
Theys, John, Denver, Colo. Sprinkling saddle. 1,873,672; Aug. 23.
Thiele, Henry D., Milwaukee, Wis. Under-pad for rugs, carpets, and mats. 1,872,846; Aug. 23.

Thomas & Betts Co. (See Thomas, George C., jr., assignor.)
Thomas, Elbert F., Pampa, Tex. Hat display case. 1,872,847; Aug. 23.
Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Box and fixture support. 1,873,509; Aug. 23.
Thompson, Cyrus E., Winfield, Kans. Paper clip. 1,873,228; Aug. 23.
Thompson, Earl A., Portland, Oreg., assignor to General Motors Corporation, Detroit, Mich. Power transmission mechanism. 1,873,725; Aug. 23.
Thompson, Ranney J. (See Woody, W. L., and Thompson.)
Thompson, Russell G., and C. W. Crumrine, assignors to Electromatic Typewriters, Inc., Rochester, N. Y. Typewriting machine. 1,873,510; Aug. 23.
Thompson, Russell G., and C. W. Crumrine, assignors to Electromatic Typewriters, Inc., Rochester, N. Y. Perforating machine. 1,873,511; Aug. 23.
Thompson, Russell G., assignor to Electromatic Typewriters, Inc., Rochester, N. Y. Typewriting machine. 1,873,512; Aug. 23.
Thompsons Engineering & Pipe Company. (See Murnane, Cornelius, assignor.)
Thomson, Robert F. (See Fairweather, D. A. W., and Thomson.)
Thornton, John E., West Hampstead, London, England, assignor to J. O. O'Brien, Manchester, England. Multicolor screen film. 1,873,673; Aug. 23.
Thornton, John E., St. Brelade, Jersey. Channel Islands, assignor to John O. O'Brien, Manchester, England. Production of cinematograph film positives. 1,873,674; Aug. 23.
Thurston, Charles E. (See Flanagan, John F., assignor.)
Tifft, Thomas De C., Westfield, N. J., assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,873,070; Aug. 23.
Tillyer, Edgar D., assignor to American Optical Company, Southbridge, Mass. Diagnostic instrument. 1,873,675; Aug. 23.
Tillyer, Edgar D., assignor to American Optical Company, Southbridge, Mass. Ophthalmic lens. 1,873,676; Aug. 23.
Timken Roller Bearing Company, The. (See Riblet, Robert M., assignor.)
Tips' Tool Company. (See Bodendieck, Henry W., assignor.)
Todd Dry Dock, Engineering & Repair Corporation. (See Meachem, Harry, assignor.)
Todd Drydock, Engineering & Repair Corporation. (See Nightingale, Harry, assignor.
Told, Arnold H., Chicago, Ill. Adjustable rail brace. 1,872,848; Aug. 23.
Tone, Frank J., assignor to The Carborundum Company, Niagara Falls, N. Y. Low permeable refractory and making the same. 1,873,071; Aug. 23.
Tougas, Emile E. (See Schumb, M. T., and Tougas.)
Townes, Thomas P., Lander, assignor of one-half to Mabel Flesche, Basin, Wyo. Convertible table. 1,872,849; Aug. 23.
Trainer, Maurice N., East Orange, N. J., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del. Brake shoe. 1,872,850; Aug. 23.
Transerv Corporation. (See Harbert, Victor H., assignor.)
Transerv Corporation. (See Wagner, John A., assignor.)
Traver, Philip C., Lynbrook, N. Y. Projectile shooting gun. 1,873,677; Aug. 23.
Treptow, George R., assignor to Camel Company, Chicago, Ill. Track means. 1,873,796; Aug. 23.
Tressler, Donald K., Pittsburgh, Pa., assignor to The Mathieson Alkali Works, Inc., New York, N. Y. Chlorhydrins of aliphatic ketones and preparing the same. 1,873,072; Aug. 23.
Trojan Powder Company. (See Snelling, W. O., and Boyd, assignors.)
Trojan Powder Company. (See Snelling, W. O., and Wyler, assignors.)
Trosch, Alfred, assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y. Machine lathe. 1,873,678; Aug. 23.
Trumble, Milon J., Alhambra, Calif., assignor, by mesne assignments, to Coals and Chemicals Ltd. Treating carbonaceous material. 1,873,910; Aug. 23.
Tucker, Robert T. (See Osterstrom, R. C., and Tucker.)
Turner, Harold R., Pittsfield, Mass., assignor to General Electric Company. Electric switch. 1,873,797; Aug. 23.
Turner, Richard G., and V. H. Jennings, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle changing loom. 1,873,073; Aug. 23.
Turner, Richard G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Picker spindle. 1,873,162; Aug. 23.
Turner, Richard G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle for electrical weft detectors. 1,873,163; Aug. 23.
Turner, Richard G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Internal electrical feeler for shuttles. 1,873,679; Aug. 23.
Turnquist, Edward, assignor to Guide Lamp Corporation, Anderson, Ind. Manufacture of sheet metal ware. 1,873,164; Aug. 23.
Twiss, Alfred T., Trafford, Pa., assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,873,680; Aug. 23.
Underwood Elliott Fisher Company. (See Conard, Frederick U., assignor.)
Underwood Elliott Fisher Company. (See Stickney, Burnham C., assignor.)
Union Carbide & Carbon Research Laboratories, Inc. (See Miller, Samuel W., assignor.)
United Autographic Register Co. (See Cooke, Allen B., assignor.)
United Autographic Register Co. (See Euth, John E., assignor.)
United Autographic Register Co. (See Jensen, Louis, assignor.)
United Autographic Register Co. (See Jensen, L., and Reucker, assignors.)
United Autographic Register Co. (See Schroeder, Bernard A., assignor.)
United-Carr Fastener Corporation. (See Carr, Fred S., assignor.)
United-Carr Fastener Corporation. (See Carr, Moses F., assignor.)
United-Carr Fastener Corporation. (See Hall, Charles L., assignor.)
United-Carr Fastener Corporation. (See Hall, C. L., and Walters, assignors.)
United-Carr Fastener Corporation. (See Holmes, George A., assignor.)
United-Carr Fastener Corporation. (See Johnson, Gustav, assignor.)
United-Carr Fastener Corporation. (See Jones, Walter I., assignor.)
United-Carr Fastener Corporation. (See Kimbell, Arthur W., assignor.)
United-Carr Fastener Corporation. (See Walker, William J., assignor.)
United States Quarry Tile Company. (See Solon, Léon V., assignor.)
Universal Button Fastening & Button Company. (See Clark, John M., assignor.)
Universal Button Fastening & Button Company. (See Ford, Ira D., assignor.)
Urfer, Adolf, assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y. Compass. 1,873,684; Aug. 23.
Urschel, William E., Valparaiso, Ind. Bean picker. 1,873,681; Aug. 23.
Vacher, Fernand, Paris, France, assignor, by mesne assignments, to Continental-Diamond Fibre Company, Newark, Del. Synthetic resin and making same. 1,873,799; Aug. 23.
Van Ackeren, Joseph, Pittsburgh, Pa., assignor to The Koppers Company. Vertical coking retort oven and operating the same. 1,873,074; Aug. 23.
Van Ackeren, Joseph, Pittsburgh, Pa., assignor to The Koppers Company of Delaware. Vertical coking retort oven. 1,873,075; Aug. 23.
Van Ackeren, Joseph, Pittsburgh, Pa., assignor to The Koppers Company of Delaware. Self-sealing door for coke ovens. 1,873,076; Aug. 23.
Van Ackeren, Joseph, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware. Coking retort oven. 1,873,077; Aug. 23.
Van Ackeren, Joseph, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware. Coke oven apparatus. 1,873,078; Aug. 23.
Vance, Thomas F., jr. (See Morrison, Cornelius F., assignor.)
Van Dresser, Huntington, Memphis, Tenn. Window guard. 1,873,229; Aug. 23.
Van Loon, Christiaan, Dordrecht, assignor to Naamlooze Vennootschap Anton Jurgens Margarinefabrieken, Nijmegen, Netherlands. Converting neutral or nearly neutral triglycerides mutually or with other esters. 1,873,513; Aug. 23.
Van Ness, John A., Bloomington, Ill. Fish lure. 1,873,682; Aug. 23.
Van Nieuwenhuyzen, Fred, Pella, Iowa. Rake. 1,872,852; Aug. 23.
Van Weenen, Franciscus L., assignor to Naamlooze Vennootschap Maatschappij tot Veraardiging van Snijmachines volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands. Weighing apparatus. 1,872,851; Aug. 23.
Varney, Theodore, assignor to Aluminum Company of America, Pittsburgh, Pa. Suspending and protecting aerial cables. 1,873,798; Aug. 23.
Vassos, John, New York, N. Y., assignor to The Coca-Cola Company, Atlanta, Ga. Beverage dispensing device. Des. 87,654; Aug. 23.
Veeder, Curtis H., assignor to Veeder-Root Incorporated, Hartford, Conn. Counter actuating mechanism. 1,873,079; Aug. 23.
Veeder-Root Incorporated. (See Cobb, Frederick G., assignor.)
Veeder-Root Incorporated. (See Veeder, Curtis H., assignor.)
Vernam, Gilbert S., Hackensack, N. J., and F. G. Hallden, Bellerose, N. Y., assignors to International Communications Laboratories, Inc., New York, N. Y. Recording printer. 1,873,080; Aug. 23.
Vidrio Products Corporation. (See Goldblatt, Henry J., assignor.)

Virck, Paul, Wolfen, near Bitterfeld, and Georg Matzdorf, Dessau in Annhalt, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Sulphur dye. 1,873,514; Aug. 23.
Visking Corporation, The. (See Voss, J., and Schade, assignors.)
Vivid, Incorporated. (See Flanigan, John J., assignor.)
Vogt, Clarence C. (See Smith, D. F., Pieper, and Vogt.)
Volf, Christian A., jr., Union City, N. J., assignor to M. T. Quigg, New York, N. Y. Rotor, impeller, or the like. 1,873,853; Aug. 23.
Von Hohenhoff, Richard W., Baltimore, Md. Fountain shaving brush. 1,872,853; Aug. 23.
Von Wedel, Carl J. R. H., Berlin, Germany, assignor to Electrons, Inc. Electric discharge device. 1,873,683; Aug. 23.
Von Witzki, Leo, San Francisco, Calif. Receptacle. 1,873,951; Aug. 23.
Voss, Julius, and A. Schade, Wiesbaden-Biebrich, Germany, assignors, by mesne assignments, to The Visking Corporation, Chicago, Ill. Apparatus for spinning tubular bodies made of cellulose. 1,873,685; Aug. 23.
Vostrez, Victor, Tobias, Nebr. Combined separator and atomizer for manifolds. 1,873,082; Aug. 23.
Wagner, Cary K., assignor to Tae Pure Oil Company, Chicago, Ill. Treating hydrocarbon oils. 1,873,728; Aug. 23.
Wagner, Friedrich, Russdorf near Oberfrohna, Germany. Double warp frame. 1,873,686; Aug. 23.
Wagner, Homer H. (See Cole, H. L., and Wagner.)
Wagner, John A., Decatur, assignor, by mesne assignments, to Transerv Corporation, Chicago, Ill. Wear reducing key for brake heads. 1,873,687; Aug. 23.
Wakefield, Walter H., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft end controller for automatic looms and bobbin therefor. 1,873,166; Aug. 23.
Waldon Corporation, John. (See Case, Lynn B., assignor.)
Waldron, Lewis S. and T. B. Terry, Charlottesville, Va. Fuse cartridge. 1,872,854; Aug. 23.
Walker, Arthur W., Seminole, Okla. Oil-well cementing plug. 1,872,855; Aug. 23.
Walker, Brooks, assignor of one-third to C. L. Walker, Piedmont, and one-third to H. E. Kennedy, Berkeley, Calif. Internal combustion engine. 1,872,856; Aug. 23.
Walker, Clinton L., et al. (See Walker, Brooks, assignor.)
Walker, George H., assignor to Heenan & Froude Limited, Worcester, England. Hydraulic clutch. 1,873,688; Aug. 23.
Walker, John C., Eldorado, Kans., assignor to Empire Oil and Refining Company, Dover, Del. Prevention of hard scale formation in oil wells. 1,873,083; Aug. 23.
Walker, John C., Tallant, Okla., assignor to Empire Oil and Refining Company, Dover, Del. Preventing corrosion in oil wells. 1,873,084; Aug. 23.
Walker, John C., Tallant, Okla., assignor to Empire Oil and Refining Company, Dover, Del. Method of and reagent for treating wet oils. 1,873,165; Aug. 23.
Walker, William J., Waterbury, Conn., assignor to United-Carr Fastener Corporation, Cambridge, Mass. Bag frame and fastener for the same. 1,873,911; Aug. 23.
Wall & Oehs, Incorporated. (See Bowers, Frank E., assignor.)
Walsh, James F., East Orange, and A. F. Caprio, Newark, N. J., assignors to Celluloid Corporation. Composition containing cellulose derivatives and making the same. 1,873,689; Aug. 23.
Walter, Charles T. (See McKee, H. H., and Walter.)
Walters, Rollo F. (See Hall, C. L., and Walters.)
Wanner, Albert J., assignor of one-half to C. C. Jacobs, Akron, Ohio. Mechanical movement. 1,873,230; Aug. 23.
Ward Baking Company. (See Hoffman, Charles, assignor.)
Ward, Charles B., Detroit, Mich. Can or pail hand truck. 1,873,690; Aug. 23.
Ward-Love Pump Corporation. (See Johnson, Oscar W., assignor.)
Warner, Bradford G., Fairfield, assignor to The Warner Brothers Company, Bridgeport, Conn. Paper box. 1,873,085; Aug. 23.
Warner Brothers Company, The. (See Warner, Bradford G., assignor.)
Warren, Charles H., Sparta, Mich. End locating device. 1,873,515; Aug. 23.
Watkins, George B. (See Brier, J. C., Watkins, and Brown.)
Watkins, George B., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Laminated glass. 1,873,691; Aug. 23.
Watson, William H., Bradford, England. Twisting machine. 1,873,692; Aug. 23.
Wattie, William M., assignor to Crompton & Knowles, Loom Works, Worcester, Mass. Head motion for looms. 1,873,516; Aug. 23.
Wattie, William M., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Lock knife for harness mechanism. 1,873,517; Aug. 23.
Watts, Gordon E. (See Davidson, A., Tatum, and Watts.)
Watts, William S., assignor to Bendix Brake Company, South Bend, Ind. Support. 1,873,086; Aug. 23.
Webber, Arthur. (See McKnight, R. R., and Webber.)
Weber Electric Company. (See Butler, William L., assignor.)
Weber Electric Company. (See Fabrey, William H., assignor.)
Weber, Louis, Langley, England. Process of and apparatus for drying hops and/or extracting oils and resins therefrom. 1,873,167; Aug. 23.
Webster, Albert S., Ottawa, Ontario, Canada, assignor to American Bank Note Company, New York, N. Y. Rotary web undersurface printing machine. 1,873,912; Aug. 23.
Weis, Arthur R. (See Bigelow, G. E., and Weis.)
Weis, Henry, Manufacturing Company. (See Jones, Arthur E., assignor.)
Weis, Henry, Manufacturing Company. (See Kerr, P. W., and Jones, assignors.)
Weisberg & Greenwald, Inc. (See Greenwald, Willard F., assignor.)
Weissenborn, Albert. (See Knorr, A., and Weissenborn.)
Wejnarth, Axel R., Gredbyvagen, Eskilstuna, Sweden. Electrothermic smelting of sulphidiferous materials. 1,873,800; Aug. 23.
Welke, Ferdinand G. (See Davisson, D. W., and Welke.)
Wendt, Wesley E., assignor to Delco-Light Company, Rochester, N. Y. Electrical apparatus. 1,873,168; Aug. 23.
Wendt, Wesley E., assignor to Delco-Light Company, Rochester, N. Y. Electrical apparatus. 1,873,169; Aug. 23.
Wensley, Roy J., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit-breaker-tripping system. 1,873,087; Aug. 23.
Werner, Calvin J., Dayton, Ohio, assignor to Delco Products Corporation. Thermostatic cut-out. 1,873,231; Aug. 23.
Wescott, William B., Boston, assignor to Dewey and Almy Chemical Company, Cambridge, Mass. Coagulation of rubber. 1,873,913; Aug. 23.
Weson, Harold, and E. S. Pomeroy, assignors to Peerless Handcuff Company, Springfield, Mass. Police officer's shackle. 1,872,857; Aug. 23.
Western Electric Company. (See Dreyer, Charles F., assignor.)
Western Electric Company. (See Hallam, C. A., and Palmer, assignors.)
Western Electric Company. (See Hallam, Cecil A., assignor.)
Western Electric Piano Company. (See Larson, A. F., and Anderson, assignors.)
Westinghouse Electric Elevator Company. (See Hughes, D. W., and Ellis, assignors.)
Westinghouse Electric & Manufacturing Company. (See Arnold, Edwin E., assignor.)
Westinghouse Electric Elevator Company. (See Baldwin, Edward N., assignor.)
Westinghouse Electric Elevator Company. (See Dunlop, James, assignor.)
Westinghouse Electric & Manufacturing Company. (See Bethel, Claude, assignor.)
Westinghouse Electric & Manufacturing Company. (See Bletz, Edward, assignor.)
Westinghouse Electric & Manufacturing Company. (See Breisky, J. V., and Draper, assignors.)
Westinghouse Electric & Manufacturing Company. (See Clark, Earl K., assignor.)
Westinghouse Electric & Manufacturing Company. (See Cole, H. L., and Wagner, assignors.)
Westinghouse Electric & Manufacturing Company. (See Conrad, Frank, assignor.)
Westinghouse Electric & Manufacturing Company. (See Eames, William F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Else, H. D., and Libby, assignors.)
Westinghouse Electric & Manufacturing Company. (See Fortescue, Charles Le G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Frosbee, Frank F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Gallahan, Walter, assignor.)
Westinghouse Electric & Manufacturing Company. (See Grau, Ernst, assignor.)
Westinghouse Electric & Manufacturing Company. (See Gulliksen, Fin H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hengstenberg, Paul M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hodgkins, Charles H., assignor.)
Westinghouse Electric & Manufacturing Company. (See McCulloch, T. C., and Goldsborough, assignors.)
Westinghouse Electric and Manufacturing Company. (See Mercereau, J. T., and Cole, assignors.)
Westinghouse Electric and Manufacturing Company. (See Oplinger, K. A., and Owen, assignors.)
Westinghouse Electric & Manufacturing Company. (See Schaelchlin, Walter, assignor.)
Westinghouse Electric & Manufacturing Company. (See Schmidt, Henry F., assignor.)
Westinghouse Electric and Manufacturing Company. (See Sparkes, H. P., and Stickney, assignors.)
Westinghouse Electric & Manufacturing Company. (See Sperling, Jacob, assignor.)
Westinghouse Electric & Manufacturing Company. (See Tanberg, Ragnar, assignor.)

Westinghouse Electric & Manufacturing Company. (See Twiss, Alfred T., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wensley, Roy J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Woodson, James C., assignor.)
Wheeler, Harold A., Jackson Heights, N. Y., assignor to Hazeltine Corporation, Jersey City, N. J. Volume control for radioreceivers. 1,873,236; Aug. 23.
Wheeler, Henry A., West Palm Beach, Fla. Solar water heating system. 1,873,854; Aug. 23.
Wheelock, John H., Fitzwilliam, N. H., assignor to Signal Engineering & Manufacturing Company, New York, N. Y. Code setting device for signal systems. 1,873,729; Aug. 23.
White, Blanche B. (See Moss, W. H., and White.)
White, Charles H., assignor to Deere & Company, Moline, Ill. Disk harrow. 1,873,518; Aug. 23.
White, Charles N., Medina, N. Y. Rose. Pl. Pt. 22; Aug. 23.
White, Harold E., Zellenople, assignor to Lava Crucible Company of Pittsburgh, Pittsburgh, Pa. Crucible furnace. 1,873,801; Aug. 23.
Whitehead, William. (See Dreyfus, C., and Whitehead.)
Whitfield, Clifford M., and R. C. Gage, Sioux Falls, S. Dak. Christmas tree holder. 1,873,693; Aug. 23.
Whitin Machine Works. (See Boyd, Thompson, assignor.)
Whiting Corporation. (See Coffey, Oscar L., assignor.)
Whiting, Donald F., Port Washington, assignor to Fox Case Corporation, New York, N. Y. Condenser microphone amplifier. 1,872,858; Aug. 23.
Whiting, Ernest C., Brighton, Mass. Coin controlled apparatus. 1,872,859; Aug. 23.
Whitney, Chancy F. (See Sabbah, Camil A., and Whitney.)
Wiegand, Erich, Hohen Neuendorf, assignor to Allgemeine Elektricitatz Gesellschaft, Berlin, Germany. Electron emitting material. 1,873,730; Aug. 23.
Wieman Kammerer Wright Co. (See Abegg, Walter A., assignor.)
Wilcox & Gibbs Sewing Machine Co. (See Lewis, Griffith M. assignor.)
Wilde, Samuel A., assignor to Glenwood Range Company, Taunton, Mass. Door. 1,873,088; Aug. 23.
Wilde, Samuel A., assignor to Glenwood Range Company, Taunton, Mass. Gas stove. 1,873,089; Aug. 23.
Wiley, John, assignor to Armstrong Cork Company, Lancaster, Pa. Manufacture of inlaid linoleum or the like. 1,873,090; Aug. 23.
Wilhjelm, Christian, as trustee. (See Johanson, Gustav H., assignor.)
Wilhjelm, Christian, Philadelphia, Pa. Temperature control apparatus. 1,873,091; Aug. 23.
Wilke, Karl, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Benzanthrone derivatives of pyrazolanthrone and preparing them. 1,873,925; Aug. 23.
Wilkinson, Tom B., Blackston, Arnside, England. Driving gear of jigging conveyers. 1,873,624; Aug. 23.
Willerscheidt, Joseph. (See Kreuser, J. A., and Willerscheidt.)
William, Frank T., and H. E. Ellis, Meriden, assignors to The Miller Company, of Meriden, Conn. Heater. 1,873,695; Aug. 23.
Williams, Carroll M., Swissvale, Pa. Collar button. 1,873,170; Aug. 23.
Williams, Edward T., New Rochelle, N. Y. Refrigeration. 1,873,237; Aug. 23
Williams, Edward T., Pelham Manor, N. Y. Refrigeration. 1,873 519; Aug. 23.
Willis, Clodius H., Schenectady, N. Y., assignor to General Electric Company. Electric power converting apparatus. 1,873,802; Aug. 23.
Willison John, Shaker Heights, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Uncoupling mechanism for car couplers. 1,873,092; Aug. 23.
Wilson, David, New York, N. Y. Door latch for motor vehicles. 1,873,803; Aug. 23.
Wilson, John N., Washington, Pa., assignor to Simplex Engineering Company. Furnace port. 1,873,093; Aug. 23.
Wilson, Thomas C., Incorporated. (See Young, James H., assignor.)
Wilson, Wylie G., Elizabeth, N. J. Fluid tight joint and method of making. 1,873,855; Aug. 23.
Windaus, Adolf, Gottingen, Germany. Antirachitic preparation and making same. 1,873,942; Aug. 23.
Winding Gulf Collieries. (See Jones, Emory E., assignor.)
Wingler, August. (See Schulemann, W., Schönhöfer, and Wingler.)
Winter, Walter, Osborne, Kans. Corner guide for brick laying. 1,872,860; Aug. 23.
Winthrop Chemical Company. (See Knorr, A., and Weissenborn, assignors.)
Winthrop Chemical Company. (See Pfannenstiel, Adolf, assignor.)
Winthrop Chemical Company. (See Schmidt, Hans.)
Winthrop Chemical Company. (See Schulemann, W., Schonhofer, and Wingler, assignors.)
Winston, Harry C., assignor to Everlastik, Inc., Chelsea, Mass. Elastic fabric. 1,873,094; Aug. 23.
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wired Radio, Inc. (See Hyland, Lawrence A., assignor.)
Wise Patent and Development Company. (See Wise, Roy T., assignor.)
Wise, Roy T., Berkeley, Calif., assignor to Wise Patent and Development Company, New York, N. Y. Electric motor transmission. 1,872,861; Aug. 23.
Wise, Roy T., Berkeley, Calif., assignor, by mesne assignments, to Wise Patent and Development Company, New York, N. Y. Constant mesh gear electric motor transmission. 1,872,862; Aug. 23.
Wolcott, Frank E., West Hartford, Conn., assignor to The Silex Company. Lower bowl for coffee makers. Des. 87,655; Aug. 23.
Wolcott, Frank E., West Hartford, Conn., assignor to The Silex Company. Handle for coffee makers. Des. 87,656; Aug. 23.
Wolcott, Frank E., West Hartford, Conn., assignor to The Silex Company. Coffee maker. Des. 87,657; Aug. 23.
Wolfe, Archie R., Summit, N. J. Nonscrew plug. 1,873,856; Aug. 23.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Web moistening device. 1,873,232; Aug. 23.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Plate carrying cylinder. 1,873,233; Aug. 23.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Ink spray condenser for printing machines. 1,873,234; Aug. 23.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Inking mechanism. 1,873,235; Aug. 23.
Wood, Joseph, assignor to Barcy-Nicholson Company, Detroit, Mich. Pipe coupling. 1,872,863; Aug. 23.
Wood, Morris B., assignor to The Chase-Shawmut Company, Newburyport, Mass. Off-peak power and metering system and apparatus. 1,873,238; Aug. 23.
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Wood Shovel and Tool Company. (See Brandenburg, Francis C., assignor.)
Woodford, Watson, H., Bridgeport, Conn. Electric impulse contacting means. 1,873,095; Aug. 23.
Woodruff, Graham C., Bronxville, N. Y., assignor to The L. C. L. Corporation. Drop side container car. Re18,577; Aug. 23.
Woodson, James C., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Conveyer furnace. 1,873,239; Aug. 23.
Woodstock Typewriter Company. (See Hokanson, Otto A., assignor.)
Woodstock Typewriter Company. (See Mack, Robert A., assignor.)
Woodward, Henry T., North Palo Alto, assignor to California Chemical Corporation, Newark, Calif. Making a filtering, bleaching, and insulating material. 1,873,520; Aug. 23.
Woody, Walton L., Shaker Heights, and R. J. Thompson, East Cleveland, assignors to National Malleable and Steel Castings Company, Cleveland, Ohio. Mold dumping apparatus. 1,873,096; Aug. 23.
Worthington Pump and Machinery Corporation. (See Gilman, George H., assignor.)
Worthington, John T., and H. F. Fisher, Long Beach, assignors to Petroleum Rectifying Company of California, Los Angeles, Calif. Pipe-line treater. 1,873,857; Aug. 23.
Wright, Jesse C., Los Angeles, assignor to Globe Oil Tools Co., Los Nietos, Calif. Well drilling bit. 1,873,240; Aug. 23.
Wright, Jesse C., Los Angeles, assignor to Globe Oil Tools Co., Los Nietos, Calif. Well bit. 1,873,241; Aug. 23.
Wright, Leonard K., Jackson Heights, Long Island, N. Y. Current control device. 1,873,242; Aug. 23.
Wyler, Joseph A. (See Snelling, W. O., and Wyler.)
Yankee Metal Products Corp. (See Putterman, Benjamin, assignor.)
Yarcho, Mary L., Des Moines, Iowa. Cosmetic container. 1,872,864; Aug. 23.
Young, Charles D., Haverford, Pa. Rail joint. 1,873,097; Aug. 23.
Young, Donald H., Berkeley, Calif., assignor to American Manganese Steel Company, Chicago, Ill. Digging element for excavating machines. 1,872,865; Aug. 23.
Young, Donald H., Berkeley, Calif., assignor to American Manganese Steel Company, Chicago Heights, Ill. Bucket lip extension. 1,872,866; Aug. 23.
Young, James H., Bronx, assignor to Thomas C. Wilson, Incorporated, New York, N. Y. Tube cleaner. 1,873,521; Aug. 23.
Young, Paul R., Lititz, assignor to Armstrong Cook Company, Lancaster, Pa. Surface covering material. 1,873,098; Aug. 23.
Yount, H. H., et al. (See Lyles, George D., and J. M., assignors.)
Zebrowski, Charles, West Allis, Wis. Door operating mechanism. 1,873,243; Aug. 23.
Zeh, Ludwig. (See Kramer, E., Bollweg, and Zeh.)
Zetsche, Jonni, N. Petersen, Hamburg, Germany, and J. Sinclair-Ross, London, England, said Petersen assignor to said Zetsche and said Sinclair-Ross. Electric motor. 1,873,171; Aug. 23.

Ziegler, Frederick J., Decatur, Ill. Smoker's convenience. 1,872,867; Aug. 23.
Zingali, Giovanni, Montclair, N. J. Rod clamp. 1,873,731; Aug. 23.
Zodtner, Heinrich, Berlin-Birkenwerder, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Cooling arrangement for high frequency apparatus. 1,873,804; Aug. 23.
Zouri Drawn Metals Company. (See Smith, Lorne C., assignor.)
Zucco, Pierre, San Francisco, Calif. Method and apparatus for forming piles. 1,873,244; Aug. 23.
Zwicky, Melchior, Berkshire Heights, assignor to Textile Machine Works, Wyomissing, Pa. Variable speed drive control. 1,873,099; Aug. 23.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 23D DAY OF AUGUST, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abrading apparatus. S. N. Johnson. 1,873,129; Aug. 23.
Accelerator for vulcanization processes. W. Lommel, T. Goost, and H. Friedrich. 1,873,935; Aug. 23.
Accelerator for vulcanization purposes. W. Lommel, T. Goost, and H. Friedrich. 1,873,936; Aug. 23.
Accelerator for vulcanizing rubber compounds. W. Lommel T. Goost, and H. Friedrich. 1,873,937; Aug. 23.
Accelerator, Vulcanization. W. Lommel, T. Goost, and H. Friedrich. 1,873,934; Aug. 23.
Acetylene, Apparatus for dry generation of. R. S. Jane. 1,872,741; Aug. 23.
Acid, Preparing hydrocyanic. R. R. Fulton. 1,872,923; Aug. 23.
Acid, Production of chemically pure phosphoric. W. Müller and J. M. Michel. 1,873,457; Aug. 23.
Acids, Denitration of spent. W. O. Snelling and J. A. Wyler. 1,873,793; Aug. 23.
Acoustic device, Piezo electric. A. Meissner. 1,873,715; Aug. 23.
Adsorption system. E. B. Miller. 1,872,783; Aug. 23.
Aeroplane. V. Kutnar. 1,873,651; Aug. 23.
Aeroplane. G. Reel. 1,872,811; Aug. 23.
Aeroplane. G. C. Sullivan. 1,872,845; Aug. 23.
Air cleaner. H. E. Altgelt. 1,873,252; Aug. 23.
Aircraft, Apparatus for continuously recording the path of flight of. R. Hugershoff. 1,873,126; Aug. 23.
Aircraft control apparatus. H. Haas. 1,873,579; Aug. 23.
Aircraft, Supplemental adjustable wing for. J. F. O'Malley. 1,873,662; Aug. 23.
Air foil. C. E. Rickard. 1,873,664; Aug. 23.
Air in internal combustion engines, Apparatus for forming and controlling the circulation of. A. A. Bull. 1,872,668; Aug. 23.
Alcohol recovery. S. R. Merley. 1,873,006; Aug. 23.
Alcohols and other organic compounds, Dehydrating. S. R. Merley. 1,873,005; Aug. 23.
Aldehyde condensation products and making same. H. Kappeler. 1,873,599; Aug. 23.
Aldehydes of the cyclohexane series. A. Knorr and A. Weissenborn. 1,873,430; Aug. 23.
Alkali metal xanthates, Producing. L. Rosenstein. 1,872,821; Aug. 23.
Alumina from coal and its ashes, Recovering. W. M. Guertler. 1,873,642; Aug. 23.
Aluminum alkali fluoride compounds, Double. H. Specketer, J. Söll. 1,873,727; Aug. 23.
Aluminum sulphate, Making basic. E. D. Smith. 1,873,348; Aug. 23.
Amino anthraquinone, Manufacture of sulphonated. A. Davidson, W. W. Tatum, and G. E. Watts. 1,873,300; Aug. 23.
Ammonia liquor, Method and apparatus for the manufacture of concentrated. M. Shoeld. 1,872,829; Aug. 23.
Ammonia still waste, Apparatus for treatment of. W. D. Patton. 1,873,629; Aug. 23.
Amusement apparatus. R. Rapeln. 1,873,216; Aug. 23.
Anchor, Rail. A. F. Fifield. 1,873,192; Aug. 23.
Anhydrides, Manufacture of aliphatic acid. H. Dreyfus. 1,872,914; Aug. 23.
Animal trap. A. H. Meade. 1,873,616; Aug. 23.
Annunciator. J. S. Jones. 1,873,419; Aug. 23.
Anthraquinone derivatives, Manufacture of. A. Shepherdson. 1,873,344; Aug. 23.
Anthraquinone derivatives, Manufacture of. A. Shepherdson. 1,873,345; Aug. 23.
Antirachitic, preparations and making same. A. Windaus. 1,873,942; Aug. 23.
Apparel buckle. F. Hirsh. Des. 87,636; Aug. 23.
Apron, Fender. J. H. Cohen. Des. 87,622–3; Aug. 23.
Armrest. J. F. Doller. 1,873,190; Aug. 23.
Armrest for motor vehicles, Demountable. C. F. Jarvis. 1,873,414; Aug. 23.
Armor, Cable. R. L. Peek, jr., E. and C. L. Hippensteel. 1,873,470; Aug. 23.
Article for display. F. A. Biederman. 1,873,867; Aug. 23.
Articles, Making. C. Dreyfus. 1,872,912; Aug. 23.
Artificial ankle joint. M. E. Rice. 1,872,815; Aug. 23.
Assembling apparatus. A. W. Phelps and C. J. Keller. 1,873,150; Aug. 23.
Atomizer. O. J. Mutschel. 1,873,459; Aug. 23.
Attaching machine, Snap fastner. G. A. Holmes. 1,873,890; Aug. 23.
Attenuator, Variable. H. R. Hunkins. 1,872,954; Aug. 23.
Autographic register. A. B. Cooke. 1,873,550; Aug. 23.
Autographic register. L. Jensen. 1,873,593; Aug. 23.
Automobile jack. C. H. Johnson and A. E. Miller. 1,872,959; Aug. 23.
Automobile signaling device. A. W. Reynolds. 1,873,033; Aug. 23.
Automobile wheel. A. B. Couture. Re18,578. Aug. 23.
Automotive demountable wheel. R. L. Olsen. 1,873,464; Aug. 23.
Axle, Making a front. E. C. Mogford and G. Spatta. 1,873,453; Aug. 23.
Bactericide applicable to acid-fast bacteria. R. Adams. 1,873,732; Aug. 23.
Bag: *See*—
Traveling bag.
Bag frame. W. C. Hiering. 1,872,950; Aug. 23.
Bag making machine. A. Potdevin. 1,873,634; Aug. 23.
Bag or similar container. J. L. Lopez. Des. 87,640. Aug. 23.
Bait, Artificial. W. E. Clark. 1,873,289; Aug. 23.
Bait, Artificial. C. L. Grove. 1,873,577; Aug. 23.
Balancing machine. R. E. Johnson. 1,873,416; Aug. 23.
Band for garments. J. F. Hargreaves. 1,873,583; Aug. 23.
Bar and drop wire, Warp stop motion contact. O. V. Payne. 1,873,019; Aug. 23.
Bars and fence posts, Making metal. C. B. Murton. 1,872,789; Aug. 23.
Bark from logs, Device for removing. J. M. Council. 1,873,697; Aug. 23.
Baseball. G. Senn. 1,873,221; Aug. 23.
Base for plastic material, Reenforcing. G. E. Land. 1,872,985; Aug. 23.
Bath construction, Shower. P. W. Kerr and A. E. Jones. 1,873,424; Aug. 23.
Battery connecter and making same, Storage. M. Matseu. 1,873,931; Aug. 23.
Battery terminal clamp. P. E. Coe. 1,872,683; Aug. 23.
Bean picker. W. E. Urschel. 1,873,681; Aug. 23.
Bearing, Antifriction. J. F. O'Connor. 1,873,717; Aug. 23.
Bearing for corn harvesters, Shaft. W. J. Coultas. 1,873,295; Aug. 23.
Bearing for engine crankshafts. G. W. Gillett. 1,873,382; Aug. 23.
Bearing for railway cars, Side. H. Fuchs. 1,873,702; Aug. 23.
Beater engine. F. J. Grathwol and J. E. Grathwol. 1,873,839; Aug. 23.
Beater, Food. B. H. Decker and F. E. Andersen. Des. 87,626; Aug. 23.
Bedpan. G. W. Randall. 1,872,809; Aug. 23.
Bed, Wall. N. B. Douglass. 1,872,909; Aug. 23.
Bell and spigot joint. J. R. McWane. 1,872,781; Aug. 23.
Bentonite compositions. Preparing. H. Batterman. 1,873,262; Aug. 23.
Benzanthrone derivatives of pyrazolanthrone and preparing them. K. Wilke. 1,873,925; Aug. 23.
Bill fold. W. J. Kallebe. 1,872,748; Aug. 23.
Billet furnace. R. Daae. 1,872,904; Aug. 23.
Binder for locomotive frames, Pedestal. B. Cook. 1,872,897; Aug. 23.
Binder, Loose leaf. J. Schade. 1,872,825; Aug. 23.
Bit: *See*—
Drill bit. Well bit.
Bleaching process. H. John. 1,872,743; Aug. 23.
Blood pressure lowering substance and producing it. R. H. Major. 1,872,775; Aug. 23.
Board: *See*—
Composite board. Running board.
Body, Ball cock. H. D. Clemmons. Des. 87,620–1; Aug. 23.
Body pattern extractor. M. D. Smith. 1,873,227; Aug. 23.
Boiler: *See*—
Liquid boiler.
Boiler attachment, Water heater. S. and C. Epstein. 1,873,638; Aug. 23.
Bolster, Car truck. C. W. Sherman. 1,873,055; Aug. 23.
Book, Loose leaf. F. S. Schade. 1,872,824; Aug. 23.
Booster actuating mechanism for pressing machines. E. Davis. 1,873,299; Aug. 23.
Bottle closure applying means. F. L. Darling. 1,873,113; Aug. 23.
Bottle, Non-refillable. J. Duponti. 1,873,830; Aug. 23.
Bottle, Refrigerator. R. H. Dallas. Des. 87,624; Aug. 23.
Bowl for coffee makers, Lower. F. E. Wolcott. Des. 87,655; Aug. 23.
Box: *See*—
Convertible box. Journal box.
Fuse box. Paper box.
Box and crate. G. P. Igleheart and A. L. Rosenmund. 1,873,589; Aug. 23.

Brace: *See*—
Rail brace.
Braiding carrier. M. Krissiep. 1,872,980; Aug. 23.
Brake: *See*—
Reverse brake. Vehicle brake.
Brake. V. Bendix. 1,872,874; Aug. 23.
Brake. V. Bendix. 1,873,103; Aug. 23.
Brake. E. G. Gunn. 1,873,389; Aug. 23.
Brake. R. F. Kohr. 1,872,974; Aug. 23.
Brake connection. A. C. Starr. 1,873,065; Aug. 23.
Brake operating means. L. E. LaBrie. 1,872,982; Aug. 23.
Brake pawl, Hand. V. H. Harbert. 1,873,706; Aug. 23.
Brake shoe. H. Perrot and G. Calvignac. 1,873,025; Aug. 23.
Brake shoe. R. B. Pogue. 1,872,806; Aug. 23.
Brake shoe. M. N. Trainer. 1,872,850; Aug. 23.
Brake structure. R. J. Norton. 1,872,796; Aug. 23.
Brake system for automotive vehicles. C. S. Bragg and V. W. Kliesrath. 1,872,657–59; Aug. 23.
Brake testing structure. H. H. Semmes. 1,873,051; Aug. 23.
Breathing apparatus. H. V. Sturtevant. 1,873,160; Aug. 23.
Brush, Fountain shaving. R. E. Smith. 1,873,669; Aug. 23.
Brush, Fountain shaving. R. W. von Hohenhoff. 1,872,853; Aug. 23.
Brush keep and shaper, Individual. B. Searles. 1,872,827; Aug. 23.
Brush with lifting member, Commutator. A. C. Henry. 1,872,948; Aug. 23.
Bucket and skip hoist, Grab. C. C. Hormel. 1,873,764; Aug. 23.
Bucket lip extension. D. H. Young. 1,872,866; Aug. 23.
Buckle. W. D. Seibert. 1,873,219; Aug. 23.
Buckle, Slide. I. D. Ford. 1,873,371; Aug. 23.
Building construction. G. E. Land. 1,872,984; Aug. 23.
Building frame. A. F. Bemis. 1,873,264; Aug. 23.
Burner: *See*—
Combined gas and oil burner.
Burner and variable supply means therefor, Liquid fuel. H. Nightingale. 1,873,781; Aug. 23.
Burner control system, Fuel. J. V. Breisky and T. Draper. 1,872,880; Aug. 23.
Bushing extractor. W. J. Adolph. 1,873,250; Aug. 23.
Butt removing and husking mechanism for green corn. W. W. Morral and S. E. Morral. 1,873,455; Aug. 23.
Butter cutting machine. C. Doering and H. Doering. 1,873,923; Aug. 23.
Butter forming and cutting machine, Automatic. C. Doering and H. H. Doering. 1,873,311; Aug. 23.
Button. J. M. Clark. 1,873,545; Aug. 23.
Button. I. D. Ford. 1,873,372–3; Aug. 23.
Button chain clip, Upholstery. E. B. G. Lefevre. 1,873,607; Aug. 23.
Button, Collar. C. M. Williams. 1,873,170; Aug. 23.
Cabinet, Commodity. E. D. Davis. 1,873,557; Aug. 23.
Cabinet, Hosiery display. C. C. McGaugh. 1,873,140; Aug. 23.
Cabinet inclosure. N. A. Best. 1,872,652; Aug. 23.
Cabinet, Kitchen. W. C. Schwantes. 1,873,492; Aug. 23.
Cabinet, Refrigerating. M. A. Gloekler. 1,872,728; Aug. 23.
Cabinet, Sewing. M. A. Davitt. Des. 87,625; Aug. 23.
Cabinet, Towel. H. S. McCormick. 1,873,139; Aug. 23.
Cable, Impregnated paper insulated, lead covered. D. W. Roper. 1,872,818; Aug. 23.
Cable terminal. C. L. McMaster and O. J. Gartner. 1,873,775; Aug. 23.
Cables, Suspending and protecting aerial. T. Varney. 1,873,798; Aug. 23.
Calcium carbonate, Making precipitated. J. W. Church and H. G. Elledge. 1,872,891; Aug. 23.
Calcium molybdate, Producing. E. Pokorny. 1,873,475; Aug. 23.
Cam grinding fixture. L. C. Shippy and J. Q. Holmes. 1,873,224; Aug. 23.
Cam shaft shift control means. E. Richter and M. Richter. 1,873,481; Aug. 23.
Camera, Automatic. A. M. Mannick. 1,873,654; Aug. 23.
Camera, Folding. L. Goldhammer. 1,873,927; Aug. 23.
Camera lens and filter mount. A. J. Ginsberg. 1,873,758; Aug. 23.
Cameras, Focusing device for motion picture. A. Fried. 1,873,571; Aug. 23.
Can: *See*—
Oil can.
Can body blank folding machine. W. E. Burns. 1,872,670; Aug. 23.
Can testing machine. P. Kruse. 1,873,602; Aug. 23.
Candy package. C. C. Chase. 1,873,286; Aug. 23.
Cap construction, Bubbler. W. G. Laird. 1,873,137; Aug. 23.
Cap, Radiator. R. K. Lee. 1,872,764; Aug. 23.
Cap remover, Bottle. K. Rettich. Des. 87,644; Aug. 23.
Capacitor test, Variable. V. M. Graham. 1,873,704; Aug. 23.
Car, Drop side container. G. C. Woodruff. Re18,577; Aug. 23.
Car, Stock. I. V. Edgerton. 1,872,703; Aug. 23.
Cars, Method and apparatus for pre-cooling refrigerator. F. E. Greene. 1,872,937; Aug. 23.
Carbon dioxide products, Method and apparatus for making dry. C. L. Jones. 1,873,418; Aug. 23.
Carbonaceous material, Treating. M. J. Trumble. 1,873,910; Aug. 23.
Carburetor. G. M. Bicknell. 1,872,654; Aug. 23.
Carburetor. F. O. and T. M. Ball. 1,873,919; Aug. 23.
Carburetor. G. R. Ericson. 1,872,708; Aug. 23.
Carburetor. F. C. Mock, C. J. Gustafson, and M. E. Chandler. 1,872,786; Aug. 23.
Carburetor attachment. A. Laurencich. 1,872,762; Aug. 23.
Carpet. J. B. Moffat. Des. 87,643; Aug. 23.
Carrier: *See*—
Braiding carrier. Luggage carrier.
Carrier and reflecting body, Combination tire. F. A. Cecil. 1,873,823; Aug. 23.
Carton. J. F. Halladay and M. E. Holy. 1,873,882; Aug. 23.
Carton opening and filling machine. E. L. Smith and F. B. Fuller. 1,873,059; Aug. 23.
Cartridge, Self retaining. F. H. Armstrong. 1,873,858; Aug. 23.
Case: *See*—
Hat display case.
Case and display stand, Combined sample. H. H. Labadie and B. B. Beers. 1,873,431; Aug. 23.
Cash register. C. H. Arnold. 1,873,733; Aug. 23.
Cash register. F. L. Fuller. 1,873,701; Aug. 23.
Cash register. F. L. Fuller. 1,873,754; Aug. 23.
Cash register. C. W. Green. 1,873,759–60; Aug. 23.
Cash register. C. L. Lee. 1,873,770; Aug. 23.
Cash register. W. H. Robertson. 1,873,723; Aug. 23.
Casing and assembling the same, Fan. G. R. Goldthwaite. 1,873,386; Aug. 23.
Casing for temperature indicators. H. P. Sparkes and F. S. Stickney. Des. 87,651; Aug. 23.
Caster. W. F. Herold. 1,873,888; Aug. 23.
Catalytic process and apparatus. A. O. Jaeger and J. A. Bertsch. 1,872,956; Aug. 23.
Cell and making the same. T. W. Case. 1,872,675; Aug. 23.
Cellulose esters and making the same. H. Dreyfus. 1,872,701; Aug. 23.
Cellulose materials, Dyeing of regenerated. R. Brightman. 1,873,278; Aug. 23.
Centrifugal machine. L. D. Jones. 1,872,962; Aug. 23.
Centrifugal switch. Z. C. Bradford. 1,873,180; Aug. 23.
Centrifuge. L. F. Clark. 1,873,185; Aug. 23.
Chain, Bracelet. A. E. R. Speidel. Des. 87,652; Aug. 23.
Chain, Closing. C. Rorabeck. 1,872,820; Aug. 23.
Chain manufacture. O. W. Mojonnier. 1,873,619; Aug. 23.
Chain, Nonskid tire. L. Labbé. 1,872,757; Aug. 23.
Chain or ornament holding unit. W. E. Braunlich. 1,873,736; Aug. 23.
Chair: *See*—
Folding chair.
Chair iron. D. R. Collier and H. W. Sheldrick. 1,872,894; Aug. 23.
Chair iron. H. W. Sheldrick. 1,873,054; Aug. 23.
Channeling system, Selective. R. H. Ranger. 1,873,786; Aug. 23.
Chart reading device, Illuminated. H. House. 1,872,737; Aug. 23.
Chemical reactions in improved reaction media, Carrying out organic. C. Dreyfus. 1,872,700; Aug. 23.
Chromium trioxide, Preparation of. P. R. Hines. 1,873,889; Aug. 23.
Chuck, Cushion diamond drill. O. B. Anderson. 1,873,173; Aug. 23.
Cigarette making machine. W. E. Molins. 1,873,779; Aug. 23.
Cigarette rolling device. J. H. Brown. 1,873,816; Aug. 23.
Circuit-breaker-tripping system. R. J. Wensley. 1,873,087; Aug. 23.
Circuit for carrier telegraph signals, Relay receiving. F. G. Halden. 1,872,940; Aug. 23.
Circuit for submarine cable operation, Interpolating. H. J. Rosenberger. 1,873,044; Aug. 23.
Circuit interrupter. H. L. Hartzell. 1,873,198; Aug. 23.
Circuit, Motor starting. J. T. Fitzsimmons. 1,873,117; Aug. 23.
Circuit, Rotary distributor phasing. G. A. Locke. 1,873,440; Aug. 23.
Circuits, Core construction for magnetic. R. E. Stewart. 1,873,354; Aug. 23.
Circuits, Transmission control. B. G. Bjornson. 1,873,268; Aug. 23.
Clamp: *See*—
Battery terminal clamp. Rod clamp.
Grade clamp.
Clamp machine. R. W. Burns. 1,873,818; Aug. 23.
Clamping apparatus. S. D. Butterworth. 1,873,819; Aug. 23.
Clasp for garment support. S. N. Coulter. 1,873,551; Aug. 23.
Clay, Improving. R. Cross. 1,873,296; Aug. 23.
Clay, Process for reactivating. E. R. Lederer. 1,872,988; Aug. 23.
Cleaner: *See*—
Air cleaner. Tube cleaner.
Muffler and air cleaner.
Cleaner for boilers, Soot. T. M. Bruback. 1,873,282; Aug. 23.
Cleaner structure, Windshield. M. Romano. 1,873,907; Aug. 23.

Cleaning device for sewage filter beds. W. C. Laughlin and A. B. Asch. 1,872,759; Aug. 23.
Cleat, Shoe. G. L. Pierce. 1,873,904; Aug. 23.
Clip: *See*—
Button chain clip. Paper clip.
Closing clip.
Clip, Apparatus for forming and attaching a terminal. J. Q. Holmes and A. W. Phelps. 1,873,125; Aug. 23.
Clip fastening means, Metal. H. L. Greve. 1,872,734; Aug. 23.
Clock, Sport timing. G. R. Holmes. 1,873,408; Aug. 23.
Closet flushing device. C. W. Brown. 1,873,181; Aug. 23.
Closing clip. E. O. Frederics. 1,873,378; Aug. 23.
Closure for garments and other purposes. W. C. Avedon. Re18,571; Aug. 23.
Closure operator. E. Y. Gilkey. 1,873,381; Aug. 23.
Cloth, Method and apparatus for finishing. R. De Hope and H. Ruegg. 1,873,635; Aug. 23.
Clutch. G. W. Doyle. 1,872,910; Aug. 23.
Clutch. G. S. Lane. 1,873,986; Aug. 23.
Clutch. J. D. Rauch. 1,873,479; Aug. 23.
Clutch, Expanding. A. Y. Dodge. 1,872,690; Aug. 23.
Clutch, Hydraulic. G. H. Walker. 1,873,688; Aug. 23.
Clutch, Intermittent. W. C. Pitter. 1,873,633; Aug. 23.
Clutch quieting means. H. D. Else and C. R. Libby. 1,873,561; Aug. 23.
Coal briquetting machine. E. E. Jones. 1,873,596; Aug. 23.
Coating machine. L. B. Case. 1,873,821; Aug. 23.
Code setting device for signal systems. J. H. Wheelock. 1,873,729; Aug. 23.
Coffee brewing device. J. R. Peirce. 1,873,023; Aug. 23.
Coffee maker. F. E. Wolcott. Des. 87,657; Aug. 23.
Coil recording and charging system. P. Storch and E. Rossberg. 1,872,842; Aug. 23.
Coil unit. G. Rigante. 1,873,665; Aug. 23.
Coils, Method of and apparatus for making. R. F. Sedgley. Re18,576; Aug. 23.
Coin controlled apparatus. E. C. Whiting. 1,872,859; Aug. 23.
Coin handling mechanism for vending machines, telephones, etc. G. F. Gibson. 1,873,755; Aug. 23.
Collapsible tube. E. C. Davidson. 1,872,687; Aug. 23.
Collars to shirts, Attaching detachable. J. A. Packett. 1,873,145; Aug. 23.
Color cinematographic apparatus. J. A. Ball. 1,873,259; Aug. 23.
Combustion apparatus. J. Sperling. 1,873,353; Aug. 23.
Compass. A. Urfer. 1,873,684; Aug. 23.
Composite board. O. A. Heppes. 1,873,887; Aug. 23.
Composition containing cellulose derivatives and making the same. J. F. Walsh and A. F. Caprio. 1,873,689; Aug. 23.
Compounds containing aluminum and fluorine, Manufacture of. H. Finkelstein and F. Achterberg. 1,872,716; Aug. 23.
Compressor, Air. J. T. Peterson. 1,872,805; Aug. 23.
Compressor, High temperature adiabatic. W. E. Goldsborough. 1,873,878; Aug. 23.
Compressors, Infrigidation for gas. W. E. Goldsborough. 1,872,932; Aug. 23.
Condensation products of polyhydric alcohols and aromatic hydrocarbons and producing same, Sulphonated. F. Günther and J. Hetzer. 1,872,736; Aug. 23.
Condenser. S. I. Cole. 1,873,548; Aug. 23.
Condenser. C. H. Davis, jr. 1,873,298; Aug. 23.
Condenser for refrigerating machines. C. Steenstrup. 1,873,670; Aug. 23.
Conductor transmission line, Coaxial. D. A. Quarles. 1,873,477; Aug. 23.
Conduit, Electric wire. B. N. Brouner. 1,873,815; Aug. 23.
Conduit holding device. C. L. Hall. 1,873,881; Aug. 23.
Conduits, Apparatus for making inter-locking multiple duct. W. McClintock and R. Lacy. 1,873,445; Aug. 23.
Connecter, Electrical. A. B. Dibner. 1,873,559; Aug. 23.
Connecter, Shock absorbing. J. P. Ratigan. 1,873,325; Aug. 23.
Connecter, Swivel electrical. H. Rohrdanz. 1,873,042; Aug. 23.
Connecting member for continuous fasteners. M. F. Carr. 1,873,872; Aug. 23.
Connection. L. Brunner. 1,873,281; Aug. 23.
Connection, Brake operating. V. Bendix. 1,872,873; Aug. 23.
Connection, Brake operating. B. E. House. 1,872,953; Aug. 23.
Connection for plumbing systems, Adjustable test. E. W. N. Boosey. 1,873,274; Aug. 23.
Connection, Making a. W. A. Abegg. 1,873,245; Aug. 23.
Connection, Pipe. E. James. 1,873,590; Aug. 23.
Connection, Pipe. E. James. 1,873,592; Aug. 23.
Connection, Radiator. E. James. 1,873,591; Aug. 23.
Construction unit. A. E. Jones. 1,873,417; Aug. 23.
Contact freezing apparatus and method. C. L. Jones and J. D. Small. 1,873,130; Aug. 23.
Container. W. Kuerschner and F. A. Higer. 1,872,981; Aug. 23.
Container. E. L. Little. 1,872,771; Aug. 23.
Container, Cosmetic. M. L. Yarcho. 1,872,864; Aug. 23.
Container forming mechanism. E. C. Angell. 1,873,254; Aug. 23.
Container, Freezing. R. H. Chilton. 1,873,287; Aug. 23.
Container, Metal. L. M. Piker. 1,873,720; Aug. 23.
Control apparatus, Temperature. C. Wilhjelm. 1,873,091; Aug. 23.
Control maintenance in hydraulic transmission. G. E. Hallenbeck. 1,873,396; Aug. 23.
Control mechanism for grinding machines. P. Plantinga. 1,873,151; Aug. 23.
Controlling device for alterative fluid supply. F. Lawrence. 1,873,897; Aug. 23.
Controlling the soft focus device in cinematographic view taking apparatus, Device for. A. L. V. C. Debrie. 1,873,742; Aug. 23.
Convertible box. C. H. Kennedy. 1,872,966; Aug. 23.
Convertible table. T. P. Townes. 1,872,849; Aug. 23.
Conveyer, Apron. T. Allsop. 1,873,865; Aug. 23.
Conveyer furnace. J. C. Woodson. 1,873,239; Aug. 23.
Conveyer guide. F. C. Morrow. 1,873,456; Aug. 23.
Conveyer system for manipulating flat articles. H. Klaucke. 1,873,428; Aug. 23.
Cooling arrangement for high frequency apparatus. H. Zodtner. 1,873,804; Aug. 23.
Cooling arrangement for packing boxes. G. E. Bigelow and A. R. Weis. 1,873,267; Aug. 23.
Cooling chamber for a mechanical refrigerating unit. L. G. Copeman. 1,872,685; Aug. 23.
Cooling, Evaporative. C. F. Ritchie and W. A. Gale. 1,873,329; Aug. 23.
Core, Catalytic. A. E. Harnsberger and C. L. Smith. 1,873,707; Aug. 23.
Cork board insulation and erecting the same. C. C. Schrader. 1,873,050; Aug. 23.
Cork padding for ironing machines. W. F. Grupe. 1,873,578; Aug. 23.
Corkscrew and bottle decapper, Combined. R. R. Rundell. 1,873,331; Aug. 23.
Corn stalk cutter. F. D. Jones and H. Moschel. 1,872,747; Aug. 23.
Corrosion by sulphur compounds during conversion of hydrocarbons, Preventing. A. P. Sachs. 1,873,851; Aug. 23.
Corrosion in oil refining equipment, Preventing. W. G. Laird. 1,873,136; Aug. 23.
Cotton distributing mechanism. T. Boyd. 1,873,179; Aug. 23.
Counter actuating mechanism. C. H. Veeder. 1,873,079; Aug. 23.
Counter fixture, Store. C. W. Green. 1,873,705; Aug. 23.
Coupling: *See*—
Hose coupling. Swivel coupling.
Pipe coupling. Swivel pipe coupling.
Range boiler coupling.
Coupler. H. H. Service. 1,873,494; Aug. 23.
Coupler, High pressure. D. G. Adams. 1,873,914; Aug. 23.
Coupling for drill bits. H. C. Brewster. 1,873,814; Aug. 23.
Covering, Box. A. Melin. Des. 87,641; Aug. 23.
Covering, Building. J. E. Rinck. 1,873,944; Aug. 23.
Crane. N. P. Larsen. 1,873,433; Aug. 23.
Crate. J. J. Dahlstrom. 1,873,187; Aug. 23.
Crosshead, Adjustable. T. Rogatchoff. 1,873,482; Aug. 23.
Crosshead adjuster. T. Rogatchoff. 1,873,483; Aug. 23.
Crucible furnace. H. E. White. 1,873,801; Aug. 23.
Cultivator. C. G. Strandlund. 1,872,843; Aug. 23.
Cup plate for protecting ends of pipe coverings. J. W. Farley. 1,873,747; Aug. 23.
Current control device. L. K. Wright. 1,873,242; Aug. 23.
Current distributing device, Electric. W. A. Knoop. 1,873,429; Aug. 23.
Curtain fixture. L. C. Klenzle. 1,873,205; Aug. 23.
Cushion. B. Ostroff. 1,873,212; Aug. 23.
Cushion filling machine. C. Hennoll. 1,873,586; Aug. 23.
Cuspidor for automobiles. J. H. Gault. 1,872,725; Aug. 23.
Cutter: *See*—
Corn stalk cutter. Drill cutter.
Cutter and making same, Hobbing. O. G. Simmons. 1,873,158; Aug. 23.
Cutting, mixing and attrition mill, Rotary. R. C. Hopkins. 1,873,409; Aug. 23.
Cylinder drying machine. H. P. Fell. 1,873,833; Aug. 23.
Cylinder hone. C. T. Rottler. 1,873,320; Aug. 23.
Cylinder, Plate carrying. H. A. W. Wood. 1,873,233; Aug. 23.
Damper control means for furnaces. H. Meachem. 1,873,656; Aug. 23.
Damper, Vibration. R. K. Lee. 1,872,763; Aug. 23.
Decoration, Surface. J. C. McCarthy. 1,872,997; Aug. 23.
Deflector for automobile heaters, Adjustable. Q. G. Noblitt and E. C. Booth. 1,872,794; Aug. 23.
Delivery mechanism. M. A. Droitcour. 1,873,316; Aug. 23.
Demodulator and method of demodulation. S. Ballantine and L. M. Hull. Re18,579; Aug. 23.
Dental device. S. Silverberg. 1,872,832; Aug. 23.
Desk construction, Metal. D. E. Hunter. 1,873,982–3; Aug. 23.
Detector and bobbin therefor, Weft. O. V. Payne. 1,873,468; Aug. 23.
Detergent composition. A. G. Glover. 1,873,383; Aug. 23.

Device for holding and dispensing soap bars. F. G. Ringland. 1,872,816; Aug. 23.
Device to aid hearing, Portable. C. Carroll. 1,872,674; Aug. 23.
Diagnostic instrument. E. D. Tillyer. 1,873,675; Aug. 23.
Diaphragm for sound receiving, reproducing, amplifying, and transmitting instruments. H. Schmidt. 1,873,335; Aug. 23.
Die stock. F. Judge. 1,873,132; Aug. 23.
Diesel engine. W. G. Gernandt. 1,873,877; Aug. 23.
Diesel engine. E. Schinke 1,873,908; Aug. 23.
Dilator. W. J. Kirk. 1,873,427; Aug. 23.
Direction indicator. F. M. Golon. 1,873,576; Aug. 23.
Discharge device, Gaseous. L. De Forest. 1 873,558; Aug. 23.
Disconnecting switch. H. W. Bodendieck. 1,873,272; Aug. 23.
Disk harrow. C. H. White. 1,873,518; Aug. 23.
Dispenser, Liquid merchandise. C. Doering. 1,873,929; Aug. 23.
Dispenser, Powder. C. P. Smith. 1,872,836; Aug. 23.
Dispensing device. J. J. Smith. 1,872,837; Aug. 23.
Dispensing device, Beverage. J. Vassos. Des. 87,654; Aug. 23.
Dispensing machine. A. H. Du Grenier. 1,873,317; Aug. 23.
Display device. W. A. Bramball, jr. 1,872,661; Aug. 23.
Display device, Collapsible. J. R. Cockle. 1,872,682; Aug. 23.
Dispay device for refrigerator installations. H. H. McKee and C. T. Walter. 1,872,779; Aug. 23.
Display device, Jewelry. D. Z. Peters. 1,872,804; Aug. 23.
Display stand. S. W. Hilton. Des. 87,633–5; Aug. 23.
Display stand. R. M. Ring. 1,873,036; Aug. 23.
Distillation, Method and apparatus for fractional. I. H. Levin. 1,873,771; Aug. 23.
Divider and grain wheel, Automatically adjustable. R. C. Livesay. 1,873,439; Aug. 23.
Door. S. A. Wilde. 1,873,088; Aug. 23.
Door check or closer, Automatic. F. F. Kuhl. 1,873,650; Aug. 23.
Door, Elevator. H. R. Grable. 1,873,574; Aug. 23.
Door for coke ovens, Self-sealing. J. Van Ackeren. 1,873,076; Aug. 23.
Doorlock. A. V. Rowe. 1,873,485; Aug. 23.
Door lock, Dumbwaiter. I. Attias 1,873,918; Aug. 23.
Door operating mechanism. C. Zebrowski. 1,873,243; Aug. 23.
Door or window. W. D. Ferris. 1,873,367; Aug. 23.
Door structure. A. L. Abbott, and W. C. and C. E. Miller. 1,873,247; Aug. 23.
Door system, Elevator. N. O. Lindstrom. 1,872,770; Aug. 23.
Double warp frame. F. Wagner. 1,873,686; Aug. 23.
Draft stabilizer. E. A. Field and E. A. Field, jr. 1,873,567; Aug. 23.
Drill: *See*—
Portable drill.
Drill bit. G. H. Gilman. 1,873,757; Aug. 23.
Drill cutter. E. A. Reed. 1,873,327; Aug. 23.
Drinking fountain. J. F. Blaich. Des. 87,616; Aug. 23.
Drive, Front wheel. R. M. Barnhart. 1,873,810; Aug. 23.
Driving tank. C. Mehl. 1,873,617; Aug. 23.
Ductor roll timer. W. G. Humphrey. 1,872,739; Aug. 23.
Duplicating machine. J. E. Euth. 1,873,563; Aug. 23.
Duplicating machine. J. J. Flanigan. 1,872,718–19; Aug. 23.
Duplicating machine. D. Gestetner. 1,872,727; Aug. 23.
Duplicating machine and stationery for use therein. B. A. Schroeder. 1,873,489; Aug. 23.
Dust barrier. U. Taucher. 1,873,161; Aug. 23.
Dust handling apparatus, Furnace. F. B. Allen. 1,873,806; Aug. 23.
Dye jigger machine. H. J. Crick. 1,873,740; Aug. 23.
Dye, Monoazo. H. Ohlendorf. 1,873,628; Aug. 23.
Dye, Naphthophenazine. G. Reddelien and H. Ohlendorf. 1,873,938; Aug. 23.
Dyeing process and apparatus. E. R. Meinig. 1,873,004; Aug. 23.
Dyeing with substituted sulphur dyestuffs. E. Kramer, B. Bollweg, and L. Zeh. 1,873,948; Aug. 23.
Dyes adapted for dyeing regenerated cellulose materials, Azo. R. Brightman. 1,873,277; Aug. 23.
Dyes, Secondary disazo. W. Lange and M. Raeck. 1,873,606; Aug. 23.
Dyes, Sulphur. P. Virck and G. Matzdorf. 1,873,514; Aug. 23.
Dyestuffs and making same, Azo. G. Bonhôte. 1,873,533; Aug. 23.
Dyestuffs in substance or on the fiber, Manufacture of substituted sulphur. E. Kramer, B. Bollweg, and L. Zeh. 1,873,946–7; Aug. 23.
Elastic fabric. H. C. Winton. 1,873,094; Aug. 23.
Elastic top in hosiery or the like. P. Schönfeld. 1,873,486–7; Aug. 23.
Electric discharge device. C. J. R. H. Von Wedel. 1,873,683; Aug. 23.
Electric furnace. A. J. Hanson. 1,872,942; Aug. 23.
Electric furnace, Induction. F. Linnhoff. 1,872,990; Aug. 23.
Electric heater. P. A. Goldfisch. 1,872,730; Aug. 23.
Electric impulse contacting means. W. H. Woodford. 1,873,095; Aug. 23.
Electric motor. J. Zetsche, N. Petersen, and J. Sinclair-Ross. 1,873,171; Aug. 23.
Electric motor transmission. R. T. Wise. 1,872,861; Aug. 23.
Electric motor transmission, Constant mesh gear. R. T. Wise. 1,872,862; Aug. 23.
Electric regulating switch. A. S. Anninnsen and J. Oftedal. 1,873,527; Aug. 23.
Electric regulator. H. R. Crago. 1,872,681; Aug. 23.
Electric switch. F. A. Blashfield. 1,873,269; Aug. 23.
Electric switch. H. A. Douglas. 1,873,313; Aug. 23.
Electric switch. T. T. Greenwood. 1,873,388; Aug. 23.
Electric switch. H. R. Turner. 1,873,797; Aug. 23.
Electrical apparatus. P. H. Maurer. 1,873,613; Aug. 23.
Electrical apparatus. V. T. Paré. 1,872,799; Aug. 23.
Electrical apparatus. W. E. Wendt. 1,873,168–9; Aug. 23.
Electrical apparatus. R. H. Kingdon. 1,873,426; Aug. 23.
Electrically heated mat. G. Knopf. 1,873,601; Aug. 23.
Electrode and composition for coating same, Cast iron welding. R. L. Scollard and T. D. Ketchbaw. 1,873,340; Aug. 23.
Electron emitting material. E. Wiegand. 1,873,730; Aug. 23
Electrooptical system. F. Gray. 1,873,387; Aug. 23.
Elevator: *See*—
Storage elevator.
Elevator buffer. E. E. Arnold. 1,873,807; Aug. 23.
Elevator control system. W. F. Eames. 1,872,915; Aug. 23.
Ellipsograph. J. J. Kittel. 1,872,973; Aug. 23.
Embroidery or rug machine. C. J. Ashby. 1,873,257; Aug. 23.
Emulsions, Manufacture of. A. J. Hailwood, A. Shepherdson, and A. Stewart. 1,873,580; Aug. 23.
End locating device. C. H. Warren. 1,873,515; Aug. 23.
Energy absorption means for switching contacts. K. Schmidt. 1,873,048; Aug. 23.
Engine: *See*—
Beater engine. Jordan engine.
Diesel engine. Rotary engine.
Internal-combustion engine.
Engine. H. M. Leonard. 1,872,761; Aug. 23.
Engine and operating the same, Internal combustion. F. Oberhaensli. Re18,575; Aug. 23.
Engine cooling system. E. S. Patch. 1,873,146; Aug. 23.
Envelope handling machine. A. Gay. 1,872,726; Aug. 23.
Envelope, Savings bank. E. B. Berkowitz. 1,872,651; Aug. 23.
Esters, Treating carbohydrate. W. O. Snelling and R. N. Boyd. 1,873,061; Aug. 23.
Ethers, Synthesizing. R. L. Brown and W. W. Odell. 1,873,537; Aug. 23.
Excavating machines, Digging element for. D. H. Young. 1,872,865; Aug. 23.
Expansion joint. H. C. Davis. 1,873,825; Aug. 23.
Expansion joint. J. V. Giesler. 1,873,703; Aug. 23.
Explosive. J. A. Hammond. 1,872,941; Aug. 23.
Extractor: *See*—
Body pattern extractor. Bushing extractor.
Eye testing device. R. L. Stimson and W. H. Boutelle. 1,873,356; Aug. 23.
Eyeglasses. I. M. Schwab. 1,873,338; Aug. 23.
Eyelet for clasps. A. Danenberg. 1,873,699; Aug. 23.
Fabric: *See*—
Elastic fabric. Pile fabric.
Fabric having lap stripes. Mechanism and process for producing knitted. J. Lawson and R. H. Lawson. 1,872,766; Aug. 23.
Fan blade. J. Karageorge. 1,872,749; Aug. 23.
Fastener and installation thereof, Separable snap. C. L. Hall and R. F. Walters. 1,873,880; Aug. 23.
Fastener and insulations thereof, Slide. G. Johnson. 1,872,960; Aug. 23.
Fastener, Closure. G. D. and J. M. Lyles. 1,873,653; Aug. 23.
Fastener, fastener installation, and attaching the same, Separable. A. W. Kimbell. 1,872,968; Aug. 23.
Fastener member, Snap. G. Johnson. 1,873,891; Aug. 23.
Fastener, Pin. E. H. Blazer. 1,873,270; Aug. 23.
Fastener stud and installation thereof, Snap. M. F. Carr. 1,873,871; Aug. 23.
Fastener stud, Self locking snap. W. I. Jones. 1,873,893; Aug. 23.
Fastener, Separable. G. Johnson. 1,873,892; Aug. 23.
Fastening installation. F. S. Carr. 1,873,869; Aug. 23.
Fastening means for shoe heels, Top lift. L. Benningfield. 1,872,648; Aug. 23.
Faucet. R. H. Mueller and C. B. Alber. 1,872,787; Aug. 23.
Ferrocyanides, Producing. W. Gluud and K. Keller. 1,872,929; Aug. 23.
Fertilizer, Preparation of a non-hygroscopic mixed. H. Helmann. 1,873,401; Aug. 23.
Fibrous articles, Manufacture of. D. F. Smith, E. J. Pieper, and C. C. Vogt. 1,873,056; Aug. 23.
Film feeding mechanism. E. S. Mechau. 1,873,778; Aug. 23.
Film gate. T. C. McCulloch and T. R. Goldsborough. 1,873,448; Aug. 23.
Film in cinematographic apparatus, Device for reducing the tension of the. E. Oehmichen. 1,873,463; Aug. 23.

Film, Multicolor screen. J. E. Thornton. 1,873,673; Aug. 23.
Film positives, Producing cinematograph. J. E. Thornton. 1,873,674; Aug. 23.
Film viewing machine. I. Serrurier. 1,873,341; Aug. 23.
Films, Apparatus for examining and selecting motion picture. I. Serrurier. 1,873,342; Aug. 23.
Films or the like particularly for use in electric condensers, Producing. E. Pfiffner. 1,873,474; Aug. 23.
Filter construction, Oil. E. J. Sweetland. 1,873,795; Aug. 23.
Filter, Dust catcher air. G. B. Galvin. 1,873,573; Aug. 23.
Filter insertion. V. Horák. 1,873,410; Aug. 23.
Filtering, bleaching and insulating material, Making a. H. T. Woodward. 1,873,520; Aug. 23.
Filtering device. E. Perlman. 1,872,802; Aug. 23.
Firecrackers, Manufacture of. T. G. Hitt. 1,873,202; Aug. 23.
Fire extinguishing apparatus. A. C. Rowley. 1,873,724; Aug. 23.
Fish lure. J. A. Van Ness. 1,873,682; Aug. 23.
Fitting and valve construction therefor, Drainage. E. W. N. Boosey. 1,873,273; Aug. 23.
Fitting, Drainage. E. W. N. Boosey. 1,873,275; Aug. 23.
Fixture, Supporting. C. J. Lemont. 1,873,434; Aug. 23.
Flask. C. D. Barr. 1,873,176; Aug. 23.
Float, Swimming. C. C. Harris. 1,873,197; Aug. 23.
Floor covering. P. R. Bettison. 1,872,653; Aug. 23.
Floor coverings, Embossed. J. C. McCarthy. 1,873,001; Aug. 23.
Flowers, Packing. W. O. Roy. 1,873,666; Aug. 23.
Fluid-power operating means. L. E. La Brie. 1,873,184; Aug. 23.
Fluid transportation system. G. W. Saathoff. 1,873,045; Aug. 23.
Fluid warmer. W. I. Carpenter. 1,873,820; Aug. 23.
Folding card table. J. W. Beiger. 1,873,263; Aug. 23.
Folding chair. A. S. Kux. 1,873,768; Aug. 23.
Folding table. J. Silverman. 1,872,833; Aug. 23.
Food product. C. Hoffman. 1,873,709; Aug. 23.
Foot measuring device. J. Pietzuch. 1,873,663; Aug. 23.
Fount and feeder, Poultry. H. J. Barker. 1,872,645; Aug. 23.
Frame: *See*—
Bag frame.
Building frame.
Double warp frame.
Heddle frame.
Side frame.
Frame and fastener for the same, Bag. W. J. Walker. 1,873,911; Aug. 23.
Frame unit for scaffolding, shorings, concrete forms and the like. T. F. Kerlin. 1,873,204; Aug. 23.
Freezer, Ice cream. L. F. Holland. 1,873,407; Aug. 23.
Frequency generator, Constant. F. Conrad. 1,872,896; Aug. 23.
Front, Store. F. J. Bentz. Des. 87,615; Aug. 23.
Front, Store. S. J. Switow. 87,653; Aug. 23.
Fruit cleaning apparatus. T. Farley. 1,873,832; Aug. 23.
Fruit peeling machine. H. Goranson and D. Goranson. 1,872,731–2; Aug. 23.
Fruit sizer. C. H. Evans. 1,873,323; Aug. 23.
Fuel, Burning fluid. H. L. Doherty. 1,872,907; Aug. 23.
Fuel mixture for internal combustion engines, Apparatus for enriching. W. S. English. 1,873,746; Aug. 23.
Fuel supply for internal combustion engines. W. E. Goldsborough. 1,872,931; Aug. 23.
Fur cutting machine. R. H. Plass. 1,873,027; Aug. 23.
Furnace: *See*—
Billet furnace.
Conveyer furnace.
Crucible furnace.
Electric furnace.
Heating furnace.
Furnace construction, Boiler. H. P. Kirchner. 1,872,972; Aug. 23.
Furnace conveyer shaft with disks. F. A. Fahrenwald. 1,872,711; Aug. 23.
Furnace port. J. N. Wilson. 1,873,093; Aug. 23.
Furniture. W. R. Smart. 1,873,347; Aug. 23.
Fuse. E. O. Schweitzer. 1,873,339; Aug. 23.
Fuse. A. G. Steinmayer. 1,873,498; Aug. 23.
Fuse box, Self loading. H. F. Schmidt. 1,873,488; Aug. 23.
Fuse cartridge. L. S. Waldron and T. B. Terry. 1,872,854; Aug. 23.
Game. R. F. Nekuda. 1,873,211; Aug. 23.
Garden implement. V. M. Pyatt. 1,873,215; Aug. 23.
Garment or ironing press. J. C. Ledbetter. 1,873,608; Aug. 23.
Gas and carbonized fuel, Manufacturing. J. F. Byrne. 1,872,883; Aug. 23.
Gas and liquid contact apparatus. F. W. Sperr, jr. 1,873,064; Aug. 23.
Gas and oil burner, Combined. W. E. Goldsborough. 1,872,930; Aug. 23.
Gas from pulverized coal and steam, Producing water. H. Hillebrand. 1,873,941; Aug. 23.
Gasket. H. Ernst. 1,872,709; Aug. 23.
Gate: *See*—
Film gate.
Gauging apparatus. C. F. Dreyer. 1,873,315; Aug. 23.
Gear for jigging conveyers, Driving. T. B. Wilkinson. 1,873,694; Aug. 23.
Gear for manure spreaders or other vehicles, Running. C. Maul. 1,873,444; Aug. 23.
Gear operation recorder, Draft. H. T. Krakau. 1,872,977; Aug. 23.
Generation station, Peak load. F. W. Gay. 1,872,927; Aug. 23.
Generator: *See*—
Frequency generator.
Generator and heater. J. A. Kreuser and J. Willerscheidt. 1,872,754; Aug. 23.
Glass: *See*—
Laminated glass.
Glass and operating the same, Apparatus for making laminated. J. L. Drake. 1,872,693; Aug. 23.
Glass and producing the same, Laminated. D. Adams. 1,873,248; Aug. 23.
Glass apparatus. W. F. Brown. 1,872,664; Aug. 23.
Glass, Apparatus for forming sheet. L. C. Mambourg. 1,872,776; Aug. 23.
Glass, Apparatus for making laminated. J. L. Drake. 1,872,692; Aug. 23.
Glass, Apparatus for surfacing sheet. J. L. Drake. 1,872,694; Aug. 23.
Glass apparatus, Sheet. J. L. Drake. 1,872,696; Aug. 23.
Glass apparatus, Sheet. J. L. Drake. 1,872,699; Aug. 23.
Glass apparatus, Sheet. F. J. Kincaid. 1,872,751; Aug. 23.
Glass, Device for securing. L. C. Smith. 1,873,349; Aug. 23.
Glass, Method and apparatus for producing sheet. J. L. Drake. 1,872,698; Aug. 23.
Glass, Method of and apparatus for feeding molten. K. E. Peiler. 1,873,021–2; Aug. 23.
Glass, Obtaining variegated. W. T. Barker, jr. 1,873,866; Aug. 23.
Glass, Process and apparatus for producing sheet. C. Cone. 1,872,684; Aug. 23.
Glass, Process and apparatus for producing sheet. J. L. Drake. 1,872,691; Aug. 23.
Glass, Process and apparatus for producing sheet. J. L. Drake. 1,872,695; Aug. 23.
Glass securing device. L. C. Smith. 1,873,350; Aug. 23.
Glass surfacing apparatus. J. L. Drake. 1,872,697; Aug. 23.
Grade clamp. E. St. John. 1,873,357; Aug. 23.
Grader and cutter, Asparagus. S. H. Champlin, P. A. Cutter, F. Kasten, P. C. Butte. 1,872,889; Aug. 23.
Grate. F. A. Lorenz, jr. 1,872,773; Aug. 23.
Grate. C. F. Street. 1,872,844; Aug. 23.
Grid glow tube regulator. F. H. Gulliksen. 1,873,761; Aug. 23.
Grinder stand, Portable. J. Sunnen. 1,873,507; Aug. 23.
Grinding device. A. A. Martell. 1,873,612; Aug. 23.
Grinding machine. W. F. Fraser. 1,873,751; Aug. 23.
Grinding machine. W. F. Fraser. 1,873,752; Aug. 23.
Grinding machine. F. M. Kern. 1,873,423; Aug. 23.
Grooves in bushings, Cutting. H. F. Root. 1,872,817; Aug. 23.
Guard, Eyelid. S. E. Bohner. 1,873,028; Aug. 23.
Guard mechanism for grinding machines, Splash. P. Plantinga. 1,873,152; Aug. 23.
Guard, Window. H. VanDresser. 1,873,229; Aug. 23.
Guide, Elevator car. L. G. Persson. 1,872,803; Aug. 23.
Guide for brick laying, Corner. W. Winter. 1,872,860; Aug. 23.
Guide, Ported shoe. A. B. Crowell. 1,873,741; Aug. 23.
Guiding means for the carrier plates in match making machines. H. Kugler. 1,873,604; Aug. 23.
Gum solutions, Manufacture of vegetable. A. Pfister. 1,873,631; Aug. 23.
Gumming mechanism for envelope making machines. C. F. Pflanze. 1,873,850; Aug. 23.
Gun wad material, Making. R. H. Johnson. 1,872,745; Aug. 23.
Hair curler. E. E. Baldwin. 1,872,644; Aug. 23.
Hair pin, Decorative. G. A. Carlson. 1,873,543; Aug. 23.
Hair waving, Apparatus for. G. Decker. 1,873,874–5; Aug. 23.
Half-tone process and type. H. R. Harvey. 1,872,943; Aug. 23.
Handle for coffee makers. F. E. Wolcott. Des. 87,656; Aug. 23.
Hangar for dirigibles. G. F. Essig. 1,873,562; Aug. 23.
Hanger. G. Robinson. 1,873,039; Aug. 23.
Harvester, Vegetable. R. D. Smith. 1,873,352; Aug. 23.
Hat display case. E. F. Thomas. 1,872,847; Aug. 23.
Hat-shaping machine. M. Casse. 1,873,285; Aug. 23.
Hatch construction for upper decks. H. H. Fliegel. 1,873,639; Aug. 23.
Hayrack. S. Pearce. 1,873,469; Aug. 23.
Heat exchange device. A. B. Modine. 1,872,785; Aug. 23.
Heat treating objects, Apparatus for. F. A. Fahrenwald. 1,872,713; Aug. 23.
Heater: *See*—
Electric heater.
Heater. F. T. Williams and H. E. Ellis. 1,873,695; Aug. 23.
Heating a conductive body. E. L. Bailey. 1,873,808; Aug. 23.
Heating and cooling system, Engine. H. C. Frentzel, jr. 1,873,879; Aug. 23.
Heating apparatus, Electrical. H. N. Shaw. 1,873,053; Aug. 23.
Heating furnace. P. Frantz. 1,873,570; Aug. 23.
Heddle frame. L. Strohacker. 1,873,726; Aug. 23.

Helmet, Sand-blaster's. F. M. Bowers. 1,872,877; Aug. 23.
Hinge. E. H. Lehman. Des. 87,638; Aug. 23.
Hinge, Ball bearing. W. D. Ferris. 1,873,566; Aug. 23.
Hinge construction. C. A. Brethen. 1,873,534; Aug. 23.
Hitch, Safety. H. Ketel. 1,872,750; Aug. 23.
Holder, Abrasive. W. G. Dunn. Des. 87,627; Aug. 23.
Holder, Bag. P. W. Ernsberger. 1,872,918; Aug. 23.
Holder, Christmas tree. H. C. Peterson. 1,873,471; Aug. 23.
Holder, Christmas tree. C. M. Whitfield and R. C. Gage. 1,873,693; Aug. 23.
Holder, Clothespin. A. Krebs. 1,872,753; Aug. 23.
Holder, Collar tip. E. Keinath. 1,873,648; Aug. 23.
Holder, Combination curtain and shade. B. Formann. 1,873,028; Aug. 23.
Holder, Copy. E. J. Dubois. 1,873,744; Aug. 23.
Holder, Dish. S. H. Davenport. 1,873,297; Aug. 23.
Holder, Display card. G. S. Malcolm. 1,873,611; Aug. 23.
Holder for loose-leaf binder. R. J. Copeland. 1,873,921; Aug. 23.
Holder, Magazine. H. T. Adams. 1,873,524; Aug. 23.
Holder, Pencil. J. P. McEnery. 1,873,614; Aug. 23.
Holder, Sign. E. Bernstein. 1,873,178; Aug. 23.
Holder, Storage battery. J. M. Newton. 1,873,460; Aug. 23.
Holder, Tap. H. G. Procunier. 1,873,476; Aug. 23.
Holder, Tool. H. A. Myers. 1,872,790; Aug. 23.
Holes in metal castings, Forming tapered. F. B. Corey. 1,872,899; Aug. 23.
Honing machine. A. M. Johnson. 1,872,746; Aug. 23.
Hook for aircraft cargo handling apparatus. M. Castro. 1,873,822; Aug. 23.
Hopper, Feed apparatus. L. A. Frayer. 1,873,377; Aug. 23.
Hops and/or extracting oils and resin therefrom, Process of and apparatus for drying. L. Weber. 1,873,167; Aug. 23.
Hose coupling. J. DeMooy. 1,873,304; Aug. 23.
Hosiery, Mechanism for knitting full-fashioned. E. Richter. 1,873,035; Aug. 23.
Hosiery package. W. H. Gosch. 1,872,936; Aug. 23.
Hub puller. J. G. Elder. 1,873,322; Aug. 23.
Humidifying apparatus. F. W. Harris. 1,873,884; Aug. 23.
Hydraulic jack. E. M. Pfauser. 1,873,473; Aug. 23.
Hydrocarbons and apparatus therefor, Hydrogenation of. F. T. Snyder. 1,872,839; Aug. 23.
Hydrocarbons, Cracking. E. C. Herthel. 1,872,949; Aug. 23.
Hydrocarbons, Cracking. E. W. Isom. 1,872,955; Aug. 23.
Hydrocarbons, Cracking. H. I. Ringgenberg. 1,873,037; Aug. 23.
Hydrocarbons, Cracking. T. DeC. Tifft. 1,873,070; Aug. 23.
Hydrocarbons, Cracking and coking. H. L. Pelzer. 1,873,024; Aug. 23.
Hydrocarbons, Cracking and coking. G. H. Taber, jr., and E. W. Isom. 1,873,068; Aug. 23.
Ice shaving machine. R. Smith. 1,873,351; Aug. 23.
Ignition apparatus. J. L. Arthur. 1,873,174–5; Aug. 23.
Ignition apparatus. C. H. Davis, jr. 1,873,188; Aug. 23.
Ignition coil. H. L. Hartzell. 1,873,122; Aug. 23.
Ignition device. H. L. Hartzell. 1,873,123; Aug. 23.
Ignition system. H. Ford. 1,873,369; Aug. 23.
Ignition timer. C. H. Davis, jr. 1,873,114; Aug. 23.
Implement, Offset. W. H. Stuck. 1,873,359; Aug. 23.
Index, Card. A. F. Hunt. 1,873,841; Aug. 23.
Indicating device. R. D. Smith. 1,872,838; Aug. 23.
Indicator: *See*—
Beacon and air current indicator.
Direction indicator.
Temperature indicator.
Inking mechanism. H. A. W. Wood. 1,873,235; Aug. 23.
Inkstand and bottle. T. D. Hopkins. 1,873,203; Aug. 23.
Insole, Shoe. H. C. Langer. 1,872,987; Aug. 23.
Insulating products, Making high temperature. J. D. Morgan. 1, 873,014; Aug. 23.
Insulator. W. D. Kyle. 1,873,605; Aug. 23.
Insulator for heaters for electron discharge devices. H. L. Crowley. 1,872,901; Aug. 23.
Insulator structure. C. Le G. Fortescue. 1,873,750; Aug. 23.
Internal combustion engine. J. C. Evans. 1,873,324; Aug. 23.
Internal combustion engine. F. J. Omo. 1,873,015; Aug. 23.
Internal combustion engine. R. W. Paton. 1,872,800; Aug. 23.
Internal combustion engine. B. Walker. 1,872,856; Aug. 23.
Iron: *See*—
Chair iron.
Iron or steel article and making the same, Coated. R. R. Tanner. 1,873,363; Aug. 23.
Ironing machine. F. T. Russell. 1,873,332; Aug. 23.
Jack: *See*—
Automobile jack.
Hydraulic jack.
Lifting jack.
Jacks attached to the axles of vehicles. G. Dessaint. 1,873,116; Aug. 23.
Joint: *See*—
Artificial ankle joint.
Ball and spigot joint.
Expansion joint.
Pipe joint.
Rail joint.
Skylight joint.
Joint and method of making, Fluid tight. W. G. Wilson. 1,873,855; Aug. 23.
Jordan engine. J. D. Haskell. 1,873,199; Aug. 23.
Journal box for railway cars. R. R. Hawk. 1,873,885; Aug. 23.
Journal box, Roller bearing. A. O. Bucklus. 1,873,541; Aug. 23.
Jug. G. E. Ball. Des. 87,613–14; Aug. 23.
Kerr cell. W. Gallahan. 1,872,925; Aug. 23.
Ketones and preparing the same, Chlorhydrins of aliphatic. D. K. Tressler. 1,873,072; Aug. 23.
Ketones with more than nine ring members, Preparation of cyclic non-saturated. L. Ruzicka. 1,873,154; Aug. 23.
Key for brake heads, Wear reducing. J. A. Wagner. 1,873,687; Aug. 23.
Kit, Hypodermic needle. A. A. Epstein. 1,872,917; Aug. 23.
Knife for harness mechanism, Lock. W. M. Wattle. 1,873,517; Aug. 23.
Knife for looms, Lock. A. A. Gordon. 1,873,194; Aug. 23.
Knitting machine, Circular. M. Steinmüller. 1,873,502; Aug. 23.
Knitting machines, Movement control mechanism for straight. E. Richter. 1,873,034; Aug. 23.
Ladder for freight cars. G. S. Chiles. 1,872,680; Aug. 23.
Ladle, Foundry. O. L. Coffey. 1,873,549; Aug. 23.
Laminated glass. J. C. Brier, G. B. Watkins, and W. F. Brown. 1,872,663; Aug. 23.
Laminated glass. W. F. Brown. 1,873,280; Aug. 23.
Laminated glass. G. B. Watkins. 1,873,691; Aug. 23.
Lamp. L. C. Doane. 1,873,309; Aug. 23.
Lamp apparatus, Vapor. B. J. Hall. 1,873,392; Aug. 23.
Lamp, Battery hand. R. A. Stevenson. 1,872,840; Aug. 23.
Lamp, Electric. H. A. Douglas. 1,873,312; Aug. 23.
Latch. A. Ekman. 1,873,560; Aug. 23.
Latch for duplex waffle irons. B. A. Benson. 1,873,104; Aug. 23.
Latch for motor vehicles, Door. D. Wilson. 1,873,803; Aug. 23.
Latch lock. W. D. Ferris. 1,873,565; Aug. 23.
Lath, Paper. W. D. Jarvis. 1,872,957; Aug. 23.
Lathe, Automatic. L. C. Shippy and A. W. Phelps. 1,873,157; Aug. 23.
Lathe, Machine. A. Trosch. 1,873,678; Aug. 23.
Lawn sprinkler. J. F. Moran. 1,873,622; Aug. 23.
Lawn sprinkler. R. H. and R. E. Sherbondy. Des. 87,648; Aug. 23.
Lead pan. F. A. Fahrenwald. 1,872,712; Aug. 23.
Lens, Locating prescriptive characteristics of a. C. C. Allen. 1,873,249; Aug. 23.
Lens testing device. C. C. Allen. 1,873,526; Aug. 23.
Lever. W. J. Andres. 1,872,870; Aug. 23.
Lifting apparatus. M. H. Lemaire and L. P. Guilbert. 1,873,712; Aug. 23.
Lifting device. C. H. Clark. 1,873,288; Aug. 23.
Lifting jack. M. B. Lucker. 1,873,714; Aug. 23.
Lighter, Table. H. J. Goldblatt. Des. 87,631–2; Aug. 23.
Lighting fixture. G. H. Cole. 1,873,291; Aug. 23.
Lighting fixture. A. G. Steinmayer. 1,873,500; Aug. 23.
Lighting unit, Inclosed. L. C. Doane. 1,873,308; Aug. 23.
Lightning arrester. J. R. McFarlin. 1,873,449; Aug. 23.
Lightning arrester. A. G. Steinmayer. 1,873,499; Aug. 23.
Lightning arrester and making the same. J. R. McFarlin. 1,873 450; Aug. 23.
Lightning arrester, Porous. R. Tanberg. 1,873,362; Aug. 23.
Lining, Shoe. E. H. Shaw. 1,873,222; Aug. 23.
Link for shock absorbers, Connecting. R. H. Ahlers. 1,873,172; Aug. 23.
Linoleum. C. F. Humphreys and H. W. Prentis, jr. 1,873,587; Aug. 23.
Linoleum and making the same. J. C. McCarthy. 1,872,998; Aug. 23.
Linoleum, Making. M. S. McConoughey. 1,873,844; Aug. 23.
Linoleum or the like, Manufacture of inlaid. J. Wiley. 1,873,090; Aug. 23.
Liquid boiler. W. L. R. Emmet. 1,873,637; Aug. 23.
Liquid meter. J. E. Blalock. 1,873,106; Aug. 23.
Liquid treating apparatus. H. G. Mojonnier. 1,873,588; Aug. 23.
Liquids, Device for controlling pressure of volatile. H. B. Siems. 1,872,831; Aug. 23.
Liquids, Device for measuring. W. Berger. 1,872,650; Aug. 23.
Liquids, Selective separation of. A. Johnson. 1,872,958; Aug. 23.
Load balancing equipment. W. Schaelchlin. 1,873,046; Aug. 23.
Loading machine. E. C. Miller. 1,873,008; Aug. 23.
Loading means for bottle cleaning machines. G. J. Meyer. 1,873,845; Aug. 23.
Loading or boxing apparatus. W. H. Brooks. 1,873 868; Aug. 23.

Lock: *See*—
Door lock. Sliding door lock.
Latch lock. Spindle lock.
Pin lock.
Lock keeper, Adjustable. J. W. Anstine. 1,873,528; Aug. 23.
Lock switch, Combination. C. Rosine. 1,873,484; Aug. 23.
Locking means. V. H. Harbert. 1,873,643–4; Aug. 23.
Locking means, Hatch cover. V. H. Harbert. 1,873,645; Aug. 23.
Locomotive, Integral mining. C. Bethel. 1,872,875; Aug. 23.
Loom, Box. I. Mercier Solé. 1,873,159; Aug. 23.
Loom, Shuttle changer. A. J. Chevrette. 1,872,890; Aug. 23.
Loom, Shuttle changer. A. J. Chevrette. 1,873,112; Aug. 23.
Loom, Shuttle changing. R. G. Turner and V. H. Jennings. 1,873,073; Aug. 23.
Looms, Controlling and indicating mechanism for. F. G. Cobb. 1,872,893; Aug. 23.
Looms, Electrical detector mechanism for drop box. D. H. Bushey. 1,873,109; Aug. 23.
Looms for weaving, Warp stop motion for. A. M. M. Collon. 1,873,739; Aug. 23.
Looms, Head motion for. W. M. Wattle. 1,873,516; Aug. 23.
Looms, Knock-off mechanism for. W. E. Lundgren. 1,872,994; Aug. 23.
Looms, Needle motion for Axminster. W. W. Robertson. 1,873,038; Aug. 23.
Looms, Rocker-shaft bearing for. C. C. Shaw. 1,873,791; Aug. 23.
Looms, Selvage trimmer for. C. R. Kronoff. 1,872,979; Aug. 23.
Looms, Take-up for. W. E. Lundgren. 1,872,993; Aug. 23.
Looms, Weft detecting mechanism for double shuttle. C. E. Brown. 1,873,182; Aug. 23.
Looms, Weft detecting mechanism for drop box. C. E. Brown. 1,873,108; Aug. 23.
Looms, Weft detecting mechanism for pick and pick. C. E. Brown. 1,873,183; Aug. 23.
Loop for fixtures, Split supporting. J. B. Glowacki. 1,873,385; Aug. 23.
Loud-speaker construction. J. B. Swallow. 1,873,360; Aug. 23.
Lubricator: *See*—
Force feed lubricator.
Lubricator. D. W. Davisson and F. G. Welke. 1,873,189; Aug. 23.
Luggage carrier. F. W. Marco. 1,872,995; Aug. 23.
Machine for drying yarn or other textile materials in hanks and loops. A. N. Marr. 1,872,777; Aug. 23.
Machine for filling containers. R. N. Cundall. 1,872,686; Aug. 23.
Machine for forming the ends of paper tubes. T. Farro. 1,873,366; Aug. 23.
Machine for grading globular articles. O. S. Sells. 1,873,220; Aug. 23.
Machine for manufacturing brake drums. H. Ford. 1,873,568; Aug. 23.
Machine for producing slits in type bars. H. Luce. 1,872,992; Aug. 23.
Machine for working glass. E. Roirant. 1,873,788; Aug. 23.
Mail exchange, Aerial. L. C. Ashley. 1,873,917; Aug. 23.
Manifold. M. L. Carpentier and J. B. Macauley, jr. 1,872,673; Aug. 23.
Marker, Book. J. Posner. 1,872,807; Aug. 23.
Mask, Ear. H. B. Ely. 1,873,864; Aug. 23.
Mat: *See*—
Electrically heated mat.
Match book. A. L. Jorgensen. 1,873,420; Aug. 23.
Material, Apparatus for making sheet. T. Robinson. 1,873,040; Aug. 23.
Material, Apparatus for manufacture of sheet. H. Brown. 1,873,279; Aug. 23.
Material, Device for catching and stacking sheet. R. N. Richards. 1,873,480; Aug. 23.
Material, High temperature transfer. M. J. Morgan. 1,873,013; Aug. 23.
Material, Preparing all metal gimped. R. B. Kingman. 1,872,971; Aug. 23.
Material spreader. F. C. Stolle. 1,872,841; Aug. 23
Material, Surface covering. P. R. Young. 1,873,098; Aug. 23.
Materials coated with lacquers, and a process of producing coatings. G. Kranzlein and R. K. Muller. 1,873,945; Aug. 23.
Materials, Ferromagnetic. B. Scharnow. 1,873,155; Aug. 23.
Materials, Method of and apparatus for separating. C. A. Hallam. 1,873 393–4; Aug. 23.
Materials, Method of and apparatus for separating. C. A. Hallam and R. Palmer. 1,873,395; Aug. 23.
Materials to protect them from mildew and other fungoid growths, Proofing or like treatment of. R. G. Fargher, L. D. Galloway, and M. E. Probert. 1,873,365; Aug. 23.
Measuring and dispensing device. J. G. Moxey. 1,873,624; Aug. 23.
Measuring cubic capacity of shoes, Device for. E. J. Bliss. 1,873,532; Aug. 23.
Measuring device, Foot. J. Fitzpatrick. 1,872,921; Aug. 23.
Meat sawing apparatus. E. W. Bleam. 1,872,656; Aug. 23.
Mechanical movement. A. J. Wanner. 1,873,230; Aug. 23.
Metal and forming the same, Porous. C. F. Sherwood. 1,873,223; Aug. 23.
Metal complex compounds, Stable solutions of. H. Schmidt. 1,873 668; Aug. 23.
Metal sections, Method of and apparatus for assembling. G. Raymond. 1,872,810; Aug. 23.
Metal ware, Manufacture of sheet. E. Turnquist. 1,873,164; Aug. 23.
Metals, Apparatus for the electrolytic deposition of. M. Devecis. 1,873,826; Aug. 23.
Meter: *See*—
Liquid meter.
Meter control. J. L. Brownell. 1,873,539; Aug. 23.
Metering panel. H. J. L. Frank. 1,872,723; Aug. 23.
Metering system. J. H. Levis, rj. 1 873,772; Aug. 23.
Methylamines substituted in the methyl group by a cyclic radicle, Producing. W. Herzberg and H. Lange. 1,873,402; Aug. 23.
Mica plates, Making composite. L. T. Frederick. 1,873,753; Aug. 23.
Microphone amplifier, Condenser. D. F. Whiting. 1,872,858; Aug. 23.
Microscope for examining pictures with rasant lateral lighting. F. Perez. 1,873,149; Aug. 23.
Milk, Apparatus for taking samples of. W. E. Mitton. 1,873,010; Aug. 23.
Milk, Heating. C. E. North. 1,872,795; Aug. 23.
Mill: *See*—
Cutting, mixing, and attri- Rod mill.
tion mill.
Mills, Adjusting device for roller. J. W. Kent. 1,872,967; Aug. 23.
Mirror and accessories therefor. O. C. Ritz Woller. 1,873,943; Aug. 23.
Mirror, Barber's. A. Godin. Des. 87,630; Aug. 23.
Mirror, Rear vision. R. A. Darling. 1,872,905; Aug. 23.
Mixer. I. W. Litchfield. 1,873,438; Aug. 23.
Mixtures of substances, Separation of. L. D. Jones. 1,873,598; Aug. 23.
Model for illustrating office buildings and the like. W. Favreau. 1,873,748; Aug. 23.
Mold charges, Apparatus for and method of producing. W. J. Miller. Re18,581; Aug. 23.
Mold dumping apparatus. W. L. Woody and R. J. Thompson. 1 873,096; Aug. 23.
Molded bodies and the product, Producing. H. L. Crowley. 1,872,902; Aug. 23
Molding apparatus. T. Robinson. 1,873,014; Aug. 23.
Molding machine. C. Jackson. 1,873,412; Aug. 23.
Molds for molding thermo-plastic materials, Heating. B E. Broadwell. 1,873,535; Aug. 23.
Mop. C. S. Nelson. 1,872,791; Aug. 23.
Moth worms, Destroying, etc. W. Y. Castonguay. 1,872,676; Aug. 23.
Motor: *See*—
Electric motor. Speed motor.
Motor control system, Auxiliary. F. W. Gay. 1,872,926; Aug. 23.
Motor drive, Single. F. W. Hild. 1,873,404; Aug. 23.
Motors, System for reciprocating electric. P. Frenell. 1,873,193; Aug. 23.
Mounting, Motor. R. K. Lee. 1,872,765–8; Aug. 23.
Mounting, Motor. A. W. Seyfried. 1,873,343; Aug. 23.
Mounting, Ophthalmic. F. E. Bowers. Des. 87,617; Aug. 23.
Mounting, Radio transmitter. H. P. Miller, jr., and E. G. Ports. 1,873,009; Aug. 23.
Mounting, Window sash. J. R. Stewart. 1,873,066; Aug. 23.
Mowers, Attachment for lawn. R. C. Best. 1,873,266; Aug. 23.
Ms-anthradianthrones, Manufacture of. M. A. Kunz and K. Koeberle. 1,872,756; Aug. 23.
Muffler and air cleaner. H. G. Kamrath. 1,872,752; Aug. 23.
Navigation system and method. F. A. Kolster. 1,872,975; Aug. 23.
N-hydroxyethylated derivatives of 1-amino or 2-amino-5-hydroxynaphthalene-7-sulphonic acid. G. Matzdorf. 1,873,443; Aug. 23.
Necktie. O. C. Samphere. 1,873,333; Aug. 23.
Nozzle. J. M. Hothersall. 1,873,840; Aug. 23.
Nozzle, Air. J. M. McClatchie. 1,873,002; Aug. 23.
Nozzle directing device. R. J. McIntosh. 1,873,615; Aug. 23.
Nozzle, Hose spray. D. Elder. 1,873,321; Aug. 23.
Nut and nut and screw fastened installation. A. W. Kimbell. 1,873,894–5; Aug. 23.
Oil burning apparatus. M. J. Hammers. 1,873,581; Aug. 23.
Oil can. P. Fountaine. 1,873,835; Aug. 23.
Oil fields, Developing. H. L. Doherty. 1,872,906; Aug. 23.
Oil from fixtures thereof with water, Separation of. L. D. Jones. 1,873,597; Aug. 23.
Oil, Process and apparatus for the fractional distillation of. W. G. Laird. 1,873,135; Aug. 23.
Oil, Treating. R. C. Osterstrom and R. T. Tucker. 1,873,783; Aug. 23.
Oil wells, Preventing corrosion in. J. C. Walker. 1,873,084; Aug. 23.

Oil wells, Prevention of hard scale formation in. J. C. Walker. 1,873,083; Aug. 23.
Oils, Apparatus for the fractionation of heavy. E. A. Barbet. 1,873,734; Aug. 23.
Oils, Coking heavy. O. F. Campbell and E. C. Herthel. 1,872,884; Aug. 23.
Oils, Coking heavy. W. S. Gullette. 1,872,938; Aug. 23.
Oils, Cracking. H. A. Fouts. 1,872,722; Aug. 23.
Oils, Distilling. W. F. Moore. 1,873,454; Aug. 23.
Oils, Distilling hydrocarbon. H. L. Doherty. 1,872,908; Aug. 23.
Oils, Method of and reagent for treating wet. J. C. Walker. 1,873,165; Aug. 23.
Oils, motor fuel, and the like, Recovering light. C. J. Ramsburg. 1,872,808; Aug. 23.
Oils, Treating hydrocarbon. C. R. Wagner. 1,873,728; Aug. 23.
Opener and dispensing apparatus, Combination bottle. H. M. Bridgewater. Des. 87,618; Aug. 23.
Opener, Furrow. B. P. Johnson. 1,873,128; Aug. 23.
Operating mechanism. W. A. Ring and I. M. Laddon. 1,873,906; Aug. 23.
Ophthalmic lens. E. D. Tillyer. 1,873,676; Aug. 23.
Optical system and method, Achromatic. J. A. Ball. 1,873,258; Aug. 23.
Ore flotation. I. H. Derby and O. D. Cunningham. 1,873,115; Aug. 23.
Organic compounds, Catalytic oxidation of. M. Luther and H. Klein. 1,872,774; Aug. 23.
Organic compounds, Producing oxygenated. R. L. Brown and W. W. Odell. 1,873,538; Aug. 23.
Ornamental stand. P. J. King. 1,872,970; Aug. 23.
Ornamentation of hard surface covering materials. J. C. McCarthy. 1,872,999–1,873,000; Aug. 23.
Oven and broiler rack, Slidable. C. W. Greenwald. 1,872,733; Aug. 23.
Oven apparatus, Coke. J. van Ackeren. 1,873,078; Aug. 23.
Oven, Coking retort. J. van Ackeren. 1,873,077; Aug. 23.
Oven, Vertical coking retort. J. van Ackeren. 1,873,075; Aug. 23.
Ovens and operating same, Vertical Coking retort. J. van Ackeren. 1,873,074; Aug. 23.
Oxides, Producing antimony. J. J. Listrat. 1,873,774; Aug. 23.
Package and method for the shipment of metal pieces. A. H. Moon. 1,873,780; Aug. 23.
Packing, Metallic. J. F. Enderlin and J. E. Ogles. 1,873,745; Aug. 23.
Packing ring. A. D. Bailey. 1,873,859; Aug. 23.
Pad for carpets, rugs and mats, Under. H. D. Thiele. 1,872,846; Aug. 23.
Pan: *See*—
Lead pan.
Paper, Apparatus for making. W. H. Cannard. 1,873,111; Aug. 23.
Paper box. B. G. Warner. 1,873,085; Aug. 23.
Paper clip. C. E. Thompson. 1,873,228; Aug. 23.
Paper feed roller. C. W. Crumrine. 1,873,555; Aug. 23.
Paper Folding machine. H. F. Bechman. 1,873,102; Aug. 23.
Paper, making the same and composition for rendering the same transparent, Transparent. K. Bratring. 1,872,662; Aug. 23.
Paper pulp bleaching process. W. Hirschkind. 1,873,924; Aug. 23.
Paper pulp, Making. W. H. Mason. 1,872,996; Aug. 23.
Paper registering device. E. L. Smith. 1,873,057; Aug. 23.
Paper sheet holder. J. A. Smith. 1,873,226; Aug. 23.
Paper slitting and stacking device. H. E. Sheeler. 1,873,792; Aug. 23.
Parachute. B. L. Elliott. 1,872,705; Aug. 23.
Pedestal. W. H. Mahoney. Des. 87,642; Aug. 23.
Pendent or similar article, School. R. Carter. Des. 87,658; Aug. 23.
Perforating machine. C. W. Crumrine. 1,873,554; Aug. 23.
Perforating machine. R. G. Thompson and C. W. Crumrine. 1,873,511; Aug. 23.
Petroleum distillates, Refining. L. P. Chebotaref. 1,872,679; Aug. 23.
Petroleum product and art of wood preservation. W. H. Hampton and B. B. Farrington. 1,873,582; Aug. 23.
Petroleum smelting process. B. E. Crocker. 1,872,900; Aug. 23.
Phenols and other liquors, Elimination of. S. P. Miller. 1,873,901; Aug. 23.
Phenols from waste and other liquids, Removal of. S. P. Miller. 1,873,900; Aug. 23.
Phonograph. R. R. Erbe. 1,872,707; Aug. 23.
Phonograph. J. P. Stockton. 1,873,358; Aug. 23.
Phonograph, Automatic. T. W. Small. 1,872,835; Aug. 23.
Photographic machine, Color. M. DeFrancisco. 1,873,302; Aug. 23.
Picker: *See*—
Bean picker.
Picker spindle. R. G. Turner. 1,873,162; Aug. 23.
Picture apparatus, Motion. K. A. Oplinger and W. O. Osbon. 1,873,016; Aug. 23.
Pie crust dough, Making and packaging. E. O. Nickerson. 1,873,716; Aug. 23.
Pile fabric. C. Dreyfus. 1,873,863; Aug. 23.
Pile fabric containing derivatives of cellulose. C. Dreyfus. 1,873,862; Aug. 23.
Piles in situ, Apparatus for the formation of concrete. J. M. Dealy. 1,872,688; Aug. 23.
Piles, Method and apparatus for forming. P. Zucco. 1,873,244; Aug. 23.
Pin: *See*—
Hair pin.
Pin lock. J. K. Blakeslee. 1,872,655; Aug. 23.
Pipe coupling. J. Wood. 1,872,863; Aug. 23.
Pipe joint. J. W. Moore. 1,873,620–1; Aug. 23.
Pipe joint, Flexible. W. R. Smittle. 1,873,495; Aug. 23.
Pipe-line treater. J. T. Worthington and H. F. Fisher. 1,873,857; Aug. 23.
Pipes or conduits with concrete, Apparatus and method for covering. C. Jackson. 1,873,413; Aug. 23.
Piston. G. E. Frankquist. 1,872,724; Aug. 23.
Piston for internal combustion motors. E. C. Long. 1,872,772; Aug. 23.
Plant for cafeteria, Cooking. C. Ortega. 1,873,144; Aug. 23.
Plates, Apparatus for manufacturing. W. Sykes. 1,873,361; Aug. 23.
Pliers or the like. A. C. Allan. 1,873,805; Aug. 23.
Plow attachment for tractors. J. F. Flanagan. 1,873,749; Aug. 23.
Plows, Power lift mechanism for. R. J. Altgelt and C. H. Genberling. 1,873,253; Aug. 23.
Plug, Non-screw. A. R. Wolfe. 1,873,856; Aug. 23.
Plug, Oil-well cementing. A. W. Walker. 1,872,855; Aug. 23.
Plug, Spark. T. G. McDougal. 1,872,778; Aug. 23.
Plug structure, Sectional. G. L. Chamberlain. 1,872,678; Aug. 23.
Plywood, Making. H. V. Dunham. 1,873,827; Aug. 23.
Porous medium for aerating apparatus. W. T. MacDonald. 1,873,843; Aug. 23.
Portable drill. J. H. King. 1,872,969; Aug. 23.
Potassium phosphate from potassium aluminate in solutions, Separating. R. Schulze. 1,873,490; Aug. 23.
Potato digging machine. E. W. Johnson. 1,872,744; Aug. 23.
Pot head. A. G. Steinmayer. 1,873,497; Aug. 23.
Powder puff. J. J. Quinn. 1,873,030; Aug. 23.
Power actuator. C. S. Bragg and V. W. Kliesrath. 1,872,660; Aug. 23.
Power and metering system and apparatus, Off-peak. M. B. Wood. 1,873,238; Aug. 23.
Power converting apparatus, Electric. C. H. Willis. 1,873,802; Aug. 23.
Power mechanism for wells. J. G. Gibson. 1,873,380; Aug. 23.
Power steering mechanism for automobiles. O. N. Farley. 1,872,714; Aug. 23.
Power take-off mechanism. C. P. Galanot. 1,872,924; Aug. 23.
Power transmission. L. J. Hedstrom. 1,873,200; Aug. 23.
Power transmission mechanism. E. A. Thompson. 1,873,725; Aug. 23.
Press: *See*—
Garment or ironing press.
Pressure and temperature distillation, Constant. D. G. Brandt. 1,872,879; Aug. 23.
Pressure control mechanism. G. A. DeLangie. 1,873,303; Aug. 23.
Printer, Recording. G. S. Vernam and G. Hallden. 1,873,080; Aug. 23.
Printing machine having automatic feeder. W. K. Eckhard. 1,872,916; Aug. 23.
Printing machine, Rotary web undersurface. A. S. Webster. 1,873,912; Aug. 23.
Printing machines, Ink spray condenser for. H. A. W. Wood. 1,873,234; Aug. 23.
Printing, Method and apparatus for preventing offset in. T. F. Knowlton. 1,873,207; Aug. 23.
Printing press and fudge attachment. E. W. Dean. 1,873,301; Aug. 23.
Program service system. C. H. Bergmann. 1,873,813; Aug. 23.
Projectile shooting gun. P. C. Traver. 1,873,677; Aug. 23.
Propeller type fluid translating apparatus. H. F. Schmidt. 1,873,336; Aug. 23.
Propellers for aeroplanes and the like. L. Stipa. 1,873,505; Aug. 23.
Protective structure, Heat resisting. A. L. Abbott. 1,873,523; Aug. 23.
Protector for toilet seats. M. T. Simon. 1,873,225; Aug. 23.
Puller: *See*—
Hub puller.
Puller. J. T. Cosgrove. 1,873,294; Aug.23.
Pump. H. Becker. 1,873,812; Aug. 23.
Pump, Automatic fluid pressure displacement. C. B. Pendleton. 1,872,801; Aug. 23.
Pump, Oil. A. W. F. Manzel. 1,873,442; Aug. 23.
Pump rein. J. P. Ratigan. 1,873,326; Aug. 23.
Pumping apparatus. L. F. V. Drake. 1,873,314; Aug. 23.
Pyrotechnic display. R. C. Hitt. 1,873,201; Aug. 23.
Rack: *See*—
Hay rack. Oven and broiler rack.

Radiator. O. L. Seward. 1,873,052; Aug. 23.
Radio receiving system. H. E. Overacker. 1,873,017; Aug. 23.
Radio station selector, Combined mechanical and electrical. V. M. Graham. 1,873,879; Aug. 23.
Radio transmitting system. H. Romander. 1,873,043; Aug. 23.
Rail bond. H. J. Hausken. 1,873,400; Aug. 23.
Rail brace, Adjustable. A. H. Told. 1,872,848; Aug. 23.
Rail, Guard. W. F. Ald. 1,873,915; Aug. 23.
Rail joint. C. D. Young. 1,873,097; Aug. 23.
Rake. F. Van Nieuwenhuyzen. 1,872,852; Aug. 23.
Range boiler coupling. L. A. Dunckiee. 1,872,702; Aug. 23.
Razor blade and razor, Safety. A. F. Ford. 1,872,721; Aug. 23.
Razor, Safety. O. L. Altvater. 1,872,869; Aug. 23.
Reaction products from hydrocarbons and water, Producing. R. L. Brown and W. W. Odell. 1,873,536; Aug. 23.
Reaction products of vinyl esters and aldehydes, Making. F. W. Skirrow. 1,872,834; Aug. 23.
Reamer. L. O. Beard. 1,873,177; Aug. 23.
Receiver, cigar and cigarette holder, Combined ash. R. U. Scarponi. Des. 87,647; Aug. 23.
Receptacle. I. Von Witzki. 1,873,081; Aug. 23.
Receptacle, Smoker's. B. Putterman. 1,873,029; Aug. 23.
Record changing mechanism for phonographs. R. R. Erbe. 1,872,706; Aug. 23.
Recorder: *See*—
Gear operation recorder.
Rectifier, Copper oxide. P. M. Hegstenberg. 1,872,947; Aug. 23.
Rectifier, Mercury arc. D. C. Prince. 1,873,722; Aug. 23.
Rectifier voltages, Measurement of. C. A. Sabbah and C. F. Whitney. 1,873,667; Aug. 23.
Reel: *See*—
Salt water reel.
Reflector, Collapsible. L. C. Doane. 1,873,310; Aug. 23.
Refractory and making the same, Low pressure. F. J. Tone. 1,873,071; Aug. 23.
Refrigerating apparatus. W. R. Hainsworth. 1,873,390; Aug. 23.
Refrigerating apparatus. W. S. Josephson. 1,873,131; Aug. 23.
Refrigerating apparatus. J. G. King. 1,873,425; Aug. 23.
Refrigerating apparatus and method. H. M. Taylor. 1,873,364; Aug. 23.
Refrigerating ice cream containers and the like. G. F. Dickson. 1,872,689; Aug. 23.
Refrigerating machine, Apparatus for measuring capacity of a. H. Inokuty. 1,873,127; Aug. 23.
Refrigerating system. W. L. Edel. 1,873,319; Aug. 23.
Refrigeration. A. Lenning. 1,873,435; Aug. 23.
Refrigeration. C. H. Tanger. 1,873,508; Aug. 23.
Refrigeration. E. T. Williams. 1,873,237; Aug 23.
Refrigeration. E. T. Williams. 1,873,510; Aug 23.
Refrigeration and the like. T. A. Banning. 1,873,101; Aug. 23.
Register: *See*—
Autographic register. Cash register.
Registering device. C. Messick and A. S. Langsdorf. 1,872,782; Aug. 23.
Regulating system. E. Grau. 1,873,641; Aug. 23.
Regulator: *See*—
Electric regulator. Grid glow tube regulator.
Relay, Thermal. E. Bletz. 1,873,271; Aug. 23.
Release for crusher bowls, Yielding. E. B. Symons. 1,873,671; Aug. 23.
Remote control system. A. H. Belliveau. 1,872,647; Aug. 23.
Resin and making same, Synthetic. F. Vacher. 1,873,790; Aug. 23.
Resin and making the same, Synthetic. W. H. Moss. 1,873,849; Aug. 23.
Resin and making the same, Synthetic. W. H. Moss and B. B. White. 1,873,348; Aug. 23.
Resin from residual oils, Precipitation of. M. R. Bhagwat. 1,873,105; Aug. 23.
Resins, Preparing synthetic. W. F. Greenwald. 1,873,575; Aug. 23.
Ring: *See*—
Packing ring.
River revetment. C. E. Snyder. 1,873,496; Aug. 23.
Rod: *See*—
Sewer rod. Welding rod.
Rod clamp. G. Zingali. 1,873,731; Aug. 23.
Rod mill. H. S. Rexworthy. 1,873,032; Aug. 23.
Rod weeder. F. T. Court. 1,873,552; Aug. 23.
Roll chuck, Roller bearing working. E. B. Hudson. 1,873,710; Aug. 23.
Roll conveyer system. E. W. Henderson and H. J. Fisher. 1,873,940; Aug. 23.
Roll for printing presses and coating the surfaces of the same. A. B. Davis. 1,873,873; Aug. 23.
Roller: *See*—
Paper feed roller. Paper sheet roller.
Roller cleaning and oiling device for driers. C. W. Linfesty. 1,873,437; Aug. 23.
Roller screen. M. Seide. 1,873,156; Aug. 23.
Roofing. G. P. Heppes. 1,873,886; Aug. 23.
Roofing implements, Method of and apparatus for finishing. F. C. Overbury. 1,873,213; Aug. 23.
Roofing units, Method of and machine for coating. C. R. MacDonald. 1,873,209; Aug. 23.
Roost structure, Sanitary pivoted. C. E. Hilton. 1,873,763; Aug. 23.
Rose. R. L. Catron. Pl. Pt. 23; Aug. 23.
Rose. C. N. White. Pl. Pt. 22; Aug. 23.
Rose, Cerise. E. H. Mann. Pl. Pt. 21; Aug. 23.
Rose, Yellow. E. H. Mann. Pl. Pt. 20; Aug. 23.
Rotor, impeller, or the like. C. A. Volf, jr. 1,873,853; Aug. 23.
Rubber coagulation. W. B. Wescott. 1,873,913; Aug. 23.
Rug. J. F. Jewell. 1,872,742; Aug. 23.
Running board. H. D. Stewart. 1,873,504; Aug. 23.
Runway for sliding panes. H. D. Randall. 1,873,031; Aug. 23.
Runway, Lubricated window glass. E. W. M. Bailey. 1,873,529; Aug. 23.
Saddle, Sprinkling. J. Theys. 1,873,672; Aug. 23.
Safe. A. L. Abbott. 1,873,246; Aug. 23.
Safe and the like, Disappearing door. A. L. Abbott and W. C. Miller. 1,873,522; Aug. 23.
Safety device, Elevator car. J. Dunlop. 1,873,829; Aug. 23.
Safety device for elevators. E. N. Baldwin. 1,873,809; Aug. 23.
Safety device for motion picture projecting machines. J. E. Cohen. 1,873,738; Aug. 23.
Salt water reel. C. T. Pflueger and W. L. Adams. Re18,580; Aug. 23.
Salts and liquors, Method and apparatus for separating. W. H. Allen, F. MacDonald, and A. Gale. 1,873,251; Aug. 23.
Salts of organic bases and preparing the same, Soluble. W. Schulemann, F. Schönhöfer, and A. Wingler. 1,872,826; Aug. 23.
Sand washer, Mechanical. R. Clanton. 1,872,892; Aug. 23.
Sanding apparatus. J. M. Carr. 1,872,886; Aug. 23.
Sandwich assembling device. K. E. Bemis. 1,873,920; Aug. 23.
Saw, Circular. J. T. H. Dempster. 1,873,700; Aug. 23.
Saxophone. F. Calvani. 1,873,184; Aug. 23.
Scale. H. J. Behrens. 1,872,646; Aug. 23.
Scale balance corrector. H. Meyerink. 1,873,657; Aug. 23.
Scoop structure. J. W. Patterson. 1,873,018; Aug. 23.
Scraper. F. S. Casse. 1,872,887; Aug. 23.
Scraper, Disk harrow. W. D. Dewend. 1,873,307; Aug. 23.
Scraper, Railroad ballast. F. Speno. 1,873,794; Aug. 23.
Screen: *See*—
Roller screen.
Screen grid tube. H. O. Peterson. 1,873,026; Aug. 23.
Seal for compression apparatus, Gas. W. E. Goldsborough. 1,872,934; Aug. 23.
Seal, Lubricant. W. A. Mulhern. 1,872,788; Aug. 23.
Seal, Silo. F. Günther. 1,872,735; Aug. 23.
Seat: *See*—
Valve and valve seat.
Seat. H. E. Kuehn. 1,873,603; Aug. 23.
Seat construction for sedan type automobiles. E. W. Allbright. 1,873,525; Aug. 23.
Seats of pulp material, Making toilet. H. C. T. Harvey. 1,873,585; Aug. 23.
Securing means. I. D. Ford. 1,873,370; Aug. 23.
Selective system and apparatus. E. E. Kleinschmidt. 1,873,206; Aug. 23.
Selvage motion, Center. A. A. Gordon. 1,872,935; Aug. 23.
Separator and atomizer for manifolds, Combined. V. Vestrez. 1,873,082; Aug. 23.
Separator for electrical warp strop motions. O. V. Payne. 1,873,214; Aug. 23.
Service building. G. L. Rosebrook. Des. 87,645; Aug. 23.
Sewer rod. J. G. Heaney. 1,872,944; Aug. 23.
Sewing machine tape guiding means. G. M. Lewis. 1,872,769; Aug. 23.
Shackle, Police officer's. H. Wesson and E. S. Pomeroy. 1,872,857; Aug. 23.
Shade and curtain fixture, Window. E. E. Sullivan. 1,873,506; Aug. 23.
Shear sharpening device. A. A. Emery. 1,873,636; Aug. 23.
Ship side-light, side-scuttle, or port opening for. H. A. Crocker. 1,873,186; Aug. 23.
Shock absorber. E. L. O. Allen. 1,873,100; Aug. 23.
Shock absorber. F. E. Aseltine. 1,873,256; Aug. 23.
Shock absorber. C. H. Kindl and F. D. Funston. 1,873,133; Aug. 23.
Shock absorber. Bayard D. Kunkle and C. H. Kindl. 1,873,208; Aug. 23.
Shock absorbing mechanism. C. K. Brooks and H. L. Spence. 1,872,881; Aug. 23.
Shock absorbing mechanism. A. O. Buckius. 1,873,540; Aug. 23.
Shock absorbing mechanism. H. T. Krakau. 1,872,978; Aug. 23.
Shock absorbing mechanism, Friction. J. F. O'Connor. 1,873,718; Aug. 23.
Shoe plate. F. D. Reynolds. 1,873,328; Aug. 23.
Shuttle for electrical weft detectors. R. G. Turner. 1,873,163; Aug. 23.
Shuttles, Internal electrical feeler for. R. G. Turner. 1,873,679; Aug. 23.
Side frame. A. O. Buckius. 1,872,882; Aug. 23.
Sign. R. E. Barclay. 1,873,261; Aug. 23.

Sign construction, Illuminated. J. W. Harris. 1,873,584; Aug. 23.
Sign exhibiting machine, Automatic changeable. G. F. Gibson. 1,873,756; Aug. 23.
Signal: *See*—
Traffic signal. Train signal.
Signal device, Elevator car. D. W. Hughes and C. E. Ellis, jr. 1,873,765; Aug. 23.
Signal lamp for automobiles. W. Brown. Des. 87,619; Aug. 23.
Signaling device for automobiles. G. D. Sanford. Des. 87,646; Aug. 23.
Signaling device, Vehicle direction and movement. R. G. McLeod. 1,873,003; Aug. 23.
Signaling system, Synchronous. G. A. Locke. 1,873,609; Aug. 23.
Skylight construction. A. F. Abronski. 1,872,868; Aug. 23.
Skylight joint. C. C. Rupertus. 1,873,789; Aug. 23.
Slack adjuster for railway car brakes. A. M. Capper. 1,872,885; Aug. 23.
Sled, Baby carriage. P. Francke. 1,873,836; Aug. 23.
Slicing machine. J. C. Noll. 1,873,903; Aug. 23.
Sliding door lock. E. W. North. 1,873,462; Aug. 23.
Smelting of sulphidiferous materials, Electrothermic. A. R. Wejnarth. 1,873,800; Aug. 23.
Smoker's convenience. F. J. Ziegler. 1,872,867; Aug. 23.
Snap fastener attaching machine. G. A. Holmes. 1,873,890; Aug. 23.
Snap switch. W. L. Butler. 1,873,110; Aug. 23.
Snubber for elevators. J. Dunlop. 1,873,828; Aug. 23.
Socket, Fastener. M. F. Carr. 1,873,870; Aug. 23.
Socket, Interchangeable electrical. W. H. Fabrey. 1,873,191; Aug. 23.
Socket, Lamp. A. G. Steinmayer. 1,873,501; Aug. 23.
Socket wrench. E. M. Pfauser. 1,873,472; Aug. 23.
Sodium aluminium fluorides. Production of. J. E. Morrow. 1,873,210; Aug. 23.
Sole, Shoe. J. E. Dyer. Des. 87,628; Aug. 23.
Sound, Apparatus for photographically recording. F. Hehlgans. 1,873,646; Aug. 23.
Sound deadening device. J. J. Kocher. Re18,573; Aug. 23.
Sound recording process. A. J. Cawley. 1,872,677; Aug. 23.
Sound reproducer. F. L. Capps. 1,872,672; Aug. 23.
Sound reproducer. S. A. Sollie. 1,873,062; Aug. 23.
Sound reproducing apparatus for advertising purposes. F. G. Salcedo. 1,873,790; Aug. 23.
Sound reproducing device. S. L. Price. 1,873,153; Aug. 23.
Speed drive control, Variable. M. Zwicky. 1,873,099; Aug. 23.
Speed drive mechanism, Variable. C. F. Meyer. 1,873,007; Aug. 23.
Speed mechanism, Variable. L. Jensen and F. C. Reucker. 1,873,415; Aug. 23.
Speed motor, Variable. M. T. Schumb and E. E. Tougas. 1,873,491; Aug. 23.
Spindle lock. C. F. Meilink. 1,873,452; Aug. 23.
Spool and protector therefor. G. F. Miller. 1,873,618; Aug. 23.
Spoon or similar article. G. Allen, M. G. Parker, and L. E. Ressegger. Des. 87,659; Aug. 23.
Spoon or similar article. M. Johnson. Des. 87,637; Aug. 23.
Sprayer. C. F. Buddenhagen. 1,873,817; Aug. 23.
Spraying device. F. E. Hansen. 1,873,398; Aug. 23.
Spraying device. E. Z. Munz. 1,873,625; Aug. 23.
Spraying device. J. B. Schmitt. 1,873,337; Aug. 23.
Spring: *See*—
Vehicle spring.
Spring and shock absorbing device, Hydraulic. E. J. Fischer. 1,872,919; Aug. 23.
Spring cushion construction. W. B. Foster. 1,872,922; Aug. 23.
Spring cutting and hooking machine. M. Nigro. 1,873,626; Aug. 23.
Spring shackle. R. M. Riblet. 1,872,814; Aug. 23.
Spring structure. R. Ferguson. 1,872,715; Aug. 23.
Spring tension device for ribboners. E. B. Somers. 1,873,063; Aug. 23.
Sprinkler: *See*—
Lawn sprinkler.
Stabilizer, High frequency. L. A. Hyland. 1,873,842; Aug. 23.
Stall for animals. B. D. Scott. 1,873,493; Aug. 23.
Stand: *See*—
Display stand. Ornamental stand.
Grinder stand.
Star finder. W. E. Johnson. 1,873,595; Aug. 23.
Stator and roller plates, Making. L. Hammond. 1,873,397; Aug. 23.
Steel, Treating silicon. A. F. Murphy and W. Jones. 1,873,659; Aug. 23.
Steering mechanism for tractors. H. E. McCray. 1,873,447; Aug. 23.
Stem, Insulation joint and hickey, Combination. J. B. Glowacki. 1,873,384; Aug. 23.
Stepladder. J. B. Blosser. 1,873,107; Aug. 23.
Sterilizer. L. A. Bent. 1,873,265; Aug. 23.
Sterilizer. A. Nohr. 1,873,627; Aug. 23.
Stocking. J. L. Bausher. 1,873,811; Aug. 23.
Stocking and making the same, Seamless. H. E. Katzenmoyer. 1,872,964; Aug. 23.
Stop motion, Device for the warp. R. Miyata. 1,872,784; Aug. 23.
Stop motion, Electrical warp. O. V. Payne. 1,873,147; Aug. 23.
Stop motion, Electrical warp. O. V. Payne. 1,873,467; Aug. 23.
Stop motion, Knock-off for electrical warp. O. V. Payne. 1,873,465; Aug. 23.
Storage elevator, Counterbalanced vehicle. L. Haish and F. M. Henry. 1,873,391; Aug. 23.
Store. C. E. Rorrer and A. R. Mitterer. 1,873,852; Aug. 23.
Stove. J. Fickinger. Des. 87,629; Aug. 23.
Stove, Gas. S. A. Wilde. 1,873,089; Aug. 23.
Stove, Heating. B. B. Kahn. 1,873,767; Aug. 23.
Structural members for drilling and like operations, Apparatus for positioning. H. H. McClintic. 1,873,547; Aug. 23.
Stud and lock, Plaster board. T. Collins. 1,873,292; Aug. 23.
Sub-frame for automobile bodies. C. Beck and R. B. Burton. 1,872,671; Aug. 23.
Substances, Separating. L. D. Jones. 1,872,963; Aug. 23.
Suction producing means for suction operated motors. W. A. Edwards. 1,873,320; Aug. 23.
Sulphur dyestuffs in substance or on the fiber, Manufacture of substituted. E. Kramer. 1,873,947; Aug. 26.
Support. V. Bendix. 1,872,872; Aug. 23.
Support. W. S. Watts. 1,873,086; Aug. 23.
Support, Box and fixture. G. C. Thomas, jr. 1,873,509; Aug. 23.
Support for building construction, Adjustable shelf-angle. F. D. Reiland. 1,872,813; Aug. 23.
Support for electric discharge devices. F. Fleckenstein and G. W. Miller. 1,873,834; Aug. 23.
Support for weighing scales, Adjustable fulcrum. F. C. Fisher. 1,872,920; Aug. 23.
Support, Reading. K. Draxler. 1,872,911; Aug. 23.
Supporting means for disk plow shafts. J. B. Mapp and F. W. Hoeme. 1,873,655; Aug. 23.
Surfacer, Electric. S. A. Modglin. 1,873,011; Aug. 23.
Suspenders. W. J. Ellis. 1,873,831; Aug. 23.
Swing, Amusement. C. Dahl. Re18,572; Aug. 23.
Switch: *See*—
Centrifugal switch. Snap switch.
Disconnecting switch. Thermostatic switch.
Electric regulating switch. Thermostatically controlled switch.
Electric switch.
Lock switch.
Switch. H. E. Norviel. 1,873,142; Aug. 23.
Switch. H. E. Norviel and V. Ecoff. 1,873,141; Aug. 23.
Switch control means for vehicle lamps. H. Steinhart and H. Arnold. 1,873,909; Aug. 23.
Switch mechanism. A. T. Twiss. 1,873,680; Aug. 23.
Switch operating mechanism, Electric. W. K. Rankin. 1,873,787; Aug. 23.
Switching apparatus parts, Producing. H. O. Siegmund. 1,873,346; Aug. 23.
Swivel coupling. B. M. Brownell. 1,872,666; Aug. 23.
Swivel pipe coupling. B. M. Brownell. 1,872,665; Aug. 23.
Swivel supporting means for electrically operated devices. M. W. Goldberg. 1,872,729; Aug. 23.
Table: *See*—
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Folding card table. Utility table.
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Table. M. Levine. Des. 87,639; Aug. 23.
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Talking machine. A. F. Larson and C. W. Anderson. 1,873,432; Aug. 23.
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Tank and condenser for motor vehicle cooling system, Auxiliary storage. J. A. Peterson. 1,873,632; Aug. 23.
Tap changing system. J. T. Mercereau and H. L. Cole. 1,873,777; Aug. 23.
Tape serving machine. H. C. Hebig. 1,872,945; Aug. 23.
Taper rollers, System of lapping. W. E. Hoke. 1,873,647; Aug. 23.
Telegraph repeater. E. T. Burton. 1,873,283; Aug. 23.
Telegraph system. F. G. Halliden. 1,873,883; Aug. 23.
Telegraph system, Eight-unit code. A. F. Connery. 1,872,895; Aug. 23.
Telegraph system, Printing. P. Hitt. 1,872,951; Aug. 23.
Telephone system. A. E. Flenley. 1,872,720; Aug. 23.
Telephone system, Power line carrier. H. B. Arnold. 1,873,255; Aug. 23.
Telephone system, Power line carrier. J. D. Sarros. 1,873,334; Aug. 23.
Television. H. E. Ives and F. Gray. 1,873,411; Aug. 23.
Television apparatus. M. Centeno V. 1,873,696; Aug. 23.
Television apparatus. M. Centeno V. 1,873,926; Aug. 23.
Temperature control, Fluid. H. J. Lang. 1,873,769; Aug. 23.
Temperature indicator. F. F. Forshee. 1,873,374; Aug. 23.
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Temperatures in chemical reactions, Apparatus for controlling. C. R. Downs. 1,873,876; Aug. 23.

Temperatures, Method and apparatus for controlling. J. J. Kanter. 1,873,421; Aug. 23.
Terminal, Electric. A. Edmonson. 1,873,930; Aug. 23.
Testing apparatus. H. L. Hartzell. 1,873,121; Aug. 23.
Textile fabrics, Apparatus for dyeing. J. A. Firsching. 1,872,717; Aug. 23.
Textile materials and preparing the same. C. Dreyfus and W. Whitehead. 1,872,913; Aug. 23.
Thermoplastic products, Producing. H. M. Bunbury. 1,873,542; Aug. 23.
Thermostatic cut-out. C. J. Werner. 1,873,231; Aug. 23.
Thermostatic switch. E. K. Clark. 1,873,544; Aug. 23.
Thermostatically controlled switch. W. L. Lindgren. 1,873,436; Aug. 23.
Threshold, Metal. J. M. Olson and E. Nelson. 1,873,143; Aug. 23.
Thrust mechanism, Variable. I. B. Laskowitz. 1,872,758; Aug. 23.
Tile. L. V. Solon. Des. 87,650; Aug. 23.
Tile panel alignment. N. H. Cederquist. 1,872,888; Aug. 23.
Tile scoring and breaking device. S. Postley. 1,873,721; Aug. 23.
Timer mechanism. E. C. Bixby. 1,873,531; Aug. 23.
Tin plate sorting machine. J. C. Balletti. 1,873,860; Aug. 23.
Tire. A. H. Shoemaker. Des. 87,649; Aug. 23.
Tires, Apparatus for manufacturing. F. J. Shook and A. L. Heston. 1,872,830; Aug. 23.
Tissue packet. J. B. Lyon. 1,873,610; Aug. 23.
Toaster. L. V. Lucia. 1,873,898; Aug. 23.
Toilet article. C. J. H. Mackenzie. 1,873,899; Aug. 23.
Tool, Commutator undercutting. W. W. Haddican. 1,872,939; Aug. 23.
Tool for forming tube connections. R. R. McKnight and A. Webber. 1,873,451; Aug. 23.
Tool, Machine. W. J. F. Forward. 1,873,376; Aug. 23.
Tool, Machine. W. J. F. Forward and R. R. Roberts. 1,873,375; Aug. 23.
Toothbrush trimming machine. W. J. Neely. 1,873,660; Aug. 23.
Toy device, Helicopter. A. Krastin. 1,873,896; Aug. 23.
Toy merry-go-round. E. B. Allabough. 1,873,916; Aug. 23.
Toy scroll saw. F. L. Lindstrom. 1,872,989; Aug. 23.
Toy, Wheeled. L. Oskow. 1,873,719; Aug. 23.
Track means. G. R. Treptow. 1,873,796; Aug. 23.
Track sander and air brake, Automatic. J. Gogol. 1,873,640; Aug. 23.
Tractor, Farm. C. Murnane. 1,873,458; Aug. 23.
Tractor, Link. C. Rorabeck. 1,872,819; Aug. 23.
Traffic signal. E. Lindner. 1,873,713; Aug. 23.
Train control system. A. G. Shaver and B. W. Meisel. 1,872,828; Aug. 23.
Train signal, Automatic. J. Curas and A. Adamis. 1,873,698; Aug. 23.
Transferring method. P. Schonfeld. 1,873,486; Aug. 23.
Transformer, High tension. C. Schrader. 1,873,049; Aug. 23.
Transformer, Variable reactance. H. L. Cole and H. H. Wagner. 1,873,824; Aug. 23.
Translating apparatus employing reflected light. E. W. Kellogg. 1,872,965; Aug. 23.
Transmission, Rotary. W. E. Goldsborough. 1,872,933; Aug. 23.
Transmitters and sound receivers on ships, Arrangement of sound. H. Hecht. 1,872,946; Aug. 23.
Transmitting system. L. A. Gebhard. 1,873,837; Aug. 23.
Trap: *See*—
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Traveling bag. N. Lish. 1,873,773; Aug. 23.
Tray and table, Combination. L. H. Burlin. 1,872,669; Aug. 23.
Tray, Ash. B. H. Hall. 1,873,120; Aug. 23.
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Tray, Jewelry. E. W. Berg. 1,872,649; Aug. 23.
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Triarylcarbinols, Manufacture of. S. Coffey. 1,873,290; Aug. 23.
Triglycerides mutually or with other esters, Converting neutral or nearly neutral. C. Van Loon. 1,873,513; Aug. 23.
Trolley, Bathing. C. C. Harris and H. W. Cadwell. 1,873,196; Aug. 23.
Truck. A. H. Oelkers. 1,872,798; Aug. 23.
Truck, Can or pail hand. C. B. Ward. 1,873,690; Aug. 23.
Truck, Engine. A. H. Oelkers. 1,872,797; Aug. 23.
Truck, Trailer. B. J. Sanford. 1,872,823; Aug. 23.
Truck wheel. L. D. Kay. 1,873,600; Aug. 23.
Truing mechanism for grinding machines. S. W. Bath. 1,873,530; Aug. 23.
Tube: *See*—
Collapsible tube. Vacuum tube.
Screen grid tube.
Tube bending machine. A. J. Mason and W. L. Tancred. 1,873,939; Aug. 23.
Tube cleaner. R. W. Randall and J. C. Koch. 1,873,478; Aug. 23.
Tube cleaner. J. H. Young. 1,873,521; Aug. 23.
Tube commutator. R. H. Ranger. 1,873,785; Aug. 23.
Tube frame for axminster looms. O. V. Payne. 1,873,020; Aug. 23.
Tube squeezer, Collapsible. T. H. Reid. 1,873,217; Aug. 23.
Tube tester. E. T. Pedranti. 1,873,148; Aug. 23.
Tubes having open filaments, Utilizing thermionic. R. Johnson. 1,873,711; Aug. 23.
Tubular bodies made of cellulose, Apparatus for spinning. J. Voss and A. Schade. 1,873,685; Aug. 23.
Tuning coil shifter. C. M. Murdock. 1,873,658; Aug. 23.
Turbine, Elastic fluid. J. H. Doran. 1,873,743; Aug. 23.
Twisting machine. W. H. Watson. 1,873,692; Aug. 23.
2-aminoanthrahydroquinone, 9:10-disulphuric ester and its salts, Production of. D. A. W. Fairweather and R. F. Thomson. 1,873,564; Aug. 23.
Typewriter. S. Ishikawa. 1,873 766; Aug 23.
Typewriter marginator. C. Olivetti. 1,873,661; Aug. 23.
Typewriters, Repeat mechanism for. O. A. Hokanson. 1,873,406; Aug. 23.
Typewriters, Repeat mechanism for. R. A. Mack. 1,873,441; Aug. 23
Typewriting machine. F. U. Conard. 1,873,293; Aug. 23.
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Uncoupling mechanism for car couplers. J. Willison. 1,873,092; Aug. 23.
Unloading means for bottle cleaning machines. G. J. Meyer. 1,873,846; Aug. 23.
Utility table. J. C. Nelson. 1,873,902; Aug. 23.
Vacuum tube. C. V. Litton. 1,872,991; Aug. 23.
Vacuum tubes and similar articles, Basing. R. S. McNeil and E. V. Bitterlie. 1 873,776; Aug. 23.
Valve. J. O. Barce. 1 873,260; Aug. 23.
Valve. W. A. Gifford. 1,872,928; Aug. 23.
Valve. C. F. Morrison. 1,873,623; Aug. 23.
Valve. H. M. Neorr. 1,872,792; Aug. 23.
Valve actuating device, Electromagnetic. C. H. Hodgkins. 1,873,405; Aug. 23.
Valve and valve seat, Air cooled. R. G. Griswold. 1,873,119; Aug. 23.
Valve assembly, Balanced. W. McClintock and F. Y. Pearne. 1,873,446; Aug. 23.
Valve, Engine. H. Ford. 1 873,569; Aug. 23.
Valve for pipe lines, Air and vacuum relief. J. C. Higgins. 1,873,403; Aug. 23.
Valve, Gas and air. G. H. Johanson. 1,872,961; Aug. 23.
Valve, Gas engine. M. J. Moran. 1,873,012; Aug. 23.
Valve mechanism, Pump. J. D. Nixon. 1,873,782; Aug. 23.
Valve rectifying system, Electric. H. W. Lord. 1,873,652; Aug. 23.
Valve, Remote control pilot. D. H. Annin. 1,872,871; Aug. 23.
Valve, Self cleaning slush pump. E. L. Eason, jr. 1,873,318; Aug 23.
Valve, Standing. A. M. Bowman, G. Graham, and J. D. Nixon. 1,873,735; Aug. 23.
Valve stem fitting fixture. C. D. Stromgren. 1,873 067; Aug. 23.
Valve structure. J. M. Mitchell. 1,873,138; Aug. 23.
Valve, Thermostatically controlled fluid. D. H. Hill. 1,873,124; Aug. 23.
Vanillin and 3-ethoxy-4-hydroxybenzaldehyde, Manufacture of a. A. Pfannenstiel. 1,873,630; Aug. 23.
Vegetable and fruit grading apparatus. P. A Cutter. 1,872,903; Aug. 23.
Vehicle brake. C. H. Taylor. 1,873,069; Aug. 23.
Vehicle, Refrigerator. J. Galamb. 1,873 572; Aug. 23.
Vehicle spring. A. Rouleau and P. Nadeau. 1,872,822; Aug. 23.
Vehicle wheel. L. E. LaBrie. 1,872,983; Aug. 23.
Velocipede. P. Schimmel and C. R. Gedat. 1,873,047; Aug. 23.
Vending machine. E. R. Knott. 1,873,649; Aug. 23.
Ventilator. A. J. Filkins. 1,873,368; Aug. 23.
Vise. F. Kuhenne. 1,872,755; Aug. 23.
Voltage electromagnet of induction disk meter devices, Construction of the. J. Busch. 1,873,737; Aug. 23.
Volume control for radioreceivers. H. A. Wheeler. 1,873,236; Aug. 23.
Wall, Metal lattice. G. F. Hauf. 1,873,762; Aug. 23.
Wash rag. R. Stewart. 1,873,503; Aug. 23.
Washer: *See*—
Sand washer.
Watch cleaning machine. F. Regero. 1,872,812; Aug. 23.
Water heating system, Solar. H. A. Wheeler. 1,873,854; Aug. 23.
Water softener. O. W. Johnson. 1,873,594; Aug. 23.
Water softener, Automatic. C. P. Eisenhauer. 1,872,704; Aug. 23.
Water softening apparatus. E. J. De Ville. 1,873,305; Aug. 23.
Water softening apparatus and multiway valve for same. E. J. De Ville. 1,873,306; Aug. 23.
Weatherstrip. E. R. Clarson. 1,873,546; Aug. 23.
Web moistening device. H. A. W. Wood. 1,873,232; Aug. 23.

Weft detecting mechanism for loom shuttles. E. R. Holmes. 1,872,952; Aug. 23.
Weft end controller for automatic looms and bobbins therefor. W. H. Wakefield. 1,873,166; Aug. 23.
Weighing apparatus. F. L. van Weenen. 1,872,851; Aug. 23.
Welding machine, Flash. E. Nilson, S. Malke, and E. O. Holmberg. 1,872,793; Aug. 23.
Welding of pressure vessels, Electric. H. O. Pollel. 1,873,905; Aug. 23.
Welding rod. S. W. Miller. 1,873,847; Aug. 23.
Well bit. J. C. Wright. 1,873,241; Aug. 23.
Well drilling bit. J. C. Wright. 1,873,240; Aug. 23.
Wheel: *See*—
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Window and frame, Interiorly swinging. J. Poock. 1,873,784; Aug. 23.
Window and screen therefor, Cement. F. F. Haskell. 1,873,399; Aug. 23.
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Wiper and record holder, Oil gauge. P. R. Bragg. 1,872,878; Aug. 23.
Wiper, Windshield. C. A. and E. L. Gooley, jr. 1,873,118; Aug. 23.
Wire, Drop. O. V. Payne. 1,873,466; Aug. 23.
Wire knotting machine. M. Nigro and A. C. Nigro. 1,873,461; Aug. 23.
Wire unreeling and tensioning device. C. J. Keller, 1,873 422; Aug. 23.
Wood, Method and apparatus for bending. F. C. Brandenburg. 1,873 276; Aug. 23.
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Wrapping machine. E. F. Cornock. 1,872,898; Aug. 23.
Wrapping machine. E. L. Smith. 1,873,060; Aug. 23.
Wrapping machines, Automatic feed for. E. L. Smith. 1,873,058; Aug. 23.
Wrench: *See*—
Socket wrench.
Wrench. A. K. Ersland. 1,872,710; Aug. 23.
Wrench. J. S. McKibbon. 1,872,780; Aug. 23.
Yoke. S. B. Haseltine. 1,873,708; Aug. 23.
Zinc vapor, Condensing. E. H. Bunce. 1,873,861; Aug. 23.
Zircon refractory. W. G. Bjorkstedt. 1,872,876; Aug. 23.

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250— 8: 1,873,017
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27. 5: 1,872,901
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31: R. 18,579
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251— 3: 1,872,787
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253: 1,873,318
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252— 1: 1,873,262
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3: 1,873,410
6: 1,873,580
78: 1,873,743
254— 86: 1,873,116
88: 1,872,959
102: 1,873,714
135: 1,873,288
255— 22: 1,873,404
61: 1,873,240
1,873,814
64: 1,873,757
71: 1,873,327
257— 3: 1,873,838
36: 1,873,670
137: 1,872,785
1,872,794
183: 1,873,588
255: 1,873,638
256: 1,873,804
262: 1,873,052
258— 1: 1,873,822
1,873,917
259— 64: 1,873,407
72: 1,873,438
260— 2: 1,873,599
3: 1,873,848
4: 1,873,105
1,873,575
1,873,799
1,873,849
17: 1,873,946
24: 1,873,514
25: 1,872,826
29: 1,873,938
45: 1,873,925
60: 1,873,300
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61: 1,872,756
65: 1,873,290
83: 1,873,606
84: 1,873,277
86: 1,873,628
95: 1,873,533

260—	98:	1, 873, 564	261—	114:	1, 873, 137	271—	5:	1, 872, 726	282—	18:	1, 873, 550
	102:	1, 872, 701			1, 873, 771		46:	1, 872, 916	285—	9:	1, 872, 666
	106:	1, 872, 821		116:	1, 873, 884		74:	1, 873, 316		10:	1, 872, 665
		1, 873, 513		121:	1, 873, 843		86:	1, 873, 480		25:	1, 872, 702
	116:	1, 872, 774	263—	3:	1, 872, 712	272—	31:	1, 873, 916		37:	1, 873, 275
	123:	1, 872, 914		6:	1, 872, 711		37:	1, 873, 216		91:	1, 873, 495
	129:	1, 873, 443			1, 872, 713	273—	60:	1, 873, 221		96:	1, 873, 304
	130. 5:	1, 873, 402		8:	1, 873, 239		102:	1, 873, 211		115:	1, 872, 781
	131:	1, 873, 154		14:	1, 873, 801	274—	5:	1, 873, 646		135:	1, 873, 620
	134:	1, 873, 072		15:	1, 873, 093		10:	1, 872, 706			1, 873, 621
	136:	1, 873, 430	265—	25:	1, 873, 051			1, 872, 707		139:	1, 873, 855
	137:	1, 873, 630		34:	1, 872, 646			1, 872, 833		162:	1, 873, 703
	141:	1, 872, 834		58:	1, 873, 657			1, 873, 358		166:	1, 872, 863
	148:	1, 873, 061		62:	1, 872, 851			1, 873, 432		189:	1, 873, 914
	151:	1, 873, 536		71:	1, 872, 920		37:	1, 872, 672		193:	1, 873, 890
		1, 873, 537	267—	1:	1, 872, 872	275—	2:	1, 872, 841			1, 873, 891
	154:	1, 873, 900		8:	1, 873, 256	277—	41:	1, 872, 961			1, 873, 892
		1, 873, 901		34:	1, 872, 919	279—	1:	1, 873, 173	286—	5:	1, 872, 788
	156:	1, 873, 538		49:	1, 872, 822		67:	1, 873, 476		27:	1, 873, 267
	159:	1, 872, 736		54:	1, 872, 814	280—	9:	1, 873, 836	287—	54:	1, 873, 281
	172:	1, 872, 700		70:	1, 873, 325		33. 16:	1, 872, 750		58:	1, 873, 326
		1, 872, 956	269—	70:	1, 873, 243		53:	1, 873, 690		90:	1, 873, 172
261—	34:	1, 873, 919		110:	1, 873, 381		80:	1, 873, 444		103:	1, 872, 944
	41:	1, 872, 786		118:	1, 873, 399		96:	1, 873, 447			1, 873, 241
	48:	1, 872, 684	270—	76:	1, 873, 102		169:	1, 873, 504	288—	1:	1, 872, 709
	59:	1, 872, 708		84:	1, 873, 415	281—	19:	1, 873, 824		3:	1, 873, 745
	66:	1, 872, 762	271—	2. 5:	1, 872, 945		25:	1, 873, 226			1, 873, 859
	111:	1, 873, 064		2. 6:	1, 873, 057	282—	12:	1, 873, 489	290—	7:	1, 872, 926

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		1, 873, 169		6:	1, 872, 983		67:	1, 873, 649			
291—	3:	1, 873, 640			1, 873, 464		97:	1, 873, 317			
	19:	1, 872, 886		13:	1, 873, 600		118:	1, 872, 779			
292—	6:	1, 873, 653	302—	15:	1, 873, 806			1, 873, 140			
	37:	1, 873, 485	304—	27:	1, 873, 204		132:	1, 872, 847			
	101:	1, 873, 911	305—	10:	1, 872, 819		160:	1, 873, 492			
	164:	1, 873, 803	308—	3:	1, 873, 482						
	283:	1, 873, 643			1, 873, 483						
		1, 873, 644		6:	1, 872, 718						
		1, 873, 645		21:	1, 873, 791						
	332:	1, 873, 560		24:	1, 873, 295						
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295—	36:	1, 872, 797		60:	1, 872, 967						
296—	6:	1, 873, 469		72:	1, 873, 086						
	24:	1, 873, 572		77:	1, 873, 885						
	28:	1, 872, 671		179:	1, 873, 382						
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		1, 873, 529		226:	1, 873, 702						
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	116:	1, 873, 781									
300—	17:	1, 873, 660									

U. S. GOVERNMENT PRINTING OFFICE : 1932

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. & J. Kitchen Tool Co., The, Chicago, Ill. Kitchen tools and utensils. Serial No. 322,786; Aug. 30. Class 23.

Adam, Stephen, Trenton, N. J. Palliative for sore eyes, rash, burns, etc. Serial No. 328,862; Aug. 30. Class 6.

American Can Company, New York, N. Y. Advertising signs. Serial No. 328,415; Aug. 30. Class 50.

American Crayon Company, The, Sandusky, Ohio. Poster and construction papers. Serial No. 326,357; Aug. 30. Class 37.

American Stores Company, Philadelphia, Pa. Butter. Serial No. 326,970; Aug. 30. Class 46.

American Stores Company, Philadelphia, Pa. Imitation vanilla for food flavoring purposes, and dried vegetables. Serial No. 326,971; Aug. 30. Class 46.

Arcadia Food Co., New York, N. Y. Gelatine dessert. Serial No. 328,472; Aug. 30. Class 46.

Arrow Packing Company, Exeter, Calif. Fresh grapes. Serial No. 295,501; Aug. 30. Class 46.

Associated Press, The, New York, N. Y. Newspaper cartoons. Serial Nos. 328,629–30; Aug. 30. Class 38.

Ath-A-Foot Co. (See Burke, Thomas A.)

Atlas Supply Company, Wilmington, Del., and Newark, N. J. Storage batteries. Serial No. 328,833; Aug. 30. Class 21.

Autofume Sterilizer Company, Oakland, Calif. Sterilizing bath apparatus. Serial No. 306,545; Aug. 30. Class 23.

Balfour, Guthrie & Co., Limited, San Francisco, Calif. Firecrackers and fireworks. Serial No. 329,108; Aug. 30. Class 9.

Barnes, Paul, Incorporated, New York, N. Y. Frocks, dresses, and suits. Serial No. 329,120; Aug. 30. Class 39.

Berdan Company, The, Toledo, Ohio. Foodstuffs. Serial Nos. 325,556–8; Aug. 30. Class 46.

Berthold, Richard E., Richmond Hill, N. Y. Pyrophoric pocket lighters. Serial No. 328,543; Aug. 30. Class 34.

Birk Bros. Malt Products, Inc., Chicago, Ill. Malt syrup. Serial No. 327,971; Aug. 30. Class 46.

Bilsh Milling Company, Seymour, Ind. Wheat flour. Serial No. 328,024; Aug. 30. Class 46.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial No. 328,884; Aug. 30. Class 42.

Boston Transcript Company, Boston, Mass. Daily newspaper. Serial No. 328,885; Aug. 30. Class 38.

Brows & Jacobson, Inc., New York, N. Y. Tweed riding apparel. Serial No. 328,046; Aug. 30. Class 39.

Bucher, Samuel, Milwaukee, Wis. Frozen confection. Serial No. 328,476; Aug. 30. Class 46.

Burke, Thomas A., doing business as Ath-A-Foot Co., St. Louis, Mo. Foot medicines. Serial No. 327,672; Aug. 30. Class 6.

California Spray-Chemical Corporation, Wilmington, Del., and Berkeley, Calif. Insecticides, germicides, and fungicides. Serial Nos. 328,545–7; Aug. 30. Class 6.

Carson Pirie Scott & Co., Chicago, Ill. Shoes. Serial No. 326,577; Aug. 30. Class 39.

Carter, Joseph A., San Antonio, Tex. Chemical solution to prevent scale and corrosion. Serial No. 327,044; Aug. 30. Class 6.

Caulk, L. D., Company, The, Milford, Del. Preparation used by dentists in removing stains from and in cleaning and polishing teeth. Serial No. 328,056; Aug. 30. Class 4.

Caulk, L. D., Company, The, Milford, Del. Dentists' articulating paper. Serial No. 329,042; Aug. 30. Class 44.

Cohen, Morris, New York, N. Y. Preserved foods. Serial No. 324,458; Aug. 30. Class 46.

Compagnie Re-Naitre, Inc., New York, N. Y. Cosmetic and dermatological preparations, and eye lotions. Serial No. 325,460; Aug. 30. Class 6.

Conrad Razor Blade Co. Inc., Long Island City, N. Y. Razor blades. Serial No. 328,977; Aug. 30. Class 23.

Conston, Harry, Camden, N. J. Ladies' hosiery. Serial No. 328,978; Aug. 30. Class 39.

Coons Pure Mineral Company, Portland, Oreg. Dry mineral preparation for the treatment of burns, bruises, sunburn, etc. Serial No. 328,085; Aug. 30. Class 6.

Cooper, Frank, Limited, Oxford, England. Marmalade. Serial No. 315,136; Aug. 30. Class 46.

Cresca Company, Incorporated, New York, N. Y. Snails, frankfurter sausages, goose liver, etc. Serial No. 315,528; Aug. 30. Class 46.

Crosley Radio Corporation, The, Cincinnati, Ohio. Radio receiving sets. Serial No. 317,455; Aug. 30. Class 21.

Cyclops Steel Company, Titusville, Pa. Molybdenum and molybdenum tungsten tool and cutting steel. Serial No. 328,325; Aug. 30. Class 14.

Degra Laboratories, Burlington, Iowa. Color restorer for gray hair. Serial No. 321,592; Aug. 30. Class 6.

DeMeester Laboratories, Detroit, Mich. Salve. Serial No. 328,214; Aug. 30. Class 6.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Bristles, sponges, crude minerals, etc. Serial No. 318,194; Aug. 30. Class 1.

Deutsche Gold- & Silber-Scheideanstalt, Frankfort-on-the-Main, Germany. Rubber bath mats, blankets, and bottle stoppers, etc. Serial No. 318,215; Aug. 30. Class 50.

DeWitt & Herz, Inc., New York, N. Y. Surgical instruments. Serial No. 328,089; Aug. 30. Class 44.

Dilling & Company, Indianapolis, Ind. Candies of all kinds. Serial No. 327,390; Aug. 30. Class 46.

Dirigo Ltd. A/S, Oslo, Norway. Paints and varnishes and waxes. Serial No. 325,163; Aug. 30. Class 16.

E. E. Medicine Co. (See Gerrald, Alonzo M.)

Economy Equipment Co., Chicago, Ill. Air conditioning and applying apparatus for food products. Serial No. 309,968; Aug. 30. Class 23.

Electric Storage Battery Company, The, Philadelphia, Pa. Electrical emergency lighting apparatus. Serial No. 328,218; Aug. 30. Class 21.

Fantazn Laboratories. (See Gerro, Ossip A.)

Fastik Products, Inc., Chicago, Ill. Machine wire staples for paper, etc. Serial No. 328,058; Aug. 30. Class 13.

Flannery, Burt V., Darlington, Md. Fresh corn. Serial No. 326,811; Aug. 30. Class 46.

Food Display Machine Corporation, Chicago, Ill. Potato chips. Serial No. 327,907; Aug. 30. Class 46.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial Nos. 328,939–40; Aug. 30. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial No. 328,942; Aug. 30. Class 42.

Fort Howard Paper Company, Green Bay, Wis. Toilet paper, towels, napkins, etc. Serial No. 328,985; Aug. 30. Class 37.

Friedman Silver Co., Inc., Brooklyn, N. Y. Sterling silver hollow ware. Serial No. 328,904; Aug. 30. Class 28.

Fulton, John J., Company, San Francisco, Calif. Diuretic stimulant to the kidneys. Serial No. 325,836; Aug. 30. Class 6.

Futter, C. A., Chicago, Ill. Eyelash curlers. Serial No. 329,017; Aug. 30. Class 44.

Gal'an Laboratories. (See Galligan, James P.)

Galligan, James P., doing business as Gal'an Laboratories, South Chicago, Ill. Bath tonic. Serial No. 328,304; Aug. 30. Class 6.

Gardner, Wilbur A., doing business as J. R. Neff Co. and also The Wilbur Gardner Company, Glendale, Calif. Coffee substitute. Serial No. 317,081; Aug. 30. Class 46.

Garres-Fourche, Bordeaux, France. Maltless beverages and ingredients for making same. Serial No. 328,525–6; Aug. 30. Class 45.

General Electric Company, Schenectady, N. Y. Clothes wringers and parts thereof. Serial No. 328,986; Aug. 30. Class 24.

Gerrald, Alonzo M., doing business as E. E. Medicine Co., Greenville, S. C. Headache powder. Serial No. 328,240; Aug. 30. Class 6.

Gerro, Ossip A., doing business as Fantazn Laboratories, Los Angeles, Calif. Anæsthetic. Serial No. 328,805; Aug. 30. Class 6.

Goodhand-Grafmuller, Inc., New York, N. Y. Gloves. Serial No. 319,244; Aug. 30. Class 39.

Great Atlantic & Pacific Tea Company, The, doing business as The Quaker Maid Co. Inc., New York, N. Y. Tea. Serial No. 327,899; Aug. 30. Class 46.

Greist Mfg. Co., The, New Haven, Conn. Portable electric lamps. Serial No. 328,386; Aug. 30. Class 21.

Harbor Coal Co. Inc., New York, N. Y. Coal. Serial No. 328,123; Aug. 30. Class 1.

Harris, Henry E., Boston, Mass. Postage stamp hinges. Serial No. 328,859; Aug. 30. Class 37.

High, Joe, Inc., Washington, D. C. Sink traps, faucets, tub wastes, etc. Serial No. 328,691; Aug. 30. Class 13.

Holland Shoe Co., Holland, Mich. Boots and shoes and tips therefor. Serial No. 328,125; Aug. 30. Class 39.

Hrynkiewicz, Anthony, doing business as Polonia Coffee Co., Jersey City, N. J. Canned vegetables. Serial No. 324,560; Aug. 30. Class 46.

Imperial Crown Perfumery Co. (See Meyer Brothers Drug Company.)

Kellogg Company, Battle Creek, Mich. Rotary chart. Serial No. 328,956; Aug. 30. Class 38.

King Dobbs & Company, Chattanooga, Tenn. Canned fruits, vegetables, fish, etc. Serial No. 321,384; Aug. 30. Class 46.

Knapp & Cooke, Euclid, Ohio. Varnishes, lacquers, paint enamels, etc. Serial No. 328,175; Aug. 30. Class 16.

Kolter, Abraham, Brooklyn, N. Y. Maltless beverage. Serial No. 328,433; Aug. 30. Class 45.

Ladycraft Dresses, Inc., New York, N. Y. Dresses, coats, skirts, shirt waists, etc. Serial No. 328,101; Aug. 30. Class 39.

Lege-On-Aire Beverage Company, Minneapolis, Minn. Maltless beverage. Serial No. 321,348; Aug. 30. Class 45.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Lincoln Electric Company, The, Cleveland, Ohio. Metallic welding electrodes. Serial Nos. 328,011–12; Aug. 30. Class 14.
Luca, Angeline U., doing business as Uccelline Product Company, Meriden, Conn. Preparation for beautifying the skin. Serial No. 327,698; Aug. 30. Class 6.
M and M Plywood Corporation, Longview, Wash., and Portland, Oreg. Laminated structural wood. Serial No. 328,795; Aug. 30. Class 12.
Manufacture Dijonnaise Des Biscuits Pernot, Societe Anonyme, Dijon, France. Cakes, biscuits, crackers, etc. Serial No. 328,443; Aug. 30. Class 46.
Marin, Manuel, & Co., Mayaguez, P. R. Medicinal preparations. Serial No. 326,865; Aug. 30. Class 6.
Matsushita Shoten Ltd., Osaka-City, Japan. Pickles. Serial No. 309,648; Aug. 30. Class 46.
Matsuyama, Prof. F. A., San Francisco, Calif. Foot liniment, ointment, powder, etc. Serial No. 327,841; Aug. 30. Class 6.
Medical Accessories, Inc., Chicago, Ill. Preparation for the treatment of gonorrhea. Serial No. 327,733; Aug. 30. Class 6.
Melville Shoe Corporation, New York, N. Y. Shoes. Serial No. 328,359; Aug. 30. Class 39.
Mento, James, Philadelphia, Pa. Hair restorer and skin antiseptic. Serial No. 327,912; Aug. 30. Class 6.
Meyer Brothers Drug Company, doing business as Imperial Crown Perfumery Co., St. Louis, Mo. Preparation which encourages and holds a natural wave to the hair. Serial No. 329,055; Aug. 30. Class 6.
Midway Chemical Company, Chicago, Ill. Polish for pianos, furniture, floors, etc. Serial No. 328,882; Aug. 30. Class 16.
Midwest Hardware Company, Chicago, Ill. Liquid shampoos. Serial No. 327,915; Aug. 30. Class 6.
Multigraph Company, Wilmington, Del., and Cleveland, Ohio. Materials for preserving the blankets of printing machines. Serial No. 328,361; Aug. 30. Class 6.
Multigraph Company, Wilmington, Del., and Cleveland, Ohio. Materials for drawing and writing on planographic printing plates. Serial No. 328,362; Aug. 30. Class 6.
Multigraph Company, Wilmington, Del., and Cleveland, Ohio. Materials and solutions for developing photographically applied images on printing plates. Serial No. 328,363; Aug. 30. Class 6.
Multigraph Company, Wilmington, Del., and Cleveland, Ohio. Materials and solutions for renewing used writing plates. Serial No. 328,364; Aug. 30. Class 6.
Munez Wurth Laboratories. (See Peoples Drug Stores, Inc.)
Neff, J. R., Co. (See Gardner, Wilbur A.)
Neustadter, A., & Co. Inc., Brooklyn, N Y. Blank books, pads, pencils, etc. Serial No. 329,091; Aug. 30. Class 37.
Nu-Jul. (See Smith, Robert T.)
Odor Away Company, The. (See Ryan, Willing W.)
Oneida Community Limited, Oneida, N. Y. Flatware, hollow-ware, and cutlery. Serial No. 325,957; Aug. 30. Class 28.
Oxford Paper Company, New York, N. Y. Paper for printing. Serial No. 328,995; Aug. 30. Class 37.
Paris Beauty Parlor Supply Co. Ltd., Los Angeles and San Francisco, Calif., and Salt Lake City, Utah. Hydrogen peroxide. Serial No. 327,983; Aug. 30. Class 6.
Parke, Davis & Co., Detroit, Mich. Preparation for use in the treatment of conditions involving deficient utilization in the body of calcium and phosphorus. Serial No. 325,796; Aug. 30. Class 6.
People's Drug Stores, Inc., doing business as Munez Wurth Laboratories, Washington, D. C. Epsom salt, sodium bicarbonate, bay rum, etc. Serial No. 326,615; Aug. 30. Class 6.
Pharis Tire and Rubber Company, The, Newark, Ohio. Pneumatic rubber tires. Serial No. 326,911; Aug. 30. Class 35.
Polonia Coffee Co. (See Hrynkiewicz, Anthony.)
Polyphase Corporation, The, New York, N. Y. Beauty cream and perfume. Serial No. 327,768; Aug. 30. Class 6.
Prest-O-Lite Storage Battery Corporation, Speedway, Ind. Storage batteries. Serial No. 328,893; Aug. 30. Class 21.
Pyo-Nox Company, Los Angeles, Calif. Medicine. Serial No. 328,308; Aug. 30. Class 6.
Quaker Maid Co., Inc., The. (See Great Atlantic & Pacific Tea Company.)
Radbill Oil Company, Philadelphia, Pa. Dry cleaning fluid. Serial No. 328,847; Aug. 30. Class 4.
Rocky Mountain Chemical and Manufacturing Co., Phoenix, Ariz. Preparations of chemical carbon removers for internal combustion engines. Serial No. 327,889; Aug. 30. Class 6.
Royal Laboratories, Inc., Newark, N. J. Skin ointment, salves, antiseptic liniment, etc. Serial No. 326,913; Aug. 30. Class 6.
Russ Manufacturing Company, The, Cleveland, Ohio. Soda fountains. Serial No. 320,036; Aug. 30. Class 23.
Ryan, William W., doing business as The Odor Away Company, Fort Worth, Tex. Preparation containing chemical properties for the elimination of body odors. Serial No. 327,567; Aug. 30. Class 6.
Seminole Paper Corporation, Chicago, Ill. Toilet paper. Serial No. 328,187; Aug. 30. Class 37.
Smith, Robert E., doing business as Nu-Jul, New York, N. Y. Jewelry cleaning solution. Serial No. 328,966; Aug. 30. Class 4.
Smith, William D., Parkersburg, W. Va. Lumber. Serial No. 328,514; Aug. 30. Class 12.
Standard Brands Incorporated, New York, N. Y. Mixture of egg material and other substances. Serial Nos. 328,314–5; Aug. 30. Class 46.
Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Denaturants. Serial No. 328,340; Aug. 30. Class 6.
Starline, Inc., Harvard, Ill. Barn siphon head ventilators. Serial No. 326,916; Aug. 30. Class 34.
Stein, A., & Company, Chicago, Ill. Girdles and hose supporters. Serial No. 327,950; Aug. 30. Class 39.
Stetson, John B., Company, Philadelphia, Pa. Hats and caps. Serial No. 287,209; Aug. 30. Class 39.
Stewart-Warner Corporation, Chicago, Ill. Cameras, projectors, and motion picture apparatus. Serial No. 328,571; Aug. 30. Class 26.
Strutwear Knitting Company, Minneapolis, Minn. Hosiery and underwear. Serial No. 329,029; Aug. 30. Class 39.
Tetley, Joshua, & Son, Limited, Leeds, England. Bituminous enamel. Serial No. 327,839; Aug. 30. Class 16.
Thornton & Minor Sanitarium Company, The, doing business as Thornton & Minor Clinic, Kansas City, Mo. Pile ointment, blood tonic, laxative preparations, and stomach medicine. Serial No. 326,650; Aug. 30. Class 6.
Tolfree, Edward R., doing business as "X" Laboratories, New York, N. Y. Lubricating oils. Serial No. 329,000; Aug. 30. Class 15.
Tracey, Stanley J., doing business as United Tennis Racket Co., New York, N. Y. Tennis rackets. Serial No. 313,160; Aug. 30. Class 22.
Trojan Hosiery Mills, Inc., Indianapolis, Ind. Hosiery. Serial No. 327,994; Aug. 30. Class 39.
Tru-Fit Dress Co. Inc., New York, N. Y. Piece goods in the nature of cut-out dresses. Serial No. 315,612; Aug. 30. Class 39.
Tuthill, Emmor G., Los Angeles, Calif. Toilet creams. Serial No. 327,610; Aug. 30. Class 6.
Uccelline Product Company. (See Luca, Angeline U.)
U. S. Cast Magnet Steel Corporation, Lawrence, Mass. Non-electrical advertising display signs. Serial No. 313,161; Aug. 30. Class 50.
United Tennis Racket Co. (See Tracey, Stanley J.)
Upham, Samuel R., doing business as Upham Company, Boston, Mass. Skin lotion. Serial No. 326,956; Aug. 30. Class 6.
Upjohn Company, The, Kalamazoo, Mich. Extract of liver preparation. Serial No. 327,777; Aug. 30. Class 6.
Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Ammeters, voltmeters, wattmeters, etc. Serial No. 327,237; Aug. 30. Class 24.
Wilson-Jones Company, Chicago, Ill. Blank books, pads, envelopes, etc. Serial No. 328,233; Aug. 30. Class 37.
Winthrop Chemical Company, Inc., New York, N. Y. Seasoning agent for salt free diet. Serial No. 328,256; Aug. 30. Class 6.
Winthrop Chemical Company, Inc., New York, N. Y. Preparation for use as a vasodilator and cardiotonic. Serial No. 328,967; Aug. 30. Class 6.
Wróblewski, David, doing business as D. Wróblewski, Brooklyn, N. Y. Preparation for buildinig up the system, enriching the blood, etc.; and hair tonic. Serial No. 327,265; Aug. 30. Class 6.
"X" Laboratories. (See Tolfree, Edward R.)
Young Radiator Company, Racine, Wis. Heaters, radiators, and parts thereof. Serial No. 328,676; Aug. 30. Class 34.

LIST OF REGISTRANTS OF TRADE-MARKS

Akron Equipment Company, The, Akron, Ohio. Ice cream cutting machines. 297,095; Aug. 30; Serial No. 326,881; published June 14, 1932. Class 23.
Alabastine Company, Grand Rapids, Mich. Base for a water-proof cement wall coating or covering. 296,985; Aug. 30; Serial No. 325,841; published June 14, 1932. Class 16.
Alabastine Company, Grand Rapids, Mich. Dry colors in the nature of a paint. 297,002; Aug. 30; Serial No. 325,843; published June 14, 1932. Class 16.
Allbestos Corporation, Philadelphia, Pa. Brake linings. 297,002; Aug. 30; Serial No. 326,450; published June 14, 1932. Class 35.

Allbestos Corporation, Philadelphia, Pa. Brake linings. 297,100; Aug. 30; Serial No. 326,701; published June 14, 1932. Class 35.
Allola Co., Rochester, Pa. Cold, vanishing, and make-up creams. 297,008; Aug. 30; Serial No. 313,989; published May 31, 1932. Class 6.
American Bemberg Corporation. (See Bemberg, I. P., Aktiengesellschaft, assignor.)
American Bleached Goods Company, Inc., New York, N. Y. Cotton piece goods. 296,957; Aug. 30; Serial No. 326,883; published June 14, 1932. Class 42.
American Felt Company, New York, N. Y. Wool felt. 297,043; Aug. 30; Serial No. 326,319; published June 14, 1932. Class 50.
American Steel and Wire Company of New Jersey, The, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass.; and Hoboken, N. J. Insulated electric cord. 297,092; Aug. 30; Serial No. 325,976; published June 14, 1932. Class 21.
Arechabala, José, S. A., Cardenas, Cuba. Sugar, vinegar, table syrups, and molasses. 296,951; Aug. 30; Serial No. 320,567; published June 14, 1932. Class 46.
Babcock & Wilcox Company, The, Bayonne, N. J., to The Babcock & Wilcox Company, New York, N. Y. Boilers, superheaters, stokers, and parts thereof. 89,810; renewed Jan. 14, 1933.
Beaver Shirt Co., Inc., New York, N. Y. Collars for shirts. 297,114; Aug. 30. Class 39.
Bemberg, I. P., Aktiengesellschaft, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Thread and yarn. 296,987; Aug. 30; Serial No. 325,056; published May 24, 1932. Class 43.
Best Products Co. (See Terry, Walter T., jr.)
Betty Jean Laboratories, Fort Wayne, Ind. Cold cream, powder, shampoo, etc. 297,024; Aug. 30; Serial No. 324,871; published May 24, 1932. Class 6.
Biggs Boiler Works Company, The, Akron, Ohio. Steel pipe. 296,940; Aug. 30; Serial No. 320,714; published June 14, 1932. Class 13.
Bio-Medical Research Laboratories, Inc., Brooklyn, N. Y. Healing antiseptic. 297,015; Aug. 30; Serial No. 292,969; published Jan. 14, 1930. Class 6.
Bio-Medical Research Laboratories, Inc., Brooklyn, N. Y. Healing antiseptic. 297,016; Aug. 30; Serial No. 292,971; published Jan. 14, 1930. Class 6.
Blackfords, Inc., New York, N. Y. Fish. 297,049; Aug. 30; Serial No. 326,453; published June 14, 1932. Class 46.
Blackman & Blackman, Inc., doing business as Premo Laboratories, New York, N. Y. Chemical preventatives for the prevention of venereal diseases. 297,007; Aug. 30; Serial No. 312,751; published May 31, 1932. Class 6.
Block, David J., doing business as Refrigerator Accessories Company, Chicago, Ill. Deodorizer composition. 297,078; Aug. 30; Serial No. 325,028; published May 31, 1932. Class 6.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 297,006; Aug. 30; Serial No. 316,802; published June 14, 1932. Class 42.
Bon Ami Company, The, New York, N. Y. Tooth paste. 297,071; Aug. 30; Serial No. 325,559; published May 24, 1932. Class 6.
Boucher Cork Co., Inc., New York, N. Y. Strips of tipping material to be applied to strips of cigarette paper. 297,022; Aug. 30; Serial No. 320,716; published June 7, 1932. Class 8.
Boynton, E. L., doing business as California Cleaning Products Co., Los Angeles, Calif. Powder for dry cleaning. 296,997; Aug. 30; Serial No. 326,576; published June 14, 1932. Class 4.
Brighton Ladies Hat Co. Inc., New York, N. Y. Hats. 297,108; Aug. 30; Serial No. 325,282; published June 14, 1932. Class 39.
British Bewoid Company Limited, London, England. Sizes, emulsions, etc. 296,948; Aug. 30; Serial No. 320,753; published May 31, 1932. Class 6.
Brown, Boveri & Cie., Baden, Switzerland. Heating tubes and tube couplings. 296,959; Aug. 30; Serial No. 326,805; published June 14, 1932. Class 13.
Buck, George E., Palmer and Worcester, Mass., assignor, by mesne assignments, to Tide Water Oil Company, New York, N. Y. Oils and greases. 88,238; renewed Sept. 10, 1932.
Buckner, Neptune, doing business as New Life Battery Company, Asheville, N. C. Solvent compound. 296,978; Aug. 30; Serial No. 322,202; published May 31, 1932. Class 6.
Burke, Charles, & Sons, Detroit, Mich. Copper polish. 297,003; Aug. 30; Serial No. 325,383; published June 14, 1932. Class 4.
Calavo Growers of California, Los Angeles, Calif. Avocado pulp. 297,013; Aug. 30; Serial No. 306,592; published June 14, 1932. Class 46.
California Cleaning Products Co. (See Boynton, E. L.)
California Perfume Company, Inc., New York, N. Y. Perfumes, toilet waters, powder and rouge compacts, etc. 297,127; Aug. 30. Class 6.
Carter-Venable Co., Inc., The, Richmond, Va. Poultry and dairy feeds. 296,984; Aug. 30; Serial No. 325,564; published June 14, 1932. Class 46.
Celanese Corporation of America, New York, N. Y. Fabrics made of silk and cellulose derivatives. 296,955–6; Aug. 30; Serial Nos. 317,157–8; published June 14, 1932. Class 42.
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. 296,980; Aug. 30; Serial No. 322,418; published June 14, 1932. Class 42.
Celluloid Corporation, Newark, N. J. Blending and toilet brushes. 297,032; Aug. 30; Serial No. 326,633; published June 7, 1932. Class 29.
Chase Brass & Copper Co. Incorporated, Waterbury, Conn. Flash lights. 297,086; Aug. 30; Serial No. 326,321; published June 14, 1932. Class 21.
Chicago Flexible Shaft Company, Chicago, Ill. Electric sadirons. 297,079; Aug. 30; Serial No. 326,537; published June 14, 1932. Class 21.
Clark, John W. M., Co., The, Athol, Mass. Remedy for certain diseases. 87,043; renewed June 25, 1932.
Climax Rubber Company. (See Stein, Jacob.)
Consolidated Wire & Associated Corporations, Chicago, Ill. Bare, insulated wire, cord, and cable, etc. 296,952; Aug. 30; Serial No. 319,511; published June 14, 1932. Class 21.
Continental Oil Company, Ponca City, Okla. Lubricating oil. 297,088; Aug. 30; Serial No. 326,360; published June 14, 1932. Class 15.
Cutler-Hammer, Inc., Milwaukee, Wis. Enclosed switches of the fuse type. 296,970; Aug. 30; Serial No. 324,093; published June 14, 1932. Class 21.
Dixie Mills Company, East St. Louis, Ill. Pig and hog feed. 296,976; Aug. 30; Serial No. 323,860; published June 14, 1932. Class 46.
Dixie Mills Company, East St. Louis, Ill. Dairy feeds. 296,977; Aug. 30; Serial No. 323,861; published June 14, 1932. Class 46.
D'Orsay Perfumeries Corporation, New York, N. Y. Perfumes, toilet waters, rouge, etc. 297,010; Aug. 30; Serial No. 316,771; published May 31, 1932. Class 6.
Driver-Harris Company, Harrison, N. J. Wire. 297,039; Aug. 30; Serial No. 326,518; published June 7, 1932. Class 14.
Drost, H., Box Mfg. Co., The, Manitowoc, Wis. Cigars. 297,035; Aug. 30; Serial No. 326,635; published June 7, 1932. Class 17.
Ducharne, F., Silk Co. Inc., New York, N. Y. Piece goods of silk, rayon, cotton, and wool. 296,958; Aug. 30; Serial No. 326,808; published June 14, 1932. Class 42.
Dunn, Richard T., doing business as J. S. Merrell Drug Company, St. Louis, Mo. Liniment. 296,969; Aug. 30; Serial No. 324,065; published May 24, 1932. Class 6.
Du Pont Cellophane Company, Inc. (See Euler, Franz, & Co., assignor.)
Duray Chem. Co. (See Lukens, Clarence D.)
Durex Abrasives Corporation, Jersey City, N. J. Coated fabric tape and coated cellulose tape. 297,106; Aug. 30; Serial No. 325,323; published June 7, 1932. Class 50.
Dynamit-Actien-Gesellschaft vormals Alfred Nobel & Co., Hamburg, Troisdorf, Germany. Partly prepared cellulose acetate material. 297,033; Aug. 30; Serial No. 326,707; published June 14, 1932. Class 1.
Economic Machinery Company, assignor to Economic Machinery Company, Worcester, Mass. Labeling machines and parts thereof. 89,019; renewed Nov. 5, 1932.
Economy Macaroni Co. (See Scotland, Bayard S.)
Edison Storage Battery Company, assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Coating and protecting compound of the nature of a paint and varnish. 296,944; Aug. 30; Serial No. 321,753; published June 14, 1932. Class 16.
Elgin National Watch Company, Chicago and Elgin, Ill. Watches, watch movements, and watch cases. 297,034; Aug. 30; Serial No. 326,708; published June 14, 1932. Class 27.
Elgin National Watch Company, Chicago and Elgin, Ill. Watches, watch movements, and watch cases. 297,036; Aug. 30; Serial No. 326,709; published June 14, 1932. Class 27.
Euler, Franz, & Co., assignor to Du Pont Cellophane Company, Inc., New York, N. Y. Parchment tissue. 88,477; renewed Sept. 24, 1932.
Evans, B. P., doing business as Wonder Hoe Co., Fort Worth, Tex. Hoes. 297,083; Aug. 30; Serial No. 326,522; published June 14, 1932. Class 23.
Ferro Machine & Foundry Company, The, Cleveland, Ohio. Iron castings. 297,014; Aug. 30; Serial No. 305,103; published June 7, 1932. Class 14.
Fields, Eugene, Jasper, Ind. Preparation for hog cholera and thumps. 297,126; Aug. 30. Class 6.
Fink, Isidore, doing business as Reischwuhr Malt Products, Astoria, Long Island, N. Y. Barley malt syrup. 297,003; Aug. 30; Serial No. 321,994; published June 14, 1932. Class 46.
Foret, Norbert J., doing business as Foret Laborstories, Raceland, La. Foot lotion. 297,072; Aug. 30; Serial No. 325,257; published May 24, 1932. Class 6.
Fort Defiance Mills. (See Grove, William I.)
Fort Howard Paper Company, Green Bay, Wis. Toilet paper, paper towels and napkins, etc. 297,060; Aug. 30; Serial No. 326,852; published June 14, 1932. Class 37.
Foxboro Company, The, Foxboro, Mass. Combined thermometer and liquid level gage. 297,080; Aug. 30; Serial No. 326,538; published June 14, 1932. Class 26.
Franklin Simon & Co. Inc., New York, N. Y. Riding suits, coats, habits, hats, and boots. 297,042; Aug. 30; Serial No. 326,254; published June 14, 1932. Class 39.

Fur Bearers, Inc., Watertown, N. Y. Dressed rabbit meat. 297,123; Aug. 30. Class 46.
Garrett County Maple Products Association, Oakland, Md. Maple syrup. 297,091; Aug. 30; Serial No. 325,946; published June 14, 1932. Class 46.
Gaseteria Incorporated, Indianapolis, Ind. Lubricating oils. 296,953; Aug. 30; Serial No. 317,713; published May 17, 1932. Class 15.
Geier, P. A., Company, The, Cleveland, Ohio. Electrically operated suction cleaners. 296,972; Aug. 30; Serial No. 324,664; published June 14, 1932. Class 21.
General American Tank Car Corporation, Chicago, Ill. Tank cars. 297,001; Aug. 30; Serial No. 326,286; published June 14, 1932. Class 19.
General Electric Company, Schenectady, N. Y. Capacitors and dielectric material. 296,981; Aug. 30; Serial No. 322,633; published June 14, 1932. Class 21.
Gimbel Brothers, Inc., New York, N. Y., Philadelphia, Pa., Milwaukee, Wis., and Pittsburgh, Pa. Handkerchiefs. 296,998; Aug. 30; Serial No. 326,678; published June 14, 1932. Class 42.
Gould, Fred, Newfield, N. J. Pigeon grit. 297,037; Aug. 30; Serial No. 326,712; published June 14, 1932. Class 1.
Gray, Richard B., doing business as The Montauk Laboratories, Bay Shore, N. Y. Medicinal preparation. 297,064; Aug. 30; Serial No. 325,752; published May 31, 1932. Class 6.
Greene, Edward, doing business as E. Greene & Company, Newark, N. J. Printed paper caution signals for index systems. 296,967; Aug. 30; Serial No. 325,578; published June 14, 1932. Class 37.
Greenhall, Leonard D., doing business as Greenhall Bros., Brooklyn, N. Y. Suspenders, garters, and apparel belts. 297,104; Aug. 30; Serial No. 325,469; published June 14, 1932. Class 39.
Grosche, Frederick W., Baltimore, Md. Storage batteries. 297,087; Aug. 30; Serial No. 326,323; published June 14, 1932. Class 21.
Grove, William I., doing business as Fort Defiance Mills, Fort Defiance, Va. Flour. 296,961; Aug. 30; Serial No. 326,783; published June 14, 1932. Class 46.
Hamilton, Janet, doing business as Hamilton Laboratories, Glendale, Calif. Corrective formula for stomach troubles. 296,964; Aug. 30; Serial No. 325,290; published May 31, 1932. Class 6.
Henckels, J. A., New York, N. Y. Razors. 88,286; renewed Sept. 10, 1932.
Henckels, J. A., New York, N. Y. Razors. 88,288; renewed Sept. 20, 1932.
Henckels, J. A., New York, N. Y. Razors. 89,257; renewed Dec. 3, 1932.
Hibbard, Spencer, Bartlett & Co., Chicago, Ill. Bit braces, expansive bits, auger bits, etc. 297,084; Aug. 30; Serial No. 325,949; published June 14, 1932. Class 23.
Hills, William, jr., assignor to The Hills Brothers Company, New York, N. Y. Dates. 89,655; renewed Dec. 31, 1932.
Hokkaido Tanko Kisen (Kabushiki) Kaisha, Mororan, Japan, to Hokkaido Tanko Kisen (Kabushiki) Kaisha, Tokio, Japan. Coal. 87,761; renewed Aug. 6, 1932.
Hormez Laboratories. (See Philippe, Louis, Inc.)
Houbigant, Inc., New York, N. Y. Perfumes. 297,050; Aug. 30; Serial No. 325,658; published May 31, 1932. Class 6.
Houbigant, Inc., New York, N. Y. Perfume, toilet water, bath salts, etc. 297,065; Aug. 30; Serial No. 325,656; published May 24, 1932. Class 6.
Houbigant, Inc., New York, N. Y. Perfumes, toilet water, face and talcum powder, etc. 297,066; Aug. 30; Serial No. 325,657; published May 24, 1932. Class 6.
Hyre, Charles G., doing business as The Pepsotalis Company, Morgantown, W. Va. Medicinal preparation. 297,051; Aug. 30; Serial No. 325,688; published May 31, 1932. Class 6.
International Milling Company, Minneapolis, Minn. Wheat flour. 296,960; Aug. 30; Serial No. 326,785; published June 14, 1932. Class 46.
Jaques Manufacturing Company, Chicago, Ill. Baking powder. 297,070; Aug. 30; Serial No. 325,449; published May 24, 1932. Class 6.
Jay Vee Studio. (See Littig, John V.)
Jenkins, Walter L., Cleveland, Ohio. Bridge-score table guide. 297,048; Aug. 30; Serial No. 326,370; published June 14, 1932. Class 37.
Kalamazoo Vegetable Parchment Company, Parchment, Mich. Writing paper. 297,062; Aug. 30; Serial No. 326,902; published June 14, 1932. Class 37.
Kayon Company, The, Milwaukee, Wis. Adhesive cement. 297,047; Aug. 30; Serial No. 326,327; published June 14, 1932. Class 5.
Keiser, James R., Inc., New York, N. Y. Handkerchiefs and kerchiefs. 87,080; renewed June 25, 1932.
Kittess, Jason J., Los Angeles, Calif. Bleaching fluid. 297,044; Aug. 30; Serial No. 325,792; published May 31, 1932. Class 6.
Klein, Chas. H., doing business as Thrift-E-Sole Company, Cincinnati, Ohio. Plastic substances for re-soling shoes. 296,990; Aug. 30; Serial No. 314,286; published June 7, 1932. Class 50.
La Compagnie Pharmaceutique Desbergers, Montreal, Quebec, Canada. Soporific medicine. 297,077; Aug. 30; Serial No. 325,005; published May 31, 1932. Class 6.
La Favorite Rubber M'f'g., Hawthorne, to La Favorite Rubber Mfg. Co., Paterson, N. J. Machinery packing and tires. 87,775; renewed Aug. 6, 1932.
La Jerome Laboratories, Inc., Chicago, Ill. Waving lotion and tonic for hair. 297,074; Aug. 30; Serial No. 325,040; published May 31, 1932. Class 6.
Lambert, Louis F., doing business as Pennsylvania Mushroom Co., Coatesville, Pa. Canned mushrooms. 297,059; Aug. 30; Serial No. 326,551; published June 14, 1932. Class 46.
Landers, Frary & Clarke, New Britain, Conn. Table, bread, carving, etc., knives. 297,121; Aug. 30. Class 23.
Landers, Frary & Clarke, New Britain, Conn. Balances and scales, etc. 297,122; Aug. 30. Class 26.
Lansing Company, Lansing, Mich. Wheelbarrows, handtrucks, warehouse-trucks and hard-carts. 87,348; renewed July 9, 1932.
Lansing Company, Lansing, Mich. Warehouse trucks. 87,349; renewed July 9, 1932.
Larabee Flour Mills Company, Kansas City, Kans., and Kansas City, Mo. Wheat flour. 296,995; Aug. 30; Serial No. 326,483; published June 14, 1932. Class 46.
Larus & Brother Company, Incorporated, Richmond, Va. Smoking tobacco. 297,025; Aug. 30; Serial No. 319,897; published June 14, 1932. Class 17.
Lehman, Louis H., doing business as Lehman Sprayshield Company, Philadelphia, Pa. Glass shower stall doors, shower bath sbields, and bath enclosures. 296,950; Aug. 30; Serial No. 320,505; published June 14, 1932. Class 13.
Littig, John V., doing business as Jay Vee Studio, Washington, D. C. Tables. 297,081; Aug. 30; Serial No. 326,427; published June 14, 1932. Class 32.
Looschen, John W., Paterson, N. J. Boat hoists. 297,009; Aug. 30; Serial No. 314,505; published June 14, 1932. Class 23.
Lukens, Clarence D., doing business as Duray Chem. Co., St. Louis, Mo. Vaginal antiseptic suppositories. 297,117; Aug. 30. Class 6.
Magnano, Antonio, to A. Magnano Company, Seattle, Wash., successor. Olive oil. 87,640; renewed July 30, 1932.
Marathon Razor Blade Co., Inc., Irvington, N. J. Safety razor blades. 297,093; Aug. 30; Serial No. 326,754; published June 14, 1932. Class 23.
Marathon Razor Blade Co., Inc., Irvington, N. J. Safety razor blades. 297,096–98; Aug. 30; Serial Nos. 326,751–3; published June 14, 1932. Class 23.
Master Metal Products, Inc., Buffalo, N. Y. Sink strainers. 297,128; Aug. 30. Class 13.
McDevitt, James E., New York, N. Y. Grips for golf clubs. 297,119; Aug. 30. Class 22.
McGilvray, J. Bain, Detroit, Mich. Medicinal preparation. 297,017; Aug. 30; Serial No. 323,899; published May 31, 1932. Class 6.
McIntyre-Burrall Co., Green Bay, Wis. Horse collars, saddles, blankets, and fly-nets. 87,553; renewed July 23, 1932.
McNamara, John C., New Orleans, La. Ointment. 296,954; Aug. 30; Serial No. 317,611; published May 24, 1932. Class 6.
Medlock, Landrum L., Roscoe, Tex. Liniment. 297,005; Aug. 30; Serial No. 312,400; published May 24, 1932. Class 6.
Meredith Publishing Company, Des Moines, Iowa. Lists and specifications for house plans and architectural plans. 297,018; Aug. 30; Serial No. 324,826; published June 14, 1932. Class 38.
Merrell, J. S., Drug Company. (See Dunn, Richard T.)
Midway Chemical Company, Chicago, Ill. Liquid material for the destruction of weeds. 296,968; Aug. 30; Serial No. 325,620; published May 31, 1932. Class 6.
Minute Safety Razor Corp., Newark, N. J. Safety razor blades. 297,099; Aug. 30; Serial No. 326,716; published June 14, 1932. Class 23.
Mitchell, G. F., & Sons Company, The, Cleveland, Ohio. Boxes for burial purposes. 296,986; Aug. 30; Serial No. 325,643; published June 14, 1932. Class 2.
Montauk Laboratories, The. (See Gray, Richard B.)
Mt. Signal Produce Co., Calexico, Calif. Fresh lettuce, strawberries, and melons. 297,004; Aug. 30; Serial No. 312,447; published June 14, 1932. Class 46.
National Chemical Products Company (Incorporated). (See Simmons, Henry H.)
National Sales Promotion Institute, Inc., Philadelphia, Pa. Magazine. 297,061; Aug. 30; Serial No. 326,756; published June 14, 1932. Class 38.
Nebo Drug Co. (See Smolen, Leon A.)
Neidich Process Company, Burlington, N. J. Carbon paper and typewriter ribbons. 297,109–11; Aug. 30; Serial Nos. 325,010–12; published June 7, 1932. Class 11.
Neidich Process Company, Burlington, N. J. Carbon paper and typewriter ribbons. 297,112–13; Aug. 30; Serial Nos. 325,008–9; published June 7, 1932. Class 11.
Nevada Packing Company, Reno, Nev. Smoked meats. 297,118; Aug. 30. Class 46.
New Life Battery Company. (See Buckner, Neptune.)
Newport Company, The, Carrollville, Wis. Pine-oil and borneol. 296,992; Aug. 30; Serial No. 312,856; published May 24, 1932. Class 6.
Newport Company, The, Carrollville, Wis. Pine-oil and borneol. 296,994; Aug. 30; Serial No. 312,855; published May 24, 1932. Class 6.

Nolon, A. H., & Son, Inc., Lauderdale, Miss. Coffee. 297,011; Aug. 30; Serial No. 307,170; published June 14, 1932. Class 46.
Nonspi Company, The, New York, N. Y. Toilet preparations. 296,947; Aug. 30; Serial No. 321,389; published June 7, 1932. Class 6.
Oklahoma Medicine Company, Fort Gibson, Okla., to Ed. Williams, Hulbert, Okla., successor. Liquid medicines for blood diseases. 89,688; renewed Dec. 31, 1932.
Park & Tilford, New York, N. Y. Creams, hand lotion, and a skin tonic. 296,965; Aug. 30; Serial No. 325,406; published May 31, 1932. Class 6.
Parker-Kalon Corporation, New York, N. Y. Nails, drive screws, screws, rivets, etc. 296,996; Aug. 30; Serial No. 326,554; published June 14, 1932. Class 13.
Pennsylvania Mushroom Co. (See Lambert, Louis F.)
Pennsylvania Petroleum Products Co., Philadelphia, Pa. Oils and lubricants. 297,089; Aug. 30; Serial No. 325,797; published June 14, 1932. Class 15.
Pepperell Manufacturing Company, Boston, Mass. Publication. 297,052; Aug. 30; Serial No. 326,616; published June 14, 1932. Class 38.
Pepsotalis Company, The. (See Hyre, Charles G.)
Pérez, Pascual, New York, N. Y. Necktie pressing and reshaping device. 297,105; Aug. 30; Serial No. 325,268; published June 7, 1932. Class 50.
Philipp Brothers, Inc., New York, N. Y. Monomethyl paramidophenol. 296,973; Aug. 30; Serial No. 324,730; published May 24, 1932. Class 6.
Philippe, Louis, Inc., doing business as Hormez Laboratories, Chicago, Ill. Compound of glandular substances in combination with skin emollients used as a face cream. 296,971; Aug. 30; Serial No. 324,570; published May 3, 1932. Class 6.
Phillips Petroleum Company, Bartlesville, Okla. Motor fuel and lubricating oils. 296,975; Aug. 30; Serial No. 323,697; published June 14, 1932. Class 15.
Pink Supply Company, Minneapolis, Minn. Plain absorbent cheesecloth. 296,988; Aug. 30; Serial No. 325,183; published June 14, 1932. Class 42.
Poirier and Lindeman Company, New York, N. Y. Narrow webbing and braids. 297,027; Aug. 30; Serial No. 325,482; published June 14, 1932. Class 40.
Pond's Extract Company, New York, N. Y. Tissue paper. 297,057; Aug. 30; Serial No. 326,758; published June 14, 1932. Class 37.
Powell, John, & Co., Inc., New York, N. Y. Insecticide. 296,966; Aug.30; Serial No. 325,440; published May 31, 1932. Class 6.
Prejean, Felix, Port Arthur, Tex. Compound to be used as an inhalant. 297,055; Aug. 30; Serial No. 325,757; published May 31, 1932. Class 6.
Premo Laboratories. (See Blackman & Blackman, Inc.)
Prescott & Co., Boston, Mass. Rubber hose. 88,112–3; renewed Aug. 27, 1932.
Prima Manufacturing Company, Inc., Philadelphia, Pa. Electric laundry washing machines. 297,124; Aug. 30. Class 24.
Refrigerator Accessories Company. (See Block, David J.)
Reilly, Frank C., New York, N. Y. Astringents, creams, rouges, etc. 297,053; Aug. 30; Serial No. 325,726; published May 31, 1932. Class 6.
Reischwuhr Malt Products. (See Fink, Isidore.)
Resinox Corporation, New York, N. Y. Solutions of synthetic resins, molding compounds containing synthetic resins, etc. 296,945; Aug. 30; Serial No. 321,894; published Feb. 9, 1932. Class 6.
Reynolds, Maebelle S., doing business as Cille Reynolds, New Orleans, La. Skin tonic, cleansing powder, etc. 296,946; Aug. 30; Serial No. 321,918; published May 24, 1932. Class 6.
Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Waxed sulphite wrapping paper. 296,974; Aug. 30; Serial No. 325,150; published Apr. 26, 1932. Class 37.
Röhm & Haas Company, Philadelphia, Pa. Chemical for use in the textile industry. 297,068; Aug. 30; Serial No. 325,622; published May 24, 1932. Class 6.
Rosen, E., Company, Providence, R. I. Candy. 297,045; Aug. 30; Serial No. 325,974; published June 14, 1932. Class 46.
Rossie Velvet Company, Mystic, Conn. Velvets. 296,963; Aug. 30; Serial No. 326,760; published June 14, 1932. Class 42.
Salfelta, New York, N. Y. Hats. 297,029; Aug. 30; Serial No. 325,858; published June 14, 1932. Class 39.
Shisa, Paul J., doing business as P. J. Shisa Coffee Company, New Orleans, La. Coffee. 297,023; Aug. 30; Serial No. 322,713; published June 14, 1932. Class 46.
Schneiderman Bros., New York, N. Y. Slider controlled fasteners. 296,999; Aug. 30; Serial No. 326,303; published June 14, 1932. Class 18.
Scotland, Bayard S., doing business as Economy Macaroni Co., Joliet, Ill. Macaroni, spaghetti, and noodles. 297,094; Aug. 30; Serial No. 326,838; published June 14, 1932. Class 46.
Scott-Sherry, Boston, Mass. Evacuant for infants and children. 297,073; Aug. 30; Serial No. 325,349; published May 24, 1932. Class 6.
Sears, Roebuck and Co., Chicago, Ill. Corsets, brassières, girdles, etc. 297,028; Aug. 30; Serial No. 325,485; published June 14, 1932. Class 39.
Selders-Mather Corporation, Chicago, Ill. Implement for fastening sheets of paper together. 297,085; Aug. 30; Serial No. 326,165; published June 14, 1932. Class 28.
Shell Chemical Company, San Francisco, Calif. Fertilizer. 297,031; Aug. 30; Serial No. 326,001; published June 7, 1932. Class 10.
Sherwin-Williams Company, The, Cleveland, Ohio. Paints, varnishes, lacquers, etc. 296,979; Aug. 30; Serial No. 322,335; published Feb. 2, 1932. Class 16.
Shigetaro Nao, as assigne of Shinohara Seizi, Tokyo, Japan, assignor to Shigetaro Nao, Menlo Park, Calif. Remedy for cuts and bruises. 88,373; renewed Sept. 10, 1932.
Simmons, Henry H., doing business as National Chemical Products (Incorporated), Casper, Wyo. Antifreeze compound. 297,076; Aug. 30; Serial No. 325,189; published May 24, 1932. Class 6.
Simons Brick Co., Los Angeles, Calif. Building materials. 297,125; Aug. 30. Class 12.
Smolen, Leon A., doing business as Nebo Drug Co., New York, N. Y. Tooth ache drops, wart remover and corn remover preparation, etc. 297,069; Aug. 30; Serial No. 325,387; published May 24, 1932. Class 6.
Société Chimique des Usines du Rhône, Anct. Gilliard, P. Monnet & Cartier, by change of name to Société des Usines Chimiques Rhone-Poulenc, Paris, France. Acids and pharmaceutical preparations. 88,212; renewed Sept. 3, 1932.
Soiltizer Company, The, Cleveland, Ohio. Humus and fertilizers. 297,040; Aug. 30; Serial No. 326,560; published June 7, 1932. Class 10.
Sonneborn, L., Sons, Inc., New York, N. Y. Petrolatum for medicinal purposes. 297,067; Aug. 30; Serial No. 325,603; published May 24, 1932. Class 6.
Squibb, E. R., & Sons, New York, N. Y. Therapeutically activated mineral oils and the like. 296,983; Aug. 30; Serial No. 325,272; published May 31, 1932. Class 6.
Steelcote Manufacturing Company, St. Louis, Mo. Paint and varnish remover, putty, etc. 297,019; Aug. 30; Serial No. 288,624; published July 14, 1932. Class 16.
Stein, Jacob, doing business as Climax Rubber Company, New York and Brooklyn, N. Y. Rubber pants, diapers, bibs, etc. 297,026; Aug. 30; Serial No. 320,703; published June 14, 1932. Class 39.
Stratigos, Evans G., New York, N. Y. Candies and pastry. 297,116; Aug. 30. Class 46.
Studebaker Chemical Company, Elyria, Ohio. Protective primer coatings. 297,000; Aug. 30; Serial No. 326,118; published June 14, 1932. Class 16.
Summit Thread Company, East Hampton, Conn. Cotton threads or yarns. 38,985; renewed Oct. 7, 1932.
Sun-Maid Raisin Growers of California, Fresno, Calif. Dried raisins and fruits. 297,021; Aug. 30; Serial No. 323,727; published June 14, 1932. Class 46.
Terry, Walter T., jr., doing business as The Best Products Co., Kansas City, Mo. Wax and polish. 296,989; Aug. 30; Serial No. 325,200; published June 14, 1932. Class 16.
Thrift-E-Sole Company. (See Klein, Chas. H.)
Tide Water Oil Company. (See Buck, George E., assignor.)
Toledo Plate & Window Glass Company, The, Toledo, Ohio. Plate and window glass. 296,962; Aug. 30; Serial No. 326,765; published June 14, 1932. Class 32.
Tourner, Chester F., Bloomington, Ind. Thrift books. 297,046; Aug. 30; Serial No. 326,170; published June 14, 1932. Class 38.
Trent Laboratories, Cleveland, Ohio. Mouth wash. 297,115; Aug. 30. Class 6.
Trico Fuse Mfg. Co., Milwaukee, Wis. Flexible take-up cords used with electrical appliances. 297,102; Aug. 30; Serial No. 326,652; published June 14, 1932. Class 21.
U. S. Bedding Co., Memphis, Tenn. Mattresses. 89,330; renewed Dec. 10, 1932.
U. S. Oil Company, East Providence, R. I. Lubricating oils and greases. 297,090; Aug. 30; Serial No. 325,927; published June 14, 1932. Class 15.
Upjohn Company, The, Kalamazoo, Mich. Medicinal preparation. 297,075; Aug. 30; Serial No. 325,128; published May 31, 1932. Class 6.
Vallen Electrical Company, Inc., Akron, Ohio. Automatically operated curtains. 296,991; Aug. 30; Serial No. 314,826; published June 7, 1932. Class 50.
Vanity Fair Silk Mills, Reading, Pa. Underwear and hosiery. 297,030; Aug. 30; Serial No. 326,237; published June 14, 1932. Class 39.
Van Raalte Company, New York, N. Y. Hosiery. 297,120; Aug. 30. Class 39.
W. & W. Chemical Co., Brooklyn, N. Y. Chemicals to insure protection against freezing. 297,012; Aug. 30; Serial No. 309,758; published June 16, 1932. Class 6.
Warren Featherbone Company, The, Three Oaks, Mich. Bias fold tape. 297,020; Aug. 30; Serial No. 323,260; published June 14, 1932. Class 40.
Warwick Chemical Company, West Warwick, R. I. Substances or chemicals. 297,056; Aug. 30; Serial No. 325,769; published May 31, 1932. Class 6.
Washington Petroleum Products, Inc., South Washington, Va. Motor lubricating oils. 297,004; Aug. 30; Serial No. 325,626; published June 14, 1932. Class 15.
Waterlox, Inc., Detroit, Mich. Chemical waterproofing compound. 296,982; Aug. 30; Serial No. 323,266; published May 31, 1932. Class 6.

Welmaid Manufacturing Corporation, Chicago, Ill. Boxes, bags, and rolls for silverware. 297,129; Aug. 30. Class 2.
Western Clock Company, Peru, Ill. Clocks and watches. 297,041; Aug. 30; Serial No. 326,590; published June 7, 1932. Class 27.
West Virginia State Medical Association, Charleston, W. Va. Periodical. 297,058; Aug. 30; Serial No. 326,505; published June 14, 1932. Class 38.
Wilbar Photo Engraving Co., Inc., New York, N. Y. Photo engraving plates. 297,107; Aug. 30; Serial No. 325,309; published June 14, 1932. Class 50.
Williams, Ed. (See Oklahoma Medicine Company.)
Wolverine-Empire Refining Company, Wilmington, Del., and New York, N. Y. Light oil. 297,101; Aug. 30; Serial No. 326,654; published June 14, 1932. Class 15.
Wonder Hoe Co. (See Evans, E. P.)
Wood, C. D., Electric Company, Inc., New York, N. Y. Attachment plugs. 297,103; Aug. 30; Serial No. 326,598; published June 14, 1932. Class 21.
Woodcraft Corporation, The, Bay City, Mich. Smoking stands. 297,038; Aug. 30; Serial No. 326,441; published June 7, 1932. Class 8.
Yardley & Co., Limited, London, England. Soaps and shaving powder. 296,993; Aug. 30; Serial No. 326,408; published June 14, 1932. Class 4.

LIST OF REGISTRANTS OF LABELS

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Brand Chewing Gum. For Chewing Gum. 41,073; Aug. 30.
Boyer, Frank, Syracuse, N. Y. Eugenie Imperial French Lotion. For Lotion. 41,074; Aug. 30.
Cooper, Charles, & Company, Newark, N. J. Cooper's Cream Ammonia. For Ammonia Compound. 41,075; Aug. 30.
Dairyman's League Co-Operative Association, Inc., Utica, N. Y. Dairylea Ice Cream. For Ice Cream. 41,076; Aug. 30.
Electro-Pure Water Co., The, Toledo, Ohio. Electro. For Carbonated Beverages. 41,077; Aug. 30.
Eskimo Pie Corporation, Brooklyn, N. Y. Eskimo. For Ice Cream. 41,078; Aug. 30.
Felco Products & Mfg. Co. (See Feldman, Jack.)
Feldman, Jack, doing business as Felco Products & Mfg. Co., New York, N. Y. Nuwax. For Waxing Sets. 41,079; Aug. 30.
French Battery Company, Madison, Wis. Ray-O-Vac Radio B Battery No. 3303. For Dry Batteries. 41,080; Aug. 30.
French Battery Company, Madison, Wis. Ray-O-Vac Radio B Battery No. XQ-3. For Dry Batteries. 41,081; Aug. 30.
Kahn's, E., Sons Company, The, Cincinnati, Ohio. Kahn's American Beauty. For Lard. 41,082–3; Aug. 30.
Lapres, Theo. J., Inc., Atlantic City, N. J. Fralinger's Creamy Mint Sticks. For Candy. 41,084; Aug. 30.
MacDonald, Pearl, New York, N. Y. Pendant La Nuit Hair Grower. For Preparation for Use on the Hair and Scalp. 41,085; Aug. 30.
MacDonald, Pearl, New York, N. Y. Pendant La Nuit Glossine. For Preparation for Use on the Hair. 41,086; Aug. 30.
McCauley, J. J., & Son, Urichsville, Ohio. McCauley's. For Cigars. 41,087; Aug. 30.
McWade, Howard L., doing business as The Samosa Tea Company, Rochester, N. Y. Samosa Tea. For Tea. 41,088; Aug. 30.
New York Extract Co., Inc., Philadelphia, Pa. Nyeco Brand. For Fountain Syrups. 41,089; Aug. 30.
Original Loofah Company, The, New York, N. Y. For complexion and bath; Loofeur, The Loof-a-Hit! For Sponges. 41,090; Aug. 30.
Parker & Hassell, San Francisco, Calif. Catarrh Remedy. For Medicine for the Treatment of Catarrh, Colds and Asthma. 41,091; Aug. 30.
Protecture Shields, Chicago, Ill. Protecture Coat Shields. For Cloth Shields. 41,092; Aug. 30.
Riverside Products Company, Cincinnati, Ohio. Old Prague. For Malt Syrup. 41,093; Aug. 30.
Russell Box Company, Medford, Mass. The Floridian. For Eggs. 41,094; Aug. 30.
Russell Box Company, Medford, Mass. The Maryland. For Eggs. 41,095; Aug 30.
Russell Box Company, Medford, Mass. The 20th Century. For Eggs. 41,096; Aug. 30.
Russell Box Company, Medford, Mass. The Golden Gate. For Eggs. 41,097; Aug. 30.
Russell Box Company, Medford, Mass. The Capitol. For Eggs. 41,098; Aug. 30.
Russell Box Company, Medford, Mass. The Liberty. For Eggs. 41,099; Aug. 30.
Russell Box Company, Medford, Mass. The Dixie. For Eggs. 41,100; Aug. 30.
Russell Box Company, Medford, Mass. The Detroiter. For Eggs. 41,101; Aug. 30.
Russell Box Company, Medford, Mass. The Clevelander. For Eggs. 41,102; Aug. 30.
Russell Box Company, Medford, Mass. The Lone Star State. For Eggs. 41,103; Aug. 30.
Russell Box Company, Medford, Mass. The New Yorker. For Eggs. 41,104; Aug. 30.
Russell Box Company, Medford, Mass. The Allegheny. For Eggs. 41,105; Aug. 30.
Russell Box Company, Medford, Mass. R S L. For Eggs. 41,106; Aug. 30.
Russell Box Company, Medford, Mass. The Missourian. For Eggs. 41,107; Aug. 30.
Samosa Tea Company, The. (See McWade, Howard L.)
Sun-Ra Products Company, St. Joseph, Mo. 20th Century. For Mustard. 41,108; Aug. 30.
Union Bag & Paper Corporation, New York, N. Y. Coffee. For Coffee. 41,109; Aug. 30.
Union Oil Company of California, Los Angeles, Calif. Union Solvent Soap. For Solvent Soap. 41,110; Aug 30.
Union Oil Company of California, Los Angeles, Calif. Motor Oil. For Motor Oil. 41,111; Aug. 30.
Wonder Products, Canton, Ohio. Wonder Glo. For Cleaner and Water Softener. 41,112; Aug. 30.

LIST OF REGISTRANTS OF PRINTS

American Woolen Company, Inc., New York, N. Y. Brionara Woolens. For Woolens. 13,882; Aug. 30.
Felco Products & Mfg. Co. (See Feldman, Jack.)
Feldman, Jack, doing business as Felco Products & Mfg. Co., New York, N. Y. Nuwax. For Waxing Sets. 13,883; Aug. 30.
Gynae Research Laboratories. (See Silver, Dr. M.)
Hills Bros., San Francisco, Calif. You'll never get any sad surprises in Hills Bros Coffee. For Coffee. 13,884; Aug. 30.
Hills Bros., San Francisco, Calif. A cupful of Hills Bros Coffee proves that controlled roasting makes a finer flavor. For Coffee. 13,885; Aug. 30.
Invertose Laboratories, Minneapolis, Minn. Pioneer American Solutions for Varicose Vein Injections. For Intravenous Solutions. 13,886; Aug. 30.
Mo-Vis Oil Co., Atlanta, Ga. Mo-Vis Oil Company. For Lubricating Oil. 13,887; Aug. 30.
Ohio Ferro-Alloys Corporation, Canton, Ohio. Philo Brand. For Ferro-Alloys. 13,888; Aug. 30.
Print-Point Products Co., Brooklyn, N. Y. Master Painter's Textural Paint. For Textural Wall Paint. 13,889; Aug. 30.
Pruden, Harry B., Orlando, Fla. Bites and stings phenolized camphor. For Antiseptic Dressing Made from Phenol, Camphor and a Neutral Hydrocarbon Oil. 13,890; Aug. 30.
Silver, Dr. M., doing business as Gynae Research Laboratories, New York, N. Y. Rationalization in Contraception. For Surgical Instruments and Surgical Supplies. 13,891; Aug. 30.
Sun Oil Company, Philadelphia, Pa. The "Mercury Process" did it. For Motor Oil. 13,892; Aug. 30.
Sun Oil Company, Philadelphia, Pa. Keep your tractor running on less money. For Motor Oil. 13,893; Aug. 30.
Sun Oil Company, Philadelphia, Pa. Sunoco Motor Oil Lubrication Chart. For Motor Oil. 13,894; Aug. 30.
Visking Corporation, The, Chicago, Ill. New Visking Casing "Easy as Peeling a Banana". For Sausage Sold in Casings. 13,895; Aug. 30.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Cellulose acetate material, Partly prepared. Dynamit-Actien-Gesellschaft vormals Alfred Nobel & Co., Hamburg. 297,033; Aug. 30; Serial No. 326,707; published June 14, 1932.
Coal. Hokkaido Tanko Kisen (Kabushiki) Kaisha. 87,761; renewed Aug. 6, 1932.
Grit. Pigeon. F. Gould. 297,037; Aug. 30; Serial No. 320,712; published June 14, 1932.

CLASS 2

Boxes, bags and rolls. Welmaid Manufacturing Corporation. 297,129; Aug. 30.
Boxes for burial purposes. G. F. Mitchell & Sons Company. 296,986; Aug. 30; Serial No. 325,043; published June 14, 1932.

CLASS 3

Horse collars, saddles, blankets, and fly-nets. McIntyre-Burrall Co. 87,553; renewed July 23, 1932.

CLASS 4

Polish, Copper. Charles Burke & Sons. 297,003; Aug. 30; Serial No. 325,383; published June 14, 1932.
Powder for dry cleaning. E. L. Boynton. 296,997; Aug. 30; Serial No. 326,576; published June 14, 1932.
Soaps and shaving powder. Yardley & Co. 296,993; Aug. 30; Serial No. 326,408; published June 14, 1932.

CLASS 5

Adhesive cement. Kayon Company. 297,047; Aug. 30; Serial No. 326,327; published June 14, 1932.

CLASS 6

Acids and pharmaceutical preparations. Société Chimique des Usines du Rhône, Anct. Gilliard, P. Monnet & Cartier. 88,212; renewed Sept. 3, 1932.
Antifreeze compound. H. H. Simmons. 297,076; Aug. 30; 325,189; published May 24, 1932.
Antiseptic, Healing. Bio-Medical Research Laboratories, Inc. 297,015; Aug. 30; Serial No. 292,969; published Jan. 14, 1930.
Antiseptic, Healing. Bio-Medical Research Laboratories, Inc. 297,016; Aug. 30; Serial No. 292,971; published Jan. 14, 1930.
Astringents, creams, rouges, etc. F. C. Reilly. 297,053; Aug. 30; Serial No. 325,726; published May 31, 1932.
Baking powder. Jaques Manufacturing Company. 297,070; Aug. 30; Serial No. 325,449; published May 24, 1932.
Bleaching fluid. J. J. Kittess. 297,044; Aug. 30; Serial No. 325,792; published May 31, 1932.
Candies and pastry. E. G. Stratigos. 297,116; Aug. 30.
Chemical for use in the textile industry. Röhm & Haas Company. 297,068; Aug. 30; Serial No. 325,622; published May 24, 1932.
Chemical preventatives for the prevention of venereal diseases. Blackman & Blackman, Inc. 297,007; Aug. 30; Serial No. 312,751; published May 31, 1932.
Chemical waterproofing compound. Waterlox, Inc. 296,982; Aug. 30; Serial No. 323,266; published May 31, 1932.
Chemicals to insure protection against freezing. W. & W. Chemical Co. 297,012; Aug. 30; Serial No. 309,758; published June 16, 1931.
Compound of glandular substances in combination with skin emollients used as a face cream. Louis Philippe, Inc. 296,971; Aug. 30; Serial No. 324,570; published May 3, 1932.
Compound used as an inhalant in treating catarrh, asthma, etc. F. Prejean. 297,055; Aug. 30; Serial No. 325,757; published May 31, 1932.
Cream, powder, shampoo, etc., Cold. Betty Jean Laboratories. 297,024; Aug. 30; Serial No. 324,871; published May 24, 1932.
Creams, Cold, vanishing, and make-up. Allola Co. 297,008; Aug. 30; Serial No. 313,989; published May 31, 1932.
Creams, hand lotion, and a skin tonic. Park & Tilford. 296,965; Aug. 30; Serial No. 325,406; published May 31, 1932.
Deodorizer composition. D. J. Block. 297,078; Aug. 30; Serial No. 325,028; published May 31, 1932.
Evacuant for infants and children. Scott-Sherry. 297,073; Aug. 30; Serial No. 325,349; published May 24, 1932.
Foot lotion. N. J. Foret. 297,072; Aug. 30; Serial No. 325,257; published May 24, 1932.
Formula for stomach troubles, Corrective. J. Hamilton. 296,964; Aug. 30; Serial No. 325,290; published May 31, 1932.
Insecticide. John Powell & Co. 296,966; Aug. 30; Serial No. 325,440; published May 31, 1932.
Liniment. R. T. Dunn. 296,969; Aug. 30; Serial No. 324,065; published May 24, 1932.
Liniment. L. L. Medlock. 297,005; Aug. 30; Serial No. 312,400; published May 24, 1932.
Liquid material for the destruction of weeds. Midway Chemical Company. 296,968; Aug. 30; Serial No. 325,620; published May 31, 1932.
Lotion and tonic for hair, Waving. La Jerome Laboratories, Inc. 297,074; Aug. 30; Serial No. 325,040; published May 31, 1932.
Medicinal preparation. R. B. Gray. 297,054; Aug. 30; Serial No. 325,752; published May 31, 1932.
Medicinal preparation. C. G. Hyre. 297,051; Aug. 30; Serial No. 325,688; published May 31, 1932.
Medicinal preparation. J. B. McGilvray. 297,017; Aug. 30; Serial No. 323,899; published May 31, 1932.
Medicinal preparation. Upjohn Company. 297,075; Aug. 30; Serial No. 325,128; published May 31, 1932.
Medicine, Soporific. La Compagnie Pharmaceutique Desbergers. 297,077; Aug. 30; Serial No. 325,005; published May 31, 1932.
Medicines, Liquid. Oklahoma Medicine Company. 89,088; renewed Dec. 31, 1932.
Monomethyl paramidophenol. Philipp Brothers, Inc. 296,773; Aug. 30; Serial No. 324,730; published May 24, 1932.
Mouth wash. Trent Laboratories. 297,115; Aug. 30.
Ointment. J. C. McNamara. 296,954; Aug. 30; Serial No. 317,611; published May 24, 1932.
Perfume, toilet water, bath salts, etc. Houbigant, Inc. 297,065; Aug. 30; Serial No. 325,656; published May 24, 1932.
Perfumes. Houbigant, Inc. 297,050; Aug. 30; Serial No. 325,658; published May 31, 1932.
Perfumes, toilet water, face and talcum powder, etc. Houbigant, Inc. 297,066; Aug. 30; Serial No. 325,657; published May 24, 1932.
Perfumes, toilet waters, powder and rouge compacts, etc. California Perfume Company. 297,127; Aug. 30.
Perfumes, toilet waters, rouge, etc. D'Orsay Perfumeries Corporation. 297,010; Aug. 30; Serial No. 316,771; published May 31, 1932.
Petrolatum for medicinal purposes. L. Sonneborn Sons, Inc. 297,067; Aug. 30; Serial No. 325,603; published May 24, 1932.
Pine oil and borneol. Newport Company. 296,992; Aug. 30; Serial No. 312,856; published May 24, 1932.
Pine-oil and borneol. Newport Company. 296,994; Aug. 30; Serial No. 312,855; published May 24, 1932.
Preparation for hog cholera and thumps. E. Fields. 297,126; Aug. 30.
Remedy for certain diseases. John W. M. Clark Co. 87,043; renewed June 25, 1932.
Remedy for cuts and bruises. Shigetaro Nao. 88,373; renewed Sept. 10, 1932.
Sizes, emulsions, etc., Resinous and animal. British Bewoid Company Limited. 296,948; Aug. 30; Serial No. 320,753; published May 31, 1932.
Solutions of synthetic resins, molding compounds containing synthetic resins, etc. Resinox Corporation. 296,945; Aug. 30; Serial No. 321,894; published Feb. 9, 1932.
Solvent compound. N. Buckner. 296,978; Aug. 30; Serial No. 322,202; published May 31, 1932.
Substances or chemicals. Warwick Chemical Company. 297,056; Aug. 30; Serial No. 325,769; published May 31, 1932.
Suppositories. C. D. Lukens. 297,117; Aug. 30.
Therapeutically activated mineral oils and the like. E. R. Squibb & Sons. 296,983; Aug. 30; Serial No. 325,272; published May 31, 1932.
Toilet preparations. Nonspi Company. 296,947; Aug. 30; Serial No. 321,389; published June 7, 1932.
Tonic, cleansing powder, etc., Skin. M. S. Reynolds. 296,946; Aug. 30; Serial No. 321,918; published May 24, 1932.
Tooth ache drops, wart remover and corn remover, etc. L. A. Smolen. 297,069; Aug. 30; Serial No. 325,387; published May 24, 1932.
Tooth paste. Bon Ami Company. 297,071; Aug. 30; Serial No. 325,559; published May 24, 1932.

CLASS 8

Smoking stands. Woodcraft Corporation. 297,038; Aug. 30; Serial No. 326,441; published June 7, 1932.
Tipping material to be applied to strips of cigarette paper. Strips of. Boucher Cork Co. 297,022; Aug. 30; Serial No. 320,716; published June 7, 1932.

CLASS 10

Fertilizer. Shell Chemical Company. 297,031; Aug. 30; Serial No. 326,001; published June 7, 1932.
Humus and fertilizers. Soilizer Company. 297,040; Aug. 30; Serial No. 326,560; published June 7, 1932.

CLASS 11

Carbon paper and typewriter ribbons. Neidich Process Company. 297,109–11; Aug. 30; Serial Nos. 325,010–12; published June 7, 1932.
Carbon paper and typewriter ribbons. Neidich Process Company. 297,123; Aug. 30; Serial No. 325,008; published June 7, 1932.

CLASS 12

Building materials. Simons Brick Co. 297,125; Aug. 30.

CLASS 13

Doors, shower bath shields, and bath enclosures, Glass shower stall. L. H. Lehman. 296,950; Aug. 30; Serial No. 320,505; published June 14, 1932.
Fasteners, Slider controlled. Schneiderman Bros. 296,999; Aug. 30; Serial No. 326,303; published June 14, 1932.
Nails, drive screws, screws, rivets, etc. Parker-Kalon Corporation. 296,996; Aug. 30; Serial No. 326,554; published June 14, 1932.
Pipe, Steel. Biggs Boiler Works Company. 296,949; Aug. 30; Serial No. 320,714; published June 14, 1932.
Sink strainers. Master Metal Products, Inc. 297,128; Aug. 30.
Tubes and tube couplings, Heating. Brown, Boveri & Cie. 296,959; Aug. 30; Serial No. 326,805; published June 14, 1932.

CLASS 14

Iron castings. Ferro Machine & Foundry Company. 297,014; Aug. 30; Serial No. 305,103; published June 7, 1932.
Wire. Driver-Harris Company. 297,039; Aug. 30; Serial No. 326,518; published June 7, 1932.

CLASS 15

Oil, Light. Wolverine-Empire Refining Company. 297,101; Aug. 30; Serial No. 326,654; published June 14, 1932.
Oil, Lubricating. Continental Oil Company. 297,088; Aug. 30; Serial No. 326,360; published June 14, 1930.
Oils and greases. G. E. Puck. 88,238; renewed Sept. 10, 1932.
Oils and greases, Lubricating. U. S. Oil Company. 297,090; Aug. 30; Serial No. 325,927; published June 14, 1932.
Oils and lubricants. Pennsylvania Petroleum Products Co. 297,089; Aug. 30; Serial No. 323,797; published June 14, 1932.
Oils, Lubricating. Gaseteria Incorporated. 296,953; Aug. 30; Serial No. 317,713; published May 17, 1932.
Oils, Motor fuel and lubricating. Phillips Petroleum Company. 296,975; Aug. 30; Serial No. 323,697; published June 14, 1932.
Oils, Motor lubricating. Washington Petroleum Products, Inc. 297,064; Aug. 30; Serial No. 325,626; published June 14, 1932.

CLASS 16

Base for a water-proof cement wall coating or covering. Alabastine Company. 296,985; Aug. 30; Serial No. 325,841; published June 14, 1932.
Coating and protecting compound of the nature of a paint or varnish. Edison Storage Battery Company. 296,944; Aug. 30; Serial No. 321,753; published June 14, 1932.
Coatings, Protective primer. Studebaker Chemical Company. 297,000; Aug. 30; Serial No. 326,118; published June 14, 1932.
Colors in the nature of a paint, Dry. Alabastine Company. 297,002; Aug. 30; Serial No. 325,843; published June 14, 1932.
Paint and varnish remover, putty, etc. Steelcote Manufacturing Company. 297,019; Aug. 30; Serial No. 288,624; published June 14, 1932.
Paints, varnishes, lacquers, etc. Sherwin-Williams Company. 296,979; Aug. 30; Serial No. 322,335; published Feb. 2, 1932.
Wax and polish. W. T. Terry, jr. 296,989; Aug. 30; Serial No. 325,200; published June 14, 1932.

CLASS 17

Cigars. H. Drost Box Mfg. Co. 297,035; Aug. 30; Serial No. 326,635; published June 7, 1932.
Tobacco, Smoking. Larus & Brother Company. 297,025; Aug. 30; Serial No. 319,897; published June 14, 1932.

CLASS 19

Cars, Tank. General American Tank Car Corporation. 297,001; Aug. 30; Serial No. 326,286; published June 14, 1932.
Trucks, Warehouse. Lansing Company. 87,349; renewed July 9, 1932.
Wheelbarrows, hand-trucks, warehouse-trucks, and hand-carts. Lansing Company. 87,348; renewed July 9, 1932.

CLASS 21

Batteries, Storage. F. W. Grosche. 297,087; Aug. 30; Serial No. 326,323; published June 14, 1932.
Capacitors and dielectric material. General Electric Company. 296,981; Aug. 30; Serial No. 322,633; published June 14, 1932.
Electric cord, Insulated. American Steel and Wire Company of New Jersey. 297,092; Aug. 30; Serial No. 325,976; published June 14, 1932.
Electric sadirons. Chicago Flexible Shaft Company. 297,079; Aug. 30; Serial No. 326,537; published June 14, 1932.
Electrical appliances, Flexible take-up cords used with. Trico Fuse Mfg. Co. 297,102; Aug. 30; Serial No. 326,352; published June 14, 1932.
Electrically operated suction cleaners. P. A. Geier Company. 296,972; Aug. 30; Serial No. 324,664; published June 14, 1932.
Flash lights. Chase Brass & Copper Co. Incorporated. 297,086; Aug. 30; Serial No. 326,321; published June 14, 1932.
Plugs, Attachment. C. D. Wood Electric Company. 297,103; Aug. 30; Serial No. 326,598; published June 14, 1932.
Switches of the fuse type, Enclosed. Cutler-Hammer, Inc. 296,970; Aug. 30; Serial No. 324,093; published June 14, 1932.
Wire, cord, and cable, and radio antenna wire, Bare, insulated. Consolidated Wire & Associated Corporations. 296,952; Aug. 30; Serial No. 319,511; published June 14, 1932.

CLASS 22

Grips for golf clubs. J. E. McDevitt. 297,119; Aug. 30.

CLASS 23

Bit braces, expansive bits, auger bits, etc. Hibbard, Spencer, Bartlett & Co. 297,084; Aug. 30; Serial No. 325,949; published June 14, 1932.
Cutting machines, Ice cream. Akron Equipment Company. 297,095; Aug. 30; Serial No. 326,881; published June 14, 1932.
Hoes. B. P. Evans. 297,083; Aug. 30; Serial No. 326,522; published June 14, 1932.
Hoists, Boat. J. W. Looschen. 297,009; Aug. 30; Serial No. 314,505; published June 14, 1932.
Implement for fastening sheets of paper together. Seiders-Mather Corporation. 297,085; Aug. 30; Serial No. 326,165; published June 14, 1932.
Knives. Landers, Frary & Clarke. 297,121; Aug. 30.
Labeling machines and parts thereof. Economic Machinery Company. 89,019; renewed Nov. 5, 1932.
Razor blades, Safety. Marathon Razor Blade Co. 297,093; Aug. 30; Serial No. 326,754; published June 14, 1932.
Razor blades, Safety. Marathon Razor Blade Co. 297,096–98; Aug. 30; Serial Nos. 326,751–3; published June 14, 1932.
Razor blades, Safety. Minute Safety Razor Corp. 297,099; Aug. 30; Serial No. 326,716; published June 14, 1932.
Razors. J. A. Henckels. 88,286; renewed Sept. 10, 1932.
Razors. J. A. Henckels. 88,288; renewed Sept. 10, 1932.
Razors. J. A. Henckels. 89,257; renewed Dec. 3, 1932.

CLASS 24

Laundry washing machines, Electric. Prima Manufacturing Company. 297,124; Aug. 30.

CLASS 26

Balances and scales. Landers, Frary & Clarke. 297,122; Aug. 30.
Thermometer and liquid level gage, Combined. Foxboro Company. 297,080; Aug. 30; Serial No. 326,538; published June 14, 1932.

CLASS 27

Clocks and watches. Western Clock Company. 297,041; Aug. 30; Serial No. 326,596; published June 7, 1932.
Watches, watch movements and watch cases. Elgin National Watch Company. 297,034; Aug. 30; Serial No. 326,708; published June 14, 1932.
Watches, watch movements, and watch cases. Elgin National Watch Company. 297,036; Aug. 30; Serial No. 326,709; published June 14, 1932.

CLASS 29

Brushes, Blending and toilet. Celluloid Corporation. 297,032; Aug. 30; Serial No. 326,633; published June 7, 1932.

CLASS 32

Mattresses. U. S. Bedding Co. 80,330; renewed Dec. 10, 1932.
Tables. J. V. Littig. 297,081; Aug. 30; Serial No. 326,427; published June 14, 1932.

CLASS 33

Glass, Plate and window. Toledo Plate & Window Glass Company. 296,962; Aug. 30; Serial No. 326,765; published June 14, 1932.

CLASS 34

Boilers, superheaters, stokers, and parts thereof. Babcock & Wilcox Company. 89,810; renewed Jan. 14, 1933.

CLASS 35

Brake linings. Allbestos Corporation. 297,082; Aug. 30; Serial No. 326,450; published June 14, 1932.
Brake linings. Allbestos Corporation. 297,100; Aug. 30; Serial No. 326,701; published June 14, 1932.
Hose, Rubber. Prescott & Co. 88,112–3; renewed Aug. 27, 1932.

Packing and tires, Machinery. La Favorite Rubber M'f'g. 87,775; renewed Aug. 6, 1932.

CLASS 37

Bridge-score table guide. W. L. Jenkins. 297,048; Aug. 30; Serial No. 326,370; published June 14, 1932.
Paper caution signals for index systems, Printed. E. Greene. 296,967; Aug. 30; Serial No. 325,578; published June 14, 1932.
Paper, paper towels and napkins, etc., Toilet. Fort Howard Paper Company. 297,060; Aug. 30; Serial No. 326,852; published June 14, 1932.
Paper, Tissue. Pond's Extract Company. 297,057; Aug. 30; Serial No. 326,758; published June 14, 1932.
Paper, Waxed sulphite wrapping. Riegel Paper Corporation. 296,974; Aug. 30; Serial No. 325,150; published Apr. 26, 1932.
Paper, Writing. Kalamazoo Vegetable Parchment Company. 297,062; Aug. 30; Serial No. 326,902; published June 14, 1932.
Parchment tissue. Franz Euler & Co. 88,477; renewed Sept. 24, 1932.

CLASS 38

Books, Thrift. C. F. Tourner. 297,046; Aug. 30; Serial No. 326,170; published June 14, 1932.
Lists and specifications for house plans and architectural plans. Meredith Publishing Company. 297,018; Aug. 30; Serial No. 324,826; published June 14, 1932.
Magazine. National Sales Promotion Institute, Inc. 297,061; Aug. 30; Serial No. 326,756; published June 14, 1932.
Periodical. West Virginia State Medical Association. 297,058; Aug. 30; Serial No. 326,505; published June 14, 1932.
Publication. Pepperell Manufacturing Company. 297,052; Aug. 30; Serial No. 326,616; published June 14, 1932.

CLASS 39

Collars. Beaver Shirt Co. 297,114; Aug. 30.
Corsets, brassières, girdles, etc. Sears, Roebuck and Co. 297,028; Aug. 30; Serial No. 325,485; published June 14, 1932.
Hats. Brighton Ladies Hat Co. Inc. 297,108; Aug. 30; Serial No. 325,282; published June 14, 1932.
Hats. Salfelts. 297,029; Aug. 30; Serial No. 325,858; published June 14, 1932.
Hosiery. Van Raalte Company. 297,120; Aug. 30.
Pants, diapers, bibs, etc., Rubber. J. Stein. 297,026; Aug. 30; Serial No. 320,703; published June 14, 1932.
Suits, coats, habits, hats, and boots, Riding. Franklin Simon & Co. Inc. 297,042; Aug. 30; Serial No. 326,254; published June 14, 1932.
Suspenders, garters, and apparel belts. L. D. Greenhall. 297,104; Aug. 30; Serial No. 325,469; published June 14, 1932.
Underwear and hosiery. Vanity Fair Silk Mills. 297,030; Aug. 30; Serial No. 326,237; published June 14, 1932.

CLASS 40

Tape, Bias fold. Warren Featherbone Company. 297,020; Aug. 30; Serial No. 323,260; published June 14, 1932.
Webbing and braids, Narrow. Poirier and Lindeman Company. 297,027; Aug. 30; Serial No. 325,482; published June 14, 1932.

CLASS 42

Cheesecloth, Plain absorbent. Pink Supply Company. 296,988; Aug. 30; Serial No. 325,183; published June 14, 1932.
Cotton piece goods. American Bleached Goods Company. 296,957; Aug. 30; Serial No. 326,883; published June 14, 1932.
Fabrics. Celanese Corporation of America. 296,955–6; Aug. 30; Serial Nos. 317,157–8; published June 14, 1932.
Fabrics. Celanese Corporation of America. 296,980; Aug. 30; Serial No. 322,418; published June 14, 1932.
Handkerchiefs. Gimbel Brothers, Inc. 296,998; Aug. 30; Serial No. 326,678; published June 14, 1932.
Handkerchiefs and kerchiefs. James R. Keiser, Inc. 87,080; renewed June 25, 1932.
Pile fabrics. Sidney Blumenthal & Co. Inc. 297,006; Aug. 30; Serial No. 316,802; published June 14, 1932.
Silk, rayon, cotton, and wool piece goods. F. Ducharne Silk Co. Inc. 296,958; Aug. 30; Serial No. 326,808; published June 14, 1932.
Velvets. Rossie Velvet Company. 296,963; Aug. 30; Serial No. 326,760; published June 14, 1932.

CLASS 43

Thread and yarn. I. P. Bemberg Aktiengesellschaft. 296,987; Aug. 30; Serial No. 325,056; published May 24, 1932.
Threads or yarns, Cotton. Summit Thread Company. 38,985; renewed Oct. 7, 1932.

CLASS 46

Avocado pulp used as a base for ice-creams, ices, and the like. Calavo Growers of California. 297,013; Aug. 30; Serial No. 306,592; published June 14, 1932.
Candy. E. Rosen Company. 297,045; Aug. 30; Serial No. 325,974; published June 14, 1932.
Canned mushrooms. L. F. Lambert. 297,059; Aug. 30; Serial No. 326,551; published June 14, 1932.
Coffee. A. H. Nielon & Son, Inc. 297,011; Aug. 30; Serial No. 307,170; published June 14, 1932.
Coffee. P. J. Sbisa. 297,023; Aug. 30; Serial No. 322,713; published June 14, 1932.
Dates. W. Hills, jr. 89,655; renewed Dec. 31, 1932.
Feed, Pig and hog. Dixie Mills Company. 296,976; Aug. 30; Serial No. 323,860; published June 14, 1932.
Feeds, Dairy. Dixie Mills Company. 296,977; Aug. 30; Serial No. 323,861; published June 14, 1932.
Feeds, Poultry and dairy. Carter-Venable Co. 296,984; Aug. 30; Serial No. 325,564; published June 14, 1932.
Fish. Blackfords, Inc. 297,049; Aug. 30; Serial No. 326,453; published June 14, 1932.
Flour, Self rising. W. I. Grove. 296,961; Aug. 30; Serial No. 326,783; published June 14, 1932.
Flour, Wheat. International Milling Company. 296,960; Aug. 30; Serial No. 326,785; published June 14, 1932.
Flour, Wheat. Larabee Flour Mills Company. 296,995; Aug. 30; Serial No. 326,483; published June 14, 1932.
Lettuce, strawberries, and melons. Mt. Signal Produce Co. 297,004; Aug. 30; Serial No. 312,447; published June 14, 1932.
Macaroni, spaghetti, and noodles. B. S. Scotland. 297,094; Aug. 30; Serial No. 326,833; published June 14, 1932.
Meat, Dressed rabbit. Fur Bearers, Inc. 297,123; Aug. 30.
Meats, Smoked. Nevada Packing Company. 297,118; Aug. 30.
Olive-oil. A. Magnano. 87,640; renewed July 30, 1932.
Raisins and fruits, Dried. Sun-Maid Raisin Growers of California. 297,021; Aug. 30; Serial No. 323,727; published June 14, 1932.
Sugar, vinegar, table syrups, and molasses. José Arechabala S. A. 296,951; Aug. 30; Serial No. 320,567; published June 14, 1932.
Syrup, Barley malt. I. Fink. 297,063; Aug. 30; Serial No. 321,994; published June 14, 1932.
Syrup, Maple. Garrett County Maple Products Association. 297,091; Aug. 30; Serial No. 325,946; published June 14, 1932.

CLASS 50

Automatically operated curtains. Vallen Electrical Company. 296,991; Aug. 30; Serial No. 314,826; published June 7, 1932.
Coated fabric tape and coated cellulose tape. Durex Abrasives Corporation. 297,106; Aug. 30; Serial No. 325,323; published June 7, 1932.
Felt, Wool. American Felt Company. 297,043; Aug. 30; Serial No. 326,319; published June 14, 1932.
Necktie pressing and reshaping device. P. Pérez. 297,105; Aug. 30; Serial No. 325,268; published June 7, 1932.
Photo engraving plates. Wilbar Photo Engraving Co. 297,107; Aug. 30; Serial No. 325,309; published June 14, 1932.
Plastic substance for re-soling shoes. C. H. Klein. 296,990; Aug. 30; Serial No. 314,286; published June 7, 1932.

LIST OF LABELS

Beech-Nut Brand Chewing Gum. For Chewing Gum. Beech-Nut Packing Company. 41,073; Aug. 30.
Catarrh Remedy. For Medicine for the Treatment of Catarrh, Colds, and Asthma. Parker & Hassell. 41,091; Aug. 30.
Coffee. For Coffee. Union Bag & Paper Corporation. 41,109; Aug. 30.
Cooper's Cream Ammonia. For Ammonia Compound. Charles Cooper & Company. 41,075; Aug. 30.
Dairylea Ice Cream. For Ice Cream. Dairymen's League Co-Operative Association, Inc. 41,076; Aug. 30.
Electro. For Carbonated Beverages. The Electro-Pure Water Co. 41,077; Aug. 30.
Eskimo. For Ice Cream. Eskimo Pie Corporation. 41,078; Aug. 30.
Eugenie Imperial French Lotion. For Lotion. F. Boyer. 41,074; Aug. 30.
For complexion and bath; Loofleur, The Loof-a-Hit! For Sponges. The Original Loofah Company. 41,090; Aug. 30.
Fralinger's Creamy Mint Sticks. For Candy. Theo. J. Lapres, Inc. 41,084; Aug. 30.
Kahn's American Beauty. For Lard. E. Kahn's Sons Company. 41,082–3; Aug. 30.
McCauley's. For Cigars. J. J. McCauley & Son. 41,087; Aug. 30.
Motor Oil. For Motor Oil. Union Oil Company of California. 41,111; Aug. 30.
Nuwax. Waxing Sets. J. Feldman. 41,079; Aug. 30.

Nyeco Brand. For Fountain Syrups. New York Extract Co. 41,089; Aug. 30.
Old Prague. For Malt Syrup. Riverside Products Company. 41,093; Aug. 30.
Pendant La Nuit Glossine. For Preparation for Use on the Hair. P. MacDonald. 41,086; Aug. 30.
Pendant La Nuit Hair Grower. For Preparation for Use on the Hair and Scalp. P. MacDonald. 41,085; Aug. 30.
Protecture Coat Shields. For Cloth Shields. Protecture Shields. 41,092; Aug. 30.
R S L. For Eggs. Russell Box Company. 41,106; Aug. 30.
Ray-O-Vac Radio B Battery No. 3303. For Dry Batteries. French Battery Corporation. 41,080; Aug. 30.
Ray-O-Vac Radio B Battery No. XQ—3. For Dry Batteries. French Battery Company. 41,081; Aug. 30.
Samosa Tea. For Tea. H. L. McWade. 41,088; Aug. 30.
The Allegheny. For Eggs. Russell Box Company. 41,105; Aug. 30.
The Capitol. For Eggs. Russell Box Company. 41,098; Aug. 30.
The Clevelander. For Eggs. Russell Box Company. 41,102; Aug. 30.
The Detroiter. For Eggs. Russell Box Company. 41,101; Aug. 30.
The Dixie. For Eggs. Russell Box Company. 41,100; Aug. 30.
The Floridian. For Eggs. Russell Box Company. 41,094; Aug. 30.
The Golden Gate. For Eggs. Russell Box Company. 41,097; Aug. 30.
The Liberty. For Eggs. Russell Box Company. 41,099; Aug. 30.
The Lone Star State. For Eggs. Russell Box Company. 41,103; Aug. 30.
The Maryland. For Eggs. Russell Box Company. 41,095; Aug. 30.
The Missourian. For Eggs. Russell Box Company. 41,107; Aug. 30.
The New Yorker. For Eggs. Russell Box Company. 41,104; Aug. 30.
The 20th Century. For Eggs. Russell Box Company. 41,096; Aug. 30.
20th Century. For Mustard. Sun-Ra Products Company. 41,108; Aug. 30.
Union Solvent Soap. For Solvent Soap. Union Oil Company of California. 41,110; Aug. 30.
Wonder Glo. For Cleaner and Water Softener. Wonder Products. 41,112; Aug. 30.

LIST OF PRINTS

A cupful of Hills Bros Coffee proves that controlled roasting makes a finer flavor. For Coffee. Hills Bros. 13,885; Aug. 30.
Bites and stings phenolized camphor. For Antiseptic Dressing Made from Phenol, Camphor and a Neutral Hydrocarbon Oil. H. B. Pruden. 13,890; Aug. 30.
Brionara Woolens. For Woolens. American Woolen Company. 13,882; Aug. 30.
Keep your tractor running on less money. For Motor Oil. Sun Oil Company. 13,893; Aug. 30.
Master Painter's Textural Paint. For Textural Wall Paint. Print-Point Products Co. 13,889; Aug. 30.
Mo-Vis Oil Company. For Lubricating Oil. Mo-Vis Oil Co. 13,887; Aug. 30.
Nuwax. For Waxing Sets. Jack Feldman. 13,883; Aug. 30.
Philo Brand. For Ferro-Alloys. Ohio Ferro-Alloys Corporation. 13,888; Aug. 30.
Pioneer American Solutions for Varicose Vein Injections. For Intravenous Solutions. Invertose Laboratories. 13,886; Aug. 30.
Rationalization in Contraception. For Surgical Instruments and Surgical Supplies. Dr. M. Silver. 13,891; Aug. 30.
Sunoco Motor Oil Lubrication Chart. For Motor Oil. Sun Oil Company. 13,894; Aug. 30.
The "Mercury Process" did it. For Motor Oil. Sun Oil Company. 13,892; Aug. 30.
The New Visking Casing "Easy as Peeling a Banana". For Sausage Sold in Casings. The Visking Corporation. 13,895; Aug. 30.
You'll never get any sad surprises in Hills Bros Coffee. For Coffee. Hills Bros. 13,884; Aug. 30.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 30TH DAY OF AUGUST, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abell, Rollin, Milton, Mass. Engine starter. 1,874,841; Aug. 30.
Abercrombie, J. S. (See Brotherton, J. E., and Morris, assignors.)
Abrahamson, Oscar E. J., Buffalo, assignor to American Radiator Company, New York, N. Y. Testing device. 1,874,842; Aug. 30.
Ackerman-Blaessner-Fezzey, Inc. (See Ackerman, E. I., and Zwierzina, assignors.)
Ackerman, Edward L., and A. J. Zwierzina, assignors to Ackerman-Blaessner-Fezzey, Inc., Detroit, Mich. Clutch mechanism. 1,874,215; Aug. 30.
Acme Knitting Machine Needle Company. (See Stewart, Albert E., assignor.)
Acme Road Machinery Company. (See Schaupp, Harry A., assignor.)
Adams, S. G., Company. (See Bryan, F. D., and Blauner, assignors.)
Adco Limited. (See Richards, E. H., and Hutchinson, assignors.)
Adler, Charles, jr., assignor to The Adler Safety Control Company, Baltimore, Md. Air cooling attachment for electric fans. 1,874,843; Aug. 30.
Adler Safety Control Company, The. (See Adler, Charles, jr., assignor.)
Adler, Sam A., Northampton, Mass. Rider ticket. 1,874,844; Aug. 30.
Advance Machine Company. (See Pond, H. J., and Thielen, assignors.)
Aerol Engine Corporation. (See Hehr, Frederick G., assignor.)
Aetna Rubber Company. (See Fulton, Alfred C., assignor.)
Aftergut, Max, Berlin-Schoneberg, Germany. Automatic glass-blowing machine. 1,875,202; Aug. 30.
Agfa Ansco Corporation. (See Heymer, Gerd, assignor.)
Agfa Ansco Corporation. (See Ruhnau, Richard, assignor.)
Ajax Electrothermic Corporation. (See Jackson, William S., assignor.)
Aktiebolaget Siefvert & Fornander. (See Klute, Georg M., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Aubort, Edouard, assignor.)
Aktiengesellschaft Brown, Boveri & Cie. (See Frey, Ernst H., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Gaudenzi, Arthur, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Guttinger, Heinrich, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Jonas, Julius, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Jonas, J., and Rump, assignors.)
Aktiengesellschaft Brown Boveri & Cie. (See Kern, Erwin, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Kobel, Ernst, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Kopeliowitsch, Jakob, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Lesch, Guntram, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Meyer, Adolf, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Prantl, Franz, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Rump, Sigurd, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Rusterholz, Viktor, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Sieber, Fritz, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Stoecklin, Josef, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See van Gastel, Albertus, assignor.)
Albersheim, Walter, assignor to Radio Corporation of America, New York, N. Y. Crystal subharmonic generator. 1,874,845; Aug. 30.
Aldrich, Lester K., Sidney, Ohio. Paper feeding machine. 1,874,149; Aug. 30.
Alexander, Alfred H., assignor to Sunsaloon Bodies Limited, Edinburgh, Scotland. Body for motor vehicles. 1,873,990; Aug. 30.
Allard, Robert M., assignor to Armstrong Cork Company, Lancaster, Pa. Decorating metal surfaces. 1,874,689; Aug. 30.
Allis-Chalmers Manufacturing Company. (See Creager, William P., assignor.)
Allis-Chalmers Manufacturing Company. (See Dahlstrand, Hans P., assignor.)
Allis-Chalmers Manufacturing Company. (See Egli, John, assignor.)
Allis-Chalmers Manufacturing Company. (See Forrest, J., and Brenchley, assignors.)
Allis-Chalmers Manufacturing Company. (See Hill, Leland H., assignor.)
Allis-Chalmers Manufacturing Company. (See Marti, Othmar K., assignor.)
Allis-Chalmers Manufacturing Company. (See Marti, O. K., Winograd, and Streull, assignors.)
Allis-Chalmers Manufacturing Company. (See Montgomery, T. B., and Stivender, assignors.)
Allis-Chalmers Manufacturing Company. (See Naef, Otto, assignor.)
Allis-Chalmers Manufacturing Company. (See Nichols, Louis C., assignor.)
Allis-Chalmers Manufacturing Company. (See Ring, Joseph J., assignor.)
Allis-Chalmers Manufacturing Company. (See Sherman, Leverett B., assignor.)
Allis-Chalmers Manufacturing Company. (See Stivender, Paul M., assignor.)
Allis-Chalmers Manufacturing Company. (See Williamson, Robert B., assignor.)
Aluminum Screw Machine Products Company. (See Malby, Seth G., assignor.)
Aman, Frank A. (See Fischer, Edward J., asignor.)
American Brass Company. (See Coe, James R., assignor.)
American Can Company. (See Young, John M., assignor.)
American Car and Foundry Company. (See Christiansen, John, assignor.)
American Chain Company. (See Reyburn, John R., assignor.)
American Cuptor Corporation. (See Pettit, K. D., Wicks, and Hajek, assignors.)
American Cyanimid Company. (See Martin, Rhetherford B., assignor.)
American Fabrics Co., The. (See Page, Samuel H., assignor.)
American Flyer, Mfg., Co. (See Becker, Harry S., assignor.)
American Fork & Hoe Company, The. (See Cowdery, Robert H., assignor.)
American Glanzstoff Corporation. (See Herrmann, Conrad, assignor.)
American Glanzstoff Corporation. (See Schaefer, K. T., and Bitter, assignors.)
American Glanzstoff Corporation. (See Stöckly, J. J., and Witte, assignors.)
American Glanzstoff Corporation. (See Wadewitz, Martin, assignor.)
American Radiator Company. (See Abrahamson, Oscar E. J., assignor.)
American Rolling Mill Company, The. (See Brislin, Leo F., assignor.)
American Rolling Mill Company. (See Huntsberger, Russell C., assignor.)
American Rolling Mill Company. (See McCutcheon, K. C., assignor.)
American Rolling Mill Company, The. (See Tytus, John B., assignor.)
American Safety Razor Corporation. (See Zeller, Isaiah N., assignor.)
American Telephone and Telegraph Company. (See Demarest, Charles S., assignor.)
American Telephone and Telegraph Company. (See Edwards, William H., assignor.)
American Telephone and Telegraph Company. (See Holden, William H. T., assignor.)
American Telephone and Telegraph Company. (See Kent, Robert J., assignor.)
American Telephone and Telegraph Company. (See Martin, De Loss K., assignor.)
American Telephone and Telegraph Company. (See Roberts, Leland C., assignor.)
American Telephone and Telegraph Company. (See Vernam, Gilbert S., assignor.)
American Thermos Bottle Company, The. (See Schlumbohm, Peter, assignor.)
American Water Softener Company. (See Waugh, Harvey C., assignor.)
Ames, Malcolm H. (See Avis, S. W., and Ames.)
Anderson, Ellis G., Oklahoma City, Okla. Counterbalancing device. 1,874,077; Aug. 30.
Anderson, John C., Keyprot, N. J. Rectangular link conveyer. 1,874,409; Aug. 30.
Anderson, Martin E., assignor to The Bristol Company, Waterbury, Conn. Indexing attachment for automatic machines. 1,874,022; Aug. 30.

Andrén, Karl H., assignor to Artos Engineering Company, Milwaukee, Wis. Insulation push-back machine. 1,874,216; Aug. 30.
Andrews, Charles, Rockford, Ill., assignor to The Washburn Company, Worcester, Mass. Strainer. 1,874,410; Aug. 30.
Andrews, Charles, Rockford, Ill., assignor to The Washburn Company, Worcester, Mass. Strainer. 1,874,411; Aug. 30.
Andrews, Charles, Rockford, Ill., assignor to The Washburn Company, Worcester, Mass. Food press. 1,874,412; Aug. 30.
Angell, Robert C., Prince Bay, N. Y., assignor to The S. S. White Dental Manufacturing Company. Making shafting. 1,874,413; Aug. 30.
Anger, Paul, Kiel, Germany. Classifying materials in jet impact pulverizers. 1,874,150; Aug. 30.
Anschicks, Rudolph J., assignor to Protectoseal Company of America. Chicago, Ill. Fluid control apparatus. 1,874,414; Aug. 30.
Anthracite Separator Company. (See Pardee, Frank jr., assignor.)
Apple, Vincent G., Dayton, Ohio. Self ventilating high speed armature. 1,875,203; Aug. 30.
Apple, Vincent G., Dayton, Ohio. Commutator and making it. 1,875,204; Aug. 30.
Apple, Vincent G., Dayton, Ohio. Dynamo electric machine. 1,875,205; Aug. 30.
Apple, Vincent G., Dayton, Ohio. Insulation incased stator with glass lining. 1,875,206; Aug. 30.
Apple, Vincent G., Dayton, Ohio. Alternating current motor. 1,875,207; Aug. 30.
Aqua Systems Incorporated. (See Beckwith, C. F., and Main, assignors.)
Aquatone Corporation. (See John, Robert, assignor.)
Arberry, Percy E., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Glass inspection apparatus. 1,874,217; Aug. 30.
Archea, Walter D., assignor to Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling machinery. 1,874,846; Aug. 30.
Arcturus Radio Tube Company. (See Kaul, John, assignor.)
Arcturus Radio Tube Company. (See Krahl, Walter L., assignor.)
Arey, Fred C., Oak Park, Ill., assignor to Vulcan Soot Cleaner Company, Du Bois, Pa. Supporting soot cleaner heads. 1,874,151; Aug. 30.
Armitage, Joseph B., Wauwatosa, assignor to Kearney & Trecker Corporation, West Allis, Wis. Rotary milling machine. 1,874,218; Aug. 30.
Armstrong Cork Company. (See Allard, Robert M., assignor.)
Armstrong Cork Company. (See Brinton, William P., assignor.)
Armstrong, Fullerton G. G., Beverly, England. Suspension arrangement for road and the like vehicles. 1,875,314; Aug. 30.
Arnold, George A., West Haven, Conn., assignor to Motor Improvements, Inc., Newark, N. J. Valve. 1,874,847; Aug. 30.
Aronson, Louis V., Newark, N. J. Cigar lighter. 1,874,219; Aug. 30.
Arrow-Hart & Hegeman Electric Company, The. (See Nero, Arvid H., assignor.)
Artos Engineering Company. (See Andrén, Karl H., assignor.)
Ashley, Frank M., Brooklyn, N. Y. Fountain pen. 1,874,023; Aug. 30.
Ashley, Frank M., Brooklyn, N. Y. Fountain pen. 1,874,024; Aug. 30.
Ashworth, Fred, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine. 1,874,690; Aug. 30.
Associated Electric Laboratories, Inc. (See McElyea, Harley B., assignor.)
Atlantic Refining Company, The. (See Ferris, Seymour W., assignor.)
Atlantic Refining Company. (See Hoel, Archie B., assignor.)
Atlas Powder Company. (See Pollock, Frank S., assignor.)
Atlas Tack Corporation. (See Calloway, Frank S., assignor.)
Atmospheric Nitrogen Corporation. (See Porter, Frank, assignor.)
Atwood, James T., Rockford, Ill. Hinge and making the same. 1,874,415; Aug. 30.
Aubort, Edouard, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Method and apparatus for suppressing harmonics in direct current systems. 1,873,952; Aug. 30.
Auñero, John M., assignor to E. A. Laboratories, Inc., Brooklyn, N. Y. Horn. 1,874,078; Aug. 30.
Aurand, Frank E., Chicago, Ill. Portable surface cleaning tool. 1,874,220; Aug. 30.
Auren, John W., Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company. Resilient shaft coupling. 1,874,152; Aug. 30.
Austin, Walter S., Grand Rapids, Mich. Two-speed axle gearing. 1,874,153; Aug. 30.
Automatic Research and Manufacturing Company. (See Roche, Clifton R., assignor.)
Automatic Safety Signal Gate Co. (See Dilley, M. M., and Fraser, assignors.)
Autoposts Company Inc. (See Condon, Edward T., assignor.)
Auto Radiator Manufacturing Company. (See Kirsch, Benjamin, assignor.)
Avis, Samuel W., Greenwich, Conn., and M. H. Ames, Waltham, Mass., assignors to Russell Burdsall & Ward Bolt & Nut Company, Port Chester, N. Y. Tool holder for nut making apparatus. 1,874,416; Aug. 30.
Babb, Walter A., Glendale, Calif. Atomizing oil burner. 1,874,848; Aug. 30.
Babcock & Wilcox Company. (See Iangvand, Ivar L., assignor.)
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)
Bacon, Myrtle M. (See Bacon, William J., assignor.)
Bacon, William J., assignor to M. M. Bacon, Memphis, Tenn. Filter pad. 1,874,734; Aug. 30.
Baer, Lawrence E., assignor to The Baer & Wilde Company, Attleboro, Mass. Collar holder. 1,874,851; Aug. 30.
Baer, Lawrence E., assignor to The Baer & Wilde Company, Attleboro, Mass. Necktie holder. 1,874,852; Aug. 30.
Baer, Lawrence E., assignor to The Baer & Wilde Company, Attleboro, Mass. Tie holder. 1,874,853; Aug. 30.
Baer & Wilde Company, The. (See Baer, Lawrence E., assignor.)
Baer & Wilde Company, The. (See Metcalf, Alpha H., assignor.)
Bailey Meter Company. (See Johnson, Clarence, assignor.)
Baily, Thaddeus F., Alliance, Ohio. Electric furnace. 1,874,417; Aug. 30.
Bair, William E., jr., Chillicothe, assignor to The Mead Corporation, Dayton, Ohio. Paper manufacture. 1,875,208; Aug. 30.
Baldwin, John D., jr., Bratenahl, assignor to A. J. Weatherhead, jr., Cleveland, Ohio. Securing means. 1,875,209; Aug. 30.
Ball Brothers Company. (See Petty, Fred J., assignor.)
Bang, Paul Yonkers, N. Y. Airplane. 1,875,210; Aug. 30.
Bantz, John F., and R. Smith, Perryville, Ind., said Smith assignor to said Bantz. Sanitary checken feeder. 1,874,418; Aug. 30.
Barber, Hugh B. (See de Coriolis, E. G., and Barber, assignors.)
Barber, John W., assignor to Barber Mfg. Company, Anderson, Ind. Seat spring construction. 1,874,221; Aug. 30.
Barber Mfg. Company. (See Barber, John W., assignor.)
Barbieri, Angelo, Milan, Italy. Electrically driven system of instruments through keyboard and pedals. 1,874,154; Aug. 30.
Barbulesco, Constantin D., assignor to P. S. Edwards, Dayton, Ohio. Constant frequency circuits. 1,874,222; Aug. 30.
Barden, William A., New York, N. Y. Ground-gripping device for shoes. 1,874,155; Aug. 30.
Bardet, George A., and G. V. Bardet, Berkeley, assignors to M. J. B. Co., San Francisco, Calif. Master valve mechanism for vacuum sealing machines. 1,874,854; Aug. 30.
Bardet, George V. (See Bardet, George A. and G. V.)
Barish, Thomas, Jamestown, N. Y. Apparatus for truing grinding wheels. 1,874,156; Aug. 30.
Barkeij, Jean A. H., Altadena, Calif. Sleeve-valve internal combustion engine. 1,874,223; Aug. 30.
Barkeij, Jean A. H., Los Angeles, Calif. Internal combustion engine. 1,874,419; Aug. 30.
Barnes, Eugene L., Buffalo, N. Y. Refrigerating apparatus and method of refrigerating. 1,875,211; Aug. 30.
Barnett, Harry J., and H. P. Trusty, Bridgeport, Conn., assignors to McLaurin-Jones Company, Brookfield, Mass. Automatic sealing machine. 1,874,224; Aug. 30.
Barrowman, William L., and G. L. Hull, Albuquerque, N. Mex. Vehicle jack. 1,874,420; Aug. 30.
Barstow, Edwin O., and S. B. Heath, assignors to The Dow Chemical Company, Midland, Mich. Synthesis of hydrochloric acid. 1,874,225; Aug. 30.
Barstow, Edwin O., and S. B. Heath, assignors to The Dow Chemical Company, Midland, Mich. Manufacture of hydrochloric acid. 1,874,692; Aug. 30.
Barstow, Edwin O., and S. B. Heath, assignors to The Dow Chemical Company, Midland, Mich. Dehydrating magnesium chloride. 1,874,735; Aug. 30.
Bartlebaugh, Benjamin C., Wheeling, W. Va. Gas burner. 1,874,691; Aug. 30.
Bassett, Charles K. (See Ryder, Earl R., assignor.)
Bates, Philo D., and M. C. Hutto, assignors to Hutto Engineering Company, Inc., Detroit, Mich. Abrasive mounting for grinding devices. 1,874,855; Aug. 30.
Bauckhan, Remsen C., Woodcliff Lake, N. J. Transmission gear shifting mechanism. 1,873,991; Aug. 30.
Bauer, Bruno, Vienna, Austria. Concrete-and-iron multiple-floored building. 1,874,157; Aug. 30.
Bausch & Lomb Optical Company. (See Trautmann, Otto E., assignor.)
Bausman, Alonzo L., Springfield, and E. D. Rapisarda, Agawam, assignors to National Equipment Company, Springfield, Mass. Forging machine. 1,874,158; Aug. 30.

Bazzoni, Lewis J., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel grooving machine. 1,874,421; Aug. 30.
Beard, Lawrence O., Lancaster, Pa. Abrading tool. 1,874,856; Aug. 30.
Beatty, Richard C., Chicago, Ill. Packaged multisheet article. 1,874,857; Aug. 30.
Beauchamp, Wilfred A., assignor to Camel Company, Chicago, Ill. Car construction. 1,874,226; Aug. 30.
Beauchamp, Wilfred A., and A. Wasberg, assignors to Camel Company, Chicago, Ill. Door elevating mechanism. 1,874,227; Aug. 30.
Beauvais, Georges, and J. Beauvais, Montreal, Quebec, Canada. Extensible and reversible table. 1,874,693; Aug. 30.
Beauvais, Jacques. (See Beauvais, Georges, and J.)
Beaver Manufacturing Company. (See Slade, H. E., and Gehring, assignors.)
Bechtol, Archie H., Daytona Beach, Fla., and W. A. Tratsch, Chicago, Ill. Game board. Des. 87,700; Aug. 30.
Becker, George L. (See Kunkelman, H. C., and Becker.)
Becker, Harry S., River Forest, assignor to American Flyer Mfg. Co., Chicago, Ill. Car coupler. 1,874,228; Aug. 30.
Beckwith, Charles F., Flushing, and C. C. Main, Piermont, assignors to Aqua Systems Incorporated, New York, N. Y. Liquid supply system. 1,874,858; Aug. 30.
Bedford, Burnice D., Schenectady, N. Y., assignor to General Electric Company. Electric amplifying circuits. 1,874,159; Aug. 30.
Beech-Nut Packing Company. (See Hambrecht, Edward J., assignor.)
Been, Paul, assignor to Harnischfeger Corporation, Milwaukee, Wis. Apparatus for handling and storing. 1,874,859; Aug. 30.
Behimer, Otto, Chicago, Ill., assignor to The Texas Company, New York, N. Y. Treating hydrocarbon oils. 1,874,860; Aug. 30.
Behimer, Otto, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Treating hydrocarbon oils. 1,874,861; Aug. 30.
Behse, Joseph E., assignor of one-fourth to G. C. Willcox, Saginaw, Mich. Roller tail-skid for airplanes. 1,874,160; Aug. 30.
Beisel, Rex B., Tulsa, Okla., assignor to Curtiss Aeroplane & Motor Company, Inc. Gun mount. 1,874,422; Aug. 30.
Bell Telephone Laboratories, Incorporated. (See Callahan, Vincent T., assignor.)
Bell Telephone Laboratories, Incorporated. (See Christopher, Arthur J., assignor.)
Bell Telephone Laboratories, Incorporated. (See Fracker, Edward G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Ganz, Albert G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gilbert, John J., assignor.)
Bell Telephone Laboratories, Incorporated. (See Ives, Herbert E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Jaycox, Edwin K., assignor.)
Bell Telephone Laboratories, Incorporated. (See Kemp, Archie R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Kuhn, John J., assignor.)
Bell Telephone Laboratories, Incorporated. (See Manderfeld, Emanuel C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Mason, Warren P., assignor.)
Bell Telephone Laboratories, Incorporated. (See Sole, John H., assignor.)
Bell Telephone Laboratories, Incorporated. (See Stoller, H. M., and Morton, assignors.)
Bell, William R., assignor to Poster Parts Company, Terre Haute, Ind. Poster process. 1,874,862; Aug. 30.
Belleville, Harry C., Oakland, Calif. Aircraft landing. 1,874,423; Aug. 30.
Belshaw, Charles F., Dearborn, Mich. Ice refrigerating device. 1,874,161; Aug. 30.
Bendix Brake Company. (See Bendix, Vincent, assignor.)
Bendix Brake Company. (See Delahaye, Walter H., assignor.)
Bendix Brake Company. (See Dodge, Adiel Y., assignor.)
Bendix Brake Company. (See Goepfrich, Rudolph A., assignor.)
Bendix Brake Company. (See Hillerman, William C., assignor.)
Bendix Brake Company. (See Hunt, George H., assignor.)
Bendix Brake Company. (See La Brie, Ludger E., assignor.)
Bendix Brake Company. (See Linsley, Douglas F., assignor.)
Bendix Brake Company. (See Lyman, Kenneth E., assignor.)
Bendix Brake Company. (See McCann, George K., assignor.)
Bendix Brake Company. (See McConkey, Montgomery W., assignor.)
Bendix Brake Company. (See McConkey, M. W., and McDonald, assignors.)
Bendix Brake Company. (See Michael, Gus F., assignor.)
Bendix Brake Company. (See Norton, Raymond J., assignor.)
Bendix Brake Company. (See Taylor, Eugene V., assignor.)
Bendix, Vincent, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake shoe. 1,874,863; Aug. 30.
Bennett, Charles E., Decatur, Ga. Superpotential drain. 1,875,212; Aug. 30.
Bennis, Alfred W., Bolton, England. Furnace grate. 1,875,213; Aug. 30.
Benoit, Leon, Chicago, Ill. Filler for eggs and the like. 1,874,162; Aug. 30.
Benson, Edward F., Woodcliff-on-Hudson, N. J. Collapsible bracket. 1,874,424; Aug. 30.
Bergen, Ruben S., Scandinavia, assignor to Plant Food Appliance Company, Waupaca, Wis. Hand fertilizer applier. 1,874,425; Aug. 30.
Berggren, Karl J., Spokane, Wash. Hinge. 1,874,426; Aug. 30.
Bergvall, Royal C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Voltage-stabilizing means for direct-current generators. 1,874,163; Aug. 30.
Bernitz Furnace Appliance Company. (See Nygaard, Oscar, assignor.)
Bernstein, Sarah E., Washington, D. C. Handkerchief. 1,874,864; Aug. 30.
Bethlehem Steel Company. (See George, Heber T., assignor.)
Bethlehem Steel Company. (See McGinnis, Harry, assignor.)
Bethlehem Steel Company. (See Nieman, Henry W., assignor.)
Bettis, Irvin H. (See Scott, F. L., and Bettis.)
Beverage, Harold H., Riverhead, N. Y., assignor to Radio Corporation of America. Acoustic combining system. 1,874,865; Aug. 30.
Beverage, Harold H., and H. O. Peterson, Riverhead, N. Y., assignors to Radio Corporation of America. Eliminating fading on short wave lengths. 1,874,866; Aug. 30.
Bicknell, R. F. (See Dalton, Frederick C., assignor.)
Billings, Howard J., South Acton, assignor to A. D. Little, Incorporated, Cambridge, Mass. Translucent printing. 1,874,427; Aug. 30.
Bird, Hugh V., Neath, South Wales. Cooking utensil and the like. 1,875,303; Aug. 30.
Bird, Lester F., assignor to Hanovia Chemical and Manufacturing Company, Newark, N. J. Alternating current vapor electrical device. 1,874,428; Aug. 30.
Bird Machine Company. (See Flynn, Mortimer F., assignor.)
Bishop, George E., Cleveland Heights, Ohio. Automatic side inclosures adapted for ventilating and hand-hole purposes. 1,874,867; Aug. 30.
Bissett, Enid, assignor to Maiden Form Brassiere Co., Inc., New York, N. Y. Brassiére. 1,874,868; Aug. 30.
Bitter, Jack L. (See Schaeffer, K. T., and Bitter.)
Bixby, Leo A., assignor to Fuller & Sons Manufacturing Co., Kalamazoo, Mich. Clutch. 1,874,229; Aug. 30.
Bixby, Walter. (See Hathaway, E. F., and Bixby.)
Black, Cyrus A. (See Maryott, Fred, assignor.)
Black and Decker Manufacturing Company, The. (See Decker, Alonzo G., assignor.)
Black & Decker Manufacturing Company, The. (See Tschudi, Erwin W., assignor.)
Black, William A., Montclair, assignor to Travis Process Corporation, Jersey City, N. J. Dispersion machine. 1,874,079; Aug. 30.
Blackmore, Lloyd, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Hood latch. 1,874,230; Aug. 30.
Blake, Cecil J., Manchester, N. H., assignor to J. Hammond Stewart, Lynn, Mass. Counter machine with flange plate waxing means. 1,874,429; Aug. 30.
Blauner, John. (See Bryant, F. D., and Blauner.)
Bleyer, Lloyd G., assignor to Chain Belt Company, Milwaukee, Wis. Endless traveling water screen. 1,874,736; Aug. 30.
Blondel, André, Paris, France. Synchronized remote control system. 1,874,430; Aug. 30.
Blumenfeld, Arthur A., assignor to General Talking Pictures Corporation, New York, N. Y. Apparatus for microscopic adjusting of optical systems. 1,874,231; Aug. 30.
Boag, David, Seattle, Wash. Fertilizer sprinkler. 1,873,992; Aug. 30.
Boeing Airplane Company. (See Minshall, Robert J., assignor.)
Boggs Manufacturing Corporation. (See Ghent, William E., assignor.)
Böhm, Otto, assignor to Telefunken fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Signaling by frequency modulation. 1,874,869; Aug. 30.
Bohn Aluminum & Brass Corporation. (See Diamond, James E., assignor.)
Boisselier, Earl D., Chicago, Ill. Toe pad. 1,874,737; Aug. 30.
Bond, Oscar, Sapulpa, Okla. Oil well shooting equipment for use on automobiles. 1,874,870; Aug. 30.
Booker, Homer N. (See Wessel, L. H., and Booker.)
Boorum & Pease Company. (See Finley, Charles A., assignor.)
Boulade, Antonin, assignor to Societe du Carburateur Zenith, Lyon, France. Carburetor. 1,874,238; Aug. 30.
Bower, Sigmund, Brooklyn, N. Y. Clothespin. 1,874,871; Aug. 30.

Bowers, Frederick M., Chester, Pa. Welder's mask. 1,874,872; Aug. 30.
Boyajian, Aram. (See McCarty, O. P., and Boyajian.)
Boye, James H., assignor to J. H. Boye Manufacturing Company, Chicago, Ill. Putting game appliance. 1,874,873; Aug. 30.
Boye, James H., Manufacturing Company. (See Boye, James H., assignor.)
Bracke, Robert F., Chicago, assignor to C. B. Camp, trustee, Glencoe, Ill. Conditioning fuel for internal combustion engines. 1,874,874; Aug. 30.
Bracke, Robert F., Chicago, assignor to C. B. Camp, Glencoe, Ill., trustee. Carburetor. 1,874,875; Aug. 30.
Braden, Rene A., Merchantville, N. J., assignor to Radio Corporation of America. Local-distant radio receiver. 1,874,234; Aug. 30.
Bradley, Eric H., assignor to National Pumps Corporation, Dayton, Ohio. Liquid dispensing apparatus. 1,874,431; Aug. 30.
Brallier, Paul S. (See Muggleton, G. D., Brallier, Van Galder, and Webber.)
Brand, Samuel, assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,874,164; Aug. 30.
Branthwaite, Isaac, Passaic, assignor to The Okonite-Callender Cable Company, Incorporated, Paterson, N. J. Electric conductor. 1,874,235; Aug. 30.
Brasington, John M., Cheraw, assignor of one-half to C. S. McCall, Bennettsville, S. C. Dusting apparatus. 1,873,993; Aug. 30.
Bratson Corporation. (See Kelley, Maude T., assignor.)
Braun, Philip N., assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y. Pressing machine. 1,874,876; Aug. 30.
Brauning, Karl A., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Plug retainer. 1,874,877; Aug. 30.
Bredenberg, Alfred, Champlain, N. Y., assignor of one-half to The Sheridan Iron Works, and one-half to T. W. & C. B. Sheridan Company. Book headbanding mechanism. 1,874,165; Aug. 30.
Brekke, Marshall T., Scarsdale, assignor to Northam Warren Corporation, New York, N. Y. Finger rest. Des. 87,660; Aug. 30.
Brenchley, Asbury C. (See Forrest, J., and Brenchley, assignors.)
Brennan, Mary C. (See Lynch, Thomas J., assignor.)
Bricker, Paul E., Michigan City, Ind. Headlight attachment. 1,874,432; Aug. 30.
Briggs, George L., Brooklyn, N. Y. Vanity case. 1,874,433; Aug. 30.
Brinton, William P., assignor to Armstrong Cork Company, Lancaster, Pa. Apparatus for printing. 1,874,166; Aug. 30.
Brinton, William P., Ridley Park, assignor to Armstrong Cork Company, Lancaster, Pa. Printing. 1,874,167; Aug. 30.
Brislin, Leo F., Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio. Controlling mechanism for scale removers and the like. 1,874,080; Aug. 30.
Bristol Company. (See Anderson, Martin E., assignor.)
Bristol, Edward S., assignor to Leeds & Northrup Company, Philadelphia, Pa. Method of and apparatus for combustion control. 1,874,878; Aug. 30.
Broce, Joseph F., Los Angeles, Calif. Compression check device. 1,874,694; Aug. 30.
Brosch, Helen, Brooklyn, N. Y. Bathing cap. 1,874,879; Aug. 30.
Brotherton, Joseph E., and R. W. Morris, Houston, assignors of one-half to J. S. Abercrombie, Harris County, Tex. Casing cutter. 1,874,880; Aug. 30.
Brown, Albert, assignor to Vogt Manufacturing Corporation, Rochester, N. Y. Pull cord or the like. 1,874,881; Aug. 30.
Brown, Arthur C., Wakefield, assignor to Heywood-Wakefield Company, Boston, Mass. Chair and friction hinge therefor. 1,874,434; Aug. 30.
Brown, Carl A., East Cleveland, F. B. Van Sickle, Wickliffe, and C. W. Craig, East Cleveland, Ohio, assignors to General Electric Company. Glass forming machine. 1,874,168; Aug. 30.
Brown, Donnelly, Kasson, Minn. Thermolunchbox. 1,874,882; Aug. 30.
Brown, John E., Elyria, assignor to The Enterprise Manufacturing Company, Akron, Ohio. Fish lure. 1,874,883; Aug. 30.
Bruce, Alfred W., New York, N. Y. High pressure locomotive. 1,874,236; Aug. 30.
Bruce, Alfred W., New York, N. Y. Lateral motion device for locomotives. 1,875,172; Aug. 30.
Bruno, Nicholas P., Erie, Pa. Flying machine safety device. 1,874,237; Aug. 30.
Bryan, Floyd D., and J. Blauner, assignors to S. G. Adams Company, St. Louis, Mo. Traffic sign or signal. 1,874,884; Aug. 30.
Buchanan, Stephen N., assignor to The Thomas & Betts Co., Elizabeth, N. J. Supporting device. 1,874,435; Aug. 30.
Buchli, Jacob, Winterthur, Switzerland. Coupling. 1,873,953; Aug. 30.
Buckley, Phillip F., Los Angeles, Calif., assignor to Ohmer Fare Register Company, Dayton, Ohio. Means to prevent the passage of grease. 1,874,885; Aug. 30.
Buderus, Carl, Frankfort-on-the-Main-Sud, Germany. Carriage for articulated trains. 1,875,214, Aug. 30.
Bukolt, Roman B., Stevens Point, Wis. Toy vehicle. 1,874,436; Aug. 30.
Bukolt, Roman B., Stevens Point, Wis. Toy vehicle. 1,874,437; Aug. 30.
Bunbury, Hugh M., Prestwich, J. S. H. Davies, Crumpsall, and W. J. S. Naunton, Prestwich, England, assignors to Imperial Chemical Industries Limited. Vulvanization of rubber and new compound therefor. 1,874,886; Aug. 30.
Burgess Battery Company. (See Henderson, Joseph M., assignor.)
Burgess Battery Company. (See Reese, David B., assignor.)
Burgess Battery Company. (See Staley, Wayne D., assignor.)
Burgess Battery Company. (See Storey, Oliver W., assignor.)
Burgess, C. F. Laboratories, Inc. (See Kliefoth, Max H., assignor.)
Burnett, Richard W., Chicago, Ill. Applying hand brakes to railway cars. 1,874,438; Aug. 30.
Burnett, Richard W., Chicago, Ill. Hand brake for railway cars. 1,874,439; Aug. 30.
Burns, Gordon E. (See Hall, E. A., and Burns.)
Burns, Wilford E., Burlingame, assignor to M. J. B. Co., San Francisco, Calif. Can making and apparatus. 1,874,887; Aug. 30.
Burrell, Edward P., Shaker Heights, assignor to The Warner & Swasey Company, Cleveland, Ohio. Chuck closing and opening mechanism. 1,874,888; Aug. 30.
Burris, Richard M., Holdenville, Okla., assignor of one-third to C. L. Hill, jr., Little Rock, Ark. Well closing apparatus. 1,874,889; Aug. 30.
Burrows, George, Long Island City, assignor to Merritt-Chapman & Scott Corporation, New York, N. Y. Method of and apparatus for connecting pipes in building pipe lines. 1,874,081; Aug. 30.
Burton, Charles S., Oak Park, assignor to Stewart-Warner Corporation, Chicago, Ill. Cam actuated fuel pump. 1,874,890; Aug. 30.
Buschbeck, Werner, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Keying circuit arrangement for transmitters. 1,874,891; Aug. 30.
Bush, John C., Aliquippa, Pa., assignor to The National Supply Company, Toledo, Ohio. Pipe slip. 1,874,440; Aug. 30.
Butler, Richard T., Minden, La. Arbor for shell reamers. 1,874,441; Aug. 30.
Butler, William J., Edgewood, and J. J. Flynn, assignors to Henry Lederer & Bro., Inc., Providence, R. I. Lighter. 1,874,892; Aug. 30.
Button, Raymond M. D., Coleford, Bath, England. Mine and like signaling apparatus. 1,874,893; Aug. 30.
Byers Machine Company. (See Lotte, Charles H., assignor.)
Cahn, Frank J. (See Miller, H. J., and Cahn.)
Calberg, Anton, Cranford, and H. K. Prinz, Linden, N. J. Air and gas mixing device for internal combustion engines. 1,874,894; Aug. 30.
Calcott, William S., and W. A. Douglass, Penns Grove, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Antioxidant for rubber. 1,874,895; Aug. 30.
California Packing Corporation. (See Wagner, Arthur J., assignor.)
Callahan, Vincent T., North Bergen, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Fuel control mechanism. 1,874,238; Aug. 30.
Calloway, Frank S., assignor to Atlas Tack Corporation, Fairhaven, Mass. Mechanism for sorting buttons or the like. 1,874,442; Aug. 30.
Camel Company. (See Beauchamp, Wilfred A., assignor.)
Camel Company. (See Beauchamp, W. A., and Wasberg, assignors.)
Camel Company. (See Tobin, Kenneth J., assignor.)
Camp, Curtis B., trustee. (See Bracke, Robert F., assignor.)
Campbell, A. S., Company. (See Kubler, Frederick J., assignor.)
Campbell, James H., Cambridge, assignor of one-half to J. D. Moore, Boston, Mass. Internal combustion engine. 1,873,994; Aug. 30.
Campbell, John B., Salem, N. J., assignor, by mesne assignments, to Carthage Mills, Incorporated, Cincinnati, Ohio. Floor covering. Re18,582; Aug. 30.
Campbell, Leon J., Buchanan, Mich., assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind. Double clutch transmission. 1,874,896; Aug. 30.
Campbell, Wyant & Cannon Foundry Company. (See Goldberg, Mark J., assignor.)
Campus, Cesare C., Santa Monica, Calif. Sanitary fitting. 1,874,169; Aug. 30.
Cannizzaro, Joseph, Union City, N. J. Rotary internal combustion engine. 1,874,239; Aug. 30.
Capps, Washington T., Baltimore, Md. Locomotive stoker. 1,875,216; Aug. 30.
Caps, Arthur W., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Photographic print delivering means. 1,874,897; Aug. 30.

Caps, Arthur W., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Photographic exposing and developing apparatus. 1,875,215; Aug. 30.
Carey, Philip, Manufacturing Company, The. (See Leshner, N., and Moeller, assignors.)
Carichoff, Eugene R., Schenectady, N. Y., assignor to General Electric Company. Circuit controller. 1,875,217; Aug. 30.
Carlson, Frederick E., assignor to Landers, Frary & Clark, New Britain, Conn. Weighing scale. 1,875,218; Aug. 30.
Carr, Archie R. (See Smith, R. R., and Carr.)
Carter, William C., Flint, Mich. Float mechanism for carburetors. 1,874,443; Aug. 30.
Carthage Mills, Incorporated. (See Campbell, John B., assignor.)
Carughi, Achille, and C. Paoloni, Brescia, Italy. Manufacturing chloride of lime through azeotropic distillation. 1,874,605; Aug. 30.
Carvelli, Carl G., Buffalo, N. Y., assignor to Wright Aeronautical Corporation. Oiling system. 1,874,444; Aug. 30.
Case, Byron A., Fort Wayne, Ind., assignor to General Electric Company. Electrical circuit regulator. 1,874,240; Aug. 30.
Cason, Dick K., jr., Houston, Tex. Self-aligning pitman head. 1,874,445; Aug. 30.
Casse, Frederick S., San Francisco, Calif. Kitchen utensil. 1,874,898; Aug. 30.
Caterpillar Tractor Co. (See Smith, Horatio W., assignor.)
Celanese Corporation of America. (See Ellis, George H., assignor.)
Centrifix Corporation. (See Hawley, Charles G., assignor.)
Chain Belt Company. (See Bleyer, Lloyd G., assignor.)
Chance Vought Corporation. (See Vought, Chance M., assignor.)
Chapin-Fulton Manufacturing Company. (See Ralston, William S., assignor.)
Chapman, Cloyd M., Douglaston, N. Y. Bonding cement and gypsum. 1,874,170; Aug. 30.
Chemisch-Pharmazeutische Aktiengesellschaft Bad Homburg. (See Liebrecht, Arthur, assignor.)
Chilton, Roland, Ridgewood, N. J., assignor to Wright Aeronautical Corporation. 1,874,446; Aug. 30.
Chireix, Henri, Paris, France, assignor to Compagnie Generale de Telegraphie Sans Fil. Measuring instrument. 1,874,899; Aug. 30.
Chisholm, Charles F., Staten Island, N. Y. Automotive vehicle lubrication. 1,874,900; Aug. 30.
Cholerton Charles, North Bergen, N. J., assignor to Shellastic, Inc. Production of molded articles. 1,875,294; Aug. 30.
Christiansen, John, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Shipping container. 1,874,901; Aug. 30.
Christopher, Arthur J., Yonkers, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Inductance network. 1,874,242; Aug. 30.
Church, Albert E., assignor to The Union Manufacturing Company, New Britain, Conn. Chuck or holding device. 1,874,082; Aug. 30.
Cincinnati Bickford Tool Company. (See Jullien, Victor, assignor.)
Cincinnati Bickford Tool Company, The. (See Klaus-Meyer, David C., assignor.)
Cincinnati Electrical Tool Company, The. (See Groene, W. F., and Reed, assignors.)
Cincinnati Grinders Incorporated. (See Fritschi, Hans, assignor.)
Cincinnati Grinders Incorporated. (See Nenninger, Lester F., assignor.)
Cincinnati Milling Machine Company, The. (See Archea, Walter D., assignor.)
Cincinnati Time Recorder Company, The. (See Lentz, Clarence J., assignor.)
Circle A Products Corporation. (See Oberdorfer, Henry D., assignor.)
Clapp, Kenneth S., Cleveland, Ohio. Switch for motor driven grease machines. 1,874,025; Aug. 30.
Clapp, Kenneth S., and T. H. Eichhoff, Cleveland, Ohio. Lubricator pump. 1,874,026; Aug. 30.
Clark, James G., Newark, N. J. Safety receptacle or container for inflammable materials. 1,874,243; Aug. 30.
Clark, Nathaniel, Clothier, W. Va. Car coupler. 1,874,447; Aug. 30.
Clark Tructractor Company. (See Williams, Alfred O., assignor.)
Clary, Jan P. (See Hansen, Thomas A., assignor.)
Clawson, Monroe S., Upper Montclair, N. J. Tempering apparatus. 1,874,448; Aug. 30.
Clay Equipment Corporation. (See Clay, Joseph B., assignor.)
Clay, Joseph B., assignor to Clay Equipment Corporation, Cedar Falls, Iowa. Ventilating device. 1,874,083; Aug. 30.
Clemence, Elliott, New York, N. Y., assignor, by mesne assignments, to The Monowatt Electric Corporation, Bridgeport, Conn. Current tap with plural extensions. 1,875,219; Aug. 30.
Cleveland Rock Drill Company. (See Renfer, John E., assignor.)
Clifford, Roger W., Schenectady, N. Y. Lateral motion device. 1,874,449; Aug. 30.
Clipsham, Kenneth M. (See Jackson, M. B., and Clipsham.)
Clum Manufacturing Company. (See Sinner, Emil, assignor.)
Clyne, Robert G. (See Olin, F. W., and Clyne.)
Clyne, Robert G., St. Louis, Mo., assignor to Western Cartridge Company, East Alton, Ill. Method and apparatus for cutting sheets. 1,874,902; Aug. 30.
Coates, Sydney N., Seattle, Wash. Electric steam boiler. 1,874,244; Aug. 30.
Coats, George S., Visalia, Calif. Deep-well turbine pump. 1,874,450; Aug. 30.
Coca-Cola Company, The. (See Mitchell, George L., assignor.)
Coe, James R., assignor to The American Brass Company, Waterbury, Conn. Rolling mill housing. 1,875,220; Aug. 30.
Coffey, Oscar L., assignor to Whiting Corporation, Harvey, Ill. Gear case. 1,874,905; Aug. 30.
Cofrin, Austin E., Green Bay, Wis. Process and machine for producing wadding material. 1,874,451; Aug. 30.
Cohn, Benjamin, Hartford, Conn. Medallion. Des. 87,661; Aug. 30.
Coil, Grover C. (See Ohmer, J. F., and Coil.)
Cole, Dale S. (See Leece, B. M., and Cole.)
Cole Electric Products Co. (See Cole, Louis W., assignor.)
Cole, Frank H., Walpole, Mass. Boiler tube cleaner. 1,874,452; Aug. 30.
Cole, Louis W., New York, assignor to Cole Electric Products Co., Inc., Long Island City, N. Y. Letter box construction. 1,874,696; Aug. 30.
Collection Equipment Corporation. (See Howard, William S., assignor.)
Collins, George R., executor. (See Collins, Timothy B.)
Collins, Timothy B., deceased, Daytona, Fla., by G. R. Collins, executor, Kansas City, Mo. Boat. 1,875,190; Aug. 30.
Colonial Iron Works Company. (See Hoefen, Walter V., assignor.)
Columbia Burner Company. (See Hall, Ernest A., assignor.)
Columbia Burner Co., The. (See Hall, E. A., and Burns, assignors.)
Columbus Auto Brass Company. (See Donley, Harold B., assignor.)
Colvin, Charles V., and R. A. Foster, Lansing, Mich. Kitchen ventilator. 1,874,906; Aug. 30.
Combs, Presley S., jr., Los Angeles, Calif. Monorail car. 1,874,907; Aug. 30.
Comer, Harris. (See Strickler, A., Comer, and Zifferblatt.)
Comer, William T., assignor to Crystal Carbonic Laboratory, Atlanta, Ga. Process and apparatus for producing frozen confections. 1,874,453; Aug. 30.
Compagnie de Bethune. (See Minotte, Maurice E. H., assignor.)
Compagnie Generale de Telegraphie Sans Fil. (See Chireix, Henri, assignor.)
Condon, Edward T., New York, N. Y. Time controlled switch. 1,874,028; Aug. 30.
Condon, Edward T., assignor to Autoposts Company Inc., New York, N. Y. Combined driving mirror, parking and signal device. 1,874,027; Aug. 30.
Condon, Maurice L., Lake Mahopac, N. Y. Anchoring transplanted trees. 1,874,029; Aug. 30.
Conklin, James W., Rocky Point, N. Y., assignor to Radio Corporation of America. Thermostat. 1,874,909; Aug. 30.
Conklin, Roscie D., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Vacuum engine. 1,874,454; Aug. 30.
Conley, Arthur W., Cleveland Heights, Ohio, assignor, by mesne assignments, to The Corozone Company, Wilmington, Del. Ozonizer. 1,874,455; Aug. 30.
Conner, Charles E., Torrance, Calif. Dispensing device. 1,874,738; Aug. 30.
Conrad, Friedrich, Berlin, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Eliminating aperiodic disturbances. 1,874,910; Aug. 30.
Continental Aircraft Engine Company. (See Du Bois, Ralph N., assignor.)
Continental Aircraft Engine Company. (See Niven, Archie M., assignor.)
Continental Diamond Fibre Company. (See Swallow, Gerald, assignor.)
Continental Divco Company. (See Herman, Kenneth R., assignor.)
Continental-Divco Company. (See Maurer, E. R., and Ferguson, assignors.)
Continental Motors Corporation. (See Evelyn, Steven F., assignor.)
Continental Motors Corporation. (See Fink, James O., assignor.)
Continental Motors Corporation. (See Frederick W., and Meyer, assignors.)
Continental Motors Corporation. (See Harris, William W., assignor.)
Continental Motors Corporation. (See Kreis, Oscar C., assignor.)
Continental Motors Corporation. (See Meyer, Andre J., assignor.)
Continental Motors Corporation. (See Niven, Archie M., assignor.)

Continental Motors Corporation. (See Sampson, Frederick W., assignor.)
Continental Steel Corporation. (See Schueler, Julian L., assignor.)
Continental Steel Corporation. (See Williams, George N., assignor.)
Conway, Joseph T., Cleveland, Ohio. Closure operator. 1,874,903; Aug. 30.
Conzetti, Achille, assignor to the Firm: J. R. Geigy, S. A., Basel, Switzerland. Manufacture of strongly basic azodyestuffs. 1,875,221; Aug. 30.
Cook Electric Company. (See Persons, Lawrence M., assignor.)
Cooper, Hyman, Linden, N. J. Folded shirt and folding same for display purposes. 1,873,954; Aug. 30.
Copeland, Robert J., Toronto, Ontario, Canada. Loose leaf binder. 1,874,456; Aug. 30.
Corey, Fred W., Tilton, N. H. Making knitting machine latch needles. 1,874,457; Aug. 30.
Cornell, Fritz G., jr., Mountain Lakes, N. J. Surface cooler and heater. 1,874,458; Aug. 30.
Corozone Company. (See Conley, Arthur W., assignor.)
Corrigan, Leslie F., Chicago, Ill. Wall cabinet. 1,874,245; Aug. 30.
Corwin, Harry D., Walnut Park, Calif. Rotary drying apparatus. 1,873,995; Aug. 30.
Cotchett, Louis M., Brookline, assignor to Textile Patent & Process Co. Incorporated, Boston, Mass. Textile fabric and manufacture. 1,874,084; Aug. 30.
Cousineau, Alfred G. J., Chicago, Ill. Aircraft construction. 1,874,459; Aug. 30.
Cowdery, Robert H., assignor to The American Fork & Hoe Company, Geneva, Ohio. Fishing rod. 1,874,246; Aug. 30.
Cox, Floyd W. (See Meyer, C. R., and Cox.)
Cox, John E. P., Rochester, N. Y. Prick punch. 1,874,460; Aug. 30.
Crafts, Curtis S., Oak Park, Ill., assignor to Goss Printing Press Company. Web roll supporting mechanism. 1,874,904; Aug. 30.
Craig, Carl J., and J. E. Nielsen, Chicago, Ill.; said Craig assignor to said Nielsen. Motion picture apparatus. 1,874,908; Aug. 30.
Craig, Charles W. (See Brown, C. A., Van Sickle, and Craig.)
Crane Co. (See Flodin, Victor E., assignor.)
Crawford, Alfred, assignor to Crawford Manufacturing Company, New Brunswick, N. J. Stop motion for knitting machines (hosiery). 1,874,085; Aug. 30.
Crawford Manufacturing Company. (See Crawford, Alfred, assignor.)
Creager, William P., Watertown, N. Y., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Fluid control system. 1,873,955; Aug. 30.
Cronburg, Claude I. (See Lingo, W. W., and Cronburg.)
Crosley Radio Corporation, The. (See Langley, Ralph H., assignor.)
Crosthwait, David N., jr., assignor to C. A. Dunham Company, Marshalltown, Iowa. Freezing temperature indicator. 1,874,911; Aug. 30.
Crosthwait, David N., jr., assignor to C. A. Dunham Company, Marshalltown, Iowa. Refrigerating method and apparatus. 1,874,912; Aug. 30.
Crowley, Henry L., assignor to Henry L. Crowley & Co. Inc., West Orange, N. J. Heater arrangement for indirectly heated cathodes. 1,875,222; Aug. 30.
Crowley, Henry L., & Co. Inc. (See Crowley, Henry L., assignor.)
Crowley, John C., Cleveland Heights, Ohio. Valve mechanism. 1,874,914; Aug. 30.
Crowley, John C., Cleveland Heights, assignor to The Dill Manufacturing Company, Cleveland, Ohio. Pressure gauge. 1,874,913; Aug. 30.
Crowley, John C., Cleveland Heights, assignor to The Dill Manufacturing Company, Cleveland, Ohio. Air chuck. 1,874,915; Aug. 30.
Crowley, John T., Lambertville, N. J. Boot. 1,874,461; Aug. 30.
Crown Cork & Seal Company. (See Ross, Hugh M., assignor.)
Crowther, Edmond C., Oak Lane, Pa., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Lock washer assembly. 1,874,462; Aug. 30.
Crystal Carbonic Laboratory. (See Comer, William T., assignor.)
Culver, Edward L., Los Angeles, Calif. Bean cleaning apparatus. 1,874,916; Aug. 30.
Cunningham, Patrick P., Provo, Utah. Tuyère. 1,873,996; Aug. 30.
Cunningham, R. R. (See Rutherford, William R., assignor.)
Curtiss Aeroplane & Motor Company. (See Beisel, Rex B., assignor.)
Curtiss Aeroplane & Motor Company. (See Geignetter, Charles G., assignor.)
Curtiss Aeroplane & Motor Company. (See Page, George A., jr., assignor.)
Curtiss Aeroplane & Motor Company. (See Steward, Colby W., assignor.)
Curtiss Aeroplane & Motor Company. (See Wright, Theodore P., assignor.)
Curtiss Aeroplane & Motor Company, Inc. (See Henrichsen, K., and Page, assignors.)
Curtiss Aeroplane & Motor Company, Inc. (See Moore, Edmund B., assignor.)
Curtiss Aeroplane & Motor Company, Inc. (See Payne, Samuel T., assignor.)
Curtiss-Wright Airplane Company. (See Henrichsen, Knut, assignor.)
Cushnie, Peter, White Plains, assignor to Sperry Products, Inc., Brooklyn, N. Y. Automatic rail locator for rail flaw detector mechanism. 1,874,030; Aug. 30.
Cutler-Hammer, Inc. (See Seeger, Edwin W., assignor.)
Cutler, Samuel C., Murral Hill, N. J. Gas washing apparatus. 1,875,300; Aug. 30.
Dahlstrand, Hans P., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Rotor structure. 1,873,956; Aug. 30.
Dailey, John J. (See Zuck, O. C., and Dailey.)
Dalton, Frederick C., Portland, Oreg., assignor of two-thirds to R. F. Bicknell, Boise, Idaho. Rotafy gas engine. 1,874,247; Aug. 30.
Danforth, Richard S., San Francisco, Calif. Cataract condensation apparatus. 1,874,849; Aug. 30.
Daniels, Joseph S., assignor to Daniels Manufacturing Company, Rhinelander, Wis. Folded paper napkin and dispenser therefor. 1,874,850; Aug. 30.
Daniels Manufacturing Company. (See Daniels, Joseph S., assignor.)
Danielson, Carl J. (See Havens, W., and Danielson.)
Danin, Philip, New York, N. Y. Machine for pressing garments. 1,874,463; Aug. 30.
Dannequin, Charles Henri, Livry-Gargan, France. Apparatus for producing dental anæsthesia. 1,874,917; Aug. 30.
Daprato Statuary Company. (See Mariotti, Joseph J., assignor.)
Darco Corporation. (See Davis, Raymond G., assignor.)
Darwins Limited, et al. (See Horsburgh, G. D. L., and Levick, assignors.)
Davenport Machine and Foundry Company. (See Scherer, Charles F., assignor.)
Davies, John S. H. (See Bunbury, H. M., Davies, and Naunton.)
Davis, Chester L., Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y. Television system. 1,874,171; Aug. 30.
Davis, Chester L., Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y. Television system. 1,874,172; Aug. 30.
Davis, Durrel H., assignor to Highway Trailer Company, Edgerton, Wis. Automatic air line connection for semi-trailers. 1,874,918; Aug. 30.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Automatic pressure locking means. 1,874,697; Aug. 30.
Davis, Francis W., Waltham, Mass. Auxiliary power steering gear. 1,874,248; Aug. 30.
Davis, Frank W., jr., and R. T. Stutts, New Bedford, Mass. Bale band tie or buckle. 1,874,464; Aug. 30.
Davis, Herbert C., Detroit, Mich., assignor to The McBee Binder Company, Athens, Ohio. Distribution and analysis accounting form. 1,873,997; Aug. 30.
Davis, Jesse H., Baltimore, Md. Window operating device. 1,874,465; Aug. 30.
Davis, J. W., Company. (See Owen, Orlando K., assignor.)
Davis, Maurice E., assignor to The Leo Meyer Company, Akron, Ohio. Cutter. 1,874,173; Aug. 30.
Davis, Raymond G., assignor to Darco Corporation, Wilmington, Del. Revivification of spent carbon. 1,873,998; Aug. 30.
Davis, Raymond G., assignor to Darco Corporation, Wilmington, Del. Revivification of spent activated carbons. 1,875,223; Aug. 30.
Davy, Richard W., New York, N. Y. Liquid feeding device. 1,874,249; Aug. 30.
Dawber, Frank. (See Grundy, A., and Dawber.)
Dawson, Edward S., jr., Schenectady, N. Y., assignor to General Electric Company. Electrical coil. 1,874,723; Aug. 30.
Dawson, Elma N. (See Dawson, James C., assignor.)
Dawson, James C., assignor to Elma N. Dawson, Webster Groves, Mo. Loose-leaf binder. 1,874,031; Aug. 30.
Dawson, James C., assignor to E. N. Dawson, Webster Groves, Mo. Loose-leaf post binder. 1,874,032; Aug. 30.
Dawson, James C., assignor to E. N. Dawson, Webster Groves, Mo. Assembling jig. 1,874,033; Aug. 30.
Day, George H., Rochester, N. Y. Key holding case. 1,874,919; Aug. 30.
Dayton Malleable Iron Company, The. (See Langenheim, Albert H., assignor.)
Dayton Malleable Iron Company, The. (See Lucker, Millard B., assignor.)
Dayton Malleable Iron Company, The. (See Runyan, William B., assignor.)
Dayton Pump & Mfg. Company, The. (See Wolfe, Harley H., assignor.)
Dayton Roderwald Company, The. (See Roderwald, Rudolf, assignor.
Decker, Alonzo G., Baltimore County, assignor to The Black and Decker Manufacturing Company, Towson Heights, Md. Screw driver and wrench friction drive. 1,874,250; Aug. 30.
De Coriolis, Ernest G., and H. B. Barber, assignors to Surface Combustion Corporation, Toledo, Ohio. Process of producing sooty atmosphere in gas-fired furnaces. 1,873,999; Aug. 30.

Dehuff, Walter F., Glen Rock, Pa. Dough mixing machine. 1,874,920; Aug. 30.
Delahaye, Walter H., Ottawa, Ontario, Canada, assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,874,921; Aug. 30.
Delaney, John H., deceased, Los Angeles, Calif., Union Bank & Trust Co. of Los Angeles, administrator. Building material. 1,874,922; Aug. 30.
Demag Aktiengeselischaft. (See Heetkamp, Heinrich, assignor.)
Demarest, Charles S., Ridgewood, N. J., assignor to American Telephone and Telegraph Company. Transmission regulating system. 1,874,466; Aug. 30.
Dennis, Alfred A., assignor to Veneer Machinery Company, Grand Rapids, Mich. Veneer joint gluer. 1,874,251; Aug. 30.
Despard, Victor R., assignor to Pass & Seymour, Inc., Syracuse, N. Y. Electric wiring apparatus. 1,875,224; Aug. 30.
Despard, Victor R., assignor to Pass & Seymour, Inc., Syracuse, N. Y. Lock switch. 1,875,225; Aug. 30.
De Turk, Jeremiah A., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Molding machine. 1,874,698; Aug. 30.
Dewandre, Albert, assignor to Servo-Frein Dewandre, Société Anonyme, Liege, Belgium. Power steering gear. 1,875,226; Aug. 30.
De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Shoe form. 1,874,923; Aug. 30.
DeWitt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Expansible toe form. 1,874,924; Aug. 30.
Deyss, Alfred E., East Schodack, N. Y. Vehicle brake. 1,874,252; Aug. 30.
Diamond, James E., New York, N. Y., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich. Piston. 1,874,925; Aug. 30.
Dickson, Vincent L., Alameda, Calif. Headlight lens. 1,874,086; Aug. 30.
Dickson, Vincent L., Alameda, Calif. Breaking down of metals. 1,874,253; Aug. 30.
Dictograph Products Co. (See Sinel, Joseph, assignor.)
Diederichs, Carl A., Pittsburgh, Pa. Toy. 1,874,087; Aug. 30.
Dill Manufacturing Company, The. (See Crowley, John C., assignor.)
Dilley, Morris MacD., and J. H. Fraser, assignors to Automatic Safety Signal Gate Co., Columbus, Ind. Highway gate. 1,874,926; Aug. 30.
Dinkel, Andrew J., assignor of one-half to William E. McCaw, Yuma, Ariz. Oil burner. 1,874,933; Aug. 30.
Dixon, Thomas S., and A. E. Simpson, assignors to The Vigilant Automatic Fire Alarm Company Limited, Christchurch, New Zealand. Electrical automatic fire alarm. 1,874,254; Aug. 30.
Dobson, William A., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,874,255; Aug. 30.
Dobson, William A., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,874,256; Aug. 30.
Dodge, Adiel Y., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake. 1,874,927; Aug. 30.
Dodge, Adiel Y., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,874,928; Aug. 30.
Dodge, Adiel Y., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,874,929; Aug. 30.
Doll, Emil, West New York, N. J. Toothbrush. 1,874,467; Aug. 30.
Donaldson, Eleanor, Minneapolis, Minn. Hose supporter for women. 1,874,089; Aug. 30.
Donley, Harold B., assignor to Columbus Auto Brass Company, Columbus, Ohio. Lamp construction. 1,874,088; Aug. 30.
Donnelly, James A., Brooklyn, N. Y., assignor to Warren Webster & Company. Steam heating system and regulator therefor. 1,874,174; Aug. 30.
Doptis, Andrew J., Detroit, Mich. Placing tool for automobile motor valve shoes. 1,874,257; Aug. 30.
Dorsch, Charles F. (See Sprague, L. A., and Dorsch.)
Dorsch, Frank A., Milwaukee, Wis. Game. 1,874,930; Aug. 30.
Dougherty, John M., St. Louis, Mo. Pressure relief valve device. 1,874,931; Aug. 30.
Douglas, Harry A., Bronson, Mich. Aeroplane. 1,874,468; Aug. 30.
Douglas, Harry A., Bronson, Mich. Aeroplane. 1,874,469; Aug. 30.
Douglass, William A. (See Calcott, W. S., and Douglass.)
Dover Manufacturing Company. (See Maurer, C. C., and Ven, assignors.)
Dow Chemical Company. (See Barstow, E. O., and Heath, assignors.)
Dow Chemical Company, The. (See Dow, Herbert H., assignor.)
Dow Chemical Company, The. (See Smith, A. K., and Veazey, assignors.)
Dow, Donald B., assignor to Indian Territory Illuminating Oil Company, Bartlesville, Okla. Intermittent flow device. 1,874,932; Aug. 30.
Dow, Herbert H., assignor to The Dow Chemical Company, Midland, Mich. Stabilized heating fluid and stabilizing same. 1,874,258; Aug. 30.
Drake, Bradford W., Stoughton, Mass. Wool bag or the like. 1,874,934; Aug. 30.
Drake, Frederick H., Boonton, L. M. Hull, Mountain Lakes, and W. D. Loughlin, Boonton, N. J., assignors, by mesne assignments, to Radio Corporation of America, New York, N. Y. Radio receiving system for aircraft. 1,874,935; Aug. 30.
Drake, Harcourt C. (See Sperry, E. A., and Drake.)
Draper Corporation, The. (See Hudson, Alexander, assignor.)
Draper Corporation. (See Lindsjo, Verner, assignor.)
Driggs, Frank H., Bloomfield, N. J., assignor to Westinghouse Lamp Company. Preparation of rare refractory metal powders by electrolysis. 1,874,090; Aug. 30.
Drissner, Alfred E., assignor to The National Acme Company, Cleveland, Ohio. Profiling attachment. 1,874,470; Aug. 30.
Dubilier Condenser Corporation. (See Dubilier, William, assignor.)
Dubilier, William, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical structure. 1,874,936; Aug. 30.
Du Bois, Ralph N., Detroit, Mich., assignor, by mesne assignments, to Continental Aircraft Engine Company. Internal combustion engine. 1,874,471; Aug. 30.
Dubonnet, André, Neuilly-sur-Seine, France. Shock absorbing suspension. 1,874,034; Aug. 30.
Duffendack, Ora S. (See Schaefer, F., and Duffendack.)
Dugan, Louis H., Tipton, Okla. Generator tester. 1,874,259; Aug. 30.
Dunham, C. A., Company. (See Crosthwait, David N., jr., assignor.)
Dunham, C. A., Company. (See Dunham, Clayton A., assignor.)
Dunham, Clayton A., Glencoe, Ill., assignor to C. A. Dunham Company, Marshalltown, Iowa. Differential heating system. 1,874,937; Aug. 30.
Dunnebier, Max. (See Winkler, A., and Dunnebier.)
Dunning, William E., assignor to The McCaskey Register Company, Alliance, Ohio. Indicator for cash registers. 1,874,938; Aug. 30.
Dunning, William E., assignor to The McCaskey Register Company, Alliance, Ohio. Autographic register. 1,874,939; Aug. 30.
Du Pont, E. I., de Nemours & Company. (See Calcott, W. S., and Douglass, assignors.)
Du Pont, E. I., de Nemours & Company. (See Engelmann, M., and Tisdale, assignors.)
Du Pont, E. I., de Nemours & Company. (See Hucks, Robert T., assignor.)
Du Pont, E. I., de Nemours & Company. (See Kramer, Richard L., assignor.)
Du Pont, E. I., de Nemours & Company. (See Lawson, W. E., and Werntz, assignors.)
Du Pont, E. I., de Nemours & Company. (See Lubs, H. A., Fox, and Smith, assignors.)
Du Pont, E. I., de Nemours & Company. (See Reid, Ebenezer E., assignor.)
Durand & Huguenin S. A. (See Fuchs, Sigismund, assignor.)
Dwyer, Lawrence P. (See Dunham, C. A., Company, assignor.)
Dwyer, Lawrence P., Winnetka, Ill., assignor to C. A. Dunham Company, Marshalltown, Iowa. Cabinet type unit heater. 1,874,940; Aug. 30.
Dyer, James D., Kansas City, Mo. Automobile windshield and corner post construction. 1,875,227; Aug. 30.
E. A. Laboratories, Inc. (See Auñero, John M., assignor.)
Earhart, Charles T., Pittsburgh, Pa. Framing table. 1,874,175; Aug. 30.
Eaton Manufacturing Company. (See Heinauer, William J., assignor.)
Eaton Manufacturing Company, The. (See Peck, Lionel S., assignor.)
Eaton Manufacturing Company. (See Reid, James S., assignor.)
Eckersley, Thomas L., Danbury, England, assignor to Radio Corporation of America. Aerial system for wireless signaling. 1,874,941; Aug. 30.
Edna Brass Manufacturing Company, The. (See Snyder, W Earl, assignor.)
Edwards, Paul S. (See Barbulesco, Constantin D., assignor.)
Edwards, William H., Great Neck, N. Y., assignor to American Telephone and Telegraph Company. Party telephone signaling arrangement. 1,874,472; Aug. 30.
Egli, Huldreich, Baltimore, and S. M. Shoemaker, Burnside Farm, Eccleston, Md. Hay curing and drying machine. 1,874,473; Aug. 30.
Egli, John, Camden, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Metal vapor arc rectifier. 1,873,957; Aug. 30.
Ehrlich, Louis B., assignor to The Electric Auto-Lite Company, Toledo, Ohio. Combined end plate and brush holder support for dynamo-electric machines. 1,874,000; Aug. 30.
Eichholz, Willy. (See Neresheimer, H., and Eichholz.)
Eichwede, Heinz, and J. Rachor, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Yellow azo dyestuff. 1 874,474; Aug. 30.
Eickhoff, Theodore H. (See Clapp, Kenneth S.)

Einfeldt, Ernest E., Davenport, Iowa, assignor to French & Hecht, Incorporated. Apparatus for electric riveting, heading, etc. 1,874,942; Aug. 30.
Einfeldt, Ernest E., Davenport, Iowa, assignor to French & Hecht, Incorporated. Wheel construction. 1,874,943; Aug. 30.
Einstein, Robert E., St. Louis, Mo. Rail lubricating apparatus. 1,874,001; Aug. 30.
Eisler Electric Corporation. (See Morick, J. A., and Swanson, assignors.)
Electric Auto-Lite Company, The. (See Ehrlich, Louis B., assignor.)
Electric Controller & Manufacturing Company. (See Wilcox, Harry L., assignor.)
Electric Smelting & Aluminum Company, The. (See Guertler, William M., assignor.)
Electric Tamper & Equipment Company. (See Love, Nelson R., assignor.)
Electro Anti-Corrosion Corporation. (See Kirkaldy, Alexander, assignor.)
Electrolux Servel Corporation. (See Randel, Bo Folke, assignor.)
Electrolux Servel Corporation. (See Taylor, Robert S., assignor.)
Ellingham, Robert W., Springfield, assignor to Fleming Machine Company, Worcester, Mass. Making a carbon cleaning brush. 1,874,475; Aug. 30.
Elliott Addressing Machine Company. (See Elliott, Harmon P., assignor.)
Elliott, Harmon P., Watertown, Mass., assignor to Elliott Addressing Machine Company. Grooved stencil card. 1,874,476; Aug. 30.
Elliott, Irwin, Harmon, assignor to Williams Oven Mfg. Co., New York, N. Y. Device for placing pie trays onto or removing them from a traveling oven. 1,874,699; Aug. 30.
Ellis Adding Typewriter Company. (See Perkins, Nathan W., assignor.)
Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Treatment of materials made of or containing cellulose derivatives. 1,874,176; Aug. 30.
Ellis, George H., Spondon, near Derby, England, assignor to Celanese Corporation of America. Treatment of materials made of or containing cellulose derivatives. 1,874,177; Aug. 30.
Engelmann, Max, and W. H. Tisdale, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Wood preservation. 1,874,260; Aug. 30.
Englehard, Charles, Inc. (See Hebler, William O., assignor.)
Englehard, Charles, Inc. (See Kremer, John, assignor.)
Englehard, Charles, Inc. (See Krueger, R. H., and Hamilton, assignors.)
Enterprise Manufacturing Company, The. (See Brown, John E., assignor.)
Evans, Ralph L., assignor to Zotos Corporation, New York, N. Y. Hair waving pad. 1,875,228; Aug. 30.
Evelyn, Steven F., assignor to Continental Motors Corporation, Detroit, Mich. Internal combustion engine attachment. 1,874,261; Aug. 30.
Evenrude, Ole, Milwaukee, Wis., assignor, by mesne assignments, to Outboard Motors Corporation. Timer for four cylinder outboard motors. 1,874,178; Aug. 30.
Ewald, Warren. (See Henshall, P. P., and Ewald.)
Ezzell, John McD., Rattan, Okla. Razor strop. 1,874,262; Aug. 30.
Fabian, Louis, Toledo, Ohio. Battery tool. 1,874,944; Aug. 30.
Fahrney, Emery H., Chicago, Ill. Process of and apparatus for carbonating liquids. 1,874,091; Aug. 30.
Fahrney, Emery H., Chicago, Ill. Temperature and flow indicator and flow control of cooling water for motors. 1,874,263; Aug. 30.
Falcke, Emil, Berlin, Germany, assignor to General Electric Company. Notching device. 1,875,229; Aug. 30.
Fantail Boat Corporation. (See Plum, Johannes, assignor.)
Fantz, Fred C., Webster Groves, Mo. Oil burner. 1,874,002; Aug. 30.
Fantz, Fred C., Webster Groves, Mo. Housing for return bends. 1,874,003; Aug. 30.
Fantz, Fred C., Webster Groves, Mo. Return bend fittings for oil stills. 1,874,004; Aug. 30.
Faulkner, David S., Los Angeles, and L. E. Zerbe, Moneta, Calif., assignors to The National Supply Company, Toledo, Ohio. Multiple speed gear driven drilling control. 1,874,264; Aug. 30.
Faultless Caster Company. (See Noelting, A. H., and Van Dusen, assignors.)
Faultless Caster Company. (See Noelting, William H., assignor.)
Fay, J. A., & Egan Company, The. (See Medholdt, Louis T., assignor.)
Fayer, Charles, Flushing, N. Y., assignor to Wappler Electric Company, Inc. Electrically operated timing mechanism. 1,874,477; Aug. 30.
Fayer, Charles, Flushing, N. Y., assignor to Wappler Electric Company, Inc. Mounting for X-ray tubes. 1,874,478; Aug. 30.
Fayer, Charles, and J. Kremer, Flushing, assignors to Wappler Electric Company, Inc., Long Island City, N. Y. Electrically operated hair curler. 1,874,479; Aug. 30.
Federal Milk Company. (See Voorhies, Grantland B., assignor.)
Ferguson, Donald M. (See Maurer, E. R., and Ferguson.)
Ferguson, Herman B., Philadelphia, Pa. Utility bag. 1,874,945; Aug. 30.
Ferris, John P., assignor to The Oilgear Company, Milwaukee, Wis. Hydraulic table drive for milling machines and the like. 1,874,265; Aug. 30.
Ferris, Seymour W., Lansdowne, assignor to The Atlantic Refining Company, Philadelphia, Pa. Treatment of hydrocarbon oils. 1,874,946; Aug. 30.
Ferris, Seymour W., Lansdowne, assignor to The Atlantic Refining Company, Philadelphia, Pa. Extraction of mineral oils. 1,874,947; Aug. 30.
Ferris, Walter, assignor to The Oilgear Company, Milwaukee, Wis. Hydraulic feed for lathes and the like. 1,874,266; Aug. 30.
Ferris, Walter, assignor to The Oilgear Company, Milwaukee, Wis. Feed mechanism for milling machines. 1,874,267; Aug. 30.
Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Hinge for doors or other closures. Des. 87,662; Aug. 30.
Fiat Società Anonima. (See Savoja, Umberto, assignor.)
Fibreboard Products Inc. (See Leslie, Harold, assignor.)
Fields Point Manufacturing Corporation. (See Townend, D., and White, assignor.)
Filene, Edward A., Boston, Mass. Speech translating system and method. 1,874,480; Aug. 30.
Fillmore-Hyde, A. (See Simonds, Francis M., assignor.)
Fink, James O., assignor to Continental Motors Corporation, Detroit, Mich. Clutch. 1,874,268; Aug. 30.
Finley, Charles A., Rutherford, N. J., assignor to Boorum & Pease Company, New York, N. Y. Loose-leaf binder. 1,874,092; Aug. 30.
Fischer, Edward J., Covington, Ky., assignor of one-half to F. A. Aman, Cincinnati, Ohio. Spring device for automotive vehicles. 1,874,269; Aug. 30.
Fischer, Ernst, Berlin-Tempelhof, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Telephone cable. 1,874,481; Aug. 30.
Fisher Governor Company, The. (See Wolfe, Kenneth R. D., assignor.)
Fisher, Henry C., Selma, Ala. Log turner and loader. 1,874,093; Aug. 30.
Fleming Machine Company. (See Ellingham, Robert W., assignor.)
Flemming, Walter. (See Luther, M., and Flemming.)
Fletcher, Harold W., assignor to Hughes Tool Company, Houston, Tex. Well strainer and making same. 1,874,035; Aug. 30.
Flodin, Victor E., Oak Park, assignor to Crane Co., Chicago, Ill. Lubricated and sealed plug valve. 1,875,302; Aug. 30.
Fluor Construction Co. (See Martin, Guy T., assignor.)
Flynn, John J. (See Butler, W. J., and Flynn.)
Flynn, Mortimer F., Grant City, N. Y. Apparatus for cleaning and conditioning fabrics. Re18,583; Aug. 30.
Flynn, Mortimer F., West New Brighton, N. Y., assignor to Bird Machine Company, South Walpole, Mass. Napping or felt conditioning apparatus. 1,874,270; Aug. 30.
Fogal, Jay R., San Francisco, Calif. Fuse. 1,874,948; Aug. 30.
Fogal, Jay R., San Francisco, Calif. Fuse. 1,874,949; Aug. 30.
Ford, Hannibal C., Jamaica, and H. L. Tanner, Brooklyn, assignors to Ford Instrument Company, Inc., Long Island City, N. Y. Transmission system. 1,874,094; Aug. 30.
Ford Instrument Company. (See Ford, H. C., and Tanner, assignors.)
Ford Instrument Company. (See Marsh, Harry S., assignor.)
Ford Instrument Company. (See Tanner, Harry L., assignor.)
Forman, Paris R., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Fluid pressure operated doorlock. 1,874,482; Aug. 30.
Forman, Paris R., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Door operating mechanism. 1,874,483; Aug. 30.
Forrest, James, Milwaukee, and A. C. Brenchley, West Allis, assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Purifier. 1,873,958; Aug. 30.
Forsell, Frans E., Cranston, R. I., assignor to Freeman-Daughaday Company. Clasp. 1,874,484; Aug. 30.
Forshee, Ernest L., Akron, Mich. Chicken feeder. 1,875,230; Aug. 30.
Forsyth, Harry, Prosser, Wash. File guide. 1,874,950; Aug. 30.
Fort Howard Paper Company. (See Shaffer, G. A., and Wirtz, assignors.)
Foster, Richard A. (See Colvin, Charles V. and R. A.)
Foster, Theodore W., & Brother C. (See Parkin, Winfred T., assignor.)
Foth, Charles J., Carlstadt, and H. Foth, Rutherford, N. J. Unbreakable and sanitary seamless receptacle. 1,875,231; Aug. 30.
Foth, Henry. (See Foth, Charles J. and H.)
Foulon, Charles, Brussels, Belgium. Grenade and lance-grenade. 1,874,951; Aug. 30.
Fowble, Archie, Dayton, Ohio. Hydraulic shock absorber for automobiles and the like. 1,874,485; Aug. 30.
Fowler, Frank E., Athens, Ga. Seal cleaning machine. 1,875,232; Aug. 30.

Fox, Arthur L. (See Lubs, H. A., Fox and Smith.)
Fox Case Corporation. (See Sponable, Earl I., assignor.)
Fox, Martin, assignor to The Seng Company, Chicago, Ill. Extension table. 1,875,295; Aug. 30.
Fox, Ray M., Los Angeles, Calif., assignor, by direct and mesne assignments, to E. T. Monett, New York, N. Y. Coin control device. 1,874,486; Aug. 30.
Fracker, Edward G., Grant City, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Resilient mounting for electrical devices. 1,874,271; Aug. 30.
Frank, John I., assignor of one-half to Theodore W. Smith, Baltimore, Md. Magazine for automatic shotguns. 1,874,952; Aug. 30.
Frank, John M. (See Ilg, R. A. and Frank, assignors.)
Frank, John P., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,874,272; Aug. 30.
Franklin, Edward J., Salt Lake City, Utah. Combination ash gate and air inlet system for furnaces. 1,874,487; Aug. 30.
Franklin, Edward J., Salt Lake City, Utah. Burner for pulverized fuel. 1,874,488; Aug. 30.
Franklin Williams, Inc. (See Franze, E. T., and Weiss, assignors.
Frantz Manufacturing Co. (See Ferris, William D., assignor.)
Franzen, Eric T., Maplewood Township, Essex County, and A. J. Weiss, West Orange, assignors to Franklin Williams, Inc., Orange, N. J. Reeling device for motion picture films. 1,874,953; Aug. 30.
Fraser, James H. (See Dilley, M. M., and Fraser.)
Frederick, Walter A., and A. J. Meyer, assignors to Continental Motors Corporation, Detroit, Mich. Preventing scuffing of cylinders and pistons. 1,874,489; Aug. 30.
Fredsell, Charles R., New York, assignor to McDonald Engineering Corporation, Brooklyn, N. Y. Labeling machine. 1,875,301; Aug. 30.
Freedlander, Abraham L., Dayton, Ohio. Gasket. 1,874,490; Aug. 30.
Freeman-Daughaday Company. (See Forsell, Frans E., assignor.)
Free Wheeling Patents Corporation. (See Campbell, Leon J., assignor.)
French & Hecht, Incorporated. (See Einfeldt, Ernest E., assignor.)
French, Roland P. (See Ohler F. L. and French.)
Frey, Ernst H., assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Overload protective system with resistance operated relay. 1,873,959; Aug. 30.
Fried, Krupp Aktiengesellschaft, Friedrich-Alfred-Hutte. (See Hartmann, Fritz, assignor.)
Friedman, Samuel, Brooklyn, N. Y. Fur treating apparatus. 1,874,273; Aug. 30.
Friend, John F. C., Newcastle-on-Tyne, England. Concentration of minerals including coal. 1,875,296; Aug. 30.
Fritschi, Hans, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machine. 1,784,491; Aug. 30.
Fröhlich, Hans, and T. Hausch, assignors to Landis & Gyr, A.-G., Zug, Switzerland. Induction meter. 1,874,954; Aug. 30.
Fuchs, Sigismund, Höchst-on-the-Main, Germany, assignor to firm of Durand & Huguenin S. A., Basel, Switzerland. Dyeing process for animal fibers. 1,874,274; Aug. 30.
Fuller, Frederick L., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,874,275; Aug. 30.
Fuller, Frederick L., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,874,276; Aug. 30.
Fuller, Frederick L., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,874,277; Aug. 30.
Fuller & Sons Manufacturing Co. (See Bixby, Leo A., assignor.)
Fulton, Alfred C., assignor to The Aetna Rubber Company, Ashtabula, Ohio. Yieldable shoe or cushion. 1,874,955; Aug. 30.
Furo, Andre C., Astoria, N. Y. Headlight indicator. 1,874,179; Aug. 30.
Gaines, Edmund P., Columbia, S. C. Aerofoil. 1,874,278; Aug. 30.
Gallsworthy, Benjamin, Bayonne, N. J., assignor to The Texas Company, New York, N. Y. Cutting oil. 1,874,956; Aug. 30.
Ganz, Albert G., Union City, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electric wave transmission. 1,874,492; Aug. 30.
Gardiner, Lion, Lakewood, assignor to The Jaeger Machine Company, Columbus, Ohio. Road rolling machine. 1,874,957; Aug. 30.
Gardner, Clyde, deceased, by Edna B. Gardner, administratrix, assignor, by mesne assignments, to Gardner Company, Ebensburg, Pa. Calculating machine. 1,874,700; Aug. 30.
Gardner Company. (See Gardner, Clyde, assignor.)
Gardner, Edna B., administratrix. (See Gardner, Clyde.)
Gardner Toy Company. (See Gardner, William E., assignor.)
Gardner, William E., assignor to Gardner Toy Company, Inc., Watertown, Mass. Toy balloon. Des. 87,663; Aug. 30.
Garrett, Francis A., assignor to Ransomes, Sims & Jefferies, Limited, Ipswich, England. Brake mechanism for the wheels of road vehicles. 1,874,180; Aug. 30.
Gaudenzi, Arthur, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Internal seal for mercury vapor rectifiers. 1,873,960; Aug. 30.
Gaudenzi, Arthur, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Vapor rectifier. 1,874,095; Aug. 30.
Gavin, William H., San Jose, assignor to Pratt-Low Preserving Company, Santa Clara, Calif. Producing tomato juice. 1,874,181; Aug. 30.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Thermionic tube. 1,874,182; Aug. 30.
Gebhard, Louis A., Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Coupling system for high frequency transmitters. 1,874,958; Aug. 30.
Gehring, John. (See Slade, H. E., and Gehring.)
Geignetter, Charles G., Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Dual control brakes. 1,874,493; Aug. 30.
Geigy, J. R., S. A., the firm. (See Conzetti, Achille, assignor.)
Geise, Henry F., Whites, Wash. Artificial hand. 1,874,183; Aug. 30.
General Aniline Works, Inc. (See Eichwede, H., and Rachor, assignors.)
General Aniline Works, Inc. (See Hentrich, W., Tietze, and Ossenbeck, assignors.)
General Aniline Works, Inc. (See Koch, Heinrich, assignor.)
General Aniline Works, Inc. (See Kränzlein, G., and Vollmann, assignors.)
General Aniline Works, Inc. (See Nawiasky, P., and Käcer, assignors.)
General Aniline Works, Inc. (See Neelmeier, W., and Lamberz, assignors.)
General Aniline Works, Inc. (See Neresheimer, H., and Eichholtz, assignor.)
General Chemical Company. (See Landau, Henry B., assignor.)
General Electric Company. (See Bedford, Burnice D., assignor.)
General Electric Company. (See Brown, C. A., Van Sickle, and Craig, assignors.)
General Electric Company. (See Carichoff, Eugene R., assignor.)
General Electric Company. (See Case, Byron A., assignor.)
General Electric Company. (See Dawson, Edward S., jr., assignor.)
General Electric Company. (See Falcke, Emil, assignor.)
General Electric Company. (See Hall, Chester I., assignor.)
General Electric Company. (See Hull, Albert W., assignor.)
General Electric Company. (See Idank, Joseph A., assignor.)
General Electric Company. (See Ives, Charles A., assignor.)
General Electric Company. (See Maddock, Alan J., assignor.)
General Electric Company. (See Maser, Harold T., assignor.)
General Electric Company. (See McCarty, O. P., and Boyajian, assignors.)
General Electric Company. (See Standerwick, Reginald G., assignor.)
General Electric Company. (See Thompson, Louis W., assignor.)
General Electric Company. (See Turner, Harry W., assignor.)
General Electric Company. (See Williams, Selden T., assignor.)
General Electric Company. (See Williamson, Raymond H., assignor.)
General Electric Company. (See Winter, Fred H., assignor.)
General Electric Company. (See Zocher, Hans, assignor.)
General Laboratories, Inc. (See Krueger, Richard E., assignor.)
General Motors Corporation. (See Rothrock, George L., assignor.)
General Motors Corporation. (See Seaholm, Ernest W., assignor.)
General Motors Corporation. (See Williams, Charles E., assignor.)
General Radio Company. (See Lamson, Horatio W., assignor.)
General Talking Pictures Corporation. (See Blumenfeld, Arthur A., assignor.)
Gentile, Frank T. (See Maccarone, F., and Gentile.)
George, Heber T., Dundalk, Md., assignor to Bethlehem Steel Company. Rod cooling and water eliminating apparatus. 1,874,959; Aug. 30.
George, William, Liberty, N. Y. Mattress or cushion covering. 1,874,494; Aug. 30.
Gerlofson, Carl H. (See Nelson, T. J., and Gerlofson.)
Geromanos, Hercules W., Boston, Mass. Educational appliance. 1,874,279; Aug. 30.
Geron, William H., Philadelphia, Pa., assignor to Self Lighting Cigarette Corporation of America. Cigarette lighter. 1,874,495; Aug. 30.

Gewalt, Herman F., assignor of one-half to W. J. Thuermann, Wilwaukee, Wis. Testing device for sprinkler systems. 1,875,233; Aug. 30.
Ghent, William E., assignor to Boggs Manufacturing Corporation, Atlanta, N. Y. Sorting machine. 1,874,096; Aug. 30.
Gibbons, Charles J., Bridgeport, Conn. Coiling machine. 1,874,280; Aug. 30.
Glebe, Erich, and A. Scheibe, Berlin, Germany, assignors to Radio Corporation of America. Vibrating crystals. 1,874,960; Aug. 30.
Gilbert, John J., Douglaston, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Submarine signaling cable. 1,874,281; Aug. 30.
Gildemeister, August A., Toledo, Ohio. Dispensing equipment. 1,874,496; Aug. 30.
Gildemeister, August A., Toledo, Ohio. Check control mechanism. 1,874,497; Aug. 30.
Gillies, William R., assignor to Union Asbestos and Rubber Company, Chicago, Ill. Heat insulating material. 1,875,297; Aug. 30.
Gisholt Machine Company. (See Miller, Ralph J., assignor.)
Gits, Remi J., Chicago, Ill. Lubricator. 1,874,961; Aug. 30.
Glenny, Clarence S., Rockford, Ill., assignor to The Washburn Company, Worcester, Mass. Stand for kitchen utensil. 1,874,498; Aug. 30.
Globe Automatic Sprinkler Company. (See Rowley, Arthur C., assignor.)
Gluck, Julius, and R. R. Karich, New York., assignors to Ohmer Fare Register Company, Dayton, Ohio. Taximeter construction. 1,874,962; Aug. 30.
Godfrey, William F., Kearney, Nebr. Pump. 1,874,282; Aug. 30.
Goepfrich, Rudolph A., asignor to Bendix Brake Company, South Bend, Ind. Brake. 1,874,963; Aug. 30.
Goes, Frederic T., assignor to The Vilter Manufacturing Company, Milwaukee, Wis. Cooling system. 1,874,964; Aug. 30.
Goetzel, John H., Cleveland, and P. C. Smith, Lakewood, Ohio. Skate. 1,874,965; Aug. 30.
Goldberg, Mark J., Beloit, Wis., assignor to Campbell, Wyant & Cannon Foundry Company, Muskegon, Mich. Fuel injection valve for oil engines. 1,874,283; Aug. 30.
Goldberg, Maximilian M., assignor to The National Cash Register Company, Dayton, Ohio. Computing machine. 1,874,097; Aug. 30.
Goldberg, Maximilian M., assignor to The National Cash Register Company, Dayton, Ohio. Auditing machine. 1,874,184; Aug. 30.
Goldberg, Maximilian M., assignor to The National Cash Register Company, Dayton, Ohio. Computing machine. 1,874,701; Aug. 30.
Goldstein, Jacob, Wilkes-Barre, Pa. Vase. 1,874,185; Aug. 30.
Gomes, Earl S., Cincinnati, Ohio. Knockdown corner locking paper container. 1,874,702; Aug. 30.
Goodall, Howard W., Aldan, and J. W. Walsh, Philadelphia, Pa. Hose coupling. 1,874,284; Aug. 30.
Goodchild, George, Saco, Me., assignor to Saco-Lowell Shops, Boston, Mass. Stop motion for twister frames. 1,874,500; Aug. 30.
Gooder, Seth M., Chicago, Ill. Method of and apparatus for raising roofs. 1,874,005; Aug. 30.
Goss Printing Press Company. (See Crafts, Curtis S., assignor.)
Goss Printing Press Company. (See Richter, Charles J., assignor.)
Grant, Casper E., Portsmouth, Va. Organ coupler. 1,875,234; Aug. 30.
Grant, John. (See Santiago, James J., assignor.)
Gray, Charles B., Millbourne, Pa. Metal cutting tool. 1,874,036; Aug. 30.
Gray, Charles B., Millbourne, Pa. Violin bow. 1,874,037; Aug. 30.
Gray, Charles B., Millbourne, Pa. Cutting machine. 1,874,038; Aug. 30.
Grayson Heat Control, Inc. (See Grayson, John H., assignor.)
Grayson Heat Control, Inc. (See Vaughn, Sidney P., assignor.)
Grayson, John H., assignor to Grayson Heat Control, Inc., Lynwood, Calif. Safety pilot gas cock. 1,874,501; Aug. 30.
Green, Allan, Sutton, near Keighley, England. Apparatus for encircling threads. 1,874,502; Aug. 30.
Green, Charles W., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,874,285; Aug. 30.
Green, Charles W., Ilion, N. Y., assignor, by mesne assignments to The National Cash Register Company, Dayton, Ohio. Cash register. 1,874,739; Aug. 30.
Green, Ernest, Hendon, London, England, assignor to Radio Corporation of America. Aerial system and feeding system therefor. 1,874,966; Aug. 30.
Green, Gordon C., Hingham, Mass. Safety razor blade stropper. 1,874,740; Aug. 30.
Greenleaf, William H., Hartford, Conn., assignor to Western Clock Company, Peru, Ill. Clock mechanism. 1,874,967; Aug. 30.
Greenwood, George W., Wilmington, Del., assignor to Stephen F. Whitman & Son, Inc., Philadelphia, Pa. Extrusion die. 1,874,503; Aug. 30.
Greer, Edward L., Highland Park, and K. F. Marx, Dearborn, Mich. Locking means for workholders or jigs. 1,874,504; Aug. 30.
Gregoire, Jean A., Paris, France. Transmission device for motor vehicles. 1,874,505; Aug. 30.
Greulich, Gerald G., Cleveland Heights, Ohio, assignor to The Lock-Steel Company, Pittsburgh, Pa. Monolithic reenforcement. 1,874,506; Aug. 30.
Gribbie, John M., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Electrical connecter. 1,874,507; Aug. 30.
Grier, Ralph H., and A. Sachs, Salisbury, Md., assignors to Sachs Sole Shaping Machine Company. Incorporated. Apparatus for shaping shoes. 1,875,304; Aug. 30.
Grigsby-Grunow Company. (See Miller, H. J., and Cahn, assignors.)
Griscom-Russell Company. (See Rice, Joseph assignor.)
Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,874,039; Aug. 30.
Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,874,040; Aug. 30.
Groene, William F., Cincinnati, and L. D. Reed, Mariemont, assignors to The Cincinnati Electrical Tool Company, Cincinnati, Ohio. Routing device. 1,874,232; Aug. 30.
Gronau, Herman, Cincinnati, Ohio. Alternating current welder. 1,874,508; Aug. 30.
Groove Lock Co. Inc. (See Leberman, Harry, assignor.)
Gross, Henry, Los Angeles, Calif. Therapeutic device. 1,874,286; Aug. 30.
Grube, Arthur W., Kansas City, Kans. Attachment for platform scales. 1,875,235; Aug. 30.
Grundy, Arthur, Wigan, and F. Dawber, Upholland, England. Telescopic or extensible table. 1,874,509; Aug. 30.
Guertler, William M., Berlin, Germany, assignor to The Electris Smelting & Aluminum Company, Cleveland, Ohio. Making Portland cement from coal ashes. 1,874,186; Aug. 30.
Guttinger, Heinrich, Wettingen, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Electric regulator. 1,873,961; Aug. 30.
Gyro Process Company. (See Harnsberger, A. E., and Smith, assignors.)
Haag, Harold C., Larned, Kans. Windshield defroster. 1,874,510; Aug. 30.
Habermaas, Edward W., assignor to Louise H. Havermaas, Cincinnati, Ohio. Pastry mold. 1,874,511; Aug. 30.
Habermaas, Louise H. (See Habermaas, Edward W., assignor.)
Haff, Henry L., Chicago, Ill. Window latch. 1,874,098; Aug. 30.
Haglund, Hakon H., Flushing, assignor to The Western Union Telegraph Company, New York, N. Y. Automatic means for changing timing intervals. 1,874,187; Aug. 30.
Hails, Edward T., Montgomery, Ala. Individual towel cabinet. 1,874,741; Aug. 30.
Hajek, Michael W. (See Pettit, K. D., Wicks, and Hajek.)
Hale, Harold E., Somerville, and W. A. Watson, Malden, Mass. Pneumatic reproducing typewriting mechanisms. 1,874,512; Aug. 30.
Hall, Chester I., Philadelphia, Pa., assignor to General Electric Company. Traffic signal controller. 1,874,513; Aug. 30.
Hall, Chester I., Philadelphia, Pa., assignor to General Electric Company. Electric heating. 1,875,236; Aug. 30.
Hall, Ernest, assignor to The Columbia Burner Company, Toledo, Ohio. Gas furnace. 1,874,968; Aug. 30.
Hall, Ernest A., assignor to The Columbia Burner Company, Toledo, Ohio. Gas controlling device. 1,874,969; Aug. 30.
Hall, Ernest A., assignor to The Columbia Burner Company, Toledo, Ohio. Gas burner spud. 1,874,970; Aug. 30.
Hall, Ernest A., and G. E. Burns, assignors to The Columbia Burner Co., Toledo, Ohio. High and low flame control for gas burners. 1,874,971; Aug. 30.
Hall, Frank W., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Process and apparatus for continuous filtration. 1,874,972; Aug. 30.
Haller, Robert, Riehen, near Basel, assignor to firm of Society of Chemical Industry in Basle, Basel, Switzerland. Manufacture of dyeings on textiles. 1,874,099; Aug. 30.
Halstead, Stanley M., A. J. Wickland, and W. C. Tustin, San Jose, Calif. Brake testing machine. 1,874,006; Aug. 30.
Hambley, George H., High Bluff, Manitoba, Canada. Power transmission device. 1,875,237; Aug. 30.
Hambrecht, Edward J., Palatine Bridge, assignor to Beech-Nut Packing Company, Canajoharie, N. Y. Candy conditioning apparatus. 1,874,973; Aug. 30.
Hamilton, William F. (See Krueger, R. H., and Hamilton.)
Hammenecker, Pieter A., Marlekerke, Belgium, assignor to The Ruberoid Co., New York, N. Y. Cold enameling asbestos-cement plates. 1,874,974; Aug. 30.
Hammond, John H., jr., Gloucester, Mass. Method of and apparatus for synchronization. 1,874,287; Aug. 30.

Hampton, Wade W., Los Angeles, Calif., assignor to Hughes Tool Company, Houston, Tex. Drill cutter. 1,874,041; Aug. 30.
Handewerk, Erwin C. (See Mahler, G. T., and Handwerk.)
Handley, George F. (See Myers, L. C., and Handley.)
Hanel, Charles L., Jackson Heights, assignor to Signal Engineering & Manufacturing Company, New York, N. Y. Selective electrical circuit controlling device. 1,874,100; Aug. 30.
Hanhardt, Jacob, Larned, Kans. Salt water plug. 1,874,975; Aug. 30.
Hanlon-Waters, Inc. (See Waters, Millard F., assignor.)
Hanlon-Waters, Inc. (See Zuck, O. C., and Dailey, assignors.)
Hanovia Chemical and Manufacturing Company. (See Bird, Lester F., assignor.)
Hans, Edmund E., Detroit, Mich. Lubricant filter. 1,874,976; Aug. 30.
Hansell, Clarence W., Rocky Point, N. Y., assignor to Radio Corporation of America. High frequency meter connection. 1,874,977; Aug. 30.
Hansell, Clarence W., Rocky Point, N. Y., assignor to Radio Corporation of America. Transmission system. 1,874,978; Aug. 30.
Hansell, Clarence W., Rocky Point, N. Y., assignor to Radio Corporation of America. Phase multiplier and modulator. 1,874,979; Aug. 30.
Hansell, Clarence W., Rocky Point, N. Y., assignor to Radio Corporation of America. Piezo-electric crystal. 1,874,980; Aug. 30.
Hansell, Clarence W., Rocky Point, N. Y., assignor to Radio Corporation of America. Voltage regulator. 1,874,981; Aug. 30.
Hansell, Clarence W., Port Jefferson, N. Y., assignor to Radio Corporation of America. Frequency changer. 1,874,982; Aug. 30.
Hansell, Clarence W., Port Jefferson, N. Y., assignor to Radio Corporation of America. Ultra short wave antenna system. 1,874,983; Aug. 30.
Hansen, Thomas A., assignor of one-fourth to J. P. Clary, Hartford, Conn. Nursing bottle holder. 1,874,514; Aug. 30.
Hanskat, Rose, Chicago, Ill. Bracelet and lorgnette holder. 1,874,984; Aug. 30.
Hardinge Company. (See Hardinge, Harlowe, assignor.)
Hardinge, Harlowe, assignor to Hardinge Company, Incorporated, York, Pa. Grinding mill. 1,874,985; Aug. 30.
Hardman, Cornelius B., Columbus, Ohio. Valve mechanism for internal combustion engines. 1,875,238; Aug. 30.
Harker, Frederick, South Ardmore, assignor to Wall & Ochs, Incorporated, Philadelphia, Pa. Portable eye testing apparatus. 1,874,986; Aug. 30.
Harnischfeger Corporation. (See Been, Paul, assignor.)
Harnischfeger Corporation. (See Ljungkull, Rolf, assignor.)
Harnsberger, Audley E., assignor to The Pure Oil Company, Chicago, Ill. Pressure relief mechanism. 1,874,742; Aug. 30.
Harnsberger, Audley E., and C. L. Smith, Chicago, Ill., assignors to Gyro Process Company, Detroit, Mich. Producing catalytic cores. 1,874,743; Aug. 30.
Harris, Seybold, Potter Company. (See Kaddeland, Christen R., assignor.)
Harris, William W., assignor to Continental Motors Corporation, Detroit, Mich. Vibration damper. 1,874,515; Aug. 30.
Harrison Radiator Corporation. (See Walker, Norman, assignor.)
Harrison Radiator Corporation. (See White, James A., assignor.)
Harrop Ceramic Service Company, The. (See Hartford, Frank M., assignor.)
Hartford-Empire Company. (See Peiler, Karl E., assignor.)
Hartford Engineering and Machine Company. (See Nesbitt, Harold H., assignor.)
Hartford, Frank M., assignor to The Harrop Ceramic Service Company, Columbus, Ohio. Apparatus for treating ceramic ware. 1,874,516; Aug. 30.
Hartmann, Fritz, Rheinhausen (Lower Rhine)-Friemersheim, assignor to Fried. Krupp Aktiengesellschaft, Friedrich-Alfred-Hutte, Rheinhausen (Lower Rhine), Germany, Iron sleeper. 1,874,987; Aug. 30.
Hartness, James, Springfield, Vt. Screw thread gauging. 1,874,517; Aug. 30.
Harvel Corporation, The. (See Harvey, Mortimer T., assignor.)
Harvey, James W., Winthrop, Me. Motor installation. 1,874,988; Aug. 30.
Harvey, Leo M., Los Angeles, Calif. Tie forming mechanism. 1,874,518; Aug. 30.
Harvey, Mortimer T., East Orange, assignor to The Harvel Corporation, Newark, N. J. Method and composition for controlling moisture. 1,874,989; Aug. 30.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Shock absorbing mechanism. 1,874,288; Aug. 30.
Haskins, Howard B. and H. E. Van Voorhees, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Hood latch. 1,874,289; Aug. 30.
Hathaway, Edgar F., Wellesley, and W. Bixby, assignors to Shawmut Engineering Company, Boston, Mass. Tube frame yarn spool. 1,874,188; Aug. 30.
Hathaway, Harlow H., Los Angeles, Calif. Building construction. 1,875,242; Aug. 30.
Hathorn, Clarence J., assignor to Stackpole Carbon Company, St. Marys, Pa. Resistor mounting. 1,874,744; Aug. 30.
Haubrock, Omer E., Bristol, Tenn. Sawmill. 1,874,519; Aug. 30.
Haughton Elevator & Machine Company, The. (See Ohler, F. L., and French, assignors.)
Hausch, Theodor. (See Frohlich, H., and Hausch.)
Havens, William, and C. J. Danielson, Waubay, S. Dak. Brooder. 1,874,745; Aug. 30.
Hawley, Charles G., Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio. Steam separator. 1,874,990; Aug. 30.
Hazlewood, John J., Pittsburgh, Pa. Window sash. 1,874,746; Aug. 30.
Head, Robert, Yonkers, assignor, by mesne assignments, to United Research Corporation, Long Island City, N. Y. Cutter head for phonograph recording. 1,874,101; Aug. 30.
Heath, Sheldon B. (See Barstow, E. O., and Heath.)
Heaton, Roy C., Tacoma, assignor to Tractor Parts Company, Seattle, Wash. Loading and transporting device. 1,874,007; Aug. 30.
Hebler, William O., assignor to C. Englehard, Inc., Newark, N. J. Gas analysis apparatus. 1,874,520; Aug. 30.
Hedeen, Elmer, assignor to C. F. Michael, Bucyrus, Ohio. Burial vault. 1,874,991; Aug. 30.
Heetkamp, Heinrich, assignor to Demag Aktiengesellschaft, Duisburg, Germany. Mandrel bar guide. 1,874,992; Aug. 30.
Heffner, Karl, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Radio apparatus for intercommunication or duplex operation. 1,874,993; Aug. 30.
Hehr, Frederick G., assignor to Aerol Engine Corporation, New York, N. Y. Combustion chamber for Diesel engines. 1,874,994; Aug. 30.
Heinauer, William J., Massillon, assignor, by mesne assignments, to The Eaton Manufacturing Company, Cleveland, Ohio. Rolling machine. 1,874,995; Aug. 30.
Heintz Manufacturing Company. (See Lambert, Albert L., assignor.)
Held, Charles, New York, N. Y. Meat slicing machine. 1,874,747; Aug. 30.
Heller, Alfred, Mahlow, near Potsdam, assignor to Weigelwerk Aktiengesellschaft, Neisse-Neuland, Germany. Steam heated boiling vessel. 1,874,996; Aug. 30.
Henal Company. (See Strickler, A., Comer, and Zifferblatt, assignors.)
Henderson, Joseph M., assignor to Burgess Battery Company, Madison, Wis. Depolarizing mix for dry cells. 1,874,748; Aug. 30.
Henig, Henry, Brooklyn, N. Y. Automatic spout. 1,874,008; Aug. 30.
Hennesy, Gerald C., Washington, D. C. Airplane. 1,874,521; Aug. 30.
Henrichsen, Knut, Garden City, N. Y., assignor to Curtiss-Wright Airplane Company. Curved control stick. 1,874,522; Aug. 30.
Henrichsen, Knut, Garden City, and G. A. Page, jr., Freeport, N. Y., assignors to Curtiss Aeroplane & Motor Company, Inc. Aircraft cowling for tandem motors. 1,874,523; Aug. 30.
Henry, Beulah L., New York, N. Y. Duplicating attachment for typewriters. 1,874,749; Aug. 30.
Henshall, Percival P., and W. Ewald, Philadelphia, assignors to John J. Nesbitt, Inc., Holmesburg-Philadelphia, Pa. Expanded tube radiator. 1,874,009; Aug. 30.
Hentrich-Winfrid, Wiesdorf-on-the-Rhine, E. Tietze, Cologne-on-the-Rhine, and A. Ossenbeck, Cologne-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Diazo-amino compounds. 1,874,524; Aug. 30.
Herman, Kenneth R., assignor, by mesne assignments, to Continental Divco Company, Detroit, Mich. Brake operating mechanism for delivery vehicles. 1,874,526; Aug. 30.
Hermann Manufacturing Company, The. (See Wessel, L. H., and Booker, assignors.)
Herpen, August-Theodor, Leipzig, Germany. Steam generator. 1,874,527; Aug. 30.
Herrmann, Conrad, Wuppertal-Elberfeld, Germany, assignor to American Glanzstoff Corporation, New York, N. Y. Spooling machine. 1,874,525; Aug. 30.
Hertz, Gustav L., Halle-on-the-Saale, Germany, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Gas filled discharge tube. 1,874,528; Aug. 30.
Hess, John P., Milwaukee, Wis. Pump. 1,874,010; Aug. 30.
Heston, Allen L., Akron, Ohio, assignor to Seiberling Rubber Company. Bias cutting machine. 1,874,750; Aug. 30.
Heymer, Gerd, Dessau-Ziebigk in Anhalt, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Printing pictures of a lenticular film. 1,874,529; Aug. 30.
Heywood-Wakefield Company. (See Brown, Arthur C., assignor.)

Heywood-Wakefield Company. (See Larsen, Lewis, assignor.)
Hiering, William C., assignor to J. E. Mergott Company, Newark, N. J. Bag fastener. 1,874,997; Aug. 30.
Hiering, William C., assignor to J. E. Mergott Company, Newark, N. J. Bag fastener. 1,874,998; Aug. 30.
Hiering, William C., assignor to J. E. Mergott Company, Newark, N. J. Hand bag. 1,874,999; Aug. 30.
Highway Trailer Company. (See Davis, Durrel H., assignor.)
Hill, C. L., jr. (See Burris, Richard M., assignor.)
Hill, Earl V., Chicago, Ill. Water cooling system. 1,875,305; Aug. 30.
Hill, Leland H., Collingswood, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Air blast equipment for oil-immersed transformers. 1,873,971; Aug. 30.
Hillerman, William C., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,000; Aug. 30.
Hilscher, Curt, Chemnitz, Germany. Thread tensioning device. 1,874,011; Aug. 30.
Hiltz, Reginald, Brookline, Mass. Reversible jaw combination wrench. 1,874,751; Aug. 30.
Hirsch, Sylvan R., Cincinnati, Ohio, assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Air or gas compressor. 1,874,752; Aug. 30.
Hobart, Floyd B., assignor to Urbana Coke Corporation, Urbana, Ill. Coke oven door. 1,874,290; Aug. 30.
Hoefen, Walter V., assignor to Colonial Iron Works Company, Cleveland, Ohio. Conveyer construction. 1,874,042; Aug. 30.
Hoeft, Adolph R., Evanston, assignor to Hoeft & Company, Inc., Chicago, Ill. Burner control mechanism. 1,875,239; Aug. 30.
Hoeft & Company. (See Hoeft, Adolph R., assignor.)
Hoel, Archie B., Drexel Hill, assignor to The Atlantic Refining Company, Philadelphia, Pa. Emulsifiable oil and producing same. 1,875,001; Aug. 30.
Hoffman, Jay C., Akron, Ohio. Railway signaling system. 1,874,291; Aug. 30.
Holden, William H. T., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Transmission regulating system. 1,874,530; Aug. 30.
Holland, Cyrus J., Chicago, Ill. Friction draft gear. 1,874,531; Aug. 30.
Holmgren, Eric A., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Insole-making machine. 1,874,532; Aug. 30.
Holst, Gilles and B. Van Der Pol, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Discharge apparatus. 1,874,292; Aug. 30.
Holst, Gilles, assignor to Naamlooze Vennootschap Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Discharge tube with glow cathode. 1,875,002; Aug. 30.
Hook, Charles H., Pittsburgh, and N. L. Mercur, McKeesport, Pa. Combination pressure regulating and shut-off valve. 1,874,293; Aug. 30.
Horn, Guido, Berlin-Weissensee, Germany. Master operator for hydraulic brake systems and the like. 1,875,003; Aug. 30.
Horsburgh, George D. L., and H. S. Levick, assignors of one-half to Swift Levick and Sons Limited and one-half to Darwins Limited, Sheffield, England. Permanent magnet. 1,875,004; Aug. 30.
Horton, Erwin C., Hamburg, and H. Hueber, assignor to Trico Products Corporation, Buffalo, N. Y. Compressed air operated windshield cleaner system. 1,874,294; Aug. 30.
Hotchner, Fred, Los Angeles, Calif. Bending tubing. 1,874,012; Aug. 30.
Hotopp, Alfred H., jr., Caldwell, N. J., assignor to Wired Radio, Inc., New York, N. Y. Radio receiving system. 1,874,295; Aug. 30.
Howard, Willima S., assignor to Collection Equipment Corporation, New York, N. Y. Hoisting apparatus for roadway vehicles. 1,874,189; Aug. 30.
Howell, Glenn T. (See Langhoffer, David N.)
Hubbard & Co. (See Pounder, Wilbur R., assignor.)
Hucks, Robert T., Parlin, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Coating material and preparing same. 1,875,005; Aug. 30.
Hudson, Alexander, Readville, Mass., assignor, by mesne assignments, to The Draper Corporation. Filling-feeler mechanism for looms. 1,874,533; Aug. 30.
Hueber, Henry. (See Horton, E. C., and Hueber.)
Huffman, Mervin C., Claremont, N. H., assignor to Sullivan Machinery Company. Pressure fluid motor. 1,874,190; Aug. 30.
Hufnagel, Alvena. (See Hufnagel, Simon F., C., A., and G.)
Hufnagel, Charles. (See Hufnagel, Simon F., C., A., and G.)
Hufnagel, George. (See Hufnagel, Simon F., C., A., and G.)
Hufnagel, Simon F., C., A., and G., Platte Township, Taylor County, Iowa. Swiller. 1,874,534; Aug. 30.
Hughes, James R., assignor to The Studebaker Corporation, South Bend, Ind. Vehicle trunk. 1,874,535; Aug. 30.
Hughes Tool Company. (See Fletcher, Harold W., assignor.)
Hughes Tool Company. (See Hampton, Wade W., assignor.)
Hughes Tool Company. (See Scott, Floyd L., assignor.)
Hughes Tool Company. (See Wellensiek, Louis H., assignor.)
Hull, Albert W., Schenectady, N. Y., assignor to General Electric Company. Controlled arc discharge apparatus. 1,874,753; Aug. 30.
Hull, Guye L. (See Barrowman, W. L., and Hull.)
Hull, Lewis M. (See Drake, F. H., Hull, and Loughlin.)
Humason, Granville A., Houston, Tex., assignor of one-third to Margia Manning, Brooklyn, N. Y. Well tester. 1,875,006; Aug. 30.
Hunt, George H., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,007; Aug. 30.
Huntoon, Charles F., San Marino, Calif. Brake beam support. 1,875,240; Aug. 30.
Huntsberger, Russell C., Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio. Gauge mechanism. 1,874,296; Aug. 30.
Hutchinson, Henry B. (See Richards, E. H., and Hutchinson.)
Hutto Engineering Company, Inc. (See Bates, P. D., and Hutto, assignors.)
Hutto, Marsden C. (See Bates, P. D., and Hutto.)
I. G. Farbenindustrie Aktiengesellschaft. (See Konrad, E., and Siefken, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Luther, M., and Flemming, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Söll, Julius, assignor.)
Idank, Joseph A., Long Island City, N. Y., assignor to General Electric Company. Electric cord terminal. 1,875,241; Aug. 30.
Ilg Electric Ventilating Company. (See Ilg, R. A., and Frank, assignors.)
Ilg, Robert A., Chicago, and J. M. Frank, Winnetka, assignors to Ilg Electric Ventilating Company, Chicago, Ill. Unit for heating and ventilating systems. 1,874,043; Aug. 30.
Illinois Railway Equipment Company. (See Johnson, Malcolm S., assignor.)
Illinois Tool Works. (See Irwin, Charles J., assignor.)
Illinois Tool Works. (See Olson, Carl G., assignor.)
Illinois Watch Case Company. (See Larson, K. R., and Irelan, assignors.)
Imperial Chemical Industries Limited. (See Bunbury, H. M., Davies, and Naunton, assignors.)
Imperial Chemical Industries Limited. (See Smith, W., and Thomson, assignors.)
Indian Territory Illuminating Oil Company. (See Dow, Donald B., assignor.)
Infant Socks, Inc. (See Longtin, William J., assignor.)
Ingersoll-Rand Company. (See Slater, Fred M., assignor.)
Ingersoll-Rand Company. (See Smickle, Raymond H., assignor.)
Ingersoll-Rand Company. (See Smith, William A., jr., assignor.)
Ingersoll-Rand Company. (See Spoor, William M., assignor.)
International Combustion Engineering Corporation. (See Patterson, W. S., and Pierce, assignors.)
International Corset Company. (See Weber, William G., assignor.)
Intertype Corporation. (See Sperry, Samuel E., assignor.)
Intertype Corporation. (See Willis, Le Roy W., assignor.)
Irelan, Ellison S. (See Larson, K. R., and Irelan.)
Irving Iron Works Company. (See Tippel, Edward F. J., assignor.)
Irwin, Charles J., assignor to Illinois Tool Works, Chicago, Ill. Making milling cutters. 1,874,536; Aug. 30.
Ives, Charles A., Erie, Pa., assignor to General Electric Company. Brake control valve. 1,874,297; Aug. 30.
Ives, Herbert E., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrooptical system. 1,874,101; Aug. 30.
Jackson, Maunsell B., and K. M. Clipsham, Toronto, Ontario, assignors to Leaside Engineering Company Limited, Leaside, Canada. Engine starter. 1,874,298; Aug. 30.
Jackson, William S., Bala-Cynwyd, Pa., assignor to Ajax Electrothermic Corporation, Trenton, N. J. Electric induction furnace. 1,875,298; Aug. 30.
Jacobs, Edward L., Vicksburg, Mich. Artificial bait. 1,874,102; Aug. 30.
Jacquemin, Auguste F., assignor to Robers Fibre Company, Kennebunk, Me. Counter molding machine. 1,874,703; Aug. 30.
Jaden, Fred I., Hastings, Nebr. Pressure oiler. 1,875,008; Aug. 30.
Jaeger Machine Company. (See Gardiner, Lion, assignor.)
Jaeger Machine Company, The. (See Mosel, Joseph H., assignor.)
James, Henry D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Safety device for elevators. 1,874,044; Aug. 30.
James, Henry D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Safety operation by buffer. 1,874,754; Aug. 30.
James Manufacturing Company. (See Olson, John B., assignor.)
James Manufacturing Company. (See Shodron, John G., assignor.)
Jarvis, Charles H., assignor to United Steeel & Wire Company, Battle Creek, Mich. Receptacle. 1,874,299; Aug. 30.

Jarvis, Tom H., West Huntington, W. Va. Pulley and mounting for glass cutting lathes. 1,874,755; Aug. 30.
Jaycox, Edwin K., Harrington Park, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Manufacture of vacuum devices. 1,874,537; Aug. 30.
Jefferies, Richard H., Richmond, Va. Cigarette extinguisher. 1,874,045; Aug. 30.
Jeffrey Manufacturing Company, The. (See Ossing, Stanley F., assignor.)
Jennings, William S., et al. (See Pot, Arthur, assignor.)
Jensen, Anton. (See Mossberg, F., and Jensen.)
Jewel Steel & Malleable Co. (See Rycroft, Ralph T., assignor.)
Jiffy Wire Connecter Company. (See Sommer, William R., assignor.)
Jipp, August. (See Küpfmüller, K., and Jipp.)
John, Robert, Long Branch, N. J., assignor to Aquatone Corporation, Chicago, Ill. Light sensitive film, sensitizer therefor, and producing same. 1,875,292; Aug. 30.
Joliner, Hans, assignor to the Firm, Society of Chemical Industry in Basle, Basel, Switzerland. Diazo-preparations and making same. 1,875,243; Aug. 30.
Johnson Chair Company. (See Johnson, Walter J., assignor.)
Johnson, Clarence, Cleveland, Ohio, assignor to Bailey Meter Company. Fluid pressure responsive device. 1,874,704; Aug. 30.
Johnson, Clarence H., Chicago, Ill., assignor, by mesne assignments, to Pullman Car & Manufactu.ing Corporation. Water closet. 1,875,009; Aug. 30.
Johnson, George A., assignor to W. H. Miner, Inc., Chicago, Ill. Toughening steel. 1,874,103; Aug. 30.
Johnson, George A., assignor to W. H. Miner, Inc., Chicago, Ill. Process and apparatus for quenching heat treated articles. 1,874,300; Aug. 30.
Johnson, Harry D., assignor of one-third to R. D. Kraetsch and one-third to H. Svarrer, Chicago, Ill. Automobile engine cooling system. 1,874,104; Aug. 30.
Johnson, John A., Woodhaven, N. Y. Apparatus for assembling receptacle closures. 1,875,010; Aug. 30.
Johnson, John S., Luling, Tex. Spear. 1,875,011; Aug. 30.
Johnson, Malcolm S., Chicago, Ill., assignor, by mesne assignments, to Illinois Railway Equipment Company. Brake hanger. 1,874,105; Aug. 30.
Johnson, Sylvester A., North Providence, assignor to Albert E. R. Speidel, Edgewood, R. I. 1,874,538; Aug. 30.
Johnson, Walter J., assignor to Johnson Chair Company, Chicago, Ill. Armchair. 1,874,539; Aug. 30.
Johnston, Charles F. (See Samantas, Nicholas, assignor.)
Johnson, William T., New Brighton, assignor to Mayer China Company, Beaver Falls, Pa. Plate or similar article. Des. 87,664; Aug. 30.
Johnston, William T., assignor of one-half to Louis S. Witte, San Benito, Tex. Quick opening and sealing attachment. 1,874,540; Aug. 30.
Jonas, Julius, Baden, Switzerland, and S. Rump, Boston, Mass., assignors to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Rectification of electric current. 1,873,962; Aug. 30.
Jonas, Julius, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Apparatus for the ignition of mercury vapor rectifiers. 1,873,963; Aug. 30.
Jones, Allan H., Trenton, N. J. Grinding device. 1,874,301; Aug. 30.
Jones, Van Clinton, Fort Wayne, Ind. Heated water gauge. 1,874,302; Aug. 30.
Jonsson, Helge S., Chicago, Ill. Engraving machine. 1,874,046; Aug. 30.
Jonsson, Sven M., Woodside, N. Y., assignor, by mesne assignments, to The Lubrication Corporation, South Bend, Ind. Lubricating device. 1,874,541; Aug. 30.
Joos, Bernard. (See Tisza, E. T., and Joos.)
Jullien, Victor, assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio. Clamp adjuster. 1,875,012; Aug. 30.
Kačer, Filip. (See Nawalsky, P., and Kačer.)
Kaddeland, Christen R., Shelton, Conn., assignor to Harris, Seybold, Potter Company, Cleveland, Ohio. Rotary color printing press. 1,874,013; Aug. 30.
Kanengeiser, Fred R., Poland, assignor to The Metropolitan Paving Brick Company, Canton, Ohio. Pipe structure. 1,874,303; Aug. 30.
Kanolt, Clarence W., New York, N. Y. Depthograph plate holder. 1,874,047; Aug. 30.
Karich, Rudolph R. (See Gluck, J., and Karich.)
Kaselitz, Oscar, Berlin, Germany. Producing compounds of the carnallite type. 1,875,013; Aug. 30.
Kaselitz, Oscar, Berlin, Germany. Production of alkali metal nitrates. 1,875,014; Aug. 30.
Kauffman, Edmund J., Girard, assignor to Valley Mould and Iron Corporation, Hubbard, Ohio. Support for hot tops. 1,874,304; Aug. 30.
Kaufhold, Harry L. (See Weaver, Walter E., assignor.)
Kaul, John, Irvington, assignor to Arcturus Radio Tube Company, Newark, N. J. Insulating coating for filaments and method of applying the same. 1,874,542; Aug. 30.
Kautenberg, W. E., Co. (See Morgan, Bernard, assignor.)
Kay-Brunner Steel Products Inc. (See Kay, Lloyd D., assignor.)
Kay, Lloyd D., Los Angeles, Calif., assignor to Kay-Brunner Steel Products Inc. Hub construction for truck wheels. 1,874,192; Aug. 30.
Kearney, Edward J., Wauwatosa, assignor to Kearney & Trecker Corporation, West Allis, Wis. Machine tool. 1,874,305; Aug. 30.
Kearney & Trecker Corporation. (See Armitage, Joseph B., assignor.)
Kearney & Trecker Corporation. (See Kearney, Edward J., assignor.)
Keen, Eliot, Jackson Heights, N. Y. Apparatus for projecting motion pictures. 1,874,193; Aug. 30.
Keen, Eliot, Jackson Heights, N. Y. Apparatus for taking and projecting motion pictures. 1,875,244; Aug. 30.
Keen, John S., Philadelphia, Pa. Six-wheel tender truck. 1,874,306; Aug. 30.
Keith, Bert W., and B. H. Keith, Sawyer, Mich. Strawberry. Pl. Pt. 26; Aug. 30.
Keith, Bud H. (See Keith, Bert W. and B. H.)
Keller-Dorian Colorfilm Corporation. (See Oswald, André, assignor.)
Kelley, Maude T., assignor of one-fourth to Bratson Corporation, Mount Vernon, N. Y. Clothes washer. 1,874,048; Aug. 30.
Kelly, Frank J., Quebec, Quebec, Canada. Power transmitting device. 1,874,756; Aug. 30.
Kemp, Archie R., Westwood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Insulating compound. 1,874,307; Aug. 30.
Kent, Robert J., Jamaica, N. Y., assignor to American Telephone and Telegraph Company. Cable car. 1,874,543; Aug. 30.
Kerler, Elizabeth, Rock Island, Ill. Hosiery drier. 1,874,757; Aug. 30.
Kern, Erwin, Wettingen, near Baden, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Rectifier isolating apparatus. 1,873,964; Aug. 30.
Kern, Erwin, Wettingen, near Baden, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Apparatus for commutating currents in polyphase windings. 1,873,965; Aug. 30.
Kern, Erwin, Wettingen, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Direct current motor control system. 1,873,966; Aug. 30.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Baffle for steam drums. 1,875,015; Aug. 30.
Ketchledge, William H., and N. R. Wright, Easton, Pa. Windshield wiper. 1,874,758; Aug. 30.
Kieckhefer Container Company. (See Walker, E. L., and Werner, assignors.)
Kieckhefer Container Company. (See Werner, Arthur W., assignor.)
Killian, Fred L., Akron, Ohio. Machine for manufacturing thin rubber articles. 1,874,014; Aug. 30.
King, Albert B., San Diego, Calif. Internal combustion engine. 1,874,194; Aug. 30.
King, Albert B., San Diego, Calif. Internal combustion engine. 1,874,195; Aug. 30.
King, Robert W., Short Hills, N. J. Viscosimeter. 1,874,015; Aug. 30.
Kirkaldy, Alexander, Yorktown Heights, assignor to Electro-Anti-Corrosion Corporation, New York, N. Y. Electrolytic means for the protection of boilers. 1,874,759; Aug. 30.
Kirsch, Benjamin, assignor to Auto Radiator Manufacturing Company, Chicago, Ill. Combined radiator shell and deflector. Des. 87,665; Aug. 30.
Kitchen, Charles B., North Glenside, Pa. Brake band equalizer for automobiles. 1,874,760; Aug. 30.
Klausmeyer, David C., assignor to The Cincinnati Bickford Tool Company, Oakley, Cincinnati, Ohio. Power braked mobile drill. 1,875,016; Aug. 30.
Klausmeyer, David C., assignor to The Cincinnati Bickford Tool Co., Oakley, Cincinnati, Ohio. Drill column clamping means. 1,875,017; Aug. 30.
Klein, William C., Allentown, Pa. Railway car truck assembly. 1,847,761; Aug. 30.
Klilefoth, Max H., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis. Fibrous product and making the same. 1,875,018; Aug. 30.
Klute, Georg M., Ostre Aker, Norway, assignor to Aktiebolaget Siefvert-Fornander, Kalmar, Sweden. Applying labels or the like upon two or more sides of boxes, particularly match boxes. 1,873,967; Aug. 30.
Kneeland, Frank H., assignor to Safety Mining Company, Chicago, Ill. Blasting cartridge. 1,874,544; Aug. 30.
Kobel, Ernst, Ennetbaden, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Electric current rectifier control system. 1,873,968; Aug. 30.
Koch, Heinrich, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New acid drestuffs of the anthraquinone series. 1,875,191; Aug. 30.
Koch, Lynn J., Allentown, Pa. Propeller. 1,874,545; Aug. 30.
Koehler Manufacturing Company. (See Wheat, Grant, assignor.)
Koeppen, John F., jr., assignor of seven-sixteenths to J. P. Koeppen and one-eighth to Mary E. Koeppen, Marion, Ind. Measuring device. 1,875,019; Aug. 30.
Koeppen, John P., et al. (See Koeppen, John F., jr., assignor.)
Koeppen, Mary E., et al. (See Koeppen, John F., jr., assignor.)
Kolko Aron, Colombes, France. Rotary motor. 1,874,308; Aug. 30.

Konoff, Alexander, assignor, by mesne assignments, to Margon Corporation, New York, N. Y. Eye set. Re18,585; Aug. 30.
Konoff, Alexander, Brooklyn, assignor, by mesne assignments, to Margon Corporation, New York, N. Y. Doll head and movable eye system therefore. 1,874,762; Aug. 30.
Konrad, Erich, and W. Siefken, Cologne-Mulheim-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Coagulation of latex like emulsions to rubber like masses. 1,874,546; Aug. 30.
Kopellowitsch, Jakob, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Switch. 1,873,969; Aug. 30.
Kouyoumjian, Haroutiun K., Providence, R. I., assignor to Ward Leonard Electric Company. Electric controlling apparatus. 1,875,020; Aug. 30.
Kraetsch, Ralph D., et al. (See Johnson, Harry D., assignor.)
Krahl, Walter L., Montclair, assignor to Arcturus Radio Tube Company, Newark, N. J. Radio circuit. 1,874,309; Aug. 30.
Kramaroff, Richard. (See Schofield, E. R., and Kramaroff.)
Kramer, Richard L., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Cellulose acetate composition. 1,874,310; Aug. 30.
Kranzlein, Georg, and H. Vollmann, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Cycloketones, polycycloketones, and quinones and preparing them. 1,874,547; Aug. 30.
Kremer, John, West Orange, assignor to Charles Engelhard, Inc., Newark, N. J. Electrical control device. 1,874,548; Aug. 30.
Kremer, Joseph. (See Fayer, C., and Kremer.)
Kreis, Oscar C., assignor to Continental Motor Corporation, Detroit, Mich. Internal combustion engine. 1,874,311; Aug. 30.
Krise, Edward W., Wilkes-Barre, Pa. Automatic burner. 1,874,312; Aug. 30.
Kroger, Fred H., Brooklyn, N. Y., assignor to Radio Corporation of America. Radio signaling system. 1,875,021; Aug. 30.
Kronheim, Jacob, Cleveland, Ohio. Resilient bottom for couches and like furniture. 1,874,049; Aug. 30.
Kronheim, Jacob, Cleveland, Ohio. Chair and couch. 1,874,050; Aug. 30.
Kronheim, Jacob, Cleveland, Ohio. Resilient seat or bottom for chairs, couches, etc. 1,874,051; Aug. 30.
Kronheim, Jacob, Cleveland, Ohio. Chair and couch. 1,874,052; Aug. 30.
Krueger, Richard E., assignor to General Laboratories, Inc., Madison, Wis. Fluid injector. 1,875,022; Aug. 30.
Krueger, Richard E., assignor to General Laboratories, Inc., Madison, Wis. Fluid injector. 1,875,023; Aug. 30.
Krueger, Richard H., Newark, N. J., and W. F. Hamilton, New York, N. Y., assignors to Charles Englehard, Inc., Newark, N. J. Gas analysis apparatus. 1,874,549; Aug. 30.
Kryzanowsky, Constant J., Baltimore, Md., assignor to Mine Safety Appliances Company, Pittsburgh, Pa., and H. J. Newmark, New York, N. Y. Apparatus for treating exhaust gases of internal combustion engines. 1,875,024; Aug. 30.
Kubler, Frederick J., New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass. Pillar for vehicle bodies. 1,874,763; Aug. 30.
Kuhn, John J., Elizabeth, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Phonograph record turntable. 1,874,550; Aug. 30.
Kummerer, Wilhelm, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Grid modulated tube. 1,875,025; Aug. 30.
Kunkelman, Harry C., and G. L. Becker, assignors to Ohmer Fare Register Company, Dayton, Ohio. Counter for machines. 1,875,026; Aug. 30.
Küpfmüller, Karl, Danzig-Langfuhr, Free State of Danzig and A. Jipp, Berlin-Spandau, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Atmospheric disturbance elimination. 1,875,027; Aug. 30.
Kurkjian, Yervant H., Hawthorne, N. J., assignor to Carl J. Schmid, Inc., New York, N. Y. Bead forming device. 1,875,028; Aug. 30.
Labbe, Henri E. L., Asnieres, France. Apparatus for the automatic emptying of receptacles containing a liquid at a given temperature. 1,874,106; Aug. 30.
La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,029; Aug. 30.
La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,030; Aug. 30.
Lackner, Oscar E. (See Oster, J., and Lackner.)
Lahey, Maurice S. (See Lahey, William F. and M. S.)
Lahey, William F. and M. S., New Canaan, Conn. Storm window construction. 1,874,764; Aug. 30.
Lambert, Albert L., Philadelphia, Pa., assignor to Heintz Manufacturing Company. Refrigerated display cabinet. 1,874,551; Aug. 30.
Lambert, Chandley W., Cleveland, Ohio. Automatic propeller pitch changer. 1,874,053; Aug. 30.
Lamberz, Wilhelm. (See Neelmeier, W., and Lamberg.)
Lammedee, John M., Morgan Park, Ill. Gauge. 1,874,765; Aug. 30.
La Mont Corporation. (See Herpen, August-Theodor, assignor.)
Lamson, Horatio W., Arlington, assignor to General Radio Company, Cambridge, Mass. Sound ranging system. 1,874,190; Aug. 30.
Landau, Henry B., Flushing, assignor to General Chemical Company, New York, N. Y. Machine for making wax bottles. 1,875,031; Aug. 30.
Landers, Frary & Clark. (See Carlson, Frederick E., assignor.)
Landgraf, Jacob T., and R. G. Miller, assignors to J. W. Miller Co., Rockford, Ill. Brooder heater. 1,875,032; Aug. 30.
Landis & Cyr, A.-G. (See Frohlich, H., and Hausch, assignors.)
Landis Machine Company. (See Newman, Samuel F., assignor.)
Landis Machine Company. (See Shearer, H. T., and Reimschissel, assignors.)
Lane, Alfred M., assignor to Monarch Metal Weatherstrip Corporation, St. Louis, Mo. Metal weather strip. 1,875,173; Aug. 30.
Lane Company, The. (See Loftin, Lawrence K., assignor.)
Lang, Walter B., Roswell, New Mexico. Inner tube for pneumatic tires. 1,874,197; Aug. 30.
Langenheim, Albert H., assignor to The Dayton Malleable Iron Company, Dayton, Ohio. Jack. 1,874,766; Aug. 30.
Langhoffer, David N. and G. T. Howell, Portland, Oreg. Safety cut out. 1,874,767; Aug. 30.
Langley, Ralph H., assignor to The Crosley Radio Corporation, Cincinnati, Ohio. Loud speaker mounting for automobile radios. 1,874,313; Aug. 30.
Langvand, Ivar L., Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam boiler. 1,874,552; Aug. 30.
Lapointe, Francis J., Ann Arbor, Mich. Broaching machine. 1,875,033; Aug. 30.
Larkin, David, Webster Groves, Mo. Furnace. 1,874,016; Aug. 30.
Larmour, William, Philadelphia, Pa., assignor of one-half to H. McAdams, Atlantic City, N. J. Knitting machine. 1,874,198; Aug. 30.
Larsen, Lewis, Menominee, Mich., assignor to Heywood-Wakefield Company, Boston, Mass. Spring base furniture. 1,875,034; Aug. 30.
Larson, Karl R., East Dundee, and E. S. Irelan, assignor to Illinois Watch Case Company, Elgin, Ill. Solderless vanity case. 1,875,245; Aug. 30.
Lasley, Robert E., Libertyville, Ill. Power plant. 1,874,314; Aug. 30.
Laurent, Leo, St. Junien, France. Machine for sharpening of saws. 1,874,315; Aug. 30.
Law, Charles R., W. and C. T., assignors to The Law Company, Incorporated, Mansfield, La. Valve. 1,875,035; Aug. 30.
Law, Charles T. (See Law, Charles R., W., and C. T.)
Law Company, The. (See Law, Charles R., W., and C. T., assignors.)
Law, William. (See Law, Charles R., W., and C. T.)
Lawson, Walter E., and J. H. Werntz, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Vinyl derivative and preparing it. 1,874,107; Aug. 30.
Layng, Thomas E. (See Parr, S. W., and Layng.)
Leahy, Herbert V., Los Angeles, Calif. Atomizing oil burner. 1,874,017; Aug. 30.
Leake, Hugh M., Cambridge, England. Seed drill. 1,875,036; Aug. 30.
Leaside Engineering Company, Limited. (See Jackson, M. B., and Clipsham, assignors.)
Leaver, James M., jr. (See Parker, George D., assignor.)
Leberman, Harry, assignor to Groove Lock Co., Inc. New York, N. Y. Fastening means for bag frames. 1,875,037; Aug. 30.
Ledbetter, James C., New York, assignor to The Prosperity Company, Inc., Syracuse, N. Y. Conveyer garment press. 1,875,038; Aug. 30.
Lederer, Henry & Bro., Inc. (See Butler, W. J., and Flynn, assignors.)
Leeak, Francis J., Lansing, Mich. Piston salvaging device. 1,875,039; Aug. 30.
Leece, Bennett M., assignor to The Leece-Neville Company, Cleveland, Ohio. Generator drive. 1,875,040; Aug. 30.
Leece, Bennett M., assignor to The Leece-Neville Company, Cleveland, Ohio. Control for battery charging and lighting systems. 1,875,041; Aug. 30.
Leece, Bennett M., assignor to The Leece-Neville Company, Cleveland, Ohio. Generator regulator. 1,875,042; Aug. 30.
Leece, Bennett M., Cleveland, and D. S. Cole, Cleveland Heights, assignors to The Leece-Neville Company, Cleveland, Ohio. Voltage regulation. 1,875,043; Aug. 30.
Leece-Neville Company, The. (See Leece, Bennett M., assignor.)
Leeds & Northrup Company. (See Bristol, Edward S., assignor.)
Leiper, Hugh N., assignor to New State Ice Company, Oklahoma City, Okla. Ice cream container. 1,875,044; Aug. 30.
Lentz, Clarence J., assignor to The Cincinnati Time Recorder Company, Cincinnati, Ohio. Automatic synchronizing mechanism for chime clocks. 1,874,316; Aug. 30.
Lesch, Guntram, Mannheim-Freudenheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Transmission line protective system. 1,873,972; Aug. 30.

Leshner, Nathan, Cincinnati, and W. J. Moeller, Mount Healthy, Ohio, assignors to The Philip Carey Manufacturing Company. Prepared stock reclaimed from waste materials and method of and apparatus for reclaiming same. 1,875,045; Aug. 30.
Leslie, Harold, Stockton, assignor to Fibreboard Products Inc., San Francisco, Calif. Fruit basket collar. 1,874,317; Aug. 30.
Le Tourneau, Robert G., Stockton, Calif. Automatic brake. 1,875,046; Aug. 30.
Le Tourneau, Robert G., Stockton, Calif. Tractor-mounted scraper. 1,875,047; Aug. 30.
Levell, Henry J., et al. (See Pot, Artbur, assignor.)
Levene, George, Norwood, assignor to Massachusetts Memorial Hospitals, Boston, Mass. Light pencil. 1,875,048; Aug. 30.
Leventhal, Mitchell, Brooklyn, N. Y. Lock frame. Des. 87,666; Aug. 30.
Levick, Henry S. (See Horsburgh, G. D. L., and Levick.)
Levinsen, Claus, Brooklyn, N. Y. Heat transmitter. 1,874,054; Aug. 30.
Levkoff, David, assignor to E. G. Levkoff, Brooklyn, N. Y. Folding box. 1,874,705; Aug. 30.
Levkoff, Evelyn G. (See Levkoff, David, assignor.)
Levkoff, Evelyn G., Rockaway Park, N. Y. Dispensing container. 1,874,318; Aug. 30.
Levow, David. (See Tilp, Joseph G., assignor.)
Lewis, George H., Kent, assignor of one-half to Frank Winters, Portland, Oreg. Tractor spade plow. 1,874,768; Aug. 30.
Lewis, Hezekiah J., New York, N. Y. Combination clock and barber's pole. 1,875,049; Aug. 30.
Liebeck, Harry, Swarthmore, Pa., assignor to Scott Paper Company. Dry-broke beater. 1,874,553; Aug. 30.
Lieberknecht, Karl, G. m. b. H. (See Lieberknecht, Karl R., assignor.)
Lieberknecht, Karl R., assignor to Karl Lieberknecht G. m. b. H., Oberlungwitz, Germany. Needle bar for straight knitting machine. 1,874,108; Aug. 30.
Liebrecht, Arthur, Frankfort-on-the-Main, assignor to the firm Chemisch-Pharmazeutische Aktiengesellschaft, Bad Homburg, Germany. Preparing suitable substitutes for table salt for flavoring purposes. 1,874,055; Aug. 30.
Liedel, Clarence A., Maybee, Mich. Pocketbook. 1,874,554; Aug. 30.
Lifland, Mortimer, Brooklyn, N. Y. Heating system. 1,875,246; Aug. 30.
Lill, Jacob, Chicago, Ill. Ash tray. 1,874,319; Aug. 30.
Lindenblad, Nils E., Rocky Point, N. Y., assignor to Radio Corporation of America. Antenna. 1,875,050; Aug. 30.
Lindsjo, Verner, assignor to Draper Corporation, Hopedale, Mass. Loose reed stopping mechanism for looms. 1,874,555; Aug. 30.
Lingo, Wayne W., Cleveland, and C. I. Cronburg, Cleveland Heights, assignors to F. R. Uible, Cleveland, Ohio. Advertising device. 1,874,199; Aug. 30.
Linn, Robert E. (See McCormick, T. J., and Linn.)
Linsley, Douglas F., Sound Beach, Conn., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,051; Aug. 30.
Lipari, John, Hawthorne, and Joseph E. Matthews, Paterson, N. J. Ombré fabric. 1,874,320; Aug. 30.
Little, Arthur D., Incorporated. (See Billings, Howard J., assignor.)
Ljungkull, Rolf, St. Paul, Minn., assignor to Harnischfeger Corporation, Milwaukee, Wis. Excavating machinery. 1,875,052; Aug. 30.
Lock-Steel Company, The. (See Greulich, Gerald G., assignor.)
Locke, Arthur, Tacoma, Wash. Automatic water dispensing means. 1,875,053; Aug. 30.
Lockwood, Harry D., Kansas City, Mo. Sign. 1,875,307; Aug. 30.
Loetscher, Emil C., Dubuque, Iowa. Composite material and making the same. 1,875,054; Aug. 30.
Loetscher, Emil C., Dubuque, Iowa. Finishing wood surfaces. 1,875,055; Aug. 30.
Loetscher, Emil C., Dubuque, Iowa. Joining thin wood veneers. 1,875,056; Aug. 30.
Loewe, Siegmund, Berlin-Friedenau, Germany, assignor to Radio Corporation of America. Tuned receiver tube. 1,875,059; Aug. 30.
Loewe, Siegmund, Berlin, Germany, assignor to Radio Corporation of America. Multiple unit high-frqeuency amplifier. 1,875,057; Aug. 30.
Loewe, Siegmund, Berlin, Germany, assignor to Radio Corporation of America. Making electron discharge devices. 1,875,058; Aug. 30.
Loftin, Lawrence K., Altavista, Va., assignor to The Lane Company, Inc. Cedar chest. 1,875,247; Aug. 30.
Lofton, Herbert M., Chattanooga, Tenn. Gate valve. 1,874,556; Aug. 30.
Lone Star Gas Company. (See Martin, James W., assignor.)
Long, Robert B., assignor to Ohmer Fare Register Company, Dayton, Ohio. Counter and resetting mechanism therefor. 1,875,060; Aug. 30.
Longnecker, Levi S., Pittsburgh, Pa. Metallurgical furnace. 1,874,321; Aug. 30.
Longtin, William J., assignor to Infant Socks, Inc., Reading, Pa. Striping attachment for knitting machines. 1,874,769; Aug. 30.
López, Salvador H., Mexico City, Mexico. Safety apparatus. 1,874,770; Aug. 30.
Lord, Hugh C., Erie, Pa. Lever mounting. 1,874,557; Aug. 30.
Lotte, Charles H., assignor to Byers Machine Company, Ravenna, Ohio. Trailer. 1,874,558; Aug. 30.
Loughlin, William D. (See Drake, F. H., Hull, and Loughlin.)
Lounsbury, Harvey J., Glen Ellyn, assignor to W. H. Miner, Inc., Chicago, Ill. Yoke. 1,874,771; Aug. 30.
Love, Nelson R., Denver, Colo., assignor to Electric Tamper & Equipment Company, Chicago, Ill. Concrete tamper. 1,874,559; Aug. 30
Lovejoy, Charles R., Jamestown, N. Y. Stove pedestal. Des. 87,667; Aug. 30.
Lovejoy, Frank H., Rumford, Me. Boom. 1,875,061; Aug. 30.
Lubrication Corporation. (See Jonsson, Sven M., assignor.)
Lubs, Herbert A., Pennsgrove, N. J., A. L. Fox, Wilmington, Del., and C. C. Smith, Pennsgrove, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Separation of ores and minerals by flotation. 1,875,062; Aug. 30.
Lucas, Noah E., Norwich, Conn. Underclearer roll. 1,874,560; Aug. 30.
Lucker, Millard B., Benton Harbor, Mich., assignor, by mesne assignments, to The Dayton Malleable Iron Company, Dayton, Ohio. Lifting jack. 1,874,772; Aug. 30.
Ludenia, Werner, and F. Schroeter, assignors to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Narrow-tape recorder for high speed telegraphy. 1,875,063; Aug. 30.
Lukens, Randolph E., Syracuse, N. Y., assignor to Mayer China Company, Beaver Falls, Pa. Plate or similar article. Des. 87,668; Aug. 30.
Luther, Martin, Mannheim, and W. Flemming, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Oxidation of aliphatic hydrocarbons of high molecular weight. 1,874,322; Aug. 30.
Lutter, Clemens. (See Schranz, K., and Lutter.)
Lyman, Kenneth E., Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,064; Aug. 30.
Lyman, Kenneth E., Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake mechanism. 1,875,065; Aug. 30.
Lynch, Thomas J., assignor to M. C. Brennan, Lowell, Mass. Tank holding one rail truck. 1,875,248; Aug. 30.
Lyons, George H. E., Bronx, N. Y. Clip or binder for paper sheets. 1,874,323; Aug. 30.
M. J. B. Co. (See Bardet, George A. and G. V., assignors.)
M. J. B. Co. (See Burns, Wilford E., assignor.)
Maccarone, Fred, and F. T. Gentile, Brooklyn, N. Y. Heel for ladies' shoes. 1,874,773; Aug. 30.
MacFarland, Allis M., Detroit, Mich., assignor to The Reflex Electrical Products Company, Cleveland, Ohio. Welding machine. 1,875,066; Aug. 30.
Machlett, Raymond R., New York, assignor to Rainbow Light, Inc., Long Island City, N. Y. Manufacturing luminous tubes and apparatus for carrying thef out. 1,874,018; Aug. 30.
MacKey, Washington, O., Djursholm, Sweden. Splash preventing device for motor cars. 1,875,067; Aug. 30.
Macklanburg, Louis A., Oklahoma City, Okla. Font of letters and numerals. Des. 87,669; Aug. 30.
Macmeeken, John W., Glen Ridge, N. J., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Centrifugal pump. 1,874,324; Aug. 30.
Maddock, Alan J., Wallsend-on-Tyne, England, assignor to General Electric Company. Electric synchronizing system. 1,874,774; Aug. 30.
Mahler, George T., and E. C. Handwerk, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y. Production of coked agglomerates. 1,875,249; Aug. 30.
Maiden Form Brassiere Co. (See Bissett, Enid, assignor.)
Main, Charles C. (See Beckwith, C. F., and Main.)
Makaroff, Wadim S., New York, N. Y., Internal combustion engine. 1,874,561; Aug. 30.
Malby, Seth G., Tenafly, assignor to Aluminum Screw Machine Products Company, Edgewater, N. J. Spool. 1,875,068; Aug. 30.
Manderfeld, Emanuel C., Boonton, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrooptical image producing system. 1,874,200; Aug. 30.
Mangiameli, Francesco, Dusseldorf, Germany. Safety device for gas conduits. 1,874,019; Aug. 30.
Mantle Lamp Company of America, The. (See Schwarz, Eugene, assignor.)
Marbury, Ralph E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. High voltage direct current system. 1,874,109; Aug. 30.
Marcel, Francois R., Brooklyn, N. Y. Curling iron. 1,875,069; Aug. 30.
March, Harry S., Morrisville, Pa., assignor to Ford Instrument Company, Inc., Long Island City, N. Y. Separable gear assembly. 1,874,775; Aug. 30.
March, Henry R., Waltham, assignor to Sacho-Lowell Shops, Boston, Mass. Twister frame. 1,874,325; Aug. 30.
Margia Manning. (See Humason, Granville A., assignor.)

Margon Corporation. (See Konoff, Alexander, assignor.)
Mariotti, Joseph J., assignor to Daprato Statuary Company, Chicago, Ill. Door operating mechanism. 1,874,562; Aug. 30.
Marti, Othmar K., Haddonfield, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Solid electrode seal for rectifiers. 1,873,973; Aug. 30.
Marti, Othmar K., and H. Winograd, Haddonfield, and W. R. Streull, Camden, N. J., assignors, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Automatic circuit breaker reclosing system. 1,873,970; Aug. 30.
Martin, DeLoss K., West Orange, N. J., assignor to American Telephone and Telegraph Company. System for producing high voltage direct currents. 1,874,563; Aug. 30.
Martin, Guy T., assignor to Fluor Construction Co., Los Angeles, Calif. Atmospheric cooling tower. 1,874,020; Aug. 30.
Martin, James W., assignor to Lone Star Gas Company, Dallas, Tex. Cabinet. 1,874,776; Aug. 30.
Martin, Otto V., Tulsa, Okla., assignor to Texaco Salt Products Company, New York, N. Y. Preparing calcium chloride. 1,875,070; Aug. 30.
Martin, Rhetherford B., Roselle, N. J., assignor to American Cyanamid Company, New York, N. Y. Mineral concentration. 1,874,564; Aug. 30.
Martin, Thomas J., assignor to Superior Meter Company, Brooklyn, N. Y. Meter protecting device. 1,875,073; Aug. 30.
Martindell, Milton H., assignor to Joseph Stokes Rubber Company, Trenton, N. J. Mold with ejector. 1,875,071; Aug. 30.
Marx, Karl F. (See Greer, Edward L., and Marx.)
Maryott, Fred, Cozad, assignor to C. A. Black, Kearney, Nebr. Sugar beet topper. 1,875,072; Aug. 30.
Maser, Harold T., Schenectady, N. Y., assignor to General Electric Company. Electric power control apparatus. 1,874,777; Aug. 30.
Mason, Warren P., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound muffler. 1,874,326; Aug. 30.
Mason, William H., assignor to Masonite Corporation, Laurel, Miss. Acoustical board. 1,875,074; Aug. 30.
Mason, William H., assignor to Masonite Corporation, Laurel, Miss. Liquid separation. 1,875,075; Aug. 30.
Masonite Corporation. (See Mason, William H., assignor.)
Massachusetts Memorial Hospitals. (See Levene, George, assignor.)
Matallana, Julio C., New York, N. Y. Collapsible shoe rack. 1,874,056; Aug. 30.
Mathers, Harry M., Portland, Oreg. Circular date calendar. 1,874,201; Aug. 30.
Matthews, Joseph E. (See Lipari, J., and Matthews.)
Mattson, Eric, et al. (See Mattson, Julius, assignor.)
Mattson, Julius, assignor of one-fourth to E. Mattson and one-fourth to H. Palm, Chicago, Ill. Traffic signaling construction. 1,875,076; Aug. 30.
Maulsby, Albert R., Everett, Wash. Applying backing fabrics to linings. 1,875,077; Aug. 30.
Maurer, Charles C., and N. D. Vea, assignors to Dover Manufacturing Company, Dover, Ohio. Switch plug. 1,874,021; Aug. 30.
Maurer, Edwin R., Detroit, and D. M. Ferguson, Highland Park, assignors, by mesne assignments, to Continental-Diveo Company, Detroit, Mich. Internal combustion engine. 1,874,327; Aug. 30.
Mayer China Company. (See Johnson, William T., assignor.)
Mayer China Company. (See Lukens, Randolph E., assignor.)
Mayer, Rene, Columbus, Ohio, assignor of one-half to H. Neyer, Vienna, Austria. Electric heating system. 1,874,778; Aug. 30.
Mays Manufacturing Company, The. (See Mays, William C. S., assignor.)
Mays, William C. S., Edgewood, R. I., assignor to The Mays Manufacturing Company, Inc. Clip for writing instruments. 1,874,110; Aug. 30.
McAdams, Harry. (See Larmour, William, assignor.)
McArdle, Michael W., Chicago, Ill. Lawn sprinkler. Des. 87,670; Aug. 30.
McArdle, Michael W., Chicago, Ill. Electric circuit installation. 1,875,078; Aug. 30.
McBee Binder Company. (See Davis, Herbert C., assignor.)
McBee Binder Co., The. (See Welk, N. S., and Zenner, assignor.)
McCabe, Ira E. (See Schanz, Lewis J., assignor.)
McCall, Charles S. (See Brasington, John M., assignor.)
McCann, George K., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,079; Aug. 30.
McCarty, Orin P., and A. Boyajian, Pittsfield, Mass., assignors to General Electric Company. Electrical frequency changer. 1,875,250; Aug. 30.
McCaskey Register Company, The. (See Dunning, William E., assignor.)
McCaskey Register Company. (See Roath, Robert C., assignor.)
McCaw, William E. (See Dinkel, Andrew J., assignor.)
McChesney, George W., Sr., Ronses Point, and M. C. Northrup, Ogdensburg, N. Y. Tree guard. 1,874,779; Aug. 30.
McClintic-Marshall Corporation. (See McClintic, Robert H., assignor.)
McClintic, Robert H., Pittsburgh, Pa., assignor, by mesne assignments, to McClintic-Marshall Corporation. Spacing table for machines for punching beams and the like. 1,875,080; Aug. 30.
McConkey, Montgomery W., assignor to Bendix Brake Company, South Bend, Ind. Making brakes. 1,875,081; Aug. 30.
McConkey, Montgomery W., and E. G. McDonald, assignors to Bendix Brake Company, South Bend, Ind. Brake. 1,875,082; Aug. 30.
McCormick, Thomas J., and R. E. Linn, Detroit, Mich.; said Linn assignor to said McCormick. Tire cover. Des. 87,671; Aug. 30.
McCornack, Herbert, Glen Ridge, N. J. Pulsator. 1,875,083; Aug. 30.
McCutcheon, Kenneth C., Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio. Recirculation of waste gases in the open hearth furnace. 1,874,328; Aug. 30.
McDonald Engineering Corporation. (See Fredsell, Charles R., assignor.)
McDonald, Eugene G. (See McConkey, M. W., and McDonald.)
McEachern, Dougald, Duncan, British Columbia, Canada. Waterproof joint. 1,874,565; Aug. 30.
McElvain, Howard C. (See McElvain, Howard J., assignor.)
McElvain, Howard J., assignor of one-half to H. C. McElvain, Portland, Oregon. Rock crusher. 1,874,329; Aug. 30.
McElyea, Harley B., assignor, by mesne assignments to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,874,566; Aug. 30.
McGinness, Joseph E., Pittsburgh, Pa. Printing mechanism for a golf ball marker. 1,875,085; Aug. 30.
McGinnis, Harry, Dundalk, Md., assignor to Bethlehem Steel Company. Adjustable wiping device for coated wire. 1,875,084; Aug. 30.
McGivern, Edward, Rapid Falls, Liverpool, Nova Scotia, Canada. Concrete bucket. 1,875,174; Aug. 30.
McGuckin, John J., Passaic, N. J., assignor to Rinck-McIlwaine, Inc., New York, N. Y. Spring tester. 1,874,780; Aug. 30.
McKeen, George E., Minneapolis, Minn. Combination tie and collar support. 1,875,251; Aug. 30.
McKesson, William C., Chicago, Ill. Oil burner. 1,874,781; Aug. 30.
McLaurin-Jones Company. (See Barnett, H. J., and Trusty, assignors.)
McMann, Arthur A., Utica, assignor to Remsen Corporation, New York, N. Y. Phonograph record. 1,875,086; Aug. 30.
McMurtrey, Benton C., Indianapolis, Ind. Universal casement hinge. 1,874,782; Aug. 30.
Meachem, Harry. (See Nightingale, H., and Meachem.)
Mead Corporation, The. (See Bair, William E., jr., assignor.)
Mead, Fred J., East Orange, N. J. Concrete form and structure. 1,874,330; Aug. 30.
Mechlin, Ernest F. (See Mechlin, Oscar A., assignor.)
Mechlin, Oscar A., assignor to E. F. Mechlin, Washington, D. C. Protection of river banks. 1,874,567; Aug. 30.
Medholdt, Louis T., assignor to The J. A. Fay & Egan Company, Cincinnati, Ohio. Knife grinder support for woodworking machines. 1,874,331; Aug. 30.
Megargee, Stanleigh, New York, N. Y. Bit. 1,875,195; Aug. 30.
Meissner, Alexander, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany. Piezo electric oscillator. 1,875,087; Aug. 30.
Mekeel, Van Cortright, Wauwatosa, Wis. Digger tooth. 1,874,783; Aug. 30.
Melville, Herbert J., and R. L. Wilson, assignors to Wm. Wrigley, jr., Company, Chicago, Ill. Package sealing machine. 1,874,568; Aug. 30.
Meneeson, Marcel, assignor to the Societe Anonyme Solex, Neuilly-sur-Seine, France. Carburetor. 1,874,784; Aug. 30.
Merchant, Paul W., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Treatment of lead sludge. 1,875,088; Aug. 30.
Mercur, Nathan L. (See Hook, C. H., and Mercur.)
Mergott, J. E., Company. (See Hiering, William C., assignor.)
Merrick, Frank W., Dorchester, assignor to Wonder Weave, Inc., Boston, Mass. Loom. 1,875,089; Aug. 30.
Merritt-Chapman & Scott Corporation. (See Burrows, George, assignor.)
Mershon, Ralph D., New York, N. Y. Electrolytic condenser. 1,874,111; Aug. 30.
Metcalf, Alpha H., assignor to The Baer & Wilde Company, Attleboro, Mass. Cuff button. 1,875,090; Aug. 30.
Metlox Corporation, Ltd. (See Prouty, Willis O., assignor.)
Metropolitan Paving Brick Company. (See Kanengeiser, Fred R., assignor.)
Meyer, Adolf, Kusnacht, near Zurich, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Rotary compressor impeller. 1,873,974; Aug. 30.
Meyer, Andre J. (See Frederick, W. A., and Meyer.)

Meyer, Andre J., assignor to Continental Motors Corporation, Detroit, Mich. Engine and preparing fuel for combustion. 1,874,509; Aug. 30.
Meyer, Charles R., and F. W. Cox, Morocco, Ind. Eccentrically hinged tractor wheel cleaner. 1,875,252; Aug. 30.
Meyer, Eeo, Company, The. (See Davis, Maurice E., assignor.)
Meyer, Raymond B., Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Electron tube transmitter. 1,875,091; Aug. 30.
Meyerhans, August, Baden, Switzerland. Transformer. 1,873,975; Aug. 30.
Michael, Charles F. (See Hedeen, Elmer, assignor.)
Micael, Gus F., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,875,092; Aug. 30.
Michael, Pierre L., Houston, Tex. Signboard frame. 1,875,093; Aug. 30.
Michel, Max, assignor to Porzellanfabrik Kahla Zweigniederlassung Freiberg, Freiberg, Germany. Apparatus for pressing articles from ceramic materials. 1,875,175; Aug. 30.
Michelson, Thor J., Venice, Calif. Sign. 1,874,202; Aug. 30.
Middleton, Leslie H., assignor to Schwarze Electric Company, Adrian, Mich. Starter and re-starter for engines. 1,875,192; Aug. 30.
Miethke, Walter, Berlin, Germany. Lamp shade. 1,875,094; Aug. 30.
Milan Brake Company, Limited, of Nevada. (See Milan, Joseph M., assignor.)
Milan, Joseph M., Indianapolis, Ind., assignor to Milan Brake Company, Limited, of Nevada. Brake. 1,875,095; Aug. 30.
Miller, Harry, Newark, N. J. Parcel receiving chute. 1,874,112; Aug. 30.
Miller, Henry J., and F. J. Cahn, assignors to Grigsby-Grunow Company, Chicago, Ill. Oxide coatings and preparing the same. 1,874,785; Aug. 30.
Miller, J. W., Co. (See Landgraf, J. T., and Miller, assignors.)
Miller, Ralph J., assignor to Gisholt Machine Company, Madison, Wis. Locking pin damping device. 1,875,096; Aug. 30.
Miller, Roy G. (See Landgraf, J. T., and Miller.)
Mine Safety Appliances Company, et al. (See Kryzanowsky, Constant J., assignor.)
Mine Safety Appliances Company. (See Punton, Charles W., assignor.)
Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)
Miner, W. H., Inc. (See Johnson, George A., assignor.)
Miner, W. H., Inc. (See Lounsbury, Harvey J., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Miner, W. H., Inc. (See Withall, Albert P., assignor.)
Minotte, Maurice E. H., Paris, assignor to Compagnie de Bethune, Bully Les Mines, France. Preparing nitrogen, carbonic oxide and hydrogen. 1,875,253; Aug. 30.
Minshall, Robert J., assignor to Boeing Airplane Company, Seattle, Wash. Retractable landing gear. 1,874,570; Aug. 30.
Mitchell, George L., assignor to The Coca-Cola Company, Atlanta, Ga. Interior inspection device. 1,874,571; Aug. 30.
Mitchell, Henry A., Wooler, Ontario, Canada. Electric fuel warmer for internal combustion engines. 1,875,176; Aug. 30.
Mitchell, Orville, Dallas, Tex., assignor to Norma-Hoffmann Bearings Corporation, Stamford, Conn. Ball bearing assembly and housing therefor. 1,875,097; Aug. 30.
Mitchell, Peter, Winnipeg, Manitoba, Canada. Ring fracturing machine. 1,874,786; Aug. 30.
Moeller, William J. (See Leshner, N., and Moeller.)
Mogridge, Bertie D. L., Ilfracombe, England, assignor to Radio Corporation of America. Cooling thermionic valves. 1,874,787; Aug. 30.
Molins, Walter E., Deptford, London, England. Cigarette container. 1,875,196; Aug. 30.
Molins, Walter E., Deptford, London, England. Carton for cigarettes and like articles. 1,875,197; Aug. 30.
Molitor, Charles B. J., Forest Hills, N. Y., assignor to Thomas Wilson & Co. Inc., New York, N. Y. Lace. Des. 87,672; Aug. 30.
Molybdenum Corporation of America. (See Sessions, Royal L., assignor.)
Monarch Metal Weatherstrip Corporation. (See Lane, Alfred M., assignor.)
Monett, Edward T. (See Fox, Ray M., assignor.)
Monowatt Electric Corporation. (See Clemence, Elliott, assignor.)
Montgomery, Frank E., Los Angeles, Calif. Combined razor blade sharpener and ash tray. Des. 87,673; Aug. 30.
Montgomery, Max A., Hudson, Ohio. Trussed structure. 1,874,572; Aug. 30.
Montgomery, Terryl B., Milwaukee, and P. M. Stivender, West Allis, assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Control system. 1,873,976; Aug. 30.
Moore, Edmund B., Hempstead, assignor to Curtiss Aeroplane & Motor Company, Inc., New York, N. Y. Variable pitch propeller. 1,874,332; Aug. 30.
Moore, George L., and J. R. Steele, Owego, N. Y. Rail anchor. 1,875,098; Aug. 30.
Moore, James D. (See Campbell, James H., assignor.)
Moore, Loyal C., Sacramento, Calif. Fire fighting apparatus. 1,874,573; Aug. 30.
Moorshead, Thomas C., London, assignor to The United Glass Bottle Manufacturers, Limited, Strand, England. Manufacture of glass bottles and similar articles. 1,875,099; Aug. 30.
Moran, Joseph F., assignor to Scovill Manufacturing Company, Waterbury, Conn. Flashlight switch. 1,874,788; Aug. 30.
Morgan, Bernard, assignor to W. E. Kautenberg Co., Inc., Freeport, Ill. Mop construction. 1,875,100; Aug. 30.
Morgan, John L., Glendora, N. J., assignor to Jesse Satenstein, New York, N. Y. Cigar grading machine. 1,874,113; Aug. 30.
Morgan, John S., Inglewood, Calif., assignor to The National Supply Company of Delaware, New York, N. Y. Brake rim construction. 1,874,574; Aug. 30.
Morick, Joseph A., Kenilworth, and K. P. Swanson, Irvington, assignors to Elsler Electric Corporation, Newark, N. J. Grid winding machine. 1,874,575; Aug. 30.
Morrell, James A., St. Louis, Mo. Outlet box. 1,875,101; Aug. 30.
Morris, H. F., Corporation. (See Waters, Gilbert C., jr., assignor.)
Morris, Howard I., Lakewood, assignor to The Yoder-Morris Company, Cleveland, Ohio. Operating mechanism. 1,874,576; Aug. 30.
Morris, Rankin W. (See Brotherton, J. E., and Morris.)
Morrison, Montford, Montclair, N. J., assignor to Westinghouse X-Ray Company, Inc. Revolving and stationary X-ray screen. 1,874,577; Aug. 30.
Morrison, Sidney A., Mason, Mich. Heat exchange device. 1,874,578; Aug. 30.
Morrow, George E., Enid, Okla. Window sash adjuster. 1,874,789; Aug. 30.
Morse, Clyde S., De Kalb, Ill. Tire insert. 1,875,102; Aug. 30.
Mortenson Engineering Co. (See Mortenson, Henry C., assignor.)
Mortenson, Henry C., Highland Park, assignor to Mortenson Engineering Company, Chicago, Ill. Building material and retaining means therefor. 1,874,790; Aug. 30.
Morton, Edmund R. (See Stoller, H. M., and Morton.)
Morton, Robert C., Baltimore, Md. Crate bar. 1,874,579; Aug. 30.
Mosel, Joseph H., Lakewood, assignor to The Jaeger Machine Company, Columbus, Ohio. Truck. 1,875,103; Aug. 30.
Mossberg, Frank, and A. Jensen, assignors to Mossberg Pressed Steel Corporation, Attleboro, Mass. Skid. 1,875,104; Aug. 30.
Mossberg Pressed Steel Corporation. (See Mossberg, F., and Jensen, assignors.)
Motor Improvements, Inc. (See Arnold, George A., assignor.)
Mueller, Theophil W., Elmhurst, Ill. Parcel carrier for baby carriages. 1,875,107; Aug. 30.
Muggleton, Gerald D., P. S. Brallier, H. C. Van Galder, and R. F. Webber, assignors to Niagara Smelting Corporation, Niagara Falls, N. Y. Method of and apparatus for mineral chlorination. 1,875,105; Aug. 30.
Mulder, Johannes G. W., Eindhoven, Netherlands, assignor to Radio Corporation of America. Discharge tube having an indirectly heated cathode. 1,875,106; Aug. 30.
Mullen, Mary H., Brigantine, N. J. Bottle. Des. 87,674; Aug. 30.
Muller, Alfred C., Chico, Calif. Dental guard. 1,875,108; Aug. 30.
Muller, George J., Baltimore, Md. Steam heating apparatus. 1,874,203; Aug. 30.
Müller, Heinrich, Nuremberg, Germany. Wheeled toy. 1,875,109; Aug. 30.
Munce, Marshall, Richmond, Va. Refrigeration apparatus. 1,875,254; Aug. 30.
Murff, Mabel M., Lawton, Okla. Roasting pan. 1,874,791; Aug. 30.
Murphy, Edward J., Framingham, Mass. Plumb bob hanger. 1,874,057; Aug. 30.
Murrall, Florance, Mayfield, N. Y. Apron. Des. 87,675; Aug. 30.
Mustad, O., & Son. (See Southwell, Frank, assignor.)
Myers, Gilbert, Boise, Idaho. Toy. 1,874,792; Aug. 30.
Myers, Leo, Kirkwood, Mo. Machine for applying collars to bottles. 1,875,110; Aug. 30.
Myers, Lewis C., Freeport, and G. F. Handley, Glendale, assignors to Royal Typewriter Company, Inc., New York, N. Y. Typewriting machine. 1,875,255; Aug. 30.
N. V. Philips', Gloeilampenfabrieken. (See Hertz, Gustav L., assignor.)
N. V. Philips', Gloeilampenfabrieken. (See Holst, G., and Van der Pol, assignors.)
Naamlooze Vennootschap Philips' Gloeilampenfabrieken. (See Holst, Gilles, assignor.)
Naef, Otto, Haddonfield, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Condenser bushing. 1,873,977; Aug. 23.
Nagai, Torazo, Los Angeles, Calif. Game table. 1,875,198; Aug. 30.
Nagel, George E., Columbus, Ohio. Gang mold for fence post construction. 1,875,256; Aug. 30.
National Acme Company, The. (See Drissner, Alfred E., assignor.)

National Cash Register Company, The. (See Brand, Samuel, assignor.)
National Cash Register Company, The. (See Frank, John P., assignor.)
National Cash Register Company, The. (See Fuller, Frederick L., assignor.)
National Cash Register Company, The. (See Goldberg, Maximilian M., assignor.)
National Cash Register Company, The. (See Green, Charles W., assignor.)
National Cash Register Company, The. (See Robertson, William H., assignor.)
National Cash Register Company, The. (See Sburlino, Pascal, assignor.)
National Cash Register Company, The. (See Shipley, Bernis M., assignor.)
National Cash Register Company, The. (See Von Pein, Edward J., assignor.)
National City Bank of New York, The, executor. (See Tanner, Harry L.)
National Equipment Company. (See Bausman, A. L., and Rapisarda, assignors.)
National Pneumatic Company. (See Conklin, Roscoe D., assignor.)
National Pneumatic Company. (See Forman, Paris R., assignor.)
National Pumps Corporation. (See Bradley, Eric H., assignor.)
National Supply Company. (See Bush, John C., assignor.)
National Supply Company of Delaware, The. (See Morgan, John S., assignor.)
National Supply Company, The. (See Faulkner, D. S., and Zerbe, assignors.)
National Supply Company, The. (See Rice, Allen E., assignor.)
National Supply Company, The. (See Rice, A. E., and Zerbe, assignors.)
Naunton, William J. S. (See Bunbury, H. M., Davies, and Naunton.)
Nawiasky, Paul, Ludwigshafen-on-the-Rhine, and F. Kačer, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparing diphthaloylnaphthalene compounds and a new product obtainable thereby. 1,874,580; Aug. 30.
Neelmeier, Wilhelm, Leverkusen-on-the-Rhine, and W. Lamberz, Wiesdorf, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Aromatic monoaroyl diamines. 1,874,581; Aug. 30.
Nelson, Albert C., Flushing, N. Y., assignor, by mesne assignments, to Westinghouse X-Ray Company, Inc. Tilt table. 1,874,582; Aug. 30.
Nelson, Theodore J., and C. H. Gerlofson, Chicago, Ill. Seat. 1,874,333; Aug. 30.
Nenninger, Lester F., assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machinery. 1,874,583; Aug. 30.
Neresheimer, Heinrich, Ludwigshafen-on-the-Rhine, and W. Eichholz, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of new vat dyestuffs. 1,874,584; Aug. 30.
Nero, Arvid H., West Hartford, assignor, by mesne assignments, to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Locking means for separable electric fittings. 1,874,334; Aug. 30.
Nesbitt, Harold H., Belair, assignor to Hartford Engineering and Machine Company, Aberdeen, Md. Mechanical refrigeration. 1,874,204; Aug. 30.
Nesbitt, John J., Inc. (See Henshall, P. P., and Ewald, assignors.)
Nevin, Donald A., Waynesboro, Pa. Card indexing device. 1,874,335; Aug. 30.
Newcomb, Edward C., assignor to The Studebaker Corporation, South Bend, Ind. Internal combustion engine. 1,874,585; Aug. 30.
New Jersey Zinc Company, The. (See Mahler, G. T., and Handwerk, assignors.)
Newman, Samuel F., assignor to Landis Machine Company, Waynesboro, Pa. Cutter and cutter holder for taps. 1,874,586; Aug. 30.
Newmark, H. J., et al. (See Kryzanowsky, Constant J.)
New State Ice Company. (See Leiper, Hugh N., assignor.)
Neyer, Hugo. (See Mayer, Rene, assignor.)
Niagara Smelting Corporation. (See Muggleton, G. D., Brallier, Van Galder, and Webber, assignors.)
Nichols, Louis C., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Bushing assembly for transformers and the like. 1,873,978; Aug. 30.
Nielsen, Jens E. (See Craig, C. J., and Nielsen.)
Nieman, Henry W., Bethlehem, Pa., assignor to Bethlehem Steel Company. Tension controlling device. 1,875,111; Aug. 30.
Nightingale, Harry, Union City, and H. Meachem, Teaneck, N. J., assignors to Todd Drydock Engineering & Repair Corporation, New York, N. Y. Delay action valve. 1,874,793; Aug. 30.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Internal combustion engine. 1,874,336; Aug. 30.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Internal combustion engine. 1,874,337; Aug. 30.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Means for cooling oil. 1,874,587; Aug. 30.
Niven, Archie M., Detroit, Mich., assignor, by mesne assignments, to Continental Aircraft Engine Company. Rocker box housing. 1,874,338; Aug. 30.
Noelting, William H., and W. M. Van Dusen, assignors to Faultless Caster Company, Evansville, Ind. Adjustable adapter frame for casters. 1,875,113; Aug. 30.
Noelting, William H., assignor to Faultless Caster Company, Evansville, Ind. Self-lubricated caster socket and stem. 1,875,112; Aug. 30.
Nome, Peter A., Brooklyn, N. Y., assignor to The Permutit Company, New York, N. Y. Differential pressure gauge. 1,874,205; Aug. 30.
Nordberg Manufacturing Company. (See Symons, Edgar B., assignor.)
Nordberg Manufacturing Company. (See Talboys, Henry H., assignor.)
Norma-Hoffmann Bearings Corporation. (See Mitchell, Orville, assignor.)
Northam Warren Corporation. (See Brekke, Marshall T., assignor.)
Northup, Maxwell C. (See McChesney, G. W., and Northup.)
Norton, Francis J., assignor to The Solvay Process Company, Syracuse, N. Y. Analytical method and apparatus therefor. 1,874,339; Aug. 30.
Norton, Raymond J., Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind. Brake part. 1,875,114; Aug. 30.
Nutting, Willard H., Oakland, assignor to The Paraffine Companies, Inc., San Francisco, Calif. Container cover. 1,874,706; Aug. 30.
Nygaard, Oscar, Saugus, assignor to Bernitz Furnace Appliance Company, Boston, Mass. Tuyère and supporting means therefor. 1,874,340; Aug. 30.
Nylund, John A., Portland, Oreg. Tapered feed roller. 1,875,257; Aug. 30.
Oberdorfer, Henry D., assignor to Circle A Products Corporation, Newcastle, Ind. Bleacher construction. 1,875,115; Aug. 30.
O'Connor, John F., assignor to W. H. Miner, Chicago, Ill. Railway draft rigging. 1,874,058; Aug. 30.
O'Connor, Thomas, assignor to Ohmer Fare Register Company, Dayton, Ohio. Register interlocking mechanism. 1,875,116; Aug. 30.
O'Connor, Thomas, assignor to Ohmer Fare Register Company, Dayton, Ohio. Register. 1,875,117; Aug. 30.
Oeste, Henry, Pittsburgh, Pa. Race timing apparatus. 1,874,794; Aug. 30.
Ogden, Floyd H., Watertown, Mass., assignor, by mesne assignments, to Pepperell Manufacturing Company, Biddeford, Me. Tufting machine. 1,874,588; Aug. 30.
Ogden, Jacob W. (See Wheeler, W. H., jr., and Ogden.)
Ohler, Frank L., and R. P. French, assignors to The Houghton Elevator & Machine Company, Toledo, Ohio. Elevator safety device. 1,875,118; Aug. 30.
Ohmer Fare Register Company. (See Buckley, Phillip F., assignor.)
Ohmer Fare Register Company. (See Gluck, J., and Karich, assignors.)
Ohmer Fare Register Company. (See Kunkelman, H. C., and Becker, assignors.)
Ohmer Fare Register Company. (See Long, Robert B., assignor.)
Ohmer Fare Register Company. (See O'Connor, Thomas, assignor.)
Ohmer Fare Register Company. (See Ohmer, J. F., and Coil, assignors.)
Ohmer, John F., and G. C. Coil, assignors to Ohmer Fare Register Company, Dayton, Ohio. Ticket printing, issuing, and recording machine. 1,875,119; Aug. 30.
Oilgear Company, The. (See Ferris, John P., assignor.)
Oilgear Company, The. (See Ferris, Walter, assignor.)
Okonite-Callender Cable Company, The. (See Branthwaite, Isaac, assignor.)
Older, Clifford, Wilmette, Ill. Joint for pavements or the like. 1,874,589; Aug. 30.
Older, Clifford, Wilmette, Ill. Pavement joint protector or traffic marker. 1,874,590; Aug. 30.
Older, Clifford, Wilmette, Ill. Expansion joint. 1,874,591; Aug. 30.
Olin, Franklin W., Alton, Ill., and R. G. Clyne, St. Louis, Mo., assignors to Western Cartridge Company, East Alton, Ill. Method and apparatus for inspecting cartridge shells. 1,875,120; Aug. 30.
Oliver, Lott D., Houston, Tex. Brick making machine. 1,875,258; Aug. 30.
Olson, Carl G., assignor to Illinois Tool Works, Chicago, Ill. Hob grinding machine. 1,874,592; Aug. 30.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Electrical connecter. 1,874,593; Aug. 30.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Electrical connecter. 1,875,594; Aug. 30.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Self-locking screw. 1,874,595; Aug. 30.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Lock washer. 1,874,596; Aug. 30.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Lock washer. 1,874,597; Aug. 30.
Olson, Harry R., Minneapolis, Minn. Handle for mattresses. 1,875,121; Aug. 30.

Olson, John B., assignor to James Manufacturing Company, Fort Atkinson, Wis. Manger structure. 1,874,598; Aug. 30.
Olson, John B., assignor to James Manufacturing Company, Fort Atkinson, Wis. Stop guard for stanchion frames. 1,874,599; Aug. 30.
Olson, Oscar F., Fenton, Iowa. Fish lure. 1,875,122; Aug. 30.
Oosterhuis, Ekko, and J. M. Unk, Eindhoven, Netherlands, assignors to Radio Corporation of America. Grid-biasing unit fed by alternating current. 1,875,123; Aug. 30.
Ormandy, William R., London, England. Recovery of acetone. 1,875,124; Aug. 30.
Orthwine, Rudolph, New York, N. Y. Display device. 1,874,795; Aug. 30.
Osann, Frederick, Company. (See Osann, F., and Plumley, assignors.)
Osann, Frederick, White Plains, and R. L. Plumley, Brooklyn, assignors to Frederick Osann Company, New York, N. Y. Portable sewing machine carrying case. 1,875,177; Aug. 30.
Oslus, Frederick J., Miami, Fla. Combination cooking and serving dish. Des. 87,676; Aug. 30.
Oslus, Frederick J., Miami, Fla. Combination cooking and serving dish. 87,677; Aug. 30.
Ossenbeck, Anton. (See Hentrich, W., Tietze, and Ossenbeck.)
Ossing, Stanley F., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Portable unloading machine. 1,874,600; Aug. 30.
Oster, John and O. E. Lackner, assignors to John Oster Manufacturing Company, Racine, Wis. Hand operated hair clipper. 1,875,125; Aug. 30.
Oster, John, Manufacturing Company. (See Oster, John, and Lackner, assignors.)
Osthoff, Walter, Barmen, Germany. Burning heavy oils. 1,874,341; Aug. 30.
Oswald, André, Paris, France, assignor, by mesne assignments, to Keller-Dorian Colorfilm Corporation, New York, N. Y. Reproducing films. 1,874,601; Aug. 30.
Oswald, Arthur A., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric discharge apparatus. 1,874,707; Aug. 30.
Otis, Herbert C., Shreveport, La. Tubing plug. 1,874,114; Aug. 30.
Ottinger, Nathan, New York, N. Y. Vanity case or analogous article. Des. 87,678; Aug. 30.
Outboard Motors Corporation. (See Evinrude, Ole, assignor.)
Owen, Henry M., Norfolk, Va. Hot water circulating unit. 1,874,602; Aug. 30.
Owen, Orlando K., assignor to J. W. Davis Company, Terre Haute, Ind. Greenhouse operation system. 1,785,126; Aug. 30.
Owens, Freeman H., New York, N. Y. Combined motion picture and sound camera. 1,874,603; Aug. 30.
Packard Motor Car Company. (See Griswold, Walter R., assignor.)
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Page, Albert E., Brooklyn, assignor to Scott & Williams, Incorporated, New York, N. Y. Chain control for splicing attachments. 1,874,342; Aug. 30.
Page, George A., jr. (See Henrichsen, K., and Page.)
Page, George A., jr., Freeport, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Oil tank. 1,874,605; Aug. 30.
Page, Samuel H., Stratford, assignor to The American Fabrics Co., Bridgeport, Conn. Lace. Des. 87,679; Aug. 30.
Pagin, John B., South Bend, Ind. Fishing lure. Des. 87,680; Aug. 30.
Palm, Herman, et al. (See Mattson, Julius, assignor.)
Palm, Victor H., Butler, Pa. Envelope. 1,874,796; Aug. 30.
Palubiak, John, St. Louis, Mo. Outside nest for canary bird cages. 1,874,708; Aug. 30.
Paoloni, Carlo. (See Carughi, A., and Paoloni.)
Paradise, Bertrand, Brooklyn, N. Y. Apparatus for inking endless ribbons. 1,874,059; Aug. 30.
Paraffine Companies, The. (See Nutting, Willard H., assignor.)
Pardee, Frank, jr., assignor to Anthracite Separator Company, Hazleton, Pa. Bag loading chute. 1,874,343; Aug. 30.
Park, Carl P., Manchester, N. H., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I. Spool. 1,874,606; Aug. 30.
Park, Carl P., Manchester, N. H., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I. Multiple bit boring machine with reciprocating heads. 1,874,607; Aug. 30.
Parker, Clara B., executrix. (See Parker, George D.)
Parker, George D., deceased, Riverside, Calif., by C. B. Parker, executrix. Apparatus for wire binding boxes. 1,875,259; Aug. 30.
Parker, George D., deceased, Riverside, Calif., by C. B. Parker, executrix, assignor of one-half to J. M. Leaver, jr., Oakland, Calif. Bundle binding and tying machine. 1,875,260; Aug. 30.
Parkin, Winfred T., assignor to Theodore W. Foster & Brother Co., Providence, R. I. Vanity case. 1,875,127; Aug. 30.

Parkman, Walter M., Jackson, assignor of twenty-three one hundredths to J. S. Watson, Lexington, Miss. Apparatus for separating a plurality of condensates of the hydrocarbon constituents of natural gas. 1,875,199; Aug. 30.
Parr, George T., St. Paul, Minn. Machine for making pie shaped receptacles. 1,874,608; Aug. 30.
Parr, Samuel W., and T. E. Layng, assignors, by mesne assignments, to Urbana Coke Corporation, Urbana, Ill. Apparatus for coking coal. 1,874,344; Aug. 30.
Parrott, Whipple O., Chicago, Ill. Play device. 1,874,345; Aug. 30.
Paschke, Charles H., Buffalo, N. Y., assignor to F. A. Paschke, Sweetwater, Idaho. Fuel burner. 1,874,346; Aug. 30.
Paschke, Frederick A. (See Paschke, Charles H., assignor.)
Pass & Seymour, Inc. (See Despard, Victor R., assignor.)
Paton, Clyde R., assignor to The Studebaker Corporation, South Bend, Ind. Motor vehicle. 1,874,609; Aug. 30.
Patterson, Ward S., Cranford, N. J., and C. Pierce, Alamorgordo, N. Mex., assignors to International Combustion Engineering Corporation, New York, N. Y. Air heater. 1,875,128; Aug. 30.
Pavitt, Frederick J., Brighton, England. No-volt tripping mechanism for electrical switches. 1,874,797; Aug. 30.
Payne, Samuel T., Freeport, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Fuselage construction. 1,874,610; Aug. 30.
Payson, Aurin E., and M. P. Wetmore, Norwich, Conn. Refrigerating device. 1,875,129; Aug. 30.
Peck, Lionel S., Macedonia, assignor to The Eaton Manufacturing Company, Cleveland, Ohio. Reducing bushing. 1,875,130; Aug. 30.
Peglar, Don C., assignor to Vacuum Dyeing Machine Corporation, Chattanooga, Tenn. Dyeing machine. 1,874,798; Aug. 30.
Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Method and apparatus for feeding and melting glass batch. 1,874,799; Aug. 30.
Peltier, Frank D., Bridgeport, Conn., assignor, by mesne assignments, to Servel, Inc., New York, N. Y. Evaporator unit. 1,874,115; Aug. 30.
Pentland, Peter, Weehawken, N. J. Building construction. 1,875,131; Aug. 30.
Pepperell Manufacturing Company. (See Ogden, Floyd H., assignor.)
Perkins, Nathan W., East Orange, assignor to Ellis Adding Typewriter Company, Newark, N. J. Multiple accumulator calculating machine. 1,874,709; Aug. 30.
Permutit Company, The. (See Nome, Peter A., assignor.)
Perry, Walter M. (See Sperry, E. A., and Perry.)
Persons, Laurence M., St. Louis, Mo. Electric switch. 1,874,116; Aug. 30.
Persons, Laurence M., St. Louis, Mo. Thermostat. 1,874,117; Aug. 30.
Persons, Lawrence M., Quincy, Ill. Water supply regulator. 1,874,611; Aug. 30.
Persons, Lawrence M., assignor to Cook Electric Company, Chicago, Ill. Regulator. 1,874,710; Aug. 30.
Peterson, Harold O. (See Beverage, H. H., and Peterson.)
Peterson, Harold O., Riverhead, N. Y., assignor to Radio Corporation of America. Shielding for high frequency apparatus. 1,875,132; Aug. 30.
Peterson, Otto, assignor to The Russ Manufacturing Company, Cleveland, Ohio. Sirup pump. 1,874,612; Aug. 30.
Pettit, Karl D., Princeton, N. J., C. P. Wicks, Stamford, Conn., and M. W. Hajek, Ridgefield, N. J., assignors to American Cuptor Corporation, New York, N. Y. Beverage dispensing apparatus. 1,874,060; Aug. 30.
Petty, Fred J., assignor to Ball Brothers Company, Muncie, Ind. Glass jar. Des. 87,681; Aug. 30.
Pfund, August H., Baltimore, Md. Paint testing instrument. 1,875,133; Aug. 30.
Pfund, August H., Baltimore, Md. Hardness testing apparatus and method. 1,875,134; Aug. 30.
Phares, Earl R., Audubon, Iowa. Cap stretching and re-shaping implement. 1,875,178; Aug. 30.
Photostat Corporation. (See Caps, Arthur W., assignor.)
Pierce, Conway. (See Patterson, W. S., and Pierce.)
Pierce, Edward E., Exeter, R. I. Attaching together a windshield cleaner arm and blade. 1,874,118; Aug. 30.
Pierson, Wallace R., Cromwell, Conn. Hybrid tea rose. Pl. Pt. 25; Aug. 30.
Pierson, William D., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Wire spooling machine. 1,874,206; Aug. 30.
Pilates, Joseph H., New York, N. Y. Chair. 1,874,613; Aug. 30.
Pilcher, Allen C., and L. C. Pilcher, Louisville, Ky., assignors, by direct and mesne assignments, to The Russ Manufacturing Company, Cleveland, Ohio. Sirup pump. 1,874,614; Aug. 30.
Pilcher, Lawrence C. (See Pilcher, Allen C. and L. C.)
Pilny, Alex, Zurich, Switzerland. Three color film for cinematographic purposes. 1,874,615; Aug. 30.
Pitkin, Arthur F., Schenectady, N. Y. Stay bolt. 1,874,347; Aug. 30.
Pitney-Bowes Postage Meter Co. (See Wheeler, W. H., jr., and Ogden, assignors.)

Pittsburgh Plate Glass Company. (See Arberry, Percy E., assignor.)
Plant Food Appliance Company. (See Bergen, Reuben S., assignor.)
Plum, Johannes, Washington, D. C., assignor to Fantail Boat Corporation, New York, N. Y. Speed boat. 1,875,135; Aug. 30.
Plumley, Raymond L. (See Osann, F., and Plumley.)
Podd, Ernest A., Houston, Tex. Spreader clamp. 1,875,136; Aug. 30.
Pollock, Frank S., assignor to Atlas Powder Company, Wilmington, Del. Plant marker. 1,875,137; Aug. 30.
Pond, Harold J., and W. Thielen, assignors to Advance Machine Company, Inc., Minneapolis, Minn. Brush attaching device for scrubbing machines. 1,875,138; Aug. 30.
Pontow, Werner, Berlin-Wilmersdorf, Germany, assignor to Westinghouse Electric & Manufacturing Company. Coupling system for regulating apparatus. 1,874,800; Aug. 30.
Porter, Alexander W., Atlantic City, N. J. Serving tray. Des. 87,682; Aug. 30.
Porter, Frank, Syracuse, assignor to Atmospheric Nitrogen Corporation, New York, N. Y. Decomposition of hydrocarbons. 1,874,801; Aug. 30.
Porter, H. K., Inc. (See Porter, Henry W., assignor.)
Porter, Henry W., Brookline, Mass., assignor to H. K. Porter, Inc. Cutting tool. 1,874,616; Aug. 30.
Porzellanfabrik Kahla Zweingniederlassung Freiberg. (See Michel, Max, assignor.)
Poster Parts Company. (See Bell, William R., assignor.)
Pot, Arthur, assignor of forty-nine one hundredths to W. S. Jennings, New York, N. Y., and fifty-one one hundredths to H. J. Levell, Mount Vernon, N. Y. Apparatus for applying heat for therapeutic and other purposes. 1,875,261; Aug. 30.
Pounder, Wilbur R., assignor to Hubbard & Co., Chicago, Ill. Anchor. 1,875,139; Aug. 30.
Powell, Elwin L., Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Radio receiving apparatus. 1,875,140; Aug. 30.
Powell, Elmer J., assignor to The Powell Pressed Steel Company, Hubbard, Ohio. Tiering lug. 1,875,141; Aug. 30.
Powell Pressed Steel Company. (See Powell, Elmer J., assignor.)
Prantl, Franz, Wettingen, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Electric locomotive speed control system. 1,873,979; Aug. 30.
Pratt-Low Preserving Company. (See Gavin, William H., assignor.)
Prenszner, Stephen, Clifton, N. J. Clock mechanism. 1,874,348; Aug. 30.
Price, Joseph, West New Brighton, assignor to The Griscom-Russell Company, New York, N. Y. Heat exchanger. 1,875,142; Aug. 30.
Price, William B., assignor to Scovill Manufacturing Company, Waterbury, Conn. Non-ferrous alloy. 1,874,617; Aug. 30.
Prince, Clarence K., deceased, R. K. Prince, administrator, assignor to The H. B. Smith Company, Westfield, Mass. Method of and apparatus for use in burning solid fuel. 1,874,618; Aug. 30.
Prince, Robert K., administrator. (See Prince, Clarence K.)
Prinz, Hermann K. (See Calberg, A., and Prinz.)
Propst, Thomas E., Maywood, Ill. Tree stand. 1,874,119; Aug. 30.
Prosperity Company, The. (See Braun, Philip N., assignor.)
Prosperity Company, The. (See Ledbetter, James C., assignor.)
Prosperity Company, Inc., The. (See Davis, Ernest, assignor.)
Protectoseal Company of America. (See Anschicks, Rudolph J., assignor.)
Prouty, Willis O., Hermosa Beach, assignor to Metlox Corporation Ltd., Manhattan Beach, Calif. Connecting device. 1,875,179; Aug. 30.
Pullman Car & Manufacturing Corporation. (See Johnson, Clarence H., assignor.)
Punton, Charles W., assignor to Mine Safety Appliances Company, Pittsburgh, Pa. Protective cap. 1,875,143; Aug. 30.
Pure Oil Company. (See Harnsberger, Audley E., assignor.)
Purplaw, Rolf, Los Angeles, Calif. Plant bed. 1,874,207; Aug. 30.
Pyrene-Minimax Corporation. (See Schnabel, Rudolf, assignor.)
Pyridium Corporation. (See Tisza, E. T., and Joos, assignors.)
Quynn, John W., Parkersburg, W. Va. Pneumatic tire construction. 1,874,120; Aug. 30.
Rabe, Heinz, Berlin-Wilmersdorf, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Automatic fire regulation system for steam boilers. 1,874,619; Aug. 30.
Rachor, Joseph. (See Eichwede, H., and Rachor.)
Racine, Victor C., Fort Worth, Tex. Linoleum accessory vending unit. 1,875,144; Aug. 30.
Radford, Stephen C., Oshkosh, Wis. System for utilizing fluid pressure. 1,874,620; Aug. 30.
Radio Corporation of America. (See Albersheim, Walter, assignor.)
Radio Corporation of America. (See Beverage, Harold H., assignor.)
Radio Corporation of America. (See Beverage, H. H., and Peterson, assignors.)
Radio Corporation of America. (See Braden, Rene A., assignor.)
Radio Corporation of America. (See Conklin, James W., assignor.)
Radio Corporation of America. (See Drake, F. H., Hull, and Loughlin, assignors.)
Radio Corporation of America. (See Eckersley, Thomas L., assignor.)
Radio Corporation of America. (See Giebe, E., and Schelbe, assignors.)
Radio Corporation of America. (See Green, Ernest, assignor.)
Radio Corporation of America. (See Hansell, Clarence W., assignor.)
Radio Corporation of America. (See Kroger, Fred H., assignor.)
Radio Corporation of America. (See Lindenblad, Nils E., assignor.)
Radio Corporation of America. (See Loewe, Siegmund, assignor.)
Radio Corporation of America. (See Mogridge, Bertie D. L., assignor.)
Radio Corporation of America. (See Mulder, Johannes G. W., assignor.)
Radio Corporation of America. (See Oosterhuis, E., and Unk, assignors.)
Radio Corporation of America. (See Peterson, Harold O., assignor.)
Radio Corporation of America. (See Round, Henry J., assignor.)
Radio Corporation of America. (See Snow, Harold A., assignor.)
Radio Corporation of America. (See Zwikker, Cornelis, assignor.)
Radio Patents Corporation. (See Richter, Rudolf, assignor.)
Rainbow Light, Inc. (See Machlett, Raymond R., assignor.
Rainbow Light, Inc. (See Young, Frederick W., assignor.)
Ralston, William S., assignor to The Chaplin-Fulton Manufacturing Company, Pittsburgh, Pa. Liquid level regulator. 1,875,145; Aug. 30.
Ramsden, John T. (See Wallace, F. R., and Ramsden.)
Randel, Bo Folke, San Diego, Calif., assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,874,621; Aug. 30.
Randolph, Guy P., assignor to W. O. Thompson, Pasadena, Calif. Desk memorandum device. 1,875,146; Aug. 30.
Ranney, Willet B., assignor to Wm. Wrigley jr., Company, Chicago, Ill. Stapling machine. 1,874,622; Aug. 30.
Ransomes, Sims & Jefferies, Limited. (See Garrett, Francis A., assignor.
Rapisarda, Edward D. (See Bausman, A. L., and Rapisarda.)
Rave, Caesar, Luckenwalde, Germany. Incandescent lamp. 1,875,147; Aug. 30.
Raynor, John S., Holmesburg, Pa. Clip for fastening foraminous plaster key. 1,874,802; Aug. 30.
Read, Harry, assignor to Read Machinery Company, York, Pa. Precision measuring tank. 1,874,349; Aug. 30.
Read Machinery Company. (See Read, Harry, assignor.)
Reardon, Robert E., Columbia, Pa. Pry tag decapper. 1,874,208; Aug. 30.
Redfield, Casper L., Chicago, Ill. Air circulating and cleaning device. 1,874,061; Aug. 30.
Reed, Frank M., Clearfield, Pa. Heat exchange mechanism. 1,874,803; Aug. 30.
Reed, Leslie D. (See Groene, W. F., and Reed.)
Reese, David B., assignor to Burgess Battery Company, Madison, Wis. Automatic stop mechanism. 1,874,804; Aug. 30.
Reeves, George V., Port Arthur, Tex. Typewriter ribbon moistener. 1,874,623; Aug. 30.
Reflex Electrical Products Company, The. (See MacFarland, Allis M., assignor.)
Reid, Ebenezer E., Baltimore, Md., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Reducing the viscosity of cellulose derivatives. 1,874,350; Aug. 30.
Reid, James S., assignor to The Eaton Manufacturing Company, Cleveland, Ohio. Sealing gasket for neck and closure structures. 1,875,148; Aug. 30.
Reid, Robert, Muskegon, Mich. Internal combustion motor. 1,875,149; Aug. 30.
Reimschissel, Charles A. (See Shearer, H. T., and Reimschissel.)
Reinhardt, Otto, Pawtucket, R. I. Curtain rod. 1,875,150; Aug. 30.
Remsen Corporation. (See McMann, Arthur A., assignor.)
Renault, Louis. (See Saives, Leon, assignor.)
Renfer, John E., assignor to Cleveland Rock Drill Company, Cleveland, Ohio. Air line oiler. 1,874,062; Aug. 30.
Renfer, John E., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Pneumatic tool. 1,874,063; Aug. 30.

Rentschler, Harvey C., East Orange, N. J., assignor to Westinghouse Lamp Company. Glow relay tube. 1,875,151; Aug. 30.
Reyburn, John R., Fairfield, Conn., assignor to American Chain Company, Inc. Connecter for chains. 1,875,262; Aug. 30.
Reynolds, Frederick D., assignor to Surety Manufacturing Company, St. Louis, Mo. Shoe plate. 1,872,152; Aug. 30.
Rhodes, Daniel S., Gloversville, N. Y. Lighter. 1,874,351; Aug. 30.
Rice, Allen E., Hermosa Beach, and L. E. Zerbe, Moneta, Calif., assignors to The National Supply Company, Toledo, Ohio. Distribution of water for cooling brake rims. 1,874,624; Aug. 30.
Rice, Allen E., Hermosa Beach, Calif., assignor to The National Supply Company, Toledo, Ohio. Drawworks brake rim construction. 1,874,625; Aug. 30.
Richards, Eric H., Harpenden, and H. B. Hutchinson, Epsom, England, assignors to Adco Limited, Harpenden, England. Manufacture of nitrogenous fertilizer and the utilization of nitrogen-bearing solutions. Re18,587; Aug. 30.
Richer, Joseph R., Oak Park, Ill. Hob grinding machine. 1,874,626; Aug. 30.
Richter, Charles J., Berwyn, Ill., assignor to Goss Printing Press Company. Web roll brake mechanism. 1,875,153; Aug. 30.
Richter, Rudolf, Karlsruhe-Durlach, Germany, assignor to Radio Patents Corporation, New York, N. Y. System for starting electric motors. 1,875,263; Aug. 30.
Riddell, W. A., Company. (See Shaeffer, George D., assignor.)
Rider, Rowland W., assignor to Utah Royalty Corporation, Salt Lake City, Utah. Converting motion and the like. 1,875,180; Aug. 30.
Ridley, Vincent W., Brooklyn, assignor to United Fruit Company, New York, N. Y. Paper Bag. 1,875,154; Aug. 30.
Riley, Fred E., Livermore Falls, Me. Gate valve with nonplugging seat construction. 1,874,627; Aug. 30.
Rinck-McIlwaine, Inc. (See McGuckin, John J., assignor.)
Ring, Joseph J., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Turbine gate mechanism. 1,873,980; Aug. 30.
Roath, Robert C., assignor to The McCaskey Register Company, Alliance, Ohio. Autographic billing and posting machine. 1,875,155; Aug. 30.
Robbins, Percy A., Highland Park, Ill. Ore skip and the like. 1,874,711; Aug. 30.
Rohers Fibre Company. (See Jacquemin, Augusta F., assignor.)
Roberts, Leland C., Towaco, N. J., assignor to American Telephone and Telegraph Company. Producing loss varying with energy level. 1,875,156; Aug. 30.
Roberts, Leland C., Towaco, N. J., assignor to American Telephone and Telegraph Company. Compression and expansion of range of energy level. 1,875,157; Aug. 30.
Roberts, Marvin. (See Vignaux, R. I., and Roberts.)
Robertson, Harry M., Cleveland, Ohio. Kiln. 1,874,064; Aug. 30.
Robertson, Warren M., Revere, Mass. Cooling milk and other beverages. 1,875,264; Aug. 30.
Robertson, William H., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,874,805; Aug. 30.
Roche, Clifton R., Los Angeles, Calif. Driving apparatus for vehicles. 1,874,604; Aug. 30.
Roche, Clifton R., Los Angeles, Calif., assignor to Automotive Research and Manufacturing Company, Reno, Nev. Automobile construction for front wheel drive. 1,874,352; Aug. 30.
Roderwald, Rudolf, Berlin, Germany, assignor to The Dayton Roderwald Company, Dayton, Ohio. Connectors for belts. 1,874,628; Aug. 30.
Roessler & Hasslacher Chemical Company, The. (See Storch, Henry H., assignor.)
Rogers, Escur E. (See Skinner, Reuben L., assignor.)
Rollason, Charles H., assignor to Wheeling Steel Corporation, Wheeling, W. Va. Handle attaching device. 1,874,629; Aug. 30.
Rombough, John B., Niagara Falls, N. Y. Mouth clamp. 1,875,158; Aug. 30.
Ronan, Austin H. (See Sklenar, W. F., and Ronan.)
Rooder, Irwin G., Brooklyn, N. Y. Fuse. 1,875,161; Aug. 30.
Roos, Albert E., Dunbar, Nebr. Wire fence. 1,874,121; Aug. 30.
Rosenbaum, Abraham, Boston, Mass. Safety razor. 1,875,265; Aug. 30.
Rosenberg, Heyman, New York, N. Y. Hardening apparatus for metal work. 1,874,122; Aug. 30.
Ross, Hugh G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transformer core. 1,874,806; Aug. 30.
Ross, Hugh M., Richmond Hill, N. Y., assignor, by mesne assignments, to Crown Cork & Seal Company, Inc., Baltimore, Md. Bottle filling and crowning machine. 1,874,353; Aug. 30.
Rothrock, George L., assignor to General Motors Corporation, Detroit, Mich. Mechanism to prevent brake chatter. 1,874,354; Aug. 30.
Round, Henry J., London, England, assignor to Radio Corporation of America. Thermionic valve. 1,874,355; Aug. 30.
Rowe, Alvin V., assignor to Rowe Manufacturing Company, Galesburg, Ill. Cultivator. 1,875,159; Aug. 30.
Rowe Manufacturing Company. (See Rowe, Alvin V., assignor.)
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Flow controlling system. 1,874,123; Aug. 30.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Quick acting release device for carbon dioxide fire systems. 1,874,356; Aug. 30.
Royal Typewriter Company. (See Myers, L. C., and Handley, assignors.)
Rubber Service Laboratories Co., The. (See Scott, Winfield, assignor.)
Ruberoid Co., The. (See Hammenecker, Pieter A., assignor.)
Rudolph, Walter H., Buffalo, N. Y. Culinary device. 1,874,807; Aug. 30.
Ruemelin, Richard, Milwaukee, Wis. Sand blast curtain. Re18,586; Aug. 30.
Ruhnau, Richard, Essen, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Cinematographic projection apparatus. 1,875,193; Aug. 30.
Rump, Sigurd. (See Jonas, J., and Rump.)
Rump, Sigurd, Zurich, Switzerland. Synchronizing system. 1,873,981; Aug. 30.
Rump, Sigurd, Zurich, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Resistance dependent selective relay. 1,875,313; Aug. 30.
Runyan, William B., assignor to The Dayton Malleable Iron Company, Dayton, Ohio. Jack. 1,874,357; Aug. 30.
Ruppel, Sigwart, Frankfort-on-the-Main, Germany. Switch plant. 1,874,808; Aug. 30.
Russ Manufacturing Company. (See Peterson, Otto, assignor.)
Russ Manufacturing Company, The. (See Pilcher, Allen C., and L. C.)
Russell, Burdsall & Ward Bolt & Nut Company. (See Avis, S. W., and Ames, assignors.)
Russell, Fred F., Oakland, Calif. Clutch. 1,874,358; Aug. 30.
Rusterholz, Viktor, Zurich, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Wood grinder regulating device. 1,873,982; Aug. 30.
Rutherford, William R., assignor of one-fourth to R. R. Cunningham, Spokane, Wash. Pole supporting base. 1,874,359; Aug. 30.
Ryan, William J., Los Angeles, Calif., assignor to The Texas Company, New York, N. Y. Heat exchanges. 1,874,360; Aug. 30.
Rycroft, Ralph T., Kenmore, assignor to Jewel Steel & Malleable Company, Buffalo, N. Y. Malleable iron casting. 1,874,361; Aug. 30.
Ryder, Earl R., assignor to C. K. Bassett, Buffalo, N. Y. Liquid meter. 1,875,160; Aug. 30.
Ryff, Marta, assignor to Swan Knitting Works Ryff & Co. Ltd., Bern, Switzerland. Undergarment. 1,874,362; Aug. 30.
Sachs, Abraham. (See Grier, R. H., and Sachs.)
Sachs Sole Shaping Machine Company. (See Grier, R. H., and Sachs, assignors.)
Saco-Lowell Shops. (See Goodchild, George, assignor.)
Saco-Lowell Shops. (See Marsh, Henry R., assignor.)
Sadtler, Helena S., Erdenheim, Pa. Transferring dyestuffs to fabrics and porous surfaces. Re18,584; Aug. 30.
Safety Mining Company. (See Kneeland, Frank H., assignor.)
Saives, Léon, assignor to Louis Renault, Billancourt, France. System of lubrication for vehicles. 1,874,809; Aug. 30.
Saives, Léon, assignor to Louis Renault, Billancourt, France. Electrically-controlled milling machine for metal. 1,874,810; Aug. 30.
Salaman, Raphael A., Royston, England. Control of theater and like lighting system. 1,874,811; Aug. 30.
Samantea, Nicholas, San Francisco, assignor of one-half to Charles F. Johnston, Oakland, Calif. Comb. 1,874,630; Aug. 30.
Sampson, Frederick W., assignor to Continental Motors Corporation, Detroit, Mich. Brake. 1,874,363; Aug. 30.
Samuel, William J., Chatham, England. Automatic theft prevention device. 1,874,812; Aug. 30.
Sanders, George F., Batesville, Ark. Canvassing appliance. 1,874,631; Aug. 30.
Sanford, George R. (See Torrey, Bates, jr., and Sanford.)
Sanon, Joseph, New Philadelphia, Ohio. Fastener. 1,874,632; Aug. 30.
Santiago, James J., assignor to J. Grant, Los Angeles, Calif. Swivel casing head. 1,875,266; Aug. 30.
Sartain, William H., Columbus, Ohio. Refrigerating apparatus. 1,874,364; Aug. 30.
Satenstein, Jesse. (See Morgan, John L., assignor.)
Sato, Junjiro, and S. Tomikawa, Jackson, Mich. Composition of matter. 1,874,633; Aug. 30.
Saunders, Benjamin P., Pontiac, Mich. Combination holder. 1,874,813; Aug. 30.
Savoja, Umberto, assignor to Fiat Società Anonima, Turin, Italy. Aeroplane. 1,875,267; Aug. 30.

Sawyer Tanning Company. (See Wetmore, Thomas C., assignor.)
Sayers, George E., Boston, Mass. Sandal. 1,875,162; Aug. 30.
Sburlino, Pascal, assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,874,365; Aug. 30.
Schaefer, Frank, Kalamazoo, and O. S. Duffendack, Ann Abor, Mich. Electrode for gaseous conduction lamps and making same. 1,874,124; Aug. 30.
Schaefer, Frank, Kalamazoo, and O. S. Duffendack, Ann Arbor, Mich. Electrode for gaseous conduction lamps and making same. 1,874,127; Aug. 30.
Schaefer, Karl T., and J. L. Bitter, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y. After treatment of yarns and filaments. 1,875,299; Aug. 30.
Schanz, Lewis J., assignor to Ira E. McCabe, Chicago, Ill. Room thermostat cover. Des. 87,683; Aug. 30.
Scharff, Willy, Frankfort-on-the-Main, Germany. Cutter grinder. 1,875,163; Aug. 30.
Schaupp, Harry A., assignor to Acme Road Machinery Company, Frankfort, N. Y. Stone spreader. 1,874,634; Aug. 30.
Schelbe, Adolf. (See Giebe, E., and Schelbe.)
Scherer, Charles F., assignor to Davenport Machine and Foundry Company, Davenport, Iowa. Molding machine. 1,874,635; Aug. 30.
Scherer, Charles F., assignor to Davenport Machine and Foundry Company, Davenport, Iowa. Protecting means for flask rest actuating mechanism. 1,874,636; Aug. 30.
Schlumbohm, Peter, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn. Manufacture of carbon dioxide ice. 1,875,164; Aug. 30.
Schlumbohm, Peter, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn. Cooling apparatus. 1,875,293; Aug. 30.
Schmid, Carl J., Inc. (See Kurkjian, Yervant H., assignor.)
Schnabel, Rudolf, Berlin, Germany, assignor, by mesne assignments, to Pyrene-Minimax Corporation. Producing foam from foam developing substances. 1,874,209; Aug. 30.
Schneider, Oskar, Berlin, Germany. Central lubricating device. 1,875,181; Aug. 30.
Schofield, Edwin R., and R. Kramaroff, Philadelphia, Pa. Reciprocal rake apparatus. 1,874,125; Aug. 30.
Schofield, Edwin R., and R. Kramaroff, Philadelphia, Pa. Bar screen. 1,874,126; Aug. 30.
Schramm, Joseph, McKees Rocks, Pa. Antiskid device. 1,874,637; Aug. 30.
Schranz, Karl, and C. Lutter, Wuppertal/Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Lithium salts of 7-Iodo-8-hydroxy quinoline-5-sulphonic acids. 1,874,638; Aug. 30.
Schroeter, Fritz. (See Ludenia, W., and Schroeder.)
Schröter, Fritz, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Wireless communication. 1,875,165; Aug. 30.
Schueler, Julian L., assignor to Continental Steel Corporation, Kokomo, Ind. Alloy steel. 1,874,814; Aug. 30.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,684; Aug. 30.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 87,685; Aug. 30.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade.. Des. 87,686; Aug. 30
Schwarze Electric Company. (See Middleton, Leslie H., assignor.)
Scott & Williams, Incorporated. (See Page, Albert E., assignor.)
Scott, Floyd L., assignor to Hughes Tool Company, Houston, Tex. Roller core bit. 1,874,065; Aug. 30.
Scott, Floyd L., and I. H. Bettis, Houston, Tex. Combination rolling and scraping cutter drill. 1,874,066; Aug. 30.
Scott Paper Company. (See Liebeck, Harry, assignor.)
Scott, Winfield, assignor to The Rubber Service Laboratories Co., Akron, Ohio. Rubber vulcanization accelerator. 1,874,639; Aug. 30.
Scovill Manufacturing Company. (See Moran, Joseph F., assignor.)
Scovill Manufacturing Company. (See Price, William B., assignor.)
Seaholm, Ernest W., Birmingham, assignor to General Motors Corporation, Detroit, Mich. Clutch. 1,874,366; Aug. 30.
Sedgley, Reginald F., Philadelphia, Pa. Firearm. 1,874,815; Aug. 30.
Seeber, Emil J., Chicago, Ill. Jack. 1,874,128; Aug. 30.
Seeger, Edwin W., Wauwatosa, assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Motor controller. 1,874,640; Aug. 30.
Seiberling Rubber Company. (See Heston, Allen L., assignor.)
Seitzman, David, New York, N. Y. Automatic antiholdup door control. 1,875,166; Aug. 30.
Self Lighting Cigarette Corporation of America. (See Gerou, William H., assignor.)
Semet-Solvay Company. (See Torrey, Bates, jr., assignor.)
Seng Company, The. (See Fox, Martin, assignor.)
Senglar, John J., Tallmadge, Ohio. Antiskid chain. 1,875,268; Aug. 30.
Servel, Inc. (See Peltier, Frank D., assignor.)
Servo-Frein Dewandre, Société Anonyme. (See Dewandre, Albert, assignor.)
Sessions, Royal L., York, Pa., assignor, by mesne assignments, to Molybdenum Corporation of America, New York, N. Y. Preparation of carbide. 1,874,641; Aug. 30.
Seyl, Joseph C., Evanston, Ill. Filing cabinet. 1,874,367; Aug. 30.
Shaeffer, George D., assignor to W. A. Riddell Company, Bucyrus, Ohio. Road grader and the like. 1,874,210; Aug. 30.
Shaffer, Glenn A., and F. H. Wirtz, assignors to Fort Howard Paper Company, Green Bay, Wis. Napkin dispenser. 1,874,642; Aug. 30.
Shakeproof Lock Washer Company. (See Crowther, Edmond C., assignor.)
Shakeproof Lock Washer Company. (See Gribbie, John M., assignor.)
Shakeproof Lock Washer Company. (See Olson, Carl G., assignor.)
Shakeproof Lock Washer Company. (See Trotter, George C., assignor.)
Shawmut Engineering Company. (See Hathaway, E. F., and Bixby, assignors.)
Shearer, Harry T., and C. A. Reimschissel, assignors to Landis Machine Company, Waynesboro, Pa. Die head. 1,874,643; Aug. 30.
Shellastic, Inc. (See Cholerton, Charles, assignor.)
Sheridan Iron Works, The, et al. (See Bredenberg, Alfred, assignor.)
Sheridan, T. W. & C. B., Company, et al. (See Bredenberg, Alfred, assignor.)
Sherman, Leverett B., Minneapolis, Minn., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Road working machine. 1,875,194; Aug. 30.
Sherman Products Corporation. (See Williams, Charles F., assignor.)
Shipley, Bernis M., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,874,368; Aug. 30.
Shipley, Bernis M., assignor to The National Cash Register Company, Dayton, Ohio. Voucher severing and stacking means. 1,874,816; Aug. 30.
Shodron, John G., assignor to James Manufacturing Company, Fort Atkinson, Wis. Tile flooring. 1,874,644; Aug. 30.
Shoe Form Co. (See De Witt, William J., assignor.)
Shoemaker, Joseph J., Clawson, Mich. Protective means for buried cables. 1,874,369; Aug. 30.
Shoemaker, Samuel M. (See Egli, H., and Shoemaker.)
Shook, Emery A., Corning, Calif. Wrench. 1,874,817; Aug. 30.
Short, Ira, Essington, Pa., assignor to Westinghouse Electric & Manufacturing Company. Gearing. 1,874,713; Aug. 30.
Showmin, Ross, Rossford, Ohio. Valve mechanism. 1,874,818; Aug. 30.
Sieber, Fritz, Baden, Switzerland. Indicating device. 1,873,984; Aug. 30.
Sieber, Fritz, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Electrical apparatus. 1,873,983; Aug. 30.
Siefken, Werner. (See Konrad, E., and Siefken.)
Siemens & Halske, Aktiengesellschaft. (See Conrad, Friedrich, assignor.)
Siemens & Halske, Aktiengesellschaft. (See Küpfmüller, Karl, and Jipp, assignors.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Fischer, Ernst, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Rabe, Heinz, assignor.)
Signal Engineering & Manufacturing Company. (See Hanel, Charles L., assignor.)
Silberman, David, New York, assignor to Waldes Koh-I-Noor, Inc., Long Island City, N. Y. Sewing machine attachment. 1,874,645; Aug. 30.
Silverman, Joseph, Chicago, Ill. Folding table. 1,875,269; Aug. 30.
Sim, William, Saugus, Mass. Variety of plant. Pl. Pt. 24; Aug. 30.
Simmons, Harry E., Toledo, Ohio. Shaving brush. 1,875,167; Aug. 30.
Simmons, Thomas H., St. Paul, Minn. Miniature theater. 1,874,819; Aug. 30.
Simonds, Francis M., assignor of one-half to A. Fillmore Hyde, New York, N. Y. Treating ores. 1,874,370; Aug. 30.
Simone, Andrea, Toronto, Ontario, Canada. Convertible store front. 1,874,820; Aug. 30.
Simpson, Albert E. (See Dixon, T. S., and Simpson.)
Sinel, Joseph, assignor to Dictograph Products Co., Inc., New York, N. Y. Receiver case for acoustic devices. Des. 87,687; Aug. 30.
Sinel, Joseph, assignor to Dictograph Products Co., Inc., New York, N. Y. Receiver case for acoustic devices. Des. 87,690; Aug. 30.
Sinel, Joseph, assignor to Dictograph Products Co., Inc., New York, N. Y. Receiver case for acoustic devices. Des. 87,689; Aug. 30.
Sinel, Joseph, assignor to Dictograph Products Co., Inc., New York, N. Y. Receiver case for acoustic devices. Des 87,690; Aug. 30.

Sinner, Emil, assignor to Cium Manufacturing Company, Milwaukee, Wis. Lock switch. 1,875,168; Aug. 30.
Sjolander, Frank V., Jamestown, Kans. Collapsible wire reel. 1,874,371; Aug. 30.
Skinner, George, Birchcliffe, Ontario, Canada. Lubricator for differential pinions. 1,874,646; Aug. 30.
Skinner, Reuben L. Pratt, assignor of one-half to E. E. Rogers, Hutchinson, Kans. Brake. 1,874,129; Aug. 30.
Sklenar, Wenzeslaw F., London, and A. H. Ronan, Ealing, London, England. Reverberatory furnace. 1,875,169; Aug. 30.
Slade, Harold E., Glen Ridge, and J. Gehring, Jersey City, N. J., assignors to Beaver Manufacturing Company. Electric socket. 1,875,270; Aug. 30.
Slater, Ferd M., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Percussive tool. 1,874,372; Aug. 30.
Smickle, Raymond H., Belvidere, assignor to Ingersoll-Rand Company, Jersey City, N. J. Rock drill. 1,874,130; Aug. 30.
Smith, Albert K., Shaker Heights Village, and W. R. Veazey, Cleveland Heights, Ohio, assignors to The Dow Chemical Company, Midland, Mich. Dehydration of magnesium chloride. 1,874,373; Aug. 30.
Smith, Carroll C. (See Lubs, H. A., Fox, and Smith.)
Smith, Clyde L. (See Harnsberger, A. E., and Smith.)
Smith, George L., assignor to United States Ordnance Company, Washington, D. C. Automatic slack adjuster. 1,874,131; Aug. 30.
Smith, George L., assignor to United States Ordnance Company, Washington, D. C. Brake mechanism. 1,874,821; Aug. 30.
Smith, George L., assignor to United States Ordnance Company, Washington, D. C. Brake equalizing mechanism. 1,874,822; Aug. 30.
Smith, H. B., Company. (See Prince, Clarence K.)
Smith, Harry G., Mishawaka, assignor to The Studebaker Corporation, South Bend, Ind. Vehicle spring. 1,874,647; Aug. 30.
Smith, Horatio W., Stockton, assignor to Caterpillar Tractor Co., San Leandro, Calif. Screen fastener. 1,875,271; Aug. 30.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood-Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,874,823; Aug. 30.
Smith, Paul C. (See Goetzel, John H.)
Smith, Raymond. (See Bants, J. F., and Smith.)
Smith, Rolla R., and A. R. Carr, Sioux City, Iowa. Bottle carrier. 1,874,132; Aug. 30.
Smith, Theodore W. (See Frank, John I., assignor.)
Smith, William, and R. F. Thomson, Grangemouth, Scotland, assignors to Imperial Chemical Industries Limited. Production of anthracene derivatives. 1,875,272; Aug. 30.
Smith, William A., jr., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve mechanism for rock drills. 1,874,133; Aug. 30.
Snow, Harold A., Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Grid forming apparatus. 1,875,170; Aug. 30.
Snow, Isaac, Lawrence, Mass., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I. Automatic side feed shuttle. 1,874,648; Aug. 30.
Snyder, Christopher H., Berkeley, Calif. Garage construction. 1,874,649; Aug. 30.
Snyder, Franklin L., and H. B. West, Sharon, Pa., assignors to Westinghouse Electric and Manufacturing Company. Automatic control equipment for load tap changers. 1,874,824; Aug. 30.
Snyder, W Earl, assignor to The Edna Brass Manufacturing Company, Cincinnati, Ohio. Force feed lubricator. 1,874,211; Aug. 30.
Societe Anonyme Solex. (See Mennessen, Marcel, assignor.)
Societe du Carburateur Zenith. (See Boulade, Antonin, assignor.)
Societe of Chemical Industry in Basle. (See Haller, Robert, assignor.)
Society of Chemical Industry in Basle. (See Johner, Hans, assignor.)
Sole, John H., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Control system. 1,874,374; Aug. 30.
Söll, Julius, Frankfort-on-the-Main-Schwanheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing hydrofluoric acid poor in silicic acid. 1,875,200; Aug. 30.
Solvay Process Company, The. (See Norton, Francis J., assignor.)
Sommer, William B., assignor to Jiffy Wire Connector Company, Hackensack, N. J. Wire connecter. 1,874,825; Aug. 30.
Soule, Henry, Dwight, N. Dak. Snap hook. 1,875,274; Aug. 30.
Southwell, Frank, Redditch, England, assignor to O. Musted & Son, Oslo, Norway. Fishhook. 1,875,182; Aug. 30.
Speidel, Albert E. R. (See Johnson, Sylvester A., assignor.)
Sperry Development Company. (See Sperry, E. A., and Perry, assignors.)
Sperry, Elmer A., Brooklyn, and H. C. Drake, Hempstead, assignors, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y. Flaw detector for irregular objects. 1,874,067; Aug. 30.
Sperry, Elmer A., and W. M. Perry, Brooklyn, N. Y., assignors to Sperry Development Company, Dover, Del. Variable pitch propeller. 1,874,714; Aug. 30.
Sperry Products, Inc. (See Cushnie, Peter, assignor.)
Sperry Products, Inc. (See Sperry, E. A., and Drake, assignors.)
Sperry, Samuel E., Hollis, assignor to Intertype Corporation, Brooklyn, N. Y. Keyboard mechanism for typographical machines. 1,874,134; Aug. 30.
Spicer Airflater, Inc. (See Spicer, Delphin H., assignor.)
Spicer, Delphin H., Lakewood, assignor to Spicer Airflater, Inc., Cleveland, Ohio. Automatic tire inflater. 1,874,375; Aug. 30.
Sponable, Earl I., assignor to Fox Case Corporation, New York, N. Y. Combined moving picture and sound camera. 1,874,712; Aug. 30.
Spoor, William M., Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Clearance valve construction. 1,874,135; Aug. 30.
Sprague, Le Roy A., and C. F. Dorsch, Modesto, Calif. Sound projecting apparatus. 1,875,171; Aug. 30.
Spriggs, Walter A., Southsea, England. Endless conveyer. 1,875,183; Aug. 30.
Stackpole Carbon Company. (See Hathorn, Clarence J., assignor.)
Staley, Wayne D., Moline, Ill., assignor to Burgess Battery Company, Madison, Wis. Making dry cells. 1,874,376; Aug. 30.
Standard Oil Company. (See Stockdale, Thomas E., assignor.)
Standard Oil Company. (See Voorhees, V., and Youtz, assignors.)
Standard Oil Company. (See Youtz, Merrill A., assignor.)
Standerwick, Reginald G., Marblehead, Mass., assignor to General Electric Company. Turbine plant. 1,874,136; Aug. 30.
Stanton, Warren F., Pawtucket, R. I. Control device for internal combustion and other engines. 1,874,377; Aug. 30.
Staudt, Richard, Saginaw, Mich. Hospital bed. 1,874,826; Aug. 30.
Stecker, Louis G., Philadelphia, Pa. Grid pasting machine. 1,874,275; Aug. 30.
Steel, Gladstone M., Chillicothe, Ohio. Feeder for farm stock. 1,874,137; Aug. 30.
Steele, James R. (See Moore, G. L., and Steele.)
Steigert, Robert A., Buffalo, N. Y. Aircraft of the heavier than air type. 1,875,276; Aug. 30.
Steigleder, Frank N., Detroit, Mich. Liquid ink eraser for pocket fountain pens and desk set fountain pens. 1,875,184; Aug. 30.
Steinruck, Hermann, Berlin, Germany. Screw tap. 1,874,378; Aug. 30.
Stern, Milton W., assignor to Stern & Stern, Inc., New York, N. Y. Cluster for ring or pendant. Des. 87,691; Aug. 30.
Stern & Stern, Inc. (See Stern, Milton W., assignor.)
Steward, Colby W., Franklin Square, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Aeroplane landing gear. 1,874,650; Aug. 30.
Stewart, Albert E., assignor to Acme Knitting Machine & Needle Company, Franklin, N. H. Yarn supporting, tensioning, and take up device. 1,874,379; Aug. 30.
Stewart, J. H. (See Blake, Cecil J., assignor.)
Stewart-Warner Corporation. (See Burton, Charles S., assignor.)
Stewart, William C., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Grading machine. 1,874,715; Aug. 30.
Stimson, Jonathan C., Chicago, Ill. Automobile signal lamp. Des. 87,692; Aug. 30.
Stimson, Jonathan C., St. Louis, Mo. Signal lantern. 1,874,138; Aug. 30.
Stivender, Paul M. (See Montgomery, T. B., and Stivender.)
Stivender, Paul M., West Allis, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Automatic synchronizer. 1,878,985; Aug. 30.
Stockdale, Thomas E., assignor to Standard Oil Company, Whiting, Ind. Pipe still distillation. 1,874,212; Aug. 30.
Stöckly, Johann J., Teltow-Seehof, near Berlin, and E. Witte, Berlin-Lichterfeld, Germany, assignors, by mesne assignments, to American Glanzstoff Corporation, New York, N. Y. Manufacture of artificial silk, hair, bands and similar products of diminished lustre. 1,875,185; Aug. 30.
Stoecklin, Josef, Zurich, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Protective relay. 1,873,986; Aug. 30.
Stokes, Joseph, Rubber Company. (See Martindell, Milton H., assignor.)
Stoller, Hugh M., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric regulator. 1,874,716; Aug. 30.
Stoller, Hugh M., Mountain Lakes, N. J., and E. R. Morton, Brooklyn, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Regulated motor system. 1,874,380; Aug. 30.
Stone, Nathaniel B., Washington, D. C. Automatic spindle grip for door knobs. 1,874,139; Aug. 30.
Stone, Nathaniel B., Washington, D. C. Mop holder. 1,874,381; Aug. 30.

Storch, Henry H., New York, N. Y., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company. Process and catalyst for the synthesis of methanol. 1,875,273; Aug. 30.

Storey, Oliver W., assignor to Burgess Battery Company, Madison, Wis. Production of manganese dioxide. 1,874,827; Aug. 30.

Straley, Harold G. (See Taylor, G. M., and Straley.)

Streuli, Werner R. (See Marti, O. K., Winograd, and Streuli.)

Strickler, Albert, Philadelphia, H. Comer, Cynwyd, and A. H. Zifferblatt, Philadelphia, assignors, by mesne assignments, to Henal Company, Wilmington, Del. Treating cutaneous affections. 1,874,140; Aug. 30.

Studebaker Corporation. (See Hughes, James R., assignor.)

Studebaker Corporation, The. (See Newcomb, Edward C., assignor.)

Studebaker Corporation, The. (See Paton, Clyde R., assignor.)

Studebaker Corporation, The. (See Smith, Harry G., assignor.)

Studebaker Corporation, The. (See Sullivan, Perry W., assignor.)

Stutts, Robert T. (See Davis, F. W., jr., and Stutts.)

Sueper, Mary T., Lindsay, Nebr. Chick protector for watering devices. 1,874,141; Aug. 30.

Sullivan Machinery Company. (See Huffman, Mervin C., assignor.)

Sullivan, Perry W., assignor to The Studebaker Corporation, South Bend, Ind. Door glass guide. 1,874,717; Aug. 30.

Sunsaloon Bodies Limited. (See Alexander, Alfred H., assignor.)

Superior Meter Company. (See Martin, Thomas J., assignor.)

Surety Manufacturing Company. (See Reynolds, Frederick D., assignor.)

Surface Combustion Corporation. (See de Coriolis, E. G., and Barber.)

Suss, Charles, Glassport, Pa. Portable fuse box and outlet box. 1,874,828; Aug. 30.

Svarrer, Harry et al. (See Johnson, Harry D., assignor.)

Swallow, Gerald, Bridgeport, Pa., assignor, by mesne assignments, to Continental-Diamond Fibre Company, Newark, Del. Dustguard. 1,874,382; Aug. 30.

Swan Knitting Works Ryff & Co. Ltd. (See Ryff, Marta, assignor.)

Swanson, Kenneth P. (See Morick, J. A., and Swanson.)

Swanstrom, Carl A., Newark, N. J. Making self-locking nuts. 1,874,829; Aug. 30.

Sweeney, Terrence A., Mercer Island, Wash., assignor to Thor Manufacturing Company, Inc. Device for baking an edible product comprising a meat center incased in an envelope of raising dough. 1,875,277; Aug. 30.

Swift, George W., jr., assignor to George W. Swift, Jr., Inc., Bordentown, N. J. Clutch. 1,874,651; Aug. 30.

Swift Levick and Sons Limited, et al. (See Horsburgh, G. D. L., and Levick, assignors.)

Swift, George W., jr., Inc. (See Swift, George W., jr.)

Symons, Edgar B., Hollywood, Calif., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Jaw crusher. 1,874,830; Aug. 30.

Tabor Manufacturing Company, The. (See Wallace, F. R., and Ramsden, assignors.)

Talboys, Henry H., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Excavating machine. 1,874,831; Aug. 30.

Tanner, Daniel R., La Grande, Oreg. Lumber marker. 1,875,278; Aug. 30.

Tanner, Harry L. (See Ford, H. C., and Tanner.)

Tanner, Harry L., Brooklyn, assignor to Ford Instrument Company, Inc., Long Island City, N. Y. Power transmitting apparatus. 1,874,383; Aug. 30.

Tanner, Harry L., deceased, Brooklyn, N. Y.; The National City Bank of New York, executor, assignor, by mesne assignments, to Wallace & Tiernan Products, Inc., Belleville, N. J. Indication controlling apparatus. 1,874,652; Aug. 30.

Tapp, Ernest T. J., London, England. Self-propelled road vehicle. 1,874,384; Aug. 30.

Tatum, John J., Baltimore, Md. Car coupler. 1,874,653; Aug. 30.

Tavani, Joseph, Philadelphia, Pa. Motion picture projecting apparatus. 1,874,241; Aug. 30.

Tavender, Walter K., Haworth, N. J. Steam heated sadiron. 1,874,832; Aug. 30.

Taylor, Albert L., Jacksonville, Fla. Process retort. 1,874,833; Aug. 30.

Taylor, Eugene V., Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,874,499; Aug. 30.

Taylor, George M. and H. G. Straley, Saratoga, Ind. Merchandise and shipping tag. 1,875,290; Aug. 30.

Taylor, Robert S., Evansville, Ind., assignor to Electrolux Servel Corporation, New York, N. Y. Continuous absorption refrigerating apparatus. 1,874,654; Aug. 30.

Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Böhm, Otto, assignor.)

Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Buschbeck, Werner, assignor.)

Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Heffner, Karl, assignor.)

Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Kummerer, Wilhelm, assignor.)

Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Ludenia, W., and Schroeter, assignors.)

Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches. (See Meissner, Alexander, assignor.)

Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Schröter, Fritz, assignor.)

Ternstedt Manufacturing Company. (See Blackmore, Lloyd, assignor.)

Ternstedt Manufacturing Company. (See Haskins, H. B., and Van Voorhees, assignors.)

Texaco Salt Products Company. (See Martin, Otto V., assignor.)

Texas Company, The. (See Behimer, Otto, assignor.)

Texas Company, The. (See Gallsworthy, Benjamin, assignor.)

Texas Company, The. (See Hall, Frank W., assignor.)

Texas Company, The. (See Merchant, Paul W., assignor.)

Texas Company, The. (See Ryan, William J., assignor.)

Textile Patent & Process Co. Incorporated. (See Cotchett, Louis M., assignor.)

Thielen, William. (See Pond, H. J., and Thielen.)

Thomas, Albert G., Lynchburg, Va. Pack of playing cards. Des. 87,693; Aug. 30.

Thomas & Betts Co. (See Buchanan, Stephen N., assignor.)

Thompson, Louis W., Schenectady, N. Y., assignor to General Electric Company. Electrical regulating apparatus. 1,875,279; Aug. 30.

Thompson, Louis W., Schenectady, N. Y., assignor to General Electric Company. Electrical regulator. 1,875,280; Aug. 30.

Thompson, W. O. (See Randolph, Guy P., assignor.)

Thomson, Robert F. (See Smith, W., and Thomson.)

Thor Manufacturing Company. (See Sweeney, Terrence A., assignor.)

Thuermann, Wilfred J. (See Gewalt, Herman F., assignor.)

Tideman, Selim N., Wilmette, Ill. Metering device. 1,875,282; Aug. 30.

Tidmarsh, William R., Montreal, Quebec, Canada. Pulp screen. 1,874,834; Aug. 30.

Tietze, Ernst. (See Hentrich, W., Tietze, and Ossenbeck.)

Tilp, Joseph G., Maplewood, N. J., assignor to David Levow, New York, N. Y. Elbow making machine. 1,875,186; Aug. 30.

Tingley, Egbert M., Oak Park, Ill. Relay protective system. 1,874,142; Aug. 30.

Tippel, Edward F. J., New York, N. Y., assignor to Irving Iron Works Company. Curved grating. 1,874,385; Aug. 30.

Tisdale, Wendell H. (See Engelmann, M., and Tisdale.)

Tisza, Edmond T., and B. Joos, Yonkers, assignors to The Pyridium Corporation, Nepera Park, N. Y. Beta (para-arsenic acid phenyl azo) alpha alpha diamino pyridine and the process of making it. 1,874,655; Aug. 30.

Tisza, Edmond T., New York, and B. Joos, Yonkers, assignors to The Pyridium Corporation, Nepera Park, N. Y. Acylated amino azo compounds and preparing the same. 1,874,656; Aug. 30.

Tobin, Kenneth J., assignor to Camel Company, Chicago, Ill. Door check or stop. 1,874,386; Aug. 30.

Todd Drydock Engineering & Repair Corporation. (See Nightingale, H., and Meachem, assignors.)

Tomikawa, Shigeru. (See Sato, J., and Tomikawa.)

Torrey, Bates, jr., Syracuse, N. Y., and G. R. Sanford, Petersburg, Va., assignors to Semet-Solvay Company, New York, N. Y. Apparatus for the separation of liquids having different boiling points. 1,874,387; Aug. 30.

Townend, Daniel. Providence, and N. C. White, Cranston, R. I., assignors to Fields Point Manufacturing Corporation, New York, N. Y. Chemical manufacture. 1,874,835; Aug. 30.

Tractor Parts Company. (See Heaton, Roy C., assignor.)

Tratsch, Walter A. (See Bechtol, A. H., and Tratsch.)

Trautmann, Otto E., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Combination telescope, stand, and observation platform therefor. Des. 87,694; Aug. 30.

Travis, Pierce M., Ridgewood, assignor to Travis Process Corporation, Jersey City, N. J. Process and apparatus for manufacturing soaps. 1,874,388; Aug. 30.

Travis Process Corporation. (See Black, William A., assignor.)

Travis Process Corporation. (See Travis, Pierce M., assignor.)

Trenner, George L. and N. R., New York, N. Y. Individual pie and pie shell baker. 1,874,836; Aug. 30.

Trenner, Nelson R. (See Trenner, George L. and N. R.)

Trico Products Corporation. (See Horton, E. C., and Hueber, assignors.)

Trotter, George C., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Self-lock screw device. 1,874,389; Aug. 30.

Trotter, George C., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Self-locking screw device. 1,874,657; Aug. 30.

Troup, John D., Purley, England. Powdered fuel burner. 1,874,390; Aug. 30.

Truplano, Gerome, Brooklyn, N. Y. Combination faucet and drinking fountain. 1,875,283; Aug. 30.

Trusty, Harry P. (See Barnett, H. J., and Trusty.)

Tschudi, Erwin W., Baltimore, assignor to The Black & Decker Manufacturing Company, Towson, Md. Elastic coupling. 1,874,658; Aug. 30.

Turner, Carroll A. (See Wiggins, J. H., and Turner.)

Turner, Harry W., Schenectady, N. Y., assignor to General Electric Company. Electrical coil and making the same. 1,874,722; Aug. 30.

Tustin, Wayne C. (See Halstead, S. M., Wickland and Tustin.)

Tuttle, Emmett H., Berlin Heights, Ohio. Music cabinet and stand. 1,874,143; Aug. 30.

Tyson, Frank, Canton, Ohio. Freezing mechanism. 1,874,718; Aug. 30.

Tytus, John B., assignor to The American Rolling Mill Company, Middletown, Ohio. Rolling and annealing process. 1,874,144; Aug. 30.

Uible, Frank R. (See Lingo, W. W., and Cronburg, assignors.)

Underwood Elliott Fisher Company. (See Dobson, William A., assignor.)

Underwood Elliott Fisher Company. (See Smith, Jesse A. B., assignor.)

Union Asbestos and Rubber Company. (See Gillies, William R., assignor.)

Union Bank & Trust Co., administrator. (See Delaney, John H.)

Union Manufacturing Company. (See Church, Albert E., assignor.)

United Fruit Company. (See Ridley, Vincent W., assignor.)

United Glass Bottle Manufacturers, Limited. (See Moorshead, Thomas C., assignor.)

United Research Corporation. (See Head, Robert, assignor.)

United Shoe Machinery Corporation. (See Ashworth, Fred, assignor.)

United Shoe Machinery Corporation. (See Bazzoni, Lewis J., assignor.)

United Shoe Machinery Corporation. (See Holmgren, Eric A., assignor.)

United Shoe Machinery Corporation. (See Stewart, William C., assignor.)

U. S. Bobbin & Shuttle Company 1929. (See Park, Carl P., assignor.)

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United States Ordnance Company. (See Smith, George L., assignor.)

United Steel & Wire Company. (See Jarvis, Charles H., assignor.)

Unk, Jacob M. (See Oosterhuis, E., and Unk.)

Upson, Charles A., assignor to The Upson Company, Lockport, N. Y. Insulating material for building and similar purposes. 1,874,659; Aug. 30.

Upson Company, The. (See Upson, Charles A., assignor.)

Urbana Coke Corporation. (See Hobart, Floyd B., assignor.)

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Urschel, William E., Valparaiso, Ind. Grading machine. 1,874,391; Aug. 30.

Urschel, William E., Valparaiso, Ind. Beet harvester. 1,874,837; Aug. 30.

Utah Royalty Corporation. (See Rider, Rowland W., assignor.)

Vacuum Dyeing Machine Corporation. (See Peglar, Don C., assignor.)

Valley Mould and Iron Corporation. (See Kauffman, Edmund J., assignor.)

Van Cura, Joseph J., East Islip, N. Y. Collar stiffener. 1,874,145; Aug. 30.

Van der Pol, Balthasar. (See Holst, G., and Van der Pol.)

Van Dusen, Walter M. (See Noelting, W. H., and Van Dusen.)

Van Gaider, Harold C. (See Muggleton, G. D., Brallier, Van Gaider, and Webber.)

Van Gastel, Albertus, Wettinger, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Protective system. 1,873,987; Aug. 30.

Van Meter, Solomon L., jr., Hempstead, N. Y. Parachute. 1,874,392; Aug. 30.

Vanover, William A., Valier, Mont. Farming implement. 1,875,308; Aug. 30.

Van Rijswijk, Willem, Ennetbaden, Switzerland. Labyrinth gland for machine shafts. 1,873,988; Aug. 30.

Van Sickle, Frank B. (See Brown, C. A., Van Sickle, and Craig.)

Van Vorhees, Harold E. (See Haskins, H. B., and Van Vorhees.)

Vaughn, Sidney P., U. S. Navy, Ackerman, Miss., assignor to Grayson Heat Control, Inc., Lynwood, Calif. Thermostatic snap valve. 1,874,660; Aug. 30.

Vaughn, Sidney P., U. S. Navy, Ackerman, Miss., assignor to Grayson Heat Control, Inc., Lynwood, Calif. Thermostat. 1,874,661; Aug. 30.

Vea, Norman D. (See Maurer, C. C., and Vea.)

Veit, Anton L., assignor of one-half to William Wagner San Francisco, Calif. Automatic control for air vehicles. 1,874,662; Aug. 30.

Veneer Machinery Company. (See Dennis, Alfred A., assignor.)

Verlinden, Edmond, Milwaukee, Wis. Musical instrument control. 1,874,663; Aug. 30.

Vernam, Gilbert S., River Edge, N. J., assignor to American Telephone and Telegraph Company. Multiplex telegrapay. 1,874,664; Aug. 30.

Vezekenyl, Louis, Cleveland, Ohio. Producing an artificial wood composition. 1,875,187; Aug. 30.

Vigilant Automatic Fire Alarm Company Limited, The. (See Dixon, T. S., and Simpson, assignors.)

Vignaux, Bernard L., jr., and M. Roberts, San Francisco, Calif. Egg packing apparatus. 1,874,393; Aug. 30.

Vilter Manufacturing Company. (See Goes, Frederic T., assignor.)

Vogt Manufacturing Corporation. (See Brown, Albert, assignor.)

Vollmann, Heinrich. (See Kränzlein, G., and Vollmann.)

Von Pein, Edward J., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,874,719; Aug. 30.

Von Sigmond, Elek, Budapest, Hungary. Composition for neutralizing alkaline soil and method of preparing same. 1,875,281; Aug. 30.

Voorhees, Vanderveer, and M. A. Youtz, Hammond, Ind., assignors to Standard Oil Company, Chicago, Ill. Concentrating olefines. 1,875,311; Aug. 30.

Voorhies, Grantland B., assignor to Federal Milk Company, San Francisco, Calif. Spray drying apparatus. 1,874,665; Aug. 30.

Vought, Chance M., Great Neck, N. Y., assignor, by mesne assignments, to Chance Vought Corporation, Hartford, Conn. Aircraft. 1,874,666; Aug. 30.

Vulcan Soot Cleaner Company. (See Arey, Fred C., assignor.)

Wada, Yoshinobu, Sendai-Shi, Japan. Pumping apparatus for medical treatments. 1,874,667; Aug. 30.

Wadewitz, Martin, Elizabethton, Tenn., assignor to American Glanzstoff Corporation, New York, N. Y. Skein and process for tying the same. 1,874,668; Aug. 30.

Wadsworth Electric Manufacturing Company, The. (See Wadsworth, George B., assignor.)

Wadsworth, George B., assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky. Switch. 1,874,146; Aug. 30.

Wagenhorst, James H., Jackson, Mich. Vehicle wheel. 1,874,394; Aug. 30.

Waggoner, W. L. Nashville, Tenn. Printing press. 1,875,291; Aug. 30.

Wagner, Arthur J., Puunene, Maui, Hawaii, assignor to California Packing Corporation, San Francisco, Calif. Case-filling machine. 1,874,669; Aug. 30.

Wagner, William. (See Veit, Anton L., assignor.)

Waldes Kho-I-Noor, Inc. (See Silberman, David, assignor.)

Waldman, Henry, New York, N. Y. Protective book cover. 1,875,284; Aug. 30.

Waldron, John, Corporation. (See Willis, Charles C., assignor.)

Walker, Emery L., Wauwatosa, and A. W. Werner, assignors to Kieckhefer Container Company, Milwaukee, Wis. Box making machine. 1,874,670; Aug. 30.

Walker, Emery L., Wauwatosa, and A. W. Werner, assignors to Kieckhefer Container Company, Milwaukee, Wis. Box stitching machine. 1,874,671; Aug. 30.

Walker, Harry E., Fairfield, Me. Portable brick- testing machine. 1,874,838; Aug. 30.

Walker, Norman, assignor to Harrison Radiator Corporation, Lockport, N. Y. Method and apparatus for making shutter blades. 1,874,068; Aug. 30.

Wall & Ochs, Incorporated. (See Harker, Frederick, assignor.)

Wallace, Frank R. and J. T. Ramsden, assignors to The Tabor Manufacturing Company, Philadelphia, Pa. Equalizing support. 1,875,285; Aug. 30.

Wallace, Friend E., Stockport, Ohio. Propeller attachment. 1,874,213; Aug. 30.

Wallace, Philip B., San Mateo, Calif. Filter. 1,874,720; Aug. 30.

Wallace & Tiernan Products, Inc. (See Tanner, Harry L., assignor.)

Walsh, Joseph W. (See Goodall, H. W., and Walsh.)

Wappler Electric Company, Inc. (See Fayer, Charles, assignor.)

Wappler Electric Company. (See Fayer C., assignor, and Kremer.)

Wappler Electric Company. (See Wappler, Reinhold H., assignor.)

Wappler, Reinhold H., Yonkers, assignor to Wappler Electric Company, Inc., Long Island City, N. Y. X-ray shield. 1,874,672; Aug. 30.

Ward Leonard Electric Company. (See Kouyoumjian, Haroutiun K., assignor.)

Warner & Swasey Company, The. (See Burrell, Edward P., assignor.)

Wasberg, Axel. (See Beauchamp, W. A., and Wasberg.)

Washburn Company, The. (See Andrews, Charles, assignor.)

Washburn Company, The. (See Glenny, Clarence S., assignor.)

Waterbury Farrel Foundry and Machine Company, The. (See Pierson, William D., assignor.)

Waters, Gilbert C., jr., assignor to H. F. Morris Corporation, Rochester, N. Y. Card table cover. Des. 87,695; Aug. 30.

Waters, Millard F., assignor to Hanlon-Waters, Inc., Tulsa, Okla. Tubing catcher stop. 1,874,673; Aug. 30.

Storch, Henry H., New York, N. Y., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company. Process and catalyst for the synthesis of methanol. 1,875,273; Aug. 30.
Storey, Oliver W., assignor to Burgess Battery Company, Madison, Wis. Production of manganese dioxide. 1,874,827; Aug. 30.
Straley, Harold G. (See Taylor, G. M., and Straley.)
Streuli, Werner R. (See Martl, O. K., Winograd, and Streuli.)
Strickler, Albert, Philadelphia, H. Comer, Cynwyd, and A. H. Zifferblatt, Philadelphia, assignors, by mesne assignments, to Henal Company, Wilmington, Del. Treating cutaneous affections. 1,874,140; Aug. 30.
Studebaker Corporation. (See Hughes, James R., assignor.)
Studebaker Corporation, The. (See Newcomb, Edward C., assignor.)
Studebaker Corporation, The. (See Paton, Clyde R., assignor.)
Studebaker Corporation, The. (See Smith, Harry G., assignor.)
Studebaker Corporation, The. (See Sullivan, Perry W., assignor.)
Stutts, Robert T. (See Davis, F. W., jr., and Stutts.)
Sueper, Mary T., Lindsay, Nebr. Chick protector for watering devices. 1,874,141; Aug. 30.
Sullivan Machinery Company. (See Huffman, Mervin C., assignor.)
Sullivan, Perry W., assignor to The Studebaker Corporation, South Bend, Ind. Door glass guide. 1,874,717; Aug. 30.
Sunsaloon Bodies Limited. (See Alexander, Alfred H., assignor.)
Superior Meter Company. (See Martin, Thomas J., assignor.)
Surety Manufacturing Company. (See Reynolds, Frederick D., assignor.)
Surface Combustion Corporation. (See de Coriolis, E. G., and Barber.)
Suss, Charles, Glassport, Pa. Portable fuse box and outlet box. 1,874,828; Aug. 30.
Svarrer, Harry et al. (See Johnson, Harry D., assignor.)
Swallow, Gerald, Bridgeport, Pa., assignor, by mesne assignments, to Continental-Diamond Fibre Company, Newark, Del. Dustguard. 1,874,382; Aug. 30.
Swan Knitting Works Ryff & Co. Ltd. (See Ryff, Marta, assignor.)
Swanson, Kenneth P. (See Morick, J. A., and Swanson.)
Swanstrom, Carl A., Newark, N. J. Making self-locking nuts. 1,874,829; Aug. 30.
Sweeney, Terrence A., Mercer Island, Wash., assignor to Thor Manufacturing Company, Inc. Device for baking an edible product comprising a meat center incased in an envelope of raising dough. 1,875,277; Aug. 30.
Swift, George W., jr., assignor to George W. Swift, Jr., Inc., Bordentown, N. J. Clutch. 1,874,651; Aug. 30.
Swift Levick and Sons Limited, et al. (See Horsburgh, G. D. L., and Levick, assignors.)
Swift, George W., jr., Inc. (See Swift, George W., jr.)
Symons, Edgar B., Hollywood, Calif., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Jaw crusher. 1,874,830; Aug. 30.
Tabor Manufacturing Company, The. (See Wallace, F. R., and Ramsden, assignors.)
Talboys, Henry H., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Excavating machine. 1,874,831; Aug. 30.
Tanner, Daniel R., La Grande, Oreg. Lumber marker. 1,875,278; Aug. 30.
Tanner, Harry L. (See Ford, H. C., and Tanner.)
Tanner, Harry L., Brooklyn, assignor to Ford Instrument Company, Inc., Long Island City, N. Y. Power transmitting apparatus. 1,874,383; Aug. 30.
Tanner, Harry L., deceased, Brooklyn, N. Y.; The National City Bank of New York, executor, assignor, by mesne assignments, to Wallace & Tiernan Products, Inc., Belleville, N. J. Indication controlling apparatus. 1,874,652; Aug. 30.
Tapp, Ernest T. J., London, England. Self-propelled road vehicle. 1,874,384; Aug. 30.
Tatum, John J., Baltimore, Md. Car coupler. 1,874,653; Aug. 30.
Tavani, Joseph, Philadelphia, Pa. Motion picture projecting apparatus. 1,874,241; Aug. 30.
Tavender, Walter K., Haworth, N. J. Steam heated sadiron. 1,874,832; Aug. 30.
Taylor, Albert L., Jacksonville, Fla. Process retort. 1,874,833; Aug. 30.
Taylor, Eugene V., Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,874,499; Aug. 30.
Taylor, George M. and H. G. Straley, Saratoga, Ind. Merchandise and shipping tag. 1,875,290; Aug. 30.
Taylor, Robert S., Evansville, Ind., assignor to Electrolux Servel Corporation, New York, N. Y. Continuous absorption refrigerating apparatus. 1,874,654; Aug. 30.
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Böhm, Otto, assignor.)
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Buschbeck, Werner, assignor.)
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Heffner, Karl, assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Kummerer, Wilhelm, assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Ludenia, W., and Schroeter, assignors.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches. (See Meissner, Alexander, assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Schröter, Fritz, assignor.)
Ternstedt Manufacturing Company. (See Blackmore, Lloyd, assignor.)
Ternstedt Manufacturing Company. (See Haskins, H. B., and Van Voorhees, assignors.)
Texaco Salt Products Company. (See Martin, Otto V., assignor.)
Texas Company, The. (See Behimer, Otto, assignor.)
Texas Company, The. (See Gallsworthy, Benjamin, assignor.)
Texas Company, The. (See Hall, Frank W., assignor.)
Texas Company, The. (See Merchant, Paul W., assignor.)
Texas Company, The. (See Ryan, William J., assignor.)
Textile Patent & Process Co. Incorporated. (See Cotchett, Louis M., assignor.)
Thielen, William. (See Pond, H. J., and Thielen.)
Thomas, Albert G., Lynchburg, Va. Pack of playing cards. Des. 87,693; Aug. 30.
Thomas & Betts Co. (See Buchanan, Stephen N., assignor.)
Thompson, Louis W., Schenectady, N. Y., assignor to General Electric Company. Electrical regulating apparatus. 1,875,279; Aug. 30.
Thompson, Louis W., Schenectady, N. Y., assignor to General Electric Company. Electrical regulator. 1,875,280; Aug. 30.
Thompson, W. O. (See Randolph, Guy P., assignor.)
Thomson, Robert F. (See Smith, W., and Thomson.)
Thor Manufacturing Company. (See Sweeney, Terrence A., assignor.)
Thuermann, Wilfred J. (See Gewalt, Herman F., assignor.)
Tideman, Selim N., Wilmette, Ill. Metering device. 1,875,282; Aug. 30.
Tidmarsh, William R., Montreal, Quebec, Canada. Pulp screen. 1,874,834; Aug. 30.
Tietze, Ernst. (See Hentrich, W., Tietze, and Ossenbeck.)
Tilp, Joseph G., Maplewood, N. J., assignor to David Levow, New York, N. Y. Elbow making machine. 1,875,186; Aug. 30.
Tingley, Egbert M., Oak Park, Ill. Relay protective system. 1,874,142; Aug. 30.
Tippel, Edward F. J., New York, N. Y., assignor to Irving Iron Works Company. Curved grating. 1,874,385; Aug. 30.
Tisdale, Wendell H. (See Engelmann, M., and Tisdale.)
Tisza, Edmond T., and B. Joos, Yonkers, assignors to The Pyridium Corporation, Nepera Park, N. Y. Beta (para-arsonic acid phenyl azo) alpha alpha diamino pyridine and the process of making it. 1,874,655; Aug. 30.
Tisza, Edmond T., New York, and B. Joos, Yonkers, assignors to The Pyridium Corporation, Nepera Park, N. Y. Acylated amino azo compounds and preparing the same. 1,874,656; Aug. 30.
Tobin, Kenneth J., assignor to Camel Company, Chicago, Ill. Door check or stop. 1,874,386; Aug. 30.
Todd Drydock Engineering & Repair Corporation. (See Nightingale, H., and Meachem, assignors.)
Tomikawa, Shigeru. (See Sato, J., and Tomikawa.)
Torrey, Bates, jr., Syracuse, N. Y., and G. R. Sanford, Petersburg, Va., assignors to Semet-Solvay Company, New York, N. Y. Apparatus for the separation of liquids having different boiling points. 1,874,387; Aug. 30.
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Wadewitz, Martin, Elizabethton, Tenn., assignor to American Glanzstoff Corporation, New York, N. Y. Skein and process for tying the same. 1,874,668; Aug. 30.
Wadsworth Electric Manufacturing Company, The. (See Wadsworth, George B., assignor.)
Wadsworth, George B., assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky. Switch. 1,874,146; Aug. 30.
Wagenhorst, James H., Jackson, Mich. Vehicle wheel. 1,874,394; Aug. 30.
Waggoner, W. L., Nashville, Tenn. Printing press. 1,875,291; Aug. 30.
Wagner, Arthur J., Puunene, Maui, Hawaii, assignor to California Packing Corporation, San Francisco, Calif. Case-filling machine. 1,874,669; Aug. 30.
Wagner, William. (See Veit, Anton L., assignor.)
Waldes Kho-I-Noor, Inc. (See Silberman, David, assignor.)
Waldman, Henry, New York, N. Y. Protective book cover. 1,875,284; Aug. 30.
Waldron, John, Corporation. (See Willis, Charles C., assignor.)
Walker, Emery L., Wauwatosa, and A. W. Werner, assignors to Kieckhefer Container Company, Milwaukee, Wis. Box making machine. 1,874,670; Aug. 30.
Walker, Emery L., Wauwatosa, and A. W. Werner, assignors to Kieckhefer Container Company, Milwaukee, Wis. Box stitching machine. 1,874,671; Aug. 30.
Walker, Harry E., Fairfield, Me. Portable brick-testing machine. 1,874,838; Aug. 30.
Walker, Norman, assignor to Harrison Radiator Corporation, Lockport, N. Y. Method and apparatus for making shutter blades. 1,874,068; Aug. 30.
Wall & Ochs, Incorporated. (See Harker, Frederick, assignor.)
Wallace, Frank R. and J. T. Ramsden, assignors to The Tabor Manufacturing Company, Philadelphia, Pa. Equalizing support. 1,875,285; Aug. 30.
Wallace, Friend E., Stockport, Ohio. Propeller attachment. 1,874,213; Aug. 30.
Wallace, Philip B., San Mateo, Calif. Filter. 1,874,720; Aug. 30.
Wallace & Tiernan Products, Inc. (See Tanner, Harry L., assignor.)
Walsh, Joseph W. (See Goodall, H. W., and Walsh.)
Wappler Electric Company, Inc. (See Fayer, Charles, assignor.)
Wappler Electric Company. (See Fayer C., assignor, and Kremer.)
Wappler Electric Company. (See Wappler, Reinhold H., assignor.)
Wappler, Reinhold H., Yonkers, assignor to Wappler Electric Company, Inc., Long Island City, N. Y. X-ray shield. 1,874,672; Aug. 30.
Ward Leonard Electric Company. (See Kouyoumjian, Haroutiun K., assignor.)
Warner & Swasey Company, The. (See Burrell, Edward P., assignor.)
Wasberg, Axel. (See Beauchamp, W. A., and Wasberg.)
Washburn Company, The. (See Andrews, Charles, assignor.)
Washburn Company, The. (See Glenny, Clarence S., assignor.)
Waterbury Farrel Foundry and Machine Company, The. (See Pierson, William D., assignor.)
Waters, Gilbert C., jr., assignor to H. F. Morris Corporation, Rochester, N. Y. Card table cover. Des. 87,695; Aug. 30.
Waters, Millard F., assignor to Hanlon-Waters, Inc., Tulsa, Okla. Tubing catcher stop. 1,874,673; Aug. 30.

Watson, Clifford A., St. Paul, Minn. Artificial board. 1,874,674; Aug. 30.
Watson, J. S. (See Parkman, Walter M., assignor.)
Watson, John W., Wayne, Pa. Multiple leaf spring. 1,874,724; Aug. 30.
Watson, William A. (See Hale, H. E., and Watson.)
Watts, John S., East Orange, N. J. Sewage sampling device. 1,874,395; Aug. 30.
Waugh, Harvey C., Hammond, Ind., assignor to American Water Softener Company, Philadelphia, Pa. Adjustment for trow of electromagnetic operating mechanism. 1,875,286; Aug. 30.
Weatherhead, Albert J., jr. (See Baldwin, John D., jr., assignor.)
Weaver, Walter E., Houston, assignor of one-half to H. L. Kaufhold, Harris County, Tex. Resilient wheel. 1,874,396; Aug. 30.
Webb, Hartwell W., Philadelphia, Pa., assignor to The S. S. White Dental Manufacturing Company. Flexible shaft casing assembly. 1,874,397; Aug. 30.
Webber, Ralph F. (See Muggleton, G. D., Brallier, Van Galder, and Webber.)
Weber, Ludwig, Berlin-Wilmersdorf, Germany. Production of semicoke briquettes from bituminous coal. 1,875,287; Aug. 30.
Weber, William G., assignor to International Corset Company, Aurora, Ill. Corset and brassière. 1,875,201; Aug. 30.
Webster, Warren & Company. (See Donnelly, James A., assignor.)
Weigelwerk Aktiengesellschaft. (See Heller, Alfred, assignor.)
Weigl, Arthur, Munchen, Germany. Device for mechanically sorting natural and artificial products according to their color and gradations of color. 1,874,069; Aug. 30.
Weis, William, Perham, Minn. Card holder for automobile radiator fronts. Des. 87,696; Aug. 30.
Weise, Hermann O., Zittau, Germany. Dye vat for dyeing piece goods. 1,874,398; Aug. 30.
Weiss, Arthur J. (See Franzen, E. T., and Weiss.)
Welk, Nelson S., and D. R. Zenner, assignors to The McBee Binder Co., Athens, Ohio. Adjustable book supporting rack. 1,875,288; Aug. 30.
Wellensiek, Louis H., assignor to Hughes Tool Company, Houston, Tex. Roller core bit. 1,874,070; Aug. 30.
Wellensiek, Louis H., assignor to Hughes Tool Company, Houston, Tex. Core bit construction. 1,874,071; Aug. 30.
Wellensiek, Louis H., assignor to Hughes Tool Company, Houston, Tex. Vent for core barrels. 1,874,072; Aug. 30.
Werner, Arthur W. (See Walker, E. L., and Werner.)
Werner, Arthur W., assignor to Kleckhefer Container Company, Milwaukee, Wis. Sheet handling device. 1,874,675; Aug. 30.
Werner, Oscar, South Bend, Ind., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Beacon and air current indicator. 1,874,214; Aug. 30.
Werntz, James H. (See Lawson, W. E., and Werntz.)
Wessel, Ludwig H., and H. N. Booker, assignors to The Hermann Manufacturing Company, Lancaster, Ohio. Machine for refining paper and pulp. 1,874,676; Aug. 30.
West, Homer B. (See Snyder, F. L., and West.)
Western Cartridge Company. (See Clyne, Robert G., assignor.)
Western Cartridge Company. (See Olin, F. W., and Clyne, assignors.)
Western Clock Company. (See Greenleaf, William H., assignor.)
Western Electric Company. (See de Turk, Jeremiah A., assignor.)
Western Electric Company. (See Oswald, Arthur A., assignor.)
Western Electric Company. (See Stoller, Hugh M., assignor.)
Western Electric Company. (See Wright, Esmond P. G., assignor.)
Western Union Telegraph Company, The. (See Haglund, Hakon, H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Auren, John W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bergvall, Royal C., assignor.)
Westinghouse Electric & Manufacturing Company. (See James, Henry D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Marbury, Ralph E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Pontow, Werner, assignor.)
Westinghouse Electric & Manufacturing Company. (See Ross, Hugh G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Short, Ira, assignor.)
Westinghouse Electric and Manufacturing Company. (See Snyder, F. L., and West, assignors.)
Westinghouse Electric & Manufacturing Company. (See Werner, Oscar, assignor.)
Westinghouse Lamp Company. (See Driggs, Frank H., assignor.)
Westinghouse Lamp Company. (See Rentschler, Harvey C., assignor.)
Westinghouse X-Ray Company. (See Morrison, Montford, assignor.)
Westinghouse X-Ray Company. (See Nelson, Albert C., assignor.)
Wetmore, Miner P. (See Payson, A. E., and Wetmore.)
Wetmore, Thomas C., assignor to Sawyer Tanning Company, Napa, Calif. Leather measuring gauge. 1,874,677; Aug. 30.
Wheat, Grant, assignor to Koehler Manufacturing Company, Marlboro, Mass. Storage battery. 1,874,725; Aug. 30.
Wheeler, Walter H., jr., and J. W. Ogden, assignors to Pitney-Bowes Postage Meter Co., Stamford, Conn. Postage meter machine. 1,874,073; Aug. 30.
Wheeler, Walter H., jr., and J. W. Ogden, assignors to Pitney-Bowes Postage Meter Co., Stamford, Conn. Prevent taking of fraudulent impressions from value-printing dies. 1,874,074; Aug. 30.
Wheeling Steel Corporation. (See Rollason, Charles H., assignor.)
Whelan, Patrick J., Renfrew, Ontario, Canada. Smoking pipe. 1,874,075; Aug. 30.
White, Clarence W., assignor to H. C. White Company, North Bennington, Vt. Desk. Des. 87,697; Aug. 30.
White, H. C., Company. (See White, Clarence W., assignor.)
White, Herbert E., Cleveland Heights, Ohio. Welding apparatus. 1,874,399; Aug. 30.
White, James A., assignor to Harrison Radiator Corporation, Lockport, N. Y. Radiator structure. 1,874,400; Aug. 30.
White, Nelson C. (See Townend, D., and White.)
White, S. S., Dental Manufacturing Company. (See Angell, Robert C., assignor.)
White, S. S., Dental Manufacturing Company, The. (See Webb, Hartwell W., assignor.)
Whitehouse, John N., New York, N. Y. Tube of laminated sheeting. 1,875,289; Aug. 30.
Whiting Corporation. (See Coffey, Oscar L., assignor.)
Whitman, Stephen F., & Son, Inc. (See Greenwood, George W., assignor.)
Wickland, Anton I. (See Halstead, S. M., Wickland, and Tustin.)
Wicks, Clifford P. (See Pettit, K. D., Wicks, and Hajek.)
Wiggins, John H., Tulsa, Okla. Floating roof for liquid storage tanks. 1,874,726; Aug. 30.
Wiggins, John H., and C. A. Turner; said Turner assignor to said Wiggins, Tulsa, Okla. Liquid sealed vacuum and pressure relief valve. 1,874,727; Aug. 30.
Wilcox, Harry L., Shaker Heights, assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio. Synchronous motor starter. 1,874,076; Aug. 30.
Wiley, James P., Ragland, Ala. Aeroplane. 1,874,839; Aug. 30.
Willcox, George C. (See Behse, Joseph E., assignor.)
Williams, Alfred O., Battle Creek, assignor to Clark Tructractor Company. Buchanan, Mich. Coupler. 1,874,147; Aug. 30.
Williams, Charles E., assignor to General Motors Corporation, Detroit, Mich. Charge forming device. 1,874,401; Aug. 30.
Williams, Charles F., Belmont, assignor to Sherman Products Corporation, South Boston, Mass. Unit formed of sheet material. 1,875,188; Aug. 30.
Williams, George N., assignor to Continental Steel Corporation, Kokomo, Ind. Machine for manufacturing lead-head nails. 1,874,678; Aug. 30.
Williams, Harrison R., New York, N. Y. Paper drying means. 1,873,949; Aug. 30.
Williams Oven Mfg. Co. (See Elliott, Erwin, assignor.)
Williams, Selden T., Forest Hills, N. Y., assignor, by mesne assignments, to General Electric Company. Immersion heater attachment and removal mechanism. 1,875,306; Aug. 30.
Williamson, Raymond H., Scotia, N. Y., assignor to General Electric Company. Rectification of alternating current. 1,874,840; Aug. 30.
Williamson, Robert B., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Dynamo-electric machine ventilation. 1,873,989; Aug. 30.
Willis, Charles C., assignor to John Waldron Corporation, New Brunswick, N. J. Method of and apparatus for folding napkins. 1,874,728; Aug. 30.
Willis, LeRoy W., Brooklyn, assignor to Intertype Corporation, New York, N. Y. Line casting machine. 1,874,721; Aug. 30.
Willoughby, John A., Cambridge, Mass. High power tube system. 1,874,679; Aug. 30.
Wilson, Robert L. (See Melville, H. J., and Wilson.)
Wilson, Thomas, & Co. Inc. (See Molitor, Charles B. J., assignor.)
Windecker, Friedrich, Fort Lee, N. J. Cover-locking and drive-controlling means for mixing and analogous machines. 1,874,402; Aug. 30.
Winkler, Alfred and Max Dünnebier, Neuwied, Germany. Process and apparatus for the separation of folded or individual sheets. 1,875,189; Aug. 30.
Winograd, Harold. (See Marti, O. K., Winograd, and Streull.)
Winter, Fred H., Schenectady, N. Y., assignor to General Electric Company. Electrical relay. 1,873,950; Aug. 30.
Winters, Frank. (See Lewis, George H., assignor.)
Winthrop Chemical Company. (See Schranz, K and Lutter, assignors.)
Wired Radio, Inc. (See Davis, Chester L., assignor.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wired Radio, Inc. (See Hotopp, Alfred H., jr., assignor.)

Wired Radio, Inc. (See Meyer, Raymond B., assignor.)
Wired Radio, Inc. (See Powell, Edwin L., assignor.)
Wirtz, Franklin H. (See Shaffer, G. A., and Wirtz.)
Withall, Albert P., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,874,403; Aug. 30.
Witte, Erhard. (See Stöckley, J. J., and Witte.)
Witte, Louis S. (See Johnston, William T., assignor.)
Wolfe, Harley H., assignor to The Dayton Pump & Mfg. Company, Dayton, Ohio. Liquid dispensing pump. Des. 87,698; Aug. 30.
Wolfe, Kenneth, R. D., assignor to The Fisher Governor Company, Marshalltown, Iowa. Gas regulator. 1,874,680; Aug. 30.
Wonder Weave, Inc. (See Merrick, Frank W., assignor.)
Wood, Romeo S., Plymouth, Mich. Pressure line control. 1,874,729; Aug. 30.
Wood, William H., South Euclid, Ohio. Storage battery. 1,874,404; Aug. 30.
Wood, William M., St. John, New Brunswick, Canada. Valve seat. 1,874,405; Aug. 30.
Woolson, Emma F., executrix. (See Woolson, Lionel M.)
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,874,681; Aug. 30.
Woolson, Lionel M., deceased, Detroit, by E. F. Woolson, executrix, Bloomfield Village, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,874,682; Aug. 30.
Woolson, Lionel M., deceased, Detroit, by E. F. Woolson, executrix, Bloomfield Village, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,874,683; Aug. 30.
Worthington Pump and Machinery Corporation. (See Hirsch, Sylvan R., assignor.)
Worthington Pump and Machinery Corporation. (See MacMeeken, John W., assignor.)
Wright Aeronautical Corporation. (See Carvelli, Carl G., assignor.)
Wright Aeronautical Corporation. (See Chilton, Roland, assignor.)
Wright, Esmond P. G., Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,874,684; Aug. 30.
Wright, Norman R. (See Ketchledge, W. H., and Wright.)
Wright, Theodore P., Port Washington, assignor to Curtiss Aeroplane & Motor Company, Inc., New York, N. Y. Exhaust silencer. 1,874,406; Aug. 30.
Wright, Theodore P., Port Washington, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Ribless wing. 1,874,685; Aug. 30.
Wrigley, Wm., jr., Company. (See Melville, H. J., and Wilson, assignors.)
Wrigley, Wm., jr., Company. (See Ranney, Willet B., assignor.)
Wyant, James N., Akron, Ohio. Tire. Des. 87,699; Aug. 30.
Wyland, William H., Sidney, Ohio. Master core for fishing bobs. 1,874,730; Aug. 30.
Yale & Towne Manufacturing Company, The. (See Brauning, Karl A., assignor.)
Yoder-Morris Company, The. (See Morris, Howard I., assignor.)
Younce, Clarence O., Tacoma, Wash. Piston ring compressing tool. 1,874,731; Aug. 30.
Young, Frederick W., Little Neck, assignor to Rainbow Light, Inc., Long Island City, N. Y. Electrical protective device. 1,874,407; Aug. 30.
Young, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Method and apparatus for forming hinge members for containers and the like. 1,874,732; Aug. 30.
Young, William, Detroit, Mich. Sleeping car. 1,874,686; Aug. 30.
Youtz, Merrill A. (See Voorhees, V., and Youtz.)
Youtz, Merrill A., Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill. Manufacture of chlorhydrins. 1,875,309; Aug. 30.
Youtz, Merrill A., Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill. Preparing glycols. 1,875,310; Aug. 30.
Youtz, Merrill A., Hammond, Ind., assignor to Standard Oil Company, Chicago, Ind. Hydrolyzing olefine oxides. 1,875,312; Aug. 30.
Zdeb, John M., Detroit, Mich. Plane. 1,874,148; Aug. 30.
Zeazey, William R. (See Smith, A. K., and Veazey.)
Zeller, Isaiah N., New York, assignor to American Safety Razor Corporation, Brooklyn, N. Y. Safety razor. 1,874,687; Aug. 30.
Zenner, David R. (See Welk, N. S., and Zenner.)
Zerbe, Lewis E. (See Faulkner, David S. and Zerbe.)
Zerbe, Lewis E. (See Rice, A. E., and Zerbe.)
Zichy, Andrew, New York, N. Y. Shotgun loader. 1,874,408; Aug. 30.
Zifferblatt, Arnold H. (See Strickler, A., Comer, and Zifferblatt.)
Zocher, Hans, Berlin, Germany, assignor to General Electric Company. Polarizers of light and a method of preparation. 1,873,951; Aug. 30.
Zotos Corporation. (See Evans, Ralph L., assignor.)
Zuck, Oral C., and J. J. Dailey, assignors to Hanlon-Waters, Inc., Tulsa, Okla. Tubing catcher. 1,874,688; Aug. 30.
Zwierzina, Alois J. (See Ackerman, E. L., and Zwierzina.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 30TH DAY OF AUGUST, 1932

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Accelerator, Rubber vulcanization. W. Scott. 1,874,639; Aug. 30.
Acetone, Recovery of. W. R. Ormandy. 1,875,124; Aug. 30.
Acid, Manufacture of hydrochloric. E. O. Barstow and S. B. Heath. 1,874,692; Aug. 30.
Acid poor in silicic acid, Preparing hydrofluoric. J. Söll. 1,875,200; Aug. 30.
Acid, Synthesis of hydrochloric. E. O. Barstow and S. B. Heath. 1,874,225; Aug. 30.
Acoustic combining system. H. H. Beverage. 1,874,865; Aug. 30.
Acoustical board. W. H. Mason. 1,875,074; Aug. 30.
Advertising device. W. W. Lingo and C. I. Cronburg. 1,874,199; Aug. 30.
Aerial system and feeding system therefor. E. Green. 1,874,966; Aug. 30.
Aerial system for wireless signaling. T. L. Eckersley. 1,874,941; Aug. 30.
Aerofoil. E. P. Gaines. 1,874,278; Aug. 30.
Aeroplane. H. A. Douglas. 1,874,468–9; Aug. 30.
Aeroplane. U. Savoja. 1,875,267; Aug. 30.
Aeroplane. J. P. Wiley. 1,874,839; Aug. 30.
Agglomerates, Production of coked. G. T. Mahler and E. C. Handwerk. 1,875,249; Aug. 30.
Air and gas mixing device for internal combustion engines. A. Calberg and H. K. Prinz. 1,874,894; Aug. 30.
Air blast equipment for oil immersed transformers. L. H. Hill. 1,873,971; Aug. 30.
Air circulating and cleaning device. C. L. Redfield. 1,874,061; Aug. 30.
Aircraft. C. M. Vought. 1,874,666; Aug. 30.
Aircraft construction. A. G. J. Cousineau. 1,874,459; Aug. 30.
Aircraft, Cowling for tandem motors. K. Henrichsen and G. A. Page, jr. 1,874,523; Aug. 30.
Aircraft landing. H. C. Belleville. 1,874,423; Aug. 30.
Aircraft of the heavier than air type. R. A. Steigert. 1,875,276; Aug. 30.
Air heater. W. S. Patterson and C. Pierce. 1,875,128; Aug. 30.
Airplane. P. Bang. 1,875,210; Aug. 30.
Airplane. G. C. Hennesy. 1,874,521; Aug. 30.
Airplanes, Roller tail-skid for. J. E. Behse. 1,874,160; Aug. 30.
Alarm: *See*—
  Fire alarm.
Alkali metal nitrates, Production of. O. Kaselitz. 1,875,014; Aug. 30.
Alloy, Non-ferrous. W. B. Price. 1,874,617; Aug. 30.
Alloy steel. J. L. Schueler. 1,874,814; Aug. 30.
Amino azo compounds and preparing the same, Acylated. E. T. Tisza and B. Joos. 1,874,656; Aug. 30.
Amplifier, Multiple unit high frequency. S. Loewe. 1,875,057; Aug. 30.
Analytical method and apparatus therefor. F. J. Norton. 1,874,339; Aug. 30.
Anchor. W. R. Pounder. 1,875,139; Aug. 30.
Anchor, Rail. G. L. Moore and J. R. Steele. 1,875,098; Aug. 30.
Antenna. N. E. Lindenblad. 1,875,050; Aug. 30.
Antenna system, Ultra short wave. C. W. Hansell. 1,874,983; Aug. 30.
Anthracene derivatives, Production of. W. Smith and R. F. Thomson. 1,875,272; Aug. 30.
Anti-oxidant for rubber. W. S. Calcott and W. A. Douglass. 1,874,895; Aug. 30.
Antiskid device. J. Schramm. 1,874,637; Aug. 30.
Aperiodic disturbances, Eliminating. F. Conrad. 1,874,910; Aug. 30.
Apron. F. Murrall. Des. 87,675; Aug. 30.
Arc discharge apparatus, Controlled. A. H. Hull. 1,874,753; Aug. 30.
Armature, Self ventilating high speed. V. G. Apple. 1,875,203; Aug. 30.
Arm chair. W. A. Johnson. 1,874,539; Aug. 30.
Article, Packaged multi-sheet. R. C. Beatty. 1,874,857; Aug. 30.
Articles from ceramic materials, Apparatus for pressing. M. Michel. 1,875,175; Aug. 30.
Articles, Process and apparatus for quenching heat treated. G. A. Johnson. 1,874,300; Aug. 30.
Articles, Production of molded. C. Cholerton. 1,875,294; Aug. 30.
Artificial board. C. A. Watson. 1,874,674; Aug. 30.
Asbestos cement plates, Cold enameling. P. A. Hammenecker. 1,874,974; Aug. 30.
Atmospheric disturbance elimination. K. Kupfmuller and A. Jipp. 1,875,027; Aug. 30.
Auditing machine. M. M. Goldberg. 1,874,184; Aug. 30.
Autographic register. W. E. Dunning. 1,874,939; Aug. 30.
Automatic brake. R. G. Le Tourneau. 1,875,046; Aug. 30.
Automatic burner. E. W. Krise. 1,874,312; Aug. 30.
Automobile construction for front wheel drive. C. R. Roche. 1,874,352; Aug. 30.
Axle gearing, Two-speed. W. S. Austin. 1,874,153; Aug. 30.
Azodyestuffs, Manufacture of strongly basic. A. Conzetti. 1,875,221; Aug. 30.
Baffle for steam drums. H. J. Kerr. 1,875,015; Aug. 30.
Bag: *See*—
  Hand bag. Utility bag.
  Paper bag.
Bag or the like, Wool. B. W. Drake. 1,874,934; Aug. 30.
Bait, Artificial. E. L. Jacobs. 1,874,102; Aug. 30.
Bar: *See*—
  Grate bar.
Bar screen. E. R. Schofield and R. Kramaroff. 1,874,126; Aug. 30.
Base, Pole supporting. W. R. Rutherford. 1,874,359; Aug. 30.
Basket collar, Fruit. H. Leslie. 1,874,317; Aug. 30.
Battery: *See*—
  Storage battery.
Beacon and air current indicator. O. Werner. 1,874,214; Aug. 30.
Bead forming device. H. Y. Kurkjian. 1,875,028; Aug. 30.
Bean cleaning apparatus. E. L. Culver. 1,874,916; Aug. 30.
Bearing assembly and housing therefor, Ball. O. Mitchell. 1,875,097; Aug. 30.
Bed, Hospital. R. Staudt. 1,874,826; Aug. 30.
Beta (para-arsonic acid phenyl azo) alpha alpha diaminopyridine and making it. E. T. Tisza and B. Joos. 1,874,655; Aug. 30.
Bias cutting machine. A. L. Heston. 1,874,750; Aug. 30.
Billing and posting machine, Autographic. R. C. Roath. 1,875,155; Aug. 30.
Binder, Loose leaf. R. J. Copeland. 1,874,456; Aug. 30.
Binder, Loose leaf. J. C. Dawson. 1,874,031; Aug. 30.
Binder, Loose leaf. C. A. Finley. 1,874,092; Aug. 30.
Binder, Loose leaf post. J. C. Dawson. 1,874,032; Aug. 30.
Bit: *See*—
  Roller core bit.
Bit. S. Megaree. 1,875,195; Aug. 30.
Bit boring machine with reciprocating heads, Multiple. C. P. Park. 1,874,607; Aug. 30.
Bleacher construction. H. D. Oberdorfer. 1,875,115; Aug. 30.
Boards: *See*—
  Acoustical board. Game board.
  Artificial board.
Boat. T. B. Collins. 1,875,190; Aug. 30.
Boat, Speed. J. Plum. 1,875,135; Aug. 30.
Body for motor vehicles. A. H. Alexander. 1,873,990; Aug. 30.
Boiler: *See*—
  High pressure boiler. Steam boiler.
Boiler tube cleaner. F. H. Cole. 1,874,452; Aug. 30.
Bolt: *See*—
  Stay bolt.
Book headbanding mechanism. A. Bredenberg. 1,874,165; Aug. 30.
Book supporting rack, Adjustable. N. S. Welk and D. R. Zenner. 1,875,288; Aug. 30.
Boom. F. H. Lovejoy. 1,875,061; Aug. 30.
Boot. J. T. Crowley. 1,874,461; Aug. 30.
Bottle. M. H. Mullen. Des. 87,674; Aug. 30.
Bottle carrier. R. R. Smith and A. R. Carr. 1,874,132; Aug. 30.
Bottle filling and crowning machine. H. M. Ross. 1,874,353; Aug. 30.
Bottles and similar articles, Manufacture of glass. T. C. Moorshead. 1,875,099; Aug. 30.
Bottom for couches and like furniture, Resilient. J. Kronheim. 1,874,049; Aug. 30.
Box: *See*—
  Folding box. Outlet box.
Box and outlet box, Portable fuse. C. Suss. 1,874,828; Aug. 30.
Box construction, Letter. L. W. Cole. 1,874,696; Aug. 30.
Box making machine. E. L. Walker and A. W. Werner. 1,874,670; Aug. 30.
Box stitching machine. E. L. Walker and A. W. Werner. 1,874,671; Aug. 30.

Boxes, Apparatus for wire binding. G. D. Parker. 1,875,259; Aug. 30.
Bracket: *See*—
  Collapsible bracket.
Brake: *See*—
  Automatic brake. Vehicle brake.
  Dual control brake.
Brake. W. H. Delahaye. 1,874,921; Aug. 30.
Brake. A. Y. Dodge. 1,874,927–9; Aug. 30.
Brake. R. A. Goepfrich. 1,874,963; Aug. 30.
Brake. W. C. Hillerman. 1,875,000; Aug. 30.
Brake. G. H. Hunt. 1,875,007; Aug. 30.
Brake. L. E. La Brie. 1,875,029–30; Aug. 30.
Brake. D. F. Linsley. 1,875,051; Aug. 30.
Brake. K. E. Lyman. 1,875,064; Aug. 30.
Brake. G. K. McCann. 1,875,079; Aug. 30.
Brake. M. W. McConkey and E. G. McDonald. 1,875,082; Aug. 30.
Brake. G. F. Michael. 1,875,092; Aug. 30.
Brake. J. M. Milan. 1,875,095; Aug. 30.
Brake. F. W. Sampson. 1,874,863; Aug. 30.
Brake. R. L. Skinner. 1,874,129; Aug. 30.
Brake. E. V. Taylor. 1,874,499; Aug. 30.
Brake band equalizer for automobiles. C. B. Kitchen. 1,874,760; Aug. 30.
Brake beam support. C. F. Huntoon. 1,875,240; Aug. 30.
Brake chatter, Mechanism to prevent. G. L. Rothrock. 1,874,354; Aug. 30.
Brake equalizing mechanism. G. L. Smith. 1,874,822; Aug. 30.
Brake for railway cars, Hand. R. W. Burnett. 1,874,439; Aug. 30.
Brake hanger. M. S. Johnson. 1,874,105; Aug. 30.
Brake mechanism. G. L. Smith. 1,874,821; Aug. 30.
Brake mechanism. K. E. Lyman. 1,875,065; Aug. 30.
Brake mechanism for the wheels of road vehicles. F. A. Garrett. 1,874,180; Aug. 30.
Brake mechanism, Web roll. C. J. Richter. 1,875,153; Aug. 30.
Brake operating mechanism for delivery vehicles. K. R. Herman. 1,874,526; Aug. 30.
Brake part. R. J. Norton. 1,875,114; Aug. 30.
Brake rim construction. J. S. Morgan. 1,874,574; Aug. 30.
Brake rim construction, Drawworks. A. E. Rice. 1,874,625; Aug. 30.
Brake shoe. V. Bendix. 1,874,863; Aug. 30.
Brake systems and the like, Master operator for hydraulic. G. Horn. 1,875,003; Aug. 30.
Brake testing machine. S. M. Halstead, A. I. Wickland and W. C. Tustin. 1,874,006; Aug. 30.
Brakes, Making. M. W. McConkey. 1,875,081; Aug. 30.
Brakes to railway cars, Applying hand. R. W. Burnett. 1,874,438; Aug. 30.
Brassière. E. Bissett. 1,874,868; Aug. 30.
Brick making machine. L. D. Oliver. 1,875,258; Aug. 30.
Brick testing machine, Portable. H. E. Walker. 1,874,838; Aug. 30.
Briquettes from bituminous coal, Production of semi-coke. L. Weber. 1,875,287; Aug. 30.
Broaching machine. F. J. Lapointe. 1,875,033; Aug. 30.
Brooder. W. Havens and C. J. Danielson. 1,874,745; Aug. 30.
Brooder heater. J. T. Landgraf and R. G. Miller. 1,875,032; Aug. 30.
Brush attaching device for scrubbing machines. H. J. Pond and W. Thielen. 1,875,138; Aug. 30.
Brush, Making a carbon cleaning. R. E. Ellingham. 1,874,475; Aug. 30.
Brush, Shaving. H. E. Simmons. 1,875,167; Aug. 30.
Bucket, Concrete. E. McGivern. 1,875,174; Aug. 30.
Building, Concrete-and-iron multiple-floored. B. Bauer. 1,874,157; Aug. 30.
Building construction. H. H. Hathaway. 1,875,242; Aug. 30.
Building construction. P. Pentland. 1,875,131; Aug. 30.
Building material. J. H. Delaney. 1,874,922; Aug. 30.
Building material and retaining means therefor. H. C. Mortenson. 1,874,790; Aug. 30.
Bundle binding and tying machine. G. D. Parker. 1,875,260; Aug. 30.
Burner: *See*—
  Automatic burner. Oil burner.
  Fuel burner. Powdered fuel burner.
  Gas burner.
Burner control mechanism. A. R. Hoeft. 1,875,239; Aug. 30.
Burner for pulverized fuel. E. J. Franklin. 1,874,488; Aug. 30.
Burner spud, Gas. E. A. Hall. 1,874,970; Aug. 30.
Bushing assembly for transformers and the like. L. C. Nichols. 1,873,978; Aug. 30.
Bushing, Condenser. O. Naef. 1,873,977; Aug. 30.
Bushing, Reducing. L. S. Peck. 1,875,130; Aug. 30.
Button, Cuff. A. H. Metcalf. 1,875,090; Aug. 30.
Cabinet. J. W. Martin. 1,874,776; Aug. 30.
Cabinet and stand, Music. E. H. Tuttle. 1,874,143; Aug. 30.
Cabinet, Filing. J. C. Seyl. 1,874,867; Aug. 30.
Cabinet, Individual towel. E. T. Halls. 1,874,741; Aug. 30.
Cabinet, Refrigerated display. A. L. Lambert. 1,874,551; Aug. 30.
Cabinet type unit heater. L. P. Dwyer. 1,874,940; Aug. 30.
Cabinet, Wall. L. F. Corrigan. 1,874,245; Aug. 30.
Cable, Submarine signaling. J. J. Gilbert. 1,874,281; Aug. 30.
Cable, Telephone. F. Fischer. 1,874,481; Aug. 30.
Calcium chloride, Preparing. O. V. Martin. 1,875,070; Aug. 30.
Calculating machine. C. Gardner. 1,874,700; Aug. 30.
Calculating machine, Multiple accumulator. N. W. Perkins. 1,874,709; Aug. 30.
Calendar, Circular date. H. M. Mathers. 1,874,201; Aug. 30.
Camera, Combined motion picture and sound. F. H. Owens. 1,874,603; Aug. 30.
Camera, Combined moving picture and sound. E. I. Sponable. 1,874,712; Aug. 30.
Can making and apparatus. W. E. Burns. 1,874,887; Aug. 30.
Candy conditioning apparatus. E. J. Hambrecht. 1,874,973; Aug. 30.
Canvassing appliance. G. F. Sanders. 1,874,631; Aug. 30.
Cap, Bathing. H. Brosch. 1,874,879; Aug. 30.
Cap, Protective. C. W. Punton. 1,875,143; Aug. 30.
Cap stretching and re-shaping implement. E. R. Phares. 1,875,178; Aug. 30.
Car, Cable. R. J. Kent. 1,874,543; Aug. 30.
Car construction. W. A. Beauchamp. 1,874,226; Aug. 30.
Car coupler. H. S. Becker. 1,874,228; Aug. 30.
Car coupler. N. Clark. 1,874,447; Aug. 30.
Car coupler. J. J. Tatum. 1,874,653; Aug. 30.
Car, Monorail. P. S. Combs, jr. 1,874,907; Aug. 30.
Car, Sleeping. W. Young. 1,874,686; Aug. 30.
Carbides, Preparation of R. L. Sessions. 1,874,641; Aug. 30.
Carbon, Revivification of spent. R. G. Davis. 1,873,998; Aug. 30.
Carbons, Revivification of spent activated. R. G. Davis. 1,875,223; Aug. 30.
Carburetor. A. Boulade. 1,874,233; Aug. 30.
Carburetor. R. F. Bracke. 1,874,875; Aug. 30.
Carburetor. M. Menesson. 1,874,784; Aug. 30.
Carburetors, Float mechanism for. W. C. Carter. 1,874,443; Aug. 30.
Card, Grooved stencil. H. P. Elliott. 1,874,476; Aug. 30.
Card indexing device. D. A. Nevin. 1,874,335; Aug. 30.
Carriage for articulated trains. C. Buderus. 1,875,214; Aug. 30.
Carrier: *See*—
  Bottle carrier.
Carrier for baby carriages, Parcel. T. W. Mueller. 1,875,107; Aug. 30.
Carton for cigarettes and like articles. W. E. Molins. 1,875,197; Aug. 30.
Cartridge, Blasting. F. H. Kneeland. 1,874,544; Aug. 30.
Case: *See*—
  Gear case. Vanity case.
  Key holding case.
  Sewing machine carrying case.
Case, Filling machine. A. J. Wagner. 1,874,669; Aug. 30.
Case for acoustic devices, Receiver. J. Sinel. Des. 87,687–90; Aug. 30.
Case or analogous article, Vanity. N. Ottinger. Des. 87,678; Aug. 30.
Cash register. S. Brand. 1,874,164; Aug. 30.
Cash register. J. P. Frank. 1,874,272; Aug. 30.
Cash register. F. L. Fuller. 1,874,275–7; Aug. 30.
Cash register. C. W. Green. 1,874,285; Aug. 30.
Cash register. C. W. Green. 1,874,739; Aug. 30.
Cash register. W. H. Robertson. 1,874,805; Aug. 30.
Cash register. B. M. Shipley. 1,874,368; Aug. 30.
Cash register. P. Sburlino. 1,874,365; Aug. 30.
Cash register. E. J. Von Pein. 1,874,719; Aug. 30.
Casing cutter. J. E. Brotherton and R. W. Morris. 1,874,880; Aug. 30.
Casing head, Swivel. J. J. Santiago. 1,875,266; Aug. 30.
Cataract condensation apparatus. R. S. Danforth. 1,874,849; Aug. 30.
Cedar chest. L. K. Loftin. 1,875,247; Aug. 30.
Cellulose acetate composition. R. L. Kramer. 1,874,310; Aug. 30.
Cellulose derivatives, Reducing the viscosity of. E. E. Reid. 1,874,350; Aug. 30.
Cement and gypsum, Bonding. C. M. Chapman. 1,874,170; Aug. 30.
Cement from coal ashes, Making Portland. W. M. Guertler. 1,874,186; Aug. 30.
Ceramic ware. Apparatus for treating. F. M. Hartford. 1,874,516; Aug. 30.
Chain, Antiskid. J. J. Senglar. 1,875,268; Aug. 30.
Chain control for splicing attachments. A. E. Page. 1,874,342; Aug. 30.
Chain, Elastic bracelet. S. A. Johnson. 1,874,538; Aug. 30.
Chair: *See*—
  Arm chair.
Chair. J. H. Pilates. 1,874,613; Aug. 30.

Chair and couch. J. Kronheim. 1,874,050; Aug. 30.
Chair and couch. J. Kronheim. 1,874,052; Aug. 30.
Chair and friction hinge therefor. A. C. Brown. 1,874,434; Aug. 30.
Charge forming device. C. E. Williams. 1,874,401; Aug. 30.
Check control mechanism. A. A. Gildemeister. 1,874,497; Aug. 30.
Check device, Compression. J. F. Broce. 1,874,604; Aug. 30.
Chemical manufacture. D. Townend and N. C. White. 1,874,835; Aug. 30.
Chest: *See*—
Cedar chest.
Chlorhydrins, Manufacture of. M. A. Youtz. 1,875,309; Aug. 30.
Chloride of lime through azeotropic distillation, Manufacturing. A. Carughi and C. Paoloni. 1,874,695; Aug. 30.
Chuck, Air. J. C. Crowley. 1,874,915; Aug. 30.
Chuck closing and opening mechanism. E. P. Burrell. 1,874,888; Aug. 30.
Chuck or holding device. A. E. Church. 1,874,082; Aug. 30.
Chute, Bag loading. F. Pardee, jr. 1,874,343; Aug. 30.
Chute, Parcel receiving. H. Miller. 1,874,112; Aug. 30.
Cigar grading machine. J. L. Morgan. 1,874,113; Aug. 30.
Cigarette extinguisher. R. H. Jefferies. 1,874,045; Aug. 30.
Cinematographic projection apparatus. R. Ruhnau. 1,875,193; Aug. 30.
Circuit arrangement for transmitters, Keying. W. Buschbeck. 1,874,891; Aug. 30.
Circuit breaker reclosing system, Automatic. O. K. Marti, H. Winograd, and W. R. Streuli. 1,873,970; Aug. 30.
Circuit, Constant frequency. C. D. Barbulesco. 1,874,222; Aug. 30.
Circuit controller. E. R. Carichoff. 1,875,217; Aug. 30.
Circuit controlling device, Selective electrical. C. L. Hanel. 1,874,100; Aug. 30.
Circuit, Electric amplifying. B. D. Bedford. 1,874,159; Aug. 30.
Circuit installation, Electric. M. W. McArdle. 1,875,078; Aug. 30.
Circuit regulator, Electrical. B. A. Case. 1,874,240; Aug. 30.
Clamp: *See*—
Mouth clamp. Spreader clamp.
Clamp adjuster. V. Juillen. 1,875,012; Aug. 30.
Clasp. F. E. Forsell. 1,874,484; Aug. 30.
Classifying materials in jet impact pulverizers. P. Anger. 1,874,150; Aug. 30.
Cleaner: *See*—
Boiler tube cleaner. Tractor wheel cleaner.
Cleaner system, Compressed air operated windshield. E. C. Horton and H. Hueber. 1,874,294; Aug. 30.
Clip for fastening foraminous plaster key. J. S. Raynor. 1,874,802; Aug. 30.
Clip for writing instruments. W. C. S. Mays. 1,874,110; Aug. 30.
Clip or binder for paper sheets. G. H. E. Lyons. 1,874,323; Aug. 30.
Clipper, Hand operated hair. J. Oster and O. E. Lackner. 1,875,125; Aug. 30.
Clock and barber's pole, Combination. H. J. Lewis. 1,875,049; Aug. 30.
Clock mechanism. W. H. Greenleaf. 1,874,967; Aug. 30.
Clock mechanism. S. Prenszner. 1,874,348; Aug. 30.
Clocks, Automatic synchronizing mechanism for chime. C. J. Lentz. 1,874,316; Aug. 30.
Closet: *See*—
Water closet.
Closure operator. J. T. Conway. 1,874,903; Aug. 30.
Closures, Assembling receptacle. J. A. Johnson. 1,875,010; Aug. 30.
Clothespin. S. Bower. 1,874,871; Aug. 30.
Clothes washer. M. T. Kelley. 1,874,048; Aug. 30.
Cluster for ring or pendant. M. W. Stern. Des. 87,691; Aug. 30.
Clutch. L. A. Bixby. 1,874,229; Aug. 30.
Clutch. J. O. Fink. 1,874,268; Aug. 30.
Clutch. F. F. Russell. 1,874,358; Aug. 30.
Clutch. E. W. Seabolm. 1,874,366; Aug. 30.
Clutch. G. W. Swift, jr. 1,874,651; Aug. 30.
Clutch mechanism. E. L. Ackerman and A. J. Zwierzina. 1,874,215; Aug. 30.
Clutch transmission, Double. L. J. Campbell. 1,874,896; Aug. 30.
Coal, Apparatus for coking. S. W. Parr and T. E. Layng. 1,874,344; Aug. 30.
Cock, Safety pilot gas. J. H. Grayson. 1,874,501; Aug. 30.
Coil and making same, Electrical. H. W. Turner. 1,874,722; Aug. 30.
Coil, Electrical. E. S. Dawson, jr. 1,874,723; Aug. 30.
Coiling machine. C. J. Gibbons. 1,874,280; Aug. 30.
Coin control device. R. M. Fox. 1,874,406; Aug. 30.
Collapsible bracket. E. F. Benson. 1,874,424; Aug. 30.
Collapsible wire reel. F. V. Sjolander. 1,874,371; Aug. 30.
Collar stiffener. J. J. Van Cura. 1,874,145; Aug. 30.
Color printing press, Rotary. C. R. Kaddeland. 1,874,013; Aug. 30.
Comb. N. Samantas. 1,874,630; Aug. 30.
Combustion chamber for Diesel engines. F. G. Hehr. 1,874,994; Aug. 30.
Combustion control, Method of and apparatus for. E. S. Bristol. 1,874,878; Aug. 30.
Commutator and making same. V. G. Apple. 1,875,204; Aug. 30.
Compounds of the carnallite type, Producing. O. Kaselitz. 1,875,013; Aug. 30.
Composition for neutralizing alkaline soil and preparing same. E. von Sigmond. 1,875,281; Aug. 30.
Composition of matter. J. Sato and S. Tomikawa. 1,874,633; Aug. 30.
Compressor, Air or gas. S. R. Hirsch. 1,874,752; Aug. 30.
Compressor impeller, Rotary. A. Meyer. 1,873,974; Aug. 30.
Computing machine. M. M. Goldberg. 1,874,007; Aug. 30.
Computing machine. M. M. Goldberg. 1,874,701; Aug. 30.
Concrete tamper. N. R. Love. 1,874,559; Aug. 30.
Condensates of the hydrocarbon constituents of natural gases, Apparatus for separating a plurality of. W. M. Parkman. 1,875,109; Aug. 30.
Condenser, Electrolytic. R. D. Mershon. 1,874,111; Aug. 30.
Conductor, Electric. I. Branthwaite. 1,874,235; Aug. 30.
Confections, Process and apparatus for producing frozen. W. T. Comer. 1,874,453; Aug. 30.
Connecter, Electrical. J. M. Grubbe. 1,874,507; Aug. 30.
Connecter, Electrical. C. G. Olson. 1,874,593–4; Aug. 30.
Connecter for belts. R. Roderwald. 1,874,628; Aug. 30.
Connecter for chains. J. R. Reyburn. 1,875,262; Aug. 30.
Connecter, Wire. W. B. Sommer. 1,874,825; Aug. 30.
Connecting device. W. O. Prouty. 1,875,179; Aug. 30.
Connection for semi-trailers, Automatic air line. D. H. Davis. 1,874,918; Aug. 30.
Connection, High frequency meter. C. W. Hansell. 1,874,977; Aug. 30.
Container, Cigarette. W. E. Molins. 1,875,196; Aug. 30.
Container, Dispensing. E. G. Levkoff. 1,874,318; Aug. 30.
Container, Ice cream. H. N. Leiper. 1,875,044; Aug. 30.
Container, Knockdown corner locking paper. E. S. Gomes. 1,874,702; Aug. 30.
Container, Shipping. J. Christiansen. 1,874,901; Aug. 30.
Control device for internal combustion and other engines. W. F. Stanton. 1,874,377; Aug. 30.
Control equipment for load tap changers, Automatic. F. L. Snyder and H. B. West. 1,874,824; Aug. 30.
Control for air vehicles, Automatic. A. L. Veit. 1,874,662; Aug. 30.
Control for battery charging and lighting systems. B. M. Leece. 1,875,041; Aug. 30.
Control for gas burners, High and low flame. E. A. Hall and G. E. Burns. 1,874,971; Aug. 30.
Control of theater and like lighting systems. R. A. Salaman. 1,874,811; Aug. 30.
Control system. T. B. Montgomery and P. M. Stivender. 1,873,976; Aug. 30.
Control system. J. H. Sole. 1,874,374; Aug. 30.
Control system, Synchronized remote. A. Blondel. 1,874,430; Aug. 30.
Controlling mechanism for scale removers and the like. L. F. Brislin. 1,874,080; Aug. 30.
Conveyer construction. W. V. Hoefen. 1,874,042; Aug. 30.
Conveyer, Endless. W. A. Spriggs. 1,875,183; Aug. 30.
Conveyer, Rectangular link. J. C. Anderson. 1,874,409; Aug. 30.
Cooler and heater, Surface. F. G. Cornell, jr. 1,874,458; Aug. 30.
Cooling apparatus. P. Schlumbohm. 1,875,293; Aug. 30.
Cooling system. F. T. Goes. 1,874,964; Aug. 30.
Cord or the like, Pull. A. Brown. 1,874,881; Aug. 30.
Core bit construction. L. H. Wellenslek. 1,874,071; Aug. 30.
Core for fishing bobs, Master. W. H. Wyland. 1,874,730; Aug. 30.
Cores, Producing catalytic. A. E. Harnsberger and C. L. Smith. 1,874,743; Aug. 30.
Corset and brassière. W. G. Weber. 1,875,201; Aug. 30.
Counter and resetting mechanism therefor. R. B. Long. 1,875,060; Aug. 30.
Counter for machines. H. C. Kunkelman and G. L. Becker. 1,875,026; Aug. 30.
Counter machine with flange plate waxing. C. J. Blake. 1,874,429; Aug. 30.
Counter molding machine. A. F. Jacquemin. 1,874,703; Aug. 30.
Counterbalancing device. E. G. Anderson. 1,874,077; Aug. 30.
Coupler. A. O. Williams. 1,874,147; Aug. 30.
Coupling: *See*—
Elastic coupling. Shaft coupling.
Hose coupling.
Coupling. J. Buchli. 1,873,953; Aug. 30.
Coupling system for high frequency transmitters. L. A. Gebhard. 1,874,958; Aug. 30.
Coupling system for regulating apparatus. W. Pontow. 1,874,800; Aug. 30.
Cover, Card table. G. C. Waters, jr. Des. 87,695; Aug. 30.
Cover, Container. W. H. Nutting. 1,874,706; Aug. 30.
Cover-locking and drive-controlling means for mixing and analogous machines. F. Windecker. 1,874,402; Aug. 30.

Cover, Protective book. H. Waldman. 1,875,284; Aug. 30.
Cover, Room thermostat. L. J. Schana. Des. 87,683; Aug. 30.
Cover, Tire. T. J. McCormick and R. E. Linn. Des. 87,671; Aug. 30.
Covering, Floor. J. B. Campbell. Re18,582; Aug. 30.
Covering, Mattress or cushion. W. George. 1,874,494; Aug. 30.
Crusher: *See*—
Jaw crusher. Rock crusher.
Crystals, Vibrating. E. Giebe and A. Scheibe. 1,874,960; Aug. 30.
Culinary device. W. H. Rudolph. 1,874,807; Aug. 30.
Cultivator. A. V. Rowe. 1,875,159; Aug. 30.
Curling iron. F. R. Marcel. 1,875,069; Aug. 30.
Current motor, Alternating. V. G. Apple. 1,875,207; Aug. 30.
Current motor control system, Direct. E. Kern. 1,873,966; Aug. 30.
Current, Rectification of alternating. R. H. Williamson. 1,874,840; Aug. 30.
Current, Rectification of electric. J. Jonas and S. Rump. 1,873,962; Aug. 30.
Current rectifier control system, Electric. E. Kobel. 1,873,968; Aug. 30.
Current system, High voltage direct. R. E. Marbury. 1,874,109; Aug. 30.
Current tap with plural extensions. E. Clemence. 1,875,219; Aug. 30.
Current vapor electrical device, Alternating. L. F. Bird. 1,874,428; Aug. 30.
Currents in polyphase windings, Apparatus for commutating. E. Kern. 1,873,965; Aug. 30.
Currents, System for producing high voltage direct. D. K. Martin. 1,874,563; Aug. 30.
Curtain rod. O. Reinhardt. 1,875,150; Aug. 30.
Curtain, Sand blast. R. Ruemelin. Re18,586; Aug. 30.
Cutaneous affections, Treating. A. Strickler, H. Comer and A. H. Zifferblatt. 1,874,140; Aug. 30.
Cut-out, Safety. D. N. Langhoffer and G. T. Howell. 1,874,767; Aug. 30.
Cutter: *See*—
Casing cutter. Drill cutter.
Cutter. M. E. Davis. 1,874,173; Aug. 30.
Cutter and cutter holder for taps. S. F. Newman. 1,874,586; Aug. 30.
Cutter drill, Combination rolling and scraping. F. L. Scott and I. H. Bettis. 1,874,066; Aug. 30.
Cutter head for phonograph recording. R. Head. 1,874,101; Aug. 30.
Cutting machine. C. B. Gray. 1,874,088; Aug. 30.
Cycloketones, polycycloketones, and quinones and preparing them. G. Kränzlein and H. Vollmann. 1,874,547; Aug. 30.
Cylinder construction, Ported. R. Chilton. 1,874,446; Aug. 30.
Cylinders and pistons, Preventing scuffing of. W. A. Frederick and A. J. Meyer. 1,874,489; Aug. 30.
Damper, Vibration. W. W. Harris. 1,874,515; Aug. 30.
Dental anæsthetia, Producing. C. H. Dannequin. 1,874,917; Aug. 30.
Dental guard. A. C. Muller. 1,875,108; Aug. 30.
Desk. C. W. White. Des. 87,697; Aug. 30.
Device for directing sound. C. Zwikker. 1,874,783; Aug. 30.
Device for mechanically sorting natural and artificial products according to their color and gradations of color. A. Weigl. 1,874,069; Aug. 30.
Device for placing pie trays onto or removing them from a traveling oven. E. Elliott. 1,874,699; Aug. 30.
Diamines, Aromatic monoaroyl. W. Neelmeier and W. Lambers. 1,874,581; Aug. 30.
Diazo-amino compounds. W. Hentrich, E. Tietze and A. Ossenbeck. 1,874,524; Aug. 30.
Diazo-preparations and making same. H. Johner. 1,875,243; Aug. 30.
Die: *See*—
Extension die.
Die head. H. T. Shearer and C. A. Reimschissel. 1,874,643; Aug. 30.
Dies, Means to prevent taking of fraudulent impressions from value-printing. W. H. Wheeler, jr., and J. W. Ogden. 1,874,074; Aug. 30.
Digger tooth. Van C. Mekeel. 1,874,783; Aug. 30.
Diphthaloyl-naphthalene compounds and a new product obtainable thereby, Preparing. P. Nawiasky and F. Kačer. 1,874,580; Aug. 30.
Discharge apparatus. G. Holst and B. Van Der Pol. 1,874,292; Aug. 30.
Discharge tube, Gas filled. G. L. Herts. 1,874,528; Aug. 30.
Discharge tube with glow cathode. G. Holst. 1,875,002; Aug. 30.
Dish, Combination cooking and serving. F. J. Osius. Des. 87,676–7; Aug. 30.
Dispensing apparatus, Beverage. K. D. Pettit, C. P. Wicks, and M. W. Hajek. 1,874,060; Aug. 30.
Dispensing apparatus, Liquid. E. H. Bradley. 1,874,431; Aug. 30.
Dispensing device. C. E. Conner. 1,874,738; Aug. 30.
Dispensing equipment. A. A. Gildemeister. 1,874,496; Aug. 30.
Dispersion machine. W. A. Black. 1,874,079; Aug. 30.
Dispenser, Napkin. G. A. Shaffer and F. H. Wirtz. 1,874,642; Aug. 30.
Display device. R. Orthwine. 1,874,795; Aug. 30.
Doll head and movable eye system therefor. A. Konoff. 1,874,762; Aug. 30.
Door check or stop. K. J. Tobin. 1,874,386; Aug. 30.
Door, Coke oven. F. B. Hobart. 1,874,290; Aug. 30.
Door control, Automatic anti-holdup. D. Seltzman. 1,875,166; Aug. 30.
Door elevating mechanism. W. A. Beauchamp and A. Wasberg. 1,874,227; Aug. 30.
Door glass guide. P. W. Sullivan. 1,874,717; Aug. 30.
Door operating mechanism. P. R. Forman. 1,874,483; Aug. 30.
Door operating mechanism. J. J. Mariotti. 1,874,562; Aug. 30.
Dough mixing machine. W. F. Dehuff. 1,874,920; Aug. 30.
Draft rigging, Railway. J. F. O'Connor. 1,874,058; Aug. 30.
Drain, Superpotential. C. E. Bennett. 1,875,212; Aug. 30.
Drier: *See*—
Hosiery drier.
Drill: *See*—
Cutter drill. Rock drill.
Power braked mobile drill. Seed drill.
Drill column clamping means. D. C. Klausmeyer. 1,875,017; Aug. 30.
Driving apparatus for vehicles. C. R. Roche. 1,874,604; Aug. 30.
Drill cutter. W. W. Hampton. 1,874,041; Aug. 30.
Drive for milling machines and the like, Hydraulic table. J. P. Ferris. 1,874,265; Aug. 30.
Dry-broke beater. H. Liebeck. 1,874,553; Aug. 30.
Dry cells, Making. W. D. Staley. 1,874,876; Aug. 30.
Drying apparatus, Rotary. H. L. Corwin. 1,873,995; Aug. 30.
Dual control brakes. C. G. Geignetter. 1,874,493; Aug. 30.
Dusting apparatus. J. M. Brasington. 1,873,993; Aug. 30.
Dyeing machine. D. C. Pegler. 1,874,798; Aug. 30.
Dyeing process for animal fibers. S. Fuchs. 1,874,274; Aug. 30.
Dyeings on textiles, Manufacture of. R. Haller. 1,874,099; Aug. 30.
Dyestuff, Yellow azo. H. Eichwede and J. Rachor. 1,874,474; Aug. 30.
Dyestuffs, Production of new vat. H. Neresheimer and W. Eichholz. 1,874,584; Aug. 30.
Dyestuffs of the anthraquinone series, New acid. H. Koch. 1,875,191; Aug. 30.
Dyestuffs to fabrics and porous surfaces, Transferring. H. S. Sadtler. Re18,584; Aug. 30.
Edible product comprising a meat center encased in an envelope of raising dough, Device for baking an. T. A. Sweeney. 1,875,277; Aug. 30.
Educational appliance. H. W. Geromanos. 1,874,279; Aug. 30.
Egg packing apparatus. B. I. Vignaux, jr. and M. Roberts. 1,874,393; Aug. 30.
Eggs and the like, Filler for. L. Benoit. 1,874,162; Aug. 30.
Elastic coupling. E. W. Tschudi. 1,874,658; Aug. 30.
Elbow making machine. J. G. Tilp. 1,875,186; Aug. 30.
Electric controlling apparatus. H. K. Kouyoumjian. 1,875,020; Aug. 30.
Electric discharge apparatus. A. A. Oswald. 1,874,707; Aug. 30.
Electric furnace. T. F. Baily. 1,874,417; Aug. 30.
Electric heating. C. I. Hall. 1,875,236; Aug. 30.
Electric induction furnace. W. S. Jackson. 1,875,298; Aug. 30.
Electric machine, Dynamo. V. G. Apple. 1,875,205; Aug. 30.
Electric regulator. H. Guttinger. 1,873,961; Aug. 30.
Electric regulator. H. M. Stoller. 1,874,716; Aug. 30.
Electric switch. L. M. Persons. 1,874,116; Aug. 30.
Electric synchronizing system. A. J. Maddock. 1,874,774; Aug. 30.
Electric wiring apparatus. V. R. Despard. 1,875,224; Aug. 30.
Electrical apparatus. F. Sieber. 1,873,983; Aug. 30.
Electrical control device. J. Kremer. 1,874,548; Aug. 30.
Electrical cord terminal. J. A. Idank. 1,875,241; Aug. 30.
Electrical frequency changer. O. P. McCarty and A. Boyajian. 1,875,250; Aug. 30.
Electrical protective device. F. W. Young. 1,874,407; Aug. 30.
Electrical regulating apparatus. L. W. Thompson. 1,875,279; Aug. 30.
Electrical regulator. L. W. Thompson. 1,875,280; Aug. 30.
Electrical relay. F. H. Winter. 1,873,950; Aug. 30.
Electrical structure. W. Dubilier. 1,874,936; Aug. 30.
Electrically driven system of instruments through keyboard and pedals. A. Barbieri. 1,874,154; Aug. 30.
Electrode for gaseous conduction lamps and making same. F. Schaefer and O. S. Duffendack. 1,874,124; Aug. 30.
Electrode for gaseous conduction lamps and making same. F. Schaefer and O. S. Duffendack. 1,874,127; Aug. 30.
Electrolytic means for the protection of boilers. A. Kirkaldy. 1,874,759; Aug. 30.

Electromagnetic operating mechanism, Adjustment for throw of. H. C. Waugh. 1,875,286; Aug. 30.
Electron discharge devices, Making. S. Loewe. 1,875,058; Aug. 30.
Electrooptical system. H. E. Ives. 1,874,191; Aug. 30.
Electrooptical image producing system. E. C. Manderfeld. 1,874,200; Aug. 30.
Elevator safety device. F. L. Ohler and R. P. French. 1,875,118; Aug. 30.
Emulsions to rubber-like masses, Coagulations of latex like. E. Konrad and W. Siefken. 1,874,546; Aug. 30.
Engine: *See*—
Gas engine. Vacuum engine.
Internal combustion engine.
Engine and preparing fuel for combustion. A. J. Meyer. 1,874,569; Aug. 30.
Engine attachment, Internal combustion. S. F. Evelyn. 1,874,261; Aug. 30.
Engine cooling system, Automobile. H. D. Johnson. 1,874,104; Aug. 30.
Engraving machine. H. S. Jonsson. 1,874,046; Aug. 30.
Envelope. V. H. Palm. 1,874,796; Aug. 30.
Eraser for pocket fountain pens and desk set fountain pens, Liquid ink. F. N. Steigleder. 1,875,184; Aug. 30.
Evaporator unit. F. D. Peltier. 1,874,115; Aug. 30.
Excavating machine. H. H. Talboys. 1,874,831; Aug. 30.
Excavating machinery. R. Ljungkull. 1,875,052; Aug. 30.
Exhaust silencer. T. P. Wright. 1,874,406; Aug. 30.
Expansion joint. C. Older. 1,874,591; Aug. 30.
Extensible and reversible table. G. Beauvais and J. Beauvais. 1,874,693; Aug. 30.
Extension table. M. Fox. 1,875,295; Aug. 30.
Extrusion die. G. W. Greenwood. 1,874,503; Aug. 30.
Eye set. A. Konoff. Re18,585; Aug. 30.
Eye testing apparatus, Portable. F. Harker. 1,874,986; Aug. 30.
Fabric: *See*—
Ombre fabric.
Fabrics, Apparatus for cleaning and conditioning. M. F. Flynn. Re18,583; Aug. 30.
Fabrics to linings, Applying backing. A. R. Maulsby. 1,875,077; Aug. 30.
Fans, Air cooling attachment for electric. C. Adler, jr. 1,874,843; Aug. 30.
Farming implement. W. A. Vanover. 1,875,308; Aug. 30.
Fastener. J. Sanon. 1,874,632; Aug. 30.
Fastener, Bag. W. C. Hiering. 1,874,907–8; Aug. 30.
Fastener, Screen. H. W. Smith. 1,875,271; Aug. 30.
Fastening means for bag frames. H. Leberman. 1,875,037; Aug. 30.
Faucet and drinking fountain, Combination. G. Trupiano. 1,875,283; Aug. 30.
Feeder, Chicken. E. L. Forshee. 1,875,230; Aug. 30.
Feeder for farm stock. G. M. Steel. 1,874,137; Aug. 30.
Feeder, Sanitary chicken. J. F. Bantz and R. Smith. 1,874,418; Aug. 30.
Fence, Wire. A. E. Roos. 1,874,121; Aug. 30.
Fertilizer applier, Hand. R. S. Bergen. 1,874,425; Aug. 30.
Fertilizer sprinkler. D. Boag. 1,873,992; Aug. 30.
Fertilizers and the utilization of nitrogen-bearing solutions, Manufacture of nitrogenous. E. H. Richards and H. B. Hutchinson. Re18,587; Aug. 30.
Fibrous product and making the same. M. H. Kliefoth. 1,875,018; Aug. 30.
File guide. H. Forsyth. 1,874,950; Aug. 30.
Filler for eggs and the like. L. Benoit. 1,874,162; Aug. 30.
Film for cinematographic purposes, Three color. A. Pilny. 1,874,615; Aug. 30.
Film, sensitizer therefor, and producing same, Light sensitive. R. John. 1,875,292; Aug. 30.
Films, Reeling device for motion picture. E. T. Franzen and A. J. Weiss. 1,874,953; Aug. 30.
Films, Reproducing. A. Oswald. 1,874,601; Aug. 30.
Filter. P. B. Wallace. 1,874,720; Aug. 30.
Filter, Lubricant. E. E. Hans. 1,874,976; Aug. 30.
Filter pad. W. J. Bacon. 1,874,784; Aug. 30.
Filtration, Process and apparatus for continuous. F. W. Hall. 1,874,972; Aug. 30.
Finger rest. M. T. Brekke. Des. 87,660; Aug. 30.
Fire alarm, Electrical automatic. T. S. Dixon and A. E. Simpson. 1,874,254; Aug. 30.
Firearm. R. F. Sedgley. 1,874,815; Aug. 30.
Fire fighting apparatus. L. C. Moore. 1,874,573; Aug. 30.
Fire regulation system for steam boilers, Automatic. H. Rabe. 1,874,619; Aug. 30.
Fishhook. F. Southwell. 1,875,182; Aug. 30.
Fish lure. J. E. Brown. 1,874,883; Aug. 30.
Fish lure. O. F. Olson. 1,875,122; Aug. 30.
Fishing lure. J. B. Pagin. Des. 87,680; Aug. 30.
Fishing rod. R. H. Cowdery. 1,874,246; Aug. 30.
Fittings for oil stills, Return bend. F. C. Fantz. 1,874,004; Aug. 30.
Flashlight switch. J. F. Moran. 1,874,788; Aug. 30.
Flaw detector for irregular objects. E. A. Sperry and H. C. Drake. 1,874,067; Aug. 30.
Flow controlling system. A. C. Rowley. 1,874,123; Aug. 30.
Flow device, Intermittent. D. B. Down. 1,874,932; Aug. 30.
Fluid and stabilizing same, Stabilized heating. H. H. Dow. 1,874,258; Aug. 30.
Fluid control apparatus. R. J. Anschicks. 1,874,414; Aug. 30.
Fluid control system. W. P. Creager. 1,873,955; Aug. 30.
Fluid injector. R. E. Krueger. 1,875,022–3; Aug. 30.
Fluid pressure operated doorlock. P. R. Forman. 1,874,482; Aug. 30.
Fluid pressure responsive device. C. Johnson. 1,874,704; Aug. 30.
Fluid pressure, System for utilizing. S. C. Radford. 1,874,620; Aug. 30.
Foam from foam developing substances, Producing. R. Schnabel. 1,874,209; Aug. 30.
Folding box. D. Levkoff. 1,874,705; Aug. 30.
Folding table. J. Silverman. 1,875,269; Aug. 30.
Font of letters and numerals. L. A. Macklanburg. Des. 87,669; Aug. 30.
Food press. C. Andrews. 1,874,412; Aug. 30.
Force feed lubricator. W. E. Snyder. 1,874,211; Aug. 30.
Forging machine. A. L. Bausman and E. D. Rapisarda. 1,874,158; Aug. 30.
Form and structure, Concrete. F. J. Mead. 1,874,330; Aug. 30.
Form, Distribution and analysis accounting. H. C. Davis. 1,873,997; Aug. 30.
Form, Expansible toe. W. J. De Witt. 1,874,924; Aug. 30.
Form, Shoe. W. J. De Witt. 1,874,923; Aug. 30.
Frame: *See*—
Side board frame. Twister frame.
Frame for casters, Adjustable adapter. W. H. Noelting and W. M. Van Dusen. 1,875,113; Aug. 30.
Framing table. C. T. Earhart. 1,874,175; Aug. 30.
Freezing mechanism. F. Tyson. 1,874,718; Aug. 30.
Frequency changer. C. W. Hansell. 1,874,982; Aug. 30.
Fuel burner. C. H. Paschke. 1,874,346; Aug. 30.
Fuel control mechanism. V. T. Callahan. 1,874,238; Aug. 30.
Fuel for internal combustion engines, Conditioning. R. F. Bracke. 1,874,874; Aug. 30.
Fuel, Method of and apparatus for use in burning solid. C. K. Prince. 1,874,618; Aug. 30.
Fur treating apparatus. S. Friedman. 1,874,273; Aug. 30.
Furnace: *See*—
Electric furnace. Metallurgical furnace.
Electric induction furnace. Reverberatory furnace.
Gas furnace.
Furnace. D. Larkin. 1,874,016; Aug. 30.
Furniture, Spring base. L. Larsen. 1,875,034; Aug. 30.
Fuse. J. R. Fogal. 1,874,948; Aug. 30.
Fuse. J. R. Fogal. 1,874,949; Aug. 30.
Fuse. L. G. Rooder. 1,875,101; Aug. 30.
Fuselage construction. S. T. Payne. 1,874,610; Aug. 30.
Game. F. A. Dorsch. 1,874,930; Aug. 30.
Game appliance, Putting. J. H. Boye. 1,874,873; Aug. 30.
Game board. A. H. Bechtol. Des. 87,700; Aug. 30.
Game table. T. Nagal. 1,875,198; Aug. 30.
Garage construction. C. H. Snyder. 1,874,649; Aug. 30.
Garment press, Conveyer. J. C. Ledbetter. 1,875,038; Aug. 30.
Gas analysis apparatus. W. O. Hebler. 1,874,520; Aug. 30.
Gas analysis apparatus. R. H. Krueger and W. F. Hamilton. 1,874,549; Aug. 30.
Gas burner. B. C. Bartlebaugh. 1,874,691; Aug. 30.
Gas controlling device. E. A. Hall. 1,874,969; Aug. 30.
Gas engine, Rotary. F. C. Dalton. 1,874,247; Aug. 30.
Gas furnace. E. Hall. 1,874,968; Aug. 30.
Gas regulator. K. R. D. Wolfe. 1,874,680; Aug. 30.
Gas washing apparatus. S. C. Cutler. 1,875,300; Aug. 30.
Gases in the open hearth furnace, Recirculation of waste. K. C. McCutcheon. 1,874,328; Aug. 30.
Gases of internal combustion engines, Apparatus for treating exhaust. C. J. Kryzanowsky. 1,875,024; Aug. 30.
Gasket. A. L. Freedlander. 1,874,490; Aug. 30.
Gasket for neck and closure structures, Sealing. J. S. Reid. 1,875,148; Aug. 30.
Gate: *See*—
Highway gate.
Gate and air inlet system for furnaces, Combination ash. E. J. Franklin. 1,874,487; Aug. 30.
Gate mechanism, Turbine. J. J. Ring. 1,873,980; Aug. 30.
Gauge: *See*—
Heated water gauge. Pressure gauge.
Leather measuring gauge.
Gauge. J. M. Lammedee. 1,874,765; Aug. 30.
Gauge mechanism. R. C. Huntsberger. 1,874,296; Aug. 30.
Gear, Aeroplane landing. C. W. Steward. 1,874,650; Aug. 30.
Gear assembly, Separable. H. S. Marsh. 1,874,775; Aug. 30.
Gear, Auxiliary power steering. F. W. Davis. 1,874,248; Aug. 30.
Gear case. O. L. Coffey. 1,874,905; Aug. 30.
Gear, Friction draft. C. J. Holland. 1,874,531; Aug. 30.
Gear, Power steering. A. Dewandre. 1,875,226; Aug. 30.
Gear, Retractable landing. R. J. Minshall. 1,874,570; Aug. 30.

Gear shifting mechanism, Transmission. R. C. Bauckham. 1,873,991; Aug. 30.
Gearing. I. Short. 1,874,713; Aug. 30.
Generator: *See*—
Steam generator. Subharmonic generator.
Generator drive. B. M. Leece. 1,875,040; Aug. 30.
Generator regulator. B. M. Leece. 1,875,042; Aug. 30.
Generator tester. L. H. Dugan. 1,874,259; Aug. 30.
Glass batch, Method and apparatus for feeding and melting. K. E. Peiler. 1,874,799; Aug. 30.
Glass-blowing machine, Automatic. M. Aftergut. 1,875,202; Aug. 30.
Glass forming machine. C. A. Brown, F. B. Van Sickle, and C. W. Craig. 1,874,168; Aug. 30.
Glass inspection apparatus. P. E. Arberry. 1,874,217; Aug. 30.
Glass jar. F. J. Petty. Des. 87,681; Aug. 30.
Glow relay tube. H. C. Rentschler. 1,875,151; Aug. 30.
Glycols, Preparing. M. A. Youtz. 1,875,310; Aug. 30.
Grader and the like, Road. G. D. Shaeffer. 1,874,210; Aug. 30.
Grading machine. W. C. Stewart. 1,874,715; Aug. 30.
Grading machine. W. E. Urschel. 1,874,391; Aug. 30.
Grate bar. R. C. Morton. 1,874,579; Aug. 30.
Grate, Furnace. A. W. Bennis. 1,875,213; Aug. 30.
Grating, Curved. E. F. J. Tippel. 1,874,385; Aug. 30.
Grease, Means to prevent the passage of. P. F. Buckley. 1,874,885; Aug. 30.
Greenhouse operation system. O. K. Owen. 1,875,126; Aug. 30.
Grenade and lance-grenade. C. Foulon. 1,874,951; Aug. 30.
Grid biasing unit fed by alternating current. E. Oosterhuis and J. M. Unk. 1,875,123; Aug. 30.
Grid forming apparatus. H. A. Snow. 1,875,170; Aug. 30.
Grid modulated tube. W. Kummerer. 1,875,025; Aug. 30.
Grid pasting machine. L. G. Stecker. 1,875,275; Aug. 30.
Grid winding machine. J. A. Morick and K. P. Swanson. 1,874,575; Aug. 30.
Grinder, Cutter. W. Scharff. 1,875,163; Aug. 30.
Grinder regulating device, Wood. V. Rusterholz. 1,873,982; Aug. 30.
Grinding device. A. H. Jones. 1,874,301; Aug. 30.
Grinding machine. H. Fritschi. 1,874,491; Aug. 30.
Grinding machinery. L. F. Nenninger. 1,874,583; Aug. 30.
Grinding mill. H. Hardinge. 1,874,985; Aug. 30.
Guard, Dust. G. Swallow. 1,874,382; Aug. 30.
Guard for stanchion frames, Stop. J. B. Olson. 1,874,599; Aug. 30.
Gun loader, Shot. A. Zicby. 1,874,408; Aug. 30.
Gun mount. R. B. Belsel. 1,874,422; Aug. 30.
Hair curler, Electrically operated. C. Fayer and J. Kremer. 1,874,479; Aug. 30.
Hair waving pad. R. L. Evans. 1,875,228; Aug. 30.
Hand, Artificial. H. F. Geise. 1,874,183; Aug. 30.
Hand bag. W. C. Hiering. 1,874,999; Aug. 30.
Handkerchief. S. E. Bernstein. 1,874,864; Aug. 30.
Handle attaching device. C. H. Rollason. 1,874,629; Aug. 30.
Handle for mattresses. H. R. Olson. 1,875,121; Aug. 30.
Handling and storing, Apparatus for. P. Been. 1,874,859; Aug. 30.
Hanger: *See*—
Brake hanger. Plumb bob hanger.
Hardening apparatus for metal work. H. Rosenberg. 1,874,122; Aug. 30.
Hardness testing apparatus and method. A. H. Pfund. 1,875,134; Aug. 30.
Harmonics in direct current systems, Method and apparatus for suppressing. E. Aubort. 1,873,952; Aug. 30.
Harvester, Beet. W. E. Urschel. 1,874,837; Aug. 30.
Hay curing and drying machine. H. Egli and S. M. Shoemaker. 1,874,473; Aug. 30.
Headlight attachment. P. E. Bricker. 1,874,432; Aug. 30.
Headlight indicator. A. C. Furo. 1,874,179; Aug. 30.
Heat exchange device. S. A. Morrison. 1,874,578; Aug. 30.
Heat exchange mechanism. F. M. Reed. 1,874,803; Aug. 30.
Heat exchanger. J. Price. 1,875,142; Aug. 30.
Heat exchanger. W. J. Ryan. 1,874,360; Aug. 30.
Heat for therapeutic and other purposes, Apparatus for applying. A. Pot. 1,875,261; Aug. 30.
Heat transmitter. C. Levinsen. 1,874,054; Aug. 30.
Heated water gauge. V. C. Jones. 1,874,302; Aug. 30.
Heater: *See*—
Air heater. Dry-broke heater.
Brooder heater.
Heater arrangement for indirectly heated cathodes. H. L. Crowley. 1,875,222; Aug. 30.
Heater attachment and removal mechanism, Immersion. S. T. Williams. 1,875,306; Aug. 30.
Heating system. M. Lifland. 1,875,246; Aug. 30.
Heating system, Differential. C. A. Dunham. 1,874,937; Aug. 30.
Heating system, Electric. R. Mayer. 1,874,778; Aug. 30.
Heel for ladies' shoes. F. Maccarone and F. T. Gentile. 1,874,773; Aug. 30.
Heel grooving machine. L. J. Bazzoni. 1,874,421; Aug. 30.
High pressure locomotive. A. W. Bruce. 1,874,236; Aug. 30.
Highway gate. M. M. Dilley and J. H. Fraser. 1,874,926; Aug. 30.
Hinge. K. J. Berggren. 1,874,426; Aug. 30.
Hinge and making the same. J. T. Atwood. 1,874,415; Aug. 30.
Hinge for doors or other closures. W. D. Ferris. Des. 87,662; Aug. 30.
Hinge members for containers and the like, Method and apparatus for forming. J. M. Young. 1,874,732; Aug. 30.
Hinge, Universal casement. B. C. McMurtrey. 1,874,782; Aug. 30.
Hob grinding machine. C. G. Olson. 1,874,592; Aug. 30.
Hob grinding machine. J. R. Richer. 1,874,626; Aug. 30.
Hoisting apparatus for roadway vehicles. W. S. Howard. 1,874,180; Aug. 30.
Holder, Bracelet and lorgnette. R. Hanskat. 1,874,984; Aug. 30.
Holder, Collar. L. E. Baer. 1,874,851; Aug. 30.
Holder, Combination. B. P. Saunders. 1,874,813; Aug. 30.
Holder, Depthograph plate. C. W. Kanolt. 1,874,047; Aug. 30.
Holder for automobile radiator fronts, Card. W. Weis. Des. 87,696; Aug. 30.
Holder for nut making apparatus, Tool. S. W. Avis and M. H. Ames. 1,874,416; Aug. 30.
Holder, Mop. N. B. Stone. 1,874,881; Aug. 30.
Holder, Necktie. L. E. Baer. 1,874,852; Aug. 30.
Holder, Nursing bottle. T. A. Hansen. 1,874,514; Aug. 30.
Hook: *See*—
Snap hook.
Horn. J. M. Aufiero. 1,874,078; Aug. 30.
Hose coupling. H. W. Goodall and J. W. Walsh. 1,874,284; Aug. 30.
Hosiery drier. E. Kerler. 1,874,757; Aug. 30.
Housing for return bends. F. C. Fantz. 1,874,003; Aug. 30.
Housing, Rocker box. A. M. Niven. 1,874,338; Aug. 30.
Housing, Rolling mill. J. R. Coe. 1,875,220; Aug. 30.
Hub construction for truck wheels. L. D. Kay. 1,874,102; Aug. 30.
Hydrocarbons, Decomposition of. F. Porter. 1,874,801; Aug. 30.
Hydrocarbons of high molecular weight, Oxidation of aliphatic. M. Luther and W. Flemming. 1,874,322; Aug. 30.
Ice, Manufacture of carbon dioxide. P. Schlumbohm. 1,875,164; Aug. 30.
Ice refrigerating device. C. F. Belshaw. 1,874,161; Aug. 30.
Ignition of mercury vapor rectifiers, Apparatus for the. J. Jonas. 1,873,963; Aug. 30.
Indexing attachment for automatic machines. M. E. Anderson. 1,874,022; Aug. 30.
Indicating device. F. Sieber. 1,873,984; Aug. 30.
Indication controlling apparatus. H. L. Tanner. 1,874,652; Aug. 30.
Indicator: *See*—
Beacon and air current indicator. Headlight indicator.
Temperature indicator.
Indicator for cash registers. W. E. Dunning. 1,874,038; Aug. 30.
Inductance network. A. J. Christopher. 1,874,242; Aug. 30.
Induction meter. H. Frohlich and T. Hausch. 1,874,954; Aug. 30.
Insole-making machine. E. A. Holmgren. 1,874,532; Aug. 30.
Insulating coating for filaments and applying the same. J. Kaul. 1,874,542; Aug. 30.
Insulating compound. A. R. Kemp. 1,874,307; Aug. 30.
Insulating material for building and similar purposes. C. A. Upson. 1,874,659; Aug. 30.
Insulating material, Heat. W. R. Gillies. 1,875,297; Aug. 30.
Insulation push-back machine. K. H. Andrén. 1,874,210; Aug. 30.
Interior inspection device. G. L. Mitchell. 1,874,571; Aug. 30.
Internal combustion engine. J. A. H. Barkelj. 1,874,419; Aug. 30.
Internal combustion engine. J. H. Campbell. 1,873,994; Aug. 30.
Internal combustion engine. R. N. Du Bois. 1,874,471; Aug. 30.
Internal combustion engine. W. R. Griswold. 1,874,039–40; Aug. 30.
Internal combustion engine. A. B. King. 1,874,194–5; Aug. 30.
Internal combustion engine. O. C. Kreis. 1,874,311; Aug. 30.
Internal combustion engine. W. S. Makaroff. 1,874,561; Aug. 30.
Internal combustion engine. E. R. Maurer and D. M. Ferguson. 1,874,327; Aug. 30.
Internal combustion engine. E. C. Newcomb. 1,874,585; Aug. 30.
Internal combustion engine. A. M. Niven. 1,874,336–7; Aug. 30.
Internal combustion engine. L. M. Woolson. 1,874,681; Aug. 30.

Internal combustion engine. L. M. Woolson. 1,874,682–3; Aug. 30.
Internal combustion engine, Rotary. J. Cannizzaro. 1,874,239; Aug. 30.
Internal combustion engine, Sleeve valve. J. A. H. Barkelj. 1,874,223; Aug. 30.
Internal combustion motor. R. Reid. 1,875,149; Aug. 30.
Iron: *See*—
Curling iron.
Iron casting, Malleable. R. T. Rycroft. 1,874,361; Aug. 30.
Iron sleeper. F. Hartmann. 1,874,987; Aug. 30.
Jack: *See*—
Lifting jack. Vehicle jack.
Jack. A. H. Langenheim. 1,874,766; Aug. 30.
Jack. W. B. Runyan. 1,874,357; Aug. 30.
Jack. E. J. Seeber. 1,874,128; Aug. 30.
Jaw combination wrench, Reversible. R. Hiltz. 1,874,751; Aug. 30.
Jaw crusher. E. B. Symons. 1,874,830; Aug. 30.
Jig, Assembling. J. C. Dawson. 1,874,033; Aug. 30.
Joint: *See*—
Expansion joint. Waterproof joint.
Joint for pavements or the like. C. Older. 1,874,589; Aug. 30.
Keyboard mechanism for typographical machines. S. E. Sperry. 1,874,134; Aug. 30.
Key holding case. G. H. Day. 1,874,919; Aug. 30.
Kiln. H. M. Robertson. 1,874,064; Aug. 30.
Kitchen ventilator. C. V. Colvin and R. A. Foster. 1,874,906; Aug. 30.
Knitting machine. W. Larmour. 1,874,198; Aug. 30.
Knitting machines, Striping attachment for. W. J. Longtin. 1,874,769; Aug. 30.
Labeling machine. C. R. Fredsell. 1,875,301; Aug. 30.
Labels or the like upon two or more sides of boxes, particularly match boxes, Applying. G. M. Klute. 1,873,967; Aug. 30.
Labyrinth gland for machine shafts. W. van Rijswijk. 1,873,988; Aug. 30.
Lace. C. B. J. Molitor. Des. 87,672; Aug. 30.
Lace. S. H. Page. Des. 87,679; Aug. 30.
Lamp, Automobile signal. J. C. Stimson. Des. 87,692; Aug. 30.
Lamp construction. H. B. Donley. 1,874,088; Aug. 30.
Lamp, Incandescent. C. Rave. 1,875,147; Aug. 30.
Lantern, Signal. J. C. Stimson. 1,874,138; Aug. 30.
Latch, Hood. L. Blackmore. 1,874,230; Aug. 30.
Latch, Hood. H. B. Haskins and H. E. Van Voorhees. 1,874,289; Aug. 30.
Latch, Window. H. L. Haff. 1,874,098; Aug. 30.
Lateral motion device. R. W. Clifford. 1,874,449; Aug. 30.
Lathes and the like, Hydraulic feed for. W. Ferris. 1,874,266; Aug. 30.
Lawn sprinkler. M. W. McArdle. Des. 87,670; Aug. 30.
Lead sludge, Treatment of. P. W. Merchant. 1,875,088; Aug. 30.
Leaf spring, Multiple. J. W. Watson. 1,874,724; Aug. 30.
Leather measuring gauge. T. C. Wetmore. 1,874,677; Aug. 30.
Lens, Headlight. V. L. Dickson. 1,874,086; Aug. 30.
Lifting jack. M. B. Lucker. 1,874,772; Aug. 30.
Lighter. W. J. Butler and J. J. Flynn. 1,874,892; Aug. 30.
Lighter. D. S. Rhodes. 1,874,351; Aug. 30.
Lighter, Cigar. L. V. Aronson. 1,874,219; Aug. 30.
Lighter, Cigarette. W. H. Geron. 1,874,495; Aug. 30.
Line casting machine. L. W. Willis. 1,874,721; Aug. 30.
Linoleum accessory vending unit. V. C. Racine. 1,875,144; Aug. 30.
Liquid feeding device. R. W. Davy. 1,874,249; Aug. 30.
Liquid level regulator. W. S. Ralston. 1,875,145; Aug. 30.
Liquid meter. E. R. Ryder. 1,875,160; Aug. 30.
Liquid separation. W. H. Mason. 1,875,075; Aug. 30.
Liquid supply system. C. F. Beckwith and C. C. Main. 1,874,858; Aug. 30.
Liquids having different boiling points, Apparatus for the separation of. B. Torrey, jr. and G. R. Sanford. 1,874,387; Aug. 30.
Liquids, Process of and apparatus for carbonating. E. H. Fabrney. 1,874,091; Aug. 30.
Lithium salts of 7-iodo-8-hydroxy quinoline-5-sulphonic acids. K. Schranz and C. Lutter. 1,874,638; Aug. 30.
Loading and transporting device. R. C. Heaton. 1,874,007; Aug. 30.
Lock frame. M. Leventhal. Des. 87,666; Aug. 30.
Lock switch. V. R. Despard. 1,875,225; Aug. 30.
Lock switch. E. Sinner. 1,875,168; Aug. 30.
Lock washer. C. G. Olson. 1,874,596–7; Aug. 30.
Lock washer assembly. E. C. Crowther. 1,874,462; Aug. 30.
Locking means, Automatic pressure. E. Davis. 1,874,697; Aug. 30.
Locking means for separable electric fittings. A. H. Nero. 1,874,334; Aug. 30.
Locking means for work holders or jigs. E. L. Greer and K. F. Marx. 1,874,504; Aug. 30.
Locking pin damping device. R. J. Miller. 1,875,096; Aug. 30.
Locomotive speed control system, Electric. F. Prantl. 1,873,979; Aug. 30.
Locomotives, Lateral motion device for. A. W. Bruce. 1,875,172; Aug. 30.
Log turner and loader. H. C. Fisher. 1,874,093; Aug. 30.
Loom. F. W. Merrick. 1,875,089; Aug. 30.
Looms, Filling-feeler mechanism for. A. Hudson. 1,874,533; Aug. 30.
Looms, Loose reed stopping mechanism for. V. Lindsjo. 1,874,555; Aug. 30.
Loss varying with energy level, Producing. L. C. Roberts. 1,875,156; Aug. 30.
Lubricating device. S. M. Jonsson. 1,874,541; Aug. 30.
Lubricating device, Central. O. Schneider. 1,875,181; Aug. 30.
Lubrication for vehicles, Systems of. L. Saives. 1,874,809; Aug. 30.
Lubricator: *See*—
Force feed lubricator.
Lubricator. R. J. Gits. 1,874,961; Aug. 30.
Lubricator for differential pinions. G. Skinner. 1,874,646; Aug. 30.
Lug, Tiering. E. J. Powell. 1,875,141; Aug. 30.
Machine for applying collars to bottles. L. Myers. 1,875,110; Aug. 30.
Machine for making pie shaped receptacles. G. T. Parr. 1,874,608; Aug. 30.
Machine for making wax bottles. H. B. Landau. 1,875,031; Aug. 30.
Machine for manufacturing lead head nails. G. N. Williams. 1,874,678; Aug. 30.
Machine for manufacturing thin rubber articles. F. L. Killian. 1,874,014; Aug. 30.
Machine for pressing garments. P. Danin. 1,874,463; Aug. 30.
Machine for refining paper and pulp. L. H. Wessel and H. N. Booker. 1,874,676; Aug. 30.
Machine for sharpening of saws. L. Laurent. 1,874,315; Aug. 30.
Magazine for automatic shot guns. J. I. Frank. 1,874,952; Aug. 30.
Magnesium chloride, Dehydrating. E. O. Barstow and S. B. Hpath. 1,874,735; Aug. 30.
Magnesium chloride, Dehydration of. A. K. Smith and W. R. Veazey. 1,874,373; Aug. 30.
Magnet, Permanent. G. D. L. Horsburgh and H. S. Levick. 1,875,004; Aug. 30.
Mandrel bar guide. H. Heetkamp. 1,874,992; Aug. 30.
Manganese dioxide, Production of. O. W. Storey. 1,974,827; Aug. 30.
Manger structure. J. B. Olson. 1,874,598; Aug. 30.
Marker, Lumber. D. R. Tanner. 1,875,278; Aug. 30.
Marker, Plant. F. S. Pollock. 1,875,137; Aug. 30.
Mask, Welder's. F. M. Bowers. 1,874,872; Aug. 30.
Material and making the same, Composite. E. C. Loetscher. 1,875,054; Aug. 30.
Material and preparing same, Coating. R. T. Hucks. 1,875,005; Aug. 30.
Material, Process and machine for producing wadding. A. E. Cofrin. 1,874,451; Aug. 30.
Materials made of or containing cellulose derivatives, Treatment of. G. H. Ellis. 1,874,176–7; Aug. 30.
Measuring device. J. F. Koeppen, jr. 1,875,019; Aug. 30.
Measuring instrument. H. Chireix. 1,874,899; Aug. 30.
Meat slicing machine. C. Held. 1,874,747; Aug. 30.
Mechanism for sorting buttons or the like. F. S. Calloway. 1,874,442; Aug. 30.
Medallion. B. Cohn. Des. 87,661; Aug. 30.
Memorandum device, Desk. G. P. Randolph. 1,875,146; Aug. 30.
Metal powders by electrolysis, Preparation of rare refractory. F. H. Driggs. 1,874,090; Aug. 30.
Metal surfaces, Decorating. R. M. Allard. 1,874,689; Aug. 30.
Metallurgical furnace. L. S. Longnecker. 1,874,321; Aug. 30.
Metals, Breaking down of. V. L. Dickson. 1,874,253; Aug. 30.
Meter: *See*—
Induction meter. Liquid meter.
Meter protecting device. T. J. Martin. 1,875,073; Aug. 30.
Metering device. S. N. Tideman. 1,875,282; Aug. 30.
Methanol, Process and catalyst for the synthesis of. H. H. Storch. 1,875,273; Aug. 30.
Milk and other beverages, Cooling. W. M. Robertson. 1,875,264; Aug. 30.
Mill: *See*—
Grinding mill. Saw mill.
Milling cutters, Making. C. J. Irwin. 1,874,536; Aug. 30.
Milling machine for metal, Electrolytically controlled. L. Saives. 1,874,810; Aug. 30.
Milling machine, Rotary. J. B. Armitage. 1,874,218; Aug. 30.
Milling machinery. W. D. Archea. 1,874,846; Aug. 30.
Milling machines, Feed mechanism for. W. Ferris. 1,874,267; Aug. 30.
Mine and like signaling apparatus. R. M. D. Button. 1,874,893; Aug. 30.
Mineral chlorination, Method of and apparatus for. G. D. Muggleton, P. S. Brallier, H. C. Van Galder, and R. F. Webber. 1,875,105; Aug. 30.
Mineral concentration. R. B. Martin. 1,874,564; Aug. 30.
Minerals including coal, Concentration of. J. F. C. Friend. 1,875,296; Aug. 30.

Mirror, parking and signal device, Combined driving. E. T. Condon. 1,874,027; Aug. 30.
Mix for dry cells, Depolarizing. J. M. Henderson. 1,874,748; Aug. 30.
Moisture, Method and composition for controlling. M. T. Harvey. 1,874,989; Aug. 30.
Mold: *See*—
Pastry mold.
Mold for fence post construction, Gang. G. E. Nagel. 1,875,256; Aug. 30.
Mold with ejector. M. H. Martindell. 1,875,071; Aug. 30.
Molding machine. J. A. de Turk. 1,874,698; Aug. 30.
Molding machine. C. F. Scherer. 1,874,635; Aug. 30.
Mononlithic reenforcement. G. G. Greulich. 1,874,506; Aug. 30.
Mop construction. B. Morgan. 1,875,100; Aug. 30.
Motion and the like, Converting. R. W. Rider. 1,875,180; Aug. 30.
Motor: *See*—
Current motor. Pressure fluid motor.
Internal combustion motor. Rotor motor.
Motor controller. E. W. Seeger. 1,874,640; Aug. 30.
Motor installation. J. W. Harvey. 1,874,988; Aug. 30.
Motor system, Regulated. H. M. Stoller and E. R. Morton. 1,874,380; Aug. 30.
Motors, System for starting electric. R. Richter. 1,875,263; Aug. 30.
Mounting for automobile radios, Loud speaker. R. H. Langley. 1,874,313; Aug. 30.
Mounting for electrical devices, Resilient. E. G. Fracker. 1,874,271; Aug. 30.
Mounting for grinding devices, Abrasive. P. D. Bates and M. C. Hutto. 1,874,855; Aug. 30.
Mounting for X-Ray tubes. C. Fayer. 1,874,478; Aug. 30.
Mounting, Lever. H. C. Lord. 1,874,557; Aug. 30.
Mounting, Resistor. C. J. Hathorn. 1,874,744; Aug. 30.
Mouth clamp. J. B. Rombough. 1,875,158; Aug. 30.
Musical instrument control. E. Verlinden. 1,874,663; Aug. 30.
Napkin and dispenser therefor, Folded paper. J. S. Daniels. 1,874,850; Aug. 30.
Napkins, Method of and apparatus for folding. C. C. Willis. 1,874,728; Aug. 30.
Napping or felt conditioning apparatus. M. F. Flynn. 1,874,270; Aug. 30.
Needle bar for straight knitting machines. K. R. Lieberknecht. 1,874,108; Aug. 30.
Needles, Making knitting machine latch. F. W. Corey. 1,874,457; Aug. 30.
Nest for canary bird cages, Outside. J. Palubiak. 1,874,708; Aug. 30.
Nitrogen, carbonic oxide and hydrogen, Preparing. M. E. H. Minotte. 1,875,253; Aug. 30.
Notching device. E. Falcke. 1,875,229; Aug. 30.
No-volt tripping mechanism for electrical switches. F. J. Pavitt. 1,874,797; Aug. 30.
Nuts, Making self locking. C. A. Swanstrom. 1,874,829; Aug. 30.
Oil and producing same, Emulsifiable. A. B. Hoel. 1,875,001; Aug. 30.
Oil burner. A. J. Dinkel. 1,874,933; Aug. 30.
Oil burner. F. C. Fantz. 1,874,002; Aug. 30.
Oil burner. W. C. McKesson. 1,874,781; Aug. 30.
Oil burner, Atomizing. W. A. Babb. 1,874,848; Aug. 30.
Oil burner, Atomizing. H. V. Leahy. 1,874,017; Aug. 30.
Oil, Cooling. A. M. Niven. 1,874,587; Aug. 30.
Oil, Cutting. B. Gallsworhy. 1,874,956; Aug. 30.
Oil tank. G. A. Page, jr. 1,874,605; Aug. 30.
Oil well shooting equipment for use on automobiles. O. Bond. 1,874,870; Aug. 30.
Oiler, Pressure. F. I. Jaden. 1,875,008; Aug. 30.
Oils, Extraction of mineral. S. W. Ferris. 1,874,947; Aug. 30.
Oils, Treating hydrocarbon. O. Bebimer. 1,874,860–61; Aug. 30.
Oils, Treatment of hydrocarbon. S. W. Ferris. 1,874,946; Aug. 30.
Oiler, Air line. J. E. Renfer. 1,874,062; Aug. 30.
Oiling system. C. G. Carvelli. 1,874,444; Aug. 30.
Oils, Burning heavy. W. Osthoff. 1,874,341; Aug. 30.
Olefines, Concentrating. V. Voorhees and M. A. Youtz. 1,875,311; Aug. 30.
Ombre fabric. J. Lipari and J. E. Matthews. 1,874,320; Aug. 30.
Opening and sealing attachment, Quick. W. T. Johnston. 1,874,540; Aug. 30.
Operating mechanism. H. I. Morris. 1,874,576; Aug. 30.
Optical systems, Apparatus for microscopic adjusting of. A. A. Blumenfeld. 1,874,231; Aug. 30.
Ore skip and the like. P. A. Robbins. 1,874,711; Aug. 30.
Ores and minerals by flotation, Separation of. H. A. Lubs, A. L. Fox, and C. C. Smith. 1,875,062; Aug. 30.
Ores, Treating. F. M. Simonds. 1,874,370; Aug. 30.
Organ coupler. C. E. Grant. 1,875,234; Aug. 30.
Oscillator, Piezo electric. A. Meissner. 1,875,087; Aug. 30.
Outlet box. J. A. Morrell. 1,875,101; Aug. 30.
Oxide coatings and preparing the same. H. J. Miller and F. J. Cahn. 1 874,785; Aug. 30.
Oxides, Hydrolyzing olefine. M. A. Youtz. 1,875,312; Aug. 30.
Ozonizer. A. W. Conley. 1,874,455; Aug. 30.
Pack of playing cards. A. G. Thomas. Des. 87,693; Aug. 30.
Package sealing machine. H. J. Melville and R. L. Wilson. 1,874,568; Aug. 30.
Pad: *See*—
Filter pad. Toe pad.
Hair waving pad.
Paint testing instrument. A. H. Pfund. 1,875,133; Aug. 30.
Pan: *See*—
Roasting pan.
Paper bag. V. W. Ridley. 1,875,154; Aug. 30.
Paper drying means. H. R. Williams. 1,873,949; Aug. 30.
Paper feeding machine. L. K. Aldrich. 1,874,149; Aug. 30.
Paper manufacture. W. E. Bair, jr. 1,875,208; Aug. 30.
Parachute. S. L. Van Meter, jr. 1,874,392; Aug. 30.
Pastry mold. E. W. Habermaas. 1,874,511; Aug. 30.
Pavement joint protector or traffic marker. C. Older. 1,874,590; Aug. 30.
Pedestal, Stove. C. R. Lovejoy. Des. 87,667; Aug. 30.
Pen, Fountain. F. M. Ashley. 1,874,023–4; Aug. 30.
Pencil, Light. G. Levene. 1,875,048; Aug. 30.
Phase multiplier and modulator. C. W. Hansell. 1,874,979; Aug. 30.
Phonograph record. A. A. McMann. 1,875,086; Aug. 30.
Phonograph record turntable. J. J. Kuhn. 1,874,550; Aug. 30.
Photographic exposing and developing apparatus. A. W. Caps. 1,875,215; Aug. 30.
Picture apparatus, Motion. C. J. Craig and J. E. Nielsen. 1,874,908; Aug. 30.
Picture projecting apparatus, Motion. J. Tavani. 1,874,241; Aug. 30.
Pictures, Apparatus for projecting motion. E. Keen. 1,874,193; Aug. 30.
Pictures, Apparatus for taking and projecting motion. E. Keen. 1,875,244; Aug. 30.
Pictures of a lenticular film, Printing. G. Heymer. 1,874,529; Aug. 30.
Pie and pie shell baker, Individual. G. L. and N. R. Trenner. 1,874,836; Aug. 30.
Piezo-electric crystal. C. W. Hansell. 1,874,980; Aug. 30.
Pillar for vehicle bodies. F. J. Kubier. 1,874,763; Aug. 30.
Pipe: *See*—
Smoking pipe.
Pipe slip. J. C. Bush. 1,874,440; Aug. 30.
Pipe structure. F. R. Kanengeiser. 1,874,303; Aug. 30.
Pipes in building pipe lines, Method of and apparatus for connecting. G. Burrows. 1,874,081; Aug. 30.
Piston. J. E. Diamond. 1,874,925; Aug. 30.
Piston salvaging device. F. J. Leeak. 1,875,039; Aug. 30.
Pitch propeller, Variable. E. B. Moore. 1,874,332; Aug. 30.
Pitch propeller, Variable. E. A. Sperry and W. M Perry. 1,874,714; Aug. 30.
Pitman head, Self-aligning. D. K. Cason, jr. 1,874,445; Aug. 30.
Plane. J. M. Zdeb. 1,874,148; Aug. 30.
Plant, Variety of. W. Sim. Pl. Pt. 24; Aug. 30.
Plant bed. R. Purplaw. 1,874,207; Aug. 30.
Plate or similar article. W. T. Johnson. Des. 87,664; Aug. 30.
Plate or similar article. R. E. Lukens. Des. 87,668; Aug. 30.
Play device. W. O. Parrott. 1,874,345; Aug. 30.
Plow, Tractor spade. G. H. Lewis. 1,874,768; Aug. 30.
Plug, Retainer. K. A. Brauning. 1,874,877; Aug. 30.
Plug, Salt water. J. Hanhardt. 1,874,975; Aug. 30.
Plug, Switch. C. C. Maurer and N. D. Vea. 1,874,021; Aug. 30.
Plug, Tubing. H. C. Otis. 1,874,114; Aug. 30.
Plumb bob hanger. E. J. Murphy. 1,874,057; Aug. 30.
Pocketbook. C. A. Liedel. 1,874,554; Aug. 30.
Polarizers of light and a method of preparation. H. Zocher. 1,873,951; Aug. 30.
Postage meter machine. W. H. Wheeler jr., and J. W. Ogden. 1,874,073; Aug. 30.
Poster process. W. R. Bell. 1,874,862; Aug. 30.
Powdered fuel burner. J. D. Troup. 1,874,390; Aug. 30.
Power braked mobile drill. D. C. Klausmeyer. 1,875,016; Aug. 30.
Power control apparatus, Electric. H. T. Maser. 1,874,777; Aug. 30.
Power plant. R. E. Lasley. 1,874,314; Aug. 30.
Power transmission device. G. H. Hambley. 1,875,237; Aug. 30.
Power transmitting apparatus. H. L. Tanner. 1,874,383; Aug. 30.
Power transmitting device. F. J. Kelly. 1,874,756; Aug. 30.
Precision measuring tank. H. Read. 1,874,349; Aug. 30.
Press: *See*—
Color printing press. Garment press.
Food press. Printing press.
Pressing machine. P. N. Braun. 1,874,876; Aug. 30.
Pressure fluid motor. M. C. Huffman. 1,874,190; Aug. 30.
Pressure gauge. J. C. Crowley. 1,874,913; Aug. 30.
Pressure gauge, Differential. P. A. Nome. 1,874,205; Aug. 30.
Pressure line control. R. S. Wood. 1,874,729; Aug. 30.
Pressure relief mechanism. A. E. Harnsberger. 1,874,742; Aug. 30.

Print delivering means, Photographic. A. W. Caps. 1,874,897; Aug. 30.
Printing. W. P. Brinton. 1,874,167; Aug. 30.
Printing apparatus. W. P. Brinton. 1,874,166; Aug. 30.
Printing mechanism for golf ball marker. J. E. McGinness. 1,875,085; Aug. 30.
Printing press. W. L. Waggoner. 1,875,291; Aug. 30.
Printing, Translucent. H. J. Billings. 1,874,427; Aug. 30.
Profiling attachment. A. E. Drissner. 1,874,470; Aug. 30.
Propeller. L. J. Koch. 1,874,545; Aug. 30.
Propeller attachment. F. E. Wallace. 1,874,213; Aug. 30.
Propeller pitch changer, Automatic. C. W. Lambert. 1,874,053; Aug. 30.
Protective means for buried cables. J. J. Shoemaker. 1,874,369; Aug. 30.
Protective means for flask rest actuating mechanism. C. F. Scherer. 1,874,636; Aug. 30.
Protective system. A. van Gastel. 1,873,987; Aug. 30.
Protective system, Relay. E. M. Tingley. 1,874,142; Aug. 30.
Protective system, Transmission line. G. Lesch. 1,873,972; Aug. 30.
Protective system with resistance operated relay, Overload. E. H. Frey. 1,873,959; Aug. 30.
Protector for watering devices, Chick. M. T. Sueper. 1,874,141; Aug. 30.
Pulley and mounting for glass cutting lathes. T. H. Jarvis. 1,874,755; Aug. 30.
Pulp screen. W. R. Tidmarsh. 1,874,834; Aug. 30.
Pulsator. H. McCornack. 1,875,083; Aug. 30.
Pump. W. F. Godfrey. 1,874,282; Aug. 30.
Pump. J. P. Hess. 1,874,010; Aug. 30.
Pump, Cam actuated fuel. C. S. Burton. 1,874,890; Aug. 30.
Pump, Centrifugal. J. W. Macmeeken. 1,874,324; Aug. 30.
Pump, Deep-well turbine. G. S. Coats. 1,874,450; Aug. 30.
Pump, Liquid dispensing. H. H. Wolfe. Des. 87,698; Aug. 30.
Pump, Lubricator. K. S. Clapp and T. H. Eickhoff. 1,874,026; Aug. 30.
Pump, Sirup. O. Peterson. 1,874,612; Aug. 30.
Pump, Sirup. A. C. Pilcher and L. C. Pilcher. 1,874,614; Aug. 30.
Pumping apparatus for medical treatments. Y. Wada. 1,874,667; Aug. 30.
Punch, Prick. J. E. P. Cox. 1,874,460; Aug. 30.
Purifier. J. Forrest and A. C. Brenchley. 1,873,958; Aug. 30.
Race timing apparatus. H. Oeste. 1,874,794; Aug. 30.
Rack: *See*—
Book supporting rack. Shoe rack.
Radiator, Expanded tube. P. P. Henshall and W. Ewald. 1,874,009; Aug. 30.
Radiator shell and deflector, Combined. B. Kirsch. Des. 87,665; Aug. 30.
Radiator structure. J. A. White. 1,874,400; Aug. 30.
Radio apparatus for intercommunication or duplex operation. K. Heffner. 1,874,993; Aug. 30.
Radio circuit. W. L. Krahl. 1,874,309; Aug. 30.
Radio receiver, Local distant. R. A. Braden. 1,874,234; Aug. 30.
Radio receiving apparatus. E. L. Powell. 1,875,140; Aug. 30.
Radio receiving system. A. H. Hotopp, jr. 1,874,295; Aug. 30.
Radio receiving system for aircraft. F. H. Drake, L. M. Hull, and W. D. Loughlin. 1,874,935; Aug. 30.
Radio signaling system. F. H. Kroger. 1,875,021; Aug. 30.
Rail locator for rail flaw detector mechanisms, Automatic. P. Cushnie. 1,874,030; Aug. 30.
Rail lubricating apparatus. R. E. Einstein. 1,874,001; Aug. 30.
Railway car truck assembly. W. C. Klein. 1,874,761; Aug. 30.
Railway signaling system. J. C. Hoffman. 1,874,291; Aug. 30.
Rake apparatus, Reciprocal. E. R. Schofield and R. Kramaroff. 1,874,125; Aug. 30.
Range of energy level, Compression and expansion of. L. C. Roberts. 1,875,157; Aug. 30.
Razor, Safety. A. Rosenbaum. 1,875,265; Aug. 30.
Razor, Safety. I. N. Zeller. 1,874,687; Aug. 30.
Receptacle. C. H. Jarvis. 1,874,299; Aug. 30.
Receptacle or container for inflammable materials, Safety. J. G. Clark. 1,874,243; Aug. 30.
Receptacle, Unbreakable and sanitary seamless. C. J. and H. Foth. 1,875,231; Aug. 30.
Receptacles containing a liquid at a given temperature, Apparatus for the automatic emptying of. H. E. L. Labbé. 1,874,106; Aug. 30.
Recorder for high speed telegraphy, Narrow-tape. W. Ludenia and F. Schroeter. 1,875,063; Aug. 30.
Rectifier isolating apparatus. E. Kern. 1,873,964; Aug. 30.
Rectifier, Metal vapor arc. J. Egli. 1,873,957; Aug. 30.
Rectifier, Vapor. A. Gaudenzi. 1,874,095; Aug. 30.
Reel: *See*—
Collapsible wire reel.
Refrigerating apparatus. W. H. Sartain. 1,874,364; Aug. 30.
Refrigerating apparatus and method of refrigerating. E. L. Barnes. 1,875,211; Aug. 30.
Refrigerating apparatus, Continuous absorption. R. S. Taylor. 1,874,654; Aug. 30.
Refrigerating device. A. E. Payson and M. P. Wetmore. 1,875,129; Aug. 30.
Refrigerating method and apparatus. D. N. Crosthwait, jr. 1,874,912; Aug. 30.
Refrigeration. B. F. Randel. 1,874,621; Aug. 30.
Refrigeration apparatus. M. Munce. 1,875,254; Aug. 30.
Refrigeration, Mechanical. H. H. Nesbitt. 1,874,204; Aug. 30.
Register: *See*—
Autographic register. Cash register.
Register. T. O'Connor. 1,875,117; Aug. 30.
Register interlocking mechanism. T. O'Connor. 1,875,116; Aug. 30.
Regulator: *See*—
Circuit regulator. Liquid level regulator.
Electric regulator. Temperature regulator.
Electrical regulator. Voltage regulator.
Gas regulator. Water supply regulator.
Generator regulator.
Regulator. L. M. Persons. 1,874,710; Aug. 30.
Relay, Protective. J. Stoecklin. 1,873,986; Aug. 30.
Relay, Resistance dependent selective. S. Rump. 1,875,313; Aug. 30.
Release device for carbon dioxide fire systems, Quick acting. A. C. Rowley. 1,874,356; Aug. 30.
Resilient wheel. W. E. Weaver. 1,874,896; Aug. 30.
Retort, Process. A. L. Taylor. 1,874,833; Aug. 30.
Reverberatory furnace. W. F. Sklenar and A. H. Ronan. 1,875,169; Aug. 30.
Ribbons, Apparatus for inking endless. B. Paradise. 1,874,059; Aug. 30.
Ring fracturing machine. P. Mitchell. 1,874,786; Aug. 30.
River banks, Protection of. O. A. Mechlin. 1,874,567; Aug. 30.
Riveting, heading, etc., Apparatus for electric. E. E. Einfeldt. 1,874,942; Aug. 30.
Road rolling machine. L. Gardiner. 1,874,957; Aug. 30.
Road working machine. L. B. Sherman. 1,875,194; Aug. 30.
Roasting pan. M. M. Murff. 1,874,791; Aug. 30.
Rock crusher. H. J. McElvain. 1,874,329; Aug. 30.
Rock drill. R. H. Smickle. 1,874,130; Aug. 30.
Rod: *See* —
Curtain rod. Fishing rod.
Rod cooling and water eliminating apparatus. H. T. George. 1,874,959; Aug. 30.
Roller: *See*—
Tapered feed roller.
Roller core bit. F. L. Scott. 1,874,065; Aug. 30.
Roller core bit. L. H. Wellensiek. 1,874,070; Aug. 30.
Rolling and annealing process. J. B. Tytus. 1,874,144; Aug. 30.
Rolling machine. W. J. Heinauer. 1,874,995; Aug. 30.
Roof for liquid storage tanks, Floating. J. H. Wiggins. 1,874,726; Aug. 30.
Roofs, Method of and apparatus for raising. S. M. Gooder. 1,847,005; Aug. 30.
Rose, Hybrid tea. W. R. Pierson. Plant Pat No. 25; Aug. 30.
Rotary motor. A. Kolko. 1,874,308; Aug. 30.
Rotor structure. H. P. Dahlstrand. 1,873,956; Aug. 30.
Routing device. W. F. Groene and L. D. Reed. 1,874,232; Aug. 30.
Rubber and new compound therefor, Vulcanization of. H. M. Bunbury, J. S. H. Davies and W. J. S. Naunton. 1,874,886; Aug. 30.
Sadiron, Steam heated. W. K. Tavender. 1,874,832; Aug. 30.
Safety apparatus. S. H. López. 1,874,770; Aug. 30.
Safety device, Flying machine. N. P. Bruno. 1,874,237; Aug. 30.
Safety device for elevators. H. D. James. 1,874,044; Aug. 30.
Safety device for gas conduits. F. Mangiamell. 1,874,019; Aug. 30.
Safety operation by buffer. H. D. James. 1,874,754; Aug. 30.
Sandal. G. E. Sayers. 1,875,162; Aug. 30.
Sanitary fitting. C. C. Campus. 1,874,169; Aug. 30.
Sash adjuster, Window. G. E. Morrow. 1,874,789; Aug. 30.
Sash, Window. J. J. Hazlewood. 1,874,746; Aug. 30.
Saw mill. O. E. Haubrock. 1,874,519; Aug. 30.
Scale removers and the like, Controlling mechanism for. L. F. Brislin. 1,874,080; Aug. 30.
Scale, Weighing. F. E. Carlson. 1,875,218; Aug. 30.
Scales, Attachment for platform. A. W. Grube. 1,875,235; Aug. 30.
Scraper, Tractor mounted. R. G. Le Tourneau. 1,875,047; Aug. 30.
Screen: *See*—
Bar screen. Water screen.
Pulp screen. X-ray screen.
Screw device, Self-lock. G. C. Trotter. 1,874,389; Aug. 30.

Screw device, Self-locking. G. C. Trotter. 1,874,657; Aug. 30.
Screw driver and wrench friction drive. A. G. Decker. 1,874,250; Aug. 30.
Screw, Self locking. C. G. Olson. 1,874,595; Aug. 30.
Screw tap. H. Steinruck. 1,874,878; Aug. 30.
Seal cleaning machine. F. E. Fowler. 1,875,232; Aug. 30.
Seal for mercury vapor rectifiers, Internal. A. Gaudenzi. 1,873,960; Aug. 30.
Seal for rectifiers, Solid electrode. O. K. Martl. 1,873,973; Aug. 30.
Sealing machine, Automatic. H. J. Barnett and H. P. Trusty. 1,874,224; Aug. 30.
Seat: *See*—
Valve seat.
Seat. T. J. Nelson and C. H. Gerlofson. 1,874,333; Aug. 30.
Seat or bottom for chairs, couches, etc., Resilient. J. Kronheim. 1,874,051; Aug. 30.
Securing means. J. D. Baldwin, jr. 1,875,209; Aug. 30.
Seed drill. H. M. Leake. 1,875,036; Aug. 30.
Separator: *See*—
Steam separator.
Sewage sampling device. J. S. Watts. 1,874,395; Aug. 30.
Sewing machine. F. Ashworth. 1,874,690; Aug. 30.
Sewing machine attachment. D. Silberman. 1,874,645; Aug. 30.
Sewing machine carrying case, Portable. F. Osann and R. L. Plumley. 1,875,177; Aug. 30.
Shade, Lamp. W. Miethke. 1,875,094; Aug. 30.
Shade, Lamp. E. Schwarz. Des. 87,684–6; Aug. 30.
Shaft casing assembly, Flexible. H. W. Webb. 1,874,397; Aug. 30.
Shaft coupling, Resilient. J. W. Auren. 1,874,152; Aug. 30.
Shafting, Making. R. C. Angell. 1,874,413; Aug. 30.
Sharpener and ash tray, Combined razor blade. F. E. Montgomery. Des. 87,673; Aug. 30.
Sheet handling device. A. W. Werner. 1,874,675; Aug. 30.
Sheets, Method and apparatus for cutting. R. G. Clyne. 1,874,902; Aug. 30.
Sheets, Process and apparatus for the separation of folded or individual. A. Winkler and M. Dünnebier. 1,875,189; Aug. 30.
Shell reamers, Arbor for. R. T. Butler. 1,874,441; Aug. 30.
Shells, Method and apparatus for inspecting cartridge. F. W. Olin and R. G. Clyne. 1,875,120; Aug. 30.
Shielding for high frequency apparatus. H. O. Peterson. 1,875,132; Aug. 30.
Shirt and folding same for display purposes, Folded. H. Cooper. 1,873,954; Aug. 30.
Shock absorber for automobiles and the like, Hydraulic. A. Fowble. 1,874,485; Aug. 30.
Shock absorbing mechanism. S. B. Haseltine. 1,874,288; Aug. 30.
Shock absorbing mechanism, Friction. A. P. Withall. 1,874,403; Aug. 30.
Shock absorbing suspension. A. Dubonnet. 1,874,034; Aug. 30.
Shoe or cushion, Yieldable. A. C. Fulton. 1,874,955; Aug. 30.
Shoe plate. F. D. Reynolds. 1,875,152; Aug. 30.
Shoe rack, Collapsible. J. C. Matallana. 1,874,056; Aug. 30.
Shoes, Apparatus for shaping. R. H. Grier and A. Sachs. 1,875,304; Aug. 30.
Shoes, Ground gripping device for. W. A. Barden. 1,874,155; Aug. 30.
Short wave lengths, Eliminating fading on. H. H. Beverage and H. O. Peterson. 1,874,866; Aug. 30.
Shutter blades, Method and apparatus for making. N. Walker. 1,874,068; Aug. 30.
Shuttle, Automatic side feed. I. Snow. 1,874,648; Aug. 30.
Side inclosures adapted for ventilating and handhole purposes, Automatic. G. E. Bishop. 1,874,867; Aug. 30.
Sign. H. D. Lockwood. 1,875,807; Aug. 30.
Sign. T. I. Michelson. 1,874,202; Aug. 30.
Sign board frame. P. L. Michael. 1,875,093; Aug. 30.
Signaling by frequency modulation. O. Böhm. 1,874,869; Aug. 30.
Silk, hair, bands, and similar products of diminished lustre. Manufacture of artificial. J. J. Stöckly and E. Witte. 1,875,185; Aug. 30.
Skate. J. H. Goetzel and P. C. Smith. 1,874,965; Aug. 30.
Skein and tying the same. M. Wadewitz. 1,874,668; Aug. 30.
Skid. F. Mossberg and A. Jensen. 1,875,104; Aug. 30.
Slack adjuster, Automatic. G. L. Smith. 1,874,131; Aug. 30.
Smoking pipe. P. J. Whelan. 1,874,075; Aug. 30.
Snap hook. H. Soule. 1,875,274; Aug. 30.
Soap, Process and apparatus for manufacturing. P. M. Travis. 1,874,388; Aug. 30.
Socket and stem, Self lubricated caster. W. H. Noelting. 1,875,112; Aug. 30.
Socket, Electric. H. E. Slade and J. Gehring. 1,875,270; Aug. 30.
Sooty atmosphere in gas fired furnaces, Producing. E. G. De Coriolis and H. B. Barber. 1,873,999; Aug. 30.
Sorting machine. W. E. Ghent. 1,874,096; Aug. 30.
Sound muffler. W. P. Mason. 1,874,326; Aug. 30.
Sound projecting apparatus. L. A. Sprague and C. F. Dorsch. 1,875,171; Aug. 30.
Sound ranging system. H. W. Lamson. 1,874,196; Aug. 30.
Spear. J. S. Johnson. 1,875,011; Aug. 30.
Speech translating system and method. E. A. Filene. 1,874,480; Aug. 30.
Speed gear driven drilling control, Multiple. D. S. Faulkner and L. E. Zerbe. 1,874,264; Aug. 30.
Spindle drip for door knobs, Automatic. N. B. Stone. 1,874,139; Aug. 30.
Splash preventing device for motor cars. W. O. MacKey. 1,875,067; Aug. 30.
Spool. S. G. Malby. 1,875,068; Aug. 30.
Spool. C. P. Park. 1,874,606; Aug. 30.
Spool, Tube frame yarn. E. F. Hathaway and W. Bixby. 1,874,188; Aug. 30.
Spooling machine. C. Herrmann. 1,874,525; Aug. 30.
Spout, Automatic. H. Henig. 1,874,008; Aug. 30.
Spray drying apparatus. G. B. Voorhies. 1,874,665; Aug. 30.
Spreader clamp. E. A. Podd. 1,875,136; Aug. 30.
Spring: *See*—
Leaf spring. Vehicle spring.
Spring construction, Seat. J. W. Barber. 1,874,221; Aug. 30.
Spring device for automatic vehicles. E. J. Fischer. 1,874,269; Aug. 30.
Spring tester. J. J. McGuckin. 1,874,780; Aug. 30
Sprinkler: *See*—
Fertilizer sprinkler.
Sprinkler systems, Testing device for. H. F. Gewalt. 1,875,233; Aug. 30.
Stand: *See*—
Tree stand.
Stand for kitchen utensil. C. S. Glenny. 1,874,498; Aug. 30.
Stapling machine. W. B. Ranney. 1,874,622; Aug. 30.
Starter and re-starter for engines. L. H. Middleton. 1,875,192; Aug. 30.
Starter, Engine. R. Abell. 1,874,841; Aug. 30.
Starter, Engine. M. B. Jackson and K. M. Clipsham. 1,874,298; Aug. 30.
Starter, Synchronous motor. H. L. Wilcox. 1,874,076; Aug. 30.
Stator with glass lining, Insulation incased. V. G. Apple. 1,875,206; Aug. 30.
Stay bolt. A. F. Pitkin. 1,874,347; Aug. 30.
Steam boiler. I. L. Langvand. 1,874,552; Aug. 30.
Steam boiler, Electric. S. N. Coates. 1,874,244; Aug. 30.
Steam generator. A. T. Herpen. 1,874,527; Aug. 30.
Steam heating apparatus. G. J. Muller. 1,874,203; Aug. 30.
Steam heating system and regulator therefor. J. A. Donnelly. 1,874,174; Aug. 30.
Steam separator. C. G. Hawley. 1,874,990; Aug. 30.
Steel, Toughening. G. A. Johnson. 1,874,103; Aug. 30.
Stick, Carved control. K. Henrichsen. 1,874,522; Aug. 30.
Still distillation, Pipe. T. E. Stockdale. 1,874,212; Aug. 30.
Stock reclaimed from waste materials and method of and apparatus for reclaiming same, Prepared. N. Leshner and W. J. Moeller. 1,875,045; Aug. 30.
Stoker, Locomotive. W. T. Capps. 1,875,216; Aug. 30.
Stone spreader. H. A. Schaupp. 1,874,634; Aug. 30.
Stop mechanism, Automatic. D. B. Reese. 1,874,804; Aug. 30.
Stop motion for knitting machines (hosiery). A. Crawford. 1,874,085; Aug. 30.
Stop motion for twister frames. G. Goodchild. 1,874,500; Aug. 30.
Stop, Tubing catcher. M. F. Waters. 1,874,673; Aug. 30.
Storage battery. G. Wheat. 1,874,725; Aug. 30.
Storage battery. W. H. Wood. 1,874,404; Aug. 30.
Store front, Convertible. A. Simone. 1,874,820; Aug. 30.
Strainer. C. Andrews. 1,874,410–11; Aug. 30.
Strainer and making same, Well. H. W. Fletcher. 1,874,035; Aug. 30.
Strawberry. B. W. and B. H. Keith. Pl. Pt. 26; Aug. 30.
Strop, Razor. J. McD. Ezzell. 1,874,262; Aug. 30.
Stropper, Safety razor blade. G. C. Green. 1,874,740; Aug. 30.
Subharmonic generator, Crystal. W. Albersheim. 1,874,845; Aug. 30.
Substitutes for table salt for flavoring purposes, Preparing suitable. A. Liebrecht. 1,874,055; Aug. 30.
Support, Equalizing. F. R. Wallace and J. T. Ramsden. 1,875,285; Aug. 30.
Support for dynamo-electric machines, Combined end plate and brush holder. L. B. Ehrlich. 1,874,000; Aug. 30.
Support for hot tops. E. J. Kauffman. 1,874,304; Aug. 30.
Supporter for women, Hose. E. Donaldson. 1,874,089; Aug. 30.
Supporting device. S. N. Buchanan. 1,874,435; Aug. 30.
Supporting soot cleaner heads. F. C. Arey. 1,874,151; Aug. 30.

Suspension arrangement for road and the like vehicles. F. G. G. Armstrong. 1,875,314; Aug. 30.
Swiller. S. F., C., A., and G. Hufnagel. 1,874,534; Aug. 30.
Switch: *See*—
Electric switch. Lock switch.
Flashlight switch. Time controlled switch.
Switch. J. Kopellowitsch. 1,873,969; Aug. 30.
Switch. G. B. Wadsworth. 1,874,146; Aug. 30.
Switch for motor driven grease machines. K. S. Clapp. 1,874,025; Aug. 30.
Switch plant. S. Ruppel. 1,874,808; Aug. 30.
Synchronization, Method of and apparatus for. J. H. Hammond, jr. 1,874,287; Aug. 30.
Synchronizer, Automatic. P. M. Stivender. 1,873,985; Aug. 30.
Synchronizing system. S. Rump. 1,873,981; Aug. 30.
Table: *See*—
Extensible or reversible table. Game table.
Extension table. Telescopic or extension table.
Folding table. Tilt table.
Framing table.
Tables for machines for punching beams and the like, Spacing. R. H. McClintic. 1,875,080; Aug. 30.
Tag decapper, Pry. R. E. Reardon. 1,874,208; Aug. 30.
Tag, Merchandise and shipping. G. M. Taylor and H. G. Straley. 1,875,290; Aug. 30.
Tank: *See*—
Oil tank. Precision measuring tank.
Tapered feed roller. J. A. Nylund. 1,875,257; Aug. 30.
Taximeter construction. J. Gluck and R. R. Karich. 1,874,962; Aug. 30.
Telegraphy, Multiplex. G. S. Vernam. 1,874,664; Aug. 30.
Telephone signaling arrangement, Party. W. H. Edwards. 1,874,472; Aug. 30.
Telephone system. H. B. McElyea. 1,874,566; Aug. 30.
Telephone system. E. P. G. Wright. 1,874,684; Aug. 30.
Telescope, stand, and observation platform therefor, Combination. O. E. Trautmann. Des. 87,694; Aug. 30.
Telescopic or extensible table. A. Grundy and F. Dawber. 1,874,509; Aug. 30.
Television system. C. L. Davis. 1,874,171–2; Aug. 30.
Temperature and flow indicator and flow control cooling waters for motors. E. H. Fahrney. 1,874,263; Aug. 30.
Temperature indicator, Freezing. D. N. Crosthwait, jr. 1,874,911; Aug. 30.
Tempering apparatus. M. S. Clawson. 1,874,448; Aug. 30.
Tension controlling device. H. W. Nieman. 1,875,111; Aug. 30.
Testing device. O. E. J. Abrahamson. 1,874,842; Aug. 30.
Textile fabric and method of manufacture. L. M. Cotchett. 1,874,084; Aug. 30.
Theatre, Miniature. T. H. Simmons. 1,874,819; Aug. 30.
Theft prevention device, Automatic. W. J. Samuel. 1,874,812; Aug. 30.
Therapeutic device. H. Gross. 1,874,286 Aug. 30.
Thermionic tube. L. A. Gebhard. 1,874,182; Aug. 30.
Thermo lunch box. D. Brown. 1,874,882; Aug. 30.
Thermostat. J. W. Conklin. 1,874,909; Aug. 30.
Thermostat. L. M. Persons. 1,874,117; Aug. 30.
Thermostat. S. P. Vaughn. 1,874,661; Aug. 30.
Thread gauging, Screw. J. Hartness. 1,874,517; Aug. 30.
Thread tensioning device. C. Hilscher. 1,874,011; Aug. 30.
Threads, Apparatus for encircling. A. Green. 1,874,502; Aug. 30.
Ticket printing, issuing and recording machine. J. F. Ohmer and G. C. Coil. 1,875,119; Aug. 30.
Ticket, Rider. S. Adler. 1,874,844; Aug. 30.
Tie and collar support, Combination. G. E. McKeen. 1,875,251; Aug. 30.
Tie forming mechanism. L. M. Harvey. 1,874,518; Aug. 30.
Tie holder. L. E. Baer. 1,874,853; Aug. 30.
Tie or buckle, Bale hand. F. W. Davis and R. T. Stutts. 1,874,464; Aug. 30.
Tile flooring. J. G. Shodron. 1,874,644; Aug. 30.
Tilt table. A. C. Nelson. 1,874,582; Aug. 30.
Time controlled switch. E. T. Condon. 1,874,028; Aug. 30.
Timer for four cylinder outboard motors. O. Evenrude. 1,874,178; Aug. 30.
Timing intervals, Automatic means for changing. H. H. Haglund. 1,874,187; Aug. 30.
Timing mechanism. Electrically operated. C. Fayer. 1,874,477; Aug. 30.
Tire. J. N. Wyant. Des. 87,699; Aug. 30.
Tire construction, Pneumatic. J. W. Quynn. 1,874,120; Aug. 30.
Tire inflator, Automatic. D. H. Spicer. 1,874,375; Aug. 30.
Tire insert. C. S. Morse. 1,875,102; Aug. 30.
Toe pad. E. D. Bolsseller. 1,874,737; Aug. 30.
Tomato juice, Producing. W. H. Gavin. 1,874,181; Aug. 30.
Tool, Abrading. L. O. Beard. 1,874,856; Aug. 30.
Tool, Battery. L. Fabian. 1,874,944; Aug. 30.
Tool, Cutting. H. W. Porter. 1,874,616; Aug. 30.
Tool for automobile motor valve shoes, Placing. A. J. Doptis. 1,874,257; Aug. 30.
Tool, Machine. E. J. Kearney. 1,874,305; Aug. 30.
Tool, Metal cutting. C. B. Gray. 1,874,036; Aug. 30.
Tool, Percussive. F. M. Slater. 1,874,372; Aug. 30.
Tool, Piston ring compressing. C. O. Younce. 1,874,731; Aug. 30.
Tool, Pneumatic. J. E. Renfer. 1,874,063; Aug. 30.
Tool, Portable surface cleaning. F. E. Aurand. 1,874,220; Aug. 30.
Toothbrush. E. Doll. 1,874,467; Aug. 30.
Topper, Sugar beet. F. Maryott. 1,875,072; Aug. 30.
Tower, Atmospheric cooling. G. T. Martin. 1,874,020; Aug. 30.
Toy. C. A. Diederichs. 1,874,087; Aug. 30.
Toy. G. Myers. 1,874,792; Aug. 30.
Toy balloon. W. E. Gardner. Des. 87,663; Aug. 30.
Toy vehicle. R. B. Bukolt. 1,874,436–7; Aug. 30.
Toy, Wheeled. H. Müller. 1,875,109; Aug. 30.
Tractor wheel cleaner, Eccentrically hinged. C. R. Meyer and F. W. Cox. 1,875,252; Aug. 30.
Traffic sign or signal. F. D. Bryan and J. Blauner. 1,874,884; Aug. 30.
Traffic signal controller. C. I. Hall. 1,874,513; Aug. 30.
Traffic signaling construction. J. Mattson. 1,875,076; Aug. 30.
Trailer. C. H. Lotte. 1,874,558; Aug. 30.
Transformer. A. Meyerhans. 1,873,975; Aug. 30.
Transformer core. H. G. Ross. 1,874,806; Aug. 30.
Transmission device for motor vehicles. J. A. Gregoire. 1,874,505; Aug. 30.
Transmission regulating system. C. S. Demarest. 1,874,466; Aug. 30.
Transmission regulating system. W. H. T. Holden. 1,874,530; Aug. 30.
Transmission system. H. C. Ford and H. L. Tanner. 1,874,094; Aug. 30.
Transmission system, C. W. Hansell. 1,874,978; Aug. 30.
Transmitter electron tube. R. B. Meyer. 1,875,091; Aug. 30.
Tray, Ash. J. Lill. 1,874,319; Aug. 30.
Tray, Serving. A. W. Porter. Des. 87,682; Aug. 30.
Tree guard. G. W. McChesney, sr., and M. C. Northrup. 1,874,779; Aug. 30.
Tree stand. T. E. Propst. 1,874,119; Aug. 30.
Trees, Anchoring transplanted. M. L. Condon. 1,874,029; Aug. 30.
Truck. J. H. Mosel. 1,875,103; Aug. 30.
Truck, Six wheel tender. J. S. Keen. 1,874,306; Aug. 30.
Truck, Tank bolding one rail. T. J. Lynch. 1,875,248; Aug. 30.
Trunk, Vehicle. J. R. Hughes. 1,874,535; Aug. 30.
Trussed structure. M. A. Montgomery. 1,874,572; Aug. 30.
Tube: *See*—
Discharge tube. Thermionic tube.
Glow relay tube. Tuned receiver tube.
Grid modulated tube.
Tube for pneumatic tires, Inner. W. B. Lang. 1,874,197; Aug. 30.
Tube having an indirectly heated cathode, Discharge. J. G. W. Mulder. 1,875,106; Aug. 30.
Tube system, High power. J. A. Willoughby. 1,874,679; Aug. 30.
Tubes and apparatus for carrying them out, Manufacturing luminous. R. R. Machlett. 1,874,018; Aug. 30.
Tubes of laminated sheeting. J. N. Whitehouse. 1,875,289; Aug. 30.
Tubing, Bending. F. Hotchner. 1,874,012; Aug. 30.
Tubing, Catcher. O. C. Zuck and J. J. Railey. 1,874,688; Aug. 30.
Tufting machine. F. H. Ogden. 1,874,588; Aug. 30.
Tuned receiver tube. S. Loewe. 1,875,059; Aug. 30.
Turbine plant. R. G. Standerwick. 1,874,136; Aug. 30.
Tuyère. P. F. Cunningham. 1,873,996; Aug. 30.
Tuyère and supporting means therefor. O. Nygaard 1,874,340; Aug. 30.
Typewriter ribbon moistener. G. V. Reeves. 1,874,623; Aug. 30.
Typewriters, Duplicating attachment for. B. L. Henry. 1,874,749; Aug. 30.
Typewriting machine. W. A. Dobson. 1,874,255–6; Aug. 30.
Typewriting machine. L. C. Myers and G. F. Handley. 1,875,255; Aug. 30.
Typewriting machine. J. A. B. Smith. 1,874,823; Aug. 30.
Typewriting mechanisms, Pneumatic reproducing. H. E. Hale and W. A. Watson. 1,874,512; Aug. 30.
Twister frame. H. R. Marsh. 1,874,325; Aug. 30.
Undercleaner roll. N. E. Lucas. 1,874,560; Aug. 30.
Undergarment. M. Ryff. 1,874,362; Aug. 30.
Unit for heating and ventilating systems. R. A. Ilg and J. M. Frank. 1,874,043; Aug. 30.
Unit formed of sheet material. C. F. Williams. 1,875,188; Aug. 30.
Unloading machine, Portable. S. F. Ossing. 1,874,600; Aug. 30.
Utensil, Kitchen. F. S. Casse. 1,874,898; Aug. 30.
Utensils and the like, Cooking. H. V. Bird. 1,875,303; Aug. 30.
Utility bag. H. B. Ferguson. 1,874,945; Aug. 30.
Vacuum devices, Manufacture of. E. K. Jaycox. 1,874,537; Aug. 30.
Vacuum engine. R. D. Conklin. 1,874,454; Aug. 30.
Valve. G. A. Arnold. 1,874 847; Aug. 30.
Valve. C. R., W., and C. T. Law. 1,875,035; Aug. 30.
Valve, Brake control. C. A. Ives. 1,874,297; Aug. 30.

Valve, Combination pressure regulating and shut-off. C. H. Hook and N. L. Mercur. 1,874,293; Aug. 30.
Valve construction, Clearance. W. M. Spoor. 1,874,135; Aug. 30.
Valve, Delay action. H. Nightingale and H. Meachem. 1,874,793; Aug. 30.
Valve device, Pressure relief. J. M. Dougherty. 1,874,931; Aug. 30.
Valve for oil engines, Fuel injection. M. J. Goldberg. 1,874,283; Aug. 30.
Valve, Gate. H. M. Lofton. 1,874,556; Aug. 30.
Valve, Liquid sealed vacuum and pressure relief. J. H. Wiggins and C. A. Turner. 1,874,727; Aug. 30.
Valve, Lubricated and sealed plug. V. E. Flodin. 1,875,302; Aug. 30.
Valve mechanism. J. C. Crowley. 1,874,914; Aug. 30.
Valve mechanism. R. Showmin. 1,874,818; Aug. 30.
Valve mechanism for internal combustion engines. C. B. Hardman. 1,875,238; Aug. 30.
Valve mechanism for vacuum sealing machines, Master. G. A. and G. V. Bardet. 1,874,854; Aug. 30.
Valve mechanism for rock drills. W. A. Smith, jr. 1,874,133; Aug. 30.
Valve seat. W. M. Wood. 1,874,405; Aug. 30.
Valve, Thermionic. H. J. Round. 1,874,355; Aug. 30.
Valve, Thermostatic snap. S. P. Vaughn. 1,874,660; Aug. 30.
Valve with non-plugging seat construction, Gate. F. E. Riley. 1,874,627; Aug. 30.
Valves, Cooling thermionic. B. D. L. Mogridge. 1,874,787; Aug. 30.
Vanity case. G. L. Briggs. 1,874,433; Aug. 30.
Vanity case. W. T. Parkin. 1,875,127; Aug. 30.
Vanity case, Solderless. K. R. Larson and E. S. Irelan. 1,875,245; Aug. 30.
Vase. J. Goldstein. 1,874,185; Aug. 30.
Vat for dyeing piece goods, Dye. H. O. Weise. 1,874,398; Aug. 30.
Vault, Burial. E. Hedeen. 1,874,991; Aug. 30.
Vehicle brake. A. E. Deyss. 1,874,262; Aug. 30.
Vehicle jack. W. L. Barrowman and G. L. Hull. 1,874,420; Aug. 30.
Vehicle lubrication, Automotive. C. F. Chisholm. 1,874,900; Aug. 30.
Vehicle, Motor. C. R. Paton. 1,874,609; Aug. 30.
Vehicle, Self propelled road. E. T. J. Tapp. 1,874,384; Aug. 30.
Vehicle spring. H. G. Smith. 1,874,647; Aug. 30.
Vehicle wheel. J. H. Wagenhorst. 1,874,394; Aug. 30.
Veneer joint gluer. A. A. Dennis. 1,874,251; Aug. 30.
Vent for core barrels. L. H. Wellenstek. 1,874,072; Aug. 30.
Ventilating device. J. B. Clay. 1,874,083; Aug. 30.
Ventilation, Dynamo-electric machine. R. B. Williamson. 1,873,989; Aug. 30.
Ventilator: *See*—
Kitchen ventilator.
Vessel, Steam heating boiling. A. Heller. 1,874,996; Aug. 30.
Vinyl derivative and preparing it. W. E. Lawson and J. H. Werntz. 1,874,107; Aug. 30.
Violin bow. C. B. Gray. 1,874,037; Aug. 30.
Viscosimeter. R. W. King. 1,874,015; Aug. 30.
Voltage regulation. B. M. Leece and D. S. Cole. 1,875,043; Aug. 30.
Voltage regulator. C. W. Hansell. 1,874,981; Aug. 30.
Voltage stabilizing means for direct-current generators. R. C. Bergvall. 1,874,163; Aug. 30.
Voucher severing and stacking means. B. M. Shipley. 1,874,816; Aug. 30.
Warmer for internal combustion engines, Electric fuel. H. A. Mitchell. 1,875,176; Aug. 30.
Washer: *See*—
Clothes washer. Lock washer.
Water circulating unit, Hot. H. M. Owen. 1,874,602; Aug. 30.
Water closet. C. H. Johnson. 1,875,009; Aug. 30.
Water cooling system. E. V. Hill. 1,875,305; Aug. 30.
Water dispensing means, Automatic. A. Locke. 1,875,053; Aug. 30.
Water for cooling brake rims, Distribution of. A. E. Rice and L. E. Zerbe. 1,874,624; Aug. 30.
Water screen, Endless traveling. L. G. Bleyer. 1,874,736; Aug. 30.
Water supply regulator. L. M. Persons. 1,874,611; Aug. 30.
Waterproof joint. D. McEachern. 1,874,565; Aug. 30.
Wave transmission, Electric. A. G. Ganz. 1,874,492; Aug. 30.
Weatherstrip, Metal. A. M. Lane. 1,875,173; Aug. 30.
Web roll supporting mechanism. C. S. Crafts. 1,874,904; Aug. 30.
Welder, Alternating current. H. Gronau. 1,874,508; Aug. 30.
Welding apparatus. H. E. White. 1,874,399; Aug. 30.
Welding machine. A. M. MacFarland. 1,875,066; Aug. 30.
Well closing apparatus. R. M. Burris. 1,874,889; Aug. 30.
Well tester. G. A. Humason. 1,875,006; Aug. 30.
Wheel: *See*—
Vehicle wheel.
Wheel construction. E. E. Einfeldt. 1,874,943; Aug. 30.
Wheels, Apparatus for truing grinding. T. Barish. 1,874,156; Aug. 30.
Window construction, Stern. W. F. Lahey and M. S. Lahey. 1,874,764; Aug. 30.
Window operating device. J. H. Davis. 1,874,465; Aug. 30.
Windshield and corner post construction, Automobile. J. D. Dyer. 1,875,227; Aug. 30.
Windshield cleaner arm and blade, Attaching together a. E. E. Pierce. 1,874,118; Aug. 30.
Windshield defroster. H. C. Haag. 1,874,510; Aug. 30.
Wing, Ribless. T. P. Wright. 1,874,685; Aug. 30.
Wiper, Windshield. W. H. Ketchledge and N. R. Wright. 1,874,758; Aug. 30.
Wiping device for coated wire, Adjustable. H. McGinnis. 1,875,084; Aug. 30.
Wireless communication. F. Schröter. 1,875,165; Aug. 30.
Wire spooling machine. W. D. Pierson. 1,874,206; Aug. 30.
Wood composition, Producing an artificial. L. Vezekenyi. 1,875,187; Aug. 30.
Wood preservation. M. Engelmann and W. H. Tisdale. 1,874,260; Aug. 30.
Wood surfaces, Finishing. E. C. Loetscher. 1,875,055; Aug. 30.
Wood veneers, Joining thin. E. C. Loetscher. 1,875,056; Aug. 30.
Woodworking machines, Knife grinder support for. L. T. Medholdt. 1,874,331; Aug. 30.
Wrench: *See*—
Jaw combination wrench.
Wrench. E. A. Shook. 1,874,817; Aug. 30.
X-ray screen, Revolving and stationary. M. Morrison. 1,874,577; Aug. 30.
X-ray shield. R. H. Wappler. 1,874,672; Aug. 30.
Yarn supporting, tensioning, and take up device. A. E. Stewart. 1,874,379; Aug. 30.
Yarns and filaments, After treatment of. K. T. Schaefer and J. L. Bitter. 1,875,299; Aug. 30.
Yoke. H. J. Lounsbury. 1,874,771; Aug. 30.

CLASSIFICATION OF PATENTS

ISSUED AUGUST 30, 1932

NOTE.—First number—class, second number—subclass, third number—patent number

1— 2: 1,874,622
2— 3: 1,875,143
8: 1,874,872
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3— 12: 1,874,183
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5— 83: 1,874,826
345: 1,875,121
360: 1,874,494
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9— 15: 1,875,061
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Disclaimers

1,765,742.—*George W. Schulz*, Cleveland, Ohio. BOOKKEEPER'S DESK. Patent dated June 24, 1930. Disclaimer filed July 11, 1932, by the assignee, *Yawman and Erbe Mfg. Co.*

Hereby enters this disclaimer to claim 15 of said patent which is in the following words, to-wit:

"15. The combination with a sheet metal desk of the class described comprising a rectangular body unit and a sheet metal top structure therefor substantially co-extensive with the vertical projection of the body at the rear and one lateral side thereof, but at the opposite side and forwardly of the rear, extending considerably beyond the lateral wall of the body to overhang the same leaving a cut-out rear corner at said opposite side and wherein the top structure has a low upstanding wall along the rear edge and along a portion of each contiguous lateral edge and wherein the top structure presents an edge of substantial thickness along the front including the laterally overhanging portion,—of means for forwardly extending the top structure, including said front edge, to provide a continuous open working surface of increased area considerably overhanging the front wall of the body, said means being included in the top structure and comprising a fixed rearward top surface member, a second top surface member of sheet metal extending substantially from the first-mentioned lateral edge to the lateral edge of the laterally overhanging portion and carrying an exposed downward thickness-simulating flange along substantially its entire front edge, and means on the top structure for slidably mounting the second surface member for reciprocation from a rearward position superposed upon the fixed surface member with the horizontal projection of the latter within said front flange, to a forward suspended position overhanging the front wall of the body, at which position any vertical offset between the fixed and slidable surface members is less than the height of said flange."

1,771,150.—*Earl P. Stevenson*, Newton, and *Harry A. Buron*, Boston, Mass. FIBROUS COMPOSITION AND METHOD FOR MANUFACTURING SAME. Patent dated July 22, 1930. Disclaimer filed July 9, 1932, by the assignee, *The Richardson Company*.

Hereby disclaims claim 15 of the said patent, except where the pulpable fibers, previous to the final dispersion step, are in a condition to readily take up water without agitation.

Disclaimer

Errata

In the disclaimer published November 3, 1931, 412 O. G., vol. 1, the number of the patent given as 1,754,504 should read 1,759,504.

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, July 13, 1932.*

Sheffield Pharmacal Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Delatone Company, Chicago, Ill., to effect the cancellation of the trade-mark registration of the Sheffield Pharmacal Co., 339 South Wabash Avenue, Chicago, Ill., No. 122,748, dated September 10, 1918, and the notice of such proceeding sent by registered mail to the said Sheffield Pharmacal Co. at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Sheffield Pharmacal Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Communications to the Patent Office

RULE 8. A separate letter should in every case be written in relation to each distinct subject of inquiry or application. Assignments for record, final fees, and orders for copies or abstracts must be sent to the Office in separate letters.

Condition of Applications Under Examination at Close of Business July 16, 1932

(Total number of applications awaiting action, excluding Trade-Mark Division, 76,531; Trade-Mark Division, 948. Oldest new case, Jan. 9, 1932; oldest amended, Jan. 9, 1932.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Apr. 4	Apr. 11	539
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Mar. 18	Mar. 20	979
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Mar. 21	Mar. 29	790
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	May 7	May 6	440
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Mar. 22	Mar. 24	466
4808 C	6. LEWERS, A. M., Carbon Chemistry	Jan. 20	Jan. 22	2,014
5725	7. JARBOE, C. G., Optics; Photography	Feb. 16	Feb. 16	1,509
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Feb. 17	Feb. 18	1,241
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Apr. 18	Apr. 18	852
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Feb. 11	Feb. 11	938
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Mar. 11	Mar. 9	662
7701	12. HENRY, C. C., Machine Elements	Mar. 29	Mar. 31	655
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Mar. 1	Mar. 1	1,163
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Mar. 28	Apr. 1	808
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Feb. 10	Feb. 10	2,047
5612	16. SPENCER, C. J., Telegraphy; Telephony	Mar. 16	Mar. 16	967
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Jan. 21	Jan. 21	1,399
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Mar. 17	Mar. 17	714
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Jan. 16	Jan. 19	1,703
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Mar. 24	Apr. 6	690
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Mar. 16	Mar. 17	918
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Mar. 16	Apr. 18	665
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Jan. 20	Jan. 18	920
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Mar. 16	Mar. 16	749
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Jan. 25	Feb. 1	1,467
5803	26. HODGES, J. S., Electricity, Generation; Motive Power	Jan. 18	Jan. 18	1,090
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Mar. 18	Mar. 20	1,064
4628	28. BENSON, A. R., Internal-Combustion Engines	Feb. 2	Jan. 29	1,324
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Jan. 16	Jan. 16	1,034
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Mar. 3	Mar. 21	921
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Jan. 16	Jan. 18	1,647
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Mar. 19	Mar. 19	901
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Jan. 18	Jan. 18	2,418
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Feb. 16	Feb. 17	901
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	May 16	May 16	510
7628	36. MORTON, O. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Jan. 21	Jan. 14	1,728
5899	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Jan. 26	Feb. 3	1,345
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Apr. 22	Apr. 22	258
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Jan. 16	Jan. 18	1,542
7880	40. OBERLIN, J. J., Receptacles	Feb. 20	Feb. 20	2,188
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Apr. 18	Apr. 19	738
5852	42. CUTTING, H. O., Electric Signaling	Jan. 25	Jan. 25	1,376
4586 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Mar. 1	Mar. 1	1,472
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Jan. 18	Jan. 18	1,937
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Mar. 16	Mar. 17	1,112
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Mar. 17	Mar. 17	699
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Feb. 27	Feb. 27	2,107
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Feb. 2	Feb. 3	908
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Jan. 16	Jan. 16	1,602
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Jan. 9	Jan. 9	2,218
5628	51. BACKUS, C. D., Radiant Energy	Feb. 16	Feb. 16	1,321
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Apr. 16	Apr. 19	841
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	May 2	May 3	548
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Jan. 16	Jan. 16	1,166
6883	55. BOWEN, S. T.—(Bread, Pastry, and Confection Making; Cutlery)	May 16	May 16	307
	(Designs)	June 22	June 16	199
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Jan. 27	Jan. 27	1,496
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Mar. 15	Mar. 16	683
5605	58. DOWELL, E. F., Abrading; Typewriting	Jan. 18	Jan. 18	1,210
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Jan. 11	Jan. 11	1,704
5806	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Jan. 16	Jan. 16	1,524
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Jan. 18	Jan. 18	1,445
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Jan. 20	Jan. 20	1,893
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Jan. 18	Jan. 18	1,540
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Mar. 22	Mar. 25	620
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Jan. 16	Jan. 16	1,099
2099 B	Trade-Marks, Labels, and Prints: F. A. RICHMOND—(Trade-Marks)	June 3	June 16	792
	(Labels and Prints)	June 16	July 2	156

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Peiler

No. 2,902. Decided April 4, 1932

PATENTABILITY—DOUBLE PATENTING.

Certain claims for improvements in glass feeding mechanism and methods *Held* unpatentable as not defining anything inventively different from what was claimed in applicant's prior patents.

APPEAL from the Patent Office. Affirmed.

LENROOT, *J.*, concurring.

Mr. Vernon M. Dorsey, Mr. S. F. Parham, and *Mr. L. G. Bates* for Peiler.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

The appellant has appealed from the decision of the Board of Appeals of the United States Patent Office, refusing to allow certain claims in his application, Serial No. 90,399½, filed February 24, 1926, for claimed improvements in glass feeding mechanism and methods. As the case is submitted to this court, refused apparatus claims 10, 12, 16, 38, and 41, and method claims 17, 18, and 26 are the only ones involved, the others having been eliminated by withdrawal, or otherwise.

The appellant has filed a series of applications in the Patent Office disclosing the subject matter of the invention in issue here. Two of these applications which have ripened into patents, were involved in our decision in *In re Peiler*, 18 C. C. P. A. (Patents) 1102, 409 O. G. 841, 48 F.(2d) 405. These patents are numbered 1,573,742 and 1,655,391, issued, respectively, on February 16, 1926, and January 3, 1928. The present application states that it is a division of the application in the last named patent above.

A description of the apparatus, so far as the same is material, was given by us in *In re Peiler*, supra, and will not here be repeated.

The involved claims were rejected by both tribunals in the Patent Office. The Board of Appeals made reference to the two Peiler patents hereinbefore mentioned, and to Story, 1,210,559, January 2, 1917. In deciding the matter, the Board called attention to the fact, which is admitted, that the specification and drawings of the parent Patent No. 1,655,391, and the application now before us are identical. It was thought by the Board that the claims in said patent probably fully protect the appellant in anything he claims here. Particularly, the Board was of opinion that claims 55 and 59 of the parent application, while somewhat broader and more generic than those here involved, covered the same inventive idea; that the methods of manipulating the stroke of the impeller suggested in the claims here involved, would be obvious to anyone skilled in the art on inspection and examination of the disclosures of the parent application, even if the specific disclosures relative thereto, which form the basis of the claims in issue, had been omitted. proceeding upon this theory, the Board felt that to allow the appellant's claims here would be to further and unduly prolong his monopoly.

Apparatus claim 10 and method claim 17 are as follows:

10. Apparatus for segregating molten glass into mold charges including a container for the glass having an outlet below the surface of the glass, means for periodically accelerating the gravity discharge of the glass through the outlet, means operating in timed relation to the accelerating means for retarding the gravity discharge of the glass through the outlet, and means for varying the said timed relation between the accelerating and retarding operations.

17. The method of feeding molten glass in mold charges, which comprises periodically accelerating and retarding in timed relation to each other gravity flow of glass through an outlet and suspending the issued glass beneath the outlet, severing a mold charge from each suspended mass, and changing the time of occurrence of the periodic accelerating impulses relatively to the retarding impulses to change the diameters of predetermined portions of the subsequently formed suspended mold charge masses.

The remaining claims have no substantial points of difference from those quoted.

Claims 55 and 59 of the parent application (Patent No. 1,655,391) are as follows:

55. Apparatus for feeding molten glass in a succession of freely hanging mold charge masses, comprising a glass container provided with a restricted well or impulsion chamber having an upper inlet in communication with a parent body of glass, a downwardly opening outlet, and a vertically reciprocating implement having its lower portion constantly in said impulsion chamber and alternately expelling and retracting glass through said outlet, without interrupting communication between the outlet and the inlet of said impulsion chamber.

59. A glass feeder for delivering glass mold charges of a variety of controlled sizes and shapes, including an enclosure defining a channel for flowing the glass from a furnace and having a discharge outlet near its outer end, an impeller extending down into the glass and reciprocating in line with said outlet to control the discharge of glass from said outlet, shears periodically closing and opening below said outlet, and a system of controls, including means for adjusting the upper and lower limits of the movement of said impeller, means for adjusting the vertical position of said shears, means for adjusting the relative time of operation of the impeller movements and of the shear movements, and means for controlling the temperature of the glass delivered to said outlet, all of the said controls being selected in relation to one another for mutual cooperation and acting in combination, to produce compact mold charges of workable glass below said outlet, to impart to said charges the particular weight, length and cross-sectional dimensions best suited to the molds which receive said charges, to maintain constant the selected weight and dimensions of the charges, and to change the weight and dimensions of the charges to suit a variety of molds.

The appellant thus states in his brief his position as to the involved claims:

The salient features of the inventions of the claims remaining on appeal, except claim 28, relate to the means for or steps of regulably controlling the upstroke and the downstroke of the plunger in each reciprocation with respect to each other and independently of each other so as to produce selectively various charge shaping effects. To this end, the invention of these appealed claims may be performed by the use of the plunger reciprocating mechanism, including the adjustable cam structure shown in Figs. 14 to 19, inclusive (R. side folio 38), described in the portion of the specification that begins in line 5 of record page 14 and extends through the first paragraph on record page 14, and any suitable arrangement of operating connections, conventional or otherwise, for utilising the rotary movements of the adjustable cam structure to effect cycles of reciprocation of the plunger, the only essential requirement being that the component upstroke and downstroke of each reciprocation shall be independently regulable.

* * * * * * *

Any mechanism, whether cam actuated or pneumatically operated, which would provide the required adjust-

ment between the component strokes or discharge accelerating and discharge retarding operations of the discharge controlling implement or means for the purpose just stated would fulfill the necessary requirements of the appealed claims, • • •.

• • • • • • •

These charge shaping adjustments which are possible with the particular cam-actuated plunger supporting, adjusting and operating mechanism whereby the rotary movements of the impeller cam are converted into reciprocations of the impeller are neither specified nor required for the performance of the appealed claims. On the contrary, they comprise distinctly different subjects matter or species of invention from which the inventions of the appealed claims are separable.

We take it from these statements, that appellant construes the claims in question to be broad, generic claims as to the adjustable control of the impeller, which would include any mechanism that would perform this function, whether it might be the device shown by appellant in his preceding patents or in his present pending application, or in some device entirely different, but performing the same functions. In other words, having claimed, as he states, a specific form in his Patent 1,655,391, he now makes a generic claim covering any form.

We are unable to discern wherein there is any inventive matter claimed in the rejected claims, in the mechanism for adjusting the operation of the impeller element, which is not sufficiently set forth in said claim 59 to give to the appellant adequate protection upon his inventive idea therein. The language "means for adjusting the upper and lower limits of the movement of said impeller," includes not only a manual adjustment of the cams upon the shaft, but also an adjustment by means of handles, worm gears, sectors, and beveled cog wheels, while the machine is in operation, or otherwise. Not only will it include all these possible elements, but the language is broad enough to include other mechanism not shown by the disclosure of the patent. Hence, if the appellant considers his present claims to be broad and generic, he has such a claim in his existing patent.

On the other hand, if it be insisted that the present claims are more specific than those in the parent patent, and hence show a patentable invention in that respect, we observe that in said claim 59, the appellant has claimed a reciprocating impeller and "means for adjusting the upper and lower limits of the movement of said impeller," while in said claim 10, for example, he has, in substance, claimed means for accelerating the discharge and means for retarding the discharge, in timed relation, and means for varying these relations.

We find ourselves in agreement with the following statement of the Board of Appeals:

• • • While it may be true that all of the claims of the patent are more generic as to the question of adjustment of the impeller and the shearing mechanism, the appealed claims are based upon the same apparatus as that disclosed in the patent. We do not have here two patentably distinct embodiments of an invention in which broad claims are placed in one application together with claims of one of the species and the claims of the other application are restricted to the other species. We see no reason why appellant could not have received any proper protection to which he was entitled, as to the subject matter now before us, in the parent case. Perhaps he has already received such protection, as the patent under discussion, as previously stated, contains broad claims. In any event it is our view that the various adjustments for which appellant seeks protection here are only the obvious ones which one skilled in the art might choose to make when operating the machine disclosed in the patent, in view of the teachings of that patent that the size and shape of the charge can be controlled by varying the timing of the impeller and the shears. Certainly it is to be presumed that the public will have received sufficient instruction as to its operation so that the results which will obviously follow from varying the time of movements of the up-and-down stroke of the impeller and of the severing mechanism may be understood.

The appellant, having disclosed or claimed no matter patentably distinct from that claimed in his existing patent, cannot have a second patent upon the same invention. *In re Robinson*, 18 C. C. P. A. (Patents) 1271, 411 O. G. 274, 48 F.(2d) 931; *In re Laughlin*, 18 C. C. P. A. (Patents) 1239, 411 O. G. 9, 48 F.(2d) 921; *In re Byck*, 18 C. C. P. A. (Patents) 1208, 410 O. G. 284, 48 F.(2d) 665; *In re Hargraves*, 19 C. C. P. A. (Patents)——, 416 O. G. 285, 53 F.(2d) 900.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

UNITED SHOE MACHINERY CORPORATION *v.* COMPO SHOE MACHINERY CORPORATION

Nos. 2,879, 2,880, 2,881. Decided February 29, 1932

1. TRADE-MARKS—DESCRIPTIVENESS—"COMPO" FOR SHOES AND FOR CEMENT FOR SHOES.

Evidence reviewed and held to establish that the term "Compo" is descriptive as applied to shoes and to shoe cement and therefore not registrable.

2. SAME—OPPOSITION AND CANCELLATION—SHOWING OF INTEREST.

A proceeding opposing the registration of a trade-mark and a proceeding asking for the cancellation of a registration are both intended "to bring about the same result, in so far as each provides a method of avoiding injury flowing from the existence of a registered trade-mark, and it seems clear to us that no greater degree of interest need be alleged or proved in one of such proceedings than in the other."

3. SAME—SAME—SAME.

"Certainly the person seeking to cancel a registration or oppose an application for registration must have a greater interest than a member of the general public who by such registration suffers no invasion of his rights and privileges. It is well understood in the application of equitable remedies that one who seeks such application is bound to show an interest in a suit personal to himself and not such an interest as he has only by virtue of being a citizen."

4. SAME—SAME—SAME—USE NOT ALWAYS NECESSARY.

"Under circumstances such as are shown in this case, we think it unnecessary for the opposer or applicant for cancellation to allege and prove any use of the term complained of. It is only necessary under such circumstances to show such interest as will justify the conclusion that damage to it will ensue if the use of such term by it or its customers in describing their goods is denied."

5. SAME—SAME—SAME—SAME.

Where both in the notice of opposition and in the petition for cancellation it was alleged that the trade-mark in question was descriptive as applied to shoes and shoe cement and that the opposer had made preparations for supplying shoe manufacturers with machines for making the type of shoe in question and with the cement to be used in their manufacture *Held* that a sufficient showing of interest had been made.

APPEAL from the Patent Office. Reversed.

Mr. A. D. Salinger and *Mr. Horace A. Dodge* for United Shoe Machinery Corporation.

Messrs. Watson, Bristol, Johnson & Leavenworth and *Mr. Ellis W. Leavenworth* for Compo Shoe Machinery Corporation.

BLAND, *J.*:

This case involves three appeals from the decision of the Commissioner of Patents, the first and second of which (Nos. 2,879 and 2,880) are opposition proceedings in which appellant opposed, in the first opposition, the registration by appellee of the word "Compo" as a trade-mark for adhesive shoe cement used in making "Compo" shoes, and in the second opposition, opposed the registration of the same trade-mark for a shoe cement softener.

The third appeal (No. 2,881) is a cancellation proceeding brought by appellant against the Bresnahan Shoe Company, for which its assignee, Compo Shoe Machinery Corporation, had been substituted, to cancel Trade-Mark No. 246,755, registered September 11, 1928, for the word "Compo" as a trade-mark for boots and shoes (first use alleged February, 1928).

The three cases involve substantially the same questions, are presented in a single record, are briefed together by the parties, and will be disposed of in a single opinion by this court. All three proceedings are grounded upon the proposition that the word "Compo" is descriptive and, therefore, not registrable as a trade-mark. The decision of this case, in view of our conclusions, involves not only a consideration of the descriptiveness of the term "Compo", but also the sufficiency of the petition for cancellation and the notices of opposition, and the sufficiency of the proof submitted. In view of the fact that we conclude that the pleadings and proof are sufficient, we think it will be helpful to first consider the descriptiveness of the term "Compo".

Appellee concedes that the term "Compo" was descriptive 50 years ago, but contends that such descriptive meaning of the term has "long since become obsolete and forgotten." There is no serious dispute between the parties at bar about the meaning and early use of the word "Compo". The term, as early as the seventies of the last century, when applied to shoes, was understood to mean a shoe with the sole cemented or glued to the upper. It was about a half century ago that shoe manufacturers, especially those in New England, were quite generally engaged in making shoes which they styled "Compo" shoes and which shoes were sold and dealt in as "Compo" shoes. As early as 1877, a patent was granted by the United States Patent Office for apparatus for pressing the soles of "Compo" shoes against the uppers. In the years 1878, 1879, and 1881, other patents for napping the fibers on shoe soles of "Compo" shoes and for sole pressing machinery for "Compo" shoes and for machinery for cementing shoe uppers and soles of "Compo" shoes were applied for and granted. These patents, containing frequent mention of the term "Compo" are set out in the record.

Appellant introduced into the record, letters, and extracts from trade journals, newspapers and directories, the dates of which range from 1873 to the time of taking testimony, and all of which contain frequent references to "Compo shoes," "Compo process," "Compoing shoes", "Compo work," "Compo cement," "Compo kettle," etc. Some of such printed matter was published in the years 1873, 1878, 1897, 1914, 1923, 1924, 1927, and 1928. The record would seem to justify the conclusion that between 1878 and 1928 there were periods consisting of probably a dozen years during which the term, if used at all, was used infrequently.

The manufacture and sale of "Compo" shoes was discontinued, apparently on account of the fact that no suitable cement or suitable cementing machinery had been devised with which a shoe meeting the commercial requirements could be produced. With the advent of pyroxylin or celluloid cements, for attaching the out sole to the shoe, and the improvement in compressing machinery, interest in the "Compo" shoe was revived and about the year 1914 a German concern, Atlas Werke, succeeded in interesting American shoe manufacturers in its machine and celluloid cement for making the "Compo" shoe. It, however, adopted as a trade-mark for its machines, cement and shoes, the word "Ago". For some reason, not necessary to discuss here, its venture was not very successful.

In 1928 the Bresnahan Shoe Company began the manufacture of "Compo" shoes with machinery and equipment of its own devising, and caused to be registered the word "Compo" as a trade-mark for such shoes. Shortly thereafter, it assigned its business and "Compo" trade-mark for boots and shoes to appellee, which has since that time been engaged in supplying shoe manufacturers with machinery and cement for making "Compo" shoes. The Compo Shoe Machinery Corporation does not make shoes, but deals with shoe maufacturers, granting licenses for the use of the trade-mark "Compo" on the product manufactured with their machinery and cement.

The United Shoe Machinery Corporation, appellant, is a later arrival in the same field and supplies shoe manufacturers with machinery and cement for making "Compo" shoes.

The Examiner of Interferences in the cancellation proceeding held that the term "Compo" in the registered trade-mark was descriptive; that appellant had sufficiently alleged and proved injury, and recommended that the trade-mark be cancelled. In the opposition cases he held that the notices were insufficient, since there was no allegation of use of the trade-mark by the opposer, relying upon *Andrews Radio Co. v. Timmons Radio Products Corp.*, 1926 C. D. 39, 345 O. G. 798. On account of the insufficiency of the notices, he dismissed the opposition and adjudged that the applicant was entitled to registration.

The Commissioner of Patents affirmed the action of the Examiner of Interferences as to the opposition proceedings, but reversed his decision in the cancellation proceeding, holding that the petitioner had not alleged nor shown sufficient interest to entitle it to intervene, and the petition was dismissed and it was adjudged that the registration should not be cancelled.

[1] We think under the evidence in this case that the term "Compo", when applied to the shoes, shoe cement, and cement softener upon which the trade-mark was used, is descriptive of such merchandise. On this record the term never became obsolete so as to destroy its descriptive character. The mere fact that "Compo" shoes were not dealt in nor referred to by name to any great extent during a period of many years does not justify the conclusion that the term had become obsolete when appellee adopted it as a trade-mark.

The controlling facts of the case at bar are very different from those in the case of *Le Blume Import Co.* v. *Coty*, 293 Fed. 344 (chiefly relied upon by appellee), where the word "Lorigan" was held to be registrable as a trade-mark for perfume. "Lorigan" and "Origan" meant the same. "Origan" was the name of a rare plant. The principal base of Coty's perfume was not the essence from the origan plant, although it was claimed to be the principal basis of other perfumes. The court pointed out the equities of Coty who, unlike the appellee in the case at bar, was the originator of the term as applied to perfume, and also called attention to the suggestive rather than the descriptive character of the term, and applied the doctrine of secondary meaning. The Examiner of Interferences in the cancellation proceedings at bar thoroughly considered that case and aptly distinguished it from the case at bar.

One of appellee's witnesses claimed to have "originated" the term "Compo". Upon this record it can hardly be said that he "originated" it; at most he only brought it into more extensive use. If appellee's position in this case is correct, a manufacturer of women's wearing apparel could "originate" the term "bustle" and get a monopoly upon the term, since bustles, as far as we know, are no longer used and have not been in use nor have they been often referred to in literature or conversation during the greater portion of the last half century. If appellee's contentions with respect to a trade-mark right in the word which it claims to be obsolete were approved by the courts, the problems of the Patent Office and the courts in determining what words were "obsolete and forgotten" would increase in frequency and perplexity. A trade-mark, as was held by the United States Supreme Court in *Bourjois & Co.* v. *Katzel*, 260 U. S. 689, 692, 312 O. G. 187, carries with it a monopoly, as far as it goes, no less complete than does a patent. Such monopolistic rights must rest on foundations more secure than those upon which appellee relies.

While no one has offered any explanation as to just why the word "Compo" was first applied to shoes, it is clear, upon this record, that for half a century when the term was applied to shoes, it was understood to mean shoes with cemented soles. We note, however, that the noun "compo" is a word of the English language and is defined in the dictionary.

Appellant's witness Brown testified that he had made "Compo" shoes during a period from 1876 to 1892 and dealt in them by use of the term "Compo shoes". He recalled the names of at least eight other shoe manufacturers, located near him, who did likewise. If appellee's registered mark is a valid one, witness Brown could not again engage in the manufacture of "Compo" shoes and safely use the term "Compo" in his dealings.

For the reasons hereinbefore stated, and without further discussing the many other pertinent reasons and suggestions afforded by the record, supporting our conclusions herein, we must hold that the term "Compo" is descriptive and cannot be appropriated as a registered trade-mark.

We now proceed to a discussion and decision of the question of the sufficiency of the petition for cancellation and notices of opposition and the proof thereunder.

In the cancellation proceeding, the Examiner of Interferences held the petition to be sufficient, and convincingly and clearly pointed out the difference in the character of allegation and proof required in a case where a cancellation was sought of a descriptive term by reason of the fact that such registration was a restraint upon the use of what was publici juris, and in a case where, by reason of confusion in trade, the cancellation was sought of a mark in which both parties claimed ownership and which both parties claimed pointed to the origin of their goods.

We went into this question quite thoroughly in *Model Brassiere Co., Inc.*, v. *Bromley-Shepard Co., Inc.*, 18 C. C. P. A. (Patents) 1294, 49 F.(2d) 482, 411 O. G. 538, and much that was said there need not be repeated here.

[2] Sections 6 and 13 of the Trade-Mark Act of February 20, 1905, under which these proceedings were instituted, provided respectively that anyone may oppose the registration of a mark "who believes he would be damaged by the registration", and that any person may apply at any time for cancellation whenever he "shall deem himself injured by the registration of a trade-mark in the Patent Office." One is a provision for preventing a registration which would result in his damage and the other is to cancel such a mark after it has been registered, if he deems himself injured. Obviously, both proceedings are intended to bring about the same result. in so far as each provides a method of avoiding injury flowing from the existence of a registered trade-mark, and it seems clear to us that no greater degree of interest need be alleged or proved in one of such proceedings than in the other.

The appellant here is not seeking to cancel the registered trade-mark "Compo" or to oppose the registration of the same for the purpose of determining ownership of the term or of acquiring the exclusive right to use the same, but it is seeking to prevent another from being in a position to legally claim prima facie ownership and right of exclusive use.

[3] The statute gives *any person* who believes he would be damaged the right to oppose, and *any person* who shall deem himself injured the right to petition for cancellation. These provisions are very broad and should be broadly construed. Of course, Congress did not mean to grant these rights to a mere intermeddler—to one who had no interest in the use of the term, and thereby authorize such a person to interfere in the affairs of others and in the business of the Patent Office. Certainly the person seeking to cancel a registration or oppose an application for registration must have a greater interest than a member of the general public who by such registration suffers no invasion of his rights and privileges. It is well understood in the application of equitable remedies that one who seeks such application is bound to show an interest in a suit personal to himself and not such an interest as he has only by virtue of being a citizen. *Tyler* v. *Judges of the Court of Registration*, 179 U. S. 405, 406; *Massachusetts* v. *Mellon*, 262 U. S. 447, 488. We know of no reason why this rule does not apply here.

But the interest shown by the appellant here certainly is not the interest of an intermeddler or one whose rights are not vitally at stake. The petition for cancellation, filed in February, 1929, and amended in May, 1929, alleged that petitioner "will be seriously damaged by the said registered trade-mark" for reasons which it then proceeded to enumerate. It alleged that it was a corporation engaged in manufacturing, and supplying to users, shoe machinery and various findings and supplies used in the manufacture and repair of boots and shoes; that for some time past it had been engaged in the development of machinery for making "Compo" shoes with the definite plan of supplying shoe manufacturers with such machines and with the necessary cement for making such shoes; that the development of such machines had at that time been practically completed and that such a machine had already been put to use in a shoe factory; that—

other of these machines are to be manufactured by applicant immediately and put into use;

that prior to the filing of the application for cancellation, applicant and its customers or prospective customers had used the word "Compo" as a descriptive adjective in connection with the shoes manufactured or to be manufactured on applicant's machines; that for a great many years it had been and then was selling to shoe manufacturers various cements and adhesives used in the manufacture of boots and shoes, including cements that were capable of use in the making of "Compo" shoes, and that the applicant intended in the future to supply to the shoe manufacturers such cements and adhesives as were particularly adapted for the making of "Compo" shoes. The petition then specifies the manner in which it will be damaged by its customers refusing to use its machinery unless they can call the shoes by their right name, and that it would undoubtedly be precluded from the use of the word "Compo" in connection with its machines and cement except at the risk of infringing such trade-mark.

The proof introduced goes further than to prove the allegations of the petition since by the time the proof was taken much advancement had been made in placing its machines and cement upon the market.

In its notices of opposition which were filed January 8, 1929, it alleged that it believed it would be seriously damaged by the registration of the proposed trade-mark and assigned as reasons why it would be damaged, that it was a corporation engaged in the business of manufacturing, and supplying users, shoe machinery and various findings and supplies used in the manufacture and repair of boots and shoes; that during the preceding year it had begun the development of machines for making "Compo" shoes with the definite plan of supplying shoe manufacturers such machines and the necessary cement for making such shoes on such machines and that, at the time of filing the application, the development of such machines was nearly completed and that at that time it expected to put such machines in use in a shoe factory on or about February 1, 1929; that other machines were to be manufactured by the opposer and immediately put into use; that it had been for a great many years, and was then, selling to shoe manufacturers various cements and adhesives used in the manufacture of boots and shoes, including cements capable of use in the manufacture of "Compo" shoes; and that it intended to supply to shoe manufacturers generally machinery and cements particularly adapted for use in connection with "Compo" shoes and in connection with machines that opposer had developed for that purpose.

The proof in the opposition proceedings and the application for cancellation was the same. Appellant showed that in the exchange of correspondence between its officers it had used the term "Compo" in connection with shoes in 1914. This, of course, was not a trade-mark use nor a use in the trade generally, but it is of value to show that in connection with its business in which it was engaged at the time it filed its application, it was desirable to use and probably necessary to use this term in order to fully describe this particular kind of shoe making machinery and the product thereof.

The proof shows that its definite plan of supplying shoe manufacturers with such machines and cement upon which it was proceeding at the time of filing the notices and petition, was carried out. Not only was appellant justified in believing that it would be damaged and in deeming that it was injured by appellee's asserted monopoly of the term "Compo", but we think it has alleged and shown a state of facts where damage was certain to result to it if appellee's claimed monopoly was not successfully disputed.

[4] Under circumstances such as are shown in this case, we think it unnecessary for the opposer or applicant for cancellation to allege and prove any use of the term complained of. It is only necessary under such circumstances to show such interest as will justify the conclusion that damage to it will ensue if the use of such term by it or its customers in describing their goods is denied. *Modern Brassiere Co. Inc.* v. *Bromley-Shepard Co., Inc.*, supra.

[5] This is not a case of a party who is not en-

gaged in the "Compo" shoe machine and cement business and who only contemplates going into it in the future, and has no real interest in the business at the time of filing the application, seeking to clear the registration books of descriptive terms to which it may find objection. Those who are engaged in trade have the right to freely use, in connection with their business, terms which describe their goods and they and their customers should not be handicapped in such use by the threat of invalid registrations, and those who are so engaged are warranted in taking advantage of their statutory right to remove such threat "at any time" when they are justified in the belief that damage will ensue to such business by reason of its natural development and expansion being hampered.

We said in *Model Brassiere Co., Inc.*, v. *Bromley-Shepard Co.* supra:

> As long as the word "ensemble" is a registered trade-mark, it is a threat, not only against the party who manufactures and sells merchandise like that of the parties to this suit, but to all who buy them for the purpose of resale. Its continuance as a registered trade-mark, which mark appellant urges is prima facie legal, thus has the tendency to interfere with and hamper the commerce of the country and the clearly defined rights of tradesmen. See *Electro Steel Co.* v. *Lindenberg Steel Co.*, 43 App. D. C. 270, 5 T. M. Rep. 295, 275 O. G. 977.

That appellee was not required to show use on the date the petition was filed, and that the record shows injury to appellee, and its right to petition is supported by *Andrews Radio Co.* v. *Timmons Radio Products Corp.*, supra; *Elishewitz* v. *Leyser Green Co.*, 47 App. D. C. 193, 247 O. G. 479, 8 T. M. Rep. 34; *Hydraulic Press Brick Co.* v. *Hocking Valley Products Co.*, 120 Ms. Dec. 196, 7 T. M. Rep. 155; *Electro Steel Co.* v. *Lindenberg Steel Co.*, supra. While we are of the opinion that the petitioner was not required to show that he used the term on the date the petition was filed, he is, of course, required to show a statement of facts from which it may be found that he was being injured at that time. He would have no right to complain about the registration of the offending mark if, at the time he filed his petition, he was not being injured by it. *Elishewitz* v. *Leyser Green Co.*, supra.

In *Elishewitz* v. *Leyser Green Co.*, 247 O. G. 479, 47 App. D. C. 193, the Court of Appeals of the District of Columbia approved the finding of the Assistant Commissioner with reference to a descriptive trade-mark in which the Commissioner used the following language:

> The petitioner for cancellation shows injury by the registration, though injury will be presumed to follow the improper registration of any descriptive word.

While we have not had the exact questions before us that were before the Commissioner of Patents in the Elishewitz case, supra, and in *Marinello* v. *Plough Chemical Co.*, 151 Ms. Dec. 311, 15 T. M. Rep. 541, and *Fleischman Co.* v. *Anderson*, 140 Ms. Dec. 488, 12 T. M. Rep. 474, and have not found it necessary to pass upon the same state of facts as were therein involved, we think these decisions are predicated upon a correct view of the law on the question now before us.

In the Marinello case, supra, it was held:

> Nor is it necessary, in opposing the registration of a descriptive mark, to show use of the mark; it is sufficient that the opposer is a dealer in the goods described by the mark as injury will be presumed to follow the improper registration of any descriptive word. *Fleischman Co.* v. *Anderson*, 140 Ms. D. 488 [12 T. M. Rep. 474]. Clearly the opposer is a dealer in the goods described by the applicant's mark.

In the Fleischman Co. case, supra, it was said:

> Since this is a descriptive mark, a dealer in goods properly described by the mark may oppose. "Injury will be presumed to follow the improper registration of any descriptive word."

Furthermore, the statement of facts contained in this record, we think, makes the rule laid down in *Canal Co.* v. *Clark*, 13 Wall. 311, 323, applicable here. It was there said:

> No one can claim protection for the exclusive use of a trade-mark or trade-name which would practically give him a monopoly in the sale of any goods other than those produced or made by himself.

For the foregoing reasons we conclude that the trade-mark sought to be cancelled and the mark sought to be registered are descriptive of the goods upon which they were to be used and that the appellant in its cancellation and opposition proceedings has sufficiently alleged and abundantly proved the elements of damage contemplated by the statute, and that it is a proper party in interest.

The decisions of the Commissioner of Patents in the opposition proceedings, dismissing the oppositions and adjudging the applicant entitled to registration, are reversed, and his decision in the cancellation proceeding, reversing the decision of the Examiner of Interferences, and adjudging that the registration of appellee should not be cancelled, is reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE MULDOON

No. 2,922. Decided April 4, 1932

PATENTABILITY—DESIGN—ELECTRIC LIGHT SOCKET.

Design for an electric light socket *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

Messrs. Gifford & Scull and *Mr. Chas. S. Grindle* for Muldoon.

Mr. T. A. Hostetler for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying appellant's application for a patent for an alleged invention relating to a design for an electric-light socket.

The claim is:

> The ornamental design for an electric light socket, as shown.

The references are: Both, Design, 68,609, November 3, 1925. Catalog of Bryant Electric Co., Bridgeport, Conn., page 92, Figs. 131 and 102.

The patent to Both shows a plural—two-way—socket. The side socket extends at an angle of about 45 degrees. The body of the socket is ornamented by flat panels arranged vertically, and extending from an externally threaded portion at one end to an externally threaded portion at the other end. The side socket is similarly ornamented.

Figs. 131 and 102 in the catalog reference show plural or two-way sockets, the side sockets of which extend at right angles to the main body portion.

Appellant's design differs from the references in contour, and has two side sockets extending at right angles from opposite sides of the middle portion of the main body. The surface at the middle of the main body is smooth. Corrugated panels or facets of varied lengths, which extend vertically both above and below the smooth surface of the main body, are so arranged as to give the socket a very ornamental appearance.

The Board of Appeals, in affirming the decision of the Primary Examiner, said that the patent to Both disclosed "the character of a panel or facet surface ornamentation disclosed by the applicant."

We are unable to concur in this view.

As hereinbefore stated, the patent to Both shows flat panels arranged vertically and extending, without interruption, substantially the entire length of the main body and on the side socket. Appellant's electric-light socket, however, is ornamented with corrugated panels, differing in length, and extending vertically on the main body both above and below a smooth surface.

The Patent Office tribunals also concurred in holding that it required nothing more than the skill of the designer or artisan to so modify the references as to obtain appellant's design.

That appellant's design is both novel and ornamental is not questioned by the Patent Office tribunals nor by the Solicitor of Patents. Therefore, the sole question before us is whether the exercise of the inventive faculties was required to produce it.

After giving the matter careful consideration, we find ourselves out of harmony with the views expressed by the Board of Appeals. The references show electric-light sockets, and appellant's design is for an article of like character, but there the similarity ends. We are of opinion that appellant's design is not suggested by the references; that it is not only substantially different from them, but produces a substantially different æsthetic effect; and that it involves invention.

For the reasons stated, the decision of the Board of Appeals is reversed.

Reversed.

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[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

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1,125,513, A. C. Graham, Well pipe perforator, D. C., S. D. Calif. (Los Angeles), Doc. 5394–J, *A. C. Graham* v. *Shell Oil Co. et al.* Dismissed with prejudice June 14, 1932.

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1,782,730. (See 1,377,669.)

1,793,673, E. V. Camp, Resilient traffic guard, filed June 13, 1932, D. C., M. D. Tenn. (Nashville), Doc. E 508, *E. V. Camp* v. *R. L. Stockard & Son, Inc.*

1,796,855, R. H. Ahlers, Electrical condenser; 1,815,496, W. A. Chryst, Ignition apparatus; 1,830,907, C. H. Kindl, Electrical condenser, filed June 18, 1932, D. C., E. D. N. Y., Doc. E 6392, *Delco-Remy Corp.* v. *Preferred Electric & Wire Corp.* Same, filed June 20, 1932, D. C., E. D. N. Y., Doc. E 6403, *Delco-Remy Corp.* v. *P. Sorensen Mfg. Co., Inc.* Same, filed June 21, 1932, D. C., E. D. N. Y., Doc. E 6411, *Delco-Remy Corp.* v. *Automotive Specialty Corp.* Same, D. C., S. D. N. Y., Doc. E 69/175, *Delco-Remy Corp.* v. *Guaranteed Parts Co., Inc.* Doc. E 69/182, *Delco-Remy Corp.* v. *K. E. M. Mfg. Co., Inc.*

1,798,751. (See 1,601,146 (*a*).)

1,810,337, C. A. Bergmann, Loud speaker, filed June 17, 1932, D. C., S. D. N. Y., Doc. E 69/108, *C. A. Bergmann* v. *Davega, Inc.*

1,815,496. (See 1,796,855.) 1,825,720. (See 1,272,056.)

1,828,533, H. W. Hoffmann, Full fashioned stocking and method of producing same, filed June 17, 1932, D. C., S. D. N. Y., Doc. E 69/77, *Ajax Hosiery Mills, Inc.*, v. *Gimbel Bros., Inc.*

1,830,907. (See 1,796,855.)

1,833,225, Neimeyer & Brubaker, Tire, filed June 16, 1932, D. C., N. D. Ohio, E. Div., Doc. E 4321, *H. F. Freeman* v. *Seiberling Rubber Co.*

1,835,019. (See 1,601,146 (*a*) and (*b*).)

1,836,391. (See 1,695,557.)

1,841,800, E. M. Gale, Feeder for threading machines, filed June 14, 1932, D. C., N. D. Ala. (Birmingham), Doc. 738, *W. H. North* v. *E. M. Gale et al.*

1,851,919. (See 1,377,669.)

1,853,846, F. L. Borchert, Terminal puller, D. C., N. D. Calif. (San Francisco), Doc. 1 3267–S, *The Tagit Co. et al.* v. *H. W. Fowler* (*Fowler Tool & Specialty Co.*). Decree for plaintiff June 9, 1932.

Re. 18,276. (See 1,272,056.)

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,721,640, L. L. Ruggles, Automatic telephone system, decided June 15, 1932, claims 4, 5, 6, 10, 12, 13, 14, 15, 16, and 17.

Pat. 1,750,483, A. J. Michelin, Vehicle wheel, decided July 7, 1932, claim 1.

Pat. 1,787,064, W. S. Calcott and W. A. Douglass, Method for retarding the deterioration of rubber, decided July 0, 1932, claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, and 18.

Pat. 1,789,474, H. R. Orwick and E. J. Bognar, Grooved refractory lining, decided July 9, 1932, claims 1 and 2.

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 2, 1932

[VOL. 421. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 327,945. RAY FUEL COMPANY, Detroit, Mich. Filed June 13, 1932.



The design being lined for red and yellow. Exclusive appropriation of the words "Hi-Heat Charcoal Bri-Kets" is disclaimed except when used in connection with the mark shown on the drawing.

For Charcoal.

Claims use since Mar. 31, 1932.

CLASS 2

Receptacles

Ser. No. 324,292. H. LEVINE, doing business as H. Levine Ccoperage, Los Angeles, Calif. Filed Feb. 18, 1932.



Applicant makes absolutely no claim to the representation of the keg, except in the relation shown in the drawings.

For Barrels and Kegs.

Claims use since January, 1931.

Ser. No. 326,178. GEORGE E. DAMROW, Brooklyn, N. Y. Filed Apr. 16, 1932.

PIE-PAK
TRADE MARK
CONTAINER

All the words are disclaimed apart from the mark as shown for the purpose of the Trade-Mark Act.

For Paper Cartons.

Claims use since Mar. 5, 1932.

Ser. No. 327,775. ST. LOUIS BASKET & BOX CORPORATION, St. Louis, Mo. Filed June 6, 1932.

CIRCLE

For Fiberboard Boxes.

Claims use since May 21, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 326,012. JOHN W. GOTTSCHALK MFG. CO., doing business as Metal Sponge Sales Corporation, Philadelphia, Pa. Filed Apr. 12, 1932.



No claim is made to the pictorial representation of the goods apart from the other features of the mark.

For Abradants Consisting of a Metallic Wire Used for Cleaning and Polishing Kitchen Utensils.

Claims use since December, 1931.

Ser. No. 326,492. OTTAWA PRODUCTS COMPANY, Toledo, Ohio. Filed Apr. 25, 1932.

OPTICLEAN

For Novelty Article Comprising a Tubular Receptacle Containing Both a Fluid and a Wiping Element Capable of Use for Cleaning Glass Such for Instance as Eye-Glass Lenses.

Claims use since Apr. 12, 1932.

Ser. No. 327,657. OSBORNE F. HATCH, doing business as Lee Products Co., Lee, Mass. Filed June 2, 1932.

LEE CLEANSER
LEE PRODUCTS CO
LEE, MASS.

No claim is made to the words "Lee Cleanser" and "Lee, Mass." apart from the mark as shown.

For Cleanser for General Household and Laundry Uses.

Claims use since Apr. 1, 1932.

Ser. No. 328,131. LEON R. MACKENZIE, Des Moines, Iowa. Filed June 20, 1932.

AMULCO

For Soap.

Claims use since September, 1931.

CLASS 5

Adhesives

Ser. No. 327,883. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y. Filed June 10, 1932.



For Rubber Adhesive.

Claims use since Mar. 23, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 318,115. EDWARD E. RICE, doing business as Nu-Know-U-Well Medicine Company, Elmira, N. Y. Filed Aug. 18, 1931.



The trade-mark consists in a pen and ink portrait of Edward E. Rice attired in a baseball uniform.

For Liniment for External Use in Treating Sprains, Torn Ligaments, Running Sores, Cuts, Bruises, and Soreness.

Claims use since Jan. 1, 1930.

Ser. No. 324,285. THE GLAZO COMPANY, INC., New York, N. Y. Filed Feb. 18, 1932.



The lining shown on the drawing is used to indicate zones of contrasting color which are not restricted to any particular color. The shape of the panels left for descriptive matter regarding the goods is shown in dotted lines, since these panels form no part of the trade-mark and may be varied in size and shape. The representation of the carton per se being disclaimed, no common law rights in said representation of the carton being hereby disclaimed.

For Nail Polish and Enamel, Liquid Nail Polish Remover, and Cuticle Oil.

Claims use since January, 1928.

Ser. No. 326,572. THE AYER COMPANY, Lowell, Mass. Filed Apr. 28, 1932.

VITO SALVE

No claim is herein made to the word "Salve" apart from the mark as shown.

For Irradiated Medicated Salve for Use in the Treatment of Skin Troubles Arising from Infection on the Surface as Well as Due to Internal Causes.

Claims use since Apr. 13, 1932.

Ser. No. 327,591. MILTON H. KLEIN, doing business as Tipona Company, Cleveland, Ohio. Filed May 31, 1932.

Tipona

For Medicinal Preparation to be Taken Internally for Reducing Weight.

Claims use since May 18, 1925.

Ser. No. 327,626. D C A DRUG STORES INC., Portland, Oreg. Filed June 1, 1932.

NUSEP

For Antiseptic, Deodorant, and Prophylactic.

Claims use since May 15, 1931.

CLASS 12

Construction Materials

Ser. No. 327,040. THE BRUNSWICK-BALKE-COLLENDER COMPANY, doing business as Phoenix Slate Company, Wilmington, Del., and Chicago, Ill. Filed May 13, 1932.

PHOENIX

For Construction Materials Composed of Slate—Namely, Slate Roofing, Slate Partitions for Building, and Slate Sidewalks.

Claims use since Jan. 1, 1910.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 313,805. JOSEPH A. SHARP, doing business as Red Head Products Co., Cleveland, Ohio. Filed Apr. 25, 1931.



The representation of the boiler and plug and the descriptive slogan "Stop That Leak" are disclaimed apart from the mark as shown.

For Boiler Repair Plugs.

Claims use since Oct. 25, 1930.

Ser. No. 327,327. WALDES KOH-I-NOOR, INC., Long Island City, N. Y. Filed May 21, 1932.

Kover-Zip

For Slide Fasteners.

Claims use since Feb. 28, 1932.

Ser. No. 327,695. KEYSTONE STEEL & WIRE COMPANY, Peoria (South Bartonville), Ill. Filed June 3, 1932.



The mark consists in arbitrarily applying a red band to each of the twisted sections of the stay for a portion of their length at one end of the stay. The representation

of the twisted wire fence stay appearing on the drawing is merely to define the position and application of the color marking to a stay of this character and forms no part of the trade-mark per se.

For Twisted Wire Fence Stays.

Claims use since May 10, 1932.

Ser. No. 327,706. PROVIDENCE FITTINGS COMPANY, INC., Lockport, N. Y. Filed June 3, 1932.

FAB

For Metal Pipe Fittings.

Claims use since May 23, 1932.

Ser. No. 327,726. BOSTON GEAR WORKS, INC., North Quincy, Mass. Filed June 4, 1932.

BG

For Chains for Sprocket Wheels.

Claims use since Dec. 15, 1915.

CLASS 15

Oils and Greases

Ser. No. 325,382. AITKEN AND MCDONALD COMPANY, Beaumont, Tex. Filed Mar. 18, 1932.

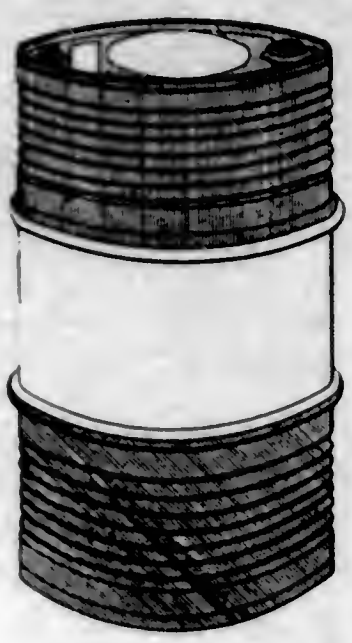
FILTERED GASOLINE

No claim is made herein to the words "Filtered Gasoline" apart from the mark shown in drawing.

For Filtered Gasoline.

Claims use since Mar. 1, 1932.

Ser. No. 325,963. WOLVESINE-EMPIRE REFINING COMPANY, Wilmington, Del., and New York, N. Y. Filed Apr. 9, 1932.



The trade-mark consists in a design formed by placing circumferentially of the lateral surface of the drum or barrel containing the goods, a band of red at one end, a band of green at the other end, and a band of white between them, each color covering about one-third of such lateral surface. No claim is made to the representation of the drum or barrel.

For Lubricating Oils.

Claims use since June, 1930.

Ser. No. 327,964. THE AMERICAN OIL COMPANY, Baltimore, Md. Filed June 14, 1932.

ARTEX

For Motor Oils and Greases, Auto Oils and Greases for Lubricating Purposes, Oil and Greases for General Lubricating Purposes, Gasoline; Motor Fuel—Namely, Combinations of Gasoline and Other Elements Mixed Therewith, Used in the Place of Gasoline and Kerosene.

Claims use since Sept. 1, 1931.

Ser. No. 328,140. STRAUSS STORES CORPORATION, Brooklyn, N. Y. Filed June 20, 1932.

Travelene

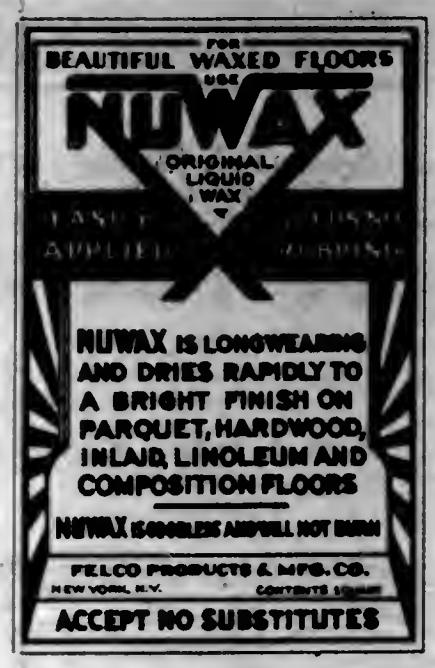
For Lubricating Oils Sold in Sealed Cans.

Claims use since May 9, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 326,313. JACK FELDMAN, doing business as Felco Products & Mfg. Co., New York, N. Y. Filed Apr. 19, 1932.



All of the wording appearing on the drawing is hereby disclaimed apart from the other features of the mark as shown, except the name "Felco Products & Mfg. Co."

For Prepared Liquid Wax.

Claims use since Mar. 3, 1931.

Ser. No. 327,990. THE SELIG COMPANY, Atlanta, Ga. Filed June 14, 1932.

O-BRITE-O

For Liquid Wax for Use on Various Kinds of Floors and Painted or Varnished Surfaces.

Claims use since Aug. 18, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 327,032. SOCIÉTÉ GÉNÉRALE AÉRONAUTIQUE, Paris, France. Filed May 12, 1932.



For Automobiles, Vehicle Bodies, Bicycles and Tricycles, Motor Cycles, and Constructive Parts Thereof; Airplanes, Flying Boats, and Constructive Parts Thereof; Row-Boats, Sail Boats, Motor Boats, Yachts, and Constructive Parts Thereof.

Claims use since Feb. 11, 1930.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 299,653. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio. Filed Apr. 29, 1930.

Auto-Lite

For Storage Batteries.

Claims use since Mar. 19, 1930.

Ser. No. 314,248. PRICE BATTERY CORPORATION, Philadelphia, Pa. Filed May 6, 1931.



Applicant disclaims the words "Super," and "Power Plates" apart from the mark shown in the drawing.

For Storage Batteries.

Claims use since March, 1926.

Ser. No. 315,633. THE CROSLEY RADIO CORPORATION, Cincinnati, Ohio. Filed June 10, 1931.

MOTO-IRON

No claim is made for the word "Iron" apart from the mark as shown in the drawing.

For Electrically Operated Sadirons for Domestic Use.

Claims use since May 18, 1931.

Ser. No. 323,120. JOHN L. BIGGS, Chicago, Ill. Filed Jan. 18, 1932.

HOT BUNNIE BOO

For Electrical Cooking Devices.

Claims use since July 1, 1931.

Ser. No. 326,899. HICKOK OIL CORPORATION, Toledo, Ohio. Filed May 9, 1932.

HISPEED

For Batteries, Cables for Electric Circuits, and Parts Thereof.
Claims use since August, 1930.

CLASS 22

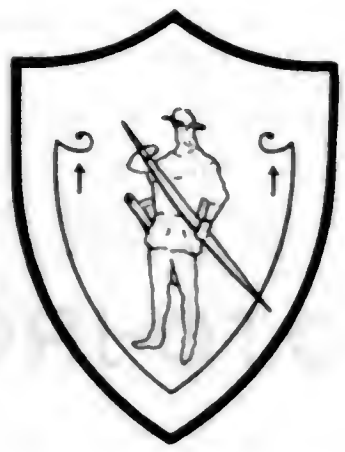
Games, Toys, and Sporting Goods

Ser. No. 327,215. HARRINGTON E. DRAKE, Newark, N. J. Filed May 18, 1932.

ROLL-MEE

For Coin-Controlled Ball-Projecting Amusement Devices.
Claims use since May 14, 1932.

Ser. No. 327,623. THE ARCHERS COMPANY, Pinehurst, N. C. Filed June 1, 1932.



For Bows, Arrows, Quivers, and Arm Guards.
Claims use since August, 1929.

Ser. No. 328,273. THE HORTON MANUFACTURING COMPANY, Bristol, Conn. Filed June 24, 1932.

BLACK WONDER

For Fishing Lines.
Claims use since 1906.

CLASS 23

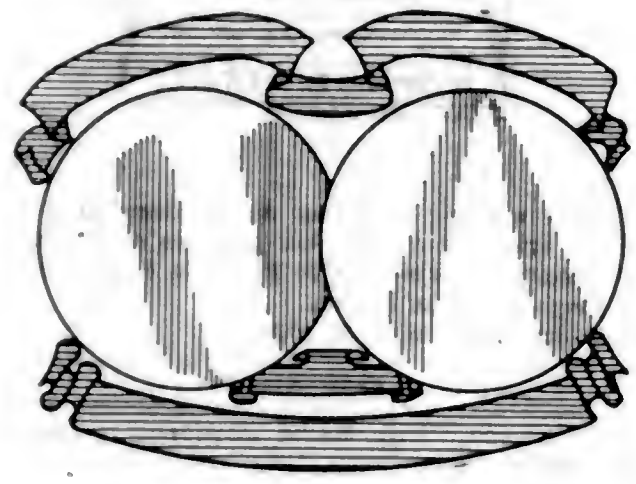
Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 325,351. U. S. SLICING MACHINE COMPANY, La Porte, Ind. Filed Mar. 21, 1932.



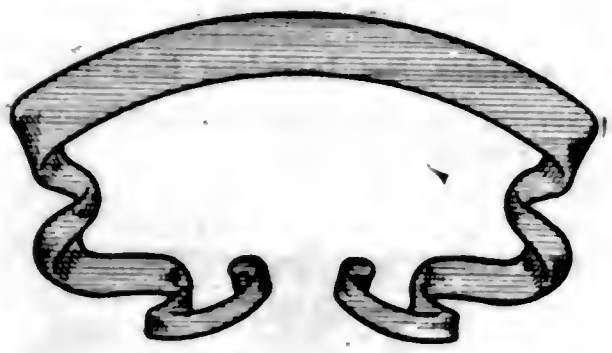
For Meat and Bread Slicing Machines and Parts Thereof as Well as Equipment for Repairing and Maintaining Slicing Machines in Operative Condition—Namely, Necessary Wrenches, Screw Drivers, Pliers, Needle Knock Out Punch, Needle Straightener, Cleaning Rod, and Cleaning Rod Handle.
Claims use since June 7, 1927.

Ser. No. 325,352. U. S. SLICING MACHINE COMPANY, La Porte, Ind. Filed Mar. 21, 1932.



The lining on the drawings is intended for shading only.
For Meat and Bread Slicing Machines and Parts Thereof as Well as Equipment for Repairing and Maintaining Slicing Machines in Operative Condition—Namely, Necessary Wrenches, Screw Drivers, Pliers, Needle Knock Out Punch, Needle Straightener, Cleaning Rod, and Cleaning Rod Handle.
Claims use since June 28, 1915.

Ser. No. 325,355. U. S. SLICING MACHINE COMPANY, La Porte, Ind. Filed Mar. 21, 1932.



The lining on the drawings is intended for shading only.
For Meat and Bread Slicing Machines and Parts Thereof as well as Equipment for Repairing and Maintaining Slicing Machines in Operative Condition—Namely, Necessary Wrenches, Screw Drivers, Pliers, Needle Knock Out Punch, Needle Straightener, Cleaning Rod, and Cleaning Rod Handle.
Claims use since Oct. 23, 1923.

Ser. No. 326,601. THE ACCURATE PARTS MANUFACTURING COMPANY, Cleveland, Ohio. Filed Apr. 29, 1932.

Cushionflex

The word "Cushion" is disclaimed apart from the mark disclosed in the drawing.

For Clutch Plates and Discs.

Claims use since Mar. 16, 1932.

Ser. No. 326,602. THE ACCURATE PARTS MANUFACTURING COMPANY, Cleveland, Ohio. Filed Apr. 29, 1932.

Powerflex

The word "Power" is disclaimed apart from the mark disclosed in the drawing.

For Clutch Plates and Discs.

Claims use since Mar. 16, 1932.

Ser. No. 327,663. ALEX RAPSKY, New York, N. Y. Filed June 2, 1932.

TALLY-HO BLADES TRADE MARK GENUINE SWEDISH STEEL

No claim is made to the exclusive use of the representation of the packet of blades and all wording, except "Tally-Ho" apart from the mark as shown on the drawing.

For Razor Blades.

Claims use since May 2, 1932.

Ser. No. 327,800. LEATHER EQUIPMENT COMPANY, INC., Chicago, Ill. Filed June 7, 1932.

Ti-tan

For Toggles and Frames for Use in Stretching Hides and Leather.

Claims use since May 21, 1932.

CLASS 24

Laundry Appliances and Machines

Ser. No. 327,809. STEAM PRESSING IRON COMPANY, Chicago, Ill. Filed June 7, 1932.

SPOTLESS

For Steam Pressing Irons.

Claims use since June, 1925.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 323,214. E. and T. FAIRBANKS AND COMPANY, St. Johnsbury, Vt. Filed Jan. 18, 1932.

TRADE FAIRBANKS PRECISION SCALES MARK

No claim is made to the use of the words "Trade-Mark," "Precision," and "Scales" apart from the trade-mark as shown. The shape of the plate does not form a part of the mark.

Applicant claims ownership of registrations No. 197,805 issued Apr. 21, 1925, and No. 199,196 issued June 2, 1925.

For Weighing Machines and Parts Thereof.

Claims use since May 14, 1930.

Ser. No. 328,082. GENERAL ELECTRIC COMPANY, Schenectady, N. Y. Filed June 16, 1932.

GE

For Charts for Recording Instruments.

Claims use since 1909.

Ser. No. 328,091. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio. Filed June 18, 1932.

Firestone

Applicant is owner of trade-mark registration #140,804 dated Mar. 29, 1921.

For Brake Testing Machines and Brake Lining Testing Machines.

Claims use since Nov. 26, 1927.

Ser. No. 328,093. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio. Filed June 18, 1932.



For Brake Testing Machines.
Claims use since Nov. 26, 1927.

CLASS 31

Filters and Refrigerators

Ser. No. 326,757. NORDE CORPORATION, Detroit, Mich. Filed May 4, 1932.

PRESERVOIR

For Refrigerator Units—Namely, Chill Trays.
Claims use since Oct. 9, 1931.

Ser. No. 327,642. YORK REFRIGERATOR COMPANY, York, Pa. Filed June 1, 1932.

"DRIARTIC"

For Refrigerator Display Cases, Commercial Refrigerators, and Store and Restaurant Equipment.
Claims use since Feb. 16, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 301,524. STETTNER CORPORATION, New York and Brooklyn, N. Y. Filed May 28, 1930.

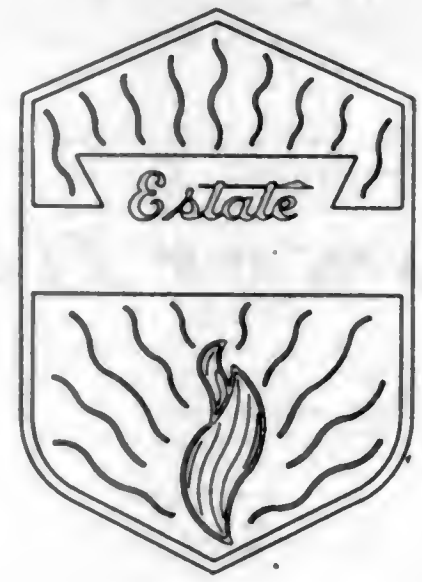
STENO-VOX

For Radio Cabinets.
Claims use since Apr. 15, 1930.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 316,089. THE ESTATE STOVE COMPANY, Hamilton, Ohio. Filed June 20, 1931.



The lines are illustrated in the drawing to indicate a finish contrasting with the background upon which they appear.

For Heating Apparatus or Appliances—Namely, Heating Ovens, Stoves, Furnaces, and Heaters Using Gas, Coal, and Like Fuels.
Claims use since July 3, 1929.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 325,431. KIRCHBACH'SCHE WERKE KIRCHBACH & Co., Coswig, Germany. Filed Mar. 24, 1932.

„Jurid"

For Brake and Clutch (Friction) Bands, Discs, Cones, Linings, and Blocks Made Substantially of Asbestos or Fabric or Vegetable or Mineral Fibrous Material or Combinations Thereof, with or without a Binder, Especially Rubber, Artificial or Natural Resin; Driving Belts for Fans and Motor Cycles.
Claims use since Jan. 10, 1921.

Ser. No. 326,019. MICRO MACHINE COMPANY, Bettendorf, Iowa. Filed Apr. 12, 1932.

Micro

For Piston and Packing Rings.
Claims use since October, 1930.

CLASS 38

Prints and Publications

Ser. No. 311,189. HISTOMAP, INC., Chicago, Ill. Filed Feb. 18, 1931.

The HISTOMAP

For Charts.
Claims use since Dec. 22, 1930.

Ser. No. 327,389. DAILY GRAPHIC, INC., New York, N. Y. Filed May 24, 1932.

LADY BE BEAUTIFUL!

For Newspaper Column In Its Daily Newspaper—to wit, The New York Evening Graphic.
Claims use since Apr. 18, 1932.

Ser. No. 327,873. GEORGE J. HECHT, New York, N. Y. Filed June 10, 1932.

The BOYS' and GIRLS' NEWSPAPER
With Which is Combined "The Children's Newspaper and Story Magazine"

For Monthly Publication.
Claims use since May 1, 1932.

Ser. No. 328,309. ERNEST E. SCHUHMANN, El Paso, Tex. Filed June 25, 1932.

Veritone

For Photographic Prints.
Claims use since Apr. 1, 1931.

Ser. No. 328,369. THE PENNZOIL COMPANY, Oil City, Pa. Filed June 28, 1932.

THE CRANKCASE

For House Organ Which is Published Monthly.
Claims use since June 10, 1932.

CLASS 39

Clothing

Ser. No. 319,711. VERTEX HOSIERY MILLS, INC., Weissport, Pa. Filed Oct. 3, 1931.

VERTEX VARIABLES

For Hosiery.
Claims use since Aug. 6, 1931.

Ser. No. 321,742. JAMES A. BANISTER COMPANY, INC., Newark, N. J. Filed Dec. 4, 1931.

Chex-Wet

For Shoes Made Wholly or in Part of Leather.
Claims use since Nov. 16, 1931.

Ser. No. 323,191. LILLY DACHÉ, New York, N. Y. Filed Jan. 20, 1932.



For Ladies' Hats.
Claims use since Jan. 13, 1932.

Ser. No. 324,803. B. SIMS CORPORATION, New York, N. Y. Filed Mar. 4, 1932.

ALL AMERI-CAP

No claim is made to the word "Cap" shown in the drawing.
For Women's and Children's Hats and Caps.
Claims use since Feb. 21, 1932.

Ser. No. 325,202. CHARLES MILBURN FOSTER, Dayton, Ohio. Filed Mar. 15, 1932.



Applicant disclaims the right to the exclusive use of the words "Shoes of Fashion."
For Ladies' Shoes Made of Lenther.
Claims use since Feb. 1, 1927.

Ser. No. 327,275. FRIENDLY SHOE COMPANY, Milford, Mass. Filed May 20, 1932.



For Men's Shoes Made of Leather With Either Leather or Rubber Soles.
Claims use since Apr. 14, 1932.

Ser. No. 327,313. THE HECHT CO., doing business as The Hub, Washington, D. C., and Baltimore, Md. Filed May 21, 1932.

The Young Washingtonian Shop

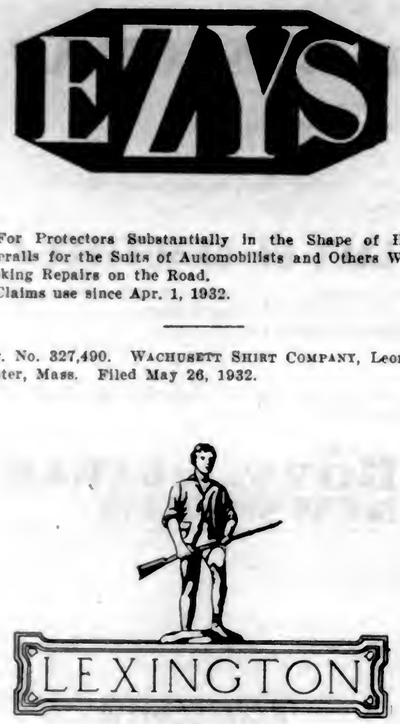
No claim is made to the word "Shop" apart from the mark shown in the drawing.
For Women's Apparel—Namely, Gloves Made of Leather, Rubber, Fabric, or Combinations Thereof; Coats, Suits, Dresses, Corsets, Underwear Made of Knitted, Netted, and Textile Fabric; Shoes Made of Leather, Rubber, Fabric, or Any Combination Thereof; Hosiery; Millinery—Namely, Hats, Caps, Berets.
Claims use since Dec. 9, 1931.

Ser. No. 327,376. JOHN J. SULLIVAN, Norfolk, Va. Filed May 23, 1932.



No claim is made to the words "Style," "Quality," and "Value" except in the association shown.
For Sweaters, Leather Coats, Windbreakers, Woolen Caps, Knickers, and Bathing Suits for Men, Women, and Children.
Claims use since November, 1931.

Ser. No. 327,476. DAVENPORT B. RICHARDSON, New York, N. Y. Filed May 26, 1932.



For Protectors Substantially in the Shape of Half-Overalls for the Suits of Automobilists and Others While Making Repairs on the Road.
Claims use since Apr. 1, 1932.

Ser. No. 327,490. WACHUSETT SHIRT COMPANY, Leominster, Mass. Filed May 26, 1932.

For Dress and Negligee Shirts.
Claims use since Apr. 15, 1932.

Ser. No. 327,574. S. BEARMAN SHOE COMPANY, St. Louis, Mo. Filed May 31, 1932.



No claim is made to the word "Shoe" apart from the mark as shown.
For Leather Shoes and Boots.
Claims use since Mar. 10, 1932.

Ser. No. 327,631. THE H & W COMPANY, INC., Newark, N. J. Filed June 1, 1932.

MISS PERT

For Bandeaus, Bandettes, and Corsettes.
Claims use since May 13, 1932.

Ser. No. 327,760. WARREN H. FAKE, Ephrata Borough, Pa. Filed June 6, 1932.

DUTCHMAID

For Hosiery and Underwear for Men, Women, and Children.
Claims use since May 28, 1932.

Ser. No. 327,811. VAN-SEN, INC., New York, N. Y. Filed June 7, 1932.

VAN-TILLO

For Bandeaux and Girdles.
Claims use since May, 1931.

Ser. No. 328,366. THE MUNSINGWEAR CORPORATION, Minneapolis, Minn. Filed June 28, 1932.

"Swimskit"

For Swim Suits or Bathing Suits for Men, Women and Children.
Claims use since June 22, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 308,143. UNITED ELASTIC CORPORATION, Easthampton, Mass. Filed Nov. 20, 1930. Under 10-year proviso.

GLENDALE

For Elastic Fabrics.
Claims use since about 1870.

Ser. No. 315,781. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed June 13, 1931.

Vel-Cord

The word "Cord" is disclaimed apart from the mark as shown.
For Pile Fabrics in the Piece.
Claims use since June 8, 1931.

Ser. No. 327,439. THE HOLLISTON MILLS, INC., Norwood, Mass. Filed May 25, 1932.

ROXITE

For Cotton Piece Goods and for Filled and Finished Cotton Piece Goods Suitable for Use as Book Cloth, Window Shade Cloth, Draperies, Furniture Covering, Wall Covering, Luggage Lining and Covering, Box Covering, Shower Bath Curtains, Labels, Tags, and Signs.
Claims use since May 12, 1932.

Ser. No. 327,910. KIRBY, BLOCK & FISCHER, INC., New York, N. Y. Filed June 11, 1932.

TOTTY

For Textile Diapers.
Claims use since May 21, 1932.

Ser. No. 327,925. H. WAGNER & ADLER CO., New York, N. Y. Filed June 11, 1932.

FINESSE

For Billiard Cloth in the Piece.
Claims use since May 25, 1932.

Ser. No. 327,926. H. WAGNER & ADLER CO., New York, N. Y. Filed June 11, 1932.

PROFESEUR

For Billiard Cloth in the Piece.
Claims use since Mar. 15, 1920.

Ser. No. 327,927. H. WAGNER & ADLER CO., New York, N. Y. Filed June 11, 1932.

TOPSALL

For Billiard Cloth in the Piece.
Claims use since May 25, 1932.

Ser. No. 328,300. BURTON BROTHERS & CO. INC., New York, N. Y. Filed June 25, 1932.

BURTON'S PIMACLOTH

For Cotton Piece Goods.
Claims use since January, 1931.

Ser. No. 328,305. HARDWICK & MAGEE COMPANY, Philadelphia, Pa. Filed June 25, 1932.

SUPREMA

BROADLOOM CARPET

No claim being made to the words "Broadloom Carpet" apart from the mark as shown.

For Textile Carpets.
Claims use since May 19, 1932.

CLASS 43

Thread and Yarn

Ser. No. 315,197. I. FLEISCHER & SONS, Cincinnati, Ohio. Filed May 29, 1931. Under 10-year proviso.

Fleischer's

For Thread.
Claims use since Jan. 1, 1890.

Ser. No. 328,138. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed June 20, 1932.

"MIDHAM"

For Cotton Thread.
Claims use since May 26, 1932.

Ser. No. 328,139. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed June 20, 1932.

"S-C-T"

For Cotton Thread.
Claims use since May 26, 1932.

Ser. No. 328,205. AMERICAN BEMBERG CORPORATION, New York, N. Y. Filed June 22, 1932.

LINTELLA

For Thread and Yarn.
Claims use since May 25, 1932.

Ser. No. 328,207. AMERICAN BEMBERG CORPORATION, New York, N. Y. Filed June 22, 1932.

SUNSPUN

For Thread and Yarn.
Claims use since May 1, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 328,111. ZOTOS CORPORATION, New York, N. Y. Filed June 18, 1932.

VAPET

For Hair Waving Pads.
Claims use since Mar. 8, 1932.

Ser. No. 328,270. THE ELECTRIC MFG. CO., San Francisco, Calif. Filed June 24, 1932.

SOLAR ECLIPSE

For Electric Hair Dryers.
Claims use since June 15, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 316,065. WILLIAM HENRY YOUNGBLOOD, Santa Rosa, Tex. Filed June 19, 1931.



For Grapefruit Juice, Grapefruit Extract, and Grapefruit Concentrate Used for Soft Drink Purposes.
Claims use since Mar. 1, 1931.

Ser. No. 325,909. HARRY E. GRIGSBY, doing business as Goody-Goody Manufacturing Company, Oklahoma City, Okla. Filed Apr. 8, 1932.

GOODY-GOODY

For Nonalcoholic, Maltless Fruit Juices Sold as Soft Drinks, and Syrups for Making Same.
Claims use since Jan. 1, 1910.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 317,032. F. & M. IMPORTING CO. INC., Los Angeles, Calif. Filed July 17, 1931.

F & M

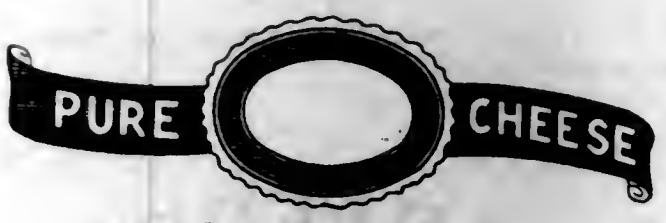
For Canned Fish, Canned Fruits, Canned Vegetables, Alimentary Pastes, Olives, Edible Oils, Candy, Chocolate, Tomato Paste.
Claims use since Dec. 1, 1924.

Ser. No. 319,729. THE OHIO FARM BUREAU SERVICE COMPANY, Columbus, Ohio. Filed Oct. 5, 1931.

Dairyflex

For Dairy Feeds.
Claims use since Apr. 23, 1926.

Ser. No. 322,710. PURE CHEESE CORPORATION, Chicago, Ill. Filed Jan. 4, 1932.



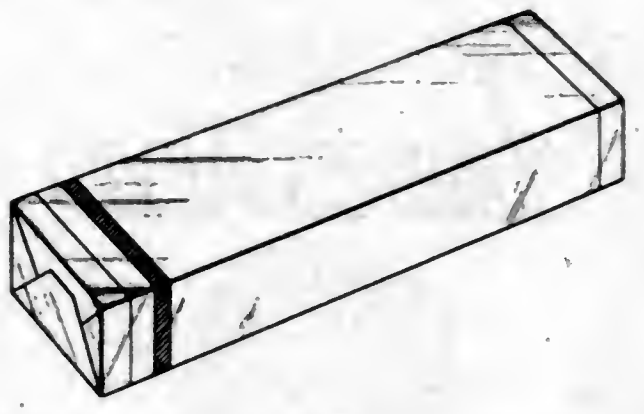
The words "Pure Cheese" are disclaimed apart from the mark as shown. The lining as shown on the drawing does not represent any particular color or shade, but is shown merely to denote shading.
For Pasteurized Cheese.
Claims use since Sept. 22, 1931.

Ser. No. 323,653. EWENS BROS., doing business as Diamond "E" Orchards, Sutherlin, Oreg. Filed Feb. 1, 1932.

Umpqua Chief

For Fresh Fruits—Namely, Pears.
Claims use since October, 1926.

Ser. No. 325,540. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Filed Mar. 26, 1932.



The trade-mark is applied to the goods in the form of a narrow band, strip or ribbon-like member of a purple color encircling each individual package of chewing gum adjacent one end. The representation of the container of the goods is disclaimed as a part of the trade-mark.
For Chewing Gum.
Claims use since Mar. 17, 1932.

Ser. No. 325,806. ROYAL CANADIAN DISTRIBUTING COMPANY, Columbus, Ohio. Filed Apr. 4, 1932.

ORIGINAL
ROYAL
CANADIAN
FIT FOR A KING
R C
FOR FOOD PURPOSES ONLY
MALT SYRUP

Exclusive use is disclaimed of the words "Malt Syrup" except in connection with the remaining features of the mark. Exclusive use of the words "For Food Purposes Only" is also disclaimed except in connection with the remaining features of the mark. Exclusive use of the words "Original" and "Royal Canadian", or of any individual word in this phrase is disclaimed, except in connection with the remaining features of the mark.
For Malt Syrup.
Claims use since July 1, 1929.

Ser. No. 327,133. CRINOLINE CANDIES, Fort Wayne, Ind. Filed May 16, 1932.

Crinoline

For Candies, Whipped Cream Fudge, Packaged and Bulk Nut Meats, Buttered Popcorn and Popcorn Seasoning.
Claims use since Jan. 13, 1932.

Ser. No. 327,174. VENICE MAID COMPANY, Vineland, N. J. Filed May 16, 1932.

VENICE MAID

For Spaghetti Sauce.
Claims use since Sept. 2, 1931.

Ser. No. 327,414. PLANTERS NUT & CHOCOLATE CO., Wilkes-Barre, Pa. Filed May 24, 1932.

NUTTY LOOPS

No claim is made to the word "Nutty" apart from the mark as shown.
For Crushed Peanut Confection.
Claims use since Apr. 1, 1932.

Ser. No. 327,765. PLANTERS EDIBLE OIL COMPANY, Suffolk, Va., and Wilkes-Barre, Pa. Filed June 6, 1932.

FRIO

For Vegetable Oil Shortening Compound.
Claims use since Apr. 1, 1932.

Ser. No. 327,767. PLANTERS EDIBLE OIL COMPANY, Suffolk, Va., and Wilkes-Barre, Pa. Filed June 6, 1932.

UPPO

For Vegetable Oil Shortening Compound.
Claims use since Apr. 1, 1932.

Ser. No. 328,031. MORTEN MILLING COMPANY, Dallas, Tex. Filed June 16, 1932.

La France

For Biscuit Flour.
Claims use since Apr. 2, 1932.

Ser. No. 328,336. MAYFLOWER MILLS, Fort Wayne, Ind. Filed June 27, 1932.

CAREFREE

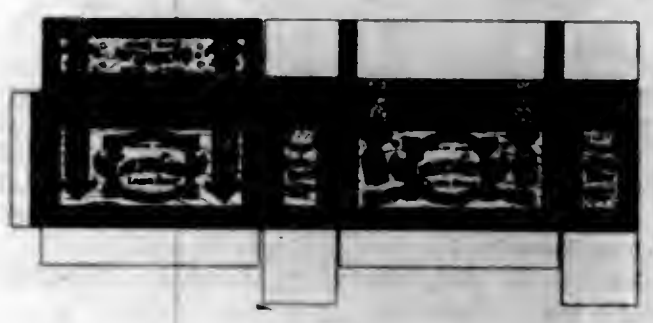


In the drawing the picture of a boy being fanciful and the lining indicating shading only.
For Pancake Flour.
Claims use since Oct. 12, 1931.

CLASS 48

Malt Beverages and Liquors

Ser. No. 322,213. GOLDEN WEST BREWING COMPANY, Oakland, Calif. Filed Dec. 17, 1931.



No claim is made to the words "Twelve Pieces," "Lager Brew," nor to the representation of a carton per se.

For Malt Beverage Packed in Cartons and Containing Less Than One-Half of One Per Cent Alcohol by Volume.

Claims use since Nov. 19, 1931.

Ser. No. 326,933. THE BRUCKMANN CO., Cincinnati, Ohio. Filed May 10, 1932.



No claim is made to any of the wording appearing on the drawings with the exception of the words, "Kentucky Pride," "Dixie," and the name of the applicant corporation.

For Non-Intoxicating Malt Beverage Containing Not More Than One-Half of One Per Cent Alcohol by Volume.

Claims use since May 4, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

AUGUST 2, 1932

296,193. CARBONATED BEVERAGES OF LIME FLAVOR SOLD AS SOFT DRINKS. PACIFIC PRODUCTS, INC., San Francisco, Calif.
Filed December 17, 1931. Serial No. 322,223. PUBLISHED MAY 17, 1932. Class 45.

296,194. SOUND RECORDING MECHANISM, SOUND REPRODUCING MECHANISM, ETC. RCA PHOTOPHONE, INC., New York, N. Y.
Filed February 2, 1931. Serial No. 310,658. PUBLISHED MAY 17, 1932. Class 36.

296,195. CATHODE RAY TUBES AND THERMIONIC TUBES. RCA VICTOR COMPANY, INC., Camden, N. J.
Filed February 6, 1931. Serial No. 310,817. PUBLISHED MAY 17, 1932. Class 21.

296,196. FRUIT CEREAL. OTCO'S PURE FOOD PRODUCTS COMPANY, Atlanta, Ga.
Filed February 9, 1931. Serial No. 310,877. PUBLISHED MAY 17, 1932. Class 46.

296,197. SILVER-PLATED KNIVES AND FORKS. ONEIDA COMMUNITY, LIMITED, Oneida, N. Y.
Filed February 11, 1931. Serial No. 310,944. PUBLISHED MAY 3, 1932. Class 28.

296,198. AIR PURIFYING PREPARATIONS, ANTISEPTICS, DEODORANTS, DISINFECTANTS, ETC. WEST DISINFECTING COMPANY, Long Island City, N. Y.
Filed March 2, 1931. Serial No. 311,635. PUBLISHED MAY 3, 1932. Class 6.

296,199. HAND LOTION. MARY ELLEN KEEGAN, doing business as The Lovelle Products Co., Minneapolis, Minn.
Filed March 4, 1931. Serial No. 311,738. PUBLISHED MAY 10, 1932. Class 6.

296,200. LAWNS FOR THE CERAMIC INDUSTRY, SIZERS FOR THE ABRASIVE MATERIALS INDUSTRY, SCREENS, SIFTING AND SORTING MACHINES, AND SEPARATORS FOR INDUSTRIAL USE IN MATERIAL HANDLING AND TREATING. THE ORVILLE SIMPSON COMPANY, Cincinnati, Ohio.
Filed March 20, 1931. Serial No. 312,350. PUBLISHED MAY 17, 1932. Class 23.

296,201. RAZORS AND RAZOR BLADES. BRITISH AMERICAN RAZORS LIMITED, Toronto, Ontario, Canada.
Filed March 26, 1931. Serial No. 312,543. PUBLISHED MAY 3, 1932. Class 28.

296,202. ELECTRIC LABORATORY AND INDUSTRIAL FURNACES. DUNCAN MACKENZIE'S SONS CO., INC., Fieldsboro and Trenton, N. J.
Filed March 30, 1931. Serial No. 312,702. PUBLISHED MAY 17, 1932. Class 21.

296,203. PUMPS AND PARTS THEREOF. THE AUTO-PRIME PUMP COMPANY, Cleveland, Ohio, assignor to Westco Pump Corporation, Davenport, Iowa, a Corporation of Delaware.
Filed April 7, 1931. Serial No. 313,025. PUBLISHED MAY 10, 1932. Class 23.

296,204. LIQUID INSECTICIDE. MIDWAY CHEMICAL COMPANY, Chicago, Ill.
Filed April 20, 1931. Serial No. 313,574. PUBLISHED SEPTEMBER 29, 1931. Class 6.

296,205. LAXATIVE TONIC. HARRY W. GOLDSTEIN, Houston, Tex., assignor to Southland Importing Company, Inc., Houston, Tex., a Corporation of Texas.
Filed April 30, 1931. Serial No. 314,028. PUBLISHED MAY 17, 1932. Class 6.

296,206. ELECTRIC INSULATING COMPOUNDS AND PANELS AND PLATES MADE THEREFROM FOR USE IN MOUNTING SWITCHES, FUSES, RELAYS, AND THE LIKE. JOHNS-MANVILLE CORPORATION, New York, N. Y.
Filed May 1, 1931. Serial No. 314,054. PUBLISHED MAY 10, 1932. Class 21.

296,207. ELECTRIC STEAM GENERATORS, PORTABLE ELECTRIC HOUSE HEATERS, AND PARTS THEREOF. JOHN D. LANDERMAN, Brookline, Mass. assignor to Electric Steam Heating Corporation, a Corporation of Massachusetts.
Filed May 1, 1931. Serial No. 314,060. PUBLISHED MAY 10, 1932. Class 21.

296,208. COTTON THREAD AND YARN. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn.
Filed June 22, 1931. Serial No. 316,139. PUBLISHED MAY 17, 1932. Class 43.

296,209. CAMERAS, MOTION PICTURE PROJECTORS, PARTS THEREOF AND PHOTOGRAPHIC SUPPLIES—NAMELY, REELS, TRIPODS, AND CAMERA CONTAINERS. THE VITASCOPE CORPORATION, Providence, R. I.
Filed June 30, 1931. Serial No. 316,513. PUBLISHED MAY 17, 1932. Class 26.

296,210. PIE PAN LIFTERS AND THE LIKE. JOSEPH S. PERRAULT, Nashua, N. H.
Filed July 2, 1931. Serial No. 316,569. PUBLISHED MAY 3, 1932. Class 23.

296,211. PHARMACEUTICAL, ANTISEPTIC, CICATRIZANT, NON-TOXICAL PRODUCT FOR THE THROAT, MOUTH, AND FEMININE HYGIENE. COMPAGNIE FRANCAISE DES MARQUES ET PRODUITS CHARLES HENRY, Paris, France.
Filed July 7, 1931. Serial No. 316,694. PUBLISHED MAY 17, 1932. Class 6.

296,212. PHARMACEUTICAL PRODUCT FOR THE PREVENTION OF SYPHILIS. COMPAGNIE FRANCAISE DES MARQUES ET PRODUITS CHARLES HENRY, Paris, France.
Filed July 7, 1931. Serial No. 316,695. PUBLISHED MAY 17, 1932. Class 6.

296,213. PHARMACEUTICAL ANTISEPTIC PRODUCT FOR URINARY PASSAGES, ESPECIALLY FOR BLENNORRHAGIA. COMPAGNIE FRANCAISE DES MARQUES ET PRODUITS CHARLES HENRY, Paris, France.
Filed July 7, 1931. Serial No. 316,696. PUBLISHED MAY 17, 1932. Class 6.

296,214. WOVEN, KNITTED, NETTED, TEXTILE AND PILE FABRICS IN THE PIECE, COMPRISED IN WHOLE OR IN PART OF ARTIFICIAL SILK. AMERICAN BEMBERG CORPORATION, New York, N. Y.
Filed March 10, 1932. Serial No. 324,978. PUBLISHED MAY 17, 1932. Class 42.

296,215. BLOUSES TO BE WORN BY WOMEN. JOSEPH E. GROTTA, New York, N. Y.
Filed March 8, 1932. Serial No. 324,939. PUBLISHED MAY 17, 1932. Class 39.

296,216. MEDICINAL COMPOUNDS FOR USE IN CONDITIONS ARISING FROM SLUGGISH BOWELS. HO-MO-LO CORPORATION, Detroit, Mich.
Filed March 3, 1932. Serial No. 324,741. PUBLISHED MAY 17, 1932. Class 6.

CARNEGIE LIBRARY OF ATLANTA

296,217. PAINTS, ENAMELS, AND VARNISHES. WILLIAM H. STONEMAN, doing business as Country Gentleman Products Co., Albany, N. Y.
Filed March 1, 1932. Serial No. 324,673. PUBLISHED MAY 17, 1932. Class 16.

296,218. JAPAN DRIER AND VARNISH. S. W. ADAMS & Co., Philadelphia, Pa.
Filed February 23, 1932. Serial No. 324,418. PUBLISHED MAY 17, 1932. Class 16.

296,219. MEASURING TOOLS—NAMELY, CALIPERS, MICROMETERS, GAUGES, CALIPER SQUARES, AND THEIR PARTS. THE "SOCIÉTÉ ANONYME SOLEX", Neuilly-sur-Seine, France.
Filed February 17, 1932. Serial No. 324,269. PUBLISHED MAY 17, 1932. Class 26.

296,220. COTTON PILLOW CASES, COTTON BED SHEETS, COTTON BED SPREADS, COTTON AND SILK CURTAINS, AND COTTON AND WOOL BLANKETS. STANDARD TRADING MILLS, New York, N. Y.
Filed February 16, 1932. Serial No. 324,233. PUBLISHED MAY 17, 1932. Class 42.

296,221. FRESH CANTALOUPES. THE "PRIDE OF RIDGEWAY" GROWERS ASSOCIATION, Norlina, N. C.
Filed February 12, 1932. Serial No. 324,114. PUBLISHED MAY 17, 1932. Class 46.

296,222. GREY COTTON PIECE GOODS. NEUSS, HESSLEIN & Co., INC., New York, N. Y.
Filed February 5, 1932. Serial No. 323,869. PUBLISHED MAY 17, 1932. Class 42.

296,223. HOSIERY. HOLEPROOF HOSIERY CO., Milwaukee, Wis.
Filed January 29, 1932. Serial No. 323,600. PUBLISHED MAY 17, 1932. Class 39.

296,224. SAVINGS CERTIFICATES. NATIONAL SALES SERVICE, Salt Lake City, Utah.
Filed February 24, 1932. Serial No. 324,443. PUBLISHED MAY 17, 1932. Class 38.

296,225. HOPS. SCHLITZ BREWING COMPANY, Milwaukee, Wis.
Filed January 25, 1932. Serial No. 323,422. PUBLISHED MAY 17, 1932. Class 1.

296,226. PILE OINTMENT. GEORGE F. BURKHARDT, doing business as The Pylo Co., Hazleton, Pa.
Filed January 25, 1932. Serial No. 323,388. PUBLISHED MAY 17, 1932. Class 6.

296,227. BOOKS, CHARTS, MAGAZINES, DATA SHEETS, AND DRAWINGS. WESLEY H. SHIRK, doing business as Engineers Publishing Company, Philadelphia, Pa.
Filed February 17, 1932. Serial No. 324,331. PUBLISHED MAY 17, 1932. Class 38.

296,228. KNIVES, FORKS, SPOONS, ETC. ONTARIO KNIFE COMPANY, Franklinville, N. Y.
Filed March 3, 1932. Serial No. 324,755. PUBLISHED MAY 17, 1932. Class 28.

296,229. INSECTICIDES. ATLANTIC PHARMACAL COMPANY, Boston, Mass.
Filed March 4, 1932. Serial No. 324,771. PUBLISHED MAY 17, 1932. Class 6.

296,230. PERFUMERY—NAMELY, A CHEMICAL SUBSTANCE FOR THE FIXATION OF PERFUMES. HOWARDS & SONS LIMITED, Ilford, England.
Filed January 6, 1932. Serial No. 322,774. PUBLISHED MAY 17, 1932. Class 6.

296,231. RAZOR BLADES. COOPER PRODUCTS CORPORATION, New York, N. Y.
Filed March 4, 1932. Serial No. 324,780. PUBLISHED MAY 3, 1932. Class 28.

296,232. CONCENTRATED PREPARATION OF PROTEIN-CALCIUM PHOSPHATE, LACTOSE, AND THE VARIOUS MINERAL SALTS OF MILK USED AS A TONIC AND BODY BUILDER. PROTEIN MINERAL CO., INC., New York, N. Y.
Filed March 4, 1932. Serial No. 324,800. PUBLISHED MAY 3, 1932. Class 6.

296,233. OINTMENT USED IN THE TREATMENT OF CANCER, BLOOD POISONING, SNAKE BITES, BLOOD CLOTS, AND VARICOSE VEINS AND MINOR SKIN IRRITATIONS. OTTO VOLLRATH, St. Paul, Minn.
Filed March 4, 1932. Serial No. 324,810. PUBLISHED MAY 3, 1932. Class 6.

296,234. MEDICINAL COMPOUND FOR USE IN THE TREATMENT OF ASTHMA, HAY FEVER, AND SIMILAR AILMENTS. CALAFO COMPANY, Los Angeles, Calif.
Filed March 5, 1932. Serial No. 324,818. PUBLISHED MAY 3, 1932. Class 6.

296,235. LAXATIVE MEDICINES. FRANK DABROWSKI, doing business as Tip-Top Laboratories, Rochester, N. Y.
Filed March 7, 1932. Serial No. 324,839. PUBLISHED MAY 3, 1932. Class 6.

296,236. TABLETS FOR HEADACHES, COLDS, NEURALGIA, TOOTHACHE, AND MUSCULAR PAINS. WINDSOR PHARMACAL COMPANY, St. Louis, Mo.
Filed March 7, 1932. Serial No. 324,863. PUBLISHED MAY 10, 1932. Class 6.

296,237. CHEMICAL SUBSTANCES FOR USE AS THREAD AND FIBER MOISTENING, PROTECTING, PENETRATING, SMOOTHING, AND FINISHING PREPARATIONS. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany.
Filed March 8, 1932. Serial No. 324,872. PUBLISHED MAY 10, 1932. Class 6.

296,238. COMPOUNDS AND/OR SOLUTIONS OF ORGANIC IODINE AND FOR COMPOUNDS AND/OR SOLUTIONS OF ORGANIC IODINE CONTAINING SODIUM HYPOIODITE. KATOLOX LABORATORIES, INC., East Orange, N. J.
Filed March 8, 1932. Serial No. 324,890. PUBLISHED MAY 10, 1932. Class 6.

296,239. HYDROSULPHITE FOR TEXTILE PURPOSES. ROYCE CHEMICAL COMPANY, Carlton Hill, N. J.
Filed March 8, 1932. Serial No. 324,903. PUBLISHED MAY 10, 1932. Class 6.

296,240. WEIGHING MACHINES. INTERNATIONAL DEVICES CORPORATION, Chicago, Ill.
Filed March 2, 1932. Serial No. 324,919. PUBLISHED MAY 3, 1932. Class 26.

296,241. AUTOMOBILE RADIATOR ANTI-FREEZE COMPOUND, AUTOMOBILE RADIATOR CLEANING COMPOUND, AUTOMOBILE RADIATOR SEALING COMPOUND, AND AUTOMOBILE RADIATOR RUST PREVENTATIVE. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed March 9, 1932. Serial No. 324,942. PUBLISHED MAY 10, 1932. Class 6.

296,242. TONIC FOR DIGESTION. E. FUCINI & Co. INC., New York, N. Y.
Filed March 9, 1932. Serial No. 324,958. PUBLISHED MAY 17, 1932. Class 6.

296,243. MEDICINAL PREPARATION FOR USE IN THE TREATMENT OF SIMPLE NERVOUSNESS, SIMPLE HEADACHE AND SIMPLE NEURALGIA, ETC. TULON PRODUCTS INCORPORATED, New York, N. Y.
Filed March 9, 1932. Serial No. 324,973. PUBLISHED MAY 10, 1932. Class 6.

296,244. PETROLEUM AND PRODUCTS OF PETROLEUM WITH OR WITHOUT ADMIXTURE OF OTHER MATERIALS FOR ILLUMINATING, HEATING, POWER, BURNING, LUBRICATING, GREASING, TEMPERING, QUENCHING, SLUSHING, AND FLUSHING; MINERAL WAX, CANDLES, PENETRATING OIL, ROAD DRESSING OIL, AND ABSORBING OIL FOR BENZOL VAPORS OBTAINED IN THE DISTILLATION OF COAL. SOCONY-VACUUM CORPORATION, New York, N. Y.
Filed September 2, 1931. Serial No. 318,692. PUBLISHED MAY 17, 1932. Class 15.

296,245. CANDY. DANIEL P. BEATON, doing business as Parachute Confection Company, Winnipeg, Manitoba, Canada.
Filed August 3, 1931. Serial No. 317,823. PUBLISHED MAY 17, 1932. Class 46.

296,246. BED PANS, DOUCHE PANS, URINALS, ETC. INTERNATIONAL STAMPING & ENAMELING CORPORATION, now by change of name International Enamelware Corporation, Brooklyn, N. Y.
Filed August 24, 1931. Serial No. 318,361. PUBLISHED MAY 17, 1932. Class 44.

296,247. BED PANS AND DOUCHE PANS. INTERNATIONAL STAMPING & ENAMELING CORPORATION, now by change of name International Enamelware Corporation, Brooklyn, N. Y.
Filed August 24, 1931. Serial No. 318,362. PUBLISHED MAY 17, 1932. Class 44.

296,248. ELECTRIC BATTERIES. BEST ELECTRIC CORPORATION, New York, N. Y.
Filed October 8, 1931. Serial No. 319,856. PUBLISHED MAY 17, 1932 . Class 21.

296,249. RADIO RECEIVING SETS AND PARTS—NAMELY, RADIO AND AUDIO TRANSFORMERS, RESISTANCES, CONDENSERS, INDUCTION COILS, RADIO VACUUM TUBES, ELECTRIC PICK-UPS, LOUD SPEAKERS, LOUD SPEAKER UNITS, DRY AND STORAGE BATTERIES, AND THE LIKE. BALTIMORE RADIO CORPORATION, New York, N. Y.
Filed December 4, 1931. Serial No. 321,794. PUBLISHED MAY 3, 1932. Class 21.

296,250. SPARK PLUGS. JAMES EDWARD HEALEY, doing business as Aviator Spark Plug Co., Oakland, Calif.
Filed February 17, 1932. Serial No. 324,254. PUBLISHED MAY 3, 1932. Class 21.

296,251. PETROLEUM PRODUCTS—NAMELY, LUBRICATING OILS AND GREASES. H. K. STAHL COMPANY, St. Paul, Minn.
Filed February 4, 1932. Serial No. 323,834. PUBLISHED MAY 10, 1932. Class 15.

296,252. SEWING MACHINE FANS, AIR DEFLECTORS AND AIR CUT-OFF FOR SEWING MACHINE FANS. FISCHBEIN COMPANY, INC., Minneapolis, Minn.
Filed February 19, 1932. Serial No. 324,312. PUBLISHED MAY 10, 1932. Class 21.

296,253. GASOLINE. BERNARD M. MARKSTEIN, doing business as Full Measure Gas Company, Cincinnati, Ohio.
Filed February 25, 1932. Serial No. 324,476. PUBLISHED MAY 10, 1932. Class 15.

296,254. SOCKETS, PLUGS, RECEPTACLES, SWITCHES, AND CONNECTING DEVICES FOR ELECTRICAL WIRING DEVICES. THE ARROW-HART & HEGEMAN ELECTRIC COMPANY, Hartford, Conn.
Filed February 26, 1932. Serial No. 324,502. PUBLISHED MAY 10, 1932. Class 21.

296,255. ELECTRIC LAMPS OF THE TABLE AND FLOOR TYPE ADAPTED TO HAVE INCORPORATED THEREWITH AN ELECTRIC CLOCK. LAMP TIME CORPORATION, Milwaukee, Wis.
Filed March 3, 1932. Serial No. 324,748. PUBLISHED MAY 10, 1932. Class 21.

296,256. STORAGE BATTERIES. READING BATTERIES, INC., Reading, Pa.
Filed March 5, 1932. Serial No. 324,830. PUBLISHED MAY 3, 1932. Class 21.

296,257. LUBRICATING OILS AND GREASES. THE PENNZOIL COMPANY, Los Angeles, Calif.
Filed March 7, 1932. Serial No. 324,937. PUBLISHED MAY 17, 1932. Class 15.

296,258. FUEL OILS, LUBRICATING OILS AND GREASES, ETC. THE PURE OIL COMPANY, Chicago, Ill.
Filed March 9, 1932. Serial No. 324,972. PUBLISHED MAY 10, 1932. Class 15.

296,259. ELECTRIC GENERATOR CONTROL APPARATUS. GENERAL CONTROL CORPORATION, Wilmington, Del., and Minneapolis, Minn.
Filed December 1, 1931. Serial No. 321,642. PUBLISHED MAY 10, 1932. Class 21.

296,260. ELECTRIC LAMP BULBS. DOANE BIGELOW, Mount Washington, Ohio.
Filed December 28, 1931. Serial No. 322,479. PUBLISHED MAY 10, 1932. Class 21.

296,261. GASOLINE, NAPHTHA, OIL, AND PARAFFINE WAX. OIL CREEK REFINING CO., Titusville, Pa.
Filed January 4, 1932. Serial No. 322,725. PUBLISHED MAY 17, 1932. Class 15.

296,262. SELF-FOLDING AND SELF-COILING ELECTRIC CONDUCTORS. UNITED ELASTIC CORPORATION, Easthampton, Mass.
Filed March 3, 1932. Serial No. 324,767. PUBLISHED MAY 17, 1932. Class 21.

296,263. IMITATION PRECIOUS STONES MADE OF PLASTIC MATTERS. GEMLOID CORPORATION, New York, N. Y.
Filed January 25, 1932. Serial No. 323,898. PUBLISHED MAY 10, 1932. Class 28.

296,264. CABLES FOR ELECTRICAL SYSTEMS. DEFIANCE SPARK PLUGS, INC., Toledo, Ohio.
Filed March 4, 1932. Serial No. 324,783. PUBLISHED MAY 3, 1932. Class 21.

296,265. SPARK PLUGS, FLASHLIGHTS, FLASHLIGHT BATTERIES, ETC. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed March 9, 1932. Serial No. 324,944. PUBLISHED MAY 10, 1932. Class 21.

296,266. SPARK PLUGS. JAMES EDWARD HEALEY, doing business as Aviator Spark Plug Co., Oakland, Calif.
Filed February 17, 1932. Serial No. 324,256. PUBLISHED MAY 3, 1932. Class 21.

296,267. GENUINE DIAMONDS AND JEWELRY FOR PERSONAL WEAR, NOT INCLUDING WATCHES CONTAINING GENUINE DIAMONDS. G. A. SODEN & Co., Chicago, Ill.
Filed March 3, 1932. Serial No. 324,762. PUBLISHED MAY 17, 1932. Class 28.

296,268. BED PANS. INTERNATIONAL STAMPING & ENAMELING CORPORATION, now by change of name International Enamelware Corporation, Brooklyn, N. Y.
Filed August 24, 1931. Serial No. 318,363. PUBLISHED MAY 17, 1932. Class 44.

296,269. BED PANS. INTERNATIONAL STAMPING & ENAMELING CORPORATION, now by change of name International Enamelware Corporation, Brooklyn, N. Y.
Filed August 24, 1931. Serial No. 318,364. PUBLISHED MAY 17, 1932. Class 44.

296,270. ADDRESSING MACHINES AND PARTS THEREOF, PRINTING MACHINES AND PARTS, AND IMPRESSING MACHINES FOR ADDRESS PRINTING PLATES AND PARTS. ADREMA MASCHINENBAUGES, M. B. H., Berlin, Germany.
Filed August 28, 1931. Serial No. 318,498. PUBLISHED MAY 3, 1932. Class 23.

296,271. MEN'S AND YOUNG MEN'S SUITS. THE JOSEPH & FEISS COMPANY, Cleveland, Ohio.
Filed September 17, 1931. Serial No. 319,144. PUBLISHED MAY 17, 1932. Class 39.

296,272. POULTRY FOOD. NORTHERN LIMESHELL PRODUCTS, Seattle, Wash.
Filed September 24, 1931. Serial No. 319,434. PUBLISHED MAY 17, 1932. Class 46.

296,273. REFRIGERATION UNITS. JOHN S. BOOTH, Dallas, Tex.
Filed October 27, 1931. Serial No. 320,568. PUBLISHED MAY 17, 1932. Class 31.

296,274. WALL PAPER CLEANER, ETC. CHARLES W. LANGDALE, Ottumwa, Iowa.
Filed November 4, 1931. Serial No. 320,785. PUBLISHED MAY 17, 1932. Class 4.

296,275. CERTAIN NAMED PAINT PRODUCTS. BRENNEREI UND PRESSHEFE-FABRIK TORNESCH GESELLSCHAFT MIT BESCHRANKTER HAFTUNG, Tornesch, Germany.
Filed December 4, 1931. Serial No. 321,746. PUBLISHED MAY 17, 1932. Class 16.

296,276. ROAD MATERIAL HANDLING EQUIPMENT. IOWA MANUFACTURING COMPANY, Cedar Rapids, Iowa.
Filed December 7, 1931. Serial No. 321,881. PUBLISHED MAY 10, 1932. Class 23.

296,277. A PERIODICAL PUBLICATION. EDWARD L. SIEKMEIER, Oak Park, Ill.
Filed December 14, 1931. Serial No. 322,115. PUBLISHED MAY 17, 1932. Class 38.

296,278. JAR RUBBERS. THE GROCERS & PRODUCERS CO., doing business as Clover Farm Stores, Cleveland, Ohio.
Filed January 22, 1932. Serial No. 323,291. PUBLISHED MAY 17, 1932. Class 35.

296,279. HYDROGEN PEROXIDE. THE PEROXIDE CHEMICAL CO., St. Louis, Mo.
Filed January 23, 1932. Serial No. 323,354. PUBLISHED MAY 17, 1932. Class 6.

296,280. PREPARATIONS USED SPECIFICALLY FOR THE TREATMENT OF SLEEPLESSNESS, AND ESPECIALLY INDICATED IN CONDITIONS OF EXHAUSTION, NERVOUS IRRITABILITY, AND NEURASTHENIA, ASTA AKTIENGESELLSCHAFT, Brackwede, Germany.
Filed February 2, 1932. Serial No. 323,736. PUBLISHED MAY 10, 1932. Class 6.

296,281. HAIR SHAMPOO CONTAINING THE EFFECTIVE COMPONENTS OF CAMOMILE, KNOWN AS KAMILLOSAN. CHEMISCH-PHARMAZEUTISCHE A.-G. BAD-HOMBURG WERK FRANKFURT A. M., Frankfort-on-the-Main, Germany.
Filed February 2, 1932. Serial No. 323,740. PUBLISHED MAY 3, 1932. Class 6.

296,282. TAILORED SEAT COVERS, SEAT PADS, SEAT SHIELDS, TAILORED AUTOMOBILE SEAT COVERS AND SEAT PADS AND SHIELDS, TAILORED CHAIR COVERS, CHAIR PADS AND CHAIR SHIELDS MADE OF FABRIC, LEATHER, IMITATION LEATHER, AND MATTING, AND COMBINATIONS THEREOF. EVR-KLEAN SEAT PAD COMPANY, St. Louis, Mo.
Filed February 15, 1932. Serial No. 324,159. PUBLISHED MAY 10, 1932. Class 32.

296,283. TAILORED SEAT COVERS, SEAT PADS, TAILORED AUTOMOBILE SEAT COVERS AND SEAT PADS, TAILORED CHAIR COVERS AND CHAIR PADS, MADE OF FABRIC, LEATHER, IMITATION LEATHER, AND MATTING, AND COMBINATIONS THEREOF. EVR-KLEAN SEAT PAD COMPANY, St. Louis, Mo.
Filed February 15, 1932. Serial No. 324,161. PUBLISHED MAY 10, 1932. Class 32.

296,284. BEAUTY CREAMS, LOTIONS, AND POWDERS. GLADYS V. MCCUNE, New York, N. Y.
Filed February 15, 1932. Serial No. 324,214. PUBLISHED MAY 10, 1932. Class 6.

296,285. OVEN IMPLEMENTS FOR USE IN REMOVING THE HOT CONTENTS OF KITCHEN RANGES. MANSFIELD D. JUDAH, Long Beach, Calif.
Filed February 17, 1932. Serial No. 324,258. PUBLISHED APRIL 12, 1932. Class 23.

296,286. PERFUME, ROUGE, SKIN CREAM, ETC. J. H. ALLISON, doing business as Allison's Drug Store, Wichita Falls, Tex.
Filed February 18, 1932. Serial No. 324,277. PUBLISHED MAY 10, 1932. Class 6.

296,287. DYES USED AS BIOLOGICAL STAINS. HARTMAN-LEDDON CO., INC., Philadelphia, Pa.
Filed February 18, 1932. Serial No. 324,286. PUBLISHED MAY 3, 1932. Class 6.

296,288. ADHESIVE DENTURE POWDER. JOHNSON & JOHNSON, New Brunswick, N. J.
Filed February 29, 1932. Serial No. 324,611. PUBLISHED MAY 3, 1932. Class 6.

296,289. CREAM FOR THE SKIN INCLUDING AS INGREDIENTS THE EFFECTIVE COMPONENTS OF CAMOMILE, KNOWN AS KAMILLOSAN, CHEMISCH-PHARMAZEUTISCHE A.-G. BAD-HOMBURG, Bad Homburg vor der Hohe, Germany.
Filed February 2, 1932. Serial No. 323,739. PUBLISHED MAY 3, 1932. Class 6.

296,290. MEDICINAL PRODUCT FOR THE RELIEF OF DROPSY, GOITRE, BRIGHTS DISEASE, ETC. CLARENCE A. GREEN, doing business as The Indian Remedy Co., Paris, Tex.
Filed August 11, 1931. Serial No. 317,868. PUBLISHED MAY 10, 1932. Class 6.

296,291. PHOTOGRAPHIC APPARATUS. ZEISS IKON AKTIENGESELLSCHAFT, Dresden, Germany.
Filed November 21, 1931. Serial No. 321,409. PUBLISHED MAY 10, 1932. Class 26.

296,292. REPRODUCTIONS OF ANTIQUE FURNITURE—NAMELY, BEDS, TABLES, CHESTS OF DRAWERS AND BLANKET CHESTS, CHAIRS, AND DESKS. VIRGINIA CRAFTSMEN INC., Harrisonburg, Va.; New York, N. Y.; and Chicago, Ill.
Filed December 10, 1931. Serial No. 322,010. PUBLISHED MAY 17, 1932. Class 32.

296,293. ASTRINGENT LIQUIDS AND CREAMS, EYELASH GROWERS, HAND LOTIONS, ETC. RICHEL COMPANY, INC., Upper Darby, Pa.
Filed December 29, 1931. Serial No. 322,522. PUBLISHED MAY 3, 1932. Class 6.

296,294. TOOTH PASTE. WALGREEN CO., Chicago, Ill.
Filed January 4, 1932. Serial No. 322,719. PUBLISHED MAY 3, 1932. Class 6.

296,295. POCKET KNIFE. CATTARAUGUS CUTLERY COMPANY, Little Valley, N. Y.
Filed January 12, 1932. Serial No. 322,927. PUBLISHED MAY 10, 1932. Class 23.

296,296. SAFETY RAZORS AND SAFETY RAZOR BLADES. UTILITY BLADE CORPORATION, Irvington, N. J.
Filed January 13, 1932. Serial No. 322,977. PUBLISHED MAY 17, 1932. Class 23.

296,297. CERTAIN NAMED PAINT PRODUCTS. RINSHED-MASON COMPANY, Detroit, Mich.
Filed March 14, 1932. Serial No. 325,113. PUBLISHED MAY 17, 1932. Class 16.

296,298. CERTAIN NAMED PAINT PRODUCTS. RINSHED-MASON COMPANY, Detroit, Mich.
Filed March 14, 1932. Serial No. 325,114. PUBLISHED MAY 17, 1932. Class 16.

296,299. CERTAIN NAMED PAINT PRODUCTS. RINSHED-MASON COMPANY, Detroit, Mich.
Filed March 14, 1932. Serial No. 325,115. PUBLISHED MAY 17, 1932. Class 16.

296,300. CERTAIN NAMED PAINT PRODUCTS. RINSHED-MASON COMPANY, Detroit, Mich.
Filed March 14, 1932. Serial No. 325,116. PUBLISHED MAY 17, 1932. Class 16.

296,301. PILE FABRICS. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed March 15, 1932. Serial No. 325,151. PUBLISHED MAY 17, 1932. Class 42.

296,302. ADHESIVE LIQUID PASTE. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio.
Filed March 21, 1932. Serial No. 325,311. PUBLISHED MAY 17, 1932. Class 5.

296,303. HOSIERY. WALTER FRED HOSIERY MILLS, INC., Nashville, Tenn.
Filed March 21, 1932. Serial No. 325,324. PUBLISHED MAY 17, 1932. Class 39.

296,304. ADHESIVE LIQUID PASTE. KROMA COLOR COMPANY, Sandusky, Ohio.
Filed March 21, 1932. Serial No. 325,333. PUBLISHED MAY 17, 1932. Class 5.

296,305. TOY BUILDING BLOCKS. ESSEX RUBBER COMPANY, Trenton, N. J.
Filed March 23, 1932. Serial No. 325,398. PUBLISHED MAY 17, 1932. Class 22.

296,306. CLEANING COMPOUND. THE PHOENIX OIL COMPANY, Cleveland, Ohio.
Filed March 24, 1932. Serial No. 325,439. PUBLISHED MAY 17, 1932. Class 4.

296,307. TRICRESYL PHOSPHATE. KAVALCO PRODUCTS INC., Nitro, W. Va.
Filed March 26, 1932. Serial No. 325,523. PUBLISHED MAY 17, 1932. Class 6.

296,308. BLANKETS WOVEN FROM COTTON, WOOL, OR OTHER FIBRES OR A COMBINATION OF COTTON, WOOL, OR OTHER FIBRES. PEPPERELL MANUFACTURING COMPANY, Boston, Mass.
Filed March 26, 1932. Serial No. 325,528. PUBLISHED MAY 17, 1932. Class 42.

296,309. SILK PIECE GOODS. H. R. MALLINSON & CO., INC., New York, N. Y.
Filed April 13, 1932. Serial No. 326,057. PUBLISHED MAY 17, 1932. Class 42.

296,310. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed April 13, 1932. Serial No. 326,047. PUBLISHED MAY 17, 1932. Class 42.

296,311. PROPHYLACTIC RUBBER ARTICLES. THE KILLIAN MANUFACTURING CO., Akron, Ohio.
Filed April 12, 1932. Serial No. 326,043. PUBLISHED MAY 17, 1932. Class 44.

296,312. SILK CREPES IN THE PIECE. WILLIAM SKINNER & SONS, New York, N. Y.
Filed April 12, 1932. Serial No. 326,030. PUBLISHED MAY 17, 1932. Class 42.

296,313. TOY RUBBER BALLOONS. THE OAK RUBBER COMPANY, Ravenna, Ohio.
Filed April 12, 1932. Serial No. 326,022. PUBLISHED MAY 17, 1932. Class 22.

296,314. TOY RUBBER BALLOONS. THE OAK RUBBER COMPANY, Ravenna, Ohio.
Filed April 12, 1932. Serial No. 326,021. PUBLISHED MAY 17, 1932. Class 22.

296,315. TOY RUBBER BALLOONS. THE OAK RUBBER COMPANY, Ravenna, Ohio.
Filed April 12, 1932. Serial No. 326,020. PUBLISHED MAY 17, 1932. Class 22.

296,316. MINERAL WATER AND FOR CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACTS USED IN MAKING THE SAME. H. E. NEWMAN, doing business as Great Falls Orange Crush Bottling Company, Great Falls, Mont.
Filed April 11, 1932. Serial No. 325,093. PUBLISHED MAY 17, 1932. Class 45.

296,317. CALFSKINS, HIDES, AND SKINS. KAUFHERR & CO., Newark, N. J.
Filed April 5, 1932. Serial No. 325,828. PUBLISHED MAY 17, 1932. Class 1.

296,318. FOOT BALLS, BASKET BALLS, VOLLEY BALLS, AND SOCCER BALLS. THE DRAPER-MAYNARD COMPANY, Plymouth, N. H.
Filed April 8, 1932. Serial No. 325,903. PUBLISHED MAY 17, 1932. Class 22.

296,319. MEDICINAL AND TOILET SOAP. E. T. BROWNE DRUG CO. INC., New York, N. Y.
Filed April 7, 1932. Serial No. 325,868. PUBLISHED MAY 17, 1932. Class 4.

296,320. OUTER SUITS FOR MEN AND BOYS. H. DAROFF & SONS, INC., Philadelphia, Pa.
Filed April 4, 1932. Serial No. 325,780. PUBLISHED MAY 17, 1932. Class 39.

296,321. PERFUMED SOAP. POTTER & MOORE LIMITED, London, England.
Filed April 2, 1932. Serial No. 325,756. PUBLISHED MAY 17, 1932. Class 4.

296,322. NON-ALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS—NAMELY, STILL FRESH FRUIT BEVERAGES AND COCOA DRINKS. SUNSPRAY BEVERAGES, INC., Brooklyn, N. Y.
Filed March 28, 1932. Serial No. 325,606. PUBLISHED MAY 17, 1932. Class 45.

296,323. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed April 2, 1932. Serial No. 325,745. PUBLISHED MAY 17, 1932. Class 42.

296,324. CLEANSER FOR PAINTED SURFACES, ETC. JOSEPH WARREN BULLEN, doing business as The Bullen Chemical Company, Folcroft, Pa.
Filed March 28, 1932. Serial No. 325,560. PUBLISHED MAY 17, 1932. Class 4.

296,325. ELECTRICAL WATER HEATERS OF THE TYPE IN WHICH THE WATER, WHILE PASSING THERETHROUGH, IS HEATED BY RESISTANCE COILS. J. R. ACKERMAN CORPORATION, Philadelphia, Pa.
Filed March 28, 1932. Serial No. 325,545. PUBLISHED MAY 17, 1932. Class 21.

296,326. HOSIERY. VAN RAALTE COMPANY, New York, N. Y.
Filed March 26, 1932. Serial No. 325,537. PUBLISHED MAY 17, 1932. Class 39.

296,327. MANICURE IMPLEMENTS, SETS AND KITS. SCHNEIDER BROTHERS INCORPORATED, Chicago, Ill.
Filed March 26, 1932. Serial No. 325,533. PUBLISHED MAY 17, 1932. Class 44.

296,328. HYDROUS CEMENT AND IMPRESSION MATERIAL FOR DENTAL IMPRESSIONS. PETER A. KANOUSE, Los Angeles, Calif.
Filed June 3, 1929. Serial No. 284,945. PUBLISHED MAY 17, 1932. Class 44.

296,329. COMPOSITION FLEXIBLE COUPLINGS FOR MACHINERY SHAFTS. THE SMITH POWER TRANSMISSION COMPANY, Cleveland, Ohio.
Filed January 18, 1930. Serial No. 294,947. PUBLISHED MAY 10, 1932. Class 23.

296,330. TYPE CLEANER FOR REMOVING INK. THE PARAFFINE COMPANIES, INC., San Francisco, Calif.
Filed March 22, 1930. Serial No. 297,771. PUBLISHED MAY 17, 1932. Class 4.

296,331. LINIMENT FOR EXTERNAL USE FOR THE TREATMENT OF INFLAMMATION AND SWELLING, SORENESS, PAIN, AND FOR GENERAL USE AS A COUNTER-IRRITANT. WILLIAM C. MCINTIRE, Charlotte, N. C.
Filed April 29, 1930. Serial No. 299,615. PUBLISHED MAY 17, 1932. Class 6.

296,332. PREPARATION FOR THE TREATMENT OF HEMORRHOIDS. ROBERT S. HEADLAND, doing business as The H. H. S. Products Company, Butler, Pa.
Filed December 6, 1930. Serial No. 308,692. PUBLISHED JANUARY 12, 1932. Class 6.

296,333. PAPER TOWELS. NORTHERN PAPER MILLS, Green Bay, Wis.
Filed March 21, 1932. Serial No. 325,385. PUBLISHED MAY 17, 1932. Class 37.

296,334. MACHINES FOR TESTING THE STRENGTH OR STRETCH OF MATERIALS. HENRY L. SCOTT COMPANY, Providence, R. I.
Filed March 22, 1932. Serial No. 325,876. PUBLISHED MAY 3, 1932. Class 26.

296,335. INSULATED WIRES AND CABLES. THE OKONITE COMPANY, Passaic, N. J.
Filed March 22, 1932. Serial No. 325,372. PUBLISHED MAY 17, 1932. Class 21.

296,336. PHOTOGRAPHIC SHUTTERS. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed March 22, 1932. Serial No. 325,366. PUBLISHED MAY 3, 1932. Class 26.

296,337. CAMERAS, PROJECTORS, AND MOTION PICTURE APPARATUS. STEWART-WARNER CORPORATION, Chicago, Ill.
Filed March 21, 1932. Serial No. 325,350. PUBLISHED MAY 3, 1932. Class 26.

296,338. STORAGE BATTERIES. NATIONAL BATTERY COMPANY, St. Paul, Minn.
Filed March 21, 1932. Serial No. 325,339. PUBLISHED MAY 10, 1932. Class 21.

296,339. BRACELETS, NECKLACES, EAR-RINGS, PINS, CLIPS, AND FINGER RINGS. ERNEST STEINER & CO., INC., New York, N. Y.
Filed March 10, 1932. Serial No. 325,022. PUBLISHED MAY 17, 1932. Class 28.

296,340. SLICING MACHINES. AMERICAN SLICING MACHINE COMPANY, Chicago, Ill.
Filed March 11, 1932. Serial No. 325,031. PUBLISHED MAY 3, 1932. Class 23.

296,341. NEW BACTERIOLOGICAL PEPTONE HAVING ESPECIALLY HIGH GROWTH STIMULATING PROPERTIES. DIFCO LABORATORIES, Detroit, Mich.
Filed March 11, 1932. Serial No. 325,035. PUBLISHED MAY 10, 1932. Class 6.

296,342. LUBRICATING OILS AND GREASES AND KEROSENE AND GASOLINE. THE R. J. BROWN COMPANY, St. Louis, Mo.
Filed March 12, 1932. Serial No. 325,058. PUBLISHED MAY 3, 1932. Class 15.

296,343. ELECTRIC FANS. THE F. A. SMITH MANUFACTURING COMPANY, Rochester, N. Y.
Filed March 12, 1932. Serial No. 325,078. PUBLISHED MAY 3, 1932. Class 21.

296,344. CREAMS, LOTIONS, ROUGES, ETC. PARISTYLE NOVELTY CO. INC., New York, N. Y.
Filed March 9, 1932. Serial No. 325,083. PUBLISHED MAY 10, 1932. Class 6.

296,345. INSECTICIDE. THE BRUNDAGE BROS. CO., Toledo, Ohio.
Filed March 14, 1932. Serial No. 325,086. PUBLISHED MAY 17, 1932. Class 6.

296,346. COMPASSES AND DIVIDERS. EAGLE PENCIL COMPANY, New York, N. Y.
Filed March 14, 1932. Serial No. 325,089. PUBLISHED MAY 3, 1932. Class 26.

296,347. OPHTHALMIC AND PROTECTION LENSES. WILLSON PRODUCTS, INC., Reading, Pa.
Filed March 14, 1932. Serial No. 325,130. PUBLISHED MAY 3, 1932. Class 26.

296,348. NON-IRRITATING, NON-TOXIC, ANTISEPTIC SOCKET DRESSING, PYORRHEA TREATMENT, AND AN AQUEOUS SOLUTION OF AN ANALINE DYE HAVING ANTISEPTIC AND ANALGESIC PROPERTIES AND MAY BE USED AS A SURGICAL DRESSING WHEREVER INDICATED. DYALINE, INC., Collinsville, Ill.
Filed March 15, 1932. Serial No. 325,137. PUBLISHED MAY 17, 1932. Class 6.

296,349. OIL WELL PUMPS AND PARTS THEREFOR. HOFCO PUMP LTD., Long Beach, Calif.
Filed March 15, 1932. Serial No. 325,145. PUBLISHED MAY 3, 1932. Class 23.

296,350. ANTISEPTIC FOR EXTERNAL AND INTERNAL USE. THE FARASTAN COMPANY, Philadelphia, Pa.
Filed March 16, 1932. Serial No. 325,165. PUBLISHED MAY 17, 1932. Class 6.

296,351. INSECTICIDES AND FUNGICIDES. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio.
Filed March 17, 1932. Serial No. 325,243. PUBLISHED MAY 17, 1932. Class 6.

296,352. DESIZING AGENT. KALLE & CO. AKTIENGESELLSCHAFT, Wiesbaden-Biebrich, Germany.
Filed March 18, 1932. Serial No. 325,261. PUBLISHED MAY 17, 1932. Class 6.

296,353. CHEMICALS FOR THE TREATMENT OF RUBBER PRIOR TO OR DURING THE CURING OR VULCANIZING THEREOF. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y.
Filed March 18, 1932. Serial No. 325,265. PUBLISHED MAY 17, 1932. Class 6.

296,354. GOGGLES AND EYE-PROTECTORS. E. B. MEYROWITZ, INC., New York, N. Y.
Filed March 18, 1932. Serial No. 325,264. PUBLISHED MAY 17, 1932. Class 26.

296,355. CHEMICALS FOR THE TREATMENT OF RUBBER PRIOR TO OR DURING THE CURING OR VULCANIZING THEREOF. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y.
Filed March 18, 1932. Serial No. 325,266. PUBLISHED MAY 17, 1932. Class 6.

296,356. RAZORS AND RAZOR BLADES. PRYBRANDS, INC., Long Island City, N. Y.
Filed March 18, 1932. Serial No. 325,269. PUBLISHED MAY 3, 1932. Class 23.

296,357. LOCAL ANESTHETICS. E. R. SQUIBB & SONS, New York, N. Y.
Filed March 18, 1932. Serial No. 325,271. PUBLISHED MAY 17, 1932. Class 6.

296,358. PRIZE CUPS, SYMBOLIC FIGURES, AND TROPHIES MADE OF OR PLATED WITH PRECIOUS METAL. INTERNATIONAL SILVER COMPANY, Meriden, Conn.
Filed March 21, 1932. Serial No. 325,328. PUBLISHED MAY 17, 1932. Class 28.

296,359. FRESH VEGETABLES AND CANTALOUPES. ERLE E. EMERY, doing business as Erle E. Emery Co., Los Angeles, Calif.
Filed January 24, 1931. Serial No. 310,332. PUBLISHED MAY 17, 1932. Class 46.

296,360. MEDICINAL COMPOUND FOR USE AS A BLOOD PURIFIER. HUPMAN HERBALIST COMPANY, Binghamton, N. Y.
Filed December 15, 1930. Serial No. 309,047. PUBLISHED MAY 17, 1932. Class 6.

296,361. PREPARATION FOR USE IN THE TREATMENT OF COLDS, BRONCHITIS, AND TUBERCULAR TROUBLES. JOHN AMOS LETHERBY, Midland, Ontario, Canada.
Filed December 28, 1931. Serial No. 322,486. PUBLISHED MAY 3, 1932. Class 6.

296,362. BURETTE CLAMPS AND CLAMP HOLDERS, AND PARTS THEREOF. FISHER SCIENTIFIC COMPANY, Pittsburgh, Pa.
Filed April 9, 1932. Serial No. 325,948. PUBLISHED MAY 17, 1932. Class 26.

296,363. LAXATIVE PREPARATION. SCHERING CORPORATION, New York, N. Y.
Filed April 15, 1932. Serial No. 326,163. PUBLISHED MAY 24, 1932. Class 6.

296,364. POWER TRANSMISSION MACHINERY, COMPRISING ROTARY SHEAVES AND DRIVES CONSISTING OF DRIVING AND DRIVEN SHEAVES, AND FLEXIBLE ENDLESS DRIVING BELTS COOPERATING WITH SAID SHEAVES TO TRANSMIT POWER FROM ONE SHEAVE TO THE OTHER. ALLIS-CHALMERS MANUFACTURING COMPANY, Milwaukee and West Allis, Wis.
Filed April 9, 1932. Serial No. 325,934. PUBLISHED MAY 17, 1932. Class 23.

296,365. GREASEPROOF AND IMITATION PARCHMENT PAPER. RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y.
Filed April 8, 1932. Serial No. 325,919. PUBLISHED MAY 17, 1932. Class 37.

296,366. WAX PAPER. NEWARK PARAFFINE & PARCHMENT PAPER CO., Newark, N. J.
Filed April 8, 1932. Serial No. 325,916. PUBLISHED MAY 17, 1932. Class 37.

296,367. COMPRESSION PRESSURE GAUGES. ETHYL GASOLINE CORPORATION, Wilmington, Del., and New York, N. Y.
Filed April 8, 1932. Serial No. 325,904. PUBLISHED MAY 17, 1932. Class 26.

296,368. RAZOR BLADES. TRIANGLE MECHANICAL LABORATORIES CORP., Brooklyn, N. Y.
Filed April 7, 1932. Serial No. 325,886. PUBLISHED MAY 17, 1932. Class 23.

296,369. RAZOR BLADES. TRIANGLE MECHANICAL LABORATORIES CORP., Brooklyn, N. Y.
Filed April 7, 1932. Serial No. 325,885. PUBLISHED MAY 17, 1932. Class 23.

296,370. TOILET PAPER, BATHROOM TISSUE, AND SKIN CLEANSING TISSUE. MYERS PAPER COMPANY, Memphis, Tenn.
Filed April 5, 1932. Serial No. 325,829. PUBLISHED MAY 17, 1932. Class 37.

296,371. PAPER NAPKINS AND HANDKERCHIEFS. THE TISSUE COMPANY, Saugerties, N. Y.
Filed April 1, 1932. Serial No. 325,730. PUBLISHED MAY 17, 1932. Class 37.

296,372. THREADS AND YARNS. AMERICAN GLANZSTOFF CORPORATION, New York, N. Y.
Filed March 31, 1932. Serial No. 325,671. PUBLISHED MAY 17, 1932. Class 43.

296,373. GENERATORS FOR RADIO RECEIVING SETS. UNITED AMERICAN BOSCH CORPORATION, Springfield, Mass.
Filed March 25, 1932. Serial No. 325,492. PUBLISHED MAY 17, 1932. Class 21.

296,374. INCANDESCENT ELECTRIC LAMPS. DURO TEST CORPORATION, New York, N. Y.
Filed March 24, 1932. Serial No. 325,427. PUBLISHED MAY 10, 1932. Class 21.

296,375. LAXATIVE AND TREATMENT FOR INTESTINAL AFFECTIONS IN TABLET FORM. OMNIUM DE SPECIALITES & PRODUITS CHIMIQUES, SOCIETE ANONYME, Paris, France.
Filed March 19, 1932. Serial No. 325,296. PUBLISHED MAY 17, 1932. Class 6.

296,376. ANTISEPTIC LOTION FOR THE SCALP AND HAIR AND A POMADE FOR SCALP NOURISHMENT AND HAIR DRESSING. LEO LEVINE, doing business as Hansa Chemical Co., Boston, Mass.
Filed March 25, 1932. Serial No. 325,475. PUBLISHED MAY 17, 1932. Class 6.

296,377. ELECTRIC STORAGE BATTERIES. ROYAL BATTERY CORPORATION, New Brunswick, N. J., and New York, N. Y.
Filed March 23, 1932. Serial No. 325,418. PUBLISHED MAY 10, 1932. Class 21.

296,378. LIPSTICK. CLARIBEL AIDA PLOWRIGHT, Manchester, England.
Filed March 22, 1932. Serial No. 325,374. PUBLISHED MAY 17, 1932. Class 6.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]
THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

296,379. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) ROBERT BOSCH AKTIENGESELLSCHAFT, Stuttgart, Germany. Filed Dec. 26, 1922. Serial No. 173,856.

Bosch

For Magneto-Electric Ignition Systems for Internal Combustion Engines and Parts Thereof—Namely, Induction Coils, Distributors, Interrupters, Spark Plugs, Terminals, Cable Lugs, and Spark Intensifiers; Dynamos, Electromotors, Electric Starting Systems for Internal Combustion Engines, Electric Headlights and Other Electric Lamps and Lanterns Connected With the Electric System of Vehicles and Cycles; Electric Bulbs, Vacuum Tubes, Primary Batteries, Storage Batteries, Electric Transformers, Switches, Switch-Boxes, Regulators for Magneto-Electric Ignition Systems, and Electric Lighting and Starting Systems; Cables, Safety Fuses, Junction Boxes, Control Devices for Electric Starting and Lighting Systems for Vehicles and Cycles; Electric Horns, Electric Cigar Lighters, Electric Pocket Lamps, Electric Heating Devices for Motor Cars, Radiators, Induction Pipes; Electric Foot-Warming Devices, Electrically Heated Gloves, Electrically Heated Windshield Cleaners, Electric Lighters for Gas, Ceramic Electrical Insulating Material.
Claims use since June 3, 1922.

296,380. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ONONDAGA SILK COMPANY, INC., Syracuse, N. Y. Filed June 2, 1931. Serial No. 315,317.

Satin Ajanta

For Silk Fabrics in the Piece.
Claims use since May 28, 1931.

296,381. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ONONDAGA SILK COMPANY, INC., Syracuse, N. Y. Filed June 2, 1931. Serial No. 315,319.

Crepe Yanda

For Silk Fabrics in the Piece.
Claims use since May 21, 1931.

296,382. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ONONDAGA SILK COMPANY, INC., Syracuse, N. Y. Filed June 2, 1931. Serial No. 315,320.

Crepe Adana

For Silk Fabrics in the Piece.
Claims use since May 20, 1931.

296,383. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MORRIS ARONOFF, doing business as Sinapine Prod. Co., Hoboken, N. J. Filed June 3, 1931. Serial No. 315,347.

SINAPINE



For a Preparation for the Treatment of Headaches, Colds, Catarrh, Asthma, Neuralgia and Sea Sickness.
Claims use since Jan. 2, 1931.

296,384. (CLASS 39. CLOTHING.) TRU-FIT DRESS CO. INC., New York, N. Y. Filed June 9, 1931. Serial No. 315,611.

AS EASY AS
ABC

For Piece Goods in the Nature of Cut-Out Dresses.
Claims use since June 2, 1931.

296,385. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) HANDY PARTS STORES, Los Angeles, Calif. Filed Aug. 26, 1931. Serial No. 318,449.

Handy Parts Stores

For Replacement Parts for Automobiles, Trucks, and Tractors—Namely, Axle Shafts, Drive Shafts, Bearings, Bushings, Clutch Parts, Motor Parts, Universal Joints, and Structural Parts Thereof.
Claims use since Apr. 1, 1926.

296,386. (CLASS 2. RECEPTACLES.) ROSETH CORPORATION, Brooklyn, N. Y. Filed Sept. 8, 1931. Serial No. 318,850.

KWIK—LOX

For Paper Garment Bags.
Claims use since June 15, 1931.

296,387. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ELIZABETH ARDEN, INC., New York, N. Y. Filed Sept. 11, 1931. Serial No. 318,931.

ALLAMANDA

ELIZABETH ARDEN

For Bath Salts.
Claims use since Feb. 20, 1931.

296,388. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ELIZABETH ARDEN, INC., New York, N. Y. Filed Sept. 11, 1931. Serial No. 318,932.

ROSE GERANIUM

ELIZABETH ARDEN

For Bath Salts.
Claims use since Feb. 20, 1931.

296,389. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE OHIO FARM BUREAU SERVICE COMPANY, Columbus, Ohio. Filed Oct. 5, 1931. Serial No. 319,736.

Pork Maker

For Hog Feeds.
Claims use since Apr. 27, 1928.

296,390. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) AMERICAN BRAKE MATERIALS CORPORATION, New York, N. Y., and Detroit, Mich. Filed Oct. 24, 1931. Serial No. 320,389.

AMERICAN BRAKEBLOK

For Composition Frictional Elements for Brakes.
Claims use since June 23, 1931.

296,391. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE COUNTY CHEMICAL COMPANY LIMITED, Birmingham, England. Filed Feb. 18, 1932. Serial No. 324,282.

BRYLCREEM

For Hair Cream.
Claims use since Jan. 12, 1928.

296,392. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) WILLIAM HELLER, INC., New York, N. Y. Filed July 11, 1931. Serial No. 316,840.

HELLER-KNIT

For Knitted Textiles in the Piece Made of Silk, Cotton, Rayon, Wool, and Artificial Yarns and Mixtures Thereof.
Claims use since June 5, 1931.

296,393. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) GOLD SEAL MANUFACTURING COMPANY, INC., East Newark, N. J. Filed Mar. 16, 1932. Serial No. 325,166.

CROYDON

For Radio, Vacuum Tubes, and Radio Receiving Sets.
Claims use since November, 1930.

296,394. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE CANDO CORPORATION, Cambridge, Mass. Filed Mar. 24, 1932. Serial No. 325,422.

IN-CEN-SE-FUME

For Deodorizers.
Claims use since Jan. 9, 1924.

296,395. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ASSOCIATED FARMERS' EXCHANGES, INC., Worcester, Mass. Filed May 7, 1932. Serial No. 326,846.

MORE VALUE

For Food for Stock and Poultry.
Claims use since May 7, 1931.

296,396. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) KEYSTONE STEEL & WIRE COMPANY, Peoria, (South Bartonville), Ill. Filed May 27, 1932. Serial No. 327,512.

CHIC-MESH

For Wire Fence.
Claims use since January, 1931.

296,397. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) EUGENE J. SCHAUB, Corona, N. Y. Filed Jan. 17, 1930. Serial No. 294,894.

KEELOCK SOUND REEL

For Reels for Motion Picture Films.
Claims use since August, 1928.

TRADE-MARK REGISTRATIONS RENEWED

39,116. COTTON PIECE GOODS AND COTTON YARN. Registered October 28, 1902. KER & CO., London, England, Glasgow, Scotland, and Manila, P. I. Renewed October 28, 1932, to Ker & Co., Manila, P. I., a Firm.

39,117. COTTON PIECE GOODS AND COTTON YARN. Registered October 28, 1902. KER & CO., London, England; Glasgow, Scotland, and Manila, P. I. Renewed October 28, 1932, to Ker & Co., Manila, P. I., a Firm.

39,118. COTTON PIECE GOODS AND COTTON YARN. Registered October 28, 1902. KER & CO., London, England; Glasgow, Scotland, and Manila, P. I. Renewed October 28, 1932, to Ker & Co., Manila, P. I., a Firm.

39,410. ELECTRICAL INSULATORS. Registered December 2, 1902. MICA INSULATOR COMPANY, New York, N. Y., a Corporation of New Jersey. Renewed December 2, 1932.

39,411. ELECTRICAL INSULATORS. Registered December 2, 1902. MICA INSULATOR COMPANY, New York, N. Y., a Corporation of New Jersey. Renewed December 2, 1932.

39,449. ELECTRICAL INSULATORS. Registered December 9, 1902. MICA INSULATOR COMPANY, New York, N. Y., a Corporation of New Jersey. Renewed December 9, 1932.

83,143. LUBRICATING OILS AND GREASES. Registered August 22, 1911. W. P. COLLINS & CO. Renewed August 22, 1931, to W. P. Collins Oil Company Incorporated, Chicago, Ill., a Corporation of Illinois, assignee.

85,810. A REMEDY FOR THE ALLEVIATION OF AFFECTIONS OF THE BOWELS. Registered March 19, 1912. HALTIWANGER-TAYLOR DRUG CO. Renewed March 19, 1932, to William B. Freeman, doing business as Haltiwanger-Taylor Drug Company, Atlanta, Ga., assignee.

86,541. CERTAIN KNITTED, NETTED, AND TEXTILE FABRICS. Registered May 14, 1912. ARNOLD OTTO MEYER, Hamburg, Germany, a Firm. Renewed May 14, 1932.

86,609. CERTAIN KINDS OF CUTLERY. Registered May 21, 1912. ARNOLD OTTO MEYER, Hamburg, Germany, a Firm. Renewed May 21, 1932.

86,731. COLD-WATER PAINT. Registered May 28, 1912. F. O. PIERCE CO., New York, N. Y. Renewed May 28, 1932, to F. O. Pierce Co., Brooklyn, N. Y., a Corporation of New York.

86,880. ORANGES. Registered June 11, 1912. CHARTER OAK CITRUS ASSOCIATION, Charter Oak, Calif., a Corporation of California. Renewed June 11, 1932.

87,475. CERTAIN MEDICINES AND PHARMACEUTICAL PREPARATIONS. Registered July 16, 1912. THE OWL DRUG CO., San Francisco, Calif., a Corporation of Nevada. Renewed July 16, 1932.

87,539. AN EMBALMING FLUID. Registered July 23, 1912. JAMES W. IRWIN. Renewed July 23, 1932, to Paul L. McConomy, Philadelphia, Pa., successor.

88,055. INSECT-POWDER. Registered August 27, 1912. BUHACH PRODUCING AND MANUFACTURING COMPANY, Stockton, Calif., a Corporation of California. Renewed August 27, 1932.

88,062. A TONIC LAXATIVE. Registered August 27, 1912. GEORGE A. COLVIN. Renewed August 27, 1932, to Brunswick Tablet Co., Chicago, Ill., a Firm, assignee.

88,792. COTTON PIECE GOODS. Registered October 22, 1912. T. A. SHAW AND CO. Renewed October 22, 1932, to T. A. Shaw & Company, Chicago, Ill., a Corporation of Illinois, successor.

88,832. SOUTH AMERICAN TEA, (*ILEX PARAGUAYENSIS*). Registered October 29, 1912. BERNDT & CO., Baltimore, Md., a Firm. Renewed October 29, 1932.

88,878. PERFUMES AND SACHET-POWDER. Registered October 29, 1912. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed October 29, 1932.

88,882. PERFUMES, SACHET-POWDERS, FACE-POWDER, AND TOOTH-POWDER. Registered October 29, 1912. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed October 29, 1932.

88,893. CERTAIN NAMED MACHINERY AND TOOLS. Registered October 29, 1912. KEYSTONE DRILLER COMPANY, Beaver Falls, Pa., a Corporation of Pennsylvania. Renewed October 29, 1932.

89,084. A CHOCOLATE CONFECTION. Registered November 12, 1912. AMBROSIA CHOCOLATE COMPANY. Renewed November 12, 1932, to Ambrosia Chocolate Company, Milwaukee, Wis., a Corporation of Wisconsin, successor.

89,088. COTTON PIECE GOODS. Registered November 12, 1912. JACOB S. BERNHEIMER & BRO., New York, N. Y., a Firm. Renewed November 12, 1932.

89,135. KNOCKDOWN HOUSES. Registered November 12, 1912. NORTH AMERICAN CONSTRUCTION COMPANY. Renewed November 12, 1932, to The Alladin Company, Bay City, Mich., a Corporation of Michigan, assignee.

89,299. CERTAIN NAMED LIFTING APPARATUS AND FREIGHT AND PASSENGER ELEVATORS. Registered December 3, 1912. SEDGWICK MACHINE WORKS. Renewed December 3, 1932, to Sedgwick Machine Works, Incorporated, New York, N. Y., a Corporation of New York, assignee.

89,506. CERTAIN NAMED FOODS. Registered December 17, 1912. THE A. SANDER PACKING COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed December 17, 1932.

LABELS

REGISTERED AUGUST 2, 1932

40,973.—*Title:* BEECH-NUT LUSTER-MINTS. For Peppermints. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published May 2, 1932.

40,974.—*Title:* CENTENNIAL. For Calf Meal. CENTENNIAL FLOURING MILLS COMPANY, Seattle, Wash. Published June 8, 1932.

40,975.—*Title:* CENTENNIAL. For Cake Flour. CENTENNIAL FLOURING MILLS COMPANY, Seattle, Wash. Published June 9, 1932.

40,976.—*Title:* CENTENNIAL. For Pancake and Waffle Flour. CENTENNIAL FLOURING MILLS COMPANY, Seattle, Wash. Published June 8, 1932.

40,977.—*Title:* GARDEN PATCH. For Vacuum Packed Canned Corn. COKATO CANNING COMPANY, Le Sueur, Minn. Published May 27, 1932.

40,978.—*Title:* GARDEN PATCH. For Canned Peas. COKATO CANNING COMPANY, Le Sueur, Minn. Published May 27, 1932.

40,979.—*Title:* GARDEN PATCH. For Canned Corn. COKATO CANNING COMPANY, Le Sueur, Minn. Published May 27, 1932.

40,980.—*Title:* CHOCOLATE COVERED CORN CRUNCH. For a Pop Corn Confection. CLARENCE W. EATON, Lynn, Mass. Published March 5, 1932.

40,981.—*Title:* VARACHINA WASHING FLUID. For Washing Fluid. JOHN FRASCHETTI, doing business as The New Castle Fluid Chemical Co., New Castle, Pa. Published April 15, 1932.

40,982.—*Title:* THE SECRET OF FAST ACCURATE TENNIS. For Tennis Rackets. HORACE W. HALL, doing business as The Speedwood Co., Newton, Mass. Published May 20, 1932.

40,983.—*Title:* TIP TOP. For Cigarette Paper. LIGGETT & MYERS TOBACCO COMPANY, New York, N. Y. Published May 6, 1932.

40,984.—*Title:* DR. MEANS' PILLS. For Pills. WILLIAM B. MEANS, Lebanon, Pa. Published January 2, 1932.

40,985.—*Title:* THE SUITE OF A THOUSAND SPRINGS. For Spring Products. NACHMAN SPRING-FILLED CORPORATION, Chicago, Ill. Published March 25, 1932.

40,986.—*Title:* RÉNOU DRY CLEANER. For Fluid Used for Cleaning Purposes. THE RÉNOU CHEMICAL CORPORATION, Akron, Ohio. Published May 27, 1932.

40,987.—*Title:* HEAVY BODIED WATERPROOF EXTERIOR PAINT. For Exterior Paint. WILLIAM RICE, doing business as Paint-Point Products Company, Brooklyn, N. Y. Published March 28, 1932.

40,988.—*Title:* THOMPSON'S TAMPA CIGARS. For Cigars. THOMPSON & COMPANY, INC., Tampa, Fla. Published May 17, 1932.

40,989.—*Title:* PEDIFORME SHOE COMPANY. For Shoes. THE WOHLGEMUTH PAPER BOX CO., Brooklyn, N. Y. Published August 4, 1930.

PRINTS

REGISTERED AUGUST 2, 1932

13,789.—*Title:* HOW LIVELY WOOL LEADS CUSTOMERS INTO YOUR STORE. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published May 21, 1932.

13,790.—*Title:* LUCKY LINDY TRADE CARD. For Toy Flying Monoplanes. BURNS LABORATORY, Cincinnati, Ohio. Published June 3, 1932.

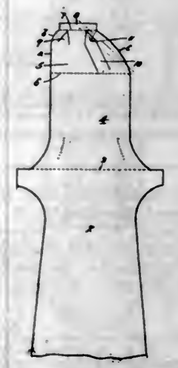
13,791.—*Title:* P-K. For License Plate Fasteners. PARKER-KALON CORPORATION, New York, N. Y. Published June 3, 1932.

13,792.—*Title:* ROTELLA'S. For Beverages. FRANK ROTELLA, doing business as Rotella's Beverages, Newark, N. J. Published April 1, 1932.

REISSUES

AUGUST 2, 1932

18,548. RIGHT AND LEFT FULL-FASHIONED FOOT HOSIERY. VINCENT KRICK, Los Angeles, Calif. Original No. 1,859,335, dated May 24, 1932, Serial No. 571,141, filed Oct. 26, 1931. Application for reissue filed June 13, 1932. Serial No. 617,015. 2 Claims. (Cl. 66—184.)



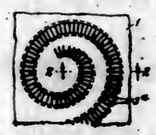
1. A full fashioned knitted foot for a full fashioned hose leg of the class knitted on a flat bed machine, which comprises a knitted flat whose great toe side extends straight beyond the "start of toe" line of the foot, a selvage along the end of the toe of the flat and being offset toward the great toe end and joining the toe part of the flat by a looping line, a diamond adjacent the great toe end of the looping line and the corner of said end narrowing inward along the said diamond, a little toe "narrowing" ending in a diamond and extending from the "start of toe" line of the flat obliquely toward the near end of the said selvage and the little toe side line narrowing in to the near end of the looping line.

18,549. BUCKLE. OZRO G. SHERMAN, deceased, Chicago, Ill., by Frank Mashek, assignee, Chicago, Ill. Original No. 1,712,096, dated May 7, 1929, Serial No. 245,808, filed Jan. 9, 1928. Application for reissue filed Mar. 28, 1932. Serial No. 601,663. 11 Claims. (Cl. 24—73.)



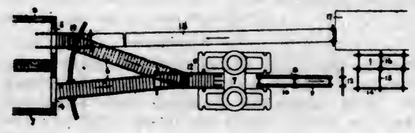
10. As an article of manufacture, a buckle comprising a frame, a gripping member connected to the frame for engaging the free end of a strip of material, a keeper connected to said frame formed to hold said free end of the strip in cooperation with the frame, and resilient means connecting said keeper to said frame for snapping it past a predetermined dead center line into engaged and disengaged positions with respect to said free end of the strip.

18,550. FAGOTING EMBROIDERY AND METHOD OF MANUFACTURING SAME. JACK SNARCK, New York, N. Y., assignor of one-half to Charles Harrison, Brooklyn, N. Y. Original No. 1,855,003, dated Apr. 19, 1932, Serial No. 583,330, filed Dec. 26, 1931. Application for reissue filed June 10, 1932. Serial No. 616,564. 4 Claims. (Cl. 2—278.)



1. The method of manufacturing fagoting embroidery consisting in embroidering a single piece of material with two rows of parallel stitches and cross-threads extending between such stitches, slitting the fabric between such parallel rows of stitching, and in a single operation folding down the edges of the slitted portion in opposite directions over the parallel rows of stitching to conceal the same and applying heat to said edges to retain the same in folded position.

18,551. METHOD OF MANUFACTURING SHEET METAL. LAWRENCE C. STEELE, Youngstown, Ohio. Original No. 1,532,607, dated Apr. 7, 1925, Serial No. 554,573, filed Apr. 18, 1922. Application for reissue filed June 13, 1932. Serial No. 617,014. 17 Claims. (Cl. 29—19.)

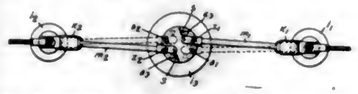


11. The method of manufacturing sheet metal consisting in delivering the heated bars from the furnace to the rolls in a plane above the mill-floor, passing the metal back and forth through the rolls, keeping the metal from contact with the mill-floor until reduced to a gauge for matching and doubling, conveying the metal rearwardly away from the rolls while maintaining it out of contact with the mill-floor, doubling the metal in the rear of the rolls, conveying the metal out of contact with the mill-floor back to the front side of the rolls to the reheating furnace, reheating the doubled pack to rolling temperature, conveying the hot doubled pack from the furnace to the rolls and rolling the pack by passing it repeatedly through the same rolls while maintaining the pack out of contact with the mill-floor until the stock is reduced to the desired gauge.

18,552. ALUMINUM ALLOY. CYRIL S. TAYLOR, New Kensington, and JUNIUS D. EDWARDS, Oakmont, Pa., assignors to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Original No. 1,830,142, dated Nov. 3, 1931, Serial No. 545,496, filed June 19, 1931. Application for reissue filed Dec. 21, 1931. Serial No. 582,511. 6 Claims. (Cl. 75—1.)

1. An aluminum alloy of low electrical conductivity containing manganese from about 0.5 to about 8 per cent and containing from about 0.05 to 3 per cent of zirconium.

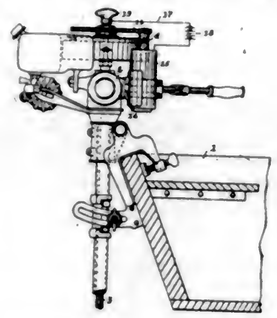
18,553. TRANSMISSION SYSTEM SWITCH. THEODOR PANZERBIETER, Berlin-Charlottenburg, and WILHELM NAGEL, Berlin, Germany, assignors to Westinghouse Electric & Manufacturing Company, New York, N. Y., a Corporation. Original No. 1,718,251, dated June 25, 1929, Serial No. 28,816, filed May 8, 1925, and in Germany Apr. 7, 1924. Application for reissue filed Sept. 11, 1929. Serial No. 391,964. 6 Claims. (Cl. 200—48.)



1. In a switch, a rotary insulator and stationary insulators spaced from said rotary insulator, contacts on said stationary insulators, bridging means comprising blade members each eccentrically pivoted upon said rotary insulator, stop means upon said rotary insulator adapted to force the blade members into engagement with said contacts when closing said switch, and spring means adapted to force said blade members against said stop means when said switch is open.

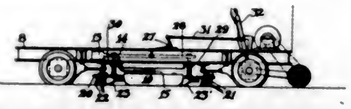
18,554. STARTER FOR INTERNAL-COMBUSTION MOTORS. FREDERICK A. VASTANO, Paterson, N. J., assignor, by mesne assignments, to Eclipse Aviation Corporation, East Orange, N. J., a Corporation of New Jersey. Original No. 1,700,750, dated Feb. 5, 1929, Serial No. 215,073, filed Aug. 24, 1927. Application for reissue filed Feb. 3, 1931. Serial No. 513,237. 9 Claims. (Cl. 192—.02.)

1. In combination, the rotary element to be started rotating and having a clutch portion, an electric circuit having a source of energy and also a break therein, an electric motor in the circuit, a rotary clutching member driven by the motor and shiftable into clutching engagement



with said clutch portion, and a knob coaxial with said element and movable lengthwise of its axis to close the circuit and shift said member into such engagement.

18,555. FISSURE DETECTOR FOR METALS. ELMER A. SPERRY, deceased, Brooklyn, N. Y., by Sperry Products, Inc., Brooklyn, N. Y., assignee. Original No. 1,820,505, dated Aug. 25, 1931, Serial No. 298,771, filed Aug. 10, 1928. Application for reissue filed Mar. 18, 1932. Serial No. 599,809. 20 Claims. (Cl. 175—183.)

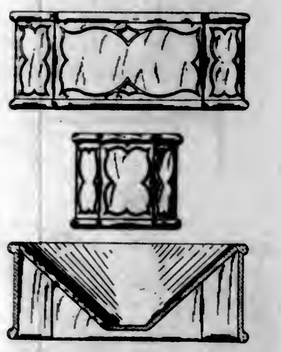


1. The method of detecting flaws within electrical conductors, which consists in passing direct current therethrough, cutting the lines of force surrounding the conductor by moving said conductor and two other conductors relatively, said last two conductors being out of contact with said first conductor, and comparing the E. M. F.'s induced in said last two conductors.

DESIGNS

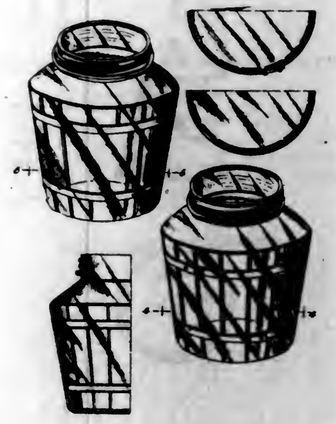
AUGUST 2, 1932

87,452. BLADE SHARPENER. JOHN H. ALLMAN, Butler, Pa., assignor of one-third to Frank J. King, Monaca, Pa., and one-third to Walter F. Faber, Rochester, Pa. Filed May 11, 1932. Serial No. 43,770. Term of patent 3½ years.



The ornamental design for a blade sharpener as shown.

87,453. GLASS PAIL. FERDINAND S. BARBIERS, Lancaster, Ohio, assignor to The Hocking Glass Company, Lancaster, Ohio, a Corporation of Ohio. Filed May 16, 1931. Serial No. 39,872. Term of patent 7 years.



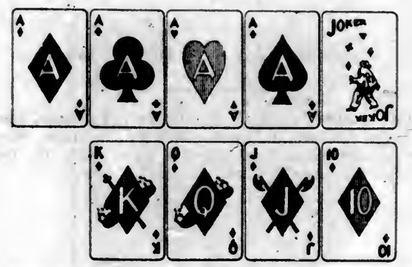
The ornamental design for a glass pail, substantially as shown.

87,454. GLASS TUMBLER. WILLIAM O. BARRY, Columbus, Ohio. Filed June 3, 1932. Serial No. 43,968. Term of patent 14 years.



The ornamental design for a glass tumbler, substantially as shown and described.

87,455. DECK OF PLAYING CARDS. NELSON P. BECK, Rochester, N. Y. Filed Apr. 26, 1932. Serial No. 43,619. Term of patent 3½ years.



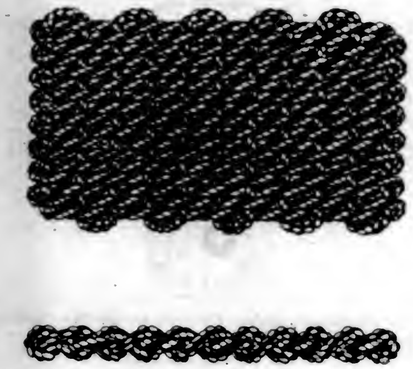
The ornamental design for a deck of playing cards, substantially as shown and described.

87,456. COOKING STOVE OR SIMILAR ARTICLE. ARTHUR L. BLAKESLEE, Kalamazoo, Mich., assignor to Kalamazoo Stove Company, Kalamazoo, Mich. Filed May 14, 1932. Serial No. 43,808. Term of patent 7 years.



The ornamental design for a cooking stove or similar article, as shown.

87,457. DOORMAT. ROBERT B. BROWN, Great Neck, N. Y., assignor to American Manufacturing Company, Brooklyn, N. Y., a Corporation of Massachusetts. Filed May 4, 1932. Serial No. 43,715. Term of patent 7 years.



The ornamental design for a door mat as shown.

87,458. SHOE. CHARLES H. CALDWELL, Brockton, Mass., assignor to Geo. E. Keith Company, Campello, Mass., a Corporation of Massachusetts. Filed May 19, 1932. Serial No. 43,847. Term of patent 7 years.



The ornamental design for a shoe, as shown.

87,459. SHOE. CHARLES H. CALDWELL, Brockton, Mass., assignor to Geo. E. Keith Company, Campello, Mass., a Corporation of Massachusetts. Filed May 19, 1932. Serial No. 43,848. Term of patent 7 years.



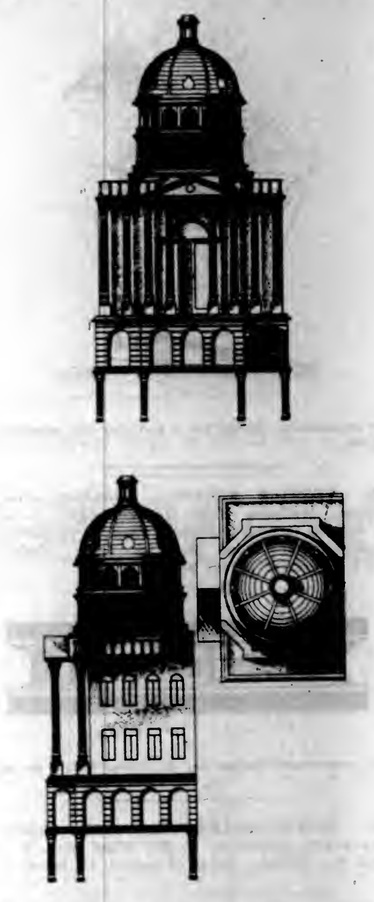
The ornamental design for a shoe, as shown and described.

87,460. BIRD HOUSE. PETER THATCHER COOK, Sausalito, Calif. Filed May 31, 1932. Serial No. 43,937. Term of patent 3½ years.



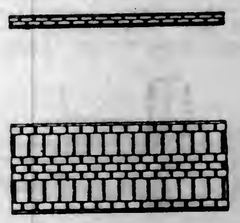
The ornamental design for a bird house, substantially as shown.

87,461. CABINET. DAVID EPSTEIN, Passaic, N. J. Filed May 4, 1932. Serial No. 43,714. Term of patent 3½ years.



The ornamental design for a cabinet, as shown.

87,462. FLEXIBLE METALLIC STRAP. WILLIAM FORSTNER, Irvington, N. J., assignor to Forstner Chain Corporation, Irvington, N. J., a Corporation of New Jersey. Filed Apr. 30, 1930. Serial No. 35,445. Term of patent 14 years.



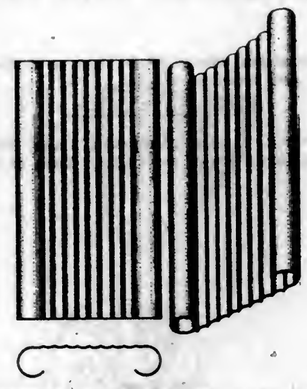
The ornamental design for a flexible metallic strap, as shown.

87,463. APPLIQUE GINGHAM EFFECT CHINTZ. MORRIS W. GREENSTEIN, New York, N. Y. Filed Apr. 2, 1932. Serial No. 43,375. Term of patent 3½ years.



The ornamental design for an applique gingham effect chintz substantially as shown and described.

87,464. REFLECTOR FOR LIGHTING FIXTURES. EDWIN F. GUTH, Webster Groves, Mo. Filed Mar. 28, 1932. Serial No. 43,278. Term of patent 3½ years.



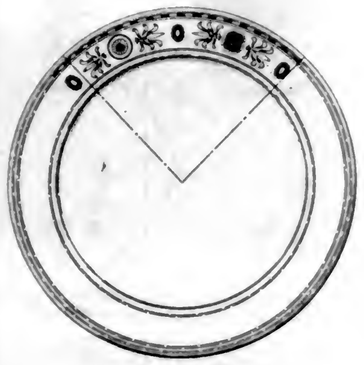
The ornamental design for a reflector for lighting fixtures, as shown.

87,465. BUCKLE. WILLIAM F. HAAS, Rockaway, N. Y. Filed June 6, 1932. Serial No. 44,004. Term of patent 3½ years.



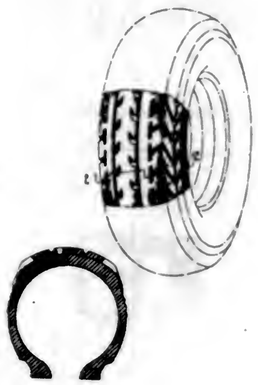
The ornamental design for a buckle as shown.

87,466. PLATE OR SIMILAR ARTICLE. ARTHUR G. HALLGREN, Montclair, N. J., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 27, 1932. Serial No. 43,634. Term of patent 7 years.



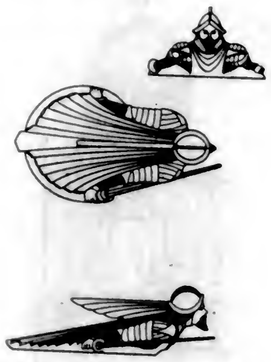
The ornamental design for a plate or similar article, as shown and described.

87,467. TIRE. ALBERT HARGRAVES, Akron, Ohio. Filed June 8, 1932. Serial No. 44,016. Term of patent 14 years.



The ornamental design for a tire as shown.

87,468. RADIATOR CAP. HERBERT V. HENDERSON, Detroit, Mich. Filed Dec. 16, 1931. Serial No. 42,105. Term of patent 3½ years.



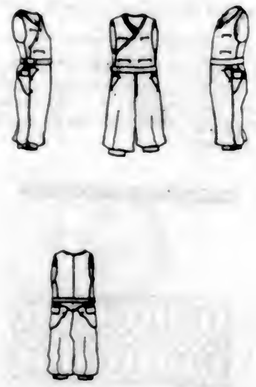
The ornamental design for a radiator cap substantially as shown.

87,469. TEXTILE FABRIC. MADELEINE CARLETON JEALOUS, Wellesley Hills, Mass., assignor to American Woolen Company, Boston, Mass., a Corporation of Massachusetts. Filed May 16, 1932. Serial No. 43,817. Term of patent 3½ years.



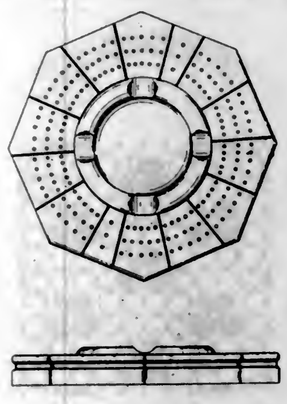
The ornamental design for a textile fabric as shown.

87,470. SUSPENDERLESS UNIFORM. JOHAN E. JOHANNESEN, Brooklyn, N. Y. Filed Mar. 5, 1931. Serial No. 38,933. Term of patent 14 years.



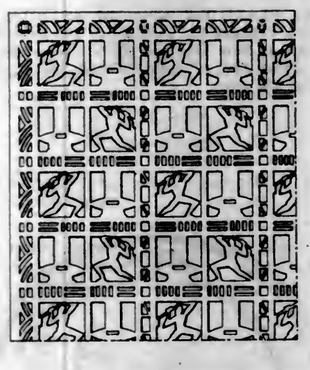
The ornamental design for a suspenderless uniform as shown.

87,471. ASH TRAY. EDWARD J. ZWEMER, Holland, Mich. Filed May 7, 1932. Serial No. 43,743. Term of patent 3½ years.



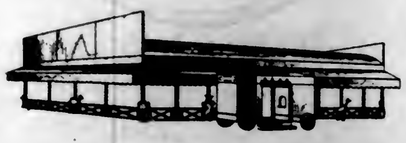
The ornamental design for an ash tray as shown.

87,472. GRILLE PANEL. ALEXIS V. LAPTEFF, Detroit, Mich., assignor to Harrington & King Perforating Company, Chicago, Ill., a Corporation of Illinois. Filed May 9, 1932. Serial No. 43,758. Term of patent 14 years.



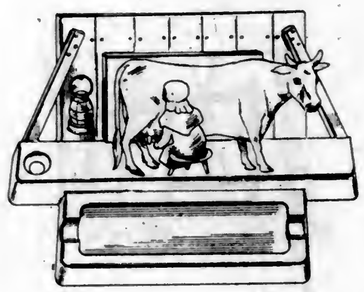
The ornamental design for a grille panel substantially as shown and described.

87,473. BUILDING. FRED L. MARKEY, Lawrence, Mass., assignor to Dodgem Corporation, Lawrence, Mass., a Corporation of Massachusetts. Filed Mar. 29, 1932. Serial No. 43,317. Term of patent 7 years.



The ornamental design for a building, as shown and described.

87,474. COMBINATION ASH TRAY AND CIGAR LIGHTER. ALEXANDER H. MASTERS, Greensboro, N. C. Filed Mar. 31, 1932. Serial No. 43,340. Term of patent 7 years.



The ornamental design for a combination ash tray and cigar lighter as shown and described.

87,475. COFFEEPOT. JAMES K. MATTER and CARLTON G. TOWNE, New Kensington, Pa., assignors to The Aluminum Cooking Utensil Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed May 31, 1932. Serial No. 43,949. Term of patent 7 years.



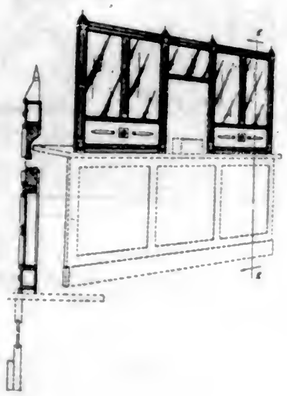
The ornamental design for a coffee pot as shown.

87,476. CIGAR AND CIGARETTE HOLDER. ARTHUR C. MATTISON, Eau Claire, Wis. Filed Dec. 19, 1931. Serial No. 42,150. Term of patent 7 years.



The ornamental design for a cigar and cigarette holder as shown and described.

87,477. BULLET-RESISTING PARTITION. OLIVER B. MCCLINTOCK, Minneapolis, Minn., assignor to O. B. McClintock Co., Minneapolis, Minn, a Corporation of Minnesota. Filed Dec. 31, 1931. Serial No. 42,339. Term of patent 7 years.



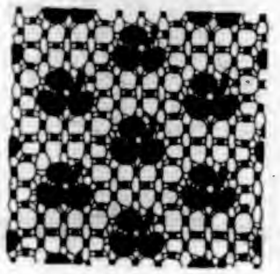
The ornamental design for a bullet-resisting partition, as shown and described.

87,478. FLASK. BEN NASH, Short Hills, N. J., assignor to Lambert Pharmacal Company, Wilmington, Del., a Corporation of Delaware. Filed June 10, 1932. Serial No. 44,037. Terms of patent 14 years.



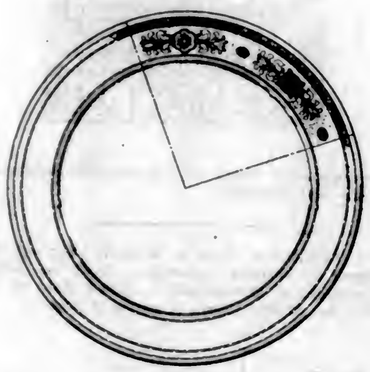
The ornamental design for a flask, as shown.

87,479. LACE. SAMUEL H. PAGE, Stratford, Conn., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 16, 1932. Serial No. 43,823. Term of patent 7 years.



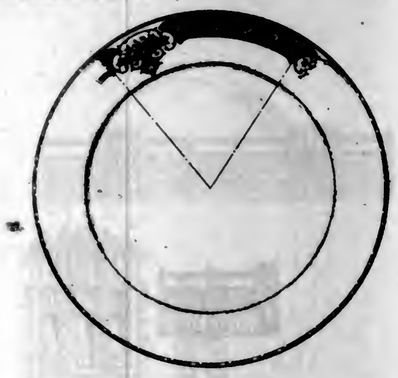
The ornamental design for a lace substantially as shown.

87,480. PLATE OR SIMILAR ARTICLE. JOHN E. PHILLIPS, Chicago, Ill., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 27, 1932. Serial No. 43,636. Term of patent 3½ years.



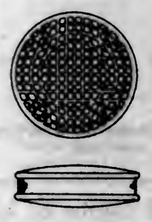
The ornamental design for a plate or similar article, as shown and described.

87,481. PLATE OR SIMILAR ARTICLE. JOHN E. PHILLIPS, Chicago, Ill., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York., Filed Apr. 27, 1932. Serial No. 43,637. Term of patent 3½ years.



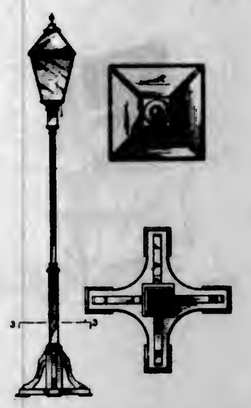
The ornamental design for a plate or similar article, as shown and described.

87,482. LOOSE POWDER SIFTER BOX. SAMUEL L. POMERANTZ, Brooklyn, N. Y. Filed June 8, 1931. Serial No. 40,120. Term of patent 3½ years.



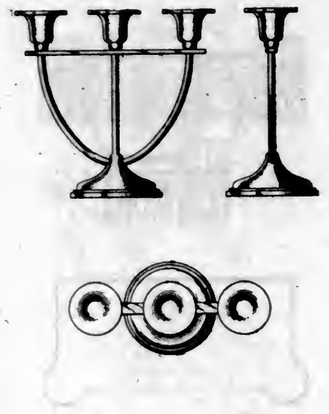
The ornamental design for a loose powder sifter box as shown and described.

87,483. FLOOR LAMP OR LIKE ARTICLE. ANTONIO DEL PURGATORIO, Jersey City, N. J. Filed June 6, 1932. Serial No. 43,992. Term of patent 14 years.



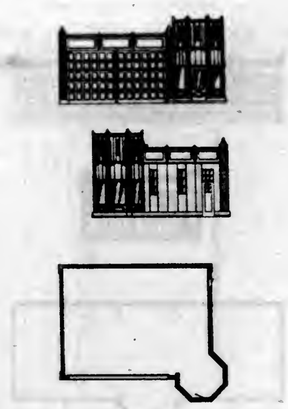
The ornamental design for a floor lamp or like article, as shown.

87,484. CANDELABRA. MAXWELL W. REH, New York, N. Y. Filed May 23, 1932. Serial No. 43,874. Term of patent 7 years.



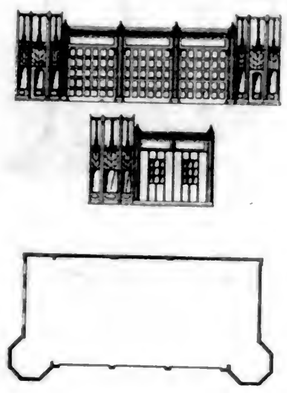
The ornamental design for a candelabra substantially as shown.

87,485. SERVICE BUILDING. GUY LYNN ROSEBROOK, Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 13, 1931. Serial No. 40,193. Term of patent 3½ years.



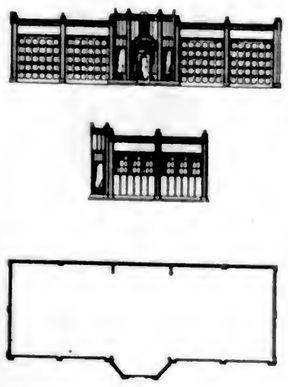
The ornamental design for a service building, substantially as shown and described.

87,486. SERVICE BUILDING. GUY LYNN ROSEBROOK, Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 13, 1931. Serial No. 40,194. Term of patent 3½ years.



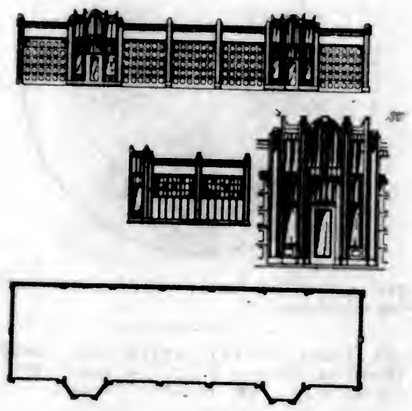
The ornamental design for a service building, substantially as shown and described.

87,487. SERVICE BUILDING. GUY LYNN ROSEBROOK, Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia Pa., a Corporation of Pennsylvania. Filed June 13, 1931. Serial No. 40,195. Term of patent 3½ years.



The ornamental design for a service building, substantially as shown and described.

87,488. SERVICE BUILDING. GUY LYNN ROSEBROOK, Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 13, 1931. Serial No. 40,196. Term of patent 3½ years.



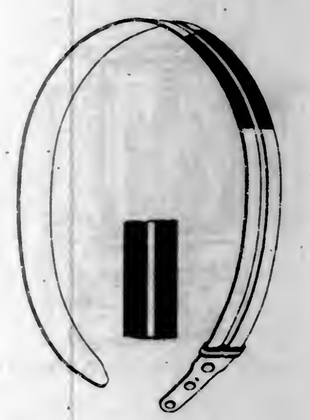
The ornamental design for a service building, substantially as shown and described.

87,489. PACKAGE CARTON OR SIMILAR ARTICLE. HERMAN RYNVELD, New York, N. Y. Filed Apr. 21, 1932. Serial No. 43,566. Term of patent 3½ years.



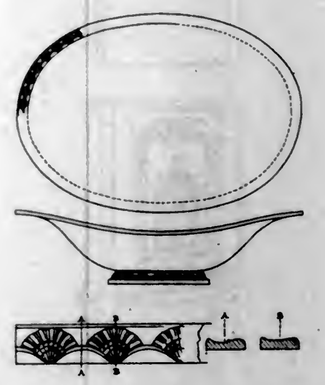
The ornamental design for a package carton or similar article, substantially as shown and described.

87,490. BELT. MORRIS SACHS, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Jan. 5, 1932. Serial No. 42,377. Term of patent 3½ years.



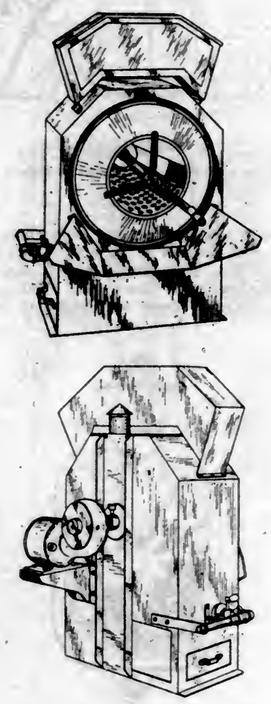
The ornamental design for a belt, as shown and described.

87,491. DISH OR OTHER SIMILAR ARTICLE OF HOLLOW-WARE. FREDERICK W. STARK, Meriden, Conn., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Apr. 1, 1932. Serial No. 43,352. Term of patent 14 years.



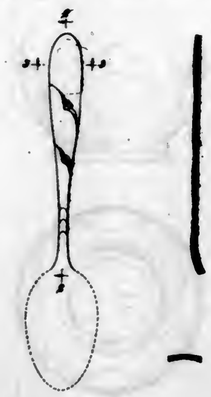
The ornamental design for a dish or other similar article of hollow-ware substantially as shown and described.

87,492. POPCORN POPPER. GEARY F. STEWART, Norwood, Ohio, assignor to The Kingery Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 23, 1932. Serial No. 43,880. Term of patent 14 years.



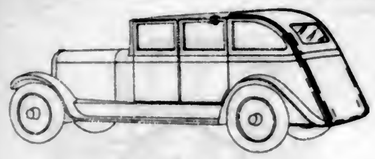
The ornamental design for a popcorn popper substantially as shown and described.

87,493. SPOON OR SIMILAR ARTICLE. FRANK S. TRUMBULL, Providence, R. I. Filed May 6, 1932. Serial No. 43,729. Term of patent 3½ years.



The ornamental design for a spoon or similar article, substantially as shown.

87,494. AUTOMOBILE. WALTER WANDERWELL, Miami, Fla. Filed Feb. 3, 1931. Serial No. 38,536. Term of patent 14 years.



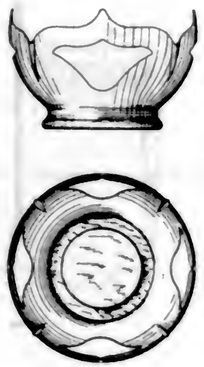
The ornamental design for an automobile as shown.

87,495. HOT WATER BOTTLE. JOHN HULL WHITCOMB, Lakewood, and NORMAN V. WAGNER, Rocky River, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1932. Serial No. 43,680. Term of patent 3½ years.



The ornamental design for a hot water bottle as shown and described.

87,496. HOLDER. JOHN JOSEPH WILLMOTT, Montclair, N. J., assignor to Louis Farber, Yonkers, N. Y. Filed Apr. 15, 1932. Serial No. 43,499. Term of patent 7 years.



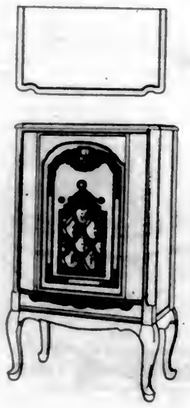
The ornamental design for a holder as shown.

87,497. RADIOCABINET OR THE LIKE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed June 3, 1932. Serial No. 43,970. Term of patent 3½ years.



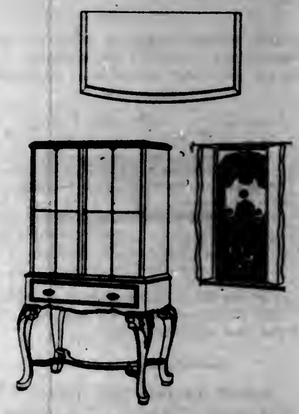
The ornamental design for a radio cabinet or the like, as shown.

87,498. RADIOCABINET OR THE LIKE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed June 3, 1932. Serial No. 43,971. Term of patent 3½ years.



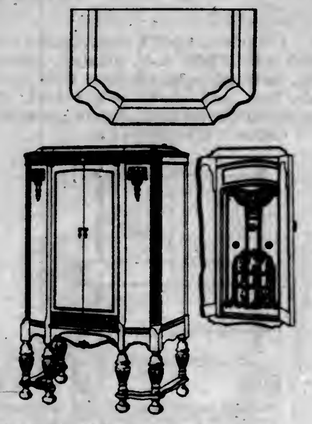
The ornamental design for a radio cabinet or the like, as shown.

87,499. RADIOCABINET OR THE LIKE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed June 3, 1932. Serial No. 43,972. Term of patent 3½ years.



The ornamental design for a radio cabinet or the like, as shown.

87,500. RADIOCABINET OR THE LIKE. EVERETT WORTHINGTON, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed June 3, 1932. Serial No. 43,973. Term of patent 3½ years.

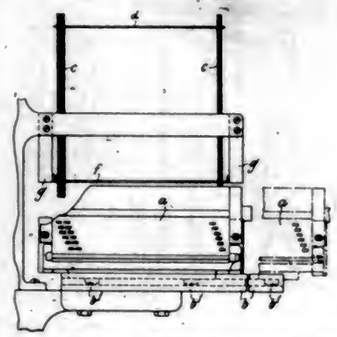


The ornamental design for a radio cabinet or the like, as shown.

PATENTS

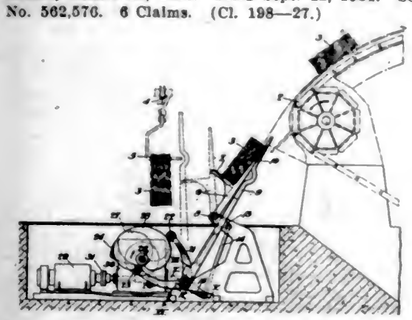
GRANTED AUGUST 2, 1932

1,869,353. TYPOGRAPHICAL COMPOSING AND LINE CASTING MACHINE. KARL BIENERT, Berlin-Spandau, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y., a Company of New York. Filed Aug. 9, 1930, Serial No. 474,133, and in Germany Feb. 12, 1930. 7 Claims. (Cl. 199—18.)



1. In a typographical composing and line casting machine, the combination of escapement actuating rods, keyboard mechanism comprising cam carriages acting upon said rods, a frame supporting the keyboard mechanism and a stationary guide mounted in the machine frame and in which the frame is movable to bring the cam carriages into and out of operative register with the escapement rods, said guide being arranged to position the keyboard mechanism clear of the machine frame when the keyboard frame is moved to its inoperative position.

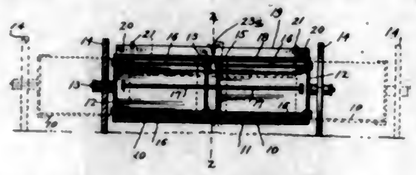
1,869,354. ROD BUNDLE TRANSFER MECHANISMS. BRUCE N. BLETSO, Cleveland Heights, and WALTER V. MAGEE, Lakewood, Ohio. Filed Sept. 12, 1931. Serial No. 562,576. 6 Claims. (Cl. 198—27.)



1. In combination with an endless rod bundle conveyer and a second conveyer spaced therefrom, a rod bundle receiving member arranged for reciprocation from a point adjacent one of said conveyers to a point adjacent the other, and a rod bundle engaging member arranged for alined reciprocation with and beyond said first named member.

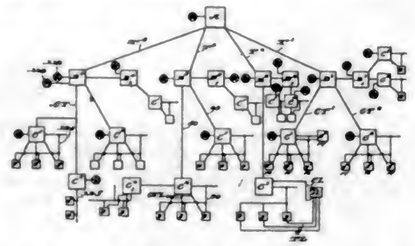
1,869,355. CART. EDWIN CHANDLER, Lisbon, Ohio. Filed June 8, 1929. Serial No. 369,306. 3 Claims. (Cl. 298—2.)

1. A cart comprising a body of longitudinal telescopic sections, there being two end sections and a middle section and supporting means connected with the end sections which permit rotary movement for dumping, each end section having its outer end closed by a head and having a



flanged ring at its inner end and rods extending between the head and flange of each section and between the flanges of the two sections.

1,869,356. WIRED BROADCAST DISTRIBUTING SYSTEM. EDWARD E. CLEMENT, Washington, D. C., assignor to Edward F. Colladay, Washington, D. C. Filed Nov. 27, 1926. Serial No. 151,116. 6 Claims. (Cl. 179—2.5.)

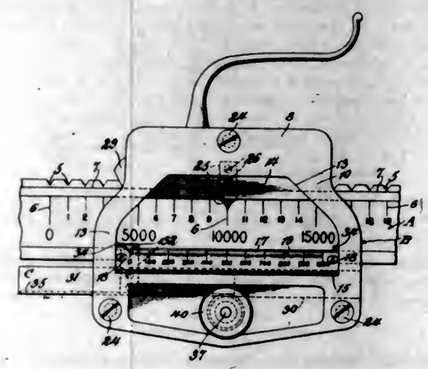


1. In an organized wired broadcasting system, a plurality of subscribers' stations divided into local groups, a centralized local distributing station for each group, a wired network connecting said subscribers' stations and their respective local distributing stations, wired broadcast receiving means at each subscriber's station connected with its associated local station for supervision therefrom, a district service station connected to a group of said local distributing stations over a common wire connection, wired broadcast receiving means at each local distributing station the receiving sets of different local distributing stations being tuned to different wave lengths different for different stations, means at said local distributing stations for relaying signals received on their receiving sets to their respective subscribers over the connecting network, and means at the district station for transmitting the same or different signals over said common wire connections on the said different wave lengths to which the receivers of said local distributing stations are tuned whereby the local distributing stations and their groups of subscribers are segregated by wave lengths independently of physical connections.

1,869,357. WEIGHING-SCALE. LOUIS W. FULLER, Rutland, Vt., assignor to The Howe Scale Company, Rutland, Vt., a Corporation of Vermont. Filed Jan. 9, 1929. Serial No. 331,280. 6 Claims. (Cl. 265—49.)

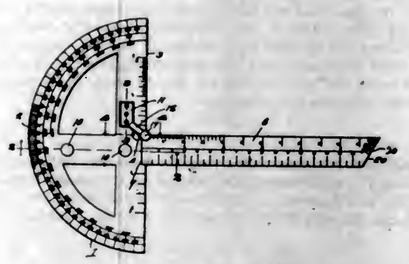
4. In a scale beam, a main poise having a central visibility opening with lugs on either side of said opening, a relatively movable fractional poise with a projection adapted to move between said lugs and by engagement with

said lugs limit the motion of said fractional poise, and means for indicating main and fractional readings through said opening.



5. In a scale beam poise, the combination of a scale beam having graduations and a main poise slidable thereon and having a central visibility opening and means for indicating the beam graduations through said opening, a fractional poise centrally disposed under the main beam, and means for indicating fractional readings through the openings in the main poise.

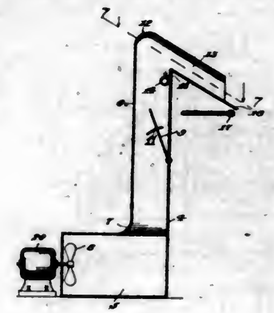
1,869,358. DRAFTING INSTRUMENT. CHARLES F. GOLDEN, Denver, Ind. Filed Feb. 1, 1930. Serial No. 425,329. 2 Claims. (Cl. 33—75.)



1. An instrument of the class described including a semi-circular protractor head having a zero graduation at the center of its arcuate edge, the straight edge of the head being cut away at its center to provide a clearance, an arm detachably connected to the head and having a straight edge in line with the zero graduation and the center of the straight edge of the head, a bracket fixedly secured to the head and overhanging the clearance, and a centering pin carried by the bracket and extending through said clearance for engaging a supporting surface at a point in line with the zero graduation and the straight edge of the arm, said arm being removable from the head without disturbing the pin.

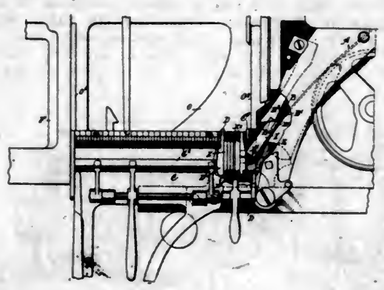
1,869,359. AIR AND GAS BURNER. SEPTIMUS H. GRIFFITHS, Wheeling, W. Va. Filed Nov. 21, 1930. Serial No. 497,321. 8 Claims. (Cl. 158—109.)

1. An air and gas burner comprising a base member having an open end and formed with an upright member provided with a rounded portion at its upper end, an electrically operated fan disposed at said open end of the base member for forcing air through the upright member, a gas supply pipe passing through the upright member adjacent the air supply and near the upper end portion of said member, and a downwardly inclined discharge



portway at the top of the member formed with double the capacity at its rear end than it has at its discharge end.

1,869,360. TYPOGRAPHICAL COMPOSING MACHINE. ALFRED W. F. GUEST, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed July 3, 1930. Serial No. 465,518. 16 Claims. (Cl. 199—27.)

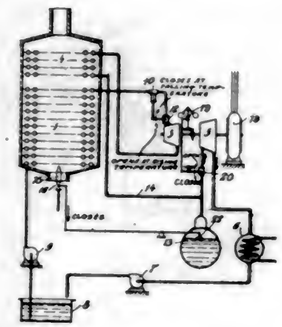


1. In a matrix composing machine, the combination of an assembler presenting a channel wherein the matrices are composed in line, said channel thruout its length having straight parallel sides, means for delivering the matrices successively to the assembler channel, said channel being displaced with respect to the line of delivery of the matrices, and means for deflecting the individual matrices edgewise to direct them into the assembler channel as they are delivered thereto.

1,869,361. HIGH PRESSURE STEAM PLANT WITH MULTISTAGE POWER ENGINE. WILHELM ABENDROTH, Berlin-Charlottenburg, Germany, assignor to Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung, Siemensstadt, Germany, a German Corporation. Filed July 8, 1926, Serial No. 121,179, and in Germany July 14, 1925. 4 Claims. (Cl. 60—73.)

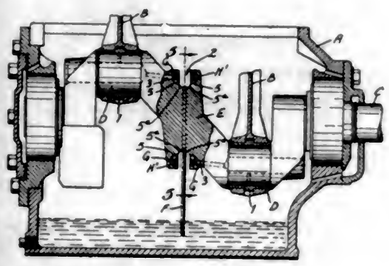
1. A steam plant having a steam generator and heat supply means therefor, a high pressure steam consumer supplied directly from said steam generator, a low pressure steam consumer having variable load demands and being supplied with exhaust steam from the high pressure consumer, and means for controlling the steam supply to the low pressure consumer in accordance with its demands, a steam accumulator disposed to receive or release steam

when the amount of steam discharged by the high pressure consumer is not in accordance with the steam demand of the low pressure consumer, and means responsive



to the state of charge of said accumulator for controlling the heat supply means to the steam generator inversely to the charged condition of said accumulator.

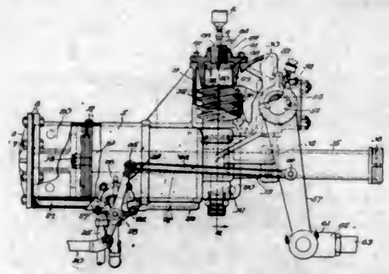
1,869,362. LUBRICATING SYSTEM FOR PISTON MACHINES. FRANK ACKERMAN, St. Louis, Mo., assignor to Curtis Manufacturing Company, Wellston, Mo., a Corporation of Missouri. Filed Dec. 23, 1929. Serial No. 416,017. 6 Claims. (Cl. 184—6.)



4. In a machine of the character described, a crank shaft provided with a crank pin, a rotatable member that revolves with the crank shaft, provided with an open-sided pressure chamber formed partly by a substantially annular groove in said member that is open at one side, a ring positioned inside of said groove so as to form a partial closure for the open side of said pressure chamber, an oil distributing surface on said member disposed in concentric relation with the axis of rotation of said member for feeding oil into said chamber when said member is in operation, an oil supplying device partially submerged in a bath of oil and contacting with said oil distributing surface, and means for delivering oil from said chamber to the crank pin.

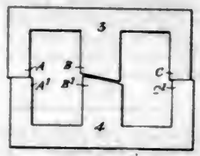
1,869,363. REVERSE GEAR MECHANISM. FRANCIS NORWOOD BARD, Highland Park, Ill. Filed Nov. 6, 1925. Serial No. 146,692. 10 Claims. (Cl. 74—14.)

1. In a reverse gear operating mechanism, a cylinder, a piston movable therein, a piston rod actuated by said piston and provided with gear teeth, a worm and a pinion in axial alinement, said pinion engaging said teeth, an os-



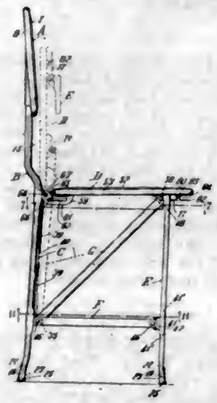
cillating lever provided with a worm gear operatively engaging said worm, and means for laterally adjusting the fulcrum of said lever.

1,869,364. REACTOR. LESLIE R. ALLISON, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 6, 1932. Serial No. 585,062. 2 Claims. (Cl. 171—242.)



2. A reactor core comprising two E-shaped core members mounted for relative transverse movement and arranged with the free ends of one member confronting the free ends of the other member, the confronting faces of the outer legs being cut so that they remain in surface contact during such movement, and the confronting faces of the inner legs being cut so that the air gap between them changes during such relative movement.

1,869,365. CHAIR. GUSTAVE F. CORDUAN, Chicago, Ill., assignor to Corduan Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 26, 1929. Serial No. 381,278. 13 Claims. (Cl. 155—141.)



8. In a chair in combination with front and rear legs, each leg being provided with upper and lower hinge lugs, and struts pivotally connecting the lower hinge lugs of the front and rear legs, a seat comprising a sheet metal base

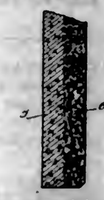
member, hinge lugs secured thereto and pivotally connected to the upper hinge lugs of the several legs, the base member being slit centrally from a point adjacent but spaced from its rear edge to a point adjacent but spaced from its front edge, the metal adjacent the slit being pressed downwardly so as to form a depressed open slot, a cover plate welded to the base plate above the slot so as to complete a guide channel and reinforce the base-plate, a slide mounted in the channel and having a hinge lug projecting downwardly through the slot, and struts pivoted to the hinge lug and projecting downwardly and outwardly with their lower ends pivoted to the lower hinge lugs of the rear legs.

1,869,366. CONTACT GLASS. JOSEF DALLOS, Budapest, Hungary, assignor to Carl Zeiss, Jena, Germany. Filed Dec. 31, 1931, Serial No. 584,146, and in Germany Jan. 6, 1931. 1 Claim. (Cl. 88—54.)



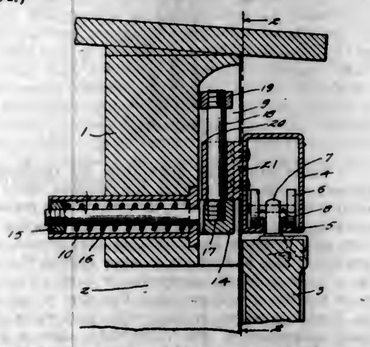
Contact glass with correction effect, consisting of a vaulted corneal part and an annular sclerotic part, the exterior surface of the corneal part being composed of two differently curved surfaces, and the interior surface being only one single surface.

1,869,367. SOUND ABSORBING MATERIAL AND METHOD OF MAKING THE SAME. WILLIAM T. DEAN, Gary, Ind., assignor to Calicel Products, Inc., Hammond, Ind., a Corporation of Illinois. Filed Dec. 20, 1930. Serial No. 503,680. 12 Claims. (Cl. 72—18.)



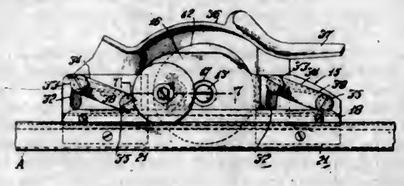
9. A sound absorbing material comprising an assembled mass of particles of rock sponge, the individual particles having such a multiplicity of air containing cells as to be at least temporarily floatable in water, and means for holding said particles in assembled relation.

1,869,368. SUPPORTING MEANS FOR SLIDING DOOR TRACK RAILS. JAMES A. DRIES, Emaus, Pa. Filed Mar. 8, 1932. Serial No. 597,579. 4 Claims. (Cl. 16—94.)



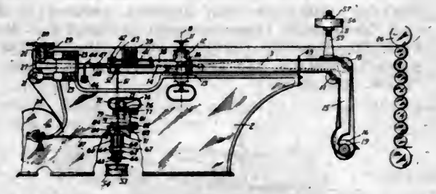
1. A supporting unit for sliding door track rails comprising an elongated body, a spring controlled reciprocable member carried by said body, a pin member carried by said reciprocable member and extending at right angles therefrom, and an element having limited sliding movement on said pin, said element being designed for connection with a track rail and said body being designed for attachment to a fixed structure above a door opening.

1,869,369. TRIMMING DEVICE. FRED E. EDGREN, Chicago, Ill. Filed Mar. 28, 1930. Serial No. 439,581. 6 Claims. (Cl. 164—84.)



1. A trimmer of the character described comprising a straightedge track engaging member; a cutting blade carrying member; a pair of oscillatably mounted links on the first member whereby the second member is movably secured to the first member; means whereby the second member is yieldingly held in raised position; and means, extending laterally from the first member, adapted to have bearing relation with the upper face of the straightedge.

1,869,370. WEIGHING MACHINE. DOZIER FINLEY, Berkeley, Calif., assignor, by mesne assignments, to Toledo Scale Manufacturing Co., Toledo, Ohio, a Corporation of New Jersey. Filed Oct. 2, 1922. Serial No. 591,694. 26 Claims. (Cl. 265—5.)



1. In a machine of the class described, a pivotally mounted frame for supporting a predetermined portion of a web, means for causing the web to travel continuously over said frame, means for balancing said frame when a web of given weight per unit of length is passing thereover, and means for indicating the weight per unit of length of the web on said frame.

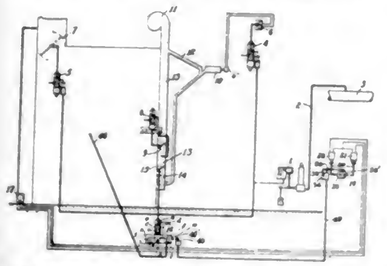
1,869,371. RECEIVER SEPARATOR. JOSEPH B. FOWLER, Philadelphia, Pa., assignor to Cochrane Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 19, 1928. Serial No. 247,791. 7 Claims. (Cl. 183—111.)



1. The combination with a steam separator having a steam inlet thereto and comprising a plurality of chambers for a series flow of steam therethrough, a passage

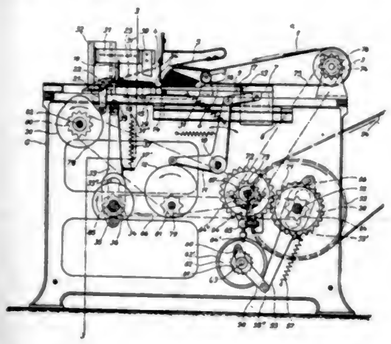
connecting said chambers, a baffle located in each of said chambers, of a common receiver normally containing a body of liquid, and means for separately draining said chambers in said receiver comprising a separate pipe connection from each chamber to said receiver, one of said connections being normally sealed in said receiver.

1,869,372. FUEL-AIR RATIO CONTROL SYSTEM. JOHN M. HOPWOOD, Pittsburgh, Pa. Filed May 7, 1930. Serial No. 450,404. 7 Claims. (Cl. 236—14.)



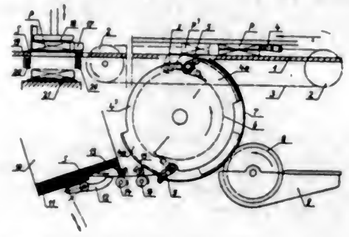
1. The combination in a fuel-air control system for a boiler furnace of means responsive to variations in steam pressure for regulating the supply of fuel to said furnace, means responsive to said steam pressure for controlling the outlet damper of said furnace, means responsive to the furnace chamber pressure for regulating the inlet damper and means for making a further adjustment in the inlet damper in accordance with the CO_2 content of gases escaping from the furnace.

1,869,373. APPARATUS FOR ALIGNING MATCH STRIPS HAVING STAGGERED MATCHES. ERNST HERMANN JÄHNE, Dresden, Germany, assignor to the Firm "Universelle" Cigarettemaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed Aug. 30, 1929, Serial No. 389,518, and in Germany Aug. 31, 1928. 7 Claims. (Cl. 93—2.)



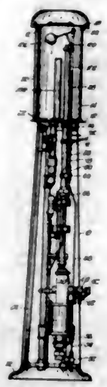
1. In a packing machine for strips provided with matches arranged in staggered relationship, a conveyor which is movable forwardly transversely to the longitudinal direction of the strips and is adapted to receive the strips with staggered tips, a multistepped slide adapted to receive from the said conveyor the strips which are deposited thereon in a pile, and to catch the lowermost strip during the stroke taking place in the feed direction of the said conveyor, means acting as support for the said lowermost strip caught by the said slide, stationary stops limiting the motion of the said slide and strip, a controlled covering plate adapted to be placed over the said strip and to receive an additional strip from the said slide in perfect alinement with the preceding one, lateral guides for straightening the said strips during their forward movement to bring them into perfect lateral alinement, means for catching the said superimposed and alined strips and conveying them in their longitudinal direction, and a device for separating the said strips into sections.

1,869,374. MACHINE FOR APPLYING SEALING STRIPS TO CIGARETTE CONTAINERS. ERNST HERMANN JÄHNE, Dresden, Germany, assignor to the Firm Universelle Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed Jan. 10, 1931, Serial No. 507,771, and in Germany Jan. 10, 1930. 4 Claims. (Cl. 216—33.)



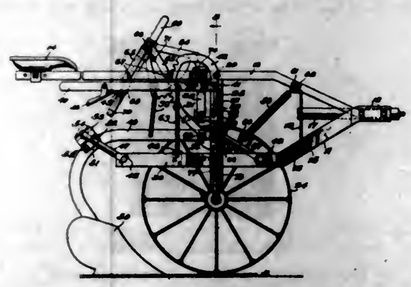
1. A machine for applying a sealing strip to a cigarette container comprising means for applying a sealing strip to the bottom of said container while the latter is in upright position with the ends of said strip overlapping the respective ends of said container and means for bending said over-lapping ends upon the end walls of said container.

1,869,375. DISPENSING APPARATUS. ROBERT J. JAUCH and HARRY L. MITCHELL, Fort Wayne, Ind., assignors to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Oct. 9, 1929. Serial No. 398,310. 7 Claims. (Cl. 221—100.)



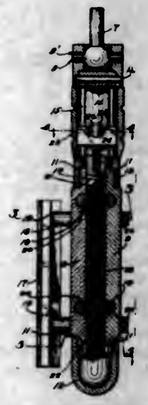
1. In liquid dispensing apparatus, the combination of a measuring container, a pump for pumping liquid to said measuring container, an air cylinder having a piston therein for actuating said pump, an air line connected to each end of said cylinder for actuating said piston, a valve for directing the flow of air to each end of the cylinder after a predetermined movement of said piston, means in said air line for controlling the flow of air to said valve, and means cooperating with said valve for preventing actuation of said valve only after a predetermined movement of said piston whereby said valve is fully operated.

1,869,376. IMPLEMENT. GEORGE DOUGLAS JONES, Cleveland, Ohio, assignor to The Cleveland Tractor Company, Cleveland, Ohio. Filed Apr. 4, 1929. Serial No. 352,428. 10 Claims. (Cl. 97—91.)



1. In an implement, a wheeled frame, a bail pivotally attached to the frame, a pair of side bars pivotally attached at one end to the bail, another bail carried by the rear portion of said side bars, a plow beam carried by the bails and vertically adjustable means for supporting the rear ends of the side bars.

1,869,377. CYLINDER FINISHING TOOL. OLAF A. JOHNSON and ROLLIN E. LINGREN, Minneapolis, Minn., assignors to Storm Manufacturing Co., Inc., Minneapolis, Minn., a Corporation of Minnesota. Filed Aug. 12, 1929. Serial No. 385,130. 10 Claims. (Cl. 51—184.4.)



1. A tool of the class described mounted for orbital movement and having a feed device for changing the orbit of the tool comprising an endwise movable non-rotary shift bar, a non-rotary endwise movable plunger, a cam connection between the bar and plunger whereby a reciprocatory endwise movement of the bar will impart reciprocatory endwise movement to the plunger, and a micrometer for endwise adjusting the bar comprising a rotatable sleeve held against axial movement, and a co-operating relatively fixed nut-acting member having screw-threaded engagement therewith.

1,869,378. BRITANNIA METAL OR PEWTER ALLOY. JOSEPH H. KONIGSBERG, Brooklyn, N. Y., assignor to Standard Rolling Mills, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 14, 1931. Serial No. 530,149. 5 Claims. (Cl. 75—1.)

1. A soft white metal alloy including from 1% to 15% of hardening metal selected from a group consisting of antimony and copper, 0.005% to 0.1% of zinc, and the remainder, tin.

1,869,379. EMULSIONS AND MATERIALS, METHODS AND PROCESSES FOR THE PREPARATION THEREOF. RICHARD W. LEWIS, Montclair, N. J. Filed July 5, 1924. Serial No. 724,291. 1 Claim. (Cl. 134—1.)

A dispersion of bitumen in water comprising a bitumen, water and a mixture for preparing and maintaining the dispersion, comprising an element of the group consisting of silica and slate dust and an element of the group consisting of tannic acid and soap.

1,869,380. DISPERSIONS AND THE PRODUCTION THEREOF. RICHARD W. LEWIS, Montclair, N. J. Filed Oct. 29, 1930. Serial No. 491,968. 3 Claims. (Cl. 134—1.)

1. A dispersion of bitumen in water comprising bitumen, water and a mixture for preparing and maintaining the dispersion, said mixture comprising grinding material divided to such an extent as to be capable of grinding action but incapable of maintaining a dispersion and consisting of an element of the group consisting of silica, slate dust, barytes, marble dust, powdered calcite, fibrous talc, zinc oxide, precipitated barium sulphate, mineral fillers and dispersing material consisting of an element of the group consisting of basic sulphates of copper, basic sulphates of iron, insoluble phosphates, ferric oxides, aluminum oxides, and chrome green, each element of said second group of elements being in the state in which it is deficient in grinding action but effective to maintain a dispersion affected by grinding.

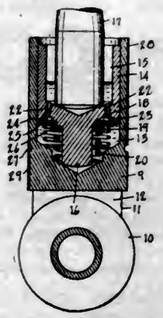
1,869,381. DISPERSIONS AND THE PRODUCTION THEREOF. RICHARD W. LEWIS, Montclair, N. J. Filed Oct. 29, 1930. Serial No. 491,969. 9 Claims. (Cl. 134—1.)

1. A dispersing mixture comprising a disintegrating base of fine silica, an insoluble hydroxide in a finely divided condition, and a peptizer for said hydroxide.

1,869,382. BITUMINOUS DISPERSIONS AND METHOD OF MAKING THE SAME. RICHARD W. LEWIS, Montclair, and ALBERT SAUNDERS, Maplewood, N. J. Filed June 4, 1930. Serial No. 459,259. 18 Claims. (Cl. 134—1.)

13. A composition of matter containing dispersed bitumen and ground mineral phosphate.

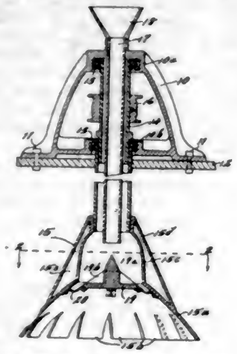
1,869,383. VALVE MECHANISM FOR INTERNAL COMBUSTION ENGINES. JOSEPH W. MACKENZIE, Jackson, Mich. Filed Jan. 4, 1930. Serial No. 418,468. 1 Claim. (Cl. 123—90.)



In a valve mechanism, the combination with an actuating cam and push rod, of a tubular guide, a cylinder reciprocating in said guide in coacting relation with said cam, said cylinder being closed at its lower end, a plunger within said cylinder coacting with said push rod and having a fluid chamber therein and a depending shouldered stop coacting with the bottom of the cylinder

to limit the relative movement of the cylinder and plunger, said plunger having an annular downwardly facing valve seat with an annular channel therein and ports connecting said channel to said fluid chamber, an annular valve coacting with said valve seat, a valve seating spring, a thrust collar arranged on said shoulder of said stop limiting the opening movement of said valve, and a spring within said cylinder seating on said collar and acting to yieldingly urge the cylinder against said cam.

1,869,384. DISTRIBUTING HEAD FOR LIQUID OR SEMILIQUID MATERIAL. JOHN C. MACLACHLAN, Chicago, Ill. Filed Oct. 20, 1930. Serial No. 489,895. 11 Claims. (Cl. 299—63.)



9. A distributing head comprising an intermediate portion having a chamber therein, a tubular portion leading upwardly from said first mentioned portion adapted to be rotated to rotate said head, a plate-like portion carried by said first mentioned portion forming the bottom of said chamber, having circumferentially spaced ribs extending outward to the edge thereof forming passages therebetween, and a plurality of circumferentially spaced members extending outwardly and downwardly at the lower portion of said head to which the material is delivered and by which it is disintegrated in the rotation of said head.

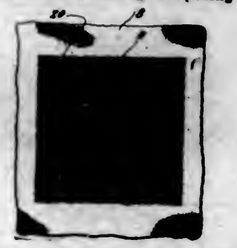
1,869,385. REENFORCING TAB. RALPH A. MAISH, Framingham, Mass., assignor to Dennison Manufacturing Company, Framingham, Mass., a Corporation of Massachusetts. Filed Feb. 25, 1931. Serial No. 518,074. 2 Claims. (Cl. 206—58.)



1. An article of the class described comprising a plurality of reenforcing tabs cut from a sheet of fabric to define a strip, the threads of said fabric running longitudinally and transversely of the strip, said tabs being integrally joined together at opposite marginal portions by unsevered longitudinal threads, whereby said tabs may be easily severed from each other.

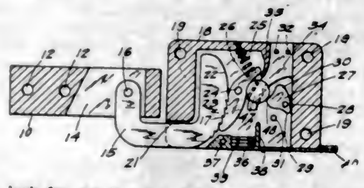
1,869,386. EMBROIDERY METHOD AND FABRICATION. JOSEPH S. MARZAK, Baltimore, Md., assignor to Lion Brothers Company, Inc., Baltimore, Md., a Corporation of Maryland. Filed Jan. 21, 1932. Serial No. 587,927. 5 Claims. (Cl. 2—278.)

1. The method of producing a fabrication of embroidery comprising a series of closely associated units or knots which consists in forming a foundation by stitching a piece of cloth which serves as a base providing a plurality of series of lines of stitching spaced in conformance with the size of the units, the lines of said respective series intersecting at intervals, and forming said units overlying the foundation by utilising the spaced intersections of the lines of stitching composing the founda-



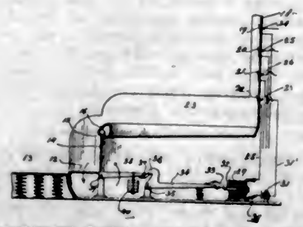
tion as approximate centers and forming each unit or knot of a number of stitches crossing near the approximate center and piercing the cloth at the periphery of the unit, portions of stitching composing the respective knots being interlocked with the corresponding lines of stitching.

1,869,387. FREIGHT CAR LOCK AND SEAL. FRANCIS W. MCFARLAND, Martinez, Calif. Filed Mar. 10, 1930. Serial No. 434,588. 3 Claims. (Cl. 194—65.)



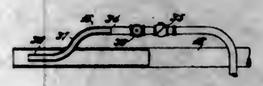
2. A lock for car doors, a latch and a lock in cooperating relation, said latch comprising a bracket with pivotally related U shaped latch member, one leg being pivoted to said bracket, the other leg being arcuately formed with said pivot as a center and having ratchet teeth formed on the periphery thereof, said lock comprising a housing adapted to receive said latch, a pawl adapted to engage said latch, a tumbler spacedly related to said pawl, a slot having selective projections, a slug adapted to pass through said slot and clear said projections, said slug being retained between said pawl and said tumbler whereby movement of said tumbler by means of a key is transmitted through said interposed slug to said pawl for disengaging said pawl from said latch, said slug thereupon being deposited in a receptacle by gravitational influence.

1,869,388. GAME. KURT PETER, New York, N. Y. Filed Mar. 26, 1929. Serial No. 349,941. 5 Claims. (Cl. 273—102.)



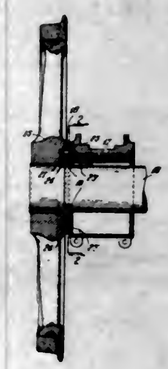
1. An amusement device, comprising a plurality of operable player stands adapted to normally support a player, a stand releasing means provided with each stand, a plurality of targets facing each stand and operatively connected to certain of said releasing means.

1,869,389. BOILER WASHING BLOW-OFF CONNECTION. BARTON P. PHELPS, Topeka, Kans. Filed Feb. 12, 1931. Serial No. 515,259. 3 Claims. (Cl. 122—396.)



1. A boiler washing blow-off connection comprising, in combination with a water and steam receiving main line, and a drop line adapted to be connected to the boiler to be blown down, a connection between said main line and said drop line having a portion disposed substantially in alignment with the discharge end of the drop line and parallel with the main line and a second off-set portion arranged substantially parallel with the first portion and disposed within the main line substantially parallel therewith in the direction of flow through said main line.

1,869,390. WHEEL HUB WEAR PLATE. JOHN PURCELL, Chicago, Ill. Filed Dec. 6, 1930. Serial No. 500,542. 8 Claims. (Cl. 308—165.)



1. A wear plate of the character described provided with a central opening for passage of a wheel journal therethrough, said opening being of a diameter larger than the diameter of the journal so as to provide an annular air space, the attaching side of the plate being provided with spaced apertured bosses adapted to maintain the plate in fixed spaced relation with the element to which it is secured, and means disposed through the plate and the apertures in the bosses for securing the plate in place.

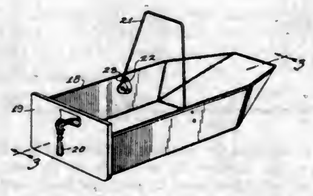
1,869,391. INSTRUMENT TO AID IN VOCAL TONE CULTURE. PAOLA QUINTINA, Brooklyn, N. Y. Filed Nov. 28, 1931. Serial No. 577,851. 4 Claims. (Cl. 84—466.)

1. An instrument to aid in vocal tone culture comprising, a thin body designed to be held edgewise between the upper and lower front teeth, an arm at the rear of said body extending downwardly to a point below the same to hold the tongue depressed, the tooth engaging edges of said body being disposed angularly to one another to



permit the device to be adjusted to vary the degree of spacing of the teeth and the degree of depression of the tongue.

1,869,392. COAL STOVE. WALTER F. ROGERS, Cicero, Ill., assignor to Crown Stove Works, Cicero, Ill., a Corporation of Illinois. Filed Aug. 19, 1931. Serial No. 558,016. 1 Claim. (Cl. 126—288.)

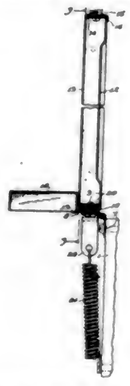


A solid fuel stove comprising a frame having an outer exposed wall provided with a removable panel section, a compartment within said frame, a sheet metal fuel pan located in said compartment and having a vertical front sheet metal wall secured to the rear face of said panel, the rear end of said pan being tapered, a bail pivoted on said pan and adapted to be swung forwardly so as to rest upon the upper edge of said front wall of the pan behind said panel, said panel projecting upwardly above said front wall, said panel and the attached pan forming a scuttle for hard fuel, and a handle on the outer face of said panel for withdrawing said scuttle from said compartment.

1,869,393. HINGED TOP FOR STOVES. WALTER F. ROGERS, Cicero, Ill., assignor to Crown Stove Works, Cicero, Ill., a Corporation of Illinois. Filed Dec. 12, 1931. Serial No. 580,571. 7 Claims. (Cl. 126—215.)

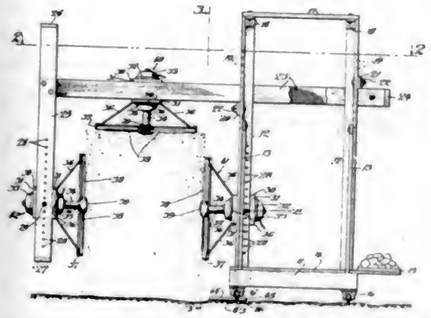
1. A device of the class described comprising a frame, a horizontal cover hinged at one edge to said frame so as

to be movable to a vertical position, a reinforcing bar secured to said cover and extending inwardly from said hinged edge to reinforce the cover, said bar having a



bracket part projecting outwardly beyond said hinged edge, and a spring counterbalance connected to said bracket and frame.

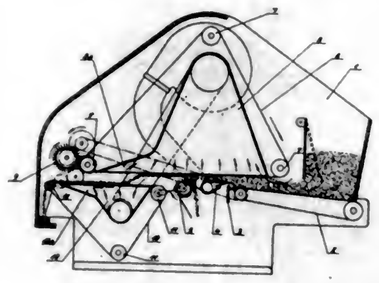
1,869,394. CUTTING MACHINE. WILLIAM H. SIKMA, Oakglen, Ill. Filed Aug. 28, 1930. Serial No. 478,353. 3 Claims. (Cl. 56—235.)



1. In a machine for cutting hedges and the like, a carriage movable relative to a hedge to be cut, apertured vertical uprights mounted on said carriage, cutting means supported by said vertical uprights for cutting the foremost side of a hedge including a horizontal supporting member having a flanged and bored housing, a motor contained in said bore, a shaft in said motor, blades provided on said shaft, a horizontal supporting member movably mounted in said uprights, and similar cutting means adjustably mounted in said horizontal supporting member for simultaneously cutting the top of a hedge, an apertured vertical supporting member supported by said horizontal supporting member, similar cutting mechanism adjustably mounted in said vertical supporting member for cutting the rearmost side of a hedge.

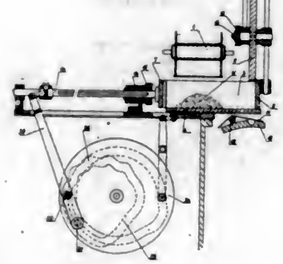
1,869,395. TOBACCO SPREADER. FRANZ HEINRICH BENNO STELZER, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed Aug. 17, 1929, Serial No. 386,557, and in Germany Aug. 27, 1928. 6 Claims. (Cl. 131—39.)

1. A tobacco spreader including suction means, perforated feed means moving over the suction means and adapted to take up the tobacco fibres at one point, a second perforated feed means at another point, a second suction means for said second feed means, and said first suction means having a gradually tapering area partly



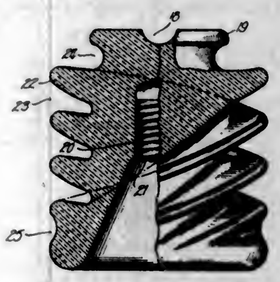
overlapped by said second feed means whereby the tobacco fleece is transferred from the first feed means to the second feed means.

1,869,396. METHOD OF PRODUCING CIGAR FILLERS BY ARRANGING THE TOBACCO FROM WHICH THEY ARE TO BE MADE BETWEEN PROFILED DIES. FRANZ HEINRICH BENNO STELZER, Dresden, Germany, assignor to the Firm Johann Carl Muller Dresden, Germany. Filed Aug. 23, 1929, Serial No. 387,877, and in Germany Sept. 1, 1928. 10 Claims. (Cl. 131—9.)



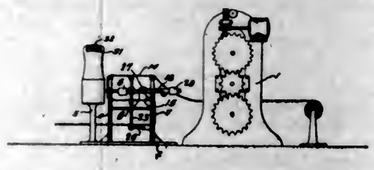
1. Apparatus for producing cigar fillers comprising in combination a shaping box, a movable bottom forming part of the said box, means for depositing tobacco in a pile on said bottom in the longitudinal direction of the said box, a die having a concave working surface and being displaceable horizontally relative to the direction of the said pile to press the tobacco against the wall of the said box, the said die and the said wall forming a mold for the tobacco, a second die movable in vertical direction and having a concave working surface to cooperate in pressing the tobacco into shape, a rolling table positioned under the said box, a trough arranged in the said table, and a rolling cloth on the said table, the tobacco being driven into the said trough by the said vertically movable die on its descent after the said movable bottom has been drawn back.

1,869,397. INSULATOR. CHARLES L. STROUP, Oak Park, Ill. Filed Mar. 16, 1929. Serial No. 347,539. 18 Claims. (Cl. 173—318.)



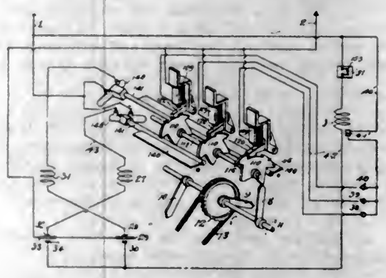
2. As an article of manufacture, an insulator comprising a body of porcelain having a helical flange, said flange being tilted upwardly throughout its length to form a water collecting and conveying channel.

1,869,398. TESTING DEVICE. EDWARD G. THOMAS, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Feb. 25, 1924. Serial No. 694,884. 17 Claims. (Cl. 265—5.)



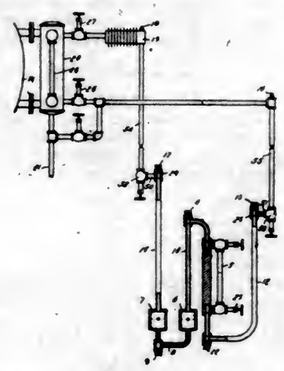
1. In a device of the class described, in combination, a plurality of supports for a strip of material, means whereby the material may be formed into loops, and means engaging the material between the loops for detecting changes in the weight per unit of length.

1,869,399. AUTOMATIC CONTROL SYSTEM. OLOF THOMPSON, Long Island City, N. Y., assignor to Takamine Corporation, Long Island City, N. Y., a Corporation of New York. Filed Feb. 1, 1929. Serial No. 336,733. 26 Claims. (Cl. 187—29.)



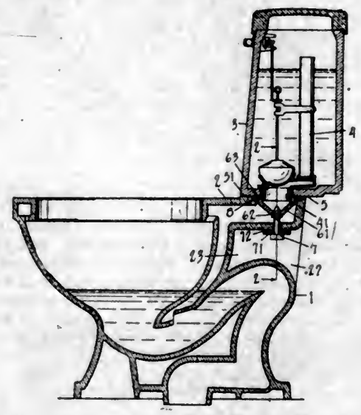
1. In a system of remote control for moving objects, a selector comprising a member normally movable, independently of said object, means for moving said member to a preselecting position to cause movement of said object, means responsive to said movement for coupling said member to said object, and means responsive to the combined movement of said object and member for stopping said object after a predetermined distance of travel.

1,869,400. MEASUREMENT OF PRESSURE DIFFERENTIALS. CLARENCE A. UNDERWOOD, East Chicago, Ind. Filed June 12, 1930. Serial No. 460,654. 3 Claims. (Cl. 73—54.)



1. An instrument for measuring pressure differentials comprising a gauge glass, a pair of closed wells containing mercury and connected below the normal mercury level, a connection between the upper end of the gauge class and the upper part of one of the closed wells, a direct connection between the upper part of the other of the closed wells and the lower pressure region, a direct connection between the lower end of the gauge glass and the higher pressure region, means for maintaining both of these direct connections full of liquid, and a volume of liquid, immiscible with the mercury and with the first-mentioned liquid and visually distinct from the first-mentioned liquid, filling the connection between the upper end of the gauge glass and the connected well, the upper part of that well above the mercury and the upper end of the gauge glass and normally establishing a meniscus in the gauge glass.

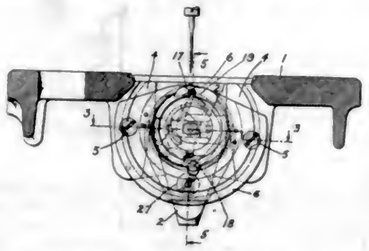
1,869,401. COMBINATION CLOSET BOWL AND TANK STRUCTURE. CARL H. ZWERMANN, Robinson, Ill. Filed Nov. 25, 1931. Serial No. 577,185. 4 Claims. (Cl. 4—14.)



1. The combination of a vitreous bowl water closet having a rearwardly projecting hollow shelf with a ground joint surface on the top having a packing seat therewithin, a vitreous tank having a joint surface corresponding thereto, a usual flush valve structure within the tank having a projecting screw shank below the bot-

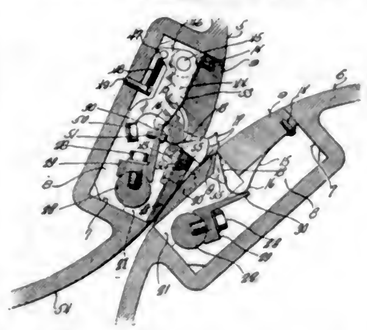
tom thereof, a nut with a flanged top for engaging the same having a cross bar with a central boss having a screw threaded aperture, a packing washer between said flange and bowl having an outwardly downwardly projecting flange to engage said seat, an attaching screw disposed through an aperture in the said shelf and engaging the said boss, and a washer and packing therefor.

1,869,402. SHUTTLE RACE FOR SEWING MACHINES. EDWARD B. ALLEN, Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed July 16, 1931. Serial No. 551,115. 6 Claims. (Cl. 112—196.)



1. In a sewing machine, a loop-taker raceway comprising a support having a machine turned cylindrical seat and a plurality of hardened ring-shaped liners received in said seat, said liners having their opposite faces flat-ground to parallelism and one of them having its inner surface cylinder-ground.

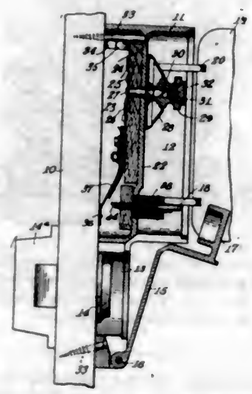
1,869,403. SHEET TRANSFER MECHANISM. FRANK R. BELLUCHE, Racine, Wis. Filed June 13, 1928. Serial No. 285,033. 11 Claims. (Cl. 91—62.)



1. In combination with a pair of cylinders having grippers adapted to clamp a sheet thereto whereby the sheet is movable therewith, means for transferring the sheet from one cylinder to the other including means for projecting the sheet toward the receiving cylinder, and means independent of said projecting means for holding the sheet against the receiving cylinder during the transferring of the sheet.

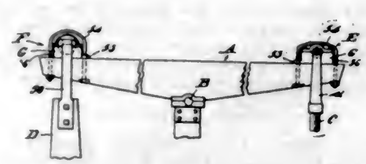
1,869,404. LOCK PROTECTION. GASTON BOISSONNAULT, Valley Stream, N. Y., assignor to Charles P. Kimmey, trustee, New York, N. Y. Filed Nov. 17, 1925. Serial No. 69,573. 5 Claims. (Cl. 177—314.)

1. In lock protection, the combination with a key actuated lock, of a movable cover over said lock and which can be opened to expose the lock for insertion of the lock actuating key, signal means operable by such opening of the lock cover, control mechanism for rendering said signal means inoperative and a movable cover over said control mechanism for holding the lock cover closed



over the lock and whereby upon release of said second cover the control mechanism will be exposed to enable one familiar with the same to render the signal means inoperative when the lock cover is thus released by said second cover.

1,869,405. ROCKER BEARING FOR WALKING BEAM END-CONNECTIONS. WILLIAM F. BOWMAN, Ocean Park, Calif. Filed Apr. 16, 1930. Serial No. 444,695. 4 Claims. (Cl. 308—21.)



1. The combination with a walking beam, of a bearing box seated on said walking beam for slidable movement relatively thereto, a bifurcated lug projecting from one side of said bearing box, and a U-shaped stirrup connected at its end to said walking beam and extending astride of said bearing box and loosely engaged by said lug.

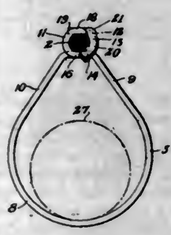
1,869,406. PREPARATION OF NEW MOUTH WASHES AND DENTIFRICES. FRIEDRICH BRÄUNLICH, Aussig A/E, Czechoslovakia, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 7, 1926, Serial No. 140,211, and in Czechoslovakia Oct. 14, 1925. 3 Claims. (Cl. 167—93.)

1. A dentifrice having as an ingredient a salt of a sulphonated castor oil soluble in water.

1,869,407. CABLE SUPPORT. ORSON W. BRENIZER, Philadelphia, Pa., assignor of three-eighths to Andrew V. Groupe, Philadelphia, Pa. Filed Feb. 24, 1931. Serial No. 517,653. 3 Claims. (Cl. 243—83.)

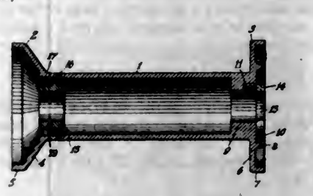
1. A cable support adapted to be applied to a supporting wire formed of twisted strands providing sections of relatively varying diameters in alternate succession lon-

gitudinally of the wire, said support being formed of a piece of flat spring wire and comprising a cable receiving loop formed by a flatwise bend in the wire forming it, oppositely directed spaced hooks extending from the respective end portions of the loop and being formed by flatwise bends in the wire forming them and being adapted to embrace the supporting wire from opposite sides thereof, one of said hooks having a bottom part adapted to extend under the supporting wire and a top part adapted to extend above the bottom part and over the supporting wire, said top part and said bottom part being substantially in parallel relation and in a common



plane extending transversely of the supporting wire normal to the axis thereof, and a downwardly and outwardly inclined arm connected to said top part by an angular edgewise bend in the wire forming them and adapted when the support is in use to extend therefrom from a position over the supporting wire to a position adjacent to one side thereof, said arm having a substantially straight edge portion adapted to face and have a biting engagement with one side of the supporting wire and to force the hook to which the arm is connected toward the opposite side of the supporting wire when the support is canted in a direction to lower said arm.

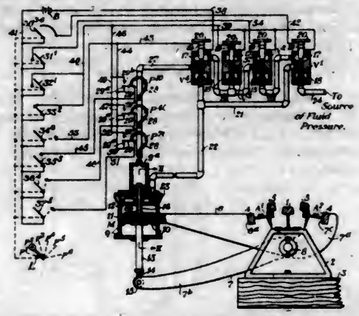
1,869,408. SPOOL. GEORGE W. BUNGAY, Plainfield, N. J., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 11, 1928. Serial No. 276,902. 3 Claims. (Cl. 242—118.)



1. A metallic spool comprising a hollow body member, flanges disposed on opposite ends thereof, bushings disposed within and at opposite ends of said body member adjacent said flanges, one of said bushings having a portion of its outer end cut away, and an extending shoulder whereby when in position an annular space is provided.

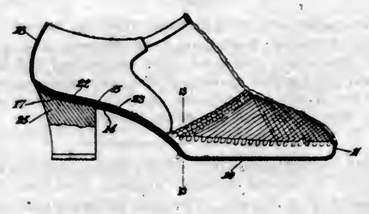
1,869,409. RAILWAY BRAKING APPARATUS. HAROLD C. CLAUSEN, Swissvale, and JOHN W. LOGAN, Jr., Edgewood, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 22, 1931. Serial No. 552,384. 20 Claims. (Cl. 303—20.)

1. Railway braking apparatus comprising two braking bars located on opposite sides of a track rail and biased to positions in which they will clear the wide driving wheels of locomotives, power operated means for mving said braking bars toward the rail into positions in which they will engage the wheels of a car to retard the speed of the car, and means for at times arresting the move-



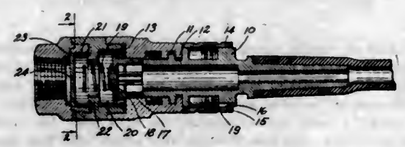
ment of said braking bars in response to their bias when the braking bars have reached the positions in which they will just clear the car wheels of ordinary width.

1,869,410. FOOTWEAR AND METHOD OF MAKING THE SAME. IRWIN W. DAVID, New York, N. Y. Filed Sept. 30, 1930. Serial No. 485,375. 4 Claims. (Cl. 36—12.)



1. A shoe comprising a sole formed of a single piece of stock split behind the ball into two sections, these being an inner and an outer section, a heel upper assembly whose lower flanges are inturned below said inner section, a shank-piece of stiff material positioned between said inner and outer sections of the sole and in contact with the inturned flanges of said heel upper assembly, stitches passing through the inner section of said sole and said shank-piece to engage the same tightly upon said inturned flanges and to cause said flanges, said inner section and said shank-piece to form a unitary heel structure, and a heel nailed to said unitary structure in such manner as to enclose between itself and said heel structure the outer section of said sole.

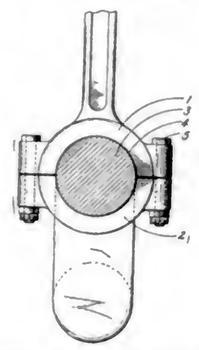
1,869,411. AUTOMATIC COUPLING VALVE. JOHN DE MOOY, Cleveland, Ohio, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 2, 1930. Serial No. 465,891. 6 Claims. (Cl. 284—18.)



1. A coupling comprising a plug member and a socket member, said socket member having a pair of chambers therein defined from each other by an annular valve seat, a valve disposed in each of said chambers, resilient means

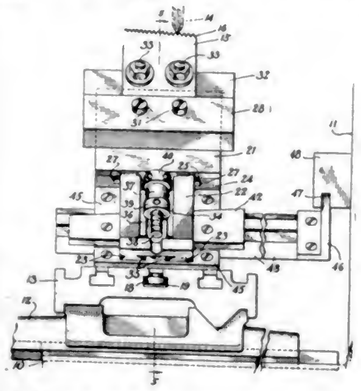
on one of said valves for resisting lodgement of the other valve on said valve seat when the pressure on opposite sides of said latter valve is substantially equal but permitting the seating of said latter valve when a differential pressure of substantial amount on opposite sides of said latter valve is attained.

1,869,412. BEARING. FRANCIS E. DE VORE, Washington, D. C., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 29, 1928. Serial No. 315,759. 8 Claims. (Cl. 308—241.)



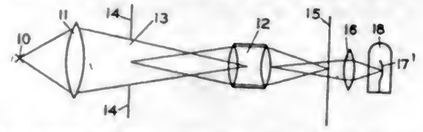
7. In combination, a cylindrical steel pin having a cylindrical chromium bearing surface thereon, and a heat treated, hardened, aluminum alloy connecting rod having a cylindrical bearing surface of the same material as the remainder of the rod mounted on said pin and arranged to bear directly on said chromium surface.

1,869,413. WORKHOLDER. JOHN EDGAR, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Original application filed Nov. 4, 1927, Serial No. 230,966. Divided and this application filed Jan. 9, 1928. Serial No. 245,342. 10 Claims. (Cl. 51—217.)



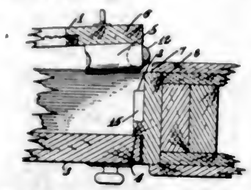
1. A work holder having, in combination, a base mounted for transverse and front to rear movement and having an upwardly inclined surface, a slide mounted for vertical movement on said surface, a work support carried by said slide, a cam slide mounted on said base for transverse movement relative thereto and under said first mentioned slide, a cam bar secured to said cam slide, said cam slide being adapted to be secured against movement with said base, an adjusting slide having a roller riding on said cam bar, said adjusting slide carrying an adjustable head adapted to support said first mentioned slide, and a spring disposed between said base and said adjusting slide and tending to hold said roller continually in contact with said cam bar.

1,869,414. SOUND REPRODUCING APPARATUS. LEON V. FOSTER, Irondequoit, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed May 29, 1931. Serial No. 541,023. 1 Claim. (Cl. 179—100.3.)



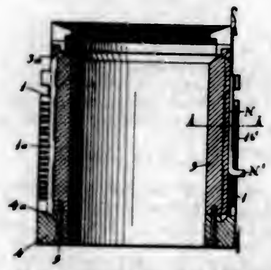
An apparatus for reproducing sound from a sound record on a film, comprising a light-sensitive cell having an electrode, an objective lens for projecting an image of an illuminated slit onto the sound record on the film, said electrode being positioned to receive light rays which pass through portions of the sound record and a collective lens positioned between said objective lens and said cell, the conjugate foci of said collective lens being positioned, respectively, at said electrode and said objective lens.

1,869,415. DOORCHECK. WILLIAM B. FULTON, Walnut Park, Calif. Filed Dec. 15, 1930. Serial No. 502,823. 3 Claims. (Cl. 16—83.)



1. In a door check, a casing, a roller type shock absorbing member mounted for free movement within said casing, means for restricting movement of said roller member within said casing and whereby said roller member may have a portion of the surface thereof projected beyond one end of the casing.

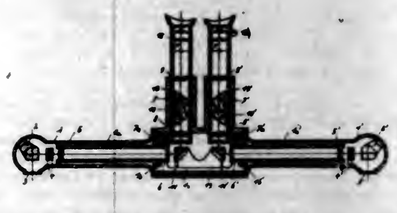
1,869,416. SUPPORT FOR SLIDING MEMBERS IN KNITTING MACHINES. GEORGE HENRY GREEN, Leicester, England. Filed Aug. 11, 1931, Serial No. 556,451, and in Great Britain Aug. 15, 1930. 14 Claims. (Cl. 66—115.)



1. In a cylindrical support for sliding components of a knitting machine, guides for the said components which guides are provided with incontinuous guiding surfaces extending axially of the said support, the said surfaces being formed by laterally projecting parts of varying heights arranged to neutralize the normal radiation of

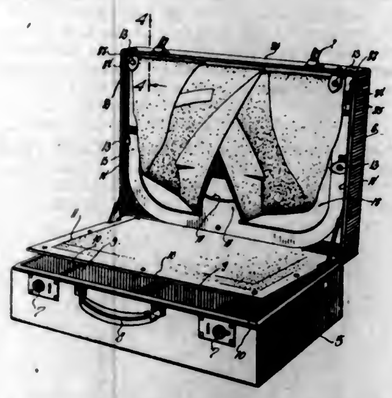
the side surfaces of the said guides and provide guiding surfaces which are each parallel with a radial plane of the said support extending centrally through one of the guiding grooves for the said components.

1,869,417. RANGE FINDER. OTTO GRÜNBERG, Vienna, Austria, assignor to Actiengesellschaft C. P. Goerz Optische Anstalt, Actiova Spolecnost K. P. Goers Opticky Ustav, Bratislava, Czechoslovakia, a Company of Czechoslovakia. Filed June 3, 1931, Serial No. 541,911, and in Germany June 13, 1930. 1 Claim. (Cl. 88—2.7.)



A binocular range finder comprising a pair of scale plates to each of which is associated a telescope tube and a telescope objective mounted in the said telescope tube, an eye piece, a rotatable reversing prism, an auxiliary objective in front of the said reversing prism, an auxiliary objective in rear of the said reversing prism, the front auxiliary objective being confocal with the telescope objective and the rear auxiliary objective being confocal with the eye piece, means for rotating both telescope tubes simultaneously around a horizontal axis and means for simultaneously rotating the said reversing prisms around the optical axis of the associated auxiliary objectives with half the angular speed of the rotation of the said telescope tubes.

1,869,418. LUGGAGE CARRIER. BENJAMIN M. HAMLIN, Racine, Wis., assignor to Wheary Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Nov. 15, 1928. Serial No. 319,578. 10 Claims. (Cl. 190—41.)



1. In a luggage carrier, a garment form of a length less than the length of a garment, means whereby a garment may be hung from the form, the garment being foldable over the edge of the form remote from said means, cushion means along the edge of the form over which the garment is folded to protect the same against wrinkling, and means carried by the form and engaging the free end of the garment to secure the same against the adjacent side of the form.

1,869,419. SOUND DAMPED MUFFLER. FRANCIS F. HAMILTON, Indianapolis, Ind. Filed July 26, 1929. Serial No. 381,408. 3 Claims. (Cl. 137—160.)

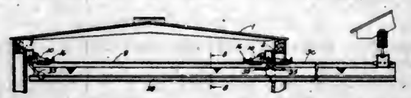
1. The method of producing a sound damped, metallic exhaust muffler comprising coating a surface of the muffler with a silicate in solution and rapidly driving off the solvent by heat of the exhaust gas passing through the muffler.

1,869,420. VEHICLE SUPPORT. MERRILL W. HARD, Los Angeles, Calif., assignor of one-fourth to Leban E. Richey, Los Angeles, Calif., and one-fourth to Otto B. Englisch, Chicago, Ill. Filed June 7, 1928. Serial No. 283,676. 13 Claims. (Cl. 254—88.)



1. A lift for automobiles comprising a ramp, a movable dolly adapted to carry the front axle of the automobile in an elevated position, a movable carriage, a supporting saddle, supporting links pivotally connecting said carriage and saddle, a rod extending forwardly from said carriage, means on said rod engageable by said dolly to advance said carriage, and links connecting said supporting links to a stationary point operable on advance of said carriage to swing said supporting links upwardly.

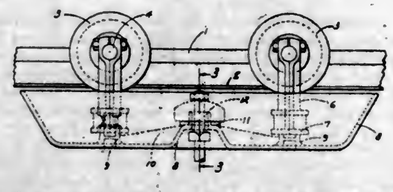
1,869,421. OVERHEAD CONVEYER SYSTEM. FRANK C. HARRIS, Cleveland, Ohio. Filed Apr. 21, 1928. Serial No. 271,753. 8 Claims. (Cl. 104—98.)



1. An overhead conveyer system for box cars or the like, comprising crane runways, means for securing the runways to the box car, a collapsible crane including trucks having wheels adapted to engage the runways, and means for securing the trucks to a runway when the crane is collapsed.

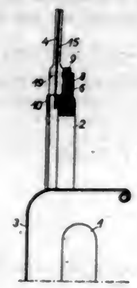
2. An overhead conveyer system for box cars or the like comprising crane runways, means for securing the runways rigidly to the box car, a crane having wheels adapted to run on the runways and including a track for a trolley, a connecting track section disposed at an angle to the runways and including a track for a trolley, means for locking the track section to a runway with its track in position to receive a trolley from the track of the crane, and safety stops associated with the crane and track section which cooperate to unblock the crane track, and track section when the latter are in alignment.

1,869,422. DRIP FRAME TROLLEY. FRANK C. HARRIS, Cleveland, Ohio. Filed Nov. 22, 1930. Serial No. 497,520. 11 Claims. (Cl. 105—154.)



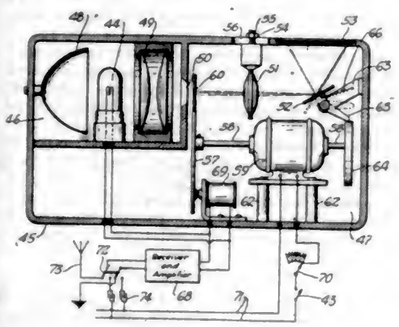
1. A monorail trolley assembly including wheels and yoke means, the assembly including means disposed below the wheels to collect and retain falling refuse.

1,869,423. AUTOMOBILE BODY. EMIL GEORG HEDER, Dresden, Germany. Filed Dec. 29, 1927, Serial No. 243,383, and in Germany Aug. 27, 1927. 7 Claims. (Cl. 296—107.)



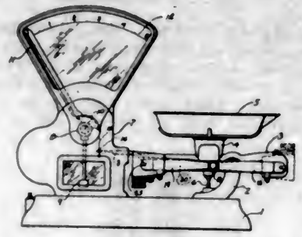
1. In combination with an automobile body having a rear wheel housing and a rigid body portion above said housing, a slidable door window and a rear side window set inwards in relation to the door window, a foldable top including parallelogram links and cant rails, one of said links, when said top is up forming a pillar member adjacent the space between said windows, said pillar member being formed as an angle bar and foldable with one face of said bar to lie on said rigid body portion when said top is folded back, said cant rails being adapted to lie in superposed relationship along said side window and between said window and the other face of said angle bar.

1,869,424. MOTION PICTURE TELEVISION SYSTEM. CLINTON W. HOUGH, New York, N. Y., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 22, 1930. Serial No. 469,724. 1 Claim. (Cl. 178—6.)



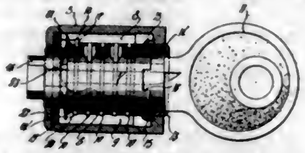
In a television system, a compact receiver comprising, a container the interior of which is divided into a first compartment and a second compartment, a source of light and a lens system in said first compartment, an aperture in said compartment opening into said second compartment, a motor in said second compartment, a scanning disk adapted to be rotated by said motor and positioned adjacent said aperture, an image screen located in the top of said compartment, a pivoted plane surface mirror in said second compartment and means operated by said motor to oscillate said mirror in synchronism with said scanning disk whereby light from said source is caused to traverse said screen in two dimensions.

1,869,425. WEIGHING SCALE. SAMUEL N. HUBT, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Jan. 12, 1931. Serial No. 508,233. 4 Claims. (Cl. 265—36.)



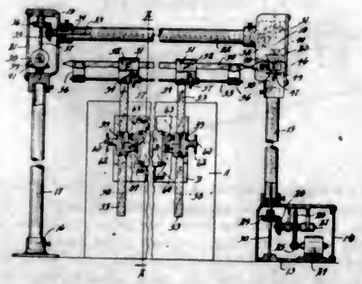
1. In a weighing scale, in combination, automatic weighing and indicating mechanism, two manipulative load offsetting means in co-operative relation therewith, said manipulative load offsetting means comprising weighted levers fulcrumed on a member of the automatic weighing mechanism, each of said weighted levers having indicating means and adapted to be shifted from an ineffective to an effective position in predetermined sequence.

1,869,426. LOCK. EDWARD N. JACOBI, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 19, 1928. Serial No. 326,934. 11 Claims. (Cl. 70—46.)



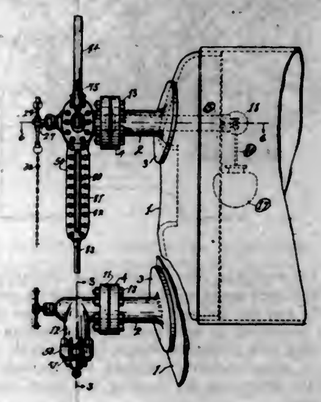
1. In a lock of the character described including a barrel, a lock cylinder rotatable therein, said lock cylinder having a plurality of tumblers retractible upon the insertion of a proper key, one of said tumblers being longer than the others to at all times have a part disposed outwardly of the periphery of the lock cylinder to restrict rotation of the cylinder, and means into which the projecting end of said tumbler may be moved to permit rotation of the cylinder.

1,869,427. PROCESS AND APPARATUS FOR PRODUCING CONVEX AND CONCAVE SURFACES IN STONE. MARSHALL E. JONES, St. Cloud, Minn. Filed Mar. 20, 1931. Serial No. 523,976. 16 Claims. (Cl. 41—1.)



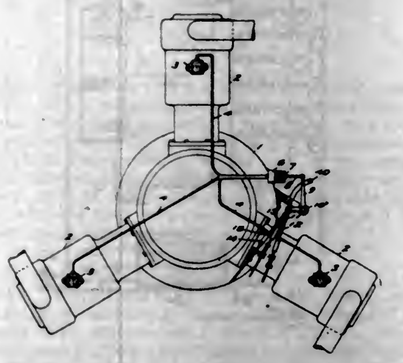
13. An apparatus of the class described, comprising a supporting structure, a pair of shafts journaled at spaced points in said supporting structure, means for driving said shafts, a pair of heads eccentrically connected to said shafts for gyration thereby, a hanger bar interconnecting said heads and swivelled therein, an arm supported from said hanger bar and depending downwardly therefrom, a block mounted on said arm for vertical adjustment, a substantially horisontally disposed rod mounted in said block for longitudinal extension inwardly therefrom, a stencil holder carried by said rod, a stencil carried by said stencil holder and adapted to be positioned over a stone to be worked and means urging said arm, block, stencil holder and stencil inwardly toward the stone.

1,869,428. BOILER WATER LEVEL INDICATING DEVICE. HOWARD J. KIRA, El Mora, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Dec. 5, 1925. Serial No. 73,320. 15 Claims. (Cl. 73—82.)



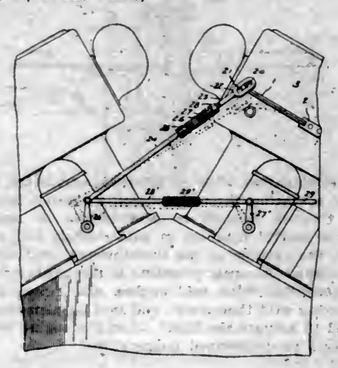
12. In a water level indicator for a boiler, a float in said boiler, a shaft connected to said float and extending from said float to the outside of said boiler, said shaft being movable longitudinally and being revoluble, and level indicating means operated by said shaft.

1,869,429. INTERNAL COMBUSTION ENGINE. ALEXANDER H. KING and EARLE A. RYDER, West Hartford, Conn., assignors to The Pratt & Whitney Aircraft Company, Hartford, Conn. Filed June 5, 1928. Serial No. 283,082. 14 Claims. (Cl. 123—52.)



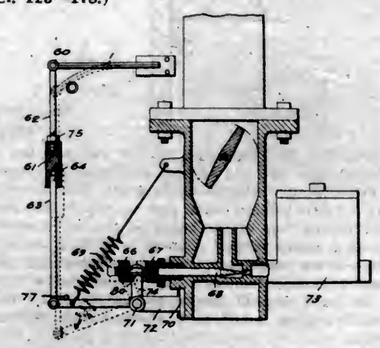
1. In combination, with an internal combustion engine having a plurality of cylinders, fluid thermostats having fluid containing bulbs mounted in thermal communication with said cylinders, engine controls, a bellows having a header in communication with each of said bulbs, and means operatively connecting said bellows with said engine controls to actuate the latter when the engine temperature reaches a predetermined point.

1,869,430. INTERNAL COMBUSTION ENGINE. ALEXANDER H. KING and EARLE A. RYDER, West Hartford, Conn., assignors to The Pratt & Whitney Aircraft Company, Hartford, Conn. Original application filed June 5, 1928, Serial No. 283,081. Divided and this application filed Aug. 31, 1929. Serial No. 389,781. 11 Claims. (Cl. 123—117.)



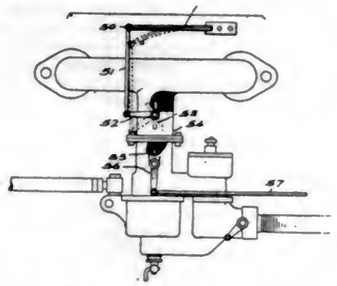
1. In combination, with an internal combustion engine having a spark adjusting control, a thermostat mounted in thermal communication with said engine, and means operatively connecting said thermostat and said spark control to actuate the latter, said means being ineffective to operate said control at any normal engine temperature but operating to retard the same when the engine temperature rises to a predetermined excessive degree.

1,869,431. INTERNAL COMBUSTION ENGINE. ALEXANDER H. KING and EARLE A. RYDER, West Hartford, Conn., assignors to The Pratt & Whitney Aircraft Company, Hartford, Conn. Original application filed June 5, 1928, Serial No. 283,081. Divided and this application filed Aug. 31, 1929. Serial No. 389,783. 10 Claims. (Cl. 123—178.)



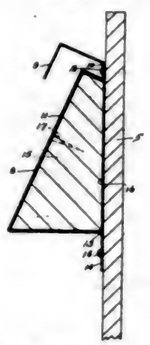
1. In combination with an internal combustion engine, a thermostat mounted in thermal communication with said engine, a fuel mixture control, and means operatively connecting said thermostat to said mixture control to actuate the latter to enrich the mixture when the temperature of the engine increases beyond a predetermined degree.

1,869,432. INTERNAL COMBUSTION ENGINE. ALEXANDER H. KING and EARLE A. RYDER, West Hartford, Conn., assignors to The Pratt & Whitney Aircraft Company, Hartford, Conn. Original application filed June 5, 1928, Serial No. 283,081. Divided and this application filed Aug. 31, 1929. Serial No. 389,786. 1 Claim. (Cl. 123—198.)



In combination with an internal combustion engine, an engine operating throttle control, a conduit leading from said throttle control to said engine, a supplemental throttle control mounted in said conduit and adapted to govern the passage of gas therethrough, said throttle normally being in open position, a thermostat in thermal communication with said engine, and means operatively connecting said thermostat and said supplemental throttle control to actuate the latter when the engine temperature reaches a predetermined temperature.

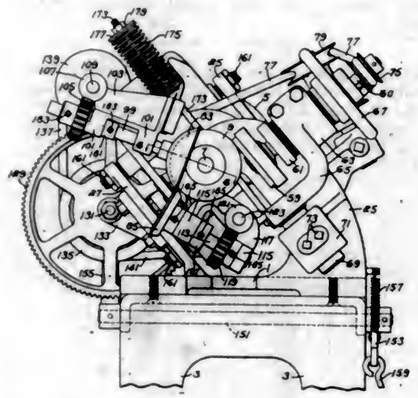
1,869,433. DISPLAY DEVICE. ROY MEADER, Springfield Mass., assignor to The A. Nash Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 3, 1931. Serial No. 561,011. 5 Claims. (Cl. 211—89.)



2. A device for displaying fabrics and adapted to be positioned upon the top edge of a horizontal supporting strip disposed vertically as to its width, said device comprising a fabric-holding board and an attachment member secured to one face of the board at the top thereof and providing a clamp portion adapted to slidably engage the top edge of the supporting strip and an abutment portion disposed angularly relative to the board and adapted to abut the front face of the supporting strip for holding the fabric-holding board at a similar angle relative to said strip.

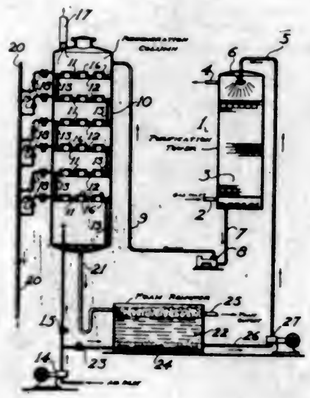
1,869,434. EDGE TRIMMER AND THE LIKE. FRANK W. MERRICK, Dorchester, Mass. Filed Apr. 27, 1929. Serial No. 358,644. 17 Claims. (Cl. 12—88.)

1. In a machine of the character described, a rotary knife having at its rim a cutting edge which is adapted to cut through planes at right angle to the axis of rotation of said knife, a pair of cooperating presser members for guiding the work relative to said cutting edge, one of said presser members being cup-shaped and partially surrounding said knife so as to act as a shield for the latter, the axis of said presser member disposed transversely to the axis of rotation of said knife, said presser member having a rim portion for engaging one side of the work, the other presser member having a peripheral



portion for engaging the opposite side of the work, said presser members being so disposed that both are between said knife and the body of the work when the edge of the latter is presented to said cutting edge, means for yieldingly urging said presser members toward each other, and means for simultaneously rotating said presser members in opposite directions for feeding the work toward said cutting edge.

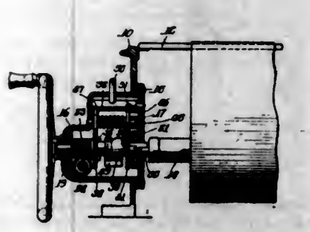
1,869,435. METHOD OF REGENERATING SOLUTIONS USED IN THE PURIFICATION OF HYDROCARBON GAS. HAROLD JANNEY NICHOLS, Jr., and CLARENCE R. WISE, Roselle, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed July 1, 1927. Serial No. 202,829. 1 Claim. (Cl. 23—225.)



An improved process for regeneration of liquor resulting from the treatment of gas containing sulphurous impurities with a suspension of a metallic oxide capable of reacting with said impurities in an aqueous solution of an alkali metal salt of carbonic acid, which comprises passing the liquor successively through a series of zones, passing a gas rich in free oxygen counter-currently to the liquor successively through the zones, providing thorough contact of liquor and gas whereby a foam containing sulphur is formed, and removing the foam from the liquor in at least two of the zones.

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1,869,436. GEARING FOR HEKTOGRAPH MACHINES. JOHN P. PEDERSON, Chicago, Ill., assignor to Ditto, Incorporated, Chicago, Ill., a Corporation of West Virginia. Filed Mar. 10, 1930. Serial No. 434,575. 7 Claims. (Cl. 242—55.)



1. In a duplicating machine, in combination with a frame, of a set of spindles journaled in said frame, a shaft adapted for rotation, a ratchet wheel journaled on one end of said shaft having connection with one of said spindles, a second wheel journaled on the other end of the shaft having connection with the other spindle, a clutch member located on said shaft between said ratchet wheels, means on said clutch member adapted for engagement with the ratchet wheels, and other means on said shaft for forcing said clutch member into engagement with either of said ratchet wheels depending on the direction of rotation given to said shaft.

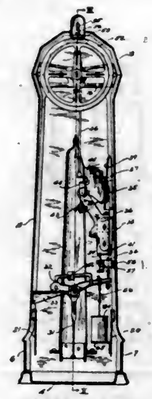
1,869,437. ANTIVIBRATION DEVICE. ALBERT H. RANGNOW, Los Angeles, Calif. Filed July 28, 1931. Serial No. 553,575. 3 Claims. (Cl. 180—70.)



1. The combination, with the frame and drive of a self-propelled vehicle, said drive being provided with a universal joint and said frame having a cross piece; of a body of elastic material which consists of two complementary parts which are recessed to form a seat for the casing of said universal joint, and means to secure the complementary parts of said bodies together between said universal joint and cross piece and in position to prevent vibration of said universal joint.

1,869,438. WEIGHING SCALE. ORWELL C. REEVES and CHARLES O. MARSHALL, Toledo, Ohio, assignors to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Apr. 16, 1928, Serial No. 270,207, and in Canada Sept. 4, 1928. 8 Claims. (Cl. 265—62.)

1. In a weighing scale, in combination, a platform, an indicator operatively connected thereto, said indicator including a revoluble chart and co-operating index, the chart and index being so located as to lie in about waist high position in respect of a person of average height

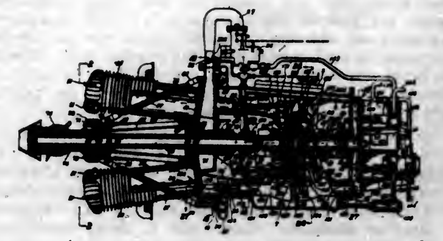


standing upon the scale platform, and means for illuminating the indicator when it is moved to indicating position.

1,869,439. RANCIDITY RETARDANT. GODFREY EDWARD SCHARFF, Stevenston, Scotland, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 26, 1928, Serial No. 315,348, and in Great Britain Nov. 23, 1927. 2 Claims. (Cl. 99—11.)

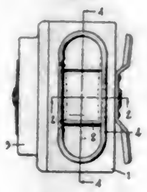
1. The method of preventing rancidity in a vegetable oil which comprises adding thereto at least 2%, based on the weight of said oil, of finely ground magnesium oxide.

1,869,440. INTERNAL COMBUSTION ENGINE. CHARLES E. SCHLENKER, Lakewood, Ohio, assignor to Western Reserve Air Motors Corporation, a Corporation of Ohio. Filed June 3, 1929. Serial No. 367,857. 13 Claims. (Cl. 123—58.)



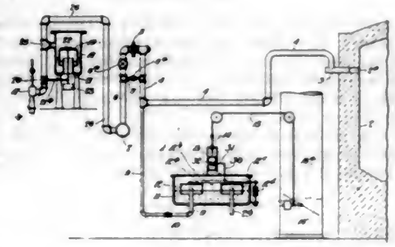
5. In an internal combustion engine, a substantially cylindrical housing, a manifold member supported on one end and an accessory casing disposed on the other end, cylinders and piston rod guides supported by the manifold member, a rotatable shaft supported by said housing and manifold member, said shaft extending beyond the confines of said housing, a tubular support for said shaft supported by the housing and means for bracing said support comprising a plurality of radially extending rods connected to the end of said tubular member and adjacent the periphery of said housing, pistons and piston rods rigidly secured thereto reciprocable in said cylinders and means operatively connecting said piston rods to said shaft.

1,869,441. FISHING REEL. WILLIAM SHAKESPEARE, Jr., Kalamazoo, Mich., assignor to Shakespeare Company, Kalamazoo, Mich. Filed Apr. 7, 1930. Serial No. 442,068. 6 Claims. (Cl. 242—84.1.)



5. In a fishing reel, the combination of a frame having opposed grooved parts, and elongated longitudinally curved line guide eye sprung into and retained in said grooved parts by its resilience.

1,869,442. FURNACE PRESSURE REGULATOR. ALFRED STEINBART, Pittsburgh, Pa. Filed Apr. 17, 1931. Serial No. 530,995. 5 Claims. (Cl. 236—15.)

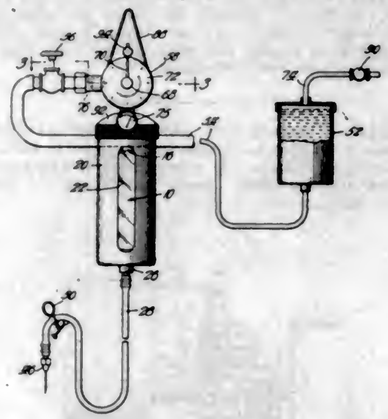


1. The method of automatically maintaining balanced pressure in a furnace, which consists in allowing hot gases from the furnace to issue from an opening when the pressure in the furnace is above atmospheric pressure and allowing cold air to stream into the furnace through the said opening when the pressure in the furnace is below atmospheric pressure and using the variation in density of the hot furnace gases and cold air passing through said opening to regulate the draft.

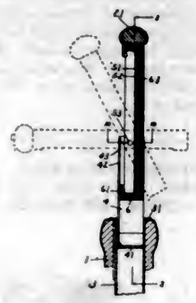
1,869,443. ADMINISTRATION OF THERAPEUTIC AGENTS. CLIFFORD L. STOCKLIN, Chicago, Ill., assignor to Cook Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 6, 1928. Serial No. 297,590. 13 Claims. (Cl. 128—215.)

1. A method of applying measured doses of medicament which comprises penetrating the part to be treated with a canula, storing a body of liquid medicament and storing a predetermined charge of another liquid under resilient pressure, and permitting said pressure acting through said other liquid to expel an equivalent volume of medicament through said canula.

6. Medicament injection apparatus of the character described comprising in combination a canula, a cartridge connected to said canula to discharge therethrough a power source for putting the contents of said cartridge under pressure, operator controlled pressure adjustment means, measuring means for controlling the expulsion of a predetermined fraction of the contents of said cartridge fixedly mounted on and movable with said cartridge, and operator controlled means for cutting off the flow at a point between said cartridge and said canula, said pressure adjustment means and measuring means being mounted together at the end of said cartridge remote from the connection to said canula.



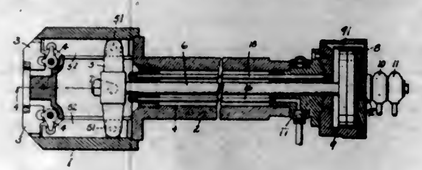
1,869,444. TABLET FOR ARMCHAIRS. FRED W. TOBEY, Grand Rapids, Mich., assignor to The Macey Company, Grand Rapids, Mich. Filed Dec. 12, 1930. Serial No. 501,755. 3 Claims. (Cl. 155—128.)



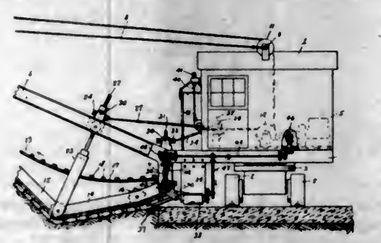
3. The combination of an arm chair, a box-like housing within the arm open at the top and flanged for attachment to the arm, a slidable frame disposed within the housing and adapted to extend to the bottom thereof, having a cross bar and upwardly extending flanged bar arms terminating in attaching ears and being provided with hooked stops and having the flange portion notched to afford stops, and a pivoted box-like tablet open on its under side and pivoted to the upwardly extending ears and adapted to swing in alignment with the said housing and be dropped into the same, and adapted to turn crosswise and engage the stops and rest upon the top of said arm.

1,869,445. PNEUMATIC CHUCK. HAROLD A. TOMKINS, Jackson, Mich. Filed Aug. 20, 1930. Serial No. 476,559. 4 Claims. (Cl. 279—4.)

2. In a chuck structure, a pneumatic chuck, a double acting pneumatic cylinder with piston connected to actuate the said chuck, a central bearing member for the said chuck divided and one portion forming a pivoted cap, a lever with cam shaped end disposed to lock said cap in position, an auxiliary pneumatic cylinder with double acting piston connected to said lever for actuating the same, an independent air connection to said cylinder to actuate the lever to lock the cap, and an air connection from the opposite end of said auxiliary cylinder to the releasing end of the chuck cylinder, whereby releasing the chuck will actuate the lever to unlock the cap.

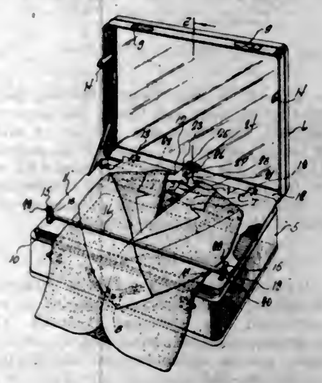


1,869,446. ROAD MACHINE. WILLIAM A. WEIKEL, Pottsville, Pa. Filed July 28, 1931. Serial No. 552,715. 4 Claims. (Cl. 37—109.)



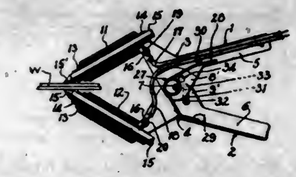
1. A road machine comprising a mobile support, a boom mounted on the support, an endless scraper operatively mounted on the boom, said scraper including inner and outer hingedly connected side members, sprockets mounted on the side members, endless chains trained on the sprockets, scraper blades mounted on the chains, means pivotally connecting the inner side members, at their inner ends to the inner end of the boom, means adjustably connecting the hingedly connected ends of the side members to the boom, remotely controlled means for actuating the adjustment and means for actuating the endless scraper.

1,869,447. HAND LUGGAGE. GEORGE HENRY WHEARY, Racine, Wis., assignor to Wheary Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Dec. 2, 1929. Serial No. 411,091. 17 Claims. (Cl. 190—41.)



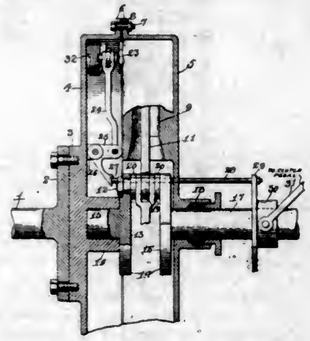
1. A luggage carrier including a main section and a lid hingedly connected therewith, an internal cover for the lid, a garment supporting member carried by the cover, a garment hanger, and means for mounting the garment hanger near the hinged connection of the lid and main section, said hanger being adapted to have a garment draped thereover and the garment then extended outwardly over the internal cover and about the supporting member carried thereby.

1,869,448. ELECTRICAL SOLDERING APPARATUS. WILLIAM R. WOODRING, Los Angeles, Calif. Filed Dec. 27, 1930. Serial No. 505,094. 3 Claims. (Cl. 219—12.)



1. An electrical soldering instrument comprising a pair of levers hingedly connected together, and including means for opening and closing the levers, a pair of electrodes oppositely mounted on said levers and having conductors leading therefrom for connection with a source of electric current, the circuit of said electrodes being closed by moving the electrodes together or in contact with the work adapted to be inserted therebetween and means for locking said levers in open position for normally maintaining an open circuit of the electrodes.

1,869,449. FLUID CLUTCH. JAMES A. WORDEN, Antigo, Wis., assignor of one-half to A. M. Oleston, Antigo, Wis. Filed June 11, 1929. Serial No. 369,941. 1 Claim. (Cl. 192—60.)

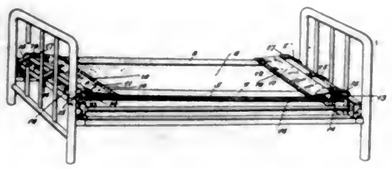


A fluid clutch comprising a drive shaft, a driven shaft, a housing carried by one of said shafts, fluid cylinders carried by said housing, pistons operating in the cylinders and having connection with the other shaft, valve members for controlling the flow of fluid to said cylinders, means for normally maintaining the valve members in a closed position, and causing the cylinders and pistons to move simultaneously, means for opening said valves including a screw member for each valve, a crank arm on each screw member, a rod connected with each crank arm, and means for imparting reciprocating movement to the rods for rotating the screws for moving each valve member.

1,869,450. MATTRESS PROTECTOR. BENNETT WEINBERG, Butte, Mont. Filed Nov. 26, 1930. Serial No. 498,481. 2 Claims. (Cl. 5—354.)

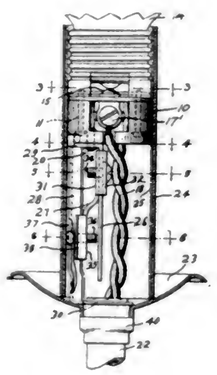
1. A mattress-protecting bed spring cover comprising a flexible inelastic sheet, two elastic strips extending along the end edges of said sheet respectively and se-

cured at their inner edges thereto, said inelastic sheet and elastic strips being substantially in the same horizontal plane, two transverse bars around which the outer edge portions of said elastic strips are rolled respectively,



hooks having flat shanks lying upon said rolled edge portions of said elastic strips, and rivets passing through said bars, said hook shanks and said rolled edge portions of said elastic strips.

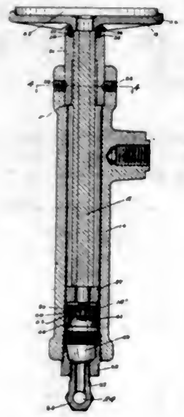
1,869,451. CANDLE SOCKET. BURLING D. WELLS, Danbury, Conn., assignor to Harvey Hubbell, Incorporated, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 30, 1929. Serial No. 410,731. 8 Claims. (Cl. 240—52.4.)



1. In a candle socket an insulating body member carrying lamp contacts and a compound adjustable hickey for supporting the body member on a fixture comprising a longitudinal slotted member secured to the body member, a longitudinal slotted member adapted to be secured to a supporting means, a connecting member having end portions offset laterally from each other, and clamping means on each of said end portions of the connecting member adapted to cooperate with the slotted portion of each longitudinal member to adjustably secure the longitudinal members in position.

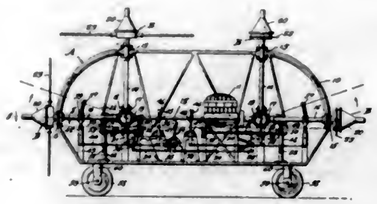
1,869,452. HYDRAULIC BRAKE SYSTEM. JOHN WILLIAM WHITE, Buffalo, N. Y. Filed Aug. 10, 1925. Serial No. 49,391. 4 Claims. (Cl. 60—54.6.)

1. In a hydraulic brake system, a pressure inducing instrumentality including, a cylinder, a piston rod in said cylinder, a substantially cup-shaped flexible piston in advance and independent of said rod, and a disc interposed between the end of the rod and cup-shaped



member, said disc having an annular flange surrounding the base portion of the cup-shaped member for supporting the latter.

1,869,453. HELICOPTER. REES KENFIG WILLIAMS, Baltimore, Md. Filed June 23, 1931. Serial No. 546,331. 2 Claims. (Cl. 244—19.)

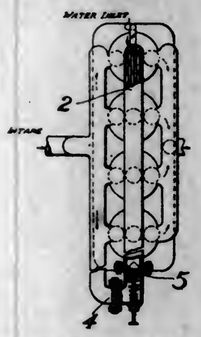


1. In an aircraft, a body having landing gear, propellers carried by the body and having blades movable in a horizontal path, propellers fore and aft of said body and having blades, means for changing the angular disposition of the fore and aft propellers, means for altering the pitch of the fore and aft propellers independently of each other, and means for altering in unison the pitch of the blades of the first named propellers.

1,869,454. MANUFACTURE OF BARIUM COMPOUNDS. SERGE WITTOUCK, Paris, France, assignor to International Industrial and Chemical Company, Limited, Montreal, Quebec, Canada. Filed Feb. 27, 1929, Serial No. 343,241, and in Great Britain Mar. 3, 1928. 7 Claims. (Cl. 23—110.)

1. In the manufacture of a barium silicate compound, the method comprising providing a mixture including silicon in oxy-compound form and a compound of barium fusible at a temperature requisite to reaction thereof with silica to form said silicate and calcining said mixture while dispersed in a quantity of said barium silicate compound.

1,869,455. INTERNAL COMBUSTION ENGINE AND METHOD OF OPERATING THE SAME. WLADIMIR M. ZAIKOWSKY, Pasadena, Calif., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 27, 1927. Serial No. 194,575. 10 Claims. (Cl. 123—1.)



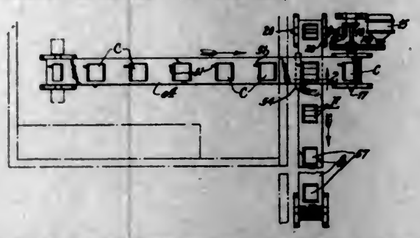
1. In an internal combustion engine, a chamber adapted to receive combustible mixture under pressure from the engine cylinders, means for cooling the combustible mixture in the chamber, means for returning the cooled combustible mixture to the engine cylinders on the compression stroke and means normally operating to relieve partially and continuously the pressure in the chamber.

1,869,456. REAR VISION MIRROR. WILLIAM BAUSCH, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed June 27, 1930. Serial No. 464,227. 6 Claims. (Cl. 88—1.)



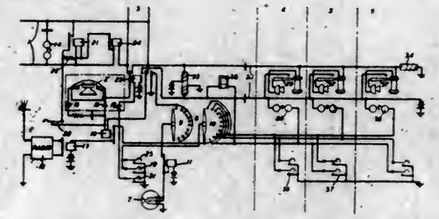
2. A mirror comprising two relatively long, narrow, transparent elements, each of said elements having a spherical surface on one side, said elements being angularly disposed with their edges in abutting relationship, each of said elements having a reflecting coating on one side thereof.

1,869,457. APPARATUS FOR HANDLING EGGS. LEON BENOIT, Chicago, Ill. Filed June 29, 1928. Serial No. 289,176. 25 Claims. (Cl. 226—14.)



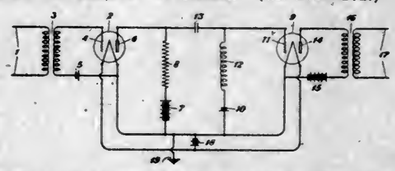
1. In an egg handling apparatus, comprising a cellular tray adapted to fill a cellular carton, means for mechanically conveying the tray and carton from remote points to positions in which the tray is directly over the carton, and means for automatically opening the tray bottom for releasing eggs therefrom into the carton cells.

1,869,458. COMMUNICATION SYSTEM. CARROLL O. BICKELHAUPT, New York, N. Y., and CECIL E. PENDEL, Atlanta, Ga., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 10, 1930. Serial No. 487,866. 10 Claims. (Cl. 179—2.)



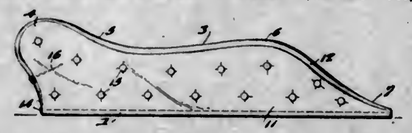
1. A system comprising two lines, a telephone set normally connected with one of said lines, means for connecting said telephone set to the other line, means operative at will in response to the lifting of the receiver off the hook of the telephone set for actuating said connecting means to connect said telephone set to said other line, a radio set and means associated with said telephone set and responsive to the lifting of the receiver off the hook of said set and operative over whichever line is connected to the telephone set at the time for disabling said radio set.

1,869,459. AMPLIFYING SYSTEM. LEE GORDON BOSTWICK, Chatham, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Continuation of application Serial No. 49,561, filed Aug. 11, 1925. This application filed Apr. 8, 1931. Serial No. 528,670. 4 Claims. (Cl. 179—171.)



1. A system for amplifying one range or band of audio frequencies to a greater extent than all other higher frequencies, including two three-element vacuum tubes, the filament electrodes of which are tied together, a condenser connected between the plate electrode of the first vacuum tube and the grid electrode of the second vacuum tube, and an inductance having a very large resistance connected between the grid electrode of the second vacuum tube and the filament electrodes of both vacuum tubes, said condenser and said inductance forming a circuit which is resonant at the band or range of audio frequencies to be specially amplified.

1,869,460. EXERCISE AND MASSAGE CUSHION. ACHILL W. BRAND, Morro Bay, Calif. Filed Aug. 29, 1929. Serial No. 389,239. 1 Claim. (Cl. 128—70.)



An exercise and massage cushion comprising a narrow elongated substantially inflexible supporting base, and a cushion body built up on the base having an undulating contour line longitudinally on the top thereof corresponding substantially to the line on the back of the human body coextensive with the spine, said undulating top line being of narrow width in its lateral extent to contact

with the back of a person lying thereon longitudinally over and immediately adjacent the spine and in its lateral extent being inclined downwardly to a wedge-shaped termination at one end of the supporting base and being rounded over and slightly elevated in a ball form at the other end to fit the back of the neck adjacent the base of the skull.

1,869,461. MULTIFOCAL LENS. LUCIAN W. BUGBEE, Jr., Indianapolis, Ind., assignor, by mesne assignments, to Continental Optical Manufacturing Company, Indianapolis, Ind., a Corporation. Filed Mar. 23, 1927. Serial No. 177,629. 2 Claims. (Cl. 88—54.)



1. A one piece multifocal lens having a near field with its boundary line partly circular and partly substantially horizontal, and a distance field surrounding said near field, with the near field merging with the distance field at the circular part of the boundary line thereof and being shouldered at substantially the horizontal portion of the boundary line thereof.

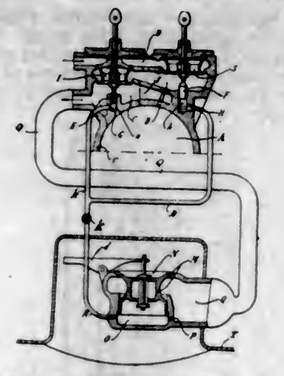
1,869,462. STRETCHING AND FASTENING DEVICE FOR ROPES. OLAV BURHEIM, Trondhjem, Norway. Filed Feb. 27, 1930, Serial No. 431,918, and in Norway Jan. 25, 1929. 4 Claims. (Cl. 24—68.)



4. A stretching and fastening device for ropes, comprising a lever, means for fastening a rope end to the lever, a rest on the lever adapted to hold a bight of another rope end, and a crotch provided on the lever on the side of the rest opposite to the said rope end fastening means and adapted to so receive a branch of the rope bight that said branch is adapted to press the other branch in frictional contact with the bottom of the crotch, the end of the lever located on the side of the fastening means opposite the rest and the crotch being provided with a hook adapted to be hooked onto the rope to hold said lever in stretching position.

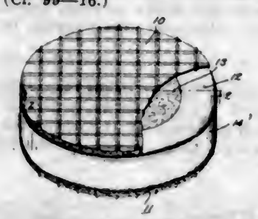
1,869,463. POPPET VALVE FOR STEAM DISTRIBUTING GEARS. ARTURO CAPROTTI, Milan, Italy. Filed Aug. 28, 1927, Serial No. 214,912, and in Italy Aug. 25, 1926. 6 Claims. (Cl. 121—133.)

1. A poppet valve mechanism for reciprocating steam engines comprising a valve casing, a steam chest in the casing, a connection between the chest and a source of steam under pressure, an inlet poppet valve in the steam chest for admitting steam to the engine cylinder, a stem carried by the valve, said stem having its outer end passing out to the free atmosphere, a chamber having



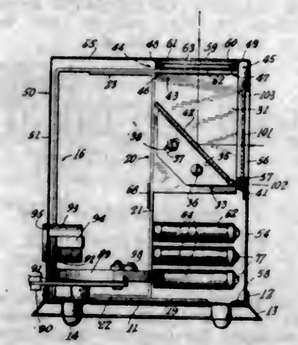
one open end in the wall of the steam chest, a tail on the inner end of the valve stem entering said chamber and circumferentially spaced apart from the wall of said chamber, and a duct connecting the closed end of the chamber with the source of steam under pressure.

1,869,464. CONFECTION. PAUL WESLEY CLARK, Los Angeles, Calif. Filed Apr. 14, 1932. Serial No. 605,225. 3 Claims. (Cl. 99—16.)



1. A confection comprising top and bottom wafers, an annular ring of marshmallow between the wafers, and ice cream filling the center of the ring.

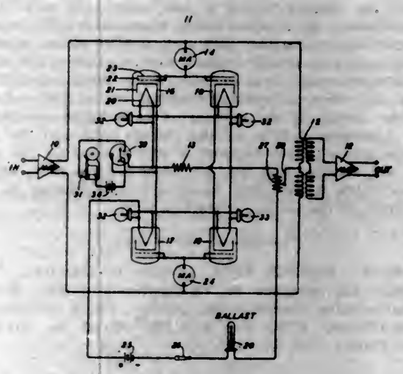
1,869,465. TRAVELING ADVERTISING SIGN. MORRIS J. COHAN, Brooklyn, N. Y., assignor to Reliance Specialties Mfg. Co., Inc., New York, N. Y., a Corporation of New York. Filed May 20, 1931. Serial No 538,651. 12 Claims. (Cl. 40—32.)



1. In a traveling sign, a base plate, a plurality of end supporting members carried thereby, and a mirror-supporting member carried by each of said end supporting

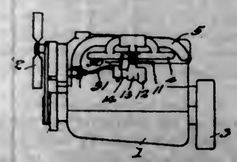
members, each of said mirror-supporting members being provided with an inclined mirror-supporting surface, together with means for adjusting the inclination of said mirror-supporting members, together with a plurality of longitudinally disposed flanged guide members carried by said end supporting members, an endless flexible sign stencil having a portion thereof passing over said longitudinally disposed flanged guide members, a plurality of rollers for carrying said endless flexible sign stencil, means for moving said endless flexible sign stencil over said rollers at an adjustable rate of speed and means for tensioning said endless flexible sign stencil in its movement over said flanged guide members, in combination with a closure adapted to cover and house the operating parts of the sign carried by said base plate, said closure embodying a top portion carrying a glass member.

1,869,466. VOLTAGE LIMITER. IRA E. COLE, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 25, 1931. Serial No. 546,681. 5 Claims. (Cl. 171—97.)



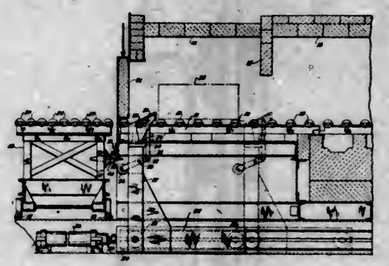
1. In a voltage limiting circuit, two hot-cathode gas-filled space discharge devices each having its discharge space terminals connected in shunt relation to the circuit on which the voltage is to be limited and means applying a steady difference of potential between an electrode of one device and an electrode of the other to give a lower breakdown voltage to one than to the other device.

1,869,467. CARBURETOR. DOUGLAS COLLINS, Salisbury, N. C. Filed Apr. 22, 1930. Serial No. 446,367. 6 Claims. (Cl. 123—124.)



1. A valve control mechanism comprising a ported air chamber and choke valve therefor, a pressure chamber and a pressure operated lever therein rigid with the valve, means for introducing fluid pressure to the pressure chamber and resilient means for holding the valve in closed position.

1,869,468. HANDLING ARRANGEMENT FOR FURNACES. FRANK T. COPE and ARTHUR H. VAUGHAN, Salem, Ohio, assignors to The Electric Furnace Company, Salem, Ohio, a Corporation of Ohio. Filed Dec. 24, 1928. Serial No. 328,273. 5 Claims. (Cl. 214—18.)

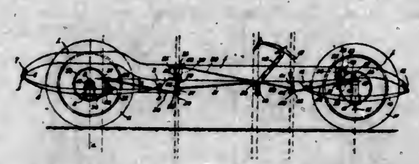


1. A furnace having a hearth comprising spaced rows of rollers, the hearth having a longitudinal slot formed therein within one end of the furnace, means for moving articles along the hearth, said means including a carriage spaced below the slot, a pusher arm carried by the carriage and extending upwardly therefrom through said slot, a pusher finger pivoted on the arm, and means located in alignment with the carriage for reciprocating the carriage longitudinally of the hearth.

1,869,469. METHOD OF PREVENTING RANCIDITY IN SOAPS AND PRODUCT. ROBERT E. DIVINE, Bogota, N. J. Filed Dec. 4, 1926. Serial No. 152,720. 7 Claims. (Cl. 87—16.)

1. As a new product a soap comprising in admixture a relatively small amount of an amino sulfonic acid compound.

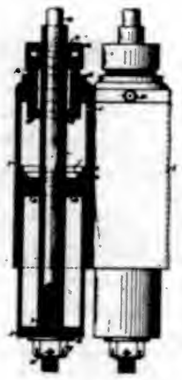
1,869,470. DIFFERENTIATING BRAKE. HILLIS C. DUNN, East McKeesport, Pa. Filed July 19, 1929. Serial No. 379,481. 12 Claims. (Cl. 188—10.)



12. In a differentiating brake appliance for cooperative use on a vehicle having a wheel-carrying structure, a superposed frame, a bowed leaf spring carried by said structure and a shackle pivotally connected with one end of said spring and also with said frame; the combination of a brake rigging at said wheel, brake-actuating mechanism carried by said frame and a lost motion connection between said mechanism and brake-rigging and extending in substantially the same direction as the length of said leaf spring, whereby the movement of said shackle about its pivots in response to relative approach of the frame

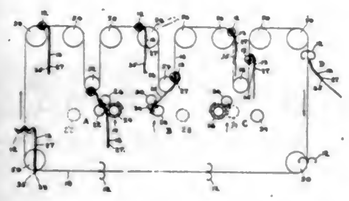
and wheel structure causes a take-up of the lost motion in said connection preparatory to earlier initiation of a braking effect in response to actuation of said mechanism.

1,869,471. CABLE EQUALIZER. ALFRED J. EGGAN, Chicago, Ill., assignor to Livingston Engineering Company, Chicago, Ill., a Corporation of Illinois. Filed June 13, 1929. Serial No. 370,515. 12 Claims. (Cl. 187—1.)



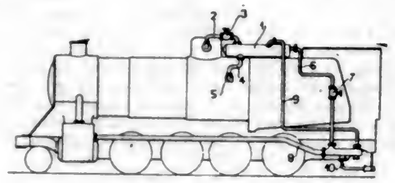
1. A cable equalizing device comprising a pair of integrally cast metal cylinders, a connection between said cylinders, a piston mounted for sliding movement in each cylinder having a central opening therein, a closing member threaded into one end of each cylinder and having central opening therein, a cap member threaded on each closing member with a central opening therein and a cable shackle bolt adapted to penetrate the central openings in each cylinder and means for connecting each bolt to its associated piston.

1,869,472. METHOD OF AND MACHINE FOR OPERATING UPON HIDES, SKINS, AND LEATHER. HANS FREUDENBERG, Weinheim, Germany. Filed Sept. 7, 1927, Serial No. 218,016, and in Germany Sept. 11, 1926. 45 Claims. (Cl. 149—8.)



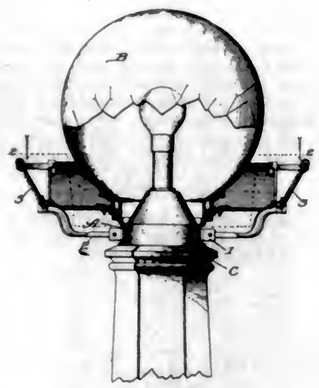
5. That improvement in methods of operating upon hides, skins and pieces of leather which comprises gripping a portion of each of a plurality of hides, skins, or pieces of leather, performing a plurality of operations in succession upon an ungripped portion of each of the pieces of work while moving the pieces of work continuously in succession to and by work-treating positions and while each piece is controlled through its gripper portion, and subsequently performing a plurality of operations upon the remaining portion of each piece of the same lot of work.

1,869,473. FEEDING DEVICE FOR THE BOILERS OF LOCOMOTIVES. LOUIS FRIEDMANN and HANS DEUTSCH, Vienna, Austria, assignors to the Firm Alex Friedmann, Vienna, Austria. Filed Feb. 28, 1929, Serial No. 343,416, and in Austria Mar. 7, 1928. 1 Claim. (Cl. 122—458.)



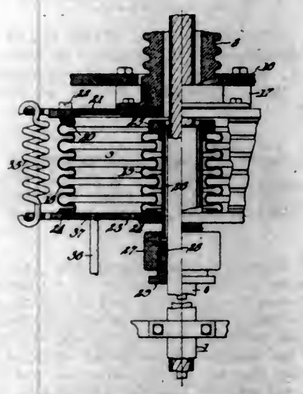
A locomotive feed water heating arrangement comprising a hot water storage tank having its lowermost portion located above the high water level of the boiler; a connection from said lowermost portion to the boiler check valve; a valved pipe connecting the steam space of the boiler with the uppermost portion of the storage tank; an injector having a cold water inlet and a hot water outlet, an exhaust steam nozzle, and a live steam nozzle, the construction and arrangement of the injector being such that it will operate with exhaust steam alone or with exhaust steam and live steam simultaneously; a pipe connecting an exhaust port of the engine and the exhaust nozzle of the injector; a valved pipe connecting the uppermost portion of the storage tank and the live steam nozzle of the injector, a pipe connecting the said hot water outlet and the hot water storage tank, and a check valve in said last mentioned pipe opening in the direction of the hot water storage tank.

1,869,474. STREET SIGN. HELEN C. GATCHELL, Chicago, Ill., assignor to Visible Night-and-Day Street-Name Signs, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed May 2, 1929. Serial No. 359,938. 13 Claims. (Cl. 40—131.)



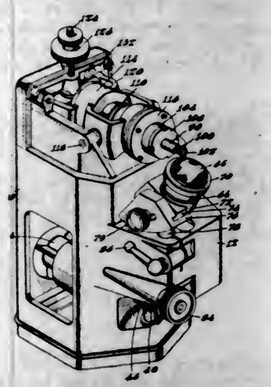
1. In a device of the character set forth, a post-engaging member, means for securing said member to a post, a plurality of signs, arms connected to said member and adapted to support said signs in the desired position, said arms comprising inner and outer segments having surfaces adapted to make sliding contact and having also telescoping flanges, and means for adjustably securing said arm segments in the desired relation.

1,869,475. CABLE TERMINAL. JOHN C. HALE, Bound Brook, N. J., assignor to Research Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 15, 1930. Serial No. 421,029. 14 Claims. (Cl. 247—6.)



1. A cable terminal for a hollow cable comprising a chamber surrounding the cable and in communication with the interior thereof, said chamber having a portion of its surface of rigid insulating material and other portions of its surface being of extensible construction to permit the chamber to have varying volumetric capacity.

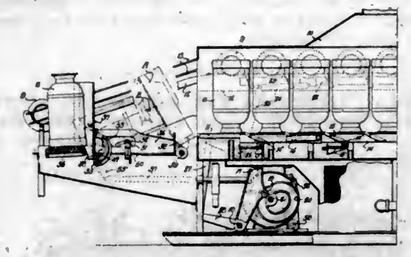
1,869,476. STITCH INDENTING MACHINE. WILLIAM HAMANN, Irondequoit, N. Y., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 7, 1928. Serial No. 324,428. 21 Claims. (Cl. 12—32.)



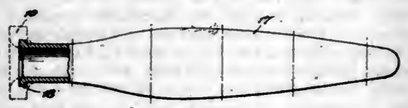
1. A machine of the class described, having in combination, an operating tool, a cooperating rotary work support angularly adjustable about an axis substantially intersecting the axis of the tool, and axially disposed driving means for said work support constructed and arranged to maintain positive driving connection with the work support in all positions of angular adjustment.

1,869,477. CAN-TURNING MACHINE. JOSEPH HAUK, Milwaukee, Wis., assignor to Hauk Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 4, 1929. Serial No. 404,648. 6 Claims. (Cl. 214—1.)

1. In a can-turning mechanism, the combination of a pair of can carrier members movable together and relative to each other, said carrier members being positioned together to receive a can in inverted position, means for moving both carrier members together to partially turn the can, and means for moving one of the carrier members relative to the other to raise and turn the can to upright position.

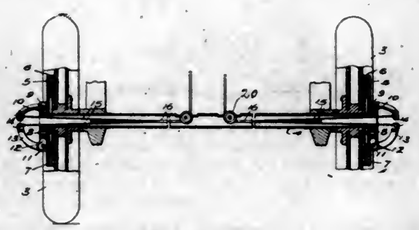


1,869,478. METHOD OF FORMING A PROPELLER. SPENCER HEATH, Elkridge, Md., assignor to The American Propeller Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 13, 1930. Serial No. 475,058. 9 Claims. (Cl. 29—156.8.)



3. The method of constructing a propeller blade which comprises drawing a cupped metal member to form an elongated cylindrical tube, decreasing the thickness of the wall of the tube circumferentially from the open end toward the closed end, deforming the end of the tube into the shape of a wedge, expanding the tube to form a substantially elliptical blank the circumferential dimensions of which correspond with those of the blade to be formed, and pressing the resultant blank into the shape to be given the finished blade.

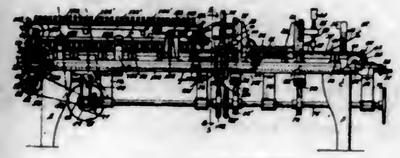
1,869,479. BRAKE FOR LANDING GEAR WHEELS OF AIRPLANES. ALFRED H. HOFER, Dayton, Ohio, assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1928. Serial No. 304,815. 8 Claims. (Cl. 188—72.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



2. A device of the character described, including the wheels, axle and fuselage of an aircraft, a disc non-rotatably mounted on each end of said axle and adapted to be moved into engagement with its adjacent wheel, a spider non-rotatably mounted on each end of said axle, cams pivoted in each of said spiders, the faces of said cams

acting against the said discs, independent selective manually actuated mechanisms in the said fuselage, and means connecting each set of said cams to an independent operating mechanism, the whole arranged whereby the cams for each wheel may be collectively or selectively manually actuated to retard the rotation of the wheels collectively or selectively.

1,869,480. APPARATUS FOR ASSEMBLING RECEPTACLE CLOSURES. JOHN A. JOHNSON, Woodhaven, N. Y. Filed June 1, 1928. Serial No. 282,260. 32 Claims. (Cl. 113—80.)

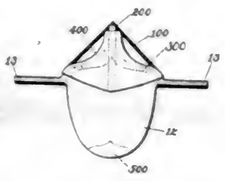


1. In assembling apparatus for closure caps flared outwardly about the margin, an endless conveyor carrying successively arranged plates having cap receiving seats to receive and support the caps by engagement of the outwardly flared marginal portion of the caps only, cap delivery chutes relative to the outlets of which chutes the cap receiving seats in the plates are positioned by the travel of the conveyor, devices for applying adhesive and sealing disks to closure caps supported in said plate seats and relative to which devices said seats are successively positioned by the travel of the conveyor, and means for placing the sealing disks in the caps under pressure for a predetermined length of travel of the conveyor.

1,869,481. PROCESS FOR PRODUCING PURE ANTHRACENE. LEOPOLD KAHL, Berlin-Wilmersdorf, Germany. Filed June 27, 1929, Serial No. 374,289, and in Germany Sept. 29, 1928. 8 Claims. (Cl. 260—168.)

1. A process for the purification of anthracene comprising dissolving the anthracene in liquids comprising essentially organic bases, treating the solution with caustic potash in the hot, and filtering the solution after cooling, as set forth.

1,869,482. METHOD OF AND APPARATUS FOR PREPARING CLOSED UPPERS. FAY D. KINNEY, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 12, 1929. Serial No. 346,386. 1 Claim. (Cl. 12—146.)



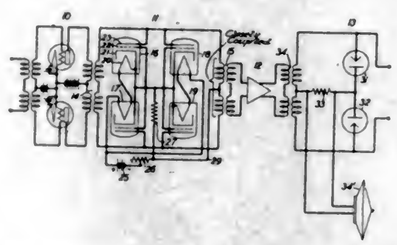
The method of preparing a closed upper which comprises cutting out a blank with an opening extending longitudinally into the blank from the middle of the rear edge thereof, superposing upon the blank a form the outline of the rear portion of which is a right angle with the apex of the angle at the middle of the rear edge of the blank, folding the rear corner portions of the blank over the form to bring the edges of the two halves of the rear edge of the blank into abutting relation, applying a stay over the margins of the abutting edges, applying a counter over the stay, turning over the form with the blank upon it, and applying a toe-piece to the blank.

1,869,483. DUST GUN. EDGAR KNAPP and CARL G. ALLGRUNN, Middleport, N. Y., assignors to Niagara Sprayer Company, Middleport, N. Y., a Corporation. Filed Dec. 2, 1927. Serial No. 237,204. 6 Claims. (Cl. 43—147.)



1. In a device for distributing powder and the like, a pump chamber, a material chamber, valved communicating means between the chambers, said valved means permitting flow of fluid into the material chamber from the pump chamber and restricting flow in the opposite direction, a piston in the pump chamber, means arranged externally of the pump chamber for actuating the piston, a nozzle portion in the material chamber supported by and extending inwardly from a wall thereof, and a nozzle portion extending outwardly from said wall, said inwardly extending nozzle portion terminating short of the opposite wall of the material chamber and being provided with inlet means adjacent the extended end thereof and with additional inlet means in its side wall spaced from said first mentioned inlet means, the side wall of the inwardly extending nozzle portion being imperforated for a substantial distance between the inlet means at the end and the second mentioned additional inlet means.

1,869,484. PEAK VOLTAGE LIMITER. WILLIAM A. KNOOP, Hempstead, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 19, 1931. Serial No. 523,682. 7 Claims. (Cl. 171—119.)

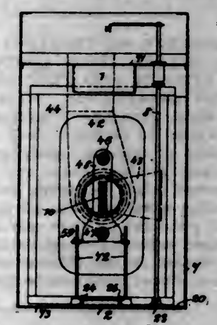


1. The combination with a transmission line comprising a pair of conductors, of a voltage limiting circuit comprising a pair of hot-cathode gas-filled discharge devices having anodes connected to opposite line conductors and cathodes connected to a neutral point of said line, said devices having a resultant zero discharge voltage range as great as the maximum normal voltage on said line, and a substantially constant voltage discharge characteristic over a limiting range in excess of said normal maximum voltage.

1,869,485. GAS METER. FRIEDRICH KROMSCHRÖDER, Osnabruck, Germany, assignor to G. Kromschröder Aktiengesellschaft, Osnabruck, Germany, a Corporation of Germany. Filed Nov. 8, 1927, Serial No. 231,920, and in Germany Nov. 12, 1926. 15 Claims. Cl. 73—1.)

1. In a dry gas meter having a gas filled passage provided with a port therein, the combination with a diaphragm

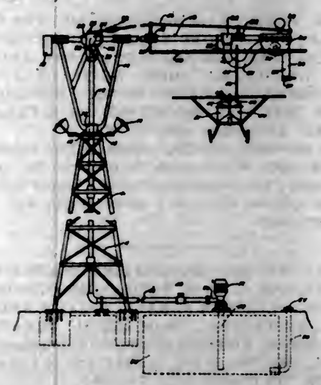
carrying pan having a centrally disposed port adapted to cooperate with the port in said conduit, and means disposed on opposite sides of said centrally disposed port and engaging said pan adjacent the periphery thereof for pressing said pan against said passage to effect gas-tight contact of the surfaces thereof surrounding said ports.



1,869,486. MOTOR FUEL. VERNON LANTZ, Berkeley, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Sept. 6, 1927. Serial No. 217,888. 8 Claims. (Cl. 44—9.)

1. A motor fuel comprising a mixture of petroleum distillate and commercial alcohol and containing an aliphatic amine of strongly basic characteristics, said amine being present in insufficient quantity to materially affect the anti-knock properties of the fuel but in sufficient quantity to prevent separation of the mixture into its component parts at low temperatures.

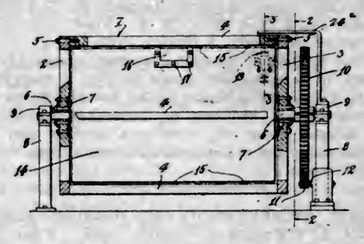
1,869,487. FUEL SUPPLYING APPARATUS FOR AIRCRAFT. LEON LEFEVRE and WILLIAM E. LEAS, Chicago, Ill. Filed Feb. 8, 1929. Serial No. 338,554. 11 Claims. (Cl. 244—2.)



10. A refueling station for aeroplanes in flight comprising a rotatable arm spaced materially from the ground and a flexible hose supported by said arm and extendable therefrom.

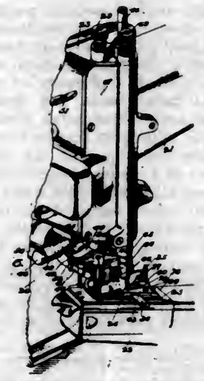
1,869,488. ORE AGITATOR. BENJAMIN F. MASON, Ocean Park, Calif. Filed Nov. 12, 1929. Serial No. 406,622. 1 Claim. (Cl. 259—90.)

In an ore agitator, a carriage for rotatably supporting a cylinder in a horizontal position comprising a pair of parallel end frame members, a pair of trunnions each extending horizontally outwardly from each end frame member, said trunnions being coaxial, at least three longitudinal frame members connecting said end members, said longitudinal frame members being parallel to and spaced equidistant from each other and from the axis of said trunnions, a cylinder positioned between said end members



coaxial with said trunnions, wedging means compressed between each longitudinal frame member and said cylinder for positively securing said cylinder in said carriage, said wedging means serving as the sole supporting means between said carriage and said cylinder, means for rotatably supporting said trunnions, and means for rotating one of said trunnions.

1,869,489. SEWING MACHINE. ARTHUR A. MERRITT, Edgewood, R. I., assignor to Willcox & Gibbs Sewing Machine Co., New York, N. Y., a Corporation of New York. Filed Feb. 18, 1926, Serial No. 89,174. Renewed June 4, 1929. 8 Claims. (Cl. 112—235.)



1. In a sewing machine, the combination with stitch-forming mechanism, of twin presser-feet working side by side and forming a slot between their forward portions, means independently supporting the two presser-feet from a part of the machine frame and independently yieldingly pressing the same into engagement with work thereunder, and trimmer mechanism including two relatively movable cutting edges cooperating at said slot to trim material advancing therein.

1,869,490. METHOD OF PRODUCING MOLDABLE COMPOUND. JOHN MURSCH, Teaneck, N. J., assignor to Joseph Gatti, New York, N. Y. Filed Apr. 29, 1931. Serial No. 533,793. 1 Claim. (Cl. 92—21.)

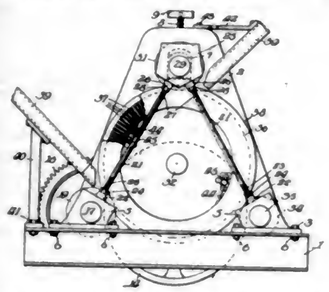
The method of producing moldable material which consists in preparing fibre in a finely divided dry state, mix-

ing the dry fibre with cresylic acid, formaldehyde and caustic soda in the presence of water, boiling the resulting mixture to convert into synthetic resin, and finally curing the resultant plastic and dough-like substance.

1,869,491. METHOD OF PRODUCING SHEETED COMPOUNDS. JOHN MURSCH, Teaneck, N. J., assignor to Joseph Gatti, New York, N. Y. Filed Apr. 29, 1931. Serial No. 533,795. 5 Claims. (Cl. 92—21.)

1. The method of producing sheeted compounds which consists in reducing dry waste fibre to a finely divided condition, thoroughly impregnating the divided fibre with an uncured resin, reducing the impregnated fibrous mass to a flowable condition, forming a uniform film of the flowable mass, and drying into a coherent sheet.

1,869,492. COMPRESSING AND MOLDING MACHINE. JOHN A. O'HALLORAN, Clinton, Iowa. Filed July 1, 1930. Serial No. 465,162. 18 Claims. (Cl. 107—8.)



4. In a molding and compressing machine, a rotatable ring like mold wheel having circumferentially arranged and radially disposed pockets formed therein and extending from the outer peripheral surface of the inner peripheral surface thereof, a plurality of rollers receiving said mold wheel therebetween and engaging with the same, certain of said rollers being adjustable with respect to the outer peripheral surface of the mold wheel, one of said rollers engaging with the mold wheel outer peripheral surface in a manner to prevent relative lateral shifting movement as between said wheel and the rollers, the others of said rollers having direct frictional contact with the outer peripheral surface of the mold wheel for imparting rotary motion thereto and for forcing and compressing plastic matter into and through the mold pockets, and means cooperable with the inner peripheral surface of the mold wheel for removing the molded and compressed plastic matter from the same as it exudes from the pockets.

1,869,493. LITHIUM ALLOYS AND PROCESS OF PRODUCING THE SAME. HANS OSBORG, Frankfort-on-the-Main, Germany. Filed July 8, 1930. Serial No. 466,583. 12 Claims. (Cl. 204—19.)

6. The process set forth in claim 2 in which the anode is placed in a lower portion of the fused bath and the cathode is placed in an upper portion of the bath.

1,869,494. COMPOSITION CONTAINING LITHIUM AND SILICON AND PROCESSES OF PRODUCING SAME. HANS OSBORG, Frankfort-on-the-Main, Germany. Filed July 8, 1930. Serial No. 466,584. 9 Claims. (Cl. 23—204.)

1. The method of producing a composition containing lithium and silicon which comprises heating a mixture of lithium and silicon at a relatively elevated temperature in excess of about 500° C. in a substantially inert atmosphere to produce a non-deliquescent composition stable at high temperatures in excess of about 600° C. and containing lithium and silicon in amounts proportional to the reacting ingredients.

1,869,495. PROCESS OF TREATING MOLTEN METALS AND ALLOYS WITH COMPOSITIONS CONTAINING LITHIUM AND PRODUCTS RESULTING FROM SUCH TREATMENTS. HANS OSBORG, Frankfort-on-the-Main, Germany. Filed July 12, 1930. Serial No. 467,625. 14 Claims. (Cl. 75—17.)

1. The process of treating, purifying and scavenging metals and alloys in their molten state to improve the properties thereof which comprises introducing into a bath of a molten metal or alloy, an active "lithium-alkali" alloy in restricted amounts only sufficient to purify, scavenge and improve the said metal or alloy and insufficient to remain in the finished and treated metal or alloy as a dominant compound or constituent thereof.

1,869,496. ART OF TREATING METALS. HANS OSBORG, Frankfort-on-the-Main, Germany. Filed Sept. 6, 1930. Serial No. 480,179. 13 Claims. (Cl. 75—17.)

1. The process of treating metals or alloys in a molten state which comprises incorporating in the molten metallic mass to be treated a salt-like hydride of an "alkali" metal capable of taking up gases and impurities in said mass and of improving the qualities of the metal under treatment.

1,869,497. PROCESS OF TREATING MOLTEN FERROUS METALS AND ALLOYS WITH COMPOSITIONS CONTAINING "LITHIUM-ALKALI" ALLOYS AND PRODUCTS RESULTING FROM SUCH TREATMENTS. HANS OSBORG, Frankfort-on-the-Main, Germany. Filed Dec. 21, 1931, Serial No. 582,490, and in Canada June 26, 1931. 13 Claims. (Cl. 75—27.)

1. The process of treating iron and/or steel and/or alloys thereof in their molten state to improve the properties thereof, which comprises treating said iron and/or steel and/or alloys thereof while in a molten state with a "lithium-alkali" alloy.

1,869,498. PROCESS OF TREATING MOLTEN COPPER AND COPPER ALLOYS WITH COMPOSITIONS CONTAINING "LITHIUM-ALKALI" ALLOYS AND PRODUCTS RESULTING FROM SUCH TREATMENTS. HANS OSBORG, Frankfort-on-the-Main, Germany. Filed Dec. 21, 1931, Serial No. 582,491, and in Canada June 26, 1931. 13 Claims. (Cl. 75—62.)

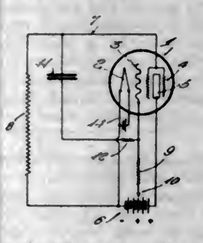
1. The process of treating copper and/or copper alloys thereof in their molten state to improve the properties thereof, which comprises treating said copper and/or copper alloys thereof while in a molten state with a "lithium-alkali" alloy.

1,869,499. PROCESS OF TREATING MOLTEN NICKEL AND NICKEL ALLOYS WITH COMPOSITIONS CONTAINING "LITHIUM-ALKALI" ALLOYS AND PRODUCTS RESULTING FROM SUCH TREATMENTS. HANS OSBORG, Frankfort-on-the-Main, Germany. Filed Dec. 21, 1931, Serial No. 582,492, and in Canada June 26, 1931. 13 Claims. (Cl. 75—66.)

1. The process of treating nickel and/or nickel alloys thereof in their molten state to improve the properties thereof, which comprises treating said nickel and/or nickel alloys thereof while in a molten state with a "lithium-alkali" alloy.

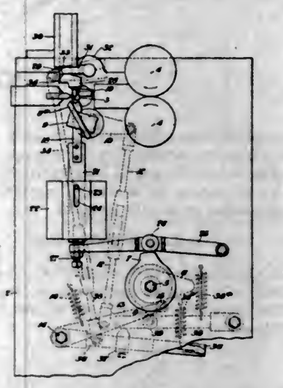
1,869,500. RELAXATION CIRCUIT OSCILLATOR. ROBERT M. PAGE, Washington, D. C. Filed Feb. 11, 1930. Serial No. 427,622. 11 Claims. (Cl. 250—36.)

5. In a relaxation oscillator, an electron tube having cathode, inner grid, outer grid, and anode, a resistor connected between said outer grid, and said cathode, a source of potential connected between said cathode and said inner grid, a second source of potential connected between



said inner grid and said anode, and a condenser and a second resistor connected in series between said inner grid and said outer grid.

1,869,501. APPARATUS FOR AND METHOD OF MANUFACTURING SPRINGS. CARL H. PETERSON, Worcester, Mass., assignor to The American Steel and Wire Company of New Jersey, a Corporation of New Jersey. Filed Mar. 14, 1932. Serial No. 598,746. 6 Claims. (Cl. 140—80.)

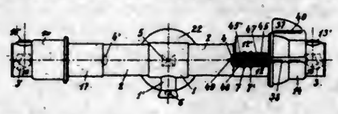


1. The combination with a spring coiling machine having a forming mandrel, of means for cutting off short lengths of the spring as formed, said means being positioned and operated so as to leave approximately two and one-half coils of preformed spring on the mandrel, a die member movable toward said mandrel and adapted to clamp the complete coils against said mandrel, and a second die movable toward said mandrel and cooperating with said first named die to bend the half coil of the preformed coils down into a position parallel with the longitudinal axis of the spring to form a hook.

1,869,502. APPARATUS FOR MECHANICALLY SOLVING RECTANGULAR TRIANGLES. KARL PETSCHENIG, Vienna, Austria, assignor to the Firm: Aktiengesellschaft C. P. Goerz Optische Anstalt, Akciova Spolecnost K. P. Goerz Opticky Ústav, Bratislava, Czechoslovak Republic. Filed June 3, 1929, Serial No. 367,952, and in Germany June 7, 1928. 6 Claims. (Cl. 33—46.)

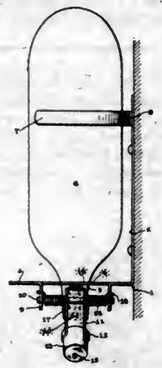
1. A range finder comprising a casing, a carrier supporting the said casing and adapted to turn around a vertical axis and means for adjusting the range finder to the absolute distance of the target from the point of observation in combination with sleeves secured to the said carrier and forming bearings for the said range finder casing the axis of these bearings being horizontal, a ring surrounding the said casing and adapted to turn around an

axis journalled in the said casing and forming a diameter of the said ring means for turning the said ring around its diametrical axis, a driving gear operatively connected to the said means for adjusting the range finder to the absolute distance of the target from the point of observation and to the said means for turning the ring around its diametrical axis, the ratio of leverages between the said driving gear and the said ring turning means on the one hand, and the said driving gear and the said means



for adjusting the range finder on the other hand, being such that the axial excursion parallel to the axis of the finder of the points of the ring located in a plane perpendicular to its diametrical turning axis, is proportional to the absolute distance of the target from the point of observation, at least one pointer and at least one scale for the said pointer, one of the last named two elements, viz., the pointer and the scale, being rigidly connected to one of the said sleeves while the other is movable relatively thereto.

1,869,503. COMBINED AUTOMATIC FIRE EXTINGUISHER AND ALARM. ERNEST F. POHL, St. Louis, Mo., assignor to Automatic Fire Extinguisher & Alarm Co., St. Louis, Mo. Filed June 26, 1931. Serial No. 547,083. 3 Claims. (Cl. 169—26.)

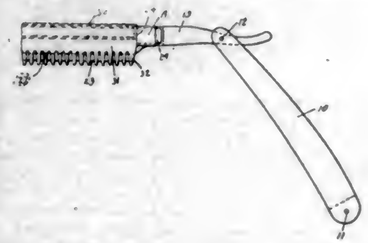


2. A device of the class described comprising a one-piece L-shaped bracket consisting of a back and an end wall extending from the back and having the metal of the end wall at one of its edges partially severed and bent outwardly from the exterior face of the end wall to form ears, a pin secured in the said ears, a hammer pivoted to the bracket by the said pin and arranged to swing around the edge of the end wall from the exterior face thereof towards the inside of the same, a spring engaging the hammer and having coils disposed on the said pivot, lugs carried by the hammer and the end wall, a releasable link engaged with the lugs for holding the hammer in a retracted position against the action of the spring, and means for supporting a liquid receiving container on the bracket with a portion in the path of the hammer, whereby the frangible container will be violently struck by the hammer and its liquid contents scattered a considerable distance.

1,869,504. DETACHABLE SAFETY STRAIGHT RAZOR MARINO PRIORI, Indianapolis, Ind. Filed Oct. 19, 1931 Serial No. 569,628. 1 Claim. (Cl. 30—12.)

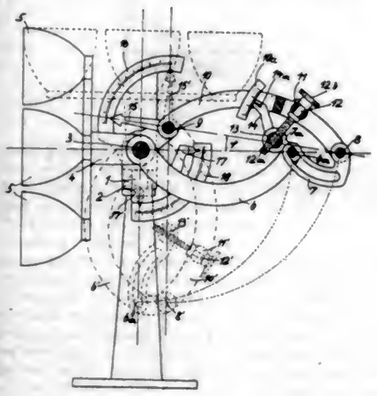
A detachable razor construction of the straight razor type including a main shank or body portion arranged at one end for pivotal connection to a handle, an intermedi-

ate integral socket forming tubular portion the socket being longitudinally arranged, the forward edge of said integral socket portion constituting a blade stop, and a blade bearing opposite and including a laterally projecting overlapping clamping extension associated therewith, and a longitudinally and slidably mounted detachable substantially flat razor blade including a blade portion terminating in a longitudinally cutting edge, and a tongue extension in longitudinal alignment with the blade portion and



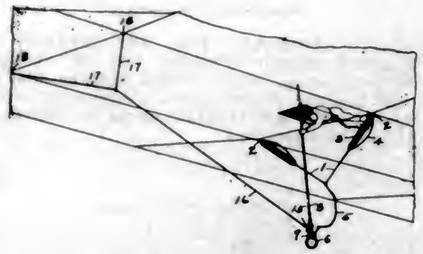
laterally offset from the cutting edge, the edge of said laterally offset portion of the blade engaging the socket forming stop portion for limiting longitudinal movement of the blade and the tongue receivable by the socket, the blade supporting end of the body portion including a longitudinal corrugation of concave arrangement forming a pair of spaced longitudinal bearings contacting upon one face of the blade and approximating a hollow ground construction when the blade is mounted therein.

1,869,505. SOUND LOCATION DEVICE. HANS RAABER, KARL PETSCHENIG, IGNAZ PECHAN, and ERNST EICHWALDER, Vienna, Austria, assignors to Actiengesellschaft C. P. Goerz Optische Anstalt, Actiova Spolecnost K. P. Goerz Opticky Ustav, Bratislava, Czechoslovakia, a Company of Czechoslovakia. Filed May 7, 1931, Serial No. 535,792, and in Germany May 17, 1930. 3 Claims. (Cl. 181—26.)



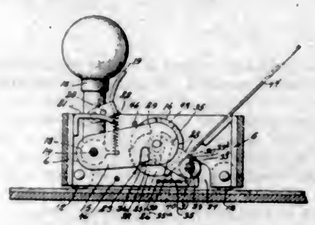
1. A device for determining the direction of sound rays incoming from an overground sound rays emitting source comprising sound receivers, a frame carrying the said sound receivers, a horizontal shaft on which the said frame is rotatably mounted, a pointer for indicating the actual angle of altitude of the said sound rays emitting source, means for adjusting the inclination of the said pointer to the horizontal in accordance with the height of the said sound rays emitting source above the horizon and with the temperature at the ground for the horizontal position of the acoustic axes of the said sound receivers and means for operatively connecting the said frame with the said pointer, whereby the difference between the angle indicated by the said pointer and the angle of inclination of the acoustic axes of the said sound receiver to the horizon is decreased following a predetermined law as the angle of inclination of the acoustic axes to the said sound receivers to the horizon increases from 0° to 90° and becomes zero when the last named angle becomes 90°.

1,869,506. METHOD OF AND APPARATUS FOR MOORING AN AIRPLANE WHILE IN FLIGHT TO ANOTHER AIRCRAFT. HOLDEN C. RICHARDSON, Cleveland, Ohio. Filed Oct. 23, 1925, Serial No. 64,320. Renewed July 9, 1929. 46 Claims. (Cl. 244—2.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In combination, a target ring flexibly and yieldingly supported from a dirigible, a detachable coupling for maneuvering said ring and a hook carried by an airplane adapted to be caught by said ring whereby the airplane may be suspended from said dirigible.

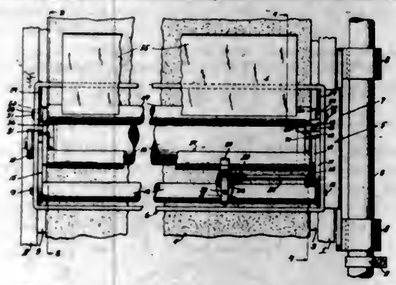
1,869,507. DUPLICATING MACHINE. LOUIS J. SAUER, Oak Park, Ill., assignor to Charles H. Joy, sr., Chicago, Ill. Filed May 29, 1930. Serial No. 457,234. 8 Claims. (Cl. 101—133.)



1. A device of the character described, comprising a printing bed, a platen roller arranged to travel over said bed, a margin bar pivoted substantially in axial alignment with said platen roller, means for moving said platen roller to and from said bed, means to rotate said margin bar during the to and from movement of said platen roller, and means for rotating said platen roller during its downward movement.

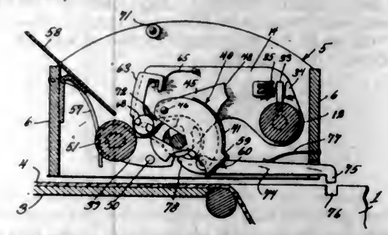
1,869,508. DUPLICATOR FEEDING AND ALIGNING DEVICE. LOUIS J. SAUER, Oak Park, Ill., assignor to Charles H. Joy, sr., Chicago, Ill. Filed Oct. 6, 1930. Serial No. 486,608. 43 Claims. (Cl. 101—133.)

1. A device of the character described comprising a printing bed, a carriage arranged to travel over said bed, a platen roller on said carriage and movable to and from said bed, a pressure roller, a movable margin bar, and automatically movable means for controlling the operation of said platen roller during its to and from movement



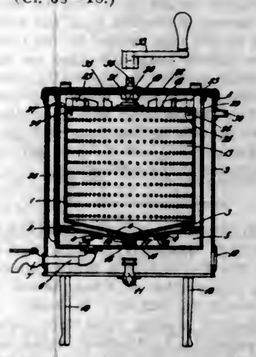
in a manner to cause the cooperative action of said rollers to feed sheets of different thickness to the same marginal position on said bed.

1,869,509. DUPLICATOR. LOUIS J. SAUER, Oak Park, Ill., assignor to Charles H. Joy, sr., Chicago, Ill. Filed Apr. 13, 1931. Serial No. 529,629. 22 Claims. (Cl. 101—133.)



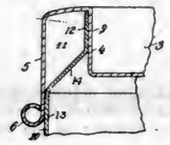
1. A device of the character described comprising a printing bed, a carriage arranged to travel over said bed, means for operating said carriage and having a lost motion relative thereto, a platen roller movable by said carriage operating means, a pressure roller, a movable margin bar, and clutch means cooperating between said platen roller and said carriage operating means to cause the cooperative action of said rollers and said margin bar to feed sheets of different thickness to the same marginal position on said bed.

1,869,510. WASHING MACHINE. LESLIE OAKLEY SAUNDERS, Hampton Wick, England, assignor to R. Vernon Limited, London, England. Filed June 13, 1930, Serial No. 460,936, and in Great Britain June 18, 1929. 2 Claims. (Cl. 68—18.)



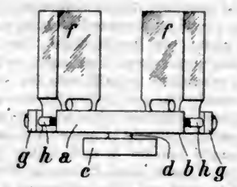
1. A washing machine including a receptacle divided into upper and lower compartments, a basket rotatably mounted in the upper compartment, a cover plate for the basket, a plurality of radial vanes carried by the cover plate, means for heating liquid in the lower compartment of the receptacle, a pipe leading from the lower compartment and terminating as a jet above the cover plate, the jet being arranged to direct the heated water against the vanes to compel rotation of the basket, means for admitting water delivered by said pipes to the interior of the basket, means establishing communication between the compartments of the receptacle, and baffle means to prevent flow of water from the lower compartment directly to the upper compartment.

1,869,511. SHEET METAL CONTAINER. ERNST SCHMIDT, Berlin, Germany. Filed Nov. 30, 1929, Serial No. 410,814, and in Germany Dec. 14, 1928. 2 Claims. (Cl. 220—42.)



1. A can having a neck formed to present concentric, vertically and horizontally offset sealing flanges and a lid having an inverted U-shaped edge channel closed at the top and open at the bottom, the walls of the channel being designed to sealingly cooperate with the sealing flanges of the neck in the initial application of the lid and to continue this sealing cooperation in the movement of the lid to final closing position, the relation of the sealing flanges of the neck and the channel in the lid providing an annular air chamber in the initial sealing cooperation of the lid and neck in which the air is trapped by such sealing cooperation, the area of such chamber being gradually reduced as the lid is moved to final position to thereby compress the air trapped in said chamber to provide a compressed air cushion surrounding the neck of the can and in the path of leakage from the can.

1,869,512. OPTICAL SQUARE. FRANZ SCHNABL, Jena, Germany, assignor to Bausch & Lomb Optical Co., Rochester, N. Y. Filed Oct. 23, 1930, Serial No. 490,801, and in Germany Mar. 13, 1930. 3 Claims. (Cl. 88—1.)

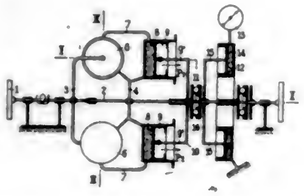


1. An optical square comprising a support and two reflecting members carried by said support, each of said reflecting members being connected to said support by means of heads which are formed integral with the members and are connected thereto by means of relatively thin neck portions.

1,869,513. TORQUE-MEASURING INSTRUMENT. FRITZ SEEWALD, Berlin-Johannisthal, and HEINRICH EBERT, Berlin-Adlershof, Germany, assignors to the Firm Deutsche Versuchsanstalt fur Luftfahrt, E. V., Berlin-Adlershof, Germany. Filed Aug. 8, 1929, Serial No. 384,375, and in Germany Aug. 4, 1928. 10 Claims. (Cl. 265—25.)

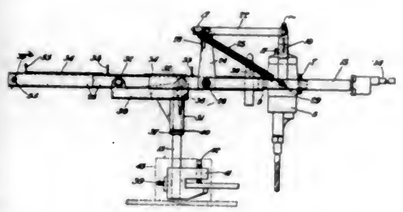
1. A torque-measuring instrument comprising a driving and a driven shaft, a cylinder arranged tangentially

with respect to the axis of revolution of said shafts, means connected with said driving shaft for generating forces in a body of liquid in said cylinder, a cylinder arranged in parallel to the axis of revolution of said



shafts, a liquid connection between said cylinders, and means for measuring the forces generated in a body of liquid in said parallel cylinder by the forces in said tangential cylinder.

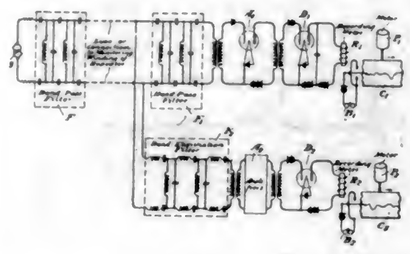
1,869,514. DRILLING AND REAMING DEVICE. FREDERICK L. SEITZ, Gary, Ind. Filed July 31, 1930. Serial No. 472,088. 3 Claims. (Cl. 77—7.)



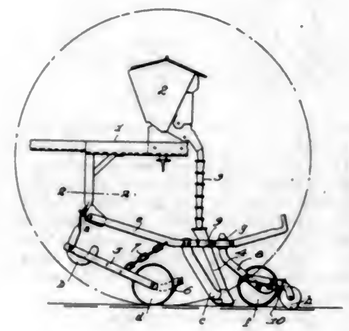
1. A drill and reaming device comprising a supporting post, a carriage pivotally mounted on said post for swinging movement about the longitudinal axis of said post, track rails mounted for travel on said carriage, a lever frame pivotally connected to said rails for swinging movement at right angles to the swinging movement of said carriage, a hanger bracket pivotally mounted in said lever frame, a yoke pivotally mounted for swinging movement in said hanger bracket in a direction parallel to the longitudinal axis of said lever frame, a driving unit pivotally mounted in said yoke for swinging movement in a direction at right angles to the longitudinal axis of said lever frame, means for normally maintaining said hanger bracket parallel with said supporting post regardless of the position of said lever frame relative to said rails and resilient means for normally biasing said driving unit into parallel position with said hanger bracket.

1,869,515. MEASUREMENT OF ATTENUATION AND NOISE. ROY B. SHANCK, Douglas Manor, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 22, 1931. Serial No. 582,668. 5 Claims. (Cl. 179—175.3.)

1. The method of simultaneously measuring attenuation and noise in a circuit for the transmission of alternating currents, which consists in sending over the circuit a testing frequency, segregating the testing frequency from other frequencies at a distance point, observing the variations of the current of the testing frequency to obtain the indication of attenuation variation, and simultaneously observing the variations of received energy outside a narrow band of frequencies including the testing frequency to obtain the indication of the noise on the circuit.



1,869,516. AGRICULTURAL IMPLEMENT. WACLAW SIEMIENSKI, Dubidze P. Brzeznica, Poland. Filed July 6, 1929, Serial No. 376,309, and in Poland Mar. 16, 1929. 1 Claim. (Cl. 111—81.)



In combination with the frame of an agricultural machine, a bracket depending therefrom, an extension beam pivotally connected at its front end to the bracket, a hook shaped support depending from the bracket, a drill opener and an ejector tube carried by the extension beam, a pair of bars spaced apart arranged on opposite sides of the hook shaped support and pivotally connected thereto at their front ends, a roller mounted between the rear ends of said bars for rotation and connecting means between the rear portion of said bars and the said extension beam and said roller and the said pair of bars being arranged in advance of the drill opener.

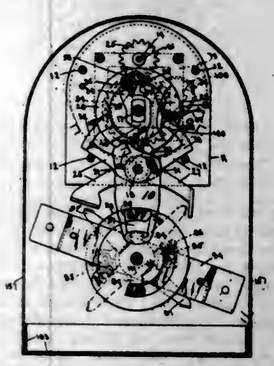
1,869,517. MUSHROOM SPAWN AND METHOD OF MAKING SAME. JAMES W. SINDEN, State College, Pa., assignor to The Pennsylvania State College, State College, Pa., a Corporation of Pennsylvania. Filed Mar. 17, 1931. Serial No. 523,381. 5 Claims. (Cl. 47—1.)

5. The method of making mushroom spawn including preparing a substrate by treating cereal material with water and sterilization, inoculating the substrate by introduction of a culture, and incubating until the substrate is overgrown with mycelium.

1,869,518. ALKALI METAL IODIDE COMPOSITION. JOHN LAWRENCE SMITH, Brooklyn, N. Y., assignor to Charles Pfizer & Company, Inc., New York, N. Y., a Corporation of New Jersey. Filed Aug. 1, 1929. Serial No. 382,844. 10 Claims. (Cl. 23—250.)

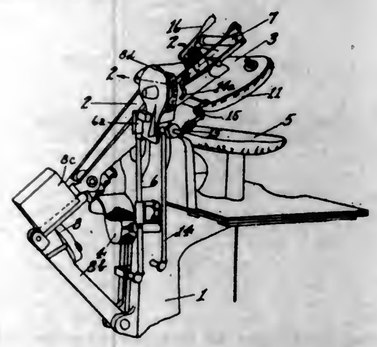
1. A dry powdered composition comprising an alkali metal iodide and approximately 2% of an oxide having a greater affinity for water than the alkali metal iodide.

1,869,519. LIMIT TIMING MECHANISM. RAYMOND D. SMITH, Pleasantville, N. Y., assignor, by mesne assignments, to Tremont Products Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 17, 1923. Serial No. 675,419. 52 Claims. (Cl. 200—39.)



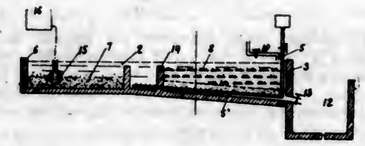
2. In a flow timer, in combination: time-setting means, a flow governor, an actuator for said governor separate from said means and arranged for movement to establish said governor under time control, a signal shifting in response to movement of said governor to indicate the flow affecting position thereof, and additional indicating means responsive to movements of said actuator thereby to differently condition said signal respectively when said governor is and is not under time control.

1,869,520. GARMENT OR IRONING PRESS. ARTHUR E. SNOW, Cincinnati, Ohio, assignor to The Daly Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 22, 1927. Serial No. 177,413. 4 Claims. (Cl. 68—9.)



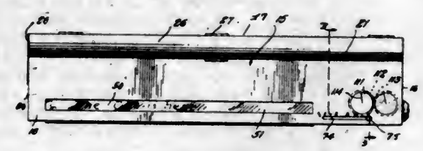
1. The combination with a pressing element of a pressing machine having an internal chamber for a heating medium and a lengthwise channel having jet openings opening through the pressing face of a pressing element, of a valve comprising a casing mounted on the pressing element and having a passage communicating with said channel, a pair of separated chambers one being connected to the internal steam chamber of the pressing element and the other having an inlet pipe for compressed air, normally closed spring pressed valve heads in said chambers and having stems extending to the outside of the casing and a lever pivoted to the casing and coacting with said stems on opposite sides of its axis, whereby when the lever is rocked in one direction from neutral position, one valve is opened and when it is rocked in the other direction, the other valve is opened.

1,869,521. MANUFACTURE OF COPPER SULPHATE. PIERRE JOSEPH FRANÇOIS SOUVIRON, Tarbes, France. Filed Dec. 5, 1929, Serial No. 411,945, and in France Dec. 15, 1928. 5 Claims. (Cl. 23—125.)



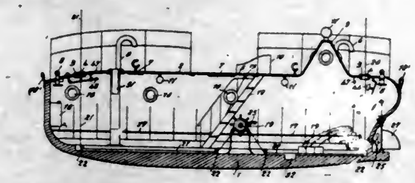
1. A closed circuit process for the preparation of copper sulphate consisting in treating metallic copper with a solution of cupric chloride, submitting the cuprous chloride formed to the action of air, treating the copper oxychloride formed with sulphuric acid, precipitating the excess of copper sulphate formed and treating fresh copper with the mother liquor constituted by a solution of cupric chloride and copper sulphate.

1,869,522. EDUCATIONAL APPLIANCE. FLORENCE M. STADER, Plymouth, Mich. Filed Mar. 25, 1929. Serial No. 349,751. 10 Claims. (Cl. 35—12.)



1. An educational appliance including a movable member adapted to loosely receive a plurality of indicia bearing cards, means for moving said member to successively periodically discharge said cards from the same, means for temporarily supporting each card after it is discharged from the said member to temporarily expose the indicia on the same, and means for moving said supporting means to release the card after a predetermined exposure thereof.

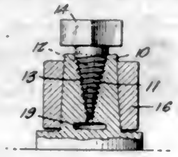
1,869,523. LIFEBOAT. NATALE STROCCHI and FRANCESCO MINARDI, Ravenna, Italy. Filed June 3, 1931, Serial No. 541,870, and in Italy July 3, 1930. 3 Claims. (Cl. 9—4.)



1. A life-boat having openings in its deck, levers pivotally connected to the deck, plugs carried by the levers, hooks carried by the deck for engaging the levers to hold

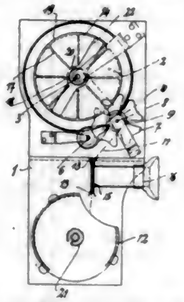
the plugs normally engaged in the openings, a windlass in the boat and tackle ropes adapted to pass through the openings when the plugs are removed therefrom, said ropes being connected with the windlass.

1,869,524. BATTERY POST. JAMES S. TAYLOR, Albuquerque, N. Mex., assignor of one-half to Earl Bee Young, Albuquerque, N. Mex. Filed Jan. 19, 1931. Serial No. 509,784. 3 Claims. (Cl. 173—259.)



1. An electric cable connector for storage batteries comprising a tapered post split longitudinally and provided with a tapered threaded bore, a cable terminal having an opening to receive the post, and a tapered screw engageable within the threaded bore to expand the post and engage the walls of the terminal opening.

1,869,525. DAYLIGHT FILM VIEWING POCKET APPARATUS. WILHELM TIDEMAN, Bremen, Germany, assignor of one-half to Walther Gildemeister, Bremen, Germany. Filed Aug. 29, 1927, Serial No. 216,025, and in Germany Mar. 22, 1927. 2 Claims. (Cl. 88—18.3.)

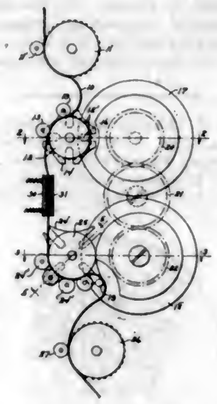


1. In a film viewing apparatus, the combination of a revolubly mounted driving shaft, a film reception drum loosely mounted on said shaft, a transverse spring mounted on said shaft and in contact with said drum, a star wheel, a revolubly mounted one-pawl spindle in gear with said driving shaft and in intermittent gear with said star wheel, a tappet roll, a revolubly mounted axle carrying said star wheel and tappet roll, a film box, a revolubly mounted axle on which said film box is mounted, a fixed film guide located between said film box and said tappet roll and having an opening therein to expose the film, a viewing device in line with said opening, and a common base plate having a portion on which said driving shaft, said axles, and said one-pawl spindle are mounted, and a portion on which said fixed guide and film box are mounted, said portions being relatively offset so as to lie in different vertical planes.

1,869,526. PARASITICIDE. MAX L. TOWER, HARRY W. DYE, and FRANK L. MCDONOUGH, Middleport, N. Y., assignors to Niagara Sprayer Company, Middleport, N. Y., a Corporation. Filed Apr. 18, 1928. Serial No. 271,102. 3 Claims. (Cl. 167—20.)

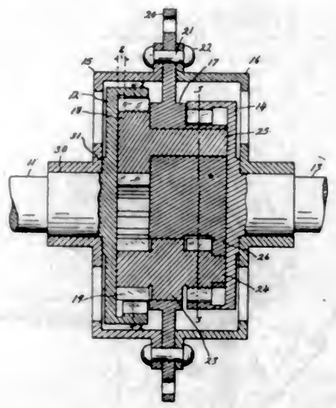
1. A parasiticidal composition comprising light petroleum oil, a solution of a polysulphide and a gum emulsifier comprising gum arabic and gum ghatti in about equal proportions by weight.

1,869,527. FILM CONTROLLING MECHANISM. SERGE USUN, Sao Paulo, Brazil. Filed July 20, 1928. Serial No. 294,288. 2 Claims. (Cl. 88—18.3.)



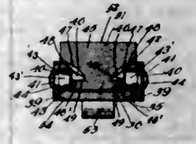
1. In film controlling means, means including a Geneva stop mechanism for imparting positive intermittent movement to the film, means including a second Geneva stop mechanism for imparting movement to the film, and gearing causing the rotation of the mechanism last named for an interval after the completion of operation of the mechanism first named, said mechanisms operating for equal periods of time, said stop mechanisms including star-wheel engaged pins each timed for engagement exclusively of the other in the first and third stages of movement of the film, and timed for simultaneous engagement during the intervening stage, producing slack in the film, uniform movement during the intervening stage, and then slight tensioning of the film.

1,869,528. DIFFERENTIAL GEARING. NIKOLA TESLA, Detroit, Mich. Filed Nov. 17, 1930. Serial No. 496,292. 4 Claims. (Cl. 74—99.)



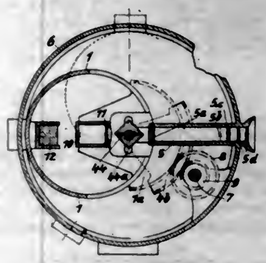
1. In a differential, the combination of two internal side gears, one larger and one smaller one a spider and a plurality of epicyclic pinions rotatable in the said spider and arranged in a wreath-like configuration in a circle in such a manner that the first internal gear meshes with every other pinion, in the set and the second gear meshes with the remaining pinions and in which any one pinion also meshes with two other pinions adjacent thereto, the said meshing taking place inside the larger side gear thereby shortening the over-all width of the mechanism.

1,869,529. HARVESTING INSTRUMENTALITY. WILLIAM E. URSCHEL, Valparaiso, Ind. Filed Apr. 16, 1928. Serial No. 270,234. 12 Claims. (Cl. 55—108.)



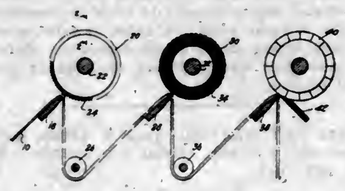
1. The combination with a series of links connected by rivets constituting a chain defining an endless channel, of a yieldable band disposed in said channel, there being grooves in said band adjacent the walls of said channel, and heads on said rivets projecting into said grooves to effect a flexible joinder therebetween.

1,869,530. RANGE FINDER WITH AN INVARIABLE DIRECTION OF THE OPTICAL AXIS OF THE EYE-PIECE. CHRISTIAN VON HOFE and JOHANN SCHIER, Vienna, Austria, assignors to Aktiengesellschaft C. P. Goerz Optische Anstalt, Actiova Spolecnost K. P. Goerz Opticky Ustav, Bratislava, Czechoslovakia, a Company of Czechoslovakia. Filed July 8, 1931, Serial No. 549,500, and in Czechoslovakia Aug. 6, 1930. 1 Claim. (Cl. 88—2.7.)



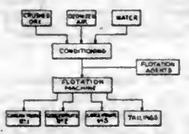
A range finder with an invariable direction of the optical axis of the eye piece comprising a stationary eye piece casing, a horizontal range finder tube rotatable in the said eye piece casing around its horizontal axis, a cube shaped combination of reflecting prisms having contacting silvered hypothenuses, mounted in the said eye piece casing and rotatable therein around a horizontal axis parallel to the axis of the range finder tube, and means comprising toothed gearings for rotating the said range finder tube and the said tube shaped combination of reflecting prisms the ratios of the said toothed gearings being such that the angular speed of the said range finder tube is twice that of the said cube shaped combination of reflecting prisms, and means comprising an auxiliary objective and a reflecting prism interposed between the range finder tube and the said auxiliary objectives for paralleling the diverging rays of light coming from the said range finder tube before entering the said cube shaped combination of reflecting prisms.

1,869,531. METHOD OF MAKING CEMENTED PILE FABRICS. ERNEST H. WARD, East Orange, and EMIL G. JEGGE, Montclair, N. J., assignors to Lea Fabrics Inc., Newark, N. J., a Corporation of Delaware. Filed Aug. 27, 1930. Serial No. 478,225. 15 Claims. (Cl. 154—2.)



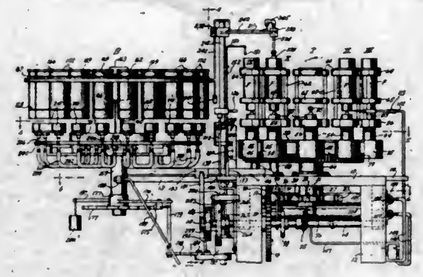
1. In a method of making cemented pile fabrics in which loops of pile element material are cemented to a backing, the step comprising opening the loops promiscuously to provide pile fibers of different lengths attached to the backing.

1,869,532. PROCESS OF SEPARATING ORE. ARTHUR J. WEINIG, Golden, Colo., assignor to The American Metal Company, Limited, New York, N. Y., a Corporation of New York. Filed Oct. 4, 1927. Serial No. 223,876. 10 Claims. (Cl. 209—167.)



1. A method of ore separation which comprises bringing a gas containing free oxygen in the presence of moisture into contact with the ore containing normally floatable constituents, and thereby changing the surface of certain particles but not others normally floatable, to a degree sufficient to effect their flotation properties and subsequently separating the unaltered constituents from the altered normally floatable constituents.

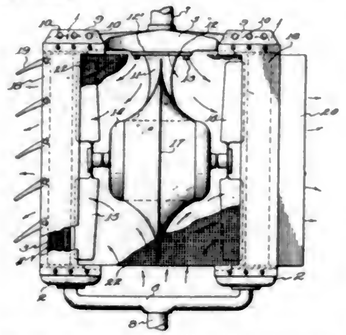
1,869,533. VACUUM BOTTLE SEALING MACHINE. MINER P. WETMORE, Norwich, Conn., assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed June 9, 1928. Serial No. 284,073. 6 Claims. (Cl. 49—7.)



2. In a machine for sealing double-walled vacuum bottles of glass at the neck, the combination of a frame having means for supporting a pair of nested glass cylinders in inverted position, said supporting means engaging a shoulder on the outer cylinder whereby the nested

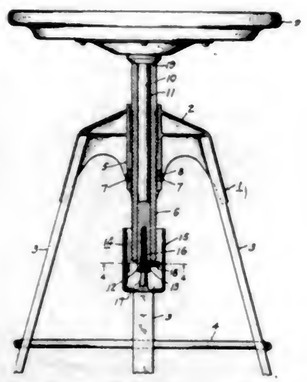
cylinders are capable of vertical movement in the frame, a vertically movable rod mounted below said frame in axial alignment with said cylinders, a weighted block slidably mounted on the upper end of said rod and having a circular beveled groove on top for receiving the plastic lower ends of said cylinders and uniting them in a sealed joint, and means for imparting a sudden upward movement of said rod to throw said block into sealing contact with the cylinder ends, the quick upward movement of said block lifting the cylinders during the sealing operation, said block and cylinders dropping by gravity to normal position.

1,869,534. AIR HEATER. FRED M. YOUNG, Racine, Wis. Filed May 2, 1929. Serial No. 359,902. 3 Claims. (Cl. 257—13.)



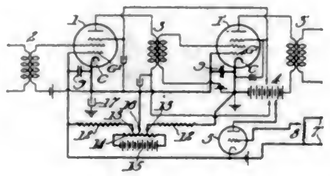
3. A device of the class described comprising spaced heating units having air passages therethrough, a bridge rigidly connecting said heating units at their upper ends, a support rigidly mounted on said bridge and depending between said units comprising a tubular structure having flaring ends, a fan comprising a motor and spaced propellers rigidly mounted on the bottom end of said support, and an air deflector on the housing of said motor for directing substantially equal amounts of air through said units respectively and comprising concaved sides for imparting a circular movement to the air to avoid the creation of eddy currents.

1,869,535. SWIVEL STOOL. BIRGER TORVALD ANDSEN, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Oct. 10, 1931. Serial No. 568,052. 6 Claims. (Cl. 155—93.)



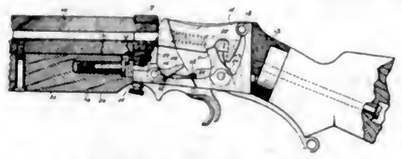
2. In a swivel stool, in combination, a pedestal, a swivel seat carried by the pedestal, a threaded sleeve interposed between the seat and pedestal, the sleeve making threaded engagement with the pedestal, and friction means carried by the swivel seat for connecting the seat to the sleeve, the seat serving as a means for actuating the sleeve.

1,869,536. CONTROL APPARATUS, KNOX CHARLTON BLACK, Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America. New York, N. Y., a Corporation of Delaware. Filed Apr. 22, 1930. Serial No. 446,362. 11 Claims. (Cl. 250—27.)



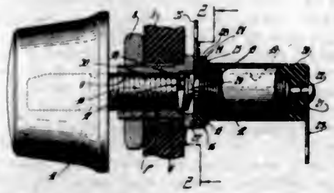
1. The combination with a vacuum tube having a cathode, a plate, a control grid and a second grid; and circuit elements connecting said cathode to said control grid and plate to establish signal circuits; of means maintaining said second grid at the signal potential of said cathode, and means including a vacuum tube in series with the second grid and cathode for controlling the bias on said second grid between predetermined negative and positive values.

1,869,537. FIREARM. WALTER S. BRADBURY and AUBREY L. LOWE, Ilion, N. Y., assignors to Remington Arms Company, Inc., a Corporation of Delaware. Filed Mar. 23, 1931. Serial No. 524,534. 3 Claims. (Cl. 42—28.)



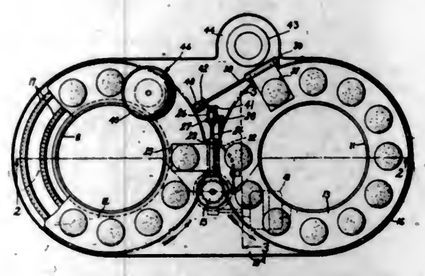
1. In a firearm, a receiver, a pivoted stud in said receiver, a breech block comprising an aperture adapted to receive said pivoted stud, co-operating breech locking shoulders on said breech block and receiver, the pivot stud receiving aperture in said breech block being elongated to insure engagement between said shoulders.

1,869,538. RHEOSTAT. HARRY L. BRADLEY, Milwaukee, Wis., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 13, 1928. Serial No. 284,097. 6 Claims. (Cl. 201—51.)



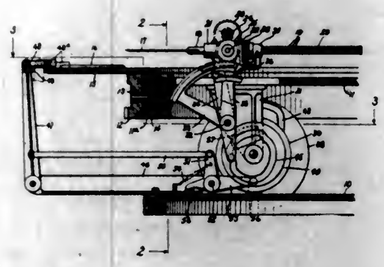
6. A compression rheostat, comprising a tubular bushing having a double counterbore at one end the bottoms of which form spaced shoulders, a tubular shell of insulating material having one end open and secured in the outermost counterbore, a compressible resistance element in the shell, a terminal for one end of the resistance element, and having a part received in said outer counterbore between the bottom of said counterbore and the adjacent end of the shell and having a part projecting through an opening in the annular wall of the outer counterbore, an adjusting screw threaded in the bushing and having its inner end portion received in the inner counterbore and passing through an opening in the terminal member to engage the adjacent end of the compressible resistance element, and means within the inner counterbore carried by the adjusting screw and engageable with the bottom of said inner counterbore for preventing detachment of the screw from the bushing.

1,869,539. FOOD PREPARING MACHINE. HARRY RUSSELL BRAND, New York, N. Y. Filed June 27, 1929. Serial No. 373,968. 16 Claims. (Cl. 53—7.)



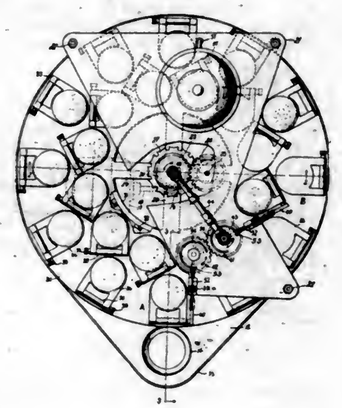
1. In a machine for cooking food, a pair of members each providing a surface for cooking a food portion, a peel normally engaging one of said surfaces, and means for intermittently operating the peel to transfer the food portion from one of the surfaces to the other.

1,869,540. FOOD HANDLING MECHANISM FOR COOKING MACHINES. HARRY RUSSELL BRAND, New York, N. Y. Filed June 27, 1929. Serial No. 373,970. 10 Claims. (Cl. 53—7.)



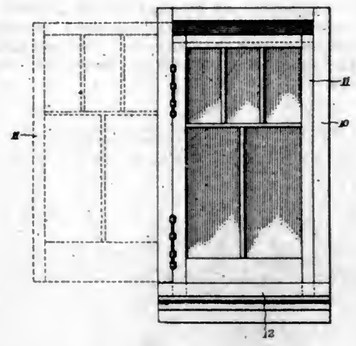
1. In a food cooker, a member providing a surface on which food may be cooked, a peel slidable along said surface to pick up the food thereon, an abutment movable against the food to prevent sliding thereof while the peel is introduced thereunder, and means for actuating the peel and the abutment in mutually timed relation.

1,869,541. FOOD PREPARING MACHINE. HARRY RUSSELL BRAND, New York, N. Y. Filed June 27, 1929. Serial No. 373,969. 12 Claims. (Cl. 53—7.)



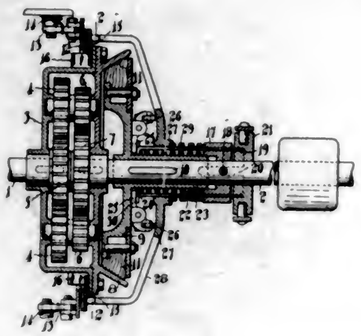
1. In a machine of the character described, a plurality of griddles arranged in two rows, means for progressing each row, and means for inverting successive griddles of the first row to deposit food carried thereby upon the griddles of the second row.

1,869,542. CASEMENT WINDOW AND HINGE THEREFOR. THERON T. CHAMBERLAIN, Chicago, Ill., assignor of one-half to Chester Thomas Hanley, Chicago, Ill. Filed Dec. 10, 1930. Serial No. 501,206. 4 Claims. (Cl. 16—179.)



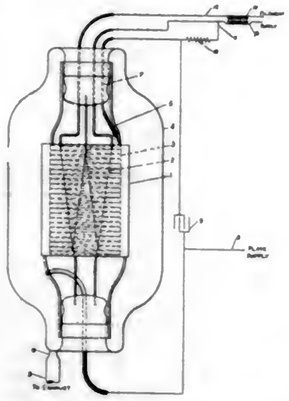
1. A hinge comprising, in combination, a pair of hinge plates, a pintle rigid with one of said plates, a pair of spaced curls on the other of said plates engaging said pintle intermediate the ends thereof to permit of axial movement of said curls along said pintle, and a pair of lugs on said pintle-carrying plate extending therefrom into the path of axial movement of said curls, said curls having recesses therein arranged in one relative pivotal position of said plates to permit said curls to pass said lugs, said lugs being spaced apart a distance greater than the width of one of said curls to receive one of said curls therebetween upon pivotal movement of said plates out of the position in which the curls may pass the lugs.

1,869,543. TRANSMISSION MECHANISM. LEONARD K. CHESWRIGHT, Swansea, Ontario, Conada. Filed June 25, 1931. Serial No. 546,768. 11 Claims. (Cl. 74—34.)



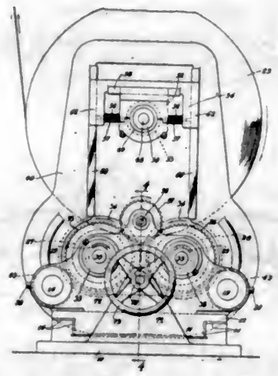
1. In transmission mechanism, the combination of alined driving and driven shafts; an epicyclic gear train forming a driving connection between the two shafts including a rotatable part concentric with the shafts; means, initially inoperative, for applying a variable frictional resistance to the rotation of said part relative to the driven shaft; a stationary part provided with a braking surface; means, initially inoperative for applying a variable braking resistance to the rotation of the rotatable part relative to the stationary part; and manually controlled means adapted by a continuous uni-directional movement to first apply braking resistance to the movement of the rotatable part relative to the stationary part and subsequently apply braking resistance to the rotation of said part relative to the shafts and release the first mentioned braking resistance.

1,869,544. METHOD OF CLEANING UP GASES. HAROLD EDWARD CLARRY, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed July 28, 1928. Serial No. 295,906. 2 Claims. (Cl. 250—27.5.)



1. The method of treating an electron discharge device including a grid lead and a vaporizable gutter material attached thereto, comprising exhausting the device, passing an ultra high frequency current through the grid lead to heat the same during the exhaust operation, sealing off the device, and thereafter again passing an ultra high frequency current through the grid lead to heat the same and flash the getter material.

1,869,545. WEB ROLL SUPPORTING MECHANISM. CURTIS S. CRAFTS, Oak Park, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Apr. 22, 1929. Serial No. 357,127. 10 Claims. (Cl. 242—58.)



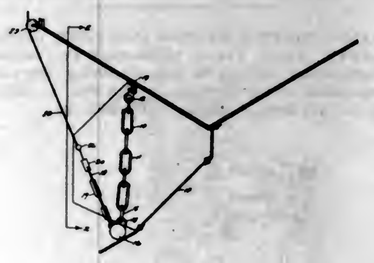
1. Web roll supporting mechanism including in combination a pair of rollers parallel to each other for rotatably supporting the web roll, spindles engaging the ends of the axial orifice of the web roll for steadying the web roll on the rollers and laterally movable supports in which said spindles are mounted.

1,869,546. BRAKE RUBBING ROTOR. DAVID LEO CRAMP, Kirkland Lake, Ontario, Canada. Filed July 15, 1931. Serial No. 550,928. 7 Claims. (Cl. 188—218.)



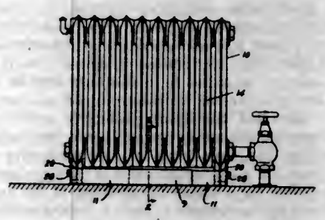
1. A brake rubbing rotor comprising a channelled rim suitably supported for rotation, an annular bed secured to said channelled rim and rigidly secured to an outer wall spaced therefrom by a plurality of brackets, spaced arcuate rubbing plates introduced in said channelled rim and said outer wall and rigidly secured.

1,869,547. GATE VALVE FOR RUNWAYS. DAVID LEO CRAMP, Kirkland Lake, Ontario, Canada. Filed Nov. 16, 1931. Serial No. 575,808. 10 Claims. (Cl. 193—21.)



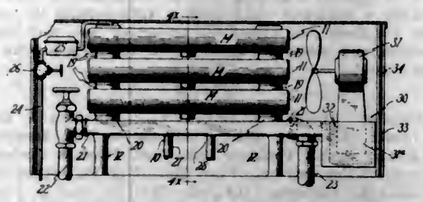
1. A gate valve for runways comprising vertically hung parallel chains weighted and trailing on a runway and means for lifting the trailing weights.

1,869,548. RADIATOR DUSTGUARD. FRANK DE RIENZO and ROSARIO MUZZIPAPA, Summit, N. J. Filed Dec. 24, 1928, Serial No. 328,276. Renewed Jan. 21, 1932. 2 Claims. (Cl. 257—124.)



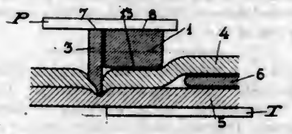
1. A dust guard, adapted for use with a radiator including in combination an upwardly inclined guard to close the front of the radiator base, upwardly inclined guards to enclose the ends of the radiator base, means for holding said guards in place with their bottom edges on the floor, and means whereby any of said guards may be extended to fit radiators of different sizes.

1,869,549. AIR HUMIDIFIER. GEORGE D. DOHERTY, Minneapolis, Minn., assignor to Doherty-Brehm Company, Minneapolis, Minn., a Corporation of Delaware. Filed Mar. 12, 1930. Serial No. 435,052. 13 Claims. (Cl. 261—15.)



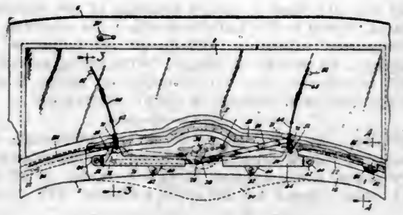
1. An apparatus of the character described, comprising a plurality of spaced and superposed heating sections connected to one another for circulating a heating medium therethrough, said sections, when assembled together, constituting a rigid mass of substantial weight, means on said sections for containing a humidifying medium for imparting humidity to the heated air, and an electric fan motor wholly mounted on said assembled structure for forcing a circulation of air longitudinally between said sections and in contact with said humidifying medium, the vibrations of said fan motor being damped effectively by the mass of said assembled structure.

1,869,550. PRESSING AND CUTTING TEMPLATE FOR THE PRODUCTION OF ARTICLES COMPOSED OF CRUDE RUBBER SHEETS. ISTVÁN DOROGI and LAJOS DOROGI, Budapest, Hungary, assignors of one-half to Dr. Dorogi es Tarsa Gummigyar R. T., Budapest-Albertfalva, Hungary, a Limited Company of Hungary. Filed Oct. 11, 1928, Serial No. 311,946, and in Hungary Aug. 17, 1928. 5 Claims. (Cl. 154—42.)



1. In a device adapted to cut and to press together the edges of a pair of sheets of crude rubber separated by a template, a cutting member laterally spaced from the edge of said template, a pressing member located intermediate said cutting member and the edge of the template, said pressing member being movable independently of said cutting member, said cutting member extending above said pressing member so that said cutting member can be actuated before said pressing member is actuated, said device having a table adapted to support said sheets of rubber, said device also having a movable head which is movable toward said table, so that said movable head first actuates said cutting member and then actuates said pressing member.

1,869,551. WINDSHIELD WIPER. HARLEY J. EARL, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 15, 1928. Serial No. 306,150. 2 Claims. (Cl. 15—253.)

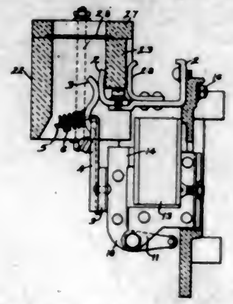


1. For use on a windshield, a frame for said windshield, a wiper adapted to move over said windshield, and a lug on the wiper and a recess in the lower part of the frame to hold said wiper in stationary position substantially parallel with an edge of the windshield when in inoperative position.

1,869,552. ARC BOX. DELBERT ELLIS, Turtle Creek, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 23, 1927. Serial No. 221,417. 1 Claim. (Cl. 200—144.)

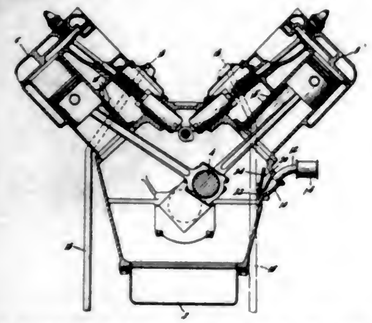
A circuit interrupter including a pair of separable contacts mounted within an arc-quenching chamber, said

chamber being open at the top and bottom and having side walls of refractory insulating material, the walls



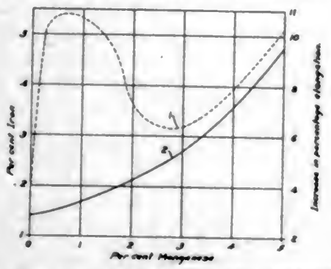
of said chamber being in two sections and having a wire screen secured between said two sections across the opening at the top of the chamber.

1,869,553. THERMOSTATICALLY CONTROLLED CRANKCASE VENTILATING INLET. LOCKWOOD B. ELLIS, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 26, 1930. Serial No. 471,001. 9 Claims. (Cl. 123—171.)



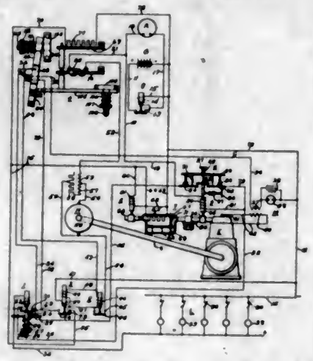
1. A fitting for a crankcase air inlet in the form of a plate adapted to be secured to the inlet and having an aperture therein, a shield for the aperture secured to the plate and arranged to extend inwardly of the crankcase, a valve pivoted to the plate centrally of the aperture, and a thermostat extending inwardly of the crankcase and adapted to be secured at one end to the fitting and at the other end to the valve for operating the latter to close the aperture upon increase in engine temperature.

1,869,554. ALLOY. OWEN W. ELLIS, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 14, 1928. Serial No. 326,029. 4 Claims. (Cl. 75—1.)



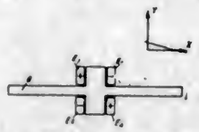
1. An alloy comprising zinc, copper, aluminum, iron and manganese that is substantially free from tin, the zinc, copper and aluminum being present in such proportions that the alloy will crystallize in the alpha beta or beta structure, the proportion of iron being less than 2% and the proportion of manganese being less than 2.5%.

1,869,555. CONTROL SYSTEM FOR FARM LIGHTING PLANTS. LEO C. FRANK, McKeesport, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 8, 1930. Serial No. 427,000. 8 Claims. (Cl. 290—30.)



1. In an electric-generating system, in combination, an internal-combustion engine, a dynamo-electric machine, a battery, a load line and a system of control comprising a series line relay for closing a motor circuit for said dynamo-electric machine to crank said engine when the load in the line exceeds a predetermined amount, an electrically controlled time-limit protective cranking device for interrupting the motor circuit should the engine fail to start within the time limit of the protective cranking device, and an electrically controlled time-limit engine choking device for varying the choking of the engine during the cranking operation over a predetermined range during a predetermined interval of time.

1,869,556. METHOD AND MEANS FOR VIBRATING CRYSTALS. ERICH GIEBE and ADOLF SCHEIBE, Berlin, Germany, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 20, 1928, Serial No. 248,145, and in Germany Jan. 28, 1927. 7 Claims. (Cl. 171—327.)

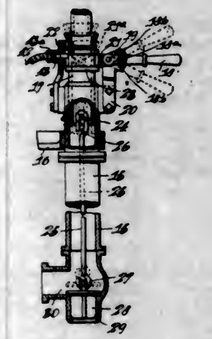


1. A flexural vibrating system comprising a crystal, having a relatively thick portion intermediate its ends and relatively long extensions projecting from said thick portion, and, electrodes positioned at the thick portion of the crystal.

1,869,557. RUBBER SUBSTITUTE. KINGSLEY A. GILLESPIE, Stamford, Conn., assignor to The Stamford Rubber Supply Company, Stamford, Conn., a Corporation of Connecticut. Filed Mar. 7, 1929. Serial No. 345,243. 6 Claims. (Cl. 106—23.)

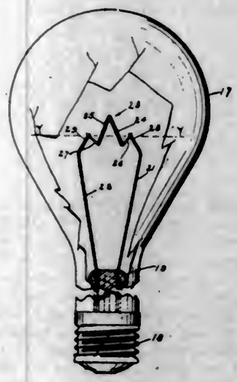
3. The method of manufacturing a rubber factice which consists in mixing a non-mineral oil, a low temperature vulcanizing agent and a substance which when subjected to heat generates ammonia and maintaining the mass during vulcanization at a temperature below that at which the ammonia is generated.

1,869,558. LOCKING DEVICE. RICHARD J. GOLLONG and RALPH H. CARTER, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 12, 1931. Serial No. 562,592. 9 Claims. (Cl. 285—161.)



1. A locking device for a swing pipe adapted to receive liquid from a plurality of filling lines comprising, a sleeve telescopically positioned within the swing pipe to contact with an outlet of one of said filling lines when in its extended position, means to lower and raise said sleeve in said swing pipe, and locking means positioned to contact, in its locking position, with said sleeve to limit the retraction thereof.

1,869,559. FILAMENT MOUNTING FOR INCANDESCENT LAMPS. DANIEL SNYDER GUSTIN, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Mar. 19, 1926. Serial No. 95,818. 4 Claims. (Cl. 176—40.)



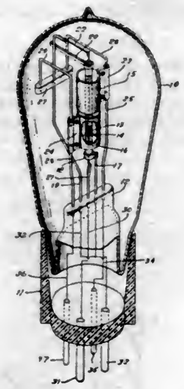
1. An incandescent electric lamp comprising a bulb, rigid support wires extending into said bulb, an inverted V-shaped continuously coiled filament having uncoiled resilient portions connected at their ends with the ends of the support wires, the said uncoiled portions being of a length sufficient to resiliently support the relatively heavy coiled filament and dissipate energy detrimental to the life of the filament.

1,869,560. MULTIPLE FILAMENT RECTIFIER. CLARENCE A. HORN, Rahway, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Jan. 25, 1928. Serial No. 249,256. 4 Claims. (Cl. 250—27.5.)



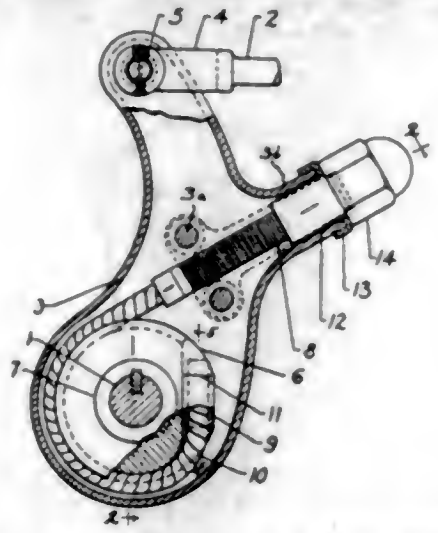
2. A rectifier tube comprising a plurality of associated anodes and cathodes, a metallic support spaced therefrom, means connecting the upper ends of said cathodes to said support, means connecting the lower ends of said cathodes to said support, a heater adjacent each cathode and means connecting one end of each heater to said support.

1,869,561. DOUBLE PLATE RECTIFIER. CLARENCE A. HORN, Rahway, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Jan. 25, 1928, Serial No. 249,257. Renewed May 15, 1930. 3 Claims. (Cl. 250—27.5.)



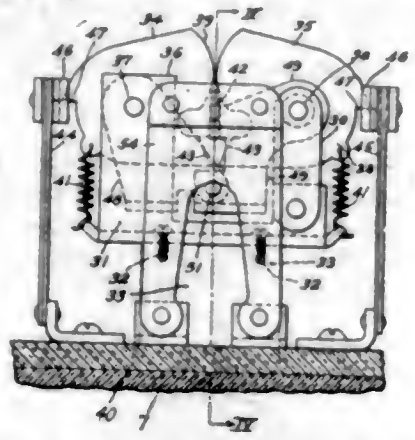
1. A full wave rectifier tube comprising a pair of cylindrical anodes longitudinally spaced from each other, means on one side of said anodes to support one of said anodes and means on the other side of said anodes to support the other of said anodes, a cylindrical cathode substantially concentrically disposed within said anodes and common to both said anodes a heater within said cathode and means supporting the upper ends of both said anodes and the upper end of said cathode in spaced relation.

1,869,562. ADJUSTING MEANS FOR LEVER ARMS. LOUIS C. HUCK, Detroit, Mich. Filed Nov. 19, 1928. Serial No. 320,505. 3 Claims. (Cl. 287—52.02.)



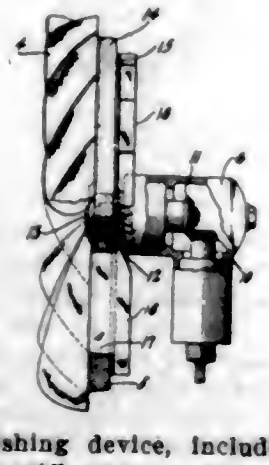
3. A shaft, a hub fixed thereto, a lever enclosing said hub and rotatable about the axis of said shaft, a flexible member partially surrounding said hub and having one end secured thereto, means adjustably connecting the other end of said flexible member to said lever.

1,869,563. CIRCUIT BREAKER. OLIVER S. JENNINGS, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 20, 1930. Serial No. 489,804. 8 Claims. (Cl. 200—116.)



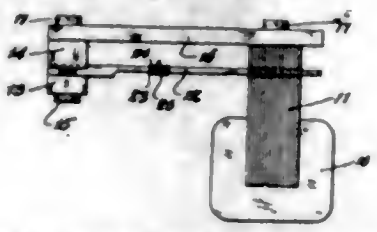
1. The combination with a trip member for a multi-pole circuit breaker and a pair of cooperating current-responsive cams for releasably retaining the trip member in operative position, of a third current-responsive means for releasably retaining said cams in cooperating retaining position and means for resetting all of said current responsive members to retain said trip member.

1,869,564. POLISHING TOOL. DAVID R. JOHNSTON, Detroit, Mich. Filed Mar. 10, 1930. Serial No. 434,687. 11 Claims. (Cl. 51—195.)



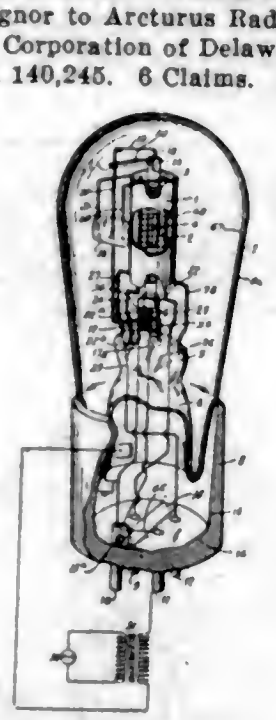
1. A rotary finishing device, including a rotary disc having a relatively stiff center portion and a soft flexible edge portion and being provided with a series of slits therein, and a series of renewable flaps removably carried by the disc with portions thereof projecting through the slits in interlocking relation therewith and provided each with a finishing surface for intermittent contact with the work as the disc is rotated.

1,869,565. RESONANT MECHANISM. WERNER KOENIG, Zug, Switzerland, assignor to Landis & Gyr, A-G., Zug, Switzerland, a Corporation of Switzerland. Filed Mar. 5, 1931, Serial No. 520,318, and in Switzerland Mar. 12, 1930. 2 Claims. (Cl. 84—456.)



2. A series of interchangeable resonant reeds, each comprising a vibratory portion and a thickened end portion, the series being divided into a plurality of groups, each group differing from the other groups in the size of the thickened portion, while the individual members of each group differ from the other members of the group in the length of the vibratory portion, whereby a wide range of frequencies is covered by a minimum number of variations.

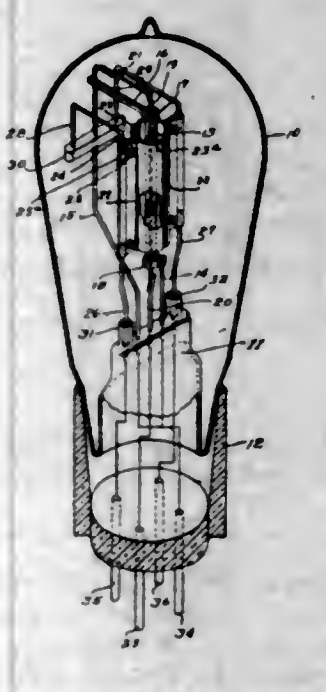
1,869,566. VACUUM TUBE. WALTER LOUIS KRAHL, Harrison, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Oct. 8, 1926. Serial No. 140,245. 6 Claims. (Cl. 250—27.5.)



1. In a vacuum tube, a carbon filament; a metallic spring for resiliently supporting one end of said filament to compensate for variations in length thereof due to temperature variations; a layer of metal which will deposit on carbon by plating formed on said filament; and a second layer of different metal which will weld to the metallic spring being formed on said first layer, said second layer being welded to said spring, thereby uniting a carbon filament to a metallic spring not capable of being welded to a metal which will plate directly on the carbon.

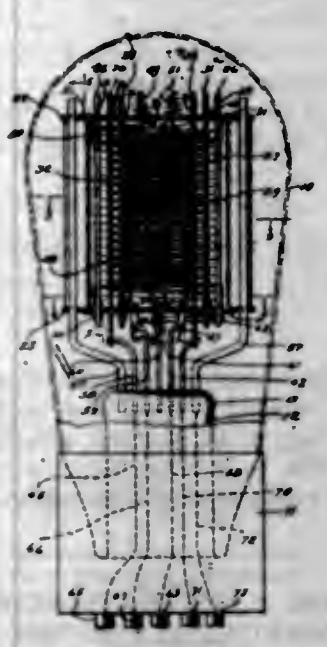
6. In a vacuum tube, an envelope a cathode within said envelope, a heater adjacent said cathode, a base on said envelope, a pair of terminals on said base extending downwardly therefrom and adapted to make contact with the terminals in a standard socket, a connection between said terminals, a connection from one end of said heater to one of said terminals, an additional terminal mounted on said base and having wire attaching means projecting above the base adjacent the side of said envelope, and a connection between said additional terminal and the other end of said heater.

1,869,567. **FULL WAVE RECTIFIER.** WALTER LOUIS KRAHL, Montclair, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Aug. 5, 1927. Serial No. 210,809. 4 Claims. (Cl. 250—27.5.)



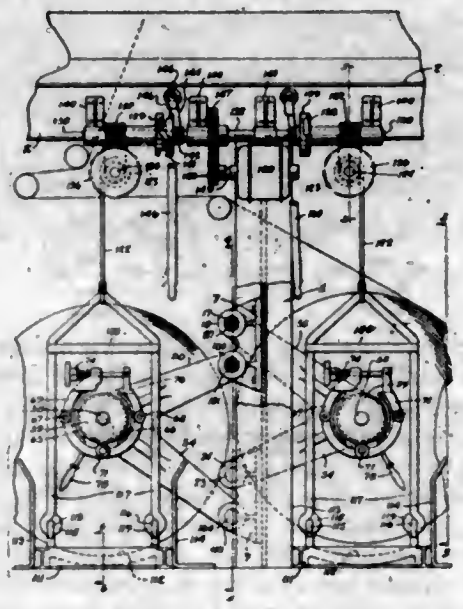
1. A rectifier tube comprising a stem; a conductor extending through said stem and supported thereby; a cylindrical cathode mounted upon said conductor; a pair of conductors adjacent said first conductor, extending through said stem and supported thereby; a semi-cylindrical anode supported on each of said conductors adjacent said cathode but spaced therefrom and from each other, each of said anodes comprising a pair of plates having flanges and secured together by means of said flanges; means comprising an insulating member for maintaining the opposite ends of said anodes in spaced relation; and an atmosphere of greatly reduced pressure surrounding said cathode and anodes.

1,869,568. **PENTODE TUBE.** WALTER LOUIS KRAHL, Montclair, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed May 6, 1930. Serial No. 450,076. 4 Claims. (Cl. 250—27.5.)



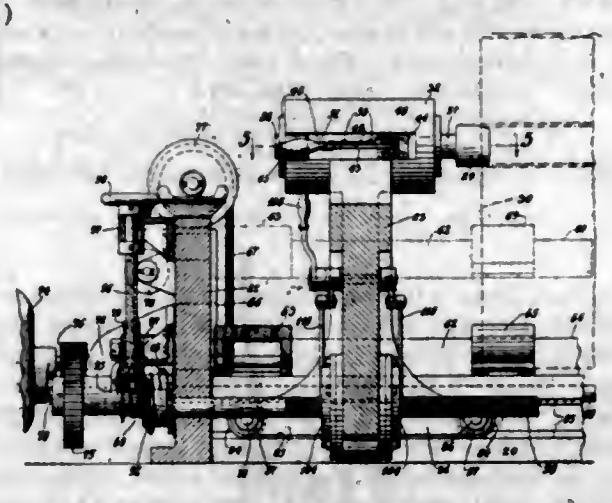
1. In an electron device a pair of spaced apart insulators, a plurality of helically wound grids spaced between said insulators, a pair of support rods for each of said grids, means to rigidly anchor one of each pair of support rods upon said insulating members, and means to rigidly anchor the other of each pair of support rods to the press of said tube.

1,869,569. **WEB ROLL SUPPORTING AND CONTROLLING MECHANISM.** HUBERT LANG, Chicago, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Apr. 22, 1929. Serial No. 357,096. 8 Claims. (Cl. 242—58.)



1. A web roll mechanism including in combination a plurality of vertically and transversely disposed supports, a pair of carriers, each movably mounted upon said supports and extending laterally therefrom, and devices mounted on said carriers for engaging either end of the axial orifice of a web roll.

1,869,570. **WEB ROLL SUPPORTING MECHANISM.** HUBERT LANG, Chicago, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Apr. 22, 1929. Serial No. 357,097. 15 Claims. (Cl. 242—58.)

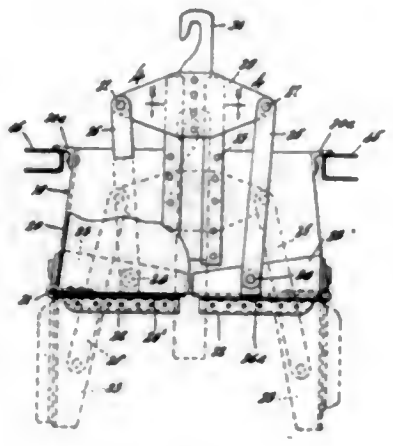


4. A web roll supporting and handling mechanism including in combination means for engaging either end of the axial orifice of a web roll, means for rotatably supporting said engaging means, means for spacing and conjointly moving said supporting means to register the web roll, a cradle on which the web roll is received, and cables attached to said cradle, a common shaft on which the cables are wound for raising the cradle and a power means for turning said shaft.

1,869,571. **CUPOLA CHARGING EQUIPMENT.** ARNOLD LENZ, Saginaw, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 10, 1929. Serial No. 369,543. 5 Claims. (Cl. 266—27.)

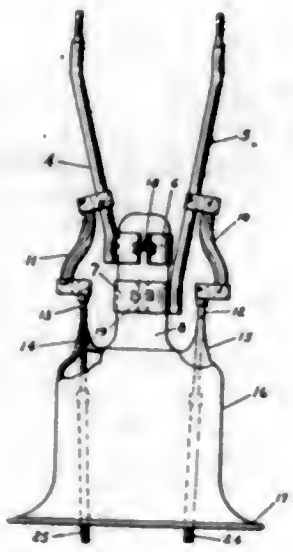
5. In cupola charging equipment, the combination of a cupola having a lower combustion portion, an upper charging portion, both circular in transverse section, a charging opening in the wall of the charging portion, a rectangular container having bottom doors hinged to the exterior of the container, controlling means for the doors

disposed exteriorly of the container, opposite flanges on the exterior of the container, a charging mechanism including a ram adapted to enter the charging opening, and hoisting cables adapted to be attached to the means for controlling the bottom doors of the container, a recess in the wall of the charging portion of the cupola opposite



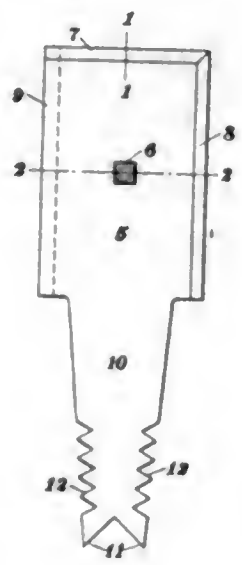
the charging opening of a size to receive the end of the container entered thru the charging opening, and parallel supporting members fixed in the cupola wall to receive the flanges on the container, the ends of said supporting members extending into the charging opening and opposite recess adjacent their side edges.

1,869,572. MOUNT ASSEMBLY FOR HIGH WATTAGE LAMPS. ARNOLD CRAWFORD MASSIE, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Mar. 27, 1929. Serial No. 350,319. 4 Claims. (Cl. 176—35.)



1. An incandescent electric lamp comprising a bulb, support wires secured to said bulb, a filament secured to said support wires, leading in wires extending through the wall of said bulb, said wall having portions surrounding said leading in wires in intimate contact therewith terminating in feather edges adjacent said leading in wires, and a flexible connection between said leading in wires and said filament support wires.

1,869,578. COMBINATION WEED GRUBBER AND HOE. WILLIAM MCMEANS, Scranton, Pa. Filed Nov. 16, 1931. Serial No. 575,292. 1 Claim. (Cl. 97—65.)



A combination weed grubber and hoe, a flat blade with a tapering extension having a suitable handle attached at right angles thereto, the extension being cut V shaped at base to provide two points and with saw teeth cut in both edges to a suitable distance from the end of the extension to form a weed grubbing tool.

1,869,574. CASTER. ROBERT E. MILLER, Bronxville, N. Y. Filed Apr. 15, 1930. Serial No. 444,365. 5 Claims. (Cl. 16—42.)

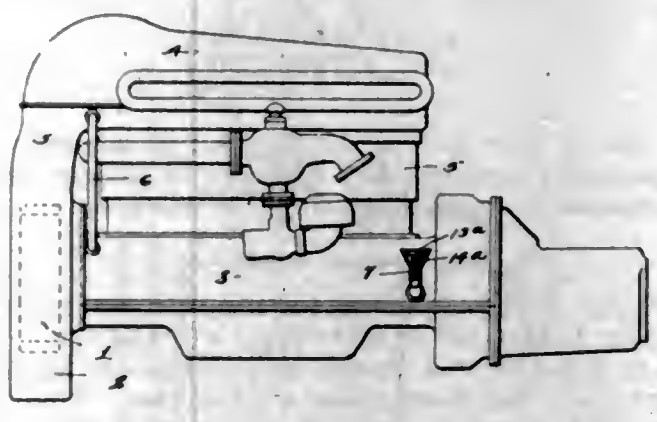


1. In a sliding caster, in combination, a hollow foot having a floor engaging bottom wall and a generally upwardly convex top wall and an attaching member associated with said foot comprising a convexed portion having a rolling contact with said top wall.

1,869,575. CRANK CASE VENTILATING MEANS FOR INTERNAL COMBUSTION ENGINES. RALPH MURPHY and EDWARD S. MARKS, Syracuse, N. Y., assignors, by mesne assignments, to Franklin Development Corporation, Syracuse, N. Y., a Corporation of New York. Filed May 12, 1926. Serial No. 108,476. 2 Claims. (Cl. 123—171.)

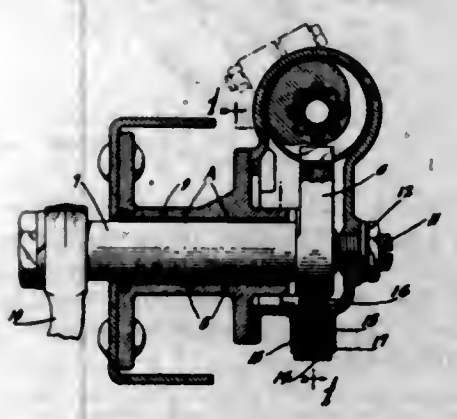
1. In an internal combustion engine having an air cooling system consisting of a fan at one end of the engine, a fan casing and an air conduit discharging onto the heads

of the cylinders of the engine and communicating with the fan casing, a pipe connecting the air conduit and one end of the crank case and a pipe leading from the other



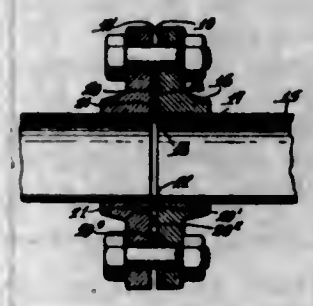
end of the crank case into the outer air, and a normally-open, pressure-operated, spring-pressed valve in one of said pipes.

1,869,576. STEERING GEAR. EDWARD R. NYLAND, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 27, 1930. Serial No. 484,789. 4 Claims. (Cl. 74—79.)



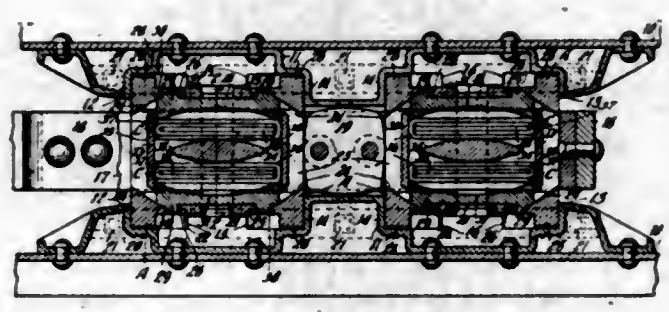
1. In steering mechanism of the class described, a driving worm having a course increasing in width from an intermediate portion toward both ends, a sector having teeth receivable within the worm course for the actuation of the sector, means providing a floating axis for the sector, and a resilient device tending to move the axis toward the worm to automatically maintain the sector teeth in close fitting relation with the intermediate portion of the worm course throughout the range of sector travel.

1,869,577. COMPOSITE DISK SEAL. WILLIAM F. OBERHUBER, Lansdowne, Pa. Filed Apr. 8, 1926. Serial No. 100,558. 11 Claims. (Cl. 288—1.)



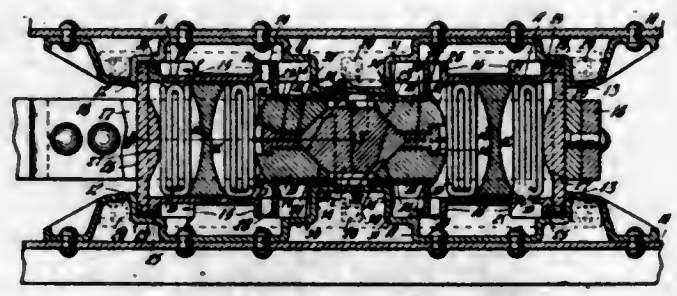
1. A metallic annulus for sealing between facing flanges having its only contact surfaces in the form of undercut spring contact edges directed toward the interior of the disk so that the pressure from the interior outwardly engages the undercut part of the edges.

1,869,578. SHOCK ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 27, 1928. Serial No. 295,656. 4 Claims. (Cl. 213—30.)



2. In a shock absorbing mechanism, the combination with followers relatively movable toward and away from each other; of a pair of side members having longitudinally disposeed, curved bearing surfaces on the inner sides thereof, said side members and followers having cooperating wedge faces effective to force the side members laterally toward each other upon relative approach of the followers; two laminated plate springs disposed on opposite sides of the mechanism; and a spacing member interposed between said plate springs, said spacing member having curved bearing surfaces on the opposite sides thereof, cooperating with the laminated plate springs.

1,869,579. SHOCK ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 27, 1928. Serial No. 295,657. 1 Claim. (Cl. 213—32.)

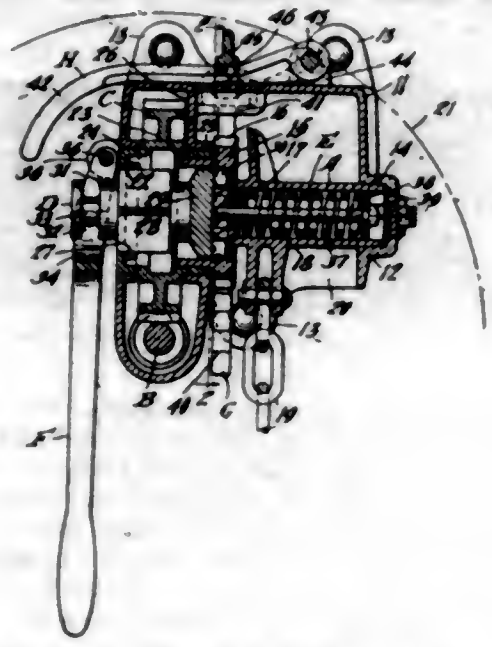


In a shock absorbing mechanism, the combination with a casing having a reduced section at one end, forming a friction shell, said casing being closed at the opposite end by a separable end wall member; of friction shoes; a cooperating wedge member; and a main spring resistance, said friction shoes, wedge member and main spring resistance being insertible through the last named end of the casing when said wall section is detached, said shoes having shouldered engagement with the reduced section of the casing to limit outward movement of the shoes, and the wedge having shouldered engagement with the shoes to limit outward movement of the wedge, said main spring resistance including front and rear laminated spring plate members separated by spacing means, said shoes having convex bearing surfaces cooperating with one of the laminated plate spring members, said end wall having a convex bearing surface cooperating with the other laminated spring member and said spacing means having concave bearing surfaces opposed to said convex bearing surfaces cooperating with said laminated plate spring members.

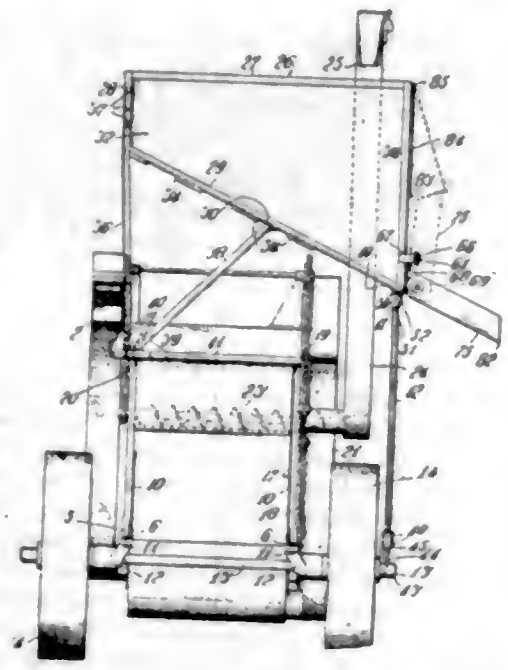
1,869,580. HAND BRAKE. ROLAND J. OLANDER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 24, 1931. Serial No 552,880. 14 Claims. (Cl. 74—112.)

1. In a hand brake mechanism, the combination with a rotary chain winding drum; of power-multiplying gear means for rotating the drum; ratche[illegible] as operatively

connecting the drum and power-multiplying gear means, said ratchet means having ratcheting action to permit rotation of the drum with respect to said power-multiplying gearing in chain winding direction; and manually operated means for rapidly rotating said drum with respect to said gearing in chain winding direction.



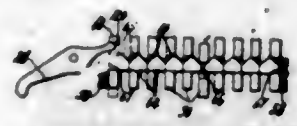
1,869,581. GRAIN STORAGE TANK FOR THRESHERS. LOUIS A. PARADISE and EDWIN FREDERICK HUDDLE, Moline, Ill., assignors to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed May 9, 1928. Serial No. 276,238. 9 Claims. (Cl. 214—65.)



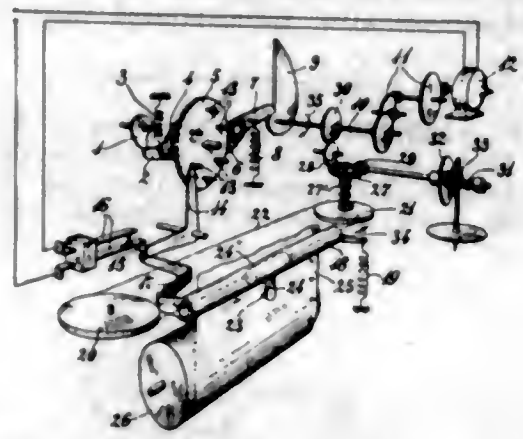
1. In a grain harvester of the class described, a main frame, a supporting axle and bearing for said frame, a storage tank mounted directly above said frame, an auxiliary bearing on the outer end of said axle, and radially disposed tubular members extending from said auxiliary bearing and engaging beneath the lower edge of said tank for supporting the same.

1,869,582. COMBINED TYPEWRITING AND COMPUTING MACHINE. HENRY L. PITMAN, Westfield, N. J., assignor, by mesne assignments, to Elliott-Fisher Company, a Corporation of Delaware. Filed Jan. 19, 1926. Serial No. 82,226. 17 Claims. (Cl. 235—60.)

9. In a computing machine having a movable pin-bar and a series of key-settable indexing pins, the combination of means operative to eliminate an incorrectly-set pin by the subsequent setting of a correct pin, said means including a groove in said pin-bar, and a series of separable wedge-shaped elements slidably displaceable along said groove in the pin-bar to block the depression of all the pins by their endwise displacement by one pin, said wedge-shaped elements being operative to forcibly restore a depressed pin when a second pin is depressed.



1,869,583. INTERMITTENTLY RECORDING DEVICE, ESPECIALLY IN ELECTRICAL APPARATUS. RICCARD PUDELKO, Zug, Switzerland, assignor to Landis & Gyr A.-G., Zug, Switzerland, a Swiss Firm. Filed Apr. 22, 1924, Serial No. 708,309, and in Switzerland May 7, 1923. 18 Claims. (Cl. 234—5.5.)



17. A metering and indicating mechanism including a recorder, means periodically to move the recorder into contact with a record sheet, and means brought into operation after said recorder has contacted with the record sheet to return said recorder to zero while in contact with said sheet.

1,869,584. METHOD OF INCLOSING CERTAIN ARTICLES IN WRAPPERS. MAX REYMOND, La Tour De Peilz, Switzerland, assignor to Nestle and Anglo-Swiss Condensed Milk Company, Cham, Switzerland, a Company of Switzerland. Filed Sept. 16, 1929, Serial No. 392,765, and in Switzerland Sept. 28, 1928. 5 Claims. (Cl. 93—2.)

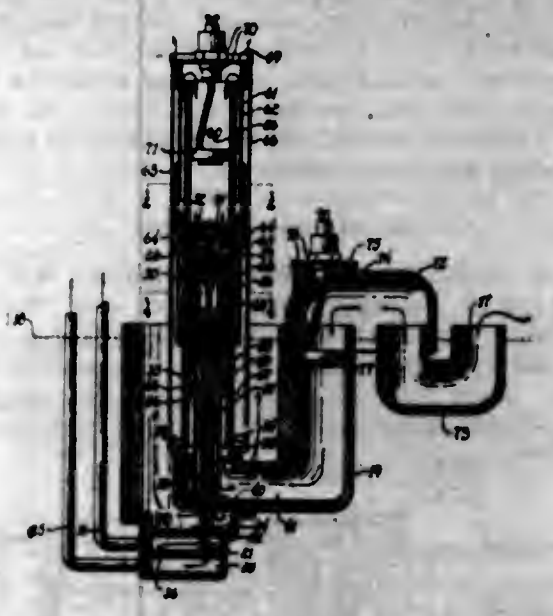


1. The method of wrapping or packing chocolate, nougat, cheese and similar solid substances which consists in placing the substance upon one half of a rectangular sheet of wrapping material, folding the other half of the sheet upon the substance, drawing together into contiguous parallel relation the edges of the sheet which project beyond the ends and one side of the substance and folding the same against the said ends and side of the substance, then folding the said previously folded edges reversely upon themselves and finally applying pressure and brushing to consolidate the aforesaid folds of the wrapping material.

1,869,585. METHOD OF AND MEANS IN CALORIMETRY FOR BURNING GASES OF RELATIVELY LOW HEATING VALUE. EDWIN X. SCHMIDT, Whitefish Bay, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 18, 1930. Serial No. 475,922. 15 Claims. (Cl. 73—184.)

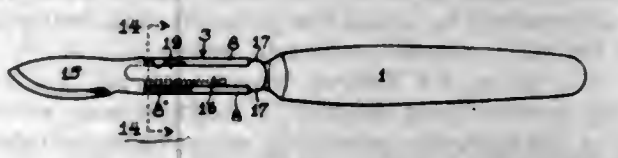
1. The method, in calorimetry, of efficiently burning a continuous sample of combustible gas having a low rate

of flame propagation, which method comprises causing a downward flow of the gas from a burner tip, igniting said



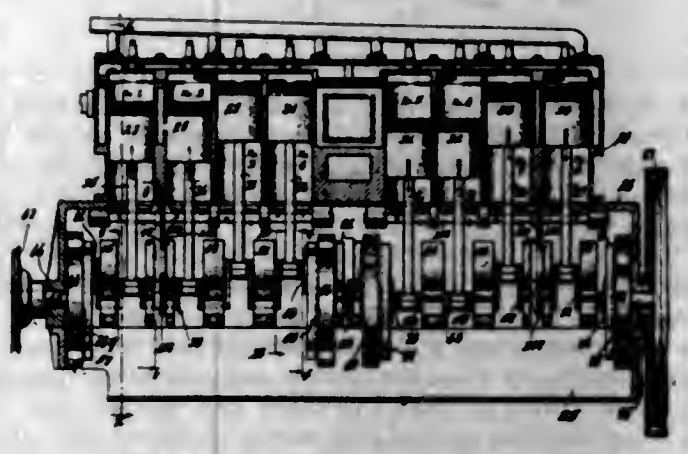
flow of gas, and simultaneously causing a flow of air upwardly against said flow of gas to support combustion of the latter.

1,869,586. SURGEON'S KNIFE. NILS SEAHOLM, Mount Vernon, N. Y. Filed Apr. 9, 1931. Serial No. 528,816. 4 Claims. (Cl. 30—9.)



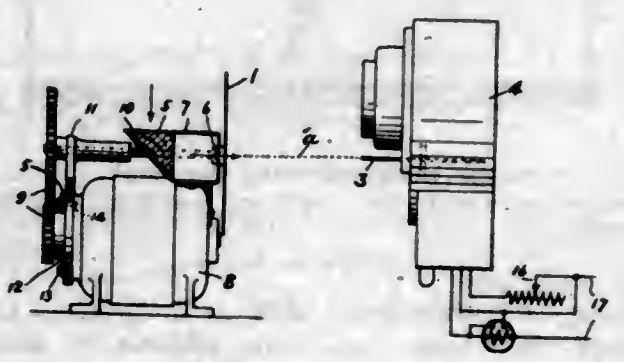
1. The combination, with a blade having a relatively wider shank section and beyond the same a relatively narrower shank section, of a handle to which said blade may be attached or removed, including a handle proper terminating at one end in a blade clamping end comprising a pair of opposite clamping walls yieldably connected and undercut upon their inner opposed sides from the outer ends thereof to a point intermediate the extremities thereof in order to grip said wider shank section and means for supporting said blade including a pair of ledges associated with said clamping walls, and registering projections in the undercut sections of said clamping walls, there being corresponding notches in the edges of said wider shank section, to engage with said projections in order to properly locate said blade with respect to said handle.

1,869,587. MOTOR PISTON CONTROL APPARATUS. ROBERT CROSWELL SMITH, Chicago, Ill. Filed Apr. 2, 1931. Serial No. 527,184. 18 Claims. (Cl. 74—14.)



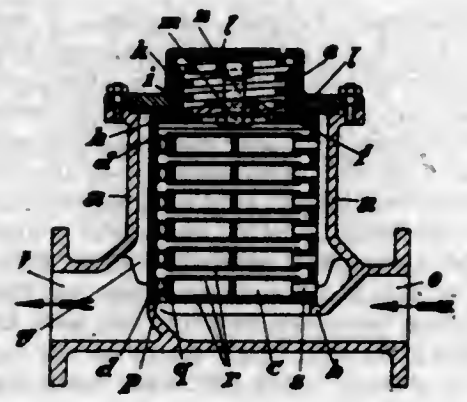
1. An apparatus of the character described, comprising a plurality of cylinders, a plurality of pistons reciprocable in said cylinders, a power shaft, a crank shaft axially offset from said power shaft, an operative connection between said crank shaft and said pistons, and means connecting said crank shaft and said power shaft to cause a differential rotation between said crank shaft and said power shaft.

1,869,588. CONSTANT SPEED TESTING DEVICE FOR WATTHOUR METERS. FREDERICK STRATTNER, Philadelphia, and WALTER C. WAGNER, Ardmore, Pa. Filed July 16, 1929. Serial No. 378,617. 7 Claims. (Cl. 175—183.)



6. The method of testing a watthour meter which comprises the steps of loading the meter, varying the load until its rotatable element rotates at a predetermined speed identical to that at which the rotatable element of a standard meter would rotate under a predetermined load, measuring the load applied, and comparing it to said predetermined load.

1,869,589. FILTER FOR LIQUIDS AND GASES. MAX TISCHER, Augsburg, Germany. Filed Mar. 8, 1930, Serial No. 432,951, and in Germany Mar. 2, 1929. 6 Claims. (Cl. 183—51.)

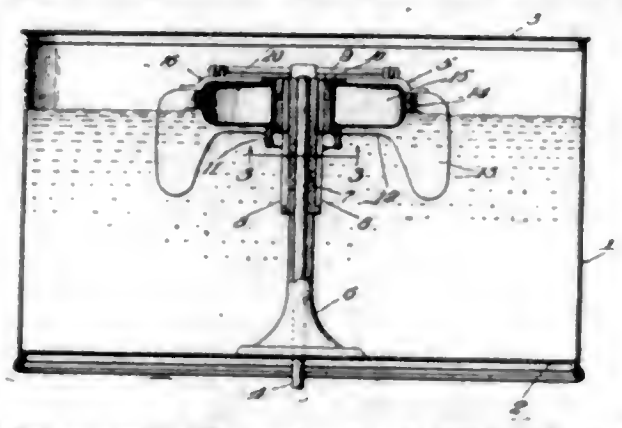


1. In a filter for liquids or gases, in combination a casing, a filtering member therein comprising a plurality of superposed filtering cells, each cell consisting of a ring shaped body and an outer ring shaped wall thus forming a circular channel, said channels communicating with spaces between the cells and a section of said casing having an inlet, filter fabric stretched over both ends of each of said ring shaped cell bodies enclosing a space communicating by bores in the wall of said filter bodies with another division of the casing having an outlet, a piston shaped lid on top of said series of cells and a compression spring within said lid adapted to press said lid and series of cells against a seat provided in the lower portion of said casing.

1,869,590. AGITATOR. WALTER K. VOSS, Davenport, Iowa. Filed Mar. 24, 1930. Serial No. 438,334. 8 Claims. (Cl. 259—101.)

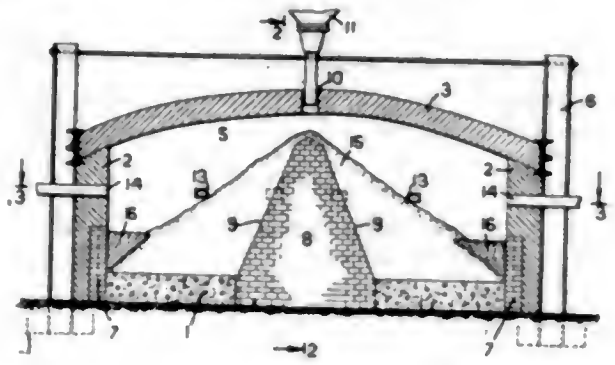
1. An agitator for washing machines and the like provided with a driving shaft, comprising a sleeve on said shaft, an impeller adapted to be shifted upon said sleeve

and provided with a hub portion, arms radiating from said hub portion, impelling blades at the extremity of said arms, and a buoyant chamber associated with said im-



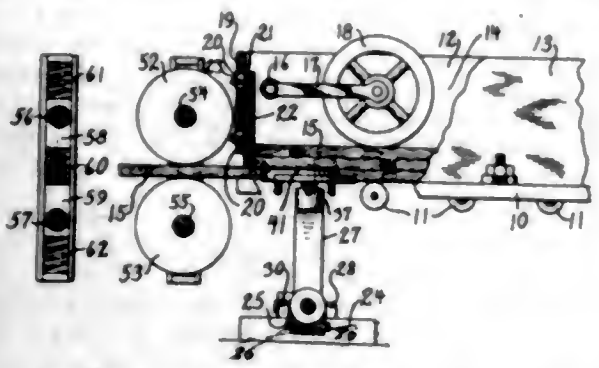
peller for automatically adjusting the height of the same in accordance with the depth of washing fluid in the machine.

1,869,591. CENTER WALL FURNACE. RICHARD A. WAGSTAFF, Salt Lake City, Utah, assignor to American Smelting & Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 30, 1928. Serial No. 322,752. 2 Claims. (Cl. 263—43.)



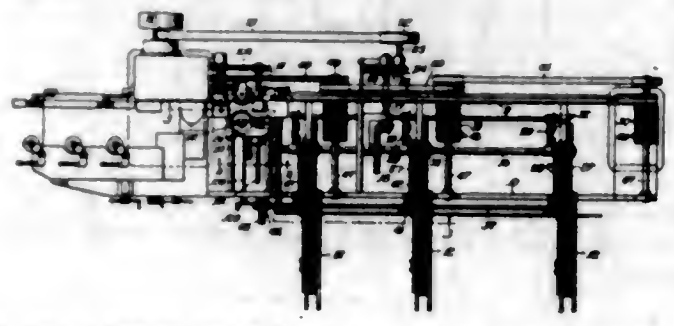
1. A reverberatory furnace comprising a firing end, a flue end and a roof and side walls connecting said ends and extending longitudinally of the furnace, there being a smelting zone between said ends, an auxiliary center furnace wall located between said side walls and extending within the smelting zone and longitudinally of the furnace and above the bath line thereof, said roof having center charge holes arranged longitudinally over said center wall for covering said center wall with the charge to be smelted, and means at the firing end for firing the furnace, said charge receiving heat both directly from said firing means and indirectly from said firing means in the form of heat reflected and radiated from said side walls and roof.

1,869,592. FEEDING DEVICE FOR WOODWORKING MACHINES AND THE LIKE. WILLARD L. HARTNELL, Beloit, Wis., assignor to Yates-American Machine Company, Beloit, Wis., a Corporation of Delaware. Filed Jan. 24, 1930. Serial No. 423,201. 9 Claims. (Cl. 144—245.)



1. A feeding device for woodworking machines comprising propelling means adapted to engage the side edges of the boards or the like to be propelled, means for supporting said propelling means, and yieldable means for forcing said propelling means toward the boards or the like to be propelled thereby, said propelling means including two non-circular members cooperating in a certain position to form a circular member and one of which is adapted for moving said propelling means in a direction away from the boards or the like to be propelled thereby to permit said boards or the like to be engaged by said circular propelling members.

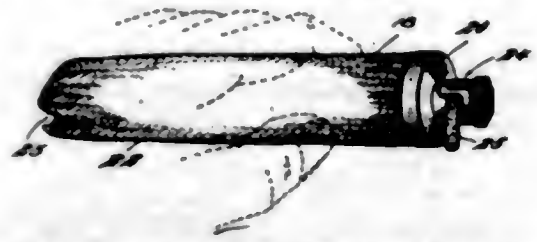
1,869,593. FEEDER FOR WOODWORKING MACHINES. WALLACE D. JOHNSON, Beloit, Wis., and WILLARD L. HARTNELL, New York, N. Y., assignors to Yates-American Machine Company, Beloit, Wis., a Corporation of Delaware. Filed Dec. 11, 1930. Serial No. 501,584. 9 Claims. (Cl. 144—242.)



1. In a device for feeding boards endwise into an associated woodworking machine, means for forming the boards into a stack, means for feeding the lowermost board endwise out from under the stack, and means for automatically suspending the operation of the stack-forming means when the stack reaches a certain height.

3. In a device for feeding boards endwise into an associated woodworking machine, a longitudinally extending guide, a transversely extending conveyor, a transversely extending slideway between the conveyor and the guide in spaced relation to the latter for receiving boards from the conveyor and depositing them against the guide, and a feed roll in spaced relation to the guide for feeding forwardly one at a time the boards deposited against the guide; said feed roll having a relieved peripheral section, a resiliently yieldable peripheral section which normally fills out the relieved section to provide an uninterrupted circular feeding periphery for the roll, and a cone-shape tip which will direct a raised board downwardly onto the yieldable section.

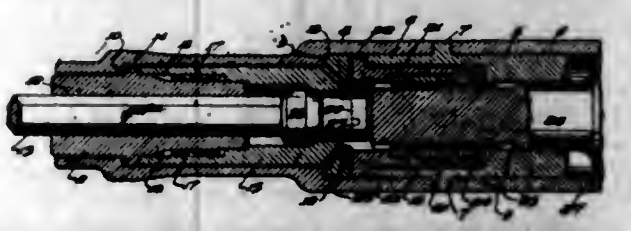
1,869,594. COLLAPSIBLE TUBE. JAMES G. JOHNSTON, Attleboro, Mass. Filed Aug. 25, 1930. Serial No. 477,491. 7 Claims. (Cl. 221—60.)



1. A device for use with a collapsible tube having an externally threaded central dispensing nozzle on the upper end thereof, comprising a protective sheaf for said tube comprising a rigid top member having a central nozzle opening and adapted to abut the top of said tube exteriorly of said nozzle and a member of flexible material attached to said top member and adapted to enclose the sides of said tube and having an open lower end for insertion of the tube therein and a cap member for said tube comprising an internally threaded portion adapted to be threaded onto said nozzle to have the lower end thereof abut the top sheaf member around said nozzle to secure said sheaf to said tube, said cap member having a dispensing slot in the side thereof above said nozzle and a portion having a side wall surrounding said threaded portion rotatably secured to said threaded portion having a portion of side

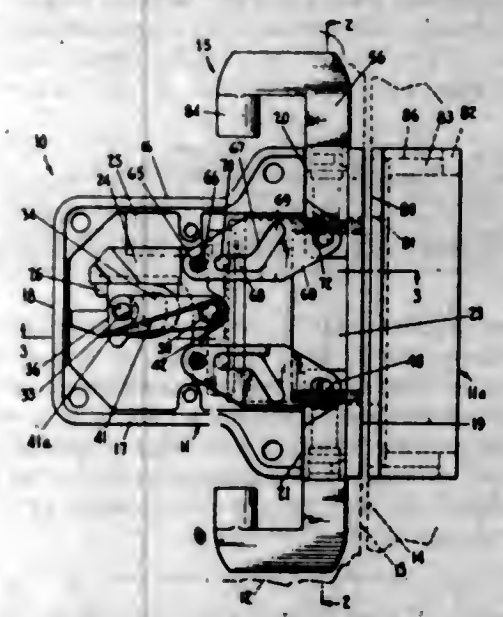
wall thereof open to dispense the contents of the collapsible tube through the channel formed when the open portion of the side wall of the rotatable portion is brought into alignment with the slot in the threaded portion.

1,869,595. FLUID OPERATED TOOL. AUGUST H. KATTERJOHN, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Sept. 20, 1929. Serial No. 394,081. 2 Claims. (Cl. 121—7.)



1. In a fluid operated tool, the combination with a barrel and a hammer piston therein, of a chuck housing at the front end of the barrel having front and rear rearwardly facing internal annular bearing shoulders, a chuck journaled in the front portion of the housing and having an outstanding annular flange bearing against the front shoulder, a chuck driver sleeve member journaled in the housing and slidably interlocked with the chuck behind the flange, said sleeve member having an annular flange bearing against the rear shoulder, a driving sleeve having an annular flange corresponding to that carried by the driver sleeve, interlocking fingers carried upon the abutting faces of both flanges, and a splined connection between the driving sleeve and the piston.

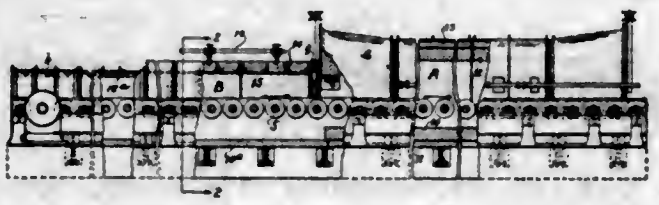
1,869,596. LOCK. CHARLES KEMP and IRVING KEMP, New York, N. Y. Filed Feb. 18, 1931. Serial No. 516,576. 13 Claims. (Cl. 70—74.)



1. In a lock, a horizontal bolt, means for moving said bolt for projecting the same, a vertical bolt and means associated with said bolts for rotating said vertical bolt during part of the projecting movement of said horizontal bolt and for causing sliding movement of said vertical bolt during another part of the projecting movement of said horizontal bolt, said means including a member pivoted to said casing and having cammed connections with said bolts.

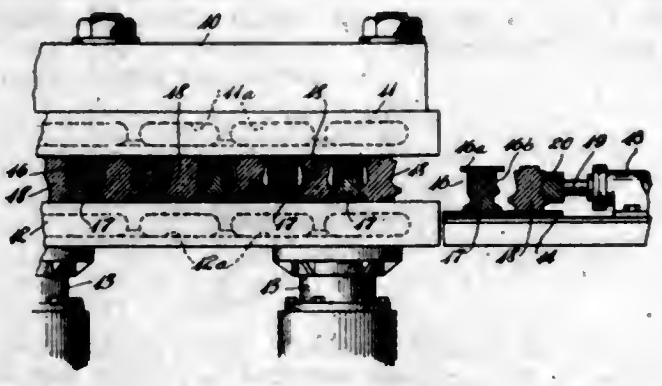
1,869,597. NORMALIZING FURNACE. GEORGE COOK KIMBALL, Pittsburgh, Pa. Filed Mar. 26, 1930. Serial No. 439,164. 2 Claims. (Cl. 263—6.)

2. In a normalizing furnace, a heating chamber, a cooling chamber disposed in communicating relation with the heating chamber, means for selectively establishing and cutting off communication between the chambers, and removable and interchangeable roof sections for the cooling chamber, some of said roof sections being water cooled, whereby the positional disposition of the water cooled roof



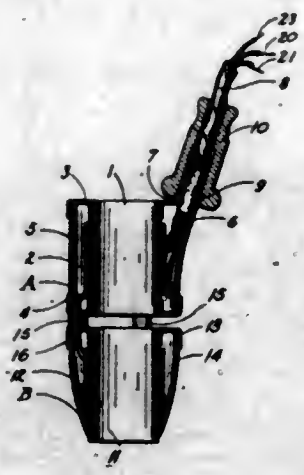
sections and the other roof sections of the cooling chamber may be selectively changed to bring about the desired cooling effect in the cooling chamber.

1,869,598. VULCANIZING APPARATUS. CHARLES W. LEGUILLON, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed May 1, 1929. Serial No. 359,488. 6 Claims. (Cl. 18—53.)



1. Vulcanizing apparatus comprising a succession of mating mold bars defining molding cavities between successive bars in combination with a vulcanizing press acting against a plurality of said bars in a direction transverse to that of their mating movement to complete article cavities with said bars and hold said bars in assembled relation.

1,869,599. ELECTRIC HEATER. WILBUR STANLEY LEWIS, Lakewood, Ohio, assignor to The Nestle-Le Mur Company, New York, N. Y., a Corporation of Ohio. Filed Dec. 27, 1927, Serial No. 242,652. Renewed Nov. 23, 1929. 4 Claims. (Cl. 219—24.)



1. A tubular heater comprising two axially spaced units, each consisting of a coil of conducting wire enclosed within a hollow annular shell, each shell including concentrically arranged inner and outer tubes and perforated caps and united together by the expansion of the ends of the inner tubes.

1,869,600. AIR-GUN. CRAWFORD C. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Oct. 8, 1927, Serial No. 224,888. Renewed June 20, 1931. 33 Claims. (Cl. 124—11.)

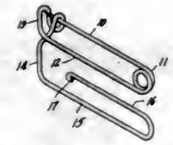


4. In a gun, the combination of a shooting barrel, a magazine barrel, said barrels being formed by bending a strip of metal S shaped, and end caps received by said barrels.

9. In an air gun, the combination of a false barrel having depending ears, an auxiliary housing positioned to one side of said barrel having slots adapted to receive said ears, and means for securing the ears to said housing.

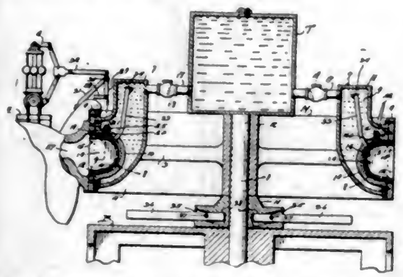
13. In an air gun having a spring actuated plunger, an abutment tube for the plunger, and a false barrel supported by said tube out of shock transmitting contact with said abutment tube.

1,869,601. LINGERIE CLASP. ROSE H. MARTENS, Copley, Ohio. Filed Aug. 21, 1931. Serial No. 558,441. 7 Claims. (Cl. 24—73.)



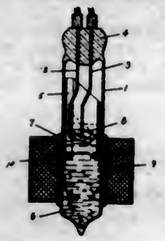
1. A lingerie clasp comprising a safety pin and a shoulder strap retaining loop including a portion extending laterally from adjacent one end of the pin, a portion extending longitudinally in spaced relation toward the other end of the pin, and a reversely bent portion extending inwardly of the space between said longitudinally extending portion and said pin, the several longitudinally extending portions being widely spaced, whereby a shoulder strap may be freely engaged in the loop by passing the same between the reversely bent portion and the shank of the pin and between the inner end of the reversely bent portion and the laterally extending portion into the space between the longitudinally extended portion and said reversely bent portion.

1,869,602. STEAM GENERATING PLANT. VADEN W. MASON, Brookneal, Va. Filed Aug. 5, 1930. Serial No. 473,208. 13 Claims. (Cl. 60—1.)



1. In a plant of the class described comprising a rotatable member provided in its peripheral portion with a plurality of circumferentially spaced pockets, heat plates within the pockets, means for discharging water upon each of the plates when the pocket for said plate is at a predetermined point in the rotation of the member.

1,869,603. ELECTRIC SWITCH OF THE MERCURY TUBE TYPE. IRA E. MCCABE, Chicago, Ill. Original application filed July 4, 1928, Serial No. 290,287. Divided and this application filed Nov. 24, 1930. Serial No. 497,848. 4 Claims. (Cl. 200—112.)



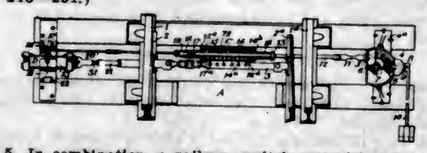
1. An electric mercury tube switch comprising a vertical sealed tube, a main body of mercury contained therein, a member of magnetic material normally floating thereupon, lead in wires sealed in an end of the tube and extending therein, one supporting a cup of insulating material normally containing a small body of mercury therein above the normal level of the main body of mercury and another terminating within said small body of mercury within said cup, and a magnet adapted when energized to draw the magnetic member within the main body of mercury causing the mercury to rise in the tube, submerge the said cup and close the circuit between the respective lead in wires and when deenergized to release the member to emerge from the main body of mercury whereby the level of the mercury will descend below the cup and break the circuit between the said lead in wires.

1,869,604. BUFFING DEVICE FOR RAILWAY SWITCHES AND THE LIKE. WILLIAM C. MCWHIRTER, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 11, 1929, Serial No. 391,801. Renewed Apr. 14, 1932. 7 Claims. (Cl. 188—97.)



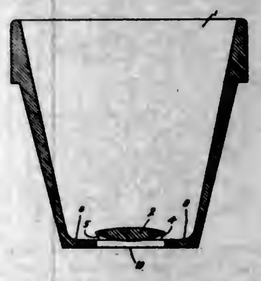
1. In combination with a cylinder containing a fluid, a piston reciprocable in said cylinder, a reservoir, means including a restricted orifice for constantly connecting said cylinder with said reservoir, a cam, and a valve operated by said cam for at times providing an additional path between said cylinder and said reservoir to vary the opposition offered by said fluid to movements of the piston in one direction.

1,869,605. BUFFING DEVICE FOR RAILWAY SWITCHES AND THE LIKE. WILLIAM C. MCWHIRTER, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Sept. 11, 1929, Serial No. 391,801. Divided and this application filed Dec. 8, 1930. Serial No. 500,776. 12 Claims. (Cl. 246—291.)



5. In combination, a railway switch comprising a movable point, an operating device connected with said point through resilient means, apparatus for permitting free movement of said point in one direction while retarding movement of the point in the other direction, and means controlled by said operating device for rendering said apparatus ineffective to retard the movement of said point in such other direction.

1,869,606. FLOWERPOT. LEE D. MENNELL, Cleveland, and WHEELER LAFFERTY, Lakewood, Ohio. Filed Dec. 2, 1930. Serial No. 499,476. 9 Claims. (Cl. 47—34.)



1. A flower pot having an integral drainage disc raised inwardly from the bottom of the pot, said disc having laterally disposed slots oppositely spaced in the sides thereof, an inner edge of the pot bottom forming the lower edge of each slot.

1,869,607. GRAFTING AND BUDDING TAPE. ALLAN B. MERRILL, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 28, 1931. Serial No. 533,419. 3 Claims. (Cl. 47—6.)



1. A binding tape suitable for use in budding and grafting operations, said tape comprising a strip of rubber composition having a portion thereof vulcanized and a portion thereof unvulcanized.

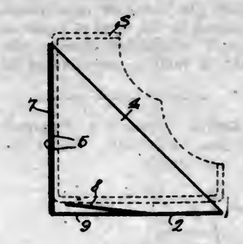
1,869,608. ART OF PREPARING LUBRICATING OIL. CLARKE C. MILLER, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Oct. 21, 1925. Serial No. 64,022. 6 Claims. (Cl. 196—151.)

1. The method of imparting standard color and bloom to unduly light colored lubricating oils which comprises adding thereto asphaltene-like polymerization bodies derived from hydrocarbon oils.

5. A fluorescent, heavy, distillate lubricant oil containing a small proportion of asphaltene-like polymerization bodies derived from hydrocarbon oils, said oil having a Conradson carbon test of not over 0.25% carbon.

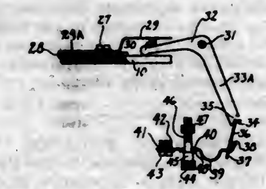
1,869,609. SANDWICH HOLDER. MATIAS MORALES, Tampa, Fla. Filed Oct. 16, 1930. Serial No. 489,183. 3 Claims. (Cl. 229—22.)

1. A device for holding one corner portion of a sandwich to protect the hand of the user while the sandwich is being eaten, including a single blank of sheet material including an intermediate portion, side wings and lapping portions on the side wings, said portions and wings being



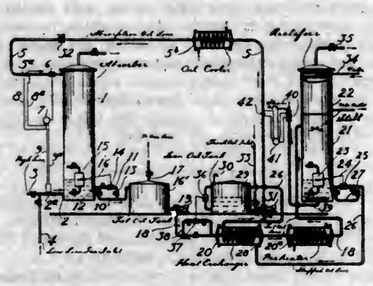
bendable to form an angular holder open between the wings and opposite said intermediate portion for the protrusion of a portion of an article held between the wings.

1,869,610. ELECTRIC SWITCH. ANDREW H. NEUREUTHER, Peru, Ill., assignor to Western Clock Company, Peru, Ill., a Corporation of Illinois. Filed Jan. 19, 1928. Serial No. 247,866. 3 Claims. (Cl. 200—67.)



2. In an electric driving mechanism, a pivotally mounted actuating member, a resilient conducting part mounted thereon and electrically insulated therefrom, an electrically conducting lever pivotally mounted adjacent to said actuating member having a contacting portion positioned between said conducting part and said member and resilient positioning means co-acting with said lever and said actuating member.

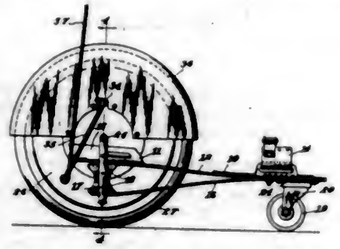
1,869,611. APPARATUS FOR ABSORBING GAS. HENRY JANNEY NICHOLS, Jr., and PAUL E. KUHL, Roselle, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed May 2, 1929. Serial No. 359,786. 3 Claims. (Cl. 196—8.)



1. In an absorption system, an absorber, lines for separately supplying oil and gas thereto, a tank connected to the absorber to receive the charged oil, means for expelling

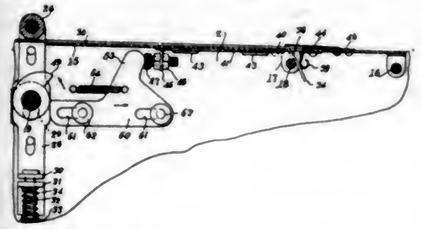
absorbed constituents from the charged oil, a charged oil line connecting said tank with the means for expelling absorbed constituents, means for drawing off the oil freed from absorbed constituents, a tank receiving the oil so freed from the absorbed constituents, a float control device actuated by the level of liquid in the last mentioned tank, and means for causing the float control device to actuate a valve in the charged oil line.

1,869,612. SKATE. JOSEPH I. PADGETT, Jacksonville, Fla. Filed Aug. 21, 1931. Serial No. 558,566. 1 Claim. (Cl. 208—175.)



In a skate having a front steering rolled and a pair of rear wheels, brake mechanism connected to the rear wheels, a swinging yoke connected to the braking mechanism, manually operable pull means connected to the yoke, a stirrup arranged between the rear wheels, and a heel piece yieldably suspended in the stirrup.

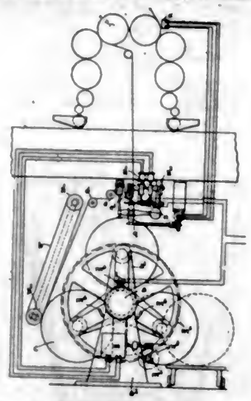
1,869,613. AUTOGRAPHIC REGISTER. FRANK E. PFEIFFER, Dayton, Ohio, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 21, 1930. Serial No. 476,792. 6 Claims. (Cl. 282—16.)



1. In an autographic register, in combination with a writing table, means to move a plurality of strips of paper over the table and eject them, said means comprising cooperating members, one of which is cut away so that during the ejecting operation the paper is released, and means slidably mounted on the table and operated by said first named means and a slidable member interposed between said means first named and said slidably mounted means to operate the latter to align the strips of paper when they are released.

1,869,614. WEB TENSIONING APPARATUS. THOMAS EWART PHYTHIAN, Headingley, Leeds, England. Filed Jan. 10, 1930, Serial No. 419,959, and in Great Britain Jan. 19, 1929. 6 Claims. (Cl. 242—75.)

1. In a rotary web-printing press, a roll stand magazine, an endless belt web-tensioning device, set to engage the supply roll in use on the roll stand magazine, a reversible motor for turning the roll stand magazine to control the web tension, a floating roller over which the web passes, positively operating switches for determining the operation and direction of rotation of the said motor, and a selective mechanism controlling the said switches, the said selective mechanism including a control spindle of



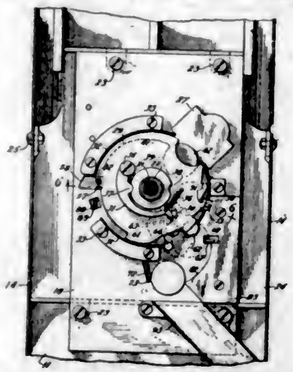
adjustable position and a connection between said spindle and said floating roller, whereby said spindle is moved in response to movements of the floating roller.

1,869,615. EXPANSION BRACELET. EUGEN PRESTINARI, Irvington, N. J., assignor to Gemex Company, a Corporation of New Jersey. Filed Oct. 27, 1930. Serial No. 491,382. 8 Claims. (Cl. 59—79.)



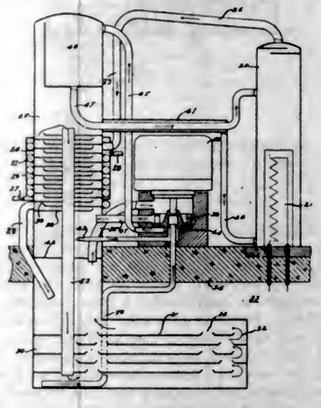
1. A bracelet comprising a series of links each having a pair of frame members with laterally extending means for connecting said frame members together, and a second series of pairs of links independent of each other joining said pairs of members and each movable independently with reference to the frame members of said links and means acting within said independent links for urging the links to contracted position.

1,869,616. COIN MECHANISM. BRUNO RADTKE, Libertyville, Ill., assignor to Mills Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1931. Serial No. 516,056. 10 Claims. (Cl. 194—101.)



1. Coin mechanism comprising, a coin carrier adapted to be moved from an initial coin-receiving position to a coin-discharging position, a detecting magnet disposed adjacent the path of movement of said carrier, and means for retaining a coin or slug contained in said carrier within the sphere of action of said magnet, whereby to insure detection and retention of the same if it be a magnetic slug, said means in such event also preventing further movement of the carrier.

1,869,617. REFRIGERATING APPARATUS. DONALD H. REEVES, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 30, 1930. Serial No. 478,919. 6 Claims. (Cl. 62—119.5.)



1. Refrigerating apparatus of the continuous absorption type including a generator, an absorber containing absorption liquid, a condenser, and an evaporator connected to form a closed system, said evaporator being positioned below the generator and absorber, said evaporator and absorber containing an inert gas, and common means for circulating said inert gas and for returning absorption liquid collecting in the evaporator to the absorber.

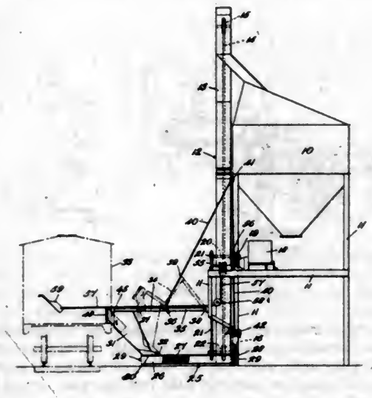
1,869,618. FIREARM. EUGENE G. REISING, Hartford, Conn. Filed June 19, 1931. Serial No. 545,430. 18 Claims. (Cl. 42—17.)



1. A firearm including a barrel, a magazine tube extending lengthwise along one side of the barrel and opening to the rear thereof, means for exerting pressure at the forward end of a line of cartridges in said tube, a cartridge support for the leading cartridge in said line, means for placing said leading cartridge normally resting on said support with its nose in position to receive on the under side thereof pressure of the next cartridge in the line, a stop to limit backward movement of said leading cartridge, and means for forcing said leading cartridge into said barrel.

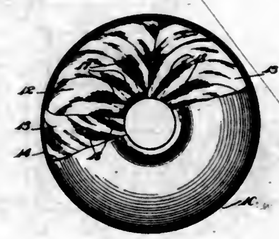
1,869,619. APPARATUS FOR HANDLING CEMENT AND OTHER PULVERULENT MATERIALS. MILTON A. ROBLEE and GEORGE HENRY KUNZ, Milwaukee, Wis., assignors to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 10, 1932. Serial No. 598,060. 9 Claims. (Cl. 214—44.)

1. In apparatus for handling pulverulent, granular and similar materials, an elevating conveyer; a feeding conveyer disposed in fixed relation to said elevating conveyer for transferring the material thereto; and an apron for conducting the material from a container to said



feeding conveyer, said apron being mounted for swinging movement to and from a position to receive the material from its container.

1,869,620. TIRE AND METHOD OF MAKING THE SAME. FRANCIS C. ROGERS and VINCENT B. GAY, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Aug. 16, 1929. Serial No. 386,845. 10 Claims. (Cl. 154—14.)

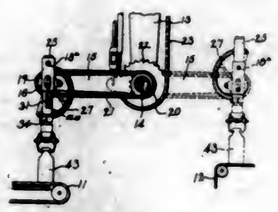


7. The method of making tires which comprises applying a strip of tire-building fabric circumferentially to a tire-building form at the outer periphery thereof, forming integral marginal tabs on the lateral portions of said strip, applying said tabs to the form in overlapping relation to each other, and then completing the building of the tire.

1,869,621. RECOVERY OF SODIUM CARBONATE FROM BRINE. LUDWIG ROSENSTEIN, San Francisco, and KENNETH G. BELL, Bartlett, Calif., assignors to Pacific Alkali Company, Los Angeles, Calif., a Corporation of Delaware. Filed July 26, 1930. Serial No. 471,102. 10 Claims. (Cl. 23—38.)

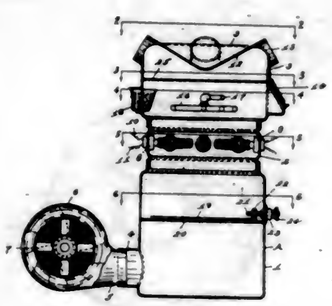
1. The method of obtaining sodium carbonate substantially free from sodium sulphate, from an aqueous solution containing sodium carbonate and also containing sodium sulphate, which comprises causing crystallization of sodium carbonate from said solution while maintaining the solution under such conditions as to cause such crystallization to occur substantially wholly in the form of sodium carbonate heptahydrate.

1,869,622. APPARATUS FOR HANDLING GLASSWARE. GEORGE E. ROWE, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Aug. 20, 1928. Serial No. 300,751. 19 Claims. (Cl. 214—1B.)



15. In a glassware transfer device, the combination of means for moving said ware laterally, additional means for moving said ware vertically, and means for rotating the ware about its vertical axis the last two means being actuated by the movement of the first means.

1,869,623. ELECTRIC HEATING APPARATUS. ELIGIO RUBINI and JOHN DE LAI, Toronto, Ontario, Canada. Filed Dec. 3, 1930. Serial No. 499,708. 2 Claims. (Cl. 219—38.)

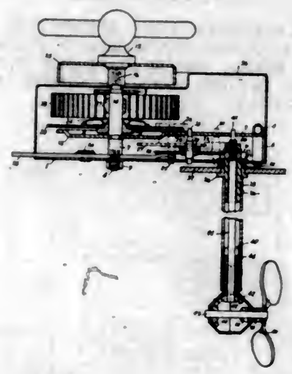


1. In an electric furnace, the combination with a casing having an air inlet and outlets arranged at opposite ends respectively thereof and means for forcing air through said casing, of an intermediate heating chamber, said chamber comprising a pair of reticulated walls transversely arranged in spaced relation to each other between said inlet and outlets, and a plurality of heating elements removably supported around the inner face of said casing within said heating chamber.

1,869,624. RUBBER VULCANIZATION PROCESS. WINFIELD SCOTT, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed Jan. 24, 1929. Serial No. 334,859. 10 Claims. (Cl. 18—50.)

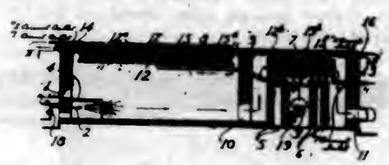
1. The process of manufacturing a vulcanized rubber product possessing age resisting characteristics which comprises incorporating with said product, prior to vulcanization, a reaction product of a ketone containing a methyl group attached to the carbon atom of the ketone group and a naphthylamine.

1,869,625. TOY OUTBOARD MOTOR DRIVING AND STEERING MECHANISM. URSEN R. SEWARY, La Salle, and FRANK E. MOFFETT, Ladd, Ill., assignors to Western Clock Company, Peru, Ill., a Corporation of Illinois. Filed May 23, 1931. Serial No. 539,620. 5 Claims. (Cl. 46—37.)



1. In a toy outboard motor device, a frame, driving means mounted in said frame, a tube rotatably mounted in said frame, resilient retaining means associated with said tube and said frame, a two part gear protecting casing each part having a semi-tubular portion by means of which the said two parts are retained as a unit when said semi-tubular portions are inserted in said tube, and a shaft journaled in the upper part of said tube and in the semi-tubular parts of said two part gear protecting casing at the other end of said tube.

1,869,626. METHOD AND MEANS FOR THE CONTROL OF HEAT IN THE DISTILLATION OF OIL. ALEXANDER C. SPENCER, Sarnia, Ontario, Canada, assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 11, 1929. Serial No. 362,270. 5 Claims. (Cl. 196—116.)

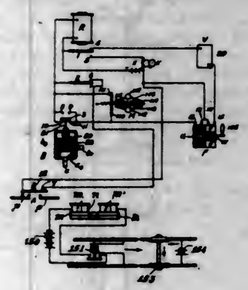


4. In the art of heating oil in tube stills, the improvement which comprises supplying radiant and convection heat from each of a plurality of separate sources to each of a plurality of separate tube circuits in parallel connection, and interrelating the amount and character of heat supplied to each circuit.

1,869,627. APPARATUS FOR CONTROLLING THE MOVEMENT OF VEHICLES ON RAILROADS. FRANK J. SPRAGUE, New York, N. Y., assignor to Sprague Safety Control & Signal Corporation, New York, N. Y., a Corporation of Virginia. Original application filed Apr. 12, 1927, Serial No. 183,193. Divided and this application filed July 6, 1929. Serial No. 376,401. 6 Claims. (Cl. 246—63.)

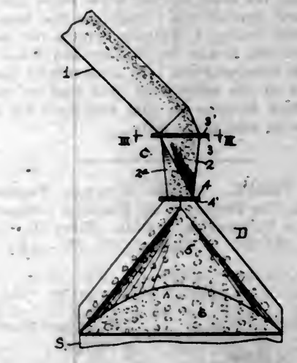
1. In an automatic train control system comprising a normally active relay de-energized when a receiver on the locomotive registers inductively to form a magnetic

couple with a traffic controlled element, a brake initiating circuit controlled thereby, and a restoring circuit for said relay including manually operated normally open contacts



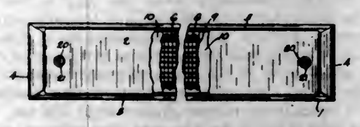
in series with normally closed pneumatically operated contacts the latter being paralleled by speed controlled contacts.

1,869,628. NONSEGREGATING CONVEYER CHUTE. ARTHUR J. STOCK, Jr., Lakewood, Ohio. Filed Feb. 10, 1928. Serial No. 253,358. 4 Claims. (Cl. 193—2.)



1. A chute for feeding ungraded material and inhibiting segregation into fine and coarse zones, which comprises an initial gravitational chute-portion presenting surfaces imparting an axial twist to material flowing therethrough, and a final gravitation chute-portion thence widening laterally with a floor terminating in a transverse lower edge forming a substantially transversely straight-line drop-off and higher at one point than at others.

1,869,629. ELECTRIC RESISTANCE HEATING ELEMENT. EMIL STRANSZKY, Warren, Pa. Filed May 3, 1928. Serial No. 274,795. 12 Claims. (Cl. 219—46.)



1. Electric resistance heating device comprising a netted fabric having a warp and weft made, one of naked resistance wire and the other of flexible insulating material, and an imperforate, liquid tight metallic sheathing surrounding said fabric, the insulating material portion extending beyond the resistance wire portion and attached to said metallic sheathing.

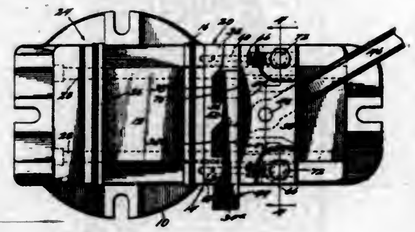
1,869,630. COATING MACHINE. HENRY A. STONE, Easton, Pa., assignor to Individual Drinking Cup Company, Inc., Easton, Pa., a Corporation of Pennsylvania. Filed Mar. 18, 1929. Serial No. 347,940. 22 Claims. (Cl. 91—55.)



1. A coating machine of the character described including a rotatable member formed with a surface to receive the articles to be coated, an article carrier supported by and movable with the rotatable member, means controlled by the rotation of the member for engaging the carrier with the article to raise and support the same above the receiving surface of the rotatable member, and means for coating the article while supported upon the carrier.

10. A coating machine of the character described including a coating zone, means for coating articles within said zone, a heating zone, and a conveyor for carrying the coated articles from the coating zone through the heating zone, said conveyor being formed and adapted to give a horizontally rotative movement of the articles as they pass through the heating zone.

1,869,631. WORKHOLDING VISE. ANDREW W. SWANSON, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a Corporation of Illinois. Filed Feb. 5, 1931. Serial No. 513,634. 4 Claims. (Cl. 81—26.)

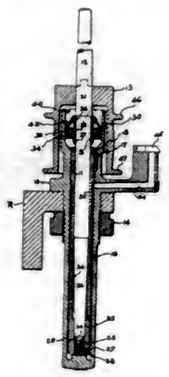


1. A clamping mechanism of the class described including a support, clamping means on said support adapted to be shifted toward and away from a work piece, a bearing member having an arcuate surface, and a member slidable upon said bearing member for effecting the actuation of said clamping means, the arcuate surface of said bearing member rendering said clamping means self-adjustable to conform with slight differences in the contour of the work to be clamped.

1,869,632. SPINNING OR TWISTING SPINDLE. BERTRAM R. SWEET, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Feb. 8, 1932. Serial No. 591,498. 4 Claims. (Cl. 118—66.)

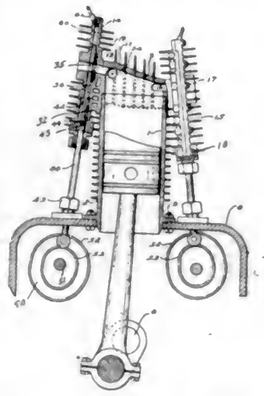
1. In a spinning or twisting machine having a supporting frame, a spinning or twisting spindle comprising a base rigidly mounted on said supporting frame having an integral upstanding sleeve portion, a non-rotating bolster loosely mounted within said base, a spindle blade rotatable in said bolster, a whirl on said blade, and an anti-

friction bearing comprising a plurality of balls permanently assembled with inner and outer ball races, the inner ball race being permanently assembled with the spindle blade within said whirl, and the outer ball race being a



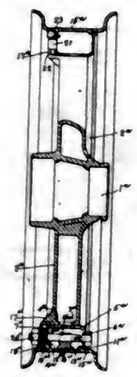
snug sliding fit in the upstanding sleeve portion of the base, whereby said spindle and assembled anti-friction bearing may be removed as a unit from said base and bolster.

1,869,633. INTERNAL COMBUSTION ENGINE. ALFRED VANG, Detroit, Mich., assignor, by mesne assignments, to Motor Development Corporation, a Corporation of Michigan. Filed Sept. 27, 1929. Serial No. 395,673. 8 Claims. (Cl. 123—188.)



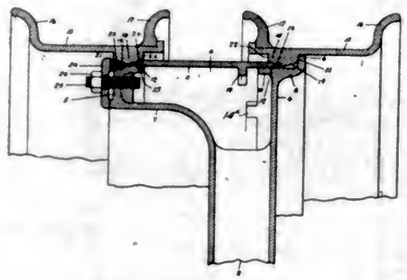
1. In an internal combustion engine having a combustion chamber and a port therefor, the combination of a guide having an opening therein substantially coincident with the said port, a valve arranged to slidably engage the said guide with a sloppy fit for opening and closing the said port, a cover plate secured to the said guide surface for the said slide valve, and a compression plate directly engaging the said valve having an opening therein substantially coincident with the port and an endless ridge extending around the said opening, the said guide surface having a complementary groove about the said opening, the said endless ridge of the compression plate arranged to have a sliding engagement with the groove in said guide, whereby the compression plate can move outwardly during the compression and power strokes to effect a substantially air tight seal between the cylinder port and the said slide valve.

1,869,634. WHEEL. GEORGE WALTHER, Dayton, Ohio. Filed Jan. 21, 1929. Serial No. 333,778. 2 Claims. (Cl. 301—12.)



1. The combination of a wheel body for supporting a single tire-carrying rim, a tire-carrying rim on said wheel body, said wheel body having a peripheral supporting surface and an aligning abutment adjacent the inboard supporting surface for alignment of the tire-carrying rim and contacting the same, a detachable felloe mounted on said peripheral surface for supporting the tire-carrying rim, said felloe having a wedging surface for contacting with the said rim, means for forcing said felloe on said wheel body to force said rim into contact with said aligning abutment on the wheel body, and lugs on said felloe and cooperating surfaces on said abutment for positioning the felloe on said wheel body.

1,869,635. WHEEL. GEORGE WALTHER, Dayton, Ohio, assignor to The Dayton Steel Foundry Company, Dayton, Ohio, a Corporation of Ohio. Filed May 11, 1929. Serial No. 362,226. 5 Claims. (Cl. 301—13.)

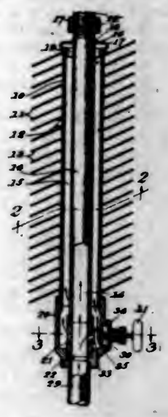


1. In a wheel, the combination of a wheel body having laterally extending shoulders at spaced points on the periphery thereof, and a ring mounted on said wheel body and having depending lugs adapted to engage with the laterally extending shoulders when the ring is positioned with the depending lugs against said laterally extending shoulders to prevent lateral displacement of said ring, said ring being adapted for rotational movement in respect to the wheel body to disengage the said depending lugs from the laterally extending shoulders to thus position the ring for permitting lateral displacement thereof in respect to said wheel body, the said ring when in position with the lugs against the shoulders being adapted to act as a support for a single rim, and when in position with the lugs free from said shoulders being adapted to act as a spacer for dual rims.

1,869,636. PROCESS OF CEMENTING RUBBER TO METAL AND PRODUCT. RAYMOND M. WARNER, Barberton, Ohio, assignor, by mesne assignments, to The Miller Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed May 29, 1928. Serial No. 281,588. 2 Claims. (Cl. 18—59.)

1. The process of cementing rubber to metal comprising applying to the metal surface a coat of a cement of brominated rubber in which the proportion of bromine is from one-eighth to one-fourth that required to saturate the rubber, superimposing a layer of vulcanizable rubber thereon, and subjecting the rubber to vulcanization.

1,869,637. RADIATOR. ARTHUR C. WALWORTH, Newton, Mass. Filed Jan. 31, 1930. Serial No. 424,864. 7 Claims. (Cl. 257—124.)



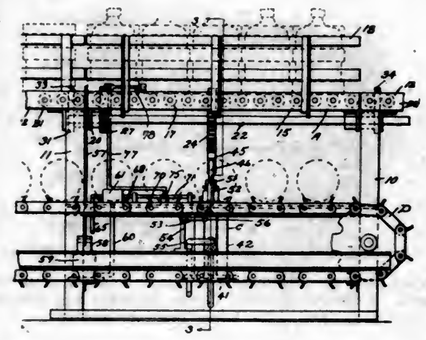
1. A radiator unit or section comprising a radiator tube, a pipe extending longitudinally through said tube and connected therewith at the ends of the latter to form a fluid chamber within said tube and about said pipe, means at the ends of said pipe whereby said pipe may be connected in a vertical riser to constitute a continuous part thereof, and a valve accessible from the exterior of said tube for controlling communication between the interior of said pipe and said fluid chamber.

1,869,638. RUBBER CEMENT AND PROCESS OF PRODUCING THE SAME. RAYMOND M. WARNER, Barberton, Ohio, assignor, by mesne assignments, to The Miller Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Original application filed May 29, 1928, Serial No. 281,588. Divided and this application filed Apr. 20, 1929. Serial No. 356,891. 7 Claims. (Cl. 87—17.)

1. A rubber cement comprising partially brominated rubber.

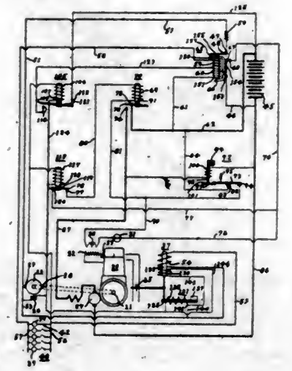
1,869,639. CONVEYER TILTING SECTION. ARTHUR L. WASHBURNE, Los Angeles, Calif., assignor to Sparletts Bottled Water Corporation, Los Angeles, Calif., a Corporation of California. Filed Sept. 24, 1930. Serial No. 484,123. 14 Claims. (Cl. 214—1.1.)

1. A conveyer for transporting crates containing bottles comprising a frame work, carrier rollers on said frame work, a tiltable frame section, a front wall in said tiltable section for crates to rest against in unloading position, live carrier rollers in said frame work disposed in said tiltable section and in adjacent sections of the remaining frame work; a roller drive shaft line extending along one side of said frame work and geared to said



live carrier rollers, means pivoting said tiltable frame section about said live shaft; and motor mechanism for swinging said tiltable section.

1,869,640. ELECTRICAL APPARATUS. WILLIAM C. WELLS and WESLEY E. WENDT, Dayton, Ohio, assignors to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 30, 1929. Serial No. 389,493. 4 Claims. (Cl. 290—40.)

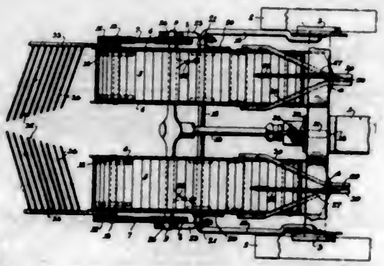


1. An electrical generating system comprising in combination a work circuit, electrical apparatus, a prime mover for driving the electrical apparatus, said electrical apparatus being adapted to supply current to said circuit, a throttle valve on the prime mover for controlling the output of the electrical apparatus, a coil for actuating said valve, said coil being adapted when energized for a predetermined length of time to vary in effectiveness, a voltage coil energized by the electrical apparatus, and a thermostat heated by said voltage coil and mechanically connected to said means for compensating such variation in effectiveness of said coil.

1,869,641. MECHANISM FOR ATTACHING POTATO DIGGERS TO A TRACTOR. ERNEST H. WILSON, Hastings, Fla. Filed June 19, 1931. Serial No. 545,588. 9 Claims. (Cl. 55—51.)

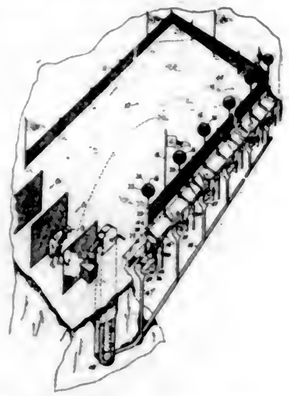
1. In an apparatus of the class described, the combination with a tractor, of a pair of conventional potato

diggers, a draw-bar having its forward ends pivotally mounted in the gear housing of the tractor and having its rear portion extending under the frames of the potato



diggers, and an adjustable brace rod extending from the tractor to the rear portion of the draw-bar and adapted to adjustably raise and lower same as desired.

1,869,642. GOLF DRIVE REGISTERING DEVICE. CLAUDE WOOLMAN, San Diego, Calif. Filed May 26, 1930. Serial No. 455,736. 18 Claims. (Cl. 273—35.)

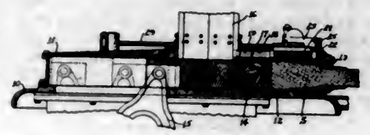


1. In a golf playing apparatus, a fairway having a transverse inclination sufficient to convey golf balls to the lower side thereof, means to automatically convey balls rolling to the lower side of said fairway to one end thereof, and automatic visual indicators adapted to indicate to players at one end of the field the approximate distance to which balls are driven.

1,869,643. PURIFICATION OF WATER. OSCAR ADLER and RUDOLF ADLER, Karlsbad, Czechoslovakia. Original application filed July 9, 1926, Serial No. 121,491, and in Czechoslovakia July 15, 1925. Divided and this application filed July 13, 1929. Serial No. 378,172. 1 Claim. (Cl. 210—28.)

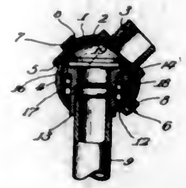
A method of freeing water from organisms, which comprises the steps of mixing the water with a substance containing chlorine; passing the water through porous refractory substances which prevent the movement of the organisms situated in the water; then conducting the water over a material containing carbon to convert the chlorine substance into a chlorine compound; and flushing out any solid particles accumulated in the porous bodies by a stream of water treated with a substance containing chlorine in a direction opposite to that of the normal flow of water to kill all organisms present in the porous bodies.

1,869,644. PRINT FORMING MACHINE. JOHN P. ALDRICH and HOWARD A. MORRIS, Toledo, Ohio, assignors to The Automat Molding & Folding Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 12, 1930. Serial No. 501,856. 6 Claims. (Cl. 31—12.)



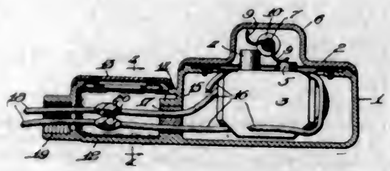
6. In a print-forming machine, means for forming a continuous slab of material, said means including a guideway and plunger movable to and fro in said guideway, and means to relieve the suction on said plunger during retracting movement, said last means including one or more restricted openings in a wall of said guideway and a scraper for removing the material squeezed thru said openings during the advancing movement of said plunger.

1,869,645. SWIVEL FIXTURE. ERNST G. K. ANDERSON, Evanston, Ill., assignor to Appleton Electric Company, a Corporation of Illinois. Filed Sept. 3, 1929. Serial No. 390,203. 1 Claim. (Cl. 285—91.)



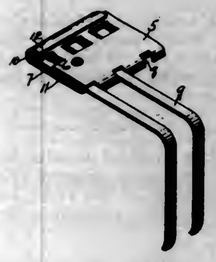
In a device of the character described, a member having a hemispherical socket, a ball fitted into the socket, a cap fixed to said member and extending across the socket, said cap having a ball-retaining ring surrounding the ball and having an internal diameter less than the diameter of the ball, said ring lying at an acute angle to the central axis of the socket, said ball being hollow, a fixture stud extending into and slidable in the ball, said stud having at its inner end an external flange, a spring surrounding the stud below the flange, and there being a shoulder within the ball supporting the spring.

1,869,646. SWITCH BOX. ERNST G. K. ANDERSON, Evanston, Ill., assignor to Appleton Electric Company, a Corporation of Illinois. Filed Sept. 13, 1929. Serial No. 392,279. 1 Claim. (Cl. 247—9.)



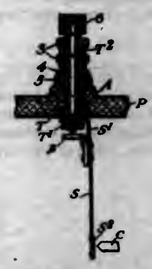
A switch box adapted to form an air-tight enclosure for a switch while permitting the switch to be opened and closed from without the box, composed of an integral box having a switch chamber and a connection chamber joined together by a passage, a detachable air-tight cover for the switch chamber, a switch-operating element extending through and movable in said cover and making a fluid-tight joint therewith, wires extending through said passage from one of said chambers to the other, and a sealing compound filling said passage around and in intimate contact with said wires to close communication between said chambers, the switch chamber being substantially air-tight after the passage has been filled with the sealing compound and the cover has been closed.

1,869,647. LAWN RAKE. JOHN ANDERSON, Portland, Conn. Filed Oct. 8, 1930. Serial No. 487,278. 5 Claims. (Cl. 55—104.)



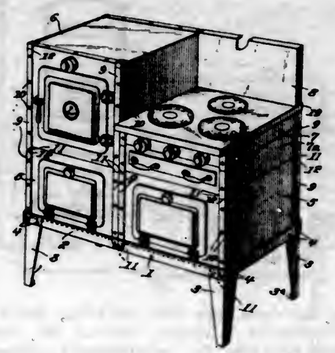
1. A rake including a base, the latter comprising a base plate, teeth having their rear ends passed underneath the base plate and hooked over the rear edge of said plate, a cover plate underlying the base plate and having its rear edge backturned over the back edge of the base plate and the ends of the teeth hooked over said edge, means for securing the base and cover plates together, and means for securing a handle to said structure.

1,869,648. CONTACT SPRING SUPPORTING AND ADJUSTING STRUCTURE. HARRY E. ASHWORTH, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 26, 1931. Serial No. 588,261. 1 Claim. (Cl. 200—166.)



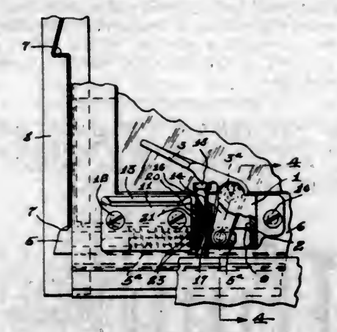
A contact spring supporting and adjusting structure, comprising an apertured supporting plate, a terminal screw passing through said plate and fixed therein and provided with a longitudinal hole extending the entire length of the screw and at least a part of which is threaded, a contact spring assembly comprising a spring hinge member bent to form two angularly disposed arms one of which is clamped against said plate by the head of said terminal screw and the other of which constitutes the contact spring, a thrust bracket attached to said contact spring, and an adjusting screw passing through said hole in the terminal screw and coacting with said thrust bracket, said spring hinge member being biased to urge said bracket against said adjusting screw, whereby the position of the free end of the contact spring may be varied from the other side of said plate by turning said adjusting screw in the terminal screw.

1,869,649. REVERSIBLE ELECTRIC RANGE. GEORGE EDWIN ATKINSON, Proctorville, Ohio, assignor, by mesne assignments, to Armstrong Appliance Corporation, a Corporation of Delaware. Filed Oct. 5, 1929. Serial No. 397,648. 3 Claims. (Cl. 219—37.)



1. In combination in an electric cooking range, a range body comprising removable, interchangeable and reversible sections, and a single flexible electric cable connection between two of said sections adapted by disconnection and connection of but one end thereof to permit said sections to be readily superimposed or reversed in side by side relation.

1,869,650. SASH HOLDER WITH ANTIRATTLER MEANS. ROY T. AXE, Syracuse, N. Y., assignor to The O. M. Edwards Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed May 29, 1930. Serial No. 457,085. 8 Claims. (Cl. 292—173.)

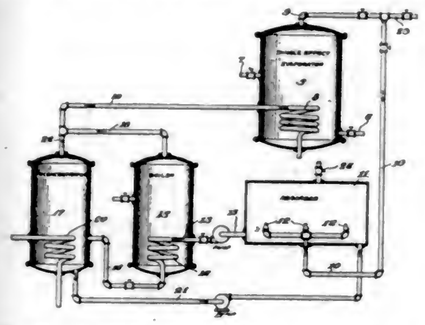


1. A sash holder comprising a body element for attachment to an element of a window sash, a latch member, an operating member movably mounted in the body, and a flat spring fixed to the operating member at one end and thrusting at its other end against one of said elements in a drection at an angle to the operating movement of the operating member.

1,869,651. EVAPORATOR. WALTER L. BADGER, Ann Arbor, Mich., assignor to Swenson Evaporator Company, Harvey, Ill., a Corporation of Illinois. Filed Aug. 20, 1928. Serial No. 300,765. 6 Claims. (Cl. 159—47.)

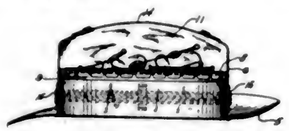
1. The method of operating an evaporation cycle consisting in passing the vapor driven off in the evaporator into contact with a solution that elevates its temperature because of the presence of the vapor, passing the resultant hotter dilute solution to a steam generator to generate

steam extraneous to the solution, passing the dilute solution from the steam generator to a reconcentrator, supplementing in the reconcentrator the heat liberated by the reconcentration of the solution with additional heat,



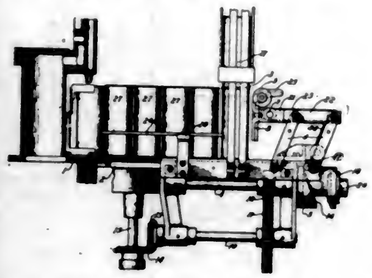
utilizing the steam from both the steam generator and the reconcentrator to provide heat for the evaporation cycle, and returning the reconcentrated solution after concentration into contact with vapor from the evaporator cycle.

1,869,652. KIT HAT. HAROLD H. BAKER, Milwaukee, Wis. Filed July 7, 1930. Serial No. 465,958. 3 Claims. (Cl. 2—185.)



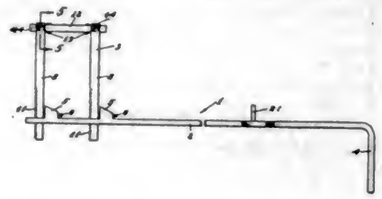
3. A hat comprising a body portion having a crown, means within said body portion and spaced from the top of the crown for forming a compartment therebelow, the top of the crown being provided with a slit of substantial length, and a multiple slide operated fastener for closing said slit.

1,869,653. CAN FEEDING APPARATUS. EDWARD G. BAUER, Hoopeston, Ill., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Filed Feb. 18, 1926. Serial No. 89,138. 9 Claims. (Cl. 198—24.)



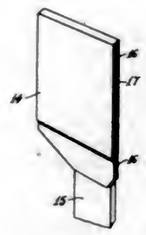
1. An apparatus for feeding square or rectangular cans singly from a stack of cans comprising a horizontally disposed feed table, a vertical chute adjacent said table, a reciprocating slide moving through said chute, a removable feeding head on said slide for engaging cans in said chute and moving them along said feed table, said removable head having a horizontal extension for engaging the remaining stack of cans and lifting them away from the can being removed, a support for said feed slide, means on said support to permit repositioning said feed slide to thereby adjust it for different size cans.

1,869,654. AUTOMATIC WORK GRIPPER. WILLIAM H. BEAN, Oakland, Calif. Filed June 29, 1931. Serial No. 547,745. 10 Claims. (Cl. 294—16.)



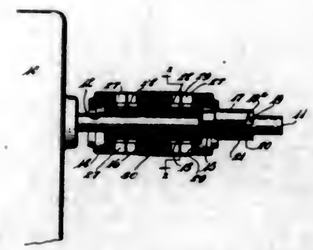
1. A work gripper, comprising a bar and a frame swingably and adjustably secured thereto, said frame having a brace adapted to engage with the work when the latter is gripped and yielding means for urging the brace into engagement with the work.

1,869,655. IMPELLER BLADE. JOHN D. BEEBE, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Aug. 29, 1930. Serial No. 478,623. 4 Claims. (Cl. 170—159.)



1. An impeller blade comprising a rigid backing, a blade face of resilient rubber composition, and means coacting with said rigid backing and extending toward the face of the blade into said rubber composition for restraining the latter at the blade face from stretching under the action of centrifugal force.

1,869,656. TIRE BUILDING APPARATUS. JOSEPH J. BLACK, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Feb. 20, 1931. Serial No. 517,170. 6 Claims. (Cl. 154—10.)

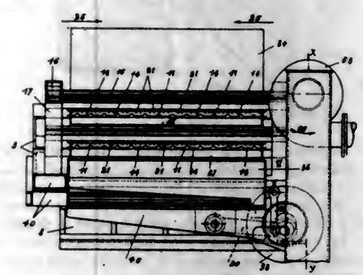


1. Tire-building apparatus comprising an externally splined sleeve adapted to be engaged and driven by the spindle of a tire-building machine, a plurality of complementary shell sections slideably engaged in said sleeve, and locking means for confining said sections against longitudinal displacement.

1,869,657. RUBBER COMPOSITION AND METHOD OF PRESERVING RUBBER. HAROLD E. BOWERS, Chicago, Ill., assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Jan. 16, 1930. Serial No. 421,262. 21 Claims. (Cl. 18—50.)

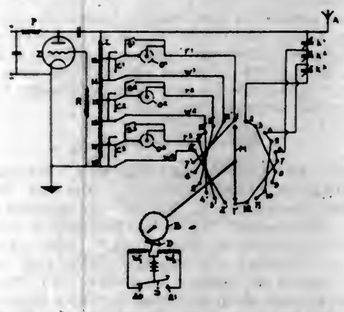
1. The method of preserving vulcanized rubber which comprises treating the rubber before vulcanization with an alkyl substituted diaryl nitrosamine.

1,869,658. MACHINE FOR CRACKING AND SORTING NUTS. BAPTISTIN BRANDA, Marseille, France. Filed Sept. 13, 1930, Serial No. 481,793, and in France Mar. 3, 1930. 5 Claims. (Cl. 146—8.)



1. A machine for decorticating and sorting nuts comprising a hopper for receiving the nuts to be decorticated, a stationary platform, knives carried by and depending from said stationary platform, a movable platform animated with a rapid alternative movement of short strokes, the surface of said platform spaced from said stationary platform in co-operative relation therewith and including a substantially flat member extending transversely of the movable platform with a triangular shaped member extending upwardly from said flat member at either longitudinal edge thereof for cooperative action with said depending knives, a receptacle, means for conveying the nuts to said receptacle, said receptacle being agitated, a plurality of superposed sieves in said receptacle, each sieve being of different mesh for separating the shells from the kernels, means for retaining on the upper sieve undecorticated nuts and means for returning said undecorticated nuts to said hopper.

1,869,659. METHOD OF MAINTAINING SECRECY IN THE TRANSMISSION OF WIRELESS TELEGRAPHIC MESSAGES. WILLEM BROERTJES, Amsterdam, Netherlands. Filed Nov. 14, 1929, Serial No. 407,218, and in Germany Oct. 11, 1929. 5 Claims. (Cl. 178—22.)

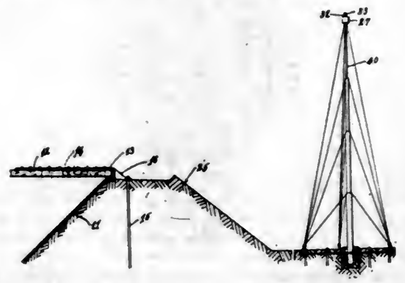


1. Method for the wireless transmission of telegraphic messages by means of Morse or other code, wherein the dots and dashes of which the message is composed are transmitted by means of a plurality of working frequencies which are interchanged at will during the transmission of the message.

1,869,660. ALKYL ETHER ETHYLENE GLYCOL ESTERS OF FATTY ACIDS. JAMES RAYMOND BUCKLEY, Parlin, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 6, 1930. Serial No. 500,673. 4 Claims. (Cl. 260—106.)

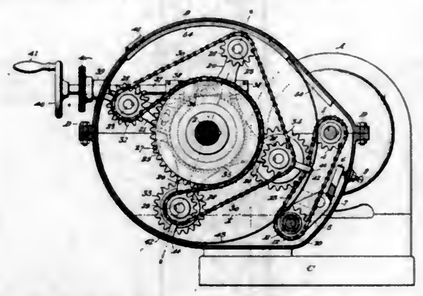
1. An ester of a saturated fatty acid having more than seven carbon atoms with the monoethyl ether of ethylene glycol.

1,869,661. LIGHTNING PROTECTION SYSTEM AND METHOD. HAROLD L. BUMBAUGH, San Francisco, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed July 26, 1927. Serial No. 208,536. 2 Claims. (Cl. 173—31.)



1. The combination with a reservoir for inflammable substances, of a metallic grid in contact with and extending over said reservoir and electrically connected with the earth, an elevated structure at one side of the reservoir, and a means mounted on the elevated structure operable to artificially produce a higher ionized zone above the level of the grid than is producible in said zone by the natural charged condition of the earth, the last mentioned means being electrically connected with the earth.

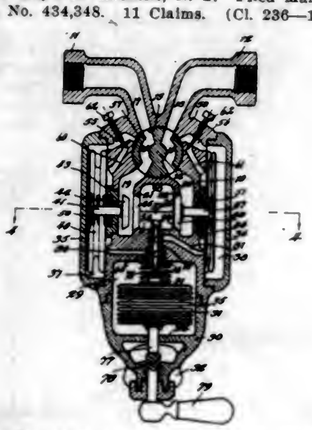
1,869,662. VARIABLE SPEED REDUCER. WILLIAM BURKART and RALPH M. PARSONS, Denver, Colo.; said Parsons assignor of one-half of his entire right to William C. Candler, Littleton, Colo. Filed Feb. 6, 1931. Serial No. 513,831. 7 Claims. (Cl. 74—31.)



1. In a variable speed reducer of the character described, the combination with a power driven chain; of a drive shaft, a rotatable member thereon having a plurality of shafts rotatably mounted therein, in rotative order, sprocket wheels keyed on one end of said shaft having the same number of teeth, a sprocket wheel of greater diameter keyed to said drive shaft and an endless chain which passes over the first mentioned wheels and around the latter wheel, variable toothed sprocket wheels keyed upon the opposite ends of said rotatable shafts, and means for turning said rotatable member to bring any one of the

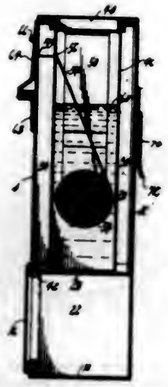
variable toothed wheels into engagement with said power driven chain, said power driven chain being mounted on sprocket wheels having the same number of teeth as the first mentioned wheels.

1,869,663. THERMOSTATIC MIXING MEANS. MARCEL E. CARTIER, New Rochelle, N. Y. Filed Mar. 8, 1930. Serial No. 434,348. 11 Claims. (Cl. 236—12.)



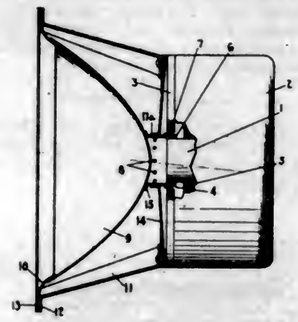
1. A mixing valve comprising a mixing chamber, separate inlets leading thereto, a valve for controlling the flow from one of said inlets to said chamber, said valve having an actuator subject to opposed forces and responsive to variations of pressure in said inlet, said actuator being adapted to assume positions governed by the relative values of said forces, in combination with a thermostatic device responsive to the temperature of the fluid from the mixing chamber for controlling the difference between said opposed forces, for the purpose described.

1,869,664. SANITARY APPLIANCE. VERLE A. CASTLE, Delta, Iowa, assignor of one-half to Meyer S. Levine. Filed July 28, 1930. Serial No. 471,401. 6 Claims. (Cl. 91—14.)



1. In a sanitary appliance of the kind described, a casing, a compartment therein, a tank for liquid in said compartment, and removable therefrom, a slot in said tank, a cover for said tank, a roll support depending therefrom for a roll of fabric, the slot in said tank being provided for such fabric to extend through, a slot in said casing for such fabric to extend through also, holding means for such fabric and a tearing edge adjacent thereto for such fabric.

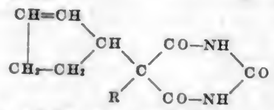
1,869,665. LOUD SPEAKER. THOMAS CHANN, New York, N. Y. Filed Mar. 14, 1930. Serial No. 435,913. 6 Claims. (Cl. 181—31.)



1. An acoustic device comprising, in combination, a convex diaphragm having a continuous sound generating surface at all points within its periphery, a cylinder secured to the center of said diaphragm on the convex side thereof, a voice coil on said cylinder, and a flexible suspension surrounding said cylinder and secured thereto, and secured at its periphery to a support, said suspension being progressively stiffer outwardly.

1,869,666. Δ2-CYCLOPENTEN BARBITURIC ACIDS. RENÉ CHAUX and CHARLES DUFRAISSE, Paris, France, assignors to Compagnie de Bethune, Bully-les-Mines, France, a Corporation of France. Filed Jan. 31, 1930. Serial No. 425,064, and in France Feb. 5, 1929. 2 Claims. (Cl. 260—33.)

1. The new barbituric acids herein described, of the general formula:



where R is an aliphatic, phenyl, or Δ2-cyclopenten radical, these products being crystallized bodies with sedative, hypnotic and analgesic properties.

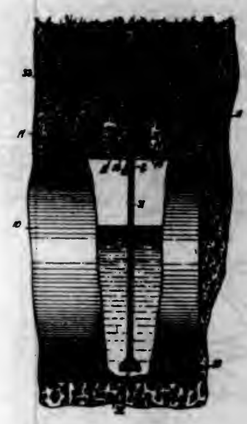
1,869,667. ALUMINUM ARC WELDING. JACK CHURCHWARD, New Haven, Conn. Filed July 8, 1922, Serial No. 573,736. Renewed Dec. 15, 1931. 17 Claims. (Cl. 219—8.)

1. The process of arc welding aluminum comprising applying to the work to be welded an electrode consisting largely of aluminum, and so directing a welding current through the work and the electrode than an arc is formed therebetween and a positive polarity is established in the electrode.

1,869,668. SYNTHETIC DRYING OILS AND PROCESS OF MAKING THEM. ARNOLD M. COLLINS, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Original application filed Aug. 7, 1929, Serial No. 384,238. Divided and this application filed June 16, 1931. Serial No. 544,931. 4 Claims. (Cl. 260—171.)

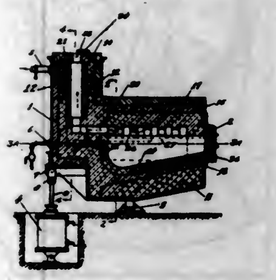
1. The process which comprises heating a polymerizable aliphatic hydrocarbon containing at least 2 unsaturated bonds to effect polymerization, discontinuing the heating before the formation of a gel, and while the material is still readily soluble in acetone, and removing any unchanged hydrocarbon to obtain an oil having the properties of a drying oil and non-volatile at 100° C.

1,869,669. UNDERGROUND STORAGE-TANK INSTALLATION. EDWARD S. CORNELL, Jr., Watertown, Conn., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Oct. 10, 1930. Serial No. 487,748. 1 Claim. (Cl. 220—86.)



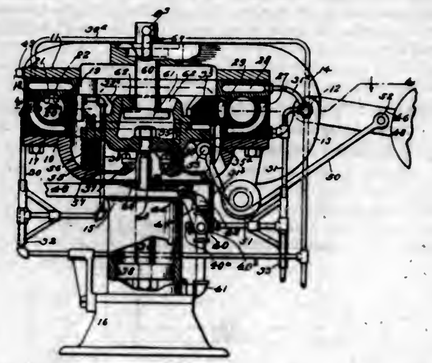
In an underground storage-tank installation, the combination with a storage tank buried beneath the surface of the ground and formed with an aperture; of a water-tight slip-joint-fitting installed in the aperture in the said tank and provided with a through passage for the reception of a tube; a continuous one-piece fluid-conducting tube extending through the said slip-fitting from the exterior to the interior of the said tank and having its periphery frictionally gripped by the said slip-fitting; and an earth-bound horizontal fluid-duct leading laterally from the said fluid-conducting tube in spaced relationship above the said storage-tank and having earth or other filling interposed therebetween; whereby upon the settling of the tank the said slip-fitting will move therewith and slip over the surface of the fluid-conducting tube without imposing a rupturing strain thereupon or upon the earth-bound horizontal fluid-duct leading therefrom so that a continuous connection with said tank is assured despite the said settling.

1,869,670. FUEL FIRED FURNACE. WILLIAM A. DARRAH, Chicago, Ill. Filed June 25, 1927. Serial No. 201,480. 6 Claims. (Cl. 263—43.)



1. A furnace comprising a housing, means for inclining said housing, a refractory hearth within said furnace, a combustion chamber adjacent said hearth, said combustion chamber having a heat conducting refractory wall adjacent said hearth, and a roughened roof over said hearth, arranged to be heated by products of combustion from said combustion chamber.

1,869,671. VULCANIZING MOLD. BARTHOLD DE MATTIA, Clifton, N. J., assignor to National Rubber Machinery Company, a Corporation of Ohio. Filed Oct. 26, 1928. Serial No. 315,146. 8 Claims. (Cl. 18—19.)

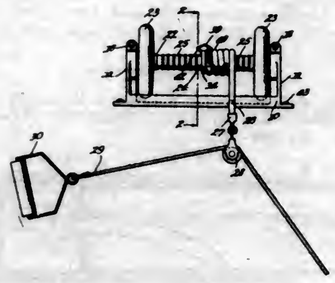


1. A vulcanizing mold for inner tubes comprising three individually heated and relatively separable sections defining between them an annular mold cavity of substantially circular cross-section, the curved face of one of said sections forming the inner wall or base of the mold cavity and presenting overhanging portions at opposite sides of the central circumferential plane of the mold to provide a grooved seat for the inner tubes, and means for effecting the relative separation of the mold sections when the mold is opened.

1,869,672. PRODUCTION OF DIIODO-CHELIDAMIC ACID. MAX DOHRN, Berlin-Charlottenburg, and PAUL DIEDRICH, Finkenkrug-Osthavelland, Germany, assignors to Schering-Kahlbaum A. G., Berlin, Germany. Filed Sept. 28, 1931, Serial No. 565,692, and in Germany Oct. 7, 1930. 1 Claim. (Cl. 260—42.)

The method of producing diiodo-chelidamic acid comprising dissolving chelidamic acid in caustic alkali in excess of the molecular quantity, acting thereon with iodine, heating to boiling point, adding acid to render the solution acid, adding an alkali to render the solution alkaline and repeating acidification and alkalinization under continuous boiling.

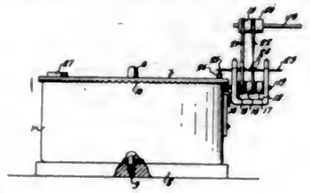
1,869,673. EXERCISING MACHINE. CHARLES L. DUFF, Columbus, Ohio. Filed Sept. 15, 1930. Serial No. 482,115. 5 Claims. (Cl. 272—79.)



1. An exercising machine of the class described having in combination a supporting frame, a rotatable shaft having its ends journaled in bearings formed in said frame, a relatively heavy member connected to said shaft adjacent each end thereof, said shaft having a medially disposed smooth portion and grooves extending from op-

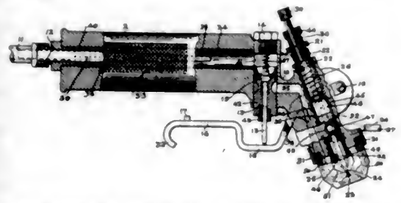
posite sides of said medial portion, a friction clutch having angularly disposed links connected thereto, the free end portions of said links each having an enlarged head provided with off-set notches, a flexible strap, and a coupling connecting said strap to said links and having one end arranged to fit movably in said off-set notches whereby to permit the strap to be moved on the shaft without wrapping over the clutch.

1,869,674. FABRIC DYEING MACHINE. FRANCIS DUFFY, Hamilton, Ontario, Canada. Filed Oct. 26, 1929. Serial No. 402,744. 3 Claims. (Cl. 8—18.)



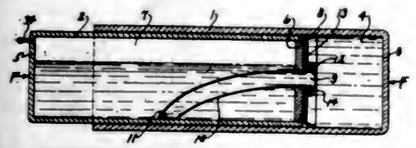
1. In a fabric dyeing machine, a dyeing liquid containing receptacle, a rotary cover plate positioned upon the top of the receptacle and having a plurality of orifices therein, and a plurality of perforate fabric containers extending downwardly from the orifices in the cover plate into the dyeing liquid.

1,869,675. SELF MOISTENING SMOOTHING IRON. CURRAN S. EASLEY, Lagrange, Ga., assignor to Truline, Inc., Lagrange, Ga., a Corporation of Georgia. Filed Nov. 15, 1928. Serial No. 319,627. 3 Claims. (Cl. 68—26.)



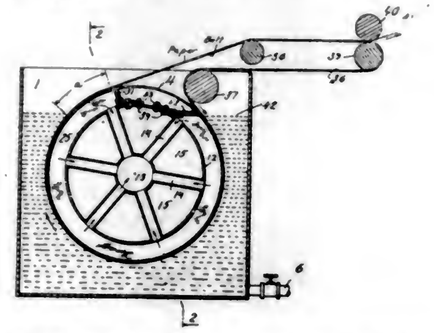
1. A combined heating, moistening and smoothing iron characterized by having a heating element in the base, a handle for operatively directing the heated base over the work to be ironed, a nozzle attached to and projecting forwardly and downwardly from the front end of the handle, an air supply for the nozzle, a water inlet to the nozzle, an air valve, a water valve, and a lever adjacent the handle and connected with both valves for simultaneously controlling the flow of water and air from the nozzle.

1,869,676. AIR SPRING. WILFRED A. EATON, Edgewood, Pa. Filed June 28, 1929. Serial No. 374,414. 3 Claims. (Cl. 267—32.)



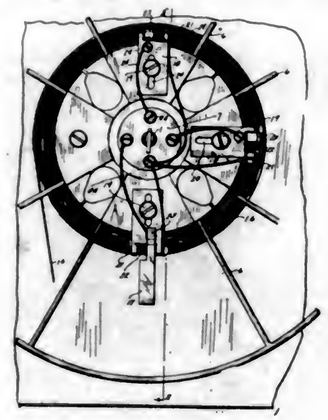
1. Apparatus of the class described, comprising horizontally disposed cylinder and piston parts cooperative to form an expansible chamber, means providing a constant volume chamber in aligned relation with said expansible chamber and separated therefrom by a wall transverse to the axis of said parts, said wall having a central opening, and means associated with said wall to form a passageway leading from the lower portion of said constant volume chamber to said opening.

1,869,677. SHEET-FORMING APPARATUS. HARRY A. EMERY, Roselle Park, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 20, 1929. Serial No. 415,507. 12 Claims. (Cl. 92—43.)



1. In a paper-making machine, in combination, a container for paper pulp, a forming member having a perforated peripheral surface said forming member being mounted within said container and having a portion of its peripheral surface submerged in said pulp, means stationarily fixed within said member constructed and arranged to provide a zone of reduced pressure in said member relative to the pressure exerted on the exterior thereof and means for rotating said forming member.

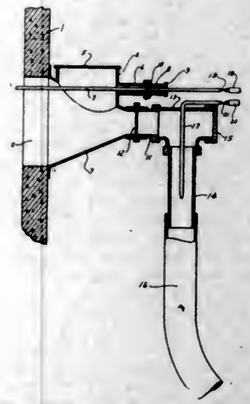
1,869,678. CIRCUIT CONTROLLER FOR MOTION PICTURE FILMS. HOWARD H. FENNER and ROBERT E. SILVIS, Mill City, Oreg., assignors to Automatic Projector-Operator Inc., Portland, Oreg., a Corporation of Oregon. Filed Nov. 20, 1929. Serial No. 408,551. 3 Claims. (Cl. 200—52.)



1. In a device of the class described, the combination of a shaft, a hub mounted upon the shaft, an insulated cylinder mounted upon the hub and in spaced relation with the hub, a plurality of metallic bands disposed upon the insulated hub and in spaced relation with each other, electric terminals outwardly extending from the metallic bands and in spaced relation therewith, a reel removably

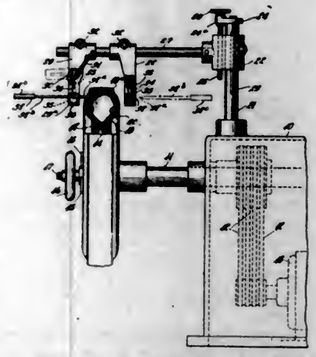
disposed upon the shaft, an insulating hub forming the engaging surface between the reel and the shaft, a plurality of electric terminals carried within the insulating hub, said electric terminals being in registerable engagement with the terminals carried by the cylinder, a plurality of telltales adjustably disposed upon the reel and adapted for placement between the film disposed about the reel and adapted for being held down between the film and within the reel by the winding of the film about the reel, and an electric terminal disposed in registerable alignment with the telltale and adapted to registerable engagement therewith when the telltale is released.

1,869,679. MACHINE FOR UNLOADING CEMENT. ALTON K. FREDERICK, Osborn, Ohio, assignor to Southwestern Portland Cement Company, Osborn, Ohio, a Corporation of Delaware. Filed Sept. 11, 1930. Serial No. 481,095. 4 Claims. (Cl. 302—52.)



1. A loading apparatus for loose material comprising a discharge spout having a receiving hopper and a discharge pipe, a compressed air agitator pipe extending through said hopper and beyond the receiving end thereof, and a compressed air injector pipe extending into said discharge pipe and in the direction of the discharge end thereof.

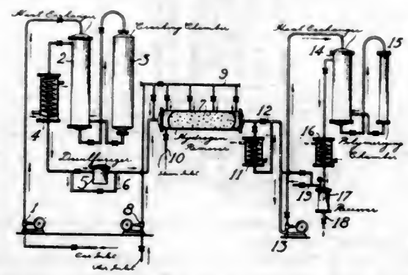
1,869,680. METHOD AND APPARATUS FOR REMOVING TREADS FROM TIRES. WALTER B. FREEMAN, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Dec. 22, 1928. Serial No. 328,007. 11 Claims. (Cl. 154—14.)



6. In apparatus for removing treads from tires, the combination of means for supporting and rotating a tire, a tool mounting at one side of the tire and formed with a slot, a guide-block slidably mounted in said slot, and a tool slidably mounted in said guide block.

8. The method of removing a tread member from a pneumatic tire casing which comprises cutting through the sidewall to the fabric portion, internally supporting the fabric portion by inflation so as to permit resilient deflection thereof, inserting a rounded ply-separating tool between the tread and the fabric portion and causing a relative rotative movement between the tire and the tool to progressively separate the tread from the fabric portions.

1,869,681. METHOD FOR THE PRODUCTION OF NORMALLY LIQUID HYDROCARBONS FROM GASEOUS OR LOWER BOILING HYDROCARBON MATERIALS. PER K. FROLICH, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 24, 1930. Serial No. 438,650. 13 Claims. (Cl. 196—10.)



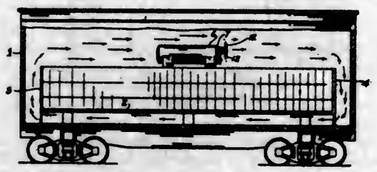
1. An improved process for producing valuable higher boiling hydrocarbons from lower boiling saturated hydrocarbons of more than one carbon atom, which comprises the steps of converting such saturated hydrocarbons into unsaturates, removing the major quantity of free hydrogen and polymerizing the olefins to form higher boiling hydrocarbons.

1,869,682. TOOL FOR GIVING A PERMANENT WAVE TO HAIR. ANDRÉ M. GAY, West Newton, Mass. Filed June 20, 1931. Serial No. 545,717. 13 Claims. (Cl. 132—33.)



1. A tool of the character described comprising a cylindrical rod having a transverse slit in one end and a plurality of parallel cylindrical projections permanently secured thereto and extending laterally from one side only in a single row.

1,869,683. REFRIGERANT GENERATOR AND CIRCULATOR. RALPH V. GRAYSON, Atlanta, Ga. Filed May 6, 1931. Serial No. 535,527. 5 Claims. (Cl. 62—91.5.)

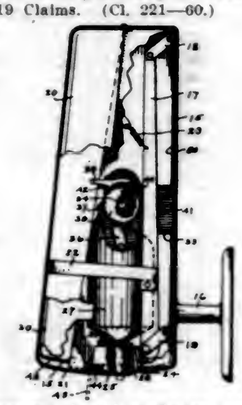


2. Refrigerating system comprising walls forming a refrigerated chamber, means in said chamber for forming a circuitous circulation path, and a refrigerant generator and circulator positioned at the upper portion of said circulation path comprising means for generating a cold fluid under pressure, and means actuated by the pressure of said fluid for circulating said fluid.

1,869,684. ANTIFREEZING LIQUID. OLIVER P. GREENSTREET, Owensville, Mo. Filed Sept. 4, 1930. Serial No. 479,805. 1 Claim. (Cl. 252—5.)

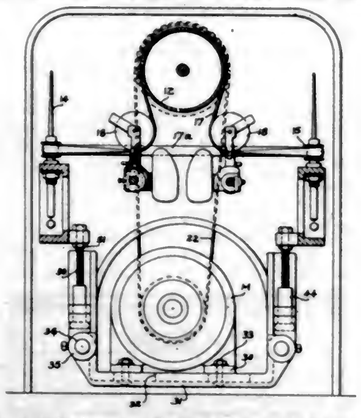
An anti-freezing liquid for use in radiators consisting in kerosene, in which the high boiling point fractions have been eliminated, and oil of mirbane.

1,869,685. DISPENSING DEVICE. HAROLD M. GUSDORF, Indianapolis, Ind. Filed Aug. 1, 1930. Serial No. 472,231. 19 Claims. (Cl. 221—60.)



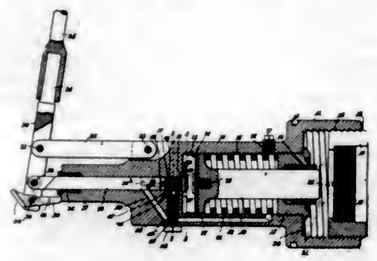
1. In a dispenser adapted to dispense substances from a collapsible container, means for supporting the discharge end of the container, a container engaging shaft adapted to be revolved, a ratchet mechanism associated with the shaft, and a reciprocable member adapted to revolve said shaft through said ratchet mechanism, and retarding means for decreasing the rotary travel of said shaft at successive operations of said reciprocable member.

1,869,686. MOTOR DRIVE FOR SPINNING OR TWISTING MACHINES. ROBERT HARGREAVES, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed July 27, 1931. Serial No. 553,290. 5 Claims. (Cl. 118—48.)



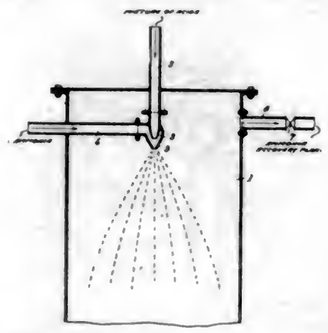
1. In a spinning or twisting machine, a frame having a plurality of spindles mounted along each side thereof, a driving cylinder for said spindles mounted in said frame and positioned substantially above the level of the driving portions of said spindles, a motor suspended from side portions of said frame and within the floor space thereof, a relatively long direct vertical belt drive from said motor to said cylinder, and means to raise and lower said motor relatively to said frame to adjust the belt tension.

1,869,687. TOOL FOR REMOVING WHEELS FROM AUTOMOBILE AXLES. OSCO E. HART, Colorado Springs, Colo. Filed Dec. 18, 1929. Serial No. 414,954. 11 Claims. (Cl. 138—9.)



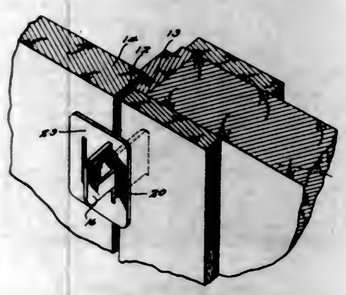
1. The combination of a casing having at one end an oil reservoir and means for securing it to the periphery of the hub of a vehicle wheel, said casing having a central bore extending from and communicating with the outer end of said reservoir and of uniform diameter throughout its length; a piston in said reservoir provided with a ram of reduced diameter adapted to bear against the end of the wheel-supporting axle; a plunger in the opposite end of said casing fitting said bore and adapted to be reciprocated therein to force oil under pressure from said bore directly into said reservoir against said piston; a spring-pressed valve having a head within said reservoir normally closing the inner end of said bore and having the part within the mouth of said bore in two sections, one section being movable longitudinally relatively to the other section; a return passage from said bore to said reservoir normally closed by the said movable section of said valve; and manually actuated means pivotally connected to said plunger for imparting a short stroke to said plunger thereby causing the valve to be moved by the oil confined within said bore only enough to uncover the bore and permit said oil to be forced under pressure from said bore directly into said reservoir or imparting a longer stroke to insure contact with the valve and move it sufficiently to uncover the return passage.

1,869,688. METHOD FOR MANUFACTURING MIXED FERTILIZERS. HEINRICH HEIMANN, Dessau in Anhalt, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 10, 1928, Serial No. 276,815, and in Germany June 11, 1927. 2 Claims. (Cl. 71—9.)



1. A process for manufacturing mixed fertilizers which comprises spraying a mixture of mineral acids and fertilizer salt solutions into a reaction chamber simultaneously with gaseous ammonia.

1,869,689. DOORLOCK. JAMES HOLLAND, Los Angeles, Calif. Filed Dec. 20, 1930. Serial No. 503,775. 2 Claims. (Cl. 292—200.)



1. A device of the character described comprising a lock plate adapted to be inserted between the edge of a door and a door post, the portion of the plate extending between said members terminating in a blade adapted to penetrate the face of the door post and to be held in place by the door when the door is closed, a plate having a slotted opening through which an outwardly projecting portion of the lock plate extends whereby the keeper plate will lie substantially flush against the face of the door and its post, said lock plate being vertically offset to form an upper vertical shoulder spaced a distance from the face of the door substantially equal to the thickness of the keeper plate and whereby the keeper plate may be positioned between said shoulder and the face of the door, a vertical shoulder formed along the lower edge of the lock plate and lying in substantially the same vertical plane with the shoulder of the upper edge whereby a lower projecting portion of the lock plate will extend into the slotted opening of the keeper plate to prevent direct vertical movement thereof when the keeper plate is interposed between the upper vertical shoulder and the face of the door.

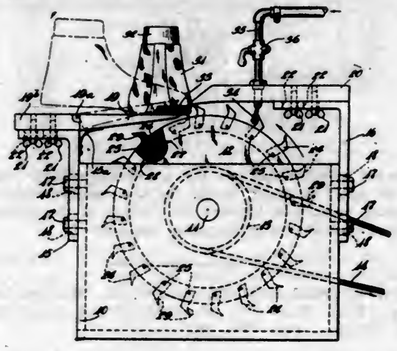
1,869,690. METHOD AND MACHINE FOR SPLICING RUBBER TUBES. OTTO F. HOMIER and HARVEY L. YOUNG, Akron, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed July 26, 1930. Serial No. 470,833. 13 Claims. (Cl. 154—14.)



1. The method of splicing tube ends which comprises adhesively uniting respective annular zones of the inner faces thereof in an annular seam by applying pressure to their outer faces by progression along the seam, and progressively trimming the excess material from the seam.

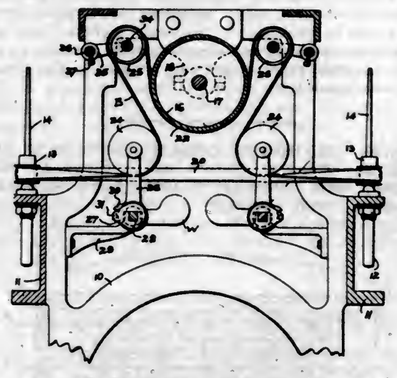
5. Apparatus for splicing tube ends comprising means for supporting a pair of tube ends in opposed relation, and means for effecting seaming of annular zones of their inner faces by pressure applied to their outer faces to unite the tube ends by progression along an annular seam.

1,869,691. COATING APPARATUS. ETHAN CHARLES HOPKINS, Belmont, Mass., assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 19, 1930. Serial No. 445,662. 11 Claims. (Cl. 12—80.)



1. In coating apparatus, the combination of a rotatable member and means for driving the same, a circumferential series of rigid fingers pivotally mounted thereon, means for applying coating material to said fingers, means determinately positioning the work in the orbit of said fingers, and a guard extending substantially from the material-applying means to the work to prevent unintended disposition of the coating material.

1,869,692. SPINDLE DRIVE FOR SPINNING OR TWISTING MACHINES. LEON H. HORNER, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed May 1, 1931. Serial No. 534,317. 6 Claims. (Cl. 118—47.)



1. In a spinning or twisting machine, a driving cylinder, a plurality of spindles arranged in a row at each side of said cylinder, an endless band partially encircling a spindle in each row and having both runs thereof disposed at one and the same side of said cylinder and beyond the periphery thereof, one run of said band having driving contact with substantially one-half of the circumference of said cylinder.

1,869,693. FOLDING TABLE. ARTHUR REYBURN CLARENCE HOURD, London, Ontario, Canada. Filed Mar. 14, 1930. Serial No. 435,931. 2 Claims. (Cl. 45—11.)

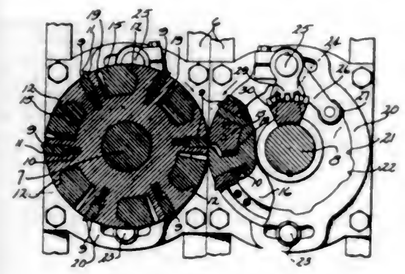
1. In a table of the character described, a leg pivotally secured to the table top, a strut pivotally secured to the

table top and angularly inclined to the leg when such leg is in the extended position, a substantially U-shaped member secured to the leg and through which the strut extends, a pin extending through the open end of the



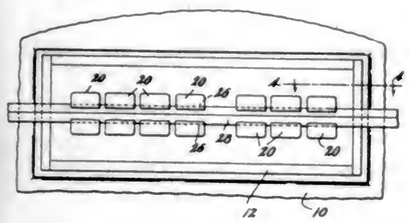
U-shaped member into the leg, a member slidably engaging the strut contained within the U-shaped member, and a spring positioned between the bottom of the U-shaped member and the strut engaging member.

1,869,694. WEB FOLDER. DAVID W. HUDSON, Green Bay, Wis. Filed July 20, 1931. Serial No. 551,961. 20 Claims. (Cl. 270—78.)



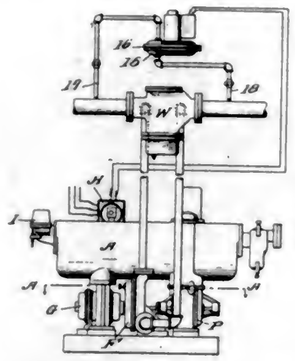
1. Folding apparatus comprising a support providing a plurality of jaws, means mounting said support for rotation and a plurality of relatively movable jaws mutually interconnected and simultaneously movable to and from clamping engagement with respect to the several first mentioned jaws.

1,869,695. METHOD OF FORMING DESIGNS IN SURFACES. TIMOTHY JELLOW and ANTHONY DI BONA, Quincy, Mass. Filed Apr. 6, 1929. Serial No. 353,095. 1 Claim. (Cl. 41—39.)



The method of inscribing the surface of stone or like material which consists in covering the surface with a protective layer, then assembling a plurality of friable die members upon a rigid supporting member to align the same, then impressing the die members while thus assembled into the protective layer to form depressions therein, then removing the supporting member, and subsequently sand-blasting through the die members and depressions and into the underlying surface of the stone.

1,869,696. TURBINE AND MOTOR DRIVING MECHANISM FOR ROTARY PUMPS. IRVING C. JENNINGS, South Norwalk, Conn. Filed May 8, 1930. Serial No. 450,712. 7 Claims. (Cl. 103—11.)

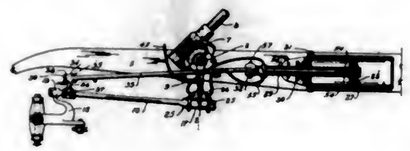


1. The combination in a vacuum steam heating system of a differential valve in the steam supply line of the system for maintaining a differential of pressure between the steam supply and the heating system, a rotary pumping apparatus for creating and maintaining the vacuum in the system, a low pressure steam turbine operated by said differential of steam pressure for driving the pumping mechanism, means to assist the pumping action in the system, and means controlled from said differential of steam pressure for throwing the first means into and out of operation.

1,869,697. PROCESS OF MAKING BITUMINOUS EMULSIONS AND PRODUCTS THEREOF. LESTER KIRSCHBRAUN, Leonia, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 2, 1928. Serial No. 244,058. 3 Claims. (Cl. 134—1.)

1. The process of making bituminous emulsions consisting in emulsifying a bitumen normally non-liquid at atmospheric temperatures in an aqueous vehicle with an argillaceous emulsifying agent, the improvement which consists in stabilizing, against sedimentation, the emulsion by the addition thereto of tannic acid.

1,869,698. STEERING MECHANISM FOR AUTOMOBILES. STEVE KOMFALA, Denver, Colo. Filed Sept. 9, 1929. Serial No. 391,229. 4 Claims. (Cl. 180—79.2.)



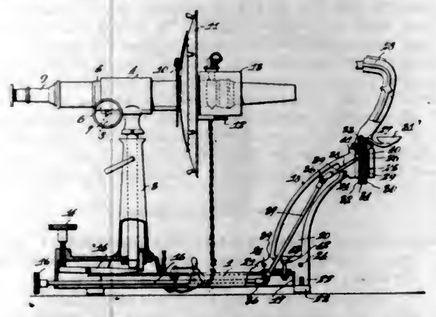
1. In a motor-driven vehicle having a steering gear, a cylinder, a piston in the cylinder, a rod for the piston, in operative connection with the steering gear, a valve element outside the cylinder adapted to connect cylinder spaces at opposite sides of the piston with sources of differing fluid pressures through the medium of the piston rod, the latter having ducts connecting the valve-element with the cylinder spaces, and means for actuation of the valve element connected to be operated by the steering gear.

1,869,699. ILLUMINATED SIGN. LENOARD LEVITT, Missoula, Mont., assignor, by direct and mesne assignments, of forty one-hundredths to Marie K. Yacorzynski, Spokane, Wash., and thirty one-hundredths to Frederick Joseph Roberts, San Diego, Calif. Filed May 9, 1930. Serial No. 450,988. 1 Claim. (Cl. 40—133.)



The combination in an illuminated sign, of a lamp box and lamp therein, said box having two end flanges and a bottom flange forming exterior retaining grooves, an exterior upset shoulder across the top edge of the box forming a seat, a transparent panel and an exterior stencil plate having edges in said grooves and the upper edge of the panel located in said seat, offset perforated lugs integral with said shoulder, complementary perforated lugs on the upper edge of the plate, clamp screws fastening two pairs of complementary lugs, and a permanent rivet fastening an intermediate pair of lugs.

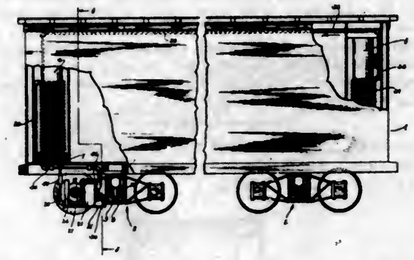
1,869,700. ATTACHMENT FOR OPHTHALMOMETERS. GURNEY LEE MANDAVILLE, Fort Pierce, Fla. Filed May 28, 1930. Serial No. 456,582. 8 Claims. (Cl. 88—20.)



1. In ophthalmometers of the kind having a base to support a standard with telescope, the combination with the base of a forwardly and upwardly projecting bracket, means securing said bracket to the forward extremity of said base, a head rest mounted on the forward end of said bracket, a chin rest plunger vertically movable in the front end of said bracket, means operable at the base and extending through said bracket to said plunger for raising and lowering the chin rest, said means comprising a rod rotatably mounted in the base, a second rod rotatably mounted in said bracket, a universal joint between said rods, a third rod rotatable in the forward portion of said bracket, a universal joint between said second and third rods, and a pinion and rack connection between said third rod and said chin rest plunger.

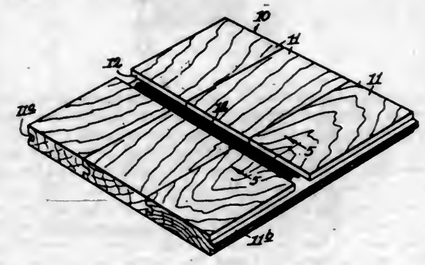
1,869,701. REFRIGERATOR CAR. ALONZO C. MATHER, Chicago, Ill. Filed Dec. 11, 1929. Serial No. 413,329. 4 Claims. (Cl. 62—117.)

1. The combination of a car having a truck provided with a movable axle, a platform connected with the truck, a compressor and a condenser carried by said platform, a cooling unit disposed within said car and operatively connected with said compressor and said condenser, means for operatively connecting the compressor with said axle, a motor, shiftable means for operatively connecting the



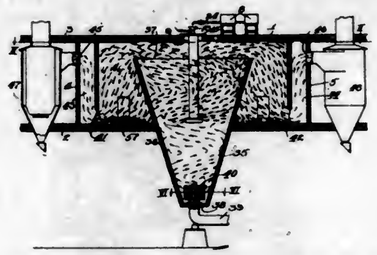
motor with the compressor and disconnecting the compressor and the axle, and depending members associated with said axle and arranged for partly supporting said platform.

1,869,702. FLOOR BLOCK AND FASTENER THEREFOR. CHESTER M. MACCHESNEY, Chicago, Ill., assignor to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed July 11, 1929. Serial No. 377,461. 6 Claims. (Cl. 20—8.)



1. A floor block comprising complementary wooden members arranged side by side, and a metal fastener of permanent angle cross-section having downwardly diverging walls sharpened at their lower edges and penetrating said members to hold them in assembled relation.

1,869,703. PROCESS AND APPARATUS FOR DEHYDRATING LIQUID MATERIAL. JOHN C. MACLACHLAN, Chicago, Ill., assignor, by mesne assignments, to Albert P. Hunt, Chicago, Ill. Filed Oct. 25, 1928. Serial No. 315,091. 15 Claims. (Cl. 159—4.)

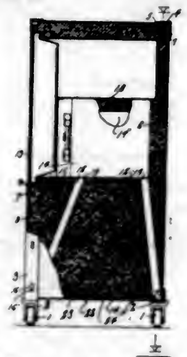


1. Apparatus for dehydrating liquids containing solids, which comprises a drying cabinet, means within said cabinet for spraying a liquid in a substantially horizontal plane, means positioned below said first mentioned means for directing a swirling current of a gaseous drying medium against said sprayed liquid and means forming an up-

wardly expanding chamber including said two first mentioned means and opening at its top into the interior of said cabinet.

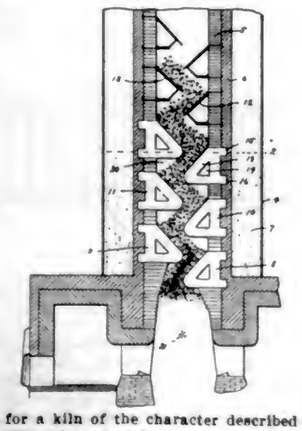
15. The method of dehydrating liquid materials containing solids, which comprises spraying said liquid materials in a generally horizontal plane, directing an upwardly swirling column of heated air against said sprayed materials, effecting a continuous expansion of the ascending column of air and causing the deposition of the dried sprayed particles at points lying outside of said column of heated air.

1,869,704. LOADED SAFE. CHARLES F. MEILINK, Toledo, Ohio. Filed July 27, 1929. Serial No. 381,641. 2 Claims. (Cl. 109—2.)



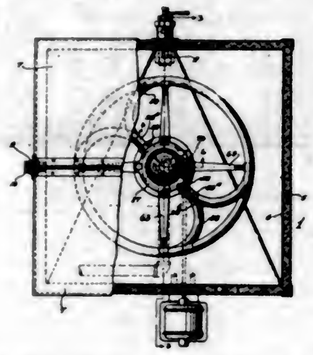
1. A safe comprising a sheet metal housing provided with an opening through one side thereof, a door jamb assembled with the housing about the opening, a plurality of receptacles in the housing and fixed with door jamb in effecting assembly therebetween, diverging legs from the assembled receptacles to the lower portion of the outer housing forming a support for the receptacles, a door coacting with the jamb to close the opening through which access may be had to the receptacles, and a cementitious filler for the housing about the jamb, receptacles, and legs as assembly augmenting means binding such into a unitary structure.

1,869,705. KILN. HUGH MISCAMPBELL, Duluth, Minn., assignor, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Feb. 18, 1929. Serial No. 340,835. 1 Claim. (Cl. 222—3.)



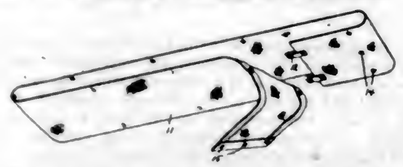
A baffle for a kiln of the character described consisting of a plurality of precast hollow sections built into the walls of the kiln in close fitting relation to each other, and so arranged that the hollow portion of each baffle is closed at one end and open at the other in respect to the interior of the kiln.

1,869,706. LIQUID TREATING APPARATUS. CLIFFORD MORROW, Canton, Ohio, assignor to The H. H. Miller Indnstries Company, Canton, Ohio, a Corporation of Ohio. Filed Oct. 2, 1930. Serial No. 486,035. 28 Claims. (Cl. 257—104.)



1. In a liquid treating apparatus, the combination of a tank formed with an opening in its bottom, a tubular member within said tank and stationarily supported at its lower end on said bottom, concentric to said opening, a hollow shaft extending through said member and rotatably mounted on its inner wall at its upper end, means connected to the lower end of said shaft below said bottom for rotating it, a head secured to the upper end of said shaft and rotated thereby, a fitting disposed below and connected to said bottom, a pipe connected to said fitting and extending through said hollow shaft for supplying a heat transfer medium to the interior of said head, a coil in said tank connected at one end to said head to permit flow of the medium into and through said coil and at its opposite end to said head to permit the discharge of the medium from said coil, and a conduit extending through said shaft for discharging the medium from said coil.

1,869,707. PLATFORM CANVAS ATTACHMENT. CLARENCE E. NELSON, Terrace, Minn. Filed Feb. 8, 1932. Serial No. 591,745. 3 Claims. (Cl. 56—1.)

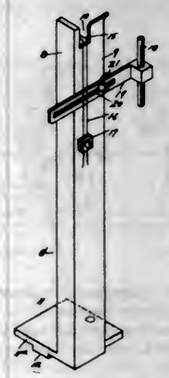


1. In a platform canvas of the character described, an elongated canvas strip provided with transversely extending flaps, connecting means between the ends of the strip, an elongated auxiliary strip substantially narrower than the first-mentioned strip, means for securing the narrow strip to the first-mentioned strip and connecting means between the ends of the narrow strip.

1,869,708. CENTER STOCK GUIDE FOR PRINTING PRESSES. BAILEY NOWELL, Venice, Calif. Filed Sept. 25, 1931. Serial No. 565,119. 4 Claims. (Cl. 271—61.)

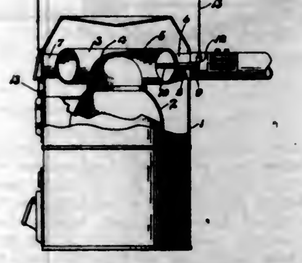
1. The combination with a Miehle vertical printing press feed table bed having a feeder guide slot and a central

blower system tube, of a plurality of alined pairs of vertical feeder guides each pair adapted to hold a stack of stock to provide for feeding a plurality of sheets concurrently



from the table; the inner guides adjacent to the blower tube being adjustable along the slot without interference by the tube.

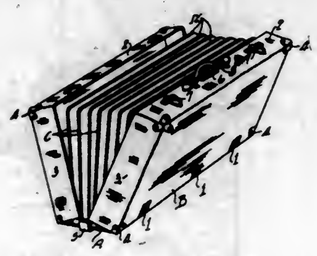
1,869,709. FURNACE RADIATOR. OSCAR P. NYSTROM and GERRIT JAARDA, Holland, Mich., assignors to Holland Furnace Company, Holland, Mich., a Corporation of Michigan. Filed Apr. 7, 1930. Serial No. 442,144. 2 Claims. (Cl. 126—102.)



1. In a device of the character described, a hollow body member, an outlet extending at about right angles therefrom, said outlet having a protuberance on its outer surface, a rod extending through said protuberance and into the interior of the hollow body member, said rod being revolubly mounted and being substantially parallel to the axis of the said outlet, regulating means located in said hollow body member, said regulating means being operated by the said rod, means for turning said rod about its axis, said protuberance being hollow and opening into said outlet whereby the rod has double bearing therein and whereby gases passing through the inner bearing from within the hollow body member will emerge into the said outlet.

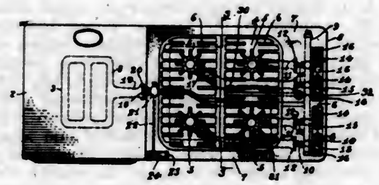
1,869,710. PORTABLE SAMPLE CASE. WILLIAM OCHSE, San Antonio, Tex. Filed July 27, 1929. Serial No. 381,534. 2 Claims. (Cl. 190—16.)

1. A combined portable sample and display case comprising, in combination, a pair of rectangular side walls having right-angularly extending front and end wall-forming continuations, a rectangular back wall common to said side walls, the back wall being disposed intermediate the inner side margins of, and hingedly attached to, the respective side walls, rails rigidly fixed upon the inner face and adjacent the opposite ends of the back wall, and a series of article-supporting rectangular wings having pivot engagement at opposite inner corners with said rails for swingable movement relatively to the back wall, said side wall continuations having a width substantially equal to one half of the width of the back wall but butt-wise engagement in enclosing the wings when the case is in



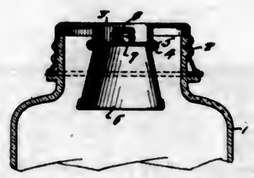
closed portable condition as a sample case, the side walls and their said continuations bracing the back wall in upright position when the case is open and endwise rested on a support in wing display position.

1,869,711. STOVE. JAMES C. OLSEN, Jr., and HARRY L. BOTTLE, Anderson, Ind., assignors to Anderson Stove Company, Anderson, Ind., a Corporation of Indiana. Filed Apr. 7, 1930. Serial No. 442,072. 9 Claims. (Cl. 126—37.)



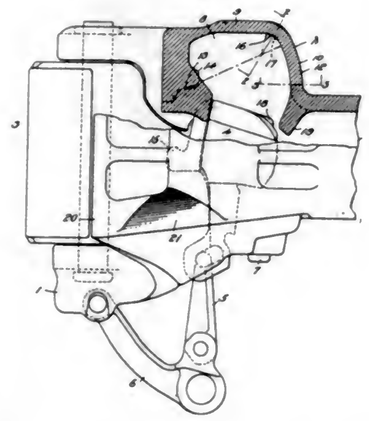
1. In a cooking range, a cooking-top frame having a plurality of openings in one end, a fuel supply manifold, a plurality of heating elements in the cooking-top, fuel-feeding means between said elements and manifold, and valves beneath the frame controlling said fuel-feeding means and having their handles extending through said openings in all positions of the handles, accessible for manipulation from above said frame.

1,869,712. ATTACHMENT FOR CAN COVERS. HORACE FITZ W. PALMER, Bennettsville, S. C. Filed May 7, 1929. Serial No. 361,112. 1 Claim. (Cl. 221—93.)



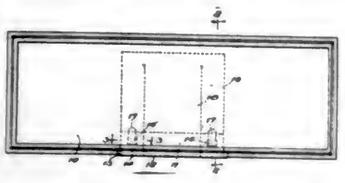
The combination of a threaded can cover for glass jars of the type described, an inverted cup having its base portion flanged, said flange being affixed to the inner central portion of the can cover top, an auxiliary spout in the bottom of the cup, said spout having a removable cover normally sealing the spout.

1,869,713. CAR COUPLER. WILLIAM J. REGAN, Wilkinsburg, Pa., assignor to The McConway & Torley Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 27, 1929. Serial No. 350,259. 6 Claims. (Cl. 213—127.)



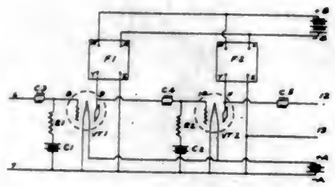
1. A car coupler having a head and a shank, a knuckle rotatably mounted on the head, a vertical movable and rearwardly swinging lock for the knuckle, means on said head and lock cooperating to provide a free pivotal connection therebetween at the forward side of the lock, and bottom operating release means for actuating said lock, the upper portion of said head being formed with a chamber for receiving the upper end of said lock, said chamber being provided with a forwardly extending rear wall projecting above the shank of the coupler, and the upper portion of the interior surface of said wall being curved to conform substantially to the path of travel of the rear upper portion of said lock.

1,869,714. PANEL SUPPORT. JAMES W. RODACK, Chicago, Ill., assignor, by mesne assignments, to Woodall Industries, Incorporated, Detroit, Mich. Filed Mar. 9, 1929. Serial No. 345,725. 2 Claims. (Cl. 40—146.)



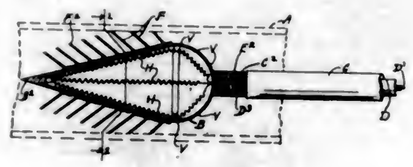
1. The combination with a panel, of a bracket cooperating with one edge of said panel, comprising a body resting against the rear face of said panel, an extension projecting laterally from said body and a flange carried by said extension and resting against the front face of said panel, outstanding sockets on said bracket, a supporting frame, tongues on said frame for reception in said sockets, and a leg secured to said frame to be positioned at an angle thereto.

1,869,715. WAVE FILTER IMPEDANCE-COUPLED AMPLIFIER. WINFIELD W. SALISBURY, Berkeley, Calif. Filed Mar. 19, 1928. Serial No. 262,880. 3 Claims. (Cl. 179—171.)



3. A vacuum tube amplifier comprising a plate circuit current coupling device consisting of a low-pass filter having a mid series termination adjacent said plate and a parallel utilization circuit passing only alternating current components.

1,869,716. PIPE CLEANER. WALTER SCHOENFELD, St. Paul, Minn. Filed Jan. 15, 1932. Serial No. 586,855. 4 Claims. (Cl. 15—104.30.)



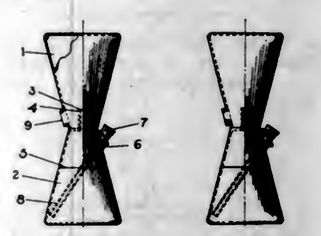
1. A pipe cleaning device of the class described comprising a hollow body preferably elongated and adapted to be inserted in a sewer pipe or the like for reciprocating movement therein, means for detachably connecting said body member to an elongated flexible member insertable in a conduit, electric conducting means in said flexible member, electric heat generating means within said body and outwardly directed cutter and burning means fixed on the exterior of said body comprising fingers directed forwardly.

1,869,717. BOTTLE HOLDER. HENRY B. SILVER, New York, N. Y. Filed Feb. 12, 1930. Serial No. 427,841. 4 Claims. (Cl. 226—129.)



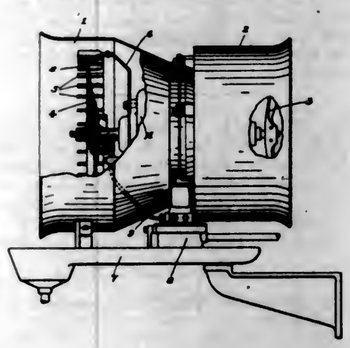
1. A holder of the character set forth, comprising a base board having a plurality of bottomed sockets, a casing secured thereto and having a wall spaced therefrom provided with openings alined with the sockets and side flanges secured to the base board, said base board, casing and flanges forming a guideway, a clamping plate slidable in the guideway and having openings that move into and out of register with the casing openings and board sockets, and a device journaled in the casing and engaged with the plate to move the same.

1,869,718. VISCOSITY INDICATING DEVICE. EMORY E. SMITH, San Francisco, Calif., assignor to Leon Livingston, San Francisco, Calif. Filed Jan. 31, 1931. Serial No. 512,586. 3 Claims. (Cl. 265—11.)



3. A device for indicating viscosity comprising two connected receptacles, said device being designed to stand alternately on two opposite ends whereby said receptacles are disposable one above the other alternately, an orificed nozzle interconnecting said receptacles and providing communication therebetween, one of said receptacles having a filling aperture and being adapted, when in its lower position, to receive through said filling aperture a charge of oil, the viscosity of which is to be observed, a stopper closing said filling aperture, and a vent tube extending from within the lower part of said last mentioned receptacle and through said stopper to an exterior point above the level of the oil charge, said vent tube being removable with said stopper, said nozzle projecting into the upper of said receptacles when said device is standing in position to be filled.

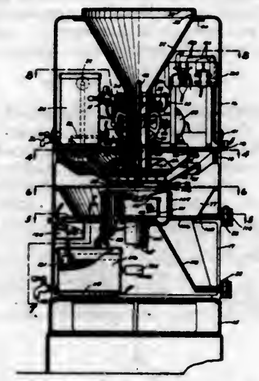
1,869,719. HUMIDIFIER. EDWARD SOUTHWORTH, Portland, Me. Filed Feb. 2, 1931. Serial No. 512,911. 4 Claims. (Cl. 261—90.)



1. A humidifier, comprising in combination a revoluble disc having a plurality of concentrically disposed, overhanging steps spaced on the water-contacting side thereof, said steps adapted to be arranged to form a depression on the side of said disc nearer the outlet end of said humidifier, a plurality of apertures through said disc arranged in a circle concentric with and near its axis, and means to conduct water to and through said apertures and thence to the depression side of said disc.

1,869,720. BEVERAGE MAKING MACHINE. ANDREW STRAND and JOHN B. HAWLEY, Jr., Minneapolis, Minn., assignors, by direct and mesne assignments, to Anne Foley Phelps, Minneapolis, Minn. Filed Feb. 26, 1930. Serial No. 431,452. 28 Claims. (Cl. 53—3.)

1. In a beverage making machine, a stationary support, means for delivering beverage making material to said support, means for conveying said beverage making material away from the point of delivery toward the edges of the support, and means for supplying a liquid to the beverage making material as it is being so conveyed.

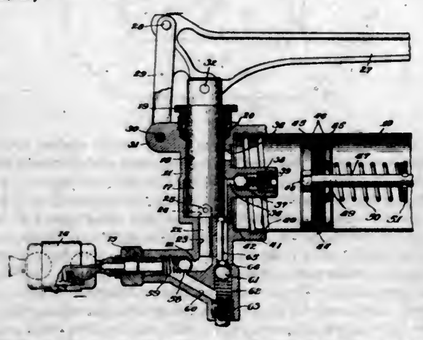


6. In a beverage making machine a support having a series of ribs upon the upper surface thereof, and a rotatable feed scroll operative immediately above said ribs.

1,869,721. EXTRACTION AND CONCENTRATION OF VITAMINS. BARNETT SURE, Fayetteville, Ark. Filed Jan. 15, 1930. Serial No. 421,074. 4 Claims. (Cl. 167—81.)

4. The method of concentrating vitamins B and G from rice polishings which comprises subjecting the material to the solvent action of a mixture of substantially 25% by volume of alcohol with water and containing about .5% of acetic acid, separating solid and liquid, distilling alcohol and water from the liquid under reduced pressure at a temperature under substantially 70° C., adding glacial acetic acid to the residue to dissolve the vitamin content thereof, diluting the mass with anhydrous acetone to form a mixed solvent in which the vitamin is soluble and in which an impurity is insoluble, separating the insoluble impurity from the liquid, distilling the liquid to remove acetic acid and acetone under reduced pressure at a temperature not over substantially 70° C., whereby to form an acidified residue containing the vitamins, adding water to the residue, and simultaneously volatilizing water and acid from the mass, whereby to form a stabile slightly acidified vitamin extract.

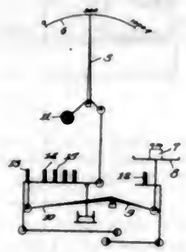
1,869,722. LUBRICANT COMPRESSOR. GEORGE F. THOMAS, Berwyn, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 29, 1928. Serial No. 315,635. 13 Claims. (Cl. 221—47.4.)



1. In a portable hand operated lubricant compressor adapted to discharge lubricant under high pressure, a

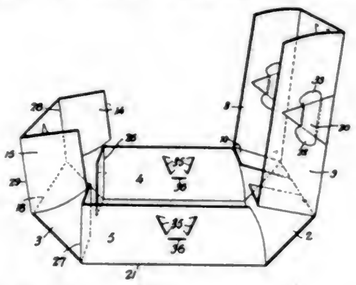
supply chamber, a discharge conduit, a cylinder disposed between said chamber and said conduit, a lever operated plunger in said cylinder to draw lubricant from said chamber into the cylinder and thereupon force it into said conduit, and valvular means separate from and actuated by said plunger to allow excess lubricant in said conduit to be returned to said cylinder from said conduit.

1,869,723. WEIGHING SCALE. ADRIANUS VAN DUYN, Rotterdam, Netherlands, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands, a Limited Liability Company of The Netherlands. Filed Feb. 20, 1928, Serial No. 255,709, and in Germany Mar. 2, 1927. 6 Claims. (Cl. 265—58.)



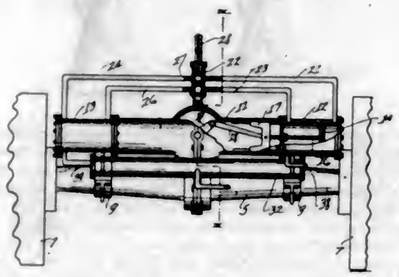
1. In a weighing scale, the combination with a weigh beam, of a fulcrum for supporting said weigh beam so that the portion thereon on one side of the fulcrum is longer than the portion on the opposite side thereof, a weigh pan on the shorter portion of said weigh beam, a pointer connected to the longer portion thereof for indicating the weight of an article placed on said weigh pan, a counterbalance movable with said pointer and a series of loose weights, of equal weight adapted to be selectively placed on opposite ends of the scale pan to increase the weighing capacity of said scales.

1,869,724. FOLDING PAPER BOX. CHARLES P. WALLACE, Lockport, N. Y. Filed Apr. 8, 1930. Serial No. 442,583. 2 Claims. (Cl. 229—33.)



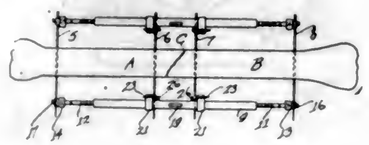
1. A one piece box having a bottom to which are attached exterior side walls having end reinforcing flaps and end walls, one of said end walls having a cover strip from which is struck a triangular locking tab having oval locking ears attached to the sides thereof, and having end flaps for insertion inside said side walls, said cover attached to said other end wall and having side flaps for insertion within said side walls, said side flaps having struck therefrom locking triangular tabs provided with oval locking ears attached to the sides thereof for locking engagement with said side walls, said cover being provided with converging locking slits for cooperation with the locking tab on the cover strip, said slits and the sides of said tabs being coincident when the tabs are folded in position for insertion of the ears in the slits, said side walls provided with slits for cooperation with the locking tabs on said side flaps.

1,869,725. HYDRAULIC BRAKE. EARL E. YOUNGREN, San Francisco, Calif. Filed June 22, 1929, Serial No. 373,015. Renewed Dec. 18, 1931. 1 Claim. (Cl. 188—99.)



In a braking mechanism for motor vehicles having a rear axle assembly and including a driving shaft, a crank interposed between said cylinders, and adaptedly rotated by said driving shaft, pistons mounted in each of said cylinders, connecting rods connecting said pistons and said crank, pipes connecting the opposite ends of each of said cylinders to each other, a valve interposed in said pipes, means for actuating said valve to release the flow into said pipes, a reservoir positioned adjacent said cylinder, a pipe extending from said reservoir to one end of one of said cylinders, a pipe extending from the opposite end of said reservoir to the other of said cylinders, pistons mounted in said reservoir, and fluid means for moving said pistons away from each other for the purpose of injecting fluid into each of said cylinders from said reservoir.

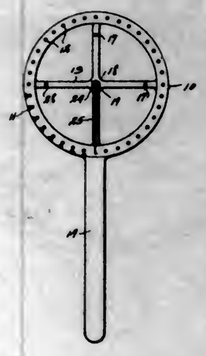
1,869,726. SURGICAL APPARATUS. EARL E. YOUNGREN, San Francisco, Calif. Filed Feb. 10, 1930. Serial No. 427,331. 2 Claims. (Cl. 128—92.)



1. In a device of the character described, comprising a pair of needles adapted to be passed through a fractured bone at a point adjacent the fracture, a second pair of needles adapted to be positioned through a bone at a point remote from said first mentioned needles, pivoted needle clamps secured to said second mentioned needles, offset arms pivotally secured to said clamps, turn-buckles adjustably connected with the offset arms, blocks laterally movable on said turnbuckles, vertically adjustable needle holders positioned in said blocks and adapted to engage said first mentioned needles for the purpose specified.

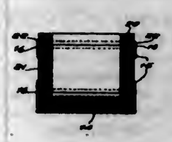
1,869,727. DRAFT GAUGE. CHARLES WALTER WATKINS, Kingston, Pa. Filed Jan. 30, 1930. Serial No. 424,597. 1 Claim. (Cl. 73—2.)

A draft gauge of the character described comprising an annular apertured ring, a hub, a plurality of radially disposed apertured spoke members, a current engaging member, means for swingingly mounting said current engaging member axially of said hub for movement across



one face of said ring, and a pin removably positioned in said apertures of said spokes, said pin being adapted to restrict the movement of said current engaging member.

1,869,728. PROCESS OF MAKING METALLIC BOXES. PAUL R. ZINSER, Chicago, Ill., assignor, by mesne assignments, to Woodall Industries, Incorporated, Detroit, Mich. Filed Apr. 9, 1928. Serial No. 268,435. 1 Claim. (Cl. 204—6.)



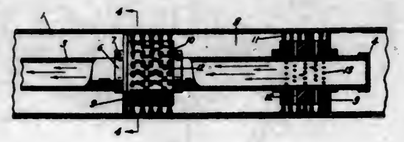
The process of making metallic receptacles consisting in creating a pattern receptacle of water-proof and acid-proof fibrous material, such as laminated paper treated with asphaltum by creating sections of the said pattern receptacle from said material and assembling said sections, coating the interior face of the pattern receptacle with a conductive coating and electroplating a metallic shell upon the interior of said receptacle.

1,869,729. ADHESIVE TAPE CONTAINER AND CUTTER. ROSCOE C. ZUCKERMAN, Stockton, Calif. Filed Feb. 19, 1930. Serial No. 429,565. 8 Claims. (Cl. 206—32.)



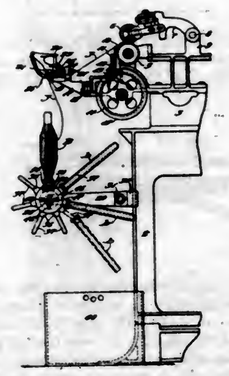
1. An adhesive-tape container and cutter including a circular band having an opening therein and adapted to surround a spool of tape, means mounted in connection with the band for supporting a spool in turnable relation to the band to enable a length of tape being unwound from the spool, while being drawn through the band-opening, a blade member curved concentric with the band and disposed immediately adjacent the same and means mounting the blade in connection with the band for movement over the opening and beyond one end thereof, said end forming a fixed blade to cuttingly cooperate with the movable blade, whereby the projected tape will be severed by the relative movement of the blades into overlapping relation with each other.

1,869,730. APPARATUS FOR CLEANING TUBES. JOHN S. ANTLE, Bexley, Ohio. Filed Oct. 23, 1931. Serial No. 571,585. 5 Claims. (Cl. 15—104.20.)



1. Apparatus for cleaning tubes or the like comprising a device adapted to be inserted into a tube to be cleaned, said device including means adapted to form with the wall of said tube a chamber surrounding said device which is substantially closed at the front and rear thereof, said means being just sufficiently spaced from the wall of said tube to permit the entrance of air to said chamber, and means for creating an effective vacuum in said chamber and for withdrawing the foreign matter therefrom.

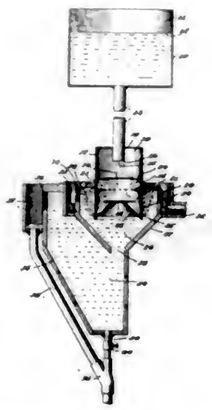
1,869,731. SUPPLY HOLDER. HAROLD ARMITAGE, Brookline, Mass., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 30, 1930. Serial No. 424,709. 8 Claims. (Cl. 242—130.)



1. A supply-holder comprising a plurality of means each adapted to hold a bobbin, means for mounting said holder to rotate on a horizontal axis to adapt it to be adjusted to bring the bobbins successively into delivering position, and automatically-operated detent-means for retaining the holder in the position to which it is adjusted.

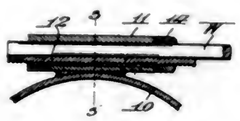
6. In a device of the type specified, the combination of a flanged bearing, an annulus rotatable on the bearing and having detent-notches in its side, spindles projecting radially from the annulus to adapt them to support bobbins, and a latch on the bearing engageable with the notches in the annulus to hold the latter in its adjusted position.

1,869,732. APPARATUS FOR THE CONCENTRATION OF ORES. WILLIAM JAMES ASSELSTINE, Premier, British Columbia, Canada, assignor of one-half to Dale L. Pitt, Premier, Canada. Filed Nov. 10, 1930. Serial No. 494,754. 16 Claims. (Cl. 209—170.)



1. An ore flotation apparatus comprising a pulp feed tank open to the atmosphere, a closed aeration chamber, a compressed air zone at the upper portion of the aeration chamber providing an air cushion to prevent undue vibration, a feed pipe leading from the feed tank to the aeration chamber, a series of baffles in said aeration chamber, a separation chamber separate from said aeration chamber but in communication therewith, wherein froth separates from the pulp, an overflow launder for said froth, and a pulp discharge outlet at the bottom of the separation zone.

1,869,733. ORTHODONTIC APPLIANCE. SPENCER R. ATKINSON, Pasadena, Calif. Filed Jan. 25, 1930. Serial No. 423,491. 6 Claims. (Cl. 32—19.)

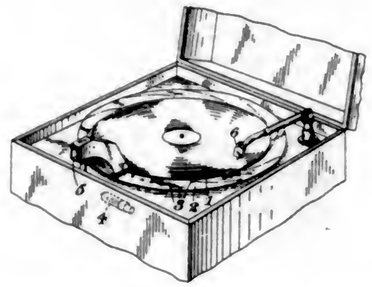


1. In an orthodontic appliance, a tube adapted to be secured to a tooth band, a threaded sheath mounted to move lengthwise through said tube and held against rotary motion, which sheath is substantially U-shape in cross section, an arch wire positioned in said U-shaped sheath and rigidly fixed thereto and a nut screw-seated on one end of said sheath and bearing against the end of said tube.

1,869,734. MANUFACTURE OF ELASTIC-PLASTIC MATERIAL. JEAN BAER, Basel, Switzerland. Filed June 16, 1930, Serial No. 461,640, and in Germany June 24, 1929. 2 Claims. (Cl. 134—17.)

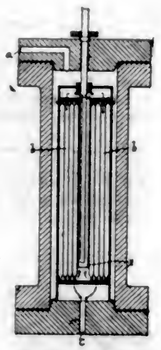
1. A process for producing an elastic-plastic body from a mixture of caoutchouc with the polymerization product of halogenized hydrocarbons of the C_nH_{2n+2} group and a material selected from a group consisting of alkali and alkali earth polysulphides, consisting in dissolving said polymerization product in carbon disulphide and mixing the solution thus obtained and rubber latex.

1,869,735. TELEVISION AND LIKE APPARATUS. JOHN LOGIE BAIRD, London, England, assignor to Television Limited, London, England, a British Company. Filed Oct. 7, 1929, Serial No. 397,983, and in Great Britain Oct. 10, 1928. 7 Claims. (Cl. 178—6.)



1. In apparatus of the class described, the combination with a rotatable element having a record thereon representing variations in light intensity derived by scanning an image, of means for reproducing the variations in light intensity from the record thereof, and scanning means associated with said first named means for deflecting light beams from the latter across a field of vision, said scanning means being carried by said element.

1,869,736. APPARATUS FOR CARRYING OUT EXOTHERMIC CATALYTIC GAS REACTIONS. ALBERT BERENBRUCH, Neurossen, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 21, 1928, Serial No. 271,828, and in Germany May 7, 1927. 7 Claims. (Cl. 23—288.)

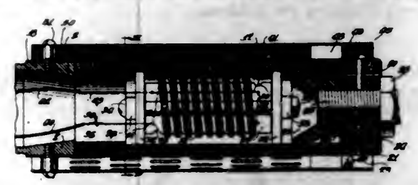


1. Apparatus for carrying out exothermic catalytic gas reactions, comprising a reaction vessel in which tubes containing a catalyst are closely packed together in a bundle.

1,869,737. PORTABLE HEAT BLOWER. ADAM A. BREUER, Chicago, Ill. Filed Dec. 31, 1930. Serial No. 505,764. 8 Claims. (Cl. 29—39.)

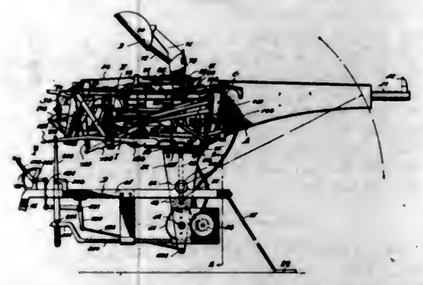
1. A portable heat blower having a discharge nozzle of bent tubular form for insertion in solidified greases,

oils, and the like, said blower including a heating chamber having a discharge outlet, and a tubular nozzle connected to said outlet for insertion in solidified grease



and the like, the nozzle being provided with a lateral opening rearwardly of the discharge end of the same for permitting air discharge when the end is clogged.

1,869,738. MACHINE GUN. LOUIS DAVIS, Jr., Galveston, Tex., assignor of one-eighth to Delbert Hulett and A. J. Stuckey, Galveston, Tex. Filed May 29, 1931. Serial No. 541,039. 32 Claims. (Cl. 89—13.)

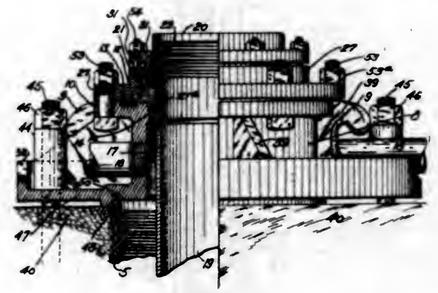


1. A machine gun comprising a barrel, a cylinder rotatably mounted in rear of the barrel, having a plurality of chambers therein, means for rotating the cylinder for successively bringing the chambers therein in registration with the barrel, means for automatically firing a cartridge in the chamber which is in registration with the barrel, means arranged on one side of the cylinder for automatically feeding cartridges successively into the chambers of the cylinder, means arranged on the other side of the cylinder of the gun for automatically ejecting exploded shells from the cylinder, an elevated hopper for supplying cartridges to the feeding mechanism, means under said hopper for supporting a series of cartridges in endwise relation and means for delivering a cartridge one at a time to the feed mechanism.

2. A gun comprising a gun mount, a gun head mounted on the mount for swinging movement in a horizontal plane, the gun head including cartridge firing, feeding and shell ejecting mechanism, a motor for operating said mechanism, and means for automatically oscillating the gun head in a horizontal path including, driving ratchet means a pitman rod for operating said driving ratchet, said pitman rod releasably engaging said driving ratchet and a crank connected with the gun head.

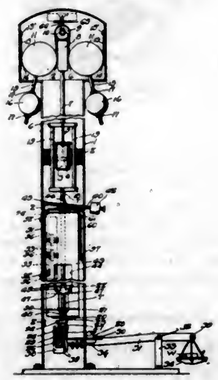
1,869,739. CONTROL HEAD FOR OIL WELLS. CHARLES L. DEAN, Denver, Colo., and LEWIS D. HILTON, San Antonio, Tex., assignors, by mesne assignments, to William A. Trout, Los Angeles, Calif., and Charles R. Butler and Chester A. Rasmussen, Long Beach, Calif. Filed Jan. 21, 1929. Serial No. 333,928. 1 Claim. (Cl. 285—22.)

A control head construction for oil wells including the combination with an outer casing and an inner casing spaced therefrom, a base element, a shoulder on the base element, a coupling connecting the inner casing sections and having a groove, a load carrying ring interlocked with said groove and resting on said shoulder, a packing flange overlying the base element and ring, fastenings for securing the packing flange and base element together to anchor the inner casing to the outer casing and thereby prevent upward movement of the inner casing under gas pressure, said packing flange having a recess in its upper



face above the load carrying ring to provide a packing receiving cavity, a packing in said cavity, and a packing gland cooperating with the cavity formed by said recess and the coupling to compress the packing held therein.

1,869,740. WEIGHING APPARATUS. JOHAN HENDRIK DE IONGH, Wassenaar, Netherlands, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands, a Limited Liability Company of the Netherlands. Filed Apr. 26, 1930, Serial No. 447,454, and in Great Britain May 17, 1929. 19 Claims. (Cl. 265—48.)

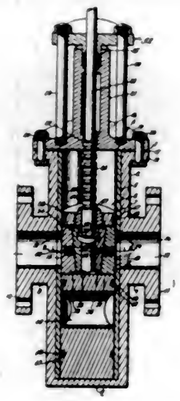


1. Weighing apparatus comprising load counterbalancing devices, an actuating rod having a portion thereof extending above said load counterbalancing devices, and a supplementary weight platform arranged on this latter portion.

1,869,741. VALVE. VIRGIL L. DU BOIS, Tulsa, Okla., assignor to The Stough Tank Erecting Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Aug. 8, 1929. Serial No. 384,295. 6 Claims. (Cl. 251—68.)

1. A valve of the character described including a casing having closed ends, a cylindrical chamber, a flow channel intersecting the chamber, a piston in said chamber having spaced transverse openings and adapted for stop engagement with the closed ends of the chamber for selectively aligning said openings with said channel,

spaced plug members in one of said openings of larger diameter than said channel and conforming to the walls of the casing, a wedge member between said plug members, means for actuating the wedge members to extend the plug members, and means yieldingly urging the plug members outwardly from said wedge members.

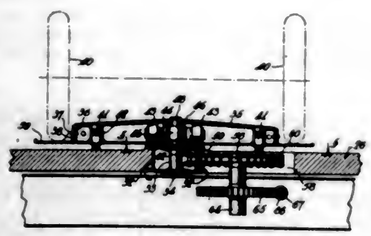


1,869,742. CARTON. LOUIS L. EDMUNDS, Crockett, Calif. Filed Oct. 17, 1930. Serial No. 489,306. 4 Claims. (Cl. 229—39.)



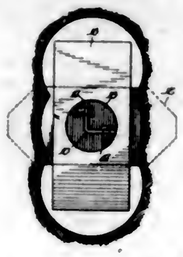
1. In a carton of the type having front, back and side walls glued to form a rectangular container, the combination of a pair of oppositely disposed flaps corresponding in shape and size to the end of the carton, and a pair of interlocking inner flaps having a length greater than half the distance acrcoss the carton, each of said inner flaps having three projecting and overhanging portions which interlock in both a vertical and a horizontal plane.

1,869,743. PARKING GARAGE. ERNST GEIGER, Irvington, N. J. Filed Nov. 28, 1928. Serial No. 322,330. 12 Claims. (Cl. 214—16.1.)



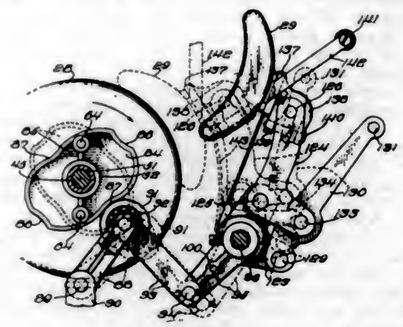
1. In apparatus of the class described, a pair of spaced rails forming a track, a carriage including a low platform, front and rear trucks swivably supporting the same on said rails, rollers mounted on the trucks extending into the space between the rails and engaging the same to prevent tilting of the platform.

1,869,744. FENCE POST ANCHOR. ARTHUR L. GOLDENSTAB, Duluth, Minn. Filed Sept. 19, 1928. Serial No. 307,021. 1 Claim. (Cl. 189—31.)



The combination with a fence post, of an anchoring device associated with the base of the post, said anchoring device comprising two members, one of said members comprising an elongated plate rigidly secured to the base of the post and adapted to be imbedded in the soil upon rotation of the post, the other member comprising a second plate provided with an opening and arranged to loosely encircle the post and to rest upon the upper surface of the first named plate.

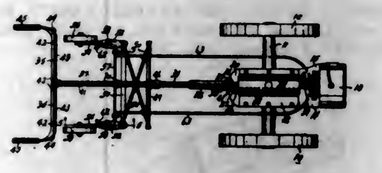
1,869,745. IRONING MACHINE. HERMANN HILL, Detroit, Mich., assignor to Syracuse Washing Machine Corporation, Syracuse, N. Y., a Corporation of Delaware. Filed Apr. 6, 1929. Serial No. 352,978. 8 Claims. (Cl. 68—9.)



1. In an ironing machine, in combination, a roll, a shoe, a constantly driven member, a cam, a roller resiliently pressed against said cam, means connecting said roller and said shoe for causing movement of said shoe in accordance with the position of said roller on said cam, said cam being provided with a depression in which said roller is engaged when said shoe is moved to substantially its point of greatest distance from said roll, said cam being further provided with a depression in which said roller is engaged when said shoe is moved to substantially its point of greatest pressure against said roll, means for clutching said cam to said constantly driven member, and automatic means for disengaging said clutching means when said roller is engaged with either of said depressions.

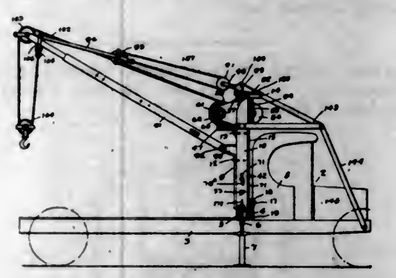
5. In an ironing machine, in combination, an oscillatable shaft, a member fixed thereto, a bell crank pivoted to said member, a link pivoted to said member, means for supporting an ironing shoe on one arm of said bell crank, and disengageable means on the other arm of said bell crank and on said link for holding said bell crank against movement relative to said member.

1,869,746. TRACTOR. JOHN I. HOKE, New Carlisle, Ind. Filed May 24, 1930. Serial No. 455,413. 21 Claims. (Cl. 180—19.)



1. In a tractor having rear pivot wheels and a control shaft adapted to rotate about its longitudinal axis, the combination of a bracket fixedly carried by said shaft, an upper cross bar secured at its center to said bracket, a lower cross bar spaced from the upper cross bar, rods pivotally carried by said cross bars and extending diagonally between the ends thereof, members rotatably mounting said wheels, and arms pivotally carried by the lower cross bar and supporting said wheel mounting members whereby lateral movement of said arms will turn said mounting members and wheels.

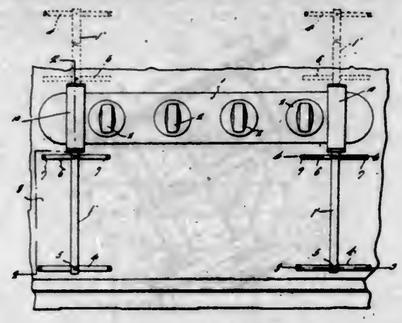
1,869,747. AUTOMOBILE TRUCK DERRICK. WILLIAM S. HOWARD, New York, N. Y., assignor, by mesne assignments, to Utility Products Company, a Corporation of New Jersey. Filed Dec. 26, 1929, Serial No. 416,513. Renewed Jan. 21, 1932. 17 Claims. (Cl. 212—59.)



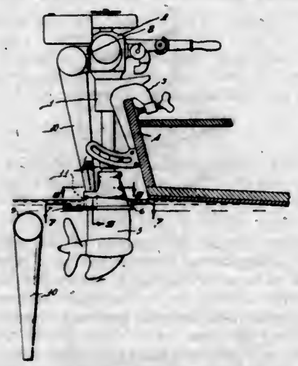
1. The combination with an automobile truck, of a fixed structural frame mounted on the forward part of the chassis of the truck, said fixed frame being broad transversely of the chassis and very narrow from the base upward in the fore and aft direction, a boom swingingly mounted in said frame at an elevation to clear cargo placed on the chassis directly behind the frame, an overhead swiveled support mounted in the upper part of the frame above the boom, a hoisting drum carried by said swiveled support, and means for operating said drum and said swivel support.

1,869,748. SIGNALING DEVICE. JOHN EDWARD HULING, Buffalo, N. Y. Filed May 13, 1931. Serial No. 537,130. 2 Claims. (Cl. 200—52.)

1. In a structure of the class described, a casing, a bracket arranged vertical within the casing, a freely vibrating arm projecting horizontal from the intermediate portion of the bracket and having a contact element at the outer portion thereof, an arm carried by the upper portion of said bracket immediately above said vibrator arm and having an adjustable contact for engagement by the first named contact element, and means to move the casing to actuate said vibrator arm.



1,869,749. EXHAUST TUBE FOR INTERNAL COMBUSTION ENGINES. FINN T. IRGENS, Milwaukee, Wis., assignor to Outboard Motors Corporation, Milwaukee, Wis., a Corporation of Michigan. Filed Oct. 17, 1929. Serial No. 400,218. 3 Claims. (Cl. 115—17.)

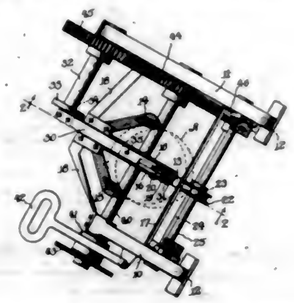


1. The combination with a marine engine having an exhaust port, of a tapered exhaust pipe connected with said port and leading to a point beneath the surface of the water, said pipe having a submersible outlet movable in accordance with the operation of said engine and directed rearwardly with reference to its path of movement, whereby to eliminate back pressure from said pipe, the tapering form of said pipe being adapted to destroy its resonance to pulsation frequencies.

1,869,750. FEEDING DEVICE. LOUIS L. ISSELHARDT, Marion, Ind., assignor to Superior Paper Products Co., Marion, Ind., a Corporation of Indiana. Filed Apr. 17, 1930. Serial No. 444,943. 6 Claims. (Cl. 271—1.)

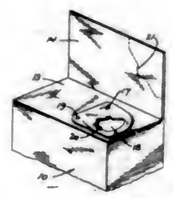
1. A device for feeding blanks for paper plates or the like comprising, in combination, a pair of feed rolls, a rack for holding a stack of blanks and comprising a plurality of guide members and a bed sloping downwardly toward said rolls, said bed being relatively narrow to permit warped blanks to lie closely thereon, one of said guide members having its lower end adjacent said rolls, the forward end of said bed and the lower end of the guide member adjacent said rolls being reversely curved

to permit a warped blank to pass easily therebetween, and a pusher bar movably mounted centrally of said bed and having a longitudinal movement in the plane of said bed to move the bottom blank or predetermined number of



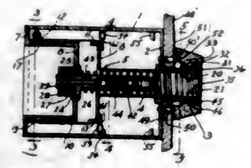
blanks of the stack into said rolls and an upward movement to raise the blanks in the stack and move them against the guide member adjacent the rolls to keep the stack in an orderly condition.

1,869,751. DISPENSING CARTON. GIUSEPPE IACOBITTI, Crockett, Calif., assignor to California and Hawaiian Sugar Refining Corporation, Limited, San Francisco, Calif., a Corporation of California. Filed Aug. 15, 1930. Serial No. 475,565. 5 Claims. (Cl. 229—17.)



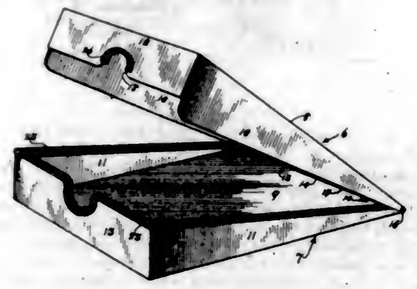
1. A closure device for cartons of the pouring type comprising a supporting member having a pouring opening adapted to be secured upon a closure flap and register with a similar opening in the flap, said supporting member being substantially flat and having a plurality of tines arranged along its edge which when forced through the flap material and flattened are adapted to hold it in place, a movable closure means disposed between said support and the flap adapted when in one position to close said pouring opening, and a second flap having a tearing off portion disposed over said closure means.

1,869,752. TIME SWITCH. JOHN J. JAKOSKY, Los Angeles, and ALFRED W. KNIGHT, South Pasadena, Calif., assignors to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed Aug. 9, 1926. Serial No. 128,090. 2 Claims. (Cl. 200—34.)



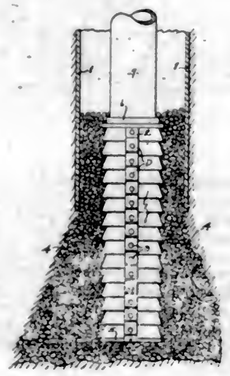
1. A time switch comprising, in combination with an electric circuit, contact means included in said circuit and operable to break the same at either of two points, an operating member operable to first cause operation of said contact means to close the circuit at one of said points while said circuit is closed at the other point and, at a predetermined time thereafter, to cause operation of said contact means to break the circuit at the other of said points, and manually releasable means for holding said operating member in a position of engagement with said contact means such as to cause the circuit to be held open at said one point.

1,869,753. BRUSH PRESERVING CASE. RICHARD KAMM, Chicago, Ill. Filed Mar. 13, 1931. Serial No. 522,342. 2 Claims. (Cl. 206—15.)



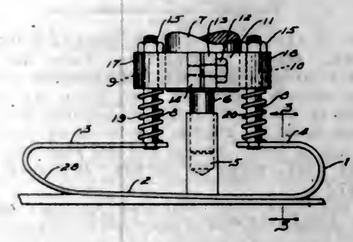
1. A case for preserving the bristle portion of a brush therein, said case comprising two members hinged together and containing wall means thereon adapted to overlap, there being an opening provided in the overlapping wall means for receiving the brush handle therein, and the wall means of one of said members being bent along its edge to form a clamping channel, and compressible strip means clamped in said channel and overlapping the edge of said channeled wall means, so as to be compressed between the two wall means for providing a substantially air-tight case.

1,869,754. WATER WELL SCREEN. ERVIN L. KELLEY, Kansas City, Mo. Filed Mar. 12, 1932. Serial No 598,336. 1 Claim. (Cl. 166—5.)



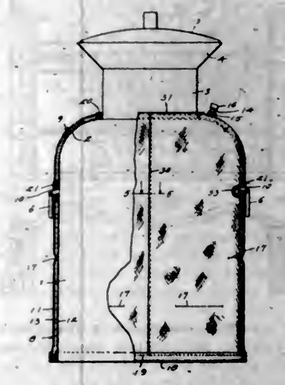
In a water well screen, a member having an annular flanged funneled wall, the flange inwardly extending and integral with the small end of the funneled wall and functioning as a reenforcement therefor, and a seat for a flange union of a casing, lugs spaced around the funneled wall, the lugs transversely extending across the wall, each lug having a tongue longitudinally extending and aligned therewith, means to connect the tongue with the lug of an adjacent funneled wall, by which means the said walls are axially aligned and attached, substantially as shown.

1,869,755. MOLDING FORMING TOOL. ALONZO R. KETCHAM, Detroit, Mich. Filed Aug. 27, 1930. Serial No. 478,016. 11 Claims. (Cl. 153—48.)



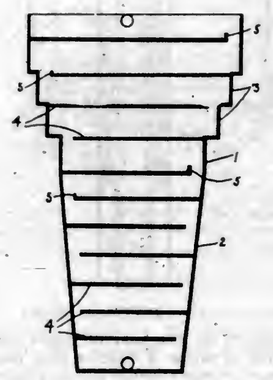
11. In combination with a ram of a power driven hammer, a head having a smooth surfaced and resilient work engaging side adapted to bend a projecting side flange of a molding inwardly upon its intermediate portions.

1,869,756. COOLING JACKET FOR MILK AND OTHER CANS. ALMAN A. KINARD, Memphis, Tex. Filed Sept. 16, 1930. Serial No. 482,302. 2 Claims. (Cl. 150—52.)



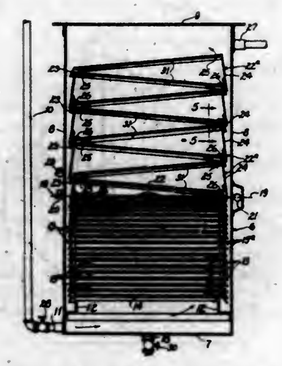
1. A cooling jacket for a receptacle, comprising a body portion adapted to be applied to the receptacle and having inner and outer walls providing therebetween a water chamber and made of porous material to permit the water in the chamber to seep therethrough for evaporation on the outer surface thereof, a filler nipple carried by the jacket and communicating with the water chamber thereof, and a removable closure for the filler nipple.

1,869,757. APPARATUS FOR CONTACTING LIQUIDS AND GASES. HANS KUHNI, Basel, Switzerland, assignor to l'Air Liquide, Société Anonyme pour l'Etude et l'Exploitation des Procédés George Claude, Saint-Lazare, Paris. Filed Nov. 27, 1926, Serial No. 151,098, and in France Nov. 28, 1925. 5 Claims. (Cl. 261—114.)



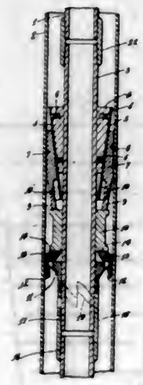
1. A process for bringing in direct contact liquids and gases or vapors, which comprises the step of passing a liquid and a gaseous fluid through a rectifying column in counter-current, while varying the space for contact between liquid and gas when the viscosity of the liquid increases.

1,869,758. SCRUBBER. PAUL LUNOSTRAS, Clayton, Mo., assignor to Lungstras Dyeing and Cleaning Company, St. Louis, Mo., a Corporation of Delaware. Filed May 1, 1931. Serial No. 534,192. 1 Claim. (Cl. 210—47.)



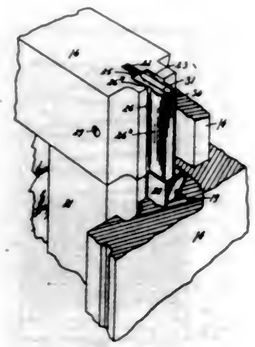
In a device of the character described a tank, pans secured in said tank, slots secured in said pans, angle irons secured to said pans for holding said pans in spaced relationship, secondary angle irons secured to said pans to form baffle plates in the passage of a liquid between said pans.

1,869,759. TUBING ANCHOR. THEODORE L. LYNCH, Oxnard, Calif. Filed Apr. 15, 1929. Serial No. 355,081. 11 Claims. (Cl. 103—219.)



1. In a device of the character described, the combination of a section of tubing, a wedging head positioned on said tubing, anchor slips slidably mounted upon and carried by said wedging head, said slips being provided with serrations on their faces inclined at the axis of said tubing, a ring movably positioned upon said tubing and below said wedging head, a plurality of spaced friction shoes pivotally connected to said ring, a weight slidably positioned on said tubing above said ring, means operably connecting said shoes and weight to cause said weight to force said shoes outwardly from said tubing, and means for limiting movement of said ring longitudinally upon said tubing.

1,869,760. WEATHERPROOF WINDOW CONSTRUCTION. SERN MADSEN, Clinton, Iowa, assignor to Curtis Companies, Incorporated, Clinton, Iowa, a Corporation of Iowa. Filed June 10, 1931. Serial No. 543,305. 15 Claims. (Cl. 20—69.)



1. In a weatherproof window structure, a window sash having grooves in its stiles with wider portions at their outer parts, the window frame having side jambs provided with grooves, weather strips with anchoring portions received in the inner parts of the grooves in the stiles and with spaced resilient leaves in the wider portions of the grooves in the stiles and projecting therefrom into the grooves in the jambs and bearing resiliently against the walls of said latter grooves.

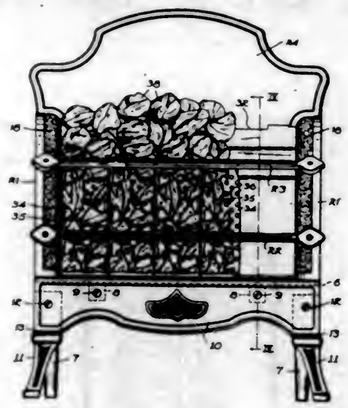
1,869,761. CATALYST FOR THE PREPARATION OF ESTERS. JEROME MARTIN, Terre Haute, Ind., and IGNACE J. KRCHMA, Baltimore, Md., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Original application filed May 16, 1928, Serial No. 278,333. Divided and this application filed May 14, 1931. Serial No. 537,500. 7 Claims. (Cl. 23—237.)

1. A new composition comprising materials selected from the groups consisting of silver and silver compounds, and a uranyl compound of a metal selected from the group consisting of calcium, barium, strontium, magnesium, zinc, silver, and lead.

1,869,762. CATALYST FOR THE PREPARATION OF ESTERS. JEROME MARTIN, Terre Haute, Ind., and IGNACE J. KRCHMA, Baltimore, Md., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Original application filed May 16, 1928, Serial No. 278,334, now Patent No. 1,817,899, dated Aug. 4, 1931. Divided and this application filed May 14, 1931. Serial No. 537,501. 10 Claims. (Cl. 23—237.)

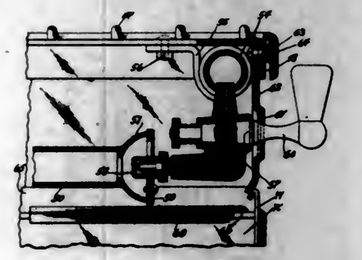
1. A new composition comprising materials selected from the groups consisting of silver and silver compounds, a uranyl compound of a metal selected from the group consisting of calcium, barium, strontium, magnesium, zinc, silver, and lead; and a material selected from the group consisting of metals and compounds of metals selected from the group consisting of copper, nickel, iron and cobalt.

1,869,763. GAS HEATER. GEORGE H. MCFADDEN, Steubenville, Ohio, assignor to The Ohio Foundry & Manufacturing Company, Steubenville, Ohio, a Corporation of Ohio. Filed May 19, 1931. Serial No. 538,436. 6 Claims. (Cl. 126—92.)



1. Heater structure comprising a framework having a back plate and an intermediate plate disposed between the back plate and the front side of the heater, the intermediate plate extending from one end of the heater, the intermediate plate extending from one end of the heater toward the other end adjacent to the longitudinal medial line thereof, and extending upwardly and rearwardly to the back plate, a burner disposed forwardly of the intermediate plate, and radiating elements disposed above the burner and in proximity to the forward side and top sides of the intermediate plate, a passageway for air being provided between the uppermost edge of the intermediate plate and the back plate, and the space below the bottom edge of the back plate, being unobstructed to permit circulation of air upwardly along the rear face of the intermediate plate.

1,869,764. GAS RANGE. EUGENE R. METHUDY, Clayton, Mo., assignor, by mesne assignments, to Methudy Automatic Lighter Company, East St. Louis, Ill., a Corporation of Illinois. Filed July 11, 1927, Serial No. 204,701. Renewed June 15, 1931. 15 Claims. (Cl. 126—39.)



1. A range comprising a burner box frame having an inwardly extending flange and a downwardly extending flange along its front side, a grid supported by said frame, a gas manifold supported at the underside of said inwardly extending flange and near the inner side of said downwardly extending flange, valves opening downwardly from said manifold, a valve cover plate extending downwardly in front of said valves and to the rear of said downwardly extending flange and having openings through which parts of said valves extend, rotary fasteners passing outwardly through said cover plate and said downwardly extending flange, and an element engaging said grid and extending along the front of said downwardly extending flange and being engaged and held by and covering the outer ends and preventing removal of said fasteners.

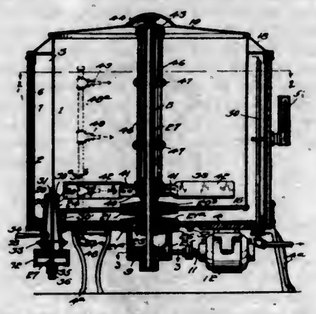
1,869,765. ADJUSTABLE HEADREST. THOMAS WILLIS MITCHELL, Brussels, Ontario, Canada. Filed May 15, 1931. Serial No. 537,566. 5 Claims. (Cl. 155—177.)



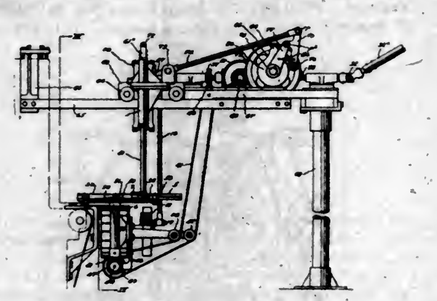
1. A head-rest composed of a stock, a separate and distinct pad, a telescopic element consisting of an outer member slidably mounted in the stock and an inner member secured to the pad, teeth provided on said inner and said outer members, and click means for engaging said teeth to retain the members in various positions of adjustment.

1,869,766. PASTEURIZER. CLIFFORD MORROW, Canton, Ohio, assignor to The H. H. Miller Industries Company, Canton, Ohio, a Corporation of Ohio. Filed Nov. 16, 1929. Serial No. 407,751. 10 Claims. (Cl. 257—108.)

1. In apparatus of the class described, the combination of inner and outer holders disposed concentrically and forming a space between them for a heat exchange medium, a spacing collar between the bottoms of said holders, said holders being formed with openings registering with the openings through said collar, a tubular member mounted at its lower portion in said collar and extending through the openings in said bottoms and upwardly through said inner holder to a point beyond the level of the liquid when said holder is filled, a shaft extending through said tubular member and carrying at its upper end a driving element, means connected to said shaft below said said outer holder, for rotating it, a bearing on said tubular member disposed adjacent the bottom of said inner holder, an agitating device rotatably mounted on said bearing and driving connections between said device and said driving element.



1,869,767. LEER STACKER. CLYDE NAGLE and RAYMOND W. NIVER, Elmira, N. Y. Filed Dec. 2, 1927. Serial No. 237,293. 4 Claims. (Cl. 198—31.)



1. A leer stacker comprising a pusher, a crank for actuating the same, a link pivoted on the crank, a pitman connecting the link and the pusher, and a cam engaging the link and effective for modifying the action of the pusher.

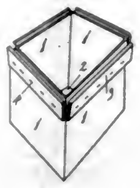
1,869,768. PRODUCTION OF PHOSPHORIC ESTERS. FRITZ NICOLAI, Ludwigshafen-on-the-Rhine, and CURT SCHOENBURG, and GERHARD V. DER BRUCK, Bitterfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 11, 1929, Serial No. 406,509, and in Germany Nov. 22, 1928. 8 Claims. (Cl. 260—98.)

1. The process for the production of neutral phosphoric esters of alcohols, which comprises mixing phosphorus oxychloride at a temperature between about 15° below zero C. and about 15° C. with a primary saturated aliphatic alcohol, heating the mixture to a temperature below that at which the main portion of the hydrochloric acid is evolved, and then removing the hydrochloric acid.

1,869,769. BOX, FOR REFRIGERATED SHIPMENTS AND THE LIKE. ALAN M. OVERTON, Cincinnati, Ohio, assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Oct. 6, 1930. Serial No. 486,565. 4 Claims. (Cl. 229—45.)

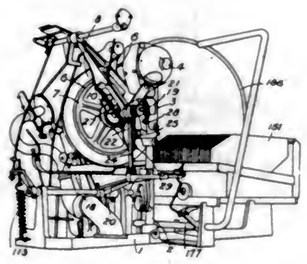
2. In a container having a bottom and side walls, a separate cuff member formed of a piece of board bent upon itself and disposed with its folded portion adjacent the top edge of a side wall, said cuff member being stitched to said

side wall by interspaced stitches passing through a lower edge portion thereof and a side wall, said stitches interspaced to permit the passage of an extension of a cover flap,



a cover for said container, a cover flap on said cover and disposed in the space between said cuff and said side wall, and an extension on said cover flap extending beyond said cuff in the interspace between the stitches.

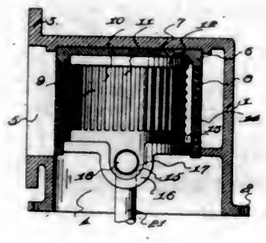
1,869,770. SOUND REPRODUCING APPARATUS. WILLIAM ROBERT OYSTON, Parkville, Victoria, Australia, assignor to Continuous Gramophones Limited, London, England. Filed Sept. 9, 1929, Serial No. 391,219, and in Australia Sept. 10, 1928. 8 Claims. (Cl. 274—10.)



2. In a sound-reproducing apparatus, a controlling mechanism comprising an oscillating shaft, power-driven means for actuating said shaft, a vertically-positioned turntable for a record disk, a pin-provided lever arm mounted on said shaft for centering said disk upon said turntable, said lever arm being operated by the oscillation of said shaft, a spindle rotatable with said turntable, a form rotated by said spindle, a crank-arm fixedly secured at one end to said shaft and a connecting rod having its bottom end pivotally secured to the other end of said crank arm, and a tootbed segment rotatably mounted on a fixed support, said segment pivotally carrying the upper end of said connecting rod and being adapted to be engaged and rotated by the rotation of said worm so as to depress said connecting rod longitudinally.

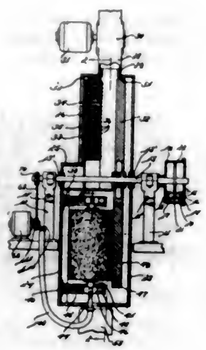
1,869,771. APPARATUS FOR SEPARATING LIQUIDS FROM SATURATED FLUIDS. PASQUALE PASCALE, New York, N. Y., assignor to Dri-Steam Valve Corporation, a Corporation of Delaware. Filed Aug. 28, 1926. Serial No. 132,283. 5 Claims. (Cl. 183—98.)

1. In a separator of the character described, the combination of a hollow body having an inlet opening and an outlet opening, a second body within the first mentioned one and interposed between said inlet and outlet openings, said second body provided with numerous small perforations, a cage within the perforated member and provided with a flange of greater diameter than the cage, whereby said cage is spaced from the inner periphery of



the inner body, to form an annular channel between the inner body and lower portion of the cage to entrap the condensates of the fluid passing through the body, and means communicating with said channel whereby the entrapped condensates are disposed of.

1,869,772. SMOKE PRECIPITATING APPARATUS. SALVATORE PATERNITI, Detroit, Mich. Filed June 15, 1929. Serial No. 371,188. 1 Claim. (Cl. 183—7.)

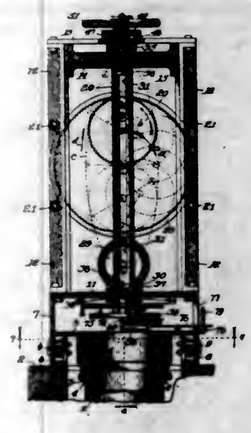


In a smoke precipitating apparatus of the class described: a housing; an enclosing housing mounted in said housing; a circular metallic plate having a radial recess for reception of said enclosing housing; contact members projecting outwardly from said plate; a disc rotatably mounted in said housing and in spaced relation to said plate; and a roller brush mounted in said enclosing housing and engaging the face of said disc.

1,869,773. DISPENSING MACHINE. HERMAN A. POPPENHUSEN, Hammond, Ind. Filed Mar. 5, 1928. Serial No. 259,336. 15 Claims. (Cl. 107—21.)

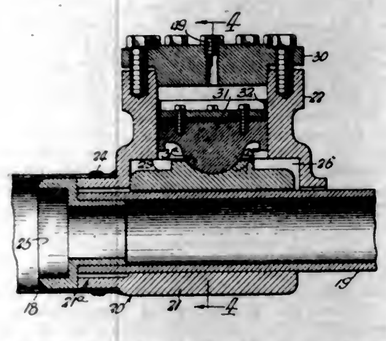
1. A machine for dispensing semi-solid bulk material from a receptacle, comprising automatic means for cutting successive pieces directly from the material within the

receptacle, and means whereby the machine may be set to cut pieces of different sizes from the bulk material



within the receptacle, said means including a pointer which may be set in advance of the operation of the cutting means to indicate the size of the piece to be cut.

1,869,774. RAILROAD SPREADER. HARRY W. PROTZELLER, East Chicago, Ind., assignor to O. F. Jordan Company, East Chicago, Ind., a Corporation of Indiana. Filed Feb. 23, 1929. Serial No. 341,926. 8 Claims. (Cl. 37—105.)



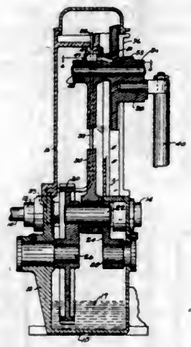
1. In combination with inner and outer telescopic elements, a member on one end of the outer element and through which the other element is longitudinally movable, a device having guided engagement and movable in said member toward and away from said inner element, and a hydraulically actuated piston also movable in said member and engaged with said device to move it into engagement with said inner tubular element said device and piston being formed with interengaging parts that normally permit a rocking movement between them.

1,869,775. LIQUID FUEL FOR METALLURGICAL FURNACES. FRANZ PUENING, Pittsburgh, Pa. Filed Aug. 5, 1925. Serial No. 48,380. 2 Claims. (Cl. 44—8.)

1. As a liquid fuel for metallurgical furnaces: a hydrocarbon liquid consisting of the pitch residuum of high temperature coke oven tar from which so much creosote oil has been removed as to render the residuum non-fluid at normal temperature, dissolved in and held in stable solution by low temperature coal tar, the low temperature coal tar being of such proportion in the liquid relative to the pitch residuum therein that the mixture when moderately preheated is thereby maintained a permanent solution fluid at normal temperature.

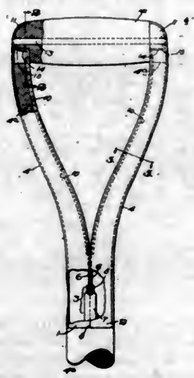
2. As a fuel, a hydrocarbon liquid consisting of the residuum of high temperature coke oven tar from which so much wood preserving oil has been removed as to render the residuum non-fluid at normal temperature, dissolved and held in stable solution by low temperature tar, the low temperature tar being of such proportion in the liquid relative to the said residuum of high temperature coke oven tar therein that the mixture when moderately preheated is thereby maintained a permanent solution fluid at normal temperature.

1,869,776. AUTOMATIC OILING SYSTEM. ALFRED RANDOLPH and EDWIN S. DAWSON, Salem, Ohio, assignors to The Deming Company, Salem, Ohio, a Corporation of Ohio. Original application filed July 29, 1929, Serial No. 381,708. Divided and this application filed May 29, 1930. Serial No. 456,884. 4 Claims. (Cl. 184—4.)



1. In an oiling system for a power head having a connecting rod and a cross head, which have mutual rubbing surfaces and a cross head guide, the combination of an oil cup on the connecting rod, a passageway through said rubbing surfaces for distributing oil from the oil cup to the cross head guide.

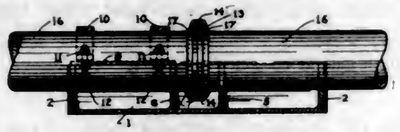
1,869,777. D-HANDLE FOR SHOVELS AND THE LIKE. WILLIAM A. READY, Brookline, Mass. Filed Nov. 18, 1929. Serial No. 407,800. 9 Claims. (Cl. 294—57.)



1. A D-handle construction for shovels and the like comprising, in combination, a sheet metal part composed of two similar pieces, an insert member welded to said two pieces of the casing adjacent to one end of the sheet metal

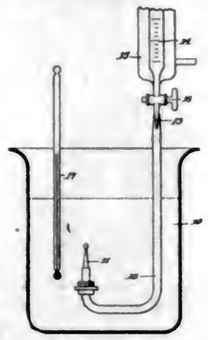
part to unite said pieces at said one end for a portion of their length, and said two pieces diverging from that end, and a grip-piece secured between the spaced ends of said two pieces of the sheet metal part.

1,869,778. APPARATUS FOR COUPLING PIPES. CHARLES L. ROBERTS, Reno, Nev. Filed Oct. 31, 1930. Serial No. 492,588. 3 Claims. (Cl. 61—72.)



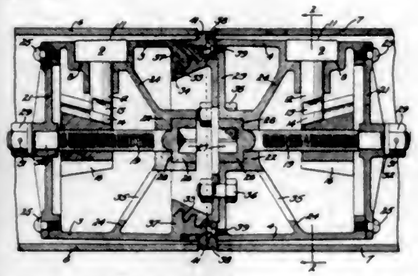
1. A device for coupling submarine pipe sections comprising a semi-cylindrical cradle, a plurality of pipe supports, clamps over certain of said supports and hand holes under said clamps.

1,869,779. LUBRICATING OIL. EDWARD N. ROBERTS, Casper, Wyo., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Apr. 23, 1928. Serial No. 272,321. 8 Claims. (Cl. 87—9.)



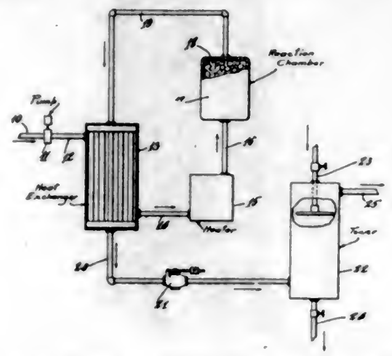
1. The method of controlling the drop size of petroleum lubricating oils which consists in adding thereto not more than about 1% of sperm oil.

1,869,780. COUPLING. LELAND S. ROSENER, San Francisco, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Aug. 12, 1930. Serial No. 474,708. 7 Claims. (Cl. 285—1.)



1. In a coupling for temporarily connecting a pair of pipe sections, frames adapted for mounting on the ends of said sections, dogs on said frames, a wedge movably mounted on each frame, means for positively connecting the dogs and wedges, means for actuating the wedge to move the dogs into locking engagement with the pipe sections, and interengaging means operable to connect the frames for coupling the pipe sections together.

1,869,781. PROCESS OF TREATING OILS. WILLIAM H. SHIFFLER, MELVIN M. HOLM, and MARVIN F. MILLER, Berkeley, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed June 3, 1929. Serial No. 367,889. 19 Claims. (Cl. 196—23.)

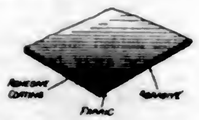


1. In a process of dechlorinating distillates of gasoline and kerosene types, the step of subjecting a condensate having an initial boiling point of below 300° F. obtained from a metallic halide conversion of heavy boiling point mineral oil, said condensate containing a fractional quantity of chlorine other than hydrogen chloride, to a temperature of over about three hundred degrees F. for a period of time sufficient to decompose such combined chlorine.

1,869,782. LIP STICK. WOLDEMAR M. STERNBERG, Oak Park, Ill., assignor of one-half to Epstein & Harris, a Copartnership consisting of Albert K. Epstein and Benjamin R. Harris, Chicago, Ill. Filed Jan. 16, 1926. Serial No. 81,834. 3 Claims. (Cl. 167—85.)

1. A lipstick composed of siliceous materials, water soluble dye materials, and a binder composed of substances which are solid at ordinary room temperatures, readily fusible and non-soluble in respect to the water soluble dye materials, the lipstick being self-sustaining and being adapted to apply a uniform semi-permanent color to the lips when applied thereto after the lips are wetted.

1,869,783. ADHESIVE. LAURENCE CARL STILLE, Valparaiso, Ind., assignor, by mesne assignments, to George C. Peterson Co., Chicago, Ill., a Corporation of Delaware. Filed Jan. 10, 1929. Serial No. 331,639. 6 Claims. (Cl. 87—17.)

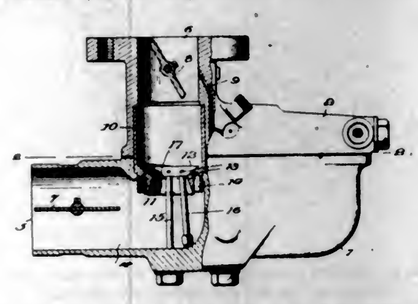


1. An adhesive of the character described consisting of shellac gum, Pontianak gum, titanium oxide, an inert filler and a solvent.

1,869,784. PROCESS OF METAL COATING. HARRY W. THEISS, Louisville, Ohio. Filed Jan. 25, 1928, Serial No. 249,495. Renewed Dec. 10, 1931. 8 Claims. (Cl. 91—70.2.)

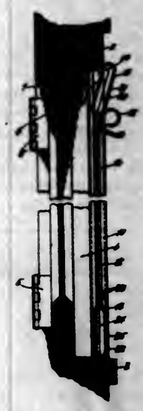
1. The process of continuously coating iron or steel articles which consists in coating the article with zinc and then coating such zinc coated article with lead containing a sufficient amount of zinc to make said lead coating electro-positive to iron and steel and finally smoothing said lead-zinc coating by passing the coated article through heated oil which is substantially resistant to decomposition at the temperature of the molten bath.

1,869,785. CARBURETOR. WILLIAM M. THOMAS, Albuquerque, N. Mex., assignor of one-fourth to Fred W. Lee and one-fourth to Bryan G. Johnson, Albuquerque, N. Mex. Filed June 20, 1930. Serial No. 462,536. 2 Claims. (Cl. 261—41.)



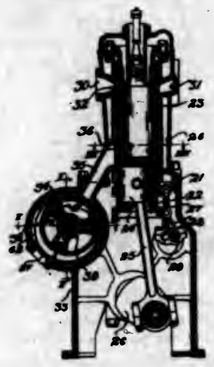
1. In a carburetor for internal combustion engines, a main air passage therethrough, means forming a constricted portion within said passage, said means having an outwardly and onwardly directed shoulder leading from the constricted portion to the wall of said passage, a fuel supplying nozzle in said main air passage, said nozzle having its discharge end terminating adjacent the portion of greatest constriction, an air chamber opening into the main air passage at all engine speeds, surrounding at least a part of the constricted portion of the main air passage, said shoulder having openings therethrough adjacent the constricted portion for the continuous introduction of an auxiliary supply of air from said surrounding chamber into the fuel and air mixture in the main passage, the openings in said shoulders emerging adjacent the point of greatest constriction in said main air passage.

1,869,786. WINDOW SCREEN AND SUPPORT THEREFOR. MICHAEL J. TRACY, St. Louis County, Mo. Filed Oct. 14, 1931. Serial No. 568,685. 4 Claims. (Cl. 156—14.)



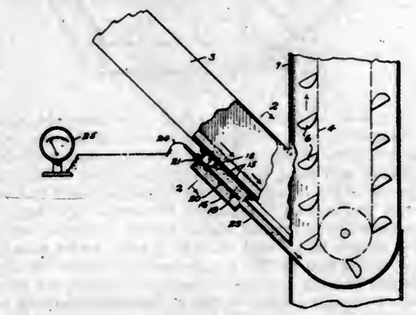
1. A window screen comprising a pair of vertical tubular guides having slots through their adjacent edges and each having a notch at its upper end and a notch near its lower end, a section of screen material having its marginal portions extending through said slots into said guides, longitudinally movable frame members mounted in said guides and engaging the marginal portions of said screen section, and transverse frame members attached to the upper and lower ends of said screen section, the transverse frame member at the upper end of said screen section extending permanently through said notches at the upper ends of said guides.

1,869,787. SUPERCHARGER. JOHN T. TRUMBLE, Lansing, Mich. Filed Sept. 19, 1927. Serial No. 220,586. 17 Claims. (Cl. 123—76.)



1. A supercharging pump for internal combustion engines comprising an eccentric rotor and a cylinder each revolving at the same speed, vanes connecting said rotor and cylinder, said vanes defining separate chambers, ports in the wall of said cylinder for charging and discharging said compartments, and individual passages for each cylinder of the engine positioned to be uncovered by said ports at predetermined periods of the cycle of operation in each cylinder.

1,869,788. THERMOCOUPLE POCKET. LAWRENCE B. WEST, Chattanooga, Tenn. Filed Sept. 20, 1930. Serial No. 483,369. 9 Claims. (Cl. 73—32.)

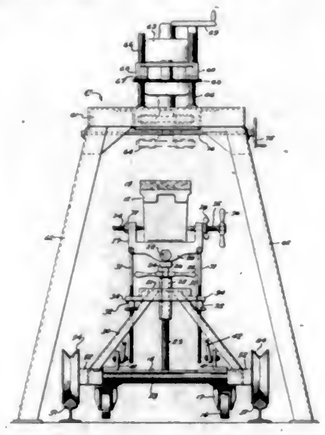


6. In a device of the character described the combination of a chute; means forming a chamber secured to said chute; a perforated member separating said chute and said chamber; and a thermocouple in said chamber.

1,869,789. SUCTION BOX DRESSER. FRANK M. WILLIAMS, Watertown, N. Y. Filed July 31, 1929. Serial No. 382,515. 6 Claims. (Cl. 144—118.)

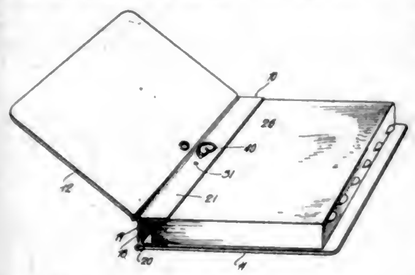
1. Apparatus assembly for refinishing the surface of suction boxes for paper machines, comprising a pair of trucks provided with cradles for mounting a suction box

therebetween, means associated with the cradles for varying the elevation and inclination of the suction box, a cutter mounted in spaced relation to the path of movement of said trucks relative to the cutter, means for



contacting the cutter with the suction box mounted on said cradles, and means permitting the moving of said cradles and suction box supported thereby relative to said cutter during such contact.

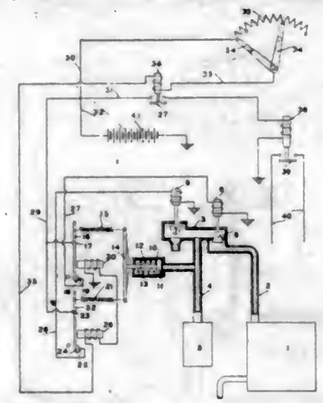
1,869,790. LOOSE-LEAF BINDER AND LOCK. WALTER F. WOLF, New York, N. Y. Filed Sept. 22, 1930. Serial No. 483,649. 2 Claims. (Cl. 129—13.)



1. In a loose leaf binder, a pair of cover members, rigid flaps hinged to said cover members over which the said members may be swung, a locking post extending inwardly from one of said flaps, and a releasable locking device carried by the other of said flaps for telescoping said locking post and for locking engagement therewith, said locking device including a tubular casing having a conical wedge surface on the inner wall thereof, a ball carrier slidable in said casing and having a post-receiving socket therein, a plurality of balls mounted in said ball carrier for cooperation with said conical wedge surface and movable beyond the inner walls of said socket, a spring acting upon said ball carrier to position the balls in engagement with the wedge surface, and a manipulating member pivoted to the outer free end of said ball carrier by which the same may be manually actuated against the action of said spring to release said balls.

1,869,791. ELECTRICAL CONTROL OF FLUID PRESSURE. ORVILLE C. WRIGHT, St. Louis, Mo. Filed July 9, 1931. Serial No. 549,793. 8 Claims. (Cl. 137—139.)

1. In a device of the class described, the combination with a source of fluid supply, of a pressure chamber communicating therewith, application and release valves, actuating mechanism for said valves independently movable adapted to maintain a variable pressure in said chamber,



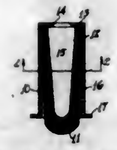
said mechanism including a control circuit and a pair of valve actuating circuits and means for varying the current strength in said control circuit to influence the opening and closing of said valve actuating circuits.

1,869,792. COOLING AND ICE TANK COILS. ERNST S. H. BAARS, Milwaukee, Wis., assignor to The Vilter Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 3, 1929. Serial No. 383,272. 5 Claims. (Cl. 62—158.)



1. In cooling and ice tank coils, the combination of a tank, said tank being filled for a desired height with a refrigerating medium, upper and lower headers within the tank communicating with a source of liquid refrigerant supply, sets of cooling tubes for the circulation therethrough of the cooling medium, each set comprising at least three tubes, the major portion of each tube being vertically disposed, one of said tubes communicating at its upper end with the interior of the upper header through the top of said header, and the lower end of said tube communicating with the lower header through the top thereof, and the upper ends of the other tubes communicating with the interior of the upper header through the bottom thereof and extending upwardly into the interior of said header for a desired distance, and its lower end communicating with the lower header, and means for causing a circulation of the refrigerating medium within the tank back and forth around the cooling tubes.

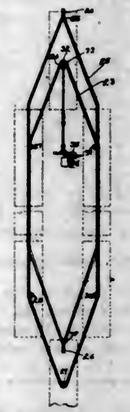
1,869,793. BUFFER. HARVEY W. BAILEY, Portland, Oreg. Filed May 14, 1929. Serial No. 363,051. 3 Claims. (Cl. 267—63.)



1. A buffer consisting of a tapering elongated rubber cell whose resiliency increases toward its smaller end, a head on its smaller end to which pressure can be applied,

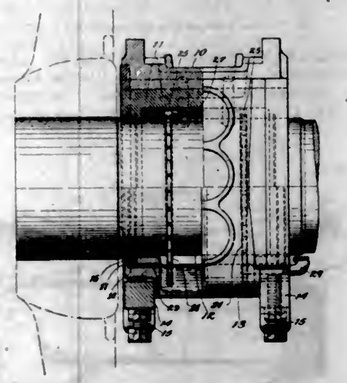
said head serving as a guide for directing said pressure along the axis of said buffer, and a buffer casing for supporting the walls of said cell against outward expansion and for the purpose of adding a frictional resistance to the compressive and resilient resistance of said cell.

1,869,794. STORAGE BUILDING FOR AUTOMOBILES. JOSEPH D. BELL, San Francisco, Calif. Filed May 21, 1928. Serial No. 279,574. 10 Claims. (Cl. 214—16.1.)



1. A place of storage for vehicles comprising a floor having a groove therein, a cam groove secured on the floor in a higher plane than the groove, an endless chain movable in said groove, a plurality of load carrying trucks, an arm extending from one truck to the chain and connected therewith, a guide pin carried by each truck and extending into the cam groove for directing the movement of the truck around the floor as it is moved from one place to another by the endless chain.

1,869,795. BOX AND BEARING FOR RAILWAY VEHICLES. JOSEPH N. BLUE, Big Spring, Tex. Filed Aug. 12, 1930. Serial No. 474,757. 3 Claims. (Cl. 308—85.)



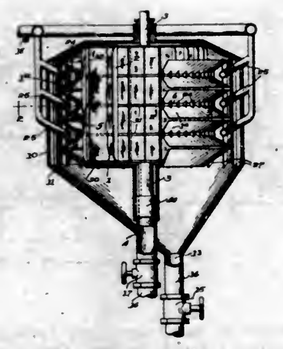
1. In a journal box and bearing, in combination, a boxing surrounding the journal having an open end, a bearing in said boxing engaging the upper half of the journal, a lubricant holder slidably mounted in the open end of said boxing having longitudinally and transversely extending end faces, the longitudinally extending end faces of said holder abutting similar longitudinally extending end faces on said bearing and the transversely extending end faces thereof residing closely adjacent the journal and having joint packing therein, a distancing member across the open end of said boxing, said member having means for drawing the longitudinally extending abutting end faces of said holder and bearing together and drawing said joint packing into engagement with the journal, and lubricant carrying means forming a loop around said journal and passing through said bearing and lubricant holder.

1,869,796. SLIP-ON BED BRACE. EDWARD CLAUSSEN, Walla Walla, Wash. Filed Apr. 29, 1931. Serial No. 533,596. 4 Claims. (Cl. 5—305.)



1. In a slip-on bed brace, clamping means frictionally attached to the side rail of a bed, clamping means frictionally attached to the bed post thereof, means to yieldingly separate said clamping means, and means to forcibly urge said clamping means toward each other to securely brace said bed.

1,869,797. SEPARATION OF MATERIALS. JOHN M. CLEAVER, Los Angeles, Calif. Filed Apr. 20, 1931. Serial No. 531,327. 15 Claims. (Cl. 210—64.)

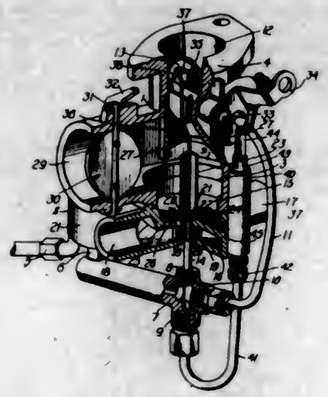


6. In combination, a housing, an impeller adapted for rotation in the housing, a circumferential discharge slot in the housing, an intake to the housing, an outlet at the axis of the housing, a shell enclosing the housing and forming a passageway communicating with the intake and the discharge, and a supply conduit leading to said passageway.

1,869,798. CARBURETOR. ARTHUR COLEMAN, Kansas City, Kans. Filed Oct. 31, 1930. Serial No. 492,465. 5 Claims. (Cl. 261—15.)

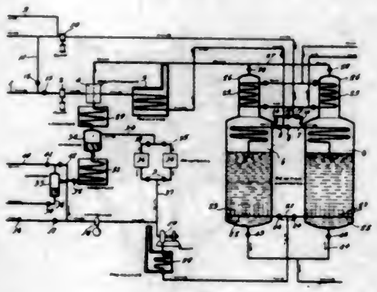
1. In a carburetor including a casing having a mixing chamber provided with a fuel outlet, a vertical tube within said chamber and carried by the bottom thereof,

a jet having a port for admitting fuel through the tube to the mixing chamber, means for supplying fuel to the jet, a chamber in said casing below the mixing chamber



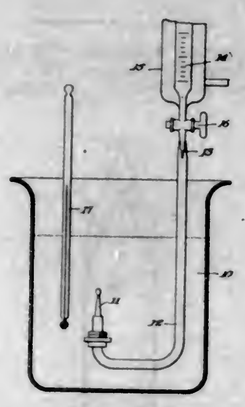
for heating the jet and tube to vaporize fuel passing therethrough, and a valve controlling the outlet from the mixing chamber.

1,869,799. PROCESS OF CONVERTING HEAVY HYDROCARBONS. PHILIP S. DANNER, Point Richmond, Calif., assignor, by mesne assignments, to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Apr. 30, 1925. Serial No. 26,836. 7 Claims. (Cl. 196—54.)



1. The process of converting heavy hydrocarbons consisting in heating the hydrocarbons, forcing said heated hydrocarbons under a relatively high pressure into a closed chamber, mixing an aluminum chloride with a suitable liquid, forcing the mixture thus made into the closed chamber, forcing jets of preheated hydrogen gas into the liquids in the chamber at a pressure of above about 100 atmospheres to agitate the same and to combine some of said gas with the hydrocarbon molecules, cooling the hydrogen gas that does not chemically react in said chamber together with the hydrocarbon vapors and aluminum chloride vapors sufficiently to condense only the heavier hydrocarbon vapors and the aluminum chloride vapors, returning to the chamber the condensates thus formed, cooling the lighter hydrocarbon vapors and fixed gases sufficiently to condense said vapors, and separating said condensed vapors from the fixed gases.

1,869,800. LUBRICATING OIL. STERLING H. DIGGS, Casper, Wyo., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Apr. 23, 1928. Serial No. 272,257. 19 Claims. (Cl. 87—9.)



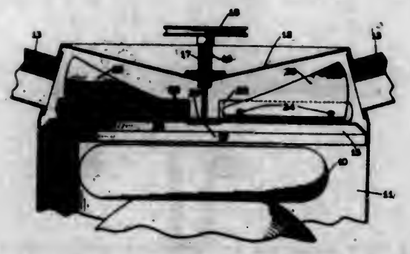
1. The method of controlling the drop size of petroleum cylinder stock which consists in adding thereto not more than about 1% of oil soluble lead soaps.

1,869,801. HATBAND. ANTHONY DONATO, Schenectady, N. Y. Filed Nov. 4, 1930. Serial No. 493,453. 3 Claims. (Cl. 2—179.)



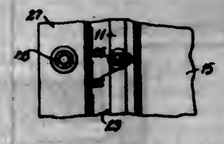
1. In a hat band of the type described having a knot formation near one end, a hook fastener on the said one end having its hook directed away from the inward side thereof, a second hook fastener on the remaining free end of the band having its hook directed away from the outward side thereof, so that the hooks will engage the band when it is mounted on a hat.

1,869,802. FAN BLADE ATTACHMENT. JOSEPH P. DORE, Holland, Mich., assignor to Holland Furnace Company, Holland, Mich., a Corporation of Michigan. Filed July 13, 1931. Serial No. 550,429. 3 Claims. (Cl. 230—119.)



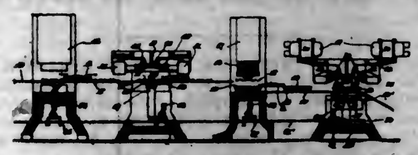
1. In a device of the class described, a cylindrical jacket having a closed end and a lateral outlet near said closed end, a fan rotatable on an axis substantially coincident with the axis of said cylindrical shell, said fan consisting of a flat hub portion, two blades extending radially from said hub portion at opposite angles thereto, said blades being attached to the flat hub portion, a scoop member detachably fastened to each blade parallel to but spaced from the forward edge of the respective blade, said scoop member curving upwardly and rearwardly from said blade for the purpose described.

1,869,803. CARDCASE AND METHOD OF MANUFACTURE. WILL J. ECKER, Jr., St. Louis, Mo. Filed May 21, 1930. Serial No. 454,279. 6 Claims. (Cl. 206—46.)



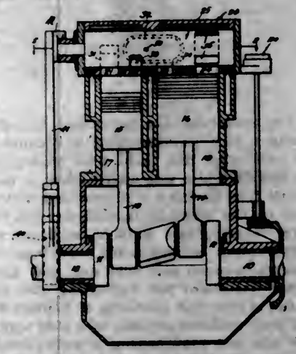
1. A card holder, sheets of tissue paper and cards, and single means of detachably securing the cards to the holder by means of the tissue paper.

1,869,804. APPARATUS FOR WELDING WHEELS TO RIMS. CAROLUS L. EKSERGIAN, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 6, 1928. Serial No. 267,831. 6 Claims. (Cl. 219—4.)



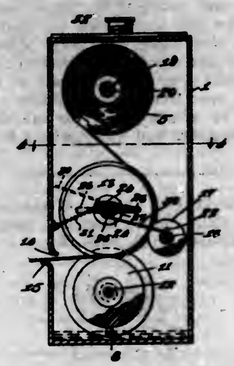
1. A welding machine comprising a work conveyor operating to convey the work to be welded upon a determinate path, a plurality of welding electrodes in relatively fixed juxtaposition to the path, means to shift the work from the path to the electrodes and back again, and means to operate the welding electrodes and close the welding circuit in synchronism with said shifting means.

1,869,805. ART OF FUEL INJECTION FOR INTERNAL COMBUSTION ENGINES. ORVILLE H. ENSIGN, Pasadena, Calif., assignor to Ensign Carburetor Co., Ltd., Huntington Park, Calif., a Corporation of California. Filed Jan. 17, 1927, Serial No. 161,513. Renewed Dec. 29, 1931. 26 Claims. (Cl. 123—68.)



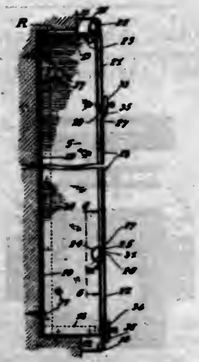
1. In combination with an internal combustion engine having mechanism for compressing successive charges; means for isolating a part of a compressed but unfired charge and returning that part to a subsequent charge at the beginning of its compression, and means for supplying fuel to said isolated partial charge exclusively during its return flow to said subsequent charge being compressed.

1,869,806. CABINET. ROY B. GALE, Frisco, Colo. Filed May 13, 1931. Serial No. 537,144. 4 Claims. (Cl. 91—14.5.)



1. A cabinet divided into two compartments, one containing a deodorant and said compartment having an opening communicating with the second compartment, the second compartment having a roll of soft tissue journaled therein, perforated to divide the same into sheets, rolls between which the sheets are directed, another roll journaled in the cabinet in contact with one of the first named rolls, an apertured disc providing a valve mounted with the last named roll for admitting the deodorant into the second named compartment when the aperture in the disc registers with the opening in the deodorant compartment, means on the shaft of one of the first named rolls for turning the latter to unroll the tissue, means operated by said turning means for momentarily stopping one of the contacting rolls to cause the severance of the sheets of tissue and for directing the sheets singly through the cabinet to cause the roll provided with the valve to contact with the under face of the sheet to impregnate the same with the deodorant.

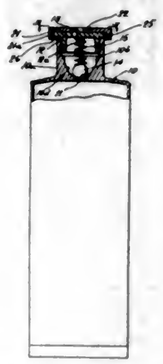
1,869,807. WALL CABINET. SAMUEL HAMMER, Brooklyn, N. Y., assignor to United Metal Box Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 7, 1929. Serial No. 405,346. 1 Claim. (Cl. 312—112.)



A wall cabinet comprising a vertically elongated sheet metal body structure adapted to be mounted in a wall recess and having a marginal frame of angular cross sec-

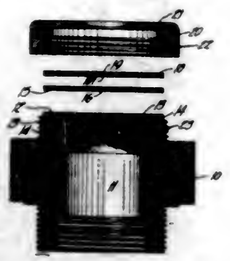
tion surrounding the front open side thereof to engage the face of said wall, and said structure at opposite sides thereof and at the juncture of the body wall with said frame being provided with vertically extending shoulders having slots therethrough at vertically spaced points, a sheet metal panel having marginal flanges engaging said shoulders, bendable tongues secured to and projecting rearwardly from said flanges engaged through said openings and securing said panel upon the shoulders, said panel at its upper and lower ends being spaced from the bottom and top walls respectively of the cabinet, and upper and lower doors hinged respectively to the rear side of said frame at the top thereof and upon the rear side of said panel at its lower end for independent operation to open position and for swinging movement by gravity to a normal closed position against said shoulders and substantially in the plane of said panel.

1,869,808. DISPENSING TUBE. WILLIAM T. HANCOCK, Long Beach, Calif. Filed Dec. 18, 1929. Serial No. 414,858. 4 Claims. (Cl. 221—60.)



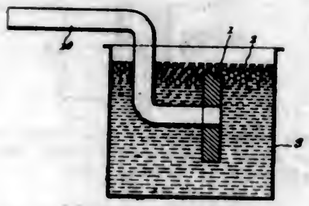
1. A dispenser of semi-liquid substance comprising, in combination: a compressible container having a neck within which is provided a chamber, a restricted opening at each end of said neck, one of said openings providing communication between the chamber and container and the other forming a final discharge orifice, and a spring pressed valve in said chamber normally seating against said first mentioned opening and adapted to be unseated by pressure in the container; the inner walls of said neck converging downwardly to said first mentioned opening to form guide means for the valve.

1,869,809. LIQUID ATOMIZING DEVICE. JOHN M. HEWLETT, Schenectady, N. Y. Filed Dec. 24, 1930. Serial No. 504,511. 3 Claims. (Cl. 299—120.)



1. In a liquid spray device, a head having a free plane surface, a recess formed in the end thereof, a first disc having plane parallel surfaces and a central opening and tangential slots for conducting liquid from said recess to said opening, said first disc being seated against the end surface of said head, a second disc having plane parallel surfaces, one of which is adapted to be seated against said first disc, said second disc being provided with a central orifice, communicating with the central opening of said first disc, and a cap for retaining said discs in position against the end surface of said head.

1,869,810. PROCESS OF MAKING CHILLED FOOD PRODUCTS. LINZY HICKS, Lexington, Ky. Filed Jan. 28, 1927. Serial No. 164,312. 1 Claim. (Cl. 107—54.)



The art of producing articles of the class described comprising forming a ring of frozen edible material of sufficient stability to be self-sustaining when encircling a support, inserting a tool in the opening of the ring proportioned to snugly fit said opening, coating the balance of the ring with an edible coating, and removing the tool.

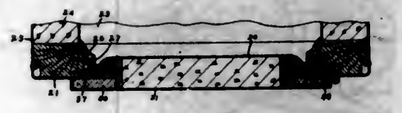
1,869,811. FLOW INDICATOR. LELAND H. HILL, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed Sept. 8, 1923, Serial No. 661,550. Divided and this application filed June 24, 1927. Serial No. 201,065. 5 Claims. (Cl. 73—167.)



1. A unitary structure for indicating the flow of a fluid traversing a pipe line including a Venturi tube for insertion in said pipe line, said tube having high and low-pressure openings in a side wall thereof, a manometer for said Venturi tube having a wall provided with openings corresponding to the openings in said Venturi-tube wall, and means for securing said walls in adjacent sealed relation, whereby said corresponding openings form individual passages between said tube and said manometer.

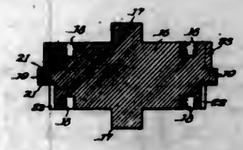
5. A unitary structure for indicating the flow of a fluid traversing a pipe line including a Venturi tube having high and low-pressure openings in a side wall thereof, a manometer for said tube having a wall provided with openings corresponding to the openings in said Venturi tube wall, said walls having registering apertured extensions, and means including a gasket between the walls and bolts cooperating between said extensions for securing the walls in adjacent sealed relation, whereby said corresponding openings form individual passages between said tube and said manometer.

1,869,812. REFRIGERATING APPARATUS. WILLIAM C. HOLBROOK, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 31, 1928. Serial No. 316,285. 4 Claims. (Cl. 25—4.)



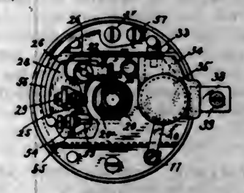
1. A door for a refrigerator comprising a substantially rectangular frame having an edge provided with a flanged offset, insulation within said frame, a metal pan on one side of said frame with its edge partly over the edge of the frame, a second metal pan on the other side of said frame with its edge adjacent the edge of said frame near said flanged offset, there being a gap between the edges of said pans, a gasket adapted to bear against a portion of the refrigerator, and a finishing strip in said gap between said first named pan and said flanged offset adapted to lock said gasket in place between the edge of said first named pan and said finishing strip.

1,869,813. VALVE WRENCH. ROBERT M. JONES, Chicgo, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 2, 1930. Serial No. 472,567. 2 Claims. (Cl. 81—90.)



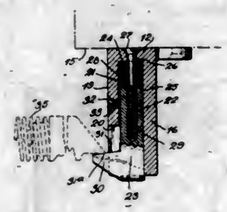
1. A valve wrench comprising a disc-like head of suitable diameter to be received within a valve seat ring when in position in a valve, said disc having a laterally projecting flange arranged to abut the face of said ring when the head is inserted therein, a protective covering on said flange, means on said disc for engaging the inner surface of said ring, a handle for said head and means for locking said handle to said head in any one of a plurality of positions.

1,869,814. IGNITER. ALBERT G. KARKAU, Cleveland, Ohio, assignor to Joseph A. Williams, Cleveland, Ohio. Filed Sept. 21, 1928. Serial No. 307,362. 20 Claims. (Cl. 200—31.)



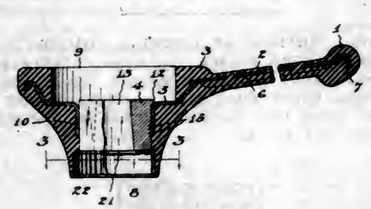
18. In an igniter a rotary shaft having a cam, a circuit breaker adapted to be operated thereby, a laterally movable slide carrying the circuit breaker, and a governor adapted to be rotated by the shaft and operatively connected to both the slide and the cam so as to move the slide laterally outward and to turn the cam on the shaft as the speed increases.

1,869,815. STRIKER FOR DOORLOCKS. ALEXANDER S. KATZ, Brooklyn, N. Y. Filed Dec. 24, 1930. Serial No. 504,572. 20 Claims. (Cl. 292—340.)



6. A lock keeper comprising a member having a plate portion adapted to be attached to a door jamb, a rear wall extending perpendicularly to said portion, a pair of parallel side walls extending from said rear wall, a front wall spaced from and parallel to said rear wall, interconnecting said side walls, said front wall terminating short of the ends of said side walls, and a strike member having a shank formed with a smooth surface slidably received between said front, rear and side walls and a head disposed between said side walls and projecting away from said rear wall and beyond said front wall.

1,869,816. STEERING WHEEL. HERMAN T. KRAFT, Akron, Ohio, assignor to The H. A. Husted Company, Detroit, Mich., a Corporation of Mich. Filed Feb. 21, 1930. Serial No. 430,196. 4 Claims. (Cl. 74—33.)



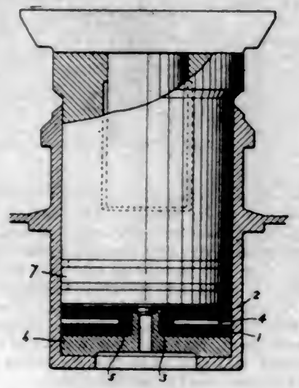
1. In a composition steering wheel having a central axial hub portion, a metallic hub member embedded in said axial portion and having an axial bore therein for the reception of a steering post, and a cup-shaped member of greater diameter than said bore for the reception of a steering post housing abutting against an end of said hub member and being embedded in said axial hub portion in axial alignment with said hub member.

1,869,817. METHOD OF MAKING DENTAL PINS. KURT K. LEDIG, Newark, N. J., assignor to American Platinum Works, Newark, N. J., a Corporation of New Jersey. Filed Aug. 9, 1929. Serial No. 384,741. 1 Claim. (Cl. 91—70.1.)



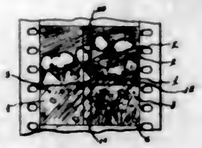
The method of making a dental pin having a nickel base, comprising plating the pin with gold then heating the plated pin in a furnace containing charcoal at a temperature below the melting points of the metals used, to cause a diffusion of the gold plate with the nickel base, the gold plate completely covering the pin.

1,869,818. CUSHION FOR MOLDING MACHINES. WILFRED LEWIS, Haverford, Pa., assignor to The Tabor Manufacturing Company, Philadlphia, Pa., a Corporation of Pennsylvania. Filed May 31, 1929. Serial No. 367,248. 3 Claims. (Cl. 267—1.)



1. A cushion for jar molding machines comprising a flat steel disk provided on each of its faces with a marginal flange and having between its faces an annular groove extending toward its center and providing a relatively small centrally disposed hub.

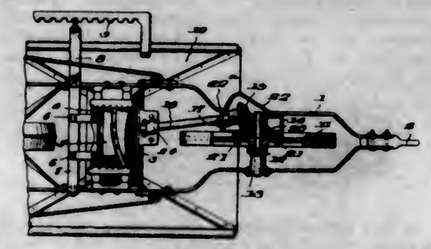
1,869,819. METHOD OF FORMING COMPOSITE MOTION PICTURE FILMS. RAYMOND J. MAMMES, Los Angeles, Calif., assignor to Metro-Goldwyn-Mayer Corporation, Culver City, Calif., a Corporation of New York. Filed Dec. 12, 1927. Serial No. 239,355. 2 Claims. (Cl. 88—16.)



1. A method of producing motion picture films containing scenes composed of a plurality of different and separately recorded components, comprising photographically recording different components on separate negative films, and developing such negative films, printing all components recorded on one of said negative films upon a portion of a positive film, protecting other portions of said positive film from exposure during such printing, then protecting the exposed portion of the positive film as well as a part of the remaining unexposed portion of said positive, printing all components carried by another of said negative films upon the unprotected, unexposed portion of the positive film, optically reducing the components carried by said last named negative film during such printing operation, then protecting the exposed portions of said positive film and printing into the unexposed portion of said positive film the components carried by another negative film, so as to form a single composite scene on the positive film which includes components recorded on all of said negatives.

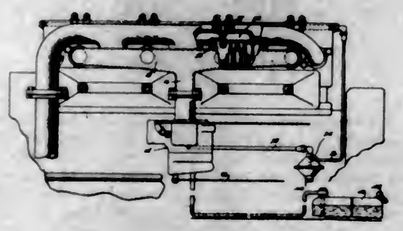
1,869,820. FERTILIZER DISTRIBUTOR. JOHN A. MCKAY and PATRICK H. LYNCH, Dunn, N. C. Filed May 27, 1930. Serial No. 456,194. 2 Claims. (Cl. 74—56.)

2. In a machine of the class described, the combination with a frame, of a shaft supported thereby, driving means for said shaft comprising a ground wheel and gearing associated therewith and a housing for said gearing comprising a main section and a cover plate therefor, connected thereto and substantially coextensive therewith,



said section and plate forming a bearing for said shaft, said housing projecting laterally, and having a relatively long inclined forward face, whereby when any obstruction is encountered as the machine moves along, either the obstruction or the machine is deflected.

1,869,821. CHARGE SUPPLYING AND MIXING METHOD AND APPARATUS FOR INTERNAL COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed May 31, 1929. Serial No. 367,206. 47 Claims. (Cl. 123—119.)

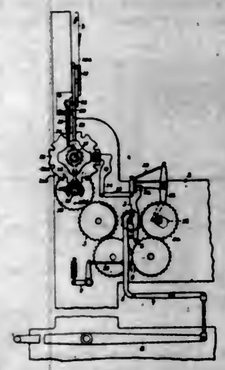


1. Method of supplying and mixing charges for internal combustion engines in which the fuel is blasted into the air stream in the direction of flow thereof in the region of intake depression between the throttle and engine cylinders in a state of comminution by and with high pressure gases discharged in effective inductive relation to the mouth of the fuel passage and attaining a maximum inductive effect approximating the maximum intake depression as the latter approaches its minimum value, and the fuel passage is varied in opening by and as a direct function of pressure reduction in the intake at wide open throttle operation.

1,869,822. CHANGE MECHANISM FOR LOOMS. CHARLES A. RAMSEY, Paterson, N. J. Filed May 15, 1931. Serial No. 537,513. 4 Claims. (Cl. 139—180.)

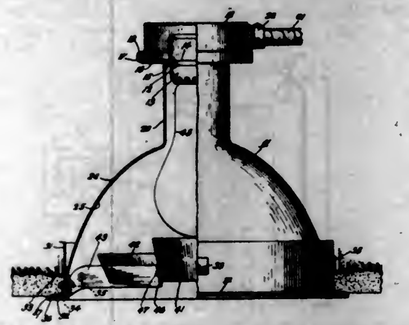
1. In combination, with a change-motion mechanism comprising, with back-and-forth shiftable vibrator means having a vibrator gear to be rotated a partial revolution one way or the other and two intergeared constantly rotated master gears adapted, respectively, to rotate the vibrator gear one way or the other when the vibrator

means is shifted one way or the other, an actuating member rotating with said master gears step by step in one direction, means to shift said vibrator means back and



forth comprising a rotative cam, and means for releasably connecting said member and cam for rotation at times together.

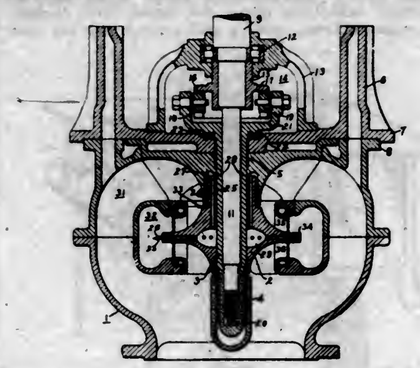
1,869,823. LAMP. JULIUS F. READER, Oak Park, Ill., assignor of one-half to Walter G. Warren & Co., Chicago, Ill., a Corporation of Illinois, and one-half to John W. Root, Chicago, Ill. Filed Jan. 26, 1931. Serial No. 511,119. 2 Claims. (Cl. 240—1.)



1. In a lamp assembly, the combination of a securing ring having parts adapted for attachment to wire lath and a flange for engagement with the face of a wall or ceiling, fastening devices arranged through said ring, and a reflector adapted for insertion within the ring and to be engaged by said fastening devices.

1,869,824. PUMP. HANS RICHTER, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 11, 1928, Serial No. 291,772, and in Germany July 29, 1927. 10 Claims. (Cl. 103—87.)

1. In a rotary pump for pumping fluids, in combination, a pump casing having intake and discharge chambers, an impeller rotatably mounted in the casing, a channel leading from the intake chamber and extending through the impeller for the circulation of a fluid, said channel being adapted to permit a more rapid discharge than intake of the fluid under the action of the impeller as it rotates thereby to give a low fluid pressure in the impeller channel, an auxiliary casing associated with the pump casing, and a second fluid channel extending from the auxiliary casing and communicating with the im-

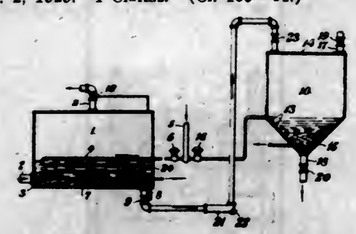


peller channel to provide a drain for the auxiliary casing whereby the fluid is caused to flow from the auxiliary casing into the impeller channel.

1,869,825. RECOVERY OF PURE HYDROGEN. GERHARD RITTER, Oggersheim, and EDWIN UFER, Neuroessen, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed May 14, 1928, Serial No. 277,781, and in Germany May 27, 1927. 4 Claims. (Cl. 23—210.)

1. A process for the recovery of substantially pure hydrogen from gaseous mixtures rich in hydrogen, which comprises washing the said gaseous mixture with a low-boiling petroleum distillate at a temperature of below —60° C. but above the freezing point of the solvent.

1,869,826. SEPARATING PLANT FOR SOLUTIONS IN VOLATILE SOLVENTS. KENNETH JAMES RENNIE ROBERTSON, London, England, assignor to Carrier Engineering Company Limited, London, England. Filed June 12, 1929, Serial No. 370,424, and in Great Britain Mar. 2, 1929. 4 Claims. (Cl. 159—44.)

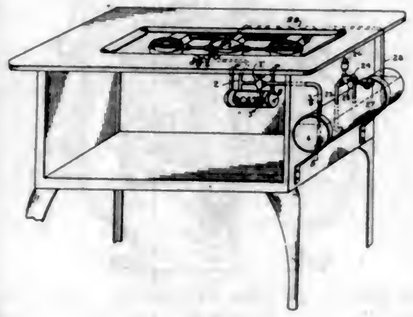


1. A method of recovering a volatile solvent from a solution containing grease, consisting in heating the solution to evaporate the solvent, drawing off the solvent in vapor form to a vapor bath, automatically causing the vapor to be confined responsive to rise in temperature to build up a pressure when it is desired to remove the separated grease, and expelling the grease by said pressure.

1,869,827. VAPOR STOVE. ADOLPH T. SCHMIDT, Milwaukee, Wis., assignor to A. J. Lindemann & Hoverson Company, a Corporation of Wisconsin. Original application filed Aug. 24, 1926, Serial No. 131,200. Divided and this application filed Apr. 9, 1927. Serial No. 182,192. 4 Claims. (Cl. 158—81.)

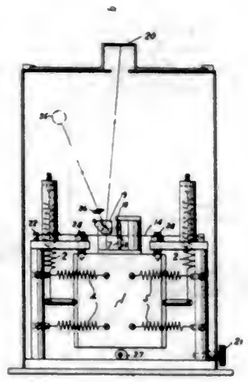
1. The combination of a tank for liquid and other fluid fuel, means for injecting air under pressure into said

tank above and below the liquid level therein, a fuel conduit leading from said tank for supplying mixed fuel to a lighting device or other burner, said conduit communicating with said tank above the liquid level thereof, means communicating between said conduit and the tank



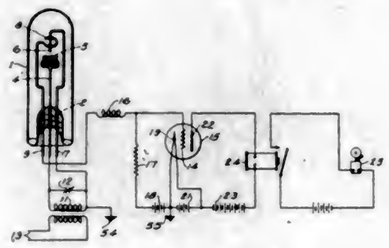
below the liquid level for supplying liquid fuel thereto, an auxiliary tank for liquid fuel with which said conduit also communcates, and means for controlling the passage of fuel to and through said auxiliary tank and for causing it to pass to the point of consumption without passing therethrough.

1,869,828. DEVICE FOR MEASURING AND RECORDING VIBRATIONS IN THREE DIRECTIONS SIMULTANEOUSLY. JAMES EDMOND SHRADER, Drexel Hill, Pa. Filed Feb. 2, 1929. Serial No. 336,976. 4 Claims. (Cl. 73—51.)



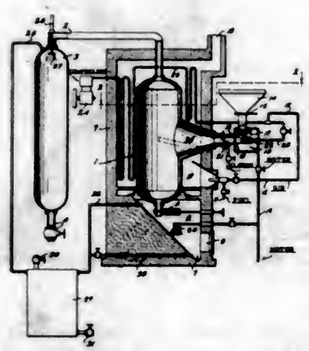
3. An instrument of the type recited comprising a frame, a cubic mass, a system of balanced springs suspending the mass from the frame, spindles mounted on the mass and of which two are turnable about vertical axes, and of which one is turnable about a horizontal axis, mirrors mounted on the spindles, flexible connectors connected at their ends with the frame and respectively wrapped around the spindles of the mirrors and of which two are disposed horizontally and at right angles to each other and of which the third is disposed vertically, a source of light, a scale at the top of the frame, and prisms for changing the direction of beams of light to bring them to said scale.

1,869,829. FREQUENCY-RESPONSIVE CRYSTAL RELAY. ALBERT M. SKELLETT, St. Louis, Mo., and VLADIMIR K. ZWORYKIN, Swissvale, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 3, 1927. Serial No. 158,608. 6 Claims. (Cl. 175—320.)



1. In a frequency-responsive system, a pair of electrodes, a third electrode separated from said pair, a readily ionizable medium surrounding said three electrodes, and means, including a piezo-electric crystal, for ionizing said medium when a predetermined frequency is impressed upon said pair of electrodes.

1,869,830. APPARATUS FOR THE TREATMENT OF ORE. JOSEPH F. TAPIE, Santa Barbara, Calif., assignor of one-half to George Fiske Hammond, Santa Barbara, Calif. Original application filed Sept. 2, 1931, Serial No. 560,858. Divided and this application filed Jan. 5, 1932. Serial No. 584,820. 6 Claims. (Cl. 266—19.)

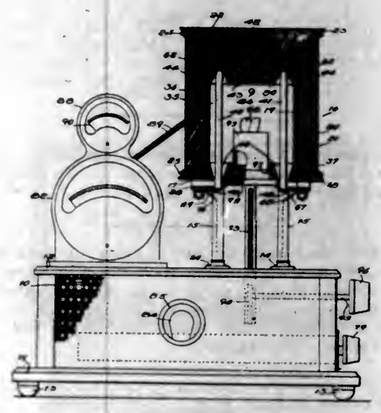


2. An apparatus for the treatment of ore comprising an externally heated retort, a lateral ore supply port leading into the retort, a precipitating chamber communicating with the retort, a reaction chamber, means for feeding ore to the reaction chamber, means for moistening the ore with water in the reaction chamber, means for contacting the moistened ore with chlorine, and means for projecting the chlorinated ore through the lateral port against an interior wall of the retort.

1,869,831. DENTAL FURNACE. NAT THOMPSON, Chicago, Ill., assignor to Coe Laboratories, Inc., Chicago, Ill., a Corporation of Illinois. Filed Aug. 9, 1929. Serial No. 384,657. 2 Claims. (Cl. 219—35.)

1. In an electrical furnace, a muffle defining a heating chamber, closed at one end and open at the opposite end, a connecting bar extending along the closed end of said

chamber, a baffle plate for the open end of said chamber, said baffle plate having openings therethrough, a pair of heater bars disposed along the sides of said chamber



and extending through the openings in said baffle plate, and means externally of said plate for supporting said last bars and holding same in contact with said first bar.

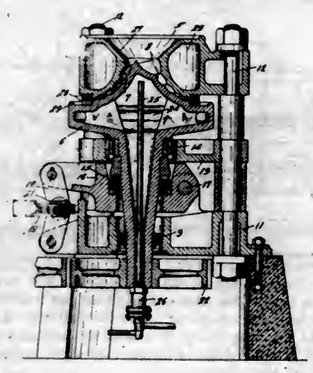
1,869,832. THROTTLING VALVE. ARTHUR LITTLE TOBIN, Salem, Mass., assignor to Ruggles-Klingemann Mfg. Co., Salem, Mass. Filed Nov. 12, 1927. Serial No. 232,797. 6 Claims. (Cl. 277—4.)



1. In a throttling valve comprising a valve casing having an inlet and an outlet for the passage of pressure fluid, a main valve and a by-pass valve in said casing, an actuating member for operating the main valve and means whereby said actuating member operates the by-pass valve at near the open and closed positions of the main valve only to thereby further increase and decrease the flow of pressure fluid through said casing.

1,869,833. MASTICATOR. THOMAS H. WILLIAMS, Cuyahoga Falls, Ohio, assignor to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 16, 1930. Serial No. 475,771. 7 Claims. (Cl. 18—2.)

1. A masticator comprising a rotor journaled with its axis vertical, a fixed head above the rotor and providing a hopper adapted to deliver material through the head onto the rotor, the upper surface of said rotor and the under surface of said head being formed with cooperating conical surfaces having spiral grooves thereon adapted to feed the material downwardly and outwardly between the head and rotor, a pair of juxtaposed, hardened rings adjacent the discharge end of the cooperating spiral grooves, one of said rings being fixed on the outer periphery of the rotor and the other on the outer periphery of the head, means on the outer periphery of the rotor for

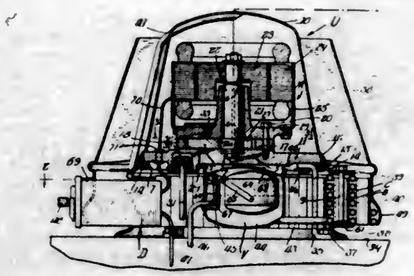


receiving the treated material after it is discharged from the head and rotor, and means for scraping the masticated material from the rotor.

1,869,834. METHOD OF PREPARING GOLD COMPOUND OF CYSTINE. KUNI YOSHIOKA, Minami Ku, Osaka, Japan. Filed Mar. 12, 1928. Serial No. 261,193. 3 Claims. (Cl. 260—11.)

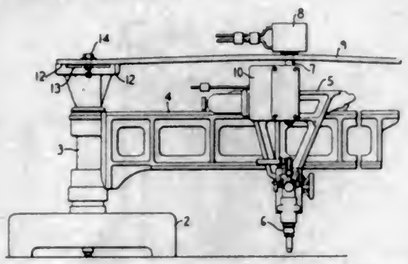
3. The method of preparing a gold compound of cystine, which consists in dissolving cystine in a caustic alkali solution, pouring a chloride of gold solution into the same, then causing a precipitate to form therein, and finally collecting the precipitate thus obtained.

1,869,835. REFRIGERATION UNIT. ROBERT L. ALEXANDER and JAMES R. MCCALLUM, Clinton, Iowa, assignors to The Climax Engineering Company, Clinton, Iowa, a Corporation of Delaware. Filed Feb. 26, 1930. Serial No. 431,524. 12 Claims. (Cl. 62—115.)



1. A refrigerating apparatus comprising in combination, a sealed compression unit including a compressor and a driving motor therefor enclosed within a casing, means for supporting said casing with the lower end thereof in spaced relation to and above a surface, a condenser connected to receive compressed refrigerant from said compressor, means for receiving refrigerant from said condenser, a control device for said motor and means for mechanically connecting said condenser, said receiving means and said control device to said unit below the lower end of said casing.

1,869,836. CUTTING TORCH MACHINE. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 2, 1931. Serial No. 560,707. 4 Claims. (Cl. 266—23.)

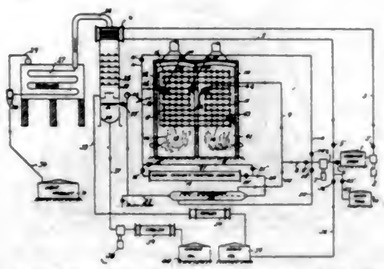


1. In cutting torch apparatus, in which a torch and a follower on a movable frame are guided for universal movement in a plane by cooperation of the follower with a template plate, the provision of means for stressing the template plate at its region of support so as to oppose natural deflection of the plate.

1,869,837. ESTERIFICATION. EUGENE E. AYRES, Jr., Swarthmore, Pa., assignor to The B. A. S. Company, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 4, 1927. Serial No. 165,878. 15 Claims. (Cl. 260—106.)

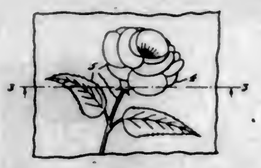
1. In the production of a mixture in commercially desired proportions of alcohols and esters of alcohols, the process comprising esterifying a mixture of aliphatic monohydroxy alcohols of different boiling points to a degree of esterification at which alcohol is present in the product in a proportion higher than that desired in the final product, and separating from the product of esterification by rectification lower-boiling alcohols and such esters as pass off therewith until the residue contains alcohols and esters in the said commercially desired proportions.

1,869,838. PROCESS AND APPARATUS FOR HEATING OIL. JOHN C. BLACK, Destrehan, La., assignor to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Oct. 20, 1926. Serial No. 142,998. 9 Claims. (Cl. 196—110.)



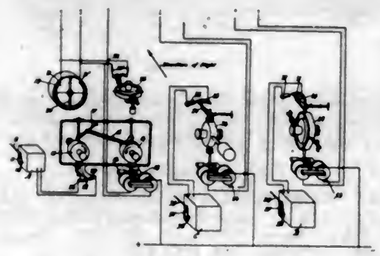
6. An apparatus for heating oils to a cracking temperature, comprising a plurality of furnaces having passageways for the combustion gases and exit flues, multiple sets of horizontal heating coils arranged in succession in said passageways and pipe connections connecting the sets of coils, whereby the oil to be heated is conducted to and through the set of coils closest to the exit flues in concurrent flow with combustion gases, thence to and through the set of coils closest to the combustion chamber of the furnaces in concurrent flow with combustion gases and finally to and through the intermediate set of coils disposed between the aforementioned sets of coils in concurrent flow with the combustion gases.

1,869,839. METHOD OF MAKING PLAQUES AND THE LIKE. CONSTANCE BOULARD, New York, N. Y. Filed Apr. 19, 1929. Serial No. 356,384. 8 Claims. (Cl. 41—24.)



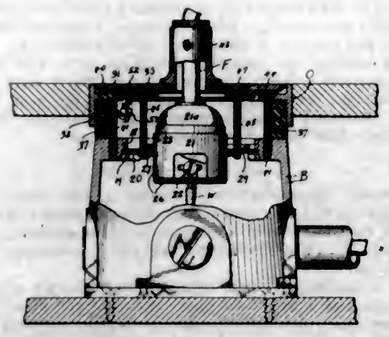
5. A method of creating an ornamental device consisting in permanently plastically bonding foil on a rigid backing and inscribing a design on the foil.

1,869,840. STABILIZING APPARATUS. JOHANN MARIA BOYKOW, Berlin-Lichterfelde-West, Germany, assignor to Messgerate Boykow, G. m. b. H., Berlin-Lichterfelde-West, Germany. Filed Oct. 4, 1929, Serial No. 397,178, and in Germany Oct. 6, 1928. Renewed May 13, 1932. 10 Claims. (Cl. 244—29.)



1. Automatic apparatus for stabilizing airplanes, comprising gyroscopic controlling devices for stabilizing the airplane on a straight course, and means for causing said gyroscopic controlling devices—when flying in a curve—to exert an additional influence upon the airplane according to the necessities of stabilization in a curve.

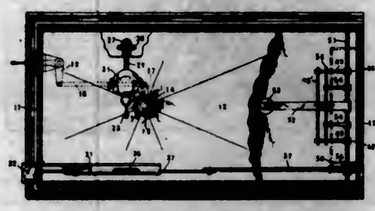
1,869,841. FLOOR BOX. STEPHEN N. BUCHANAN, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Dec. 17, 1928. Serial No. 326,512. 12 Claims. (Cl. 247—19.)



1. In an outlet fitting, a box having an opening and a cover therefor, a plate mounted in the opening under the cover, means to carry an electrical receptacle upon the plate, lugs formed on the box in the opening under the cover, said lugs having surfaces formed in spaced parallel

planes and between which the plate is disposed, and screws carried loosely in the cover and engaging the plate to lift the latter against the lugs to make a positive electrical ground connection between the box and plate.

1,869,842. GAME. FRANK B. CHESTER, New York, N. Y., assignor to Chesterfield Control Company, Dover, Del., a Corporation of Delaware. Filed Feb. 23, 1928. Serial No. 256,207. 3 Claims. (Cl. 273—87.)



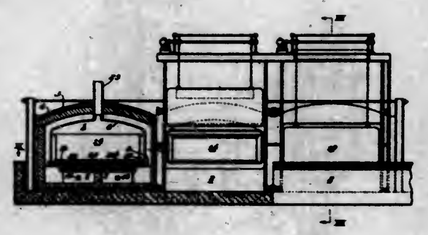
1. A game including a deck inclined towards a common point, a missile-supporting means disposed adjacent such point and movably mounted with respect to said deck and an impelling member mounted on the deck independent of said missile-supporting means and movable adjacent thereto and means for actuating said impelling member.

1,869,843. SELF GUIDING DRILLING BIT. WILLIAM PERRY COLE, Long Beach, Calif. Filed July 21, 1930. Serial No. 469,479. 6 Claims. (Cl. 255—73.)



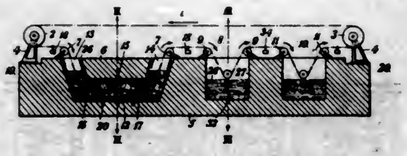
1. A device as described, comprising a drilling bit, a shank extending downwardly therefrom, a guide bit at the lower end of the shank, the shank having a plurality of guide and strengthening ribs at the top extending outwardly from said shank, the shank proper being of lesser diameter than the hole cut by the guide bit, and a plurality of cutting blades on the drilling bit, each blade having a horizontal cutting edge merging at their inner edges with the ribs and each blade having a vertical outside edge, the drilling bit, the shank, and the guide bit being formed integral and having a slushing duct therethrough with discharge ends at the drilling bit and guide bit there being passages between the ribs for upflow of slushing fluid.

1,869,844. RECOVERY OF METAL FROM COATED METAL FOILS. RALPH B. DERR, Oakmont, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Apr. 9, 1931, Serial No. 528,745. Divided and this application filed Dec. 17, 1931. Serial No. 581,780. 7 Claims. (Cl. 263—47.)



1. An apparatus for reclaiming aluminum foil from paper-backed foil scrap, comprising an externally heated gas-tight retort provided with a charging door and a gas take-off, a foil-receiving basket having a foraminous bottom and insertable through said door, and means for passing a desired gas upwardly through foil disposed in the basket.

1,869,845. CLEANING OF ARTICLES. ALEXANDER FOWLER and KENNETH JAMES RENNIE ROBERTSON, London, England, assignors to Carrier Engineering Company Limited, London, England. Filed Aug. 26, 1929, Serial No. 388,522, and in Great Britain Nov. 1, 1928. 3 Claims. (Cl. 266—7.)

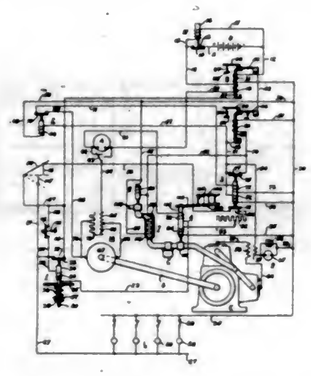


1. In a combination of apparatus of the character described, a plurality of baths, means for supplying a solvent in vaporous form and at a desired temperature to one of the baths, a pickling solution in another of the baths, means for controlling the temperature of the vapor in said first bath, means for immersing an object to be degreased within the vapor whereby some of the vapor will be condensed upon the relatively cooler object, and the temperature of the object raised, means for removing the object from said bath, the temperature of the object and the volatile character of the solution causing degreased material on the surface of the object to assume a dry condition, and means for immersing the object within the pickling bath, wherein the dry residue will be removed.

1,869,846. CONTROL SYSTEM FOR FARM LIGHTING PLANTS. LEO C. FRANK, McKeesport, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 17, 1930. Serial No. 436,356. 10 Claims. (Cl. 290—30.)

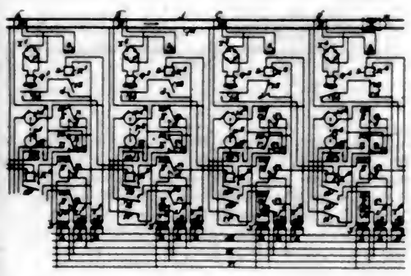
4. In an electric generating system including a battery, a load line, an internal combustion engine, a dynamo for cranking the engine and for supplying the load in the line when driven as a generator by the engine in combination, a control system including a time-limit protective cranking device to prevent depletion of the battery as a result

of continued cranking should the engine fail to start, and an adjustable governor whereby the voltage of the dynamo when acting as a generator may be varied, and a



control relay controlling the operation of the governor during the starting operation and causing the energization of the time-limit protective cranking device.

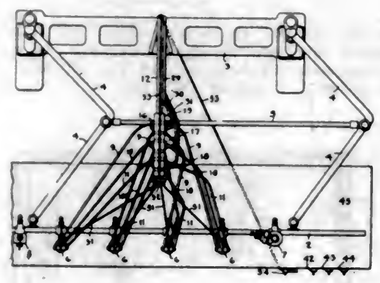
1,869,847. RAILWAY TRAFFIC CONTROLLING APPARATUS. LARS O. GRONDAHL, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 13, 1931. Serial No. 529,723. 18 Claims. (Cl. 246—34.)



1. In combination, a stretch of railway track divided into a plurality of sections, means controlled by a train in one of said sections for supplying periodic currents of different frequencies to each of certain others of said sections, and means controlled by a train in each of said certain other sections for coding the current supplied to such section.

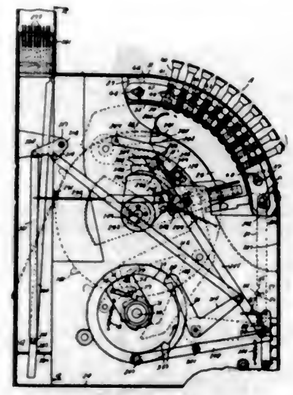
1,869,848. MULTIPLE CUTTING TORCH APPARATUS. RICHARD F. HELMKAMP, Jersey City, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 18, 1930. Serial No. 496,431. 12 Claims. (Cl. 266—23.)

3. The combination set forth in claim 1, further characterized in that the distributors provide expansion and equalizing chambers to cause a gradual rise in delivery pressure of the gases at the jets when the valves are



opened quickly, and that the outlets from the distributor chambers to the torch conduits are grouped in equal relation to the supply.

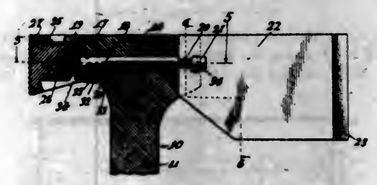
1,869,849. CHECK PUNCHING AND ISSUING MACHINE. REUBEN H. HELSEL, Long Island City, N. Y., assignor to General Register Corporation, Brooklyn, N. Y., a Corporation of Pennsylvania. Filed Sept. 9, 1930. Serial No. 480,659. 9 Claims. (Cl. 235—23.)



1. A register comprising means for supporting and feeding a strip, punching mechanism movable to a plurality of positions relative to said strip, for indicating on the strip the amount of a sale, an indicator for visibly indicating to the customer the amount designated on the strip, and means controlled by the position and operation of said punching mechanism for operating said indicator.

1,869,850. LATHING HAMMER. JOSEPH W. HENNECKE, Los Angeles, Calif. Filed Nov. 13, 1929. Serial No. 406,804. 16 Claims. (Cl. 306—42.)

1. A lathing hammer comprising a body, a blade arranged on one side of the body, a bolt extending longitudinally through the body, said bolt having a head adapted to engage the blade and fasten the blade to the body, and a hammering head adapted to be screwed onto the opposite end of the bolt to cause the bolt to tighten the



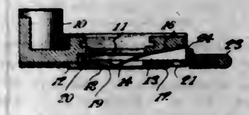
blade in place, said bolt being rotatably adjustable enabling the hammering head to be tightened into proper position with respect to the body.

1,869,851. CIGARETTE HOLDER. MYRTLE RUELLE KELCHNER, New York, N. Y. Filed Feb. 17, 1930. Serial No. 428,937. 6 Claims. (Cl. 131—10.)



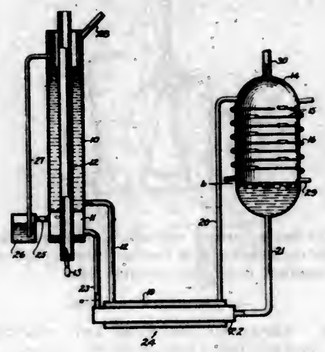
5. In a device of the class described, a tubular body having a mouthpiece and an opening adapted to receive an article to be smoked, and a flexible strip having an end portion engaging at the open end of the tubular body and extending thereinto along the inner wall thereof at one side, an intermediate portion adapted to engage below the article to eject the same, and the opposite end portion thereof extending outwardly beyond the end of the tubular body to form a finger piece.

1,869,852. APERTURE PLATE. ALBERT KINDELMANN, Floral Park, N. Y., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 1, 1930. Serial No. 425,175. 9 Claims. (Cl. 88—17.)



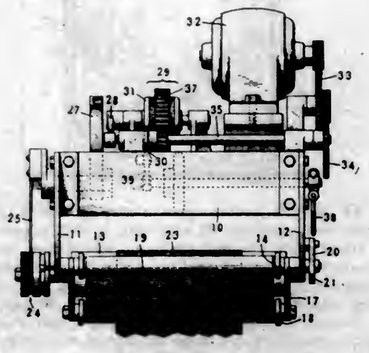
1. In combination, a gate plate having a lateral slot therein, and a seat receiving recess in said slot, and an aperture plate receivable in said slot, said aperture plate having an offset seat portion receivable in the recess in said slot, said aperture plate having an aperture in the off-set seat portion.

1,869,853. ABSORPTION TYPE REFRIGERATING APPARATUS. DONALD B. KNIGHT, Brooklyn, N. Y., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed June 10, 1931. Serial No. 543,277. 9 Claims. (Cl. 62—119.5.)



7. A vapor liquid pump comprising a fluid tight chamber, heating means for said chamber, a fluid tight pump vessel, a conduit from the upper part of said chamber to said pump vessel, a liquid inlet in the lower part of said chamber, and a discharge pipe extending upwardly from the lower part of said pump vessel.

1,869,854. STRIP FEEDING MACHINE. RICHARD LANGE, Leonia, N. J. Filed May 24, 1930. Serial No. 455,300. 7 Claims. (Cl. 271—2.4.)

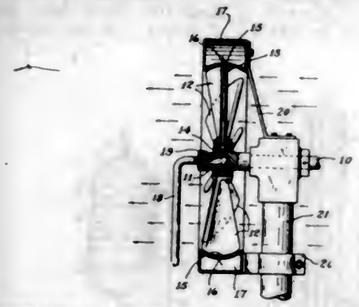


1. In a strip feeding device, the combination of strip pulling members, means for holding engaged extended contact surfaces of said strip pulling members, means for separating the contact surfaces of said members, and means for positively driving one of said strip pulling members a predetermined distance.

1,869,855. ROTARY HEAT EXCHANGER. JOSEPH M. LE GRAND, New York, N. Y., assignor to Carrier Engineering Corporation, Newark, N. J., a Corporation of New York. Filed Nov. 15, 1930. Serial No. 495,907. 8 Claims. (Cl. 257—259.)

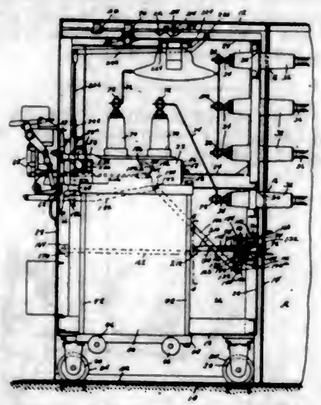
1. A heat exchanger comprising in combination, a support, a rotary fan mounted thereon having openings with-

in its blades, means to pass gases through the openings within said blades during rotation, means to collect the



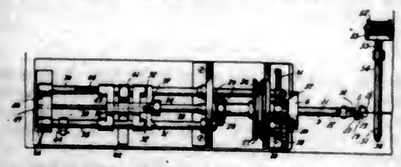
gases after having passed through said blades closely adjacent their peripheries, said last means comprising a volute having openings within its interior wall.

1,869,856. ELECTRIC SWITCH AND RACKING DEVICE THEREFOR. FREDERICK H. MACNEIL, Boston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Oct. 18, 1929. Serial No. 400,536. 27 Claims. (Cl. 175—298.)



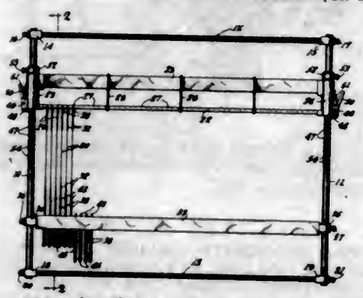
1. An electric switch gear including a cell, a truck movable into and out of said cell, a switch carried by said truck having switch operating mechanism, cooperating contact members carried by said cell and truck, force-multiplying means connecting said truck and cell for moving said truck into and out of said cell, means to lock said force-multiplying means against operation, and manual means operable independently of said switch operating mechanism for controlling the operation of said locking means.

1,869,857. FISHHOOK SNELLING MACHINE. HAROLD W. MEYER, Brooklyn, N. Y. Filed July 24, 1931. Serial No. 552,822. 37 Claims. (Cl. 117—34.)



1. A fish hook snelling machine comprising a rotating hook holder, associated means for properly relating a snell with the shank of a hook held in the rotating hook holder, winding-on means and means for effecting traverse movement of the rotating hook in the holder relative to the winding-on means.

1,869,858. APPARATUS FOR SNELL HOOK MANUFACTURE. HAROLD W. MEYER, Brooklyn, N. Y. Filed Aug. 14, 1931. Serial No. 557,077. 13 Claims. (Cl. 29—9.)



4. Apparatus for the manufacture of snell hooks comprising a frame having side guides, cross bars connecting said side guides and one freely movable on the side guides toward and away from the other, individual snell tensioning devices in spaced relation on one of the cross bars and the other cross bar having correspondingly spaced holding means for the opposite ends of snelled fish hooks and quick-releasable means for holding the freely movable cross bar spaced from the other cross bar and whereby by release of such means, said freely movable cross bar may be quickly shifted in the frame to release all of the individually tensioned snelled hooks.

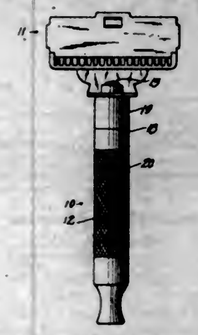
1,869,859. DRIVING MECHANISM. CLIFFORD MORROW, Canton, Ohio, assignor to The H. H. Miller Industries Company, Canton, Ohio, a Corporation of Ohio. Filed Mar. 29, 1930. Serial No. 439,990. 2 Claims. (Cl. 259—185.)



1. In a freezing apparatus, the combination of a freezing cylinder having a stationary head at one end and relatively rotatable agitating members therein and connected to a pair of concentric shafts extending through said head, aligned hydraulic motors each consisting of a chamber having an inlet and an outlet, and a rotary piston mounted therein and connected to one of said shafts, a pair of aligned pumps each consisting of a chamber having an inlet and an outlet and a rotary piston mounted therein and a conduit leading from said outlet and connected to the inlet for one of said motors, a driven shaft connected to the pistons for said pumps, and means for regulating the flow of the fluid through each of said conduits independently.

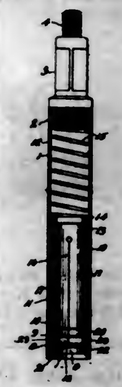
1,869,860. ADJUSTABLE CONTAINER FOR SAFETY RAZORS. HARRY NATKIEL, New York, N. Y., assignor, by mesne assignments, of one-half to Henry Engelke, New York, N. Y. Filed Feb. 7, 1931. Serial No. 514,145. 4 Claims. (Cl. 30—12.)

1. A device including a razor head, a tubular handle connected at one end to the razor head, said handle being split into detachably interconnecting portions at a point in proximity to the razor head, so as to form a relatively short holder portion at the razor head and a relatively long one piece cover portion remote from the razor head, the free end of the cover portion being closed, the holder portion having a recess registering with the interior of the cover portion, and a stick of material longitudinally slidingly fitted in said recess and projecting freely into



the cover portion, whereby the razor head constitutes a handle for the application of said stick of material on removal of the cover portion.

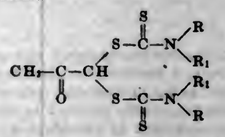
1,869,861. SUCKER ROD FISHING TOOL. WALTER A. O'BANNON, Tulsa, Okla. Filed Mar. 9, 1931. Serial No. 521,332. 9 Claims. (Cl. 294—102.)



1. A sucker rod fishing tool comprising a barrel, a lifting detent movably mounted therein and expansible in said barrel to receive a sucker rod, said detent having internal shoulder engaging means at one end to engage beneath a shoulder on the rod, said barrel being provided with an internal supporting stop to receive the end of the detent when the latter has contracted into the engaging relation aforesaid.

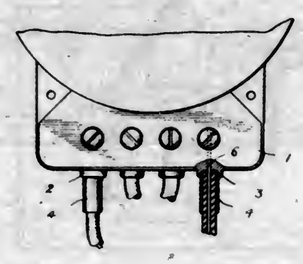
1,869,862. VULCANIZATION ACCELERATOR. LUDWIG ORTHNER, Leverkusen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed June 23, 1931, Serial No. 546,416, and in Germany June 28, 1930. 12 Claims. (Cl. 18—53.)

5. The process which comprises incorporating within rubber a vulcanising agent and a compound of the probable general formula



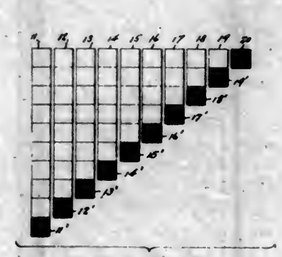
wherein the R's mean aliphatic, alicyclic or aromatic hydrocarbon radicals, the R_1's mean aliphatic or alicyclic hydrocarbon radicals, or R and R_1 being attached to the same nitrogen atom stand for alkylene groups, and vulcanizing the mixture.

1,869,863. CABLE TERMINAL SHIELD. HORTON J. PETERSON, Eveleth, Minn. Filed Feb. 13, 1930. Serial No. 428,212. 3 Claims. (Cl. 247—2.)



1. The combination with an electric meter casing having a plurality of flanged terminal sockets formed therein through which the supply wires make contact with the meter, of an elongated breakable thimble-like shield snugly fitting over the end of the insulation of the supply wire and tightly fitting the socket, said thimble having a substantially flat end provided with a hole through which a bared end of the wire may pass with a snug fit.

1,869,864. TESSELLATE PUZZLE. ARTHUR B. PHILLIPS, Lynbrook, N. Y. Filed May 23, 1930. Serial No. 454,849. 7 Claims. (Cl. 273—157.)

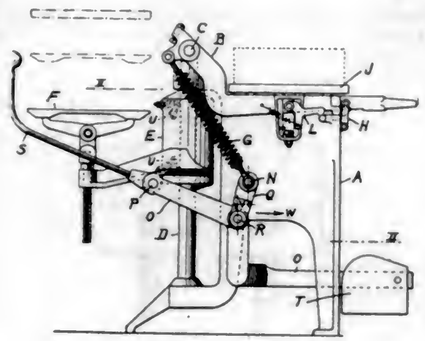


1. A puzzle, comprising a plurality of pieces having their surfaces patterned in squares, certain of said pieces containing in their square patterned surfaces squares of contrasting color, said pieces being capable of fitting together to produce a finished geometrical form of tessellate appearance in which no squares of the contrasting color are aligned either horizontally, vertically or diagonally as taken along lines passing through diagonal corners of said squares of the contrasting color.

1,869,865. JARRING ROLLOVER, PATTERN DRAWING, MOLDING MACHINE. JOHN T. RAMSDEN, Philadelphia, Pa., assignor to The Tabor Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 23, 1930. Serial No. 454,850. 4 Claims. (Cl. 22—83.)

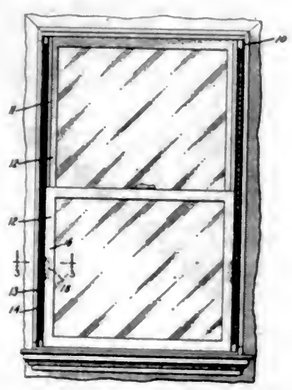
1. A molding machine comprising in combination a frame, a guide rod mounted thereon, a housing guided by said rod, a leveling device carried by said housing, a lever pivotally mounted on said frame and pivotally con-

nected to said housing, and a counterweight carried by said lever so as to hold said housing in engagement with said rod, the centers of said leveling device, said guide



rod, and said counterweight being in the same vertical plane so that said leveling device is balanced with respect to said guide rod.

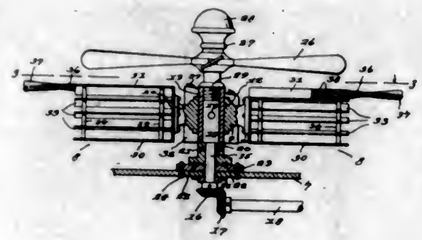
1,869,866. SASH HOLDER. SALVATORE RESCA, Brooklyn, N. Y. Filed Apr. 19, 1930. Serial No. 445,629. 1 Claim. (Cl. 292—15.)



The combination with a window frame, of a slidable sash therein, a plurality of spaced rollers on the jambs of said frame in contact with the stiles of said sash, thereby providing a rolling contact between said stiles and said jambs for guiding said sash in its movement and preventing rattling thereof, a casing on each stile of said sash, and a plurality of spring-actuated bolts slidably arranged in each casing for co-operation with said rollers, said bolts being also spaced and adapted to ride over said rollers as the sash moves in said frame and project between the rollers to maintain the sash in adjusted positions on said frame.

1,869,867. FLYING MACHINE. SANDOR ROSENBERG, New York, N. Y. Filed Sept. 30, 1931. Serial No. 566,141. 5 Claims. (Cl. 244—19.)

1. A rotatable condenser adapted to be attached to a flying machine, said condenser comprising a top and bottom and a series of partitions positioned between said top and bottom, the arrangement of the partitions and top and bottom being such that air passing through said



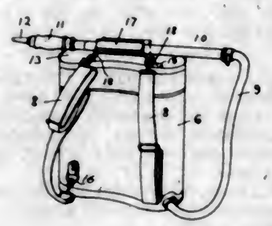
condenser is compressed upon the rotation of said condenser and a propellerlike element extending laterally of said condenser.

1,869,868. RUBBER PRINTING STAMP. LOUIS P. SELDEN, Richmond, Va., assignor to Samuel S. Rosendorf, Richmond, Va. Filed July 2, 1931. Serial No. 548,426. 9 Claims. (Cl. 101—379.)



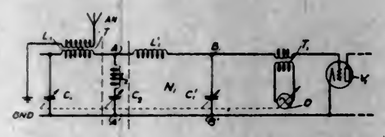
1. A base cushion for rubber stamps including a sheet of rubber having ribs rising from its upper side and intersecting to form a multiplicity of triangles.

1,869,869. PORTABLE FIRE EXTINGUISHER AND SPRAYER. MYRON H. SMITH, Utica, N. Y., assignor to D. B. Smith & Company, Inc., Utica, N. Y., a Corporation of New York. Filed June 9, 1931. Serial No. 543,139. 2 Claims. (Cl. 299—97.)



1. In a portable fire extinguisher and sprayer the combination of a tank, a flexible hose attached to said tank, a cylindrical force pump having one end connected to said hose, and a member rigidly secured to the upper part of the tank and constructed to provide a handle portion for carrying the tank and a portion for detachably holding the pump.

1,869,870. FILTERING CIRCUITS. GEORGE H. STEVENSON, Sound Beach, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 17, 1930. Serial No. 445,060. 8 Claims. (Cl. 178—44.)



1. A selective network comprising input and output tuned circuits and a tuned coupling circuit connected in parallel with said input and output circuits, the tuning elements of said circuits being mechanically connected whereby said input and output circuits are maintained in syntony and transmission therebetween is suppressed at a frequency different by a substantially constant amount from the frequency of tuning of said syntonous circuits.

1,869,871. AIRPLANE. WILLIAM B. STOUT, Detroit, Mich., assignor to Ford Motor Company, Highland Park, Mich. Filed July 19, 1926. Serial No. 123,404. 3 Claims. (Cl. 244—14.)



1. An airplane having, in combination with a pair of wings one totally ahead of the other, a spacing and mounting structure for said wings including a main rearward cockpit portion tapering in height and depth toward the tail of the airplane, and a propeller located at a point ahead of the forward end of said portion but in rear of and above the forward wing, said structure also including a portion forming a forwardly extending stepped-down prolongation of the first mentioned portion, the forward wing being carried near the forward end of said forwardly extending portion.

1,869,872. CALCULATING MACHINE. JOSEPH A. V. TURCK, Wilmette, Ill., assignor to Felt & Tarrant Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 31, 1923. Serial No. 654,874. 54 Claims. (Cl. 235—82.)

1. In a calculating machine, the improvement characterized by keys, and key-driven actuating mechanism for transferring increments of calculative actuation to an accumulator mechanism, and flexible means whereby the keys may be moved a distance in excess of that required for calculative actuation of the accumulator mechanism.

6. In a key-driven and alternatively key-set power-driven calculator including the column-actuating mechanism and the key mechanism furnishing spring-power in key-driven actuation, the improvement characterized by a universal actuating mechanism for the power drive comprising means to relieve the spring-tensioning necessary in key-driven actuation, said universal actuating mechanism transmitting calculative actuation to any selected orders during power drive of the machine.

15. In a calculating machine, in combination: key-actuated column actuators; a universal actuator; and a pair of flexible link mechanisms interposed between the column actuators and the universal actuator, each flexible link mechanism including a ram and an encircling spring, but only one of said springs being tensioned during operation of the column actuators by the keys.

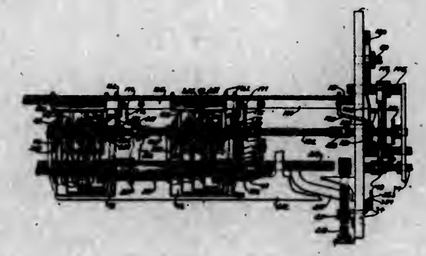


25. In a calculating machine, the improvement characterized by adding mechanism, a column of numeral keys adapted to be moved variably in key-driven actuation and to have a relatively constant motion in key-set actuation, combined with a stop bar co-operating with the keys in either actuation for limiting the additive actuation of the adding mechanism, said keys having a longer key-driving movement and a shorter key-setting movement.

36. In a calculating machine the combination of a series of column-actuators arranged in orders, a series of numeral keys for each actuator, sectors operated by said actuators respectively, an accumulator having ordinal gears engageable with various of said sectors, said accumulator being pivotally mounted and movable with its gears towards and from said sectors for the engagement and disengagement of the gears, adjustable means releasable by the depression of a numeral key for holding an actuator from operation, and driving means having yielding connection with each actuator.

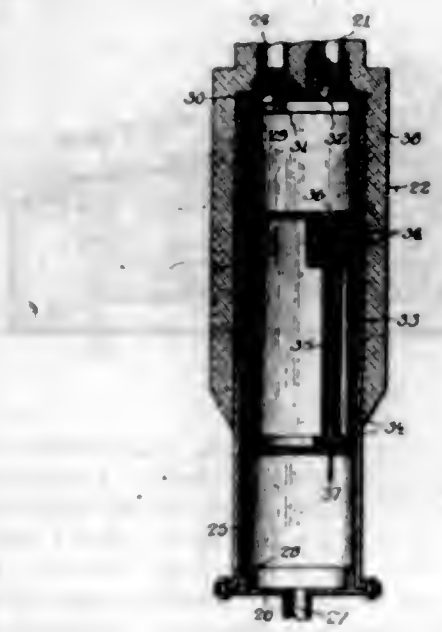
39. In a calculating machine, the improvement characterized by a shiftable accumulator register controlled selectively by key drive and by key-set power drive, combined with a key-drive and a key-set drive therefor and means for changing the drive from one type to another.

1,869,873. CASH REGISTER. EDWARD J. VON PEIN, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Apr. 4, 1921. Serial No. 458,509. 26 Claims. (Cl. 235—117.)



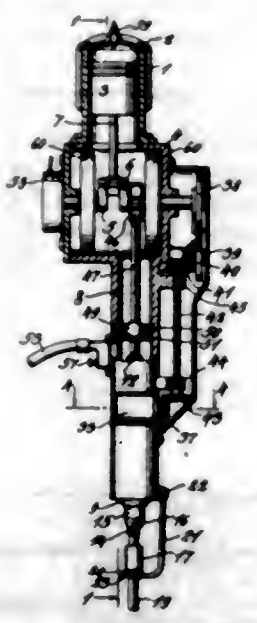
1. In a machine of the class described, a totalizer involving rotatable elements and a turn-to-zero shaft, driving means for rotating said shaft, means for arresting said rotatable elements at zero, an element on said shaft, and means actuated by said driving means adapted to move into the path of the element for stopping said shaft at zero, said arresting means being actuated by the last-named means.

1,869,874. SURGE PUMP. VANDERVEER VOORHEES, Hammond, Ind., assignor to Standard Oil Company (Indiana), Chicago, Ill., a Corporation of Indiana. Filed Nov. 9, 1929. Serial No. 405,952. 5 Claims. (Cl. 103—52.)



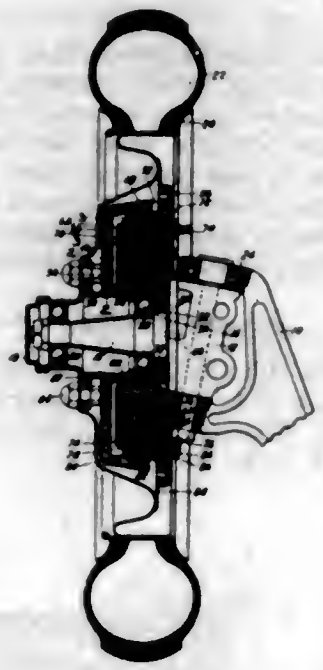
1. A hot oil pump comprising a surge chamber, a reciprocating seal slidably mounted in said chamber, said seal being at least one-half the length of said chamber, means whereby said seal is reciprocated by a cool fluid and means whereby the reciprocation of the seal forces hot liquid into and out of said chamber.

1,869,875. POWER OPERATED ROCK DRILL. EDWARD J. WARREN, Denver, Colo. Filed Dec. 19, 1930. Serial No. 503,417. 3 Claims. (Cl. 255—42.)



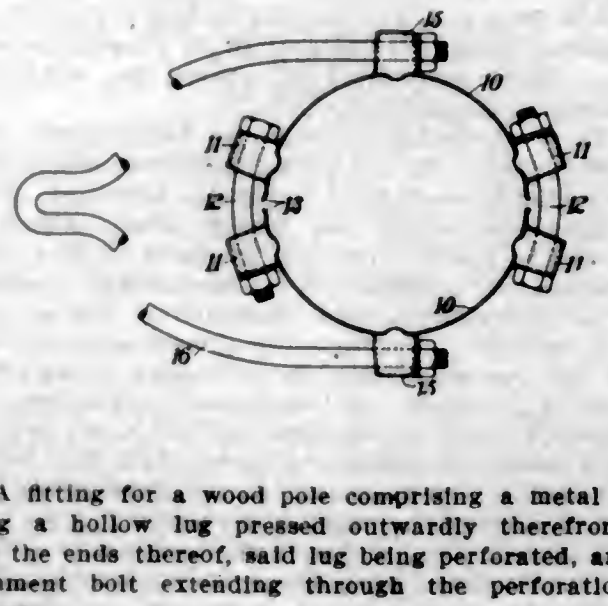
1. In a device of the class described, in combination, a crank shaft, a casing enclosing the crank shaft, said casing having an elongated tubular portion whose axis lies in a plane perpendicular to the axis of the crank shaft, the outer end of the tubular portion having a bearing, a drill rod slidably mounted in the bearing, an eccentric secured to the crank shaft, a rod having one end connected with the eccentric and the other end slidably supported in a bearing adjacent the inner end of the drill rod whereby the drill rod will be subjected to a succession of blows when the crank shaft rotates, means interposed between the crank shaft and the drill rod for imparting to the latter a step by step rotation when the crank shaft rotates, the drill rod being provided with an opening extending longitudinally thereof and a pump mechanism operated by the rotation of the crank shaft for forcing water through the opening.

1,869,876. ELECTROMAGNETIC AUTOMOTIVE VEHICLE BRAKE. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 23, 1929. Serial No. 341,882. 28 Claims. (Cl. 188—164.)



1. A vehicle brake comprising, in combination, a wheel hub, a friction member rotatable therewith but axially movable thereon and adapted to transmit torque directly thereto, a cooperating stationary friction member, an electric coil adapted to actuate said movable friction member into engagement with said stationary friction member, and means to return said axially movable friction member when magnetization thereof is discontinued.

1,869,877. POLE FITTING. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed May 16, 1930. Serial No. 453,064. 12 Claims. (Cl. 189—31.5.)



4. A fitting for a wood pole comprising a metal strap having a hollow lug pressed outwardly therefrom between the ends thereof, said lug being perforated, and an attachment bolt extending through the perforation of said lug.

1,869,878. CURRENT TRANSFORMER. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Original application filed Mar. 7, 1930, Serial No. 433,921. Divided and this application filed Mar. 21, 1931. Serial No. 524,408. 20 Claims. (Cl. 175—358.)

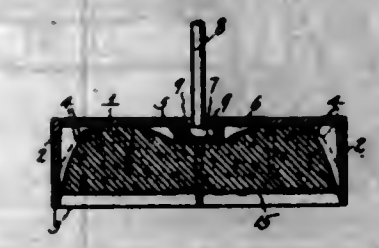


1. A transformer having a core, conductors acting to set up magnetic fields in said core in different directions, and a closed circuit interlinked with the fields set up by one of said conductors for neutralizing said field.

1,869,879. DECOMPOSITION OF CRUDE PHOSPHATES. OTTO BALZ and WILHELM WAGNER, Ludwigshafen-on-the-Rhine, Germany. Filed Dec. 24, 1930, Serial No. 504,644, and in Germany Jan. 6, 1930. 8 Claims. (Cl. 71—7.)

1. The process of decomposing crude phosphates which comprises acting with phosphoric acid of between about 32° and 42° Bé. strength on a crude phosphate in the presence of a salt selected from the group consisting of the sulphates and chlorides of the alkali metals (including ammonium) and magnesium, the said salt being employed in an amount of at least 1000 kilograms for each 1000 litres of phosphoric acid of about 35° Bé. strength.

1,869,880. PAVING TILE. EDWARD H. BINNS, Pittsburgh, Pa. Filed Sept. 18, 1930. Serial No. 482,791. 2 Claims. (Cl. 94—11.)

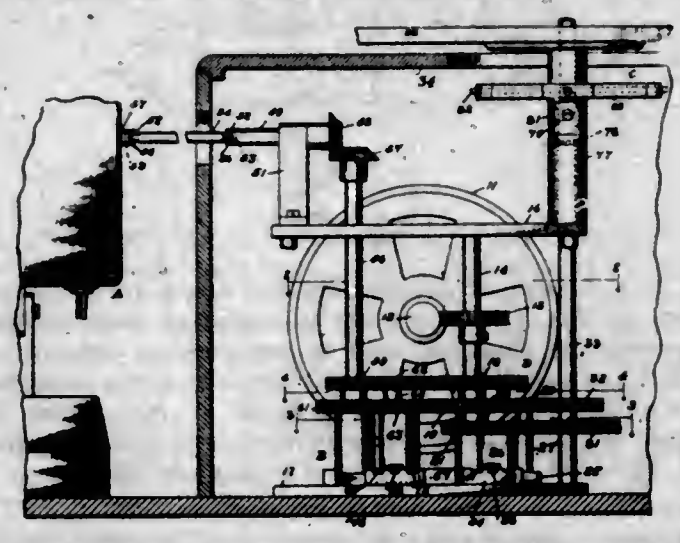


1. A composite tile for paving comprising a shaped shell or hollow container having top and side walls and open at the bottom, said top wall having a key opening approximately in the intersecting vertical longitudinal and transverse planes through the center of gravity of the tile, a key receiving chamber formed on and projecting inwardly from the top wall and communicating with said key opening, said key-receiving chamber being closed from the shell interior and a suitable filling material molded in said shell or container around the wall of said closed key chamber and partially filling the same, in combination with a tile lifting key fitting said key opening and adapted to be turned in said chamber into engagement with said top wall.

1,869,881. PROCESS OF PREPARING GLUE STOCKS. CHARLES H. CAMPBELL, Aspinwall, Pa. Filed Jan. 29, 1931. Serial No. 512,220. 3 Claims. (Cl. 83—94.)

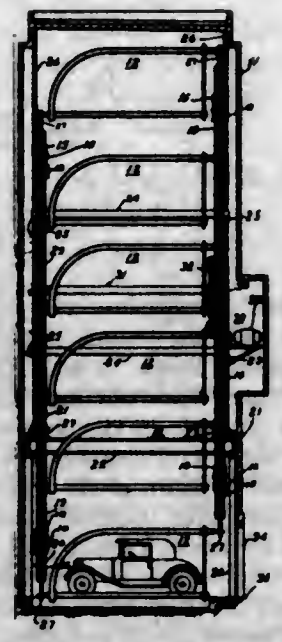
1. The process of preparing glue stock which comprises adding to the same a granular abrasive material and then subjecting the stock to disintegration between relatively movable grinding elements, the relative speed of which elements is such that the fats of the stock are not emulsified.

1,869,882. COMBINED MOTION PICTURE PROJECTOR AND SOUND REPRODUCING MACHINE. JOSEPH ELLIS COHEN and HUMBERT GODOY, Philadelphia, Pa., and RUDOLPH MIEHLING, New York, N. Y., assignors to Sentry Safety Control Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Sept. 9, 1930. Serial No. 480,704. 2 Claims. (Cl. 88—16.2.)



1. Mechanism for selectively controlling the speeds of motor operated combined motion picture and talking machines, comprising a main shaft driven by the motor, gears on said shaft, a cam plate pivotally mounted on said shaft, gears on said plate meshing with gears on said shaft, a talking machine shaft having gears meshed selectively by the gears on said cam plate, a motion picture shaft having gears thereon, a cam plate pivotally mounted on said last shaft, and gears on said last cam plate meshing with the gears on said last shaft and adapted to be selectively meshed with gears on said main shaft.

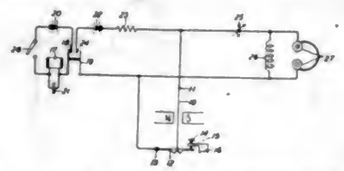
1,869,883. SAFETY DEVICE FOR CIRCUITOUS ELEVATORS. GILBERT CURRIE, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 30, 1931. Serial No. 512,290. 4 Claims. (Cl. 19?—232.)



2. In a safety device for conveyors comprising a plurality of conveyor elements normally movable simultaneously at the same speed, means for stopping said conveyor elements upon relative movement thereof, said means includ-

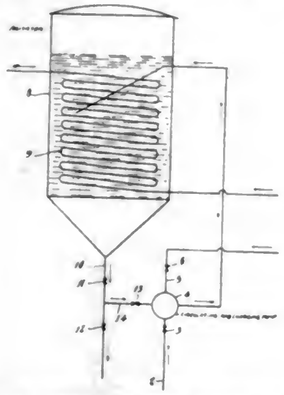
ing a commutator for each conveyor element movable in accordance with the movement thereof, each commutator having a plurality of alternately disposed conducting and insulating segments, and a plurality of contact members disposed in engagement with said commutator segments and adapted to maintain an electrical circuit closed while said conveyor elements move simultaneously at the same speed and to interrupt the circuit when the conveyor elements move relatively.

1,869,884. TESTING DEVICE. AUSTEN M. CURTIS, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 9, 1930. Serial No. 466,732. 7 Claims. (Cl. 175—183.)



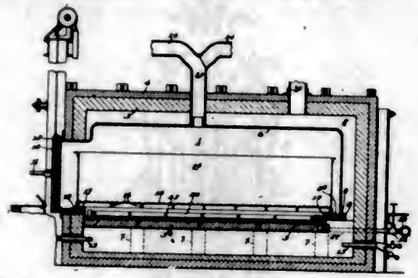
1. The method of determining the stress in a member under tension which consists in vibrating said member in a constant magnetic field to generate an alternating E. M. F., transmitting certain frequencies while suppressing all other frequencies of said E. M. F., translating the transmitted frequencies into a musical note and comparing said note with a musical note of a given frequency.

1,869,885. METHOD OF MAKING MOTOR FUEL. WILLIAM N. DAVIS, Oakland, and WILLIAM H. HAMPTON, Berkeley, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Nov. 30, 1927. Serial No. 236,689. 11 Claims. (Cl. 196—40.)



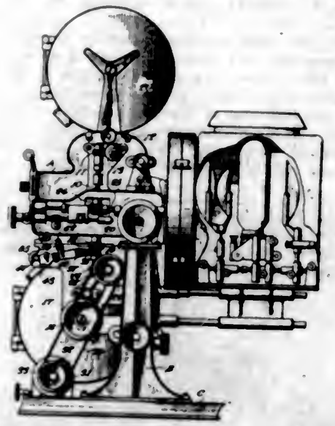
1. A sulphur removing process of treating motor fuels containing sulphur bearing bodies and non-sulphur bearing unsaturated hydrocarbons, in which a part of the sulphur bearing bodies are removed by a selective action of sulphuric acid and a part of the sulphur bearing bodies polymerized while excessive polymerization of the unsaturated hydrocarbons is prevented, which comprises contacting such motor fuel with sulphuric acid of such strength and quantity as to have the capacity at low temperatures of selectively removing a part of the sulphur bodies and to polymerize a further part of said bodies and to effect a material rise of temperature of reaction unless restrained, conducting the treatment between the motor fuel and acid, by absorbing heat of reaction, at a maximum temperature of treatment sufficiently low to permit a part of the sulphur bodies to be selectively removed by said acid and a part thereof to be polymerized and below the temperature at which the non-sulphur bearing unsaturated hydrocarbons readily polymerize, separating the motor fuel from the acid, and distilling the motor fuel from the polymerized bodies.

1,869,886. RECOVERY OF METAL FROM COATED METAL FOILS. RALPH B. DERR, Oakmont, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 9, 1931. Serial No. 528,745. 10 Claims. (Cl. 148—5.)



5. A process of treating paper-backed aluminum foil to recover the foil, comprising distilling off the major portion of the volatile matter between 800 to 1000° F. in a non-oxidizing atmosphere, and then supplying oxygen for combustion of the residual carbonaceous matter, the oxygen concentration being adjusted to effect such combustion without burning the aluminum.

1,869,887. CLUTCH OPERATING MECHANISM. AUGUSTO DINA, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 28, 1929. Serial No. 417,118. 6 Claims. (Cl. 192—82.)



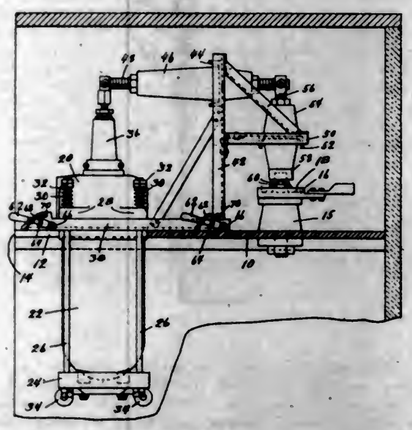
1. A clutch device comprising a movable clutch member, a pivoted arm on which it is mounted for movement, an extension of the arm extending to the other side of the pivot axis from the member, an operating arm pivoted about the same axis as the first arm and lying on the same side of the axis as the extension, a spring cushion disposed between the arms on that side of the axis, to permit some independent relative movement, said operating arm having a segment rack at its end, a gear means to move the operating arm and connected to the segment rack, and means connected to the gear means to lock it in predetermined positions, the spring means or cushion disposed to snap the clutch member into mesh with its cooperating member even though the operating arm is already locked in one of its predetermined positions.

1,869,888. LOCKING AND CLAMPING MECHANISM FOR MOTION PICTURE PROJECTOR MACHINE PARTS. AUGUSTO DINA, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 1, 1930. Serial No. 432,810. 5 Claims. (Cl. 248—47.)



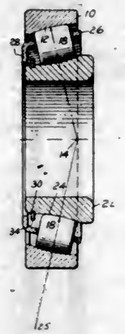
1. In combination with an apparatus having an element that vibrates about a horizontal axis, a supporting pedestal therefor, a frame carrying said element, said frame being pivotally mounted on said pedestal for movement about the axis of said vibrating element whereby the vibrating element is supported directly by said pedestal and the vibrations thereof are not imparted to said frame, said frame extending substantially above and below said pivot point, said pedestal having a member extending above said pivot point in clamping engagement with said frame and an additional clamping member carried by said pedestal below said pivot point and in engagement with the lower portion of said frame, said clamping means being widely spaced from said vibrating element whereby a substantial leverage is obtained for rigidly securing said frame.

1,869,889. PLATEN-MOUNTED ELECTRIC SWITCH. WILLIAM S. EDSALL, Boston, Mass., assignor, by mesne assignments, to Condit Electrical Manufacturing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 28, 1924. Serial No. 752,730. 14 Claims. (Cl. 175—298.)



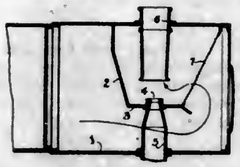
3. An electric switch including a casing having supporting members intermediate the ends thereof, switch supporting rollers, and means to move said rollers into and out of position beneath said supporting members.

1,869,890. ANTIFRICTION BEARING. HAROLD R. GIBBONS, Chatham, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 29, 1926. Serial No. 125,690. 8 Claims. (Cl. 308—212.)



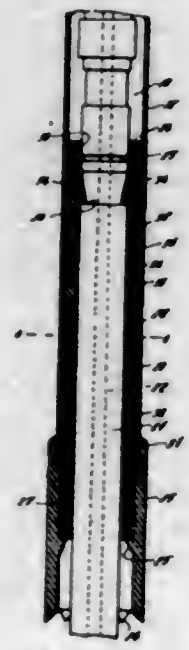
1. In a single-row, self-aligning roller bearing for thrust and radial load, an outer race ring having an angular contact raceway curved on an arc having its center at the axis of the bearing, a circular series of convexed rollers having substantially the same transverse radius of curvature as the outer raceway and contacting with the outer raceway with substantially line contact, an inner race ring having an angular contact raceway curved to conform to the rollers with substantially line contact, said inner race ring having a groove near its smaller end and having its raceway extended at its larger end beyond the corresponding ends of the rollers in their running positions, a separator ring having openings for the rollers and encircling the rollers between their axes and the outer race ring, said separator having an end flange extending adjacent to the inner race ring outside of the groove, and a limit ring in the groove of the inner race ring and having its outer diameter larger than the inner diameter of the flange, the flange having a smaller running clearance with the limit ring than the distance the larger end of the inner raceway is extended beyond the rollers, the limit ring being adapted to be engaged by said flange to apply the ring to the groove and to limit endwise movement of the rollers towards the larger end of the inner raceway in assembling, thereby enabling the outer race ring and the rollers to be assembled by relative axial movement alone; substantially as described.

1,869,891. SELF-CLEANING LOCOMOTIVE DRAFT APPLIANCE. ADOLF GIESL-GIESLINGEN, New York, N. Y. Filed Apr. 5, 1930. Serial No. 441,894. 5 Claims. (Cl. 230—96.)



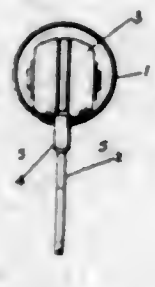
1. In a locomotive using exhaust steam for obtaining draft, the combination with a smokebox, said smokebox being divided by a partition inside substantially in the described manner, means of discharging the combustion gases to the atmosphere by the action of the exhaust steam jet or jets, said exhaust steam passing through said partition and being discharged into the smokebox and coming in contact with a part of the combustion gases before passing through the partition, while coming in contact or entraining the remaining part of the combustion gases after having passed through said partition.

1,869,892. WELL DRILL. DONALD C. GROVE and JOSEPH C. BURNS, Big Springs, Tex. Filed May 25, 1929. Serial No. 365,882. 1 Claim. (Cl. 255—28.)



In a well drill of the class described, a casing, a shoe on the lower end of said casing provided with internal stops, a drill tool suspended in said casing and mounted for reciprocatory motion, said drill tool being provided with a fluid supply passage, and a packer unit embracing the drill tool and confined within said casing, adapted when in position to rest upon the stop carried by said shoe, said tool including a section provided with an annular groove, said packer being provided with spring pressed balls cooperable with said groove, said section being also provided with an annular shoulder, said packer being further provided with spring pressed pawls cooperable with said shoulder.

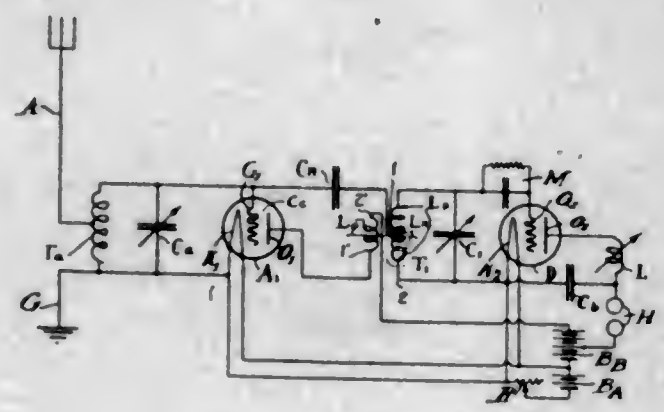
1,869,893. CAR FOR MONORAIL SYSTEMS. CHARLES S. HADDLESAY, Elmhurst, Ill. Filed Feb. 25, 1931. Serial No. 518,186. 5 Claims. (Cl. 105—155.)



1. A monorail car from which the load is suspended having two wheels, one on each side of a yoke, said two wheels being on a common axis with said axis threaded into the yoke and locked with inner ball bearing races on either side of the yoke.

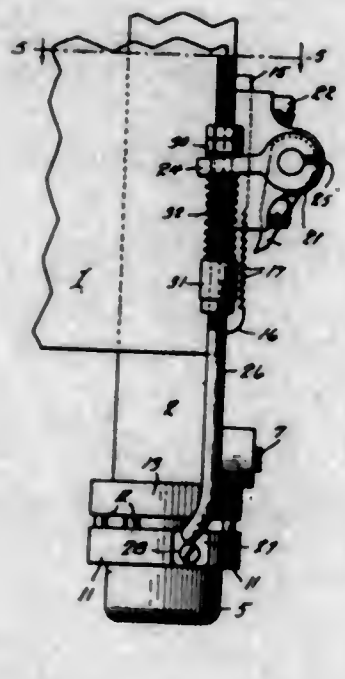
1,869,894. RADIO RECEIVING SYSTEM. LOUIS A. HAZELTINE, Hoboken, N. J., assignor to Hazeltine Corporation, a Corporation of Delaware. Original application filed Feb. 27, 1925, Serial No. 12,000, now Patent No. 1,648,808, dated Nov. 8, 1927. Divided and this application filed Oct. 24, 1925. Serial No. 64,533. 16 Claims. (Cl. 250—20.)

1. In a radio receiver adapted to be connected to an antenna system, a radio-frequency amplifier including at least one vacuum tube having grid and plate electrodes, said grid being included in an input circuit of said amplifier tube and said plate in an output circuit thereof, capacity between said circuits including the natural capacity inherent between said grid and plate electrodes, said circuits being traversed by currents of such high frequency as to make appreciable the capacity coupling between said circuits due to the said capacity and through which coupling high-frequency energy may be transferred to said antenna and radiated therefrom, an additional vacuum tube having an input circuit and an



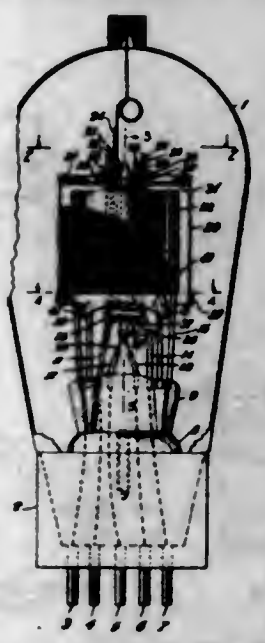
output circuit, said input circuit thereof being linked with said output circuit of said additional tube to facilitate the transfer of energy from said output circuit to said input circuit thereof for producing oscillations, and means associated with said radio-frequency amplifier tube for neutralizing the undesirable capacity coupling between the input and output circuits thereof, whereby said oscillations are in effect localized in said additional vacuum tube and thereby substantially prevented from being communicated to said antenna system.

1,869,895. SAFETY DEVICE FOR PRESSES. ERNIE F. HAZENFIELD, Decatur, Ill., assignor to Williams Sealing Corporation, Decatur, Ill., a Corporation of Illinois. Filed Aug. 2, 1930. Serial No. 472,599. 7 Claims. (Cl. 192—129.)



1. In combination with a guiding standard and a plunger movably supported thereby, a head carried by the plunger and having a limited amount of movement with respect thereto, means capable of arresting downward movement of the plunger, and operative connections between said means and the head arranged exteriorly of the head and plunger for rendering said means effective to stop the plunger upon premature stopping of the head.

1,869,896. ELECTRON DEVICE. CLARENCE A. HORN, Elizabeth, N. J. Filed Nov. 7, 1930. Serial No. 494,028. 6 Claims. (Cl. 250—27.5.)



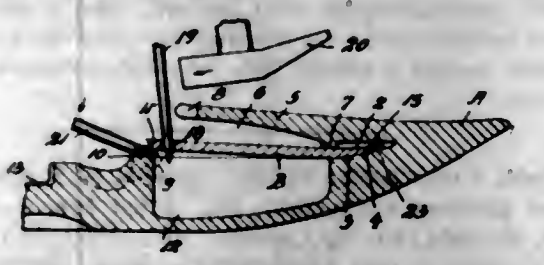
1. An electron device comprising an outer screen grid, a transverse plate at the top of said grid having upturned ears, an insulating plate resting on said ears, and other electrodes carried by said insulating plate and thereby definitely spaced with respect to the said screen grid.

1,869,897. METHOD OF AND APPARATUS FOR COMBUSTION OF FUELS. HERBERT A. HYMER, Detroit, Mich. Filed Nov. 1, 1926. Serial No. 145,564. 16 Claims. (Cl. 158—76.)



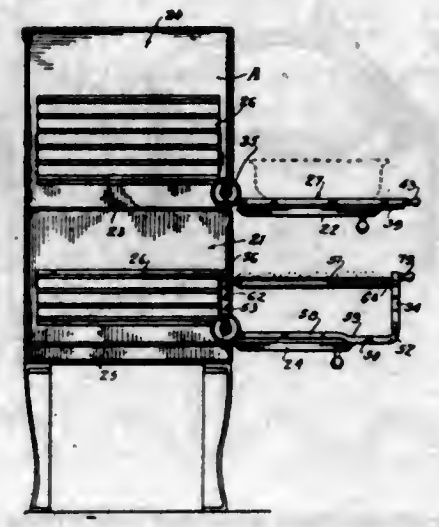
8. A burner for hydrocarbon fuels comprising a chambered head member, a fuel and air mixing device supported by said head member, a combustion shell adjacent the head member and receiving the charge from said mixing device, means for subjecting air to the temperature of the combustion shell, said head chamber having openings for receiving the heated atmospheric air and an additional intake opening for receiving unheated air, means for causing the fuel to be mixed with the chamber air before passing into the combustion chamber, and means to cause the charge to entrain preheated air directly from the space about the shell.

1,869,898. GUARD FINGER AND LEDGER PLATE FOR MOWING MACHINES. JAMES B. JENSON, Salt Lake City, Utah. Filed May 19, 1930. Serial No. 453,566. 10 Claims. (Cl. 56—311.)



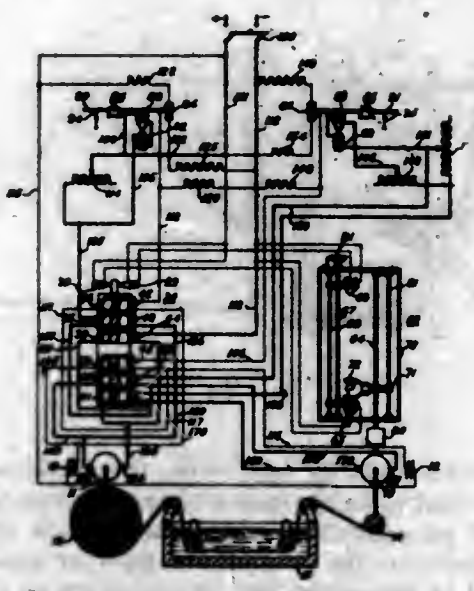
1. In combination, a guard finger provided with a socket, a resilient ledger plate for the guard finger and adapted to be inserted in the socket, the ledger plate having a configuration corresponding to that of the socket and snugly fitting therein, and means for interlocking the ledger plate in the guard finger, the socket being formed to maintain the interlocking action through cooperation with the inherent resiliency of the plate.

1,869,899. OVEN. HERBERT KUCKEL, New Orleans, La. Filed Oct. 3, 1929. Serial No. 397,118. 6 Claims. (Cl. 126—339.)



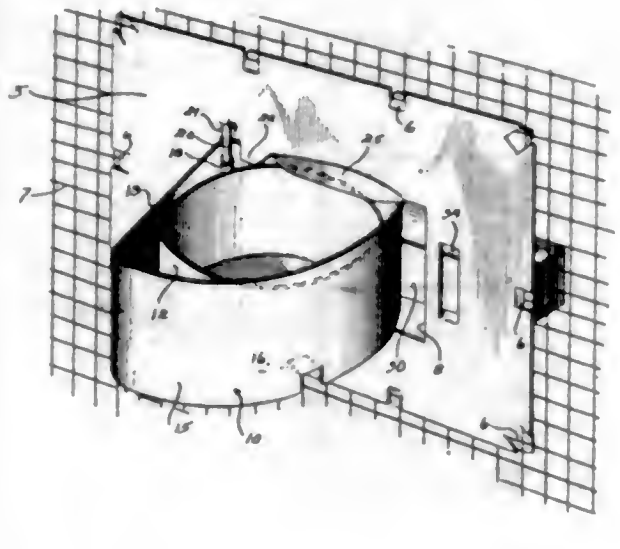
1. In a stove, an oven having a bottom wall and a hinged door, a carriage slidable into and out of the oven over the door when the same is in its lowered position, the carriage including a grate having front and rear bars, side bars and longitudinally extending intermediate bars, the intermediate bars being provided with depending flanges, wheels carried by the grate and located within the plane of the side edges of the carriage, the flanges of certain intermediate bars having extensions at their forward ends provided with runners for engaging the bottom wall and the oven door when the same is in its lowered position.

1,869,900. MOTOR CONTROL SYSTEM. WILLIAM H. LANDENBERGER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 27, 1931. Serial No. 547,296. 10 Claims. (Cl. 242—55.)



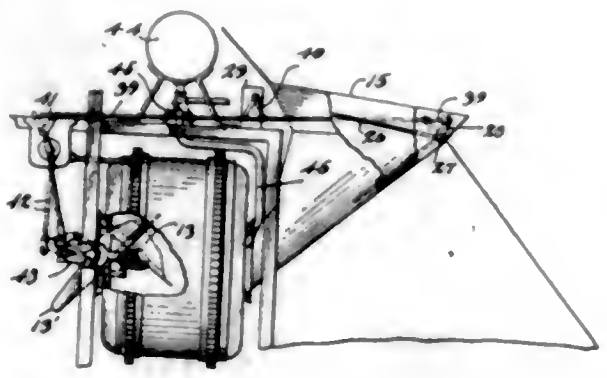
2. A control system for transferring material from either of two rotatively mounted members to the other comprising, in combination, a dynamo-electric machine connected to each member, means for reversibly operating the said machines as a motor and as a generator, and as a generator and as a motor, respectively, means associated with the generator for providing a substantially constant tension on the material as it is being transferred, and means associated with the motor for transferring the material at a substantially constant speed.

1,869,901. ANIMAL FEEDING DEVICE. JOHN ELMER LE FEVER, Tionaga, Ontario, Canada. Filed June 7, 1930. Serial No. 459,697. 9 Claims. (Cl. 119—61.)



1. A feeder of the class described comprising a mounting plate provided with an opening, a holder hingedly supported by the plate for horizontal swinging movement thru the opening, means for limiting swinging movement of the holder into either a loading or a feeding position, a feed pan supported in the holder and removable therefrom when the holder is in a loading position, and means for preventing removal of the pan when the holder is in a feeding position.

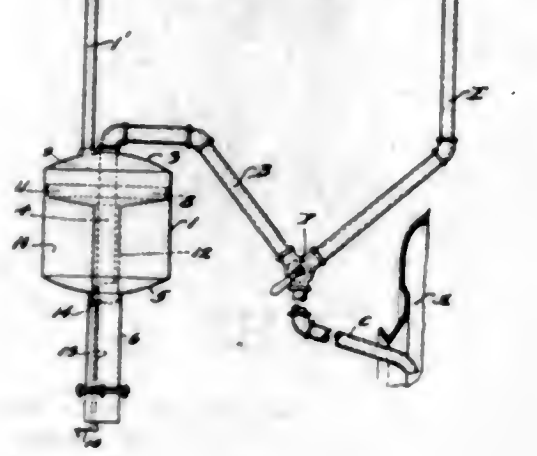
1,869,902. CONCRETE MIXING, SPREADING, AND FINISHING MACHINE. ERICH H. LICHTENBERG, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Aug. 3, 1927. Serial No. 210,273. 8 Claims. (Cl. 83—73.)



1. In concrete mixing apparatus, the combination, with a mixer adapted to be charged with aggregates to be mixed therein and an operation control mechanism therefor, of means disposed in the line of the path of aggregates to be delivered to the mixer incident to charging thereof for actuating the control mechanism.

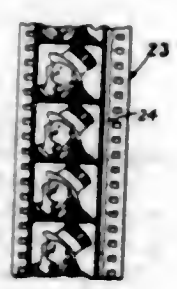
1,869,903. SIPHON WATER TANK. ERICH H. LICHTENBERG, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Dec. 23, 1929. Serial No. 416,137. 12 Claims. (Cl. 221—95.)

1. In a water measuring device, a closed vertical main tank, a supplemental tank vertically movable within the main tank and having its top closed by the top of said main tank, and a siphon pipe extending into said supplemental tank, the supplemental tank closely defining the walls of



the main tank and so related thereto as to deliver a predetermined amount of water independently of any tilting of the device.

1,869,904. ANIMATED MOTION PICTURE. NED HERBERT MANN, Hollywood, Calif. Original application filed Sept. 16, 1928, Serial No. 304,197. Divided and this application filed Oct. 30, 1931. Serial No. 571,994. 4 Claims. (Cl. 88—16.2.)

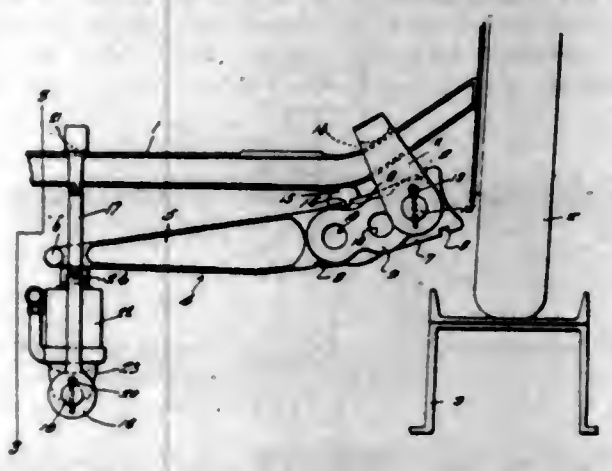


3. The method of producing an animated sound motion picture comprising photographing a sound producing subject, synchronously recording sounds accompanying said subject, utilizing the successive frames of the film bearing the photographs of the sound producing subject as a guide to correspondingly shape the sound producing portions of a puppet to conform to the movements of the sound producing portions of the original sound producing subject, photographing said puppet, then combining said puppet photographic record and the aforementioned synchronous sound recordal into one synchronous reproduction unit.

1,869,905. BENDING TOOL. AUSTIN G. MARSH and AUGUST BILLEK, Springfield, Ill. Filed Jan. 4, 1932. Serial No. 584,744. 5 Claims. (Cl. 153—38.)

1. A bending tool comprising a lever, having a series of openings in one end portion, said lever further having a plurality of recesses in at least one side thereof, a pin selectively insertable through the openings, a clevis mount-

ed for swinging movement on the pin and engageable with the work for operatively connecting the lever with said work, a shim selectively engageable in the recesses and en-



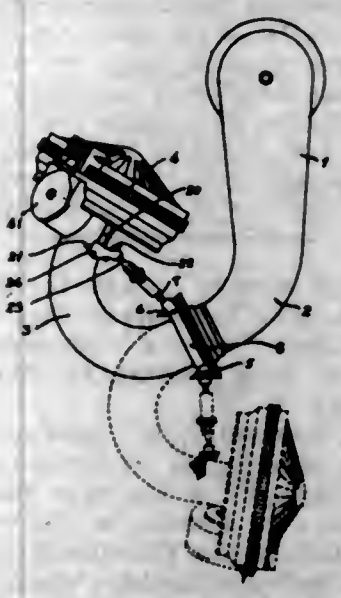
gageable with the work for coaction with the clevis for bending said work when the lever is actuated, and means for actuating the lever.

1,869,906. PROCESS OF PREPARING CALCIUM CHLORIDE. OTTO V. MARTIN, Tulsa, Okla., assignor, by mesne assignments, to Texaco Salt Products Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 14, 1927, Serial No. 233,307. Renewed Sept. 9, 1931. 10 Claims. (Cl. 23—90.)

1. The process of preparing calcium chloride from oil well brines and the likes, which comprises heating the brines containing calcium chloride, spraying the brines to cool and evaporate the same, continuing the heating and cooling by evaporation until the calcium chloride content of the brine has reached 30%, further concentrating the solution by boiling if necessary to about 45 to 55% calcium chloride content, filtering the hot solution under pressure, concentrating the filtrate to 60 to 70% calcium chloride content and cooling said concentrated filtrate to obtain solid hydrated calcium chloride.

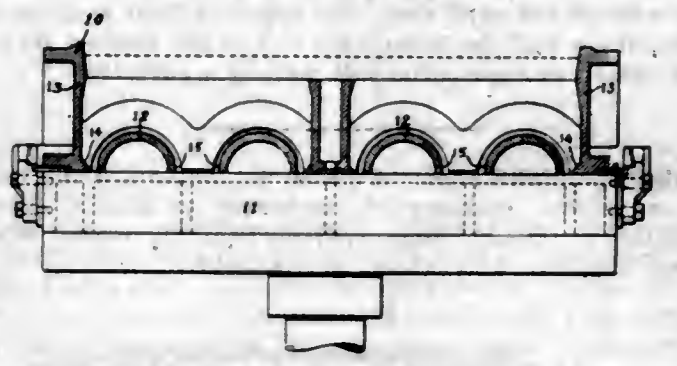
7. The process of preparing calcium chloride from oil well brines comprising treating the brine with lime to precipitate and remove impurities therefrom including silica, alumina, iron and magnesium compounds, heating and spraying the treated brine to effect preliminary concentration thereof, further concentrating the brine by boiling until the calcium chloride content has reached in excess of 50%, filtering the hot solution under pressure, and cooling the hot filtrate to obtain hydrated calcium chloride.

1,869,907. DEVICE FOR AUTOMATICALLY CHANGING PHONOGRAPHIC NEEDLES. JIRO MATSUSAKI, Onomachi, Katogun, Japan. Filed Feb. 27, 1931, Serial No. 518,816, and in Japan Mar. 12, 1930. 8 Claims. (Cl. 274—45.)



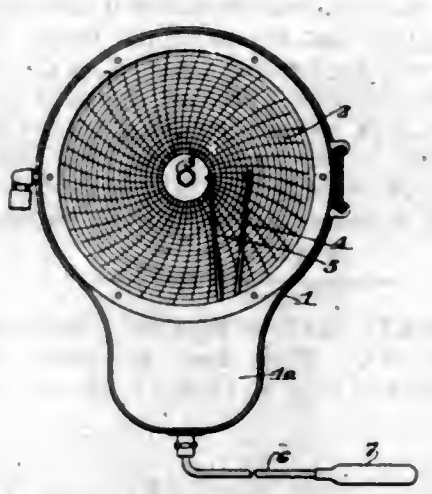
1. Apparatus for automatically changing phonographic needles of a phonographic machine, comprising a sound box, a sound tube consisting of two parts one revoluble with reference to the other and to which the sound box is attached, a needle reservoir carried by said sound box and having a feeding groove formed therein for receiving a single needle from the reservoir, a plunger longitudinally movable in said sound box, means actuated by the relative rotary movement of said two parts of the sound tube to move said plunger to cause the latter to eject a needle from the reservoir and means associated with the sound box for gripping said needle.

1,869,908. APPARATUS FOR MOLDING CAST IRON PIPE AND THE LIKE. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Original application filed Mar. 19, 1928, Serial No. 262,683. Divided and this application filed Jan. 14, 1932. Serial No. 586,616. 3 Claims. (Cl. 22—157.)



1. A pattern plate for molding cast iron pipe and the like having a pattern part on its face; said pattern part having plane vertically tapered surfaces instead of curved surfaces at and near its junction with the face and extending a sufficient distance from said junction to permit a more perfect packing of the sand and afterwards a substantially perfect separation of the rammed sand in the flask from the pattern.

1,869,909. RECORDER. HARRY Y. NORWOOD, West Rush, N. Y.; assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Apr. 17, 1929. Serial No. 355,862. 5 Claims. (Cl. 234—11.)

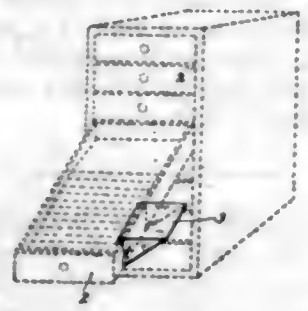


1. In apparatus of the character described, the combination with a member sensitive to conditions to be controlled, constructed and arranged to move in response to variations of said conditions, of a plurality of separately movable elements and means for separately transmitting motion from the sensitive member to said elements causing them to move at different rates.

1,869,910. HAND REST. ARTURO OMEGNA, Santiago, Chile. Filed Oct. 18, 1930. Serial No. 489,668. 1 Claim. (Cl. 120—53.)

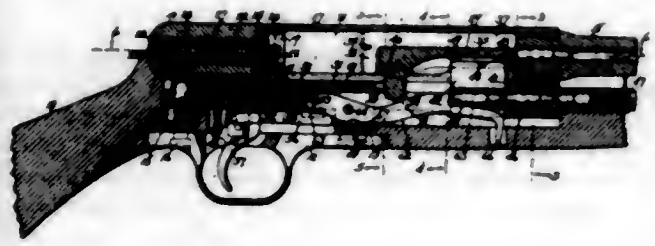
A hand rest for use in connection with card containing trays comprising a relatively broad hand supporting sec-

tion having its inner edge bent downwardly at right angles to the support to fit over the wall of a card receiving tray, the sides of the support being bent downwardly to form flanges, the inner ends of the side flanges



being bent inwardly toward each other in spaced relation to the inner bent end of the support to form a space for the wall of the card tray, the inwardly bent ends of the side flanges and the inner bent end of the support serving as a clamp to engage the side wall of a card tray.

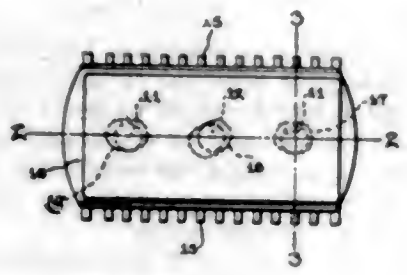
1,869,911. FIREARM. EUGENE G. REISING, East Hartford, Conn., assignor of one-fourth to Alva C. Washburne, Pittsfield, Mass. Filed Dec. 31, 1930. Serial No. 505,794. 13 Claims. (Cl. 42—17.)



1. A firearm including a stock, a frame encased in said stock, a frame head fitted to the upper edge of the frame, a screw projecting through the frame into said head to secure the latter in place, a trigger plate located underneath the stock and spaced from said frame by an intervening part of the frame, a screw projecting through said plate and into the end of the first mentioned screw to secure the plate and frame to the stock, a receiver, a barrel, and firing mechanism mounted on said structure.

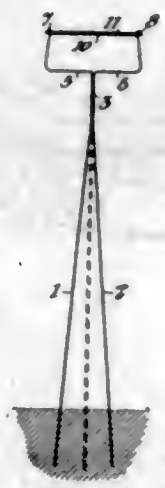
9. A firearm including a frame having a slot in its outer side surface, a receiver mounted on the frame and including a head, a sear mounted in said slot and projecting through an opening in said head, and firing mechanism including a hammer adapted to be engaged by said sear.

1,869,912. SAFETY RAZOR BLADE. WILLIAM C. ROGERS, Chicago, Ill. Filed Dec. 31, 1928. Serial No. 329,424. Renewed Feb. 4, 1932. 7 Claims. (Cl. 30—12.)



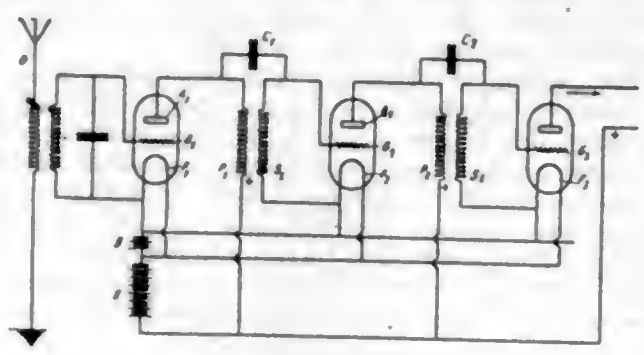
3. A safety razor blade having base pin receiving holes and a handle attaching screw receiving slot disposed with its longitudinal center line at a more acute angle to the longitudinal center line of the blade than to the transverse center line of the latter.

1,869,913. PLANT LABELING DEVICE. EDWIN M. ROSENBLUTH, Wallingford, Pa. Filed May 26, 1930. Serial No. 455,523. 5 Claims. (Cl. 40—10.)



1. A plant labeling stake comprising two members joined together at the upper portion of said stake and forming tines at both the upper and lower ends, adapted respectively for holding a label and for insertion in the soil; wherein the upper tines are bent to form substantially parallel opposite hook members.

1,869,914. RADIO TRANSFORMER. HENRY JOSEPH ROUND, Muswell Hill, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Original application filed Mar. 31, 1920, Serial No. 370,175, and in Great Britain May 13, 1919. Divided and this application filed Aug. 21, 1928. Serial No. 301,038. 3 Claims. (Cl. 175—359.)

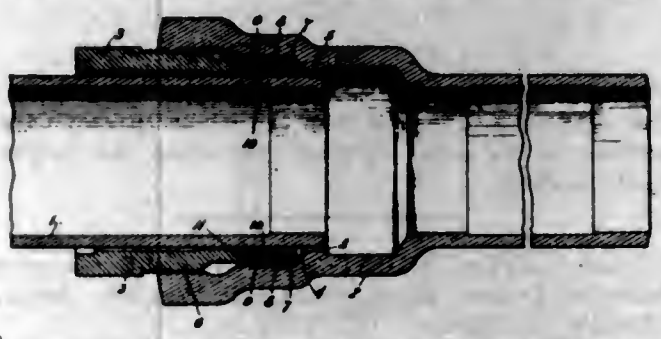


1. A transformer adapted to transfer radio frequency currents of a broad band of frequencies from the output terminals of an amplifier, comprising a primary winding, a secondary winding inductively coupled thereto, each of said windings being formed of high resistance wire and the inductance to capacity ratio of said windings having such a value that the maximum voltage across the terminals of said secondary winding is not substantially greater than twice the minimum voltage as the various frequencies of said band are applied to said primary winding.

1,869,915. PIPE JOINT. JAMES D. SAMPLE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Sept. 27, 1928. Serial No. 308,633. 1 Claim. (Cl. 285—166.)

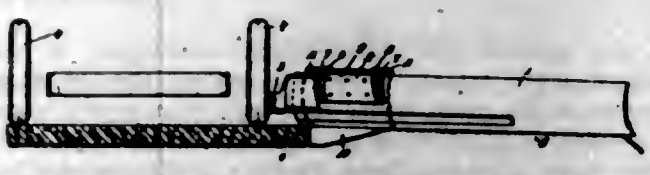
A pipe joint comprising, in combination, a bell having an annular shoulder on its interior; a pipe section whose outside diameter is less than the least diameter of the shoulder, and received in the bell so as to be spaced from said shoulder and having its end extending beyond the shoulder and having a plain, smooth exterior surface; packing material between the pipe section and the bell and abutted against said shoulder; a gland

screw threaded to the bell at the mouth thereof and engaging the packing material with its inner end, but being out of contact with the pipe section when the pipe is centered in the bell; said gland compressing the packing material and forcing it radially in both directions to make a tight joint; said packing material comprising an inner ring of soft metal abutted against the shoulder and



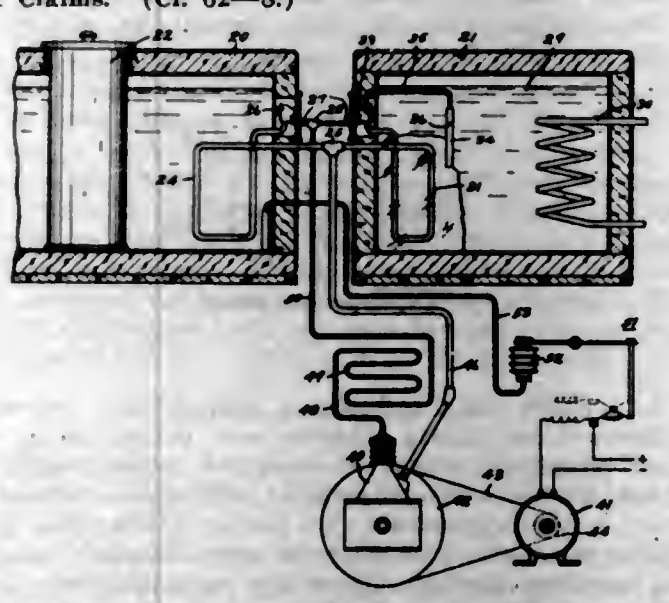
fitting closely within the bell and upon the pipe section, a rubber ring adjacent the inner ring, and an outer soft metal ring with which the gland contacts; the outer ring fitting closely over the pipe section and being of reduced thickness adjacent the pipe section; the end of the gland being beveled so as to force the outer ring against the pipe section when screwed down tightly.

1,869,916. SHOULDER GRADING MACHINE. CARL G. SCHMID, Indianapolis, Ind., assignor to Insley Manufacturing Company, Indianapolis, Ind., a Corporation. Filed Aug. 12, 1931. Serial No. 556,707. 7 Claims. (Cl. 37—143.)



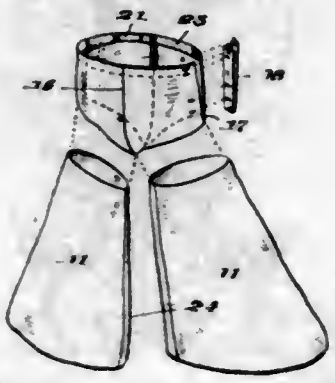
1. A shoulder finishing machine comprising the combination with a traction device, of a main shoulder finishing blade, and an auxiliary blade carried by the main blade for excavating a trench of desired configuration between a roadway and the shoulder thereof, and means allowing the auxiliary blade to be freely swung from inoperative to operative positions, and vice versa, the auxiliary blade being supported in inoperative position adjacent the top of the main blade, and engaging the operative surface of the main blade in operative position.

1,869,917. REFRIGERATION APPARATUS. WARREN H. F. SCHMIEDING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Jan. 25, 1926. Serial No. 83,427. 11 Claims. (Cl. 62—8.)



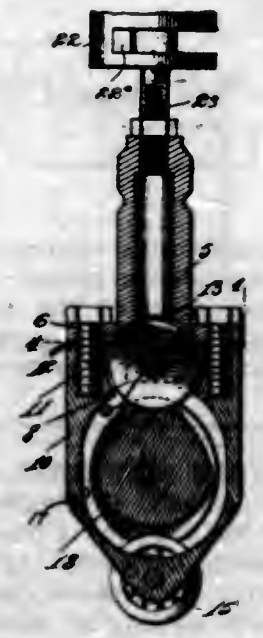
1. A refrigerating system comprising, in combination, an evaporator for cooling the medium to be cooled, means for withdrawing refrigerant from the evaporator and for condensing said refrigerant and for forcing the same into the evaporator, and valve means at the inlet of the evaporator for controlling the flow of refrigerant to said evaporator, said last means being directly responsive to the pressure within the evaporator for regulating the flow of refrigerant to the evaporator and responsive to the condition of the medium cooled by said evaporator for positively preventing the flow of refrigerant to the evaporator.

1,869,918. PAJAMAS. MAX C. SCHRANK, Bridgeton, N. J. Original application filed Nov. 4, 1930, Serial No. 493,383, Patent No. 1,831,769, dated Nov. 10, 1931. Divided and this application filed Oct. 22, 1931. Serial No. 570,428. 1 Claim. (Cl. 2—237.)



As an improvement in apparel suitable for outside wear, a garment having a waist portion with a placket at each side that opens from the top downward, means for securing each placket in a closed position, a hem forming a tunnel that extends from the rear edge of one placket to the rear edge of the other placket across the waist portion at the back, and a short normally contracted piece of elastic webbing situated in the tunnel adjacent each placket with its forward end terminating at and secured adjacent the rear edge of the placket and the rear end of each piece of webbing being secured in the tunnel, the portion of the garment at the waist between the rear ends of the two opposite pieces of webbing being inelastic and by the opposing pull of the two pieces of webbing when the two plackets are secured in closed position, being maintained in a smooth condition against the back of the wearer and the portion of the garment at the waist that reaches from the forward edge of one placket to the forward edge of the other placket being inelastic and lying smooth throughout the distance between such placket edges, while the garment is on the person.

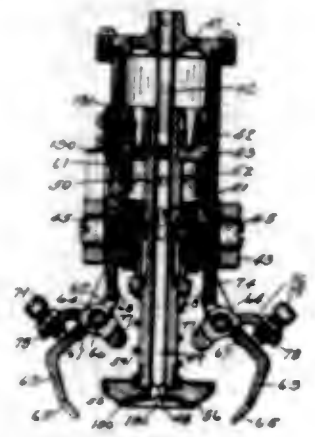
1,869,919. INTERNAL COMBUSTION ENGINE VALVE. WILLIAM H. SEABROOK, Detroit, Mich., assignor to Seabrook Motor Corporation, Fitzgerald, Ga., a Corporation of Georgia. Filed Aug. 14, 1928, Serial No. 299,626. Renewed July 2, 1930. 4 Claims. (Cl. 123—90.)



1. In a valve, a cylindrical housing for attachment to a valve tappet, a valve stem having one end loosely received

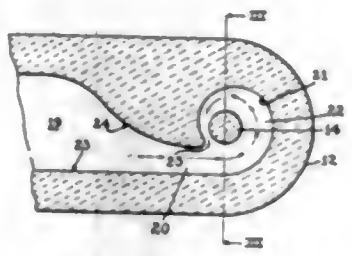
therein, and a frusto-conical shaped expansible spring having its small end tightly hugging the valve stem and its large end snugly accommodated in the housing to permit the valve stem to shift laterally in any direction.

1,869,920. MACHINE FOR FORMING HOLLOW GLASSWARE. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 1, 1927. Serial No. 216 824. 15 Claims. (Cl. 49—14.)



10. In a glassware forming machine, a rotary mold carriage, an annular series of ware forming molds thereon, ware take-out mechanism individual to the molds, said take-out mechanism including a take-out arm movable laterally relative to the corresponding mold, an air motor hinged to an end portion of said arm, a disk seatable upon ware in the finishing mold, ware engaging jaws pivoted to one end of the air motor, said jaws being movable into ware engaging position by and upon complete seating of the disk upon the ware, means actuated by seating of the disk on the ware to supply air pressure to the air motor, connection between said air motor and disk whereby maintenance of air pressure within the former effects transferring engagement between said jaws and the ware, automatic means to release ware from the jaws at a predetermined station, and means functioning at least during transfer of ware from the mold to cause continuous movement of air through said motor for injection into ware being transferred from the mold.

1,869,921. MEANS FOR FEEDING MOLTEN GLASS. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 14, 1929. Serial No. 399,461. 6 Claims. (Cl. 49—55.)



1. Glass feeding apparatus comprising a container for molten glass provided with a bottom outlet opening, and means for supplying glass to the container, said container formed with a spiral passageway through which the glass is directed in a spiral path to the outlet.

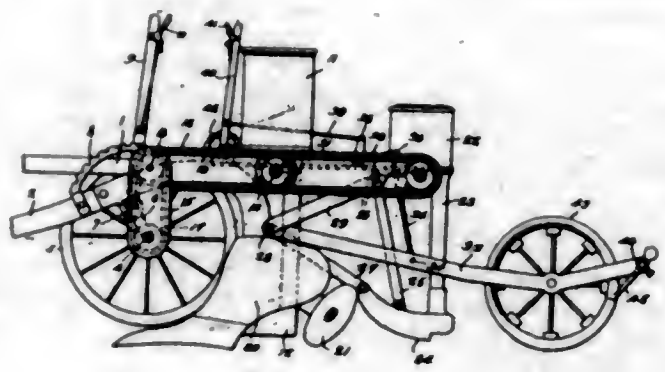
1,869,922. LUMINOUS SIGNALING DEVICE. GEORGE SOUČEK, Prague-Letnany, Czechoslovakia. Filed Sept. 15, 1930. Serial No. 482,103. 1 Claim. (Cl. 240—1.2.)

A luminous signaling device for aiding safe landing of aeroplanes comprising illuminated lines arranged in the form of figure T with its axis or center line in the direction of landing, substantially parallel with the surface of the plane of landing and at such a height above ground that a smooth landing is possible, and an illuminated line of different color crossing the said center line adjacent its free end, the said cross line having an elevated center



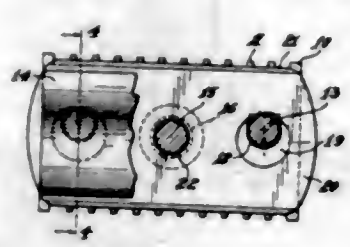
portion operating during descent to cover first the center of the rear cross line and then the whole thereof with the exception of its ends, thereby indicating the height for smooth landing.

1,869,923. ATTACHMENT FOR LISTERS. JOSEPH J. STEVENS, Dalton, Kans. Filed July 17, 1930. Serial No. 468,619. 2 Claims. (Cl. 111—22.)



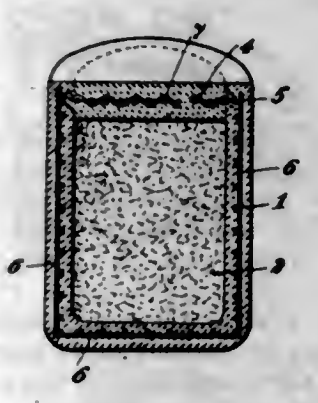
1. An agricultural implement embodying a wheel-mounted main frame, a furrow opener carried thereby, a seeder on the main frame and including a shoe mounted for raising and lowering and located in the wake of the furrow opener, an auxiliary frame, a packer carried by the auxiliary frame and disposed behind the shoe, a downwardly and forwardly inclined brace having its rear end connected to the main frame, another brace having its lower end connected to the shoe, means for connecting the upper end of said other brace, adjustably to the first-specified brace, a forwardly extended link having its rear end connected to the forward portion of the shoe, and a pivot element connecting the auxiliary frame to a part of the furrow opener, the forward end of the link and the forward end of the first-specified brace being mounted on the pivot element.

1,869,924. SAFETY RAZOR. NICHOLAS TESTI, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Jan. 20, 1930. Serial No. 422,115. 4 Claims. (Cl. 30—12.)



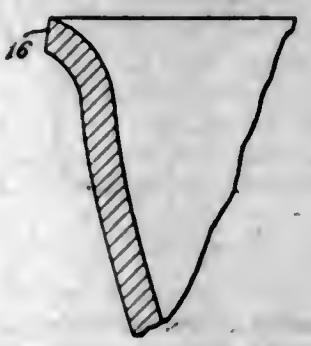
1. A safety razor including a blade holder, two spaced cylindrical positioning studs on said holder having their longitudinal axes located on one side of the longitudinal axis of said holder, a clamping pin on said holder disposed centrally in the longitudinal axis thereof, and a blade having spaced positioning stud-receiving apertures and a clamping-pin receiving opening, each of said positioning stud receiving apertures being of regular contour and having its center disposed in the longitudinal axis of said blade, each aperture being both transversely and longitudinally of the blade larger than the diameter of the respective positioning stud.

1,869,925. ARTICLE FOR INTRODUCING MATERIALS IN A METALLURGICAL BATH. ROBERT TURNBULL, Toronto, Ontario, Canada, assignor, by mesne assignments, to Hugh C. Sicard, New York, N. Y. Filed Sept. 24, 1930. Serial No. 483,986. 1 Claim. (Cl. 75—27.)



As an article of manufacture, a package of material for alloying iron, said package comprising a hermetically sealed container of Portland cement adapted to combine with the slag of a melting furnace for iron, a predetermined amount of metallurgical alloying material for iron tightly compressed within said container to form a solid sealed mass adapted to resist substantial crushing forces and shocks, said container being adapted to release the alloying contents at the combining temperature of the said alloying material and iron whereby said alloying material combines with the iron and the particles of the container go into the slag.

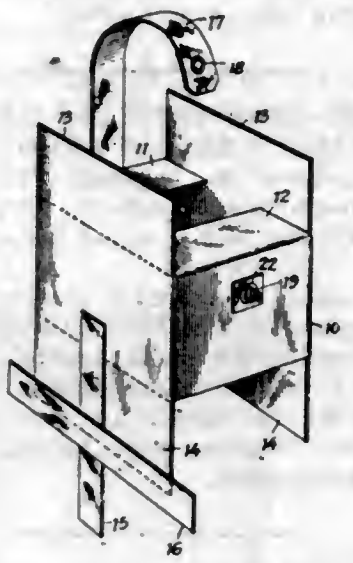
1,869,926. SHEET METAL ELBOW AND METHOD OF PRODUCING. CHARLES A. WULF, Indianapolis, Ind., assignor to American Valve and Enameling Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed July 5, 1929. Serial No. 375,933. 4 Claims. (Cl. 219—10.)



3. The method of forming short radius elbows of thin sheet metal which comprises the formation of a semi-tubulated blank having laterally extending fins connected to the main body by short radius curves, removing the surplus of said fins to leave a narrow upwardly inclined flange, diametrically surfacing the blank to remove from the inner faces of said upwardly extended flanges material to abut the lower outer corner of said flanges, clamping so-prepared semi-tubulated blanks together with their surfaced flange areas mating, and thereupon electrically welding said mating edges during external pressure exerted on the edges of said tubular blanks.

1,869,927. BOX. REGINALD WURZBURG, Memphis, Tenn. Filed Jan. 25, 1930. Serial No. 423,323. 13 Claims. (Cl. 229—45.)

1. A collapsible box whose length is substantially greater than its width and depth, said box having a pair of flaps secured to side walls thereof, said flaps being shaped to fold down and leave a joint between them, a non-adhesive flexible inelastic closure strip secured to the box at one end of said joint in position to fold down on the box lengthwise of the joint to seal said joint, a fastener element on the free end of said strip, and a fastener element on the box at the other end of said

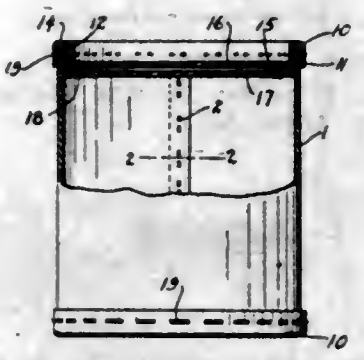


joint in position to cooperate with said first-named fastener element to hold said strip taut, substantially as set forth.

1,869,928. PROCESS OF PRODUCING ALCOHOLS FROM GASOLINE. EUGENE E. AYRES, Jr., Swarthmore, Pa., assignor to The B. A. S. Company, Philadelphia, Pa., a Corporation of Delaware. Filed Sept. 14, 1925. Serial No. 56,410. 3 Claims. (Cl. 260—156.)

1. In the manufacture of monohydric alcohols having four to five carbon atoms, the steps comprising chlorinating in vapor phase a saturated hydrocarbon obtained from natural gas and having four to five carbon atoms, by heating the hydrocarbon in the presence of chlorine gas and in the substantial absence of actinic rays and of electric discharge and thereby forming a chlorine derivative thereof containing a substantial proportion of primary monochloride, and hydrolyzing the resulting hydrocarbon chloride by heating in the presence of an aqueous alkaline agent and an ester of a substantially water-insoluble fatty acid and thereby forming corresponding monohydric alcohol of which a substantial proportion is primary normal alcohol.

1,869,929. DRUM CONTAINER. HERBERT R. BLISS and HOWARD G. ALLEN, Niagara Falls, N. Y., assignors to H. R. Bliss Co., Inc., Niagara Falls, N. Y., a Corporation of New York. Filed May 29, 1929. Serial No. 366,795. 3 Claims. (Cl. 229—5.7.)



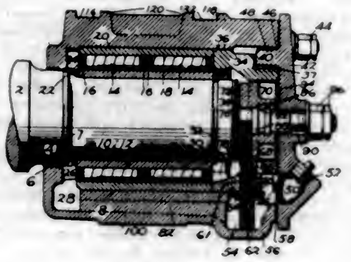
1. A fiber board container comprising, a drum-shaped body, an end head ring having a U-shaped formation in cross section and separate from the body, said end head ring being placed onto the end of the body with the bight portion of the U abutting against the edge of the drum body and with the legs of the U lapping the inner and outer sides of the wall of the drum body, a plurality of metallic stitches circumferentially arranged and in spaced relation extending through the legs of the U and

marginal portions of the drum wall for securing the end head ring to the drum body, an inwardly projecting flange carried by the end head ring, and a fiber disc-like end head closure member overlapping said flange and metallic stitches securing the same thereto.

1,869,930. AZO DYESTUFFS AND METHOD OF PREPARING SAME. RAINALD BRIGHTMAN, Manchester, England, assignor to Imperial Chemical Industries Limited, Westminster, England. Filed Aug. 7, 1930, Serial No. 473,763, and in Great Britain Aug. 21, 1929. 5 Claims. (Cl. 260—86.)

1. The process of preparing a monoazo dyestuff which comprises coupling a diazotized aromatic amine of the benzene or naphthalene series selected from the group consisting of such unsulphonated non-carboxylated aryl amines which do not contain a hydroxyl group and sulphonated amino thiazoles with 1-amino-5-naphthol-7-sulphonic acid compounds.

1,869,931. JOURNAL BOX. RICHARD J. BRITTAIN, Jr., Bloomfield, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 21, 1927. Serial No. 200,336. 10 Claims. (Cl. 308—180.)



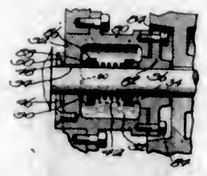
1. In a device of the character described, an axle box, an axle journalled in the box, an end cap removably fixed to the end of the box, a ring fitting in the box, the ring being separate from the end cap and having an opening extending through it, a thrust block fitting in the opening, and a clamping stud rigidly secured to the thrust block and extending through the end cap whereby the thrust block can be moved inwardly from outside the end cap to measure the play between the axle and the thrust block; substantially as described.

1,869,932. STRIP GASKET. LOUIS S. BROWN, Los Angeles, Calif. Filed Nov. 9, 1929. Serial No. 405,987. 1 Claim. (Cl. 154—45.5.)



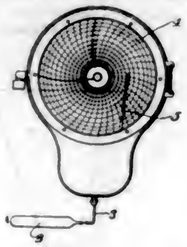
A strip packing gasket adapted to be interposed between contiguous faces of members forming an overlapping joint which comprises a flat strip of rubber having covering of a material impervious to the action of oil and the like, said covering being in the form of a flat sheet of fibrous material folded upon itself to embrace the flat rubber strip, the line of fold occurring in the joint and facing the interior of the container in which the joint occurs, and the free edges of the material being stitched together by a line of stitching passing through the material and the rubber strip.

1,869,933. SEAL FOR ROTATING SHAFTS. GEORGE J. COOKE, Chicago, Ill., assignor to Cooke Electric Refrigeration Company, Chicago, Ill., a Corporation. Filed Feb. 10, 1926. Serial No. 87,270. 8 Claims. (Cl. 286—7.)



7. A seal for a rotating shaft which extends through a wall comprising an annular cup-shaped member adapted to encircle the shaft and free to rotate and move longitudinally thereon, said cup having a bottom adapted to seat upon the wall around the shaft and form a ground joint therewith, an annular rubber-like gasket adapted to encircle the shaft within the cup and a spring adapted to encircle the shaft and press the gasket into the cup, and squeeze same into firm sealing contact with the shaft, neither cup, spring nor gasket having any positive driving connection with the shaft but being rotated thereby solely through the frictional engagement of the rubber-like gasket on the shaft.

1,869,934. PRESSURE RESPONSIVE INSTRUMENT. ALBERT J. DOSER, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Jan. 24, 1931. Serial No. 511,079. 5 Claims. (Cl. 234—11.)



1. In instruments of the character described, the combination of a driving device, an element to be moved thereby and motion-transmission mechanism between the device and the said element, including a member connected to the device and moved by the latter to describe a definite path, an arm pivotally connected to said member, resilient means tending to restrain relative motion between the arm and said member, means in the path of motion of said arm and unconnected with said member for limiting the angular motion of the arm, and a connection between the arm and the said element.

1,869,935. SHOULDER STRAP HOLDER. TILLIE FESTER, Cleveland, Ohio. Filed June 1, 1931. Serial No. 541,463. 2 Claims. (Cl. 24—73.)



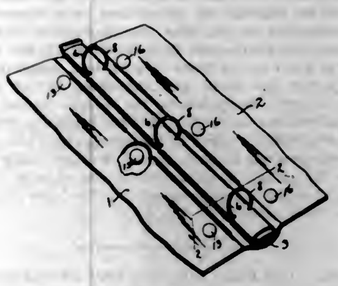
2. A device of the class described comprising a strip folded upon itself, a male member of a snap fastener attached to one end of the strip, a female member of the fastener being attached to the other end, a clip slidably arranged on the folded parts of the strip for adjusting the size of the loop defined by the ends of the strip between the snap fastener elements and the clip, said clip being formed of a strip of material bent upon itself to form a loop which encircles the two folded parts of the strip, and means for detachably connecting the folded end of the strip to a garment.

1,869,936. ELECTRIC SWITCH. ANDREW E. GRISWOLD, Seattle, Wash., assignor to Trumbull Electric Manufacturing Company, Pacific Division, Seattle, Wash., a Corporation of Washington. Filed June 3, 1929. Serial No. 367,874. 7 Claims. (Cl. 173—328.)



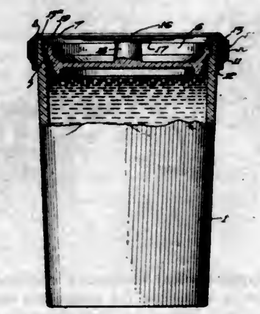
1. An electric switch embodying a receptacle, two pairs of resilient split terminal clips disposed within said receptacle, the two clips of one pair being spaced farther apart than the two clips of the other pair, a cover plate and two U shaped switch blade elements of different lengths secured to said cover plate, both blades of both switch blade elements engaging said terminal clips and closing circuits through said terminal clips in one position of said cover and one blade of each of said blade elements being clear of said terminal clips and leaving the circuits through said terminal clips open in another position of said cover.

1,869,937. LOOSE LEAF BINDER. GUY E. HAMLIN, Syracuse, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed Nov. 5, 1931. Serial No. 573,144. 4 Claims. (Cl. 129—24.)



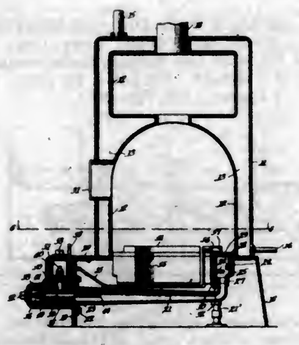
3. A loose leaf binder comprising a back member, opposed covers formed of a flexible material and hingedly connected to the back member, a plurality of leaf-retaining means secured to the back member in spaced relation, and a plurality of spaced individual protective disks secured to each cover in spaced relation, each disk being positioned to register with one of the leaf-retaining means when the covers are in the closed position.

1,869,938. CLOSURE CAP FOR TUMBLERS, JARS AND OTHER RECEPTACLES. HARRY INGRAM, Wheeling, W. Va. Filed Oct. 24, 1929. Serial No. 402,238. 7 Claims. (Cl. 215—56.)



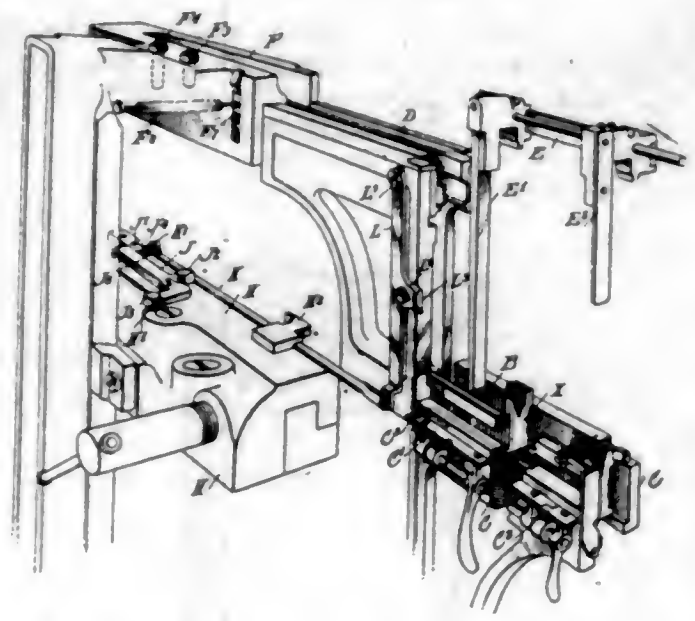
1. A closure for tumblers and other receptacles, comprising an external closure cap formed with a vent opening, an internal service cap, a seat formed within the receptacle for supporting the service cap, and a vent-valve disposed within the receptacle to contact with part of the service cap and also with the under surface of the closure cap about the vent opening, the closure cap having a limited flexure about the vent opening for relief of excess internal pressure within.

1,869,939. HEATING APPARATUS. ROY S. LATIMER, Troy, N. Y. Filed Apr. 18, 1928. Serial No. 271,063. 52 Claims. (Cl. 158—7.)



5. A burner unit for use with a heater having a combustion chamber with heat absorbing side walls surrounding the same comprising a burner element in juxtaposition to said side wall at the base thereof, said burner element being provided with an upper burner mixture outlet opening, and means to supply air under pressure from the exterior of a combustion chamber slightly above and to the side of said opening remote from said side wall.

1,869,940. TYPOGRAPHICAL COMPOSING AND CASTING MACHINE. LUTHER E. MORRISON, New York, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Sept. 14, 1929. Serial No. 392,620. 18 Claims. (Cl. 199—52.)

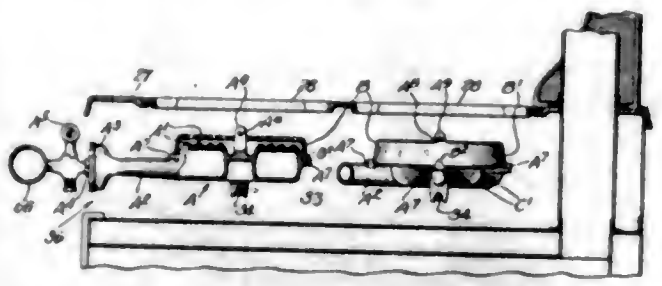


1. In a typographical composing and casting machine, the combination of means for composing matrices in line at different levels, means for presenting the composed line to the mold at different levels, and automatic means for bringing the matrices composed at an upper level to a lower level before casting takes place.

1,869,941. PROCESS FOR MANUFACTURING ACID PHOSPHATE. BEVERLY OBER and EDWARD HYATT WIGHT, Baltimore, Md., assignors, by mesne assignments, to The Oberphos Company, Baltimore, Md., a Corporation of Maryland. Filed June 19, 1926. Serial No. 117,170. 2 Claims. (Cl. 71—7.)

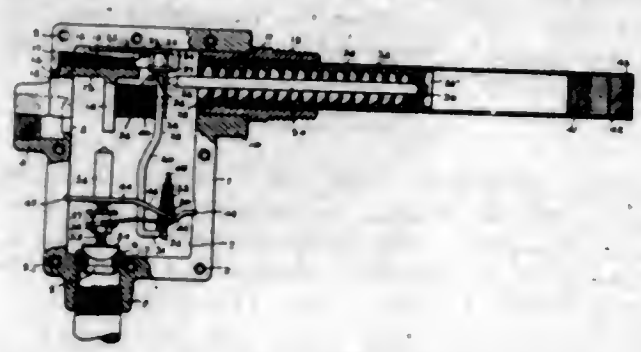
1. A process for manufacturing acid phosphate comprising the steps of initially mixing phosphate rock and an acid at atmospheric temperature and pressure, increasing the temperature and pressure during the reaction stage, decreasing the pressure and temperature and subsequently further decreasing the pressure.

1,869,942. BURNER UNIT FOR GAS HEATING APPARATUS. HENRY W. O'DOWD, Jersey City, N. J., assignor to Standard Gas Equipment Corporation, a Corporation of Maryland. Filed Nov. 10, 1926. Serial No. 147,461. 6 Claims. (Cl. 126—39.)



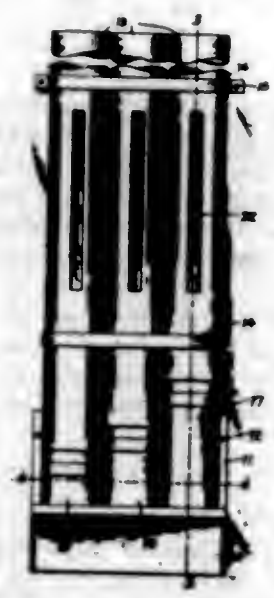
1. A burner unit including, in combination, a Bunsen burner member having a group of aligned individual flame ports arranged in close proximity to each other, and a unitary cover plate sustained above said burner member and having a continuous discharge opening common to all the flame ports and presenting side walls disposed at opposite sides of said ports, said cover plate forming between itself and the burner member a secondary air chamber and having its discharge opening situated in a zone immediately above that of the flame ports, whereby the flame jets entrain secondary air and are discharged therewith through said discharge opening.

1,869,943. THERMOSTATIC GAS CONTROL. HAROLD W. PRICE, Toronto, Ontario, Canada, assignor, by mesne assignments, to Georgie Walton Ryan, New York, N. Y. Filed Dec. 22, 1927, Serial No. 241,930. Renewed Mar. 4, 1931. 16 Claims. (Cl. 236—48.)



1. Thermostatic fluid control mechanism comprising a lever, a thermostatic member engaging said lever, a yieldable fulcrum for said lever, a fluid valve, an actuating lever for said valve, and extensible means extending between the first named lever and the actuating lever and directly connected to both of same and exerting tension therebetween, said extensible means being movable across the fulcrum point of said actuating lever on movement of said first named lever in response to thermal changes whereby said actuating lever will be rapidly swung about its fulcrum point.

1,869,944. SANITARY CARTON HOLDER. WILLIAM J. RANEY, Memphis, Tenn. Filed Aug. 19, 1929. Serial No. 386,911. 1 Claim. (Cl. 312—42.)

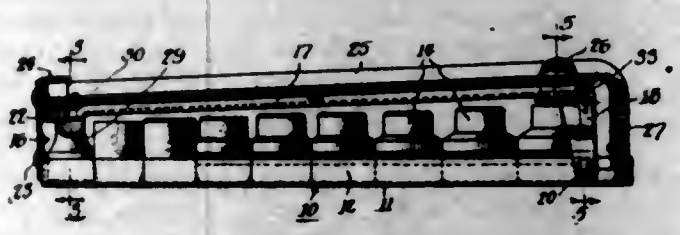


A dispensing device for cartons comprising a horizontally extending shelf having a member projecting upwardly therefrom adapted for attachment to a support or the like, a plurality of individual carton holding tubes freely resting on the shelf, each tube closed at its top and partially cut away at its front to provide a dispensing opening adjacent the shelf, and the shelf having openings formed therein intermediate the edges thereof whereby when the cartons are contained in the tubes and rest on the shelf the peripheral edges of the cartons will but partially cover the openings so as to permit a finger being inserted therein for aiding in withdrawing the cartons from the tubes, and common means embracing the tubes for holding them in fixed position on the shelf.

1,869,945. HOLDER FOR SOCKET WRENCH SETS. HAROLD G. RICE, Chicago, Ill., assignor to Indestro Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 8, 1926. Serial No. 140,241. 1 Claim. (Cl. 206—16.)

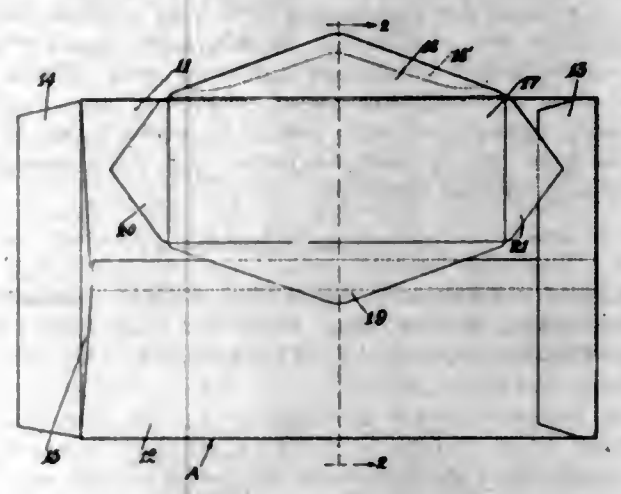
A holder for receiving a set of sockets in a row and a bent end handle member arranged lengthwise there-

over with the bent end projecting downwardly along the side of the sockets at one end of the row and comprising a tray for receiving the sockets in a row, a retaining member pivotally connected to the tray at one end, latch means at the other end of the tray for locking said retaining means in closed position and provided with means for positioning and preventing lateral move-



ment of one end of the handle member relative to the sockets, means secured to said retaining member for releasably holding the other end of the handle adjacent the row of sockets, and means comprising a part of said tray for coacting with the bent end of said handle for preventing said end from moving laterally away from the end socket and whereby endwise movement of the handle is prevented.

1,869,946. DUPLEX ENVELOPE. WILLIAM H. RIFE, Chicago, Ill. Filed Sept. 13, 1928. Serial No. 305,668. 1 Claim. (Cl. 229—72.)



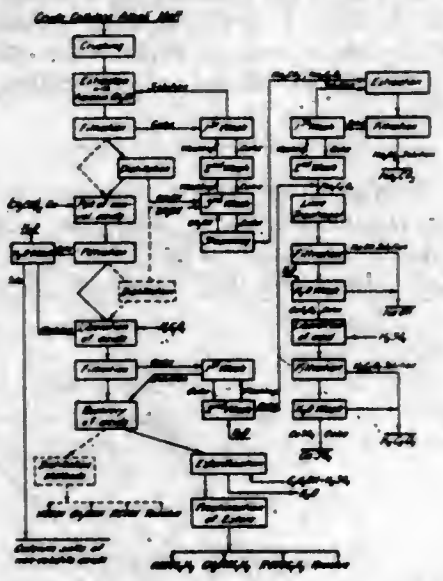
A duplex envelope of the character described, comprising a container formed of a blank of paper cut to provide a main body portion having top, bottom, and side flaps folded over to provide a compartment, a second blank cut to provide a second body portion having a bottom flap adapted to be sealed over the line of sealing of said top and bottom flaps of said main body portion, a side flap adapted to be sealed over the line of sealing of one of said side flaps of said main body portion, and a top flap adapted to be folded over the top edge of said main body portion and sealed on the side of said main body portion opposite the side of said main body portion on which said bottom flap of said second body portion is sealed.

1,869,947. SAFETY BOLT. ALVIN L. SHOOK, Kelseyville, Calif. Filed Apr. 13, 1931. Serial No. 529,822. 1 Claim. (Cl. 151—27.)



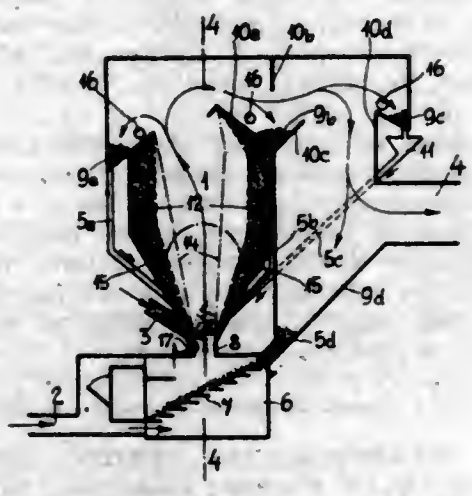
A bolt having a pair of oppositely arranged holes in its threaded end, said holes passing through the threaded end of the bolt and diverging from said end through the sides of the bolt, said bolt having a transverse hole therein connecting the inner ends of the first mentioned holes together and the end of the bolt having a groove therein, the ends of which communicate with the outer ends of the holes first mentioned and a member formed of a single piece of spring wire bent into substantially V-shape with a short bight part resting in the groove with its limbs passed through the said first mentioned holes, the ends of the limbs being bent inwardly to enter the transverse hole.

1,869,948. SEPARATION AND RECOVERY OF PRODUCTS PRODUCED BY THE ALKALINE FUSION OF CELLULOSIC MATERIALS. LLOYD C. SWALLEN, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Nov. 24, 1928. Serial No. 321,725. 14 Claims. (Cl. 260—119.)



1. Process for recovering products obtained by the alkaline fusion of cellulosic materials which comprises extracting said fusion product with an aqueous alcohol, removing the alcohol from the resulting solution, removing the non-volatile acids from said solution, and then converting the residual salts in said solution into the corresponding acids.

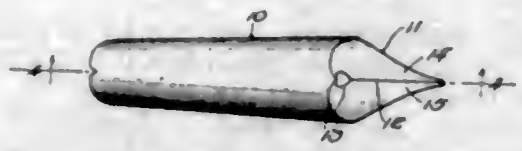
1,869,949. A PROCESS FOR GASIFYING AND DISTILLING COAL DUST. GÉZA SZIKLA and ARTHUR ROZINEK, Budapest, Hungary. Filed July 23, 1926. Serial No. 124,536, and in Hungary July 25, 1925. 7 Claims. (Cl. 48—203.)



3. A process for gasifying and distilling coal dust, wherein coal in the form of dust or fine granules is driven through a gasifying shaft in an ascending current of gas and thereby is gasified and distilled, employing a quantity of oxygen insufficient for complete combustion; characterized by the fact that an ungasified incandescent portion of fuel dust is carried along by the gas in addition to the supply of fresh coal dust and is

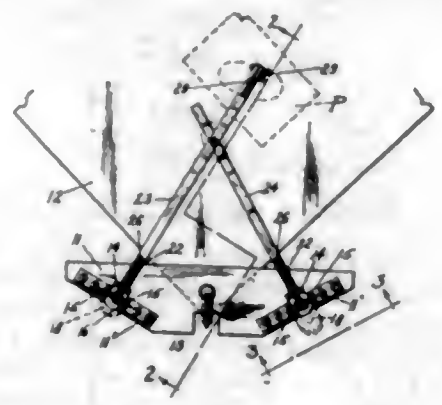
introduced in part at least into the gasifying chamber, said dust after separation from the current of gas being returned in continuous circulation to the gasifying shaft.

1,869,950. PEN. HARRY E. WALDRON, Fort Madison, Iowa, assignor to W. A. Sheaffer Pen Company, Fort Madison, Iowa, a Corporation of Delaware. Filed Aug. 10, 1931. Serial No. 556,133. 5 Claims. (Cl. 120—109.)



1. A pen comprising a body portion having a pointed writing end, said body portion having a metal plating over a substantial portion at said pointed writing end of a character to provide a smooth surface for effecting a free and uniform flow and spread of a writing fluid on a writing surface.

1,869,951. PENDULUM TOY. GEORGE E. WORTHINGTON, North Hollywood, Calif., assignor to F. J. Catterlin, Los Angeles, Calif. Filed Apr. 24, 1929, Serial No. 357,812. Renewed Dec. 18, 1931. 5 Claims. (Cl. 234—1.)



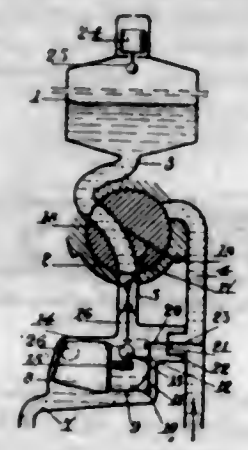
1. In combination, a marking device, two pendulum rods mounted to swing freely, and rigid means connecting said pendulum rods to said marking device to operate the same during the swinging of said pendulums.

1,869,952. PROCESS OF PREPARING PHOSPHATIC FERTILIZER. DAVID L. ANDERSON, Baltimore, Md., assignor, by mesne assignments, to The Oberphos Company, Baltimore, Md., a Corporation of Maryland. Filed Sept. 19, 1929. Serial No. 393,853. 2 Claims. (Cl. 71—7.)

1. A method of preparing phosphatic fertilizer comprising treating insoluble phosphatic material with an acid of a concentration of 52 to 56° Bé. at a pressure between 25 and 50 pounds per square inch, maintaining exothermic heats within the reacting mass, reducing the pressure on the reaction mass and heating the same to a temperature equal to that obtained by heating with steam under a pressure of 20 pounds.

1,869,953. MEASURING AND FEEDING DEVICE FOR LIQUIDS. MARIO CLEMENT CARBONARO, Paris, France, assignor to Société Anonyme pour Tous Appareillages Mécaniques, Levallois-Perret, Seine, France. Filed Apr. 20, 1929, Serial No. 356,670, and in France Apr. 27, 1928. 15 Claims. (Cl. 221—100.)

1. In apparatus as described, the combination of a liquid measuring assembly, means supplying liquid under pressure to said measuring assembly, a valve means controlling the flow of liquid to and discharge from said measuring assembly, a lever having an arm coacting with said valve and a second arm associated with spring means, a member connected to the second arm, locking means

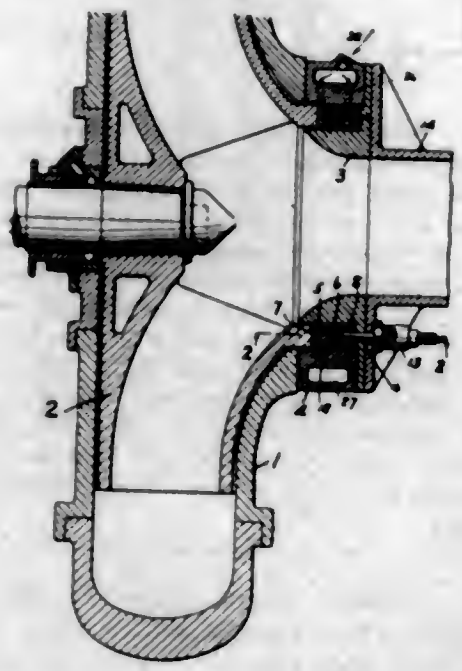


for the member, means controlled by the discharging liquid and the liquid supplying means for actuating the locking means.

1,869,954. METHOD OF DECOLORIZING ESTER DISTILLATION FRACTIONS. EDWIN H. CARNARIUS and VERNE D. CHARLESTON, Peoria, Ill., assignors to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed Oct. 24, 1930. Serial No. 491,078. 12 Claims. (Cl. 260—106.)

1. A process for the decolorization of colored fractions obtained in the distillation of aliphatic monocarboxylic acid esters which comprises agitating said colored fractions with an oxidizing agent, removing any unreacted oxidizing agent and such reaction products as are not dissolved in the treated fractions, and subsequently distilling said treated fractions.

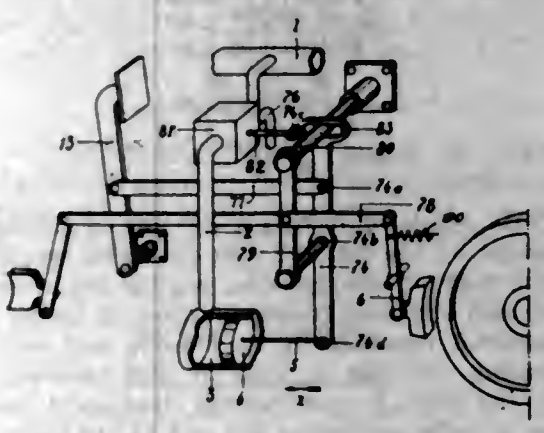
1,869,955. DREDGING OR LIKE PUMP. CHARLES E. DAUGHERTY, Wayne, Pa. Filed Oct. 22, 1930. Serial No. 490,352. 6 Claims. (Cl. 103—111.)



1. In a centrifugal dredging or like pump having a front cover and a pump impeller and a fixed throat ring sleeve and a throat ring and designed for opposing flow of material between the front shroud of the impeller and the front cover of the pump, the combination of a liner ring and an adjusting ring constituting a unitary structure axially slidable with respect to the surface at the eye of the impeller and a fixed anchor plate, all arranged in an annular space provided between the throat ring sleeve and the throat ring, arcuate stops turnably mounted between the anchor plate and adjusting ring to facilitate axial sliding movement and to oppose rotary

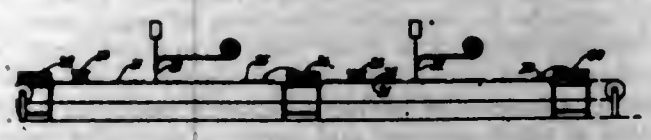
movement of the adjusting ring and liner ring, spring pressed means having limited movement and acting on the liner ring to yieldingly hold it up to said impeller surface, means for introducing liquid under pressure through the spring pressed means to said surface, and means for introducing liquid through the throat ring sleeve and discharging it obliquely against the direction of movement of the impeller between the throat ring sleeve and said liner and adjusting rings into the space between the front shroud and the cover plate near the eye of the impeller.

1,869,956. SERVO-BRAKE. ALBERT DEWANDRE, Liege, Belgium, assignor to Servo Frein Dewandre Societe Anonyme, Liege, Belgium. Filed Sept. 14, 1925, Serial No. 56,320, and in Belgium Aug. 10, 1925. Renewed May 11, 1931. 17 Claims. (Cl. 188—152.)



6. In a servo-brake mechanism, a brake, power operating means subjected to pressure differences, a distributor for controlling such pressure differences, a manually-operable pedal, a lever system operated by the power means and connected to the brake, to the pedal, and to the distributor, the lever system being initially operated by the pedal to compel distributor action, the brake operation of the lever system following operation of the power means incident to the distributor action, such lever system transmitting a proportion of the braking force of the operating means through the pedal connection to the foot of the operator as an indicative reaction of braking force.

1,869,957. METHOD AND APPARATUS FOR THE FORMATION OF PLYWOOD. THEODORE WILLIAMS DIKE, New Westminster, British Columbia, Canada, assignor to I. F. Laucks, Inc., Seattle, Wash., a Corporation of Washington. Filed Feb. 28, 1931. Serial No. 518,944. 21 Claims. (Cl. 144—309.)

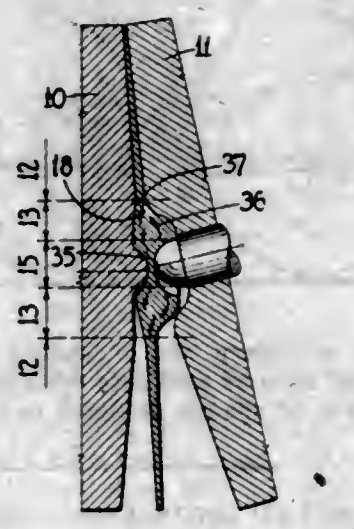


1. The method of assembling plywood panels which comprises passing in a continuous manner through a zone in which there is a controlled concentration of the adhesive particles suspended in air the surfaces of plies that are to receive the adhesive, and bringing such surfaces into juxtaposition with the remaining plies.

1,869,958. ELASTIC FABRIC. CAMILLE DREYFUS, New York, N. Y. Filed Aug. 8, 1930. Serial No. 474,068. 4 Claims. (Cl. 139—421.)

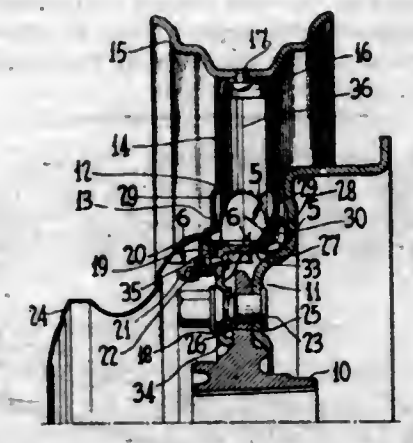
1. An elastic fabric containing yarns of an organic derivative of cellulose and rubber threads.

1,869,959. METHOD AND APPARATUS FOR ROLLING DISKS. CAROLUS LEVON EKSERGIAN, Detroit, Mich., and EDWARD G. BUDD, Philadelphia, Pa., assignors to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 31, 1929. Serial No. 417,613. 19 Claims. (Cl. 80—60.)



1. The method of rolling relatively thin disks such as automobile wheel disks which consists in simultaneously axially compressing and radially rolling the blank, the while maintaining an excess of metal of substantial thickness at the center of the blank integral with the body thereof, and continuously feeding metal outwardly from the center to prevent reduction of section incident to the radial stresses incident to the relatively extreme thinning.

1,869,960. ARTILLERY STEEL WHEEL. CAROLUS L. EKSERGIAN and PAUL W. GAENSSLE, Detroit, Mich., assignors to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 5, 1931. Serial No. 520,196. 5 Claims. (Cl. 301—9.)

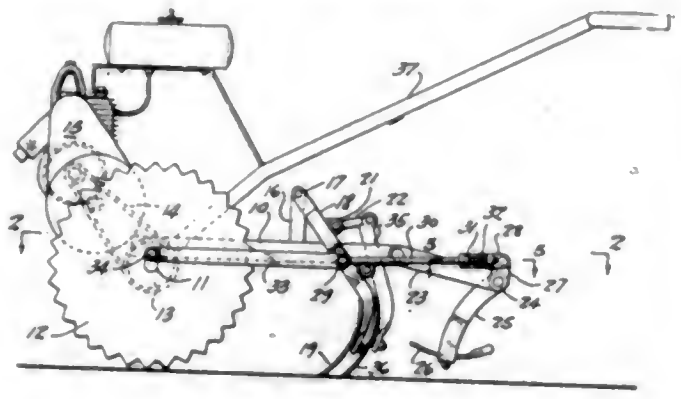


1. A vehicle wheel comprising, in combination, integral hollow spoke and foreshortened nave portions, and a reinforcing clamp comprising opposed members engaging opposite sides of the wheel nave to clamp the same, said members extending radially inwardly in abutting relationship beyond the hollow nave portion and being secured together in said zone of radial abutment.

1,869,961. POWER DRIVEN SPADER. HAROLD H. GLASIER, Los Angeles, Calif. Filed Aug. 31, 1931. Serial No. 560,343. 19 Claims. (Cl. 97—48.)

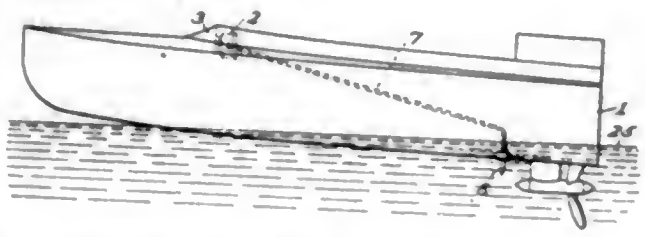
1. A spader comprising a frame, a ground wheel at the forward end of said frame; a set of primary spades pivotally mounted on said frame intermediate the front and rear thereof; a set of secondary spades pivotally mounted on said frame at the rear of said primary spades;

means connected to said wheel to change rotary motion to reciprocating motion, said means including a reciprocating link connected to the arms of the primary set of



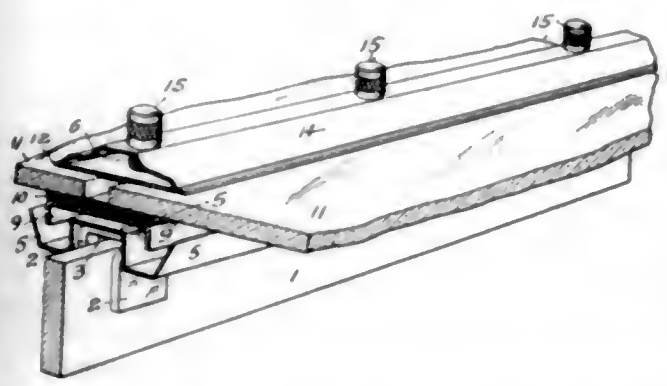
spades and secondary set of spades on opposite sides of the pivotal axes of said sets whereby the primary and secondary sets of spades oscillate in opposite directions.

1,869,962. SPEED INDICATOR. ROBERT F. GOLDEN, South Orange, N. J., assignor to The National Lock Washer Company, Newark, N. J., a Corporation of New Jersey. Filed Mar. 10, 1930. Serial No. 434,532. 8 Claims. (Cl. 73—122.)



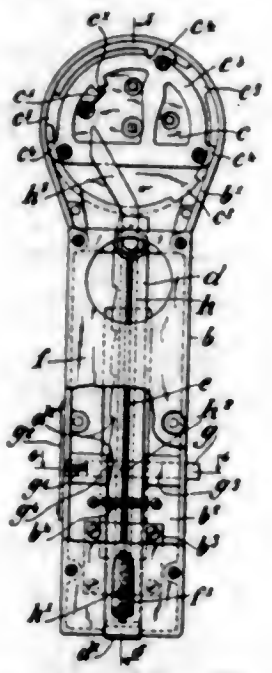
1. In combination, a boat hull having a fitting with a hole therein below the load line, a speed indicator, means to secure said indicator to said hull, an impact tube extending through said hole and having an opening, a tube connecting the impact tube to the indicator, and coacting means on said impact tube and fitting preventing insertion of the impact tube in the hole except with said opening facing the bow of the boat.

1,869,963. GLASS STRUCTURE. HAROLD B. HAWES, Fairfield, Conn., assignor to G. Drouve Co., Fairfield, Conn., a Corporation of Connecticut. Filed Sept. 12, 1930. Serial No. 481,368. 4 Claims. (Cl. 108—16.)



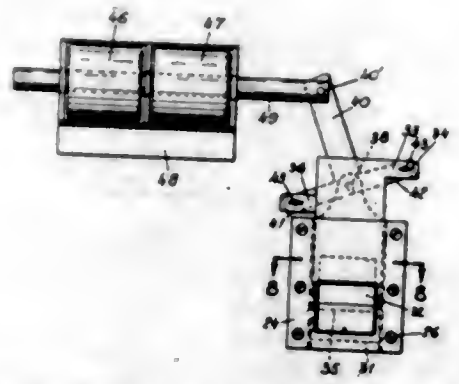
1. In a glass structure unit as described, having a rafter bar, a series of sheet metal clips welded to said bar at different locations and having flat upper portions spaced from said bar and having open gates, an elongated gutter resting upon and embracing said clips, bolts passed through said clips and gutter and extending upwardly, nuts driven on said bolts against the gutter whereby the latter is secured to the clips between the bolt heads and said nuts.

1,869,964. DRAFT REGULATOR. HORACE W. HEYMAN, Maplewood, N. J. Filed Jan. 29, 1930. Serial No. 424,243. 1 Claim. (Cl. 161—8.)



In a draft regulator having a housing, a timing mechanism carried by the housing and an alarm winding key, a mounting plate in the housing, a slide bar mounted on the plate, said slide bar having notches, a spring pressed detent mounted transversely to the bar and having one end extending through a wall of the housing, a coil spring on the plate to cushion the downward movement of the bar, a lever pivoted at one end to the plate, means to connect the lever intermediate its ends with the detent, and an extension on the lever engaged by the key.

1,869,965. LIGHT CONTROL MECHANISM FOR PROJECTORS. ROBERT HOROWITZ, Bronx, N. Y. Filed July 18, 1931. Serial No. 551,698. 1 Claim. (Cl. 88—17.)



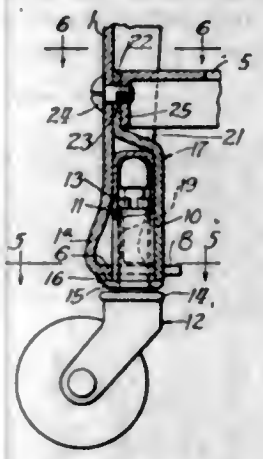
The combination with a projection machine, of a shutter adjacent the projection aperture, a plain and an apertured plate movable in opposite directions to open and close the passage of light, a lever having opposed arms each connecting with one of said plates, a pair of solenoids arranged in tandem and having a common armature connected with a third arm on said lever, a manually operable switch controlling current to one of said solenoids, a spring impelled lever having a roll pressed against a film in said machine, and means, including a switch operated by said lever, to control the other of said solenoids.

1,869,966. CASTER MOUNTING. RUDOLPH W. JANDA, Berwyn, Ill., assignor to Conlon Corporation, Cicero, Ill., a Corporation of Illinois. Filed Feb. 10, 1930. Serial No. 427,233. 9 Claims. (Cl. 16—38.)

1. In combination, a supporting member provided with an inturned flange, a bracket secured to the supporting member and extending along the same, said bracket having an opening at its lower end and the flange of the sup-

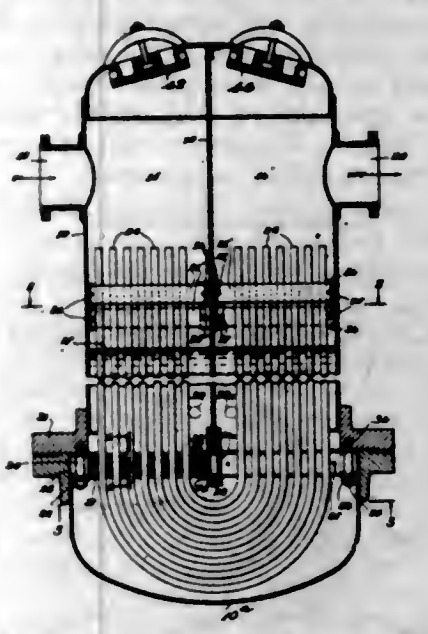
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porting member being provided with an opening aligned with the opening of the bracket, a socket member extending through the openings of the bracket and the supporting



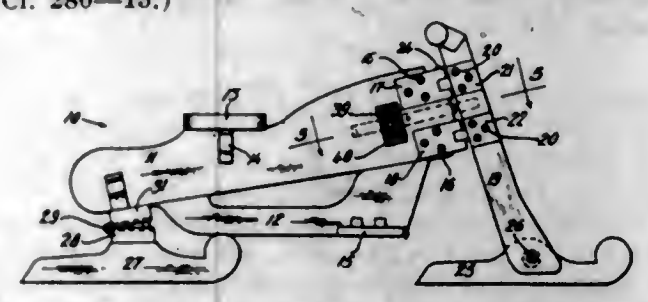
member, said socket member being confined between the bracket and the supporting member, and a caster including a shank inserted into the socket member.

1,869,967. DESUPERHEATER. SVEND M. JORGENSEN, Elizabeth, N. J., assignor to The Superheater Company, New York, N. Y. Filed Nov. 21, 1929. Serial No. 408,768. 12 Claims. (Cl. 257—221.)



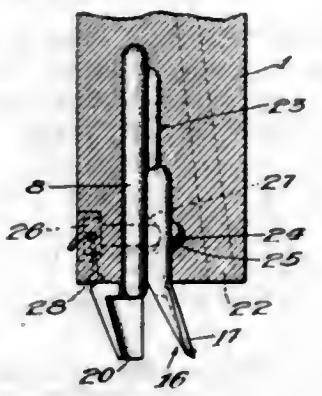
1. In a desuperheater, the combination of two vertically extending chambers therein, one having an inlet and the other an outlet, U-tubes having their mouths facing upwardly for conducting heating fluid from one chamber to the other, and liquid in said chambers in heat absorbing contact with said tubes below their mouths and of the same character in each.

1,869,968. SLED. THORVALD J. JORGENSEN, Franklin Square, and OLAF K. JORGENSEN, Garden City, N. Y. Filed Feb. 28, 1931. Serial No. 519,038. 4 Claims. (Cl. 280—15.)



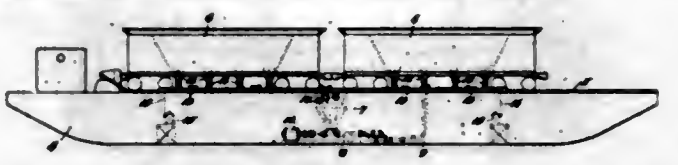
1. A sled, comprising a body having a support therebelow, a runner having an aperture therein for movably receiving said support, and spring means mounted on said runner below its aperture for carrying part of the weight of said body, said spring being in contact with said support.

1,869,969. ROTARY DRILLING TOOL. CHARLES B. KENNEDYE, University City, Mo., assignor to The Kennedye Corporation, Wilmington, Del., a Corporation of Delaware. Filed Nov. 23, 1929. Serial No. 409,206. 3 Claims. (Cl. 255—61.)



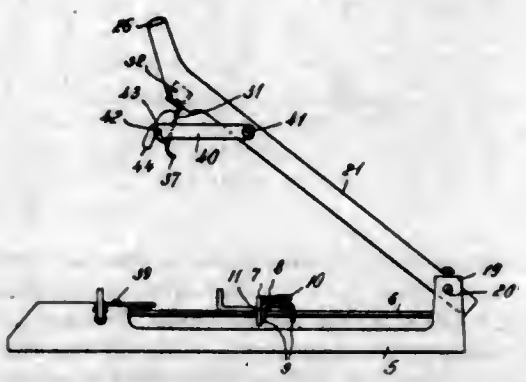
2. A reamer comprising a body portion substantially rectangular in shape, one side of which comprises a cutting edge, an offset shoulder integrally associated with the lower edge of said rectangular body portion, and an extension projecting below said shoulder provided with a lower side and bottom cutting edge, the plane of the face of said extension being at an angle to the plane of the face of the rectangular member.

1,869,970. APPARATUS FOR HANDLING CEMENT OR LIKE MATERIAL IN BULK. MORRIS KIND, Bryn Mawr, Pa., assignor to Hercules Cement Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 17, 1930. Serial No. 421,332. 17 Claims. (Cl. 214—15.)



1. Apparatus for handling cement or like material in bulk comprising in combination, a float, a track, a car discharging downwardly at each side of the track, a longitudinal screw conveyor arranged substantially in the plane of the track at each side thereof for receiving the discharge from the car, flexible water-proof connecting means for delivering the discharge from the car into the longitudinal conveyors, a transverse screw conveyor below the track receiving from said longitudinal conveyors and discharging into a receiving bin, and conveying mechanism for withdrawing the material from said bin and discharging it from the float.

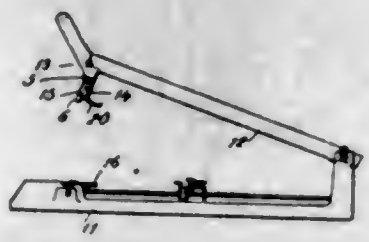
1,869,971. APPARATUS FOR ATTACHING PAPER FASTENERS. FRED J. KLINE, Bayville, N. Y., assignor to Acco Products, Inc., Long Island City, N. Y., a Corporation of New York. Filed July 26, 1929. Serial No. 381,368. 11 Claims. (Cl. 1—4.)



1. In an apparatus of the character described, the combination of a base and a support for a paper fastener movable toward the base and having means thereon to engage

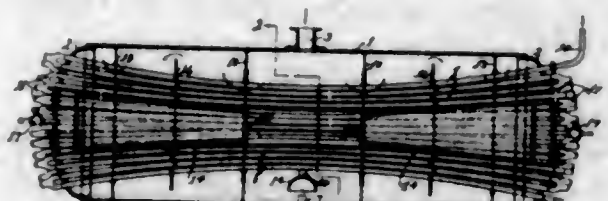
opposite sides of the prongs of the fastener to hold them in parallel spaced relation, the latter means being pivoted to the support and adapted to be swung away from the prongs as the support moves toward the base.

1,869,972. FILING DEVICE. FRED J. KLINE, Bayville, N. Y., assignor to Acco Products, Inc., Long Island City, N. Y., a Corporation of New York. Filed Mar. 7, 1931. Serial No. 520,788. 8 Claims. (Cl. 1—4.)



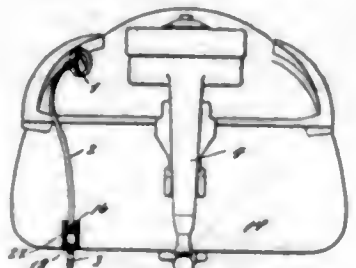
1. In an apparatus for securing fasteners to a support therefor, a mobable head, a swinging guide thereon adapted to receive a fastener, spaced pins on the head to engage openings in the fastener and a die plate co-operating with the head.

1,869,973. COMBINED CONDENSER AND HEATER. CHARLES E. LUCKE, New York, N. Y., asignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Dec. 20, 1929. Serial No. 415,385. 11 Claims. (Cl. 257—236.)



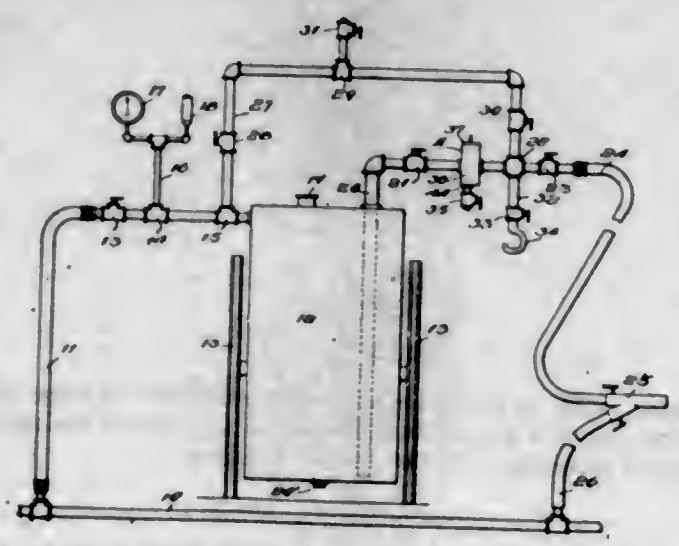
1. In a heat exchanger, an elongated casing and curved tubes extending through said casing, said tubes being arranged in circular rows, and connections between the tubes outside the casing for relating the tubes serially.

1,869,974. SPEED INDICATING MEANS. IRVIN W. MASTERS, Newark, N. J., assignor to The National Lock Washer Company, Newark, N. J., a Corporation of New Jersey. Filed Oct. 11, 1929. Serial No. 398,874. 5 Claims. (Cl. 73—122.)



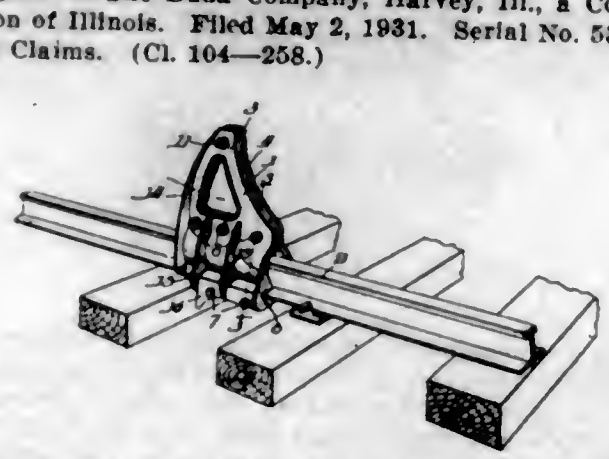
1. In combination, a boat hull, a bracket secured to a vertically extending part of the exterior of said hull adjacent the load line, an impact tube having an opening, means to detachably support the tube on the bracket with said opening, disposed below said load line, a speed indicator, means to detachably secure said indicator to said hull, and means connecting said impact tube to said indicator.

1,869,975. SPRAYING APPARATUS. KARL A. MILAR, Chicago, and DUNCAN L. CLINCH, Hubbard Woods, Ill., assignors, by mesne assignments, of one-half to Duncan L. Clinch, Hubbard Woods, Ill., and one-half to Karl A. Milar, Chicago, Ill. Filed Mar. 22, 1930. Serial No. 437,990. 6 Claims. (Cl. 91—45.)



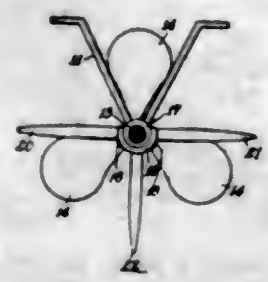
1. In a spraying apparatus, the combination with a pressure tank for the material and having an air inlet pipe and a material outlet pipe; a strainer having inlet and outlet ports, a bleed valve independent of either of said ports, located in said outlet pipe; a by-pass from the inlet pipe direct to the outlet pipe and connected with the latter on the outlet side of the strainer; and control valves arranged to shut off the delivery of the material and by-pass the air through the strainer direct to the bleed valve to clean the strainer.

1,869,976. CARSTOP. CLAUD T. MILLER, Harvey, Ill., assignor to The Buda Company, Harvey, Ill., a Corporation of Illinois. Filed May 2, 1931. Serial No. 534,565. 15 Claims. (Cl. 104—258.)



1. A railway car stop comprising a shoe having a wheel engaging head portion and means for clamping said head portion to the base of a track rail whereby the head is supported from the base of the rail independently of the head of the rail.

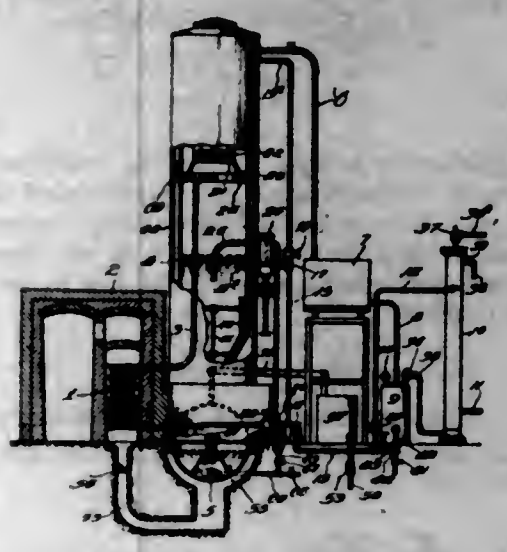
1,869,977. PROPELLER GUARD. BEN C. MODIN, Brooklyn, N. Y. Filed Nov. 4, 1930. Serial No. 493,294. 4 Claims. (Cl. 115—34.)



1. In a propeller-driven vessel; a guard for the propeller thereof, comprising an arcuate sleeve adapted to be rigidly secured over the lower half of the propeller

shaft bearing immediately forward of the propeller and having a pair of integral stationary blades extending laterally therefrom in opposite directions and substantially in a horizontal plane, and an integral intermediate stationary blade extending downwardly therefrom substantially in a vertical plane.

1,869,978. PROCESS AND APPARATUS FOR CONVERTING HYDROCARBONS. ALFRED OBERFELL, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed July 2, 1923. Serial No. 648,917. Renewed Apr. 6, 1927. 6 Claims. (Cl. 196—59.)



1. A process of converting hydrocarbons consisting in introducing the charging oil to a pool in a conversion zone, withdrawing the oil from said pool and passing it through a heating zone and there raising it to a conversion temperature, directing the heated oil to the conversion pool, subjecting the vapors evolved to a refluxing and condensing action, passing the unvaporized products to a coking zone, distilling the unvaporized products under reduced pressure conditions in said zone by the heat of the partially expended flue gases from the heating zone, and maintaining the hydrocarbon products in the conversion pool and coking zone in a turbulent condition to prevent deposition of the free carbon.

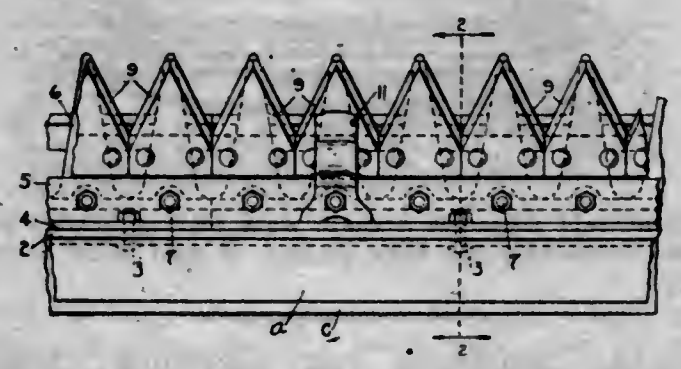
1,869,979. ART OF TREATING METALS. HANS OSBORG, Frankfort-on-the-Main, Germany. Original application filed Sept. 6, 1930, Serial No. 480,179, and in Canada June 26, 1931. Divided and this application filed Dec. 21, 1931. Serial No. 582,493. 5 Claims. (Cl. 75—17.)

1. An improving, purifying and scavenging agent for metallic substances in molten condition which comprises a mixture of salt-like hydrides of "alkali" metals having a relatively high melting point and being capable of liberating hydrogen at relatively high temperatures whereby the molten metallic substance combines with oxygen and other gases and impurities present in said metallic substances.

1,869,980. PROCESS OF TREATING MOLTEN METALS AND ALLOYS WITH COMPOSITIONS CONTAINING LITHIUM AND PRODUCTS RESULTING FROM SUCH TREATMENT. HANS OSBORG, Frankfort-on-the-Main, Germany. Filed Dec. 21, 1931, Serial No. 582,494, and in Canada June 26, 1931. 25 Claims. (Cl. 75—17.)

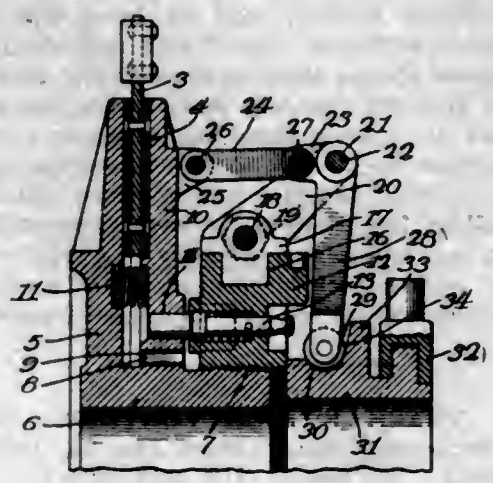
1. The process of treating metals including copper, iron, and nickel and/or alloys of such metals in their molten state to purify and scavenge the same and to improve the properties thereof, which comprises treating said metals and/or alloys thereof while in a molten state with a lithium-silicon composition.

1,869,981. CUTTER BAR. LOUIS A. PARADISE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Sept. 6, 1929. Serial No. 390,688. 4 Claims. (Cl. 56—298.)



1. The combination of an L bar forming the front frame bar of a harvester, a leg of said bar disposed vertically, and a bottom leg extending rearwardly, a supplemental similar L bar having its vertical leg secured to the vertical leg of the first mentioned bar and having a horizontal leg extending forwardly, guard fingers mounted on said forwardly extending leg and having their lower side in the horizontal plane of the rearwardly extending leg of the first mentioned bar, and means to secure said bars together.

1,869,982. CLUTCH. WILLIAM J. PEARMAIN, Racine, Wis., assignor to The Twin Disc Clutch Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 19, 1929. Serial No. 386,840. 1 Claim. (Cl. 192—68.)

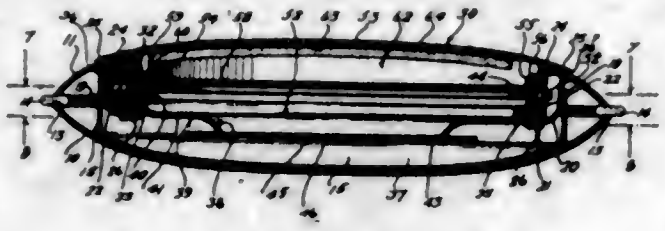


In a clutch of the class described, a friction plate, clamping plates on opposite sides of said friction plate and movable into and out of engagement therewith, one of said clamping plates being adapted to be mounted on a shaft and the other of said clamping plates floating axially with respect to the first mentioned clamping plate but rotating therewith, a collar axially adjustable upon the first mentioned clamping plate, a ring rotatably mounted on said collar, rectangular bell crank levers fulcrumed on said ring the shorter arms of said bell crank levers extending toward the clamping plates and the longer arms thereof extending toward the axis of the clutch, links connecting the short arms of the bell crank levers with the floating clamping plate and a sleeve adapted to slide on the shaft and engaging the longer arms of the bell crank levers for operating the same.

1,869,983. VANITY CASE. ALFRED F. REILLY, Attleboro, Mass., assignor to Evans Case Company, North Attleboro, Mass., a Corporation of Massachusetts. Filed Nov. 3, 1930. Serial No. 492,919. 26 Claims. (Cl. 132—83.)

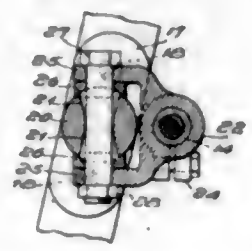
1. A powder dispenser comprising a ring, a plate having a pair of substantially arcuate slots therein, means

on the under side of said ring and means on the plate cooperating therewith to hold the plate against the under



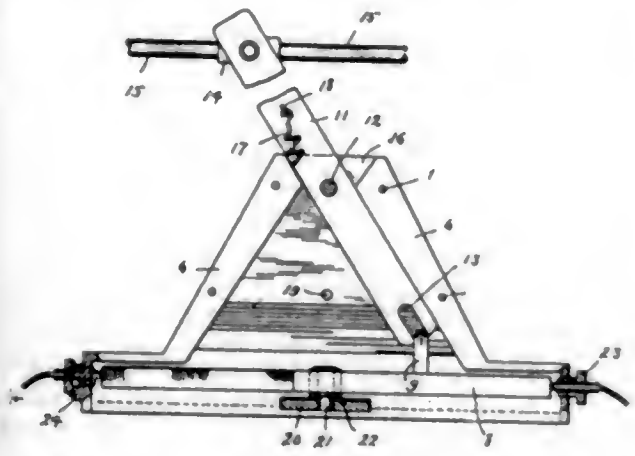
side of said ring, the arcuate slots leaving flexible portions connecting the body portion of said plate to said ring.

1,869,984. MOUNTING FOR DIRIGIBLE LIGHTS. CLIFFORD SKLAREK, Chicago, Ill., assignor to International Spotlight Corporation, Chicago, Ill., a Corporation of Illinois. Filed Sept. 29, 1930. Serial No. 485,000. 2 Claims. (Cl. 287—89.)



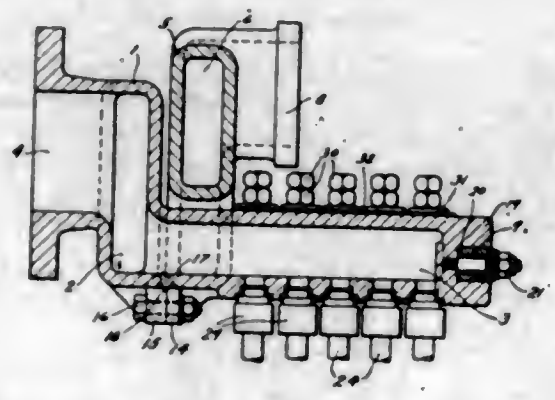
1. In a mounting of the character described, the combination with a bearing member; of a bracket member adapted to be attached to a support; means providing universal adjustment between said members, said means including: a ball section on one of said members; rigid, integrally formed spaced arms on the other of said members adapted to straddle the ball section, the inner opposed faces of said arms being plane and parallel; a washer interposed between each arm and the ball section, each washer having an outer flat face and an inner spherical face to fit the ball section, whereby the washers assembled on the ball section may be inserted laterally as a unit between the rigid arms; and devices for clamping said arms, washers and ball section tightly together in adjusted position.

1,869,985. TRACK SWITCH CONTROL. GEORGE C. SMITH, Stevenson, Minn. Filed Jan. 24, 1931. Serial No. 510,999. 3 Claims. (Cl. 246—410.)



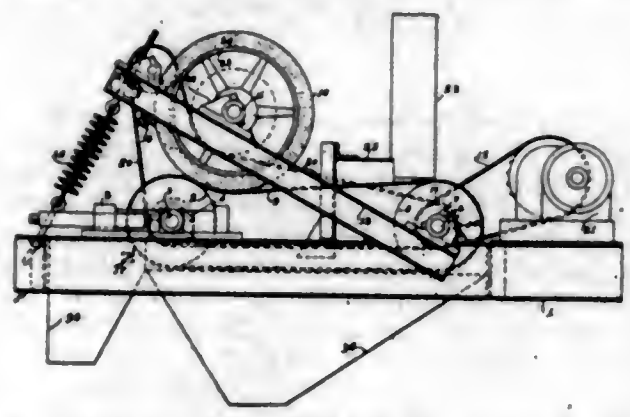
1. Track switch control mechanism comprising a stand spaced from a track adjacent the switch and cooperatively connected with the switch point bar, a block slidable within the stand for moving said bar, an upstanding swingable lever for operating the block, and a horizontally disposed rod attached to said lever and extending parallel with the track whereby the lever may be operated by reciprocating said rod.

1,869,986. SUPERHEATER HEADER. RICHARD STEIN, Kassel, and HERBERT FRANK, Kassel-Wilhelmshohe, Germany, assignors to The Superheater Company, New York, N. Y. Filed Jan. 10, 1931, Serial No. 507,849, and in Germany Jan. 15, 1930. 5 Claims. (Cl. 122—462.)



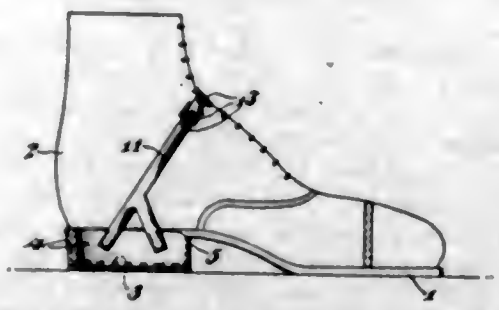
4. A superheater header having in combination two separate parts for saturated and superheated steam respectively, each part provided with alined transverse subsidiary headers each having a flange, a bar engaging all of the flanges, and means securing the bar to two of said subsidiary headers.

1,869,987. SEPARATOR. JOHN W. VAN DENBURG, White Plains, N. Y. Filed Nov. 15, 1929. Serial No. 407,421. 2 Claims. (Cl. 100—37.)



2. A separator which comprises a stationary frame, a roll mounted in bearings thereon, a second roll mounted on said frame parallel to the first roll, bearings for the second roll adjustable toward and away from the first roll, a belt running over the rolls, a frame mounted for pivotal movement about an axis parallel to the axis of said second roll, and a resilient surfaced roll mounted parallel to said other rolls, in bearings on said pivoted frame, a continuation of the arc of movement of the axis of said resilient surfaced roll about the axis of said frame as a center intersecting said second roll, said resilient surfaced roll bearing against said belt.

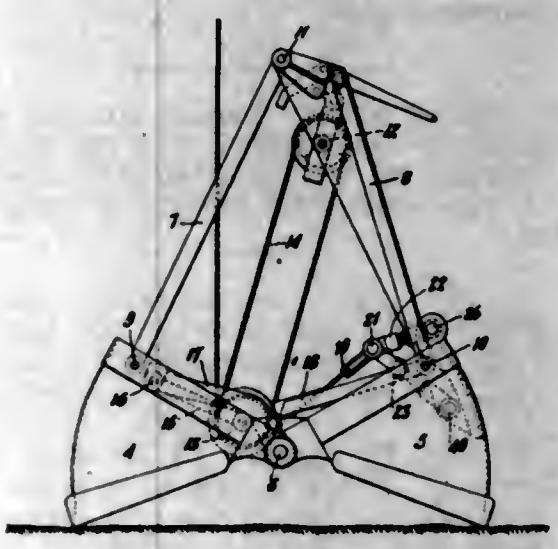
1,869,988. HEEL AND SOLE PROTECTOR. STEPHEN VELLNER, Philadelphia, Pa. Filed Dec. 4, 1930. Serial No. 499,869. 1 Claim. (Cl. 36—72.)



A shoe or overshoe protector, comprising a wall adapted to surround a heel, a bottom wall having a downwardly

extending peripheral portion secured to the lower edge portion of said first wall to form a relatively rigid flange of substantially double thickness, and a member positioned within and extending freely below said flange.

1,869,989. ADJUSTMENT MEANS FOR BUCKET LINES. WILLIAM MAYO VENABLE, Pittsburgh, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Nov. 20, 1930. Serial No. 496,900. 6 Claims. (Cl. 37—184.)



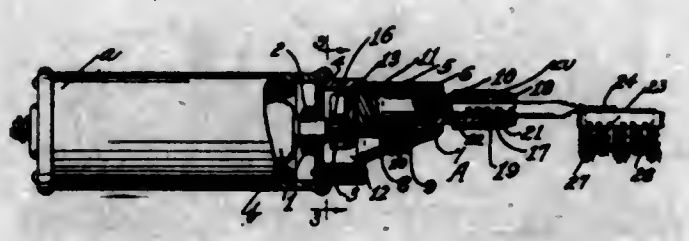
6. Means for adjusting the end of a bucket line including in combination with a scoop member of the bucket, a pair of arms independently pivoted at different points to the scoop member with their free ends articulated together and means for moving the articulated joint.

1,869,990. CONCRETE PILE SHELL. ELIHU D. WATT, La Grange, Ill., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 26, 1929. Serial No. 395,255. 4 Claims. (Cl. 61—57.)



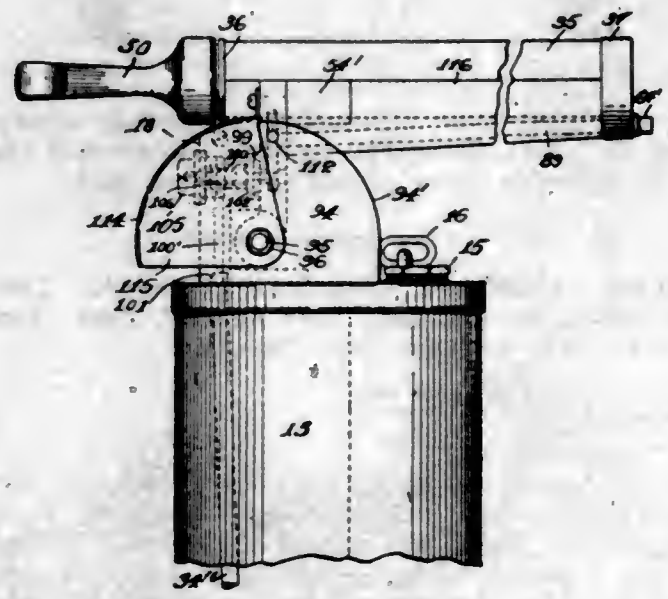
1. A pile shell adapted for driving on a driving core, comprising in combination, a hollow monolithic concrete body and reinforcing rings arranged in spaced relation on the inner side of said body throughout its length and having a portion thereof embedded in said concrete body and a portion exposed for contact with the driving core whereby the driving core is prevented from making contact with the concrete of the body, said rings held in spaced relation by said concrete body.

1,869,991. TOOTHBRUSH. WILLIAM C. WHITE and WILBUR D. MCCRAY, Los Angeles, Calif. Filed Mar. 14, 1930. Serial No. 435,789. 2 Claims. (Cl. 74—14.)



1. In a device of the character disclosed, a shaft provided with screw-threads, a brush head, means on said shaft for detachably securing a brush head, the opposite end of said shaft being provided with a guide member, a slide block for said guide member, propulsive means for reciprocating said slide block relative to the guide, and a screw-threaded bushing in engagement with the threads of the shaft and whereby when the slide block is moved, the shaft is laterally and longitudinally oscillated to in turn oscillate the head.

1,869,992. SPRAYING DEVICE. PETER L. WILBUR, Tuckahoe, N. Y., assignor to Wil-X-M'f'g Corporation, a Corporation of New York. Filed Nov. 27, 1926, Serial No. 151,071. Renewed Dec. 16, 1931. 22 Claims. (Cl. 299—96.)

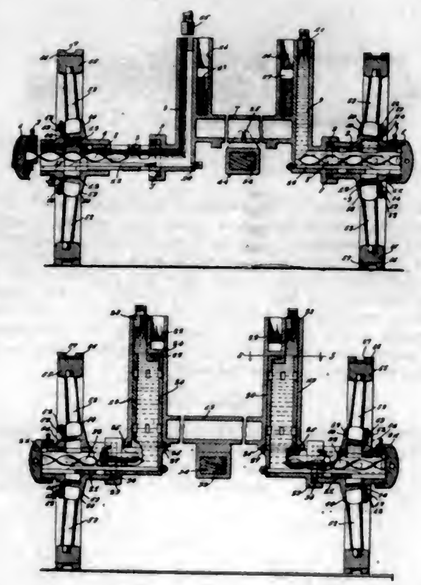


16. A liquid spraying device comprising a container, a discharge nozzle therefor, an air pump pivotally mounted upon the exterior of said container on an axis extending transversely thereof, whereby said pump may be adjusted to extend in the plane of the longitudinal axis of and in contiguous relation to the container in the inoperative position thereof, and to extend laterally of the container in the operative position thereof, an outlet from said pump adapted to communicate with the interior of said container, and means controlled by the position of the pump for establishing and disestablishing said communication.

1,869,993. VEHICLE. MATHIAS J. ADAMS, Turkey River, Iowa. Filed Feb. 6, 1930. Serial No. 426,413. 4 Claims. (Cl. 308—95.)

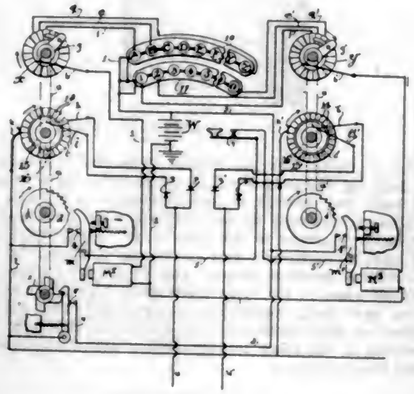
1. In a vehicle, a running gear including front and rear axles, oil reservoirs formed with said axles and rising therefrom, stake sockets formed with said oil reservoirs, spindles included in the rear axles and being

hollow, sleeves mounted for rotation in the oil reservoirs of the front axle, spindles associated with said sleeves, wheels including hubs mounted for rotation on said spin-



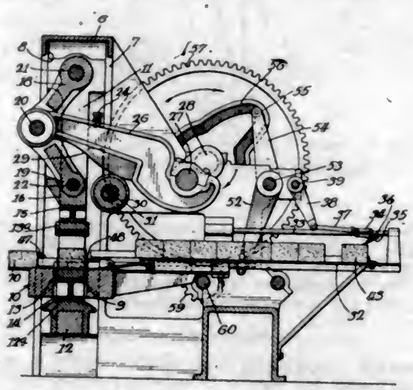
dles, the latter being provided with openings arranged about the circumference thereof, hub caps for said hubs, and oil agitating means carried by said hub caps.

1,869,994. PRINTING TELEGRAPH SYSTEM. JAMES N. BAKER, Towson, Md. Filed Aug. 13, 1930. Serial No. 474,894. 9 Claims. (Cl. 178—51.)



1. Telemetric system for simultaneously repeating at a remote station signals from separate groups, separately actuated and transmitted over a single wire, comprising means associated with each group and responsive to the actuation of signals in said respective groups, for transmitting over said single wire impulses of reversed polarity, identified with said respective groups, in successions of impulses corresponding in number to the ordination of the actuated signals in said respective groups, signals at the receiving end of said system corresponding in ordinal value to the signals in said respective groups, escapements associated with signals at the receiving end arranged to repeat the transmitted impulses, and actuating the receiving signals in correspondence to the ordinal value of the repeated impulse successions, and polarized selectors associated with the respective escapements for operatively subjecting said escapements to the received impulses of that polarity only for which each is respectively attuned, whereby each group of receiving signals responds only to the corresponding group of signals at the transmitting station.

1,869,995. BRICK PRESS. FRED H. BANKEAT, Ottawa, Ill., assignor to Chicago Retort and Fire Brick Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 13, 1930. Serial No. 502,182. 4 Claims. (Cl. 25—89.)



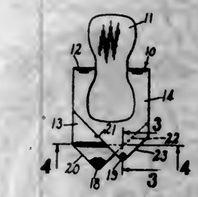
1. In a press of the class described, means constituting the vertical walls of a mold chamber, top and bottom press plates, a vertically sliding frame in which the bottom plate is carried, a sliding bar to which the top press plate is secured, a toggle lever between said bar and said sliding frame, a link connected at one end to the pivot to the toggle, a crank to which the other end of said link is connected, a cam fin on the link, a guide engaged by said fin, and a stop adapted to be engaged by the sliding frame to limit the downward movement thereof and support the frame when in its lowermost position with the cam fin out of contact with said guide, whereby the toggle is operated to cause the top plate to recede from the bottom plate before the top plate clears the top of the mold.

1,869,996. CONTROLLING GRAIN GROWTH IN ALUMINUM-MANGANESE ALLOYS. THEODORE W. BOSSERT, New Kensington, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 19, 1930. Serial No. 462,417. 3 Claims. (Cl. 75—1.)

1. An aluminum-manganese alloy consisting of aluminum, and about 0.75 to 3.0 per cent of manganese and 0.2 to 0.5 per cent of copper.

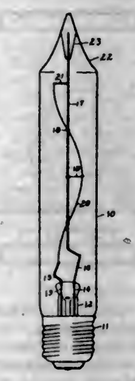
1,869,997. SIGNAL OR CLIP. CHAPEL S. CARTER, Orange, and JOHN H. DUNCAN, New Haven, Conn., assignors to The H. C. Cook Company, Ansonia, Conn. Filed May 27, 1931. Serial No. 540,342. 4 Claims. (Cl. 24—259.)

1. A signal or clip for a card of a card index or the like, comprising a strip of thin resilient material doubled upon itself to form a pair of legs, said legs terminating in angularly pointed ends, the corresponding sides of the pointed ends being in parallel spaced relation, the extreme



ends of the legs being transversely offset with respect to one another, and said legs lying in flat contact at a point above but adjacent to said spaced ends.

1,869,998. INCANDESCENT LAMP. PAUL O. CARTUN, Cleveland Heights, Ohio, assignor to General Electric Company, a Corporation of New York. Filed Dec. 31, 1929. Serial No. 417,758. 2 Claims. (Cl. 176—39.)

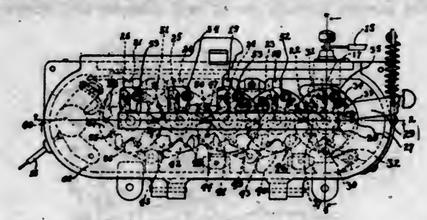


1. An electric incandescent lamp comprising a tubular bulb, an electrically conductive arbor extending axially of said bulb, a filament having one end thereof electrically connected to said arbor, a pair of leads one connected to said filament and the other to the opposite end of said arbor, support wires carried by said arbor and engaging said filament and a spring member carried by said arbor and engaging the inner surface of said bulb end.

1,869,999. AUTOMATIC STOP MECHANISM CONTROL. ALEXANDER CLAXTON CARY, 3d, Larchmont, N. Y., assignor to American Bank Note Company, New York, N. Y., a Corporation of New York. Filed Feb. 7, 1928. Serial No. 252,630. 3 Claims. (Cl. 235—182.)

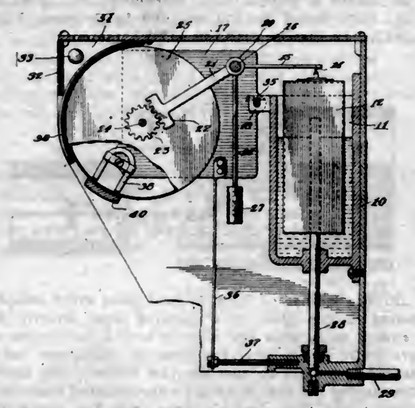
1. An automatic stop mechanism control embodying therein a plurality of spaced pairs of contacts, one of the contacts of each pair being electrically connected with a contact of an adjacent pair, means electrically connecting one of the contacts of the first and last pair with an electrical source, a plurality of movable members adapted to bridge the gap between and electrically connect the contacts of each pair, a sequence of rotatable members, each of said rotatable members having associated therewith a movable contact member a main actuating mechanism operative upon one of said rotatable members and adapted to receive impulses from a moving mechanism of a machine with each cycle of operations of said machine,

means causing a progressive actuation of said rotatable members, and means whereby the movable member associated therewith may be operatively connected with, and



adjusted in relation to, a rotatable member to predetermine an interval of simultaneous actuation of said circuit controlling devices.

1,870,000. MULTIPLE DRAFT AND PRESSURE GAUGE. ARTHUR B. CUNNINGHAM and ALBERT F. SPITZGLASS, Chicago, Ill., assignors to Republic Flow Meters Company, Chicago, Ill., a Corporation of Illinois. Refiled for abandoned application Serial No. 22,630, filed Apr. 13, 1925. This application filed July 13, 1925. Serial No. 43,161. 15 Claims. (Cl. 73—31.)

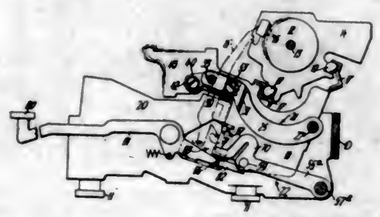


14. A pressure indicating device comprising indicating means including a rotary character wheel, a pressure actuated means for actuating said wheel, an adjustable support for said wheel, and means for adjusting said support to effect zero setting of said wheel.

1,870,001. TYPEWRITING MACHINE. WILLIAM A. DOBSON, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 11, 1929. Serial No. 345,954. 1 Claim. (Cl. 197—149.)

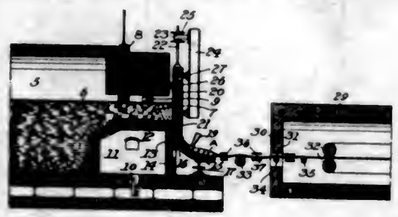
In a portable typewriting machine having a one-part carriage, tracks on which the carriage runs, a nontraveling frame on which said tracks and carriage are shiftable up and down, and a guiding device for the lower portion of said frame, means for guiding the upper portion of said frame, including two links at the sides of said frame, each guide-link having one link-element that is pivoted to the main frame of the typewriter, and another link-element that is pivoted to said shiftable track-frame, and also including means adjustably securing said link-elements together in a manner to secure adjustability of the elements, for varying the length of the guide-link, said securing means including a screw having a large shoulder fitting tightly in a hole in a main link-element, said screw having a threaded shank extending through the other link-element and provided with a fastening nut, said

shoulder being eccentric to said shank, to effect relative adjustment of the link-elements, the shoulder of said screw remaining tightly fitted in said hole, and a second screw passing through one of said elements and threaded



into the other thereof, for completing the fastening of the link-elements together, one of said link-elements being slotted to accommodate relative shifting of said elements effected by said shouldered screw.

1,870,002. METHOD OF AND APPARATUS FOR PRODUCING SHEET GLASS. FRITZ ECKERT, Berlin, Germany, assignor of one-fourth to William A. Morton and one-fourth to Paul L. Geer, Pittsburgh, Pa. Filed Apr. 21, 1928, Serial No. 271,948, and in Germany July 9, 1927. 13 Claims. (Cl. 49—17.)



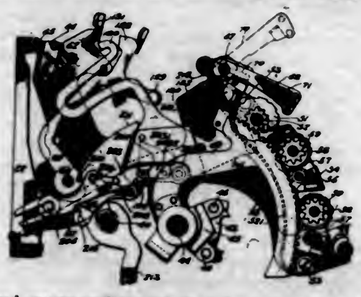
13. The method of forming sheet glass which comprises flowing molten glass in attenuated form directly from a molten glass mass and directly over a continuous support while maintaining the glass in continuous contact therewith, cooling the flowing glass while on the support, interrupting the flow to form an accumulated mass on the support, and then drawing glass from the accumulated mass and effecting stretching thereof beyond the support to form the final sheet beyond the support.

1,870,003. COATING FOR THERMIONIC DEVICES. HOWARD M. ELSEY, Oakmont, and ALVIN T. KROGH, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 1, 1927. Serial No. 195,862. 5 Claims. (Cl. 250—27.5.)

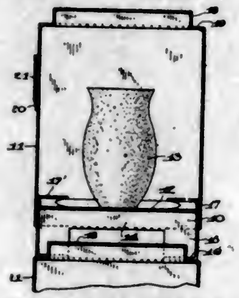
3. The process of making a coating of alkaline-earth carbonate on an oxidizable foundation material which comprises covering the foundation metal with a mixture including a compound of one or more of the alkaline-earth metals and a volatile organic compound that is capable of forming a reducing atmosphere when it is heated and then heating the metal above 200° C. in an atmosphere of carbon dioxide.

1,870,004. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed June 8, 1925. Serial No. 36,599. 13 Claims. (Cl. 235—130.)

1. In a cash register, the combination of a totalizer, item entering means, a lever for resetting the totalizer, means for locking said lever, a manipulative device movable to one position for controlling said item entering means and to another for controlling a resetting operation, and means under control of the manipulative device for unlocking the resetting lever when the device is adjusted to one of its positions.

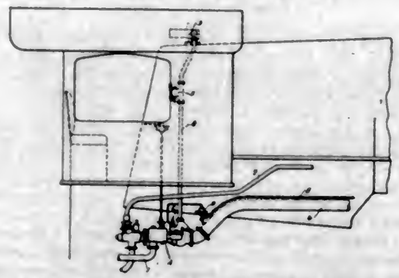


1,870,005. CLAY MODEL PROTECTOR. ALICE GUTSCH, Milwaukee, Wis. Filed Nov. 19, 1930. Serial No. 496,812. 7 Claims. (Cl. 312—107.)



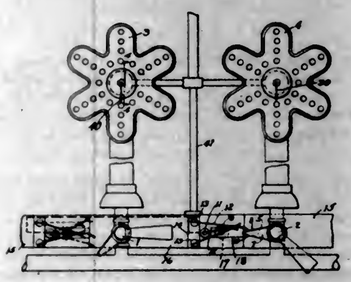
6. A clay model protector comprising a sheet metal base having a model-supporting top wall and integrally formed down-turned marginal flanges, and a sheet metal cover having side walls telescopically supported about said down-turned flanges against relative lateral movement for enclosing a model on said base, said cover having upper portions engageable with said base flanges for supporting said base thereabove against relative lateral movement.

1,870,006. EXHAUST STEAM INJECTOR. MALCOLM HARD, Flushing, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Dec. 5, 1928. Serial No. 323,852. 19 Claims. (Cl. 103—265.)



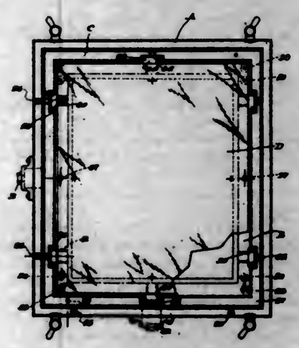
1. In an exhaust steam injector control system, a valve for controlling the admission of a live steam supply to the injector, a pressure chamber adapted to be placed in communication with a source of live steam, means responsive to pressure variations in said chamber for governing the position of said valve, and means responsive to exhaust steam pressure for controlling the pressure in said chamber.

1,870,007. AUTOMATIC GAS LIGHTER. GEORGE HERBSTER, Cleveland, Ohio, assignor to The Bauer Ignition Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 27, 1929. Serial No. 358,521. 3 Claims. (Cl. 175—115.)



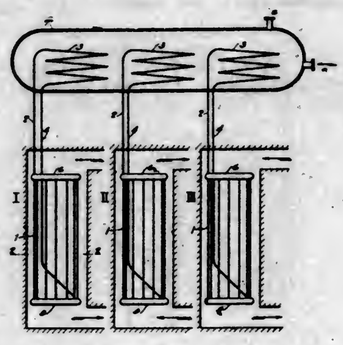
2. An automatic electric igniter, comprising in combination with a burner and a valve for controlling the fuel supply to said burner, a contact projecting from said valve and movable with the movable member of the valve, a second contact mounted in the vicinity of said valve and having a portion extending into the path of movement of said first named contact, means for normally disposing said second contact in a predetermined relative position with respect to said first contact when the valve is closed, and means for adjusting said second contact across the path of movement of said first named contact.

1,870,008. NEGATIVE HOLDER FOR PHOTOGRAPHIC PRINTING MACHINES. WILLIAM C. HUEBNER, Chicago, Ill., assignor to Huebner-Bleistein Patents Company, Buffalo, N. Y., a Corporation of New York. Filed July 27, 1928, Serial No. 295,683. Renewed Jan. 6, 1932. 14 Claims. (Cl. 95—76.)



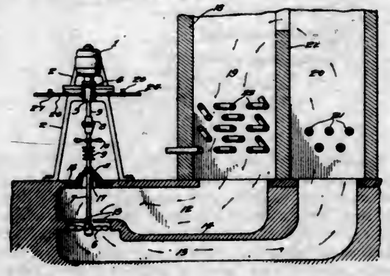
1. In a negative holder for photographic printing machines, the combination with a main holder having air sealing means adapted to engage a print-receiving surface; of a negative holder proper; means for retaining the two holders in predetermined assembled relation; and air sealing means directly effective between said two holders.

1,870,009. WASTE HEAT BOILER. ANDRÉ HUET, Paris, France, assignor to The Superheater Company, New York, N. Y. Filed Mar. 1, 1929, Serial No. 343,602, and in France July 27, 1928. 3 Claims. (Cl. 122—33.)



1. In apparatus of the class described, the combination of a container for fluid to be heated, a duct located at a lower level than the container, means at times during normal operation causing a flow through the duct of a fluid above the temperature to which it is desired to heat the fluid in the container and at other times causing a flow through the duct of a fluid below said temperature, and a heat transferring unit constituting a closed circuit partially filled with liquid a portion of the circuit extending into the duct and a second portion extending into but not opening into the container.

1,870,010. DEVICE FOR RECIRCULATING HIGHLY HEATED GASES. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 1, 1927. Serial No. 237,002. 6 Claims. (Cl. 230—117.)



6. In combination with an oven, a motor supported on the top thereof, a shaft extending from said motor into said oven, a fan on said shaft within said oven, and a cooling disk carried by said shaft between said top and motor.

1,870,011. ERECTING STRIP FOR BUILDING MATERIALS. JOHN CLEMENT JOHNSON, North Easton, Mass. Filed Mar. 31, 1931. Serial No. 526,717. 5 Claims. (Cl. 72—118.)



1. An erecting strip of the character set forth, comprising a base, a flange extending longitudinally of the base centrally between the side edges of the latter and

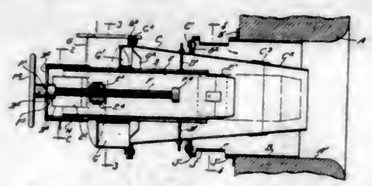
arranged at right angles thereto, and a plurality of rows of prongs carried by the flange and extending laterally in opposite directions therefrom, the rows of prongs being arranged in relatively spaced relation on and extending longitudinally of the flange.

1,870,012. RADIATOR CONSTRUCTION. JOHN KARMAZIN, Detroit, Mich. Filed May 28, 1927. Serial No. 194,899. 2 Claims. (Cl. 257—129.)



1. An element for a sectional tubular radiator comprising a fin element having tapering tubular projections extending therefrom, each projection comprising sections with different degrees of taper, the walls of said sections meeting in an angle, and the ends of the projections being turned inward.

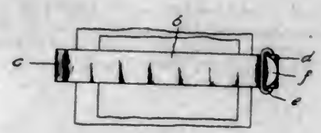
1,870,013. FUEL BURNER. WALTER F. KEENAN, JR., Pelham, N. Y., assignor to Foster-Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 7, 1927. Serial No. 238,274. 7 Claims. (Cl. 110—104.)



6. A comminuted fuel burner comprising in combination a hollow burner member fixed in position and having a smooth inner surface and tapering towards its discharge end, means movable relative to said discharge end for regulating the effective discharge area of said burner member comprising an axially movable nozzle member having a smooth outer surface radially spaced from the inner surface of said burner member and forming an unobstructed annular passage therebetween, and means for passing a mixture of air and comminuted fuel in a spiral path to and through said annular passage.

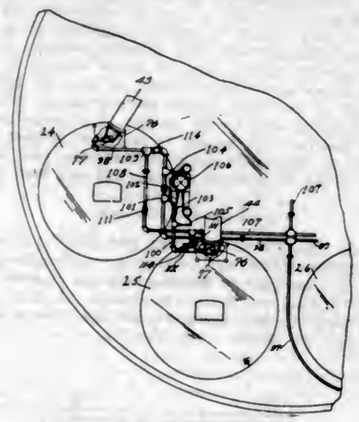
1,870,014. CLASP FOR LINGERIE, HAIR, AND LIKE PURPOSES. GEORGE ADE LAUGHTON, Birmingham, England. Filed Jan. 17, 1931, Serial No. 509,317, and in Great Britain Apr. 28, 1930. 1 Claim. (Cl. 24—258.)

A clasp of the kind described comprising a resilient strip doubled upon itself to form two cooperating limbs which are yielding and normally divergent, the free ends of both limbs being curved toward each other, the free end of one of the limbs being curled upon said limb to form a fixed eye, with the back of the eye lying in the same plane with the rest of the limb, the free end of the other portion being bent on an arc extending above the body portion of its limb and with the end being so curved that its bottom surface conforms to and is adapted to engage upon the eye of the other limb when the limbs are pressed together, and when so pressed together are immovable relatively along a longitudinal axis, the curved end of the second limb being concentric with



the eye portion of the first limb, and a loop concentrically mounted within the eye and adapted to be swung over to engage behind the curved portion of the second limb, when said curved portion is pressed into position upon said eye.

1,870,015. STOKER. WILLIAM H. ROWLAND MARSDEN, Pittsburgh, Pa., and LONNIE EDWARD OSBORNE, deceased, Allegheny County, Pa., by Zollie G. Osborne, executrix, Bellevue, Pa., assignors, by mesne assignments, to The Standard Stoker Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 13, 1927. Serial No. 225,906. 3 Claims. (Cl. 110—104.)



3. In combination, a furnace, a fuel distributor tube delivering to the furnace, a steam pipe discharging into the tube, a low pressure steam lead to the pipe, a high pressure steam lead to the pipe, a normally closed valve in the high pressure lead, and manual means for opening the valve.

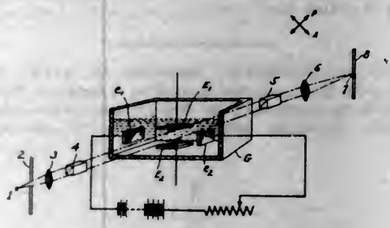
1,870,016. THROTTLE. NEAL T. MCKEE, Bronxville, N. Y., assignor to American Throttle Company, Inc., New York, N. Y. Filed Sept. 13, 1928. Serial No. 305,725. 1 Claim. (Cl. 137—144.)

In apparatus of the class described, the combination of an elongated casing arranged transversely in the upper part of a locomotive smoke-box, a horizontal partition in said casing having a plurality of alined ports along its length, a corresponding number of removable caps in the wall above the partition, each cap having a cylindrical cavity alined with the associated port, a plurality of poppet valves each adapted to close a port and having a cylindrical portion fitting loosely and reciprocating in the corresponding cap cavity, each of said valves having a central bore with a passage extending from a point near the upper end of the bore to the lower face of the valve, stems extending through said bores and each provided with a shoulder adapted to engage and raise its valve, a pilot valve on the upper end of each stem to control the upper end of the bore, removable means to retain the pilot valves on the



stems, guides on the lower wall each engaging the lower end of a stem, and means to raise said rods seriatim thereby opening the pilot valves and main valves and to lower the rods seriatim thereby closing both sets of valves.

1,870,017. PHOTOELECTRIC RELAY. FRITZ MICHELSEN, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Apr. 18, 1927, Serial No. 184,616, and in Germany May 5, 1926. 10 Claims. (Cl. 88—61.)



1. A light relay system comprising, a container, a birefringent liquid within said container, means for subjecting said liquid to the action of two electric fields at an angle with respect to each other so that said liquid is rendered doubly refractive to light rays and the quality of the liquid is permanently maintained.

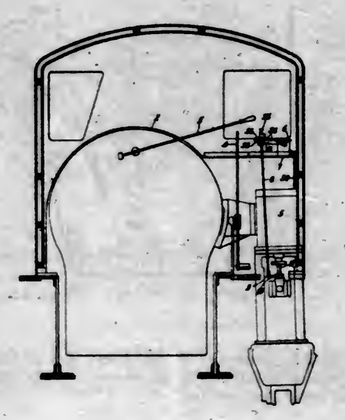
1,870,018. LAMINATED GLASS AND METHOD OF MAKING THE SAME. WILLIAM HENRY MOSS and KENNETH H. CRUTCHFIELD, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Nov. 2, 1928. Serial No. 316,372. 16 Claims. (Cl. 49—81.)

1. In the method of forming laminated glass having a layer of a material containing an organic derivative of cellulose between sheets of glass, the step of applying an adhesive coating composition containing a urea-phenol-aldehyde resin that is compatible with said derivative of cellulose.

1,870,019. LOCOMOTIVE. GEORGE F. NIEDERMANN, Hartford, Wash., assignor to Lima Locomotive Works, Incorporated, New York, N. Y., a Corporation of Virginia. Filed Apr. 21, 1927. Serial No. 185,404. 8 Claims. (Cl. 184—6.)

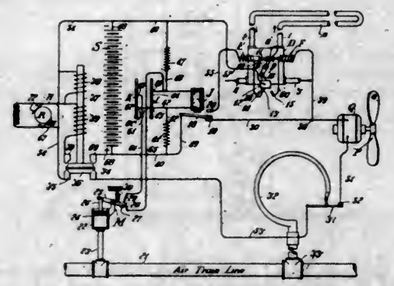
1. In a locomotive having a cab, valve mechanism, and parts requiring lubrication, the combination of a lubricator

located in the cab and having feed connection to a part to be lubricated, an operating arm for the lubricator, a driving rod for the lubricator pivoted to a moving part of the



valve mechanism, and a member slidable on said operating arm and pivotally connected to said driving rod, together with releasable latch means for said member.

1,870,020. HEATING AND VENTILATING SYSTEM. PAUL B. PARKS, Oak Park, Ill., assignor to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York. Filed June 18, 1927. Serial No. 199,716. 12 Claims. (Cl. 237—5.)

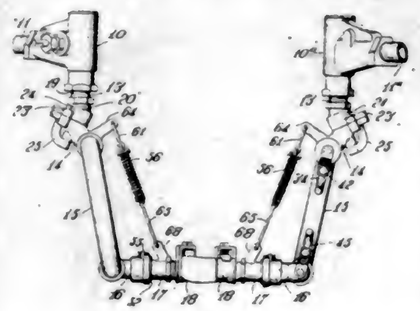


1. In combination, a railway car, a heating element in the car, means for supplying a heating medium to said heating element, an air circulating means in the car, and means for automatically controlling said air circulating means to make it operative only at determined low speeds of the car and when said heating element is not receiving heating medium.

1,870,021. FLEXIBLE CONDUIT STRUCTURE. JOHN H. PHILLIPS, Jackson, Mich. Filed Dec. 29, 1927. Serial No. 243,328. 4 Claims. (Cl. 285—9.)

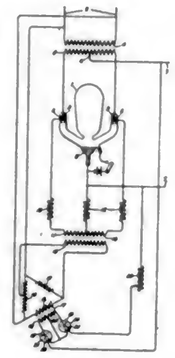
2. In a metal conduit structure for flexibly connecting the train pipes of adjacent railway cars, the combination of a vertically disposed section, a joint member connected therewith and operable about an axis inclined from the

vertical and extending backwardly relative to said vertical section, a forwardly inclined pipe section depending from and flexibly connected to said joint section, a lower joint



section flexibly connected to the lower end of said pipe section, and a substantially horizontal section connected with said lower joint section.

1,870,022. ELECTRIC TRANSLATING CIRCUIT. DAVID C. PRINCE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 17, 1931. Serial No. 530,879. 4 Claims. (Cl. 175—363.)

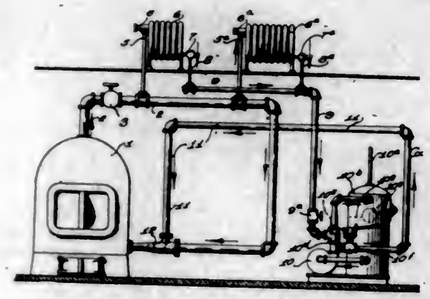


2. In combination, an alternating current supply circuit, a load circuit, an electric valve provided with a control grid for transmitting energy from said supply circuit to said load circuit, an impedance phase shifting circuit comprising a plurality of impedance elements and associated with said grid, a second electric valve for controlling the impedance of one of said impedance elements, said second valve being provided with an electron emitting cathode, and means for exciting said cathode in accordance with an electrical condition of one of said supply and load circuits.

1,870,023. IODIZED OILS FOR ROENTGENOGRAPHIC WORK. GEORGE W. RAIZISS and LE ROY W. CLEMENCE, Philadelphia, Pa., assignors to Abbott Laboratories, North Chicago, Ill., a Corporation of Illinois. Filed June 7, 1928. Serial No. 283,732. 4 Claims. (Cl. 87—12.)

1. As a new medicinal agent, a non-drying oil of the rape family combined with iodine.

1,870,024. METHOD OF HEATING WITH WATER. BO FOLKE RANDEL, San Diego, Calif., assignor to C. A. Dunham Company, Marshalltown, Iowa, a Corporation of Iowa. Filed Feb. 25, 1929. Serial No. 342,423. 14 Claims. (Cl. 237—81.)



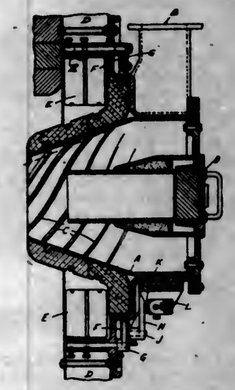
1. A method of heating, which consists in introducing heated water from a common supply duct into a plurality of expansion and heat emitting spaces having a common discharge duct, partially evacuating said expansion spaces, expanding part of said heated water into vapor form in said plurality of extension spaces, condensing said vapor in said plurality of expansion spaces, and withdrawing non-condensable gases and condensate as formed from said plurality of spaces, and collecting same in the common discharge duct.

1,870,025. SCISSORS. FREDERIC H. RAUH, South Orange, N. J., assignor to J. Wiss & Sons Co., Newark, N. J., a Corporation of New Jersey. Filed Nov. 3, 1928. Serial No. 316,918. 1 Claim. (Cl. 30—13.)



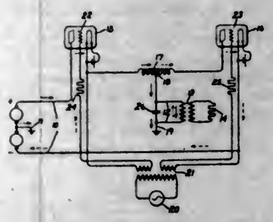
In self-opening scissors, the combination of a pair of shanks, each embodying an operating handle provided with a cutting blade at one end, a pivot connecting the shanks at a point between the cutting blades and the handles, the shanks being offset and broadened behind the pivot, unbroken by any openings in their broadened, outer faces, and rounded on the exterior lines of such surfaces, one of which broadened portions is provided with a rearwardly opening recess, and the other with an integral lug projecting into said recess to constitute stop-opening means, the recess being closed on all sides except rearwardly in all positions of the shanks, the shanks adjacent to the offset portions being rounded in cross section and substantially separated from each other when the scissors are closed, and spring opening means operating between the shanks, whereby the scissors are prevented from pinching the hand of the user.

1,870,026. PULVERIZED FUEL BURNER. FAY HARRY ROSENCRANTS, London, England, assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 31, 1928, Serial No. 303,169, and in Great Britain Sept. 6, 1927. 2 Claims. (Cl. 110—104.)



2. A pulverized fuel burner including a nozzle member of circular cross-section having a tangential fuel inlet and a concentric fuel outlet and spirally arranged vanes on the inner surface of said member, said vanes being of greater height toward the outlet end of the nozzle member than at the inlet end thereof.

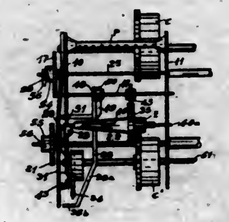
1,870,027. ELECTRIC POWER CONVERTING APPARATUS. CAMIL A. SABBAH, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 30, 1930. Serial No. 471,876. 2 Claims. (Cl. 175—363.)



2. In combination, a direct current system provided with a grounded neutral, an alternating current system, and means for transferring power from said direct current system to said alternating current system comprising a pair of electric valves and a reactor connected serially across said direct current system, means for periodically rendering said valves alternately conductive and non-conductive, and connections from said alternating current system to the midpoint of said reactor and to ground respectively.

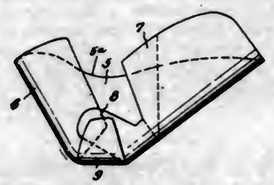
1,870,028. ELECTRICAL TIME SWITCH. J AMORY SMITH, Los Angeles, Calif. Filed Oct. 6, 1928. Serial No. 310,885. 12 Claims. (Cl. 200—38.)

1. In a standard time-piece, in combination a winding shaft, an escapement wheel operated by said shaft, a switch, operated by said winding shaft, an oscillating pallet oscillated by said escapement wheel, a pair of trip hammers for controlling the unwinding of said shaft, separate means engageable with said hammers alternately to lock said pallet to stop the escapement wheel, means for alternately contacting either of said separate means to free one of them and to hold the other, and means



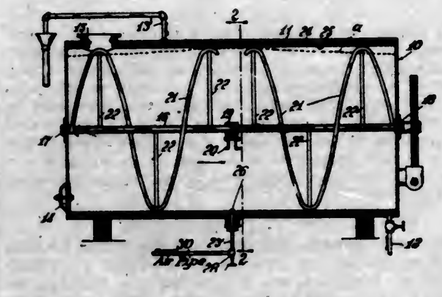
for selectively and predeterminately arranging the intervals of contacting between the alternative separate means and the said alternative means.

1,870,029. FOOT APPLIANCE. ROSE J. B. SMITH, Cleveland, Ohio. Filed Apr. 9, 1930. Serial No. 442,905. 4 Claims. (Cl. 2—61.)



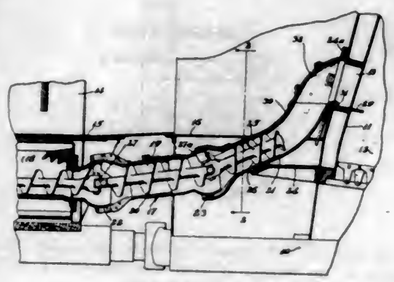
1. A foot appliance consisting of a blank of smooth, non-absorbent and imperforate flexible material, and provided with side portions and intermediate flap members, which when folded form a complete covering for the entire toe area of the foot.

1,870,030. METHOD OF CRYSTALLIZING. CLARENCE L. SOVERREIGN, Riverside, Ill., assignor to International Patents Development Company, Wilmington, Del., a Corporation of Delaware. Filed July 13, 1928. Serial No. 292,410. 13 Claims. (Cl. 127—60.)



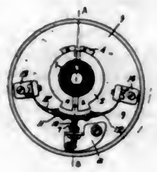
10. In the crystallization of dextrose from a starch converted dextrose solution involving agitating the mass sufficiently to bring about dispersion of the solid phase throughout the solution and permit growth of purgible crystals, the improvement which consists in giving the mass a more active agitation during the first part of the crystallizing operation than during the remainder thereof to hasten the dispersion of the solid phase.

1,870,031. STOKER. MARTIN L. WENRICH, Altoona, Pa., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Feb. 26, 1929. Serial No. 342,865. 6 Claims. (Cl. 110—101.)



1. In combination, a locomotive having a deck and a firebox backwall provided with a firedoor opening therethrough, a tender for said locomotive, a rigid riser conduit mounted on said locomotive and extending from beneath the floor of the deck to said firedoor opening, said conduit comprising a lower inclined portion and an upwardly curved upper portion, a helical screw within said inclined portion having its axis parallel with the sidewalls thereof for conducting fuel along the same and for forcing it through said curved portion, and means for conveying fuel from said tender to said riser conduit and delivering the fuel thereto at a point below said deck.

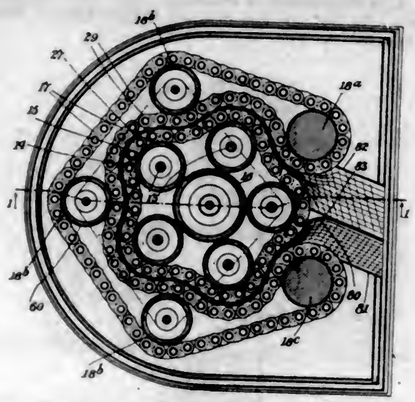
1,870,032. ELECTRIC CONTACT BREAKER. ARTHUR PRIMROSE YOUNG, Kenilworth, and LEONARD GRIFFITHS, Coventry, England, assignors to General Electric Company, a Corporation of New York. Filed Oct. 24, 1929, Serial No. 402,171, and in Great Britain Nov. 10, 1928. 1 Claim. (Cl. 200—19.)



A contact breaker comprising a spindle, a set of permanent magnets having radially projecting poles at their adjacent extremities and mounted on said spindle, a fixed contact, an arc-shaped armature, a contact carried thereby, and a bent flat spring, said armature being held by the midportion of said spring, said spring being secured to supports at opposite sides of said fixed contact, said fixed contact adapted to be engaged by the movable contact when the controlling force of the spring overcomes said magnet.

1,870,033. APPARATUS FOR EXTRACTING LIQUID FROM SOLID OR SEMISOLID MATTER BY PRESSURE. ROBERT TAYLOR BINNIE, Glasgow, Scotland, assignor of one-half to William Miller, Edinburgh, Scotland. Filed July 9, 1930, Serial No. 466,687, and in Great Britain Feb. 12, 1930. 8 Claims. (Cl. 100—37.)

1. Apparatus for extracting liquid from liquid-containing material by pressure comprising, in combination, a central support, inner guide rollers arranged around and supported by said central support, an inner endless travelling member passing around said guide rollers, means for driving said member, rotatable outer guide rollers arranged around said inner guide rollers, and an outer endless travelling member passing around said outer guide rollers, said outer member partly enwrapping said

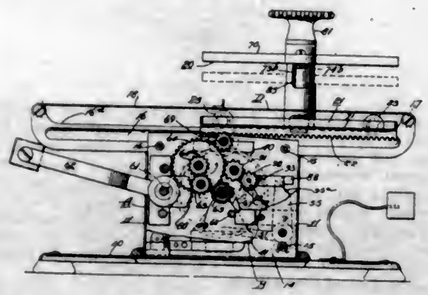


inner member and being adapted to travel therewith, said members presenting pressure surfaces at least one of which is permeable.

1,870,034. REFRACTORY LINING FOR MELTING POTS. GERALD R. BROPHY, Schenectady, N. Y., and GUISEPPE SCORZONI, East Lynn, Mass., assignors to General Electric Company, a Corporation of New York. Filed Mar. 26, 1927. Serial No. 178,806. 2 Claims. (Cl. 106—9.)

1. A method of coating a metal receptacle which comprises applying to the inner surface of said receptacle a mixture consisting largely of calcium hydroxide but containing water, an organic binder and an inorganic binder, drying said coating and then baking said coating at a temperature varying from about 500° C. to about 700° C.

1,870,035. AUTOMATICALLY TIMED ELECTRIC TOASTER. GEORGE BROWNING, Wilmette, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 24, 1928. Serial No. 307,896. 4 Claims. (Cl. 161—16.)



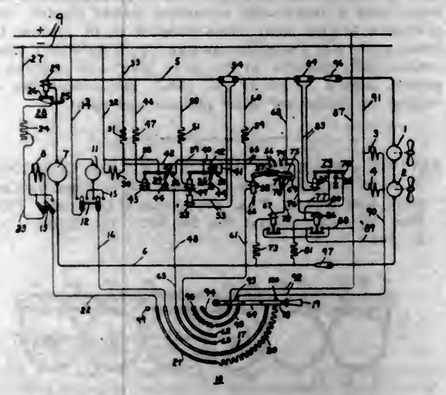
1. In a construction for the purpose indicated, a gravity operated timing device consisting of a member pivotally mounted for gravity movement upon being over balanced toward either side of its pivotal support; means operated by the setting movement of the mechanism whose stay at said position is timed, for rocking said gravity device over its pivot to carry the loaded end to position above the pivot; means actuated by the same movement for arresting the first mentioned movement at a position at which the device is slightly over balanced toward the side from which it is moved, said arresting means being adapted to be easily forced back to permit the gravity device to arrive at a position with its center of gravity vertically aligned with the pivot when the gravitation of the contents to the lower end tends to so move it, said gravity device having a bar carried rigidly with it in its rocking movement having a face which is exposed upwardly at the said erect position of the device, and a pivoted bar arranged to swing downwardly into position for lodging upon said face of the bar at the erect position of the device at two points at opposite sides of the vertical plane of the pivot of the device, for stressing the latter toward said erect position from either side thereof.

1,870,036. THRUST BEARING FOR FLEXIBLE PIPE JOINTS. ALEXANDER D. BRUCE, EDWARD A. RUSSELL, and THOMAS H. MANCHESTER, Chicago, Ill., assignors to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York. Filed Dec. 13, 1928. Serial No. 325,876. 4 Claims. (Cl. 285—9.)



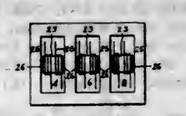
1. In a thrust bearing for flexible pipe joints, a bushing comprising a cylindrical metallic ferrule closed at one end, a steel reinforcing plate in the closed end of the ferrule, and a block of bearing composition confined within the ferrule, the exposed end of the block being formed with a conical recess to receive a relatively rotating stud.

1,870,037. POWER SYSTEM. FRANK A. BYLES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 28, 1928, Serial No. 250,251. Renewed Apr. 15, 1932. 5 Claims. (Cl. 171—225.)



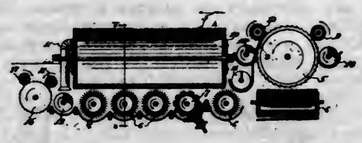
1. In a power system, a generator, means for controlling said generator, and means independent of said controlling means and responsive to the sum of the generator voltage and generator current for limiting the initial load current of said generator to a predetermined value and thereafter tapering off the load current limit as the generator voltage rises.

1,870,038. AMPLIFYING SYSTEM. WENDELL L. CARLSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 13, 1925. Serial No. 30,036. 13 Claims. (Cl. 179—171.)



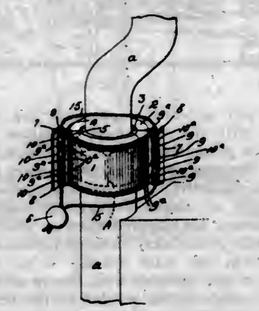
1. The combination in an amplifying system of a plurality of electron discharge amplifiers connected in cascade and an iron core having mounted thereon a plurality of sets of transformer windings, said transformer windings serving to connect the output circuits of a plurality of amplifiers to the input circuits of a plurality of amplifiers, at least one of said amplifiers being connected to amplify radio frequency currents of a received signaling frequency and another of said amplifiers being connected to amplify currents of a different frequency.

1,870,039. COTTON IMPALING AND CLEANING MACHINE FOR HARVESTERS. JOSHUA C. CONRAD, Fort Worth, Tex. Filed Mar. 10, 1930. Serial No. 434,673. 12 Claims. (Cl. 19—38.)



1. In a seed cotton hulling and cleaning machine, a toothed cylinder having a series of beater cylinders arranged in transverse relationship thereto; means to impart a rapid cleaning action to said cotton to remove the hulls and extraneous matter therefrom as the said cotton is urged progressively through the machine.

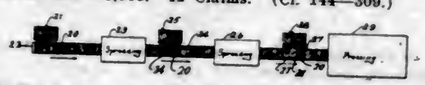
1,870,040. PIPE UNION HOUSING. EMIL DIETZE, Richmond Hill, N. Y., assignor to American Casting and Manufacturing Corporation, Brooklyn, N. Y., a Corporation of New York. Filed May 23, 1931. Serial No. 539,433. 3 Claims. (Cl. 70—122.)



1. In a pipe union housing, the combination with a union or coupling, of a sectional housing, whose sections are provided with abutting flanges, said flanges having

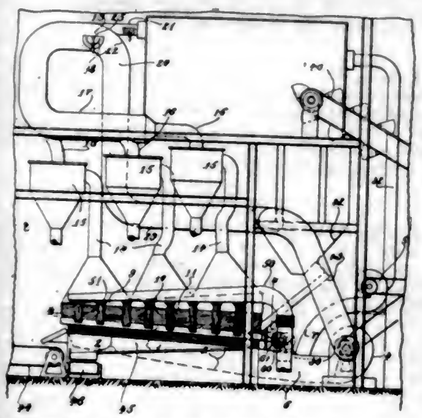
each a series of integral loops, the loops on one flange engaging the loops on the abutting flange, said flanges having their outer edges widened outside the line of the loops to permit one outer edge to ride on an adjacent outer edge when the sections are opened on the wire as a hinge in order to enable the housing to embrace a nut or other device, a wire passing through the engaging loops of the flanges, and means for sealing the ends of the wire.

1,870,041. METHOD AND APPARATUS FOR THE FORMATION OF PLYWOOD AND THE LIKE. THEODORE WILLIAMS DIKE, New Westminster, British Columbia, Canada, assignor to I. F. Laucks, Inc., Seattle, Wash., a Corporation of Washington. Filed May 21, 1931. Serial No. 538,983. 42 Claims. (Cl. 144—309.)



1. The method of forming plywood, which comprises continuously supplying an adhesive material in discrete-particle form and in uniform quantities to be received by moving squares, moving squares along a path such that a surface of each square will receive said material during its movement, successively forming assemblies by a step which includes associating a square with the coated surface of each square which has so received said material, the sequential coating and associating steps being uniformly timed, and subjecting the completed assemblies to bonding conditions.

1,870,042. COAL CLEANING AIR TREATMENT METHOD AND APPARATUS. MORTON I. DORFAN, Hagerstown, Md., assignor to Pangborn Corporation, Hagerstown, Md., a Corporation of Maryland. Filed Nov. 15, 1929. Serial No. 407,321. 7 Claims. (Cl. 209—502.)



6. Continuously operating apparatus for treating air in connection with the continuous operation of cleaning coal, comprising means for impounding the air discharged from the coal cleaning apparatus, preliminary air cleaning means, means connecting said first mentioned means to said preliminary air cleaning means to conduct thereto the entire volume of air impounded, an air skimming device connected to said preliminary cleaning means and adapted to separate from the main volume of air a relatively small volume of air, together with the greater portion of the suspended solid matter carried by the entire volume of air, means for filtering said relatively small volume of air removing the solid particles therefrom, and means for returning said main volume of air and said small volume of cleaned air to the coal cleaning apparatus.

1,870,043. PLANT PLANTER. PETER ERICKSON, East Glen Lake, Minn. Filed May 21, 1931. Serial No. 538,932. 8 Claims. (Cl. 111—4.)



1. A plant planter comprising a shank, a first shovel secured to the lower end of said shank, a plant holding clip normally projecting inwardly through an opening adjacent the top of said shovel, means for swinging said clip outwardly through said opening, a second shovel having side and bottom edges adapted at times to be engaged with said first shovel, at least one of said shovels being spoon-shaped so that said shovels form a chamber when they are in engagement and means for raising said second shovel relative to said first shovel.

1,870,044. DIPPER TOOTH. JACOB W. FELLMETH, Danville, Ill. Filed July 22, 1931. Serial No. 552,395. 16 Claims. (Cl. 37—142.)



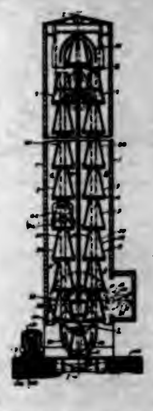
1. A removable tip for a dipper tooth point, said tip being in the form of a single metal casting having a wedge-shaped cutting edge shaped to form a prolongation of the point, and a rearwardly extending forked portion comprising a bottom wear plate adapted to fit against the lower surface of the point, and an upper narrower flange substantially parallel to the wear plate and adapted to project into a recess in the point, and means for securing the flange and wear plate to the point.

1,870,045. EDGE FOR MATTRESSES OR CUSHIONS. JOHN F. GAIL, Evanston, Ill., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 24, 1926. Serial No. 156,901. 13 Claims. (Cl. 5—360.)



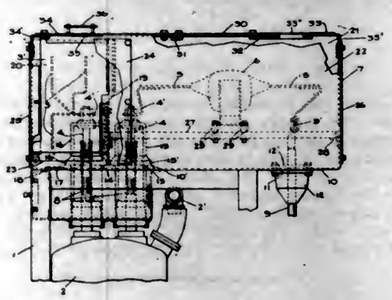
7. As a new article of manufacture, a mattress boxing comprising a strip of ticking, a fabric strip forming a row of flexible pockets adjacent said boxing strip, vertical rows of stitching for connecting the pocket forming strip to the box strip and an axially vertical spring in each pocket for supporting the said strip.

1,870,046. AUTOMOBILE STORAGE ELEVATOR. CHARLES F. GODDARD, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 18, 1929. Serial No. 393,414. 17 Claims. (Cl. 214—16.1.)



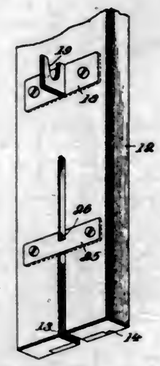
1. In an elevator, means defining a pair of adjacent vertical columns interconnected at their respective ends, a plurality of load receptacles in each of said columns and means for supporting all of the receptacles in each column and for moving said receptacles through the path defined by said columns with a continuous movement, said moving means including a lower transfer mechanism operably responsive to actuation of said moving means for transferring the lower receptacles from either column to the other, and an upper transfer mechanism supported by said receptacles and operably responsive to movement of said receptacles for transferring the upper receptacles from either column to the other.

1,870,047. ELECTRICAL SWITCH GEAR. CHARLES H. HILL, Drexel Hill, Pa., assignor to General Electric Company, a Corporation of New York. Filed Oct. 9, 1930. Serial No. 487,532. 6 Claims. (Cl. 175—298.)



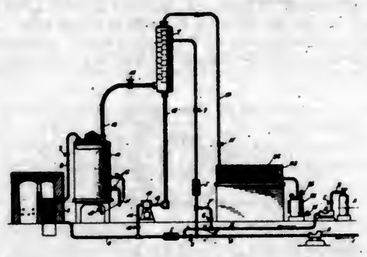
1. In metal clad switchgear including a supporting frame and a switch unit having disconnecting contacts vertically movable therein to connected and disconnected positions, a superstructure mounted on said frame comprising a unitary sheet metal housing having a metallic isolating partition for dividing the same into compartments including a busbar compartment, said compartments having apertures in the bottom wall thereof on opposite sides of said partition and said busbar compartment provided with removable cover structure at opposite ends thereof, and insulating shields supporting fixed disconnecting contacts mounted in and extending through said apertures, said fixed disconnecting contacts being connected to busbars in said busbar compartment and to electrical conductors in another of said compartments.

1,870,048. PILASTER. WILLIAM T. HORMES, Baltimore, Md. Filed Aug. 1, 1928. Serial No. 296,669. 3 Claims. (Cl. 312—145.)



3. The combination with a support member and a cornice associated therewith, of a pilaster removably engaging said support member and shorter than the distance between the cornice and the lower edge of the support member, so that a space is provided below the pilaster while it is engaged with the cornice, said pilaster being provided with a longitudinal slot, support means for the pilaster carried by said support member and located in the space below the pilaster, so that the pilaster is supported from below with its upper end in abutted contact with the cornice, a cross plate secured to said pilaster and extended transversely across said slot, and a removable plinth provided with a hook member complemental to said cross plate, said plinth being adapted to cover the space below the pilaster.

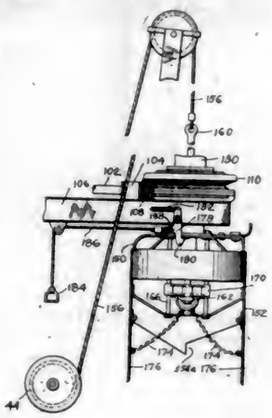
1,870,049. PROCESS FOR TREATING PETROLEUM OIL. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 9, 1926, Serial No. 80,285. Renewed Dec. 19, 1929. 1 Claim. (Cl. 196—25.)



A continuous process for cracking hydrocarbon oil, comprising subjecting the oil to a cracking temperature under a superatmospheric pressure in a heating zone, delivering the heated oil to an enlarged reaction chamber, wherein conversion occurs, passing vapors evolved from the oil to a dephlegmating zone, wherein the insufficiency cracked

fractions are condensed, commingling with the incoming charging oil for the process caustic soda, in an amount sufficient to neutralize the corrosive effect of the sulphurous compounds contained in the oil and formed as a result of the cracking reaction, delivering the oil and commingled caustic soda to said dephlegmating zone, wherein it acts as a dephlegmating medium for the oil vapors, supplying reflux condensate, incoming charging oil and the commingled caustic soda to the heating zone.

1,870,050. EXCAVATING BUCKET. FRANCIS H. HUNT, Leonia, N. J., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Original application filed Apr. 26, 1926, Serial No. 153,097. Divided and this application filed Apr. 16, 1927. Serial No. 184,407. 9 Claims. (Cl. 255—19.)



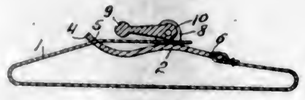
1. In a machine of the class described, in combination, a digging bucket, a cross-head guided for upward and downward movement in said bucket, a discharge gate on the bottom of said bucket, means for operatively connecting said cross-head to said gate, said cross-head operating to close said gate when moved upwardly and to release said gate when moved downwardly, means for hoisting said bucket, said hoisting means being constantly connected to said cross-head and adapted to apply pressure either downwardly or upwardly to said cross-head at the will of the operator and means for rotating said bucket while said hoisting means is operative.

1,870,051. SNAP FASTENER MEMBER AND METHOD OF MAKING THE SAME. GUSTAV JOHNSON, West Roxbury, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed May 8, 1930. Serial No. 450,734. 2 Claims. (Cl. 79—3.)



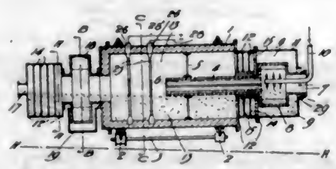
1. The method of forming a hollow sheet metal resilient snap fastener member having means for upsetting an attaching element which comprises providing a piece of sheet metal with a boss for snap fastening engagement with a cooperating snap fastener member, said boss being joined at its base with the upsetting means, dividing the boss into a number of yieldable portions by cutting slots in the boss and thereafter for compressing the boss to reduce the width of each slot especially at its inner end, thereby to provide a substantially continuous surface adjacent to the upsetting means to prevent interference with the attaching element when pressed against said upsetting means.

1,870,052. TOURNIQUET. HORATIO S. JONES, Kansas City, Mo. Filed Nov. 24, 1930. Serial No. 497,681. 2 Claims. (Cl. 128—327.)



1. A tourniquet comprising a connecting member adapted to have its inner side bear against a body member and having an outwardly turned and portion having guiding means, a flexible member adapted to embrace and compress said body member and attached at one end to said connecting member and having its free end portion having running engagement with said guiding means, and a cam member having a smooth periphery and pivoted to said connecting member so as to freely swing to and remain in a release position to which it may be swung and adapted to be swung to and from a position in which it will clamp said flexible member against said connecting member.

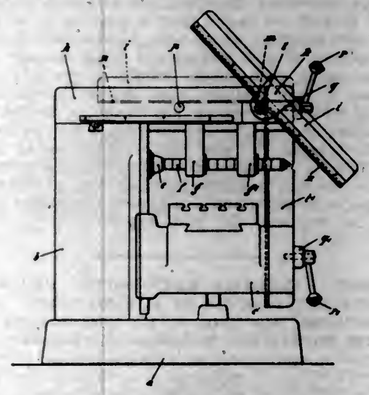
1,870,053. ELECTRIC ROTARY FURNACE. BO MICHAËL STURE KALLING and CARL VON DELWIG, Avesta, Sweden, assignors to A. Johnson & Co., Stockholm, Sweden, a Company of Sweden. Filed Dec. 7, 1929, Serial No. 412,518, and in Sweden Dec. 10, 1928. 4 Claims. (Cl. 13—10.)



1. In an electric rotary furnace, electrodes for conducting current through the ore, means for supporting the electrodes inside the furnace with the major part of each electrode out of contact with the furnace wall, said means comprising circular disc electrodes of smaller diameter than the inside diameter of the furnace taken at the maximum-heat zone thereof, and supports for said discs engaging with the furnace walls for positioning said discs out of direct contact with the walls of the furnace.

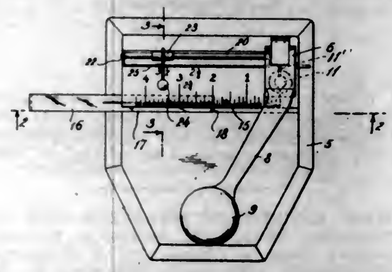
1,870,054. COMBINED SINGLE-STANDARD MILLING MACHINE AND COUNTER-ARM BRACES. LEONHARD KELLENBERGER, St. Gallen, Switzerland. Filed Nov. 12, 1930, Serial No. 495,135, and in Germany Nov. 21, 1929. 3 Claims. (Cl. 90—18.)

1. A combined single-standard milling machine and counter-arm brace, comprising, in combination with the upper cross arm of said machine, a turnable guide member at the free end of said arm, a brace shiftable in said guide member and adapted to be turned together with it into a po-



sition in which it lies parallel to the said arm at a side thereof, and means for fastening the said brace in its operative vertical position.

1,870,055. PAPER PERFORATING DEVICE. FRED J. KLINE, Bayville, N. Y. Filed Mar. 6, 1931. Serial No. 520,602. 6 Claims. (Cl. 164—120.)



1. A punch for perforating papers comprising a base, a die and punch supported thereon, means for operating the punch, a pivoted gauge having a knob in laterally displaceable alignment with the punch and a gauge bar having notches to receive and determine the position of the gauge.

1,870,056. ROTOR FOR TURBOGENERATORS. LUDWIG KROPFF, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 3, 1929, Serial No. 375,609, and in Germany July 6, 1928. 5 Claims. (Cl. 171—252.)



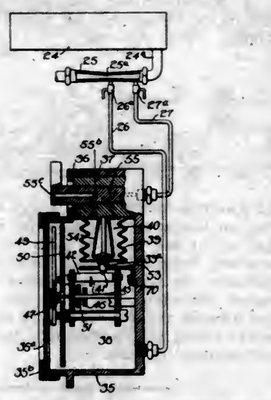
1. A rotor for turbogenerators, comprising in combination, an iron core with slots, a winding located in said slots, caps covering the ends of said winding, damping bars likewise located in said slots, said damping bars having a relatively small radial depth, and short-circuiting rings jointly comprising a plurality of integral pieces of a good conductor located between the ends of said winding and said caps and in the same plane as said bars, each integral piece being connected with the ends of a large number of said damping bars, the thickness of said short-circuiting rings being substantially equal to the radial depth of said damping bars.

1,870,057. COMBINATION POLISHING BRUSH. BEN JAMES LEVIN, New York, N. Y. Filed Mar. 27, 1931. Serial No. 525,661. 2 Claims. (Cl. 15—107.)



1. A brush supporting member having a broad flat portion adapted to be arranged between and to support a pad and bristles, a narrow projection extending longitudinally from said flat portion, and an enlarged terminal portion on the projection adapted to support dauber bristles and cooperating with the projection to form a handle, and adapted to have the heel of the user's hand rest thereon to position the hand on the handle.

1,870,058. GAUGE DEVICE. SAMUEL LEVINE, Passaic, N. J., assignor, by mesne assignments, to Sol H. Levine, Passaic, N. J. Filed June 26, 1928. Serial No. 288,405. 6 Claims. (Cl. 73—110.)

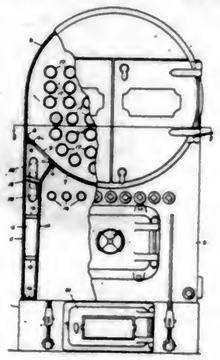


5. A pressure responsive unit for pressure gauges comprising a block, a pressure responsive element attached to said block to form a chamber between said element and block, said block having passageways establishing communication between the interior of the formed chamber and the exterior of said block, a valve seat in said block communicating with said passageways, a valve mounted in said seat controlling the passageways and means located in the formed chamber and attached to the block for limiting the motion of the pressure responsive element.

1,870,059. BOILER. CLARENCE B. LITTLE and WALTER J. HAAG, Dayton, Ohio, assignor to The Brownell Company, Dayton, Ohio, a Corporation of Ohio. Filed May 27, 1929. Serial No. 366,239. 6 Claims. (Cl. 122—74.)

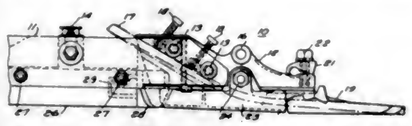
1. In a boiler, the combination of a continuous sheet forming the inside and outside of side water legs and the sides and top of the boiler, an arcuate arch brace sheet forming the crown sheet of the boiler welded along its

edges to the interior of the first mentioned sheet and welded to the top of the inside sheets of the water legs with the part of the sheet between the welds being straight and having apertures in said straight part for



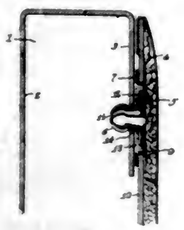
circulation between the legs and the boiler, whereby when the structure is assembled and welded it forms a continuous integral braced structure without rivets or bolts, and braces transversely arranged between the walls of the water legs formed by said continuous sheet.

1,870,060. SECTION INSULATOR. ROBERT H. MCCAFFERTY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1931. Serial No. 524,776. 8 Claims. (Cl. 191—39.)



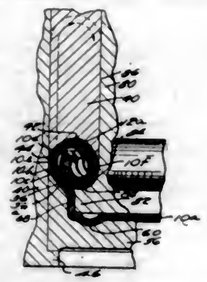
1. In a section insulator for trolley conductors, in combination, an insulating body member, metal end members therefor, metal end runners removably attached to the end members, bayonet approach members attached to the end members for holding the trolley conductor, a rubber runner removably attached to the body member and disposed between the end runners in alinement therewith, and metal arcing tips molded into the rubber runner to prevent burning its ends.

1,870,061. FASTENER CONSTRUCTION. ROBERT MITCHELL, Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed May 18, 1927. Serial No. 192,170. 6 Claims. (Cl. 24—213.)



6. A fastener installation comprising, in combination, a part having a backing of relatively thin sheet material provided with an aperture therethrough, a casing part located entirely within said aperture and confined between the faces of said backing, attaching means of a single thickness of the material of the casing extending laterally outwardly therefrom over each face of the material to hold the casing part in position in said aperture, said attaching means being substantially flush with tht surfaces of said backing and being the only means of the casing part located outside of the hole in the backing, a snap fastener stud member having a base located within said casing and having a headed shank extending therefrom, means providing a lost motion connection between the stud base and the casing thereby providing for shifting of the stud in any lateral direction relative to said upholstery part, a part to which said backing is attached and socket means presented by said part for receiving the said stud.

1,870,062. FLANGED REENFORCED PAPER ARTICLE AND PROCESS OF MAKING SAME. ARLINGTON MOORE, New York, N. Y. Filed June 22, 1926. Serial No. 117,749. 10 Claims. (Cl. 93—36.)

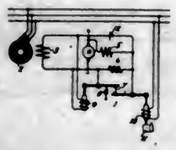


1. In the process of making flanged, marginally reenforced paper articles, the step of simultaneously inflowing the flange margin all the way around into a multiple ply fold composed entirely of material of the flange.

1,870,063. REFINING OF PETROLEUM OILS. JACQUE C. MORRELL, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 9, 1925, Serial No. 74,397. Renewed Nov. 21, 1930. 3 Claims. (Cl. 196—40.)

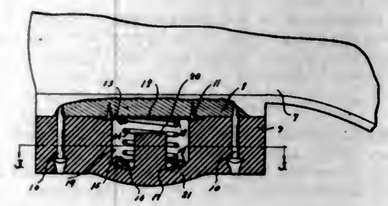
2. A process for refining hydrocarbon oil which comprises treating the same with concentrated sulphuric acid spaced with a substantially water-free organic acid capable of cutting down the reactivity of the sulphuric acid and of lessening undesirable reaction between the sulphuric acid and the oil.

1,870,064. ELECTRICAL REGULATOR. CLIFFORD A. NICKLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 29, 1931. Serial No. 553,805. 9 Claims. (Cl. 171—229.)



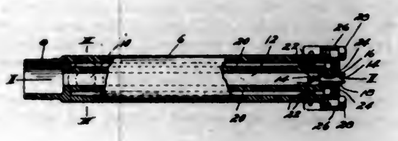
1. In combination, an inductive winding, a pair of relatively vibratory contacts connected to cause periodic increases and decreases of the current in said winding, and an asymmetrical conductor connected to reduce the effective inductance of said winding.

1,870,065. HEEL CONSTRUCTION. MICHAEL W. NUSSER, Detroit, Mich. Filed Jan. 17, 1931. Serial No. 509,417. 3 Claims. (Cl. 36—35.)



1. A heel construction of the class described, adapted for attachment to a shoe having an attachment portion, comprising: a tread member attachable to said attachment portion and having on its inner face a centrally located pocket; a boss extending upwardly from the base of said pocket centrally thereof and terminating below said face; and yieldable means positioned in said pocket in embracing relation to said boss and engaging at one end the base of said pocket, and at the opposite end, said attachment portion for resisting inward pressure on the central portion of said tread member.

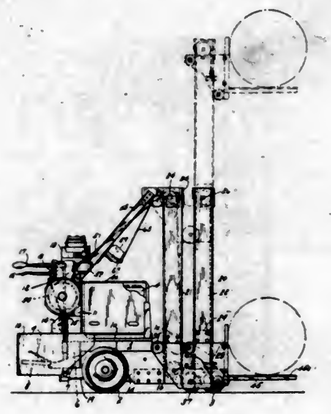
1,870,066. OIL BURNER. LOUIS OLSON, Enumclaw, Wash. Filed Mar. 27, 1930. Serial No. 439,350. 4 Claims. (Cl. 299—143.)



1. An oil burner comprising a block having a pressure fluid supply inlet, an oil supply inlet, a pair of pressure fluid passages and an oil supply passage formed within said block extending from their respective inlets to outlets formed by said block, said outlets including a series of radially extending pressure fluid ports and a series of radially extending oil outlet ports all formed in said block, and slots formed in said block on each side of the series of oil outlet ports, said series of pressure fluid ports communicating with said slots and positioned in a plane parallel to the plane of said outlet ports.

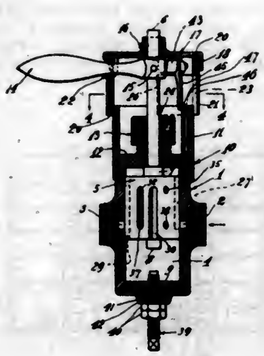
1,870,067. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 26, 1928. Serial No. 321,963. 4 Claims. (Cl. 187—11.)

1. In a power driven truck, the combination of a wheel mounted frame, a pair of spaced guides on said frame, a member movably mounted on said guides, said member comprising a pair of plates and vertically disposed guides, said plates being connected in spaced relation and disposed at the sides of said first mentioned guides and carrying rollers engaging therewith, each said plate extending forwardly beyond said first mentioned guides and carrying said last mentioned guides on their outer portions in a plane disposed parallel to said first mentioned guides, a load carrying member movably mounted on said last mentioned guides and comprising plates extending forwardly thereof and supporting at their outer ends a load support disposed in front of the truck frame and arranged to be lowered into close relation to the floor, and means



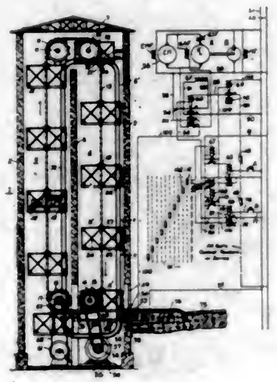
for moving said movable member and said load carrying member relative to each other and said first mentioned guides.

1,870,068. LUBRICATING VALVE. SAMUEL S. ROBERTS, Pittsburgh, Pa. Filed Jan. 10, 1929. Serial No. 331,574. 3 Claims. (Cl. 184—7.)



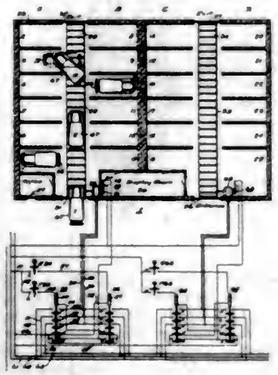
1. In a lubricating device, a cylinder; a container for the lubricant; inlet and outlet connections on the cylinder for the lubricant; a piston oscillatable and longitudinally reciprocable in the cylinder; means to oscillate the piston; said piston having a system of superficial grooves comprising a pair of longitudinal feed-grooves reaching to opposite ends of the piston, a pair of discharge-grooves also reaching to opposite ends of the piston, and in diametrically opposite relation to the feed-grooves, and an equalizer-groove, closed at both ends, positioned intermediate each pair of grooves terminating at the same end of said piston, said piston having also two sets of transversely disposed ducts each set comprising three connected branches, two of said branches connecting one discharge groove with an equalizer-groove and the third branch being adapted to convey the lubricant to a part of the periphery of the piston.

1,870,069. AUTO-PARKING AND STORAGE SYSTEM. WALTER S. RUGG, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 15, 1927. Serial No. 205,875. 16 Claims. (Cl. 187—16.)



1. In a storage system, a housing having an entrance, a plurality of storage elements, means for mounting said storage elements for simultaneous movement in an endless path within said housing, means for moving said elements, means for selecting a plurality of storage elements and registering calls therefor, and means for stopping said moving means as each selected storage element arrives at said entrance.

1,870,070. AUTOMOBILE STORAGE BUILDING. WALTER S. RUGG, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 5, 1930. Serial No. 433,300. 3 Claims. (Cl. 214—16.1.)



1. In an automobile storage structure, an aisle having a width less than the length of any automobile to be stored in the structure, a plurality of automobile storage spaces opening thereinto, endless conveyor means in said aisle for engaging and moving only one end of an automobile through an arc to position the automobile at an angle to the direction of movement of said endless conveyor means, whereby an automobile may be driven into any of the said storage spaces.

1,870,071. PRODUCTION OF PIPERIDINE. WALTER SCHOELLER, ERWIN SCHWENK, and HANS JORDAN, Berlin, Germany, assignors to Schering-Kahlbaum A.-G., Berlin, Germany. Filed June 7, 1930, Serial No. 459,826, and in Germany June 21, 1929. 3 Claims. (Cl. 260—43.)

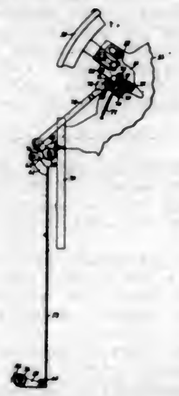
1. The process of the manufacture of piperidine comprising treating pyridine in the presence of a highly active nickel catalyst with hydrogen of 100–150 atm. at a temperature not above 160° C.

1,870,072. SNAP SWITCH. JOSEPH F. SEUFFERT, New York, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed Dec. 13, 1926. Serial No. 154,319. 2 Claims. (Cl. 200—67.)



1. An electric switch comprising a supporting plate having an opening therein, a control member passing through said opening and pivoted on one side of said plate, said control member having an arm extending beyond said pivot away from the plate, a U-shaped switch member having its arms disposed on opposite sides of said arm of the control member and mounted on the same pivot, a lug rockably mounted in an opening in the bottom of said U, and a compression spring having one end connected to said arm of the control member and the other end receiving said lug, said spring forming the sole operative connection between said control member and switch member.

1,870,073. CASH REGISTER. BERNIS M. SHIPLEY and EARL E. HOLT, Dayton, Ohio, assignors to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed May 23, 1929. Serial No. 365,441. 11 Claims. (Cl. 235—130.)



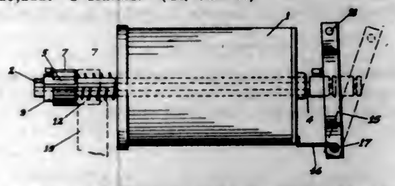
1. The combination with a voucher receptacle; and means to deposit vouchers in the receptacle; of a movable support for the vouchers in the receptacle; a machine

release key; means under the control of the support to prevent movement of the key to release the machine; and an element intermediate the support and the means to snap the means into effective position after the means reaches a certain position.

1,870,074. LOW COLD TEST LUBRICATING OIL. FREDERICK W. SULLIVAN, Jr., Whiting, Ind., and WILLIAM J. MCGILL, Wood River, Ill., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Dec. 29, 1928. Serial No. 329,305. 20 Claims. (Cl. 87—9.)

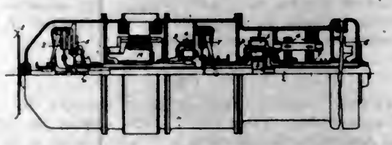
1. The method of lowering the pour test of a viscous hydrocarbon oil which comprises supplying therein a small proportion of an amide derived from fatty acids and derivatives of aniline having alkyl groups substituted in the ring.

1,870,075. STARTING MOTOR. JOSIAH H. SUTTER, Wichita, Kans. Filed Feb. 28, 1931. Serial No. 519,111. 4 Claims. (Cl. 74—7.)



1. A device of the class described comprising a starter motor having a hollow drive shaft, a slidable rod in the hollow drive shaft provided with a key rotatable with the shaft, a sliding pinion provided with a spline slot receiving the key and adaptably engaged by the shoulder on the key so that a longitudinal movement of the rod in one direction will impart longitudinal movement to the pinion, a coil spring exerting torsion on the pinion to normally hold the pinion against the shoulder, a side spring having expansive force to move the pinion longitudinally of the rod when the pinion turns on the rod to aline the shoulder and the slot in the pinion.

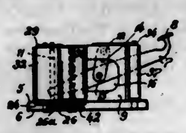
1,870,076. VARIABLE SPEED GEARING. HEDLEY JEFFREYS THOMSON, Woodford Green, England. Filed June 5, 1929, Serial No. 368,643, and in Great Britain June 26, 1928. 11 Claims. (Cl. 172—239.)



1. In an electromechanical power transmission system the combination of power, load, and lay shafts, an epicyclic gearing connecting said shafts, a dynamo-electric machine connected with one of said shafts, a second dynamo-electric machine, two driving connections of different speed ratio for connecting said second dynamo-electric machine to one of the other shafts, means for rendering either of said connections operative, electrical connections between said dynamo electric machines, and electrical control means for causing said machines to supply current the one to the other.

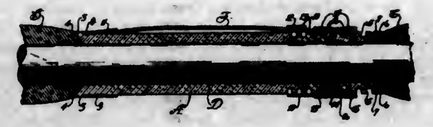
1,870,077. ADVERTISING DEVICE. OTTO ULRICH, Cronberg-on-the-Taunus, Germany. Filed Aug. 11, 1931, Serial No. 556,362, and in Germany Aug. 14, 1930. 3 Claims. (Cl. 40—93.)

1. An advertising device comprising, in an inclosing case, having windows in its side walls, two reels, a gear wheel coupled to each of said reels, a picture band wound upon one of said reels, guide rollers arranged to guide said picture band along said windows to the other of said reels, a counterweighted lever having a forked end, a coupling pivotally mounted on this end, and adapted to engage with a nut movable on a vertically arranged thread-



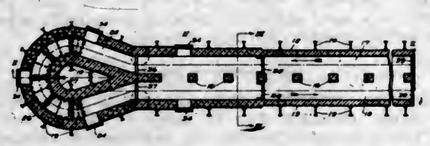
ed spindle, a pinion mounted on said spindle and engaging with a gear wheel coupled to one of said reels and a switch gear adapted to automatically disengage said pinion from said gear wheel and engage it with the gear wheel coupled to the other of said reels when the picture band has been wound on said first reel and unwound from said other reel, substantially as set forth.

1,870,078. REEL SEAT FOR FISHING RODS. JACK T. WELCH, Dowagiac, Mich., assignor to James Heddon's Sons, Dowagiac, Mich., a Corporation of Michigan. Filed Nov. 15, 1929. Serial No. 407,328. 4 Claims. (Cl. 43—22.)



1. A reel seat in which is combined a barrel of substantially uniform diameter having along a substantial portion thereof inwardly formed threads with top surfaces of substantial area and in flush relation with the remainder of the barrel surface, a pair of opposed clamping rings fitted upon the barrel adapted to engage between them the base plate of a reel, one of said rings being mounted for free sliding movement upon the barrel and to receive bearing from either or both the threaded and unthreaded portions of its surface, and a follower ring mounted upon the barrel for abutment against the outer end of the sliding clamping ring, the follower ring being provided throughout its length with internal threads complementary to and coacting with those on the barrel, adapted with rotation of the follower ring to advance the same toward or from the sliding clamping ring.

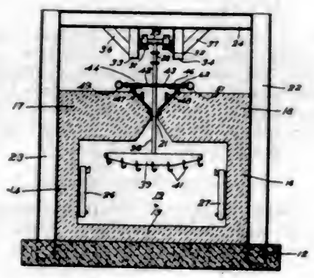
1,870,079. ELECTRIC FURNACE. JAMES C. WOODSON, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 6, 1929. Serial No. 337,797. 1 Claim. (Cl. 13—20.)



A furnace structure comprising two straight and substantially parallel-extending chambers located in side-by-side relation, each having open ends, a chamber of substantially U-shape, located at one end of the two chambers and communicating directly therewith, the radius of curvature of the chamber of U-shape being greater than half the distance between the center lines of the two parallel-extending chambers, and an electric heating

element distributed substantially uniformly over the floor and the side walls of the chamber of U-shape and extending over substantially the arcuate length of the chamber of U-shape.

1,870,080. SLOT CLOSURE. JAMES C. WOODSON, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 28, 1931. Serial No. 518,930. 6 Claims. (Cl. 263—8.)



1. In a horizontal-chamber heat-treating furnace having a longitudinal slot in its roof-wall, an endless conveyor chain moving above said slot, and spaced material-supporting rods depending from the chain and moving in the slot, a slot-closure means including pivotally-mounted overlapping plates above the slot to be moved aside by a depending rod, and resilient means for yieldingly holding the plates in normal operative positions and for returning them thereto after movement thereof by a depending rod.

1,870,081. PROCESS AND PRODUCT FOR COVERING A METALLIC ARTICLE WITH AN UNWORKABLE ALLOY. WILLIAM J. WRIGHTON, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Sept. 11, 1928. Serial No. 305,335. 3 Claims. (Cl. 148—32.)

3. An article of the character described composed of a tarnishable gold alloy base and a coating of tin thereover, said coating being alloyed to the gold alloy base and rendering said article non-tarnishable.

1,870,082. PRINTING COMPOUND AND METHOD OF MAKING SAME. PAUL YOHNS, New York, N. Y., assignor to The Butterick Publishing Company, a Corporation of New York. Filed July 29, 1926. Serial No. 125,829. 6 Claims. (Cl. 134—35.)

1. A printing compound suitable for printing on thin paper comprising acetine, gum shellac and more than 14% of a basic dye which remains permanently soluble in hot water after printing and drying.

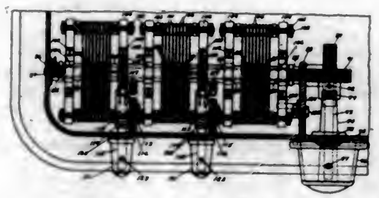
1,870,083. PIPE HANGER. LOTHAR R. ZIFFERER, deceased, Columbia, Pa., by Mabel C. Zifferer and H Nelson Albright, Columbia, Pa., and Harry E. Champion, Blue Point, Long Island, N. Y., executors, assignors to Columbia Malleable Castings Corporation, Columbia, Pa., a Corporation of New York. Original application filed May 27, 1930, Serial No. 456,016. Divided and this application filed Aug. 7, 1931. Serial No. 555,686. 2 Claims. (Cl. 248—31.)

1. A pipe hanger in which is comprised a ring having a collar wherein is fitted a sleeve having a head with means engageable with other means on the collar for resisting rotation of the sleeve relative to the collar, a portion of the sleeve exterior beyond the collar being of reduced diameter, and the collar being provided with



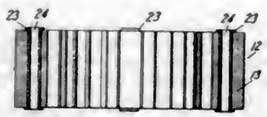
means bendable to lie partly within such reduced portion whereby to confine the sleeve and collar against any but a limited longitudinal movement relative to each other.

1,870,084. VARIABLE CONDENSER. VINCENT G. APPLE, Dayton, Ohio. Filed June 14, 1928. Serial No. 285,355. 7 Claims. (Cl. 175—41.5.)



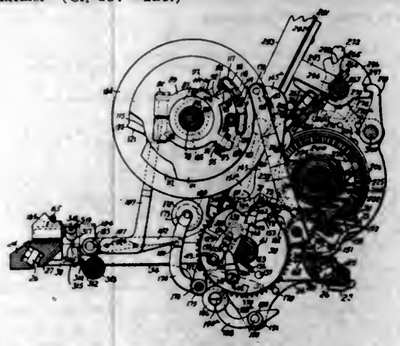
2. A variable condenser having both elements movable in opposite directions, separate control knobs whereby each element may be moved independently of the other, the one knob operating thru gearing of high reduction ratio, so that said knob is adapted to slowly but accurately bring about exact relation between said elements, and a spring in tension holding the element operable by high reduction gearing to a zero position but operable to be further extended by movement of said element in either direction from said zero position.

1,870,085. LAMINATED CORE. VINCENT G. APPLE, Dayton, Ohio. Filed Oct. 7, 1929. Serial No. 397,894. 11 Claims. (Cl. 171—252.)



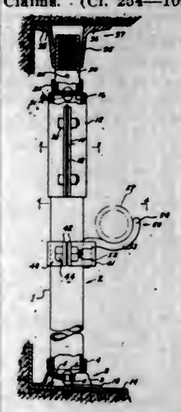
4. The method of making a laminated core with insulation lined openings therethrough, which consists of stacking the laminæ, temporarily holding them together, inserting bushings of insulation saturated fibrous material in said openings to extend considerably beyond at each end of said core, drawing down the extending ends to form heads, hardening the insulation, then removing the temporary holding means.

1,870,086. TYPEWRITING MACHINE. EDWIN E. BARNEY, New Rochelle, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Apr. 13, 1927. Serial No. 183,466. 57 Claims. (Cl. 197—126.)



4. The combination of a rotary platen, a spring-pressed paper clamp mounted thereon, automatic means for opening the clamp in opposition to the spring pressure, and means for maintaining said automatic means in ineffective position until after a predetermined point has been reached, said maintaining means being adjustable so as to afford a variable number of uninterrupted revolutions of the platen before said automatic means can become effective.

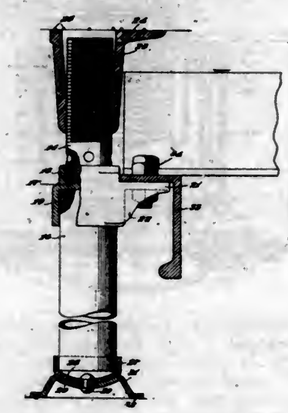
1,870,087. SUPPORTING STRUCTURE. LOUIS I. BECKWITH, Dorchester, Mass. Filed July 23, 1929. Serial No. 380,340. 7 Claims. (Cl. 254—100.)



1. An upright of the class described comprising an elongate intermediate portion, a rotatable member rotatably connected to one end of the intermediate portion, said member being screw threaded, an end member having a screw-threaded portion in engagement with the aforesaid rotatable member, means providing for relative rotary movement of said rotatable member and the intermediate portion while maintaining these parts in substantially the same positions longitudinally of each other, said end member having a substantially flat transversely extending bearing surface provided with prongs to effect its non-rotatable engagement with a horizontal surface.

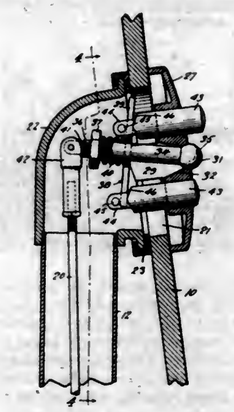
1,870,088. REFRIGERATING APPARATUS. LOUIS I. BECKWITH, Brookline, Mass. Filed June 12, 1931. Serial No. 544,023. 7 Claims. (Cl. 248—2.)

1. An installation of the class described comprising expansible uprights spaced in rows, each upright extending substantially between the floor and ceiling and comprising upper and lower relatively rotatable sections, means associated with each section and relatively rotatable in relation thereto for abutment against the floor and ceiling respectively, a web disposed transversely between the adjoining ends of the sections of each upright, interfitting connections between adjoining ends of said sections and



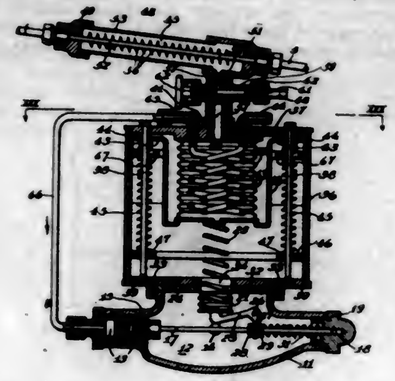
the webs, said connections providing for relative rotary movement of the sections of each upright while retaining them substantially in alignment, structural means extending longitudinally of each row and connecting the webs associated with the uprights thereof, beams extending transversely between the rows and supported by the structural means, and means for supporting a cooling coil from the beams.

1,870,089. WASTE PIPE FITTING. LEON BLOCH, Cleveland Heights, Ohio. Filed May 6, 1931. Serial No. 535,483. 10 Claims. (Cl. 4—203.)



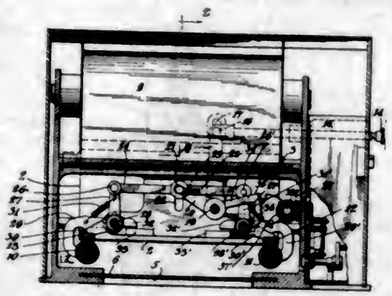
1. A plumbing fixture including, an escutcheon plate, a pair of projections extending from one side thereof and having a double bevel end portion, and elongated control member pivoted between said projections, an overcentering plate slidable longitudinally of said member, a spring on said member urging said plate into engagement with said projections whereby to secure an overcentering effect, and means for moving said member about its pivot point.

1,870,090. VALVE APPARATUS. WILLIAM J. BOLTON, Oakmont, Pa. Filed May 7, 1929. Serial No. 361,128. 14 Claims. (Cl. 236—92.)



1. In an automatically operable control device for refrigerating systems, a valve for controlling the flow of refrigerant in the system, means responsive to the pressure of the expanded gases in the cooling coil of the system tending to close said valve, thermostatic means adapted to be responsive to the temperature of the refrigerant discharged from the cooling coils tending to open said valve in opposition to the pressure exerted on the valve closing means by the expanded gases in the cooling coils, and adjustable means for predetermining the maximum back pressure necessary to close said valve.

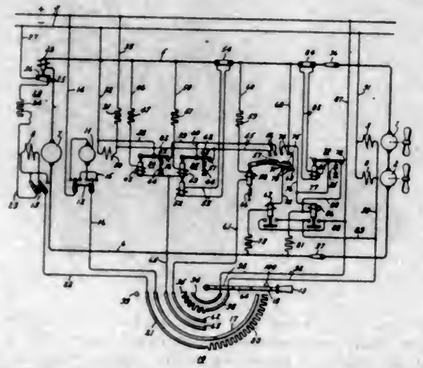
1,870,091. FILM POSITIONING DEVICE FOR AERIAL CAMERAS. AMBROSIUS BRIECHLE, New York, N. Y., assignor to Fairchild Aerial Camera Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 11, 1932. Serial No. 585,819. 7 Claims. (Cl. 95—34.)



1. In a film camera, means for positioning and maintaining said film flat and parallel to the exposure plane immediately prior to and during the complete photographic exposure, said means including winding and unwinding film spools and devices adapted to releasably engage said film so as to place the latter under tension in all directions within a plane parallel to the exposure plane.

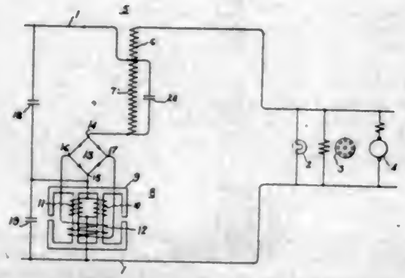
1,870,092. POWER SYSTEM. FRANK A. BYLES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Original application filed Jan. 28, 1928, Serial No. 250,251. Divided and this application filed June 6, 1930. Serial No. 459,439. 11 Claims. (Cl. 172—8.)

1. A generator, a motor, means for successively controlling said generator and said motor, regulating means for limiting the power delivered by said generator, means for limiting the current demanded by said motor, and means depending on the voltage of said generator when the controlling means is operating on said motor for transferring the control from said power regulating means to said power limiting means.



11. A generator, a motor, means for successively controlling said generator and said motor, regulating means for limiting the power delivered by said generator, means for changing an operating characteristic of said motor for limiting the power demanded by said motor, and means depending on the voltage of said generator when the controlling means is operating on said motor for transferring the control from said power regulating means to said motor characteristic changing means.

1,870,093. ELECTRICAL REGULATOR. ARAM BOYAJIAN and EARL V. DE BLIEUX, Pittsfield, Mass., assignors to General Electric Company, a Corporation of New York. Filed Apr. 29, 1930, Serial No. 448,398. Renewed Dec. 24, 1931. 11 Claims. (Cl. 171—119.)

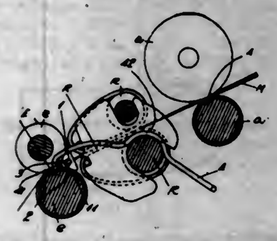


1. In combination, an alternating current circuit, a booster transformer including a series winding connected in said circuit and a shunt winding connected across said circuit, a rectifier and a saturable reactor connected in series with said shunt winding, a direct current saturating winding on said reactor, and means including said rectifier for energizing said saturating winding.

1,870,094. PROCESS OF TREATING SLAG WOOL. JOSEPH C. CARLIN, Nashville, Tenn., assignor to Tennessee Products Corporation, Nashville, Tenn., a Corporation of Tennessee. Filed Oct. 9, 1930. Serial No. 487,640. 9 Claims. (Cl. 91—68.)

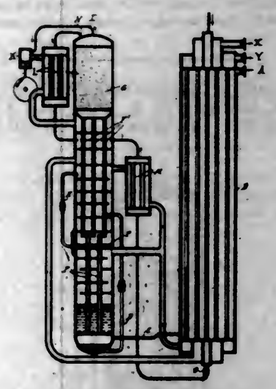
1. The process of rendering mineral wool dustless which comprises saturating the wool material with a solution containing a deliquescent salt, then removing excess of solution and drying the wool material.

1,870,095. REDUCING DEVICE FOR SLIVERS FOR DRAWING MECHANISMS FOR TEXTILE SLIVERS. FERNANDO CASABLANCAS, Sabadell, Spain. Filed Mar. 31, 1930, Serial No. 440,517, and in Spain Apr. 25, 1929. 8 Claims. (Cl. 19—131.)



1. In a drawing mechanism for textile slivers, drawing cylinders for the slivers, a pair of floating reducers resting upon the lower drawing cylinders, and means for connecting said reducers together to permit the reducers to move toward and away from each other.

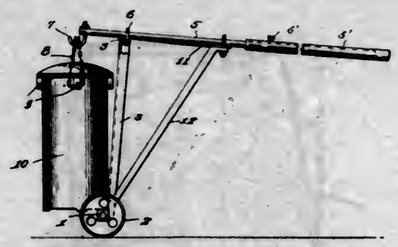
1,870,096. MANUFACTURE OF HYDROGEN BY THE PARTIAL LIQUEFACTION OF GASEOUS MIXTURES CONTAINING THE SAME. GEORGES CLAUDE, Paris, France, assignor to Société l'Air Liquide, Société Anonyme pour l'Etude et l'Exploitation des Procédés Georges Claude, Siège Social, Paris, France. Filed May 4, 1925, Serial No. 28,028, and in France May 15, 1924. 12 Claims. (Cl. 183—115.)



9. A process for separating the constituents of gaseous mixtures by liquefying a part of said constituents and expanding the whole amount of non-liquefied constituents, which comprises the steps of totally liquefying a single gas and further cooling the same by means of the cold expanded non-liquefied constituents; and washing the said non-liquefied constituents of the gaseous mixture, while still under pressure, with said liquefied and cooled single gas.

1,870,097. DEVICE FOR LIFTING AND MOVING TRANSFORMERS. MERWIN R. COLLER, North Hollywood, Calif. Filed May 21, 1931. Serial No. 539,051. 1 Claim. (Cl. 280—53.)

A lifting and moving device for heavy containers comprising an axle, wheels journaled upon the axle, a rectangular frame having side members attached to the axle at one side thereof, cross braces disposed across the frame and secured at their ends at the corners and in the vicinity of the side members thereof, a handle mounted upon the frame and disposed at a right angle thereto, said handle having an end portion extending in advance of the frame and the axle, a hook carried by the handle and adapted to be connected with the article to be lifted and moved, upper braces connected with the intermediate portion of

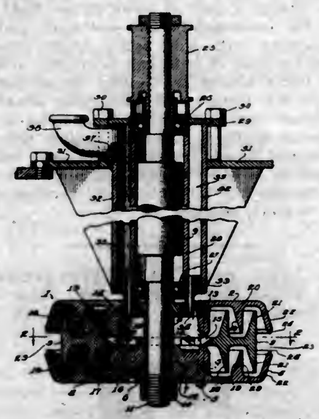


the handle and the top of the frame at points spaced from the upper corners thereof and lower braces connected with the intermediate portion of the handle and the side of the axle at points adjacent the side members of the frame.

1,870,098. ANTITOBACCO CONFECTION. HARRY WILLIAM COX and DONALD HENRY MOORE, Weston-Super-Mare, England; said Moore assignor to said Cox. Filed Nov. 12, 1930, Serial No. 495,286, and in Great Britain Dec. 18, 1929. 2 Claims. (Cl. 131—67.)

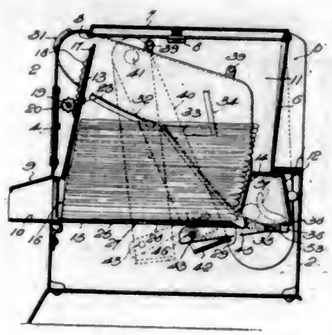
1. A confection comprising a chewing sweet having therein gum chicle with which is incorporated powdered cinchona bark as an anti-tobacco agent.

1,870,099. ATOMIZER. WALTER B. CROAN, Chicago, Ill. Filed Sept. 1, 1930. Serial No. 479,114. 1 Claim. (Cl. 299—63.)



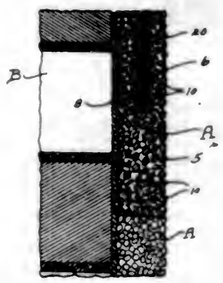
An atomizer comprising a rotatably mountable shaft having a head secured thereto, said head comprising end members, and an intermediate member, said intermediate member being clamped between the said end members, one of said end members having a hub by means of which the head is secured to the shaft, said hub having a central depression and said intermediate member and the opposite end member being centrally hollow for forming a receiving pocket for liquid to be sprayed, said intermediate member having apertures all in the same transverse plane arranged for guiding and delivering the liquid received by the pocket to opposite sides of said intermediate member between it and the end members, said intermediate member having concentric oppositely projecting annular flanges, and said end members each being provided with inwardly extending annular flanges inter-spaced with the flanges on the end members.

1,870,100. VENDING MACHINE. JOHN SIMMINS CURZON, Peerless, Utah, assignor of one-half to Ace Miner, Helper, Utah. Filed Feb. 8, 1930. Serial No. 426,929. 1 Claim. (Cl. 312—51.)



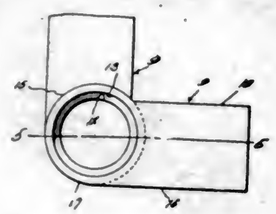
In a vending machine, a casing having a front wall, side walls, a bottom, a top and a back wall with a door through which the machine may be loaded, the front wall having a discharge throat; a works unit insertible into the casing as a unit and itself comprising a pair of end walls and a bottom wall joining the end walls, a rod carrying a flap valve mounted between said end walls, a plate extending upwardly from adjacent said rod and inclined rearwardly and joining said end walls together, a slide on the front face of said plate, said plate and said slide being disposed to the rear of said rod whereby said slide may be raised and lowered in back of the rod to alter the area of the opening covered by said flap valve, said slide having a pair of racks on its front face, a rotatable rod journalled in said end walls and having pinions meshing with said racks, article discharging mechanism mounted on said side walls and cooperating with said unit's bottom for feeding the articles one at a time into said throat, said discharging means including a swinging lever, said casing having a slot in one side wall, a handle having a projection passing through said slot and secured to said swinging lever, said casing having an opening in one side wall aligning with the end of said rotatable rod into which an operating key may be passed to rotate said rod.

1,870,101. WALL AND CEILING STRUCTURE. WILLIAM J. DAVEY, Takoma Park, Md. Filed Feb. 18, 1931. Serial No. 516,746. 13 Claims. (Cl. 72—18.)



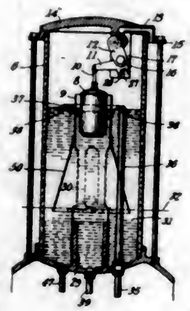
1. A wall or ceiling structure embodying a coat of porous material formed with isolated vibratory sections on its surface, and damping means for the vibratory sections.

1,870,102. BUILDING BRICK. JAMES DANDO DAVIES, Martins Ferry, Ohio. Filed July 31, 1930. Serial No. 472,077. 1 Claim. (Cl. 72—38.)



In a building construction, a veneer wall formed of standard bricks and two sets of tying corner bricks, the corner bricks being of the same thickness as a standard brick, one end of each brick of one set being placed between the ends of a pair of bricks of the other set whereby the bricks of each set are spaced apart to receive between them the end bricks of alternate rows of said standard bricks, the bricks of one set extending in a different direction from the bricks of the other set to form a corner, the corner forming ends of the bricks of the two sets being rounded with an edge of each brick merging into the rounded part and each rounded part having an opening passing therethrough with an annular groove in one face of the brick surrounding the opening, and an annular rib on the other face surrounding the opening, the ribs on one set of bricks fitting in the grooves of the other set of bricks to tie the two sets together with the openings in the bricks of the two sets being in alignment to form a continuous passage at the corner of the building.

1,870,103. LIQUID DISPENSING APPARATUS. HARRY E. DOBSON, New York, N. Y. Filed Mar. 2, 1931. Serial No. 519,391. 16 Claims. (Cl. 221—95.)

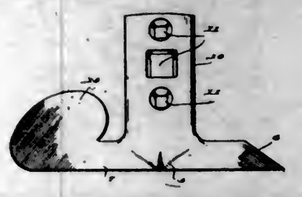


1. A continuous delivery visible supply and liquid metering dispensing system, comprising a visible bowl having air venting and air cushion trapping means therein, means for continuously supplying liquid into said bowl, means for continuously withdrawing liquid from the bowl and including outlet flow connections, a liquid meter in said outlet flow connections, said bowl having a liquid body retaining outlet well connected with the meter for maintaining a liquid head thereon and a precipitation chamber separate from said well and into which the liquid is delivered into the bowl, the air venting and cushioning means including a float and a tubular guide for said float associated with the liquid well and forming a division wall between the precipitation chamber and outlet well, said tubular guide having a liquid passage enabling communication between the chamber and well.

1,870,104. PRODUCTION OF OXYGENATED ALIPHATIC COMPOUNDS. HENRY DREYFUS, London, England. Filed May 27, 1926, Serial No. 112,170, and in Great Britain June 26, 1925. 5 Claims. (Cl. 260—134.)

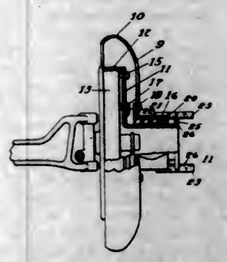
1. A process of manufacturing members of the ketene-acetic group of oxygenated aliphatic compounds, which comprises subjecting acetaldehyde in the form of vapor to a temperature above 150° C. and not exceeding 400° or 500° C. in presence of a hydrogen splitting catalyst.

1,870,105. CULTIVATOR SHOVEL. GEORGE F. DUGGER, Allen, Tex., assignor of one-half to James Garland, Allen, Tex. Filed Dec. 7, 1929. Serial No. 412,388. 1 Claim. (Cl. 97—204.)



A cotton sweep including a ground engaging point, diverging wings formed with said point and extending rearwardly therefrom at oblique angles with respect to the horizontal, and an upstanding shank formed with said point and between said diverging wings, one of said wings being formed with a rearwardly extending rounded mold board of relatively great area, said mold board being disposed in substantially the same plane as said wing and arising a considerable distance above the upper edge of said wing, the lower edge of said extension being formed as a continuation of the lower edge of said wing so that a substantial portion of the lower edge of the extension will contact with the ground so that as the sweep is drawn forward to loosen the earth the mold board will direct the severed material toward the plant row.

1,870,106. WHEEL ALIGNER FOR VEHICLES. FREDERICK H. EVANS, Rochester, N. Y. Filed July 11, 1928. Serial No. 291,985. 8 Claims. (Cl. 33—203.)

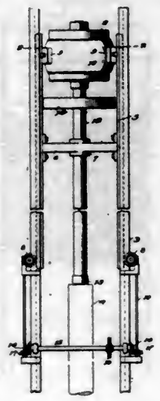


2. A wheel aligner comprising a wheel engaging member adapted for attachment to a wheel to be tested, a rolling member mounted on said wheel engaging member and having a periphery substantially equal to that of the tire normally carried by the wheel to be tested, and means supporting said rolling member on said wheel-engaging member to turn with the wheel engaging member and to move thereon coaxially of the wheel.

1,870,107. MEDICATED OINTMENT COMPOSITION. HENRY C. FULLER, Washington, D. C. Filed Feb. 21, 1930. Serial No. 430,446. 16 Claims. (Cl. 167—63.)

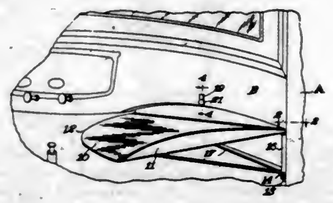
1. An ointment composition comprising an ointment base, with which are compounded a phenylphenol and another medicinal agent.

1,870,108. MECHANISM FOR SAWING TUBES FROM INGOTS. THOMAS J. GLYNN, Pittsburgh, Pa. Filed May 7, 1930. Serial No. 450,563. 1 Claim. (Cl. 77—5.)



Means for sawing seamless tubes from ingots including vertical uprights, U-shaped in cross-section, adapted to support an ingot, a saw supporting structure embodying rack bars slidably mounted in the uprights, a motor carried by said supporting structure and movable therewith, a cylindrical saw operatively engaged with said motor and depending from the latter, said saw being normally urged into engagement with the ingot under weight of the motor, and means co-acting with said rack bars to elevate said supporting structure in the uprights.

1,870,109. SERVICE TRAY. ARCHIE S. GOFORTH, Decatur, Ala. Filed Nov. 9, 1931. Serial No. 573,965. 1 Claim. (Cl. 45—51.)

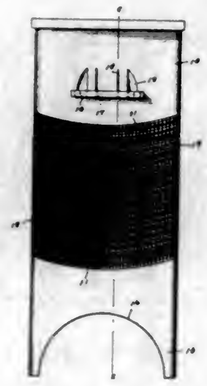


A tray of the kind described comprising a substantially sector-shaped body, a swinging bracket adapted for mounting within an automobile body immediately beneath its instrument board and carrying said sector-shaped body, flanges upturned from the longer edges of the sector-shaped body and coacting with the instrument board to limit the swing of said body, and means on the instrument board for latching engagement with the flanges to hold the sector-shaped body at the limits of its movements.

1,870,110. PROTECTIVE PAPER FOR AGRICULTURAL OR HORTICULTURAL USES. WILLIAM AUGUSTUS HALL, Marignane, France. Filed Feb. 17, 1931, Serial No. 516,524, and in France Feb. 18, 1930. 13 Claims. (Cl. 47—9.)

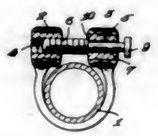
10. A mulch paper having approximately the composition of 40 per cent absorbent cellulose paper, 30 per cent of decomposable weatherproofing agents and 30 per cent of fertilizer.

1,870,111. WASHBOARD. YOSHISUKE HANAOKA, Honolulu, Territory of Hawaii. Filed Oct. 4, 1930. Serial No. 486,461. 1 Claim. (Cl. 68—29.)



In a wash board, a rubbing surface comprising transversely disposed downwardly curved ribs defining transversely disposed downwardly curved grooves extending across the face of the board, each of the walls of the ribs having grooves which extend transversely thereof and define spaced parallel distributing grooves, the grooves on the left side of the board rubbing face being spaced closer than the grooves on the right hand side of the board rubbing face.

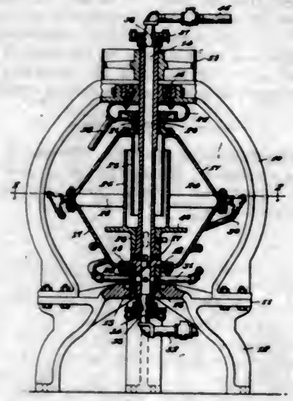
1,870,112. BOLT AND CLAMP. LEON R. HAND, Hummels Wharf, and LEWIS A. EYSTER, Sunbury, Pa. Filed Apr. 6, 1931. Serial No. 528,170. 1 Claim. (Cl. 24—19.)



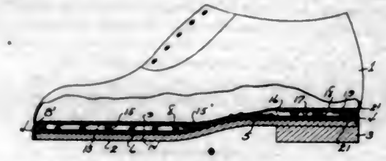
A split ring metal clamp which is yieldable under pressure, and which has its ends widened and thickened, an adjustable shouldered member received through the said ends of the clamp and said member having a headed end designed to contact with one of the end members of the clamp when the said members are adjusted longitudinally for compressing the body of the clamp and which shoulder, when the member is adjusted in a second direction, is adapted to contact with the inner face of one end of the clamp for spreading the clamp ends away from each other and for expanding the body thereof.

1,870,113. SEPARATING MACHINE. WILLIAM A. HAWKINS, Ensley, and GUY W. LATHEM, Bessemer, Ala. Filed Mar. 7, 1931. Serial No. 520,864. 1 Claim. (Cl. 233—21.)

A separator comprising cone-shaped housing sections, a trough member interposed between the larger ends of said sections, a support for the housing, pipes connecting said trough with the housing support, a hollow shaft fixed to the housing sections and journaled in said support and having openings adapted to communicate with said pipes, said shaft having other openings adapted to communicate with the interior of the lower housing section, a plug between the first and second named group of openings, overlapping baffle sleeves fixed to the pipe and the upper housing section respectively and disposed transversely across said trough and a collecting chamber mounted upon the pipe and having a passageway communicating with the interior of one of said baffle sleeves.



1,870,114. SHOE VENTILATING DEVICE. EDWIN H. HELLER, Sikeston, Mo. Filed Aug. 12, 1931. Serial No. 556,671. 1 Claim. (Cl. 36—3.)



A foot cushioning and ventilating shoe including a sole provided with a continuous upstanding flange that affords the sole with an air pocket, a compressible strip arranged in the pocket and having its sole portion centrally slitted, a metal reinforcing plate in the slit, a thin metal plate overlying the strip at the heel portion thereof, a stiff metal shank secured to the arch of the strip and to the metal heel plate, an apertured metal plate to which the front end of the shank is secured, coiled expansion springs between said apertured metal plate and the sole portion of the compressible strip, an apertured plate at the heel portion of the pocket having its rounded rear portion provided with a depending flange which is notched, coiled compression springs on the under face of the said apertured plate of a normal length greater than that of the flange, and a leather inner sole having its front and rear portion apertured, its central portion connected to the metal shank, its edges stitched to the flange of the shoulder and the rounded edge of its heel portion provided with an arcuate notch disposed outwardly of the notched flanges on the apertured heel plate.

1,870,115. LANDING SAIL FOR AIRCRAFT. HERMANN HEIN, Bremen, Germany. Filed Feb. 10, 1932, Serial No. 592,122, and in Germany Feb. 26, 1931. 5 Claims. (Cl. 114—0.5.)



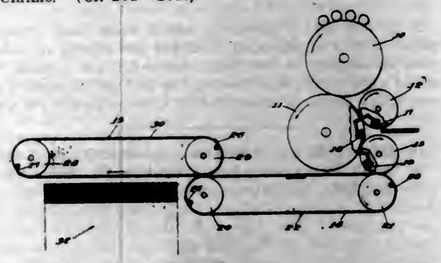
1. A landing sail for aircraft provided with flooding means at the front edge.

1,870,116. AIRCRAFT LANDING SAIL. HERMANN HEIN, Bremen, Germany. Filed Feb. 10, 1932, Serial No. 592,123, and in Germany Feb. 27, 1931. 1 Claim. (Cl. 114—0.5.)



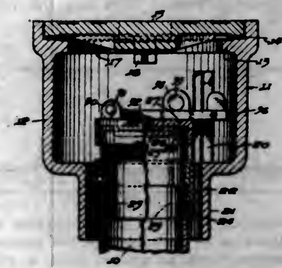
Tackle for towing aircraft landing sails behind ships, in which in addition to the usual towing members leading to the deck of the ship, auxiliary towing members are attached in front of the part of the sail adapted to receive the aircraft, which auxiliary members are guided or attached to the stern of the ship close above the water, running say parallel to the water surface.

1,870,117. PRINTING PRESS. CARL HENDERSON, Oak Park, Ill. Filed Jan. 10, 1931. Serial No. 507,968. 9 Claims. (Cl. 101—232.)



1. In a printing press; a printing couple comprising an impression cylinder and a form cylinder of substantially equal diameters; feeding mechanism disposed in the same vicinity as the form cylinder and adapted to feed sheets to said impression cylinder; and a transfer cylinder disposed on the same side of the impression cylinder as said feeding mechanism and adapted to strip the sheets from said impression cylinder, said sheets making less than one complete revolution of the impression cylinder.

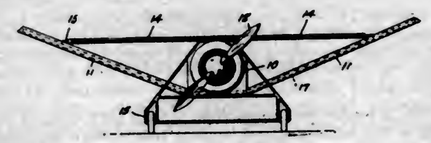
1,870,118. SLIP-JOINT FILL BOX. JAMES B. HOLTSON, Towson, Md., assignor to The Huffman Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 25, 1930. Serial No. 484,402. 10 Claims. (Cl. 220—86.)



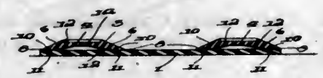
9. In combination, a tank fill pipe, a fitting upon the upper end thereof and a fill box slidably receiving the fitting.

1,870,119. AIRPLANE. GEORGE A. HUGHES, Havelock, Nebr. Filed Jan. 30, 1932. Serial No. 589,936. 4 Claims. (Cl. 244—12.)

1. In an aircraft of the character described, a fuselage, main airfoils disposed at opposite sides of the fuselage in upwardly divergent relation to each other, auxiliary vertically swinging airfoils located between the main airfoils and disposed in a horizontal plane, a shaft supporting the auxiliary airfoils and joined with struts of the main airfoils, means for adjusting the auxiliary airfoils independently of each other, spaced parallel tail frames on the aft of the fuselage, a horizontal shaft mounted medially of said frames, a vertically swinging elevator on said shaft, and a rudder adjustably supported by said shaft medially between the tail frames.

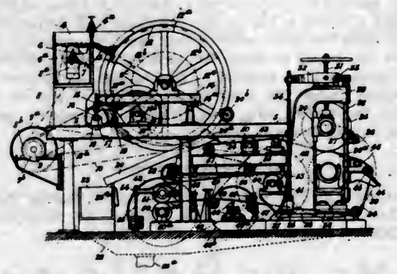


1,870,120. SOUND MUFFLING DEVICE FOR TYPEWRITERS AND OTHER MACHINES. JAMES T. HUMES, Harrisonburg, Va. Filed Dec. 27, 1930. Serial No. 505,166. 4 Claims. (Cl. 248—16.)



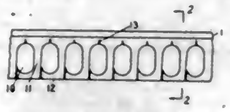
1. A sound muffling device for typewriting and other machines comprising a pad of resilient, readily yielding material of an area as great as that of the base of the typewriting or other machine, and leg supporting devices on the upper face of the pad of a relatively rigid material less yielding than the material of the pad, each having its upper face adapted to receive a leg of the typewriting or other machine and having its base of greater area than its upper face.

1,870,121. TREATMENT OF VEGETABLE REFUSE FOR OBTAINING USEFUL PRODUCTS THEREFROM. JAMES JACKSON, Birmingham, England, assignor to Industrial Waste Eliminators Limited, London, England. Filed Feb. 23, 1928, Serial No. 256,409, and in Great Britain Mar. 2, 1927. 7 Claims. (Cl. 100—37.)



1. In a vegetable refuse apparatus for partially dehydrating liquid from refuse prior to final separation in an expressing press, the combination comprising a base, a tank supported by said base and adapted to contain a liquid into which the previously disintegrated refuse is passed for the purpose of effecting the separation of the lighter vegetable constituents of the refuse from the undesirable heavier portions by reason of the lighter constituents floating to the surface of the liquid in the tank, a movable dehydrating means supported by said base and disposed adjacent to the tank, means for transferring the floating lighter refuse to the said dehydrating means, and means for conveying the refuse from the dehydrating means to an expressing press.

1,870,122. AUTOMOBILE ANTISQUEAK WELT. STANLEY W. JANSEN, Detroit, Mich., assignor to Backstay Welt Company, Union City, Ind., a Corporation of Indiana. Filed Oct. 1, 1930. Serial No. 485,757. 13 Claims. (Cl. 280—153.)

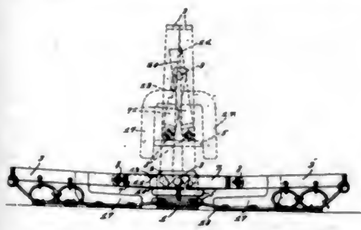


10. A fender welt comprising a strip body portion having a beaded edge, and fingers transversely projecting from said edge, each of said fingers being enlarged at its end.

1,870,123. EMBALMING FLUID. HILTON IRA JONES, Wilmette, Ill., assignor of one-half to Paul H. Buchanan, trustee for The National Selected Morticians of Washington, D. C., a Corporation. Filed Sept. 20, 1930. Serial No. 483,392. 2 Claims. (Cl. 27—22.)

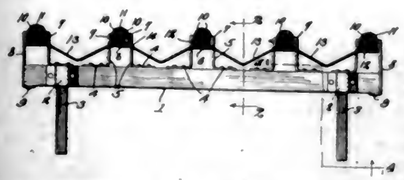
1. An embalming fluid comprising an alkaline soap solution and a sodium salt of the type of sodium orthophenylphenate.

1,870,124. TRAP. ALVIN F. KASPER, Potter, Wis. Filed Apr. 27, 1931. Serial No. 533,314. 2 Claims. (Cl. 43—63.)



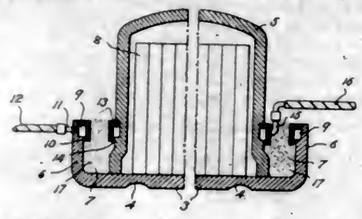
1. A trap comprising a base, jaws pivoted to said base and adapted to occupy a horizontal position when set, tension means for urging the jaws together and into a vertical position, a pair of arms pivotally connected to the jaws, a pivot connecting said arms with one end of one of the arms extended to provide an extension and the other arm having a notch, a lug on the extension and fitting in the notch with the pivot between said arms disposed in a plane below the pivots between said arms and jaws for holding the latter in a set position, a trip carried by the base and engaging under the arms to swing said arms on their pivots for freeing the jaws from a set position, and a cover carried by said jaws.

1,870,125. ROOST. GILBERT S. KOLSTAD, Spring Valley, Minn. Filed Oct. 26, 1929. Serial No. 402,706. 2 Claims. (Cl. 119—25.)



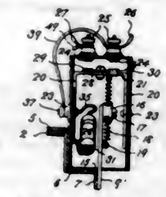
2. The combination with a supporting structure, of standards secured to the structure and arranged in pairs, a saddle between and integral with the standards constituting each pair, parallel perch sections seated on said saddles and held together by the sides of the saddles, and parallel troughs at opposite sides of and attached to the respective perch sections, said sections constituting supports for those sides of the troughs attached thereto, the upper ends of the standards and the sides of the saddles cooperating to form upstanding tongues, there being slots in the troughs through which the tongues are extended.

1,870,126. ART OF ANNEALING METAL WORK. LESTER L. LEWIS, New Castle, Pa., assignor of two-thirds to Blair Strip Steel Company, New Castle Pa., a Corporation of Pennsylvania. Filed Feb. 17, 1930. Serial No. 429,165. 7 Claims. (Cl. 148—16.)



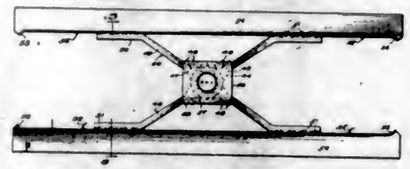
2. In the art of annealing metal work, heat treating metal work in an unsealed condition and sealing the metal work subsequent to the heat treatment, and cooling the sealed work in air, and treating the seal during cooling for preventing access of discoloration agents through the seal.

1,870,127. CIRCUIT CONTROL APPARATUS. LESTER L. LEWIS, New Castle, Pa. Filed Feb. 17, 1930. Serial No. 429,164. 12 Claims. (Cl. 200—59.)



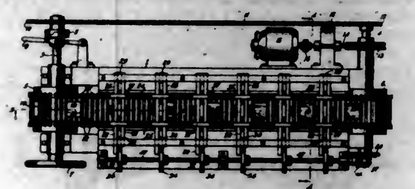
1. In circuit control apparatus, the combination, with a support, of a U-shaped plate pivotally engaging the support, a circuit-closing switch connected to be moved by the plate to and from a circuit-closing position, and an actuating lever for the plate extending between the sides of the plate and resiliently connected to the yoke of the plate.

1,870,128. AUTOMOBILE SERVICING LIFT. PETER J. LUNATI, Memphis, Tenn. Filed Aug. 16, 1926. Serial No. 129,529. 4 Claims. (Cl. 254—93.)



1. An automobile servicing lift comprising an upright cylinder adapted to be embedded in the ground with its upper end substantially at ground level, a plunger slidably and rotatably fitting the cylinder and with its upper end above ground level when in lowered position, a pair of parallel vehicle supporting rails located on opposite sides of the plunger, each rail having a horizontal vehicle engaging portion and a vertical portion, a head member secured to the plunger at its upper end, arms projecting horizontally outward from the head and having their outer ends attached to the vertical portions of the rails, and means for effecting the elevation and lowering of the plunger.

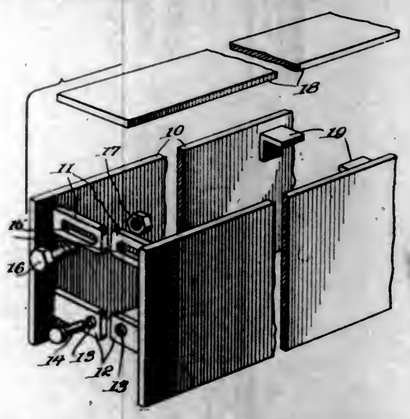
1,870,129. ENGRAVING MACHINE. HYMAN MATZNER and MICHAEL FRANZ, New York, N. Y. Filed June 7, 1930. Serial No. 459,758. 10 Claims. (Cl. 33—26.)



1. An engraving machine including a pair of drums, power actuated means for driving said drums at the same speed, a clutch for connecting said power actuated means to one of said drums, a hand actuated wheel connected to the last mentioned drum whereby when said clutch is opened said hand actuated wheel may move said drum, an endless carrier mounted on said drums and moved thereby, said hand actuated wheel acting to move said carrier rapidly, and said power actuated means acting to move said carrier slowly, means on the carrier for clamping an article to the carrier and cutting members arranged intermediate the drums and positioned to cut grooves in the articles supported by the carrier as they move from one end of the machine to the other.

2. An engraving machine including a movable carrier, a plurality of sliding frames coacting therewith, means on the carrier for holding articles to be engraved, a plurality of sets of cutters, means for connecting one set of cutters to each of said frames, a cam coacting with each frame, said cams individually moving said frames whereby the cutters associated with each frame may be caused to successively cut on the articles the same design or a different design according to the shape of the cam used, and means for actuating all of said cams at the same speed.

1,870,130. EXPANSION JOINT FORM. WILLIAM P. MAUTZ, Lebanon, and FRED B. OREN, Effingham, Ill. Filed Nov. 22, 1929. Serial No. 409,154. 1 Claim. (Cl. 25—118.)



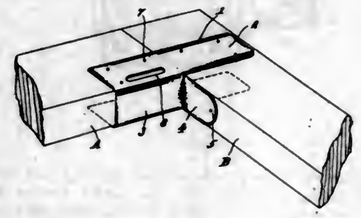
A removable expansion joint form for road construction comprising spaced plates, pairs of upper and lower lugs extending from said plates and each pair of lugs having overlapping relation and the lower pairs of lugs having aligned apertures and the upper pairs of lugs having aligned slots, pins extending through the apertures of the lower lugs to pivotally connect said lower lugs, bolts extending through the slots to adjustably connect the upper lugs, nuts on the bolts, and covers supported by the upper lugs between the plates.

1,870,131. PROCESS FOR THE PRODUCTION OF A MIXED FERTILIZER CONSISTING OF AMMONIUM BICARBONATE AND AMMONIUM SULPHATE. AUGUST MEIER, Munich, Germany. Filed May 12, 1931, Serial No. 536,952, and in Germany May 14, 1930. 6 Claims. (Cl. 71—9.)

1. A process for the production of a mixed fertilizer containing ammonium bicarbonate and ammonium sulphate, which comprises introducing carbon dioxide into a concentrated ammonia solution until just before precipitation of ammonium bicarbonate commences, mixing the solution with a saturated ammonium sulphate solution, and treating the mixed solutions with carbon dioxide and ammonia.

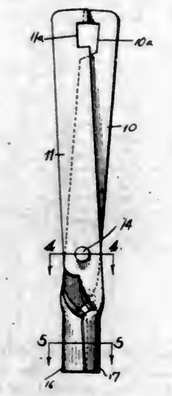
6. A stable mixed fertilizer consisting of a precipitated mixture of ammonium bicarbonate and ammonium sulphate.

1,870,132. METAL CORNER. JOHN C. MILLER, Lakewood, Ohio. Filed Apr. 10, 1931. Serial No. 529,196. 2 Claims. (Cl. 20—92.)



1. A corner brace and an attaching means comprising an elongated body for securing the adjacent ends of right angularly disposed members and of substantially U-shape in cross section providing parallel side plates and a web portion connecting said side plates approximately one half of their length, said side plates engaging opposite faces of the members and said web portion engaging one edge of one of the members and bent to form a right angularly disposed tongue engaging the other member, said tongue and plate having apertures to receive fasteners for securing the plates and tongues to the respective members.

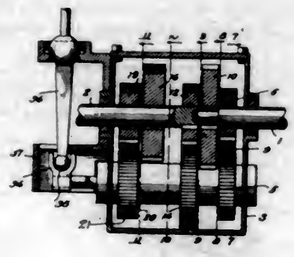
1,870,133. TONGS OR PLIERS. ORAN MYERS, Sacramento, Calif. Filed Dec. 18, 1930. Serial No. 503,335. 1 Claim. (Cl. 85—51.)



A tongs including a pair of pivotally connected members, a jaw on one of said members U-shaped in cross-section, and a coacting jaw on the other member V-

shaped in cross-section and having its sides overlapping the sides of the first jaw in angular relation, the side edges of the V-shaped jaw being sharpened to form gripping and cutting edges.

1,870,134. SILENT GEAR SHIFT FOR AUTOMOBILE ENGINES. CLYDE R. NEWCOMB, Orchards, Wash. Filed Dec. 19, 1930. Serial No. 503,557. 3 Claims. (Cl. 74—59.)



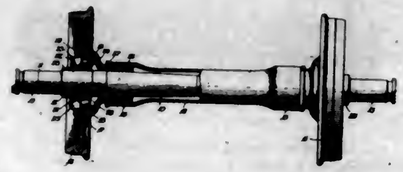
1. A gear shift comprising aligned driving and driven shafts, a casing mounted upon the shafts, sleeves journaled in the casing and provided at their sides with openings disposed at angles of 45 degrees to the axes of the sleeves, lugs slidable in the openings, said lugs being rhombus shaped, gear wheels journaled upon the sleeves and having recesses adapted to receive the ends of the lugs, springs surrounding the lugs and normally holding them at retracted position, one of said gear wheels being operatively connected with the driving shaft, the remaining gear wheels being operatively connected together in sets, stub shafts slidable in the sleeve and collars mounted upon the stub shafts and adapted to engage the lugs to move them in the openings of the sleeves and into the recesses of the gear wheels.

1,870,135. DRILL. HARRY CHARLES NORLEY, North Bay, Ontario, Canada, assignor to Canadian Atlas Steels Limited, Welland, Ontario, Canada, a Company Incorporated under the Companies Act of Canada. Filed Dec. 11, 1931. Serial No. 580,421. 5 Claims. (Cl. 255—64.)



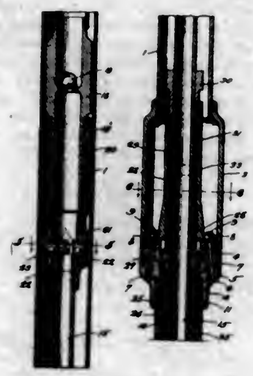
1. The combination with the drill shank and bit engaging means rotatably connecting the shank and bit together, and means incorporated in the structure of the shank and bit for positively locking the shank and bit in the engaged position, such locking means comprising a recess formed in the shank, an inwardly settable portion forming part of the bit for engaging the recess.

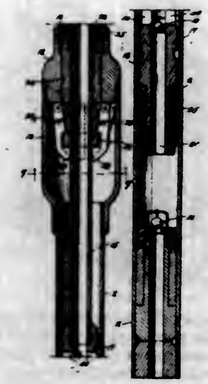
1,870,136. WHEEL AND AXLE ASSEMBLY. ALFRED H. OELKERS, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed July 5, 1928. Serial No. 290,350. 21 Claims. (Cl. 295—36.)



1. In a wheel and axle assembly the combination of wheels having hub portions, and an axle having portions into which said hub portions are disposed and secured.

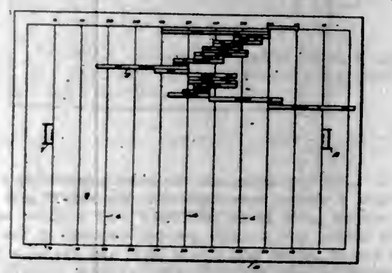
1,870,137. PUMP. IRA JAMES PARKER, Coffeyville, Kans. Filed Mar. 5, 1930. Serial No. 433,847. 3 Claims. (Cl. 103—189.)





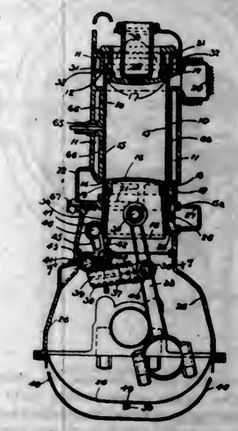
1. A pump including an upper working barrel, a lower working barrel, a tubular connection between the barrels, standing valves at the lower ends of the respective barrels, a traveling valve in each barrel, a tubular connection between the traveling valves opening into the lower working barrel, a valved inlet in the upper traveling valve for admitting fluid to the upper traveling valve from the upper working barrel, a stationary packing carried by and within the connection between the barrels and forming a sealing working contact with the connection between the traveling valves, means within the pump for fastening the stationary packing in position, and means operated by raising the lower traveling valve above its normal upper limit of movement, for unfastening the packing to permit upward withdrawal of the packing and the traveling valves relative to the working barrels.

1,870,138. TOY FOOTBALL GAME. OLIVER L. PARKER, Greeley, Colo. Filed Mar. 16, 1931. Serial No. 523,079. 2 Claims. (Cl. 273—94.)



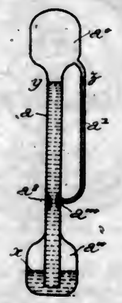
1. A toy football game comprising a game board in simulation of a football field, and a plurality of game pieces of different lengths to be successively positioned on said board, said game pieces being provided with indicia to indicate offensive and defensive plays, the length of said pieces indicating the yardage of play.

1,870,139. INTERNAL COMBUSTION ENGINE. ANGELO PIEROTTI, Perth, Western Australia, Australia. Filed Jan. 15, 1930, Serial No. 420,919, and in Australia Feb. 25, 1929. 1 Claim. (Cl. 123—65.)



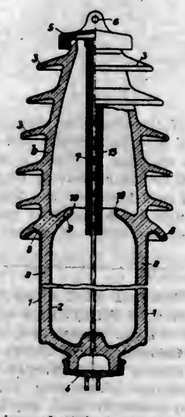
In a two-cycle internal combustion engine including a cylinder having exhaust and intake ports, a sleeve valve having ports to align, respectively, with said cylinder ports and movable longitudinally of the cylinder into port closing or into port uncovering positions, a piston working in said cylinder, a crank shaft, and a connecting rod between the piston and crank shaft; means operative by the movement of the piston to move the valve outwardly of said cylinder during the final phase of the outstroke of the piston for opening said exhaust intake ports and to move the valve inwardly of said cylinder during the initial phase of the instroke of the piston to close said exhaust and intake ports, said means comprising an arm having one of its ends mounted to rock on a fixed point, a link connected at one of its ends to the valve and at its other end to said arm between the ends of the latter, and a member mounted directly on said arm for sliding movement lengthwise of the latter and having one end pivotally connected to said connecting rod between the ends of the latter.

1,870,140. APPARATUS FOR DETECTING AND MEASURING VIBRATIONS. PIERRE FELIX EDOUARD PIETTE, Clamart, France. Filed July 12, 1929, Serial No. 377,901, and in Belgium Dec. 8, 1928. 9 Claims. (Cl. 73—51.)



3. An apparatus of the class described comprising a container having a constricted portion formed therein, a manometric tube extending from said constricted portion to another portion of said container, a first liquid filling the constricted portion of said container and a portion of said manometric tube, and a liquid of different density than said first liquid filling the rest of said manometric tube.

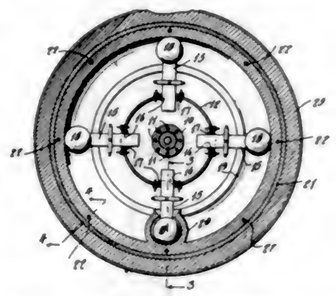
1,870,141. HIGH TENSION CONDENSER. WILHELM REGERBIS, Hermsdorf, and MARTIN HANDTRAG, Berlin-Friedenau, Germany, assignors to Hermsdorf-Schomburg Isolatoren, G. m. b. H., Hermsdorf, Germany. Filed Aug. 3, 1929, Serial No. 383,245, and in Germany Aug. 3, 1928. 15 Claims. (Cl. 175—41.)



1. A high-tension electrical condenser comprising a hollow body of silicic material composed of a thin-walled flask-shaped condenser part and of a tubular lead-through

part coaxially coordinated to the mouth of said condenser part and provided with exterior petticoats, an external and an internal conductive coating on said condenser part, fittings attached to said hollow body and electrically connected each to one of said coatings, said condenser part having a collar-shaped extension arranged in proximity of the rim of said external coating and extending within the lead-through part towards the free end thereof, said internal coating covering the inner face of said collar-shaped portion.

1,870,142. PUNCTURE PROOF CUSHION WHEEL. MARCEL A. ROBIN, Port-au-Prince, Haiti. Filed Aug. 4, 1927. Serial No. 210,623. 3 Claims. (Cl. 152—46.)



1. A wheel of the character specified having an air reservoir, spokes coacting with the air in said reservoir for cushioning, balls on said spokes, a felly engaged by the balls and capable of substantially unrestricted yielding movement from one of the balls as an axis.

1,870,143. ICE BAG. GRACE E. ROUX, Hanford, Calif. Filed Nov. 5, 1929, Serial No. 405,039½. Renewed Apr. 11, 1932. 2 Claims. (Cl. 128—258.)

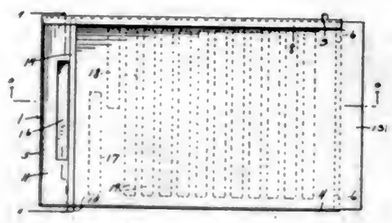


1. In a device of the character described, a flat circular blank, a series of eyelets positioned about said blank and adjacent the margins thereof, a receptacle secured to said blank, said receptacle having extensions approaching the margin of said blank at the top and bottom and one side thereof, and cords engaging said eyelets so that said blank assumes the shape of a cap for head wear.

1,870,144. PROCESS FOR THE PREPARATION OF HYDROGEN FROM GAS MIXTURES CONTAINING HYDROCARBONS. PAUL SCHUFTAN, Höllriegelskreuth, near Munich, Germany, assignor to Gesellschaft für Linde's Eismaschinen A. G., Munich, Germany, a Corporation of Germany. Filed Aug. 21, 1929, Serial No. 387,562, and in Germany Aug. 20, 1928. 12 Claims. (Cl. 23—212.)

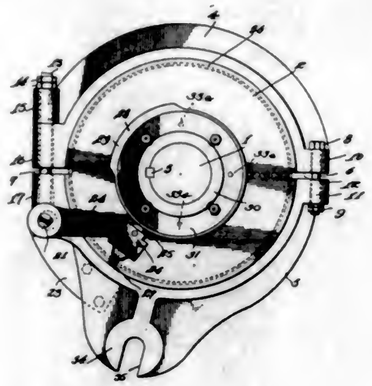
1. In a process of catalytically decomposing a hydrocarbon-containing gas mixture into hydrogen and carbon dioxide in the presence of an excess of steam at about 500° C., the step which comprises separating hydrogen and catalyst poisons from the gas mixture and concentrating the hydrocarbons in the gas mixture from which hydrogen and catalyst poisons have been separated to at least 60% before subjecting the same to decomposition.

1,870,145. WRITING GUIDE FOR THE BLIND. ALICE SHARP, Red Bluff, Calif. Filed Oct. 6, 1931. Serial No. 567,252. 6 Claims. (Cl. 35—8.)



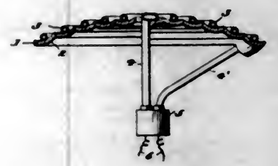
1. A writing device for the blind, comprising a paper holder, a slotted body disposed at one side of said holder, a stencil plate to be positioned over a paper sheet in the holder, and a guide member disposed in the holder to extend across said stencil plate and having a portion engaged in said slot, said slot having a plurality of recesses formed along one edge to receive the said portion of the guide member.

1,870,146. AUTOMATIC BRAKE. JOSEPH W. SHARPE, St. Louis, Mo. Filed Feb. 3, 1930. Serial No. 425,579. 4 Claims. (Cl. 188—77.)



1. In an automatic brake for use on rotary shafts, a brake disc, brake bands surrounding said brake disc, bolt means connecting said brake bands in normally spaced relation relative to one another and to said brake disc, means for securing said brake bands against rotation, and means for actuating said brake bands into engagement with said brake disc to retard said shaft at predetermined points of rotation, comprising an enlarged boss integral with one of said bolts and having a bore, an eccentric engageable through said bore, and means for rotating said eccentric to raise and lower said bolt.

1,870,147. ILLUMINATING DEVICE. EMANUEL C. SMALLY, Canton, Ohio. Filed Apr. 2, 1931. Serial No. 527,307. 8 Claims. (Cl. 176—14.)



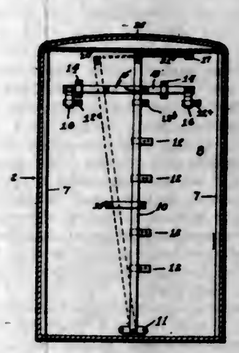
1. An illuminating device comprising a reflector having a coiled groove formed in its outer face, and a glass luminous tubing coiled thereon, and united to said face throughout its entire length forming a single integral unit, said tubing having an electrode at each end thereof.

1,870,148. CURTAIN BRACKET. LOUIS G. STRNAD, Chicago, Ill. Filed Feb. 13, 1932. Serial No. 592,803. 5 Claims. (Cl. 156—19.)



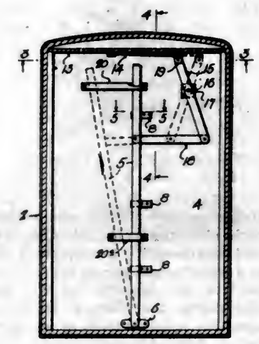
1. In a curtain bracket, a pair of bracket plates adapted to be secured to a window frame and curtain rods attached at their outer ends to the bracket plates, each rod comprising a pair of angle arms each having one end pivotally attached to an adjacent bracket plate, and an extensible rod detachably connected at its ends to the free ends of the angle arms.

1,870,149. DRAWER LOCKING MECHANISM FOR TRUNKS. EMIL O. SUHLFLOW and JOHN MEIDL, Oshkosh, Wis., assignors, by mesne assignments, to The Belber Trunk & Bag Company, Woodbury, N. J., a Corporation of Pennsylvania. Filed May 19, 1930. Serial No. 453,605. 11 Claims. (Cl. 45—94.)



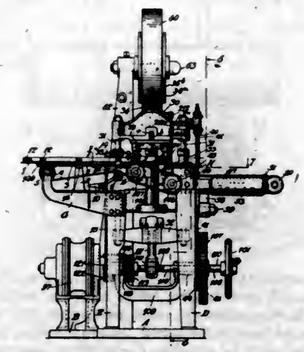
1. A drawer locking mechanism, comprising in combination with a drawer containing section and a tier of drawers therein, keepers on the rear of the drawers, a bar mounted in said section to the rear of the drawers and movable in a perpendicular plane into and out of locking engagement with said keepers, and means including a bell-crank lever mounted in said section for movement in a horizontal plane and connected with said bar for moving the same.

1,870,150. DRAWER LOCKING MECHANISM FOR TRUNKS. EMIL O. SUHLFLOW and JOHN MEIDL, Oshkosh, Wis., assignors, by mesne assignments, to The Belber Trunk & Bag Company, Woodbury, N. J., a Corporation of Pennsylvania. Filed May 19, 1930. Serial No. 453,606. 6 Claims. (Cl. 45—94.)



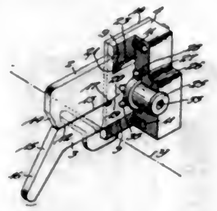
1. A locking mechanism, comprising in combination with a container housing section having a plurality of containers therein arranged one above the other, a bar mounted in said section to the rear of the containers for simultaneously locking and unlocking the same, two levers mounted in the section for movement in planes at right angles to each other for moving the bar, one lever being the actuating lever and the other the multiplying lever for the first one, and links, one connecting the levers together and the other connecting the multiplying lever to the bar.

1,870,151. CAP-LINING MACHINE. EDWIN V. SWANGREN, Maywood, Ill., assignor of one-half to Walter N. Stevenson, Evanston, Ill. Filed Sept. 1, 1928. Serial No. 303,586. 32 Claims. (Cl. 113—80.)



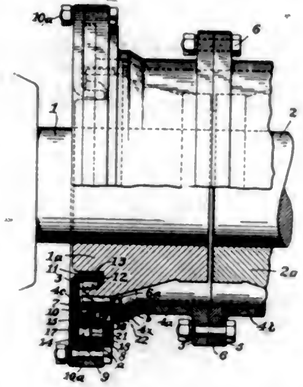
1. In a cap-lining machine, a stationary conveyor table arranged to support the caps, an intermittently rotated cap-conveyor above and adjacent said table having a circular series of orifices, means for feeding caps into said orifices, at one point in their path of travel, intermittently actuated liner-disk punching members above and in alignment with the orifices successively at a later point in their path of travel, paper-feed mechanism for intermittently feeding a strip of paper between said punching members, and a liner-seating plunger in axial alignment with said punching members arranged to seat liner disks in said caps.

1,870,152. SLUB-CATCHER AND YARN-CLEANER. GEORGE N. TAYLOR, East Providence, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 13, 1930. Serial No. 488,475. 12 Claims. (Cl. 28—71.)



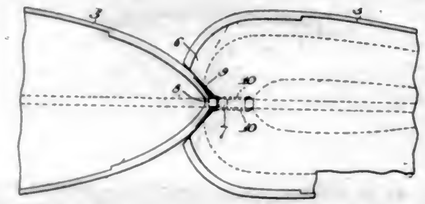
1. A slub-catcher or yarn-cleaner comprising a pair of relatively movable elements arranged with their edges in opposite parallel relationship to provide a slit through which the yarn draws, interengaging bearing faces on said elements inclined to the direction of the slit, resilient means for maintaining the bearing faces of said elements in engagement, and means to effect relative sliding movement between said elements to cause the inclined bearing faces to act to move one element toward or away from the other element to adjust the width of the slit in accordance with the size of the yarn to be operated upon.

1,870,153. FLEXIBLE SHAFT COUPLING. WALTER C. THOMAN, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Dec. 24, 1929. Serial No. 416,245. 3 Claims. (Cl. 64—105.)



1. In combination, shaft hubs to be attached to the shaft ends and each having teeth, a sleeve encircling said hubs and having rows of teeth to engage the hub teeth, said sleeve at one end having its wall flaring outwardly and provided with an annular flange lying in a plane transverse to the axis of the sleeve, and an end wall secured to said flange and having a lubricant sealing engagement at its edge with the hub section, said sleeve being split, providing a section carrying one of the rows of teeth and having an annular flange fitting against the annular flange first mentioned and enclosed by the said end wall, a shearing pin connecting the flange of the tooth-carrying section of the sleeve with the adjacent part of the sleeve, the opposing faces of the tooth-carrying section and the adjacent sleeve portion, which are relatively movable when the pin shears, being subject to the lubricant within the sleeve, which is directed thereto by the flared wall of the sleeve, substantially as described.

1,870,154. DIKE CONSTRUCTION. GEORGE G. WEHR, Philadelphia, Pa. Filed Dec. 18, 1929. Serial No. 415,055. 6 Claims. (Cl. 61—4.)



5. A disk, break-water or sea-wall or the like, consisting of a line of ship-hulls positioned end to end and suitably ballasted, the stern overhang of each ship-hull being notched and the bow of each ship-hull being positioned in the notch of the adjacent ship-hull in tongue and groove fashion.

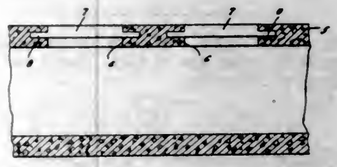
1,870,155. GASOLINE METER. HARRY G. WEYMOUTH and EARL M. KREIDLER, Pittsburgh, Pa., assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 3, 1929. Serial No. 352,283. 14 Claims. (Cl. 235—94.)



1. In a register having a dial, indicators movable over said dial and mechanism to simultaneously move said indicators at different rates of movement over said dial, said mechanism including gears carried by a vertical shaft for respectively driving said indicators, the combination of means to convert said register into a double face register comprising a bracket supporting a second dial, indicators movable over said dial and mechanism to operate said indicators at rates of movement corresponding respectively to the rates of movement of said first named indicators, said bracket being formed so that when it is secured in position the operating mechanism carried thereby will mesh with said gears.

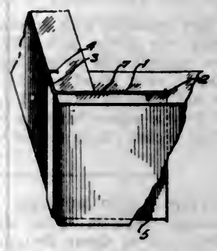
9. In a register of the class described comprising a main driving shaft; a unit indicator shaft having an indicating element secured thereto; gearing for driving said unit shaft from said main shaft, including a constantly engaged friction drive; a sleeve supported by said unit shaft having an indicating element secured thereto; a reduction gearing drive connecting said sleeve and said main driving shaft including a constantly engaged friction drive; a set-back mechanism for said unit shaft having a one-way clutch engageable to reset said shaft but freed therefrom if said mechanism is operated in registering direction; and means to operatively connect said sleeve and unit shaft for simultaneous rotation during resetting.

1,870,156. ROAD CULVERT. WILLIAM L. WHEELER, Walnut Grove, Mo. Filed Nov. 11, 1930. Serial No. 494,985. 1 Claim. (Cl. 94—33.)



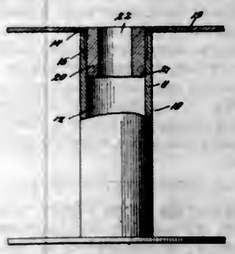
A culvert for the purpose specified comprising an elongated hollow body open at the ends and having openings in the top thereof with gratings thereacross, each grating being formed of a plurality of bars having reduced ends embedded in the top of the body at the edges forming the opening.

1,870,157. CORNER FASTENING MEANS. WILLIAM E. WILLIAMS, Harrisonville, Mo., assignor of one-half to Delbert T. Hulse, De Queen, Ark. Filed July 28, 1930. Serial No. 471,394. 5 Claims. (Cl. 20—92.)



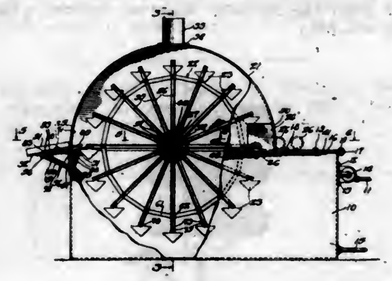
1. In combination with two members to be secured together, one at right angles to the other, one of the members having a longitudinal saw cut between the side walls thereof and the other a transverse saw cut, a fastening plate having its main body in the longitudinal saw cut, the plate having a head embedded in the first member at the inner end of the saw cut within the perimeter of the member and a lip carried by and in spaced relation with the main body of the plate, engaging the transverse saw cut of the second member.

1,870,158. WINDING DEVICE. JAMES C. WYNDER, Hartsville, S. C., assignor to Sonoco Products Company, Hartsville, S. C., a Corporation of South Carolina. Filed Nov. 7, 1930. Serial No. 494,095. 7 Claims. (Cl. 242—119.)



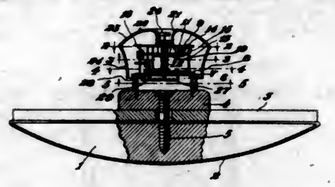
1. In a spool, in combination, a body member provided with an opening in the end thereof, an end disc having a central aperture registering with said opening, and means for securing said disc to said body member comprising a piece of wire bent to form convolutions, portions of one or more of which are disposed in contact with the wall of said opening and other portions of which overlie the margin of the aperture in said end disc.

1,870,159. TEMPERING MACHINE. OSCAR P. ANDERSON, Aurora, Ill. Filed Oct. 17, 1930. Serial No. 489,440. 8 Claims. (Cl. 266—6.)



1. A machine of the class described including a housing providing a tank adapted to contain a liquid and providing a hood over said tank, a wheel mounted for rotatable movement through said tank and said hood, supporting means for said wheel including a rotatable shaft member, a plurality of baskets mounted for swinging movement on said wheel and rotatable therewith, means for pivotally mounting said baskets on said wheel, a table supported on said tank at the upper side of said tank and adjacent one end thereof, means for securing said table on said tank, said hood having an opening therein adjacent the inner end of said table whereby material may be fed from said table into said baskets, means connected to said shaft for operating said wheel whereby material in said baskets may be rotated through said liquid, and means for discharging material from said baskets out of said housing.

1,870,160. COMBINATION CALL BELL AND BLOTTER HOLDER. PLACIDO H. BANDONILL, Vigan, Ilocos Sur, P. I. Filed June 1, 1931. Serial No. 541,484. 2 Claims. (Cl. 116—172.)



1. A call bell, including a ring member designed to be positioned on the head of a blotter holding block, a clockwork having its frame resting on the ring member and secured to the head, a tubular member extending through the frame and through the central portion of the spring of the clockwork and said spring having one end secured to the tubular member and its other end secured to the frame, a gear for the clockwork turned by the spring thereof and operating the remaining gears of the clockwork, a pivoted hammer operated by the clockwork, a ratchet wheel fixed on the tubular member, a spring influenced pawl carried by the gear to engage with the ratchet wheel, a bell surrounding the clockwork and having its top bulged inwardly and connected with the tubular member, a push button in the bulged portion having a stem projecting through the tubular member and through

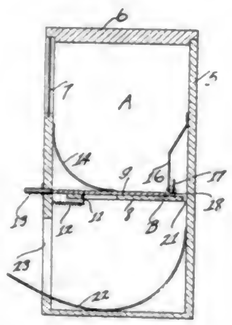
the lower portion of the frame of the clockwork and having its lower portion enlarged, a pivotally supported spring influenced lever on the under face of the clockwork frame, a teat on the lever for limiting the swinging thereof toward the frame and a finger on the lever extended through the frame to contact with the hammer to prevent the operation thereof and the operation of the clockwork.

1,870,161. COMBINED TRAFFIC INDICATOR AND ADVERTISING DEVICE. JOSEPH P. BARRON, Knoxville, Pa. Filed Aug. 21, 1931. Serial No. 558,576. 1 Claim. (Cl. 40—131.)



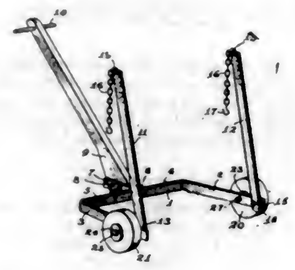
In combination with a traffic signal casing having different colored signals at the sides thereof and having the sides coated a dark color, a plurality of panels secured to the opposite sides of the casing and each having an opening registering with the signals, said panels colored in accordance with the color of the signals and each panel bent angularly to provide portions projecting outwardly from the casing and in substantial alignment with the corners of said casing, said portions adapted to have advertisements applied thereto.

1,870,162. TOOTHPICK HOLDER. HENRY P. C. BECK, San Francisco, Calif. Filed July 26, 1930, Serial No. 471,026. Renewed May 13, 1932. 8 Claims. (Cl. 312—78.)



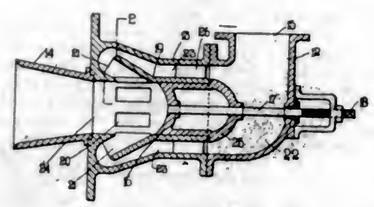
1. In a dispensing device, a receptacle, a division plate mounted in said receptacle and spaced from the rear wall thereof, a slider movable on said division plate, roller means resiliently mounted in said receptacle and normally contacting said division plate, said roller means being disposed in the path of the slider whereby the latter engages the same for disposal thereunder when moved to dispensing position.

1,870,163. LIFT CART. WILLIAM G. BEHLING, North Bergen, N. J. Filed Apr. 1, 1931. Serial No. 526,990. 4 Claims. (Cl. 280—53.)



1. A lift cart provided with a frame, traction wheels for supporting the frame, a handle connected to the frame at the opposite side to the supporting wheels, an upright adjacent each wheel and flexible means carried by the upper end of the uprights and depending therefrom, each of said flexible means having a member at its lower end adapted to engage the handle of an ash can or other receptacle.

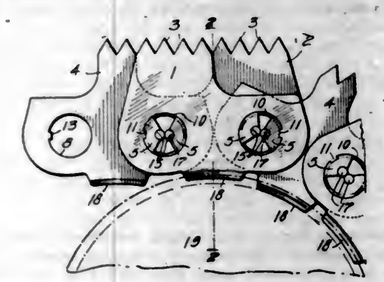
1,870,164. TURBULENT BURNER. ALFRED WILLIAM BENNIS, Bolton, England. Filed Mar. 29, 1929, Serial No. 350,984, and in Great Britain Apr. 2, 1928. 8 Claims. (Cl. 110—104.)



1. A burner for pulverulent material having an opening at the outlet end thereof forming the mouth of the burner, a mixing chamber in rear of and opening into said burner mouth, said burner having an inlet passage for the fuel and air mixture adjacent the inlet end of the burner, and an annular passage leading from said inlet passage longitudinally of and around the mixing chamber to a position in front of the rear of the mixing chamber and thence inwardly in substantially a reversed direction into said mixing chamber, whereby a turbulence is set up in the flowing mixture and a complete mixing of the fuel and air effected.

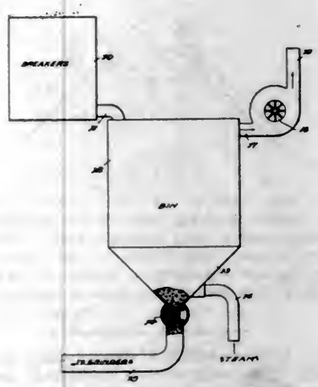
1,870,165. CHAIN OR LINK BELT. SAMUEL J. BENS, New York, N. Y., assignor to Chain Saw Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 3, 1928. Serial No. 297,185. 7 Claims. (Cl. 74—32.)

1. A chain comprising a pair of links, a third link having its end enclosed between the ends of the first two, said links having aligning apertures in their overlapped ends, two segments each of the full thickness of the three links disposed within and engaging the walls of



the aligning apertures of the three links, and a pair of keys one inserted in each segment and engaging each other on a line contact.

1,870,166. PROCESS OF PREPARING COMMINUTED CORK. SAMUEL C. BOND, Holly Oak, Del., assignor to The Henry P. Scott Company, a Corporation of Delaware, as trustee. Filed Jan. 22, 1930. Serial No. 422,665. 2 Claims. (Cl. 83—94.)

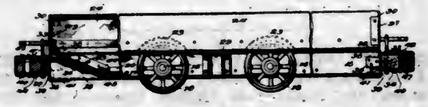


1. The process of refining crude cork having resilient and non-resilient components, which comprises subjecting the crude cork to an atmosphere of hot water vapor to toughen the resilient portions thereof, grinding the thus treated cork to effect granulation of the resilient portions and pulverization of the non-resilient portions, and separating the granulated resilient material from the pulverized material.

1,870,167. MINE CAR. CLARENCE A. BOYD, Barnesville, Ohio, assignor to The Watt Car and Wheel Company, Barnesville, Ohio, a Corporation of Ohio. Filed Feb. 14, 1931. Serial No. 515,835. 16 Claims. (Cl. 105—364.)

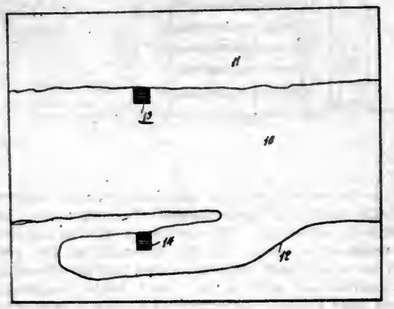
1. In a mine car, a body having flare plates forming a portion of its bottom, and side plates extending upwardly from said flare plates, said flare plates having offset portions overlapping and attached to the side plates and said side plates having offset edge portions overlapping and attached to said flare plates.

2. In a mine car, a body having flare plates forming a portion of its bottom, and side plates extending upwardly from said flare plates, said flare plates having offset portions overlapping the side plates and said side plates



having offset edge portions overlapping said flare plates with the angles formed by the offset portions of abutting plates coinciding longitudinally of the car body.

1,870,168. GAME APPARATUS. BURKE H. BRIDGERS, Wilmington, N. C. Filed Apr. 10, 1930. Serial No. 443,145. 1 Claim. (Cl. 273—132.)



Game apparatus comprising a game piece to represent a row boat, a set of game pieces representing law enforcement officers, a second set of game pieces representing bootleggers, a third set of game pieces representing containers for liquor, said game pieces of each set the same in number and being selectively applicable to the boat, the pieces of the first and second mentioned sets of game pieces being individually distinguished from each other in appearance and the third mentioned set of game pieces having interchangeably identifying means, the boat having a capacity to convey two of the pieces of the first and second mentioned sets or one piece of either set with two of the pieces of the third set, in combination with a game board having a representation of a body of water adapted to be traversed by the boat.

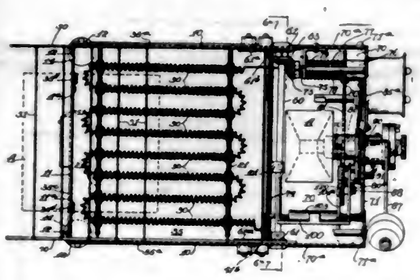
1,870,169. HANGER. ANNA L. BROWN, Tulsa, Okla. Filed Mar. 1, 1929. Serial No. 343,651. 1 Claim. (Cl. 223—64.)



A coat hanger comprising a holder bar, a hook having a shank passing through the bar, said shank having a head portion lying beyond one side edge of the bar, said head portion merging in an extension disposed parallel with the shank of the hook and passing through the bar, a washer applied to the shank and the extension between the head portion and the side edge of the bar, said extension being extended into a handle having a return bend portion which is wrapped around the shank of the

hook and the extension at the edge of the bar opposite that edge at which the washer is located whereby the bar is clamped between the washer and the wrapped portion of the handle.

1,870,170. AUTOMATICALLY TIMED APPARATUS FOR HEAT TREATMENT. GEORGE BROWNING, Wilmette, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 15, 1927, Serial No. 213,179. Renewed June 25, 1932. 6 Claims. (Cl. 161—16.)



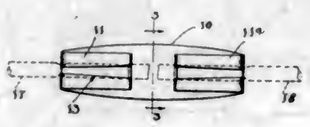
1. A mechanism for the purpose indicated comprising a shaft, an initial gear carried thereby, and a spring operatively connected with the gear for being conditioned for resilient re-action by the rotation of the gear, a train in which said gear is rotated in the direction for so conditioning said spring, said train comprising a second gear meshing with the first gear, a stud axle on which said second gear is journalled, a third gear journalled co-axially with respect to the second gear and carrying a lever arm moving with said third gear adjacent to the face of the second gear, the latter having an abutment with which the lever engages for rotating said second gear; other gear means in the train antecedent to said third gear for rotating the latter, and manually operated means for giving rotary movement to the initial gear of said train; and an additional gear not included in said train meshing with said initial gear and carrying a lever, an automatically acting dog for releasably locking the second lever against return rotation at a predetermined limit of rotation by said manually operated train, a gravity operating device for releasing said dog, said additional gear having a lever which encounters said gravity device in the rotation derived by said additional gear from the manual operation of the train to the predetermined limit for rocking said gravity device upwardly slightly past the position of balance on its pivot to a position of stayed equilibrium, and a timer mounted for movement by a wheel of the train to a position for moving the device back past said balanced position by the movement of said timer due to the movement of the timing means thereof.

1,870,171. SOUND BOARD. LEO J. BUCKLEY, Binghamton, N. Y. Filed Oct. 22, 1931. Serial No. 570,489. 10 Claims. (Cl. 84—192.)



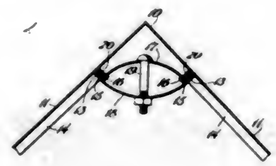
1. A sound board comprising a core having one or more perforations formed therein and extending through the core, and a sheet of relatively thin veneer secured to the face of the core and closing the ends of the perforations.

1,870,172. FASTENING DEVICE. ADOLF BUSCHHAUS, Wuppertal-Barmen, Germany, assignor to Barthels Manufacturing Company, Glendale, N. Y., a Corporation of New York. Filed May 21, 1932, Serial No. 612,830, and in Germany Feb. 11, 1930. 1 Claim. (Cl. 24—129.)



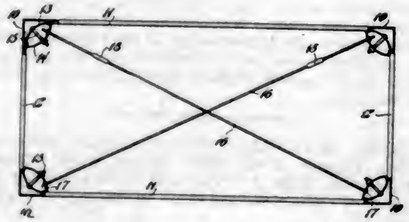
A fastening device of the class described, comprising a metallic body having a tongue bent back from an edge of the body and spaced away from such body, the inner end of the tongue being bent inwardly towards the body, such tongue having a longitudinal slit, and also having enlarged openings in the portion at such edge and in the inwardly bent end, which openings are connected by such slit.

1,870,173. METAL FURNITURE FASTENING. ROBERT G. CALTON, Nashville, Tenn., assignor to Tennessee Enamel Manufacturing Co., a Corporation of Tennessee. Filed Mar. 9, 1931. Serial No. 521,854. 6 Claims. (Cl. 45—48.)



3. In a metal table of the class described, base frame members having inwardly bent flanges at their ends; angular sheet metal legs having flanges abutting the flanges on the base frame members; pairs of sheet metal clips engaging the opposed faces of the abutting flanges; and a bolt through each pair of clips to clamp the flanges together.

1,870,174. METAL FURNITURE. ROBERT G. CALTON, Nashville, Tenn., assignor to Tennessee Enamel Manufacturing Co., a Corporation of Tennessee. Filed June 11, 1931. Serial No. 543,659. 2 Claims. (Cl. 45—48.)



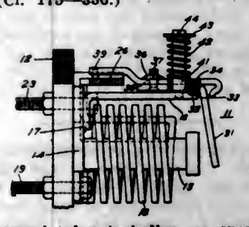
2. In a metal table of the character described, sheet metal base frame members having flanged ends providing seats, angle shaped sheet metal legs having inwardly bent flanges seated against the flanged ends of the base frame members; pairs of oppositely bowed sheet metal clip members clamping each of said legs to the frame

members, the inner sheet metal clip member of each pair having a diagonally extending opening; diagonal brace rods each having a head at one end and screw threads at the other end extending through the openings in the diagonally opposed clip members; the clip member at the screw threaded end of each diagonal brace rod having screw threads whereby the tension of the rod may be adjusted; and non-circular portions on said rods to permit adjustment so as to vary the tension and thereby prevent weaving or racking of the table frame.

1,870,175. MANUFACTURE OF COMPOSITIONS AND ARTICLES FROM CELLULOSE DERIVATIVES. CAMILLE DREYFUS, Basel, Switzerland, WILLIAM MCC. CAMERON, New York, N. Y., and GEORGE SCHNEIDER, Mountain Lakes, N. J., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed May 29, 1922. Serial No. 564,570. 10 Claims. (Cl. 18—48.)

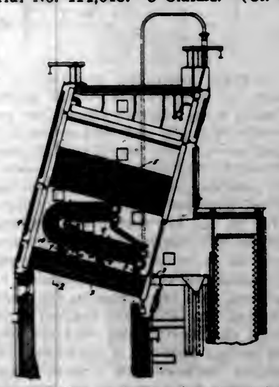
1. Process of melting an organic derivative of cellulose comprising heating the organic derivative of cellulose in the presence of an excess quantity of rosin to a temperature sufficient to melt the organic derivative of cellulose, whereby two layers of molten material are formed, one layer consisting of rosin and the other layer containing the molten organic derivative of cellulose.

1,870,176. THERMAL RELAY. CHARLES H. HODGKINS, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 29, 1931. Serial No. 565,744. 11 Claims. (Cl. 175—336.)



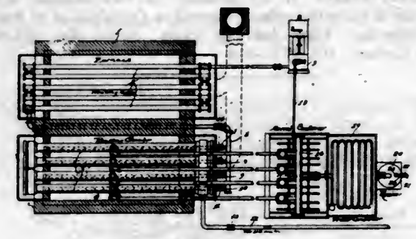
1. In a thermal relay including an energizing coil, a magnetic-circuit structure having an armature movable relatively to the coil, a heated fixed member having a thermally-variable magnetic characteristic and controlling the position of the armature, said armature having a portion adjustable relatively to the fixed member.

1,870,177. BOILER. DAVID S. JACOBUS, Montclair, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Dec. 17, 1929. Serial No. 414,645. 5 Claims. (Cl. 122—476.)



1. In a steam boiler, a bank of water tubes in vertically spaced rows, a superheater disposed above said bank, and a support for said superheater comprising members engaging water tubes in a plurality of said vertically spaced rows so as to distribute compression due to superheater load to the engaged water tubes.

1,870,178. PROCESS FOR CRACKING OIL. LESTER KIRSCHBRAUN, Leonia, N. J., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Sept. 10, 1920, Serial No. 409,889. Renewed May 28, 1928. 2 Claims. (Cl. 196—58.)

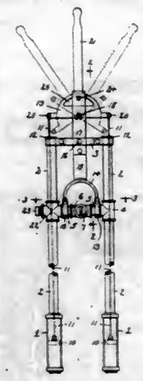


2. A process of cracking oil, comprising passing oil through a heating zone, thence passing the same to a vaporizing zone containing a plurality of connected vaporizing tubes, in initially introducing different relative quantities of oil to each of said tubes, in varying the relative quantities of oil introduced to the tubes as the treatment proceeds by decreasing the initial quantity introduced to one tube and increasing the initial quantity introduced to another tube and in condensing and collecting the vapors from the plurality of tubes.

1,870,179. SOAKING OF HIDES. RICHARD KLEIN, Heidelberg, and HEINRICH ULRICH, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Aug. 8, 1930, Serial No. 474,055, and in Germany Aug. 15, 1929. 7 Claims. (Cl. 149—4.)

7. The process for soaking dry hides which comprises immersing the hides in a from 0.05 to 0.3 per cent aqueous solution comprising triethanol amine, the treatment being stopped before the hides considerably swell.

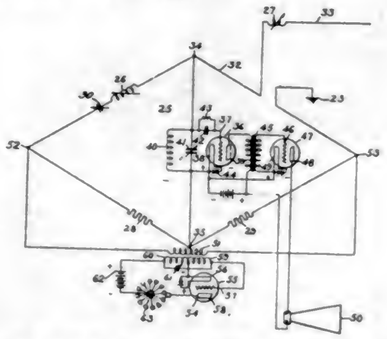
1,870,180. PUMP RIG. WALTER S. LONG, Jeffers, Mont. Filed Mar. 21, 1930. Serial No. 437,885. 1 Claim. (Cl. 103—21.)



In combination with a pair of spaced barrels connected together by a cross coupling, a pump rig comprising a brace member attached to the barrels above the cross

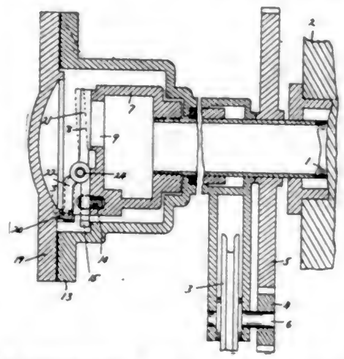
coupling, a yoke mounted upon the cross coupling and having an upwardly extending plate disposed between the barrels, said plate being connected with the brace member, a segment head pivoted to the plate and having a slot, a pin carried by the plate and entering said slot, plunger rods pivotally connected with the ends of the segment plate and entering the barrels, said segment plate having a handle extension located midway between the ends thereof.

1,870,181. PROTECTIVE SYSTEM. EDWARD B. MALLORY, Tenafly, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 23, 1926. Serial No. 104,096. 4 Claims. (Cl. 177—314.)



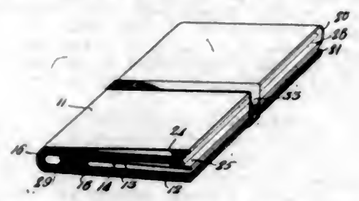
1. In an alarm system, a balanced network analogous to a Wheatstone bridge, a condenser, the dielectric of which comprises a space to be protected included in one arm of said network, indicating means including a demodulating device connected across points in said network between which no difference of potential exists when said network is in balance, and a source of modulated high-frequency alternating potential connected across conjugate points of said network, whereby an unbalanced condition of said network permits said alternating potential source to influence said indicating means.

1,870,182. BOILER CLEANER. NORMAN L. SNOW, New Canaan, Conn., and FRANK BOWERS and CURTIS L. HOWSE, Detroit, Mich., assignors to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 19, 1923, Serial No. 675,689. Renewed Nov. 17, 1930. 23 Claims. (Cl. 122—392.)



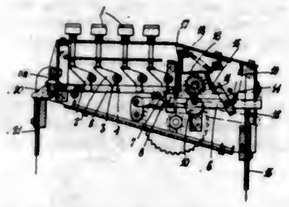
1. The combination with a rotary blower element and means for rotating the same, of a valve movable into open and closed positions for controlling the admission of cleaning fluid to said blower element, said valve being movable with said blower element and also movable relative thereto, means for moving the valve relative to the blower element to control the admission of the cleaning fluid as aforesaid and means for automatically moving the valve to relieve the friction opposing an opening movement of said valve relative to said blower element.

1,870,183. PAMPHLET AND BOOK COVER. BRADFORD E. STEPHENS, Needham, Mass. Filed Dec. 31, 1930. Serial No. 505,682. 2 Claims. (Cl. 281—15.)



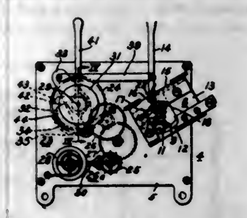
1. A foldable cover of the class described, comprising a substantially rectangular sheet of flexible material having intersecting, primary and secondary fold lines dividing it into four sections, a pair of separated binding strips pivotably connected to two of said sections along one edge of said sheet, for the attachment of a newspaper to the cover, the sheet having an opening at the intersection of said fold lines, so that the cover and newspaper may be folded along the axis of the primary fold line and then along the axis of the secondary fold line to produce a compact structure in which two of said sections constitute outer covers and the other two sections are juxtaposed at the center of the folded article.

1,870,184. MACHINE FOR PERFORATING STATISTICAL CARDS. ARTHUR THOMAS and GEORGE CRAIG, Thornton Heath, England, assignors to The Accounting & Tabulating Corporation of Great Britain Limited, London, England. Filed Feb. 17, 1931, Serial No. 516,301, and in Great Britain Feb. 28, 1930. 7 Claims. (Cl. 164—112.)



1. In a keyboard controlled machine the combination of a plurality of plungers adapted to produce holes in statistical cards, a key bar for each key, an operative connection between each key and its key bar, a downwardly depending lug on said key bar, a pivoted control member having a recess in its upper surface, means for urging said control member upwardly whereby the upper surface of the control members bears against the downwardly depending lug on the key bar, a toothed wheel mounted eccentrically on the control member, a second toothed wheel adapted to be rotated continuously, whereby when a key is depressed the key bar is displaced until the lug thereon registers with the recess in the control member thereby bringing the eccentric toothed wheel into engagement with the continuously rotating toothed wheel, whereby the control member is depressed, and an operative connection between the control member and a plunger and means for restoring the key bar when said key is released.

1,870,185. TIME SWITCH. FRANK THORNTON, Jr., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 19, 1928. Serial No. 306,814. 2 Claims. (Cl. 200—39.)

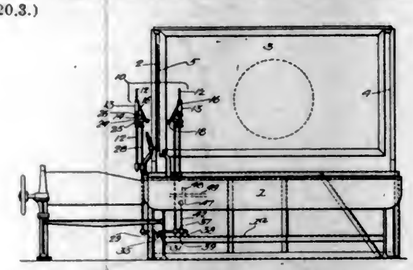


1. In combination with a switch movable to two operating positions, an over-center spring for moving the switch to the said position, an operating member movable to two operating positions for moving the spring over center when moved in either direction a predetermined distance, and means for biasing the operating member toward one of its operating positions, of an escapement device connected to the operating member and driven thereby for restraining movement thereof to the said position until the escapement device has moved a predetermined distance.

1,870,186. METHOD OF PREPARING PIGMENT COMPOSITIONS. ALBERT E. VERBYLA, Newark, N. J. Filed Sept. 29, 1930. Serial No. 485,310. 2 Claims. (Cl. 134—58.)

1. A new composition of matter comprising a finely divided pigment, water, and a fatty acid compound of a vegetable oil such fatty acid having not more than four carbon atoms.

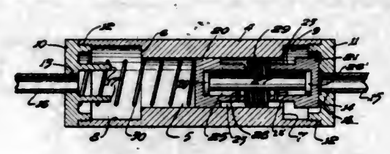
1,870,187. STRIPPING MECHANISM FOR HOSIERY DRIERS. HARRY F. WANAMAKER, Philadelphia, Pa., assignor to Proctor & Schwartz Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 6, 1931. Serial No. 513,977. 13 Claims. (Cl. 223—20.3.)



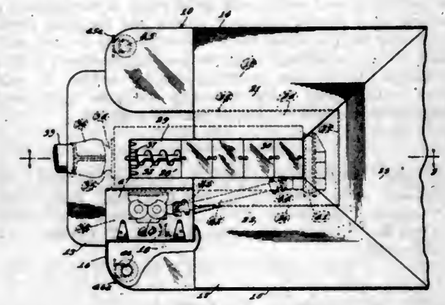
1. A device for loosening the top of a stocking from a form on which the stocking is tautly disposed, comprising means for gripping the stocking at directly opposed points on opposite sides of the form intermediate the top and foot of the stocking and moving the top toward the foot and relative to the form, and means for regulating the degree of pressure exerted by the gripping means at the opposite sides of the form respectively to equalize the actions of the gripping means at said opposite sides of the form.

1,870,188. DEVICE FOR MEASURING, REGULATING, AND METERING SUPPLY OR DISTRIBUTION OF FLUIDS. VICTOR R. ABRAMS, Brunswick, Ga. Filed July 1, 1930. Serial No. 465,225. 14 Claims. (Cl. 221—102.)

1. A measuring device including a cylinder having a bore provided with enlarged portions, pistons movably mounted in the bore, and means connecting the pistons and permitting one of the pistons to move relatively to the other, the space between the pistons constituting a measuring chamber, and the pistons being operable under fluid pressure to charge and discharge the measuring chamber.

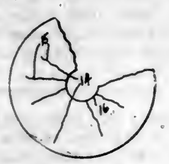


1,870,189. LOCOMOTIVE TENDER. HOWARD P. ANDERSON, Erie, Pa., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Sept. 23, 1931. Serial No. 564,553. 4 Claims. (Cl. 105—234.)



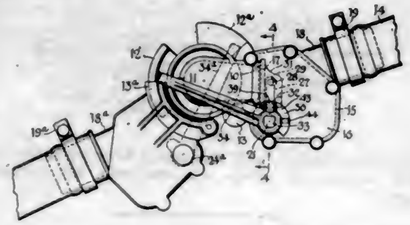
1. In a locomotive tender, a body portion comprising a base plate side and end walls and partition plates separating the fuel section from the water section thereof, the combination of a watertight housing in said water section extending longitudinally of the tender and opening through the front wall thereof, said housing being arranged to receive a stoker trough having a conveyor therein, said trough communicating with said fuel section, a watertight compartment at the forward end of the tender adjacent said stoker trough housing arranged to receive stoker drive mechanism, said housing and compartment being spaced between and apart from said tender sidewalls, the space between said tender sidewalls and said housing and compartment forming part of the tender water section.

1,870,190. METHOD OF SPLITTING WOOD. MAURICE M. BERNFELD, St. Paul, Minn., assignor, by mesne assignments, to himself, and Clarence C. Maskowitz, New York, N. Y. Filed Mar. 6, 1930, Serial No. 433,552. Renewed Jan. 4, 1932. 2 Claims. (Cl. 144—309.)



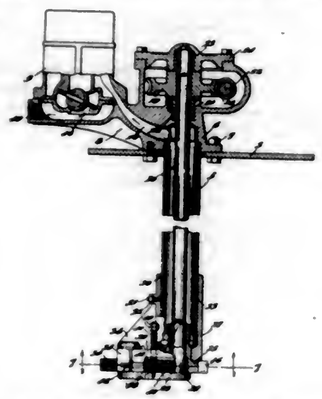
1. A step in the method of producing boards from logs having rays emanating from the hearts of the said logs, which consists in removing the heart of the log, after a section of the log defined by its heart rays has been removed.

1,870,191. AIR BRAKE. HENRY F. BICKEL, Plainfield, N. J., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Oct. 9, 1930. Serial No. 487,622. 8 Claims. (Cl. 284—8.)



1. The combination of a hose coupling of the type adapted to interlock with a similar coupling by rotary motion about a transverse axis; a poppet type valve and seat controlling flow from the hose outwardly through the coupling, the valve seating in the direction of such flow; a lever for actuating said valve, said lever being in the path of a portion of a mating coupling during the coupling movement, and being adapted to be moved thereby to open said valve as the couplings move to coupled position; and a releasable detent for resisting closing motion of said valve, said detent being manually operable while said coupling is coupled with said mating coupling.

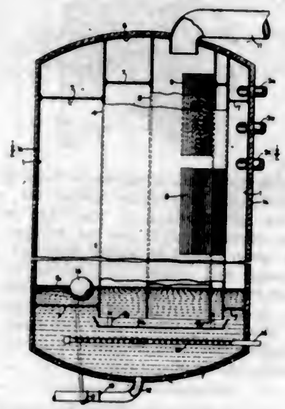
1,870,192. SUBMERGED PUMP. CLYDE G. BUTLER, Cincinnati, Ohio, assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 3, 1928. Serial No. 274,706. 11 Claims. (Cl. 103—119.)



6. A pump for submerged operation in liquid, comprising a tube for insertion into the container, a pair of intermeshing gears carried on one end of said tube and pumping into the tube, the teeth being exposed for action on the liquid body, said gears being relatively rotatable and also free to rotate in relation to one of the gear centers, and means for operating the gears from said center.

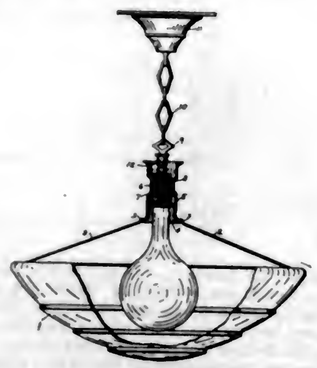
1,870,193. METHOD OF AND APPARATUS FOR DISTILLATION OF HYDROCARBON OILS. JAMES H. GRAHAME, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 24, 1930. Serial No. 446,829. 9 Claims. (Cl. 196—93.)

1. A method of treating hydrocarbon oil comprising heating the oil to the vaporizing temperature of certain of its desirable lighter fractions, introducing the heated oil into an enlarged vessel, disposing the oil in a film therein to thereby facilitate the vaporization of the said lighter fractions, depositing an unvaporized portion of the oil in the bottom of the vessel, moving a vaporized fraction and such liquid particles as are entrained therewith through a passage first of increasing and then of decreasing cross-sectional area thus varying the velocity of the va-



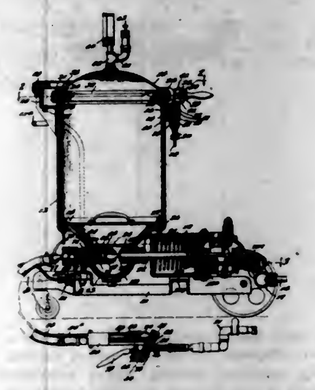
porous fraction, abruptly changing the direction of flow of the vaporous fraction while flowing at the higher velocity and successively repeating the movement to thereby mechanically remove the entrained liquid particles, eventually releasing the substantially liquid free vaporous fraction overhead to further treating means while regulatably withdrawing the surplus of the unvaporized portion collecting in the bottom of the vessel.

1,870,194. LIGHTING FIXTURE. EDWIN F. GUTH, Webster Groves, Mo. Filed Nov. 13, 1930. Serial No. 495,868. 1 Claim. (Cl. 240—78.)



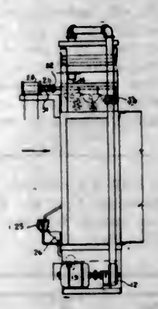
An indirect lighting fixture comprising suspension means, a socket carried thereby, external threads on said socket which extend through the entire length of said socket, an electric lamp in said socket, a socket cover having a threaded portion which fits said threads, a skirt on said cover adapted to enclose the neck of said lamp, there being a plurality of holes in said skirt, a bowl the inner surface of which forms a reflector, means engaging said holes and supporting said bowl and an inverted skirt-like shell threaded on the upper part of the socket to lock the socket cover in a predetermined position and to conceal the socket from view.

1,870,195. LUBRICATING APPARATUS. CLEO HARRIS and CLYDE G. BUTLER, Cincinnati, Ohio, assignors to The Cincinnati Ball Crank Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 15, 1931. Serial No. 569,020. 12 Claims. (Cl. 221—74.)



1. In a lubricant dispensing apparatus, a tank for containing the lubricant, a follower plate in said tank adapted to be disposed upon the lubricant, a lid for said tank, an air supply conduit extending to the upper end of said tank above said follower plate, means for clamping said lid in closed position upon said tank, and a valve in said air supply conduit actuated by said clamping means for automatically relieving the air pressure within the tank prior to the raising of the lid.

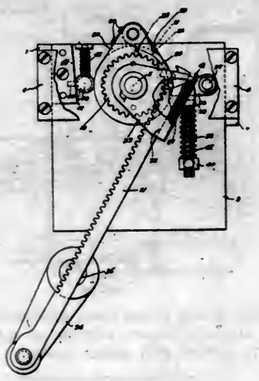
1,870,196. AIR FILTER. CHESTER P. HEGAN, Louisville, Ky., assignor to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed June 18, 1928. Serial No. 286,291. 11 Claims. (Cl. 183—21.)



1. In a filter the combination of a filter unit, means for accumulating a supply of liquid at a level above said unit, means for automatically dumping said accumulated liquid toward said filter unit, means for supplying liquid to said accumulating means, and means actuated by the weight of a portion of the liquid dumped by the accumulating means for arresting operation of the liquid supplying means.

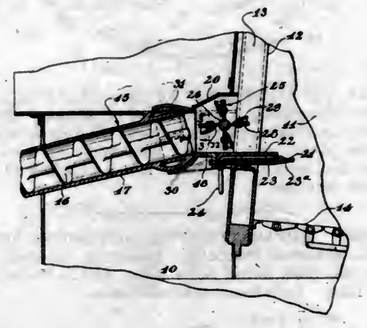
1,870,197. PAPER FEED MECHANISM. EDWARD W. SIBLEY, Kenmore, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Mar. 5, 1929. Serial No. 344,481. 4 Claims. (Cl. 271—2.4.)

1. In a paper feeding mechanism, the combination of a plurality of members adapted to frictionally engage a strip of paper or other flexible material, a ratchet for intermittently moving said members and having a cylindrical portion and a pair of shoulders, a gear, a pawl carried by said gear for engagement with one of said shoulders, a rack disposed in intermeshing engagement with said gear, a crank for reciprocating said rack with an accelerating and decelerating rate of movement at the commencement and conclusion of each stroke thereof, a yieldable stop



adapted to be engaged by the other of said shoulders and to arrest the rotation of said ratchet at the conclusion of each actuation thereof, and a roller detent mounted for engagement with the cylindrical portion of said ratchet to prevent the backward rotation thereof upon the return or inactive stroke of said rack.

1,870,198. STOKER MECHANISM. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed May 11, 1929. Serial No. 362,151. 6 Claims. (Cl. 110—101.)

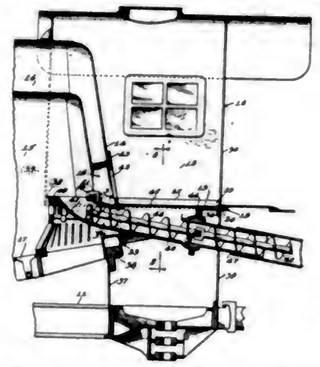


4. In a stoker, the combination of a fuel feeding system comprising a transfer conduit and a distributor arranged to scatter fuel over a fire, conveying means within said transfer conduit for advancing a stream of fuel therethrough to said distributor, and a single revoluble deflecting member acting in the path of the advancing fuel stream to spread and direct said fuel laterally in predetermined proportions to said distributor.

1,870,199. LOCOMOTIVE CAB UNDERFRAME. EDWIN ARCHER TURNER, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Nov. 29, 1930. Serial No. 498,987. 16 Claims. (Cl. 105—37.)

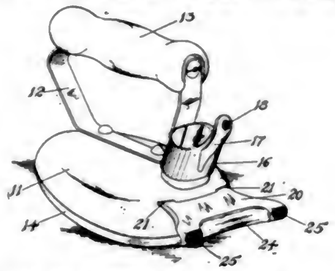
1. A locomotive cab underframe having a stoker conduit section formed integral therewith and an upstand-

ing flange formed therewith, a portion of said flange extending above the floor of said underframe and a portion thereof extending below the floor of said underframe, said



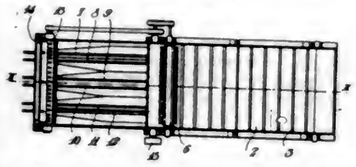
upper portion of said flange being apertured to form a fire-door ring and said lower portion of said flange being apertured to receive said stoker conduit.

1,870,200. SADIRON. GEORGE E. CURTISS, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Oct. 28, 1930. Serial No. 491,668. 1 Claim. (Cl. 68—26.)



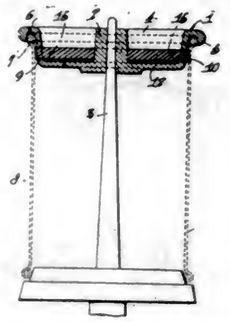
A sad iron having means for supporting it in a tilted position, comprising a plurality of projections extending therefrom having supporting portions lying substantially in a single plane, each of said supporting portions being curved, and each being divided into a plurality of raised gripping surfaces.

1,870,201. APPARATUS FOR ARRANGING BOXES. PAUL WILHELM DIETMANN, Jonkoping, Sweden. Filed Mar. 26, 1930, Serial No. 439,151, and in Sweden June 21, 1929. 3 Claims. (Cl. 198—30.)



1. In a device for arranging boxes, as match boxes, into a predetermined order for subsequent operation, box-receiving channels of a width somewhat greater than that of the boxes when in their desired position, the two side walls of each such channel being of different height, an inclined guiding wall along the upper edge of at least one of the side walls of each channel and of a width, substantially greater than the length of the boxes, and means to automatically supply boxes onto said guiding walls.

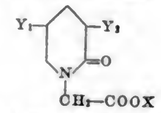
1,870,202. TWISTING CAP. RICHARD GOLLONG, Johnson City, Tenn., assignor to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 31, 1931. Serial No. 560,420. 11 Claims. (Cl. 118—63.)



1. A spool holder comprising a spool and a cap having oppositely disposed openings provided therein, and a centrifugally actuated locking means associated therewith comprising a bar having tongues formed at either end projecting through said openings and adapted to engage a spool.

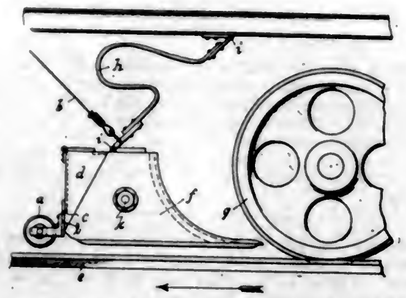
1,870,203. COMPOUNDS OF THE PYRIDINE SERIES. CURT RÄTH, Opladen, Germany, assignor to the Firm Schering-Kahlbaum A. G., Berlin, Germany. Filed Mar. 26, 1930. Serial No. 439,221. 4 Claims. (Cl. 260—42.)

1. As new products N-carboxalkylated halogen pyridones having the general formula:



in which Y_1 and Y_2 are hydrogen or halogen atoms, at least one being a halogen atom, and X the typical hydrogen atom which may also be replaced by an alkali forming metal, these compounds being well crystallized colorless substances which dissolve in cold water with difficulty and in hot water more readily and form alkali salts which are very readily soluble in water.

1,870,204. BRAKE FOR RAILROAD VEHICLES. JOSEF ROHM, Wiener-Neustadt, Austria. Filed July 19, 1930, Serial No. 469,189, and in Germany June 11, 1930. 3 Claims. (Cl. 188—36.)



1. A brake for railroad vehicles, comprising in combination: a brake shoe normally suspended above the rail; means for bringing said brake shoe into contact with the rail; a sand receptacle provided in said brake shoe; a pivoted closure flap for controlling the issue of the sand from the receptacle; a roller upon said pivoted closure flap, said roller being so arranged as to come into contact with the rail before the brake shoe reaches the rail.

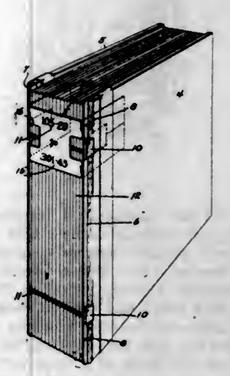
CARNEGIE LIBRARY OF ATLANTA

1,870,205. ELECTROMAGNETIC PICK-UP. HUGO SACHS, Leipzig, Germany. Filed July 21, 1931, Serial No. 552,233, and in Germany July 21, 1930. 4 Claims. (Cl. 179—100.41.)



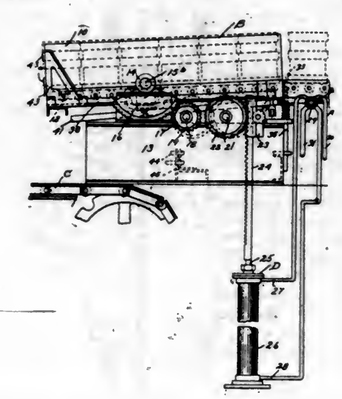
1. An electromagnetic pickup device comprising a magnet which forms a carrier arm and is mounted so as to overhang and swing parallel to the plane of the record, an upwardly tiltable pickup unit articulated on the pole branches of said magnet and a stylus on said pickup unit making contact with the record.

1,870,206. INDEX FOR LOOSE LEAF BINDERS. CHARLES A. SCHIMELFENIG, The U. S. Army. Filed Dec. 5, 1929. Serial No. 411,928. 4 Claims. (Cl. 129—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



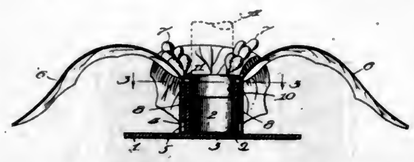
4. An article of manufacture for use on loose leaf binders having binding members, comprising an indexing attachment adapted to be mounted on one of said binding members and consisting of a strip of flexible material having a central unobstructed portion adapted to be exposed across the back of the binder and on which index markings may be applied, elongated openings extending on opposite sides of said central portion and divided portions from the outer ends of said openings to the ends of the strip adapted to permit the threading of said end portions over a binding member with its ends adapted to be adjustably and frictionally gripped in place when the binding member is adjusted to retain the leaves in place.

1,870,207. STACKER. ARTHUR L. WASHBURNE, Los Angeles, Calif. Filed Nov. 14, 1931. Serial No. 574,951. 20 Claims. (Cl. 214—6.)



1. A stacker adapted for operation with a delivery conveyor for packages comprising in combination an open ended chute frame pivotally mounted intermediate its ends for tilting to effect a loading position in alinement with the delivery conveyor or an upright unloading position: means to tilt said frame including a set of gears having a driving gear, intermediate eccentric gears to effect a slow tilting movement at the ends of the swing of said frame; and means to selectively drive said set of gears in either direction.

1,870,208. CANDLESTICK. DAVID H. CROSSER, Chicago, Ill., assignor to R. E. Gebhardt Company, a Corporation of Illinois. Filed Dec. 21, 1931. Serial No. 582,247. 8 Claims. (Cl. 41—10.)

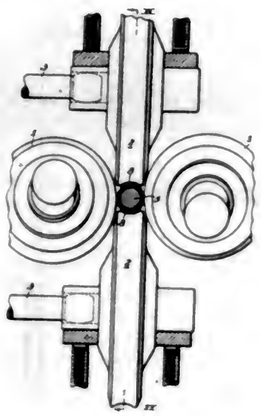


8. A candle stick including a base and a socket adapted to hold a candle rising from the base, the socket being of a material easily penetrable by a wire inserted lengthwise of the sides of the socket through the upper end, and an ornamental skirt surrounding the socket and extending from the upper end thereof outwardly and downwardly, to form a cover for the base, said skirt having wire stems penetrating the walls of the socket from the upper end and constituting the supporting means for the skirt.

1,870,209. METHOD OF REDUCING AND ELONGATING TUBULAR BLANKS. SAMUEL E. DIESCHER, Pittsburgh, Pa. Filed Apr. 4, 1931. Serial No. 527,652. 4 Claims. (Cl. 80—62.)

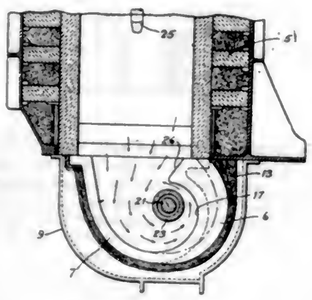
2. The method of reducing the wall thickness and elongating a tubular metal blank, which comprises cross-

rolling the blank on a mandrel between helically acting reducing rolls on opposite sides of the blank to reduce the wall thickness of the blank and cause it to bulge laterally away from the mandrel between the rolls and to feed the blank longitudinally; and diverting longitudinally the peripheral flow of the metal, and limiting the bulging of the blank to determine the diameter of the formed tube, and pulling the blank forward in the pass,



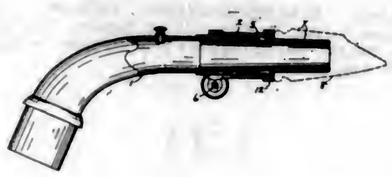
by guide disks bearing on the blank between the reducing rolls and rotating to move in the direction of the longitudinal movement of the blank at a speed greater than the speed of longitudinal movement of the blank; and progressively converting the reduced and elongated tube to cylindrical form as it advances from the place of reduction and elongation; thereby forming a tube of greater internal circumference than the mandrel and of desired wall thickness and diameter.

1,870,210. APPARATUS FOR FEEDING MOLTEN GLASS. LEONARD D. SOUBIER, Alton, Ill., assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Apr. 23, 1931. Serial No. 532,190. 4 Claims. (Cl. 49—55.)



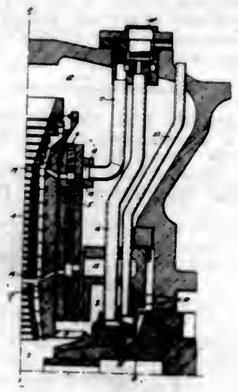
1. Glass feeding apparatus comprising a forehearth for molten glass, a feeding bowl attached thereto, said bowl having a bottom outlet opening arranged at one side of the longitudinal median line of the forehearth, and a channel shaped to direct the glass in a spiral path to the outlet.

1,870,211. TUNING DEVICE FOR WIND MUSICAL INSTRUMENTS. ALFRED L. SMITH, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed Sept. 8, 1931. Serial No. 561,677. 8 Claims. (Cl. 84—386.)



1. A tuning unit for reed musical instruments comprising inner and outer tubular members rigidly connected together in spaced concentric relation and providing an open end chamber between said tubular members.

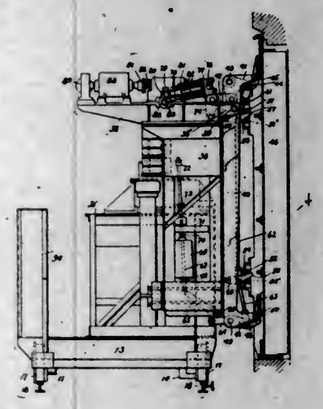
1,870,212. CONDUCTING MEANS FOR STEAM IN RADIAL FLOW STEAM TURBINES. ALF LYSHOLM and GÖSTA LUDVIG BERTIL WAHLSTEN, Stockholm, Sweden, assignors to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden, a Joint Stock Company of Sweden. Filed Mar. 14, 1930, Serial No. 435,724, and in Germany Mar. 20, 1929. 5 Claims. (Cl. 253—16.5.)



1. In a radial flow elastic fluid turbine, a rotor comprising a labyrinth packing member and a shaft, a stationary labyrinth packing member cooperating with said first packing member to provide a labyrinth packing for the rotor extending in generally radial direction, a stuffing box for said shaft and conduit means including a plurality of apertures in said members for conducting elastic fluid leaking from said stuffing box and said labyrinth packing to said rotor at a stage normally operating at a pressure not exceeding substantially atmospheric pressure.

1,870,213. COKE OVEN DOOR HANDLING MACHINE. FORD L. SABIN, Cleveland Heights, Ohio, assignor to The Wellman Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 30, 1927. Serial No. 236,602. 7 Claims. (Cl. 212—4.)

1. In a door handling machine for coke ovens or the like, a carriage adapted to be positioned opposite the front wall of an oven, a door carrier on said carriage adapted to move towards and away from the oven, a vertical lever pivoted above its lower end at the forward



end of said carrier, a door hook pivotally mounted on said lever, means for bringing said hook into engagement with a projection on the door, and means for holding the lower end of said lever against the door during the first part of the rearward movement of the carrier, whereby said rearward movement swings said vertical lever and raises said door hook.

1,870,214. PURIFICATION OF ALUMINUM CHLORIDE SOLUTIONS. HANS AICKELIN and FRITZ TELLER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 16, 1930, Serial No. 502,851, and in Germany Dec. 19, 1929. 6 Claims. (Cl. 23—92.)

1. A process of removing iron compounds from aluminum chloride solutions, which comprises intimately mixing an aqueous aluminum chloride solution of a concentration corresponding to at least 30 grams of aluminum oxide in each kilogram of the liquid, in which the iron is present in the form of unhydrolyzed ferric chloride, with oxygen-containing organic solvents boiling above 100° C. and difficultly soluble in water, and separating the organic solvent from the aluminum chloride solution.

4. A process of removing iron compounds from aluminum chloride solutions, which comprises intimately mixing an aqueous aluminum chloride solution of a concentration corresponding to at least 30 grams of aluminum oxide in each kilogram of the liquid, in which the iron is present in the form of unhydrolyzed ferric chloride, with cyclohexanone, and separating the organic solvent from the aluminum chloride solution.

Patents Nos. 1,870,215 to 1,871,435

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Labels	26	No. 40,990 to No.	41,015, inclusive.
Prints	28	No. 13,793 to No.	13,820, inclusive.
Reissues	12	No. 18,556 to No.	18,567, inclusive.
Designs	58	No. 87,501 to No.	87,558, inclusive.
Patents	1,221	No. 1,870,215 to No.	1,871,435, inclusive.
Total	1,578		

Adjudicated Patents

(D. C. N. Y.) Kelley patent, No. 1,132,186, for traffic-signaling system, claims 1, 2, and 9 *Held* not infringed. *Kelley* v. *City of New York*, 58 F.(2d) 831.

(D. C. Me.) Paisseau patent, No. 1,525,317, for process of preparation of pearl essence, claims 1, 2, 4, and 5 *Held* infringed. *Pairpearl Products* v. *Joseph H. Meyer Bros.*, 58 F.(2d) 802.

(C. C. A. Ohio.) Steimer patent, No. 1,564,909, for glass feeding mechanism, *Held* invalid. *Hartford-Empire Co.* v. *Nivison-Weiskopf Co.*, 58 F.(2d) 701.

(C. C. A. Ohio.) Peiler patent, No. 1,573,742, for feeding molten glass, claims 2, 5, 8, and 9 *Held* valid and infringed, claims 15–20, inclusive, and claims 24, 25, 26, and 29 *Held* valid, other process claims and other apparatus claims *Held* invalid. *Id.*

(C. C. A. Ohio.) Soubier patent, No. 1,574,709, for apparatus for delivering charges of molten glass, claims 14–16, 24, and 27 *Held* not infringed. *Id.*

(C. C. A. Ohio.) Ferngren patent, No. 1,574,789, for method and apparatus for delivering molten glass, claims 1, 7, and 13 *Held* not infringed. *Id.*

(C. C. A. Ohio.) Peiler patent, No. 1,589,304, for feeding molten glass, *Held* invalid as to claim sued on. *Id.*

(C. C. A. Ohio.) Peiler patent, No. 1,631,107, for feeding molten glass, claims 1–22, 25, 26 *Held* invalid. *Id.*

(D. C. Me.) Paisseau patent, No. 1,760,771, for process for purifying pearl essence, claims 1 and 2 *Held* invalid. *Pairpearl Products* v. *Joseph H. Meyer Bros.*, 58 F.(2d) 802.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,622,002, E. A. Rutenber, Timer for electrically operated devices, decided June 20, 1932, claim 10.

Pat. 1,634,083, E. A. Rutenber, Timer for electrically operated devices, decided June 20, 1932, claims 3, 4, 9, 10, 11, and 13.

Pat. 1,802,072, A. R. Bethel, Glass feeders, decided July 15, 1932, claims 1, 2, and 3.

Pat. 1,819,005, Joseph Sachs, Automatic circuit breaker, decided July 15, 1932, claim 1.

Notice of Cancellation

U. S. Patent Office, *Washington, July 13, 1932.*

Sheffield Pharmacal Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Delatone Company, Chicago, Ill., to effect the cancellation of the trade-mark registration of the Sheffield Pharmacal Co., 339 South Wabash Avenue, Chicago, Ill., No. 122,748, dated September 10, 1918, and the notice of such proceeding sent by registered mail to the said Sheffield Pharmacal Co. at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Sheffield Pharmacal Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Service of Papers in Contested Cases

Attention is called to Rule 153 (*a*), which requires that "every paper" filed in a contested case in the Patent Office must be served upon the other parties.

This includes all appeals in such cases.

Condition of Applications Under Examination at Close of Business July 23, 1932

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 75,761; Trade-Mark Division, 979. Oldest new case, Jan. 15, 1932; oldest amended, Jan. 15, 1932.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Apr. 9	Apr. 20	512
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Mar. 25	Mar. 27	964
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Mar. 25	Apr. 12	759
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	May 9	May 17	411
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Mar. 26	Mar. 31	467
4898 C	6. LEWERS, A. M., Carbon Chemistry	Jan. 25	Jan. 27	2,022
5725	7. JARBOE, C. G., Optics; Photography	Feb. 23	Feb. 23	1,506
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Feb. 24	Feb. 27	1,208
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Apr. 23	Apr. 23	836
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Feb. 19	Feb. 19	910
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Mar. 17	Mar. 18	668
7701	12. HENRY, C. C., Machine Elements	Mar. 3	Apr. 7	626
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Mar. 3	Mar. 9	1,136
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Mar. 31	Apr. 9	820
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Feb. 17	Feb. 17	2,022
5612	16. SPENCER, C. J., Telegraphy; Telephony	Mar. 23	Mar. 23	967
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Jan. 26	Jan. 30	1,408
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Mar. 23	Mar. 24	674
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Jan. 23	Jan. 28	1,689
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Apr. 1	Apr. 8	681
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Mar. 22	Mar. 22	915
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Mar. 26	Apr. 27	654
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Jan. 25	Jan. 28	909
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Mar. 23	Mar. 28	741
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Feb. 1	Feb. 1	1,458
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Jan. 30	Jan. 23	1,088
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Mar. 26	Mar. 30	1,038
4628	28. BENSON, A. R., Internal-Combustion Engines	Feb. 10	Feb. 8	1,337
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Jan. 27	Jan. 27	1,018
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Mar. 3	Mar. 29	915
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Jan. 25	Jan. 25	1,623
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Mar. 25	Mar. 28	892
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Jan. 23	Jan. 25	2,392
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Feb. 23	Feb. 24	880
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	May 23	May 23	493
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Jan. 23	Jan. 28	1,708
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Feb. 3	Feb. 15	1,336
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	May 1	May 15	241
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Jan. 25	Jan. 25	1,522
7880	40. OBERLIN, J. J., Receptacles	Feb. 27	Mar. 1	2,183
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Apr. 25	May 2	693
5882	42. CUTTING, H. O., Electric Signaling	Jan. 30	Feb. 1	1,369
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Mar. 8	Mar. 8	1,482
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Jan. 25	Jan. 23	1,944
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Mar. 23	Mar. 24	1,092
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Mar. 24	Mar. 25	677
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Mar. 3	Mar. 3	2,096
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Feb. 8	Feb. 9	900
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Jan. 23	Jan. 23	1,611
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Jan. 16	Jan. 16	2,218
5628	51. BACKUS, C. D., Radiant Energy	Feb. 25	Feb. 25	1,308
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Apr. 23	Apr. 27	819
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	May 9	May 10	534
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Jan. 23	Jan. 23	1,150
6883	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	May 19	May 20	328
	Designs	July 1	July 12	178
4725	56. PORTER, F. J.' Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Feb. 4	Feb. 8	1,492
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Mar. 23	Mar. 19	655
5605	58. DOWELL, E. F., Abrading; Typewriting	Jan. 25	Jan. 25	1,227
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Jan. 15	Jan. 15	1,720
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Jan. 23	Jan. 23	1,488
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Jan. 23	Jan. 23	1,446
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Jan. 28	Jan. 27	1,903
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Jan. 25	Jan. 25	1,520
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Mar. 25	Mar. 25	612
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Jan. 25	Jan. 25	1,680
3099 B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND—Trade-Marks	June 10	July 12	797
	Labels and Prints	June 23	July 9	182

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE BRUNSWICK-BALKE-COLLENDER COMPANY

No. 2,920. Decided April 4, 1932

TRADE-MARKS—DESCRIPTIVENESS—"LEAGUE" FOR BOWLING PINS.

The term "League" as applied to bowling pins *Held* descriptive and therefore not registrable.

APPEAL from the Patent Office. Affirmed.

Mr. Albert H. Fihe, Mr. A. V. Cushman, and *Mr. John J. Darby* for Brunswick-Balke-Collender Company.

Mr. T. A. Hostetler for the Commissioner of Patents.

GRAHAM, *P. J.*:

Appellant has applied to the United States Patent Office to register as a trade-mark the word "League," as applied to bowling pins. Registration was denied by both tribunals in the Patent Office upon the theory that the word "League" could not be exclusively appropriated and used as a trade-mark by any one manufacturer of bowling pins; in other words, as we understand it, that the word is descriptive as applied to these goods.

In connection with his decision, the Commissioner called attention to the adopted and published rules of the American Bowling Congress, and particularly, to Rule 10 thereof, regulating the sizes and weights of official pins. Rule 29 thereof also gives certain regulations for so-called "league games."

The applicant filed in the Patent Office an affidavit to the effect that the word "League" upon bowling pins, to the trade, meant only origin or source.

We are of opinion no error was committed by the Commissioner herein. The word "League," as used by the appellant here, is, to our mind, clearly either descriptive or misdescriptive. In either event, it ought not to be registered as a trade-mark. Every maker of bowling pins ought to be able to call his pins "League" pins, if they comply with the rules generally obtaining in league games.

The following cases illustrate the views of the courts as to similar descriptive words: *Re Excelsior Shoe Company*, 40 App. D. C. 480, 196 O. G. 805, in which the mark involved was "Boy Scouts" as applied to shoes for boys and men; the word "Navy" as applied to certain goods, *In re National Candy Company*, 35 App. D. C. 351, 156 O. G. 539; the word "Fashion" as applied to men's clothing, *Rosenberg Bros. & Co.* v. *Wetherby-Kayser Shoe Co.*, 17 C. C. P. A. (Patents) 794, 394 O. G. 3, 37 F.(2d) 437; "Autographic" as applied to manifold registers, etc., *In re Autographic Register Co.*, 17 C. C. P. A. (Patents) 1044, 397 O. G. 548, 39 F.(2d) 718; "Ensemble" as applied to ladies' garments, *Model Brassiere Co.* v. *Bromley-Shepard Co.*, 18 C. C. P. A. (Patents) 1294, 411 O. G. 538, 49 F.(2d) 482.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

ROBBINS *v.* STEINBART

No. 2,932. Decided April 4, 1932

1. INTERFERENCE—PRIORITY—RIGHT TO MAKE THE CLAIMS.

Record review and *Held* that S. has a right to make the claims since "the claims are couched in such language as to read directly upon Steinbart's disclosure and there are no limitations which restrict them to the disclosure of Robbins."

2. SAME—SAME—OPERATIVENESS—CONSTRUCTIVE REDUCTION TO PRACTICE.

Record reviewed and *Held* that the application of S. constitutes a constructive reduction to practice of the invention in issue since if, as specifically disclosed, the device of S. is inoperative, it could be made operative without the exercise of invention.

APPEAL from the Patent Office. Affirmed.

Mr. H. A. Toulmin and *Mr. H. A. Toulmin, jr.*, for Robbins.

Mr. Paul A. Staley and *Mr. Marston Allen* for Steinbart.

BLAND, *J.*:

In this appeal from the decision of the Board of Appeals of the United States Patent Office, in an interference proceeding, the invention relates to machines for making steel wool, and the issue is confined to two counts as follows:

1. In a machine for manufacturing steel wool, a table, cutting tools arranged adjacent thereto, means to guide a plurality of parallel strands formed from a single wire adjacent said tools over said table, said means consisting of sheaves over which the strands are looped at either end of said table, and means for driving said sheaves to move said wires independently of the pull of the wire thereon.

2. In a machine for manufacturing steel wool, a table, cutting tools arranged adjacent thereto, means to guide a plurality of parallel strands formed from a single wire in engagement with said tools over said table, and means to drive said guiding means so that each loop of wire will be independently driven by said guiding means whereby the driving strains will be applied to each loop independently against the resistance of the tools engaging the strand of wire of that loop.

The counts were claims 17 and 57 of the Robbins patent, No. 1,584,145, issued May 11, 1926 (application filed October 14, 1924). Steinbart's application was filed on November 27, 1923. After the issuance of Robbins' patent, Steinbart copied the two claims at issue for the purpose of interference. Robins' preliminary statement alleged conception in January, 1921, the embodiment of the invention in a full sized machine on the 12th day of May, 1924, and successful operation of said machine in June, 1924. Steinbart's preliminary statement alleged conception and drawings January, 1922, and—

that he first embodied his present invention in a full sized machine which was completed on or about the first day of October, 1924,

which was successfully operated on about said last named date. It will be noticed that Steinbart

claimed a date for actual reduction to practice later than his constructive date which was the date of filing the application on November 27, 1923. After seeing the filing date of Robbins, Steinbart moved to amend his preliminary statement and sought to change his date for the first actual reduction to practice from October 1, 1924, to April 30, 1924, which motion was denied by the Examiner of Interferences.

Robbins moved to dissolve the interference for the reason that the counts could not be read upon the machine shown and described in Steinbart's application and for the further reason that Steinbart's application showed and described an inoperative device and one lacking utility. The Law Examiner sustained the motion to dissolve upon the ground that Steinbart's machine was inoperative. Steinbart appealed to the Board of Appeals which reversed the Law Examiner's decision. The Board held that the machine as disclosed was prima facie operative and stated that—

> It is believed the interference should be continued in order to give the parties opportunity, if they so desire, to present testimony on the question of operativeness.

In deciding the interference issue the Examiner of Interferences accepted the ruling of the Board of Appeals as to Steinbart's right to make the counts as conclusive, since the new testimony taken did not warrant a different conclusion. He held as follows:

> No ruling is made as to whether a knife resiliently pressed against the wires would be operable in the patent sense but even if such knife would be inoperable the skill of the art would have supplied an operable knife mounting and the resulting mechanism would have satisfied the counts of this interference.

He reviewed the evidence of both parties affecting their early conceptions and rejected all evidence of both parties as proving an earlier date of conception than the date of the filing of the Steinbart application, holding that Steinbart's application was a conception and reduction to practice of the counts in interference, and priority of invention of the counts was awarded to Steinbart.

Upon appeal to the Board of Appeals, it held, as did the Examiner of Interferences and the Law Examiner, that the counts read upon Steinbart's disclosure, and said:

> Appellant contends as one of the allegations of error that the counts do not properly read upon Steinbart's disclosure. It is his view that the inclusion of the term "independently" in the counts limits the counts to a machine in which some other means for advancing the wire is present other than the power sheaves. The counts were copied from Robin's patent and were doubtless drawn in view of the disclosure where the additional winding reels are present. It is our view, however, that since the counts do not specifically include an additional means they should not be construed as limited to an apparatus in which such means is necessarily present.

Upon the question of inoperativeness of the Steinbart machine, the Board said:

> Taking up first the question of inoperativeness it is our opinion that the machine as disclosed in the Steinbart application is not a practical construction. The most serious difficulty as shown by the evidence relates to the mounting of the knives. The counts, however, are not specific as to this feature and since it was old in steel wool machines to employ knives in a similar way we do not consider that it would require the exercise of invention to substitute other knife mountings old in the art or modify those disclosed in the Steinbart application in such a way that a practical knife action would result. As previously stated the particular subject matter of the issue relates to the feeding of the wire and we are satisfied there is no patentable relationship here between the feed and the knife mounting. We have also considered the improper showing of the gears and the other matters dealing with the alleged improper feeding of the wire but we consider that these matters also can be readily corrected and adjusted by those skilled in the art without requiring the exercise of invention. It is our view, therefore, that the Steinbart application contains an operative disclosure of the subject matter of the counts of the issue and the fact that many of the details shown were discarded, particularly with relation to the support for the knives, we do not regard as material.

It also concluded that the testimony relating to Robbins' conception earlier than the filing date of Steinbart was not satisfactory and gave him no conception date earlier than Steinbart's application. It also rejected the Steinbart proof as establishing an earlier date of conception than his filing date. Having held that Steinbart could make the counts and that his device was operable as far as the issue of the involved counts was concerned, and having held that Steinbart was the first to conceive and reduce to practice the issues of the counts, it affirmed the action of the Examiner of Interferences in awarding priority to Steinbart. From this decision Robbins appeals here.

If our consideration of the sufficiency of Robbins' evidence to establish a conception by him earlier than Steinbart's filing date were an initial question with us, it is possible that we might have arrived at a conclusion differing from those of the two concurring tribunals below, but we are not convinced that they are manifestly wrong, and under the well-known rule, we are constrained to concur in the holding of the Board in this particular. *Leonard* v. *Everett*, 52 App. D. C. 90, 304 O. G. 232, 281 Fed 594; *Oldroyd* v. *Morgan*, 58 App. D. C. 78, 374 O. G. 4, 24 F.(2d) 1004. We also concur in the holding of the Board as to the effect of the evidence produced for the purpose of showing a conception date of Steinbart earlier than his filing date.

In view of our above conclusions, the issues narrow down to the following propositions:

First. Do the counts in issue read upon the disclosure of Steinbart in his application of November 27, 1923?

Second. Should the Steinbart application be regarded as a conception and reduction to practice of the subject matter of the counts?

The record and briefs are long and voluminous and contain more charges and evidence of false swearing, and bitter controversy, than is involved in any appeal that has come to our attention. We do not regard it as necessary, in our decision of the issues presented, to indulge in extended comment on the many different phases of the case which have occupied the attention, in some instances at length, of the tribunals below.

[1] On the first proposition as to whether the counts read upon Steinbart's disclosure, we agree with all the tribunals below, that have passed on the question, that the claims, as drawn, read directly upon Steinbart's application. When the counts are read in connection with Robbins' structure, a meaning can be given to them which probably was not in the mind of Steinbart, but the claims are couched in such language as to read directly upon Steinbart's disclosure and there are no limitations which restrict them to the disclosure of Robbins.

On this phase of the case the Law Examiner aptly said:

> The reason given by the party Robbins in support of his motion to dissolve on the ground that the party Steinbart can not make count 1 is that the count specifies means for pulling on the wire independently of the movement given to the wire by the power driven sheaves, but recitation of said means is not found in the count. The last element of the count "means for driving said sheaves" is followed by the statement "to move said wires independently of the pull of the wire thereon." This statement does not directly or inferentially import an element into the count corresponding to "means to pull the wire", but clearly states that the pull of a wire does not drive the sheaves. The cutting effect of the knives as opposed to the movement of the wire by the sheaves would result in a pull on the wire, but the means for driving the sheaves is not dependent on the last mentioned "pull". It is clear that the Steinbart sheaves are driven by the motor 49 and are not moved by the pull of the wire.

Substantially the same reasons for arriving at the same conclusion as that arrived at by the Law Examiner are found in the decision of the Examiner of Interferences and the Board of Appeals, and we agree with such conclusions.

It may be suggested that the counts at bar must be given the construction contended for by appellant in order to sustain the validity of the two involved claims of appellant's patent, and that to give them the construction contended for by appellee would render them invalid by reason of the prior art. As far as we know this question was not considered by the tribunals below, and it certainly has not been sufficiently briefed nor discussed here to justify our consideration of it.

In *Deibel* v. *Heise & Schumacher*, 18 C. C. P. A. (Patents) 907, 405 O. G. 845, 46 F.(2d) 570, this court used the following language, which we regard as apt in the present controversy:

> * * * The counts of the interference should be given the broadest interpretation which they will reasonably support, and this court is not justified in reading limitations into them for the purpose of changing the plain import of their terms. Had appellant desired to limit his claims to a particular kind or type of kraft paper he might have done so. However, having deliberately elected to claim the invention broadly, he is not in a position to insist that limitations be read into his claims (the counts in issue) for the purpose of avoiding the issue of priority. * * *

The second proposition involves matters more controverted and more troublesome than those involved in the first proposition. Robbins points out a number of reasons why he regards the Steinbart machine as inoperative. In Steinbart's structure both drums turn in opposite directions, which would either prevent any operation or movement of the machine or would bring about a total destruction of the wire worked upon. Appellant contends that the cutting knives are wholly inoperative inasmuch as they are spring pressed, which permits chattering and the consequential destruction of the wire. It is unnecessary for us to enumerate or to discuss here other serious defects affecting the machine's operation which defects are pointed out in appellant's brief. Appellant contends that everything disclosed in Steinbart's application was abandoned except the legs; that new devices were supplied in most instances; that the whole machine was at one time abandoned; and that no successful operating machine was ever produced until 1925, and when so produced was in no sense in accordance with the disclosure of the Steinbart application.

With much of this contention we agree. It seems obvious that the knives would not function as intended; that the drums would not rotate properly; and that the machine had other serious defects which rendered it, as the Board held, an impracticable construction. The gist of the decision of the Board, on this phase of the case, however, rests in its conclusion that the parts of the Steinbart machine which rendered its operation impracticable were such features as could be supplied from the prior art by a mechanic, or be supplied by a mechanic, without the necessity of inventive skill. At this point appellant vigorously and with much persuasiveness urges, in substance, that an applicant cannot claim a constructive reduction to practice from an application disclosure of an inoperative machine which, with the exception of the legs, must be discarded before a successful machine can be constructed; that the structure speaks for itself in this respect; and that appellee's preliminary statement and his attempt to amend the same, together with his apparent abandonment of the original structure and final construction of an almost wholly differently operating machine, show conclusively that Steinbart's application was not a reduction to practice of the subject matter of the counts at bar.

[2] We are fully cognizant of the unusual situation which the facts in this case present, but nevertheless we must agree with the holdings of the tribunals below to the effect that if it did not require invention to substitute elements of the prior art for the elements responsible for the inoperativeness, the machine could not be held to be inoperative as far as the issue in the counts involved is concerned. For instance, let us suppose that the only feature claimed to be inoperative in the Steinbart device was the fact that the two drums run in opposite directions. No one has contended, and it cannot be contended logically, that it requires inventive genius to make them both run in the same direction and thus operate in accordance with the issues presented by the counts at bar. Under such circumstances it would be improper to hold that the structure by reason of such defect was not a reduction to practice of the issues. Carrying this thought further, if all the other elements contributing to the inoperativeness could be supplied without inventive genius it seems obvious that the same result would be arrived at. True enough, it is possible to visualize a situation where, owing to many defects, such an impracticable and unworkable contraption was proposed as to amount to no disclosure at all, and where those skilled in the art, seeking to follow the teachings of the applicant, would find nothing to work upon in trying to evolve from the applicant's teachings a successful commercial machine. Appellant in one phase of its argument seeks to present this supposed state of facts as a true picture of conditions at bar. When all the facts and their relation to the particular issues at bar are considered, such a viewpoint is not justifiable.

On the question of curing defects by resorting to the prior art or mechanical skill, the Patent Office

and the appellee have cited us no authority. The appellant, however, contends that the law does "not permit reconstruction of a machine to make it operative" and cites *Weisbrod* v. *Sisson*, 46 App. D. C. 311, 245 O. G. 1026, and *Bliss* v. *Brooklyn*, 10 Blatch. 521, Fed. Case No. 1546, and suggests that the doctrine in those cases applies, since appellee would have to abandon his "old flexible knife mounting and movement, which was the essence of his invention." Regardless of what value we might give such a doctrine in a proper case, it has not been made plain to us that the knife mounting is the essence of the invention. It is, as heretofore stated, no part of the invention of the involved claims.

The rule applicable to the question at bar is well laid down in *Computing Scale Co.* v. *Standard Computing Scale Co.*, 195 Fed. 508, 511, in which the following language was used:

> The primary question is: To what extent must a device, built as shown in the drawings and specifications, be operative in order to support a conclusion that the conceived invention has been completely made? This question was quite fully considered by this court in an opinion by Judge (now Mr. Justice) Lurton in *Standard Cartridge Co.* v. *Peters Cartridge Company*, 77 Fed. 630, 23 C. C. A. 367. He quotes from *Loom Co.* v. *Higgins*, 105 U. S. 586, 26 L. Ed. 1177, the illustration of an invention in some appurtenance of the steam engine which may be completely shown without describing other parts of the engine. He lays down the rules, also, as fully as contended for by the patentee here, that a completed invention is not negatived because the drawings are rude or imperfect, or because they are incomprehensible to one unacquainted with that class of machinery, or because they do not in all respects show the relation of the novel features to the old device nor describe precisely the mode of attachment nor with scientific exactness show other details of the combination. He concludes that the controlling question is whether "the absent features are such as would be readily supplied by a mechanic familiar with the subject and without requiring further invention" (77 Fed. 647, 23 C. C. A. 383); and whether the mechanical questions left unsolved by the drawings were of such dignity as to require invention to carry into effect the idea indicated by the drawings (77 Fed. 652, 23 C. C. A. 388); and whether "that which remained imperfect in the sketches was remediable by the exercise of the technical knowledge of mechanics familiar with the construction and operation of the old machines" (77 Fed. 655, 23 C. C. A. 391). It is true Judge Lurton was considering a question really of conception, but he was adopting and applying the rule appropriate to questions of completion or reduction to practice.

See also *Howell* v. *Hess*, 122 O. G. 2392, 1906 C. D. 217.

We think that the features of the Steinbart device responsible for its alleged inoperativeness could have been corrected without the exercise of inventive skill.

The decision of the Board of Appeals, awarding priority of invention to the party Steinbart in the subject matter of the counts at issue, is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE RETZBACH AND BRUNINGA

No. 2,906. Decided April 4, 1932

PATENTABILITY—PROCESS OF MAKING FROZEN CONFECTION. Claims for a process of making frozen confections *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. John H. Bruninga and *Mr. Chas. E. Riordon* for Retzbach and Bruninga.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner rejecting all of the claims in appellants' application for a patent for an alleged invention relating to a process for making frozen confections, particularly chocolate covered ice cream bars.

Claims 2, 16, 28, and 38 are illustrative. They read:

> 2. In the art of making frozen confections, the process comprising flowing semifrozen ice cream into a candy shell and chilling the filled shell so as to harden the ice cream therein.
>
> 16. In the art of making frozen confections, the process comprising, filling a candy shell with layers of semifrozen ice cream and chilling the filled shell so as to harden the ice cream therein.
>
> 28. In the art of making frozen confections, the process comprising, placing a candy shell in an envelope, filling the shell with semifrozen ice cream, and chilling the filled shell in the envelope so as to harden the ice cream therein.
>
> 38. In the art of making frozen confections, the process comprising, placing a candy shell in a lined box, filling the shell with semifrozen ice cream, and chilling the filled shell in the box so as to harden the ice cream therein.

The references are: Rosenberger, 502,864, Aug. 8, 1893; Cuscaden et al., 682,243, Sept. 10, 1901; Boyd, 1,138,929, May 11, 1915; Boyd, 1,200,705, Oct. 10, 1916; Bausman, 1,276,006, Aug. 20, 1918; Dalton, 1,313,793, Aug. 19, 1919; Nelson, 1,404,539, Jan. 24, 1922; Brigham, 1,417,446, May 23, 1922; Gereke, 1,437,512, Dec. 5, 1922; Harlan, 1,475,579, Nov. 27, 1923.

The claimed process is sufficiently defined in the quoted claims.

The patents to Rosenberger, Bausman, and Boyd disclose methods of making candy by first forming a candy shell, filling it with a plastic candy cream, and then sealing it. The patent to Bausman and the Boyd patent No. 1,138,929, disclose the additional step of cooling the shells and the cream centers before sealing.

The patent to Dalton disclosed the method of filling cartons with semifrozen ice cream and thereafter chilling it until hardened.

The patent to Nelson shows that it was old to make a confection by covering ice cream with a chocolate coating.

In view of those patents, the Board held that the process defined in claims 1, 2, 3, 8, 10, and 12 was clearly suggested by the references and did not involve invention.

Claims 16, 18, and 19 include the additional feature of depositing the ice cream in layers. However, as the patents to Dalton and Cuscaden et al. disclosed it to be old to mold bricks composed of different flavored ice creams, the board held these claims to be unpatentable.

Claims 28, 32, and 35 include the additional feature of placing the candy shell in an envelope before filling it with semifrozen ice cream. This feature being old, as disclosed in the patents to Harlan and Brigham, these claims were held to be devoid of invention.

Claims 38 and 41 include the additional feature of placing the candy shell in a lined box before filling it with ice cream. In view of the fact that the patent to Gereke showed it to be old to bake plastic dough

in a shell of cardboard having a lining of parchment, or other suitable material, these claims were held to be unpatentable in view of the other references of record.

It is contended by counsel for appellants that the involved process of producing candy coated ice cream bars is new; that improved results have been secured by it; and that, therefore, appellants are entitled to a patent.

We are unable to concur in the views expressed by counsel for appellants.

Each step in the alleged novel process is shown by the references to be old. Furthermore, the involved process and its application to the production of candy coated ice cream bars is plainly suggested by the references. Accordingly, we are of opinion that the tribunals of the Patent Office reached the right conclusion, and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE HORTON

Nos. 2,827 and 2,828. Decided April 4, 1932

PATENTABILITY—APPEAL—WHAT MAY BE CONSIDERED.

"* * * It does not appear to be within our authority to review and determine technical questions of structure involved in patents which are not references in the case, and upon which the tribunals of the Patent Office made no findings in the *ex parte* proceeding."

ON PETITION for rehearing. For original decision see 418 O. G. 273.

Petition denied.

GARRETT, *J.*:

In these consolidated cases appellant has filed a petition for rehearing, requesting that "certain questions be remanded to the Patent Office for finding thereupon."

In our original opinion it was pointed out that when the claims are given a broad interpretation the disclosures of the Sachs patents clearly anticipate them.

Appellant insists that a construction of claims had in certain interference proceedings, referred to and discussed in said original opinion, is binding in the present *ex parte* proceeding and that under said construction the Sachs patents do not constitute a proper reference against him.

In said original opinion we recited certain questions upon which the tribunals of the Patent Office had not passed but upon which it would be necessary for the court to pass if we should attempt to follow appellant's theory of the case, and we then stated:

It does not appear to us to be within our authority to review and determine material technical questions of structure upon which the *ex parte* tribunals of the Patent Office have made no finding.

The writer of the original opinion and of this supplemental statement is quite willing frankly to concede that the phraseology of the foregoing quoted paragraph was not as happily chosen as might have been, and that, standing alone, it might be misleading, but, when taken in connection with the full text of the opinion, it is believed that no room exists for any very serious misunderstanding.

However, our means may be better expressed by saying that it does not appear to be within our authority to review and determine technical questions of structure involved in patents which are not references in the case, and upon which the tribunals of the Patent Office made no findings in the *ex parte* proceeding.

As we view the case, there was no necessity for the tribunals of the Patent Office, nor for this court, to pass upon the issue raised in the interference controversies in connection with the issues at bar. The patents and applications which were involved there are not here involved. All this is stated in our original opinion, and the statement of the Examiner clearly shows that the claims of the applications which are involved, when broadly interpreted, are anticipated by the references cited.

We are unable to agree that the case should be remanded.

The petition for rehearing is denied.

U. S. Court of Customs and Patent Appeals

IN RE HORNING

No. 2,925. Decided April 4, 1932

PATENTABILITY—ARCH SUPPORTS.

Claims for an arch support *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Arthur P. Greeley for Horning.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Primary Examiner rejecting claims 12, 13, and 16 to 20, inclusive, of appellant's application, filed August 26, 1927.

Claims 12 and 20 are illustrative of the claims in issue and read as follows:

12. A support of the kind described, comprising a base, a pocket of flexible material of a size less than that of the base, attached to the base, the superficial area of the pocket being greater than that portion of the base covered by it, and an insertable and removable filling for the pocket.

20. A support of the kind described, comprising a base, adapted to fit a shoe whereby it is retained permanently in position, a pocket of flexible material whose superficial area is greater than that of the portion of the base covered by it, attached to the upper surface of the base, and insertable and removable strips of material capable of retaining their shape under pressure, arranged in the pocket.

The references relied upon are: Nathan, 873,775, December 17, 1907; Block, 1,378,398, May 17, 1921; McQueeney, 1,546,740, July 21, 1925; Carling, 1,270,003, June 18, 1918.

The application relates to an arch support in which a pocket is provided, preferably upon the upper surface of an insole, the upper part of the pocket being of greater area than the portion of the insole covered thereby, thus permitting the insertion of material to support an abnormality of the foot.

In its decision the Board of Appeals said:

The patent to Carling discloses a similar pocket but we find no statement in the specification of that patent that the area of the upper portion of the pocket is greater than

the portion of the base covered by it. It is appellant's view that a patentable distinction exists for this reason. He urges that in inserting the packing material the insole or base portion will be bowed up and that the structure will not appear as in Fig. 2 of this patent. It is our view that in providing pockets of this nature designed for receiving a filling or packing it would be the obvious thing to those skilled in the art to provide a fullness so that the packing material may be properly accommodated. We therefore do not regard this limitation in claim 12 as one involving any patentable distinction.

The remaining claims on appeal, of which claim 20 is representative, call for a filling material of removable strips. It is old to employ strips of this nature for the same general purpose as shown in the patents to McQueeney or Block. Appellant objects to Block because the strips are placed beneath the insole and in McQueeney the portion which serves as the substantial support is without additional covering. It was urged at the hearing, and is also referred to in the brief, that the structure of Block is very uncomfortable and does not properly conform to the shape of the foot. Appellant has also advanced reasons as to the unsatisfactory character of the structure of McQueeney. It is our view, however, that since Carling clearly discloses a sheet of material attached to the upper side of the sole it would not involve invention to employ strips of filling material such as shown in McQueeney or Block in place of the fibrous filling evidently disclosed in Carling. As previously stated, the provision of the proper fullness we regard as well within the skill of those expert in the art.

We agree with the conclusions of the Board of Appeals for the reasons stated by it.

It appears that two claims, Nos. 14 and 15, were allowed by the Primary Examiner. The essential difference between said allowed claims and the claims here on appeal lies in an element contained in the allowed claims, reading, in claim 14, as follows: "means for detachably securing the pocket to the upper surface of the base, * * *." While not important in this discussion, it may be noted that in claim 15 this element contains the word "face" instead of the word "surface" as used in the above quotation, this being the only difference. Appellant contends that the allowance of said claims furnishes a reason for the allowance of the claims in issue.

Presumably said claims 14 and 15 were allowed upon the theory that the element therein above quoted made them allowable, and we do not think that appellant, when he secures his patent upon the allowed claims, will admit that the presence of said element does not in itself render the claims patentable over the prior art. Such an admission, if accepted as eliminating said element as a basis of patentability in an infringement suit, would, in our opinion, render necessary, a finding that his patent was invalid.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

864,314, J. A. LeRoy, Independent framing device for kinetoscopes, D. C., S. D. N. Y., Doc. E 30/117, *J. A. LeRoy* v. *The De Vry Corp.* Dismissed for lack of prosecution (notice June 22, 1932).

935,612, C. W. Saalburg, Picture, D. C., S. D. N. Y., Doc. E 38/58, *Van Dyck Gravure Co.* v. *American Multicolor Corp.* Dismissed for lack of prosecution (notice June 22, 1932).

966,788, G. W. Bent, Caster, D. C., S. D. N. Y., Doc. E 24/255, *G. W. Bent et al.* v. *Faultless Caster Co.* Dismissed for lack of prosecution (notice June 22, 1932).

968,576, C. R. Libby, Pneumatic despatch tube apparatus, D. C., S. D. N. Y., Doc. E 29/104, *The Lamson Co.* v. *G. Atlas Systems, Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

987,092, F. B. Thompson, Picture film, D. C., S. D. N. Y., Doc. E 31/189, *Dera Film Protector Co., Inc.*, v. *Connsell Film Process and Chemical Co., Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,004,505, A. V. Verneuil, Synthetic sapphire, D. C., S. D. N. Y., Doc. E 41/342, *L. Heller & Son, Inc.*, v. *H. Feldman.* Dismissed for lack of prosecution (notice June 22, 1932).

1,018,502, Just & Hanaman, Incandescent body for electric lamps, D. C., S. D. N. Y., Doc. E 32/257, *General Electric Co.* v. *Palatine Industrial Co. et al.* Doc. E 37/224, *General Electric Co.* v. *M. Kaplan.* Doc. E 40/363, *General Electric Co.* v. *A. Frost.* Dismissed for lack of prosecution (notice June 22, 1932) in each of above cases.

1,022,140, C. Hubert, Portable lighter, D. C., S. D. N. Y., Doc. E 41/393, *M. E. Bernhardt et al.* v. *Fair Trading Co., Inc.* Dismissed for lack of prosecution (notice June 22, 1932). Doc. E 43/87, *M. E. Bernhardt Co., Inc.*, v. *Amsco Products, Inc.* Decree as above.

1,043,021, C. W. Mayer, Machine for coating carbon paper, D. C., S. D. N. Y., Doc. E 41/123, *C. & R. Research Corp.* v. *J. Allen & Co.* Dismissed for lack of prosecution (notice June 22, 1932).

1,113,149, E. H. Armstrong, Wireless receiving system, D. C., S. D. N. Y., Doc. E 42/120, *Westinghouse Electric & Mfg. Co. et al.* v. *Allen-Rogers, Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,126,379, A. A. Brown, Trousers, D. C., S. D. N. Y., Doc. E 42/92, *Brown Method Co., Inc.*, v. *J. Levy et al.* Dismissed for lack of prosecution (notice June 22, 1932).

1,198,326, J. Carey, Printed matter, D. C., S. D. N. Y., Doc. E 46/5, *Gilman Fanfold Corp., Ltd., et al.* v. *American Fanform Co. et al.* Dismissed for lack of prosecution (notice June 22, 1932).

1,207,263, C. E. Archbald Machine for inking ribbons, D. C., S. D. N. Y., Doc. E 41/286, *C. E. Archbald* v. *F. Simoncy et al.* Dismissed for lack of prosecution (notice June 22, 1932). Doc. E 41/288, *C. E. Archbald* v. *Iron Clad Ribbon & Carbon Co.* Decree as above.

1,244,747, C. F. Larsen, Gas lighter, D. C., S. D. N. Y., Doc. E 33/3, *S. A. L. Corp.* v. *Art Metal Works.* Dismissed for lack of prosecution (notice June 22, 1932).

1,271,527, M. C. Hopkins, Sound regenerating machine, D. C., S. D. N. Y., Doc. E 35/313, *Lektophone Corp.* v. *A. Scaison et al.* Dismissed for lack of prosecution (notice June 22, 1932). Doc. E 35/315, *Lektophone Corp.* v. *Bear Tone Radio Corp.* Decree as above.

1,290,011, Hirsch & Hirsch, Process of making castings of rare earth metals and their alloys, D. C., S. D. N. Y., Doc. E 45/83, *Alpha Products Co., Inc.*, v. *Frischer & Co., Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,307,734, A. V. Gullborg, Lubricating means, appeal filed June 21, 1932, C. C. A., 1st Cir., Doc. 2710, *Alemite Corp.* v. *Lubrair Corp.*

1,322,579, L. C. Kenen, Crank-shaft construction, D. C., S. D. N. Y., Doc. E 43/162, *G. W. Dunham* v. *Lancia Motor Sales Corp.* Dismissed for lack of prosecution (notice June 22, 1932).

1,326,153, W. J. Fleming, Buckle support, D. C., S. D. N. Y., Doc. E 35/15, *Fleming & Keevers Co., Inc.*, v. *H. Goodman et al.* Dismissed for lack of prosecution (notice June 22, 1932).

1,327,936, S. Anthony, Card index, D. C., S. D. N. Y., Doc. E 40/231, *Acme Card System Co.* v. *Press Steel Engineering Corp.* Dismissed for lack of prosecution (notice June 22, 1932).

1,347,590, M. W. Robertson, Electrical connector, D. C., S. D. N. Y., Doc. E 40/391, *G. P. Schmidt* v. *Boxill Bruel Carbon Co.* Dismissed for lack of prosecution (notice June 22, 1932).

1,368,039, F. L. Lindstrom, Spinning top, D. C., S. D. N. Y., Doc. E 26/162, *F. L. Lindstrom et al.* v. *The Girard Model Works, Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,368,780, E. D. Anderson, Machine for making and labeling packages, D. C., S. D. N. Y., Doc. E 42/374, *E. D. Anderson, Inc.*, v. *American Mint Corp.* Dismissed for lack of prosecution (notice June 22, 1932).

1,371,247, J. Jonas, Hat stretching machine, D. C., S. D. N. Y., Doc. E 41/188, *J. Jonas* v. *Garve Co., Inc., et al.* Dismissed for lack of prosecution (notice June 22, 1932). Doc. E 41/203, *J. Jonas* v. *J. Paley et al.* Decree as above.

1,391,986, S. Bosky, Brassière, D. C., S. D. N. Y., Doc. E 34/396, *S. Bosky* v. *P. Wagner.* Dismissed for lack of prosecution (notice June 22, 1932).

1,408,384, T. J. Newlyn, Cosmetic lotion, D. C., S. D. N. Y., Doc. E 42/82, *T. J. Newlyn* v. *Marvo Beauty Laboratories, Inc., et al.* Dismissed for lack of prosecution (notice June 22, 1932).

1,433,819, O. Heyman, Jewelry unit and method and apparatus for making same, D. C., S. D. N. Y., Doc. E 26/95, *O. Heyman* v. *Seidman & Cohan, Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,435,911, W. S. Bechtold, Article of manufacture, D. C., S. D. N. Y., Doc. E 29/127, *Newark Tortoise Shell Novelty Co.* v. *The Art Ivory Mfg. Co., Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,440,220, H. Hopkes, Knife sharpener, D. C., S. D. N. Y., Doc. E 33/369, *M. G. Goff* v. *T. Brande* (*Keen Edge Knife Sharpening Co.*). Dismissed for lack of prosecution (notice June 22, 1932).

1,445,861, B. von Bultzingslowen, Advertising sign, D. C., S. D. N. Y., Doc. E 41/218, *B. von Bultzingslowen* v. *Manheimer-Weiss Sign Co., Inc.* Dismissed for lack of prosecution (notice June 22, 1932). Doc. E 41/312, *B. von Bultzingslowen* v. *Murphy & Brode, Inc.* Decree as above.

1,455,141, Lowell & Dunmore, Radio receiving apparatus, D. C., S. D. N. Y., Doc. E 37/883, *Dubilier Condenser & Radio Corp.* v. *Batteryless Radio Corp.* Dismissed for lack of prosecution (notice June 22, 1932).

1,505,592, F. W. Epperson, Frozen confectionery, filed June 21, 1932, D. C., S. D. N. Y., Doc. E 69/144, *National Popsicle Corp. et al.* v. *Morel Bros. Ice Cream Co., Inc.*

1,506,046, W. H. Bullock, Radio receiving system, D. C., S. D. N. Y., Doc. E 46/13, *W. H. Bullock et al.* v. *Haynes-Griffin, Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,549,882, L. L. Jones, Condenser, D. C., S. D. N. Y., Doc. E 38/287, *Amsco Products, Inc.*, v. *General Instrument Corp.* Dismissed for lack of prosecution (notice June 22, 1932).

1,550,794, R. D. Fay, Magneto-telephone, D. C., S. D. N. Y., Doc. E 43/67, *V. Himmer* v. *Fenton & Hein et al.* (*Fenco*). Dismissed for lack of prosecution (notice June 22, 1932). Doc. E 44/167, *V. Himmer* v. *G. R. P. Products Co., Inc.* Decree as above.

1,553,993, W. R. Delaney, Millinery box, D. C., S. D. N. Y., Doc. E 44/118, *G. H. Buick et al.* v. *S. Rappaport.* Dismissed for lack of prosecution (notice June 22, 1932).

1,563,174, Dumbleton & Lindberg, Self adapting sleeve stretcher, D. C., S. D. N. Y., Doc. E 41/222 and E 43/895, *R. Cunningham et al.* v. *I. Goldberg.* Doc. E 41/228, *R. Cunningham et al.* v. *A. Roberts et al.* Dismissed for lack of prosecution (notice June 22, 1932) in each of above cases.

1,566,047, M. B. Solomon, Tray structure, D. C., S. D. N. Y., Doc. E 35/175, *American Tray Co., Inc.*, v. *Universal Art Metal Works, Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,566,066, H. M. Becher, Process for dyeing fur and product thereof, D. C., S. D. N. Y., Doc. E 44/189 and E 44/198, *P. Becher et al.* v. *M. Jawits et al.* Doc. E 44/194, *P. Becher et al.* v. *J. Montag et al.* Doc. E 45/26, *H. M. Becher et al.* v. *N. Berlin.* Doc. E 45/203, *H. M. Becher et al.* v. *M. Meskin et al.* (*Meskin Bros.*). Dismissed for lack of prosecution (notice June 22, 1932) in each of above cases.

1,573,374, P. A. Chamberlain, Radio condenser, D. C., S. D. N. Y., Doc. E 40/24, *Mohawk Corp. of Illinois et al.* v. *United Scientific Laboratories, Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,578,788, O. C. Wiese, Cloth, D. C., S. D. N. Y., Doc. E 40/198, *S. Fromm et al.* v. *M. Masich, Inc., et al.* Dismissed for lack of prosecution (notice June 22, 1932).

1,579,503, L. Block, Valve, D. C., S. D. N. Y., Doc. E 37/157, *The Republic Brass Co.* v. *Ross & Gade, Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,584,410, Vendome & Marcoux, Pocket vaporizer or spray apparatus, D. C., S. D. N. Y., Doc. E 42/127, *Morse Franck, Inc.*, v. *A. J. K. Co., Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,585,683, F. S. Oppenheim, Container, D. C., S. D. N. Y., Doc. E 41/50, *F. S. Oppenheim et al.* v. *Davega, Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,589,401, L. Klivansky, Metallic clothes hamper, D. C., S. D. N. Y., Doc. E 39/110. *I. Sarpay et al.* v. *H. Toohin, Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,594,047, E. F. Clark, Pocket cigar lighter, D. C., S. D. N. Y., Doc. E 43/116, *W. G. Clark & Co., Inc.*, v. *The M. S. Rodenberg Co.* Doc. E 43/117, *W. G. Clark & Co., Inc.*, v. *Amsco Products, Inc.* Doc. E 44/325, *Clark Lighter Co., Inc.*, v. *D. Tucker et al.* Dismissed for lack of prosecution (notice June 22, 1932) in each of above cases.

1,595,840, L. Wallach, Doll hand and bottle, D. C., S. D. N. Y., Doc. E 38/359, *W. Rothstein et al.* v. *M. Schener et al.* Dismissed for lack of prosecution (notice June 22, 1932).

1,600,177, A. Hurewitz, Stenciling device, D. C., S. D. N. Y., Doc. E 39/18, *A. Hurewitz* v. *Animated Products Corp.* Dismissed for lack of prosecution (notice June 22, 1932).

1,614,108, A. B. Deitsch, Traveling case, D. C., S. D. N. Y., Doc. E 42/91, *A. B. Deitsch* v. *M. Schill & Co., Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,627,382, M. Golomb, Protective device for boxers, D. C., S. D. N. Y., Doc. E 42/224, *M. Golomb et al.* v. *S. C. & E. Mfg. Co., Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,628,591, P. Harris, Wig for dolls, D. C., S. D. N. Y., Doc. E 42/43, *Mutual Hair Goods Co., Inc., et al.* v. *Blum Lustig Toy Co., Inc.* Dismissed for lack of prosecution (notice June 22, 1932). Doc. E 43/383, *Mutual Hair Goods Co., Inc.*, v. *Pompeian Art Works.* Decree as above.

1,633,366, H. Fischer, Sound amplifier, D. C., S. D. N. Y., Doc. E 43/354, *H. Fischer* v. *Utah Radio Products Co.* Dismissed for lack of prosecution (notice June 22, 1932).

1,636,416, L. G. Handy, Track for toy electric train, D. C., S. D. N. Y., Doc. E 45/243, *L. G. Handy et al.* v. *The Dorfon Co.* Dismissed for lack of prosecution (notice June 22, 1932).

1,645,327, Hirshfeld & Stern, Electric toaster, D. C., S. D. N. Y., Doc. E 43/322, *H. A. Hirshfeld et al.* v. *Electreconomy Co., Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,648,808, L. A. Hazeltine, Wave signaling system, D. C., S. D. N. Y., Doc. E 44/90, *Hazeltine Corp.* v. *Stewart-Warner Speedometer Corp.* Dismissed for lack of prosecution (notice June 22, 1932).

1,801,128, A. E. Waller, Finding for a clasp, D. C., S. D. N. Y., Doc. E 61/346, *A. E. Waller* v. *Apollo Die Tool & Metal Stamping Corp.* Patent sustained, injunction granted (notice June 21, 1932).

Re. 14,746, G. I. Rockwood, Dry pipe valve, D. C., S. D. N. Y., Doc. E 35/75, *G. I. Rockwood* v. *Central Automatic Sprinkle et al.* Dismissed for lack of prosecution (notice June 22, 1932).

Re. 16,351, M. Caruso, Toy car wheel, D. C., S. D. N. Y., Doc. E 45/248, *The Lionel Corp.* v. *American Flyer Mfg. Co.* Dismissed for lack of prosecution (June 22, 1932).

Des. 43,459, Kellner & Worms, Knitted necktie, D. C., S. D. N. Y., Doc. E 26/244, *Franklin Knitting Mills, Inc.*, v. *Gropper Knitting Mills, Inc.* Doc. E 39/253, *Franklin Knitting Mills, Inc.*, v. *H. Lieberman et al.* Doc. E 40/15, *Franklin Knitting Mills, Inc.*, v. *S. Schumer et al.* Dismissed for lack of prosecution (notice June 22, 1932) in each of above cases.

Des. 57,423, P. I. Ansorge, Lighting fixture part, D. C., S. D. N. Y., Doc. E 31/314, *Empire Lighting Fixture Co., Inc.*, v. *M. Levine et al.* Dismissed for lack of prosecution (notice June 22, 1932).

Des. 65,066, M. Klein, Dining room lighting fixtures, D. C., S. D. N. Y., Doc. E 31/222, *Shapiro & Aronson, Inc.*, v. *Excelite Fixture Corp.* Doc. E 43/205, *Shapiro & Aronson, Inc.*, v. *S. Frost.* Dismissed for lack of prosecution (notice June 22, 1932) in each of above cases.

Des. 66,509, W. Nestler, Gimp, D. C., S. D. N. Y., Doc. E 40/9, *D. M. Lending et al.* v. *Mutual Trimming Co., Inc.* Doc. E 43/108, *D. M. Lending et al.* v. *Fashion Trimming Co., Inc.* Dismissed for lack of prosecution (notice June 22, 1932) in each of above cases.

Des. 67,656, M. Gross, Dress, D. C., S. D. N. Y., Doc. E 38/354, *M. Gross Co.* v. *I. L. Silbiger.* Dismissed for lack of prosecution (notice June 22, 1932).

Des. 70,508, E. Pappert, Eye glass frame, D. C., S. D. N. Y., Doc. E 44/10, *E. Pappert* v. *Ulaid Optical Mfg. Corp. et al.* Dismissed for lack of prosecution (notice June 22, 1932).

Des. 71,166, I. Weisenfreind, Beverage set urn, D. C., S. D. N. Y., Doc. E 39/95, *I. Weisenfreind* v. *M. S. Luria.* Dismissed for lack of prosecution (notice June 22, 1932).

Des. 72,895, C. A. Wetzell, Toy, D. C., S. D. N. Y., Doc. E 44/202, *C. A. Wetzell et al.* v. *W. Bimblick.* Dismissed for lack of prosecution (notice June 22, 1932).

Disclaimers

1,618,516.—*Grosvenor M. Cross,* Minneapolis, Minn. SPRING-TENSION NEUTRALIZER. Patent dated February 22, 1927. Disclaimer filed July 20, 1932, by the *patentee.*

Hereby disclaims from the scope of claim 24 any means for automatically adjusting the values of the opposing forces to conform to different loads of the vehicle body except means for automatically adjusting by a relative rectilinear shift of the elements involved in the adjustment the values of the opposing forces to conform to different loads of the vehicle body.

1,757,051.—*Carl Albert Klopfer,* Berlin-Steglitz, Germany. APPARATUS FOR THE REGULATION OF COMBUSTION IN FURNACES. Patent dated May 6, 1930. Disclaimer filed July 15, 1932, by the assignee, *Askania-Werke Aktiengesellschaft vormals Centralwerkstatt Dessau und Carl Bamberg-Friedenau.*

Hereby disclaims claim 1, which is in the following words, to wit:

"An apparatus for the regulation of combustion in furnaces comprising in combination a plurality of burners; a plurality of feed devices supplying the fuel to said burners; a plurality of means each controlled by one of the feed devices in accordance with the quantities of fuel supplied by them and producing a regulating effect; and regulating means for the combustion controlled by the total effect produced by said first mentioned means."

1,777,253.—*Johannes Bruijnes, Jacob van der Hoeven,* and *Ekko Oosterhuis,* Eindhoven, Netherlands. OXIDE CATHODE. Patent dated September 30, 1930. Disclaimer filed July 13, 1932, by the assignee, *N. V. Philips' Gloeilampenfabrieken.*

Hereby enters this disclaimer to those parts of certain claims in said specification which are in the following words, to wit:

In the claims, where the language "a wire helically *wound* on the core *so as* to be in electrical contact therewith" is employed, your petitioner disclaims the use of any construction other than where the wire is shorted directly on the core throughout the length of the wire.

1,815,524.—*John D. Pedersen,* Jackson, Wyo. REVERSIBLE CLIP FOR AMMUNITION. Patent dated July 21, 1931 Disclaimer filed July 18, 1932, by the *patentee.*

Hereby enters this disclaimer to claims 1 and 7 in said specification which are in the following words, to wit:

"1. An ammunition clip for holding a stack of cartridges and adapted to be inserted therewith into the receiver of a gun, said clip comprising a back plate and two forwardly extending spring pressed side walls for embracing said ammunition stack with a compressing action, each side wall having formed therein adjacent its junction with the back plate an inwardly projecting rib for engaging in front of the cartridge extracting rims and also an outwardly projecting rib for engaging behind a shoulder in said receiver so as to position said clip within the receiver."

"7. An ammunition clip for holding a double row stack of cartridges in staggered relation and adapted to be inserted therewith into the receiver of a gun, said clip comprising a back plate and two forwardly spring pressed side walls extending from said back plate for embracing said ammunition stack with a compressing action, said side walls having inturned portions at their upper and lower ends, the inturned portions at the same end of the clip being displaced vertically relative to one another by a slight distance, said displacement distance being substantially less than the radius of a cartridge base."

1,823,123.—*Karl E. Peiler,* West Hartford, Conn. TWO TABLE GLASS FORMING MACHINE. Patent dated September 15, 1931. Disclaimer filed July 11, 1932, by the patentee, assignee *Hartford-Empire Company,* concurring and consenting.

Hereby enters this disclaimer.

The petitioner disclaims any interpretation of the words "transfer position" in claim 6 which does not require that this position be radially fixed relative to the parison mold carrier, and which does not require that this position be the one at which the parison is finally released from all the mold parts which form it into a parison.

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 9, 1932

[Vol. 421. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 317,382. Shell Oil Company, San Francisco, Calif. Filed July 27, 1931.

SHELL

For Petroleum Pitch, a Residue from the Distillation of Crude Petroleum Oils.
Claims use since Oct. 15, 1929.

Ser. No. 327,041. The Brunswick-Balke-Collender Company, doing business as Phoenix Slate Company, Wilmington, Del., and Chicago, Ill. Filed May 13, 1932.

PHOENIX

For Quarried Slate.
Claims use since Jan. 1, 1910.

Ser. No. 327,804. National Automotive Fibres, Inc., Oakland, Calif. Filed June 7, 1932.

WHITE SPRAY

For Cotton Wadding and Cotton Batting.
Claims use since May 1, 1930.

CLASS 2

Receptacles

Ser. No. 321,711. Gift Shop Necessities Co., Kansas City, Mo. Filed Dec. 1, 1931.

BEAUTILITIES

For Decorative Base Metal Boxes, Cans, Baskets, and Bins, and Lids and Covers Therefor.
Claims use since Oct. 29, 1931.

Ser. No. 327,916. Missouri Casket Company, Kansas City, Mo. Filed June 11, 1932.

TRIBUTE

For Burial Caskets and Vaults.
Claims use since May 4, 1932.

Ser. No. 327,938. Robert Gaylord Incorporated, St. Louis, Mo. Filed June 13, 1932.

RITE-WAY

For Fiberboard Boxes.
Claims use since May 20, 1932.

Ser. No. 328,106. The Sozonian Vault Company, Bucyrus, Ohio. Filed June 18, 1932.

COLONIAL

For Burial Vaults.
Claims use since Apr. 26, 1932.

Ser. No. 328,107. The Sozonian Vault Company, Bucyrus, Ohio. Filed June 18, 1932.

Gothic

For Burial Vaults.
Claims use since Apr. 26, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 327,585. FOAMO KLEANZIT COMPANY, Waseca, Minn. Filed May 31, 1932.

FOAMO KLEANZIT

The expression "Kleanzit" is disclaimed apart from the mark as shown.

For Cleaners for Fabrics Such as Rugs, Upholstery, Clothing, and the Like.

Claims use since May 17, 1922.

Ser. No. 327,965. THE AMERICAN OIL COMPANY, Baltimore, Md. Filed June 14, 1932.

ARTEX

For Petroleum Solvent and Cleaning Naphtha—Namely, a Dry Cleaner.

Claims use since Sept. 1, 1931.

Ser. No. 328,008. F. N. KISTNER CO., Chicago, Ill. Filed June 15, 1932.

SILVER-MAID
The World's Wonder Polishing Cloth



No claim is made to the words "Polishing Cloth" apart from the mark shown on the drawing. The picture of a woman appearing on the drawing is fanciful.

For Chemically Treated Polishing Cloths.

Claims use since Mar. 10, 1932.

Ser. No. 328,070. NEW YORK MERCHANDISE CO. INC., New York, N. Y. Filed June 17, 1932.

Bestmaid

For Abrasive Pot Cleaners Made of Metallic Wire.

Claims use since January, 1922.

Ser. No. 328,518. H. S. BENEDIKT COMPANY, INC., New York, N. Y. Filed June 2, 1932.

GOLDEN DOME

For Dry Cleaning Fluid for Clothes, Upholstery, and General Household Use.

Claims use since June 1, 1932.

CLASS 5

Adhesives

Ser. No. 328,493. CHAS. A. KRAUSE MILLING CO., Milwaukee, Wis. Filed July 1, 1932.

TUXON

For Paper Hangers' Size.

Claims use since June 14, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 309,144. DR. RUDOLF REISS RHEUMASAN- UND LENICET-FABRIK, Berlin-Charlottenburg, Germany. Filed Dec. 18, 1930.

LENIRENIN

For Medicine for Treatment of Colds, Laryngitis, and Generally for Oral, Nasal, and Eye Treatment; Further for the Treatment of Hemorrhoids and Skin Diseases: Rhinita Acuta et Chronica, Hay Fever, Epistaxis, Affections of the Cavities of the Nose, Hemorrhages and Swellings after Nose Operations, Stomatitis Ulcerosa et Aphthosa, Angina, Pharyngitis, Laryngitis, Larynx-Tbc., Hemorrhages and Swellings after Tonsillotomy, Otitis Media, Catarrhs of the Conjunctiva, Ulcus Corneæ Catarrhal, Phlyctena (Blisters Following a Burn), Conjunctivitis, Keratitis, Erosio Corneæ, Epiphora, Blepharitis, Blepharospasmus, Eczema of the Eye-Lid, Ecsemas, Fissures, Burns, Acne, Erytherma, Irritative Dermatitis after Radiation-Treatments, Sun-Burns, Ulcus Cruris, Urticaria, Pruritus, Hemorrhoids, Analfissures, Proctitis, Colitis, Proctospasmas, Dysmenorrhea, Spastic Obstipations, Tenesmus.

Claims use since May 19, 1911.

Ser. No. 309,150. DR. RUDOLF REISS RHEUMASAN- UND LENICET-FABRIK, Berlin-Charlottenburg, Germany. Filed Dec. 18, 1930.

EXCLUD

For Suppositories, Medicines Against Spasms of All Kinds, Colics, Tenesmus of the Bladder and Urethra, Ulcus Ventriculi, Pyelitis, Cystitis, Prostatis, Hypertrophy of the Prostata, Dysmenorrhea, Proctitis, Hemorrhoids, Angina Pectoris, Migraine, Pertussin, Grippal Diseases, Rhinitis Vasomotoria, Hyperemesis Gravidarum, Atony of the Intestines, Engorgements of the Portal System, Swelling of the Liver, Hydrops, Decompensated Heart Affection, Myodegeneratio Cordis, Arythmia Perpetua, Ulcus Cruris, Palpitations of the Heart, Neurasthenic Irritations, Nervous Sleeplessness, Nervous Headache, Hemorrhages of the Uterus, Uterus Tumors, Endometritis, Atonia Uteri Post Partum, Lochiometra.

Claims use since Jan. 8, 1925.

Ser. No. 311,452. CARL STEVENS, doing business as The Gen-O-San Co., Los Angeles, Calif., assignor to Charles P. Diehl. Filed Feb 25, 1931.

GEN-O-SAN

For Antiseptic and Prophylactic Preparation.

Claims use since Nov. 1, 1930.

Ser. No. 314,828. VINCE LABORATORIES, INC., New York, N. Y. Filed May 20, 1931.

VINCE
The Scientific Mouth-Wash

No registration rights are claimed for the words "The Scientific Mouth-Wash." The lining in the drawing is intended to indicate the color blue.

For Mouth-Wash.

Claims use since Jan. 2, 1927.

Ser. No. 315,412. HENRY A. PAUL, doing business as Paul's Pharmacy Inc., Daytona Beach, Fla. Filed June 4, 1931.

Paul's
COCOTAN
FOR SUNBURN
"WHEN IT SHINES IT SOOTHES"

The words "For Sunburn" and "When It Shines It Soothes" are disclaimed apart from the other features of the mark shown in the drawing.

For Skin Lotion to Prevent Sun Burn and to Produce a Natural Tan Through the Agency of Sunshine.

Claims use since April, 1930.

Ser. No. 317,380. MARY GALLAGHER, New York, N. Y. Filed July 27, 1931.

J
M J
H

For Cream Used as a Tissue Builder.

Claims use since Apr. 2, 1931.

Ser. No. 318,406. MONA LEEA, LTD., New York, N. Y. Filed Aug. 25, 1931.

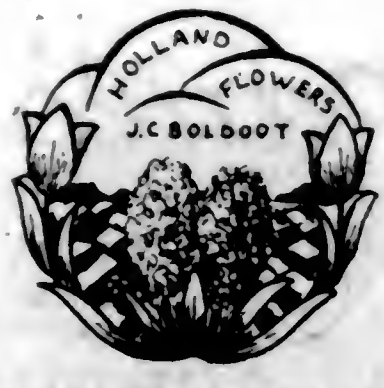


Sweat = off

For Cosmetic Creams to Induce Perspiration.

Claims use since May 15, 1931.

Ser. No. 320,366. NAAMLOOZE VENNOOTSCHAP EAU DE COLOGNE FABRIEK J. C. BOLDOOT, Amsterdam, Netherlands. Filed Oct. 23, 1931.



The words "Holland" and "Flowers" are disclaimed for registration purposes apart from the mark shown in the drawing.

For Perfumery, Eau-de-Cologne, Toilet Creams, Toilet Powders, Tooth Pastes, Tooth Powders, Shampoos, Brilliantine, Hair Wash, Mouth Wash, and Hair Tonics.

Claims use since July 25, 1931.

Ser. No. 322,463. LOREN M. HAESELER, doing business as Clay Cough Drop Co., Chicago, Ill. Filed Dec. 26, 1931. Under 10-year proviso.

CLAY'S

For Syrup for Coughs, Cough Drops, Cold Capsules, Liquid Inhalant for Head Colds and Medicinal Salve for Chest Colds and Sore Throat.

Claims use since July, 1893.

Ser. No. 324,102. OTTO GENSH, New York, N. Y. Filed Feb. 12, 1932.

FALBA

For Medicinal Teas for the Relief and as a Palliative for Colds, Costiveness, Indigestion, Dizziness, Liver and Kidney Complaints, and Rheumatism.

Claims use since Dec. 1, 1931.

Ser. No. 324,128. R. H. BRIGMAN COMPANY, Olin, N. C. Filed Feb. 13, 1932.



The applicant disclaims the words "Trade-Mark" as shown on the drawing, being descriptive and not capable of exclusive appropriation.

For Pneumonia Salve.

Claims use since Aug. 1, 1929.

Ser. No. 324,206. JAMES ZUPANSKI, Philadelphia, Pa. Filed Feb. 15, 1932.



The trade-mark, the subject of which, includes the applicant's signature, which is written in a distinct manner and is associated with his, the applicant's, portrait.

I hereby disclaim all the wording which appears on the drawing except the applicant's name, "James Zupanski's."

For Preparation for the Treatment of Scalp Diseases Such as Eczema, Dandruff, Falling Hair, Itching Scalp, and Has the Efficacy to Grow New Hair on Bald Heads.

Claims use since June 2, 1931.

Ser. No. 324,688. MARINE CHEMICALS COMPANY, LTD., South San Francisco and San Francisco, Calif. Filed Feb. 29, 1932.



For Pharmaceutical Preparation Containing Magnesium Hydroxide and the Salts of Other Elements Present in Ocean Water and Used as an Antiacid, a Laxative or a Mouth Wash.

Claims use since February, 1932.

Ser. No. 324,712. KEEPAWAY LABORATORY, London, England. Filed Mar. 2, 1932.

KEEPAWAY

For Veterinary or Sanitary Preparation for the External Treatment of Animals While in Season.

Claims use since Dec. 15, 1929.

Ser. No. 325,945. THE FRANKLIN OIL & GAS COMPANY, Bedford, Ohio. Filed Apr. 9, 1932.

FRANKLIN
RUSTFOIL

For Preparation for Prevention and Elimination of Rust.
Claims use since Mar. 1, 1931.

Ser. No. 326,166. ALICE C. SMITH, Madison, N. J. Filed Apr. 15, 1932.

"PEK"

For Hair Tonic, Hair Grower, Hair Straightening Oil, and Hair Restorer.
Claims use since Dec. 1, 1931.

Ser. No. 326,242. T. W. ROBNETT, Portland, Oreg. Filed Apr. 14, 1932.

ATH-LEX



For Pharmaceutical Preparation of an Alcoholic Solution of Gums Used in the Treatment of Trichophytosis.
Claims use since Sept. 1, 1931.

Ser. No. 326,696. ROSA K. TRATTNER, Los Angeles, Calif. Filed May 2, 1932.

ROSE K. TRATTNER'S



The portrait forming a feature of the mark is that of the applicant.
For Nutritious Herbal Preparation Used for a Tissue Building Stimulant.
Claims use since Apr. 27, 1932.

Ser. No. 326,826. JOSEPH LUNTZ, Brooklyn, N. Y. Filed May 6, 1932.

VIGOVITE

For Laxative Tonic.
Claims use since Apr. 29, 1932.

Ser. No. 326,835. TOWNS & JAMES, INC., doing business as Plymouth Laboratories, Brooklyn, N. Y. Filed May 6, 1932.

PLYMO

For Internal and External Pharmaceutical and Medicinal Preparations—Namely, an "Emulsion of Mineral Oil and Agar-Agar with Phenolphthalein," for Use in the Treatment of Gastritis, Constipation, Indigestion, Irregular Elimination, and Other Disorders of the Alimentary Tract; "Suppositories" for the Evacuation of the Bowels and for Relieving Constipation of Infants, Young Children, and Adults; "Inhalent" a Liquid Used Externally in the Treatment of Head Colds.
Claims use since 1931.

Ser. No. 326,936. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del. Filed May 10, 1932.

DU PONT
PARAZENE

The words "Reg. U. S. Pat. Off." are disclaimed apart from the mark as shown in the drawing.

For Repellent of Moths, Peach Tree Borers, and Other Insects.

Claims use since May 4, 1932.

Ser. No. 326,966. EDWARD E. RUTHERFORD, Toronto, Ontario, Canada. Filed May 9, 1932.

VIT-ALEXIN

For Medical Preparation for the Relief of Neurasthenia and Cognate Diseases for Intramuscular Injection.

Claims use since Apr. 30, 1932.

Ser. No. 326,978. MILLE FLEURS, INC., New York, N. Y. Filed May 11, 1932.

Frederick Body

The name appearing in the drawing is a facsimile of the signature of the president of the corporation.

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs; Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes and Toilet Waters.

Claims use since May 7, 1932.

Ser. No. 326,997. AMERICAN BIOCHEMICAL CORPORATION, Cleveland, Ohio. Filed May 7, 1932.

PARACELSUS

A B C PARACELSUS

For Combination of Mineral Salts Used to Aid in Supplying, in Concentrated Form, the Mineral Salts Which are Sometimes Found Deficient in the Daily Diet.

Claims use since Oct. 1, 1931.

Ser. No. 327,054. ELWOOD J. GOODIER, doing business as The Goodier Company, Dallas, Tex. Filed May 13, 1932.

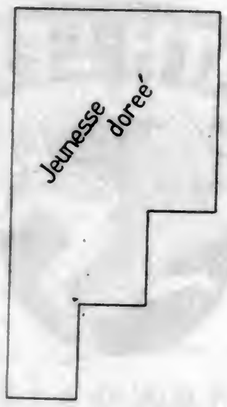


Applicant disclaims the use of the words "Kitchen Hand Lotion" apart from the trade-mark as shown.

For Hand Lotion.

Claims use since Mar. 14, 1932.

Ser. No. 327,124. ETHEL G. ANDERSON, Chicago, Ill. Filed May 16, 1932.



For Perfumes, Facial Creams, Face and Body Powders, Rouges, Bath Salts, Lipstick.

Claims use since Nov. 1, 1930.

Ser. No. 327,221. HAMPDEN PAINT & CHEMICAL COMPANY, Springfield, Mass. Filed May 18, 1932.

HAMPDEN PROCESS

The applicant is the owner of T. M. registration No. 124,306 for the word "Hampden," granted under the 10-year proviso. The word "Process" in the drawing is disclaimed apart from the mark as shown.

For Water-Proofing Chemicals.

Claims use since May 3, 1932.

Ser. No. 327,267. ABRAHAM M. LIEBMAN, doing business as Lam Laboratories, Philadelphia, Pa. Filed May 18, 1932.

LAM

For Cream for the Treatment of Colds, Neuralgia, Rheumatic Pains, Skin Troubles, and Other Ailments Due to Congestion.

Claims use since Mar. 1, 1926.

Ser. No. 327,268. YORK AND COMPANY, Grand Rapids, Mich. Filed May 18, 1932.



Applicant disclaims the words "Gold Medal" except in connection with the mark shown.

For Salt.

Claims use since Feb. 9, 1932.

Ser. No. 327,286. PENN-JERSEY AUTO STORES, INC., Easton, Pa. Filed May 20, 1932.



The words "All-Ways the Best" are disclaimed apart from the other features of the mark shown in the drawings.

For Liquid Radiator Stop Leak Compound.

Claims use since Mar. 1, 1931.

Ser. No. 327,297. HERBARIA HERB CO., Chicago, Ill. Filed May 18, 1932.

Herbaria

For Mixtures of Herbs for Purifying the Blood, Liver and Kidney Ailments, Arteriosclerosis, Rheumatism, Nervous Ailments, Stomach Ailments, Diabetes, Gallstones, Piles and Hemorrhoids, Cough, Asthma and Catarrh, Checked Menstruation, and Reducing.

Claims use since Dec. 1, 1930.

Ser. No. 327,336. BLOOMINGDALE BROS., INC., New York, N. Y. Filed May 23, 1932.

TRAV·IL·AIDS

BLOOMINGDALE'S
NEW YORK

The words "Bloomingdale's" and "New York" are disclaimed apart from the mark as shown in the drawing.

For Spirits of Camphor U. S. P., Spirits of Nitre U. S. P., Aromatic Spirits of Ammonia U. S. P., Tincture of Iodine U. S. P., Essence of Peppermint U. S. P., Rhubarb and Soda Tablets, Aspirin Tablets 5 Grain, Soda Mint Tablets 5 Grain, Cascara Sagrada Tablets 5 Grain, Saccharin Tablets ½ Grain, and Sodium Bicarbonate Tablets 5 Grain.

Claims use since May 12, 1932.

Ser. No. 327,362. PETER F. KLOEPPINGER, doing business as The Dan-Gon Manufacturers, Denver, Colo. Filed May 23, 1932.

DAN-GON

For Liquid Dandelion Killer.

Claims use since Apr. 1, 1932.

Ser. No. 327,384. FRANK E. BOGA, doing business as Du-Best Family Remedy Co., Brooklyn, N. Y. Filed May 21, 1932.

Du-Best

Applicant hereby disclaims any right, title, or interest or patent to the word "Best" as used in applicant's trade-mark.

For Skin Salve and Ointment.

Claims use since Jan. 1, 1932.

Ser. No. 327,407. PARFUMERIE ST. DENIS, New York, N. Y. Filed May 24, 1932.

AUF WIEDERSEHEN

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.

Claims use since Mar. 15, 1932.

Ser. No. 327,577. BU-CU-MINT COMPANY, Binghamton, N. Y. Filed May 31, 1932.

BU-CU-MINT

The word "Mint" is disclaimed for registration purposes apart from the mark shown in the drawing.

For Diuretic Liquid Medicine.

Claims use since Jan. 6, 1932.

Ser. No. 327,625. D C A DRUG STORES INC., Portland, Oreg. Filed June 1, 1932.



The representation of the label is disclaimed per se apart from the other features of the mark shown in the drawing.

For Face Cream and Face Powder.

Claims use since May 15, 1931.

Ser. No. 327,627. D C A DRUG STORES INC., doing business as D. C. A. Laboratories, Portland, Oreg. Filed June 1, 1932.

HYMOL

For Reconstructive Tonic.

Claims use since May 15, 1931.

Ser. No. 327,703. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla. Filed June 3, 1932.

HYCO-GAS

The word "Gas" appearing in the drawing is disclaimed apart from the mark shown in the drawing.

For Gas for Commercial and Domestic Purposes.

Claims use since May 31, 1932.

Ser. No. 327,755. THE HYGIENIC PRODUCTS COMPANY, Canton, Ohio. Filed June 6, 1932.



For Cleaning Powder for Automobile Radiators.

Claims use since Oct. 3, 1927.

Ser. No. 327,756. THE HYGIENIC PRODUCTS COMPANY, Canton, Ohio. Filed June 6, 1932.

Sani-Flush

For Cleaning Powder for Automobile Radiators.

Claims use since Apr. 1, 1922.

Ser. No. 327,770. POND'S EXTRACT COMPANY, New York, N. Y. Filed June 6, 1932.



For Face Powder.

Claims use since May 7, 1932.

Ser. No. 327,794. GEORGE H. HYLAND, doing business as Standard Homeopathic Company, Los Angeles, Calif. Filed June 7, 1932.

HESOC

For Laxative Preparation, Consisting of African Plantain Demulcent Seed, Food Charcoal, Lactose and Dextrin.

Claims use since May 20, 1930.

Ser. No. 327,806. ROYAL LABORATORIES, INC., Newark, N. J., and New York, N. Y. Filed June 7, 1932.

DIOTHYMOEUCADINE

For Germicidal Preparation for the Treatment of Pyorrhea, Alveolaris, Trench Mouth, Infected Canals, Abscesses, Syphilis Manifestations in Oral Cavity.

Claims use since May 23, 1930.

Ser. No. 327,807. ROYAL LABORATORIES, INC., Newark, N. J., and New York, N. Y. Filed June 7, 1932.

PYRL

For Preparation for the Treatment of Inflamed, Spongy, and Receded Gums.

Claim's use since May 23, 1928.

Ser. No. 327,816. AMTORG TRADING CORPORATION, New York, N. Y. Filed June 8, 1932.

SOLNIC

For Insecticide, Vermicide and Animal Dip.

Claims use since March, 1932.

Ser. No. 327,835. ROYAL LABORATORIES, INC., Newark, N. J. Filed June 8, 1932.

ANTINEX

For Preparation for the Treatment of Athlete's Foot and Impetigo.

Claims use since Apr. 10, 1932.

Ser. No. 327,850. BERNHARD KOHN, doing business as The Medicinal Products Co., Long Island City, N. Y. Filed June 9, 1932.

CITROSALVEN

For Medicinal Preparation to be Employed Intravenously in the Treatment of Gastric and Duodenal Ulcer and Other Conditions Affecting the Gastro-Intestinal Tract.

Claims use since May 5, 1932.

Ser. No. 328,023. ETHEL ZEMAN, Los Angeles, Calif. Filed June 15, 1932.

PYORAGO

For Medicinal Preparation in Powdered Form for Cleaning the Teeth and for Relief of Trench Mouth and Other Diseases of the Mouth.

Claims use since June 6, 1932.

CLASS 12

Construction Materials

Ser. No. 321,565. A. C. HORN COMPANY, Long Island City, N. Y. Filed Nov. 28, 1931.

HYDRATITE

For Integral Waterproofing for Concrete, Cement, and Lime Mortars.

Claims use since Jan. 1, 1912.

Ser. No. 327,091. L. DEL TURCO & BROS., INC., Harrison, N. J. Filed May 14, 1932.

INTEGRO

For Steps, Flooring Sections, Stair Treads, Aggregate Stair Treads, Non-Slip Stair Treads, and Stair Treads Having Abrasive Elements Secured Therein and/or Thereto.

Claims use since May 9, 1932.

Ser. No. 327,787. ERNEST F. BRANTBERGER, Denver, Colo. Filed June 7, 1932.



The words "Root Beer Kegs" and the representation of the goods are disclaimed apart from the other features of the mark shown in the drawings.

For Dispensing Booths Simulating Huge Kegs.

Claims use since April, 1929.

Ser. No. 328,269. THE DUTY LUMBER CO., Wheeling, W. Va. Filed June 24, 1932.

DUCOLUM

For Lumber and Wood Shingles.

Claims use since Dec. 14, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 327,914. MIDWEST HARDWARE COMPANY, Chicago, Ill. Filed June 11, 1932.

APRIL SHOWERS

For Lawn Sprinklers.
Claims use since May 27, 1932.

CLASS 15

Oils and Greases

Ser. No. 327,068. RICHFIELD OIL CORPORATION OF NEW YORK, New York, N. Y. Filed May 13, 1932.

ROCO PENN

The word "Penn" is disclaimed apart from the mark as shown.
For Petroleum Products—Namely, Lubricating Oils and Motor Lubricating Oils.
Claims use since Apr. 20, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 318,232. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Dry and Ready Mixed Paints and Paint Pigments Used in the Manufacture of Paints, Varnishes, Lacquers, Painters' Fluids for Staining or Oozing, Wax Floor Polish, Automobile and Furniture Polish, and Painting Materials—Namely, Paint Colors, Pigments, Oils, Casein, and the Like.
Claims use since Sept. 24, 1930.

Ser. No. 322,024. MIDWAY CHEMICAL COMPANY, Chicago, Ill. Filed Dec. 11, 1931.

SUPER DEFIANCE

For Polish for Furniture, Automobiles, and Painted, Varnished, or Lacquered Surfaces.
Claims use since July 1, 1931.

Ser. No. 327,797. GERTRUDE A. KREYMER, Spokane, Wash. Filed June 7, 1932.

S.Q.S

Gertrude A. Kreymer

The signature on the drawing is an exact facsimile of that of applicant.
For Furniture and Automobile Polish.
Claims use since May 2, 1923.

CLASS 20

Linoleum and Oiled Cloth

Ser. No. 326,778. CARTHAGE MILLS INCORPORATED, Cincinnati, Ohio. Filed May 5, 1932.

CARTHA-GHAN

For Floor-Coverings Comprising a Felt-Like Base Having a Colored Fibrous Surface.
Claims use since Apr. 25, 1932.

Ser. No. 326,779. CARTHAGE MILLS INCORPORATED, Cincinnati, Ohio. Filed May 5, 1932.

CARTHASAR

For Floor-Coverings Comprising a Felt-Like Base Having a Colored Fibrous Surface.
Claims use since Apr. 25, 1932.

Ser. No. 326,780. CARTHAGE MILLS INCORPORATED, Cincinnati, Ohio. Filed May 5, 1932.

CARTHASTAN

For Floor-Coverings Comprising a Felt-Like Base Having a Colored Fibrous Surface.
Claims use since Apr. 8, 1932.

Ser. No. 327,343. CORTICINE FLOOR COVERING COMPANY LIMITED, London, England. Filed May 23, 1932.

CORTICINE

For Linoleum and Oil Cloth.
Claims use since 1873.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 319,973. CAMPBELL-HARRIS BATTERY CORPORATION, Kansas City, Mo. Filed Oct. 12, 1931.



For Storage Batteries.
Claims use since August, 1917.

Ser. No. 321,378. COLONIAL RADIO CORPORATION, Buffalo, N. Y. Filed Nov. 21, 1931.

SKYLARK

For Radio Receiving Sets and Parts Thereof.
Claims use since Jan. 19, 1931.

Ser. No. 325,208. CASSIDY COMPANY, INCORPORATED, Long Island City, N. Y. Filed Mar. 17, 1932.

BI-FLECTOR

BRIDGE LAMP

No claim being made for the words "Bridge Lamp" apart from the trade-mark shown in the drawing.
For Electric Lighting Fixtures, Consisting of Wall Brackets, Chandeliers, and the Like; Complete Electric Floor and Table Lamps.
Claims use since Feb. 21, 1932.

Ser. No. 327,494. ATLAS SUPPLY COMPANY, Newark, N. J. Filed May 27, 1932.

ATLAS

For Storage Batteries, Storage Battery Chargers, Electric Fuses, Flash Lights, Flash Light Batteries, Battery Cables, Miniature Electric Light Bulbs, and Insulating Tape.
Claims use since May, 1917, on electric fuses, electric lamps, and electrical insulating material; since July, 1926, on electric batteries; since June, 1931, on electric batteries, battery chargers; and since November, 1931, on electric fuses, flash lights, flash light batteries, battery cables, miniature electric light bulbs, and insulating tape.

Ser. No. 327,851. FREDERICK LOESER & CO., INC., Brooklyn, N. Y. Filed June 9, 1932.

Campaigner

For Radio Receiving Sets.
Claims use since May 3, 1932.

Ser. No. 328,152. ATLAS SUPPLY COMPANY, Wilmington, Del., and Newark, N. J. Filed June 21, 1932.

MONITOR

For Storage Batteries.
Claims use since June 6, 1932.

Ser. No. 328,153. ATLAS SUPPLY COMPANY, Wilmington, Del., and Newark, N. J. Filed June 21, 1932.

PAR-VAL

For Storage Batteries.
Claims use since June 6, 1932.

Ser. No. 328,298. HATHEWAY & COMPANY, INC., New York, N. Y. Filed June 24, 1932.

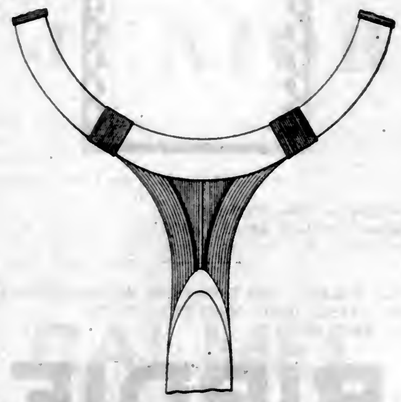
SUPERDUCT

For Non-Metallic Flexible Electric Conduit.
Claims use since April, 1924.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 325,097. HORACE W. HALL, Newton, Mass. Filed Mar. 14, 1932.



The mark consists of a narrow white stripe between two red triangular areas in the throat of the racket. No claim is made to the representation of a part of a tennis racket shown on the drawing.
For Tennis Rackets.
Claims use since June 12, 1924.

Ser. No. 327,900. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed June 11, 1932.



The shading in the drawing indicates a green color. The trade-mark consists of a single green diamond impressed in the surface of a cueball. No claim is made to the representation of the cue ball.

For Cue Balls for Pocket-Billiards.

Claims use since June 1, 1932.

Ser. No. 328,412. SNYDER & BLACK, INC., New York, N. Y. Filed June 25, 1932.



For Bridge Game Package.

Claims use since Apr. 27, 1932.

Ser. No. 328,596. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed July 7, 1932.

BIRDIE

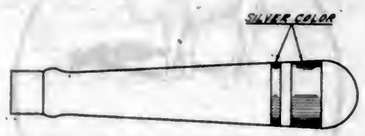
For Artificial Bait.

Claims use since June 17, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 317,292. THE A. & J. MANUFACTURING CO., Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill., a Corporation of Illinois. Filed July 25, 1931.

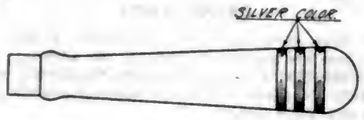


The trade-mark consists in one wide and one narrow silver color stripe on the free end of the handles of the goods as indicated by the lining shown in the drawing. The representation of the handle, the legend "Silver Color," and the lead lines thereof are disclaimed.

For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Pan Greasers, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers; Egg Beaters, Covers, and Bowls (Sets); Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Mechanical Flour Sifters.

Claims use since May, 1931.

Ser. No. 317,293. THE A. & J. MANUFACTURING CO., Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill., a Corporation of Illinois. Filed July 25, 1931.



The trade-mark consists in three silver color stripes on the free end of the handles of the goods as indicated by the lining shown in the drawing. The representation of the handle, the legend "Silver Color," and the lead lines thereof are disclaimed.

For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Pan Greasers, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers; Egg Beaters, Covers, and Bowls (Sets); Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Mechanical Flour Sifters.

Claims use since May, 1931.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 318,047. CHUM RAZOR BLADE CORPORATION, Detroit, Mich. Filed Aug. 17, 1931.



The word "Blade" is disclaimed, apart from the mark shown.

For Razor Blades.

Claims use since July 11, 1931.

Ser. No. 323,109. THE NATIONAL CASH REGISTER COMPANY, Dayton, Ohio. Filed Jan. 13, 1932.

National

Applicant claims ownership of the following trade-mark registrations: No. 41,421, dated Nov. 3, 1903; No. 53,129, dated May 29, 1906; No. 64,900, dated Aug. 27, 1907; No. 133,291; dated July 20, 1920; No. 134,258, dated Aug. 24, 1920; No. 136,876, dated Nov. 9, 1920; No. 242,365, dated May 22, 1928; No. 264,236, dated Nov. 19, 1929; No. 264,237, dated Nov. 19, 1929.

For Paper Slitting and Stacking Machines.

Claims use since June 12, 1930.

Ser. No. 323,644. WORTHINGTON PUMP AND MACHINERY CORPORATION, New York, N. Y. Filed Jan. 30, 1932.

WORTHINGTON

Applicant claims ownership of registrations: No. 155,130, dated May 16, 1922; No. 153,081, dated Mar. 7, 1922; and also No. 155,874, dated June 6, 1922.

For Rock Drills, Rock Hammers, Sinkers, Drifters, Plug and Feather Drills, Foot Hole Drills, Tripod Drills, Self Feeding Rock Drills, Channel Bar Drills, Broaching Drills, Pavement Breakers, Asphalt Cutters, Concrete Breakers, Shaft Sinkers, Block Holers, Self-Rotating Stopers, Hand-Rotated Stopers, Column and Bar Drills; Drill Bits, Moil Points, Chisels, Tampers, Air Line Manifolds, Tunnel Bars and Clamps, Columns and Arms and Clamps, Tripods, Quarry Bars, Roving Trucks, Drill Steel Heat Treating Machines, and Reaming Gauge Drill Bit Die Equipment.

Claims use since September, 1930.

Ser. No. 323,645. WORTHINGTON PUMP AND MACHINERY CORPORATION, New York, N. Y. Filed Jan. 30, 1932.



For Rock Drills, Rock Hammers, Sinkers, Drifters, Plug and Feather Drills, Foot Hole Drills, Tripod Drills, Self Feeding Rock Drills, Channel Bar Drills, Broaching Drills, Pavement Breakers, Asphalt Cutters, Concrete Breakers, Shaft Sinkers, Block Holers, Self-Rotating Stopers, Hand-Rotated Stopers, Column and Bar Drills; Drill Bits, Moil Points, Chisels, Tampers, Air Line Manifolds, Tunnel Bars and Clamps, Columns and Arms and Clamps, Tripods, Quarry Bars, Roving Trucks, Drill Steel Heat Treating Machines, and Reaming Gauge Drill Bit Die Equipment.

Claims use since September, 1930.

Ser. No. 325,759. LANDON P. SMITH, INC., Irvington, N. J. Filed Apr. 2, 1932.

Red Devil

Applicant is the owner by assignment of trade-mark registrations No. 87,669, July 30, 1912; No. 97,732, June 16, 1914; No. 162,120, Dec. 5, 1922; No. 169,874, July 3, 1923, for the mark "Red Devil" so far as said registrations pertain to or embrace all the goods herein enumerated.

For Glazier Scrapers for Surfaces of Glass, Wood, Metal, or Other Substances, Coated or Uncoated in Whole or in Part.

Claims use since Feb. 1, 1900.

Ser. No. 327,164. MISSION DRY CORPORATION, LTD., Los Angeles, Calif. Filed May 16, 1932.

JUNIOR

For Beverage Dispensers—Namely, Fruit Juice Dispensers and Combination Soda Fountain and Fruit Juice Dispensers.

Claims use since Dec. 18, 1931.

Ser. No. 327,578. CALMEC MFG. CO. LTD., Los Angeles, Calif. Filed May 31, 1932.

CALMEC

For Oil Field Equipment—Namely, Crown Blocks, Rotary Tables, Line Spoolers, Cement Heads, Counter Balances, Pitmans, Rod Spiders, Tubing Spiders, Drill Pipe Spiders, Chain Tighteners, Pump Valves, Pump Pistons.

Claims use since January, 1927.

Ser. No. 327,723. BOSTON GEAR WORKS, INC., North Quincy, Mass. Filed June 4, 1932.



For Spur Gears, Worm Gears and Worms Therefor; Miter Gears, Spiral Gears, Spiral Miter Gears, Non-Metallic Gears, Change Gears, Internal Gears, Bevel Gears, Racks and Pinions Therefor; Chain Drives, Sprocket Wheels, Jaw, Sleeve, and Flexible Couplings; Anti-Friction Bearings, Bushings, Universal Joints, Oil Cups, Pillow Blocks, Pulleys, Speed Reducers, and Pinion Rods.

Claims use since Dec. 15, 1915.

Ser. No. 328,092. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio. Filed June 18, 1932.

THERMOLECTRIC

For Tire Repair Vulcanizing Apparatus—Namely Inner Tube Vulcanizing Plates, Inside Curing Arms, Tire Tread Repair Molds, and Spot Patchers.

Claims use since June 1, 1927, to inner tube vulcanizing plates; Jan. 28, 1930, to inside curing arms; Dec. 1, 1929, to tire tread repair molds and spot patchers.

Ser. No. 328,321. BYRON JACKSON CO., Los Angeles, Calif. Filed June 27, 1932.

HYDROPRESS

For Centrifugal and Turbine Pumps and Parts Therefor.

Claims use since May 31, 1932.

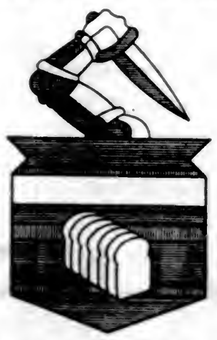
Ser. No. 328,402. MAC-ROH SALES & MANUFACTURING CO., Bettendorf, Iowa. Filed June 29, 1932.

SLICE-MASTER

For Bread Slicing Machinery.

Claims use since Apr. 30, 1932.

Ser. No. 328,403. MAC-ROH SALES & MANUFACTURING CO., Bettendorf, Iowa. Filed June 29, 1932.



The lining in the drawing represents conventional coloring, no particular color, or combination of colors however being claimed.

For Bread Slicing Machinery.

Claims use since Apr. 30, 1932.

Ser. No. 328,445. CHARLES D. MORTON, Chicago, Ill. Filed June 30, 1932.

VEND-GARD

For Vending Machine for Paper Articles.

Claims use since May 1, 1932.

CLASS 24

Laundry Appliances and Machines

Ser. No. 318,219. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Laundry Driers—Namely Laundry Drying Rooms, Laundry Drying Racks, Laundry Drying Machines, and Laundry Drying Extractors.

Claims use since Sept. 24, 1930.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 316,672. THE TABULATING MACHINE COMPANY, New York, N. Y. Filed July 6, 1931.

BUSINESS INTERNATIONAL MACHINES

Applicant disclaims the words "Business Machines" except as a part of the mark as shown in the drawing.

For Card Controlled Tabulating Machines, Card Punching Machines, Card Sorting Machines, Card Duplicating Machines, Card Controlled Listing Machines, Card Interpreting Machines, and Punched Card Verifying Machines.

Claims use since Feb. 22, 1926. Apr. 14, 1926, on card controlled tabulating machines; Feb. 22, 1926, on card punching machines; Mar. 24, 1926, on card sorting machines; Apr. 28, 1926, on card duplicating machines; Apr. 14, 1926, on card controlled listing machines; Mar. 26, 1927, on card interpreting machines; Aug. 21, 1926, on punched card verifying machines.

Ser. No. 326,014. JOSEPH P. GAUGLER, doing business as The Fiatelle Company, New York, N. Y. Filed Apr. 12, 1932.

COLORHELM

For Color Display Card Used as a Device for Matching and Harmonizing Colors.

Claims use since Sept. 1, 1930.

Ser. No. 327,648. FAIRCHILD-WOOD VISAPHONE CORPORATION, New York, N. Y. Filed June 2, 1932.

VISACOLOR

For Sensitized Photographic Film.

Claims use since Feb. 13, 1932.

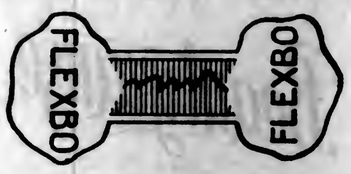
Ser. No. 327,649. FAIRCHILD-WOOD VISAPHONE CORPORATION, New York, N. Y. Filed June 2, 1932.

VISAFILM

For Sensitized Photographic Film.

Claims use since Jan. 15, 1932.

Ser. No. 327,913. E. B. METROWITZ, INC., New York, N. Y. Filed June 11, 1932.



The lining shown on the drawing is used for purposes of shading only.

For Spectacle Frames.

Claims use since May 13, 1932.

Ser. No. 328,042. SOLESCOPE INCORPORATED, Boston, Mass. Filed June 16, 1932.

SOLESCOPE

For Picture Projecting Apparatus and Slides Therefor.

Claims use since May 6, 1932.

Ser. No. 328,371. A. LANDIS RILEY, doing business as Landis Manufacturing Company, Atlantic City, N. J. Filed June 28, 1932.

BATRICHEK

For Battery Water Level Indicator.

Claims use since June 11, 1932.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 325,142. JOSEPH GRANAT, doing business as Granat Bros., San Francisco, Calif. Filed Mar. 15, 1932.

Lily-of-the-Valley

For Finger Rings.

Claims use since Jan. 2, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 326,434. STEWART-WARNER CORPORATION, Chicago, Ill. Filed Apr. 23, 1932.



For Refrigerating Apparatus.

Claims use since Mar. 21, 1932.

Ser. No. 326,924. BARKER BROS. INCORPORATED, Los Angeles, Calif. Filed May 9, 1932.

FREEZ-O

No claim is made to the word "Freez" except in the association shown on the drawing.

For Refrigerators.

Claims use since Feb. 21, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 322,564. THE STEARNS & FOSTER CO., Cincinnati and Lockland, Ohio. Filed Dec. 30, 1931.

HOSTESS

For Mattresses.
Claims use since July 1, 1931.

Ser. No. 322,565. THE STEARNS & FOSTER CO., Cincinnati and Lockland, Ohio. Filed Dec. 30, 1931.

Insulo
Spring Cushion

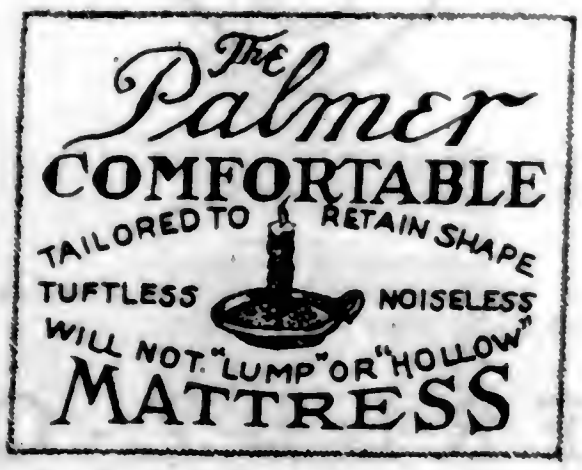
No claim being made to the words "Spring Cushion" apart from the mark as shown.
For Spring Cushion Construction.
Claims use since May 27, 1931.

Ser. No. 325,455. BARKER BROS. INCORPORATED, Los Angeles, Calif. Filed Mar. 25, 1932.

SPAN-MILANO

The geographical term "Milano" is disclaimed apart from the other features of the mark.
For Living Room, Dining Room, and Bed Room Furniture—Namely, Tables, Chairs, Beds, Dressers, Highboys, Chiffoniers, Chifforobes, Dressing Tables, Vanities, Benches, Clothing Cabinets, Kitchen Cabinets, Chinaware Cabinets, Linen Cabinets, Cedar Chests, Cabinets for Silverware, Costumers, Trunk Racks in the Nature of Furniture, Stools, Servers, Buffets, Tea Wagons, Book Wagons, Book Racks, Book Blocks, Book Ends, Mirror Frames, Secretaries, Bookcases, Magazine Stands, Muffin Stands, Hanging Wall Racks, Sewing Stands, Dressing Screens, Partitioning Screens, Folding Tray Stands, Davenports, Sofas, Wardrobes, Telephone Stands, Tabourettes, Desks, Settees, Commodes, Washstands, Picture Frames, Pedestals.
Claims use since Jan. 1, 1932.

Ser. No. 326,869. THE PALMER BROTHERS CO., New London, Conn. Filed May 7, 1932.



Applicant disclaims all right, title, and interest in and to all of the wording in the drawing excepting the words "The Palmer."
For Mattresses.
Claims use since Apr. 28, 1932.

CLASS 33

Glassware

Ser. No. 318,226. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Glass in All Forms, Table and Flat Glassware, Glass in Bulk, Glassware, Plate Glass, Sheet Glass, and Reinforced Glass.
Claims use since Sept. 24, 1930.

Ser. No. 327,191. HOFFMANN-HAYMAN COFFEE CO., San Antonio, Tex. Filed May 17, 1932.

Crystalvac

For Empty Glass Jars.
Claims use since Apr. 1, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 324,264. ODIN STOVE MANUFACTURING COMPANY, Erie, Pa. Filed Feb. 17, 1932.

Beautyrange

No claim is made to the word "Range" apart from the mark as shown.
For Gas Stoves and Ranges.
Claims use since Dec. 1, 1931.

Ser. No. 327,734. MOTOR WHEEL CORPORATION, Lansing, Mich. Filed June 4, 1932.

Weather Control

For Air Circulating Oil Burning Furnaces for Heating and Otherwise Conditioning Air Supplied to Living Rooms.
Claims use since August, 1929.

Ser. No. 328,019. SCOTT-BALLANTYNE COMPANY, Omaha, Nebr. Filed June 15, 1932.

"MAGIC-WEATHER"

For Air Conditioning Equipment—Namely, Blower Type Fans and Air Washers for Cooling and Ventilating.
Claims use since Feb. 15, 1932.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 313,397. VICTOR MANUFACTURING & GASKET COMPANY, Chicago, Ill. Filed Apr. 15, 1931.

V

For Gaskets.
Claims use since Dec. 1, 1910.

Ser. No. 328,332. KELLY-SPRINGFIELD TIRE COMPANY, New York, N. Y. Filed June 27, 1932.

DISPATCH

For Automobile Tires of Rubber or Rubber and Fabric.
Claims use since June 22, 1932.

CLASS 36

Musical Instruments and Supplies

Ser. No. 327,650. FAIRCHILD-WOOD VISAPHONE CORPORATION, New York, N. Y. Filed June 2, 1932.

VISAFLEX

For Phonograph Records.
Claims use since Mar. 19, 1932.

CLASS 37

Paper and Stationery

Ser. No. 320,882. THE WAHL COMPANY, Chicago, Ill. Filed Nov. 6, 1931.

DORIC

For Fountain Pens and Pencils.
Claims use since Apr. 9, 1931.

Ser. No. 322,399. THE PARKER PEN COMPANY, Janesville, Wis. Filed Dec. 23, 1931.

PARCO

For Pencils, Fountain Pens, Desk Sets, and the Component Parts Thereof.
Claims use since Apr. 7, 1931.

Ser. No. 328,258. AMERICAN SALES BOOK COMPANY, LIMITED, Toronto, Ontario, Canada, and Niagara Falls and Elmira, N. Y. Filed June 24, 1932.

SPEEDISET

For Paper and Stationery, Particularly Record Forms.
Claims use since June 19, 1931.

Ser. No. 328,414. Z. & W. M. CRANE, INC., Dalton, Mass. Filed June 28, 1932.

TINTAB

For Writing Paper and Envelopes.
Claims use since June 1, 1932.

Ser. No. 328,592. SCOTT PAPER COMPANY, Chester, Pa. Filed June 25, 1932.



For Tissue, Creped, and Absorbent Papers.
Claims use since Apr. 30, 1932.

CLASS 38

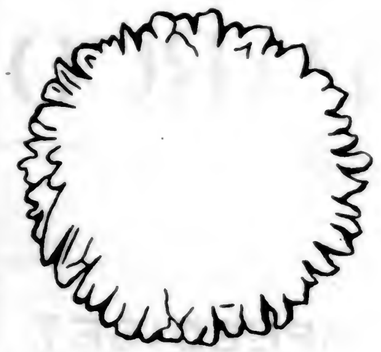
Prints and Publications

Ser. No. 284,477. WARREN W. MAYTROTT, doing business as Dahliadel Nurseries, Vineland, N. J. Filed May 22, 1929.

DAHLIADEL NURSERIES

For Illustrated Yearly Catalogs.
Claims use since Feb. 15, 1911.

Ser. No. 284,478. WARREN W. MAYTROTT, doing business as Dahliadel Nurseries, Vineland, N. J. Filed May 22, 1929.



For Illustrated Yearly Catalogs.
Claims use since Feb. 20, 1917.

Ser. No. 317,161. THE CLAYTON MAGAZINES, INC., New York, N. Y. Filed July 21, 1931.

The WESTERNER

For Periodical.
Claims use since March, 1931.

Ser. No. 326,802. AMERICAN HEBREW PUBLISHING COMPANY, New York, N. Y. Filed May 6, 1932.

American Hebrew and Jewish Tribune

For Periodical.
Claims use since Feb. 12, 1932.

Ser. No. 327,721. HENRY YOUNG, Clarion, Pa. Filed June 3, 1932.



For Numerical Puzzles Run as a Column in Newspapers and Magazines.
Claims use since May 5, 1932.

Ser. No. 328,051. THE STANDARD STATISTICS COMPANY, INC., New York, N. Y. Filed June 16, 1932.

Standard Investor's Guide

For Publications Issued Periodically.
Claims use since Feb. 1, 1932.

Ser. No. 328,132. HARRY T. MADDEN, doing business as Kennedy Kane, Brooklyn, N. Y. Filed June 20, 1932.

Whatever Happened to ?

For Column or Section of Daily Newspaper.
Claims use since June 12, 1932.

CLASS 39

Clothing

Ser. No. 300,384. WESTERN GARMENT MFG. CO., Wichita, Falls, Tex. Filed May 12, 1930.

WICHITA BRAND



Little Chief

No claim being made to the word "Brand" apart from the mark as shown on the drawing.
For Boys' Pants, Boys' Shirts, and Boys' Play Suits.
Claims use since Apr. 1, 1930.

Ser. No. 315,863. MODISHFORM BRASSIERE CO. INC., New York, N. Y. Filed June 15, 1931.

"Jr. Mode" FREE BREATHING

No claim is made herein to the words "Mode" and "Free Breathing" apart from the trade-mark as shown.
For Brassières, Bandeaux, and Girdles; Corsets, Women's Underwear, Pajamas, Negligees, Women's Petticoats, and Slips.
Claims use since Apr. 21, 1931.

Ser. No. 325,334. LORCH MANUFACTURING COMPANY, Dallas, Tex. Filed Mar. 21, 1932.

College Campus



For Women's and Misses' Silk Frocks.
Claims use since Mar. 1, 1932.

Ser. No. 325,665. SULTANA HOSIERY MILLS, INC., New York, N. Y. Filed Mar. 30, 1932.

SULTANA

For Hosiery and Lingerie.
Claims use since 1925 on hosiery; since February, 1932, on lingerie.

Ser. No. 327,212. H. & L. BLOCK, LTD., San Francisco, Calif. Filed May 18, 1932.

Block Bilt

For Coats and Leather Coats, Leather Vests, Leather Breeches, Wool Blazers, Neckties; Leather Gloves for Men, Women, and Children.
Claims use since January, 1931.

Ser. No. 327,213. H. & L. BLOCK, LTD., San Francisco, Calif. Filed May 18, 1932.



The lining appearing on the drawing is for the purpose of shading only.
For Coats and Leather Coats, Leather Vests, Leather Breeches, Wool Blazers, Neckties; Leather Gloves for Men, Women, and Children.
Claims use since February, 1931.

Ser. No. 327,820. H. S. M. CLOTHING CO. INC., New York, N. Y. Filed June 8, 1932.

H. S. M.



For Men's and Boys' Outer Clothing—Namely, Suits, Trousers, Vests, Coats, and Overcoats.
Claims use since November, 1928.

Ser. No. 327,863. THE BRIA-SHAPS COMPANY, Whitinsville, Mass. Filed June 10, 1932.

BRIA-SHAPS



No claim is made herein to exclusive use of the word "Shaps" except as associated with the mark as shown in the drawings.
For Leggings and Overall Protectors for Nether Garments.
Claims use since Mar. 16, 1932.

Ser. No. 328,045. NORMAN J. WRIGLEY, Atlanta, Ga. Filed June 16, 1932.

TARZAN TRADE MARK SUNSHINE HEALTH SUITS

No claim is made to the terms "Trade-Mark" and "Sunshine Health Suits" apart from the mark as shown on the drawing. The pictorial representation on the drawing is fanciful.
For Children's Play Suits.
Claims use since Oct. 30, 1931.

Ser. No. 328,095. IRVING FRIEDRICKS, doing business as Irving Friedricks Co., New York, N. Y. Filed June 18, 1932.

KAMA-KLOTH

The word "Kloth" is disclaimed apart from the mark as shown on the drawing.
For Ladies' Sport Coats.
Claims use since Jan. 2, 1932.

Ser. No. 328,126. HUT NECKWEAR CO. INC., New York, N. Y. Filed June 20, 1932.

DRAPETOWNE TIE

The word "Tie" being disclaimed apart from the mark as shown on the drawing.
For Neckties and Cravats.
Claims use since June 13, 1932.

Ser. No. 328,449. RODES-RAPIER CO., INC., Louisville, Ky. Filed June 30, 1932.

hadley hall

For Coats, Vests, Trousers, Knickerbockers, Top Coats, and Overcoats for Men, Youths, and Boys.
Claims use since September, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 327,226. LONSDALE COMPANY, Providence, R. I. Filed May 18, 1932.

DUO-ROVING

No claim being made to the exclusive use of the word "Roving," apart from the mark as shown in the drawing.
For Cotton Piece Goods.
Claims use since Mar. 24, 1932.

Ser. No. 327,572. AMERICAN BEMBERG CORPORATION, New York, N. Y. Filed May 31, 1932.

Glow Bemberg

For Knitted, Netted, and Textile Fabrics, Composed Wholly or in Part of Filaments of Artificial Origin of Regenerated Cellulose.
Claims use since Apr. 4, 1932.

Ser. No. 327,771. THE PRINTZ-BIEDERMAN COMPANY, Cleveland, Ohio. Filed June 6, 1932.

Printzess "Tourister"

For Woolen Textile Fabrics in the Piece.
Claims use since May 15, 1932.

Ser. No. 327,909. JOHNSON & JOHNSON, New Brunswick, N. J. Filed June 11, 1932.

CHUX

For Diapers Made of Cotton, Paper, and Gauze.
Claims use since May 23, 1932.

Ser. No. 327,969. BIANCHINI, FÉRIER, Lyon, France. Filed June 14, 1932.

VELDIAG

For Piece Goods Composed Wholly or in Part of Wool, Hair, Silk, Rayon, Cotton, Hemp, Flax, Jute, Alpha Fibre, Aloe Fibre, Vegetable Fibre, or Mixtures Thereof.
Claims use since Feb. 15, 1932.

Ser. No. 328,044. WESTERN BOTTLE MFG. CO., doing business as The Western Company, Chicago, Ill. Filed June 16, 1932.

KEC

For Handkerchiefs.
Claims use since June 9, 1932.

Ser. No. 328,499. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y. Filed July 1, 1932.

Calsanda

For Silk Fabrics in the Piece.
Claims use since Apr. 5, 1932.

Ser. No. 328,500. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y. Filed July 1, 1932.

Cantiga

For Silk Fabrics in the Piece.
Claims use since May 12, 1932.

Ser. No. 328,501. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y. Filed July 1, 1932.

Cherumba

For Silk Fabrics in the Piece.
Claims use since Apr. 5, 1932.

Ser. No. 328,502. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y. Filed July 1, 1932.

Mistique

For Silk Fabrics in the Piece.
Claims use since May 12, 1932.

Ser. No. 328,503. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y. Filed July 1, 1932.

Chellanda

For Silk Fabrics in the Piece.
Claims use since Apr. 5, 1932.

CLASS 43

Thread and Yarn

Ser. No. 327,773. PARA THREAD COMPANY, INC., Woonsocket, R. I. Filed June 6, 1932.

TENSILASTIC

For Rubber Thread.
Claims use since Sept. 13, 1929.

Ser. No. 328,407. BERNHARD ULMANN CO. INC., New York, N. Y. Filed June 29, 1932. Under 10-year proviso.

LORRAINE

For Worsted Yarns for Knitting, Crocheting, Embroidering and Similar Purposes.
Claims use since 1888.

Ser. No. 328,431. KING COTTON MILLS CORPORATION, Richmond, Va. Filed June 30, 1932.

DOLPHIN

For Cotton Yarns.
Claims use since June 18, 1932.

Ser. No. 328,432. KING COTTON MILLS CORPORATION, Richmond, Va. Filed June 30, 1932.

FLYING NEEDLES

For Cotton Yarns.
Claims use since June 18, 1932.

Ser. No. 328,435. S. H. KRESS & CO., New York, N. Y. Filed June 30, 1932.

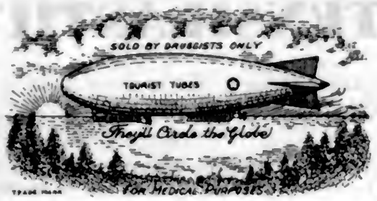
SIREN

For Threads and Yarns.
Claims use since June 20, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 299,359. WILLIS W. WYANT, doing business as Akron Rubber Supply Company, Akron, Ohio. Filed Apr. 23, 1930.



The words "Sold By Druggists Only," "Tubes," "For Medical Purposes," and "Trade Mark" are hereby disclaimed apart from the mark as shown.
For Prophylactic Rubber or Tissue Articles for Prevention of Diseases.
Claims use since August, 1925.

Ser. No. 313,623. NORTH AMERICAN RADIUM CORPORATION, New York, N. Y. Filed Apr. 21, 1931.

RADIUMATOR

For Appliance for Charging Water and/or Other Fluids With Radium Emanation.
Claims use since Dec. 15, 1930.

Ser. No. 327,301. BECTON, DICKINSON & CO., Rutherford, N. J. Filed May 21, 1932.

Asepto

For Syringes of the Bulb Type and of the Piston Type Used for Hypodermic Work, Irrigation, Aspiration, Injections, and Douching, Hypodermic Needles, and Clinical Thermometers.
Claims use since 1900.

Ser. No. 327,664. WALLACE W. ROBINSON, Portland, Me. Filed June 2, 1932.

SOS

For Emergency Devices for First Aid Treatment of Injuries to the Human Body, Said Devices Including a Lever-Operated Tourniquet and a Spot-Pressure Sterilizing Hemostat.
Claims use since Mar. 15, 1932.

Ser. No. 328,265. DIANA MANUFACTURING COMPANY, Green Bay, Wis. Filed June 24, 1932.

QUEENS

For Sanitary Pads.
Claims use since May 1, 1932.

Ser. No. 328,537. PROSTHETIC PRODUCTS, INC., New York, N. Y. Filed July 2, 1932.

LUXENE

For Plastic Resin Used in the Dental Profession for the Making of Artificial Dentures, Including Full Dentures and Partial Dental Plates.
Claims use since May 1, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 327,875. HYGRADE NUT CO. INC., New York, N. Y. Filed June 10, 1932.

Chock full o' Grapes

For Nonalcoholic, Maltless Beverage Sold as a Soft Drink.
Claims use since May 26, 1932.

Ser. No. 328,494. LIBERTY BOTTLING CO., INC., Chicago, Ill. Filed July 1, 1932.

Blue Rock

For Nonalcoholic, Non-Cereal, Carbonated and Uncarbonated Maltless Beverages Sold as Soft Drinks and Syrups for Making Same, and Carbonated and Uncarbonated Waters, Distilled Water and Mineral Water Sold as Bottled Water Beverages.
Claims use since Mar. 1, 1919.

Ser. No. 328,567. SOUTHERN DAIRIES, INC., Washington, D. C., and Savannah, Ga. Filed July 5, 1932.

GOLDEN SPRAY

For Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Sirups Therefor.
Claims use since July 1, 1908.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 310,333. FIDALGO ISLAND PACKING COMPANY, Anacortes, Wash. Filed Jan. 24, 1931.

CLEMATIS

Applicant is the owner of prior registration No. 79414.
For Canned Salmon.
Claims use since 1900.

Ser. No. 310,947. RIALTO CO-OPERATIVE CITRUS ASSOCIATION, Rialto, Calif. Filed Feb. 11, 1931.

IL PONTE
RIALTO

For Fresh Citrus Fruits.
Claims use since Jan. 12, 1931.

Ser. No. 312,725. GRANTLAND B. VOORHIES, doing business as Alpha Milk Laboratories, Sacramento, Calif. Filed Mar. 30, 1931.

ALPHA-LAC

The word "Lac" is disclaimed apart from the mark as shown in the drawing.
For Dried Lacteal Baby Food.
Claims use since Mar. 14, 1931.

Ser. No. 318,944. THE FISHER BROTHERS COMPANY, Cleveland, Ohio. Filed Sept. 11, 1931.



The drawing is lined for green and gold.
For Coffee and Tea.
Claims use since Aug. 10, 1931.

Ser. No. 322,385. THE GERMANTOWN RENDERING COMPANY, Cincinnati, Germantown, and Dayton, Ohio. Filed Dec. 23, 1931.

RUJAK

For Stock and Poultry Feeds.
Claims use since Nov. 1, 1931.

Ser. No. 324,103. GODCHAUX SUGARS, INC., New Orleans, La. Filed Feb. 12, 1932.

Godchaux's

The name "Godchaux's" is shown in the signature of the late Mr. Paul L. Godchaux, who was president of the Godchaux Clothing Company and treasurer of Godchaux Sugars, Inc.
For Sugar.
Claims use since January, 1924.

Ser. No. 324,399. MRS. L. O. REAVIS, Kansas City, Kans. Filed Feb. 23, 1932.

MOM'S

For Noodles.
Claims use since May 1, 1931.

Ser. No. 324,615. LEVER BROTHERS COMPANY, Cambridge, Mass. Filed Feb. 29, 1932.

Duall

For Vegetable Shortening.
Claims use since Feb. 25, 1932.

Ser. No. 325,095. GIBSON CANNING COMPANY, Gibson City, Ill. Filed Mar. 14, 1932.

MISS ILLINOIS

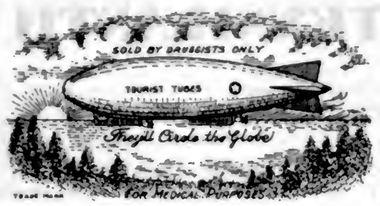


The representation of a woman forming a feature of the drawing is fanciful.
For Canned Corn.
Claims use since Jan. 14, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 299,359. WILLIS W. WYANT, doing business as Akron Rubber Supply Company, Akron, Ohio. Filed Apr. 23, 1930.



The words "Sold By Druggists Only," "Tubes," "For Medical Purposes," and "Trade Mark" are hereby disclaimed apart from the mark as shown.
For Prophylactic Rubber or Tissue Articles for Prevention of Diseases.
Claims use since August, 1925.

Ser. No. 313,623. NORTH AMERICAN RADIUM CORPORATION, New York, N. Y. Filed Apr. 21, 1931.

RADIUMATOR

For Appliance for Charging Water and/or Other Fluids With Radium Emanation.
Claims use since Dec. 15, 1930.

Ser. No. 327,301. BECTON, DICKINSON & CO., Rutherford, N. J. Filed May 21, 1932.

Asepto

For Syringes of the Bulb Type and of the Piston Type Used for Hypodermic Work, Irrigation, Aspiration, Injections, and Douching, Hypodermic Needles, and Clinical Thermometers.
Claims use since 1900.

Ser. No. 327,664. WALLACE W. ROBINSON, Portland, Me. Filed June 2, 1932.

SOS

For Emergency Devices for First Aid Treatment of Injuries to the Human Body, Said Devices Including a Lever-Operated Tourniquet and a Spot-Pressure Sterilizing Hemostat.
Claims use since Mar. 15, 1932.

Ser. No. 328,265. DIANA MANUFACTURING COMPANY, Green Bay, Wis. Filed June 24, 1932.

QUEENS

For Sanitary Pads.
Claims use since May 1, 1932.

Ser. No. 328,537. PROSTHETIC PRODUCTS, INC., New York, N. Y. Filed July 2, 1932.

LUXENE

For Plastic Resin Used in the Dental Profession for the Making of Artificial Dentures, Including Full Dentures and Partial Dental Plates.
Claims use since May 1, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 327,875. HYGRADE NUT CO. INC., New York, N. Y. Filed June 10, 1932.

Chock full o' Grapes

For Nonalcoholic, Maltless Beverage Sold as a Soft Drink.
Claims use since May 26, 1932.

Ser. No. 328,494. LIBERTY BOTTLING CO., INC., Chicago, Ill. Filed July 1, 1932.

Blue Rock

For Nonalcoholic, Non-Cereal, Carbonated and Uncarbonated Maltless Beverages Sold as Soft Drinks and Syrups for Making Same, and Carbonated and Uncarbonated Waters, Distilled Water and Mineral Water Sold as Bottled Water Beverages.
Claims use since Mar. 1, 1919.

Ser. No. 328,567. SOUTHERN DAIRIES, INC., Washington, D. C., and Savannah, Ga. Filed July 5, 1932.

GOLDEN SPRAY

For Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Sirups Therefor.
Claims use since July 1, 1908.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 310,333. FIDALGO ISLAND PACKING COMPANY, Anacortes, Wash. Filed Jan. 24, 1931.

CLEMATIS

Applicant is the owner of prior registration No. 79414.
For Canned Salmon.
Claims use since 1900.

Ser. No. 310,947. RIALTO CO-OPERATIVE CITRUS ASSOCIATION, Rialto, Calif. Filed Feb. 11, 1931.

IL PONTE
RIALTO

For Fresh Citrus Fruits.
Claims use since Jan. 12, 1931.

Ser. No. 312,725. GRANTLAND B. VOORHIES, doing business as Alpha Milk Laboratories, Sacramento, Calif. Filed Mar. 30, 1931.

ALPHA-LAC

The word "Lac" is disclaimed apart from the mark as shown in the drawing.
For Dried Lacteal Baby Food.
Claims use since Mar. 14, 1931.

Ser. No. 318,944. THE FISHER BROTHERS COMPANY, Cleveland, Ohio. Filed Sept. 11, 1931.



The drawing is lined for green and gold.
For Coffee and Tea.
Claims use since Aug. 10, 1931.

Ser. No. 322,385. THE GERMANTOWN RENDERING COMPANY, Cincinnati, Germantown, and Dayton, Ohio. Filed Dec. 23, 1931.

RUJAK

For Stock and Poultry Feeds.
Claims use since Nov. 1, 1931.

Ser. No. 324,103. GODCHAUX SUGARS, INC., New Orleans, La. Filed Feb. 12, 1932.

Godchaux's

The name "Godchaux's" is shown in the signature of the late Mr. Paul L. Godchaux, who was president of the Godchaux Clothing Company and treasurer of Godchaux Sugars, Inc.
For Sugar.
Claims use since January, 1924.

Ser. No. 324,399. MRS. L. O. REAVIS, Kansas City, Kans. Filed Feb. 23, 1932.

MOM'S

For Noodles.
Claims use since May 1, 1931.

Ser. No. 324,615. LEVER BROTHERS COMPANY, Cambridge, Mass. Filed Feb. 29, 1932.

Duall

For Vegetable Shortening.
Claims use since Feb. 25, 1932.

Ser. No. 325,095. GIBSON CANNING COMPANY, Gibson City, Ill. Filed Mar. 14, 1932.

MISS ILLINOIS



The representation of a woman forming a feature of the drawing is fanciful.
For Canned Corn.
Claims use since Jan. 14, 1932.

Ser. No. 326,347. VAUGHN-GILLETTE, Bay City, Mich. Filed Apr. 21, 1932.



No claim is made to the word "Tasty" apart from the mark shown on the drawing.
For Cakes and Pies.
Claims use since Jan. 5, 1931.

Ser. No. 326,769. CARL A. CARLSON, Peoria, Ill. Filed May 4, 1932.



No claim is made to the word "Tart" apart from the mark as shown on the drawing.
For Tart-Like Pastry Confection.
Claims use since Apr. 11, 1932.

Ser. No. 327,421. PECAN KRISP COMPANY, INC., Dallas, Tex. Filed June 9, 1932.

PECAN KRISP

The word "Pecan" apart from the mark as shown is disclaimed for the purpose of the present registration.
For Flavoring Material in Granular Form for Ice Cream.
Claims use since Aug. 1, 1929.

Ser. No. 327,555. RAYMOND L. HAYNIE, Reedville, Va. Filed May 28, 1932.

'VITE 'EM INN

For Canned Vegetables and Canned Tomato Juice.
Claims use since Apr. 1, 1932.

Ser. No. 327,709. ROYAL BAKING POWDER COMPANY, New York, N. Y. Filed June 3, 1932.

ROYAL

For Gelatin Dessert and Gelatin Aspic.
Claims use since May 20, 1924, on gelatin dessert; since July 16, 1931, on gelatin aspic.

Ser. No. 327,928. ARTHUR ABELL, doing business as Old Meadow Creamery, Cleveland, Ohio. Filed June 11, 1932.

Old Meadow

For Milk, Cream, Butter, Buttermilk, and Cottage Cheese.
Claims use since Sept. 1, 1924.

Ser. No. 327,933. BIRK BROS. MALT PRODUCTS, INC., Chicago, Ill. Filed June 13, 1932.

Old Maestro

For Malt Syrup.
Claims use since Mar. 26, 1932.

Ser. No. 327,980. DR. LARRY'S FOOD PRODUCTS LABORATORIES, New York, N. Y. Filed June 14, 1932.



No claim is made herein to the word "Wheat" per se, as a technical trade-mark, apart from the mark as shown in the drawings.
For Cookies and Crackers.
Claims use since May 26, 1932.

Ser. No. 328,151. AMERICAN POP CORN COMPANY, Sioux City, Iowa. Filed June 21, 1932.

VOLUMIZED

For Pop Corn in Its Natural State.
Claims use since June 9, 1932.

Ser. No. 328,165. D. GOLDENBERG, INC., Philadelphia, Pa. Filed June 21, 1932.



For Candy.
Claims use since Dec. 3, 1931.

Ser. No. 328,248. NEWARK WHOLESALE GROCERY CO., Newark, N. J. Filed June 23, 1932.

SO·C·IA

For Coffee.
Claims use since May 15, 1932.

Ser. No. 328,274. KINGSBURY PACKING CO., Chicago, Ill. Filed June 24, 1932.

MARCLAY

For Pickles.
Claims use since Feb. 3, 1932.

Ser. No. 328,279. THE PROCTER & GAMBLE COMPANY, Cincinnati, Ohio. Filed June 24, 1932.

PROGA

For Cooking-Fats.
Claims use since May 25, 1932.

Ser. No. 328,339. SOUTHERN DAIRIES, INC., Washington, D. C. Filed June 27, 1932.



Sally Sothern

In the drawing the picture is fanciful, being that of a fictitious person known to applicant's trade as Sally Sothern.
For Ice Cream.
Claims use since Oct. 25, 1931.

Ser. No. 328,384. THE LEVERING COFFEE COMPANY, Baltimore, Md. Filed June 25, 1932.

SWEET-CUP

For Tea.
Claims use since May 13, 1932.

Ser. No. 328,496. MASSACHUSETTS CHOCOLATE COMPANY, Boston, Mass. Filed July 1, 1932.

NAVOCHIEF

For Sweet Chocolate.
Claims use since February, 1932.

Ser. No. 328,531. LAMBERT MARKETING COMPANY, Sacramento, Calif. Filed July 2, 1932.

TOP CARD

For Fresh Grapes, Fresh Deciduous Fruits, Fresh Vegetables.
Claims use since Sept. 16, 1931.

Ser. No. 328,532. LAWRENCEBURG ROLLER MILLS CO., Lawrenceburg, Ind. Filed July 2, 1932.

"MATURED DOH"

For Wheat Flour.
Claims use since May 17, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 326,948. D. & J. MCCALLUM, LTD., Edinburgh, Scotland. Filed May 10, 1932.



No claim is made to any of the words appearing on the drawing with the exception of the name "McCallum's" and the name of the applicant which is a facsimile signature of the late Mr. Duncan Stewart.
For Scotch Whisky.
Claims use since January, 1926.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

AUGUST 9, 1932

296,398. GREY COTTON PIECE GOODS. NEUSS, HESSLEIN & CO., INC., New York, N. Y.
Filed January 29, 1932. Serial No. 323,763. PUBLISHED MAY 24, 1932. Class 42.

296,399. WOOLEN CLOTH IN THE PIECE. BERKWITS & BLOOMFIELD, INC., New York, N. Y.
Filed December 5, 1931. Serial No. 321,798. PUBLISHED MAY 24, 1932. Class 42.

296,400. THREADS. GUDEBROD BROTHERS SILK COMPANY, Philadelphia, Pa.
Filed November 19, 1931. Serial No. 321,317. PUBLISHED MAY 24, 1932. Class 43.

296,401. INDOOR OR OUTDOOR BOARD-GAME PLAYED WITH A BALL AND TWO OR MORE STICKS. REEVES PULLEY COMPANY, Columbus, Ind.
Filed February 11, 1932. Serial No. 324,083. PUBLISHED MAY 24, 1932. Class 22.

296,402. NON-ALCOHOLIC, MALTLESS SOFT DRINK, SYRUP, AND CONCENTRATES FOR MAKING SAME. TRIPLE "XXX" COMPANY, Galveston, Tex.
Filed January 15, 1932. Serial No. 323,070. PUBLISHED MAY 31, 1932. Class 45.

296,403. GRAPE JUICE. VINE-GLO CORPORATION OF NEW YORK, New York, N. Y.
Filed December 16, 1931. Serial No. 322,194. PUBLISHED MAY 24, 1932. Class 45.

296,404. TOY COWBOY ACCESSORIES—NAMELY, AMMUNITION HOLDERS, CARTRIDGE BELTS, PISTOL HOLSTERS, KNIFE SHEATHS, LARIATS, AND CUFFS. BRAUER BROS., INC., St. Louis, Mo.
Filed December 3, 1931. Serial No. 321,718. PUBLISHED MAY 24, 1932. Class 22.

296,405. CHEMICAL OUTFIT FOR EDUCATIONAL PURPOSES SOLD AS A UNIT. KEMKIT CHEMICAL CORPORATION, Brooklyn, N. Y.
Filed October 24, 1931. Serial No. 320,437. PUBLISHED MAY 24, 1932. Class 22.

296,406. GOLF CLUBS. THE CRAWFORD, MCGREGOR AND CANBY COMPANY, Dayton, Ohio.
Filed August 17, 1931. Serial No. 318,052. PUBLISHED MAY 24, 1932. Class 22.

296,407. ARTIFICIAL RESINS AND PLASTIC MASSES. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed March 3, 1932. Serial No. 324,737. PUBLISHED MAY 24, 1932. Class 1.

296,408. SEALING COMPOUNDS FOR USE ON UNIONS OF GASOLINE, KEROSENE, AND OIL ENGINES OF ALL TYPES. PEP MANUFACTURING COMPANY, New York, N. Y.
Filed March 2, 1932. Serial No. 324,722. PUBLISHED MAY 31, 1932. Class 5.

296,409. COKE. THE ATLANTIC REFINING COMPANY, Philadelphia, Pa.
Filed February 1, 1932. Serial No. 323,650. PUBLISHED MAY 31, 1932. Class 1.

296,410. COKE. THE ATLANTIC REFINING COMPANY, Philadelphia, Pa.
Filed February 1, 1932. Serial No. 323,649. PUBLISHED MAY 31, 1932. Class 1.

296,411. COKE. THE ATLANTIC REFINING COMPANY, Philadelphia, Pa.
Filed February 1, 1932. Serial No. 323,648. PUBLISHED MAY 31, 1932. Class 1.

296,412. SELF RISING WHEAT FLOUR, PHOSPHATED FLOUR, AND PLAIN WHEAT FLOUR. THE ABILENE FLOUR MILLS COMPANY, Abilene, Kans.
Filed February 1, 1932. Serial No. 323,647. PUBLISHED MAY 24, 1932. Class 46.

296,413. LIVING HARDY GROWING PLANT OF THE CACTUS FAMILY, HAVING A SPINY ARMOR OF SOFT RED COLOR AND A BRILLIANT YELLOW FLOWER WHEN IT BLOOMS AND SUITABLE FOR INDOOR OR OUTDOOR PLANTING. CONSOLIDATED DISPLAYS, INC., Chicago, Ill.
Filed October 30, 1931. Serial No. 320,633. PUBLISHED MAY 31, 1932. Class 1.

296,414. PLAYING CARDS. THE UNITED STATES PLAYING CARD COMPANY, East Norwood, Cincinnati, Ohio.
Filed April 23, 1932. Serial No. 326,438. PUBLISHED MAY 31, 1932. Class 22.

296,415. MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT OF ALCOHOL. EDWARD E. HART, New York, N. Y.
Filed April 25, 1932. Serial No. 326,473. PUBLISHED MAY 31, 1932. Class 48.

296,416. SEMI-LIQUID ADHESIVE. MODERN SUPPLY COMPANY, Chicago, Ill.
Filed April 18, 1932. Serial No. 326,227. PUBLISHED MAY 31, 1932. Class 5.

296,417. KID, GLAZED KID, AND OTHER LEATHERS. AMALGAMATED LEATHER COMPANIES, INC., Wilmington, Del.; Philadelphia, Pa.; New York, N. Y.; Boston, Mass.; Rochester, N. Y.; Chicago, Ill., and St. Louis, Mo.
Filed April 19, 1932. Serial No. 326,240. PUBLISHED MAY 31, 1932. Class 1.

296,418. EGGS AND BUTTER. ALEX. GROSSMANN & CO. INC., New York, N. Y.
Filed April 19, 1932. Serial No. 326,256. PUBLISHED MAY 31, 1932. Class 46.

296,419. PASTRIES. MARIE B. KUETER, Oakland, Calif.
Filed April 19, 1932. Serial No. 326,262. PUBLISHED MAY 31, 1932. Class 46.

296,420. COAL. OLD BEN COAL CORPORATION, Chicago, Ill.
Filed April 23, 1932. Serial No. 326,429. PUBLISHED MAY 31, 1932. Class 1.

296,421. AN ELECTRO-MAGNETIC BELT. JACOB D. MARKWOOD, doing business as Electro-Magnetic Belt Company, Minneapolis, Minn.
Filed March 16, 1932. Serial No. 325,178. PUBLISHED MAY 24, 1932. Class 44.

296,422. A CLEANER AND POLISH FOR METALS, ETC. CORNISH MINING CO., Cornish, Me.
Filed March 24, 1932. Serial No. 325,424. PUBLISHED MAY 24, 1932. Class 4.

296,423. SIMULANT, JUVENILE, PLAY APPAREL, COMPRISING COWBOY, TROOPER, POLICE, AND INDIAN OUTFITS, INCLUDING SUITS, COATS, VESTS, TROUSERS, CHAPS, BELTS AND LEGGINGS, HOSIERY, LEATHER BOOTS AND SHOES, HATS AND CAPS, LEATHER GLOVES, SHIRTS, BANDANNAS, AND TOP-COATS. KEYSTON BROS., San Francisco, Calif.
Filed March 25, 1932. Serial No. 325,503. PUBLISHED MAY 31, 1932. Class 39.

296,424. LADIES', MISSES', AND CHILDREN'S WEARING APPAREL—NAMELY, AERONAUTICAL GARMENTS, RIDING HABITS, AND ANY COMBINATION SKIRT, JACKET, AND BREECHES USED FOR SPORTS WEAR. EDITH FOLTZ, Portland, Oreg.
Filed March 29, 1932. Serial No. 325,618. PUBLISHED MAY 24, 1932. Class 39.

296,425. CHILDREN'S DRESSES. TOBIN & EDELMAN, Philadelphia, Pa.
Filed March 30, 1932. Serial No. 325,666. PUBLISHED MAY 17, 1932. Class 39.

296,426. ANTI-SKID CHAINS. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed April 4, 1932. Serial No. 325,775. PUBLISHED MAY 17, 1932. Class 18.

296,427. OUTER SUITS FOR MEN AND BOYS. H. DAROFF & SONS, INC., Philadelphia, Pa.
Filed April 4, 1932. Serial No. 325,781. PUBLISHED MAY 24, 1932. Class 39.

296,428. COLLARS AND COLLARS FOR COLLAR ATTACHED SHIRTS, BLOUSES, WINDBREAKERS, PAJAMAS, NIGHTSHIRTS MADE OF COTTON, LINEN, SILK, RAYON, WOOL, WORSTED, FLANNEL, OR ANY COMBINATION OF THESE MATERIALS. H. D. BOB COMPANY, INC., New York, N. Y.
Filed April 8, 1932. Serial No. 325,899. PUBLISHED MAY 31, 1932. Class 39.

296,429. HOSIERY. JACOB & SCHEY, New York, N. Y.
Filed April 11, 1932. Serial No. 325,984. PUBLISHED MAY 24, 1932. Class 39.

296,430. ARTIFICIAL RESPIRATORS. WARREN E. COLLINS, INC., Boston, Mass.
Filed April 14, 1932. Serial No. 326,080. PUBLISHED MAY 31, 1932. Class 44.

296,431. POLISHING AND CLEANING PREPARATIONS AND DRESSINGS FOR BOOTS, SHOES, ETC. WOHL SHOE COMPANY, St. Louis, Mo.
Filed April 14, 1932. Serial No. 326,122. PUBLISHED MAY 24, 1932. Class 4.

296,432. HOSIERY. ONLIBEST HOSIERY MILLS, INC., Berlin, N. J.
Filed April 15, 1932. Serial No. 326,158. PUBLISHED MAY 24, 1932. Class 39.

296,433. OXYGEN TENTS, OXYGEN CHAMBERS, RESPIRATORS, ETC. OXYGEN THERAPY SERVICE, INC., New York, N. Y.
Filed April 15, 1932. Serial No. 326,159. PUBLISHED MAY 24, 1932. Class 44.

296,434. QUALITY PATENT FLOUR, WHOLE WHEAT FLOUR, PASTRY FLOUR, SELF-RISING PANCAKE FLOUR, AND BUCKWHEAT FLOUR. CO-OPERATIVE GRANGE LEAGUE FEDERATION EXCHANGE, INC., Ithaca, N. Y.
Filed March 28, 1932. Serial No. 325,567. PUBLISHED MAY 31, 1932. Class 46.

296,435. EGGS. JOSEPH STOLLER, New York, N. Y.
Filed March 31, 1932. Serial No. 325,696. PUBLISHED MAY 24, 1932. Class 46.

296,436. WATERPROOF ADHESIVE CEMENT. LAMAC PROCESS COMPANY, Erie, Pa.
Filed April 4, 1932. Serial No. 325,794. PUBLISHED MAY 24, 1932. Class 5.

296,437. SPECIALLY PREPARED BAKING PRODUCTS—NAMELY, BREAD. PROTEO FOODS, INCORPORATED, Chicago, Ill.
Filed April 8, 1932. Serial No. 325,918. PUBLISHED MAY 24, 1932. Class 46.

296,438. COAL. HARLAN-WALLINS COAL CORPORATION, Verda, Ky.
Filed April 15, 1932. Serial No. 326,143. PUBLISHED MAY 24, 1932. Class 1.

296,439. WHEAT FLOUR. FEDERAL MILL, INC., Lockport, N. Y.
Filed April 18, 1932. Serial No. 326,207. PUBLISHED MAY 24, 1932. Class 46.

296,440. LIQUID CARBON REMOVER. MAXWELL WEINTRAUB, doing business as Maxwell Chemical Company, Brooklyn, N. Y.
Filed February 24, 1932. Serial No. 324,450. PUBLISHED MAY 24, 1932. Class 6.

296,441. COSMETIC PREPARATIONS—NAMELY, CLEANSING CREAM, COLD CREAM, SKIN AND TISSUE CREAM, VANISHING CREAM, AND AFTER-SHAVING CREAM. THE PRODERMATECT COMPANY, Scottdale, Pa.
Filed December 18, 1931. Serial No. 322,267. PUBLISHED MAY 31, 1932. Class 6.

296,442. CHEMICAL PREPARATION USED AS A WOOD PRESERVATIVE, DECK CLEANER, PAINT REMOVER, DISINFECTANT, AND FOR FIREPROOFING OF WOOD. CHIPMAN CHEMICAL COMPANY, INC., Bound Brook, N. J.
Filed March 8, 1932. Serial No. 324,881. PUBLISHED MAY 31, 1932. Class 6.

296,443. SCOTCH SHORT BREAD. ELEANOR GIVEN THOMPSON, Kansas City, Mo.
Filed March 22, 1932. Serial No. 325,377. PUBLISHED MAY 24, 1932. Class 46.

296,444. MEN'S APPAREL, COMPRISING MEN'S SUITS AND SPORTS SUITS CONSISTING OF COATS, VESTS, TROUSERS AND KNICKERS, TUXEDOS, FULL-DRESS AND FROCK GARMENTS, TOP COATS, OVERCOATS, AND SEPARATE TROUSERS. HICKEY-FREEMAN COMPANY, Rochester, N. Y.
Filed April 19, 1932. Serial No. 326,258. PUBLISHED MAY 31, 1932. Class 39.

296,445. BOYS' BLOUSES AND SHIRTS. ALPERIN, STRAUSS CO., INC., New York, N. Y.
Filed April 20, 1932. Serial No. 326,278. PUBLISHED MAY 31, 1932. Class 39.

296,446. PLAYING CARDS. THE UNITED STATES PLAYING CARD COMPANY, East Norwood, Cincinnati, Ohio.
Filed March 15, 1932. Serial No. 325,155. PUBLISHED MAY 31, 1932. Class 22.

296,447. MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME AND MALT EXTRACTS FOR MAKING THE SAME. COMPAÑIA CERVECERA INTERNACIONAL, S. A., Habana, Cuba.
Filed March 24, 1932. Serial No. 325,423. PUBLISHED MAY 24, 1932. Class 48.

296,448. ROWING MACHINE-BODY BUILDER AND REDUCING EXERCISER. MAC-COL MANUFACTURING COMPANY, INC., St. Louis, Mo.
Filed March 24, 1932. Serial No. 325,433. PUBLISHED MAY 24, 1932. Class 22.

296,449. NON-ALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES USED AS SOFT DRINKS AND CONCENTRATES AND EXTRACTS FOR PREPARING OF SAME. MISSION DRY CORPORATION, LTD., Los Angeles, Calif.
Filed March 25, 1932. Serial No. 325,479. PUBLISHED MAY 31, 1932. Class 45.

296,450. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. MONUMENT BOTTLING COMPANY, Indianapolis, Ind.
Filed March 31, 1932. Serial No. 325,691. PUBLISHED MAY 24, 1932. Class 45.

296,451. ELECTRIC REFRIGERATORS AND PARTS THEREOF. GRIGSBY-GRUNOW COMPANY, Chicago, Ill.
Filed April 4, 1932. Serial No. 325,787. PUBLISHED MAY 24, 1932. Class 31.

296,452. BOARD GAME PLAYED WITH MOVABLE PIECES. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass.
Filed April 8, 1932. Serial No. 325,917. PUBLISHED MAY 31, 1932. Class 22.

296,453. GOLF TEES. MERION SPORTING GOODS MFG., CORPN., Philadelphia, Pa.
Filed April 9, 1932. Serial No. 325,956. PUBLISHED MAY 24, 1932. Class 22.

296,454. GOLF BALLS. GOLF BALL INC., Chicago, Ill.
Filed April 14, 1932. Serial No. 326,088. PUBLISHED MAY 24, 1932. Class 22.

296,455. GOLF BALLS. GOLF BALL INC., Chicago, Ill.
Filed April 14, 1932. Serial No. 326,089. PUBLISHED MAY 24, 1932. Class 22.

296,456. GOLF BALLS. GOLF BALL INC., Chicago, Ill.
Filed April 14, 1932. Serial No. 326,090. PUBLISHED MAY 24, 1932. Class 22.

296,457. GOLF BALLS. GOLF BALL INC., Chicago, Ill.
Filed April 14, 1932. Serial No. 326,091. PUBLISHED MAY 24, 1932. Class 22.

296,458. GOLF BALLS. GOLF BALL INC., Chicago, Ill.
Filed April 14, 1932. Serial No. 326,093. PUBLISHED MAY 24, 1932. Class 22.

296,459. GOLF BALLS. GOLF BALL INC., Chicago, Ill.
Filed April 14, 1932. Serial No. 326,099. PUBLISHED MAY 24, 1932. Class 22.

296,460. PHOTOGRAPHIC FLASHES. HITT FIREWORKS COMPANY, doing business as Hitt Manufacturing Company, Seattle, Wash.
Filed April 14, 1932. Serial No. 326,102. PUBLISHED MAY 24, 1932. Class 9.

296,461. WHISKY. MACDONALD & MUIR, Leith, Scotland.
Filed April 14, 1932. Serial No. 326,111. PUBLISHED MAY 24, 1932. Class 49.

296,462. DOLLS. IDEAL NOVELTY & TOY CO., Brooklyn, N. Y.
Filed April 20, 1932. Serial No. 326,287. PUBLISHED MAY 24, 1932. Class 22.

296,463. TOY FIGURES. GEO. BORGFELDT & CO., New York, N. Y.
Filed April 23, 1932. Serial No. 326,411. PUBLISHED MAY 31, 1932. Class 22.

296,464. ARTICLES OR WRITINGS PUBLISHED IN DAILY NEWSPAPER. EXAMINER PRINTING COMPANY, San Francisco, Calif.
Filed February 29, 1932. Serial No. 324,687. PUBLISHED MAY 24, 1932. Class 38.

296,465. MONTHLY PUBLICATION. PRACTICAL MECHANICS PUBLISHING CO., Chicago, Ill.
Filed March 3, 1932. Serial No. 324,759. PUBLISHED MAY 31, 1932. Class 38.

296,466. BANKNOTES, CHECKS, DRAFTS, BILLS OF EXCHANGE, AND CERTIFICATES; AND PAPER FOR BANKNOTES, CHECKS, DRAFTS, BILLS OF EXCHANGE, AND CERTIFICATES. DENNISON & SONS, INC., Long Island City, N. Y.
Filed March 4, 1932. Serial No. 324,785. PUBLISHED MAY 24, 1932. Class 37.

296,467. SLABS AND TILES MADE OF WHITE AND/OR COLORED GLASS. THE NURRE COMPANIES, INCORPORATED, Bloomington, Ind.
Filed March 5, 1932. Serial No. 324,827. PUBLISHED MAY 17, 1932. Class 12.

296,468. OIL BURNERS. MASTER OIL BURNER, INC., Worcester, Mass.
Filed August 20, 1931. Serial No. 318,244. PUBLISHED MAY 17, 1932. Class 34.

296,469. STEEL STORAGE BASKETS, SHOP BOXES, SHOP TAPER PANS, CRANE BOXES, SHOP BINS, STACKING BOXES, AND TOOL BOXES. ALL-STEEL-EQUIP COMPANY, Aurora, Ill.
Filed October 31, 1931. Serial No. 319,683. PUBLISHED MAY 17, 1932. Class 2.

296,470. SKILLETS OR FRYING PANS PRODUCED IN CAST AND SHEET METAL, AS IRON, ALUMINUM OR ALUMINUM ALLOYS AND STEEL. ARTHUR WATERMAN, Boston, Mass.
Filed August 4, 1931. Serial No. 317,652. PUBLISHED MAY 17, 1932. Class 13.

296,471. COATS, VESTS, PANTS, AND OVERCOATS FOR MEN AND BOYS. FASHION PARK ASSOCIATES, INC., Rochester, N. Y.
Filed October 27, 1931. Serial No. 320,497. PUBLISHED MAY 24, 1932. Class 39.

296,472. STUDENTS' CLOTHING—NAMELY, SUITS AND OVERCOATS. THE H. A. SEINSHEIMER COMPANY, Cincinnati, Ohio.
Filed October 30, 1931. Serial No. 320,646. PUBLISHED DECEMBER 15, 1931. Class 39.

296,473. MEN'S AND BOYS' DRESS, NEGLIGEE, AND WORK SHIRTS. I. H. BARNETT & BRO., New York, N. Y.
Filed November 17, 1931. Serial No. 321,196. PUBLISHED MAY 24, 1932. Class 39.

296,474. KNITTED AND WOVEN HOSIERY FOR MEN, WOMEN, AND CHILDREN. LEO MOSSLER, New York, N. Y.
Filed January 16, 1932. Serial No. 323,112. PUBLISHED MAY 24, 1932. Class 39.

296,475. YOUNG MEN'S AND STUDENTS' THREE AND FOUR PIECE SUITS, OVERCOATS, AND TOP COATS. HARRIS CLOTHING COMPANY, Baltimore, Md.
Filed February 1, 1932. Serial No. 323,661. PUBLISHED MAY 24, 1932. Class 39.

296,476. WOMEN'S, MISSES', AND CHILDREN'S DRESSES, TWO PIECE DRESSES, AND THREE PIECE SUITS. RUBINGER SPORTSWEAR, CORP., New York, N. Y., and West New York, N. J.
Filed February 25, 1932. Serial No. 324,487. PUBLISHED MAY 24, 1932. Class 39.

296,477. TRUCK TANK, TRAILER TANK, AND SEMI-TRAILER TANK BODIES. THE DAVIS WELDING & MANUFACTURING COMPANY, Cincinnati, Ohio.
Filed February 29, 1932. Serial No. 324,593. PUBLISHED MAY 17, 1932. Class 19.

296,478. TOILET-BOWL CLEANER. EUGENE MUETH, doing business as Toil-Glen Products Co., St. Louis, Mo.
Filed March 4, 1932. Serial No. 324,796. PUBLISHED MAY 31, 1932. Class 4.

296,479. SKIN AND TOILET PREPARATIONS—NAMELY, FACE POWDERS SOLD IN ASSOCIATION WITH A POWDER PUFF. PRIMROSE HOUSE, INC., Dover, Del., and New York, N. Y.
Filed August 29, 1931. Serial No. 318,565. PUBLISHED MAY 31, 1932. Class 6.

296,480. WASHING FLUID IN THE NATURE OF A LAUNDRY BLEACH AND FOR CLEANING FLOORS, WALLS, WINDOWS, AND CARPETS. JACOB SIMON, doing business as Sun Bleach Products Company, Chicago, Ill.
Filed September 14, 1931. Serial No. 319,039. PUBLISHED MAY 24, 1932. Class 6.

296,481. DRESS, NEGLIGEE AND WORK SHIRTS, BLOUSES, UNDERWEAR, AND CAPS FOR MEN AND BOYS. NEISNER BROTHERS, INC., Rochester, N. Y.
Filed October 6, 1931. Serial No. 319,783. PUBLISHED DECEMBER 1, 1931. Class 39.

296,482. CALCIUM COMPOUND WITH SAPONIN FOR MEDICAL INDICATIONS IN CALCIUM THERAPY IN GENERAL. GEHE & CO., AKTIENGESELLSCHAFT, Dresden, Germany.
Filed October 9, 1931. Serial No. 319,878. PUBLISHED MAY 24, 1932. Class 6.

296,483. PREPARATIONS FOR THE TREATMENT OF LUMBAGO, NEURITIS, AND RHEUMATISM. WILLIAM T. KULL, doing business as Rheumatox Company, Cleveland, Ohio.
Filed December 4, 1931. Serial No. 321,770. PUBLISHED MAY 24, 1932. Class 6.

296,484. LIQUID SHAMPOO PREPARATION FOR CLEANSING THE HAIR AND REMOVING DANDRUFF FROM THE SCALP. FREDERICK EUGENE ISCHERLAND, Flint, Mich.
Filed February 1, 1932. Serial No. 323,664. PUBLISHED MAY 31, 1932. Class 6.

296,485. MEDICINAL PREPARATION — NAMELY, MUTTON SUET SALVE FOR EXTERNAL USE IN THE TREATMENT OF COLDS, CROUP, RHEUMATIC PAINS, LUMBAGO, NEURALGIA, SPRAINS AND MUSCULAR SORENESS, BRUISES, BOILS, INSECT BITES, FROST-BITE, CHAPPED HANDS, SUNBURN, AND MINOR BURNS AND SCALDS. PLOUGH, INC., doing business as The St. Joseph's Laboratories, Memphis, Tenn.
Filed February 13, 1932. Serial No. 324,132. PUBLISHED MAY 24, 1932. Class 6.

296,486. COSMETICS AND FACIAL PREPARATIONS—NAMELY, FACE POWDERS, FACE CREAMS, DEPILATORIES, BRILLIANTINE, ASTRINGENTS, DEODORANTS, TOILET WATERS, AND PERFUMES. GLEBEAS IMPORTATION CO. INC., doing business as Glebeas Importing Co., New York, N. Y.
Filed February 27, 1932. Serial No. 324,556. PUBLISHED MAY 31, 1932. Class 6.

296,487. NONALCOHOLIC, CEREAL, MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. PH. SCHNEIDER BREWING CO., Trinidad, Colo.
Filed July 11, 1928. Serial No. 269,429. PUBLISHED NOVEMBER 25, 1930. Class 48.

296,488. MONTHLY PUBLICATION. PARK PUBLISHING COMPANY, Chicago, Ill.
Filed August 29, 1931. Serial No. 318,563. PUBLISHED OCTOBER 13, 1931. Class 38.

296,489. PERIODICAL PUBLICATION. THE DOSCH-KIRCHER ORGANIZATION, Chicago, Ill.
Filed January 25, 1932. Serial No. 323,394. PUBLISHED MAY 31, 1932. Class 38.

296,490. BOND PAPER. UPTOWN CARD AND PAPER COMPANY, New York, N. Y.
Filed February 29, 1932. Serial No. 324,678. PUBLISHED MAY 24, 1932. Class 37.

296,491. ARTICLES OR WRITINGS PUBLISHED IN DAILY NEWSPAPER. EXAMINER PRINTING COMPANY, San Francisco, Calif.
Filed February 29, 1932. Serial No. 324,684. PUBLISHED MAY 24, 1932. Class 38.

296,492. ARTICLES OR WRITINGS PUBLISHED IN DAILY NEWSPAPER. EXAMINER PRINTING COMPANY, San Francisco, Calif.
Filed February 29, 1932. Serial No. 324,685. PUBLISHED MAY 24, 1932. Class 38.

296,493. ARTICLES OR WRITINGS PUBLISHED IN DAILY NEWSPAPER. EXAMINER PRINTING COMPANY, San Francisco, Calif.
Filed February 29, 1932. Serial No. 324,686. PUBLISHED MAY 24, 1932. Class 38.

296,494. WAXED PAPER LUNCH ROLLS. BADGER PAPER MILLS, INC., Peshtigo, Wis.
Filed May 10, 1930. Serial No. 300,258. PUBLISHED MAY 31, 1932. Class 37.

296,495. NECKTIES OF PURE SILK AND HALF SILK AND ARTIFICIAL SILK. HERMANN SPIELMAN & SOHN, Vienna, Austria.
Filed April 4, 1931. Serial No. 312,962. PUBLISHED MAY 24, 1932. Class 39.

296,496. NECKTIES OF PURE SILK AND HALF SILK AND ARTIFICIAL SILK. HERMANN SPIELMAN & SOHN, Vienna, Austria.
Filed April 4, 1931. Serial No. 312,963. PUBLISHED MAY 24, 1932. Class 39.

296,497. AIR-CIRCULATING BLOWERS FOR COAL BURNING HEATERS. AUSTIN MANUFACTURING AND SALES CORP., Syracuse, N. Y.
Filed May 6, 1931. Serial No. 314,224. PUBLISHED MAY 17, 1932. Class 34.

296,498. MEDICINES. DR. RUDOLF REISS RHEUMASAN- UND LENICET-FABRIK, Berlin-Charlottenburg, Germany.
Filed December 18, 1930. Serial No. 309,142. PUBLISHED MAY 24, 1932. Class 6.

296,499. MEDICINES FOR THE TREATMENT OF VENEREAL DISEASES AND FOR TREATMENT OF LOWER ABDOMINAL DISEASES GENERALLY. DR. RUDOLF REISS RHEUMASAN- UND LENICET-FABRIK, Berlin-Charlottenburg, Germany.
Filed December 18, 1930. Serial No. 309,145. PUBLISHED MAY 24, 1932. Class 6.

296,500. PHARMACEUTICAL PREPARATION USED AS A STIMULANT TO THE UNSTRIPED MUSCLE (UTERINE). JAMES E. MCCARTHY, Notre Dame, Ind.
Filed December 12, 1930. Serial No. 308,897. PUBLISHED MAY 24, 1932. Class 6.

296,501. FIRE BRICK, REFRACTORY BRICK, TILE AND MOLDED BODIES. GLADDING, MCBEAN & CO., Los Angeles, Calif.
Filed November 10, 1930. Serial No. 307,714. PUBLISHED SEPTEMBER 1, 1931. Class 12.

296,502. FIRST-AID KITS, GAS MASKS, ETC. E. D. BULLARD COMPANY, San Francisco, Calif.
Filed September 26, 1930. Serial No. 306,084. PUBLISHED MAY 24, 1932. Class 44.

296,503. MEN'S DRESS AND WORK SHIRTS. JOSEPH DANERHIRSCH, doing business as Daner Co., New York, N. Y.
Filed August 12, 1930. Serial No. 304,496. PUBLISHED OCTOBER 6, 1931. Class 39.

296,504. MULCH PAPER. THE PARAFFINE COMPANIES, INC., San Francisco, Calif.
Filed March 22, 1930. Serial No. 297,765. PUBLISHED MAY 24, 1932. Class 37.

296,505. PERIODICAL PUBLICATIONS—NAMELY, PRINTED NEWS SHEETS. INTERNATIONAL BUSINESS MACHINES CORPORATION, New York, N. Y.
Filed March 12, 1931. Serial No. 312,051. PUBLISHED MAY 24, 1932. Class 38.

296,506. PERIODICALS AND DESCRIPTIVE BULLETINS. THE KANSAS CITY SOUTHERN RAILWAY COMPANY, Kansas City, Mo.
Filed March 25, 1931. Serial No. 312,523. PUBLISHED MAY 24, 1932. Class 38.

296,507. GOLF CLUBS. THE BILLINGS & SPENCER COMPANY, Hartford, Conn.
Filed March 27, 1931. Serial No. 312,596. PUBLISHED MAY 24, 1932. Class 22.

296,508. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. MOTHER BROWN'S PURE ORANGE JUICE COMPANY, North Arlington, N. J.
Filed March 28, 1931. Serial No. 312,660. PUBLISHED MAY 24, 1932. Class 45.

296,509. GOLF TEES. ROSS H. JOHNSON, doing business as Johnson Products, Inc., Indianapolis, Ind.
Filed April 3, 1931. Serial No. 312,919. PUBLISHED MAY 12, 1931. Class 22.

296,510. FOOD PRODUCTS—NAMELY, CREAMED OATS. WATERMAN & COMPANY, New York, N. Y.
Filed March 12, 1931. Serial No. 312,076. PUBLISHED MAY 31, 1932. Class 46.

296,511. BREAKFAST CEREAL FOODS AND BUCKWHEAT FLOUR. WOLFF BROS. MILLING CO. INC., Paterson, N. J.
Filed April 18, 1931. Serial No. 313,520. PUBLISHED MAY 31, 1932. Class 46.

296,512. IMPORTED CHEESE (ALPENSCHATZ). PAUL R. FORBRIGER, doing business as German American Import Co., New York, N. Y.
Filed May 13, 1931. Serial No. 314,528. PUBLISHED MAY 31, 1932. Class 46.

296,513. IMPORTED CHEESE (EDELSIEG). PAUL R. FORBRIGER, doing business as German American Import Co., New York, N. Y.
Filed May 13, 1931. Serial No. 314,529. PUBLISHED MAY 31, 1932. Class 46.

296,514. IMPORTED CHEESE (HARZER-LAUSBUB). PAUL R. FORBRIGER, doing business as German American Import Co., New York, N. Y.
Filed May 13, 1931. Serial No. 314,530. PUBLISHED MAY 31, 1932. Class 46.

296,515. IMPORTED CHEESE (PRIMAS). PAUL R. FORBRIGER, doing business as German American Import Co., New York, N. Y.
Filed May 13, 1931. Serial No. 314,531. PUBLISHED MAY 31, 1932. Class 46.

296,516. NON-ALCOHOLIC, MALTLESS ORANGE JUICE FOR BEVERAGE PURPOSES. THE PURE ORANGE JUICE COMPANY OF AMERICA, Chicago, Ill., assignor to Lash, Inc., San Francisco, Calif., a Corporation of California.
Filed May 8, 1930. Serial No. 300,142. PUBLISHED MAY 24, 1932. Class 45.

296,517. THREAD AND YARN. I. P. BEMBERG, AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y.
Filed March 12, 1932. Serial No. 325,054. PUBLISHED MAY 24, 1932. Class 43.

296,518. BOOKS, MAGAZINES, AND PAMPHLETS. NATIONAL HOME LIBRARY FOUNDATION, Washington, D. C.
Filed March 16, 1932. Serial No. 325,179. PUBLISHED MAY 31, 1932. Class 38.

296,519. PASS-BOOKS, AND CHECK-BOOK COVERS. THE MAYERS COMPANY, INC., doing business as The Independence Plan Company, Los Angeles, Calif.
Filed March 25, 1932. Serial No. 325,476. PUBLISHED MAY 31, 1932. Class 37.

296,520. TITLE FOR A COLUMN IN A MAGAZINE. LOUIS C. STONE, New York, N. Y.
Filed March 26, 1932. Serial No. 325,544. PUBLISHED MAY 31, 1932. Class 38.

296,521. TEXTILES NAMELY PILLOW SLIPS, CRIB SHEETS, DIAPERS, CRIB BLANKETS AND FLANNELS IN CUT LENGTHS. SAUTER BROTHERS, New York, N. Y.
Filed April 7, 1932. Serial No. 325,882. PUBLISHED MAY 31, 1932. Class 42.

296,522. GRAPE JUICE. SPRING MOUNTAIN VINEYARD CO. INC., New York, N. Y.
Filed April 7, 1932. Serial No. 325,884. PUBLISHED MAY 24, 1932. Class 45.

296,523. HANDKERCHIEFS. STEDMAN MANUFACTURING COMPANY, Asheboro, N. C.
Filed April 11, 1932. Serial No. 326,040. PUBLISHED MAY 24, 1932. Class 42.

296,524. KNITTED FABRICS FOR UNDERWEAR MADE UP OF RAYON AND ARTIFICIAL SILK. EDAY FABRICS, INCORPORATED, West New York, N. J.
Filed April 14, 1932. Serial No. 326,083. PUBLISHED MAY 24, 1932. Class 42.

296,525. TEXTILE FABRICS—NAMELY, SILK PIECE GOODS. DOSHI TRADING CO. LTD., New York, N. Y.
Filed April 15, 1932. Serial No. 326,131. PUBLISHED MAY 24, 1932. Class 42.

296,526. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed April 16, 1932. Serial No. 326,176. PUBLISHED MAY 24, 1932. Class 42.

296,527. TEXTILE DISH CLOTHS. ELECTRIC KNITTING CO. INC., Cohoes, N. Y.
Filed April 20, 1932. Serial No. 326,284. PUBLISHED MAY 31, 1932. Class 42.

296,528. DESIGNERS' MARKING PAPER IN THE ROLL. NATIONAL CONSUMERS PAPER CORPORATION, New York, N. Y.
Filed April 21, 1932. Serial No. 326,337. PUBLISHED MAY 31, 1932. Class 37.

296,529. NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGE SOLD AS A SOFT DRINK AND SIRUP AND EXTRACT FOR MAKING THE SAME. JAMESON GEORGE BUSTON, North Tazewell, Va.
Filed April 23, 1932. Serial No. 326,412. PUBLISHED MAY 31, 1932. Class 45.

296,530. CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACTS USED IN MAKING THE SAME. LEO THOMA, Jr., doing business as Leo Thoma Bottling Co., Kansas City, Mo.
Filed April 23, 1932. Serial No. 326,435. PUBLISHED MAY 31, 1932. Class 45.

296,531. CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND SYRUPS AND EXTRACTS USED IN MAKING THE SAME. LEO THOMA, Jr., doing business as Leo Thoma Bottling Co., Kansas City, Mo.
Filed April 23, 1932. Serial No. 326,436. PUBLISHED MAY 31, 1932. Class 45.

296,532. CLOTH CONSISTING OF LLAMA AND WOOL IN THE PIECE. S. STROOCK & CO. INC., New York, N. Y.
Filed April 23, 1932. Serial No. 326,448. PUBLISHED MAY 31, 1932. Class 42.

296,533. PIECE GOODS OF SILK, RAYON, COTTON, AND WOOL AND MIXTURES OF THESE MATERIALS. F. DUCHARNE SILK CO. INC., New York, N. Y.
Filed April 26, 1932. Serial No. 326,519. PUBLISHED MAY 31, 1932. Class 42.

296,534. PIECE GOODS OF SILK, RAYON, COTTON, AND WOOL AND MIXTURES OF THESE MATERIALS. F. DUCHARNE SILK CO. INC., New York, N. Y.
Filed April 26, 1932. Serial No. 326,520. PUBLISHED MAY 31, 1932. Class 42.

296,535. THERMAL AND SOUND INSULATING WALL BOARD. PLASTERGON WALL BOARD COMPANY, Buffalo, N. Y.
Filed March 11, 1932. Serial No. 325,047. PUBLISHED MAY 17, 1932. Class 12.

296,536. THERMAL AND SOUND INSULATING WALL BOARD. PLASTERGON WALL BOARD COMPANY, Buffalo, N. Y.
Filed March 15, 1932. Serial 325,149. PUBLISHED MAY 17, 1932. Class 12.

296,537. SEMI-ANNUAL PUBLICATION. THE HAT TRADE PUBLISHING COMPANY, New York, N. Y.
Filed March 16, 1932. Serial No. 325,170. PUBLISHED MAY 24, 1932. Class 38.

296,538. WOODEN BEAMS, DOORS, LATHS, PLANKS, ETC. THE BRITISH COLUMBIA LUMBER AND SHINGLE MANUFACTURERS LIMITED, Vancouver, British Columbia, Canada.
Filed March 17, 1932. Serial No. 325,207. PUBLISHED MAY 17, 1932. Class 12.

296,539. COMPOSITE STRUCTURAL MATERIALS—I. E., PLASTIC BLOCKS, SLABS, AND TILES OF ARTIFICIAL STONE. BOSTONE, INCORPORATED, Lafayette, Ind.
Filed March 23, 1932. Serial No. 325,412. PUBLISHED MAY 17, 1932. Class 12.

296,540. BRICKS. WESTERN BRICK COMPANY, Danville, Ill.
Filed March 28, 1932. Serial No. 325,609. PUBLISHED MAY 17, 1932. Class 12.

296,541. RUBBER TILES, RUBBER FLOORING IN BOTH BLOCK AND SHEET FORM, AND FOR RUBBER FLOORING ACCESSORIES—NAMELY, COVE BASES, RUBBER MOULDINGS, RUBBER STAIR TREADS, RUBBER WAINSCOTING, AND RUBBER CORNERS. AMERICAN RUBBER PRODUCTS CORPORATION, New York, N. Y.
Filed March 31, 1932. Serial No. 325,672. PUBLISHED MAY 31, 1932. Class 12.

296,542. PREPARATION FOR MIXING WITH CEMENT, LIME, AND PLASTER TO REDUCE VISCOSITY AND SUSCEPTIBILITY TO ABSORBING MOISTURE, AND TO MINIMIZE SURFACE CRAZING AND EFFLORESCENCE. THE CEMENT MARKETING COMPANY, LIMITED, London, England.
Filed April 1, 1932. Serial No. 325,707. PUBLISHED MAY 31, 1932. Class 12.

296,543. RECORD BOOKS AND DIARIES. SAMUEL WARD MANUFACTURING COMPANY, Boston, Mass.
Filed April 2, 1932. Serial No. 325,767. PUBLISHED MAY 24, 1932. Class 37.

296,544. ATTORNEY'S DIRECTORY. PUBLISHED FROM TIME TO TIME. THE C-R-C LAW LIST COMPANY, New York, N. Y.
Filed April 5, 1932. Serial No. 325,816. PUBLISHED MAY 24, 1932. Class 38.

296,545. WOOD BLOCKS FOR FLOORS AND THE LIKE. CELLIZED OAK FLOORING, INC., Memphis, Tenn.
Filed April 7, 1932. Serial No. 325,892. PUBLISHED MAY 24, 1932. Class 12.

296,546. COUPONS USED IN CONNECTION WITH THE SALE OF INSURANCE POLICIES. EDWIN M. EVANS, Bloomington, Ill.
Filed April 8, 1932. Serial No. 325,905. PUBLISHED MAY 31, 1932. Class 38.

296,547. WRAPPING PAPER. DETROIT SULPHITE PULP & PAPER CO., Detroit, Mich.
Filed April 14, 1932. Serial No. 326,082. PUBLISHED MAY 24, 1932. Class 37.

296,548. DAILY PERIODICAL. THE PRORACFORM COMPANY, Chicago, Ill.
Filed April 14, 1932. Serial No. 326,115. PUBLISHED MAY 24, 1932. Class 38.

296,549. MONTHLY PERIODICALS. MAXWELL LEVINSON, Philadelphia, Pa.
Filed April 15, 1932. Serial No. 326,150. PUBLISHED MAY 31, 1932. Class 38.

296,550. PERIODICAL PUBLISHED AT IRREGULAR INTERVALS. LOUIS B. APPLETON, doing business as Buzzy, New York, N. Y.
Filed April 19, 1932. Serial No. 326,199. PUBLISHED MAY 31, 1932. Class 38.

296,551. PERIODICAL. W. D. HOARD & SONS COMPANY, Fort Atkinson, Wis.
Filed April 21, 1932. Serial No. 326,354. PUBLISHED MAY 31, 1932. Class 38.

296,552. PUBLICATION IN MAGAZINE FORM. CHICAGO ROTOPRINT COMPANY, Chicago, Ill.
Filed April 22, 1932. Serial No. 326,362. PUBLISHED MAY 31, 1932. Class 38.

296,553. SERIES OF CARTOONS OR COMIC STRIPS PUBLISHED IN MAGAZINES AND DAILY NEWSPAPERS. EUGENE BYRNES, New York, N. Y.
Filed April 23, 1932. Serial No. 326,413. PUBLISHED MAY 31, 1932. Class 38.

296,554. ACID RESISTING, BONDING, AND LINING MATERIALS USED IN THE CONSTRUCTION OF TANKS, VATS, ETC. THE ATLAS MINERAL PRODUCTS COMPANY, Mertztown, Pa.
Filed March 11, 1932. Serial No. 325,032. PUBLISHED MAY 17, 1932. Class 12.

296,555. GENERAL TONIC HAVING A WINE BASE. JOSEPH TRINER COMPANY, Chicago, Ill.
Filed March 14, 1932. Serial No. 325,124. PUBLISHED MAY 31, 1932. Class 6.

296,556. WATER TREATMENT COMPOUND IN THE FORM OF HARD ROUND BALLS USED FOR THE PREVENTION OF INCRUSTATION AND/OR FOAMING BY DISSOLVING THE SAME IN THE FEED WATER OF THE BOILERS, ETC. NATIONAL ALUMINATE CORPORATION, Chicago, Ill.
Filed March 19, 1932. Serial No. 325,295. PUBLISHED MAY 24, 1932. Class 6.

296,557. COUGH BALSAM, A MEDICINAL PREPARATION FOR THE TREATMENT OF COUGHS, COLDS, CROUP, HOARSENESS, BRONCHITIS, AND INFLUENZA. RICHARD T. DUNN, doing business as J. S. Merrell Drug Company, St. Louis, Mo.
Filed March 24, 1932. Serial No. 325,426. PUBLISHED MAY 24, 1932. Class 6.

296,558. LINE OF TOILET PREPARATIONS—TO WIT, PERMANENT WAVING LOTION, A CONCENTRATED PREPARATION USED IN FINGER WAVING, FINGER WAVING LOTION (FAST DRYING), AND OIL SHAMPOO. THE COSMETIC RESEARCH LABORATORIES, Wilkes-Barre, Pa.
Filed March 25, 1932. Serial No. 325,461. PUBLISHED MAY 24, 1932. Class 6.

296,559. MEDICATED ADHESIVE BANDAGE DRESSING. THE DRANE PLASTER CO., Yonkers, N. Y.
Filed March 28, 1932. Serial No. 325,569. PUBLISHED MAY 24, 1932. Class 6.

296,560. HYDROSULPHITE PRODUCTS OR COMPOUNDS—NAMELY, SODIUM FORMALDEHYDE HYDROSULPHITE, ZINC FORMALDEHYDE HYDROSULPHITE, SODIUM HYDROSULPHITE. U. S. OIL COMPANY, East Providence, R. I.
Filed April 1, 1932. Serial No. 325,731. PUBLISHED MAY 24, 1932. Class 6.

296,561. DRAWING AND HEALING SALVE. DORIS A. WUSTER, doing business as D. A. W. Laboratories, Baltimore, Md.
Filed April 1, 1932. Serial No. 325,735. PUBLISHED MAY 24, 1932. Class 6.

296,562. SYNTHETIC RESIN TO BE USED IN PROTECTIVE COATINGS AND IN MOLDED PRODUCTS. HERCULES POWDER COMPANY, Wilmington, Del.
Filed April 5, 1932. Serial No. 325,824. PUBLISHED MAY 31, 1932. Class 6.

296,563. WASHING FLUID POSSESSING INCIDENTAL PROPERTIES FOR BLEACHING, REMOVING STAINS, SCORCH, AND MILDEW, AND ALSO ACTING AS A DISINFECTANT AND DEODORANT. A. YANNI & SON, McKeesport, Pa.
Filed April 6, 1932. Serial No. 325,861. PUBLISHED MAY 24, 1932. Class 6.

296,564. LAXATIVES. ACTONA RESEARCH LABORATORIES, INC., Philadelphia, Pa.
Filed April 7, 1932. Serial No. 325,863. PUBLISHED MAY 31, 1932. Class 6.

296,565. PREPARATIONS FOR TREATING FLUIDS FOR USE IN BOILERS. ALLIS-CHALMERS MANUFACTURING COMPANY, Milwaukee, Wis.
Filed April 9, 1932. Serial No. 325,933. PUBLISHED MAY 24, 1932. Class 6.

296,566. CREAM, LIPSTICKS, ROUGE, ETC. THE WALLINGFORD LABORATORIES, INC., Wallingford, Conn. Filed April 12, 1932. Serial No. 326,035. PUBLISHED MAY 24, 1932. Class 6.

296,567. SALVE FOR WOUNDS, BURNS, CUTS, AND INJURIES. JOHANNA H. MADDEN, doing business as Skinit Co., Minneapolis, Minn. Filed April 22, 1932. Serial No. 326,382. PUBLISHED MAY 31, 1932. Class 6.

296,568. DENTURE CREAM. ALCOLITE INC., Philadelphia, Pa. Filed April 21, 1932. Serial No. 326,318. PUBLISHED MAY 31, 1932. Class 6.

296,569. TROPICAL PREPARATION USED AS A PREVENTATIVE OF PERSPIRATION. FREDERICK J. SCHARKOPF, Richmond Hill, N. Y. Filed April 16, 1932. Serial No. 326,194. PUBLISHED MAY 31, 1932. Class 6.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

296,570. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) LESTER MONTGOMERY, doing business as Messenger & Montgomery, Santa Barbara, Calif. Filed Apr. 21, 1932. Serial No. 326,332.

K–aK

For Metal Boats of the Type of a Canoe.
Claims use since June 1, 1931.

296,571. (CLASS 12. CONSTRUCTION MATERIALS.) THE FELTERS COMPANY, Boston, Mass. Filed Mar. 30, 1932. Serial No. 325,647.

NO-DRAFT

For Weather Strip Felt.
Claims use since Dec. 1, 1930.

296,572. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) E. CLEMENS HORST CO., San Francisco, Calif. Filed July 3, 1931. Serial No. 316,596.

FRESHPACK

For Hops.
Claims use since May 22, 1931.

296,573. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SAVERIO TALENTI, Long Island City, N. Y. Filed June 25, 1931. Serial No. 316,302.

ETERNAL CITY

For Olive Oil.
Claims use since May 5, 1931.

296,574. (CLASS 45. BEVERAGES, NONALCOHOLIC.) JACK FREEDMAN, doing business as Freedman Beverage Co. and Glen Cove Bottling Co., Glen Cove, N. Y. Filed July 23, 1929. Serial No. 287,527.

FREEDMAN

For Non-Alcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks.
Claims use since April, 1929.

296,575. (CLASS 37. PAPER AND STATIONERY.) KOH-I-NOOR BLEISTIFTFABRIK L. & C. HARDTMUTH, Budweis, Czechoslovakia. Filed Aug. 9, 1930. Serial No. 304,413.

Whist

For Pencils of All Kinds.
Claims use since July 19, 1930.

296,576. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) S. H. KRESS & Co., New York, N. Y. Filed May 27, 1931. Serial No. 315,103.

Heap Big 2 Scoop

For Ice Cream Scoops.
Claims use since May 1, 1931.

296,577. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) JOHANN HEINRICH HERMANN VOSS, doing business as J. H. H. Voss, Inc., New York, N. Y. Filed July 17, 1931. Serial No. 317,054.

J. H. H. VOSS VALVE

For Valves, Particularly for Valves for Ammonia, Air and Gas Compressors.
Claims use since June 1, 1931.

296,578. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MRS. OESTERLE & SON, Milmay, N. J. Filed July 22, 1931. Serial No. 317,218.

Mrs. Oesterle's

For Meat and Gravy Seasoning.
Claims use since June 23, 1931.

296,579. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) AMERICAN HARD RUBBER COMPANY, Hempstead and New York, N. Y. Filed July 31, 1931. Serial No. 317,497.

WAVESETTA

For Hard Rubber Combs for Dressing, Ornamenting and Cleaning the Hair.
Claims use since July 2, 1931.

296,580. (CLASS 12. CONSTRUCTION MATERIALS.) ANNIE E. WEINFELD, trustee of the estate of Annie Dugan, deceased, Chicago, Ill. Filed Jan. 9, 1932. Serial No. 322,872.

DUGAN'S

For Stone Patcher Material Made of Bedford Stone, Cement and Plaster of Paris.
Claims use since June 1, 1913.

296,581. (CLASS 38. PRINTS AND PUBLICATIONS.) AMERICAN INSTITUTE OF BANKING, New York, N. Y. Filed May 13, 1932. Serial No. 327,038.

AMERICAN INSTITUTE OF BANKING

For Booklets.
Claims use since June, 1918.

296,582. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DAVID W. LEWIS & CO. INC., New York, N. Y. Filed May 24, 1932. Serial No. 327,401.

Rich in Nature's Vitamins

DAVID W. LEWIS CO., Inc.

For Creamery Butter.
Claims use since June, 1931.

296,583. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) PALMER PRODUCTS, INC., Waukesha, Wis. Filed May 24, 1932. Serial No. 327,406.

KLEAN-BRITE

For Soap Paste Intended for the Cleaning of Porcelain, Painted Surfaces, Metal Both Plated and Unplated Enamel Ware, All Kitchen Ware, Marble, Tile, and the Like.
Claims use since January, 1931.

296,584. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) BOSTON GEAR WORKS, INC., North Quincy, Mass. Filed June 4, 1932. Serial No. 327,724.

BOSTON

For Chains for Sprocket Wheels.
Claims use since Dec. 15, 1915.

TRADE-MARK REGISTRATIONS RENEWED

38,626. SALT. Registered July 15, 1902. DIAMOND CRYSTAL SALT COMPANY, St. Clair, Mich. Renewed July 15, 1932, to Diamond Crystal Salt Company, New York, N. Y., a Corporation of Michigan.

38,689. PRINTING INKS. Registered July 29, 1902. SIGMUND ULLMAN CO. Renewed July 29, 1932, to General Printing Ink Corporation, New York, N. Y., a Corporation of Delaware, assignee.

39,328. WHEAT-FLOUR. Registered November 25, 1902. WASHBURN CROSBY COMPANY. Renewed November 25, 1932, to General Mills, Inc., Minneapolis, Minn., a Corporation of Delaware, assignee.

39,452. LIQUID ANTISEPTIC OR ANTIZYMATIC WASH. Registered December 9, 1902. THE VOEGELI BROS. DRUG CO., Minneapolis, Minn. Renewed December 9, 1932, to Lambert Pharmacal Company, Wilmington, Del., a Corporation of Delaware, assignee by mesne assignments.

39,521. MEDICINAL AND CHEMICAL PREPARATIONS FOR PREVENTION AND CURE OF DISEASES. Registered December 23, 1902. HENRY K. WAMPOLE & CO. Renewed December 23, 1932, to Henry K. Wampole and Company, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

39,569. COCOANUT CANDY. Registered December 30, 1902. VASILIOS CONTOS, Chicago, Ill. Renewed December 30, 1932.

86,484. CERTAIN MEDICINAL PREPARATIONS. Registered May 7, 1912. H. TROMMSDORF, Erfurt and Aix-la-Chapelle, Germany. Renewed May 7, 1932, to Clemens Lageman, doing business as the firm of H. Trommsdorf, Aachen, Germany.

86,804. PORTLAND CEMENT. Registered June 4, 1912. JOSEPH H. HOUGHTON, New York, N. Y. Renewed June 4, 1932, to Joseph H. Houghton, Brooklyn, N. Y.

86,841. MEDICINAL SALVE. Registered June 4, 1912. U-VA-JEE MANUFACTURING CO. Renewed June 4, 1932, to Juliana Krueger, doing business as U-Va-Jee Manufacturing Co., Watertown, Wis., assignee by mesne assignments.

86,890. READY-MIXED DECORATIVE AND PRESERVATIVE PAINTS. Registered June 11, 1912. DENNY, HILBORN & ROSENBACH. Renewed June 11, 1932, to Denny, Hilborn & Rosenbach, Inc., Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

86,891. READY-MIXED DECORATIVE AND PRESERVATIVE PAINTS. Registered June 11, 1912. DENNY, HILBORN & ROSENBACH. Renewed June 11, 1932, to Denny, Hilborn & Rosenbach, Inc., Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

86,892. READY-MIXED DECORATIVE AND PRESERVATIVE PAINTS. Registered June 11, 1912. DENNY, HILBORN & ROSENBACH. Renewed June 11, 1932, to Denny, Hilborn & Rosenbach, Inc., Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

87,012. SHERRY-WINE. Registered June 18, 1912. ALEX. D. SHAW & Co., New York, N. Y., a firm. Renewed June 18, 1932.

87,028. WOOLEN CLOTH KNOWN AS "PIECE GOODS." Registered June 25, 1912. AMERICAN WOOLEN COMPANY, Jersey City, N. J., and Boston, Mass. Renewed June 25, 1932, to American Woolen Company, New York, N. Y., a Corporation of Massachusetts, assignee.

87,049. PAINTS AND PAINTERS' MATERIALS. Registered June 25, 1912. DENNY, HILBORN & ROSENBACH. Renewed June 25, 1932, to Denny, Hilborn & Rosenbach, Inc., Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

87,314. LEATHER BELTING. Registered July 9, 1912. BAY STATE BELTING COMPANY, Boston, Mass., a Corporation of Massachusetts. Renewed July 9, 1932.

87,342. STEEL WAREHOUSE-TRUCKS. Registered July 9, 1912. ILLINOIS IRON AND BOLT CO., Carpentersville, Ill., a Corporation of Illinois. Renewed July 9, 1932.

87,445. WHEAT-FLOUR. Registered July 16, 1912. THE HARDESTY MILLING CO., Canal Dover, Ohio. Renewed July 16, 1932, to The Hardesty Milling Co., Dover, Ohio, a Corporation of Ohio.

87,637. CERTAIN KNIVES, CLEAVERS, CHOPPERS, PIG-SCRAPERS, RAZORS, AND SAWS. Registered July 30, 1912. EDWARD FREDERIC RIDGWAY. Renewed July 30, 1932, to John Wilson (Sheffield) Limited, Sheffield, England, a Corporation of Great Britain, successor.

87,733. ATOMIZERS AND NEBULIZERS. Registered August 6, 1912. THE DE VILBISS MANUFACTURING COMPANY. Renewed August 6, 1932, to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio, by change of name.

87,838. OLEOMARGARIN. Registered August 13, 1912. AMMON & PERSON. Renewed August 13, 1932, to Eckerson Company, Jersey City, N. J., a Corporation of New Jersey, assignee by mesne assignments.

87,854. MANILA AND SISAL ROPE AND CORDAGE. Registered August 13, 1912. COLUMBIAN ROPE COMPANY, Auburn, N. Y., a Corporation of New York. Renewed August 13, 1932.

88,040. CERTAIN AGRICULTURAL IMPLEMENTS AND PARTS THEREOF. Registered August 20, 1912. S. R. WHITE'S SONS. Renewed August 20, 1932, to S. R. White's Sons, Inc., Norfolk, Va., a Corporation of Virginia, assignee.

88,779. WATER AND OTHER FLUID METERS AND PARTS THEREOF. Registered October 22, 1912. NEPTUNE METER COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 22, 1932, to Neptune Meter Company, New York, N. Y., a Corporation of New Jersey.

88,780. WATER AND OTHER FLUID METERS AND PARTS THEREOF. Registered October 22, 1912. NEPTUNE METER COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 22, 1932, to Neptune Meter Company, New York, N. Y., a Corporation of New Jersey.

88,833. CANDY FIGS. Registered October 29, 1912. BISHOP & COMPANY, Los Angeles, Calif. Renewed October 29, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey, assignee.

88,844. CANDIES. Registered October 29, 1912. L. J. CHRISTOPHER. Renewed October 29, 1932, to Christopher Candy Company, Los Angeles, Calif., a Corporation of Delaware, assignee.

88,880. CERTAIN NAMED TOILET PREPARATIONS. Registered October 29, 1912. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed October 29, 1932.

88,881. PERFUMES, SACHET-POWDER, TOILET WATER, FACE-POWDER, AND BATH POWDER. Registered October 29, 1912. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed October 29, 1932.

88,883. CERTAIN NAMED TOILET PREPARATIONS. Registered October 29, 1912. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed October 29, 1932.

88,966. VIOLINS. Registered October 29, 1912. SIMSON & FREY, INC., New York, N. Y., a Corporation of New York. Renewed October 29, 1932.

88,990. PERFUMERY. Registered October 29, 1912. ALFRED WRIGHT PERFUMER INC., Philadelphia, Pa. Renewed October 29, 1932, to Mellier Company, Perfumer, St. Louis, Mo., a Corporation of Missouri, assignee.

89,029. COCOA, CHOCOLATE, CANDY. Registered November 5, 1912. HARTWIG & VOGEL AKTIENGESELLSCHAFT, Dresden, Germany, a Corporation of Germany. Renewed November 5, 1932.

89,079. BARB-WIRE. Registered November 12, 1912. THE AMERICAN STEEL & WIRE COMPANY OF NEW JERSEY, Hoboken, N. J. Renewed November 12, 1932, to The American Steel and Wire Company of New Jersey, Cleveland, Ohio, a Corporation of New Jersey.

89,226. LIQUID AND POWDERED PERFUMES. Registered December 3, 1912. COLGATE & CO., Jersey City, N. J., and New York, N. Y. Renewed December 3, 1932, to Colgate-Palmolive-Peet Company, Chicago, Ill., a Corporation of Delaware, assignee.

89,250. HAIR REMEDIES. Registered December 3, 1912. FRANK A. GRAY, Kansas City, Mo. Renewed December 3, 1932.

89,313. TOILET POWDERS. Registered December 3, 1912. E. WERTHEIMER & CIE., Paris, France. Renewed December 3, 1932, to Bourjois, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

89,340. CANDY. Registered December 10, 1912. CLARENCE A. CRANE. Renewed December 10, 1932, to B. M. Crane, executor of estate of Clarence A. Crane, deceased, Cleveland, Ohio, assignee.

89,345. SUSPENSORIES, ABDOMINAL BANDS, AND SURGICAL BANDAGES. Registered December 10, 1912. THE DEIMEL LINEN-MESH SYSTEM COMPANY, San Francisco, Calif., a Corporation of California. Renewed December 10, 1932.

89,350. WHEAT-FLOUR. Registered December 10, 1912. FISHER FLOURING MILLS COMPANY, Seattle, Wash. Renewed December 10, 1932, to Fisher Flouring Mills Co., Harbor Island, Seattle, Wash., a Corporation of Washington.

89,432. CANNED SALMON. Registered December 17, 1912. ASTORIA & PUGET SOUND CANNING CO., South Bellingham, Wash., a Corporation of Washington. Renewed December 17, 1932.

89,437. FRUIT EXTRACTS. Registered December 17, 1912. A. BOAKE, ROBERTS & CO. LTD., Stratford, England, a Corporation of Great Britain. Renewed December 17, 1932.

89,449. POULTRY-LITTER. Registered December 17, 1912. WALTER DURBROW. Renewed December 17, 1932, to Atkins & Durbrow, Inc., New York, N. Y., a Corporation of New York, assignee.

89,537. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS. Registered December 24, 1912. THE COLLINS COMPANY, Collinsville, Conn., a Corporation of Connecticut. Renewed December 24, 1932.

89,538. CERTAIN NAMED CUTLERY AND TOOLS. Registered December 24, 1912. THE COLLINS COMPANY, Collinsville, Conn., a Corporation of Connecticut. Renewed December 24, 1932.

89,589. OILS FOR HEATING, LIGHTING, AND LUBRICATING. Registered December 24, 1912. C. C. WAKEFIELD & COMPANY. Renewed December 24, 1932, to C. C. Wakefield and Company Limited, London, England, a Corporation of Great Britain, assignee.

LABELS

REGISTERED AUGUST 9, 1932

40,990.—*Title:* HONEY BLOSSOM BAR. For Cocoanut Toasted Bars. STEVEN C. BOUZEANES, doing business as Honey Blossom Candy Co., Tampa, Fla. Published March 2, 1932.

40,991.—*Title:* ANESTEX NEOTUBES. For Local Anesthetic. DAVID CURTIS, doing business as Laboratories (De-Ce Products Co. of N. Y.), New York, N. Y. Published June 20, 1932.

40,992.—*Title:* O-BOY. For Preparation for Cleaning and Polishing Automobiles. HERBERT P. DOUGLAS, doing business as Douglas Auto Polish Company, Pittsburgh, Pa. Published May 13, 1932.

40,993.—*Title:* DU-ONS. For Underwear. DUOFOLD INC., Mohawk, N. Y. Published February 24, 1932.

40,994.—*Title:* VACUUM PACKED COFFEE. For Coffee. DWINELL-WRIGHT COMPANY, Boston, Mass. Published May 15, 1932.

40,995.—*Title:* WHEATIES. For Whole Wheat Flakes. GENERAL MILLS, INC., Minneapolis, Minn. Published June 28, 1932.

40,996.—*Title:* GOLDENBERG'S WALNUT CHEWS. For Candy. D. GOLDENBERG, INC., Philadelphia, Pa. Published February 13, 1932.

40,997.—*Title:* CORZOL. For Salve for Head and Chest Colds. WALTER W. GRAEBNER, doing business as Corzol Chemical Co., Philadelphia, Pa. Published May 20, 1931.

40,998.—*Title:* ROSA LEE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published May 24, 1932.

40,999.—*Title:* BETSY PERKINS. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published July 1, 1932.

41,000.—*Title:* HUNTER'S FIVE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published May 31, 1932.

41,001.—*Title:* THE HYDE PARK. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published June 9, 1932.

41,002.—*Title:* FASHION. For Bathroom Tissue. HOBERG PAPER & FIBRE COMPANY, Green Bay, Wis. Published January 29, 1932.

41,003.—*Title:* HENRY J. HAVANNA SMOKERS. For Cigars. HENRY J. JACKSON, Chicago, Ill. Published April 15, 1932.

41,004.—*Title:* KRIM'S JU-C-ORANGE. For Carbonated Orangeade. MAX KRIM, doing business as Krim Beverage Company, Lebanon, Pa. Published April 30, 1932.

41,005.—*Title:* CREMELLO. For Ice Cream Powder. CLINT C. LINDLEY, doing business as Southwest Flavoring Company, San Antonio, Tex. Published May 31, 1932.

41,006.—*Title:* MORGAN'S SABALOL SPRAY. For Nose and Throat Spray. MORGAN SABALOL PRODUCTS, INC., New York, N. Y. Published June 15, 1932.

41,007.—*Title:* PASTEURIZED PROCESS CHEESE. For Cheese. PABST CORPORATION, Milwaukee, Wis. Published April 30, 1932.

41,008.—*Title:* FAMOUS 'PLANES. For Candy. PACKAGE PAPER COMPANY, Holyoke, Mass. Published June 30, 1932.

41,009.—*Title:* CARTOON LESSONS. For Cartoon Lessons. THE PORTER CHEMICAL COMPANY, Hagerstown, Md. Published March 29, 1932.

41,010.—*Title:* WEAR-RITE BRASSIERES & GIRDLES. For Brassières and Girdles. SACKS-SONS CARTON CO., INC., Brooklyn, N. Y. Published February 1, 1932.

41,011.—*Title:* BREAK O'MORN. For Coffee. STANDARD BRANDS INCORPORATED, New York, N. Y. Published July 1, 1932.

41,012.—*Title:* KWIX-A-WINK TIME TABLE. For Combination Time Tables and General Business Advertisements. ARTHUR L. STREAMBERG, Swampscott, Mass. Published May 9, 1932.

41,013.—*Title:* THE "JIFFY" TIME TABLE. For Combination Time Tables and General Business Advertisements. ARTHUR L. STREAMBERG, Swampscott, Mass. Published May 2, 1932.

41,014.—*Title:* KOPY-KAT, DRAW AND COLOR PICTURES. For Colors. WALTER E. WILSON, doing business as Kolorkraft Company, Detroit, Mich. Published April 20, 1932.

41,015.—*Title:* KOPY-KAT, COLOR PICTURES. For Assorted Colors. WALTER E. WILSON, doing business as Kolorkraft Company, Detroit, Mich. Published April 20, 1932.

PRINTS

REGISTERED AUGUST 9, 1932

13,793.—*Title:* PENNY FOR PENNY. For Athletic Underwear. THE B. V. D. COMPANY, INC., New York, N. Y. Published May 28, 1932.

13,794.—*Title:* EVENING GOWN BACKS. For Bathing Suits. THE B. V. D. COMPANY, INC., New York, N. Y. Published June 15, 1932.

13,795.—*Title:* THE 1932 B. V. D. SURF SUITS. For Bathing Suits. THE B. V. D. COMPANY, INC., New York, N. Y. Published May 15, 1932.

13,796.—*Title:* NITRATE OF SODA. For Nitrate of Soda. THE BARRETT COMPANY, New York, N. Y. Published February 1, 1932.

13,797.—*Title:* OUTDOOR GIRL BEAUTYGRAM. For Lip Stick, Face Rouge, and Face Powder. CRYSTAL CORPORATION, New York, N. Y. Published May 12, 1932.

13,798.—*Title:* WHEAT-TONE CONTAINS BOTH MALT AND MILK FOR HEALTH! For Bread. THE W. E. LONG CO., Chicago, Ill. Published May 13, 1932.

13,799.—*Title:* WHEAT-TONE IS A COMPACT ALL-FOOD BREAD. For Bread. THE W. E. LONG CO., Chicago, Ill. Published May 13, 1932.

13,800.—*Title:* WHEAT GERM, MALT, MILK, CRACKED WHEAT, HONEY, POTATOES—A MEAL IN ITSELF! For Bread. THE W. E. LONG CO., Chicago, Ill. Published May 13, 1932.

13,801.—*Title:* FOUND ONE BREAD WHEAT-TONE FOR ALL WHO LIKE GRAHAM, BRAN, CRACKED WHEAT OR ANY DARK BREAD. For Bread. THE W. E. LONG CO., Chicago, Ill. Published January 20, 1932.

13,802.—*Title:* WHEAT-TONE BLENDED FROM INGREDIENTS THAT MAKE A LOAF TO SATISFY ALL DARK BREAD TASTES! For Bread. THE W. E. LONG CO., Chicago, Ill. Published January 16, 1932.

13,803.—*Title:* A WHOLE MEAL IN ITSELF! For Bread. THE W. E. LONG CO., Chicago, Ill. Published May 13, 1932.

13,804.—*Title:* BIGGEST FOOD VALUE IN THE WORLD! For Bread. THE W. E. LONG CO., Chicago, Ill. Published May 13, 1932.

13,805.—*Title:* WHEAT-TONE TOAST! ALL THE BREAKFAST YOU NEED! For Bread. THE W. E. LONG CO., Chicago, Ill. Published May 13, 1932.

13,806.—*Title:* WHEAT-TONE MAKES FOOD DOLLARS GO FARTHER! For Bread. THE W. E. LONG CO., Chicago, Ill. Published May 13, 1932.

13,807.—*Title:* OLD HOME ASKS YOUR INSPECTION BEFORE YOU BUY IT! For Bread. THE W. E. LONG CO., Chicago, Ill. Published May 13, 1932.

13,808.—*Title:* WHY CHOOSE YOUR BREAD BLINDLY? For Bread. THE W. E. LONG CO., Chicago, Ill. Published May 17, 1932.

13,809.—*Title:* NATURALLY AGED FLOUR—CELLOPHANE WRAPPER—READY TO SERVE. For Bread. THE W. E. LONG CO., Chicago, Ill. Published May 27, 1932.

13,810.—*Title:* NOW ENJOY ALL THAT ANY DARK BREAD CAN GIVE YOU IN WHEAT-TONE. For Bread. THE W. E. LONG CO., Chicago, Ill. Published January 23, 1932.

13,811.—*Title:* IF YOU LIKE GRAHAM OR BRAN BREAD TRY WHEAT-TONE. For Bread. THE W. E. LONG CO., Chicago, Ill. Published January 27, 1932.

13,812.—*Title:* WHEAT TONE BREAD. For Bread. THE W. E. LONG CO., Chicago, Ill. Published February 6, 1932.

13,813.—*Title:* HERE IS BREAD VALUE PLUS WHEAT-TONE. For Bread. THE W. E. LONG CO., Chicago, Ill. Published May 11, 1932.

13,814.—*Title:* WHEAT-TONE HAS REPLACED TWO OR MORE DARK BREADS IN MANY HOMES! For Bread. THE W. E. LONG CO., Chicago, Ill. Published February 27, 1932.

13,815.—*Title:* OVER 100 WOMEN HELPED US TO PERFECT WHEAT-TONE. For Bread. THE W. E. LONG CO., Chicago, Ill. Published January 30, 1932.

13,816.—*Title:* WHEAT-TONE AMAZES GUESTS BY GIVING EACH HER PREFERRED TASTE. For Bread. THE W. E. LONG CO., Chicago, Ill. Published January 29, 1932.

13,817.—*Title:* PRAISE FROM HUNDREDS!—READ WHAT THEY SAY ABOUT WHEAT-TONE. For Bread. THE W. E. LONG CO., Chicago, Ill. Published January 28, 1932.

13,818.—*Title:* WHERE FINE FOODS ARE SOLD—TRANSPARENT PACKAGES LET YOU SEE BEFORE YOU BUY! For Bread. THE W. E. LONG CO., Chicago, Ill. Published June 24, 1932.

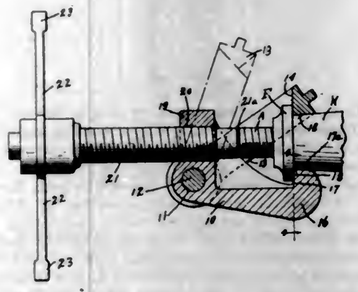
13,819.—*Title:* MORE MINERAL SALTS—MORE FOOD VALUE—MORE FLAVOR IN—WHEAT-TONE. For Bread. THE W. E. LONG CO., Chicago, Ill. Published February 20, 1932.

13,820.—*Title:* "TWIN DINNER." For Dinners. MCVITTIE WAFFLE HOUSE, INC., doing business as McVittie's, Denver, Colo. Published May 3, 1932.

REISSUES

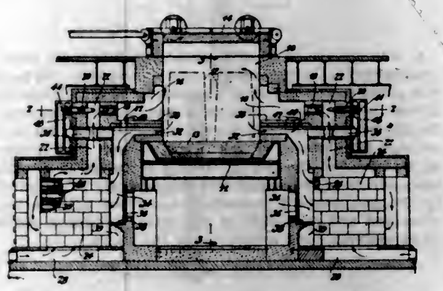
AUGUST 9, 1932

18,556. WHEEL PULLER. ARTHUR L. CORNWELL, Wellsville, N. Y. Original No. 1,764,243, dated June 17, 1930, Serial No. 347,571, filed Mar. 16, 1929. Application for reissue filed June 13, 1932. Serial No. 617,016. 5 Claims. (Cl. 29—85.)



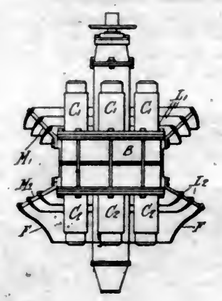
1. A device of the kind described comprising a body equipped with a hub engaging beak, a yoke shaped latch pivoted to said body equipped to engage the hub opposite said beak, said body equipped with an offset extension, and an operating stem threaded in said extension adapted to engage the end of an axle within said hub.

18,557. SOAKING-PIT FURNACE. FORREST W. MANKER, Detroit, Mich., assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Original No. 1,711,273, dated Apr. 30, 1929, Serial No. 43,698, filed July 15, 1925. Application for reissue filed Jan. 13, 1930. Serial No. 420,615. 17 Claims. (Cl. 263—15.)



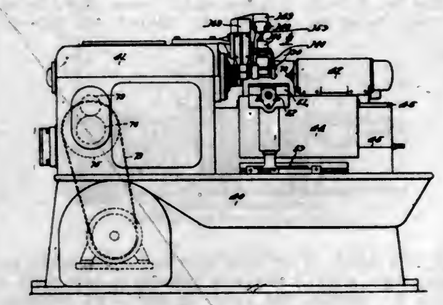
11. A method of heating ingots contained in a vertical pit comprising simultaneously introducing into the pit above the bottom thereof and from diametrically opposite directions a plurality of streams of burning gases, withdrawing the products of combustion from a plurality of diametrically opposite points below the points of introduction of the burning gases and injecting some of the withdrawn products of combustion into the burning gases before they enter the pit.

18,558. AIR COOLING MEANS FOR INTERNAL COMBUSTION ENGINES. ANTHONY GEORGE MALDON MICHELL, Melbourne, Victoria, Australia, assignor, by mesne assignments, to Michell-Crankless Engines Corporation, New York, N. Y., a Corporation of New York. Original No. 1,670,666, dated May 22, 1928, Serial No. 220,762, filed Sept. 20, 1927, and in Great Britain July 27, 1926. Application for reissue filed Apr. 28, 1931. Serial No. 533,530. 8 Claims. (Cl. 123—171.)



1. The combination with an internal combustion engine, of a series of annular baffles at the front of the engine for forming air streams parallel to the axes of the engine cylinders, and a series of annular baffles at the leeward end of the engine to intercept said parallel air streams and divert them inwardly upon and over the rear cylinders.

18,559. WORK HANDLING MECHANISM FOR MACHINE TOOLS. EDWIN R. SMITH and ALBERT SCHINKEZ, Seneca Falls, N. Y., assignors to Seneca Falls Machine Company, Seneca Falls, N. Y., a Corporation of Massachusetts. Original No. 1,841,988, dated Jan. 19, 1932, Serial No. 335,599, filed Jan. 28, 1929. Application for reissue filed Feb. 29, 1932. Serial No. 595,953. 30 Claims. (Cl. 82—2.)

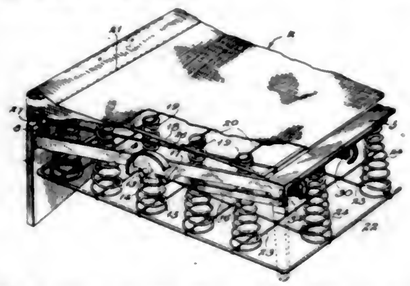


1. In a machine tool, a work feeding device, work supporting devices, work driving devices, a work removing device, and fluid actuated means to operate said devices, and control mechanism effective to cause actuation of said

feeding, work-supporting, and work-driving devices by said fluid operated means in predetermined timed succession.

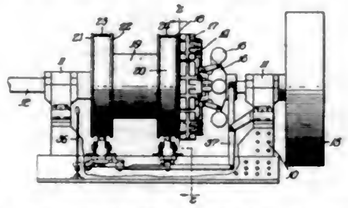
20. In a machine tool, a work holding device, means including a cylinder and fluid operated piston effective to move said device to work-receiving and work-delivery positions and to an intermediate inoperative position, valve mechanism effective to cause selective movement of said work-holding device to its several positions, said control means including a valve for said piston and cylinder, said valve having three control positions corresponding to the three positions of said piston in said cylinder, and automatic means to move said control valve selectively to any one of its three control positions.

18,560. SPRING CONSTRUCTION FOR FURNITURE. JOSEPH R. THOMAS, Fort Madison, Iowa, assignor of one-half to The Rome Company, Inc., a Corporation of New York. Original No. 1,694,995, dated Dec. 11, 1928, Serial No. 183,796, filed Apr. 14, 1927. Application for reissue filed Dec. 9, 1930. Serial No. 501,144. 18 Claims. (Cl. 5—25.)



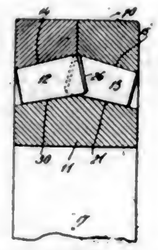
17. An invertible seat section comprising an invertible frame having connected front and rear members in different horizontal planes, that one of these frame members which takes a position at the front being lower than that member which takes a position at the rear in both the seat and in the inverted positions, a resilient seat therein having opposite soft edges and means for mounting the seat in the frame to invert therewith and present a soft edge above that one of said members which is at the front of the frame in either position.

18,561. NEUTRAL BRAKE. HARRY H. WATERS, Clinton, Iowa, assignor to Climax Engineering Company, Clinton, Iowa, a Corporation of Delaware. Original No. 1,619,449, dated Mar. 1, 1927, Serial No. 60,367, filed Oct. 5, 1925. Application for reissue filed July 24, 1930. Serial No. 470,503. 13 Claims. (Cl. 192—4.)



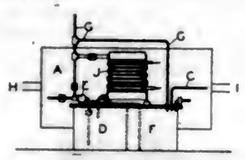
1. In a device of the class described, a constantly rotating shaft, a pulley rotatably mounted on said shaft, a clutch for coupling said pulley to said shaft, reversing gearing for said pulley, a neutral brake for holding said pulley stationary, and a single operating mechanism interconnecting the clutch, the reversing gearing, and the neutral brake, whereby the application of the neutral brake is automatically performed when reversing the direction of rotation of said pulley.

18,562. ROLLER BEARING. WILHELM B. BRONANDER, Montclair, N. J., assignor to Joseph G. Denny, jr., Philadelphia, Pa. Original No. 1,697,493, dated Jan. 1, 1929, Serial No. 485,822, filed July 19, 1921. Renewed May 16, 1928. Application for reissue filed Dec. 29, 1930. Serial No. 505,432. 13 Claims. (Cl. 308—214.)



7. In a roller bearing, a bearing member having reversely inclined conical tracks, a second bearing member having a convex bearing track having the curvature of a segment of a sphere whose center is located in the axis of rotation of the bearing and opposed to both the conical tracks, a series of tapered rollers bearing at their opposite ends on one of the conical tracks and having concave grooves intermediate their ends substantially conforming with the curvature of and engaging said convex track and a second series of tapered rollers bearing at their opposite ends on the other of the conical tracks and having concave grooves intermediate their ends substantially conforming with the curvature of and engaging said convex track.

18,563. DEHYDRATION OF FUEL GASES. CHARLES COOPER and DANIEL MAYON HENSHAW, Huddersfield, England, assignors to W. C. Holmes and Company, Limited, Huddersfield, England. Original No. 1,614,347, dated Jan. 11, 1927, Serial No. 85,044, filed Jan. 30, 1926, and in Great Britain Dec. 11, 1924. Application for reissue filed Jan. 2, 1929. Serial No. 329,857. 2 Claims. (Cl. 23—3.)

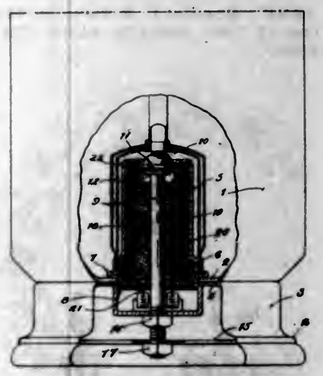


1. The process of treating industrial fuel gases prior to transportation in the mains which comprises, subjecting said gases to the action of hygroscopic or water-absorbing bodies in the liquid state until the moisture content of the gas has been reduced merely to such degree that on the average the dew point of the gas is such that moisture separated from the gas by cooling at points of minimum temperature in the mains will subsequently be evaporated by the gas, whereby permanent deposition of moisture is prevented and corrosion of the mains inhibited without an excessively rapid drying out of the mains.

18,564. ELECTRIC PERCOLATOR. WALTER S. MARVIN, deceased, Two Rivers, Wis., by The Metal Ware Corporation, Two Rivers, Wis., assignee. Original No. 1,810,490, dated June 16, 1931, Serial No. 303,892, filed Sept. 4, 1928. Application for reissue filed June 9, 1932. Serial No. 616,289. 11 Claims. (Cl. 219—44.)

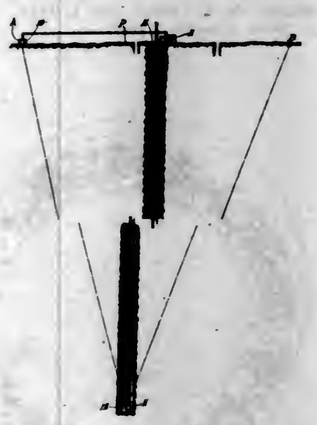
1. In an electric percolator, the combination of a pot having a bottom, a base having a transverse wall, said bottom and said wall having aligning apertures, an electric heating unit cup mounted on said bottom in said pot and having an extension projecting through the aligning

apertures, an inverted cap bearing on the underside of said transverse wall, a shield plate carried by the base and spaced from the transverse wall of the base, a bolt carried by the upper end of the heating unit cup and ex-



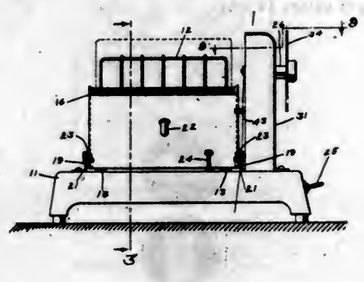
tending downwardly through the cap and shield plate, a nut carried by the bolt adjacent its outer end and locking said cap in place, and a second nut on the outer end of said bolt engaging the outer face of the shield plate to retain the same in position in the base.

18,565. METHOD OF DETERMINING THE STRAIGHTNESS OF DRILL HOLES IN THE EARTH. ESME EUGENE ROSAIRE, Houston, Tex., assignor to Geophysical Research Corporation, New York, N. Y., a Corporation of New Jersey. Original No. 1,811,648, dated June 23, 1931, Serial No. 330,542, filed Jan. 5, 1929. Application for reissue filed Apr. 19, 1932. Serial No. 607,207. 21 Claims. (Cl. 181—0.5.)



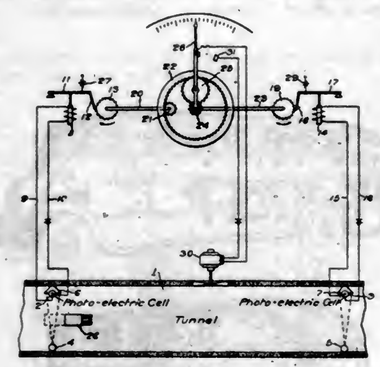
3. The method of determining the deviation from vertical of a bore formed in the earth which comprises causing sound waves to transverse the sub-service formation intermediate points on the earth's surface lying on a line intersecting said bore and a selected point in the bore below the earth's surface and recording the time intervals required by the sound waves to traverse the different paths between said points.

18,566. BREAD TOASTER. ELMER H. SMITH, Minneapolis, Minn., assignor, by mesne assignments, to Elmer H. Smith, as trustee for himself and Walter E. Johnson and J. J. Huebscher. Original No. 1,720,451, dated July 9, 1929, Serial No. 160,671, filed Jan. 12, 1927. Application for reissue filed Apr. 24, 1930. Serial No. 447,072. 12 Claims. (Cl. 53—5.)



1. A bread toaster having a stationary holder adapted to hold an article to be cooked in upright position, heating element supports pivoted adjacent their lower portions adjacent said holder and adapted to swing toward and away from it, said elements having heating means adapted to cook an article on the support when the elements are placed adjacent thereto, means against which elements rest by gravity when in cooking position, said means being operative to move the elements to the opposite side of their pivotal centers to cause them to fall by gravity in a direction away from said holder.

18,567. TRAFFIC SUPERVISOR. ROY J. WENSLEY, South Orange, and VLADIMIR K. ZWORYKIN, Haddonfield, N. J., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Original No. 1,743,175, dated Jan. 14, 1930, Serial No. 120,486, filed July 3, 1926. Application for reissue filed Jan. 13, 1932. Serial No. 586,446. 4 Claims. (Cl. 98—49.)

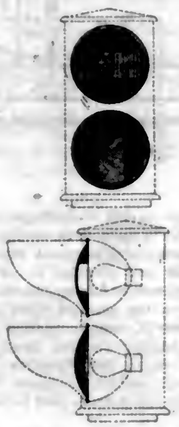


1. In a system for controlling the ventilation of a tunnel traversed by motor vehicles, in combination, a motor-driven fan for said tunnel, a plurality of vehicle-actuated means located at spaced points in the tunnel, means controlled by said plurality of vehicle-actuated means for effecting energization of the fan motor when the number of vehicles between said spaced points exceeds a predetermined number.

DESIGNS

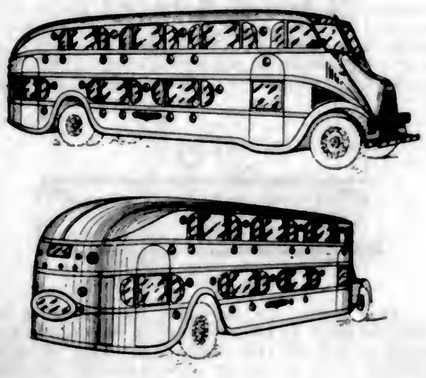
AUGUST 9, 1932

87,501. TRAFFIC SIGNAL. CHARLES ADLER, Jr., Baltimore, Md. Filed May 25, 1932. Serial No. 43,896. Term of patent 14 years.



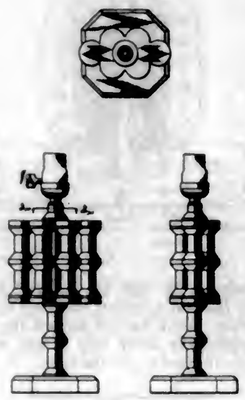
The ornamental design for a traffic signal as shown and described.

87,502. AUTOMOBILE. DWIGHT E. AUSTIN, Los Angeles, Calif. Filed Nov. 20, 1929. Serial No. 33,501. Term of patent 14 years.



The ornamental design for an automobile as shown.

87,503. LAMP. RUSSELL J. BARONE, Rochester, N. Y. Filed June 11, 1932. Serial No. 44,058. Term of patent 14 years.



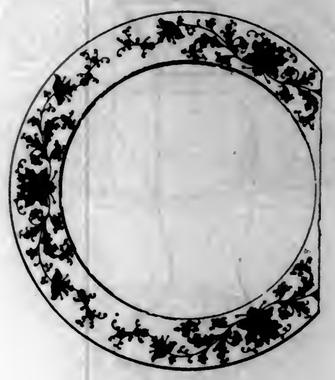
The ornamental design for a lamp as shown and described.

87,504. PLATE OR SIMILAR ARTICLE. LEWIS H. BOWN, East Aurora, N. Y., assignor to Buffalo Pottery, Buffalo, N. Y. Filed June 1, 1932. Serial No. 43,951. Term of patent 7 years.



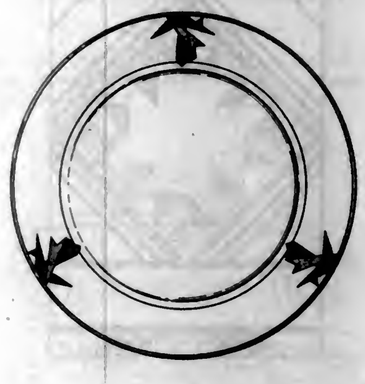
The ornamental design for a plate or similar article as shown and described.

87,505. PLATE OR SIMILAR ARTICLE. LEWIS H. BOWN, East Aurora, N. Y., assignor to Buffalo Pottery, Buffalo, N. Y. Filed June 1, 1932. Serial No. 43,952. Term of patent 7 years.



The ornamental design for a plate or similar article as shown and described.

87,506. PLATE OR SIMILAR ARTICLE. LEWIS H. BOWN, East Aurora, N. Y., assignor to Buffalo Pottery, Buffalo, N. Y. Filed June 1, 1932. Serial No. 43,953. Term of patent 7 years.



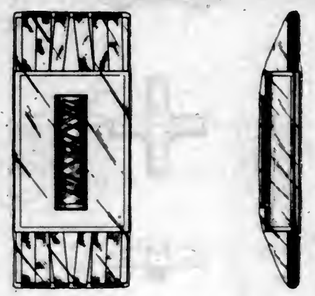
The ornamental design for a plate or similar article, as shown.

87,507. EMBLEM. CARL BUSS, West Pittston, Pa. Filed Dec. 3, 1931. Serial No. 41,956. Term of patent 14 years.



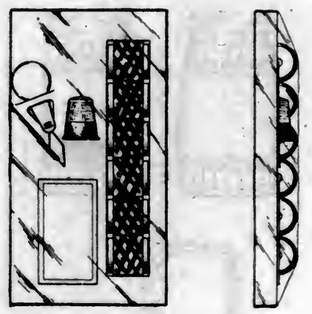
The ornamental design for an emblem substantially as shown and described.

87,508. PACKAGE OF TAPE AND SEWING THREAD. ALBERT B. COLLINGBOURNE, Elgin, Ill. Filed Feb. 29, 1932. Serial No. 43,035. Term of patent 7 years.



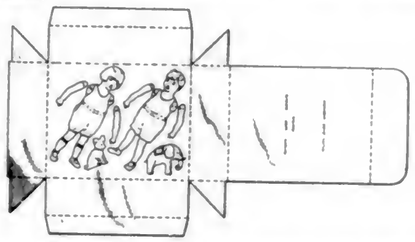
The ornamental design for a package of tape and sewing thread, as shown and described.

87,509. SEWING SET PACKAGE. ALBERT B. COLLINGBOURNE, Elgin, Ill. Filed Feb. 29, 1932. Serial No. 43,036. Term of patent 7 years.



The ornamental design for a sewing set package, as shown and described.

87,510. COMBINATION BOX BLANK AND CUTOUT CARD. ALBERT B. COLLINGBOURNE, Elgin, Ill. Filed Mar. 12, 1932. Serial No. 43,171. Term of patent 7 years.



The ornamental design for a combination box blank and cutout card, as shown.

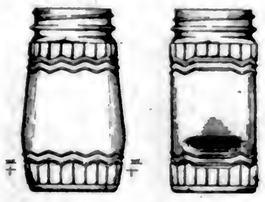
87,511. LAVATORY AND SHOWER VALVE HANDLE. JAMES DUNCAN, Waterville, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 4, 1932. Serial No. 43,984. Term of patent 7 years.





The ornamental design for a lavatory and shower valve handle as shown.

87,512. JAR. EDWIN W. FUERST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 10, 1932. Serial No. 44,049. Term of patent 14 years.





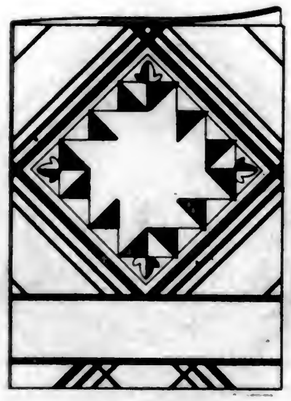
The ornamental design for a jar substantially as shown.

87,513. BOX OR SIMILAR RECEPTACLE. MARIAN B. HEATH, Meadville, Pa. Filed Feb. 23, 1932. Serial No. 42,962. Term of patent 7 years.



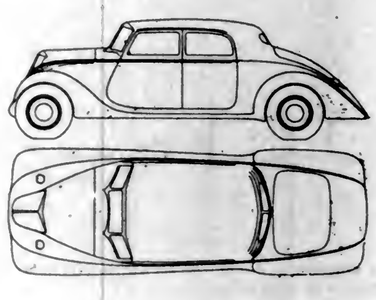
The ornamental design for a box, or similar receptacle, as shown.

87,514. BOOK COVER. NEWTON S. HILLYARD, St. Joseph, Mo. Filed Oct. 12, 1931. Serial No. 41,373. Term of patent 14 years.

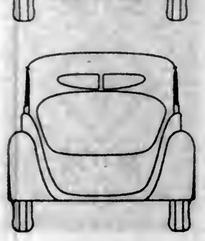


The ornamental design for a book cover, as shown and described.

87,515. AUTOMOBILE. ROSCOE C. HOFFMAN, Detroit, Mich. Filed Jan. 28, 1932. Serial No. 42,647. Term of patent 7 years.

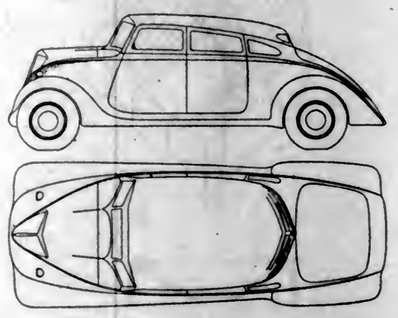






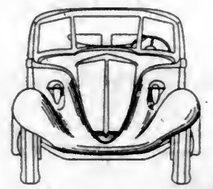
The ornamental design for an automobile as shown.

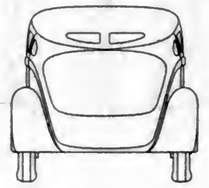
87,516. AUTOMOBILE. ROSCOE C. HOFFMAN, Detroit, Mich. Filed Jan. 28, 1932. Serial No. 42,648. Term of patent 7 years.



The ornamental design for an automobile as shown.

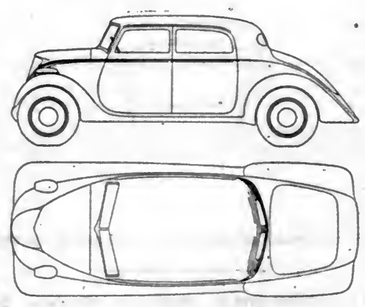
87,516.—Continued

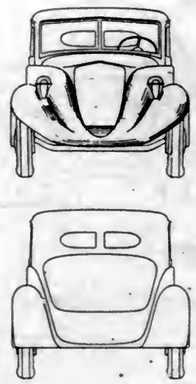




The ornamental design for an automobile, as shown.

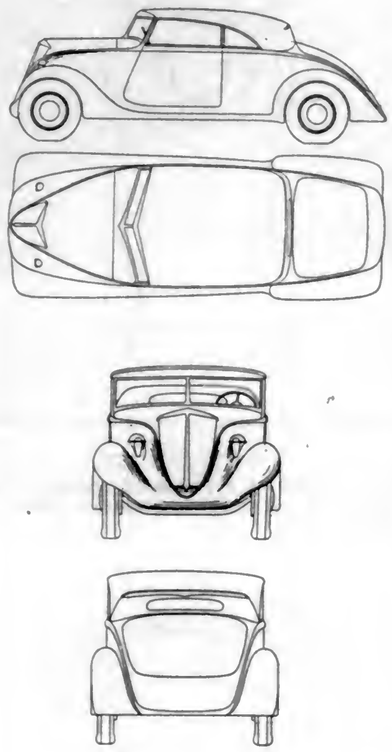
87,517. AUTOMOBILE. ROSCOE C. HOFFMAN, Detroit, Mich. Filed Jan. 28, 1932. Serial No. 42,649. Term of patent 7 years.





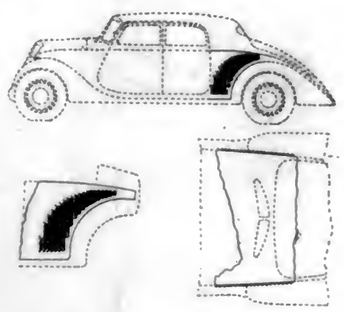
The ornamental design for an automobile, as shown.

87,518. AUTOMOBILE. ROSCOE C. HOFFMAN, Detroit, Mich. Filed Jan. 28, 1932. Serial No. 42,650. Term of patent 7 years.



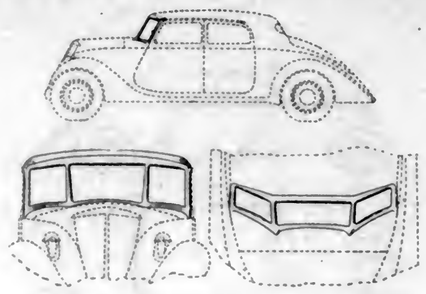
The ornamental design for an automobile, as shown.

87,519. AUTOMOBILE. ROSCOE C. HOFFMAN, Detroit, Mich. Filed Apr. 22, 1932. Serial No. 43,576. Term of patent 7 years.



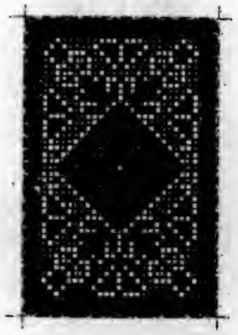
The ornamental design for an automobile substantially as shown and described.

87,520. AUTOMOBILE. ROSCOE C. HOFFMAN, Detroit, Mich. Filed Apr. 22, 1932. Serial No. 43,577. Term of patent 7 years.



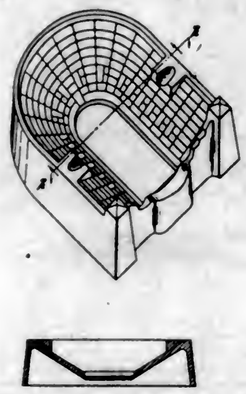
The ornamental design for an automobile substantially as shown and described.

87,521. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed June 6, 1932. Serial No. 43,989. Term of patent 3½ years.



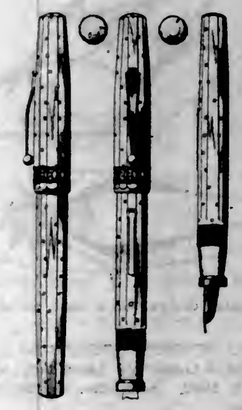
The ornamental design for lace, substantially as shown and described.

87,522. COMBINATION ASH TRAY AND PAPER WEIGHT. WILLIAM W. JOLLY, Minneapolis, Minn. Filed Oct. 23, 1931. Serial No. 41,493. Term of patent 3½ years.



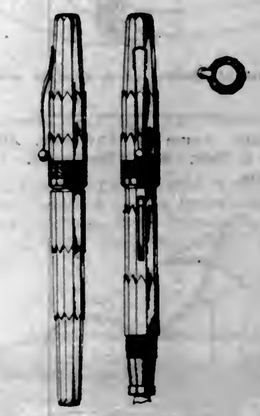
The ornamental design for a combination ash tray and paper weight substantially as shown.

87,523. FOUNTAIN PEN. DAVID KAHN, Woodcliff, N. J., assignor to David Kahn, Inc., North Bergen, N. J., a Corporation of New Jersey. Filed Mar. 8, 1932. Serial No. 43,128. Term of patent 14 years.



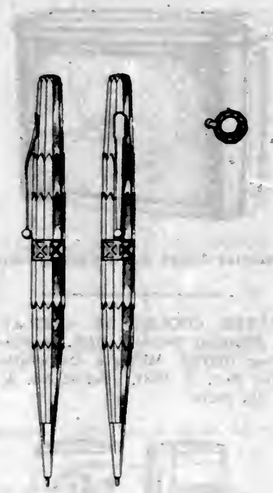
The ornamental design for a fountain pen substantially as shown and described.

87,524. FOUNTAIN PEN. DAVID KAHN, Woodcliff, N. J., assignor to David Kahn, Inc., North Bergen, N. J., a Corporation of New Jersey. Filed May 6, 1932. Serial No. 43,736. Term of patent 14 years.



The ornamental design for a fountain pen substantially as shown.

87,525. PENCIL. DAVID KAHN, Woodcliff, N. J., assignor to David Kahn, Inc., North Bergen, N. J., a Corporation of New Jersey. Filed May 24, 1932. Serial No. 43,891. Term of patent 14 years.



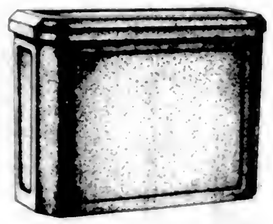
The ornamental design for a pencil substantially as shown.

87,526. ASH TRAY. PETER R. KAPIKIAN, Astoria, N. Y. Filed May 5, 1932. Serial No. 43,720. Term of patent 3½ years.



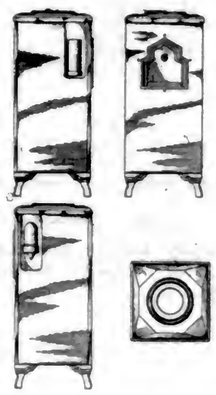
The ornamental design for an ash tray, as shown.

87,527. FLUSHING TANK. HERBERT V. KOHLER, Sheboygan, and FRANK G. BROTZ, Kohler, Wis., assignors to Kohler Company, Kohler, Wis., a Corporation of Wisconsin. Filed Jan. 16, 1931. Serial No. 38,837. Term of patent 14 years.



The ornamental design for a flushing tank, as shown.

87,528. WATER COOLER OR SIMILAR ARTICLE. WILLIAM KOHLER, Detroit, Mich., assignor to Norge Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 9, 1931. Serial No. 41,663. Term of patent 3½ years.



The ornamental design for a water cooler or similar article, as shown.

87,529. SHOE. LOUIS M. LEVERONE, Allston, Mass. Filed June 9, 1932. Serial No. 44,028. Term of patent 3½ years.



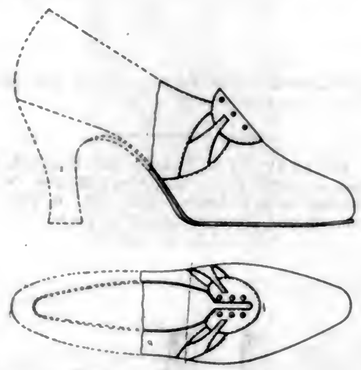
The ornamental design for a shoe as shown and described.

87,530. SHOE. LOUIS M. LEVERONE, Allston, Mass. Filed June 9, 1932. Serial No. 44,029. Term of patent 3½ years.



The ornamental design for a shoe as shown and described.

87,531. SHOE. LOUIS M. LEVERONE, Allston, Mass. Filed June 9, 1932. Serial No. 44,030. Term of patent 3½ years.



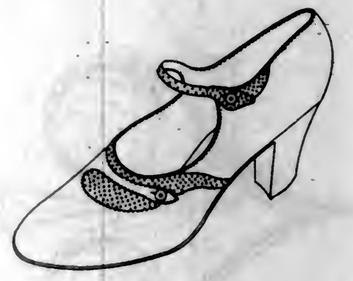
The ornamental design for a shoe as shown and described.

87,532. SHOE. LOUIS M. LEVERONE, Allston, Mass. Filed June 9, 1932. Serial No. 44,032. Term of patent 3½ years.



The ornamental design for a shoe as shown and described.

87,533. SHOE. LOUIS M. LEVERONE, Allston, Mass. Filed June 9, 1932. Serial No. 44,033. Term of patent 3½ years.



The ornamental design for a shoe as shown and described.

87,534. SHOE ORNAMENT. LOUIS M. LEVERONE, Allston, Mass. Filed June 9, 1932. Serial No. 44,084. Term of patent 3½ years.



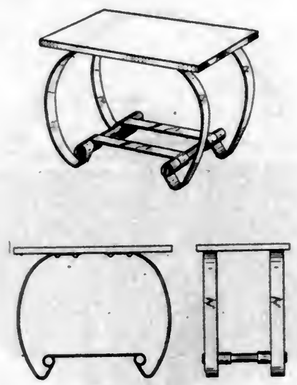
The ornamental design for a shoe ornament as shown.

87,535. BILLIARD TABLE. JESSE O. MATTESON, Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 27, 1932. Serial No. 43,629. Term of patent 7 years.



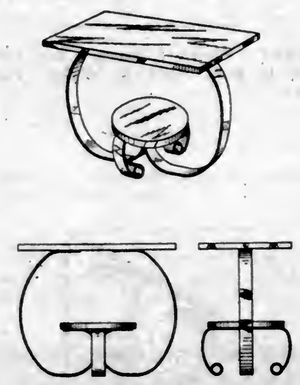
The ornamental design for a billiard table, as shown.

87,536. TABLE. WILLIAM R. MCGOWEN, Pittsburgh, Pa., assignor to The McKay Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 15, 1932. Serial No. 44,085. Term of patent 3½ years.



The ornamental design for a table, as shown.

87,537. TABLE. WILLIAM R. MCGOWEN, Pittsburgh, Pa., assignor to The McKay Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 15, 1932. Serial No. 44,086. Term of patent 3½ years.



The ornamental design for a table, as shown.

87,538. MOURNING RING. MAX NATHAN and ARTHUR GROSS, New York, N. Y. Filed Mar. 5, 1932. Serial No. 43,103. Term of patent 14 years.



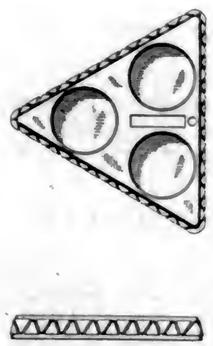
The ornamental design for a mourning ring as shown and described.

87,539. CABINET. RUSSELL A. PICKENS, Fair Lawn, N. J., assignor to Servel Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 11, 1930. Serial No. 37,627. Term of patent 3½ years.



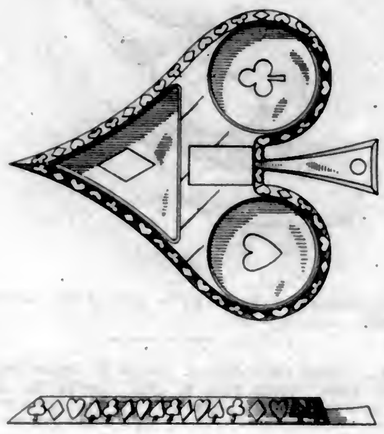
The ornamental design for a cabinet, as shown.

87,540. TRAY. SIDNEY I. PICKER, New York, N. Y. Filed May 19, 1932. Serial No. 43,845. Term of patent 7 years.



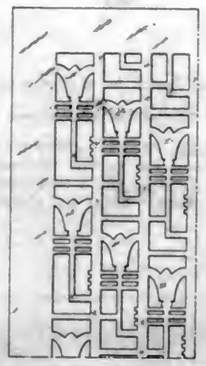
The ornamental design for a tray substantially as shown and described.

87,541. TRAY. SIDNEY I. PICKER, New York, N. Y. Filed May 19, 1932. Serial No. 43,846. Term of patent 7 years.



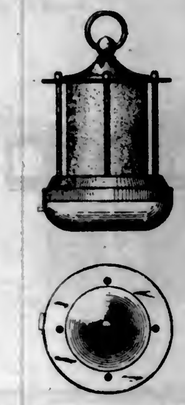
The ornamental design for a tray substantially as shown and described.

87,542. GRILLE PANEL. LOUIS PIROLA, Chicago, Ill., assignor to The Harrington & King Perforating Company, Chicago, Ill., a Corporation of Illinois. Filed May 23, 1932. Serial No. 43,885. Term of patent 14 years.



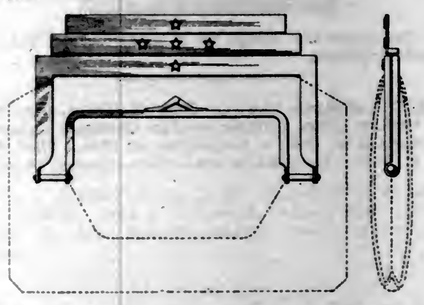
The ornamental design for a grille panel substantially as shown and described.

87,543. PORTABLE ELECTRIC LAMP. ADOLPH C. RECKER, Oakville, Conn., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed June 10, 1932. Serial No. 44,046. Term of patent 14 years.



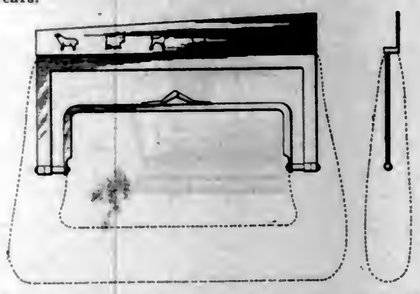
The ornamental design for a portable electric lamp as shown.

87,544. HANDBAG OR THE LIKE. HERBERT L. REDMAN, Forest Hills, N. Y., assignor to Saks & Company, New York, N. Y., a Corporation of New York. Filed Mar. 3, 1932. Serial No. 43,066. Term of patent 14 years.



The ornamental design for a handbag or the like, as shown.

87,545. HANDBAG OR THE LIKE. HERBERT L. REDMAN, Forest Hills, N. Y., assignor to Saks & Company, New York, N. Y., a Corporation of New York. Filed Mar. 3, 1932. Serial No. 43,067. Term of patent 14 years.



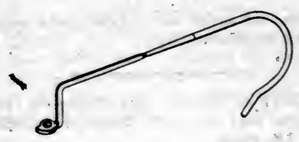
The ornamental design for a handbag or the like, as shown.

87,546. LADY'S HANDBAG OR THE LIKE. HERBERT L. REDMAN, Forest Hills, New York, N. Y., assignor to Saks & Company, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1932. Serial No. 43,528. Term of patent 14 years.



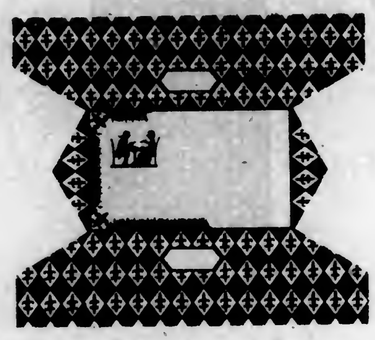
The ornamental design for a lady's handbag or the like, as shown and described.

87,547. TEMPLE MEMBER FOR SPECTACLES. EDWIN REYNOLDS, Vineland, N. J. Filed May 2, 1932. Serial No. 43,694. Term of patent 14 years.



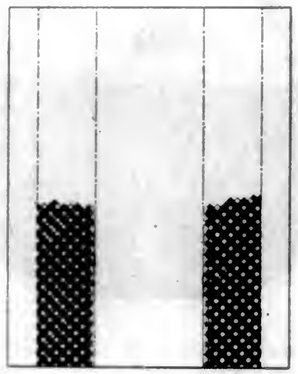
The ornamental design for a temple member for spectacles, substantially as shown.

87,548. BOX WRAP. ALPHONSE ROART, Philadelphia, Pa. Filed May 20, 1932. Serial No. 43,859. Term of patent 14 years.



The ornamental design for a box wrap, substantially as shown.

87,549. LABEL BLANK. EDWARD W. SEARS, Kansas City, Mo. Filed May 9, 1932. Serial No. 43,755. Term of patent 7 years.



The ornamental design for a label blank substantially as shown and described.

87,550. PLAYING CARD. LEE SKIPWITH, Bronxville, N. Y. Filed May 25, 1932. Serial No. 43,900. Term of patent 3½ years.



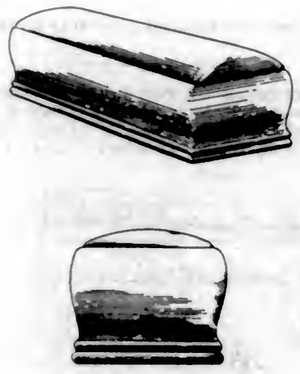
The ornamental design for a playing card, as shown.

87,551. BRACELET CHAIN. ALBERT E. R. SPEIDEL, Edgewood, R. I., assignor to Speidel Corporation, a Corporation of Rhode Island. Filed May 27, 1932. Serial No. 43,919. Term of patent 3½ years.



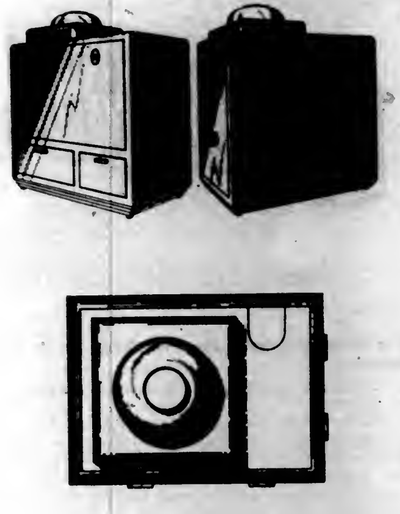
The ornamental design for a bracelet chain, substantially as shown.

87,552. BURIAL VAULT. JOHN M. SEELY, near New Carlisle, Ohio, assignor to The Champion Company, Springfield, Ohio, a Corporation of Ohio. Filed May 31, 1932. Serial No. 43,936. Term of patent 14 years.



The ornamental design for a burial vault, as shown.

87,553. COVER FOR BOILERS, HEATING FURNACES, WATER HEATERS, OR THE LIKE. WALTER D. TEAGUE, New York, N. Y., assignor to National Radiator Corporation, Johnstown, Pa., a Corporation of Delaware. Filed May 17, 1932. Serial No. 43,825. Term of patent 14 years.



The ornamental design for a cover for boilers, heating furnaces, water heaters, or the like, as shown.

87,554. COMBINATION LAMP STAND AND RADIO-CABINET. JOHN G. TEICHMAN, Durand, Mich. Filed Jan. 25, 1932. Serial No. 42,627. Term of patent 3½ years.



The ornamental design for a combination lamp stand and radio cabinet as shown.

87,555. PLATE OR SIMILAR ARTICLE. GEORGE WESP, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed June 10, 1932. Serial No. 44,038. Term of patent 3½ years.



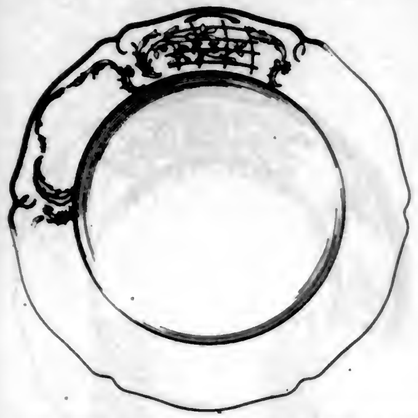
The ornamental design for a plate or similar article, as shown and described.

87,556. PLATE OR SIMILAR ARTICLE. GEORGE WESP, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed June 10, 1932. Serial No. 44,039. Term of patent 3½ years.



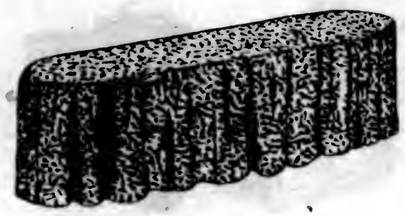
The ornamental design for a plate or similar article, as shown and described.

87,557. PLATE OR SIMILAR ARTICLE. GEORGE WESP, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed June 10, 1932. Serial No. 44,040. Term of patent 3½ years.



The ornamental design for a plate, or similar article as shown and described.

87,558. CATAFALQUE. JOHN M. SEELEY, near New Carlisle, Ohio, assignor to The Champion Company, Springfield, Ohio, a Corporation of Ohio. Filed Feb. 15, 1932. Serial No. 42,865. Term of patent 7 years.



The ornamental design for a catafalque, as shown and described.

PATENTS

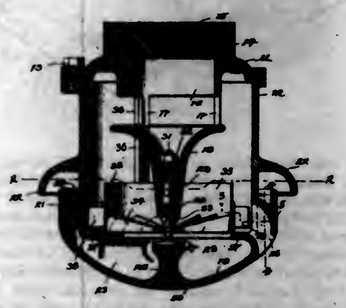
GRANTED AUGUST 9, 1932

1,870,215. REENFORCED BUILDING PAPER. HERBERT A. ANDERSON, Chicago, Ill., assignor to American Reenforced Paper Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Nov. 26, 1930. Serial No. 498,267. 3 Claims. (Cl. 154—52.)



1. As an improved article of manufacture, a multi-ply, waterproof, building paper which will not shrink appreciably when exposed in a stretched condition to varying weather conditions, comprising a composite fabric formed of two sheets of paper craped or crimped to render them elastic or capable of stretching, and provided with unspun reenforcing fibres secured by a waterproof adhesive in a straightened condition between the sheets so that the fibres extend both longitudinally and transversely of the sheets and arranged so that the craped or crimped sheet exposed to the weather may contract and expand freely under the action of the weather while the reenforcing fibres maintain the overall dimension of the composite fabric substantially constant.

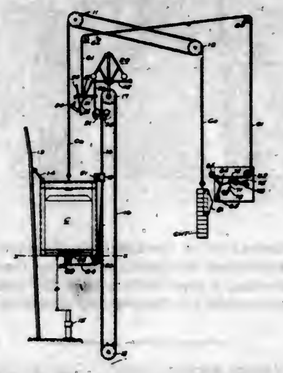
1,870,216. DUST SEPARATOR. WAYNE A. BALDWIN, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Oct. 9, 1930. Serial No. 487,621. 11 Claims. (Cl. 183—77.)



1. The combination with a dust separator having an air inlet and a dust discharge opening isolated from said inlet, of motor means arranged to be driven by air flowing into the separator through the inlet; and a fan driven by said motor means located in said casing beyond said motor means, out of the path of normal air flow and operating to resist inflow through said dust discharge opening.

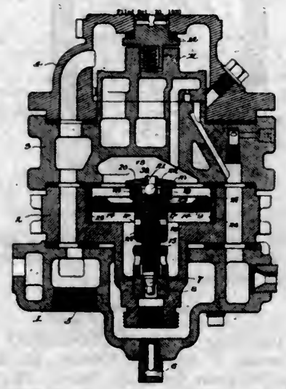
1,870,217. SAFETY DEVICE. FRED BAUMGARTNER, Chicago, Ill., assignor to Westinghouse Electric Elevator Company, a Corporation of Illinois. Filed Mar. 13, 1931. Serial No. 522,446. 6 Claims. (Cl. 187—89.)

1. In combination, an elevator car, a safety-braking device carried by the car, an overspeed governor for actuating the safety-braking device when the car overspeeds, a counterweight, an engageable member mounted adjacent to the hatchway, an engaging member carried by the



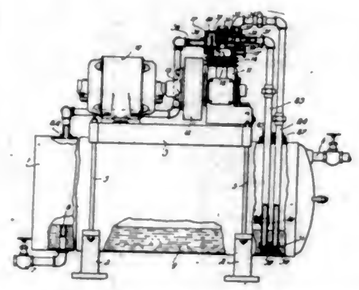
counterweight in cooperative relation thereto, and means actuated by the movement of the engageable and engaging members to cooperative position for varying the speed adjustment of the overspeed governor.

1,870,218. AIR BRAKE. HENRY F. BICKEL, Plainfield, N. J., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Oct. 20, 1930. Serial No. 490,006. 5 Claims. (Cl. 303—55.)



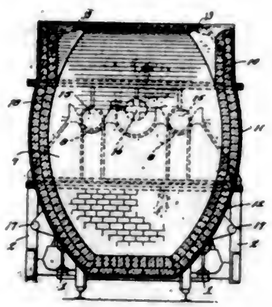
1. The combination with a brake valve of the type having an equalizing chamber, a shiftable valve and ports controlled thereby through which fluid is supplied to the brake pipe and equalizing chamber in running and release position, and discharged from the equalizing chamber in service position, of an equalizing discharge valve mechanism comprising a piston subject in opposing directions to brake pipe pressure and equalizing chamber pressure; a discharge valve actuated by said piston and controlling discharge from the brake pipe when brake pipe pressure predominates; and a check valve mounted in the center of said piston, movable in the direction of the axis thereof, and arranged to permit flow of excess pressure fluid from the equalizing chamber to the brake pipe and to close against reverse flow.

1,870,219. COMPRESSOR COOLING SYSTEM. BURTON S. AIKMAN, Milwaukee, Wis., assignor to National Brake & Electric Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Jan. 19, 1929. Serial No. 333,692. 35 Claims. (Cl. 230—208.)



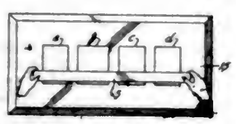
1. In combination, a discharge check valve chamber, a housing surrounding the same, a delivery conduit leading from the housing, a pipe leading from the chamber to the housing, and means for introducing a cooling liquid into said pipe.

1,870,220. HOT METAL CAR. CARL P. ASTROM, East Orange, N. J., assignor to M. H. Treadwell Company, New York, N. Y., a Corporation of New York. Filed Oct. 9, 1930. Serial No. 487,396. 3 Claims. (Cl. 266—39.)



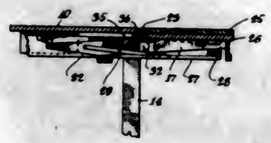
1. In a hot metal car, a ladle having a substantially rectangular horizontal section and an elliptical vertical section with an opening at the top.

1,870,221. METHOD FOR APPLYING SIGN CHARACTERS. GEORGE H. BABCOCK, Chicago, Ill., assignor to Rayner Decalcomania Company, Chicago, Ill., a Corporation of Illinois. Original application filed Dec. 16, 1930, Serial No. 502,826. Divided and this application filed Sept. 24, 1931. Serial No. 564,777. 2 Claims. (Cl. 40—140.)



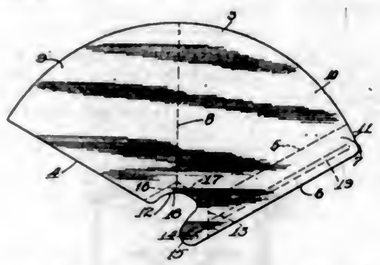
1. The method of applying transfer characters to a sign field which comprises aligning a plurality of selected separated characters in desired positions upon a base, in securing the characters against movement upon the base by applying pressure simultaneously to all of them upon certain definite portions of the surfaces thereof, in adhering to other portions of the surfaces of the characters a connecting medium which joins them together, in positioning the joined characters upon a field, and in freeing the characters for transfer to the field.

1,870,222. EXTENSION TABLE. WILHELM BALSCHUWEIT, New York, N. Y. Filed May 31, 1930. Serial No. 458,253. 2 Claims. (Cl. 45—113.)



2. In an extension table, a pair of normally concealed superimposed leaves, a means for locking the leaves of said table in their unextended superposed position, said means comprising a cross-bar hingedly secured to one of the table leaves, a cleat attached to the lowermost table leaf, having a depression for the reception of said cross-bar, claws on said cleat normally engaging said cross-bar, and a pin adapted to be depressed by the table top upon the extension of the leaf to which said cross-bar is hinged to disengage said claws from the cross-bar to free the lowermost leaf for its extension.

1,870,223. CUP AND BLANK THEREFOR. CESARE BARBIERI, New York, N. Y., assignor to Vortex Cup Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 9, 1929. Serial No. 412,695. 11 Claims. (Cl. 229—1.5.)

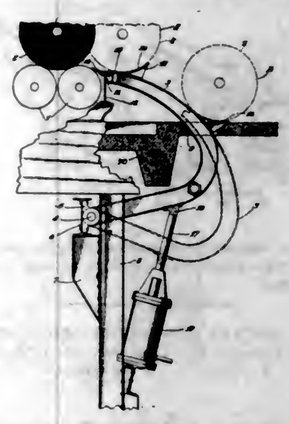


8. A cup made from a paper blank and having a body portion adapted when in use to present a substantially rounded mouth and being of open form tapering from its mouth in wedge-like form to a water-tight bottom closure made by a straight edge transverse fold-up of the cup material secured to the body portion, the line of fold of said fold-up being of sufficient length to enable substantially the entire body portion to assume an elliptical shape and said body portion having one side provided with an adhesive flap for securing the cup blank in the form of a cup, said fold-up including an extension tab on said flap having adhesive applied thereto at the same time the adhesive is applied to the flap, the adhesive on said extension constituting a part of a single line and strip of adhesive applied to said flap.

1,870,224. APPARATUS FOR HANDLING ROLLS. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed Sept. 15, 1928. Serial No. 306,250. 5 Claims. (Cl. 242—66.)

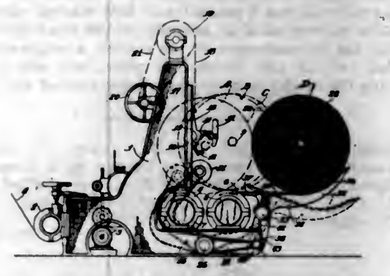
4. A device for association with an under drum of a paper rewinder, comprising a stationarily mounted shaft

positioned beneath said drum, arms pivoted at one end about said shaft, a cradle carried by said arms at the other end and having a plane roll receiving surface and an arcuate roll retaining surface and means for swinging said



arms to elevate said roll receiving surface to position adjacent said drum to receive a roll therefrom and to lower said cradle to automatically discharge said roll over said arcuate surface.

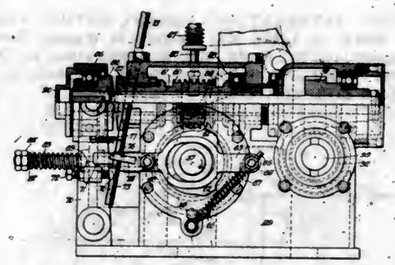
1,870,225. PAPER WINDING APPARATUS. EARL E. BERRY, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed Dec. 28, 1928. Serial No. 328,919. 11 Claims. (Cl. 242—66.)



7. In combination with a pair of drums adapted jointly to support a reel of material, reel ejecting means, reel receiving and discharging means and power operated driving mechanism for operating said reel ejecting means to roll said reel out of supported relation with respect to said drums over the surface of one of said drums onto said reel receiving and discharging means and synchronously actuating said latter means to discharge said reel.

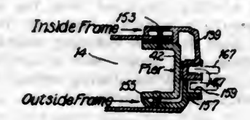
1,870,226. CLUTCH. JOSEPH W. BISHOP, Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 249,842. 5 Claims. (Cl. 192—33.)

1. The combination of a driving shaft, a driven shaft, means including a pair of clutch members for transmitting power from said driving shaft to said driven shaft, a cam on said driven shaft, means tending to throw one of said clutch members into engagement with the other, means actuated by said cam for throwing said one of said clutch members out of engagement with said other and holding it out of engagement, said means being releasable to permit reengagement of said clutch members, a manually movable member, means operable by movement of said manually movable member to a certain position to release the second mentioned means, said second mentioned means being operable after the release thereof



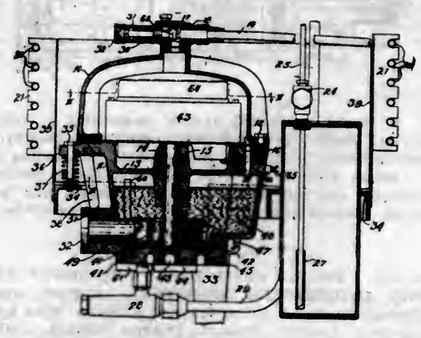
to again move said one of said clutch members out of engagement with said other clutch member and means for preventing the retention of said manually controlled member in said position from actuating the second mentioned means.

1,870,227. RAILWAY CAR. JOHN ROBERT BLACKHALL, Highland Park, and HARVEY S. PARDEE, Ravinia, Ill.; said Pardee assignor to said Blackhall. Filed May 1, 1929. Serial No. 359,480. 3 Claims. (Cl. 105—397.)



1. A car body comprising sides having spaced inner and outer walls, inside window frames removably fastened to the inner wall and outside removable window frames fastened to the outer wall, said frames having common mullions.

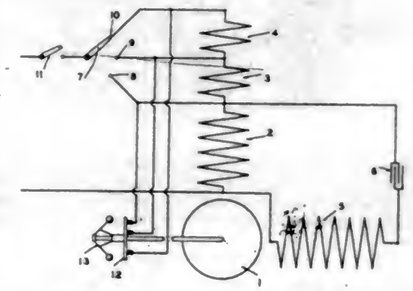
1,870,228. DIRECT CONNECTED MOTOR AND COMPRESSOR. HOWARD E. BLOOD and ROYAL G. NELSON, Detroit, Mich., assignors to Norge Corporation, a Corporation of Michigan. Filed Nov. 28, 1927. Serial No. 236,091. 15 Claims. (Cl. 62—115.)



1. A direct connected motor and compressor unit for refrigerating apparatus comprising a casing, a motor and compressor unit mounted in said casing with a removable

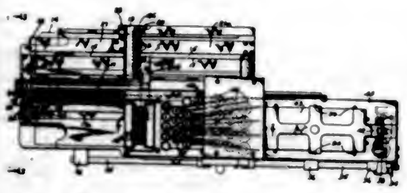
compressor body forming a bottom closure for said casing, a heat shield surrounding the casing, means yieldingly supporting said casing, condenser coils mounted on said heat shield, and a liquid receiver connected to said coils.

1,870,229. ALTERNATING CURRENT MOTOR. AUGUST W. BOHN, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Apr. 9, 1930. Serial No. 442,738. 3 Claims. (Cl. 172—278.)



2. In an alternating current motor, an induced member, an inducing member provided with a main inducing winding, a phase displacing circuit comprising an auxiliary inducing winding displaced from the main inducing winding, auxiliary winding turns on the inducing member coaxial with the main inducing winding, a switch for short-circuiting said turns, and means maintaining said switch in open position during normal running of the machine and closed at starting.

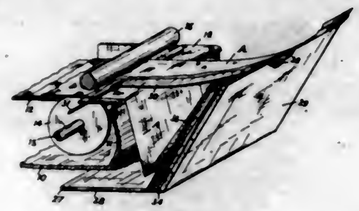
1,870,230. DISTANCE CONTROL DEVICE. JOSEPH CLARENCE BOLT, Boston, and CURT I. JOHNSON, Worcester, Mass., assignors to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Nov. 21, 1930. Serial No. 497,236. 15 Claims. (Cl. 178—23.)



1. A record controlled system comprising a record analyzing device, a coding device controlled thereby, a decoding device operatively connected to said coding device, means controlled by the analyzing device for synchronizing the coding and decoding devices, and perforating mechanism controlled by said decoding device.

1,870,231. RECORD STRIP EASEL AND DEFLECTOR FOR AUTOGRAPHIC REGISTERS. EDWARD KIRBY BOTTLE, Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada, a Corporation of Ontario. Filed Aug. 8, 1928. Serial No. 298,190. 13 Claims. (Cl. 282—16.)

1. In an autographic register, in combination, record strip feeding means, a detachable easel having a rear wall and a base plate forming means for securing the easel in position relatively to the point of emergence of the strip from the feeding means, said easel providing



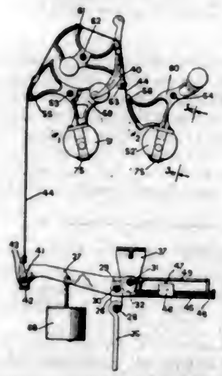
a temporary compartment positioned below said point of emergence into which one or more of the record strips may be folded.

1,870,232. ROTARY SCRUBBING MACHINE. HILLER A. BRIM, Chicago, Ill. Filed Jan. 31, 1929. Serial No. 336,494. 2 Claims. (Cl. 15—49.)



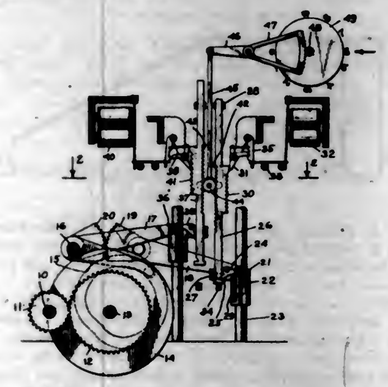
2. In a floor scrubbing machine, a brush carrier comprising a web casting, a plurality of brushes mounted on said casting, each brush substantially triangular in shape with a flat end and a pointed end, said brushes mounted with the pointed ends all pointing in the same direction around the circumference of the carrier, a single spring holding two of said brushes in place, and means for rotating the carrier to move the brushes pointed end first.

1,870,233. WEIGHING SCALE. JAMES W. BRYCE, Bloomfield, N. J., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Nov. 26, 1926. Serial No. 150,735. 25 Claims. (Cl. 265—62.)



1. A scale comprising a plurality of pendulum systems, a scale beam and a single element having a connection at one end to said beam and connections at other points to each of said systems for connecting said beam to all of said systems to distribute a load therebetween.

1,870,234. TABULATING MACHINE. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed June 16, 1928. Serial No. 286,006. 4 Claims. (Cl. 235—92.)



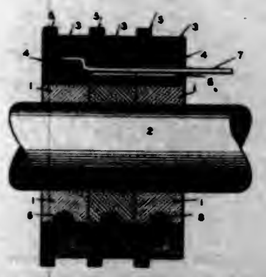
1. In a tabulating machine, the combination of indicating elements for indicating card classification of successively fed record cards, differential devices under control of perforations in said record cards, and means whereby said differential devices directly adjust said indicating elements from one position to the other and in either direction to indicate card classification of each of a series of record cards.

1,870,235. THERMOSTAT. VANNEVAR BUSH, Belmont, Mass., assignor to General Plate Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Sept. 6, 1930. Serial No. 480,078. 13 Claims. (Cl. 297—15.)



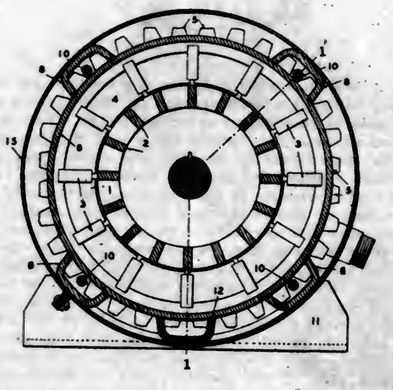
5. A thermostatic sheet comprising materials of varying thermal coefficients of expansion, the variation being continuous and gradual and in the direction of sheet thickness.

1,870,236. COLLECTOR RING ASSEMBLY AND METHOD OF MAKING SAME. GEORGE R. CHERVENKA, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Nov. 22, 1929. Serial No. 408,948. 2 Claims. (Cl. 171—322.)



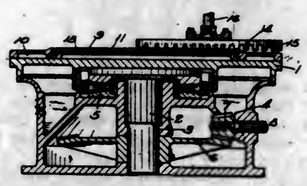
1. The method of forming a collector ring assembly made up of a plurality of units each embodying a ring, a hub element and an insulating body, which comprises securing a conductor to each ring, securing each ring to a hub element by molding a body of insulating material therebetween, opening being left through said material for the passage of conductors, and bringing said units into assembled relation by passing the conductor of each unit through after assembled units.

1,870,237. DYNAMO ELECTRIC MACHINE. GEORGE R. CHERVENKA, St. Louis Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Mar. 29, 1930. Serial No. 439,928. 3 Claims. (Cl. 171—252.)



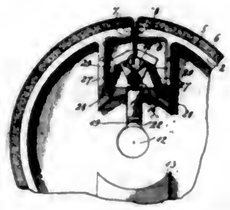
2. In a dynamo electric machine, a laminated field member, the laminæ of which have peripherally spaced heat radiating extensions, end rings at opposite sides of said field member, spaced channel members extending over the field member and inter-engaging with the laminæ extensions and welded at their ends to the rings to secure said rings in fixed relation, end plates cooperating with the end rings to enclose the electrically operative parts of the machine, said end rings being provided with spaced radial extensions, through bolts each passing through a channel member and engaging said end ring extensions to maintain the end rings in position, a cylindrical cover embracing and supported by the channel members and forming therewith and with the field member and end rings, longitudinally extending air passages, and a fan driven by the machine and forcing air through said passages.

1,870,238. PROCESS OF SURFACING PLATE GLASS. JOSEPH P. CROWLEY, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 27, 1923, Serial No. 654,091. Renewed Dec. 24, 1931. 3 Claims. (Cl. 51—131.)



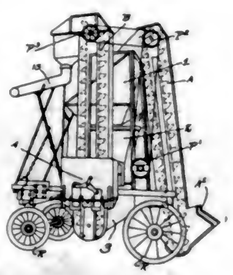
1. That improvement in the art of surfacing plate glass, which consists in supporting the sheet freely in a recessed support so that its exposed surface is in substantially the same plane as the surrounding surface of the support, and then applying surfacing means to the exposed faces of the sheet and support, whereby the surfacing means is guided smoothly on and off the sheet.

1,870,239. BUFFING WHEEL. JOHN F. A. DAVIS, Wenham, Mass. Filed Oct. 20, 1927. Serial No. 227,442. 2 Claims. (Cl. 51—194.)



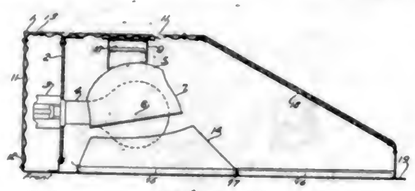
1. A buffing wheel comprising the body of the wheel having within it a chamber open for receiving the meeting ends of an abrasive covering for the wheel, a grip having opposing jaws located within said chamber, an inwardly and outwardly movable grip carrier, means for pivotally securing the opposing jaws of the grip to the grip carrier whereby as the grip is moved inwardly both jaws may be moved laterally toward one another into engagement with said ends of the abrasive sheet and grip the sheet between them on bringing the jaws together, springs backing said jaws of the grip and arranged interposed, respectively, between said jaws and the bottom of said chamber within which the grip is contained whereby the springs will be tensioned by draft of the jaws as the jaws are moved inwardly by the carrier as aforesaid and thereby exert force to close the jaws for gripping the meeting ends of the abrasive sheet as aforesaid, and whereby also inward movement of the jaws and tensioning of the springs may be continued after the jaws have gripped said ends of the abrasive sheet as aforesaid, and means for moving the grip carrier inwardly or outwardly.

1,870,240. CEREAL WEIGHING AND TRANSPORTING DEVICE. ANGEL LOPEZ DOMAICA, Las Rosas, Agentina. Filed Dec. 22, 1928, Serial No. 328,036, and in Argentina Oct. 10, 1928. 1 Claim. (Cl. 198—39.)



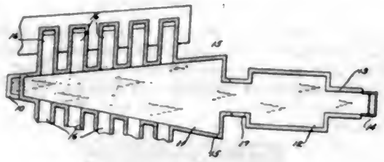
A cereal weighing and transporting device, comprising a wheeled frame, an elevator on said frame having a mouth for receiving the cereal from a thresher and sheller, an upper hopper, means for conveying the cereal received by said mouth to said upper hopper, a normally closed door in the bottom of said hopper, means for opening said door, a platform scale, a hopper on said scale adapted to receive the cereal discharged through said door, means for elevating said last named hopper above the platform of said scale allowing a removal of the latter, a third hopper, means for controlling the discharge of the weighed cereals into said third hopper, a discharge nozzle for said cereals, and a conveyer for elevating the cereal from said third hopper into said nozzle.

1,870,241. LUMINAIR. WILLIAM A. DOREY, Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 14, 1931. Serial No. 556,963. 36 Claims. (Cl. 240—106.)



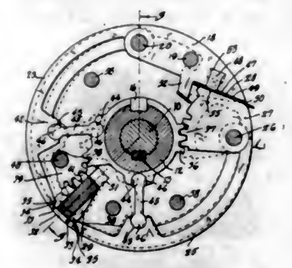
1. A lighting unit having a closed housing provided with a vertical partition near one side wall for dividing the housing into a small chamber for wiring and a large chamber for the light source, a socket carried by the partition, an incandescent lamp bulb carried by the socket and projecting into the large chamber, and a prismatic lens cover forming the bottom of the large chamber, the lens cover being adapted to receive downwardly directed light and concentrate it into a downwardly and obliquely slanting beam whose lateral spread is controlled by the prismatic formation of the lens cover.

1,870,242. GLASS FURNACE. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 12, 1928. Serial No. 246,140. 8 Claims. (Cl. 49—54.)



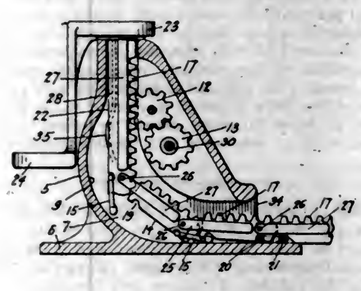
1. In glass apparatus, a furnace including a melting end having an inclined bottom and side walls diverging from the intake end of said furnace.

1,870,243. COLLAPSIBLE SPOOL OR BLOCK. ERNEST W. DUSTON, Salem, Ohio, assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 27, 1929. Serial No. 350,233. 6 Claims. (Cl. 242—72.)



6. In a collapsible block, a shaft, a sleeve keyed to the shaft, a pair of end plates mounted for limited turning movement relative to the shaft, a pair of segments mounted between and pivoted to said plates and extending in opposite directions from their pivots, a radially movable section between the free ends of the segments and guided for sliding movements in said plates, and means operated by relative turning movement of the sleeve and plates to shift the segments and section to expand and collapse the block.

1,870,244. LIFTING JACK. ARTHUR E. ELSTON, Denver, Colo. Filed Oct. 29, 1928. Serial No. 315,792. 8 Claims. (Cl. 254—95.)

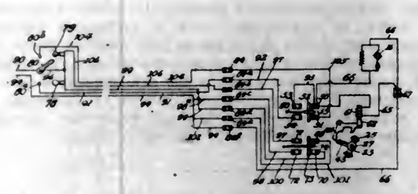


1. A lifting jack comprising a housing providing a guideway, a lifting column in the guideway composed of sections hinged together, links for locking the sections in alined relation, pivotally connected with the sections and loosely interlocked with adjoining sections, and mechanism for moving the column in the guideway.

1,870,245. MOLDED PRODUCT SIMILAR TO STONEWARE AND PROCESS OF MAKING THE SAME. HARRY C. FISHER, Norwood, Ohio, assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Jan. 2, 1929. Serial No. 329,938. 27 Claims. (Cl. 18—47.5.)

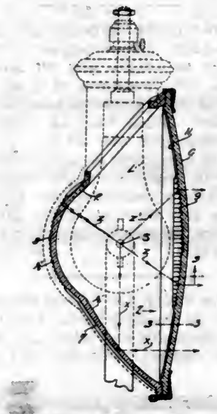
1. A glass-like molded artificial stone product comprising a body of soluble silicate through which asbestos fibers and non-fibrous filler materials have been dispersed.

1,870,246. MOTOR OPERATED MECHANISM. JOSEPH FREUD and CHARLES H. KOEHLER, Chicago, Ill. Filed Oct. 26, 1928. Serial No. 315,148. 6 Claims. (Cl. 172—239.)



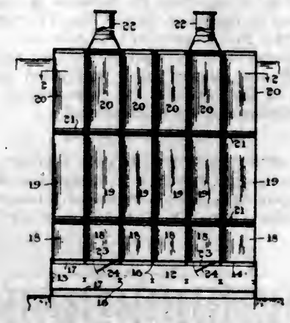
1. In motor-operated mechanism, the combination of a shifting element, an electric motor, gearing operated by the motor, intermittent mechanism operable by said gearing for rotating said element in cycles, controlling means for the gearing comprising a helix and an armature, and motor-actuated means for positively shifting the armature when it is inoperative by the helix.

1,870,247. LUMINAIR. ANDRÉ FROGET, Paris, France, assignor to Holophane Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 6, 1928, Serial No. 324,204, and in France Dec. 17, 1927. 1 Claim. (Cl. 240—41.3.)



A luminair comprising a light source, a glass reflector having a central portion which is spherical about the light source and provided with totally reflecting concentric prisms and an outer annular portion of parabolic shape with its focus at the light source and provided with radial reflecting prisms, and a refracting cover plate having a central circular portion opposite the spherical portion of the reflector and adapted to receive the cone of light reflected thereby and the cone of direct light and having parallel prisms to refract the divergent rays to condense them in one direction without affecting their spread in directions at right angles thereto, the cover plate also having an annular zone opposite the annular paraboloidal zone of the reflector for receiving the parallel rays reflected thereby and direct light, and being provided with corrugations at right angles to the prisms for spreading such light.

1,870,248. METHOD AND APPARATUS FOR BUILDING RETAINING WALLS, PIERS, ETC. WALTER GRIESBACH, Montreal, Quebec, Canada. Filed Mar. 2, 1931. Serial No. 519,565. 7 Claims. (Cl. 61—39.)



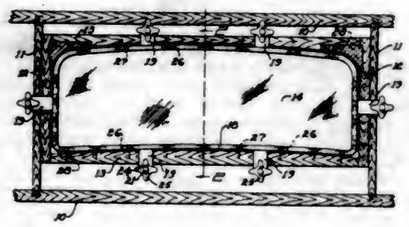
1. A method of erecting retaining walls, bridge piers and similar structures which consists in providing a working chamber open at the bottom, erecting a plurality of hollow cylindrical units on the roof of the working chamber to provide a cofferdam, filling certain of said units with material to sink the working chamber and the cofferdam to the required depth, temporarily utilizing certain of the remaining cylindrical units as shafting for the introduction of compressed air into the working chamber and for

the introduction and removal of materials, filling in the working chamber with material to form a footing and finally filling in the previously unfilled cylindrical units so that the working chamber and the cylindrical units form the permanent shell of the complete structure.

1,870,249. ANTHRAQUINONE BODY AND PROCESS OF PREPARING SAME. IVAN GUBELMANN and ROBERT J. GOODRICH, South Milwaukee, and WILLIAM L. RINTELMAN, Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Dec. 14, 1928. Serial No. 326,147. 8 Claims. (Cl. 260—57.)

1. The method of separating an anthraquinone-2,6-disulfonic acid body from isomeric beta anthraquinone sulfonic acids which comprises converting an aqueous solution of the said acids into their respective ammonium salts and crystallizing out the ammonium salt of the 2,6-anthraquinone-disulfonic acid.

1,870,250. MOTOR VEHICLE. JACOB HAMMERL, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 19, 1931. Serial No. 509,681. 8 Claims. (Cl. 29—84.)

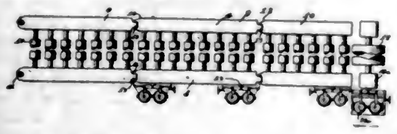


1. A device for temporarily securing a window glass against a window frame abutment comprising a frame adapted to be moved into the window frame opening, and clamp means associated with the frame and adapted to be detachably applied to the window frame for moving the frame into the window frame opening to clamp the entire edge portion of the window glass against the abutment.

1,870,251. WETTING AND PENETRATING AGENTS AND PROCESS FOR PREPARING THE SAME. CLYDE O. HENKE, Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Dec. 21, 1929. Serial No. 415,789. 21 Claims. (Cl. 252—1.)

1. The process which comprises treating textile fibers with an aqueous solution of a sulfonated polynuclear hydrocarbon of the type that are characterized by strong wetting properties and a terpene alcohol.

1,870,252. SYNCHRONOUS MOTOR DRIVEN SHAKE. LLOYD HORNBOSTEL, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a Corporation of Wisconsin. Filed Feb. 2, 1931. Serial No. 512,893. 18 Claims. (Cl. 92—45.)



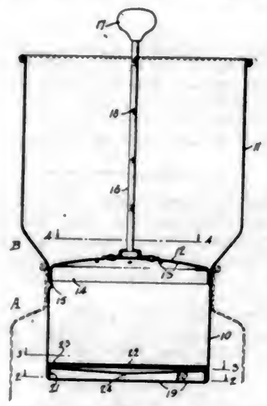
1. A shake mechanism for a paper making machine comprising forming means for the paper web, means for vibrating said forming means and adjustable means including synchronous motors for controlling the amplitude of vibration of the forming means.

1,870,253. THERMOSTATIC CONTROL. CHESTER F. JOHNSON, deceased, Detroit, Mich., by Detroit and Security Trust Co., executor, Detroit, Mich. Filed Sept. 10, 1930. Serial No. 481,025. 5 Claims. (Cl. 236—101.)



1. A thermostatically controlled vent for carbureters including a bimetallic thermostatic strip anchored at one end and provided with vent closing means at its free end, and adjusting means therefor comprising a bar attached to the thermostatic strip adjacent the anchorage thereof, and extending in line with the normal axis thereof and means engaging the free end of said bar to vary the initial flexure of the thermostatic strip relative to its anchorage whereby to closely adjust the opening movement of the thermostatic strip to commence at a predetermined temperature.

1,870,254. COFFEE AND TEA MAKER. RALPH N. KIRCHER and ROBERT H. WENTORF, West Bend, Wis., assignors to West Bend Aluminum Company, West Bend, Wis., a Corporation of Wisconsin. Filed Dec. 31, 1929. Serial No. 417,750. 4 Claims. (Cl. 53—3.)

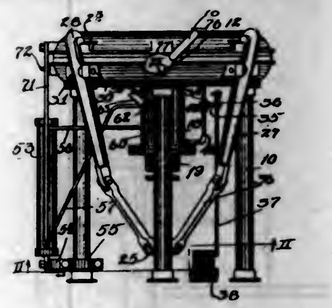


1. In an infusing percolator or like device, a hollow container constituted as a one-piece tubular structure with one end open and the other closed, the closed end being perforated to permit liquid to flow through the container, the said container having a lower portion reduced in diameter to form a chamber for the material to be infused and an upper portion enlarged in diameter to receive a quantity of water, in combination with a perforated adapter, having a depression in its upper face disposed above the perforated bottom, a screen arranged over the said adapter and spaced therefrom through the said depression and a foraminous separator positioned above the material in the chamber to retard the flow of water into the said chamber and confine the said material therein.

1,870,255. INNER TUBE AND TIRE MOLD. ARNOLD R. KRAUSE and RALPH W. HUTCHENS, Eau Claire, Wis., assignors to Gillette Rubber Company, Eau Claire, Wis., a Corporation of Wisconsin. Filed Feb. 1, 1929. Serial No. 336,767. 3 Claims. (Cl. 18—17.)

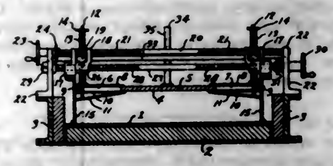
1. In combination, a pair of cooperable mold casings, one of said casings being movable relative to the other, fluid means for raising and lowering said movable casing into cooperation with the other casing comprising a pivotally mounted fluid cylinder, a piston movable therein

and a rod connected at one end to said piston and at its other end to one side of said movable casing and for controlling the flow of fluid into said cylinder, said



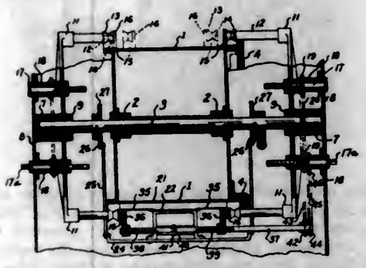
latter means being operable by the raising of said movable casing to disconnect the fluid from said cylinder when the movable casing has reached a given position.

1,870,256. DOUGH MOLDING MACHINE. FRANK X. LAUTERBUR and EDWARD J. LAUTERBUR, Sidney, Ohio. Filed Feb. 12, 1931. Serial No. 515,271. 19 Claims. (Cl. 107—9.)



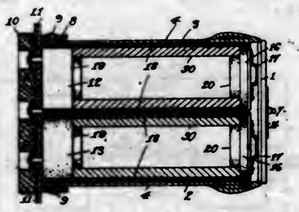
3. In a machine of the character described, in combination with conveying means, a pressure board facing the conveying means comprising a middle section and edge sections along the edges of the middle section and laterally movable relative to said middle section whereby the width of the pressure board may be changed, and walls along the outer edges of said edge sections, adjustable across said conveying means.

1,870,257. DOUGH MOLDING APPARATUS. FRANK X. LAUTERBUR and EDWARD J. LAUTERBUR, Sidney, Ohio. Filed May 18, 1931. Serial No. 538,176. 17 Claims. (Cl. 107—9.)



2. In a drum-type dough molding machine, the combination of a rotatable drum, means forming an opposed side wall of a pressure molding compartment, and means forming end walls of said compartment, said last noted means mounted in free-floating position relative to said drum, said means comprising ring members each having an annular flange forming an end wall of said pressure compartment.

1,870,258. PNEUMATIC DISPATCH CARRIER. DANIEL J. MACMILLAN, Brooklyn, N. Y. Filed Oct. 31, 1929. Serial No. 403,723. 16 Claims. (Cl. 243—35.)

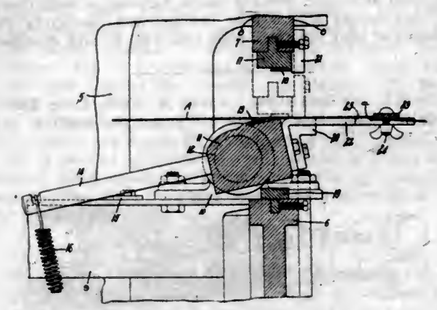


1. In a pneumatic dispatch carrier, a pair of tubes arranged adjacent and parallel, a tube surrounding the sides of the said tubes, one end of the outer tube being closed, and a closure for the tubes at the other end to secure the contents of the inner tubes.

1,870,259. PAPER AND PROCESS OF MANUFACTURING THE SAME. RALPH H. MCKEE, Jersey City, N. J. Filed Mar. 14, 1929. Serial No. 347,189. 9 Claims. (Cl. 92—21.)

1. A pervious and non-water-resistant paper comprising a thin sheet of fibrous material, and less than 3% of a strengthening and binding material precipitated during the process of making the paper from a viscose solution having a low caustic soda and carbon bisulfide content on the fibres constituting the said fibrous material to give the latter a strength approximating corresponding to sized paper of same weight without rendering it water resistant.

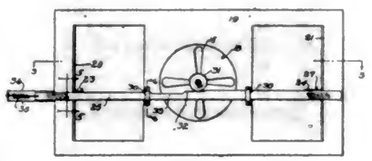
1,870,260. APPARATUS FOR BENDING SHEET METAL. ARTHUR N. MERRYMAN, Woburn, Mass., assignor to The Cheney Company, Winchester, Mass., a Corporation of Massachusetts. Filed Nov. 14, 1929. Serial No. 407,107. 4 Claims. (Cl. 153—12.)



1. An apparatus of the character described having, in combination, a frame, a die member pivotally mounted upon said frame, another die member slidably mounted upon the frame, means to move the slidable die member into engagement with sheet material resting upon the pivoted die member and thereafter impart a downward and lateral rocking movement to the latter through pressure exerted against the sheet material by the slidable die member, whereby said die members will co-operate with each other to bend the sheet material to form an

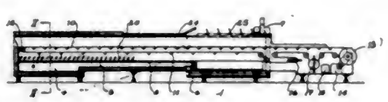
under-cut portion thereon, and a positioning member adapted to be engaged by successive bent portions of the sheet material and thereby position the latter to receive successive bending operations.

1,870,261. HEATING AND VENTILATING APPARATUS. JAMES C. MILES, Cleveland, Ohio. Filed Aug. 14, 1929. Serial No. 385,723. 8 Claims. (Cl. 126—110.)



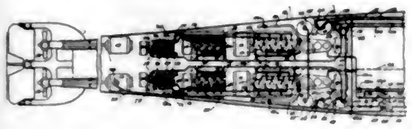
1. The combination with the heating chamber of a hot air furnace, of a fan for forcing air under pressure into the chamber, means for driving the fan, a damper, means for moving the damper to open position when the fan is stopped, and disengageable rack and pinion means actuated automatically by the fan driving means for moving the damper toward closed position when the fan is started.

1,870,262. MUFFLE FURNACE LEER. WILLIAM A. MORTON, Pittsburgh, Pa., assignor to Amsler Morton Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 8, 1929. Serial No. 338,464. 8 Claims. (Cl. 49—47.)



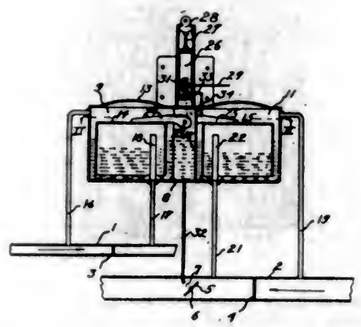
7. An annealing furnace comprising a chamber forming wall structure, heating means adjacent a wall thereof, and means within said chamber for regulating the amount of heat radiating from said wall to said chamber.

1,870,263. SUBMARINE. ABNER R. NEFF, Long Beach, Calif. Filed Mar. 18, 1930. Serial No. 436,705. 12 Claims. (Cl. 114—16.)



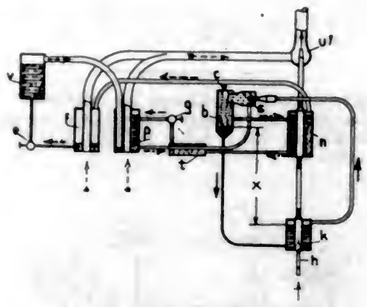
1. In a submarine, the combination of a hull and a propeller therefor, a propulsion power plant including a combustion engine, air storage units, a compressor, intake means for the compressor whereby it may take either air or engine exhaust for compression, and a piping system connecting with the air storage units and whereby the compressor may compress either air or exhaust into any selected storage unit.

1,870,264. REGULATOR. WILLIAM R. PAULSEN, Pittsburgh, Pa. Filed May 31, 1930. Serial No. 458,060. 3 Claims. (Cl. 137—78.)



1. A pressure regulating mechanism comprising a container divided by a partition into two separate compartments each having a quantity of liquid provided therein, an inverted bell arranged in each of said compartments with its lower end immersed in said liquid, a support pivoted in said partition, means rigidly attaching each of said bells to said pivoted support whereby the movement of one results in a corresponding movement of the other, and means for communicating fluid pressure to the interior and exterior of said bells.

1,870,265. REFRIGERATING PROCESS AND THE APPARATUS APPLICABLE THERETO. ARTHUR SELIGMANN, Dusseldorf, Germany. Filed Aug. 18, 1928, Serial No. 300,505, and in Germany Aug. 22, 1927. 11 Claims. (Cl. 62—169.)



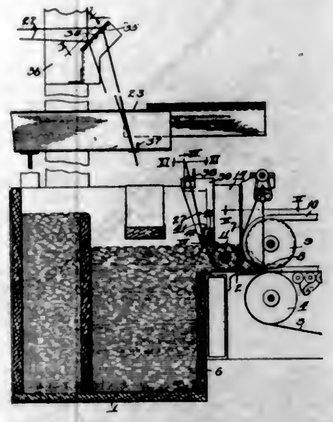
1. The process of refrigerating, which consists in raising by jet compression a refrigerating medium dissolved in a solvent from the lower absorbing pressure to the higher generating pressure, evaporating the power medium different from the refrigerating medium prior to its work in the jet compression, then condensing the same by mixing it with the solution, separating the power medium and the solution by the agency of their different specific gravities, and permitting the power medium to flow back to be again evaporated.

1,870,266. PEN. ALBERT F. SPITZGLASS, Chicago, Ill., assignor to Republic Flow Meters Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 13, 1928. Serial No. 312,225. 14 Claims. (Cl. 120—43.)



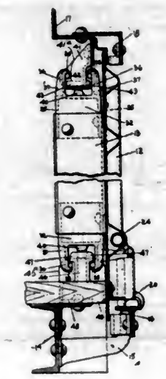
1. In a capillary marker, the combination of a marking fluid reservoir, a cooperating marking point, and a holder removably insertable into said reservoir for forming therewith a feed chamber adjacent to said point for supplying marking fluid to said point.

1,870,267. METHOD AND APPARATUS FOR MAKING REENFORCED PAPER. NORMAN S. STONE and ROBERT L. BURNS, Mosinee, Wis., assignors to Mosinee Paper Mills Company, Mosinee, Wis., a Corporation of Wisconsin. Filed Apr. 15, 1929. Serial No. 355,075. 10 Claims. (Cl. 92—40.)



1. In combination with a paper machine including a flow box and forming wire, a roll positioned in the path of the flow of stock ahead of the forming wire and means for guiding spaced reenforcing strands to said roll to pass thereunder into the flow of stock onto said wire.

1,870,268. CAR DOOR CONSTRUCTION. KENNETH J. TOBIN and WILLIAM W. DARROW, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 13, 1927. Serial No. 225,874. 31 Claims. (Cl. 189—46.)



24. In a house car, in combination, a sliding door, a door jamb secured to an edge thereof, detent members adapted to cooperate with said jamb at the top and bottom thereof, said detent members and said jamb having cooperating shouldered portions adapted to prevent sliding movement of said door when said door is in its lowermost position, said shouldered portions being adapted to clear when said door is in elevated position, and means for elevating said door, said detent members and said jamb having cooperating portions adapted to abut when said door is in raised position to limit the movement of said door toward its home position.

1,870,269. EGG PRODUCT AND METHOD OF PRODUCING THE SAME. DONALD K. TRESSLER, Gloucester, Mass., assignor to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Aug. 16, 1930. Serial No. 475,858. 19 Claims. (Cl. 99—11.)

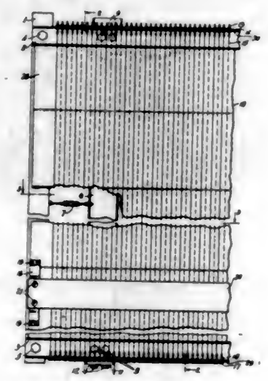
7. A liquid egg product containing between 0.10% and 0.005% pancreatin U. S. P.

14. A method of preventing coagulation in frozen egg content which consists in homogenizing the egg products, and treating with an added hydrolytic enzyme prior to the freezing step.

1,870,270. PREPARATION OF DRY NONHYGROSCOPIC CRUDE LACTOSE. ROBERT M. WASHBURN, Evanston, Ill., assignor, by direct and mesne assignments, to Dee-Hy Products Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 12, 1929. Serial No. 332,237. 3 Claims. (Cl. 99—11.)

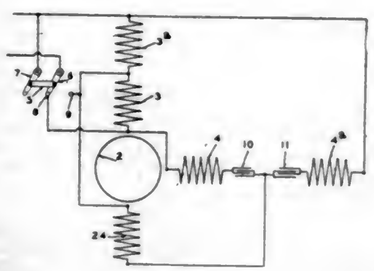
3. The herein described method of producing an odorless power from whey which consists in boiling the whey to bring the albumen content to the surface thereof, subsequently removing the albumen, neutralizing the whey, thereafter extracting the moisture of the whey to form a powder, subjecting the powder to the action of water to satisfy its affinity therefor and produce a cake, and finally reducing said cake to a finely comminuted state.

1,870,271. ACOUSTIC DEVICE. RAYMOND L. WEGEL, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 17, 1929. Serial No. 386,605. 25 Claims. (Cl. 181—31.)



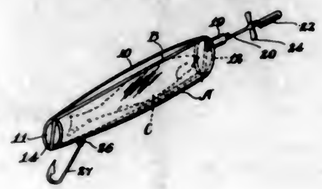
1. In an acoustic device, an elongated direct acting sound radiating surface comprising a plurality of stretched metallic members and thin material vibratable with and secured to said members, and means connected to said surface for directly impressing vibrations on each of said members.

1,870,272. ALTERNATING CURRENT MOTOR. HANS WEICHSEL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Nov. 7, 1930. Serial No. 493,924. 3 Claims. (Cl. 172—233.)



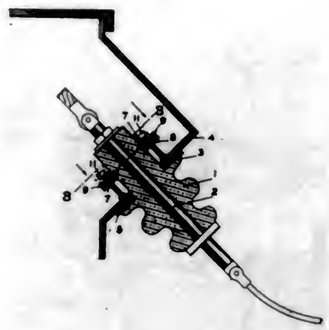
3. In a split phase motor, a main inducing winding and an auxiliary inducing winding displaced therefrom and connected to the line in parallel therewith, means for so grouping the turns of said windings as to produce either an N-pole or a 2N-pole magnetization, two condensers in the auxiliary winding circuit, a regulating winding on the stator substantially coaxial with the main inducing winding and connected between the mid-point of the main inducing winding and such point of the auxiliary winding circuit as will provide two current paths therefrom to the main inducing winding, each of said paths including a condenser and a part of the auxiliary winding.

1,870,273. FISHING BAIT. JOHN J. WILLINGER, St. Paul, Minn. Filed Aug. 29, 1929. Serial No. 389,187. 6 Claims. (Cl. 43—41.)



1. A fish bait including, a transparent tubular receptacle open at both ends, a clamp for supporting said receptacle extending closely over the open ends of said receptacle in a manner to form guard means over the ends of said receptacle whereby live bait may be contained therein for fishing.

1,870,274. CLAMPING DEVICE. OTTO WULFERT and CHARLES P. POTTER, St. Louis, Mo., assignors to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Oct. 31, 1929. Serial No. 403,891. 3 Claims. (Cl. 173—311.)



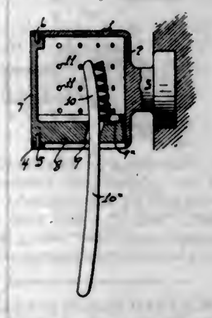
1. A clamping apparatus for maintaining an insulating bushing in position in a plate or wall, which comprises a supporting member, a movable locking member adapted to bear on said supporting member and to engage the bushing, and a clamping bolt in threaded engagement with the supporting member, said supporting member being provided with a stop to hold the locking member in engagement with the bushing when the parts are in operative relation and said locking member having a lost motion connection with the clamping bolt.

1,870,275. SEAT PAD OR CUSHION. WILLIAM H. ADAMS, Kenyon, R. I. Filed Jan. 30, 1931. Serial No. 512,272. 2 Claims. (Cl. 28—1.)



1. A seat pad formed of a flat braid made by braiding fabric tapes together, said braid having a spiral formation with the adjacent turns secured together, and with the outer turn disconnected from the other turns for a limited distance thereby to provide a handle.

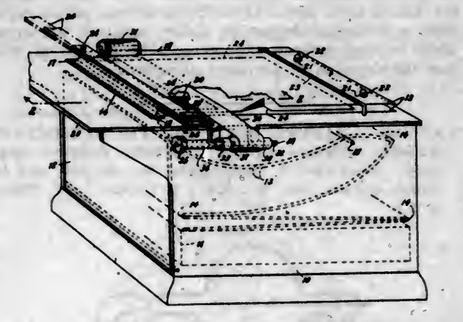
1,870,276. TOOTHBRUSH HOLDER. DAVID BEILOCK, New York, N. Y. Filed Oct. 16, 1931. Serial No. 569,169. 3 Claims. (Cl. 206—15.1.)



1. A holder for tooth brushes comprising a casing having a top wall, a side wall and a rigid supporting arm extending from the side wall, a rotary holder comprising a vertical wall and an angularly extending holding plate carried by said wall, the rotary holder being pivoted to said arm and to the top of the casing and the holding plate being formed with a plurality of apertures for the reception of tooth brushes with their handles depending below the casing, the arm being so positioned as to permit rotation of the holder to carry the holding plate within the casing and to position the vertical wall of the holder exteriorly of the plate relatively to the casing, the casing thus being closed at its front and bottom by the rotary holder.

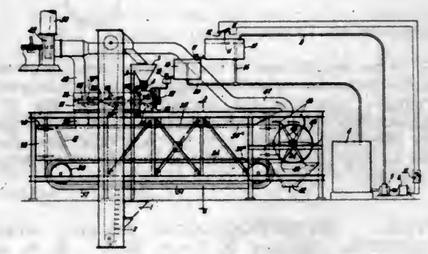
1,870,277. MANIFOLDING DEVICE. EDWARD KIRBY BOTTLE, Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada, a Corporation of Canada. Filed Dec. 26, 1925, Serial No. 77,728. Renewed Dec. 21, 1931. 4 Claims. (Cl. 282—14.)

1. In a manifolding device, in combination, a platen for supporting forwardly fed parts of a record strip in position for reception of an inscription, spaced pins upstanding from said platen near one end thereof and fixed thereupon for entering apertures in the strip to position the latter in inscription-receiving position upon the platen, and a transverse guiding and retaining bar for the strips overlying the same and positioned in proximity to said positioning pins at the rearward sides thereof, said pins having unobstructed upper ends and



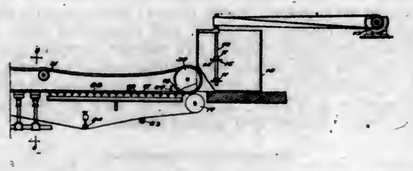
being spaced slightly from said retaining bar whereby the record strip may be raised upwardly while under said bar so as to engage or disengage said pins with said apertures.

1,870,278. ACIDULATING UNIT. MACK D. BROADFIELD, Valdosta, Ga. Filed Jan. 4, 1930. Serial No. 418,455. 12 Claims. (Cl. 198—165.)



6. A den for conveying plastic materials comprising a laterally rigid bottom belt and two laterally rigid side belts actuated to move in the same direction as the bottom belt and positioned in respect to the bottom belt so as to form a movable den having a closed bottom, and means for sealing the spaces between the adjacent portions of the side and bottom belts.

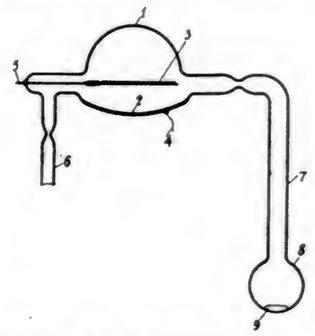
1,870,279. METHOD OF MAKING LAYERS OF DISTENDED FIBROUS MATERIAL. FRANK L. BRYANT, Chicago, Ill., assignor, by mesne assignments, to Cellufoam Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 16, 1930. Serial No. 452,900. 8 Claims. (Cl. 92—39.)



1. The method of producing a layer of fluffy distended material, which consists in subjecting the ingredients thereof to agitation to produce distension by the formation of bubbles throughout the mass, discharging the material so distended in the form of a continuous layer, feeding forward the layer under conditions permitting

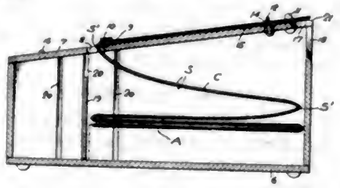
partial draining of the liquid therefrom, continuing the feeding in an uninterrupted manner and without compression of the layer of material through a zone subjected to a drying temperature, and delivering the sheet in uncondensed and distended form at a point beyond the drying zone, and contacting the surface of the layer with a material adapted to absorb moisture therefrom while passing through the drying zone to prevent surface discoloration of the layer of material.

1,870,280. MANUFACTURE OF PHOTO-ELECTRIC TUBES. NORMAN ROBERT CAMPBELL, Watford, England. Filed Dec. 1, 1928, Serial No. 323,100, and in Great Britain Dec. 1, 1927. 3 Claims. (Cl. 250—27.5.)



1. In the manufacture of photoelectric tubes, the process for the formation of a red-sensitive cathode comprising forming a very thin and normally invisible film of a photosensitive material on the metal cathode of the tube, then admitting hydrogen into the said tube, and thereafter passing an electric discharge through the hydrogen in the tube.

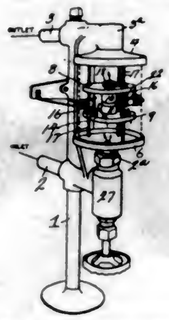
1,870,281. INTERCHANGEABLE RECORD STRIP CONTROL. WILLIAM D. CATON, Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada, a Corporation of Ontario, Canada. Filed Aug. 5, 1931. Serial No. 555,257. 5 Claims. (Cl. 282—12.)



1. The combination with a manifolding record device having a record supply storage compartment, of a detachable plate platen having thereon longitudinally spaced record controlling elements, and supporting lugs positioned in mutually co-operative relation between the platen and the body of the manifolding device and arranged for co-operation for supporting and positioning the platen for operation whereby said platen may be readily removed and replaced by a similar platen.

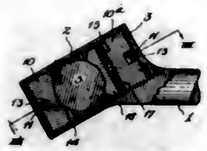
1,870,282. OIL TESTING DEVICE. OWEN COVER, Goshen, Ind. Filed July 10, 1926. Serial No. 121,594. 17 Claims. (Cl. 175—183.)

1. An oil testing device comprising a casing, upper and lower discs in said casing in spaced relation to each other and between which oil passes through ports in the lower disc, electrodes carried by said discs and between which the oil passes to a discharge port in the electrode of the upper disc, rods within the casing and extending through the discs, means for adjusting the position of



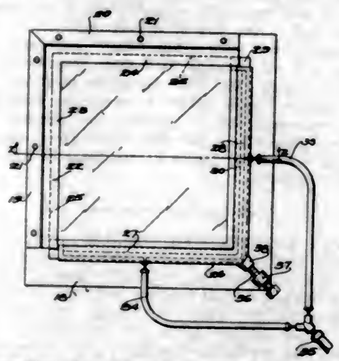
the discs on the rods, contact members carried by the casing in registration with recesses in the lower disc, and spring conductor arms carried by the discs and connected to the electrodes and having sliding engagement with the contact members of the casing.

1,870,283. ADJUSTABLE TIE-ROD. FREDERICK C. CRAWFORD, Detroit, Mich., assignor to Thompson Products, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 13, 1926. Serial No. 94,553. 13 Claims. (Cl. 74—47.)



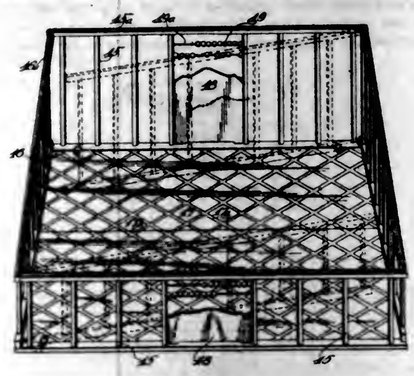
5. A tie rod, comprising an intermediate rod member, a head on one end of said rod member having a bore open at both ends and in non-alinement with the axis of said rod member, a ball of a ball stud within said bore and plugs adjustably positioned within said bore on each side of said ball and providing bearing seats therefor.

1,870,284. LAMINATED GLASS APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 18, 1926. Serial No. 136,239. 24 Claims. (Cl. 49—81.)



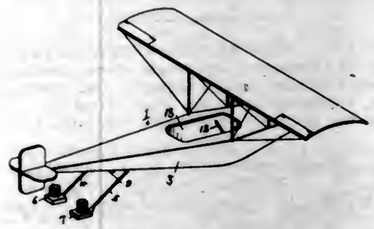
1. Apparatus for uniting a plurality of sheets to form a composite sheet including a stationary frame and a movable frame cooperating to support said sheets, and means for creating a vacuum between said sheets.

1,870,285. PLAYPEN. ABRAHAM G. FELDMAN, Chicago, Ill. Filed Apr. 22, 1931. Serial No. 532,098. 8 Claims. (Cl. 256—25.)



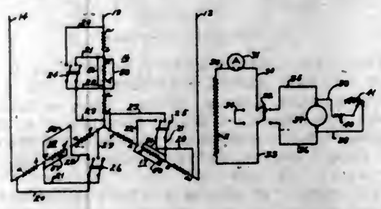
4. A play-yard comprising substantially-parallel stationary walls, base rails forming part of the latter, an end wall in connection with said stationary walls and swingable from one of them, and a connection between the free end of the swingable wall and the corresponding end of the other stationary wall comprising a dowel stud erected on the base rail of said other wall, and said free end being made with a cavity in its bottom edge to receive said dowel stud.

1,870,286. MAGNETIC BRAKE SHOES FOR AEROPLANES. JAMES GAFNEY, New York, N. Y. Filed Aug. 13, 1929. Serial No. 385,531. 1 Claim. (Cl. 244—2.)



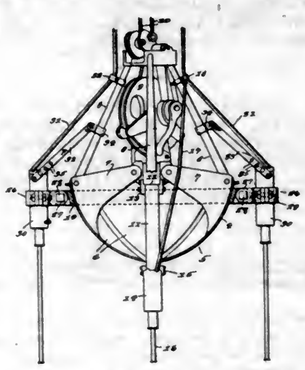
In a landing device for aeroplanes, a pair of tail end skids, a magnet on each skid, arms fixed to the skids and hingedly connected to the fuselage of the aeroplane at opposite sides thereof, a hand lever and a cable attached thereto and to said arms whereby the skids may be raised or lowered, in combination with a steel surfaced landing platform.

1,870,287. ALTERNATING CURRENT MACHINE AND STARTING MEANS THEREFOR. FRAZER W. GAY, Newark, N. J. Filed Jan. 29, 1930. Serial No. 424,191. 8 Claims. (Cl. 172—274.)



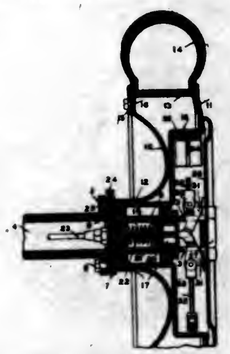
4. In combination with an alternating current machine comprising a phase winding having three winding groups solidly and permanently connected in series, of switching means connected thereto and arranged upon closing to place said three winding groups in multiple with their respective E. M. F.'s. in the same time phase.

1,870,288. EXCAVATING BUCKET. JUDSON HAYWARD, Hackensack, N. J., and HERMAN J. BRENDLIN, New York, N. Y., assignors to The Hayward Company, New York, N. Y., a Corporation of New York. Filed Oct. 2, 1931. Serial No. 566,556. 11 Claims. (Cl. 262—1.)



1. The combination with the bowl of an orange-peel bucket, of a pneumatic hammer held by the blades constituting said bowl.

1,870,289. HYDRAULIC BRAKE MECHANISM. EDWARD D. JOHNSON, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed May 22, 1930. Serial No. 454,615. 6 Claims. (Cl. 188—152.)

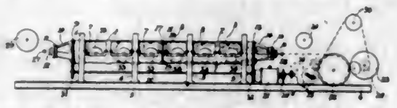


1. In a device of the class described, the combination with a hollow wheel spindle, of a piston within and movable longitudinally of said spindle, a wheel mounted on said spindle and provided with a brake drum, a brake shoe for said drum movable in a plane transverse to the spindle, and operating connections between said piston and brake shoe.

1,870,290. STRANDING AND LAYING MACHINE. JOHN HAMILTON LARMUTH, Upper Colwyn Bay, North Wales. Filed Feb. 5, 1931, Serial No. 513,524, and in Great Britain Feb. 26, 1930. 4 Claims. (Cl. 117—20.)

1. A stranding or laying machine comprising bobbin cradles, bobbins mounted in the said cradles with their axes

of rotation arranged horizontally, a carrying member divided into two parts, means on each part of the carrying member for carrying a plurality of bobbin cradles coaxially with the carrying member, disconnectable securing means



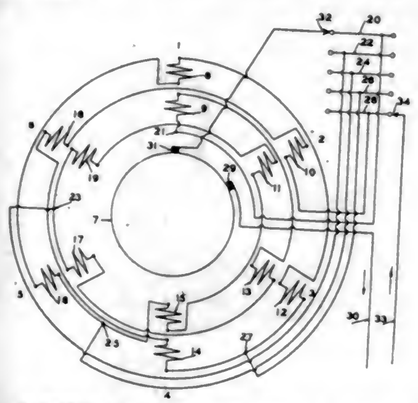
on the two parts of the carrying member for positively securing the two parts together to form a single unit at will, and separate driving means for rotating the two parts in different directions at will.

1,870,291. LOADING ATTACHMENT FOR CONVEYER MECHANISM. FRANK L. MCCARTY, Rock Springs, Wyo., assignor, by mesne assignments, to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 22, 1926, Serial No. 117,832. Renewed Jan. 7, 1932. 24 Claims. (Cl. 198—220.)



1. A loading attachment for a reciprocating conveyer comprising a movable trough, a bottom trough and means mounted on the bottom trough to extend or retract the movable trough when not in motion.

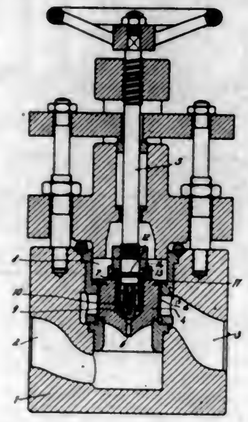
1,870,292. DYNAMO ELECTRIC MACHINE. BRADLEY MCCORMICK, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Nov. 5, 1931. Serial No. 573,043. 5 Claims. (Cl. 171—230.)



1. A dynamo electric machine having a plurality of field coils of each pole, said coils being connected to form a plurality of groups of field coils, each group consisting of a field coil of all poles of like polarity, and means for supplying current to each group of coils either individually or in series with other groups.

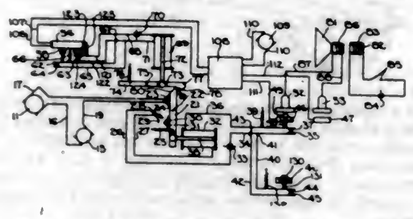
1,870,293. STEAM VALVE. HANS MILLER, Berlin-Lichterfelde, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Sept. 30, 1929, Serial No. 396,181, and in Germany Oct. 2, 1928. 2 Claims. (Cl. 277—37.)

1. In a balanced valve for a two-way fluid passage the combination with a valve casing, a main fluid duct through said casing and a valve plug disposed intermediate the ends of said duct to control said duct, and a valve spindle for operating said plug, of a pressure chamber above said plug, two auxiliary ducts provided in said plug for connecting the two portions of the main duct to said pressure chamber, and yielding means for each auxiliary duct for closing it



when the plug has closed the main duct, but adapted to yield to the higher of the two fluid pressures prevailing at the two ends of said main duct to permit fluid of higher pressure to enter said chamber, whereby any fluid pressure tending to lift the plug from its seat is substantially neutralized, said yielding means being tensioned by said valve spindle.

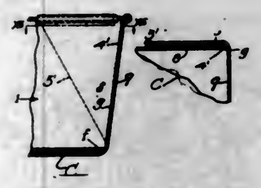
1,870,294. SUBWAY ANNOUNCING APPARATUS. JOHN O. PRESCOTT, Glenbrook, Conn., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Apr. 8, 1931. Serial No. 528,581. 24 Claims. (Cl. 246—124.)



1. In a train announcing system, in combination, a voice current generating mechanism arranged at a fixed point apart from a train, a loud speaker on a train, and means to establish a wired circuit from the mechanism to the loud speaker whereby current impulses generated by the mechanism will be converted into sound and broadcast by the speaker.

1,870,295. PLAITED CORNER-FOLD PAN AND THE ART OF AND BLANK FOR MAKING THE SAME. WILLIAM JOHN ROEPKE, Dayton, Ohio, assignor, by mesne assignments, to Roepke Container Corporation, Baltimore, Md., a Corporation of Maryland. Filed Feb. 17, 1926, Serial No. 88,834. Renewed Dec. 29, 1931. 7 Claims. (Cl. 153—10.)

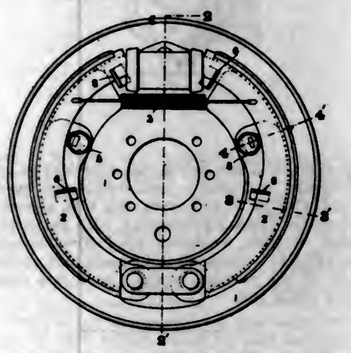
1. The method of making a plaited corner-fold pan which consists in forming at the corners of a blank to be folded, imprints of triangular form having margins that converge inwardly from the edge of the blank; forming margins of each imprint as a groove on one face of the blank and thereby forming a thin rib on the other face of the blank; then bending the wall forming portions and the plaits of the blank onto a form with bends of the blank at the grooves thus causing the ribs to form straight edges for the plaits to fit against the walls adjacent thereof.



2. A blank for forming a folded corner pan; in which the corners are respectively provided with an imprint adapted to form a plait having converging margins, one of which margins is a groove in one, and a thin rib on the other face of the blank and the other of which margins is a thin rib on the one face and a groove on said other face of the blank, so that when the blank is folded over a form to make a pan, the folding of the plaits will occur at the edges of the imprint thereby forming a straight edge for each of the plaits to fit on the inside of the pan to abut tightly against the wall adjacent such edge.

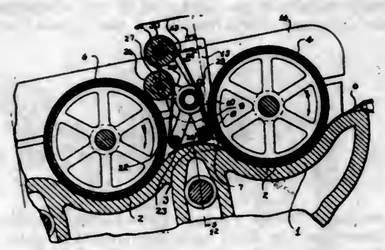
7. A pan comprising a metal sheet having a margin forming the pan walls, and provided in such margin with four sets of reverse bends forming ribs symmetrically arranged outside the corners of a rectangular figure; such figure forming the bottom of the pan; said sheet being bent at the junctions of the walls and such rectangular figure, and formed into plaits having compressed narrow beaded or thin ribbed straight edges fitted against the walls of the completed pan so as to practically do away with the corner crevices, and yet preserving practically flat end walls for molding the walls of loaves; each of the flattened edges of said ribs respectively fitting against the inside face of an adjacent wall of the pan.

1,870,296. BRAKE MECHANISM. STEVE SCHNELL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Oct. 2, 1930. Serial No. 485,839. 3 Claims. (Cl. 188—78.)



1. In brake mechanism, the combination with a brake shoe, of a flat malleable guide member positioned at right angles to the plane of the shoe having a slot to receive an element of the shoe to retain the shoe against lateral movement in either direction, said guide member being deformable by hammer blow to adjust the clearance between it and the shoe.

1,870,297. IRONING MACHINE. GILES T. SCOFIELD, Rochester, N. Y. Filed Apr. 13, 1928. Serial No. 269,755. 5 Claims. (Cl. 68—9.)



1. The combination with an iron having two concave surfaces and an intervening convex surface, and two padded rolls arranged above the iron and cooperating with said concave surfaces, of a plurality of endless belts arranged between the two rollers and each having a portion conforming to and engaging the convex surface between the two rollers, all portions of the iron engaged by the belts being situated between the rollers, and means for driving said belts at a surface speed corresponding to the surface speed of said two rollers.

2. The combination with an iron having a concave ironing surface and a surface beyond said concave surface and a padded roll arranged above the iron and cooperating with said concave surface, of a rotary stripper having its periphery operating in a direction opposite to the direction of movement of the adjacent portion of the padded roll to strip the material from said roll, said stripper having a brush surface operating in close proximity to the iron beyond the concave surface to direct the work against the iron beyond said concave surface and having bristles sufficiently long to hold said work against the surface.

1,870,298. COIFFURE RETAINING CAP. MAX STONE, New York, N. Y. Filed Nov. 3, 1931. Serial No. 572,791. 1 Claim. (Cl. 132—49.)



A hair net formed of two semi-circular members of netted material joined together, reenforcing material mounted at the front of said hair net extending from the marginal edge toward the center, hems in said hair net forming a cap, the seam joining said members extending from front to rear of the finished cap, and an elastic band secured to the marginal edge of said hair net for constricting the latter about the head of the wearer.

1,870,299. ART OF PACKAGING CIGARETTES. ARTHUR V. STRELITZ, Milwaukee, Wis. Filed Apr. 17, 1931. Serial No. 530,786. 3 Claims. (Cl. 206—41.)

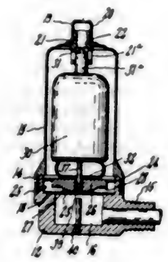
1. A cigarette package comprising a filler having a plurality of spaced and connected sections, each section

being formed with a plurality of elongated, parallel compartments of a size to snugly hold and protect individual cigarettes, said sections being foldable one on another and the spacing between two of said sections being such that the compartments of one section fit in the recesses formed between adjacent compartments of the adjacent section,



and an outer flexible wrapper enclosing said folded filler and cigarettes, the filler being constructed of thin paper and the walls of adjacent compartments being in contact with one another to provide for the use of an outer wrapper of the same size as would be employed to package an equal number of cigarettes without the use of a filler.

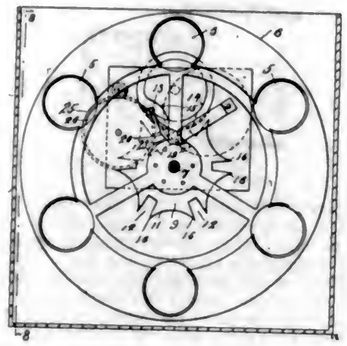
1,870,300. RADIATOR VALVE. CHRISTOPHER G. THIBODEAU, Arlington, Mass., assignor of one-half to Frank W. Zinn, Boston, Mass. Filed Sept. 28, 1931. Serial No. 565,419. 11 Claims. (Cl. 236—62.)



1. A radiator valve comprising a casing having an inlet communicating with a heating system, and including an annular inlet valve seat, and an outlet having an outlet valve seat, an upwardly opening flexible discoidal inlet valve bearing loosely at its margin on said annular seat and adapted to be raised therefrom by fluid pressure admitted through the inlet, an outlet valve adapted to close on the outlet valve seat, and heat responsive means interposed between the inlet and outlet valves and normally contracted to support the outlet valve open and the discoidal valve free to be opened by incoming fluid under pressure, said means including an inlet valve flexing element and being expansible by heat to simultaneously close the outlet valve and cause said element to conform the discoidal valve to its seat by flexing said valve, means being provided for transmitting motion from said heat responsve means to the outlet valve, the arrangement being such that fluid under pressure admitted through the inlet opens the inlet valve, said fluid, when heated, causing the confinement of said valves against their seats.

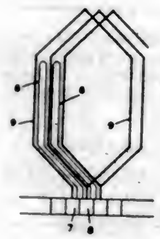
1,870,301. AUTOMATIC STEREOPTICON CHANGING DEVICE. STEVEN R. VANDEWATER, St. Louis, Mo., assignor to Vanderoy Advertising System, Inc., St. Louis, Mo., a Corporation of Missouri. Filed Feb. 13, 1930. Serial No. 428,002. 6 Claims. (Cl. 88—27.)

1. A device of the character described comprising a stationary shaft, a slide carrying disc wheel and a notched disc both loosely mounted on the said shaft, a spring connection between said discs having its ends fastened to respective projections on said wheel and disc that are further separated by a forward rotative step of the notched disc to tension said connection, the notched disc having a cove between said notches, a circular cam adapted to engage the adjacent cove and having a notch, an operative pin carried by said cam adapted to engage said disc



notches successively and rotate the notched disc a step ahead till the cove and cam portions engage, detent means to hold the slide carrying wheel still while the notched disc makes a partial revolution and tripped by said pin, and means to rotate said cam, substantially as described.

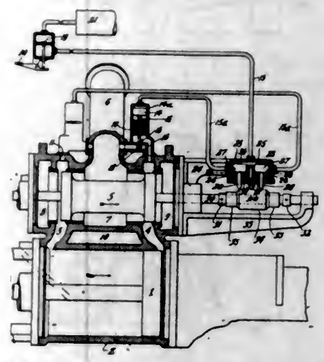
1,870,302. ALTERNATING CURRENT MOTOR. HANS WEICHSEL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Nov. 7, 1930. Serial No. 493,923. 2 Claims. (Cl. 172—276.)



1. In a single phase motor, the combination of an inducing member, a slotted induced member provided with a commuted winding in said slots and with a commutator, short circuited brushes cooperating with the commutator, and loops of high resistance conductive material connecting adjacent commutator segments and positioned in the slots of the induced member each loop being confined to a single slot.

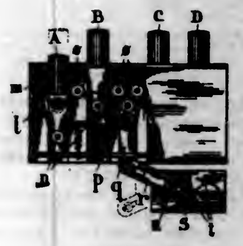
1,870,303. STEAM ENGINE. HUBERT J. TITUS, Paterson, N. J., and JOHN S. WALLIS, New York, N. Y., assignors to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed June 18, 1926. Serial No. 116,919. 9 Claims. (Cl. 121—142.)

1. In a locomotive, the combination of a cylinder, a piston, a valve chest, a steam pipe, a main steam passage, a main valve set to give a limited maximum cut-off, a supplementary steam passage for supplying steam to start the locomotive, and means for limiting the pres-



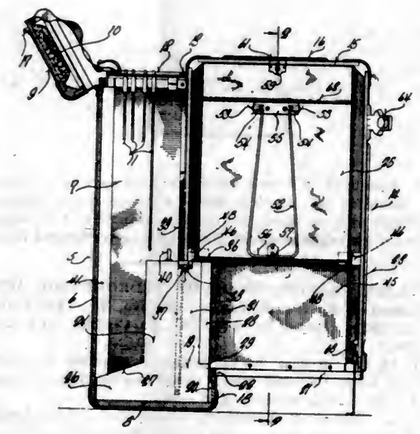
sure delivered through said supplementary passage to a predetermined maximum sufficiently low to prevent slippage in starting.

1,870,304. DIRECTION INDICATOR FOR MOTOR CARS. WILHELM WENTZEL, Frankfort-on-the-Main, Germany. Filed Apr. 12, 1926, Serial No. 101,451, and in Germany Feb. 15, 1927. 1 Claim. (Cl. 200—35.)



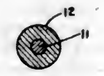
In a switch for direction indicators comprising a number of circuits for the indicator arms, the combination of a plurality of press button switches corresponding to the number of circuits, press buttons controlling each of said switches, a clockwork adapted to return each of said press buttons into its inoperative position after being depressed, contact springs connected in each of said circuits, a pin on each of said switches adapted to bridge said contact springs for a specified period, a common coupling element having a limited freedom of movement arranged between all of said press-buttons adapted to allow the depression of only one of said press buttons at one time, and a lever of said clockwork positively connected to said common coupling element adapted to wind said clock work on the depression of one of said press buttons and, on the release of one of said press buttons after being depressed, adapted to pull said button into its inoperative position in the same measure as said lever is itself returned into its initial position by said clockwork.

1,870,305. BAGGAGE CARRIER. GEORGE HENRY WHEARY, Racine, Wis., assignor to Wheary Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Jan. 3, 1928. Serial No. 244,215. 10 Claims. (Cl. 190—13.)



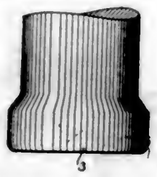
1. In a baggage carrier having a wardrobe section and a closure hingedly connected thereto, the bottom of the closure being on a higher plane than the bottom of the wardrobe section and an extension member projecting from the bottom of the wardrobe section and over which the closure closes on the wardrobe section, the outer walls of the extension member and closure forming continuations of each other, an article container of substantially L shape in transverse section disposed in the bottom of the wardrobe section with its vertical portion outermost and close to the outer wall of the extension member and projected thereabove, the inner end of the horizontal portion of said container extending to a point adjacent the rear wall of the wardrobe section whereby a well is provided between the wardrobe section rear wall and the vertical portion of the container the bottom of which is defined by the upper wall of the horizontal portion of the container into which garments extend, that portion of the outer face of the container above the extension member being open to permit access to the interior of the container without removing the same from said trunk, and a closure for said container.

1,870,306. CATHODE FOR ELECTRON DISCHARGE DEVICE. EMIL GIDEON WIDELL, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed May 27, 1926. Serial No. 112,180. 3 Claims. (Cl. 250—27.5.)



1. A cathode for an electron discharge device comprising an electrically conducting core member and a coating of a thermionically active material on the outer surface of said core member, with a substantial portion of said surface having on each square centimeter thereof a coating of about three to ten milligrams of the thermionically active material.

1,870,307. METHOD OF MAKING CELLULOSE ARTICLES. HENRY H. WRIGHT, Passaic, N. J., assignor, by mesne assignments, to Du Pont Cellophane Company, Inc., New York, N. Y., a Corporation of Delaware. Filed July 25, 1925, Serial No. 46,159. Renewed May 20, 1930. 9 Claims. (Cl. 18—48.)



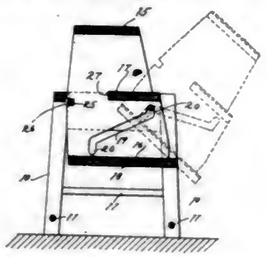
1. A method of forming cellulose articles which consists in moulding the article from a sheet of a cellulose xanthate and reverting the cellulose xanthate to cellulose hydrate while maintaining the article in its desired shape.

1,870,308. MANUFACTURE OF HYDROBROMIC ACID. ABRAHAM SIDNEY BEHRMAN, Chicago, Ill. Filed June 15, 1931. Serial No. 544,710. 14 Claims. (Cl. 23—156.)

1. In the process of preparing a solution of hydrobromic acid, the step which comprises reacting bromine, water in the liquid phase, and carbon.

7. A process of producing concentrated hydrobromic acid, which comprises passing water successively through a series of carbon beds, introducing gaseous bromine into one or more beds before the last bed of the series, and causing said bromine to pass countercurrently to the flow of water through the successive beds.

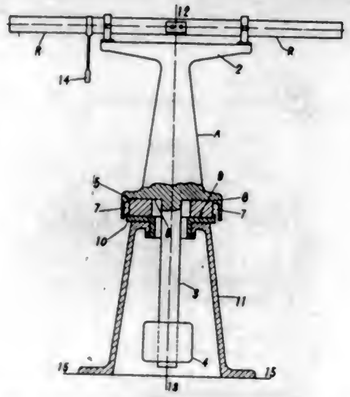
1,870,309. COMBINED STOOL AND STEPLADDER. FREDERICK CUMMISKEY, New York, N. Y. Filed May 12, 1931. Serial No. 536,842. 2 Claims. (Cl. 155—42.)



2. In a structure of the class described, a frame having legs, side members, a transverse rod joining the side members and an open top, a movable supporting section provided with slots having the end portions thereof extending angularly in opposite directions and receiving said transverse connecting rod whereby the supporting section is pivotally and slidably connected to said frame thereby allowing the side section to be swung to a position extending above the frame, and a connecting rung in the path of movement of the side walls of said supporting section, the side walls of said supporting section being provided with notches receiving said rung.

1,870,310. ANTIVIBRATION MEANS FOR THE SUPPORT OF OPTICAL OBSERVATION INSTRUMENTS. JAMES WEIR FRENCH, Anniesland, Glasgow, Scotland, assignor to Barr and Stroud, Limited, Glasgow, Scotland. Filed Mar. 14, 1930, Serial No. 435,802, and in Great Britain Mar. 21, 1929. 3 Claims. (Cl. 248—30.)

1. A support for an optical observation instrument comprising means for bearing the instrument, elastic means upon which the bearing means rest, the supporting surface between the bearing means and the elastic means lying substantially in a horizontal plane passing



through the centre of gravity of the supported mass, and means for supporting the elastic means, the support including relatively rotatable parts so that the instrument may be angularly directed.

1,870,311. CLEANSER FOR ALUMINUM. WILMER CHARLES GANGLOFF, Cincinnati, Ohio, assignor to The Drackett Chemical Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 19, 1928. Serial No. 313,653. 1 Claim. (Cl. 87—5.)

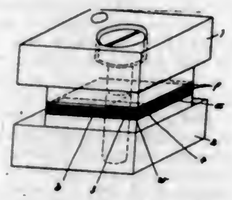
An aluminum cleanser comprising the following ingredients in substantially the following proportions:

	Per cent
Powdered pumice	25
Powdered SiO_2 (calcined)	25
Sesqui-carbonate of soda	25
Trisodium phosphate	10
Powdered soap	10
Ammonium chloride	5

1,870,312. CLEANSER FOR HOUSEHOLD USE. WILMER CHARLES GANGLOFF, Cincinnati, Ohio, assignor to The Drackett Chemical Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 19, 1928. Serial No. 313,654. 1 Claim. (Cl. 87—5.)

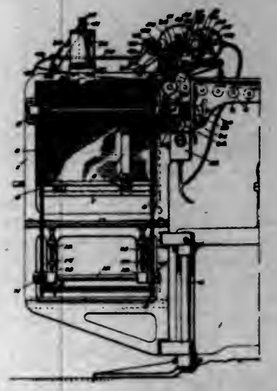
In a water soluble cleanser the combination of borax, approximately 24%; sodium sesquicarbonate, approximately 50%; trisodium phosphate, approximately 24%; sodium silicate, approximately 2%.

1,870,313. SELENIUM CELL. HEINRICH JOHANNES KÜCHENMEISTER, Berlin, Germany. Filed July 6, 1928, Serial No. 290,781, and in Germany July 16, 1927. 4 Claims. (Cl. 201—63.)



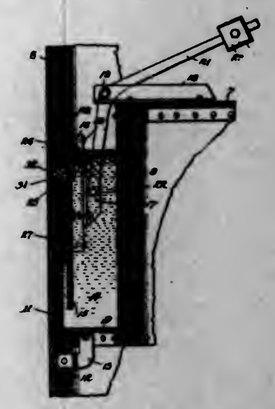
1. A photoelectric cell comprising a stack of a multiplicity of alternate layers of conducting material and insulating material of polygonal shape, alternate conducting layers being conductively connected together, said stack having two contiguous faces extending normal to each other and coated with light sensitive material up to their common edge, and means for angularly adjusting the position of said cell for laterally shifting the junction of the edges of said stack and rendering either edge thereof effective to the action of variable light rays.

1,870,314. METHOD AND APPARATUS FOR FEEDING SHEETS. EDWIN S. LINCOLN, Scarsdale, N. Y., assignor to Dexter Folder Company, New York, N. Y., a Corporation of New York. Filed June 11, 1930. Serial No. 460,526. 40 Claims. (Cl. 271—18.)



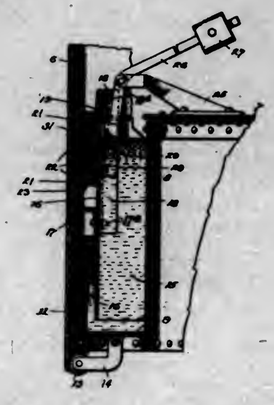
1. Means for separating a sheet of magnetic material from a stack comprising a pair of pole pieces of like polarity at opposite sides of the stack, a pole piece of opposite polarity above the stack, whereby the top sheet is lifted from the stack, and means for forwarding the lifted top sheet.

1,870,315. GAS HOLDER. JOHN R. L. SANTOS, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 29, 1928. Serial No. 302,783. 6 Claims. (Cl. 48—176.)



1. In a waterless gas holder, the combination of a shell; a piston vertically movable therein to vary the effective volume of the holder; a liquid-retaining trough encircling the piston; a packing structure encircling the piston, contacting the shell and forming a freely movable dip seal with the liquid in the trough, the liquid in the trough being subject to the pressure of the gas within the holder, said arrangement providing means for forcing the lubricant to the packing; and a plurality of weighted levers for movably supporting and guiding the packing structure.

1,870,316. GAS HOLDER. JOHN R. L. SANTOS, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 29, 1928. Serial No. 302,784. 7 Claims. (Cl. 48—176.)



1. In a waterless gas holder, the combination of a shell; a piston movable therein to vary the effective volume of the shell; a flexible annulus surrounding the piston; a liquid seal cooperating with the lower portion of said annulus and effecting a gas-tight joint between the annulus and the piston while maintaining the general flexibility of the annulus; an annular scraper structure yieldingly mounted on the piston; a packing annulus supported on said flexible annulus in position to be protected by said scraper structure and contacting said shell; and yielding means for expanding said flexible annulus to press said packing into sealing engagement with the shell.

1,870,317. DISHWASHING MACHINE. EDGAR S. STODDARD, Berwyn, and WILLARD C. RYKERT, Chicago, Ill., assignors to The Conover Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 5, 1929. Serial No. 344,111. 2 Claims. (Cl. 299—63.)



1. A spray-projecting impeller of the upright type for use in a dish washing machine, comprising a vertical portion, and a plurality of symmetrically positioned inclined vanes terminating in concave deflectors attached to said vertical portion, said deflectors being provided with raised portions adapted to decrease the effective area thereof, the raised portions being arranged along the discharge edges of said deflectors.

1,870,318. DISHWASHING. EDGAR S. STODDARD, Berwyn, Ill., assignor to The Conover Company, Chicago, Ill., a Corporation of Illinois. Filed June 24, 1929. Serial No. 373,483. 2 Claims. (Cl. 87—5.)

1. A method of cleaning dishes which comprises placing soap and trisodium phosphate in a quantity of hot water, forcibly projecting the water with said materials therein in the form of a spray against the dishes to be cleaned, preparing a second solution of trisodium phosphate in hot water, forcibly projecting said second solution in the form of a spray against the dishes, and finally rinsing the dishes with hot water.

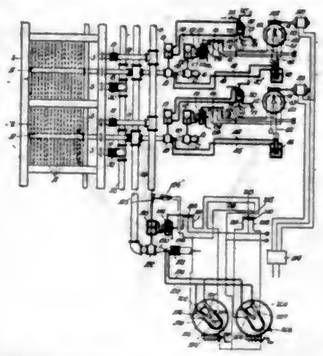
1,870,319. METHOD OF SEPARATING BETAINE HYDROCHLORIDE AND POTASSIUM CHLORIDE FROM WASTE MOLASSES. YOSHITARO TAKAYAMA, Tokyo, Japan. Filed Mar. 10, 1928, Serial No. 260,806, and in Japan Nov. 15, 1927. 8 Claims. (Cl. 260—25.)

1. The method of treating waste liquor of beet molasses consisting in treating the waste liquor to crystallize the crude betaine hydrochloride containing potassium chloride; neutralizing a water solution of the said crude crystals with lime; filtering the solution; and concentrating the filtrate to crystallize the potassium chloride.

1,870,320. METHOD FOR CLEANING OIL WELLS. EDWARD MAURICE ADAMS, Lexington, Ky., and WILMER CHARLES GANGLOFF and GRACE G. SPENCER, Cincinnati, Ohio, assignors to The Drackett Chemical Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 16, 1932. Serial No. 599,347. 3 Claims. (Cl. 166—21.)

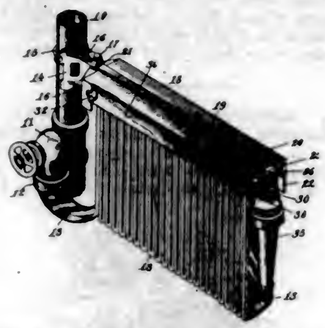
1. The method of cleaning oil wells of paraffin and/or asphaltic compound obstructions which consists in depositing in the well a composition which will react in the presence of water to produce heat and pressure, said composition being first rendered safe and fluid by mixture in substantially water-free oil vehicle, then pouring water into the well and finally pumping the oil and the melted obstruction materials from the well.

1,870,321. FILTRATION PLANT CONTROL. SAMUEL L. ADELSON, Chicago, Ill., assignor to General Zeolite Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 17, 1927. Serial No. 233,779. 25 Claims. (Cl. 210—125.)



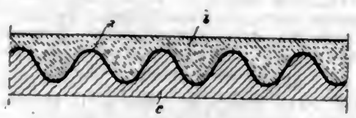
23. In a flow control system, a conduit, means adapted to close said conduit, regulating means for maintaining a constant flow in said conduit actuated from the flow in said conduit, means for cutting out said regulating means actuated upon substantial stoppage of flow in said conduit, and means for again cutting in said regulating means actuated upon the restarting of the flow in said conduit.

1,870,322. HOSE RACK. RAYMOND F. BROWN, New York, N. Y. Filed Oct. 7, 1930. Serial No. 486,918. 6 Claims. (Cl. 299—77.)



2. A hose rack including a frame, a series of supporting bars mounted thereon along one rigid wall thereof, a cover pivotally secured upon the portion of the frame opposite said rigid wall, means for locking said cover in position to confine the hose looped on said bars, a pressure resisting member adapted to cooperate with certain of said bars and thereby engaging with folded bends of the looped hose to prevent the passage of water through the portions of said hose engaged by said pressure resisting member until said cover has been released and the other bars have been freed of the portions of the hose thereon, substantially as specified.

1,870,323. MANUFACTURE OF INSULATING MATERIAL. GIUSTINO CATTANEO, Milan, Italy. Filed Oct. 12, 1929, Serial No. 399,374, and in Italy Oct. 19, 1928. 2 Claims. (Cl. 154—44.)



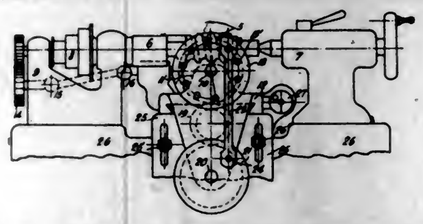
1. A composite plate comprising a corrugated metallic sheet, a rubber sheet having a roughened surface affixed at that surface to one surface of said metallic sheet, and a layer of thermally insulating material affixed to the other surface of said metallic sheet.

1,870,324. MUTE FOR STRINGED MUSICAL INSTRUMENTS. MANUEL SARRABLO Y CLAVERO, Paris, France. Filed Jan. 31, 1929, Serial No. 336,508, and in France Jan. 12, 1928. 1 Claim. (Cl. 84—310.)



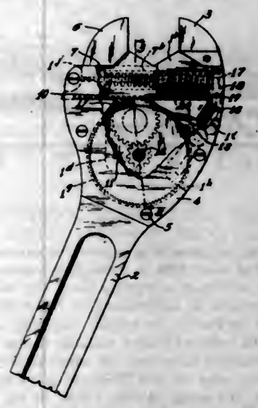
A mute for use in mandolins, banjos, guitars and the like, comprising two cheeks cut out in form of teeth in the lower part and connected in the upper part so that said teeth form pincers, said teeth having on their inner faces metallic studs which normally rest in touch with one another as the two studs are oppositely situated in such a manner that by placing the mute upon the bridge the studs engage the perforations in the bridge so that the pincers formed by the opposite disposed teeth close again, so that the mute is securely attached to the bridge and prevented from being casually dislodged by vibrations of the sounding board of the instrument.

1,870,325. MEANS FOR PRODUCING WORMS OR CYLINDRICAL CAMS. JOHN GEORGE DOUGLAS, Leagrave, Luton, England, assignor to George Kent, Limited, London, England. Filed Nov. 16, 1929, Serial No. 407,750, and in Great Britain Nov. 20, 1928. 12 Claims. (Cl. 90—1.)



1. In a machine for cutting a worm or cam, the combination of a rotatable work holding means, a tool carrier rotatable on an axis substantially at a right angle to the axis of the work holding means adapted to carry a planing-tool type of cutter, means for maintaining the cutting edge of the cutter subatantially at right angles to the helix angle of the worm, and means for rotating said work holding means and carrier in timed relationship.

1,870,326. WRENCH. MILTON W. EMMETT, Los Angeles, Calif., assignor to Emmett Wrench Company, a Corporation of Washington. Filed Aug. 24, 1929. Serial No. 388,056. 6 Claims. (Cl. 81—133.)



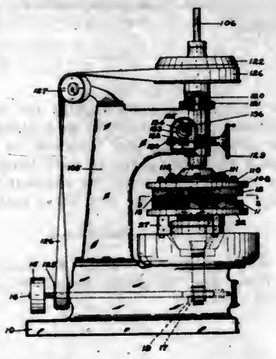
1. In a wrench, a body having a fixed jaw thereon, a movable jaw reciprocally mounted on the body with respect to the fixed jaw, a gear rack in association with the movable jaw, a gear rotatably mounted on the body in engagement with the rack, a ratchet member, reduction gear means connecting the ratchet member with the gear whereby the latter rotates slower than the former, and a pawl mounted on the body in engagement with the teeth of the ratchet member.

1,870,327. CIGARETTE SNUBBER. LOUIS J. ENDSLEY, Chicago, Ill. Filed June 27, 1931. Serial No. 547,196. 7 Claims. (Cl. 131—51.)



1. A device of the character described comprising, in combination, a body having an opening adjacent one end, a plunger in said body, an operating stem on said plunger extending through the other end of said body to facilitate movement of said plunger past said opening, and yieldable means to return said plunger.

1,870,328. LAPPING MACHINE. HEBERT S. INDGE, Westboro, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 21, 1930. Serial No. 469,367. 3 Claims. (Cl. 51—118.)



1. A lapping machine comprising two opposed laps and a work cage supported therebetween, a rotatable spider arranged to support one of the laps, a head mounted concentric with the spider and rotatable relative thereto, means to rotate said head and spider at different rates of speed, pinions rotatably mounted upon said head and spaced from its axis so as to revolve therewith, driving pins arranged to engage said work cage, each of said driving pins being eccentrically mounted upon one of said rotatable pinions, a ring gear arranged to rotate with said spider, and gears carried by said rotatable head which engage the ring gear and said pinions and cause the work cage to move through a composite motion of rotation and gyration.

1,870,329. HOTHOUSE INSTALLATION. OTTO HAPPEL, Bochum in Westphalia, Germany. Filed Mar. 6, 1930, Serial No. 433,688, and in Germany Apr. 3, 1929. 6 Claims. (Cl. 47—17.)

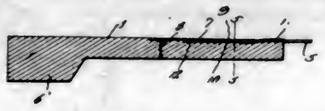


1. A hot-house provided with air heaters fed with a heating medium and consisting of ribbed pipes and one or more blowers cooperating with the heaters; connecting passages below the floor of the hot-house which conduct the heated air to air-discharge passages arranged beyond the plant-culture surface and below the floor of the hot-house and which are arranged upon at least two opposite sides of a plant-culture surface unit of the hot-house served by the air flow of the heater; a relatively large number of openings being distributed over the entire length of said air-discharge passages through which the hot air enters into the air space of the hot-house to flow back therefrom over the plant-cultures to the blower of the heater.

1,870,330. GLAZIER'S POINT DRIVER. HARRY HARRIS, Miami, Fla. Filed Jan. 16, 1930. Serial No. 421,254. 3 Claims. (Cl. 1—44.)

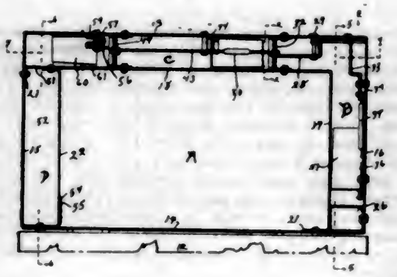
1. In a driving device for glazier points, a handle member, an abutment plate secured on said handle member and having one end thereof terminating in inward spaced

relation from the adjacent end of said handle member, said plate at said one end being bifurcated, and a spring clamping member extending between the furcation and having one end thereof projecting beyond the adjacent end of said plate for engagement with a glazier point for retaining the point on one end of said handle with one edge



of the point in abutting relation with the edge of said plate at said one end of the plate, said plate being of a thickness corresponding to the thickness of the glazier point, and said plate being set in said handle with the outer surface thereof flush with the adjacent face of said handle member at the opposite end of the plate.

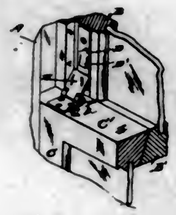
1,870,331. ANIMAL TRAP. JOHN F. HAUCK, Tyndall, S. Dak. Filed Aug. 5, 1929. Serial No. 383,711. 2 Claims. (Cl. 43—76.)



1. In an animal trap, an enclosing structure formed to provide a pair of runways, an apertured partition separating said runways, a door to close or disclose said aperture, the trap being provided with an entrance providing acceess from the exterior of the trap to one of said runways near said partition, a door to close said entrance, each of said doors being positioned so as to close in the direction in which gravity urges them, means connecting said doors in such a manner that the entrance door is closed when the partition door is open, and vice-versa, and so that the entrance door overbalances the partition door, means in the other runway, to be actuated by the passage of an animal, to engage the partition door, to move it to closed position and to simultaneously move the entrance door to open position, a second partition in the last mentioned runway, provided with an opening, and positioned on the far side of the first mentioned partition from the entrance, a door to close or disclose said last mentioned opening, connected to the means for moving the connected doors, to be normally opened and closed simultaneously with the opening and closing of the entrance door, and an enlarged compartment communicating with the last mentioned runway beyond the last mentioned partition.

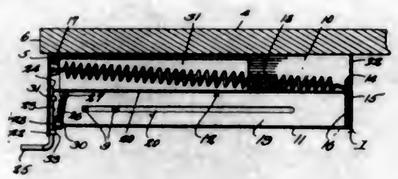
1,870,332. VENTILATING WINDOW LOCK. DAMIAN JOKUBAITIS, Detroit, Mich. Filed July 23, 1931. Serial No. 552,621. 3 Claims. (Cl. 292—238.)

1. In a device of the character described, a U-shaped element adapted to embrace the horizontal rail of a slidable sash frame; a swinging latch member pivoted to the U-shaped element adapted to be tilted into the path of an adjacent slidable sash frame; a relatively short channel member having one of its walls of greater depth than the other, the walls of said channel member bearing respectively upon the horizontal rail of the first named sash frame



and one of the flanges of the U-shaped element; and a bolt fitted with a nut extending through said channel member and one of the flanges of the U-shaped element, whereby upon adjusting the bolt in the nut, the U-shaped element is forced to grip the rail of the sash frame.

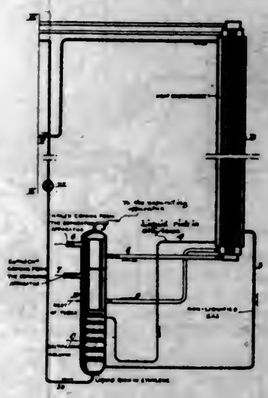
1,870,333. BOOT CLEANER. GODFREY J. KADAVY, Omaha, Nebr. Filed Dec. 22, 1930. Serial No. 504,145. 1 Claim. (Cl. 15—237.)



A boot cleaner comprising a box-like casing provided in its forward end wall with a rectangular opening and with vertical slots extended upwardly from the opening, a box-like slide mounted to reciprocate in the opening and supported on the bottom of the casing, the slide being provided on its top with vertical blades slidable in the slots, the top of the slide having holes located immediately adjacent to the blades, the area of the holes being equal to the area of the blades, the slide having a slot in its side, a guide stud on the side of the casing and extended into the slot to limit the outward movement of the slide, a pull spring connected to the forward end wall of the casing and to the rear end of the slide and housed within the casing, above the slide, and latch means holding the slide releasably in the casing: the blades forming dirt scrapers and stiffening reenforcements for the slide, and the blades being spaced far enough apart so that the spring can be received between them when the slide is in the casing, the top of the casing being open to permit the insertion of the spring, and the bottom of the slide being open to let out the dirt that falls through the holes, and to give acess to the stud when the slide is advanced.

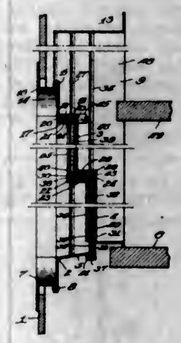
1,870,334. EXTRACTION OF ETHYLENE FROM GASEOUS MIXTURES. HENRI LANTZ, Paris, France, assignor to L'Air Liquide, Société Anonyme pour l'Etude et l'Exploitation des Procédés Georges Claude, Paris, France. Filed Mar. 18, 1929, Serial No. 348,038, and in France Mar. 26, 1928. 3 Claims. (Cl. 183—115.)

1. A method of extracting, by liquefaction, the ethylene in ethylene-containing gaseous mixtures, which comprises the steps of cooling the gaseous mixture to liquefy substantially the whole of the ethylene, thereby dissolving in said liquid a part of the acetylene and nitrogen oxides contained in said mixture, further dissolving the remaining part of the acetylene and nitrogen oxides by circulating the liquid obtained in said partial liquefaction in intimate contact with, and in the opposite direction to, the gaseous



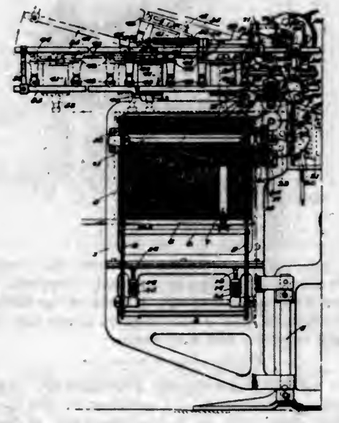
fraction remaining after the said liquefaction, separating the cold gases of said gaseous mixture, liquefying a part of the gaseous mixture remaining after the further dissolving operation in indirect heat-exchange with said separated cold gases, and adding said liquefied part to the liquid rich in ethylene obtained in the first liquefaction.

1,870,335 WINDOW CONSTRUCTION. ERNEST J. LIEBETRAU, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed July 14, 1930. Serial No. 467,770. 13 Claims. (Cl. 114—177.)



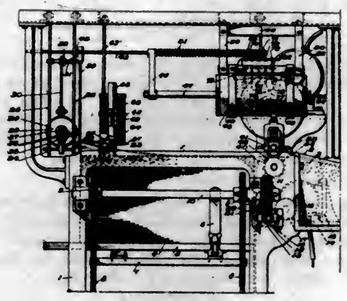
1. In a window construction, a slidable sash therefor, said sash being formed with channel-shaped rails, the upper one of which is removable for permitting glazing thereof from the top, a reinforcing bar positioned in said rails, and means for detachably connecting the upper rail to the reinforcing bars in the side rails.

1,870,336. SHEET FEEDING APPARATUS. EDWIN S. LINCOLN, Scarsdale, N. Y., assignor to Dexter Folder Company, New York, N. Y., a Corporation of New York. Filed June 11, 1930. Serial No. 460,527. 26 Claims. (Cl. 271—18.)



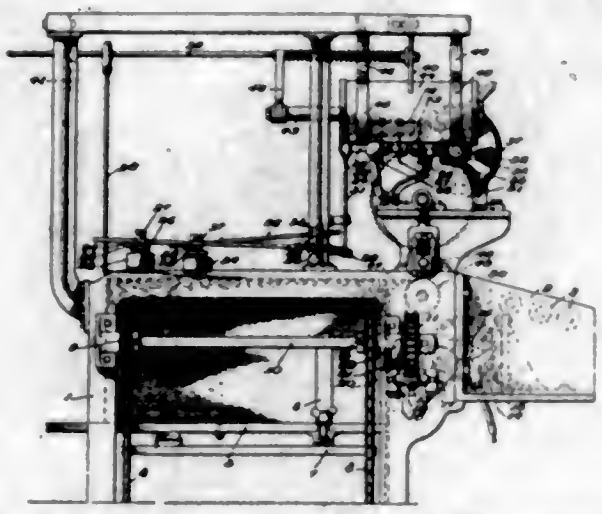
1. Apparatus of the class described comprising the combination of magnetic lifting means for lifting a portion of a sheet, magnetic means for simultaneously holding down an adjacent portion to flex the sheet, and means for lifting the entire sheet bodily.

1,870,337. SHEET FEEDING APPARATUS. EDWIN S. LINCOLN, Scarsdale, N. Y., assignor to Dexter Folder Company, New York, N. Y., a Corporation of New York. Filed June 11, 1930. Serial No. 460,528. 15 Claims. (Cl. 271—18.)



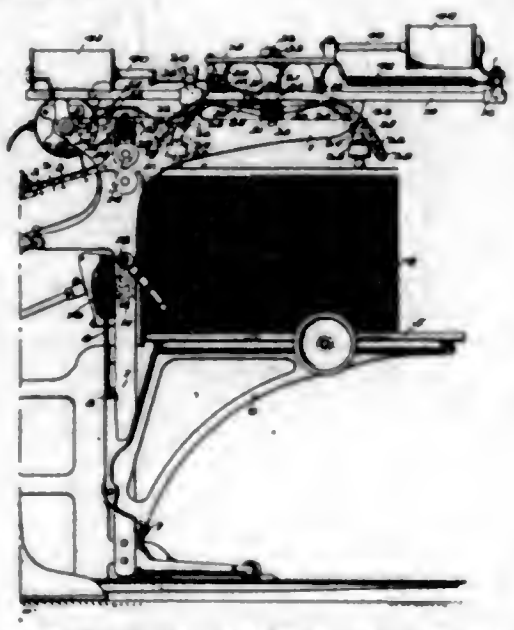
1. In apparatus of the class described, the combination of a lifting magnet adapted to lift a portion of a sheet from a pile, a pivotally mounted arm supporting said magnet, means for rotating said arm about its pivot to lift said magnet, and means for feeding the lifted sheet off the pile.

1,870,338. SHEET FEEDING APPARATUS. EDWIN S. LINCOLN, Scarsdale, N. Y., assignor to Dexter Folder Company, New York, N. Y., a Corporation of New York. Filed June 11, 1930. Serial No. 460,529. 20 Claims. (Cl. 271—18.)



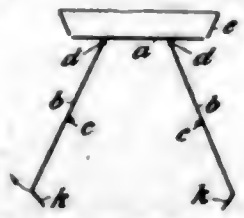
1. In apparatus of the class described, the combination of a plurality of vertically movable supports, lifting means carried by said supports, a common operating shaft for said supports, and a lost motion connection between one of said supports and said shaft.

1,870,339. SHEET FEEDING APPARATUS. EDWIN S. LINCOLN, Scarsdale, N. Y., assignor to Dexter Folder Company, New York, N. Y., a Corporation of New York. Filed June 11, 1930. Serial No. 460,530. 15 Claims. (Cl. 271—18.)



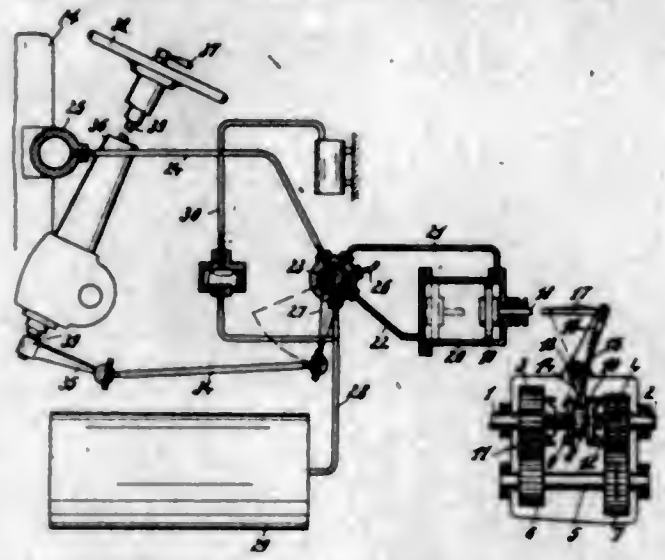
1. In apparatus of the class described, the combination of a horizontally movable support and a plurality of lifting magnets carried thereby and vertically movable relative thereto, and a common operating means for lifting said magnets relative to said support and for thereafter moving said support and the magnets horizontally.

1,870,340. APPARATUS FOR ACCOMMODATING OBJECTS TO BE DELIVERED OR HANDED OUT. JØRGEN SEIDELIN LOTTRUP, Copenhagen, Denmark. Filed Sept. 8, 1930, Serial No. 480,534, and in Denmark Sept. 9, 1929. 12 Claims. (Cl. 133—14.)



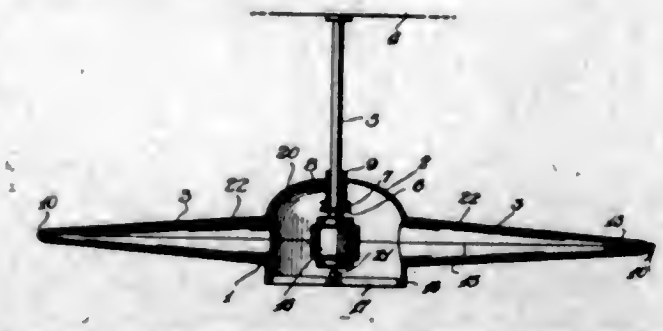
12. An apparatus for accommodating objects to be delivered comprising a support, a normal horizontal receiving plate, and two flaps swingable in relation to the said support and connected to the said plate at opposite ends thereof, said flaps forming together the sole support for the receiving plate.

1,870,341. CHANGE SPEED GEAR. KARL MAYBACH, Friedrichshafen, Germany, assignor to Maybach-Motorenbau G. m. b. H., Friedrichshafen, Germany. Filed May 29, 1930, Serial No. 457,233, and in Germany June 15, 1929. 2 Claims. (Cl. 74—59.)



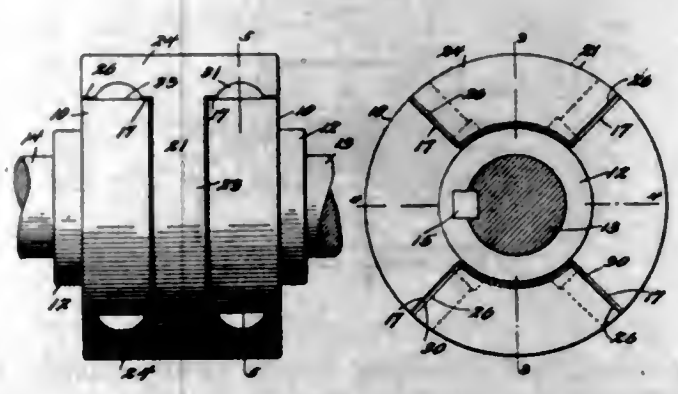
1. In a transmission mechanism of the type comprising a first rotatable member and a second rotatable member, means for rotating said first member at a speed different from that of the second member, but in the same direction and in constant speed ratio thereto; a slidable sleeve between said members adapted to be rotated independently thereof, clutch mechanism whereby said sleeve may be connected with either of said members, means whereby said sleeve is at all times tensioned toward one or the other of said members, means forming part of said clutch mechanism whereby when said sleeve leaves the more rapidly rotating member and moves to engage with the more slowly rotating member, said clutch mechanism will overrun and not engage so long as said sleeve is rotating more rapidly than such member, and similar means forming part of said clutch mechanism whereby when said sleeve leaves the more slowly rotating member and moves to engage with the more rapidly rotating member, said clutch mechanism will overrun and not engage so long as such member is rotating more rapidly than the sleeve; means for operating said sleeve; tensioning means comprising a cylinder, a piston therein, and two different vacuum containing receptacles, conduits connecting one end of said cylinder to one of said vaccum receptacles, other conduits connecting the other end of said cylinder to the other one of said vacuum receptacles, and vacuum control means connected to said conduits and adapted for alternately connecting one or the other cylinder side to its respective vacuum receptacle.

1,870,342. IMPULSE FAN. MAX M. MUNK, Washington, D. C. Filed Jan. 26, 1931. Serial No. 511,399. 5 Claims. (Cl. 230—259.)



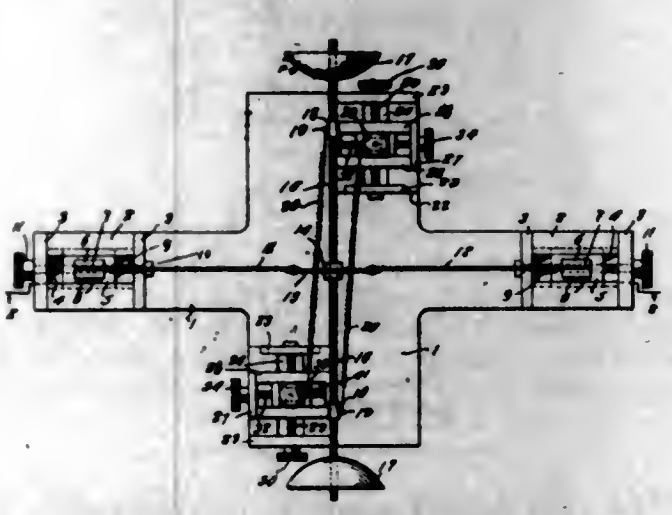
5. The combination with an electric blower, and of an impeller journaled thereon, the impeller being revolved by the action of the air blown through conduits within the impeller blades.

1,870,343. FLEXIBLE COUPLING. ANDREW A. NEAVE, Easton, Pa., assignor to Treadwell Engineering Company, Easton, Pa., a Corporation of Pennsylvania. Filed Feb. 12, 1929. Serial No. 339,436. 6 Claims. (Cl. 64—91.)



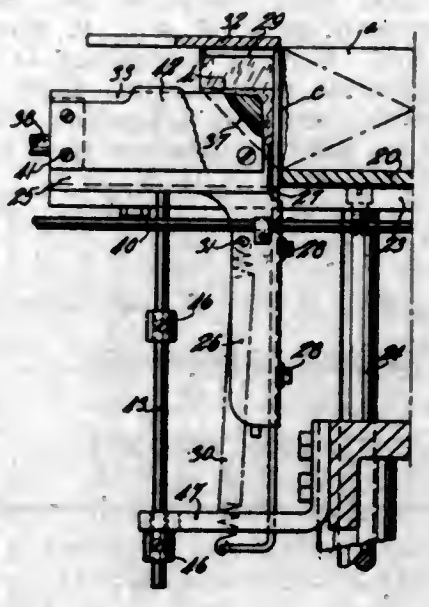
1. In apparatus of the class described, the combination with a pair of driving and driven elements, each of which comprises a body portion and a plurality of abutments extending radially outward from said body portion to provide flat driving surfaces disposed at intervals of 90° about the body portion, alternate surfaces being opposed to each other, of an intermediate torque transmitting member comprising a body portion and a plurality of abutments on opposite sides thereof to provide flat driving surfaces on each side disposed at intervals of 90° about the body portion and arranged to oppose the corresponding surface, on said driving and driven elements, and a plurality of semi-cylindrical bearing blocks adapted to seat in correspondingly shaped recesses in the driving surfaces of the intermediate member and having flat surfaces for engagement with the opposing driving surfaces on the driving and driven members, whereby the latter may partake of a combined sliding and rocking movement with respect to the intermediate member to compensate for faulty alignment of the driving and driven members, and to permit slight relative angular and bodily movement thereof.

1,870,344. BALANCE. FRANK NEUMANN, Washington, D. C. Filed June 9, 1927. Serial No. 197,733. 5 Claims. (Cl. 265—1.)



1. A device of the class described comprising an oscillable member means supplying forces to restore said oscillating member to its position of neutral equilibrium and a resilient means substantially parallel and coacting with the member to oppose the restoring forces in the mounting means.

1,870,345. WRAPPING MACHINE. ROBERT HARRY OAKES, Springfield, and JOHN R. TINDAL, West Springfield, Mass., assignors to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed July 8, 1931. Serial No. 549,416. 6 Claims. (Cl. 93—2.)

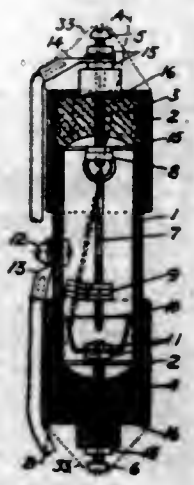


1. A wrapping machine comprising a folder adapted to engage one side of a tubular extension of a wrapper and form a fold therein, a device for creasing an adjacent flap against the side of the folder, and means in the folder for applying a sealing liquid to the inner surface of said adjacent flap.

1,870,346. DECOMPOSITION PRODUCT OF UREA AS OR IN FERTILIZERS. OTTO RIPKE, Elberfeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 29, 1928, Serial No. 281,590, and in Germany June 13, 1927. 2 Claims. Cl. 71—9.)

2. A fertilizer consisting of a mixture of compounds obtained by heating urea until no more ammonia is evolved, said mixture consisting principally of cyanuric acid and ammelide.

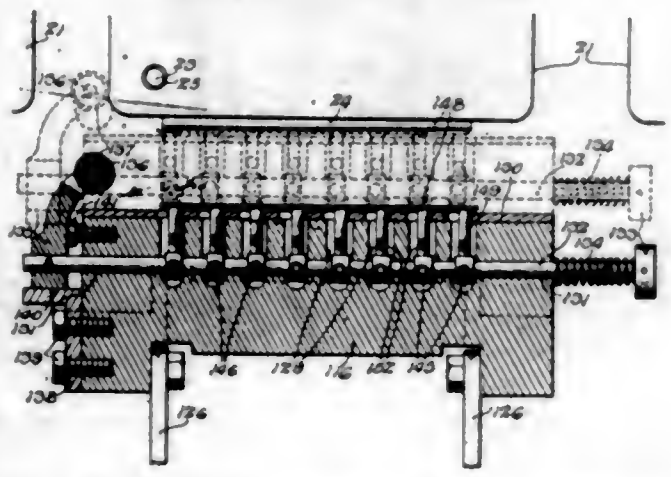
1,870,347. MASS-MOVEMENT DETECTOR. THOMAS M. ROBERTS, Washington, D. C. Filed Sept. 10, 1926. Serial No. 134,683. 2 Claims. (Cl. 200—52.)



1. In a detector of mass movements by change in vertical inclination, a casing, a fixed terminal in one end of the casing, a terminal in the opposite end of the casing, means to adjust the position of the last named terminal in its approach toward and into electrical connection with said fixed terminal, said fixed terminal

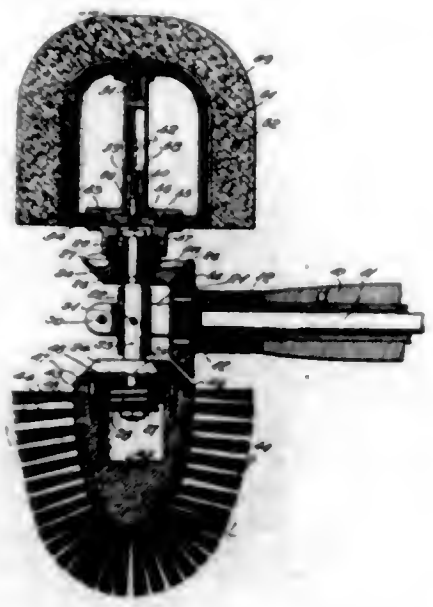
being a flaring circular cup-shaped conducting member concentric with the opposite terminal in its normal position, and an electric signal circuit connected with said terminals.

1,870,348. MACHINE FOR APPLYING STRIPS TO BOOKS. HENRY SIEB, Hammond, Ind., assignor, by mesne assignments, to T. W. & C. B. Sheridan Company, New York, N. Y., a Corporation of New York. Original application filed Dec. 31, 1928, Serial No. 329,466. Divided and this application filed Mar. 7, 1929, Serial No. 345,179. Renewed Sept. 1, 1931. 15 Claims. (Cl. 154—41.)



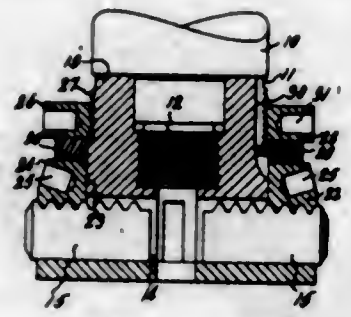
1. In a book-binding machine having a holder for a group of signatures, means supplying a continuous strip of material to be affixed to the back of a signature group, means for severing a section from said strip, means for applying such section to the signature group, the same movable toward and from said holder, and means for adjustably shifting said applying means and section longitudinally of said holder into a predetermined registry with said holder and signature group prior to the affixing of such section to the signature group.

1,870,349. SHOE BRUSHING APPARATUS. JOHN E. S. TAYLOR, Alexandria, Va., assignor to Universal Power Tool Company, Alexandria, Va., a Corporation of Virginia. Filed Dec. 31, 1929. Serial No. 417,736. 2 Claims. (Cl. 15—230.)



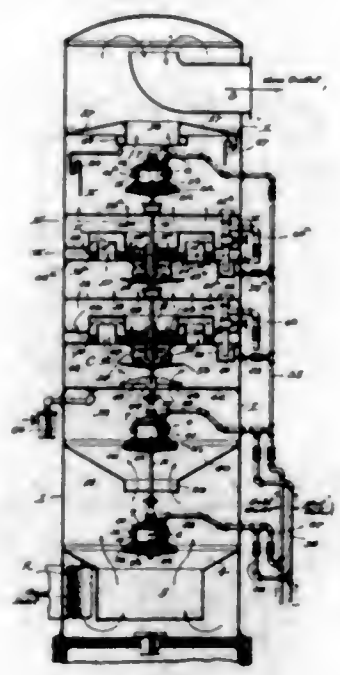
1. In brushing and polishing apparatus, a hollow inflatable buffer comprising flexible side and end walls, a tie connection within the body connecting the end walls, and a flexible jacket covering the side and one of the end walls and also covering the end of the tie connection that is engaged with said end wall.

1,870,350. ADJUSTABLE BORING HEAD. FREDERICK D. VAN NORMAN, Springfield, Mass., assignor to Van Norman Machine Tool Company, Springfield, Mass., a Corporation of Massachusetts. Filed Mar. 1, 1930. Serial No. 432,409. 1 Claim. (Cl. 77—58.)



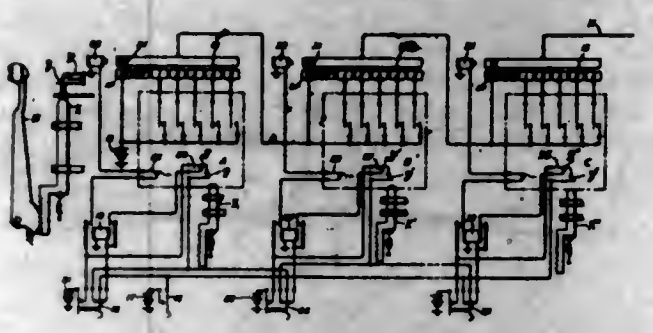
A boring tool comprising a body portion adapted for attachment to a rotatable shaft, a plurality of cutting members movable substantially radially in the body portion and bearing on side faces thereof teeth having inclined sides, a rotatable adjusting ring surrounding the body portion and having on one of its faces a spiral groove having inclined sides mating with the inclined sides of the teeth on the cutting members, a clamping nut threaded onto the body porton, a second ring mounted between the nut and the first ring, means for preventing rotation of the second ring while permitting it to move in a direction parallel to the axis of the boring tool, and spring means interposed between the first ring and the nut to preserve the frictional contact between the walls of the spiral groove and the teeth on the cutting members when the nut is slightly backed away to permit adjustment of the cutting members by rotation of the adjusting ring.

1,870,351. DUST CONDENSER. FREDERICK H. WAGNER, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Oct. 7, 1930. Serial No. 487,076. 9 Claims. (Cl. 261—89.)



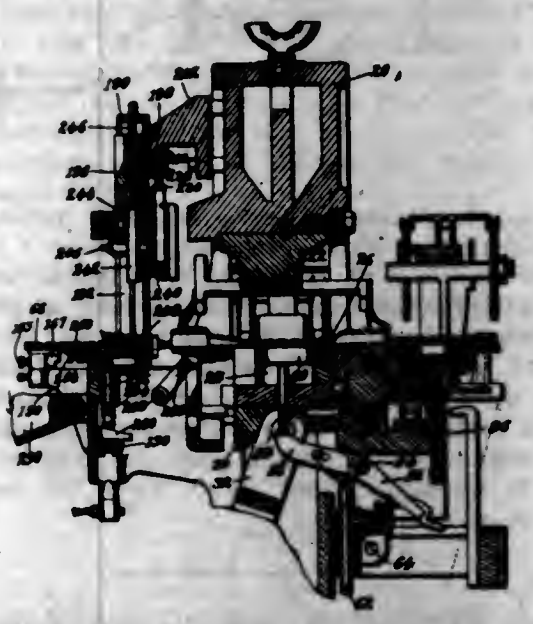
1. In a gas cleaning apparatus, the combinations of a casing having a gas inlet and a gas outlet; a shaft extending vertically in the casing: a turbine for driving the shaft; means for introducing fluid to the turbine to actuate the same; means for gathering the fluid passing from the turbine; and means attached to the shaft for receiving the fluid discharged from the turbine and atomizing the same transversely of the casing, whereby the fluid performs the dual function of driving the turbine and spraying the gas.

1,870,352. TELEGRAPH SYSTEM. EDWARD F. WATSON, Larchmont, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 13, 1930. Serial No. 475,097. 15 Claims. (Cl. 178—2.)



1. In an impulse transmission system, a plurality of transmitting devices of the permutation code type, an outgoing circuit common to said devices, circuit connections whereby any one of said devices may impress impulses upon said circuit, a switch at each of said devices for conditioning its associated device to the transmitting condition, and a transfer switch at each device, characterized in this that the transfer switch of a device is connected to each of the other devices through said conditioning switches for selecting a device conditioned to transmitting condition from other devices not so conditioned and causing it to transmit over said outgoing circuit.

1,870,353. HEEL MACHINE. FRED ASHWORTH, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Sept. 4, 1923, Serial No. 660,750, and in Canada Apr. 4, 1923. Divided and this application filed Sept. 15, 1930. Serial No. 481,886. 13 Claims. (Cl. 12—47.)

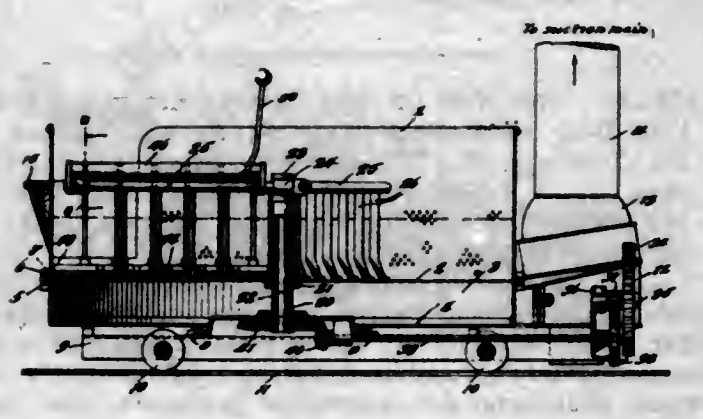


1. In a heel machine, the combination of means for supporting a blank for an operation, a movable blank positioning device, and means for operating the positioning device gently to position a blank upon the support and thereafter sudddenly to remove the blank from the support.

1,870,354. PHOTOGRAPHIC GELATINE LAYER. JOHANNES BRUNKEN, Dessau in Anhalt, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed July 7, 1931, Serial No. 549,331, and in Germany July 11, 1930. 8 Claims. (Cl. 95—7.)

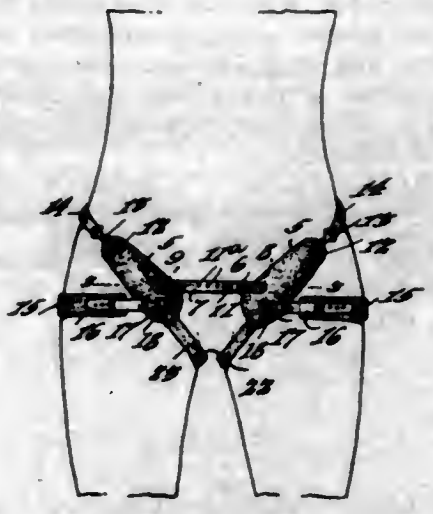
1. In the manufacture of photographic articles provided with a gelatine emulsion layer of constant hardness the step which comprises acting upon the said gelatine emulsion with a dilute solution of an aliphatic dialdehyde.

1,870,355. APPARATUS FOR COOLING COFFEE, ETC. WILLIAM G. BURNS, New York, and RICHARD A. GREENE, Brooklyn, N. Y., assignors to Jabez Burns & Sons, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 23, 1929. Serial No. 387,840. 13 Claims. (Cl. 34—21.)



1. The combination with a receptacle adapted to contain roasted coffee or other material to be cooled, of means for drawing air downwardly through said receptacle, a rotatable arm having a plurality of stirrers extending downwardly into said receptacle, said stirrers being of V-shaped cross-section with the hollow portion at the rear to create air spaces in said material for the admission of fresh air thereto, and means for rotating said arm.

1,870,356. TRUSS. PAUL W. DAVIS and JAMES M. BOOTH, Kansas City, Mo. Filed June 26, 1931. Serial No. 547,119. 1 Claim. (Cl. 128—100.)



In a truee, elongated pads, means for holding the pads in diagonal positions with their upper ends diverging, a two-part brace each part being pivotally connected to one of the pads and pivots by which the two parts of the brace are pivotally connected, a supporting strap adapted to extend horizontally on a plane above the upper ends of the pads with their ends adapted to embrace the sides of the wearer, fastenings by which the ends of the strap are connected to the pads, a strap adapted to occupy a position parallel with the first mentioned strap and therebelow, connections by which the ends of the second mentioned strap are connected to the pads near their lower ends, and straps connected to the second mentioned strap at the rear and adapted to extend through the crotch of a wearer, the front ends of said straps having means by which they are connected to the pads near their lower ends.

1,870,357. NEW CATALYSTS. ALFRED DIERICHS, Leverkusen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Original application filed Jan. 21, 1930, Serial No. 422 379, and in Germany Jan. 28, 1929. Divided and this application filed Dec. 23, 1930, Serial No. 504,413. 7 Claims. (Cl. 23—233.)

1. A catalyst consisting of at least one alkali metal salt and boron phosphate.

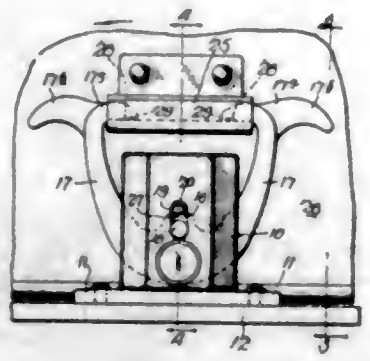
1,870,358. PROCESS OF TREATING PRINTED PAPER FOR USE AS PAPER MAKING STOCK. LOGAN A. DILS, Chicago, Ill., assignor to Kellogg-Dils, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 2, 1930, Serial No. 499,610. Renewed Dec. 12, 1931. 6 Claims. (Cl. 92—9.)

1. The process of making paper-making stock from printed paper, which consists in finely shredding printed paper, then beating it at atmospheric pressure in a hot solution containing sodium hydroxide, sodium borate, trisodium phosphate and potassium carbonate, and then washing the beaten mass.

1,870,359. METHOD OF MAKING GALOSHES, SHOES WITH RUBBER SOLES OR THE LIKE BY PRESSING. HENRY CHRISTIAN LOUIS DUNKER, Helsingborg, Sweden. Filed Aug. 12, 1929, Serial No. 385,464, and in Germany July 19, 1929. 4 Claims. (Cl. 18—53.)

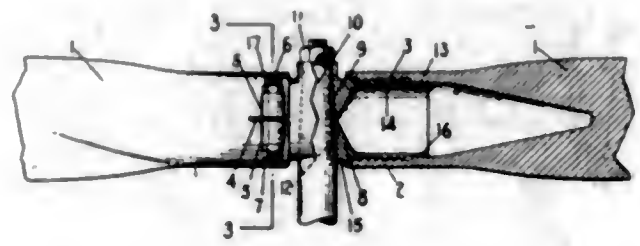
1. A method of pressing galoshes, rubber footwear or the like with wholly rubber-covered sides, consisting in covering a last with lining fabric, covering the said lining on the last with pieces of unvulcanized rubber, inserting the last thus ready built for pressing between heated outer press molds in a pressing machine and moving said outer molds together about the covered last, so that the rubber in the covering of the last is pressed and pre-vulcanized, the outer molds being kept tight together until the pressed rubber footwear is pre-vulcanized to definitive shape while on the press last and enclosed by the outer molds, removing said molds from the last, removing the pressed and pre-vulcanized footwear from the press last and finally further treating and finishing the vulcanization of the article outside the press and without the footwear needing to be supported by any last preventing deformation.

1,870,360. HOOD LOCK. JOHN C. ELLISON, Chicago, Ill. Filed Feb. 24, 1931. Serial No. 517,815. 6 Claims. (Cl. 70—14.)



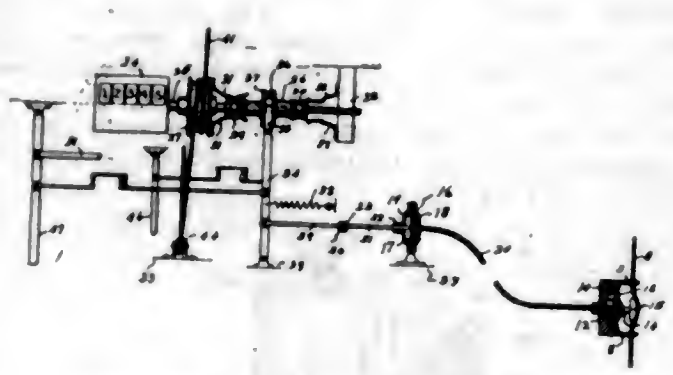
1. A device of the character described, comprising in combination a body member, a pair of oppositely-disposed arms pivotally mounted in the body member, spring tension means coacting with said arms for yieldingly holding them in open and closed position, a removable member adapted to be held by said arms and a lock in the body member to engage the arms to securely hold them while they are engaged with the removable member.

1,870,361. PROPELLER HUB AND BLADE MOUNTING. THOMAS F. HAMILTON, Milwaukee, Wis., assignor, by mesne assignments, to Hamilton Standard Propeller Company, West Homestead, Pa., a Corporation of Pennsylvania. Filed Nov. 8, 1928. Serial No. 317,895. 4 Claims. (Cl. 170—160.)



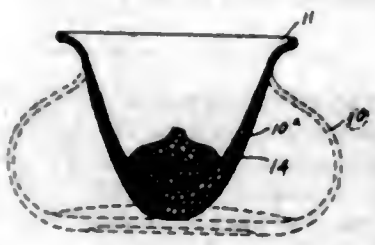
1. An aeronautical propeller blade mounting comprising a hub adapted to be mounted on an engine shaft, a plurality of radial integral arms extending from the hub, external threads on said arms, propeller blades having hollow internally threaded ends adapted to engage the threads on said arms, the hollow blade ends having diametrically disposed slots, bosses on the blade ends on each side of each of said slots, and bolts in said bosses to clamp the blade ends on the hub arms.

1,870,362. DEPTH INDICATOR. PAUL B. HART, Houston, Tex. Filed June 25, 1928. Serial No. 288,229. 6 Claims. (Cl. 33—125.)



1. A depth measuring device for well drilling operations including a register, means including a cable for moving a load into or out of the well, means movable in unison with the load moving means and adapted to be made effective to operate the register, and means connected to said cable and operable by the load on the cable to operatively connect the register operating means with the register and other means normally tending to release said operating means from the register and effective to accomplish that result when the load is removed from the cable.

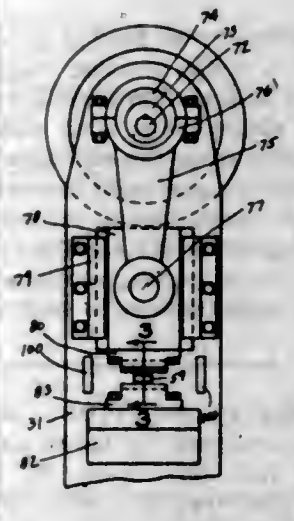
1,870,363. PROCESS OF MAKING FISH BOWLS. ADDISON JENKINS, Kokomo, Ind., assignor to D. C. Jenkins Glass Company, Kokomo, Ind., a Corporation. Filed Dec. 20, 1930. Serial No. 503,625. 1 Claim. (Cl. 49—82.)



The process of making a glass vessel consisting in first forming a parison of glass, and while in a semi-molten state dropping into the interior of the bottom

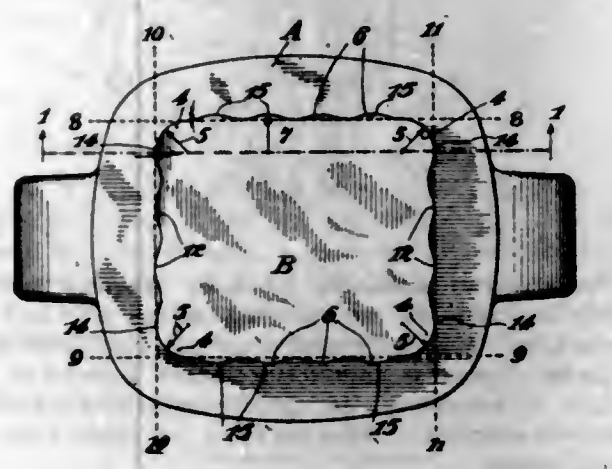
thereof a gob of molten glass having a different color and thereafter forming the parison into final shape, during which formation the gob spreads and fuses with the glass forming the bottom thereof.

1,870,364. APPARATUS FOR AND PROCESS OF MAKING SPRING CUSHION FRAMES. ROY S. JONES, Anderson, Ind., assignor to Barber Manufacturing Company, Anderson, Ind., a Corporation. Filed Mar. 2, 1931. Serial No. 519,374. 8 Claims. (Cl. 153—34.)



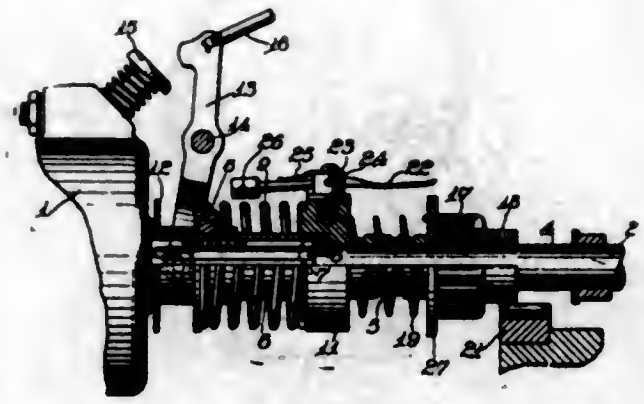
1. The process of rapidly nesting and locking a bar and the like in and to the end of an open tube, corrugated and transversely positioned support member, consisting of simultaneously flattening inwardly the tube forming sides of the end of the member and the corrugation in the member and into nested and flattened relation, forcing a bar or the like transversely of and into the flattened end for bending the same into a transverse groove to nest the bar in the groove formed thereby, turning rearwardly over the bar the free and upwardly-extending end of the member, and then forcing the inturned rearwardly-directed end of the member into enfolding relation relative to the bar for locking the bar to the member.

1,870,365. INGOT AND MOLD FOR MAKING SAME. EDMUND J. KAUFFMAN, Girard, Ohio, assignor to Valley Mould & Iron Corporation, Hubbard, Ohio, a Corporation of New York. Filed Dec. 10, 1929. Serial No. 412,958. 10 Claims. (Cl. 22—218.)



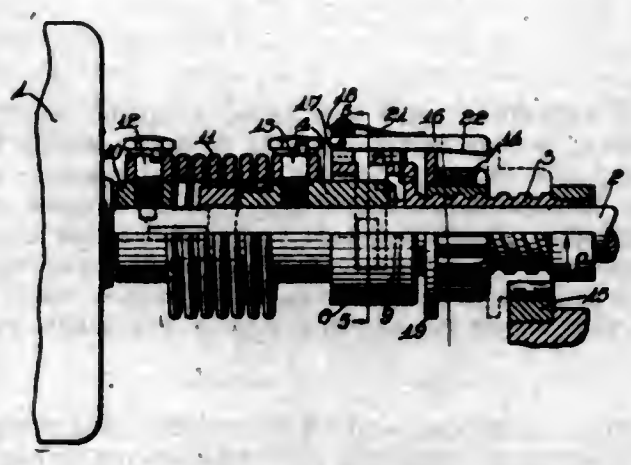
1. A rectangular ingot having ripples extending lengthwise of the ingot, said ripples on the wide sides of the ingot having valleys adjacent the corners of the ingot, and the ripples on the narrow sides of the ingot beginning with the corners of the ingot as crests.

1,870,366. STARTING MECHANISM. DANIEL P. KEARNEY, Detroit, Mich., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Sept. 1, 1931. Serial No. 560,585. 7 Claims. (Cl. 74—7.)



1. Engine starting mechanism including a driving member, manual means for moving said driving member into engagement with a member of an engine to be started, automatic means for retracting said member from such engagement, and means responsive to rotation of said moving means for holding said member retracted.

1,870,367. ENGINE STARTING MECHANISM. DANIEL P. KEARNEY, Detroit, Mich., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Aug. 27, 1931. Serial No. 559,721. 11 Claims. (Cl. 74—7.)

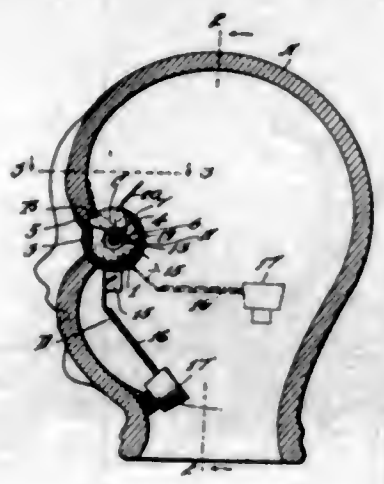


1. In starter gearing for internal combustion engines, power means, a driving member connected thereto for automatic movement into and out of engagement with a member of an engine to be started, means for retaining said driving member in idle position until the power means are actuated and for thereafter locking the driving member in operative engagement with the engine member, and means for rendering said locking means inoperative when the engine starts.

1,870,368. EYE MOUNTINGS FOR DOLLS. JOHN L. LITOMY, Glen Ridge, N. J., assignor of one-third to Joseph A. Taferner and one-third to Leo J. Schlitzer, New York, N. Y. Filed July 8, 1931. Serial No. 549,379. 7 Claims. (Cl. 46—40.)

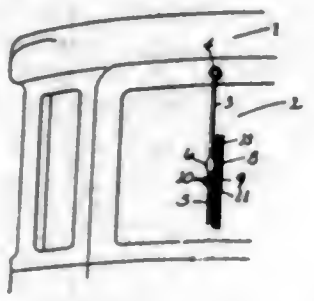
1. In an eye mounting for dolls, a supporting member comprising a single piece of wire having an intermediate crimped portion and having its end portions in axial

alinement and means at its extremities to penetrate into opposite walls of a doll head, and means for holding the end portions of said wire against bending and per-



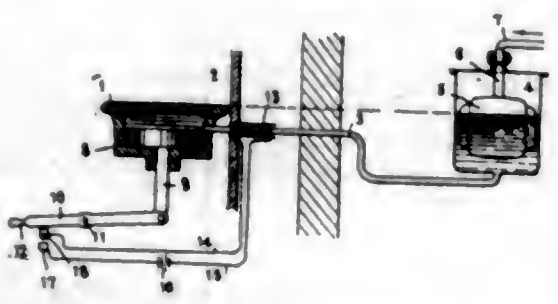
mitting said crimped portion to be straightened under pressure, so that upon straightening of said crimped portion said extremities will be forced in opposite directions.

1,870,369. WINDSHIELD WIPER. LOUIS LUNSFORD, Muskegon, Mich., assignor to Lunsford Manufacturing Company, Muskegon, Mich. Filed July 6, 1931. Serial No. 548,758. 3 Claims. (Cl. 15—255.)



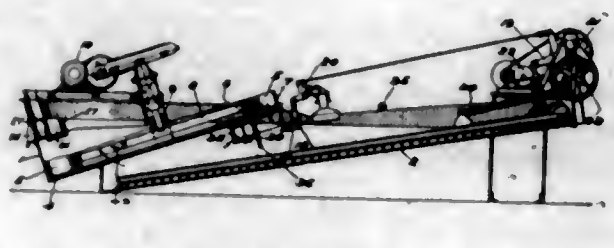
1. A windshield wiper comprising a tubular container member of flexible porous material having inwardly folded ends, said container having a filling of granular salt, and a channel-shaped supporting member clamped upon a longitudinal portion of said container member and its contents and clamping the overlapped ends whereby to form a wiper element, said supporting member being provided with means for securing it to a windshield wiper.

1,870,370. AUTOMATICALLY SUPPLIED MOLD WITH CONTROLLED RELEASE FOR THE PRODUCTION OF ICE BLOCKS. PIERRE JEAN MARCHAUT, Enghien, France. Filed Jan. 8, 1931, Serial No. 507,406, and in France Nov. 29, 1930. 3 Claims. (Cl. 62—108.5.)



1. An ice making machine, including the combination with a constant level water tank of a mold automatically supplied by said tank, a movable bottom of said mold, and means for simultaneously actuating said movable bottom and for supplying heat to the water supply adjacent to said mold.

1,870,371. CLASSIFIER. ALEXANDER D. MARRIOTT, Denver, Colo., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 17, 1930. Serial No. 489,267. 9 Claims. (Cl. 209—18.)

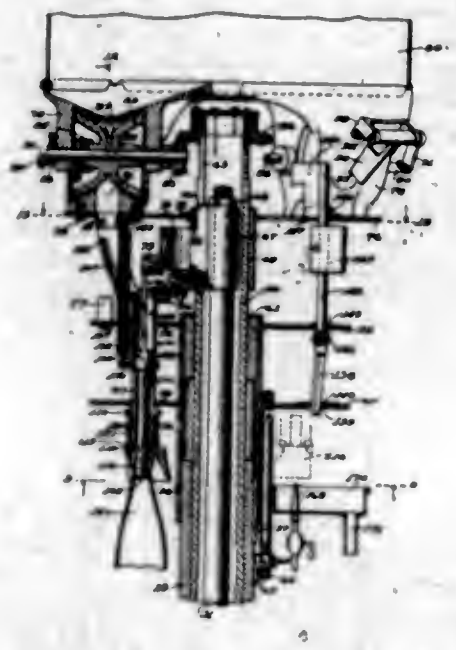


1. Apparatus of the class described having a classification compartment, a sedimentation compartment forming a top for the lower end of said classification compartment and inclined in a single plane with respect to the liquid level therein, an inlet from the classification compartment to the sedimentation compartment located in the lower end of the classification compartment, an outlet from the sedimentation compartment to the classification compartment, and rotary means for conveying sedimented material from the sedimentation compartment to said outlet.

1,870,372. SLURRY FILTRATION. ERNEST J. MAUST, New York, N. Y., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 22, 1930. Serial No. 483,767. 1 Claim. (Cl. 210—203.)

In cement slurry filtration, the step of adding 0.1% of lime.

1,870,373. BOTTLE CORKING MACHINE. GEORGE J. MEYER, Milwaukee, Wis., assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis., a Corporation of Wisconsin. Filed Apr. 8, 1931. Serial No. 527,438. 14 Claims. (Cl. 226—91.)

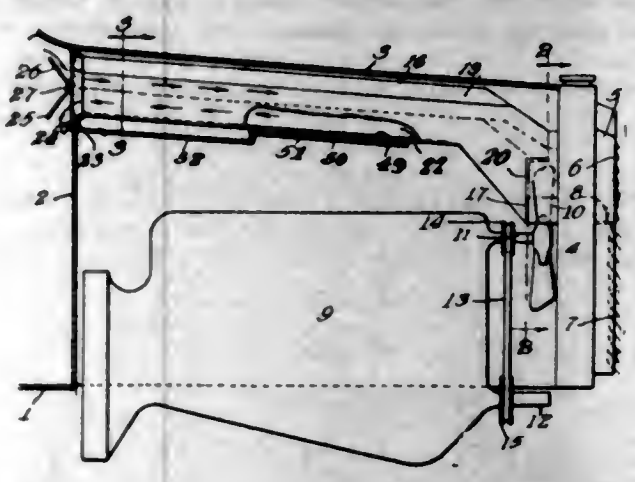


1. In a container-closing machine, the combination of a container support, cork-driving means disposed above said support, cork-compressing means co-operating with said driving means, and reciprocatory actuating means movable on one stroke to operate said cork-compressing means and movable on another stroke to operate said cork-driving means.

1,870,374. AUTOMOBILE HEATER. EDWARD G. MIHALIAK, Brookfield, Ill. Filed Feb. 10, 1928. Serial No. 253,356. 12 Claims. (Cl. 237—12.3.)

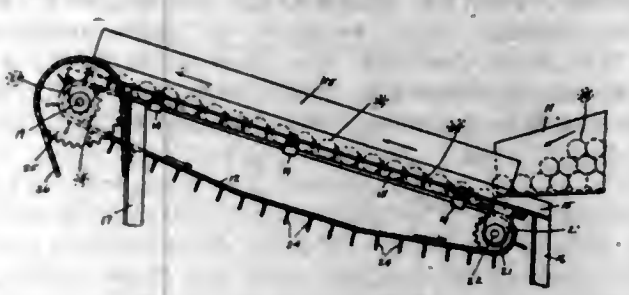
1. The combination with an automotive vehicle including a body, a liquid cooled, internal combustion engine for

propelling the vehicle, a radiator for cooling the engine cooling medium and a fan back of said radiator for drawing air therethrough to effectively cool the cooling medium circulating through the radiator, of means for supplying warm air to the interior of said body comprising a pair of conduits communicating at their rear ends with the interior of said body, one of said conduits communicating at its front end with the air passageways of said radiator and constituting an air outlet for said body, the other conduit having an enlarged mouth part at its front end, located back of an upper portion only of said radiator for receiving air which is warmed in its passage through said radiator,



said mouth part being also located back of and overlapping a material part of the upper portion of the area of rotation of said fan, whereby the latter tends to force said warmed air rearwardly through said last mentioned conduit, and a front closure for the upper part of said radiator, spaced forwardly therefrom for restricting the volume of outside air which enters said upper radiator portion and forming an air passageway in front of the radiator whereby said fan is operative to draw air from said outlet conduit, through said passageway, inwardly through said radiator and to then force such air rearwardly into the vehicle body through said warm air conduit.

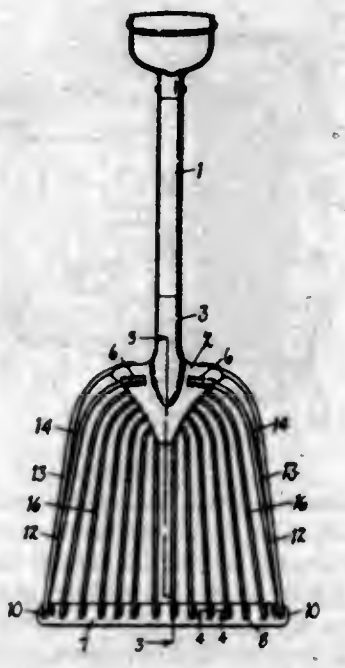
1,870,375. CONVEYER FOR CHANGING GROUPS OF ARTICLES INTO SINGLE FILE. SAMUEL B. MOTT, Noblesville, Ind., assignor to Indiana Condensed Milk Company, Indianapolis, Ind., a Corporation. Filed Sept. 25, 1931. Serial No. 565,076. 11 Claims. (Cl. 198—32.)



1. Conveying apparatus for changing groups of cans and like articles into single file, which includes a conveyer for groups of said articles, a downwardly-inclined single file conveyer extending at a right angle thereto, and an intermediate section connecting said conveyers which has trackways for the articles twisted at substantially ninety degrees so as to horizontally turn the articles correspondingly before entering the single file conveyer.

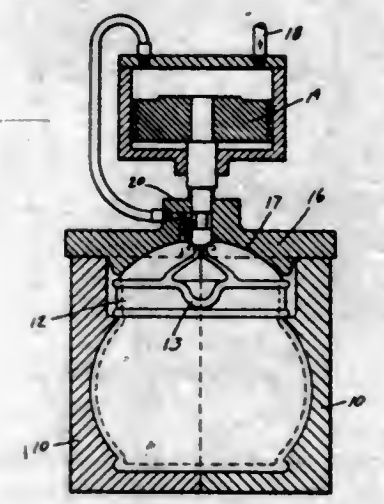
1,870,376. WIRE SCOOP. NORRIS F. MURRAY, Hinsdale, Ill., assignor to Michigan Wire Goods Company, Niles, Mich. Filed Apr. 16, 1931. Serial No. 530,556. 5 Claims. (Cl. 209—419.)

3. In a wire scoop, the combination with a handle provided with a metal head plate having inturned flanges on its upper and side edges and having transversely disposed loops struck rearwardly therefrom adjacent the upper ends of the side flanges, a nose piece, looped side members disposed with their bight portions through the ends of the nose piece, the upper arms of said side members being clamped by the flanges on the upper edge of said head plate, the lower arms of said side members being



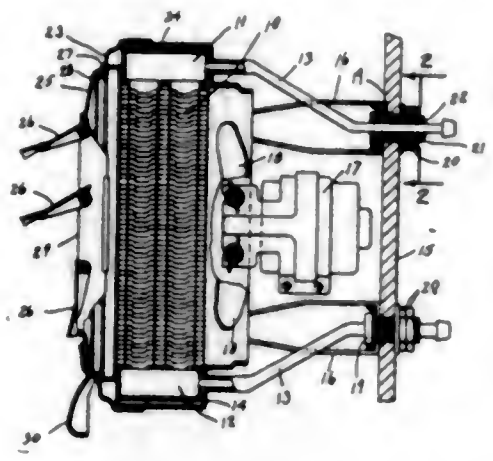
passed through the side flanges of said head plate and through said loops therein, the ends of corresponding arms of said side members being disposed in overlapping relation and welded together, and looped wire slats having their bights engaged with said head plate side flanges which are clamped thereon and the ends of their arms secured to said nose piece.

1,870,377. GUARD FOR SERVICE PITCHERS AND PROCESS OF MAKING SAME. EDWARD J. NEWMAN, Kokomo, Ind., assignor to D. C. Jenkins Glass Company, Kokomo, Ind. Filed Mar. 21, 1931. Serial No. 524,823. 3 Claims. (Cl. 49—80.)



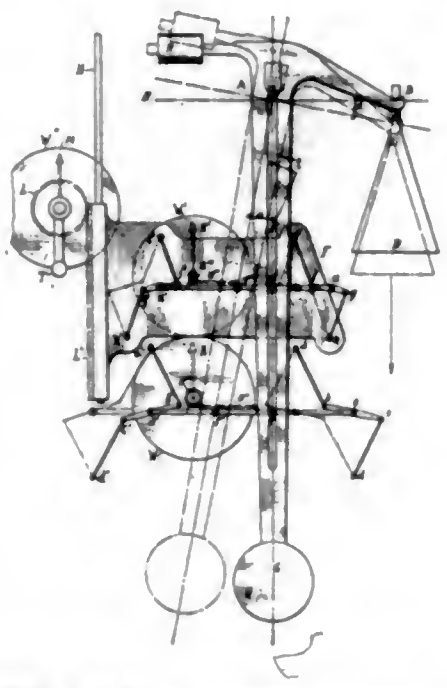
3. The process of forming a service pitcher having a guard thereon, consisting in forming a blank, molding a neck thereon provided with a mouth and having upwardly extending ears on each side of the mouth, enclosing the same in a mold, applying a pair of plungers laterally against said ears for forcing them toward each other, and thereafter forcing the mold head provided with a concave surface downwardly over the blank for engaging the inwardly bent ears and forcing them downwardly toward each other in position to provide the desired guard, and thereupon blowing the blank against the walls of the mold to give it final shaping.

1,870,378. MOUNTING FOR AUTOMOBILE HEATERS. QUINTIN G. NOBLITT and EARL C. BOOTH, Indianapolis, Ind., assignors to Noblitt-Sparks Industries, Inc., Indianapolis, Ind., a Corporation. Original application filed Mar. 28, 1930, Serial No. 439,717. Divided and this application filed Oct. 2, 1931. Serial No. 566,570. 6 Claims. (Cl. 257—137.)



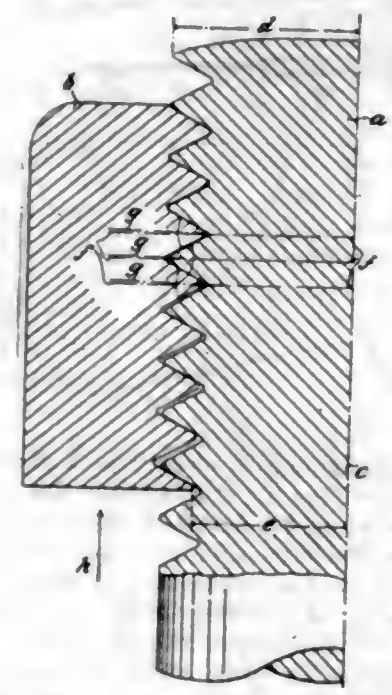
3. The combination with an automobile heater having a radiator core adapted to be mounted upon the dashboard of an automobile and having conduits connected thereto for conducting water from the cooling system of the automobile through said radiator, of means for supporting said heater upon said dashboard comprising a plurality of tubular supporting members adapted to extend through said dashboard through which said conduits are adapted to extend in spaced relation thereto, means for rigidly clamping said members to said dashboard, and a frame structure mounted on said tubular member upon which said heater is mounted, whereby said heater will be supported by said members independently of said conduits and said conduits will be protected from vibration and loss of heat through said tubular members.

1,870,379. WEIGHING MACHINE. CARLO PERUZZINI, Milan, Italy. Filed Nov. 2, 1928, Serial No. 316,669, and in Italy Nov. 9, 1927. 7 Claims. (Cl. 265—37.)



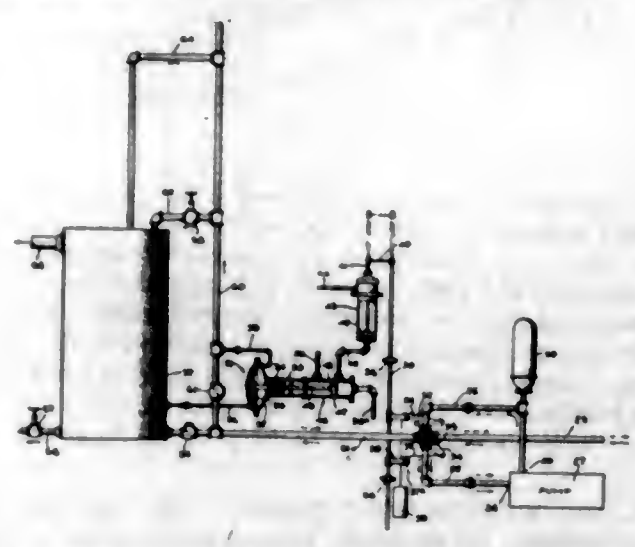
1. Automatic weighing machine adapted for indicating weight and total value of goods weighed, including a lever device having arms arranged at an angle to each other and fulcrumed at a point intermediate the relatively distant ends of the arms thereof, having one arm in the form of a pendulum and another arm adapted to be subject to the weight of the goods, weight indicating means operatively connected with the pendulum and adapted to be displaced thereby, value indicating means comprising a member operatively connected with said pendulum and displaceable thereby and symmetrically arranged hinged balance beam mechanisms supporting said member, and adjusting means associated at one point with said pendulum for vertically moving said value indicating means to a position corresponding to a price per unit of weight, said adjustable means having its point of association with the pendulum variable with respect to the pivot of the latter.

1,870,380. NUT. EDWARD CORNELIUS PETERS and DICK CLAY PETERS, Graffham, Petworth, England. Filed Apr. 30, 1931, Serial No. 533,994, and in Great Britain Dec. 18, 1930. 2 Claims. (Cl. 151—14.)



1. A nut having a tapered aperture, and a screw thread of uniform depth formed in said tapered aperture, the outside diameter of said screw thread at the narrower end of said aperture being approximately equal to the outside diameter of a screw thread of a corresponding normal nut and the inside diameter of said screw thread at the wider end of said aperture being approximately equal to the inside diameter of a screw thread of a corresponding normal nut.

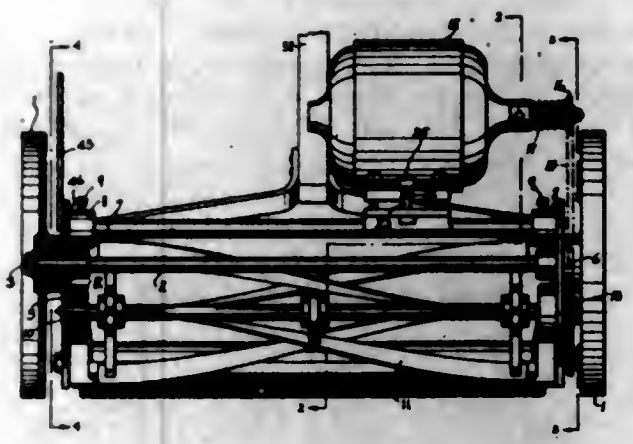
1,870,381. FILTER BLOWBACK. WILLIAM E. PIPER, New Canaan, Conn., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 21, 1929. Serial No. 394,285. 4 Claims. (Cl. 210—182.)



2. A filter apparatus comprising a pulp container, a filter element in said container, a receptacle, mechanism including a pump and conduits connecting said pump with the filter element and with said receptacle, said

conduits comprising a vertical section provided with a plurality of vertically spaced means for discharging liquid into said receptacle, a multiple way valve in said conduits adapted in one position to establish communication through said conduit between the inlet of said pump and the filter element and the outlet side of said pump and the said vertical section of said conduit and in another position to establish communication between the inlet of said pump and the receptacle and the outlet of said pump and the filter element, and means for moving said valve from one of said positions to the other of said positions comprising a casing, a movable member dividing the interior of the casing into two chambers, a conduit connecting one of said chambers to said receptacle and a conduit connecting the other of said chambers with the vertical section of said first mentioned conduit.

1,870,382. ELECTRICALLY OPERATED LAWN MOWER. GEORGE RAUN, El Campo, Tex. Filed July 14, 1928. Serial No. 292,651. 3 Claims. (Cl. 56—249.)



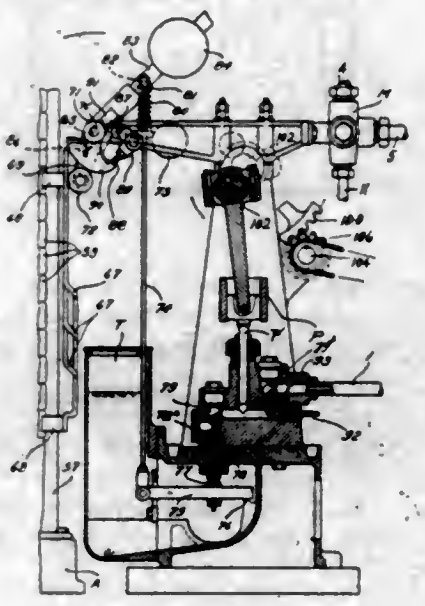
1. In a lawn mower a frame, a pair of wheels supporting said frame, a rearward extension on said frame, a rod journalled in said extension, arms projecting rearwardly from said rod, a ground roller journalled on said arms, an upwardly extending arm on said rod, a lever pivoted on said frame, a link connecting said lever and said upwardly extending arm, a pin on said lever adapted to engage a plurality of openings in said frame, and means to hold said pin resiliently in one of said openings.

1,870,383. DUSTING POWDER AND METHOD OF MANUFACTURING SAME. GEORGE ETHELBERT SANDERS, New York, N. Y. Filed Mar. 30, 1927. Serial No. 179,712. 1 Claim. (Cl. 167—22.)

A process of forming a dry dusting powder containing calcium cresylate which comprises absorbing cresylic acid on infusorial earth and then mixing with hydrated lime, the infusorial earth acting as a fluffer and preventing the cresylic acid and hydrated lime from forming a cake when combining and forming calcium cresylate.

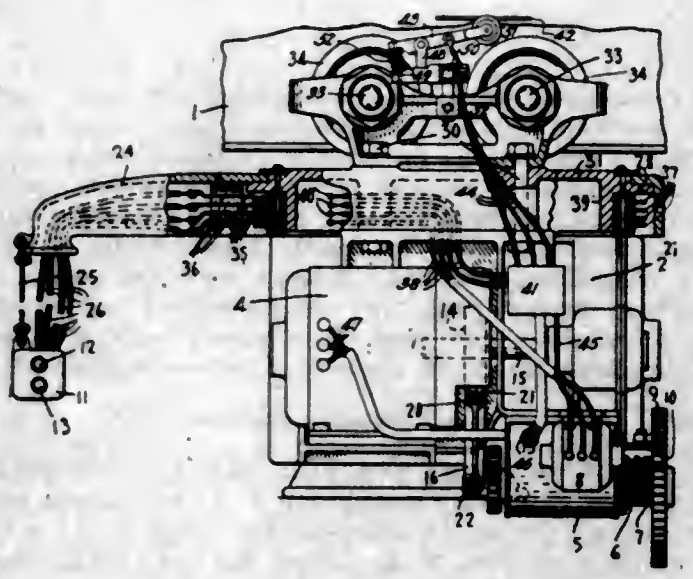
1,870,384. FLUID PRESSURE APPLYING APPARATUS. GUSTAV ADOLF SCHETTLER, Leeds, England, assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed Jan. 19, 1928, Serial No. 247,876, and in Great Britain Jan. 27, 1927. 5 Claims. (Cl. 103—40.)

1. In a hydraulic pressure applying apparatus, a pump having a plurality of plungers and associated suction valves, an accumulator having connections with the pump and arranged to be charged by the latter, said accumulator comprising a member carried by the accumulator and movable therewith during the charging and discharging of the accumulator, cams of uniform height carried by said member in spaced relation to each other in the direction of travel of said member, and levers operatively connected to the suction valves, the cams being



arranged to operate directly upon the levers to put the suction valves and thus the plungers out of operation one after another during the charging of the accumulator.

1,870,385. HOISTING MECHANISM. FRANK F. SEAMAN and CARL E. SCHIRMER, Springfield, Ohio, assignors to Robbins & Myers, Inc., Springfield, Ohio, a Corporation of Ohio. Filed Mar. 14, 1930. Serial No. 435,936. 7 Claims. (Cl. 172—179.)

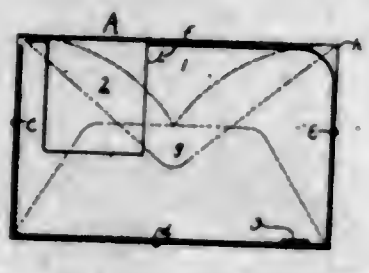


1. In an apparatus of the character described, an overhead support, an electric motor located on said support, a rotatable arm carried by said support, electrical conducting means carried by said support leading to said motor, cooperating electrical conducting means carried by said arm, a remote control switch located in convenient reach of the operator, and conductors leading from said switch to said arm conductor means.

1,870,386. NOVELTY ENVELOPE. ALFREDO SEVER, New York, N. Y., assignor of one-fifth to Crichton Clarke, New York, N. Y. Filed Jan. 14, 1931. Serial No. 508,565. 3 Claims. (Cl. 229—85.)

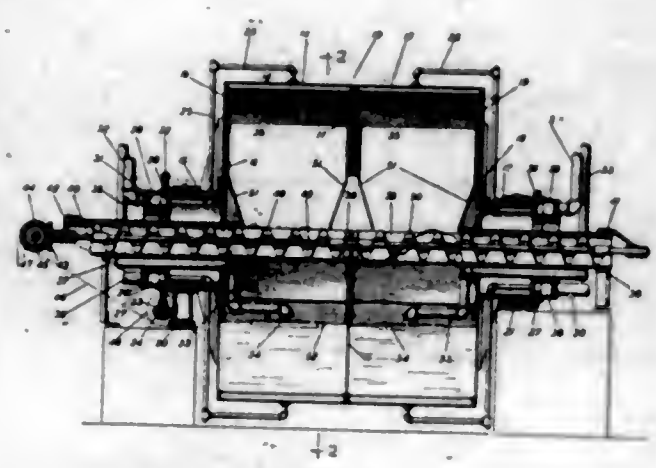
1. A novelty envelope having therein a metal frame conforming closely in shape to the interior of the envelope

and serving to brace the same and to be held securely thereby, the side of the frame which extends along the



crease of the flap of the envelope being free at one end and resilient, whereby it springs outwardly when the flap is released or partially opened.

1,870,387. MULTIPLEX FILTER. JOHN T. SHIMMIN, Tonopah, Nev., assignor to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 27, 1930. Serial No. 505,043. 4 Claims. (Cl. 210—202.)



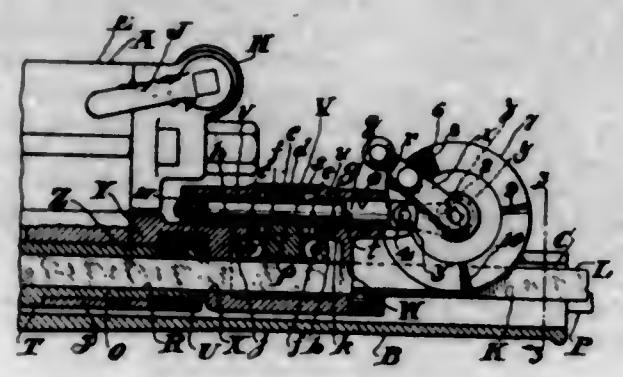
1. In filter apparatus, in combination a rotary drum having two filtering compartments, said drum having annular ends, means for supporting said drum including hollow trunnions secured centrally to the ends thereof, and means for simultaneously removing from said filtering compartments cake formed therein during a filtering operation, comprising unitary conveying means extending through said filter compartments and through said trunnions, and adapted to convey cake from said filter compartments in opposite directions respectively.

1,870,388. PROCESS FOR REFINING BISMUTH. WALTER C. SMITH, Maplewood, N. J., assignor to Cerro de Pasco Copper Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 21, 1931. Serial No. 510,324. 13 Claims. (Cl. 75—17.)

1. In the separation of metals from bismuth alloys, the steps comprising bubbling a halogen gas through the molten metal and thereafter bubbling air through the molten metal.

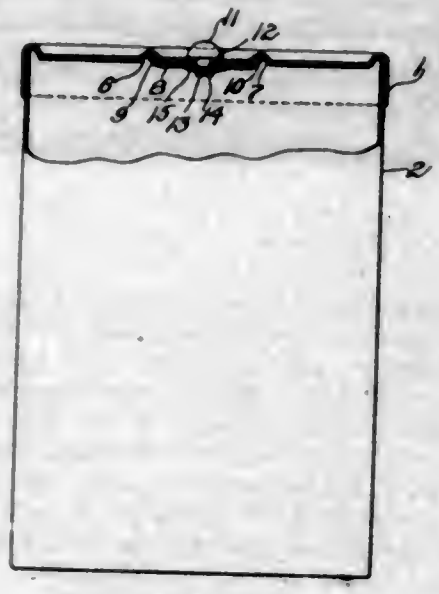
1,870,389. FEEDING DEVICE FOR PERCUSSIVE MOTORS. WILLIAM A. SMITH, Jr., Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 31, 1930. Serial No. 457,824. 5 Claims. (Cl. 255—45.)

1. In a feeding device, the combination of a motor and a support whereon said motor is slidably mounted, a reciprocatory hammer piston in the motor imparting jars thereto tending to move the motor longitudinally of the support, means associated with the support having a bearing surface, a casing carried by the motor having a pair of inclined surfaces extending in opposite directions, spring pressed locking means in the casing, and manually operable means for pressing the locking means into engagement with the bearing surface and with either of



the inclined surfaces to selectively prevent recoil of the motor upon reversal of the piston at either end of its stroke.

1,870,390. RECEPTACLE COVER. DAVID A. SPRIGINGS, Providence, R. I., assignor to Stickney & Poor Spice Co., Boston, Mass., a Corporation of Massachusetts. Filed July 22, 1931. Serial No. 552,385. 3 Claims. (Cl. 221—62.)

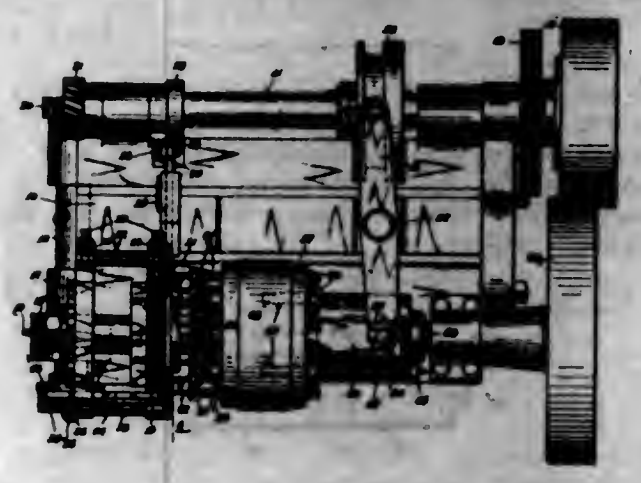


1. A device of the character described comprising a cover having perforations; a dredge member slidably mounted on the cover to close said perforations as desired, said dredge being provided with a spring, the latter being movable bodily with the dredge; and means cooperating with said spring portion to hold the dredge member tightly to the cover.

1,870,391. TUBULAR RIVET DRILLING MACHINE. EDWIN B. STIMPSON, Brooklyn, N. Y., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 8, 1928. Serial No. 259,091. 1 Claim. (Cl. 77—23.)

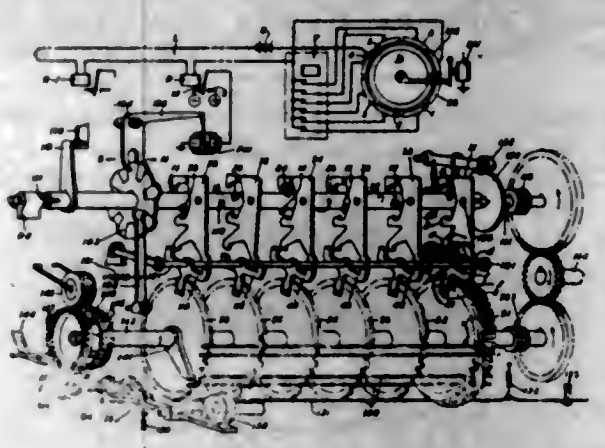
A rivet drilling machine comprising a carrier disc having its periphery provided with a series of notches to receive the shanks of rivets to be drilled, a clamping band extending circumferentially over a portion of the periphery of said disc, clamping blocks carried by said band and spaced thereon distances corresponding to the distances between said notches in said disc, means to rotate said disc step by step to present notches therein beneath the blocks on the clamping band during the dwells of the disc, means to feed shanks of rivets into said notches

during said dwells means to apply tension to said clamping band during said dwells to cause said clamping blocks to tightly clamp the shanks of said rivets in said notches



and to lift said blocks from the shanks of said rivets when said disc is moving step by step, and means to drill the clamped rivets.

1,870,392. TELEGRAPH PRINTER. EDWARD F. WATSON, Larchmont, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 1, 1931. Serial No. 560,631. 16 Claims. (Cl. 178—34.)



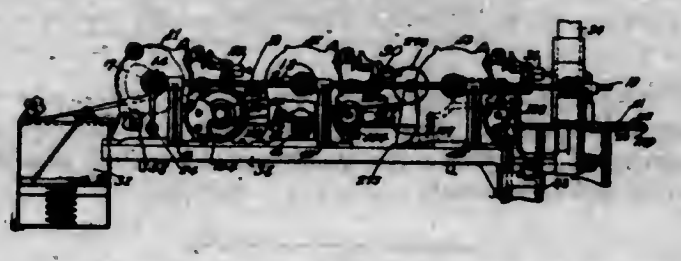
1. A character recording device responsive to permutation signals from a line circuit for printing of characters one at a time in differently aligned portions of a multiple line of print without separate shift operations and shift signals, which comprises a rotating type carrier having a plurality of character types arranged in a plurality of angularly and axially displaced positions, common permutation means for translation of a signal simultaneously into angularly and axially displaced printing positions of said character types, and means for striking a character type selected by said translation for printing in one only of the differently aligned portions of said multiple line as selected by said translation.

1,870,393. MEASURING DEVICE. PETER WILLIAMSON, Jr., Everett, Mass. Filed Jan. 19, 1931. Serial No. 509,815. 6 Claims. (Cl. 184—7.)



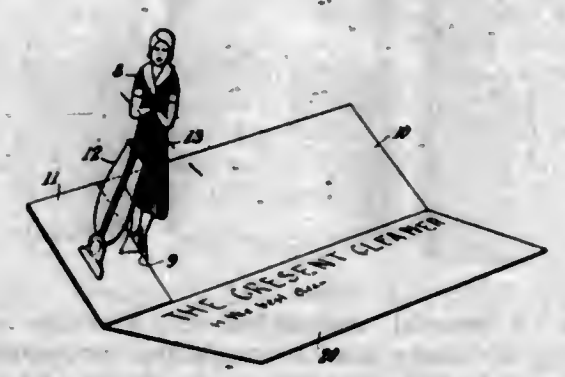
1. In a device of the class described, means forming a discharging cylinder and a reloading cylinder, pistons in each of said cylinders, means for supplying lubricant to said discharge cylinder under intermittent pressure, and a pair of cross passages connecting said cylinders, the piston in said discharging cylinder traversing one of said cross passages the other of said passages being constantly open.

1,870,394. APPARATUS FOR PRINTING CIRCULAR LETTERS AND THE LIKE. CHARLES B. YODER, Webster Groves, and JOSEPH J. GAHN and CHARLES B. WILKES, Jr., St. Louis, Mo., assignors to Yogaw Press, Inc., St. Louis, Mo., a Corporation of Missouri. Filed Nov. 2, 1928. Serial No. 316,856. 6 Claims. (Cl. 101—47.)



1. A multicolor printing device comprising a base, a plurality of circular letter machines mounted in tandem on said base, each of said machines being of similar construction and including a rotary drum mounted on a main operating shaft and carrying type, an underrunning platen, feed rollers and inking rollers, a motor adapted to drive the main operating shaft of one of the machines, a miter gear on one end of each of said operating shafts, a counter shaft normal to said operating shafts, and miter gears secured to said counter shaft and meshing respectively with said gears on the operating shafts.

1,870,395. ADVERTISING NOVELTY. GEORGE ZARIN, New York, N. Y. Filed May 18, 1931. Serial No. 538,188. 14 Claims. (Cl. 40—126.)

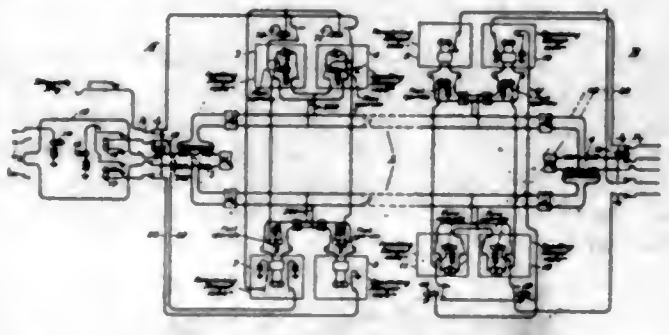


1. In a device of the character disclosed, the combination of a base, a movable member hingedly mounted on said base, a spring secured on the base at the foot of said member and having a spring tensioned arm engaging the member to raise the same into upstanding relation on the base, said spring having a substantially V-shaped base portion and the arm extending angularly from one end of the same out of the general plane of the substantially V-shaped base portion and means for securing said substantially V-shaped base portion on the base of the device with the arm projecting angularly therefrom standing in back of the movable member.

1,870,396. TELEPHONE SIGNALING SYSTEM. LEONARD G. ABRAHAM, Madison, and ELLIOT M. STAPLES, Hohokus, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 21, 1931. Serial No. 576,586. 11 Claims. (Cl. 179—45.)

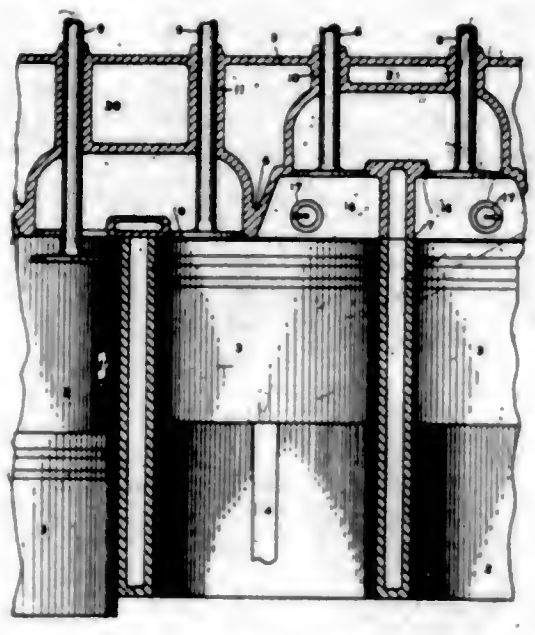
1. A signaling system comprising a line adapted for transmission in both directions between two stations, two sending ringers at one of said stations for applying signaling currents of different frequencies to said line

for transmission in one direction, two receiving ringers at said same station responsive at said different frequencies to signaling currents transmitted in the opposite direction over said line, and means at said station



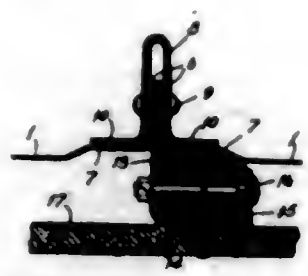
for interconnecting said sending ringers with said receiving ringers so that when a sending ringer of one frequency is operative the receiving ringer for that frequency will be disabled.

1,870,397. COMBUSTION CHAMBER FOR INTERNAL COMBUSTION ENGINES. GEORGE M. BICKNELL, St. Louis, Mo. Filed July 12, 1929. Serial No. 377,645. 3 Claims. (Cl. 123—191.)



1. In an internal combustion engine of the valve-in-head type, a cylinder head of substantial rectangular cross section, said head having inlet and exhaust ports, poppet valves carried by said head and controlling said ports, pockets in said head forming combustion chambers, said inlet valves being mounted in said pockets, and said exhaust valves being mounted flush with the surface of said head.

1,870,398. CAR ROOF. CHARLES DAVID BONSALL, Pittsburgh, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed June 27, 1931. Serial No. 547,327. 8 Claims. (Cl. 108—5.)



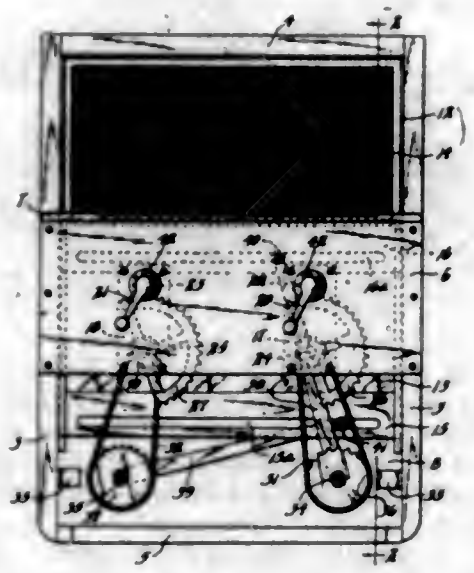
1. In a car roof, a series of plates embodied therein and extending transversely thereof, said plates extending below the underside of said roof, members located alongside of said plates, horizontal fasteners for securing said members to the sides of said plates, and a lining secured to the undersides of said members.

1,870,399. PACKAGE AND METHOD OF MAKING THE SAME. REGINALD ALTON BUTLER and ALBERT T. MATTHEWS, Thomaston, Ga., assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Nov. 5, 1929. Serial No. 405,050. 7 Claims. (Cl. 93—2.)



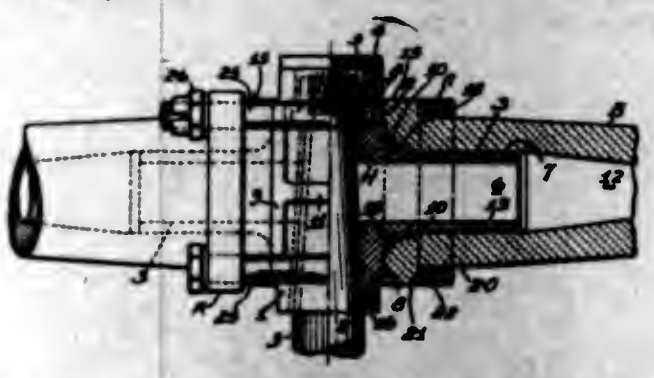
1. In combination with a plurality of frusto-conical articles assembled in end-to-end relation, a wrapper therefor comprising a longitudinally extending stiffening member bridging the peripheral spans incidental to the shape of the articles, and a helical winding thereon.

1,870,400. COMBINATION SCREEN AND WINDOW CONSTRUCTION FOR VEHICLES. CARL W. BUTTERFASS, Young America, Minn., assignor of one-half to Edward Williamson, Bongard, Minn. Filed July 16, 1931. Serial No. 551,095. 1 Claim. (Cl. 268—126.)



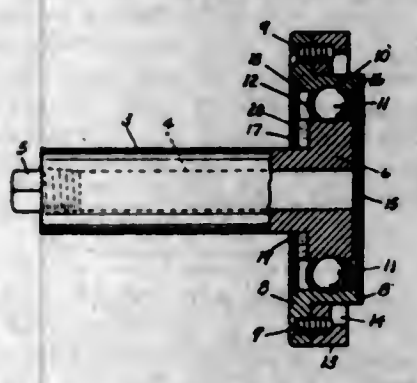
A combination screen and window construction for vehicles, comprising a frame having a window opening adjacent its upper end, a window pane slidably mounted in said frame for extension across said window opening and for lowering below said window opening, a window screen slidably mounted in said frame in inwardly spaced relation from said pane for extension across said window opening and for lowering below said window opening, slotted bars secured respectively to the lower edges of the pane and screen, operating cranks mounted in said frame for respectively operating said pane and screen, segment gears pivotally mounted in said frame, pinions carried by said cranks and meshing respectively with said segment gears, sprockets carried by said segment gears, sprocket shafts mounted in said frame below the lowermost positions of said slotted bars, sprockets carried respectively by said shafts, arms carried by said shafts and having portions respectively fitting within the slots of said two bars, one of said arms being spaced outwardly from the other of said arms, to permit both said screen and said pane to be independently raised and lowered without interference one by the other.

1,870,401. HUB FOR SMALL PROPELLERS. FRANK W. CALDWELL, Pittsburgh, Pa., assignor, by mesne assignments, to Hamilton Standard Propeller Company, Homestead, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1931. Serial No. 567,812. 5 Claims. (Cl. 170—173.)



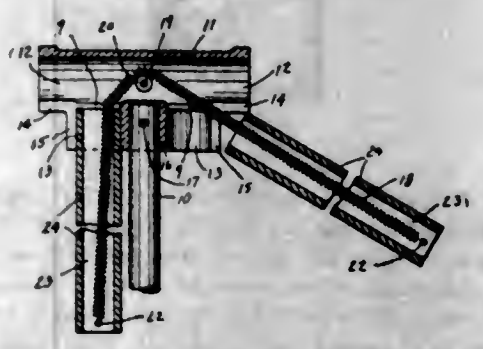
1. A metal aeronautical propeller comprising a hub, blades adapted to be detachably mounted thereon in fixed pitch-adjusted position, and means to clamp the blades on the hub, the hub consisting of a one-piece member having a longitudinal axial bore for receiving an engine shaft and having radial lateral spurs adapted to receive hollow blade shanks telescoped thereon, blades having hollow shanks adapted to fit over said spurs, said shanks having outwardly extending terminal flanges, ring members slidably mounted on the blade shanks behind the flanges and adapted to seat on the outside of the flanges, and bolts adapted to extend through the rings to draw rings toward each other and so to clamp the blades on the hub and to receive the tension moment between the blades resulting from centrifugal force in flight.

1,870,402. BAND-SAW GUIDE WHEEL. ANDREW G. CARTER, Grand Rapids, Mich. Filed Apr. 16, 1931. Serial No. 530,539. 6 Claims. (Cl. 143—161.)



6. A band saw guide wheel comprising a spindle having an inner bearing member at its outer end, a wheel having an outer bearing member overhanging the inner bearing member at both sides thereof and enclosed on the outer side, and an inner closure plate fixed within the inner end of said outer bearing member and having a central spindle opening provided with a packing.

1,870,403. COLLAPSIBLE HANDLE. FREDRICK W. COFFING, Danville, Ill. Filed Dec. 21, 1931. Serial No. 582,244. 7 Claims. (Cl. 145—65.)

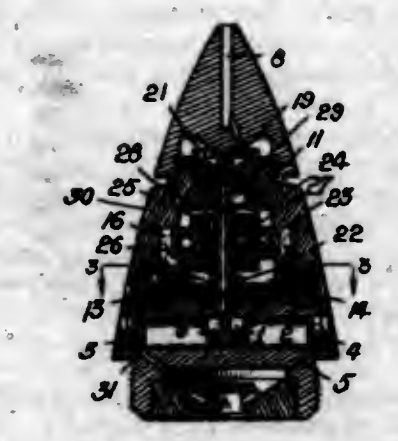


1. A collapsible handle structure, including a pair of handle members, a shaft, and a head structure rigid with the shaft and including a pair of sockets arranged side by side and between which is secured said shaft, and a pair of substantially aligned sockets arranged substantially transverse to the shaft, each member being interchangeably receivable by an aligned socket and the adjacent side socket for handle extension and collapse, respectively.

1,870,404. METHOD OF TREATING WATER. RALPH B. DERR, Oakmont, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 9, 1929. Serial No. 406,163. 15 Claims. (Cl. 210—23.)

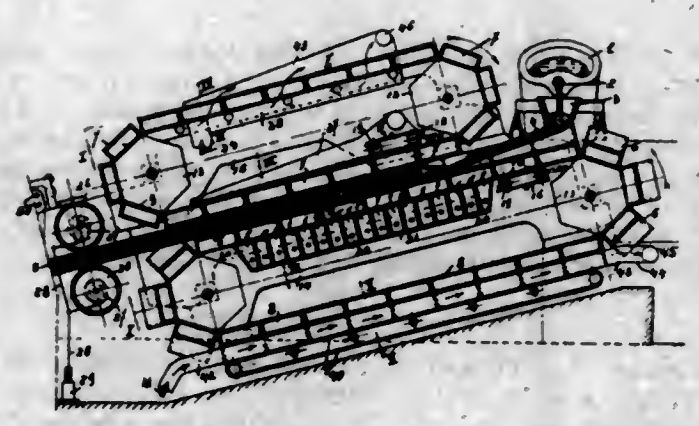
1. The method of treating water, comprising adding thereto a soluble phosphate and a soluble aluminate in proportions adapted to cause flocculation when dissolved in water.

1,870,405. FUSE FOR ANTIAIRCRAFT PROJECTILES. THOMAS B. DOE, New York, N. Y. Filed Aug. 14, 1931. Serial No. 557,048. 5 Claims. (Cl. 102—39.)



5. In a fuse for projectiles, the combination with the hammer, of a detent for normally holding said hammer retracted, means subject to the air pressure due to the flight of the projectile for holding said detent in place, spring means opposing said other means for withdrawing the detent comprising a plurality of springs of graduated relative stiffness, and means for setting said springs for range whereby for the longer ranges the less stiff and more sensitive springs are effective and for shorter ranges the stiffer and less sensitive.

1,870,406. MOLDING MACHINE FOR THE PRODUCTION OF A CONTINUOUS INGOT. MATHIEU DOUTEUR, La Plaine St. Denis, near Paris, France. Filed Oct. 28, 1929, Serial No. 402,898, and in Belgium Oct. 31, 1928. 4 Claims. (Cl. 22—66.)



1. In a molding machine for the production of a continuous ingot direct from molten metal in combination: a mold formed of two series of molding elements forming two endless chains adapted to box together and to separate for stripping the solidified ingot, means whereby the molten metal is submitted to a sudden cooling and simultaneously to a longitudinal com-

pression, the said compression being produced by the combined action of a thrust on the ingot exerted by the molding elements and of a braking of the movement of the ingot, whereby the compactness of the inner metallic texture of the metal is increased during the shrinkage.

1,870,407. DELUSTERING OF TEXTILE MATERIAL. CAMILLE DREYFUS, New York, N. Y.; GEORGE W. MILES, Boston, Mass.; and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Feb. 25, 1929. Serial No. 342,666. 12 Claims. (Cl. 28—1.)

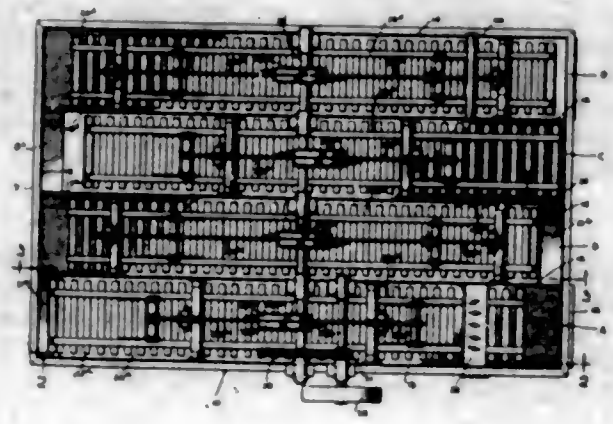
1. Method of reducing the luster of textile materials containing artificial fibres comprising treating the same with a medium containing latex in dilute solution and a finely divided relatively water insoluble body.

1,870,408. COLORING OF TEXTILE MATERIALS. CAMILLE DREYFUS, New York, N. Y.; GEORGE W. MILES, Boston, Mass.; and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Feb. 25, 1929. Serial No. 342,667. 7 Claims. (Cl. 91—68.)

2. Textile material containing cellulose acetate having a color imparted to at least part of the surface thereof by means of finely dispersed graphite and latex.

3. Method of coloring textile materials containing organic derivatives of cellulose, comprising applying thereto by means of a bath treatment a dispersion of finely divided graphite.

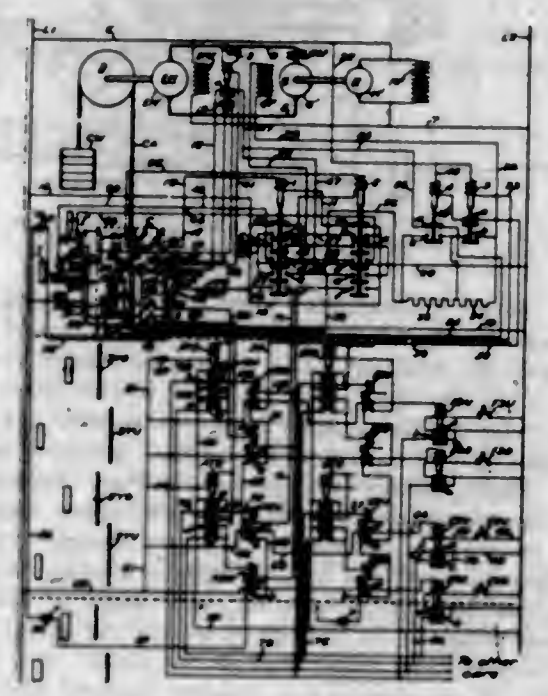
1,870,409. CLASSIFIER. JOHN H. V. FINNEY and ALEXANDER D. MARRIOTT, Denver, Colo., assignors, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed June 19, 1929. Serial No. 372,202. 5 Claims. (Cl. 209—462.)



1. A multideck classifier including a plurality of single sloping deck classifier units arranged side by side and with their decks inclined in opposite directions, each of said units having an overflow outlet, means for discharging the settled solids from one unit to another throughout all of said plurality of units and means for introducing fluid into the last of said units and causing it to pass counter-current through the various units.

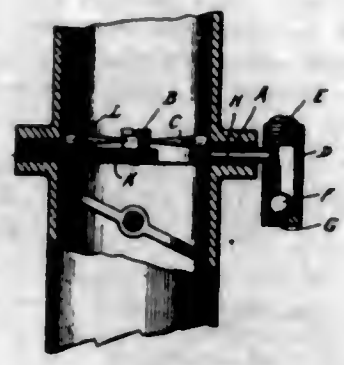
1,870,410. AUTOMATIC ELEVATOR CONTROL SYSTEM. RAY P. HIGBEE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 22, 1927. Serial No. 200,573. 5 Claims. (Cl. 172—152.)

1. In an elevator control system, a car, a variable-speed motor therefor, control means for controlling the speed and direction of said motor including a direction switch and a speed switch, means for initiating the operation of said direction switch, means controlled by said direction switch for actuating said speed switch, means operable responsive to the speed of said motor for maintaining said direction switch in operation while said motor is operating above a predetermined speed, and means dependent upon the position of said car for opening said speed switch to decrease the speed of said motor and thereby cause the speed responsive means to render said direction switch ineffective.



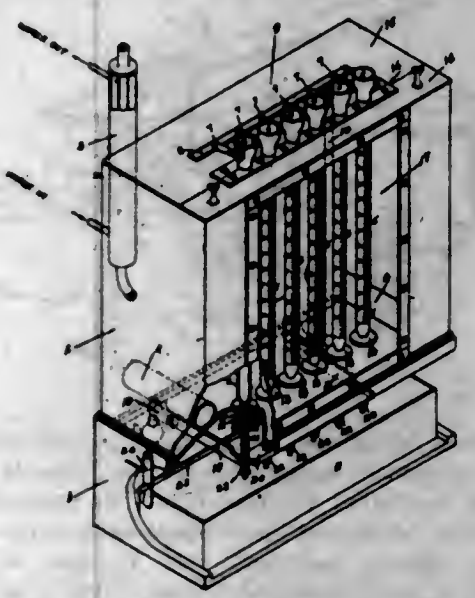
5. In a control system for an elevator car operable past a plurality of floors, motive means to cause said car to travel within a predetermined speed range and at higher speed, normally ineffective stopping means for said motive means, means including passenger operated call buttons to render said stopping means effective to cause said motive means to stop said car at a selected floor, and means operable to limit the speed of said car to said predetermined range and to render said stopping means effective to cause said motive means to stop said car at the floor next approached.

1,870,411. AUXILIARY AIR INLET. THEODORE HORSCROFT, Perth Amboy, N. J., assignor of eleven-twentieths to John L. McDowall, Perth Amboy, N. J. Filed Dec. 7, 1926. Serial No. 153,152. 7 Claims. (Cl. 123—124.)



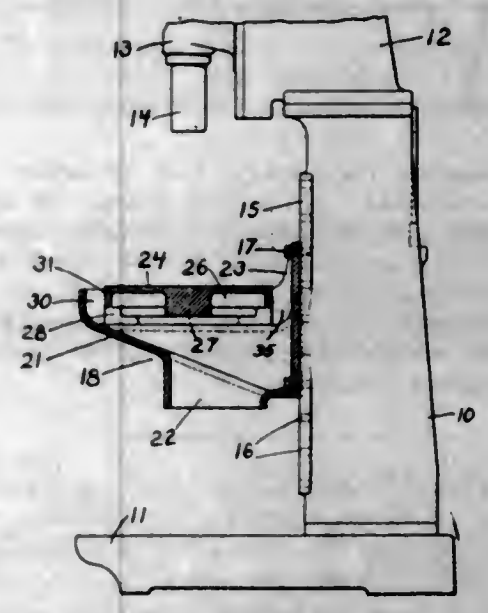
1. A temperature sensitive air inlet valve comprising a cylindrical casing having a high coefficient of expansion, said casing having an air port in one end thereof, and a spherical valve member having a lower coefficient of expansion tightly fitted in said casing over said port, whereby said casing will securely hold said member over said port at a low temperature and at a higher temperature will expand and release said ball and permit it to be lifted off of said port.

1,870,412. METHOD OF AND MEANS FOR MEASURING THE VISCOSITIES OF LIQUIDS. HARVEY T. KENNEDY, Rochester, N. Y. Filed Mar. 15, 1927. Serial No. 175,584. 11 Claims. (Cl. 265—11.)



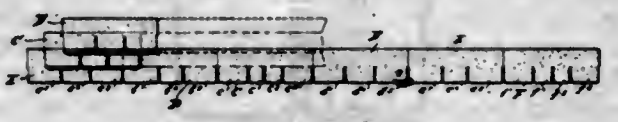
10. An instrument for simultaneously measuring the viscosities of a plurality of liquids, comprising a base; a bath reservoir mounted on said base; a plurality of vertical tubes extending through said reservoir, said tubes being provided near their upper extremities with side-arm tubes and being formed at their lower extremities with relatively small internal diameters; a pair of arms pivotally mounted on said base below said reservoir, said arms being joined at their outer ends by a transverse member; and a plurality of pads resiliently mounted on said transverse member, said pads being adapted to close the lower ends of said vertical tubes when said pivotally mounted arms are swung upward and to open said lower ends of said vertical tubes when said pivotally mounted arms are swung downward; there being a scale associated with each tube from which the viscosity of the liquid in that tube as indicated by the position of the meniscus of the liquid, may be read when the meniscus of a liquid of known viscosity contained in one of said vertical tubes coincides with the point on the scale associated with its tube corresponding to its viscosity.

1,870,413. WORKTABLE AND MOUNT THEREFOR. DAVID C. KLAUSMEYER, Cincinnati, Ohio, assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 4, 1929. Serial No. 390,258. 2 Claims. (Cl. 77—63.)



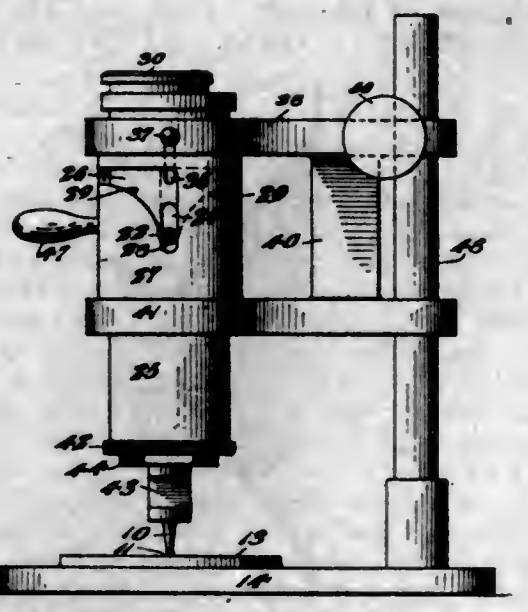
1. An upright drilling machine combining a column; and a work table adapted to be secured on one side thereof; said column having at its forward face spaced vertically extending bearing surfaces with series of vertically spaced apertures therein and said table having complemental bearing surfaces with a set of apertures therein the apertures in said column being arranged in a series of vertically spaced sets each complemental to the set of apertures in said table whereby the table may be bolted to said column in selected vertical positions vertically arranged guide surfaces provided by said column intermediate said bearing surfaces; vertically arranged bearing surfaces formed on said table and engaging said guide surfaces to locate said table on said column and facilitate adjustment of the former, and said table being further provided with an upper centrally located work supporting surface, and a plurality of openings leading from adjacent the edge of said table to a common large discharge opening in the lower part of said table, the lower walls of said plurality of openings being sharply inclined to permit the free gravitation of work chips.

1,870,414. ROOFING STRIP. HAROLD L. LEVIN, Nutley, N. J., and FRANK H. NEHER, Cambridge, Mass., assignors, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed May 17, 1929. Serial No. 363,751. 6 Claims. (Cl. 108—7.)



1. A roofing set comprising a plurality of strips, each strip of the set being provided with a plurality of slots defining shingle simulating tabs, the end tabs of each strip in the set differing in width from each other and from corresponding end tabs of other strips in the set and being of such a width that the difference between the width of any end tab in the set and one-half the width of any other end tab in the set shall be in excess of the minimum required side-lap between the joints of adjacent strips and the most proximate slot in the strip overlying said joint when the strips of a number of said sets are laid in overlapping courses, and whereby the end tabs of the strips in one course will overlie the end tabs of the course below.

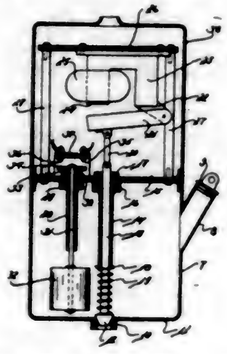
1,870,415. HARDNESS TESTING MACHINE. ROBERT B. LEWIS, Philadelphia, Pa., assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 26, 1928. Serial No. 288,517. 3 Claims. (Cl. 265—12.)



1. A hardness testing machine comprising a vertically movable spindle terminating in a penetration tester, a sleeve encircling said spindle and having lost motion connection therewith to provide limited relative motion between said parts, a gage movable with said sleeve and

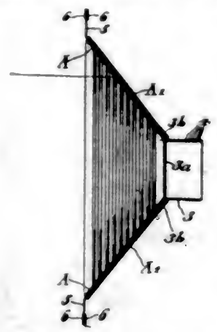
actuated by the movement of said spindle, a material contact element carried by said sleeve, means for bringing said contact element and said penetration tester simultaneously into contact with the material under test, and weight means acting upon said spindle to produce a penetration movement relative to said contact element whereby said gage is actuated as a measure of the penetration.

1,870,416. LUBRICANT CONTROL MECHANISM. JOSEPH W. LOVELL, Detroit, Mich. Filed Nov. 11, 1929. Serial No. 406,365. 2 Claims. (Cl. 184—67.)



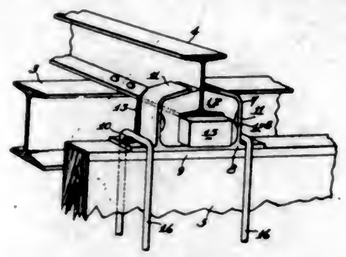
1. A lubricant control mechanism of the class described, adapted for use with a machine having an electrically operated control and electric means for operating said control, comprising: a lubricant container; a float in said container; a valve for controlling flow of lubricant from said container; electromagnetic means operable upon being energized for moving said valve to open position; an electric circuit connecting to said electromagnetic means; a switch interposed in said circuit and normally held closed by said float and opened upon the movement of said float downwardly in said container to a pre-determined distance; and a circuit leading to said electric means, said circuit being passed through said float operated switch.

1,870,417. DIAPHRAGM. RUDOLPH F. MALLINA, Atlantic City, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Jan. 15, 1929. Serial No. 332,737. 7 Claims. (Cl. 181—32.)



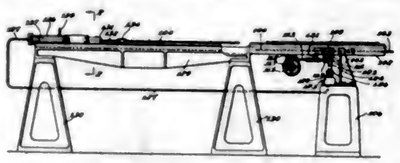
1. A laminated diaphragm having the configuration of a hollow geometrical figure, said diaphragm comprising attached complemental sections of sheet material disposed one within another, said sections having corrugated surfaces.

1,870,418. SHOCK INSULATED TRUCK BODY. WILLIAM G. MAYER, Pittsburgh, Pa. Filed July 13, 1928. Serial No. 292,473. 4 Claims. (Cl. 293—35.)



1. A vehicle structure comprising in combination longitudinally disposed structural section chassis members, a rigid body including I-beam cross sills supported thereby and connected thereto, and cushioning connections between said chassis members and I-beams at crossing points, each of said connections comprising a bracket having a base connected to said chassis member, opposed arms arched inwardly to leave a restricted opening between the ends thereof through which said sills extend, and flanges formed on one end of said arms, a cushioning block provided with an aperture for receiving said sill aligned with said opening retained within said bracket by said arms and restrained from longitudinal movement in one direction by said flanges, said block enclosing and frictionally engaging the flange and web of said enclosed sill and entirely separating it from the bracket and chassis member, and a separate bracket connected to said I-beam on the side opposite said flanges to restrain longitudinal movement of the block in the other direction, said brackets and blocks connecting the chassis and body frame and forming a resilient support for said body frame permitting distribution of non-uniformly distributed loads throughout said cushioning blocks.

1,870,419. DRAWBENCH. ROY D. PALMER, Oakmont, and ROLAND L. JEFFERS, Parnassus, Pa., assignors to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 16, 1929. Serial No. 363,661. 12 Claims. (Cl. 205—3.)

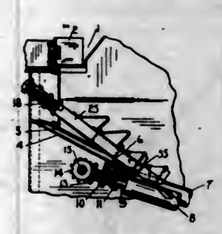


1. An apparatus for drawing tube by means of a die and bulb, comprising a draw-head, means for advancing and returning said draw-head, a movable member for cushioning the return movement of said draw-head, mechanism for manipulating the bulb to move it into cooperative relation with the die, and means associated with said movable member for controlling the operation of said manipulating mechanism.

1,870,420. CORN HARVESTER. LOUIS A. PARADISE and WILBUR J. COULTAS, Moline, Ill., assignors to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed July 22, 1929. Serial No. 380,070. 5 Claims. (Cl. 130—5.)

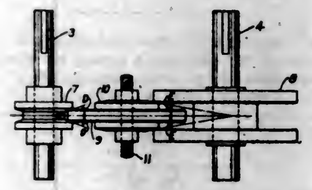
4. In combination in a corn harvester, an ear receiving hopper, means for delivering ears thereto, means forming a bottom for the hopper including a plurality of husking

rolls at the forward end and a bottom wall overlying the rear ends of said rolls and provided with troughs, means below said wall for driving the rolls, ear feeding mech-



anism slidable in the troughs and operative to direct ears to the rolls, and driving means for the ear feeding mechanism operated by the driving means for the rolls.

1,870,421. SYSTEM OR FRICTION GEARING. HERBERT L. PROUT, Villa Park, Ill. Filed Apr. 27, 1931. Serial No. 533,201. 3 Claims. (Cl. 74—26.)



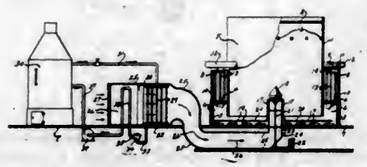
1. A system of friction gearing comprising a drive shaft, a driven shaft in parallel relation thereto, friction wheels having beveled friction surfaces mounted thereon, said friction wheels on said drive shaft being of different diameter than friction wheels on said driven shaft, intermediate friction wheels having beveled friction surfaces of different diameters and face angles for engaging friction wheels on said driving and driven shafts, said intermediate friction wheels being floatably mounted above and between said driving and driven friction wheels and driven in such a direction as to be drawn into closer contact with said wheels by the tangential forces being transmitted.

1,870,422. BUILDING CONSTRUCTION. HERBERT W. REEL, Hinsdale, Ill., asignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 2, 1929. Serial No. 329,824. 1 Claim. (Cl. 72—68.)



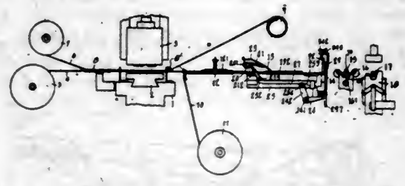
In a building tile, a rectangular mass of precast cementitious material, and reinforcing members extending through said tile with the ends of said reinforcing members extending beyond the ends of said tile, the ends of said reinforcing members being adapted to be bent downwardly upon supporting members to form hook ends, said reinforcing members extending at an angle to the longitudinal edges of said tile, the ends of said tile being provided with grooves for the reception of the hook ends of the reinforcing members of adjacent tile, said hook ends and grooves on one end of each tile being substantially similar in spaced relation with the grooves and hook ends on the opposite end of said tile.

1,870,423. MILK EVAPORATING MEANS. WILLIAM F. RICHARDS, Mason, Mich., assignor to S. M. A. Corporation, Mason, Mich., a Corporation of Ohio. Filed Aug. 15, 1929. Serial No. 386,058. 1 Claims. (Cl. 257—244.)



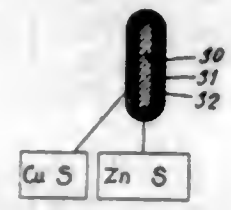
Air heating means for driers of the kind described, comprising an air supply conduit for conducting heated air to the drier, means for causing air flow through said conduit, a steam heating coil in said conduit, a source of heating steam for said coil, a steam trap for collecting hot condensate from said steam coil, a preheating coil in said conduit in advance of said steam coil and connected to said trap for receiving hot condensate therefrom, therby to preheat the air before it reaches the steam coil and conserving heat, and means for returning the cooled condensate to said steam source.

1,870,424. AUTOMATIC LABEL PRINTING, CUTTING, FOLDING, AND PACKING MACHINE. ARTHUR ROSENTHAL, Grand Rapids, Mich. Filed Jan. 10, 1929. Serial No. 331,662. 9 Claims. (Cl. 101—292.)



1. In an automatic apparatus for printing, cutting, folding and packing a plurality of label strips, the combination of a printing press with a plurality of printing means, a plurality of supply reels delivering a plurality of label strips in parallel relation thereto, a plurality of blotter strips with supply and take-up reels therefor, guides for said label and blotter strips to and from the printing press, a plurality of supply reels for delivering overlay strips, auxiliary label feed devices comprising guideways for the label and overlay strips, reciprocating spring fingers under independent pressure to engage the separate label strips in said guideways, means for elevating said spring fingers on their return movement, cut off shears the lower member of which is provided with a grooved engaging jaw surface and the pivoted member of which is provided with independently adjustable clamping jaws for engaging and holding the label strip in said groove when severing the label and to vary the feeding action of the label strips to equalize the said labels, parallel label feed jaws for grasping the label in advance of the cut off shears delivering the same to be cut, the upper member of which is broad and centrally pivoted to equalize the action on both said label strips to effectively engage each strip, folder means cooperating with said jaws to fold and crease the labels, delivery jaws in spaced parallel relation to the feed jaws for grasping the folded label and delivering the same to the packer means, and packer means cooperating with said delivery jaws.

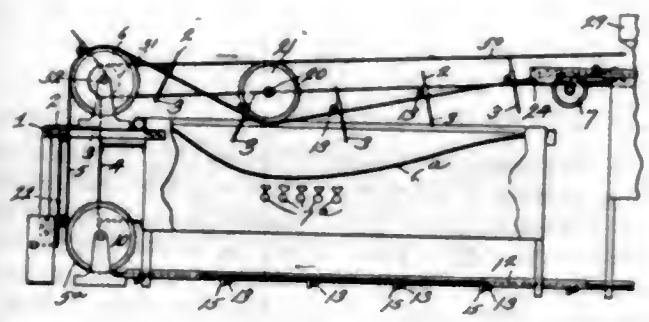
1,870,425. ELECTRODE ELEMENTS FOR RECTIFIERS AND PROCESS OF MANUFACTURING THE SAME. HARRY SHOEMAKER, Jersey City, N. J., asignor, by mesne assignments, to P. R. Mallory & Co., Incorporated, Indianapolis, Ind., a Corporation of Indiana. Filed Jan. 29, 1929. Serial No. 335,932. 12 Claims. (Cl. 175—366.)



4. The process adapted to produce electronegative electrode elements, which comprises providing an initial body of a metallic alloy, exposing the same to the action of sulphur vapors in a hermetically-sealed chamber at sub-atmospheric pressure, gradually raising the temperature of the same to a reaction temperature of approximately 430 degrees C., and thereafter gradually cooling the same in said hermetically-sealed chamber.

12. An electrode body adapted for use as an electronegative electrode element in dry surface contact rectifiers and the like which comprises a maximum valent compound of copper with a chemical element of the oxygen family of the Sixth Periodic Group, said compound comprising elongated needle-like crystals disposed parallel and cut transversely to provide an end-on contacting surface with an electropositive electrode body.

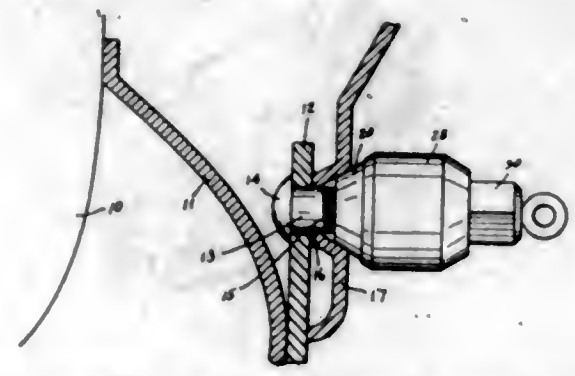
1,870,426. COATING MACHINE FOR SHINGLES. GILBERT J. SNYDER, South Bend, Ind., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 22, 1927. Serial No. 241,907. 19 Claims. (Cl. 91—46.)



1. A shingle coating machine comprising a frame, an endless chain conveyor in said frame, gripping members carried by said conveyor, means for regulating the position of the gripping members on the shingles, said gripping members being adapted to grip shingles in a horizontal positon and turn said shingles to a position approaching a vertical and convey the shingles through a bath in said last named position, means cooperating with the shingles after they leave the bath for turning the same to a position approaching a horizontal, means for applying powder to the under sides of the shingles, means for applying a second material to the upper sides of the shingles, and means for discharging said shingles.

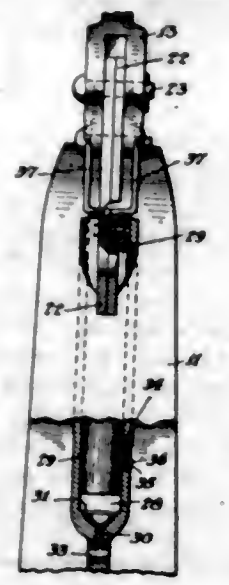
17. The combination with a shingle treating machine having shingle coating and surfacing means and a conveyor, of swingably supported means carried by said conveyor adapted to grippingly engage shingles along the lateral edges thereof, said last named means being automatically adjustable to grip shingles of varying widths.

1,870,427. LOCK. EDMUND O. STALLINGS and ROY H. GORTON, Indianapolis, Ind., assignors, by mesne assignments, to Ralph G. Lockwood, Indianapolis, Ind. Filed Apr. 28, 1928. Serial No. 273,538. Renewed Mar. 16, 1931. 9 Claims. (Cl. 70—122.)



1. A device comprising a body having an exposed threaded portion for bolt and nut connection, a lock housing having a tool engageable exposed portion for rotating the body, a lock supported by said housing. means actuable by the lock for operatively connecting the body and housing together, a peripherally enveloping sleeve casing rotatably mounted upon both body and housing and freely rotatable at all times, and means locking the sleeve to the body and housing for preventing axial separation thereof.

1,870,428. NOISE ELIMINATOR. EDWIN B. STIMPSON, Brooklyn, N. Y., asignor to Edwin B. Stimpson Company, Brooklyn, N. Y. Filed May 27, 1927. Serial No. 194,627. 1 Claim. (Cl. 188—94.)

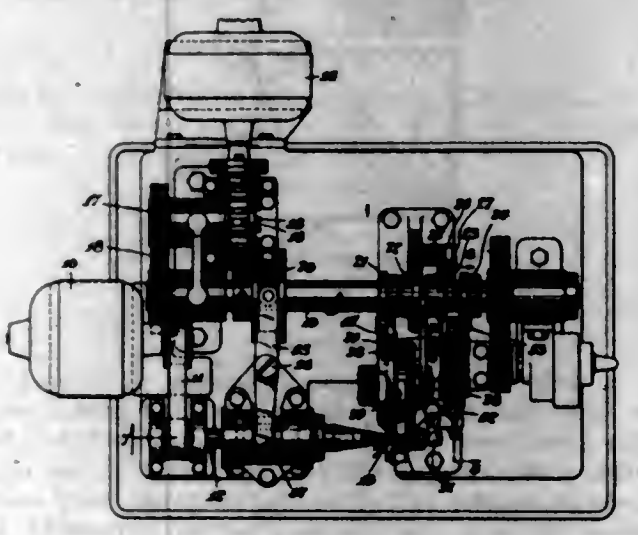


A dash pot operative to permit unrestrained operating motion of a machine, but to pneumatically restrain the return motion until it is nearly completed and then pneumatically cushion it; said dash pot comprising an air cylinder open at one end and closed at the other by a conical valve seat leading to an inlet opening, a check valve seated wholly by gravity and operable to admit air to the closed end of the cylinder, a removable plug providing an air leak in the cylinder wall spaced from the closed end of the cylinder, and a piston within the cylinder, the piston having a length exceeding the distance between the air leak and the final position of the piston end on the return stroke, the side wall of said piston comprising a cut-off valve for the air leak when the piston is in final position.

1,870,429. RIVET DRILLING MACHINE. EDWIN B. STIMPSON, Brooklyn, N. Y., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 13, 1928. Serial No. 261,228. 8 Claims. (Cl. 77—5.)

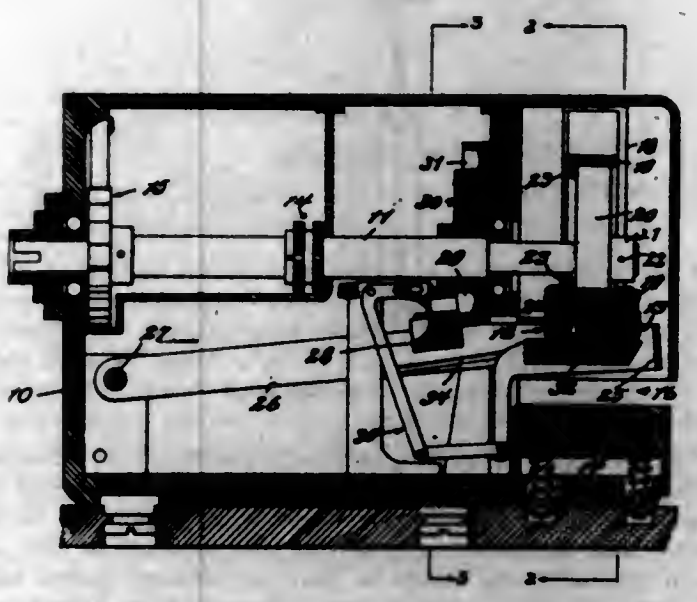
1. The combination with a cutting tool, of a rotary work carrier, means for feeding the work to said carrier, addi-

tional means for holding and centering the work with respect to said cutting tool, means for relatively moving the work and cutting tool for engagement and disengagement, means for releasing the work from said additional holding means, means for subsequently releasing the work from said carrier, and means for actuating each of said



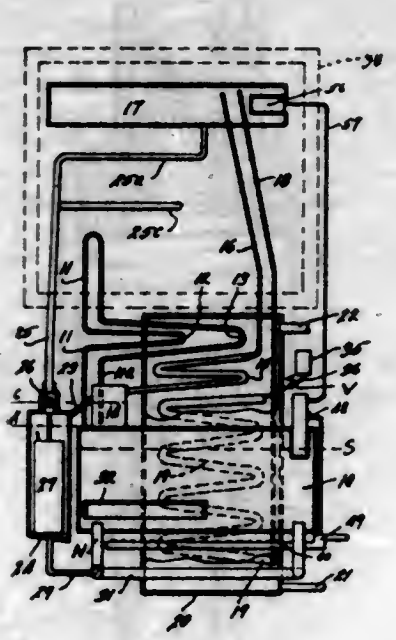
means in timed relation to each of said other means, said work carrier comprising a relatively thin rotary disc provided with notches in its periphery for reception of the work and a stationary work retaining means extending over a substantial portion of the carrier periphery close thereto and laterally spaced therefrom on one side.

1,870,430. DRIVE FOR A PRINTING MEMBER, INKING DEVICE, AND GUARD. RALPH G. WHITLOCK, Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev., a Corporation of Nevada. Filed Feb. 23, 1929. Serial No. 342,091. 5 Claims. (Cl. 101—301.)



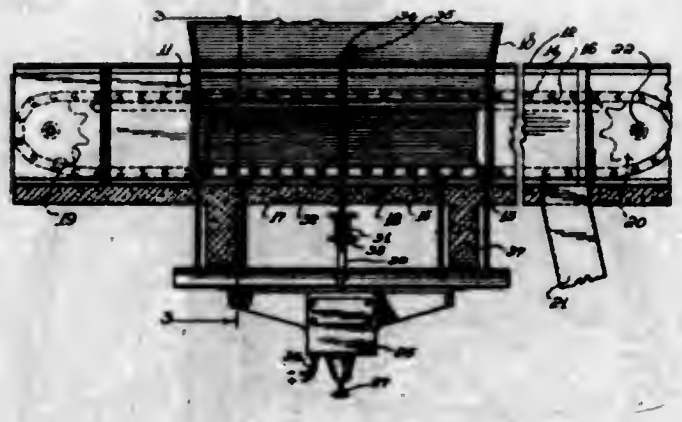
1. The combination of a reciprocable printing member; an inking device, a movable guard, and means operable by the guard for initially moving the inking device in a direction substantially alined with the path of the printing member to clear the inking device from the type face of the printing member, then bodily move the cleared inking device first out of and then into the path of the printing member and finally abruptly move the inking device in a direction alined with the path of the printing member.

1,870,431. REFRIGERATING APPARATUS AND CONTROL THEREFOR. HENRY E. WILLSIE, New York, N. Y., assignor to The Union Trust Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 6, 1927. Serial No. 217,678. 8 Claims. (Cl. 62—5.)



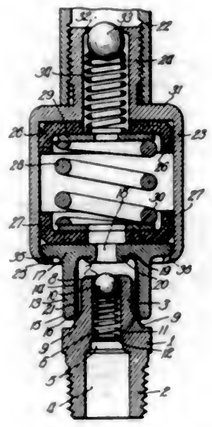
1. The combination in a refrigeration apparatus of a still-absorber, evaporator and condenser connected in an operative cycle, a float chamber, a pipe connected to the bottom of the evaporator and to the float chamber, a pipe connecting the float chamber to the still-absorber, a check valve in the pipe connecting the evaporator to the float chamber, and a float within the float chamber arranged to unseat the check valve during the heating period.

1,870,432. CONVEYER DEVICE. EARL W. WITTER, New Brighton, Staten Island, N. Y., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 26, 1929. Serial No. 395,286. 1 Claim. (Cl. 198—57.)



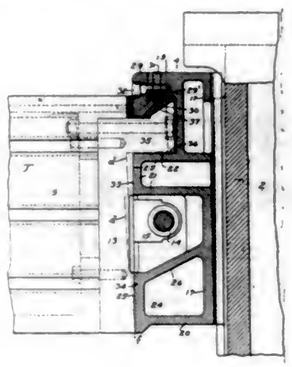
In a bin unloading device for powdered material, a bin, a housing passing through said bin, a discharge conveyer operating in said housing, said housing being provided with an opening in the walls thereof to permit flow of powdered material from said bin to said conveyer, a vibrator bar in vibration contact with a wall of said housing at the bottom of said bin, connecting rods leading from said vibrator bar through the bottom of said bin, and an electrical vibrator connected to the lower end of said connecting rods and adapted to cause the vibration of the walls of said housing to cause the free flow of powdered material through said opening.

1,870,433. LUBRICATING APPLIANCE. OSCAR U. ZERK, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Oct. 21, 1929. Serial No. 401,274. 13 Claims. (Cl. 221—47.4.)



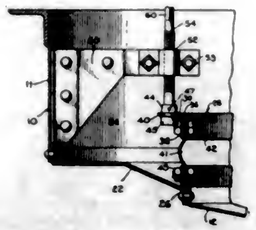
6. A nozzle for a lubricant compressor having a contactor of inherently resilient metallic material, of tubular form, circumferentially expandible by pressure engagement with a longitudinally inclined nipple surface.

1,870,434. WORKTABLE GUIDE FOR SHAPING MACHINES. WILLIAM F. ZIMMERMANN, Maplewood, N. J., assignor to Gould & Eberhardt, Newark, N. J., a Corporation of New Jersey. Filed Nov. 23, 1929. Serial No. 409,287. 8 Claims. (Cl. 90—58.)



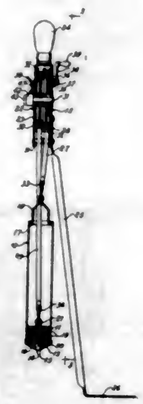
1. A shaper combining a frame, a cross-rail mounted thereon and affording a relatively wide horizontal disposed table-supporting seat; a work-table translatably mounted on said cross-rail and having a lateral extension fitted to said seat, said extension being provided, above said seat, with an upwardly and rearwardly inclined bearing surface; a portion of said cross-rail projecting forwardly over the extension of said work-table and having an upwardly and rearwardly inclined bearing surface contacting with the first named bearing surface solely to hold said work-table against upward and outward movement.

1,870,435. ADJUSTABLE OVERFLOW LIP FOR SEDIMENTATION APPARATUS. JOHN A. BAKER, Westport, Conn., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 17, 1929. Serial No. 400,258. 3 Claims. (Cl. 210—55.)



1. A decanting apparatus comprising a sedimentation tank, said tank being provided with a peripheral launder having a wall over which liquid is adapted to flow into the launder, a plurality of brackets supported on the tank in spaced relationship and extending inwardly, bolts movably mounted on said brackets and having depending heads and adjustable overflow lip assembly supported on said head, said assembly including a flexible section forming a part of the wall of the launder.

1,870,436. DEVICE FOR SAMPLING LIQUID. IVAN J. BALL and STUART H. INGRAM, Los Angeles, Calif., assignors of one-third to Smith-Emery Company, Los Angeles, Calif., a Corporation of California. Filed Aug. 25, 1930. Serial No. 477,608. 17 Claims. (Cl. 137—18.)

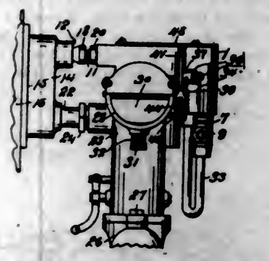


15. A liquid sampling device including, two elements adapted to be passed through a body of liquid, one of the elements being a tube, the other being a plunger in the tube, and means for controlling the passage of the elements through the liquid so that one element moves more rapidly than the other to cause liquid to be drawn into the tube, the ratio of speed of movement between the elements being related to the horizontal configuration of the body of liquid so that the quantity of liquid drawn into the tube during the vertical passage of the elements through a given portion of the body of liquid is in proportion to the horizontal dimension of the said portion, said means including a cylindrical reel, a reel having a longitudinal cross-sectional configuration corresponding generally to the vertical cross sectional configuration of the body of liquid, and flexible elements connected to the elements and wound on the reels.

1,870,437. HEAT INSULATOR. JESSE BRYTE BARNITT, Pittsburgh, and RALPH B. DEER, Oakmont, Pa., assignors to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 27, 1927. Serial No. 201,958. 13 Claims. (Cl. 106—18.)

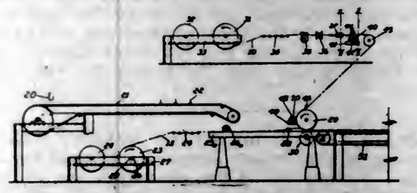
1. A heat insulator comprising aluminum oxide and a bonding agent, said oxide having been artificially produced in a finely divided substantially monohydrate form from aluminous material of higher hydration.

1,870,438. CARBURETOR. JAMES R. BELLVILLE, Kansas City, Mo. Filed Aug. 21, 1929. Serial No. 387,391. 8 Claims. (Cl. 261—13.)



1. A carburetor having a mixing chamber, a heating member having a heating passage discharging into said chamber and having an air inlet, a fuel conductor having an outlet, and a nozzle normally spaced from said heating member and discharging into said air inlet and longitudinally adjustable in said outlet to and from a position in which it will close said inlet.

1,870,439. PLASTER-BOARD AND METHOD OF MAKING SAME. CHARLES R. BIRDSEY, Hinsdale, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 31, 1928. Serial No. 303,243. 8 Claims. (Cl. 154—2.)



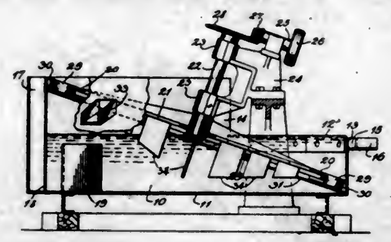
1. A plaster board comprising a body portion of cementitious material, a covering sheet secured on each face thereof, one of said cover sheets being folded around the edge of said board and having a second fold extending across a portion of the opposite face of said body parallel to said sheet, and a selvage edge formed by folding the edge of the second cover sheet, said selvage edge being secured to said second mentioned fold by an adhesive different in composition than said cementitious material.

1,870,440. TIE-PLATE. WILLIAM S. BOYCE, Chicago, Ill. Filed Aug. 8, 1929. Serial No. 384,255. Renewed Jan. 6, 1932. 4 Claims. (Cl. 238—298.)



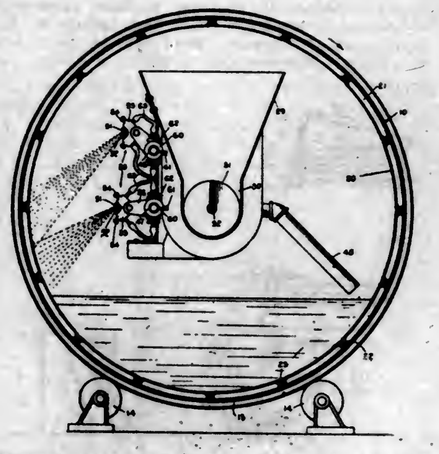
1. A tie plate having a rail seat and a rail abutting shoulder on its top face, a pair of ribs extending transversely of the plate and depending therefrom approximately beneath the edges of the base flanges of a rail seated on said rail seat, said ribs being adapted to be initially embedded in a tie to prevent longitudinal shifting of the tie plate, a pair of transversely extending, primary tie bearing surfaces respectively adjacent said ribs, the bottom of the median portion of the plate being arched longitudinally, and the bottom faces of the opposite end portions being provided with a plurality of transversely spaced, longitudinally extending recesses forming longitudinally extending ribs therebetween, said recesses being of a material depth throughout their length whereby said ribs constitute initial tie bearing surfaces of reduced area on said end portions, said reduced area, initial tie bearing surfaces being adapted to be readily embedded in the tie whereby embedment of the tie plate is not materially hindered by said end portions.

1,870,441. DECANTATION APPARATUS. HARRISON S. COE, La Cygne, Kans. Filed Feb. 17, 1928. Serial No. 255,173. 19 Claims. (Cl. 209—18.)



1. Decantation apparatus for separating solids from liquids including an annular inclined platform, a settling compartment in association therewith positioned to receive material passing through said annular platform, and means for conveying settled solids from the compartment along the platform to a point of discharge above the liquid level.

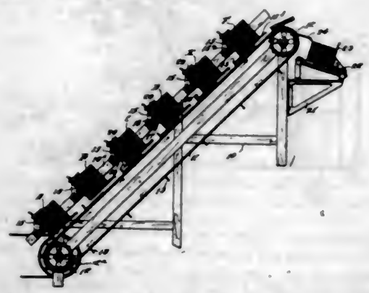
1,870,442. APPLICATION OF LIQUID TO FILTER CAKES. FRANCIS B. COLEY, Westport, Conn., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 10, 1929. Serial No. 391,688. 1 Claim. (Cl. 210—199.)



Mechanism adapted for use in a rotary filter having a rotary drum provided with a filter medium adjacent the inner surface of the periphery of the drum and on which cake is formed in a filtering zone and washed in a wash-

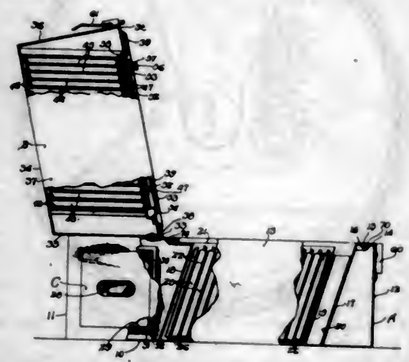
ing zone; comprising means for harmlessly washing said cake in the washing zone by applying water uniformly thereto while having no cake-disturbing impact including a water pipe adapted to be located in said drum and to extend longitudinally thereof, an air pipe parallel to the water pipe and above the same, brackets adjustably mounted on said pipes, each bracket on the air pipe corresponding to a bracket on the water pipe, an atomizer unit adjustably mounted on each bracket and including an air nozzle and a water nozzle, cross take-offs in each pipe in correspondence with the brackets thereon, and two flexible tubes extending from each take-off and connected one with the corresponding nozzle of an atomizer unit on one of said pipes and the other with the corresponding nozzle of an atomizer on the other pipe.

1,870,443. APPARATUS FOR ASSEMBLING ROOFING ELEMENTS. DONALD A. CUMFER, Nutley, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed May 4, 1929. Serial No. 360,549. 9 Claims. (Cl. 270—58.)



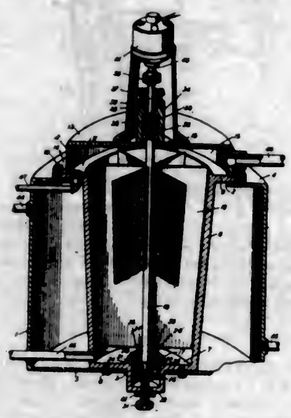
1. In apparatus of the character described, means for supporting roofing elements in a plurality of spaced stacks, means cooperating with said supporting means for successively withdrawing the lowermost element of each of said stacks, whereby to form a set of elements composed of one element from each of said stacks, and means for accumulating a plurality of said sets of elements into a bundle.

1,870,444. FOLDING CREDIT REGISTER. JOHN E. DUNGAN, Chicago, Ill., assignor, by mesne assignments, of one-half to Remington Rand Inc., Buffalo, N. Y., a Corporation of Delaware. Filed July 14, 1925, Serial No. 43,531. Renewed Jan. 9, 1932. 2 Claims. (Cl. 45—2.)



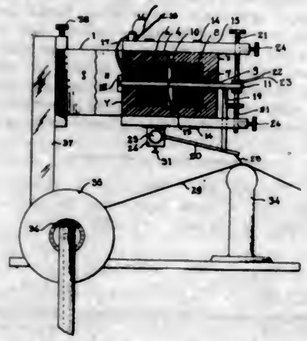
1. A credit register having normally superposed sections, walls in each section, a plurality of shelves on each wall, the walls having slots above each shelf and parallel thereto, a plurality of drawers on said shelves, each of said drawers having side walls and a pin traversing the drawer and projecting through said side walls into opposed slots, said drawers being of less length than said slots and said pins being at the rear of said drawers and of appreciably less diameter than the width of said slots whereby said drawers may be drawn from out of contact with said shelves but maintained in proper position between opposed walls, and a hinged connection between said sections for effecting the disposition thereof in angularly related planes, thereby rendering the drawers in each section independently removable in different planes.

1,870,445. APPARATUS FOR HEAT TREATING LIQUIDS. EDWARD C. D'YARMETT, Kansas City, Mo., assignor to The Fractionator Company, Kansas City, Mo., a Corporation of Missouri. Filed Feb. 28, 1930. Serial No. 432,134. 9 Claims. (Cl. 196—128.)



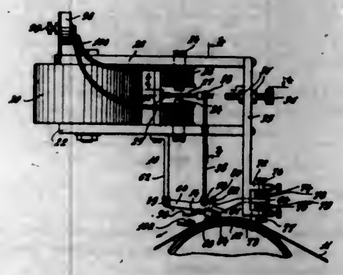
6. In combination with a tapered vessel, centrifuging means including tapered vanes extending axially of and revolvable in the vessel and spaced from the wall of the vessel to form a film space adjacent said wall, means for vertically adjusting the centrifuging means to vary the film space, and means for heating the wall of the vessel.

1,870,446. SOUND RECORDING DEVICE. EARL H. FOLEY, Seattle, Wash., assignor to Filmtone Corporation, a Corporation of Delaware. Filed Aug. 15, 1924, Serial No. 732,225. Renewed Sept. 23, 1931. 19 Claims. (Cl. 179—100.4.)



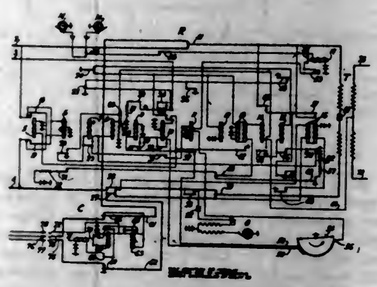
1. A sound recording device comprising an armature associated with an electrical device sensitive to fluctuations in current induced by sound waves, a stylus arm formed with a slot therein and arranged to be actuated by said armature, adjustable pivoting means for said stylus arm, inherently resilient means for resisting adjustment of said pivoting means in one direction, and adjusting means extending through the slot in the stylus for positively supporting said pivoting means and adapted to regulate the position of said pivoting means against the resistance of said inherently resilient means.

1,870,447. SOUND RECORDING AND RECORDS. EARL H. FOLEY, Astoria, N. Y., assignor to Filmtone Corporation, a Corporation of Delaware. Filed July 10, 1930. Serial No. 467,093. 11 Claims. (Cl. 179—100.4.)



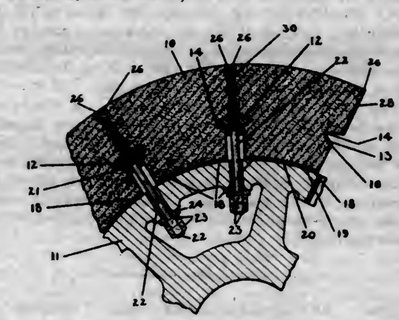
1. In a device for cutting sound grooves, a vibratory supporting member, a cutting tool having an elongated shank, a clamp for removably securing said shank to said member, a cutting point of hard material embedded in one end of said shank and formed with a cutting edge at one side of said shank and means on said shank for indicating said side, so as to permit proper and ready positioning of said shank in said clamp.

1,870,448. AUTOMATIC TELEPHONE SYSTEM. FERNAND GOHOREL, Paris, France, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Dec. 19, 1927, Serial No. 241,018. Patent No. 1,842,602, dated Jan. 26, 1932. Divided and this application filed Jan. 24, 1931. Serial No. 510,914. 6 Claims. (Cl. 179—18.)



1. In an automatic telephone system, a non-numerical switch, trunk lines accessible thereto terminating in contacts, means for making certain of said trunks busy, wipers for said switch normally standing on the contacts of one of said trunk lines, a relay in said switch operable in two stages, a motor magnet for said switch, said relay operated in one stage whenever the trunk line upon whose contacts the wipers are standing becomes busy, means controlled by the operation of the relay in said one stage for causing the operation of the motor magnet to move the wipers into engagement with the contacts of another trunk line, and means for operating said relay in its second stage to extend a connection to an idle trunk line.

1,870,449. SEGMENTAL GRINDING WHEEL. WALLACE W. GREENWOOD, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 3, 1930. Serial No. 449,476. 8 Claims. (Cl. 51—207.)

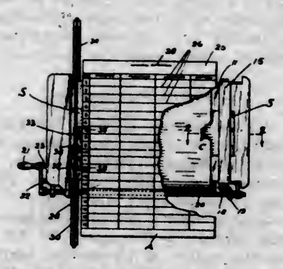


1. A grinding wheel comprising a rotatable support, a plurality of abrasive segments mounted thereon, each segment having a permanent lateral facing preformed integrally therewith which has a surface shaped to fit accurately against a lateral face of an adjacent segment, and means to clamp the segments removably in position on the support, said segments being separately removable and replaceable without affecting the facing.

1,870,450. METHOD FOR IMPROVING AND REMOVING THE ODOR AND/OR FLAVOR OF LEGUMES. LOUIS W. HAAS and HERBERT O. RENNER, Chicago, Ill., assignors, by mesne assignments, to J. R. Short Milling Company, Chicago, Ill., a Corporation of Illinois. Filed June 17, 1930. Serial No. 461,844. 7 Claims. (Cl. 99—11.)

1. A method of removing the characteristic flavor of legumes which consists in reducing said legumes to a finely divided state and then treating the finely divided material with a reducing agent of the lower members of the aliphatic aldehyde group for a time sufficient to remove the characteristic flavor and odor.

1,870,451. COLLATING DEVICE FOR AUTOGRAPHIC REGISTERS. LOUIS FRED HAGEMANN, Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada, a Corporation of Ontario, Canada. Filed Dec. 21, 1929. Serial No. 415,636. 24 Claims. (Cl. 282—7.)



1. In a manifolding machine, in combination, means for feeding one or more record strips into inscription receiving position, a collating sheet support mounted for

movement transversely of the path of record strip feed, means for feeding said collating sheet support to adjust the sheet into different writing positions and a checking device cooperating directly with said collating sheet support for arresting and retaining said collating sheet in its several adjusting positions.

1,870,452. PROCESS FOR REDUCING THE CONTENTS OF RESINS AND FATTY ACIDS IN CELLULOSE PRODUCED BY MEANS OF SULPHITE DIGESTION. GUSTAF HAGLUND, Stockholm, Sweden, assignor to Patentaktiebolaget Grondal-Ramen, Stockholm, Sweden. Filed Apr. 10, 1931, Serial No. 529,301, and in Germany Nov. 18, 1930. 5 Claims. (Cl. 92—11.)

1. The method of reducing the content of resins and the like in cellulose produced by the sulphite digestion process which comprises, separating the cellulose from a major portion of the waste liquor contained in the cellulose-waste liquor mixture from the digestion before the temperature of the liquor has fallen to such an extent that the resins contained in the liquor are caused to precipitate appreciably.

1,870,453. ARTIFICIAL MASS AND PROCESS OF MAKING THE SAME. HERBERT HÖNEL, Vienna, Austria, assignor to Beck, Koller & Company, Inc., Detroit, Mich., a Corporation of Delaware. Filed May 20, 1930. Serial No. 454,186. 16 Claims. (Cl. 260—8.)

1. A process of making artificial masses which comprises forming a mono-ester from a relatively low molecular polybasic carboxylic acid and a polyhydric aliphatic alcohol, adding a high molecular monobasic carboxylic acid, reacting the mixture with a phenol alcohol and finally esterifying the entire mass by heating.

1,870,454. MIXED ESTER COMPOSITION AND PROCESS OF MAKING THE SAME. HERBERT HÖNEL, Vienna, Austria, assignor to Beck, Koller & Company, Inc., Detroit, Mich., a Corporation of Delaware. Filed June 6, 1930. Serial No. 459,613. 9 Claims. (Cl. 260—8.)

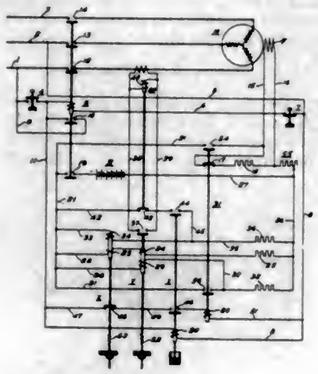
1. A process which comprises esterifying the acid product obtained by the reaction of a fresh natural resin and phenol alcohols, by combining with such acid product a relatively low molecular carboxylic acid and polyhydric alcohol.

1,870,455. ARTIFICIAL MASS AND PROCESS OF MAKING THE SAME. HERBERT HÖNEL, Vienna, Austria, assignor to Beck, Koller & Company, Inc., Detroit, Mich., a Corporation of Delaware. Filed June 7, 1930. Serial No. 459,845. 19 Claims. (Cl. 260—8.)

1. A new composition of matter formed by the reaction of (1) a high molecular monobasic carboxylic acid, (2) a member of a group which consists of relatively low molecular polybasic carboxylic acids and anhydrides, (3) a polyhydric alcohol, (4) a phenol alcohol and (5) a natural glyceride of a high molecular monobosic carboxylic acid.

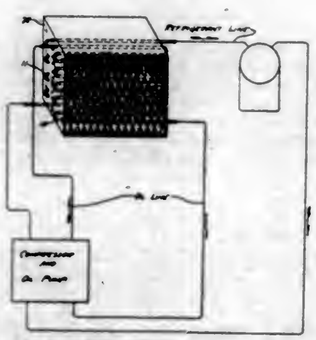
1,870,456. SYNCHRONOUS MOTOR CONTROL. DONOVAN E. INMAN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 26, 1931. Serial No. 559,410. 8 Claims. (Cl. 171—118.)

1. In a control system, a synchronous motor, a source of alternating current, a line contactor for connecting the motor to the source of alternating current, a field winding, a source of direct-current for the field winding, a field contactor, a long-time time-limit relay started by the operation of the line contactor, a short-time time-limit relay, the operation of which is initiated upon the completion of the operation of the long-time time-limit relay, for effecting the operation of the field contactor,



means for deenergizing the field contactor, and means for initiating the operation of the short-time time-limit relay to re-synchronize the motor.

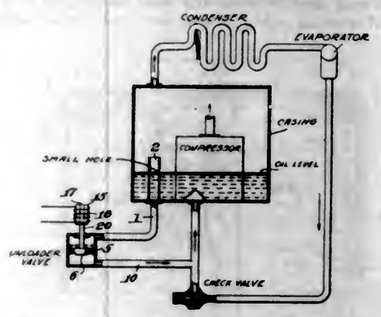
1,870,457. REFRIGERATING APPARATUS. MAHLON W. KENNEY, Elmhurst, Ill., assignor, by mesne assignments, to Grigsby-Grunow Company, a Corporation of Illinois. Filed Dec. 19, 1930. Serial No. 503,461. 3 Claims. (Cl. 257—36.)



1. In a refrigerating system of the type wherein refrigerant and lubricant freely mingle, a unitary condenser structure provided with separate paths therethrough for refrigerant and lubricant respectively, and supporting means for controlling the heat transfer from one of said paths through to the other whereby said refrigerant and lubricant may be cooled to different temperatures in the same structure.

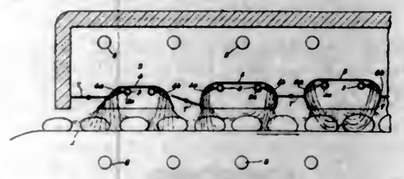
1,870,458. REFRIGERATION APPARATUS. MAHLON W. KENNEY, Elmhurst, Ill., assignor, by mesne assignments, to Grigsby-Grunow Company, a Corporation of Illinois. Filed Jan. 12, 1931. Serial No. 508,023. 12 Claims. (Cl. 62—115.)

1. A system of the character described comprising a compressor, a gas conduit having a check valve connected to the intake thereof, a shunt path from the exhaust to the intake of the compressor including a valve



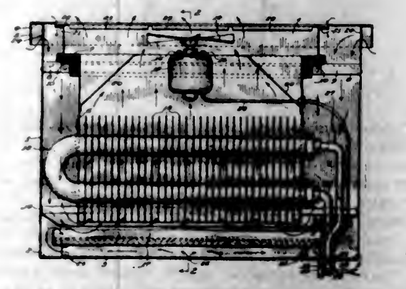
for unloading said compressor during the starting thereof, and means associated with said shunt path for the introduction of a sealing liquid on said valve.

1,870,459. DEVICE FOR STEAMING BREAD IN BAKE OVENS. WILLY KLENK, Stuttgart-Cannstatt, Germany, assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Dec. 3, 1931, Serial No. 578,757, and in Germany Dec. 11, 1930. 2 Claims. (Cl. 107—57.)



1. In combination with a bake oven having a traveling conveyor, a steam injector for producing a jet of steam located in the feed-in end of said oven above said conveyor, and a baffle hood positioned above said injector having at least a portion of its lower face inclined to the conveyor to present a deflecting surface against which the steam jet is directed, whereby the steam is deflected downward in a diffused mist over the conveyor.

1,870,460. AIR COOLING CABINET AND METHOD FOR PREVENTING CONDENSATION OF MOISTURE THEREON. ALBERT L. LAMBERT, Narberth, Pa., assignor to Heintz Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 15, 1931. Serial No. 568,944. 13 Claims. (Cl. 62—129.)



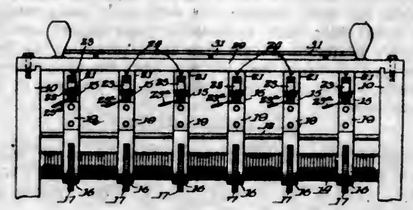
1. The method of preventing the condensation of moisture upon the outer surfaces of the outer walls of an air cooling cabinet which consists in passing the air to be cooled over the inner surfaces of the walls and maintaining such temperature for the stratum of air next to said walls that the temperature of the outer surfaces of the walls is above the condensation point of the outside air.

1,870,461. PAPER LATH. HERBERT E. MARKS, Sewickley, Pa., assignor to Mary Haines Marks, Sewickley, Pa. Filed Feb. 13, 1931. Serial No. 515,479. 2 Claims. (Cl. 72—116.)



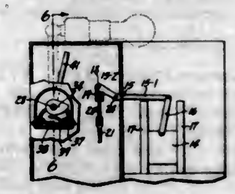
1. Paper lath comprising a paper backing sheet formed with longitudinal corrugations, individual bridge members extending transversely of said corrugations and formed with indentations at points disposed in the spaces between said corrugations, and staples resting in said indentations and entering said backing sheet to secure said bridge members thereto, whereby relative transverse movement between said backing sheet and said bridge members is prevented and said sheet is supported against such movement with respect to the bridge members as would tend to distort said corrugations.

1,870,462. PRETESTING DEVICE. JOHN L. MCWEENY, Chicago, Ill., assignor, by mesne assignments, to The Muter Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 2, 1931. Serial No. 519,382. 9 Claims. (Cl. 175—183.)



1. Apparatus for determining the resistance between two terminals of a resistor before the assembly thereof is complete, which comprises a support, a micrometric shaft thereon, a pair of terminal clamps cooperating with said shaft, said clamps having jaws adapted to receive and hold terminal clips, means cooperating with said shaft for moving said clamps thereon relative to each other, and an electric circuit including an ohmmeter connected across said clamps for determining the resistance of the portion of a resistor lying between said terminal clips.

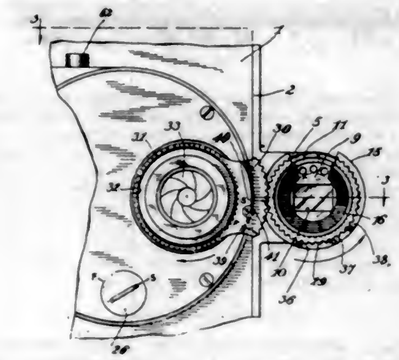
1,870,463. FRAMING LIGHT SHUTTER LIFTER. WALDO P. NELSON, Salt Lake City, Utah. Filed Apr. 21, 1930. Serial No. 445,996. 7 Claims. (Cl. 88—17.)



7. A framing light shutter lifter, including in combination, a motion picture projector having an automatic fire shutter, an oscillating shaft secured to a wall of said

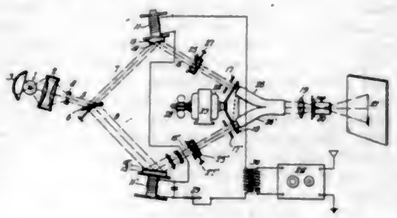
projector adjacent said shutter, said shaft being disposed with its rotative axis at substantially right angles to the plane of the shutter, a lamp arm mounted on said shaft, and means whereby said shutter is lifted when said lamp arm is lowered.

1,870,464. LIGHT METER AND VIEW SCOPE FOR CAMERAS. GEORGE RAMSEY, Brooklyn, N. Y. Filed Sept. 14, 1927. Serial No. 219,400. 9 Claims. (Cl. 88—16.)



9. A combined view scope and light meter for cameras to simultaneously view the limits of the camera lens field in full light intensity and a reading of a light meter to indicate the light intensity of said field; comprising a view scope field limit member; a light meter; and an eye piece to simultaneously view the readings of the light meter and the said field in full light intensity for all readings of the light meter and for all settings of the camera lens.

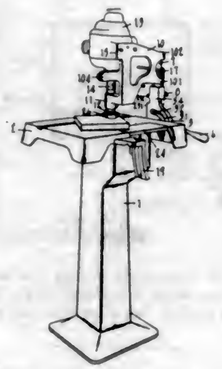
1,870,465. SYSTEM OF TELEVISION. JOHN B. RATHBUN, Chicago, Ill., assignor of one-half to Fred C. Wellman, Chicago, Ill. Filed Aug. 4, 1930. Serial No. 473,049. 4 Claims. (Cl. 178—6.)



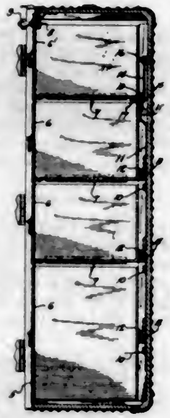
1. In a modulated polarized light system, means for increasing the light efficiency thereof, comprising a source of light, a polarizer in which the light from said source is polarized in a reflected beam, and a transmitted beam, and means for recombining the polarized beams.

1,870,466. COMBINATION SAW PLANER AND PLANER FOR PRINTERS' USE. JOHN A. RICHARDS, Kalamazoo, Mich. Filed Aug. 1, 1931. Serial No. 554,414. 9 Claims. (Cl. 29—33.)

1. In a combination saw trim and planer machine, a suitable work table having a vertical rear wall, a bracket having a face corresponding to the said wall, said bracket being slotted and having clamp bolts for bolting the same in place, an electric motor having a motor frame carried by said bracket, an adjustable post in the said bracket grooved and retained by a suitable bolt, the opposite end being adjusted by oppositely disposed set screws to adjust its alinement, a counterbalance spring on the said post between the said frame and table for counterbalancing when the motor and frame are disposed in horizontal position, and a detachable adjusting arm for the said frame for clamping the frame in working position when the post is horizontal and permitting the same to be free to turn when in the vertical position.

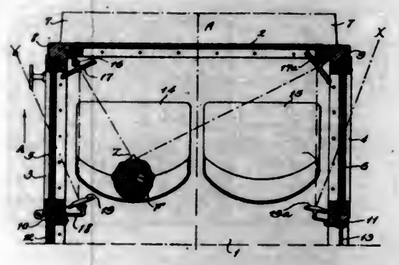


1,870,467. DRAWER LOCKING DEVICE. JULIUS RITTER, Jr., Racine, Wis., assignor to Hartmann Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed June 12, 1930. Serial No. 460,659. 4 Claims. (Cl. 45—94.)



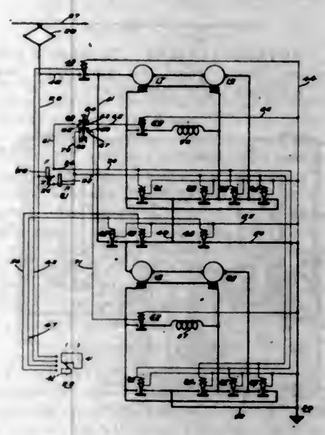
1. The combination with a trunk section having a plurality of drawers positioned one above the other, some of the drawers being formed at their rear ends with complementary locking members, of a locking means for said drawers, comprising a lock for one of said drawers, a bar slidably mounted on the inner surface of the rear of the trunk section and having fingers which lockingly engage the complementary locking members of the drawers so equipped, and a flanged lever extending laterally from said bar between rear portions of the lock equipped drawer and an adjacent drawer and movable to unlock said other drawers only when the lock equipped drawer is withdrawn from the trunk section.

1,870,468. SYSTEM OF REFLECTING MIRRORS OR THE LIKE. OSCAR A. ROSS, New York, N. Y. Filed Oct. 20, 1925. Serial No. 63,763. 11 Claims. (Cl. 88—1.)



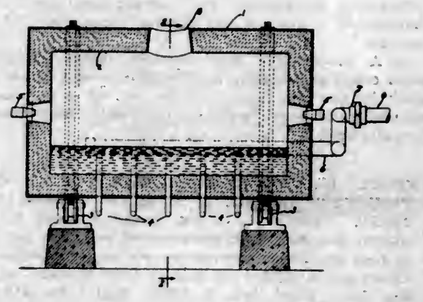
1. In combination with a vehicle having a substantially enclosed body supporting a driver's seat therein, the body being formed with opaque members positioned between the wind-shield and the entrance doors thereof whereby a person normally occupying the seat will have a partially obstructed field of vision down a street which is disposed to the front of the vehicle and laterally of the street being travelled upon, the body also having posts rearwardly of the doors and extending between the floor portion and the roof portions thereof, of light deflecting members supported by the posts, reflecting surfaces formed thereon positioned to receive an image of the objects in the field obstructed by the opaque members, secondary light deflecting members supported by the opaque members in view of the occupant of the seat, and reflecting surfaces formed thereon positioned to receive the image depicted by the reflecting surfaces of the primary light deflecting members whereby the occupant of the seat will see the objects in the obstructed field of vision in the same manner as if the opaque members were absent.

1,870,469. LOCOMOTIVE CONTROL SYSTEM. FRANCIS H. SHEPARD, New Rochelle, N. Y., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 4, 1930. Serial No. 441,563. 5 Claims. (Cl. 105—61.)



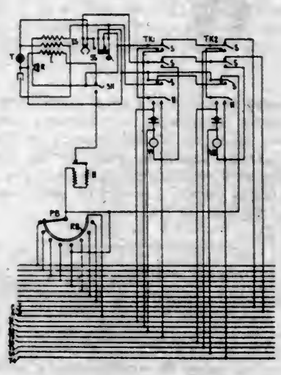
1. In a system for obtaining the maximum tractive effort from a motor-driven vehicle having a plurality of driving axles, in combination, a plurality of propelling motors for driving the axles, said motors being provided with field windings, means for controlling the direction of movement of the motor-driven vehicle, and means disposed for manual operation to cooperate with said direction-controlling means for selectively shunting predetermined motors to effect a division of the torque delivered by the motors substantially in accordance with the weights imposed on the axles.

1,870,470. CONCENTRATION OF BISMUTH ALLOY. WALTER C. SMITH, Maplewood, N. J., assignor to Cerro de Pasco Copper Corporation, New York, N. Y., a Corporation of New York. Filed June 4, 1930. Serial No. 459,180. 5 Claims. (Cl. 75—17.)



1. A process for concentrating bismuth in a bismuth bullion containing as an impurity an element of the group comprising lead, tin, arsenic, sulphur and antimony, comprising passing air through the molten mass at such a rate that the oxidation of impurities in the bullion will generate sufficient heat to maintain the metal in a molten state.

1,870,471. TELEPHONE SYSTEM. RUDOLPH FRANK STEHLIK, Chicago, Ill., assignor to Associated Telephone & Telegraph Company, Chicago, Ill. Filed Nov. 1, 1930, Serial No. 492,837, and in Great Britain Nov. 5, 1929. 8 Claims. (Cl. 179—27.)



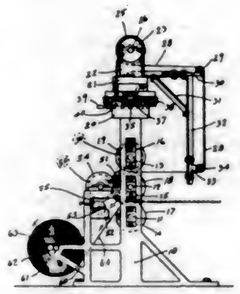
1. In combination with a telephone instrument of multi-station intercommunicating system normally connected for the extension of calls over such system, a manually operable element for selecting and signalling any other station of the system over a single wire speaking circuit, a two-wire trunk having a branch terminating in said telephone, and manually operable means for interrupting the normal connections to said telephone and for connecting the same to said trunk line.

1,870,472. CONVERSION OF CARBOHYDRATES TO PRODUCTS OF HIGHER OXIDATION. WILLIAM E. STOKES, Rockville Center, and ARNOLD H. PETER, New York, N. Y., assignors to Royal Baking Powder Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 21, 1925. Serial No. 76,914. 16 Claims. (Cl. 260—119.)

1. A process for the conversion of carbohydrates to products of higher oxidation, comprising bringing together carbohydrate and nitric acid in an amount less than that required for the oxidation, and manganese chloride in an amount sufficient to inhibit the formation of oxalic acid, heating the mixture until reaction starts and allowing its ingredients to react, adding nitric acid, heating until reaction again starts, and allowing further oxidation therewith, then adding more nitric acid, and maintaining the mixture at a temperature above room temperature and below the starting temperature of the reaction.

16. A process for the oxidation of carbohydrates, which comprises reacting a carbohydrate with nitric acid solely in the presence of an amount of a manganese-containing compound sufficient to inhibit the formation of oxalic acid.

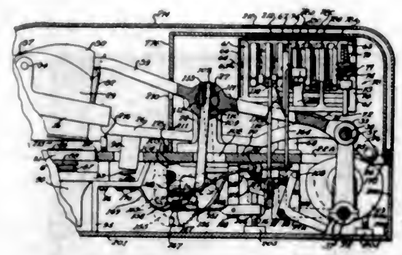
1,870,473. PROCESS OF AND APPARATUS FOR CONTINUOUSLY FORMING A BIAS CORRUGATED STRIP. CHARLES L. TUMULTY and FORREST H. TUMULTY, Anderson, Ind., assignors of seventeen per cent to Neel McCullough, seventeen per cent to George W. Pierce and seventeen per cent to Fred Mustard, Anderson, Ind. Filed Jan. 6, 1930. Serial No. 418,852. 7 Claims. (Cl. 154—33.)



1. The process of forming a continuous strip of biased corrugated board comprising, continuously presenting a strip of paper stock in biased relation to the axes of and to two parallel meshing rolls having corrugations biased thereon and continuously presenting a noncorrugated facing strip to the corrugated strip substantially transverse to the axes of the rolls.

1,870,474. PRINTING PRESS. RALPH G. WHITLOCK, Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev., a Corporation of Nevada. Filed June 30, 1925. Serial No. 40,631. 14 Claims. (Cl. 101—91.)

1. In a printing press, in combination, a printing member; type secured thereto; a guard box surrounding the said printing member and the said type; a type shield rockably mounted on and within said guard box; an ink pad secured to said type shield; an inking roller revolubly mounted in said guard box and in contact with said ink pad; a tension spring secured to said printing member and tensioning said type shield; means to actuate said printing member within said guard box to make impressions; means to actuate said guard box to hold said matter before, during and until said impression operation is completed; means to retain in contact with, and remove from the face of said type, said ink pad during said operation; means to operate said type



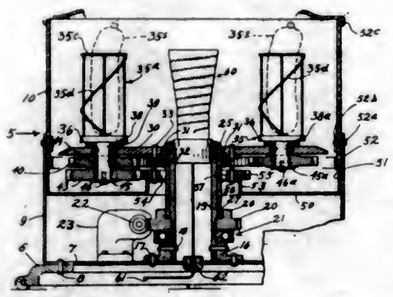
shield to cover said type; means to remove said type shield from over said type during said printing operation.

1,870,475. PIPE WELDING MACHINE. EDWIN E. ARNOLD, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 27, 1930. Serial No. 505,065. 5 Claims. (Cl. 219—6.)



1. In a pipe-welding machine including a standard, pinch rolls thereon for engaging an initially open pipe blank moving therethrough, and means for heating said pipe blank, a pair of pressure rolls inside of the pipe blank to cooperate with said pinch rolls to guide the pipe blank and effect welding thereof, the periphery of each of said pressure rolls being so shaped as to prevent the development of torsional force between the moving pipe and the pressure rolls.

1,870,476. ROTARY COOKER. RICHARD J. BABCOCK, Los Angeles, Calif. Filed Feb. 18, 1931. Serial No. 516,728. 8 Claims. (Cl. 126—41.)

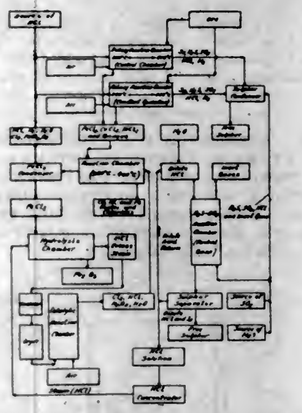


1. In a cooker, a support, a master gear rotatably mounted upon said support, an upstanding sleeve about which said master gear rotates and upon which it has a working fit, said gear having an upstanding circular flange in outwardly spaced relation to said sleeve, an outer sleeve having a working fit around the first mentioned sleeve and having a slidable but non-rotatable fit within said flange of said gear, a platform fitted around and secured to said outer sleeve, food supports mounted upon said platform and rotatable therewith, and a central heating element to supply a cooking heat to food carried by said food supports, said platform together with the food supports mounted thereon and with said outer sleeve being vertically removable from said gear and being manually replaceable thereon.

1,870,477. RECOVERY OF SULPHUR. RAYMOND F. BACON, Bronxville, and ISAAC BENCOWITZ, New York, N. Y.; said Bencowitz assignor to said Bacon. Filed July 30, 1930. Serial No. 471,889. 4 Claims. (Cl. 23—87.)

2. In a process for treating pyrites-bearing material to recover sulphur, the improvement which comprises subjecting the material at an elevated temperature to the action of hydrogen chloride in the presence of water vapor and oxygen, and controlling the amounts of water vapor and oxygen employed to control the amount of ferrous chloride produced.

1,870,478. RECOVERY OF SULPHUR. RAYMOND F. BACON, Bronxville, and ISAAC BENCOWITZ, New York, N. Y.; said Bencowitz assignor to said Bacon. Filed Aug. 2, 1930. Serial No. 472,693. 3 Claims. (Cl. 23—226.)

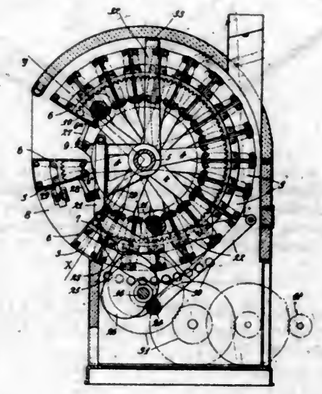


1. The method of recovering sulphur from material containing iron sulphide which comprises subjecting the material to the action of hydrogen chloride in the presence of water vapor and oxygen in suitable amount to produce ferrous chloride, hydrogen sulphide and sulphur dioxide, subjecting the ferrous chloride to the action of chlorine to form ferric chloride, hydrolyzing the ferric chloride to recover hydrogen chloride, subjecting the hydrogen chloride to the action of oxygen to ogenerate chlorine from a portion of the hydrogen chloride, utilizing the mixture of gases so produced comprising chlorine and hydrogen chloride as a source of chlorine for the treatment of additional quantities of the ferrous chloride, and returning the residual gases containing the hydrogen chloride to the process.

1,870,479. RECOVERY OF SULPHUR. RAYMOND F. BACON, Bronxville, and ISAAC BENCOWITZ, New York, N. Y.; said Bencowitz assignor to said Bacon. Filed Aug. 2, 1930. Serial No. 472,694. 4 Claims. (Cl. 23—226.)

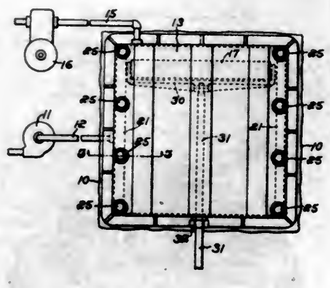
1. The method of recovering elemental sulphur which comprises subjecting iron sulphide to the action of sulphur dioxide at a suitably elevated temperature in the presence of one or more magnesium compounds.

1,870,480. APPARATUS FOR MAKING OR BAKING WAFERS AND THE LIKE. GEORGE RALPH BAKER and JOHN CURRIE PATERSON, Willesden, London, England, assignors to Baker Perkins Company Inc., Saginaw, Mich. Filed Jan. 6, 1930, Serial No. 418,678, and in Great Britain Jan. 9, 1929. 11 Claims. (Cl. 107—58.)



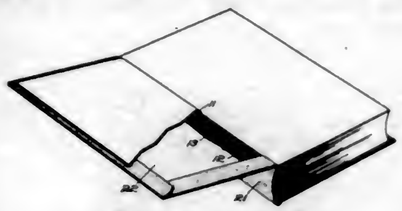
3. A machine for making or baking wafers and the like comprising a train of mould elements arranged for movement about a horizontal axis and having a gap or open sector across which the elements are in turn transferred from one end of the train to the other, transfer mechanism by which the element is moved from the delivery end of the train toward a horizontal or substantially horizontal position, means temporarily halting the mould in such position, and means operating thereafter to move the element upwardly into engagement with a mould element at the commencement of the train.

1,870,481. METHOD OF AND APPARATUS FOR PRODUCING MATRICES. ROY C. BAKER, Wollaston, Mass., assignor of one-fifth to Louis A. Jones, Belmont, Mass. Filed July 17, 1929. Serial No. 378,879. 17 Claims. (Cl. 101—12.)



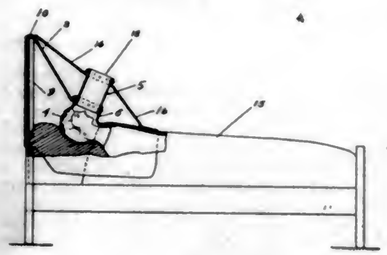
1. Matrix producing apparatus comprising, in combination, means forming a sealed chamber for the type and the matrix paper, said chamber having a flexible wall, and means for exhausting air from said chamber and causing said wall to urge said paper against the type face.

1,870,482. BOOKBINDING. ROY C. BAKER, Wollaston, Mass., assignor of one-fifth to Louis A. Jones, Belmont, Mass. Filed Aug. 12, 1929. Serial No. 385,329. 2 Claims. (Cl. 281—23.)



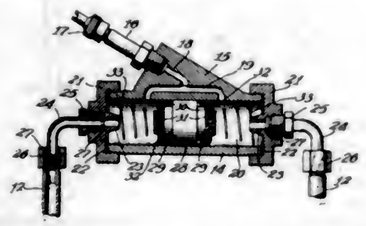
1. The combination of a set of signatures having a series of grooves across the back, and a super attached to said signatures and having a series of members received in said grooves, respectively, and having a thickness greater than the remainder of the super.

1,870,483. DRAFT PROTECTOR. MOSSI B. BANTLY, Los Angeles, Calif. Filed July 28, 1931. Serial No. 553,542. 6 Claims. (Cl. 5—317.)



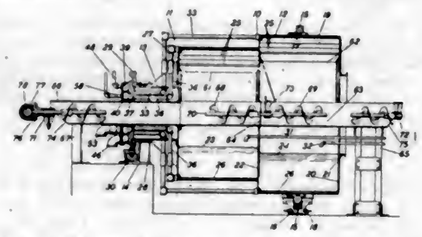
1. A protector from drafts comprising a breathing tube, a sheet having an apertured portion through which said tube extends and to which it is secured, said sheet being adapted for use as an auxiliary bed cover, means for attaching one edge portion of said sheet to the top portion of a bed frame, and auxiliary means to cooperate with said sheet to maintain said breathing tube in an upstanding operative position with relation to the face of a subject occupying the bed in conjunction with which the device is used.

1,870,484. TWIN TIRE PRESSURE CONTROL MEANS. JAMES O. BASTA, Oak Park, Ill. Filed June 18, 1931. Serial No. 545,166. 3 Claims. (Cl. 152—12.)



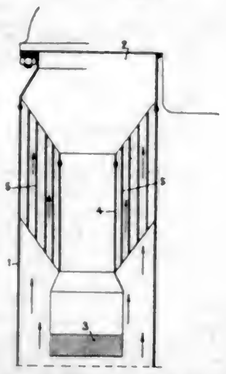
1. In a pressure exchange device for twin tires, means including a cylinder affording communication between said tires, a rodless spring balanced piston normally positioned intermediate the ends of said cylinder, facings on both ends of said piston, and heads secured to the ends of said cylinder having hollow bosses inwardly projecting therefrom adapted to cooperate with said piston facings for controlling communication between said tires, a bleeder opening through said piston in alignment with the hollow bosses whereby when the piston is in contact with either boss communication between the tires is restricted but not entirely cut off.

1,870,485. MULTIPLEX ROTARY DRUM FILTER. FRANK W. BECHART, Denver, Colo., assignor, by mesne assignments, to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 17, 1930 Serial No. 489,335. 7 Claims. (Cl. 210—202.)



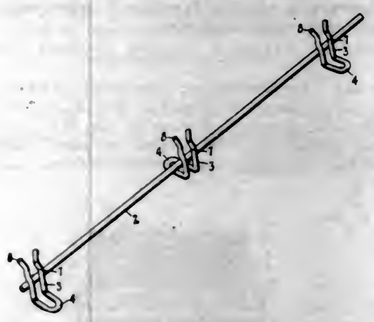
3. A filter comprising a plurality of abutting unequal sized drums rotatable as a unit, filter cells carried interiorly of said drums, means for alternately applying suction and blow back to said cells, means for rotating said drums, a filter cake discharge from said drums, and means for maintaining a filtrant bath in each of said drums.

1,870,486. APPARATUS FOR THE PREVENTION OF FIRE BY BACK FIRING IN INTERNAL COMBUSTION ENGINES, AND FOR PREVENTING THE OBSTRUCTION OF THE SUCTION CONDUITS BY FROST. CHARLES HENRI BICHLER, Paris, France. Filed Jan. 8, 1930, Serial No. 419,402, and in France Aug. 12, 1929. 9 Claims. (Cl. 123—142.)



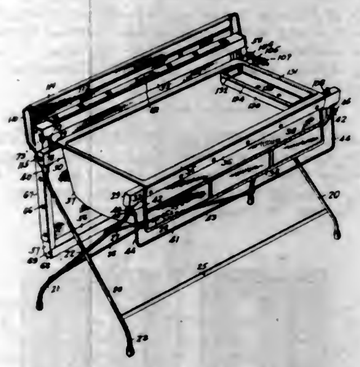
1. Apparatus for preventing back firing to the carburetters of internal combustion engines and for preventing obstruction of the suction conduits thereof by frost comprising a conduit adapted for connection with the carburetter, a tubular chamber located within said conduit in co-axial relation therewith, a foraminated fire stop located in obstructing relation to said chamber, and means between said chamber and conduit arranged to form interior passages of greater cross-section than the dimensions of the foramina of said fire stop, for maintaining those portions of the conduit at opposite ends of said chamber in open communication with each other.

1,870,487. STRUCTURAL UNIT. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Jan. 10, 1931. Serial No. 507,777. 5 Claims. (Cl. 72—122.)



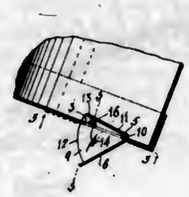
5. A structural unit comprising a longitudinal supporting rod, and a plurality of U-shaped combined leg and attaching members disposed in spaced relation transversely of said rod, one arm of each member being fixedly secured to the rod, the other being free to permit springing thereof, the arms of said members projecting above the rod and spaced to receive a reinforce element between them.

1,870,488. INFANT'S FOLDING BATHTUB. BEN BLEUSTEIN, New York, N. Y. Filed Aug. 22, 1931. Serial No. 558,648. 5 Claims. (Cl. 4—117.)



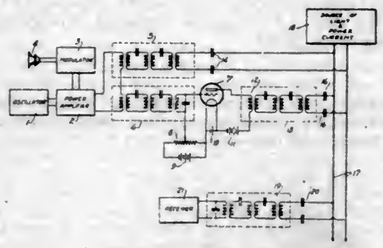
1. In a folding bath tub, a stand including a front rail, a rear rail, and means for supporting said rails for collapse towards each other, a flexible bath tub supported by said rails, a dressing table including a pair of sheet metal side members, each slotted for the reception of a guide member and having an outer face unmutilated by the slot thereof, and a guide member for each of said side members fixed to and projecting above the rear rail and passing through the slot and adapted to move therein on the movement of the table, and having a terminal headed portion permanently arranged in the interior of the side member beyond the slot, and thereby preventing disengagement of the guide member from the slot.

1,870,489. POURING SPOUT AND CONTAINER. HENRY BRUCKER, Maplewood, N. J., assignor to American Aluminum Ware Co., Newark, N. J., a Corporation of New Jersey. Filed Feb. 7, 1931. Serial No. 514,080. 11 Claims. (Cl. 221—11.)



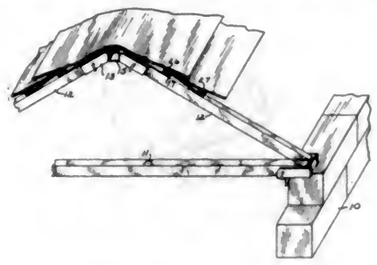
1. The combination of a container having a discharge opening in a wall thereof, and a spout including a body portion to overlie said opening and hingedly connected at one end to said wall, said spout having resilient sector-shaped side wings concentric with the point of hinging of the spout to frictionally engage the walls of said opening, one of said wings having a projection within the boundaries of said wing and projecting laterally from the plane thereof at substantially right angles thereto formed with a shoulder to positively engage the inner side of said wall of the container to limit opening movement of the spout, said projection inclining from said shoulder toward the plane of the wing to permit said projection to slip past the wall of the opening as the spout is inserted into the opening.

1,870,490. SECRET WIRED RADIO TRANSMISSION SYSTEM. JOSEPH L. CASSELL, New York, N. Y., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 20, 1930. Serial No. 489,772. 3 Claims. (Cl. 179—1.5.)



1. A transmission system comprising, in combination, a source of carrier current, means adapted to modulate said carrier current at audible frequencies, a filter system responsive to high frequency current within a predetermined frequency band, a second filter system responsive to high frequency current within a predetermined frequency band different from said first-mentioned frequency band, a thermionic tube having grid and plate electrodes, a connection between the output of said second filter and the grid of said thermionic tube, a source of biasing potential for said grid, means adapted to periodically vary the value of said biasing potential, a third filter responsive to high frequency current within the frequency band to which said second filter is responsive, a connection between the plate of said thermionic tube and said third filter system, and receiving means responsive only to high frequency current within the frequency band to which said first-mentioned filter is responsive.

1,870,491. ROOF FOR TOY STRUCTURES. ARTHUR P. CHURCH, Santa Barbara, Calif. Filed Aug. 22, 1930. Serial No. 477,053. 7 Claims. (Cl. 108—3.)



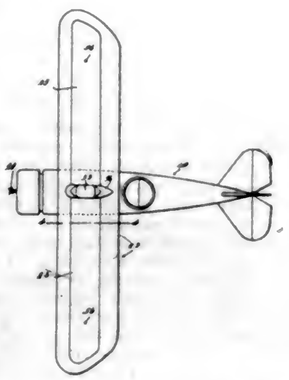
1. A roof structure comprising a plurality of plates, means on each plate for attaching a succeeding plate, and a cover secured to each plate and extending to overlie its junction with the succeeding plate.

1,870,492. COMBINED CANVAS STRETCHER AND PICTURE FRAME. LUCIEN C. CLARK, Brighton, Mass. Filed Sept. 3, 1930. Serial No. 479,525. 3 Claims. (Cl. 40—152.)



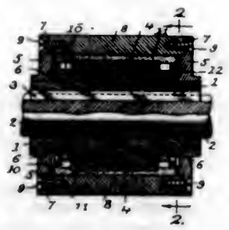
1. A combined canvas stretcher and picture frame comprising a plurality of double-faced strips, each face having a beading at its outer edge, the inner edges of the strips being rabbeted to form recesses within which to fit smaller frames, said strips having their ends mitred and also formed with interfitting tongues and recesses, and said rabbeted edges of the strips extending throughout the tongues of the joints.

1,870,493. AEROPLANE. WILLIAM JOSEPH COOLEY, Jefferson, Ga. Filed Oct. 22, 1931. Serial No. 570,475. 5 Claims. (Cl. 244—12.)



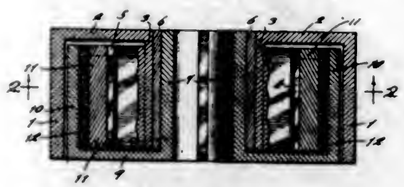
1. In an aeroplane construction of the class described, a single master wing formed with longitudinally disposed depressions, auxiliary wings adapted to fit snugly within said depressions and a supporting structure on said master wings, attaching members hingedly connected to diametrically opposite sides of said support, and hinge connections between said members and auxiliary wings, said hinge connections embodying pivotal means whereby the oppositely disposed auxiliary wings are allowed to tilt laterally in opposite directions in superposed spaced relation above said master wing.

1,870,494. CENTRIFUGAL FRICTION CLUTCH. EDWARD C. DAMROW, Fond du Lac, Wis., assignor to Damrow Brothers Company, Fond du Lac, Wis., a Corporation of Wisconsin. Filed Dec. 11, 1931. Serial No. 580,375. 1 Claim. (Cl. 192—105.)



A centrifugal clutch comprising in combination, a driving shaft, a sleeve like hub secured on said shaft and provided with a plurality of radially extending blades, a driven member comprising end heads journalled by annular flanges on said hub, and an annular sleeve fixedly attached at its respective ends to said heads, and a plurality of approximately quadrantal shaped friction shoes arranged loosely in the spaces between the aforesaid blades and having curved outer faces adapted for frictional engagement with the inner circular face of the shell of the driven clutch member, the friction shoes being under cut at their ends to overhang the annular flanges of the end heads and affording a maximum longitudinal extent of frictional contact surface in the shoes and a maintenance of the same in adjacent relation to the driven member in an inactive condition of the mechanism.

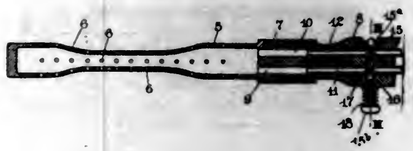
1,870,495. CENTRIFUGAL FRICTION CLUTCH. EDWARD C. DAMROW, Fond du Lac, Wis., assignor to Damrow Brothers Company, Fond du Lac, Wis., a Corporation of Wisconsin. Filed Dec. 30, 1931. Serial No. 583,857. 1 Claim. (Cl. 192—105.)



A centrifugal clutch mechanism, comprising in combination a driving member consisting of an inner cylindrical hub portion, a head forming part of said hub portion with its outer margin formed for driving engagement with a power source, and a plurality of radial blades forming a fixed part of the said hub portion, and providing intervening receiving spaces, a driven clutch member consisting of an inner cylindrical hub and an outer annular shell or sleeve portion united together by an end head, and a plurality of friction shoes of a segmental form arranged in the cavities between the aforesaid radial blades, with their outer convex faces adapted

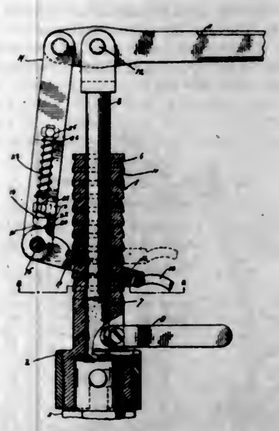
for frictional engagement with the inner circular face of the outer shell or sleeve of the driven clutch member, the friction shoes having corner recesses and the radial blades having end guide ribs engaging said recesses.

1,870,496. HAIR CURLING DEVICE. ROY E. DRANNON and NAT W. KENISON, Bexley, Ohio. Filed July 17, 1931. Serial No. 551,458. 4 Claims. (Cl. 132—33)



1. A hair curling device comprising a tubular perforated iron about which the hair to be curled is wound, means for supplying steam and air to the interior of said iron, a handle for said iron, and control means in said handle for alternately admitting the steam and air to said iron.

1,870,497. PRESSURE GREASE GUN. EMMETT ADDISON DUNLAP, Fort Worth, Tex., assignor to Reliance Machine & Stamping Works, Inc., New Orleans, La., a Corporation of Louisiana. Filed June 10, 1930. Serial No. 460,182. 12 Claims. (Cl. 221—47.4.)

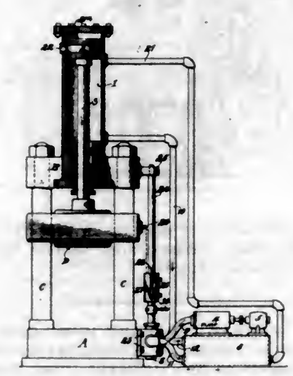


1. A grease gun comprising a barrel and plunger operating means including a lever pivotally connected to said plunger operating means, a ring pawl freely slidable longitudinally on said barrel and a link pivotally connecting said lever and ring pawl, the latter being inclinably in either direction relative to a plane perpendicular to the axis of said barrel so as to engage the sides of said barrel and act as a shiftable fulcrum for said lever.

1,870,498. CONCENTRATED SOLUTIONS FOR DYEING PURPOSES. HANS ELLNER, Stuttgart, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 12, 1929. Serial No. 385,470, and in Germany Aug. 13, 1928. 12 Claims. (Cl. 8—6.)

1. The process which comprises mixing one part by weight of a coupling component containing at least one hydroxy group and being free from sulfonic and carboxylic acid groups, with 1 to 1.5 parts by volume of a water miscible mono hydric alcohol, and adding thereto the about theoretical quantity of a caustic alkali solution of 34° Bé. and 1 to 2 parts by volume of water.

1,870,499. HYDRAULICALLY OPERATED DROP HAMMER. WALTER ERNST, Mount Gilead, Ohio, assignor to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed June 18, 1929. Serial No. 371,777. 3 Claims. (Cl. 60—52.)

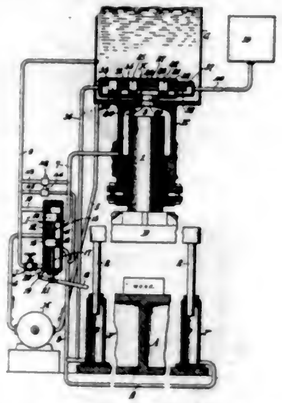


In a self-contained hydraulic drop hammer unit, the combination with a vertically reciprocable hammer; of a cylinder having a pressure end and a closed end; a piston mounted for reciprocatory movements in the cylinder and connected to the hammer; a pump; an operating motor for the pump; and means forming with the pump and the cylinder a closed hydraulic circuit including a pump suction pipe, a supply pipe for receiving discharge from the pump, an exhaust pipe, a combined inlet and outlet pipe connected at one of its ends to the pressure end of the cylinder, the opposite end of said pipe being adapted to communicate separately with both the supply pipe and the exhaust pipe, a valve movable to two positions for placing the combined inlet and outlet pipe in communication with the supply pipe to raise the piston and the hammer and for placing said combined inlet and outlet pipe in communication with said exhaust pipe when the hammer is in its upper position for effecting a drop of the hammer; a relief pipe having one of its ends arranged to communicate with the pump suction pipe and having its other end arranged to communicate with the cylinder at a point adjacent the closed end thereof but spaced from said closed end at a distance greater than the thickness of the piston, whereby, when the hammer is raised to its uppermost position, pressurue fluid will be returned to the pump suction pipe; and means for operating said valve.

1,870,500. HYDRAULIC PRESS. WALTER ERNST and HOWARD F. MACMILLIN, Mount Gilead, Ohio, assignors to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed May 9, 1930. Serial No. 451,181. 20 Claims. (Cl. 138—17.)

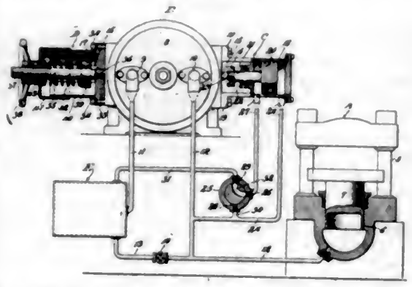
1. In a press, the combination of reciprocable ram means; cooperating cylinder means having a ram advancing chamber and a ram returning chamber; a surge tank; a reversible flow hydraulic circuit connected to the chambers of said cylinder means and providing for interchange of fluid between said chambers for operating the ram means in either direction; and a valve interposed between said tank and said ram advancing chamber and normally

affording communication therebetween and being directly responsive to a decrease in pressure in said ram returning chamber during performance of a pressing stroke and



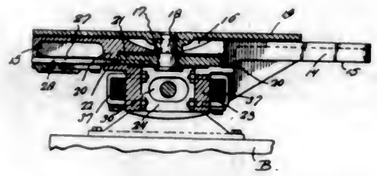
prior to building up of pressure in said ram advancing chamber for closing communication between said tank and said ram advancing chamber.

1,870,501. PLURAL PRESSURE PUMP CONTROL FOR HYDRAULIC PRESSES. WALTER ERNST, Mount Gilead, Ohio, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed July 14, 1931. Serial No. 550,777. 1 Claim. (Cl. 138—17.)



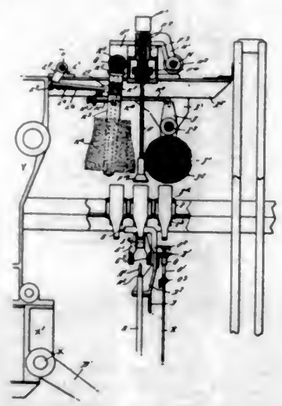
A control mechanism to actuate a ram or the like, in combination with a variable output pump having a housing, control means therein provided with shiftable control rods at diametrically opposite sides slidable through and projecting beyond the housing, spring mechanism exteriorly of the pump having a cross head connected to the control rod at one side of the housing, a plural pressure control mechanism including a cylinder member, a pair of spaced apart supporting members extending from the cylinder member and attached to the said housing and offsetting the cylinder member therefrom, a piston operable in the cylinder member having a stem extending through the end of the cylinder member facing the pump and provided with a cross head located between said supporting members and attached to the other control rod, the said mechanisms by their location substantially symmetrically on opposite sides of the pump serving to balance the entire structure, said cylinder being located in a closed hydraulic circuit comprising a fluid tank, a suction pipe line extending from said tank and attachable to the inlet of the pump, a pressure pipe line attachable to the outlet of the pump and to the ram and communicating with the cylinder on the larger area side of the piston, a valved return line from the pressure pipe line to the tank, a three way valve member, a casing for the valve member having three ports controlled by the valve, said pressure pipe line being connected to one of said ports, a pipe communicating with another of said ports and with said tank, and a duct leading from the other port to the cylinder at the smaller area side of the piston.

1,870,502. FIFTH WHEEL CONSTRUCTION. ALBERT C. FUHRMAN, Canton, Ohio. Filed Sept. 15, 1930. Serial No. 482,030. 5 Claims. (Cl. 280—33.1.)



1. In a fifth wheel construction, a body plate having a slot and throat communicating with each other, a hollow boss depending centrally from said plate, a disk adapted to repose upon said plate, a pin projecting from said disk, a locking plate received by said boss for rotation therein and having a passage adapted to coincide with said slot and throat of the body plate to slidably receive said pin, means for rotating said locking plate from a remote point, a hollow casting secured to the lower edge of said boss and holding the locking plate positioned therein, and means including a shaft passed through said casting for supporting the body plate for tilting movement.

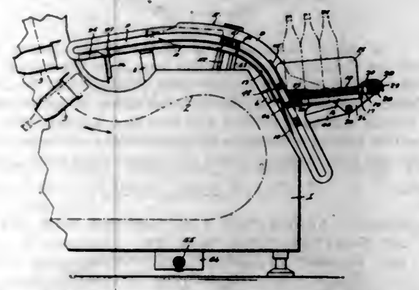
1,870,503. BOTTLE CLEANING APPARATUS. JOHN R. GRUETTER, Cleveland, Ohio, assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 23, 1931. Serial No. 510,713. 22 Claims. (Cl. 15—60.)



1. In an apparatus for cleaning bottles, the combination, with a conveyor comprising transversely extending bottle carriers each having seats for bottles and adapted to be moved intermittently through such apparatus, of brushing means above said conveyor, the said means comprising a brushing mechanism consisting of a set of brushes mounted for rotation each about a substantially vertical axis and extending transversely of said apparatus, and a second brushing mechanism comprising a brush adjacent to the said set of brushes and extending transversely of said apparatus and mounted for rotation about a substantially horizontal axis, a transverse series of bottle-bottom clamps mounted for reciprocation between the two brushing mechanisms, means for rotating the bottle-bottom clamps, means for lifting a transverse series of bottles from their

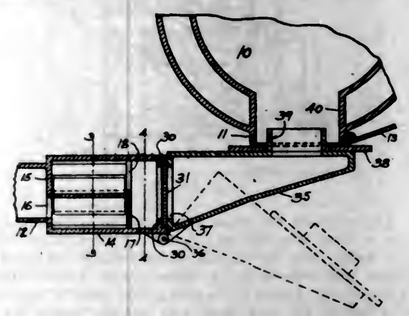
respective seats in a carrier into engagement with the bottle-bottom clamps and for moving the bottles thus clamped upwardly between said brushing mechanisms and for thereafter restoring the bottle to their seats in such carrier, means operative by the lifting of the said bottle from their seats for moving said brushing mechanisms toward each other and for moving the said brushing mechanisms apart during the downward movement of the bottles toward their seats, means for rotating the said brushes and means for reciprocating one of the said brushing mechanisms transversely of the conveyor.

1,870,504. BOTTLE HANDLING MECHANISM. JOHN R. GRUETTER, Cleveland, Ohio, assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 1, 1931. Serial No. 578,297. 17 Claims. (Cl. 198—20.)



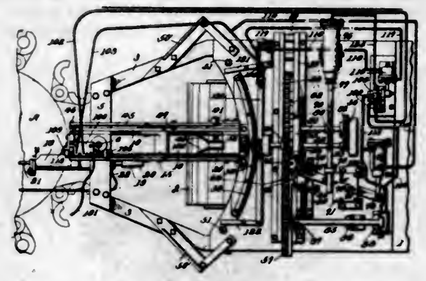
1. In bottle handling apparatus, the combination of bottle holders, bottle delivery means consisting of a continually rotating screw on which the bottles rest, means movable to and fro between bottle receiving and discharging positions for conducting bottles released from the delivery means to the holders, and bottle obstructing means restraining the delivery of bottles to the conducting means excepting at intervals when the last mentioned means is in bottle receiving position.

1,870,505. AUTOMATIC DRAFT CONTROLLING DEVICE. WILLIAM A. HANNUM, Grand Lake, Colo. Filed Oct. 23, 1930. Serial No. 490,739. 5 Claims. (Cl. 236—45.)



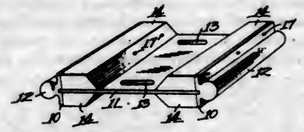
1. An air controlling device of the character described, comprising a casing, an inner transverse wall mounted in the casing and having staggered openings therethrough, a longitudinally disposed wall mounted in the casing and engaging against said transverse wall, said longitudinally disposed wall having a longitudinally disposed opening therethrough, a rockable closure member mounted in the casing and engaging within said longitudinally disposed opening, said casing and said transverse wall having staggered openings therethrough whereby to permit the passage of air through the casing on opposite sides of said closure member and coactively cushioning the movement of said closure member, adjustable balancing means carried by said closure member for adjusting the balance thereof, and means for connecting the casing to a heating unit.

1,870,506. LEER LOADER. COY H. HARDMAN, Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Jan. 30, 1929. Serial No. 336,264. 8 Claims. (Cl. 198—31.)



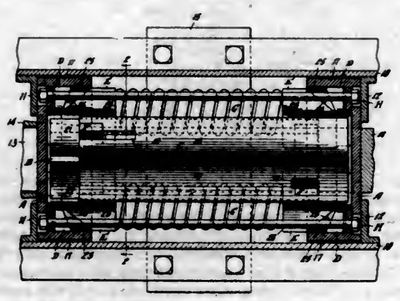
1. A leer loader including a pivotally mounted frame, a carriage adapted to travel back and forth on said frame, a cylinder mounted on said carriage, grippers adapted to be opened and closed and raised and lowered by said cylinder, a lever operatively connected with said carriage, a cylinder for operating the lever, a vertically reciprocable rod, a ware steadying device carried by the rod, an operative connection between said lever and said rod, and means for swinging said frame back and forth across the leer.

1,870,507. SWIMMING FLOAT. CARL C. HARRIS, Orange, Mass. Filed Mar. 28, 1932. Serial No. 601,531. 8 Claims. (Cl. 9—11.)



1. As an article of manufacture, a float comprising a center board, vertical side pieces along the sides thereof and secured thereto, and buoyant material secured to the opposite sides of the center board.

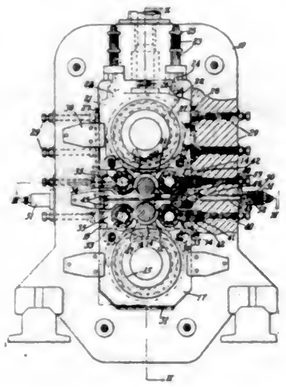
1,870,508. FRICTION SHOCK ABSORBING MECHANISM. STACY B. HASELTINE, Chicago, Ill., assignor by mesne assignments, to W. H. Miner, Inc., a Corporation of Delaware. Filed Aug. 2, 1923, Serial No. 655,223. Renewed Sept. 2, 1927. 23 Claims. (Cl. 213—36.)



19. A friction draft gear including a center column; relatively longitudinally movable intercalated friction plates supported on the sides thereof; a constricting de-

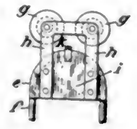
vice; a plurality of application spring means located abreast on the sides of the column and acting on the constricting device to set up pressure on the plates and yieldingly resist relative motion of the plates in response to draft strains; and means for returning the plates to release position.

1,870,509. ROLLING MILL. JOHN A. HEIDEN, Pittsburgh, Pa. Filed Mar. 20, 1928. Serial No. 263,096. 43 Claims. (Cl. 80—38.)



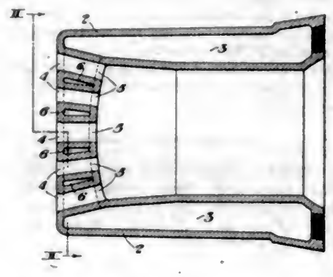
19. A rolling mill having in combination a pair of working rolls, and supporting rolls for each of said working rolls mounted on opposite sides thereof, the axes of said supporting rolls being disposed parallel to the axes of the associated working rolls, the axial center of the supporting rolls for each working roll being positioned on a common plane that passes above the plane of the axial center of associated working roll, so that said supporting rolls will resist lateral deflection of said working rolls and will translate a portion of said resistance in a direction opposing the force exerted by a piece being rolled between said working rolls.

1,870,510. DEVICE FOR CARRYING POWER LINES. MAX HESPELER, Neckarsulm, Germany. Filed Apr. 10, 1930, Serial No. 443,238, and in Germany May 23, 1929. 1 Claim. (Cl. 248—33.)



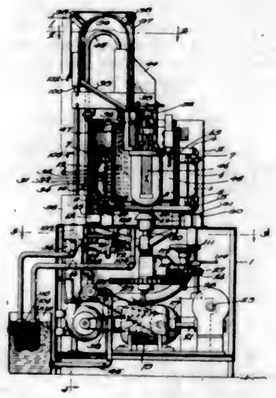
In a device of the kind described having a supporting cable and an electric conductor, means for supporting the conductor wire including a pair of laterally spaced inverted U-shaped frames of general rectangular shape, a block in the form of a semi-circular segment having its chordal side horizontal and its arcuate side extending upwards, said block being fixed between the lower parts of the legs of said frames and having its arcuate side grooved to receive the conductor, pulley axles extending between said frames at the upper parts of the legs, and pulleys on said axles peripherally grooved to fit on the cable.

1,870,511. TUYÈRES. JOHN C. HOPKINS, Lakewood, Ohio. Filed Aug. 28, 1931. Serial No. 560,029. 4 Claims. (Cl. 266—41.)



1. A tuyère comprising a double walled hollow body portion forming a water jacket and a double walled nose portion integral with said body portion and communicating therewith to permit the circulation of cooling water through said body portion and said nose portion, said nose portion having a plurality of passageways extending therethrough and communicating with said hollow body portion.

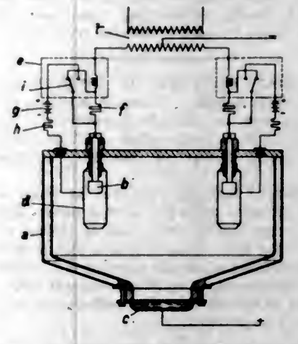
1,870,512. APPARATUS FOR TESTING THE EFFECT OF WEATHER UPON OBJECTS. CLARENCE W. JAMESON, Chicago, Ill., assignor to Atlas Electric Devices Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 13, 1927, Serial No. 161,010. Renewed Mar. 10, 1932. 15 Claims. (Cl. 23—253.)



7. Apparatus of the class described, including in association, a lamp constituting a source of ultra-violet radiation, a holder for the objects to be treated arranged to maintain said objects at a substantially fixed distance from said lamp, means for wetting said articles and controlling means for said lamp and wetting means for alternately subjecting said objects to the effects of said lamp and said wetting means.

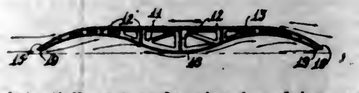
1,870,513. METAL VAPOR RECTIFIER. ERWIN KERN, Wettingen, Switzerland, assignor to Aktiengesellschaft Brown, Boveri and Cie, Baden, Switzerland. Filed June 18, 1928, Serial No. 286,452, and in Germany June 27, 1927. 2 Claims. (Cl. 175—363.)

1. In a metal vapor rectifier, means for suppressing backignition including a differential selective relay to operate in the case of a return current connected to the back-ignition circuit, an additional ohmic resistance brought into use by the relay and connected in the back-ignition circuit,



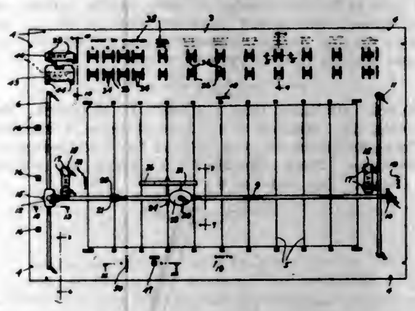
a grid interposed between each anode and the cathode, and means to charge the grid negatively on the operation of the said relay.

1,870,514. WING. EMMANUEL G. KONTOS, Chicago, Ill. Filed Dec. 18, 1930. Serial No. 503,153. 9 Claims. (Cl. 244—12.)



1. A substantially rectangular wing, for a flying machine, having a downwardly flared edge therearound, and means formed in said wing, extending longitudinally thereof below the plane of said edge, to maintain the stability of said wing.

1,870,515. FOOTBALL GAME INDICATOR. JOHN STANLEY KOTLARZ, Elizabeth, N. J. Filed Apr. 12, 1932. Serial No. 604,814. 20 Claims. (Cl. 116—120.)

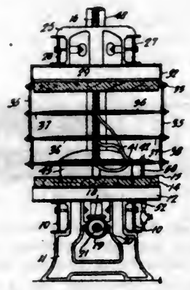


1. A football game indicator comprising a board having a representation of a football field thereon, a rod extending longitudinally over the field, a yardage marker slidably mounted on the rod, and a ball marker slidably mounted on the rod and operatively associated with the yardage marker.

1,870,516. PRINTING ON TEXTILE FABRICS. MAX ALBERT KUNZ, Mannheim, and FRITZ TELLER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 26, 1928, Serial No. 273,147, and in Germany May 23, 1927. 8 Claims. (Cl. 8—5.)

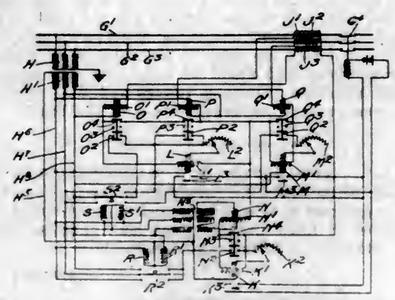
1. The process for printing with vat dyestuffs on textile fabrics which are not deleteriously affected by alkalies which comprises printing the fabric with a printing paste comprising a vat dyestuff and as a thickening agent a vegetable mucilage capable of being coagulated by basic agents, and then fixing the vat dyestuff on the printed parts by treating the fabric in the presence of a reducing agent in a bath comprising an alkaline agent.

1,870,517. VENEER PRESS. ERNEST GEORGE LACEY, Abbotsford, Victoria, Australia. Filed Oct. 14, 1930, Serial No. 488,623, and in Australia Nov. 22, 1929. 11 Claims. (Cl. 144—281.)



1. A veneer press comprising a fixed horizontally disposed base plate, an adjustable top plate arranged in vertical alignment with the base plate, means for adjusting the top plate to and from the base plate, and for retaining it in an adjusted position, a plurality of flexible metal envelopoes disposed parallel with and arranged between the fixed and adjustable plates, means for adjustably supporting the envelopes in position, means for delivering water under pressure to one of the ends of the said envelopes, means for discharging the water from the opposite ends of the envelopes, and valve mechanism in the discharge means for regulating the pressure within the envelopes.

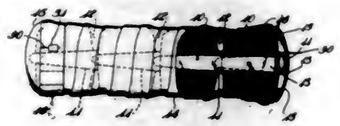
1,870,518. ELECTRIC PROTECTIVE SYSTEM. HENRY LEBEN, Newcastle-upon-Tyne, and NORMAN COOKE, Sunderland, England, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England, a Company of Great Britain. Filed July 11, 1929, Serial No. 377,563, and in Great Britain July 31, 1928. 15 Claims. (Cl. 175—294.)



1. In an electric protective system having a time-discriminating action dependent on the fault distance, the combination of a circuit-breaker in the protected line, a normally inoperative time-discriminating relay, means whereby the time-discriminating relay when rendered operative acts to open the circuit-breaker after a time interval which depends on a ratio dependent on the voltage and current characteristics of the line and representative of the fault distance, an instantaneously acting initiating relay having a contact-making system and coils act-

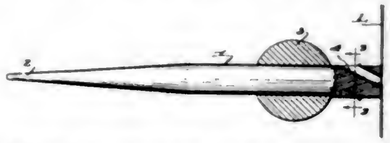
ing wattmetrically thereon, means whereby the initiating relay acts when operated to render the time-discriminating relay operative, and means for energizing the initiating relay coils in accordance with the voltage and current characteristics of the line whereby the relay is caused to operate only when the flow of power in the line is in a predetermined direction and a ratio dependent on the voltage and current characteristics of the line and representative of the fault distance is less than a predetermined value.

1,870,519. PACKAGE AND METHOD OF MAKING THE SAME. CHARLES W. LEGUILLON, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Jan. 8, 1930. Serial No. 419,396. 25 Claims. (Cl. 93—2.)



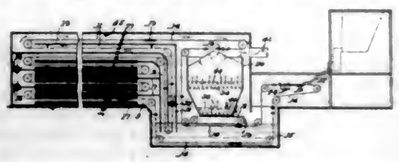
1. In combination with a plurality of frusto-conical articles assembled in end-to-end relation, a package therefor comprising a reinforcing strip lying upon the surfaces of the articles and extending from one to another thereof, a helical wrapping upon said articles and reinforcing strip and means for securing the wrapping means for securing the wrapping against unwinding.

1,870,520. FISHLINE FLOAT. MILES E. LOEHR, Claypool, Ind. Filed July 8, 1929, Serial No. 376,779. Renewed Jan. 2, 1932. 1 Claim. (Cl. 43—49.)



A fishline float comprising a stem of buoyant material tapered towards one end and having bore extending longitudinally and obliquely from the larger end and opening through one side wall of the stem, a line having a loop formed thereon and extended through the bore in said larger stem end and passed around the stem, one end of said line extending in one direction and the other end in the opposite direction, one being designed to carry the sinkers and hooks, the other to be held and manipulated by the fisherman, and a buoyant member slidably mounted on said stem and adjustable toward and away from the larger end to vary the sensitiveness of the float.

1,870,521. APPARATUS FOR CARBONIZATION OF FUEL BRIQUETTES. HENRY F. MAUREL, Providence, R. I., assignor to Maurel Investment Corporation, a Corporation of Rhode Island. Filed Mar. 5, 1929. Serial No. 344,478. 8 Claims. (Cl. 202—117.)

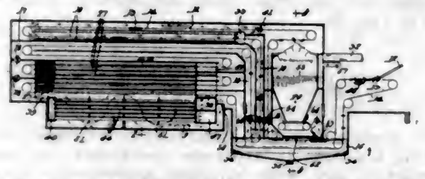


1. In an apparatus for carbonizing ground coal briquettes, the combination of a distilling chamber having means for heating it by indirect heat, means for protecting said chamber from direct heat, a hardening chamber having means for heating it by direct heat, an endless conveyor adapted to carry the briquettes back and forth through the first chamber and then into the second chamber and finally discharging them, and means for keeping the gases in said chambers from mixing.

1,870,522. MANUFACTURE OF FUEL BRIQUETTES FROM WASTE WOOD. HENRY F. MAUREL, Providence, R. I., assignor to Maurel Investment Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Sept. 16, 1929. Serial No. 393,121. 2 Claims. (Cl. 44—24.)

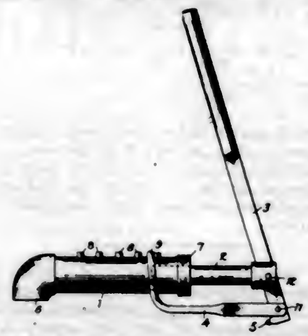
1. A method of making briquettes of waste wood and bark, which includes mixing it with a heavy asphalt base oil in the proportion of from ten to thirty percent by weight, kneading it to bring it into a plastic and uniform condition, forming the plastic mixture into briquettes and subjecting the briquettes to direct contact with products of combusion to harden the same sufficiently to produce a fuel which can be handled.

1,870,523. APPARATUS FOR THE CARBONIZATION OF COALS. HENRY F. MAUREL, Providence, R. I., assignor to Maurel Investment Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Sept. 21, 1929. Serial No. 394,245. 5 Claims. (Cl. 202—117.)



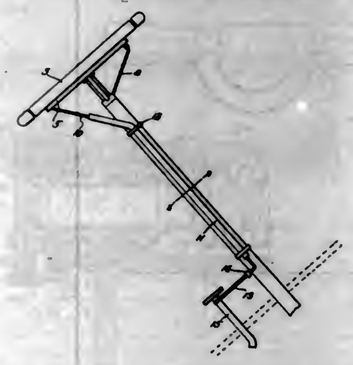
2. In an apparatus for preparing ground fuel briquettes, the combination of a chamber having means for heating it by indirect heat, means for protecting said chamber from direct heat and the products of combustion therefrom, a second chamber having means for heating it by direct heat, an endless conveyor extending into and through said chamber to convey the briquettes into the first chamber and back and forth therein, entering at the bottom, and then through the second chamber, and means for preheating the first chamber, located below the bottom thereof, and heating entirely by indirect heat.

1,870,524. GREASE GUN. ROBERT E. MCGAHEY, Alexandria, Va., assignor to Reliance Machine & Stamping Works, Incorporated, New Orleans, La., a Corporation of Louisiana. Filed July 22, 1930. Serial No. 469,747. 6 Claims. (Cl. 221—47.4.)



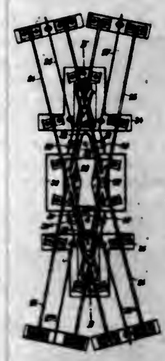
1. In a grease gun in combination, a cylinder, a piston working in said cylinder, a lever for operating said piston and having a pawl pivoted thereto and surrounding the body of said cylinder and movable longitudinally thereof.

1,870,525. STEERING WHEEL BRAKE. IKUGORO NAGAMATSU, Las Vegas, Nev. Filed Sept. 22, 1931. Serial No. 564,407. 3 Claims. (Cl. 280—88.)



1. In combination with a brake pedal and steering column and steering shaft of a motor vehicle, a steering wheel, a universal joint connecting the hub of the wheel with the upper end of the shaft, means for supporting the wheel against tilting movement except in one direction and means whereby the tilting movement of the wheel will depress the brake pedal.

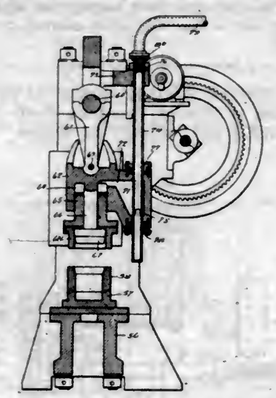
1,870,526. ELECTRIC TOY RAILWAY. FRIEDRICH OTTENSTEIN, Nuremberg, Germany. Filed June 5, 1931, Serial No. 542,438, and in Germany June 19, 1930. 3 Claims. (Cl. 238—10.)



1. In an electric toy railway track central live rails, a metal tongue at the switches and crossings disposed between the rails of the track for forming a continuation of the said live rails, metal bows having slots for the insertion of the central rail ends and a screw connection for connecting the said metal bows to the metal tongue and for fixing the metal tongue to the part of the track support disposed under it, as and for the purpose set forth.

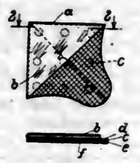
1,870,527. HYDRAULIC CONNECTION FOR PRESSES. ROBERT J. PARDEE, Cleveland Heights, Ohio, assignor to The Cleveland Punch & Shear Works Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 24, 1931. Serial No. 577,071. 11 Claims. (Cl. 267—1.)

1. In a machine of the character described, a shaft, a cylinder slide operatively connected with said shaft and having a fixed stroke, a piston slidably mounted within said cylinder slide, a rigid member disposed adjacent said cylinder slide and extending into said cylinder slide, a bore in said rigid member disposed in constant open



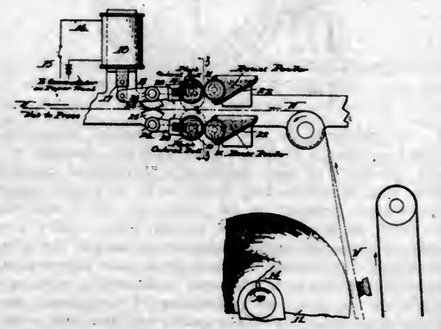
communication with the interior of said cylinder slide and means permitting a reciprocation of said cylinder slide with respect to said member.

1,870,528. CORNER HOLDER FOR PICTURES OR THE LIKE. LEOPOLD RADO, Berlin-Wannsee, Germany. Filed Apr. 9, 1931, Serial No. 528,933, and in Germany Nov. 27, 1929. 10 Claims. (Cl. 40—156.)



9. A corner holder for cards comprising a triangular pocket of transparent membrane and having an upper wall and a lower wall, the pocket having fibrous material attached to its lower face and projecting out beyond the opening in the pocket.

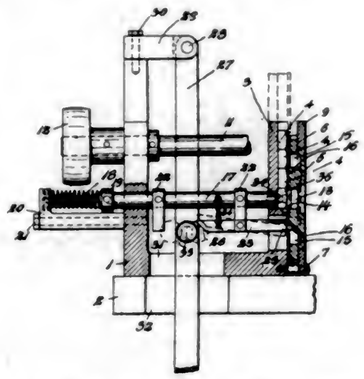
1,870,529. PASTE DRYING DEVICE FOR A PRINTING WEB. OSCAR CHARLES ROESEN, Brooklyn, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 15, 1927, Serial No. 233,441. Renewed Jan. 6, 1932. 7 Claims. (Cl. 242—58.)



1. In a web press, the combination with a fresh web roll supporting shaft adapted to rotate on its axis, and a contact on this shaft for completing a circuit at a

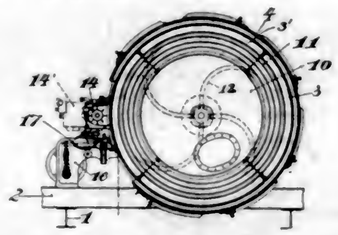
predetermined time during the revolution of the roll, of means for engaging the surface of the fresh web roll for pasting the same to the expiring web roll and means operated by the closing of said contact for applying powder to the surface of the web after pasting, for the purpose described.

1,870,530. SEMI-AUTOMATIC BOLT NUTTING MACHINE. BEN M. SAWYER, Cleveland, Ohio. Filed Aug. 1, 1929. Serial No. 382,610. 13 Claims. (Cl. 10—155.)



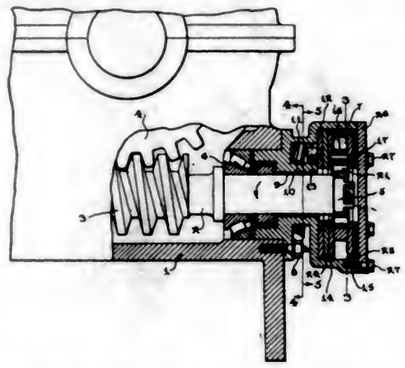
1. In a device of the class described, in combination, a chute for feeding nuts, a constantly rotating receiving means having an opening substantially corresponding in configuration to that of the nuts for receiving the nuts, and instrumentalities for transferring the nuts from said chute to said means, and timing mechanism for rendering said instrumentalities operative when the opening in said means becomes registered with a nut.

1,870,531. REFRIGERATING PROCESS AND APPARATUS FOR COOLING FAT EMULSIONS SUCH AS MARGARINE AND THE LIKE. WILHELM GOTTHILF SCHROEDER, Lubeck, Germany. Filed Aug. 20, 1929, Serial No. 387,166, and in Germany Feb. 4, 1926. 3 Claims. (Cl. 62—114.)



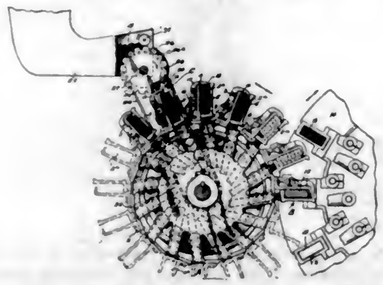
1. An apparatus for cooling fat emulsions comprising a jacket member, a drum provided with hub elements revolubly mounted in said member, a cylindrical member rigidly secured within said drum so as to form a space between them adapted to be constantly and completely filled with brine, a series of concentrically coiled tube lengths for a cooling agent mounted one within the other in said space and secured to said drum, said tube lengths being coiled to produce a flow of said cooling agent oppositely to the direction of rotation of said drum, supply and drain pipes in the respective hub elements terminating each with a hollow central head on the cylindrical member and tubular spokes on said head for each of said coiled tube lengths.

1,870,532. FRICTION BRAKE. THOMAS J. SCHUETZ, Tulsa, Okla., assignor to Braden Steel & Winch Company, Tulsa, Okla. Filed July 15, 1929. Serial No. 378,474. 3 Claims. (Cl. 188—72.)



1. A friction brake for a rotary shaft, comprising a housing adapted to receive a portion of said shaft, a friction plate unit in said housing surrounding said shaft and comprising a plurality of friction plates secured together with a clutch casing interposed therebetween, a clutch member fixed on said shaft and rotatable therewith, within said clutch casing, and a pressure member adapted to normally prevent the rotation of said unit, said clutch being adapted to rotate freely in one direction and engage said friction plate unit when force is applied in the reverse direction, whereby retrograde rotation of said shaft is prevented.

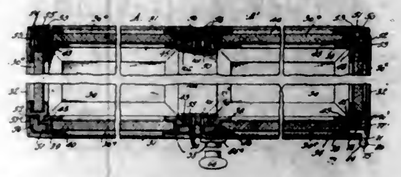
1,870,533. METHOD OF AND MACHINE FOR PACKAGING CIGARETTES. FITZHUGH EARLY SCOTT and LAWRENCE R. BRYANT, Richmond, Va., assignors to Liggett & Myers Tobacco Company, New York, N. Y., a Corporation of New Jersey. Filed July 24, 1931. Serial No. 552,992. 17 Claims. (Cl. 226—5.)



1. The method of packaging cigarettes with a humidor insert, which consists in segregating a group of unwrapped cigarettes, compressing the group, associating a humidifying insert with said group and in direct contact with certain of the cigarettes therein, and then delivering the said group of cigarettes along with the insert into a prepared wrapper and closing the same, whereby the moisture from the humidifying element will be free to be taken up by the tobacco in the wrapped package.

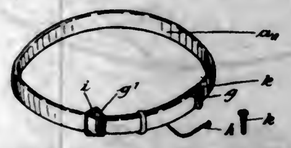
5. In a machine for packaging cigarettes, a turret carrying a plurality of cigarette pockets, each having an opening in a wall thereof, a closure for said opening, means for opening and closing the closure, and means for feeding a humidifying insert into direct contact with the cigarettes in each pocket when the said closure is in open position.

1,870,534. DISPLAY CASE OR CABINET. HARRY L. SKOOGH, Olean, N. Y., assignor to Art Metal Construction Company, Jamestown, N. Y., a Corporation. Filed Apr. 24, 1930. Serial No. 446,900. 22 Claims. (Cl. 312—140.)



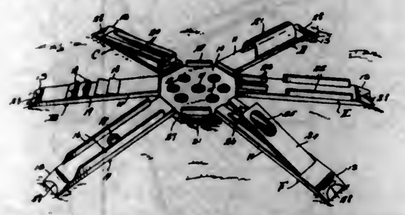
10. A cabinet having a plurality of panels connected to form an enclosure with the edges of certain of said panels forming the margins of an opening into said cabinet, a detachable panel having its edges formed to abut against said marginal edges of said opening for closing the latter, fixed shoulders on said first panels at the marginal edges of said opening, and endwise movable locking bars having parts arranged in and extending lengthwise of the edges of said detachable panel and having projections which, when said bars are moved lengthwise, engage behind said shoulders to lock said panel in position.

1,870,535. SWIMMING BELT. MAX STELLMACHER, Berlin, Germany. Filed May 28, 1928, Serial No. 281,227, and in Germany June 1, 1927. 4 Claims. (Cl. 9—17.)



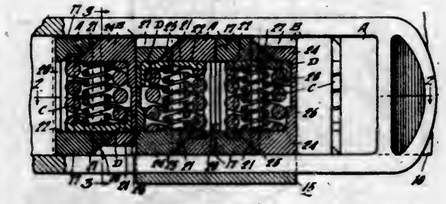
1. A combined life preserver and belt consisting of an elongated and tubular inflatable body normally foldable in the longitudinal direction and closed at both ends to serve as a belt, a combined inflating and closing member for said inflatable body, a buckle connected to one of the end portions of the tubular body for receiving the other end portion of the body to permit the same to be adjusted to any waist measurement with the end portions overlapping, an abutment on the other end portion of the body for coacting with the buckle to prevent said end portion slipping through the buckle when the body is inflated, and a holding member for retaining the overlapping portions of the tubular body together when the device is used as a belt or preserver.

1,870,536. GAME APPARATUS. STEVEN L. VACCARO, Jr., New Orleans, La. Filed Jan. 22, 1931. Serial No. 510,553. 1 Claim. (Cl. 273—32.)



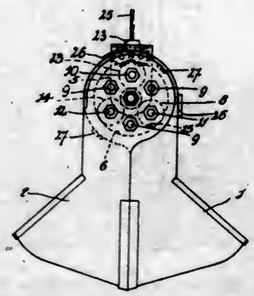
A game apparatus of the character described comprising a central element, a plurality of run-way elements, hinges connecting the outside faces of the run-way elements to the central element and normally supporting the runway elements with their upper faces in spaced relation to the upper face of the central element whereby said runway elements may be turned into a position approximately parallel to each other and at right angles to the central element, and means for holding the runway elements in the last named position.

1,870,537. FRICTION SHOCK ABSORBING MECHANISM. WILLIAM E. VAN DORN, Altadena, Calif., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 31, 1930. Serial No. 425,029. 9 Claims. (Cl. 213—38.)



2. In a friction shock absorbing mechanism, the combination with a plurality of transversely disposed friction elements, said elements being arranged in pairs, the elements of each pair having wedging engagement with each other, one of said elements of each pair having a longitudinally disposed friction surface, and the elements of two adjacent pairs having frictional engagement with each other along transverse friction surfaces; of spring resistance means opposing relative movement of the elements of each pair; and a spring cap cooperating with each pair of elements and having a longitudinally disposed friction surface cooperating with the longitudinal friction surface of one of said elements and held against longitudinal movement with respect to the other element.

1,870,538. AUTOMATIC GRIPPER. WILLEM VOORWINDE, Rotterdam, Netherlands. Filed Oct. 2, 1929, Serial No. 396,916, and in the Netherlands Oct. 2, 1928. 3 Claims. (Cl. 37—184.)

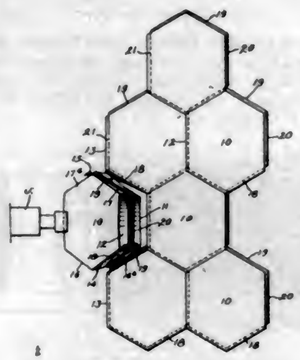


1. In combination, a pair of grab members mounted for relative swinging movement, a ring gear connected with one grab member and arranged concentric to the axis of swinging movement of the members, a set of planetary gears connected with the other grab member and in mesh with the ring gear, and a sun gear mounted concentrically within the ring gear and in mesh with the planetary gears.

1,870,539. TUNNEL WALL BLOCK. ARTHUR W. WARNER, Media, and ROSCOE F. BALLARD, Chester, Pa., assignors to Tunnel and Mine Machinery Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Aug. 29, 1930. Serial No. 478,780. 5 Claims. (Cl. 61—45.)

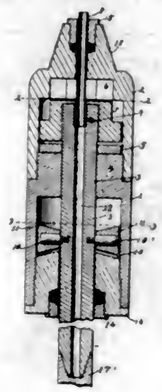
1. A tunnel wall block having parallel ends and having sides, each side including two faces forming a salient

angle, the faces of each side being equipped with similar elements of tongue and groove joints, the elements of



diametrically opposed faces of opposite sides being complementary, each of said elements tapering in width in a direction longitudinal to the face.

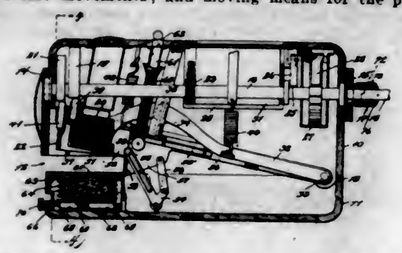
1,870,540. ROTARY JAR. LENNIE WELLS, Long Beach, Calif. Filed Sept. 2, 1924. Serial No. 735,324. 11 Claims. (Cl. 255—27.)



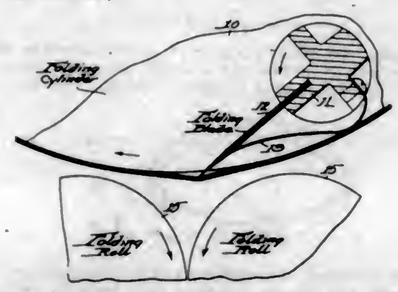
1. In an apparatus of the class described, in combination, a pair of relatively movable members, one of which is adapted to be held stationary while the other is adapted to have an upward strain placed thereon and continuously rotated through the arc of an entire circumference for subjecting said first member to one or more upward blows or shocks, each of said members being provided with means adapted to coact to produce said upward blows or shocks.

1,870,541. METER PRESS. RALPH G. WHITLOCK, Los Angeles, Calif., assignor to Ralph G. Whitlock Patents, Inc., Las Vegas, Nev., a Corporation of Nevada. Filed Nov. 13, 1928. Serial No. 319,147. 34 Claims. (Cl. 101—301.)

1. A printing press of the character disclosed comprising a printing member; a guard therefor; means for directing the printing member and guard to substantially right line movements; and moving means for the printing member and guard, comprising cams having related lengths in their faces for timing the movements of the print member and guard.

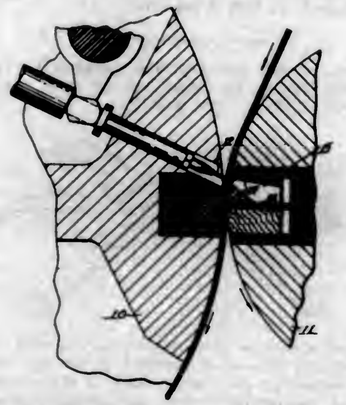


1,870,542. PAPER GUIDE FOR FOLDING BLADES. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Sept. 8, 1928, Serial No. 304,656. Renewed Jan. 6, 1932. 13 Claims. (Cl. 270—50.)



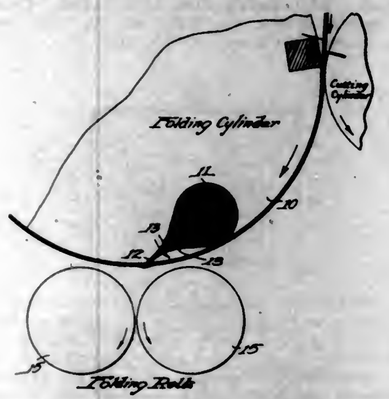
1. The combination of a folding blade for a folding machine with a shield for preventing the paper from crowding into the corner next to the butt of the blade.

1,870,543. PAPER PIERCING DEVICE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Dec. 18, 1928, Serial No. 326,861. Renewed Jan. 19, 1932. 6 Claims. (Cl. 270—38.)



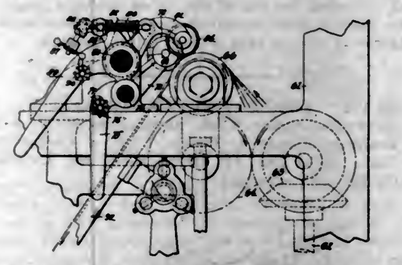
1. In a folding couple, the combination with two cylinders forming the couple and impaling pins on one of said cylinders, the other cylinder having clearance holes for the impaling pins contracted at their outer ends so as to admit the pin snugly and give an adequate support to the paper on that cylinder around the pin.

1,870,544. FOLDING BLADE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Jan. 2, 1929, Serial No. 329,869. Renewed Mar. 26, 1932. 6 Claims. (Cl. 270—50.)



1. The combination with a folding cylinder, of a rotating folding blade-element having means to conform the sheet being folded to substantially the curvature of the folding rolls during the folding of the sheet.

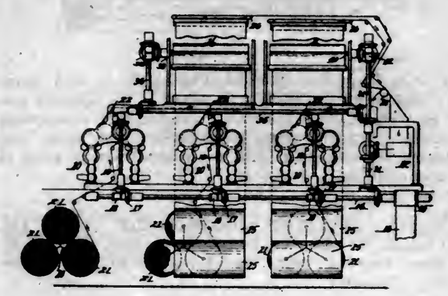
1,870,545. WEB FEEDING AND SLITTING MECHANISM. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed May 26, 1926, Serial No. 111,787. Divided and this application filed Apr. 6, 1929. Serial No. 353,197. 9 Claims. (Cl. 164—61.)



1. In a web feeding device, the combination with a drag roller, and means for positively driving the drag roller, of a slitting shaft having a slitting knife thereon for cooperating with the drag roller to slit the web longitudinally, positive means for driving the slitting shaft from the drag roller and means whereby the slitting shaft can be swung away from the drag roller and held in fixed position away from it.

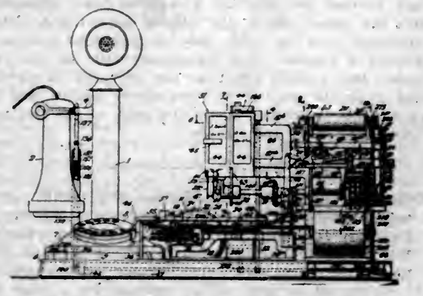
1,870,546. PRESS DRIVE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed May 10, 1929, Serial No. 362,018. Renewed Jan. 6, 1932. 8 Claims. (Cl. 270—8.)

1. In a newspaper printing machine, the combination with a lower deck consisting of a plurality of units and an upper deck comprising two units arranged end to end, of a driving shaft extending along the units of the lower deck, means for detachably connecting the said driving shaft with the several units of the lower deck so that any of them can be operated and any of them can be stopped, a vertical shaft connected to be rotated by the main shaft and extending up to the level of the upper deck, a shaft parallel with the driving shaft connected with the vertical shaft to be operated therewith



and extending throughout the length of the upper deck and having means for driving the printing machine unit at the remote end of the upper deck, means for detaching the unit therefrom, and a second horizontal shaft at right angles to the last named horizontal shaft connected with said vertical shaft and with the printing machine unit in the upper deck at the opposite end thereof for driving it.

1,870,547. AUTOMATIC TELEPHONE DIALING AND RECORDING APPARATUS. NATHAN WISE, Mount Vernon, N. Y.; Pearl L. Wise and Aaron William Levy executors of said Nathan Wise, deceased. Filed Jan. 23, 1930. Serial No. 422,719. 24 Claims. (Cl. 179—90.)

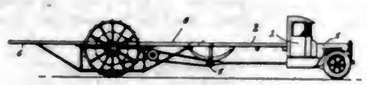


1. For use in operative association with a telephone apparatus including a telephone, a switch to render the telephone operative to start a call and a device for manual transmittal of telephone numbers, an apparatus comprising driven means operative to move said device to automatically transmit a telephone number, driving means to automatically actuate said driven means, and means cooperating with said switch to automatically start said driving means operating upon moving the switch to start a call.

1,870,548. COUPLING OF AGRICULTURAL MACHINES. ENRIQUE WITTOUCK and ADOLFO GUILLERMO WITTOUCK, Buenos Aires, Argentina. Filed Oct. 25, 1928, Serial No. 315,073, and in Argentina Sept. 4, 1928. 1 Claim. (Cl. 180—72.)

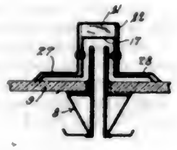
An attachment for motor vehicles including a supporting frame, supporting and driving wheels for said frame mounted for relative rotation, means for connect-

ing the frame with the motor vehicle chassis, a lateral extension on said frame, an axle passing through said frame at the lateral extension thereof and directly supporting one of the drive wheels at one side of the attachment, a tubular drive shaft mounted on a portion of



said axle located in the lateral extension of said frame and supporting the other drive wheel at the opposite side of said attachment, and power transmitting connections coacting with the axle and tubular drive shaft and adapted for connection with the respective rear axles of a motor vehicle.

1,870,549. SKYLIGHT CONSTRUCTION. LOUIS ABT, Chicago, Ill., assignor to William Paddor, Chicago, Ill. Filed July 18, 1930. Serial No. 468,878. 3 Claims. (Cl. 108—16.)



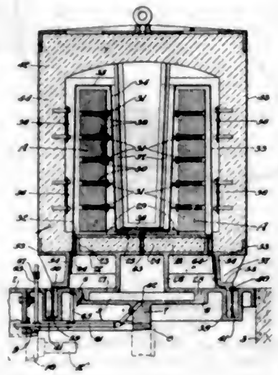
1. A ventilating skylight construction comprising a stationary section and a movable section, and means for effecting a weather-proof joint therebetween comprising a sheet metal member mounted on and running along the edge of said tiltable section and having a channeled hood portion, a flange extending from one side of said hood portion for effecting a weather-proof engagement with the upper face of the tiltable section and a flange extending from the other side of said hood portion for effecting a weather-proof engagement with the stationary section and a sheet metal member mounted on and running along the edge of said stationary section and having a flange extending above the edge of the stationary section into said hood portion.

1,870,550. CIRCULAR KNITTING MACHINE. PERCIVAL ARTHUR BENTLEY, CHARLES FREDERICK MANGER, and CARLYLE HERBERT WAINWRIGHT, Leicester, England. Filed Sept. 15, 1930, Serial No. 482,070, and in Great Britain Sept. 24, 1929. 12 Claims. (Cl. 66—14.)



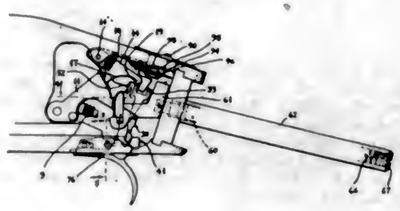
2. In a circular knitting machine wherein at certain parts of the work the needles of a group of needles cease knitting successively, the combination with such needles, of hooked sinkers associated with said needles, means adapted to be shifted to engage the yarn to prevent contact of the yarn with the sinker hooks, and means for shifting said first named means progressively across the said group of needles as the needles are thrown out of action successively, so as always to be in close proximity to a needle at the end of those needles of the group which are knitting, and thereby maintain the yarn out of the range of action of the hook of a sinker associated with that needle.

1,870,551. APPARATUS FOR ANNEALING. CHARLES J. BROWN, Donora, Pa. Filed May 31, 1928. Serial No. 281,804. 7 Claims. (Cl. 13—20.)



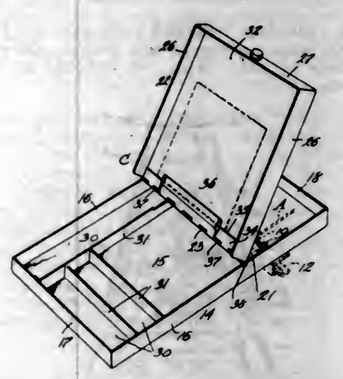
1. Apparatus for annealing coiled metal products comprising, in combination, a base for supporting the coiled products, means for centering said coils on said base, a ring-like cover adapted to enclose said coiled products, said cover comprising an inner cylinder closed at its lower end and adapted to extend within the center of the coiled products, an outer cylinder adapted to extend downwardly around said coiled products and engage said base, and a top wall extending between said cylinders and enclosing the top of the coiled products, and a bell-like furnace-cover mounted for vertical movement and adapted to enclose said covered coiled products.

1,870,552. SINGLE TRIGGER MECHANISM. JOHN BROWNING, Ogden, Utah, assignor to J. M. & M. S. Browning Company, Ogden, Utah, a Corporation of Utah. Filed Jan. 11, 1930. Serial No. 420,094. 22 Claims. (Cl. 42—42.)



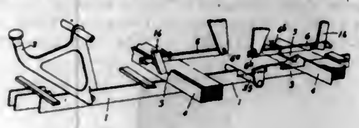
1. In combination, hammers, sears respectively associated therewith, a trigger mechanism including a connector through which said sears are successively operated upon successive intentional pulls of the trigger and an inertia block supported for movement and otherwise than on said connector and associated with said connector for maintaining the same out of operative relation to the sears during the forward rebound of the gun.

1,870,553. WORK SUPPORT FOR ARTICLES OF FURNITURE. RALPH F. BULLEN, Jamestown, N. Y., assignor to Art Metal Construction Company, Jamestown, N. Y. Filed June 1, 1929. Serial No. 367,775. 2 Claims. (Cl. 45—7.)



1. A sheet metal slide for an article of furniture having a guide in which said slide is supported to move in and out, said slide comprising a shallow tray, a flat sheet metal cover which normally rests upon and extends across the top of said tray with one of its faces forming a horizontal working surface, a hinge disposed transversely across and secured to said tray and having a flat leaf extending parallel to and secured upon the opposite face of said cover with an edge thereof forming a shoulder, and said cover being movable about said hinge to an upright position in which said shoulder acts as a rest, whereby sheets of copy engaging against said second face of said cover can be supported on said cover by the engagement of their lower edges with said rest.

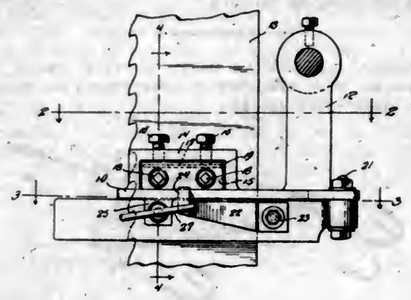
1,870,554. WAGE PAYING MACHINE. CHARLES LAURENCE BURDICK, London, England. Filed July 22, 1929, Serial No. 380,217, and in Great Britain Sept. 24, 1928. 3 Claims. (Cl. 133—4.)



1. A machine for delivering money, comprising money reservoirs, setting keys, a keybar operated by each of said setting keys, a selector bar operated by each of said keybars, pusher levers, pusher links whereof selected numbers from one upwards are moved laterally by each of said selector bars and thereby brought into operative engagement with its corresponding pusher lever, and drive transmitting means to bring about the actual ejector movement of those of the pusher levers so engaged to eject money sufficient to make up the total denoted by the keys utilized in the setting operation, together with drive operating means and means operated by the pressure of any key to engage said drive operating means with said drive transmitting means at a predetermined point in its movement after said pressure.

1,870,555. BAND SAW GUIDE. GEORGE BURTON, Klamath Falls, Oreg. Filed Feb. 9, 1931. Serial No. 514,610. 2 Claims. (Cl. 143—167.)

1. A unitary saw guide for a band resaw machine, comprising a base, opposite saw-engaging elements carried by the base, opposite lumber-engaging elements carried by the base, and a torsional plate whose axis is parallel to but spaced from that of the saw to yieldingly

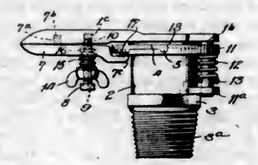


mount the base for lateral movement whereby said guide accommodates itself to the lumber irrespective of the shape of the latter.

1,870,556. CELLULOSE ACETATE COMPOSITION. STEWART J. CARROLL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 9, 1929. Serial No. 345,895. 5 Claims. (Cl. 106—40.)

2. A composition of matter comprising cellulose acetate and trichlor acetamide.

1,870,557. SCREW PLUG SLIDE VALVE. JOHN PRICE CURD, Louisville, Ky. Filed Dec. 13, 1929. Serial No. 414,711. 6 Claims. (Cl. 251—19.)



1. In a screw-plug slide valve, a hollow cylindrical body, threads on the lower outside of the body adapted to screw into the outlet of a tank, a spring-pressed cover or gate attached to said body by means of a pivot pin and adapted to slide over the upper side of the body, a pliant annular gasket fixed in the upper rim of said body and adapted to render liquid-tight the joint between the body and the gate when closed, in combination with a circular lug on the upper rim of said body having on its under side a circular ball race, a combination handle adapted to operate said cover or gate, a ball in said handle adapted to roll in the circular ball race and guide the gate as it opens and closes and spring-pressed means attached to said combination handle adapted to hold the ball operatively in the race.

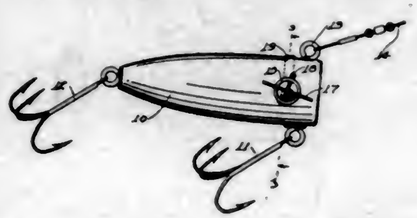
1,870,558. DEVICE FOR TREATING NASAL AND PULMONARY AFFLICTIONS. ADELA N. DARBY, San Diego, Calif. Filed June 22, 1928. Serial No. 287,402. 8 Claims. (Cl. 128—200.)



1. A device of the character described, comprising a shell having a forward end adapted to fit into the human nos-

trii, a frangible cartridge, means within said shell against which said cartridge may be compressed, and a plunger movable into the rear end of said shell for compressing and fracturing the cartridge.

1,870,559. ARTIFICIAL BAIT. HARRY F. DRAKE, Milwaukee, Wis. Filed Feb. 27, 1931. Serial No. 518,601. 8 Claims. (Cl. 43—46.)



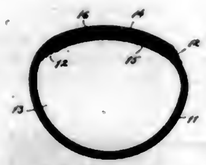
1. In an artificial bait, a body, a shaft passing transversely therethrough, diving vanes on the ends of the shaft adjustably inclined by turning the shaft, and a set screw in the body engaging the shaft for locking it in its adjustments.

1,870,560. DETERGENT MATERIAL AND PROCESS OF MAKING THE SAME. CHARLES M. FEHR, Easton, Pa., assignor to Sterling Products Company, Easton, Pa., a Corporation of Pennsylvania. Filed Oct. 1, 1926. Serial No. 139,013. 6 Claims. (Cl. 87—5.)

1. A detergent material in the form of a jelly, having fine grit distributed throughout its mass and comprising a thoroughly intermixed mass of material of which the major portion is carbon tetrachloride and the minor portion is a soap of the character which results from the treatment of red oil with an alkaline silicate.

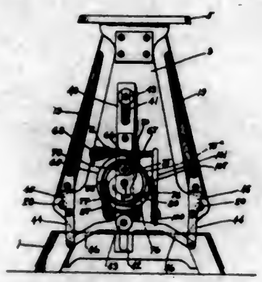
4. The process of preparing a substantially stable fluid, jelly-like detergent which comprises thoroughly mixing a saponifiable material which approximately an equal amount of carbon tetrachloride, causing saponification of said saponifiable material with an alkaline solution to produce a soap which is substantially free from excess of alkali or acid, vigorously agitating the soap mixture to cause the formation of a jelly-like mass, and gradually adding further amounts of carbon tetrachloride to the jelly-like mass while continuing the said agitation until there is produced a stable, fluid jelly containing a major portion of said solvent and a minor portion of the saponaceous material, the latter being present in sufficient amount to function as a soap when the jelly is used for cleaning but less in amount than requisite to constitute a body of solid soap.

1,870,561. PNEUMATIC TUBE AND METHOD OF MAKING SAME. ARTHUR G. FITZ GERALD, Brookline, Mass. Filed Apr. 11, 1929. Serial No. 354,202. 6 Claims. (Cl. 154—14.)



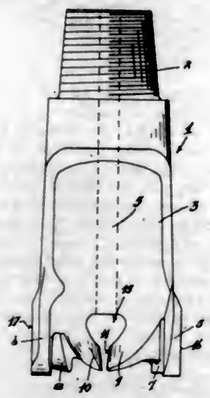
1. The method of making endless, pneumatic-tire tubes which comprises forming an endless band of vulcanizable rubber compound with one edge tapering from its inner side toward the opposite edge, bringing the margins of said band into overlapping relation over the middle portion thereof, in a longitudinal seam, for a width substantially equal to the width of the tread wall of the tube, to form said tread wall, with said tapered edge entirely underneath, the overlapping margin and vulcanizing the tube.

1,870,562. BREAD TOASTER. THOMAS C. FORBES, Hopkins, Minn., assignor to Max McGraw, Chicago, Ill. Filed May 23, 1927. Serial No. 193,558. 12 Claims. (Cl. 161—16.)



2. A bread toasting device comprising a heating element, means movable to hold the bread in toasting position with reference to the heating element and to withdraw and turn the bread, a timing mechanism, including a winding spring, and connections between the timing mechanism and the bread moving means for causing said means respectively to hold the bread in toasting position, turn the bread, again hold the bread in toasting position and finally withdraw the bread after toasting, said connections comprising a slide, having a link connection with the bread moving means, a spring controlled drum arranged to engage and translate the slide, detents for temporarily preventing drum rotation, and a lever connected to simultaneously wind the springs of the timing mechanism and drum when moved in one direction, and for operating the detents to obtain step-by-step rotation of the drum when moving in opposite direction of the drum when moving in opposite direction..

1,870,563. DRILLING BIT. ELWIN W. FORROW, Los Angeles, Calif., assignor to Byron Jackson Co., Los Angeles Calif., a Corporation of Delaware. Filed Apr. 21, 1928. Serial No. 271,692. 1 Claim. (Cl. 255—61.)

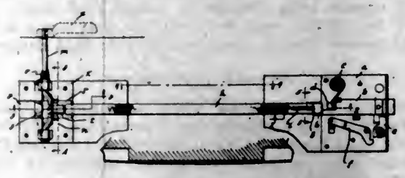


A rotary drilling bit of fish tail type consisting of a substantially flat blade extending the full width of the bit, said blade having a downwardly projecting cutting edge at each side edge of the blade, and projecting forwardly with respect to the direction of rotation of the bit, a cutter tooth at each side of the blade and projecting from the face of the flat blade in a forward direction with respect to the direction of rotation, said last-named cutters extending forwardly and downwardly and terminating in a cutting edge disposed in an inclined direction with respect to the horizontal plane, each of said last named teeth having a substantially radially extending cutter blade projecting from its outer side and disposed in a plane inclined with respect to the vertical line.

1,870,564. METHOD OF TREATING IMPREGNATED FABRICS. HAROLD P. HAYDEN, Woodbridge, N. J., assignor to The Barber Asphalt Company, Philadelphia, Pa., a Corporation of West Virginia. Filed Nov. 10, 1928. Serial No. 318,602. 2 Claims. (Cl. 91—70.)

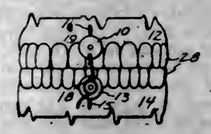
1. The method of producing a bituminously saturated fabric which includes passing a strip of fabric into a bath of bitumen heated to render it fluid, withdrawing the strip from the bath, and before the bitumen has cooled subjecting a surface of the strip to the action of a flame at a temperature and for a period of time sufficient to permit fibres protruding from the surface to be burned off.

1,870,565. REMOTE CONTROL LOCK. ERNEST E. HEINTZ and THOMAS P. ARCHER, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 13, 1925. Serial No. 15,174. 15 Claims. (Cl. 292—169.)



1. In a remote control latch for automobile bodies, the combination of a latching unit provided with a bolt retractable from the outside of the door, a remote actuator, a reciprocable draft bar connection between said bolt and actuator, and a quickly detachable connection of the pin and slot type between the draft connection and bolt and remote actuator.

1,870,566. MOUTH CLOSING DEVICE. EDWARD G. HEITRITTER, Sioux City, Iowa. Filed June 23, 1931. Serial No. 546,177. 12 Claims. (Cl. 27—1.)



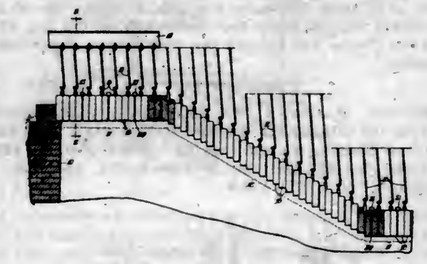
1. In a mouth closing device, a pair of anchor elements including parts adapted to pierce and be embedded in the respective gums of a corpse, and a flexible tie element secured to one of said anchor elements and adapted to be adjustably secured to the other of said anchor elements.

1,870,567. ARTIFICIAL LEATHER MANUFACTURE. ROGER B. HILL, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Original application filed Jan. 16, 1929, Serial No. 333,026. Divided and this application filed Dec. 12, 1929. Serial No. 413,682. 6 Claims. (Cl. 91—68.)

1. A process which comprises impregnating a web of fibers with water-dispersed rubber, drying, impregnating the dried web throughout with water containing a tanning agent, and again drying.

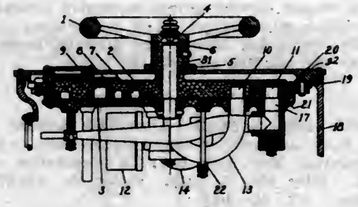
5. A process which comprises impregnating a web of fibers with water-dispersed rubber, drying, impregnating with water containing about 1% of a vegetable tanning agent of the type of oak extract, chestnut extract, quebracho extract, or the like, and again drying.

1,870,568. FURNACE CONSTRUCTION. LOUIS H. HOSBEIN, Winnetka, Ill., assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 13, 1929. Serial No. 354,724. 16 Claims. (Cl. 110—99.)



1. In furnace roof construction, in combination, beams disposed above the furnace chamber in spaced relationship, tile supports suspended from the beams, a plurality of courses of refractories engaged with each tile support to form a roof section with the terminal refractories extending under the beams from which the section is supported, said sections arranged in association to form a refractory top closure for the furnace chamber, and the respective tile supports with their supported refractories being withdrawable upwardly to clear the roof and movable rotatably above the roof to clear the beams.

1,870,569. ACOUSTIC COMPENSATOR. BEVERLY R. HUBBARD, Melrose, Mass., assignor to Submarine Signal Company, Boston, Mass., a Corporation of Maine. Filed Oct. 31, 1929. Serial No. 403,799. 6 Claims. (Cl. 181—26.)

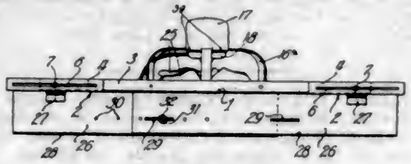


1. An acoustic compensator including two parallel opposed plates bearing against one another, means for rotating one of said plates with respect to the other, a sound groove in one of sad plates and a groove just exterior of the bearing surface of the plates positioned lower than the plates and extending substantially about the periphery thereof.

1,870,570. VENTILATING MEANS. HERMAN C. HUEGLIN, Chicago, Ill., assignor to Federal Merchandise Company, Chicago, Ill., a Corporation of Illinois. Filed June 30, 1928. Serial No. 289,573. 3 Claims. (Cl. 98—94.)

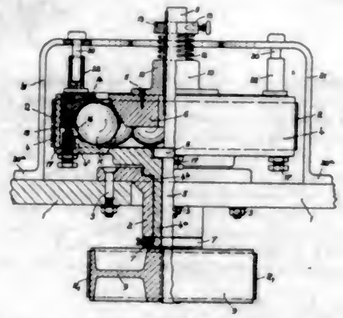
1. In ventilating means, a supporting structure comprising a central plate and two end plates of channel cross-section disposed in telescoping relation therewith,

said central plate having a ventilating opening, a ventilating fan mounted on said structure in alignment with the opening, a closure plate comprising two members of angle cross-section telescoped together and hingedly se-



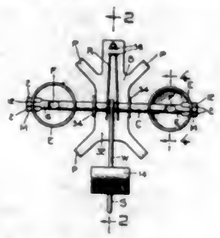
cured to the supporting structure for movement toward and away from the same, and means on the top of the structure for engaging the under side of the top of a window casing for holding the structure in the window opening.

1,870,571. MACHINE FOR THE SPHERICAL GRINDING OF BILLIARD BALLS AND OTHER BLANKS. OTTO KADZIK, Vienna, Austria. Filed Nov. 4, 1930, Serial No. 493,359, and in Austria Oct. 15, 1930. 3 Claims. (Cl. 51—156.)



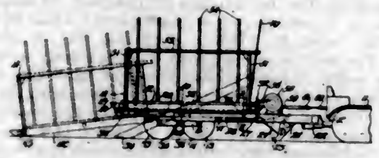
1. Machine for the spherical grinding of blanks rolling on a rotary table comprising in combination an annular guide for the blanks, an annular grinding ring resting on the blanks to be treated, springs circumferentially arranged round said grinding ring and supporting the latter, the tension of said springs increasing automatically in accordance with the descent of the grinding ring and gradually decreasing thereby the grinding pressure exerted by the grinding ring on the blanks.

1,870,572. DOLL'S EYES. ALEXANDER KONOFF, Brooklyn, N. Y., assignor, by mesne assignments, to Margon Corporation, New York, N. Y., a Corporation of New York. Filed May 2, 1930. Serial No. 449,127. 16 Claims. (Cl. 46—40.)



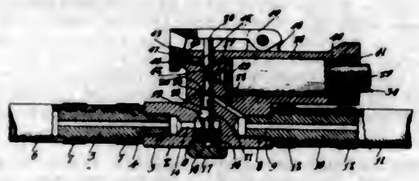
1. A movable eye set comprising a cross rod, a pair of substantially hemispherical eye shells, and means on said cross rod mating directly with mating means cut through the side walls of said eye shells and thereby directly causing the eye shells to rotate with the cross rod but normally permitting them to reciprocate freely along the cross rod, in order that the eye shells may automatically and freely adjust themselves in use to the the spacing of the eye sockets in the doll's head to which the eye set is applied.

1,870,573. VEHICLE AND REMOVABLE BODY THEREFOR. JOSEPH KUCHAR, Chicago, Ill., assignor to Athey Truss Wheel Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 3, 1928. Serial No. 323,222. 2 Claims. (Cl. 214—65.)



1. In a vehicle, a frame, a tiltable support on said frame adapted to be tilted to form an inclined plane from the ground to the frame, a removable body for the vehicle comprising a pair of longitudinally extending runners to serve as skids when the body is upon the ground, laterally extending rollers on said body having their bearing surfaces disposed above the plane of the lower surface of and laterally within said runners and adapted to engage and roll upon said tiltable support, said runners being disposed to engage said tiltable support for guiding said body and for preventing lateral displacement thereof when positioned on said support.

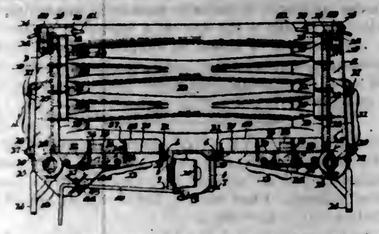
1,870,574. VALVE FOR TIRE INFLATORS. JAMES FRANCIS KEY, Pasadena, Calif., assignor to First Trust & Savings Bank of Pasadena, as trustee, Pasadena, Calif. Filed Mar. 23, 1929. Serial No. 349,288. 1 Claim. (Cl. 277—20.)



A valve for a tire inflator comprising a body forming a vertical air passage, a valve operative within the air passage and having a vertically extending operating stem, a vertical bore in said body constituting a reduced extension of the air passage in which said operating stem is disposed, a port connecting with said vertical bore, a groove in said operating stem normally uncovering said port but disposed to move by said port and permit said operating stem to cover said port when it is depressed to open the valve, a threaded socket at the opposite end of said vertical bore from that receiving said operating stem, and a cap threaded to said socket and forming a seat for a spring of said valve, and a packing means forming part of the operating stem of the valve and disposed normally above said port and adapted to cover said port in the depressed position of the operating stem.

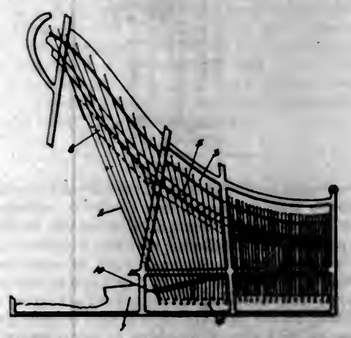
1,870,575. FREIGHT CAR. WILLIAM F. KIESEL, Jr., Hollidaysburg, Pa. Filed Mar. 7, 1931. Serial No. 520,798. 20 Claims. (Cl. 105—406.)

1. In a railway car, a center sill, a side truss, and a corner member in the form of an angle having a vertical arm formed with flanged and recessed portions adapted to receive the end of the side truss and constituting an end post, and having a transversely extending horizontal arm with its inner end terminating at the center sill and secured thereto.



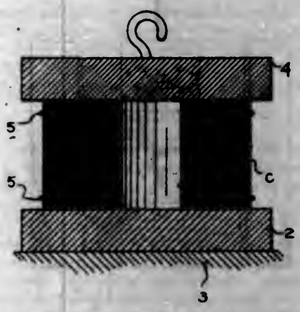
2. In a railway car, side trusses, a gate at the ends of said side trusses, and corner members having vertical portions secured to said side trusses and forming end posts and having transversely extending horizontal portions forming an end sill, said corner members having flanges serving as abutments for holding the end gate in position.

1,870,576. ELECTRIC DEVICE FOR MUSICAL INSTRUMENTS. ARMAND F. KNOBLAUGH, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Feb. 8, 1932. Serial No. 591,481. 6 Claims. (Cl. 84—173.)



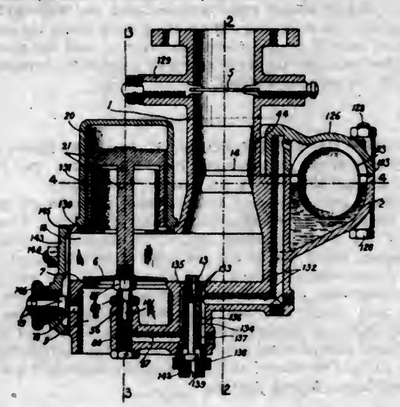
5. In a stringed musical instrument, a plurality of strings of varying lengths, a plurality of magnets having electromagnetic pickup means mounted close to and across the strings, the magnets varying in width substantially as the strings vary in length.

1,870,577. METHOD OF HEAT TREATING STRIP MATERIAL. HOWARD S. LAMB, Youngstown, Ohio, assignor to The Cold Metal Process Company, Youngstown, Ohio, a Corporation of Ohio. Filed Mar. 17, 1930. Serial No. 436,513. 3 Claims. (Cl. 148—13.)



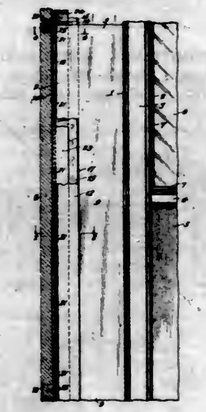
2. In the method of annealing the edge of strip metal, the steps consisting in forming the same into a coil and subjecting a face of the coil, which face is constituted of an edge of the coiled material, to an annealing temperature.

1,870,578. CARBURETOR FOR INTERNAL COMBUSTION ENGINES. PAUL LOUIS LEMOINE, Paris, France. Filed Dec. 19, 1930, Serial No. 503,443, and in France Jan. 7, 1930. 4 Claims. (Cl. 261—72.)



1. A carburetor including a casing having a float chamber, and a mixing chamber, there being a fuel conduit leading from said float chamber; a fuel jet situated in the mixing chamber at the extremity of the fuel conduit coming from the float chamber; a throttling valve for the carburetted air situated after the mixing chamber, an automatic valve controlling the principal air inlet of the carburetor; a conduit starting in the passage chamber (between the valve and the mixing chamber), and opening into the upper part of the float chamber above the level of the fuel, the said float chamber being air-tight to atmosphere; a conduit starting at atmosphere and terminating in the mixing chamber close to the extremity of the fuel jet, the axis of the extremity of the conduit and the axis of the jet being approximately perpendicular one to the other and arranged in such manner that a jet of air coming from the conduit strikes against the extremity of the jet nozzle; a conduit starting at atmosphere and opening into the upper part of the float chamber above the level of the fuel, and a throttle for this conduit, the said throttle being controlled by the automatic valve in such manner as to open when this valve lifts.

1,870,579. PARTITION WALL EDGE CONSTRUCTION. LOUIS L. LEVENE, Merrick, N. Y. Filed Mar. 9, 1931. Serial No. 521,226. 15 Claims. (Cl. 189—84.)



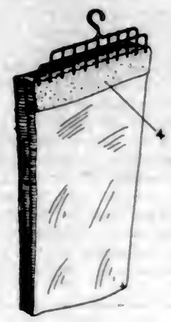
1. In a partition wall, the combination of a straight stiff bar incorporated in an edge portion of said partition

wall adjacent to and alongside of a wall surface of a building structure, a sealing strip of soft resiliently yieldable material interposed between said bar and said surface so as to follow the contour of the latter thereby to provide a tightly closed joint between said bar and surface, and means for adjusting said sealing strip along its length so as to move it transversely relatively to said bar thereby to follow said surface irrespective of undulatory irregularities in the contour thereof.

1,870,580. CAST IRON ROLL. EMERSON K. LEWIS and EUGENE WENZ, Pittsburgh, Pa. Filed Mar. 29, 1929. Serial No. 351,116. 2 Claims. (Cl. 80—58.)

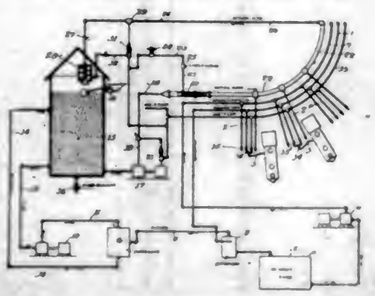
1. As a new article of manufacture, a condensed grain cast iron roll formed of an iron alloy containing about 2 to 3.4 per cent of carbon, about 0.8 to 2.5 per cent of chromium about 0.4 to 3.0 per cent of nickel, about 1.25 to 3.0 per cent of silicon, and about 0.4 to 1.0 per cent of manganese, proportioned to provide a close grained gray iron structure from surface to center irrespective of the degree of chilling, and having outer condensed grain and inner uncondensed portions, a low hardness differential from surface to center, and substantially uniform hardness in said uncondensed portion.

1,870,581. BACON TREATING METHOD. HARRY H. MCKEE, Chicago, Ill., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 27, 1931. Serial No. 518,641. 4 Claims. (Cl. 17—45.)



1. The method of suspending pork bellies which comprises separating but not severing a portion of the skin from the belly and suspending the belly solely by said separated skin.

1,870,582. LOCOMOTIVE REFILLING METHOD. FRANK W. MILLER, Chicago, Ill. Filed Jan. 17, 1929. Serial No. 333,232. 8 Claims. (Cl. 122—396.)



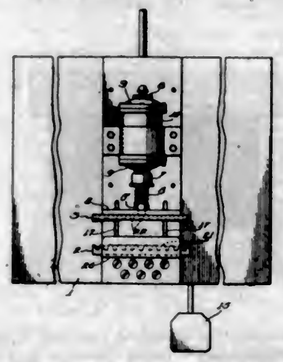
1. A method of refilling locomotive boilers comprising heating a supply of refill water to slightly less than 212° F. and storing a quantity of it sufficient for the simultaneous refilling of a plurality of locomotive boilers, pumping the heated water as needed into a distributing system under at least 75 pounds pressure, entraining upon the water as it enters the system a supply of steam, regulating the pressure of steam as supplied to slightly below the pressure of the water, and conducting the superheated mixture of steam and water under pressure into a boiler to be refilled.

1,870,583. SELECTIVE UNLOADER MECHANISM FOR ELEVATORS. SAMUEL OLSON, Oak Park, Ill., assignor to Samuel Olson & Company Inc., Chicago, Ill., a Corporation of Illinois. Filed Mar. 5, 1929. Serial No. 344,166. 7 Claims. (Cl. 198—38.)



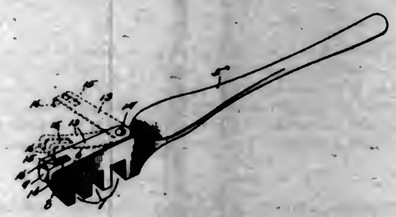
1. In combination with a conveyor and driving means therefor, a load-carrier on said conveyor, electrically controlled load ejecting mechanism disposed adjacent each of a plurality of discharge stations arranged along the path of travel of the conveyor, each of said mechanisms including a rotary load ejecting arm and a switch member for completing the electrical circuit for actuating said arm, and means on the load-carrier adapted to selectively operate one of said switch members at a predetermined station when the load-carrier substantially registers with said station for rotating the arm thereat and by whose movement the load-carrier is discharge at said station.

1,870,584. COMB HANGER STRAIGHTENING METHOD AND DEVICE. DAVID SAMUEL OSTROM, Kansas City, Kans., assignor, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Nov. 7, 1929. Serial No. 405,381. 3 Claims. (Cl. 153—48.)



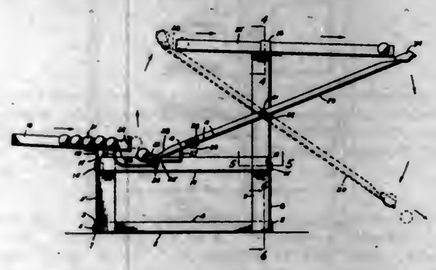
1. Complementary dies for straightening bacon comb hangers having straight meeting faces at one side of a medial longitudinal line, and provided with teeth receiving and straightening recesses and projections, and having the meeting faces at the opposite side of said medial longitudinal line, plain and longitudinally curved.

1,870,585. CUTTING OR MARKING TOOL. RALPH C. PARKS and MURRAY C. ELDREDGE, Chicago, Ill. Filed Mar. 24, 1928. Serial No. 264,351. 4 Claims. (Cl. 49—52.)



1. A cutting tool comprising a head, a slot at one end of said head, openings at opposite sides of said slot and extending to but one side of said head, a cutting wheel mounted on a pivot and removably mounted in said slot with the pivot therefor extending into said openings, a spring clip mounted on a second side of said head having a portion positioned to be yieldingly urged in a direction to cover that portion of the openings which extend to said first-mentioned side to prevent accidental displacement of said pivot from said openings.

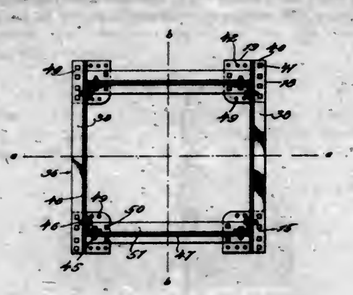
1,870,586. MECHANICAL TOY. PETER PLATAKIS, Minneapolis, Minn. Filed Mar. 25, 1932. Serial No. 601,188. 10 Claims. (Cl. 46—37.)



1. In a mechanical toy, a magazine adapted to retain rollable elements, a runway disposed above said magazine, and a pivoted beam adapted to receive elements from said magazine and deliver them to said runway, said beam being operated by elements, discharging from said runway.

1,870,587. CROWN CONSTRUCTION FOR DERRICKS. LESLIE A. RAWSON, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed July 8, 1929. Serial No. 376,801. 4 Claims. (Cl. 189—21.)

1. In crown construction for a derrick: a crown frame consisting of a pair of parallel primary cap members and a pair of parallel secondary cap members, placed to form a rectangle; a post member under each corner of said crown frame; and a cap block at the upper end of each post member adapted to support and secure the ends of said cap members, said cap block comprising a plate member including a horizontal upper face, two outer perpendicular edges, and two inner perpendicular edges, there being matched groups of primary bolt holes spaced adjacent to said inner perpendicular edges and matched groups

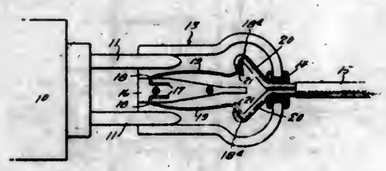


of secondary bolt holes adjacent to said outer perpendicular edges, and means for securing said plate member to the upper end of a derrick post.

1,870,588. FRUIT PRODUCT. WILLIAM A. ROOKER and VICTOR E. SPEAS, Kansas City, Mo., assignors to Speas Mfg. Co., Kansas City, Mo., a Corporation of Missouri. Filed July 31, 1929. Serial No. 382,580. 6 Claims. (Cl. 99—11.)

6. The process of producing a fruit product, comprising the steps of treating the juice of the fruit with protein matter to remove tannin, treating the tannin free juice with enzymes to convert the starch, proteins, and pectous substances, and neutralizing the acid of the juice, treating with an adsorptive or activated substance to remove color, odor and flavor and concentrating the juice at a temperature insufficient to destroy the vitamines and nutritious matter in the juice.

1,870,589. SOCKET. ARTHUR F. ROSWURM, Lakewood, Ohio. Filed Jan. 31, 1931. Serial No. 512,692. 4 Claims. (Cl. 173—332.)

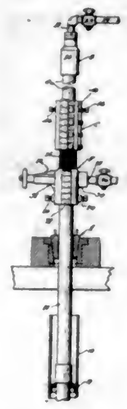


2. An electric socket including, a pair of shell members made of insulating material, a central, longitudinally extended rib integral with one of said shell members, a pair of L-grooves formed in said rib near one end of said shell, each being substantially as deep as the thickness of said rib, a narrow opening at the other end of said shell, a pair of spring members, each having a hook-shaped end portion received in one of said L-grooves, an outwardly bowed central contact portion and a sharply outwardly bent terminal portion, a pair of conductors passing through said narrow opening and connected one to each said terminal portion.

1,870,590. FLOW CONTROL HEAD. JAMES J. SANTIAGO, Los Angeles, Calif., assignor to John Grant, Los Angeles, Calif. Filed Dec. 11, 1929. Serial No. 413,284. 13 Claims. (Cl. 166—15.)

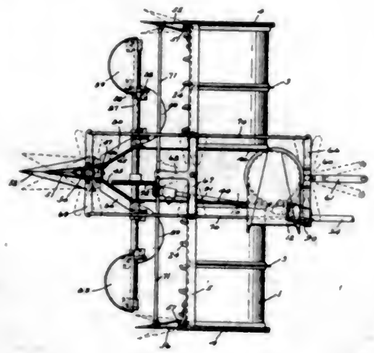
1. Flow control apparatus for wells embodying, in combination with a flow pipe in the well, a bipartite fitting

adapted to be applied to and around the flow pipe at a joint therein, and adapted to make a fluid tight juncture with a flow pipe below such joint, said fitting having a vertical-pipe-receiving bore and a valve movable transversely across said bore, a bipartite cap member adapted to be applied



to and around the flow pipe above the fitting, said cap member engaging the fitting in a manner to form a fluid tight joint therewith and to allow screwing and unscrewing of the pipe joint, and means for clamping said cap to the pipe so that the cap rotates with the pipe as the latter is turned.

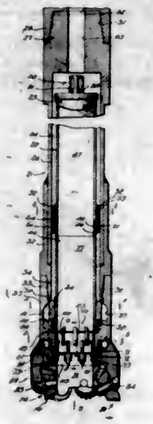
1,870,591. SNOWPLOW. FRANK SAXON, Worthington, Minn. Filed July 3, 1930. Serial No. 465,585. 7 Claims. (Cl. 37—43.)



1. A device of the class described adapted to be attached to the front of a motor vehicle, and having a snow scoop, snow ejecting means arranged to receive snow from the scoop, means adapted to move the snow from the scoop to the ejector means, and a plow-like rudder means adapted to plow the snow in advance of the scoop and to guide the device.

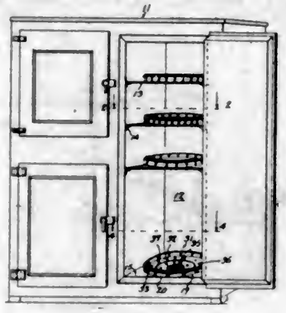
1,870,592. CORE DRILL. MARTIN SCHUERMAN, Maywood, Calif. Filed May 21, 1931. Serial No. 539,006. 4 Claims. (Cl. 255—72.)

1. In a core drill, a tubular head, a set of two oppositely arranged spindles rigid therewith and inclining upwards and inwards toward the axis of rotation of the head, an inwardly tapered roller cutter journaled for free rotation on each of said spindles, and drag teeth rigid with said



head and having vertical cutting edges at slightly less radial distance from said axis than the innermost portion of said cutter to trim the core being formed by said cutters.

1,870,593. REFRIGERATOR SHELF APPLIANCE. LOUIS S. SHAUER and ROSE SHAUER, Los Angeles, Calif. Filed Mar. 11, 1931. Serial No. 521,646. 12 Claims. (Cl. 211—153.)



2. A shelf appliance having a circular tray formed of sheet material, and having a central pivot socket formed with a central portion extending downwardly and a portion immediately adjacent being above the plane of the circular tray, a disk-like receptacle formed of sheet material having a downwardly extending central portion forming a downward projection to fit in the said socket, the said receptacle being rotatable with the socket and the projection acting as a pivot.

1,870,594. PROCESS OF MAKING CHLOROFORM INSOLUBLE CELLULOSE ACETATE AND THE PRODUCT THEREOF. CYRIL J. STAUD and HARRY LE B. GRAY, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 1, 1929. Serial No. 336,911. 9 Claims. (Cl. 260—101.)

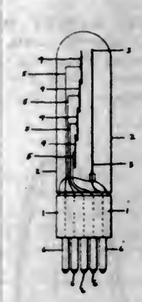
6. A cellulose acetate in fibrous form which is insoluble in chloroform but soluble in metacresol, aniline, and tetrachloroethane.

1,870,595. AEROPLANE STRUCTURE. HERBERT V. THADEN, Mount Lebanon, Pa., assignor, by mesne assignments, to General Aviation Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 19, 1931. Serial No. 509,695. 6 Claims. (Cl. 244—31.)



1. In an airplane wing having spaced, longitudinally-extending, reinforcing members, transversely-arranged interconnecting, vertical corrugated members connected at their ends to the wing brace members, said corrugated members being arranged at spaced intervals, tank means interposed between said corrugated means and supported thereby.

1,870,596. MULTIPLE PLATE PHOTO ELECTRIC TUBE. BENJAMIN W. WOODWARD, Brooklyn, N. Y., assignor to Walter Howey, New York, N. Y. Filed Mar. 31, 1930. Serial No. 440,333. 6 Claims. (Cl. 250—27.5.)



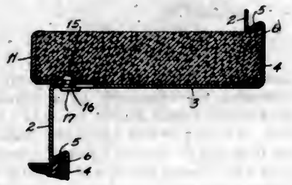
3. An evacuated tube comprising an anode element, a plurality of adjacently positioned overlapping cathode light sensitive plates positioned in operative relation to the anode element, and suitable insulated supports for each.

1,870,597. MULTIPLE FUSE. SAMUEL J. WYNN, Norwalk, Conn., assignor to L. W. Holding Corporation, New York, N. Y., a Corporation of New York. Filed June 4, 1931. Serial No. 541,995. 9 Claims. (Cl. 200—125.)



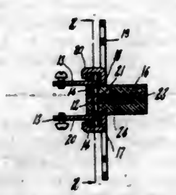
1. A multiple fuse plug, comprising a hollow body supporting a pair of contacts, fuse material within the hollow body and in the form of a base portion connected with one of said contacts and having a plurality of fingers extending from the base portion and within the inner face of the hollow body, a core in intimate contact with the inner surface of the hollow body and adapted to assume various rotative positions and having a fume chamber for selective location over the fuse fingers, and a means on the core and on the fuse body for selectively connecting any specific fuse finger exposed to the fume chamber with the other contact.

1,870,598. STAIR STRUCTURE. JOHN AMANN, St. Louis, Mo. Filed Apr. 8, 1931. Serial No. 528,588. 3 Claims. (Cl. 72—96.)



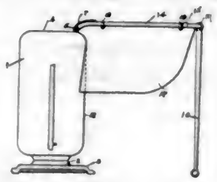
1. A stair structure of the class described, comprising side stringers, metal step treads slotted near their front edges, curvilinear members adapted to cover the front and top marginal edges of a concrete tread superimposed upon said metal treads, said curvilinear members having their lower ends slotted and turned at rightangles to the vertical, so that the slot in said curvilinear member registers with the slot in said tread, a curvilinear locking member adapted to engage the slot in said curvilinear member at one end and also to engage the slot in said tread when said curvilinear member is moved inwardly beyond the normal front edge of said tread and interlock said curvilinear member and said tread when said curvilinear member is slidably moved outwardly to its normal position.

1,870,599. ELECTRIC SWITCH. HUGH W. BATCHELLER, Worcester, Mass. Filed Apr. 9, 1929. Serial No. 353,779. 3 Claims. (Cl. 200—164.)



1. An electric switch comprising an insulating body adapted to be fixed to a support and provided with a bearing constituting a guiding means whereby a movable hand piece may be rotatably guided in opposite directions in a predetermined path relative to said body, spaced apart conductors fixed to the body and insulated from each other thereby, said conductors having gap-separated terminals formed to contact simultaneously with circuit closing means, a circuit closer including an insulating rotatable hand piece projecting outward from said body and adapted to turn in opposite directions in said bearing and guided in a predetermined path thereby, and spring pressed circuit closing means movable in and guided by the hand piece and yieldingly projected from the inner end thereof, to yieldingly, enter and bridge said gap when the hand piece is turned in one direction, and retreat from the gap when the hand piece is turned in the opposite direction, the hand piece being maintained at an invariable angle with the body by said bearing.

1,870,600. COMBINED HEATING AND COOKING STOVE. EDWARD BERNSTEIN, New York, N. Y. Filed Oct. 7, 1930. Serial No. 487,013. 3 Claims. (Cl. 126—4.)



1. In a combined heating and cooking stove, a heater having a horizontal top connected by a convexed curve with a vertical back, a grid hinged on said top and extending around said curve and down the back, and legs hinged on the free end of the grid and of lengths to support the grid in a horizontal position above said horizontal top of the heater and capable of being folded flat against the grid when the grid is in position against the back of said heater.

1,870,601. HYDROLYSIS OF METHYL CHLOROFORM. EDGAR C. BRITTON and WILLIAM R. REED, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 18, 1928. Serial No. 326,904. 7 Claims. (Cl. 260—112.)

4. The method of making acetic acid which comprises heating methyl chloroform and water in the proportion of 1 mole of the former to at least 2 moles of the latter under pressure in excess of atmospheric at a temperature between 75° and 160° C.

6. The method of making acetyl chloride which comprises heating methyl chloroform and water in approximately equimolecular proportion under pressure corresponding to the vapor pressure of the reaction mixture at a temperature between 75° and 160° C. in the presence of a catalyst.

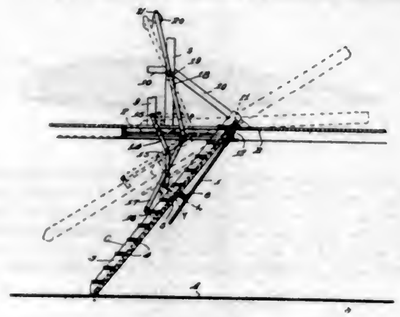
7. The method of making acetic anhydride which comprises heating methyl chloroform and water in the proportion of approximately 2 moles of the former to 3 moles of the latter under pressure corresponding to the vapor pressure of the reaction mixture at a temperature between 75° and 160° C. in the presence of a catalyst.

1,870,602. MANUFACTURE OF ACID PHOSPHATE. ALBERT H. CASE, Short Hills, N. J. Filed Jan. 16, 1930. Serial No. 421,264. 3 Claims. (Cl. 71—7.)

1. The manufacture of a soluble phosphate from insoluble phosphate rock which comprises grinding said insoluble phosphate rock to approximately 200 mesh in the presence of an excess amount of water, separating ground rock coarser than approximately 200 mesh from the finely ground 200 mesh material, removing the excess of water from said finely ground phosphate rock and then adding to said finely ground phosphate rock concentrated sulfuric acid having a strength greater than approximately 65° Bé. whereby the material will be brought to a highly heated state and the conversion of said insoluble phosphate rock to a soluble phosphate will occur in a relatively short period of time.

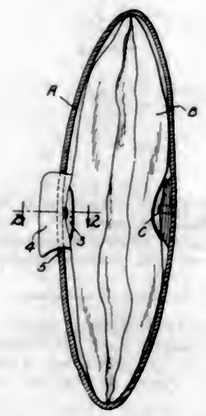
1,870,603. MOVABLE STAIR. ALFRED CICILIONI, Peckville, Pa. Filed Nov. 23, 1928, Serial No. 321,432. Renewed May 13, 1932. 3 Claims. (Cl. 228—50.)

1. In combination with an upper floor of a building having an opening therein, a trap-door for closing the opening and movable downwardly, a stairway, means for slidably connecting the stairway with a part of the door, a support above the floor, means for slidably connecting the stairway with said support, and a link arrangement connecting the stairway with the support for moving the



stairway upwardly through the opening when the door is being closed and for lowering the stairway into an inclined position when the door is open.

1,870,604. FOOTBALL, BASKET BALL AND THE LIKE. CLARENCE COLES, St. Louis, Mo., assignor to Rawlings Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 10, 1930. Serial No. 494,650. 12 Claims. (Cl. 273—65.)

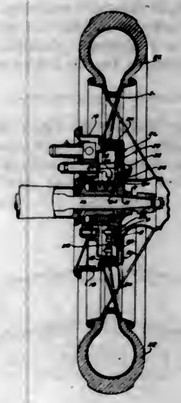


1. A ball composed of an inflatable bladder and a casing surrounding the bladder, an inflating device for the bladder attached to the bladder and casing and accessible from the exterior of the casing, and a separate means for connecting the bladder to the casing at a point remote from said inflating device.

1,870,605. BRAKE DRUM SPACER. WILLIAM B. CONLON, Minneapolis, and LLOYD HAYES, Robbinsdale, Minn. Filed Feb. 12, 1931. Serial No. 515,180. 6 Claims. (Cl. 301—6.)

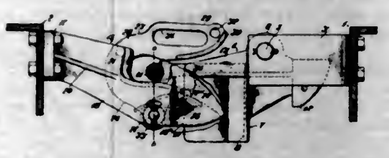
6. The combination with a wheel hub having a circumferentially extended flange axially inset from the outer end of the hub, a brake drum the back of which is seated against the outer face of the flange and has an axial aperture for the hub, the back of the drum at its aperture being axially outwardly offset on the hub, and a hub

shell, studs detachably securing the drum and hub shell to the hub flange, the hub shell outward of the studs primarily engaging the back of the drum with its outer edge adjacent to the back of the drum, said hub shell radially inward from the studs having points of contact



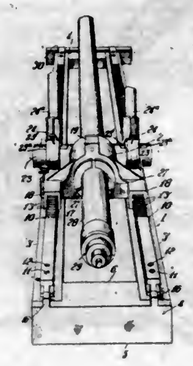
that primarily engage the axially offset portion of the back of the drum, of spacing means interposed between the back of the drum and the back of the hub shell radially outward of the studs and between said points of contact on the hub shell and the back of the drum.

1,870,606. COUPLER. ELY J. CONTOIS, Battle Creek, Mich., assignor to Clark Tructractor Company, Buchanan, Mich., a Corporation of Michigan. Filed Jan. 17, 1930. Serial No. 421,867. 18 Claims. (Cl. 280—33.15.)



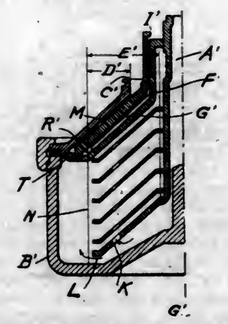
1. In coupling means of the character described, a coupling head comprising a coupling element, a draw head provided with a slot open at one side and adapted for reception of said element, and latch means guarding the open side of the slot and disposed outwardly beyond the end walls thereof in the plane of the coupling element whereby the latch acts as a guiding means during the coupling operation and the load and shocks incident to coupling and transportation are taken directly by the draw head.

1,870,607. PIPE PUSHING JACK. CHARLES A. CRANE, Jr., Chicago, Ill., assignor to Templeton, Kenly & Co. Limited, Chicago, Ill., a Corporation of Illinois. Filed July 7, 1928. Serial No. 290,992. 7 Claims. (Cl. 254—29.)



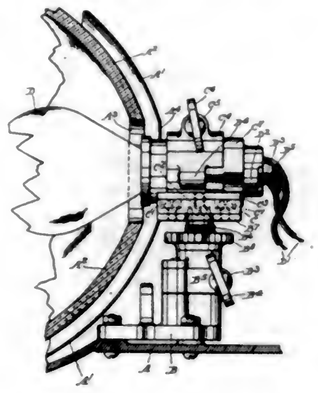
7. A base for a pipe pushing jack comprising end plates, longitudinally extending side members fixed to and connecting said end plates, a toothed rail disposed above and bolted to each side member and lugs integral with each end plate and engaged with the ends of each rail.

1,870,608. APPARATUS FOR SEPARATING LIQUIDS OF DIFFERENT SPECIFIC GRAVITIES. SVEN ALFRED BERTIL DAHLGREN, Alsten, Sweden, assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Original application filed June 21, 1930, Serial No. 462,773, and in Sweden July 3, 1929. Divided and this application filed Apr. 28, 1931. Serial No. 533,428. 4 Claims. (Cl. 233—46.)



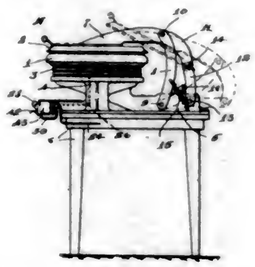
1. A centrifugal bowl comprising a main separating chamber, a heavier liquid discharge channel extending inward from the peripheral part of the bowl and arranged to provide a heavier liquid seal between the separating space of the bowl and the outlet from said discharge channel, an auxiliary separating chamber adapted to receive separated heavier liquid, a lighter liquid outflow channel extending outward from the central part of the bowl to said auxiliary chamber, and a lighter liquid discharge conduit extending inward from said auxiliary chamber.

1,870,609. LAMP STAND. CHARLES W. DAKE, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Nov. 13, 1930. Serial No. 495,341. 2 Claims. (Cl. 240—44.2.)



1. A support for electric light holders in combination, a bracket, a stud longitudinally adjustable in said bracket, means for locking said stud in adjusted position, a split socket, a lamp holder supported in said socket and longitudinally movable therein, means for longitudinally adjusting said holder in said socket, means for locking said holder in adjusted position, and cushioning means interposed between said stud and socket, said cushioning means being fastened to said stud by certain fastening bolts and to said socket by other fastening bolts and constituting the sole connection of said socket to said stud.

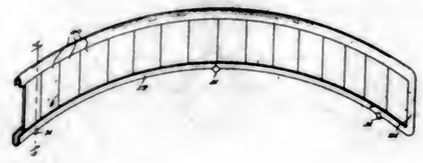
1,870,610. PRESSING MACHINE (PRESSURE OPERATED BUCK). ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 4, 1928. Serial No. 244,522. 14 Claims. (Cl. 68—9.)



1. A pressing machine comprising a frame, upper and lower pressing elements, the upper pressing element being movable forwardly and rearwardly into a position opposed to the lower pressing element, means for moving the lower pressing element toward the upper one for applying pressure to the article on the lower element, means for supporting and guiding the upper pressing element comprising a forwardly and rearwardly movable carrier, a horizontally disposed press lever pivoted between its ends to the carrier, the upper pressing element being carried at the forward end of said lever, and an upright forwardly movable link pivoted at its lower end to the frame and at its upper end to the rear end of said lever, the upper end of the link being movable in the highest part of its arc of movement when the upper pressing element is opposed to the lower.

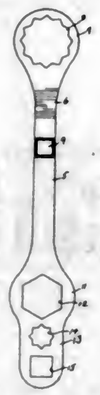
10. In a garment or ironing press, coacting press jaws including a head and buck, a horizontally disposed frame on one end of which the buck is mounted, spaced swing links of different lengths disposed to the rear of the buck and having their lower ends pivoted on the rear portion of the horizontal frame, the shorter swing link being located at the rear of the long link, a head-carrying member disposed above the frame and extending rearwardly from the head, and a pivotal connection made between the upper end of each swing link and the head-carrying member to impart a compound movement to the press head to carry the head to the buck and away therefrom.

1,870,611. PLATE HOLDER FOR STEREOSCOPIC CAMERAS. ERNEST E. DRAPER, Scarsdale, N. Y., assignor to The Perser Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1931. Serial No. 532,521. 14 Claims. (Cl. 95—66.)



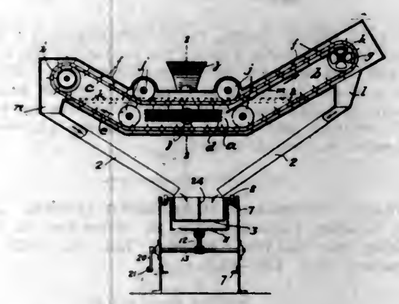
1. A plate holder for stereoscopic cameras comprising an arcuate channel adapted to receive a plurality of photographic plates, grooves on each side of said holder, flexible opaque slides in said grooves and means to lock said plates in said grooves.

1,870,612. WRENCH. ALEX DE SCHEREKO, Chicago, Ill. Filed Mar. 17, 1930. Serial No. 436,503. 1 Claim. (Cl. 81—121.)



A wrench of the character described comprising an integral flat body, the peripheral edge of which continues as a smooth uninterrupted surface and includes an elongated narrow flat shank having an enlarged flat head at one end offset from the shank but substantially parallel thereto and connected to the shank by an intermediate diagonal portion, said head having a serrated nut-receiving opening therein and having an outer circular periphery serving as a handle for the wrench, a square socket operating stud extending from the shank near the diagonal portion, a second flat head also serving as a handle for the wrench and extending from the other end of the shank but in straight alignment therewith with that portion thereof adjacent the shank widening out into a circular portion to provide a better grip for the hand and extending out into an elongated narrowed portion, said latter head having a plurality of varied nut receiving openings in longitudinal alignment within the limits of the head with a larger one of the openings in the wider circular portion and a smaller opening surrounded by a circular end of the latter said head.

1,870,613. METHOD OF SEPARATING COAL FROM IMPURITIES. FRANCIS I. DU PONT, Wilmington, Del. Filed Jan. 28, 1930. Serial No. 428,925. 10 Claims. (Cl. 209—173.)



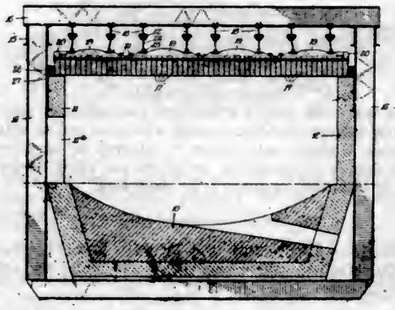
1. The method of separating coal from impurities which includes introducing the coal and impurities into a bath comprising a solution of sodium thiosulphate of such concentration as to have a specific gravity substantially less than that of the impurities to be removed and greater than that of the coal and separately removing the coal and separated impurities from the bath.

1,870,614. DRYING OIL. ALEXANDER EIBNER, Munich, Germany, assignor to the Firm Theodor Kotthoff, Cologne Radertal, Germany. Filed May 1, 1930, Serial No. 449,059, and in Germany Sept. 7, 1929. 5 Claims. (Cl. 134—56.)

1. The process of obtaining a quick drying oil capable of forming a non-shrinking non-hygroscopic film, which comprises heating a fatty oil to a temperature of 270 to 320° C. in the absence of oxygen to polymerize said oil into a stand-oil, iso-colloidal in form, and containing two differently dispersed phases, the lesser dispersed phase of which is distributed in the higher dispersed phase, dissolving said colloid in an organic solvent and cooling the solution to precipitate said lesser dispersed quick drying phase.

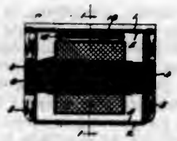
1,870,615. FURNACE CONSTRUCTION. LOUIS ELLMAN, Pittsburgh, Pa., assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 23, 1927. Serial No. 170,118. 13 Claims. (Cl. 110—99.)

1. In furnace construction, a furnace roof comprising a plurality of refractories assembled in roof sections, hangers supporting respective sections individually for swinging movement, stop members supported by the hangers of marginal roof sections for limiting outward movement of the refractories therein, said marginal roof sections being maintained out of gravitational equilibrium



by interior roof sections and stabilizing gravity moments of said marginal sections being exerted upon the refractories of the interior roof sections.

1,870,616. OZONIZER. ALBERT E. EVANS, Cleveland, Ohio, assignor, by mesne assignments, to The Corozone Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 25, 1928. Serial No. 308,164. 2 Claims. (Cl. 175—356.)



1. An ozone machine comprising: a casing having a front wall, side walls provided with inwardly extending flanges adjacent the rear edges thereof, and also with longitudinally extending channels, and a separate rear wall secured to said flanges, said side walls having laterally extending flange portions at each end thereof; a transformer having a laminated core disposed within said casing, and having the opposite sides of said core tightly engaging said channels to maintain the laminations thereof against displacement; and ends of openwork structure secured to said laterally extending flanges at opposite ends of said casing to permit of the circulation of air through said casing and around said transformer.

1,870,617. PLAITING MACHINE. GEORGES EZBELENT and ROGER EZBELENT, Paris, France, assignors to Ezbelent Fils, a French Company. Filed July 25, 1929, Serial No. 381,024, and in France May 8, 1929. 10 Claims. (Cl. 223—44.)

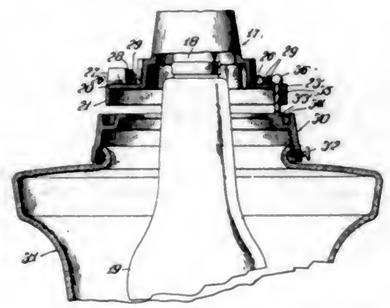
1. In a plaiting machine, two devices comprising a pressing device with cylinders rotatably mounted close near each other and a plait forming device with knives adapted to be reciprocated towards and away from said cylinders, a link, a pivot mounted on said link and on

which said link is adapted to be pivoted, means for pivoting said link about said pivot, a stud engaging said link, guiding means for said pivot, whereby said pivot may be reciprocated towards and away from said stud, means for reciprocating said pivot towards and away



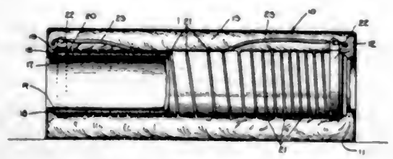
from said stud during a complete oscillation of said link, means interposed between said stud and one of said two devices, whereby said device is adapted to be driven by said link, and means for actuating the other device during a complete oscillation of said link.

1,870,618. LIGHTING FIXTURE. FRED R. FARMER, Wilmette, Ill. Filed May 31, 1930. Serial No. 457,691. 5 Claims. (Cl. 240—78.)



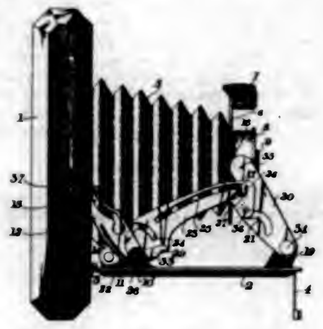
2. A lighting fixture comprising a supporting bulb holding unit having a laterally disposed base portion provided with circumferentially spaced apart slots having horizontal surfaces arranged successively in different horizontal planes; and a bowl-holding unit provided with a plurality of upstanding pins adapted to extend through said slots, the pins terminating in lateral portions adapted to engage said surfaces at the slots in the bulb-holding unit for suspending the bowl-holding unit in place whereby the relation between the two units may be altered by lifting the rotating the bowl-holding unit so as to seat the ends of the pins on the pre-selected surfaces.

1,870,619. ROASTER. JOSEPH A. FLANZER, Brooklyn, N. Y., assignor, by mesne assignments, of one-half to Technidyne Corporation, New York, N. Y., a Corporation of New York, and one-half to Maxwell James, New York, N. Y. Filed July 5, 1928. Serial No. 290,515. 8 Claims. (Cl. 219—35.)



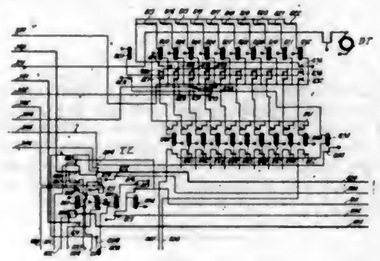
2. A roaster for frankfurters comprising a tubular receptacle forming a substantially close fitting enveloping casing for the frankfurter, and means for heating said receptacle over substantially its complete enveloping surface, whereby the meat is roasted by conduction of heat from the walls of the receptacle.

1,870,620. SELF-ERECTING FRONT MECHANISM FOR CAMERAS. CARL C. FUESST, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 6, 1930. Serial No. 486,650. 9 Claims. (Cl. 95—40.)



1. In a folding camera, the combination with a body, a bed hinged thereto, a brace for supporting the bed, a foldable lens assembly swingingly supported by the bed and a hinged brace for erecting said foldable lens assembly, of a link mechanism actuated by said bed brace, and actuating said hinged brace, whereby an erecting movement is created therein.

1,870,621. AUTOMATIC TELEPHONE SYSTEM. JOHN E. GARDNER, Clarendon Hills, Ill. Filed Nov. 21, 1927, Serial No. 234,752. Renewed Jan. 14, 1932. 13 Claims. (Cl. 179—18.)



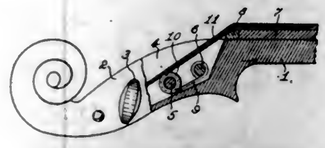
3. In an automatic telephone system, a plurality of trunks, a separate group of switches terminating each of said trunks, and digit responsive control mechanism common to all of said switches for controlling any one of said switches independently of the rest.

1,870,622. BELT FASTENING. JAMES T. GAUDIN, Birmingham, Ala. Filed July 25, 1931. Serial No. 553,123. 6 Claims. (Cl. 24—206.)



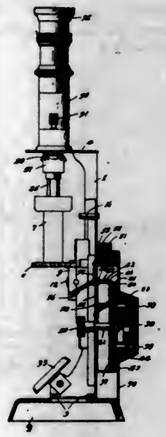
1. A belt clasp, comprising a flexible toothed plate secured to the inner face of one end of the belt, a slot formed in the other end of the belt, a guide secured to the belt in line with said slot, a spring carried by and overlying the guide and having a free end adapted to engage and interlock with the toothed plate, and a slide coacting with the guide and spring to retract the latter and release the belt elements.

1,870,623. VIOLIN. EDWARD L. GOSS and HENRY MUELLER, Waterloo, Iowa. Filed Nov. 12, 1930. Serial No. 495,057. 3 Claims. (Cl. 84—297.)



1. In an instrument of the violin class, in combination with the peg-box and pegs thereof, and the finger-board nut, of a string crossing said nut under lengthwise tension, bending thence slidably in a loop around a stem of one of the remoter pegs and returning thence to be windable around the stem of a peg nearer said nut.

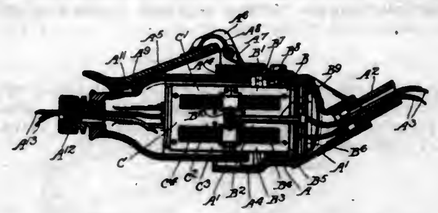
1,870,624. COLORIMETER. PAUL A. E. HELLIGE, Jackson Heights, N. Y. Filed Feb. 9, 1931. Serial No. 514,479. 6 Claims. (Cl. 88—14.)



1. A colorimeter comprising a frame, a pair of adjustable stages on the front of said frame for supporting standard and test solutions, means including an eyepiece at the top of said frame for comparing the color of said solutions, means for raising and lowering one stage and for indicating the effective depth of its solution with respect to the eyepiece, means including a rotatable shaft for raising and lowering the other stage, a dial at the back of said frame operated by said shaft and having a light pervious flange provided with calibrations readable from the general position of said eyepiece, a reflector on the front of said frame adapted to throw light underneath said solutions, and means for directing light from said reflector underneath said dial flange to illuminate it.

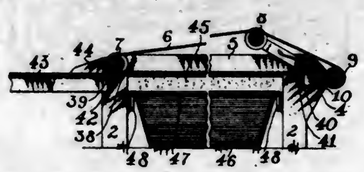
1,870,625. ARCLESS RECEPTACLE AND PLUG CONNECTER. EMIL C. HELLWIG, Aurora, Ill., assignor to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Jan. 10, 1931. Serial No. 507,821. 10 Claims. (Cl. 175—361.)

1. In an electric plug and socket, core elements and coils mounted in each and means for locking them removably together to maintain the core elements and coils in working relation to form an electric transformer, and means associated with the primary coil and operative



only when the plug and socket are not locked together for closing a magnetic circuit through the core elements associated with such coil.

1,870,626. APPARATUS FOR FLATTENING PRINTS. ROY S. HOPKINS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 15, 1930. Serial No. 428,639. 7 Claims. (Cl. 92—70.)

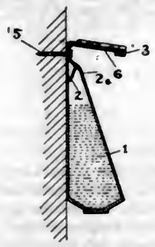


1. A print flattening machine including a steam chamber, a conveyor for moving prints over the steam chamber, means for holding prints against the conveyor and exposing a face of the prints to the steam.

1,870,627. PREPARATION OF TETRANITRODIPHENYL. EARNEST H. HUNTRESS, Cambridge, Mass., assignor to Swann Research, Inc., a Corporation of Alabama. Filed Jan. 27, 1930. Serial No. 423,908. 1 Claim. (Cl. 260—142.)

The method of preparing 2, 4, 2', 4' tetranitrodiphenyl in one step, comprising reacting together diphenyl and nitric acid in the proportions of 10 grams of diphenyl to 40 cc. of nitric acid of specific gravity 1.5, in the presence of 50 cc. of sulphuric acid of specific gravity 1.84.

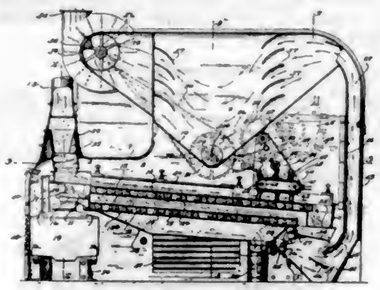
1,870,628. CONTAINER FOR POISON SYRUP AND THE LIKE. CHARLES P. HURLEY, Caldwell, N. J., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 8, 1931. Serial No. 549,493. 5 Claims. (Cl. 43—131.)



1. A container for poison or the like which comprises a sealed vessel in the form of a collapsible tube, means for suspending said vessel in a vertical position, a poison-

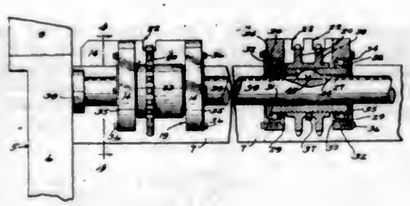
holding cavity at the lower extremity of said vessel and a flattened projecting portion at its upper extremity, and an entrance to said poison-holding cavity disposed in the tube wall below the flattened projecting portion and above the poison level in the tube.

1,870,629. GRAIN CLEANING AND SEPARATING MACHINE. CHARLES C. INGRAHAM, Minneapolis, Minn. Filed May 26, 1930. Serial No. 455,742. 11 Claims. (Cl. 209—267.)



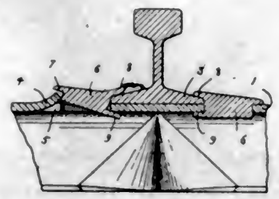
6. In a grain separating machine, the combination with a vibratory screen-equipped shoe, of a traveling flow retarding device, comprising a plurality of flexible blades spaced from the screen of the shoe adjacent the delivery end thereof, said blades being successively operative on the material advanced on the screen to control the movement thereof towards the discharge end of the screen.

1,870,630. FEED CHAIN SPROCKET MOUNTING AND DRIVE THEREFOR. ARTHUR B. JOHNSON, Minneapolis, Minn. Filed Oct. 22, 1930. Serial No. 490,437. 3 Claims. (Cl. 143—49.)



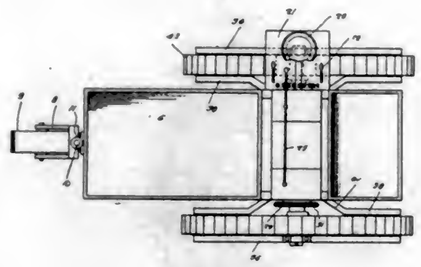
1. In a feed mechanism a plurality of spaced rotating feed members, a drive shaft substantially concentric to but loose in the said feed members, means for journalling and maintaining the feed members in accurate axial alignment independently of the drive shaft, and driving connections between the drive shaft and feed members for imparting like rotary motion thereto but permitting eccentric motion of the shaft in respect to the feed members.

1,870,631. RAIL AND TIE FASTENER. VERNON L. KEECH, Duluth, Minn. Filed July 13, 1931. Serial No. 550,387. 4 Claims. (Cl. 238—331.)



1. A rail and sheet metal tie fastener comprising in combination an upwardly struck tongue in the upper surface of the tie, and a rail engaging dog swageably engageable with the tongue for the purpose described.

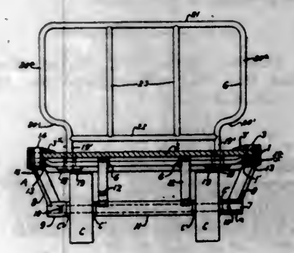
1,870,632. TRACTOR. LOUIS F. KENNEDY, Mankato, Minn. Filed Apr. 11, 1930. Serial No. 443,453. 2 Claims. (Cl. 180—9.2.)



1. In a tractor, a pair of opposed traction members each including a pair of relatively spaced opposed frame bars, sprockets journalled between the bars at corresponding ends thereof, idlers journalled between the bars inwardly from said ends, an axle shaft supported between the traction members and having the ends thereof supported by the frame bars of said members, a bearing rotatable on each end of the axle shaft, a sprocket on said bearing, traction chains connecting the last named sprockets with the first named sprockets and trained over said idlers, a transmission disposed adjacent each traction member, and a driving connection between each transmission and an adjacent bearing.

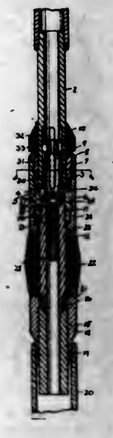
1,870,633. TRUCK. FRANK G. KOEHLER, St. Louis, Mo. Filed May 3, 1930. Serial No. 449,398. 4 Claims. (Cl. 280—49.)

1. A truck comprising a deck, a metallic deck frame surrounding said deck at the marginal edge thereof, said deck frame comprising a structure including a horizontally extended leg, a shaft, brackets for supporting said shaft, and stake pockets on said brackets, said stake pockets being extended through apertures in said horizontal leg of said deck frame of such dimensions with respect to the dimensions of said stake pockets to be



frictionally gripped by the walls of said apertures, whereby said stake pockets and the brackets with which same are associated are fixed to said deck frame.

1,870,634. WELL TESTING DEVICE. GUY V. LEWIS, Laredo, Tex. Filed May 6, 1927. Serial No. 189,294. 11 Claims. (Cl. 166—1.)

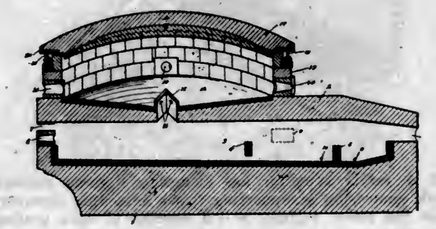


1. In a device of the character described, a drill stem, a tubular mandrel, a valve housing forming a swivel connection between said drill stem and mandrel, a packer on said mandrel, a support for said packer slidable on said mandrel, a valve at the upper end of said mandrel, and means responsive to rotation of said drill stem to move said valve to and from its seat.

1,870,635. TREATMENT OF CELLULOSE ACETATE. CARL J. MALM, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 3, 1930. Serial No. 449,388. 5 Claims. (Cl. 260—102.)

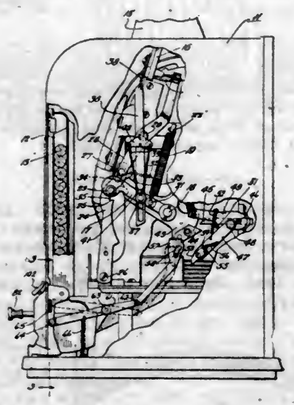
1. A process for changing the solubility of cellulose acetate which comprises conducting the hydrolysis during the first part of the solubility change at an accelerated rate and, prior to stopping the hydrolysis, at a slower rate.

1,870,636. APPARATUS FOR MAKING GLASS AND VITREOUS ENAMELS. GLENN H. MCINTYRE and ROBERT W. STUART, Cleveland, Ohio, assignors to The Ferro Enamel Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 5, 1930. Serial No. 473,210. 12 Claims. (Cl. 49—54.)



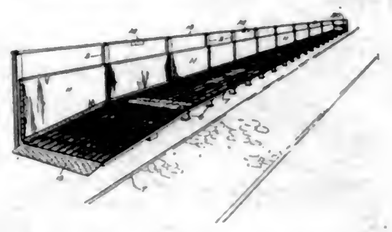
1. In apparatus for making vitreous materials, the combination with a melting chamber having a coniform bottom for receiving the raw materials to be melted, a centrally located discharge aperture in said bottom, and means for progressively depositing such material on such bottom.

1,870,637. SELECTIVE VENDING MACHINE. FRED L. MILLS, Oak Park, Ill., assignor to Mills Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 30, 1928. Serial No. 273,847. 13 Claims. (Cl. 194—2.)



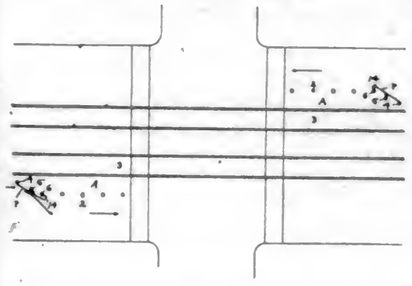
1. A vending machine comprising a plurality of merchandise compartments, means normally preventing discharge of the contents of said compartments, coin-operated mechanism for releasing said means, an ejector for each of said compartments, and a manually operable selector member whereby the customer may release for operation a selected one only of said ejectors, said selector member comprising a locking element adapted to be moved to a selected position by the operator preliminary to the operation of the selected ejector.

1,870,638. SAFETY ZONE. HARRY A. MOLER, Detroit, Mich., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Mar. 19, 1931. Serial No. 523,755. 10 Claims. (Cl. 104—30.)



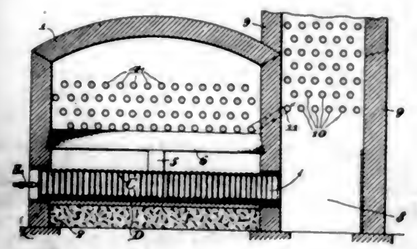
1. A safety zone for use alongside a street railway track comprising a supporting frame extending upwardly from the street surface, and a flooring of open grating supported by the frame above the street surface.

1,870,639. GUARD FOR SAFETY ZONES. JOHN MUELLER, Cleveland, Ohio. Filed July 14, 1930. Serial No. 467,721. 4 Claims. (Cl. 256—1.)



1. A safety-zone protecting device, comprising a barrier having upright posts at one end and a fender having slip connections with said posts and arranged at an inclination to deflect approaching vehicles.

1,870,640. RADIATION COMBUSTION CHAMBER. ARTHUR E. NASH, Philadelphia, and JAMES S. ALCORN, Cynwyd, Pa., assignors to Alcorn Combustion Company, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 29, 1926. Seral No. 151,307. 11 Clams. (Cl. 196—116.)



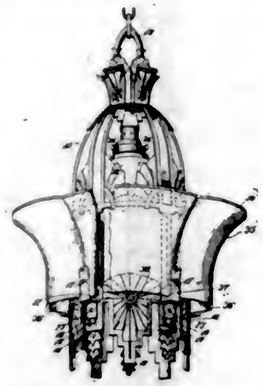
3. Heat transfer apparatus comprising a combustion chamber having a radiating wall structure of refractory metal, a bank of tubes through which fluid is passed disposed in fixed and predetermined position with respect to and heated substantially solely by radiation from said radiating structure, and means for burning fuel in said chamber at a rate to maintain said radiating metal at incandescence, said metal at incandescence being chemically inert to the products of combustion.

1,870,641. COMB. RAYMOND E. NOYES, Kansas City, Mo. Filed Mar. 25, 1931. Serial No. 525,123. 8 Claims. (Cl. 132—13.)



1. A comb comprising a body; a plurality of teeth integral therewith; a cavity formed within the body; a gland formed in each of a number of said teeth; and means for manually forcing a predetermined amount of liquid from the cavity through all of the glands.

1,870,642. LIGHTING FIXTURE. ALBERT J. D. OHM, Oak Park, Ill., assignor to Beardslee Chandelier Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed July 31, 1930. Serial No. 472,000. 7 Claims. (Cl. 240—78.)

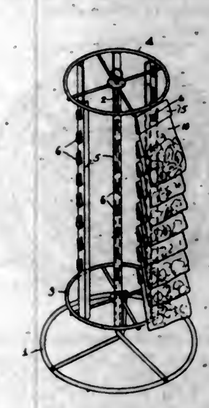


1. A lighting fixture comprising a generally cylindrical main frame provided on its exterior and above the lower end thereof with outwardly disposed upstanding lugs at prearranged distances apart about the main frame; and an outer shade open at the top and at the bottom and adapted to have the frame extend therethrough, said shade being composed of a plurality of outwardly disposed portions extending beyond the circle of said lugs with the portions intermediate of the outwardly disposed portions extending within the circle of said lugs, said latter mentioned portions at the lower open end of the shade being adapted to seat on said lugs with the upstanding portions of the lugs disposed substantially parallel with the outer face of the intermediate portions of the shade.

1,870,643. DISPLAY DEVICE FOR CONFECTIONS AND THE LIKE. CHARLES A. PETERSON, Cleveland, Ohio, assignor to The Peterson Nut Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 20, 1931. Serial No. 531,347. 2 Claims. (Cl. 211—163.)

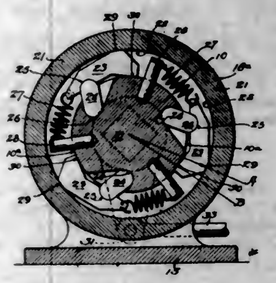
1. A display device including a base comprising a ring-like member, a bowed angular member having its ends

secured to the ring, a vertical standard having an offset portion, the end of said offset portion being attached to the ring and the bend between the offset portion and



the standard being secured to the bend in the first mentioned member, and a rack rotatably supported on the standard.

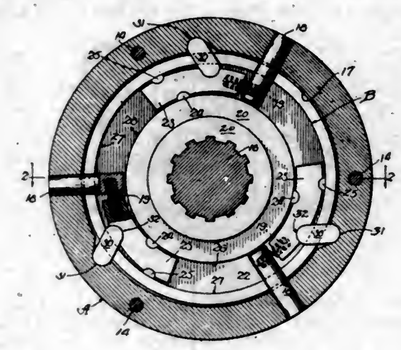
1,870,644. CLUTCH MECHANISM. WALTER CHARLES PITTER, Epping, Essex, England, assignor to The Pitter Trust, Chicago, Ill., a Common Law Trust. Filed Nov. 26, 1930. Serial No. 498,209. 4 Claims. (Cl. 192—14.2.)



1. A clutch mechanism having coaxial rotary driving and driven members arranged to leave an annular interspace of uniform axial and radial dimensions over the entire circumferential length, including tiltable gripping members located in the interspace, and pinless struts each seated in an arcute recess of a gripping member at one end and in an arcuate outwardly diverging recess of the driving member at the other end.

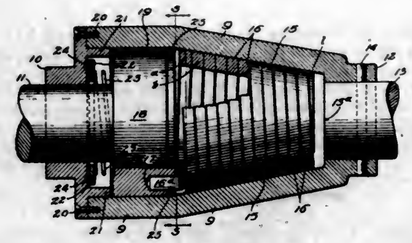
1,870,645. ROTARY CLUTCH MECHANISM. WALTER CHARLES PITTER, Epping, Essex, England, assignor to The Pitter Trust, Chicago, Ill., a Common Law Trust. Filed Dec. 4, 1930. Serial No. 499,889. 6 Claims. (Cl. 192—45.2.)

1. In a rotary clutch of the character described, an inner member and an outer member coaxially arranged, the inner member having a coaxial channel having radially opposed walls, an elongated gripper element having opposed gripping surfaces in said channel, a spring near one end of said gripper element and carried by the outer member to force the gripper element rearward, and a strut element carried by the outer member and directed



inwardly and forwardly to tilt the gripper element to bind it in said channel when the outer member moves forward relative to the inner member.

1,870,646. SPRING CLUTCH DEVICE. WALTER CHARLES PITTER, Epping, Essex, England, assignor to The Pitter Trust, Chicago, Ill., a Common Law Trust. Filed Dec. 20, 1930. Serial No. 503,672. 10 Claims. (Cl. 192—41.).

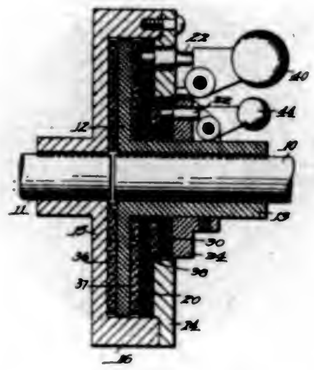


1. A rotary clutch of the character described comprising an outer shell-like member having an inner wall defining a conical recess on the axis of the device closing walls at each end of said shell-like member, an inner member mounted to rotate within and relative to the outer member on the axis of the device, a conically-shaped coiled spring anchored at one end to the inner member and fitting into the conical recess of the outer member, means within the shell holding the members against material longitudinal displacement relative to each other, and means for yieldingly maintaining the spring in close-fitting relation with the wall defining said recess.

1,870,647. CENTRIFUGAL CLUTCH. LOUIS W. RAWSON, Worcester, Mass., assignor to Worcester Polytechnic Institute, Worcester, Mass., an Educational Institution of Massachusetts. Filed May 31, 1929. Serial No. 367,237. 9 Claims. (Cl. 192—105.)

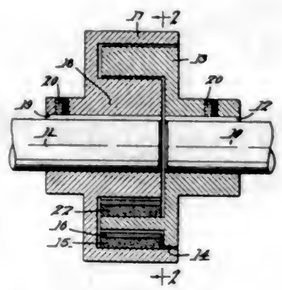
1. A centrifugal clutch comprising a driving member, a driven member, friction elements operatively located between said members, a plurality of centrifugal clutch elements pivotally mounted to rotate with the driven member, a disc effective under influence of said centrif-

ugal clutch elements to apply pressure to said friction elements, a plurality of auxiliary centrifugal clutch elements pivotally mounted to rotate with the driving mem-



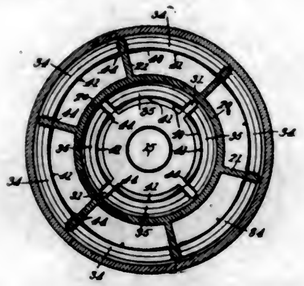
ber, and a second disc effective under influence of said auxiliary clutch members to apply pressure to said friction elements.

1,870,648. ACCELERATING CLUTCH. LOUIS W. RAWSON, Worcester, Mass., assignor to Worcester Polytechnic Institute, Worcester, Mass., an Educational Institution of Massachusetts. Filed Sept. 4, 1930. Serial No. 479,708. 1 Claim. (Cl. 192—105.)



In a clutch, the combination of a driving clutch element having a hub and a wall extending transversely therefrom, radial ribs directly axially of said element from said wall and defining, with said wall, open-ended pockets, a driven clutch element having a hub and a wall extending transversely therefrom, radial ribs directed axially of said element from said wall and defining, with said wall, open-ended pockets, said driving member being nested within the driven member, friction shoes disposed within the pockets of said driving member for positive movement therewith, said driven element having an interior cylindrical surface extending around said shoes, whereby the centrifugal force of the driving element will force the shoes out into contact with said cylindrical surface and drive the driven element therethrough by friction, a second set of friction shoes within the pockets of the driven element whereby the second set of shoes will be carried around positively with the driven element, said driving element having an interior cylindrical surface positioned to receive the pressure of said second set of shoes.

1,870,649. CENTRIFUGAL CLUTCH. LOUIS W. RAWSON, Worcester, Mass., assignor to Worcester Polytechnic Institute, Worcester, Mass., a Corporation of Massachusetts. Filed July 17, 1931. Serial No. 551,452. 2 Claims. (Cl. 192—105.)

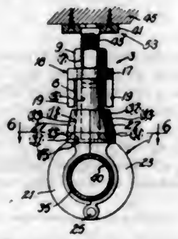


1. A centrifugal clutch comprising a driving and a driven clutch member, each having an axially projecting annular flange a plurality of radially disposed partitions spaced to form a circular series of pockets on each clutch member a centrifugal member mounted for outward movement in each pocket by centrifugal force and positioned to engage the inner surface of the flange on the other clutch member when thus moved outward, certain of said members having leaf springs secured to the inner side thereof and cross plates in said partitions extending over and engaging the end portions of the surfaces of said leaf springs and increasing the spring tension thereof as the centrifugal members move outward.

1,870,650. CHEMICAL MODIFICATION OF CELLULOSE FIBER. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 6, 1930. Serial No. 480,202. 14 Claims. (Cl. 92—13.)

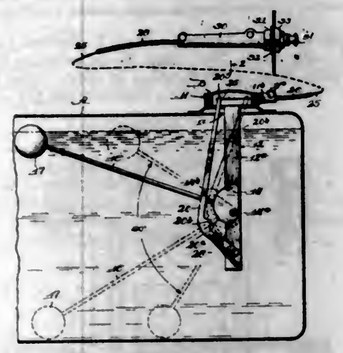
1. A process which comprises subjecting cellulose pulp to the action of reagents at 300° to 400° F. to dehydrolyze certain of its components, and then treating the pulp with an alkaline reagent to dissolve products of hydrolysis and other non-alpha celluloses associated with the pulp.

1,870,651. HANGER. WARD M. ROBINSON and HAROLD K. RADER, Port Huron, Mich., assignors to Mueller Brass Company, Port Huron, Mich., a Corporation of Michigan. Filed Feb. 28, 1931. Serial No. 519,017. 5 Claims. (Cl. 248—31.)



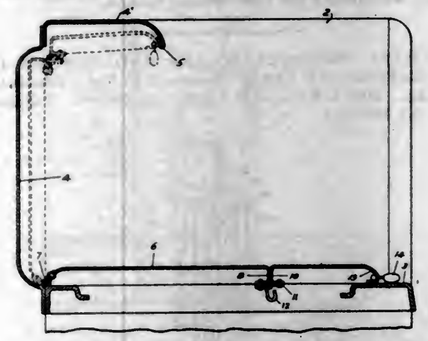
3. A hanger comprising a connecting member having a collar and being adjustable by rotation, a carrier comprising separate arms adapted to be enclosed over a device to be supported, said arms having means thereon to engage said collar, and a lock rotatably and longitudinally movable along the connecting member, said lock being adapted to have a key portion thereof introduced into recesses in the collar and arms to prevent opening of the arms or rotation thereof.

1,870,652. DEPTH TESTING AND INDICATING DEVICE. EDWARD A. ROCKWELL, Long Island City, N. Y. Filed Dec. 7, 1927. Serial No. 238,246. 8 Claims. (Cl. 73—82.)



1. In an apparatus for the purpose indicated, in combination with a container, a depth-responsive device therein having means adapted to assume a different position according to the depth of a liquid in the container, a depth indicator adapted to be mounted independently of the container, operating connections from the depth-responsive device to the indicator, the indicator being provided with a manually operable part susceptible of greater or less movement according to the position of said means, said manually operable part having a series of recesses therein, and said indicator also including a part adapted to successively enter said recesses upon movement of the operable part, whereby to give an audible indication of the extent of said movement.

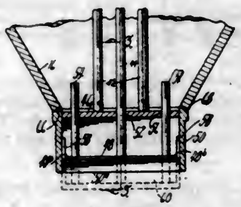
1,870,653. ARTICULATED TOP COVER FOR GAS RANGES. WILLIAM S. ROSS, Piqua, Ohio, assignor to The Favorite Stove and Range Company, Piqua, Ohio, a Corporation of Ohio. Filed Dec. 31, 1930. Serial No. 505,797. 13 Claims. (Cl. 126—214.)



1. A cover for a gas range consisting of a plate member formed of sections hinged to each other and hinged to the top of the range, and means on one of said sections to hold the other section in a substantially horizontal position when said first section is in a vertical position.

1,870,654. DOUGH DISPENSING DEVICE. CLIFFORD R. SCHOEL, Waterloo, Iowa, assignor to Gem Doughnut Machine Co., Inc., Waterloo, Iowa, a Corporation. Filed June 18, 1931. Serial No. 545,158. 4 Claims. (Cl. 107—14.)

3. In a dough dispensing device, a rectangular cylinder and a cut-off plunger relatively movable for dispensing pieces of dough, said cylinder having a cut-off end, said cut-off plunger being adapted to successively assume a dispensing position within the cylinder, a dispensing position spaced beyond the cut-off end thereof whereby a dispensing opening is formed between the cut-off plunger and said cut-off end and a cut-off position at said cut-



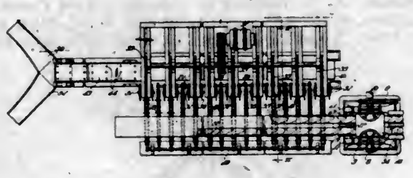
off end for cutting off a pair of pieces of dough at opposite sides of said cylinder and a pair of means for closing off a portion of said dispensing opening whereby to cause dispensation of a pair of non-continuous pieces of dough therefrom, the ends of said dispensing openings being enlarged.

1,870,655. COMPUTATION RULE. MILTON O. SCHUR, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed May 12, 1927. Serial No. 190,772. 7 Claims. (Cl. 235—61.)



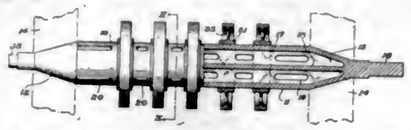
2. A computation rule comprising a plurality of adjacent and parallel, uniformly extensible scales, fixed scales adjacent and parallel to said extensible scales, all said scales being in cooperative relation with one another and corresponding to substantially lineally varying factors and having a common line of origin, said extensible scales each being fixed at one end at said origin and being freely extensible from said fixed end.

1,870,656. MANUFACTURE OF WOODEN SHIMS. GRANT B. SHIPLEY, Pittsburgh, Pa., assignor to The Wood Preserving Corporation, a Corporation of Delaware. Filed Feb. 6, 1931. Serial No. 513,885. 22 Claims. (Cl. 144—3.)



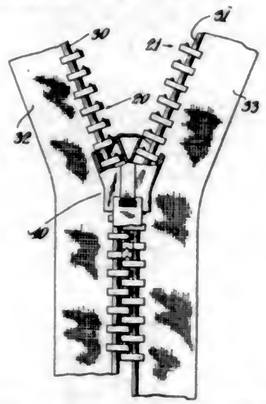
1. A method of manufacturing wooden shims, which comprises simultaneously and progressively exerting sufficient pressure against both sides of a strip of wood from one end toward the other to reduce it to a permanent predetermined thickness, leaving the side edges of said strip unconfined during the compressing step to permit increase in width thereof, trimming the side edges of said strip to reduce the same to the desired width, by cutting said strip from the compressed end toward the uncompressed end during the compressing step, and cutting the compressed and trimmed strip transversely to divide the same into shims.

1,870,657. FURNACE ROLL OR SHAFT. FREDERICK S. SNYDER and CARL H. SIPE, Beaver Falls, Pa., assignors to Demmie T. Sipe, Latrobe, Pa. Filed Aug. 25, 1930. Serial No. 477,514. 3 Claims. (Cl. 263—6.)



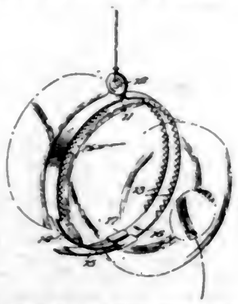
3. A furnace conveyor roll comprising a central cylindrical portion, reduced trunnions integral therewith, and continuous ribs within said cylindrical portion integral therewith and extending substantially from end to end thereof.

1,870,658. FLEXIBLE FASTENING DEVICE. NOEL STATHAM, Irvington-upon-Hudson, N. Y., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Filed Oct. 26, 1927. Serial No. 228,803. 5 Claims. (Cl. 24—205.)



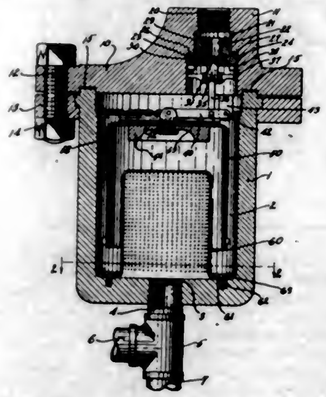
1. A fastener element for automatic fasteners and the like comprising a substantially conical male fastener portion on one side thereof and a substantially conical depression on the other side thereof, the altitude of said substantially conical male fastener portion above the average level of the surrounding material being substantially equal to about one-half of the diameter of said substantially conical male fastener portion at its base.

1,870,659. ARTICLE HOLDER. ROBERT J. STEPHENSON, Auburn, N. Y., assignor to Columbian Rope Company, Auburn, N. Y., a Corporation of New York. Filed Aug. 7, 1930. Serial No. 473,686. 3 Claims. (Cl. 242—141.)



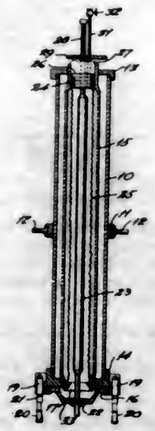
1. A holder for a ball of twine comprising a flexible strip having its ends detachably engaged with each other and formed into a band adapted to encircle the periphery of the ball, said band and attached ends lying flat against the ball, means for retaining the ball in said band and means on the exterior surface of the band for attachment of a suspension element.

1,870,660. STEAM TRAP. LESLIE P. STRONG, Lakewood, Ohio, assignor to The Clark Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 14, 1931. Serial No. 522,584. 3 Claims. (Cl. 137—103.)



1. A steam trap, comprising a chambered casing structure having an inlet opening in the bottom wall thereof and through which steam and water enter the chamber of said casing structure, said casing structure being also provided with an outlet opening through which water leaves said chamber, valve mechanism for controlling the flow of water through said outlet opening, an inverted substantially cup-shaped bucket arranged within said chamber for actuating said valve mechanism, and a strainer for said inlet opening arranged within said chamber and having an inverted generally cup-shaped body portion extending into the space within said bucket and also having an annular base portion secured to said casing structure bottom wall around the inlet opening thereof.

1,870,661. PRINTER'S ROLLER AND PROCESS OF MAKING THE SAME. BENEDICT F. VOGT, Louisville, Ky. Filed Feb. 21, 1930. Serial No. 430,381. 2 Claims. (Cl. 18—58.)



1. Those steps in the process of constructing a printer's roller which consist in assembling a circumferentially expansible tubular fabric casing in unexpanded condition on a stock with its ends held in fixed spaced relation, placing the casing and stock in a mold having a diameter equal to the finished article and greater than the diameter of the unexpanded tubular casing, and forcing a cushioning compound in a freely plastic state into said casing whereby to expand and stretch the casing circumferentially while maintaining it at a fixed length, and allowing the compound to solidify with the casing thus stretched whereby the compound will be under radial compression upon removal of the mold.

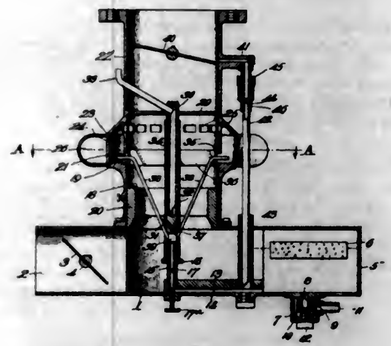
CARNEGIE LIBRARY OF ATLANTA

1,870,662. COLOR BACKED MOTION PICTURE FILM. JACKSON B. WELLS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 17, 1930. Serial No. 453,341. 8 Claims. (Cl. 95—9.)



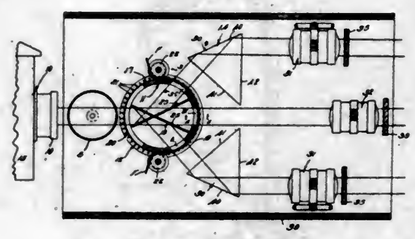
1. A photographic film base comprising a support of cellulose acetate, an intermediate backing of cellulose acetate of low precipitation value and a color backing.

1,870,663. CARBURETOR. STRAUD K. WOOD, Denver, and JESSE C. KING, La Junta, Colo. Filed May 21, 1928. Serial No. 279,492. 11 Claims. (Cl. 48—180.)



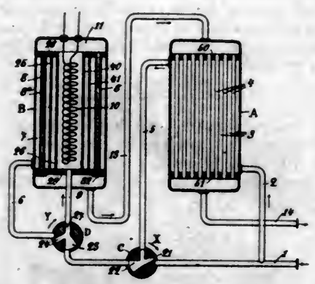
1. In a gas mixing device having an air chamber, a mixing chamber in communication therewith, a gasifying chamber around the mixing chamber, a heating chamber adapted to be heated by exhaust gases of an engine around the gasifying chamber to heat the same, a fan in the mixing chamber rotated by the passage of air from the air chamber through the mixing chamber, and one or more fuel-supply tubes rotatable with the fan and discharging into the gasifying chamber; the mixing chamber having communication with the gasifying chamber to draw hot gas therefrom.

1,870,664. OPTICAL SYSTEM. WALTER L. WRIGHT, Santa Monica, Calif., assignor to Synchrome Corporation, Los Angeles County, Calif., a Corporation of California. Filed Mar. 17, 1930. Serial No. 436,318. 10 Claims. (Cl. 88—16.4.)



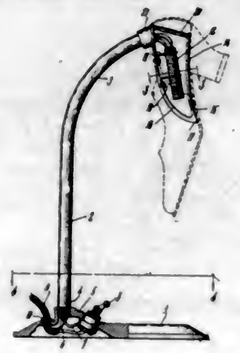
1. In an optical system of the character described, a film carrier having a curved part supporting a film about a center, means throwing a single shaft of light, light dividing means located between said first-mentioned means and the film carrier receiving said shaft of light and dividing it into a plurality of shafts and directing them radially relative to said center and through spaced pictures on the film supported by the carrier, and means receiving the shafts after they have passed through the film and directing them onto a screen in register.

1,870,665. DEVICE FOR PRODUCING EXOTHERMIC REACTIONS BETWEEN GASES BY CONTACT WITH A SOLID CATALYZER. ETIENNE AUDIBERT, Senlis, France, assignor to Societe Nationale de Recherches sur le Traitement des Combustibles, Senlis, France. Filed Nov. 7, 1929, Serial No. 405,495, and in France Oct. 21, 1929. 8 Claims. (Cl. 23—288.)



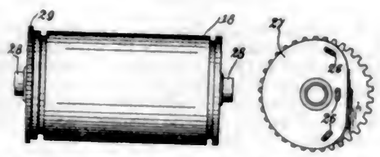
1. In a device for producing reactions between gases by contact with a catalyzer, the combination of a casing, a perforated plate secured in the upper part of this casing, a plurality of tubes secured in the holes of the said plate, a second perforated plate loosely placed in the lower portion of the said casing, the lower ends of the tubes being secured in the holes of this second plate, a catalyzing material in the said tubes, a hollow member detachably secured under the said second plate, this member having perforated portions extending under the said tubes and adapted to support the said catalyzing material..

1,870,666. COUNTER HEATER. WILLIAM H. BAYNARD, Boston, Mass., assignor to Harry H. Beckwith, Brookline, Mass. Filed July 6, 1928. Serial No. 290,854. 3 Claims. (Cl. 12—51.)



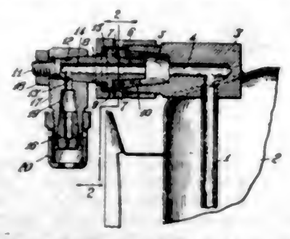
1 A device of the class described comprising a head over which the counter portion of a shoe may be placed, said head having side openings directed toward the counter sides of the shoe so placed, and heating means in said head positioned to direct heat against the shoe through said openings.

1,870,667. RAZOR STROPPER. FERDINAND H. BORM, Chicago, Ill. Original application filed Dec. 10, 1926, Serial No. 153,740. Divided and this application filed June 8, 1928. Serial No. 283,786. 3 Claims. (Cl. 51—194.)



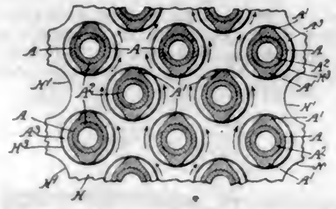
1. A stropping device of the class described comprising a drum member composed of end members and a flexible shell covered with an abrading material; said flexible shell having a cylindrical portion and a flattened portion and secured to said end members only at points upon said flattened portion to permit longitudinal and transverse flexing of said cylindrical portion.

1,870,668. GAS BURNER. LE ROY O. BROWN, Chicago, Ill., assignor to Justrite Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 18, 1931. Serial No. 516,691. 5 Claims. (Cl. 67—105.)



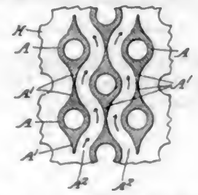
1. A gas burner including a gas feed member having an externally threaded end portion, a cap nut engaged therewith, a gas conductor projecting at one end into said feed member and having its other end portion projecting through a central opening in the head of said nut, an annular flange on said conductor disposed between the head of said nut and the mouth of said feed member, an insulating member interposed betwen said feed member and said conductor and maintaining all parts of the latter out of contact with said feed member, and an insulating element interposed between said flange of said conductor and the head of said nut.

1,870,669. TUBE FOR BOILERS, HEAT EXCHANGERS, AND THE LIKE. ROGER STUART BROWN, Chicago, Ill. Filed Jan. 21, 1929. Serial No. 333,890. 22 Claims. (Cl. 257—262.)



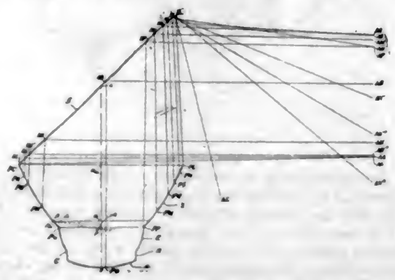
1. A tube adaptable for use with heat exchangers and the like, the interior surface of which is cylindrical in cross-section, the exterior surface of which is stream-lined in transverse cross-section, such stream-lining exterior being formed separately from, and surrounding, the central cylindrical portion.

1,870,670. TUBE FOR BOILERS, HEAT EXCHANGERS, AND THE LIKE. ROGER STUART BROWN, Chicago, Ill. Filed July 9, 1930. Serial No. 466,755. 10 Claims. (Cl. 257—262.)



1. For use with heat exchangers and the like, a plurality of tubes arranged in staggered relation, the exteriors of said tubes being stream-lined in transverse cross-section, said tubes being arranged to provide passages therebetween of substantially uniform cross-sectional area, the interior surfaces of said tubes defining a cylinder.

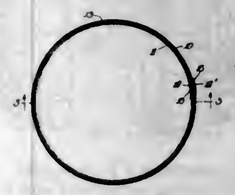
1,870,671. CONCENTRATED BEAM LIGHT. HILLHOUSE BUEL, New York, N. Y., assignor, by mesne assignments, of one-half to Lillian Louise Hammond and William P. Hammond, jr. Filed May 2, 1927. Serial No. 188,317. 5 Claims. (Cl. 240—41.1.)



1. In a headlight of the class described, in combination, a light source and a primary reflector adapted to reflect light therefrom, said primary reflector being a surface of

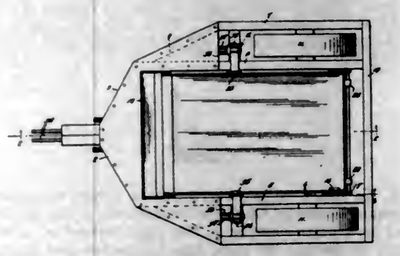
revolution, the curve of which is irregular and is generated by adding to the tangent angle of a comparative parabola at points starting from the parametric plane and progressing outwardly, a progressive increment which is cumulative of all the preceding increments, such increments being ½ the assumed percentage of the angles formed between the sides of the cones of rays for such points.

1,870,672. BAG. JOHN E. CORNELL, Chicago, Ill., assignor, by mesne assignments, to Cornell Bag Corporation, a Corporation of Delaware. Filed Sept. 12, 1927. Serial No. 218,969. 1 Claim. (Cl. 229—55.)



A bag having multi-ply side walls, comprising a single strip of paper wrapped in convolutions, the marginal edges of adjacent convolutions being secured together, with intermediate portions of adjacent convolutions in free sliding contact, and means securing the inner edge portion to the next adjacent convolution substantially throughout its length.

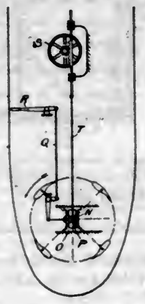
1,870,673. ROAD SCRAPER. FORREST R. DETRICK, Worthington, Ohio. Filed July 3, 1930. Serial No. 465,704. 1 Claim. (Cl. 37—129.



A scraper of the character described comprising a wheeled frame, a scoop pivotally connected at its rear end portion to the said frame, an upstanding ear or each side of the scoop, a jack at each side of the scoop interposed between the frame and the adjacent ear on the scoop, and a dump gate at the rear end of the said scoop.

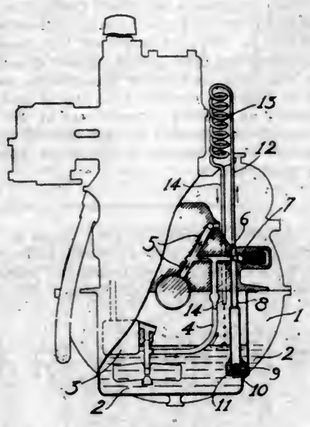
1,870,674. PROPELLING AND STEERING MECHANISM FOR SHIPS. JOSEF EHRHART, St. Poelten, Austria, assignor to J. M. Voith, Heidenhiem on the Brenz, Germany, a Copartnership consisting of Dr. Walther Voith, St. Poelten, Austria, and Dr. Hermann Voith and Dr. Hanns Voith, Heidenheim, Germany. Filed Apr. 23, 1931, Serial No. 532,299. and in Germany Apr. 26, 1930. 15 Claims. (Cl. 115—50.)

1. In a blade-wheel propeller of the kind described, having a rotary disc with blades projecting therefrom into the medium to be operated upon, and the blades movable in respect to each other while moving around their orbit, a steering center or control point block, a guide for said block to permit it to be moved in one direction, a second guide for the first guide to permit the block to be moved in a direction at an angle to the first direction, the movement of one guide being independent of the other guide,



means for moving the block from zero position in either direction, and means translating the movement of the block to the blades.

1,870,675. TEMPERATURE CONTROL IN FORCE FEED LUBRICATING OIL SYSTEMS. EARLE W. EVANS, Linden, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Oct. 30, 1928 Serial No. 316,092. 5 Claims. (Cl. 184—104.)

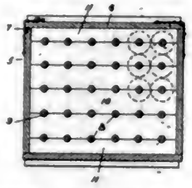


1. In a temperature controlling means for lubricating systems, the improvement which comprises a reservoir, a passageway through which oil normally flows to the reservoir, heat-responsive means for diverting said flow at least in part, means for changing the temperature of the diverted oil, and means for returning the oil to the system.

1,870,676. PACKING CASE. CHARLES R. FRANKLIN, Dover, and EDWARD GOLDSWORTHY, Wharton, N. J. Filed Nov. 16, 1929. Serial No. 407,744. 3 Claims. (Cl. 217—52.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

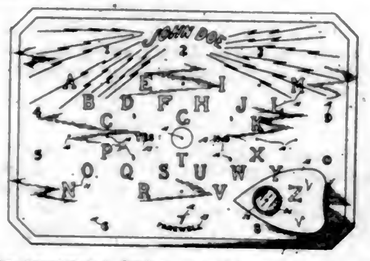
1. A packing case comprising a box, a plurality of separating plates placed one above the other in the ends of the

box, the upper and lower sides of the intermediate plates and the inside of the top and bottom plates formed with spaced recesses, and a plurality of rods, the ends of each



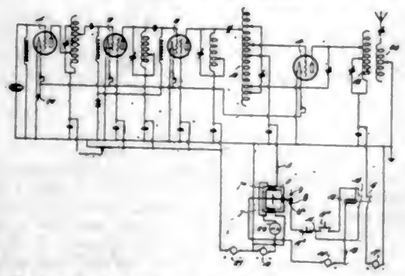
rod fitting in opposite recesses of the separating plates, and the rods dimensioned according to the perforation in the articles to be carried thereby.

1,870,677. AMUSEMENT DEVICE. WILLIAM A. FULD, Baltimore, Md. Filed June 6, 1930. Serial No. 459,571. 4 Claims. (Cl. 273—161.)



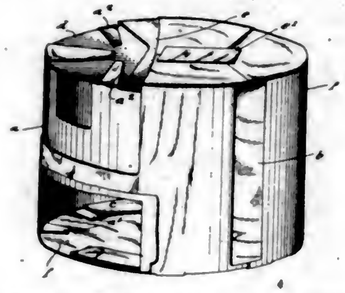
2. An amusement device comprising, in combination, a board bearing characters inscribed thereon, a plurality of protuberances carried by said board interspersed among said characters, a plaque mounted on legs movable upon the board, a combined lamp socket, battery clip and switch carried by the lower surface of said plaque, said switch adapted to be closed by contact with any of said protuberances occurring as a result of movement of the plaque to close a circuit from a battery in said clip through a lamp in said socket to illuminate a character adjacent the contacting protuberance.

1,870,678. RADIO TRANSMITTER. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 26, 1929. Serial No. 350,049. 3 Claims. (Cl. 250—17.)



1. In a radio transmitter, a thermionic tube, a source of control electrode biasing potential, a source of anode potential, a polarized relay having its winding connected in series with said source of biasing potential and the control electrode of said thermionic tube, said relay having a polarized armature and associated contacts connected to control the application of anode supply potential to said thermionic tube in accordance with the direction of current flowing in the winding of said relay.

1,870,679. CARTON OR CONTAINER. MILNE GIBSON, Lyrup, River Murray, South Australia, Australia, assignor to The Guardian Trust Company, Cleveland, Ohio, a Corporation of Ohio, as trustee for Gibson Patent Containers, Ltd. Filed Aug. 23, 1928, Serial No. 301,520, and in Australia Oct. 12, 1927. 6 Claims. (Cl. 206—44.)



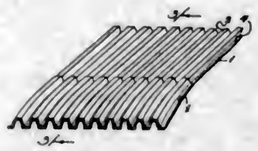
1. A carton, comprising a body portion formed from a strip of material having its opposite ends brought around and secured together and having projections along opposite longitudinal sides bent inwardly, a disc disposed inside the body and resting on the projections at one end to form a bottom, a ring member placed inside the body portion directly beneath the projections of the upper end, and a sheet of transparent wrapping material with its center portion disposed over the top to form a window with the ring end member, the sides of said sheet being folded ober the body and the bottom thereof to completely enclose the carton.

1,870,680. CARDBOARD BOX AND CARTON. MILNE GIBSON, Lyrup, River Murray, South Australia, Australia, assignor to The Guardian Trust Company, Cleveland, Ohio, a Corporation of Ohio, as trustee for Gibson Patent Containers, Ltd. Filed Nov. 21, 1928, Serial No. 320,829, and in Australia Sept. 21, 1928. 6 Claims. (Cl. 229—6.)



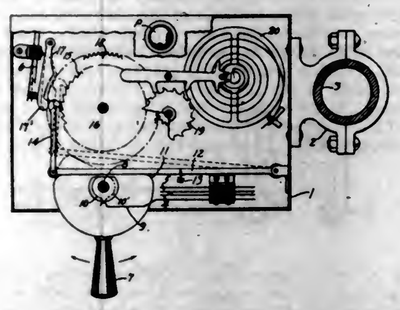
1. An improved cardboard box or carton comprising an external binder of thin flexible material, a disc in the central area of the binder, a side wall formed of a strip of material having its ends joined together and having inturned lugs along its lower edge, said lugs being located above said disc, said binder extending outside the wall and disc and inturned within said wall, and a second disc within the box and resting on the inturned portion of said binder.

1,870,681. PAPER. CARL S. HAMERSLEY, New York, N. Y., assignor to The Hamersley Manufacturing Co., Garfield, N. J., a Corporation of New Jersey. Filed Apr. 26, 1930. Serial No. 447,487. 2 Claims. (Cl. 154—55.)



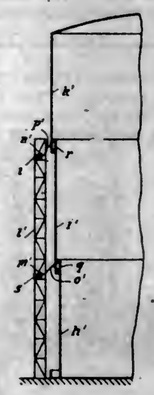
1. As an article of manufacture, a flexible paper distorted at intervals out of the plane of the surfaces of the paper to provide corrugations, and a similarly distorted flexible paper strip attached in superposed relation to the paper along an edge thereof and extending across the corrugations.

1,870,682. DIRECTION INDICATING SYSTEM. RAYMOND A. HEISING, Millburn, and JAMES P. KENDALL, Cranford, N. J. Filed Jan. 5, 1924. Serial No. 684,593. 13 Claims. (Cl. 177—339.)



4. In a direction indicating system, a right hand signal light, a left hand signal light, means for selectively closing the circuit of either of said lights, a pilot light connected in series with whichever of said lights is in circuit, a short circuit around said pilot light, and means actuated by the action of the circuit closing means for intermittently opening said short circuit during at least a portion of the time either of said signaling lights are in circuit.

1,870,683. TELESCOPING GASOMETER. KONRAD JAGSCHITZ, Mainz, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Nuremberg, Germany, a Corporation of Germany. Filed Nov. 20, 1928, Serial No. 320,735, and in Germany Nov. 23, 1927. 9 Claims. (Cl. 48—177.)



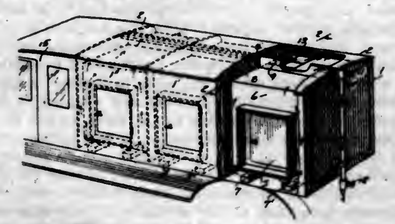
1. In a gasometer, a plurality of relatively movable telescoping gasometer sections, all of said sections except the uppermost being open at the top, so that said sections confine a continuous space for the storage of gas, and a sealing member carried between the inner wall of one section and the outer wall of the other section of each pair of adjacent sections and adapted to slide on at least one of such walls.

1,870,684. HEAT EXCHANGE METHOD AND APPARATUS. DAVID H. KILLEFFER, Yonkers, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 30, 1929. Serial No. 410,749. 6 Claims. (Cl. 62—91.5.)



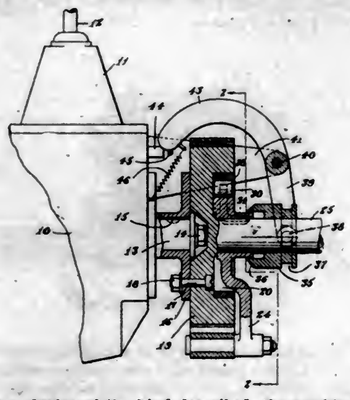
2. A method of refrigerating a space or products by transferring heat therefrom at varying rates, which includes sublimating solid carbon dioxide by absorbing heat through spaced apart thin metal elements, one of which is in contact with said solid and the other of which is in contact with a region or material from which the heat is absorbed, interposing a gas between said metal elements for convection transfer of heat at a relatively slow rate suitable for certain conditions, and displacing said gas by liquid of lower freezing point than said solid when a lower refrigerating temperature is desired.

1,870,685. REFRIGERATOR TRUCK BODY. EDWIN J. LOCKWOOD, Peekskill Village, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 12, 1928. Serial No. 269,354. 9 Claims. (Cl. 62—91.5.)



1. In a refrigerator truck body, containing a plurality of sections, each section having commodity access means and each containing solidified gas refrigerant, the vaporization from which is free to circulate coextensive with the hollow shell structure of said body and of each of said sections.

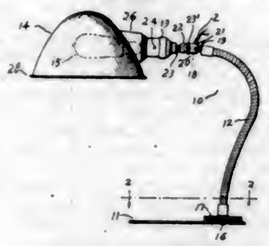
1,870,686. REVERSE BRAKE. CARL A. MATSON, Lynnfield, Mass., assignor to The Matson Company, Concord, N. H., a Corporation of New Hampshire. Filed Apr. 13, 1929. Serial No. 354,686. 15 Claims. (Cl. 192—4.)



1. In a device of the kind described, the combination of a driving member, a driven member adapted to be rotated in

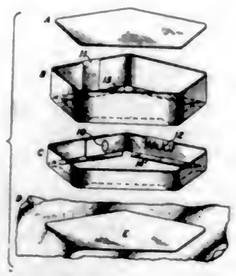
either direction by the driving member, a brake drum mounted on said driven member, a brake band associated with the brake drum, a brake lining carried by said band, a lever mounted on the driven member and operably connected to the brake band, and locking means associated with the lever for operating the same to prevent rotary movement of the driven member in one direction.

1,870,687. PORTABLE LAMP. BYRON MCCANDLESS, U. S. Navy. Filed Aug. 31, 1931. Serial No. 560,253. 1 Claim. (Cl. 240—53.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



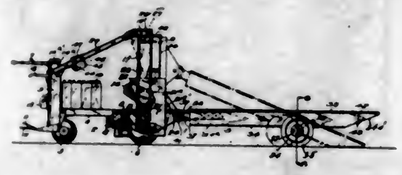
A portable lamp comprising a substantially circular base, an internally threaded boss secured to said base eccentrically thereof, a flexible support, a threaded projection on said support adapted to be received in said boss, said support having a similar threaded projection on the other end thereof, a connection comprising two U-shaped members adjustably pivoted together, a hollow projection on each member, one projection on the connection being internally threaded and adapted to receive the threaded projection on the support, a light socket, the other projection on the connection being externally threaded and adapted to be received in a threaded opening in the light socket, an electricity conducting means connected to said socket through said latter hollow projection, a shade, a substantially circular flange on said shade, the outline of said flange and of said base being substantially equal in size, a hollow boss projecting externally of said shade, said boss tapering internally and receiving and holding said socket therein, all of said separable lamp parts being adapted to be packed into said shade as a container and said base being clamped to the shade flange to act as a cover therefor.

1,870,688. PAPER-BOARD BOX. JOHN ERNEST PAGE, Sydney, Australia, assignor, by mesne assignments, to The Guardian Trust Company, Cleveland, Ohio, a Corporation of Ohio, trustee for Gibson Patent Containers, Ltd., a Corporation of New South Wales, Australia. Filed Nov. 12, 1929, Serial No. 406,685, and in Australia Apr. 19, 1929. 6 Claims. (Cl. 229—6.)



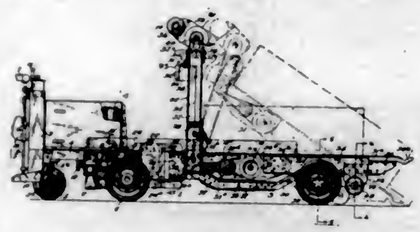
2. A container of the character described, comprising, a continuous tubular member of fibreboard material forming a body portion of the container, a bottom end member comprising a bottom portion and a side wall portion telescoped over one end of said tubular member, said tubular member having tang portions projecting inwardly and resting on the inside face of said bottom end member, and a stiff oversize insert member within said tubular member, said insert member having its peripheral edge pressed against the tubular member whereby the tubular member and the bottom end member are secured together in frictional binding engagement to provide a complete set up container assembled without the use of further securing means.

1,870,689. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 30, 1928. Serial No. 289,462. 14 Claims. (Cl. 214—65.)



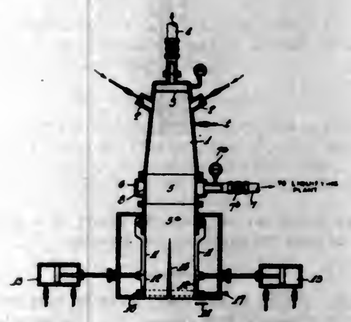
1. A truck comprising articulatable driving and load supporting sections, connections between said sections, wheels for said driving section, certain of said wheels being steerable, means for driving certain of said wheels for said driving section, said supporting section comprising a platform and a pair of wheels disposed below and intermediate the ends of said platform about the axis of which the platform may be tilted, and said connections between said sections comprising a vertical guide on the inner end of said driving section, a member movable upwardly and downwardly on said guide in a plane beyond the inner end of said driving section and a universal joint between said movable member and the inner end of said platform, said movable member when raised serving to tilt said platform into an inclined position to relate its free end relatively close to the floor, whereby the driving of said driving section in one direction will effect the riding of a load up said platform to load it thereon and driving of said driving secton in the opposite direction will slide the load off the platform and discharge it on the floor, and said universal joint being disposed at a point beyond the axle for the prixomate wheels of said driving section, and means for raising and lowering said movable member.

1,870,690. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 20, 1928. Serial No. 294,211. 12 Claims. (Cl. 214—65.)



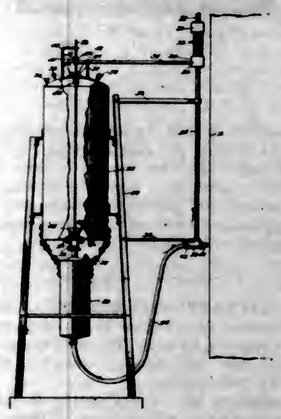
1. In apparatus of the class described, the combination of a traction section, a load carrying section, draft members carried by said sections, a pivot connection between one of said members and said load carrying section, a pivot connection between said members, the axes of said connections being at right angles to each other, wheels for supporting said traction section, a pair of wheels below said load carrying section and cooperating with said draft members to support said section, a platform having an unobstructed surface swingably mounted on said load carrying section to dispose its outer end in close relation to the floor, whereby driving of said sections forwardly will project the platform below a load and cause the latter to ride up said platform, means on said load carrying section for operating said platform, and means for steering certain of the wheels for said traction section, said operating means comprising a member pivotally mounted on the pivot between said draft member and load carrying section, a connection between said platform and said pivoted member and a power mechanism for moving said connection.

1,870,691. METHOD OF AND APPARATUS FOR MAKING AND SHAPING SOLID CARBON DIOXIDE. ROBERT R. RUST, Garden City, and CHARLES L. JONES, Pelham, N. Y., assignors to Dryice Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Dec. 17, 1929. Serial No. 414,675. 20 Claims. (Cl. 62—121.)



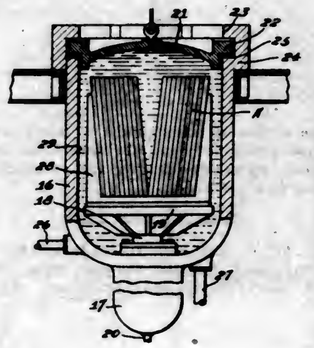
1. A method which includes making and accumulating solid carbon dioxide by evaporating liquid carbon dioxide in a pressure chamber; affording an outlet for extrusion of the accumulated solid while opposing substantial resistance to such extrusion; and utilizing the internal pressure of gas in the chamber to compress the solid, and force extrusion thereof through said outlet against said resistance.

1,870,692. FIRE EXTINGUISHER. JOHN G. SCHOOLER, San Angelo, Tex. Filed Feb. 25, 1929. Serial No. 342,416. 3 Claims. (Cl. 169—9.)



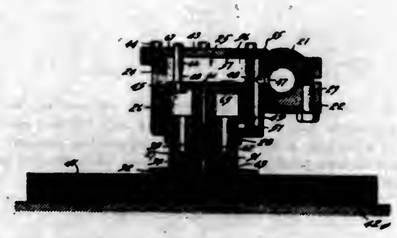
1. A fire extinguisher comprising compressed air and chemical containers having a connection therebetween defining a seat, a valve engaging the seat and having a stem, a lever connected at one end with the stem and having a weight at the other end, a stud on said weight slidably receiving a second weight, trip mechanism including a rod by which the second weight is held suspended above the first weight, and a link also included in said mechanism being destructible by fire to permit either a simultaneous lowering of the weights or the striking of the second weight against the first to move the lever for an opening of the valve.

1,870,693. PROCESS FOR MAKING COMPOSITE GLASS. JAMES H. SHEETS, Brackenridge, Pa., assignor to Duplate Corporation, a Corporation of Delaware. Filed July 23, 1929. Serial No. 380,277. 5 Claims. (Cl. 49—81.)



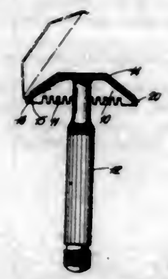
5. A process of compositing glass and cellulose plastic sheets, which consists in securing the sheets together with the application of heat thereto and under a compositing pressure which seals the joints at the edges of the sheets, and then applying a higher fluid pressure directly to all the surfaces of the plate thus formed to give a further compositing action with the temperature of the fluid at a point such as to soften the plastic sheet.

1,870,694. SUCTION CUP. JOHN CONRAD STRICKLER, San Francisco, Calif., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 17, 1931. Serial No. 563,318. 7 Claims. (Cl. 294—64.)



1. A vibrating suction cup for article separation, comprising a vibrating member carrying an article engaging element, means for applying a pulsating suction to said member and element to sustain the article and vibrate said member.

1,870,695. SAFETY RAZOR. BENJAMIN M. SYLVAN, New York, N. Y. Filed June 20, 1931. Serial No. 545,729. 5 Claims. (Cl. 30—12.)



4. As an article of manufacture, a safety razor blade of truncated pyramidal form, the truncation being open and the sides inclined downwardly and outwardly relative to said open truncation.

1,870,696. SELF COOLING, DRILLING, AND CORING BIT. THOMAS G. TAYLOR, Shawnee, Okla. Filed July 16, 1929. Serial No. 378,595. 10 Claims. (Cl. 255—4.)



1. A drilling member, as described, embodying an encasing element and a combined coring and drilling element thereto attached, a motor driven refrigerating element and a motor driven mud circulating element both housed within said encasing element.

1,870,697. APPARATUS FOR HOLDING ROTARY DRILLING POWER UNITS IN A WELL AGAINST ROTATION. THOMAS G. TAYLOR, Roswell, N. Mex. Filed Dec. 6, 1930. Serial No. 500,588. 5 Claims. (Cl. 255—4.)

1. A device of the kind described comprising a set of well drilling tools including a drilling bit and a motor for rotating it, means for holding the tools except the bit from rotating in the well comprising jaws pivotally attached to the set of tools, fluid pressure means for moving said jaws to position in engagement with the walls of the well and means for utilizing the weight of a portion of the set of tools for supplying the pressure.



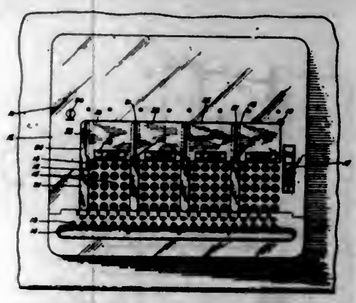
1,870,698. PIEZO ELECTRIC CRYSTAL HOLDER. ARTHUR M. TROGNER, East Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 26, 1929. Serial No. 350,094. 9 Claims. (Cl. 171—327.)



7. Piezo electric crystal apparatus comprising a container, a cover member for said container, a multiplicity of pedestal members disposed normal to said cover member within said container, a plurality of slidable panels engageable between said pedestal members, and piezo electric crystal elements of different frequency characteristics carried by each of said slidable panels.

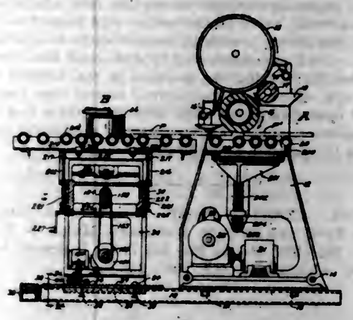
1,870,699. CALCULATING MACHINE. JOSEPH A. V. TURCK, Wilmette, Ill., assignor to Felt & Tarrant Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 30, 1929. Serial No. 359,263. 4 Claims. (Cl. 235—145.)

1. In combination with a calculating machine having a keyboard comprising parallel rows of finger keys with buttons thereon, a columnar covering plate mounted over and obscuring the buttons of a plurality of keys in one of the rows thereof and visually and physically setting off the keyboard into separate simultaneous keyboards, and means for removably clipping said plate to the underside of the buttons of the keys, whereby said plates



may be shifted from row to row at will to vary order and numbers of rows of keys that may be selected for setting off as separate keyboards by said plate.

1,870,700. GRAINING MECHANISM. GUIDO VON WEBERN and EDWARD W. HAMANT, Dayton, Ohio, assignors to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 9, 1929. Serial No. 406,018. 17 Claims. (Cl. 101—154.)



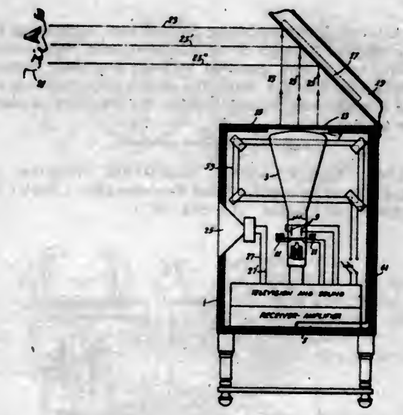
1. A graining machine, comprising, a main graining mechanism including a roll adapted and arranged to transfer a pattern to one surface of a blank, a second graining mechanism, including a roll, adapted and arranged to transfer a similar pattern to another surface of the blank substantially normal to the aforesaid surface, means to adjust the two mechanisms toward and away from each other for graining blanks of different lengths, and a longitudinally adjustable conveyer interposed between the two mechanisms for carrying the blank from one mechanism to the other.

1,870,701. PROCESS AND MACHINE FOR MAKING KNITTED FABRICS. JAMES C. WILLIAMS, Dalton, Ga., assignor to Westcott Hosiery Mills, Dalton, Ga., a Corporation of Georgia. Filed Jan. 31, 1929. Serial No. 336,448. 17 Claims. (Cl. 66—48.)



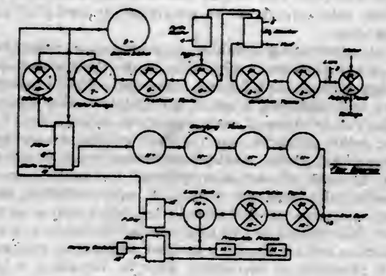
1. In a process for making knitted fabrics the steps of reciprocating a series of needles with a group of said needles in idle position and a group in knitting position, lifting a needle or needles out of action and lowering a plurality of needles into action at opposite ends of the active group of needles at each oscillation and varying the number in the plurality of needles lowered into action at the end of the active group.

1,870,702. TELEVISION APPARATUS. VLADIMIR K. ZWORYKIN, Haddonfield, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 13, 1931. Serial No. 529,653. 10 Claims. (Cl. 178—6.)



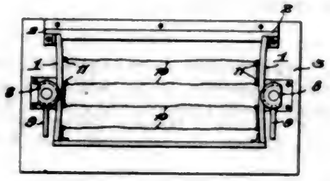
1. In a radio receiving device for reconstructing electrooptical images, a cabinet, a cover for said cabinet, an image reconstructing device contained within said cabinet, and an image reflecting member supporting upon the inner surface of said cabinet cover and movable by opening said cover to a position from which the image produced on said image reconstructing device as reflected from said member may be viewed.

1,870,703. METALLURGICAL PROCESS. JOHN ALLINGHAM, Los Angeles, Calif. Filed Apr. 17, 1931. Serial No. 530,880. 6 Claims. (Cl. 75—18.)



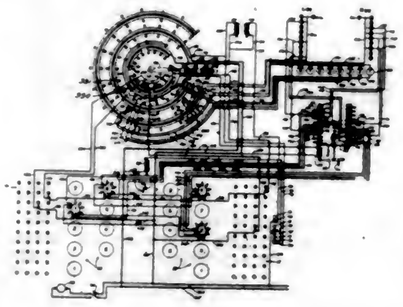
1. The metallurgical process for treating material containing organic salt of gold, silver, copper, or mercury, which comprises: making said material slightly alkaline, to render the salts more easily oxidizable; oxidising the salts in the alkalized material; and then subjecting the oxidized salts to the action of sulphur dioxide.

1,870,704. BROOD FRAME. GEORGE B. BARKER, Sparks, Nev., assignor of one-half to Melvin E. Jepson, Reno, Nev. Filed July 5, 1928. Serial No. 290,638. 8 Claims. (Cl. 6—10.)



3. A brood frame including flexible wire supporting elements adapted initially to be displaced from their normal position, and a wire mounted between said wire supporting elements, whereby when the said wire supporting elements resume their normal position the wire will be placed under tension.

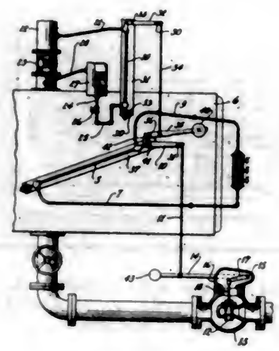
1,870,705. CALCULATING MACHINE. WILLIAM M. BLACK, Fresno, Calif. Filed Jan. 19, 1927. Serial No. 162,052. 23 Claims. (Cl. 235—92.)



17. In a calculating machine, a product registering device including a plurality of dials arranged to represent the places of an answer, said dials each carrying a series of numbers from 0 to 9 inclusive, solenoids for rotating said dials independently of each other, stop means operating in conjunction therewith to selectively control the degree of rotation of the dial, a circuit including a solenoid and stop means whereby a predetermined numeral on the dial will be disclosed, and switch means co-operating therewith to cause said circuits to be progressively operated across the machine.

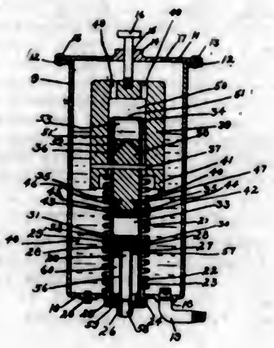
20. A calculating machine, comprising a multiplicand bank of key switches, a multiplier bank of key switches, the switches of each bank having numerical values progressing from 1 to 9 inclusive, a set of multiplicand relay solenoids, one for the switches of each numerical value, a set of multiplier relay solenoids, one for each switch of corresponding numerical value, multiple switches, one adapted to be closed by each of said multiplicand and multiplier relay solenoids, the separate units of said switches having numerical value of the several key switches, a primary circuit, including a key of each of the key banks and a corresponding relay solenoid, a product registering mechanism, and a plurality of secondary circuits, including a predetermined switch section of each of the switches closed by the relay solenoids and including predetermined product registering mechanism whereby the product obtained by the multiplication of the two digits represented by the closed key switches will be registered by the mechanism, and means whereby the digits of the product will be registered in their proper places on the product dial beginning with the digit at the right-hand side of the answer.

1,870,706. FEED-WATER REGULATOR. GRANT D. BRADSHAW, Beaver, Pa. Filed Mar. 27, 1929. Serial No. 350,281. 3 Claims. (Cl. 122—451.1.)



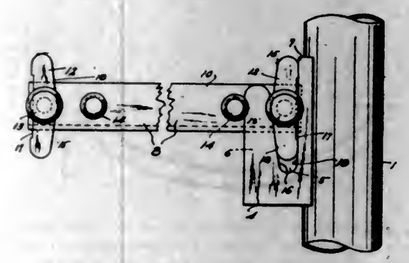
3. In a boiler system, the combination of two feed-water regulators, one regulator being responsive to variations in steam flow from said system, and the other regulator being responsive to variations in water level in a boiler of said system, means operatively connecting said regulators with the feed water valve of the boiler, said means comprising a lever operatively connected to said water level responsive regulator, and means actuated by said steam flow responsive regulator for varying the position of the fulcrum of said lever, said operatively connecting means also comprising a lever operatively connected with said steam flow responsive regulator, and a cam operated by said latter lever for varying the position of said fulcrum.

1,870,707. INERTIA PUMP. CHESTER H. BRASELTON, New York, and FRED B. MACLAREN, Malba, N. Y. Filed Jan. 30, 1922, Serial No. 532,718. Renewed Sept. 14, 1928. 15 Claims. (Cl. 103—208.)



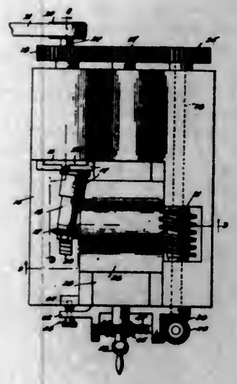
1. A device of the class described comprising a receiving tank; a pump operated by inertia and discharging into said tank; and means, automatically initiated by the level of the liquid in said tank, for opposing a variable resistance to the intake stroke of the pump.

1,870,708. CORNER JOINT FOR METAL BEDS. JOHN TESTER BROTHERS, Birmingham, Ala., assignor, by mesne assignments, to Henry B. Floyd, Chicago, Ill. Filed May 3, 1926. Serial No. 106,325. 4 Claims. (Cl. 5—294.)



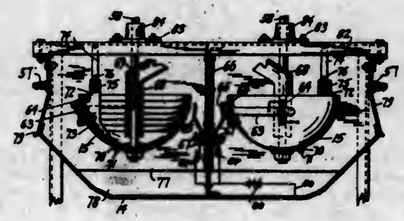
1. A corner joint for metal beds having corner posts and angled side rails, comprising an angled post member provided with one flange adapted for attachment to the post and another flange provided with a vertical slot spaced from the point of junction of said flanges and shaped to provide a straight vertical edge adjacent the junction and an upwardly tapering tongue having an inner edge downwardly inclined toward the said junction, the rail being adapted at its ends to take a bearing against said flange adapted for attachment to the post and having button rivets on its vertical flange adapted to overlap said slotted flange on said post member and having a wedge adapted to take a bearing in the slot of said latter flange.

1,870,709. GEAR GENERATING MACHINE. JOHN M. CHRISTMAN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 29, 1930. Serial No. 492,022. 14 Claims. (Cl. 51—90.)



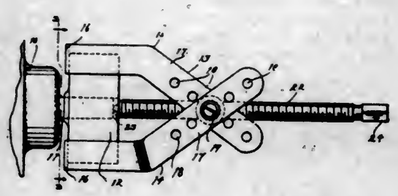
1. In apparatus for generating tooth surfaces on a gear blank, the combination with a driving gear, of a master gear meshing therewith, means for rotating the gear blank in timed relation with said master gear, a rotating generating tool, means moving in timed relation to the rotational movement of said gear blank for revolving said tool in a path eccentric to the rotational axis thereof to move the tool into and out of engagement with said gear blank, and mechanism for imparting linear rolling movement to said master gear with respect to said driving gear and similar movement to said gear blank with respect to said cutting tool.

1,870,710. PLACER-MINING MACHINE. WINSTON G. CHURCHILL, Denver, Colo.; Adelaide Lamb Churchill executrix of said Winston G. Churchill, deceased. Filed May 1, 1928, Serial No. 274,225. Renewed Dec. 3, 1931. 12 Claims. (Cl. 209—478.)



1. In a separator, a rotary, non-magnetic bowl having interiorly, circumferential magnetic riffles, and having back of the magnetic riffles pockets to receive values washed from material held on the riffles by magnetic force, and means for magnetization of the riffles during rotation of the bowl.

1,870,711. PULLEY REMOVER. DAVID C. COONEY, Easthampton, Mass. Filed June 27, 1931. Serial No. 547,892. 1 Claim. (Cl. 29—85.)

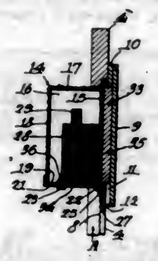


A pulley remover comprising a pair of U-shaped members, each of said members embodying a bight portion and a pair of spaced arms having angularly extending portions provided with longitudinally spaced openings and the angularly extending portions of the arms of said U-shaped members crossing each other, the angularly extending portions of the arms of one of said U-shaped members being offset to dispose said bight portions in the same plane, a bearing bar, screws freely passing through alined openings in said arms and threaded into the ends of said bearing bar, and a screw member threaded in said bearing bar centrally thereof.

1,870,712. INSECT TRAP. GEORGE S. CROWN, Bakersfield, Calif. Filed Dec. 30, 1930. Serial No. 505,631. 3 Claims. (Cl. 43—119.)

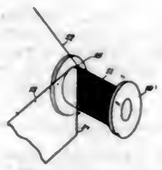
1. A trap of the class described, comprising a casing provided with a leader which opens through the side of the trap, the trap including a bottom having an opening, a

closure hinged to the trap and cooperating with the bottom of the trap, and a leader carried by the closure and occupying the opening when the closure is shut, the closure



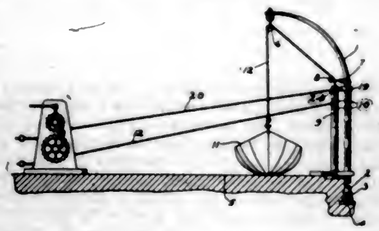
carrying the last-specified leader clear of the opening, when the closure is opened thereby to leave the opening unencumbered.

1,870,713. WIRE COIL AND METHOD OF MAKING SAME. HENDRIK DE JONG, Eindhoven, Netherlands, assignor to Radio Corporation of America a Corporation of Delaware. Filed Feb. 12, 1930, Serial No. 427,720, and in the Netherlands Feb. 22, 1929. 5 Claims. (Cl. 175—21.)



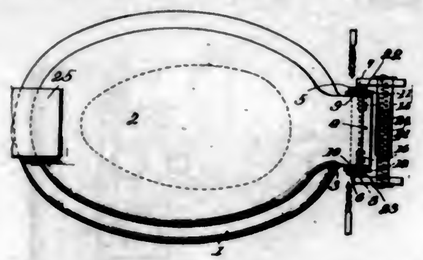
1. A method of winding transformer coils composed of alternate layers of wire windings and coiled insulation strips which comprises bevelling at least one of the ends of each of the insulation strips before they are wound and feeding the strip so that the sharp point of the bevelled end is adjacent that side of the bobbin where the strip is gripped by the winding wire.

1,870,714. LIFEBOAT SECURING MEANS. WILBUR RAY DEAN, Bandon, Oreg. Filed Apr. 29, 1930. Serial No. 448,307. 1 Claim. (Cl. 9—22.)



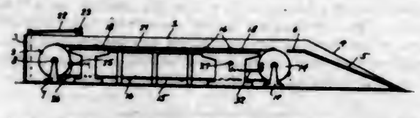
Life boat securing means for a ship comprising a davit hinged to the edge of the ship with freedom of revolving motion and having a sheave supported in the upper end thereof, a standard mounted adjacent the davit and having sheaves supported therein, winches mounted in spaced relation to the davit and the standard, a cable connecting one of the winches and the davit and guided over one of the sheaves in the standard for lowering and raising the davit and a second cable connecting the other winch and a boat disposed under the davit and guided over a sheave in the standard for lowering and raising the boat.

1,870,715. METHOD OF ASSEMBLING AND HINGING TOILET SEATS AND COVERS. EDWARD L. DELANY, Brooklyn, N. Y. Filed May 31, 1930. Serial No. 458,410. 7 Claims. (Cl. 29—84.)



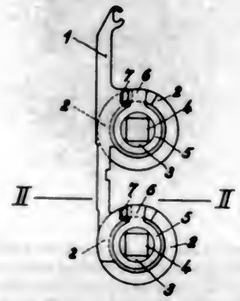
1. A method of assembling hinges on toilet seats and covers for shipment consisting in first, pivotally connecting the cover to the hinge plates said plates having alining and trunnion holes, second alining and holding the hinge plates in proper position on the seat, third alining seat and cover, fourth drilling holes in the seat through the alining holes in the hinge plates, fifth inserting alining and fastening means in said drilled holes.

1,870,716. MOTOR VEHICLE TESTING APPARATUS. CASIMIR A. DOMZALSKI, Detroit, Mich. Filed Dec. 10, 1931. Serial No. 580,191. 4 Claims. (Cl. 265—24.)



4. A motor vehicle testing apparatus comprising spaced, parallel channel members, a pair of transversely aligned shafts journaled in the channel members and having their inner ends adjacent each other, means for releasably securing the shafts together for rotation in unison, pulleys fixed on the shafts and operable in the channel members, pulleys mounted for rotation in the channel members in spaced relation to the first named pulleys, and endless belts operable in the channel members and trained over the pulleys, said belts being adapted to support the vehicle and being actuated by the drive wheels of said vehicle.

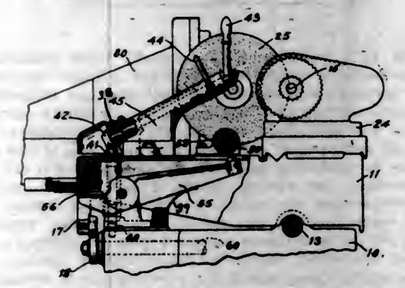
1,870,717. RING SPACER FOR MATRIX SETTING AND TYPE LINE CASTING MACHINES. JULIUS DORNETH, Konradshohe, near Tegel-Berlin, Germany, assignor to Typograph G. m. b. H., Berlin, Germany. Filed Dec. 8, 1931, Serial No. 579,781, and in Germany May 22, 1931. 4 Claims. (Cl. 199—67.)



1. A ring spacer for matrix setting and type line casting machines, comprising a non-rotatable part including

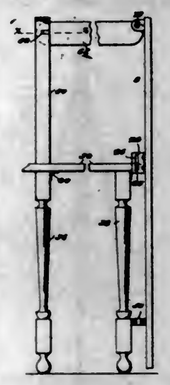
an arm, an annular portion carried thereby, a hook on the upper end of the arm for suspending the arm from a guide wire, a rotatable wedge ring on the annular portion, a spring secured to the rotatable wedge ring, and in the position of rest of the wedge ring, engageable over the non-rotatable part of the spacer for clamping the same between itself and the wedge ring so that the latter is held fast in its initial position during the circulation of the spacer on the guide wire.

1,870,718. RELIEVED SCREW THREAD GRINDING MACHINE. ALDEN M. DRAKE, West Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y., a Corporation of New Jersey. Filed June 16, 1930. Serial No. 461,457. 4 Claims. (Cl. 51—94.)



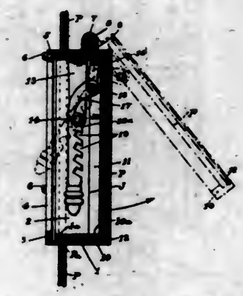
1. A thread grinding machine comprising in combination, a base, a work supporting frame mounted thereon, a rotatably mounted abrasive wheel, cam means to move said frame to advance work mounted on said frame to and from said wheel, a cam for oscillating said frame toward and from said wheel while said work is in its advanced position toward said wheel, a rod slidable within said frame and engaging said base at one end, a cam mounted in said frame and engaging said rod at its opposite end, and manually operated means to rotate said cam to position said frame in two predetermined oscillated positions.

1,870,719. CONCEALABLE FURNISHING. WALTER C. FAIN, Norfolk, Va., assignor to Wainslo Manufacturing Corporation, Norfolk, Va. Filed Mar. 18, 1929. Serial No. 347,913. 7 Claims. (Cl. 155—83.)



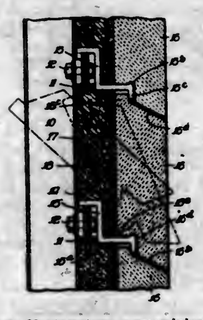
7. In collapsible furnishings, a vertical support, a seat hinged to said support, inner and outer seat supporting legs, means for hinging said legs to the seat bottom so that the legs may assume a vertical seat-supporting position when the seat is extended and a folded position substantially parallel to the bottom of the seat when the seat is in its inoperative position, means for controlling the path of the inner leg, and independent means for controlling the path of the outer leg.

1,870,720. VENTILATOR. CYRUS H. FARLEY, Portland, Me. Filed Mar. 24, 1931. Serial No. 524,919. 2 Claims. (Cl. 98—96.)



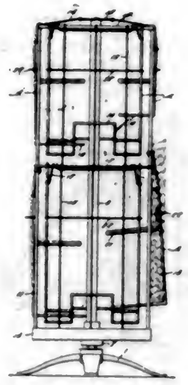
1. A ventilator applicable for use on a window pane having but a single aperture therein, comprising a cylindrical body member disposed on the outer side of said pane, a reduced portion on the inner end of said body member extending into the aperture in said pane, a clamp ring on the inner side of said pane, screws adapted to secure said clamp ring to said body member, said pane being interposed, a cover frame, an arm on said cover frame, a lever pivotally connected to said arm, an arm on said body member, a pin laterally disposed on said last mentioned arm, near its lower end, and a cammed hook on said lever adapted to engage said pin with a tensional strain tending to firmly seat said cover frame on the face of said body member.

1,870,721. FURNACE CONSTRUCTION. RAYMOND D. FOLTZ, South Orange, N. J., assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 3, 1931. Serial No. 560,955. 9 Claims. (Cl. 72—101.)



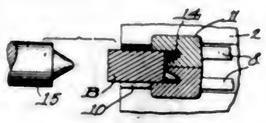
1. A furnace wall structure comprising, in combination, upright frame members spaced apart from one another in a row, transverse members carried by said upright members and spaced apart one above another, refractory tiles supported by said transverse members one above another and spaced apart from said upright members to form a furnace wall lining, said tiles having ledges at the outer portions of their upper and lower edges, and tile engaging members shiftably anchored on said transverse members and engaging the tile ledges to retain the tiles against displacement inwardly of the furnace chamber, the spacing of said transverse members affording room between them permitting removal and insertion of the tiles from the outer side of the structure.

1,870,722. PAPER BAG HOLDER. BASILIO L. FRATESI, Jr., Tribbett, Miss. Filed Aug. 28, 1931. Serial No. 559,977. 2 Claims. (Cl. 211—53.)



1. A bag holder of the class described comprising a base, a frame rotatably supported thereby and a plurality of spring-pressed bag holders pivotally connected with the frame, each holder consisting of a pair of limbs the upper ends of which are pivotally connected with the frame, a pair of inwardly extending horizontally arranged U-shaped members, the outer limbs of which are connected with the first mentioned limbs and an inverted vertically arranged U-shaped member connecting the ends of the inner limbs together and extending upwardly.

1,870,723. METHOD OF AND MEANS FOR HANDLING CUT BLANKS FOR FORGINGS. JOHN HENRY FRIEDMAN, Tiffin, Ohio, assignor to The National Machinery Co., Tiffin, Ohio. Filed Nov. 14, 1929. Serial No. 407,256. 13 Claims. (Cl. 78—60.)

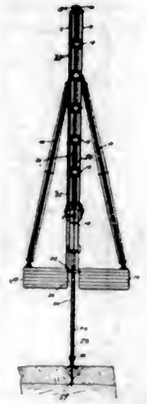


12. Apparatus for producing from a short blank a forging with a depression in one end, including separable movably connected jaws having a blank holding cavity open at one end and provided in its other end with a projection, dies movable to grip the jaws and hold them against movement relative thereto, and a heading tool movable between the gripping dies to engage one end of the held blank and shape the opposite end thereof about the projection in the cavity.

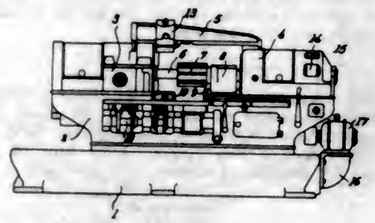
1,870,724. MULTIPLE SPINDLE AUTOMATIC SCREW MACHINE. ANTON GEBSTADT, Berlin-Charlottenburg, Germany. Filed Jan. 28, 1930, Serial No. 424,125, and in Germany Jan. 31, 1929. 28 Claims. (Cl. 29—38.)

1. In a multiple-spindle automatic screw machine in combination with a spindle box, a gear box, a bridge connecting the latter to said spindle box, tool carriages including a central carriage and side carriages, cam shafts carrying cams for actuating said tool carriages, including cam shafts arranged at the front and rear side of the machine for actuating said side carriages, a special cam for controlling the working stroke of said central carriage mounted upon one of said shafts, a second special cam for controlling the idle stroke of said central carriage, two driving mechanisms separated from but adapted to become alternately active for intermittently moving said two special cams, means for arresting the movement of one of said special cams during the movement of the other of said special cams, a worm wheel, an intermediate shaft for carrying the wheel and to which wheel and shaft said cam controlling the working stroke of said central tool carriage is rigidly connected while said cam controlling the idle stroke of said central tool carriage is loosely mounted upon said intermediate shaft, and means for driving said latter cam at a higher speed and independently of said first cam when the cam is shifted, a rack fixed to the said central tool carriage, a slide movably arranged in the machine bed and in engagement with said rack, a gear rotatably journalled in the guide, an adjustable rack engaging said latter gear, and a roller slide.

1,870,725. DRILLING EQUIPMENT. WILLIAM D. GRANT, Vancouver, British Columbia, Canada. Filed Mar. 31, 1931. Serial No. 526,689. 8 Claims. (Cl. 255—51.)



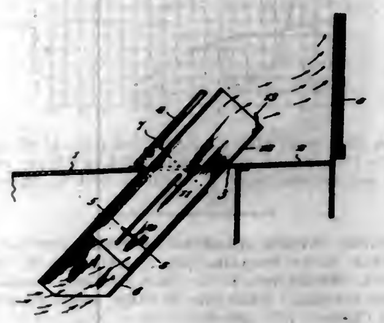
1. In a subaquatic drilling equipment comprising a barge and operating cables thereon in combination with a pair of vertical leads mounted upon said barge, means for controlling the idle stroke of said central carriage, two driving meechanisms to intermittently move said two special cams and means for automatically connecting the two driving mechanisms to their respective cams for arresting the movement of one of said special cams during the movement of the other of said special cams.



10. In a multiple-spindle automatic screw machine in combination a spindle box, a gear box, a bridge connecting the latter to said spindle box, tool carriages including a central carriage and side carriages, cam shafts carrying cams for actuating said tool carriages, including cam shafts arranged at the front and rear side of the machine for actuating said side carriages, a special cam for controlling the working stroke of said central carriage mounted upon one of said shafts, a second special cam for controlling the idle stroke of said central carriage, two driving mechanisms separated from but adapted to become alternately active for intermittently moving said two special cams, means for arresting the movement of one of said special cams during the movement of the other of said special cams, a worm wheel, an intermediate shaft for carrying the wheel and to which wheel and shaft said cam controlling the working stroke of said central tool carriage is rigidly connected while said cam controlling the idle stroke of said central tool carriage is loosely mounted upon said intermediate shaft, and means for driving said latter cam at a higher speed and independently of said first cam when the cam is shifted, a rack fixed to the said central tool carriage, a slide movably arranged in the machine bed and in engagement with said rack, a gear rotatably journalled in the guide, an adjustable rack engaging said latter gear, and a roller slide.

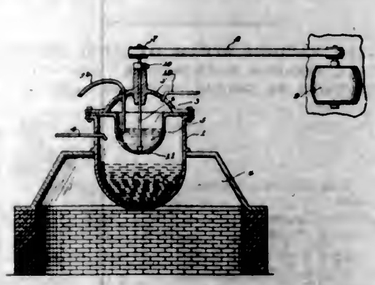
holding said leads in spaced apart relation, guy members supporting said leads, a slideway formed upon one face of said leads, a drilling member mounted on said slideway, and means to support said drilling member, a spud member slidable between said leads, a foot clamp fitting said spud member, said foot clamp being positioned upon the lower end of said spud member and beneath the bottom of said barge.

1,870,726. WINDSHIELD HEATER. ARTHUR R. GREENE, Fort Dodge, Iowa. Filed June 8, 1931. Serial No. 542,903. 4 Claims. (Cl. 20—40.5.)



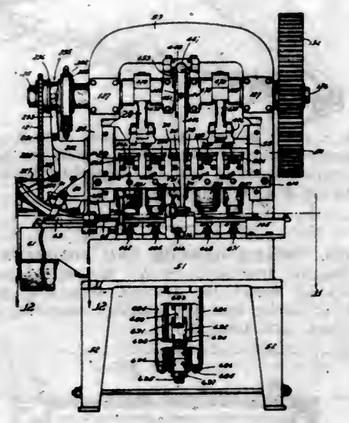
1. The combination with an automobile hood having an opening therethrough, of a cover for said opening mounted upon the hood, and a tubular body carried by said cover and disposed under the hood with its rear end adjacent the opening in the hood whereby if the cover be raised the body will be set to direct hot air from the engine of the automobile through the opening in the hood to play upon the automobile windshield.

1,870,727. PROCESS AND APPARATUS FOR MAKING COLLOIDAL SUBSTANCES. ALBERT HARTZELL, Yonkers, and FRANK H. LATHROP, Geneva, N. Y., assignors to Walter C. O'Kane, Durham, N. H., and Paul Moore, Washington, D. C., chairman and secretary of The Crop Protection Institute, Washington, D. C., an Association. Filed Aug. 16, 1924. Serial No. 732,528. 7 Claims. (Cl. 252—6.)



5. A colloidal apparatus comprising means for vaporizing a substance to be colloidized, means for introducing a current of gas into the vaporizing means to assist in carrying off the vapors formed therein, means for exposing said vapors to a colloidizing material, and means for conducting the vapors from the first-named means into the colloidizing material.

1,870,728. APPARATUS FOR MAKING LEVER OPENER CONTAINER PARTS. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 30, 1929. Serial No. 417,379. 34 Claims. (Cl. 29—33.)



1. A machine for producing lever opener container parts, comprising in combination means for cutting and forming an opening lever from a strip of sheet material, reciprocating means having oppositely movable grasping fingers for holding and advancing a succession of container parts, means for preparing a container part for the reception of said formed lever, and mechanism for assembling the lever on the container part.

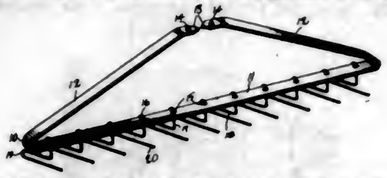
10. In a machine for producing lever opener container parts the latter having projecting lips, the combination of feeding devices for intermittently advancing a strip of sheet material through the machine, drawing dies adapted to operate while said strip is at rest for projecting restricted portions thereof to form protuberances, blanking dies for cutting opening levers from said strip so that each lever contains a single protuberance, feeding devices for intermittently advancing a container part through the machine, mechanism for inserting the protuberance of said lever into an opening formed in the projecting lip of said container part while the latter is at rest, instrumentalities for clinching the protuberance of said lever on said container part, and means for bending the lip with the lever clinched thereon.

25. A machine for producing lever opener container parts, comprising in combination, feeding devices for advancing through the machine a strip of sheet material from which opening levers are cut, said devices including feeding rollers and actuating instrumentalities for rotating said rollers, clutch members interposed between said rollers and said instrumentalities, other feeding devices for advancing through the machine a container part to which is subsequently secured a said opening lever, and means cooperating with a container part while within its feeding devices for operating said clutch members to effect engagement between said rollers and their actuating instrumentalities thereby advancing said strip during proper feeding of said container part.

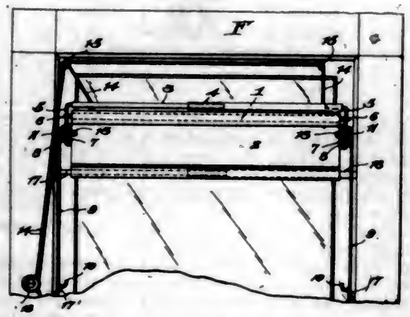
1,870,729. TIE RACK. HERMAN H. A. HULSEBERG, Chicago, Ill. Filed June 10, 1929. Serial No. 369,673. 1 Claim. (Cl. 211—87.)

As a new article of manufacture, a tie rack formed from a blank strip of comparatively narrow material having the ends thereof bent inwardly to constitute inwardly converging arms and a flat transversely extending body, the arms and body all extending substantially in the

same plane, said arms terminating in offset flat ears extending toward each other and projecting substantially parallel to the body portion and adapted to receive means for securing the arms firmly in engagement with a support at a point intermediate the ends of said body, the body portion being provided with a plurality of spaced eye receiving portions and tie supporting hooks engaging said eye receiving portions.

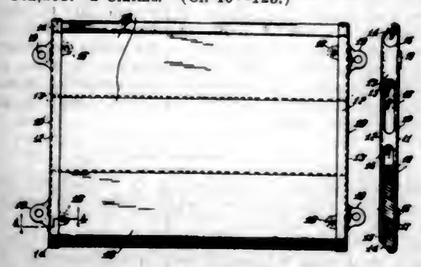


1,870,730. SHADE HANGER AND ADJUSTER. JOHN L. HYLAND, New York, N. Y. Refiled for abandoned application Serial No. 157,593, filed Dec. 28, 1926. This application filed May 20, 1930. Serial No. 454,112. 5 Claims. (Cl. 156—27.)



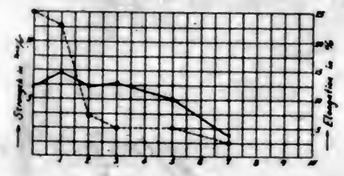
1. In combination with a shade roller carrier and means to connect same for vertical adjustment to a window frame, combined operating and holding means for the carrier connected thereto and having parts engageable with the sides of the window frame to hold the carrier against movement, said last named means including arms connected at their upper ends to the carrier and having shade pintle receiving recesses, said arms having their upper portions bent downwardly, then upwardly and finally downwardly and having said downwardly bent portions provided at their lower ends with finger grips, and friction shoes on the upper ends of the downwardly bent portion of the arms to engage the window frame sides.

1,870,731. PLACARD BOARD HOLDER. FRED A. ISAACSON, Topeka, Kans. Filed Sept. 10, 1931. Serial No. 562,103. 2 Claims. (Cl. 40—125.)



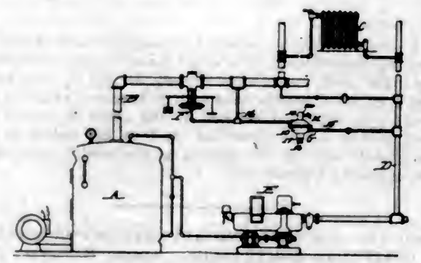
1. A holder of the character described comprising a pair of elongated channeled castings adapted to receive the ends of a board therein, said castings each having oppositely sloping end walls, the rear marginal wall of each casting having laterally disposed apertured ears, while the intermediate outer side wall is provided with laterally disposed attaching lobes.

1,870,732. ANTICORROSIVE ALUMINIUM LIGHT ALLOY. ITYRO IYTAKA, Sugamo-Machi, Kitatoshima-Gun, Tokyo, Japan, assignor to Mitsubishi Zosen Kabushiki Kaisha, Tokyo, Japan. Filed Jan. 12, 1931. Serial No. 508,217. 1 Claim. (Cl. 75—1.)



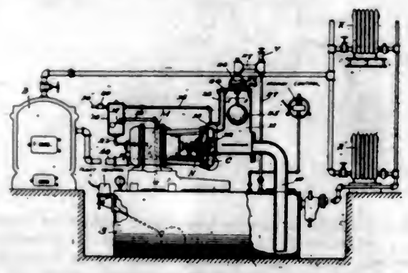
An alloy containing 0.5 to 5.0 per cent. of chromium, 0.5 to 7.0 per cent. of magnesium, 0.3 to 4.0 per cent of iron and the remainder of aluminum with its impurities.

1,870,733. STEAM HEATING SYSTEM. IRVING C. JENNINGS, South Norwalk, Conn., and LOUIS W. SOUTHGATE, Washington, D. C.; said Southgate assignor to said Jennings. Filed July 18, 1930. Serial No. 468,798. 11 Claims. (Cl. 237—67.)



1. In a steam heating system having a radiator, a supply line to the radiator and a return line from the radiator, a valve connected to admit atmospheric air to the supply line and means governing the operation of the valve to prevent the pressure in the supply line from falling below the pressure in the return line.

1,870,734. VACUUM STEAM HEATING APPARATUS. IRVING C. JENNINGS, South Norwalk, Conn. Filed Jan. 4, 1932. Serial No. 584,743. 6 Claims. (Cl. 103—113.)



1. In a vacuum steam heating apparatus having supply and return lines, the combination of a closed separating tank to which the return line is connected at a high

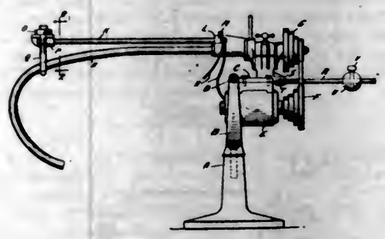
level, an air or gas pump and a centrifugal water pump, a connection from the lower part of the tank to the centrifugal water pump and a connection from the top of the tank to the air pump arranged so that the air pump will prime the water pump and will remove the air and gas from the top of the tank and from the system simultaneously as the water pump withdraws the water from the tank.

1,870,735. ART OF ROASTING EDIBLES. LESTER L. JONES, Oradell, and JOSEPH JONES, Westwood, N. J., assignors, by mesne assignments, of one-half to Technidyne Corporation, New York, N. Y., a Corporation of New York, and one-half to Maxwell James, New York, N. Y. Filed July 5, 1928. Serial No. 290,487. 10 Claims. (Cl. 126—41.)



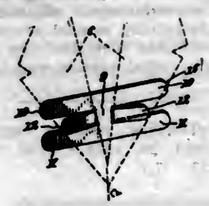
1. In combination, a roaster for meats of pre-formed shape and dimensions comprising a roaster receptacle having an internal shape and dimension substantially the same as those of the meat to be roasted whereby the receptacle forms an enveloping casing for the meat, and a carrier for the meat conforming closely to the internal shape and dimensions of the lower part of said receptacle and removably receivable by the receptacle.

1,870,736. FLEXIBLE SHAFT MACHINE ATTACHMENT. JOSEPH F. KELLER, New York, N. Y., assignor, by mesne assignments, to Pratt & Whitney Company, Hartford, Conn., a Corporation of New Jersey. Filed Oct. 12, 1929. Serial No. 399,378. 1 Claim. (Cl. 51—170.)



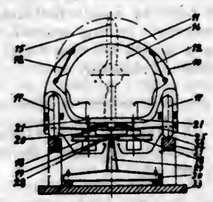
An attachment for flexible shaft bench grinders wherein a supporting stand is provided with a bracket pivotally mounted thereon and adapted for pivotally supporting the motor and its driving connections to the flexible shaft, comprising a tubular arm extending outward from said bracket above and in the direction of the flexible shaft, means for detachably securing the tubular arm to the bracket, a bracket provided with a depending ring at the outer end of said tubular arm, said ring being adapted to support the flexible shaft and permit lateral and up and down movement thereof, an electric switch mounted on said tubular arm bracket above the ring, wiring connections extending from said switch through the tubular arm to the motor for controlling the same, a counterweight arm adapted to extend from said motor supprting bracket in the opposite direction from said tubular switch arm, means for removably attaching the last named arm to the bracket and an adjustable weight on said counterweight arm for counterbalancing the tubular switch arm.

1,870,737. LAPEL PROTECTOR. MAX N. KOHLER, New Orleans, La. Filed Feb. 15, 1932. Serial No. 593,158. 1 Claim. (Cl. 223—18.6.)



A lapel protector, comprising a body member formed of sheet cardboard material possessing a certain inherent resiliency, three or more tongues projecting in opposite horizontal directions from the body member and being connected to the body member at the inner ends thereof but separated from one another along their adjacent longitudinal edges, the two end tongues at each side being longer and separated by an intermediate shorter tongue, said tongues having outer rounded edges, the intermediate tongues adapted to be bent forwardly out of the plane of the longer end tongues to enable the end tongues at each side to underlie the lapels of a coat while the intermediate shorter tongues engage upon the outer faces of the lapels.

1,870,738. HIGH SPEED RAILWAY WITH PROPELLER DRIVEN STREAMLINE VEHICLES. FRANZ KRUCKENBERG and FRITZ HEYNER, Heidelberg, Germany; said Heyner assignor to said Kruckenberg. Filed Sept. 6, 1929, Serial No. 390,770, and in Germany Sept. 13, 1928. 13 Claims. (Cl. 104—119.)



1. A high speed vehicle comprising a streamline outer body, supporting wheels, means mounting said wheels in spaced relation on and substantially entirely within said body, an inner body and means mounting said inner body within said outer body, the lower portion of said inner body depending into the space between said wheels.

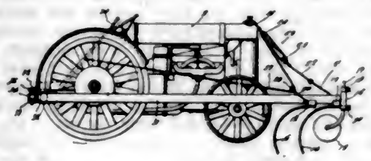
1,870,739. LAWN BROOM. JOHN W. LAMBERT, Anderson, Ind. Filed Feb. 27, 1928. Serial No. 257,464. 14 Claims. (Cl. 55—114.)



2. In a hand implement of the character described, a pair of substantially sector shaped plates, registering semi-conical indentations radially disposed at the apices

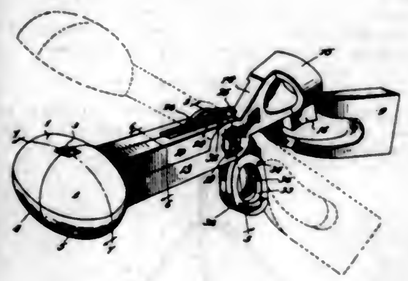
of said plates forming a socket for a handle shaft, and a plurality of radially disposed spaced fingers, engaged intermediate the plates and projecting from the arcuate margin thereof, a reinforcement rib formed on one of the plates in substantially parallel spaced relation with the margin thereof and divergent ribs formed on the plate in substantial radial relation with its sector shape.

1,870,740. CULTIVATOR. BURTON LEITER, Edmore, Mich. Filed Sept. 29, 1931. Serial No. 565,876. 3 Claims. (Cl. 97—47.)



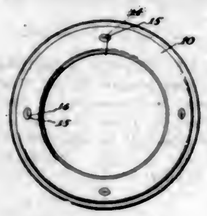
1. In a structure of the class described, in combination, a tractor, a wheel supported tooth equipped cultivator arranged in advance of the front wheels of the tractor, a draft bar attached to the rear end portion of the tractor, and reach rods separably connected at their rear ends to the draw bar and at their front ends to the cultivator, flexible stay and hoisting means including an operating lever pivotally mounted on the tractor, said operating means embodying a saddle for detachably embracing the filler neck of the tractor radiator.

1,870,741. EGG BREAKER. NELS NASTROM, Elk Mountain, Wyo. Filed July 9, 1930. Serial No. 466,823. 7 Claims. (Cl. 146—2.)



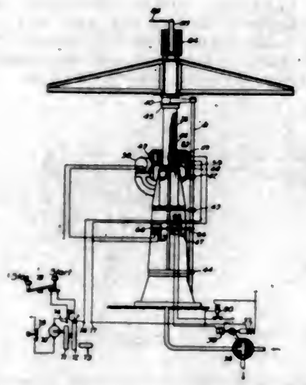
1. An egg breaker comprising a holder consisting of two cups adapted to enclose an egg and each bisected transversely, a knife movable between and independently of the sections of one cup to split the shell of an egg held in the cups, means whereby the cups may be moved apart to receive the egg, and means whereby the members of the cups may be moved apart to discharge the meat of the egg and retain the shell.

1,870,742. INFLATION INDICATOR FOR TIRES. AMY S. PIERCE, Los Angeles, Calif. Filed Nov. 23, 1931. Serial No. 576,694. 11 Claims. (Cl. 116—34.)



1. The combination with a penumatic tire casing, of thin sections of resilient material secured to the outer faces of the side walls of the casing, each section of material being provided with a slit and the edges adjacent to said slit being beveled inwardly.

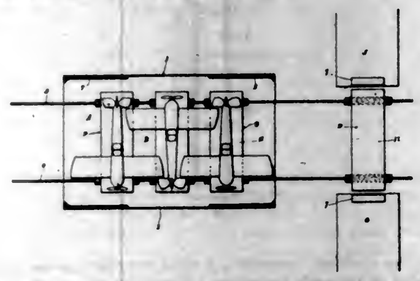
1,870,743. MEANS FOR ELECTROPLATING. ROBERT J. PIERSOL, Pittsburgh, Pa., assignor to United States Chromium Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 15, 1928. Serial No. 254,461. 13 Claims. (Cl. 204—5.)



7. The combination with mechanism comprising a vertically reciprocable plunger and horizontal supporting arms extending from the top thereof to support articles to be treated, and a plurality of tanks containing solutions in which the articles are to be treated, of means for automatically causing the plunger to rise vertically with the supporting arms and their load and to move the arms and their load horizontally to a predetermined position above a tank and then lower with the arms and their load to immerse the load in the tank, and means for causing the horizontal movement to be dependent upon a predetermined raising movement, and for causing a subsequent lowering movement to be dependent upon the horizontal movement.

13. In combination, a carrier capable of vertical and horizontal movement, a plurality of tanks disposed in a predetermined path of movement of the carrier and containing solutions for treating articles conveyed by the carrier, of means for raising and lowering the carrier, means for horizontally advancing the carrier, means responsive to a predetermined vertical movement for controlling the advancing means, and means controlled by the advancing means for lowering the carrier after a predetermined advance.

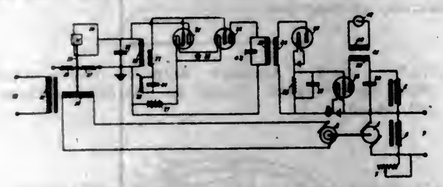
1,870,744. STORING OF AIRPLANES. WINFRED M. PIERSON, La Grande, Oreg. Filed Sept. 4, 1931. Serial No. 561,264. 14 Claims. (Cl. 244—2.)



1. In storing airplanes, a hangar element, a track extending through the hangar element and extending from each end of the latter, spaced means travelling on the track for supporting airplanes transversely of and oppositely disposed with respect to each other in storage position within said hanger element whereby the wing of one will extend to the tail of another, and oppositely extending inclined permanently stationary ramp elements associated with said means, located on opposite sides of the track at a point removed from the hangar element.

4. In a method of storing airplanes, successively mounting to extend lengthwise in opposite directions airplanes horizontally upon independent portable supporting carriers travelling upon a common track therefor whereby the tail of each subsequently mounted airplane will oppose the wing of the other mounted airplanes, and then successively moving said carriers with the horizontally disposed airplanes thereon into and transversely of a hangar element whereby the airplanes will be stored horizontally in and transversely of the latter in sidewise opposed relation and oppositely disposed relative to each other.

1,870,745. SYNCHRONIZATION FOR FACSIMILE TRANSMISSION. ELLISON S. PURINGTON, Gloucester, Mass., assignor to John Hays Hammond, jr. Filed May 18, 1929. Serial No. 364,223. 10 Claims. (Cl. 172—293.)



8. In a system for maintaining synchronism between sending and receiving members in television, facsimile reproduction systems, and the like, means for generating an alternating current having a frequency directly proportional to the speed of rotation of the receiving member, a source of alternating current having a frequency proportional to the speed of rotation of the sending member, means for comparing the phase of said first named current with the phase of said second named current, a source of high frequency current, means controlled by said phase comparing means for varying the frequency of said last named high frequency curent in accordance with differences in phase of the currents being compared for controlling the speed of the receiving member.

1,870,746. AUTOMATIC SAFE DOORLOCK. PAUL EDWARDS PYLE, La Fayette, Ind., assignor to The Schwab Safe Company, La Fayette, Ind. Filed May 26, 1930. Serial No. 455,672. 8 Claims. (Cl. 109—9.)



1. In a safe construction, a hinged door, a spring-actuated rotatable plate carried by the door, locking bolts actuated by a movement of the plate, means for rotating the plate to withdraw the locking bolts, a pawl for holding the plate stationary when the locking bolts have been withdrawn, and an auxiliary locking bolt carried by the door and arranged to move the pawl out of holding position when the auxiliary locking bolt has entered its socket.

1,870,747. ATTACHMENT FOR BARBER CHAIRS. ROBERT P. RALSTON, New Concord, Ohio. Filed June 2, 1931. Serial No. 541,641. 6 Claims. (Cl. 155—88.)



5. A unitary seat adjusting mechanism for barber chairs comprising guide supports designed to be removably secured to the chair frame, side carrying bars slidably mounted in the guide supports, a shaft mounted in the guide supports, means connecting the shaft and side carrying bars to permit the latter to be moved relative to the supports in the rotation of the shaft, a lever, means mounting the lever on the shaft for turning the latter, said means hav-

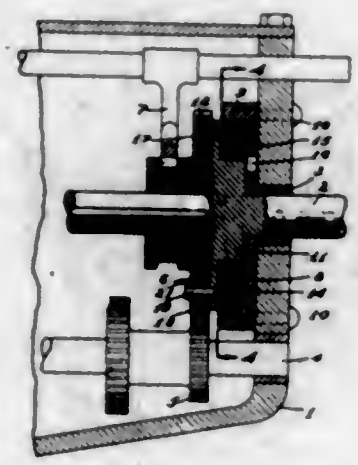
ing provision for rotating said lever on its longitudinal axis for turning the shaft, and means for locking the shaft in any desired rotative position operated by the said longitudinal rotation of the lever.

1,870,748. SWING. NANCY I. RAMEY, Salem, Oreg. Filed July 9, 1930. Serial No. 466,850. 6 Claims. (Cl. 272—1.)



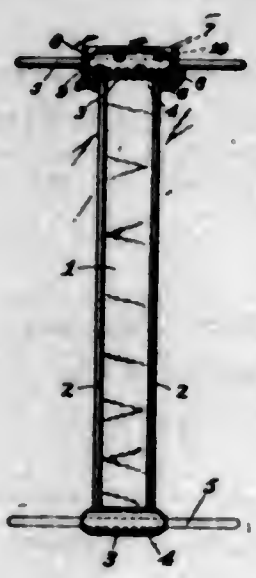
1. A swing comprising a spheroidal body constituting a seat which may be mounted from any position, and a neck rising from the body to be clasped by a person seated on the body.

1,870,749. MECHANICAL MOVEMENT. CHARLES A. RASCO, San Francisco, Calif., assignor of one-half to L. C. Chambers, San Francisco, Calif. Filed June 29, 1931. Serial No. 547,733. 13 Claims. (Cl. 192—4.)



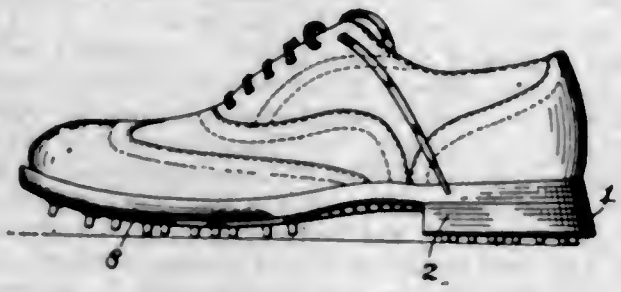
1. A mechanical movement comprising a revolvable shaft having an eccentric hub thereon, a ring around the hub having means for holding the same in concentric relation to the axis of rotation and having an inner face concentric with the hub and a spacing member between the hub and the ring.

1,870,750. RUBBER EXERCISING STRAP. MILTON B. REACH, Springfield, Mass., assignor to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Filed Dec. 26, 1930. Serial No. 504,938. 5 Claims. (Cl. 272—82.)



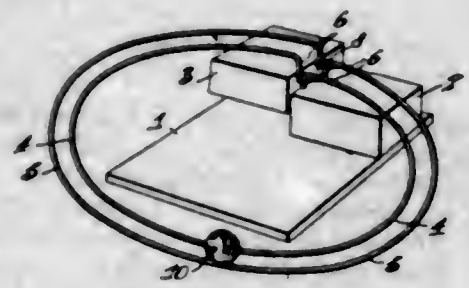
1. An exerciser comprising a band of rubber having grips molded to the ends thereof and extending beyond the side edges of the band, substantially as described.

1,870,751. GOLF SHOE. MILTON B. REACH, Chicopee, Mass., assignor to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Filed Jan. 7, 1931. Serial No. 507,269. 3 Claims. (Cl. 36—2.5.)



2. A golf shoe comprising a heel flared on its outer side face downwardly and outwardly and having a substantially vertical face on the inner side, a sole having a rounded edge along the inner side of the shoe substantially in the same vertical plane with the side of the upper and having its opposite edge extending laterally beyond the vertical plane of the side of the upper, said extended edge being rectangular in cross section, and a scored flexible shank connecting the sole and heel, substantially as described.

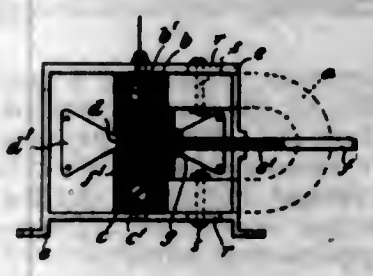
1,870,752. TOY. ANTHONY REIHING, Toledo, Ohio. Filed May 16, 1932. Serial No. 611,709. 4 Claims. (Cl. 46—37.)



1. A toy comprising a rigidly held block and a free block adjacent thereto, an annular resilient track, one

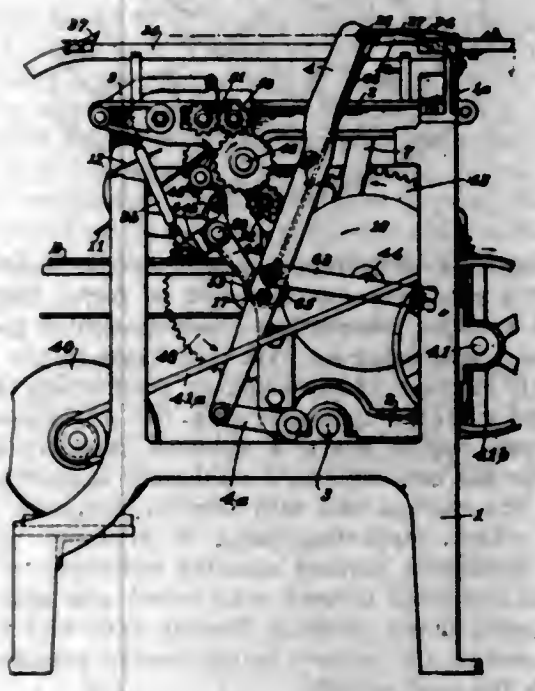
end of which is secured to the fixed block and the other end is secured to the free block, the resiliency of the track normally holding the free block elevated above the rigid block, and a rolling element on the track.

1,870,753. MAGNET UNIT. HUGO SACHS, Leipzig, Germany. Filed May 11, 1931, Serial No. 536,583, and in Germany May 15, 1930. 5 Claims. (Cl. 175—339.)



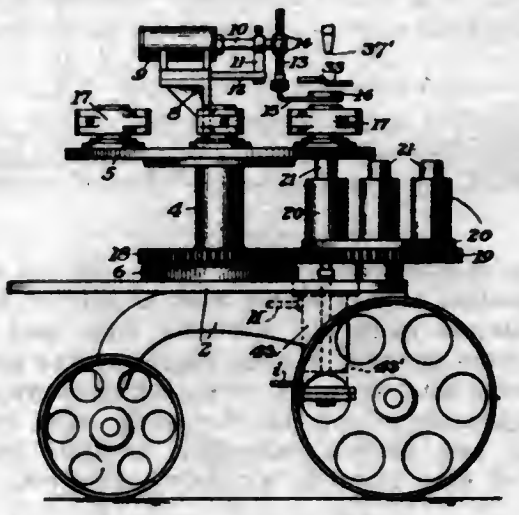
1. An electromagnetic unit for use in loud speakers, gramophone pickups and the like, comprising a frame, a magnet, pole pieces with oblique ends rigidly attached to the poles of said magnet with their oblique ends facing each other and converging, a vibratory armature of a shape corresponding to the gap between the oblique ends of said pole pieces, located between said oblique ends and resiliently supported on said frame, energising coils co-operating with said armature, and means for moving said pole pieces as a unit transversely to said armature to ensure equal adjustment of the air gaps between each face of the armature and the corresponding oblique face of the pole piece.

1,870,754. APPARATUS FOR FOLDING SHEET MATERIAL. OTTO CARL SCHULZ, Chicago, Ill. Filed Dec. 10, 1930. Serial No. 501,371. 19 Claims. (Cl. 270—67.)



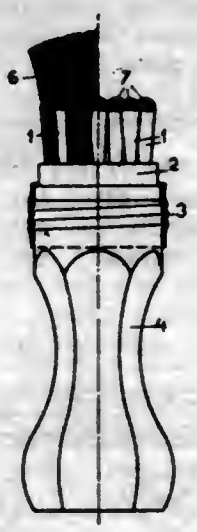
1. Apparatus for folding sheet material including a supporting frame, a folding table carried by said frame and having longitudinal side portions in pivotal relation to a central table portion and adapted to form two longitudinal folds in the sheet material, means for operating said side portions to swing them over upon the top of the central portion to form the fold and to swing them outwardly to lie substantially in the plane of the central portion to receive the sheet material to be folded, and means for cross-folding the longitudinally folded sheet material.

1,870,755. GLASS WORKING MACHINE. JAMES P. SCULL, Millville, N. J., assignor to Whitall-Tatum Company, Millville, N. J., a Corporation of New Jersey. Filed Jan. 12, 1922. Serial No. 528,629. 55 Claims. (Cl. 49—5.)



22. In a glass working machine, a plurality of molds, means for moving the molds successively to charging position, a pouring guide adapted to successively cooperate with the molds, shearing means, mechanism for moving said pouring guide laterally to and from operative position with relation to said molds, said mechanism moving said guide from operative position at a different time from the movement of molding parts of said machine and subsequently to a complete shearing cycle, and means at the charging position for performing an initial operation on the glass after a complete shearing cycle and after movement of the pouring guide laterally from a charged mold and before movement of the charged mold away from charging position.

1,870,756. SHAVING BRUSH. EDUARD SEYKORA, Vienna, Austria. Filed Aug. 7, 1931, Serial No. 555,819, and in Austria Nov. 5, 1930. 1 Claim. (Cl. 15—110.)



In a shaving brush with tufts of hair a rubber base adapted to be detachably connected to a handle, a plurality of rubber fingers or the like of approximately half the length of the hairs distributed over the upper surface of the said base and formed integrally therewith, and holes in the said base for the reception of said tufts of hair uniformly distributed in the intermediate spaces between said fingers.

1,870,757. AIRPLANE GIG. ELIOT S. STAPLES, Glenview, Ill. Filed June 22, 1931. Serial No. 545,960. 14 Claims. (Cl. 244—1.)

1. Apparatus of the class described, comprising means for supporting the front portion of an airplane for hori-

zontal, pivotal movement about a fixed center, and vertically adjustable means connected with said front-supporting means for portably supporting the rear portion of the airplane.



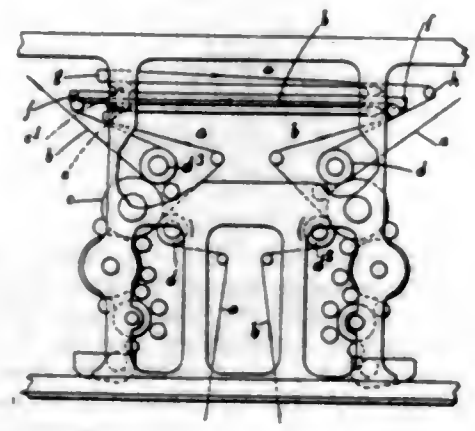
14. In a jack for elevating a portion of the airplane, the combination of a portable base, a pair of relatively spaced members extending upwardly from said base in relatively fixed position, a cross bar extending across the space between said upwardly extending members and vertically adjustably connected therewith, said cross bar having an end portion extending laterally outwardly from one of said upwardly extending members.

1,870,758. ARCH SUPPORT. HARRY A. TALLMAN, Fort Scott, Kans. Filed Jan. 2, 1932. Serial No. 584,529. 1 Claim. (Cl. 36—71.)



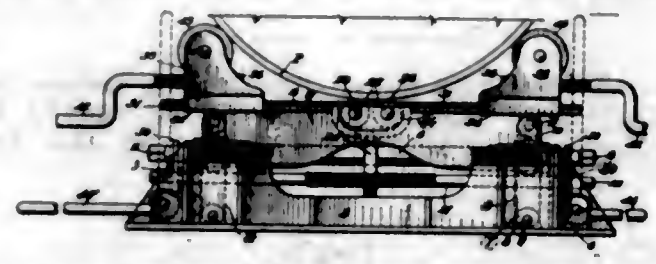
An arch support comprising an elongated resilient metallic plate including a bowed intermediate portion, and a body on the plate extending across the bowed portion, said body having transverse cut-outs in a lower portion and further having transverse slits in an upper portion communicating with the cut-outs, the walls of the slits being engageable with each other for limiting the flexing of the plate in one direction.

1,870,759. ROTARY PRINTING PRESS. ARTHUR TERRY, London, England. Filed Apr. 13, 1929, Serial No. 354,951, and in Great Britain Apr. 19, 1928. Renewed Dec. 31, 1931. 2 Claims. (Cl. 101—220.)



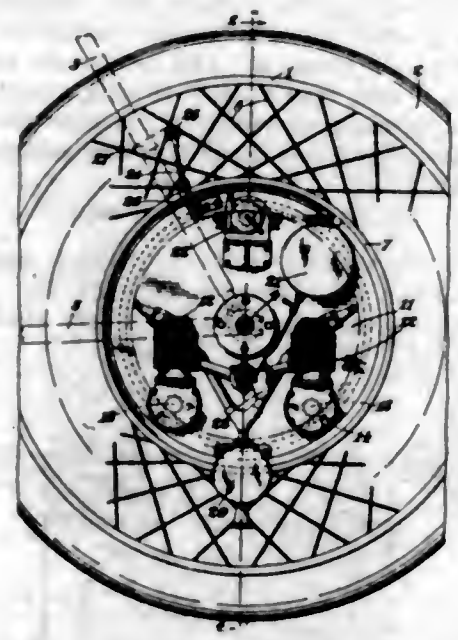
1. A perforating press of the character described comprising a pair of printing cylinders, means for feeding a web to each printing cylinder in a separate path, and turner bars and rollers for guiding the webs to pass and cross over each other, whereby each web may be led from one printing cylinder to the other for simultaneously receiving an impression upon both sides thereof.

1,870,760. PIPE LINE DOLLY. JOHN J. TIPTON, Kansas City, Mo. Filed June 24, 1931. Serial No. 546,498. 8 Claims. (Cl. 254—126.)



1. A pipe line dolly, comprising a base, a table above the base, means on the base supporting the table and adjustable to vary the height of the latter, means on the table to engage opposite sides of and retain a pipe section on the table against rolling or shifting laterally, and means for effecting longitudinal adjustment of the table to shift the pipe section laterally.

1,870,761. MOTOR UNIT FOR BICYCLES, TRICYCLES, AND THE LIKE. SERGE VINCENT CONSTANTINOVITCH, PRINCE WIASEMSKY, London, England. Filed Oct. 12, 1929, Serial No. 399,313, and in Great Britain Oct. 20, 1928. 7 Claims. (Cl. 180—33.)

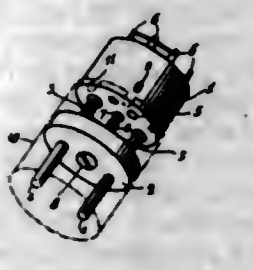


1. Means for converting pedal-operated road-vehicles in which a road wheel is mounted in forks, into motor-propelled vehicles, comprising a self-contained power-unit attachment comprising an axle mountable in the forks of the vehicle in place of the ordinary road wheel therein, a road wheel mounted upon said axle, two engines each having its own engine shaft, a silencer, magneto and carburetor for the two engines, a stationary supporting frame carrying the engines and said silencer, magneto and carburetor, which supporting-frame is mounted upon said axle, an internally toothed annulus concentric with, carried upon and fixed to said road wheel and spur pinions on the engine shafts meshing directly each with the teeth of the annulus, the engines being thereby permanently in gear with the road wheel.

1,870,762. PLUG-IN DEVICE. CARL WINTER, Dresden, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed June 18, 1930, Serial No. 461,882, and in Germany June 28, 1929. 3 Claims. (Cl. 200—51.)

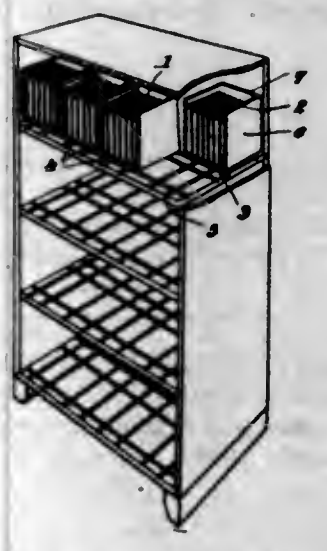
1. An electrical circuit selector plug-in device comprising, a base of non-conducting material and an attaching member, a plurality of sets of terminals carried by said base, a set of cooperating contacts on said attaching

member, said latter being adapted to selectively engage with any desired set of said terminals, a housing for said attaching member and means on said housing coop-



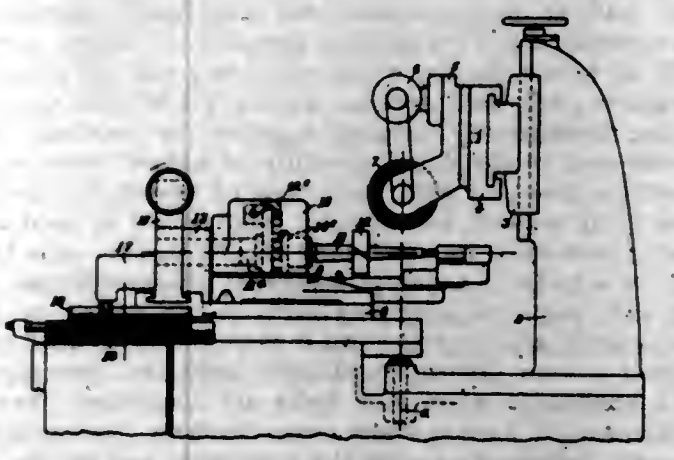
erating with means on said base for indicating and fixing the position of said attaching member contacts with respect to said terminals.

1,870,763. CABINET, PARTICULARLY BOOKCASE. ANTON ZNIDERSIC, Fiume, Italy. Filed Mar. 24, 1930, Serial No. 438,610, and in Austria Mar. 29, 1929. 1 Claim. (Cl. 312—34.)



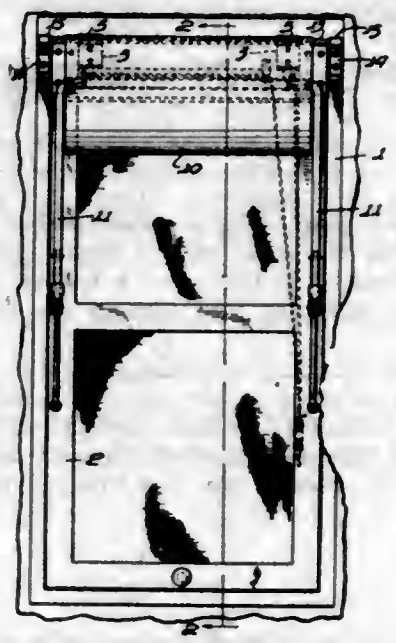
A cabinet in the form of a book-case comprising a body embodying transverse shelves, tracks arranged in pairs longitudinally and transversely of each other on each of the shelves, a plurality of book containing boxes mounted on each shelf and of a number less than the number which the shelf will accommodate, and including means on the boxes for cooperating with the tracks so that the boxes may be shifted on the tracks from one side to the other of the book-case and also backwardly and forwardly on the shelves.

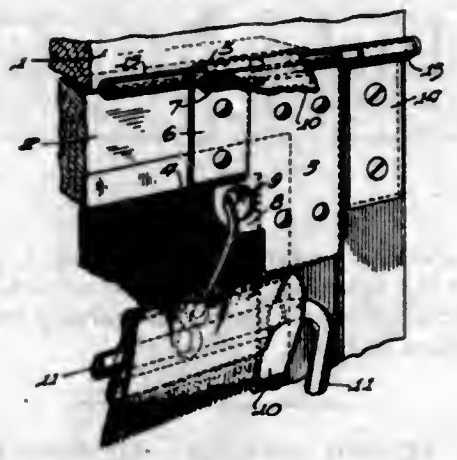
1,870,764. HELICAL GEAR GRINDER. ALBERT AEPPLI, Zurich, Switzerland, assignor to Henry S. Otto and Henry Escher, New York, N. Y. Filed Dec. 2, 1930, Serial No. 499,527, and in Germany Mar. 8, 1930. 8 Claims. (Cl. 51—52.)



1. A helical gear grinding machine comprising in combination, a base, a support thereon, abrasive wheels mounted on said support, a carriage movable on said base having a gear to be ground rotatably mounted thereon, means to reciprocate said carriage in one direction during an advancing movement thereof in a direction normal thereto, means to effect oscillation of said gear by the reciprocatory movement of said carriage, and means to vary the oscillated positions of said gear progressively during the advancing movement of said carriage.

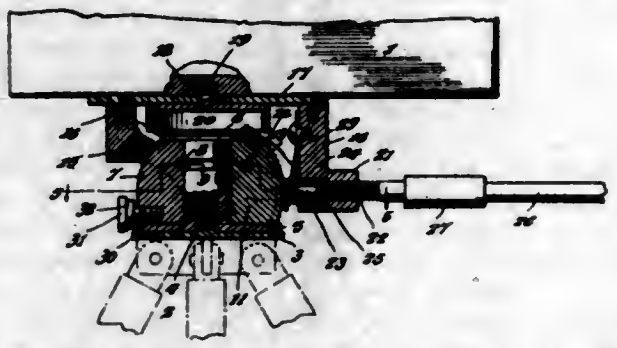
1,870,765. COMBINED SCREEN AND AWNING. JOHN F. BAUMANN, North Bergen, N. J. Filed Nov. 27, 1931. Serial No. 577,604. 3 Claims. (Cl. 156—15.)





3. A combined screen and awning including a head rod for the awning, clamping corner brackets on the screen frame engaging the head rod and bearing brackets to be secured to the window casing engaging the ends of the head rod, said corner brackets having rope guides therein.

1,870,766. CAMERA MOUNTING. MARTIN L. BEISTLE, Shippensburg, Pa. Filed May 31, 1930. Serial No. 458,631. 3 Claims. (Cl. 248—47.)



1. A mounting comprising a base adapted to be secured upon a fixed support and including a central post, a main body swiveled upon said post and having a recess in one end, an object-carrying frame pivotally mounted upon the body for tilting movement in a vertical plane, a locking

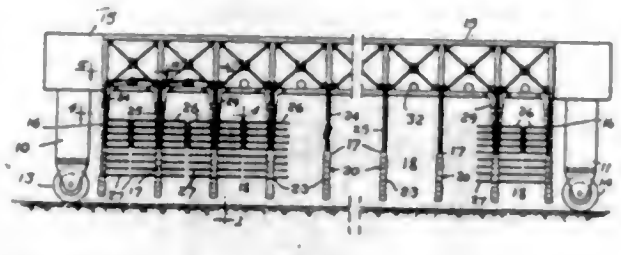
member mounted in the recess in the body, a dog mounted in the frame to engage said locking member, and means for shifting the dog into or out of engagement with the locking member.

1,870,767. ARTIFICIAL BAIT. JOHN EMMETT BROWN, Elyria, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 19, 1929. Serial No. 386,858. 12 Claims. (Cl. 43—42.)



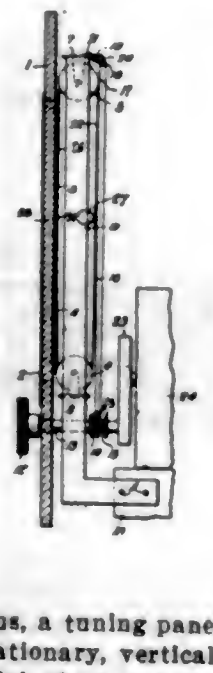
1. A fish lure comprising a hook and a sinker connected therewith, the body of the sinker being substantially in the form of a disk, and a weight carried upon one side of the disk, the disk around the weight constituting a plane.

1,870,768. RACE STARTING APPARATUS. IRWIN COMFORT and BERTRAM CLIFFORD, Brooklyn, N. Y. Filed Jan. 27, 1932. Serial No. 589,142. 7 Claims. (Cl. 119—15.5.)



1. Race starting apparatus comprising a plurality of barriers for the racers in combination with means whereby the location of all the racers in starting position automatically starts the race.

1,870,769. TUNING DEVICE. MICHAEL RALPH DEL SONNO, New York, N. Y. Filed Jan. 4, 1932. Serial No. 584,733. 4 Claims. (Cl. 116—124.1.)



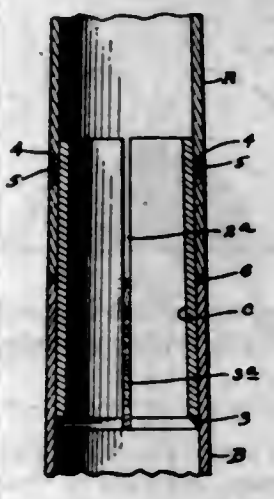
1. In a radio apparatus, a tuning panel having mounted thereon a full-vision, stationary, vertically calibrated dial plate, said calibrated dial plate having a suitable sight-opening, or window, a belt with its associated rollers, one side of said belt being in very close proximity to said sight-opening, or window, in said calibrated dial plate, said side of said belt consisting of a color-dividing line, or level, which indicates on said calibrated dial plate the setting of the receiving apparatus, driving means adapted to move said belt proportionally in response to tuning of said receiving apparatus, said driving means comprising two flexible cables so attached to the other, or rear, side of said belt, and to the vernier tuning shaft, which is used as a winding form, that movement of said tuning shaft will proportionally move said belt, and the general interrelation and arrangement of the various parts being such that movement of the tuning knob of said receiving apparatus will proportionally move said color-dividing line, or level, within the confines of the upper and lower extremities of the scale of said full-vision, stationary, vertically calibrated dial plate.

1,870,770. STEEL POLE. CLINTON DE WITT, Berkeley, Calif., assignor to Taper Tube Pole Co., San Francisco, Calif., a Corporation of California. Filed Apr. 2, 1927. Serial No. 180,416. 2 Claims. (Cl. 189—26.)



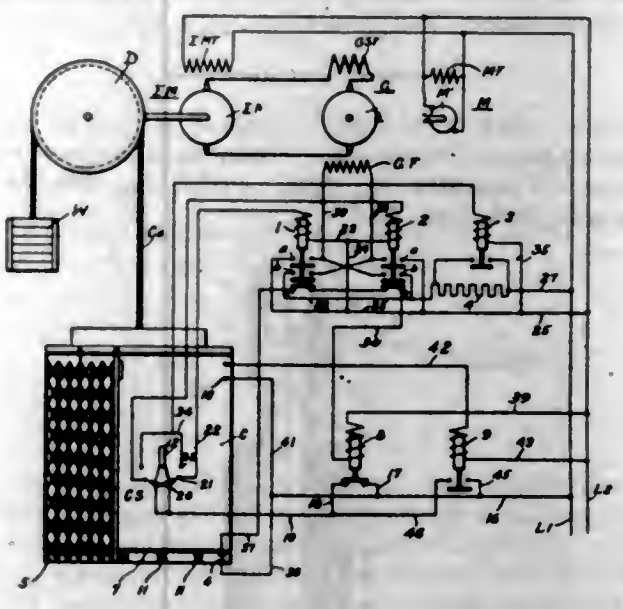
2. A pole for vertical erection and to resist a horizontal load at its uppermost end, said pole comprising a lowermost unit formed of a plurality of hollow sections the lowermost thereof being cylindrical and the remainder frusto-conical, said sections having telescoping ends and being permanently secured together by welding, upper units each comprising a plurality of hollow frusto-conical sections arranged with their ends of telescoping and permanently secured together by welding, all of said units being assembled by telescoping the contiguous ends thereof, detachable connecting means at the contiguous ends of said units for clamping said units together in axial alignment, said sections other than the lowermost cylindrical section tapering uniformly from the lowermost to the uppermost when said units are assembled, the wall thickness of each section being uniform throughout its length, commencing with the lowermost section the wall thickness of each succeeding section being less than the preceding one whereby the wall thickness of the pole will uniformly decrease from bottom to top.

1,870,771. JOINT FOR CONNECTING TUBULAR SECTIONS OF POLES AND THE LIKE. CLINTON DE WITT, San Francisco, Calif. Filed May 26, 1930. Serial No. 455,725. 6 Claims. (Cl. 285—111.)



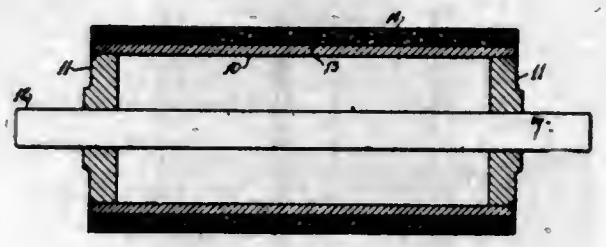
1. In a structure of the character described, a pair of abutting tubes, an expansible reinforcing sleeve mounted interior of the tubes, and a plurality of welded connections formed between each tube and the interior reinforcing sleeve.

1,870,772. ELEVATOR GATE SYSTEM. WILLIAM F. EAMES, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 19, 1928. Serial No. 278,964. 12 Claims. (Cl. 187—29.)



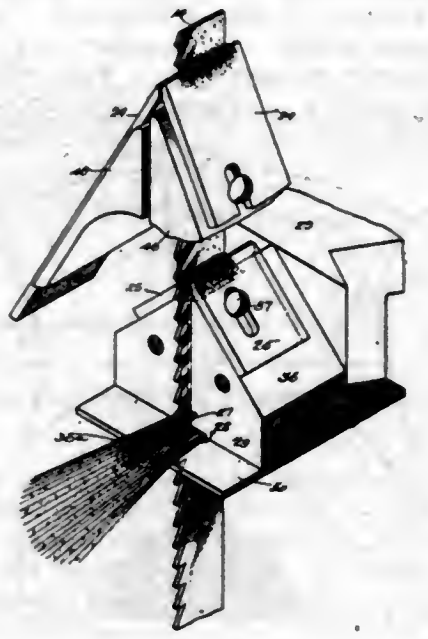
1. In an elevator the combination with a car, a gate for closing said car, a motor for operating said car, and a control circuit for said motor, of means responsive to the position of said gate to prevent operation of the car with the gate open only upon the occurrence of predetermined loading conditions rendering such operation of the car unsafe, and means for rendering said first means ineffective whereby the car may be operated to carry passengers with the gate open while the load is in a predetermined safe position.

1,870,773. COMPOSITION ROLLER. CHARLES W. ELDER, Roy, Wash. Filed Jan. 28, 1929, Serial No. 335,705. Renewed Dec. 11, 1931. 1 Claim. (Cl. 91—67.8.)



A composition roller having a rigid axis and a resilient cylindrical body formed around said axis consisting of a mixture of four parts of rubber and one part of cork and having the surface of said roller coated with an air excluding material.

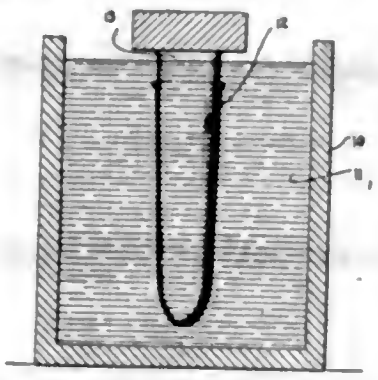
1,870,774. POWER MEAT SAW. EUGENE F. GAINES, Philadelphia, Pa., assignor to Atlas Manufacturing Company, Philadelphia, Pa., a Corporation of Delaware. Filed Oct. 22, 1930. Serial No. 490,500. 39 Claims. (Cl. 143—158.)



1. In meat sawing apparatus and in combination with a saw blade and means for supporting and driving the same, scrapers co-operating with the saw blade for removing collected material from the side faces thereof and having engagement with the blade from a point immediately rearwardly of the gullets of the teeth thereof to the rear of the blade, whereby said scrapers in addition to removing adhering material from the side faces of the saw engage the ends of fibres straddling the forward edge of the blade in the gullets of the teeth to separate the overhanging ends from the side faces, and means for producing converging air blasts directed against opposite sides of the saw at the apices of the gullets for engaging said overhanging ends and removing the fibres and collected matter from the gullets.

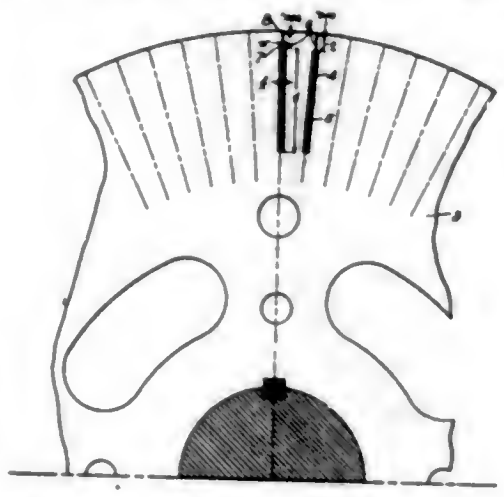
18. The method of cleaning the blades of band meat saws while the saw is in motion, consisting in initially disturbing the ends of fibres clinging in the gullets of the saw to free them from the side faces of the saw and then directing a blast of air against the saw in a direction to engage said fibres and blow them from the gullets.

1,870,775. METHOD OF VULCANIZING, STRIPPING, AND FINISHING DIPPED RUBBER GOODS. JOHN R. GAMMETER, Akron, Ohio. Filed Dec. 26, 1930. Serial No. 504,700. 10 Claims. (Cl. 18—58.)



1. That method for making dipped rubber goods from latex or the like which includes the steps of vulcanizing the goods upon the forms by immersion in hot water, stripping the goods from the form after vulcanization while still wet and warm by sliding the top ends of the goods down the forms which puckers the goods as they are stripped, drawing the bottom ends of the goods out after stripping, tumbling the goods with warm, dry, inert, powdered material to absorb the moisture therefrom, and finally tumbling the goods in a dry atmosphere thoroughly to dry the same and to free them from excess powdered material.

1,870,776. SQUIRREL-CAGE PUMP MOTOR OR THE LIKE. FRANCIS J. JOHNS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 22, 1929. Serial No. 401,574. 9 Claims. (Cl. 172—280.)



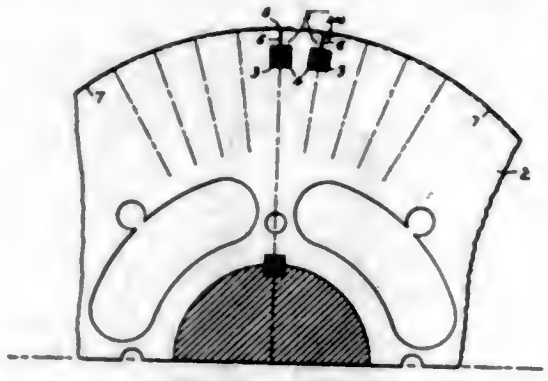
1. A sixty-cycle squirrel-cage induction motor having substantially rectangular deep bars of such depth d (in inches), as compared with their resistivity ρ (in ohms per inch cube), that the ratio of d to

$$\sqrt{\rho}$$

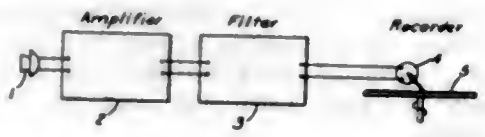
is at least about 1200, characterized by having slitted bridges above the squirrel-cage bars, and characterized further by having such bar-width b, slit width w and slit depth t and tb is at least as large as about one third of dw.

1,870,777. REVERSIBLE SQUIRREL-CAGE MOTOR HAVING LOW PLUGGING TORQUE. FRANCIS J. JOHNS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 22, 1929. Serial No. 401,575. 6 Claims. (Cl. 172—280.)

1. A polyphase iron-core squirrel-cage motor having low plugging torque, characterized by having copper squirrel-cage bars and a slitted bridge over each bar; the slot-factor of the bridge being approximately between 2½ and 8½; the slot-factor of the bar being approximately between .25 and .85; the ratio of said slot-factors being approximately between 6 and 24; the gap flux density being approximately between 27,000 and 36,000 lines per square inch; the rotor tooth density being approximately between 80,000 and 120,000 lines per square inch; and the bar-depth being approximately between .20 and .30 inch.



1,870,778. SOUND RECORDING METHOD. GEORGE W. LANG, Medford, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 20, 1928. Serial No. 320,734. 1 Claim. (Cl. 179—100.4.)



In a system in which sound is reproduced from a sound record by a mechanical pick-up device, the method of recording and reproducing sound which comprises converting said sound into electrical energy, amplifying the high frequencies of said energy more than the low frequencies of said energy, recording said sound on said record by means of said amplified energy, reproducing from said record said amplified energy, amplifying the low frequencies of said reproduced energy more than the high frequencies of said reproduced energy, and converting said reproduced energy into sound.

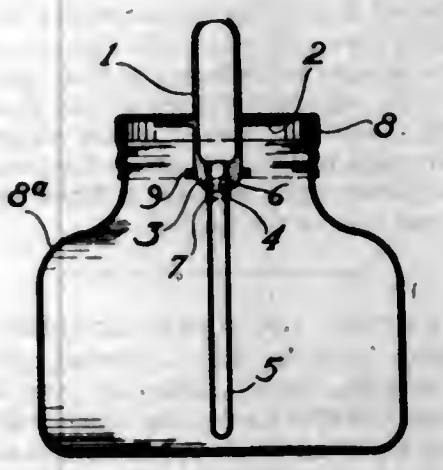
1,870,779. SETTING TOOL. LESLIE A. LAYNE and ALBERT L. ROCO, Houston, Tex.; said Roco assignor to said Layne. Filed Mar. 2, 1932. Serial No. 596,238. 22 Claims. (Cl. 166—10.)



14. A setting tool stem, a packer tube, a packer thereon, a bushing detachably secured to said stem, spacing means on said bushing engaging said packer tube to hold said

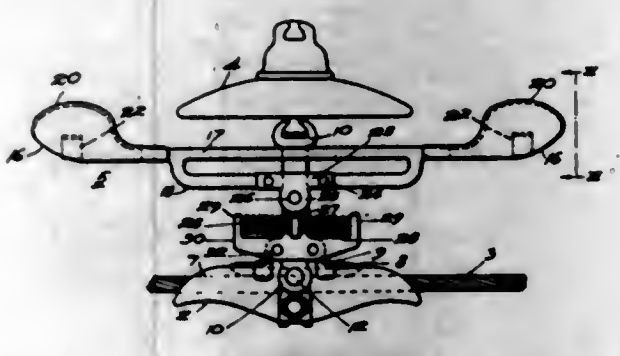
bushing normally spaced above said tube, means on said stem adapted when said stem is released from said bushing to detach said spacing means from said packer tube, and means on said bushing to then expand said packer.

1,870,780. TUBE AND BULB DEVICE. RICHARD P. MILBURN, Newark, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Aug. 26, 1929. Serial No. 388,292. 4 Claims. (Cl. 128—233.)



1. A combined bottle closure and liquid dropper comprising a cap having an opening and adapted to fit over and form a cover for the top of a bottle, and a liquid dropper including a tube, a bulb provided with a base engaging a portion of the tube, a ring impressing a portion of the base against the tube, and a flange projecting from the bulb radially beyond the ring in spaced relation to the base, the dropper bulb extending through the opening with the flange seating against the cap.

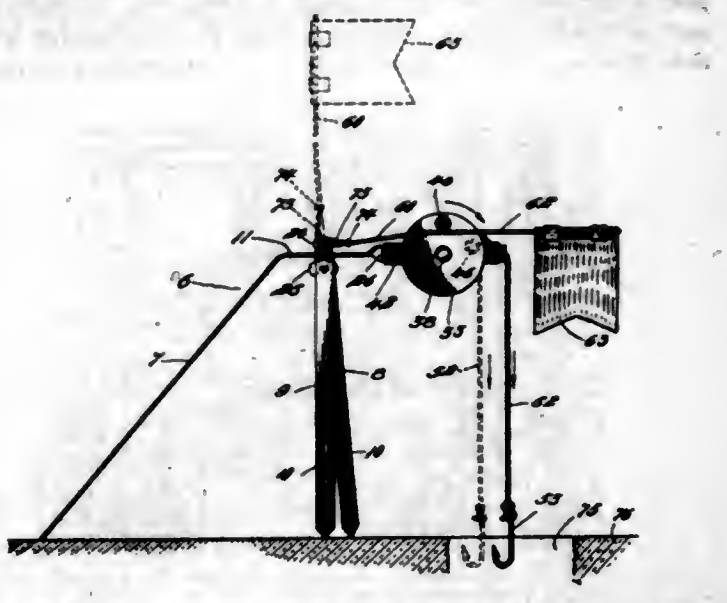
1,870,781. TRANSMISSION LINE DEVICE. FREDERIC H. MILLER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 22, 1928. Serial No. 301,281. 5 Claims. (Cl. 173—318.)



1. In a transmission-line device, the combination with an insulator and a line-conductor clamp including pivotally-connected suspension and conductor-clamping members, of an electrostatic-field-control structure including a field-control portion pivotally mounted on said suspension member and extending in opposite directions from the insulator along the conductor, means for yieldably holding said field control portion in position and means between the field-control portion and the conductor for reducing the force of impact between the conductor and said field-control portion.

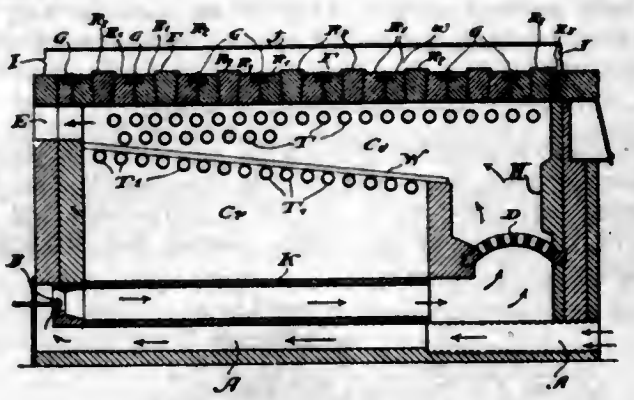
1,870,782. TRAP FOR ICE FISHING. FRANK MINUTILLI, Harrisville, R. I. Filed Jan. 20, 1932. Serial No. 587,637. 6 Claims. (Cl. 43—16.)

1. In a trap for ice fishing, legs comprising inclined lower portions and pivotally interengaging top portions, a carrier plate pivotally supported at one end by said top portions, an extension arm integral with one of the top portions, a reel pivotally supported by the arm, a handle upon the reel, a signal arm pivotally supported by the carrier



plate, and a spring upon the plate for upwardly pressing the arm into contact with the handle, said signal arm being movable from engagement when the reel is rotated.

1,870,783. FURNACE WALL STRUCTURE. ARTHUR E. NASH, Philadelphia, Pa., assignor to Alcorn Combustion Company, Philadelphia, Pa., a Corporation of Delaware. Filed May 18, 1928. Serial No. 278,706. 4 Claims. (Cl. 110—99.)



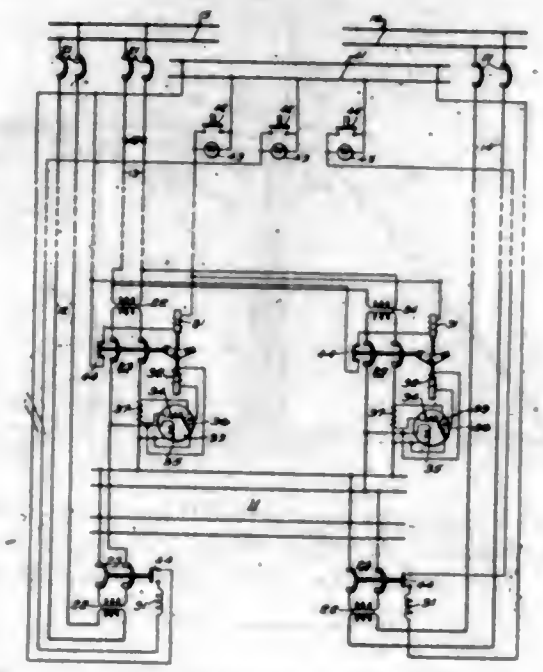
1. Furnace roof structure comprising a metal supporting framework and blocks of refractory material, having a density and conductivity of the order of one-third of that of standard fire brick or fire clay refractories, carried by and insulating said framework constituting the entire depth of the roof structure and having their inner ends directly exposed to the interior of the furnace.

1,870,784. ALTERNATING CURRENT DISTRIBUTION SYSTEM. JOHN S. PARSONS, East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 5, 1929. Serial No. 330,521. 4 Claims. (Cl. 171—97.)

1. In an alternating-current system of distribution comprising a network load circuit energized from a plurality of different sources from a central station through feeder circuits, each feeder including a step-down transformer, an interrupter disposed between the transformer and source and a network switch disposed between the transformer and network; means for opening said network switch when said interrupter is opened including a directional relay energized from said associated feeder for opening the network switch on the occurrence of energy flow from the network, and means controlled from a point adjacent to said interrupter for closing said network switch, whereby an operator may control both the opening and closing of said network switch from said station.

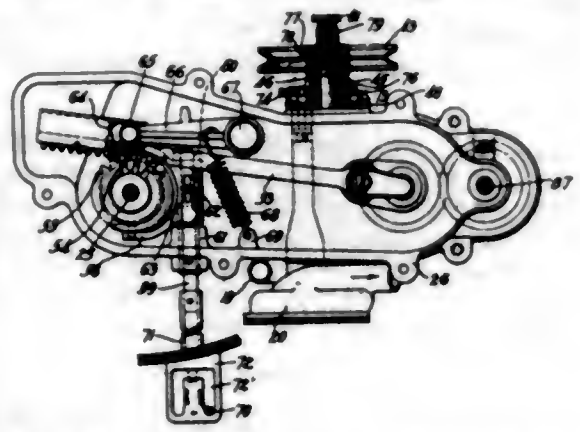
4. In an alternating-current system of distribution comprising a network load circuit energized from a plurality

of different sources from a central station through feeder circuits, each feeder including a step-down transformer, an interrupter disposed between the transformer and source and a network switch disposed between the transformer and network; means for opening said network switch when said interrupter is opened including a directional relay en-



ergized from said associated feeder on the network side of said switch for opening the network switch on the occurrence of energy flow from the network, and means controlled from a point adjacent to said interrupter for closing said network switch, whereby an operator may control both the opening and closing of said network switch from said station.

1,870,785. WASHING MACHINE. CHARLES E. REDDIG, Kew Gardens, N. Y., assignor to Graybar Electric Company, Inc., New York, N. Y., a Corporation of New York. Filed June 16, 1928. Serial No. 285,951. 6 Claims. (Cl. 74—14.)



1. In a washing machine, the combination of an impeller shaft, a plurality of relatively movable pinions of different diameter connected to said shaft, an oscillating gear engaging one of said pinions, and means connected to said pinions and gear for disengaging said gear from said one pinion and relatively moving said pinons for engagement between the other pinion and said gear.

1,870,786. DIFFERENTIALLY COLORED FABRIC AND METHOD OF MAKING THE SAME. GEORGE RIVAT, Paterson, N. J., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Sept. 20, 1929. Serial No. 394,138. 4 Claims. (Cl. 8—5.)

1. Method of producing differential color effects comprising locally applying to a fabric containing an organic derivative of cellulose a material containing a swelling agent for the derivative of cellulose, an alkali and a metallic oxalate, applying a paste containing an aniline salt and an oxidizing agent and then steaming.

1,870,787. LAMINATED SPRING FOR MOTOR VEHICLES. ROBERT HENRY SMITH, Brisbane, Queensland, Australia. Filed Sept. 18, 1930, Serial No. 482,758, and in Australia Sept. 30, 1929. 4 Claims. (Cl. 267—48.)

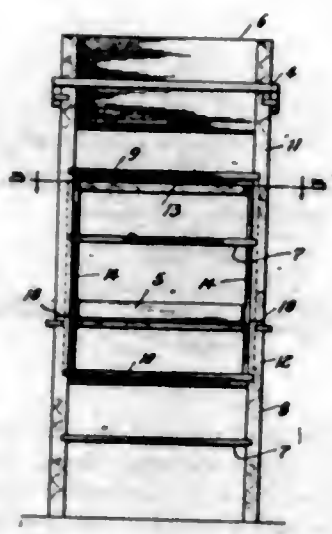


1. A spring for motor vehicles comprising relatively movable component leaves and inclined planes on such leaves superposed in contact and adapted to slide upon each other when said component leaves move during flexion, in combination with additional spring means adapted to exert pressure upon said inclined planes and superposed leaves, and clip means for clamping said inclined planes to said pressure means and to the spring.

1,870,788. METHOD OF MANUFACTURING RUBBER ARTICLES. DOUGLAS FRANK TWISS, Wylde Green, FRANK THEODORE PURKIS, Moseley, and EDWARD ARTHUR MURPHY, Wylde Green, England, assignors to Dunlop Rubber Company Limited, Birmingham, England, a Corporation of Great Britain. Filed Sept. 17, 1929, Serial No. 393,308, and in Great Britain Oct. 18, 1928. 13 Claims. (Cl. 18—50.)

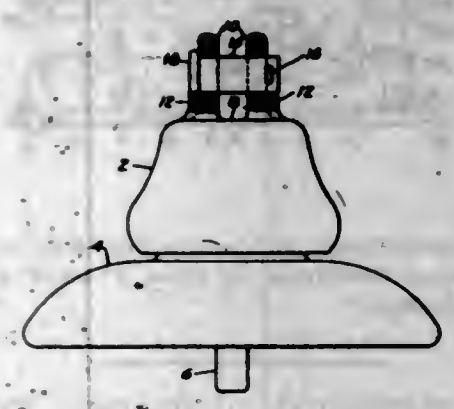
1. A process for the manufacture of rubber articles from concentrated aqueous dispersions of rubber or the like vegetable resins of the kinds hereinbefore specified which consists in gelling by the action of heat the aqueous dispersion aforesaid into which are incorporated for the particular purpose specified one or more non-coagulating substances which decompose or interact by the rise in temperature with the formation of one of more acid coagulants.

1,870,789. COMBINATION FURNITURE SET. EDWARD F. WHITE, Rutherford, N. J. Filed Dec. 11, 1929. Serial No. 413,149. 4 Claims. (Cl. 155—41.)



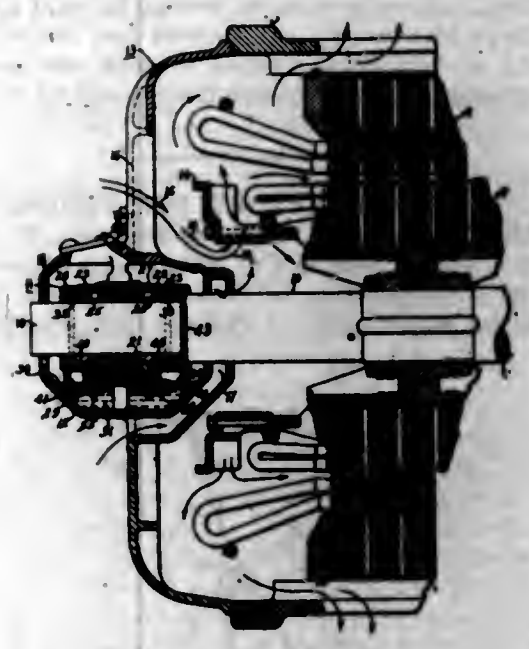
1. An article of furniture as characterized, comprising a first article of furniture having corner posts, a second article of furniture having corner posts spaced to agree with the spacing of the posts of said first article of furniture and superposed thereupon in substantial alinement therewith, and a third article of furniture having corner portions thereof interfitting with portions of the corner posts of the first article of furniture and projecting thereabove and interfitting with the contiguous superposed posts of the second article of furniture for retaining the third article of furniture within the confines of the other two and for retaining the superposed article of furniture against lateral displacement.

1,870,790. CONNECTER. GEORGE M. BARROW, Derry, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 22, 1931. Serial No. 510,451. 8 Claims. (Cl. 173—318.)



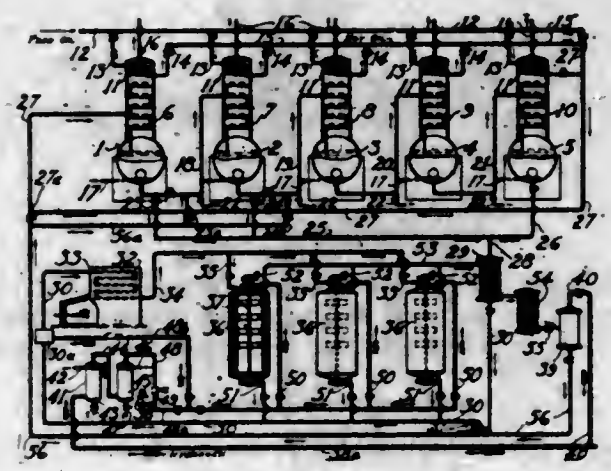
4. In combination, an insulator including a member having an aperture therethrough transverse to the insulator axis and a shoulder at one side adjacent to said aperture, and a pin in said aperture having a head at one side of said member and an opening at the other side thereof transverse to said axis and to the axis of the pin, said head having a shoulder cooperating with said first shoulder to maintain a cotter in said opening in predetermined electrical relation to the insulator.

1,870,791. SEALED SLEEVE BEARING. JOHN L. BROWN, Verona, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 16, 1928. Serial No. 270,183. 4 Claims. (Cl. 308—128.)



1. A split bearing sleeve having top and bottom halves having coplanar vertical side surfaces, said top half having a transverse slot across its under side adapted to receive an oil ring, said bottom half having depending skirts on either side of said oil ring, and two removable oil ring guards secured, one at each side, to said top half to cover the ends of the transverse oil-ring slot, said guards contacting with the ends of said depending skirts to provide a splash-confining chamber for said oil ring, said chamber extending down below the main body portion of the button half of said sleeve.

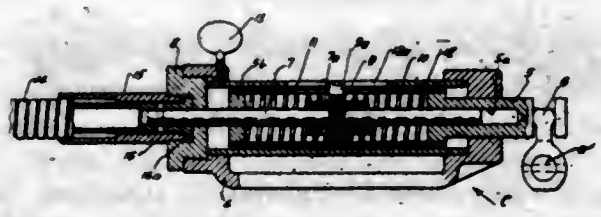
1,870,792. METHOD AND APPARATUS FOR HYDROGENATION AND DISTILLATION OF LOW-SULFUR PETROLEUM OILS. EDGAR M. CLARK, New York, N. Y., assignor to Standard I. G. Company. Filed Jan. 26, 1928. Serial No. 249,585. 7 Claims. (Cl. 196—62.)



1. Process for obtaining valuable products from hydrocarbon oil which comprises distilling from the oil the lowest boiling fraction, subjecting the residual oil to the action of hydrogen under a pressure in excess of 50 atmospheres and at temperature above 750° F. but below 950° F., removing vapors evolved in the hydrogenation, cooling the same, passing the hydrogenated condensate to the distilling operation and distilling same with fresh unhydrogenated oil.

5. Continuous hydrogenation equipment, comprising a series of stills, means for passing preheated oil into a preliminary still of said series, means for passing a portion of the residual oil through the remaining stills of the series, separate means for taking off another portion of the residual oil from said still, a heater, means for passing said residual oil through said heater, a reactor, means for supplying hydrogen at high pressure thereto, means for passing the oil from said heater to said reactor for intimate commingling with the hydrogen therein, means for separating normally liquid products from the gases and vapors from said reactor, and means for returning said normally liquid products to the series of stills.

1,870,793. SPEED REGULATION OF ENGINES. LESTER L. COLLINS, Franklin, Pa., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 27, 1929. Serial No. 350,196. 7 Claims. (Cl. 74—40.)

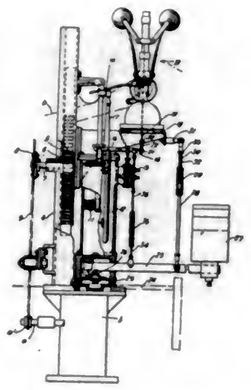


1. A regulator for an engine governor comprising a casing, a plunger slidably mounted therein, members rotatably mounted in said casing and disposed inwardly and outwardly of said plunger, and means for varying the position of said plunger by rotation of either of said members.

1,870,794. APPARATUS FOR THE SPEED REGULATION OF ENGINES. LESTER L. COLLINS, Franklin, Pa., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 30, 1929. Serial No. 351,253. 6 Claims. (Cl. 103—12.)

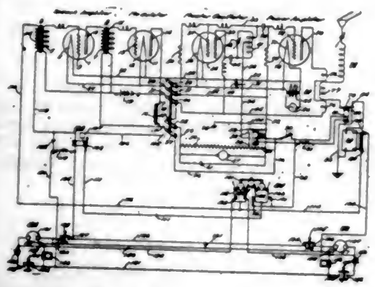
1. Regulating apparatus for the driving engine of a pump or compressor comprising actuating means for the

control member of the engine, hydraulic means for operating said actuating means including a pilot valve, a lever for actuating said valve, compensating means for restoring said valve to neutral position after movement of said



lever, speed responsive means connected to said lever to move the latter in opposite directions, and pressure responsive means having a loose connection to the latter so as to move the same in one direction only.

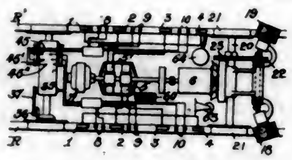
1,870,795. CONTROL MEANS FOR TRANSMITTING SYSTEMS. ROBERT L. DAVIS, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 1, 1927. Serial No. 165,135. 5 Claims. (Cl. 250—17.)



1. In a radio transmitting system, thermionic means for generating radio frequency oscillations, modulating means therefor comprising a microphone and a plurality of thermionic devices, a source of energizing current for said microphone, and means whereby all of said thermionic devices are placed in an inoperative state upon deenergization of said microphone.

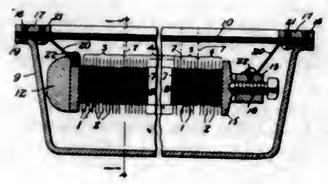
1,870,796. RAIL FLAW DETECTOR. HARCOURT C. DRAKE, Hempstead, N. Y., assignor, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 11, 1927. Serial No. 182,981. 8 Claims. (Cl. 234—1.5.)

1. A rail flaw detector comprising a plurality of spaced contacts, means for moving relatively said contact and rail, means for supplying electric current to the rail, a pair of contacts between said first-named contacts, means for detecting variations in the voltage drop therebetween,



means for amplifying such variation, and rail-marking means actuated therefrom to place a mark on the rail adjacent each flaw.

1,870,797. ELECTRICAL CONDENSER. WILLIAM DUBILIER, New York, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Original application filed May 24, 1921, Serial No. 472,105, Patent No. 1,575,044, dated Mar. 2, 1926. Divided and this application filed Sept. 6, 1924. Serial No. 730,311. 7 Claims. (Cl. 171—41.)



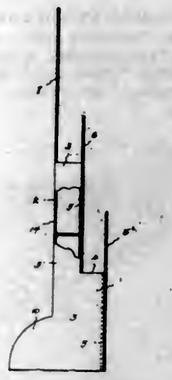
1. An electrical condenser comprising a plurality of stacks of sheets, a common metal casing for said plurality of stacks by which casing said stacks are connected in series; and a corresponding number of condenser terminals extending from the stacks through the casing and insulated therefrom.

1,870,798. EASEL OR SUPPORT FOR POSTERS AND THE LIKE. MORRIS M. EINSON, Yonkers, N. Y., assignor to Einsen-Freeman Co., Inc., Long Island City, New York, a Corporation of New York. Filed May 4, 1931. Serial No. 534,733. 7 Claims. (Cl. 40—125.)



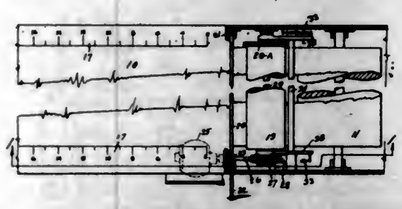
1. A combined stretcher and supporting device for a flexible poster comprising stiffening bars at each end of said poster, a stretcher bar composed of a pair of resilient rods united together by a double ferrule or tubular member which permits of a relative sliding movement under frictional restraint of said rods for adjustment, and a supporting drop hingedly connected to said ferrule or tubular member.

1,870,799. DISPLAY DEVICE. MORRIS M. EINSON, Yonkers, N. Y., assignor to Einson-Freeman Co., Inc., Long Island City, N. Y., a Corporation of New York. Filed Oct. 5, 1931. Serial No. 566,841. 2 Claims. (Cl. 40—126.)



1. A display card device and support therefor, said support being of a tubular form having a back wall, side walls and open ends, said side walls having steps, a display card secured to each step in front thereof, a portion cut from said back wall folding within said body so that the free end of said cut out portion bears against the back of a display card whereby said body is maintained in the set up position, and rigid or non-foldable portions cut from said back wall forming feet projecting from said side walls providing an extended base for said body.

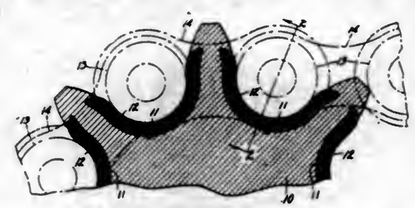
1,870,800. MOTOR DRIVEN PAPER DISPENSER. CHARLES W. ELDER, Roy, Wash. Filed Jan. 28, 1929. Serial No. 335,704. 1 Claim. (Cl. 164—42.)



In a paper dispensing apparatus, the combination of a wrapping table having a manually operated cut-off shear mounted at one end thereof and having a scale of lengths indicated thereon whose values are measured from said cut-off shear, a motor driven paper dispensing device adapted to feed web paper between the cutting edges of said shear onto said table, and a motor controlling switch closed by the separation of the blades of said shear and opened by the closing of the blades of said shear whereby the operator thereof can cut the paper to any measured length.

1,870,801. SPROCKET AND CHAIN CONSTRUCTION. ERNEST P. ENGSTROM, Akron, Ohio, assignor to John R. Gammeter, Akron, Ohio. Filed Nov. 5, 1930. Serial No. 493,564. 9 Claims. (Cl. 74—31.)

1. A sprocket and chain construction comprising a sprocket having pockets formed in the spaces between the teeth which extend from the bottom of such spaces to points somewhat beyond the pitch circle of the sprocket, bodies of tough, elastic, abrasive-resistant rubber in said pockets and bonded by vulcanization to the surfaces thereof, said rubber bodies projecting slightly above the pockets, and a chain for said sprocket, said chain having

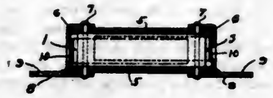


driving members of hardened steel thereon for meshing with said sprocket, said members bearing on the rubber surfaces at the bottoms and sides of said spaces.

1,870,802. METHOD OF TREATING DRIED FRUITS. CARL RAYMOND FELLERS, Amherst, Mass., assignor to The Hills Brothers Company, New York, N. Y., a Corporation of New York. Filed Jan. 24, 1931. Serial No. 511,106. 10 Claims. (Cl. 99—11.)

1. A process for treating packaged dried fruit to render innocuous microorganisms and insects carried by the fruit which comprises subjecting the entire fruit in packages to a temperature of at least 150° F. at a relative humidity of at least 60%, and continuing the treatment for a period of at least 25 minutes.

1,870,803. CONDENSER. JOSEPH A. FRIED, Flushing, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 7, 1926, Serial No. 127,906. Renewed July 6, 1931. 3 Claims. (Cl. 175—41.)



1. A condenser comprising sheets of conductive material separated by insulation wound up and worked into the required shape, a wrapping of insulating material forming a casing for said condenser and clips secured to the ends of said casing, said clips being connected to the opposite terminals of the condenser.

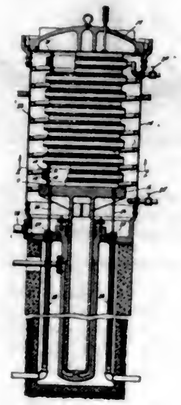
1,870,804. DETERGENT AND WATER SOFTENING PRODUCT. WILLIAM A. GALE and CHARLES F. RITCHIE, Trona, Calif., assignors, by mesne assignments, to American Potash & Chemical Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 6, 1926. Serial No. 92,949. 3 Claims. (Cl. 87—5.)

1. A crystalline water softening and detergent product containing a double salt of trisodium phosphate and sodium metaborate, and another alkali metal salt of a weak acid.

1,870,805. METHOD AND APPARATUS FOR CURING SOLID TIRES. JOHN R. GAMMETER, Akron, Ohio. Filed Mar. 25, 1929. Serial No. 349,547. 12 Claims. (Cl. 18—17.)

2. A method of making solid rubber tires including a base, a resilient body and a layer of hard rubber between said base and said body, said method comprising premolding said tires to set them in the desired shape, stacking said tires with non-molding sealing rings in a heater to provide spaces respectively about the tire stack and

inside the tire stack which are sealed from each other, and subjecting the base and tread portions of the tire to temperatures without further molding for the periods

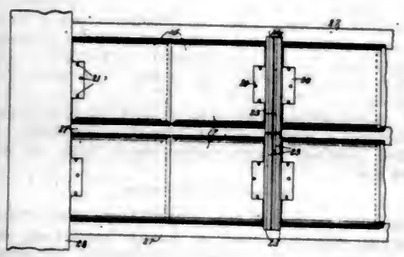


required respectively by introduction of fluid curing mediums to said spaces to vulcanize the body portions and the hard rubber portions of the tires.

1,870,806. AZO COLORING MATTER SOLUBLE IN BENZENE. LEON W. GELLER, Hamburg, N. Y., assignor to National Aniline & Chemical Co. Inc., New York, N. Y., a Corporation of New York. Filed Dec. 23, 1925. Serial No. 77,373. 20 Claims. (Cl. 260—81.)

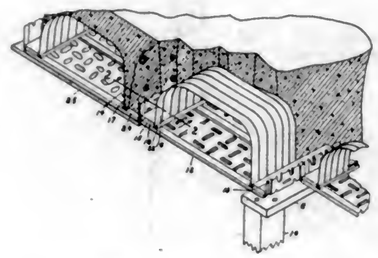
1. In the production of an azo coloring matter soluble in benzene, the process which comprises coupling a diazotized arylamino body with a nuclear hydroxy-derivative of a hydrocarbon included within the benzene and naphthalene series in the presence of formaldehyde.

1,870,807. TILE AND SOFFIT MEANS FOR CONCRETE FLOOR CONSTRUCTION. WILLIAM M. GOLDSMITH, Cincinnati, Ohio, assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 17, 1929. Serial No. 379,022. 8 Claims. (Cl. 72—66.)



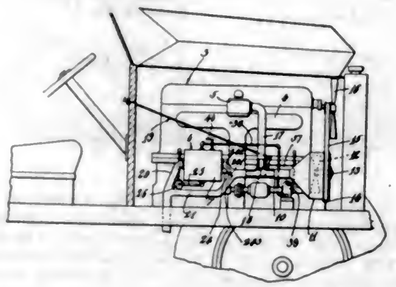
7. Rib-forming means for concrete floor construction and comprising spaced tiles in longitudinal alignment and having end closures thereon, and plate members having strengthening means thereon, said members being adapted for horizontal positioning between the ends of the tiles and said strengthening means providing on both surfaces of the plate members a bonding formation adapted for interlocking relationship with plastic material placed on the plate members.

1,870,808. CONCRETE FLOOR CONSTRUCTION. MAX S. GOLDSMITH, Cincinnati, Ohio, assignor to The Goldsmith Metal Lath Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 30, 1930. Serial No. 464,724. 5 Claims. (Cl. 72—66.)



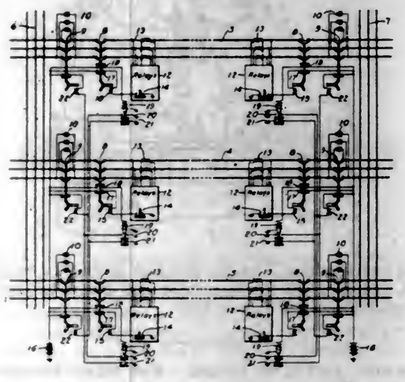
1. In a concrete floor in course of construction the combination of temporary support means, parallel rows of hollow members of different heights arranged to provide rib molds between adjacent higher members and over the shallower members, the shallower members having pockets formed along their lateral edges, and the higher members comprising side walls having their lower edges received in the pockets.

1,870,809. SYSTEM FOR LUBRICATING MACHINERY. JOHN C. HANDY, Berkeley, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Jan. 9, 1929. Serial No. 331,254. 2 Claims. (Cl. 184—104.)



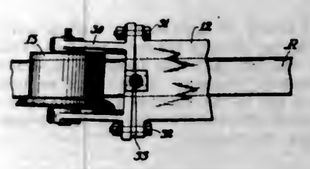
1. A system for lubricating an engine comprising chambers in temperature exchange relation, one of said chambers for oil, a conduit connected with the other chamber, an air receiver connected with said conduit, a branch to said conduit, an air heater connected with said branch, a valve at the junction of the branch with the conduit operable into positions to permit air only from the receiver or heater to pass through the conduit, a by-pass connected with the conduit, a valve at the junction of the by-pass and conduit operable to control the relative amounts of air passing to said other chamber and by-pass, a thermostatic device in the first mentioned chamber operably connected with the last mentioned valve, and a means to conduct the oil from the first mentioned chamber to friction surfaces of an engine.

1,870,810. TRANSMISSION LINE STABILITY SYSTEM. BERT V. HOARD, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 21, 1931. Serial No. 558,628. 6 Claims. (Cl. 172—237.)



1. A multicircuit synchronous-cynchronous transmission system having means for cutting out a faulty circuit and means for substantially simultaneously restoring the system reactance after said cutting-out operation to substantially the value that it had before said cutting-out operation.

1,870,811. RAIL FLAW DETECTOR. GEORGE L. JONES, Garden City, N. Y., assignor to Sperry Products, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 28, 1931. Serial No. 511,659. 12 Claims. (Cl. 175—183.)



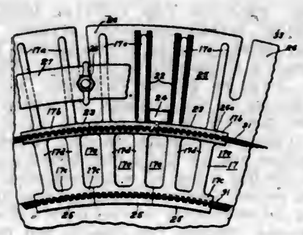
1. In a flaw detector for rails, a carriage mounted for lateral movement with respect to the rail and adapted to be moved along the rail, said carriage supporting detector means, and means associated with said carriage tending to maintain the same in fixed relationship with respect to said rail.

1,870,812. RECIRCULATING TUBE FOR WATER TUBE BOILERS. WILLIAM ANTHONY JONES, West New Brighton, N. Y. Filed May 11, 1931. Serial No. 536,449. 5 Claims. (Cl. 122—406.)



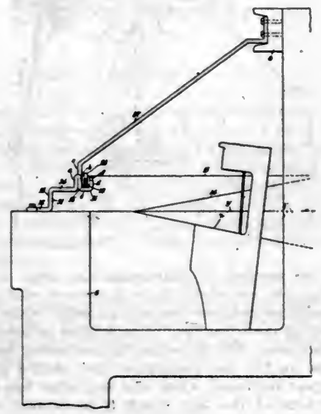
1. A water tube boiler having rows of straight inclined steam generating tubes with both ends connected to a steam drum, in combination with some inner concentric water recirculating tubes with slots in the inner tubes.

1,870,813. FINGER PLATE. HERBERT G. JUNGK, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 26, 1929. Serial No. 349,986. 15 Claims. (Cl. 171—206.)



1. In a dynamo-electric machine, a laminated core having teeth on the periphery thereof and longitudinal ventilating openings, a finger plate having finger projections and ventilating openings which are so arranged as to register with the respective teeth and ventilating openings of said core, said finger plate consisting of a plurality of segmental units having parts abutting to form a circumferential ring, when assembled into a complete finger plate, and banding means for holding said segments in abutting circumferential relation, and means for holding said assembled finger plate against said core.

1,870,814. THREAD CLAMP. JEREMIAH KEYS, Philadelphia, Pa., assignor to Alva Carpet & Rug Company, a Corporation of Pennsylvania. Filed Oct. 20, 1930. Serial No. 489,872. 7 Claims. (Cl. 139—35.)



1. A thread clamp comprising a clamp body including a pair of side members, one of which is provided with pins and the other of which is provided with openings adapted to receive such pins, yieldable means urging said side members toward each other, and a clamp bar adapted to be moved into thread-engaging position intermediate said side members.

1,870,815. PURIFICATION OF ALCOHOL. ROBERT B. LEBO, Elizabeth, N J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Sept. 1, 1926. Serial No. 133,084. 3 Claims. (Cl. 260—156.)

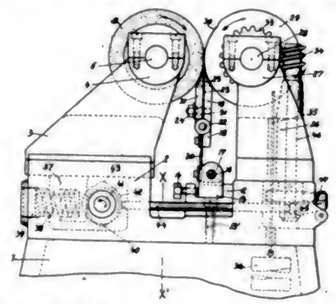
1. A process for the purification of alcohols, comprising digesting the alcohol with nitric acid in an effective

quantity and concentration so selected as to be equivalent to less than 2% by volume of 40° Bé. nitric acid, neutralizing the digested mixture with an alkali, and distilling the alcohol from the neutralized mixture.

1,870,816. PROCESS FOR PARTIAL OXIDATION OF GASEOUS HYDROCARBONS. WARREN K. LEWIS, Newton, Mass., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 21, 1928. Serial No. 263,409. 3 Claims. (Cl. 260—116.)

1. A process for the treatment of normally gaseous hydrocarbon mixtures to form normally liquid oxygen-containing products, comprising the steps of passing gaseous hydrocarbons and air under high pressure and elevated temperature into a zone of partial oxidation, passing the resulting product from said zone of partial oxidation and reducing the temperature whereby liquid and vapor phases are produced, reducing the pressure and rectifying the mixture to yield a gas containing nitrogen of the air and hydrocarbons including methane and propane, and a liquid comprising normally liquid oxygenated products, cooling said gas under pressure to a temperature sufficiently low to liquefy the greater part of the methane, rectifying the liquefied gas to produce nitrogen gas substantially free from hydrocarbon gas and liquid, returning the hydrocarbon to the process and separately withdrawing nitrogen.

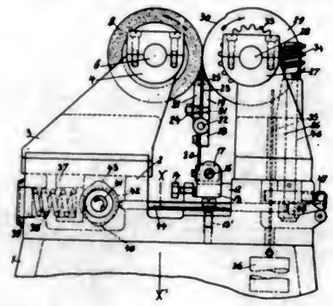
1,870,817. MANUFACTURE OF KNIVES. MAX MAAG, Zurich-Schwamendingen, Switzerland, and ROBERT SALOMON, Neuilly-sur-Seine, France, assignors to Societe d'Etudes de Machines à Affuter, Paris, France. Filed Nov. 10, 1928, Serial No. 318,327, and in Germany Nov. 23, 1927. 6 Claims. (Cl. 51—278.)



1. In the method of sharpening the edge of a blade by keeping one face of the blade in contact with a support of non-abrasive and non-resilient material, while the marginal zone of the other face of said blade is being ground, the improvement which resides in continuing said grinding action on the last mentioned face until a portion of said support is ground away and said edge has advanced into the zone of the face which is in contact with said support.

1,870,818. GRINDING MACHINE. MAX MAAG, Schwamendingen, Switzerland, and ROBERT SALOMON, Neuilly-sur-Seine, France, assignors to Société d'Etudes de Machines à Affuter, Paris France. Original application filed Nov. 10, 1928, Serial No. 318,327, and in Germany Nov. 23, 1927. Divided and this application filed Dec. 28, 1929. Serial No. 417,051. 10 Claims. (Cl. 57—72.)

9. A blade sharpening machine comprising a frame, a carriage slidably arranged the eon, a rotating grinding disc mounted on said carriage and having its axis horizontal and transverse to said carriage, a blade supporting body of non-abrasive and non-resilient material mounted on said frame in opposition to said grinding disc, means to reciprocate said carriage to cause said grinding disc to cut into said body, and a blade holder arranged between said disc and said body and adapted to keep a blade
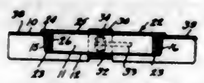


in upright position with its marginal portion in contact with said body and in the path of said disc to be ground off simultaneously with said body.

1,870,819. CUTTING BLADE. MAX MAAG, Schwamendingen, Zurich, Switzerland, and ROBERT SALOMON, Valdoie, near Belfort, France, assignors to Societe d'Etudes de Machines à Affuter, Paris, France. Original application filed Nov. 10, 1928, Serial No. 318,327. Divided and this application filed Oct. 31, 1931. Serial No. 572,396. 4 Claims. (Cl. 30—12.)



1. As an article of manufacture, a blade having a cutting edge having slightly concave marginal faces, characterized by the fact that said faces are substantially flat in the immediate proximity of said edge as distinguished from convex due to the absolute absence of any deformations occurring adjacent the edge during the edge forming and finishing treatment.

1,870,820. BUCKLE-PURSE. BENJAMIN H. MARCUS, Brooklyn, N. Y. Filed Feb. 12, 1930, Serial No. 427,671. Renewed June 8, 1932. 5 Claims. (Cl. 206—37.)

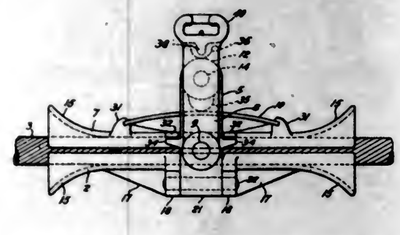


4. In a purse adapted to be attached to a belt, a base, a chamber therein provided with a groove, a lid extending into the chamber, flanges at the top and bottom of said lid, a gasket between said flanges, and a projection on the lid adapted to be received by the groove.

1,870,821. SUSPENSION CLAMP. FREDERIC H. MILLER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 2, 1927. Serial No. 230,470. 6 Claims. (Cl. 248—31.)

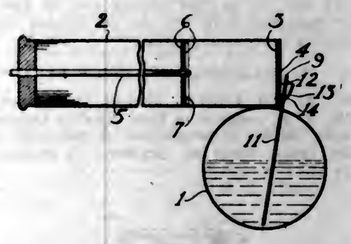
6. In combination, in a cable support constituting substantially a closed loop surrounding the position of the cable axis therein and comprising, as perimetral sections

of the loop, a top-end mounting portion, a pair of upright side portions and a bottom-end cable-receiving portion between the lower ends of said side portions, the structure, viewed at right angles to said position, being of inverted substantially T-shape, with said receiving portion constituting the head and the other sections together constitut-



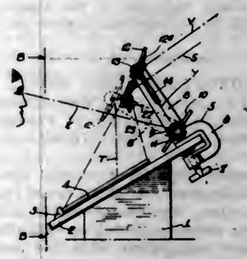
ing the leg, means pivotally mounting the head to tilt in opposite directions from its central position on the leg, a hinge connecting adjacent ends of two of said sections to provide movement of one of the hinged sections outwardly from the perimeter of the loop about an axis parallel to the loop axis, and means releasably securing said one section in position in the loop.

1,870,822. SPRAY DEVICE. FRANKLIN C. NELSON, Roselle, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Nov. 10, 1930. Serial No. 494,455. 3 Claims. (Cl. 299—88.)



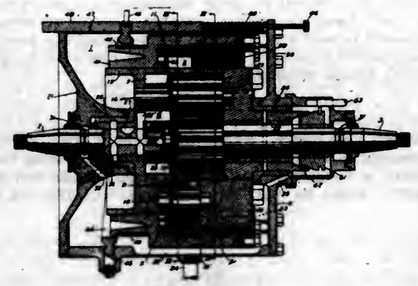
1. As an article of manufacture, a composite discharge tube comprising spaced tubes each having a delivery end, a tubular shell the walls of which connect the tubes, and a cup the bottom of which has closed connection with the tubes and shell, the shell opening into the lower portion of the cup.

1,870,823. MUSICAL DIRECTING APPARATUS. OSCAR A. ROSS, New York, N. Y. Filed Mar. 4, 1927. Serial No. 172,757. 14 Claims. (Cl. 88—16.)



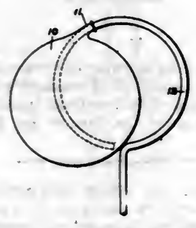
1. In combination with a motion picture screen arranged to have motion pictures projected thereonto and a musical director's stand arranged to support a musical score thereon and positioned forwardly of the screen, of a musical directing apparatus comprising; spaced clamping members arranged to be clampably secured to the stand, means supported thereby for clamping the members to the stand in spaced relation, a primary reflecting mirror, a secondary reflecting mirror, supporting members supported by each clamping member for supporting the mirrors therebetween in reflective relation to each other, means supported by the mirror supporting members for adjustably positioning the primary mirror whereby the image depicted onto the screen by the motion picture projector will be reflected onto the reflecting surface of the secondary mirror, and means jointly supported by the mirror supporting members and the clamping members for adjustably positioning the secondary mirror whereby the image received thereby from the primary mirror will be directed into the vision of a musical director normally positioned to view the musical score supported by the stand.

1,870,824. HYDRAULIC TRANSMISSION MECHANISM. FRANCIS H. SHEPARD, Jr., New Rochelle, N. Y. Filed Jan. 10, 1929. Serial No. 331,629. 9 Claims. (Cl. 60—53.)



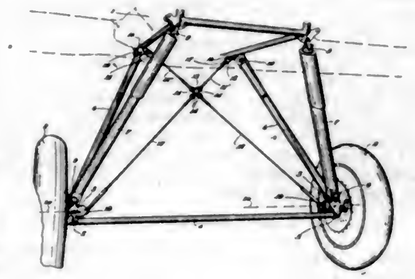
1. In a hydraulic transmission mechanism, in combination, two pump mechanisms, one comprising an annular gear wheel and a plurality of cooperating pinions and the other comprising a spur gear wheel and a plurality of cooperating pinions, driving means for actuating the pinions, a closed hydraulic circuit for connecting the two pump mechanisms, a driven member connected to the spur gear wheel, means for holding the annular gear wheel stationary, and means for varying the output of the first pump mechanism to change the ratio between the driving means and the driven member.

1,870,825. PROCESS OF PRINTING ON INFLATABLE ARTICLES. CARL C. SPRAGUE, Westboro, Mass. Filed Dec. 29, 1930. Serial No. 505,300. 2 Claims. (Cl. 101—426.)



1. The process of printing on inflatable articles consisting in stretching the article to a flat form of a shape and size approximating a great circle of the article when inflated, then printing thereon in a stretched flat condition.

1,870,826. LANDING CHASSIS FOR AIRCRAFT. MICHAEL WATTER, New York, N. Y., assignor to Chance Vaught Corporation, Hartford, Conn., a Corporation of Delaware. Filed Oct. 24, 1931. Serial N. 570,776. 11 Claims. (Cl. 244—2.)



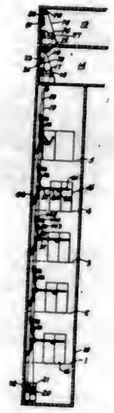
1. A landing chassis for aeroplanes comprising a pair of axle units braced by struts universally connected with the craft frame, a tension spreader member universally connected to said axle units and flexible transverse bracing means between the craft frame and said stub axles for preventing lateral movement.

1,870,827. BUFFER. EDWIN E. ARNOLD, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1930. Serial No. 471,636. 13 Claims. (Cl. 188—94.)

1. A retarder for an elevator car comprising a plurality of retarding sections and speed responsive means for selectively rendering each of said sections operative for a predetermined speed range of the elevator car during its period of retardation.

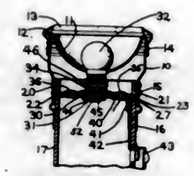
1,870,828. MULTICAR DOOR OPERATOR. EDWIN E. ARNOLD, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 27, 1930. Serial No. 505,063. 7 Claims. (Cl. 187—52.)

1. In an elevator system, the combination with a plurality of cars operable past a plurality of doors in a hatchway, individual means for moving said cars, and individual means for controlling said moving means to start and to stop said cars, of means for operating the doors comprising an individual door-operating motor for each car, an individual movable member for each car disposed to be operated past said doors by the motor for that car, an individual electromagnet for each of said cars disposed at each of



said doors, and means operably responsive to operation of the controlling means of any one of said cars to stop that car at a landing, for energizing the electromagnet associated with that car at that landing and for energizing the motor associated with that car for moving the door at that landing to its open position.

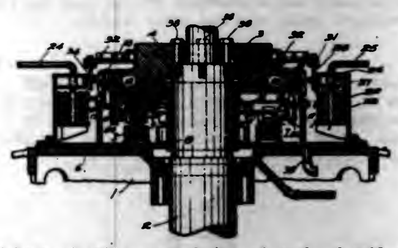
1,870,829. FLASH LIGHT. GEORGE H. BARBER, New Rochelle, N. Y., assignor to Bond Electric Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 16, 1928. Serial No. 262,093. 16 Claims. (Cl. 240—10.66.)



1. In a flashlight, the combination with a casing, of a lamp socket support, means to removably secure the support to the casing comprising recesses formed in the casing into which portions of the support extend and resilient means to position the support in the casing.

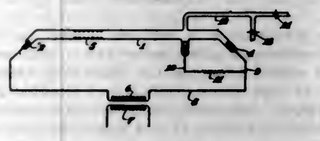
1,870,830. THRUST BEARING. RENÉ A. BAUDRY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Mfg. Company, a Corporation of Pennsylvania. Filed May 11, 1928. Serial No. 277,052. 4 Claims. (Cl. 308—160.)

1. In a leveling shoe for a vertical thrust bearing, a ring-shaped base plate, a plurality of jack-screws secured to said plate, discs supported by said screws, segmental bearing shoes supported on said discs, said discs being in recess engagement with the bottoms of said bearing shoes, means for preventing rotation of said shoes, comprising an upper, annular-shaped plate spaced above said base plate and having holes therein, said discs being slidably mounted in said holes, means for preventing rotation of each of said shoes relative to each of said discs comprising a dowel pin extending downwardly from the bottom of said shoes into a slot disposed in the outer



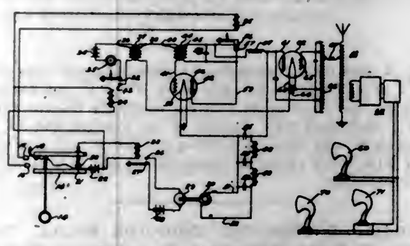
periphery of said upper plate, and each of said shoes having a threaded hole adapted to receive a screw eye for removal of said shoe.

1,870,831. LUMINESCENT DISCHARGE DEVICE. JACQUES BRETTMON, Paris, France. Filed Feb. 10, 1928. Serial No. 253,422. 15 Claims. (Cl. 176—125.)



1. The method of forming a molecular compound of a metallic element with nitrogen in a glow discharge tube which comprises admitting nitrogen to the exhausted tube at the moment when the metallic element is at a red heat and subsequently pumping out the excess gases.

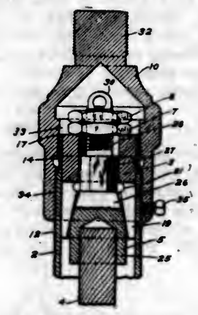
1,870,832. RADIOCONTROL SYSTEM. WILLIAM E. BRINDLEY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 20, 1926. Serial No. 110,363. 4 Claims. (Cl. 250—19.)



2. In a radio system, oscillation generating means, modulating means therefor, and a single operating means for successively causing the generation of oscillations and the modulation thereof.

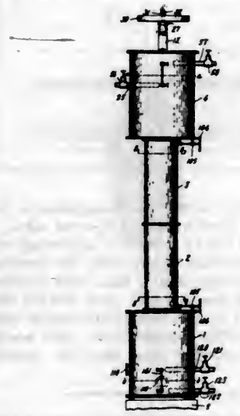
1,870,833. TERMINAL DEVICE. GORDON A. BUAR, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 11, 1929. Serial No. 354,308. 6 Claims. (Cl. 173—303.)

1. In combination, a tube having exterior screw-threads adjacent to, but removed from, an end thereof and a portion of reduced exterior diameter from said threads to said end, an insert having a flange abutting said end, a tubular body portion having an inner longitudinal surface of polygonal transverse contour, a knurled cylindrical outer surface tightly fitting the tube, and circumferentially-spaced fingers having cylindric outer surfaces, longitudinally diverging tapered inner surfaces and portions of reduced cross section adjacent to said body, an internally screw-threaded cap cooperating with said tube threads over the end of the tube having an end stud portion, a grooved section adjacent to said reduced tube portion and a tapered inner surface for engagement with



said tube end, a set screw extending through said cap against said tube, a flexible conductor in the tube, a terminal member having a socket for said conductor, a tapered outer-surface portion for cooperation with said fingers, a polygonal portion in said polygonal body portion and a lifting portion, and means on said terminal member cooperating with said insert for drawing and locking said insert and terminal member together.

1,870,834. METHOD OF EXTRACTION OR OTHER COUNTERCURRENT TREATMENT. JESSE M. COAHRAN, Smethport, Pa., assignor to Olean Sales Corporation, Olean, N. Y., a Corporation of Delaware. Original application filed Jan. 21, 1925, Serial No. 3,797, now Patent No. 1,845,128, dated Feb. 16, 1932. Divided and this application filed Mar. 16, 1927. Serial No. 175,734. 17 Claims. (Cl. 260—122.)

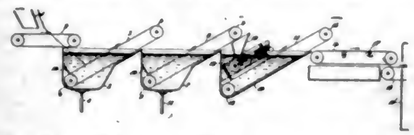


1. The method of acting on material with a treating agent to produce a physical interchange therebetween, which comprises establishing countercurrent flow between said material and agent while maintaining a preponderating proportion of substantially fresh treating agent to act on the more completely treated material and a prepon-

derating proportion of substantially untreated material to act on the more completely used treating agent.

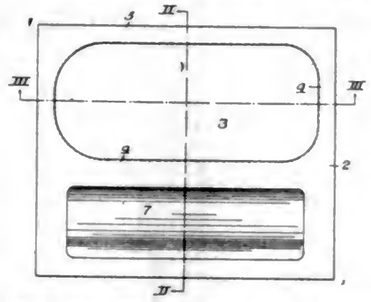
11. The method of extracting acetic acid from acid containing liquor, which comprises maintaining a relatively large pool of such liquor, maintaining a relatively large pool of a solvent for acetic acid immiscible with the liquor, establishing a relatively small flow of liquor from said pool of liquor to and through the pool of solvent and in intimate contact therewith, and maintaining a relatively small flow of solvent from said pool of solvent and in intimate contact with and in opposite direction to said flow of liquor and then through said pool of liquor and in intimate contact therewith, drawing off the spent liquor from said pool of solvent, and drawing off the acetic acid laden solvent from said pool of liquor.

1,870,835. PROCESS OF MICA SPLITTING AND MACHINE THEREFOR. JOSEPH M. COFFEY, HENRY H. FRANCE, and JOSEPH J. PIEKNEY, Schenectady, N. Y., assignors to Mica Insulator Company, New York, N. Y., a Corporation of New Jersey. Filed July 5, 1928. Serial No. 290,493. 10 Claims. (Cl. 125—24.)



1. The process for splitting mica block comprising first immersing the block in boiling liquid to loosen the layers and then mechanically acting upon the same to effect their separation.

1,870,836. BATHTUB. JOHN C. CROMWELL, Columbus, Ohio, assignor to The Steel Sanitary Company, Alliance, Ohio, a Corporation of Ohio. Filed Mar. 18, 1927. Serial No. 176,567. 2 Claims. (Cl. 4—173.)

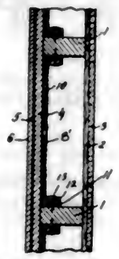


1. A sheet metal bath tub comprising a curved rim section having a downwardly projectng edge, a smooth bottom section having an upwardly projecting edge, and a body portion comprising exclusively two sections having butt welded connecting joints, said body-forming portion having upper and lower edges butt welded respectively to the downwardly and upwardly projecting edges of the top and bottom section respectively, said sections being formed of freely sheared and separate plates bent to shape.

1,870,837. DIFFERENTIALLY COLORED FABRIC AND METHOD OF PRODUCING THE SAME. CAMILLE DREYFUS, New York, N. Y., and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed June 28, 1928. Serial No. 289,070. 10 Claims. (Cl. 8—5.)

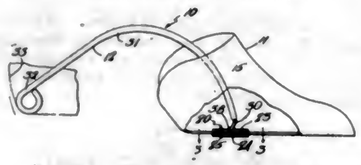
1. Method of producing differential effects on fabrics containing organic derivatives of cellulose comprising subjecting said fabrics to the action of an oxidizing agency, which fabric has Diphenyl Black Base applied thereto and being locally printed with a paste that contains an alkali and a substance selected from the group consisting of oxalic acid and metal oxalates.

1,870,838. INSULATED WALL CONSTRUCTION. EDWIN W. DAVIS, Cloquet, Minn., assignor to Wood Conversion Company, Cloquet, Minn., a Corporation of Delaware. Filed May 16, 1929. Serial No. 363,566. 4 Claims. (Cl. 20—4.)



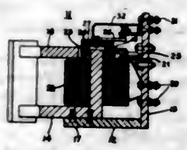
1. In combination a building frame, an insulating member comprising a fibrous core and at least one covering sheet of creped paper, and a rigid strip clamping said member to said frame, said strip extending parallel to the creping of said paper whereby said creped paper may stretch without rupture of said insulating member.

1,870,839. SHOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed June 20, 1931. Serial No. 545,763. 8 Claims. (Cl. 12—128.2.)



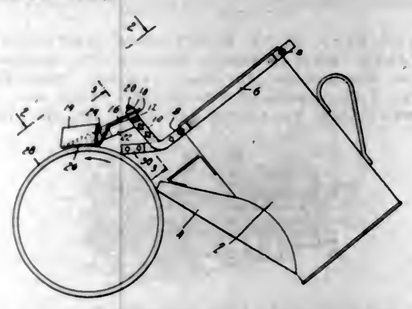
1. A shoe form comprising an expansible toe form having a pivotally mounted cross-brace which in one position expands and in another position contracts the toe form, and a back part wire secured at its forward end to the crossbrace, said crossbrace being laminated and said back part wire being pivotally connected to one lamination of the crossbrace.

1,870,840. DOUBLE-COIL INDUCTOR RELAY. WILLIAM F. EAMES, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 18, 1929. Serial No. 371,754. 9 Claims. (Cl. 200—110.)



1. An inductor-relay structure cooperating with an inductor plate including a magnetic yoke, a plurality of relatively movable coils operatively associated with said yoke and normally energized and a switch actuated by the relative movement of said coils.

1,870,841. PIPE COATING APPARATUS. CLARENCE R. ECKERT, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 21, 1930. Serial No. 422,332. 2 Claims. (Cl. 91—67.4.)

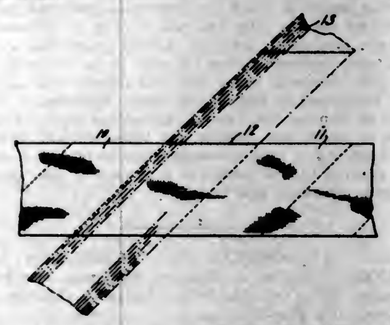


1. A pouring bucket adapted for applying to and spreading liquid coating material about a rotating pipe, comprising a receptacle for the coating material having a spout through which coating material may be poured onto the pipe, a spreading member mounted on said pouring bucket and positioned in front of said spout in position to engage the coating material on the pipe to form the coating material into a smooth layer when the receptacle is tilted to pour the coating material onto said pipe, and a positioning member on said pouring bucket arranged to contact with the rotating pipe to carry the weight of said pouring bucket.

1,870,842. PRODUCTION OF DIAZO-NITROARYL COMPOUNDS. LAWRENCE H. FLETT, Hamburg, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 24, 1929. Serial No. 388,268. 19 Claims. (Cl. 260—69.)

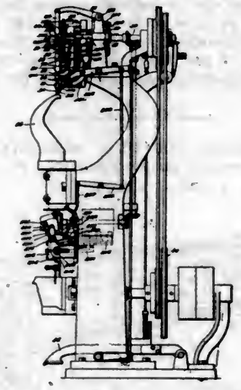
1. A process for the production of diazonitroaryl compounds which comprises nitrating an acylated arylamine to form a nitroacylarylamine, heating the resulting nitroacylarylamine, without isolation from the reaction mass, in the presence of a mineral acid to split off the acyl group, and then diazotizing the resulting nitro-arylamine without isolation from the resulting mixture.

1,870,843. METHOD OF MANUFACTURING BIAS FABRIC. ROBERT J. FORD, Bristol, R. I., assignor to National India Rubber Company, Bristol, R. I., a Corporation of Rhode Island. Original application filed Oct. 2, 1929, Serial No. 396,599. Divided and this application filed July 26, 1930. Serial No. 470,792. 3 Claims. (Cl. 2—243.)



1. The method of making stays for footwear having fabric uppers which comprises coating fabric with rubber, bias cutting the rubberized fabric into sections, uniting the edges of the sections to form a sheet of bias-cut rubberized fabric, then placing a layer of rubber onto the sheet of rubberized fabric to form a composite sheet, and thereafter slitting the composite sheet lengthwise into strips.

1,870,844. SEWING MACHINE. ALFRED B. FOWLER, deceased, Beverly, Mass., by Mary F. Fowler, administratrix, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 11, 1926. Serial No. 115,202. 11 Claims. (Cl. 112—36.)



1. A lockstitch sewing machine having, in combination, stitch forming and setting devices including a hook needle operating during its retraction to draw thread from the preceding needle loop, a loop taker, a thread lock against which the stitch is set, a pull-off variable to regulate the supply of thread in accordance with the thickness of the work, a take-up, and means for varying the throw of the take-up so that the same length of loop is left above the work to be pulled through by the needle regardless of the thickness of the work.

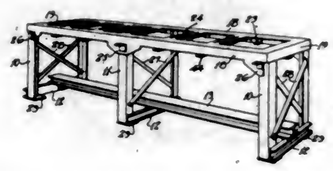
1,870,845. MOP. HYMAN GOLDFINGER, Brooklyn, N. Y. Filed May 6, 1930. Serial No. 450,077. 1 Claim. (Cl. 15—120.)



A device as characterized comprising in combination with a flexible mop head, a body portion providing an elongated handle and a rod fixed with respect thereto extending axially therefrom, an enlarged end piece on the

outer end of said rod, a ball pivoted to said end piece at an enlarged portion thereof so as to permit swinging the ball on an axis transverse to the axis of the rod and prevent rotation of the ball around said axis of the rod, a slidable and rotatable hand grip on the rod, said hand grip having a bracket attached thereto, a second ball pivoted on said bracket on an axis transverse to the axis of said rod, said bracket and second mentioned ball being offset from the axis of the rod and thereby adapted to be brought into juxtaposition to the end piece and first mentioned ball at the end of the rod, said mop head being attached at its opposite ends to the said balls whereby the mop is doubled and the ends held adjacent to each other in the aforementioned juxtaposed position of the balls, the ball on the outer end of the body portion being adapted to swing back so as to be directed toward the slidable hand grip upon withdrawing said hand grip from the juxtaposed position of the balls, whereby the outer ball rests adjacent its supporting end piece while the mop is being wrung.

1,870,846. FRAME FOR FLAT SCREENS. SIDNEY B. GORBUTT, Portland, Oreg. Filed May 31, 1930. Serial No. 458,352. 1 Claim. (Cl. 92—33.)



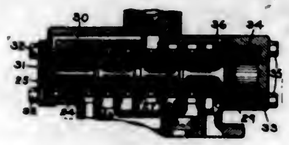
A unitary structural steel frame for supporting flat screens consisting of a rectangular top formed of angle bars having their outer edges downturned and the top of their end members flush with the top of their side members, a plurality of pairs of transversely spaced legs supporting said angle bars, each pair of legs having a cross tie between the lower ends thereof, and a central longitudinal tie on the top side of said cross tie and normal thereto forming a support for the operating mechanism of the screen diaphragm.

1,870,847. SHAVING BRUSH. JOHN J. GOTTSCHALK, Taunton, Mass. Filed Jan. 26, 1931. Serial No. 511,148. 9 Claims. (Cl. 15—138.)



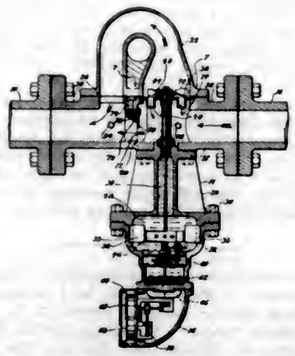
1. A shaving brush comprising, in combination, a brush holder having opposed socket portions separated by a partition, a body of bristles anchored in one socket portion, the other socket portion being threaded, a tubular member providing a passage between the socket portions, terminating at one end within the body of bristles and at its opposite end forming a nipple projecting into the other socket portion, a hollow handle having a portion threaded for cooperation with the threaded socket of the brush holder, and a closure cap at the inner end of the handle having a self-closing valve operable by the projection of said nipple into opening relation with it.

1,870,848. FLUID COMPRESSOR CONTROLLING VALVE. ELLIS E. HEWITT, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 15, 1930. Serial No. 436,048. 1 Claim. (Cl. 121—108.)



A steam controlling valve mechanism for a steam engine comprising a casing, a bushing in said casing, a controlling valve having a plurality of piston heads of the same diameter, and each provided with piston rings, said piston heads being mounted to reciprocate in said bushing, an additional piston head of larger diameter associated with said valve, a hollow cover plate detachably secured to said casing, and a bushing in said cover plate in which said piston head of larger diameter is adapted to reciprocate.

1,870,849. FLOW QUANTITY METER. JOHN LAWRENCE HODGSON, near Leighton, Buzzard, England. Filed June 9, 1928. Serial No. 284,094. 6 Claims. (Cl. 73—68.)



1. In a turbine meter containing pressure differential producing means in which the differential produced varies in a known manner with the rate of flow, a differential responsive mechanism actuated thereby comprising a turbine having inclined blades adapted to be actuated by axial flow, damping means for said turbine and nozzle means interposed in said meter axially upstream of said turbine to impinge the flow at the desired angle on said turbine to rotate said turbine, the blades of said turbine being fixed and of such a non-multiple number and spacing in relation to said nozzles as to produce a substantially uniform torque on said turbines.

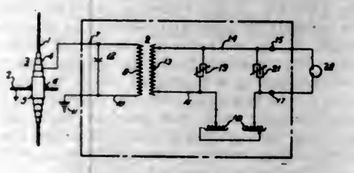
1,870,850. ATTACHMENT TO CULTIVATING MACHINES. WILLIAM J. HORTON, Winnipeg, Manitoba, Canada. Filed Oct. 12, 1928. Serial No. 312,120. 2 Claims. (Cl. 97—207.)

1. In a cultivating attachment, the combination with a curved shank and a doubly winged cultivating point fastened by a single bolt to the lower end thereof, of a vertically disposed curved coulter having the upper end thereof engaging the shank and provided with a pair of rearwardly extending lugs preventing lateral displacement of the coulter in respect to the shank, the lower end thereof being provided with a downwardly extending



fastening bolt passing through the cultivating point and the shank, and a weed and soil separating attachment fastened to the under side of the shank by the latter bolt and provided with a central socket receiving the under side of the shank.

1,870,851. CONTROL SYSTEM. VIVAN B. JONES, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 30, 1929. Serial No. 389,331. 6 Claims. (Cl. 171—119.)



1. In combination with an alternating-current circuit, a control circuit including a transformer having the primary winding thereof capacitatively coupled to said circuit, an electro-responsive device and means for energizing the same from the secondary winding of said transformer comprising a circuit embodying means for tuning it with respect to the frequency of said alternating-current circuit and means for improving the voltage regulation of said control circuit and for increasing the permissible volt-ampere burden of said electro-responsive device comprising a condenser connected in parallel-circuit relation with said device.

1,870,852. PROCESS OF MAKING STYROLS. GEORGE W. JARGSTORFF, Glen Rock, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Oct. 24, 1930. Serial No. 491,083. 10 Claims. (Cl. 260—168.)

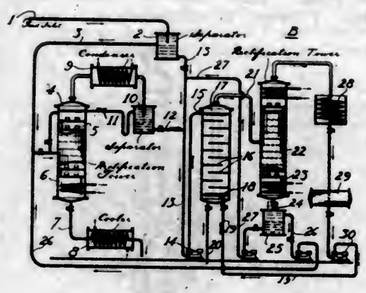
1. A process of making styrols which comprises heating a halogen alkyl benzol in the presence of an inorganic catalyst selected from the group consisting of mercurous chloride, mercuric chloride, zinc chloride, mercuric oxide, mercuric-sulphate and mercuric acetate to split off the corresponding halogen acid, and recovering a styrol.

1,870,853. FOUNTAIN PEN. THEODORE H. LASSAGNE, Oakland, Calif. Refiled for abandoned application Serial No. 85,277, filed Feb. 1, 1926. This application filed Aug. 13, 1929. Serial No. 385,631. 16 Claims. (Cl. 120—46.)



1. In a fountain pen, a barrel, a resilient ink sac in said barrel, spring presser bar mechanism for compressing said sac, and means including a writing point movably mounted in said barrel for actuating said mechanism.

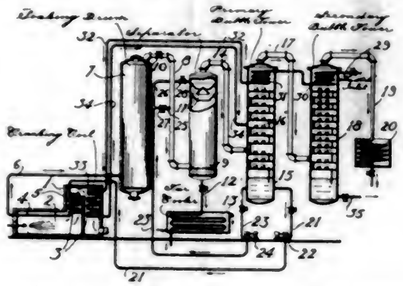
1,870,854. PROCESS FOR SEPARATING MIXTURES OF SUBSTANCES ONLY PARTIALLY MISCIBLE. WARREN K. LEWIS, Newton, Mass., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Apr. 25, 1929. Serial No. 358,013. 7 Claims. (Cl. 202—41.)



1. In the process of separating water from aqueous mixtures of organic liquids which are only partially miscible with water and do not form homogeneous constant boiling mixtures with water, the improvement which comprises first separating the bulk of the organic liquid in substantially anhydrous form by rectification, taking off from the rectification stage an aqueous product containing some said aqueous product with a liquid organic solvent capable of the organic liquid, contacting at least a portion of

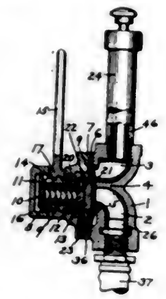
of dissolving the organic liquid but immiscible with water, withdrawing the solvent containing dissolved organic liquid and some water, separating the solvent from the organic liquid dissolved therein, whereby a mixture rich in the organic liquid is obtained, and returning the last-mentioned mixture to the rectification stage.

1,870,855. METHOD AND MEANS FOR OPERATING CRACKING COIL INSTALLATIONS. ERIC W. LUSTER, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Sept. 25, 1929. Serial No. 394,959. 2 Claims. (Cl. 196—58.)



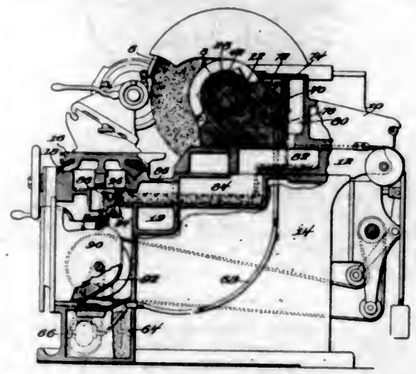
1. Method of cracking hydrocarbon oil which comprises introducing the oil to be cracked into an intermediate stage of a rectifying zone, drawing off commingled feed oil and condensate from said zone, passing the mixture of oil so formed into a cracking zone, discharging the oil therefrom into a separating zone in which no substantial cracking takes place introducing into the stream of oil passing to the separating zone a quantity of commingled feed oil and condensate from the rectifying zone, and also introducing a quantity of such oil into the upper part of the separating zone, and passing vapors from the cracked product, together with vapors from the feed oil, into the rectification zone at a point below that at which the feed oil enters.

1,870,856. CONTROL VALVE DEVICE. EWING K. LYNN, East McKeesport, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 24, 1930. Serial No. 455,290. 8 Claims. (Cl. 251—24.)



4. The combination with a back-up hose adapted to be connected to the brake pipe, of an application valve device connected to said hose and comprising a casing having an inlet and an outlet passage, a valve seat interposed between said passages, a diaphragm for controlling communication between said passages and adapted in one position to engage said seat for cutting off communication between said passages, a member mounted in said casing for operating said diaphragm and having a longitudinal slot, means fixed relative to the casing and engaging in said slot for preventing rotative movement of said member, a handle having screw-threaded engagement with said member for operating said member, and a spring interposed between said member and said diaphragm for resiliently pressing said diaphragm into engagement with said seat.

1,870,857. GRINDING MACHINE. MAXWELL I. MATHEWSON, Providence, R. I., assignor to Brown and Sharpe Manufacturing Company, a Corporation of Rhode Island. Filed June 22, 1927. Serial No. 200,624. 11 Claims. (Cl. 184—6.)



1. In a lubricating system for a machine tool, the combination of spindle bearings, a spindle adapted for rotation in the bearings at relatively high speeds, a lubricant supply reservoir, a supply connection from the reservoir to the spindle bearings, an overflow dam for maintaining the lubricant in the reservoir above the level of the spindle bearings to cause the bearings at all times to be submerged in an oil bath, a distributing reservoir for collecting the overflow from the supply reservoir and the bearings having a restricted orifice for drawing off a portion of the lubricant from the distributing reservoir, channels through which the overflow from the supply reservoir and the bearings is conveyed to the distributing reservoir, and an overflow dam for drawing off lubricant from the distributing reservoir.

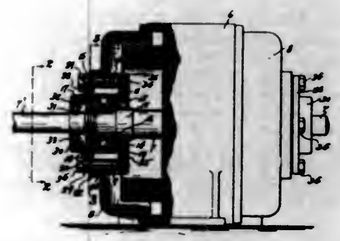
1,870,858. METHOD FOR THE PRODUCTION OF ETHYLENE GLYCOLS AND ETHYLENE HYDROCARBONS. ALEXANDER T. MAXIMOFF, Vercelli, Italy, assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Original application filed May 18, 1926, Serial No. 109,961, now Patent No. 1,752,016, dated Mar. 25, 1930. Divided and this application filed Oct. 16, 1929. Serial No. 400,164. 3 Claims. (Cl. 260—156.5.)

1. In the production of ethylene glycols from ketones, the step of treating said ketones with an aluminum amalgam containing a small percentage of a metallic element selected from the group consisting of zinc and cadmium.

1,870,859. PRODUCTION OF ETHYLENE HYDROCARBONS. ALEXANDER T. MAXIMOFF, Vercelli, Italy, assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Original application filed May 18, 1926, Serial No. 109,961, now Patent No. 1,752,016, dated Mar. 25, 1930. Divided and this application filed Oct. 16, 1929. Serial No. 400,165. 4 Claims. (Cl. 260—170.)

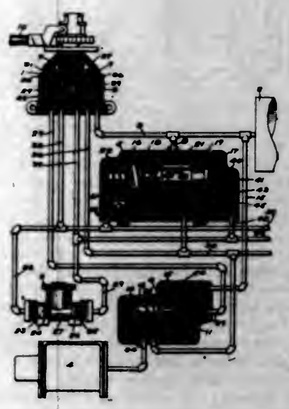
4. A method for the production of propylene from acetone, which comprises treating acetone with an aluminum amalgam containing more than approximately 3% of zinc.

1,870,860. MOUNTING FOR ANTIFRICTION BEARINGS. DANIEL J. MAYER, Belleville, N. J., assignor to Metal Textile Corporation, West Orange, N. J., a Corporation of Delaware. Filed July 25, 1930. Serial No. 470,624. 6 Claims. (Cl. 308—178.)



1. A mounting for anti-friction bearings, comprising a chambered housing to surround the bearing and shaft served by the latter, said housing having a stop shoulder at its inner end, a contractible cylindrical bushing around said bearing and abutting said stop shoulder, a contractible wedge cone ring having a cylindrical bore to fit over said bushing, said wedge cone ring being longitudinally movable intermediate said housing and said bushing for contracting the latter into gripping engagement with the bearing, and means to both actuate said wedge cone ring and retain the same in actuated position.

1,870,861. BRAKE AND DOOR INTERLOCK. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 16, 1929. Serial No. 363,482. 18 Claims. (Cl. 303—6.1.)



1. The combination with a fluid pressure brake equipment and door controlling means for a vehicle, of a brake cylinder forming part of sa'd equipment, and slow acting means cooperating with said fluid pressure brake equipment and said door controlling means operative automatically after the opening of the vehicle door is initiated for supplying fluid under pressure to the brake cylinder, sa'd slow acting means being set in operation upon the initiation of the opening of said door.

1,870,862. GOLF BALL. ALLEN G. MCKINNON, Cranston, R. I., assignor to Revere Rubber Company, Providence, R. I., a Corporation of Rhode Island. Filed Mar. 11, 1930. Serial No. 434,895. 6 Claims. (Cl. 273—62.)



1. A golf ball center having a pill, two or more shells of resilient flexible material around the pill, and a lubricant between the adjacent surfaces of the shells and the pill.

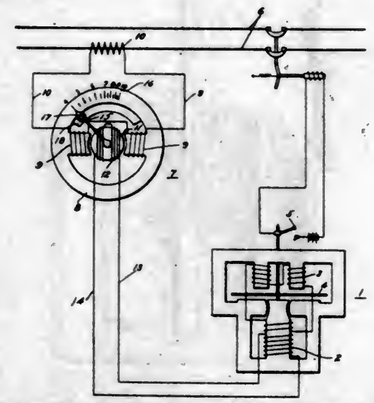
1,870,863. METALLURGICAL PROCESS. RALPH F. MEYER, Freeport, Pa., assignor to Meyer Mineral Separation Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Apr. 15, 1931. Serial No. 530,296. 9 Claims. (Cl. 75—67.)

1. A process of chloridizing oxidized ore, comprising moistening said ore, roasting it in admixture with ferrous chloridizing reagent at chloridizing temperature above 250° C. to form a calcine and to accumulate the chloridized metal values in the calcine, while introducing air in amount substantially less than theoretically required to oxidize said ferrous reagent to ferric oxide, said reagent chloridizing the metal values and being preponderantly oxidized to ferric oxide.

1,870,864. ART OF DISSOLVING AND DISPERSING NITROCELLULOSE. WILLIAM BEACH PRATT, Wellesley, and RALPH T. HALSTEAD, Boston, Mass., assignors to Dispersions Process, Inc., Dover, Del., a Corporation of Delaware. Filed Feb. 26, 1929. Serial No. 342,935. 3 Claims. Cl. 134—79.)

1. A process which comprises dissolving nitrocellulose with a solvent capable of forming a solution into which water may be incorporated without precipitating nitrocellulose, incorporating a hydrophilic colloid into the solution, and gradually manipulating water thereinto until a change of phase takes place and the nitrocellulose solution disperses as minute particles in the aqueous medium.

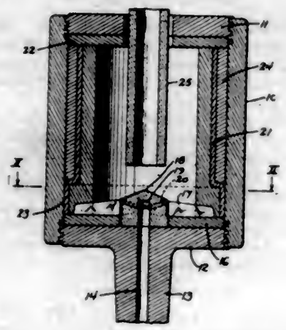
1,870,865. RELAY. RAYMOND T. PIERCE, Millburn, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 7, 1928. Serial No. 324,424. 7 Claims. (Cl. 175—294.)



1. The combination with an alternating-current circuit, a circuit-interrupter therefor, and a relay for controlling said interrupter, of means for supplying energy to said

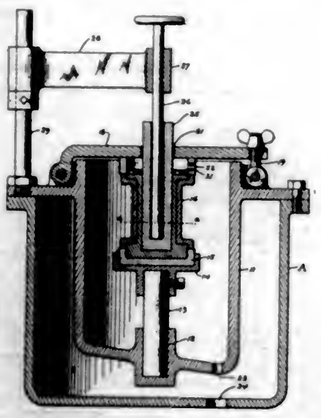
relay from said circuit including a variable-ratio transformer having a stationary magnetic circuit designed to be saturated by a current of predetermined magnitude below the working current value for said relay, a movable winding variably-inductively associated with said stationary magnetic circuit for energizing said relay and predetermining the sensitivity thereof, and means for adjustably determining the position of said movable winding.

1,870,866. APPARATUS FOR CENTRIFUGAL CASTING OF DUAL METAL BUSHINGS. ROBERT D. PIKE, Piedmont, Calif., assignor to Kalif Corporation, Emeryville, Calif., a Corporation of Delaware. Filed Nov. 22, 1929. Serial No. 409,046. 6 Claims. (Cl. 22—65.)



1. An apparatus for casting cylindrical bushings by the centrifugal method which comprises a vertically disposed centrifugal mold having an annular cavity provided at one end of a larger outside diameter than the inside diameter of the casting to be made, and means for projecting molten metal into said annular space as said mold is rotated.

1,870,867. METHOD OF CASTING DUAL METAL BEARINGS. ROBERT D. PIKE, Diablo, and ELLSWORTH W. CARROLL, San Francisco, Calif., assignors to Kalif Corporation, Emeryville, Calif., a Corporation of Delaware. Filed June 17, 1930. Serial No. 461,708. 4 Claims. (Cl. 22—203.)

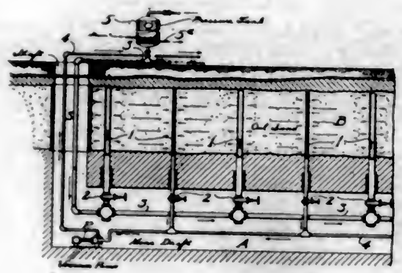


1. A process for making dual metal bushings in which a molten metal is poured into integral contact with a pre-formed solid metal which consists in pouring into contact with the lower part of the solid metal, while maintaining all surfaces to be integrally attached in a metallic condition, the requisite amount of molten metal to complete the casting and then plunging into this molten metal a pulp-like core which forces the molten metal into its final position integrally attached to the solid metal.

1,870,868. SIZING OF DYED YARN. HERBERT PLATT, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed July 18, 1928. Serial No. 292,605. 3 Claims. (Cl. 91—68.)

1. Method of sizing yarn containing organic derivatives of cellulose, which yarn has previously been dyed with a water insoluble dye that is dispersed in an aqueous liquid by means of a sulfo-fatty acid, comprising treating the same with a sizing bath containing gelatin which bath has a pH value of substantially 7 to 7.5, at a temperature of 60° to 80° C.

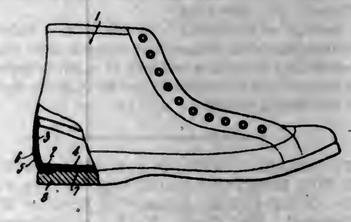
1,870,869. METHOD AND MEANS FOR DEVELOPING IMPERMEABLE BARRIERS IN POROUS MEDIA. LEO RANNEY, New York, N. Y., and LESTER CHARLES UREN, Berkeley, Calif., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Aug. 23, 1929. Serial No. 387,841. 6 Claims. (Cl. 262—1.)



1. In a method of forming impermeable barriers in a sand stratum from a mine gallery, the improvement which comprises heating a section of the sand by causing flow of a heated fluid medium through the pores in the sand of the section from an inlet to an outlet opening communicating with the gallery, and then injecting a molten substance, caused to flow in like manner from the inlet to the outlet opening, and which on subsequent cooling, will solidify and seal the pores of the sand stratum.

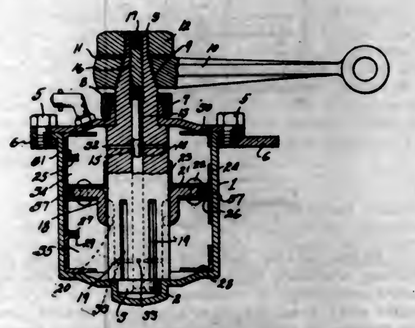
1,870,870. FOOTWEAR AND PROCESS OF MAKING THE SAME. HAROLD D. RICE, Bristol, R. I., assignor to The Goodyear India Rubber Glove Manufacturing Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Apr. 13, 1931. Serial No. 529,825. 8 Claims. (Cl. 36—14.)

2. In the manufacture of footwear, the steps of applying an aqueous dispersion of rubber to the lower inner margin of an upper, applying an aqueous dispersion of rubber to an insole, causing the solid constituents of said dispersions to deposit thereon, uniting said upper and said insole by



means of said deposit, applying a foxing to the lower side portion of said upper, applying an outsole to said upper and insole, and vulcanizing the rubber portions of said article.

1,870,871. SHOCK ABSORBER. CLEMENT C. RICHARD, Detroit, Mich., assignor of one-half to Otis K. Richard, Detroit, Mich. Filed May 9, 1929. Serial No. 361,644. 6 Claims. (Cl. 188—88.)



1. In a shock absorber, a cup shaped sheet metal housing, a cap secured to the open end of the housing, a shaft rotatably mounted in the housing and cap and extending through the cap, an operating arm secured to the extending end of the shaft, a piston rotatable with the shaft and movable longitudinally thereof, a pair of sheet metal cam members secured to opposite sides of the piston and each having a peripheral lateral flange on one side providing a flexible outer wall fitting the inner face of the housing, a piston ring positioned between the cam members and engaging the wall of the housing, a pair of cam members stationarily mounted in each end of the housing and coacting with the cam members on the piston, the arrangement being such that movement of the operating arm in one direction turns the shaft and moves the piston longitudinally of the shaft in one direction, and movement of the arm in the opposite direction causes movement of the piston in the opposite direction longitudinally of the shaft, a bypass through the shaft from one side of the piston to the other, and means for regulating flow through the bypass.

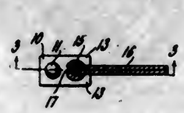
1,870,872. FIRE EXTINGUISHER. WILLIAM L. ROESSNER, Denver, Colo., assignor of one-third to Emma Wheeler and one-third to Victor Clyde Smedley, Denver, Colo. Filed May 29, 1930. Serial No. 457,100. 7 Claims. (Cl. 169—26.)

5. A fire extinguisher comprising, in combination, a holder having means for supporting a frangible grenade containing a fire extinguishing liquid, contractible means mounted on the holder, said means having jaws extending on opposite sides of the lower end of the grenade, means tending to move the jaws towards the grenade to break the latter and release its contents, and heat responsive



means for holding the jaws against movement while the temperature is below a predetermined limit and for releasing the jaws when the temperature rises above the limit.

1,870,873. FASTENER ELEMENT. EUGENE W. RUTHERFORD, New Haven, Conn., assignor to The Shoe Hardware Company, Waterbury, Conn., a Corporation of Connecticut. Filed Mar. 20, 1931. Serial No. 523,989. 1 Claim. (Cl. 20—205.)



An element for multiple fasteners of a type adapted to be engaged and disengaged by the operation of a slider, said element having a body with compressible jaws defining a space for surrounding and clamping the edge of a tape, and a member integral with the body extending midway into the space between the jaws.

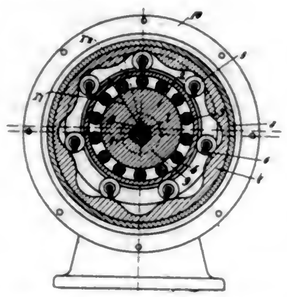
1,870,874. SYSTEM FOR CONTROLLING REFRIGERATION. RICHARD SAUSE, New York, N. Y. Filed Mar. 6, 1930. Serial No. 433,541. 14 Claims. (Cl. 194—6.)



1. In refrigeration of the class wherein an electric circuit supplies current for operating the apparatus which effects the refrigeration; the combination with contacts forming a break in the circuit, of a coin retaining and re-

leasing element having a cooperative relation with the contacts, means for positioning the coin so as to be retained by such element for closing the circuit through the contacts, time measuring means, and means operable by the time measuring means for acting on the retaining element to maintain the coin in retained position during a definite period of time and for releasing the coin so as to break the circuit at the completion of such period, the coin maintaining and releasing means including a timing member operable by the time measuring means, and a spring pressed device operable in one direction by the member and in the opposite direction by the spring, whereby to maintain the coin in position and to release it when the time period is completed.

1,870,875. SPEED REDUCING TRANSMISSION DEVICE. PROSPER SCHEUER, Ghent, Belgium. Filed July 8, 1930, Serial No. 466,445, and in Belgium July 20, 1929. 4 Claims. (Cl. 74—14.)



1. A speed reducing gear comprising: a driving shaft, an eccentric on said driving shaft, a ring concentrically arranged and freely rotating about the eccentric, a driven shaft, a circular crown supported by said driven shaft, raised portions forming a cam face inside the crown and facing the ring and the eccentric, solid transmission rollers arranged between the ring and the interior cam face, said solid rollers being in all cases equal to the number of raised portions of the interior cam face minus one, and fixed guiding studs for the rollers.

1,870,876. PROCESS OF MAKING STYROLS. OMAR H. SMITH, West Englewood, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Apr. 20, 1929. Serial No. 356,889. 5 Claims. (Cl. 260—168.)

1. A method of producing a styrol which comprises heating a preformed mixture of benzol and alkyl benzol to approximately 600 to 750° C. to thereby split the latter into a styrol and hydrogen, continuously reacting upon the hydrogen with a material capable of forming a stable compound therewith under reaction conditions, and separating the styrol from the products.

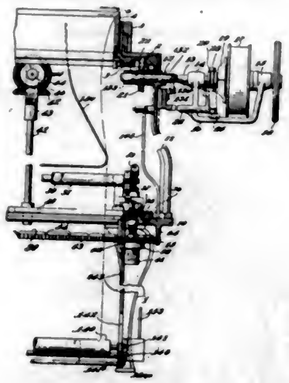
1,870,877. PRODUCTION OF STYROLS. OMAR H. SMITH, West Englewood, and GEORGE W. JARGSTORFF, Glen Rock, N. J., assignors to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Aug. 22, 1930. Serial No. 477,183. 6 Claims. (Cl. 260—168.)

1. A method of producing styrol from a halogenated alkyl benzol by removal of halogen acid therefrom which comprises heating a halogenated alkyl benzol in the presence of a small amount of a reaction product of an organic base and an acid, the proportion of said reaction product being such as to enable it to function only as a catalyst, and subsequently recovering styrol.

1,870,878. PRODUCTION OF STYROLS. OMAR H. SMITH, West Englewood, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Aug. 22. 1930. Serial No. 477,184. 10 Claims. (Cl. 260—168.)

1. A method of producing a styrol from a halogenated alkyl benzol involving removal of halogen acid therefrom which comprises heating a mixture of a halogenated alkyl benzol and a strong non-volatile inorganic acid, and subsequently recovering styrol.

1,870,879. FABRIC TAKE-UP AND STOP MOTION DEVICE FOR KNITTING MACHINES. HARRY SWINGLEHURST, Orange, N. J., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed June 27, 1930. Serial No. 464,249. 22 Claims. (Cl. 66—151.)



1. Fabric take-up and stop motion device for use in knitting machines having rotating fabric-producing elements comprising in combination, rolls for drawing the fabric away from the fabric-producing element mounted for freedom of motion in response to varying tension on the fabric; means for operating the rolls for drawing off the fabric according to the position of said rolls as controlled by said tension; means causing the said rolls to rotate in unison with the fabric-producing element about an axis at an angle to said rolls, a driving connection for the machine adapted to be released, and means operating as a consequence of the bodily movement of the rolls when the tension on the fabric permits recession of the rolls from the fabric-producing elements to a predetermined degree to release said driving connection.

1,870,880. TREATMENT OF RUBBER. WILLIAM P. TER HORST, Packanack Lake, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed July 29, 1930. Serial No. 471,589. 13 Claims. (Cl. 18—50.)

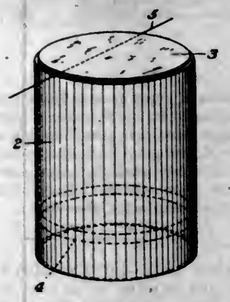
12. A rubber product obtained from treating rubber with the material resulting from reacting in a single stage operation phenol, aniline and acetone.

13. A rubber product obtained from treating rubber with the material resulting from reacting in a single stage operation betanaphthol, aniline and acetone.

1,870,881. TREATMENT OF WHITE WATER PRODUCED IN PULP AND PAPER MAKING. ALFRED M. THOMSEN, San Francisco, Calif. Filed Apr. 6, 1931. Serial No. 528,246. 12 Claims. (Cl. 92—1.)

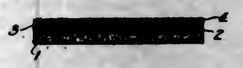
1. In the treatment of white water, the method of adding to same a soluble salt of a metal possessing an insoluble hydroxide, adding a soluble hydroxide, separating the precipitate produced from the bulk of the water acted upon, adding suitable acid to dissolve the insoluble hydroxide in said precipitate, and returning the resultant product to the mill circuit.

1,870,882. MAKING PIE CRUST. ASHLEY F. WARD, Cincinnati, Ohio, assignor to Ashley F. Ward, Inc., Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 11, 1929. Serial No. 331,819. 4 Claims. (Cl. 99—10.)



1. The method of making pie crusts, which comprises forming a mass of pie dough in an open porous condition and chilled to a stiffness at which the dough cannot be satisfactorily rolled but at which it can be cut, and slicing from such chilled mass of dough pie crusts of a thinness suitable for use in pies and without subjecting the dough to compacting pressure, so as to thereby retain the open porous condition of the dough in the completed pie crusts.

1,870,883. RUBBERIZED FABRIC. STANLEY JACOBY WILLIAMSON, Belmont, Mass., assignor to American Rubber Company, East Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 11, 1929. Serial No. 413,310. 10 Claims. (Cl. 154—2.)



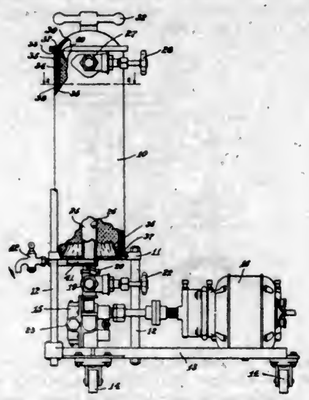
1. Process of making rubberized fabric which comprises providing a fabric having a nap on at least one surface, impregnating the nap with rubber, applying a sheet of rubber on the rubberized nap, applying a leather and rubber mixture over the rubber sheet, and vulcanizing the assembly.

1,870,884. GAUGE DEVICE. CARL WINNING, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 17, 1930. Serial No. 468,685. 4 Claims. (Cl. 200—56.)



1. A contact member for a gauge device, comprising a supporting means and a wire of resilient material in the form of a spiral carried at one end by the supporting means having its free end adapted to be engaged by the pointer of the gauge device.

1,870,885. FILTERING APPARATUS. SAMUEL ALSOP, New York, N. Y. Filed Apr. 20, 1929. Serial No. 356,758. 4 Claims. (Cl. 210—184.)

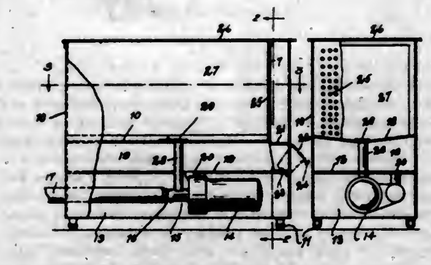


1. A filter element comprising split expansible screens and a sheet of porous flexible filter material between said screens and held contiguous each screen by the opposite screen whereby different thicknesses of filter material may be placed between said screens.

1,870,886. PROCESS OF RECLAIMING VULCANIZED RUBBER AND PRODUCT OF SAME. ARTHUR E. BARNARD, Norristown, Pa., assignor to Dispersions Process, Inc., Dover, Del., a Corporation of Delaware. Filed Apr. 13, 1929. Serial No. 354,991. 9 Claims. (Cl. 18—52.)

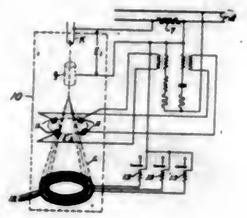
1. A method which comprises plasticizing vulcanized rubber, dispersing the plastic mass in water in the presence of a dispersing agent, adding the aqueous dispersion to a relatively large body of water to flocculate the rubber, removing the rubber flocs from the aqueous medium, washing the flocs, and drying.

1,870,887. VACUUM CLEANER. FRED BERNHARD, New York, N. Y. Filed Nov. 14, 1928. Serial No. 319,394. 1 Claim. (Cl. 15—16.)



A suction cleaner comprising a box, a cover therefor, a partition dividing said box into upper and lower compartments, said partition being inclined from a pair of opposite edges downwardly towards its center line, a conduit opening into the upper compartment at the level of said center line of the partition and connecting the compartments, means for sucking dirt through said pipe from said upper to said lower compartment, a receptacle into which the dirt is discharged pivoted to a wall of said lower compartment, and a cover for said receptacle having a plurality of filtering openings to permit the escape of air from said lower compartment.

1,870,888. CONTROL METHOD AND APPARATUS. RUDOLF G. BERTHOLD, Berlin-Siemensstadt, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 20, 1929, Serial No. 387,256, and in Germany Aug. 21, 1928. 8 Claims. (Cl. 175—183.)



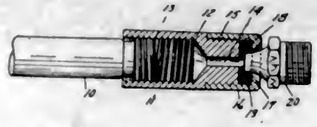
1. Apparatus for determining the quotient of the magnitudes of two electric quantities comprising means for producing an electric current having a predetermined path, means for controlling the speed of said current in its path in accordance with one of said quantities, and means for deflecting said current from its path in accordance with the other of said quantities.

1,870,889. DISPENSING MECHANISM. HARRY RUSSELL BRAND, New York, N. Y. Filed Nov. 7, 1929. Serial No. 405,355. 5 Claims. (Cl. 107—28.)

4. A dispensing mechanism comprising a casing formed with a cylindrical valve chamber having an intake port and an outlet port in diametrically opposed position, a sleeve valve rotatable in the chamber, said sleeve valve having a slot therein adapted to open and close said ports successively as the sleeve is rotated, a closure for one end of the sleeve valve adjacent the slot, a plunger reciprocable in the sleeve valve toward and from said closure, a crank adapted to reciprocate the plunger, and means for simultaneously rotating the sleeve and crank, said slot being of such extent that the intake port will be fully open during substantially the entire outward stroke of the plunger and the outlet port will be fully open during substantially the entire inward stroke of the plunger.

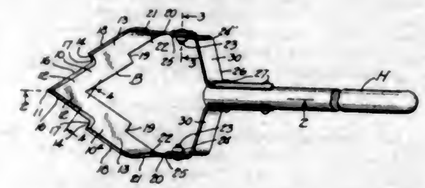
1,870,890. NOZZLE OR END FOR PUSH TYPE GREASE GUNS. HOY H. BRAY, Cuyahoga Falls, Ohio. Filed Mar. 31, 1930. Serial No. 440,303. 3 Claims. (Cl. 221—47.4.)

1. A nozzle or end for push type grease guns comprising a sleeve formed with a bore providing an outlet for the grease, a second sleeve adapted to be removably secured on said first sleeve and having a radial inwardly directed flange on its outer end, and a pair of resilient, grease-proof washers clamped between the end of said first sleeve and said flange, the washer adjacent the outer end of said first sleeve having a central opening substantially coinciding



with said outlet and the washer adjacent said flange having a larger conical opening exposing a portion of the face of the first-named washer to press against a grease fitting, the larger side of the opening in the second washer being outwardly of the nozzle whereby said second-named washer is adapted to fit about the periphery of a grease fitting and to be radially compressed thereby.

1,870,891. LAWN AND GARDEN IMPLEMENT. OWEN R. BRISTOW and SAMUEL D. BUNDY, San Bernardino, Calif.; said Bundy assignor to said Bristow. Filed Sept. 15, 1930. Serial No. 482,031. 3 Claims. (Cl. 97—227.)



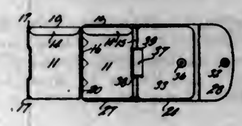
1. An implement of the character described comprising a cutting element having V-shaped blade presenting forward cutting edges, the rear ends of the blade terminating in laterally projecting arms the confronting sides of which incline towards each other in a direction rearwardly of the element for coaction in compressing the side edges of a sod passing between the arms, and a support including a yoke having legs secured to the arms and co-operating with the latter and blade to define an opening through which a sod cut by the blade is free to pass during advancing movement of the implement.

1,870,892. ROLLER BEARING CONSTRUCTION. CHARLES S. BROWN, Syracuse, N. Y. Filed Apr. 23, 1930. Serial No. 446,671. 2 Claims. (Cl. 308—217.)



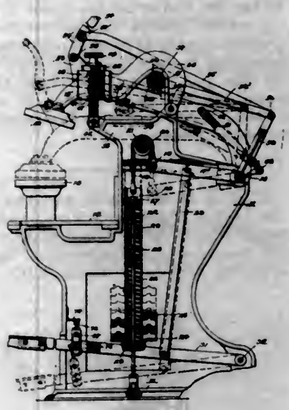
1. A roller bearing construction comprising a one piece metal cage formed of a cylindrical member having integral inwardly bent continuous annular side flanges, the portion of the tubular member between the side flanges forming a cylindrical wall and having roller receiving slots, the side flanges having projections formed therefrom from the excess metal provided by the turning in of the flanges from the circle of the cylindrical wall and the rollers being arranged between the side flanges and having recesses for receiving said projections.

1,870,893. FLEXIBLE POCKET RECEPTACLE. WARNER R. BUXTON, Longmeadow, Mass. Filed July 17, 1930. Serial No. 468,576. 7 Claims. (Cl. 150—35.)



1. In combination, a folder of flexible material having a central section and a pair of flaps hingedly connected one to each side edge thereof, key holder means carried by the central section near one end edge thereof, a container having closely spaced front and rear walls at least in part of transparent material and connecting side walls, means hingedly connecting said container near one end edge to said folder to swing about a line substantially coincident with the hinge line of one of said flaps so that the container may be swung into and out of superposed relation with such flap, and a similar container having one end edge hingedly connected to the other edge of the first container and adapted to be superposed on the latter.

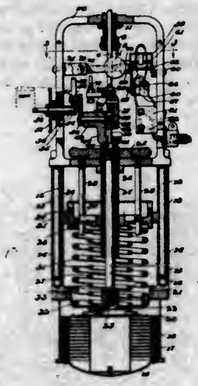
1,870,894. GARMENT PRESS. JOHN L. CARD, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 22, 1929. Serial No. 409,110. 8 Claims. (Cl. 68—9.)



1. In a garment press, the combination of a fixed frame; a buck thereon; a head carrying lever fulcrumed on the frame; a guide member spaced from said frame; a reciprocable member engageable with said guide member and said lever for rocking the lever; and toggle means for reciprocating said reciprocable member.

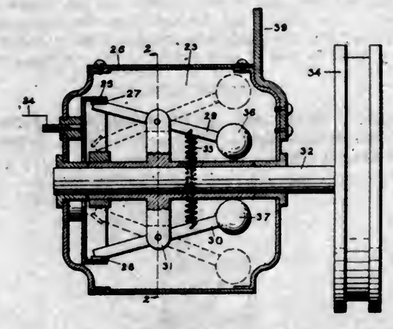
1,870,895. REGULATOR. WILLIAM W. CARSON, Jr., Knoxville, Tenn., assignor to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Oct. 29, 1928. Serial No. 315,760. 14 Claims. (Cl. 236—99.)

1. Apparatus of the class described comprising the combination of pressure responsive means, a member controlled thereby, connections between said means and member means for selectively controlling said connections to vary the position of said member for a given position, of said means, and resilient means for controlling the action



of said pressure responsive means and operable to exert differing magnitudes of resilient force in different conditions of said controlling means.

1,870,896. AUTOMATIC CIRCUIT BREAKING SWITCH. ALBERT C. DANNER, Indianapolis, Ind., assignor of one-half to Robert J. Hocker, Indianapolis, Ind. Filed Sept. 18, 1929. Serial No. 393,553. 2 Claims. (Cl. 200—80.)

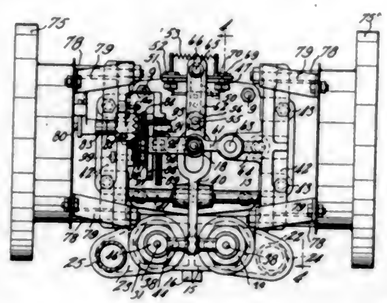


1. A means for making and breaking a circuit comprising a single stationary circuit contact ring having an interior brush surface, contact brushes within said ring serving to make frictional and electrical contact therewith, arms, one end of each serving to carry one of said brushes, weights at the opposite ends of said arms, rotatable pivot means serving to pivot said arms between said brushes and the said weights, and yielding means for drawing the weight carrying ends of said arms inwardly for contacting the brushes with said ring; whereby the frictional and electrical contact of said brush and ring will be broken when said pivot means is rotated by the centrifugal action of said weights on said arms.

1,870,897. PISTON METER. JOHN B. DAVIS, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 20, 1930. Serial No. 483,260. 6 Claims. (Cl. 73—30.)

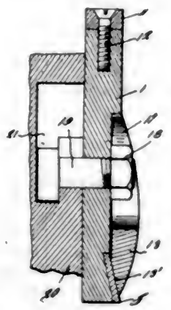
1. A piston meter, comprising, a cylinder, a piston reciprocable therein, a piston rod extending through one end of the cylinder, means including valve mechanism for ad

mitting liquid under pressure first to one and then to the opposite end of said cylinder and for discharging liquid alternately from opposite ends thereof so that when liquid is admitted to either end it will be discharged from the other end, means reciprocable in a path parallel to and at one side of the piston rod for actuating said mechanism, a rocker arm connected to said means and extending across one end of the cylinder at substantially right angles to the axis of the piston rod, latch mechanism for holding said arm in either of its two extreme positions, latch releasing



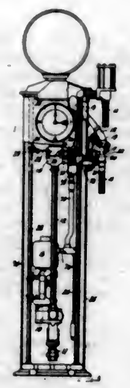
means including a member reciprocable in a path parallel to and on the opposite side of said piston rod from said reciprocable means, a member connected to said piston rod, resilient means operatively interposed between said member and rocker arm, and stressed by movement of the piston rod while the arm is held by the latch mechanism for driving said arm when released by the latter, and means on the piston rod for operating the reciprocable member of the latch releasing means to effect release of said arm at the end of each stroke of the piston.

1,870,898. ANVIL FOR FUEL HOGGERS. ALBIN DE BOURG, Bonner, Mont. Filed Mar. 3, 1931. Serial No. 519,821. 1 Claim. (Cl. 83—75.)



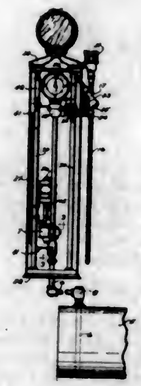
An anvil for a fuel hogger comprising a plate-like member having a recess in one face thereof which extends from one end of the plate to the other with the lower wall of the recess sloping downwardly and outwardly to form a seat, a blade resting on the seat, a clamping plate bolted to the first-mentioned plate and having a portion seated in the recess with the lower edge of the plate beveled to engage the blade to hold the blade upon its seat, a plurality of bolts threaded in the upper part of the first plate and having their lower ends engaging the upper edge of the blade whereby turning movement of the bolts will adjust the blade downwardly, means for detachably connecting the anvil to its supporting member, such means comprising headed bolts passing through the anvil member, and said supporting member having bayonet slots therein for receiving the heads of the bolts.

1,870,899. LIQUID DISPENSING APPARATUS. WARREN H. DE LANCEY, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Oct. 20, 1930. Serial No. 489,921. 4 Claims. (Cl. 221—95.)



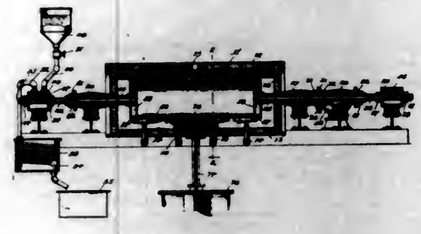
1. In a liquid dispensing apparatus, a liquid delivery line, power operated pumping means to force liquid through said line, means for measuring the liquid forced through said line, a normal control member manually movable from one position to another to start and stop said power operated means and thereby control the delivery of liquid through said line, and means responsive to abnormal rise in temperature adjacent the apparatus to automatically move said normal control member into position to stop said power-operated means.

1,870,900. LIQUID DISPENSING APPARATUS. WARREN H. DE LANCEY, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Nov. 14, 1931. Serial No. 575,084. 6 Claims. (Cl. 221—95.)



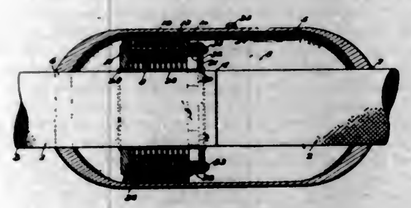
1. In a liquid dispensing apparatus, a storage tank for liquid, pumping means for withdrawing liquid from the tank, a suction pipe connecting the pump and tank, a check valve in said pipe preventing return flow of the liquid drawn by said means, a delivery conduit, a normally closed valve controlling the outlet of said conduit, and an expansion chamber connected to the suction side of said pumping means.

1,870,901. RETORT. IRA H. DERBY, Indianapolis, Ind., assignor to Peter C. Reilly, Indianapolis, Ind. Filed Mar. 6, 1929. Serial No. 344,797. 15 Claims. (Cl. 202—136.)



1. The combination of a furnace chamber; a cylindrical shell therein having open ends; a pair of head members for closing said ends movable into and out of sealing engagement with said shell; and means attached to said ends for supporting and for rotating said heads and the shell supported thereby.

1,870,902. EXPANSION ABSORBER. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Sylphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Dec. 17, 1927. Serial No. 240,880. 7 Claims. (Cl. 173—268.)



1. The combination with a cable joint, of a sheath enclosing said joint, a pair of tubular corrugated walls surrounding said cable and constituting a collapsible and expansible vessel, the space between said walls being charged with a fluid medium under superatmospheric pressure and said sheath being charged with an insulating medium under pressure, and means associated with said walls to limit expansion thereof.

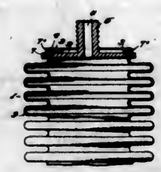
3. An expansible and contractible unit for maintaining the pressure of a fluid in a container comprising an annular flexible vessel containing an expansible fluid, a tubular supporting member having flared ends and an annular head at each end of the vessel surrounding the tubular supporting member, said flared ends of the tubular member limiting the expansion of said vessel.

1,870,903. DISPENSING TUBE. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Sylphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Dec. 15, 1928. Serial No. 326,170. 3 Claims. (Cl. 221—60.)



1. A dispensing tube for paste and like substances comprising a thin flexible tubular wall and a comparatively thick disk-like end wall or head therefor, said head having a peripheral flange integral therewith and thinner than the material of said head, said flange being bent back onto said head, and the end portion of said tubular wall extending around and under said flange with the end thereof clamped between said flange and head to form a tight seal.

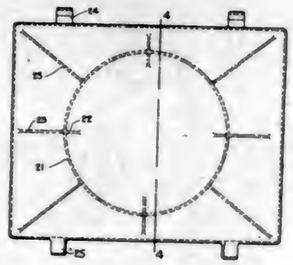
1,870,904. ATTACHMENT OF HEADS TO BELLOWS. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Sylphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Aug. 2, 1930. Serial No. 472,565. 16 Claims. (Cl. 113—116.)



1. A highly-flexible, deeply-corrugated metal bellows formed of relatively thin metal and provided with a relatively thick head within the end of the bellows tube and a relatively thick reenforcing ring surrounding the end of the bellows tube and in substantially radial alignment with said head, the end of said bellows tube being fused to said head and said ring.

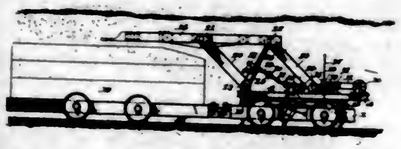
9. In a method of making highly-flexible bellows of relatively thin metal and which includes the forming of relatively deep corrugations by cold working in the relatively thin metal of the bellows tube, embracing the end of the bellows tube between a relatively thick head and a relatively thick reenforcing ring and fusing the tube-end, head and ring into an integral joint.

1,870,905. DROP DOOR FOR RAILWAY CARS. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Original application filed Apr. 26, 1929, Serial No. 358,305. Patent No. 1,813,536, dated July 7, 1931. Divided and this application filed Jan. 19, 1931. Serial No. 509,711. 7 Claims. (Cl. 105—280.)



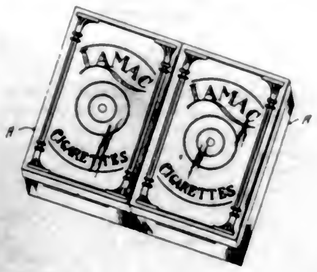
1. A hinged door for a railway car comprising a substantially rectangular body, a substantially circular rib, said body extending beyond said rib on all sides thereof, and brackets springing from the rib and merging into the body within the circular rib.

1,870,906. WHEELED MINE CRANE. CHARLES GOTTSCHALK and DAVID T. BLAKEY, Evansville, Ind.; said Blakey assignor to said Gottschalk. Filed May 15, 1929. Serial No. 363,356. 4 Claims. (Cl. 254—126.)



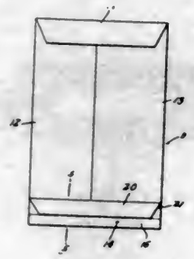
1. In a wheeled mine crane, the combination with a truck, of a crane arm, pairs of supporting arms pivotally connected to said crane arm and to the truck, and, means for raising and lowering the crane arm comprising a screw co-operatively related to the crane arm, an anchored wheel having a screw-threaded bore engaged with said screw, whereby turning of the wheel causes movement of the screw through the wheel, and means for rotating said wheel.

1,870,907. BOX. REISTER R. GROOMES and PHILIP A. LADDON, Washington, D. C. Filed Apr. 10, 1930. Serial No. 443,230. 1 Claim. (Cl. 206—41.)



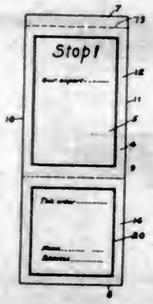
A box for dispensing cigarettes and the like comprising two substantially duplicate units having side walls, a trackway extending along the side wall of one unit and disposed outwardly thereof, a plate fixedly carried by a side wall of the second unit interlocking with the trackway of the first unit, said plate allowing one unit to readily slide with respect to the other, the trackway being substantially C-form in cross section and secured along its intermediate portion to the side wall, the plate having its central portion anchored to its side wall with the longitudinal marginal portions of the plate free.

1,870,908. ENVELOPE. SEUNG K. HAHN, Philadelphia, Pa. Filed Apr. 20, 1931. Serial No. 531,589. 1 Claim. (Cl. 229—85.)



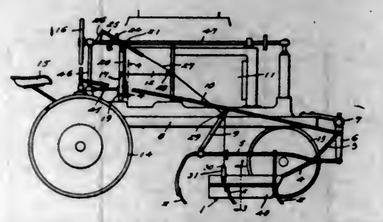
In an envelope, a front wall provided at one end thereof with a flap having an adhesive, a back wall embodying overlapping panels flatly engaged by the edge portion of said flap, an envelope opening strip between said flap and the panel of said back wall and positioned adjacent the point of connection of said flap with said front wall, and a reinforcing strip secured to the outer surface of said flap and having a spaced lower edge in spaced parallel relation to one edge of said envelope opening strip, the end portion of said reinforcing and guide strip being extended angularly in from the sides of the envelope to facilitate tearing.

1,870,909. SALES OR ADVERTISING LETTER. EDWARD J. HOFFMANN, Cincinnati, Ohio. Filed Apr. 24, 1929. Serial No. 357,725. 1 Claim. (Cl. 229—92.1.)



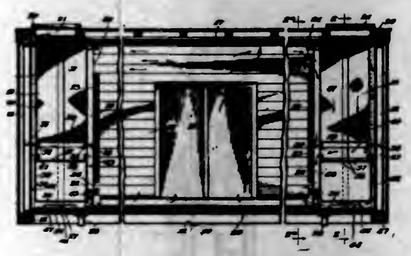
A return mailing envelope for a photograph comprising a paper photograph, a folder-sheet substantially equal in width to said photograph, said folder-sheet being permanently fastened at one end to the back of the photograph, another portion of the folder covering the face of the photograph and bearing reading matter related to the photograph, the opposite end portion of the folder-sheet being connected by a weakened tearing-off line and folded on said line over against the back of the photograph and bearing other reading matter relating to the photograph, said folder constituting a protecting covering for the face of the photograph.

1,870,910. MEANS FOR RAISING AND LOWERING SHIELDS OF TRACTOR SUPPORTED CULTIVATORS. JOSEPH E. HUGHES, Battle Creek, Nebr. Filed July 23, 1931. Serial No. 552,712. 5 Claims. (Cl. 97—188.)



1. A cultivator shield raising and lowering device, comprising a supporting member provided with a guide and a lug, a second guide movably supported by said member, a notched bar slidably mounted on said member and passing through the guides, means for connecting the bar to a shield, a spring urging said second guide in a direction to hold the bar with one of its notches engaged with the lug, and a roller journaled in said second guide and contacting with the bar.

1,870,911. REFRIGERATOR CAR. GEORGE A. HULL, Chicago, Ill., assignor to Equipment Specialties Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1929. Serial No. 352,626. 10 Claims. (Cl. 62—19.)



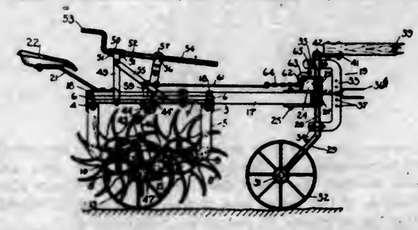
1. In a refrigerator car, the combination of a car structure having floor, walls and roof with a bulkhead, forming an ice chamber in said car, said bulkhead having ventilating openings above and below the same, an ice support in said ice chamber, a brine tank rectangular in plan and of substantially the same floor area as said ice support located below said ice support to receive brine drippings from said ice chamber, said car having an air passage between said ice support and brine tank for cooling air by passage through brine drippings and said car having air passages about and under said brine tank for cooling air by contact with said tank and a drip pan below said brine tank and below the car floor for receiving drainage from both said tank and floor.

1,870,912. PACKAGE. OSCAR JANSSEN, St. Louis, Mo. Filed Dec. 17, 1931. Serial No. 581,587. 4 Claims. (Cl. 206—46.)



1. A package for razor blades and the like comprising an outer container having an outlet, adjacently located blade holders in said container each supporting a blade, tabs on the successive holders adapted to be presented through said outlet, said tabs being bent away from said openings before removal, tabs on the opposite sides of said holder presented towards said opening before removal, the tabs of adjacent holders being provided with interlocking means effective during withdrawal of the successive holders, whereby the withdrawal of each holder results in drawing a tab of the next holder for presentation through said opening, said interlock being automatically broken as each holder completes its passage through said outlet.

1,870,913. CULTIVATING IMPLEMENT. CHRISTIAN E. JOHNSON, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed May 6, 1929. Serial No. 360,851. 6 Claims. (Cl. 55—11.)



1. In a rotary hoe, the combination of a frame, rotary hoe elements carried by said frame, front and rear axles mounted on said frame, supporting wheels mounted on said axles, a rock shaft extending transversely of said frame and operatively connected for raising and lowering said frame relative to all of said supporting wheels, and means for operating said rock shaft.

1,870,914. SHEET METAL STRUCTURE. FRANK LANE, Mansfield, Ohio. Filed Feb. 11, 1929. Serial No. 338,959. 5 Claims. (Cl. 189—26.)

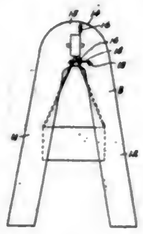


1. A sheet metal member adapted to form with companion members a section for telescopic association with adjacent sections to provide a supporting pole, said sheet metal member comprising a separate individual upwardly tapered plate provided with marginal flanges and a central portion presenting two angularly related surfaces meeting along a central longitudinal line of said plate and a flat metal strip with angle ends welded at said ends to the inner faces of said plate across the open angle of said member.

1,870,915. SUPPORT STRUCTURE. EUGENE A. LEARY, Cincinnati, Ohio. Filed Jan. 20, 1932. Serial No. 587,645. 2 Claims. (Cl. 5—130.)

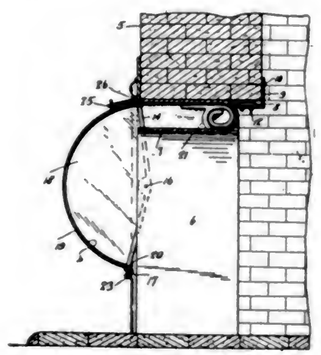
2. A foldable support structure consisting of a pair of leg members each comprising two sections hingedly joined

for lateral edgewise abutment in operative position, a dovetail notch being provided in the abutting edge of one of said sections in each leg member adjacent the top thereof, a support beam having dovetailed ends snugly receivable in said notches and adapted to be locked there-



in upon movement of said sections into edgewise abutment, enlarged portions on the beam adjacent said ends and adapted to abut the inner sides of the leg members upon positioning of the beam, and means for releasably clamping the leg members in operative relationship.

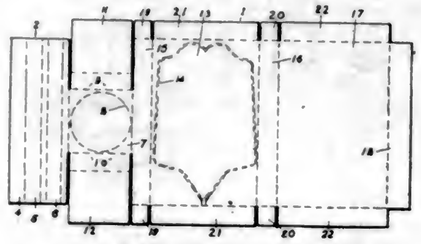
1,870,916. SMOKE SHADE FOR FIREPLACES. ARVID LINDBERG, Lima, Ohio. Filed Feb. 27, 1931. Serial No. 518,859. 2 Claims. (Cl. 126—142.)



1. An apparatus of the class described comprising a pair of hollow side walls, a casing across the top of the side walls and having an open front, a shade adapted to be pulled from and pushed into the casing, a pair of frames having arcuate sections, means for rockably mounting the frames in the side walls, said casing having slots to receive portions of the frames, said shade having one end fixed to the frame so that the side edges thereof may rest on the arcuate sections of the frames when the frames are swung outwardly from the side walls.

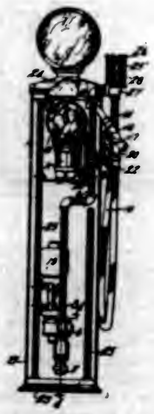
1,870,917. CARTON. EARL W. LITTLE, Indianapolis, Ind. Filed Sept. 17, 1929. Serial No. 393,246. 6 Claims. (Cl. 229—27.)

1. A carton consisting of a single blank arranged to be folded to form a frame receiving compartment, a side forming fold at one edge thereof, a base receiving section having one edge attached to said side forming fold, folds adapted to form end walls for said base receiving compartment, a foldable section at the outer edge of each end wall forming fold adapted to be folded for forming one face wall of the base receiving compartment, one above the other, and a section at one edge of the base



receiving section adapted to be folded to form a pair of compartments with a dividing wall section and also form one wall of the base receiving compartment.

1,870,918. LIQUID DISPENSING APPARATUS. JOSEPH A. LOGAN, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed July 25, 1931. Serial No. 553,062. 2 Claims. (Cl. 221—95.)

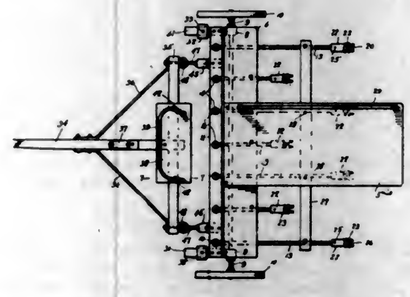


1. In combination, a liquid delivery conduit, a meter interposed therein, a valved nozzle on the delivery end of said conduit, said conduit including a flexible and somewhat elastic section between said nozzle and meter, which section is extensible and contractible within limits, means for forcing liquid through said conduit, and an outwardly-opening, non-return valve located in said conduit between said flexible section and said meter.

1,870,919. CULTIVATOR. HENRY A. LUDEKE, Garner, Iowa. Filed Aug. 20, 1931. Serial No. 558,383. 2 Claims. (Cl. 97—145.)

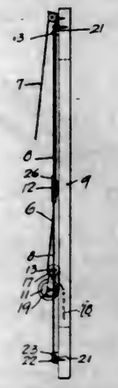
1. A cultivator comprising a laterally extending member, a platform attached to said member and extending rearwardly therefrom, a pair of journal blocks, one of said blocks being of each outward extremity of the laterally extending member, an axle disposed through the journal

blocks and provided with ground engageable wheels, cultivator elements carried by the laterally extending member, a forward platform, a link connection between the



forward platform and the rearwardly extending platform, and weight counter-balancing means on the rearwardly extending platform.

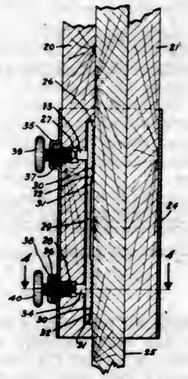
1,870,920. CURTAIN GUIDE. THOMAS E. MCNULTY, Alameda, Calif. Filed Sept. 16, 1929. Serial No. 392,998. 13 Claims. (Cl. 156—27.)



1. A shade apparatus adapted to be used on a window frame comprising a window shade, adjustable means on the window frame engaging the free end of the shade to suspend the same and being adapted to move the entire shade as a unit into selected positions on the window, means on the other end of the shade upon which the shade is rolled, releasable means operatively related to said shade rolling means to normally arrest the operation of the latter and prevent the rolling and unrolling of the shade, guiding elements on the window frame, one adjacent each longitudinal edge of the shade, and means of connection between the shade arresting means and the guide elements to adjustably hold the former on the latter.

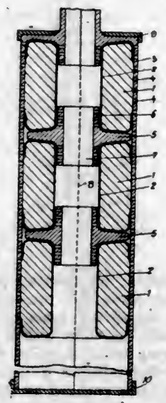
1,870,921. CRUTCH. VERNON MURKA, Dayton, Ohio. Filed Oct. 1, 1931. Serial No. 566,232. 8 Claims. (Cl. 135—50.)

1. A crutch having two struts held in spaced relation by a shoulder rest at one end and a hand grip intermediate the ends thereof comprising, in combination; a sleeve about the ends of the struts opposite the shoulder rest, holding the struts in spaced relation; a leg slidably supported between the strut ends within the sleeve; a toothed member movably supported in one of said struts; and means supported solely by the sleeve and adapted to



be operated to urge the toothed member into gripping engagement with the leg to lock it against movement relatively to the struts.

1,870,922. APPARATUS FOR TREATING CHEESES WITH LIQUIDS. HENDRIK NOLET, Arnhem, Netherlands, assignor to Algemeene Kunstzijde Unie N. V., Arnhem, Holland. Filed Mar. 9, 1931, Serial No. 521,331, and in the Netherlands Feb. 18, 1930. 9 Claims. (Cl. 18—8.)

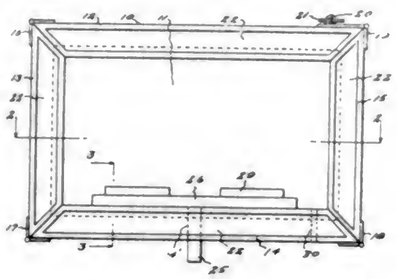


1. An apparatus for washing cross coils or cheeses, consisting of a perforated tube, the inner diameter of which corresponds roughly to the outer diameter of the coils, and intermediate pieces with a central bore, which are inserted between the end faces of the coils.

1,870,923. WINDSHIELD HEATING DEVICE. FRANK PITRELLA, Seneca Falls, N. Y. Filed May 31, 1930. Serial No. 458,329. 1 Claim. (Cl. 20—40.5.)

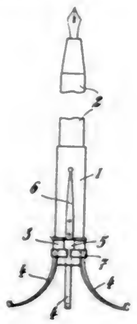
A windshield heating device comprising an articulated frame, a window mounted in said frame, a heat diverter inside of said frame, means to convey heat to said diverter and means in said frame to attach the same to a windshield of an automobile, said articulated frame comprising a plurality of rod members of resilient non-metallic material pivotally attached together, and said last men-

tioned means comprising elongated cavities formed in the inner sides of said rod members and adapted to function as vacuum cups, said heat diverter comprising a slotted tubular member closed at both ends, laterally upwardly



extending vanes adjacent said slots, a hollow stem on said tubular member and communicating with the interior thereof, an opening in one of the rod members of said frame through which said stem extends, and a port in said frame communicating with the atmosphere.

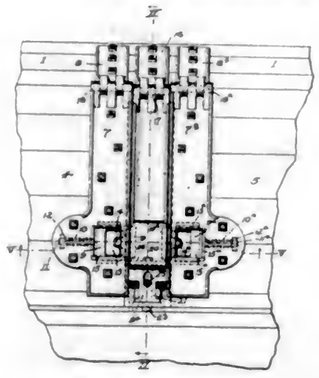
1,870,924. STAND ATTACHMENT FOR FOUNTAIN PENS. KARL PLATZER, Innsbruck, Tyrol, Austria. Filed Oct. 22, 1931, Serial No. 570,462, and in Austria Oct. 27, 1930. 5 Claims. (Cl. 120—108.)



1. A stand attachment for fountain-pens comprising a ring adapted to slide upon the cap of a fountain-pen, a plurality of outwardly spring arms projecting from the said ring substantially at right angles to the mid-plane thereof, a second ring adapted to be fitted tightly over the cap of the said fountain-pen, and recesses in the said second ring adapted to be engaged by the said arms.

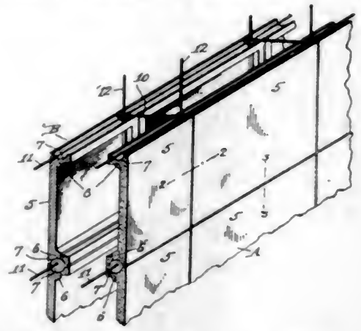
1,870,925. CYLINDER FOR WASHING MACHINES AND THE LIKE. THOMAS J. POWER, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 16, 1931. Serial No. 563,176. 13 Claims. (Cl. 220—32.)

1. In combination with a cylinder having an opening formed therein for the introduction and withdrawal of material, a plurality of doors; a division bar intermediate the adjacent ends of the doors, said doors and bar being independently hinged to the cylinder at a margin of the opening formed therein, the pivots of the doors aligning and the pivot of the bar being parallel to but out of line with the door pivots; and a latch carried by each door adjacent the free marginal portion thereof, said latches standing in alignment with an opening formed in the normally free end of the division bar for locking engagement therewith when the bar and one or both of the doors are moved to closed position, said latches by reason of



the offset position of the door and bar pivots being precluded from entering into cooperative locking relation at other positions of the parts.

1,870,926. WALL CONSTRUCTION. FRANK MCM. SAWYER, Richmond, Va. Filed Jan. 3, 1930. Serial No. 418,221. 1 Claim. (Cl. 72—30.)

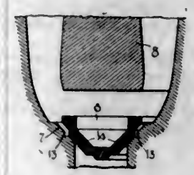


A wall construction formed with a plurality of precast concrete slabs arranged in vertical and horizontal rows forming continuous vertical and horizontal joints between the slabs, said joints crossing each other, each of the slabs being formed entirely around its periphery with rearwardly extending flanges which are coextensive in width, the outer sides of said flanges being grooved to form horizontal and vertical cement holding spaces in the completed wall and abutting edges of unequal width, horizontal and vertical reenforcing rods between the grooves in adjacent slabs and crossing each other at the intersections of the joints and cement filling in the grooves.

1,870,927. VALVE ESPECIALLY FOR PUMPS AND COMPRESSORS. KURT SCHOENE, Hamburg, Germany. Filed Aug. 20, 1930, Serial No. 476,657, and in Germany Sept. 17, 1929. 2 Claims. (Cl. 251—127.)

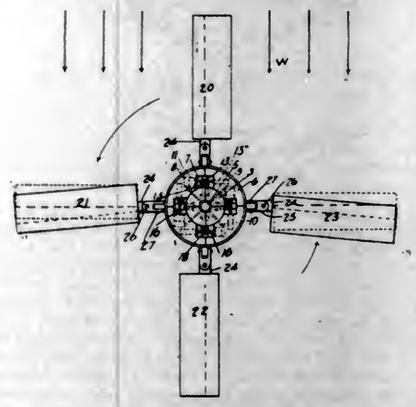
1. A valve for pumps or compressors comprising in combination a body having a conical valve seat and a coacting valve having a conical seating surface which mates with said seat when the valve is closed, said seat and seating surface defining in the open positions of the valve a passage through which flow substantially parallel with said surfaces occurs, said seat and seating

surface being so dimensioned one relatively to the other that the edges of the seat and the edges of the seating surface are opposed to each other in a direction sub-



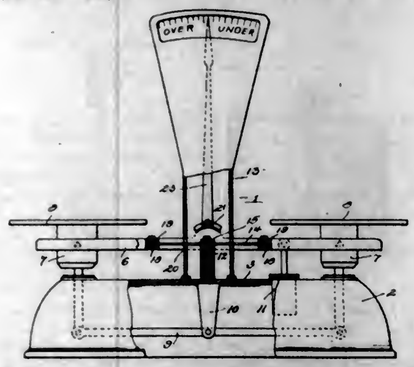
stantially perpendicular to the direction of flow through the valve when the valve is in its limiting open position.

1,870,928. HORIZONTALLY ROTATABLE WINGED ROTOR FOR AIRCRAFT. GERALD DREW SMITH, Toronto, Ontario, Canada. Filed Dec. 30, 1931. Serial No. 583,962. 12 Claims. (Cl. 244—19.)



10. In an aircraft rotor, a rotor hub, wings turnably and independently mounted in the hub, means operated by fluid pressure for controlling the angle of incidence of the wings, and means for distributing such pressure to maintain a constant average lift of the rotor wings.

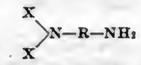
1,870,929. SCALE. WALTER S. SMITH, Brooklyn, N. Y. Filed Nov. 2, 1928. Serial No. 316,786. 6 Claims. (Cl. 265—59.)



1. In a scale, a base, an even balance beam pivotally mounted in connection with said base, a resistance element comprising a thin flat ribbon of metallic material positioned longitudinally of said beam and arranged to lie on each side of the pivotal axis therefor, said ribbon having its ends secured to said beam and its intermediate portion anchored to said base.

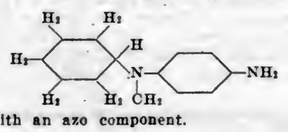
1,870,930. LIGHT-SENSITIVE LAYER. EDUARD WILHELM SPRÖNGERTS, deceased, Wiesbaden-Biebrich, Germany, by Johanna Spröngerts, administratrix, Wiesbaden-Biebrich, Germany, and Robert Franke, Wiesbaden-Biebrich, Germany, assignors to Kalle & Co. Aktiengesellschaft, Wiesbaden-Biebrich, Germany, a Corporation of Germany. Filed Dec. 23, 1930, Serial No. 504,418, and in Germany Jan. 22, 1930. 12 Claims. (Cl. 95—7.)

1. As new products, light-sensitive layers containing diazo compounds of amino compounds of the following formula



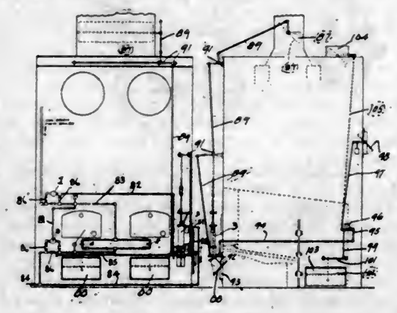
wherein R stands for an aromatic residue which may be substituted, and X for hydrogen, alkyl, aryl, aralkyl or a hydrogenated aromatic residue, but at least one X for a hydrogenated aromatic residue.

11. As new products, light sensitive layers containing diazo compounds of amino compounds of the following formula



together with an azo component.

1,870,931. OIL BURNER AND DRAFT CONTROL MECHANISM. EARLE I. STAPLES, San Francisco, Calif. Filed Apr. 16, 1929. Serial No. 355,489. 5 Claims. (Cl. 236—26.)

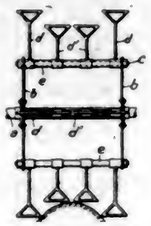


1. In a fuel burning system the combination with steam boilers, of hydrocarbon burners under the boilers, a fuel line to conduct fuel to the burners, a fuel flow regulator valve interconnected into said fuel line, a draft regulator, a control valve to connect the fuel line to the draft regulator for operating said draft regulator; steam operated means to actuate the fuel flow regulator valve, and steam operated means to actuate said control valve, a steam line to communicate the boiler pressure to both of said steam operated means; and means interconnected in the steam line between the boiler and the said steam operated means to vary the steam pressure in the said line inversely with respect to the boiler pressure.

1,870,932. POTATO TOPS DESTROYER. ADOLF STERNEMANN, Berlin-Friedenau, Germany. Filed Oct. 22, 1929, Serial No. 401,434, and in Germany Oct. 25, 1928. 3 Claims. (Cl. 56—249.)

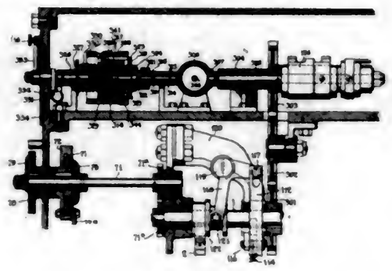
1. A potato tops destroyer for use in harvesting of potatoes comprising in combination a shaft arranged

transversely with respect to the direction of movement of the destroyer, arms hinged to said shaft in such manner as to swing in the direction of movement of the destroyer, beating members located at the free ends of said arms and each consisting of a frame of isosceles triangular



shape and having its apex connected to the free end of a respective arm and having its base extending parallel to the said shaft, the beaters between the ends of the arms being shorter than those at the ends of the said shaft, means for supporting the shaft, and means for rotating it.

1,870,933. SEQUENCE CONTROLLING DEVICE. WILLIAM STROBRIDGE, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Mar. 22, 1929. Serial No. 349,194. 12 Claims. (Cl. 192—142.)



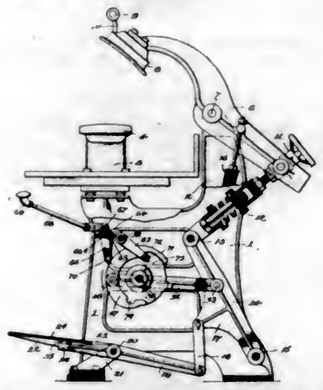
11. In an apparatus of the character described, the combination of a constantly rotating shaft; an armature slidably mounted thereon and rotatable therewith; a second shaft in alignment with said rotating shaft; a solenoid winding carried by the second shaft; cooperative clutch elements associated with the armature and the second shaft respectively; an arm extending from the second shaft; and a manually adjustable stop standing in the path of movement of said arm for limiting the rotation of said second shaft.

1,870,934. PAD FOR GARMENT PRESSING MACHINES. WILLIAM STROBRIDGE, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 20, 1931. Serial No. 576,355. 5 Claims. (Cl. 68—9.)



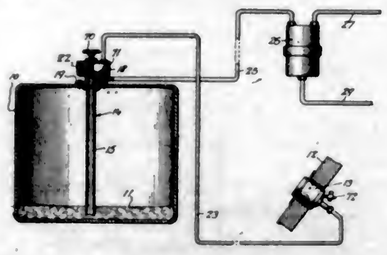
1. A pad for garment pressing machines, comprising a plurality of layers of wire mesh fabric having a plurality of spaced and independent knob-like projections formed upon each layer, the knobs of one layer being staggered with relation to those of the next adjacent layer; and means for holding said layers in superimposed relation.

1,870,935. GARMENT PRESS. HARRY G. SUTTON, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed May 7, 1929, Serial No. 361,176. Renewed Apr. 28, 1932. 20 Claims. (Cl. 68—9.)



1. In a garment press, the combination of a pair of relatively movable pressing elements, one of said members being freely movable toward and from the other by the operator; a constantly moving power applying mechanism; crank means interposed between said mechanism and said last-named pressing element for applying heavy pressure between the pressing elements; means for effecting an interconnection between said pressure applying means and the power mechanism when and only when the pressing elements have been brought to pressing or closed position; operator controlled means for actuating said interconnecting means; and lock-out means rotatable with said crank means and positioned by the movement of the head for preventing actuation of said operator controlled means until said elements are in pressing relation.

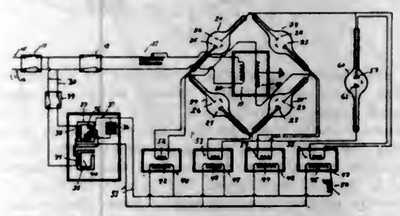
1,870,936. SYSTEM FOR INDICATING LIQUID LEVELS. CLARENCE E. VAN AUKEN, Chicago, Ill.; Joseph Purmort, administrator of the estate of said Clarence E. Van Auken, deceased, assignor to Cora F. Van Auken. Filed Oct. 30, 1919. Serial No. 334,536. 9 Claims. (Cl. 73—54.)



1. A system of the character described for use with an internal combustion engine, said system having in combinative association a closed liquid reservoir under sub-atmospheric pressure, from which liquid may be drawn, a sub-atmospheric pressure indicator and a sub-atmospheric conduit connecting the indicator and reservoir, whereby the air in the reservoir, conduit and indicator is reduced

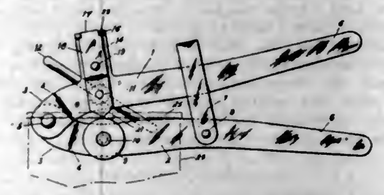
to an attenuated state relatively to the change of hydraulic head in the reservoir, and means operable by the inspiration stroke of the engine for automatically maintaining the air at the required degree of attenuation to effectively operate the indicator.

1,870,937. ELECTRICAL RECTIFYING AND STABILIZING APPARATUS. WILBUR S. WERNER, Fort Mitchell, Ky., assignor to The Kelley-Koett Manufacturing Company, Covington, Ky., a Corporation of Ohio. Filed May 9, 1930. Serial No. 451,061. 4 Claims. (Cl. 175—363.)



3. Current rectifying and stabilizing apparatus comprising a plurality of rectifying tubes connected in series each having a filament and a plate, a circuit in which said filaments and plates are included in series, a closed magnetic core, an open magnetic core, a filament heating primary circuit in which are included a primary winding on said closed core, a primary winding on said open core, a secondary circuit in which are included a secondary winding on said closed core, a condenser, and the primaries of separate tertiary filament heating circuit transformers, and tertiary filament heating transformer secondary circuits, in which said filaments are separately included, the closed and open magnetic cores and windings serving to effect uniform heating of the filaments in the rectifying tube whereby the operation of the rectifying tubes is maintained constant independently of fluctuations in energizing supply service and variation in load.

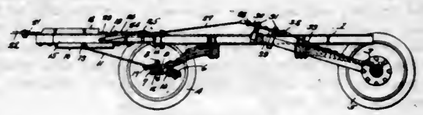
1,870,938. CAN OPENER. DANIEL M. WINANS, Binghamton, N. Y., assignor to Daniel M. Winans Corporation, Binghamton, N. Y. Filed Mar. 2, 1931. Serial No. 519,324. 6 Claims. (Cl. 30—3.)



1. A can opener comprising a pair of pivoted levers provided with a pair of rotatable can-gripping means, one of said means having teeth and adapted to engage the upper surface of the bead of a can and acting to turn the can when rotated, the other of said means being adapted to engage the under surface of said bead in opposing relation to said first means and in substantial alignment therewith, and a knife carried by one of said levers and independent of said gripping means operable to cut the top of said can when turned.

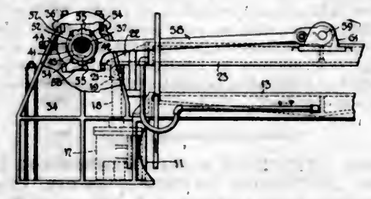
1,870,939. TRAILER. WILEY T. WITT, Moody, Tex. Filed Mar. 31, 1931. Serial No. 526,780. 2 Claims. (Cl. 280—33.44.)

1. A trailer including a wheel-supported structure having a brake, a draft tongue extending from said structure, an element mounted thereon for attachment to a draft device, said element and tongue being mounted for relative movement, means for transmitting draft from said element to the tongue to propel the trailer forwardly, means operated by the forward movement of the trailer



and the tongue relative to said element for applying the brake, said means including a slide, spaced equalizers carried thereby, brake connections attached to one of the equalizers, and lever and link connections between the other equalizer and the tongue and element.

1,870,940. FELTING MACHINE. HOWARD M. ZOERB and RUDOLPH W. BUETTNER, Milwaukee, Wis., assignors to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed Apr. 13, 1928, Serial No. 269,824. Divided and this application filed May 4, 1931. Serial No. 534,967. 1 Claim. (Cl. 28—14.)



The combination with a felting machine including relatively reciprocable plates, of means for relatively reciprocating said plates with a variable amplitude of reciprocating motion, said means including a rotatable shaft having circular portions eccentric relatively thereto, at least two eccentric annuli rotatable on said eccentric portions to vary the eccentricity of the annuli relative to the shaft; means for positioning said annuli in similar adjustments including inter-engaging members on the shaft and on said eccentric annuli respectively; means independent of said positioning means for fixing said annuli in said adjusted positions, said independent means comprising split extensions on the annuli and threaded means for contracting said extensions upon the eccentric portions of the shaft; and eccentric straps journaled on said annuli and connected with one of said plates.

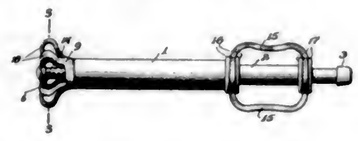
1,870,941. SHEATH CRAYON HOLDER. SIMON BARENDSE, Paris, and LOUIS GARREAU, Maisons Laffitte, France. Filed Apr. 20, 1931, Serial No. 531,578, and in France Feb. 28, 1931. 6 Claims. (Cl. 206—56.)



1. A sheath crayon holder comprising, in combination, a tubular body, a head revolubly fitted on the body and having an opening in its face remote from said body

and a tubular extension accommodated in said body, a stationary hollow core freely housed in the head and having an aperture coinciding with the head opening and an extension housed in the head extension, a closure swivelingly fulcrumed intermediate the head and core for moving therebetween toward or away from said coincident opening and aperture responsive to a rotation of the head, a support for the crayon slidably housed in the core extension, and a gear whereby rotation of the head in the one or other direction while moving said closure to open or shut position shifts the crayon outwardly or inwardly of the holder.

1,870,942. SYRINGE. DANA C. BEATTY, New York, N. Y., assignor to Gynex Corporation, New York, N. Y., a Corporation of New York. Filed May 26, 1928. Serial No. 280,724. 16 Claims. (Cl. 128—241.)



1. A syringe or the like comprising inner and outer members slidable and rotatable with respect to each other, and dilators mounted on said inner and outer members independently rotatable with respect thereto so as to avoid twisting said dilators at relative rotation between said members and adapted to be dilated when the members are slid in one direction.

1,870,943. ELECTRODE SPACER MEMBER FOR ELECTRON DISCHARGE DEVICES. ARTHUR CLIFFORD BLAKEMAN, North Arlington, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Nov. 30, 1929. Serial No. 410,699. 2 Claims. (Cl. 250—27.5.)

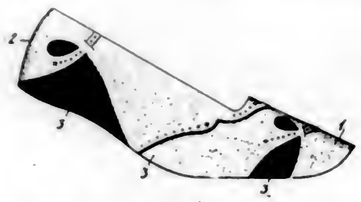


1. A spacer member for an electron discharge device comprising a sheet of insulative material, a support for a filament suspension member comprising a metallic strip folded to provide a shank, portions of said strip being bent in opposite directions and parallel with the surface of said sheet and having their ends extending through apertures in the sheet and bent to clamp the shank in perpendicular relation to the upper surface of the sheet.

1,870,944. PRODUCTION OF PULP, ETC. LINN BRADLEY, Montclair, N. J., and EDWARD P. MCKEEFE, Plattsburg, N. Y., assignors to Bradley-McKeefe Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 2, 1926. Serial No. 133,290. 4 Claims. (Cl. 92—11.)

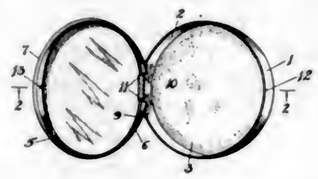
1. The method of producing pulp which comprises cooking wood with a cooking liquor containing a sulfite of sodium, treating constituents of the residual liquor under reducing conditions to form a product containing sodium sulfid, producing a cooking liquor containing such sodium sulfid and cooking wood therewith, treating residual liquor from such cooking operation to form a different cooking liquor containing caustic soda as its primary active reagent and cooking wood therewith, and treating residual liquor from such caustic soda cooking operation to regenerate a cooking liquor.

1,870,945. SHOE MODEL. CHARLES W. CONAWAY, Great Neck, N. Y. Filed Feb. 3, 1932. Serial No. 590,567. 1 Claim. (Cl. 35—17.)



A shoe model comprising a plurality of connected irregular pieces of differently colored paper, the edges of adjacent pieces overlying each other flatwise to form a continuous strip which in turn forms a hollow self-supporting body, the front, rear and sides of said body corresponding in contour to the toe, heel and sides respectively of a finished shoe upper, the outside surfaces of the differently colored irregular paper pieces delineating the contrasting color ornamentation of different portions of the surface of said body, the edges of the outside pieces delineating the ornamental outline design thereon.

1,870,946. VANITY CASE. ELI N. CUTLER, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Aug. 31, 1931. Serial No. 560,302. 1 Claim. (Cl. 132—83.)

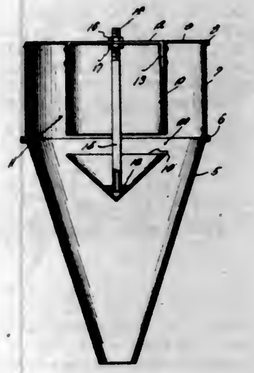


In a vanity case, a body capacitated to hold a cosmetic and having a peripheral wall, a projection on the wall bent to form a hinge knuckle, a cover having a peripheral wall formed with a bead or groove, a mirror in the cover substantially the size thereof and a single spring wire seated in and extending around the groove engaging substantially the whole periphery of the mirror and locking it in place and passing through the hinge knuckle for pivotally associating the cover and body, and means for holding the body and cover in closed relation.

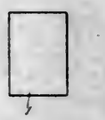
1,870,947. DUST COLLECTOR. LELAND JOSEPH DRUMGOLD, Oakland, Calif., assignor of one-half to Van A. Neher, Oakland, Calif. Filed Nov. 7, 1930. Serial No. 494,133. 1 Claim. (Cl. 183—86.)

A dust collector comprising an elongated conical portion and a superposed cylindrical portion of a diameter substantially equal to the larger diameter of the conical portion, a concentrically disposed open ended cylinder in the cylindrical portion having its ends substantially transversely aligned with the ends of said cylindrical portion, a cover between the top of the cylinder and the top of the cylindrical portion, a baffle adjustably mounted on the cylinder at its upper end, the means for supporting the baffle being disposed on the inside wall and near the top of the cylinder, said baffle comprising an inverted hollow cone the larger diameter of which is substantially equal to the diameter of the cylinder, the baffle being adjustable to simultaneously provide an air passage of

equal height between the entire peripheries of the opposed edges of the cone and cylinder respectively, and a tangential intake in the cylindrical portion entering a chamber defined by the wall of the cylindrical portion and the cylinder, said chamber providing an unobstructed path to the passageway defined by said cone and cylinder.

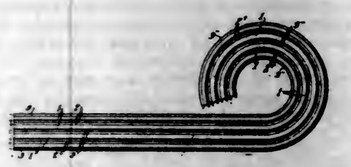


1,870,948. ELECTRICAL CONDENSER UNIT. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Original application filed June 11, 1924, Serial No. 719,335. Divided and this application filed Mar. 19, 1926. Serial No. 96,097. 3 Claims. (Cl. 175—41.)



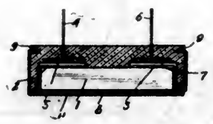
1. A condenser member comprising a core of insulation, and a pair of wrappings for said core, said wrappings being transversely arranged with respect to each other, and one enclosing the other.

1,870,949. ROLLED CONDENSER. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed June 24, 1926. Serial No. 118,388. 3 Claims. (Cl. 175—41.)



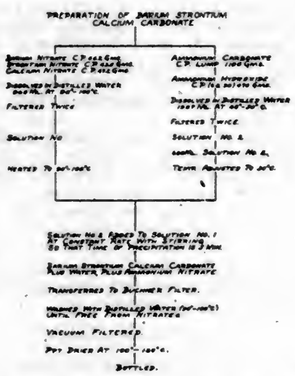
1. A condenser comprising rolled units having armatures, said units being connected in series by certain of the armatures contacting with each other.

1,870,950. ELECTRICAL CONDENSER. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 9, 1926. Serial No. 134,532. 1 Claim. (Cl. 175—41.)



A condenser comprising a body, a casing to receive said body, said casing having an opening therein, and a flange at the rim thereof, terminals connected to said body, the body and terminals being imbedded and fixed in an insulating compound, the said compound overlying the rim portion of the casing and forming a cover therefor.

1,870,951. ELECTRON EMISSION MATERIAL. MARK N. FREDENBURGH, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed July 11, 1928. Serial No. 292,037. 19 Claims. (Cl. 250—27.5.)



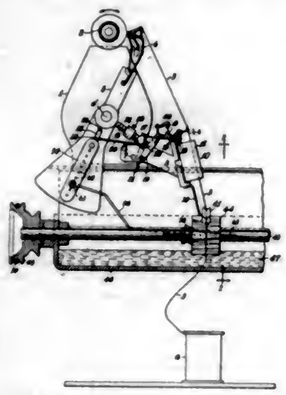
1. The method of forming intimate admixtures of alkaline earth metal carbonates which comprises forming a solution of barium, strontium and calcium salts in the desired proportion, heating the solution to temperatures approximating but in excess to 85° C. and simultaneously precipitating therefrom the alkaline earth metals as a carbonate by the addition of a solution of normal ammonium carbonate.

4. An electrode having a coating, comprising a mixture of substantially pure alkaline earth metal carbonates having a crystal structure isomorphous to aragonite.

1,870,952. LIQUID APPLYING MACHINE. SEVERN MICHAEL FREY, Buffalo, N. Y., assignor to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 28, 1930. Serial No. 432,026. 7 Claims. (Cl. 91—38.)

1. A device for applying a liquid to a linearly traveling thread of varying speeds comprising absorbent means continuously applying the liquid to the thread contacting therewith, a rotary wiper contacting with said absorb-

ent means and feeding said absorbent means with a liquid agent, said rotary wiper having a surface which converges towards one end, and means responsive to the variation

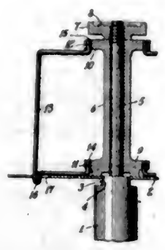


in the linear speed of the thread to effect a corresponding variation in the arc of contact per interval of time of said rotary wiper with said absorbent means.

1,870,953. PROTECTION OF APPARATUS AGAINST ACIDS. NICOLAS BENOIT GRILLET, Neuilly-sur-Seine, France, assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 17, 1927, Serial No. 234,046, and in Germany Feb. 4, 1927. 13 Claims. (Cl. 23—239.)

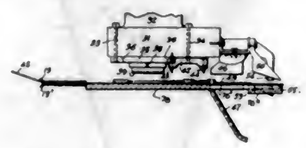
1. A process of protecting metallic apparatus constructed of metal, the base of which is copper, against corrosion by carboxylic acids introduced therein which comprises freeing the apparatus before use from substances capable of favoring the corrosion by said acids of said apparatus, removing from the materials, prior to the introduction thereof in the apparatus, all oxygen including oxygen in chemical combination capable of favoring corrosion of said apparatus and protecting the materials in said apparatus from contact with air.

1,870,954. ADJUSTABLE CAKE HOLDER. ARTHUR E. GUENTHER and HARRY S. TOOLE, Buffalo, N. Y., assignors, by mesne assignments, to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed May 27, 1926. Serial No. 111,950. 2 Claims. (Cl. 242—127.)



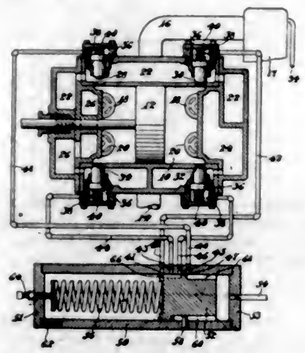
1. A bobbin comprising a spindle, a plate keyed thereto and disposed substantially at right angles thereto, a spool mounted on said spindle, a plurality of vanes pivoted to said spool and provided with lugs received within cam slots in said plate, a flange on said spool to permit manual rotation thereof, and a nut threaded on said spindle and adapted to contact with said flange to lock said spool in position.

1,870,955. MACHINE AND METHOD FOR MAKING BOOK MATCHES. CHARLES GUSTAVSON, Woodside, Long Island, EDWARD VAN HOOFSTADT, and LEO GREENBAUM, New York, N. Y., assignors to Lion Match Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 15, 1930. Serial No. 502,350. 10 Claims. (Cl. 144—51.)



1. In a machine for making book match combs, a table having a hard, unyielding, plane, cutting surface, a cutting head movable toward and away from said surface, a gang of cutting knives carried by the head with the cutting edges of all of said knives occupying a common plane, and means to move the cutting head to drive the cutting edges into engagement with said hard, unyielding surface, through comb stock positioned between the cutting surface and said head.

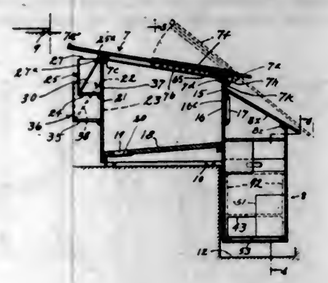
1,870,956. CLEARANCE UNLOADER FOR COMPRESSORS. RAYMOND C. MCALLISTER, Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 14, 1931. Serial No. 550,728. 3 Claims. (Cl. 230—21.)



1. In a compressor unloader the combination of a cylinder and piston, inlet and discharge valves, a receiver, a plurality of clearance pockets of equal volumes, a plurality of clearance valves controlling communication between the cylinder and the clearance pockets, one of the clearance pockets being provided with two clearance valves permitting communication between that pocket and both ends of the cylinder, and fluid actuated means responsive to receive pressure for actuating the clearance valves to unload and load the compressor in steps.

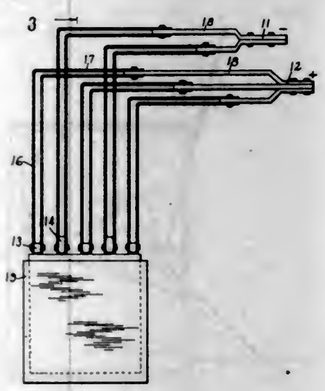
1,870,957. ANIMAL HUTCH. LUCIEN MERIAUX, Culver City, Calif. Filed Mar. 4, 1931. Serial No. 519,942. 7 Claims. (Cl. 119—16.)

1. In a hutch, a compartment having an upright wall with a feed opening therethrough, a feed supporting platform secured to the outer side of said wall, a container having an open top and bottom, said container normally



resting upon said platform to hold feed in place thereon, and a pivotal connection securing the upper inner corners of said container to said wall.

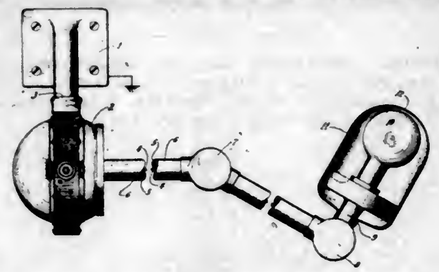
1,870,958. APPARATUS FOR METAL PLATING. KENNETH C. MONROE, Bridgeport, Conn., assignor to Bridgeport Brass Company, Bridgeport, Conn. Filed Mar. 29, 1929. Serial No. 350,994. 5 Claims. (Cl. 204—5.)



1. Apparatus for the electrodeposition of metal from solution, comprising a source of current, a container for the solution, anode and cathode bars supported adjacent the container which in turn support the anodes and the work, means to conduct current from the source to said bars, the cross sectional area of the anode bars being substantially equal to that of the cathode bars, and the ends of said anode bars connected to the source of current being remote from the ends of the cathode bars connected to the source of current, the number of anode bars being unequal to that of the cathode bars, and said bars being alternately placed.

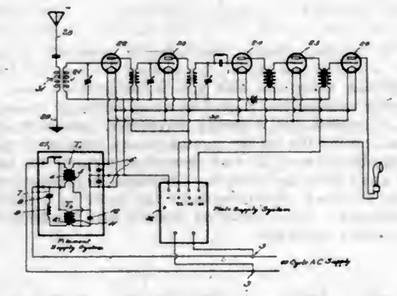
1,870,959. X-RAY APPARATUS. MONTFORD MORRISON, Chicago, Ill., assignor, by mesne assignments, to Westinghouse X-Ray Company, Inc., a Corporation of Delaware. Filed Apr. 13, 1925. Serial No. 22,665. 9 Claims. (Cl. 250—34.)

9. In a shock proof X-ray unit the combination of an X-ray tube and a metallic holder therefor, means for supporting said holder comprising a plurality of grounded metallic sections pivotally connected together, a conductor internally concentric with each of said sections, the conductor of each of said sections being pivotally connected to the conductor of the adjacent section and said



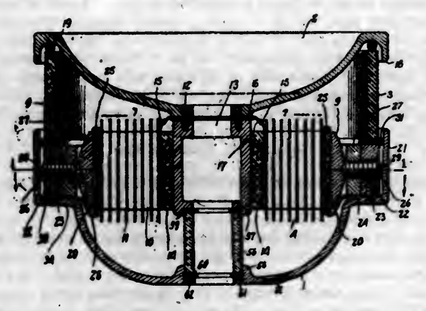
last mentioned pivotal connections being coaxially disposed with respect to the pivotal connections of said sections and insulated from said sections.

1,870,960. METHOD OF ENERGIZING FILAMENTS. ALEXANDER NYMAN and GORDON V. PECK, New York, N. Y., assignors to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 18, 1926. Serial No. 95,723. 9 Claims. (Cl. 250—27.)



9. The method of heating the filament of a vacuum tube which consists in utilizing an alternating current, altering the wave form thereof to become substantially rectangular and applying the resultant to said filament.

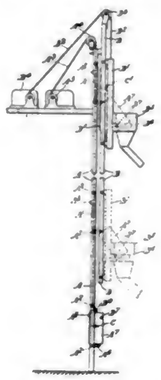
1,870,961. CONDENSER. ALEXANDER NYMAN, Dobbs Ferry, and WILLIAM DUBILIER, New Rochelle, N. Y., assignors to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 4, 1927. Serial No. 210,628. 14 Claims. (Cl. 175—41.)



1. A condenser comprising a plurality of radially arranged sections and a casing with portions of its area

adapted to serve as terminals, one part of the casing being shaped to make direct contact with the common center of the sections, and another part thereof shaped to make contact with the outer ends of the sections.

1,870,962. SKIP HOIST. GERALD J. OLDROYD, Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 7, 1929. Serial No. 398,017. 12 Claims. (Cl. 214—120.)



1. A hoisting means comprising a generally upright track, a bucket and means for moving it along the track, a dumping receptacle and means adjustable along the track for causing the bucket to dump when in its excursion it reaches the dumping receptacle, automatic control means for the bucket moving means adapted to cause the bucket to atop at and thereafter reverse its movement away from the dumping receptacle, said means comprising a switch associated with the dumping receptacle and adapted to be actuated by contact with the bucket at the dumping receptacle.

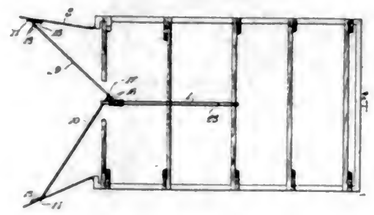
1,870,963. ROOF CONSTRUCTION. NICHOLAS P. PIERROSE, Los Angeles, Calif. Filed Nov. 27, 1929. Serial No. 410,167. 3 Claims. (Cl. 108—28.)



3. A roof construction comprising a marginal board extending along the eaves of the roof, a lower run of shingles overlying said board, a roofing paper binding strip having two limbs one of which is positioned on each side of said board, the uppermost of said limbs being gripped between said lower run of shingles and said board, and means to fasten said binding strip in place, said fastening means including a rigid binding strip underlying the eaves.

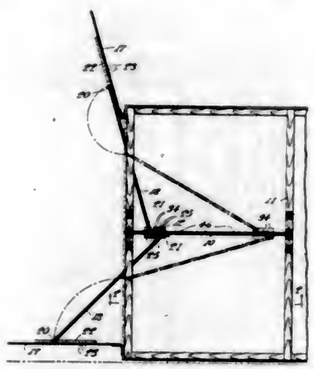
1,870,964. DOOR OPERATING MECHANISM. SEIFERT W. ROUSSEAU, Baldwin, N. Y. Filed Mar. 7, 1929. Serial No. 345,024. 2 Claims. (Cl. 268—62.)

1. Door operating mechanism comprising in combination, two mating doors hinged at their opposite outer edges, and means for coordinately opening each of said doors selectively by various degrees but closing the doors always to the same position, said means including a travelling member movable at right angles to the plane passing through the hinge axes of said doors, links connected at their outer ends with said doors and operatively connected with said travelling member at their inner ends, transverse strips having a series of elements providing adjustable pivotal attachment for the outer ends of said links to the doors, a king pin forming the connection for one



of said links, or when desired for both of said links, with said travelling member, said links at their inner ends being provided with a plurality of adjustment holes, and a pivot pin for securing one link upon the other in adjusted positions when the other is secured by said king pin.

1,870,965. DOOR OPERATING MECHANISM. SEIFERT W. ROUSSEAU, Baldwin, N. Y. Filed Aug. 23, 1930. Serial No. 477,295. 5 Claims. (Cl. 268—62.)

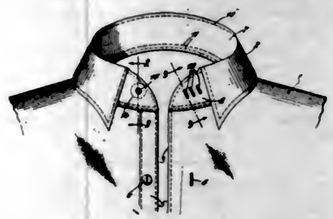


1. Door operating mechanism comprising in combination, two mating hinged doors, and means for co-ordinately opening said doors by either equal angles or by unequal angles, said means including a travelling member movable at right angles to the plane of the opening closed by said doors, two link members each attached at opposite ends to said travelling member and to one of said doors, a bar member attached to each door and provided with a plurality of holes for selective pivotal attachment of said links, and a bar member attached to said travelling member and provided at each side with a plurality of holes for selective pivotal attachment of said links.

1,870,966. ADJUSTABLE COLLAR BAND FOR SHIRTS. WILTON RUBINSTEIN, St. Louis, Mo. Filed Oct. 5, 1931. Serial No. 566,897. 7 Claims. (Cl. 2—127.)

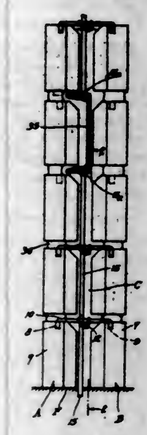
1. The combination with a shirt having detachable edges and having a fastener for holding together the detached edges near the upper end of the shirt, and a collar band permanently attached to the upper end of the shirt and having its ends at the detached edges of said shirt and having a button hole through one end thereof, of a button

permanently attached to the opposite end of the collar band for engagement in said button hole and comprising a flat base movably and rotatively confined between and disconnected from the inner and outer portions of said band, a stem movably and rotatively projecting through the outer



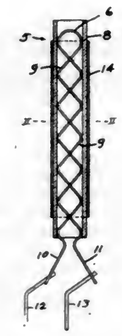
portion and beyond the outer surface of said band a distance approximately equal to the thickness of the opposite end of the band, and a substantially flat and relatively thin disc head integral with the outer end of said stem and having rounded corners throughout its periphery.

1,870,967. BUILDING CONSTRUCTION. WALTER R. SIMONS, Los Angeles, Calif. Filed Oct. 15, 1930. Serial No. 488,775. 3 Claims. (Cl. 72—30.)



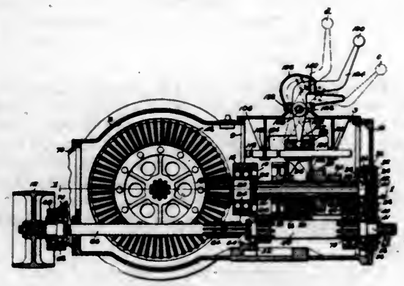
1. In a building construction for walls, a pair of adjacent upright wall units having inner faces which are in parallel spaced relation to each other, each of said wall units being composed of courses of brick, the brick of said courses at one side of the wall being each beveled away at the upper edge of its inner face toward the mid-width of the wall, oppositely disposed bevels thus being provided which enlarge the space between said wall units, a substantially horizontal tie rod located in the enlarged space thus provided, additional metallic structure to which said tie rod is secured, and a cementitious filling occupying the space between said courses together with said enlarged space and adhering to the inner faces of the brick and to the aforementioned tie rod and metallic structure.

1,870,968. HEATER ELEMENT. ROGER HULL SINDEN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed May 21, 1928. Serial No. 279,361. 2 Claims. (Cl. 250—27.5.)



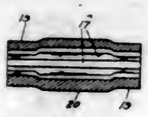
1. A cathode assembly for a thermionic device comprising a tubular insulator having a relatively thin wall, an electron emission material disposed on the outer side of said insulator and a heater unit consisting of a double helical filament having portions disposed in contact with and supported by the inner wall of said insulator.

1,870,969. TRACTOR. FREDERICK O. SNOW, Jr., Winchester, Mass., assignor to Mead-Morrison Manufacturing Company, East Boston, Mass., a Corporation of Maine. Filed Aug. 16, 1928. Serial No. 300,111. 3 Claims. (Cl. 74—58.)



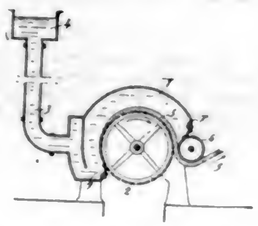
1. In a tractor, in combination, a transmission shaft, a driving shaft, a counter shaft, a high speed gear secured to said transmission shaft, a second high speed gear secured upon said counter shaft in continuously meshing engagement with said high speed gear, a second speed gear secured on said counter shaft, a low speed gear also secured on said counter shaft, a slidable gear unit splined to said driving shaft and including a gear to mesh with the high speed gear of said counter shaft, said unit also including a gear to mesh with the second speed gear of said counter shaft, a reverse pinion fast upon said transmission shaft, a second sliding gear unit slidable on said driving shaft into mesh either with the low speed gear on said counter shaft or the reverse gear on said transmission shaft, and shifting means to complete one or the other of the trains of gears and to lock the other gears in unmeshed relation.

1,870,970. METHOD OF MAKING BLIND CAGE SLEEVES WITH BALL GUIDE INTEGRAL. EDWARD E. STEVENSON, Los Angeles, Calif., assignor to Emsco Derrick and Equipment Company, Los Angeles, Calif. Filed Mar. 7, 1930. Serial No. 433,965. 4 Claims. (Cl. 29—157.1.)



3. The method of constructing a valve cage which consists in boring a hole axially through a cylindrical piece of metal, then forming within the tube thus made longitudinal ribs by means of machining channels from end to end of said tube, then swedging down an end portion of the internally ribbed sleeve thus formed, thus lessening both the internal and external diameter of such end portion thereof, and then in boring out said contracted end portion to increase the internal diameter thereof and render it smooth.

1,870,971. PROCESS AND APPARATUS FOR PREPARING WEBS FROM FIBROUS MATERIALS. EINAR FRITIOF SUNDSTRÖM and KARL EVALD STÉEN, Sundsvall, Sweden. Filed July 30, 1929, Serial No. 382,240, and in Sweden Apr. 17, 1928. 10 Claims. (Cl. 92—39.)



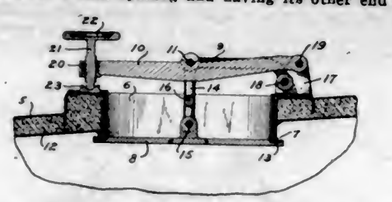
1. In an apparatus for separating fibrous material from a liquid holding the material in suspension, the combination of a pressure chamber; a rotatable perforated drum forming a depositing bed in the pressure chamber for the material; and means for introducing said suspension into the chamber and for feeding it in contact with the bed under a substantial static head above atmospheric pressure, thereby producing a continuous compact path of material on the drum.

1,870,972. CELLULOSE COMPOSITIONS OF MATTER. MAX JOSEPH THEUMANN, Lyon, France, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 24, 1930. Serial No. 423,266, and in France May 21, 1929. 6 Claims. (Cl. 106—40.)

1. A composition of matter comprising a cellulose derivative and tri-m-oxyphenyl phosphate as a plasticizer and fireproofing agent.

1,870,973. CLOSURE. FREDERICK O. THWAITS, Wauwatosa, Wis., assignor to The Heil Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 25, 1931. Serial No. 518,046. 9 Claims. (Cl. 220—25.)

1. In combination, an element having an opening, a closure plate for said opening, a lever having one end pivotally associated with said element and having said plate supported from the opposite end thereof, and a member having one end pivotally associated with said element at one side of said opening and having its other end adjustably associated with said element at the opposite side of said opening, the medial portion of said member being cooperable with said lever.

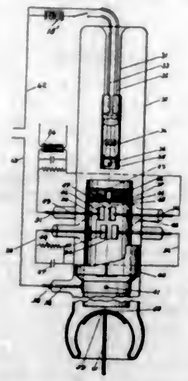


1,870,974. ADVERTISING DEVICE. RUDOLPH A. TRANSUE, Brooklyn, N. Y., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Aug. 22, 1930. Serial No. 477,001. 2 Claims. (Cl. 40—11.)



1. In combination with an automobile radiator water supply can having a spout and a shield to partially close the open top of said can and disposed adjacent to said spout, a plate to receive a placard, means for securing said placard to said plate and means for securing said plate on the upper surface of said shield to position the placard within the range of vision of the occupants of an automobile when the end of said spout is positioned to discharge water into the inlet of an automobile radiator.

1,870,975. CATHODE RAY OSCILLOGRAPH. CLAYTON TRIDLE ULREY, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Sept. 11, 1928. Serial No. 305,295. 11 Claims. (Cl. 234—1.5.)



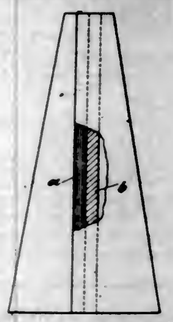
1. A cathode ray oscillograph comprising an envelope, means therein for producing a beam of electrons of small cross section, a tubular anode, a window in said envelope in line with said beam of electrons and permeable thereto, means for deflecting said beam and means disposed externally of the envelope for directly recording the extent of the deflection of said beam.

1,870,976. FISHING ROD. JACK T. WELCH, Dowagiac, Mich., assignor to James Heddon's Sons, Dowagiac, Mich., a Corporation of Michigan. Filed Dec. 29, 1930. Serial No. 505,314. 7 Claims. (Cl. 43—18.)



5. A fishing rod in which is comprised a flexible section to be joined to others, a ferrule applied over and secured to one end of the section, and a sleeve having a cellulose base applied over and secured to both the ferrule and rod section in their joinder zone.

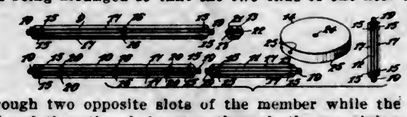
1,870,977. PRODUCTION OF PAPER OR LIKE CARTONS OR RECEPTACLES. CYRIL JOSEPH WILSON, Edgbaston, Birmingham, England, assignor to Associated Ice & Dairies Limited, Manchester, England, a British Company. Filed July 10, 1930, Serial No. 467,051, and in Great Britain July 13, 1929. 2 Claims. (Cl. 93—36.)



1. A carton or container body of the kind referred to wherein a substantial width and/or thickness or barrier of wax or the like is interposed between the joint-forming adhesive and the interior of the body.

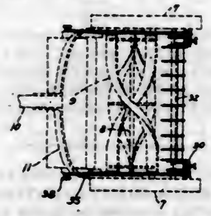
1,870,978. TOY BUILDING UNIT. EVERETT K. WOLFE, New York, N. Y. Filed Jan. 30, 1930. Serial No. 424,542. 1 Claim. (Cl. 46—35.)

A toy building unit intended for use as one of a plurality of similar units adapted to be connected together to form a toy building structure, said unit consisting of a single elongated member of substantially uniform square cross section throughout its length, said member having slots extending longitudinally along the length of each of its four side surfaces of a character to receive wall forming plates therein, said member also having holes formed transversely therethrough in pairs spaced apart along the length of the member, the two holes of each pair crossing each other in the same plane transversely of the member and being arranged so that the two ends of one hole open



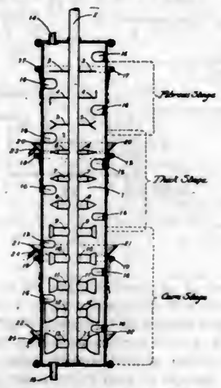
through two opposite slots of the member while the two ends of the other hole open through the remaining two slots of the member, said holes being all of the same size, and said member also having dowel-like projections formed thereon at its opposite ends extending in the direction of length of the member and each of the same size as said holes adapted to be snugly received in any selected holes of other members.

1,870,979. LAWN MOWER ATTACHMENT. ANDREW ALESEN, West Hollywood, Calif. Filed Jan. 12, 1932. Serial No. 586,153. 10 Claims. (Cl. 56—249.)



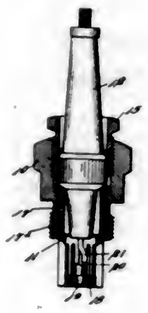
1. A lawn mower attachment comprising a rake element having a plurality of teeth projecting therefrom, and hanger means to attach said rake element to a lawn mower in advance of the cutting blades thereof, said hanger elements being provided with hinge elements to permit said teeth to swing clear of the soil when the mower is advanced and causing said teeth to swing into a digging position when the mower is propelled rearwardly.

1,870,980. METHOD OF MANUFACTURING CELLULOSE ACETATE. JEAN ALTWEGG, Lyon, France, assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del., a Corporation of Delaware. Filed May 5, 1927, Serial No. 189,100, and in France May 10, 1926. 2 Claims. (Cl. 260—101.)



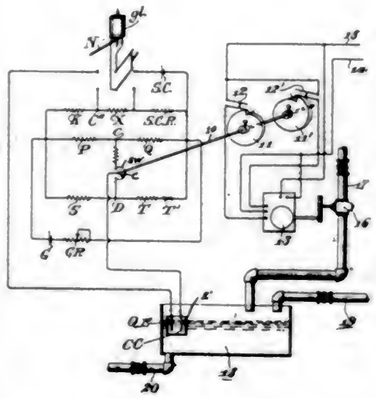
1. A method of preparing cellulose acetate which comprises treating a cellulose material with an acetylating agent and subjecting the reacting mass continuously and progressively to tearing, kneading and paddling operations.

1,870,981. SPARK PLUG FOR INTERNAL COMBUSTION ENGINES. JOHN M. AUZIN, Warwick, R. I. Filed Feb. 17, 1930, Serial No. 428,868. Renewed Sept. 4, 1931. 12 Claims. (Cl. 123—169.)



1. A spark plug having a body section, a central core therein, the body section adjacent the lower end of the central core having an annular air chamber and terminating in a depending heat exchanging cage, and ports communicating said annular air chamber with the interior of said cage.

1,870,982. METHOD OF AND APPARATUS FOR ELECTRICAL MEASUREMENT CONTROL. LEO BEHR, Philadelphia, Pa., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 2, 1927. Serial No. 196,079. 13 Claims. (Cl. 175—183.)



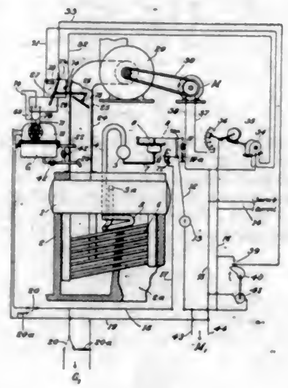
1. The method of determining one of two variable factors whose product is proportional to a voltage derived from a source of current which consists of producing change in current from another current source proportional to variations of the other of said factors, amplifying the effect of said current change to modify a second voltage derived from said second current source proportional to said current change, and balancing said first voltage against said second voltage to determine their ratio in terms of said one of said factors.

1,870,983. BABY CARRIAGE. HARRY BERMAN, Brooklyn, N. Y. Filed May 31, 1930. Serial No. 458,050. 2 Claims. (Cl. 280—47.)



1. In a baby carriage, a main body, a support slidable longitudinally of the body, a foot well pivotally secured to the forward end of said support, means to adjust the foot well to different angular positions, and means to retain said slidable support in different positions with respect to the body.

1,870,984. CONTROL SYSTEM. EDWARD S. BRISTOL, Philadelphia, Pa., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 20, 1928, Serial No. 248,144. Renewed May 22, 1931. 18 Claims. (Cl. 236—26.)

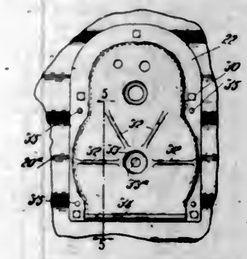


1. In a control system for fluid flow, valve regulating means interposed in the path of said fluid flow, a variable speed fluid impeller for effecting said fluid flow, and means for varying the speed of said impeller by and in accordance with the position of said valve regulating means.

1,870 985. HOUSING FOR HAND BRAKE WINDING MECHANISM. RICHARD W. BURNETT, Chicago, Ill. Filed Dec. 29, 1928, Serial No. 329,243, and in Canada Feb. 25, 1927. 4 Claims. (Cl. 74—112.)

1. In brake operating mechanism comprising a chain, a winding member and gearing therefor, and pivoted holding and releasing devices; a housing to enclose said winding member and gearing devices comprising a pressed steel front plate, a pressed steel back plate, one dished to provide a mechanism compartment open at one end to accommodate lateral movement of the chain and formed intermediate its ends with outwardly curved side walls conforming to the general contour of a part of the gearing, and flanges merging into said intermediate curved portion,

said plates being formed with oppositely disposed bearing openings for the shafts of said winding member and said gearing therefor and formed with inwardly projecting



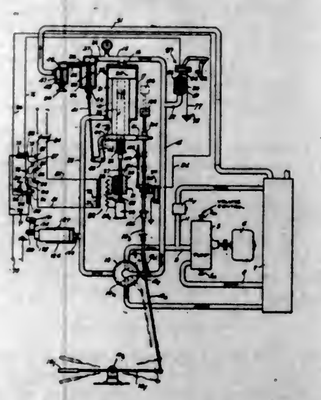
bosses through which said bearing openings are made, one of said plates being formed with reinforcing ribs extending radially from one of said bearing openings.

1,870,986. METHOD OF MAKING WHEELS. HENRY Z. COBB, Providence, R. I., assignor to Revere Rubber Company, Chelsea, Mass., a Corporation of Rhode Island. Filed Nov. 29, 1929. Serial No. 410,387. 8 Claims. (Cl. 74—33.)



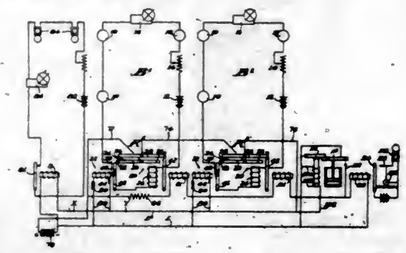
1. A wheel frame composed of units having a rim portion and spoke portions, said units being arranged in interfitting relation with the spoke portions of the units forming the spokes of the frame, clips extending around the spokes and having a tongue extending around the rim at the junction of the rim and the spokes, and a hub carried by the spokes.

1,870,987. APPARATUS FOR UPSETTING ARTICLES OF MANUFACTURE. LEM P. DRAKE, Bell, Calif., assignor to Jadson Motor Products Company, Bell, Calif., a Corporation of California. Filed Oct. 16, 1929. Serial No. 400,080. 14 Claims. (Cl. 219—3.)



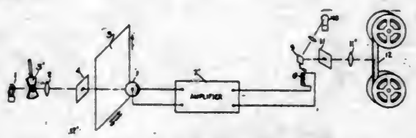
1. In an apparatus for expanding the cross-sectional area of rods and the like, guiding means, a ram to progressively advance a rod longitudinally under the guidance of said guiding means, an abutment positioned to be engaged by the end of said rod to form an upset thereon, said abutment being in spaced relation to said guiding means, means to electrically supply a forging temperature to the portion of said rod between said guiding means and said abutment, means to supply hydraulic pressure to said ram to advance it, a relief valve to limit the hydraulic pressure supplied to said ram during the initial portion of its advance movement, and means operated by the continued advance movement of said ram to automatically disconnect said relief valve from the hydraulic means in order that the full volume thereof may be supplied to the ram after the initial portion of its movement.

1,870,988. FIRE ALARM SYSTEM AND REPEATER. VERNON DURBIN, Newton, Mass., assignor to Holtzer-Cabot Electric Company, Roxbury, Mass., a Corporation of Massachusetts. Filed Mar. 21, 1929. Serial No. 348,895. 15 Claims. (Cl. 177—354.)



12. A fire alarm system having, in combination, box circuits, repeater means for each box circuit including a box circuit relay and a non-interference relay, armatures for the relays, interlocking means for the armatures to prevent retraction of one armature when the other is retracted, contacts associated with each armature for controlling energization of the relay of the other armature and adapted to be closed during the first portion of the attracting movement of a retracted armature and prior to unblocking of the other armature, and means for delaying completion of the attracting movement of the armature after closure of the contacts.

1,870,989. ELECTRICAL TRANSMISSION OF MESSAGES. BYRON E. ELDRED, New York, N. Y. Filed Sept. 28, 1929. Serial No. 395,822. 22 Claims. (Cl. 178—30.)

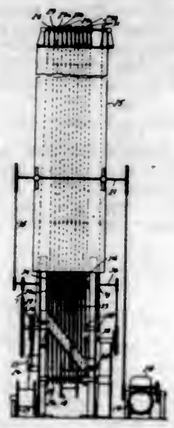


1. The method of transmitting a message which consists in making a light controlling record of said message, passing light through said record to produce flashes, producing elecrical impulses having intensities proportional to said flashes, and producng impulses at another point proportional thereto.

1,870,990. INSULATION OF WIRE. RALPH RUSSELL EVANS, Watertown, Mass., assignor to Simplex Wire and Cable Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 24, 1930. Serial No. 430,725. 3 Claims. (Cl. 91—68.)

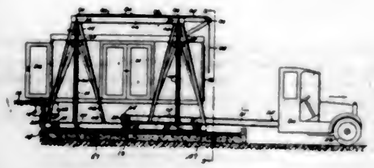
1. In the application of coagulable liquid dispersions of insulating material to wire, the improvement whch comprises passing the wire, then unwetted by the liquid dispersion, upwardly through an aperture substantially larger

than the wire in a die and then through a mechanically undisturbed pool of the liquid dispersion maintained on the upper face of the die without permitting the wire to contact with the die, and causing the liquid dispersion flowing downwardly through the aperture to be carried away from the approaching unwetted wire below said die.



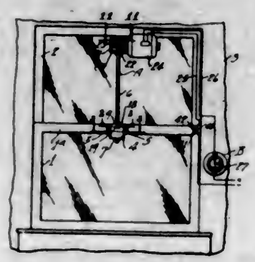
3. Apparatus for applying liquid dispersions of insulating material to wire, comprising a die having a vertical aperture therethrough, said aperture being smallest in section above its lower end and flaring outwardly below said smallest section, a trap having a vertical aperture therethrough in alignment with said first-mentioned aperture positioned beneath said die, said second-mentioned aperture being at least as large in section throughout as said smallest section of said first-mentioned aperture, the upper end of said second-mentioned aperture being in section smaller than the lower end of said first-mentioned aperture, guides positioned above said die and below said trap adapted to position a wire moving upwardly through said trap and said die over said guides to avoid contact between said wire and said die, means for maintaining a pool of the liquid dispersion of insulating material on the upper face of said die and means for discharging such liquid dispersion from said trap away from said wire.

1,870,991. APPARATUS FOR LIFTING A VEHICLE BODY. BENJAMIN F. FITCH, Greenwich, Conn., assignor to Motor Terminals Company, Wilmington, Del., a Corporation of Delaware. Filed May 1, 1930. Serial No. 448,865. 20 Claims. (Cl. 254—47.)



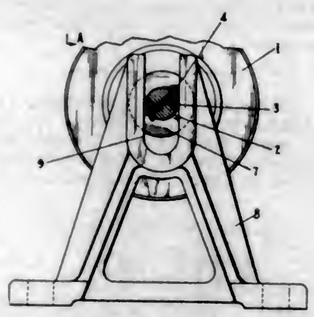
1. An apparatus for transferring freight comprising a flexible cable having a depending portion adapted to be connected to a demountable automobile body, a sheave supporting the cable, a movable member carrying the sheave and adapted to be moved by the truck carrying the automobile body, and means for anchoring the cable whereby movement of the member by the truck may move the cable about the sheave to lift the automobile body.

1,870,992. VENTILATION REGULATING APPARATUS. ARTHUR L. FREULER, St. Louis, Mo., assignor of ninety per cent to Julian Maas and ten per cent to Chester E. Myers, St. Louis, Mo. Filed Jan. 30, 1930. Serial No. 424,513. 8 Claims. (Cl. 268—124.)



1. Apparatus comprising, in combination, a carriage adapted for attachment to a movable closure, a rotative threaded shaft adapted to be actuated for shifting movement of said carriage thereby and therealong, an expansible-nut-device for selectively engaging the carriage with the shaft, said device including a plurality of threaded members adapted for swingable actuation into or out of co-operative engagement with the shaft, means for swingingly actuating said threaded members, said last means including an oscillatory member pivotally conjoined to said threaded members, and cam means on said threaded members having operative co-action with fixed members on the carriage on actuation of said oscillatory member.

1,870,993. AUTOMOTIVE FAN BEARING. ARCHIBALD D. GARDNER, Jackson, Mich., assignor to Automotive Fan & Bearing Co., a Corporation of Michigan. Filed July 8, 1930. Serial No. 466,486. 2 Claims. (Cl. 308—18.)



1. In automobile fans, a shaft, a bracket having a slot adapted to receive one end of said shaft, said slot being of greater length than the diameter of the shaft, a shoulder on the shaft, a nut on the shaft adapted to clamp the bracket against said shoulder and a pin extending through the shaft and secured therein within the said slot, to hold the shaft from rotation while said nut is being tightened, but permitting the longitudinal adjustment of the shaft before the tightening thereof.

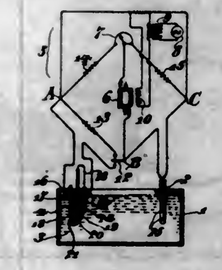
1,870,994. STREET MARKER. JAMES S. GEORGE, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Dec. 12, 1928. Serial No. 325,618. 3 Claims. (Cl. 94—1.5.)

1. As a new article of manufacture, a street marker comprising a head, a depending hollow shank having expansible projections, and a spreader within the shank between the projections, said spreader having a conical portion flaring downwardly from the projections and a head



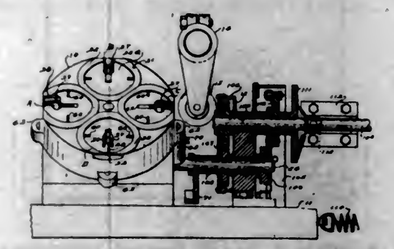
above the upper conical end, the projection tips being indented inwardly to engage between the conical portion and head and lock the spreader in position.

1,870,995. ELECTRIC CONTROL SYSTEM. WILLARD N. GREER, Philadelphia, Pa., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 15, 1927. Serial No. 240,323. 11 Claims. (Cl. 175—183.)



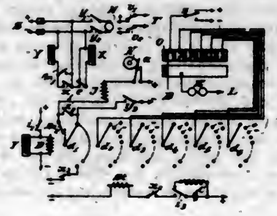
1. An electrical measuring system comprising a balanceable electrical measuring network, relatively fixed electrodes disposed in a conducting solution connected in one branch of said network, relatively movable electrodes likewise disposed in said solution and connected in another branch of said network, and means for balancing the differences in potentials representative of the resistances between said pairs of electrodes.

1,870,996. MACHINE FOR SAWING PISTON RINGS. JOSEPH H. HOENN, Saginaw, Mich., assignor to Wilcox-Rich Corporation, a Corporation of Michigan. Filed Aug. 31, 1929. Serial No. 389,661. 12 Claims. (Cl. 90—20.)



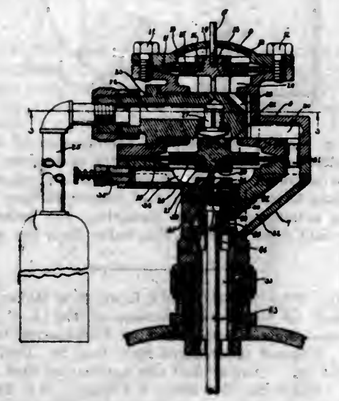
11. Apparatus for recutting gaps in piston rings comprising the combination of a pair of elements comprising a cutter, and a chuck adapted to confine a ring to a predetermined circumferential dimension and having a slot therein adapted to admit said cutter, a tongue member carried by said chuck and positioned to intervene in the gap between the ends of the ring and to register with said cutter slot whereby the ring ends are positioned relative to said slot, means for producing a relative feeding movement between said chuck and cutter, and means automatically controlled by movement of the movable elements of the pair for retracting said tongue in advance of said cutter.

1,870,997. PRINTING TELEGRAPH EXCHANGE SYSTEM. AUGUST JIPP, Berlin-Spandau; EHRHARD ROSSBERG, Berlin-Siemensstadt; FRANZ SIMON and ALFRED SCHEUNERT, Berlin-Charlottenburg; and WILLY SKAWRAN, Berlin-Niederschonhausen, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Jan. 4, 1930, Serial No. 418,460, and in Germany Dec. 28, 1928. 19 Claims. (Cl. 178—4.)



1. In a printing telegraph exchange system, a plurality of subscribers' stations, printing telegraph transmitting and receiving mechanisms at each of the stations, a central office, means at said office for establishing connections between said subscribers' stations as desired, and automatic means operating on extending a connection to a desired station for sending back to the calling station signals which characterize the desired station, said automatic means being arranged to operate said receiving mechanism at the calling station.

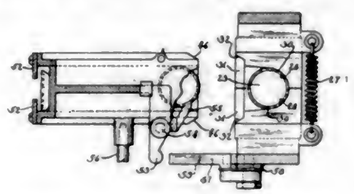
1,870,998. AUTOMATIC CONTROL MECHANISM. JAMES KANTOR, Chicago, Ill., assignor to The Liquid Carbonic Corporation, Chicago, Ill. Filed Aug. 10, 1928. Serial No. 298,852. 15 Claims. (Cl. 226—118.)



8. In a device of the character described, the combination with a valve, of fluid pressure operated means for opening said valve, controllable means for admitting counterbalancing fluid pressure against said pressure operated means to render the same ineffective and a second fluid pressure operated means for closing said valve when the first mentioned pressure operated means becomes ineffective.

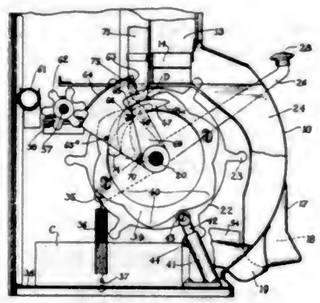
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1,870,999. CROWNING MECHANISM. JAMES KANTOR, Chicago, Ill., assignor to The Liquid Carbonic Corporation, Chicago, Ill. Filed Sept. 20, 1928. Serial No. 307,121. 8 Claims. (Cl. 226—88.1.)



3. A crowning mechanism comprising supporting means, means mounted for reciprocatory action upon said supporting means and provided with a crown holder comprising a plurality of laterally separable elements biased towards crown supporting position, a crown supply holder carried by the supporting means and having an outlet opening, a crown chute movably carried by the supporting means and arranged for placing the outlet opening in said supply holder in communication with the crown holder and restraining means for the crowns in said chute operated by the initial movement of the chute to placing position to release the first crown and by a continued movement of the chute to restrain the successive crowns.

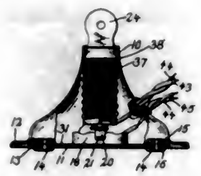
1,871,000. VENDING MACHINE. CURT W. KLOSTERMANN, Chicago, Ill., assignor to Mechanical Vending Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 2, 1929. Serial No. 411,035. 10 Claims. (Cl. 194—2.)



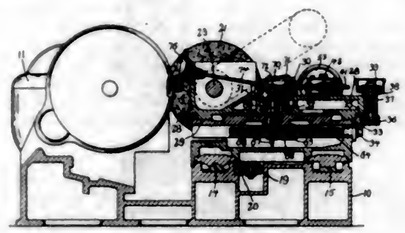
1. In a vending machine, the combination of a frame, a magazine for containing a plurality of articles of merchandise mounted in said frame, coin controlled rotatable means having a plurality of fingers thereon for discharging articles from said magazine, and means actuated by said fingers for ejecting coins from the machine.

1,871,001. FAN BASE. JOHN LANZ, New Haven, Conn., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Original application filed Jan. 28, 1927, Serial No. 164,367. Divided and this application filed Jan. 13, 1928. Serial No. 246,591. 3 Claims. (Cl. 248—16.)

3. In combination, a base member, a cover member for said base member, said members having registering openings therein, a securing member of rubber-like material having a body portion, and a head portion at each end of said body portion disposed in said registering openings, with the body portion thereof in said opening, and the headed portions thereof respectively extending over oppositely directed surfaces of said base and cover member, whereby the inherent resiliency of the rubber-like material of said securing member will draw the head portions together to engage said base and cover members and retain them together, said head portions being hollow to permit ready compression thereof and thereby facilitate inserting them through the registering openings.

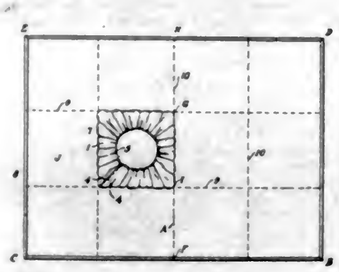


1,871,002. ROLL GRINDER. RICHARD C. LEWIS, Ansonia, and CARL F. SCHNUCK, New Haven, Conn., assignors to Farrel-Birmingham Company, Inc., Ansonia, Conn. Filed Sept. 25, 1928. Serial No. 308,254. 18 Claims. (Cl. 51—40.)



4. In a grinding machine, a reciprocable carriage, a sub-base slidably mounted upon said carriage, a grinding wheel base pivotally mounted upon said sub-base and common means to move said sub-base and swing said wheel base upon its pivot.

1,871,003. COMBINATION PILLOW AND COVERLET. CLAUDIA K. LONGLETZ, near Dayton, and CLARA A. ENGLE, Dayton, Ohio. Filed Nov. 15, 1929. Serial No. 407,404. 2 Claims. (Cl. 5—339.)

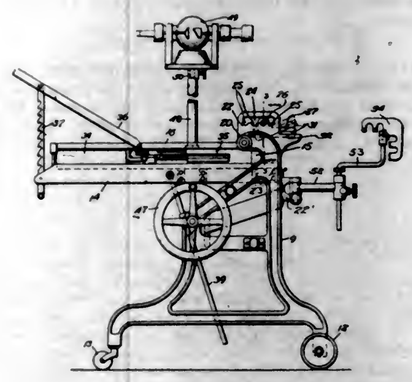


1. An article of the type described, comprising a rectangular coverlet divided into rectangular folds, a flexible retaining member secured at its inner edges to one of the middle folds, and a draw ring secured to the outer free edge portion of said retaining member, said draw ring adapted to be drawn over said sections when in their folded condition to enclose their folds within said retaining member.

1,871,004. CATALYZER FOR GASEOUS REACTIONS. FRANCESCO LOPEZ, Padova, Italy, assignor to Società Anonima Industria Ammoniaca, Padova, Italy, a Corporation of Italy. Filed Nov. 30, 1928, Serial No. 322,967, and in Italy Mar. 26, 1928. 5 Claims. (Cl. 23—233.)

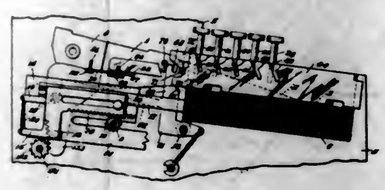
2. The method of producing a catalyzer which consists in coating a surface with catalyzing material, then machining said surface so as to produce catalyzing elements in the form of relatively thin and wide shavings having a comparatively large surface in proportion to weight.

1,871,005. CYSTOSCOPIC X-RAY TABLE. ARTHUR MUTSCHELLER, New York, N. Y., and CARL JOHAN LARSEN, East Orange, N. J., assignors to Wappler Electric Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed May 25, 1926. Serial No. 111,479. 7 Claims. (Cl. 250—34.)



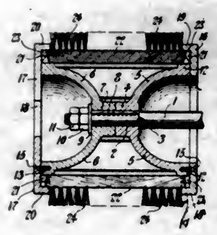
3. A device comprising a table frame, a table top carried by said table frame and mounted to tilt relatively thereto, supporting plates mounted upon said table frame, and a rocking board mounted with said supporting plates, said rocking board and said supporting plates being provided with means for enabling said rocking board to be detachably journaled upon said supporting plates in a plurality of different positions relatively to said table frame.

1,871,006. COMBINED CASH REGISTER AND ADDING MACHINE. WILLIAM LEONARD PADEN, Saginaw, Mich. Filed Oct. 6, 1923. Serial No. 666,981. 3 Claims. (Cl. 235—7.)



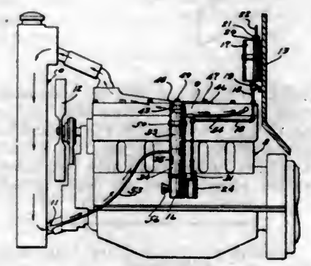
1. In a combined cash register and adding machine, normally unlocked actuating devices, total adding mechanism normally disconnected from said actuating devices, detail adding mechanism also normally disconnected from said actuating devices, a series of value keys for determining the registrations on said mechanisms, a special transaction key, means operated by the value keys to connect said detail adding mechanism with said actuating devices and to place said total adding mechanism in a position to be engaged with said actuating devices, and means operated by said special transaction key to connect said total adding mechanism with said actuating devices.

1,871,007. ROTARY BRUSH. WILLIAM RAISCH, Forest Hills, N. Y., assignor to Municipal Sanitary Service Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 14, 1928. Serial No. 270,049. 7 Claims. (Cl. 15—179.)



1. A brush comprising successively arranged brush sections provided with brush backs having opposite ends, and sides opposed to similar sides of the backs of adjacent sections, a holder for said brush sections having portions extending opposite to the end faces of said brush back ends, and positioning means including projections and narrow relatively to the ends of the brush backs interposed between said brush back ends and said portions of said holder that are opposite said end faces, said projections being rigid with one and received by the other with clearance less than the distance between said ends and said opposite portions to preserve space therebetween, said projections also being fixed with respect to said opposite portions of said holder and successively spaced by sufficient amounts to maintain continuous space between the sides of adjacent brush backs.

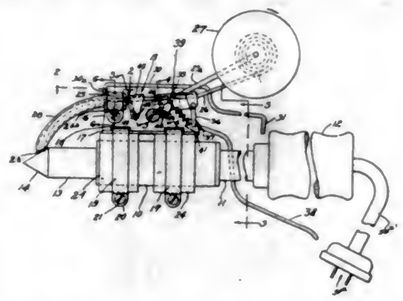
1,871,008. HEATER FOR LIQUID COOLING SYSTEMS OF INTERNAL COMBUSTION ENGINES. FRANK B. RENTZ, Yankton, S. Dak., assignor to Glen V. Pickett, Yankton, S. Dak. Filed Mar. 21, 1930. Serial No. 437,792. 4 Claims. (Cl. 123—174.)



1. The combination with an internal combustion engine having a liquid cooling system, of a heater for the liquid in said system including a burner, a chimney-like

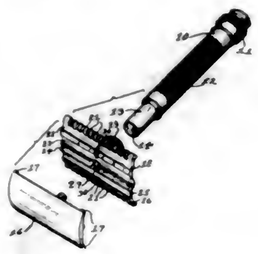
combustion chamber leading from the burner, a boiler at the top of the combustion chamber and having a central flue leading from the combustion chamber, a water coil in the combustion chamber entirely below the boiler and leading from said system to the boiler at the bottom thereof, and a conduit leading from the boiler to said system.

1,871,009. WELDING AND SOLDERING APPLIANCE. WALTER H. RIGHTER, Glendale, Calif. Filed Oct. 15, 1930. Serial No. 488,786. 4 Claims. (Cl. 113—109.)



1. In a device of the kind described, an elongated soldering tool having an applicator portion, a support extending laterally from said tool, a spout having a shank portion which is mounted upon said support and which is turnable about an axis which extends substantially parallel to the long axis of the tool, a manually operable rod or arm secured to said spout to turn the same upon said support to vary the distance of the delivery portion of the spout from the applicator portion of the tool, and means to feed wire solder through said spout.

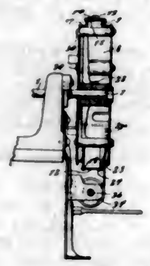
1,871,010. SAFETY RAZOR. ANDREW ROBB, New Britain, Conn. Filed July 21, 1930. Serial No. 469,468. 8 Claims. (Cl. 30—12.)



1. In a safety razor, a cap member, a guard member, a handle having means for engaging said cap member to hold a blade tightly between said cap member and guard member, and means on said cap member interfitting with said guard member to positively hold said guard member against rotation when twisted 90 degrees from shaving position.

1,871,011. CONTROL APPARATUS FOR GANG CONDENSERS. THEODORE J. SCOFIELD and WILLIAM D. MINER, Jackson, Mich., assignors to Sparks-Withington Company, a Corporation of Ohio. Filed Oct. 11, 1929. Serial No. 398,864. 7 Claims. (Cl. 116—124.3.)

1. In indicating drums for condensers and the like, disc flanges bent downwardly and thence upwardly to form driving grooves, and at an outer portion bent outwardly and then inwardly to form side grooves, means for se-



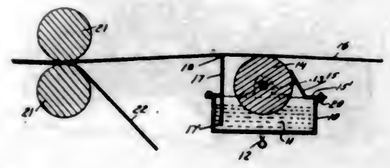
curing said flanges together with the side grooves facing each other and an indicating strip secured in said side grooves.

1,871,012. ELECTROLYTIC CONDENSER AND HOLDER THEREFOR. THEODORE J. SCOFIELD, Jackson, Mich., assignor to The Sparks-Withington Co., Jackson, Mich., a Corporation of Ohio. Filed Jan. 14, 1930. Serial No. 420,649. 1 Claim. (Cl. 175—315.)



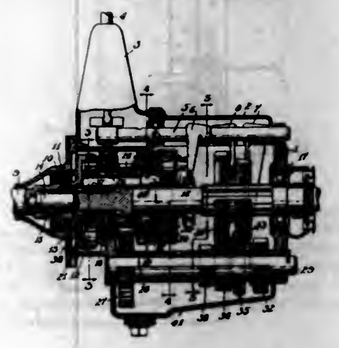
A holder for electrolytic condensers containing an opening and a small hole at one side of the opening, said opening and hole being connected by a channel for insertion of conductors, a pair of ears extending downwardly around the opening and separated by said channel, and additional ears extending downwardly around the opening and separated from each other and from the first mentioned ears by rounded openings in said holders said ears defining a socket slightly smaller than the condenser to be clamped therein.

1,871,013. APPARATUS FOR APPLYING COATINGS. WILLIAM M. SHAKESPEARE, South Orange, N. J., assignor to Anaconda Sales Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 30, 1929. Serial No. 417,425. 6 Claims. (Cl. 91—33.)



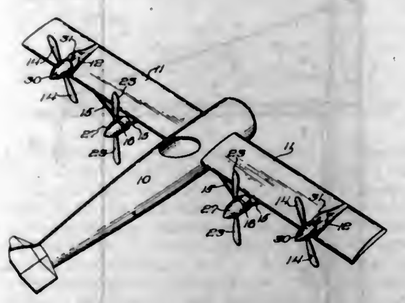
1. In apparatus for coating a sheet, the combination of a tank for coating material, a roller having a portion of its periphery dipping into the coating material in the tank, means for heating the tank, means for moving the sheet in contact with a portion of the roller above the surface of the coating material to receive a film of coating material, and a metal doctor blade engaging the sheet and a substantial distance above the surface of the coating material, removing part of the film therefrom, this blade being mounted to extend below the surface of the coating material in the tank.

1,871,014. TRANSMISSION GEAR. JOHN M. SIMPSON, Muncie, Ind. Filed Mar. 3, 1926. Serial No. 91,895. 12 Claims. (Cl. 74—57.)



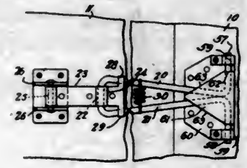
1. The combination with a casing, a driving shaft, a driven shaft extending into said casing, a hub surrounding the axes of said shafts, a gear driving connection between said hub and said driving shaft, a gear driving connection between said hub and said driven shaft, a pair of spaced apart bearings in said casing for said hub, a driving gear on said hub between said bearings, a supplemental shaft, a gear on said supplemental shaft driven from said driving gear and means for drivingly connecting said driven and supplemental shafts.

1,871,015. AIRPLANE. JOHN SQUIRES, Detroit, Mich. Filed Mar. 8, 1929. Serial No. 345,303. 7 Claims. (Cl. 244—14.)



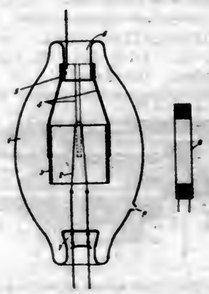
1. In an airplane, in combination, an engine, a propeller positioned rearwardly of said engine and driven therefrom, an enclosure for said engine, a central hood carried by said propeller having parallel side walls extending from in advance of said propeller rearwardly thereof, the rear end of said enclosure being of generally circular shape and the forward end of said hood being of substantially the same size as the rear end of said enclosure and extending into closely adjacent relationship with respect thereto, said hood having a streamlined tail integrally formed therewith.

1,871,016. SPRING ACTUATING AND CONTROL MECHANISM. CHARLES C. TOMKINSON, Plainfield, N. J., assignor to J. Edward Ogden Company, Inc., East Orange, N. J., a Corporation of New Jersey. Filed Apr. 9, 1930. Serial No. 442,721. 9 Claims. (Cl. 16—72.)



1. Spring actuating mechanism comprising a pair of coacting elements, one of said elements being resilient, cam means coacting between said elements for swinging one of said elements relative to the other, and adjustable means engaging and coacting with the resilient element for adjusting the tension of said resilient element.

1,871,017. PROCESS OF DEPRIVING ELECTRIC DEVICES OF OCCLUDED GASES. BALTHASAR VAN DER POL, Eindhoven, Netherlands, assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Mar. 30, 1929, Serial No. 351,200, and in the Netherlands Mar. 30, 1928. 3 Claims. (Cl. 250—27.5.)



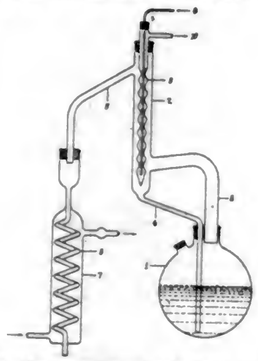
1. The method of exhausting an electron discharge device comprising an evacuated envelope enclosing an electron emitting cathode, an anode and a metal part normally outside the electron stream from said cathode to said anode, which comprises establishing an electron stream from said cathode to said anode during the evacuation of said envelope, and subjecting said stream to a magnetic field of a direction and magnitude sufficient to deflect said stream from its normal course and cause it to impinge on and thereby denude said metal part of deleterious gases.

1,871,018. COILED LAMP FILAMENT. STEN WADSTEN, Bloomfield, and CHARLES WALLACE HUNT, Wyoming, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Original application filed Dec. 29, 1928, Serial No. 329,149. Divided and this application filed Oct. 30, 1929. Serial No. 403,396. 3 Claims. (Cl. 176—132.)



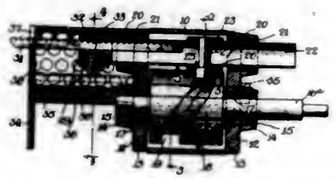
1. A coiled lamp filament having its ends terminating in a plurality of turns of lesser pitch and of greater pliability than the turns intermediate the said ends.

1,871,019. PROCESS FOR CONCENTRATING FORMALDEHYDE SOLUTIONS. FREDERIC WALKER, New Brighton, Staten Island, N. Y., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, a Corporation of Delaware. Filed Mar. 26, 1930. Serial No. 439,013. 4 Claims. (Cl. 202—41.)



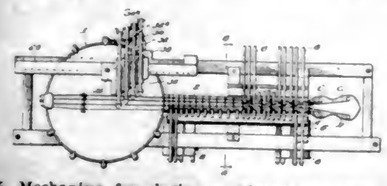
1. Process of concentrating solutions of formaldehyde in less volatile liquids comprising vaporizing the solution, fractionally condensing the major part of the vapors, returning the condensate to the solution being vaporized without substantial washing or scrubbing contact with the vapors distilling from said solution, and passing the uncondensed vapors to a condenser.

1,871,020. RECIPROCATING TOOL. ANDREW WYZENBEEK, Chicago, Ill. Filed Jan. 15, 1930. Serial No. 420,870. 2 Claims. (Cl. 74—14.)



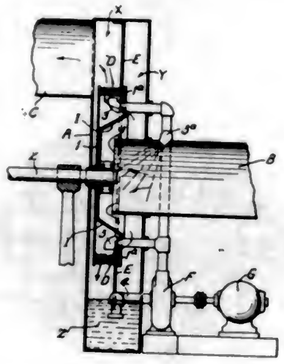
1. A device of the character described comprising, in combination, a casing, a shaft rotatably journaled in said casing, a cam block on said shaft having a cam groove therein, a second shaft supported in said casing for reciprocatory movement relative thereto and arranged with one end thereof extending from said casing, a sleeve carried by said second shaft having a bore provided with a countersink therein, a cam follower in the form of a headed pin seated in said bore with the head of said pin disposed in said countersink, said sleeve being disposed on said second shaft to permit engagement of said cam follower with said groove, and means carried by said sleeve for casing-engagement to prevent rotation of said second shaft relative to said casing.

1,871,021. MECHANISM FOR PLAYING STRINGED INSTRUMENTS. EINAR T. ZACHRISON, Chicago, Ill. Filed Apr. 18, 1929. Serial No. 356,224. 19 Claims. (Cl. 84—8.)



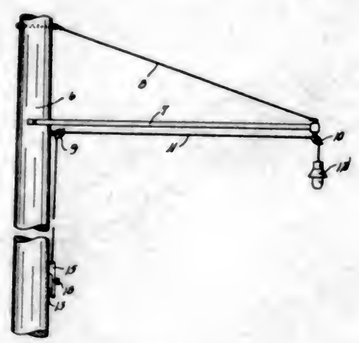
13. Mechanism for playing a stringed instrument, comprising means for fingering the strings and means for picking said strings, said picking means including pivoted arms, one of which is provided with a pick, and a member adapted to raise said arm and pick for impinging a string.

1,871,022. APPARATUS FOR REMOVING SOLID MATTER FROM AIR AND GASES. WALTER ZELLWEGER, St. Louis, Mo. Filed Aug. 18, 1930. Serial No. 476,049. 7 Claims. (Cl. 183—13.)



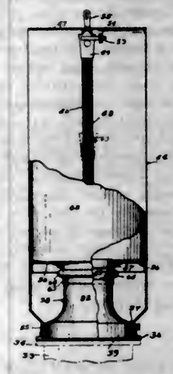
1. An apparatus for the purpose described, comprising a casing provided with an inlet pipe and an eduction pipe, a rotatable, cylindrical filter ring arranged in said casing between the discharge end of the inlet pipe and the inlet end of the eduction pipe, and a rotatable knockout device positioned between the inner side of said ring and the discharge end of the inlet pipe and disposed so that the solid particles in the gas stream intercepted by said device will be discharged at a point outside of the filter ring.

1,871,023. STREET LAMP CABLE SECURING DEVICE. OTTO ANKLAM, Minneapolis, Minn. Filed Feb. 1, 1932. Serial No. 590,148. 5 Claims. (Cl. 240—63.)



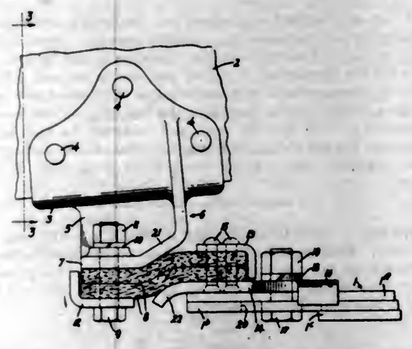
1. A device for securing a cable to a support, comprising a block mounted on said support, said block having a boss formed thereon projecting outwardly from its outer face, a plate overlying said block and having an aperture therein within which said boss is received, a bar bearing against said boss and normally straddling said plate, means at one end of said plate for securing a cable thereto, and a stud having a key opening therein securing said bar to said block.

1,871,024. DUST BAG AND COUPLING FOR VACUUM CLEANERS. WILLIAM BARBER, Brooklyn, N. Y. Filed June 11, 1929. Serial No. 370,021. 7 Claims. (Cl. 183—51.)



1. A tubular dust bag having an opening therein, zipper means for closing and locking said opening, a lining bag of porous material, having a reduced neck portion, a coupling having a reduced grooved neck portion adapted for engagement thereat with the neck of the lining bag and means for disengageably securing said lining bag and said coupling in engagement.

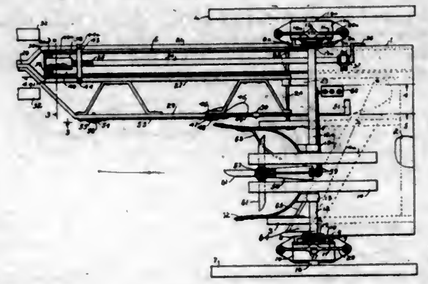
1,871,025. VEHICLE SUSPENSION MEANS. HARVEY W. BELL, Ardsley-on-Hudson, N. Y., assignor to The Beloyt Corporation, New York, N. Y., a Corporation of Delaware. Filed May 28, 1930. Serial No. 456,360. 7 Claims. (Cl. 267—30.)



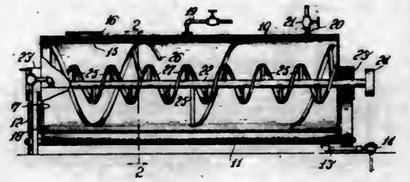
1. In combination, a supporting member, a supported member, a flexible plate, means attaching opposite ends of the flexible plate to said members in offset relation and with said ends extending in substantially parallel planes, a load bearing member carried by the supporting member and having a curved surface of slight curvature engaging an intermediate portion of the flexible plate, and a load bearing member carried by the supported member and having a substantially flat bearing surface extending obliquely to said parallel planes and engaging said intermediate portion of the flexible plate in opposed relation to the first-mentioned load bearing member.

1,871,026. MACHINE FOR DISPOSING OF ARTICHOKE PLANTS. AUGUSTO BELLI, near Santa Cruz, Calif. Filed Apr. 27, 1931. Serial No. 533,845. 6 Claims. (Cl. 55—62.)

6. A machine of the character described comprising a pair of supporting wheels, a frame tiltably mounted thereon, means for vertically adjusting either end of the frame thereon, a second frame pivotally mounted with respect to the first frame, means for tilting the first frame with respect to the second frame, supporting wheels mounted on the second frame, a plow mounted on the second frame, plant chopping means mounted on the first frame, and a scoop scraper mounted on the first frame rearwardly of the chopping means and adapted to discharge rearwardly of the said plow.



1,871,027. THIN BOILING STARCH AND METHOD OF MAKING SAME. CARL BEROQUIST, New York, N. Y., assignor to International Patents Development Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 6, 1928. Serial No. 297,613. 10 Claims. (Cl. 127—71.)



1. Method of modifying starch which comprises heating starch containing not more than two per cent of water in the presence of from 0.02 per cent to 0.06 per cent of anhydrous chlorine, by weight on the dry starch maintained in uniform distribution through the starch, at temperatures within the range of from 105° C. to 120° C. until the product has a 30 gram fluidity of from 1½ to 5 cubic centimeters when subjected to the hereinabove described fluidity test.

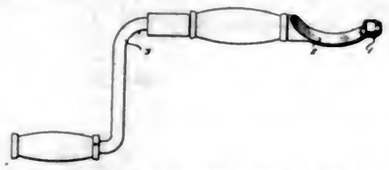
1,871,028. LOCOMOTIVE. JAMES G. BLUNT, Schenectady, N. Y. Filed Apr. 9, 1926. Serial No. 100,832. 11 Claims. (Cl. 121—122.)



1. A combined frame brace and machinery support for locomotives, comprising a rear transverse member; a front transverse member, the said members each having means for attachment to the side frames of a locomotive, and means for supporting one end of a piston rod cross head

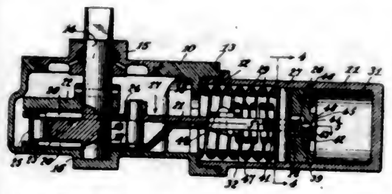
guide; and longitudinal members connecting the transverse members, and having rearward extensions forming a loop, the branches of which providing a bearing for a valve motion link.

1,871,029. WIRE JOINING TOOL. QUINCY WARD BOESE, New York, N. Y., assignor to Stapling Machines Co., a Corporation of Delaware. Filed Oct. 22, 1930. Serial No. 490,431. 4 Claims. (Cl. 140—118.)



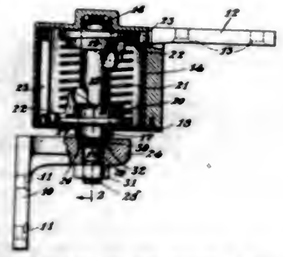
1. A tool for joining package wires by intertwisting comprising a twisting head bored substantially parallel with its central axis and provided with a slotted opening formed at an angle to the axis of the bore, and a member extending into the bore at either side of the slot to engage and twist the wires upon rotation of the head; the diameter of the bore being greater than the width of the slotted opening whereby when the wires have been straightened in the bore they are out of line with the slotting opening and are confined in the bore during rotation of the head.

1,871,030. DOORCHECK AND CLOSER. EMIL BOMMER, Brooklyn, N. Y. Filed Jan. 11, 1932. Serial No. 585,831. 7 Claims. (Cl. 16—55.)



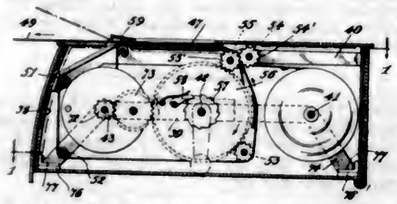
1. In a door check and closer, a cylinder, a piston and connecting bar therein, connected by a pin received in a lost-motion slot to permit relative movement of the piston with respect to the bar, and a normally closed relief device for fluid pressure, slidably disposed in the piston in position to be engaged by the end of said bar and to be opened thereby upon the relative movement of the piston with respect to the bar.

1,871,031. HINGE CONSTRUCTION. GUSTAV BOMMER, Brooklyn, N. Y., assignor to Emil Bommer, Brooklyn, N. Y. Filed June 11, 1931. Serial No. 543,579. 2 Claims. (Cl. 16—180.)



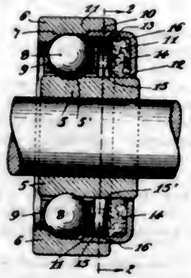
1. In a door hinge of the kind described, the combination of a fixture adapted to engage the door and formed with a cylindrical casing, a bracket for mounting the fixture on a door jamb, said bracket including a horizontal part having a vertical opening of cylindrical form extending therethrough, a vertical pivot shaft on which the casing is centrally mounted for turning movement, formed with a cylindrical portion extending below the bottom end of the casing and adapted to engage the opening, said cylindrical portion being of a length to extend downwardly through and well below the opening and having a screw-threaded region adjacent its lower end, cutting members projecting from the surface of the cylindrical portion at a locality above the screw-threaded region, extending parallel with the axis of the cylindrical portion and hardened, and a nut engageable with the screw-threaded end of the cylindrical portion, to be turned against the horizontal part and adapted, on being turned thereagainst, to draw the vertical shaft downwardly through the opening and cause the hardened cutting members to penetrate the material of the horizontal part, whereby securely to maintain the shaft locked to the bracket against turning movement despite the rotative force exerted upon the shaft by the turning of the casing thereon.

1,871,032. RECORDING APPARATUS. AUGUST N. E. BOOS, New York, N. Y. Original application filed Mar. 13, 1924, Serial No. 698,845. Divided and this application filed June 18, 1929. Serial No. 371,826. 7 Claims. (Cl. 282—16.)



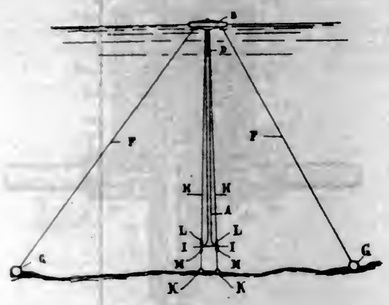
1. In a recording apparatus for the purpose set forth, consisting of framework, parallel spindles mounted at their inner end portions to the framework and including a spindle for supporting a supply roll and a second spindle, take-up mechanism loosely mounted on the second spindle, a driving gear loosely mounted on the first spindle feed rollers operated by the driving gear and adapted to feed paper from the supply roll to the take-up mechanism, and means for operating the take-up mechanism from said driving gear.

1,871,033. ANTIFRICTION BEARING. GEORGE R. BOTT, Stamford, Conn., assignor to Norma-Hoffmann Bearings Corporation, Stamford, Conn., a Corporation of New York. Filed Feb. 6, 1930. Serial No. 426,253. 4 Claims. (Cl. 308—187.)



1. In an open type anti-friction ball bearing, inner and outer bearing rings having races in their opposed faces, bearing balls engaged with said races, the race of the outer bearing ring being open on one side, and the inner face of said ring adjacent to the open side of the race having an annular shoulder thereon, and means for retaining a body of lubricant between the bearing rings at one side of the balls embodying a sheet metal retainer having an annular flange extending within the outer bearing ring and abutting at its edge against said shoulder, said flange being of greater thickness than the depth of said shoulder and providing a projection from the inner face of the bearing ring contiguous to the balls to retain said ring and balls in assembled relation.

1,871,034. SUBMARINE WATER-DUCT. PAUL BOUCHEROT and GEORGES CLAUDE, Paris, France. Filed Oct. 28, 1927, Serial No. 229,357, and in France Nov. 18, 1926. Renewed June 17, 1932. 4 Claims. (Cl. 61—72.)



1. A submarine water duct adapted to bring up water from sea depths, including means whereby the weight of the displaced water volume will be substantially equal to the weight of the duct, a ring provided upon the lower portion of said duct, a cable provided with an anchor movably attached to the lower portion of said duct by passing said cable through said ring, stops positioned above and below said ring upon said cable so that normally there is a tension by the anchor upon the stop above but so that when the cable is raised, the stop below will bear upon the ring only after the anchor is dislodged.

1,871,035. TRANSOM BLIND. FRED J. BURNS, Saginaw, Mich., assignor to The Columbia Mills, Incorporated, Saginaw, Mich., a Corporation of New York. Filed Jan. 23, 1931. Serial No. 510,671. 3 Claims. (Cl. 98—121.)



1. The combination with a transom opening, of a pair of vertically disposed metal strips having a plurality of legs formed integral therewith, said legs projecting outwardly from one edge of the strips, slats supported on the legs with the inner longitudinal edge of the slats in contact with one face of the strips, and the ends of the slats projecting beyond the strips.

1,871,036. PROCESS OF TREATING RUBBER AND PRODUCTS OBTAINED THEREBY. SIDNEY M. CADWELL, Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Mar. 2, 1928. Serial No. 258,670. 47 Claims. (Cl. 18—53.)

36. Vulcanized rubber derived from rubber containing zinc oxide, sulphur, and a *S*-polynitrophenyl mercaptobenzothiazole.

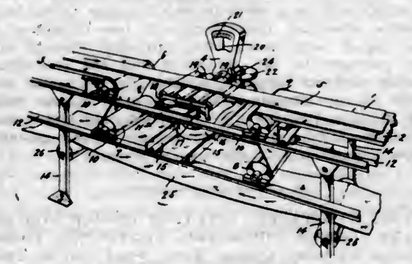
1,871,037. TREATMENT OF RUBBER. SIDNEY M. CADWELL, Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Sept. 11, 1930. Serial No. 481,353. 28 Claims. (Cl. 18—53.)

1. A process of controlling the vulcanization of rubber which comprises incorporating with rubber compounding ingredients including a sulphur, an organic accelerator compatible with ammonia, and an acidic vulcanization retarder and subjecting the rubber stock at a vulcanizing temperature to an atmosphere containing ammonia.

1,871,038. VULCANIZATION OF RUBBER AND SIMILAR MATERIALS. SIDNEY M. CADWELL, Grosse Pointe Park, Mich., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Nov. 27, 1931. Serial No. 577,703. 18 Claims. (Cl. 18—53.)

1. A process of producing vulcanized rubber by dry heat which comprises incorporating into rubber a vulcanizing agent and an organic accelerator and vulcanizing the rubber in an atmosphere containing gaseous ammonia, said organic accelerator being employed in an amount insufficient to effect proper vulcanization in the absence of the ammonia.

1,871,039. APPARATUS FOR CONTINUOUSLY WEIGHING STRIP MATERIAL. JOHN E. CADY, Indianapolis, Ind., assignor to G & J Tire Company, Indianapolis, Ind., a Corporation of Indiana. Filed May 2, 1930. Serial No. 449,345. 6 Claims. (Cl. 265—27.)

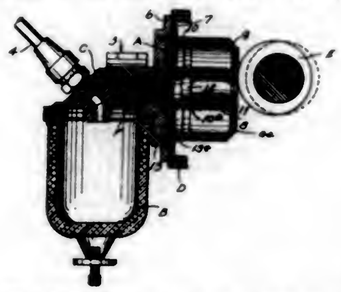


1. A weighing device comprising a scale and horizontally aligned conveying means disposed at the sides of the scale and separated therefrom by a substantial distance whereby strip material passing over the scale between said conveying means is substantially wholly supported by said scale.

1,871,040. PUMP. WILLIAM C. CARTER, Flint, Mich. Filed Apr. 29, 1929. Serial No. 359,099. 1 Claim. (Cl. 103—38.)

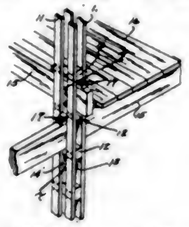
A pump for fuel supply systems provided with a pumping chamber, a diaphragm for creating suction and pressure in said chamber, an open-ended tubular guide projecting laterally from the body of the pump, a spring on one side of said diaphragm for flexing it in one direction, a reciprocating plunger in said tubular guide a second

spring that co-operates with said plunger to flex the diaphragm in the opposite direction, and a rotary cam that has a wiping action on the outer end of said plunger, the axis of said cam being disposed sufficiently off center with relation to the longitudinal axis of said plunger



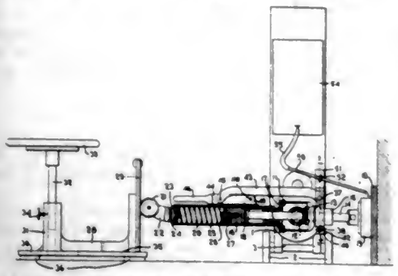
to cause the cam to have a tendency to cock or tilt the plunger when it first contacts with same and thus counteract the thrust which the cam exerts on the plunger in a direction tending to force the plunger laterally against the side of the tubular guide in which the plunger reciprocates.

1,871,041. KNOCKDOWN SCAFFOLDING. JOHN F. CAVANAGH, Robbinsdale, Minn. Filed Feb. 11, 1931. Serial No. 514,949. 6 Claims. (Cl. 304—12.)



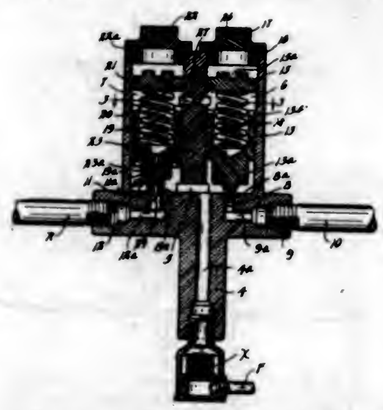
1. A knock-down scaffolding comprising columns, beams and platform-forming elements, said columns having beam passages extending therethrough in two directions at right angles, said beams being extensible through said beam passages in two directions and the scaffolding-forming elements being supportable on the beams supported by the columns, certain of said columns being made up of sections having overlapped ends, and certain of said beams being passed through aligned passages of the lapped ends of the column sections.

1,871,042. PRESSURE APPLYING DEVICE FOR ROTARY POWER OPERATED SURFACING TOOLS. ERCOLE CAVICCHI, Quincy, Mass. Filed Jan. 31, 1931. Serial No. 512,720. 11 Claims. (Cl. 51—180.)



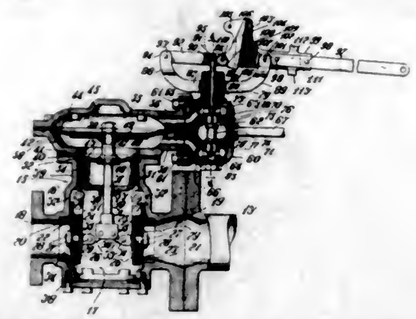
1. A pressure applying mechanism for forcing a tool into engagement with a vertical surface to be treated, comprising an abutment presenting a surface substantially parallel to said vertical surface, a horizontal tool holding means having a tool at one end and means at its other end to engage said abutment and resilient means between the tool and the abutment engaging means whereby when said tool holder is placed between the work and said abutment said resilient means will force the tool yieldingly against the work.

1,871,043. OIL BURNER REGULATING AND RELIEF DEVICE. CHARLES H. CHALMERS, Minneapolis, Minn. Filed May 12, 1930. Serial No. 451,587. 10 Claims. (Cl. 137—153.)



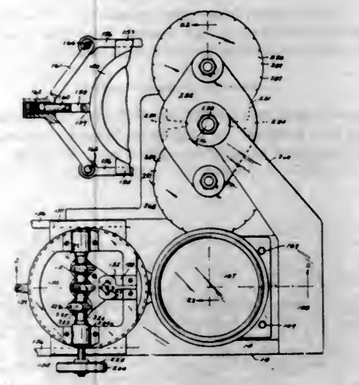
1. A pressure regulating and relief device, comprising a barrel having a yieldingly actuated plunger valve slidably disposed therein, a fluid intake communicating with the inner end of said barrel to subject said plunger to the pressure of incoming fluid, a discharge passage having a valve seat therein with which said plunger valve cooperates, and an axial drain passage through said plunger valve communicating with said discharge passage.

1,871,044. AUTOMATIC DISCHARGE VALVE. DAVID N. CROSTHWAIT, Jr., and HARRY BRENNAN, Marshalltown, Iowa, assignors to C. A. Dunham Company, Marshalltown, Iowa, a Corporation of Iowa. Filed Dec. 31, 1928. Serial No. 329,552. 9 Claims. (Cl. 137—139.)



1. An automatically operated cut-off valve comprising a valve casing having an inlet and an outlet, a valve member adapted to control communication between the inlet and outlet, a stem projecting from the casing and operatively connected with the valve member at its inner end, a differential pressure motor comprising a casing, a flexible diaphragm dividing the casing into separate chambers, the outer end of the stem being connected with the diaphragm, and a pilot valve comprising a casing housing, an inlet chamber connected with a source of fluid under pressure, there being separate passages leading from the inlet chamber to the diaphragm chambers, a valve stem, a pair of valves mounted on the stem and adapted to alternatively close the passages, an operating lever pivotally mounted on the pilot valve casing, a lever pivoted at one end on the casing and intermediately connected with the valve stem, a roller mounted on the lever, a cam movably mounted on the operating lever, and a spring adapted to yieldably force the cam into the path of the roller.

1,871,045. CASTING MACHINE. WILLIAM J. DEMMING, deceased, Lakewood, Ohio, by Agnes M. Demming, administratrix, Lakewood, Ohio, assignor to Multigraph Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 18, 1930. Serial No. 503,163. 67 Claims. (Cl. 199—73.)



1. In a machine for casting, the combination of a rotary wheel having about its periphery molds for both the article and the sprue, means for injecting molten material into such combined cavity, and means for thereafter shearing off the sprue and still later ejecting the article from the wheel.

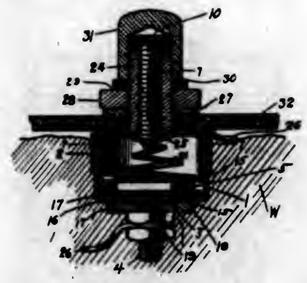
1,871,046. MANUFACTURE OR TREATMENT OF TEXTILE PRODUCTS. WILLIAM ALEXANDER DICKIE, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Oct. 8, 1928, Serial No. 311,263, and in Great Britain Nov. 2, 1927. 10 Claims. (Cl. 18—48.)

1. A process of cutting woven, knitted, or other fabrics in dividing, parting, trimming, or perforating operations, said process comprising treating a fabric containing yarns of a thermoplastic material with a substance that lowers the softening point of the thermoplastic material, and effecting at least a partial scission of the fabric by means of heated cutting means.

1,871,047. PROCESS OF TREATING TEXTILE MATERIAL CONTAINING CELLULOSE DERIVATIVES AND PRODUCT THEREOF. CAMILLE DREYFUS, New York, N. Y. Filed June 20, 1928. Serial No. 287,044. 6 Claims. (Cl. 8—5.)

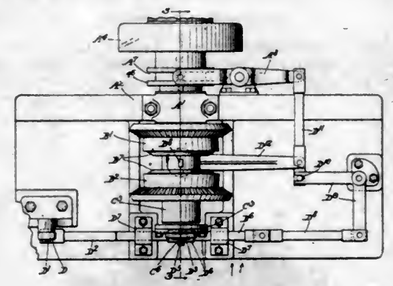
1. The method of simultaneously dyeing and increasing the safe ironing point of textile materials containing cellulose acetate comprising treating the same with a bath containing hematine and then treating with an acid solution containing a bichromate.

1,871,048. ADJUSTABLE CONDENSER. WILLIAM DUBILIER, New Rochelle, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 1, 1926. Serial No. 85,361. 4 Claims. (Cl. 250—14.)



1. A radio set with insulation, and a condenser embedded in said insulation and adjustable from without the same.

1,871,049. DOUBLE ACTING AUXILIARY CLUTCH. ASGER EILERSGAARD, Chicago, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed June 8, 1929. Serial No. 369,378. 9 Claims. (Cl. 192—35.)



1. In combination, a main clutch, an auxiliary clutch, a single source of power for both of them, main clutch operating means controlled by the auxiliary clutch, a hand lever adapted to control the auxiliary clutch and an operating connection between it and such clutch movable independent of lever movement and responsive to movement of the main clutch operating means, the auxiliary clutch being adapted to positively move the main clutch both into and out of the driving position.

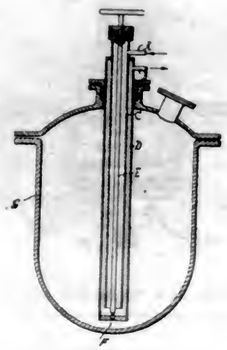
1,871,050. METHOD OF MULCHING. SAMUEL S. EVELAND, Philadelphia, Pa. Filed Oct. 31, 1930. Serial No. 492,617. 2 Claims. (Cl. 47—9.)

1. A method of cultivating growing plants which consists in applying a mulch of wet pulp from which paper is made to the ground surrounding a plant.

1,871,051. DISTILLATION. HANS FRANZEN, Mannheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 22, 1929, Serial No. 334,183, and in Germany Feb. 8, 1928. 8 Claims. (Cl. 202—50.)

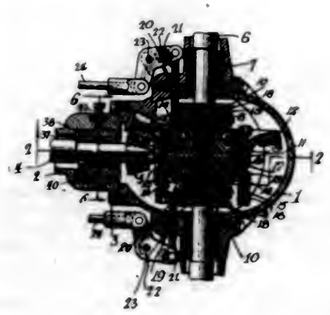
4. In a process of distillation by the introduction into an organic liquid to be distilled of another liquid inert to said organic liquid, and having a boiling point below

that of said organic liquid while heating said organic liquid to a temperature above the boiling point of said inert liquid, the step of dividing said inert liquid into a



portion introduced into the organic liquid to be distilled and another portion insulating the former during its introduction into the said organic liquid to be distilled.

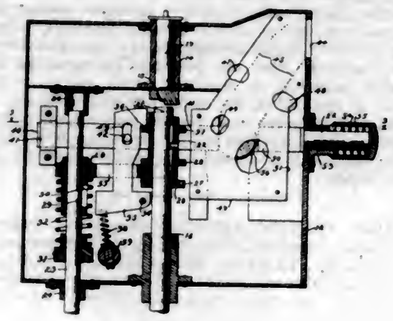
1,871,052. DIFFERENTIAL. JOSEPH GUILMETTE, St. Felicien, Quebec, Canada. Filed Oct. 9, 1930. Serial No. 487,424. 6 Claims. (Cl. 74—7.)



1. A differential comprising a main gear having a frictional portion, axles at opposite sides of said portion, frictional driving members carried by said axles and engaging said portion, and spring means holding said members in engagement with said portion, auxiliary gears fixed to said main gear, pinions splined with respect to said axles, and means for moving said pinions into and out of engagement with said auxiliary gears.

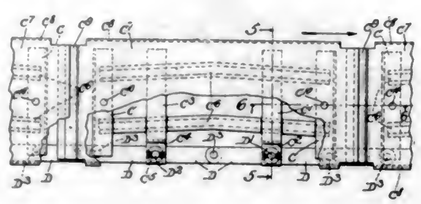
1,871,053. SPEEDOMETER TESTING MACHINE. HENRY C. HAEBERLE and CLARENCE T. HARRINGTON, San Jose, Calif. Filed Mar. 11, 1931. Serial No. 521,675. 5 Claims. (Cl. 194—1.)

1. A speedometer testing machine comprising, a normally inoperative master speedometer and supporting means therefor, clutch controlled vehicle actuated means for operating the speedometer, releasable means automatically engageable with the clutch to hold it in an inoper-



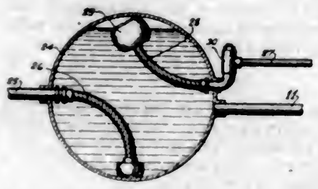
ative position, coin controlled means for releasing said last mentioned means, and means rendered operable by the vehicle for rendering the clutch operable.

1,871,054. MOLD CONVEYER. JOHN J. HARTLEY, Chicago, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 29, 1929. Serial No. 358,837. 7 Claims. (Cl. 198—181.)



2. In combination in a conveying assembly, a plurality of rollers, a chain, means for driving said chain, a plurality of platform members, each having a plurality of track members adapted to contact and rest upon said rollers, said track members being permanently so bent as to avoid uneven wear upon the rollers, and means for joining said platform members to said chain.

1,871,055. LIQUID SUPPLYING MEANS FOR AIRCRAFT ENGINES. STEPHEN A. HASBROUCK, New Haven, Conn., assignor to Pratt & Whitney Aircraft Company, East Hartford, Conn., a Corporation of Delaware. Filed June 19, 1930. Serial No. 462,307. 6 Claims. (Cl. 244—31.)



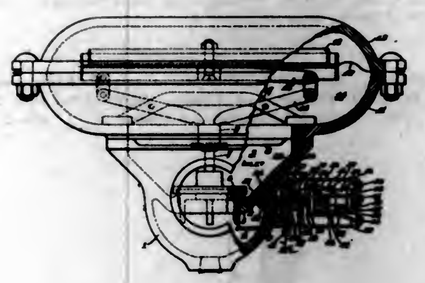
1. A liquid supplying means for aircraft engines comprising in combination, a main tank, a secondary tank, means to force liquid from said main tank to said secondary tank, means to supply liquid from said secondary tank to an engine, and pressure releasing means for said secondary tank adapted to permit the escape of entrapped air from said secondary tank in any position of said secondary tank.

1,871,056. PRODUCTION OF BARIUM ALUMINATE. HAROLD W. HEISER, East St. Louis, Ill., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 20, 1931. Serial No. 531,645. 8 Claims. (Cl. 23—52.)

1. The method of producing soluble barium aluminate from bauxite and barytes which comprises finely grinding the ores, intimately mixing the finely ground materials, moistening the mixture with a solution of inorganic bonding agent, forming briquettes of the material thus treated, and heating said briquettes to a temperature of at least 1400° centrigrade.

5. The method of producing soluble barium aluminate from bauxite and barytes which comprises finely grinding the ores, intimately mixing the finely ground materials, moistening the mixture with a 15 per cent solution of sodium hydroxide in such amount as to incorporate in the material about 1 to 2 per cent of sodium hydroxide, forming briquettes of the material thus treated, and heating said briquettes to a temperature of at least 1400° centrigrade.

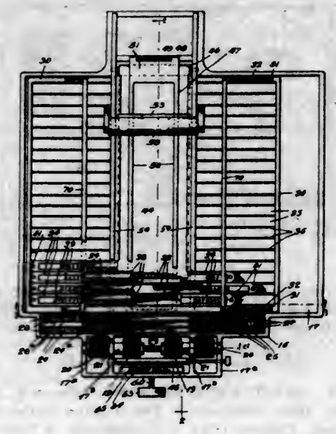
1,871,057. VALVE MECHANISM. CHARLES HOWARD HOOK, Pittsburgh, and NATHAN L. MERCUR, McKeesport, Pa. Filed June 18, 1931. Serial No. 545,168. 5 Claims. (Cl. 137—139.)



1. A valve mechanism comprising a valve, an armature operably coupled to said valve, a solenoid for moving said armature and valve in a given direction, resilient means normally urging said armature and valve in a different direction, means for connecting said solenoid in a control circuit, a switch arranged adjacent said armature for establishing a secondary circuit for the solenoid, means on said armature for closing said switch when the armature is acted upon by said solenoid, and manual means for moving said armature to substantially its magnetic circuit closing position, said manual means being adapted to release itself automatically when the solenoid is energized.

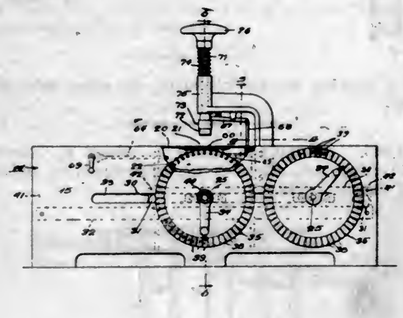
1,871,058. COUPON TICKET PRINTING MACHINE. MORRIS J. HOFFMAN, Chicago, Ill. Filed Oct. 31, 1930. Serial No. 492,506. 18 Claims. (Cl. 101—102.)

1. A coupon ticket printing machine comprising in combination a supporting member, a type carriage adjustably mounted on said supporting member, a series of type holders on said type carriage, set type in said type holders and arranged in rows, means for positioning individual type holders in said type carriage to hold any type thereof in any selected row, means whereby said type carriage is adjusted to bring any selected row of type



into printing position, and impression making means cooperating with said selected row of type to make an impression.

1,871,059. PRINTING MACHINE. MORRIS J. HOFFMAN, Chicago, Ill. Filed Nov. 21, 1930. Serial No. 497,107. 6 Claims. (Cl. 101—100.)



1. In a printing machine, the combination of a plurality of rotary carriers having lines of word printing elements circumferentialy disposed thereon, a movable supporting frame in which said carriers are rotatably mounted, a dial and a pointer associated with each carrier for determining the printing position of any selected printing element thereof, each dial being rigidly connected with the frame and each pointer rigidly connected with a carrier, and printing mechanism having means for printing records in association with the word printed by said selected printing element.

1,871,060. PRINTING DEVICE. MORRIS J. HOFFMAN, Chicago, Ill. Filed Jan. 22, 1931. Serial No. 510,394. 15 Claims. (Cl. 101—96.)

1. In a printing device, a series of printing members having spaced type characters thereon and stop shoulders

thereon conforming to the spacing of the type characters in combination with an insertable and removable index

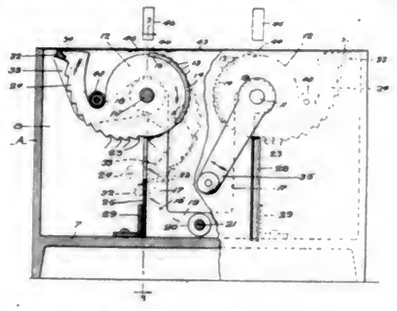
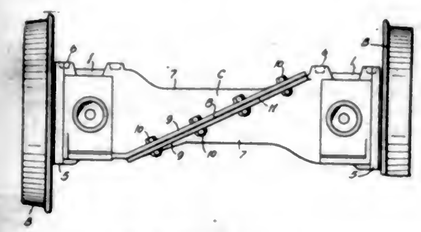


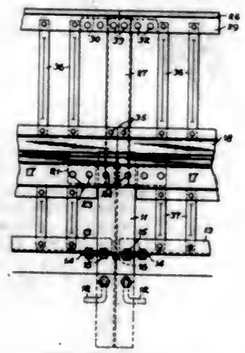
plate having shoulders thereon cooperating with the stop shoulders of said printing members to locate selected type characters thereof in printing position.

1,871,061. SPLIT AXLE HOUSING. OSCAR J. HORGER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Nov. 4, 1931. Serial No. 572,932. 5 Claims. (Cl. 295—36.)



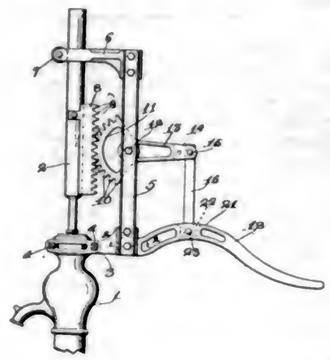
1. A housing for roller bearing car axles split diagonally.

1,871,062. HIGHWAY GUARD. PERCY E. HUNTER, Pittsburgh, Pa. Filed Feb. 10, 1932. Serial No. 592,016. 13 Claims. (Cl. 256—13.1.)



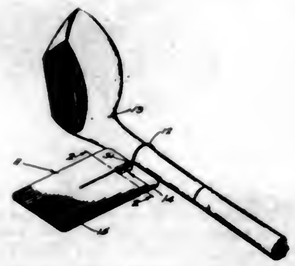
8. Fence structure comprising a buffer rail, a lower panel disposed in a plane rearwardly of the vertical face of the buffer rail, and an upper panel disposed in a plane rearwardly of said buffer rail and rearwardly of the vertical plane of the first-named panel.

1,871,063. PUMP OPERATING MECHANISM. JOHN E. JIMMIS, Waukau, Wis. Filed Apr. 25, 1931. Serial No. 532,769. 2 Claims. (Cl. 103—214.)



1. In a pump, the combination with a pump casing and a pump rod, of operating means for the pump comprising a support including spaced upper and lower arms and a connecting vertical upright, means connecting the lower arm to the pump casing, means carried by the upper arm for slidably receiving the pump rod, a rack bar secured to the pump rod betweenthe arms, a sector gear rockably mounted on the upright engaging the rack bar, said sector gear having an outwardly extending arm, an operating lever pivotally secured to the lower end of the upright, and a link pivotally connected to the lever and to the arm of the sector gear.
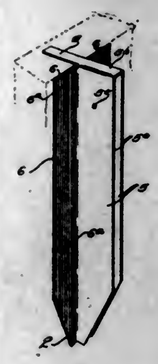
1,871,064. LOCKING DEVICE. ALLEN F. KIPPER and REUEL H. THAYER, Los Angeles, Calif. Filed Dec. 20, 1930. Serial No. 503,685. 9 Claims. (Cl. 40—21.)



1. In a sealing device for an article, the combination of: loop means for encircling the article to be sealed, said loop means having a continuously notched surface; aperture forming means providing an aperture through which both ends of said loop means may be inserted; and integrally formed engaging means associated with said aperture forming means for preventing the withdrawal of said loop means.

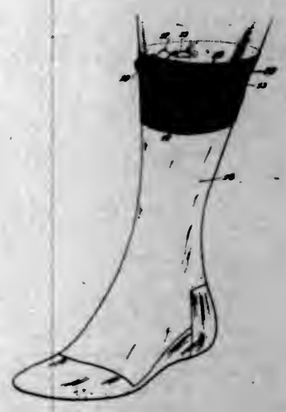
1,871,065. HOLDER FOR ROADWAY PAVEMENT EXPANSION MEANS. WALTER T. LAMB, Alpine, Calif., assignor of one-half to Harry Johnson, San Diego, Calif. Filed Dec. 10, 1930. Serial No. 501,269. 12 Claims. (Cl. 94—51.)

1. In a device of the class described, a pair of relatively fixed parallel disposed supporting members arranged to receive a roadway pavement expansion means therebetween, securing flanges extending in angularly disposed



relation with said supporting members and means for fastening said supporting members by means of said flanges to headers.

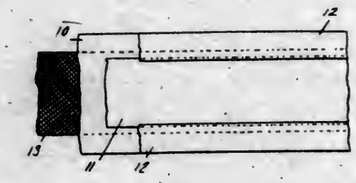
1,871,066. GARTER OR THE LIKE. ABRAHAM P. LUBELL, New York, N. Y. Filed Sept. 15, 1931. Serial No. 562,897. 2 Claims. (Cl. 24—73.)



2. A stocking garter adapted to conform to the rotundity of the leg to constrict the stocking around the leg, comprising end fasteners adapted to be engaged with the stocking by penetrating the weave thereof, a coiled spring having capacity for expansion and contraction, and means connecting the fasteners with the coiled spring, comprising wire frames having sides spread in opposite directions to form a base of sufficient lateral extent to prevent turning of the garter on the leg, said wire frames being pivotally connected at their outer ends with the fasteners and at their inner ends with the ends of the spring.

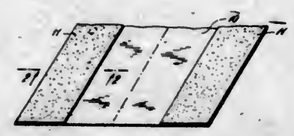
1,871,067. REENFORCED ROOFING. HARRY C. MACAN, Rutherford, N. J., assignor to Anaconda Sales Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 20, 1930, Serial No. 476,537. Renewed Mar. 25, 1932. 9 Claims. (Cl. 154—51.)

1. A roofing material which comprises a web of fibrous material impregnated with a water-proofing material and of greater length than width, surfacing material on the surface of the web intended to be exposed to the weather,



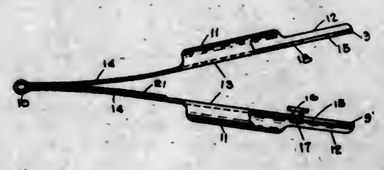
and a fabric reenforcing member of less width than the web on the other surface thereof and extending substantially the full length of the web.

1,871,068. ROOFING MATERIAL. HARRY C. MACAN, Rutherford, N. J., assignor to Anaconda Sales Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 30, 1931. Serial No. 512,357. 8 Claims. (Cl. 154—51.)



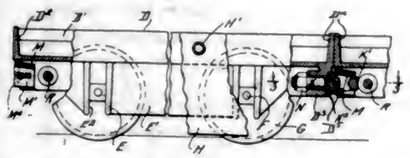
2. A material for use as a valley, flashing, and the like, which comprises a web of weather-resistant metal of substantial thickness, and a relatively narrow strip of fabric affixed to one face of the metal web and extending substantially from one side edge thereof so as to expose the remaining surface of the web.

1,871,069. BLADE HOLDER. JAMES M. MAHER, Fremont, Nebr. Filed Dec. 20, 1930. Serial No. 503,800. 1 Claim. (Cl. 30—25.)



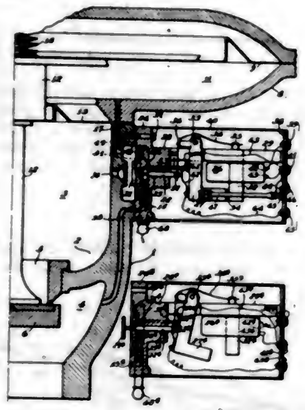
A razor blade holder, comprising a single length strip of spring metal overturned intermediately to provide a pair of arms, said arms being curved outwardly from each other to inherently hold the arms in divergent relation, each of said arms having an outwardly curved handle portion near its outer end and the handle portions adapted to register when the arms are pressed together, the free ends of said arms having inner opposed flat faces adapted for abutting engagement when the arms are brought together, said outer end flat portions having registering slots therein, a locking member carried by one of said arms operable in said slots for interlocking the arms together when closed, and a supporting plate secured across the inner side of one of said arms adapted to receive a razor blade thereon, said arms adapted to clamp the razor blade between the arms with the cutting edges of the blade extending beyond the opposite longitudinal edges of the arm.

1,871,070. KILN CAR. PAUL A. MEEHAN, Cleveland, Ohio, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 23, 1929. Serial No. 357,438. 10 Claims. (Cl. 25—142.)



1. In a tunnel kiln comprising an elongated kiln chamber, a plurality of kiln cars movable longitudinally therethrough, under the action of a car pushing mechanism, said cars being formed at their ends with surfaces extending substantially the full width of the cars, the said surfaces at adjacent ends of each adjacent pair of cars being arranged to transmit substantially all of the force through which the cars in advance are moved and to seal the joint betweenthe cars, and means for preventing relative lateral movement of adjacent cars in said kiln chamber comprising cooperating devices at adjacent ends of said cars.

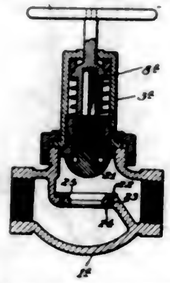
1,871,071. ELECTRORESPONSIVE VALVE MECHANISM. NATHAN L. MERCUR, McKeesport, Pa. Filed Aug. 7, 1931. Serial No. 555,768. 7 Claims. (Cl. 137—139.)



1. A valve mechanism comprising a valve, an armature operably coupled to said valve for moving it from one position to another, a solenoid for moving said armature in one direction, means normally urging said armature away from said solenoid, manually operable means for also moving said armature and releasably holding it in a selected position when said solenoid is deenergized, said manual means being so constructed as to be automaticaly released and rendered inactive when said armature is acted upon by said solenoid, and a normally open switch for establishing a circuit through said solenoid arranged to be closed by said manually operable means when the latter is made to engage said armature.

1,871,072. VALVE. JOHN MILLER, Crafton, Pittsburgh, Pa. Filed Dec. 11, 1931. Serial No. 580,247. 6 Claims. (Cl. 251—47.)

1. A valve comprising in combination a body having a valve seat, a tubular cap mounted over said seat and provided at its upper end with a shoulder projecting inwardly over the top and at its lower end with an outwardly projecting flange, a retaining nut engaging said flange connected to said body, a sleeve held in fixed position in the lower end of said cap, a valve stem extending through said cap and comprising upper and lower members slidably connected within the cap, said lower member including a valve head adapted to cooperate with said seat, and an upwardly projecting shank having screw threads cooperating with threads formed in said sleeve, said upper member being provided with a spherically



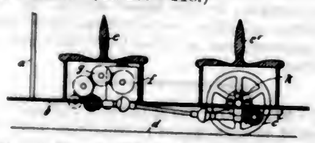
surfaced sealing flange underlying said shoulder within said cap and forming an annular space between said flange and cap, a hard substantially unyielding gasket ring disposed in said annular space, and a spring acting upon said sealing flange within said cap to urge its spherical surface into sealing contact with said gasket, fluid pressure within the cap acting to increase the sealing pressure between said gasket and flange.

1,871,073. ILLUMINATING APPARATUS FOR DISPLAY PURPOSES. ELSIE B. MONHEIM, now by marriage Elsa B. Walker, Seattle, Wash. Filed Dec. 16, 1929. Serial No. 414,375. 7 Claims. (Cl. 240—10.1.)



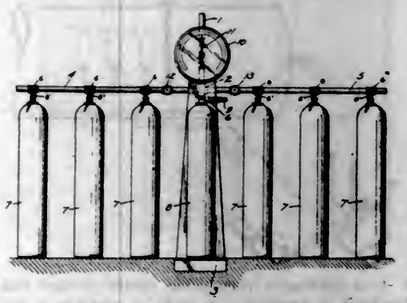
1. Advertising apparatus comprising, in combination with a display, a hood projecting beyond the face of the display, said hood providing a reflecting inner surface arranged in prismatic facets, angularly disposed, one to the other, about a substantial 180° arc, means to introduce light rays to said reflecting inner surface, and means to impart an effect of motion to said light rays across the face of the display.

1,871,074. ELECTRIC STREET-VEHICLE. LOUIS-EUGÈNE-WIDOLT MONTROSE-OSTER, Carlsbad, Czechoslovakia, assignor to Suddeutsche Eisenbahngesellschaft, Essen, Germany, a Corporation of Germany. Filed May 5, 1930, Serial No. 449,727, and in Germany May 7, 1929. 9 Claims. (Cl. 105—118.)



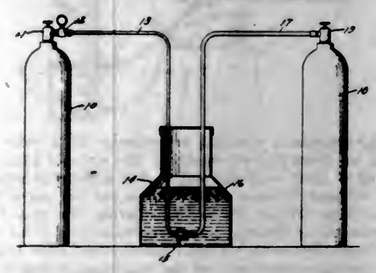
1. An electrically operated vehicle or car for passenger service, comprising wheels of normal size, and a car-body having a low floor positioned approximately at the height of one step above the surface of the street throughout the car-body.

1,871,075. APPARATUS FOR MEASURING THE CONTENTS OF GAS CONTAINERS. CHESTER MOTT and GERALD G. SPENCER, Denver, Colo., assignors, by mesne assignments, to Union Carbide and Carbon Research Laboratories, Inc., a Corporation of New York. Filed July 5, 1928. Serial No. 290,374. 3 Claims. (Cl. 265—27.)



1. An apparatus for measuring the contents of gas containers comprising: a manifold; a plurality of charging valves arranged on said manifold; a cross coupling on said manifold; a compressor pipe connected to said coupling; a charging valve connected to said coupling, said valves adapted for attachment to said gas containers; and means for weighing a detachable container connected by means of a horizontally disposed coil to the charging valve connected to said cross coupling.

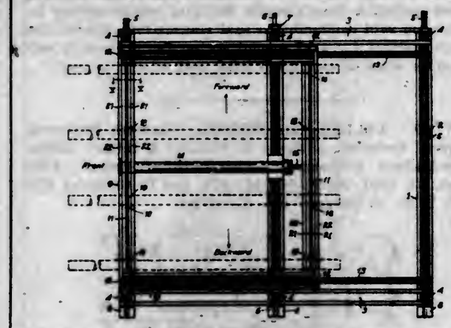
1,871,076. METHOD OF FILLING TANKS WITH COMPRESSED GAS. CHESTER MOTT, Denver, Colo., assignor, by mesne assignments, to Union Carbide and Carbon Research Laboratories, Inc., a Corporation of New York. Filed July 14, 1928. Serial No. 292,817. 2 Claims. (Cl. 62—1.)



1. A method of filling a receiver with a gas which includes the steps of: entraining in a stream of said gas particles of this gas in liquefied form; introducing the mixture into said receiver; and vaporising the liquid in said receiver to raise the pressure in said receiver.

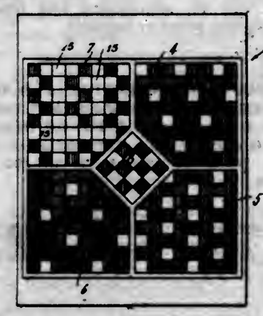
1,871,077. APPARATUS FOR SERVING TUBE FINISHING MACHINES. OLIVER M. MOWAT, Youngstown, Ohio. Filed Aug. 31, 1929. Serial No. 389,733. 5 Claims. (Cl. 10—87.)

1. In combination with a tube finishing machine, of apparatus for serving tubes to and carrying them from said machine, said apparatus comprising a movable mounted rack adapted for feeding tubes in an endwise fashion into and discharging them from said machine, said rack being provided at its opposite ends with vertically movable tube rests which engage the tubes carried upon the rack, and means for raising said rests to center the tubes in the finishing machine and for lowering them out of engagement with the tubes when such are engaged in the finishing machine to permit lateral movement of the rack and



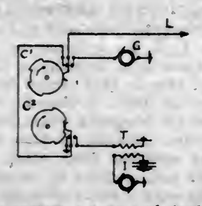
frame for reloading and unloading the rack without interrupting the continuous operation of the finishing machine.

1,871,078. COLOR MATCHING APPARATUS. BEN NASH, Short Hills, N. J., assignor to Revere Rubber Company, Providence, R. I., a Corporation of Rhode Island. Filed Sept. 26, 1930. Serial No. 484,695. 4 Claims. (Cl. 88—14.)



1. A color matching chart comprising a sheet having a plurality of sections of a uniform predominating color or color combination arranged for simultaneous inspection, said sections having transparent areas dispersed throughout the predominant color in different proportions, whereby upon the superimposition of said chart upon a background of a different color or color combination a plurality of different color effects are produced simultaneously with said predominating color or color combination.

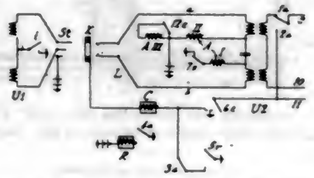
1,871,079. TELEPHONE SYSTEM. JOHN ELLIS OSTLINE, Liverpool, England, assignor to Associated Telephone and Telegraph Company, Kansas City, Mo., a Corporation of Delaware. Filed Aug. 28, 1928, Serial No. 302,613, and in Great Britain Sept. 5, 1927. 4 Claims. (Cl. 179—89.)



1. In a telephone system, a source of ringing current and a source of ringing tone, two cam-controlled interrupter springs, a conductor connected to the first of said springs.

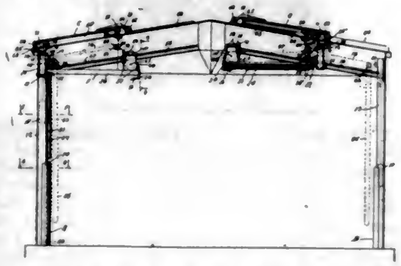
a front contact for said first spring for connecting said conductor to said ringing-current source, a back contact for said first spring for extending said conductor to said second spring, a front-contact for said second spring for connecting said conductor to said ringing-tone source, and a back contact for said second spring for grounding said conductor when disconnected from both of said sources.

1,871,080. TELEPHONE SYSTEM. ALFONS PEISSNER, Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Filed Feb. 13, 1931, Serial No. 515,478, and in Germany May 17, 1930. 9 Claims. (Cl. 179—16.)



1. In a repeater, an incoming and an outgoing line, an impulsing relay, means for transmitting digit impulses over said incoming line to control said relay, means controlled by said relay for repeating said impulses over said outgoing line, and a normally short-circuited winding on said relay for maintaining said relay energized throughout the first series of impulses.

1,871,081. DOOR CONSTRUCTION AND OPERATING MECHANISM THEREFOR. ARTHUR T. PRESCOTT, East Orange, N. J., assignor to J. Edward Ogden Company, Inc., East Orange, N. J., a Corporation of New Jersey. Filed Mar. 20, 1930. Serial No. 437,292. 4 Claims. (Cl. 20—16.)

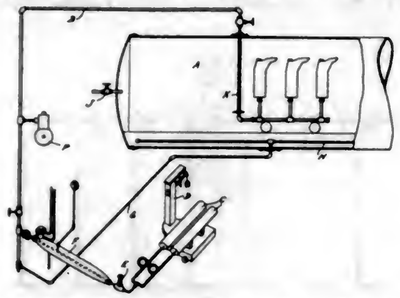


1. In combination, a structure having a door opening, a hatch cover above said opening, hatch coamings for supporting said cover, a door for closing said door opening, means for opening said door, and means for successively raising the cover free of said coamings and moving the door and cover rearwardly of the door opening.

1,871,082. BLEACHING ARTIFICIAL FATTY ACIDS. WILHELM PUNOS, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 2, 1928, Serial No. 274,673, and in Germany May 20, 1927. 3 Claims. (Cl. 87—12.)

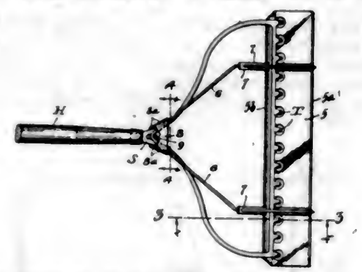
1. A process for bleaching crude substances obtained by the destructive oxidation of high molecular paraffins and containing artificial fatty acids, and obtained by oxidizing higher hydrocarbons of the paraffin series with gases containing oxygen which comprises treating the said crude substances with a solution of agents supplying oxygen while warming to at least 100° C. but not so high as to lead to a decomposition of the fatty acids.

1,871,083. VULCANIZATION OF RUBBER. CHESTER J. RANDALL, Woonsocket, R. I., assignor to The Goodyear's India Rubber Glove Mfg. Company, Naugatuck, Conn., a Corporation of Connecticut. Filed June 9, 1930. Serial No. 459,924. 6 Claims. (Cl. 18—53.)



2. In a process of vulcanizing rubber articles under a differential of pressure, the steps of creating a reduced pressure in the interior of the articles and a pressure greater than atmospheric on the exterior of the articles, releasing the reduced pressure, then introducing into the vulcanizer ammonia gas under pressure while maintaining the air pressure greater than atmospheric and vulcanizing the articles so confined.

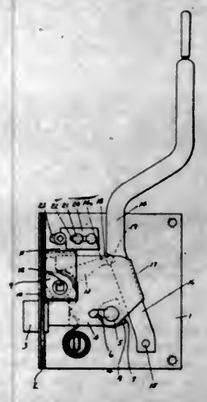
1,871,084. SELF-CLEANING RAKE ATTACHMENT. CHARLES F. REITER, Minneapolis, Minn. Filed Dec. 31, 1930. Serial No. 505,726. 2 Claims. (Cl. 55—146.)



1. An automatic cleaning attachment for a rake comprising an elongated substantially flat stripper plate constructed of sheet material and having a series of substantially circular recesses disposed adjacent the inner longitudinal edge thereof for accommodating the rake teeth, said plate being disposed in a plane extending at an angle to the rake teeth with its outer longitudinal edge disposed some distance outwardly of the rake and provided with an upturned longitudinal flange, a pair of resilient arms disposed above the rake head and having downwardly turned outer ends secured to said flange, means for securing the inner ends of said arms to the rake and a pair of downwardly extending rigid braces for securing the inner longitudinal edge of said plate to intermediate portions of said resilient arms, said braces being disposed inwardly of the rake teeth.

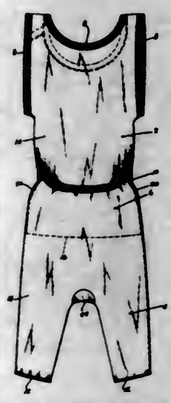
1,871,085. DOOR LATCH. HOLDEN W. RIGHTMYER, Toledo, Ohio, assignor to The American Swiss Company, Toledo, Ohio, a Corporation of Ohio. Filed June 23, 1931. Serial No. 546,295. 2 Claims. (Cl. 292—169.)

1. A door latch comprising a back plate, a tensioned latch bolt movable over said back plate, an outside operated roll back for retracting said latch bolt, a flange on the outer portion of said latch bolt, a lever pivoted at one end to said back plate and normally disposed in substantially vertical position with a portion thereof lying close to said latch bolt, said lever being engageable with said flange for retracting said latch bolt, an arm fixed to and movable with said roll back, and an abutment on



the side of said lever remote from said flange and adapted to be moved into the path of movement of said arm for blocking movement of said outside roll back.

1,871,086. UNDERGARMENT. GEORGE E. RUTLEDGE, Chicago, Ill., assignor to Vassar Swiss Underwear Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 24, 1931. Serial No. 582,993. 2 Claims. (Cl. 66—175.)

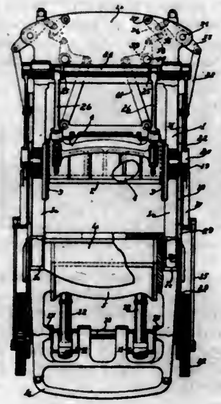


2. An undergarment comprising a body portion, a leg portion, and a drop seat formed with the leg portion and having its side edges secured to the sides of the undergarment substantially throughout their extent, said drop seat having an elastic main portion of textile fibre yarn and an integrally formed band portion of rubber yarn, said band portion being formed at the upper edge of the main portion and being relatively more elastic than the same.

1,871,087. PRODUCTION OF EFFECTS ON TEXTILES. ALWIN SCHNEEVOIGT and ALFRED NOWAK, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 6, 1929, Serial No. 376,489, and in Germany July 25, 1928. 10 Claims. (Cl. 8—5.)

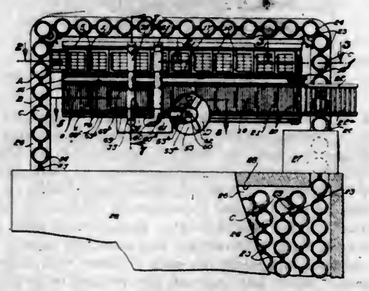
1. A process for the production of local effects on textiles which comprises applying local patterns onto a textile material with a preparation comprising a methylol compound of a urea.

1,871,088. TRIPLE ACTION POWER PRESS. ADOLPH SEIDEL and MEREDITH R. HATCH, Toledo, Ohio, assignors to The Toledo Machine & Tool Company, Toledo, Ohio, a Corporation of Ohio. Filed June 9, 1930. Serial No. 459,896. 13 Claims. (Cl. 113—38.)



1. In a power press, a frame having a bed, a blank-holder and a plunger mounted one within the other for reciprocatory movements above said bed, a lower plunger operable through the bed, a crank-shaft below the lower plunger, and separate driving connections between said shaft and each of said plungers and blank-holder to impart predetermined reciprocatory movements thereto and to cause the blank-holder and upper plunger to dwell in engagement with a blank and during the blank-shaping movement of the lower plunger.

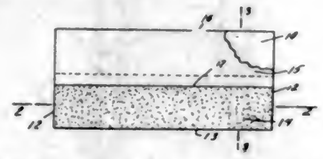
1,871,089. CONFECTION COATING APPARATUS. IRA SHAFER, San Diego, Calif. Filed Apr. 7, 1931. Serial No. 528,278. 12 Claims. (Cl. 107—1.)



4. In an apparatus of the class described, a pair of conveyor structures arranged side by side, the one conveyor structure including tray members for receiving dish-shaped confections, the other of said conveyor structures arranged to receive said confections after their being filled, a coating material pipe extending across said conveyor structures, spouts associated with said pipe for discharging its contents upon confections carried by said conveyor structures, a tilting means engageable by said tray members of said one conveyor structure as said tray members pass a given point, retainers on said tray members, for holding said confections thereon while said trays are tilted whereby excess coating material may drain from said confections a blower, and a conduit leading therefrom and extending across both of said conveyor structures, said conduit provided with discharge orifices for directing a hardening medium against said confections subsequent to the coating of said confections with said coating mate-

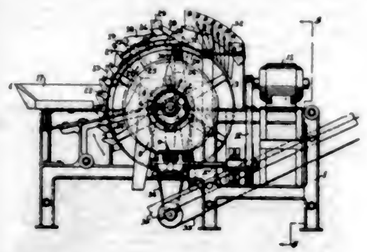
rial, the discharge orifice for said one conveyor structure being arranged over said tilting means so as to assist the action thereof by impelling excess coating material from said confections.

1,871,090. BUILDING PRODUCT. WILLIAM M. SHAKESPEARE, South Orange, N. J., assignor to Anaconda Sales Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 18, 1930. Serial No. 421,807. 26 Claims. (Cl. 154—51.)



1. A building element which comprises a plate of heat-insulating material having a multiplicity of voids within it, said plate having a portion only covered by a sealing coating, an armoring layer over said coating and covering the normally exposed area of the plate, and a layer of fibrous material on the upper surface of the plate to the rear of the armoring layer.

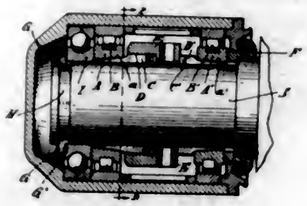
1,871,091. ARTICLE TRIMMING AND SLICING MACHINE. IRA G. SHARPE, Liberty Center, Ohio, assignor to The Kraut Machinery Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 1, 1930. Serial No. 492,628. 5 Claims. (Cl. 146—81.)



1. A machine for trimming the ends of articles comprising an endless carrier having a plurality of transversely arranged pockets to receive articles to be trimmed, means to impart containuous movement to said carrier, a pair of stationary cutters arranged respectively on opposite sides of said carrier in staggered relation, a plunger individual to and longitudinally aligned with each pocket and movable with said carrier, and means to impart transverse shifting movement to each plunger with respect to the carrier after one end of the respective article has been trimmed thereby to position the opposite end thereof properly for trimming.

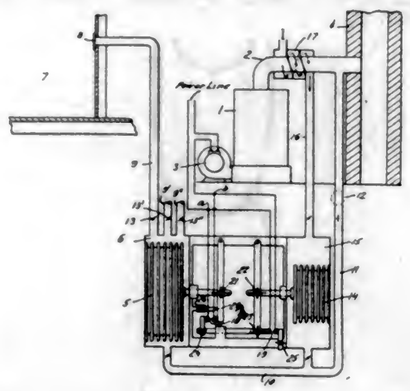
1,871,092. DEVICE FOR SECURING SLEEVES, COLLARS OR THE LIKE ON CYLINDRICAL SHAFTS. CHARLES HENRY SMITH, Wildcroft, Danbury, England, assignor to Norma-Hoffmann Bearings Corporation, Stamford, Conn., a Corporation of New York. Filed Feb. 27, 1930, Serial No. 431,774, and in Great Britain Apr. 22, 1929. 1 Claim. (Cl. 287—52.)

In combination with a shaft and spaced bearings therefor each having an inner ring provided with an axially tapering inner face, spaced sleeves arranged on the shaft between said inner bearing rings, each of said sleeves being longitudinally split throughout its length and having opposed end portions externally threaded, the remaining portion of each sleeve having its outer surface longitudinally tapered for frictional contact with the tapered inner face of one of the bearing rings, and a nut surrounding said shaft and having an internally threaded end portion to receive the threaded end of one of the sleeves, the other end of said nut having abutting bearing contact against the opposed end face of the other



sleeve whereby upon the rotation of said nut in one direction, the sleeves are forced into said bearing rings and contracted upon said shaft to lock the bearing rings solely by frictional radial pressure in fixed relation to the shaft, and said nut being adapted for interchangeable threaded engagement with the sleeves to withdraw the same from locked engagement with the bearing rings.

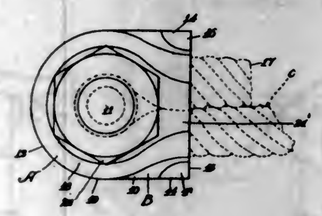
1,871,093. HEATING FURNACE CONTROL. RUSSELL W. STEM, Bethlehem, Pa. Filed Oct. 17, 1930. Serial No. 489,322. 12 Claims. (Cl. 236—9.)



1. An improved heating control for a furnace connected to a chimney which tends to induce a draft through the furnace comprising a thermostat chamber remotely situated with respect to an enclosed space to be heated, a pilot orifice opening into said space and means including a connection between said orifice and said chamber for maintaining by means of pressure differential available from the chimney a flow of air from said space through said chamber, and temperature responsive means adapted to control said furnace arranged in said chamber.

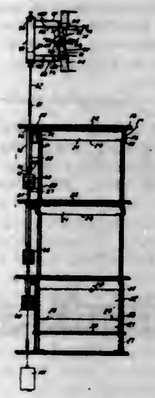
1,871,094. RIGID STUD COMPRESSION CONNECTER. JOHN E. SUMPTER, Minneapolis, Minn., and ALFRED ALSAKER, Chicago, Ill., assignors to Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 13, 1928. Serial No. 325,755. 6 Claims. (Cl. 173—259.)

1 A rigid stud compressor connecter including, a base plate, a threaded rigid stud integrally projecting from said plate, one side of said plate being squared, a pair of guide lugs projecting from the corners of said squared side, a concaved compressor plate adapted to



freely slide over said rigid stud, a nut for tightening said compressor plate, and a recess extending into said base plate and rigid stud for an equipment stud connection.

1,871,095. DOOR CLOSURE AND OPERATING MECHANISM. CHARLES C. TOMKINSON, Plainfield, N. J., assignor, by mesne assignments, to J. Edward Ogden Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 4, 1928. Serial No. 267,166. 12 Claims. (Cl. 187—52.)

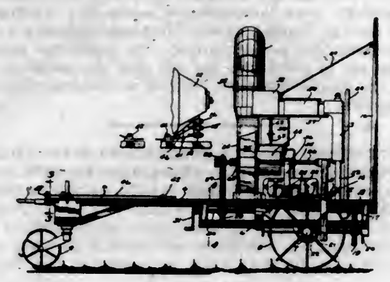


1. Door closure and operating mechanism comprising a plurality of hatchway doors movable to open and closed positions, operating and control means for said doors for controlling the opening and closing movements of doors on alternate floors, and other means for controlling the movements of the other doors.

1,871,096. APPARATUS FOR EXTINGUISHING FOREST FIRES. OSCAR TORSETH, Coeur D'Alene, Idaho. Filed June 24, 1929. Serial No. 373,353. 2 Claims. (Cl. 169—2.)

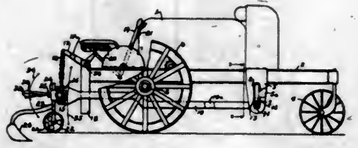
1. An apparatus of the class described comprising a portable frame, an internal combustion engine and a blower mounted on the frame, driving connections from the engine to the blower, and a hose leading from the blower, the radiator of the engine being in front of the eye of the blower.

2. An apparatus of the class described comprising a portable frame, a motor driven blower on the frame having an upstanding spout, and a hose leading from the spout, said spout being swivelled to the blower, the swivel connection of the spout and the junction of the spout



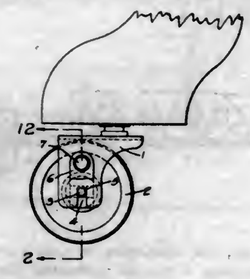
with the hose being at a sufficient elevation to clear any protruding element mounted on the apparatus when turned about the axis of the upstanding spout.

1,871,097. TRACTOR ATTACHMENT. ALFRED J. TRIGWELL, Salinas, and CARL H. TRUBSCHENCK, Oakland, Calif. Filed Feb. 3, 1931. Serial No. 513,109. 2 Claims. (Cl. 97—47.)



1. In combination, a tractor, a vertically adjustable frame pivotally mounted thereon forwardly of its rear axle and extending rearwardly thereof, said frame including a transversely disposed member adjustably journaled therein, and earth working implements mounted on said member.

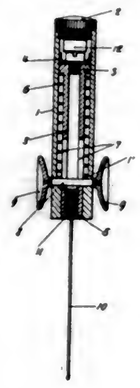
1,871,098. CASTER. CLEMENT R. UHL, Toledo, Ohio, assignor to The Toledo Metal Furniture Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 22, 1931. Serial No. 531,947. 2 Claims. (Cl. 16—30.)



1. In a caster, a fork having upwardly extending bearing notches in the lower ends of its legs, a bearing pin mounted at its ends in said notches and removable there-

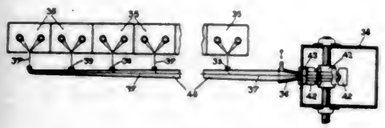
from lengthwise of the notches and transversely of the pin axis, said pin being longer than the width of the fork, a wheel rotatably mounted on the pin within the fork, and a spring-finger fixed at one end to the outer side of each fork leg and having its free end projecting downwardly over the respective notch and terminating near the end thereof, each of said fingers having an inturned shoulder portion without the assembled position of the pin to coact with the pin ends and yieldingly retain the pin in operative position at the inner ends of the notches.

1,871,099. NEEDLE-HOLDING HANDLE. MARCEL VITOUX, Troyes, France. Filed June 19, 1929, Serial No. 371,997, and in France Oct. 20, 1928. 11 Claims. (Cl. 66—1.5.)



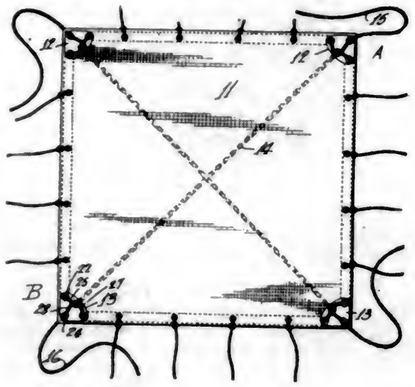
1. A holding handle for knitting needles used in repairing runs in knitted fabrics, comprising a cylinder, a needle-holding piston mounted for reciprocation in said cylinder and having grooves therein, and a spindle extending transversely through said cylinder and grooves and engageable by the ends of the latter to limit the reciprocation of said piston.

1,871,100. PROCESS AND APPARATUS FOR MANIPULATING TEXTILE MATERIALS. CHARLES DODGSON WALTON and FREDERICK TROUTON SMALL, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed May 7, 1929, Serial No. 361,090, and in Great Britain May 9, 1928. 7 Claims. (Cl. 18—8.)



7. Apparatus for conveying a continuous length of thread, comprising a condnit following the path of the thread and suction means for producing a flow of thread-conveying fluid along said conduit including a plurality of concentrically arranged tapered tubes having an annular space therebetween, said space being closed at one end and a fluid supply pipe in the outer tube.

1,871,101. FASTENER FOR TARPAULINS. JOHN WILLIAM WALTZ, Ridgefield, N. J., assignor to C. R. Daniels Inc., New York, N. Y., a Corporation of New York. Filed Dec. 21, 1931. Serial No. 582,369. 3 Claims. (Cl. 135—15.)



1. A tarpaulin attachment comprising a triangular perforated plate, grommets securing said plate to the tarpaulin and a rope laced through said grommets, the leaving end of said rope being laced under a plurality of sections of said rope between different pairs of said grommets.

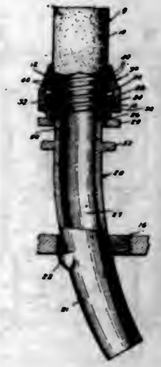
1,871,102. METHOD AND APPARATUS FOR MAKING SHEETS. RAYMOND J. WEAN, Warren, Ohio, assignor to The Wean Engineering Company, Inc., Warren, Ohio, a Corporation of Ohio. Filed Nov. 14, 1931. Serial No. 575,011. 9 Claims. (Cl. 29—18.)



9. In the method of producing sheets by rolling, the steps comprising passing the material to be rolled into and through a furnace in one direction only, discharging the material from said furnace in said one direction only, and subjecting the material to rough rolling repeatedly in a given stand of rolls, passing the rough rolled material into and through a second furnace in one direction only, discharging material from said second furnace in said one direction only, subjecting the material repeatedly in a given stand of rolls to a finish rolling operation, and mechanically handling the material during said last mentioned rolling operation.

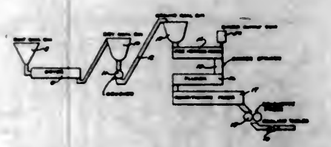
1,871,103. NOZZLE. JONATHAN NEWTON WHITE, New York, N. Y., assignor to United Metal Hose Co. Inc., New York, N. Y., a Corporation of New York. Filed Aug. 27, 1928. Serial No. 302,155. 3 Claims. (Cl. 221—100.)

1. In a nozzle for metal lined hose, a nozzle body having an elongated discharge portion, and a hose clamp engagement portion, a clamp for said hose provided with means for engaging the said clamp engagement portion on said body, and a compression member surrounding the hose and within the said clamp, said nozzle body also having a portion providing an extension for the me-



tallic lining of said hose, said portion effecting contact with said lining when the said compression and clamp members are applied.

1,871,104. PROCESS FOR MAKING BRIQUETTES. ROBERT E. WILLARD, Minneapolis, Minn., assignor, by mesne assignments, to Briquet Engineering Company, Minneapolis, Minn., a Corporation of Delaware. Filed Apr. 28, 1930. Serial No. 447,926. 1 Claim. (Cl. 44—10.)



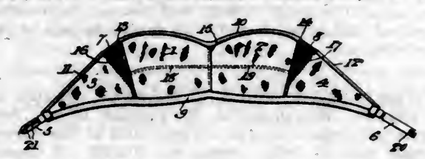
The process of making briquettes which includes heating the ground briquette material approximately to the temperature of its incipient distillation by the application of steam directly in contact therewith, agitating the same and introducing thereinto a briquette binder while maintaining substantially the temperature above indicated and while in direct contact with steam, further continuing the agitation of the briquette material and binder while subjecting the same to a spray of water to cool the same down to a proper temperature for forming briquettes, and then pressing said briquette material into the form of briquettes.

1,871,105. COATING PROCESS AND APPARATUS. CHARLES E. YATES, East Rutherford, and HARRY C. MACAN, Rutherford, N. J., assignors to Anaconda Sales Company, New York, N. Y., a Corporation of Delaware. Filed May 17, 1928. Serial No. 278,437. 8 Claims. (Cl. 41—18.)



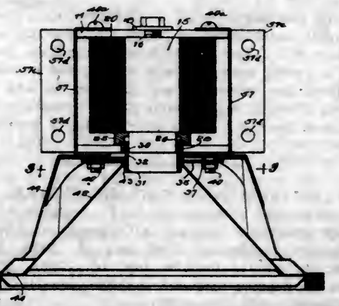
1. The process of coating metal articles which consists in passing irregularly spaced articles under an intermittent spray of a coating material forming darker areas thereon, said material having a chemical affinity for the metal article, and passing the articles under a uniform spray of a different coating material through which the darker areas are visible.

1,871,106. BRASSIÈRE. GABRIELLE M. P. YERKES, Hartsdale, N. Y., assignor to G. M. Poix, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 30, 1931. Serial No. 583,891. 3 Claims. (Cl. 2—42.)



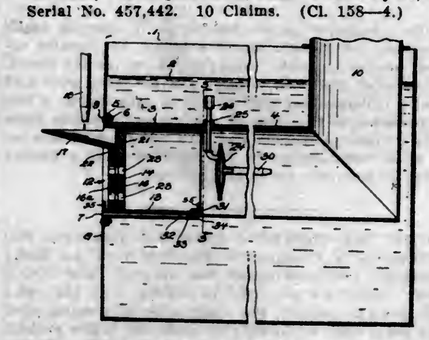
1. A brassière comprising two fulled breast portions, tapered side portions, the ends of which are spaced a material distance apart when the brassière is in use and attaching straps extending from the side portions, elastic gores of considerable depth being inserted in the top edge of the garment between the breast and side portions to maintain the brassière in place without the use of shoulder straps.

1,871,107. LOUD SPEAKER CONSTRUCTION. PAUL G. ANDRES, La Grange, and FRED W. TEMPLE, St. Charles, Ill., assignors to Temple Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 15, 1929. Serial No. 371,243. 4 Claims. (Cl. 179—115.5.)



2. A device of the kind described comprising a magnet having an annular magnetic field, frame members, a winding disposed in said annular field, a sleeve for carrying said winding, a plurality of flexible arms carrying said sleeve, a diaphragm operatively connected to said sleeve, means for supporting said diaphragm, and common means for securing said frame members, said flexible arms and said supporting means to said magnet.

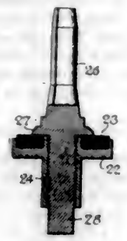
1,871,108. OIL BURNING MECHANISM. CHARLEY BUANETT, Washington C. H., Ohio. Filed May 29, 1930. Serial No. 457,442. 10 Claims. (Cl. 158—4.)



1. In oil burning mechanism, a horizontally disposed combustion flue, an upright draft flue communicating

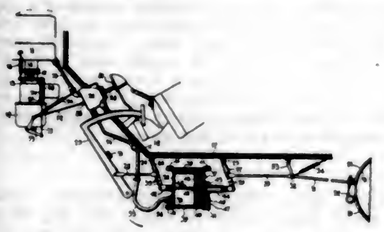
with the discharge end of the combustion flue, a removable vaporizing unit situated in the inlet end of the combustion flue, said unit being formed with a perforated wall having a perforated pad of a refractory and adsorptive material mounted thereon, and means for delivering regulated quantities of oil to the padded surface of the vaporizing unit.

1,871,109. VALVE FOR AIR BRAKES. CHARLES A. CAMPBELL, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Aug. 25, 1928. Serial No. 302,057. 3 Claims. (Cl. 303—1.)



1. An emergency valve for use in triple valves, comprising in combination, a valve body having a recess in one face and a tubular pilot extending from the opposite face; a gasket seated in said recess; and a stem projecting from the recessed face threaded in and extending entirely through said tubular pilot to reinforce the same, said stem having a flange overhanging a portion of said gasket.

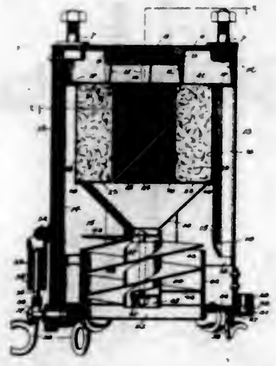
1,871,110. AUTOMOTIVE BRAKE SYSTEM. CHARLES A. CAMPBELL, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Original application filed Aug. 8, 1928, Serial No. 298,229, and in Canada Jan. 16, 1929. Divided and this application filed Oct. 9, 1930. Serial No. 487,615. 7 Claims. (Cl. 188—152.)



5. In a combined power and manually operable brake mechanism, the combination of a brake; an operator actuated member; a brake valve; a pair of pivoted levers, one connected with said member and the other with said brake; a cylinder connected to one of said levers; a piston connected to the other of said levers; a piston guide wholly within the cylinder and with which said piston coacts while reciprocating in said cylinder; and a flexible packing between the piston and cylinder.

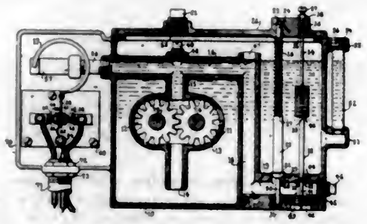
1,871,111. AIR CLEANER. CHARLES A. CAMPBELL, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Oct. 9, 1930. Serial No. 487,616. 13 Claims. (Cl. 183—48.)

10. In an air cleaner, the combination of a casing open at its lower end; a plurality of blade-like baffles projecting inward part way from said casing; a filtering unit insertible and removable into and from the space within said baffles through the open lower end of said casing, said unit being frictionally gripped by said baffles and including a foraminous shell, and a porous filling within



said shell; and a removable closure for the lower end of said casing, said closure having means for positively retaining said filter unit in position.

1,871,112. MOTOR CONTROL SYSTEM. CHARLES E. CARPENTER, Hopewell Junction, N. Y. Filed Aug. 11, 1924, Serial No. 731,282. Renewed July 25, 1931. 24 Claims. (Cl. 172—289.)



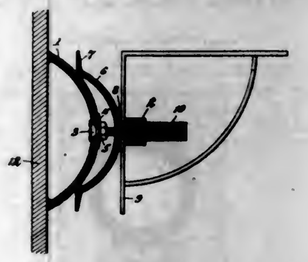
1. In a control system, in combination, an electric motor, a positive displacement pump driven thereby, a conduit to receive a stream of liquid impelled by said pump, a normally open check valve controlling the escape of liquid from said conduit, said valve being adapted to automatically close upon the development of a predetermined pressure in said conduit to thereby effect a sudden large increase in pressure of said liquid, and the pressure operated switch responsive to said increase in pressure for commutating the circuit of said motor.

11. An electric motor controller comprising a fluid pump producing a fluid pressure in accordance with the motor speed, means to cause the motor to have a reversed torque in being stopped, and means operated by said fluid pressure to cause the aforesaid means to maintain said reverse torque until the motor stops.

1,871,113. CUP, ADHERENT THROUGH MECHANICAL PRESSURE. OTTO LUIS COMPTER and JULIO MÉNARD, Buenos Aires, Argentina. Filed Jan. 20, 1931. Serial No. 510,040. 1 Claim. (Cl. 248—30.)

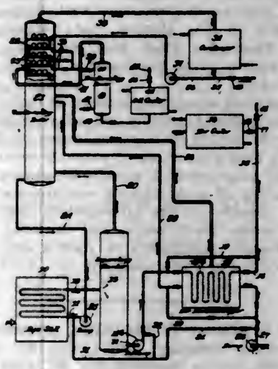
A suction cup, comprising a semispherical elastic member adapted to contact with a smooth surface, a semispherical metallic member positioned on the exterior surface of the elastic member and having a rim adapted to press against the elastic member, a threaded screw passing through the elastic member and the metallic member and having its head fixed to the elastic member by means

of an air-tight joint, and means cooperating with the screw for varying the contact between the metallic member and the elastic member to control the suction within the elastic member when the latter is in contact



with the smooth surface, said contact varying means being provided with an exteriorly threaded portion of reduced size and means associated with said exteriorly threaded portion for securing articles thereon.

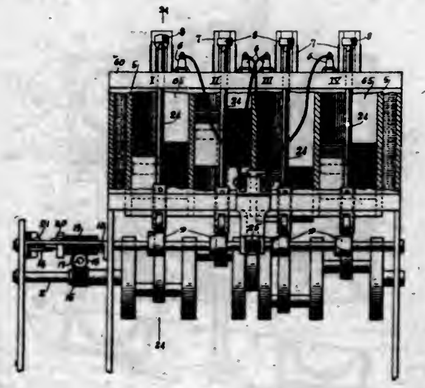
1,871,114. DISTILLATION OF HYDROCARBON OILS. THOMAS S. COOKE, New York, N. Y., and OSWALD C. BREWSTER, Casper, Wyo., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed July 14, 1928. Serial No. 292,661. 14 Claims. (Cl. 196—82.)



10. An apparatus for distilling hydrocarbon oils which comprises a preheater, a conduit for supplying oil to be distilled thereto, a fractionating tower, a vapor pipe leading from said preheater to said tower, a conduit for supplying unvaporized oil from said preheater to said tower, a pipe still, means for conveying oil from the base of said tower into said pipe still, a separating chamber into which said pipe still feeds, a conduit for conveying vapors from said chamber to the base of the fractionating tower and a conduit for conveying residue from said chamber to the preheater.

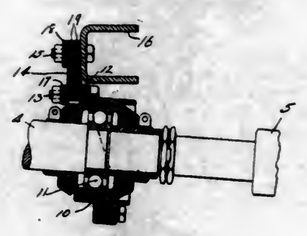
13. The method of distilling hydrocarbon oils which comprises passing said oil downwardly through a fractionating column, withdrawing said oil from said column and passing it through a heating zone in a confined stream, heating the oil therein to vaporize a part thereof, passing the vapors to said column and causing them to ascend said column countercurrent to said oil whereby the lighter fractions of said oil are vaporized, subjecting the combined vapors to a fractionation operation, withdrawing resulting condensate from said fractionating operation and subjecting it to a stripping operation, returning the resulting stripped vapors to said fractionation operation, and passing the fractionated vapors from said fractionation operation to a condensing operation.

1,871,115. METHOD OF OPERATING INTERNAL COMBUSTION ENGINES. SAMUEL P. COWARDIN and HARRY A. COWARDIN, Richmond, Va. Original application filed July 14, 1924, Serial No. 725,931. Divided and this application filed Dec. 15, 1926. Serial No. 154,927. 3 Claims. (Cl. 123—33.)



1. In a multi-cylinder fuel injection internal combustion engine embodying ignition means, independent timing means therefor, injection means, means for varying the amount of injection, and means for varying simultaneously the time of injection and the time of ignition; the method of starting the engine comprising the following steps, to wit: setting the independent ignition timing means to cause ignition during injection; setting the amount varying means to no injection; moving the simultaneous timing control to full retard; adjusting the amount varying means to provide some injection, and gradually advancing the simultaneous timing control until injection and ignition occur.

1,871,116. SHAFT MOUNTING. LLOYD A. CUMMINGS, Jamestown, N. Y., assignor to Marlin-Rockwell Corporation, Jamestown, N. Y. Filed Nov. 21, 1928. Serial No. 320,920. 2 Claims. (Cl. 64—89.)

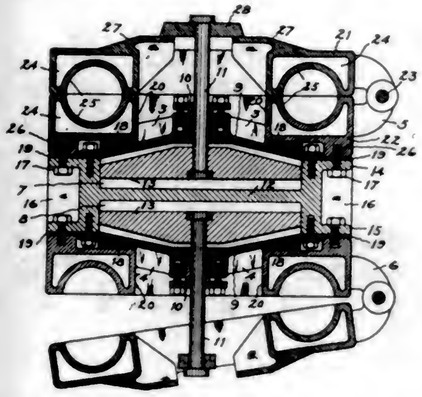


1. A device for mounting the drive shaft of a motor vehicle, between the universal joints thereof, from the vehicle frame, which comprises a bearing rotatably mounting the shaft closely adjacent a universal joint thereof, and a relatively short and wide plate of flexible, resilient material with laminations of fabric incorporated therein connected at one end to said bearing and at its other end to said frame.

1,871,117. CATALYST FOR VAPOR PHASE OXIDATION OF ORGANIC COMPOUNDS. ALLAN R. DAY, Ardmore, Pa. Filed Nov. 10, 1930. Serial No. 494,800. 11 Claims. (Cl. 23—234.)

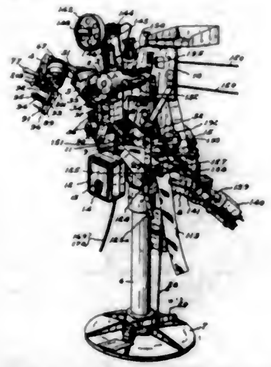
1. A catalyst comprising metallic silver with the addition of a small amount of a rare earth oxide.

1,871,118. WATCHCASE HEATER. HAROLD A. DENMIRE, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 7, 1927. Serial No. 173,300. 2 Claims. (Cl. 18—17.)



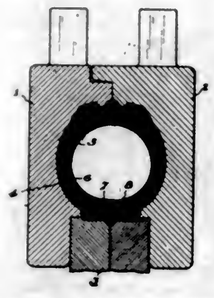
1. A watch case heater comprising a base having a hydraulic cylinder therein with opposed pistons mounted therein and piston rods extending through the cylinder heads, and assembled mold units composed of separable sections and removably mounted on said base, and means carried by the piston rods and engageable with the outer of the mold sections to close the mold.

1,871,119. FABRIC MEASURING AND CUTTING DEVICE FOR BEAD FLIPPER MACHINES. HAROLD A. DENMIRE, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 11, 1929. Serial No. 339,022. 8 Claims. (Cl. 164—42.)



1. In an apparatus for forming bead flippers, the combination with means for feeding a flipper strip to a rotatable bead core, of a measuring device engageable with said rotatable bead core adjacent to said feeding means and a cutting device controlled by said measuring device to automatically cut said flipper strip to a predetermined length.

1,871,120. APPARATUS FOR AND METHOD OF VULCANIZING TIRE CASINGS AND INNER TUBES. HAROLD A. DENMIRE, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 30, 1927. Serial No. 187,712. 5 Claims. (Cl. 18—45.)

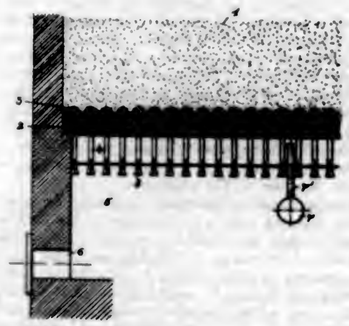


4. An air bag of the character described comprising an endless body portion of annular form having its side wall separated by an endless split therein for the insertion within the bag of an inflatable member, and a plurality of cooperating fasteners carried by the engaging portions of said endless split for holding the edges of the split together during handling of the bag.

1,871,121. SEPARATION OF PARTICLES OF DIFFERENT DENSITIES BY MEANS OF LIQUIDS. COLIN WILLIAM HIGHAM HOLMES, Low Fell, England, assignor of one-half to The Birtley Iron Company, Limited, Birtley, England. Filed Mar. 6, 1930, Serial No. 433,812, and in Great Britain Mar. 8, 1929. 2 Claims. (Cl. 209—173.)

1. A process of separating a material having solid constituents of different specific gravities; comprising water-proofing by means of oily substances of the material containing a high proportion of valuable constituents and being highly adsorptive of water and aqueous saline solutions, floating off said valuable constituents on a saline solution of specific gravity intermediate that of the valuable and waste constituents, and draining the water-proofed valuable constituents to yield a dry concentrate free from water and saline solution.

1,871,122. FILTER FOR LIQUIDS. ALFRED KRETZSCHMAR, Breslau, Germany. Filed Nov. 30, 1931, Serial No. 578,070, and in Germany Dec. 27, 1928. 2 Claims. (Cl. 210—130.)



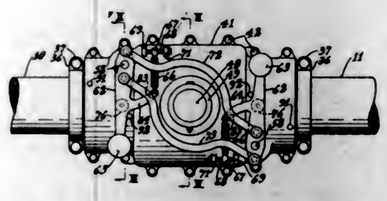
2. A filter, comprising a filtering bed having a supporting base, a chamber below the base provided with means for introducing water and air under pressure therein, and conduits extending within the bed for delivering flushing water and air therethrough, said conduits passing through the base and into the chamber and being apertured adjacent their lower ends over a portion thereof extending from points respectively above and below the highest and lowest level of the water occurring during the flushing operation.

1,871,123. SURFACING PROCESS AND APPARATUS FOR SAME. MAX A. LAABS, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Dec. 27, 1927, Serial No. 242,637. Renewed June 15, 1932. 8 Claims. (Cl. 51—55.)



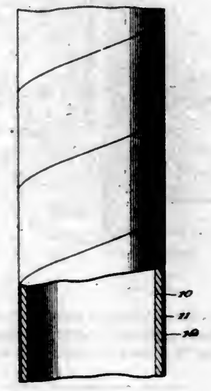
1. In an apparatus for surfacing a sectional portion of an ophthalmic lens blank said portion having an edge contour a portion of which departs from a full circle, means for supporting the blank, a guide over the blank having a portion shaped to the departure portion of the contour of the section to be surfaced, a tool having a portion engaging the shaped portion of the guide, means for rotating the tool, and means for moving the tool along the shaped portion of the guide.

1,871,124. VARIABLE PITCH PROPELLER. JOHN P. LANDRUM, Birmingham, Ala., assignor of one-half to Perry R. McCormack, Birmingham, Ala. Filed Oct. 21, 1929, Serial No. 401,212. Renewed May 20, 1932. 19 Claims. (Cl. 170—162.)



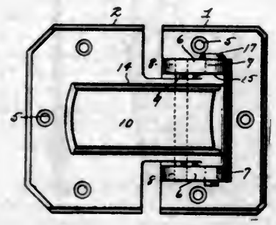
1. In an airplane propeller, a propeller shaft, a housing rotatable with the shaft, a pair of blade supporting sleeves rotatable within the housing, thrust bearing means between the sleeves and the housing, a pair of blades securely mounted in the sleeves, a worm for rotating each of the sleeves in the housing to vary the pitch of the blades, a spring biased weight arm fixedly secured to each of the worms and effective in response to angular velocity of the propeller to rotate said worms, and means for effecting operation of said weight arms in unison.

1,871,125. PROTECTIVE MEANS FOR BURIED METALLIC SURFACES. STANTON U. MCGARY, WALTER F. ROGERS, and STANLEY GILL, Houston, Tex., assignors to Gulf Production Company, Houston, Tex., a Corporation of Texas. Filed Oct. 11, 1929. Serial No. 399,079. 4 Claims. (Cl. 137—75.)



1. A soil stress and corrosion-resistant covering for burned metallic pipe comprising a continuous corrosion-resistant coating covering the pipe surface, and an armor jacket for protecting said coating from mechanical injury by the soil comprising a helical wrapping of metallic ribbon of foil thickness.

1,871,126. HINGE. LOUIS W. MORLEY, Trenton, N. J., assignor to C. V. Hill & Co., Inc., Trenton, N. J., a Corporation of New Jersey. Filed Mar. 16, 1932. Serial No. 599,257. 8 Claims. (Cl. 16—191.)

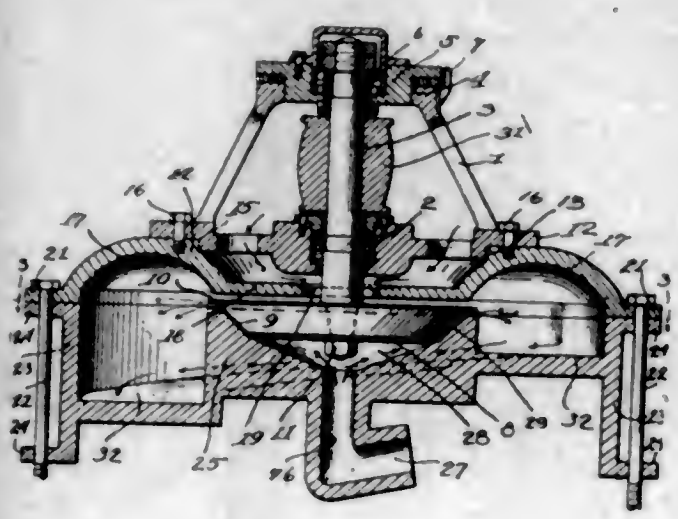


1. A hinge comprising a pair of leaves, one leaf having a pair of knuckle flanges extending forwardly therefrom in spaced relation and a stop pin carried by said flanges, and the other leaf having at one end thereof a tongue bent rearwardly substantially at right angles thereto and provided with lateral knuckles extending between and pivoted to the said knuckle flanges and having a stop flange for engagement with the said stop pin at the limit of swinging movement of the second-named leaf.

1,871,127. DISINTEGRATING MILL. SAMUEL K. NESTER, Geneva, N. Y., assignor, by mesne assignments, to Frederick John, Edwin China, and Burt, Boulton & Haywood, Limited, London, England. Filed Sept. 29, 1924, Serial No. 740,650. Renewed Aug. 8, 1930. 25 Claims. (Cl. 83—13.)

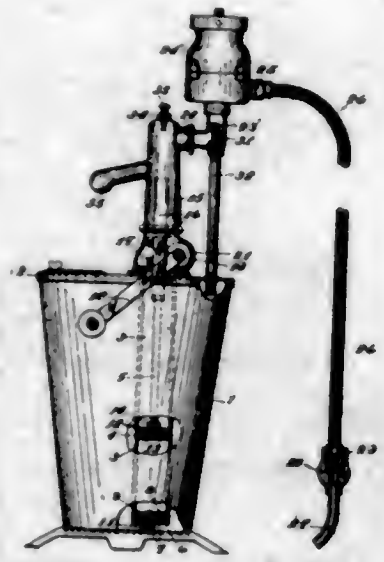
1. An apparatus for the disintegration of particles, liquid or solid, suspended in a liquid, comprising closely

adjacent working surfaces, means to introduce material between the working surfaces, an output chamber hav-



ing outlet therein, sidewalls for said output chamber, and a baffle plate adjacent such outlet positioned to direct the treated material through the outlet.

1,871,128. PUMPING APPARATUS. WALTER H. PARKER, Pittsburgh, Pa., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 21, 1931. Serial No. 582,399. 4 Claims. (Cl. 221—95.)



1. A dispensing and measuring apparatus for viscous substances, such as grease, comprising a container for the grease, a pump, a meter, a discharge line, and a discharge nozzle mounted upon said container and connected together so that upon actuation of said pump grease will flow from said container through said meter discharge line and nozzle in succession, a valve adjacent said nozzle mounted to move in a direction opposite to the direction of flow of grease therethrough, spring means to automatically seat said valve and prevent flow of grease from said nozzle when said pump is not in operation and to impose a resistance to the free flow grease through the meter and nozzle upon actuation of said pump, and a bypass having its outlet opening into said container above the level of grease therein and its inlet between said pump and meter, the resistance of said spring means causing air entrained in the stream of grease to be returned to said container above the level of grease therein without entering said meter.

1,871,129. AUTOMATIC COLLAPSING WHEEL ELEVATING DEVICE. MAURICE C. PIERCE, Madison, Wis. Filed June 21, 1927. Serial No. 200,386. 7 Claims. (Cl. 254—88.)



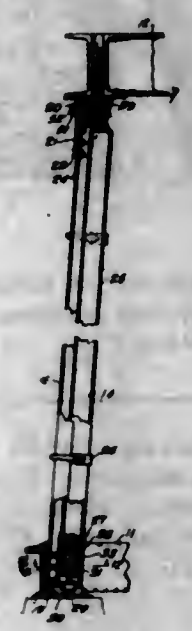
1. In a device for the purpose set forth, two channeled members having their ends pivotally connected, one designed to be arranged horizontally and the other at an angle, the lower end of the angle member being cut diagonally and having pivotally secured thereto and extending therebeyond a base plate, a friction surface on the under face of the base plate, a support pivoted to the under face of the horizontal member and having its ends cut angularly to underlie both the horizontal and the angle members and having its lower end widened and formed with a sharpened extension, a second angularly disposed support pivoted beneath the outer end of the horizontal member and having its outer end widened and sharpened and removable tension bars between the supports and the angle channel member, for the purpose set forth.

1,871,130. DOUBLE LEG CONSTRUCTION FOR DERRICKS WITH EQUALIZING MEANS. LESLIE A. RAWSON, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Apr. 19, 1930. Serial No. 445,631. 18 Claims. (Cl. 189—13.)



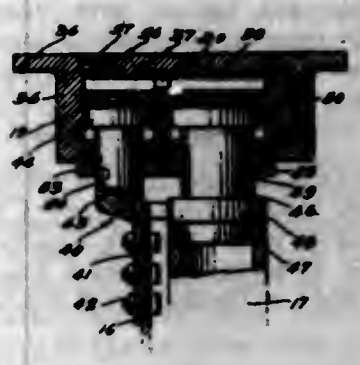
3. In a derrick of the class described the combination of: a crown structure; leg means including a plurality of legs whereby said crown structure is supported; and load distributing means operative to automatically proportion the load on said legs upon the application of the load on said crown structure.

1,871,131. DOUBLE LEG CONSTRUCTION FOR DERRICKS. LESLIE A. RAWSON, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Apr. 23, 1930. Serial No. 446,555. 16 Claims. (Cl. 189—13.)



1. A derrick including: an inner leg; an outer leg; proportioning means for automatically proportioning the load between them; and stop means for holding said proportioning means in a certain position.

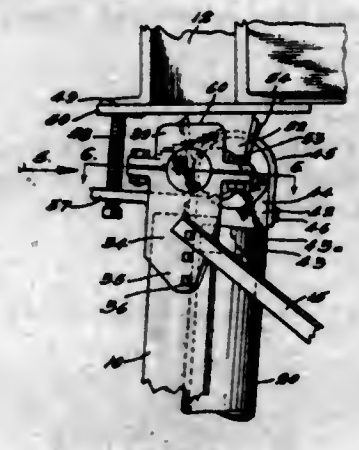
1,871,132. DERRICK HAVING FLUID LOAD-EQUALIZING MEANS. LESLIE A. RAWSON, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 23, 1931. Serial No. 510,698. 11 Claims. (Cl. 189—13.)



5. In an oil well derrick having a primary leg, a secondary leg, and a thrust receiving member, and in combination therewith: a body of fluid; and means for confining said fluid under pressure in such a manner that said fluid transmits the thrust of said legs to said member.

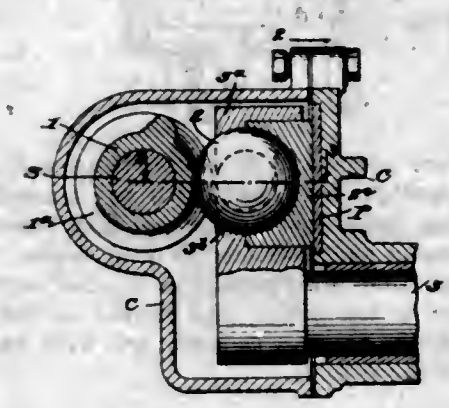
1,871,133. ECCENTRIC EQUALIZER FOR DERRICKS. LESLIE A. RAWSON, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Jan. 23, 1931. Serial No. 510,699. 4 Claims. (Cl. 189—13.)

1. In a derrick having a crown structure, a base structure, and a double leg construction, the combination of: an equalizing means including an eccentric equalizer having a central eccentric, intermediate fulcrums adapted



to engage one of said structures, and outer eccentrics, said eccentrics engaging the legs of said double leg construction.

1,871,134. CAM AND LEVER STEERING GEAR. DAVID E. ROSS, Lafayette, Ind. Filed Oct. 15, 1928. Serial No. 312,616. 10 Claims. (Cl. 74—79.)



1. In a steering gear; a rotatable actuating member provided with a projecting helical rib, a rocker arm beside the actuating member, and a member having a groove engaging said rib and pivotally mounted on the rocker arm so that it can automatically adjust itself relative to the arm and the actuating member and maintain accurate engagement with the rib in all operative positions of the rocker arm.

1,871,135. ANTIRACHITIC PRODUCT AND PROCESS. HARRY STEENBOCK, Madison, Wis., assignor to Wisconsin Alumni Research Foundation, a Corporation of Wisconsin. Filed Dec. 27, 1926. Serial No. 157,429. 4 Claims. (Cl. 99—11.)

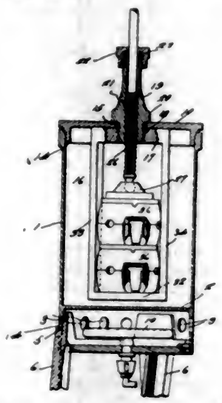
1. The process of preparing antirachitic food substances which comprises: subjecting cereals, solid cereal products, etc. to the action of ultra violet rays, such as emanate from a quartz mercury vapor lamp, for a period sufficient to effect antirachitic activation but so limited as to avoid subsequent substantial injury to the antirachitic principle and/or palatability.

1,871,136. ANTIRACHITIC PRODUCT ESSENCE AND PROCESS. HARRY STEENBOCK, Madison, Wis., assignor to Wisconsin Alumni Research Foundation, a Corporation of Wisconsin. Filed Dec. 27, 1926. Serial No. 157,430. 9 Claims. (Cl. 99—11.)

1. The process of producing a concentrated antirachitically activated substance from substances rich in unsaponifiable lipoids, which comprises separation and irradiation of said unsaponifiable lipoids, such irradia-

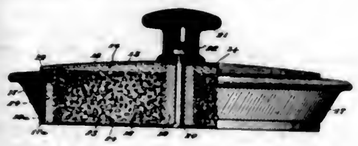
tion being effected by subjecting the lipoids, before or after separation, to the action of ultra violet rays, such as emanate from a quartz mercury vapor lamp for a period sufficient to effect antirachitic activation, but so limited as to avoid subsequent substantial injury of the antirachitic principle.

1,871,137. DENTURE PRESS. BIRGER UNDERDAHL, Portland, Oreg. Filed Aug. 17, 1928. Serial No. 300,325. 4 Claims. (Cl. 18—7.)



1. In a denture press, and in combination, a flask frame having spaced upright bars, one with an inwardly directed lip extending from one of its upright edges, and a flask for removable arrangement in said frame, the flask concaved at one side for opposition to and reception of one upright bar of the frame and convex at its opposite side for opposition to and cooperation with the lip on the other bar of the frame.

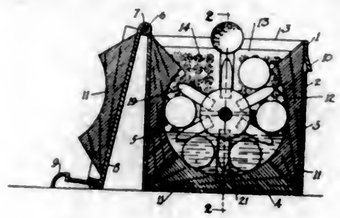
1,871,138. INSULATED LID OR COVER. HUGH H. WARD, Jr., Chester, Pa. Filed July 21, 1931. Serial No. 552,254. 4 Claims. (Cl. 220—24.)



1. A lid or cover comprising a top plate having an integral peripheral loop, a reinforcing steel plate the peripheral part of which extends into said loop to attach said plates together, said loop having a downward extension provided at its bottom with lugs a peripheral packing ring or gasket having at its top an inwardly extending lip fitting against said downward extension and engaged by said lugs, when they are turned outward and engaged with said lip.

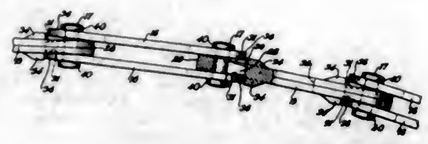
1,871,139. GOLF BALL WASHING MACHINE. STARLING S. WILCOX, Jr., and HARVEY R. GREINER, Columbus, Ohio. Filed Oct. 4, 1929. Serial No. 397,237. 1 Claim. (Cl. 15—21.)

A golf ball cleaning machine comprising a casing including a removable closure, a partition wall positioned within said casing and formed, when said closure occupies a casing closing position, to provide a substantially circular opening, brushes carried by the walls of said casing and projecting toward said opening, a rotatable carrier positioned within said opening and provided with radially extending fingers between which golf balls are adapted to be positioned, and means admitting of manual



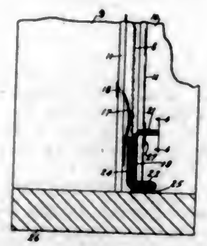
rotation of said carrier to bring the golf balls carried thereby into frictional rubbing engagement with the bristles of said brushes.

1,871,140. CONVEYER CHAIN. GEORGE E. WILLIAMS, Alliance, Ohio, assignor to Transue and Williams Steel Forging Corporation, Alliance, Ohio, a Corporation of Delaware. Filed May 28, 1930. Serial No. 456,422. 4 Claims. (Cl. 74—32.)



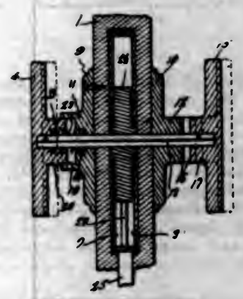
1. Conveyer chain construction including outer link members provided with bearing openings in their end portions, inner link members provided with bearing openings in their end portions, headed pins freely and detachably rotatably mounted in said bearing openings for connecting adjacent links together, cut-out portions provided in the surfaces of some of the link members partially surrounding the bearing openings and adapted to receive the ends of adjacent link members when the chain is in a curved position, and stop means on certain of the link members between and aligned with their bearing openings preventing relative longitudinal movement between the link members when the chain is in a linear or a curved position.

1,871,141. ROLL-SCREEN HOLDING DEVICE. WILLIAM J. BAKER, Newport, and HARRY A. KONEN, Clifton, Ky., assignors to W. J. Baker Company, Newport, Ky., a Corporation of Kentucky. Filed Jan. 21, 1930. Serial No. 422,326. 4 Claims. (Cl. 156—59.)



1. In combination, an upwardly-urged screen and a guideway therefor, a strip attached to the bottom edge of the screen and having an end extending into the guideway, a lateral projection on said end of the strip and adapted to preclude withdrawal of the positioned strip from its guideway, a spring in the guideway adjacent the lower end thereof and normally urging said lateral projection against a wall of the guideway, and abutment means disposed in the guideway adjacent the spring and movable to adjusted position relative to the end of the guideway, said abutment means being adapted to prevent movement of the spring-urged strip end past the abutment until the application of pressure upon the strip overcomes the action of said spring.

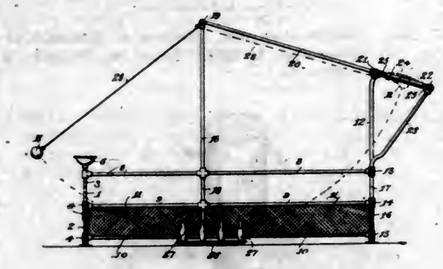
1,871,142. DOORSTOP. DANTE BIANCHI and HARRY DE VRIEZE, Hawthorne, N. J. Filed Sept. 10, 1931. Serial No. 562,152. 1 Claim. (Cl. 292—182.)



A door stop comprising a housing mounted in the door, a cylinder mounted in the lower end portion of the door, said cylinder being open at its lower end, said lower end being substantially flush with the bottom of the door, an elongated tubular housing mounted vertically in the door and extending between the cylinder and the first named housing, a floor engaging member operatively mounted in the cylinder, a plunger rod connected to the member and extending slidably through the tubular housing into the first-named housing, plates fixed on the faces of the door and including integral, outwardly projecting hub portions, a shaft extending rotatably and slidably through the hub portions of the plates, through the door and through the first named housing, said shaft projecting outwardly beyond the hub portions of the plates, knobs fixed on the projecting end portions of the shaft, a cam plined on the shaft for rotation therewith in the housing and engageable with the plunger rod for actuating same in one direction to engage the member with the floor, and means for securing the shaft against rotation, said means including co-acting teeth on one of the hub portions and the adjacent knob, and a coil spring encircling the shaft and engaged with the other knob for yieldingly urging said shaft in a direction to engage the co-acting teeth, a collar fixed on an intermediate portion of the plunger rod, and a coil spring encircling said plunger rod and having one end in engagement with the cylinder and its other end engaged with the collar for yieldingly urging the plunger rod in the opposite direction.

1,871,143. GAME APPARATUS. GUY L. BONHAM, West Hartford, Conn. Filed June 27, 1930. Serial No. 464,396. 1 Claim. (Cl. 273—40.)

Game apparatus including game pieces, a structure extending thereover, a ball suspended from said structure and adapted to be swung relative thereto so as to strike the game pieces on the return movement of the ball toward the player, and a resilient back stop in the path of the ball, and inclined downwardly away from the player, said back stop including a flexible strip adapted to be engaged by the ball when reaching one limit of



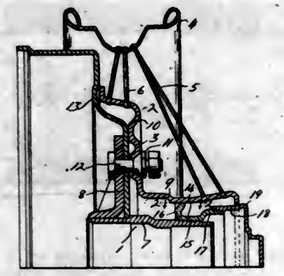
its movement, and yielding means for holding the strip normally taut, and expediting the return of the ball in the direction of the game pieces.

1,871,144. VEHICLE WHEEL. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed July 18, 1927. Serial No. 206,755. 4 Claims. (Cl. 301—13.)



1. In a vehicle wheel, the combination with a wheel body member, of a pair of demountable felloes having radially inner and outer portions with the radially inner portions inter-engaging and the radially outer portions spaced from each other, and means extending radially through said radially inner portions for detachably securing said felloes to said wheel body member.

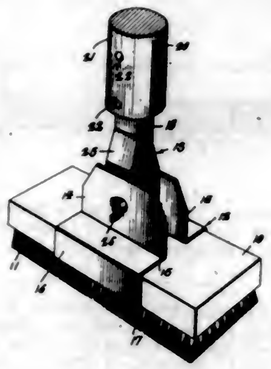
1,871,145. VEHICLE WHEEL. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Dec. 12, 1927. Serial No. 239,565. 3 Claims. (Cl. 301—9.)



1. In a vehicle wheel, the combination with a hub having a barrel, of a hub shell having a barrel spaced

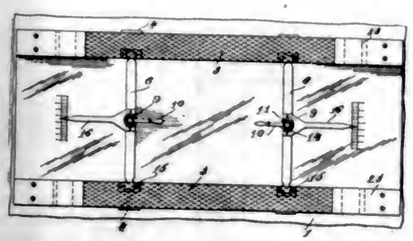
from said hub barrel, and a sheet metal spacer threadedly engaging said hub barrel and provided with an outwardly extending corrugated flange abutting said hub shell barrel to form an extended bearing therefor.

1,871,146. BRUSH HANDLE. GEORGE A. BOSLER, Chicago, Ill. Filed Dec. 5, 1931. Serial No. 579,310. 1 Claim. (Cl. 306—16.)



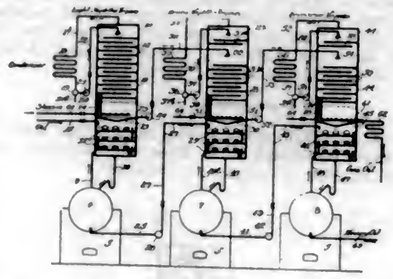
A handle attachment for a brush comprising a clamp including a pair of plates having angularly bent portions conforming with and embracing the sides of a brush back and upwardly extending portions, a stem comprising a pair of flexible plates secured together at one end, said secured ends being adapted to be secured to a handle stick, the other ends of said plates being spaced apart and disposed between the upwardly extending portions of the clamp plates, and a clamping bolt disposed through said upwardly extending plate portions and the spaced ends of said stem for holding said portions and ends in frictional engagement and the clamp engaged with the brush back, and for permitting angular adjustment of the clamp with respect to the stem.

1,871,147. MEANS FOR TESTING BRAKES. GRAHAM W. BROGAN, Towson, Mr.; S. Duncan Black and The Safe Deposit and Trust Company of Baltimore, executors of said Graham W. Brogan, deceased, assignors to William W. Varney, Baltimore, Md. Filed Dec. 19, 1927. Serial No. 241,148. 6 Claims. (Cl. 73—51.)



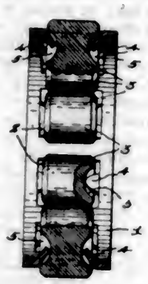
1. A brake testing device consisting of, a plurality of relatively movable surface plates over which the wheels of a vehicle the brakes of which are to be tested are respectively driven, means mutually controlling said plates whereby the relative movement of said plates must be in opposite directions.

1,871,148. ART OF DISTILLATION OF HYDROCARBON OILS. OSWALD C. BREWSTER, Casper, Wyo., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed June 8, 1925. Serial No. 35,640. 10 Claims. (Cl. 196—72.)



6. The method of distilling hydrocarbon oils comprising heating a body of oil, continuously supplying oil thereto, passing the vapors from said body of oil into a fractionating tower, collecting reflux at an intermediate point in said tower, returning reflux formed below said point of reflux collection to the heated body of oil, withdrawing residual oil from said heated body of oil, forming a second body of oil therefrom, heating said second body of oil, conducting the vapors evolved therefrom into a fractionating tower, and introducing the reflux collected in the first tower into the upper portion of the second tower.

1,871,149. ROLLER BEARING CONSTRUCTION. CHARLES S. BROWN, Syracuse, N. Y. Filed Apr. 23, 1930. Serial No. 446,674. 1 Claim. (Cl. 308—217.)

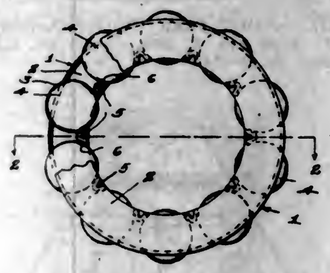


A roller bearing construction comprising a cage, and an annular series of rollers held in the cage, the cage comprising a cylindrical band having roller receiving slots, and having lugs at the ends of the slots extending inwardly toward the axis of the bearing the lugs being inclined out of the cylinder of the band and also out of planes radial to the axis of the band, and coacting with the ends of the rollers to hold the rollers from displacement, the cage being open at its ends between the lugs, all whereby the cage consists of the cylindrical band, and spaced apart inwardly converging extending lugs at the end of the roller receiving slots.

1,871,150. ROLLER BEARING. CHARLES S. BROWN, Syracuse, N. Y. Filed June 2, 1930. Serial No. 458,961. 6 Claims. (Cl. 308—217.)

1. A roller bearing construction including a cage having a peripheral wall formed with roller receiving slots and end walls extending inwardly from the peripheral

wall, rollers mounted in the slots and between the end walls; and corrugations formed in the end walls and between the rollers, the depth of said corrugations increasing toward the axis of the bearing so that each corrugation overlaps the edge of a roller to hold said roller against displacement.

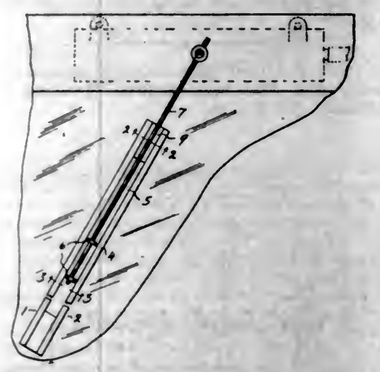


1,871,151. PRODUCT RELATING TO SMOKING SUBSTANCES AND MEANS FOR MAKING THE SAME. JOHN L. BROWN, Catonsville, Md., assignor of one-half to William W. Varney, Baltimore, Md. Filed May 17, 1929. Serial No. 363,868. 6 Claims. (Cl. 131—60.)



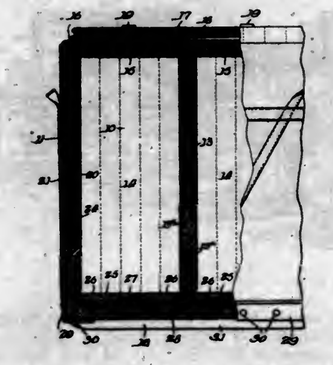
1. A combustible product embossed to resemble a natural leaf punctured and a petuning substance intimately associated with said punctured product filling said punctures.

1,871,152. WINDSHIELD WIPER. DON D. BRUSH, Detroit, Mich. Filed Apr. 1, 1929. Serial No. 351,740. 1 Claim. (Cl. 15—255.)



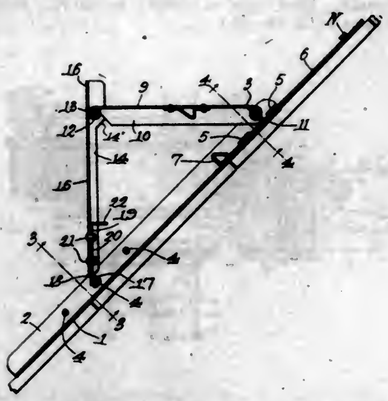
In a windshield wiper, the combination of an actuating arm, a wiping element, a pivotal connection between said actuating arm and wiping element, and means for limiting the rocking movement of said wiping element on said pivotal connection, said wiping element comprising two parallel flexible wiping strips spaced from each other, and blocks between the ends of the spaced wiping strips for limiting the inward movement and angular flexure thereof whereby at the limits of the rocking movement of said element the leading wiping strip has a limiting angle wiping contact with the windshield in each direction of movement of said actuating arm and whereby the trailing wiping strip is removed from contact with the windshield and upon the reverse movement contacts in advance of the final position of the other strip.

1,871,153. SHIPPING JACKET. CHARLES C. BUCHANAN, Madison, Ind., assignor to Meese, Inc., Madison, Ind., a Corporation of Delaware. Filed May 7, 1931. Serial No. 535,718. 6 Claims. (Cl. 150—52.)



1. A heat insulating shipping jacket comprising side walls made up of spaced inner and outer fabric envelopes with interconnecting members forming longitudinal pockets in which is packed heat insulating material, and a bottom comprising upper and lower rigid spaced members connected respectively to the inner and outer envelopes and providing a space communicating with the spaces in the side walls and filled with a heat insulating material.

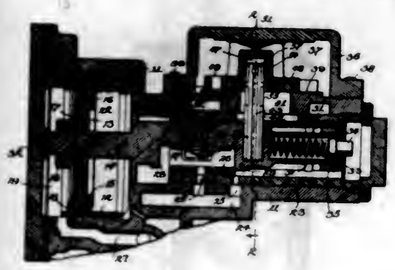
1,871,154. ROOFING BRACKET. WILLIAM W. BURK, Forest, Ohio, assignor to Jacob F. Kemmerling, Cleveland, Ohio. Filed Jan. 14, 1931, Serial No. 508,789. Renewed May 24, 1932. 4 Claims. (Cl. 304—20.)



1. A roofing bracket including a channeled base, cross pins connecting the sides of the base between its ends, a platform member pivotally connected to the base at one end, a support pivotally connected to the other end of the

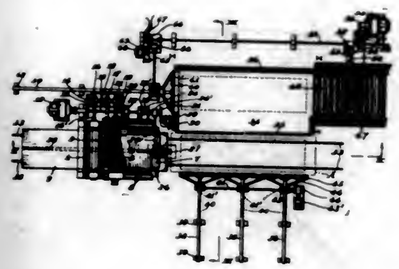
platform member, a channeled lip extending throughout the width of the support at one end and extending back of and embracing any one of the pins on the base, and means carried by the support and movable to position across the engaged pin to lock the lip in engagement with the pin.

1,871,155. AIR BRAKE. JAMES D. CARTIN, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Oct. 9, 1930. Serial No. 487,613. 2 Claims. (Cl. 303—1.)



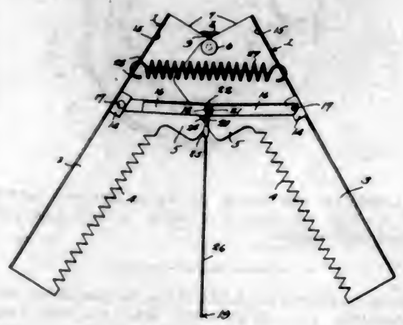
1. The combination of a rod; means for guiding the same in longitudinal reciprocations; a valve seat substantially parallel with the path of such reciprocation and having a longitudinal slot; a slide valve slidable on said seat, and having in its face a recess which overlies said slot; and a driving connection between said rod and valve comprising a pin rigidly mounted in said rod, and extending laterally through said slot and into the recess in said valve, said pin having a narrow bearing portion fitting said recess with a working clearance, and at least one tapered portion adjacent said bearing area, the taper approximating the angle of valve tilt permitted by the maximum allowable working clearance.

1,871,156. PROCESS FOR MAKING PLATE GLASS. ROBERT L. CLAUSE, Sewickley, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed July 25, 1929. Serial No. 380,919. 1 Claim. (Cl. 49—87.)



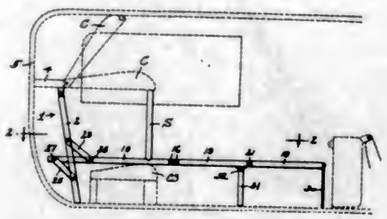
A process for making sheet glass, which consists in rolling out a sheet of glass of greater length than width and depositing it upon a flat metal surface, stowing the sheet sideways therefrom onto a flat non-metallic surface and permitting it to cool and harden to a degree such that it may be stowed endwise of the sheet, stowing the sheet endwise from such last surface into a roller leer, and reheating, flattening and annealing the sheet in said leer.

1,871,157. ANIMAL TRAP. WALTER CLAYTON, Belmar, N. J. Filed Apr. 8, 1931. Serial No. 528,663. 4 Claims. (Cl. 43—94.)



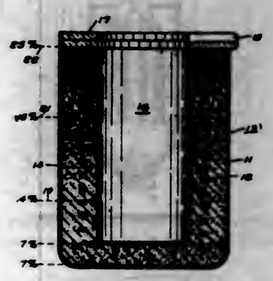
1. A trap comprising a pair of jaws, a pivotal connection between the jaws, spring means for moving the jaws toward each other, toggle links having their outer end pivoted to the jaws, a pivot member connecting the inner ends of the toggle links together, the toggle links being movable until they abut at their inner ends with the links in substantially longitudinal alignment thereby keeping the jaws from moving under the action of the spring means, and a pendulum trigger located between the jaws and mounted to swing on the pivot member which connects the inner ends of the toggle links together, the trigger being provided with a finger engaging one of the toggle links, between said pivot member and said pivotal connection, the finger and the link which it engages forming a fulcrum for the trigger, whereby, when the trigger is swung, as a lever of the second order, the pivot member will be carried far enough toward said pivotal connection to knuckle the links toward said pivotal connection, and permit the jaws to close, under the action of the spring means.

1,871,158. FOLDING BED. GILLIS A. DAIGLE, Port Arthur, Tex. Filed Sept. 12, 1931. Serial No. 562,573. 7 Claims. (Cl. 5—118.)



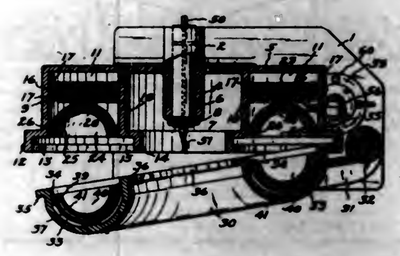
1. A vehicle having an end wall, a shelf extending substantially horizontally across said wall, a seat spaced from said wall, a frame pivoted to said shelf to swing in the space between the rear edge of the seat and said wall, and a folding bed pivoted to and supported wholly by said frame when folded.

1,871,159. INDUCTION-FURNACE LINING. NEVILLE RYLAND DAVIS, Ashton-on-Mersey, and GEORGE ANDREW WOOD, Sheffield, England, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 14, 1930, Serial No. 452,206, and in Great Britain May 15, 1929. 5 Claims. (Cl. 13—35.)



1. In an induction furnace, a lining of refractory material defining a material-containing chamber, said lining being most refractory at a level slightly above the bottom of the chamber and decreasing in degree of refractoriness with the approach to the top of said chamber.

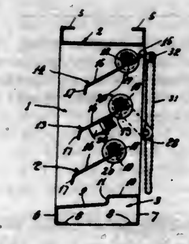
1,871,160. WATCHCASE HEATER. HAROLD A. DENMIRE, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 5, 1928. Serial No. 267,584. 14 Claims. (Cl. 18—17.)



13. A heater mold comprising a casing fixed against axial movement, a swingable cover casing, a piston in said fixed casing, a pair of mold sections respectively carried by said piston and the cover casing, spaced radial inwardly-extending lugs formed integrally with said fixed casing, spaced radial outwardly-extending lugs formed integrally with said swingable cover casing and arranged to lie between and rearwardly of said first mentioned lugs, means for rotating one of said casings to bring said lugs in superposed relation to thereby lock said casings together, and fluid pressure means for moving said piston to bring said mold sections in closed mating relationship after said casings are locked together.

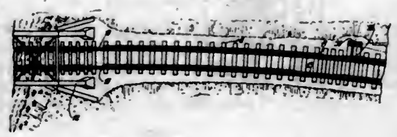
1,871,161. VENTILATOR. SIDNEY M. DICKSON, Pittsburgh, Pa. Filed May 1, 1930. Serial No. 448,828. 5 Claims. (Cl. 98—121.)

1. In a ventilator, a frame structure; a plurality of louvers; a polygonal supporting shaft for each louver; a polygonal head on each louver, said head engaging only a part of the contour of said shaft and being removable



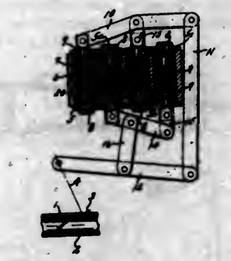
therefrom in a transverse direction; journal means for rotatably mounting the shafts in said frame structure, and means to simultaneously rotate said louvers.

1,871,162. CAR REPLACER. CAMILLO DIGIOVINE, New Geneva, Pa. Filed Nov. 18, 1931. Serial No. 575,882. 4 Claims. (Cl. 104—264.)



1. In combination with the spaced parallel supporting rails of a railway track, a car replacer associated with said supporting rails, and signal means adapted to be operated by a derailed car for indicating when a derailed car has passed over said car replacer.

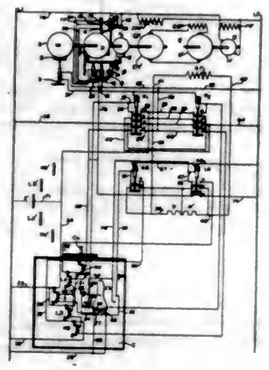
1,871,163. ELECTROPNEUMATIC THROTTLE CONTROL. RICHARD M. DILWORTH, Lakewood, Ohio, assignor to The Electro-Motive Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 19, 1931. Serial No. 509,613. 5 Claims. (Cl. 137—139.)



1. In an electro-pneumatic throttle control of the class described, wherein an engine throttle is to be controlled by a plurality of pistons arranged to be separately movable in a fixed sequence from "rest" position by air from a compressor driven by the engine, differential means associating said pistons with said throttle and providing for

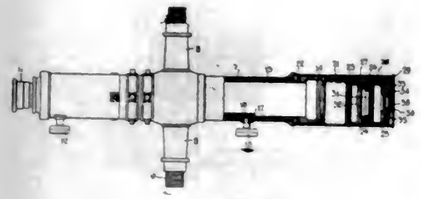
partial opening of said throttle when all of said pistons are in "rest" position, and providing for movement of said throttle to "idle" position by movement of one of said pistons under air pressure.

1,871,164. BRAKE FOR ELEVATORS. JAMES DUNLOP, Park Ridge, Ill., assignor, by mesne assignments, to Westinghouse Electric Elevator Company a Corporation of Illinois. Filed Feb. 4, 1929. Serial No. 337,307. 9 Claims. (Cl. 187—29.)



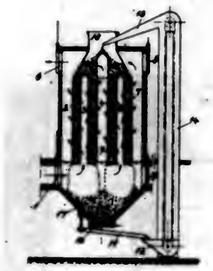
1. The combination with a car operable past a landing, a motor for operating the car and means for energizing and deenergizing the motor, of a braking system including means for applying a partial braking effect prior to the deenergization of the motor and for applying an increased braking effect when the motor is deenergized.

1,871,165. SURVEYING INSTRUMENT. WILLARD L. ECY, Troy, N. Y., assignor to W. & L. E. Gurley, Troy, N. Y., a Corporation of New York. Filed Feb. 5, 1930. Serial No. 426,133. 11 Claims. (Cl. 88—32.)



1. An attachment for use in front of the objective lens of a surveyor's telescope to modify the focusing characteristic thereof, comprising a Galilean telescope consisting of two single uncemented elements, one of which is positive, and the other negative, the former having a focal length and a dispersion value which are, respectively, twice the focal length and the dispersion value of the second.

1,871,166. REGENERATOR. HARRY FAHRBACH, Riga, Latvia. Filed June 9, 1930, Serial No. 460,034, and in Germany June 25, 1929. 10 Claims. (Cl. 257—55.)



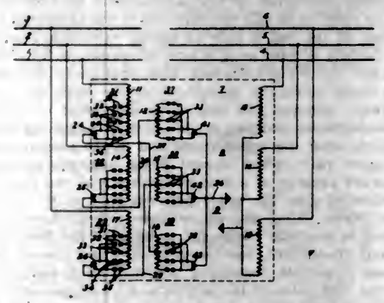
1. A heat regenerator comprising a container, a series of compartments in said container having perforated walls adapted to contain coarse-grained indifferent material and means for alternately directing into said compartments incoming air and combustion gases.

1,871,167. RAILROAD CROSSING GATE. MICHAEL J. FARRELL and LALLY STAFFARONI, Scranton, Pa. Filed Jan. 29, 1931. Serial No. 512,166. 3 Claims. (Cl. 39—7.)

2. In combination, an elevating gate, a depending U-shaped member, springs on the leg portions of the U-shaped member for maintaining the U-shaped member extended downwardly, and a switch on the gate operated by one leg of the U-shaped member when the U-shaped member is forced upwardly against the tension of the spring.

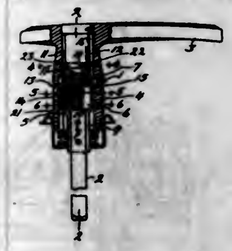
1,871,168. TAP CHANGING SYSTEM. RUSSELL M. FIELD, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 18, 1929. Serial No. 333,339. 5 Claims. (Cl. 172—238.)

1. In a transformer system, a group of windings adapted to be connected to one power circuit, and a corresponding group of windings adapted to be connected to a second power circuit, means for varying the voltage ratio between said groups of windings comprising tap-changing switches for the windings of one group, and means for varying the phase displacement between the voltages of the cooperating pairs of said windings comprising auxiliary windings each being inductively related to a winding of



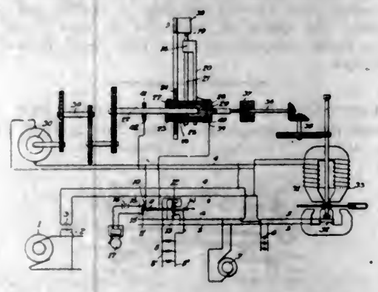
one of said groups of windings and connected in series-circuit relation with the next succeeding winding of said group.

1,871,169. HANDLE. BURTON S. FLORADAY, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed June 24, 1929. Serial No. 373,293. 12 Claims. (Cl. 70—91.)



1. The combination with a handle and a lock actuating spindle, of a shell fixedly secured to said spindle and rotatably connected to said handle, and a bolt slidably mounted upon said shell and having portions engaging opposite sides thereof, one of said portions being engageable with said handle for connecting said shell to said handle to rotate the former from the latter.

1,871,170. ELECTRIC CURRENT CONSUMPTION SYSTEM. ROY C. FREER, Cincinnati, Ohio, assignor to Duncan Electric Manufacturing Company, Lafayette, Ind., a Corporation of Illinois. Filed June 11, 1930. Serial No. 460,535. 1 Claim. (Cl. 171—97.)

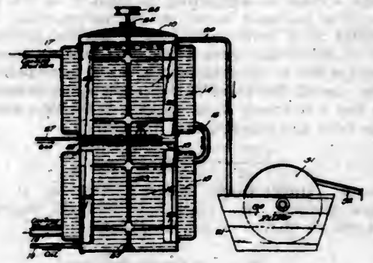


The combination with a load circuit, of a constant speed motor, a second motor whose speed varies in proportion to the current consuming load of said circuit, a rotatable contact arm, connections between said arm and the constant speed motor for effecting rotative movement of the arm, a second contact arm rotatable on a common axis with the first arm, connections between the second arm and second motor for effecting rotative movement of the second arm in the same direction as the first arm, a portion of one of the arms being disposed in the same path of movement as the other arm for engagement with the latter, responsive means operable upon engagement of the arms, a third arm fixed on the connections between the first motor and arm for rotation in unison with said first arm, an arcuate scale on the free end of the third arm concentric to the axis of rotation of the first and second arms and with the scale of which said first and second arms cooperate, and means permitting manual relative angular adjustment of the arms toward and away from each other.

1,871,171. METHOD OF MAKING SEPARATORS. WILLIAM S. GOULD, New York, and WILLARD B. OSBORNE, Buffalo, N. Y. Filed Apr. 28, 1928. Serial No. 273,765. 2 Claims. (Cl. 136—150.)

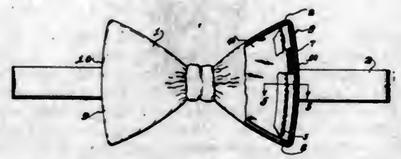
1. The method of making a dry flat separator from wood as a base, comprising treating the wood to remove substances deleterious to storage batteries, applying rubber to the wood, maintaining the wood flat and subjecting it to pressure, and simultaneously applying heat to the opposite surfaces of the wood to harden the rubber, the heating being discontinued while the wood still retains porosity.

1,871,172. RECOVERY OF WAX FROM OILS. GEORGE D. GRAVES, Casper, Wyo., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Aug. 20, 1926, Serial No. 130,444. Renewed May 29, 1930. 5 Claims. (Cl. 196—18.)



5. The method of recovering wax from foot's oil which comprises, cooling the oil below its chill point, agitating the chilled oil to form a mushy suspension of wax and oil, the suspended wax being distributed throughout the oil body, and filtering the said suspension to separate the suspended wax from the oil.

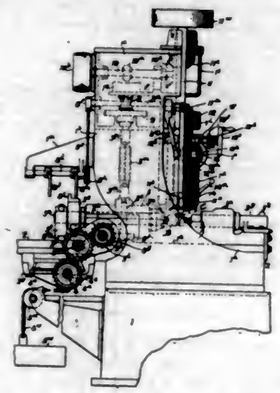
1,871,173. TIE. LESTER EDWARD GROSSMAN, Brooklyn, N. Y. Filed Dec. 9, 1930. Serial No. 501,113. 3 Claims. (Cl. 2—154.)



1. In a bow tie of the class described, the combination of a pair of front wings, a lining strip in said wings, the ends of said lining strip being bent over forming pockets, the free ends of said bent over portions stitched in place, and rubber inserts housed in said pockets, said rubber

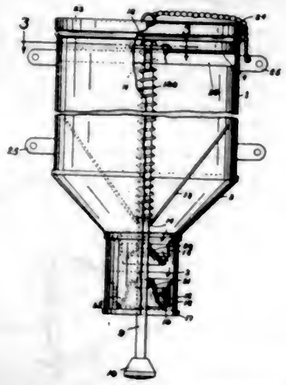
inserts being normally straight and longer than the extreme width of the front wings so that the said rubber inserts when put in place will curve outwardly and cause the outside edges of the front wings to assume a corresponding outward curve.

1,871,174. MACHINE FOR CUTTING SPIRALLY GROOVED CAMS. EUGENE J. GRUENEWALD, Lafayette, Ind., assignor to Ross Gear & Tool Company, Lafayette, Ind., a Corporation of Indiana. Filed June 23, 1931. Serial No. 546,321. 18 Claims. (Cl. 90—13.7.)



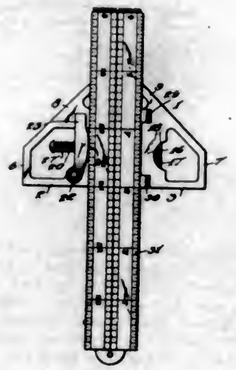
1. In a machine for cutting spirally grooved cams or the like, a table for supporting the blank to be cut, means for rotating the blank during the cutting operation, means controlled by a reciprocable master cam for moving the table in an arcuate path during the cutting operation, the means for moving the table in an arcuate path comprising spaced link gears having studs engaged with the table and a relatively fixed member, and a rack mounted on the table and engaging said link gears.

1,871,175. DISPENSING DEVICE. ALBERT C. GRUNWALD, Chicago, Ill. Filed Nov. 5, 1931. Serial No. 573,166. 2 Claims. (Cl. 221—114.)



1. A device for dispensing fluent material and comprising a container adapted for vertical positioning and composed of a cylindrical body portion, and an inwardly convergent lower portion terminating in a reduced neck, a bearing in the upper part of said body portion, a push rod passing slidably through said bearing, an abutment on the rod on each side of the bearing for limiting slidable movement of the rod, a fork member secured to and projecting outwardly of the intermediate portion of the rod and adapted to stir the contents of the container upon rotation of the rod, a pair of spaced valve seats projecting inwardly of said neck, a pair of spaced valves secured upon the rod for cooperation with said seats, the upper valve being closed by movement of the push rod to its uppermost position and opened by movement of the rod to its lowermost position, the lower valve operating simultaneously with the upper valve and in the reverse order, the upper valve when opened being adapted to permit downward passage of a limited quantity of the dispensable material into the space between said valve and the closed lower valve, the upper valve when closed being adapted to preclude downward passage of the dispensable material thereabove, the lower valve when opened being adapted to permit dispensing of the limited quantity of material held between the valves, and a compressed spring positioned upon the rod between said bearing and fork member for normally urging the rod downwardly to retain the lower valve in closed position.

1,871,176. COMBINATION BEVEL, SQUARING, AND LEVELING DEVICE. GEORGE F. HALL, Newark, N. J., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 8, 1926. Serial No. 140,271. 7 Claims. (Cl. 33—89.)



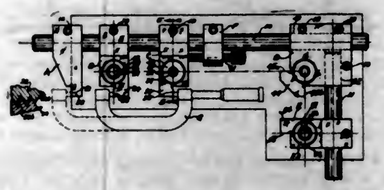
2. In a device of the character set forth, a frame comprising a horizontal base member, two angularly disposed side members, and a vertical member secured to said base member, one surface of said frame being equipped at one side of the center line with guide lugs, a clamping lever pivotally mounted on said frame at the other side of the center line and being provided with a stop flange adapted to engage said vertical member, a spring and means whereby said spring is supported by said frame, said spring being adapted to force said lever toward said guide lugs.

1,871,177. MERCURY SWITCH AND THE LIKE. SIEGFRIED HELD, Chicago, Ill. Filed July 2, 1930. Serial No. 465,384. 7 Claims. (Cl. 200—152.)



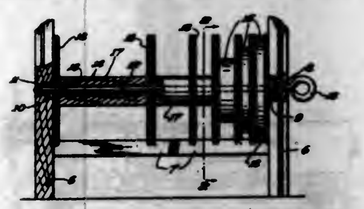
5. In a device of the class described, the combination of a body member of insulating material having a pair of longitudinally extending compartments, a vertical partition separating said compartments from each other, lateral chambers adjacent to the end portions of said compartments, there being openings between the end portions of the compartments and the adjacent chambers, contact members in the central portions of the compartments, contact members in the chambers, and a body of metallic mercury or the like within each compartment and the end chamber therefor, substantially as described.

1,871,178. TEMPLATE. WILLIAM H. HUDSON, Detroit, Mich. Filed Sept. 8, 1930. Serial No. 480,516. 18 Claims. (Cl. 33—189.)



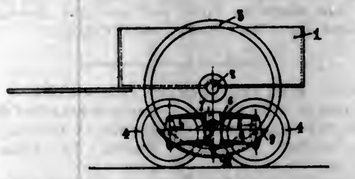
1. In an adjustable template, a setting block having a bore, a locating surface exactly perpendicular to the axis of said bore and a second bore whose axis is exactly in line with said surface.

1,871,179. DISPLAY STAND CABINET. LYNDON WALKER JOYCE, Greensboro, N. C. Filed July 25, 1929. Serial No. 380,957. 7 Claims. (Cl. 242—55.8.)



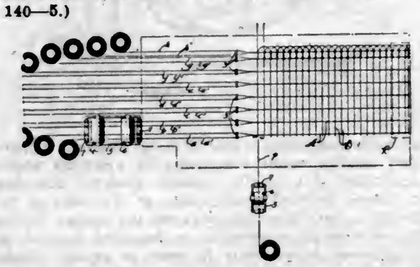
1. In a device of the character described, a rack provided with aligned apertures and having spaced-apart supporting rests adapted to support an apertured reel with the aperture thereof arranged out of alignment with the apertures of the rack, when the reel is seated upon its said rests, and a supporting rod extending through all of said apertures for rotatably supporting the reel and holding the same out of contact with the supporting rests.

1,871,180. TRAILING CARRIAGE FOR MOTOR CAR TRAILERS. ADOLPHE KÉGRESSE, Courbevoie, France. Filed June 10, 1930, Serial No. 460,176, and in France June 12, 1929. 3 Claims. (Cl. 280—33.4.)



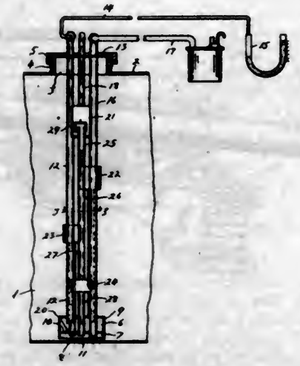
1. In combination with a non-suspended trailer comprising a trailer body, an axle supporting the body, and wheels mounted on the axle ends; a bogie for each wheel of the trailer, said bogie comprising two wheels in tandem, an axle for each wheel, and a plurality of springs connecting these axles to elastically support the bogie wheels in spaced relation; means on each bogie for supporting its trailer wheel clear of the ground; and means for varying the distance between the bogies in accordance with the distance between the trailer wheels.

1,871,181. METHOD OF COLORING WOVEN WIRE FENCES. CHESTER A. KELLOGG and GEORGE N. WILLIAMS, Kokomo, Ind., assignors to Continental Steel Corporation, Kokomo, Ind., a Corporation of Indiana. Filed Mar. 9, 1931. Serial No. 521,163. 1 Claim. (Cl. 140—5.)



The continuous method of applying color to certain wires of a fabricated fencing during the process of weaving the same which consists in passing selected wires through a chromatic bath prior to the weaving operation, in wiping the wire surfaces promptly after such chromatic treatment, and in weaving the wires so colored with others not colored into a fabricated fencing wherein the colored and uncolored wires occupy certain relative fixed positions definitely spaced apart.

1,871,182. LIQUID DEPTH INDICATING DEVICE. HORACE W. KING, Ann Arbor, Mich., assignor to King-Seeley Corporation, Ann Arbor, Mich., a Corporation of Michigan. Filed Mar. 11, 1925. Serial No. 14,715. 6 Claims. (Cl. 73—54.)



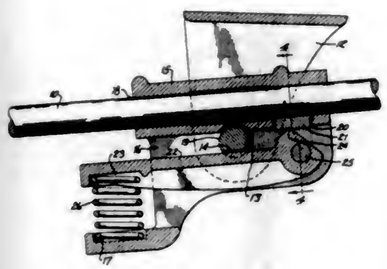
1. In a liquid depth indicating device, the combination with an air chamber provided with means for placing said chamber in communication with a liquid having an undulatory surface and a gage, means for placing said gage in communication with said air chamber, of means for introducing air into said air chamber including a reservoir for alternately receiving air and the liquid during the undulation of the liquid surface, and means forming a passageway for air and the liquid extending between said reservoir and air chamber including an air trap above the bottom of said reservoir for receiving air and the liquid from said reservoir.

1,871,183. SPECTACLES. LOUISE C. KING, Cleveland, Ohio. Filed Apr. 8, 1929. Serial No. 353,331. 1 Claim. (Cl. 88—42.)



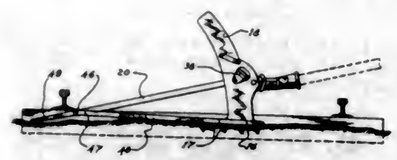
Spectacles comprising a pair of lenses and lens supporting and spacing means comprising an upwardly arched bridge formed of a readily bendable material, and elongated hinges disposed transversely of the ends of the bridge and connecting the ends of the bridge to the lenses, each hinge comprising an elongated member integrally joined intermediate its ends to an end of the bridge and an elongated member rigidly attached to the inner end portion of a lens, said members having interfitting knuckles extending throughout their length provided with alined apertures, and a pintle extending through said apertures, said members having interengaging shoulders on opposite sides of the pintle limiting the pivotal movement of the hinge members in either direction.

1,871,184. RECLINING CHAIR. ROBERT E. KOCHS, Chicago, Ill., assignor to Theo. A. Kochs Company, Chicago, Ill., a Corporation of Illinois. Filed May 26, 1930. Serial No. 455,599. 2 Claims. (Cl. 155—109.)



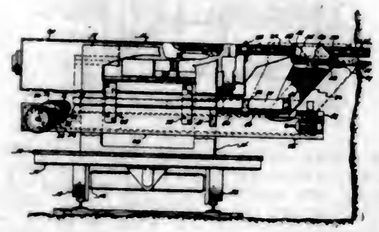
1. In combination with a chair having an adjustable back and apron pivotally mounted on the chair frame with linked connections therebetween, a bar pivotally connected at one end to the apron, a lock body having a bore receiving the bar, locking means in the body for gripping the bar, a transverse rock shaft supported from the chair frame and extending through said body providing a pivotal support therefore, lock holding means interposed between said rock shaft and locking means, and a foot pedal operatively connected to the transverse rock shaft for actuation thereof to release said holding and locking means.

1,871,185. TRACK ALIGNING AND TIE TAMPING DEVICE. PAUL KUSHNIER, Warneford, Ontario, Canada. Filed May 29, 1930, Serial No. 456,973. Renewed Nov. 28, 1931. 8 Claims. (Cl. 104—10.)



1. A track aligning and tie tamping device including a base; a body carried on said base; a rack bar operable in said body; means controlled by said rack bar; and means operating through said body for elevating said rack bar within said body.

1,871,186. MINING MACHINE. FRANK A. LINDGREN, Western Springs, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 31, 1927, Serial No. 243,846. Renewed Jan. 30, 1931. 20 Claims. (Cl. 262—28.)



3. In combination with a kerf cutting mining machine, a main frame, a cutting element arcuately movable with respect thereto to cut a horizontal kerf in a mine wall including a cutter bar having a cutter chain movable thereabout, a longitudinally extending conveyor suspended beneath said cutting element and movable therewith, and a cuttings gathering chute yieldably supported on said conveyor and extending from said conveyor upwardly beneath and above the sides of said cutter bar.

1,871,187. WAX CONTAINING COMPOSITION. JAMES D. LINDSAY, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Jan. 6, 1927. Serial No. 159,503. 14 Claims. (Cl. 134—9.)

1. A fluid composition comprising a liquid hydrocarbon and a wax of limited solubility in said liquid, said wax being finely mechanically comminuted and being present in the liquid hydrocarbon in excess of the amount soluble in the said liquid.

1,871,188. TIRE COVER WITH PERIPHERAL STIFFENING MEANS. GEORGE ALBERT LYON, Allenhurst, N. J., assignor to Lyon Incorporated, Asbury Park, N. J., a Corporation of Delaware. Filed Apr. 1, 1931. Serial No. 526,881. 1 Claim. (Cl. 150—54.)



In a tire cover, a split part constructed of thin resilient metallic material and the transverse cross section thereof being interiorly concave, said part being circumferentially arcuate throughout substantially more than 180° and to such an extent that the ends of the arcuate part hug under the tire to pull down the major portion of the cover part on the tire, the major portion of the surface on each side of the median portion of said part being circumferentially relatively smooth, the median portion having a ridge-like deformation in a circumferential direction throughout the major circumferential length of the cover part to rigidly strengthen that portion of said part.

1,871,189. TOWEL HOLDER. JAMES S. MILLER, Trenton, N. J. Filed Aug. 16, 1930. Serial No. 475,699. 3 Claims. (Cl. 312—50.)



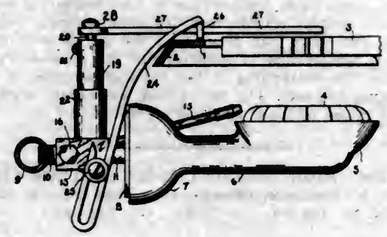
3. In a towel holder of the class described, the combination of a magazine for a stack of towels, of means for keeping said towels pressed against each other and means for giving the towels a curl as they are extracted from the magazine, said means including a plate having an inturned edge resiliently bearing against said towels.

1,871,190. KNITTING MACHINE. MAX C. MILLER, Cumberland Hill, R. I. Filed Apr. 5, 1921. Serial No. 458,639. 28 Claims. (Cl. 66—8.)



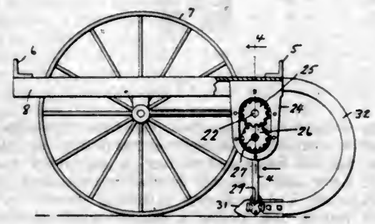
1. In a knitting machine, a needle actuating means comprising a needle advancing jack and a needle retracting jack, each movable with and independently of the needle.

1,871,191. AUTOMATIC GAS VALVE. ALBERT J. MILLIGAN, San Francisco, Calif. Filed Nov. 27, 1929. Serial No. 410,091. 5 Claims. (Cl. 126—52.)



1. In combination with a gas burner, a valve body having a passage therethrough, said valve body having an opening therein, intersecting said passage, a cylindrical piston operating in the opening of said valve body, the lower end of said piston being adapted to close the passage in said valve body, said piston having weight sufficient to close said passage, a trip lever fulcrumed above the burner and adapted to raise said piston.

1,871,192. ROD WEEDER. CHARLES E. MOODY, Lind, Wash. Filed Feb. 18, 1932. Serial No. 593,848. 1 Claim. (Cl. 97—42.)

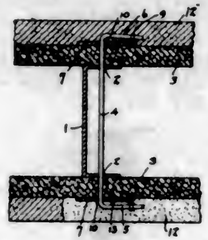


In a rod weeder mechanism of the class described wherein the same includes a frame, a pair of wheels journalled in the frame, a weeder rod journalled across the frame therebelow, of means for operating the weeder rod from one of the wheels comprising an elongated diagonal rod operatively connected with one of the wheels and having an operative connection with a transverse rod at the side of the frame remote from the last mentioned wheel, a gear housing into which extends such shaft and into which said shaft is journalled, a beveled gear on said shaft within the housing, the lower portion of the housing being inclined outwardly and downwardly, a shaft journalled in the lower portion thereof to incline downwardly and inwardly therefrom, a beveled gear in the housing on the second mentioned shaft and meshing with the first mentioned beveled gear, and a universal coupling connection between the last mentioned shafts and the weeder rod.



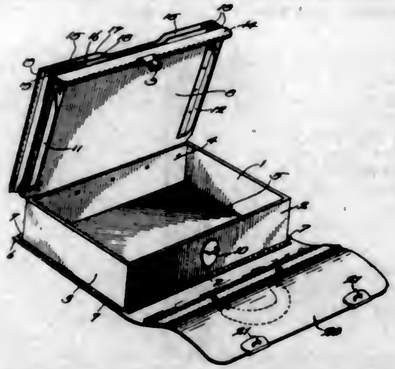
1. In a device of the class described, the combination of a cylindrical chamber of insulating material, a closure for the lower end thereof, a stationary contact at said lower end, a ferrule secured to the upper end of said chamber, a downwardly extending member secured to said ferrule and having a central longitudinally extending cylindrical bore of small size terminating at its lower end in a cylindrical bore of enlarged size, a vertically movable contact rod having its lower end working in conjunction with the stationary contact aforesaid, and having on its upper portion a piston enlargement adapted to travel within the cylindrical bore of small size, an enlarged piston surrounding said contact rod and of proper size to travel within the cylindrical bore of enlarged size in sealing fashion, said enlarged piston bearing against and lifting against the piston of smaller size aforesaid, a vent opening communicating with the upper end of the cylindrical bore, a diaphragm sealing the outer end of said vent opening and subject to rupture when the piston rises through the bore of smaller size to thereby give a visual indication, quenching liquid within the cylindrical chamber below the pistons, there being suitable passages for gas in the upper portion of the device communicating with the space beneath the pistons and above the contained liquid, together with a removable sealed container for compressed gas removably connected to the upper portion of the device and in communication with the passages aforesaid, substantially as described.

1,871,196. TIE WIRE FASTENER AND KEY. ELMER C. PITCHER, Hayward, Calif. Filed Oct. 23, 1929. Serial No. 401,890. 14 Claims. (Cl. 72—118.)

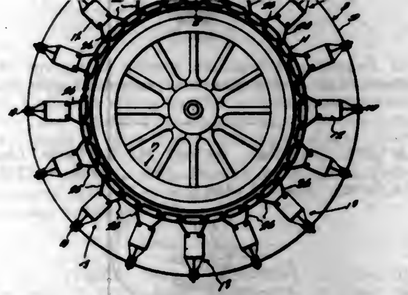


7. An article of manufacture comprising a tie wire fashioned with a head at one end, and a flat member of substantial thickness and having an oblique opening for slidably receiving the other end of the wire, the wall of the opening gripping the wire when the member extends at right angles to the axis of the wire, whereby relative movement between the wire and member is prevented.

1,871,197. TRAVELING CASE. JOSEPH H. PLOTKIN, Chicago, Ill., assignor to National Brief Case Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed June 23, 1930. Serial No. 463,107. 1 Claim. (Cl. 190—51.)

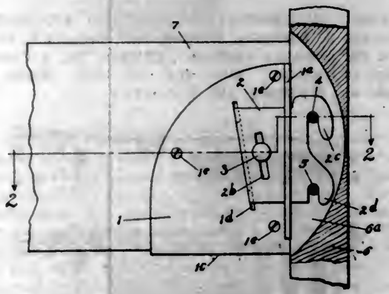


A traveling case having a hollow body open at one side, a lid hinged to one end of said body and adapted to overlie the open side thereof, said lid comprising a plu-



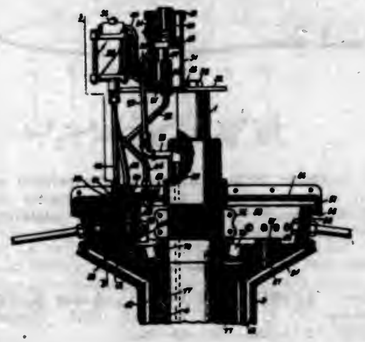
An anti-skid device for tires comprising a lug, said lug including an arcuate plate, a hollow head formed integrally with one end portion of the plate and projecting outwardly therefrom, said head being substantially triangular in top plan and including anticlinal side walls, the apex of the head having a longitudinal concavity therein, and means for mounting the lug on the tire.

1,871,199. CONNECTION MEANS FOR SIDE RAILS AND POSTS OF BEDSTEADS. HARRY RAINIER, Los Angeles, Calif. Filed May 26, 1926. Serial No. 111,719. 4 Claims. (Cl. 5—296.)



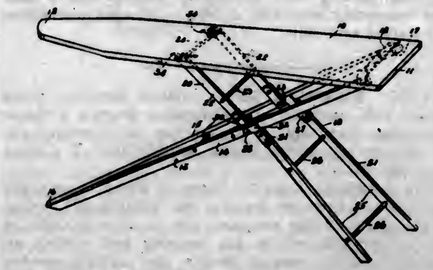
1. In a connection means for rails and posts of bedsteads, a plate provided with an outwardly extending flange secured to the one end of the bed rail and provided with a slot in said flange, said plate provided with a second slot positioned angularly to said flange, and with a rivet with a spaced head secured in spaced relation with the said second slot, and a shiftable member provided with an angular edge conforming to the angle of said second slot and provided with a right angled

City, Pa. Filed Nov. 22, 1928. Serial No. 321,234. 1 Claim. (Cl. 184—6.)



In a lubricating system of the kind described, the combination of a vertical shaft and a hub mounted on said shaft adapted to have relative motion imparted to them, a cup on said hub, a cover for said cup, said cover being non-rotatably secured to said shaft, an annular race in said cup, a shoe abutting on said race, a vertical guide in said cover for said shoe, yieldable means for pressing said shoe against said race, and a lubricating conduit passing through said shoe and said race, the continuity of said conduit being controlled by the relative motion of said hub and shaft.

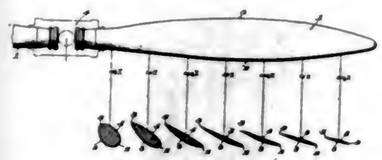
1,871,202. IRONING BOARD OR STAND. CHESTER A. RICH, Cincinnati, Ohio. Filed Aug. 20, 1931. Serial No. 558,255. 7 Claims. (Cl. 68—10.)



1. A foldable ironing stand comprising a board portion, an elongated frame pivotally attached at one end to an end of the board portion and adapted in the oper-

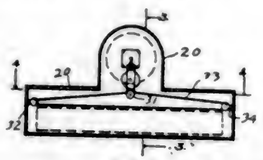
ative position to extend angularly beneath the board portion as a support therefor, a second elongated frame composed of an upper and a lower section secured together in offset endwise relationship, said second frame being pivotally connected to the first frame at an intermediate point relative to both frames, the upper portions of the lower section of the second frame being adapted to make supporting contact against the first frame in the operative position of the frames, a rung at the top of the second frame, and holders attached to the board portion intermediately thereof and adapted to receive said rung in the operative position of the frames, said frames being adapted to be pivotally moved into substantial parallelism and folded against the board portion in the inoperative position of the ironing stand.

1,871,203. PROPELLER. MARSHALL A. SMITH, Jr., South Bend, Ind., assignor to Bendix Aviation Corporation, South Bend, Ind., a Corporation of Delaware. Filed Mar. 12, 1932. Serial No. 598,509. 9 Claims. (Cl. 170—159.)



1. A propeller blade composed of symmetrical convex aerofoil sections adjacent the outer extremity thereof and having aerofoil sections including a relatively flat face at approximately the central portion thereof.

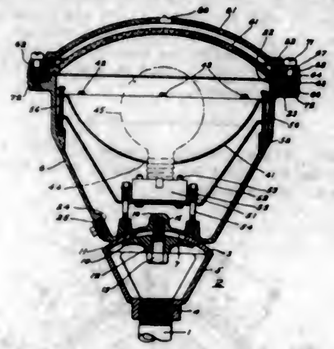
1,871,204. ADVERTISING CLOCK. AARON K. VERNON, Flushing, N. Y. Filed July 18, 1931. Serial No. 551,741. 2 Claims. (Cl. 40—32.)



1. A combination clock and advertising unit comprising a clock and display casing, a clock mechanism centrally of said casing, an advertising display located below said clock mechanism, said advertising display comprising an endless belt, a pair of rollers, each of said rollers being mounted at opposite sides of said display casing, a third roller centrally of said casing, said endless belt passing over said three rollers, and a gear train connecting said third roller to said clock mechanism for rotating said belt.

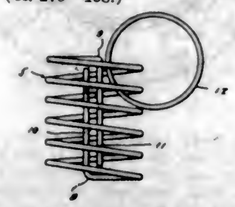
1,871,205. LIGHTING UNIT. OSCAR WERNER, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 11, 1929. Serial No. 398,918. 3 Claims. (Cl. 240—41.)

1. In a lighting unit, the lamp of which is arranged to be focused from the front of the housing and including a housing having one open side, a cover therefor, a reflector mounted within the housing and having an opening centrally located therein and having another opening in the rim thereof, a U-shaped socket-supporting bar disposed in the housing back of the reflector, a lamp socket mounted on the bar, a lamp mounted in the socket and projecting through the central opening of the reflector, means for resiliently engaging the lower part of the bar with the lower inside wall of the housing, and means for adjusting the position of the bar including a



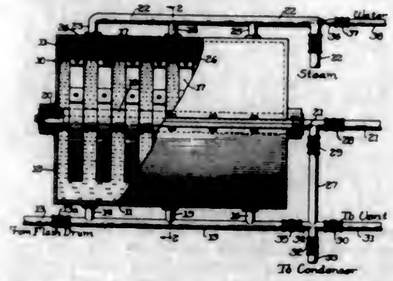
bolt projecting through the opening in the rim of the reflector and having operative engagement with the bar and the housing.

1,871,206. PUZZLE. ORVILLE M. WESTCOTT, Charleston, S. C. Filed Apr. 24, 1931. Serial No. 532,639. 3 Claims. (Cl. 273—158.)



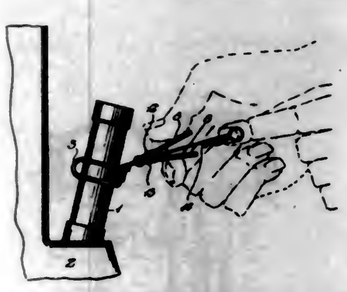
3. A puzzle of the type described consisting of a helical coil of wire having each end turned toward the center of the convolutions thereof and produced toward the opposite end of the coil, a ring encircling at least two adjacent convolutions of the coil, the produced portion of each of said ends being straight and extended almost to the opposite end of the coil, said produced portions of the ends of the wire being parallel.

1,871,207. FILTERING PROCESS AND APPARATUS. WALTER G. WHITMAN, Whiting, Ind., assignor to Standard Oil Company (Indiana), Chicago, Ill., a Corporation of Indiana. Filed Oct. 20, 1930. Serial No. 489,843. 5 Claims. (Cl. 210—181.)



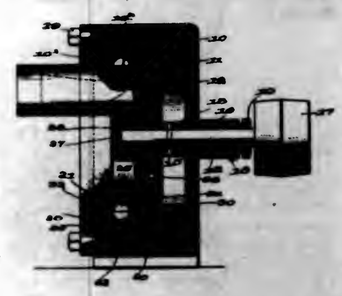
1. The method of cooling a hot, oily filter cake which comprises incorporating liquid water into steam and contacting said filter cake with said mixture of steam and liquid water.

1,871,208. OIL STICK WIPER. FRANK M. BOUCHARD, St. Elmo, Ala. Filed Mar. 28, 1931. Serial No. 524,746. 8 Claims. (Cl. 15—210.)



1. An ullage rod cleaner comprising a clamp to engage a fixed support, a spring member comprising normally divergent arms supported by said clamp, wipers supported by said arms in divergent relationship to each other, whereby, upon the hand of the operator pressing the wipers toward each other upon an ullage rod and withdrawing the ullage rod from between the wipers, the rod may be cleaned.

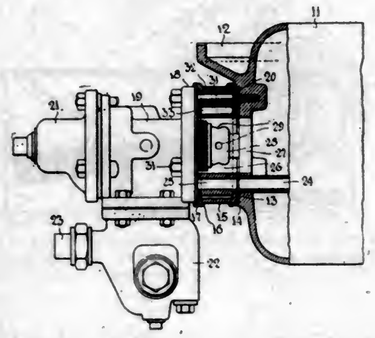
1,871,209. PUMP. ARTHUR W. BURKS, Decatur, Ill. Filed Aug. 16, 1927. Serial No. 213,815. Renewed Oct. 22, 1929. 20 Claims. (Cl. 103—96.)



3. A pump comprising a rotor having a plurality of inwardly directed blades forming buckets having mouths opening inwardly toward the rotor axis, a casing having a substantially annular channel facing said buckets whereby to form a liquid passageway, said casing having inlet and outlet ports and making a substantially liquid tight seal with the rotor beside the buckets and the raceway, and liquid deflecting means interposed between the inlet and outlet ports and closely fitting the exposed edges of the blades to deflect liquid from the passageway through the outlet port.

1,871,210. AIR-BRAKE. CHARLES A. CAMPBELL, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Oct. 8, 1931. Serial No. 567,698. 9 Claims. (Cl. 303—90.)

1. The combination of a mounting member having a seating face provided with an auxiliary reservoir port and a brake cylinder port; a filler piece having a face which mates with said seating face, and a second seating face and ports registering with the ports on the first-named seating face and terminating on said second seating face, said filler piece having a connection for a supplemental reservoir and a port leading therefrom and



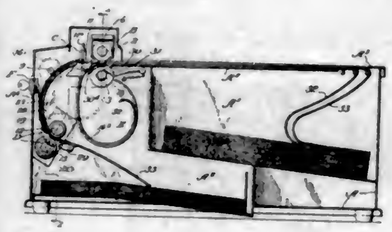
terminating on said second seating face; a supplemental reservoir connected with said supplemental reservoir connection; a triple valve mounted on said second seating face and having ports which register with the ports terminating on said second seating face; and releasable means for holding the parts in assembled relation.

1,871,211. SHOE AND METHOD OF MANUFACTURING SAME. HENRY W. COOK, Syracuse, N. Y., assignor to A. E. Nettleton Company, Syracuse, N. Y., a Corporation of New York. Filed Apr. 29, 1931. Serial No. 533,673. 2 Claims. (Cl. 36—45.)



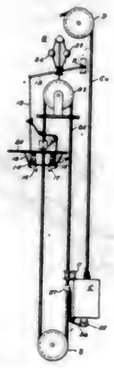
1. The method of manufacturing shoes comprising forming two complementary similarly shaped tip and vamp pieces, securing the forward edges of said tip and vamp pieces together to produce a concavo-convex toe section having a seam extending centrally thereof and leaving the rear portions of said pieces spaced apart, securing an insert piece to the adjacent spaced apart edges of said toe and vamp pieces and then hand-stitching the edge of the insert piece to the edges of the toe and vamp pieces, with the stitching extending through the insert piece and through two spaced portions of the edges of the toe and vamp pieces to form a bead.

1,871,212. AUTOGRAPHIC REGISTER. ALLEN B. COOKE, Danville, Ill., assignor to United Autographic Register Co., a Corporation of Illinois. Original application filed Feb. 16, 1931, Serial No. 516,198. Divided and this application filed July 13, 1931. Serial No. 550,536. 9 Claims. (Cl. 271—2.4.)



1. Mechanism comprising a pair of feed rolls having different rates of rotation and equipped with strip gripping and feeding spirals which come intermittently into operative relation.

1,871,213. OVERSPEED BRAKE AT TERMINALS. JAMES DUNLOP, Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company, a Corporation of Illinois. Filed Apr. 4, 1930. Serial No. 441,523. 4 Claims. (Cl. 187—89.)



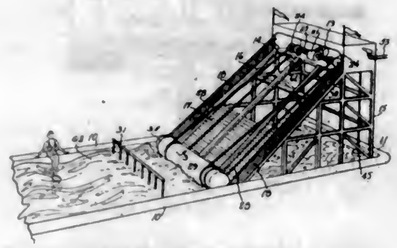
1. In combination with an elevator car, a braking device carried thereby, a speed-responsive device actuated in accordance with the speed of the elevator car for applying the braking device when the car overspeeds, and means actuated thereby for applying the braking device if the speed of the car is not properly reduced as the car approaches a terminal.

1,871,214. COMBINED DUST COLLECTOR AND SHUT-OFF COCK. BERT HYANES, Baltimore, Md., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Aug. 18, 1931. Serial No. 557,907. 8 Claims. (Cl. 303—88.)



1. In an air brake system, the combination with a dust collecting device, of a stop cock and a discharge valve operatively associated with said device; and a single means for causing operation of said cock and said valve in timed sequence.

1,871,215. MACHINE FOR MAKING WAVES. CHARLES W. KELLER and ALBERT F. SIFERTE, Portland, Oreg. Filed June 15, 1931. Serial No. 544,540. 4 Claims. (Cl. 272—26.)

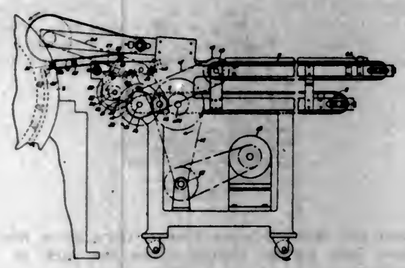


1. In a wave producing machine, the combination of a water-displacing means, means for moving said displacing means to and from the water, and means for synchronising the movements of the displacing member and the waves produced thereby.

1,871,216. TWIN LOAF ASSEMBLER. WILLIAM G. KIRCHHOFF, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 14, 1931. Serial No. 537,321. 8 Claims. (Cl. 107—7.)

1. In a dough loaf assembler the combination of a means for feeding individual loaves of dough in succession, means

for accumulating a plurality of loaves and including a movable door and a cooperative adjustable stop associated



therewith, and a door moving means operated by alternate fed loaves for moving the door and releasing the accumulated loaves as a unitary parcel.

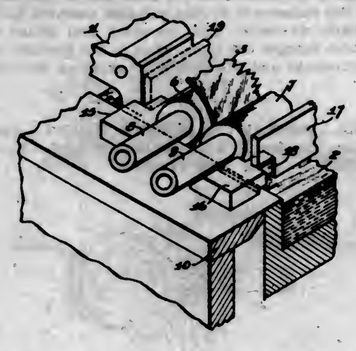
1,871,217. FILM PACK CASING. RUDOLF KLAUS, Dessau-Ziebigk in Anhalt, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed June 8, 1931, Serial No. 542,934, and in Germany June 5, 1930. 2 Claims. (Cl. 95—22.)



1. A film pack casing comprising a main front part and a rear part, said rear part fitting closely into the front part, thus procuring a light-tight closure of the side walls and one end of the casing, and forming with the front part a slit extending over the whole breadth of said rear part, said rear part being provided with a cut-out adjacent to said slit, and a resilient metal strip having a U-shaped portion removably inserted into said slit and covering said cut-out in the rear part.

1,871,218. APPARATUS FOR MAKING PLATE GLASS. WALTER G. KOUPAL, Tarentum, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Aug. 26, 1931. Serial No. 559,411. 8 Claims. (Cl. 49—33.)

3. In combination, a glass tank containing a body of molten glass and open above a portion of such body, a pair of horizontal driven and cooled sizing rolls seated above said portion of the body of glass and having the lower portions of their peripheries immersed in such body, shade stones on each side of the pair of rolls extending across the top of the tank and provided with lips above the surface of the glass adjacent to the rolls but spaced away therefrom, shade blocks seated on the walls of the tank between the shade stones and extending out over the surface of the glass, and a hollow water cooled member of rectangular cross section lying between one of said lips and the adjacent roll with its ends lying over the shade stones at the ends of the roll, said member being shaped

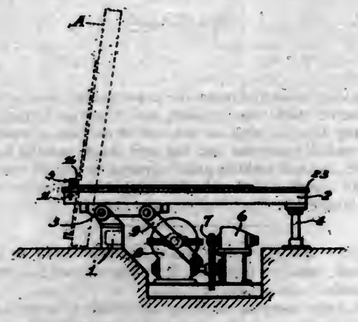


so that the lower portion thereof lies below the level of the upper surfaces of the shade blocks with the ends of said portion remote from the side walls of the tank.

1,871,219. EXPANSION JOINT AND METHOD OF CONSTRUCTING THE SAME. LYMAN L. LORD, Boston, Mass., assignor to E. B. Badger & Sons Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 30, 1929. Serial No. 417,342. 11 Claims. (Cl. 285—90.)

1. In an expansion joint, the combination with a corrugated tubular expansion member, of a pair of relatively separable external reinforcing members engaging the expansion member, and a protector covering the space between adjacent reinforcing members and engaging the outer peripheral walls of said members, said protector having a portion entering the space between the walls of said members.

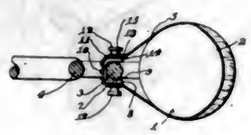
1,871,220. GLASS CUTTING TABLE. JOHN D. MCLEOD, Oakmont, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Sept. 12, 1930. Serial No. 481,446. 3 Claims. (Cl. 49—48.)



1. In combination, a cutting table mounted for tilting movement about an axis adjacent one side of the table and

provided with a recess extending in from its face adjacent said side, a stop block mounted in such recess for swinging movement so that in one position the block projects above the surface of the table and in another position it lies below said surface and also mounted for limited endwise movement upon its pivot, and means in the slot which engages the block when in one position of endwise movement and prevents said swinging movement.

1,871,221. DENTAL CHAIR ATTACHMENT. JAMES S. MILLER, Trenton, N. J. Filed Dec. 30, 1930. Serial No. 505,592. 1 Claim. (Cl. 24—81.)



In a clip of the class described, the combination of a U-shaped rigid member, of a U-shaped resilient member, and means for fastening both of said members together while leaving the legs of both of said members being free so that the legs of the said resilient member can move away from the legs of the said rigid member, a knob attached to each of the legs of said resilient member, and corrugations in said resilient member near the fastening means.

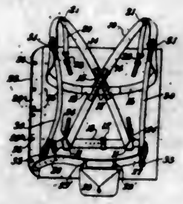
1,871,222. NECKTIE CREASE REMOVER. GEORGE B. NESS, Seattle, Wash. Filed Feb. 11, 1931. Serial No. 515,008. 5 Claims. (Cl. 223—19.)



1. A device of the kind described comprising a length of material bent upon itself and forming a bight and diverging legs, a catch on the end of one leg, spaced arms on the end of the other leg, the said catch passing between the said arms, a locking plate secured to one of the arms, the said locking plate having spaced notches to receive the said catch.

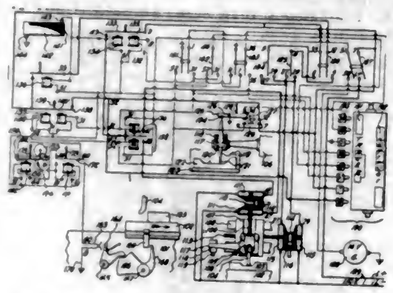
1,871,223. PACK CARRYING HARNESS. EVA M. REESE, Canton, Ohio. Filed Nov. 7, 1930. Serial No. 493,977. 7 Claims. (Cl. 224—11.)

1. A pack carrying harness including a waistband engirdling the front and sides of the wearer's waist, a one-piece strap having its ends adjustably connected together to form a loop portion, means slidably connecting said loop portion to the ends of the waistband, portions of the strap leading from each side of the loop diagonally upward across the back of and over the shoulders of the



wearer and thence downward under the arms to form a second loop portion located across the back of the shoulders.

1,871,224. ELECTRICAL CONTROL OF THE FEED OF PLANERS AND LIKE MACHINE TOOLS. JOHN C. SHAW and ROBERT D. SHAW, Brooklyn, N. Y., assignors, by mesne assignments, to Pratt & Whitney Company, Hartford, Conn., a Corporation of New Jersey. Filed July 19, 1927. Serial No. 206,824. 20 Claims. (Cl. 90—24.3.)

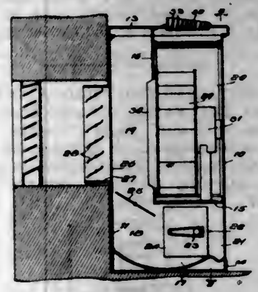


1. In the electrical control of the feed of planers and like machine tools, the combination with the tool and a reciprocating member for effecting a linear cut on the work, of magnetic clutches for effecting relative toward and from feed between the tool and work, an electric tracer adapted to follow a pattern for controlling the operation of said magnetic clutches for the toward or from feed, a relay adapted to be operated by said tracer for closing circuits to the respective clutches for said feeds, a second relay required to be closed to complete the circuit closed by the first relay to the respective magnetic clutches, and means controlled by the reciprocating member for operating said second relay, whereby the tracer control of said feed is effective only while said second relay is in circuit closing position.

1,871,225. HEATING AND VENTILATING UNIT. WILFRED SHUETLEFF, Moline, Ill., assignor to The Herman Nelson Corporation, Moline, Ill., a Corporation of Illinois. Filed Nov. 17, 1930. Serial No. 496,362. 6 Claims. (Cl. 257—137.)

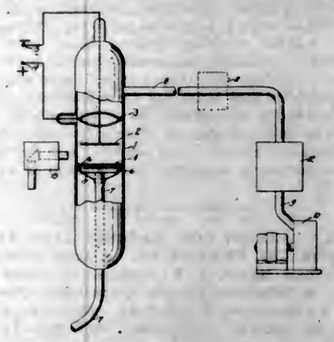
3. In a heating and ventilating unit, the combination of a cabinet provided with a horizontally extending partition wall and a vertically extending partition wall serving to divide the cabinet into a radiator chamber in the base of the cabinet, a hot air chamber behind the radiator chamber, a cold air chamber above the hot air chamber and behind the vertical partition wall, and a fan chamber in front of the vertical partition wall and above the horizontal partition wall, the cabinet being provided in its front wall near the base with a horizontally elongated

aperture constituting an indoor air inlet opening directly into the radiator chamber, being provided in its rear wall with an external air inlet opening directly into the cold air chamber and being provided in its top with an air discharge outlet, a radiator located within the radiator chamber and immediately behind the indoor air inlet, a fan located in the fan chamber and having its mouth entered into the cold air chamber in immediate proximity



to the external air inlet, and dampers for controlling the flow of air to the fan from the radiator chamber and from the external air inlet, respectively, and the discharge thereof from the fan chamber through the air discharge outlets and an air filter located within the fan chamber and configured to overhang the upper portion of the fan in position to provide for filtering of the air discharged from the fan and prior to its discharge from the discharge outlet.

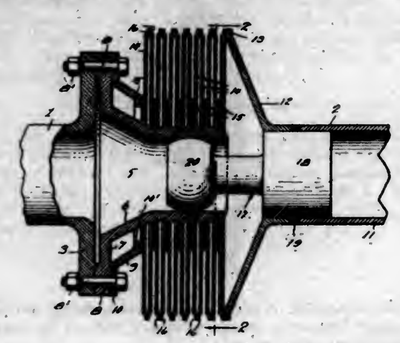
1,871,226. METHOD OF SEPARATING AND PURIFYING GASES. LJUBOMIR W. SKALA, Cicero, Ill., assignor to Skala Research Laboratories, Inc., Cicero, Ill., a Corporation of Illinois. Filed July 5, 1929. Serial No. 376,087. 1 Claim. (Cl. 23—2.)



A continuous method of gas purification, which comprises the steps of passing the gases to be purified through a palladium diffusing diaphragm located between anticathode plates in a cathode ray tube subjected to continuous evacuation, subjecting said diaphragm to electronic bombardment to thereby raise the temperature of said diaphragm to a point to enhance the diffusion of the gases, and continuously withdrawing the gases from said tube.

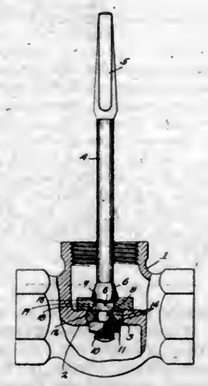
1,871,227. FLEXIBLE COUPLING. WILLIAM J. SMITH and HERMAN F. BRAUN, Lakewood, Ohio, assignors to The Cleveland Steel Products Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 29, 1928. Serial No. 302,755. 2 Claims. (Cl. 64—96.)

1. A universal joint including a flanged tubular shaft, a flanged tubular guide member having its flange adjacent the flange of said shaft, a flanged annular member encircling said guide member and having its flange adjacent the flange thereof, said flanges being concentric and bolted together, a flexible driving connection comprising a plurality of annular disks serially connected at their inner



and outer edges, the inner edge of one of said disks being connected to said annular member, a second shaft carrying a flange and a ball, said ball cooperating with said guide member and said last flange being attached to one of said annular disks.

1,871,228. GLOBE VALVE RESEATING TOOL. ALFRED D. STOUT and HUGH F. MCNALLY, Richland Center, Wis. Filed Apr. 23, 1931. Serial No. 532,360. 1 Claim. (Cl. 51—209.)

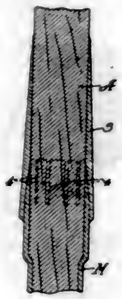


A tool for grinding valve seats, comprising a shank having an abutment with a convexed lower end, the shank having a polygonal portion, below the abutment, and having a tip below the polygonal portion, a guide held loosely on the tip and provided with oppositely flared recesses, enabling the tip to swing laterally in the guide, and a grinder having a polygonal hole receiving the polygonal portion of the shank, the grinder having a lower, flared recess in which said polygonal portion can rock, and the grinder having an upper flared seat in which the convexed end of the abutment is received for rocking movement.

1,871,229. FISHING ROD. JACK T. WELCH, Dowagiac, Mich., assignor to James Heddon's Sons, Dowagiac, Mich., a Corporation of Michigan. Filed Apr. 24, 1931. Serial No. 532,393. 6 Claims. (Cl. 43—18.)

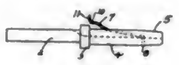
1. The method of reinforcing a flexible fishing rod formed of a material which shrinks with age which con-

sists in applying circumferentially over a selected portion of the rod a tight fitting sleeve in a wet expanded pliable condition which, upon drying contracts and hardens



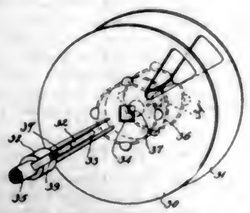
withal remaining flexible, the sleeve material having a tendency further to shrink with age whereby it remains closely fitted upon the rod.

1,871,230. CARRIER FOR MATERIAL AND SPINDLE THEREFOR. WARREN DUNHAM FOSTER, Washington Township, Bergen County, N. J., and CLARKSON ULYSSES BUNDICK, White Plains, N. Y., assignors, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 23, 1927. Serial No. 170,181. 14 Claims. (Cl. 242—70.)



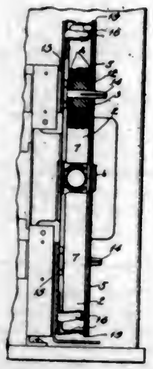
4. A spindle constructed for the removable mounting of a carrier thereupon over an end thereof, said spindle including a member mounted thereupon for movement relatively thereto and adapted to position the carrier upon the spindle and to drive it therefrom, said member comprising a carrier mount surface substantially parallel to the axis of the spindle and an extension therefrom normal thereto relatively distant from said end of the spindle and adapted to limit the movement of the carrier along the axis of the spindle in the direction away from said end.

1,871,231. CARRIER FOR MATERIAL AND SPINDLE THEREFOR. WARREN DUNHAM FOSTER, Washington Township, Bergen County, N. J., and CLARKSON ULYSSES BUNDICK, White Plains, N. Y., assignors, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y., a Corporation of New York. Original application filed Feb. 23, 1927, Serial No. 170,181. Divided and this application filed Jan. 15, 1929. Serial No. 332,712. 24 Claims. (Cl. 242—70.)



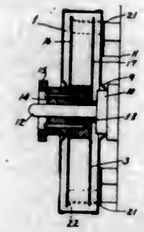
4. In combination, a spindle and a carrier adapted to be removably mounted thereupon over an end thereof for rotation therewith, said spindle being in driving engagement with said carrier, the spindle having a carrier mount portion adapted to cooperate with openings of different contours in the carrier and the carrier having side plates formed with such openings, and compensating means mounted upon the carrier and constructed to become automatically effective as the carrier is placed upon the spindle both for compensating for dimensional differences between said mount portion and said openings and also for cooperating with said spindle for maintaining the carrier in the desired position upon the axis of the spindle during the rotation of the carrier by the spindle.

1,871,232. CONTAINER FOR FILMS AND MEANS FOR HANDLING THE SAME. WARREN DUNHAM FOSTER, Washington Township, Bergen County, N. J., assignor, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 16, 1929. Serial No. 332,840. 35 Claims. (Cl. 88—17.)



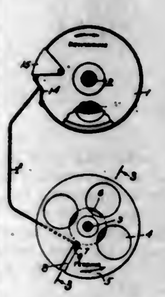
34. Film handling apparatus, including a spindle, a film container having a spindle receiving opening therein, said spindle receiving opening being substantially larger than said spindle, and means coacting between said apparatus at points relatively adjacent said spindle and the periphery of said container for maintaining the edge of said opening in spaced relation to said spindle and for maintaining said container in relatively fixed relation to said apparatus whereby said spindle may be revolved without frictionally engaging any portion of said container.

1,871,233. CARRIER FOR MATERIAL AND APPARATUS FOR USE THEREWITH. BARTON ALLEN PROCTOR, Pelham Manor, N. Y., assignor, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 16, 1929. Serial No. 332,879. 17 Claims. (Cl. 242—71.)



8. In a film handling apparatus, a spindle adapted to support a film spool, a film container, said film container comprising a casing and a film spool positioned therewithin and movable relatively thereto, said film spool including a handle extending through and beyond a wall of said casing whereby said spool may be moved along the axis of said spindle, and means to limit such movement.

1,871,234. CONTAINER FOR FILMS AND MEANS FOR HANDLING THE SAME. BARTON ALLEN PROCTOR, Pelham Manor, N. Y., assignor, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 16, 1929. Serial No. 332,881. 18 Claims. (Cl. 242—74.)



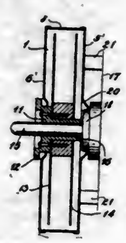
8. For use in a film handling apparatus, a detachable carrier to which one end of a film is secured, a second carrier, a slot therein extending to the circumference thereof, and means for detachably connecting the opposite end of the film to said second carrier, said means including a pin secured to said last mentioned end of the film and constructed with guiding formations thereupon, said formations being arranged to cooperate with said second carrier for maintaining said pin against substantial movement lateral to said slot while permitting its free longitudinal movement therewithin.

1,871,235. CARRIER FOR MATERIAL AND APPARATUS FOR USE THEREWITH. BARTON ALLEN PROCTOR, Pelham Manor, N. Y., EDITH DUNHAM FOSTER, Ridgewood, N. J., and CLARKSON ULYSSES BUNDICK, White Plains, N. Y., assignors, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 16, 1929. Serial No. 332,882. 8 Claims. (Cl. 242—71.)



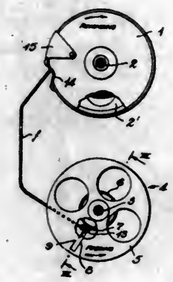
6. The method of attaching a film to a carrier which includes doubling one end of the film back upon itself and fastening it to itself while in such position, providing a film support with a substantially cylindrical outer surface and an opening parallel to the axis of such support adjacent such surface, said opening and said surface being joined by a slot of a width less than the diameter of such opening, such opening and such slot having corresponding open ends, and sliding the doubled portion of the film into such opening and the adjacent single portion into such slot by a movement parallel to the axis of such support.

1,871,236. CONTAINER FOR FILMS AND MEANS FOR HANDLING THE SAME. BARTON ALLEN PROCTOR, Pelham Manor, N. Y., assignor, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 16, 1929. Serial No. 332,883. 18 Claims. (Cl. 88—17.)



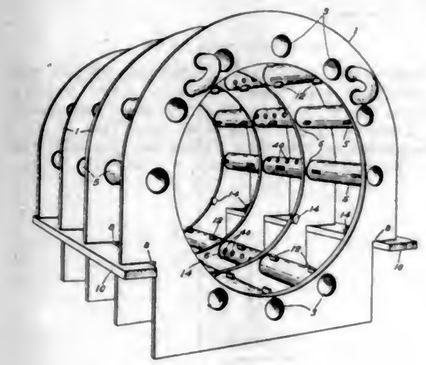
8. Film handling apparatus including a spindle, a container having a spindle receiving opening therein, and snap fastener means for maintaining the periphery of said opening in spaced relation to said spindle, said means including a member projecting from said apparatus for engaging the periphery of said openings.

1,871,237. CONTAINER FOR FILM AND MEANS FOR HANDLING THE SAME. BARTON ALLEN PROCTOR, Pelham Manor, N. Y., assignor, by mesne assignments, to Kinatome Patents Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 16, 1929. Serial No. 332,884. 12 Claims. (Cl. 242—74.)



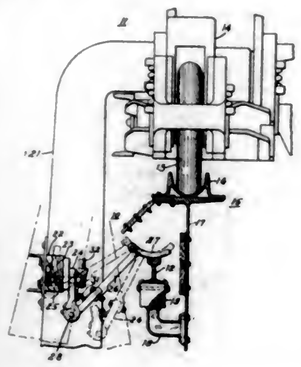
2. For use in a film handling mechanism, a detachable carrier to which one end of the film is secured, a second carrier including a slot therein, a pin freely movable in said slot longitudinally thereof, and a member affixed to the film constructed to cooperate with said pin for detachably connecting the film and said second carrier.

1,871,238. DYNAMO ELECTRIC MACHINE. MALCOLM D. ROSS, Pittsburgh, and BENNIE A. ROSE, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 19, 1930. Serial No. 503,446. 5 Claims. (Cl. 171—252.)



1. A fabricated frame for a dynamo-electric machine comprising a plurality of spaced-apart rib members to provide a plurality of ventilating ducts about the machine, seats on each of said ribs for receiving feet members, and feet members secured to said seats, said ribs having alined openings therein, tubular spacing members extending through said openings and secured to each of said ribs, said tubular spacing members being provided with openings communicating with one of said ventilating ducts.

1,871,239. CURRENT COLLECTOR. WILLIAM SCHAAKE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 19, 1930. Serial No. 503,397. 6 Claims. (Cl. 191—49.)



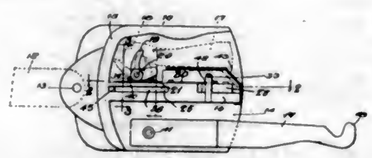
1. A current collector for collecting current from a supply conductor comprising a supporting arm, a bifurcated plate adjustably attached to the supporting arm, a contact-carrying arm pivotally mounted on the bifurcated plate and disposed at an oblique angle to the plate, a contact shoe mounted on the contact-carrying arm and disposed to engage the top side of the supply conductor, and resilient means interposed between the contact-carrying arm and the bifurcated plate to bias the contact shoe into engagement with the supply conductor.

1,871,240. THREAD GUIDE HOLDER. CARL SCHELLER, Leipzig, Germany. Filed Aug. 7, 1931, Serial No. 555,804, and in Germany Aug. 26, 1930. 1 Claim. (Cl. 287—54.)



A thread guide holder for gold braid machines and the like, comprising a boss divided into two parts for lateral application to a supporting rod, one of said parts being notched to form a fork, the other part being formed with a tongue adapted to enter said fork, a set screw passing through the fork members and through the tongue, and a hollow stem on one part for the reception of the thread guide.

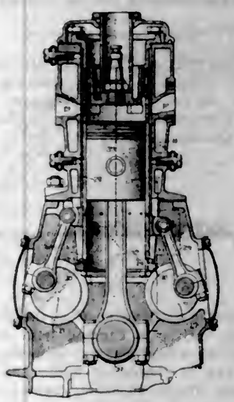
1,871,241. COUPLING MECHANISM. JOHN C. F. SELL, Chicago, Ill., assignor to Emma Otilie Sell, Chicago, Ill. Filed Nov. 8, 1929. Serial No. 405,649. 3 Claims. (Cl. 213—88.)



1. In coupling mechanism, a knuckle, a main body member upon which the knuckle is rotatably mounted, a longitudinally extending hollow vertical member providing an inclined runway alongside said knuckle, a plate member slidably mounted in said runway and movable by gravity to the lower end thereof, means manually operable to move the plate member towards the upper end of the runway, said vertical member having a slot in its side wall adjacent the knuckle, said knuckle having an extension normally projecting through said slot into the path of said plate member in said runway, one side of said extension forming a cam surface normally engaging the lower end of the plate member, said extension being so positioned that rotation of the knuckle member in one direction moves said extension out of the path of said plate member and permits the plate member to move downwardly past said extension and thereby locks the knuckle against return movement.

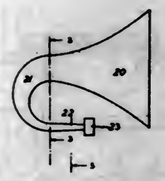
1,871,242. INNER CYLINDER CONSTRUCTION FOR INTERNAL COMBUSTION ENGINES. RALPH L. SKINNER, Detroit, Mich., assignor to Skinner Motors, Inc., Detroit, Mich., a Corporation of Delaware. Filed Apr. 9, 1931. Serial No. 528,724. 6 Claims. (Cl. 123—75.)

1. In an internal-combustion engine, the combination of an outer ported cylinder, an inner cylinder inside of and spaced away from said outer cylinder, valve-means between said cylinders, means to reciprocate said valve-means lengthwise said cylinders, means to support said inner cylinder with play between the two laterally of



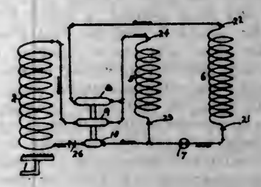
said inner cylinder, means on said support preventing unintentional ascent of the inner cylinder, and a piston reciprocatory in said inner cylinder.

1,871,243. ACOUSTIC DEVICE. EDWIN H. SMYTHE, Evanston, Ill., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 15, 1931. Serial No. 557,235. 6 Claims. (Cl. 181—27.)



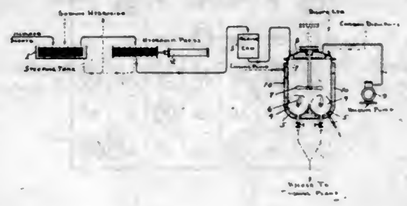
1. A sound conduit comprising two sound chambers having different cross-sectional areas, a plurality of uniformly distributed sound outlet openings in one chamber and an equal number of uniformly distributed inlet openings in another chamber, and a plurality of channels of equal length connecting said outlets to said inlets, the longitudinal axes of said channels being oblique to the longitudinal axes of said chambers.

1,871,244. AIR CONDITIONING SYSTEM. ARTHUR B. STEUART, Baltimore, Md. Filed Aug. 19, 1931. Serial No. 558,161. 4 Claims. (Cl. 62—115.)



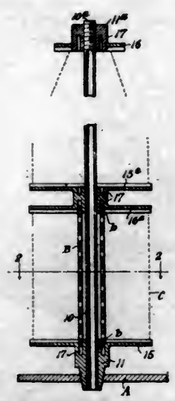
1. The combination in a heating and cooling system for dwellings or places of human assembly of a power generating means of the fluid expansion type, a boiler, a condenser and a boiler feed pump therefor together with refrigerating means consisting of a compressor driven by said power generating means, and delivering to the same condenser as the power generating means an evaporator and a pressure reducing valve of suitable type, said condensing element and evaporating element having mutually interconnecting means including change-over valves so that their respective functions in the system may be mutually interchanged or reversed.

1,871,245. PROCESS OF MAKING VISCOSE. RICHARD THURM, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Oct. 26, 1931. Serial No. 571,134. 4 Claims. (Cl. 260—100.)



1. The process of making viscose which consists in soaking cellulose sheets in sodium hydroxide, pressing out the excess sodium hydroxide, aging the soaked and pressed cellulose sheets, kneading the aged cellulose in a vacuum while gradually adding carbon disulphide until the cellulose forms a stiff xanthate dough, removing the excess carbon disulphide by vacuum, gradually adding to the xanthate dough a dilute caustic soda solution while kneading until the xanthate becomes semi-liquid and then stirring and kneading at increased speed until all the caustic soda solution has been added.

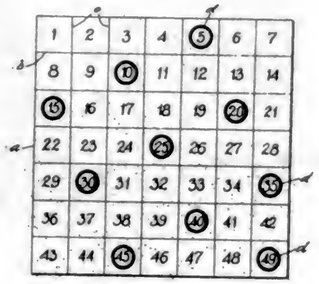
1,871,246. YARN DYEING SPINDLE. MAX THUS, Reading, Pa., assignor to Reading Dyeing Co., Reading, Pa., a Corporation of Pennsylvania. Filed May 3, 1930. Serial No. 449,579. 4 Claims. (Cl. 8—17.)



1. In yarn-dyeing mechanism comprising a spool carrier and perforated-tube yarn spools mountable thereon; mounting means for said spools each comprising a liquid-circulating spool-supporting spindle having a hollow

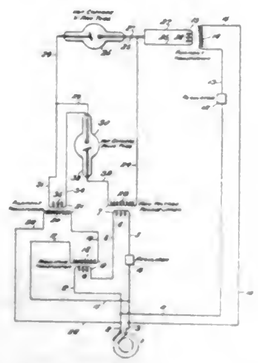
screw-head for connection thereof to the carrier, a pair of liquid-circulating yarn-compressing discs relatively adjustable axially upon said spindle and upon the projecting ends of the perforated-tube spools, and disc-adjusting means adapted to press said discs against the interposed wound yarn.

1,871,247. GAME. HENRY TROST, Union City, N. J. Filed Nov. 27, 1931. Serial No. 577,511. 4 Claims. (Cl. 273—131.)



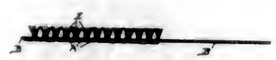
1. A game of the class described comprising a game board having a plurality of sections thereon said sections being numbered in series to distinguish the sections one from the other, an equal number of game pieces having a corresponding series of numbers adapted to be consecutively placed on the game board on sections bordering a section or a number of sections on which game pieces have previously been played, and an additional game piece characterized in a manner contrasting to the numerals of the other game pieces to distinguish the same therefrom.

1,871,248. X-RAY SYSTEM. HARRY F. WAITE, New York, N. Y. Filed Dec. 1, 1931. Serial No. 578,256. 1 Claim. (Cl. 250—34.)



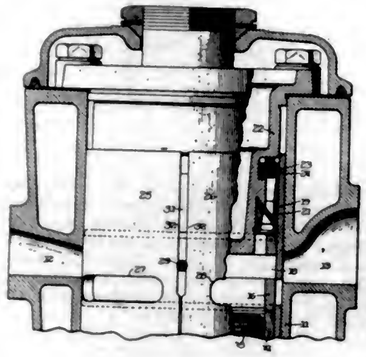
In a system of the class described, a hot cathode X-ray tube, a hot cathode valve tube, a high voltage transformer, and connections to both tubes, means for furnishing the hot cathode X-ray tube with a suitable heating current, a transformer and means for connecting the same to the hot cathode of the valve tube, means for connecting the hot cathode valve tube with the hot cathode X-ray tube, and a regulating transformer having its primary in series with the primary of the high voltage transformer, and its secondary in series with the primary of the filament transformer of the hot cathode valve tube.

1,871,249. RUG AND METHOD OF MANUFACTURING THE SAME. PHILIP C. WAITE, Oshkosh, Wis., assignor to Waite Carpet Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed Mar. 1, 1930. Serial No. 432,455. 3 Claims. (Cl. 26—2.)



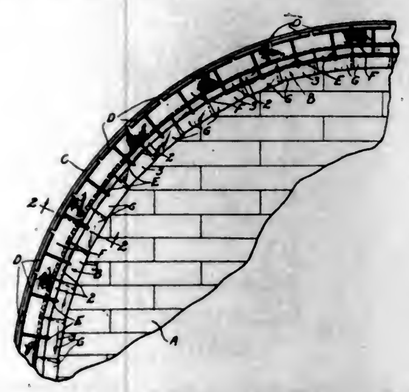
1. The process of making rugs or the like, which consists in closely tufting a backing with loosely bundled strands of thrown rayon having filaments of gossamer-like fineness, and in thereafter subjecting the rug to a bath in a liquid dye to separate, distend and intermesh the free filament ends of the tufts to afford a substantially continuous and unbroken fur-like surface, and to dye the tips of the filaments to a deeper shade than the underlying portions of the tufts.

1,871,250. INTERNAL COMBUSTION ENGINE SEALING RING LOCATING MEANS. PERCY C. WALRATH, Detroit, Mich., assignor to Skinner Motors, Inc., Detroit, Mich., a Corporation of Delaware. Filed Apr. 9, 1931. Serial No. 528,723. 4 Claims. (Cl. 123—75.)



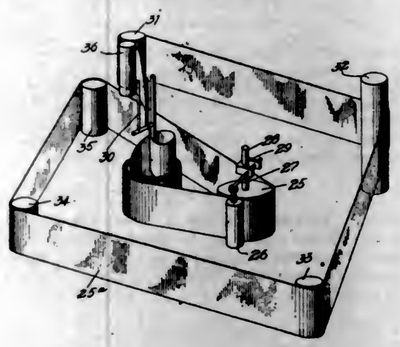
1. The combination of an outer ported cylinder, a head for said cylinder, an inner cylinder inside of and spaced away from said outer cylinder, a piston slidable in said inner cylinder, means to seal the fluid pressures in the outer cylinder above said piston including an expansible and contractible ported sealing-ring bearing endwise on an end of said inner cylinder with its ports in substantial register with those of said outer cylinder, arcuate reciprocatory valve-means sliding between said outer cylinder on the one hand and said inner cylinder and sealing-ring on the other hand, and means to prevent said sealing-ring from turning comprising a locating-pin mounted on, and projecting from the outer side of said sealing-ring, and cooperating with means preventing turning of the sealing-ring about its own axis.

1,871,251. FLOATING ROOF FOR LIQUID STORAGE TANKS. JOHN H. WIGGINS, Tulsa, Okla. Filed Mar. 31, 1930. Serial No. 440,586. 4 Claims. (Cl. 220—26.)



1. A floating roof for liquid storage tanks, provided at its peripheral edge with a flanged rim made up of a plurality of relatively short plates arranged in endwise relation and provided with integral, laterally-projecting flanges.

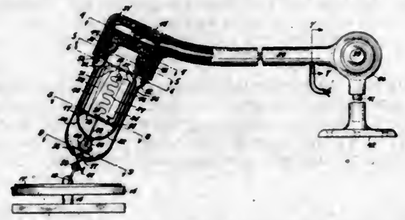
1,871,252. DISPLAY. FREDERICK A. APFELBAUM, New York, N. Y. Filed Aug. 29, 1931. Serial No. 560,060. 4 Claims. (Cl. 40—32.)



1. A display as characterized, comprising a rotatable substantially flat surface, a continuous ribbon having a portion thereof extended for display purposes and having another portion thereof coiled and standing edge wise on said rotatable surface with the ribbon extending from the coil both at its center and at its periphery to make connection with the said extended portion, whereby actuation of the extended portion and rotation of said surface obtains a progressive simultaneous winding and unwinding of the coil.

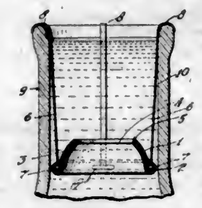
1,871,253. SOUND REPRODUCING APPARATUS. GUSTAV F. C. BAUER, Tonawanda, N. Y., assignor to National Police Signal Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 15, 1929. Serial No. 399,786. 5 Claims. (Cl. 179—100.4.)

2. A sound reproducing apparatus comprising an audio-circuit including a reproducer and an electron tube having at least two elements, said tube and reproducer being operatively connected so that audio-frequency impulses from said tube are transmitted to said reproducer, a means for supporting all but one of the elements of said tube against vibration, means connecting the opposite ends of



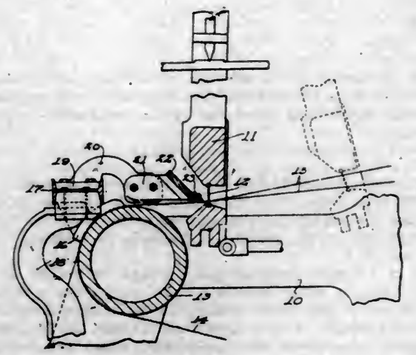
the other element of said tube to the tip of said tube and means connected to the tip of said tube for vibrating said tube.

1,871,254. LIQUID SEPARATOR. JAMES E. BRYAN, Newark, N. J. Filed May 21, 1931. Serial No. 538,904. 6 Claims. (Cl. 210—51.5.)



6. A device for separating liquids in a container, comprising an annular expansible member to be inserted into a container, means for supporting said member from the rim of the container, and a plunger to perimetrally tightly contact with the inner walls of said member and expand said member in said container into contact with the walls of the container as said plunger is pushed against said walls.

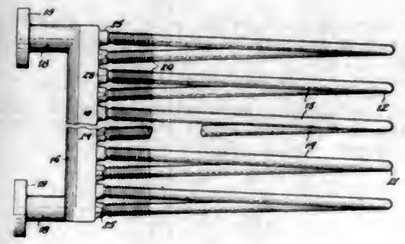
1,871,255. LOOM APPARATUS. WILLIAM EUGENE BUCHANAN, Appleton, Wis., assignor to Appleton Wire Works, Inc., Appleton, Wis., a Corporation of Wisconsin. Filed June 4, 1931. Serial No. 542,076. 6 Claims. (Cl. 139—291.)



1. In a loom, the combination of a frame for supporting thereon warp wires and woven wire cloth, a lay swingably mounted on the frame for beating up weft wires into

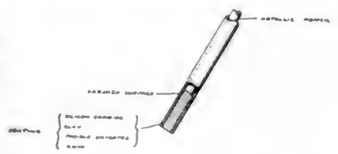
the fell, a support extending transversely of the wire cloth, a cloth-leveling bar shiftably mounted on said support and extending transversely of the cloth and having a hard polished surface engaging the cloth adjacent the fell, and means for securing said shiftably mounted bar to said support in a selected position with respect to the cloth.

1,871,256. WELDED HEATER ASSEMBLY OF ALUMINUM OR THE LIKE. CLAUDE A. BULKELEY, Kenmore, N. Y., assignor to Niagara Blower Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 30, 1929. Serial No. 403,490. 6 Claims. (Cl. 257—248.)



1. A heater structure, comprising a metal header formed to provide a header wall and a tube sheet, a comparatively thin walled coil welded to said tube sheet, and reinforcing ribs formed on the outer side of said tube sheet.

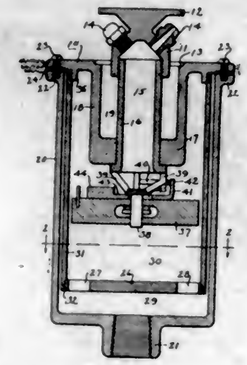
1,871,257. WELDING ELECTRODE. CHARLES A. CADWELL, Cleveland Heights, Ohio, assignor to The Electric Railway Improvement Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 19, 1925. Serial No. 63,299. 2 Claims. (Cl. 219—8.)



1. An electrode for electric arc welding, which comprises a copper containing metallic rod and an envelope thereon containing silicon carbide in substantial proportion.

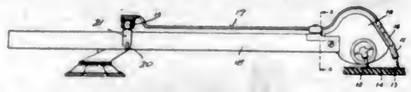
1,871,258. SPRINKLER. WALTER H. COLES and BERT J. NELSON, Troy, Ohio, assignors to The Skinner Irrigation Company, Troy, Ohio, a Corporation of Ohio. Filed Apr. 25, 1930. Serial No. 447,347. 9 Claims. (Cl. 299—61.)

1. A sprinkler comprising a rotatable sprinkling member having a water passage therein and having a nozzle connected to said water passage for directing a stream of water laterally of said sprinkling member, a supporting housing upon which said sprinkling member is normally located in retracted position, said sprinkling member being constructed to be moved during sprinkling operation by the pressure of the water to an extended operating position with the nozzle above the top of the housing portion, a water casing enclosed by said housing portion and in communication with said water passage, and means within said water casing actuated by the movement of the water



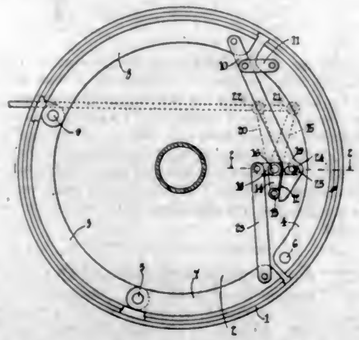
therein and having impact engagement directly with said sprinkling member to impart slow rotational movement to said sprinkling member.

1,871,259. DISK RECORD GROOVE INDICATOR. JOHN C. CROWLEY, New York, N. Y., assignor to Electrical Research Products Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 22, 1931. Serial No. 510,424. 5 Claims. (Cl. 274—1.)



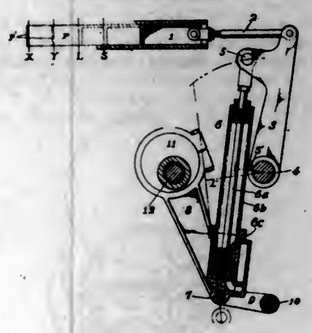
1. The combination with a sound reproducer and a groove type record of a groove indicator taking its position from the grooves on the record and used to indicate the correct groove on the record for the sound reproducer needle at any time during the playing of the record.

1,871,260. BRAKE. WALTER H. DELAHAYE, Ottawa, Ontario, Canada, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 14, 1931. Serial No. 557,024. 6 Claims. (Cl. 188—78.)



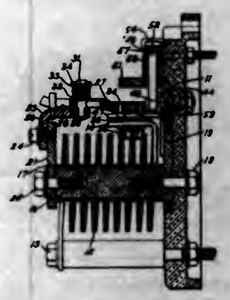
1. In a brake, a main shoe having a servo action, a second main shoe and an independent shoe, means for operating the first and second named shoes and independent means for operating the first and last named shoes.

1,871,261. DOUGH DIVIDER. GUSTAV B. EGGERT, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Aug. 17, 1931. Serial No. 557,495. 4 Claims. (Cl. 108—15.)



1. In a dough divider having a reciprocable plunger for charging dough into a measuring pocket, said plunger yieldingly driven so that its working stroke varies with the quantity of dough being measured, in combination, a rocker arm pivoted at one end to a fixed support and connected at its other end to the plunger, resilient actuating means operatively connected to said rocker arm, driving means for imparting reciprocatory motion to said resilient actuating means, the point of connection of said actuating means to said rocker arm being so located relative to the pivot of said rocker arm that said point of connection moves away from a dead center position during the working stroke.

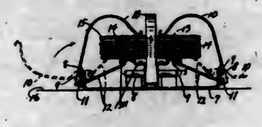
1,871,262. THERMAL RELAY. WILLIAM M. ELLINGSON, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 30, 1931. Serial No. 572,107. 22 Claims. (Cl. 175—336.)



1. In a thermal relay having an energizing coil and an armature movable relatively to the coil, means for effecting selective control of the armature at different values of current traversing the relay, including a heated plural-part member having different thermally-variable magnetic characteristics in the different parts thereof.

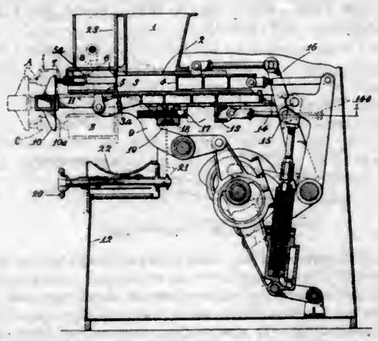
1,871,263. LETTER BUNDLE BINDER AND CARRIER. FRANK FARLEY, St. Paul, Minn. Filed Oct. 7, 1931. Serial No. 567,374. 5 Claims. (Cl. 24—17.)

1. A letter bundle and carrier device of the class described, comprising a pair of parallel plates, one plate a base and the other plate above it and normally parallel thereto, a series of clamp arms pivoted on the perimeter of one plate and having each below its pivot a short lever arm, a corresponding series of links pivoted each with one end to said short lever and its other end pivotally secured to the other plate, each said link and its connected clamp arm adaptable for movement in a common upright plane,



and said links all positioned in inclined planes when the upper plate is in raised parallel position, said upper plate comprising a goods-supporting member, and adapted when pressed toward the other plate to actuate the links and their respective clamp arms and the latter to swing simultaneously inwardly and thence downwardly to engage the topmost surface of the goods and press downwardly thereon.

1,871,264. EJECTOR MECHANISM FOR DOUGH DIVIDERS. GUSTAV B. EGGERT, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Oct. 5, 1931. Serial No. 566,865. 2 Claims. (Cl. 107—15.)

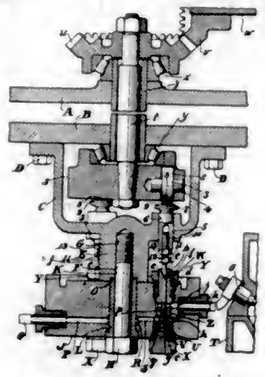


1. In a dough divider having a pressure chamber open at one end, a dividing head having a measuring pocket abutting against and movable transversely to and away from the open end of said chamber, means for forcing dough from said pressure chamber into said measuring pocket, and a floating piston in said pocket, in combination, a gate located behind said measuring pocket and having a working face directly abutted by said piston, said working face maintained parallel with the path of movement of said head to keep the piston in place during the movement of the head from its filling position to its discharge position, said gate mounted for movement axially of said pocket, and arranged to be moved backward by the piston as it is displaced by the dough forced into the pocket, adjustable means for limiting the backward movement of said gate, and power-actuated means for moving the gate forward to propel the piston and eject the dough from the pocket.

1,871,265. FUEL DISTRIBUTOR FOR INTERNAL COMBUSTION ENGINES. FRITJOF FRELIN, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 5, 1930. Serial No. 500,245. 2 Claims. (Cl. 137—145.)

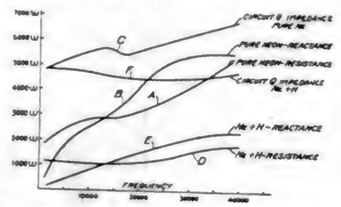
1. In a fuel distributor, the combination with a body having fuel passages and valves to control the passages,

of a casing secured to the body and having apertures in axial alignment with the valves, tappets slidable in the



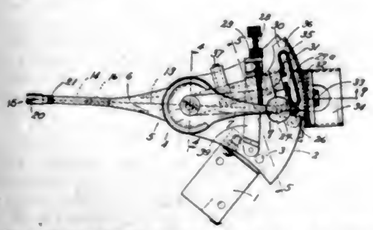
apertures and being revolvable therein, a rotary member in the casing, and a roller journalled in the member and acting upon the tappet for opening the valve.

1,871,266. ELECTROOPTICAL TRANSMISSION. FRANK GRAY, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 8, 1930. Serial No. 442,481. 19 Claims. (Cl. 178—6.)



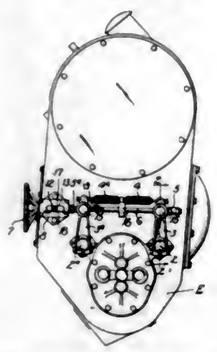
13. The combination with a glow lamp having a gas charge of inert gas and a small amount of active gas, and means for impressing upon a circuit including said lamp a variable electromotive force having frequency components extending over a wide frequency range, whereby the impedance of said combined circuit and lamp is substantially constant and the response of said lamp is substantially proportional at each instant to the amplitude of the impressed electromotive force.

1,871,267. TEMPERATURE REGULATOR. GEORGE HERBSTER, Cleveland, Ohio, assignor to The Bauer Ignition Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 24, 1930. Serial No. 447,029. 13 Claims. (Cl. 200—139.)



1. In a thermostatic electric switch, a lever fulcrumed intermediate its ends, spaced contact and insulating members carried by an end of a lever, a thermally responsive device extending between said members, and means for placing the thermally responsive device under an initial tension to electrically engage it with the contact member at room temperatures.

1,871,268. LEAD CONTROL FOR DIESEL ENGINES. REINHARD HILDEBRAND, Webster Groves, Mo. Filed Nov. 3, 1930. Serial No. 492,934. 6 Claims. (Cl. 64—5.)



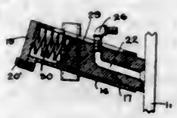
1. In a lead control for Diesel engines, the combination of a flexible driving element for transmitting movement from a driving shaft of the engine to the fuel injection pump, shiftable idlers that act on opposite sides of said flexible element, means for holding the idler at the slack side of the element in yielding engagement with the same, and a means capable of being adjusted while the engine is in operation for bodily shifting the idler at the tight side of said flexible element to change the lead of the engine.

1,871,269. METHOD OF DRYING MATERIALS. RAYMOND H. HOBROCK, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 25, 1929. Serial No. 395,103. 5 Claims. (Cl. 34—24.)



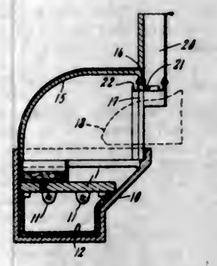
1. A method of treating a condenser which consists of evaporating the free moisture from the dielectric thereof and expelling the residual moisture from the dielectric by electroendosmosis.

1,871,270. FLANGE LUBRICATOR. ROWLAND HUBBARD, Philadelphia, Pa. Filed Dec. 14, 1929. Serial No. 413,986. 2 Claims. (Cl. 184—3.)



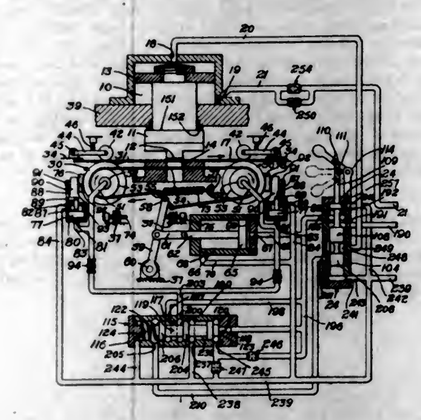
1. In a flange lubricator, in combination, an oil-distributing block one end of which is adapted to engage the flange surface to be lubricated, a holder for supporting said block in free-floating engagement with said flange surface, said block being provided with an oil passage the discharge end of which terminates in the contacting end of the block and the inlet end of which terminates in the upper surface of the block, a fitting secured to said inlet end of the oil passage and means in said holder for permitting free movement of said fitting together with said block longitudinally of said holder.

1,871,271. HEATER UNIT. MELVIN O. JENNINGS, Lexington, Mass., assignor to Harry H. Beckwith, Brookline, Mass. Original application filed Jan. 31, 1925, Serial No. 6,158. Divided and this application filed Jan. 10, 1930. Serial No. 419,881. 3 Claims. (Cl. 12—1.)



1. A device of the class described comprising a heating unit formed in the shape of a flat plate, and a trough of less width than said plate fixed to and against the upper face thereof.

1,871,272. MATERIAL HANDLING APPARATUS. RALPH JONGEDYK, Hinsdale, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 15, 1930. Serial No. 428,663. 16 Claims. (Cl. 164—56.)

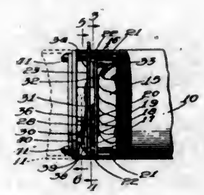


2. In a material working apparatus, a motive fluid responsive material working means, a motive fluid transmission system connected thereto, including a motive fluid responsive valve, means for maintaining the valve in a neutral motive fluid by-passing position, means for releasing the last means, and a second motive fluid transmission system constantly directing a relatively low pressure fluid against the valve and effective to cause an actuation of the valve upon its release for rendering the first system effective to cause an actuation of the fluid responsive material working means.

1,871,273. SHOE STIFFENER. STANLEY P. LOVELL, Newton, Mass., assignor to Arden Box Toe Company, Watertown, Mass., a Corporation of Massachusetts. Filed Nov. 28, 1930. Serial No. 498,759. 8 Claims. (Cl. 36—77.)

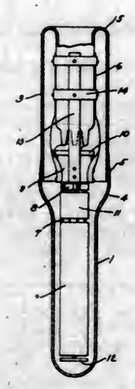
1. A shoe stiffener of substantially uniform thickness throughout and substantially uniformly impregnated with a stiffening agent but having a only localized portion in permanently limp condition.

1,871,274. MOTOR SPEED REGULATOR. EMANUEL NIELSEN, Racine, Wis., assignor to Hamilton Beach Manufacturing Company, Racine, Wis., a Corporation. Filed Nov. 24, 1930. Serial No. 497,669. 5 Claims. (Cl. 172—36.)



1. A motor having a rotatable shaft, field coils, a casing enclosing the same, and means within the motor casing for regulating the speed of rotation of the motor shaft, said means comprising an insulated member fixedly located adjacent the field coils, a plurality of contact points and a conductor plate carried by the insulated member, the contact points being tapped into the field coils, a ring-like regulator member movably mounted in the motor casing, a contact arm mounted on one face of the regulator member in juxtaposition to said contact points and conductor plate; spring means on the opposite face of said regulator member to urge said member towards said insulated member and means for actuating the regulator member.

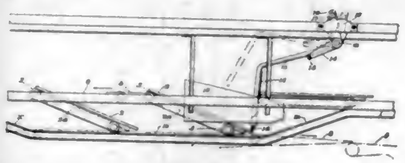
1,871,275. VACUUM ELECTRIC TUBE. ERIC ALEXANDER OLLARD, London, and ERNEST YEOMAN ROBINSON, Manchester, England, assignors, by mesne assignments, to Associated Electrical Industries Limited, a British Joint Stock Company. Filed May 15, 1924, Serial No. 713,435, and in Great Britain June 2, 1923. 8 Claims. (Cl. 250—27.5.)



5. In the method of manufacturing vacuum electric tubes, the step which comprises forming a portion of the

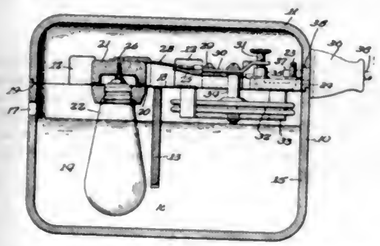
envelope from a vitreous material and producing a metallic portion of the envelope by attaching to said vitreous portion a former having a conducting surface and electrolytically depositing said metallic portion on said former.

1,871,276. MECHANISM FOR DISCHARGING BISCUITS OR THE LIKE FROM CONVEYERS. JOHN CURRIE PATERSON and GEORGE DONALD WILSON, Willesden, London, England, assignors to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Jan. 15, 1932, Serial No. 586,806, and in Great Britain Jan. 21, 1931. 6 Claims. (Cl. 198—27.)



1. In combination with a continuously driven conveyer for pans of baked biscuits and the like, means for tilting each pan as it travels through a discharge station so that its leading edge is higher than its trailing edge and it is inclined not beyond the angle of repose of the biscuits thereon, and an arm carrying brush means at its lower end, said arm pivotally suspended above the conveyer for oscillatory motion lengthwise thereof, and adapted to be engaged by the leading edge of a pan, raised thereby until it rides over said leading edge, and to sweep said brush means over the inclined pan by the action of gravity and the forward travel of the pan.

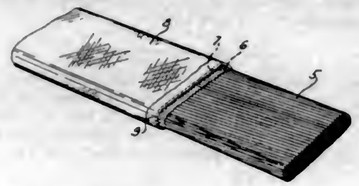
1,871,277. HUMIDIFIER. LOUIS F. PERKETT, Traverse City, Mich. Filed July 2, 1931. Serial No. 548,370. 8 Claims. (Cl. 219—45.)



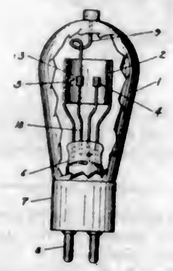
1. A humidifier of the character described embodying a casing, a horizontal support removably arranged in the casing and extending partially thereacross, a vertical partition within the casing beneath said support for dividing said casing into two chambers having communication adjacent the bottom of the partition, a lamp in one of the chambers and mounted upon said support, a thermostat for controlling the lamp and arranged in the outer chamber and mounted upon said support, a closure for the casing, and means whereby electrical connection may be made with the lamp, through a wall of the casing.

1,871,278. METHOD OF FINISHING THE EDGE OF A MATERIAL. RAYMOND E. POWELL, Westfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 20, 1929. Serial No. 393,924. 1 Claim. (Cl. 173—28.)

A method of finishing the edge of the covering of an electrical cable of non-circular cross-section, consisting in wrapping a layer of cellulose acetate fibres around the edge of the covering and contiguous conductor portion of the cable, and applying acetone to the fibres to partially dissolve them and thereby form an impervious seal between the edge of the covering and the contiguous conductor portion of the cable.

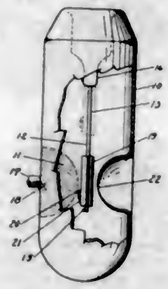


1,871,279. GLOW RELAY TUBE. HARVEY CLAYTON RENTSCHLER, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Jan. 9, 1930. Serial No. 419,524. 2 Claims. (Cl. 250—27.5.)



1. A glow discharge device comprising an envelope, a cathode of large area within said envelope, a starting anode of smaller area than said cathode and closely spaced therefrom, and a main anode adjacent said cathode but spaced a greater distance therefrom than said starting anode, leading-in wires for said cathode, starting anode and main anode, the leading-in conductor for said cathode being sealed into the envelope at a point opposite the position where the leading-in conductor for the starting anode is sealed whereby electrical leakage between the leading-in conductors for said cathode and starting anode is prevented.

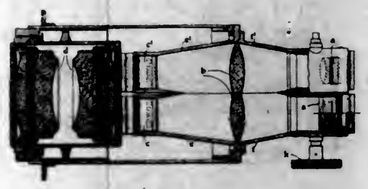
1,871,280. PHOTO-ELECTRIC TUBE. HARVEY CLAYTON RENTSCHLER, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Feb. 17, 1930. Serial No. 428,874. 1 Claim. (Cl. 250—27.5.)



A photoelectric tube comprising an envelope transparent to ultraviolet light, a coating of noble metal on a portion

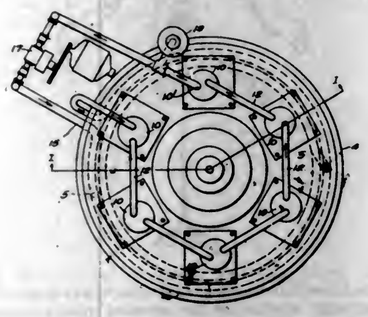
of the wall of said envelope, a quantity of lithium deposited on said noble metal, constituting a cathode for the tube, an anode and a thin bulbous window in the wall of the envelope opposite said cathode.

1,871,281. STEREOSCOPIC PHOTOGRAPHY. LAWRENCE FRANCIS SAVAGE, London, England. Filed July 11, 1927, Serial No. 204,928, and in Great Britain July 26, 1926. 3 Claims. (Cl. 88—57.)



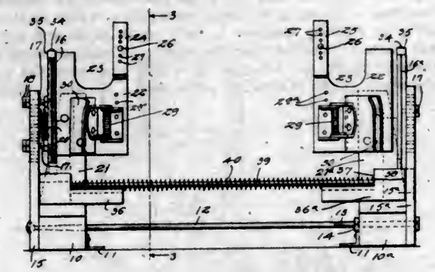
1. A lens system comprising in combination a set of separated objective lenses of equal focal length, a set of intermediate lenses in alignment with the said set of objective lenses and disposed in the focal planes thereof, said intermediate lenses being adapted for the reception of aerial images produced at the respective focal planes of the said objective lenses, a set of rephotographing lenses in alignment with the said intermediate lenses and at a determined distance therefrom, a superimposing lens disposed adjacent to the said set of rephotographing lenses, and means for adjusting the distance apart of the axes of the objective lenses, intermediate lenses and rephotographing lenses without effecting an axial movement of the said lenses substantially as hereinbefore described.

1,871,282. ANODE COOLING FOR RECTIFIERS. EROL B. SHAND, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 20, 1930. Serial No. 437,403. 7 Claims. (Cl. 250—27.5.)



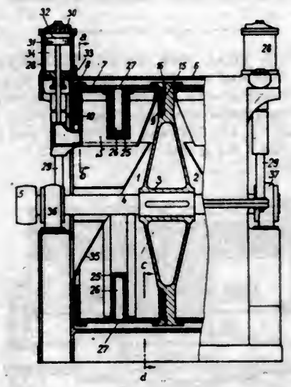
1. An anode-cooling system for a metal-tank rectifier comprising a tank, a water jacket surrounding the tank, an enlarged space at the bottom of the jacket and between the jacket and the tank, a coil of pipe in the enlarged space, a plurality of anodes for the rectifier, each anode having a longitudinal cavity therein, an outlet chamber at the end of the cavity, and a tube extending through the outlet chamber and into the cavity, a tube extending from the outlet chamber of one anode to the inlet tube of the next so that the anode cavities are connected in series, the outlet chamber of the last anode being connected to the inlet of the first through the coil in the water jacket to make a closed system, an insulating anode-cooling fluid in the system, means for circulating the fluid through the system, and an expansion chamber connected to the system.

1,871,283. ADJUSTABLE BOX FORM. RALPH A. SQUIER, Tieton, Wash. Filed Jan. 23, 1930. Serial No. 422,877. 15 Claims. (Cl. 144—295.)



1. A box form including parallel spaced horizontal head supports, vertical end plates carried by the head supports, one of said plates being yieldingly mounted and being resiliently urged toward the other plate, rear vertically disposed plates carried by the supports extending at right angles to the vertical end plates, and spring actuated head clamps carried by said last named plates and resiliently urged toward the corresponding end plates.

1,871,284. CENTRIFUGAL SEPARATOR FOR THE TREATMENT OF FLUIDS OR SLUDGES. GUSTAV TER MEER, Munich, Germany, assignor to Albert T. Otto & Sons, New York, N. Y., a Corporation of New York. Filed July 15, 1930, Serial No. 468,020, and in Germany Sept. 12, 1928. 14 Claims. (Cl. 210—63.)

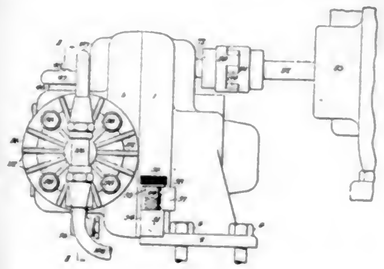


1. A centrifugal separator including a horizontally disposed shaft, and a basket mounted for rotation with said shaft, said basket having a cylindrical wall, and an end wall extending radially inwardly from said cylindrical wall, said end wall having perforations inclined radially outwardly towards the interior of the basket, whereby any solid material disposed in said perforations will be urged towards the interior of said basket under the action of centrifugal force.

1,871,285. FLUID COMPRESSOR. CHARLES M. TURSKY, Philadelphia, Pa. Filed May 19, 1931. Serial No. 538,473. 8 Claims. (Cl. 230—173.)

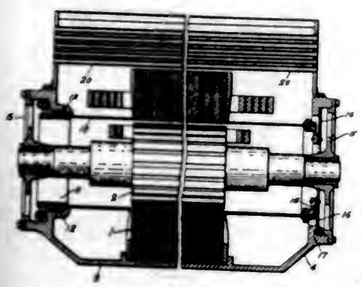
1. In a fluid compressor, the combination with a substantially closed casing; of a crank shaft journaled in said casing; said casing being divided in two sections in a plane transverse to the axis of said shaft; one of said sections containing bearings for journaling said shaft in-

dependently of the other section; said other section of said casing having, in unitary relation therewith, axially alined cylinders, in spaced relation, upon respectively opposite sides of the axis of said shaft; means detachably rigidly connecting said casing sections; said other casing section having an opening opposite to said crank shaft and provided with a removable door; a pair of pistons rigidly connected in spaced relation by a rod and mounted to reciprocate in the respective cylinders; a bearing in said



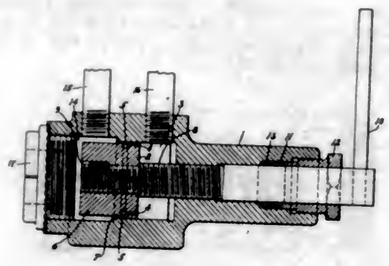
rod transverse to the common axis of said pistons; a crank pin mounted to reciprocate in said bearing in the piston rod and having a ball end; said crank shaft having in eccentric relation therewith a ball socket fitted to said ball; said ball socket comprising a plate encircling said crank pin and having means detachably securing it to said crank, accessible for removal when said door is open; whereby, said casing is readily separable for access to the compressor elements within it.

1,871,286. OIL SEAL FOR DYNAMO-ELECTRIC MACHINES. KALMAN VON KANDO, Budapest, Hungary, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1930, Serial No. 471,624, and in Hungary and Germany Mar. 15, 1930. 4 Claims. (Cl. 171—252.)



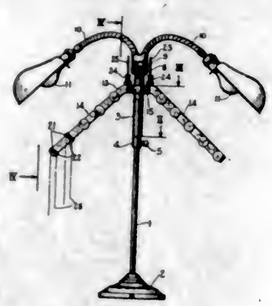
1. A dynamo-electric machine comprising a stator, a rotor mounted within said stator, a fluid-tight frame about said stator, said frame being adapted to contain a cooling liquid, a sleeve extending through said stator and surrounding said rotor, a reenforcing collar in said sleeve near one end thereof, said collar having an opening of sufficient size to permit passage of said rotor therethrough, a fluid-tight packed joint between said reenforced sleeve and said casing, an annular flange secured to the opposite end of said sleeve, an annular, flexible diaphragm secured to said flange and to said casing, a cooling liquid occupying the space between said casing and said sleeve and means in said casing to cool said cooling liquid.

1,871,287. HYDRAULIC ESCAPEMENT DEVICE. CHARLES C. WHITTAKER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 23, 1930. Serial No. 477,374. 3 Claims. (Cl. 137—75.)



1. In a hydraulic-escapement device for controlling the flow of fluids at high pressures, in combination, a casing having sections of different internal diameters, a plunger slidably mounted therein and having a circumferential groove and openings therethrough, an adjusting screw, a flow resistor carried by the plunger and cooperative with the casing, said flow restrictor having a coefficient of expansion greater than that of the casing to compensate for changes in the viscosity of the fluid with changes in temperature and of such diameter as to permit the flow of a fluid at a predetermined rate, and means for admitting a fluid to the device and exhausting it therefrom.

1,871,288. DISPLAY DEVICE. JOHN G. WHITNEY, Elyria, Ohio. Filed Mar. 22, 1930. Serial No. 437,965. 4 Claims. (Cl. 211—163.)

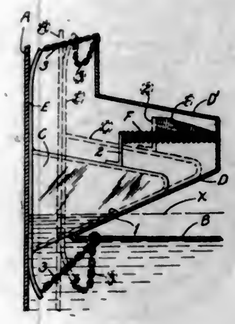


1. In a merchandise display device, a standard, a head telescopically mounted on the standard vertically adjustable thereon and rotatable about the axis thereof, means telescopically mounted on said head, a laterally extending arm supported thereby, a plurality of bars secured to the arms and extending horizontally therefrom in parallel spaced relation to each other.

1,871,289. FLOATING ROOF FOR LIQUID STORAGE TANKS. JOHN H. WIGGINS, Tulsa, Okla. Filed May 31, 1930. Serial No. 458,009. 11 Claims. (Cl. 220—26.)

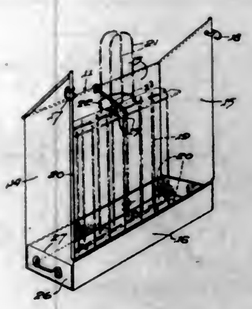
1. In a liquid storage tank, the combination of a side wall, a roof adapted to float on the liquid in the tank and having its peripheral edge spaced away from said side wall, shoe members arranged in sliding engagement with the inner face of said side wall, floats rigidly combined

with said shoe members and projecting inwardly from same towards the peripheral edge of the roof, and a supporting means for said floats and shoe members, con-



structed so that as the side wall expands, the area of said floats that contact with the liquid in the tank increases.

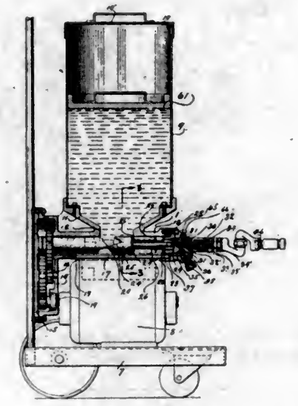
1,871,290. HEATER ATTACHMENT. DANIEL THEW WRIGHT, Washington, D. C. Filed June 12, 1930. Serial No. 460,676. 2 Claims. (Cl. 126—14.)



1. A broiler hood or casing for open hearth stoves comprising a front wall, side walls and a bottom wall, and open at its top, means carried by the hood for detachably securing the same to the front of the stove and pronged means pivoted to the front wall for engaging the top of a broiler frame and detachably supporting and maintaining said frame in adjusted position therein relative to said front wall and the front of the stove.

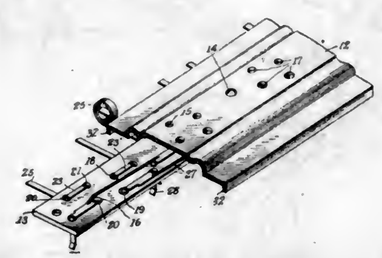
1,871,291. DISPENSING DEVICE. DANIEL G. ADAMS, New York, and ANTON C. HANSMANN, Winfield, N. Y., assignors to Adams Grease Gun Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 26, 1929. Serial No. 409,963. 8 Claims. (Cl. 221—47.1.)

1. A dispensing device, comprising in combination a container, a cylinder in communication therewith, a piston in said cylinder, the outer end of said piston being provided with a cam face, an electric motor, and a shaft in line with said piston rotated by said motor and provided with a cam face cooperating with the cam face on the piston to cause positive movement of the piston



into its cylinder thereby to place material which has passed from said container into said cylinder under pressure.

1,871,292. TUBE SOCKET. MILTON ALDEN, Springfield, Mass., assignor, by mesne assignments, to Radio Inventions, Inc., a Corporation of New York. Filed Sept. 23, 1926. Serial No. 137,286. 4 Claims. (Cl. 173—328.)

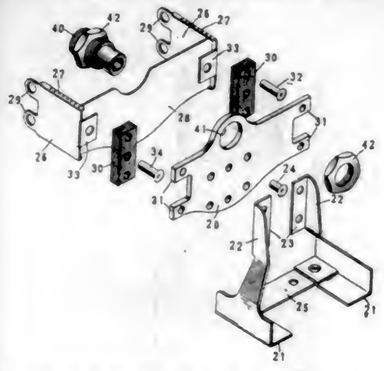


1. A holder for vacuum tubes comprising two insulating plates, one of said plates of channel form, means integral with one of said plates adapted to maintain a free space between said plates, a number of groups of perforations in said plates registering with each other, said perforations registering with the prongs of the vacuum tubes to be inserted, means for clamping said plates one against the other, contacting means projecting into said perforations and clamped between said plates and adapted to make contact with said prongs, and means integral with said contacting means for effecting connections with associated apparatus.

1,871,293. TUNING MECHANISM FOR RADIO RECEPTION, ETC. MILTON ALDEN, Springfield, Mass. Filed Dec. 14, 1926. Serial No. 154,689. 3 Claims. (Cl. 175—41.5.)

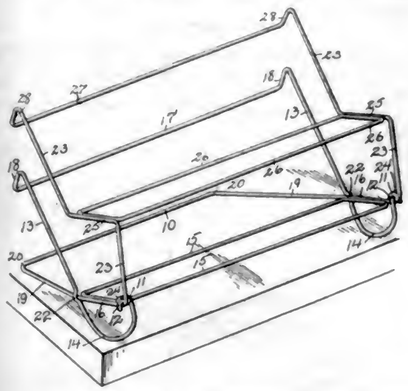
1. A chassis for a multiple unit condenser comprising angularly flanged sheet metal side plates, each having

base flanges and projecting posts arranged in pairs, cross bars connecting the ends of the flanges, cross plates con-



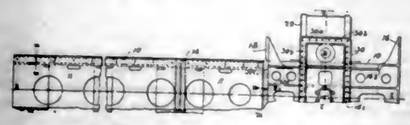
necting the ends of the posts of each pair, and shaft bearings carried by said cross plates.

1,871,294. DISPLAY RACK. CARL E. ANDERSON, East Orange, N. J., assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Filed Feb. 27, 1931. Serial No. 518,675. 5 Claims. (Cl. 211—85.)



1. A rack comprising a substantially U-shaped wire base member, a substantially U-shaped supporting member hinged at its ends to the front of the base member and bent down to form feet and then upwardly to frictionally engage the side strands of the base member and having a cross bar to support the rear end of a box, and a frame extending across the front of the base member to support the front end of the box.

1,871,295. LOCOMOTIVE. CHARLES H. APPS, East Orange, N. J. Filed Nov. 29, 1929. Serial No. 410,346. 14 Claims. (Cl. 105—172.)



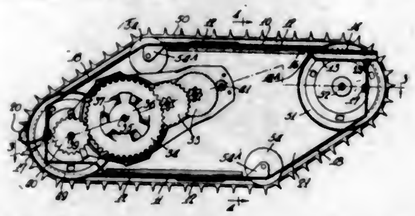
1. A frame for locomotives, comprising a pair of separate side frame members provided with a plurality of pedestal jaws, and plate means welded directly to the top of the upper margins of the side frame members throughout a length thereof comprising at least the pedestal jaws and tying the said members together.

1,871,296. ENDLESS MANDREL. HAROLD T. BATTIN, Ridgewood, N. J., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Nov. 22, 1929. Serial No. 408,945. 7 Claims. (Cl. 18—41.)



4. A circular hollow mandrel on which rubber tubes may be formed by the deposition of the solid constituents of a rubber dispersion over the exterior surface thereof, said mandrel consisting of at least two segmental sections, each end of each section having members constructed to interfit and to maintain juxtaposed sections in properly centered relation, at least one interfitting pair of members having cooperating extension elements for securing said sections together in mandrel form, and means for conducting fluids from the interior of the mandrel through said extension elements, the extension formed by said elements being arranged to form an aperture in the rubber tube during the formation thereof through which aperture the mandrel may be withdrawn.

1,871,297. TOY TANK. SAMUEL I. BERGER, Newark, N. J. Filed June 28, 1930. Serial No. 464,520. 7 Claims. (Cl. 46—48.)

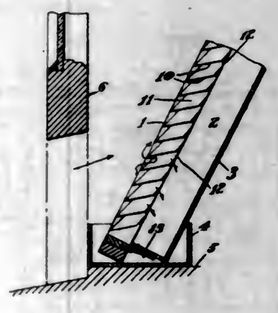


1. A toy tank of the character set forth including a hollow body, traction means therefor and a driving motor for said traction means housed within said body, said body being formed of side members and a top and a bottom member, said top and bottom members constituting similar pieces of sheet metal joined at their ends to provide top, bottom and ends of the body, the side members having flanges engaging the outer faces of the top and bottom members along the edges of the latter.

4. A toy tank including a body stamped to simulate a gun turret on its upper surface and a gun carried by said body, traction bands at each side of the body, said turret and gun being wholly within the limits defined by the compass of said traction bands.

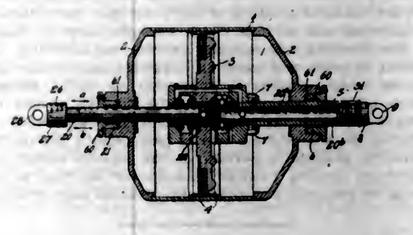
1,871,298. VENTILATOR. CHARLES R. C. BORDEN, Boston, Mass. Filed Mar. 1, 1930. Serial No. 432,291. 5 Claims. (Cl. 98—90.)

1. A ventilating device comprising a hollow dirt receiver having an air deflecting surface adapted to be disposed in upward disposition at the ventilating opening, said surface having converging transverse faces and ap-



ertures therebetween and opening into the hollow receiver, said surface also including horizontal downwardly faced surfaces resistant to the upward draft of the air.

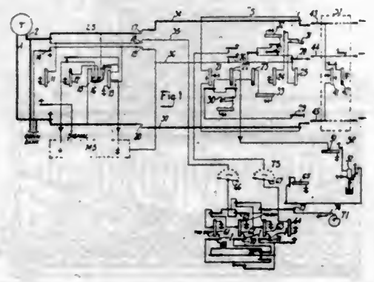
1,871,299. POWER ACTUATOR. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Nov. 22, 1924, Serial No. 751,481. Renewed Feb. 7, 1931. 29 Claims. (Cl. 121—38.)



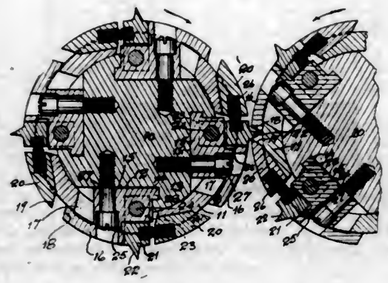
1. In a poppet valve mechanism, the combination with a valve seat, of a poppet valve for engaging said seat, provided with an axial aperture extending entirely through the valve, of a non-rotating actuating part extending entirely through said aperture, and fitting the same to support the valve co-axially with said seat, and capable of longitudinal movement with respect to the valve, means for yieldingly holding said valve on its seat and for making a gas tight joint at all times between the valve and said actuating part, to prevent the passage of gaseous pressure fluid between the valve and its actuating part when the valve is seated, and means on the actuating part for engaging the valve to unseat it.

1,871,300. TELEPHONE SYSTEM. JOHN A. BURGENER, Hinsdale, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 26, 1930. Serial No. 455,541. 24 Claims. (Cl. 179—18.)

1. In a telephone system, a line comprising two talking conductors, switching apparatus terminating said line, and means for automatically disconnecting the talking conductors of the line from said apparatus when an unstandard condition exists on the line and for re-connecting said talking conductors to said apparatus when the unstandard condition is removed from the line.



1,871,301. ROLL FOR INTERFOLDING PAPER. SAMUEL J. CAMPBELL, Green Bay, Wis., assignor to Hudson-Sharp Machine Company, Green Bay, Wis., a Corporation of Wisconsin. Filed Mar. 26, 1931. Serial No. 525,366. 15 Claims. (Cl. 270—39.)

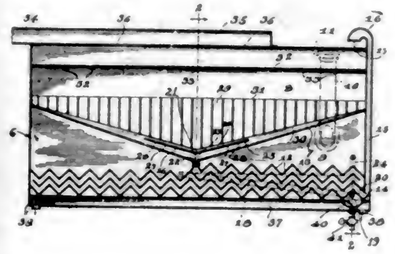


1. In mechanism of the class described, the combination of a pair of cooperating interfolding rolls mounted for opposite rotation with respect to one another and each provided with alternate tuckers and grippers, each of the grippers consisting of a fixed jaw member and a movable jaw member, and a mounting for all of the movable jaw members of a roll, said mounting being rotatably mounted on its roll, and means for imparting a movement of rotation to said mounting in timed relation to the rotation of the rolls to close and thereafter open the grippers in timed relation to the advance and recession of the tuckers.

1,871,302. APPARATUS FOR GENERATING GASEOUS MIXTURES. MANLY E. CARROLL, Miami, Fla., assignor to Air-O-Gas Generators, Incorporated, Miami, Fla. Filed Mar. 7, 1930. Serial No. 434,089. 10 Claims. (Cl. 261—123.)

1. In a device of the character described, a closed tank having an imperforate partition dividing the same into first and second chambers and preventing communication

between the chambers, an outlet for the second chamber, an air passageway arranged within the first chamber and having an inlet portion extending above the first chamber and its outlet communicating with the second chamber through said partition, the second chamber being provided with internal baffles.

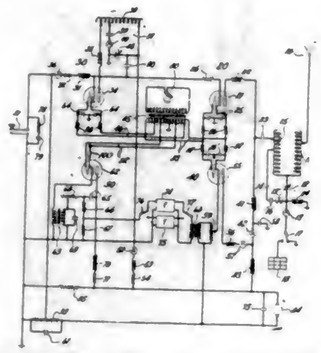


1,871,303. LOCK. SANFORD C. CHESICK, Hartford, Conn. Filed May 31, 1928. Serial No. 281,853. 3 Claims. (Cl. 70—54.)

1. A lock comprising a rotary key operated member having pin tumblers, a controlling rotary member coupled to the key operated member, rotatable therewith, and formed with a slot for the reception of the tumblers of a combination lock section, the combination lock section comprising a series of slotted plates arranged in side by side relation and carrying tumblers adapted to engage with the slot in the controlling member, plugs engaging with the slotted portions of said plates to move the latter, other plugs adapted to be moved in said slots without actuating the plates, and means for locking said non-actuating plugs in position.

1,871,304. SYSTEM OF SPACE DISCHARGE TUBES. LEWIS M. CLEMENT, Mountain Lakes, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 30, 1924. Serial No. 723,147. 18 Claims. (Cl. 250—8.)

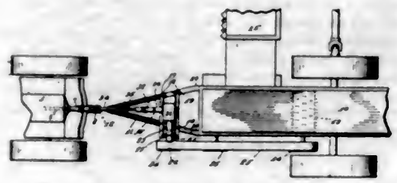
1. In a space discharge device system, a space discharge device comprising an anode, a cathode, and a control electrode, means for maintaining suitable average potential upon the control electrode of said device comprising a source of space current, a direct current path connected to the terminals of said source and including said anode and cathode in series with a resistance, a connection to said control electrode from a point in said resistance, and a second direct current path including a constant resistance external to the space discharge device in shunt to a portion of the first named direct current path.



1,871,305. METHOD OF MELTING BORINGS. EDWIN L. CROSBY and ALBERT E. RHOADS, Detroit, Mich., assignors to Detroit Electric Furnace Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 6, 1930. Serial No. 480,190. 1 Claim. (Cl. 13—34.)

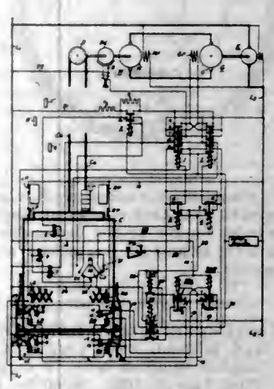
In the production of molten metal for pouring from a furnace charge consisting of finely divided material such as turnings and borings which normally form a charge of low thermal and electric current conductivity, the method of producing metal in a substantially continuous process which consists in subjecting an initial furnace charge of loose borings, turnings or the like to only the radiant heat of an electric arc to melt the charge while oscillating the charge from two to four times a minute, periodically pouring a portion of the molten metal, and selectively feeding borings, turnings or the like to the charge to maintain a substantially constant bath of metal.

1,871,306. POWER TRANSMISSION FOR AGRICULTURAL MACHINES. DAVID P. DAVIES, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Apr. 28, 1930. Serial No. 447,990. 1 Claim. (Cl. 180—53.)



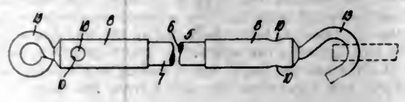
The combination, with a harvester-thrasher, of a gear housing, an adjustable support for the housing whereby the latter may be shifted in relation to the thrasher, a shaft in the housing, gearing for rotating the shaft, a universal joint connected to the gearing, an extensible shaft connected to the universal joint, a universal joint at the opposite end of the shaft and connected to a tractor power shaft whereby said geared shaft is rotated, and a belt connected to and driven by said geared shaft for actuating rotary elements of the thrasher.

1,871,307. ELEVATOR. WILLIAM R. DAVIS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 30, 1930. Serial No. 424,545. 7 Claims. (Cl. 187—29.)



1. In an elevator system, an elevator platform, means for moving said platform to a landing, a door for a first side of said platform, a door for a second side of said platform, levelling means for maintaining said first side of said platform level with the landing, levelling means for maintaining said second side of said platform level with the landing and means responsive to the opening of a door for initiating operation of one of said levelling means and for preventing operation of the other of said levelling means.

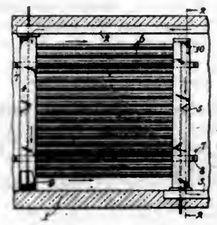
1,871,308. HARNESS CORD FOR LOOMS. SHERWOOD O. DODGE, Medford, and HERMAN J. MALAFEY, Dorchester, Mass., assignors to Guaranteed Parts, Inc., Allston, Mass., a Corporation of Massachusetts. Filed Sept. 17, 1931. Serial No. 563,294. 5 Claims. (Cl. 139—88.)



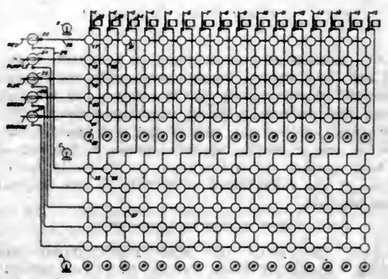
1. A harness cord for looms embodying therein a core of flexible wire, a ferrule enclosing an end of said cord and provided with a transverse opening therein, said wire terminating in said opening, a screw device mounted in said ferrule and engaging the end of the wire and deflecting the latter in the opening, and a fusible material in the opening and surrounding the deflected portion of the wire.

1,871,309. FLUE SYSTEM FOR HOT GAS HEATED BAKE OVENS. EUGENE OSCAR ENGELS, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Nov. 8, 1930. Serial No. 494,227. 5 Claims. (Cl. 107—55.)

1. In a bake oven, a flue radiator comprising a supply header connected at one end to a source of hot gases, an exhaust header substantially parallel to said supply header and communicating with the outside of the bake oven at its end remote from the inlet end of said supply header, a plurality of flues connecting said supply and exhaust headers, a partition arranged transversely in said supply header and shiftable lengthwise thereof, and a second partition arranged transversely in said exhaust header and shiftable lengthwise thereof.

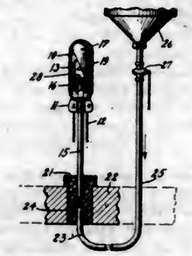


1,871,310. COMMUNICATION SYSTEM. FERDINAND S. ENTZ and ALBERT E. BACHELET, New York, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 22, 1930. Serial No. 476,966. 6 Claims. (Cl. 179—1.)



2. In a communication system, incoming and outgoing communication channels, a first and a second set of keys for interconnecting said incoming and said outgoing channels, a manual switching arrangement individual to each said incoming channel for alternatively connecting said channel to said first or said second key sets and an automatic switching arrangement individual to each said outgoing channel for alternatively connecting said channel to said first or said second key sets.

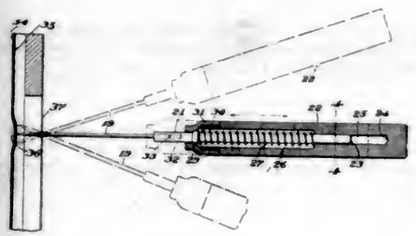
1,871,311. METHOD OF MAKING MERCURY SWITCHES. JAMES M. FAGAN, Maplewood, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Aug. 27, 1930. Serial No. 478,022. 2 Claims. (Cl. 200—152.)



1. The method of filling a mercury switch device which comprises providing a bulb with an exhaust tube extending

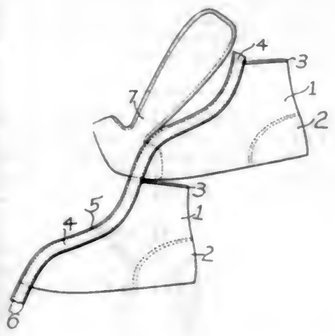
a given distance therein, evacuating said bulb through said tube, connecting said tube with a mercury supply line, admitting a quantity of mercury to a depth above the outlet orifice of the tube and causing the mercury to flow out through said tube so that the surface of the remaining mercury pool is level with the edge of the extended exhaust tube.

1,871,312. METHOD OF AND TOOL FOR REMOVING INDENTATIONS. WILLIAM FERGUSON, Flint, Mich. Filed Nov. 3, 1931. Serial No. 572,830. 6 Claims. (Cl. 81—15.)



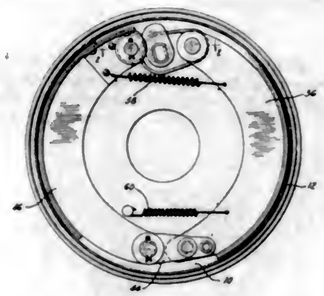
1. The method of bumping out an indentation in the metal body of a vehicle when access to the indentation is obstructed, which consists in thrusting a rod through or between the obstructing parts into engagement with the indentation, holding the end of the rod against the indentation and imparting repeated blows to the rod while it is held against the indentation to gradually force the portions of the indentation outwardly to the original or desired position.

1,871,313. METHOD OF MANUFACTURING FOOTWEAR. ROBERT J. FORD, Bristol, R. I., assignor to National India Rubber Company, Bristol, R. I., a Corporation of Rhode Island. Filed Oct. 2, 1929. Serial No. 396,599. 2 Claims. (Cl. 12—146.)



2. In the art of footwear manufacture, the steps of, forming a plurality of uppers from fabric, forming a plurality of tongues from fabric, arranging the tongues and uppers in assembled relation, arranging a continuous straight strip of bias-cut rubberized fabric on and in conformity with the front margins of the uppers, and tongues together in one operation, and severing the strip between successive uppers.

1,871,314. BRAKE. FREDERICK C. FRANK, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 30, 1930. Serial No. 464,748. 7 Claims. (Cl. 188—78.)



1. A brake comprising a backing plate, a bracket for an operating shaft, an anchor adjacent thereto and a reinforcing member for the bracket and anchor including a cup-shaped plate secured to the backing plate by the bracket and anchor.

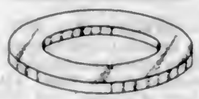
1,871,315. CASTING READILY OXIDIZABLE METALS. JOHN A. GANN, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 30, 1930. Serial No. 465,062. 7 Claims. (Cl. 22—188.)

1. The process of casting a readily oxidizable metal, which consists in forming a mold from a mixture of pulverized carbon and a plasticizer rendered moldable by being mixed with a gasifiable non-aqueous liquid, and casting said metal in said mold.

1,871,316. PURIFYING LIGHT METAL. JOHN A. GANN, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Oct. 4, 1928. Serial No. 310,440. 4 Claims. (Cl. 75—17.)

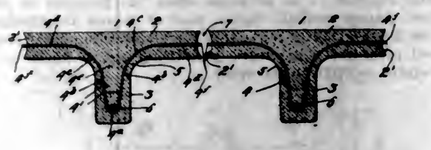
1. The method of purifying magnesium and alloys thereof which comprises melting the metal in a proportionately large bath of a mobile molten flux, temporarily subjecting the molten mixture of metal and flux to a temperature of about 100° to 300° C. above the melting point of the metal, whereby to increase the fluidity of such flux, agitating the molten metal with the flux whereby non-metallic impurities are removed from the metal by the washing action of the flux, allowing the mixture to stand quietly to segregate the flux and the metal, while cooling to a casting temperature, and separating the metal from the flux.

1,871,317. MAGNETIC CORE AND METHOD OF MAKING THE SAME. RANDALL GILLIS, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 10, 1930. Serial No. 480,880. 3 Claims. (Cl. 175—21.)



1. A magnetic core composed of insulated particles of a nickel-iron alloy held together by an autogenous bond formed under a pressure of about 250,000 pounds per square inch.

1,871,318. PRECAST CONCRETE STRUCTURAL UNIT. RICHARD F. GREENWOOD, New York, N. Y. Filed Jan. 30, 1929. Serial No. 336,045. 5 Claims. (Cl. 72—61.)



5. A pre-cast concrete structural unit comprising a concrete beam substantially T-shaped in cross section and composed of concrete flange and rib sections, and a continuous rigid plate of perforated sheet metal bent to provide at opposite ends flange sections embedded in the concrete flange sections of the T-beam and an intermediate integral channel portion, substantially V-shaped in cross-section, embedded centrally in the rib portion of said unit, each of said flange portions having bonding grooves along the side edges thereof and said metallic reinforcement having a marginal portion projecting outside the concrete flange and into said groove to provide an interlock between units.

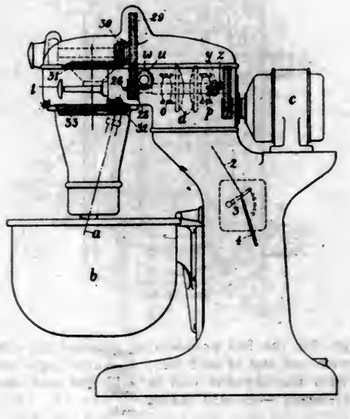
1,871,319. OIL WELL FLOW CONTROL DEVICE. EDWARD H. GRISWOLD and JOHN C. NICKLOS, Ponca City, Okla., assignors to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed Mar. 26, 1932. Serial No. 601,408. 5 Claims. (Cl. 166—2.)



1. An oil well flow control device including in combination a valve, a valve seat, a piston secured to said valve, a cylinder surrounding said piston, one side of said piston being exposed to oil pressure within said well, means for communicating the pressure above said valve seat to the other side of said piston and means for operating said valve from the surface.

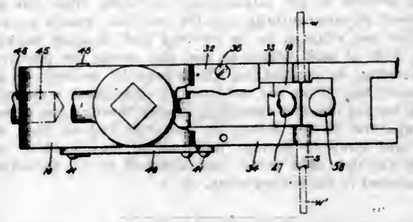
1,871,320. VARIABLE SPEED DRIVING OR TRANSMITTING GEAR. LAURENCE SEYMOUR HARBER and JOHN EDWARD POINTON, Peterborough, England, assignors to Baker Perkins Company, Incorporated, New York, N. Y. Filed July 23, 1928, Serial No. 294,782, and in Great Britain Aug. 9, 1927. 2 Claims. (Cl. 192—142.)

2. The combination of a machine, a driving motor therefor, a lay spindle operatively connected to said motor, a switch controlling a power circuit to said motor, a rotatable drum, a cable operatively connecting said drum and switch for closing the switch, a spring connected to said switch for holding it normally open, a starting handle and a dog operated thereby to rotate the drum and wind the cable, a trigger releasably holding



the drum, a trigger releasing peg, means including a friction clutch driven by said lay shaft for revolving the peg to displace the trigger, and resetting devices actuated by said handle, independently of the operation of the lay shaft, for restoring said peg to its initial position.

1,871,321. FORMING TOOL. WALTER S. HAYFORD, Morristown, and CHARLES R. MOORE, Maplewood, N. J., assignors, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed May 10, 1930. Serial No. 451,335. 2 Claims. (Cl. 140—113.)

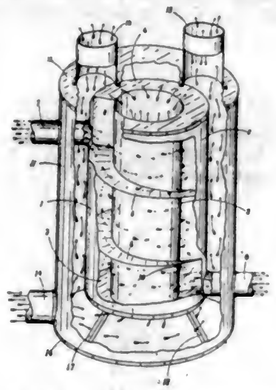


1. In a forming tool, a block, a toggle mechanism, a stationary die element mounted in said block, another die element disposed in operable relation with said mechanism, a screw, and means for actuating said screw for actuating said mechanism, for moving the last mentioned element toward said stationary element to swage a sleeve around conductor ends, the effective portions of said die elements cooperating to form a cylindrical opening of substantially uniform diameter.

1,871,322. HEAT SAVER. WILLIAM ASA HODGINS, Ottawa, Ontario, Canada. Filed Jan. 16, 1930. Serial No. 421,197. 1 Claim. (Cl. 257—167.)

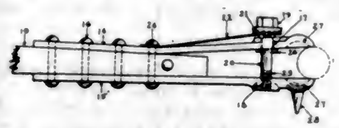
A heat saver comprising a heat radiator unit, composed of inner and outer tubular walls; a spiral flue formed intermediate said walls and end closure caps for

the opposite ends of said flue; an outer casing enclosing said unit; means for supporting said unit in said casing and in entire spaced relation therefrom; an in-



take pipe, for the hot products of combustion, communicating with one end of said flue; an outlet pipe communicating with the opposite end of said flue and warm air ducts extending from said casing.

1,871,323. DETACHMENT MECHANISM FOR CUTTER BARS. CHARLES KARL, Peoria, Ill. Filed Oct. 28, 1929. Serial No. 402,906. 1 Claim. (Cl. 287—89.)



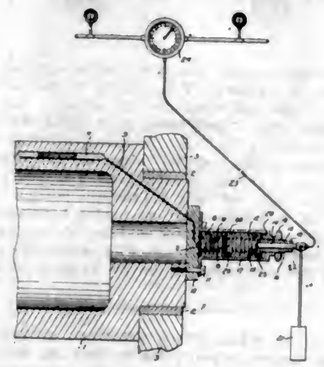
In the combination of a pitman and a cutter bar, means for detachably connecting the pitman and cutter bar, said means including pitman straps of flexible material secured to the pitman and extending from one end thereof in substantially parallel relation, means on said cutter bar adapted to be received and clamped between the ends of said pitman straps, and means for positively expanding or contracting the straps to connect or disconnect the cutter bar, said means comprising a threaded bolt having one end extending loosely through one of said straps and having means on said bolt end on each side of said strap to prevent longitudinal movement of said bolt through said strap, and adapted to be threadedly connected to the second strap.

1,871,324. INGOT MOLD. EDMUND J. KAUFFMAN, Girard, Ohio, assignor to Valley Mould and Iron Corporation, Hubbard, Ohio, a Corporation of New York. Filed Feb. 28, 1931. Serial No. 519,270. 6 Claims. (Cl. 22—139.)

1. The combination of an ingot mold for receiving high melting point molten metal, and a paper liner therefor covering the walls of the mold cavity.

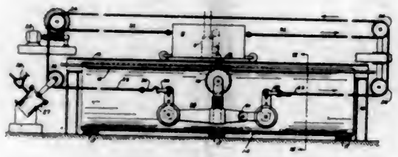
1,871,325. TEMPERATURE INDICATOR FOR ROTATING BODIES. ALEXIS W. KEEN, New York, N. Y., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Dec. 9, 1922. Serial No. 606,003. 9 Claims. (Cl. 73—52.)

1. The combination with a diaphragmatic container adapted to contain fluid and a duct for placing the same in communication with a container the pressure within which may vary, of a separate closed hydraulic system comprising a second diaphragmatic container, a conduit in communication with the said second diaphragmatic container, a registering device connected to said conduit and adapted to be actuated when the pressure in said last named conduit varies, and of means intermediate the diaphragmatic containers for maintaining their internal pressures equal while permitting one of them to be rotated relative to the other.



5. In combination a plurality of diaphragmatic containers of a fluid containing system the internal pressure of which is variable and a liquid filled system each of which systems is in fluid communication with one of the containers, of means for sustaining the containers so that one may be revolved relative to the other, and of rotatable thrust members operatively interposed between the containers.

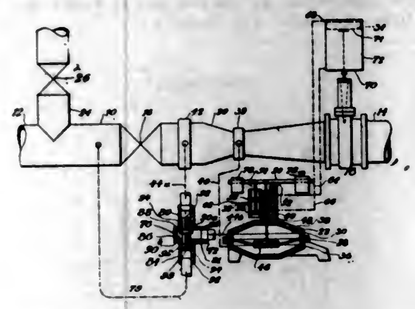
1,871,326. ARC WELDING MACHINE. GUSTAV H. KOCH, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 17, 1930. Serial No. 436,422. 4 Claims. (Cl. 219—8.)



1. In a welding machine, in combination, a carrier for moving an electrode along the abutting edges of an article to be welded, a backing strip disposed on the opposite side of the abutting edges from the electrode, a roller disposed to apply pressure to the backing strip opposite the electrode during the welding operation, a truck for supporting the roller, means for moving the electrode-carrier and said truck along the abutting edges to be welded at a predetermined rate, and means for varying the pressure applied to the backing strip.

1,871,327. AUTOMATIC VALVE SHUT-OFF. JOSEPH KUEN, Glenside, Pa., assignor to Builders Iron Foundry, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 21, 1930. Serial No. 430,417. 7 Claims. (Cl. 210—125.)

7. In a pipe line, a shut-off valve, a controller valve below said shut-off valve, a differential producer in said line below said shut-off valve, differential responsive means, a pipe connecting the upstream side of said differential producer with the high-pressure side of said differential responsive means, a double-acting check valve



interposed in said pipe and a pipe joining the opposite side of said check valve with said line above said shut-off valve.

1,871,328. SAMPLE TAKING DEVICE. FRANK G. KUNZ, Houston, Tex. Refile for abandoned application Serial No. 421,116, filed Jan. 16, 1930. This application filed Sept. 14, 1931. Serial No. 562,658. 12 Claims. (Cl. 255—1.)

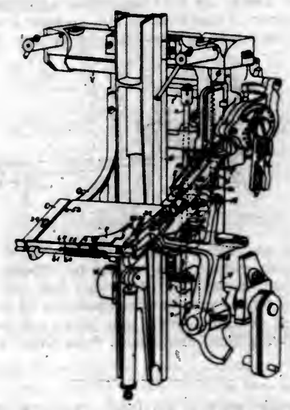


1. Apparatus for taking samples from a well bore including a drilling device for disintegrating the formation at the bottom of the bore and having a passage way for drilling fluid through which said fluid may be supplied to the bottom of the bore to carry the disintegrated formation out of the bore around said drilling device, a detachable receiver on said drilling device, arranged to intercept and confine some of said disintegrated formation and, when detached, to carry the same, in a collected mass, to the ground surface.

1,871,329. GLUE AND METHOD OF MAKING. IRVING F. LAUCKS and GLENN DAVIDSON, Seattle, Wash., assignors to I. F. Laucks, Incorporated, Seattle, Wash., a Corporation of Washington. Original application filed Oct. 29, 1923, Serial No. 671,381. Divided and this application filed Oct. 4, 1928. Serial No. 310,431. 4 Claims. (Cl. 87—17.)

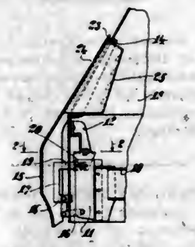
1. The process of making an adhesive, which comprises dry mixing soya bean flour with an alkaline earth hydroxide, and subsequently incorporating an alkali metal hydroxide and water.

1,871,330. TYPOGRAPHICAL SLUG-CASTING MACHINE. GEORGE E. MARLATT, Pasadena, Calif. Filed June 8, 1931. Serial No. 542,798. 16 Claims. (Cl. 199—59.)



1. In a slug-casting machine, in combination with the ribbed slugs, the adjustable knife for trimming the ribs of said slugs, the slug-ejector blade and the spring plate for guiding said slugs from said trimming knife in advance of said ejector blade, grooves in said spring plate coinciding in position with the ribs on said slugs and capable of engaging said ribs and thus preventing abnormal behavior of the slugs while passing said spring plate in advance of said ejector blade.

1,871,331. BUMPER. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1931. Serial No. 527,707. 2 Claims. (Cl. 293—54.)

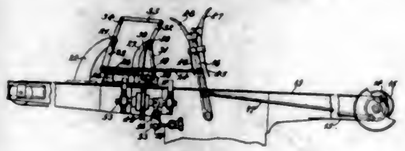


1. In combination with a bumper and means to mount the same on a vehicle, a guard secured thereto and extending upwardly therefrom, said guard having a grating and a wall secured rearwardly thereof to direct the flow of air through the guard.

1,871,332. METHOD AND MEANS FOR COLLECTING AND ARRANGING BISCUITS AND THE LIKE. ROBERT FRENCH MACFARLANE, Fulham, London, and WILLIAM EDWARD PRESCOTT, Willesden, London, England, assignors to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Dec. 28, 1929, Serial No. 417,207, and in Great Britain Jan. 3, 1929. 3 Claims. (Cl. 198—31.)

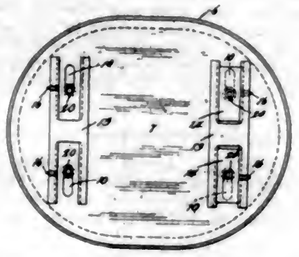
3. In combination, a continuous traveling band, a pusher parallel with said band and mounted for reciprocation crosswise the same, means for actuating said pusher, a brake member located in advance of the pusher

and arranged to engage and arrest a column of articles on the moving band before their arrival at the pusher, brake-actuating means, a conveyor leading from the zone of operation of the pusher in the direction of movement of the pusher during its working stroke, actuating means for said conveyor, a displaceable stop located normally in the path of travel of articles carried by said band and



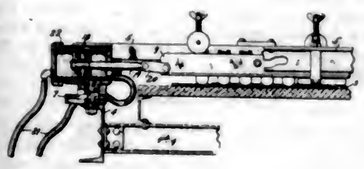
positioned to be contacted by said articles at a place in front of the pusher, and means for displacing said stop away from the column of articles out of the path of the pusher, whereby before the operation of the pusher the column of articles beyond said brake can be carried on by the moving band and spaced from those held back by the brake.

1,871,333. HOT METAL LADLE. FRANK B. MCKUNE, Hamilton, Ontario, Canada. Filed Nov. 17, 1930. Serial No. 496,071. 11 Claims. (Cl. 22—85.)



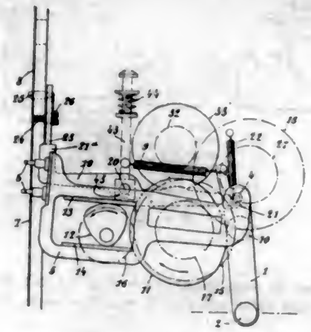
1. A multiple stopper ladle having a bottom provided with a plurality of discharge openings, means for varying the distance between said openings, movable stoppers for said openings, external actuating means for the stoppers, and means for adjusting the stoppers to cooperate with the discharge openings.

1,871,334. CUTTING MACHINE. GEORGE K. MCNEILL, Detroit, Mich., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Sept. 17, 1929. Serial No. 393,161. 11 Claims. (Cl. 164—51.)



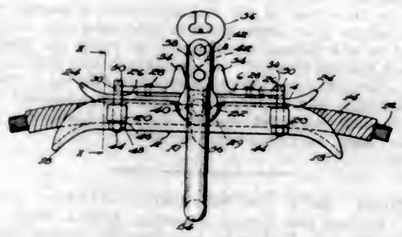
1. A fabric cutting machine having in combination a frame disposed across the fabric, a bar mounted for movement within the frame, a series of knives regularly spaced along the bar and mounted with their cutting edges in the plane of movement, a clamping means arranged to clamp the fabric adjacent the cut, and a single cylinder means for moving the clamping means transversely and the bar lengthwise.

1,871,335. STOPPING DEVICE FOR CINEMATOGRAPHIC APPARATUS. ANDRÉ NOËL MERLE, Vincennes, France, assignor to Pathe Cinema, Anciens Etablissements Pathe Freres, Paris, France. Filed Nov. 28, 1930, Serial No. 498,530, and in France Jan. 23, 1930. 4 Claims. (Cl. 88—18.4.)



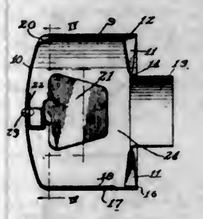
1. In a cinematographic apparatus, a film gate for the film, a claw-carrying device adapted to be moved towards and away from said film gate, means for moving said claw-carrying device towards and away from said film gate, a pivoted stop arm adapted to be brought into and out of a position in which said stop arm maintains said claw-carrying device in an inoperative position, a rotatable cam, elastic means adapted to urge said stop arm towards said cam and to cooperate with said cam for bringing said stop arm into and out of the position in which said claw-carrying device is held in the inoperative position, means for rotating said cam, a movable contact member adapted to bear on the edge of the film, a locking member connected with said contact member and adapted, when said contact member bears on the normal edge of the film, to hold said stop arm out of the position in which said claw-carrying device is held in the inoperative position, and a friction device inserted between said cam and said means for rotating said cam and adapted to yield when said movable contact member bears on the normal edge of the film.

1,871,336. CABLE SUPPORT. FREDERIC H. MILLER, Edgewood, and GEORGE M. BARROW, Derry, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 13, 1931. Serial No. 556,778. 6 Claims. (Cl. 248—31.)



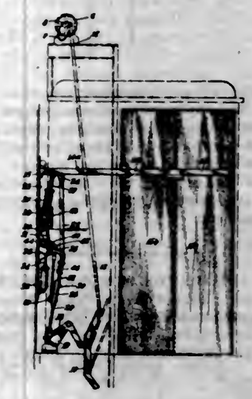
1. A cable support comprising a cable-receiving member, a relatively movable suspension element therefor, means responsive to relative movement of said member and element for releasing the cable from the support laterally to the cable axis and means for preventing release of the cable-receiving member from the suspension element when the cable is so released.

1,871,337. AIR CLEANER. THOMAS G. MOULDING, Chicago, Ill., assignor to United Air Cleaner Corporation, Chicago, Ill., a Corporation of Illinois. Filed July 9, 1930. Serial No. 466,657. 3 Claims. (Cl. 183—90.)



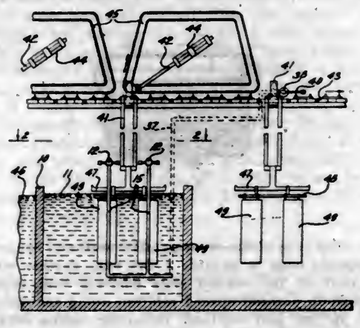
1. In a device of the character described, a casing having a walled end and inlet means arranged to impart a whirling action to entering air to separate impurities therefrom, said casing having a longitudinal peripheral slot extending substantially to said walled end for the discharge of said impurities, said casing having a plurality of peripheral inlet openings adjacent said walled end arranged to impart a whirling action to air entering therethrough whereby the whirl is increased adjacent said walled end, said casing having an outlet for cleaned air, and an air straightener in the form of a flat blade disposed adjacent said walled end for taking the whirl out of cleaned air prior to the exit thereof through said outlet.

1,871,338. DOOR OPERATOR. CLIFFORD NORTON, South Orange, N. J., assignor, by mesne assignments, to Otis Elevator Company, a Corporation of New Jersey. Filed Jan. 10, 1929. Serial No. 331,453. 12 Claims. (Cl. 187—52.)



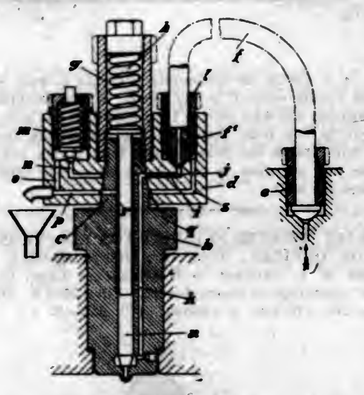
1. In combination with a movable elevator door, power means for moving said door to open position, said means including door moving mechanism operatively and permanently connected to said door, said mechanism including a door moving element movable in a door closing direction to a point beyond door closed position, an elevator controlling circuit and means controlled by said element for opening and closing said circuit, said means permitting movement of said elevator only when said element is moved in door closing direction beyond closed door position.

1,871,339. APPARATUS FOR DRYING PARTS. ALBERT PEARSON, Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 16, 1930. Serial No. 453,094. 5 Claims. (Cl. 34—12.)



5. In an apparatus for drying articles, a treating bath, means for successively moving articles into and out of said bath, and means rendered effective upon the movement of an article to a predetermined position for causing air under pressure to be directed upon another article upon being removed from said bath.

1,871,340. FUEL VALVE. GUSTAV PIELSTICK, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a Corporation of Germany. Filed Apr. 28, 1931, Serial No. 533,567, and in Germany May 8, 1930. 7 Claims. (Cl. 299—107.1.)

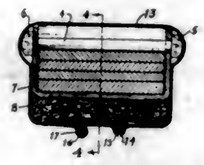


4. A fuel valve for the injection of fuel in an internal combustion engine of the character described comprising a valve body having a conical extension member, and an attachment member adapted to be connected to said extension member, said attachment member having a conical seat rotatably supported by said extension member and having a coupling adapted to be attached to an injection pipe, a safety valve provided in said attachment member, said members having cooperating fluid passages for the supply of fuel to the engine, and a connection from said passages to said safety valve provided in said attachment member.

1,871,341. SPRING COVER. DANIEL K. POPE, Cleveland, Ohio. Filed May 28, 1929. Serial No. 366,674. 3 Claims. (Cl. 267—37.)

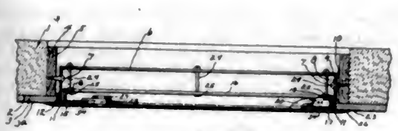
1. A one-piece molded spring cover composed of an oil resistant and waterproof vulcanized rubber composition,

and of a size and shape to be wrapped about and enclose a vehicle leaf spring with the opposite side edges of the cover overlapping along the bottom of the spring, said cover having a molded longitudinal bead formed along one side edge thereof, and a second longitudinal bead molded



on the outer face of the cover parallel with and spaced from the opposite edge to provide a flat edge portion which is overlapped by the beaded edge whereby said beads are positioned in parallel spaced relation along the under side of the spring, and resilient fastening means detachably connecting said beads to maintain a tension on the cover.

1,871,342. ACCESS DOOR. MYRON P. POTTER, Cleveland Heights, Ohio. Filed Feb. 27, 1928. Serial No. 257,176. 9 Claims. (Cl. 189—46.)



1. In a device for accessibly covering a wall recess, a frame rigidly secured in the recess, a trim adapted to lie flat against the wall face, a trim frame on the trim, a door hinged to the trim frame, means connecting the frame and trim frame for drawing the trim frame toward the frame and securing it thereto to draw the trim firmly against the wall.

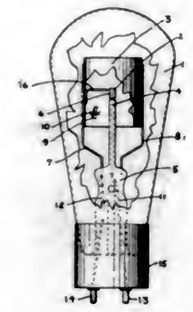
1,871,343. HEATER ELEMENT FOR ELECTRON EMISSION DEVICES. JOHN HUMPHREYS RAMAGE, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed May 9, 1928. Serial No. 276,340. 5 Claims. (Cl. 250—27.5.)



4. A thermionic device having an indirectly heated cathode comprising a heater element, an insulator enclosing said element and a layer of a compound on the wall of the insulator adjacent to said element to protect said element from gases liberated from said insulator.

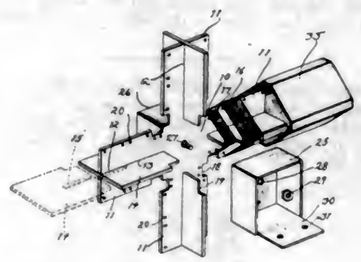
1,871,344. ELECTRON DISCHARGE DEVICE. HARVEY CLAYTON RENTSCHLER, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Jan. 3, 1927. Serial No. 158,503. 1 Claim. (Cl. 250—27.5.)

A gaseous conduction device comprising an enclosing envelope containing therein an inert gaseous filling, a thermionically inactive cathode and an anode composed substantially of thorium, said cathode having a relatively large area as compared to the area of said anode and said cathode



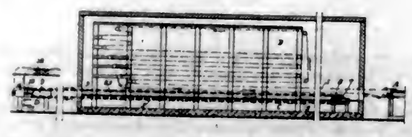
being coated at least in part with a metal of the cerium group of elements, said inert gaseous filling being at a pressure of about five to seven millimeters of mercury.

1,871,345. COIL UNIT. GIUSEPPE RIGANTE, Westerleigh, Staten Island, N. Y. Filed Mar. 25, 1931. Serial No. 525,232. 3 Claims. (Cl. 175—359.)



1. A device of the character described comprising a relatively thin body member of cross-shaped form, and relatively thin rectangular members adjustably mounted thereon and positioned in a plane at right angles to the plane of the arms, and a box like member secured to said body portion on each of the opposite sides thereof, one of said box like members providing a supporting means for the body members.

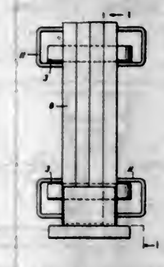
1,871,346. APPARATUS FOR COOLING MOLDED CONFECTIONS. ROBERT SAVY, Paris, France, assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Apr. 22, 1931, Serial No. 531,921, and in France May 17, 1930. 2 Claims. (Cl. 34—12.)



1. In a machine for cooling molded material, in combination a cooling chamber, an endless conveyor for carrying containers for the material to be cooled entering said chamber at one end and traveling in a circuitous path

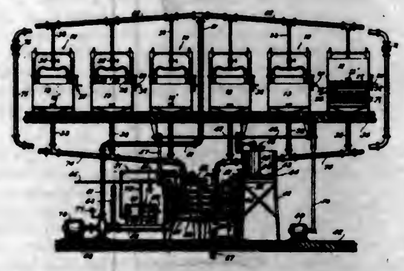
therethrough, the bottom run of said conveyor arranged to invert and empty said containers, said conveyor leaving the chamber at the same end at which it enters, a second cooling chamber below said first mentioned chamber, a horizontal baffle separating said chambers, an endless transfer conveyor for receiving material discharged from said first conveyor, said transfer conveyor having two laps and arranged to carry trays and maintain them upright on both laps, the upper lap traveling above said baffle, closely beneath, at the same speed, and in the same direction as said lower run of the first-mentioned conveyor, the lower lap of said transfer conveyor traveling beneath said baffle to carry the material thereon out of said second cooling chamber to an unloading station.

1,871,347. CONSTANT SPEED MOTOR. HUGH M. STOLLER, Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 1, 1930. Serial No. 485,577. 10 Claims. (Cl. 172—36.)



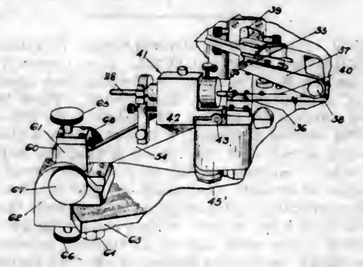
1. A constant-speed direct-current motor having an armature, a field winding, separate magnetic shunts positioned between the outer end of each field pole piece and the field yoke adjacent to the other end of the pole piece and enclosing the field winding that are substantially unaffected by the cross flux of armature reaction and displace the magnetization curve of the motor to have the operating portion thereof at relatively high flux densities on a straight line extending through the origin of magnetization curve, and means comprising a supporting member for the pole pieces composed of magnetic material free from hysteresis effects to obtain coinciding magnetization curves for the motor on rising and falling voltages and cooperating with the field winding to apply a field flux to the armature which is proportional with close precision to the line voltage applied to the armature.

1,871,348. APPARATUS FOR TREATING RUBBER. IRA J. TURNBULL, New Haven, Conn., assignor to Morgan and Wright, Detroit, Mich., a Corporation of Michigan. Filed Mar. 22, 1928. Serial No. 263,778. 8 Claims. (Cl. 91—44.)



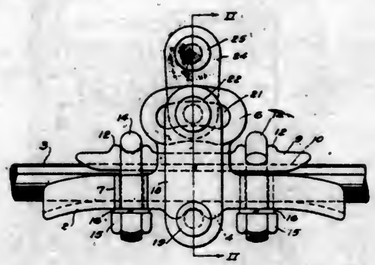
1. A device for cooling and spraying rubber stock, including in combination, a cabinet having rear and side walls, a door at the front of the cabinet, a rack extending longitudinally within the cabinet and behind the door, the rack being arranged to receive a plurality of rubber slabs, and means for spraying the enclosed slabs, said means being in the form of a rockable pipe extending longitudinally of the cabinet and above the slabs, a handle connected to said pipe on the outside of the cabinet, a second pipe laterally spaced from the rockable pipe, connecting tubes between the two pipes, said second pipe carrying a series of nozzles, a source of liquid supply, and a liquid-conveying connection from said source to the rockable pipe, said handle being effective to move the rockable pipe in a manner to cause the nozzle-carrying pipe to sweep to and fro across the rack, whereby to distribute the spraying liquid evenly upon the slabs and the distance between said nozzles and rockable pipe being sufficient to prevent liquid dripping from the nozzles onto the said slabs when the nozzle-carrying pipe has been swung toward one side of the cabinet.

1,871,349. ADJUSTABLE HOLDER FOR COIL-WINDING DIES. STEN WADSTEN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Dec. 27, 1927. Serial No. 242,715. 3 Claims. (Cl. 153—65.)



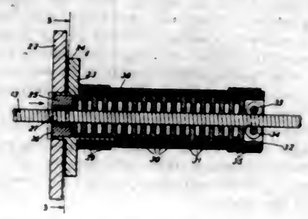
1. In a coil-winding machine including a die and wire-driving means for moving a wire into said die, the combination with a die holder, a sleeve for supporting a die, and means for adjusting said sleeve relative to said holder to position said die in a given relation to said wire driving means.

1,871,350. SUSPENSION CLAMP. NILS A. WAHLBERG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 29, 1927. Serial No. 216,144. 3 Claims. (Cl. 248—31.)



1. A clamp comprising a suspension member having a seat, co-operating clamping members disposed on said seat, one of said members having a co-operating portion for position on said seat and one of said members having a slot shaped in accordance with rocking movement of the clamping members on the suspension seat to provide a lost-motion connection to said suspension member, said suspension member being connected to the clamping members only through said slot.

1,871,351. ENTRANCE DIE FOR TANKS. JESSE F. WENTZ, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 22, 1930, Serial No. 483,602, and in Great Britain Sept. 23, 1929. 8 Claims. (Cl. 286—16.)

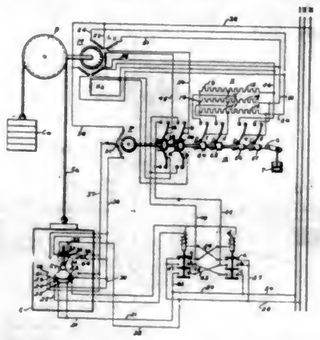


1. A sealing gland for the passage of a strand through a wall having a higher pressure on one side than on the other, comprising a tube having a plurality of rigid constricting members distributed along its length, said tube being of flexible material to permit said constrictions to move individually.

1,871,352. ELECTRON DISCHARGE DEVICE AND METHOD OF MANUFACTURE. EMIL GIDEON WIDELL, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Feb. 15, 1929. Serial No. 340,342. 4 Claims. (Cl. 250—27.5.)

1. The method of forming a thermionically active alkaline earth metal oxide coating on a tungsten metal surface which comprises coating said surface initially with thermally dissociable compounds of said alkaline earth metals containing a proportion of a compound thermally dissociable at least in part to yield a reducing gas during formation of the oxide coating by thermal decomposition of the initial coating and thereafter effecting thermal dissociation of the coating.

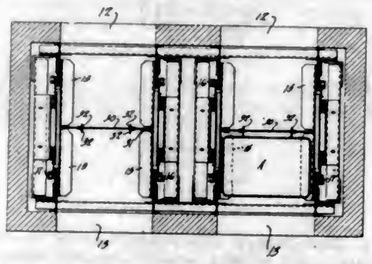
1,871,353. ELEVATOR CONTROL SYSTEM. HAROLD W. WILLIAMS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed Mar. 27, 1928, Serial No. 265,003. Divided and this application filed June 18, 1929, Serial No. 371,838. Renewed Mar. 16, 1931. 5 Claims. (Cl. 172—152.)



1. In a motor-control system, a multi-speed alternating-current motor having windings for each speed, a source of power, means for controlling the direction of movement of said motor, means for selectively controlling the connection of said windings to said source, accelerating means comprising voltage-modifying means common to the circuits for all of said windings and a single rotating-magnetic-field magnet for operating said selecting means and for excluding the voltage-modifying means from said circuits.

5. In a motor-control system, a two-speed alternating-current motor, an alternating-current source, means for controlling the direction of rotation of said motor, a primary starting resistor for modifying an operating characteristic of said motor during acceleration to low speed and to high speed and a reversible magnetic device having an element operable from an "off" position in one direction to establish low speed connections of said motor to said source and to control said starting device, and operable from said "off" position in the other direction to establish high speed connections of said motor to said source and to control said starting device and timing means for controlling the speed of movement of said element.

1,871,354. CONVEYER. ANDREW P. ANDERSON, Brooklyn, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Jan. 3, 1931. Serial No. 506,396. 4 Claims. (Cl. 198—163.)



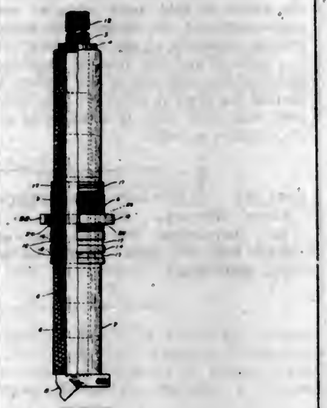
3. A conveyer adapted to transport articles in a well having openings in the opposite sides thereof and comprising a plurality of load supporting flights notched intermediate the ends, means for causing the flights to travel in the well, and a partition in the well extending transversely of the flights, the side edges of said partition entering the notches in the flights, whereby the flights travel freely along the partition and loads may be supplied independently to the flights through the openings at opposite sides of the well.

1,871,355. BUTTON STRIP. LESTER L. ALMOND, North Troy, N. Y., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y., a Corporation of New York. Filed Jan. 27, 1931. Serial No. 511,472. 3 Claims. (Cl. 2—265.)



1. A button strip comprising superposed plies, a row of stitching comprising straight seam stitches securing these plies firmly together and holding strands of these plies extending through this row of stitching from relative movement longitudinally of said strands and transversely of said row of stitching, fastening elements spaced along said row of stitching, each of said fastening elements being disposed approximately symmetrically across said row of stitching and being apertured to receive retaining stitches, and an attaching thread passing through the apertured portion of each fastening element and through the superposed plies and about strands thereof which extend transversely through and are firmly held by stitches of said row of stitching, said attaching thread being disposed substantially longitudinally of said row of stitching, whereby the attaching thread surrounds the portion of each fastening element between the apertured portion thereof and transverse strands of the plies which must be broken substantially simultaneously to pull a fastening element from the strip.

1,871,356. BUSHING STRUCTURE. ANDREW H. BAKKEN, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 5, 1929. Serial No. 376,078. 7 Claims. (Cl. 173—318.)

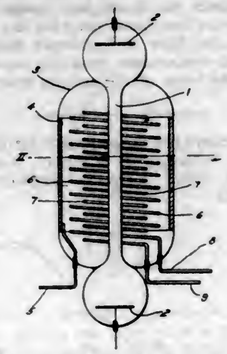


1. In combination, a bushing comprising alternately-disposed dielectric and conducting condenser elements, and a metal bushing support including a one-piece portion of substantially closed-loop shape having a flange surrounding, and held relative to an outer dielectric element of, a groove in the bushing under radial pressure in engagement with a conducting condenser element of the bushing.

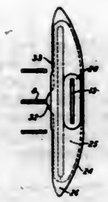
2. In combination, a condenser bushing having cylindrical outer-surface dielectric portions and an annular outer-surface groove portion between said surface portions, and a bushing support including a cylindrical sleeve surrounding the bushing and having an inwardly bent annular flange engaging a conducting condenser element in said groove.

1,871,357. PHOTO-ELECTRIC TUBE. PORTER H. BRACE, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 30, 1921, Serial No. 481,469. Renewed Dec. 13, 1929. 1 Claim. (Cl. 250—27.5.)

An electron-tube device comprising a discharge lamp as a source of light, an apertured tubular anode surrounding said lamp and spaced therefrom, an apertured tubular control electrode surrounding said anode and lamp and spaced therefrom, and a tubular cathode, said cathode constituting the outermost electrode and having its inner surface made of a material which emits electrons in response to light rays the spacing of said anode and said control electrode from said lamp being sufficient to prevent shadows being cast thereby on said cathode when said lamp is in operation.

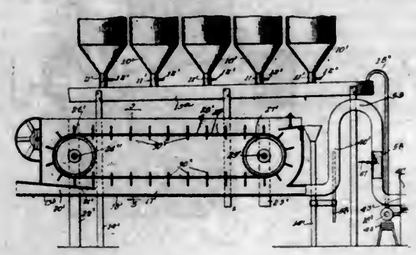


1,871,358. ELECTRICAL CONTACT. JOSEPH T. BUTTERFIELD, Hawthorne, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 4, 1930. Serial No. 486,393. 10 Claims. (Cl. 179—27.53.)



1. In a contact brush the combination of a support, a contact member, and a shoe of insulating material, said contact member and said shoe being mounted on said support in parallel with each other and in an angular relation with said support, said contact member having resiliency in the direction of said support.

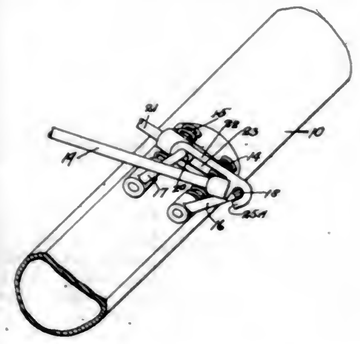
1,871,359. BLANCHING AND CLEANING DEVICE. MEAD S. CARMICHAEL, Sparta, Wis. Filed Mar. 11, 1929. Serial No. 345,958. 3 Claims. (Cl. 209—173.)



1. The combination with a trough, of movable means for directing articles along the bottom thereof, of means for maintaining a water flow therein to submerge the

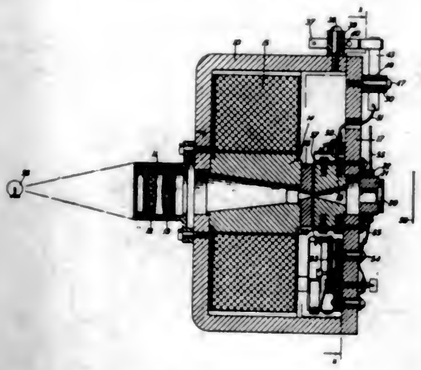
articles, said movable directing means skimming the impurities from the water without interruption to the articles, means for isolating the articles from the water, means for returning the water to said trough after the isolation of articles therefrom, and means for elevating the temperature of the water prior to the repeated use thereof and in the path of the water discharged from said trough, said temperature elevating means serving to accelerate the discharge of the articles from said trough.

1,871,360. AUTOMATIC SPARK RETARDER FOR AUTOMOBILES. GEORGE F. COLLEY, Memphis, Tenn. Filed Oct. 15, 1930. Serial No. 488,806. 10 Claims. (Cl. 123—117.)



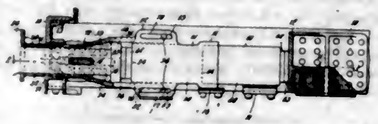
1. The combination with gas and spark controls for a gas engine, said controls occupying adjacent positions and each having arms, with shanks thereon connected respectively to the carburetor and timer of said engine, and said shanks diverging on advancement of either, of a link connecting said shanks and limiting separation of said shanks the one from the other.

1,871,361. INDICATING DEVICE. AUSTEN M. CURTIS, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 18, 1930. Serial No. 489,497. 5 Claims. (Cl. 234—5.5.)



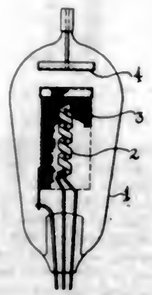
1. An oscillograph comprising a plurality of vibrating members mounted parallel in different planes in the same magnetic field and adapted to vibrate in accordance with variations in electric current flowing therethrough, and means for recording the successive positions of each of said members.

1,871,362. RAILWAY DRAFT RIGGING. CHARLES E. DATH, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 13, 1928. Serial No. 253,891. 3 Claims. (Cl. 213—22.)



1. In a draft rigging, the combination with draft sills; of front and rear stop acting means; two friction shock absorbing units interposed between said means, said units being arranged end to end and each including a friction shell open at one end and closed at the other, and friction elements co-operable with each shell, the open ends of the shells of said units being at opposite ends of the mechanism and the closed ends being in abutment, the friction elements of the front unit being at the forward end thereof and the friction elements of the rear unit being at the rear end of the latter; and means for connecting the shell of the front unit with a coupler whereby said front unit, only, is actuated in draft and both units are actuated in buff.

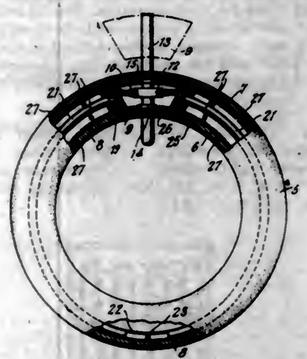
1,871,363. ELECTRODE CONSTRUCTION. EARL A. FRITZ, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 20, 1930. Serial No. 483,180. 4 Claims. (Cl. 250—27.5.)



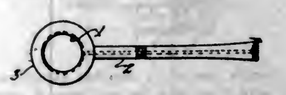
1. An electron discharge device, having a cathode coated with an emission increasing substance and a grid having a surface of tantalum oxide.

1,871,364. METHOD AND APPARATUS FOR MANUFACTURING RUBBER ARTICLES. WILLIS A. GIBBONS, Montclair, N. J., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Mar. 13, 1928, Serial No. 261,196. Renewed Oct. 22, 1929. 15 Claims. (Cl. 18—41.)

1. A form for the manufacture of hollow endless rubber articles by the deposition of rubber from an aqueous dispersion comprising a plurality of apertured sections adapted when assembled to constitute an endless support, a covering of filtering material on said sections capable of passing the aqueous portion but not the rubber of the dispersion, at least one of said sections carrying a conduit for the application of sources of fluid pressure to the interior of the sections.

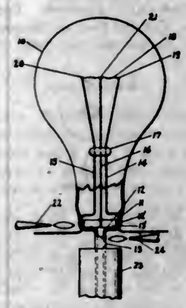


1,871,365. TOBACCO PIPE. EDWARD H. GRISWOLD, Ponca City, Okla., assignor of one-half to James A. Hudson, Ponca City, Okla. Filed July 26, 1930. Serial No. 470,813. 3 Claims. (Cl. 131—12.)



1. A pipe bowl, and a plurality of cooling fins arranged in the form of a cage for removably positioning within the bowl.

1,871,366. ELECTRICAL VACUUM DEVICE. DANIEL SNYDER GUSTIN, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed June 5, 1928. Serial No. 282,939. 5 Claims. (Cl. 176—36.)



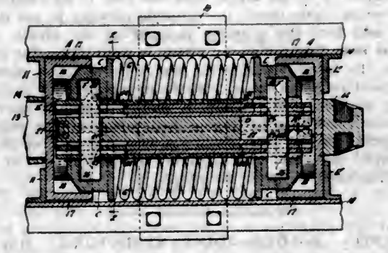
1. An incandescent electric lamp comprising a bulb, an exhaust tube terminating in an enlarged annular flange fused to the neck of said bulb, a mount including a plurality of support members held in spaced relation by a non-conductive member, a filament mounted on the ends of said support members, the opposite ends of said members extending through the neck of said bulb and disposed in spaced relation to provide a three point support for said filament.

1,871,367. METHOD OF COATING HOLLOW BODIES. AARON MARTIN HAGEMAN, Bloomfield, and ALBERT FERDINAND LINDSTROM, Nutley, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Original application filed Jan. 27, 1925, Serial No. 5,080. Divided and this application filed July 29, 1929. Serial No. 381,790. 6 Claims. (Cl. 91—70.)



1. The method of producing incandescent electric lamps consisting in coating the interior of a lamp bulb with a light diffusing medium, initially heating to partially dehydrate and prevent further flow of such coating and subsequently baking to fully dehydrate the coating.

1,871,368. FRICTION SHOCK ABSORBING MECHANISM. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Aug. 2, 1923, Serial No. 655,223. Divided and this application filed June 6, 1928. Serial No. 283,203. 7 Claims. (Cl. 213—36.)

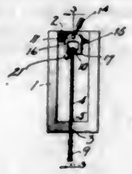


5. A shock absorber comprising two relatively movable followers, a central longitudinal oversolid post arranged between said followers and adapted to be engaged at opposite ends by said followers, two groups of intercalated friction plates arranged on opposite sides of said post and each group consisting of two sets of plates which are movable lengthwise relatively to one another, said sets of plates adapted to be engaged at their outer ends with said followers, respectively, shoes engaging with the outermost friction platea, said post having its opposite sides curved crosswise, said shoes having their inner sides curved crosswise and said friction plates being of curved form in cross section and having their mating sides engaging with each other and with the curved surfaces of said post and shoes, means for pressing said shoes laterally, means for moving said plates lengthwise, and a spring resistance.

1,871,369. THERMOSTATIC SWITCH. GEORGE HERBSTER, Cleveland, Ohio, assignor to The Bauer Ignition Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 22, 1929. Serial No. 387,630. 7 Claims. (Cl. 200—138.)

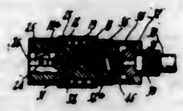
1. A thermostatic electric switch comprising a pivoted conductor having depending arms, a thermostat comprising another conductor operable between the arms to

engage one of them in electrical contact during the movement of said thermostat in one direction, and to engage another of said arms during the movement of the



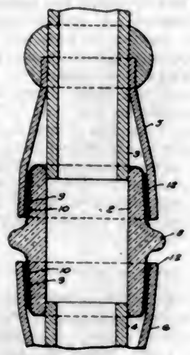
thermostat in another direction, said pivoted conductor adapted to be propelled by said thermostat in either direction in response to a variation in temperature.

1,871,370. COUPLING TERMINAL FOR CONDUITS. RAYNALDO P. JACQUES, Woonsocket, R. I., assignor to Adams Industries, Inc., New York, N. Y., a Corporation of New York. Filed June 7, 1927. Serial No. 197,127. 9 Claims. (Cl. 285—177.)



1. A detachable coupling member constituting a grease conduit element and having a bore and slots formed to receive a nipple and oppositely projecting bayonet joint studs thereon, said member having means operable by the entrance of the nipple into the bore to automatically turn or partially rotate the coupling member in one direction and lock the coupling member to the nipple, said means including a member which is movable by the studs when the nipple is entering the bore to cause first, a non-positive and then a positive engagement of the coupling member with the nipple, and is manually movable without resistance by grease compressed in the conduit to permit partial rotation of the coupling member in the opposite direction and permit the detachment of the coupling member from the nipple.

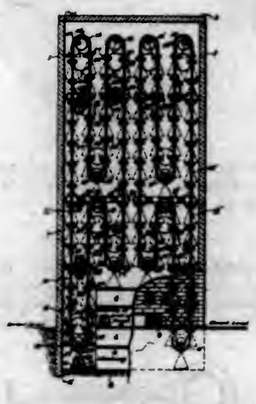
1,871,371. SOLDER JOINT STRUCTURE. RAY P. JACKSON, Berkeley, Calif., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 16, 1929. Serial No. 378,682. 14 Claims. (Cl. 49—81.)



1. In combination, a body of inorganic dielectric material, a fired superficial film of metal joined integrally thereto, and a metal-coated metal element on said film, an inner portion of the metal coating of said element being joined integrally to the film and an outer portion of said coating constituting means for joining another element thereto.

9. The method of preparing an inorganic dielectric main body having a fired superficial film of metal thereon for solder attachment to another main body which includes placing a metal element having a fusible metal coating thereon against said film and subjecting the parts to heat to joint said element and its coating integrally to the film.

1,871,372. GARAGE ELEVATOR. HENRY D. JAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 18, 1929. Serial No. 393,415. 33 Claims. (Cl. 214—16.1.)



1. In a storage system, a housing structure, an enclosure within said structure for enclosing a portion of the lowermost part thereof and defining a relatively narrow passageway connecting the lower part of the structure and the unenclosed upper portion thereof, and a conveyor system in the upper portion adapted to move through a path including a plurality of convolutions, one of which convolutions extends through the said passageway to the lower part of said building.

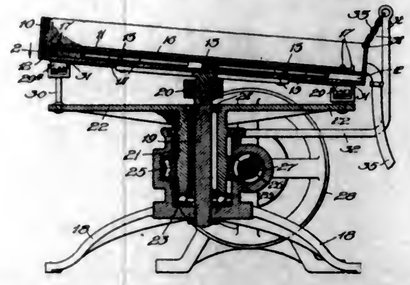
1,871,373. METHOD OF MAKING ATTACHING MEMBERS. GUSTAV JOHNSON, West Roxbury, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 21, 1930. Serial No. 430,366. 3 Claims. (Cl. 10—27.)



2. The method of forming a sheet metal tack having a head, a shank and a sharp point on the end of the shank, which comprises pressing a hollow shank from a sheet metal blank, cutting away a portion of the shank in a plane at an angle to the axis of the shank adjacent to its end and thereafter forming the remainder of the material of said shank adjacent to the cut end into a sharp point.

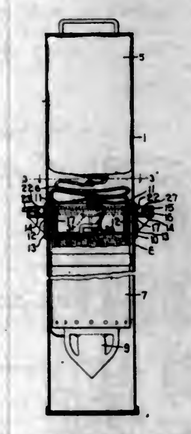
1,871,374. DEVICE FOR WASHING OR TREATING PLATES. ROBERT JOHN, Long Branch, N. J., assignor to Aquatone Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 19, 1930. Serial No. 453,589. 3 Claims. (Cl. 59—72.)

1. In a device of the character described, a suitable support, a slanting tray mounted on the support by a universal joint, means for rotatively changing the direction of slant of the tray, said means comprising a plurality of supports rotatably mounted below the tray around the universal joint, one of said supports being



higher than the other, whereby upon rotation of said supports the direction of slant of the tray is rotatively changed, and a flexible anchorage for the tray, said flexible anchorage limiting rotation thereof, but permitting reciprocatory rotary movement of the tray.

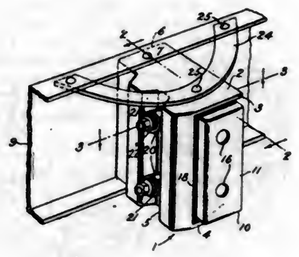
1,871,375. RELEASE FOR AERIAL FLARES. ERNEST B. JONES, South Weymouth, Mass., assignor to National Fireworks, Inc., West Hanover, Mass., a Corporation of Massachusetts. Filed Feb. 19, 1932. Serial No. 593,963. 10 Claims. (Cl. 102—24.)



1. An aerial flare releasing apparatus for air craft comprising a flare supporting tube secured upon the air craft having a closed upper end, a flare slidably mounted in the tube, an annular frame fixed upon the peripheral surface of said tube, a plurality of locking dogs slidably mounted within said frame and movable through the wall of said tube to engage and support said flare within said tube, and means to withdraw said dogs from engagement with said flare thereby releasing the flare which falls by gravity out of the lower end of said tube.

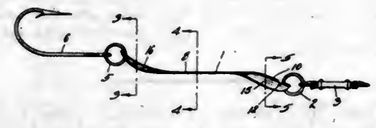
1,871,376. MOUNTING BRACKET. WALTER C. KEYS, Detroit, Mich., assignor to The Mechanical Rubber Company, Cleveland, Ohio, a Corporation of New Jersey. Filed Sept. 6, 1928. Serial No. 304,349. 5 Claims. (Cl. 248—14.2.)

1. A bracket for supporting an engine in a frame comprising in combination, a member adapted to be fastened to the frame and having horizontal and vertical faces, a second member adapted to be fastened to the engine and having horizontal and vertical faces complemental to those of the first mentioned member, and a sheet of shock absorbing material between the horizontal and the vertical



faces, one of the faces of the first mentioned member being corrugated, the complemental face of the second member being correspondingly corrugated.

1,871,377. TROLLING SPOON. HERMAN F. KHOENLE, Akron, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 3, 1930. Serial No. 486,163. 5 Claims. (Cl. 43—42.1.)



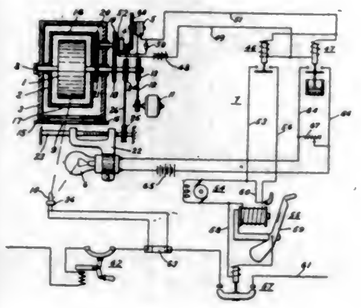
1. A trolling spoon comprising a body portion, the forward end of which is bent downwardly from the plane of the spoon and inwardly from the sides to form a downwardly open ridge-like prow and the rear end of which has its margins curved upwardly in a concave wall, the central portion of the spoon being substantially flat from edge to edge, and means for attaching a line and hook to the ends of the spoon respectively.

1,871,378. SLIDE FASTENER. ARTHUR W. KIMBELL, Newton Center, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 18, 1930. Serial No. 489,625. 3 Claims. (Cl. 24—77.)



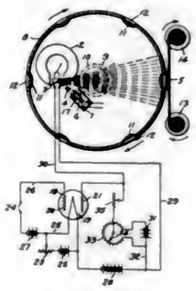
1. A slide fastener comprising a plate having a strap-receiving slots whereby the plate may be attached in sliding engagement with a strap, a cup-shaped portion formed in said plate between said strap-receiving slots, an expansible and contractible stud-receiving part having a flange portion located in said cup-shaped portion and having a hollow boss portion adapted to engage a cooperating stud, a part attached to said plate over the cup-shaped portion in said plate and cooperating to hold the stud-receiving part in position, said cup-shaped portion and said part having apertures therethrough and said boss extending slightly through one of said apertures for the purposes described.

1,871,379. OSCILLOGRAPH. JOSEPH W. LEGG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 29, 1928. Serial No. 329,273. 17 Claims. (Cl. 224—5.5.)



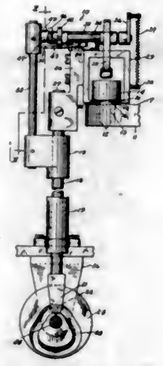
1. Recording apparatus comprising a rotatable cylindrical member adapted to carry a light-sensitive material on its circumference, means for moving a beam of light transversely to the rotation of said cylindrical member and in accordance with the variations of a quantity, and means responsive to the rotation of the said cylindrical member for successively exposing a plurality of portions of said cylindrical member to said light beam and for rotating said cylindrical member at least one revolution between successive exposures.

1,871,380. HIGH-SPEED RECORDER. JOSEPH W. LEGG, deceased, Wilkinsburg, Pa., by Esther L. Legg, administratrix, Worcester, Mass.; assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 13, 1929. Serial No. 362,613. 12 Claims. (Cl. 234—1.)



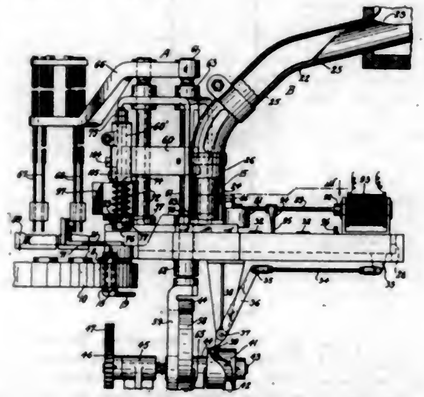
1. In recording apparatus comprising a recording surface and mechanism for moving said recording surface, means for projecting a narrow band of light against said recording surface, a deflecting element for deflecting said band of light in accordance with the variations of an electrical quantity, means for moving said deflecting element into different planes while it is being deflected in accordance with said variations, and means for successively passing a cylindrical lens transversely through said beam, the longitudinal axis of said cylindrical lens being substantially perpendicular to the plane of said band of light.

1,871,381. ARTICLE EJECTOR MECHANISM. PETER MEYER, Newark, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Aug. 2, 1929. Serial No. 383,125. 3 Claims. (Cl. 218—0.5.)



2. A discharge device for bases having contact pins comprising a support having apertures to receive the contact pins, means for lifting a base to clear the contact pins of said apertures, an oscillatory member, and means for actuating said member to engage and discharge the lifted base.

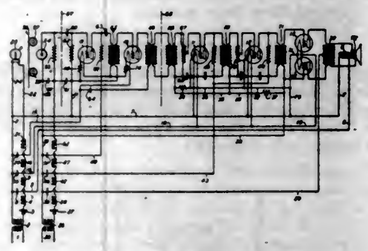
1,871,382. PIN DETECTOR FOR BASE FEEDING MECHANISM. PETER MEYER, Newark, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Aug. 31, 1929. Serial No. 389,841. 11 Claims. (Cl. 218—0.5.)



1. A machine for applying contact pins to bases comprising a support for a pin, base feeding mechanism electrically operated means controlling said feeding means, and means operable upon engagement with a positioned pin for effecting an actuation of said electrically operated means to actuate said base feeding mechanism.

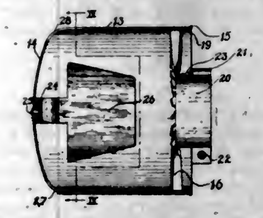
1,871,383. SOUND REPRODUCING SYSTEM. ROBERT A. MILLER, Plainfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 23, 1930. Serial No. 483,957. 7 Claims. (Cl. 179—100.3.)

1. A system for reproducing sound embodying, in combination, a source of illumination, a photoelectric cell, a photographic record of sound, means to cause said record to travel between said source and said cell, means for reproducing said sound controlled from said cell, a source of alternating current, a rectifier and a filter in the supply circuit for said source of illumination and operating from said source of alternating current, said filter being ar-



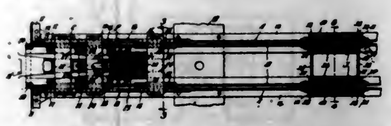
ranged to reduce variations in the current supply to said source of illumination to such an extent that the effect of said variations is less than the effect of variations in the remainder of the system.

1,871,384. AIR CLEANER. WALTER A. MILLER, Chicago, Ill., assignor to United Air Cleaner Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 15, 1929. Serial No. 355,007. 4 Claims. (Cl. 183—90.)



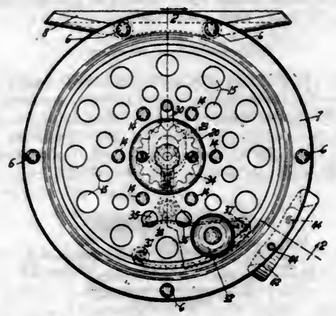
3. In a device of the character described, a casing including a walled rear end, means for imparting a whirling action to air entering said casing, said casing having tangential ports adjacent said walled end, certain of said ports thru which foreign substances carried by incoming air are discharged sloping inwardly opposite to the direction of whirl of the air, and the remainder of said ports sloping with the direction of whirl to augment the action of the air near the rear of the casing, and said casing having an outlet for clean air.

1,871,385. RAILWAY DRAFT RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 14, 1927, Serial No. 239,861. Renewed Feb. 24, 1930. 6 Claims. (Cl. 213—8.)



4. In car construction, the combination with an underframe including bolsters and laterally spaced fixed center sills secured thereto, said sills extending from end to end of the car; of a pair of laterally spaced movable sills mounted between said center sills, the movable sills extending from end to end of the car; cushioning means operatively reacting between said center and movable sills and yieldingly opposing relative longitudinal movement thereof; a coupler at each end of the movable sills and longitudinally and laterally movable with respect thereto said couplers having the shank portions thereof disposed between and embraced by said movable sills; front and rear stop acting means adjacent each end of the movable sills, said stop acting means being mounted on and movable with the movable sills; a cushioning device operatively interposed between each set of said front and rear stop-acting means and operable in buff and draft actions of the respective adjacent coupler; and yoke-acting means operatively associated with each coupler and the adjacent cushioning device, said rear stop means at each end of the movable sills having shouldered engagement with the fixed sills for limiting the movement of the movable sills relative to the fixed sills in either direction.

1,871,386. FISHING REEL. CHARLES T. PFLUEGER, Akron, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 27, 1928, Serial No. 315,416. Renewed Apr. 28, 1932. 5 Claims. (Cl. 242—84.6.)



1. In a fishing reel, a spool, a click ratchet on the spool, a reel frame, a pawl pivoted on the frame, said pawl adapted to engage the ratchet, and a spring bearing against the pawl, the surface of the pawl engaged by the spring being concave, the end portion of the spring being complementally curved to fit the surface of the pawl.

1,871,387. WOODEN BAIT AND PROCESS OF MANUFACTURING SAME. CHARLES T. PFLUEGER, Akron, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 1, 1929. Serial No. 336,870. 5 Claims. (Cl. 43—46.)

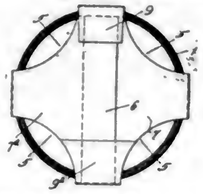


1. A wooden bait comprising an elongated bait body having a passageway of uniform diameter parallel to the axis thereof, a shaft located in the passageway and of smaller outer diameter than the interior diameter of the passageway, and respective sleeves located in the ends of the passageway and serving to hold the shaft centrally of the passageway, at least one sleeve having non-rotative connection with the bait body and with the shaft.

1,871,388. SPECIAL PACKAGE. CHARLES T. PFLUEGER, Akron, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 2, 1930. Serial No. 472,520. 1 Claim. (Cl. 206—46.)

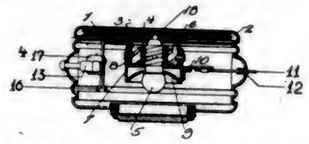
An envelope for packaging articles such as coiled leaders for fishing tackle, said envelope comprising a unitary blank of sheet material having a front panel formed with recesses for exposing the contents of the envelope, said front panel having two sections of a rear panel extending therefrom adapted to be folded flatly respecting said front

panel, said sections being recessed and otherwise shaped to coincide with the first-named face panel when folded but having extended portions adapted to overlap when folded and to be secured together in folded relation by said overlapped extended portions and wings on said first-named



face panel adapted to be folded into association with said overlapped extended portions of the rear panel and to be secured thereto whereby an envelope is provided with openings through which the contents of the envelope may be inspected from both sides thereof.

1,871,389. ELECTRIC POCKET OR HAND LAMP. PAUL RATHMANN, Bodenbach, Czechoslovakia, assignor to the Firm Elektrotechnische Fabrik Schmidt & Co., Gesellschaft m. b. H., Bodenbach, Czechoslovakia. Filed May 8, 1930, Serial No. 450,776, and in Czechoslovakia Nov. 26, 1929. 1 Claim. (Cl. 240—10.69.)



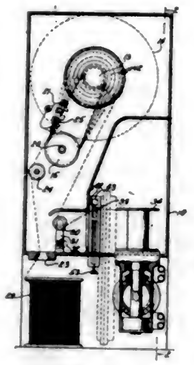
In a flash light a casing, a bulb secured on said casing, a reflector cap mounted to slide and to rotate with respect to said casing, a lever projecting from said casing and attached to said cap, said casing having a slot for the reception of the projecting end of said lever, a hinge connecting said lever to said cap, and means for translating into axial displacement the rotation of said cap.

1,871,390. SHOCK REDUCING DEVICE. ELMER E. REYNOLDS, Detroit, Mich., assignor to The Mechanical Rubber Company, Cleveland, Ohio, a Corporation of New Jersey. Filed Oct. 24, 1928. Serial No. 314,635. 9 Claims. (Cl. 267—63.)



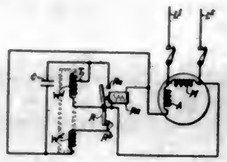
1. A device for cushioning shocks, comprising relatively movable members, a plurality of rubber elements adapted to be compressed between said members, said rubber elements being arranged in superposed registering relation and being thicker marginally than inwardly of their margins to provide recesses inwardly of said margins for permitting ready flow of the rubber upon compression, and means for preventing flow of the rubber elements outward from their margins.

1,871,391. STRAND WORKING MACHINE. DUER CYRUS ROBSON, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 19, 1929. Serial No. 341,262. 11 Claims. (Cl. 205—16.)



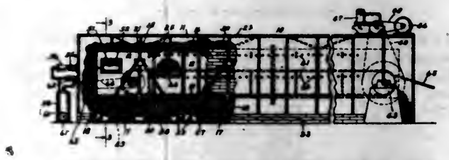
1. In a strand working machine, a housing having a plurality of angularly disposed sides and a septum extending between contiguous and opposite sides to divide the housing into two compartments and containing an aperture connecting the compartments, a capstan rotating on a horizontal axis positioned in one of the said compartments, a sheave having a horizontal axis positioned in the same compartment and obliquely offset with respect to the capstan, means for working the strand intermediate the capstan and sheave, a take-up means vertically positioned in the second compartment to receive and dispose of a strand coming from the capstan through the aperture in the septum, and strand supply means positioned outside of and underneath the housing.

1,871,392. CONTROLLER FOR INDUCTION MOTORS. EDWIN W. SEEGER, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 13, 1929. Serial No. 392,393. 4 Claims. (Cl. 172—279.)



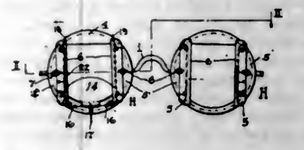
1. In a controller, in combination, an induction motor having two primary windings, a transformer, a condenser, a single-pole double-throw switch and circuits which when said switch is in one position connect the condenser across the high voltage winding of the transformer and the low voltage winding of the latter to one of the motor windings for starting and which when said switch is in another position connect the condenser directly in series with said last mentioned winding and remove the transformer from circuit for running.

1,871,393. OVEN. JACOB L. SHROYER, Oak Park, Ill., assignor to Edison Electric Appliance Company, Chicago, Ill., a Corporation of New York. Filed Apr. 1, 1929. Serial No. 351,693. 14 Claims. (Cl. 107—57.)



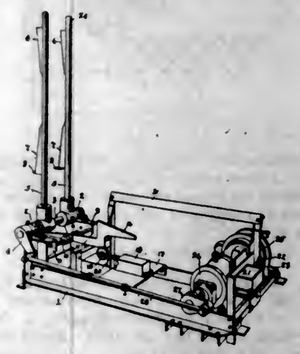
1. An electric oven comprising heat insulated metallic walls forming a plurality of spaced heating chambers, a separate metallic supporting framework for each of said heating chambers, means securing the walls of each heating chamber intermediate their ends to the supporting framework provided for said chamber so that the portions of said walls on opposite sides of said secured portion are free to expand linearly in opposite directions independently of the remaining chambers, and means providing a gas tight expansion joint between the adjacent chambers comprising a flange projecting outwardly from each abutting end of said chambers and means providing a peripheral gas tight joint for the abutting flanges.

1,871,394. MULTIFOCAL EYE-TESTING DEVICE. JOSEPH W. SMITH, Cambridge, Ohio. Filed Dec. 6, 1928. Serial No. 324,112. 11 Claims. (Cl. 88—20.)



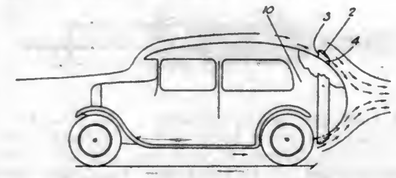
1. Eye-testing equipment, which comprises a lens-holder adapted to engage a spectacle frame, lens-guide means in said holder, means for laterally adjusting said lens-guide means, a segmental test-lens engageable in said guide means, and means for holding said segmental test-lens in any vertical position in said lens-guide means.

1,871,395. UPSETTING DEVICE FOR BARRELS AND LIKE ARTICLES. KARL F. SNOW, Brecksville, Ohio, assignor to The C. O. Bartlett & Snow Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 25, 1930. Serial No. 463,739. 3 Claims. (Cl. 214—130.)



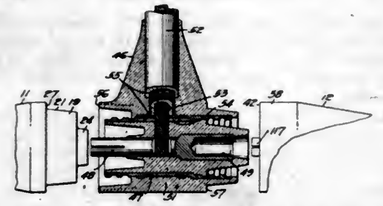
1. In apparatus of the character described the combination of an oscillatable shaft, barrel supporting arms secured to said shaft, spaced oppositely inclined surfaces on said arms adapted to support the barrel by engagement with its chime rings only, a crank arm secured to said shaft, means for actuating said crank arm to successively move said barrel supporting arms from a horizontal to a vertical position and return, and switch means actuated by said barrel on said supporting means for controlling said actuating means.

1,871,396. MEANS OF REDUCING THE FLUID RESISTANCE OF AUTOMOBILE BODIES. EDWARD A. STALKER, Ann Arbor, Mich. Filed June 8, 1928. Serial No. 283,912. 2 Claims. (Cl. 296—1.)



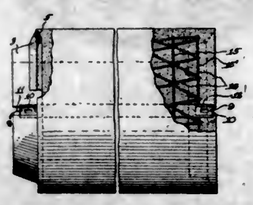
1. An automobile body comprising a blunt rounded rear end creating air turbulence just to the rear thereof, and vanes provided on opposite sides of the body and spaced outwardly from the body and inclined rearwardly and inwardly so as to direct the air streams inwardly along the rounded rear end to relieve the turbulence just to the rear of the body.

1,871,397. ELECTRICAL CONNECTING APPARATUS. NOBLE H. WATTS, Alameda, Calif., assignor, by mesne assignments, to General Electric Company, Schenectady, N. Y., a Corporation of New York. Filed July 29, 1929. Serial No. 381,699. 5 Claims. (Cl. 173—328.)



2. A connector device comprising a body formed of resilient insulating material, a metal sleeve contact embedded in said body, a central contact element disposed axially of the sleeve and carried by the body, and resilient tapered integral parts formed on said body about each contact and adapted to interfit a complementary device in order to make a fluid tight joint therewith.

1,871,398. LOCK JOINT FOR SECTIONAL CONCRETE PIPES. FRANK YEAGER, Port Huron, Mich. Filed Mar. 10, 1927. Serial No. 174,128. 6 Claims. (Cl. 72—53.)



1. A pipe joint comprised of two pipe sections, the meeting ends thereof being sloped divergingly from one of the surfaces of said sections but not as far as the

other surface, said ends being adapted substantially for mutual contact in the plane of convergence of the slopes thereof, whereby a completely closed cavity may be formed between said slopes, and means carried by said sections for drawing said sections together and closing said cavity.

1,871,399. LUBRICATING MEANS. DANIEL G. ADAMS, New York, N. Y., assignor to Adams Grease Gun Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 11, 1929. Serial No. 354,367. 12 Claims. (Cl. 221—47.4.)



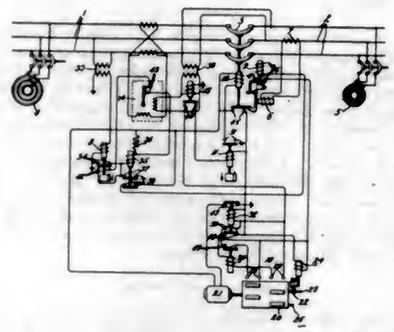
8. A lubricating means including a gun formed with a casing merging into a nozzle having an ejecting chamber, a piston positioned to move into and out of said ejecting chamber, a rod extending from said piston through the end of the gun, a handle carried by said rod exteriorly of the casing of the gun, and a follower mounted on said rod, said follower being formed to slidably fit the interior of said casing so that when said rod is moved in one direction part of the grease therein will be ejected, a spring acting on said follower and on said rod for causing the rod to be retracted after each operation as well as to cause the follower to maintain the grease in the casing under pressure as said rod is retracted and the piston moved out of said ejecting chamber, whereby a new supply of grease from the casing will be forced into the compression chamber, and a clutch for clutching the follower to the rod, said clutch permitting said rod to be retracted at all times without rotation.

1,871,400. PORTABLE GREASE GUN. HERMAN ALBERTINE, Rutherford, N. J., assignor to Rogers Products Company, Inc., a Corporation of New Jersey. Filed June 26, 1929. Serial No. 373,721. 6 Claims. (Cl. 221—47.1.)



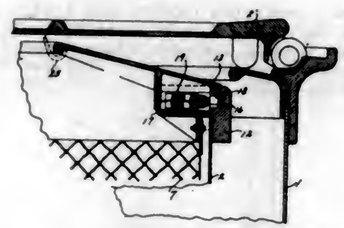
1. A portable grease gun including a wheel truck comprising a body casting on traction rollers, an upwardly facing socket in the body and an upright cylindrical grease reservoir, the lower open end of which is screwed into the socket, the socket providing an outlet for grease, a piston in the reservoir tending to force grease through the outlet, the upper end of the reservoir cylinder being closed, the piston including a handle end projecting through the top of the reservoir top and adapted to be manually elevated to withdraw the piston prior to recharging the reservoir, and steps on the truck at opposite sides of the reservoir whereby an operative standing on the steps may substantially straddle the reservoir and conveniently elevate the handle.

1,871,401. SYSTEM OF ELECTRIC DISTRIBUTION. ARVID E. ANDERSON, Lansdowne, Pa., assignor to General Electric Company, a Corporation of New York. Filed Oct. 23, 1928. Serial No. 314,470. 6 Claims. (Cl. 175—294.)



1. In a system of electric distribution, two electric circuits, a circuit breaker for connecting said circuits together, power directional means for voltage responsive means for effecting the opening of said circuit breaker when simultaneously current flows from one of said circuits to the other and the voltage of the interconnected circuits is below a predetermined value, and means controlled by predetermined voltages of said circuits for effecting the reclosure of said circuit breaker.

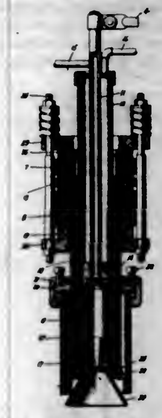
1,871,402. UNLOADING NET FOR EXTRACTORS. FRED BALZER, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 7, 1930. Serial No. 459,773. 5 Claims. (Cl. 210—76.)



5. In combination wth an extractor embodying a basket, a bag constructed of flexible material and adapted to fit within an extractor basket, and means responsive to the speed of rotation of the bag and basket for locking the bag in place.

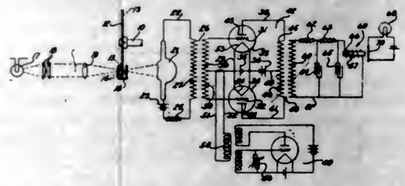
1,871,403. SPACE DISCHARGE DEVICE. HERBERT D. BROWN and CAMIL A. SARBAH, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Dec. 15, 1926. Serial No. 155,045. 3 Claims. (Cl. 250—27.5.)

1. A mercury arc device comprising an evacuated vessel, a cathode, an anode having a recess formed therein and provided with an active surface and an inactive surface, said active surface and a portion of said inactive surface being formed by the surfaces of said recess, and an insulation shield mounted within said vessel and



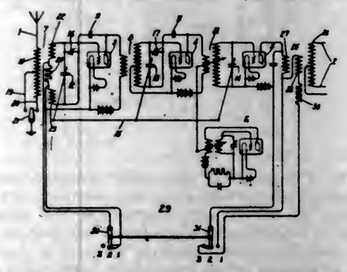
extending into said recess of said anode a distance at least as great as the width of said recess to cover said portion of said inactive surface within said recess.

1,871,404. METHOD OF AND APPARATUS FOR INDICATING SPEED. LAUREL HERMAN BROWN, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 16, 1929. Serial No. 340,369. 6 Claims. (Cl. 175—183.)



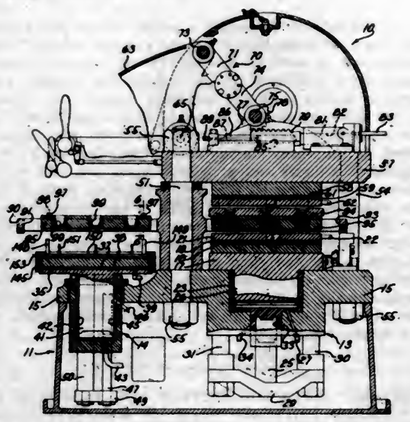
1. In a speed determining device, means under the control of the mechanism to be measured for producing a pulsating current having a regular sine-wave characteristic, an oscillatory circuit for producing a pulsating current, means for varying the frequency of the latter current at will, and means for electrically comparing the frequencies of the two currents.

1,871,405. RADIO APPARATUS. WENDELL L. CARLSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 23, 1927. Serial No. 193,438. 10 Claims. (Cl. 250—20.)



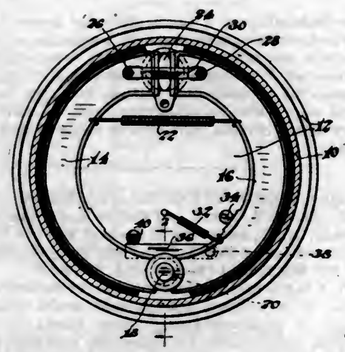
1. The combination of a space discharge device provided with an output circuit, a transformer comprising a secondary winding and two primary windings respectively loosely and closely coupled to said secondary winding, and switch means associated with said output circuit, said switch means in one position thereof completing said circuit through one of said primary windings and in another position completing said circuit through both of said primary windings.

1,871,406. MOLDING APPARATUS. JEREMIAH AMOS DE TURK, La Grange, and ESTYLE DRUCY HANSON, Westmont, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1928. Serial No. 324,863. 11 Claims. (Cl. 18—17.)



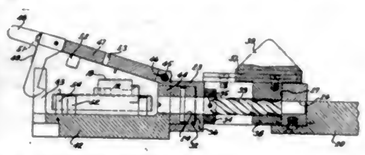
1. In a plastic molding press for two part molds, a tiltable head, spring actuated means for securing a mold part thereto, control means for releasing the spring actuated means, and means for preventing the operation of the control means unless the tiltable head is in a predetermined position.

1,871,407. BRAKE MECHANISM. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed Aug. 24, 1925, Serial No. 51,037. Divided and this application filed July 11, 1929. Serial No. 377,393. 14 Claims. (Cl. 188—79.5.)



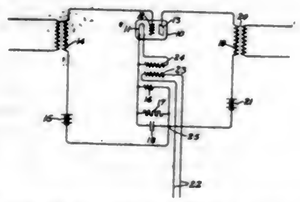
1. A brake comprising, in combination, a drum, a backing plate, shoes between the drum and backing plate, a pivot member connecting adjacent shoes and having a head slidably engaging the backing plate, a pivoted positioning lever engaged by the head of the pivot, and means for swinging the lever to adjust the position of the pivot.

1,871,408. WORKHOLDING FIXTURE. JOHN MCDONOUGH, Chicago, and DARRELL DWAIN ROCK, Cicero, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 17, 1928. Serial No. 326,471. 4 Claims. (Cl. 77—63.)



1. In a drill press having a reciprocating tool supporting head, a work indexing hub, a work holding fixture comprising a housing secured to the indexing hub, a spiral shaft journaled at both ends in the housing, a cam member having an upper camming surface and threaded to the spiral shaft and moveable therealong between the two journalled ends for rotating the shaft, cam means secured to the reciprocating tool supporting head for engaging said upper camming surface of the cam member upon reciprocation of the tool supporting head to move the cam member along the shaft, a base member for receiving the work pinned to one end of the spiral shaft, a leaf member pivoted to the base for clamping the work thereto, a pivoted support mounted in the base for securing a portion of the work, and cam means operable upon opening and closing the leaf member for actuating the pivoted support out of and into engagement with the work, respectively.

1,871,409. GRID CONNECTION FOR ELECTRIC DISCHARGE DEVICES. PAUL C. GARDINER, Oakland, Calif., assignor to General Electric Company, a Corporation of New York. Filed Jan. 27, 1930. Serial No. 423,617. 1 Claim. (Cl. 250—27.)



The combination of a space discharge device including a grid and a cathode provided with terminals, an alternating current transformer provided with a secondary winding connected to said terminals and with a tertiary winding connected between said cathode and grid, and a resistance of a value substantially equal to half the resistance of the cathode connected in shunt to said tertiary winding.

1,871,410. LIQUID PRESSURE MEASURING APPARATUS. CLYDE V. HARDY and PHILIP J. JOHNSTON, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed July 18, 1929. Serial No. 379,299. 4 Claims. (Cl. 73—31.)

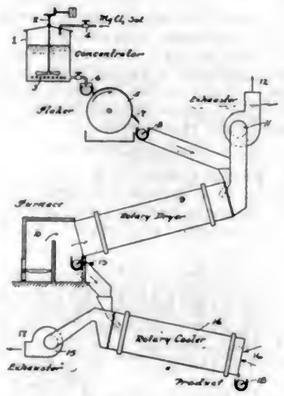
1. In a liquid pressure gage, means for determining the pressure of a rarefied system, said means including a plurality of liquid-containing tubes, means for moving the liquid in said tubes for measuring purposes, the gage being normally characterized by spillage of liquid when the liquid-moving means is improperly operated, and means secured to the gage and cooperating therewith for preventing spillage of liquid under all conditions of operation of the liquid-moving means.

4. In a liquid pressure gage, means for determining the pressure of a rarefied system, said means comprising a plurality of liquid-containing tubes terminated by a cylinder, a plunger adapted to be forced into the cylinder to move the liquid into a pressure-reading position, the arrangement being normally characterized by spillage of the liquid around the plunger when the latter is improperly operated and means secured to the gage and cooperating therewith for preventing spillage of the



liquid between the cylinder and the liquid when the plunger is improperly operated, said means comprising a chamber mounted on the cylinder and containing openings at the bottom which communicate with the end of the cylinder, said openings being adapted to receive the liquid which would normally spill and to permit return of the liquid from the chamber to the cylinder when the danger of spillage is over.

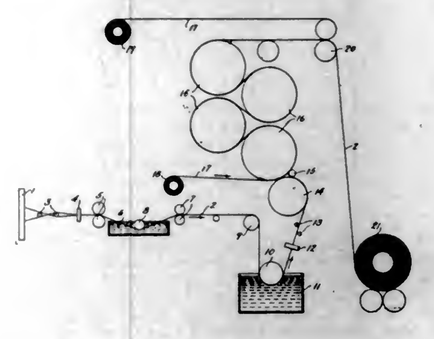
1,871,411. METHOD OF PREPARING PARTIALLY DEHYDRATED MAGNESIUM CHLORIDE. SHELDON B. HEATH, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 19, 1929. Serial No. 348,178. 6 Claims. (Cl. 23—91.)



1. In a method of preparing hydrated magnesium chloride containing less water of crystallization than corresponds to the formula $MgCl_2.6H_2O$, the steps which consist in concentrating a solution of magnesium chloride under sub-atmospheric pressure to form a slurry composed of crystals of the composition $MgCl_2.4H_2O$ and the mother liquor thereof, and flaking said slurry.

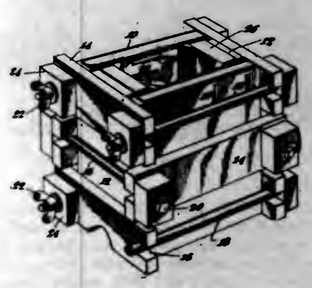
6. The method of preparing hydrated magnesium chloride containing less water of crystallization than corresponds to the formula $MgCl_2.6H_2O$ which comprises evaporating a magnesium chloride solution under sub-atmospheric pressure at a temperature of approximately 140° C. to form a slurry of crystals and mother liquor thereof, flaking such slurry, drying the flake particles to remove water from the surfaces thereof and cooling the dried particles in a current of unheated air.

1,871,412. PROCESS OF MANUFACTURING RUBBERIZED CORDS. ERNEST HOPKINSON, New York, N. Y. Filed June 19, 1929. Serial No. 371,989. 8 Claims. (Cl. 154—2.)



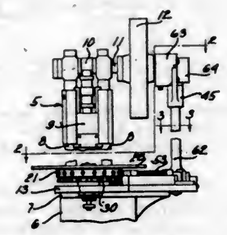
1. That method of treating separate twisted cords which consists in subjecting them to the shrinking action of water, maintaining the same in their shrunk condition, and subsequently applying rubber-containing-material thereto while in shrunk condition.

1,871,413. MONUMENT MOLD. ROBERT R. KOCH, Ramsey, N. J., assignor to Everlasting Memorial Association, Ridgewood, N. J., a Corporation of New Jersey. Filed June 17, 1931. Serial No. 545,005. 2 Claims. (Cl. 25—121.)



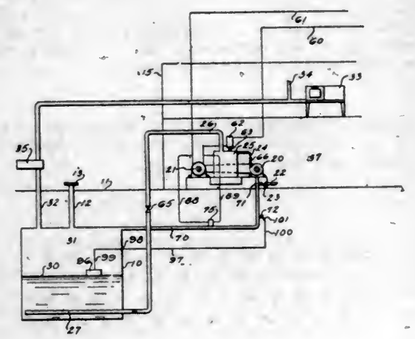
1. A mold of the class described comprising side walls of a predetermined length, end walls of a predetermined width and thickness positioned between the ends of the side walls, a removable header member positioned between the said walls and having a shape conforming to the area bounded by said walls, said header member being slightly wider than the end walls and slightly longer than the length of a side wall less the thickness of the end walls but shorter than the total length of a side wall, and means for forcing the walls against the sides and ends of the header member whereby the side walls will contact with the sides of the header member before contacting with the sides of the end walls and the end walls will contact with the ends of the header member before reaching their innermost positions.

1,871,414. FEEDING DEVICE. AUGUST STANLEY LISS, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 16, 1929. Serial No. 340,446. 3 Claims. (Cl. 164—87.)



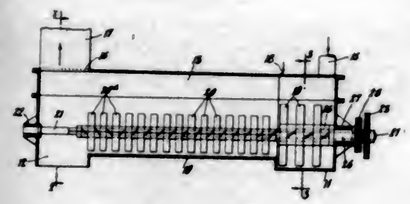
1. A unitary blank feeding device removably attachable to continuous operation punch presses as a unit comprising a bed plate carrying a rotary blank feeding dial, a Geneva gear mounted on the bed plate for imparting a step by step movement to the dial, a spring pressed locking latch carried by the bed plate to lock the dial rigidly and accurately in position between movements thereof, a cam carried by the Geneva gear to operate the locking latch, and driving means to actuate the Geneva gear.

1,871,415. GAS GENERATION. GEORGE W. LORIMER, Troy, Ohio, assignor, by mesne assignments, to Black Products Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 4, 1928. Serial No. 303,826. 19 Claims. (Cl. 261—26.)



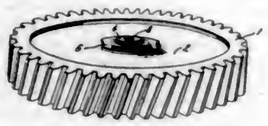
1. Apparatus of the character described, comprising a fuel tank for containing a quantity of liquid fuel, means for bubbling a combustion-supporting fluid through the liquid fuel in said tank, an offtake pipe for said tank, and a bypass for returning generated gas to said tank to be bubbled through the liquid fuel therein to thereby increase the agitation and mixing of said liquid fuel during gas generation.

1,871,416. METHOD OF PRODUCING SUPERPHOSPHATE. MACK DEAN BROADFIELD, Valdosta, Ga. Filed Jan. 27, 1931. Serial No. 511,473. 20 Claims. (Cl. 71—7.)



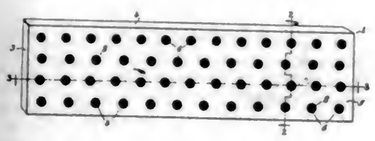
1. In the method of producing calcium acid phosphate, the step which comprises kneading the mass produced by the admixture of phosphate rock and sulphuric acid.

1,871,417. NONMETALLIC WHEEL. CLARENCE W. MANSUR, Malden, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 28, 1929. Serial No. 343,407. 5 Claims. (Cl. 74—28.)



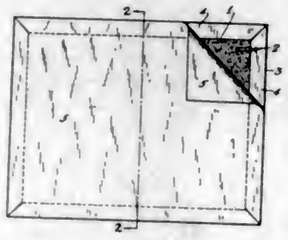
1. In an article of the character described, the combination with a non-metallic web having a polygonal opening, of a hub comprising a polygonal center piece which projects through said opening and has an integral flange engaging one face of the web, and a washer surrounding the end of said center piece and engaging the other face of the web, said washer having a polygonal opening the defining walls of which taper outwardly, the outer portion of the end of said center piece being pressed over the adjacent edge of said washers and into the space provided due to the tapered opening in the washers.

1,871,418. HUMIDOR. RALPH H. MCKEE, Jersey City, N. J. Filed Apr. 11, 1929. Serial No. 354,380. 2 Claims. (Cl. 131—30.)



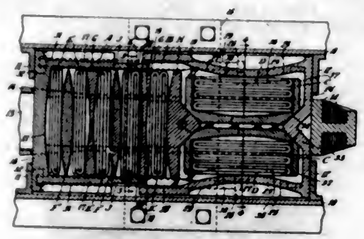
1. A compact humidifying packet for incorporation within containers containing articles to be maintained in a relatively moist condition comprising a hollow rectangular casing having thin fibrous walls and narrow cross section, a plurality of ventilating and dust-proof ports provided in the front wall of said casing, a coating of blotting paper lining a portion of the interior of said casing, a fine meshed, thin, fibrous lining located within said casing and bonded to the inner face of the front wall with cementitious substance, and a charge of Glauber's salt provided within said casing and capable of evolving water vapor when the packet is placed in an atmosphere of low relative humidity without dust passing through said lining.

1,871,419. PLIABLE HUMIDIFYING SHEET MATERIAL. RALPH H. MCKEE, Jersey City, N. J. Filed Apr. 11, 1929. Serial No. 354,381. 5 Claims. (Cl. 131—30.)



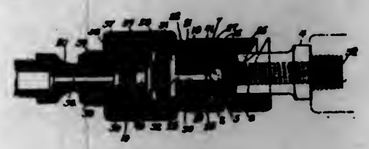
1. A flexible humidifying sheet material of "dry" character comprising a body of absorbent fibrous material having large face areas and having relatively thin edges, a multiplicity of dry solid chemical particles incorporated in said fibrous material, and thin fibrous lining covering at least said two faces of said body of fibrous material and being pervious to moisture and impervious to dust of said chemical particles, said sheet material being free from liquid water.

1,871,420. SHOCK ABSORBING MECHANISM. WILLIAM H. MINER, Chazy, N. Y., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 14, 1928. Serial No. 292,893. 1 Claim. (Cl. 213—30.)



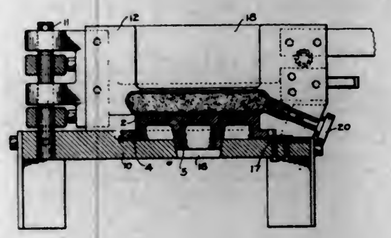
In a shock absorbing mechanism, the combination with relatively movable follower casings, one of said casings serving as a spring cage member and having two sets of longitudinally extending spaced arms telescoped within the other casing to guide said first named casing; of a laminated plate main spring resistance disposed within said spring cage casing, said spring resistance including a plurality of plate units, two sets of laminated plate springs disposed within the other casing and having bearing engagement with the side walls thereof; wedge means for forcing said two sets of laminated plate springs laterally apart, said wedge means including a combined spring follower and wedge block, having spaced arms embracing and supporting a unit of said main spring resistance, each of said arms of the spring follower slidably engaging between the spaced arms of one of said sets of arms.

1,871,421. HIGH PRESSURE COUPLER. JACOB MUHLHAUSER and DANIEL G. ADAMS, New York, N. Y., assignors to Adams Grease Gun Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 7, 1928. Serial No. 324,487. 14 Claims. (Cl. 285—176.)



1. A high pressure coupler, including a coupler body adapted to receive a fitting, said body being provided with an external tapering thread at one end, a collar having an internal tapering thread adapted to be screwed onto the first-mentioned tapering thread to provide a tight connection, means connected with the collar for connecting the collar with a source of liquid supply, and a grease actuated float arranged within said coupler body positioned to be moved by the fluid passing through the coupler body so that the float will press tightly against said fitting, said float having a T-shaped passageway extending therethrough in free communication at all times with the inlet and outlet of said coupler body.

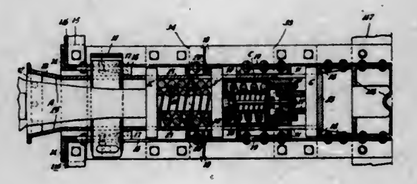
1,871,422. SEMIPERMANENT MOLD AND METHOD OF MAKING THE SAME. ALLEN B. NORTON, Cleveland, Ohio, assignor to Aluminum Company of America, a Corporation of Pennsylvania. Filed Aug. 21, 1929. Serial No. 387,810. 4 Claims. (Cl. 22—194.)



1. A method for casting a recessed article which comprises compacting green sand into a core box, striking off the sand to form a flat surface, positioning a flat supporting member on said flat surface, inverting the supporting member and core box, removing the core box and positioning said supporting member and green sand core in a mold.

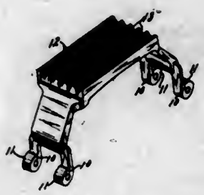
1,871,423. RAILWAY DRAFT RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 22, 1927. Serial No. 241,745. 7 Claims. (Cl. 213—7.)

6. In a railway draft rigging, the combination with inner and outer stop shoulders; of a coupler; yoke-acting means connected to the coupler for movement therewith in both buff and draft; a front follower movable in unison with the yoke in both buff and draft; a rear follower movable with the yoke in draft and held against movement during buff; an intermediate follower, said intermediate follower being movable with respect to the yoke in both buff and draft; shock absorbing means interposed between the front and intermediate followers and



an additional shock absorbing means interposed between intermediate and the rear followers; a stop shoulder for holding said intermediate follower against movement during draft, thereby producing compression of the second named shock absorbing means only; and means for limiting movement of the intermediate follower in buff to less than the full buffing stroke of the mechanism.

1,871,424. ANTISKID DEVICE. FREDERICK A. OLMSTEAD, Cleveland Heights, Ohio, assignor to The Chain Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 18, 1930. Serial No. 503,149. 2 Claims. (Cl. 152—14.)

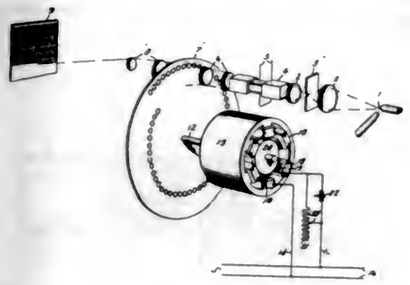


1. A cross member for non-skid tire chains, comprising a pair of like hook members each comprising a body portion and parallel side hook arms depending therefrom, a reinforcing band connecting the body portions of said two hook members, and a continuous covering of rubber in which said hook members and reinforcing band are molded so as to completely encase the same as a single unit, said unit being molded to conform to the shape of the tire and having the intermediate portion shaped to provide a flat non-skid road engaging surface.

1,871,425. ADJUSTABLE SYNCHRONOUS APPARATUS. WILLIAM A. PRINGLE, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed July 15, 1931. Serial No. 550,948. 1 Claim. (Cl. 178—69.5.)

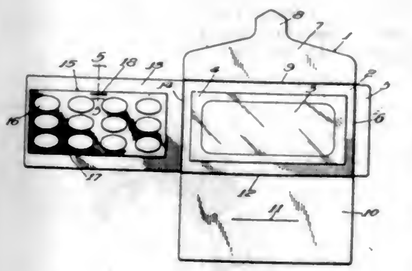
In television apparatus, a synchronous motor of the hysteresis type, a scanning disk driven thereby, circuit connections between the motor and a source of alternat-

ing current supply, and picture framing means in said connections comprising a resistance and a switch for controlling the flow of current through the resistance where-



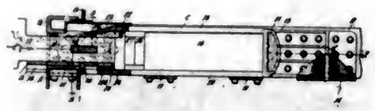
by the motor can be caused to slip any desired amount and subsequently immediately to resume synchronous operation.

1,871,426. MERCHANDISE CARTON. OTTO G. SCHMITT, Omaha, Nebr., assignor to Schmitt-Murphy Laboratories, Inc., Omaha, Nebr., a Corporation of Nebraska. Filed Oct. 16, 1930. Serial No. 489,014. 1 Claim. (Cl. 206—78.)



An envelope package adapted to contain a plurality of relatively small articles of merchandise mounted on a relatively flat support disposed within the package, the package being adapted to be opened and closed several times for the removal of individual articles of merchandise from said flat support while leaving the remaining articles of merchandise still mounted on said flat support, which comprises in combination a plurality of relatively flat component parts foldably connected to each other to form an envelope, said component parts consisting of a main body portion rectangular in form to provide a front face, said front face being provided with an aperture and a transparent sheet disposed over said aperture, flaps foldably connected with at least three edges of said rectangular front face, two opposite flaps being provided with a tongue and slit for engagement when folded, a third flap associated with the third edge of said rectangular front face visible through said aperture when said envelope is folded whereby said relatively small articles of merchandise, each of which is of lesser dimensions than the dimensions of said aperture, and said flat support, are disposed intermediate said third flap and the aperture whereby said support is substantially centrally positioned with respect to the aperture and the third flap is interposed between the articles and said opposite flaps.

1,871,427. RAILWAY DRAFT RIGGING. ERNEST R. SCHULZ, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 10, 1928, Serial No. 260,741. Renewed Aug. 23, 1930. 15 Claims. (Cl. 213—61.)



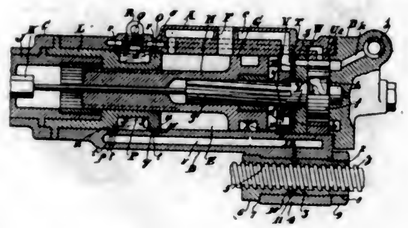
5. In a railway draft rigging, the combination with spaced draft sills; of a carry iron secured to the draft sills adjacent the outer ends thereof; a coupler; a yoke connected to the coupler shank; shock absorbing means within the yoke; and a supporting member for the coupler shank slidable on said carry iron and having a sliding connection with the yoke.

1,871,428. FLAKE MAGNESIUM CHLORIDE AND METHOD OF MAKING SAME. ALBERT KELVIN SMITH, Shaker Heights Village, Ohio, assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 25, 1928. Serial No. 280,663. 8 Claims. (Cl. 23—91.)

1. In a process for dehydrating magnesium chloride, the step which consists in evaporating a molten relatively highly hydrated magnesium chloride until a boiling point temperature approximating 193° C. is attained.

8. In a process for dehydrating magnesium chloride, the steps which consist in evaporating a molten hydrated magnesium chloride until the boiling point thereof is raised to a temperature between 180° C. and 193° C., and then flaking the molten salt.

1,871,429. OILING DEVICE. WILLIAM A. SMITH, Sr., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 29, 1932. Serial No. 608,224. 3 Claims. (Cl. 255—45.)

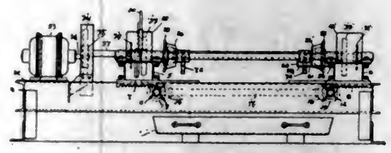


1. In a fluid actuated rock drill, the combination of a casing and feeding means carried by the casing and comprising a pair of members in threaded engagement with each other, and a passage in the casing and one of the members for conveying oil from a source of supply directly to the cooperating surfaces of the members.

1,871,430. MECHANISM FOR USE IN COATING BARRELS AND LIKE ARTICLES. KARL F. SNOW, Brecksville, Ohio, assignor to The C. O. Bartlett & Snow Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 11, 1930. Serial No. 427,627. 6 Claims. (Cl. 214—1.)

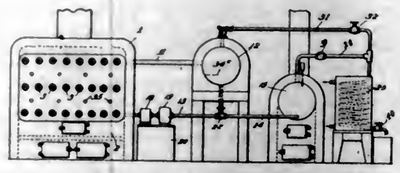
1. In a mechanism of the character described, the combination of spaced paired rollers having their peripheries

oppositely inclined to radially and axially support a cylindrical article by engaging its periphery at the terminals



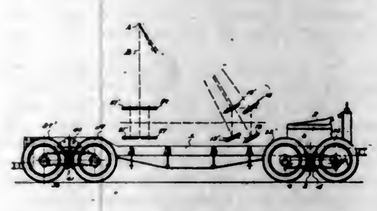
thereof, and rollers revolubly mounted on arcuately movable arms adapted to similarly engage such article and move the same off said first named rollers.

1,871,431. PROCESS OF TREATING HYDROCARBONS. WALTER M. CROSS, Kansas City, Mo., assignor, by mesne assignments, to Gasoline Products Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Oct. 6, 1924. Serial No. 741,818. 14 Claims. (Cl. 196—51.)



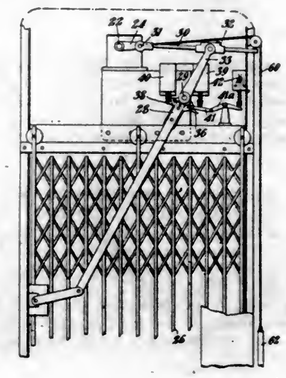
1. An improvement in the art of oil conversion for the purpose of producing lighter from heavier hydrocarbons, which consists in subjecting the oil in a tube and tank to cracking conditions of temperature and a pressure controlled to prevent substantial vaporization of the light hydrocarbons, removing vaporous products of conversion from the oil body undergoing cracking to prevent excessive pressure, withdrawing continuously the unvaporized liquid products and distilling therefrom the lighter fractions by reducing the pressure thereon, condensing and collecting the evolved vapors from the distillation under reduced pressure and the said vaporous products of conversion.

1,871,432. MULTIPLE WHEEL ROAD VEHICLE. ROLLIE B. FAGEOL, Los Angeles, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation, a Corporation of Delaware. Filed June 11, 1925. Serial No. 36,543. 18 Claims. (Cl. 280—91.)



1. A road vehicle comprising a frame, a pair of substantially parallel axles disposed at each end of said frame, a pair of non-dirigible wheels on each axle at the rear of the frame, the peripheries of adjacent wheels on the same side of the vehicle being disposed relatively close to each other, a pair of dirigible wheels on each axle at the forward end of the frame, and means to simultaneously control said dirigible wheels, said last named means being so designed that the vehicle is caused to track about a point lying in a vertical plane substantially midway between the rear pair of axles, whereby the vehicle may be turned without introducing substantial drag in the non-dirigible wheels.

1,871,433. ELECTRIC DOOR MECHANISM. CLIFFORD NORTON, South Orange, N. J., assignor, by mesne assignments, to Otis Elevator Company, a Corporation of New Jersey. Filed Mar. 7, 1929. Serial No. 345,140. 5 Claims. (Cl. 187—52.)

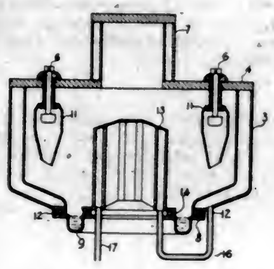


1. In combination, an elevator car; a landing door; means individual to said landing door urging said landing door to closed position; a motor on said car; a crank driven by said motor; means connecting said crank to said landing door for effecting opening of said landing door upon operation of said motor, said connecting means including a movable cam carried by said elevator car and a device individual to said landing door for cooperation with said cam, the door opening power for said landing door being transmitted from said motor through said cam and said cooperating device to said landing door; a car door; and connections from said crank to said car door for effecting opening of said car door upon operation of said motor to effect opening of said landing door and for effecting closing of said car door upon operation of said motor while said means individual to said landing door effects closure of said landing door, said connections including a constantly effective friction device so that, in the event said motor becomes disabled while a passenger is in said elevator car, said passenger may manually open said car door against the influence of said friction device only, and then, after said car door is opened, may manually open said landing door against the influence of only said means individual thereto urging it closed.

1,871,434. ELECTRIC CURRENT RECTIFIER. OSKAR SEITZ, Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Sept. 11, 1930, Serial No. 481,116, and in Switzerland Aug. 1, 1929. 3 Claims. (Cl. 750—27.5.)

1. In an electric current rectifier of the metallic vapor type, a double-walled tank having an aperture through the

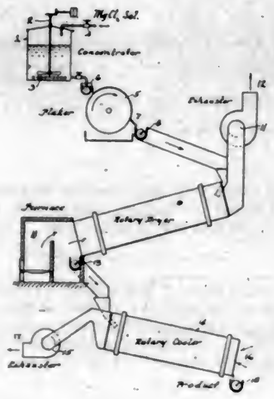
bottom thereof, a plurality of anodes extending into said tank through the cover plate thereof, an annular plate having an annular channel therein to receive cathode material, said plate partially closing the aperture through the



bottom of said tank, and a hollow cooling member arranged to close the aperture in said plate and extending upwardly interiorly of said tank into substantially the plane of said anodes, the interior surface of said cooling member being in contact with the atmosphere.

1,871,435. METHOD OF PREPARING PARTIALLY DEHYDRATED MAGNESIUM CHLORIDE. SHELDON B. HEATH, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Mar. 15, 1929. Serial No. 347,316. 6 Claims. (Cl. 23—91.)

1. In a method of preparing hydrated magnesium chloride containing less water of crystallization than corresponds to the formula $MgCl_2.6H_2O$, the steps which consist in concentrating a solution of magnesium chloride, then cooling to form a slurry composed of crystals having the composition $MgCl_2.4H_2O$ and the mother liquor thereof, and flaking said slurry.



6. The method of preparing hydrated magnesium chloride containing less water of crystallization than corresponds to the formula $MgCl_2.6H_2O$ which comprises concentrating a solution of magnesium chloride by evaporation to a temperature of approximately 170° C. at atmospheric pressure, then cooling to about 140° to 150° C., whereby a slurry composed of crystals of $MgCl_2.4H_2O$ and the mother liquor thereof is produced, flaking such slurry in the form of small particles, drying such particles to remove water from the surface thereof and cooling the dried particles in a current of unheated air.

Patents Nos. 1,871,436 to 1,872,643

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Reissues	5	No. 18,565 to No. 18,570, inclusive.
Designs	54	No. 87,559 to No. 87,612, inclusive.
Patents	1,206	No. 1,871,436 to No. 1,872,643, inclusive.
Total	1,571	

Trade-Marks Canceled

41,567. Antiseptic or disinfectant compound. Quin Sharpe Drug Co., Vicksburg, Miss. Registered December 1, 1903. Canceled July 18, 1932.

167,106. Dry compound for making a nonalcoholic maltless beverage. Golden Grain Juice Co., Minneapolis, Minn. Registered April 24, 1923. Canceled July 18, 1932.

184,347. Silks in the piece. Jansen & Pretsfeld, Inc., New York, N. Y. Registered May 20, 1924. Canceled July 26, 1932.

186,001. Preparations for the treatment of certain-named ailments. The Smith Family, Limited, Grandfield, Okla. Registered July 1, 1924. Canceled July 18, 1932.

200,401. Electrical apparatus and machines. Chicago Pneumatic Tool Company, New York, N. Y. Registered June 30, 1925. Canceled July 7, 1932.

221,545. Mixed paints. Mitchell Paint Co., Louisville, Ky. Registered December 7, 1926. Canceled July 18, 1932.

223,269. Aspirin tablets. Sam Morrow, doing business as The Lax-Aspirin Company, Abilene, Tex. Registered January 25, 1927. Canceled July 26, 1932.

224,589. Nails. Pittsburgh Steel Company, Pittsburgh, Pa. Registered March 1, 1927. Canceled July 7, 1932.

225,977. Cancer medicine. Rachel Sill, East Moline, Ill. Registered March 29, 1927. Canceled July 18, 1932.

235,686. Electrical apparatus and machines. Chicago Pneumatic Tool Company, New York, N. Y. Registered November 22, 1927. Canceled July 7, 1932.

242,492. Fertilizer mixtures. American Cyanamid Company, New York, N. Y. Registered May 29, 1928. Canceled July 26, 1932.

245,928. Medicinal preparations for the treatment of certain-named ailments. William Georges, doing business as Larex Chemical Company, Seattle, Wash. Registered August 28, 1928. Canceled July 18, 1932.

248,871. Toast. Harry George Cubbison, doing business as Cubbison Cracker Co., Los Angeles, Calif. Registered October 30, 1928.

259,590. General tonic. Helen Schy-Man-Ski & Sons, Chicago, Ill. Registered August 6, 1929. Canceled July 26, 1932.

265,406. Certain named bakery products. Harry G. Cubbison, doing business as Cubbison Cracker Co., Los Angeles, Calif. Registered December 24, 1929. Canceled July 7, 1932.

277,627. Doughnut mixture. Bear-Stewart Co., Chicago, Ill. Registered November 18, 1930. Canceled July 18, 1932.

280,285. Candy laxatives. Leonard Quartetti, doing business as Speer Products Company, Chicago, Ill. Registered February 10, 1931. Canceled July 18, 1932.

289,990. Mimeograph paper. W. L. Jones, Inc., New York, N. Y. Registered December 15, 1931. Canceled July 26, 1932.

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, July 13, 1932.*

Sheffield Pharmacal Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Delatone Company, Chicago, Ill., to effect the cancellation of the trade-mark registration of the Sheffield Pharmacal Co., 339 South Wabash Avenue, Chicago, Ill., No. 122,748, dated September 10, 1918, and the notice of such proceeding sent by registered mail to the said Sheffield Pharmacal Co. at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said Sheffield Pharmacal Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business July 30, 1932

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 74,741; Trade-Mark Division, 942. Oldest new case, Jan. 18, 1932; oldest amended, Jan. 19, 1932.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Apr. 16	May 4	501
6706	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Apr. 1	Apr. 3	924
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Apr. 4	Apr. 13	741
7063	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	May 13	May 19	415
3626	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Apr. 8	Apr. 8	456
4696 C	6. LEWERS, A. M., Carbon Chemistry	Feb. 6	Feb. 1	2,016
5725	7. JARBOE, C. G., Optics; Photography	Mar. 1	Mar. 1	1,484
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Mar. 2	Mar. 4	1,168
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	May 2	May 2	812
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Feb. 26	Feb. 26	875
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Mar. 24	Mar. 31	674
7701	12. HENRY, C. C., Machine Elements	Apr. 12	Apr. 14	622
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Mar. 12	Mar. 16	1,130
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Apr. 6	Apr. 18	816
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Feb. 25	Feb. 25	1,977
5612	16. SPENCER, C. J., Telegraphy; Telephony	Apr. 1	Apr. 1	978
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Feb. 2	Feb. 3	1,390
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Mar. 31	Mar. 31	670
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Feb. 1	Feb. 1	1,694
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Apr. 7	Apr. 18	671
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Mar. 24	Mar. 22	898
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Apr. 4	May 3	652
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Feb. 1	Feb. 1	905
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Apr. 5	Apr. 7	710
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Feb. 10	Feb. 11	1,440
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Feb. 1	Feb. 1	1,101
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Apr. 3	Apr. 4	1,022
4628	28. BENSON, A. R., Internal-Combustion Engines	Feb. 20	Feb. 20	1,330
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Feb. 1	Feb. 4	966
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Mar. 25	Apr. 1	902
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Feb. 4	Feb. 2	1,506
4064	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Apr. 1	Apr. 4	862
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Jan. 30	Feb. 1	2,374
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Mar. 2	Mar. 1	878
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	May 31	May 31	462
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Feb. 1	Feb. 1	1,694
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Feb. 12	Feb. 18	1,306
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	May 15	May 19	214
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Feb. 3	Feb. 4	1,409
7890	40. OBERLIN, J. J., Receptacles	Mar. 5	Mar. 8	2,196
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	May 6	May 9	654
5882	42. CUTTING, H. O., Electric Signaling	Feb. 10	Feb. 6	1,362
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Mar. 15	Mar. 15	1,469
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Feb. 1	Feb. 1	1,884
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Apr. 1	Apr. 1	1,049
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Mar. 30	Mar. 30	652
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Mar. 10	Mar. 11	2,053
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Feb. 18	Feb. 18	879
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Jan. 30	Jan. 30	1,619
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Jan. 30	Jan. 30	2,192
5638	51. BACKUS, C. D., Radiant Energy	Mar. 5	Mar. 5	1,287
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Apr. 30	May 2	807
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	May 16	May 17	525
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Feb. 2	Feb. 2	1,141
6883	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery / Designs	May 23	May 21	327
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	July 8	July 20	172
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Feb. 9	Feb. 12	1,509
5605	58. DOWELL, E. F., Abrading; Typewriting	Apr. 1	Apr. 1	661
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Feb. 1	Feb. 1	1,241
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Jan. 18	Jan. 19	1,731
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Jan. 30	Jan. 30	1,463
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Feb. 3	Feb. 3	1,416
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Feb. 5	Feb. 5	1,851
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Feb. 1	Feb. 1	1,495
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Apr. 7	Mar. 30	598
		Feb. 2	Feb. 2	1,663
2099 B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND, {Trade-Marks / Labels and Prints	June 24	July 15	789
		June 30	July 15	153

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE MAVROGENIS

No. 2,915. Decided April 4, 1933

APPLICATION—ABANDONMENT—APPEAL—JURISDICTION OF COURT OF CUSTOMS AND PATENT APPEALS.

Where the Commissioner of Patents decided the showing made by the applicant is not sufficient to establish the delay in the prosecution of the application was unavoidable within the meaning of section 4894 Revised Statutes, *Held* that his action is not reviewable on appeal to the Court of Customs and Patent Appeals.

APPEAL from the Patent Office. Dismissed.

Mr. Arthur R. Woolfolk, Mr. Alvin Juedes, Mr. Leonard J. Kleczka, Mr. A. V. Cushman, Mr. John J. Darby, and *Mr. Carl A. Hellman* for Mavrogenis.

Mr. T. A. Hostetler for the Commissioner of Patents.

BLAND, *J.:*

In this case the appellant seeks to have this court review and reverse the decision of the Commissioner of Patents, who refused to revive appellant's application for improvements in wireless receiving systems, filed October 19, 1923. Petitioner sought to have the Commissioner of Patents revive the application under the authority granted in section 4894 of the Revised Statues, 35 U. S. C. A. 37, the pertinent portion of which is as follows:

Sec. 4894. All applications for patents shall be completed and prepared for examination within six months after the filing of the application, and in default thereof, or upon failure of the applicant to prosecute the same within six months after any action therein, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto, *unless it be shown to the satisfaction of the Commissioner of Patents that such delay was unavoidable:* * * * [Italics ours.]

On April 10, 1925, the Examiner rejected all the claims on certain references. The applicant failed to respond to said rejection within one year from that date as was then required by law (time changed to six months March 2, 1927, 44 Stat. 1335). On December 30, 1929, after applicant had observed that the Patent Office had allowed three patents to different parties upon subject matter which he claimed was in his rejected application, he filed amendments which he regarded as responsive to the last rejection by the Examiner and at the same time filed a petition to revive the application. The petition to revive is based upon Mavrogenis' poverty from the date of the rejection by the Examiner to the date of filing the petition and upon the further proposition that the action of the Patent Office in rejecting his application upon the prior art misled the applicant and his financial backers to their injury. It is contended by appellant that, by reason of such circumstances, the delay from April 10, 1926 (one year after the Examiner's last action) to the date of filing the amendment and petion to revive is shown to be "unavoidable" within the meaning of section 4894, supra.

Appellant contends that he has shown that before his application was abandoned he disclosed his invention to the Radio Corporation of America, the Western Electric and Manufacturing Company, and the General Electric Company, and that on account of the companies being financially related, that knowledge to one is knowledge to all, and that the General Electric Company and the Radio Corporation of America are the owners of the patents which were subsequently issued and to which reference has been made heretofore.

Appellant's petition for revival, of December 30, 1929, was overruled by the Commissioner on February 24, 1930. On March 24, 1930, appellant petitioned the Commissioner for a rehearing, in which petition appellant argued against the conclusion reached by the Commissioner and introduced new affidavits. On May 24, 1930, the petition of appellant was again denied. On June 27, 1930, appellant filed another petition to revive in which additional affidavits were filed. On August 2, 1930, the Commissioner adhered to his former decisions and again denied the petition for revival, from which decision appellant appeals here.

The Solicitor for the Patent Office, in this court, raises the following propositions:

First. This court is without jurisdiction to consider this appeal.

Second. The statute gives the Commissioner of Patents sole power to revive an application that has become abandoned.

Third. The action of the Commissioner, refusing to revive the application, was proper.

The position of the Patent Office is that this court has no jurisdiction to consider the appeal for the reason that the statute has given us no affirmative jurisdiction of appeals from decisions of the Commissioner of Patents in matters like that at bar, and that the wording of the statute indicates that in such matters the action of the Commissioner, being wholly discretionary with him, is not reviewable by this tribunal, and that even if it were reviewable, the Commissioner, in the case at bar, correctly refused to revive the application, that is to say, the Commissioner did not abuse his discretion.

In view of our conclusion in the case, it will not be necessary for us to determine whether or not appellant has shown that his delay was unavoidable and whether the Commissioner's action was arbitrary and capricious.

By the act of March 2, 1929, the jurisdiction of the Court of Appeals of the District of Columbia in patent matters, except in equity, was transferred to this court. We were given no jurisdiction which the Court of Appeals of the District of Columbia did not have. As amended by the Act of March 2, 1927, sections 4909, 4911, and 4915 of the Revised Statutes, in part read as follows:

Sec. 4909. Every applicant for a patent or for the reissue of a patent, any of the claims of which have been twice rejected, and every party to an interference, may appeal from the decision of the Primary Examiner, or of the Examiner in charge of interferences in such case, to the Board of Appeals; having once paid the fee for such appeal.

Sec. 4911. If any *applicant* is dissatisfied with the decision of the *Board of Appeals*, he may appeal to the Court of Appeals of the District of Columbia, in which case he waives his right to proceed under section 4915 of the Revised Statutes. If *any party to an interference* is dissatisfied with the decision of the *Board of Appeals*, he may appeal to the Court of Appeals of the District of Columbia. • • • [Italic ours.]

Sec. 4915. Whenever *a patent on application is refused by the Commissioner of Patents*, the applicant, unless appeal has been taken from the decision of the Board of Appeals to the Court of Appeals of the District of Columbia, and such appeal is pending or has been decided, in which case no action may be brought under this section, may have remedy by bill in equity, if filed within six months after such refusal; • • •. [Italics ours.]

It will be noticed that by section 4911, appellant is authorized to appeal to the Court of Appeals of the District of Columbia (now to this court) in cases in which the *applicant* is dissatisfied with the decision of the *Board of Appeals* and in cases in which *any party to an interference* is dissatisfied with the decision of the *Board of Appeals*. No other right of appeal in patent matters is to be found within the express language of the statutes.

Appellant has called our attention to section 2 of the act of March 2, 1929, which transferred to us our present patent jurisdiction from the Court of Appeals of the District of Columbia, and which reads:

Sec. 2. (a) The jurisdiction now vested in the Court of Appeals of the District in respect of appeals from the *Patent Office* in patent and trade-mark cases is vested in the United States Court of Customs and Patent Appeals. [Italics ours.]

and argues that by such provision we have jurisdiction in appeals from decisions of the *Patent Office* which include both decisions of the Board of Appeals and decisions of the Commissioner. He calls attention to the legislative history of the act of March 2, 1927, which act simplified appeals in the Patent Office and provided for an appeal from the Board of Appeals to the Court of Appeals of the District of Columbia, and further provided for an election between an appeal to the Court of Appeals of the District of Columbia and the right to file a bill in equity.

In section 4915, supra, which provides for a remedy by bill in equity, provision is made for such remedy against the *Commissioner of Patents*, whenever a patent on application is refused. In substance, the appellant contends that, since Congress provided for an election between remedies, it contemplated the same scope of jurisdiction in both courts, and that if this were true, this court could consider an appeal from a decision of the Commissioner, if such decision amounted to a final refusal to grant a patent.

We are not impressed with these contentions. Congress, by the act of March 2, 1927, sought to reduce the amount of patent litigation in and out of the Patent Office, and it spoke in definite language when it provided for appeals to the Court of Appeals of the District of Columbia from decisions of the Board of Appeals in the two instances referred to. We are not at liberty to read into that section a provision whereby appeals may be brought here from decisions of the Commissioner of Patents.

Appellant relies, to a great extent, upon the decision of the Court of Appeals of the District of Columbia in *In re Mattullath*, 38 App. D. C. 497, 179 O. G. 853. The facts in that case were very similar to those in the case at bar. The applicant Mattullath died during the pendency of his application. About seven years after the application had become abandoned and after the Wright Brothers and others had been granted patents upon operable flying machines, to which Mattullath's application related, a petition to revive her deceased husband's application was filed by his widow as administratrix. The delay was claimed to be unavoidable by reason of her poverty. The Commissioner refused to revive the application on the theory that:

To hold otherwise would be to encourage those who had slept upon their rights while others struggled on to success, to now enter the field and wrest from them the fruits of their labor.

Upon appeal to the Court of Appeals of the District of Columbia, in an opinion by Mr. Justice Shepard, it was held that "The right to appeal from a final decision of the Commissioner of Patents is determinable by its substance and effect, rather than its form", citing *Moore* v. *Heany*, 34 App. D. C. 31, 149 O. G. 831; *In re Selden*, 36 App. D. C. 428, 164 O. G. 741, and that the petitioner had shown that the delay was unavoidable, that she had not slept upon her rights, that she was entitled to have her application revived, and the decision of the Commissioner was reversed.

While not important to our consideration of the issue at bar, it is interesting to note that in *In re Mattullath*, 46 App. D. C. 143, the Court of Appeals of the District of Columbia affirmed the action of the Commissioner of Patents in the disallowance of applicant's ten claims for a patent, chiefly upon the ground that she was "attempting to read into the application the wonderful development that has taken place in this art since the filing of this application." It is stated in the brief of the Solicitor that "Mr. Justice Gould dismissed the bill in equity and the attorneys neglected to note an appeal within the required time."

In re Carvalho, 47 App. D. C. 584, 250 O. G. 514, involved an appeal from the decision of the Commissioner of Patents, refusing to receive a patent application which, under the statute, had been abandoned. At that time, certain decisions of the Commissioner were appealable to the Court of Appeals of the District of Columbia (decisions on questions of priority, etc., 27 Stat. 436). The court held that it had no jurisdiction to review the decision of the Commissioner refusing to revive an abandoned application, and said:

In an interference the power of the Commissioner is limited by sec. 4904, Revised Statutes, to the question of priority of invention. Therefore, our jurisdiction embraces but two classes of cases: First, where an application for a patent or the reissue of a patent has been twice rejected by the Primary Examiner, then by the Board of Examiners in Chief, and afterward by the Commissioner; and, second, where the Commissioner in an interference has awarded priority to one of the parties. It was so held by this court after a careful examination of the matter in *Cooper* v. *Gold*, 34 App. D. C. 194, 197, 198, 151 O. G. 194, and *Re Fullagar*, 32 App. D. C. 222, 138 O. G. 259. The appeal before us falls within neither class. True, the action of the Commissioner may in effect result in Carvalho's failure to get a patent; for it is possible that if he filed a new application, which he would have a right to do, he would encounter the bar of public use. This, however, is not a necessary result of the rule we announce, because in most cases a new application would save the applicant's rights. If it would not in any case, the result would be due to the applicant's dilatoriness, not to the law. However that may be, Carvalho's application for a patent was not twice rejected by the Primary Examiner, nor was it ever passed upon by the Board of Examiners in Chief. Its rejection, therefore, is not one of those contemplated by sec. 4909.

For these reasons we are without jurisdiction to review the decision of the Commissioner. In reaching this conclusion we do not forget that this court announced a different doctrine in Selden's case, 36 App. D. C. 428; 164 O. G. 741; *Moore* v. *Heany*, 34 App. D. C. 31, 39, 149 O. G. 831, and in *Mattullath's* case, 38 App. D. C. 497, 179 O. G. 853. This doctrine, however, is not only inconsistent with the rulings in the Cooper and Fullager cases, but also with the quoted statutes, and is therefore disapproved. The appeal is dismissed.

It is argued by appellant that the decision in the Carvalho case is based upon the Moore and Selden cases and that those cases are not authority for the position taken and that, therefore, the Mattullath case remains the law. In view of the express holding by the court as above quoted, which disapproved the holding in the Mattullath case, we cannot agree with the contention of appellant. Moreover, subsequently, the same court in *In re Seiss*, 48 App. D. C. 581, 262 O. G. 168, dismissed an appeal from the decision of the Commissioner of Patents holding the appellant's application abandoned, and such dismissal was upon the express authority of *In re Carvalho*, supra.

Revival of an application was considered by the Court of Appeals of the District of Columbia in *Fekete* v. *Robertson*, 57 App. D. C. 73, 358 O. G. 3, 17 F.(2d) 335, and in *Martin* v. *Robertson*, 59 App. D. C. 270, 393 O. G. 1519, 39 F.(2d) 520. In *In re Selden*, 36 App. D. C. 428, 164 O. G. 741, the right to revive an application was involved. Under a statute providing for an appeal to the Court of Appeals of the District of Columbia, by an applicant who was "dissatisfied with the decision of the Commissioner", it was held that appeal to said court might be taken on the Commissioner's decision refusing to revive the application. The Commissioner rejected the application on the theory that there had been no responsive amendment filed within the limited time. The court held that the amendment was responsive. This case was decided prior to the decision in the Mattullath case.

As far as we have been able to ascertain, the decisions in the six cases above referred to are the only ones which involve the question of jurisdiction of an appellate court to review the action of the Commissioner under section 4894, which provision became a part of our patent law in the year 1870. No support for appellant's position is found in these cases when they are considered together.

We think the right to revive an abandoned application under section 4894, supra, is a matter that is left to the discretion of the Commissioner of Patents, and that his action, even though arbitrary and capricious, is not reviewable by this court. Not only does the quoted language used and the context of all the patent laws suggest that this was the legislative intent, but the failure of the Congress to expressly provide for appeals from the decision of the Commissioner of Patents to this court indicates that this question and others of equal importance were left to the sound discretion of the Commissioner.

It is a matter of common knowledge that many thousands of applications become abandoned in the Patent Office. Congress fixed a period after which such applications should be regarded in law as abandoned. It recognized that, in some instances, this provision might, on account of unavoidable circumstances responsible for the delay, bring about a great hardship on an applicant, so it wisely provided that, in such cases, if the Commissioner was satisfied that the delay was unavoidable, he might revive the application. Appellant presents a very appealing case, but to uphold his contentions would be to upset settled procedure in the Patent Office, promote lack of diligence and thus greatly handicap inventors. Obviously, Congress contemplated that the Commissioner, in exercising his discretion, would only permit revival where the excusing of such delay would be calculated to promote results reasonably in harmony with the purpose of Congress in providing the whole patent granting system.

We hold that there is no appeal to this court from the decision of the Commissioner on the question involved, and the said appeal is dismissed.

Dismissed.

U. S. Court of Customs and Patent Appeals

HENRY *v.* HARRIS

No. 2,899. Decided April 4, 1932

1. INTERFERENCE—PRIORITY—CONCEPTION.
   Evidence reviewed and *Held* that Henry had not established a conception of the invention of certain counts of the issue which called for elastic bushings by the making of bushings made of asbestos material since it cannot be held to meet the requirements of elasticity.
2. SAME—SAME—RIGHT TO MAKE THE CLAIMS.
   Evidence reviewed and *Held* that the application of Harris discloses the invention set out in counts 8, 9, 10, and 11 of the issue.
3. SAME—SAME—DILIGENCE.
   Where the evidence showed that Harris had a conception of the invention in issue prior to Henry's date of conception, that he had tried to interview his attorney a short time prior to that date and the application was virtually completed one day thereafter, *Held* that Harris was not lacking in diligence and being the first to conceive the invention, priority was properly awarded to him.

APPEAL from the Patent Office. Affirmed.

Messrs. Brown, Jackson, Boettcher, & Dienner and *Mr. Arthur H. Boettcher* for Henry.

Messrs. Kwis, Hudson, & Kent, Mr. Watts T. Estabrook, and *Mr. B. M. Kent* for Harris.

GARRETT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner of Interferences, awarding priority to Harris.

The claimed invention is directed to the use, in spring shackles for automobiles, of bushings, composed of elastic material, arranged to accommodate the pivotal movement between the parts by the yielding of the bushing material. That is to say, the elastic bushing is so placed with reference to the shackle bolt and the eye through which the bolt runs that, when the vehicle body moves up and down,

torsion occurs in the bushing, which, it is stated,—minimizes wear, eliminates rattle, and avoids the necessity of lubrication.

Eleven counts are involved. Since none of them requires construction and their literal quotation does not appear to be necessary to a clear understanding of the issues presented, none is quoted. We deem it proper, however, to quote from appellant's brief his classification of said counts:

> The counts are appropriately classified as follows:
> Counts 3, 4, 5 and 6—which go broadly to the bearing and bolt and an elastic tubular bushing expanded or compressed therebetween, counts 4, 5 and 6 bringing in the connecting link or links with varying particularity and claims 3, 4 and 6 specifying that the bushings shall be expanded into tight engagement with the surface of the bolt and the inner face of the bearing; and
> Counts 1, 2, 7, 8, 9, 10 and 11—which treat the bushing and its directly associated parts more narrowly.
> The counts of this latter group are appropriately classified as follows:
> Counts 1 and 2—which specify the bushing as of rubber, the latter also specifying the bushing as projecting beyond the ends of the eye;
> Count 7—which specifies the bushing as consisting of two abutting parts extending into the opposite ends of the eye; and
> Counts 8, 9, 10 and 11—which are limited to confining the outer ends or heads of the bushing.

The main issue, as stated by the appellant, Henry, is whether the senior party, Harris, showed diligence toward that constructive reduction to practice which resulted from the filing of his application for patent on June 27, 1925.

Appellant also states as questions of fact:

> (1) Does Henry's device of March, 1925, embody the invention of counts 3, 4, 5 and 6?
> (2) Does Harris, in his patent application, disclose the invention of counts 8, 9, 10 and 11?

Appellant treats the second of the above queries as a mixed question of fact and law.

In his decision the Examiner of Interferences awarded Harris a date of "at least as early as May 19, 1925," for conception. For reduction to practice he was held to be limited to his filing date of June 27, 1925, although Harris contended that as to all except counts 9, 10 and 11, he was entitled to a date for such reduction to practice as early as June 16, 1925.

The Board of Appeals found no specific date of conception on the part of Harris but said:

> • • • in our opinion the evidence clearly shows that the party Harris had conceived the subject matter of all of the counts prior to the date of conception awarded to appellant [Henry] • • •.

The decision of the Examiner of Interferences awarded Henry conception as of June 10, 1925, and reduction to practice as of June 18, 1925. The Board of Appeals accepted these findings as correct. Henry's filing date was July 17, 1925.

Henry has insisted, however, that he is entitled to earlier dates of both conception and reduction to practice, basing this claim largely upon the fact that in the latter part of 1924 he began some activity, or at least indulged some thought, relating to a plan for preventing wear between the shackle bolts and the spring eyes and spring horns; that early in 1925 he decided to utilize *brake lining* for this purpose, and that during the first week in March he applied such brake lining to a car as a bushing, which bushing of brake lining remained on the car until June 18, 1925.

In arguing this point particular reference is made by appellant to counts 3, 4, 5 and 6.

The Examiner of Interferences and the Board of Appeals pointed out that each of these counts called for a bushing element consisting of "an elastic tubular" member, or portion, instead of the bronze bushing theretofore used, and agreed in holding that the word "elastic" is not broad enough to cover the material of which brake lining is composed.

[1] We find no error in this holding. While, as appellant insists, the brake lining bushings may have lasted from early in March until they were removed, apparently to make way for bushings of rubber, on June 18th, still the lasting quality is not the essential characteristic of the bushings in the claimed invention. The counts call for *elastic* bushings and it is not thought that the asbestos material of the brake lining can be held to meet the requirement of elasticity, as contemplated by both applications.

[2] Appellant also insists that Harris is not entitled to make the claims which became counts 8, 9, 10 and 11, because, it is alleged, he (Harris) failed to disclose a structure showing the required means to confine the outer ends or heads of the bushings and prevent expansion.

This question was first raised by a motion to dissolve these and other counts made by Henry. The motion was overruled by the Law Examiner, and Henry, under Patent Office rule 130, requested, first, the Examiner of Interferences, and then, upon appeal, the Board of Appeals, to reinvestigate the question in view of the proofs.

Those tribunals complied and agreed in sustaining the finding of the Law Examiner, which, in effect, was that the difference between the respective elements to whose function the contention relates was, "at last, a mere difference in degree."

The Examiner of Interferences said:

> • • • Exhibit T of Harris, which this tribunal relies upon as establishing conception, clearly supports every limitation of all of the counts in issue • • •.

A very careful examination of the testimony relating to this issue has been made by us with the result that we are not convinced of any error either of law or fact in the concurring findings thereon of the three tribunals of the Patent Office. The authorities cited by appellant do not appear to us to be applicable to the facts in the case before us.

This leaves to be considered only the question of whether Harris was diligent.

[3] Accepting, as we do, the concurring findings of the tribunals of the Patent Office as to the respective dates awarded the parties for conception and reduction to practice, it is quite obvious that the activities of both were proceeding somewhat concurrently, and that all of said activities, from and including conception to and including the filing of applications for patent, took place within relatively brief periods of time.

Henry conceived June 10, 1925, reduced to practice June 18, 1925, and filed application July 17, 1925. So his activities, so far as here pertinent, covered a period of five weeks. Harris conceived at least as early as May 19, 1925, and filed the application which constituted constructive reduction to practice, June 27, 1925. So the pertinent activities of Harris likewise covered a period of approximately five weeks.

It is noted that the time between Henry's actual reduction to practice (June 18, 1925,) and the filing date of Harris (June 27, 1925,) was nine days.

The period during which Harris must have been diligent in order to prevail, in view of Henry's actual reduction to practice having been prior to the filing date of Harris, was that period immediately preceding June 10. 1925, Henry's date of conception up to his (Harris's) filing date.

It, therefore, becomes important to inquire into the activity of Harris relative to the matter during said period.

In order to get the true perspective of the situation we properly may consider the doings of Harris even earlier than the date awarded him for conception. As early as April 18, 1925, he is shown to have directed his patent attorney at Cleveland, Ohio, to proceed with the preparation of an application and to have furnished said attorney, on April 28, 1925, with a drawing for use in preparing it. He had shown him a rough sketch as early as April 14, 1925.

Harris thereafter is shown to have made other sketches, including one filed as Exhibit T, made on May 18, 1925, and exhibited to his brother on May 19, 1925. The award of conception date was based particularly upon this exhibit. In the early part of June he made other drawings which were sent to different manufacturers for making parts for a model. These parts were assembled by June 15, 1925, on which day he took the model to Cleveland to show it to his attorney. The attorney was absent from the city. On June 20, 1925, Harris returned to Cleveland and was informed that his attorney was still away and would not be back at his office before June 25th, but was informed that the application had been drawn and he signed same on that day. Returning to his attorney's office on June 25, 1925, he demonstrated the model, the application was examined and discussed, and, it being decided that it was sufficient, it was, on that day, mailed to the Patent Office where it was filed on June 27, 1925.

The testimony of the attorney was taken in the case and we agree with the Board of Appeals in the finding that his evidence satisfactorily establishes the fact that the application was virtually completed in the attorney's office by June 11, 1925, which was the day following the date awarded to Henry for conception.

This court, following numerous decisions of other courts, has many times held that we will not disturb the concurring findings of the tribunals of the Patent Office unless palpable and manifest error has been committed. *Stern et al.* v. *Schroeder et al.*, 17 C. C. P. A. (Patents) 690, 697, 398 O. G. 4, 36 F.(2d) 518; *Clancy* v. *De Jahn*, 17 C. C. P. A. (Patents) 714, 715, 392 O. G. 244, 36 F.(2d) 181; *Bennett* v. *Fitzgerald*, 18 C. C. P. A. (Patents) 1201, 1202, 410 O. G. 1063, 48 F.(2d) 917.

The earnest argument of appellant's counsel upon the several questions presented has been given careful thought, and the testimony has been carefully examined. We think this testimony leads inevitably to the conclusions of fact which have been briefly recited.

In *Jones* v. *Evans*, 18 C. C. P. A. (Patents) 866, 875, 405 O. G. 841, 46 F.(2d) 197, this court said:

> • • • Each case where diligence is involved, rests and must be decided upon its own facts, and all the surrounding circumstances must be viewed and considered in determining whether there was sufficient diligence.

Under the facts of the instant case and the surrounding circumstances, we fail to see wherein Harris was lacking in a degree of diligence entirely sufficient to satisfy all reasonable requirements of justice and law.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE HAWKINS

No. 2,927. Decided April 4, 1932

APPLICATION—DIVISION.

Held that division was improperly required between claims for two specific alloys and a claim for a metal product to which one of said alloys had been applied as an undercoat and the other as a supercoat.

APPEAL from the Patent Office. Reversed and remanded.

Mr. Sydney I. Prescott and *Mr. George S. Hastings* for Hawkins.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming, a decision of the Primary Examiner, requiring a division as between allowed claims 10, 11, and 12, and claims 13 and 14 of appellant's application, filed May 2, 1928. Said claims 13 and 14 were not passed upon as to their merits by either of the patent office tribunals, but the requirement for division was technically a final rejection of such claims, and therefore we have jurisdiction to entertain this appeal. *In re Rundell*, 19 C. C. P. A. (Patents) 867, 57 F.(2d).

Claims 12, 13 and 14 represent the issue before us and read as follows:

> 12. A metallic product, comprising a metallic body provided with an undercoat of lead containing approximately 4.5% of zinc, and approximately .5% of aluminum, and with a supercoat of lead containing approximately 2% of phosphor-tin and approximately .1% of lead phosphide.
> 13. An alloy comprising lead containing approximately 4.5% of zinc and approximately .5% of aluminum.
> 14. An alloy comprising lead containing approximately 2% of phosphor-tin and approximately .1% of lead phosphide.

The application relates to a non-corrosive alloy and method of making and using the same. Claims 10 and 11 relate to a method of applying a non-corrosive and acid-proof protecting coating to metal, two of the elements of which are the specific elements named in said claims 13 and 14.

Claim 12, above quoted, specifically includes all of the elements of claims 13 and 14. Claims 13 and 14, as will be observed, relate to two specific alloys per se of the combinations mentioned in these claims.

The alloys named in these claims are indispensable elements of all the allowed claims, without which it is clear the allowed claims would not be patentable. To illustrate, if we omit from allowed claim 12 the elements named in claims 13 and 14, it would call for a metallic product comprising a metallic body.

It is therefore clear that the patentability of the allowed claims is dependent upon the elements named in claims 13 and 14, although, of course, it was not required that said elements in themselves be patentable in order to warrant the allowance of claims 10, 11 and 12.

We are of the opinion that the question here involved is controlled by our decision in the case of *In re Rundell*, supra. In that case the majority opinion quoted from the opinion in the case of *Gill v. Wells*, 22 Wall 1, 24, as follows:

> Cases arise where a patentee, having invented a new and useful combination consisting of several ingredients which in combination compose an organized machine, also claims to have invented new and useful combinations of fewer numbers of the ingredients, and in such cases the law is well settled that if the several combinations are new and useful, and will severally produce new and useful results, the inventor is entitled to a patent for the several combinations, provided that he complies with the requirement of the Patent Act and files in the Patent Office a written description of each of the alleged new and useful combinations, and of the manner of making, constructing, and using the same.
>
> He may give the description of the several combinations in one specification, and in that event he can secure the full benefit of the exclusive right to each of the several inventions by separate claims referring back to the description in the specification; and if by inadvertence, accident, or mistake, he should fail to claim any one of the described combinations, he may surrender the original patent and have a reissue not only for the combination or combinations claimed in the original, but for any which were so omitted in the claims of the original patent.

In the case at bar, claim 12 is for a combination containing specifically all of the elements of claims 13 and 14. Claims 13 and 14 are for a combination of elements resulting in alloys. They are essentially sub-combinations of the combination set out in claim 12.

In the case of *Leeds & Catlin Co. v. Victor Talking Machine Co.*, 213 U. S. 301, 144 O. G. 1089, the court said:

> A combination is a union of elements, which may be partly old and partly new, or wholly old or wholly new. But whether new or old, the combination is a means—an invention—distinct from them. They, if new, may be inventions and the proper subjects of patents, or they may be covered by claims in the same patent with the combination.

The case of *In re Rundell*, supra, involved certain combination claims for a device for successively heating plastic caps for bottles and applying these caps to the bottles, and also specific claims for a crimping device for plastic bottle caps. Division was required by the Patent Office tribunals upon the ground that crimping dies or heads were in themselves a subject of invention, separate and independent of the system or combination in which they were used as an element.

This court held that the inventions there involved were so co-related and in unity that the appellant there was entitled to have all the claims considered in his original application, and that the Patent Office tribunals erred in requiring a divison of the claims.

In the case at bar, the specific elements of claims 13 and 14 are specifically named in the allowed claims, and such elements were absolutely essential to their allowance.

It is our opinion, therefore, that the alleged inventions set forth in claims 13 and 14 are so related to the invention set forth in the allowed claims that the Board of Appeals erred in requiring division between them.

While these claims are before us as technically rejected by the Patent Office tribunals, they have never in fact been considered by those tribunals upon their merits, and the record before us is not sufficient to enable us to do so. The ends of justice require that the proper Patent Office tribunals pass upon said claims 13 and 14 as if no order for division had been made, and for that purpose the matter will be remanded to them.

The decision of the Board of Appeals is reversed and the case is remanded to the United States Patent Office for further proceedings in conformity with the views herein expressed.

Reversed and remanded.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

949,272, P. E. Herrmann, Process of hair waving; 959,527, same, Hair waving; 1,001,029, same, Hair curler; 1,168,000, same, Hair curler and waver; 1,194,841, same, Hair steaming apparatus; 1,499,367, same, Apparatus for hair waving; 1,531,936, same, Electrical attachment plug, D. C., S. D. N. Y., Doc. E 42/17, *P. E. Herrmann et al. v. Thomas Waving Corp.* Doc. E 41/19, *P. E. Herrmann et al. v. Gem-Air Permanent Wave Co., Inc.* Doc. E 41/22, *P. E. Herrmann et al. v. Everlasting Wave Machine Holding et al.* Dismissed for lack of prosecution (notice June 22, 1932, in each of above cases).

959,527. (See 949,272.) 1,001,029. (See 949,272.)

1,018,502, Just & Hanaman, Incandescent body for electric lamps; 1,082,933, W. D. Coolidge, Tungsten and method of making same for use as filaments of incandescent electric lamps, D. C., S. D. N. Y., Doc. E 31/20, *General Electric Co. v. Palatine Industrial Co., Inc., et al.* Doc. E 31/55, *General Electric Co. v. I. Ruderfer (Grand Gas Light Co.).* Doc. E 32/197, *General Electric Co. v. Buschman Weissberg & Co., Inc., et al.* Doc. E 30/239, *General Electric Co. v. A. M. Newman et al.* Doc. E 30/241, *General Electric Co. v. P. Freeman Co., Inc., et al.* Dismissed for lack of prosecution (notice June 22, 1932, in each of above cases).

1,050,441, R. A. Fessenden, Electric signaling apparatus; 1,050,728, same, Method of signaling; 1,113,149, E. H. Armstrong, Wireless receiving system, D. C., S. D. N. Y., Doc. E 32/126, *Westinghouse Electric & Mfg. Co., et al. v. Kosdon Products Co., Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,050,728. (See 1,050,441.) 1,082,933. (See 1,018,502.)

1,089,907, 1,181,742, W. D. Coolidge, Electrical contact, D. C., S. D. N. Y., Doc. E 38/275, *P. R. Mallory & Co., Inc., v. Automatic Manufacturers Outlet, Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,107,193, 1,159,740, 1,179,068, J. R. Bray, Process and article for producing moving pictures; 1,143,542, E. Hurd, Process of and apparatus for producing moving pictures, D. C., S. D. N. Y., Doc. E 40/36, *Bray Hurd Process Co., Inc., v. Sherwood Wadsworth Pictures, Inc., et al.* Dismissed for lack of prosecution (notice June 22, 1932).

1,113,149. (See 1,050,441.) 1,143,542. (See 1,107,193.)
1,159,740. (See 1,107,193.) 1,168,000. (See 949,272.)
1,179,068. (See 1,107,193.) 1,181,742. (See 1,089,907.)

1,190,787, F. E. Miller, Voice and sound recording machine; 1,220,669, same, Cusp diaphragm mechanism, D. C., S. D. N. Y., Doc. E 43/127, *F. E. Miller Radio Corp.* v. *V. Himmer, jr.* Dismissed for lack of prosecution (notice June 22, 1932).

1,194,841. (See 949,272.) 1,220,669. (See 1,190,787.)

1,223,180, C. F. Kettering, Ignition system; 1,641,374, W. A. Chryst, Induction coil; 1,647,417, W. G. Schneider, Ignition coil, filed June 24, 1932, D. C., E. D. N. Y., Doc. E 6436, *Delco-Remy Corp.* v. *P. & D. Mfg. Co., Inc.* Same, filed June 23, 1932, D. C., E. D. N. Y., Doc. E 6422. *Delco-Remy Corp.* v. *Standard Motor Products Co., Inc.*

1,268,473, W. O. Kennington, Distributer cap for ignition apparatus; 1,351,714, A. E. Berdon et al., Distributer head for ignition devices; 1,372,065, O. F. Conklin, Distributer device for ignition apparatus, filed June 24, 1932, D. C., E. D. N. Y., Doc. E 6434, *Delco-Remy Corp.* v. *P. & D. Mfg. Co., Inc.* Same, filed June 23, 1932, D. C., E. D. N. Y., Doc. E 6420, *Delco-Remy Corp.* v. *Standard Motor Products Co., Inc.*

1,305,361, C. J. Holslag, Alternating current welding transformer; Re. 16,012, same, Method of electric arc welding, cutting and repairing, D. C., S. D. N. Y., Doc. E 41/147, *Electric Arc Cutting & Welding Co.* v. *C. Scott et al.* Dismissed for lack of prosecution (notice June 22, 1932). Doc. E 41/148, *Electric Arc Cutting & Welding Co.* v. *M. Geller et al.* Decree as above.

1,307,783 (*a*), A. V. Gullborg, Lubricating apparatus; 1,307,734, same, Lubricating means, D. C., S. D. N. Y., Doc. E 45/286, *The Bassick Mfg. Co.* v. *T. R. King.* Dismissed for lack of prosecution (notice June 22, 1932).

1,307,733 (*b*), A. V. Gullborg, Lubricating apparatus; 1,307,734, same, Lubricating means; 1,475,980, O. Zerk, Lubricating apparatus, D. C. Mass., Doc. E 3501, *Alemite Corp.* v. *K. Paine et al.* Injunction granted Jan. 6, 1932. Same, filed June 23, 1932, D. C. Conn. (New Haven), Doc. E 2220, *Alemite Corp.* v. *E. Fairchild* (*Fairchild Screw Machine Co.*).

1,307,734. (See 1,307,733 (*a*) and (*b*).)

1,326,153, W. J. Fleming, Buckle support; 1,377,253, M. J. Keevers, Fastening device, D. C., S. D. N. Y., Doc. E 40/55, *Fleming & Keevers Co., Inc.*, v. *Primrose Novelty Corp.* Dismissed for lack of prosecution (notice June 22, 1932).

1,351,714. (See 1,268,473.)

1,360,256, 1,528,178, E. Anderson, Can opener, D. C., S. D. N. Y., Doc. E 32/6, *Star Can Opener Co.* v. *N. B. Wales et al.* (*Wales Wilson Products Co.*). Dismissed for lack of prosecution (notice June 22, 1932).

1,372,065. (See 1,268,473.) 1,377,253. (See 1,326,153.)

1,431,260, 1,483,522, H. Rosen, Button making machine; 1,536,530, same, Button, D. C., S. D. N. Y., Doc. E 41/35, *H. Rosen et al.* v. *J. Sussman et al.* Doc. E 41/73, *H. Rosen et al.* v. *M. Barnstein et al.* Doc. E 41/74, *H. Rosen et al.* v. *J. Siegel et al.* Doc. E 41/75, *H. Rosen et al.* v. *J. Schauber et al.* Doc. E 40/226, *H. Rosen et al.* v. *H. Finkel et al.* Doc. E 40/227, *H. Rosen et al.* v. *M. Pearlstein et al.* Dismissed for lack of prosecution (notice June 22, 1932, in each of above cases).

1,456,528, H. D. Arnold, Electric discharge device; 1,459,412, A. M. Nicholson, Thermionic translating device; Re. 15,278, I. Langmuir, Electron discharge apparatus, D. C., S. D. N. Y., Doc. E 44/332, *Radio Corp. of America et al.* v. *Tectron Radio Corp.* Dismissed for lack of prosecution (notice June 22, 1932).

1,459,412. (See 1,456,528.)

1,470,524 (*a*), H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confection, D. C., S. D. N. Y., Doc. E 67/399, *Good Humor Corp. of America* v. *Marel Bros. Ice Cream Co., Inc., et al.* Consent decree for plaintiff (notice June 23, 1932). Same, filed May 11, 1932, D. C. N. J., Doc. E 4437, *Good Humor Corp. of America* v. *Penguin Ice Cream Corp. et al.* Same, filed June 22, 1932, D. C. N. J., Doc. E 4450, *Good Humor Corp. of America* v. *Purity Ice Cream Co.* Same, D. C., N. D. Ala. (Birmingham), Doc. 736, *Good Humor Corp. of America* v. *Highland Ice Cream & Creamery Co.* Patents held valid July 5, 1932. Same, filed July 6, 1932, D. C., E. D. N. Y., Doc. 6459, *Good Humor Corp. of America* v. *Pilgrim Ice Cream Co., Inc.* Same, filed June 30, 1932, D. C., S. D. N. Y., Doc. E 69/315, *Good Humor Corp. of America* v. *Smith Bros. Ice Cream Co., Inc.* Doc. E 69/314, *Good Humor Corp. of America* v. *Bronx Ice Cream Co., Inc.*

1,470,524 (*b*), H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confection; 1,505,592, F. W. Epperson, same, D. C., S. D. N. Y., Doc. E 58/348, *National Popsicle Corp. et al.* v. *B. Landau.* Dismissed for lack of prosecution (notice June 23, 1932).

1,470,524. (See 1,505,592.)

1,475,980. (See 1,307,733 (*b*).)

1,483,522. (See 1,431,260.) 1,499,367. (See 949,272.)

1,505,592, F. W. Epperson, Frozen confection; 1,470,524, H. B. Burt, Process of making frozen confections, D. C., S. D. N. Y., Doc. E 46/58, *The Popsicle Corp. et al.* v. *I. Weiss* (*Goody Frozen Products Co.*). Dismissed for lack of prosecution (notice June 22, 1932).

1,505,592. (See 1,470,524 (*b*).)

1,507,826, 1,588,354, L. J. Grubman, Sound producing device for dolls, D. C., S. D. N. Y., Doc E 38/274. *Voices, Inc.*, v. *Reisman Barron & Co., Inc.* Dismissed without prejudice (notice June 23, 1932).

1,528,178. (See 1,360,256.) 1,531,936. (See 949,272.)

1,536,530. (See 1,431,260.)

1,544,207, R. L. Beers, Tuyère structure for single-retort stoker; 1,710,260, O. A. Johnson, Tuyère block, D. C. Mass., Doc. E 3638, *Riley Stoker Corp.* v. *J. H. McElroy* (*Stoker Engineering & Service Co.*). Consent decree for injunction May 19, 1932.

1,550,794. (See 1,593,406.)

1,553,571, Des. 64,869, Des. 64,870, Des. 64,871, Des. 64,872, Des. 64,873, Des. 64,941, Des. 65,309, Des. 65,622, Des. 65,624, L. Strausser, Watch case, D. C., S. D. N. Y., Doc. E 42/376, *Nov-E-Line Mfg. Co., Inc.*, v. *The Diel Watch Case Co., Inc.* Dismissed for lack of prosecution (notice June 22, 1932).

1,578,231, Deses & de Mendoza, Reel; 1,605,222, same, Electric sign controller, D. C., S. D. N. Y., Doc. E 43/208, *L. G. Deses et al.* v. *Camew Display Corp.* Dismissed for lack of prosecution (notice June 22, 1932).

1,588,354. (See 1,507,826.)

1,593,406, V. Himmer, Loud speaker; 1,550,794, R. D. Fay, Magneto telephone, D. C., S. D. N. Y., Doc. E 44/33, *V. Himmer* v. *A. Madel et al.* Dismissed for lack of prosecution (notice June 22, 1932).

1,601,146, J. P. Replogle, Switch; 1,693,998, W. A. Chryst, Electric switch, 1,835,019, H. D. Dawson, Switch, filed June 24, 1932, D. C., E. D. N. Y., Doc. E 6438, *Delco-Remy Corp.* v. *P. & D. Mfg. Co., Inc.* Same, filed June 21 1932, D. C., S. D. N. Y., Doc. E 69/176, *Delco-Remy Corp.* v. *Guaranteed Parts Co., Inc.*

1,605,222. (See 1,578,231.) 1,614,136. (See Re. 16,461.)

1,641,374. (See 1,223,180.) 1,647,417. (See 1,223,180.)

1,683,531. (See Re. 17,393.) 1,693,998. (See 1,601,146.)

1,710,260. (See 1,544,207.)

1,718,997. (See 1,470,524 (*a*) and (*b*).)
(*a*) and (*b*).)

1,796,855, R. H. Ahlers, Electrical condenser; 1,815,496, W. A. Chryst, Ignition apparatus; 1,830,907, C. H. Kindl, Electrical condenser, filed June 24, 1932, D. C., E. D. N. Y., Doc. E 6437, *Delco-Remy Corp.* v. *P. & D. Mfg. Co., Inc.* Same, filed June 23, 1932, D. C., E. D. N. Y., Doc. E 6423, *Delco-Remy Corp.* v. *Standard Motor Products Co., Inc.*

1,807,697, 1,849,013, G. A. Lyon, Cover for spare tires of automobiles, filed June 21, 1932, D. C., E. D. Wis. (Milwaukee), Doc. 3615, *Lyon, Inc., et al.* v. *Federal Pressed Steel Corp.*

1,815,496. (See 1,796,855.) 1,830,907. (See 1,796,855.)

1,835,019. (See 1,601,146.) 1,849,013. (See 1,807,697.)

Re. 15,278. (See 1,456,528.)

Re. 16,012. (See 1,305,361.)

Re. 16,461, M. C. Latour, Audion or lamp relay or amplifying apparatus; 1,614,186, same, Thermionic amplifying apparatus, D. C., S. D. N. Y., Doc. E 41/97, *Latour Corp.* v. *S. E. Pearsall Co.* Dismissed for lack of prosecution (notice June 22, 1932).

Re. 17,393, J. Mayer, Hair waving appliance and method; 1,683,531, G. Decker, Hair waving outfit; Re. 17,585, J. Mayer, Permanent hair waving appliance, D. C., N. D. Ohio, E. Div., Doc. 4279, *The Philad Co. et al.* v. *E. Baum* (*Ernest Baum Products Co.*) *et al.* Patents held valid, and infringed by The Herold Bros. Co. June 23, 1932.

Re. 17,585. (See Re. 17,393.)

Des. 64,869. (See 1,553,571.)

Des. 64,870. (See 1,553,571.)

Des. 64,871. (See 1,553,571.)

Des. 64,872. (See 1,553,571.)

Des. 64,873. (See 1,553,571.)

Des. 64,941. (See 1,553,571.)

Des. 65,309. (See 1,553,571.)

Des. 65,622. (See 1,553,571.)

Des. 65,624. (See 1,553,571.)

Des. 72,164, Des. 72,165, Des. 72,166, Des. 72,221, S. N. Mallouk, Lace table cover; Des. 72,219, same, Lace doily; Des. 72,227, Des. 72,228, Des. 72,229, Des. 72,230, Des. 72,231, Des. 72,232, Des. 72,233, Des. 72,234, same, Lace cover; Des. 72,167, Des. 72,226, Des. 72,268, same, Lace tray cover; Des. 72,168, Des. 72,224, Des. 72,235, Des. 72,269, Des. 72,270, Des. 72,271, Des. 72,272, same, Lace scarf; Des. 72,169, Des. 72,170, Des. 72,171, Des. 72,172, Des. 72,173, Des. 72,174, Des. 72,175, Des. 72,220, Des. 72,222, Des. 72,223, Des. 72,225, same, Lace mat, D. C., S. D. N. Y., Doc. E 41/231, *S. N. Mallouk* v. *D. Georges et al.* Doc. E 41/233, *S. N. Mallouk* v. *A. W. Lian et al.* Doc. E 41/234, *S. N. Mallouk* v. *A. D. Sutton & Co., Inc.* Doc. E 41/235, *S. N. Mallouk* v. *A. Boutross et al.* Doc. E 41/332, *S. N. Mallouk* v. *E. Hedaya et al.* Doc. E 41/333, *S. N. Mallouk* v. *I. Shalom et al.* Dismissed for lack of prosecution (notice June 22, 1932 in each of above cases).

Des. 72,165 to 72,175. (See Des. 72,164.)

Des. 72,219 to 72,235. (See Des. 72,164.)

Des. 72,268 to 72,272. (See Des. 72,164.)

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,755,703, P. I. Murrell and W. W. Evans, Treatment of rubber, decided July 18, 1932, claims 1, 2, 5, and 8.

Pat. 1,709,167, T. F. Dwyer, jr., Soot-blower, decided July 18, 1932, claims 2, 3, 4, 8, and 9.

Pat. 1,777,253, J. Bruijnes, J. van der Hoeven and E. Oosterhuis, Vacuum tube filament structure, decided June 16, 1932, claims 1, 2, 3, and 4.

Pat. 1,815,987, C. W. Peterson, Conical diaphragm for loud speakers, decided July 19, 1932, claims 1 and 2.

Pat. 1,829,378, A. Thiriet, Treatment of cellulose materials, decided June 24, 1932, claims 7 and 8.

Adjudicated Patents

(D. C. Mich.) Erhardt patent, No. 1,407,789, for beverage mixer, *Held* invalid. *A. C. Gilbert Co.* v. *United Electrical Mfg. Co.*, 58 F (2d) 988.

(D. C. Mich) Gilbert patent, No. 1,698,363, for mixing apparatus, *Held* invalid. *Id.*

Disclaimer

1,598,853.—*Harry C. Smith*, Los Angeles, Calif., and *Dean B. Gregg*, St. Paul, Minn. DISPLAY AND DISPENSING APPARATUS. Patent dated July 27, 1926. Disclaimer filed July 28, 1932, by the assignee, *Autodrink Corporation*.

Hereby enters this disclaimer to those claims in the said specification, namely, claims 1, 5, and 8 which are in the following words, to wit:—

"1. A beverage dispensing apparatus comprising a transparent bowl-like dispensing container, overflow means therein for maintaining a predetermined beverage level, and means adapted to continuously supply beverage under pressure to said container thereby to keep the beverage remaining in the container in a constant state of agitation."

"5. A beverage dispensing apparatus including a transparent container having an outlet for determining the level of residual beverage, and means for projecting the beverage in a stream from the side of the container in which the residual beverage is held to the opposite side, thereby to diffuse the stream of beverage and maintain the residual beverage in a constant state of agitation."

"8. A beverage dispensing apparatus including a transparent container and a receptacle constituting a supply reservoir, an overflow conduit communicating with the transparent container and the receptacle and having its inlet end arranged to determine the level of beverage in the transparent container, and means communicating with said receptacle and with the transparent container for producing a continuously flowing fountain of the beverage in the center of the transparent container thereby to maintain circulation of the beverage in the container and receptacle."

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 16, 1932

[Vol. 421. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

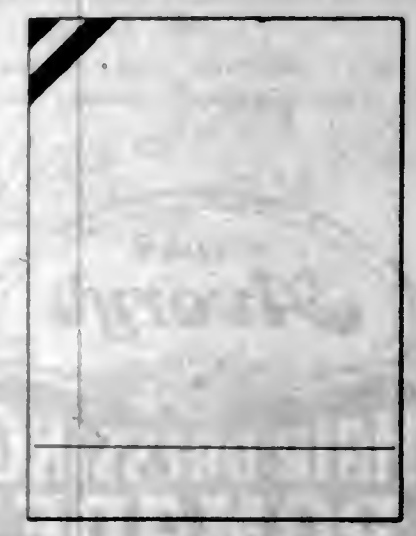
Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 328,679. AMERICAN SEED COMPANY, Detroit, Mich. Filed July 11, 1932.



The shading on the drawing indicates the colors red and blue. No claim is made per se to the representation of the package.

For Vegetable and Flower Seeds.

Claims use since June 1, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 327,545. TOLEDO SHOE FINDING COMPANY, doing business as Sunbeam Products Company, Toledo, Ohio. Filed May 26, 1932.



For Dyes, Dressings, Polishes, and Cleaners Used on Shoes.

Claims use since Dec. 18, 1931.

Ser. No. 328,007. F. N. KISTNER CO., Chicago, Ill. Filed June 15, 1932.



No claim is made to the words "Polishing Cloth" apart from the mark shown on the drawing.

For Chemically Treated Polishing Cloth.

Claims use since Mar. 10, 1932.

Ser. No. 328,220. THE KROGER GROCERY & BAKING COMPANY, doing business as Wesco Foods Company, Cincinnati, Ohio. Filed June 22, 1932.

AVALON

For Soap Flakes.

Claims use since Apr. 1, 1932.

Ser. No. 328,818. ALYMP-OL SOAP WORKS, Taunton, Mass. Filed June 27, 1932.



For Diamond Cleaner, Gold and Silver Polish, Hand Soap, and Olive Soap.

Claims use since May 26, 1932.

Ser. No. 328,380. YARDLEY & CO., LIMITED, London, England. Filed June 28, 1932.



For Toilet Soap.
Claims use since February, 1912.

Ser. No. 328,548. CHEMICAL CORPORATION OF AMERICA, Minneapolis, Minn. Filed July 5, 1932.

C-COAM

For Sweeping Compound.
Claims use since May 10, 1932.

Ser. No. 328,605. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed July 7, 1932.

GOODYEAR

For Automobile Top Dressing.
Claims use since Sept. 17, 1930.

CLASS 5

Adhesives

Ser. No. 328,553. LORRIN W. FERDINAND, Waltham, Mass. Filed July 5, 1932.



For Marine Glues in Solid and Liquid Form.
Claims use since Mar. 1, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 310,126. HIGH CHEMICAL CO., Philadelphia, Pa. Filed Jan. 19, 1931.

Solution Normet

The word "Solution" is hereby disclaimed apart from the mark shown in the drawing. The background for both words "Solution" and "Normet" being lined to identify the color red.

For Solution of Metallic Citrates for Medicinal Injections for Use in Transfusions and All Types of Anemias.
Claims use since Sept. 25, 1929.

Ser. No. 321,931. WINNIE AVERY, doing business as Madam W. Avery Company, Dallas, Tex. Filed Dec. 7, 1931.

MADAM
Avery's
HAIR DRESSING
POMADE
PREPARED ONLY BY THE
Madam W. Avery Co
4008 SOUTH CENTRAL AVENUE
DALLAS, TEXAS

The descriptive words "Hair Dressing Pomade" and "Prepared Only by the" and the address "4008 South Central Avenue, Dallas, Texas" are disclaimed apart from the trade-mark as shown on the drawing.

For Hair Dressing Pomade.
Claims use since July 15, 1928.

Ser. No. 322,339. THE VIAVI COMPANY, San Francisco, Calif. Filed Dec. 21, 1931.



The word "Capsules" is disclaimed apart from the mark as shown.

For Capsules—Namely, Gelatine Capsules Encasing Vaginal Suppositories.
Claims use since 1890.

Ser. No. 322,340. THE VIAVI COMPANY, San Francisco, Calif. Filed Dec. 21, 1931.



The word "Cerate" is disclaimed apart from the mark as shown.

For Cerate—Namely, An Ointment for Application to Inflamed and Injured Surfaces.

Claims use since 1893.

Ser. No. 322,341. THE VIAVI COMPANY, San Francisco, Calif. Filed Dec. 21, 1931.



The word "Liquid" is disclaimed apart from the mark as shown.

For Medicine—Namely, a Liquid Preparation for Inflammation of the Mucous Membranes.

Claims use since 1897.

Ser. No. 322,342. THE VIAVI COMPANY, San Francisco, Calif. Filed Dec. 21, 1931.



The word "Suppositories" is disclaimed apart from the mark as shown.

For Rectal Suppositories.

Claims use since 1897.

Ser. No. 325,004. LA COMPAGNIE PHARMACEUTIQUE DESBERGERS, Montreal, Quebec, Canada. Filed Mar. 10, 1932.



For Liver Powder.

Claims use since April, 1928.

Ser. No. 325,112. J. HARVEY RAYMOND, San Francisco, Calif. Filed Mar. 14, 1932.

LILACKO SPRAY

The word "Spray" is disclaimed apart from the trademark as shown in the drawing.

For Insecticide and Deodorizer in Liquid Form.

Claims use since Apr. 1, 1924.

Ser. No. 325,121. HAROLD H. STERN, doing business as Diacin Chemical Company, Detroit, Mich. Filed Mar. 14, 1932.

DIACIN

For Pharmaceutical Preparation (Pain Relieving Tablet.)

Claims use since Feb. 17, 1931.

Ser. No. 326,052. MRS. Z. B. HINKLE, doing business as Pep Laboratories, Atlanta, Ga. Filed Apr. 13, 1932.

PEP LABORATORIES

For Talcum Powder, Hair Dressing, Skin Lightener Cream, Vanishing Cream, and Ointment for Skin Disorders, Tetter, Blotches, and Pimples; Cold Cream, Face Powder, Rouge, Lipstick, Eye-Brow Pencils, Skin Lotions, and Deodorants.

Claims use since 1924.

Ser. No. 326,442. LOUISE BELL, Sacramento, Calif. Filed Apr. 9, 1932.

DAPHNE

For Preparation for the Treatment of Hemorrhoids.

Claims use since Mar. 1, 1932.

Ser. No. 326,884. AMICO LABORATORIES, INC., Chicago, Ill. Filed May 9, 1932.

THYOLIC

For Sulpho Ichthyolate of Ammonium and Medicinal Compounds Containing the Same, Used as a Base or Ingredient in the Manufacture of Suppositories, Tablets, Ointments, Liniments, Disinfectants, and Animal Medicines.

Claims use since May 3, 1932.

Ser. No. 326,890. PEGGY CONDON, doing business as Naturalway Labs, Yonkers, N. Y. Filed May 9, 1932.

Peggy Maids

For Manicuring Preparations, Namely, Nail Polish and Cuticle Remover.
Claims use since Mar. 5, 1932.

Ser. No. 327,066. NORTHAM WARREN CORPORATION, New York, N. Y. Filed May 13, 1932.



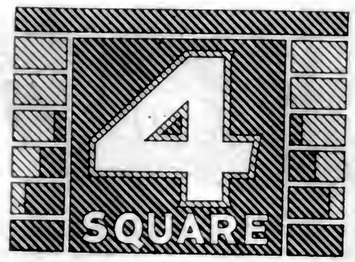
The representation of the carton being disclaimed, the lining in the drawing indicating a red color, and no claim is made to the words "Liquid Polish", "Rose", and "New York" apart from the mark shown.
For Nail Polish.
Claims use since March, 1930.

Ser. No. 327,391. THE C. B. DOLGE COMPANY, Westport, Conn. Filed May 24, 1932.

NOMOLE

For Preparation for Exterminating Moles.
Claims use since December, 1931.

Ser. No. 327,431. FOUR SQUARE PRODUCTS, INC., Dover, Del. Filed May 25, 1932.



The drawing is lined to indicate green, but applicant does not confine its claim to that color.
For Aspirin Tablets, Chocolate Coated Cascara Tablets, Soda Mint Tablets, Zinc Ointment, Rubbing Alcohol, Antiseptic Solution, Glycerine, Glycerin and Rose Water, Castor Oil, Cod Liver Oil, Mineral Oil for Medicinal Uses, Solution Boric Acid (Sterilized), Witch Hazel, Beef, Wine and Iron, Corn Solvent, Glycerin Suppository, Milk Magnesia, Seidlitz Powders, Special Cold Tablets, Boric Acid U. S. P. (Powdered), Epsom Salt, Psyllium Seed, Bicarbonate Soda, Bay Rum, Lilac Vegetal, Tooth Paste, Toilet Waters.
Claims use since Mar. 12, 1932.

Ser. No. 327,522. JAMES L. NOONAN, Cleveland, Ohio. Filed May 27, 1932.

H-Y-D-U-S

For Breath Deodorizing Tablets.
Claims use since Jan. 1, 1932.

Ser. No. 327,596. NEIMAN-MARCUS CO., Dallas, Tex. Filed May 31, 1932.

SLIMMEX

For Cream for Reducing the Body.
Claims use since May 23, 1932.

Ser. No. 327,856. E. R. SQUIBB & SONS, New York, N. Y. Filed June 9, 1932.

QUINOLOR

For Germicidal Preparations.
Claims use since June 6, 1932.

Ser. No. 327,868. GEORGE S. EATON, New York, N. Y. Filed June 10, 1932.



No claim is made to the word "Mothproof" apart from the mark shown in the drawing.
For Mothproofing Compound.
Claims use since Feb. 16, 1932.

Ser. No. 327,896. WARWICK CHEMICAL CO., West Warwick, R. I. Filed June 10, 1932.

SULFANOLE

For Chemical Products for Use in Scouring, Dyeing and Bleaching Textiles.
Claims use since Apr. 1, 1932.

Ser. No. 327,941. A. GABRIEL LANTIERI, doing business as Flis Laboratories, Chicago, Ill. Filed June 13, 1932.

FLIS

For Permanent Waving Solutions Such as Oils of Lavender, Bergamot, Yosoy-Wood, Eau-de-Quinine, Pine, and Neutral.
Claims use since June 12, 1928.

Ser. No. 327,963. ADVANCE PAINT COMPANY, Indianapolis, Ind. Filed June 14, 1932.

NOCTAN

For Anti-Knock Compounds to be Added to Gasoline.
Claims use since Apr. 1, 1932.

Ser. No. 327,966. THE AMERICAN OIL COMPANY, Baltimore, Md. Filed June 14, 1932.

ARTEX

For Insecticide, Disinfectant, and Deodorant.
Claims use since Sept. 1, 1931.

Ser. No. 327,978. GUERLAIN PERFUMERY CORPORATION OF DELAWARE, Wilmington, Del., and New York, N. Y. Filed June 14, 1932.

VOL DE NUIT

For Perfumes.
Claims use since June 6, 1932.

Ser. No. 328,050. AARON B. COHN, doing business as The Athleve Company, Toledo, Ohio. Filed June 15, 1932.



For Powder for Treatment of Epidermophyton, Trichophyton, and Skin Diseases of Like Character Caused by Perspiration, and Chafing of the Skin.
Claims use since Feb. 15, 1932.

Ser. No. 328,223. MORGAN SABALOL PRODUCTS, INC., New York, N. Y. Filed June 22, 1932.

Sabalol

For Nose and Throat Medication.
Claims use since 1873.

Ser. No. 328,232. WEST DISINFECTING COMPANY, Long Island City, N. Y. Filed June 22, 1932.

RUST-KURE

For Chemical Preparation Used to Prevent Rust and Corrosion in Boilers, Radiators, and Hot Water Systems of All Sorts.
Claims use since June 15, 1932.

Ser. No. 328,255. JESSE M. TIPPEY, doing business as Southland Chemical Co., St. Petersburg, Fla. Filed June 23, 1932.

aNTRAp.

For Insecticide.
Claims use since Nov. 16, 1931.

Ser. No. 328,486. HARRY W. GRIFFITH, doing business as The An-ti-Po Laboratories, Edinburg, Tex. Filed July 1, 1932.

AN-TI-PO

For Medicinal Preparation Adapted to be Placed in the Cavity Left by An Extracted Tooth to Relieve Pain and to Stimulate Healing.
Claims use since June 6, 1932.

Ser. No. 328,513. ANDREW WILSON, INC., Springfield, N. J. Filed July 1, 1932.

FUNG-O

For Liquid Agricultural Fungicides.
Claims use since Dec. 28, 1925.

Ser. No. 328,573. ABE J. BANDER, doing business as Rednab Co., Dallas, Tex. Filed July 6, 1932.

REDNAB

For Preparation for Constipation, Billiousness, Sluggish Liver, and Sour Stomach.
Claims use since Dec. 10, 1931.

Ser. No. 328,644. NOBIRCA BEAUTY PREPARATIONS, INC., New York, N. Y. Filed July 8, 1932.

NOBIRCA

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs; Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Eyebrow and Eyelash Darkener, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Permanent Waving Lotions, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since June 28, 1932.

Ser. No. 328,674. VARNOL CHEMICAL CORPORATION, Long Island City, N. Y. Filed July 9, 1932.

ESTEROL

For Synthetic Resins.
Claims use since May 29, 1931.

Ser. No. 328,728. H. A. DUBOIS & SONS, INC., Cobden, Ill. Filed July 12, 1932.

VELVET

For Insecticides and Fungicides Used in Spraying Trees and Plants.
Claims use since 1922.

Ser. No. 328,741. E. R. SQUIBB & SONS, New York, N. Y. Filed July 12, 1932.

ADESIUM

For Laxatives.
Claims use since June 27, 1932.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 328,482. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del. Filed July 1, 1932.

DUPONT M X

For Smokeless Shotgun Powder.
Claims use since Dec. 11, 1931.

CLASS 10

Fertilizers

Ser. No. 326,036. WHITEROCK QUARRIES, INC., Bellefonte, Pa. Filed Apr. 12, 1932.



The words "White Rock" not being claimed apart from the mark shown.
For Agricultural Lime.
Claims use since Oct. 1, 1930.

CLASS 12

Construction Materials

Ser. No. 321,567. A. C. HORN COMPANY, Long Island City, N. Y. Filed Nov. 28, 1931.

METALON

For Waterproofing Compound for Inside Concrete and Brick Walls.
Claims use since Jan. 1, 1921.

Ser. No. 327,186. JOSEPH E. DI FIORE, doing business as Jedco Products Co., Brooklyn, N. Y. Filed May 17, 1932.

JEDCO

For Cement and Plaster Mixtures.
Claims use since Apr. 28, 1932.

Ser. No. 328,158. SAMUEL CABOT INCORPORATED, Boston, Mass. Filed June 21, 1932.

ANTI-PYRE

For Fire Proof Insulating and Sound Deadening Materials.
Claims use since May 25, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 328,418. THOMAS P. DUNCAN, Jr., doing business as Cast-R-Ette Mfg. Co., Newport News, Va. Filed June 30, 1932.

CAST-R-ETTE

For Furniture Casters.
Claims use since June 24, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 324,724. SHEFFIELD STEEL CORPORATION, Kansas City, Mo. Filed Mar. 2, 1932.

ARMCO SHEFFIELD

Applicant disclaims the word "Sheffield" excepting in the particular form and association shown.
For Iron and Steel Sheets, Barb Wire, Galvanized Corrugated Roofing, Merchant Steel Bars, Rounds and Flats; Mild Steel Angles, New Billet Reinforcing Bars, Rail Steel Reinforcing Bars.
Claims use since October, 1931.

CLASS 17

Tobacco Products

Ser. No. 326,720. CHARLES ODENCE COMPANY, Boston, Mass. Filed May 3, 1932.

Cape Codder



The representation of the map which appears on the drawing is hereby disclaimed apart from the mark as shown.
For Cigars.
Claims use since Feb. 1, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No.328,423. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed June 30, 1932.

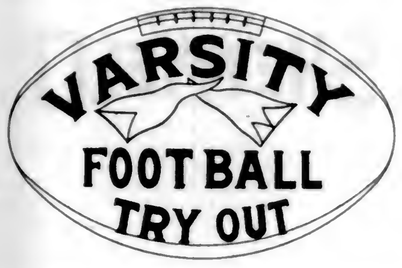
AIRWHEEL

For Hub Assemblies for Automobiles and Aeroplanes, Including Hubs, Hub Caps, Rims, Wheel Discs, Cover Plates, Brakes, and Brake Mechanisms.
Claims use since Dec. 18, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 323,416. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill. Filed Jan. 25, 1932.



No exclusive claim is made to the representation of a football or to the word "Football" apart from the mark shown.
For Coin-Controlled Amusement Machines.
Claims use since Jan. 20, 1932.

Ser. No. 324 689. C. B. WEBB COMPANY, New York, N. Y. Filed Feb. 29, 1932.



In the drawing no claim is made to the word "Ball".
For Play Balls.
Claims use since Feb. 18, 1931.

Ser. No. 327,895. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed June 10, 1932.

QUEEN ROYAL

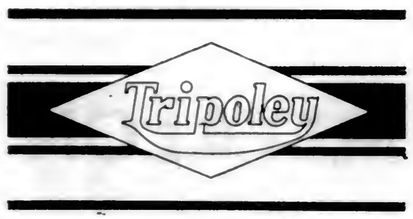
For Golf Balls.
Claims use since Mar. 16, 1932.

Ser. No. 327,987. JULIUS F. SCHARNER, Jersey City, N. J. Filed June 14, 1932.

"PICNIC"

For Parlor Game, in the Nature of a Puzzle, Played With Blocks.
Claims use since June 10, 1932.

Ser. No. 328,060. FIRESIDE GAMES, Chicago, Ill. Filed June 17, 1932.



For The Following Described Game—The Game is Played by Two or More Persons With Playing Cards, Chips and a Table Lay-Out Under Rules Similar to a Combination of the Rules of the Card Games of Poker and Michigan.
Claims use since Mar. 9, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 299,523. SKY SPECIALTIES CORPORATION, Detroit, Mich. Filed Apr. 26, 1930.



No claim being made to the word "Service" and the representation of the goods shown in the drawing of the mark apart from the mark as shown.
For Air Compression Starters for Internal Combustion Engines and Parts Thereof.
Claims use since Nov. 15, 1929.

Ser. No. 319,606. BRAGG-KLIESRATH CORPORATION, South Bend, Ind. Filed Oct. 1, 1931.

INVISIBLE FOOT

For Automatic Clutch Operators for Automobiles and Parts Thereof.
Claims use since Sept. 21, 1931.

Ser. No. 321,774. THE MAXIM SILENCER COMPANY, Hartford, Conn. Filed Dec. 4, 1931.



For Silencers for Quieting Gas Flow Noises at Exhausts and Inlets for Engines, Pumps, Compressors, Blowers, Reducing Valves, and Safety Valves.
Claims use since May, 1931.

Ser. No. 324,979. AMERICAN ROTARY TOOLS COMPANY, INC., New York, N. Y. Filed Mar. 10, 1932.

ARTCO

For Rotary Drills, Cutters, Files, Rasps, and Burrs of Carbon and High Speed Steel.
Claims use since November, 1931.

Ser. No. 328,113. ASSOCIATED ATTLEBORO MFRS., INC., Attleboro, Mass. Filed June 20, 1932.



For Small Parts for Spinning and Twisting Machines Formed from a Phenolic Condensation Product.
Claims use since Jan. 1, 1932.

Ser. No. 328 524. FLEXIBLE STEEL LACING COMPANY, Chicago, Ill. Filed July 2, 1932.

FLEXCO

For Wrenches, Boring Bits, and Punches.
Claims use since 1923 on wrenches and bits; 1931 on punches.

CLASS 26

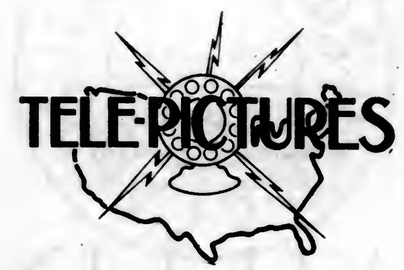
Measuring and Scientific Appliances

Ser. No. 322,857. NATIONAL BROADCASTING COMPANY, INC., New York, N. Y. Filed Jan. 9, 1932.



The words "Radio" and "Pictures" appearing in the drawing are disclaimed apart from the mark shown.
For Motion Picture Film, and Especially Film for Use in Television Programs.
Claims use since Sept. 3, 1931.

Ser. No. 322,858. NATIONAL BROADCASTING COMPANY, INC., New York, N. Y. Filed Jan. 9, 1932.



The word "Pictures" appearing in the drawing is disclaimed apart from the mark shown.
For Motion Picture Film, and Especially Film for Use in Television Programs.
Claims use since Sept. 3, 1931.

Ser. No. 328,507. RIESS MANUFACTURING COMPANY, Dayton, Ohio. Filed July 1, 1932.

STEER-O-MASTER

For Testing Apparatus, Gauges, and Equipment Used in Testing and Correcting Automobile Steering Apparatus.
Claims use since Dec. 15, 1931.

CLASS 27

Horological Instruments

Ser. No. 319,492. THE LUX CLOCK MFG. COMPANY, INC., Waterbury, Conn. Filed Sept. 28, 1931.

THERMO

For Combined Clocks and Temperature Indicating Devices.
Claims use since May 1, 1931.

CLASS 31

Filters and Refrigerators

Ser. No. 328,046. GIBSON ELECTRIC REFRIGERATOR CORPORATION, Greenville, Mich. Filed Jan. 15, 1932.

MONOUNIT

For Refrigerating Apparatus.
Claims use since Nov. 11, 1931.

Ser. No. 328,694. MICHAELS BROS., Brooklyn, N. Y. Filed July 11, 1932.

DEFIANCE

For Refrigerators.
Claims use since June 11, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 328,520. BURTON-DIXIE CORPORATION, Chicago, Ill. Filed July 2, 1932.

IZOLIN

For Pillows.
Claims use since June 21, 1932.

Ser. No. 328,593. BOSTON LEATHER SPECIALTIES, INC., Everett, Mass. Filed July 7, 1932.

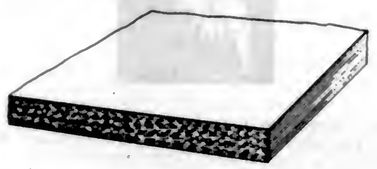
Bunny Bear

For Baby Hammocks, Baby Hammock Stands, Suspended Baby Seats, Furniture Pads, Nursery Seats, High Chair Pads, and Nursery Rings.
Claims use since July 1, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 316,458. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed June 29, 1931.



The trade-mark comprises a yellow band coextensive with one edge of the belt. The forward edge of the belt is marked to indicate the color yellow in the drawing. No claim is made to the representation of a belt.
For Belts of Rubber and Fabric.
Claims use since Nov. 4, 1930.

Ser. No. 326,610. GOODYEAR RUBBER COMPANY, San Francisco, Calif. Filed Apr. 29, 1932.

Dura-Lite

For High Pressure Rubber Hose.
Claims use since Mar. 25, 1932.

Ser. No. 328,485. THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed July 1, 1932.

SPEEDWAY

For Hose of All Kinds Made Wholly or in Part of Rubber.
Claims use since Mar. 17, 1932.

Ser. No. 328,527. GRATON & KNIGHT COMPANY, Worcester, Mass. Filed July 2, 1932.

RESEARCH

For Leather Belting.
Claims use since Oct. 9, 1931.

CLASS 37

Paper and Stationery

Ser. No. 316,192. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio. Filed June 24, 1931.

MAIN-STREET
ENAMEL

The word "Enamel" is hereby disclaimed apart from the other features of the mark shown.
For Mineral Coated Paper for Half-Tone Printing.
Claims use since Apr. 29, 1931.

Ser. No. 316,566. THE PAPYRUS COMPANY, Kenilworth, N. J. Filed July 2, 1931.



No claim being made to the wording with the exception of the words "Meta-Lite," "Silkrepe" and the name of applicant appearing on the drawing.
For Wrapping Paper, Tissue Paper, and Crepe Paper for window Decoration, Paper Costumes, and Party Favors.
Claims use since Apr. 24, 1931.

Ser. No. 326,086. GILBERT PAPER CO., Menasha, Wis. Filed Apr. 14, 1932.

ARROW HEAD

For Safety Paper.
Claims use since Mar. 3, 1932.

Ser. No. 326,130. A. B. DICK COMPANY, Chicago, Ill. Filed Apr. 15, 1932.

DERMAPRINT

For Stencils (Consisting of Coated or Impregnated Sheets Stencillized With the Aid of Light) and Stencil Sheets (Consisting of Sheets, Coated or Impregnated With Light Sensitive Material and Adapted to be Stencillized With the Aid of Light).
Claims use since Mar. 7, 1932.

Ser. No. 327,233. THE REYNOLDS-SCHIER CO., INC., Chicago, Ill. Filed May 18, 1932.

COPYMASTER

For Hectograph Machines.
Claims use since Jan. 21, 1932.

Ser. No. 327,403. JOHN A. MONAGAS, doing business as Monagas Trading Company, New York, N. Y. Filed May 24, 1932.



For Writing-Paper, Paper Used for Printing, Drawing-Paper, Bristol-Board, Cover-Paper, Blotting-Paper, Typewriting-Paper, Tissue-Paper, Wrapping-Paper, Toilet-Paper, Waxed Paper, Correspondence and Mailing Envelopes; Pens, and Copying Presses.
Claims use since June 23, 1909.

Ser. No. 327,559. MERRIMAC PAPER COMPANY, Lawrence, Mass. Filed May 28, 1932.



No registration rights are claimed in the word "Cards" apart from the mark shown in the drawing.
For Index Cards, Memorandum Cards, Record Sheets, Blank Forms, and Note Paper.
Claims use since May 19, 1932.

Ser. No. 328,177. CHARLES A. LAW, Los Angeles, Calif. Filed June 21, 1932.

Cal-i-form

The use of the word "Form" appearing on the drawing is disclaimed apart from the mark shown, the right to use it being claimed only if and when used with the four preceding letters of the trade-mark—namely, Cal-i—thereby forming the coined word "Cal-i-Form."

For Blank Forms.

Claims use since June 10, 1932.

Ser. No. 328,552. EAGLE PENCIL COMPANY, New York, N. Y. Filed July 5, 1932.

CAPITOL

For Lead Pencils.

Claims use since 1890.

Ser. No. 328,583. POND'S EXTRACT COMPANY, New York, N. Y. Filed July 6, 1932. Under sec. 5b, act of 1905, as amended in 1920.

Pond's

For Paper Handkerchiefs.

Claims use since Oct. 15, 1927.

Ser. No. 328,610. HOLLINGSWORTH & WHITNEY COMPANY, Boston, Mass. Filed July 7, 1932.

Puroparch

For Wrapping Paper.

Claims use since May 27, 1932.

CLASS 39

Clothing

Ser. No. 320,516. SOCIÉTÉ ANONYME: LOUISEBOULANGER, Paris, France. Filed Oct. 27, 1931.

LOUISEBOULANGER
CHAMPS ÉLYSÉES
3.RUEDEBERRIPARIS

Applicant hereby disclaims all of the wording appearing on the drawing as a trade-mark, except in association with the rest of the mark as shown.

For Wearing Apparel for Women, Misses, and Children, Comprising Dresses, Coats, Cloaks, Capes, Boleros, Caps, Tippets, Scarfs, and Muffs of Fabric or of Fur, and Underwear for Women, Misses, and Children.

Claims use since 1923.

Ser. No. 321,088. AMERICAN TEXTILES, INC., Bay City, Mich. Filed Nov. 11, 1931.

Cuddles

For Underwear, Bloomers, Panties, Step-Ins (Underdrawers), One Piece Combinations Consisting of a Shirt and Panties, Dance Sets (Combining Bandeaux with Step-Ins or Panties), Petty Skirts, Brassières, Costume Slips, Night Gowns, Pajamas, Vests, Shorts (for Underwear) and Athletic Shirts for Men, Women, and Children.

Claims use since Aug. 1, 1931.

Ser. No. 323,548. SOCIETE ANONYME DES ETABLISSEMENTS ANDRÉ GILLIER, Troyes, France. Filed Jan. 28, 1932.

JIL

For Articles of Clothing for Men, Women, and Children, Made of Knitted Fabrics of Silk, Wool, or Other Material—to wit, Stockings, Socks, Children's Half Hose, Under Hose, Tennis Socks, Drawers, Morning Jackets, Sex-Hiding Dresses, Tights, Vests, Pantaloons, Combination Waists and Petticoats, Slips; Robes—Namely, Town Dresses, Sport Dresses, House-Dresses, and Evening Dresses; Cloaks, Skirts, Sweaters; Ensembles of Two or Three Pieces—i. e., Skirt and Pull-Over; Pull-Over, Skirt, and Waistcoat; or Pull-Over with Beret Having the Same Design or Shade and Forming an Ensemble; and Berets.

Claims use since Sept. 1, 1927.

Ser. No. 326,421. GALE SHOE MANUFACTURING CO., Boston, Mass., and Manchester, N. H. Filed Apr. 23, 1932.

INNER ARCH

No claim being made for the words "Inner Arch" except in connection with the trade-mark shown in the drawing.

For Leather Shoes.

Claims use since Dec. 17, 1931.

Ser. No. 327,079. WOHL SHOE COMPANY, St. Louis, Mo. Filed May 13, 1932.

paris fashions
fifth avenue

No claim is made to the words "Paris Fashions" apart from the other features of the trade-mark as shown.

For Women's and Misses' Shoes, Boots, Overshoes, and House Slippers Made of Plain and Fancy Leathers, Satins, Velvets, Straws, Rubber, Felt, and Metal Cloth for Street and Dress Wear.

Claims use since Aug. 1, 1929.

Ser. No. 327,533. LOUIS TUTTMAN, New York, N. Y. Filed May 27, 1932.



The descriptive words "Togs" and "For Little Tots" are hereby disclaimed apart from the mark as shown on the drawing.

For Infants' and Children's Dresses.

Claims use since June 3, 1930.

Ser. No. 327,576. WALTER BOOTH SHOE CO., Milwaukee, Wis. Filed May 31, 1932.

Crosby Square
Authentic Fashions

No registration rights are claimed for the words "Authentic Fashions" apart from the mark shown in the drawing.

For Boots, Shoes, and Oxfords Made Wholly or in Part of Leather, Fabric, or Combinations Thereof.

Claims use since Apr. 27, 1932.

Ser. No. 327,732. MAURICE J. MARKELL, Brooklyn, N. Y. Filed June 4, 1932.

Muscle-Flexor

For Men's, Women's, and Children's Shoes Made of Leather, Rubber, or Fabric, and Combinations of These Materials.

Claims use since January, 1931.

Ser. No. 327,859. VANITY FAIR SILK MILLS, Reading, Pa. Filed June 9, 1932.

EVRYTHINGS

For Knitted and Textile Underwear and Hosiery for Women and Children—Namely, Vests, Bloomers, Drawers, Knickerbockers, Union Suits, Steps-Ins, Chemises, Corset Covers, Nightgowns, Pajamas, Petticoats, Princess Slips, Bandeaux, Bandeaux Chemises; and Knitted and Textile Underwear for Men—Namely, Union Suits, Shirts and Drawers; and Corsets.

Claims use since May 27, 1932.

Ser. No. 327,876. JOHANSEN BROS. SHOE COMPANY, St. Louis, Mo. Filed June 10, 1932.

Budgeteer
by Johansen
UNITIZED-PROCESS

The trade-mark consists primarily of the coined word "Budgeteer" and applicant disclaims any exclusive right to register hereby the words "By Johansen" or "Process," without foregoing any of its common law rights in said words.

For Shoes of Leather or a Combination of Leather, Rubber, or Fabric.

Claims use since May 27, 1932.

Ser. No. 328,161. CRADDOCK-TERRY CO., Lynchburg, Va. Filed July 12, 1932.

NATURAL BRIDGE

For Shoes of Leather and Fabric.
Claims use since Feb. 9, 1923.

Ser. No. 328,186. B. F. SCHLESINGER & SONS, INC., Baltimore, Md.; San Francisco and Oakland, Calif.; Portland, Oreg.; and Tacoma, Wash. Filed June 21, 1932.

LOUISE VALLIÉRE

For Shoes of Leather and Fabric and Combinations Thereof.
Claims use since Mar. 24, 1932.

Ser. No. 328,312. SNUGGLE RUG CO., Goshen, Ind. Filed June 25, 1932.

SNUGGLE BAG

Applicant disclaims any exclusive right to the word "Bag" apart from the mark shown.

For Infants' Garments Which are Bag-Like in Shape, with a Neck Opening at the Top and An Opening in the Front Through Which a Baby May be Inserted, So That the Neck-Band of the Garment Fits Around the Baby's Neck.
Claims use since May 20, 1932.

Ser. No. 328,504. THE PATRICIA PETTICOAT CO. INC., New York, N. Y. Filed July 1, 1932.

"JUST-IT"

For Ladies' Knitted and Silk Underwear.
Claims use since June 1, 1932.

Ser. No. 328,740. S. ROTHKOPF & SONS, New York, N. Y. Filed June 21, 1932.

HARRIET

For Hosiery.
Claims use since January, 1925.

Ser. No. 328,773. ARTCRAFT SILK HOSIERY MILLS, INC., Philadelphia, Pa. Filed July 14, 1932.

Porto

For Women's Hosiery.
Claims use since June 20, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 309,671. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Jan. 7, 1931.

Manchura

For Pile Fabrics in the Piece.
Claims use since Dec. 17, 1930.

Ser. No. 326,508. REGINA ART EMBROIDERY COMPANY, Lynn, Mass. Filed Apr. 23, 1932.

"Regina Art"

The exclusive use of the term "Art" in the trade-mark is hereby disclaimed by applicant.

For Furniture Scarfs for Tables, Chiffoniers, Dressers, Buffets, Cabinets, Pianos, Radios, Divans, Altars, Chairs, Book Cases, and Desks; Textile Buffet Sets for Tables, Chiffoniers, Dressers, Buffets and Desks; Luncheon Cloths and Table Cloths for Large and Small Tables; Textile Chair Back Pieces and Arm Pieces for Chairs and Divans and Couches; Textile Center Pieces for Tables, Stands, Taborets and Shelves; Pillow Slips for Cases, Bolsters, and Day Slips; Bed Covers, Bed Spreads, and Ornamental Bed Cover Pieces; Towels of Textiles for Religious and Secular Purposes; Altar Textile Pieces as Follows: Ciborium Covers, Purificators, Lavabo Towels, Palls, Corporals, Altar Cloths, Communion Cards, Burses, Tabernacle Veils, Tabernacle Curtains, Monstrance Covers, Exposition Veils, Benediction Veils, Antependias, Canopies, Missal Stand Covers, Gospel Stand Covers, Altar Rail Covers, Altar Curtains, Covers for Cushions, and Covers for Priedieus, All of Which are Generally Termed Draperies; the Materials of Which said Articles are Made of are as Follows: Linen, Cotton, Silk, Rayon, Velvet, Damask, Lawn, Huck, Organdie, Poplin, Artweave of Silk or Cotton, Canvas, Burlap, Cambric, Satin, and Batiste.
Claims use since Jan. 15, 1923.

Ser. No. 327,959. FRANK J. MCGOWAN, New York, N. Y. Filed June 11, 1932.

Effjaymac Fabrics

No claim is made to the descriptive word "Fabrics" apart from the mark as shown on the drawing.

For Wool, Worsteds, Cheviot, and Cashmere Suitings and Coatings.
Claims use since 1929.

Ser. No. 328,341. TROY BLANKET MILLS, Troy, N. H. Filed June 27, 1932.

WOOLMOUNT

For Piece Goods and Blankets of Cotton, Wool, or Combinations Thereof.
Claims use since May 19, 1932.

Ser. No. 328,656. BIANCHINI, FÉRIER, Lyon, France. Filed July 9, 1932.

CABOSSOL

For Piece Goods Composed Wholly or in Part of Wool, Hair, Silk, Rayon, Cotton, Hemp, Flax, Jute, Alpha Fibre, Aloe Fibre, Vegetable Fibre, or Mixtures Thereof.
Claims use since Apr. 15, 1932.

Ser. No. 328,657. BIANCHINI, FÉRIER, Lyon, France. Filed July 9, 1932.

MATVELVA

For Piece Goods Composed Wholly or in Part of Wool, Hair, Rayon, Cotton, Silk, Hemp, Flax, Jute, Alpha Fibre, Aloe Fibre, Vegetable Fibre, or Mixtures Thereof.
Claims use since Mar. 10, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 323,744. GUSTAVE GLATZER, New York, N. Y. Filed Feb. 2, 1932.

Sylva Cross

For Manicure Kits, Manicure Implements, Manicure Sets, Toilet Outfits for Manicure and Massage, Nail Files, Cuticle Scissors, Manicure Scissors, Manicure and Eye-Brow Tweezers, Emery Boards, Manicure Sticks, Nail Polishers, Cuticle Pushers, Surgical Scissors, Manicuring Nippers, Nail Buffers, Orange-Wood Sticks, Corn Knives, Cuticle Knives, Manicure Handle Pieces, Nail Clips.
Claims use since November, 1927.

Ser. No. 327,569. L. E. SHUNK LATEX PRODUCTS, INC., Akron, Ohio. Filed May 28, 1932.

TEXIDE

For Pessaries for Remedying Displacements.
Claims use since May 16, 1932.

Ser. No. 328,052. WALLACE T. ABELL, doing business as Abell Laboratories, Alhambra, Calif. Filed June 17, 1932.

Glanray

For Surgical Appliances for the Treatment of Prostate Disorders.
Claims use since May 1, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 320,379. KOTARO TAKAHASHI, Tokyo Fu, Japan. Filed Oct. 23, 1931.

DURIKONO

どりこの

The Japanese characters shown on the mark have no dictionary meaning, being simply a coined word.

For Nonalcoholic, Maltless Syrup Used in the Preparation of Soft Drinks.
Claims use since March, 1928.

Ser. No. 323,142. MISSION DRY CORPORATION, LTD., Los Angeles, Calif. Filed Jan. 18, 1932.

Oh Oh OASIS

For Nonalcoholic, Maltless, Noncereal Beverages Sold as Soft Drinks, and Syrups, Extracts, and Concentrates Used in Preparing the Same.
Claims use since Nov. 3, 1931.

Ser. No. 327,311. AMERICO B. FRISCIA, doing business as Consolidated Products Co., New York, N. Y. Filed May 21, 1932.

unico

For Flavoring for Nonalcoholic, Maltless Beverages for the Making of Soft Drinks.
Claims use since May 11, 1932.

Ser. No. 327,478. POWELL T. ROBERTS, doing business as Roberts Manufacturing Co., Alexandria, Va. Filed May 26, 1932.

ROYAL TREAT

For Carbonated Non-Alcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks—Viz., Ginger Ale, Grape, Orange, Root Beer, Sarsaparilla, Strawberry, and Lime Ricky.
Claims use since Mar. 25, 1932.

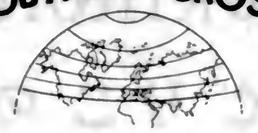
Ser. No. 328,512. THE WELCH GRAPE JUICE COMPANY, Westfield, N. Y. Filed July 1, 1932.

"Drink A Bunch of Grapes"

For Grape Juice.
Claims use since June 2, 1932.

Ser. No. 328,638. ELSIE ROHR GENTRY, Newark, N. J. Filed July 8, 1932.

SOUTHERN CROSS



For Non-Alcoholic, Non-Cereal, Maltless Beverages, Sold as Soft Drinks, and Sirups and Extracts for Making the Same.
Claims use since June 1, 1930.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 302,261. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed June 7, 1930.

FANCY MARK

The trade-mark as shown in the drawing has customarily been printed with the wording in deep blue upon a background of light green, the features of the mark presented in the drawing are claimed independently of the colors shown. Applicant makes no claim herein to the exclusive right to use the word "Fancy," apart from the mark as shown.
For Coffee.
Claims use since Feb. 28, 1905.

Ser. No. 315,838. INDEPENDENT GROCERS' ALLIANCE DISTRIBUTING CO., Chicago, Ill. Filed June 15, 1931.

IGA

For Canned Asparagus; Canned Beans, More Particularly Lima Beans, Soaked Lima Beans, Fresh Green Lima Beans, Whole Green Beans, Cut Green Beans, Cut Green Refugee Beans, Whole Wax Beans, Cut Wax Beans, Red Beans, and Red Kidney Beans; Canned Beans Canned with Meat, More Particularly Pork and Beans, Oven Baked Beans and Pork, Oven Baked Yellow Eye Beans and Pork, Oven Baked Pea Beans and Pork, Oven Baked Red Kidney Beans and Pork, and Beans with Chile Con Carne; Canned Chile Con Carne without Beans; Canned Beets, More Particularly Whole Beets, Cut Beets, Sliced Beets, and Diced Beets; Canned Carrots, More Particularly Diced Carrots; Canned Corn, More Particularly Sweet Corn, Crosby Corn, Golden Bantam Corn, Country Gentleman Corn, Whole Grain Country Gentleman Corn, Hominy, and Hominy Grits; Canned Turnip Greens, Canned Mixed Vegetables, Canned Cut Okra, Canned Peas, More Particularly Sugar Peas, June Peas, Petit Pois Peas, Sifted Sweet Wrinkled Peas, and Extra Sifted Sweet Wrinkled Peas; Canned Pumpkin, Canned Sauerkraut, Canned Squash, Canned Starch Succotash, Canned Sweet Potatoes, Canned Tomatoes; Canned Soup, More Particularly Chicken Soup, Pea Soup, Vegetable Soup, and Vegetable Beef Soup; Canned Fish, More Particularly Pink Salmon, Red Salmon, Fancy Red Alaska Salmon, Light Meat Fish, Oysters, Sardines, Shrimp, and Tuna; Meats, More Particularly Corned Beef Hash, Roast Beef, Cooked Corned Beef, Wafer Sliced Beef, Cooked Brains, Deviled Meat and Cereal, Deviled Meat, Hamburger Steak, Pigs' Feet, Pigs' Feet Cutlets, Potted Meat, Potted Meat and Cereal, Breakfast Sausage, Sausage with Cereal, Vienna Sausage, Vienna Sausage and Cereal, Spread for Sandwiches, Lunch Tongue, Tripe with Milk, Veal Loaf, Dry Sugar Cured Bacon; Canned Milk, More Particularly Evaporated Milk; Canned Chocolate Malted Milk, Cocoa, Coffee; Canned Fruits and Berries, More Particularly Blackberries, Blue Berries, Black Sweet Cherries, Red Sour Pitted Cherries, Royal Anne Cherries, Currants, Fruits for Salad, Grapefruit, Sliced Peaches, Halved Peaches, Pears, Sliced Pineapple, Crushed Pineapple, Pineapple Tidbits, and Fresh Prunes; Relishes and Condiments, More Particularly Apple Butter, Tomato Catsup, Chili Sauce, Maraschino Cherries, Apple Jelly, Crabapple Jelly, Currant Jelly, Grape Jelly, Prepared Mustard, Dusseldorf Prepared Mustard, Horse Radish Mustard, Salad Mustard, Stuffed Manzanilla Olives, Queen Olives, Stuffed Queen Olives, Peanut Butter, Sweet Chow, Sweet Onions, Dill Pickles, Fancy Dill Pickles,

Sour Pickles, Sweet Pickles, Sweet Relish, Fancy Sweet Pickles, Pimentoes, Mayonnaise, Relish Spread, and Thousand Island Dressing; Preserves, More Particularly Apricot Preserves, Cherry Preserves, Loganberry Preserves, Peach Preserves, Pine-Cot Preserves Being a Blend of Pineapple and Apricot Fruit with Sugar; Pineapple Preserves, Raspberry Preserves, and Strawberry Preserves; Sugar, More Particularly Powdered Sugar; Syrups, More Particularly Crystal White Corn Syrup, Golden Corn Syrup, Maple Syrup, Being a Blend of Cane and Maple Syrups; Malt Syrup, and Sorghum; Bread, and More Particularly Plain Brown Bread and Raisin Brown Bread; Egg Noodles, Rolled Oats, Rolled Oats with China, Fruit and Nut Filled Candies, Marshmallows, Mints, Flour, and More Particularly, Cake Flour and Pancake Flour; Pure Honey, Vinegar, More Particularly Pure Cider Vinegar, Eggs, Oleomargarine, and Butter.
Claims use since Sept. 1, 1927.

Ser. No. 316,769. ROSAURA L. VIUDA DE FERNANDEZ, Jalapa, Vera Cruz, Mexico. Filed July 9, 1931.

MAN A

For Coffee.
Claims use since May 1, 1915.

Ser. No. 317,500. BORDEN QUALITY, INC., New York, N. Y. Filed July 31, 1931.

FARM FIELD

For Cheese, Butter, Dressed Poultry, and Eggs.
Claims use since Apr. 1, 1931.

Ser. No. 317,702. THE BLOOM-ROSENBLUM-KLEIN COMPANY, doing business as The Golden Treat Malt Extract Company, Youngstown, Ohio. Filed Aug. 6, 1931.

Golden Treat

For Malt Syrup for Beverage-Making and Food Purposes.
Claims use since June 8, 1931.

Ser. No. 317,969. BORDEN QUALITY, INC., New York, N. Y. Filed Aug. 14, 1931.

POULTRYLAND

For Dressed Poultry and Eggs.
Claims use since Jan. 15, 1931.

Ser. No. 318,216. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.

DEGUSSA

For Spices, Dietetical Patent Foods, Malt, Food Starches and Sauces and Feeding Preparations—Namely, Flavorings Sold Either in Pure Form or in Mixtures with Vegetable or Meat Extracts.
Claims use since Sept. 24, 1930.

Ser. No. 322,320. JOS. LA ROSA & SONS, Modesto, Calif. Filed Dec. 21, 1931.

Hi-Jump

For Fresh Grapes.
Claims use since Sept. 21, 1931.

Ser. No. 324,272. ETABLISSEMENTS RENE BEZIERS, Douarnenez, France. Filed Feb. 16, 1932. Under 10-year proviso.



For Canned Fish.
Claims use since 1880.

Ser. No. 324,729. SAMUEL ZIMETBAUM, doing business as Trees Candy Company, Newark, N. J. Filed Mar. 2, 1932.

SHORT AND SWEET

No rights to registration are claimed on the word "Sweet" except in the association shown in the drawing.
For Chocolate Syrup for Flavoring, Ingredients for

Milk Shakes or Milk Shivers Consisting of Cocoa, Powdered Milk, Sugar and Coffee Flavor, Ice Cream and Ingredients for Nut Sundaes and Sundaes, Consisting of Cocoa, Powdered Milk, Sugar, Coffee Flavor and Pecan Nuts, Ingredients for Frappes, Consisting of Crushed Fruit, Ingredients for Pudding, Consisting of Chopped Fruit, Nuts and Jam, and Ingredients for Charlotte Russe, Consisting of Whipped Cream and Egg White.
Claims use since Apr. 15, 1924.

Ser. No. 326,120. G. WASHINGTON COFFEE REFINING COMPANY, Morris Plains, N. J. Filed Apr. 14, 1932.

G. Washington's
INSTANT
COFFEE

The words "Instant Coffee" are hereby disclaimed apart from the other features of the trade-mark. The name "G. Washington's" is a reproduction of the generally accepted signature of George Washington, deceased, the first President of the United States.
For Coffee.
Claims use since Jan. 1, 1928.

Ser. No. 326,958. LEVI G. MOORE, Lancaster, Pa. Filed May 7, 1932.



No claim is made to the representation of a bottle.
For Milk, Butter, Eggs, and Cottage Cheese.
Claims use since Jan. 1, 1931.

Ser. No. 327,134. J. L. DEBENEDETTI, San Francisco, Calif. Filed May 16, 1932.

FOG-KIST

For Fresh Vegetables.
Claims use since Aug. 23, 1931.

Ser. No. 327,159. L. M. MCLAREN, Yuma, Ariz. Filed May 16, 1932.

"MC'S
YUMA QUALITY
ASSURES
A PROFIT"

All of the reading matter on the drawing, except the arbitrary notation "MC'S," is disclaimed apart from the mark as shown.
For Fresh Vegetables.
Claims use since Dec. 15, 1931.

Ser. No. 327,535. WAG FOODS, INC., Syracuse, N. Y. Filed May 27, 1932.

Wag

For Wheat Flour, Canned Soup, Canned Evaporated Milk, Popcorn in Its Natural State, Tapioca, Jelly Powder, and Corn Starch.
Claims use since 1930 on all.

Ser. No. 327,866. F. C. BROWN & COMPANY, Chicago, Ill. Filed June 10, 1932.

GELSA

For Gelatine Preparation for Making Salads and Desserts Composed of Gelatine, Cane Sugar, Fruit Acid, Vegetable Coloring, and True Fruit Flavor.
Claims use since June 6, 1932.

Ser. No. 328,064. LEVER BROTHERS COMPANY, Cambridge, Mass. Filed June 17, 1932.

Covo

For Vegetable Shortening.
Claims use since June 9, 1932.

Ser. No. 328,189. SPINELLA BROTHERS BAKERY, Waterbury, Conn. Filed June 21, 1932.



All wording except the notation "Spinella" is disclaimed apart from the other features of the mark shown in the drawing.
For Bread.
Claims use since 1929.

Ser. No. 328,264. WILLIAM P. DEYO, New York, N. Y. Filed June 24, 1932.



For Horseradish.
Claims use since October, 1901.

Ser. No. 328,277. JOHN MORRELL & CO., Ottumwa, Iowa. Filed June 24, 1932.

Morrell's
1827

For Coffee.
Claims use since Jan. 30, 1932.

Ser. No. 328,411. H. L. HILDRETH CO., Boston, Mass. Filed June 25, 1932. Under 10-year proviso.

HILDRETH'S

For Confectionery—Namely, Molasses Candy and Salt Water Taffy.
Claims use since May 1, 1881.

Ser. No. 328,528. H. L. HILDRETH CO., Boston, Mass. Filed July 2, 1932.



The words "Salt Water Taffy" are disclaimed apart from the mark as shown. The picture of the mermaid is fanciful.
For Confectionery—Namely, Salt Water Taffy.
Claims use since May 1, 1932.

Ser. No. 328,578. P. A. FORD, San Francisco, Calif. Filed July 6, 1932.

GRAY DAY

For Canned Fish, Canned Vegetables, Canned Fruits, Canned Coffee.
Claims use since June 28, 1932.

Ser. No. 328,654. BARD & MARGOLIES, INC., Brooklyn, N. Y. Filed July 8, 1932.

HADDON HALL

For Candy.
Claims use since Apr. 1, 1931.

CLASS 48

Malt Beverages and Liquors

Ser. No. 328,071. PABST CORPORATION, Milwaukee, Wis. Filed June 17, 1932.

Blue Ribbon

For Wort Used in the Preparation of Malt Beverages Containing Less Than One-Half of One Per Cent Alcohol by Volume.
Claims use since June 8, 1932.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 311,820. CARDER-MARTIN, New Orleans, La. Filed Mar. 6, 1931.



No claim being made to the words "Producers of Carved Art" and "In Wood" apart from the mark shown.
For Carved Wood Plaques and Silhouettes.
Claims use since November, 1930.

Ser. No. 327,021. HENRY LEDERER & Co. Chicago, Ill. Filed May 12, 1932.

REFLECT-O-LITE

The words "Reflect" and "Lite" are disclaimed apart from the mark shown in the drawing.
For Non-Electric Signs.
Claims use since Sept. 1, 1931.

Ser. No. 327,815. AMERICAN WRINGER COMPANY, INC., Woonsocket, R. I. Filed June 8, 1932.

TENSILASTIC

For Printing Plates.
Claims use since September, 1931.

Ser. No. 327,857. BENJAMIN I. STAMM, doing business as Trans-Ray-Flex Glass Co., St. Paul, Minn. Filed June 9, 1932.

Trans-Ray-Flex

For Mechanical Advertising Signs and the Like, and for Reflectors Made of Glass and Metal for Advertising Signs.
Claims use since October, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

AUGUST 16, 1932

296,585. REFRIGERATOR PANS. NATIONAL ENAMELING & STAMPING COMPANY, Milwaukee, Wis.
Filed April 11, 1932. Serial No. 325,992. PUBLISHED MAY 31, 1932. Class 13.

296,586. MECHANICAL DEVICE ON WHICH TO RECORD OIL SERVICING FOR VEHICLES. QUAKER STATE OIL REFINING COMPANY, Oil City, Pa.
Filed April 9, 1932. Serial No. 325,959. PUBLISHED MAY 24, 1932. Class 19.

296,587. MOLDED PULP PLATES. STANDARD PULP PRODUCTS CO., INC., New York, N. Y.
Filed April 6, 1932. Serial No. 325,859. PUBLISHED MAY 24, 1932. Class 2.

296,588. PAINTS, ENAMELS, STAINS, LACQUERS, AND VARNISHES. THE PATTERSON-SARGENT COMPANY, Cleveland, Ohio.
Filed April 6, 1932. Serial No. 325,855. PUBLISHED MAY 24, 1932. Class 16.

296,589. WEAR PLATES FOR RUBBER HEELS. HOLTITE MANUFACTURING COMPANY, Baltimore, Md.
Filed April 6, 1932. Serial No. 325,851. PUBLISHED MAY 31, 1932. Class 13.

296,590. CURB, VALVE, ROADWAY, AND METER BOXES; MANHOLE FRAMES AND COVERS, AND VALVE VAULTS. CHEMUNG FOUNDRY CORPORATION, Elmira, N. Y.
Filed April 4, 1932. Serial No. 325,779. PUBLISHED MAY 24, 1932. Class 13.

296,591. PRICE TICKET HOLDERS. THE HOPP PRESS, INC., New York, N. Y.
Filed April 1, 1932. Serial No. 325,713. PUBLISHED MAY 24, 1932. Class 13.

296,592. SHOCK STRUTS. BENDIX AVIATION CORPORATION, Chicago, Ill., and South Bend, Ind.
Filed April 1, 1932. Serial No. 325,705. PUBLISHED MAY 24, 1932. Class 19.

296,593. RAILWAY EQUIPMENT. AMERICAN STEEL FOUNDRIES, Chicago, Ill.
Filed March 28, 1932. Serial No. 325,552. PUBLISHED MAY 31, 1932. Class 19.

296,594. ELECTRICALLY CONTROLLED HUMIDIFYING UNITS. PUFFER-HUBBARD MFG. CO., Minneapolis, Minn.
Filed March 12, 1932. Serial No. 325,077. PUBLISHED MAY 31, 1932. Class 34.

296,595. NAILS. GULF STATES STEEL COMPANY, Birmingham, Ala.
Filed April 16, 1932. Serial No. 326,245. PUBLISHED MAY 31, 1932. Class 13.

296,596. MECHANICAL DEVICE UPON WHICH TO RECORD OIL SERVICING FOR VEHICLES. QUAKER STATE OIL REFINING CO., Oil City, Pa.
Filed April 20, 1932. Serial No. 326,301. PUBLISHED MAY 31, 1932. Class 19.

296,597. GRAPE JUICE. LONG I VINE GLO, INC., Brooklyn, N. Y.
Filed May 3, 1932. Serial No. 326,715. PUBLISHED JUNE 7, 1932. Class 45.

296,598. NON-ALCOHOLIC MALTLESS SYRUP CONCENTRATE AND FLAVOR FOR MAKING SOFT DRINKS. TRIPLE "XXX" COMPANY, Galveston, Tex.
Filed March 14, 1932. Serial No. 325,126. PUBLISHED JUNE 7, 1932. Class 45.

296,599. FOODS DERIVED FROM PORK—NAMELY, SAUSAGES, HAM, MORTADELAS, LARD, BACON. PRODUCTOS SELECTOS DEL CERDO, S. A., Manlleu, Spain.
Filed March 23, 1932. Serial No. 325,411. PUBLISHED MAY 3, 1932. Class 46.

296,600. OYSTERS IN THEIR NATURAL STATE. J. & J. W. ELSWORTH CO., New York, N. Y.
Filed March 28, 1932. Serial No. 325,573. PUBLISHED MAY 31, 1932. Class 46.

296,601. COFFEE. JOHN HOFFMANN & SONS CO., Milwaukee, Wis.
Filed March 30, 1932. Serial No. 325,655. PUBLISHED MAY 24, 1932. Class 46.

296,602. NON-ALCOHOLIC, MALTLESS FLAVORING FOR SOFT DRINKS. PICHEL PRODUCTS CO., INC., New York, N. Y.
Filed April 4, 1932. Serial No. 325,798. PUBLISHED JUNE 7, 1932. Class 45.

296,603. POLISH FOR AUTOMOBILES AND FURNITURE. GEORGE H. JENKINS, doing business as El Sol Products Company, Camden, N. J
Filed April 15, 1932. Serial No. 326,147. PUBLISHED MAY 31, 1932. Class 16.

296,604. INSIDE PAINT. M. J. MERKIN PAINT CO. INC., New York, N. Y.
Filed April 18, 1932. Serial No. 326,224. PUBLISHED MAY 24, 1932. Class 16.

296,605. COFFEE. TONE BROS., Des Moines, Iowa.
Filed April 11, 1932. Serial No. 326,044. PUBLISHED MAY 24, 1932. Class 46.

296,606. BATS, GOLF CLUBS, GOLF BALLS, BASEBALLS, ETC. THE P. GOLDSMITH SONS CO., Cincinnati, Ohio.
Filed April 15, 1932. Serial No. 326,141. PUBLISHED JUNE 7, 1932. Class 22.

296,607. PLASTIC HEAT INSULATION MATERIAL. THE M. W. KELLOGG CO., Jersey City, N. J., and New York, N. Y.
Filed April 16, 1932. Serial No. 326,188. PUBLISHED MAY 31, 1932. Class 12.

296,608. FIREWORKS FOR PYROTECHNIC DISPLAYS, FIRECRACKERS, AND EXPLOSIVES FOR BOMBS. INDEPENDENT FIREWORKS MANUFACTURING COMPANY, Bridgewater, Mass.
Filed April 16, 1932. Serial No. 326,244. PUBLISHED JUNE 7, 1932. Class 9.

296,609. NONALCOHOLIC MALTLESS, BEVERAGE SOLD AS A SOFT DRINK AND SYRUPS THEREFOR. WOLF AND KOCH, St. Louis, Mo.
Filed April 22, 1932. Serial No. 326,407. PUBLISHED JUNE 7, 1932. Class 45.

296,610. CHEWING GUM. WM. WRIGLEY JR. COMPANY, Chicago, Ill.
Filed March 23, 1932. Serial No. 325,416. PUBLISHED MAY 24, 1932. Class 46.

296,611. COIN-CONTROLLED BALL-PROJECTING AMUSEMENT DEVICE. HERCULES NOVELTY COMPANY, Chicago, Ill.
Filed May 2, 1932. Serial No. 326,680. PUBLISHED JUNE 7, 1932. Class 22.

296,612. DOLLS. MARION GREENE, Montclair, N. J.
Filed May 4, 1932. Serial No. 326,748. PUBLISHED JUNE 7, 1932. Class 22.

296,613. DOLLS. S. H. KRESS & Co., New York, N. Y.
Filed May 4, 1932. Serial No. 326,750. PUBLISHED JUNE 7, 1932. Class 22.

296,614. GOLF BALLS. SUPREME GOLF BALL CO., Chicago, Ill.
Filed April 9, 1932. Serial No. 325,975. PUBLISHED JUNE 7, 1932. Class 22.

296,615. BOARD GAMES PLAYED BY ASSEMBLING PIECES CONSTITUTING LETTERS. I-X-L PRINTING COMPANY, New York, N. Y.
Filed April 30, 1932. Serial No. 326,639. PUBLISHED JUNE 7, 1932. Class 22.

296,616. FRESH VEGETABLES. F. V. BIRBECK, Watsonville, Calif.
Filed April 12, 1932. Serial No. 326,007. PUBLISHED MAY 24, 1932. Class 46.

296,617. BARBECUED PEANUTS. WILLIAM T. PUGH, Jr., Dallas, Tex.
Filed April 4, 1932. Serial No. 325,800. PUBLISHED MAY 31, 1932. Class 46.

296,618. BUTTONS, BROOCHES, BUCKLES, ETC. KREMENTZ & COMPANY, Newark, N. J.
Filed April 4, 1932. Serial No. 325,793. PUBLISHED MAY 31, 1932. Class 28.

296,619. FRESH CITRUS FRUITS. WINTER HAVEN CITRUS GROWERS ASSOCIATION, Winter Haven, Fla.
Filed April 2, 1932. Serial No. 325,771. PUBLISHED MAY 24, 1932. Class 46.

296,620. JEWELRY FOR PERSONAL WEAR OR ADORNMENT, NOT INCLUDING WATCHES. SPEIDEL CORPORATION, Providence, R. I.
Filed April 2, 1932. Serial No. 325,761. PUBLISHED MAY 31, 1932. Class 28.

296,621. SILVER PLATED HOLLOW WARE AND FLATWARE. ELLIS SILVER COMPANY INC., New York, N. Y.
Filed March 31, 1932. Serial No. 325,683. PUBLISHED MAY 31, 1932. Class 28.

296,622. FIRE ALARM SYSTEMS AND PARTS THEREOF—NAMELY, FIRE ALARM BOXES AND SWITCH-BOARDS. THE GAMEWELL COMPANY, Newton Upper Falls, Newton, Mass.
Filed March 30, 1932. Serial No. 325,650. PUBLISHED MAY 31, 1932. Class 21.

296,623. RADIO AERIAL ELIMINATOR. HIRAM B. BROWNING, doing business as The Elimino Company, West Toledo, Ohio.
Filed March 29, 1932. Serial No. 325,615. PUBLISHED MAY 31, 1932. Class 21.

296,624. SMOKED MEATS—NAMELY, HAMS; AND BOILED HAMS. FRANK AND COMPANY, Milwaukee, Wis.
Filed March 28, 1932. Serial No. 325,577. PUBLISHED MAY 31, 1932. Class 46.

296,625. FRESH CITRUS FRUITS. STARK & WADDELL PACKING CORPORATION, Strathmore, Calif.
Filed March 26, 1932. Serial No. 325,535. PUBLISHED MAY 31, 1932. Class 46.

296,626. FRESH CITRUS FRUITS. STARK & WADDELL PACKING CORPORATION, Strathmore, Calif.
Filed March 26, 1932. Serial No. 325,534. PUBLISHED MAY 31, 1932. Class 46.

296,627. COFFEE, TEA, AND COCOA. HAHN DEPARTMENT STORES, INC., Wilmington, Del.
Filed March 15, 1932. Serial No. 325,143. PUBLISHED MAY 31, 1932. Class 46.

296,628. OIL BURNER FOR HEATING PURPOSES. RAILWAY LOCOMOTOR COMPANY, Chicago, Ill.
Filed April 11, 1932. Serial No. 325,998. PUBLISHED MAY 24, 1932. Class 34.

296,629. CANDY. EMPIRE GUM COMPANY, New York, N. Y.
Filed March 5, 1932. Serial No. 324,821. PUBLISHED MAY 24, 1932. Class 46.

296,630. ROASTED COFFEE. JAMES J. O'CONNOR, doing business as Jas. J. O'Connor Coffee Co., St. Louis, Mo.
Filed January 25, 1932. Serial No. 323,418. PUBLISHED MAY 24, 1932. Class 46.

296,631. LUBRICATING OIL. CARL LANGER INC., Detroit, Mich.
Filed February 18, 1932. Serial No. 324,290. PUBLISHED MAY 31, 1932. Class 15.

296,632. MOTOR LUBRICATING OIL. DRYER, CLARK & DRYER OIL CO., Oklahoma City, Okla.
Filed February 11, 1932. Serial No. 324,064. PUBLISHED MAY 24, 1932. Class 15.

296,633. CANNED PINEAPPLE. HAWAIIAN PINEAPPLE COMPANY, LTD., Honolulu, Territory of Hawaii, and San Francisco, Calif.
Filed November 13, 1931. Serial No. 321,106. PUBLISHED MAY 31, 1932. Class 46.

296,634. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed November 11, 1931. Serial No. 321,007. PUBLISHED MAY 31, 1932. Class 15.

296,635. SHOES MADE OF LEATHER, RUBBER, OR FABRIC, OR COMBINATIONS OF THESE MATERIALS. THINGS SHOE STORES, INC., Boston, Mass.
Filed March 10, 1932. Serial No. 325,024. PUBLISHED MAY 17, 1932. Class 39.

296,636. CORSETS, BRASSIÈRES, AND COMBINATIONS THEREOF. SNUG-FIT BRASSIERE CO., New York, N. Y.
Filed March 11, 1932. Serial No. 325,049. PUBLISHED MAY 24, 1932. Class 39.

296,637. MEN'S AND BOYS' SHOES MADE OF LEATHER AND OF FABRIC AND OF COMBINATIONS OF LEATHER AND FABRIC. FREEMAN SHOE CORPORATION, Beloit, Wis.
Filed March 14, 1932. Serial No. 325,094. PUBLISHED MAY 24, 1932. Class 39.

296,638. CORSETS. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa.
Filed March 15, 1932. Serial No. 325,157. PUBLISHED MAY 10, 1932. Class 39.

296,639. CHAIRS. REMINGTON RAND INC., Buffalo, N. Y.
Filed April 5, 1932. Serial No. 325,830. PUBLISHED MAY 24, 1932. Class 32.

296,640. LEATHER BELTING. F. RANIVILLE COMPANY, Grand Rapids, Mich.
Filed April 11, 1932. Serial No. 325,999. PUBLISHED MAY 24, 1932. Class 35.

296,641. SALAD DRESSING. AMERICAN STORES COMPANY, Philadelphia, Pa.
Filed April 13, 1932. Serial No. 326,045. PUBLISHED MAY 24, 1932. Class 46.

296,642. MALT SYRUP. NATHAN FELDMAN, doing business as Felko Supply Company, New Brunswick, N. J.
Filed April 16, 1932. Serial No. 326,180. PUBLISHED MAY 24, 1932. Class 46.

296,643. CANDY. THOMPSON'S SPA INC., Boston, Mass.
Filed April 20, 1932. Serial No. 326,310. PUBLISHED MAY 24, 1932. Class 46.

296,644. SHOES MADE OF FABRIC AND LEATHER WITH SOLES MADE OF RUBBER OR LEATHER. S. RAUH & COMPANY, New York, N. Y.
Filed March 26, 1932. Serial No. 325,530. PUBLISHED MAY 24, 1932. Class 39.

296,645. CERTAIN NAMED PIECE GOODS. CONTINENTAL MILLS, INC., Philadelphia, Pa.
Filed March 31, 1932. Serial No. 325,681. PUBLISHED MAY 10, 1932. Class 42.

296,646. FILES. FILECRAFT, INC., Cleveland, Ohio.
Filed April 23, 1932. Serial No. 326,418. PUBLISHED MAY 31, 1932. Class 23.

296,647. WOMEN'S HATS. E. H. SCHERMAN & CO., New York, N. Y.
Filed March 16, 1932. Serial No. 325,188. PUBLISHED MAY 24, 1932. Class 39.

296,648. CHINAWARE AND POTTERY. PICKARD, INCORPORATED, Chicago, Ill.
Filed March 18, 1932. Serial No. 325,279. PUBLISHED MAY 24, 1932. Class 30.

296,649. SHOES MANUFACTURED FROM COMBINATIONS OF MATERIALS INCLUDING LEATHER, RUBBER, AND FABRIC. JAMES E. LUDLAM, Belleville, N. J.
Filed March 22, 1932. Serial No. 325,370. PUBLISHED MAY 17, 1932. Class 39.

296,650. MEN'S, WOMEN'S, AND CHILDREN'S SHOES MADE OF RUBBER, LEATHER, FABRIC, AND COMPOSITIONS THEREOF. HERMAN SCHATTNER, New York, N. Y.
Filed March 25, 1932. Serial No. 325,486. PUBLISHED MAY 31, 1932. Class 39.

296,651. PILE FABRICS IN THE PIECE. E. F. TIMME & SON, New York, N. Y.
Filed April 27, 1932. Serial No. 326,563. PUBLISHED JUNE 7, 1932. Class 42.

296,652. COTTON, RAYON, SILK, AND WOOLEN PIECE GOODS. C. M. DE LAND, New York, N. Y.
Filed May 2, 1932. Serial No. 326,672. PUBLISHED JUNE 7, 1932. Class 42.

296,653. SLEEPING BAGS. DOMINION FABRICS CORPORATION, Boston, Mass.
Filed April 5, 1932. Serial No. 325,818. PUBLISHED MAY 24, 1932. Class 39.

296,654. SILK CHIFFON IN THE PIECE. EUGENE A. OBERFELDER, New Rochelle, N. Y.
Filed April 19, 1932. Serial No. 326,314. PUBLISHED JUNE 7, 1932. Class 42.

296,655. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed June 12, 1931. Serial No. 315,786. PUBLISHED JUNE 7, 1932. Class 42.

296,656. CANDY. AMBROSIA CHOCOLATE COMPANY, Milwaukee, Wis.
Filed May 13, 1931. Serial No. 314,482. PUBLISHED MAY 24, 1932. Class 46.

296,657. TOYS, PARTICULARLY ON TOY ANIMAL FIGURES ON WHEELS AND TOY VEHICLES. MILTON BRADLEY COMPANY, Springfield, Mass.
Filed April 25, 1931. Serial No. 313,768. PUBLISHED JUNE 7, 1932. Class 22.

296,658. COMPOSITION SHINGLES. EL REY PRODUCTS CO., Los Angeles, Calif.
Filed April 18, 1931. Serial No. 313,497. PUBLISHED MAY 24, 1932. Class 12.

296,659. FRESH VEGETABLES, FRESH DECIDUOUS FRUITS, FRESH GRAPES, CANTALOUPES. EASTERN FRUIT DISTRIBUTORS, INC., Los Angeles and Fresno, Calif.
Filed April 14, 1931. Serial No. 313,336. PUBLISHED MAY 31, 1932. Class 46.

296,660. COFFEE. DURHAM BROS. & CO., INC., Roanoke, Va.
Filed April 11, 1931. Serial No. 313,235. PUBLISHED MAY 31, 1932. Class 46.

296,661. NONALCOHOLIC, MALTLESS FRUIT JUICES SOLD AS SOFT DRINKS. BORDEN'S FARM PRODUCTS CO., INC., Wassaic and New York, N. Y.
Filed April 8, 1931. Serial No. 312,898. PUBLISHED JUNE 7, 1932. Class 45.

296,662. CHEWING GUM. THE CURTISS CANDY COMPANY, Chicago, Ill.
Filed December 11, 1930. Serial No. 308,859. PUBLISHED MAY 31, 1932. Class 46.

296,663. CANDY. RIDGEWOOD FRUIT GROWERS, INC., doing business as The Ridgewood Orchards, Ridgewood Orchards, Winchester, Va.
Filed November 3, 1930. Serial No. 307,507. PUBLISHED MAY 24, 1932. Class 46.

296,664. FLOUR, ONIONS, GARLIC, ETC. MEZŐGAZDASÁGI TERMÉNY ÉS TERMÉKFORGALMI INTÉZET, Budapest, Hungary.
Filed October 14, 1930. Serial No. 306,739. PUBLISHED MAY 31, 1932. Class 46.

296,665. FLOORING MATERIAL MADE OF WOOD, SUCH AS FLOORING STRIPS, INLAID PIECES, AND THE LIKE. BRADLEY LUMBER COMPANY OF ARKANSAS, Warren, Ark.
Filed September 27, 1930. Serial No. 306,127. PUBLISHED MAY 24, 1932. Class 12.

296,666. COFFEE. THE DANNEMILLER GROCERY COMPANY, Canton, Ohio.
Filed September 17, 1930. Serial No. 305,779. PUBLISHED MAY 31, 1932. Class 46.

296,667. FRESH DECIDUOUS FRUITS, DRIED FRUITS, FRESH VEGETABLES. FRED F. TUGEL, doing business as Appleton Produce Company, Watsonville, Calif.
Filed April 12, 1932. Serial No. 326,034. PUBLISHED MAY 24, 1932. Class 46.

296,668. PETROLEUM PRODUCTS—NAMELY, LUBRICATING OILS AND LUBRICATING GREASES. HY-FLASH GAS & OIL CO., INC., Toledo, Ohio.
Filed April 11, 1932. Serial No. 326,039. PUBLISHED MAY 31, 1932. Class 15.

296,669. SILVERWARE, PARTICULARLY FLAT SILVER. THE KINNEY & LEVAN COMPANY, Cleveland, Ohio.
Filed April 12, 1932. Serial No. 326,041. PUBLISHED MAY 31, 1932. Class 28.

296,670. HANDKERCHIEFS. PHIL KARFUNKLE, Chicago, Ill.
Filed April 11, 1932. Serial No. 326,070. PUBLISHED JUNE 7, 1931. Class 42.

296,671. ELASTIC FABRIC COMPOSED OF CUT RUBBER COMBINED WITH COTTON YARNS, RAYON, AND OTHER TEXTILE FABRICS. IDEAL LINEN MESH COMPANY, Poughkeepsie, N. Y.
Filed April 18, 1932. Serial No. 326,218. PUBLISHED JUNE 7, 1932. Class 42.

296,672. CANNED SALMON. LIBBY, MCNEILL & LIBBY, Chicago, Ill.
Filed April 22, 1932. Serial No. 326,379. PUBLISHED MAY 31, 1932. Class 46.

296,673. CANNED SALMON. LIBBY, MCNEILL & LIBBY, Chicago, Ill.
Filed April 22, 1932. Serial No. 326,380. PUBLISHED MAY 31, 1932. Class 46.

296,674. COFFEE. THE GROCERS & PRODUCERS CO., doing business as The Clover Farm Stores Company, Cleveland, Ohio.
Filed April 23, 1932. Serial No. 326,422. PUBLISHED MAY 31, 1932. Class 46.

296,675. TIRE PATCHES. CASIMIR A. DOMZALSKI, Detroit, Mich.
Filed April 5, 1932. Serial No. 325,817. PUBLISHED MAY 31, 1932. Class 35.

296,676. CANNED SALMON. LIBBY, MCNEILL & LIBBY, Chicago, Ill.
Filed April 22, 1932. Serial No. 326,378. PUBLISHED MAY 31, 1932. Class 46.

296,677. MATTRESSES AND BOX SPRINGS. C. LUDWIG BAUMANN & COMPANY, Brooklyn, N. Y.
Filed March 31, 1932. Serial No. 326,677. PUBLISHED MAY 31, 1932. Class 32.

296,678. POCKET KNIVES, BUTCHER KNIVES; PARING, CARVING, AND OTHER HOUSEHOLD KNIVES OF VARIOUS KINDS; AND TABLE CUTLERY, ALL OF BASE METAL. UTICA CUTLERY COMPANY, Utica, N. Y.
Filed April 2, 1932. Serial No. 325,765. PUBLISHED MAY 31, 1932. Class 28.

296,679. POWDERED DESSERTS AND MALTED MILK. SUPERIOR PACKING CORP., New York, N. Y.
Filed March 29, 1932. Serial No. 325,625. PUBLISHED MAY 31, 1932. Class 46.

296,680. SAWS AND SAW BLADES. CLEMSON BROS., INC., Middletown, N. Y.
Filed March 26, 1932. Serial No. 325,514. PUBLISHED MAY 24, 1932. Class 23.

296,681. CHEMICAL, SCIENTIFIC, AND LABORATORY GLASSWARE. KIMBLE GLASS COMPANY, Vineland, N. J.
Filed March 28, 1932. Serial No. 325,583. PUBLISHED MAY 24, 1932. Class 26.

296,682. COFFEE. THE GROCERS & PRODUCERS CO., doing business as The Clover Farm Stores Company, Cleveland, Ohio.
Filed April 25, 1932. Serial No. 326,470. PUBLISHED MAY 31, 1932. Class 46.

296,683. COFFEE. THE GROCERS & PRODUCERS CO., doing business as The Clover Farm Stores Company, Cleveland, Ohio.
Filed April 25, 1932. Serial No. 326,471. PUBLISHED MAY 31, 1932. Class 46.

296,684. CANNED FRUITS, CANNED VEGETABLES, TOMATO JUICE, SAUERKRAUT JUICE, AND PEACH JAM. LIBBY, MCNEILL & LIBBY, Chicago, Ill.
Filed March 19, 1932. Serial No. 325,294. PUBLISHED MAY 24, 1932. Class 46.

296,685. TAILORED VEHICLE SEAT COVERS AND SEAT PADS. THE WEDLER-SHUFORD CO., St. Louis, Mo.
Filed March 21, 1932. Serial No. 325,357. PUBLISHED MAY 31, 1932. Class 32.

296,686. PORTABLE FIRE EXTINGUISHERS. R. E. DIETZ COMPANY, New York, N. Y.
Filed March 24, 1932. Serial No. 325,425. PUBLISHED MAY 3, 1932. Class 23.

296,687. DRAWING, ASTRONOMICAL INSTRUMENTS, MICROMETERS, ETC. SOCIETE GENEVOISE D'INSTRUMENTS DE PHYSIQUE, Geneva, Switzerland.
Filed September 12, 1931. Serial No. 318,999. PUBLISHED MAY 24, 1932. Class 26.

296,688. MACHINE TOOLS—NAMELY, METAL DRILLING MACHINES, GRINDING MACHINES, AND LATHES. SUPERIOR MACHINE TOOL COMPANY, Kokomo, Ind.
Filed August 17, 1931. Serial No. 318,083. PUBLISHED MAY 24, 1932. Class 23.

296,689. CEDAR CHESTS. THE LANE COMPANY, INC., Altavista, Va.
Filed August 6, 1931. Serial No. 317,719. PUBLISHED MAY 31, 1932. Class 32.

296,690. ELECTRIC IRONING MACHINES AND PARTS THEREOF. GRIGSBY-GRUNOW COMPANY, Chicago, Ill.
Filed August 3, 1931. Serial No. 317,600. PUBLISHED MAY 31, 1932. Class 24.

296,691. CHOCOLATE MILK FOOD BEVERAGE. KREMKO COMPANY, Chicago, Ill.
Filed August 1, 1931. Serial No. 317,561. PUBLISHED MAY 24, 1932. Class 46.

296,692. LADIES LEATHER AND FABRIC SHOES. ALBEE SHOE COMPANY LIMITED, Montreal, Quebec, Canada.
Filed March 3, 1932. Serial No. 324,920. PUBLISHED MAY 10, 1932. Class 39.

296,693. BOYS' AND CHILDREN'S OUTER CLOTHING—NAMELY, BOYS' WASH SUITS, BLOUSES, KNICKERS, CAPS, TIES, AND GIRLS' DRESSES, EXCEPT HOSIERY. W. T. GRANT COMPANY, Lynn, Mass., and New York, N. Y.
Filed March 5, 1932. Serial No. 324,822. PUBLISHED MAY 10, 1932. Class 39.

296,694. LEATHER BOOTS AND LEATHER SHOES. BUCKINGHAM & HECHT, San Francisco, Calif.
Filed March 5, 1932. Serial No. 324,816. PUBLISHED MAY 10, 1932. Class 39.

296,695. WOOLEN PIECE GOODS. A. D. ELLIS MILLS INCORPORATED, Monson, Mass.
Filed February 15, 1932. Serial No. 324,157. PUBLISHED MAY 31, 1932. Class 42.

296,696. SHOES CONSTRUCTED OF LEATHER. THE H. C. GODMAN COMPANY, Columbus, Ohio.
Filed January 25, 1932. Serial No. 323,400. PUBLISHED MAY 24, 1932. Class 39.

296,697. BUCKLES MADE OF MATERIAL OTHER THAN PRECIOUS METAL. FRANK MASHEK, Chicago, Ill.
Filed January 18, 1932. Serial No. 323,140. PUBLISHED APRIL 5, 1932. Class 40.

296,698. TRANSFERS AND ROLL HOLDERS FOR TRANSFERS. KAUMAGRAPH COMPANY, New York, N. Y.
Filed December 23, 1931. Serial No. 322,391. PUBLISHED MAY 24, 1932. Class 40.

296,699. YARNS AND PARTICULARLY FOR YARN OF ARTIFICIAL SILK, CONVERTED, THROWN, OR TWISTED INTO OTHER FORMS OF THREAD. BORDOW SILK CO., New York, N. Y.
Filed December 14, 1931. Serial No. 322,089. PUBLISHED MAY 3, 1932. Class 43.

296,700. LADIES' HATS. BERKWITS & BLOOMFIELD, INC., New York, N. Y.
Filed November 17, 1931. Serial No. 321,197. PUBLISHED MAY 31, 1932. Class 39.

296,701. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. HONEYMOON BEVERAGE COMPANY, River Rouge, Mich.
Filed October 16, 1931. Serial No. 320,124. PUBLISHED APRIL 26, 1932. Class 45.

296,702. FOOTWEAR — NAMELY, RECTANGULAR BAGS OF KNITTED OR CROCHETED FABRIC ADAPTED TO BE WORN ON THE FEET AS LOW SOCKS. EMPIRE KNITTING MILLS, Chicago, Ill.
Filed October 2, 1931. Serial No. 319,649. PUBLISHED DECEMBER 29, 1931. Class 39.

296,703. RUBBER HEELS AND RUBBER TAPS. THE I. T. S. COMPANY, Elyria, Ohio.
Filed September 25, 1931. Serial No. 319,408. PUBLISHED MAY 24, 1932. Class 39.

296,704. BLEACHED AND UNBLEACHED PIECE GOODS FOR SHEETS AND PILLOW CASES, MADE OF LINEN AND COTTON FABRICS. THE LAMPORT MFG. SUPPLY CO., INC., New York, N. Y.
Filed September 5, 1931. Serial No. 318,786. PUBLISHED JUNE 7, 1932. Class 42.

296,705. SHEETS OF WOOD VENEER. ROBINSON MANUFACTURING COMPANY, Everett, Wash.
Filed August 29, 1931. Serial No. 318,567. PUBLISHED MAY 24, 1932. Class 12.

296,706. WOMEN'S LEATHER SHOES. CRADDOCK-TERRY COMPANY, Lynchburg, Va.
Filed August 12, 1931. Serial No. 317,889. PUBLISHED MAY 3, 1932. Class 39.

296,707. ROOFING NAILS. THE PARAFFINE COMPANIES, INC., San Francisco, Calif.
Filed March 22, 1930. Serial No. 297,773. PUBLISHED MAY 24, 1932. Class 18.

296,708. FRESH AND CANNED CITRUS FRUITS AND JUICES. FLORIDA CITRUS EXCHANGE, Tampa, Fla.
Filed July 31, 1930. Serial No. 304,047. PUBLISHED OCTOBER 14, 1930. Class 46.

296,709. ELECTRICAL INSULATION COMPOUNDS AND FABRICS IN LIQUID, SEMI-LIQUID, PASTE FORM; IN SHEETS PLAIN AND LAMINATED, AND IN THE FORM OF MOLDING COMPOUNDS. THE HARVEL CORPORATION, Newark, N. J.
Filed July 13, 1929. Serial No. 287,071. PUBLISHED MAY 31, 1932. Class 21.

296,710. BED-FRAMES, BEDS, CUPBOARDS, ETC. SOCIÉTÉ ANONYME POUR LA DÉCORATION INTÉRIEURE MODERNE, Paris, France.
Filed November 10, 1930. Serial No. 307,745. PUBLISHED MAY 24, 1932. Class 32.

296,711. KITCHEN TOOLS AND UTENSILS. THE A. & J. MANUFACTURING CO., Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill., a Corporation of Illinois.
Filed July 3, 1930. Serial No. 303,085. PUBLISHED SEPTEMBER 1, 1931. Class 23.

296,712. ROCK, SAND, GRAVEL, AND GRAIN SCREENS. APEX MANUFACTURING CO. INC., Syracuse, N. Y.
Filed May 31, 1930. Serial No. 301,776. PUBLISHED MAY 24, 1932. Class 23.

296,713. CAKES, MUFFINS, PIES, ETC. LUCULLUS BAKERY, INC., Brooklyn, N. Y.
Filed September 28, 1929. Serial No. 290,370. PUBLISHED MAY 17, 1932. Class 46.

296,714. TEA, COCOA, COFFEE, FOOD-FLAVORING EXTRACTS, AND SPICES. NORWINE COFFEE COMPANY, St. Louis, Mo.
Filed May 7, 1928. Serial No. 266,040. PUBLISHED NOVEMBER 27, 1928. Class 46.

296,715. FOOD PRODUCTS—NAMELY, OLIVE OIL, CANNED PEELED TOMATOES, TOMATO SAUCE. FRANK M. MODICA, New York, N. Y.
Filed June 23, 1931. Serial No. 316,161. PUBLISHED MAY 24, 1932. Class 46.

296,716. OPTICAL FRAMES, MOUNTINGS, AND LENSES. THE WALMAN OPTICAL CO., Minneapolis, Minn.
Filed April 20, 1931. Serial No. 313,570. PUBLISHED MAY 24, 1932. Class 26.

296,717. STEEL OFFICE FURNITURE—NAMELY, FILING AND LINE CABINETS, COUNTER-HEIGHT CABINETS, LETTER FILES, BOOK CASES, SHELVING, OPEN STORAGE UNITS. PEERLESS STEEL EQUIPMENT COMPANY, Philadelphia, Pa.
Filed March 18, 1931. Serial No. 312,265. PUBLISHED MAY 24, 1932. Class 32.

296,718. PANCAKE FLOUR AND BUCKWHEAT FLOUR. VIRGINIA SWEET FOODS INC., doing business as Mo-An-Mo Products Co., Indianapolis, Ind.
Filed March 9, 1931. Serial No. 311,942. PUBLISHED MAY 24, 1932. Class 46.

296,719. CANNED FRUITS, CANNED VEGETABLES, CANNED FISH, ETC. PAXTON & GALLAGHER COMPANY, Omaha, Nebr.
Filed February 20, 1931. Serial No. 311,281. PUBLISHED MAY 5, 1931. Class 46.

296,720. FURNITURE—NAMELY, CHAIRS, SOFAS, CELLARETTES, CEDAR CHESTS, TABLES, STANDS, BEDROOM FURNITURE, CABINETS, RADIO CABINETS, AND OTTOMANS. FRED W. MILLER, Jackson, Mich.
Filed February 2, 1931. Serial No. 310,653. PUBLISHED MAY 31, 1932. Class 32.

296,721. PEANUT-BUTTER SANDWICHES. HOLLAND BROS. SANDWICH CO., Converse, S. C.
Filed December 27, 1930. Serial No. 309,381. PUBLISHED APRIL 14, 1931. Class 46.

296,722. TRAYS MADE OF WOOD. FURNITURE STYLISTS INC., Chicago, Ill.
Filed February 20, 1931. Serial No. 311,270. PUBLISHED APRIL 14, 1931. Class 2.

296,723. FURNITURE POLISH AND AUTOMOBILE POLISH. SHELL OIL COMPANY, San Francisco, Calif.
Filed December 29, 1930. Serial No. 309,444. PUBLISHED MAY 24, 1932. Class 16.

296,724. UNIT HEATERS, HEATING ELEMENTS, ETC. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio.
Filed May 12, 1930. Serial No. 300,819. PUBLISHED MAY 31, 1932. Class 34.

296,725. CANDY. EDGAR P. LEWIS & SONS, INC., Boston, Mass.
Filed October 26, 1931. Serial No. 320,467. PUBLISHED MAY 31, 1932. Class 46.

296,726. RUST AND CORROSION PREVENTIVE LIQUID IN THE NATURE OF A PAINT OR VARNISH. JOSEPH A. MARTOCELLO, Sr., doing business as Jos. A. Martocello & Co., Philadelphia, Pa.
Filed October 27, 1931. Serial No. 320,571. PUBLISHED MAY 31, 1932. Class 16.

296,727. METAL REFUSE CONTAINERS OR HOLDERS AND PAPER LINERS FOR SAME. TIDY PRODUCTS, INC., New York, N. Y.
Filed November 17, 1931. Serial No. 321,224. PUBLISHED MAY 24, 1932. Class 2.

296,728. ELECTRIC HAIR WAVING MACHINES AND PARTS THEREOF, ELECTRIC HAIR CURLING IRONS, ELECTRIC HAIR DRYERS, CLAMPS USED IN HAIR WAVING OPERATIONS, AND PADS USED IN HAIR WAVING OPERATIONS. WELLA WAVING CORPORATION, New York, N. Y., assignor to Franz Ströher A. G., Rothenkirchen, Germany, a Corporation of Germany.
Filed December 14, 1931. Serial No. 322,120. PUBLISHED MARCH 1, 1932. Class 44.

296,729. WEIGHING SCALES. CONTINENTAL SCALE WORKS, Chicago, Ill.
Filed December 16, 1931. Serial No. 322,164. PUBLISHED MARCH 1, 1932. Class 26.

296,730. SILOS. THE ECONOMY SILO & MFG. CO., Frederick, Md.
Filed December 31, 1931. Serial No. 322,576. PUBLISHED MAY 24, 1932. Class 2.

296,731. TOILET ARTICLES—NAMELY, UNFILLED CREAM-POTS MADE OF CONDENSATION PRODUCTS. OTTOMAR VOELK, Berlin, Germany.
Filed December 31, 1931. Serial No. 322,608. PUBLISHED MAY 24, 1932. Class 2.

296,732. HEATING, COOLING, AND AIR CONDITIONING UNITS EMPLOYING FINNED TUBING. CARRIER MANUFACTURING CORPORATION, Newark, N. J., assignor to Aerofin Corporation, Newark, N. J., a Corporation of New Jersey.
Filed January 30, 1932. Serial No. 323,607. PUBLISHED MAY 31, 1932. Class 34.

296,733. TRAILERS, VEHICLE BODIES AND CHASSIS, AND STRUCTURAL PARTS THEREOF. OWENSBORO WAGON COMPANY, Owensboro, Ky.
Filed February 1, 1932. Serial No. 323,672. PUBLISHED MAY 31, 1932. Class 19.

296,734. LAUNDRY WASHING MACHINES. HORTON MANUFACTURING COMPANY, Fort Wayne, Ind.
Filed February 5, 1932. Serial No. 323,865. PUBLISHED MAY 31, 1932. Class 24.

296,735. ICE CREAM. FRIGIVEND CORPORATION, Dayton, Ohio.
Filed February 6, 1932. Serial No. 323,894. PUBLISHED MAY 17, 1932. Class 46.

296,736. CHEMICALLY TREATED GLASS MIRRORS. A. W. ROSEN & Co., New York, N. Y.
Filed February 9, 1932. Serial No. 324,009. PUBLISHED MAY 24, 1932. Class 32.

296,737. METAL CLOTHES AND ANALOGOUS LOCKERS. FRED MEDART MANUFACTURING Co., St. Louis, Mo.
Filed February 25, 1932. Serial No. 324,478. PUBLISHED MAY 24, 1932. Class 32.

296,738. HUB CAPS. ROCKNE MOTORS CORPORATION, Detroit, Mich.
Filed February 25, 1932. Serial No. 324,485. PUBLISHED MAY 31, 1932. Class 19.

296,739. HUB CAPS. ROCKNE MOTORS CORPORATION, Detroit, Mich.
Filed February 25, 1932. Serial No. 324,486. PUBLISHED MAY 31, 1932. Class 19.

296,740. RAZOR BLADES. PAUL KALETSCH, Monaca, Pa.
Filed February 27, 1932. Serial No. 324,563. PUBLISHED MAY 24, 1932. Class 28.

296,741. ELECTRIC GELATINE DUPLICATING MACHINES AND PARTS OF ELECTRIC GELATINE DUPLICATING MACHINES. U. S. DUPLICATOR CO., Chicago, Ill.
Filed March 2, 1932. Serial No. 324,727. PUBLISHED MAY 24, 1932. Class 23.

296,742. SALAD DRESSING. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed March 7, 1932. Serial No. 324,854. PUBLISHED MAY 31, 1932. Class 46.

296,743. JUVENILE FURNITURE COMPRISING BEDS, BASSINETS, BOOKCASES, HIGH-CHAIRS, NURSERY CHAIRS, CHESTS OF DRAWERS, TOY CHESTS, CHIFFOROBES, COSTUMERS, CRIBS, DRESSING TABLES, DRESSING TABLE AND FOLDING BATHTUB COMBINATIONS, PLAY PENS, FLOOR SCREENS, BEDROOM TABLES, LAMP BASES, AND BABY SWING CHAIRS. STOKELINE FURNITURE CORPORATION, Chicago, Ill.
Filed October 16, 1931. Serial No. 320,141. PUBLISHED MAY 31, 1932. Class 32.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

296,744. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) MIAMI HOLLIDAY STEEL COMPANY, Dayton, Ohio. Filed Dec. 31, 1930. Serial No. 309,529.

MIAMI

For Tool Steel.
Claims use since Jan. 1, 1927.

296,745. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) MATHUSHEK PIANO MFG. COMPANY, New York, N. Y. Filed June 4, 1931. Serial No. 315,410.

Spinet Grand

For Pianos.
Claims use since May 5, 1931.

296,746. (CLASS 39. CLOTHING.) BERKWITS & BLOOMFIELD, INC., New York, N. Y. Filed June 25, 1931. Serial No. 316,246.

Kitty Burke
TRADE MARK

For Ladies' Hats.
Claims use since June 5, 1931.

296,747. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed June 30, 1931. Serial No. 316,502.

ALASKA SUCKER

For Sticks or Handles for Suckers.
Claims use since June 26, 1928.

296,748. (CLASS 38. PRINTS AND PUBLICATIONS.) THE DAYTON ABSTRACT & LAND TITLE COMPANY, Dayton, Ohio. Filed July 16, 1931. Serial No. 316,992.

PHOTO-PLAT

For Maps.
Claims use since Jan. 20, 1927.

296,749. (CLASS 39. CLOTHING.) VERNON H. MOSS, Lynn, Mass. Filed July 30, 1931. Serial No. 317,481.



For Boots and Shoes of Leather, Fabric, or Combinations Thereof.
Claims use since June 17, 1931.

296,750. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ZOLLINGER & SCHBOTH INC., New York, N. Y. Filed Aug. 13, 1931. Serial No. 317,965.

DULLSHEEN SATIN

For Silk Piece Goods.
Claims use since July 13, 1931.

296,751. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) J. O. PITTS, Atlanta, Ga. Filed Oct. 28, 1931. Serial No. 320,370.

KRACKER STATE EGGS

For Fresh Eggs.
Claims use since Feb. 15, 1931.

296,752. (CLASS 39. CLOTHING.) THE H. C. GODMAN COMPANY, Columbus, Ohio. Filed Dec. 7, 1931. Serial No. 321,868.

Robt F. Harley
SHOES FOR MEN

For Shoes Constructed of Leather.
Claims use since June 5, 1930.

296,753. (CLASS 39. CLOTHING.) THE H. C. GODMAN COMPANY, Columbus, Ohio. Filed Dec. 7, 1931. Serial No. 321,875.

Bob Harley
SHOES FOR MEN

For Shoes Constructed of Leather.
Claims use since June 5, 1930.

296,754. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) ALL-AMERICAN MOHAWK CORPORATION, Chicago, Ill. Filed Dec. 10, 1931. Serial No. 321,977.

SPOT LIGHT TUNING DIALS

For Radio Receiving Sets and Component Parts Thereof, Consisting of Loud Speakers, Transformers, Fixed and Variable Condensers; and Radio Television Receiving Sets.
Claims use since Aug. 29, 1930.

296,755. (CLASS 39. CLOTHING.) GEORGE C. BOSSON, Jr., Cambridge, Mass. Filed Jan. 28, 1932. Serial No. 323,521.

BOSSON PROCESS

For Waterproof Clothing—Namely, Raincoats, Ponchos, Capes, Jackets, Coats, Pants, Negligee, Sport and Work Shirts, and Hats for Men, Women, and Children.
Claims use since May 6, 1931.

296,756. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) G. E. PRENTICE MANUFACTURING COMPANY, New Britain, Conn. Filed Apr. 11, 1932. Serial No. 325,997.

PERSONAL HARDWARE

For Base Metal Buckles for Belts, Suspenders, Garters, Shoes, Arm Bands, Gloves and Cap Bands; Base Metal and Pyroxylin Trimmings for Belts, Suspenders, Garters, Shoes and Clothing—Namely, Rings, Loops, Slides, Hooks, Keepers, Tags, Fobs, Tips, Markers, Binders, Supporters, Cast-Offs, Studs, Corners and Ornaments, and Pyroxylin Chains.
Claims use since 1919.

296,757. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) E. H. SCOTT RADIO LABORATORIES, INC., Chicago, Ill. Filed Apr. 25, 1932. Serial No. 326,499.

SCOTT

For Radio Receiving Sets and Radio Receiving Apparatus—Namely, Audio Frequency Transformers, Intermediate Frequency Transformers, Radio Frequency Transformers, Special Transformers, Coils; Radio Wave Generating Apparatus—Namely Oscillators, Antennæ; Sound Reproducers—Namely, Loud Speakers; Switches, Tuning Condensers, Remote Control Apparatus, Antenna Tuners, Tuning Dials; Apparatus for Amplifying Electrical Currents—Namely, Assembled Audio Frequency Amplifying Units, Apparatus for Furnishing Current Supply for Radio Receivers—Namely, Power Amplifiers, Power Packs, Recorders, Microphone Stands, Microphone Control Boxes, Control Panels, Long and Short Wave Converters.
Claims use since May 21, 1927.

296,758. (CLASS 17. TOBACCO PRODUCTS.) EXCELSIOR TOBACCO CO. INC., St. Louis, Mo. Filed Apr. 29, 1932. Serial No. 326,606.

"NICKEL"

CIGAR SCRAP

For Cigar Scraps.
Claims use since Jan. 1, 1929.

296,759. (CLASS 17. TOBACCO PRODUCTS.) W. H. SNYDER & SONS, Windsor, Pa. Filed May 23, 1932. Serial No. 327,373.

Tiffany

For Cigars.
Claims use since Jan. 2, 1907.

296,760. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) CALIFORNIA PERFUME COMPANY, INC., New York, N. Y. Filed June 3, 1932. Serial No. 327,674.

Avon

For a Shaving Cream, Shaving Stick, Toilet Soap, a Dry Cleaning Preparation in Powder Form, Silver Polish, a Dry Cleaning Preparation Known as a Spot Remover, White Shoe Dressing, and Metal Polish.
Claims use since September, 1929.

296,761. (CLASS 37. PAPER AND STATIONERY.) THE CHATFIELD PAPER CORPORATION, Cincinnati, Ohio. Filed June 4, 1932. Serial No. 327,727.

Reliable

For Bond Paper.
Claims use since 1918.

296,762. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) BOSTON GEAR WORKS, INC., North Quincy, Mass. Filed June 7, 1932. Serial No. 327,786.

BOSTON

Applicant claims ownership of trade-mark registration No. 136,717, issued Nov. 2, 1920.
For Spur Gears, Worm Gears and Worms Therefor; Miter Gears, Spiral Gears, Spiral Miter Gears, Non-Metallic Gears, Change Gears, Internal Gears, Bevel Gears, Racks and Pinions Therefor; Chain Drives, Sprocket Wheels; Jaw, Sleeve, and Flexible Couplings; Anti-Friction Bearings, Bushings, Universal Joints, Oil Cups, Pillow Blocks, Pulleys, Speed Reducers, and Pinion Rods.
Claims use since Dec. 15, 1915.

296,763. (CLASS 45. BEVERAGES, NONALCOHOLIC.) BUFFALO ROCK CO., Birmingham, Ala. Filed July 12, 1932. Serial No. 328,720.

Hill's Special

For Carbonated Non-Alcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks, and Syrups and Extracts Used in Making the Same.
Claims use since May 30, 1930.

TRADE-MARK REGISTRATIONS RENEWED

38,557. TUBULAR AND PRONGED RIVETS. Registered July 1, 1902. TUBULAR RIVET & STUD COMPANY, Boston, Mass., a Corporation of Massachusetts. Renewed July 1, 1932.

38,729. A FOOT POWDER. Registered August 5, 1902. JOHN W. MANNING, Albany, Tex. Renewed August 5, 1932, to John W. Manning, Fort Worth, Tex.

39,050. CERTAIN NAMED CARBONS. Registered October 14, 1902. GEBRÜDER SIEMENS & Co., Charlottenberg, Germany. Renewed October 14, 1932, to Siemens-Planiawerke A. G. für Kohlefabrikate, Berlin-Lichtenberg, Germany, a Corporation of Germany, assignee.

39,288. BRONZE AND GOLD PAINTS AND POWDERS. Registered November 18, 1902. GERSTENDORFER BROS. Renewed November 18, 1932, to Sapolin Co. Inc., New York, N. Y., a Corporation of New York, assignee.

39,371. BREAKFAST FOOD-BEVERAGES. Registered December 2, 1902. THE MALTECHOCLA COMPANY. Renewed December 2, 1932, to Horlick's Malted Milk Corporation, Racine, Wis., a Corporation of Delaware, assignee by mesne assignments.

39,374. CEREAL FOOD PRODUCTS. Registered December 2, 1902. The H–O (HORNBY'S OATMEAL) COMPANY, Buffalo and New York, N. Y. Renewed December 2, 1932, to Hecker-H–O Company, Inc., Buffalo, N. Y., a Corporation of New York, assignee.

39,409. CERTAIN NAMED TELEPHONIC APPARATUS. Registered December 2, 1902. HUTCHISON ACOUSTIC CO., New York, N. Y. Renewed December 2, 1932, to Dictograph-Products Company, Inc., Jamaica, N. Y., a Corporation of Delaware, assignee by mesne assignments.

39,458. MOUTH WASH. Registered December 9, 1902. TILIT-LABORATORIUM, CAROL BERNARDI NACHFOLGER, Leipsic, Germany. Renewed December 9, 1932, to Tilit-Laboratorium Gesellschaft mit beschränkter Haftung, Dresden, Germany, a Corporation of Germany, successor.

39,522. A MEDICINE FOR DISEASES OF THE NERVOUS SYSTEM. Registered December 23, 1902. SMITH KLINE & FRENCH CO. Renewed December 23, 1932, to Smith, Kline & French Laboratories, Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

87,046. A PREPARATION FOR CERTAIN AILMENTS. Registered June 25, 1912. FRANCIS M. CRISWELL, Washington, D. C. Renewed June 25, 1932.

87,138. MATCHES. Registered July 2, 1912. AKTIEBOLAGET SÖDERTELJE TÄNDSTICKSFABRIK, Orgryte, near Gottenborg, Sweden. Renewed July 2, 1932, to Jonkopings och Vulcans Tandsticksfabriksaktiebolag, Jonkoping, Sweden, a Corporation of Sweden, assignee, by mesne assignments.

87,140. FERTILIZERS. Registered July 2, 1912. AMERICAN AGRICULTURAL CHEMICAL COMPANY. Renewed July 2, 1932, to The American Agricultural Chemical Company, New York, N. Y., a Corporation of Delaware, assignee.

87,204. CALIFORNIA WINE. Registered July 2, 1912. GOLDBERG, BOWEN & Co., San Francisco, Calif., a Corporation of California. Renewed July 2, 1932.

87,216. MATCHES. Registered July 2, 1912. JÖNKÖPINGS OCH VULCANS TÄNDSTICKSFABRIKSAKTIEBOLAG, Jonkoping, Sweden, a Corporation of Sweden. Renewed July 2, 1932.

87,217. MATCHES. Registered July 2, 1912. JÖNKÖPINGS OCH VULCANS TÄNDSTICKSFABRIKSAKTIEBOLAG, Jonkoping, Sweden, a Corporation of Sweden. Renewed July 2, 1932.

87,252. CERTAIN PAINTS AND PAINTERS' MATERIALS. Registered July 2, 1912. THE PATTERSON-SARGENT COMPANY, Cleveland, Ohio, a Corporation of Ohio. Renewed July 2, 1932.

87,304. KIPPERED HERRINGS, HERRINGS, AND SMOKED SARDINES. Registered July 9, 1912. A/S SARDINFABRIKKEN NORRIG. Renewed July 9, 1932, to A/S Hermetikfabriken Norrig, Stavanger, Norway, a Corporation of Norway, successor.

87,311. CERTAIN CONSTRUCTION MATERIALS. Registered July 9, 1912. BARRETT MANUFACTURING COMPANY. Renewed July 9, 1932, to The Barrett Company, New York, N. Y., a Corporation of New York, assignee.

87,312. PREPARED TAR, PITCH, AND ASPHALT FOR ROOFING CONSTRUCTION. Registered July 9, 1912. BARRETT MANUFACTURING COMPANY. Renewed July 9, 1932, to The Barrett Company, New York, N. Y., a Corporation of New Jersey, assignee.

87,326 BUTTER. Registered July 9, 1912. DETROIT CREAMERY COMPANY, Detroit, Mich., a Corporation of Michigan. Renewed July 9, 1932.

87,341. COTTON PIECE GOODS. Registered July 9, 1912. A. G. HYDE & SONS. Renewed July 9, 1932, to Fred Butterfield & Co., Inc., New York, N. Y., a Corporation of New York, assignee.

87,385. ROOFING-FELT. Registered July 9, 1912. WARREN CHEMICAL & MANUFACTURING COMPANY. Renewed July 9, 1932, to The Barrett Company, New York, N. Y., a Corporation of New Jersey, successor.

87,437. HOSIERY. Registered July 16, 1912. ELIZABETH CITY HOSIERY CO., Elizabeth City, N. C., a Corporation of North Carolina. Renewed July 16, 1932.

87,513. FERTILIZERS. Registered July 23, 1912. AMERICAN AGRICULTURAL CHEMICAL COMPANY. Renewed July 23, 1932, to The American Agricultural Chemical Company, New York, N. Y., a Corporation of Delaware, assignee.

87,560. CERTAIN TOILET PREPARATIONS. Registered July 23, 1912. THE OWL DRUG COMPANY, San Francisco, Calif. Renewed July 23, 1932, to Darnee, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

87,787. STEEL AND METALLIC PENS. Registered August 6, 1912. WILLIAM MITCHELL (PENS) LIMITED. Renewed August 6, 1932, to British Pens, Limited, Birmingham, England, a Corporation of Great Britain, assignee.

87,796. LUBRICATING-GREASES. Registered August 6, 1912. PENNSYLVANIA LUBRICATING COMPANY. Renewed August 6, 1932, to Pennsylvania Lubricating Company, Pittsburgh, Pa., a Corporation of Delaware, assignee.

87,919. METAL HOSE. Registered August 13, 1912. PENNSYLVANIA FLEXIBLE METALLIC TUBING COMPANY, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed August 13, 1932.

88,011. FOOT-MEASURING CHARTS. Registered August 20, 1912. SOLOMON MAYER, Boston, Mass. Renewed August 20, 1932, to Geo. E. Keith Company, Brockton, Mass., a Corporation of Massachusetts, assignee by mesne assignments.

88,030. EARTH-AUGERS. Registered August 20, 1912. STANDARD EARTH AUGER CO., Chicago, Ill. Renewed August 20, 1932, to The Specialty Device Co., Cincinnati, Ohio, a Corporation of Ohio, assignee by mesne assignments.

88,049. TAR-DISTILLATES FOR USE AS DETERGENTS. Registered August 27, 1912. BARRETT MANUFACTURING COMPANY. Renewed August 27, 1932, to The Barrett Company, New York, N. Y., a Corporation of New Jersey, assignee.

88,097. HOSIERY. Registered August 27, 1912. LORD & TAYLOR. Renewed August 27, 1932, to Gotham Silk Hosiery Company, Inc., New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,307. CANNED SALMON. Registered September 10, 1912. KELLEY-CLARKE CO., Seattle, Wash., a Corporation of Washington. Renewed September 10, 1932.

88,353. FERTILIZERS. Registered September 10, 1912. PATAPSCO GUANO CO., Baltimore, Md. Renewed September 10, 1932, to The American Agricultural Chemical Company, New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,392. REFINED PETROLEUM FOR ILLUMINATING, HEATING, AND POWER PURPOSES. Registered September 10, 1912. WEST INDIA OIL COMPANY, Bayonne, N. J. Renewed September 10, 1932, to West India Oil Company, Newark, N. J., a Corporation of New Jersey.

88,452. SPECIALLY-PREPARED PITCH FOR CERTAIN NAMED CONSTRUCTION PURPOSES. Registered September 24, 1912. BARRETT MANUFACTURING COMPANY. Renewed September 24, 1932, to The Barrett Company, New York, N. Y., a Corporation of New Jersey, assignee.

88,488. CIGARS, SMOKING AND CHEWING TOBACCO AND CIGARETTES. Registered September 24, 1912. THE HEMMETER CIGAR COMPANY, Bay City and Detroit, Mich., a Corporation of Michigan. Renewed September 24, 1932.

88,502. A HAIR-ERADICATOR. Registered September 24, 1912. BERTHE E. LEVY, New York, N. Y. Renewed September 24, 1932, to Jean Jordeau, Inc., South Orange, N. J., a Corporation of New Jersey, assignee.

88,529. ILLUMINATING-OILS. Registered September 24, 1912. STANDARD OIL CO. OF NEW YORK. Renewed September 24, 1932, to Socony-Vacuum Corporation, New York, N. Y., a Corporation of New York, by change of name.

88,531. SOAP. Registered September 24, 1912. THE STORK COMPANY, Boston, Mass. Renewed September 24, 1932, to Luxor, Limited, Chicago, Ill., a Corporation of Maine, assignee by mesne assignments.

88,548. SCOURING-SOAP. Registered October 1, 1912. BON AMI COMPANY. Renewed October 1, 1932, to The Bon Ami Company, New York, N. Y., a Corporation of Delaware, assignee.

88,607. GASOLENE, BENZIN, NAPHTHA, AND REFINED OIL FOR ILLUMINATING, HEATING, AND POWER PURPOSES. Registered October 1, 1912. WEST INDIA OIL COMPANY, Bayonne, N. J. Renewed October 1, 1932, to West India Oil Company, Newark, N. J., a Corporation of New Jersey.

88,659. ROOFING FELTS AND PAPERS. Registered October 15, 1912. BARRETT MANUFACTURING COMPANY. Renewed October 1, 1932, to The Barrett Company, New York, N. Y., a Corporation of New Jersey, assignee.

88,701. TYPE-WRITING MACHINES. Registered October 15, 1912. REMINGTON TYPEWRITER COMPANY. Renewed October 15, 1932, to Remington Typewriter Company, Ilion and New York, N. Y., a Corporation of New York, assignee.

88,862. A REMEDY FOR CERTAIN NAMED DISEASES. Registered October 29, 1912. FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, Hochst-on-the-Main, Germany. Renewed October 29, 1932, to H. A. Metz Laboratories, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

88,968. CERTAIN CHEMICALS AND PHARMACEUTICAL PREPARATIONS. Registered October 29, 1912. THE SOLVAY PROCESS COMPANY, Solvay, N. Y. Renewed October 29, 1932, to The Solvay Process Company, New York, N. Y., a Corporation of New York.

88,980. COTTON AND WOOLEN KNITTED UNDERWEAR. Registered October 29, 1912. UTAH KNITTING CO. Renewed October 29, 1932, to Ogden-Utah Knitting Company, Ogden, Utah, a Corporation of Utah, successor.

89,112. SOAP, SOLID AND LIQUID. Registered November 12, 1912. RICHARD HUDNUT, New York, N. Y., a Corporation of New York. Renewed November 12, 1932.

89,130. A CERTAIN CHEMICAL PREPARATION FOR CLEANING GARMENTS. Registered November 12, 1912. MONROE DRUG CO. Renewed November 12, 1932, to Monroe Chemical Company, Quincy, Ill., a Corporation of Maryland, assignee.

89,155. AN OIL-PAINT USED AS A WALL AND CEILING FINISH. Registered November 12, 1912. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio, a Corporation of Ohio. Renewed November 12, 1932.

89,265. WATCHES AND CLOCKS. Registered December 3, 1912. ROBT. H. INGERSOLL & BRO., New York, N. Y. Renewed December 3, 1932, to Waterbury Clock Company, Waterbury, Conn., a Corporation of Connecticut, assignee.

89,266. WATCHES AND CLOCKS. Registered December 3, 1912. ROBT. H. INGERSOLL & BRO., New York, N. Y. Renewed December 3, 1932, to Waterbury Clock Company, Waterbury, Conn., a Corporation of Connecticut, assignee.

89,282. ARTIFICIAL PEARLS. Registered December 3, 1912. JOSEPH H. MEYER BROS., New York, N. Y. Renewed December 3, 1932, to Joseph H. Meyer Brothers, Brooklyn, N. Y., a Corporation of New York.

89,284. CERTAIN NAMED FOODS. Registered December 3, 1912. MORRIS & COMPANY. Renewed December 3, 1932, to The North American Provision Company, Chicago, Ill., a Corporation of Illinois, assignee.

89,338. TALCUM POWDER, PERFUME, TOILET WATER, SACHET-POWDER, AND COLD-CREAM. Registered December 10, 1912. THE CITIZENS' WHOLESALE SUPPLY COMPANY, Columbus, Ohio, a Corporation of Ohio. Renewed December 10, 1932.

89,365. DISTILLED AND CARBONATED WATER, FLAVORED BEVERAGES, AND SYRUPS FOR MAKING BEVERAGES. Registered December 10, 1912. HYGRADE WATER & SODA CO., St. Louis, Mo., a Corporation of Missouri. Renewed December 10, 1932.

89,409. CERTAIN NAMED PIECE GOODS. Registered December 10, 1912. L. MONDON. Renewed December 10, 1932, to Albert Godde Bedin, Inc., New York, N. Y., a Corporation of New York, assignee.

89,434. AUTOPNEUMATIC PLAYER-PIANOS. Registered December 17, 1912. THE BALDWIN COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed December 17, 1932.

89,494. FERTILIZER. Registered December 17, 1912. PACIFIC BONE COAL & FERTILIZING COMPANY, San Francisco, Calif., a Corporation of California. Renewed December 17, 1932.

89,495. CANNED SALMON. Registered December 17, 1912. PACIFIC FISHERIES & PACKING COMPANY, Aberdeen, Wash. Renewed December 17, 1932, to Pioneer Packing Company, Seattle, Wash., a Corporation of Washington, assignee.

89,509. SAWS. Registered December 17, 1912. SIMONDS MANUFACTURING COMPANY, Fitchburg, Mass.; Chicago, Ill.; New York and Lockport, N. Y.; New Orleans, La.; Portland, Oreg.; Seattle, Wash.; San Francisco, Calif.; Montreal, Quebec, and St. John, New Brunswick, Canada, and London, England. Renewed December 17, 1932, to Simonds Saw and Steel Company, Fitchburg, Mass., a Corporation of Massachusetts, assignee.

89,514. A LIQUID FILLER FOR CERTAIN USES ON HARD AND SOFT WOODS. Registered December 17, 1912. STANDARD VARNISH WORKS, New York, N. Y., a Corporation of New York. Renewed December 17, 1932.

89,527. BEEF-BROTH PREPARATIONS. Registered December 24, 1912. AMERICAN KITCHEN PRODUCTS COMPANY, New York, N. Y., a Corporation of New York. Renewed December 24, 1932.

89,531. CRAYONS. Registered December 24, 1912. BINNEY & SMITH COMPANY, New York, N. Y., a Corporation of New Jersey. Renewed December 24, 1932.

89,563. CERTAIN NAMED TOOLS. Registered December 24, 1912. MATHIAS KLEIN & SONS. Renewed December 24, 1932, to Mathias Klein & Sons, Chicago, Ill., a Corporation of Illinois, assignee.

89,564. CERTAIN NAMED TOOLS AND PARTS OF MACHINERY. Registered December 24, 1912. MATHIAS KLEIN & SONS. Renewed December 24, 1932, to Mathias Klein & Sons, Chicago, Ill., a Corporation of Illinois, assignee.

89,597. FOUNTAIN-PENS AND PARTS THEREOF. Registered December 31, 1912. AIKEN-LAMBERT COMPANY, New York, N. Y., a Corporation of New York. Renewed December 31, 1932.

89,605. CANNED SALMON. Registered December 31, 1912. ASTORIA & PUGET SOUND CANNING CO., South Bellingham, Wash., a Corporation of Washington. Renewed December 31, 1932.

89,609. CHEWING-GUM. Registered December 31, 1912. AUTOSALES GUM & CHOCOLATE COMPANY, New York, N. Y. Renewed December 31, 1932, to American Chicle Company, Long Island City, N. Y., a Corporation of New Jersey, assignee by mesne assignments.

89,631. CERTAIN NAMED CUTLERY AND TOOLS. Registered December 31, 1912. HENRY DISSTON & SONS, INCORPORATED, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed December 31, 1932.

89,636. WHEAT-FLOUR. Registered December 31, 1912. EMPIRE STATE FLOUR MILLS, Syracuse, N. Y. Renewed December 31, 1932, to Hecker-Jones-Jewell Milling Company, New York, N. Y., a Corporation of New York, assignee.

89,640. SIDE-LEATHERS. Registered December 31, 1912. S. B. FOOT & CO., Red Wing, Minn., a Corporation of Minnesota. Renewed December 31, 1932.

89,651. TELEPHONE PAY-STATIONS. Registered December 31, 1912. THE GRAY TELEPHONE PAY STATION COMPANY, Hartford, Conn., a Corporation of Connecticut. Renewed December 31, 1932.

89,669. COTTON YARNS. Registered December 31, 1912. JEWEL COTTON MILLS, Thomasville, N. C., a Corporation of North Carolina. Renewed December 31, 1932.

89,672. BAKING-POWDER AND BAKING-SODA. Registered December 31, 1912. LAYTON PURE FOOD COMPANY, East St. Louis, Ill. Renewed December 31, 1932, to Rumford Chemical Works, Rumford, R. I., a Corporation of Rhode Island, assignee.

89,711. ENAMELS, READY-MIXED PAINTS, VARNISHES, AND VARNISH-REMOVERS. Registered December 31, 1912. STANDARD VARNISH WORKS, New York, and Port Richmond, N. Y. Renewed December 31, 1932, to Standard Varnish Works, New York, N. Y., a Corporation of New York.

89,722. CANDIES AND CHOCOLATES. Registered December 31, 1912. WALLACE & CO., New York and Brooklyn, N. Y. Renewed December 31, 1932, to Wallace & Co., Brooklyn, N. Y., a Corporation of New Jersey.

89,723. CANDIES AND CHOCOLATES. Registered December 31, 1912. WALLACE & CO., New York and Brooklyn, N. Y. Renewed December 31, 1932, to Wallace & Co., Brooklyn, N. Y., a Corporation of New Jersey.

89,724. CANDIES AND CHOCOLATES. Registered December 31, 1912. WALLACE & CO., New York and Brooklyn, N. Y. Renewed December 31, 1932, to Wallace & Co., Brooklyn, N. Y., a Corporation of New Jersey.

89,729. OUTER SHIRTS. Registered December 31, 1912. THE YORKE SHIRT CO., Glens Falls and New York, N. Y., a Corporation of New York. Renewed December 31, 1932.

89,816. FLOUR. Registered January 14, 1913. THE CLEVELAND MILLING CO. Renewed January 14, 1933, to Fairchild Milling Company, Cleveland, Ohio, a Corporation of Ohio, assignee.

89,822. BED-FRAMES, BED-SPRINGS, BED-MATTRESSES, AND PILLOWS. Registered January 14, 1913. DEWITT-SEITZ COMPANY, Augusta, Me., and Duluth, Minn., a Corporation of Maine. Renewed January 14, 1933.

89,872. CANNED FRUITS. Registered January 14, 1913. OCEANA CANNING CO., Shelby, Mich., a Corporation of Michigan. Renewed January 14, 1933.

LABELS

REGISTERED AUGUST 16, 1932

41,016.—*Title:* SIRIAN ULTRA-VIOLET LAMP. For Ultra-Violet Lamps. ARCTURUS RADIO TUBE COMPANY, Newark, N. J. Published July 19, 1932.

41,017.—*Title:* CLIMAX. For Ginger Ale. THE BEAUFONT CO., INC., Richmond, Va. Published April 1, 1932.

41,018.—*Title:* CAJOMA CLEANSER. For Liquid Cleansing Compound. JOSEPH CAPPELLO, Detroit, Mich. Published May 1, 1932.

41,019.—*Title:* SPAGHETTI A LA MUSSOLINI. For Canned Spaghetti. COLLEGE INN FOOD PRODUCTS CO., Chicago, Ill. Published April 15, 1932.

41,020.—*Title:* COLLEGE INN RICE DINNER. For Spanish Style Rice Dinner. COLLEGE INN FOOD PRODUCTS CO., Chicago, Ill. Published April 15, 1932.

41,021.—*Title:* COSMOS ULTRA-VIOLET. For Lamps. COSMOS CORPORATION, Newark, N. J. Published June 24, 1932.

41,022.—*Title:* NU-WAX. For Waxed Paper. CUPPLES COMPANY, MANUFACTURERS, St. Louis, Mo. Published March 3, 1930.

41,023.—*Title:* JUAREZ WHISKEY STRAIGHT AMERICAN. For Whiskey. D. M. DISTILLERY CO., S. A., Juarez, Mexico. Published July 14, 1932.

41,024.—*Title:* KOLD-LAX. For Liquid Cold Preparation. ERNEST C. FOKES, doing business as Kold Lax Laboratories, La Grange, Ga. Published January 1, 1930.

41,025.—*Title:* SMART SET SALMON FOR SALAD. For Salmon. G. P. HALFERTY & CO., Seattle, Wash. Published June 10, 1932.

41,026.—*Title:* HANSON'S. For Orange Juice. HANSON & CHOATE CO., Los Angeles, Calif. Published April 15, 1932.

41,027.—*Title:* EX-LO. For a Preparation for Keeping the Skin Smooth, Soft, and Free from Irritations. HARMON PHARMACEUTICAL CO., INC., Philadelphia, Pa. Published May 9, 1932.

41,028.—*Title:* IN DIANA DYRAT. For Powdered Rat Poison. DAVID HONOROFF, Gary, Ind. Published May 2, 1932.

41,029.—*Title:* ROMANOFF CAVIAR TOASTIES. For Caviar Toasties. HUNTLEY & PALMERS, LIMITED, Reading and London, England. Published July 1, 1932.

41,030.—*Title:* POPLAR. For Bacon. THE E. KAHN'S SONS COMPANY, Cincinnati, Ohio. Published December 1, 1929.

41,031.—*Title:* AVALON. For Soap Powder. THE KROGER GROCERY & BAKING COMPANY, Cincinnati, Ohio. Published April 1, 1932.

41,032.—*Title:* LIGHTNING CLEANSER. For Cleansing Compound. LIGHTNING CLEANSER CO., Primos, Del. Published May 18, 1932.

41,033.—*Title:* GLAD NEST. For Hosiery. HERMAN MANTELL, New York, N. Y. Published July 27, 1931.

41,034.—*Title:* MILLERINE. For Treatment for the Hair. D. L. MILLER, doing business as Millerine Company, Seattle, Wash. Published June 15, 1932.

41,035.—*Title:* WHIF. For Household Insecticide. NORTHWESTERN OIL COMPANY, Superior, Wis. Published March 25, 1932.

41,036.—*Title:* NERVATOL. For Reconstructive Stimulant and Tonic. W. E. PAALHAR, doing business as Vitono Medicine Company, Los Angeles, Calif. Published February 24, 1932.

41,037.—*Title:* FAMOUS PECOS VALLEY CANTALOUPES. For Cantaloupes. PECOS CANTALOUPE ASSOCIATION, Pecos, Tex. Published May 31, 1932.

41,038.—*Title:* KEYNO CARD-O. For Game. SELMA PRESS, INC., Chicago, Ill. Published March 22, 1932.

41,039.—*Title:* ITALY. For Tuna Fish. SOUTHERN CALIFORNIA FISH CORPORATION, Terminal Island, Calif. Published April 25, 1932.

41,040.—*Title:* TROJAN TABLETS. For Tablets. TROJAN COMPANY, Fort Dodge, Iowa. Published June 16, 1932.

41,041.—*Title:* 76 LUSTRE WAX. For Lustre Wax for Tile, Woodwork, Automobiles, Linoleum, and Floors. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published January 25, 1932.

41,042.—*Title:* AUTO WHISTLING BOMBS. FOR Auto Whistling Bombs. THE VIRGINIA FIREWORKS CO., INC., Petersburg, Va. Published May 31, 1932.

41,043.—*Title:* PERI SKIN REPAIRER. For Toilet Preparation. JULIAN L. WALLER, San Francisco, Calif. Published April 28, 1932.

41,044.—*Title:* WARD'S RYE BREAD—SLICED. For Bread. WARD BAKING COMPANY, New York, N. Y. Published June 21, 1932.

PRINTS

REGISTERED AUGUST 16, 1932

13,821.—*Title:* THE CORRECT MAKE-UP COULD HAVE SAVED A FALLEN STAR. For Lipsticks. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published July 16, 1932.

13,822.—*Title:* STOP RIFLING THE "U. S. MALES!" For Athletic Underwear. THE B. V. D. COMPANY, INC., New York, N. Y. Published June 25, 1932.

13,823.—*Title:* LIVELY WOOL IS BLENDED FROM PRIZE CARPET WOOLS. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published May 21, 1932.

13,824.—*Title:* LIVELY WOOL STAYS YOUNG LONGER. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published May 21, 1932.

13,825.—*Title:* AND ONLY LIVELY WOOL COULD GIVE YOUR RUG SUCH RICHNESS IN TONES. For Rugs. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published May 21, 1932.

13,826.—*Title:* HERE'S AN 8-POINT MERCHANDISING POLICY. For Rugs and Carpets. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published June 25, 1932.

13,827.—*Title:* BOUNDING OVER THE BOUNDING SEAS. For Carpets. BIGELOW-SANFORD CARPET CO. INC., New York, N. Y. Published July 1, 1932.

13,828.—*Title:* CARROCCIO'S GRATED CHEESE. For Grated Cheese. T. A. CARROCCIO & SONS, New York, N. Y. Published June 23, 1932.

13,829.—*Title:* COL-TEX GASOLINE. For Gasoline. COL-TEX REFINING COMPANY, Wilmington, Del., and Oklahoma City, Okla. Published December 23, 1931.

13,830.—*Title:* BABIES NO LONGER • • • YET THEY FACE GRAVE DANGERS! For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published June 20, 1932.

13,831.—*Title:* HOTCHA. For Dresses. LA MODE GARMENT COMPANY, Chicago, Ill. Published April 9, 1932.

13,832.—*Title:* DEMAND DR. P. PHILLIPS—STAMPED —TREE RIPE—FRESH FROM MY GROVES ORANGES, GRAPEFRUIT, TANGERINES. For Oranges, Grapefruit, and Tangerines. DR. P. PHILLIPS Co., Orlando, Fla. Published December 14, 1931.

13,833.—*Title:* INFECTED GOLF CLUBS. For Chemical Preparation in Powder Form for Use Upon the Hands of Athletes. RUSSELL SEE, Rahway, N. J. Published May 10, 1932.

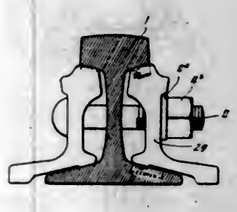
13,834.—*Title:* LOOK FOR THE STARS—THE GUARANTEE OF A QUALITY BARREL OR KEG. For Barrels and Kegs. ST. LOUIS COOPERAGE COMPANY, St. Louis, Mo. Published July 13, 1932.

13,835.—*Title:* VIBRO POWER. For Radio Apparatus. UNITED AMERICAN BOSCH CORPORATION, Springfield, Mass. Published July 13, 1932.

REISSUES

AUGUST 16, 1932

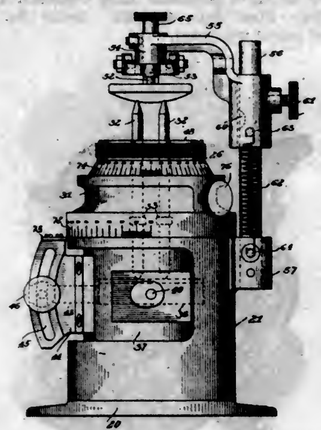
18,568. TIGHT CENTER BAR. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Original No. 1,799,380, dated Apr. 7, 1931, Serial No. 349,567, filed Mar. 25, 1929. Application for reissue filed Feb. 26, 1932. Serial No. 596,649. 26 Claims. (Cl. 238—243.)



28. A rail joint bar reformed from an originally rolled bar, said reformed bar having at least one of its top and bottom members of uniform width throughout its length, and said member having its included fishing surface made of less effective rail contacting width at its end portions than at its center portion by partial depression of each end portion of the original fishing surface out of the plane of rail fishing contact.

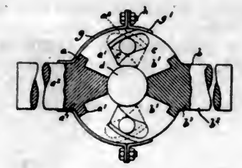
18,569. LENS BLOCKING DEVICE. JOSEPH J. MCCABE, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Original No. 1,727,889, dated Sept. 10, 1929, Serial No. 196,112, filed June 2, 1927. Application for reissue filed June 26, 1931. Serial No. 547,163. 32 Claims. (Cl. 51—277.)

24. A lens blocking stand having in combination a base, means for supporting a lens, said means being movably mounted on said base to turn about different axes, a holder for a lens block and means for producing a relative move-



ment between said holder and said first named means to bring the lens and block into contact with each other.

18,570. UNIVERSAL JOINT. CARL W. WEISS, Brooklyn, N. Y. Original No. 1,769,762, dated July 1, 1930, Serial No. 381,114, filed July 26, 1929. Application for reissue filed July 1, 1932. Serial No. 620,521. 1 Claim. (Cl. 64—91.)



A universal joint having two members capable of relatively angular displacement and having coacting teeth with their proximate faces formed with non-concentric grooves intersecting at an angle and a relatively movable body received partly in each of such grooves and through which force is transmitted from one coacting portion to the other, each proximate face of each tooth being relieved within its outer surface to form a space between two adjacent teeth for coaction with the corresponding tooth of the other member, and to leave a reinforcing portion at the outer surface of each tooth at each side extending laterally over the space between adjacent teeth.

DESIGNS

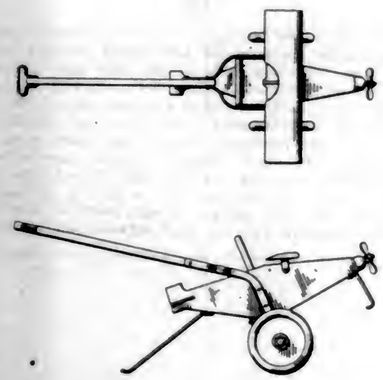
AUGUST 16, 1932

87,559. LACE. WILLIAM R. ADAIRE, Fox Chase, Pa., assignor to North American Lace Company, Philadelphia, Pa. Filed June 4, 1932. Serial No. 43,987. Term of patent 3½ years.



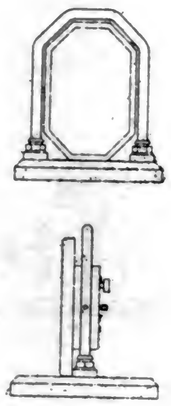
The ornamental design for lace substantially as shown.

87,560. CHILD'S VEHICLE OR SIMILAR ARTICLE. JOHN ALEXANDER ANDERSON, Edson, Alberta, Canada. Filed Apr. 4, 1932, Serial No. 43,379, and in Canada Mar. 11, 1932. Term of patent 7 years.



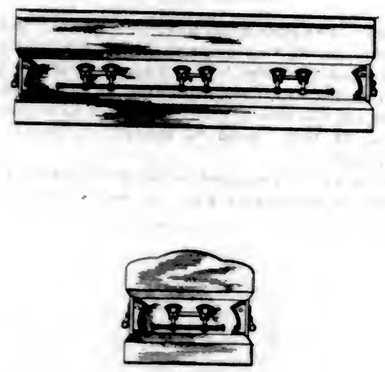
The ornamental design for a child's vehicle or similar article, substantially as shown.

87,561. CLOCK. ELOF L. CARLSON, Bristol, Conn., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed Nov. 19, 1930. Serial No. 87,711. Term of patent 14 years.



The ornamental design for a clock as shown and described.

87,562. BURIAL VAULT. RALPH COHEN, Galion, Ohio, assignor to Perfection Steel Body Co., Galion, Ohio, a Corporation of Ohio. Filed July 2, 1932. Serial No. 44,243. Term of patent 14 years.



The ornamental design for a burial vault, as shown.

87,563. HAT. MARIA CONSTANTINE, New York, N. Y. Filed June 2, 1932. Serial No. 43,961. Term of patent 7 years.



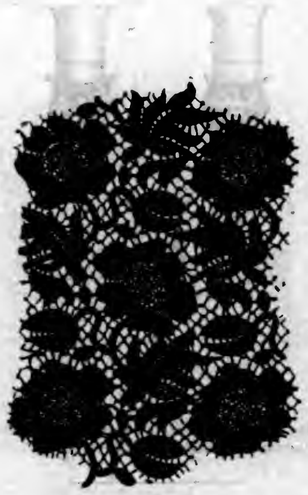
The ornamental design for a hat, as shown.

87,564. HAND MIRROR OR SIMILAR TOILET ARTICLE. ALFRED S. DONALDSON, Newark, N. J., assignor to Du Pont Viscoloid Company, Wilmington, Del., a Corporation of Delaware. Filed May 17, 1932. Serial No. 43,826. Term of patent 3½ years.



The ornamental design for a hand mirror or similar toilet article as shown.

87,565. LACE. BERT EDSON, Pawtucket, R. I., assignor to New England Lace Mills Inc., New York, N. Y. Filed June 29, 1932. Serial No. 44,219. Term of patent 3½ years.



The ornamental design for lace substantially as shown.

87,566. HEAD OF A CANE OR SIMILAR ARTICLE. CHARLES H. DUDLEY, Hanover, N. H. Filed Apr. 27, 1932. Serial No. 43,625. Term of patent 14 years.



The ornamental design for a head of a cane or similar article as shown and described.

87,567. BOTTLE OPENER. ALFRED J. FLAUDER, Trumbull, Conn., assignor to The Weidlich Bros. Mfg. Co., Bridgeport, Conn., a Corporation of Connecticut. Filed June 22, 1932. Serial No. 44,165. Term of patent 7 years.



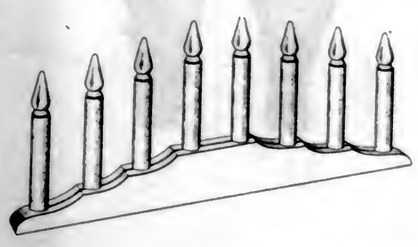
The ornamental design for a bottle opener, substantially as shown and described.

87,568. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed June 11, 1932. Serial No. 44,056. Term of patent 3½ years.



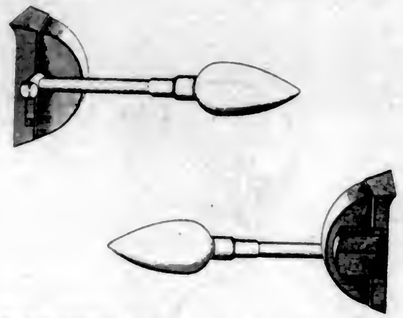
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

87,569. DECORATIVE LIGHTING DEVICE. MORRIS GOLDMAN, Bridgeport, Conn. Filed Nov. 3, 1931. Serial No. 41,608. Term of patent 7 years.



The ornamental design for a decorative lighting device, as shown.

87,570. MOTOR VEHICLE DIRECTION INDICATOR SIGNAL. ALLEN EVERT HALL, Newport News, Va. Filed Mar. 22, 1932. Serial No. 43,262. Term of patent 14 years.



The ornamental design for a motor vehicle direction indicator signal as shown.

87,571. BELT FOR PERSONAL WEAR. HARRY A. HAMILTON, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed June 18, 1932. Serial No. 44,124. Term of patent 3½ years.



The ornamental design for a belt for personal wear, as shown and described.

87,572. BELT FOR PERSONAL WEAR. HARRY A. HAMILTON, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed June 18, 1932. Serial No. 44,126. Term of patent 3½ years.



The ornamental design for a belt for personal wear, as shown and described.

87,573. EMBROIDERED TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH HARTMANN, Garfield, N. J. Filed June 20, 1932. Serial No. 44,148. Term of patent 3½ years.



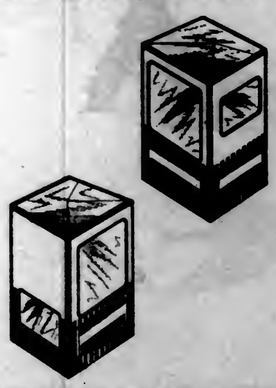
The ornamental design for an embroidered textile fabric or similar article substantially as shown and described.

87,574. CHECK WRITER. HERBERT R. HEDMAN, Winnetka, Ill., assignor to The Hedman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1932. Serial No. 44,140. Term of patent 14 years.



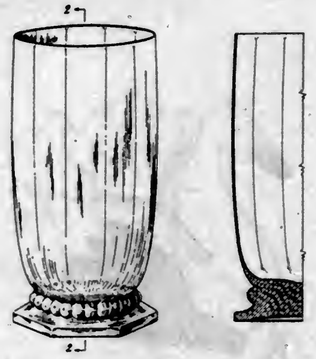
The ornamental design for a check writer, as shown and described.

87,575. CAKE BOX. HARRIET HEILE, Chicago, Ill., assignor to Ward Baking Company, New York, N. Y., a Corporation of New York. Filed May 21, 1932. Serial No. 43,863. Term of patent 14 years.



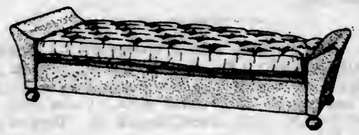
The ornamental design for a cake box as shown and described.

87,576. GOBLET OR SIMILAR ARTICLE OF GLASSWARE. THOMAS CLARENCE HEISEY, Newark, Ohio, assignor to A. H. Heisey Company, Newark, Ohio, a Corporation of Ohio. Filed Feb. 26, 1932. Serial No. 43,005. Term of patent 14 years.



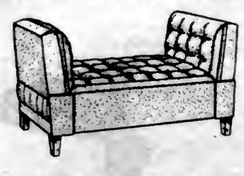
The ornamental design for a goblet or similar article of glassware substantially as shown.

87,577. COMBINATION BED AND DIVAN. EUGENIA M. HOEY, San Francisco, Calif. Filed May 24, 1932. Serial No. 43,887. Term of patent 7 years.



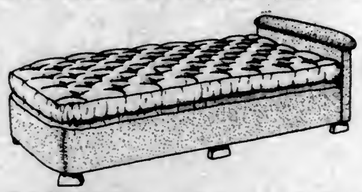
The ornamental design for a combination bed and divan, substantially as shown.

87,578. COMBINATION BED AND DIVAN. EUGENIA M. HOEY, San Francisco, Calif. Filed May 24, 1932. Serial No. 43,888. Term of patent 14 years.



The ornamental design for a combination bed and divan, substantially as shown.

87,579. COMBINATION BED AND DIVAN. EUGENIA M. HOEY, San Francisco, Calif. Filed May 24, 1932. Serial No. 43,889. Term of patent 7 years.



The ornamental design for a combination bed and divan, substantially as shown.

87,580. INFLATABLE TOY. CLARENCE W. HUBBELL, Naugatuck, Conn., assignor to Revere Rubber Company, Providence, R. I., a Corporation of Rhode Island. Filed Jan. 8, 1932. Serial No. 42,420. Term of patent 3½ years.



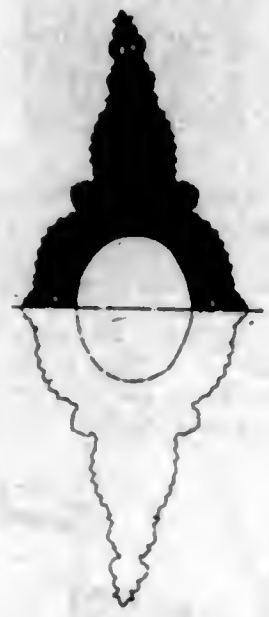
The ornamental design for an inflatable toy as shown and described.

87,581. NECKPIECE FOR A WOMAN'S GARMENT OR SIMILAR ARTICLE. NATHAN KLEIN, Newark, N. J., assignor to Jacques J. Alder, North Bergen, N. J., doing business as J. J. Alder & Co., Union City, N. J. Filed June 20, 1932. Serial No. 44,149. Term of patent 3½ years.



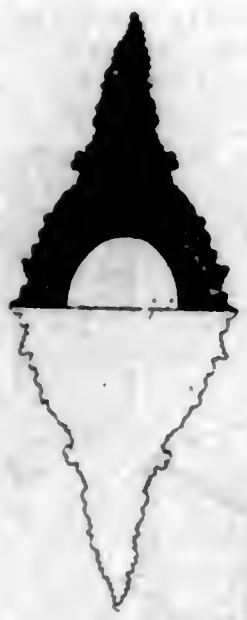
The ornamental design for a neckpiece for a woman's garment or similar article substantially as shown and described.

87,582. NECKPIECE FOR A WOMAN'S GARMENT OR SIMILAR ARTICLE. NATHAN KLEIN, Newark, N. J., assignor to Jacques J. Alder, North Bergen, N. J., doing business as J. J. Alder & Co., Union City, N. J. Filed June 27, 1932. Serial No. 44,201. Term of patent 3½ years.



The ornamental design for a neckpiece for a woman's garment or similar article substantially as shown and described.

87,583. LACE YOKE FOR A NECKPIECE FOR A WOMAN'S GARMENT OR SIMILAR ARTICLE. NATHAN KLEIN, Newark, N. J., assignor to Jacques J. Alder, North Bergen, N. J., doing business as J. J. Alder & Co., Union City, N. J. Filed June 27, 1932. Serial No. 44,202. Term of patent 3½ years.



The ornamental design for a lace yoke for a neckpiece for woman's garment or similar article substantially as shown and described.

87,584. SIGN PLATE FOR AN AUTOMOTIVE SIGNAL. RICHARD W. LEIBEAT, Pittsburgh, Pa. Filed June 20, 1931. Serial No. 40,283. Term of patent 3½ years.



The ornamental design for a sign plate for an automotive signal, as shown and described.

87,585. SHOE. LOUIS M. LEVERONE, Allston, Mass. Filed June 9, 1932. Serial No. 44,031. Term of patent 3½ years.



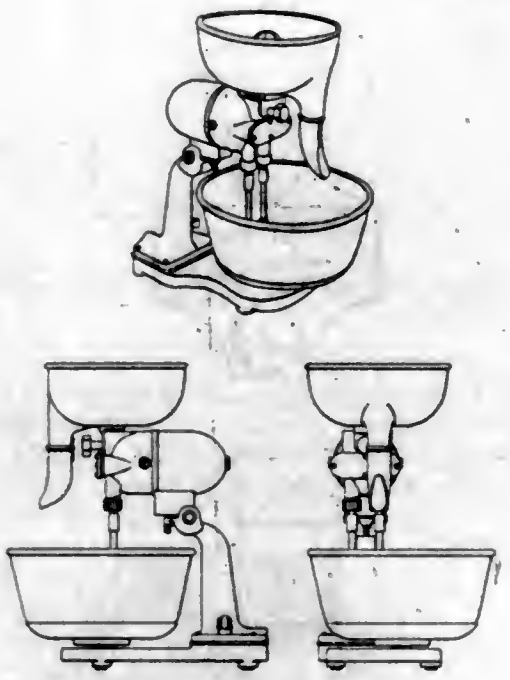
The ornamental design for a shoe as shown and described.

87,586. COUNTER SERVICE TEAPOT. JAMES GRAYSON LUTTRELL, Baltimore, Md., assignor to McCormick & Co., Incorporated, Baltimore, Md., a Corporation of Maryland. Filed June 23, 1932. Serial No. 44,173. Term of patent 7 years.



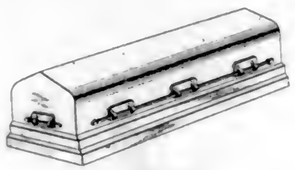
The ornamental design for a counter service teapot, substantially as shown.

87,587. COMBINED HOUSEHOLD FOOD MIXER AND JUICE EXTRACTOR. MICHAEL W. MCARDLE, Chicago, Ill. Filed July 13, 1931. Serial No. 40,516. Term of patent 14 years.



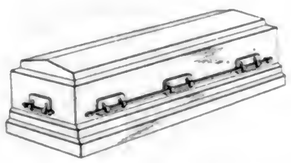
The ornamental design for a combined household food mixer and juice extractor, as shown.

87,588. BURIAL VAULT. WALTER J. MICHAEL, Bucyrus, Ohio. Filed June 13, 1932. Serial No. 44,061. Term of patent 7 years.



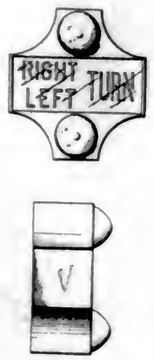
The ornamental design for a burial vault as shown.

87,589. BURIAL VAULT. WALTER J. MICHAEL, Bucyrus, Ohio. Filed June 13, 1932. Serial No. 44,062. Term of patent 7 years.



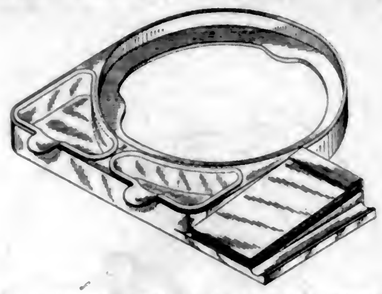
The ornamental design for a burial vault as shown.

87,590. SIGNAL LIGHT CASING. JOHN MONACO, East Orange, N. J. Filed June 13, 1932. Serial No. 44,073. Term of patent 14 years.



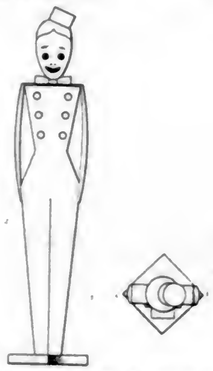
The ornamental design for a signal light casing, as shown.

87,591. BASE FOR A TELEPHONE INSTRUMENT. WALTER J. PAFF, Dayton, Ohio, assignor to R. E. Helfinstine, Dayton, Ohio. Filed Mar. 22, 1932. Serial No. 43,258. Term of patent 7 years.



The ornamental design for a base for a telephone instrument, as shown.

87,592. FIGURETTE. EDWARD PFEIFFER, New York, N. Y. Filed May 23, 1932. Serial No. 43,886. Term of patent 3½ years.



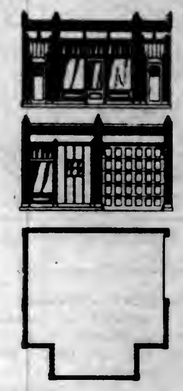
The ornamental design for a figurette as shown.

87,593. FRET BAR FOR USE IN PLAYING STRINGED INSTRUMENTS. JACOB S. PREISNER, New Haven, Conn. Filed Sept. 16, 1931. Serial No. 41,121. Term of patent 7 years.



The ornamental design for a fret-bar for use in playing stringed instruments as shown.

87,594. SERVICE BUILDING. GUY LYNN ROSEBROOK, Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 13, 1931. Serial No. 40,197. Term of patent 3½ years.



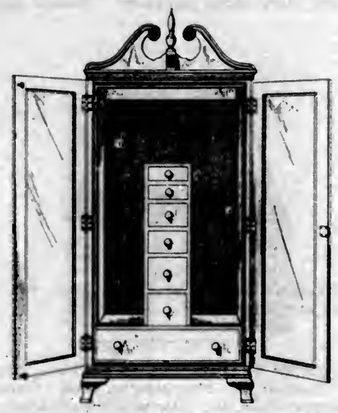
The ornamental design for a service building, substantially as shown and described.

87,595. SCREW BOLT OR SIMILAR ARTICLE. HEYMAN ROSENBERG, New York, N. Y. Filed May 18, 1932. Serial No. 43,792. Term of patent 14 years.



The ornamental design for a screw bolt or similar article, substantially as shown and described.

87,596. CABINET. THOMAS D. SCHAADT, Fullerton, Pa. Filed July 16, 1931. Serial No. 40,574. Term of patent 3½ years.



The ornamental design for a cabinet as shown and described.

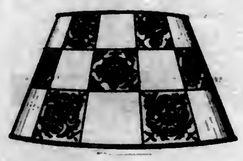
87,597. CLOCK. MAX SCHLENKER, La Salle, Ill., assignor to Western Clock Company, Peru, Ill., a Corporation of Illinois. Filed May 25, 1932. Serial No. 43,895. Term of patent 7 years.





The ornamental design for a clock, as shown and described.

87,598. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed June 16, 1932. Serial No. 44,090. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

87,599. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed June 16, 1932. Serial No. 44,091. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

87,600. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed June 16, 1932. Serial No. 44,092. Term of patent 3½ years.



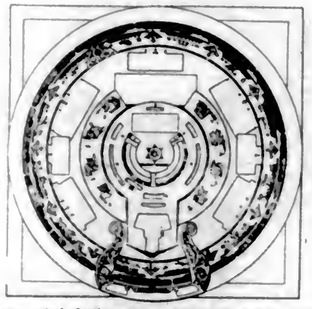
The ornamental design for a lamp shade, substantially as shown and described.

87,601. EXPANSIBLE APPAREL BELT. MAX SILVERMAN and HERMAN POMERANTZ, New York, N. Y. Filed Dec. 31, 1931. Serial No. 42,342. Term of patent 7 years.



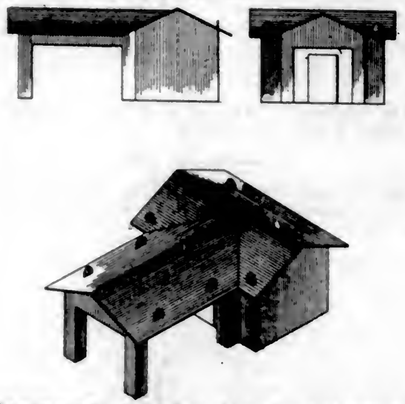
The ornamental design for an expansible apparel belt, as shown and described.

87,602. HOROSCOPE. RICHARD SPENCER, Fort Worth, Tex. Filed June 9, 1932. Serial No. 44,022. Term of patent 3½ years.



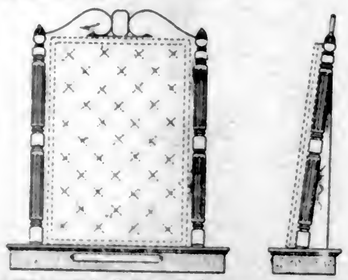
The ornamental design for a horoscope as shown.

87,603. TOY BUILDING. CLEMENT L. STEPHENSON, Rochester, N. Y., assignor of one-half to Wegman-Walsh Press, Inc., Rochester, N. Y., a Corporation of New York. Filed May 23, 1932. Serial No. 43,881. Term of patent 3½ years.



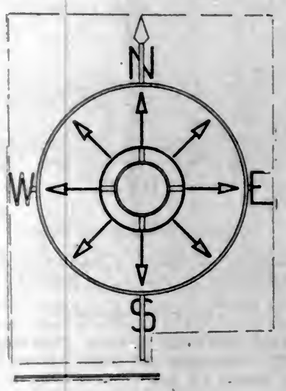
The ornamental design for a toy building substantially as shown.

87,604. COMBINED ADVERTISING STAND AND MATTRESS SUPPORT. HOWARD M. TAYLOR, Baltimore, Md. Filed May 27, 1931. Serial No. 40,014. Term of patent 14 years.



The ornamental design for a combined advertising stand and mattress support, as shown and described.

87,605. MARKER FOR AVIATION FIELDS OR THE LIKE. WALLACE F. TERRY, Pittsburgh, Pa., assignor to Ira C. Houck, trustee for H. S. Harrop, F. G. Bishoff, R. W. Williams, and Wallace F. Terry. Filed Jan. 24, 1931. Serial No. 38,441. Term of patent 7 years.



The ornamental design for a marker for aviation fields or the like, substantially as shown and described.

87,606. MUG OR SIMILAR ARTICLE. ROBERT W. THOMAS, Lancaster, Ohio, assignor to General Glass Corporation, Lancaster, Ohio, a Corporation of Indiana. Filed Mar. 24, 1932. Serial No. 43,280. Term of patent 3½ years.



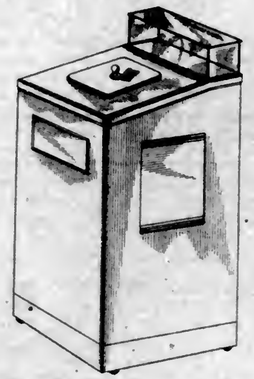
The ornamental design for a mug or similar article, as shown.

87,607. GASOLINE DISPENSING PUMP. GEORGE W. VOS, New Rochelle, N. Y. Filed June 16, 1932. Serial No. 44,093. Term of patent 14 years.



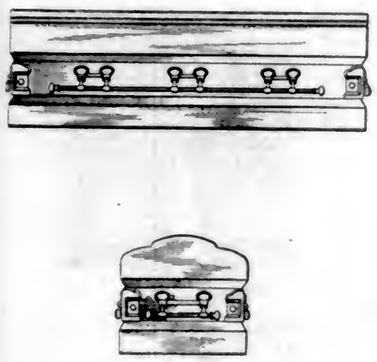
The ornamental design for a gasoline dispensing pump, as shown.

87,608. DISPENSING CABINET. WARREN S. WATTS, Montclair, N. J., assignor to Eskimo Pie Corporation, New York, N. Y. Filed May 2, 1932. Serial No. 43,685. Term of patent 14 years.



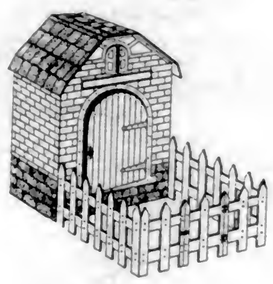
The ornamental design for a dispensing cabinet, as shown.

87,609. BURIAL VAULT. CLARENCE J. WEGNER, Gallon, Ohio, assignor to Perfection Steel Body Co., Gallon, Ohio, a Corporation of Ohio. Filed July 2, 1932. Serial No. 44,244. Term of patent 14 years.



The ornamental design for a burial vault, as shown.

87,610. TOY HOUSE OR SIMILAR ARTICLE. LEO L. WEISS, New York, N. Y. Filed June 9, 1932. Serial No. 44,024. Term of patent 3½ years.



The ornamental design for a toy house or similar article, substantially as shown.

87,611. FOUNTAIN PEN OR SIMILAR ARTICLE. JOHN N. WHITEHOUSE, New York, N. Y. Filed Apr. 23, 1932. Serial No. 43,584. Term of patent 7 years.



The ornamental design for a fountain pen or similar article substantially as shown and described.

87,612. TOY WHISTLE. FRANK X. WIRSHUBER, Chicago, Ill. Filed Mar. 23, 1932. Serial No. 43,270. Term of patent 3½ years.



The ornamental design for a toy whistle as shown.

PATENTS

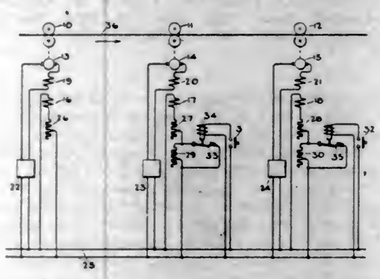
GRANTED AUGUST 16, 1932

1,871,436. PRESSING AND IRONING MACHINE. CHARLES E. WAREAM, Norwood, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 3, 1930. Serial No. 465,555. 6 Claims. (Cl. 68—9.)



1. In a machine of the class described, a supporting frame, a plurality of spaced work receiving bucks, means for connecting said bucks together in a gang, means for conveying said bucks through a given path, a plurality of rotatable ironing rolls fixed at various points in the path for engagement with said bucks, and means in the path of said bucks operative upon being actuated by a buck for rendering said conveying means ineffective.

1,871,437. CONTROL SYSTEM FOR ROLLING MILLS. HARRY A. WINNE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 21, 1931. Serial No. 510,314. 6 Claims. (Cl. 80—35.)



3. A control system for apparatus including a plurality of roll stands for continuously treating strip material comprising a separate driving motor for each of said stands, means for adjusting the speeds of said motors to establish a predetermined speed relation between them, means for maintaining said speed relation, a resistance in a control circuit for certain of said motors, a normally closed switch for short circuiting each of said resistances, electromagnetic means for opening said switches, and a push button switch for controlling said electromagnetic means to open said short circuit and thereby temporarily increase the speeds of said motors without disturbing said speed adjusting means.

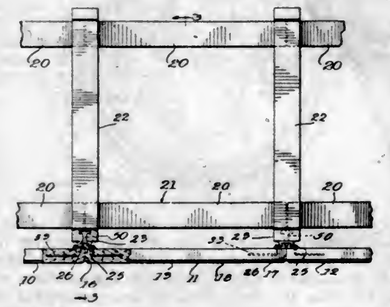
1,871,438. METHOD OF MANUFACTURING TIRE CASINGS. ADRIAN O. ABBOTT, Jr., Detroit, Mich., assignor to Morgan and Wright, Detroit, Mich., a Corporation of Michigan. Filed Mar. 15, 1928. Serial No. 261,832. 8 Claims. (Cl. 154—14.)

1. That method of manufacturing tire casings which consists in, assembling constituent rubberized ply-rubber and bead-elements in band form, interposing between the contacting faces of the rubberized-plies material which possesses adhesion preventing qualities at normal



temperatures but not at a vulcanizing temperature, shaping the band to approximately tire form, and vulcanizing.

1,871,439. CRIBBING. EARL C. ALEXANDER, Glen Ellyn, Ill., assignor to Massey Concrete Products Corporation, Chicago, Ill., a Corporation of Virginia. Filed Nov. 5, 1931. Serial No. 573,170. 11 Claims. (Cl. 61—47.)

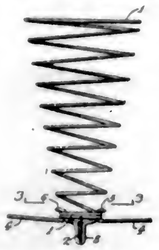


1. A concrete facing assembly comprising a pair of concrete facing blocks each having substantially plane faces, plane upper and lower bearing surfaces and plane ends with a pair of securing fixtures carried by the rear side of said facing blocks, said fixtures being located adjacent each other at one edge of two adjacent blocks and having oppositely sloping camming surfaces, and a clamping member having complementary camming surfaces oppositely disposed to the surfaces on said fixtures whereby said blocks are drawn together and secured together when said clamping member is placed on said fixtures.

1,871,440. MEANS TO SECURE COILED SPRINGS TO A SUPPORT. DEAN S. BARNARD, Hinsdale, Ill., assignor to The Rome Company, Inc., a Corporation of New York. Filed June 15, 1931. Serial No. 544,490. 1 Claim. (Cl. 5—265.)

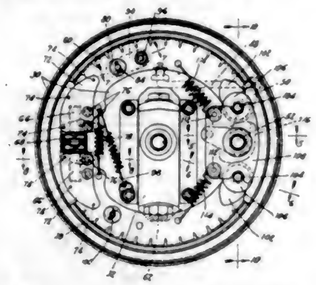
In a spring cushion, a series of parallel bars, vertical coiled springs arranged in a row one upon each bar, a heavy wire extending transversely to the bars underneath the springs, said wire having at each bar a bend in the form of a U provided with a central depending narrower U, each narrower U embracing the corresponding bar from the side opposite that on which the spring is located, each wider U fitting into the end of the adjacent

spring, the arms of each wide U being composed of two sections of wire lying side by side in a plane parallel with the length of the corresponding bar, and the ends



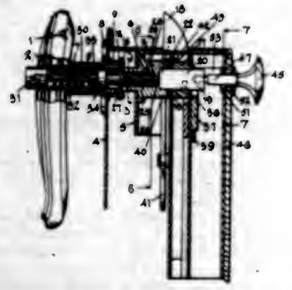
of the arms of each wide U being bent outwardly over a coil of the spring within which it lies to hold the spring against the underlying bar.

1,871,441. BRAKE MECHANISM. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 8, 1927. Serial No. 159,806. 31 Claims. (Cl. 188—78.)



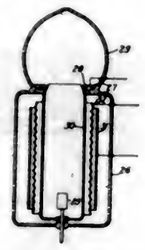
1. A brake comprising, in combination, retarding means, a shaft having an arm angularly movable therewith, and a floating applying device for the retarding means including a floating lever having members straddling the arm, the lever being pivotally connected at its end to the end of said arm and means adjacent the applying device for restraining lateral movement of the retarding means.

1,871,442. LOCKING-MECHANISM FOR DOORS. KARL A. BENZEE, Toledo, Ohio, assignor of one-half to Burrell A. Keeler, Toledo, Ohio. Filed May 18, 1931. Serial No. 537,017. 7 Claims. (Cl. 70—91.)



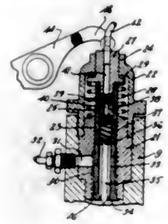
1. In a locking mechanism for door latch bolts having a frame, a door handle, a sleeve connected to the door handle and supported in the frame, a plunger connected to the latch bolt, a socket formed in the sleeve for receiving the plunger, and means for moving the said plunger from the socket to disconnect the sleeve from the latch bolt.

1,871,443. SPACE CURRENT DEVICE. RUDOLF G. BERTHOLD, Berlin-Siemensstadt, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 26, 1925, Serial No. 58,843, and in Germany Oct. 6, 1924. 4 Claims. (Cl. 250—27.5.)



2. A space-current device comprising a hermetically closed envelope, a diffusion diaphragm dividing said envelope into an anode chamber and a cathode chamber, an anode in said anode chamber, said anode chamber to be maintained at a high vacuum, a mercury cathode and a cooperating electrode in said cathode chamber, said diffusion diaphragm having openings adjacent the periphery of the stream of mercury vapor from said cathode.

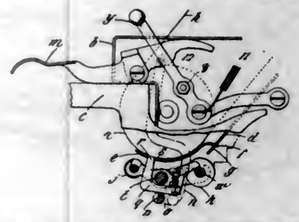
1,871,444. FUEL INJECTION MEANS FOR INTERNAL COMBUSTION ENGINES. GEORGE W. CODRINGTON, Lakewood, Ohio. Filed Sept. 15, 1930. Serial No. 481,870. 1 Claim. (Cl. 103—40.)



Liquid fuel injection means for an internal combustion engine comprising injection pump means having a valve-supporting body, a hollow inlet valve seating in said body and having a tubular stem part extending through the wall thereof, an outlet valve seating within said inlet valve, said inlet valve having a flexible pump outlet connection without said body and providing communication with the inlet valve hollow, and unseating gear without said body and associated with said inlet valve stem to control the pump output.

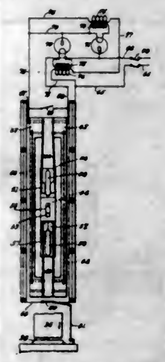
1,871,445. PAPER FEEDING AND RETAINING ARRANGEMENT FOR TYPEWRITERS. JOHN JOSEPH COOPER, London, England, assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1928, Serial No. 267,170, and in Great Britain July 15, 1927. 4 Claims. (Cl. 197—127.)

4. In a typewriting machine having a cylinder and feed-rollers, the combination with a feed-roller release key, of a gripper effective to grip the margin of a sheet on said cylinder by the casting off of said feed-rollers by said key, an independently-operable finger-piece, and means on said key and operable by said finger-piece for



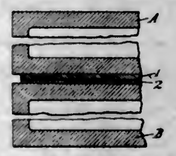
moving and maintaining said feed-rollers away from the platen, and moving said gripper towards the platen without gripping the sheet.

1,871,446. ELECTRIC HAMMER. STILES M. DECKER, Leonia, N. J. Filed Apr. 24, 1928. Serial No. 272,372. 6 Claims. (Cl. 172—126.)



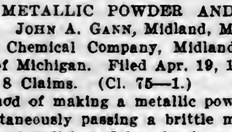
1. A variable speed self-starting electric motor operable by single phase alternating current without phase splitting or special starting devices, said motor comprising magnetic bodies guided one for travel in a definite path relative to the other, a primary winding carried by one body, a closed secondary carried by the other body in inductive relation to the primary winding, and means for energizing said primary winding at such a time in the relation of said relatively movable bodies that the magnetic fluxes resulting from the primary and secondary will react, and by their mutual repulsion will move the travelling magnetic body in the direction in which it is guided to travel, and means for arbitrarily varying the timing of the repulsive reactions independently of the frequency of the single phase exciting current.

1,871,447. METHOD OF FLATTENING FLEXIBLE SHEETS FACED WITH WOOD. ARMIN ELMENDORF, Chicago, Ill., assignor to The Flexwood Company, a Corporation of Delaware. Filed May 16, 1931. Serial No. 537,803. 4 Claims. (Cl. 144—309.)



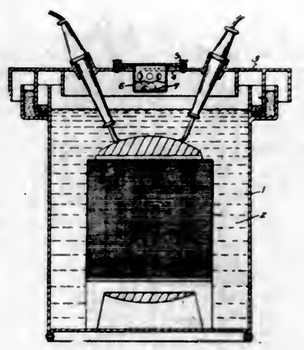
1. The method of eliminating bulges in dry, thin wood veneer due to unequal shrinkage in the direction of the grain in drying from a green state, which consists in pressing the veneer flat, heating the veneer to a temperature in the neighborhood of the boiling point of water, and maintaining the pressure and the heat until the wood has softened.

1,871,448. TOOL FOR DRESSING THE GRINDSTONES IN WOOD GRINDERS. ALBERT ELSENHANS, Essen, Germany. Filed Dec. 17, 1930, Serial No. 503,007, and in Germany Dec. 31, 1929. 1 Claim. (Cl. 125—37.)



In a tool for dressing grindstones in wood grinders the combination of a central hub, consisting of mouldable material, and sheets of flexible thin spring steel embedded therein the flats of which conform to high pitched helicoidal surfaces and the outer edges being disposed on a cylindrical periphery so as to form invariably sharp cutting edges extending in helical lines, and being cast in place with their inner parts after being arranged in due twisted position.

1,871,449. GAS FILLED TANK. OTTO H. ESCHHOLZ, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 6, 1922. Serial No. 592,898. 4 Claims. (Cl. 220—85.)

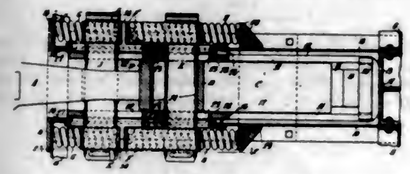


1. The combination with a casing for electrical apparatus adapted to be immersed in insulating liquid, and a space above said liquid for inert gas, of a liquid seal for isolating said space from the atmosphere under predetermined conditions and for permitting communication therebetween under other conditions, and means for removing oxygen from such air as may enter the tank through the liquid seal.

1,871,450. METALLIC POWDER AND METHOD OF MAKING. JOHN A. GANN, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Apr. 19, 1929. Serial No. 356,611. 8 Claims. (Cl. 75—1.)

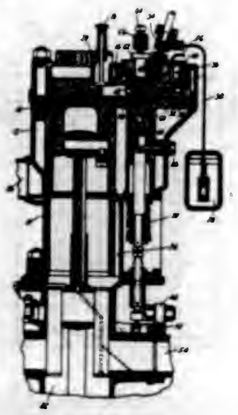
1. A method of making a metallic powder, which comprises simultaneously passing a brittle magnesium-aluminum alloy and polished flake aluminum through a pulverizing zone.

1,871,451. RAILWAY DRAFT RIGGING. WILLIAM A. GEIGER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 10, 1928. Serial No. 260,560. 6 Claims. (Cl. 213—7.)



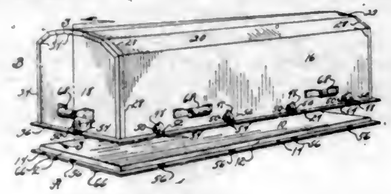
1. In a railway draft rigging, the combination with draft sills; of a friction shock absorbing mechanism interposed between the sills; a coupler; a pressure transmitting block interposed between the coupler and the friction shock absorbing mechanism; a yoke enclosing the friction shock absorbing mechanism; an independent spring shock absorbing means; a key having a lost motion connection with the yoke and also having a lost motion connection with the pressure transmitting block and co-operating with the spring shock absorbing means, whereby the actuating force is transmitted to the friction shock absorbing mechanism during the entire compression stroke during buff and through the pressure transmitting block to the spring shock absorbing means after a predetermined compression of the friction shock absorbing mechanism.

1,871,452. INJECTION ENGINE. JOHN D. HAY, South Bend, Ind., assignor, by mesne assignments, to Bendix Aviation Corporation, a Corporation of Delaware. Filed Sept. 30, 1925. Serial No. 59,596. 4 Claims. (Cl. 123—33.)



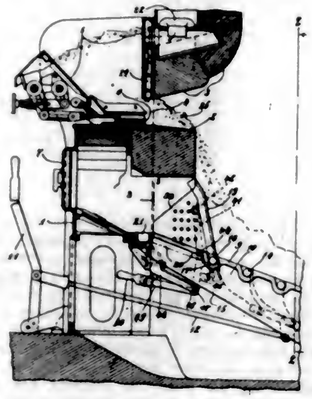
1. An engine of the injection type comprising, in combination, an engine cylinder and piston with a combustion chamber above the piston, an adjacent pump cylinder and piston, a passage from the pump cylinder opening into the combustion chamber and uncovered by the pump piston at the end of its suction stroke, an intake passage opening into the pump cylinder above the first passage, and a fuel passage opening into the intake passage in such a manner that gas rushing through the intake passage on the suction stroke of the pump piston will take up fuel from the fuel passage, the pump cylinder and piston being arranged to compress the fuel and the gas from the intake passage and the gas received from the combustion chamber at the end of the suction stroke and inject the compressed mixture into the combustion chamber at the end of the compression stroke of the pump piston.

1,871,453. SHEET METAL CASKET BOX. ROY L. COBB, Spencer, Iowa. Filed Apr. 13, 1931. Serial No. 529,557. 3 Claims. (Cl. 27—35.)



1. A sheet metal box including a body member having side walls, end walls and a top, the top of said body member being formed of a pair of outer sections formed integrally on said side walls, together with one or more separately formed intermediate sections, each extending longitudinally the entire length of the top, said top sections having interlocking connections at their adjacent margins, and connections at their ends with the end walls and being supported solely by such connections.

1,871,454. FURNACE. CHARLES J. HUBER, Baltimore, Md., assignor of one-half to Flynn and Emrich Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 25, 1927. Serial No. 215,280. 1 Claim. (Cl. 110—33.)

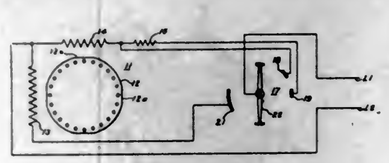


In a furnace, the combination with a coking shelf and a grate beneath the coking shelf, of means in the form of an upright grid section extending upwardly from the grate at a sharp angle to the grate substantially to the coking shelf, the upright grid section comprising a stationary portion and a swinging section which may be rotated forwardly and downwardly to give access to the fire, a fire door aligned with said swinging section, the upright grid section having at each side of the swinging member a forwardly projecting wing immediately adjacent and parallel to the path of said swinging section to support the fire when the swinging section is moved downwardly.

1,871,455. METHOD OF STARTING AN INDUCTION MOTOR. RICHARD H. JORDAN, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 22, 1930. Serial No. 483,486. 4 Claims. (Cl. 172—279.)

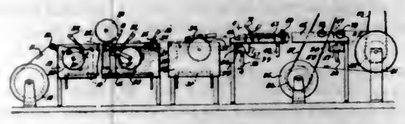
1. The method of starting a split-phase induction motor having a geometrically polarized rotor, a main and an auxiliary stator winding and a resistor connected in series

circuit with the auxiliary winding, which includes the steps of first energizing the auxiliary winding, then energizing the main winding while maintaining the energiza-



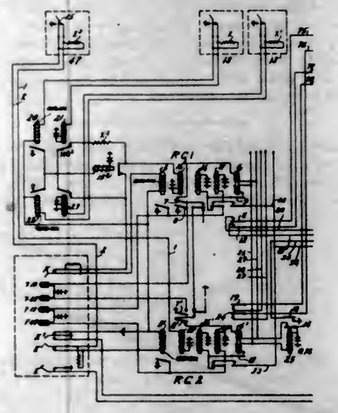
tion of the auxiliary winding, then maintaining the energization of the main winding and energizing the resistor in series circuit with the auxiliary winding.

1,871,456. METHOD OF AND APPARATUS FOR TREATING MATERIALS. RAY CHARLES KIVLEY, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 16, 1927. Serial No. 233,729. 10 Claims. (Cl. 91—68.)



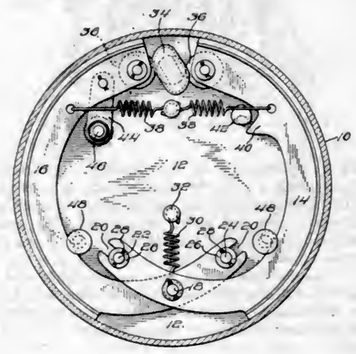
1. A method of weatherproofing material, which consists in coating a material with a weatherproofing compound, immersing the coated material in water, and compacting and polishing the compound upon the material while the coated material is submerged in the water.

1,871,457. SIGNALING SYSTEM. CLARENCE E. LOMAX, Oak Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 11, 1927. Serial No. 174,449. 7 Claims. (Cl. 177—360.)



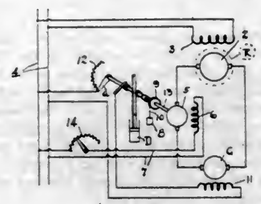
5. In an alarm system, a line, a resistance in said line normally short-circuited, a pair of relays normally energized over said line through said short circuit, one of said relays being marginal, means for removing said short circuit to include said resistance in said line, said marginal relay deenergized responsive to the inclusion of said resistance in said line, the other relay maintained energized through said resistance, alarm equipment operated responsive to the deenergization of said marginal relay to transmit an alarm, said other relay deenergized in case of an open circuit in the line, a trouble signal, and means responsive to the deenergization of said other relay for operating said trouble signal and for preventing the operation of said alarm equipment.

1,871,458. BRAKE. KENNETH E. LYMAN, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 2, 1928. Serial No. 274,384. 8 Claims. (Cl. 188—78.)



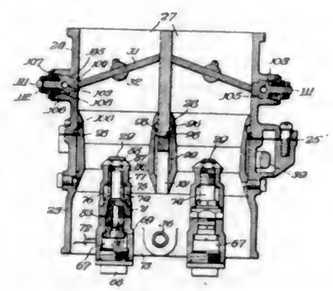
1. A brake comprising at least two floating overlapping shoes connected by a floating pivot intermediate the ends of said shoes, together with a fixed pivot on which one of the shoes fulcrums to apply the other.

1,871,459. CONTROL MEANS FOR SHEET FEEDING OR DELIVERING, OR THE LIKE. LLOYD E. MILLER, Cleveland Heights, Ohio, assignor to The Reliance Electric and Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 30, 1930. Serial No. 471,725. 20 Claims. (Cl. 271—2.3.)



1. In apparatus of the character described, a roll assembly for handling sheet material, a driving motor therefor, a generator supply E. M. F. to said driving motor, a control motor energized in the armature circuit of said driving motor and said generator, a weight, a cable suspending said weight at one end and having its other end wound on a pulley secured to the control motor shaft to counter the normal moving tendency thereof, means for preventing overrun of said control motor, said means including a closed-circuit band about the armature of said motor, and a variable resistance in the field circuit of said generator also operated by said control motor shaft.

1,871,460. AIRPLANE CARBURETOR. FRANK C. MOCK, Chicago, Ill., assignor to Bendix Stromberg Carburetor Company, Chicago, Ill., a Corporation of Illinois. Original application filed Jan. 16, 1924, Serial No. 686,474. Divided and this application filed Mar. 18, 1926, Serial No. 95,517. Renewed Apr. 11, 1929. 6 Claims. (Cl. 261—41.)



2. In a carburetor, the combination of a carbureting chamber having a throttle valve therein, a plug rotatably mounted in the wall of said carbureting chamber adjacent said throttle valve, an idling jet in said plug adapted to be displaced relative to said throttle by the rotation of said plug, a shank extending from said plug to the exterior of the carburetor, an arm on the outer end of said shank, a quadrant over which said arm is adapted to rotate, and means for holding said arm in different adjusted positions relative to said quadrant.

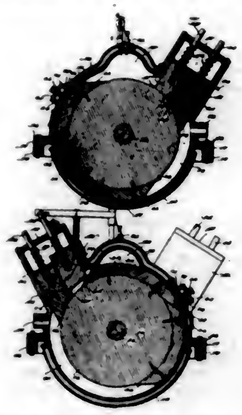
1,871,461. ANTIGLARE DEVICE FOR AUTOMOBILE DRIVERS. FRED MORE, Hobart, N. Y. Filed Feb. 3, 1932. Serial No. 590,735. 4 Claims. (Cl. 2—10.)



1. An attachment for hats, caps, or the like, including a light screen and means for clamping the light screen to the hat or cap, said means including a clamping structure engaging the hat and means for adjustably mounting the screen on the clamping structure, said means including a ball and socket structure, and a spring acting on the ball for yieldingly holding the same in different adjusted positions, said spring having a cupped end fitting over said ball providing a maximum friction with a minimum pressure.

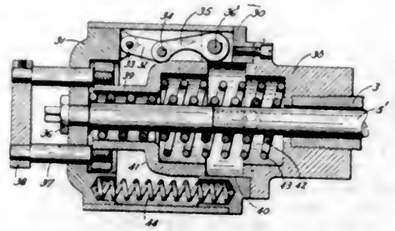
1,871,462. ROTARY MOTOR. WILLIAM E. MORSE, Rapid City, S. Dak. Filed Apr. 30, 1929. Serial No. 359,356. 2 Claims. (Cl. 123—14.)

1. A rotary engine comprising a rotor, a casing housing the rotor and provided with a compression chamber, said rotor having a pair of spaced annular grooves, a semicircular sealing strip secured in each groove and provided with tapered ends, one strip being located directly opposite the other strip, one of the grooves forming an intake and compression channel, the other groove forming an expansion and exhaust channel, the compression chamber extending across the rotor with the chamber tapering from the firing and compression channel to and across the expansion channel, a pair of co-operating spring-pressed abutments for each channel having the free ends



thereof normally disposed in their respective channels and slidably mounted in an offset of the casing, the casing having an intake port and an exhaust port.

1,871,463. CHUCK OPERATING DEVICE. JOHN A. OLSON, Cleveland, Ohio. Filed Nov. 19, 1928. Serial No. 320,398. 12 Claims. (Cl. 279—119.)



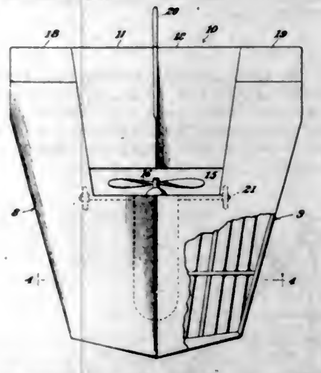
1. In a chuck draw rod operating device, a housing supported by the chuck drive tube, a head secured to the draw rod and reciprocable within said housing means to reciprocate said head including a plurality of toggle links pinned to the head and housing, means to actuate the toggle links including a cam reciprocally disposed about the draw rod, spring means to actuate the head and draw rod in one direction.

1,871,464. SAUSAGE CASING. SEYMOUR OPPENHEIMER, Chicago, Ill., assignor to Oppenheimer Casing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 12, 1932. Serial No. 598,383. 5 Claims. (Cl. 40—2.2.)



1. A sausage casing of the lined type comprising a pair of close-fitting sleeves, and label means positioned between said sleeves and externally visible through the outer sleeve.

1,871,465. AIRPLANE WING. GENE J. PARK and GEORGE ANTOL, New York, N. Y. Filed July 14, 1931. Serial No. 550,788. 2 Claims. (Cl. 244—12.)

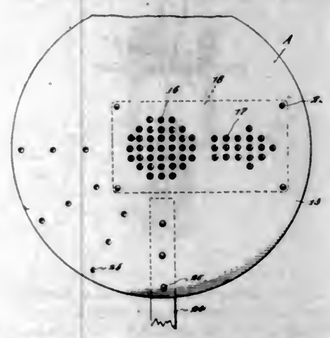


1. In an airplane, a pair of wings inclined upwardly from a longitudinal median line of the airplane and tapering in their combined width and in a forward direction, and a pair of auxiliary wings inclined downwardly from a longitudinal median line, said auxiliary wings being of much less width than the first said wings and terminating at the top face of the latter.

1,871,466. MANUFACTURE OF 1-AMINOANTHRAQUINONE-2-SULPHONIC ACID. ALBIN PETER, Basel, Switzerland, assignor to the Firm of Chemical Works formerly Sandoz, Basel, Switzerland. Filed Mar. 5, 1931, Serial No. 520,471, and in Germany Mar. 11, 1930. 2 Claims. (Cl. 260—60.)

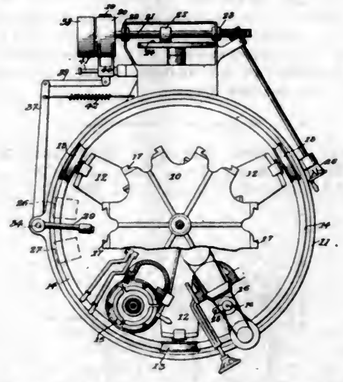
1. A process for the preparation of 1-aminoanthraquinone-2-sulphonic acid, consisting in heating to 210–240° C. a mixture of 1-aminoanthraquinone with such a quantity of an acid alkali sulphate that on each molecule of aminoanthraquinone at least one molecule of sulphuric acid will be present, while the water steam formed is eliminated during the heating.

1,871,467. DIRECTION INDICATOR. ALONZO B. TURK and GORDON T. GRANGER, Okmulgee, Okla. Filed Aug. 13, 1930. Serial No. 475,082. 3 Claims. (Cl. 40—130.)



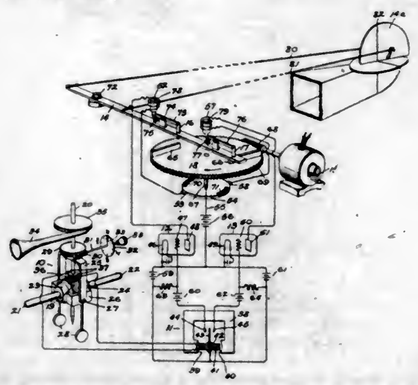
1. An apparatus for the reflection of light, a body plate having a series of central perforations therein forming a design, and a series of side perforations therein forming another design leading from the first design radially of the body plate and together with the first design forming a composite symbol, a clamping plate arranged in rear of the face plate and connected therewith having a plurality of indentations, reflecting elements clamped between said plates received in said indentations and partially projecting through said openings, a support extending back of the body plate, the body plate being formed with lines of openings extending radially of the plate, and fasteners passed through the support and a selected line of openings whereby the body plate may be secured to the support with the last mentioned design extending in a determined direction.

1,871,468. INTERNAL GRINDER CONTROL. CLIFFORD T. RAULE, Brookline, Pa. Filed Mar. 1, 1929. Serial No. 343,801. 7 Claims. (Cl. 51—50.)



3. In a multiple grinding machine, a turntable, duplicate grinding units, each comprising a grinding wheel, means for applying the wheel to or removing it from the work, and a work-holder, mounted at spaced intervals therearound and adapted to complete the grinding operation at each unit while the unit is making a single rotation of the turn-table, in combination with a device for automatically stopping the movement of the turntable as each unit reaches a designated point, and means for disconnecting the device for automatically stopping the turntable by a determinative movement of the grinding unit characteristic of removal of the grinding wheel from the work.

1,871,469. CONTROL SYSTEM FOR MOVING OBJECTS. THOMAS R. RHEA and JAMES D. TEAR, Schenectady, N. Y., and CHARLES F. GABEN, Urbana, Ill., assignors to General Electric Company, a Corporation of New York. Filed July 12, 1929. Serial No. 377,824. 17 Claims. (Cl. 172—282.)



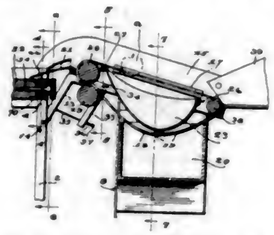
1. A steering system for a moving object comprising a steering device for said object, a continuously rotating

driving member, means for connecting said steering device to said member for a predetermined movement of said steering device after which said steering device is released, and means responsive to a deviation of said object from a predetermined course for controlling said connecting means.

1,871,470. DYEING OF CELLULOSE DERIVATIVES. GEORGE RIVAT, Paterson, and ERNEST CADOENE, Englewood Cliffs, N. J., and CAMILLE DREYFUS, New York, N. Y., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed June 30, 1926. Serial No. 119,743. 20 Claims. (Cl. 8—5.)

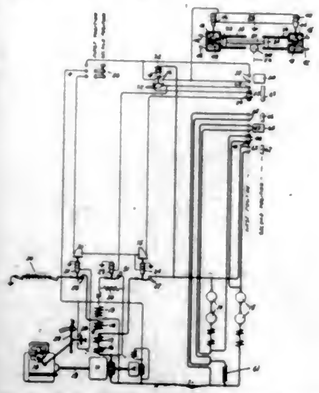
1. A process of mordanting organic derivatives of cellulose which comprises subjecting such organic derivatives of cellulose to the simultaneous action of mordanting salts which normally do not mordant organic derivatives of cellulose and swelling agents.

1,871,471. SORTER. MERRITT C. ROSE, BERT R. ROSE, and HENRY L. ROSE, Parma, Idaho. Filed Dec. 11, 1928. Serial No. 325,240. 3 Claims. (Cl. 209—84.)



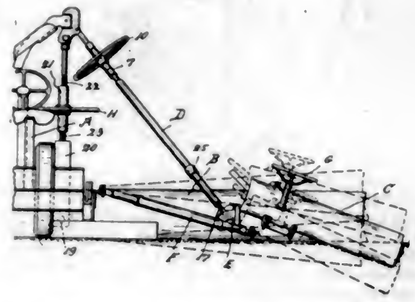
1. A sorter comprising a perforated belt upon which apples are to be loaded for a separation of apples large enough to lodge in the perforations from apples small enough to pass through the perforations, means to receive the small apples passing through, and means to both support the receiving means and stand in the way of protruding parts of the lodged apples to push said apples out of the perforations.

1,871,472. POWER SYSTEM. ROBERT T. SAWYER, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,436. 8 Claims. (Cl. 290—14.)



1. A power system including a plurality of driving motors, a generator for supplying current to said motors, motor circuit connections for relating said motors to said generator in series or parallel arrangement, and means for preventing change in said motor circuit connections until a predetermined voltage is attained in the system and for effecting change in the motor circuit connections at said predetermined voltage.

1,871,473. SPRING LOADED STRUT FOR SHOULDER FINISHING MACHINES. CARL G. SCHMID and ALVIN C. RASMUSSEN, Indianapolis, Ind., assignors to Insley Manufacturing Company, Indianapolis, Ind., a Corporation. Filed Nov. 23, 1931. Serial No. 576,856. 9 Claims. (Cl. 37—135.)



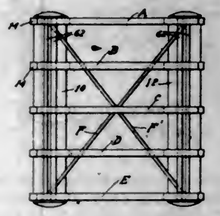
1. A mechanism of the character described comprising the combination with shoulder grading blades carried by a shoulder finishing machine, of an adjustable supporting strut for the blades, means for adjusting the blades and strut, and means associated with the strut and adjusting means for counteracting the weight of the blades for facilitating adjustment of the blades.

1,871,474. REAMER. MICHAEL I. SEILER, Millersburg, Pa., assignor to Keystone Reamer & Tool Co., Millersburg, Pa., a Corporation of Pennsylvania. Filed Nov. 10, 1927. Serial No. 232,408. 2 Claims. (Cl. 90—12.5.)



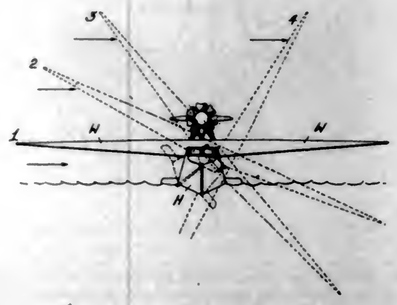
1. A valve reseating tool comprising a guide rod threaded adjacent one end and having a slightly tapered enlargement converging toward said threaded portion, a rotary cutter having a bore fitting said enlargement and seating thereupon, said cutter consisting of a block having a tapering tool portion and a cylindrical body portion of sufficient length to materially increase the inertia of the cutter, and operating means screwing upon the threaded portion of said guide rod and engaging said cutter to lock the same to said guide rod through frictional pressure between the coacting tapered surfaces of said bore and enlargement.

1,871,475. FLOATING WHARF. AUGUSTUS SMITH, Roselle, N. J., assignor to Bergen Point Iron Works, Bayonne, N. J., a Corporation of New Jersey. Filed July 28, 1931. Serial No. 553,659. 19 Claims. (Cl. 114—0.5.)



1. A floating wharf comprising a rigid superstructure, buoyant devices supporting said superstructure, certain of said devices being connected, as a unit, to said superstructure along a straight line on one side, and certain of said devices being connected, as a unit, to said superstructure at a point on the other side thereof, and being rockable vertically.

1,871,476. MARINE AIRCRAFT. ELMER A. SPERRY, Brooklyn, N. Y., assignor to Sperry Development Company, Dover, Del., a Corporation of Delaware. Filed Nov. 20, 1929. Serial No. 408,459. 10 Claims. (Cl. 244—2.)



1. In a marine aircraft, a laterally extending wing, a device for materially augmenting the buoyancy of said wing at or near said tip, so organized as to preserve a contour best suited for flight, said device being normally ineffective, and means responsive to the engagement of said wing with the water whereby said device may be rendered effective.

1,871,477. AZO-DYESTUFFS CONTAINING METAL AND PROCESS OF MAKING SAME. FRITZ STRAUB and WALTER ANDEREAU, Basel, Switzerland, assignors to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Aug. 21, 1928, Serial No. 301,165, and in Switzerland Sept. 10, 1927. 4 Claims. (Cl. 260—12.)

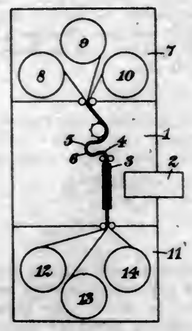
1. A process for the manufacture of azo-dyestuffs in substance containing chromium and copper, consisting in treating azo-dyestuffs containing lake-forming groups and having affinity for cotton, with agents yielding copper and chromium.

1,871,478. COLOR PHOTOGRAPHY. WILLIAM THOMAS TAYLOR, Eccles, Manchester, England, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 21, 1928, Serial No. 248,391, and in Germany Feb. 1, 1927. 5 Claims. (Cl. 95—2.)



1. A composite pack for color photography comprising a plurality of super-imposed layers of light-sensitive materials suitably arranged on transparent supports, said materials being selectively sensitive to light rays forming particular bands of the spectrum, which layers, after exposure and development, when super-imposed, will form a complete, negative, composite representation of a subject in substantially its natural colors, and one of the layers of light-sensitive material being selectively sensitive to blue rays of light and being located farthest from the source of light, when the pack is exposed.

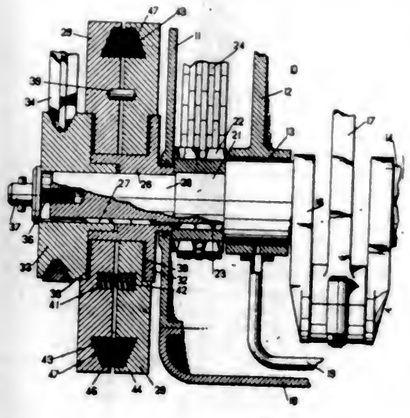
1,871,479. COLOR PHOTOGRAPHY. WILLIAM THOMAS TAYLOR, Eccles, Manchester, England, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Original application filed Jan. 21, 1928, Serial No. 248,391, and in Germany Feb. 1, 1927. Divided and this application filed Apr. 22, 1929. Serial No. 357,270. 6 Claims. (Cl. 95—2.)



1. A negative taking combination for color photography comprising a roll having a plurality of flexible strips of transparent material in super-imposition, a coating on each of said strips of a light sensitive material selectively sensitive to light rays forming particular bands of the spectrum, which strips, after exposure and development, when superimposed, form a complete, negative, composite representation of a subject in substantially its natural colors,

and one of said coatings of light sensitive material being selectively sensitive to blue rays of light and being located on the strip of transparent material which is farthest from the source of light during exposure.

1,871,480. INTERNAL COMBUSTION ENGINE. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 7, 1929, Serial No. 330,889. Renewed Sept. 23, 1931. 11 Claims. (Cl. 74—6.)



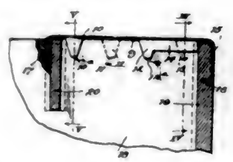
5. In a vibration damper having inertia members and a speed responsive weight device cooperating therewith, said members and said weight device having engaging portions relatively movable in response to speed changes, a liner carried by said members and interposed between the said relatively movable portions of the members and the weight device to prevent adhesion therebetween.

1,871,481. WEDGE. FREDERIC EMILE LOUIS TRIMBACH, Luneville, and PAUL ROBIN, Paris, France, and GEORG STEINMETZ, Pfungstadt, Germany; said Robin assignor to said Trimbach and said Steinmetz. Filed Apr. 11, 1929, Serial No. 354,408, and in France Feb. 26, 1929. 1 Claim. (Cl. 85—13.)



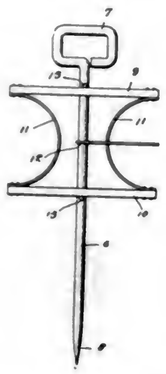
A wedge comprising several pairs of co-operating prongs, the prongs of each pair being curved in opposite directions in the same plane for forcing the prongs of each pair in diametrically opposed directions when driven into the material, beveled portions arranged on the prongs of each pair in opposite directions, said beveled portions being themselves situated in opposite directions and in planes disposed outside of the original planes of said prongs, and being subjected to being bent in opposite directions when driven into said material, whereby with the forcing of the prongs in diametrically opposed directions to simultaneously drive the ends of said prongs along a diagonal outside of the original plane of the prongs.

1,871,482. CRATE FASTENER. JOSEPH O. TURNER, Winston-Salem, N. C., assignor to The Mengel Company, Louisville, Ky. Filed Apr. 14, 1930. Serial No. 444,309. 2 Claims. (Cl. 217—70.)



1. A crate fastener comprising a long narrow straight deformable metal body; a plurality of tongues depending from the opposite sides of said body; a tongue depending from one end of said body in alignment with said body and designed to overlie and engage a crate partition; and a second tongue depending from the other end of said body and having a plurality of projecting prongs.

1,871,483. GARDEN REEL. CORNELIUS UITENDAAL, New Canaan, Conn. Filed June 19, 1931. Serial No. 545,525. 1 Claim. (Cl. 242—96.)

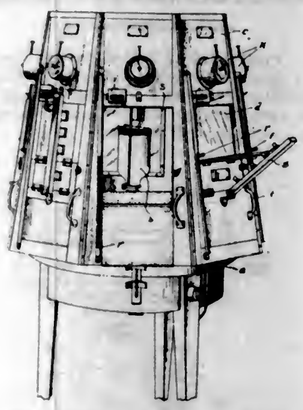


The combination of a pointed pin having an upper loop handle bent therefrom, spaced cross pieces journaled in the pin, inwardly directed reversely bowed members between the pieces and having their ends joined with the ends of said pieces, and a cable embracing the pin between the pieces and adapted to be wound on and unwound from the said members on rotation of the cross pieces.

1,871,484. PHOTOGRAPHIC PRINTING APPARATUS. HUBERT UYTTENBROECK, Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Filed July 11, 1929, Serial No. 377,515, and in Germany June 11, 1928. 1 Claim. (Cl. 95—73.)

A photographic printing apparatus including a rotatably mounted casing, printing frames mounted in the wall of the casing, each frame having a cover, a shutter for each frame slidably guided in the casing for vertical movement, a stop member carried by each shutter, spring restrained levers pivotally mounted on the casing one adjacent each shutter and having hooks for detachably engaging the respective stops to maintain the shutters in open positions, a printing timing clock for each shutter, each clock being mounted on the casing and each being operable to actuate the

associated levers to release a shutter to permit the same to close by gravity, a handle for each shutter slidably guided in the casing and operable to elevate the associated



shutter to open position, and members hingedly connected to the casing for engaging the respective covers to hold the same in closed relationship with the printing frames.

1,871,485. BEARING. AUGUST GUNNAR FERDINAND WALLGREN, Stockholm, Sweden, assignor to Aktiebolaget Nomy, Stockholm, Sweden, a Corporation of Sweden. Filed May 14, 1928, Serial No. 277,769, and in Sweden May 18, 1927. 32 Claims. (Cl. 308—73.)



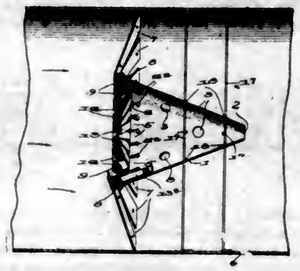
1. A bearing of the radial type comprising an inner member, an outer member spaced radially from the inner member, a plurality of bearing blocks having operative positions radially between said members, one of said members and said blocks having cooperating surfaces for causing rotation in one direction to tilt the blocks one way and rotation in the other direction to tilt the blocks the other way, and means for permitting and limiting shift of position between said blocks and said one of said members.

1,871,486. PROCESS OF DYEING TEXTILE YARNS. WILLIAM WHITEHEAD, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Apr. 12, 1926. Serial No. 101,571. 13 Claims. (Cl. 8—5.)

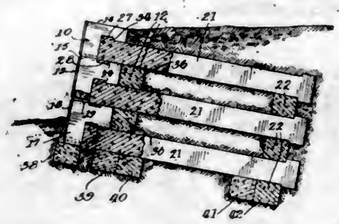
1. Process for the production of unevenly coloured yarns from yarns containing organic derivatives of cellulose comprising immersing a package of the yarn, wound on a hollow perforated support, in a bath capable of effecting a colour change of the yarn and removing the same before the colour change is uniform throughout the package.

1,871,487. FUEL ECONOMIZER AND HEAT CONTROL. GEORGE L. ZUCKER, East Orange, N. J. Filed May 28, 1931. Serial No. 540,787. 12 Claims. (Cl. 110—147.)

1. A master device of the character described adapted for use in a passageway and comprising a perforated member, a plurality of radially arranged auxiliary wings for regulating the passageway relative to said perforated member, and pivotal supports for said auxiliary wings, the axis of each of the pivotal supports extending approximately radially of the perforated member.

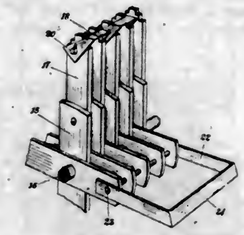


1,871,488. CRIBBING. EARL C. ALEXANDER, Glen Ellyn, Ill., assignor to Massey Concrete Products Corporation, Chicago, Ill., a Corporation of Virginia. Filed Nov. 5, 1931. Serial No. 573,169. 5 Claims. (Cl. 61—47.)



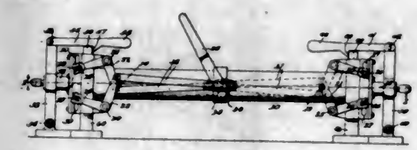
1. A cribbing comprising a plurality of stretchers of simple rectangular cross section having plane sides and a plurality of headers of substantially rectangular cross section having laterally projecting lugs at each end, said headers and stretchers being laid alternately and transversely upon each other to form a cribbing, and a facing wall comprising a multiplicity of facing cribbing members of sufficient size to engage each other and enclose and cover one wall of said cribbing, said facing members being provided with rearwardly extending flanges having interlocking formations for interlocking engagement with said headers.

1,871,489. COMBINATION HAMMER AND CUTTER FOR HAMMER MILLS. CHARLES D. AMMON, Lincoln, Nebr. Filed May 22, 1930. Serial No. 454,620. 7 Claims. (Cl. 83—11.)



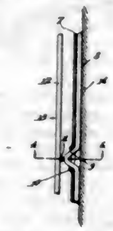
1. A reel for hammer mills having swinging battering members in combination with cutting members each releasably secured to a plurality of said battering members.

1,871,490. APPARATUS FOR TAPERING TUBULAR SHAFTS FOR GOLF CLUBS AND THE LIKE. HAROLD G. BARRETT, Wilmette, Ill., assignor to Pyratone Products Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 1, 1929. Serial No. 351,599. 4 Claims. (Cl. 18—6.)



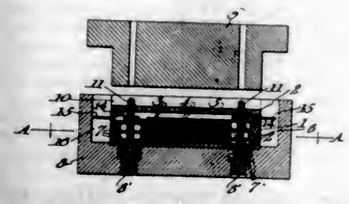
3. An apparatus for expanding and tapering a hollow shaft of non-metallic material of a normally uniform diameter, embodying a closed casing, a tapering mold therein supported by and opening through the ends of the casing and into which mold the shaft is inserted, said mold being of an external diameter considerably less than the internal diameter of the casing, means for supplying a heating medium to the casing about the mold, clamping members adjacent each end of the shaft for clamping the ends of the shaft to hold the shaft from longitudinal shrinking movement, means for expanding the shaft in said mold, means for causing the shaft to disengage the wall of the mold whereby the shaft may be drawn out of the mold, and means for simultaneously rendering the said clamping members at both ends of the mold inactive to release said shaft.

1,871,491. PLASTER AND STUCCO GROUND. LEWIS BRANDT, Pittsburgh, Pa., assignor to Pittsburgh Steel Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 2, 1926. Serial No. 113,259. 6 Claims. (Cl. 72—116.)



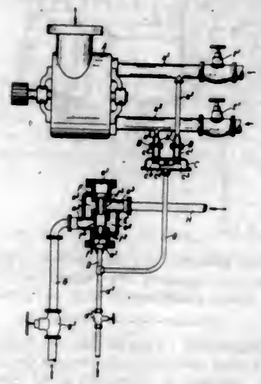
4. A reenforcement foundation comprising a reticulated element, a furring element connected with the reticulated element and having portions spaced from the reticulated element, and a backing material having a member between the reticulated element and said portions and having another member on the outer face of the furring element.

1,871,492. METHOD OF FORMING MOLDED ARTICLES. ROBERT A. BRENNECKE, Chicago, Ill. Filed Mar. 10, 1927. Serial No. 174,373. 2 Claims. (Cl. 175—41.)



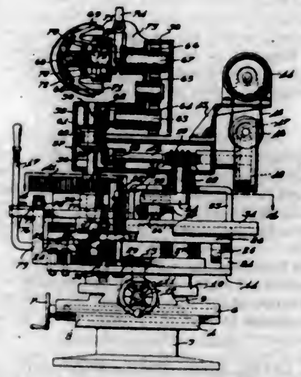
1. Method of making an electrical condenser which comprises assembling in a mold, with the aid of pins located therein, a plurality of alternate insulating and conductive elements, and frame and closure elements of moldable insulating material, and subjecting the assembled elements to a molding operation to unite them into an integral unit.

1,871,493. CONDENSING LOCOMOTIVE. ERICH BURMEISTER, Zurich, Switzerland, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Apr. 19, 1929, Serial No. 356,551, and in Germany June 7, 1928. 7 Claims. (Cl. 60—95.)



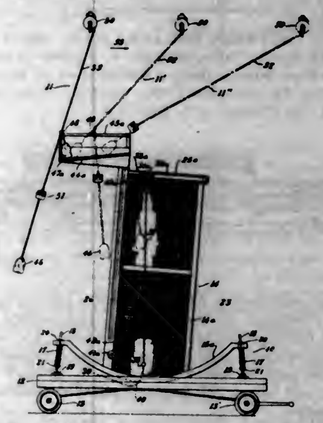
1. In a condensing locomotive a main driving steam engine, a blower adapted to supply cooling air to the condensing plant, an auxiliary steam engine adapted to drive said blower, and a regulating device in the pipe supplying working steam to said auxiliary engine, a branch pipe connecting the regulating member of said device to the working steam supply pipe of said main engine to cause said regulating device to vary the supply of steam to said auxiliary engine according to and in the same sense as a variation of the steam supplied to the main driving engine, and a throttling means in said branch pipe.

1,871,494. GRINDING AND POLISHING MACHINE. GUSTAVE A. CARLSON, Detroit, Mich. Filed June 20, 1930. Serial No. 462,465. 7 Claims. (Cl. 51—94.)



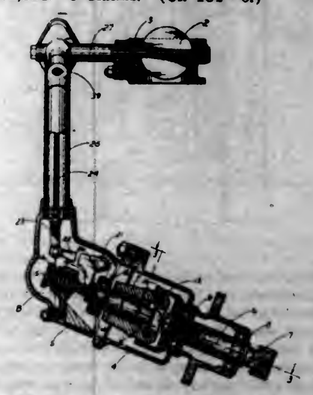
1. The combination with a grinding wheel, of a rotatable head adapted to support a shell, a casing supporting said head, longitudinally slidable means supporting said casing, a rack and pinion connection between said casing and said slidable means whereby sliding movement of said means causes rotation of said casing, and a motor for rotating said head and sliding said slidable means.

1,871,495. CARGO HANDLING APPARATUS FOR AIRCRAFT AND THE LIKE. MANUEL CASTRO, Canton, Ohio. Filed June 13, 1930. Serial No. 460,945. 29 Claims. (Cl. 258—1.)



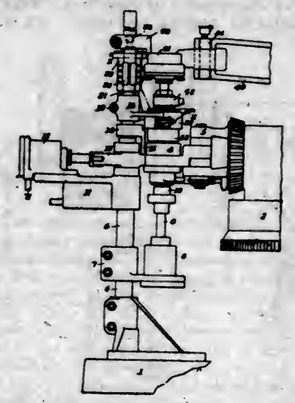
1. Ground elements for cargo handling apparatus for aircraft and the like, including a base, a frame extending upwardly from the base and mounted for rocking movement thereon, means at the upper end of the frame for positioning cargo to be picked up, and means on the frame for receiving discharged cargo.

1,871,496. METHOD OF LUBRICATING ENGINE GOVERNORS. HAROLD D. CHURCH, Cleveland, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 22, 1929. Serial No. 372,824. 5 Claims. (Cl. 184—6.)



1. In combination with an internal combustion engine having a throttle valve and an oil pump, a governor for said engine including a rotating shaft driven by said engine, an arm movable in response to changes in speed of said shaft, and a connection between said arm and said throttle valve, a casing surrounding said shaft and extending around said arm and said connection, an oil passage arranged to receive oil under pressure from said pump and deliver the same to the interior of said casing adjacent said connection, whereby said oil may lubricate said connection and flow through said casing to lubricate the entire length of said arm and said shaft, and means for returning oil to the crankcase of said engine from a point adjacent the driven end of said shaft.

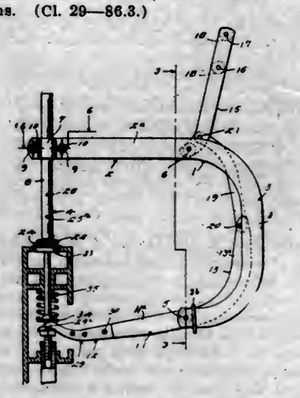
1,871,497. GLASS WORKING MACHINE. AUGUSTUS MARTS CLARK, Millville, N. J., assignor to Whitall Tatum Company, Millville, N. J., a Corporation of New Jersey. Filed Apr. 7, 1926. Serial No. 100,339. 36 Claims. (Cl. 49—5.)



3. In a glass working machine, a plurality of parison molds, means for moving said molds, a mouth forming pin mechanism for co-operation successively with said molds, a pouring guide for co-operation successively with said molds, and fluid pressure means for moving said mouth pin forming mechanism and said pouring guide in opposite directions both to and from a mold in predetermined timed relation to each other and to the movement of said molds.

29. In a glass working machine, a mold, a fluid pressure operated mechanism cooperating therewith, means for swinging said mechanism laterally, a stop adapted to cooperate with said mechanism, and means for operating said mechanism only after it has come into engagement with said stop.

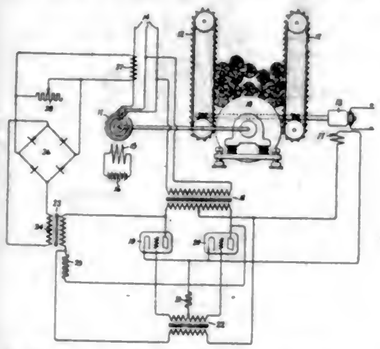
1,871,498. VALVE LIFTER. IRA J. CLARK, Fort Morgan, Colo. Filed Nov. 14, 1931. Serial No. 575,121. 4 Claims. (Cl. 29—86.3.)



1. In a valve lifter, a frame having a horizontal arm and a vertical arm extending downwardly from one end of the horizontal arm, valve head engaging means carried

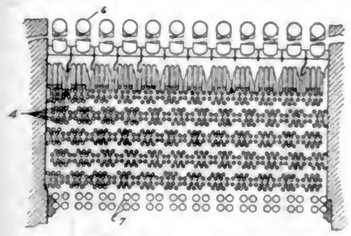
by the other end of the horizontal arm, a lever located below the horizontal arm and pivoted at one end to the vertical arm, spring seat engaging means carried by the free end of the lever, an arm extending upwardly from the pivoted end of the lever, a hand lever pivoted at one end to the horizontal arm, and a link pivoted to the upper end of the lever arm and to the hand lever at a point close to the pivot of such lever.

1,871,499. ELECTRIC CONTROL SYSTEM. HARRY R. CRAGO, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 17, 1931. Serial No. 530,889. 3 Claims. (Cl. 172—289.)



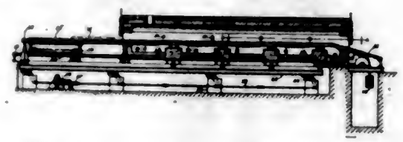
1. In combination, a mechanism for performing a predetermined operation upon a material, an electric motor for driving said mechanism, mechanism for continuously feeding said material to said work performing mechanism, a motor comprising field and armature windings for operating said feed mechanism, a source of alternating current, electric valve means interconnecting one of said windings and said source, and means responsive to the current drawn by said drive motor for controlling the conductivity of said valve.

1,871,500. WATER TUBE BOILER. GEORGE H. DANIELS, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Feb. 14, 1931. Serial No. 515,663. 6 Claims. (Cl. 122—303.)



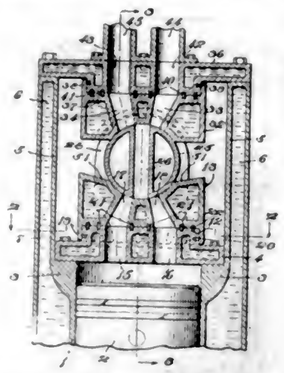
1. A water tube boiler having a combustion chamber and a bank of horizontally inclined steam generating tubes arranged in side-by-side sections above said chamber, the tubes of each section being arranged in clusters and having their ends expanded in corresponding vertical uptake and downtake headers of substantially rectangular cross-section, the headers at each end of said bank being arranged with their adjacent walls substantially in contact, each of said headers having a multiplicity of tube openings formed in a wall thereof and arranged in groups vertically of said header, handhole openings formed in the headers at one end of said bank in a wall opposite said tube openings and shaped and proportioned for the removal therethrough of all of the tubes connected to corresponding groups of tube openings, outer tubes in each cluster being bent laterally for the major portion of their lengths to interrupt the lanes between adjacent sections, and the tubes in the tube rows containing said bent tubes being spaced substantially uniformly throughout the major portion of their lengths in planes normal to the axes of said headers to provide lanes of substantially uniform width across said boiler.

1,871,501. CONVEYER FOR FURNACES. ERNEST G. DE CORIOLIS, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed May 16, 1931. Serial No. 537,802. Renewed Feb. 6, 1932. 17 Claims. (Cl. 263—6.)



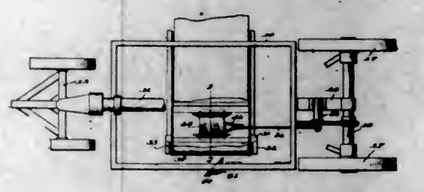
16. The combination with a conveyer for moving work through a furnace, of longitudinally reciprocable flexible means at the discharge end of the conveyer for receiving the work therefrom, means for causing said means to take an inclined path of travel at a point in advance of said conveyer, and means for maintaining said flexible means under tension.

1,871,502. ROTARY VALVE. DOUGLAS D. DE LOACH, Savannah, Ga., assignor to Foss-De Loach Company, Savannah, Ga., a Corporation of Georgia. Filed Feb. 7, 1928. Serial No. 252,537. 1 Claim. (Cl. 123—190.)



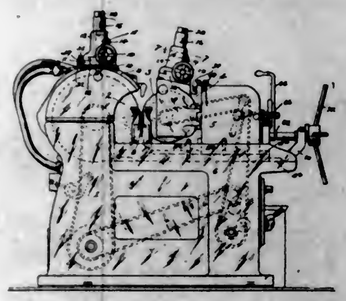
In an internal combustion engine, an engine block having a cylindrical bore and a space above said bore, a cylinder head having an extension upstanding therefrom, a cover for the space above said cylinder bore, said cover having an extension depending therefrom and overlying said upstanding extension, a lower valve seat member supported on said upstanding extension and movable vertically, an upper valve seat member engaged with the depending extension of said cover, a rotary valve interposed between said members and having a transverse passage therethrough, said valve seat members and engine head and cover each having communicating intake and exhaust passages, a packing ring encircling each port and seated in said valve seat member and extension, and a second packing ring encircling both ports and seated in said member and extension.

1,871,503. CLEANER FOR ROLLERS OF ELEVATING GRADERS. LOUIS T. DURSBERG, Hoxie, Kans. Filed Dec. 8, 1931. Serial No. 579,812. 1 Claim. (Cl. 198—229.)



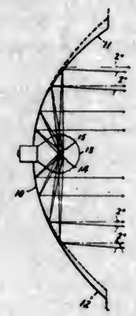
In an elevating grader, a foot roller on which an endless traveling carrier is trained, a dust pan disposed adjacent the roller and located between the sections of the carrier, a base member forming the bottom of the pan, an inclined scraper blade having a free edge in close association with the roller and forming one side wall of the pan, said blade being connected to the base member and having a portion spaced from said base member to provide a guide element, the other side wall of the pan being connected to the base member and having a portion spaced from said base member to provide a second guide element, a scraper element having laterally disposed flanges received by the guide elements and slidably mounted in the pan.

1,871,504. TRUING DEVICE FOR THE WHEELS OF GRINDING MACHINES. SOL EINSTEIN and LESTER F. NENNINGER, Cincinnati, Ohio, assignors, by mesne assignments, to The Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 28, 1924. Serial No. 689,068. 5 Claims. (Cl. 125—11.)



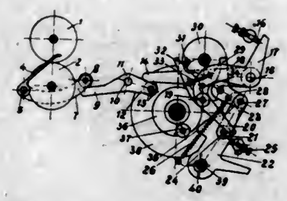
4. The combination with a grinding machine of the centerless type including a bed or support, a grinding wheel rotatably mounted thereon, and a regulating wheel support disposed in opposition to the grinding wheel, of a regulating wheel housing mounted on said support for angular adjustment with respect to the opposed grinding wheel, and a truing tool mechanism carried by said housing including a guide extending transversely of the housing, said guide being supported for angular adjustment as an entirety with the housing and for additional angular adjustment to place same in skewed relation to the housing, a slide mounted for movement along the guide in a path determined by the adjustments thereof, and a truing device carried by the slide and projecting within the housing; whereby said truing device will peripherally traverse a contained regulating wheel in a plane forming an acute dihedral angle with any intersecting radial plane of the wheel.

1,871,505. VEHICLE HEADLAMP. ROBERT N. FALGE, Birmingham, Mich., and WILLARD C. BROWN, East Cleveland, Ohio, assignors to General Electric Company, a Corporation of New York. Filed June 16, 1927. Serial No. 199,866. 3 Claims. (Cl. 240—41.25.)



1. The combination of a substantially paraboloidal reflector, a source of light adjacent the focus of the reflector and a source of light spaced a slight distance above the first named source, means for separately energizing said sources, said reflector comprising, top, bottom and central zones, the rays of light from said top and bottom zones being but slightly affected by shifting from one source to the other while the rays of light from said central zone are shifted sharply downwardly upon energizing the upper source, said top and bottom zones being formed to direct the rays falling upon them beneath the top of the beam produced when the lower source is energized whereby, upon changing to the upper source, an effective lowering of the beam is secured.

1,871,506. MAIL STAMPING MACHINE AND THE LIKE. WILHELM FRIEDRICHS, Reinickendorf-Ost, near Berlin, Germany. Filed Sept. 11, 1929, Serial No. 391,930, and in Germany Sept. 13, 1928. 6 Claims. (Cl. 101—235.)

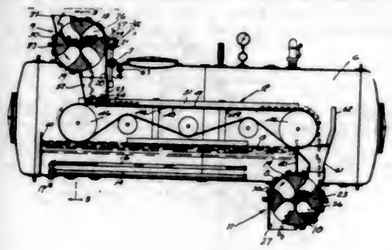


1. In a device of the kind described in combination, a record bearing roller, a rotatable operating member, operatively engageable with said roller, locking means for said member, link-connected foldable operating means linked to said locking means, an actuating spring acting upon said operating means, feeding means, and levers engageable with the feeding means and with the operating means, and adapted to release the locking means in order to make active the record-roller.

1,871,507. FRUIT PROCESSOR. GEORGE D. GARDNER, San Jose, Calif., assignor to Gardner Manufacturing Company, Ltd., Sunnyvale, Calif., a Corporation of California. Filed Apr. 1, 1929. Serial No. 352,332. 12 Claims. (Cl. 99—2.)

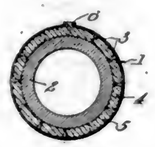
1. In a fruit processor of the character described, a closed vessel having an inlet and outlet opening thereon, means for supplying steam to said vessel; a conveyor

adapted to carry the fruit from the inlet to the outlet opening; gate means in operative relation to said inlet opening adapted to distribute fruit on said conveyor in



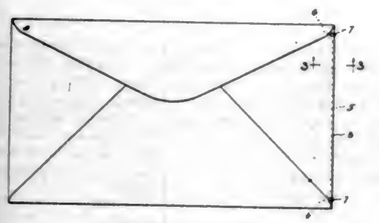
a single stratum and means for packing said inlet and outlet openings being adapted to deliver the fruit through the respective openings to and from said conveyor.

1,871,508. METALLIC CONDUIT. HENRY A. GARDNER, Washington, D. C. Filed July 2, 1930. Serial No. 465,441. 1 Claim. (Cl. 204—1.)



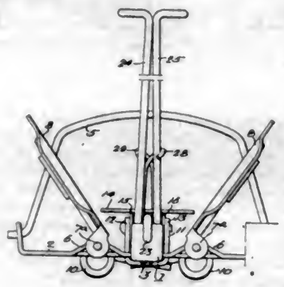
The combination with a ferrous member, of a coating of corrosion inhibitive material disposed on the surface of said member, a metallic jacket disposed over said coating for retaining the same on said ferrous member, and means comprising a plurality of nails formed of a metal which is electropositive to iron extending through said jacket into contact with said ferrous member for spacing said jacket from said ferrous member.

1,871,509. ENVELOPE OPENER. FRANK J. GARGANO, Brooklyn, N. Y. Filed May 18, 1931. Serial No. 538,306. 1 Claim. (Cl. 229—86.)



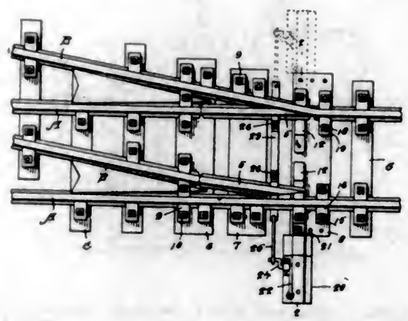
In combination, an envelope, and an opener disposed in the envelope adjacent a folded edge and comprising a wire lying in the fold, members disposed at opposite ends of the wire and each consisting of a disk-like head and connected tongue, the tongue being of a width less than the diameter of the head but of a length corresponding to the diameter thereof and having its length arranged radially of the head, the connected tongue and head being disposed transversely of the wire and integrally joined to the latter at the line of junction between the two, the heads being disposed interior to the envelope and the tongues extending through the folded edge and being bent over against the heads.

1,871,510. ANIMAL TRAP. WALTER A. GIBBS, Chester, Pa. Filed Oct. 24, 1930. Serial No. 490,982. 7 Claims. (Cl. 43—88.)



1. In an animal trap, a pair of jaws for gripping a leg of the animal cought, means comprising a brace formed to encircle the said leg at a substantial distance from the gripping point to brace the same and prevent breaking thereof at the gripping point, and common means for rendering said jaws and said first means inoperative until said trap is sprung.

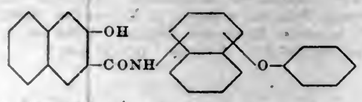
1,871,511. MINE TRACK AND SWITCH CONSTRUCTION. MONT GOFF, Stone, Ky. Filed Mar. 4, 1932. Serial No. 596,806. 1 Claim. (Cl. 246—415.)



In a construction of the character described, the combination with main and branch rail tracks and ties supporting the same, of switch points movably supported for controlling communication between the main and branch rail tracks, a series of ties beneath said points, blocks formed on one of the ties and disposed between the points and having reversely beveled portions for play of said points thereon, shiftable clamps carried by one of the ties for the main track to engage the outer sides of rails thereof, removable clamps on the last referred to tie and engaging the inner sides of the rails, a support attachable to either end of one tie adjacent to the switch points, a throw lever carried by said support, a throw connected with the switch points, and a connection between the throw and said lever.

1,871,512. AZO-DYES DERIVED FROM NAPHTHYL-ARYL ETHERS. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland Mich., a Corporation of Michigan. Filed June 21, 1929. Serial No. 372,806. 6 Claims. (Cl. 260—76.)

1. In a process for the manufacture of new azo-dyes, the step which consists in coupling a 2.3-hydroxynaphthoyl-amino-naphthylphenyl ether having the probable general formula,



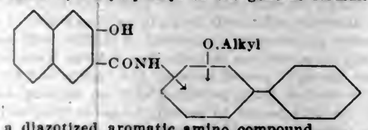
with a diazotized aromatic amino compound.

1,871,513. AZO-(2.3 HYDROXY-NAPHTHOYL)-AROMATIC DIAMINES AND AZO DYESTUFFS DERIVED THEREFROM. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 27, 1929. Serial No. 374,284. 12 Claims. (Cl. 260—70.)

1. The method of making a new azo compound which comprises coupling any diazotized aromatic amine of the benzene, naphthalene or diphenyl series with an aromatic diamine of the group consisting of the benzene, naphthalene, diphenyl, and diphenylene series and condensing the thereby formed azo-diamine with two molecular equivalents of 2.3-hydroxynaphthoic acid.

1,871,514. AZO DYES FROM ETHER-ARYLIDES OF AMINO-HYDROXYDIARYLS. ERNEST F. GRETHER and GERALD H. COLEMAN, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 1, 1929. Serial No. 375,327. 15 Claims. (Cl. 260—76.)

1. A process for the manufacture of new azo dyes which comprises coupling an alkyl ether of a 2.3-hydroxy-naphthoyl-amino-hydroxydiphenyl of the general formula :—



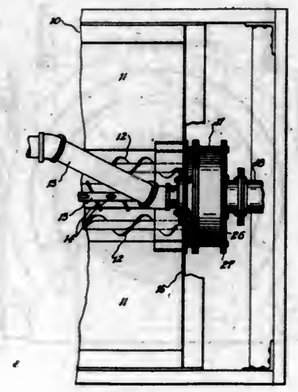
with a diazotized aromatic amino compound.

1,871,515. DYE INTERMEDIATES AND DERIVED AZO DYES. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 25, 1929. Serial No. 381,087. 14 Claims. (Cl. 260—72.)

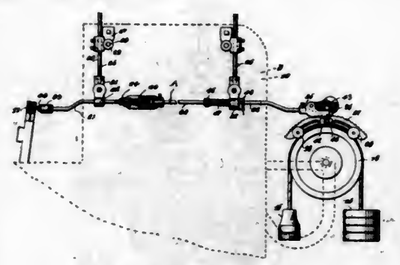
1. The method of making new azo-compounds which comprises condensing a diamino aromatic azo-compound having the general formula, $NH_2-R-N=N-R'-NH_2$, wherein R and R' represent aryl residues of the benzene and/or naphthalene series which may bear substituents selected from the group consisting of halogen and nitro substituents, with 2.3-hydroxynaphthoic acid in the approximate proportion of one mole of the former to two moles of the later and in the presence of a condensing agent.

1,871,516. FEED WHEEL. ALBERT J. GURNEY, Canton, Ohio, assignor to The American Mine Door Company, Canton, Ohio, a Corporation of Ohio. Filed Nov. 16, 1929. Serial No. 407,674. 2 Claims. (Cl. 302—49.)

1. In combination with a hopper having a blower pipe, an agitator shaft and a conveyer therein, a closed housing at one side of the hopper and communicating at its upper portion with the blower pipe and at its lower portion only with the conveyer, a feed wheel upon the agitator shaft and entirely enclosed within the housing for carrying material upward within the housing from the conveyer to the blower pipe, and for preventing air from the blower pipe from entering the conveyer.



1,871,517. WARP LET-OFF ATTACHMENT. HERBERT I. HANSEN and JOHN A. HINRICHS, Paterson, N. J.; said Hinrichs assignor to said Hansen. Filed Sept. 19, 1929. Serial No. 393,755. 7 Claims. (Cl. 139—100.)

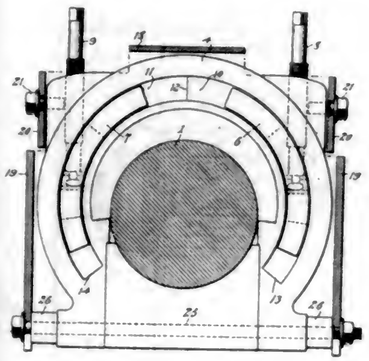


1. A loom attachment comprising in combination with the warp roll or beam, a rope coiled about said beam, a clamp carried by one of the convolutions of the rope, a longitudinally movable tap rod positively actuated on each pick of the loom for engaging said clamp to disturb the tension of the rope, and a ratchet device between the clamp and tap rod.

1,871,518. END PLAY LINER FOR LOCOMOTIVE DRIVING BOXES. HENRY O. HAVEMEYER, jr., Mahwah, N. J., and JOHN E. MUHLFELD, Scarsdale, N. Y. Filed Sept. 13, 1929. Serial No. 392,444. 10 Claims. (Cl. 308—165.)

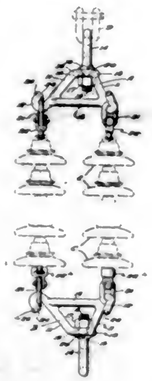
1. An end play liner for locomotive driving boxes, comprising a liner plate, means for holding the plate in position, a pair of wedges coacting with the plate for shifting

the same in a direction substantially longitudinally of the locomotive axle to take up unnecessary play, means for



guiding said wedges in arc shaped paths and screw means acting at a tangent to said guiding means for forcing said wedges along said paths.

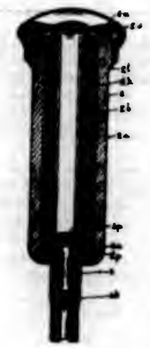
1,871,519. INSULATOR SUSPENSION YOKE. KENT A. HAWLEY, Baltimore, Md., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed July 10, 1929. Serial No. 377,237. 6 Claims. (Cl. 173—318.)



1. A yoke for supporting a plurality of strings of insulators, comprising a hub member provided with suspension means and having a series of inclined diverging arms radiating therefrom and terminating in hooks, horizontal brace elements connecting the intermediate portions of the successive arms and means swingably engaged upon the hooks and adapted for connection with the ends of the insulator strings.

2. A yoke for supporting a plurality of strings of insulators, comprising a hub member provided with suspension means and having a series of inclined diverging arms radiating therefrom and terminating in hooks, elongated links swingably engaged upon the hooks and adapted for connection with the ends of the insulator springs, and means partly traversing the open portions of the hooks beyond the links for preventing detachment of the latter.

1,871,520. MILKING MACHINE. FERNAND HENRARD, Brussels, Belgium, assignor to Ecremeuses Melotte Societe Anonyme, Remicourt, Belgium. Filed Oct. 4, 1929. Serial No. 397,282. 1 Claim. (Cl. 31—84.)



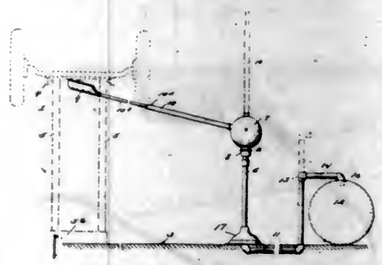
A milking cup, comprising a rigid casing connected at its lower end with a conduit leading to a continuous vacuum, a cylindrical elastic nipple joined at one of its ends to the upper portion of the said casing and joined at its other end to the said conduit, the nipple having a thin wall and a diameter sufficiently small to envelop a teat of small dimension and adapted on account of its thin wall and its elasticity to permit the introduction of large teats, and an annular air-tight pocket between the casing and the nipple, the conduit being provided with an opening leading to the air-tight pocket to permit the same vacuum to act on the pocket and on the nipple.

1,871,521. STOCK TIRE CHAIN. FREDERICK G. HODELL, Cleveland Heights, Ohio, assignor to The Chain Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 28, 1930. Serial No. 477,221. 3 Claims. (Cl. 29—148.)



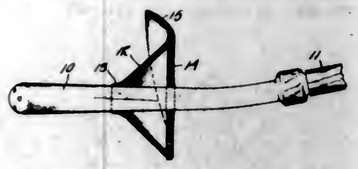
1. A stock tire chain, comprising parallel side chains connected at intervals by cross chains and of sufficient length for sub-division to form several individual non-skid chains, said side chains being provided with surplus blank or unconnected portions adapted for connection by cross chains available as the result of sub-division of the main body of the stock chain.

1,871,522. OIL DRAINING STATION. ERNEST W. HOLMES and EARL E. CLINE, Chattanooga, Tenn, assignors to Ernest Holmes Company, Chattanooga, Tenn., a Corporation of Tennessee. Filed Sept. 1, 1928. Serial No. 303,432. 11 Claims. (Cl. 184—1.5.)



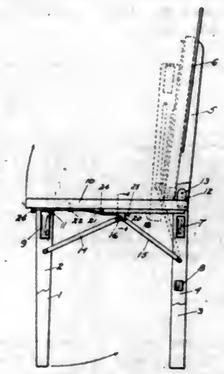
1. An oil receiver comprising a relatively fixed standard, a rigid arm pivoted at one end on said standard to swing substantially vertically and carrying a funnel on its other end, and means acting on the pivoted end of said arm to yieldingly hold said arm and funnel normally in a substantially upright position.

1,871,523. SYRINGE. JACOB V. HOWARD, Indianapolis, Ind. Filed Nov. 15, 1930. Serial No. 496,004. 1 Claim. (Cl. 128—239.)



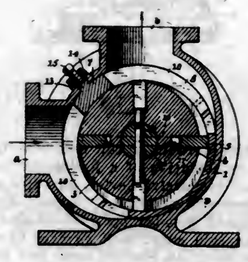
An attachment for use with a syringe nozzle comprising a rear perforated disk portion adapted to fit around said nozzle, said portion having a flexible forward hollow substantially cone-shaped portion adapted to fit into a cavity into which the nozzle is inserted, to conform to the shape of said cavity and to retain in the cavity the fluid injected by said nozzle, the inner surface of the apex of said forward hollow portion being tapered to tightly engage said nozzle to prevent escape of the liquid and a flanged portion on said rear portion turned in the direction of said apex and extending approximately three fourths the distance around the upper portion of its edge, said cone portion having a perforation at its apex adapted to receive the syringe nozzle, the disk portion being provided with openings through which fluid leaking past the said nozzle may escape from the interior of the cone portion, substantially as set forth.

1,871,524. FOLDING CHAIR. HAROLD HOWE, New York, N. Y., assignor to Howe Folding Furniture, Inc., New York, N. Y. Filed May 5, 1931. Serial No. 535,167. 10 Claims. (Cl. 155—141.)



9. A folding chair comprising a back and rear legs, a seat pivoted thereto, front legs pivoted to said seat, links pivoted at one end to said front and rear legs and having a common movable pivot at their opposite ends, and means disposed substantially centrally of said seat for guiding the movement of said common pivot.

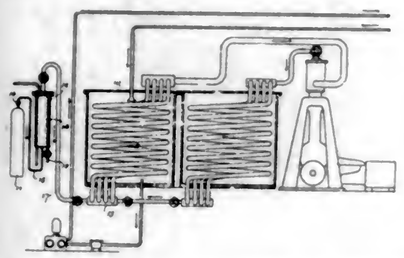
1,871,525. ROTARY PUMP. ARTHUR HUDSON, Clifton, N. J. Filed July 26, 1930. Serial No. 470,893. 3 Claims. (Cl. 103—138.)



1. A rotary machine of the class described comprising a cylinder having in its cylindrical wall a fluid intake and outlet, a rotor revoluble in the cylinder and having a piston movable toward and from and normally urged toward said wall of the cylinder, an annular structure extending around the rotor within the cylinder and outwardly abutted by the piston and apertured for passage of fluid from the intake to the outlet around the rotor and having an abutment opposing direct fluid flow from the inlet to the outlet and having its inner surface formed to cam the piston past the abutment, said structure being split in two sections in a plane angularly related to

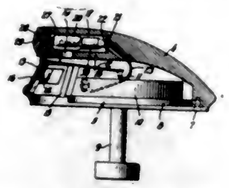
the diametric plane occupied by the abutment and said sections having their ends lapping and flush with each other at the inner periphery of said structure, and means to adjust the section having the abutment bodily toward the other section.

1,871,526. SEPARATOR. JOHN HUDSON, Brooklyn, N. Y. Filed May 24, 1928. Serial No. 280,281. 5 Claims. (Cl. 62—115.)



1. The combination with a refrigerating apparatus; of a device for charging said apparatus from a container of refrigerant adapted to be connected with the apparatus and also with said container, said device serving for the purpose of separating or extracting any water content of the refrigerant during charging, said device including means having freezing surfaces, and means for conducting the refrigerant in the presence of said surfaces for the purpose of freezing the water which will be deposited thereon in the form of snow or ice.

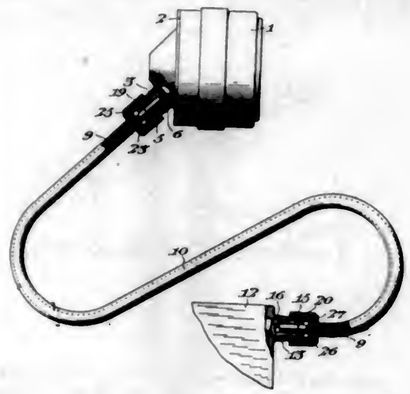
1,871,527. MOTOR HEAT INDICATOR. ROY T. HURLEY, Dobbs Ferry, N. Y., assignor to Motometer Gauge & Equipment Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Sept. 7, 1929. Serial No. 390,872. 3 Claims. (Cl. 116—114.)



1. In a combined radiator cap and heat indicating instrument, the combination of a horizontal casing with a pendent thermal responsive device, an outer shell member cooperating therewith to form a chamber, and indicating mechanism in said chamber operable by said thermal responsive device, said outer shell member having a recess therein for receiving an electric lamp and having a passage from said recess to said chamber in the vicinity of said indicating mechanism said outer shell member being in a horizontal plane.

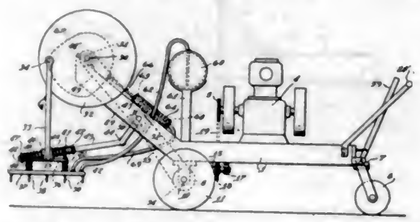
1,871,528. FLEXIBLE SHAFT AND CASING ASSEMBLY. EMMET A. JOLINE, Drexel Hill, Pa., assignor to The S. S. White Dental Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 17, 1930. Serial No. 421,509. 2 Claims. (Cl. 64—30.)

1. In a device of the class described, the combination with driving mechanism and driven mechanism each having a housing and a rotatable socket with a cavity of non-circular section, of a flexible shaft of substantially constant external diameter having end keys each of non-circular section conforming to one of said socket cavities, said keys being located in said cavities with a slip-joint connection to establish driving relationship between said sockets, a sheathing having a substantially constant internal diameter for snugly receiving the shaft whereby to avoid whipping movement of the shaft in the casing, means for securing the sheathing to said housings at its ends whereby it can guide said shaft substantially throughout its length and prevent withdrawing movement



of said keys from said socket cavities, and cooperating portions on said keys and sockets for preventing axial movements of each said shaft key into its corresponding socket cavity whereby to withdraw the other said key from its corresponding socket cavity, each said key having a cross section lying within the extension of the external diameter of the shaft whereby said shaft may be withdrawn from the sheathing from either end thereof upon disengagement of the securing means at the corresponding end of the sheathing.

1,871,529. AUTOMATIC FERTILIZER. GEORGE C. KARSHNER, Detroit, Mich. Filed Feb. 6, 1932. Serial No. 591,381. 6 Claims. (Cl. 111—6.)

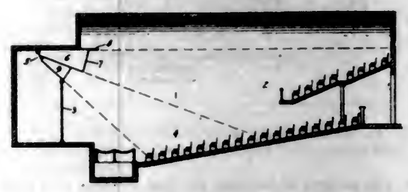


1. A fertilizing machine comprising a wheeled frame, a motor adapted to drive said frame, rotatable members carried by said frame and adapted to be rotated by said motor, and a manifold equipped with a plurality of nozzles suspended from said rotatable members and adapted to be raised and lowered thereby.

1,871,530. METHOD OF PRODUCING HYDRATED LIME. CHARLES WILLIAM KELLER, Bellefonte, Pa., assignor to American Lime and Stone Company, Bellefonte, Pa., a Corporation of Pennsylvania. Filed Apr. 3, 1931. Serial No. 527,619. 6 Claims. (Cl. 23—188.)

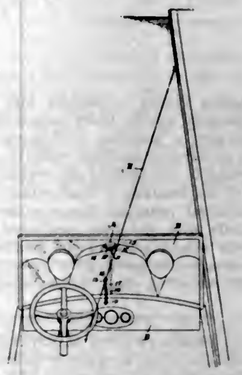
1. The process of hydrating lime consisting in performing the hydration in two stages in each of which a portion of the water necessary to hydration is added and between which stages the lime is permitted to rest through a period sufficient to effect the reaction resulting from the water being initially added.

1,871,531. SOUND DISTRIBUTION SYSTEM FOR AUDITORIUMS. EDWARD W. KELLOGG, Moorestown, N. J., assignor to General Electric Company, a Corporation of New York. Filed Apr. 16, 1932. Serial No. 605,710. 7 Claims. (Cl. 181—30.)



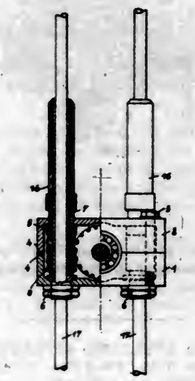
1. In a sound distribution system for auditoriums, a sound reproducer adapted to project all of a sound spectrum, and a second sound reproducer adapted to project all of said sound spectrum except a band of frequencies at the low end thereof, said first reproducer being mounted to project all of said spectrum to a portion of the auditorium remote from said reproducers and to project a band of frequencies at the low end of said spectrum to a portion of the auditorium near said reproducers, said second reproducer being mounted to project all of said sound spectrum except said low frequency band to the portion of the auditorium near said reproducers.

1,871,532. DRIVING AND PARKING GUIDE FOR VEHICLES. MARY DUDLEY KENNA, New York, N. Y. Filed Feb. 23, 1929, Serial No. 342,190, and in Great Britain June 15, 1928. 1 Claim. (Cl. 116—31.)



A steering gauge for automobiles comprising a front sight consisting of a split ring adapted to be clamped about the radiator filling nozzle and provided with a laterally offset sighting point, said front sighting point being laterally disposed with respect to the center line of the vehicle away from that side occupied by the driver thereof, and a rear sight in advance of the driver and in a plane above the front sight and laterally disposed with respect to the center line of the vehicle toward that side occupied by the driver thereof, said rear sight consisting of an upstanding rod having a sight opening at the upper end thereof, an upstanding socket for said rod carried adjacent the windshield of the vehicle, said rod being vertically adjustable within said socket and said socket being pivotally mounted and adjustable at its lower end whereby to secure transverse adjustment of said rear sight.

1,871,533. SPINDLE RAIL. JOHANN JACOB KEYSER, Aarau, Switzerland. Filed Oct. 16, 1929, Serial No. 400,011, and in Germany and Switzerland Nov. 5, 1928. 1 Claim. (Cl. 118—45.)



In a spindle rail for speed frames, spinning frames, doubling frames and the like, a casing divided through its medial longitudinal plane, providing upper and lower sections, said sections having complemental bearing members, a drive shaft journalled in said bearing members, said drive shaft having gears thereon, a plurality of spindles mounted in said lower section and each having a worm gear in mesh with a respective gear on said drive shaft, said worm gears having an abutment upon their upper ends for engagement by said upper section, and means for securing said upper section to said lower section whereby to retain the parts in operative relation.

1,871,534. EYE GOGGLES. DONALD E. KIMBALL, Cleveland, Ohio, assignor to The Safety Equipment Service Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 15, 1930. Serial No. 502,393. 5 Claims. (Cl. 2—14.)

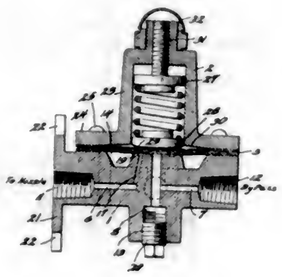


1. Eye goggles, comprising goggle-cups, a nose-bridge including a coil spring, a casing therefor, and a central engagement between said casing and an enlarged coil of the spring.

1,871,535. VALVE. EMERT J. LATTNER, Cedar Rapids, Iowa. Filed Aug. 15, 1930. Serial No. 475,404. 12 Claims. (Cl. 137—153.)

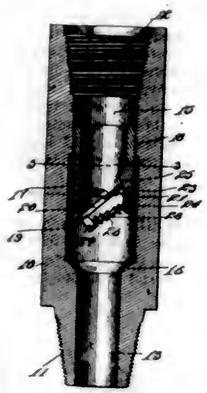
1. In a fluid pressure regulating valve having inlet, outlet and by-pass ports, valve seats asociated with said outlet and by-pass ports, a flexible diaphragm constituting a valve member so situated with respect to said ports as

to permit flow from said inlet port to said outlet port only while said incoming fluid is at a pressure above a predetermined amount and to permit flow through said by-pass port



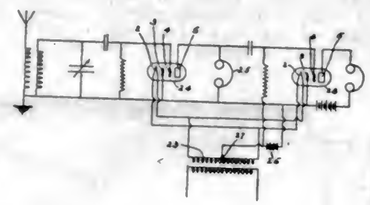
only while excess pressure conditions prevail, and adjustable spring means for yieldingly holding said diaphragm against said seats.

1,871,536. WELL DRILLING APPLIANCE. FRANK L. LE BUS, Electra, Tex. Filed Feb. 25, 1929. Serial No. 342,444. 1 Claim. (Cl. 137—69.)



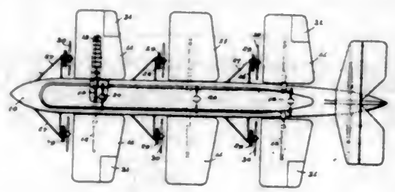
In a device of the class described, a tubular body adapted to be coupled in on a string of drill pipe sections adjacent the lower end thereof, a sleeve threaded into the tubular body member and provided with a valve seat inclined at an angle to the horizontal, an arm projecting downwardly from the upper end of the valve seat, a valve pivotally mounted on the arm and adapted to engage the seat, a rod pivotally mounted on the arm adjacent the valve, an ear secured to the valve and provided with a passage adapted to receive the free end of the rod and a spring located between the ear and the arm, the sleeve, valve, and valve mounting being removable as a unit from the upper end of the tubular body.

1,871,537. ELECTRON DISCHARGE DEVICE. ERNEST ANTON LEDERER, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Oct. 22, 1925. Serial No. 64,074. 5 Claims. (Cl. 250—27.)



4. The method of reducing the hum incident to the use of alternating current heating the cathode of a three electrode tube comprising a grid, an anode and a cathode heated by alternating current which comprises reducing the capacity between said grid and cathode.

1,871,538. AIRPLANE. MATHIAS LEUPOLD, Jamaica, N. Y. Filed Apr. 7, 1931. Serial No. 528,437. 8 Claims. (Cl. 244—14.)

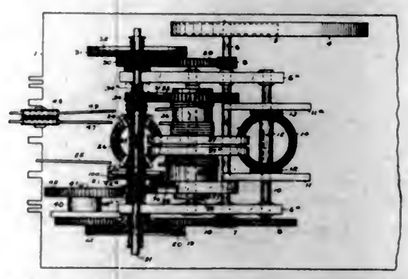


1. An airplane having a fuselage with a plurality of transverse bearings spaced apart longitudinally and longitudinal bearings, a plurality of transverse shafts journaled in the transverse bearings respectively, a plurality of wings secured to the ends of the transverse shafts and at the sides of the fuselage, a longitudinal shaft journaled in the longitudinal bearings, means connecting the last mentioned shaft with the first mentioned shafts, a plurality of power means adjacent the transverse shafts respectively, and means connecting the power means with the longitudinally extending shaft for rotating the latter.

1,871,539. EXCAVATING MACHINE. CHARLES H. LOTTE, Massillon, Ohio, assignor to Byers Machine Company, Ravenna, Ohio, a Corporation of Maryland. Filed Aug. 17, 1928. Serial No. 300,231. 5 Claims. (Cl. 214—135.)

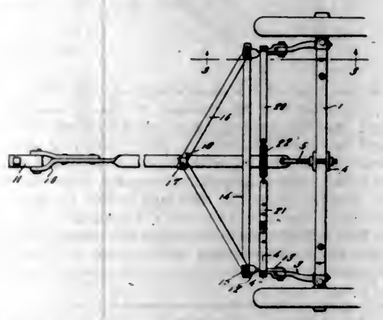
1. In a power excavator, the combination of a frame, a turntable mounted on the frame, a boom extending from the turntable having a dipper stick and dipper, a main driving shaft, a drum supporting shaft, an auxiliary shaft, two sets of gears of different ratios engaging the main shaft and adapted to be selectively connected to the auxiliary shaft for driving the latter shaft in opposite directions at different speeds, a gear of one of said sets being secured to the drum supporting shaft for continuous rotation thereof by the main shaft, two drums loosely mounted on

the drum supporting shaft, each having a clutch mechanism for locking the drum to the said shaft, a gear secured to one of the drums and a clutch pinion on the auxiliary



shaft adapted to be engaged with the drum gear to cause the auxiliary shaft to rotate the said drum selectively in opposite directions.

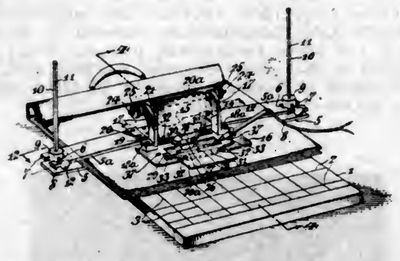
1,871,540. HITCH FOR AUTOMOBILE TRACTORS AND THE LIKE. JOSEPH E. MACHOLDA, North Redwood, Minn. Filed Aug. 8, 1931. Serial No. 554,830. 2 Claims. (Cl. 280—33.55.)



1. A hitch of the class described comprising a tongue, means for attaching the tongue to an axle of a vehicle, forwardly extending members connected to the spindle arms of said vehicle, a cross bar connecting the front ends of said members together, a pair of bars connected to the members, a spring connecting the inner ends of said pairs of bars together, and links connecting the front ends of the aforementioned members with the tongue.

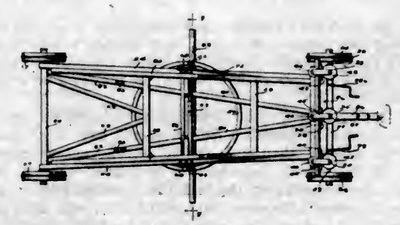
1,871,541. WRITING GUIDING MACHINE. CHARLES MARKS and CHARLES S. BRUDER, Philadelphia, Pa. Filed June 27, 1931. Serial No. 547,426. 18 Claims. (Cl. 41—7.)

14. In a writing guiding machine, the combination with a base plate provided with a central longitudinal opening, below which a sheet of gold leaf from a roll passes, of brackets rising from the base plate and provided with means at their ends for engagement with a spindle of the roll of gold leaf to prevent the roll from unwinding, said base plate having slots adjacent opposite sides of the opening through which the gold leaf passes to appear below the opening, spring clips carried by the base plate and adapted to overlie the gold leaf at points beyond the slots to hold the gold leaf taut, upper and lower clamping bars, between which an article may be clamped, whereby a name may be transferred thereto at a point through the opening, and means operatively associated with the opposite ends of the clamping bars for permitting the upper clamping bar to be arranged in different adjusted positions, said last mentioned means comprising guide rods on the lower clamping bars, collars on the rods and provided with diametrically opposite grooves, the upper clamping bars having bifurcations to engage the grooves and straddle the collars, and means for holding the collars in different adjusted positions on the rods, whereby articles of



different heighth may be clamped in position, and a base board on which the lower clamping bar is mounted, the upper surface of the base board having scored lines for facilitating the positions of the article whereby the name transferred thereto may be applied with accuracy.

1,871,542. ROAD MAINTENANCE MACHINE. JOHN S. MCCALLUM, Goldfield, Iowa. Filed Dec. 3, 1928. Serial No. 323,336. 1 Claim. (Cl. 37—156.)



A road maintenance machine comprising a frame, wheels supporting the frame, a ring, a plow secured to the ring and disposed transversely of the frame, rods connecting the ring with one end of the frame, the other end of the frame having passages, rods having the outer ends received within the passages to provide a sliding connection for the rods with said end of the frame, the last mentioned rods being pivotally connected with the inner ends of the last-mentioned rods, and means for adjustably supporting the ring from the frame.

1,871,543. MALLEABLEIZING IRON. RUSSELL H. MCCARROLL and GOSTA VENNERHOLM, Dearborn, Mich., assignors to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Aug. 25, 1930. Serial No. 477,796. 1 Claim. (Cl. 148—21.8.)

The method of manufacturing malleableized iron which consists in preparing molten iron having a carbon content between 2.00% and 2.70%, a manganese content between 1.20% and .40% and a silicon content between 2.80% and 1.80%, casting the molten iron in molds, cooling the molten metal quickly in said molds to prevent decomposition of iron carbide during freezing of the metal, thereby producing white cast iron of high silicon content, and subjecting such white cast iron to an annealing heat treatment of from two to fifteen hours duration, such annealing heat treatment comprising heating the iron quickly to a maximum temperature above the critical between 1650° and 1825° F., holding at such a maximum temperature for approximately 60% of the entire time for the annealing treatment, cooling to slightly above the Ar_1 critical point, such cooling being effected in approximately 15% of the time for the entire annealing heat

treatment, and the slow cooling through and slightly below such point, such slow cooling being effected in approximately 25% of the time for the entire annealing heat treatment.

1,871,544. CAST IRON ARTICLE AND METHOD OF MANUFACTURING THEREOF. RUSSELL H. MCCARROLL and GOSTA VENNERHOLM, Dearborn, Mich., assignors to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Dec. 26, 1930. Serial No. 504,836. 4 Claims. (Cl. 148—3.)



1. An article of manufacture comprising cast iron containing not below 1.75 silicon, and having a matrix not above the martensitic range nor below the sorbitic range and having the free carbon content in the form of temper carbon.

4. The process of manufacturing cast iron which consists in preparing a batch of molten metal having a carbon content greater than 2% and a silicon content greater than 1.75% while maintaining a higher carbon than silicon content, casting the metal in a metal mold to produce an article, allowing said article to cool, then subjecting it to a short cycle anneal of from 1600° to 1700° F. to produce a machinable product having a hardness below, but in the region of, 228 Brinnell, and finally subjecting to a reheating above the temperature of the critical followed by quenching to secure a matrix not above the martensitic nor below the sorbitic range.

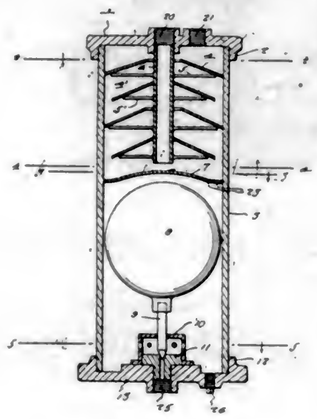
1,871,545. METHOD OF MANUFACTURING CAST IRON, AND CAST IRON ARTICLES. RUSSELL H. MCCARROLL and GOSTA VENNERHOLM, Dearborn, Mich., assignors to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Jan. 19, 1931. Serial No. 509,879. 2 Claims. (Cl. 148—21.7.)

1. The method of manufacturing cast iron which consists of preparing a batch of molten metal in which the constituents will be within the following limits:

Carbon from 1.90 to 2.30%
Manganese from .20 to .65%
Silicon from 1.50 to 2.20%
Phosphorus below .12% and
Sulphur below .12%,

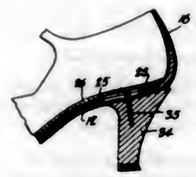
casting the molten metal in a mold to secure an article of predetermined configuration, and after the article has cooled reheating to approximately 1750° F. for a predetermined period of time, depending upon cross section and analysis, sufficient to decompose the combined carbon, then lowering the temperature to a point somewhat above the critical range, and preventing further decomposition at such point by a rapid cooling, such as quenching, thereby to obtain a matrix composed of solid solution, and then finally reheating to a point below the critical range, to produce a matrix composed of martensite, troosite, sorbite or pearlite as determined by the reheating temperature.

1,871,546. AUTOMATIC OIL SEPARATOR. EDWARD R. MCCLAFFERTY, Pittsburgh, Pa. Filed Oct. 13, 1931. Serial No. 568,644. 2 Claims. (Cl. 183—106.)



1. A separator of the class described including a cylinder, a top head for the cylinder, a bottom head for the cylinder, said top head being provided with an inlet opening and an outlet opening, a tube extending from the top head communicating with the inlet opening down into the cylinder, baffles extending inwardly from the inside of the cylinder about the tube, and baffles extending outwardly from the tube alternately arranged with respect to the first baffles, a partition across the cylinder below the tube and having perforations, said bottom head having an outlet opening, and float valve control means therefor.

1,871,547. SHOE STRUCTURE. FRANK A. MELCHIONNA, Cincinnati, Ohio. Filed Jan. 22, 1927. Serial No. 162,880. 7 Claims. (Cl. 36—24.5.)



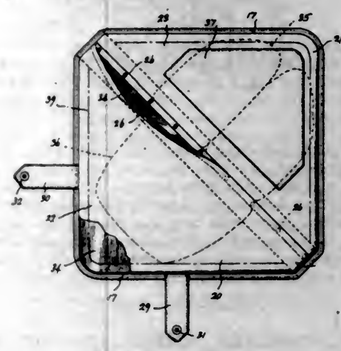
1. A reinforcing plate for the sole structure of shoes having wooden heels comprising a sheet metal member having an outer curvature to coincide with the curvature of the heel portion of a shoe sole, and forming a narrow rim over which the lasted edge of the heel portion of a shoe upper may extend said rim forming a central aperture, the transverse width of the rim portion being less than the width of the over-lasted portion of the upper to permit fastening of the upper by means extending through the aperture, the extreme rear end of the rim portion having a perforation therethrough for aligning the sole structure with the heel seam of a shoe upper.

1,871,548. HOG RING. HENRY MEYER, Rhineland, Mo. Filed Apr. 17, 1931. Serial No. 530,951. 2 Claims. (Cl. 119—135.)



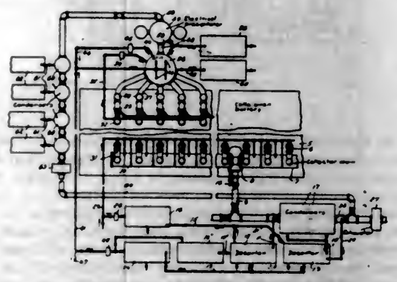
1. A link hog ring comprising a pair of rods having hooked ends, inwardly extending loops adjacent to their outer ends and a link connecting the loops.

1,871,549. HAND BAG. ELSIE F. MILLER, New York, N. Y. Filed May 12, 1930. Serial No. 451,811. 2 Claims. (Cl. 150—28.)



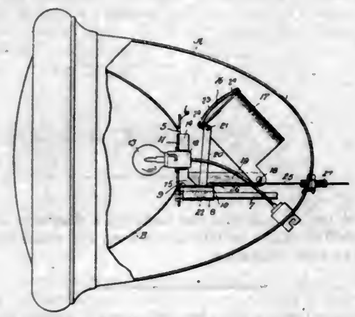
1. A hand bag comprising a body of substantial marginally square formation having diagonally arranged spaced parallel crease lines reaching diagonally opposed corners to provide a relatively stiff intermediate back portion and matched substantially triangular-shaped stiff side portions upon folding of the body, pockets carried by the side portions at their inner faces and having mouth openings confronting each other and the intermediate back portion, the pockets at their mouth openings being adapted to overlap throughout, and fasteners at the overlap to close the same.

1,871,550. APPARATUS FOR DISTILLATING TAR. STUART PARMELEE MILLER, Tenafly, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed June 3, 1927. Serial No. 196,269. 1 Claim. (Cl. 202—173.)



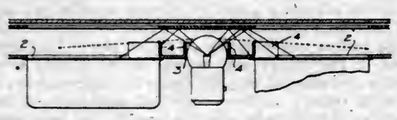
In combination with a coke oven a plurality of stills, means for passing gases from each of a plurality of the ovens to each of the stills, and means for introducing tar into each of the stills, and means for withdrawing distillation residue therefrom, a large still, means for introducing the residue into the large still, means for passing gases from each of the plurality of stills to the large still and means for bringing the residue into direct contact with the gases therein in the form of a spray.

1,871,551. HEADLIGHT. GEORGE W. O'BRIEN, Jersey City, N. J. Filed July 28, 1931. Serial No. 553,656. 8 Claims. (Cl. 240—45.)



1. A headlight including a parabolic reflector having an opening at its vortex, and a lamp mounted for movement through said vortex opening from a normal position at the focus to a retracted position in rear of the vortex opening and wholly outside of the confines of the reflector and a screen movable from a normal out-of-the-way position when the lamp is projected forwardly, to a position in front of said lamp when the same is retracted.

1,871,552. INSTRUMENT PANEL BOARD. JOHN R. PADESKY, La Crosse, Wis., assignor to Moto Meter Gauge & Equipment Corporation, New York, N. Y., a Corporation of Delaware. Original application filed July 28, 1928, Serial No. 295,947. Divided and this application filed Dec. 21, 1929. Serial No. 415,682. 1 Claim. (Cl. 240—8.16.)

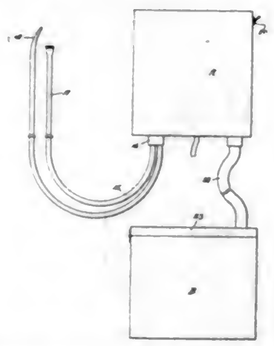


In a panel board for instruments the combination of a light member with a plurality of instruments, a cover plate forming an enclosure with said panel board, the light being projected to the inside of said enclosure thereby concealing the light from the front of said panel, a plurality of openings in said panel board, the light member and instruments being insertable within said openings, shields of a concavo-convex character secured around some of said openings, one of said shields partially surrounding the light opening and another the instrument opening, the convex surfaces of same shields being adjacent one to the other whereby the direct rays of light will be restricted to a predetermined place by the first mentioned shield and the reflected rays be diverted by the second mentioned shield.

1,871,553. MEANS FOR COOLING THE HEAD OF ONE HAVING A PERMANENT WAVE. WILLIAM G. PARKER, Lakeland, Fla. Filed June 26, 1931. Serial No. 547,139. 3 Claims. (Cl. 132—36.)

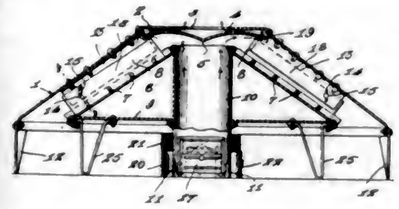
1. A device of the class described comprising a housing, a motor driven fan in said housing, an ice box, means for

introducing air into the box, a connection from the box to the housing, whereby the operation of the fan will draw



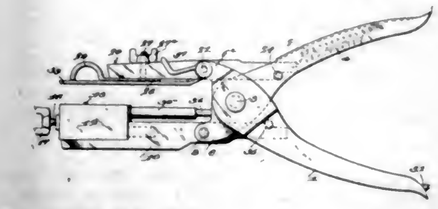
air thru the ice box into the housing, a discharge for the air from the fan, a nozzle and a hose for connecting the nozzle to said discharge.

1,871,554. BROODER ATTACHMENT. EDWIN F. PAUL, Manchester, Kans. Filed Mar. 10, 1930. Serial No. 434,745. 3 Claims. (Cl. 119—32.)



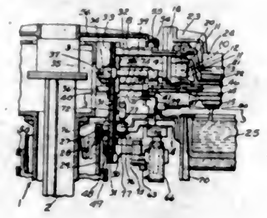
3. A hover comprising a downwardly slanting canopy having an opening in its top, a downwardly slanting casing in the canopy, a chimney centrally fixed in the casing and projecting therebelow and designed to enclose a heater in the bottom thereof, pairs of spaced plates fixed respectively to the canopy and casing, means adjustably connecting the pairs of lapping plates for adjusting the casing with respect to the canopy and said pairs of plates providing therebetween separate flues for the heat passing from the chimney between the canopy and casing.

1,871,555. ELECTRICALLY HEATED BRANDING IRON. HARRY A. PEARCE, El Paso, Tex. Filed Nov. 15, 1930. Serial No. 495,969. 8 Claims. (Cl. 219—30.)



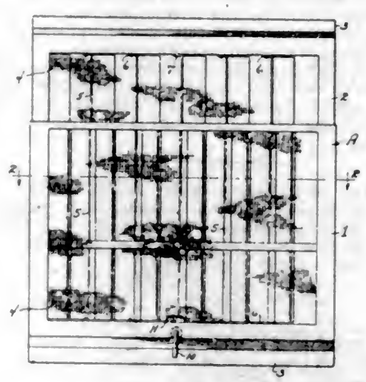
8. A branding iron comprising a plier-like structure including pivotally connected normally open handles, jaws carried by said handles and movable toward and away from each other on the closing and opening of the handle, a marking element carried by one of said jaws, an article holder carried by the other jaw and having a recess, a clamping spring mounted on the holder-carrying jaw and having arms arranged to cooperate with said holder to secure the article to be marked in the recess in the holder.

1,871,556. GLASS GATHERING AND FORMING MACHINE. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Feb. 6, 1929. Serial No. 337,941. 14 Claims. (Cl. 48—5.)



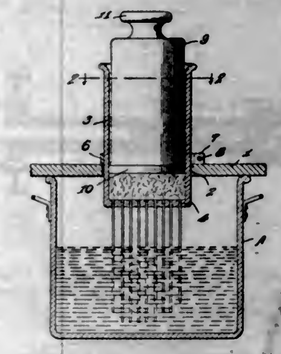
1. In glass gathering apparatus, a plurality of glass gathering receptacles movable successively to and from position to gather glass from a gathering pool, and severing means for successively severing the glass gathered by the respective receptacles from the glass of the pool, said severing means traveling with each of said gathering receptacles during a severing operation and then returning to position to cooperate with the succeeding receptacle.

1,871,557. COMBINED SCREEN AND SHUTTERS. GABOR RACY, South Norwalk, Conn. Filed Apr. 7, 1930. Serial No. 442,413. 1 Claim. (Cl. 98—99.)



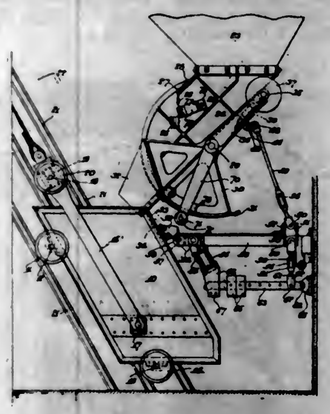
The combination of wire mesh covered slidably interfitted frames, flanges formed on the top and bottom ends of said frames and angularly disposed to bring the same flush with the fronts of the frames, ears on the frames at right-angles thereto, sets of louvers pivotally supported on the ears and extensibly interfitted with each other and arranged in spaced side by side relation, a bar arranged between the louvers and the wire mesh portions of the frames and linked to the pivotal connections of the louvers, and a crank handle journaled transversely in one of the frames and operatively connected with the bar to reciprocate the same for the opening and closing of the louvers.

1,871,558. NOODLE PRESS. OSCAR REDWITZ, Sharon, Pa. Filed Nov. 7, 1930. Serial No. 494,158. 1 Claim. (Cl. 107—14.)



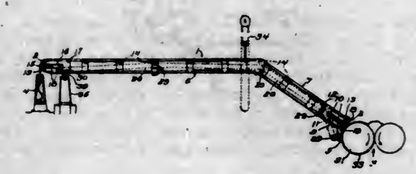
A noodle press comprising a cylinder having an outwardly flared upper end and being provided with a bottom with apertures arranged therein, said apertures having outwardly flared upper ends, a plunger for said cylinder, an enlarged ring portion formed with the bottom of said plunger and snugly engaging the wall of said cylinder, a handle for said plunger and being provided with an annular groove forming a hand hold, a base having an opening formed therein for the purpose of receiving said cylinder and adapted for engagement with the top of a receptacle, a band surrounding said cylinder for vertical slidable movement thereon, ears formed with said band, a thumb nut for said ears for securing the band in adjusted positions about the cylinder to support the latter through said opening at various distances above the bottom of said receptacle.

1,871,559. SKIP HOIST. PERCIVAL K. REED, Llanerch, Pa., assignor to Atlas Conveyor Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 27, 1929. Serial No. 395,493. 4 Claims. (Cl. 214—125.)



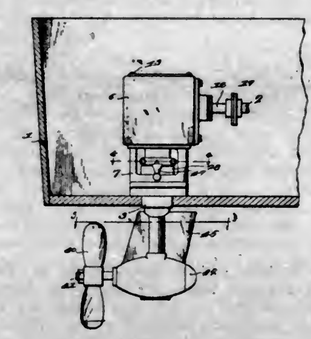
1. In a skip hoist, means for loading the bucket comprising a chute; a gate structure movably mounted with respect to said chute and having a portion adapted to extend across the end thereof; counterweights adapted to impel the gate structure to the closed position; means for impelling the gate structure to the open position comprising shoes carried by the bucket, and a device adapted to be engaged by said shoes as the bucket descends to the loading position, said device engaging a portion of the gate structure and normally moving in unison therewith but adapted to be pushed by the shoe out of the path of travel thereof when the bucket ascends after the gate has moved toward or to the closed position; and a latch member adapted normally to retain the gate structure in the open position, said latch member being independent of the means for impelling the gate structure to the open position.

1,871,560. RUBBER STOCK FEEDING DEVICE. ISIDORE J. REMARK, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 7, 1926. Serial No. 134,076. 13 Claims. (Cl. 18—4.)



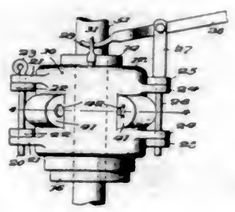
1. The combination with a rubber mill having a roll to which the rubber stock adheres, of a conveyor belt having an end portion closely adjacent said roll in contact with the rubber stock adhering to the roll, said belt being driven solely by its engagement with the rubber stock adhering to said roll and in a direction such that the upper run of the belt moves away from the roll, whereby a strip of stock may pass from the roll to the belt at the point where the stock is engaged by both the roll and belt and be delivered by the belt to a remote operating station.

1,871,561. RUDDER AND PROPELLER GEAR DRIVE FOR MOTOR BOATS. HENRY W. RICE, East Boothbay, Me. Filed May 28, 1930. Serial No. 456,768. 1 Claim. (Cl. 115—34.)



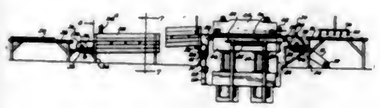
A propulsion and steering means for boats comprising a stationarily positioned casing having apertures upon opposite sides thereof, a vertically positioned casing rotatable mounted in the stationarily positioned casing, a propulsion means mounted in said vertically positioned casing and adapted for actuation from a suitable source of power, a steering vane positioned on said vertically positioned casing, a tiller mounted on said rotatable casing including a clamp member adapted to partly encircle said rotatable casing, a separate clamp cooperable with said first named clamp member and said casing, whereby said tiller may be detached and projected through a desired aperture in said stationary casing.

1,871,562. PIPE CLAMP. WILLIAM E. RICH, Bradley, Ark., assignor of one-half to Roy Britton, Cotton Valley, La. Filed Oct. 20, 1930. Serial No. 490,015. 8 Claims. (Cl. 24—248.)



1. In a pipe clamp, a casing, links mounted therein for vertical swinging movement, pipe clutch dogs carried by said links, lift rods vertically slidable in said casing, link engageable means secured on said rods and adjustable longitudinally thereof, and means for moving said lift rods vertically in the casing.

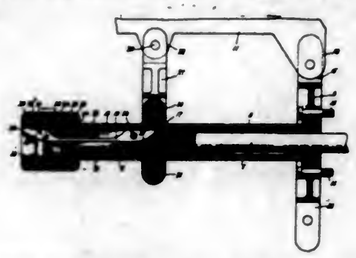
1,871,563. APPARATUS FOR MANUFACTURING TILE BOARD. RICHARD ERICSON, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 30, 1929. Serial No. 403,386. 13 Claims. (Cl. 154—1.)



1. In a machine for the manufacture of tile board, a steaming chamber, means for conveying plaster board through said chamber so that said plaster board is subjected to the moistening action of steam, pressing means adapted to impress a tile board impression upon one surface of said moistened plaster board, and means for drying said tile board.

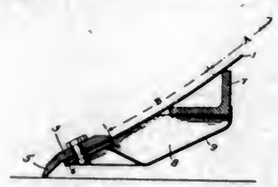
1,871,564. LOCKING MECHANISM FOR SWIFTS. JOHN JOSEPH SIPPEL, Upper Darby, Pa., assignor to Wicaco Machine Corporation, a Corporation of Pennsylvania. Filed Jan. 2, 1930. Serial No. 418,137. 7 Claims. (Cl. 242—110.)

1. In a collapsible swift, a central shaft, brackets pivoted at the rear ends to said shaft, a sliding sleeve on said shaft and link mechanism radially connected to said brackets, a knob on said sleeve and a trigger on said shaft extending into said knob, said trigger normally positively locking the sleeve to prevent lateral movement of the sleeve and said knob cooperating with the trigger so that



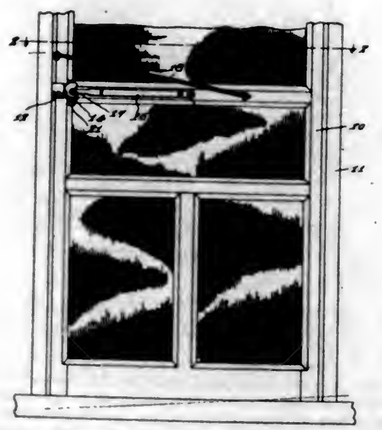
when said knob is initially operated the trigger will be released and the sleeve capable of sliding movement to thereby tilt said brackets.

1,871,565. SNOWPLOW NOSE AND CUTTER BAR THEREFOR. GEORGE C. SOULE and JOHN B. WOODBURY, South Portland, Me., assignors to Maine Steel Products Company, Portland, Me., a Corporation of Maine. Filed Oct. 18, 1929. Serial No. 400,545. 6 Claims. (Cl. 37—44.)



4. A cutter bar for a snow plow having a portion in substantial continuation of the lifting angle of the plow and having its lower margin downwardly divergent therefrom to constitute an inclined cutting edge.

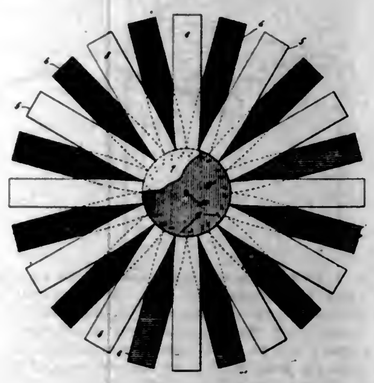
1,871,566. DOORCHECK. EDWARDE EARLE STEPHENS, Charleston, W. Va. Filed Aug. 30, 1930. Serial No. 478,985. 4 Claims. (Cl. 16—84.)



1. A door check including a cup-like receptacle adapted to be secured to the door frame and having an inwardly projecting socket formed centrally of the bottom thereof,

a hollow inflatable member having a reinforced portion partly received by the receptacle, and a headed bolt passed through said socket and secured to said reinforced portion of the inflatable member to hold the latter associated with the receptacle.

1,871,567. FIBER CONTAINER. CLYDE W. STUART, New York, N. Y. Filed Dec. 24, 1929. Serial No. 416,240. 3 Claims. (Cl. 217—122.)



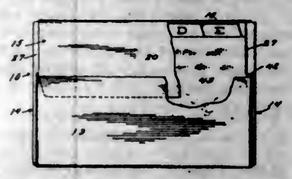
1. A built-up container, comprising a body formed from a plurality of blanks, each having a solid integral center with radiating arms integral with the center which when bent up overlap, a pair of rings for holding said arms in their bent formation, one of said rings being arranged at the outer end of the arms, a plurality of staples for each ring for holding the same in place, and reinforcing disks secured to the center interiorly and exteriorly of said blanks.

1,871,568. PRINTING PLATE AND METHOD OF MANUFACTURING IT. HYLTON SWAN, Upper Montclair, and SIGFRIED HIGGINS, Verona, N. J., assignors to Bakelite Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 15, 1929. Serial No. 407,563. 8 Claims. (Cl. 101—395.)



1. A printing plate having a printing face portion prepared from a phenolic resinoid composition and a backing of resilient material.

1,871,569. CARD FILING CASE. NATHAN WARSHAW, Brooklyn, N. Y. Filed Feb. 20, 1931. Serial No. 517,278. 3 Claims. (Cl. 129—43.)



2. A device of the character described comprising a rectangular case including a back, a bottom, sides, a cover and a front panel, all formed from a single blank, a reinforcing frame of subatantially U-shape located within the case against the bottom and sides thereof and secured to the latter, said front panel being swingably mounted with respect to the back and having portions slidably engaged against said frame.

1,871,570. TARPAULIN. LESTER N. WEBER, Chicago, Ill., assignor to American Reenforced Paper Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Dec. 4, 1930. Serial No. 499,965. 5 Claims. (Cl. 108—8.)



1. A tarpaulin formed of reenforced, waterproof paper and provided with tie loops along the edges of the paper and each tie loop having its leg portions adhesively secured to the opposite faces of the reenforced paper, and each tie loop having its leg portions firmly secured together at the edge of the paper by fastening means extending through said leg portions and adapted to prevent the leg portions from being pulled apart at this point.

1,871,571. TARPAULIN. LESTER N. WEBER, Chicago, Ill., assignor to American Reenforced Paper Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Jan. 21, 1931. Serial No. 510,120. 5 Claims. (Cl. 108—8.)



1. A tarpaulin formed of waterproof reenforced paper and provided along its edges with anchoring eyelets, each comprising a strip of textile material folded about the edge of the paper and adhesively secured to the paper, a covering of waterproof paper secured over the textile material to exclude moisture therefrom, and a grommet secured through said reenforced paper, textile material and paper covering.

1,871,572. REENFORCED RUBBER AND PROCESS OF MAKING THE SAME. WILLIAM BURTON WESCOTT, Dover, Mass., assignor to Rubber Latex Research Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 2, 1924. Serial No. 703,782. 4 Claims. (Cl. 154—2.)

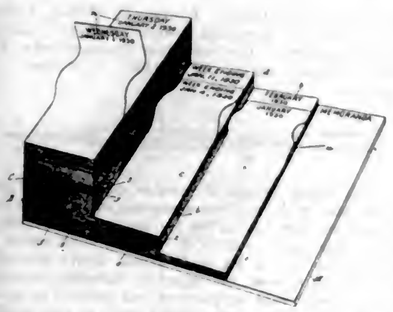
1. A body of coagulation rubber containing included long fiber in random arrangement and also containing fabric, said fabric being localized in the body and having threads extending into other parts of said body.

2. In the manufacture of rubber articles, the process which comprises producing a bath of latex in a state of incipient coagulation, immersing in the bath a mass of fibers in random arrangement and also placing formed fabric therein adjacent the surface of the mass of fibers.

1,871,573. PAD. MARCUS B. WHITNEY, Darien, Conn. Filed Oct. 2, 1930. Serial No. 485,088. 5 Claims. (Cl. 40—121.)

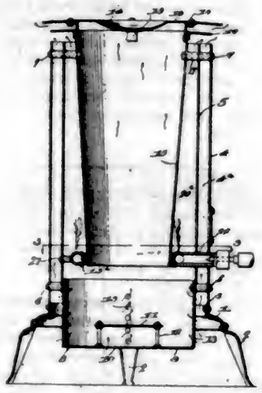
1. A calendar pad including a plurality of superimposed bound leaves corresponding in number to the number of days in a given year; a lower group of said leaves corresponding in number to the number of months in a year and being of greater size than the remaining leaves and bearing respectively on the portions thereof which extend beyond the remaining leaves, indicia identifying the months of the year; an intermediate group of leaves

which combined with the lower group of leaves equals the number of weeks in the year, said intermediate group of leaves being of greater size than and having a portion extending beyond the remaining upper group of leaves, the extending portions of said intermediate group of leaves and the portions of the lower group of leaves which



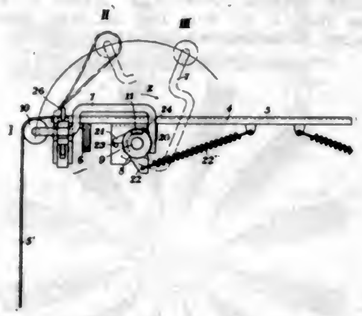
underlie said extending portions of the intermediate group of leaves bearing respectively thereon indicia identifying the weeks of the given year; and the remaining upper group of leaves and the portions of the intermediate and lower group of leaves which underlie the uppermost group of leaves bearing respectively thereon indicia identifying the days of the given year.

1,871,574. GAS HEATER STOVE. MYRON W. WOOD, Wichita, Kans. Filed July 21, 1930. Serial No. 469,596. 1 Claim. (Cl. 126—90.)



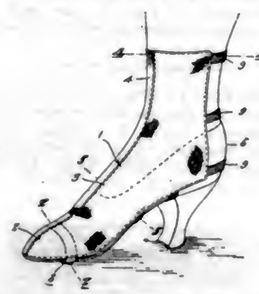
A gas heater comprising an outer cylindrical casing, a pan secured to and depending from the lower end of said casing, and having a bottom with a central air inlet therein, an air deflector arranged above said opening, a hollow inverted truncated cone-shaped open ended casing supported in said outer casing with its lower smaller end terminating short of said outer casing and its upper end extended above it, said casings being spaced radially from each other to form a combustion chamber tapering towards its upper end, an annular burner arranged between the lower end of said inner casing and the outer casing spaced from both but nearer to the inner casing whereby the flame is caused to follow the inclined wall of the inner casing, the side walls of said pan being apertured to supply air to the combustion chamber outside the burner and feed the flame throughout its length.

1,871,575. MACHINE FOR MOLDING AND PRESSING OIL SEED CAKES OR THE LIKE. ALV AARSKOG and KARSTEN SVENDSEN, Stavanger, Norway, and PETER EBEL, Magdeburg, Germany, assignors to the Firm Aktieselskabet Lilleborg Fabriker, Stavanger, Norway. Filed Aug. 19, 1930, Serial No. 476,362, and in Germany Aug. 29, 1929. 7 Claims. (Cl. 100—51.)



1. In a press cake forming machine, the combination of a press for forming the cake, cake supporting and cloth holding means co-operating with the press and movable to and from the same and means actuated by the cake supporting and cloth holding means upon its movement from the press for folding opposite ends of the cloth carried thereby around the cake.

1,871,576. SHOE AND STOCKING PROTECTOR. LILLIAN ARGARD, near Atlanta, Ga. Filed Aug. 17, 1931. Serial No. 557,633. 1 Claim. (Cl. 36—72.)

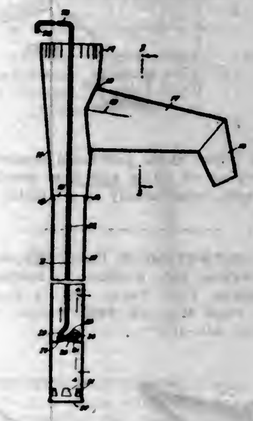


A shoe and stocking protector for the purpose set forth, comprising a fabric body of water-proof material, shaped to include a toe portion, an arched portion and a rear portion which extends upwardly from the arched portion and the lower edges of the protector being arranged approximately in the same plane and the protector being arched or U-shaped in cross section throughout the length thereof, the toe portion of the protector having an inner continuous pocket, a band guided through the pocket and movable to adjusted positions, the lower edges of the arched portion of the protector being connected by spaced elastic straps, the rear of the protector having secured to one of its edges a plurality of spaced elastic straps and snap fasteners between the free ends of the straps and the second edge of the protector.

1,871,577. LIFT PUMP. MAURICE J. BABIN, New York, N. Y. Filed May 6, 1930. Serial No. 450,261. 6 Claims. (Cl. 103—178.)

1. In a lift pump, a plunger including a flap valve element and a plunger rod, said plunger rod being formed

from a single length of stock of uniform thickness throughout its entire length and bent at its lower end to provide a horizontal bearing terminal upon which the flap valve element is swingably mounted, said lower end



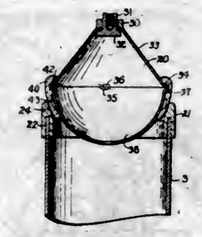
having a bent portion between said terminal and the remainder of the plunger rod to provide a pair of bights with which the valve element respectively engages to limit its swinging movement in opposite directions.

1,871,578. TENNIS RACKET FRAME. WILLIAM BANCROFT, Pawtucket, R. I. Filed Nov. 22, 1930. Serial No. 497,581. 5 Claims. (Cl. 273—73.)



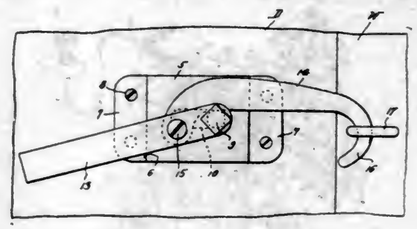
1. An improved tennis racket comprising a plurality of bow strips of wood, a strip of rawhide interposed between the wooden strips at the outer or top portion of the bow, and supplementary strips of black walnut or other appropriate substantially non-shrinkable material joined with the ends of the rawhide strip and lying between the strips of wood at the sides and lower portion of the bow frame.

1,871,579. FLOAT VALVE. SAMUEL F. BASHARA, Houston, Tex. Filed Sept. 13, 1929. Serial No. 392,379. 8 Claims. (Cl. 4—56.)



1. A float valve including in combination a cap, a cup, said cap and cup having outstanding flanges adapted to abut, means for retaining said flanges in abutting relation, and a seating ring of flexible material overlying said flanges, said means including interengaging outstanding lugs on said flanges.

1,871,580. CLOSURE FASTENER. JOHN J. BEADLE, Corydon, Iowa. Filed Dec. 10, 1931. Serial No. 580,168. 2 Claims. (Cl. 292—118.)

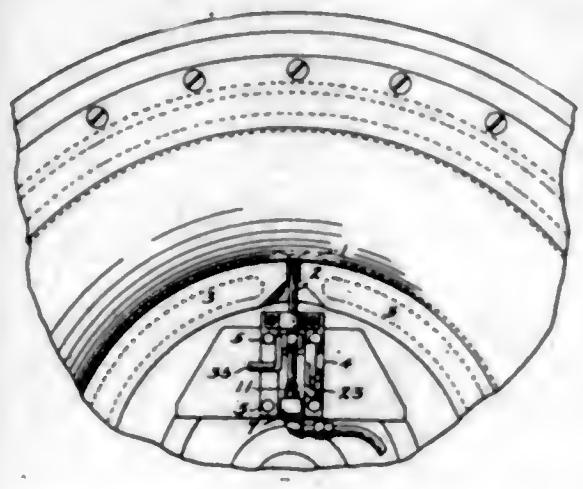


1. A device of the class described comprising in combination a slotted attaching plate, a pivot bolt extending through the slot, a U-shaped handle pivoted adjacent one end upon said bolt, and a latch member having one end arranged between and pivotally connected to the arms of said U-shaped handle intermediate the ends thereof.

1,871,581. VALVE HOLDER FOR TUBE VULCANIZERS. WALTER BRETH, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 21, 1932. Serial No. 587,941. 10 Claims. (Cl. 18—2.)

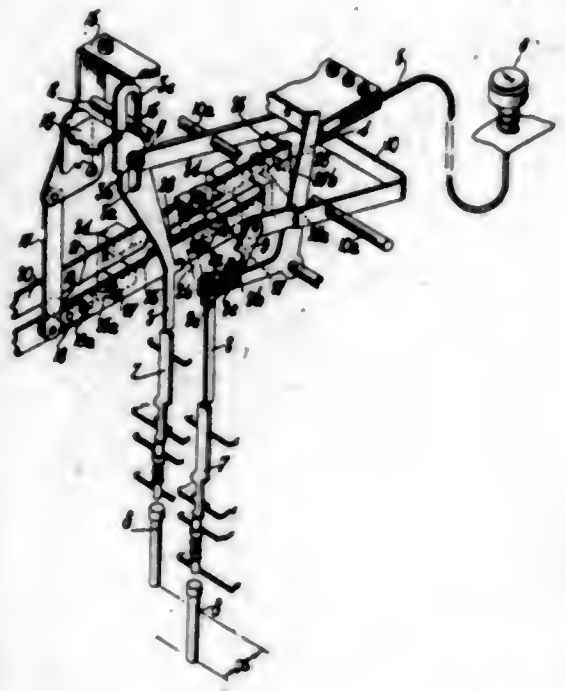
10. In a vulcanizing device having mating mold sections to receive an endless rubber tube therebetween to be vulcanized, said tube having a fluid inlet stem extending from between said sections, a rigidly mounted fluid conduit positioned in substantially axial alignment with said stem, a movable member having a stem engaging seat for engaging one side of said stem, a clamping member carried by said movable member and having a stem engaging seat for engaging the other side of said stem, spring means normally urging said movable member toward said conduit, actuating means for moving said movable member away from said conduit against the resistance of said spring and longitudinally of said stem, and a cam for moving said clamping member into clamping

engagement with said stem whereby upon release of said actuating means said spring means will resiliently urge the open end of said stem against the discharge end of



said conduit, said open end of said stem and discharge end of said conduit having overlapping surfaces to form a seal and establish communication therebetween.

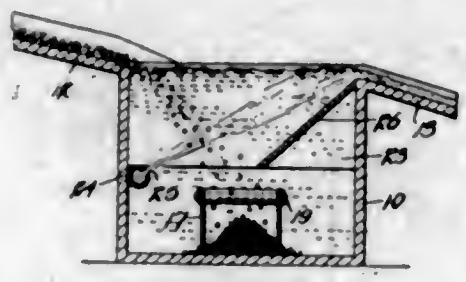
1,871,582. CARD PERFORATING MACHINE OR THE LIKE. LESLIE EARNEST BROUGHAM, Thornton Heath, England, assignor to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Filed Jan. 10, 1930, Serial No. 419,976, and in Great Britain Jan. 21, 1929. 20 Claims. (Cl. 164—112.)



1. In a punch perforating machine for making records on statistical record cards or strips the combination with the normal punching mechanism, of complementary punching mechanism, means for operatively connecting both of said mechanisms at a predetermined zone on a card or strip, means disconnecting the said mechanisms at other zones on the said card or strip, and means for disabling the said first means at will.

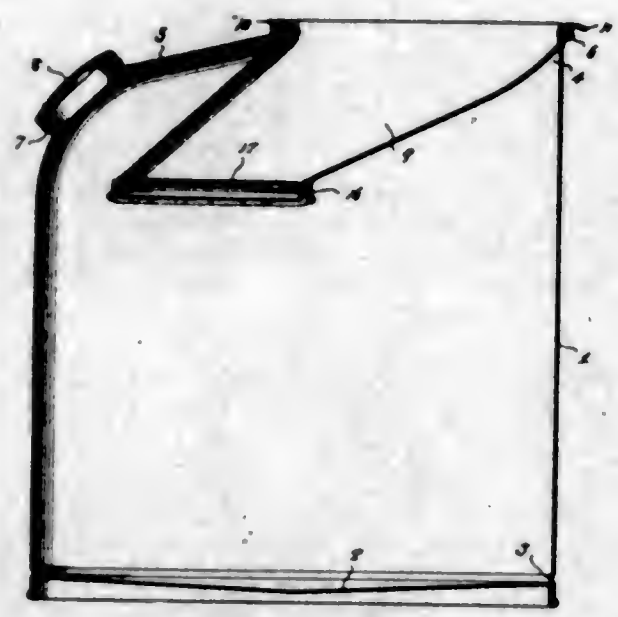
1,871,583. GRAVEL WASHING MACHINE. EDGEHILL T. BURNSIDE, Shelbyville, Ind. Filed Apr. 12, 1930. Serial No. 443,890. 2 Claims. (Cl. 209—157.)

1. A gravel cleaning machine comprising a tank having a sloping bottom, a conveyor comprising a series of scoops movable through the tank to move the gravel along said sloping bottom and out of the tank, a gravel inlet chute at one side of the tank, a pipe beneath said chute having an upwardly directed slot to direct water upwardly through the incoming gravel, a pair of guide partitions for directing the gravel into the path of water from said pipe in the tank and into the path of the con-



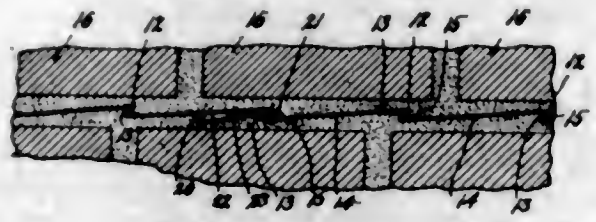
veyor, and an outlet chute positioned opposite the inlet chute for carrying off water and light material washed out of the gravel, substantially as set forth.

1,871,584. SANITARY MILK PAIL. CHARLES E. CARTER, Fort Wayne, Ind., assignor to Sterling Manufacturing Company, Fort Wayne, Ind., a Corporation of Delaware. Filed Mar. 12, 1930. Serial No. 435,208. 1 Claim. (Cl. 81—51.)



In a milk pail, the combination, with a container having a top partially closed, of an intake chute extending through the top and completing the closure thereof, the said chute being turned at its outer end portion to an angular relation to the main body of the chute and proportioned to snugly fit the opening in the top, and a spring clip engaging the top and said outer end portion and tensioned to maintain frictional engagement between said outer end portion and the top.

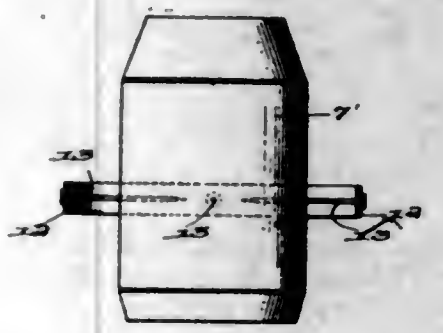
1,871,585. METAL FLASHING. ALLAN CHENEY, Melrose, Mass. Filed Dec. 2, 1930. Serial No. 499,498. 8 Claims. (Cl. 72—127.)



1. Through-wall flashings for insertion between layers of masonry and adapted to extend through the masonry or like walls for intercepting and draining outwardly moisture that may infiltrate through said masonry, said

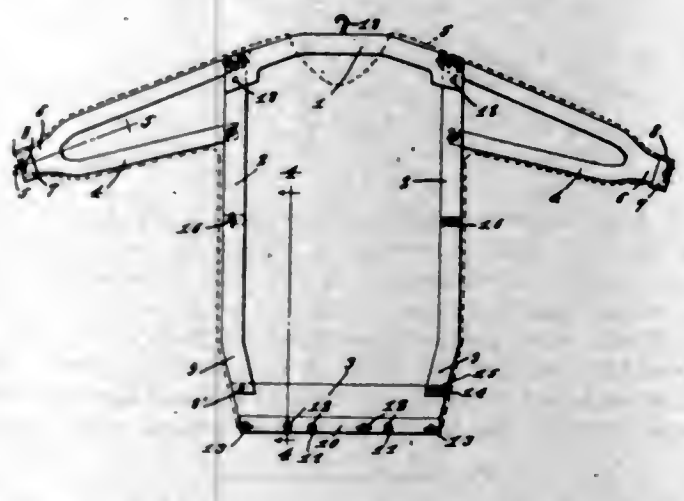
flashing consisting of a sheet of metal bent to form a series of ribs extending transversely of the sheet formed of relatively short, upwardly inclined portions and adjacent relatively longer longitudinally inclined portions, the latter providing inclined drainage areas terminating in channels contiguous to said ribs to catch and convey away any moisture that may infiltrate to the surface of said sheet.

1,871,586. CASTING CAR WHEELS. CHARLES COBB, Jr., Marshall, Tex. Filed Feb. 24, 1930. Serial No. 430,957. 2 Claims. (Cl. 22—167.)



1. In a mold for casting car wheels with hubs, a core for forming the hub of the wheel, and having a metallic cooling ring surrounding the core in spaced relation and attached to the circumference thereof to extend into a portion of the hub for more uniform cooling of the metal.

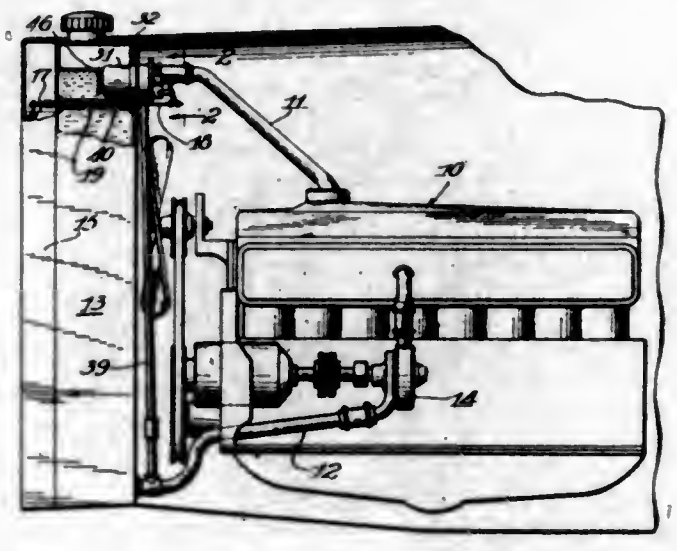
1,871,587. FOLDING SWEATER STRETCHER. HYACINTH O. COOK, Philadelphia, Pa. Filed Nov. 1, 1930. Serial No. 492,824. 1 Claim. (Cl. 223—17.)



A sweater stretcher comprising a frame including a top strip carrying a hook, side strips having inwardly disposed lower end portions, a bottom strip attachable with said inwardly disposed end portions and substantially V-shaped arms secured to the corners of the frame at the ends of the top and side strips, all of said strips being pivotally connected together and certain of the pivots being removable, said strips constituting adjustably connected sections, clamping plates carried at the opposite sides of the lower strip and other clamping plates carried at the outer ends of the V-shaped arms.

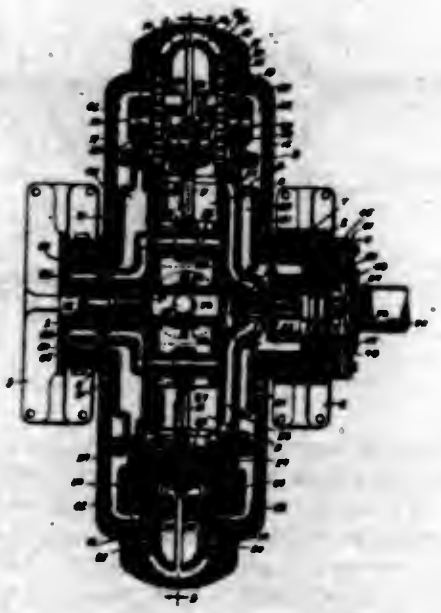
1,871,588. COOLING APPARATUS. HOWARD H. CRAWFORD, Detroit, Mich., assignor to Pines Winterfront Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 27, 1931. Serial No. 518,735. 21 Claims. (Cl. 123—178.)

1. An engine cooling system for automotive vehicles comprising a radiator and engine water jacket in series, a by-pass in parallel with the radiator, a thermostat free to expand in one direction to open circulation through the



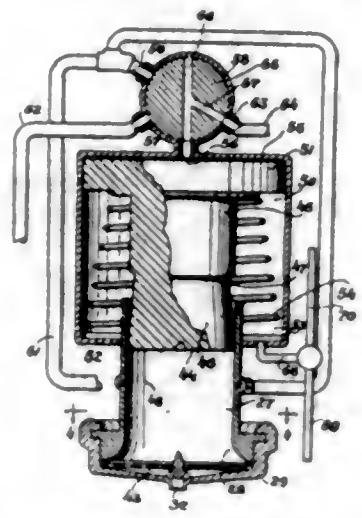
radiator, means opposing expansion in the opposite direction, and a valve adapted to be operated by last said expansion to close said by-pass.

1,871,589. INTERNAL COMBUSTION ENGINE. FRANCIS M. DAINTON, New York, N. Y., assignor of one-half to Alfred St. James, New York, N. Y. Filed Nov. 6, 1930. Serial No. 493,870. 12 Claims. (Cl. 123—47.)



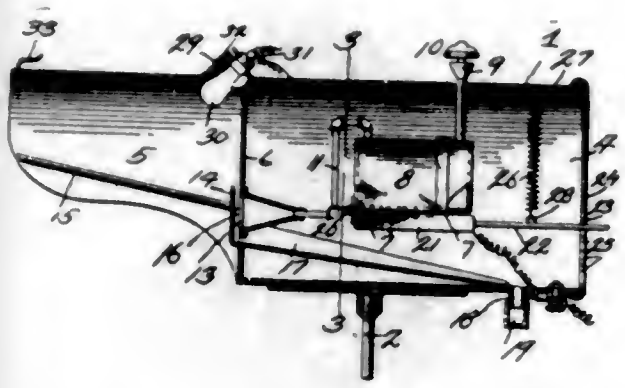
6. A two-cycle internal combustion engine including a block having radially arranged cylinders communicating at their inner ends, pistons mounted to reciprocate in the cylinders, an air-tight casing mounted to turn on the block, enclosing the block and to which rotary motion is imparted by the pistons, said block having air passages communicating with the interior of the casing, a check valve admitting air from said passage to the space between the pistons, said block having exhaust passages therein opened by the pistons on their outward strokes, valves in the heads of the pistons, said valves opened by the pressure of air back of them, the valves in the pistons opening to admit air under highest compression within the casing, said exhaust passages each connecting two of the cylinders, and exhaust manifolds communicating with said passages.

1,871,590. APPARATUS FOR EXTRACTING JUICE FROM FRUITS. UGO V. D'ANNUNZIO, New York, N. Y., and GINO FINZI, Milan, Italy. Filed Apr. 4, 1931. Serial No. 527,818. 20 Claims. (Cl. 100—50.)



1. In apparatus for expressing juice from fruits, a chamber having an open lower end within which a fruit may be inserted, a quickly removable and replaceable member detachably connected to said chamber and adapted to close the open end of said chamber, having parts adapted to penetrate the skin of said fruit, and means for exerting pressure against said fruit so as to force it against said member.

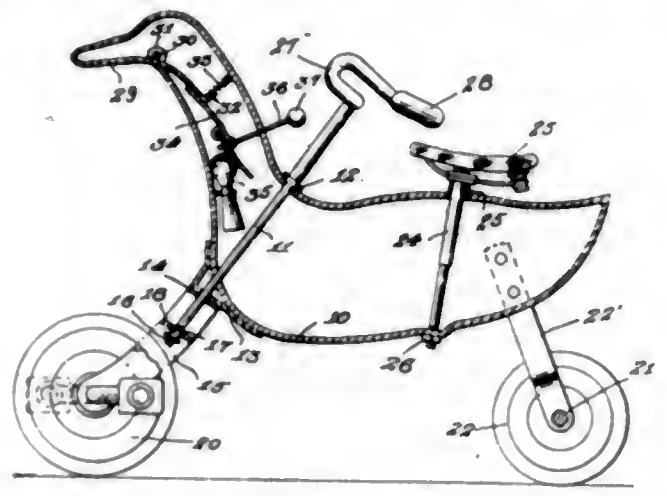
1,871,591. HAIR STEAMER AND DRIER. JAMES A. DARY, Hartford, Kans. Filed Apr. 2, 1931. Serial No. 527,280. 7 Claims. (Cl. 4—165.)



1. A hair steaming and drying device comprising a casing having a chamber therein, a head receiving extension carried by the casing, a water receiving receptacle within the chamber of the casing, means whereby steam generated within the water receptacle will be discharged into the head receiving hood, an electric heating element beneath the receptacle, means for adjusting said heating element towards and away from the receptacle, said means comprising spring means normally forcing the heating element towards the receptacle, a handle carried by the heating element and extending through an elongated slot in the casing, one side of said slot having lugs adjacent to receive the handle and hold the same against the action of the spring means.

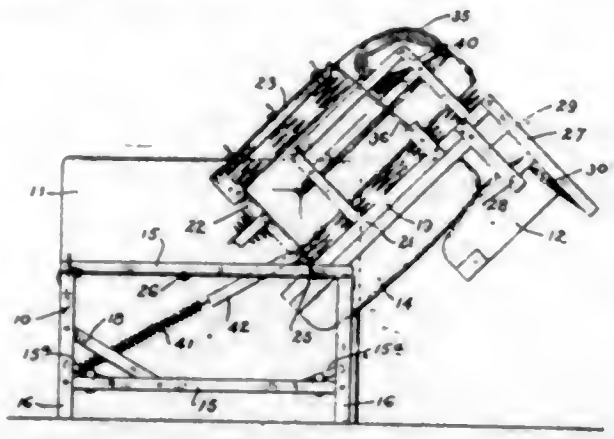
1,871,592. VEHICLE. JOHN A. DOODY, Tracy, Calif. Filed Nov. 1, 1930. Serial No. 492,789. 1 Claim. (Cl. 208—42.)

A figure wheeled toy comprising a body having a throat portion, supporting wheels for the body, means for steering and propelling the body, a lower jaw member pivoted in the throat, a spring located in the throat and bearing against said member and serving to normally hold the same at a closed position, a lever fulcrumed in the throat and having one end bearing against the inner end of said jaw member whereby the lever is subjected to the influence of said spring, an annunciator located in the throat and having a bulb engaged by said lever, a rod passing through the



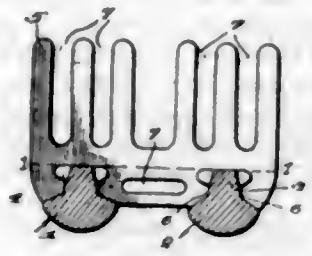
wall of the throat and connected with the lever, the sound emitting end of the annunciator being disposed away from the lever and the lower jaw member.

1,871,593. FOLDING BED. THOMAS B. DRAPER, Oakland, Calif. Filed Jan. 29, 1930. Serial No. 424,207. 3 Claims. (Cl. 5—35.)



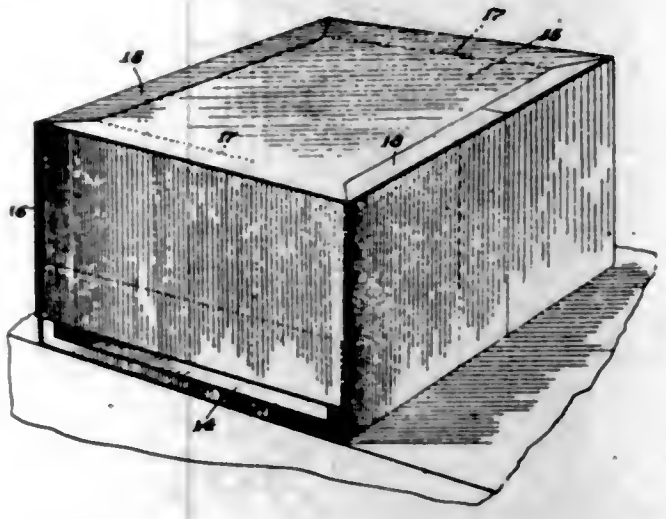
3. A device of the character described comprising a folding frame, a spring carried by the frame and including outer, inner and intermediate sections articulately connected and adapted to be folded to a position in which the inner and outer sections are opposite each other, means releasably securing the sections in a folded position and an apron member carried by said means and extending between edges of the inner and outer sections when folded.

1,871,594. METAL REENFORCEMENT FOR STRUCTURAL REENFORCED CONCRETE MEMBERS. BERNARD DUCHSCHER, Cleveland, Ohio. Filed Oct. 24, 1929. Serial No. 402,241. 6 Claims. (Cl. 72—112.)



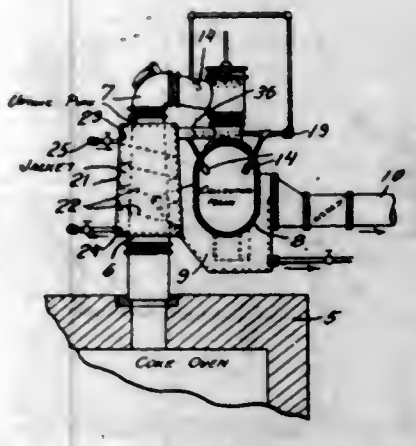
3. A metal reenforcement for concrete comprising a bar composed of a body portion having a reduced portion extending outwardly along one longitudinal edge thereof, and lugs projecting in paired relation from opposite sides of the reduced portion defining interlocking means for other reenforcing members.

1,871,595. BEEHIVE COVER. MERRITT G. ELDRED, Ontarioville, Ill., assignor to American Reenforced Paper Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Aug. 29, 1929. Serial No. 389,125. 1 Claim. (Cl. 6—12.)



As an article of manufacture, a beehive cover formed of flexible waterproof paper having side walls and a top, watertight joints connecting the side walls and top, and a foldable flap constituting part of one of the side walls for closing or leaving open the entrance to the beehive.

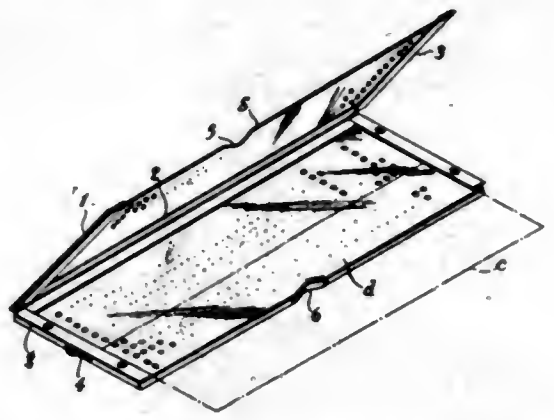
1,871,596. DEHYDRATION AND DISTILLATION OF TAR. EDWARD H. ELLMS, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed May 16, 1927. Serial No. 191,580. 1 Claim. (Cl. 202—72.)



The method of distilling tar continuously, which comprises bringing tar into indirect countercurrent heat exchange relation with hot coke oven gases directly as they rise from a coke oven, thereby heating the tar above the boiling point of lower boiling constituents, separating the vapors of such lower boiling constituents during the heating operation and thereafter condensing the vapors.

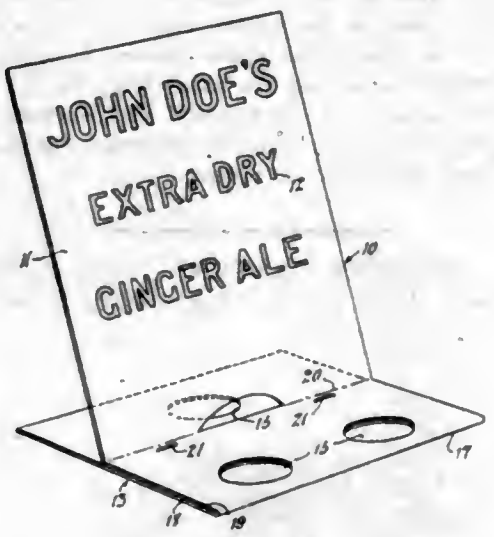
1,871,597. APPARATUS FOR PUNCHING HOLES IN STATISTICAL OR LIKE RECORD CARDS. FRANCIS GUY SYDENHAM ENGLISH, West Croydon, England, assignor to The Accounting & Tabulating Corporation of Gt. Britain Limited, London, England. Filed Oct. 9, 1929, Serial No. 398,530, and in Great Britain Oct. 19, 1928. 5 Claims. (Cl. 164—119.)

1. A holder for individual statistical cards or the like while being punched by a separate hand tool comprising a die plate perforated according to the rows and columns on the card to be punched, guides on the side edges of the die plate for definitely aligning a card therewith, a transparent stripper flexibly connected along one edge with the die plate whereby it may be swung relatively thereto to permit the insertion or removal of a card and formed with perforations corresponding to and in registry with



those in the die plate, whereby when a card is inserted between the die plate and stripper with the parts in superimposed relation a plurality of holes may be accurately punched by the separate hand tool as desired without moving the holder, stripper, or the card therebetween.

1,871,598. DISPLAY DEVICE. FRANKLIN E. EVERSON, Scarsdale, N. Y. Filed Nov. 7, 1931. Serial No. 573,685. 4 Claims. (Cl. 40—4.)

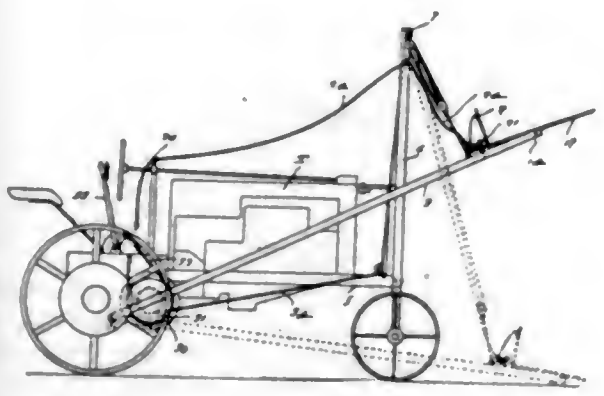


1. A display device for containers, including a body of sheet material, the said body being scored on transverse lines to form two end portions and an intermediate portion, one of said end portions constituting a display member, said intermediate portion being folded upon the other end portion and together forming a base for said display member, and means securing the said intermediate portion in folded position upon the said other end portion, said base being formed with a plurality of openings for the reception of containers for supporting the device in position thereon.

1,871,599. MANURE LOADER. JOSEPH FAERBICH, Tyndall, S. Dak. Filed Sept. 30, 1930. Serial No. 485,522. 1 Claim. (Cl. 214—140.)

A loading attachment for a tractor comprising a pair of uprights having their lower ends connected to the front part of the tractor, one at each side of said front part, a cross piece connecting the upper ends of said uprights together, a pair of forwardly diverging beams located one at each side of the tractor and having their rear ends pivotally connected with the gear housings of the wheels of the tractor, braces connecting said beams together adja-

cent their front ends, a cross shaft rotatably supported by the front ends of said beams, a rake assembly having the front portion of the prongs fastened to said cross shaft, an inverted U-shaped member having the ends of its limbs connected with intermediate portions of the beams with its bight part forming a seat part for the rake assembly when the same is in lowered position, a pivoted latch carried by the rear part of the rake assembly, for engaging a part of said inverted U-shaped member to hold the assembly in lowered position, a cable connected with the



latch for releasing the same and extending to the rear part of the tractor, a pulley carried by one of the uprights over which the cable passes, a drum connected with the take-off shaft of the tractor, brake means for the drum, a cable having one end connected with the drum, a pulley on the cross piece which connects the upper ends of the uprights together and over which the cable passes, a pulley block, a flexible member connecting the same with the forward part of the beams, a pulley block carried by the cross piece and the last-mentioned cable passing through the said blocks, and connected with one of them.

1,871,600. GARMENT HANGER. TILLIE FULLER, Madison, S. Dak. Filed Oct. 1, 1931. Serial No. 566,347. 2 Claims. (Cl. 223—64.)



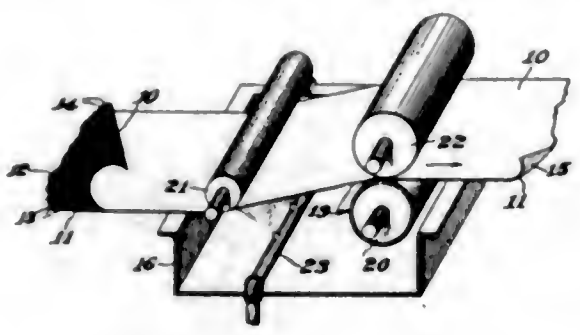
1. In a garment hanger, a plate provided with a pair of parallel sleeves, a pair of U-shaped members each of which at its closed end is rotatably engaged with one of said sleeves, each of said U-shaped members having opposed portions thereof arcuate intermediate its ends and reversely curved adjacent its ends.

1,871,601. METHOD OF AND APPARATUS FOR MAKING HOLES IN THE GROUND. LEE S. GATY, Columbus, Ohio. Filed Mar. 26, 1931. Serial No. 525,408. 6 Claims. (Cl. 61—76.)



1. The method of forming a hole in the earth consisting in driving a tool of the form of the hole into the locus of the hole and thereby compressing the earth from the locus of the hole into the earth bounding such locus and yieldingly resisting the operation of the driving tool when the hole is nearing completion.

1,871,602. WATERPROOFED REENFORCED PAPER. GEORGE E. GIBBS, Attleboro, Mass., assignor to American Reenforced Paper Company, Attleboro, Mass., a Corporation of Massachusetts. Filed May 23, 1928. Serial No. 279,963. 2 Claims. (Cl. 154—52.)

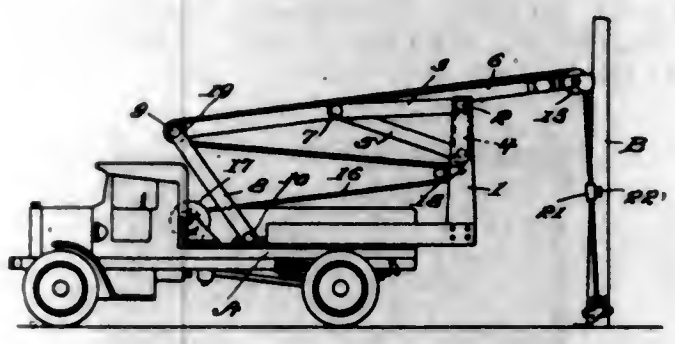


1. As an improved article of manufacture, a reenforced, waterproof, multiply building paper that will not shrink upon exposure to the weather sufficiently to cause the marginal edges of the paper to pull loose from the building structure to which it is secured, comprising two sheets of moisture pervious paper secured together by a waterproof layer of asphaltum and reenforced by straightened unspun fibres secured between the sheets of paper by the asphaltum, and the sheet of the building paper that is exposed to the weather having applied to its outer face a thin water-repellent coating comprising a mixture of asphaltum and paraffin adapted to impart to the paper a smooth, clean, non-sticky surface without penetrating through the sheet and adapted to exclude moisture from this sheet of paper to prevent the same from shrinking the multiply paper.

1,871,603. AUTOMATIC HOIST BOOM. CLAUD D. GINTER, Fresno, Calif. Filed Nov. 25, 1930. Serial No. 498,146. 3 Claims. (Cl. 212—8.)

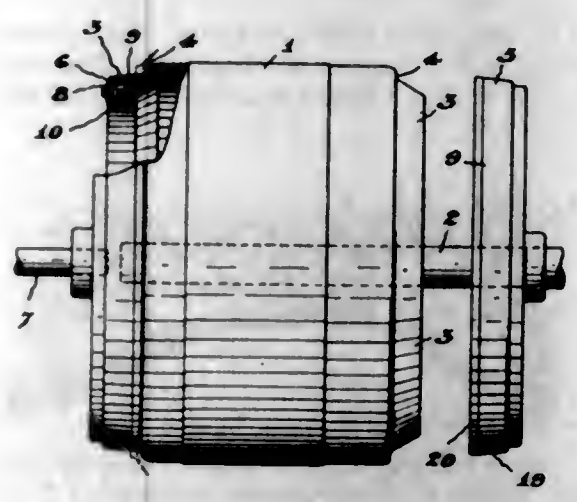
1. A device of the class described comprising a support, an upright on the support, a bell crank having arms of unequal length carried by the upper end of the upright,

a boom pivoted to the outer end of the long arm of the bell crank intermediate the ends of the boom, an arm pivotally connected with the support and the forward end of the boom, a pulley supported from the short arm of the bell crank, a cable passing over the said pulley, a pulley at



the forward end of the boom over which the cable passes, a pulley at the rear end of the boom over which the cable passes, and a stop upon the cable for engaging the rear end of the boom when the cable is pulled upon, whereby the rear end of the boom will be raised to lift an object to which the cable is attached.

1,871,604. BEAD PLACING RING. ROBERT M. GRAHAM, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 15, 1930. Serial No. 495,857. 8 Claims. (Cl. 154—9.)



1. In a tire building machine, the combination with a tire building drum, of a bead placing ring mounted coaxially with the drum for movement axially into and out of engagement with an end of the drum, the drum and ring having telescopically interfitting radially rigid portions coaxial with the drum for accurately centering the ring with respect to the drum and for rigidly holding the ring and drum against relative radial movements.

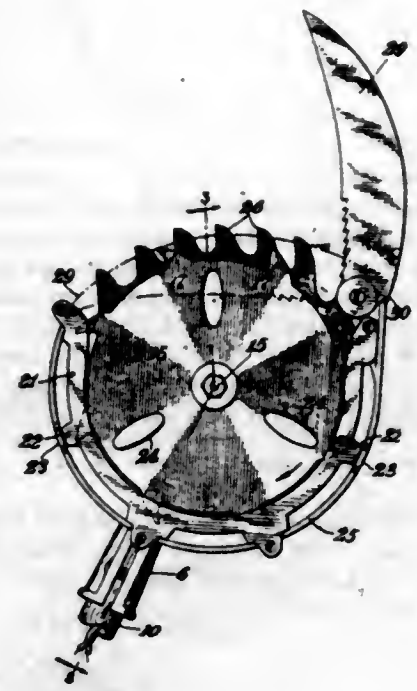
1,871,605. SWITCH HANDLE. MONROE GUETT, Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Sept. 2, 1931. Serial No. 560,820. 6 Claims. (Cl. 200—172.)

6. In a switch, a switch spindle, a collar on said spindle, a switch actuator on said spindle, said actuator having an offset portion with recesses therein, a handle having a resilient bifurcated end adapted to be forced over and embrace said collar and straddle said offset portion, said bifur-



cations fitting in said recesses to prevent movement of said handle axially of said spindle independent of said actuator.

1,871,606. PORTABLE TRIMMING DEVICE. SALEEM J. HADDAD, Tenafly, N. J. Filed June 10, 1930. Serial No. 460,152. 8 Claims. (Cl. 30—11.)



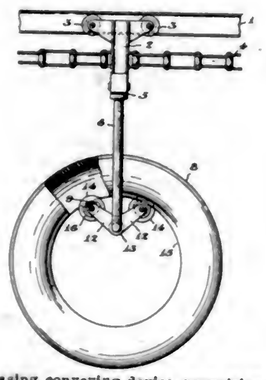
1. A trimming device including a rotary saw, a plate-like member substantially parallel to and slightly spaced from said saw, and a plurality of fingers on said plate-like member located near the periphery of the saw, the saw having teeth with both side edges sharpened, one side edge being substantially radial and the other side edge running obliquely, said saw being reversible so as to cut selectively with either of said side edges.

1,871,607. ALUMINIUM ALLOY. HORACE CAMPBELL HALL, Littleover Derby, and TENNYSON FRASER BRADBURY, Derby, England, assignors to Rolls Royce Limited, Derby, England. Filed Oct. 16, 1930. Serial No. 489,224, and in Great Britain Oct. 24, 1929. 1 Claim. (Cl. 75—1.)

An aluminius alloy formed by compounding the elements and that in the relative quantities respectively within the ranges set out below:—

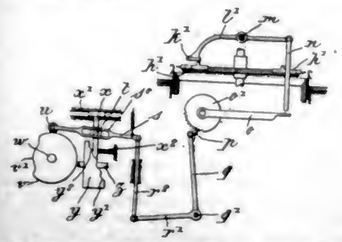
Magnesium from 0.1 to 0.4 per cent of the whole.
Nickel from 0.5 to 2.5 per cent of the whole.
Iron from 0.3 to 1.5 per cent of the whole.
Silicon from 0.5 to 5 per cent of the whole.
Titanium up to 0.5 per cent of the whole.
Manganese up to 0.2 per cent of the whole.
Chromium from .01 to 0.2 per cent of the whole.
Copper up to 0.5 per cent of the whole.
Aluminium the remainder except for traces only of other elements.

1,871,608. TIRE CASING CONVEYER. EDWARD L. HALLINAN, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 16, 1931. Serial No. 516,091. 7 Claims. (Cl. 198—177.)



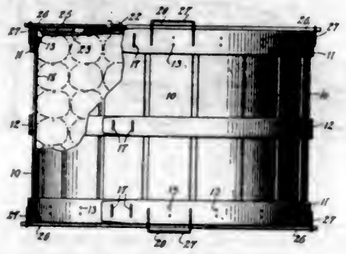
1. A tire casing conveying device comprising a movable carriage, a supporting bracket, a swivel member for rotatably mounting said bracket on said carriage, a roller member rotatably carried by said bracket for freely supporting a tire casing, and a circumferential flange on said roller member intermediate the ends thereof extendable into the tire casing between the tire beads for maintaining the tire casing on said conveying device whereby said tire casing may be rotated circumferentially and turned about a vertical axis during travel on said conveying device.

1,871,609. CIRCULAR KNITTING MACHINE. AUGUSTE HARER, Vienne Le Chateau, France. Filed Oct. 27, 1930, Serial No. 491,628, and in Belgium Nov. 16, 1929. 6 Claims. (Cl. 66—95.)



1. In a circular knitting machine, a needle positioned along the circumference of a circuit, a transfer point, means for displacing said transfer point including a cam, a rotatable element operative to actuate said cam and means for rotating said rotatable element comprising a lever, a link having a slot formed therein, means slidably guided in said slot, a first cam operative to displace one end of said link, and a second cam operative to displace said means.

1,871,610. SHIPPING CONTAINER. FOSTER J. HEACOCK, Clearville, Pa. Filed Jan. 24, 1930. Serial No. 423,117. 11 Claims. (Cl. 217—44.)



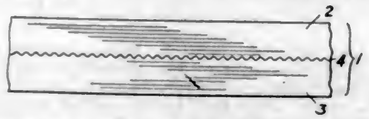
1. A container of the class described, comprising a bendable wall section including vertical slats and longitudinally-extending outer reinforcing strips, said wall section further including inner bendable connecting and reinforcing members therefor, one end of said strips extending beyond the end slat to provide for the overlapping connection thereof with the opposite end of said strips, staples adapted to secure said slats with said strips and said bendable members, and a protector carried by the inner face of said wall section, said protector comprising a sheet of protecting material supported by and between said bendable members.

1,871,611. ILLUMINATED CANOPY FOR CASKET ILLUMINATION. HARVEY S. HEADLAND, Pittsburgh, Pa. Filed July 7, 1930. Serial No. 466,207. 6 Claims. (Cl. 135—5.)



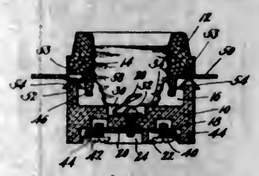
1. A casket canopy comprising attaching bracket members each having relatively spaced portions to fit over the upper edge of a casket wall, a longitudinally expansible and contractible frame structure supported by the brackets, and a canopy draped over the frame member.

1,871,612. GOODYEAR WELTING. WILLIAM F. HEFT, Quakertown, Pa., assignor to McAdoo & Allen Welting Company, Quakertown, Pa., a Partnership consisting of Henry M. McAdoo, William McAdoo, jr., and George Allen. Filed Mar. 23, 1931. Serial No. 524,662. 2 Claims. (Cl. 36—78.)



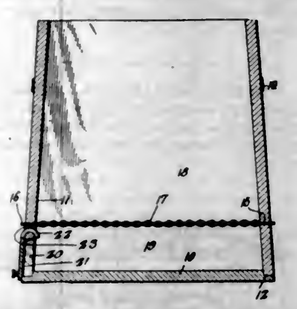
1. Goodyear welting having a straight edge and a picot edge and having a groove near the picot edge, the picot edge being beveled towards the ends of its teeth or points and towards the groove, the side faces of the teeth or points of the picot edge being perpendicular to the faces of the welting.

1,871,613. ELECTRIC LAMP RECEPTACLE. GUSTAF A. JOHNSON and FRANK E. JOHNSON, New Bedford, Mass., assignors to John I. Paulding, Inc., New Bedford, Mass., a Corporation of Massachusetts. Filed Feb. 16, 1929. Serial No. 340,379. 15 Claims. (Cl. 173—339.)



1. A lamp receptacle having, in combination, a body portion provided with an annular rim and a screw shell, a clamping ring threaded on said screw shell for attaching said body portion to a suitable mounting and a holding ring mounted on said annular rim and adapted to engage one side of said mounting for preventing rotary movement of said body portion when said clamping ring is tightened; said holding ring being approximately right-angled in radial cross-section with both flanges straddling said annular rim.

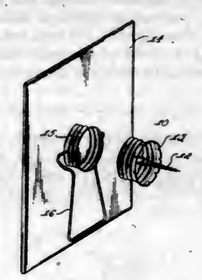
1,871,614. INCINERATOR. WILLIAM V. JOHNSTON, Casper, Wyo. Filed Oct. 15, 1930. Serial No. 488,911. 1 Claim. (Cl. 110—18.)



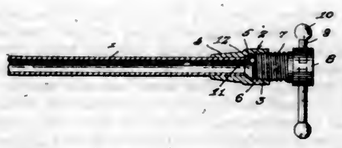
The herein described construction of knock-down incinerators, consisting of four plates of heat absorbing material, each plate being of the same length, width and thickness and having a series of transverse apertures therethrough, each of said plates decreasing in width from its bottom edge to its top, and the side edges of said plates being provided with a mortised joint for interengagement, providing a hollow frustopyramidal body, a grate which is square in plan and which has fingers projecting from its edges, said fingers adapted to pass through the apertures in said plates to hold the grate in the body and to assist in holding the body plates associated, and a metal band which is square in plan and which is designed to be passed over the upper and reduced end of the body and to be brought into frictional contact with the sides of the body for holding the plates constituting the body removably associated.

1,871,615. AUTOMOBILE MIRROR. CHARLES CARTER JONES, Meridian, Miss. Filed Jan. 19, 1931. Serial No. 509,871. 1 Claim. (Cl. 45—97.)

An automobile mirror support comprising a substantially cylindrical shaped element externally screw-threaded and having one end closed and provided with a centrally arranged aperture and having the edges of its opposite end serrated, a headed screw-threaded fastener extending through the aperture and threaded to a support to force the serrated edge to bite into the support and hold said element against rotation, a second substantially cylindrical shaped element internally screw-threaded and threaded onto the first element and having one end closed, a mirror secured to the closed end of the second element, and a handle secured to opposite sides of the second element to permit supporting of the mirror when said elements are detached.

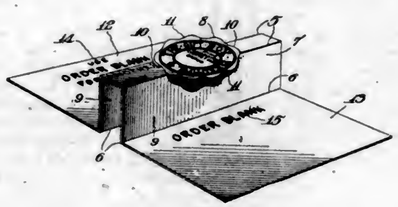


1,871,616. TOOL. ANDREW R. KERR, Great Falls, Mont. Filed May 22, 1931. Serial No. 539,326. 1 Claim. (Cl. 153—79.)



In combination with a tube coupling having a flared seat, a screw-threaded shank threaded in the coupling, means for rotating the shank, and a semi-conical shaped element formed eccentrically with one end of the shank with the smallest end thereof spaced from the end of the shank and adapted to extend into the end of a tube with the curved wall of said element engaging the wall of the tube adjacent the end of the latter and during the rotation of the shank adapted to gradually flare said wall of the tube tightly against the flared seat of the coupling without breaking or cracking the tube.

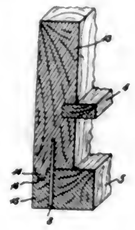
1,871,617. SEPARATOR FOR CARDS IN A BOX. HARRY W. KING, Philadelphia, Pa. Filed June 15, 1928. Serial No. 285,606. 2 Claims. (Cl. 206—46.)



1. As a new article of manufacture, a separator for stacks of cards in a box, said separator consisting of a single sheet of material bent U form, the U form being transversely and centrally between the ends of the sheet and acting as an upstanding separating element causing laterally disposed portions to be formed at the lower part of the upstanding element, said lateral portions adapted to

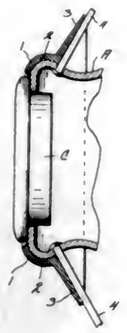
underlie two stacks of cards to a point in extremely close position to the ends of the box, while the separator element is adapted to assume a position between the two stacks, said separator element having a substantially circular piece simulating a seal stamped from the element, said circular piece having lateral parts to overlie the tops of the two stacks of cards, to prevent the cards at the top of one stack from mixing with the cards of the other stack, one of said lateral portions at the base of the separator element being scored where it connects with the element, whereby it may be detached.

1,871,618. WINDOW FRAME. HENRY G. KLOPP, Spokane, Wash. Original application filed Apr. 17, 1929, Serial No. 355,865, Patent No. 1,790,428. Divided and this application filed Dec. 13, 1930. Serial No. 502,216. 1 Claim. (Cl. 20—11.)



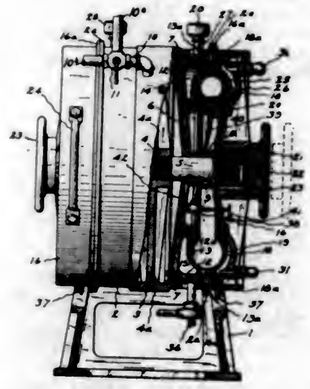
In a window frame, the combination with a pulley stile having a longitudinally extending tongue near one side thereof, said tongue having its opposite edges correspondingly tapered relatively to each other to define a wedge-shaped element, of a blind stop having a groove complemental in shape to the tongue, said groove being placed near the corresponding side of the blind stop, and a fastening device driven into the blind stop in a perpendicular direction whereby to equalize the compressive forces relative to said tapered contacting surfaces, said fastening device being offset from the tongue and groove connection whereby to prevent splitting of the tongue.

1,871,619. ATTACHMENT FOR HUBS. ALBERT KOYEN, Fremont, Nebr. Filed Mar. 12, 1931. Serial No. 522,070. 4 Claims. (Cl. 301—37.)



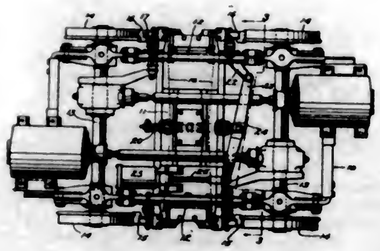
2. A vehicle wheel including in combination a hub, and spokes radiating therefrom, a member of flexible deformable, resilient material disposed circumjacent the hub and gripping said hub by its resiliency and having a circular part radiating therefrom for engagement with one side of the adjacent portions of the spokes whereby to provide a shield for the hub and spokes.

1,871,620. WATCHCASE HEATER. HERMAN T. KRAFT, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 2, 1927. Serial No. 230,491. 6 Claims. (Cl. 18—17.)



1. A heater comprising a fluid pressure cylinder having a closed inner end, a piston in the cylinder, means for admitting fluid under pressure between the piston and closed end of the cylinder, a centrally disposed shaft rigidly secured to the closed end of the cylinder and extending through said piston, an inner mold section on the outer face of said piston, a complemental outer mold section, and means for detachably clamping said outer mold section to said shaft.

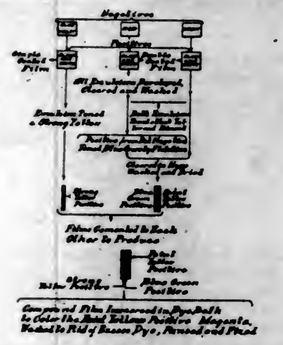
1,871,621. BRAKING APPARATUS. ELMER LATSHAW, Philadelphia, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 19, 1930. Serial No. 503,571. 4 Claims. (Cl. 188—52.)



1. In a car truck, a frame, a brake cylinder secured to the frame at one side thereof, a brake lever pivoted at one end to the frame adjacent the opposite side thereof and at its opposite end to the rod of the cylinder piston, and brake means operatively connected to said lever intermediate the ends thereof.

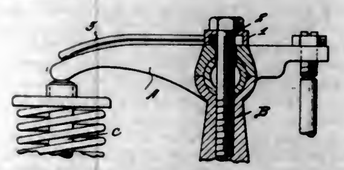
1,871,622. PROCESS OF MAKING COLORED PHOTOGRAPHIC POSITIVES. ALLISON R. LAWSHE, Trenton, N. J. Filed Mar. 22, 1930. Serial No. 438,237. 6 Claims. (Cl. 95—2.)

1. In the art of color photography, the method of producing a multi-color photograph which consists in preparing from a set of three color record negatives, respectively, two registered positives on opposite sides of a double coated transparent support, and a third positive on another transparent support, coloring said positives, respectively, two different colors, cementing the third positive



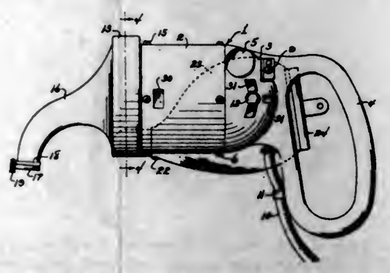
face to face with and in register with one of the other positives, and finally dyeing the third of said colored positives a different color from the other two.

1,871,623. VALVE OILER. JOHN S. LE FEVRE, El Centro, Calif., assignor of one-fourth to Walter L. Scott and one-fourth to Arnold O. Klein, El Centro, Calif. Filed Sept. 9, 1930. Serial No. 480,729. 1 Claim. (Cl. 184—6.)



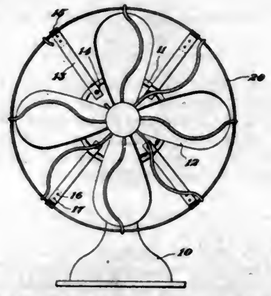
A lubricating device for the valve stems of an overhead valve engine, comprising a cup having an opening therein adapted to have passed therethrough the cap screw of the rocker arm mechanism of the engine, said cup being secured to the mechanism to receive oil from the rocker arm shaft, a pair of diverging conduits in communication with said cup and curved for a portion of their length to follow the curvature of the rocker arms of said mechanism, said conduits terminating in close proximity to the free ends of the rocker arms and being provided with openings in their lower ends for the disposal of oil upon the top of said free ends.

1,871,624. VACUUM CLEANER. JOSEPH A. LOEWINSOHN, Atlanta, Ga. Filed Feb. 20, 1931. Serial No. 517,287. 1 Claim. (Cl. 15—15.)



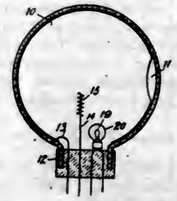
A portable vacuum cleaner comprising a casing having each end open and provided in one side with an air exhaust opening, a hollow handle communicating with one end of the casing and having an opening to admit air, a motor located in the casing and extending into the handle, fasteners detachably securing the handle to the casing and detachably securing the motor to said casing and handle, a suction chamber connected with the other end of the casing, a nozzle for said chamber, an annular flange in the chamber, a disk secured to a shaft of the motor and engaging the flange to close the chamber from the casing, and blades on opposite sides of the disk for sucking air into said chamber and for exhausting said air therefrom and to suck air into said casing and exhaust air therefrom for cooling the motor.

1,871,625. SUPPORT. ARTHUR SEYMORE LUFF, New Orleans, La. Filed May 11, 1931. Serial No. 536,627. 1 Claim. (Cl. 230—275.)



A fan guard comprising arm members positioned to dispose the outer terminals thereof in concentric alignment, plate members immovably positioned on the rear face of the arm adjacent the mentioned ends thereof, the adjacent extremities of the arm members, the plate membrs having semi-circular portions yieldably disposed in confronting relation, said portions having the terminals thereof outwardly flared and extending at right angles to the arm members to provide a guide entrance for the guard.

1,871,626. PHOTO ELECTRIC TUBE. PAUL H. MACNEIL, Huntington, N. Y. Filed June 6, 1930. Serial No. 459,492. 2 Claims. (Cl. 250—27.5.)

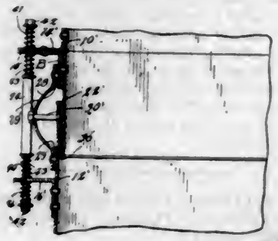


1. A photoelectric tube including an envelope and supporting base therefor, an anode, a selenium sulphate member acting as a photo-cathode, an energizing filament supported by said base for energization to maintain the photo-cathode of said tube just below its actuation point, said filament being positioned within said envelope to be energized through said base, and an individual envelope within said first-mentioned envelope sealing said filament with respect to said first-mentioned envelope.

1,871,627. EXPANSION JOINT FOR FLUE SECTIONS AND THE LIKE. WILLIAM J. MASSA, New York, N. Y., assignor to Bergen Point Iron Works, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 29, 1929. Serial No. 403,271. 11 Claims. (Cl. 285—90.)

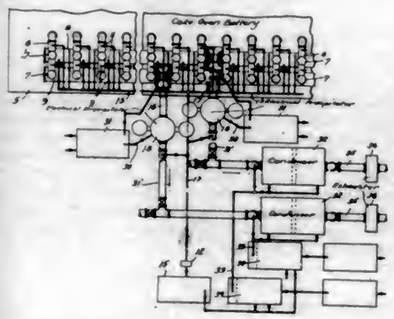
1. An expansion joint for flue sections and the like comprising a bowed member adapted to be located between

the ends of flue sections to prevent the escape of gases, and means transverse to the axis of the flue to apply and vary



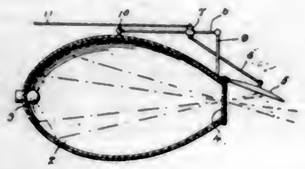
pressure on said bowed member, whereby to make a tight joint.

1,871,628. PRODUCTION OF PITCH AND APPARATUS THEREFOR. GREGORY EDWARD MCCLOSKEY, South Orange, N. J., and WILLIAM B. WINGERT, Detroit, Mich., assignors to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 25, 1927. Serial No. 186,354. 9 Claims. (Cl. 202—30.)



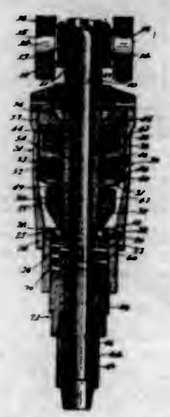
1. The method of producing pitch from hot fresh coal-distillation gases, which comprises separating the rich from the lean gases discharged at different stages of the distillation and subjecting one of the hot fresh gases separately from the other to regulated cooling sufficient to condense pitch constituents thereof and thereafter separately separating and separately collecting the pitch from the gases.

1,871,629. HEADLIGHT. JOSEPH B. MCMENAMIN, Port Kennedy, Pa. Filed Nov. 17, 1930. Serial No. 496,295. 1 Claim. (Cl. 240—41.35.)



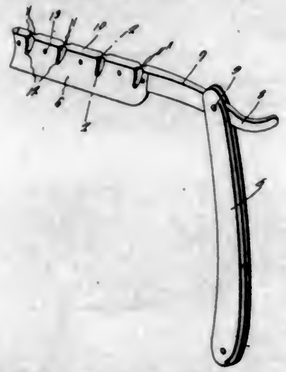
A headlight comprising a casing having a compartment provided with an opening, a lens disposed over said opening, a lamp bulb located in the compartment, a shutter hinged to the casing and adapted to move over said opening and adapted to serve as a blind for partially closing the opening and serve as a reflector for rays of light passing through the opening, a horizontal guide member mounted upon the casing, a sleeve slidable upon the guide member, a rod pivotally connected with the sleeve and the shutter and means for moving the sleeve.

1,871,630. THRUST BEARING. BURT S. MINOR, San Pedro, and WILLIAM H. CLAPP, Pasadena, Calif. Filed Jan. 11, 1930. Serial No. 420,134. 7 Claims. (Cl. 308—227.)



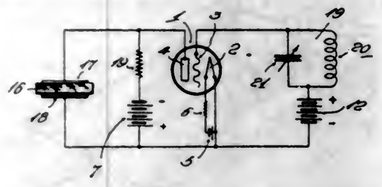
1. In a device of the character described, a stationary stem, a collar secured to said stem, a thrust bearing including a plurality of thrust plates and anti-friction roller therebetween mounted on said stem, the thrust plates of said bearing resting on said collar, a housing rotatably mounted on said thrust bearing, a combined thrust and radial bearing including an inner race mounted on said stem and engaging said collar and an outer race slidably mounted in said housing and an expansion coil spring engaging the outer race of said combined thrust and radial bearing, and a shoulder on said housing, whereby upon expansion of said spring any slack or play between the thrust plates and anti-friction roller of said bearing will be automatically taken up.

1,871,631. NONVACUUM RAZOR. OTIS A. TANNEHILL, Crane, Tex. Filed Feb. 5, 1931. Serial No. 513,617. 1 Claim. (Cl. 30—12.)



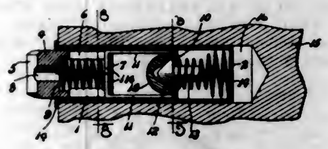
A razor of the character described comprising a blade having a thickened edge portion, said blade being provided with inwardly extending grooves extending inwardly from the thickened edge portion, said blade being provided with openings at the inner ends of the said grooves.

1,871,632. OSCILLATION SYSTEM. FREDERICK E. TERMAN, Stanford University, Calif., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 19, 1929. Serial No. 408,391. 2 Claims. (Cl. 250—36.)



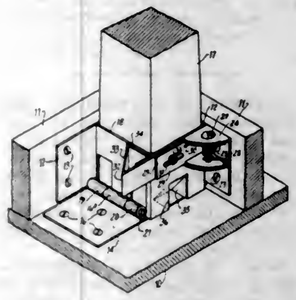
1. An oscillation system comprising an electron tube including a cathode, a grid and a plate, an input circuit including said plate and cathode, an output circuit including said grid and cathode, means for charging said anode at a negative potential, means for charging said grid at a positive potential, and a frequency determining vibratile element connected in said input circuit.

1,871,633. SPRING BOLT LATCH. HERMAN TER MEER, Grand Rapids, Mich., assignor to National Brass Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Aug. 10, 1931. Serial No. 556,083. 7 Claims. (Cl. 292—169.)



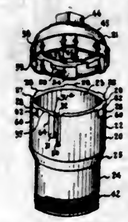
1. A latch comprising, a housing closed at one end and open at the other, a coiled spring located within the housing against its closed end, a latch bolt located within the housing formed of two parts longitudinally extensible with respect to each other, a second coiled spring between said parts of the latch bolt normally extending the same, the outer of said parts of the latch bolt having a longitudinal passage therethrough whereby an implement may be passed through the passage to engage with the inner part of the latch bolt to actuate the same and move it inwardly against the first mentioned spring.

1,871,634. FOLDING ARTICLE OF FURNITURE. WILLIAM R. TINGLE, Morganton, N. C. Filed Dec. 3, 1930. Serial No. 499,794. 4 Claims. (Cl. 45—11.)



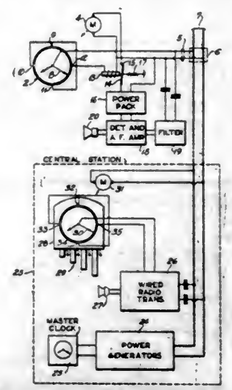
1. In a folding table having a plurality of legs pivotally connected thereto, resilient means secured to said table and being adapted to swing into the path traversed by said legs when they are swung on their pivot, means for limiting the inward swinging movement of said resilient means, means associated with said legs having a cavity in the upper end thereof adapted to be automatically engaged by the resilient means to hold the legs in folded position with respect to the table, the resilient means being adapted to slide over said legs and engage a side of said legs to hold the legs in unfolded position.

1,871,635. MOLDED HOLLOW INSULATING ARTICLE. WILLIAM C. TREGONING, Wauwatosa, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed May 7, 1928. Serial No. 275,768. 13 Claims. (Cl. 173—362.)



1. An electric lamp socket casing comprising separately molded cap and shell members of insulating material, one of said members having a flexible portion formed integrally therewith, and said members respectively having cooperating shoulders formed integrally therewith, one of said shoulders being carried by said flexible portion to provide a snap catch between said cap and shell members upon assembly thereof.

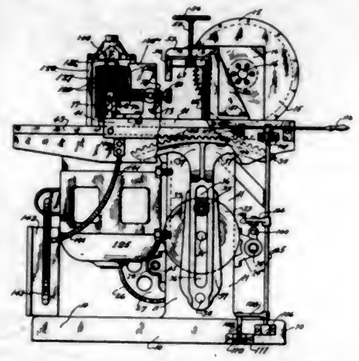
1,871,636. TIME SERVICE SYSTEM. ARTHUR M. TROGNER, Maplewood, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed May 28, 1931. Serial No. 540,633. 4 Claims. (Cl. 179—2.5.)



1. A time service system comprising, means for producing commercial alternating current, wire lines for conveying said alternating current, a regulator for controlling the frequency of said alternating current, an electrically driven clock connected to said power lines for producing horological sound effects, a microphone in the vicinity of said clock for picking up said sound effects, a radio transmitting organization for transmitting said sound effects by carrier frequency energy over said wire lines, means controlled by said clock for rendering said radio transmitting organization operative at predetermined times, another electrically driven clock connected to said wire lines at a point removed from said source of horological sound

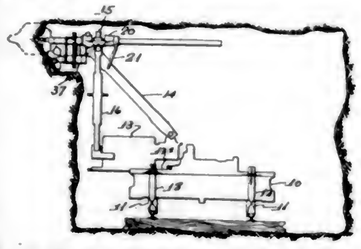
effects, means responsive to carrier frequency energy connected to said wire lines for reproducing said horological sound effects in the vicinity of said second electrically driven clock, and means under control of said second clock for rendering said last mentioned means operative at predetermined times.

1,871,637. WOODWORKING MACHINE. CHARLES F. VANCE, Winston-Salem, N. C. Filed Oct. 23, 1931. Serial No. 570,559. 8 Claims. (Cl. 144—204.)



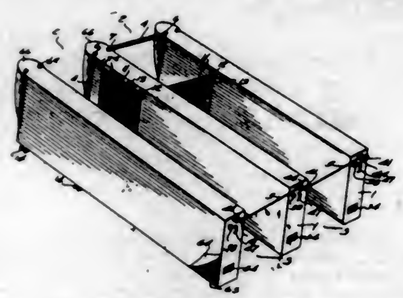
1. In a woodworking machine for forming tenons in the ends of a plurality of pieces of wood and similar material, a cut-off saw, a cutter head for forming grooves and tenons in the ends of said pieces, a carriage, means for clamping the pieces in position in said carriage, means for moving the carriage in one direction for feeding the pieces past the saw, means for reversing the direction of travel of the carriage to feed the material again past the saw and past the cutter head, means for again reversing the travel of the carriage to feed the material back by the cutter head and back toward the saw and means for automatically stopping the feeding means before the pieces again reach the saw.

1,871,638. DRILLING MECHANISM. FREDERICK W. VODOZ, Wilmette, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 29, 1929. Serial No. 381,732. 7 Claims. (Cl. 255—20.)



3. In combination with a drilling mechanism, a drill, a single threaded shaft for rotating and feeding said drill, a second drill parallel with said first mentioned drill, and means for rotating and feeding said second drill simultaneously with said first mentioned drill comprising a drill supporting member journaled on and depending from said threaded shaft and having said second mentioned drill supported for rotatable movement therein, and a gear fixed on said threaded shaft and driven thereby having bearing engagement with said drill supporting member for moving said drill supporting member as said shaft moves translationally.

1,871,639. STALL FOR STARTING RACE HORSES. CHARLES M. WAITE, Woodhaven, N. Y. Filed Apr. 13, 1928. Serial No. 269,650. 19 Claims. (Cl. 119—15.5.)



1. In apparatus of the class described, portable units of one or more stalls having broad-based side members firmly secured together in operative positions so as to rest directly on the ground, and ground-gripping bars secured transversely across the bottoms of two or more of said side members for holding them in place said stalls having a rear entrance and a front exit.

1,871,640. CLOSURE STRUCTURE FOR TUBES OR THE LIKE. SAMUEL MARSHALL WEAVER, Shaker Heights, Ohio. Filed Dec. 19, 1929. Serial No. 415,302. 5 Claims. (Cl. 221—60.)



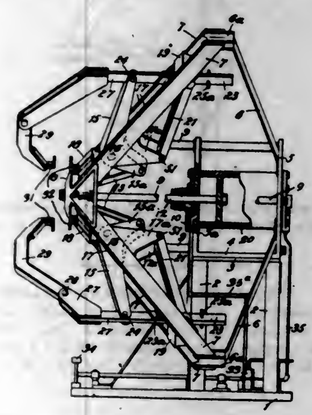
1. A closure for the necks of tubes and the like, comprising a one-piece body member having a top portion adapted to overlie a tube neck and also having a depending portion adapted to be secured within a tube neck, said body member being provided with a centrally disposed passage-way extending through its top and depending portions, the lower end of said passage-way being therefore adapted for communication with the interior of any tube to the neck of which the closure is secured, a cap member arranged above and secured to the top portion of said body member and having an opening registering with the upper end of the passageway of said body member, and a cut-off member interposed between said body member top portion and said cap member and adjustable to establish and to cut-off communication between said body member passage-way and said cap member opening.

1,871,641. CONDENSATION PRODUCT. HENRY C. P. WEBER, Edgewood, Pa. Filed Feb. 16, 1927. Serial No. 168,845. 13 Claims. (Cl. 260—4.)

1. The method of forming a condensation product which comprises treating cellulose with a parchmentizing agent capable of activating the cellulose without dissolving it, treating the undissolved activated cellulose with formaldehyde and then treating the mixture with phenol to form resinous material.

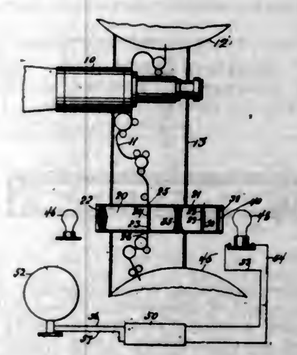
13. The method of forming a condensation product which comprises simultaneously treating cellulose with formaldehyde and a hydrating agent, thereby forming a formaldehyde addition compound of cellulose and then treating the resulting product with a phenol to form a resinous material.

1,871,642. APPARATUS FOR REMOVING FLEXIBLE CORES SUCH AS AIR BAGS FROM TIRE COVERS. HARRY WILLSHAW, Sutton Coldfield, and LEONARD SINNETT BLANCHARD, Hamstead, Birmingham, England, assignors to Dunlop Rubber Company Limited, a British Corporation. Filed Mar. 31, 1931, Serial No. 526,664, and in Great Britain Apr. 4, 1930. 7 Claims. (Cl. 18—2.)



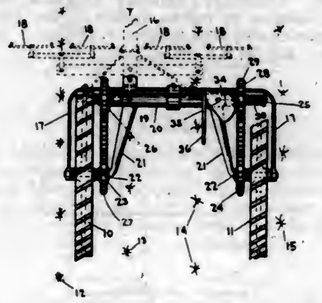
2. Apparatus of the type described which comprises pairs of tire bead engaging hooks at intervals spaced about a circle, transmission linkages for said pairs of hooks to displace the hooks of each pair radially outwardly and then to displace them in an axial direction, common actuating mechanism for actuating said mechanism simultaneously, said transmission linkage comprising a slidable member, a bell crank lever pivoted thereon, a link mounted on said slidable member, and a frame member connected to the other end of said bell crank lever and to said link, a hinged member carrying one of said hooks and pivotally mounted on said frame member to swing outwardly, and a stop to limit its inward swing, the other hook of said pair being mounted on said slidable member.

1,871,643. APPARATUS FOR SOUND REPRODUCTION WITH ARTICULATE MOTION PICTURE FILMS. LYMAN A. WILSON and JOSEPH JOHNSON, New York, N. Y. Filed Nov. 28, 1930. Serial No. 498,661. 3 Claims. (Cl. 179—100.3.)



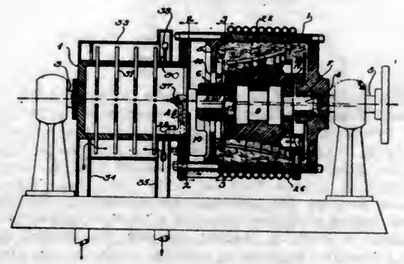
1. In an apparatus of the character described, the combination of a light chamber comprising a shell, a lens at one end of the shell, an end plate having a microscopic slit at the other end of the shell, a film guide plate having a large aperture in the shell and spaced from said lens and said end plate, said shell having openings for the passage of film having a light sound record thereon adjacent to said film guide plate and a lens in the shell positioned between the film guide plate and said end plate.

1,871,644. DRAFT REGULATOR. FRANK F. WULF, Omaha, Nebr. Filed July 19, 1930. Serial No. 469,024. 1 Claim. (Cl. 97—233.)



A draft regulator, comprising an arched member having an intermediate sleeve portion and end crank portions, a traction wheel mounted on each crank portion, a sprocket wheel on each crank portion connected to its respective traction wheel, a shaft mounted to turn in said sleeve, a clutch member fixed to each end portion of the shaft beyond the sleeve, a sprocket wheel mounted to turn freely on each end portion of the shaft and disposed in line with the sprocket wheels on said crank portions, springs carried on the outer ends of the shaft and bearing against said adjacent sprocket wheels, the sprocket wheels on the shaft having clutch elements for interlocking engagement with said first clutch elements for interlocking the parts for rotation in one direction, chains connecting the alined sprocket wheels, and a cam mounted on one end of the sleeve and disposed at the inner side of one of the sprocket wheels on the shaft for freeing the sprocket wheel from the adjacent clutch element at times.

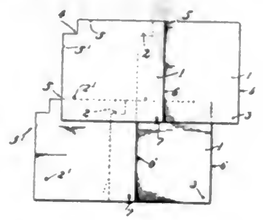
1,871,645. REFRIGERATING MACHINE. WILLIAM G. ABBOTT, Jr., Milford, N. H. Filed June 30, 1928. Serial No. 289,432. 11 Claims. (Cl. 62—115.)



1. In a refrigerating system, a rotary compressor, including a rotary casing containing a body of liquid, said casing being arranged upon rotation to maintain said liquid in the form of an annulus, a rotor within the casing rotatable about an axis eccentric in relation to the inner surface of the annulus, said rotor having a helical passage partially submerged in the liquid of said annulus, said passage being arranged to have a large inlet end

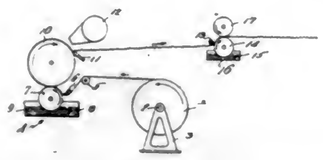
to receive refrigerant and tapering to a smaller outlet end to give up compressed refrigerant, a duct for cooling compressed refrigerant connected to the outlet of the helical passage, said duct extending spirally about the rotary casing and being arranged to vent refrigerant into a cooler, the liquid in said annulus being circulated past the inner surface of the wall of the casing by the arrangement of the helical passage, and air being swept past the outer surface of the wall by rotation of the spiral duct.

1,871,646. SHINGLE. HERBERT ABRAHAM, New York, N. Y., assignor to The Ruberoid Co., New York, N. Y., a Corporation of New Jersey. Filed June 1, 1931. Serial No. 541,247. 4 Claims. (Cl. 108—9.)



1. A shingle of substantially rectangular form adapted to be laid in side lapped relation with laps of different widths, said shingle having an opening entering into one upper corner, which opening provides a gauge for laying with a side lap of one width, a notch in the upper edge adjacent said corner which notch provides a gauge for laying with a side lap of a different width, and a perforation adjacent the other upper corner for the reception of a fastening nail, the width of the side lap being determined by registering the nailing perforation of an overlapping shingle with one of the sidelap gauges of an overlapped shingle.

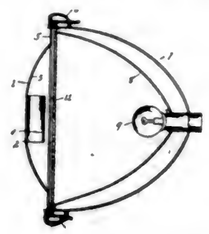
1,871,647. METHOD FOR MAKING COLORED CREPE PAPER WITH INSOLUBLE DYES AND RESULTING PRODUCT. GARDNER R. ALDEN, Framingham, Mass., assignor to Dennison Manufacturing Company, Framingham, Mass., a Corporation of Massachusetts. Original application filed Nov. 12, 1926, Serial No. 147,959. Divided and this application filed Apr. 2, 1930. Serial No. 441,140. 2 Claims. (Cl. 92—69.)



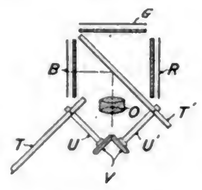
1. A method for making non-bleeding colored crepe paper, which comprises treating a sheet of paper with a solution of a fixing reagent, creping the treated sheet and thereafter applying a solution of dye to the creped sheet.

1,871,648. DISPLAY SIGN. RUSSELL ALDEN BAKER, Toronto, Ontario, Canada. Filed Feb. 19, 1932. Serial No. 594,132. 3 Claims. (Cl. 40—131.)

1. A display sign of the class described comprising a concave reflector having a transverse opening therein exposing a sign plate disposed within the concave surface of the reflector and in line with the opening formed therein, a source of light located behind the sign plate the rays of which are reflected by the reflector and impinge on the face of the sign plate thereby effecting the illumination of the characters on the face of the sign plate.

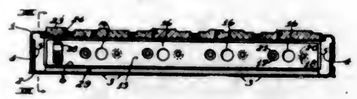


1,871,649. THREE-COLOR CINEMATOGRAPHIC CAMERA. JOSEPH A. BALL, Los Angeles, Calif., assignor, by mesne assignments, to Technicolor, Inc., New York, N. Y., a Corporation of Delaware. Filed June 7, 1929. Serial No. 369,073. 4 Claims. (Cl. 88—16.4.)



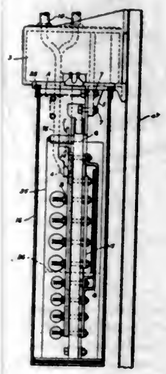
1. A camera for making three color records of an object-field comprising an objective lens for focusing a beam of light, means including two reflecting portions successively movable across the optical axis behind the objective lens for reflecting recurrent portions of the beam to different sides of the optical axis to form two color records, one of said reflecting portions transmitting a part of the beam to form a third color record in the optical axis concomitantly with one of said first two records, and one of said portions having an opaque surface of sufficient extent to obstruct light from certain of the films during intermittent advancement thereof.

1,871,650. SIGNALING MECHANISM. CHARLES B. BARTLEY, Pittsburgh, Pa. Filed Dec. 30, 1930. Serial No. 505,475. 10 Claims. (Cl. 40—132.)



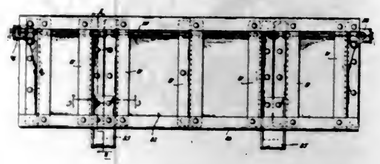
1. A house numbering device comprising a housing formed by a pair of telescopically fitting sections, the upper or cover member of said sections having therein a plurality of spaced uniformly shaped openings, a supporting member detachably positioned in said housing, and a plurality of adjustable and removable interchangeable character bearing elements mounted in said support and fitted in the spaced openings in said housing cover.

1,871,651. OIL IMMERSED POWER PANEL. HAROLD G. BAXTER, Baldwin, N. Y., and GEORGE G. SHANNONHOUSE, Wilmington, Del., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 5, 1929. Serial No. 330,450. 5 Claims. (Cl. 247—10.)



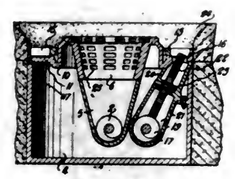
1. Current distributing apparatus comprising a support, an insulating panel suspended from the support and containing electrical apparatus, a removable cover for the panel closed by the support and a barrier carried by the panel extending beyond the said apparatus for preventing contact of the cover with the apparatus when the cover is being removed or placed in operative position.

1,871,652. DUMP WAGON DOOR. JAMES D. BENBOW and JAMES B. GREEN, Aurora, Ill., assignors to Western Wheeled Scraper Company, Aurora, Ill., a Corporation of Illinois. Original application filed Apr. 17, 1928, Serial No. 270,645. Divided and this application filed Feb. 14, 1929. Serial No. 339,822. 11 Claims. (Cl. 298—24.)



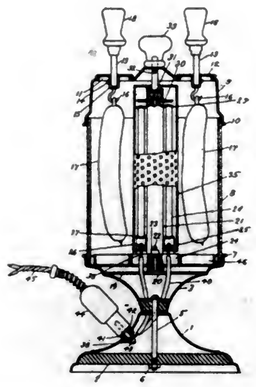
1. In a door for a dump vehicle, the combination of a sheet of metal, a plurality of bars of structural shape having webs and flanges, said bars disposed in parallelism upon said sheet of metal, said sheet having the margins thereof folded transversely over the ends of said bars to form reinforcing flanges for the edges transverse to the bars, said bars having openings through the webs thereof, said openings being disposed in a line parallel to one of the folded edges, and a chain passing loosely through said openings.

1,871,653. STOKER FEEDING MECHANISM. MILLARD WHYTE BEST, Hamilton, Ontario, Canada. Filed Oct. 6, 1930, Serial No. 486,596, and in Canada June 26, 1930. 5 Claims. (Cl. 110—165.)



1. In a furnace, the combination with the fire pot and a fuel feeding and ash removing mechanism incorporating a screw conveyer, of a rotatable fire pot base actuated by the conveyer mechanism, teeth formed in said fire pot base, and a gear engaging the teeth in the base and the screw conveyer in the mechanism.

1,871,654. ROASTING APPARATUS. ISAAK F. BLIER, New York, N. Y. Filed June 19, 1930. Serial No. 462,293. 3 Claims. (Cl. 219—19.)



1. In a roasting apparatus, the combination with a base, of a transparent tubular member on said base, a cover on said tubular member, a frame supported centrally on said base, said cover being adapted to be attached to said frame thereby retaining said tubular member, said cover being provided with a plurality of apertures, holders for sausages adapted to be supported on said cover over said apertures, said sausages being suspended from said holders inside of said tubular member, a heater supported on said central frame, and a ring-shaped tray on said base under said sausages.

1,871,655. NONDRIP LIQUID DISPENSER. CHARLES L. BOND, Los Angeles, Calif. Filed Sept. 16, 1929. Serial No. 393,067. 3 Claims. (Cl. 221—114.)

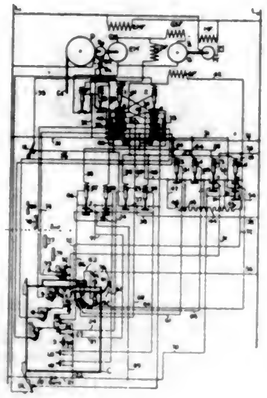
2. The combination with a tube; of a valve slidable in the tube and having at one side and at its lower end

an outlet, and fitting the tube so that when the valve is retracted the outlet is cut off by the lower edge of the



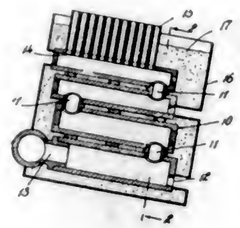
tube; an equalizing yoke pivoted to the valve; and springs connecting the ends of the yoke with the tube to yieldingly hold the valve retracted in the tube.

1,871,656. ELEVATOR CONTROL SYSTEM. EDGAR M. BOUTON, Chicago, Ill., and WILLIAM F. EAMES, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 19, 1927. Serial No. 234,425. 17 Claims. (Cl. 187—29.)



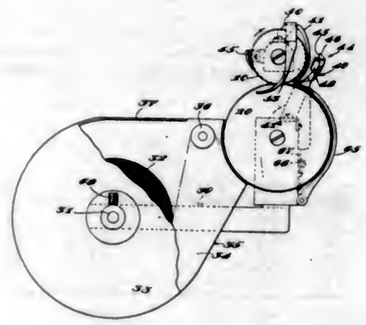
1. In an elevator-control system, an elevator, motive means for said elevator, means for starting said motive means to cause said elevator to travel only the distance between two adjacent floors, means for starting said motive means to cause said elevator to travel a greater distance, and means controlled by the selection of either of said starting means for determining the speed of said elevator during the consequent travel.

1,871,657. CONDENSER FOR ZINC VAPORS. EARL H. BUNCE, Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 30, 1928. Serial No. 303,037. 4 Claims. (Cl. 266—19.)



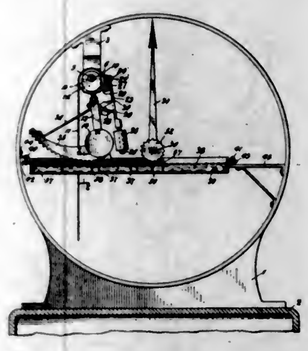
1. A condenser for zinc vapor comprising a series of substantially horizontally disposed connecting chambers with a vapor inlet at one end of the series and a waste gas outlet at the other end of the series, the chambers being connected in series by staggered conduits so that the path of the vapor through the condenser unit is circuitous, and being progressively decreased in volume from the vapor inlet end to the waste gas outlet end.

1,871,658. MACHINE FOR APPLYING TAPE TO SHEET UNITS. LELAND K. BUTLER, Manchester, N. H., assignor, by mesne assignments, to Excel Taping Machine Co., Lynn, Mass., a Corporation of Massachusetts. Filed Apr. 5, 1928. Serial No. 267,715. 16 Claims. (Cl. 154—42.)



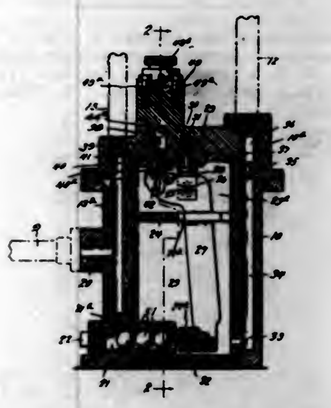
1. In a machine of the class described, a pair of rolls for applying adhesively coated tape to a sheet unit, one of said rolls having a convexly curved peripheral face, the other roll having a concavely curved peripheral face, means for guiding tape between juxtaposed portions of the rolls, and a guiding element arranged to direct a seamed sheet unit between the rolls, said element having a ridge to engage marginal portions of the element adjoining the seam, said guide element being juxtaposed to the roll with the concavely curved face.

1,871,659. WEIGHING SCALE. HUGH M. CAMERON, Woodhaven, N. Y., assignor to John Chatillon & Sons, New York, N. Y., a Corporation of New York. Filed June 20, 1930. Serial No. 462,683. 11 Claims. (Cl. 265—62.)



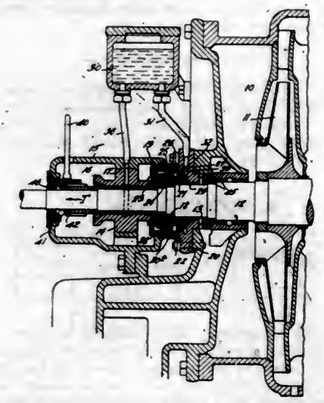
1. In a weighing scale having an indicator, a pinion through which the indicator is driven, and a member adapted to move in proportion to loads applied to the scale, a rack bar in positive operative connection with the pinion and the member substantially in the same plane, and means for supporting said rack bar independently of the moving parts of the scale.

1,871,660. SYSTEM FOR BURNING LIQUID FUEL. JOHN W. CANNON, Providence, R. I. Filed Jan. 9, 1928. Serial No. 245,357. 10 Claims. (Cl. 103—41.)



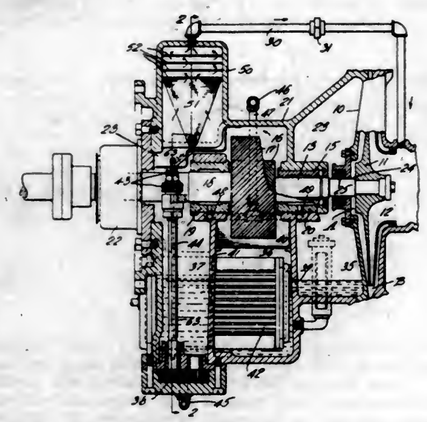
1. In a controller for fuel oil, a pump for supplying under pressure oil to be transmitted in controlled amounts, a tank connected to the delivery side of said pump, a horizontal passage in said tank connected with the tank inlet, a plurality of balls in said horizontal passage, the said balls being of slightly less diameter than said horizontal passage, a chamber receiving oil from said horizontal passage, a lever pivotally supported in said chamber so that the lower end of the lever tends by gravity to close said horizontal passage, an oil outlet from the said chamber, and valve means operative from the rocking of said lever to control the supply of oil from the upper portion of said chamber to the outlet.

1,871,661. SEALING AND THRUST DEVICE. WILLIS H. CARRIER, Essex Fells, N. J., assignor to Carrier Engineering Corporation, Newark, N. J. Filed Mar. 22, 1929. Serial No. 349,251. 10 Claims. (Cl. 286—9.)



10. The combination with a rotary shaft and a casing having a shaft opening through which said shaft extends, of means for sealing said shaft opening comprising a sealing member surrounding said shaft and arranged to rotate and move axially with the shaft, a sealing chamber in which said sealing member rotates and has a limited axial movement, a seat at one end of said sealing chamber surrounding said shaft opening opposite one end of said sealing member, a fixed member opposing the oppostie end of said sealing member and cooperating therewith to resist the end thrust on said shaft, means for supplying a sealing fluid to said sealing chamber to form a seal for said shaft opening, and means for positively forcing lubricant between the opposing faces of said fixed member and said sealing member.

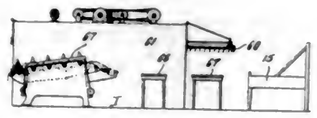
1,871,662. METHOD AND MEANS FOR LUBRICATING COMPRESSORS AND THE LIKE. WILLIS H. CARRIER, Essex Fells, N. J., assignor to Carrier Engineering Corporation, Newark, N. J. Filed Mar. 22, 1929. Serial No. 349,252. 16 Claims. (Cl. 230—207.)



1. The combination with a compressor having a shaft, of a chamber which contains a lubricant for the compressor and communicates with the interior of the compressor

by a shaft opening through which said shaft extends from the compressor into said chamber, said shaft opening communicating only at one end thereof with said chamber and means for maintaining in said chamber a pressure below that existing in said shaft opening whereby leakage is prevented from said chamber through said shaft opening into the compressor.

1,871,663. LAUNDRY SYSTEM. EMIL J. CARROLL, Norwood, Ohio, assignor to The American Laundry Machinery Company, Norwood, Ohio, a Corporation of Ohio. Filed Aug. 7, 1926. Serial No. 127,897. 2 Claims. (Cl. 68—11.)



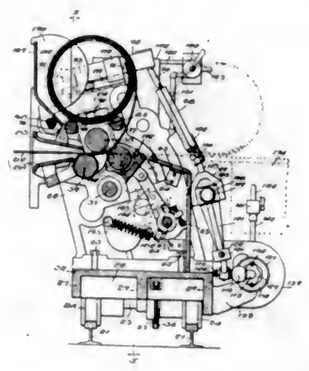
1. Laundry apparatus, comprising a laundry washing machine having a load-receiving chamber adapted to receive as a load a predetermined batch of laundry work of volume smaller than its own volume, means for metering laundry work into such a predetermined batch, said metering means being located above the floor upon which said washing machine is located, and operator-controlled means for effecting delivery of such a predetermined batch from said metering means to said laundry washing machine, whereby during one laundry washing operation, another predetermined batch of work may be metered out for the following laundry washing operation, with the result that the operation of said laundry washing machine is substantially continuous, interrupted only by the emptying and loading of its chamber, and with the further result that the floor on which the washing machine is located is not cluttered up by laundry work awaiting metering.

1,871,664. COMBINATION GARMENT. KATHERINE E. CUNNINGHAM, Chicago, Ill., assignor to Associated Apparel Industries, Inc., Chicago, Ill., a Corporation of Illinois. Filed Sept. 11, 1930. Serial No. 481,087. 1 Claim. (Cl. 2—30.)



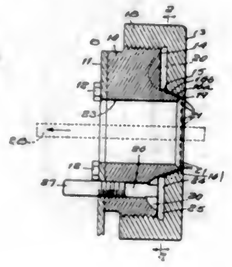
A combination garment comprising a corset having openings on both sides thereof extending from the top to a point adjacent the hipline, longitudinal side elastic sections adjacent both edges of each opening and extending substantially the full length of the corset, side lacings connecting adjacent edges of said openings, and a brassière attached to the upper edge of the corset having an opening on at least one side continuous with the opening in the corset.

1,871,665. COILING MACHINE. CHARLES D. DALLAS, Chicago, Ill., assignor to Revere Copper & Brass Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Jan. 10, 1931. Serial No. 507,805. 5 Claims. (Cl. 242—78.)



1. In a coiling machine, three rollers arranged in nesting spaced apart horizontally inclined pyramidal relation, a drive shaft and connecting mechanism operable to rotate the apex roller in one direction and the base rollers in the opposite direction to curve a strip of material fed between the apex and the base rollers in a generally horizontal direction, means operable to gradually change the spacing between said apex roller and said base rollers as a sheet of material is advanced through said rollers, and adjustable means operable to increase and decrease the maximum and minimum spaced apart position of said apex and base rollers.

1,871,666. AIR RING. CHARLES D. DALLAS, Chicago, Ill., assignor to Revere Copper & Brass Incorporated, Rome, N. Y., a Corporation of Maryland. Filed Aug. 26, 1931. Serial No. 559,465. 7 Claims. (Cl. 113—97.)



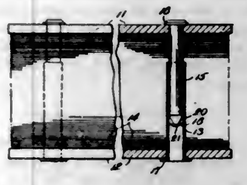
1. A wiper nozzle of the kind described comprising a member having a cylindrical bore extending therethrough, and an annular manifold chamber concentric with said bore, means connecting the chamber with a supply of gaseous fluid under pressure, said member having a plurality of discharge slots arranged with angular symmetry relative to said bore and terminating in the inner periphery of the manifold chamber, said slots converging inwardly at an acute angle to the axis of said bore, said member having a plurality of recesses opening into said annular chamber, each of said recesses being in alignment with and forming an extension of a slot.

1,871,667. SIGNAL FLAG AND LAMP STAND DEVICE. HUBERT K. DALTON, Stamford, Conn. Filed Mar. 13, 1931. Serial No. 522,299. 5 Claims. (Cl. 248—43.)



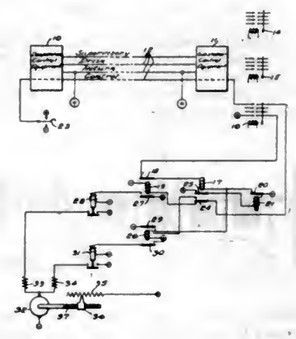
1. In a collapsible and portable signal standard, the combination with a standard having a spring lever at the respective ends, of a base having a plurality of superposed recesses adapted for engagement with said spring lever, and a shoulder for resting against the end of said standard, said base having a flagstaff thereon, adapted to be exposed from the standard as a flagstaff or inserted into the standard.

1,871,668. TRANSFER BINDER. GEORGE H. DAWSON, Boston, Mass., assignor to Service Bureau, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 30, 1929. Serial No. 336,178. 4 Claims. (Cl. 129—13.)



4. A permanent binder for perforated sheets, comprising a pair of cover members, an open-ended tube attached to one of said members, a solid dowel connected to the other member and having a tapered end telescoped within the tube, the telescoped tube and dowel extending through the apertured sheets bound between the cover members, and a locking plate permanently fixed to the tip of the tapered dowel end, the locking plate having a plurality of spaced, radial wings constantly engaging the interior surface of the tube as the dowel is forced into the tube, and said wings being flexed toward the mouth of the tube by reason of said engagement so that the dowel can be moved through the tube in one direction only and is locked against movement in the other direction at any position of rest, thereby to clamp the cover members upon he intermediate sheets and prevent relative outward movement of said members.

1,871,669. POLARITY RESPONSIVE NEUTRAL RELAY SELECTOR. GENNERO DE CROCE, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 23, 1928. Serial No. 321,443. 10 Claims. (Cl. 175—320.)

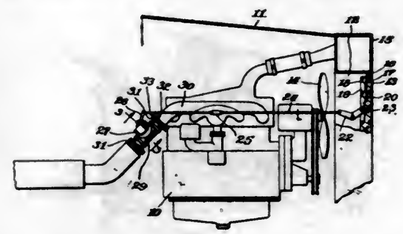


8. A control system comprising a direct current source, a pair of selecting relays for energizing respectively either one of a pair of independent operating circuits, one terminal of the operating coil of one of said relays being connected to one polarity of said direct current source and one terminal of the operating coil of the other of said relays being connected to an opposite polarity of said direct current source, a control circuit, a control relay for transferring said control circuit from one of the operating coils of said relays to the other, and means for applying either polarity of said direct current source to sold control circuit.

1,871,670. METHOD OF UNITING ARTICLES AND PRODUCT THEREOF. CAMILLE DREYFUS, New York, N. Y., and GEORGE SCHNEIDER, East Orange, N. J., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Feb. 13, 1928. Serial No. 254,156. 21 Claims. (Cl. 49—81.)

1. Method of uniting surfaces made of material that does not soften or melt during the subsequent pressing operation comprising applying a mass of powder containing finely divided organic derivatives of cellulose and a plastifier between said surfaces and pressing to form an adherent union between said surfaces.

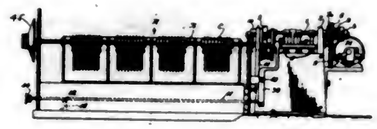
1,871,671. THERMOSTATIC RADIATOR SHUTTER CONTROL. JAMES H. EDWARDS, Chicago, Ill., assignor to Pines Winterfront Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 17, 1928. Serial No. 326,477. 2 Claims. (Cl. 123—174.)



1. A thermostat shutter control unit comprising a section of exhaust conduit for an internal combustion engine, said conduit being provided with a heat transfer chamber,

a casing for thermostatic elements located in said heat transfer chamber, a plurality of thermostatic wafers located in said casing, a bell crank movably mounted upon said casing, a plunger slidably mounted in said casing for engaging said wafers, and a spring for maintaining said plunger in engagement with said wafers.

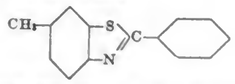
1,871,672. MECHANISM FOR SELECTIVELY CONTROLLING THE ANGULAR MOVEMENT OF A SHAFT. ALBERT E. ELLINGER, Snyder, N. Y., assignor to Morris Goldstein, Buffalo, N. Y. Filed Oct. 16, 1929. Serial No. 400,142. 11 Claims. (Cl. 192—142.)



1. The combination of mechanism having movable elements operated by a common shaft with mechanism for controlling the movement of said shaft comprising a second shaft, means for rotating said second shaft, means connecting said first mentioned shaft with said second shaft whereby a rotary movement of the second shaft effects an oscillatory movement of said first mentioned shaft and the elements carried thereby, means arranged for movement with said second shaft, and manually controlled means for engaging said last mentioned means to stop said second shaft at a predetermined position.

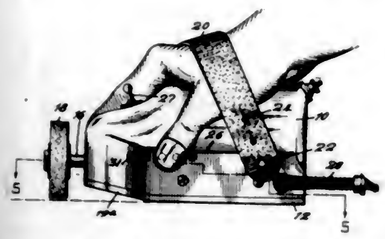
1,871,673. COLORING OF CELLULOSE DERIVATIVES. GEORGE HOLLAND ELLIS and HENRY CHARLES OLPIN, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Sept. 22, 1928, Serial No. 307,771, and in Great Britain Nov. 28, 1927. 8 Claims. (Cl. 8—5.)

1. Process for coloring materials comprising organic substitution products of cellulose, comprising applying thereto unsulphonated thiazole derivatives in which the dehydrothio-p-toluidine residue



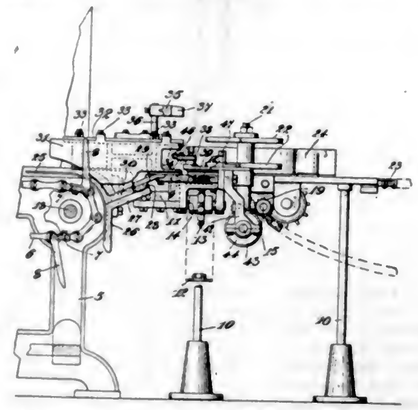
is linked through nitrogen to an aryl group.

1,871,674. METAL REFINISHER. CLARENCE D. ELLITHORPE, Springfield Gardens, Long Island, N. Y., assignor to Duplex Electric Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 30, 1930. Serial No. 485,376. 1 Claim. (Cl. 51—170.)



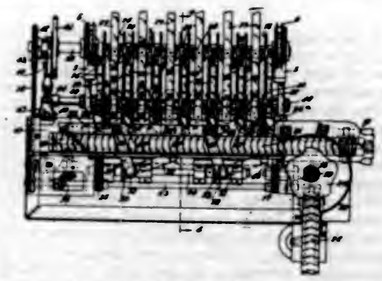
A portable tool of the class described comprising a flat iron shaped casing having a forwardly beveled base, a motor in said casing, a motor shaft projecting from the front end of said casing, gripping ledges along each side of said casing, a supporting member mounted on the rear of the casing, means to ventilate said motor comprising a fan on the motor shaft and ventilating openings in said casing, and a toggle switch adjacent the front of said casing adapted to be manipulated by the operator's finger, said supporting member extending over the operator's hand whereby said tool may be tipped on said beveled base and a pistol grip to facilitate such movement.

1,871,675. FEED MECHANISM FOR LABELING MACHINES. EDWARD ERMOLD, New York, N. Y. Filed July 7, 1930. Serial No. 466,144. 5 Claims. (Cl. 198—31.)



1. In combination with a labeling machine having conveyer means for transporting containers to label receiving position, a feed conveyer for the containers disposed at right angles to the transporting conveyer means and in spaced relation to one end thereof, a relatively fixed obliquely inclined support between said transporting conveyer means and the feed conveyer, a movable member adapted to engage containers on the feed conveyer and transversely move the same off of said conveyer, means for actuating said member, and stationary means adapted to engage the upper end of the container during its transverse movement and tilt the same to dispose the container on said support in obliquely inclined parallel relation therewith for engagement by a part of the transporting conveyer means.

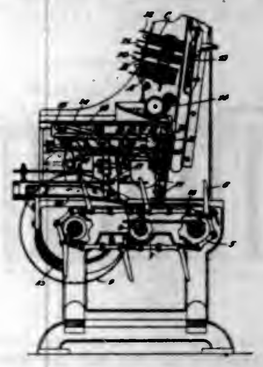
1,871,676. FEED MECHANISM FOR LABELING MACHINES. EDWARD ERMOLD, New York, N. Y. Filed July 7, 1930. Serial No. 466,146. 6 Claims. (Cl. 198—31.)



1. In combination with a labeling machine, means for feeding containers to be labeled to the machine including a guideway for receiving a plurality of containers, means

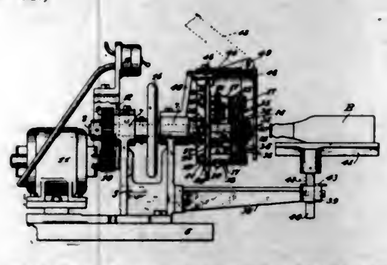
mounted for reciprocating movement along the opposite sides of the guideway and comprising pivotally mounted dogs projecting into opposite sides of the guide way, stops limiting pivotal movement of the dogs to their projecting positions for engagement with the innermost container in the guideway to feed the same through said guideway in the movement of said reciprocating means in one direction, said dogs being pivotally moved by contact with a container in the movement of said means in the opposite direction, stationary means engaging the pivoted dogs at the end of their reciprocating movement in the latter direction to move said dogs and project the same between adjacent containers in the guide way, and means for actuating said reciprocating means.

1,871,677. BOTTLE LABELING MACHINE. EDWARD ERMOLD, New York, N. Y. Filed July 7, 1930. Serial No. 466,145. 11 Claims. (Cl. 216—13.)



1. In a bottle labeling machine having a bottle conveyer, means for positioning a label and a tin foil sheet in the path of movement of the bottles, relatively stationary label wiping means, means movable relative to the individual bottles to engage and wipe the tin foil sheet thereon without interruption of the movement of the bottle conveyer, and means for actuating said movable means.

1,871,678. MACHINE FOR REMOVING TIN FOIL FROM BOTTLES. EDWARD ERMOLD, New York, N. Y. Filed Jan. 31, 1931. Serial No. 512,714. 5 Claims. (Cl. 15—93.)



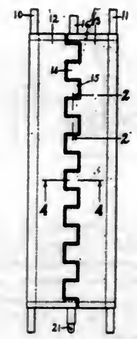
4. Means for removing tin foil from bottles including a rotary cutter head, resiliently yieldable cutting elements, spaced apart axially of the cutter head and each having an intermediate coil therein, a support projecting from one side of the cutter head in spaced parallel relation to the axis thereof and upon which said coils are mounted, said elements having end portions extending inwardly from the coils and terminating in radially spaced relation to the axis of the cutter head, means for maintaining said elements in spaced apart relation, and means for adjusting the latter means to tension said coils, and means for supporting a bottle with its neck in co-axially centered relation with the axis of the cutter head for effective engagement of said cutting elements with the tin foil thereon.

1,871,679. BINDING OF SHEET ARTICLES. HAROLD A. EVANS, Lynn, Mass., assignor to Parco Specialty Co., Lynn, Mass., a Corporation of Massachusetts. Filed Nov. 23, 1929. Serial No. 409,379. 3 Claims. (Cl. 154—2.)



1. The method of finishing the edge of a sheet article, which comprises coating one marginal face of a binding strip with a permanently plastic adhesive, folding the other marginal portion of the strip so that its edge is engaged by the adhesive but so that a portion of the adhesive is exposed and a portion of the strip adjoining the fold is free from adhesive, sewing said uncoated portion of the strip to one face of the marginal portion of the sheet article, folding the strip over the edge of the sheet and causing the exposed adhesively coated portion of the strip to adhere to the opposite face of the marginal portion of the sheet.

1,871,680. STRETCHER. THOMAS J. FLANAGAN, New Haven, Conn. Filed May 1, 1931. Serial No. 534,395. 2 Claims. (Cl. 5—82.)



1. A stretcher comprising two similar fabric sections each of which is provided with loops upon its inner edge, the loops of one section being designed to be placed in registering alignment with the loops of the other section, means to hold said sections together comprising a hollow fabric strap threaded through said loops, and a stiffening member designed to be inserted within said strap to impart stiffness to the latter during the threading operation.

1,871,681. PROCESS OF REFINING OILS. JAMES G. FORD, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 1, 1927. Serial No. 195,874. 2 Claims. (Cl. 196—16.)

1. The method of reconditioning insulating oils having a paraffine-base and containing a slight amount of water and oxidation products which comprises adding a sufficient amount of fuming sulphuric acid to the oil to react with the water and oxidation products therein, agi-

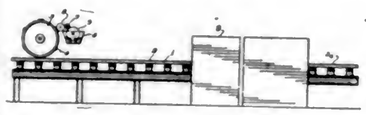
tating the oil and acid for a period sufficient to remove said oxidation products with said acid and for an insufficient period to remove substantial quantities of the unsaturates and then treating the oil with silica-gel.

1,871,682. PROCESS FOR REFINING PARAFFIN AND NAPHTHENE BASE OILS. JAMES G. FORD, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 1, 1927. Serial No. 195,875. 8 Claims. (Cl. 196—140.)

1. In the process of reconditioning an insulating oil containing oxidation products and unsaturated compounds, the steps which comprise treating the oil with a sufficient amount of a concentrated sulphuric acid to react with the oxidation products of the oil but insufficient to react with a substantial amount of the unsaturated hydrocarbons, removing the oil from the reaction products, treating the oil with an inorganic salt capable of producing demulsification and then separating and removing the oil from the sulphonated products.

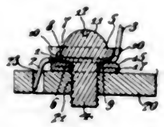
7. In the process of refining on insulating oil containing oxidation products and unsaturated hydrocarbons, the step which comprises treating the oil with from approximately 5% to 7% by volume of a concentrated sulphonating agent for a sufficient time to remove the oxidation products but for an insufficient time to react with more than a minor proportion of the unsaturated hydrocarbons and removing the oil from the reaction products.

1,871,683. CHEMICAL PRINTING. ERNEST GASKINS, City Point, Hopewell, Va., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed May 26, 1930. Serial No. 455,965. 4 Claims. (Cl. 101—426.)



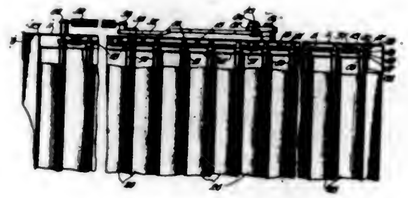
1. The method of imprinting on paper sheets, which comprises printing with a dilute solution of potassium permanganate to said sheets, and drying said imprint by the application of heat to produce a brown coloration of manganese dioxide, said manganese dioxide being capable of eradication by the application of a dilute solution of hydrochloric acid.

1,871,684. LOCKING DEVICE FOR SCREWS AND THE LIKE. WILLIAM JAMES GIBBONS, Philadelphia, Pa. Filed Nov. 29, 1930. Serial No. 498,969. 6 Claims. (Cl. 151—32.)



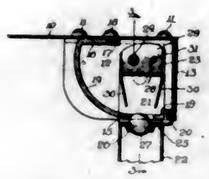
5. In a locking device for screws and the like, the combination of a screw having a head the lower portion of which is of less diameter than the adjoining upper portion thereof and the outer edge of said head having notches therein, an annular washer mounted on the said portion of less diameter, the thickness of said washer being less than the length of the said portion of less diameter so that the washer may be rotatably adjusted upon said portion of less diameter, the said washer having fingers which project outwardly from the outer edge thereof one of said fingers adapted to be bent into engagement with one of said notches, a support having a projection extending upwardly therefrom in spaced relation to the said screw, and a member adapted to be secured and held by said screw on said support, the other of the fingers of said washer contacting with said projection to prevent rotation of said screw in a direction to cause backing out thereof from said support.

1,871,685. RADIATOR SHUTTER. FRED GOLDFISHER, Chicago, Ill., assignor to Pines Winterfront Company, Chicago, Ill., a Corporation of Delaware. Filed May 13, 1929. Serial No. 362,573. 19 Claims. (Cl. 189—62.)



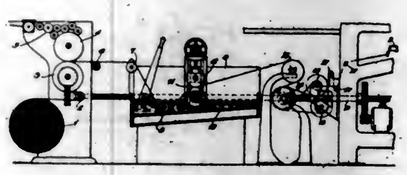
8. In a radiator shutter for internal combustion engines, the combination of side and end frame members forming a fenestration, with a plurality of fixed members shutters pivotally mounted in said bearing strip, said carried by one of said end frame members, a bearing strip slidably mounted on said fixed members, a plurality of bearing strip being formed with apertures for bearings, and trunnions carried by said shutters and having frusto-conical surfaces engaging in said apertures, said bearing strip being resilient to compensate for irregularities in the dimensions of said shutters.

1,871,686. TABLE LEG LOCK. GEORGE W. HAMBROOK and WERNER E. CLARIN, Chicago, Ill., assignors to Clarin Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 31, 1931. Serial No. 572,289. 5 Claims. (Cl. 45—11.)



1. The combination with a table top, of a housing attached to and beneath said top formed with a hole in a wall thereof, a leg pivoted on said housing formed with a a ball se[illegible] registering with said hole in the extended position of the leg, and a gravity-actuated ball adapted to occupy said hole and seat in the upright position of the table to thereby lock said leg in extended position.

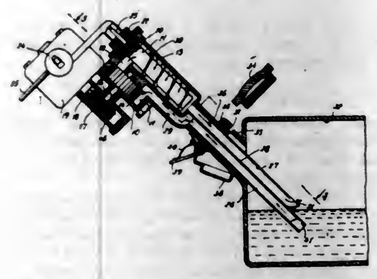
1,871,687. WAXING OF PAPER AND WRAPPING OF ARTICLES THEREIN. CARL S. HAMERSLEY, New York, N. Y. Filed Mar. 25, 1929. Serial No. 349,549. 7 Claims. (Cl. 93—2.)



1. In the wrapping of articles in waxed paper the step which consists in chilling the wax of the paper immediately prior to its entry into the wrapping apparatus.

4. A waxed wrapping paper provided at the seam portions thereof with a coating of wax of increased thickness as compared with the thickness of the coating of wax throughout the remainder of the paper.

1,871,688. LIQUID HEATING DEVICE. EDGAR W. HELLER, Newark, N. J. Filed Aug. 22, 1930. Serial No. 477,138. 4 Claims. (Cl. 219—39.)

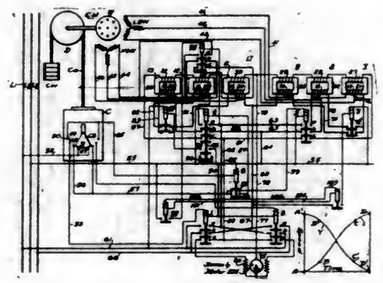


1. In a device for heating liquids contained in a vessel, the combination of a casing, a pair of pipes connected to lie side by side and extending parallel, one of said pipes having an intake opening at its end, the other having an outlet opening for discharge of liquid at an angle to the axis of the pipe, said pipes being adapted to be introduced into the vessel with at least said intake opening lying below the level of the liquid and said pipes being attached to said casing, a chamber in the casing to which said first pipe leads, a pump in said chamber, a second chamber in the casing from which said second pipe leads, said chambers being in communication, and means in said second chamber for heating the liquid passing therethrough.

1,871,689. ELEVATOR CONTROL SYSTEM. RAY P. HIGBEE, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 19, 1928. Serial No. 278,947. 18 Claims. (Cl. 172—152.)

1. In a motor control system, in combination, a motor having dual primary windings for obtaining two-speed operation, a source of power for the motor, and means for controlling the speed of the motor comprising means interposed between the primary windings of the motor and the source of power for varying the voltage applied to either primary winding, said means including variable impedance means and means for reconnecting said variable impedance means as transformers, said voltage varying means being operable in response to the speed of said motor.

18. In an alternating-current motor-control system, a motor having primary winding connections for low and high speed operation of said motor, a source of voltage for said motor, circuit connections between said source and said windings, selective switches to control the speed of said motor, and means responsive to operation of said selective switches to cause said motor to decelerate from high speed to low speed for controlling the rate of change



of speed of said motor comprising means to reduce the voltage initially supplied to said low speed winding connections, means responsive to a predetermined speed of said motor for increasing said voltage, and means responsive to the speed of said motor for thereafter gradually decreasing said voltage.

1,871,690. DISPLAY DEVICE. GEORGE FRANCIS HOGAN, Chicago, Ill. Filed Nov. 8, 1930. Serial No. 494,253. 3 Claims. (Cl. 40—145.)

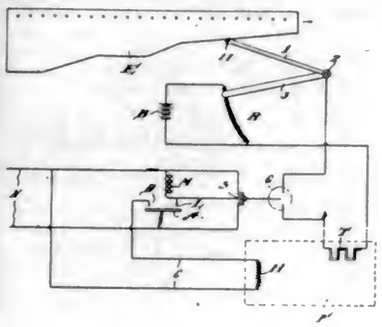


1. A street sign comprising a single strip of resilient metal bent to form a pair of indicia bearing arms, said arms being connected by a generally cylindrical support-gripping portion which defines an arc of a circle greater than 180° for securing said sign to a support.

1,871,691. METHOD AND APPARATUS FOR CONTROLLING TEMPERATURES AND THE LIKE. LESLIE E. HOWARD, Lockport, N. Y., assignor to Simonds Saw and Steel Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed Dec. 11, 1929. Serial No. 413,274. 6 Claims. (Cl. 236—46.)

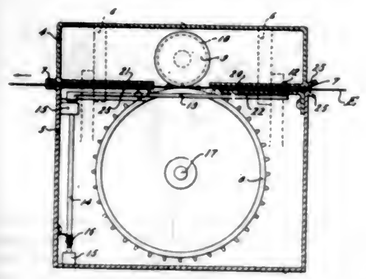
6. Apparatus for controlling the temperatures of furnaces and the like comprising a circuit including a galvanometer and means associated with the furnace for producing an electromotive-force proportional to the temperature of the furnace, a circuit including a battery providing a supply of electromotive-force, a variable resistance in the battery circuit, the other circuit being connected across this variable resistance, an actuator for varying said resistance, a longitudinally movable cam engaging said actuator for varying the electromotive-force in the battery circuit, a normally open circuit including a heating element for the furnace, electromagnetic means for closing the heating circuit, the galvanometer being operable between two positions and effective in one of these positions for closing a circuit to energize said electromag-

netic means, the latter means being effective for holding the heating circuit closed while the galvanometer retracts from its circuit closing position, the galvanometer being



effective on retracting from said circuit closing position to a second position for short circuiting said electromagnetic means and thereby interrupting the heating circuit.

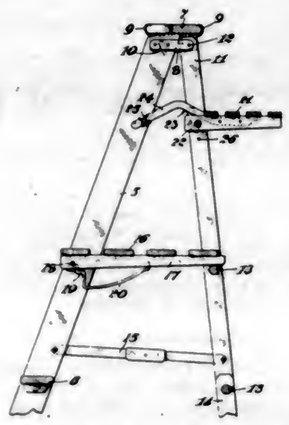
1,871,692. CAM OPERATING MECHANISM. LESLIE E. HOWARD, Lockport, N. Y., assignor to Simonds Saw and Steel Company, Fitchburg, Mass., a Corporation of Massachusetts. Original application filed Dec. 11, 1929, Serial No. 413,274. Divided and this application filed Oct. 30, 1930. Serial No. 492,170. 9 Claims. (Cl. 74—1.)



1. Apparatus of the character referred to comprising an elongate sheet of material having a longitudinal cam edge, means providing a passageway for guiding the sheet of material, means for feeding the sheet longitudinally through the passageway when the leading end of the sheet is inserted into the entrance of the passageway, the sheet being freely removable from said means when its trailing end reaches the exit of the passageway, and a controller engageable with said edge as the sheet feeds through said passageway.

1,871,693. STEPLADDER. JOSEPH HUCK, Cresskill, N. J., assignor to Chesebro, Whitman Co. Inc., Long Island City, N. Y., a Corporation of New York. Filed Apr. 9, 1930. Serial No. 442,732. 3 Claims. (Cl. 228—17.)

2. A step ladder comprising a ladder proper having side rails, supporting legs pivotally connected to the upper ends of said rails, a platform pivotally mounted at one of its ends between the supporting legs to extend rearwardly therefrom, means rigidly fixed to the platform and projecting longitudinally thereof beyond its pivoted end, and guide means mounted on one of the ladder rails movably engaged by said last named means and cooperating therewith in the pivotal movement of said supporting legs to

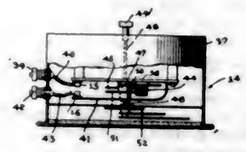


move said pivoted platform to an extended horizontal position with respect to said legs or to a vertical folded position therebetween.

1,871,694. PROCESS FOR PRODUCING AROMATIC HYDROCARBONS. HARRY KARL IHRIG, Pittsburgh, Pa. Filed June 15, 1927. Serial No. 199,116. 5 Claims. (Cl. 260—168.)

1. A process of treating a mixture of saturated aliphatic hydrocarbons and aromatic, hydroaromatic and unsaturated hydrocarbons, comprising treating such mixture with a polar solvent of the liquefied gas type to form a solution containing said aromatic, hydroaromatic and unsaturated hydrocarbons together with a minor proportion of said saturated aliphatic hydrocarbons, separating said solution from the undissolved saturated aliphatic hydrocarbons, recovering the extracted material from said solution, treating said extracted material with a polar solvent of the liquefied gas type and thereby dissolving said aromatic, hydroaromatic and unsaturated hydrocarbons and separating them as a solution in the solvent from the minor proportion of saturated aliphatic hydrocarbons contained in said extracted material, separating the last-named solution from the residual undissolved saturated aliphatic hydrocarbons, and recovering the purified extract from said last-named solution.
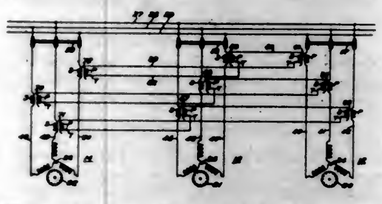
1,871,695. LIGHTING SYSTEM FOR MOTOR VEHICLES. MAX ISERMANN, New York, N. Y., and ERNST OHLSSON, Jersey City, N. J.; said Ohlsson assignor to said Isermann. Filed July 8, 1929. Serial No. 376,681. 6 Claims. (Cl. 161—1.)



1. An electrical system comprising a circuit including a source of electric current, a translating device, a manual switch, and an automatic switch in combination with a

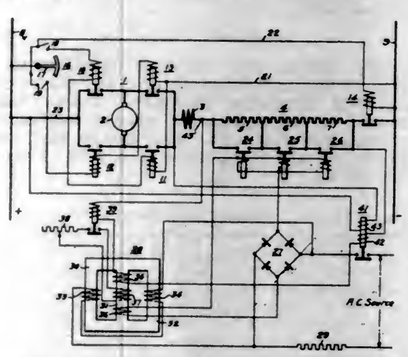
second manually operable switch in parallel with said automatic switch, and electro-responsive means disposed in said circuit for closing said second manually operable switch and holding it closed.

1,871,696. CONTROL SYSTEM. RAY P. JACKSON, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 24, 1931. Serial No. 524,786. 4 Claims. (Cl. 172—239.)



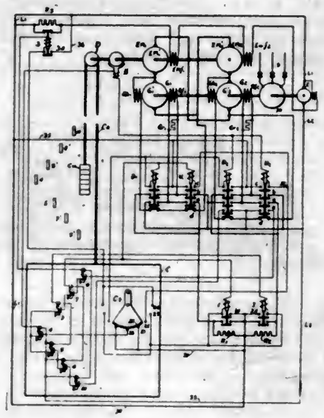
2. The combination with a work-device comprising a tool and a carriage for bringing the tool and the material to be worked into cooperative relation, of a main motor for actuating the tool, a plurality of feed motors for actuating the feed carriage, a source of power for the motors, said feed motors being so connected to the power source as to develop torques in opposite directions, means responsive to the load on the main motor for so varying the energization of the feed motors that the tool and the material are fed into cooperative relation when the load of the main motor is less than a predetermined selected value and that the tool and material are retracted from such cooperative relation when the load exceeds said predetermined selected value, and means for varying the effectiveness of the load-responsive means, thereby affording a plurality of predetermined selected values at which the tool may be retracted from cooperative engagement with the material being worked.

1,871,697. CONTROL SYSTEM. HENRY D. JAMES, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 19, 1929. Serial No. 348,269. 8 Claims. (Cl. 172—179.)



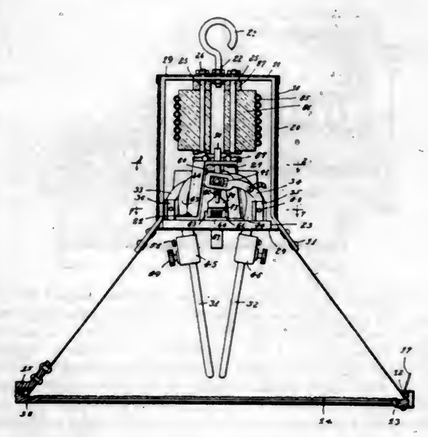
1. In a motor-control system, in combination, a motor, an accelerating resistor, a plurality of switches, magnet coils for actuating said switches, said switches being disposed to shunt sections of said resistor in a predetermined sequence, a source of alternating-current power, a rectifier disposed to rectify the current from the alternating-current source of power and to supply unidirectional current to said magnet coils, a resistor connected in series circuit relation with said rectifier, and a variable reactor connected in parallel-circuit relation to said rectifier.

1,871,698. MOTOR CONTROL SYSTEM. HENRY D. JAMES, Edgewood, and HAROLD W. WILLIAMS, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 17, 1929. Serial No. 414,684. 8 Claims. (Cl. 172—152.)



1. In a control system, a driven member, a motor for driving said member, a plurality of generators electrically connected to said motor, means for exciting all of said generators, and means for establishing low-speed operation of said motor comprising means operated when said driven member passes a predetermined point in its path of travel for removing the excitation of one of said generators.

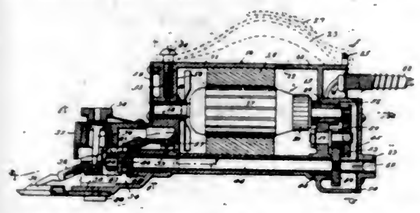
1,871,699. THERAPEUTIC ARC LAMP. IVAR JEPPSSON, Chicago, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed July 10, 1929. Serial No. 377,313. 4 Claims. (Cl. 176—103.)



1. A lamp of the character described adapted to be suspended in an overhead position, electrodes positioned with respect to each other as the sides of a V, a lever having a drop member adapted to be pulled, means actuated by

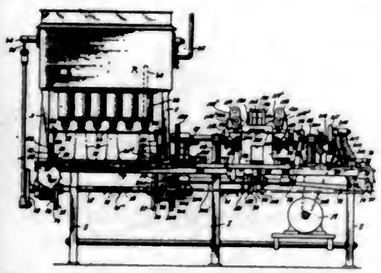
said lever by pull on said drop member for permitting said electrodes to gravitate into contact, and means for automatically separating said electrodes to a given arc gap when the pull member is released.

1,871,700. SHEARING MACHINE. IVAR JEPPSSON, Chicago, and EDWIN S. BARTLETT, Forest Park, Ill., assignors to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 19, 1932. Serial No. 600,006. 20 Claims. (Cl. 30—1.)



11. In a shearing machine, the combination of an elongated hollow handle, a comb carried on the front end of said handle adjacent the bottom thereof, a cutter reciprocable on the comb, an oscillating member pivotally mounted at its rear end on the handle and operatively connected at its front end with the cutter for reciprocating the same, a motor mounted lengthwise in the handle with the driving shaft thereof received in front and rear bearings provided in said handle, a driving spindle mounted in the bottom of the handle and extending lengthwise thereof, said spindle having a driving connection at its front end with the oscillating member intermediate the ends of the latter whereby to communicate oscillatory movement to said member in the turning of said spindle, and means providing a driving connection between the rear end of said driving shaft and the rear end of said spindle.

1,871,701. RECEPTACLE CLOSING AND SEALING MEANS. ELLIS L. JONES, Long Island City, N. Y., assignor, by mesne assignments, to American Sealcone Corporation, New York, N. Y., a Corporation of New York. Filed June 16, 1928. Serial No. 285,849. 6 Claims. (Cl. 226—56.)



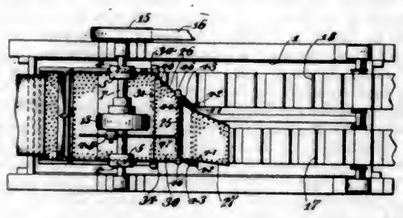
1. In apparatus for the purpose specified, means to collapse the open end of a receptacle and clamp a sealing member to said collapsed receptacle end, comprising a pair of slides supported to have reciprocatory movement toward and away from each other, a second pair of slides carried by the first slides to participate in the movement thereof and relative to which the first slides are adapted to have independent movement, a pair of levers pivotally supported on horizontal axes extending transversely of the movement of the slides and have movement in the plane of movement of the slides, a drive shaft rotatable on an axis extending in the plane of movement of the slides, and operative connection between said shaft and slide actuating levers to oscillate the levers and reciprocate the slides.

1,871,702. PARCHMENTIZED CREPE PAPER AND METHOD OF MAKING. ERNEST L. KALLANDER, Framingham, and ROBERT F. CHARLES, Concord, Mass., assignors to Dennison Manufacturing Company, Framingham, Mass., a Corporation of Massachusetts. Filed July 23, 1930. Serial No. 469,977. 16 Claims. (Cl. 154—33.)



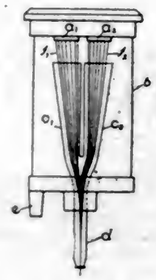
1. Method of making crepe paper, comprising the steps of applying a parchmentizing solution to a sheet of paper and subsequently creping the sheet.

1,871,703. CLASSIFYING APPARATUS. THOMAS KARLOVITCH and JOHN SEBES, Mount Carmel, Pa. Filed July 5, 1929. Serial No. 376,133. 6 Claims. (Cl. 209—496.)



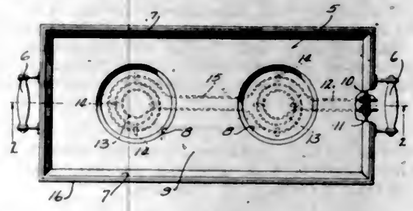
1. A classifying apparatus of the character described, comprising a jig pan having the rear end portion of a side wall thereof bent and extended in a direction transversely of the length of the said pan, the lower edge of the said inwardly extended portion being projected beyond the plane of the bottom of the said jig pan, the said extended portion being bent inwardly, a discharge gate located between the opposite side walls of the rear end portion of the said jig pan with its opposite side edges located in adjoining relation to the said portions, and means for pivotally supporting the said gate at its front end, permitting the rear end thereof to swing back and forth between the rear ends of the side walls.

1,871,704. APPARATUS FOR THE PRODUCTION OF STRONG FILAMENTS OF ARTIFICIAL SILK BY THE STRETCH SPINNING PROCESS. HUBERT KEMPF, Barmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filed July 29, 1927, Serial No. 209,231, and in Germany Aug. 5, 1926. 4 Claims. (Cl. 18—8.)



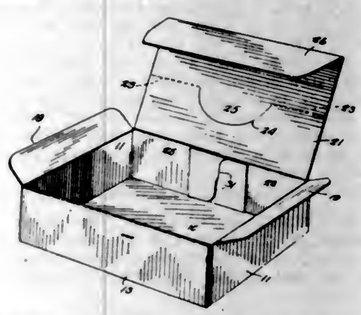
1. An apparatus for the production of threads of artificial silk, comprising a precipitating apparatus, an extrusion device provided with groups of separate apertures for forming a plurality of individual filaments arranged in groups, said extrusion device being mounted at the top of the precipitating apparatus, and a plurality of funnels disposed beneath said extrusion device to receive said groups of filaments, said funnels having a common outlet for the combined groups of filaments.

1,871,705. HEATED TRAY. GOTTFRIED KEUL, Dover, Ohio. Filed July 10, 1929. Serial No. 377,098. 4 Claims. (Cl. 219—19.)



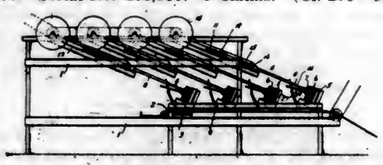
3. A light-weight portable tray comprising a plate having an integrally continuous supporting surface, means for the support of electrical terminals, terminals mounted in said means, an insulated resistance element connected with said terminals and having convolutions concentrated beneath a predetermined area of said plate, and means mechanically connecting the convoluted portion of said element directly to the registering portions of said plate, the portions of said element intervening between said convoluted portion and said terminal being spaced from said plate, whereby to avoid heat transmission to said plate except at said area.

1,871,706. FOLDABLE PAPER BOX. WILLIAM R. KREBS, Baltimore, Md. Filed Apr. 3, 1931. Serial No. 527,469. 2 Claims. (Cl. 206—44.)



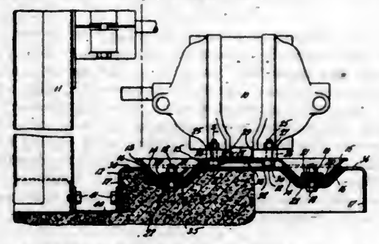
1. A blank for folding boxes consisting of a single sheet of material cut and scored to provide a rectangular bottom portion, end, front and main rear flaps extending from the respective edges of the bottom and defined therefrom by fold lines, square corner portions in the cornera between the end and front flaps and defined therefrom by fold lines, tabs on the free edges of the front and end flaps, a cover portion extending from the free edge of the rear flap and defined therefrom by a fold line and having a front cover flap extending from the free edge of the cover and defined therefrom by a fold line, said cover being divided into forward and rear portions by fold lines extending inwardly from the end edges of the cover and having their inner ends connected by a semicircular slit, and auxiliary rear flaps extending from the rear edges of the end flaps and defined therefrom by fold lines, said auxiliary end flaps being separated from the main end flap and cover by slits and having cooperating locking slits adjacent their rear ends.

1,871,707. MATERIAL HANDLING APPARATUS. EDWARD ERNST KLUPMEYER and AURA ALBERT MAXWELL, Joliet, Ill., assignors to The Ruberoid Co., New York, N. Y., a Corporation of New Jersey. Filed June 27, 1930. Serial No. 464,160. 5 Claims. (Cl. 270—58.)



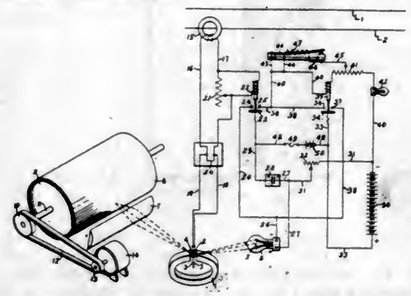
1. A material handling device comprising a conveyor, a series of material containing bins, a series of material handling devices, a suction chamber mounted on each of said devices, means actuated when said chamber is in contact with the material for rendering said suction chamber operable to lift material from one of said bins and means for operating said handling devices and suction chambers into contact with said material and then over said conveyor.

1,871,708. MACHINE MOUNTING. EDWARD S. LEA, Morrisville, Pa., assignor to Carrier Engineering Corporation, Newark, N. J. Filed May 20, 1929. Serial No. 364,349. 2 Claims. (Cl. 248—16.)



2. In a machine mounting, the combination of a base plate and a machine-carrying plate each consisting of a sheet metal stamping, one formed with a plurality of tapering sockets, and the other formed with a corresponding number of hollow tapered projections arranged to seat in said sockets, annular yielding bodies surrounding said projections between the same and said sockets and on which said projections rest, bolts extending through central holes in said sockets and projections out of contact with one of said plates, yielding washers surrounding said bolts within said hollow projections, and nuts screwed on said bolts above said yielding washers.

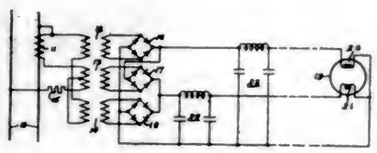
1,871,709. RECORDING SYSTEM. JOSEPH W. LEGG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 10, 1927. Serial No. 197,983. 6 Claims. (Cl. 234—5.5.)



1. In a recording system having a light-sensitive surface and means for imparting continuous rotative move-

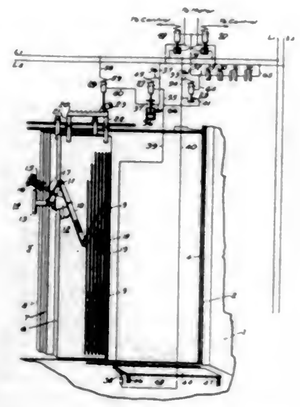
ment to said surface, a deflecting system including a mirror controlled in accordance with a characteristic of a quantity, a source of light for passing a beam of light to said mirror and thence to said surface, means responsive to the occurrence of an event affecting said characteristic for energizing said source of light, a disabling device for said last named means actuated in response to the occurrence of said event, and means effective at the termination of a predetermined period for deenergizing said source of light.

1,871,710. METERING SYSTEM. BERNARD E. LENEHAN, Bloomfield, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 11, 1929. Serial No. 354,301. 8 Claims. (Cl. 171—34.)



1. In combination, an alternating-current power circuit, a product meter for indicating the power supplied to said circuit and means for energizing said meter comprising current and voltage transformers associated with said circuit, rectifiers connected to said transformers adapted to supply direct currents proportional to the vector sum and difference of the current traversing said circuit and the voltage thereacross, a transmission circuit connecting said rectifiers and said meter whereby the windings of the latter are respectively energized by the sum and the difference of said direct currents.

1,871,711. DOOR OPERATING APPARATUS. FRANK E. LEWIS, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 12, 1928. Serial No. 269,504. 11 Claims. (Cl. 187—58.)

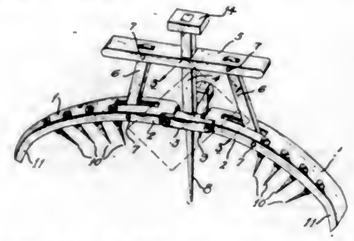


1. In a door controlling apparatus, the combination with a door and means for closing said door, of means operably responsive to the weight of a passenger for retarding the closing of said door.

1,871,712. METHOD OF ELECTRIC SHEET-WELDING. CHARLES G. LLOYD, La Grange, Ill., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Feb. 7, 1929, Serial No. 338,208. Divided and this application filed Feb. 20, 1930. Serial No. 430,109. 1 Claim. (Cl. 219—10.)

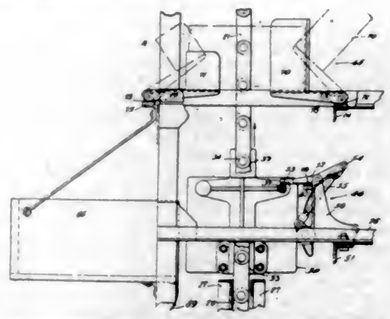
The method of uniting thin metallic sheets which consists in superimposing one sheet upon another, contacting an electrode with one of said sheets, effecting continuous relative transverse movement between said sheets and said electrode to bring the latter towards a new point of contact, and, simultaneously during said transverse movement first withdrawing said electrode gradually from said sheet until the arc between the electrode and the sheet is extinguished and then moving the electrode towards the sheet until contact is against established at a new point.

1,871,713. MEAT HOLDING DEVICE. MARK LOWENTHAL, Elizabeth, N. J. Filed Oct. 16, 1931. Serial No. 569,133. 1 Claim. (Cl. 146—216.)



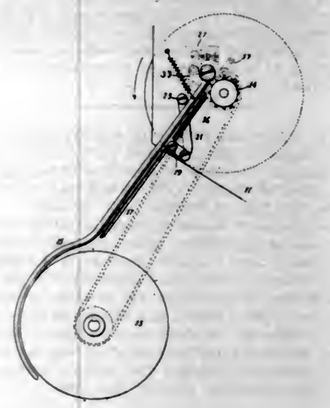
A device of the character described comprising a horizontal block provided with a downwardly extending prong for piercing an article of meat to position the block thereon and provided with an upwardly extending operating stem, a pair of arcuate arms pivotally secured to said block for holding engagement with the sides of the article of meat, said arms being provided with meat-piercing prongs, a horizontal plate located above the horizontal block and provided with an opening through which the operating stem passes, and links pivotally connected, at opposite ends, to said plate and to said arms, all of said parts being arranged in proper vertical alignment so that a meat-cutting knife may bear against and be guided by the front edge of the device while the knife is moved back and forth.

1,871,714. VERTICAL CONVEYER. WILLARD A. MARCY, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Jan. 31, 1930. Serial No. 424,854. 13 Claims. (Cl. 198—38.)



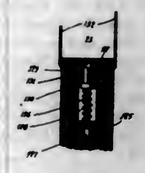
1. The combination with an elevator which includes a car divided into a plurality of load supporting spaces and adapted to pass a plurality of stations disposed along the path of travel of the car of an automatic ejector means and a loading means at each of said stations, the ejector and loading means of each station registering with a space on the car other than those with which such means at the other station register whereby the placing of a load in a particular space determines the station at which it will be ejected and another load may be supplied to the space at such station.

1,871,715. FILM TAKE-UP. RUSSELL P. MAY, Haddonfield, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 15, 1930. Serial No. 502,310. 5 Claims. (Cl. 242—76.)



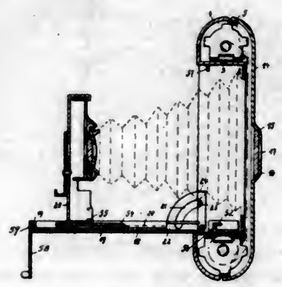
5. In a motion picture machine, a take-up release mechanism which comprises means for guiding the film toward a take-up reel and movable to feeding and operating positions, and means operated by the retardation of said reel effected upon attaching the film to said reel for permitting the guide members to be moved to the operating position.

1,871,716. TALKING MOTION PICTURE PROJECTOR. RUSSELL P. MAY, Haddonfield, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Original application filed Sept. 12, 1929, Serial No. 392,051. Divided and this application filed Feb. 17, 1931. Serial No. 516,359. 4 Claims. (Cl. 242—74.)



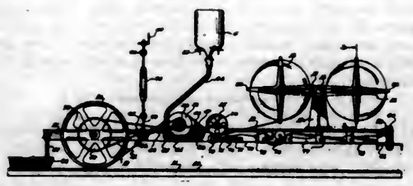
4. A take-up reel for use in an automatic motion picture projector which comprises a hub portion, and a spring-pressed plunger mounted in said hub portion whereby a film being fed onto said take-up reel will be caught in a hole in the end thereof by said plunger and the next turn of film accumulated on said hub will press said plunger into said hub flush with the top of the first turn of film.

1,871,717. PHOTOGRAPHIC CAMERA. BRUNO MAYER, Nuremberg, Germany. Filed Feb. 28, 1929, Serial No. 343,444, and in Germany Mar. 5, 1928. 1 Claim. (Cl. 95—32.)



A photographic camera, comprising in combination a casing formed in one piece of sheet metal, two lateral walls being bent upwardly at right angles and reduced rearwardly, intermediate sections joined to the lateral walls, cross ledges arranged on said intermediate sections and adapted to be bent downwardly at right angles, two slightly curved strips placed at the longitudinal sides of said section and adapted to be bent upwardly at right angles, longitudinal ledges adapted to abut against said cross ledges, end sections lapped over in form of a quadrant, inwardly turned ledges arranged on the lateral walls, laps adapted to connect the said ledges, a rear cover formed out of an undivided body of sheet metal and adapted to put on the rearwardly reduced parts of said lateral walls, said cover being provided in the center with a depression having an aperture therein, a red disk fixed in said aperture.

1,871,718. STRIP LABELER. WILLIAM M. MCNEIL, Chicago, Ill., and BERNARD T. BALLARD, Fort Dodge, Iowa, assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed July 25, 1930. Serial No. 470,575. 5 Claims. (Cl. 216—9.)

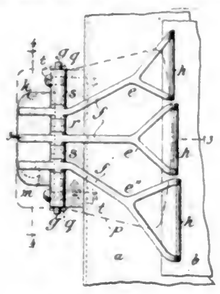


1. In a label strip applying apparatus, a pivotally mounted roll supporting element having a plurality of label strip rolls rotatably mounted thereon, means for anchoring said element in a plurality of positions so that full rolls of label strip may be successively brought into operative position, means for applying adhesive to one face of said label strip, and means for pressing said label strip onto a moving sheet of material.

1,871,719. DESK CLIP FOR HOLDING BLANKS. RALPH I. MEADER, Lynbrook, N. Y. Filed July 17, 1929. Serial No. 378,852. 7 Claims. (Cl. 24—66.)

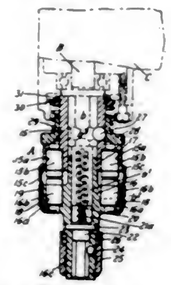
1. A desk clip for holding a pile of loose blanks, comprising a supporting member adapted to locate the blanks, and an elongated holding member mounted on the sup-

porting member, engaging one edge portion of the blanks, with means for pressing it down yieldingly against the pile of blanks, said holding member formed in a plurality



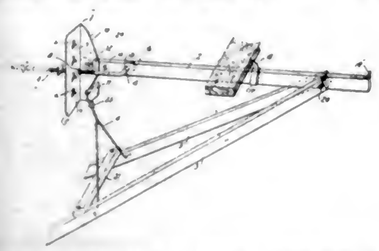
of steps, all bearing upon the blanks and projecting to successively varying distances beyond the located edge of the blanks.

1,871,720. ATTACHMENT FOR DRIVING SPINDLES. LEON F. MEUNIER, Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed July 22, 1927. Serial No. 207,656. 15 Claims. (Cl. 279—1.)



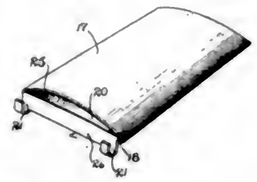
1. A tool chuck for attachment to a rotatable spindle comprising driving and driven elements arranged for limited movement toward and from each other, renewable clutch members telescopingly engaging said elements with a press fit, and cooperating means integral with said elements and said members providing engaging faces positively keying said members to their respective supporting elements.

1,871,721. SCAFFOLD BRACKET. HENRY B. MILLER, Honey Creek, Wis. Filed Apr. 3, 1929. Serial No. 352,182. 8 Claims. (Cl. 304—33.)



1. A collapsible scaffold bracket comprising a wall plate, an arm pivotally secured thereto, a brace pivotally secured to the arm, a hanger pivotally secured to the brace, and a hook on said plate, said hanger being engageable with said hook.

1,871,722. WINDSHIELD WARMER. CHARLES A. MORGAN, Grand Rapids, Mich. Filed Aug. 5, 1931. Serial No. 555,159. 4 Claims. (Cl. 20—40.5.)

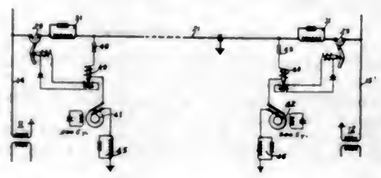


1. A windshield warmer comprising an upper member of curved cross section and having portion return bent along its edges, and a second member of slightly curved cross section, said member being received in the channels formed at the edge of the first mentioned member whereby a passageway is formed between the members for the purpose described.

1,871,723. PROCESS FOR THE RECOVERY OF CRYOLITE. JOHN E. MORROW, East St. Louis, Ill., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 29, 1929. Serial No. 367,140. 7 Claims. (Cl. 23—88.)

2. The process of recovering cryolite values from waste products containing cryolite which comprises treating said waste products with a caustic solution of a strength sufficient to effect a substantial separation of the cryolite and insufficient to decompose the cryolite at the boiling temperature of the solution and dissolving thereby a substantial portion of the cryolite contained in said waste products, separating the solution from the insoluble residue, and thereafter treating the solution with an acidic material to precipitate cryolite therefrom.

1,871,724. MULTIFREQUENCY CIRCUIT BREAKER CONTROL SYSTEM AND PROTECTIVE SYSTEM. CHARLES McL. MOSS, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 3, 1928. Serial No. 258,894. 21 Claims. (Cl. 175—294.)



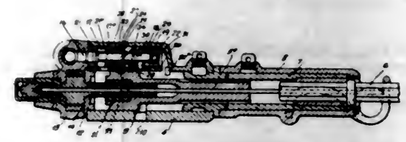
1. The combination with an electrical power system having a plurality of parallel lines, isolating devices for said lines and actuating means therefor, of auxiliary sources of control currents of different frequencies associated with the lines so that a fault in any line establishes a closed circuit for the auxiliary sources, and means individual to said lines, responsive to the control currents flowing to said fault, for controlling the isolating devices in the faulty line only.

1,871,725. LAMINATED GLASS AND METHOD OF MAKING SAME. WILLIAM HENRY MOSS, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Oct. 20, 1928. Serial No. 313,964. 10 Claims. (Cl. 49—81.)

1. In the method of forming laminated glass having a layer of a material containing an organic derivative of cellulose between sheets of glass, the step of applying an

adhesive coating composition containing a lactic acid resin formed by heating lactic acid as the sole reactant under reflux which resin is compatible with said derivative of cellulose.

1,871,726. FLUID PRESSURE TOOL. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 16, 1929. Serial No. 399,888. 4 Claims. (Cl. 121—19.)



1. In a fluid pressure motor, a cylinder providing a piston chamber, a piston reciprocable therein, a fluid pressure valve, one end of which controls admission of fluid pressure to one end of said piston chamber and the other end of said valve to the other end of said piston chamber, said valve having only one compression area constantly in communication with one end of said piston chamber and a shift area opposed to said compression area, means intermittently bringing said shift area into communication with said piston chamber including a port controlled by said piston, a continuously open vent for said shift area, and means intermediate said port and said end of said piston chamber providing an additional vent under control of said piston and of said valve and operable only after movement of said valve by action of pressure fluid on said shift area.

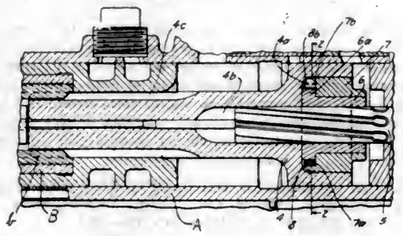
1,871,727. BRAKE CROSS SHAFT ASSEMBLY AND METHOD OF MAKING THE SAME. FREDERICK CARL MATTHAEI and GEORGE DANIEL SHANAHAN, Detroit, Mich., assignors of one-half to American Metal Products Company, a Corporation of Michigan, and one-half to Motors Metal Manufacturing Company, a Corporation of Michigan. Filed Oct. 8, 1930. Serial No. 487,164. 14 Claims. (Cl. 29—152.)



1. In a shaft for operating brakes and the like, the combination of a tube havings a slot therein, and a pair of complementary elements secured in the slot and joined to form a single lever.

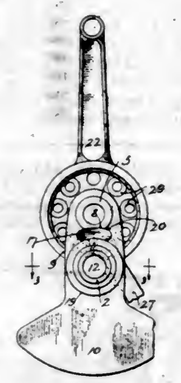
1,871,728. SLIP ROTATION APPARATUS. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 6, 1929. Serial No. 353,206. 15 Claims. (Cl. 121—7.)

1. In a percussive drill, in combination, a reciprocating percussive member, means responsive to the movement of said member for imparting rotative movement to the same, and means on said member responsive to overload



for effecting slip between said first named means and said member.

1,871,729. CRANK CONNECTION FOR RADIAL MOTORS. JOHN NEWMANN, Brooklyn, N. Y. Refile of application Serial No. 395,508, filed Sept. 27, 1929. This application filed July 17, 1931. Serial No. 551,429. 4 Claims. (Cl. 74—38.)



1. In a crank construction for motors, the combination of a shaft composed of aligned sections, a crank arm on one of said sections, a wrist pin on said crank arm, a second crank arm on the second shaft section, said latter crank arm having an aperture to receive said wrist pin, said second shaft section having a central bore, said second crank arm and second shaft section having a cut or slot extending from the wrist pin aperture of said second crank arm to the bore of said second crank section and said second shaft section having a cut extending inwardly thereof adjacent said second crank arm and crossing the plane of said first cut.

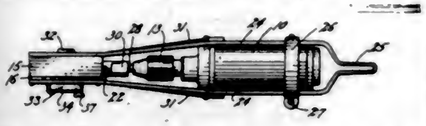
1,871,730. STRUCTURAL MATERIAL. CHARLES L. NORTON, Boston, Mass. Filed Nov. 17, 1930. Serial No. 496,348. 16 Claims. (Cl. 154—45.9.)

16. In structural material, the combination of a permeable base of concreted asbestos fibres with a hydraulic cement, and a void-free surface layer comprising a high proportion of hydraulic cement and hard-burned kaolin comminuted to particle size of the same order as that of the associated cement, bonded by said cement to said base, the cement of said layer hardened, and the layer highly polished.

1,871,731. PLASTER-BOARD MANUFACTURE. JAMES S. OFFUTT, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1930. Serial No. 462,691. 5 Claims. (Cl. 154—2.)

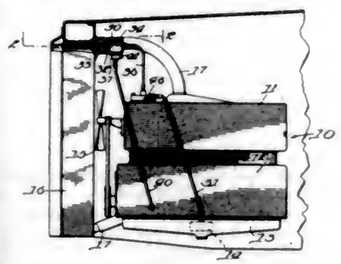
1. The method of securing bond between the core body of a plasterboard and the paper cover sheets, which comprises forming a layer of rubber latex at the interface between the paper cover sheet and the core material, permitting the core material to set to solid form, and passing the plasterboard through a drying kiln of high temperature so as to coagulate the rubber latex at said interface.

1,871,732. PORTABLE THREADING DEVICE. HARVEY M. OLMSTEAD, Denver, Colo. Filed May 24, 1930. Serial No. 455,317. 4 Claims. (Cl. 10—89.)



1. A threading attachment for portable electric drills comprising: a gear box; a worm gear journalled in said gear box; a pipe threading die operatively connected to said worm gear and positioned on the exterior of said gear box; a worm shaft extending laterally of said worm gear and projecting from said gear box; means for connecting said worm shaft to the shaft of a portable drill; a U-shaped frame secured at its extremities to opposite sides of said gear box and extending rearwardly along each side of said portable drill to align the latter with said worm; and a clamping band arranged to hold said portable drill in said U-shaped frame member.

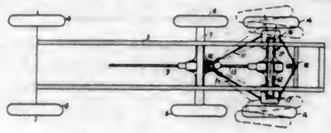
1,871,733. ENGINE-SHUTTER APPARATUS. EDGAR G. PETERSEN, Chicago, Ill., assignor to Pines Winterfront Company, Chicago, Ill., a Corporation of Delaware. Filed June 6, 1930. Serial No. 459,494. 11 Claims. (Cl. 123—174.)



1. In combination with an engine provided with an oil pump and shutters controlling the flow of air to cool the engine, a circuit through which oil circulates from and to the pump, a pressure-responsive shutter-actuating device in said circuit, regulable means independent of the temperature of the engine for controlling the rate of oil outflow from said pressure-responsive device, and means responsive to the temperature of the engine for varying the rate of oil inflow to said pressure-responsive device.

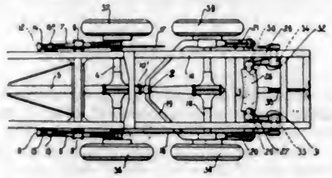
1,871,734. MOTOR CAR FRAME. PETER LOURENS PRINS, Bussum, Netherlands, assignor to Daniel Maurits Kan, Hilversum, Netherlands, Franciscus Antonius Drieman, Marinus Leonard Kan, and Frans Johan Jacob van Schaardenburg, Amsterdam, Netherlands. Filed Aug. 22, 1928, Serial No. 301,325, and in the Netherlands Sept. 5, 1927. 1 Claim. (Cl. 280—124.)

A motor car chassis having a frame forward and rear driven axles, a radius bar connected to said rear driven axle, a universal joint connecting said radius bar to said frame, supporting resilient means connected to said frame and slidably engaging said rear driven axle and a



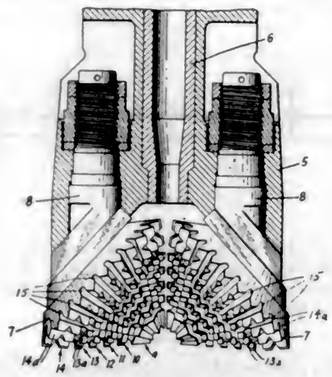
non-supporting resilient means between said frame and said axle normally maintaining said rear driven axle in normal axial position.

1,871,735. SIX-WHEEL MOTOR CHASSIS. PETER LOURENS PRINS, Amsterdam, Netherlands. Filed Nov. 6, 1930, Serial No. 493,827, and in Germany Nov. 7, 1929. 3 Claims. (Cl. 280—124.)



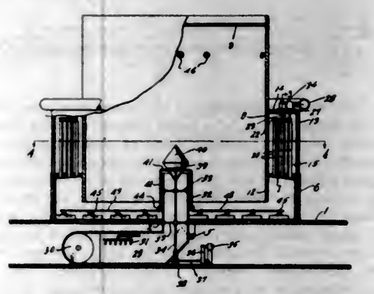
1. In a six wheel motor car the combination with a chassis frame having two rear axles spaced a relatively small distance apart and a lever system, of a secondary frame associated with the rearward axle, a universal joint connecting the same with the chassis frame, longitudinal suspension springs pivoted between their ends to the chassis frame, means connecting one end of each of said suspension springs with the intermediate axle, means connecting the other end of each of said suspension springs with said lever system, a transverse carrier flexibly associated with the said secondary frame whereby to flexibly support said chassis frame, and means connecting said lever system with said transverse carrier.

1,871,736. TOOTH FORMATION AND ARRANGEMENT FOR ROTARY DRILLING. CLARENCE E. REED, Wichita, Kans., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 10, 1930. Serial No. 501,169. 5 Claims. (Cl. 255—71.)



1. In rotary drilling apparatus for earth boring, a roller cutter having long penetrating teeth formed with a wedge shaped or inverted V point and substantially parallel sides below said point, adjacent teeth being spaced from one another to provide a pocket for the material displaced by the points of the teeth.

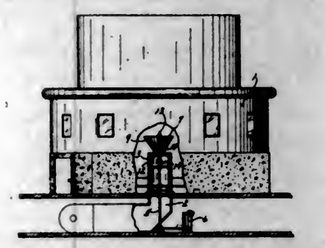
1,871,737. SPRAY DRIER. WILLIAM F. RICHARDS, Mason, Mich., assignor to S. M. A. Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 7, 1928. Serial No. 324,559. 4 Claims. (Cl. 159—4.)



1. Drying apparatus of the class described, comprising a hollow casing having wall portions forming a drying chamber, a ceiling member mounted at the top of said chamber and movable bodily and vertically toward and away from the upper edge of said wall portions, and means for yieldingly supporting the ceiling member, whereby upon sufficient increase in pressure within said chamber said ceiling member moves away from the edge of the chamber wall portions and opens a free vent from said chamber to atmosphere.

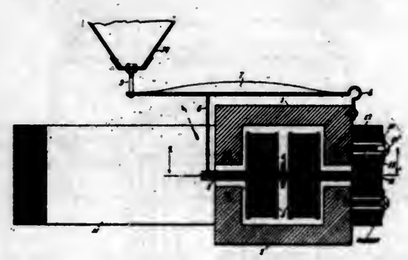
3. Apparatus for drying liquids, comprising a floor, an inverted hollow casing having a skirt open at the bottom, wall means enclosing an annular bay outside of the skirt, said skirt terminating above the floor level to provide beneath the skirt edge an unobstructed annular entrance to the bay, the floor being continuous throughout the inner casing chamber and the outer bay chamber, floor scraping means rotatable about the central vertical axis and extending through the bay entrance and effective upon substantially the entire floor area, fine dust collecting means adapted to separate the fine dust from the air flowing into the bay and arranged to deliver such material upon the floor of the bay, whereby the scraping means continuously and thoroughly mixes the fine dust deposited upon the bay floor with the coarser material deposited upon the inner chamber floor, to form a homogeneous good quality product, said bay having an annular roof, and said walls enclosing a series of compartments above said roof and spaced around the outside of said casing, said dust collectors being located in said compartments and discharging through the bay roof onto the bay floor.

1,871,738. BAFFLE. WILLIAM F. RICHARDS, Mason, Mich., assignor to S. M. A. Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 23, 1930. Serial No. 477,237. 3 Claims. (Cl. 159—4.)



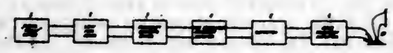
1. A baffle for spray driers, comprising a vertically disposed member having a central axis, a series of radial vanes attached to said member and each arranged in a plane passing through the central axis, the upper edges of said vanes being curved laterally to form a series of fins overlapping each other and presenting horizontal mouths or openings, said fins being connected to the vertical portions of the vanes by curved parts which gradually deflect the air current through said mouths.

1,871,739. DRIVING UNIT FOR SOUND REPRODUCERS. ABRAHAM RINGEL, Brooklyn, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 5, 1928. Serial No. 267,533. 3 Claims. (Cl. 179—180.)



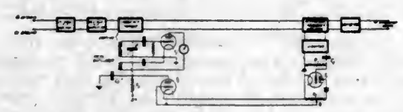
1. In combination a permanent magnet, a pair of pole pieces on said magnet, an armature suspended for vibration between said pole pieces, one end of said armature protruding past said pole pieces, and means comprising a single slotted member fastened to said pole pieces and positioned to engage the end of said armature and limit its movements, said member being of yielding material and having a slot which is larger than the end of the armature into which the end of the armature extends.

1,871,740. METHOD OF RECEIVING RADIO SIGNALS AND APPARATUS THEREFOR. WALTER VAN B. ROBERTS, Bronxville, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 26, 1926. Serial No. 144,244. 15 Claims. (Cl. 250—20.)



1. In a method of receiving radio signals within a given range of frequencies by the superheterodyne method in which the signal frequency is made to produce an intermediate difference frequency by beating with local oscillations, the step of producing an intermediate difference frequency which is above said range whereby it can be produced by only one signal frequency within the said range.

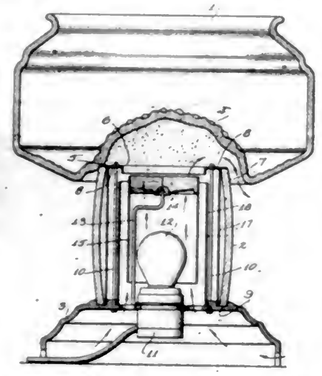
1,871,741. CONSTANT BEAT FREQUENCY SYSTEM. GEORGE RODWIN, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 30, 1929. Serial No. 336,089. 15 Claims. (Cl. 250—20.)



1. A method of maintaining a local oscillator circuit including an electron discharge tube in a superheterodyne receiving system at a definite, fixed frequency relation with the frequency of the incoming signal regardless of

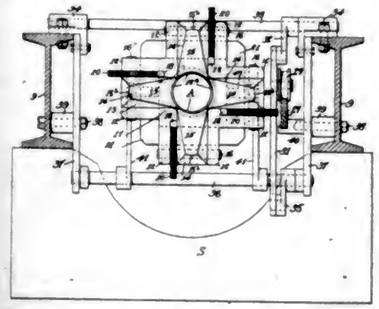
signal and local frequency variations which consists in limiting a portion of the beat frequency energy to remove amplitude variations therefrom, transforming the beat frequency variations into potential variations, amplifying the potential variations, and impressing a predetermined portion of the amplified potential upon the anode circuit of the tube.

1,871,742. AQUARIUM. ALBERT SABATH, Chicago, Ill. Filed Aug. 28, 1931. Serial No. 559,956. 2 Claims. (Cl. 119—5.)



1. A device of the class described comprising a base, a translucent chimney on said base, a glass aquarium supported on the rim of said chimney, the bottom of said aquarium having a raised portion forming a translucent dome, illuminating means on said base, pictorial representations of aquatic objects adapted to be illuminated by said means, and a rotatable screen movable between said pictorial representations and said illuminating means, said screen having a variegated portion between said illuminating means and said dome.

1,871,743. APPARATUS FOR MAKING COLUMNS AND THE LIKE. CLINTON H. SAWYER, New York, N. Y. Filed Mar. 14, 1930. Serial No. 435,829. 13 Claims. (Cl. 153—70.)



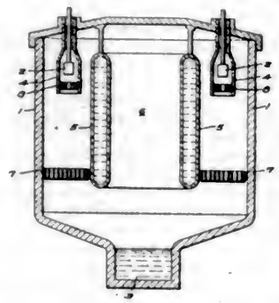
1. In apparatus for reducing round metal stock to smaller diameter, a die embodying a series of members each having the face of arcuate shape in cross-section, a head on which said die members are pivotally mounted to have adjustment toward and away from the axis of the head, said members being circumferentially disposed about the axis of the head and the arcuate faces constituting segments of the die opening, and means to adjust said die members to increase and decrease the space between the faces of said members.

1,871,744. COMBINED LATCH AND ACTUATING MECHANISM FOR SWINGING CLOSURES. STEPHEN SCHAUER, Dearborn, Mich. Filed Aug. 19, 1929. Serial No. 386,940. 6 Claims. (Cl. 268—70.)



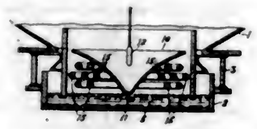
1. The combination with a building structure having a pair of hinged doors, of a beam secured to said structure, brackets secured to said beam at spaced points longitudinally thereof, a tube extending between said brackets, triggers carried by said brackets, one by each bracket, actuating means for said triggers including an element extending through the tube, and mechanism for operating said doors when said triggers are actuated including a plunger movable longitudinally of said tube and adapted to be successively engaged by said triggers, rods terminally secured to said plunger and doors, and coil springs sleeved on said tube upon opposite sides of said plunger.

1,871,745. MERCURY-ARC RECTIFIER. MORITZ SCHENKEL, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 20, 1930, Serial No. 454,044, and in Germany June 4, 1929. 5 Claims. (Cl. 250—27.5.)



1. A mercury-arc rectifier comprising a tank, a plurality of anodes disposed in annular formation in said tank, a vaporizable cathode in said tank, an annular condensing chamber disposed within the anode circle, an individual anodé shield for each of said anodes, an annular grid common to all of said anodes and substantially filling the space between said condensing chamber and the wall of said tank.

1,871,746. VAPOR ELECTRIC DEVICE. MORITZ SCHENKEL, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 2, 1930, Serial No. 465,381, and in Germany July 4, 1929. 5 Claims. (Cl. 250—27.5.)



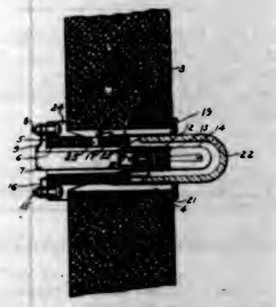
1. A vapor-electric device comprising a mercury cathode, a funnel-shape shield above said cathode having an opening in proximity to the surface of the mercury, said opening being of small size relative to the mercury surface and means below said shield for condensing mercury vapor rising from said cathode.

1,871,747. IMPELLER FOR CENTRIFUGAL PUMPS. HENRY SCHLACHTER, Beatrice, Nebr., assignor to Dempster Mill Manufacturing Company, a Corporation of Nebraska. Filed July 5, 1929. Serial No. 375,999. 5 Claims. (Cl. 103—112.)



1. In a rotary pump or the like, a shrouded impeller having an opening through the shroud, the opening having an area greater than the area of the peripheral clearance of the running joint formed by the casing and the impeller shroud and being so positioned that the total pressures on the two sides of said impeller shroud will be in a predetermined ratio to each other.

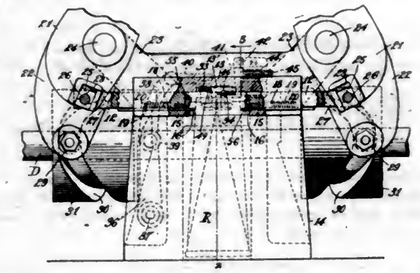
1,871,748. SWITCHBOARD INDICATING LAMP. WALTER H. SCHRAMM, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 11, 1927. Serial No. 198,294. 4 Claims. (Cl. 177—329.)



3. A switchboard lamp comprising a bushing, said bushing being provided with a flange, a recess and a threaded portion, and having a portion extending into an opening in the switchboard with the flange engaging a face of the switchboard, a lens holder threadably engaging the bushing and having an enlarged portion engaging a face of the switchboard and cooperating with the bushing to retain the bushing and holder in an assembled position with the opening in said switchboard, a resistance member disposed within the recess, a socket mounted on said bushing and connected to the resistance member, a lamp cooperating with the socket, and a lens mounted on said holder.

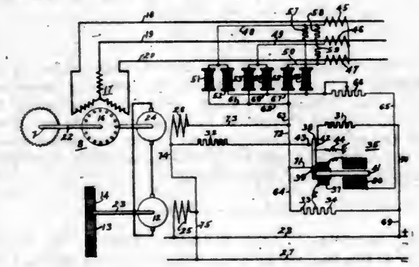
1,871,749. APPARATUS FOR CLOSING AND SEALING RECEPTACLES. JOHN O. SEIFERT, Flushing, N. Y., assignor, by mesne assignments, to American Sealcone Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 5, 1930. Serial No. 500,177. 15 Claims. (Cl. 226—56.)

15. In apparatus for closing and sealing the open end of receptacles, means movable toward and away from each other and between which the open end of a receptacle is adapted to be positioned to collapse the same, means superposed to the collapsing means relative to which the collapsed receptacle end is positioned to sever a portion from the collapsed receptacle end, means associated with the collapsing means to clamp and seal a closure member engaged on the collapsed and severed receptacle end to the



collapsed and severed receptacle end, and means to yieldingly actuate the receptacle collapsing means to and maintain said means in receptacle collapsing position during the movement of the closure member clamping and sealing means to closure member clamping and sealing position.

1,871,750. SPEED REGULATING SYSTEM. GEORGE R. SHAW, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 25, 1928. Serial No. 249,296. 3 Claims. (Cl. 172—239.)

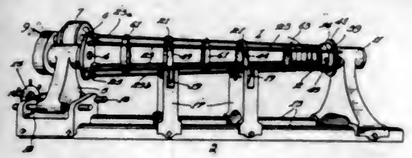


1. In a power system, in combination, an alternating-current motor for operating a work device, a direct-current generator driven by the alternating-current motor, said generator being provided with a separately excited field winding, a direct-current motor connected to the generator, said direct-current motor being disposed to control the load imposed upon the alternating-current motor by the work device, a plurality of resistors disposed to be connected in circuit with the generator field winding, a vibrating relay having contact members for providing different resistor combinations in the generator field winding circuit, and means for effecting the operation of the said vibrating relay in accordance with the load upon the alternating-current motor, said means comprising a plurality of current transformers having their primary windings connected in circuit with the said alternating-current motor, a plurality of resistors connected across the secondary windings, and a plurality of rectifier units interposed between the resistors and the vibrating relay to provide direct-current energy for operating said vibrating relay.

1,871,751. CAGE MAKING MACHINE. AUGUST C. SHERMAN, MILTON B. GRANT, and HERMAN F. HEDDERICK, St. Louis, Mo., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 5, 1931. Serial No. 542,366. 8 Claims. (Cl. 140—71.)

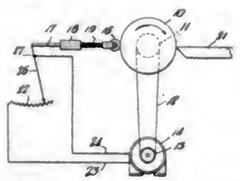
1. A machine for the manufacture of cages for reinforcing concrete products, said cages comprising longitudinal

rods, spacer rings and a helically-wound wire, said machine comprising a source of motive power, a head stock, a tail stock and supporting members for said cage provided with rollers, means for fastening said rods to said head stock and



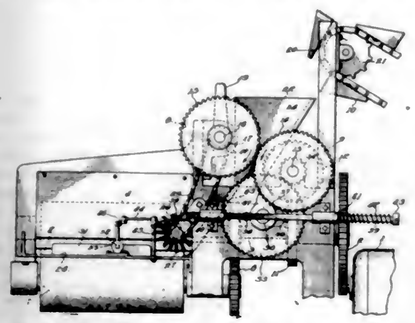
tail stock, and means for holding said rods in place at intermediate points between said head and tail stocks, said holding means cooperating with said rollers when said cage is being rotated.

1,871,752. CONTROL APPARATUS. GIFFORD K. SIMONDS, Boston, Mass., assignor to Simonds Saw and Steel Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed Mar. 4, 1931. Serial No. 519,992. 5 Claims. (Cl. 82—1.)



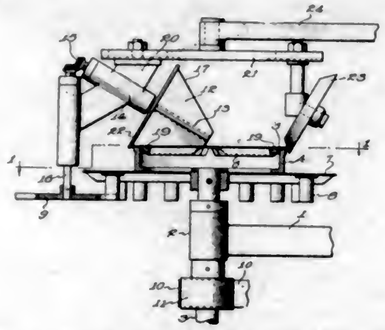
1. In an apparatus of the class described wherein the diameter of stock is reduced by a machining operation, means for rotating the stock, means for regulating the speed of rotation thereof, and means continually in contact with the stock for controlling the regulating means whereby the rotation of the stock is automatically maintained continually at the optimum speed.

1,871,753. PIE CRUST ROLLER. DENNIS W. SMITH, Wilmette, Ill., assignor to Colborne Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 17, 1930. Serial No. 496,201. 1 Claim. (Cl. 107—12.)



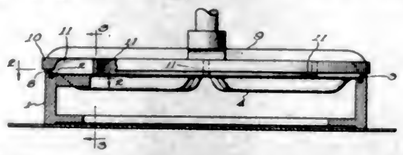
A dough rolling machine comprising a drive mechanism, two pairs of rollers driven by said mechanism, means for conveying portions of dough successively to one pair of rollers which serve to roll such portions into flat elongated forms, a chute extending downwardly from said pair of rollers and terminating in a horizontal extension thereof in front of the second pair of rollers, a rotary feed brush for urging the dough along said chute, and reciprocating means for delivering the elongated formed portions of dough in the direction of their shorter axes to the second pair of rollers.

1,871,754. PIE SEPARATOR AND TRIMMER FOR PIE MAKING MACHINERY. DENNIS W. SMITH, Wilmette, Ill., assignor to Colborne Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed June 19, 1931. Serial No. 545,454. 5 Claims. (Cl. 107—1.)



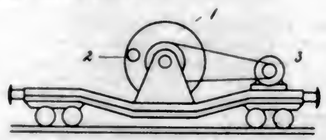
1. In a pie machine, a pie plate holder supported upon a vertical axis, a pie separator element supported for rotation on an axis inclined to the axis of said holder for cooperation with pie plates supported by said holder, said separator element having longitudinal flanges extending a greater radial distance from said separator at one end than at the other, whereby said separator element when rolled over the pie plate on said holder, will divide a pie on the pie plate into equal sectors, and means for producing a rolling motion between the plate holder and the separator.

1,871,755. PIE SEPARATING AND TRIMMING MECHANISM. DENNIS W. SMITH, Wilmette, Ill., assignor to Colborne Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed July 15, 1931. Serial No. 550,930. 4 Claims. (Cl. 107—1.)



1. Mechanism for separating and trimming sector shaped pies in single circular pie plates, comprising a relatively reciprocable plate holder and a severing and trimming member, said plate holder including an annular flange shaped to provide a rest for the rim of a pie plate, an annular rib surrounding and extending above the plane of said rest, said separating and trimming member including a ring shaped trimming surface for cooperating with said rib and having radially extending severing elements.

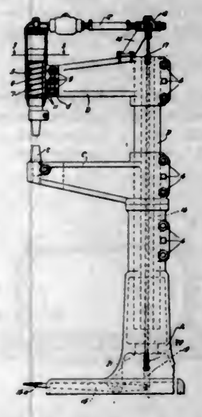
1,871,756. MEANS FOR EXAMINING STRUCTURES. WILHELM SPÄTH, Barmen, Germany. Filed Feb. 24, 1928, Serial No. 256,787, and in Germany Dec. 18, 1926. 2 Claims. (Cl. 73—51.)



2. A device for examining mechanical structures comprising a vehicle adapted to be moved onto and secured in a definite position on a structure to be examined so that impulses imparted to the vehicle will be transmitted

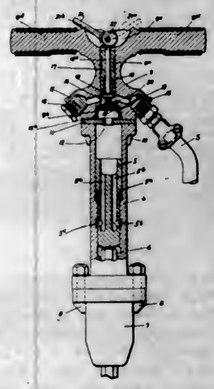
to the structure, an unbalanced rotatable member mounted on said vehicle and adapted to be rotated to impart impulses of known amplitude and frequency to the vehicle, while the device remains in a definite position on the structure to which it is secured, whereby the reaction of the structure to the impulses of the device affords a ready means of testing the structure, and means for rotating said member.

1,871,757. SUPPORT FOR POWER TOOLS. EDWARD W. STEVENS and DONALD A. YOUNG, Detroit, Mich., assignors to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed June 6, 1928. Serial No. 283,438. 5 Claims. (Cl. 78—42.)



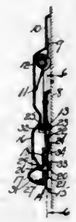
1. The combination with a fluid pressure tool of a rigid support therefor, and means securing said tool to said support and providing a tang and slot connection, said connection leaving a passage between said tool and said support, and means directing the exhaust motive fluid of the tool into said passage.

1,871,758. FLUID PRESSURE TOOL. EDWARD W. STEVENS, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 30, 1931. Serial No. 526,189. 13 Claims. (Cl. 121—36.)



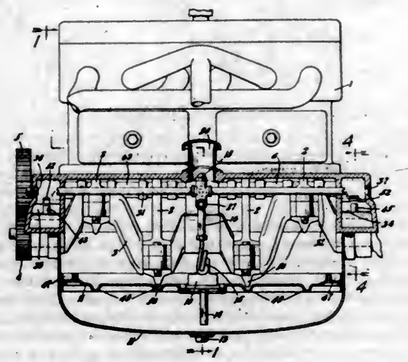
1. In a fluid percussive tool, in combination, a cylinder, a piston reciprocable therein, a handle secured to said cylinder and having a bore in axial alignment with said cylinder, and a resilient member interposed between said cylinder and said handle and having an aperture therethrough for establishing communication between said piston chamber and said handle bore.

1,871,759. SUITCASE LOCK. ELMER B. STONE, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed May 23, 1931. Serial No. 539,511. 6 Claims. (Cl. 70—115.)



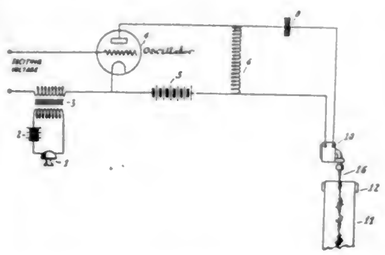
1. A lock including a pivotally mounted hasp, a lock plate, a catch slidably mounted on the outer face of said plate to engage and hold said hasp in its closed position, means attached to the back of said plate and adaptable for engagement with said catch for retaining it in its disengaged position, and means on said hasp to engage said retaining means through said plate to release it from said catch.

1,871,760. LUBRICATING SYSTEM. ALEX TAUB, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 21, 1928. Serial No. 263,483. 9 Claims. (Cl. 184—6.)



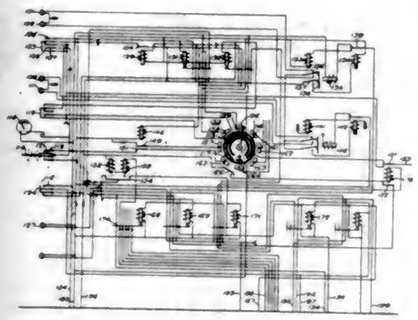
1. In a lubricating system for internal combustion engines, the combination with a sedimentation chamber that opens into the engine crank case for the overflow of excess lubricant, a straight inflexible oil delivery passageway leading thereto and from which foreign material that tends to clog the passageway may be forced into the settling chamber.

1,871,761. PAPER ROLL PHONOGRAPH RECORD. JULIUS WEINBERGER, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 27, 1925. Serial No. 65,131. 4 Claims. (Cl. 179—100.3.)



1. The method of recording sound on a transparent flexible record which consists in providing the record with an opaque coating, and scraping off a portion of the opaque coating by an engraving stylus vibrated at a modulated superaudible frequency.

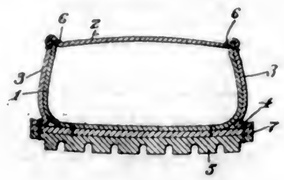
1,871,762. SUPERVISORY CONTROL SYSTEM. THOMAS U. WHITE, Chicago, Ill., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 7, 1926. Serial No. 114,088. 12 Claims. (Cl. 177—353.)



1. In a signalling system, a first station, a second station, a continuously operating distributor at each of said stations, apparatus units at said second station, means including said continuously operating distributors for selecting one of said apparatus units for operation, means for identifying said selection at said first station, and means operative only if said identification checks with the selection intended for completing an operating circuit to operate said selected apparatus unit.

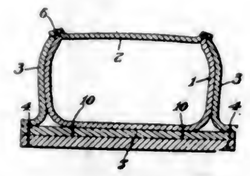
1,871,763. MOCCASIN. DANIEL W. WIGGIN, Yarmouth, Me., assignor to The Abbott Company, Yarmouth, Me., a Corporation of Maine. Filed Sept. 24, 1930. Serial No. 484,036. 5 Claims. (Cl. 36—11.)

1. A moccasin comprising a vamp, an upper member including a toe area and integral lateral areas extending therefrom, the lateral areas overlying the sides of the vamp, a seam joining the upper member at the junction of its toe and lateral areas with the edge of the vamp, a



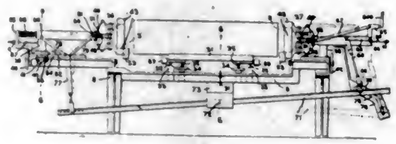
sole beneath the tread of the vamp, the lateral portions of the upper member being united to said sole at the edges thereof.

1,871,764. MOCCASIN CONSTRUCTION. DANIEL W. WIGGIN, Yarmouth, Me., assignor to The Abbott Company, Yarmouth, Me., a Corporation of Maine. Filed Oct. 21, 1930. Serial No. 490,233. 1 Claim. (Cl. 36—11.)



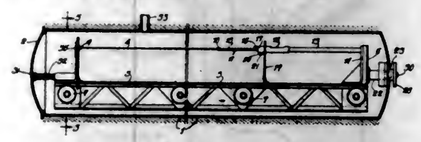
In footwear of the moccasin type a toe piece structure to overlie substantially the top of the foot, a vamp proper to embrace substantially the sides and bottom of the foot, a sole beneath the tread of the vamp, an outer vamp element secured at its lower edge to the sole and overlying the sides of the vamp proper, and a common seam uniting the upper edges of the vamp proper and the vamp element with each other and with the toe piece.

1,871,765. MACHINE FOR PACKAGING PIE PLATES AND SIMILAR ARTICLES. BERT R. WILLIAMSON, Waterville, Me., assignor, by mesne assignments, to Fidelity Trust Company, Portland, Me., a Corporation of Maine, trustee. Filed Aug. 16, 1928. Serial No. 299,950. 11 Claims. (Cl. 93—2.)



1. In a device of the class described, the combination with two oppositely disposed heads, of means to support a bundle of articles between said heads, each head having means moving therewith for holding a sealing disk in position to be applied to the end of the bundle and also having folding jaws, means to move the heads toward each other thereby to press the disks against the ends of the bundle and then to actuate the folding jaws to fold the peripheral portion of the disks over against the sides of the bundle.

1,871,766. METHOD AND APPARATUS FOR TREATING STRINGS OR STRANDS. HARRY WILLSHAW, Wylde Green, SYDNEY NEVILLE GOODHALL, Marston Green, and CHARLES FOLLISS, Birmingham, England, assignors to Dunlop Rubber Company Limited, Erdington, Birmingham, England, a British Corporation. Filed July 31, 1928, Serial No. 296,588, and in Great Britain Aug. 4, 1927. 16 Claims. (Cl. 18—6.)



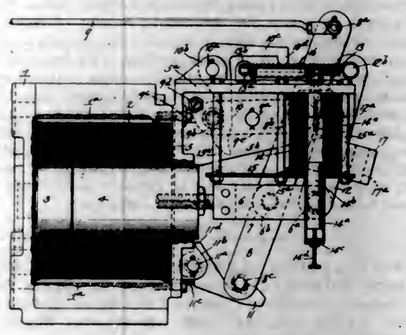
1. The method of treating strings of vulcanizable material of the kind described, which comprises subjecting said strings to fluid under pressure at a vulcanizing temperature and imposing a longitudinal tension upon said strings, said tension being a function of the pressure of said fluid.

1,871,767. METHOD AND APPARATUS FOR COMBINED PROJECTION. WALTER G. WOLFE, Greenwood, Mass., assignor to Wilmot R. Evans, Boston, Mass., trustee. Filed Mar. 2, 1928. Serial No. 258,514. 2 Claims. (Cl. 88—24.)



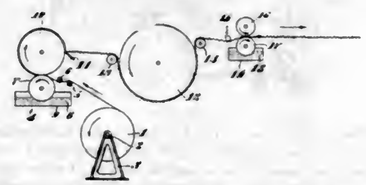
1. In a picture projection system, a translucent screen, a backstage projector, means independent of the film for varying the light intensity locally of the field of the beam thereof, a front stage projector, and means for locally varying the light intensity of its beam for producing a selective predominance of one of the beams on the screen in any desired area.

1,871,768. OPERATING MECHANISM FOR CIRCUIT BREAKERS. JOSEPH D. WOOD, Bethlehem, Pa., assignor to Roller-Smith Company, a Corporation of New York. Filed Dec. 7, 1929. Serial No. 412,329. 19 Claims. (Cl. 200—89.)



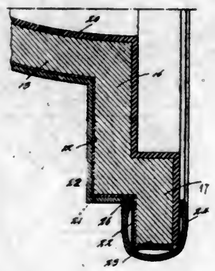
2. A circuit breaker mechanism comprising a solenoid, a main closing lever actuated by said solenoid, a pivoted element, said main closing lever being pivotally mounted on said pivoted element and rotated thereon as its fulcrum during the closing movement, a latch for retaining said pivoted element in fixed position during the closing movement, and means for tripping said latch upon the occurence of an abnormal condition.

1,871,769. METHOD FOR COLORING CREPE PAPER AND RESULTING PRODUCT. GARDNER R. ALDEN, Framingham, Mass., assignor to Dennison Manufacturing Company, Framingham, Mass., a Corporation of Massachusetts. Filed Oct. 7, 1926. Serial No. 140,040. 10 Claims. (Cl. 8—5.)



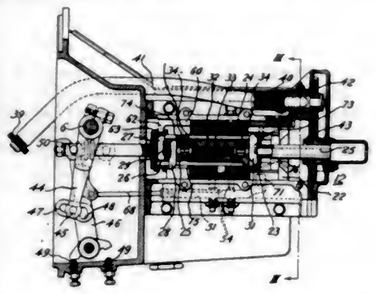
1. A method for making non-bleeding or fast-colored paper which comprises treating the paper with a water-insoluble dye dissolved in a substantially non-aqueous solvent, and subsequently expelling the solvent therefrom.

1,871,770. METHOD OF DEPOSITING ON CHROMIUM. BLASIUS BART, East Orange, N. J., assignor to The Frink Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Aug. 24, 1929. Serial No. 388,231. 12 Claims. (Cl. 204—1.)



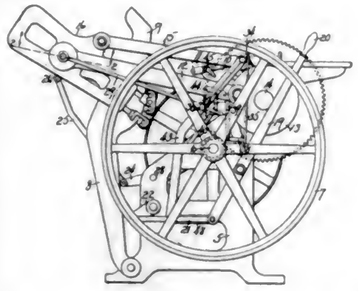
1. In the art of forming articles electrolytically, the method which consists in providing a master mold having a highly polished metallic surface, subjecting the same to the action of an electrolytic bath containing chromium to form on said highly polished surface a thin layer of chromium having a surface exactly the complement of the highly polished master mold surface and possessing the highly polished light reflecting characteristics of such surface, forming a backing layer of metal on said thin chromium layer to form a working mold, positioning a layer of insulating material on said backing layer leaving the edge and the chromium faced surface of the working mold exposed subjecting the working mold with one side so insulated to the action of an electrolytic bath until a thin initial coating of metal has formed on the exposed surface, positioning a ring of resilient insulating material about the edge of the working mold to block off further deposits thereon and to clamp the edge of the initial coating to the chromium surface, continuing to subject the working mold with its initial layer of metal so clamped to the action of said electrolytic bath until the layer is of the desired thickness, removing the clamping ring, removing the formed layer from the working mold and trimming off the portion of the initial layer which was covered by the ring.

1,871,771. GEAR SHIFTING MECHANISM. FERDINAND M. BARTELME, Chicago, Ill. Filed July 24, 1925. Serial No. 45,751. 9 Claims. (Cl. 74—38.)



1. The combination with a transmission mechanism and a main and an auxiliary clutch for respectively connecting the transmission mechanism to the driving and the driven elements of a motor vehicle, of means for positively locking said auxiliary clutch in engaged position while said main clutch is engaged.

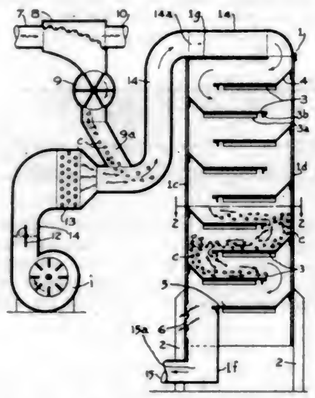
1,871,772. SAFETY DEVICE FOR PRINTING PRESSES. ORSON D. BAYREE, Hartford, Conn., assignor to The Travelers Insurance Company, Hartford, Conn., a Corporation of Connecticut. Filed Feb. 29, 1928. Serial No. 258,049. 14 Claims. (Cl. 192—137.)



1. In combination with the relatively movable bed and platen of a printing press together with mechanism including an eccentric for varying the degree of approach of said parts one toward the other and an actuating lever pivoted on a portion of the frame of the press and connected to the eccentric, a contactor relatively movably supported upon one of said parts, a connection between said contactor and the actuating lever of said mechanism to effect, by reason of movement of said contactor on its support, operation of said eccentric to increase the distance between said parts at their nearest approach, and means for disconnecting said connection to permit movement of said actuating lever independently of said mechanism.

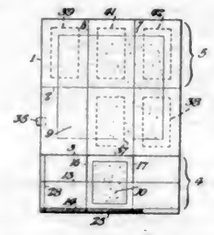
1,871,773. APPARATUS FOR DRYING SEED-COTTON. CHARLES ABEL BENNETT, Washington County, Miss., assignor to the Government and the People of the United States of America. Filed July 30, 1931. Serial No. 554,048. 1 Claim. (Cl. 34—37.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

A cotton drying apparatus of the character described comprising an enclosed vertical tower of substantially air-tight construction, means for introducing and pneumatically conveying seed-cotton therein, staggered non-foraminous floors arranged horizontally within said tower to form a descending zigzag plenum chamber for both said seed-cotton and heated atmosphere, a heated atmosphere generator, inlets and outlets for continuous flow of heated



atmosphere and seed-cotton concurrently through said descending zigzag plenum chamber within said vertical tower, means for discharge of foreign matter and excess heated atmosphere from said vertical tower, and means for discharge of dried seed-cotton from the bottom of said vertical tower.

1,871,774. ADVERTISING FOLDER. CHARLES BLUM and EUGENE C. MOORE, Jr., Philadelphia, Pa., assignors to Charles Blum Advertising Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 5, 1929. Serial No. 376,229. 5 Claims. (Cl. 229—92.1.)

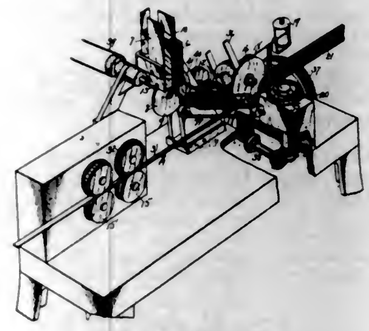


1. A single rectangular advertising folder sheet with rectangular scored panels, including a reply section which is unitary therewith but detachable, capable of being primarily folded to the size of one of said scored panels to form an inclosure for primary mailing; said reply section being thereby creased to be folded to form a sealed reply container and including a rectangular panel scored and adapted to be folded to form a sealed envelop pocket to seclude valuables inclosed in said folded reply section; a rectangular panel scored and adapted to be folded within said reply section; and another rectangular panel scored and adapted to be folded and to embrace and conceal said other folded sections of the reply container.

1,871,775. BRUSH ELEMENT AND PROCESS. HENRY CAVE, Hartford, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a Corporation of Connecticut. Filed Dec. 14, 1925. Serial No. 75,219. 3 Claims. (Cl. 300—21.)

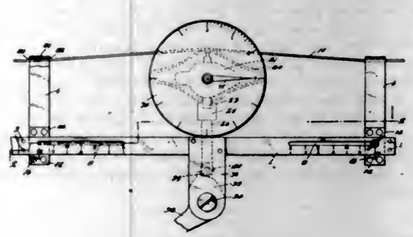
1. The method of making brush structure which consists in forming a narrow strip of stiff metal into channel form, forming surface indentations in the inner faces of

the sides of said channel, inserting a series of bristles, or like brush material, between the sides of the strip with the bristles extending lengthwise of the indentations and with a part of the bristles lying in the same so that



the entire series will be held against creeping and falling lengthwise of the channel, and pressing the sides of the channel against the bristles with sufficient force to compress the bristles and hold them against removal from the channel.

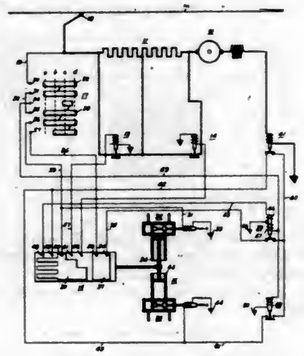
1,871,776. DEVICE FOR DETERMINING THE RESISTANCE OF BODIES TO DEFLECTION. GEORGE E. CHATILLON, New York, N. Y., assignor to John Chatillon & Sons, New York, N. Y., a Corporation of New York. Filed Dec. 30, 1929. Serial No. 417,297. 13 Claims. (Cl. 265—1.)



1. The combination comprising a beam, a pair of members mounted on said beam for engaging a body to be tested, means for laterally adjusting said members along said beam, a spring carried by said beam between said members and movable relatively to said beam, means for applying force to said spring to deflect the body out of line, and means for indicating the force exerted on said spring to hold the body thus deflected.

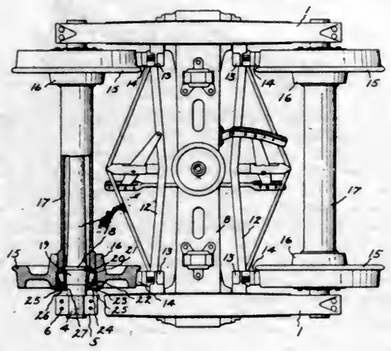
1,871,777. NOTCHING RELAY. JOHN A CLARKE, Jr., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 30, 1930. Serial No. 424,546. 7 Claims. (Cl. 172—179.)

1. In a control system for vehicle motors, in combination, a plurality of accelerating switches, a sequence drum for controlling the operation of the accelerating switches, means for actuating the sequence drum step-by-step, a limit switch for controlling the step-by-step operation of the sequence drum, means for effecting a step-by-step operation of the sequence drum independently of the limit switch, thereby to actuate the accelerating switches



and supply a predetermined current to the motor, and means cooperating with the sequence drum to stop the said drum after it has moved one notch.

1,871,778. RAILWAY CAR TRUCK. CLAUS J. WERNER CLASEN, Davenport, Iowa, assignor to The Bettendorf Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Feb. 18, 1928. Serial No. 255,228. 7 Claims. (Cl. 105—182.)

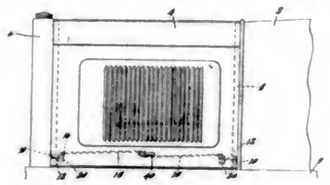


1. A railway car truck having supporting wheels at opposite sides thereof and side frame members at the outer sides of said wheels, a tubular member interposed between supporting wheels at opposite sides of the truck, and rigidly secured at its ends in the hubs of said wheels, an axle extending through said tubular member and the hubs of the wheels, said axle being non-rotatably secured at its ends to said frame members and holding said members against relative movement longitudinally of the axle, and an anti-friction bearing interposed between each wheel and said axle, each bearing including an outer race ring mounted in the wheel hub outwardly of the end of said tubular member.

1,871,779. HOOD CATCH. LEROY C. CRAM and JOHN F. WILSON, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 3, 1931. Serial No. 554,781. 2 Claims. (Cl. 292—48.)

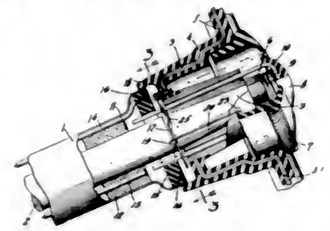
1. In a catch for the hoods of automotive vehicles, a plurality of brackets secured to relatively stationary

parts of the vehicle, a plurality of hooks pivoted to the interior of the hood, one hook for each bracket, a plurality of links, said hooks each comprising a resilient member coiled intermediate its ends and having one end for engagement with the brackets and the other end pivotally



connected to one of said links, means interconnecting said links, and means exterior to the hood and operating said interconnecting means to cause said links to move the hooks into engagement with or out of engagement from the brackets.

1,871,780. STEERING WHEEL LIGHTING SWITCH. JAMES M. CRAWFORD, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 15, 1930. Serial No. 495,887. 9 Claims. (Cl. 200—59.)



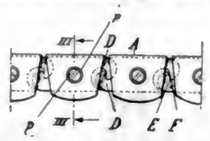
1. In a steering column assembly, wherein a stationary housing encloses a rotatable shaft having at one end a steering wheel hub, an insulator carried in the housing below the hub, a series of commutator rings embedded in the insulator in internested concentric relation, a contact element selectively engageable with said rings, means to pivotally connect the contact element with said hub for swinging movement about an axis offset from and parallel to that of the hub, and a control member associated with and rotatable relative to the hub for swinging said contact element.

1,871,781. GEL PRODUCTION UTILIZATION. WALLER CROW and HIPPOLYT DITTLINGER, New Braunfels, Tex., assignors to Dittlinger-Crow Process Company, New Braunfels, Tex., a Corporation of Texas. Filed Jan. 15, 1930. Serial No. 421,056. 3 Claims. (106—27.)

1. A composition of matter comprising reaction products of aluminum acetate and hydrate of lime combined in dry form after the complete hydration of the lime.

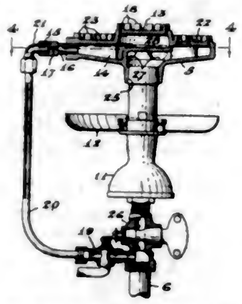
1,871,782. POWER TRANSMISSION MEANS. LUDWIG M. DIETERICH, New Brunswick, N. J. Filed Mar. 25, 1925. Serial No. 18,139. 13 Claims. (Cl. 74—32.)

1. In apparatus of the character described, in combination, a flexible power transmitting member adapted to run between the opposed side walls of the groove of a sheave, said member including a plurality of wedge-shaped blocks, hook-shaped at their respective ends adapted to be hooked together to swing one with respect to the other about an axis parallel to the axis of the sheave, a pair of side plates for each block and adapted to overlap the interengaged hook-shaped ends of said blocks thereby to prevent lateral displacement of one block with respect to the other, and means mounting said side plates upon the



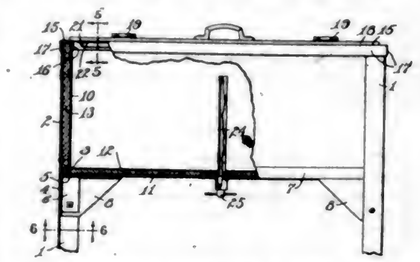
sides of said wedge-shaped blocks and adapted to permit relative sliding movement between said side plates and said wedge-shaped blocks.

1,871,783. DUAL GAS BURNER. ARTHUR FRIEDMAN, Cleveland, Ohio, assignor to The Cleveland Heater Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Feb. 27, 1928, Serial No. 257,221. Divided and this application filed Dec. 15, 1930. Serial No. 502,287. 7 Claims. (Cl. 158—105.)



1. A blue-flame gas burner comprising a burner head having a main burner portion comprising a centrally located inlet formed in the under side thereof and an annularly arranged ported outer passageway communicating with the inlet by way of a plurality of radially disposed ported passageways, a pilot burner portion comprising a centrally located ported chamber having a wall above the centrally located inlet of said main burner portion whereby gas is deflected uniformly to the radially disposed passageways, and means for independently supplying a combustible mixture of gas and air to said main and said pilot burner portions and the burner ports formed therein.

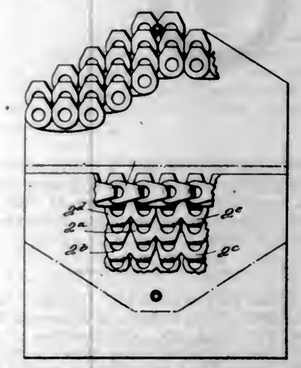
1,871,784. DISPLAY REFRIGERATOR. CHESTER A. FRICK and ROBERT E. BAKER, Muncie, Ind., assignors to Glascock Brothers Manufacturing Company, Muncie, Ind., a Corporation of Indiana. Filed July 20, 1929. Serial No. 379,734. 3 Claims. (Cl. 220—9.)



1. In a dispensing refrigerator, a frame comprising a pair of end members each comprising a pair of angles forming end trims and legs, a panel permanently secured

between said angles and having its bottom edges turned inwardly to form a flange, side bracing members formed of angles extending between said end members and detachably secured thereto, one side of said angles extending inwardly, an insulating panel resting on said bracing angles and inturned flanges, a refrigerating tub supported on said flanges and bracing angles and fitting within said frame, side panels fitting between said legs, insulating panels interposed between said side panels and the sides of said tub, a rectangular frame formed of channel members receiving the upper edges of said tub and frame and a hinged cover mounted on said rectangular frame for closing said tub.

1,871,785. LEATHER ARTICLE AND METHOD OF MAKING THE SAME. ACHILLES K. GEORGE, Haverhill, Mass. Filed Oct. 13, 1930. Serial No. 488,492. 2 Claims. (Cl. 150—28.)



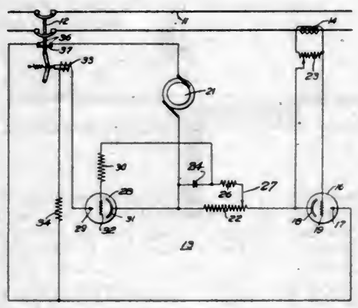
1. A bag, the main body portion comprising a series of elongated units, each of said units having a plurality of apertures in one end thereof and a plurality of apertured tabs at the other end thereof, each unit being folded centrally upon itself and looped through the apertures of adjacent folded units, the apertures in the said one end of each unit being in register with the apertures in the tabs of the unit, means for joining the side edges of the bag body, and means for finishing the top of the bag body, said last named means comprising a series of multiple folded units with the line of fold constituting the top edge of the bag, a series of single units disposed at right angles to the units comprising the bag body, said single units and said multiple units being interwoven with the units constituting the top of the bag.

1,871,786. PRODUCTION OF PROPYLENE. WILLIAM A. GERSTMYER and WEAVER R. CLAYTON, Baltimore, Md., assignors to Columbia Engineering and Management Corporation, New York, N. Y., a Corporation of Ohio. Filed Dec. 14, 1929. Serial No. 414,218. 4 Claims. (Cl. 260—170.)

1. The method of producing propylene which comprises thermally decomposing a mixture of aliphatic hydrocarbons consisting essentially of butane and iso-butane by passing the material through a heated chamber in the presence of copper at a rate such that the ratio of the initial volume to the volume of the gaseous product is about 1 : 1.29.

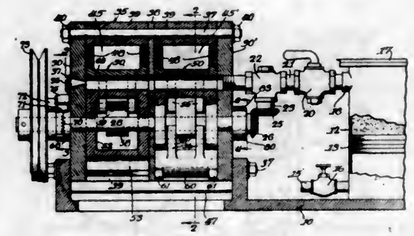
1,871,787. OVERLOAD RELAY. SHIRLEY L. GOLDSBOROUGH, East Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 12, 1930. Serial No. 501,882. 9 Claims. (Cl. 175—294.)

1. In a protective system, an electric circuit, a circuit interrupter therefor, a condenser, means responsive to an overload on said circuit for varying the charge upon said condenser during said overload at a rate independent of the magnitude of said overload, and means responsive to



a predetermined charge upon said condenser for operating said interrupter when said overload continues for a definite time interval.

1,871,788. APPARATUS AND METHOD FOR MAKING SAUSAGES. ANTON F. GRABOWSKI and ANTON L. GRABOWSKI, Chicago, Ill. Filed Oct. 24, 1929. Serial No. 402,148. 14 Claims. (Cl. 17—32.)



1. In a device of the class described and in combination, a rotatable shaft, a pair of mold members arranged as a unit on opposite sides of said shaft, each of said mold members comprising a part fixed to said shaft and a co-operating part movable relative to said shaft, and means for bringing one of said movable parts into engagement with its co-operating part while bringing the other of said movable parts out of engagement with its co-operating part.

1,871,789. SAFETY RAZOR. FREDERICK HAYDEN GREEN, Cheltenham, England. Filed Oct. 19, 1929, Serial No. 400,909, and in Great Britain Oct. 24, 1928. 1 Claim. (Cl. 30—12.)

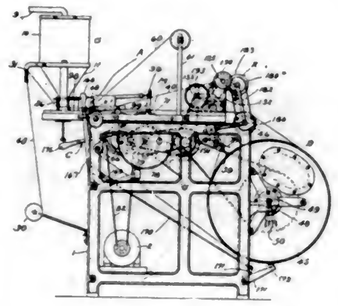
A safety razor, comprising a single-edged razor blade, a U-shaped guard therefor lying substantially in the plane of the blade, a handle secured to the guard at approximately 45° to the plane thereof, trunnions by which the blade is mounted freely swingable in the guard about an axis parallel to and near its rear edge, shoulders along the blade at each side thereof in rear of the axis of the trunnions, a blade-locking latch pivoted to the handle to swing to and from a position in which it resiliently bears upon the shoulder at one side of the blade, a blade-adjusting set screw mounted in said latch and bearing upon the blade, at the same side thereof as the said shoulder, at

a point intermediate the cutting edge of the blade and the trunnions, the said shoulders being of such depth that when the blade is released and pressed downward by the



guard upon a flat stropping surface, the shoulders incline the blade at its cutting edge to an appropriate stropping angle relatively to said surface.

1,871,790. COATING RIBBONS, TAPES AND OTHER STRIPS. SINIUS M. HANSEN, Lynn, Mass., assignor, by mesne assignments, to Parco Specialty Co., Lynn, Mass., a Corporation of Massachusetts. Filed Aug. 4, 1926. Serial No. 127,048. 14 Claims. (Cl. 91—55.)

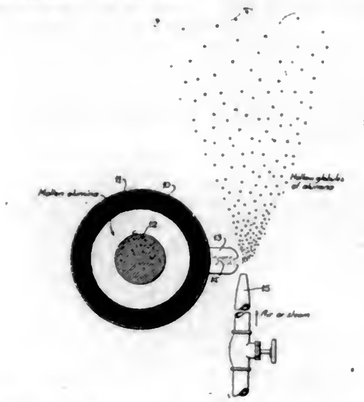


1. In a machine of the class described, mechanism for applying adhesive material to a moving tape, means for partially drying the applied adhesive comprising a rotatable drying drum of comparatively large diameter, a cooperating roller about which a plurality of turns of tape are disposed with the adhesively coated surface exposed, and guiding means located between the drum and roller and adapted to maintain the turns of tape in proper spaced relation, as a given part of the tape is moved over the roller and drum in alternate succession.

1,871,791. PROCESS OF MAKING CARBAZOLE INDOPHENOLS. RAYMOND W. HESS, Buffalo, N. Y., and ORIN D. CUNNINGHAM, Indianapolis, Ind., assignors to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 21, 1926. Serial No. 143,295. 28 Claims. (Cl. 260—55.)

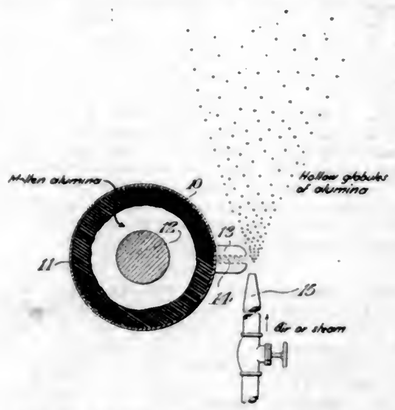
1. In the manufacture of an indophenolic compound by condensing carbazole with a para-nitrosophenol compound in the presence of sulfuric acid, the improvement which comprises maintaining throughout the condensation an excess of the para-nitrosophenol compound.

1,871,792. TREATMENT OF METALLIC OXIDES. BASIL T. HORSFIELD, Badin, N. C., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 2, 1925. Serial No. 12,617. 15 Claims. (Cl. 23—142.)



1. The method of treating molten oxides which are capable of crystallizing directly without passing through a pasty stage, comprising injecting a gas at high velocity into a stream of molten oxide so as to cause the formation of hollow globules.

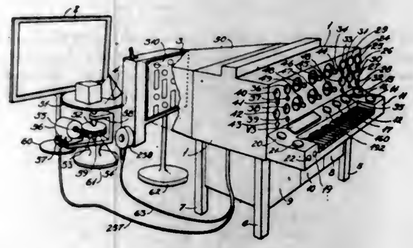
1,871,793. PURIFIED METALLIC OXIDE. BASIL T. HORSFIELD, Badin, N. C., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Mar. 2, 1925, Serial No. 12,617. Divided and this application filed June 25, 1927. Serial No. 201,866. 11 Claims. (Cl. 23—142.)



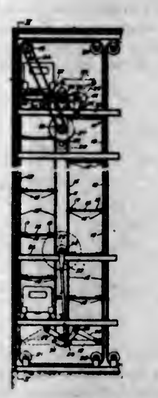
1. As a new product, metallic oxide of the class which solidify directly from the molten state without passing through a pasty stage, in the form of hollow globules.

1,871,794. SYSTEM FOR PROJECTING LIGHT IN VARIANT COLORS. CLINTON W. HOUGH, New York, N. Y., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 24, 1930. Serial No. 423,004. 7 Claims. (Cl. 240—3.1.)

7. A light projection system comprising, a projection screen, a plurality of light projectors for projecting beams of light, pattern forming means interposed between said light projectors and said projection screen, said light projectors being positioned at different angles with respect to said pattern forming means whereby said light beams produce on said screen a composite pattern having a plurality of overlapping areas of light determined as to configuration by said pattern forming means, and means for individually producing a predetermined sequence of color changes in the light beam projected from each projector whereby the color of said overlapping areas of light are altered to produce a sequence of color variations of said composite pattern.



1,871,795. AUTOMOBILE STORAGE ELEVATOR. HENRY D. JAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed Jan. 5, 1929, Serial No. 330,445. Divided and this application filed Aug. 13, 1931. Serial No. 556,786. 17 Claims. (Cl. 214—16.1.)



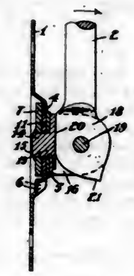
1. In combination, a plurality of load receptacles disposed in a plurality of adjacent straight series, means for moving said receptacles in a circuitous path, including a plurality of endless flexible members for engaging said receptacles while in the straight series, and means for disengaging said receptacles from said endless members, transferring them from one straight series to another, and effecting their re-engagement with the said endless members.

1,871,796. DRAPERY ROD OR THE LIKE. WILLIAM C. KENNEY, Cranston, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I., a Corporation of Rhode Island. Filed Apr. 15, 1931. Serial No. 530,281. 3 Claims. (Cl. 156—19.)

1. A sectional curtain rod, comprising a pair of end sections and an intermediate coupling member telescopically engageable with said end sections, said coupling member and both of said end sections bearing similar pattern fragments which when the several parts of the rod are assembled together form a complete pattern, said coupling member presenting adjacent its ends areas of varying cross-sectional depth, the area of greater depth fitting over one end section of the rod and the area of lesser depth fitting into the other end section of the rod, and the area of lesser depth being provided with a compensating formation adapted to take up the surplus metal resulting from said reduction in depth whereby the patterns carried by said coupling member and end sections are displayed in an effect of unbroken alinement continuously from end to end of the rod despite the variations in cross-sectional depth of the coupling member adjacent its end areas.

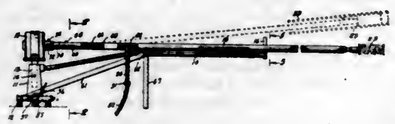


1,871,797. CURTAIN FIXTURE. WILLIAM C. KENNEY and GEORGE M. KENNEY, Cranston, R. I., assignors to Kenney Manufacturing Company, Auburn, R. I., a Corporation of Rhode Island. Filed Nov. 18, 1931. Serial No. 575,821. 10 Claims. (Cl. 156—33.)



1. A hold-back, comprising an attaching base, a stud axially rotatable on said base, and an arm pivoted to said stud to rotate therewith or to swing independently relative thereto, and means for limiting the rotation of said stud relative to said base, and means for limiting the swinging movement of said arm relative to said stud.

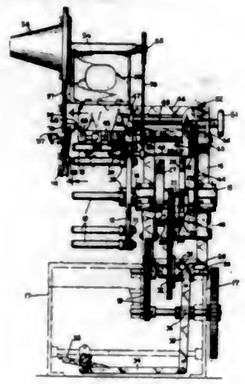
1,871,798. SECTIONAL SANITARY PIPE CLEANER. SERENO F. KING, Southbury, Conn., assignor to King Sanitary Pipe Cleaner Company, Sandy Hook, Conn., a Corporation of Connecticut. Filed Oct. 11, 1929. Serial No. 398,996. 3 Claims. (Cl. 50—21.)



1. In a portable pipe cleaner, a motor, a flexible shaft connected to the motor, an elongated rigid tubular casing, a brush at the free end of said casing, a shaft in the casing for driving the brush and connected to the flexible shaft, a short flexible casing enclosing a portion of the flexible shaft and forming a hinge-like connection between

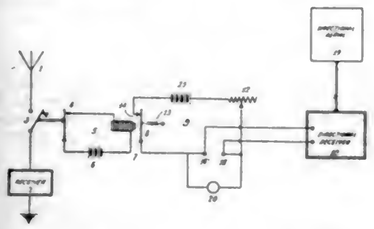
the rigid casing and the motor, and said rigid casing movable on the short flexible section as a hinge to position the long rigid section of the casing for the passage of a tube thereover.

1,871,799. COLLAPSIBLE TUBE CAPPING MACHINE. VICTOR KOENIGSHOFER, Union City, N. J., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 24, 1930. Serial No. 423,018. 25 Claims. (Cl. 29—84.)



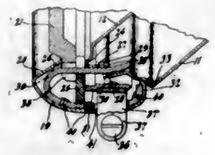
1. In a collapsible tube capping machine, the combination comprising means for holding a tube at a cap applying station, means for supporting a cap, and a capping device, said capping device comprising a pair of axially movable rock-shafts, arms carried by said rock-shafts, cap engaging jaws carried by said arms, means for rocking said rock-shafts to cause the jaws to engage a cap on said support, and means for moving said jaws so as to present the cap carried thereby to the threaded neck of a collapsible tube.

1,871,800. INTERLOCKING APPARATUS FOR DIRECTION FINDERS. FRED H. KROGER, Ridgewood, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 25, 1929. Serial No. 365,865. 2 Claims. (Cl. 250—11.)



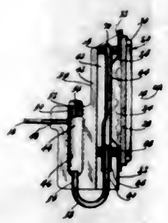
1. Interlocking apparatus for use with radio installations, comprising radio signalling apparatus having a conductor adapted to cause energy interchange with a natural medium and directional receiving apparatus including a nonuniform absorption member inherently subject to pointing errors resulting from distorted signal energy, to insure that the signalling apparatus does not cause incorrect signals to be taken on the direction finder comprising, the combination of a thermionic receiver adapted to be connected with said nonuniform absorption member, an energizing circuit for said receiver, said circuit including a switch biased to open circuit position, a switch in the conductor of said signalling apparatus, a relay circuit, a switch in said relay circuit, a link connecting said last named switch to the switch in said conductor, and an operative connection between said relay and the switch in said energizing circuit.

1,871,801. HEAD LAMP. ALBERT R. LEWELLEN, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 16, 1930. Serial No. 421,176. 3 Claims. (Cl. 240—41.5.)



1. In a headlamp, a concave outer shell, a concave reflector therein, and a light-transmitting plate, means for holding said shell, reflector and plate in mutual engagement comprising a hollow rim engaging said plate and a tension band within said rim constrictively engaging said shell and rim, additional means for positioning and securing said reflector to said shell comprising interfitting flanges thereon having a bayonet-joint connection, and means to prevent relative rotation between said shell, reflector and plate comprising an element carried by said rim and interengaging between said plate and interfitting flanges.

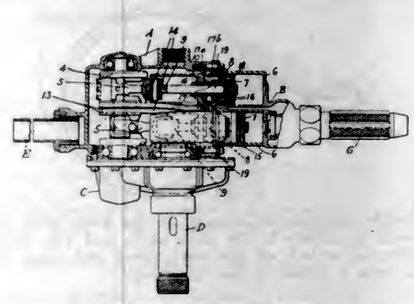
1,871,802. HEAT INDICATOR. ALBERT R. LEWELLEN, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 10, 1930. Serial No. 467,040. 3 Claims. (Cl. 73—52.)



3. In a temperature indicator, a plurality of stampings secured together in fluid tight relation to form a bracket, a plate to which said bracket is secured, said bracket having a chamber for receiving an indicating fluid and a channel formed therein, transparent means in said bracket to show changes in level of said liquid, resilient means between said plate and channel for mounting said transparent means, and means connecting said chamber and transparent means to permit the flow of fluid therebetween.

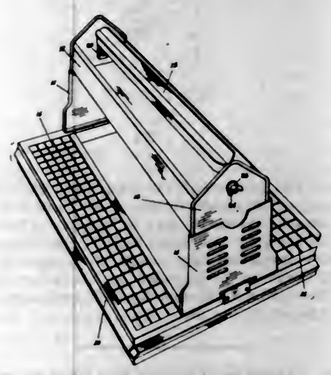
1,871,803. PACKING FOR FLUID PRESSURE MOTORS. LEON F. MEUNIER, Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 5, 1926. Serial No. 127,216. 1 Claim. (Cl. 286—27.)

In a packing and venting arrangement for machines having reciprocating double acting pistons, a piston chamber having at one end two axially spaced and relatively immovable rod supporting partitions one of said partitions serving as a closure for the piston chamber, a piston rod projecting through said partitions, said partitions being counterbored adjacent said rod, packings on said rod within said counterbores, a perforated spacing sleeve surrounding said rod between said packings and engaging with the walls of the counterbores of said partitions, said sleeve having an internal annular groove



and radial ports from said groove to the space between said partitions, a vent to atmosphere from said space, and a single gland member engaging one of said packings and operable through said sleeve upon the other packing for setting up both packings at once.

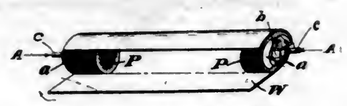
1,871,804. POULTRY FEEDER. EARL E. MCGREW, Lincoln, Nebr., assignor to McGrew Machine Company, Lincoln Nebr., a Corporation of Nebraska. Filed June 29, 1931. Serial No. 547,477. 5 Claims. (Cl. 119—61.)



1. A poultry feeder including a feed receptacle having an outwardly projecting bead on each of the opposite ends thereof, supporting legs having means for slidably receiving the ends of said receptacle, and inwardly projecting horizontal ribs on said supporting legs for releasably engaging said beads on the ends of said receptacle.

1,871,805. METHOD OF PACKAGING. WALLACE E. PARSONS, Waterville, and ERWIN H. BOODY, Portland, Me., assignors, by mesne assignments, to Fidelity Trust Company, Portland, Me., a Corporation of Maine, trustee. Original application filed Feb. 4, 1929, Serial No. 337,196. Divided and this application filed Dec. 4, 1929. Serial No. 411,509. 5 Claims. (Cl. 93—2.)

1. The method of packaging a plurality of similar articles which are compressible in a stack assembly, which consists in assembling such articles as a stack, in longitudinally compressing said stack to compact the articles, in tightly rolling said compressed stack in an enveloping sheet, in securing the edges of said enveloping sheet to each other to close the sheet about the stack as an open ended stack envelopment, and in applying over the open ends of the stack envelopment a pair of closing members which cooperate with said sheet to form thereof a substantially dust-tight protective enclosure which is sealed

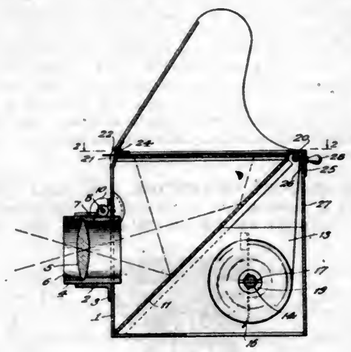


at its ends and along one longitudinal edge and which completely envelops the stack and is effective both to restrain the individual articles in the stack against separation upon release of the longitudinal compression and to prevent the entrance of foreign matter into the stack.

1,871,806. ACOUSTIC PLASTER. CARLISLE K. ROOS, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 7, 1927. Serial No. 166,600. 16 Claims. (Cl. 106—34.)

1. A plastic sound-absorbing wall plaster capable of application by trowelling and setting to a porous mass consisting of a mixture of calcined gypsum, water, a graded non-porous aggregate, a graded porous aggregate, a foaming agent of the saponin type and a commercial gypsum-setting retarder.

1,871,807. SKETCHING CAMERA. ROLF SCHWABE, Batavia, N. Y. Filed Feb. 2, 1932. Serial No. 590,337. 5 Claims. (Cl. 88—24.)

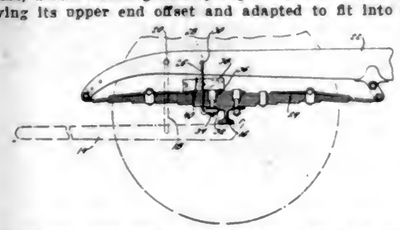


1. A sketching camera comprising a box having an opening in one side thereof, a transparent cover for said box, a lens mounted in alignment with the opening in the side of the box, a mirror positioned within the box to receive the light rays passing through the lens and reflect them on to the transparent cover, a shaft within the box adapted to rotatably support a roll of sketching paper, a guide for directing paper from a roll on the shaft along the surface of the cover, and means for securing the paper to the surface of the cover.

1,871,808. VEHICLE SHIPPING DEVICE. MARION E. STALLSMITH, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 9, 1928. Serial No. 291,337. 2 Claims. (Cl. 280—150.)

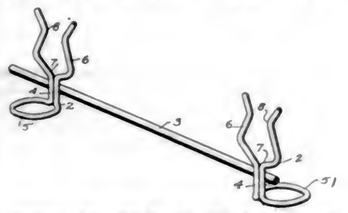
1. In combination, a vehicle frame having an opening therein, an axle, a spring connecting said axle to said

frame, a bolt securing said spring to said axle, and a bar having its upper end offset and adapted to fit into said



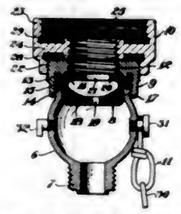
opening, the lower end of said bar being bent into a ring adapted to fit over said bolt for the purpose of holding said spring in compressed position relative to said frame.

1,871,809. BAR SUPPORT AND SPACER. LYDIA LAMPERT, Chicago, Ill., assignor to Universal Form Clamp Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 21, 1931. Serial No. 517,513. 1 Claim. (Cl. 72—122.)



A bar support and spacer of the class described, comprising a spacing rod and a plurality of chairs respectively secured to said rod at points spaced longitudinally of the rod, each of said chairs being formed of a wire rod bent to form an annular base and legs extending vertically from said base, upper end portions of said legs being bent to form co-operating clip portions for receiving and gripping a bar, said leg portions being welded to said spacer adjacent to but below the bottom of said clip portions so that a bar received by said clip portions is held thereby out of contact with the spacer and the latter serves to resist spreading of said clip portions.

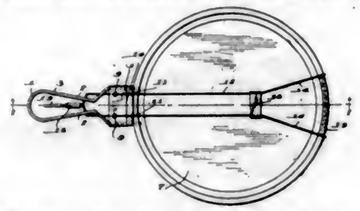
1,871,810. FAUCET CONNECTER FOR FIRE HOSE. FRANCIS L. LESTER, Los Angeles, Calif. Filed Sept. 5, 1931. Serial No. 561,339. 9 Claims. (Cl. 285—163.)



1. In a connecter for attaching a hose to a faucet, a hollow body member having an inlet opening and an outlet opening which latter is adapted for connection with a hose, a rubber gasket extending over the intake opening and having a central opening therein adapted to receive the spout of a faucet, and a coupling member on said body and having a screw threaded opening therein arranged in registration with the opening of said gasket and adapted to receive the threaded spout of a faucet.

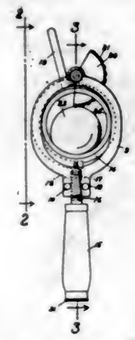
1,871,811. PAN LIFTER. WILLIAM S. LOCKE, Portland, Oreg. Filed June 22, 1931. Serial No. 546,112. 2 Claims. (Cl. 294—34.)

1. A pan lifter comprising a handle provided with a gripping member, a brace plate mounted upon the handle near the gripping portion thereof and having an opening, a guide plate secured to said brace plate and inclined at an angle relative thereto, said guide plate having a recess in alignment with the opening in said brace plate, an arm



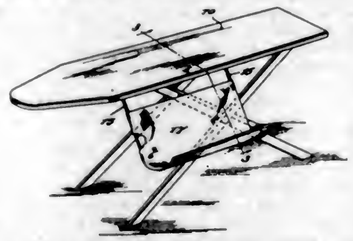
extending through the opening in the brace plate and through the groove in the guide plate, said arm having a gripping portion on one end thereof and being provided with a handle at the other end.

1,871,812. BALL MARKER. JESSE D. LYON, Cincinnati, Ohio. Filed July 15, 1931. Serial No. 550,876. 6 Claims. (Cl. 101—7.)



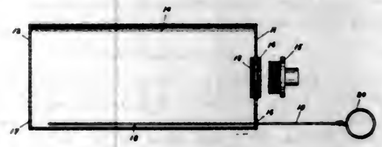
1. In a ball marker of the class described the combination of a light-weight frame provided with a holding handle, whereby the device may be held in one hand, a ball support mounted for movement relative the frame, a movable die for operating upon a ball to be marked, and an actuating lever to be operated by the other hand for moving the ball support and the ball supported thereby while subjected to the die.

1,871,813. CLOTHES SUPPORT FOR IRONING BOARDS. LESLIE E. MCLAIN, Peterson, Iowa. Filed July 9, 1931. Serial No. 549,741. 3 Claims. (Cl. 68—10.)



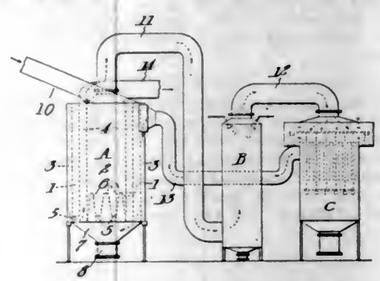
1. The combination with an ironing board, of a clothes support comprising a wire frame having a longitudinal member and J-shaped legs, a canvas covering for the frame, the legs of the frame being terminally bent abruptly to provide attaching lugs, and means carried by the ironing board for removably receiving said lugs.

1,871,814. SOAP SAVER. ROBERT J. MEISTER, Cincinnati, Ohio. Filed May 9, 1930. Serial No. 451,154. 5 Claims. (Cl. 45—28.)



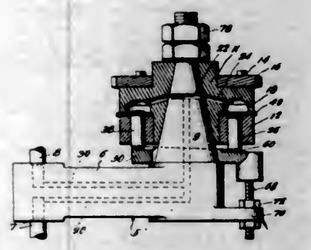
1. As a new article of manufacture a soap saver comprising an elongated non-corrodible container having a restricted perforation in each of its opposite ends and a closable filling opening disposed in one end of the container.

1,871,815. METHOD OF CLEANING GASES. ARCHIBALD F. MESTON, East Bound Brook, and HARRY A. WINTERMUTE, Plainfield, N. J., assignors to Research Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 26, 1930. Serial No. 439,162. 1 Claim. (Cl. 183—7.)



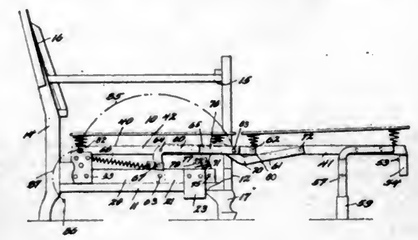
A method of conditioning hot dirty gases containing metallurgical dust in suspension which comprises cooling the hot gases by bringing them into heat interchange relationship with cool gases while subjecting the dirty gases to a dry settling operation, humidifying the cooled gases, and passing the humidified gases downwardly through an electrostatic field at a temperature near the dew point of the gases, whereby material not hitherto removed is removed in sludge-like condition, the said cool gases being the gases which have been subjected to said cleaning operation.

1,871,816. MULTICYLINDER PUMP. CLARENCE E. MILLER, Beallsville, Pa. Filed Apr. 25, 1930. Serial No. 447,322. 9 Claims. (Cl. 103—162.)



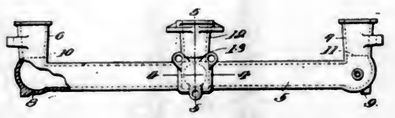
1. In a device of the class described a tapered shaft having inlet and outlet ports, a member rotatable on said shaft having a plurality of pumping chambers therein and passages for communicating the chambers with the inlet and outlet ports, a cylindrical block fixed to said member having a plurality of cylinders in axial alignment with the pumping chambers, a diaphragm interposed between said member and the cylinder block, pistons in each of said cylinders, means for effecting a communication of the chambers respectively with the inlet and outlet ports, and means for actuating the pistons and exerting pressure on the diaphragm when the pumping chambers register with the outlet ports.

1,871,817. SOFA BED. CLARENCE SUES MOECKEL, Atlanta, Ga., assignor to Southern Spring Bed Company, Atlanta, Ga., a Corporation of Georgia. Filed Oct. 9, 1930. Serial No. 487,543. 7 Claims. (Cl. 5—22.)



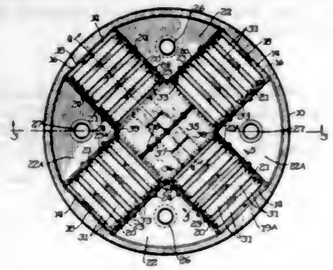
2. In a sofa bed, in combination, a stationary frame, a supporting bracket at each end thereof, two bed sections pivotally connected to said bracket and to each other for bodily movement through successive horizontal planes to and from folded and extended positions, and a common rest member associated with each of said brackets for alternately supporting corresponding portions of said bed sections in said respective positions.

1,871,818. INTAKE MANIFOLD FOR MULTIPLE CYLINDER INTERNAL COMBUSTION ENGINES. DONALD P. MOLONY, Flint, Mich., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Indiana. Filed June 24, 1924. Serial No. 722,152. 5 Claims. (Cl. 123—52.)



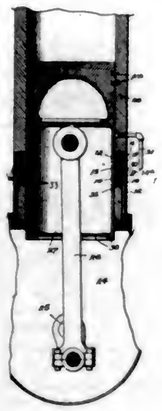
1. A manifold having a central chamber adapted to receive liquid fuel and air from a carbureter, and passages leading from said chamber at opposite ends thereof and constituting means for conducting liquid fuel and air from the chamber to a plurality of cylinders of an internal combustion engine, opposite walls of said chamber having shoulders for deflecting liquid fuel from said walls inwardly toward the longitudinal median line of the chamber so that such deflected fuel will be picked up by and commingled with air as it leaves the chamber and enters the respective passages, the intermediate portions of said walls between said shoulders being offset outwardly and forming an enlargement into which the liquid fuel and air from the carbureter is adapted to flow under their own inertia after the suction effect from any of the engine cylinders has ceased and in which the liquid fuel and air are adapted to expand and cause the velocity thereof to be lowered.

1,871,819. FRACTIONATING SYSTEM. DONALD A. MONRO, Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Apr. 25, 1931. Serial No. 532,821. 8 Claims. (Cl. 261—114.)



1. In combination, a fractionating tower, parallel supporting members secured therein, transverse parallel supporting members in substantially the same plane as the first members, a plurality of substantial rectangular plate sections mounted on said supports around a rectangular central opening, substantially triangular receptacles mounted between said rectangular plate sections, a cover for said central opening, downtake pipes from opposite triangular receptacles to alternately arranged triangular receptacles therebeneath, a plurality of vapor uptakes in each plate section whereby liquid may flow from one triangular receptacle to another in streams of substantially equal length, and means for passing vapor through said uptake and for introducing said vapor into said streams.

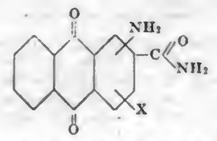
1,871,820. PACKING. ALLEN W. MORTON, Baltimore, Md., assignor to The American Hammered Piston Ring Company, Baltimore, Md., a Corporation of Maryland. Filed Sept. 13, 1930. Serial No. 481,781. 6 Claims. (Cl. 286—24.)



4. A rod packing comprising a plurality of separator rings held in spaced relation to form a plurality of annular chambers; a radially slotted contracting ring in one of said chambers, said contracting ring having an annular groove in its inside face and connecting said slots; a radially slotted contracting oil-contral ring in at least one of the remaining annular chambers; and means for removing oil from said packing and preventing the intermingling of oil from the two sides of the packing.

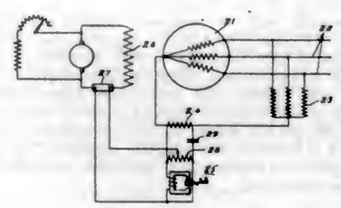
1,871,821. DYESTUFFS OF THE ANTHRAQUINONE SERIES. PAUL NAWIASKY and ARTUR KRAUSE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 10, 1930, Serial No. 501,463, and in Germany Dec. 16, 1929. 4 Claims. (Cl. 260—60.)

1. As new articles of manufacture dyestuffs suitable for dyeing cellulose esters and ethers corresponding to the formula:



in which X stands for one of the auxochrome groups $-NH_2$ and $-OH$, in which dyestuffs the hydrogen atoms of the $-NH_2$ groups may be substituted by alkyl or aryl radicles.

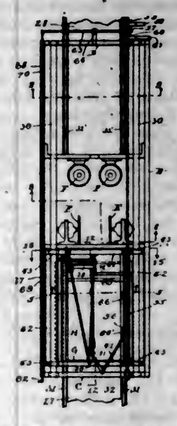
1,871,822. ALTERNATING CURRENT PROTECTIVE RELAY. FRANZ OLLENDORFF, Berlin-Wilmersdorf, and ERICH FRIEDLÄNDER, Spandau, near Berlin, Germany, assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 30, 1929, Serial No. 389,371, and in Germany Sept. 22, 1928. 8 Claims. (Cl. 175—294.)



1. In combination with an alternating-current machine, current-responsive means associated therewith and energized in accordance with the machine current, and means energized in accordance with the exciting current of said machine for varying the sensitivity of said current-responsive means.

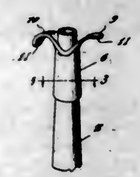
1,871,823. METHOD OF AND MEANS FOR SLOTTING GARMENT HANGERS. WILLIAM J. REHRIG, Los Angeles, Calif., assignor to Sta-On Garment Hanger Company, a Corporation of California. Filed Aug. 22, 1930. Serial No. 476,997. 6 Claims. (Cl. 144—86.)

1. A machine of the class set forth, comprising, in combination, a frame, a plurality of power driven cutters on said frame, arranged to cut notches across the opposite ends of the convex rims of a row of blanks, an individual motor for each cutter on said frame, a carriage for holding said row of blanks, said carriage being slidable upon said frame to present said row of blanks with their convex rims to the cutting action of said cutters, means for



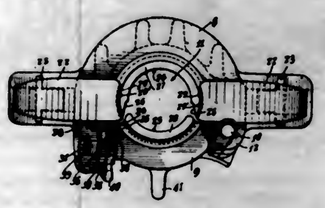
clamping said row of blanks on said carriage during the cutting action, and means for releasing said clamping means after the cutting action.

1,871,824. OIL-CAN ATTACHMENT. GEORGE W. RICHBURG, Ellenville, N. Y. Filed Nov. 6, 1931. Serial No. 573,461. 3 Claims. (Cl. 221—38.)



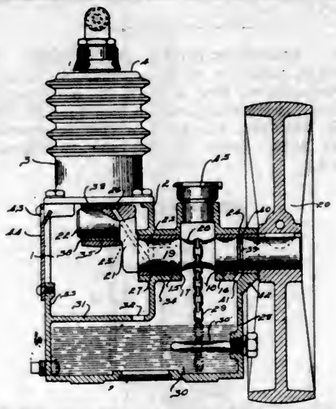
1. An attachment for oil-cans consisting of a sleeve adapted to fit upon the spout of an oil-can and provided at its forward end with lateral tongues adapted to engage the cover of an oil cup for shifting the cover to open position, the greater surfaces of the tongues being opposed and presented to the spout.

1,871,825. ELEVATOR LATCH. NELSON K. SMITH, Los Angeles, Calif., assignor to Byron-Jackson Co., Los Angeles, Calif., a Corporation of Delaware. Original application filed Apr. 7, 1930, Serial No. 442,259. Divided and this application filed June 29, 1931. Serial No. 547,523. 12 Claims. (Cl. 294—90.)



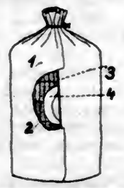
1. An elevator comprising a body provided with members pivoted together and recessed to form the bore of the elevator, one of said members provided with a horizontal pivot projecting forwardly therefrom and offset from the bore of the elevator, the other member provided with a lug, and a latch mounted on said pivot engageable with the lug.

1,871,826. COMPRESSOR. RUDOLPHE STAHL, Detroit, Mich., assignor to Saylor-Beall Manufacturing Company, a Corporation of Michigan. Filed May 1, 1930. Serial No. 448,850. 2 Claims. (Cl. 184—6.)



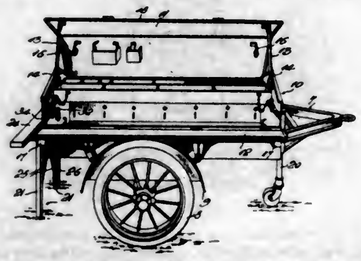
1. An air compressor including a crank case having a lubricant reservoir therein, a bearing in said crank case having a groove in its periphery open at one end, means for feeding lubricant only to the open end of said groove, and a crank shaft journaled in said bearing, including a crank arm and a crank pin and having a transverse passage extending further on one side of the axis of said shaft than on the other and communicating with the groove of said bearing, the differential of the centrifugal action upon the lubricant in the portion of said passage on opposite sides of said axis constituting the sole source of pressure for passing lubricant through the groove of said bearing.

1,871,827. BAG CONSISTING OF TWO LAYERS OF PAPER. LAURENS VAN HÜLST, Merseburg, Germany. Filed Aug. 21, 1930, Serial No. 476,929, and in Germany July 9, 1929. 6 Claims. (Cl. 229—55.)



1. A bag consisting of two layers of paper, comprising an intermediate layer of bitumen, and a reinforcement of wire gauze embedded in said bitumen.

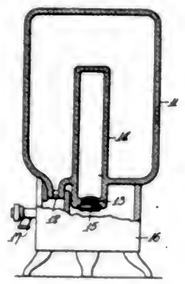
1,871,828. TRAILER. JOHN VAN VORST, Schenectady, N. Y., assignor to Mohawk Asphalt Heater Company, Schenectady, N. Y., a Copartnership consisting of John Van Vorst and George M. Baker. Filed May 15, 1930. Serial No. 452,773. 7 Claims. (Cl. 280—33.4.)



5. In a trailer, a wheeled body, a pivoted leg for said body, and means projectable from the interior to the ex-

terior of said body for holding said leg in either operative position or upwardly swung position, said body being in the form of a casing and having a lockable closure which when locked bars access to said leg-holding means.

1,871,829. REFRIGERATORY CONTAINER. JOSEPH WEINSTEIN, Brooklyn, N. Y., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Original application filed June 22, 1927, Serial No. 200,515. Divided and this application filed Mar. 21, 1930. Serial No. 437,789. 15 Claims. (Cl. 62—91.5.)

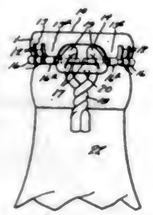


1. A bottle provided with an inwardly projecting watertight, gas-tight chamber having an independent plugable opening to the exterior through which it may be charged with refrigerant and through which gas may escape, in combination with solid carbon dioxide in said chamber, and means for preventing contact of said solid with the walls of said container.

1,871,830. FIXING PHOTOGRAPHIC BLEACHING-OUT LAYERS. BRUNO WENDT, Dessau in Anhalt, and HANS BINCER, Dessau-Ziebigk, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed May 2, 1930 Serial No. 449,356, and in Germany May 11, 1929. 7 Claims. (Cl. 95—88.)

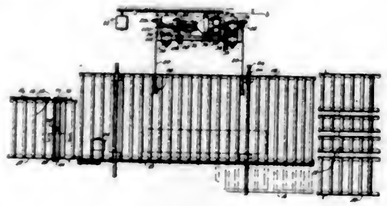
1. In the process of fixing bleaching-out layers containing light sensitive basic dyes and a sensitizer, the step which comprises treating the said layers after exposure to light with a solution containing a compound of the group consisting of free borofluohydric acid or a soluble salt thereof.

1,871,831. CAP FOR RECEPTACLES. GEORGE A. WILLIAMS, Decatur, Ill.; Elizabeth T. Williams, executrix of said George A. Williams, deceased, assignor to Williams Sealing Corporation, Decatur, Ill., a Corporation of Illinois. Filed June 19, 1930. Serial No. 462,867. 6 Claims. (Cl. 215—45.)



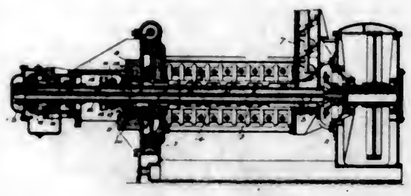
1. A cap comprising a top having a compressible liner therein and provided with a skirt extending downwardly from such top, the skirt being provided with a wide unobstructed slot extending upwardly from the bottom thereof and with a plurality of vertical narrow slots extending upwardly from the bottom thereof and forming depending tongues therebetween, a divided ring provided with hooked end mounted in sleeves at the lower ends of said tongues and having such hooked ends located in said wide slot, the skirt being convex outwardly between the top and bottom thereof with its maximum diameter below the tops of said slots, and a lever having cam loops engaging such hooked ends and adapted, when operated in one direction, to draw the ends of said ring toward each other, the cam loops being of such contour that when the lever is moved downwardly and approaches a vertically downward position, there will be a minimum divergence between the cam loops which will force the hooks into engagement with each other, the cam loops diverging slightly from each other beyond such point whereby, on final downward movement of the lever, the locking ring may expand and cooperate with the loops to retain the lever in such vertical locking position.

1,871,832. BOARD TRANSFER DEVICE. CARL ABSMEIER, Maywood, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 2, 1929. Serial No. 329,750. 13 Claims. (Cl. 198—31.)



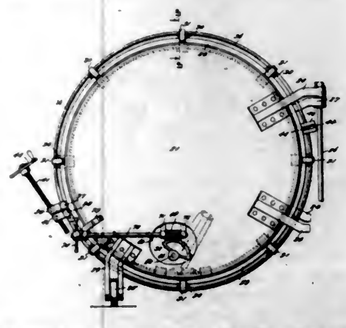
1. In a board transfer device, a setting conveyor, a kiln feed conveyor spaced apart from said setting conveyor, a transfer roller conveyor between said setting conveyor and kiln feed conveyor, and automatic means controlled by the movements of the boards along one of said conveyors adapted to move said transfer conveyor at predetermined intervals while said boards move along said transfer conveyor so as to deliver boards onto said kiln feed conveyor in different predetermined positions.

1,871,833. PELLET MAKING MACHINE. RAYMOND TUTTLE ANDERSON, Berea, Ohio, assignor to The V. D. Anderson Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 22, 1931. Serial No. 552,490. 10 Claims. (Cl. 100—48.)



1. In a pellet forming machine the combination of a press for expelling liquid from the material undergoing treatment, said press including a choke past which the dry cake resulting from the pressing action is forced; a die located outwardly of the choke, said die having a series of spaced ribs formed interiorly thereof; a second choke extending into the die and normally closing the open sides of the grooves formed by the ribs; and means for severing the material extruded through the grooves.

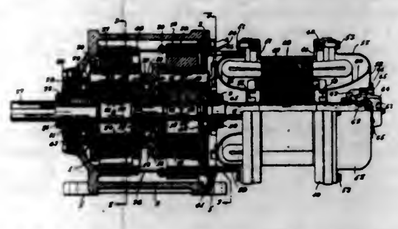
1,871,834. QUICK OPENING AND CLOSING DOOR FOR RETORTS AND THE LIKE. CARL P. ASTROM, East Orange, N. J., assignor to M. H. Treadwell Company, New York, N. Y., a Corporation of New York. Filed June 29, 1928. Serial No. 289,313. 20 Claims. (Cl. 220—55.)



1. The combination with a vessel and a cover, of a plurality of movable latches on one part to engage the other, a band engaging said latches, and means for expanding and contracting said band to move the latches simultaneously to and from engagement.

2. The combination with a vessel and cover, both having flanges abutting when the cover is closed, of a plurality of movable latches adapted to engage one of said flnges when moved to latching position, a band engaging said latches, and means for expanding and contracting said band to move said latches simultaneously to and from engagement.

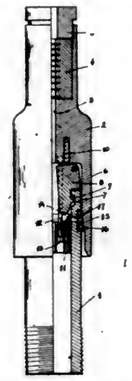
1,871,835. GEARLESS SPEED CHANGE MECHANISM. JAMES W. BATCHELDER, Brookline, Mass. Filed Dec. 11, 1930. Serial No. 501,484. 7 Claims. (Cl. 74—34.)



1. In a speed change mechanism, a casing, a slow speed shaft, a retainer rigidly fixed to said slow speed shaft, a high speed shaft, a pair of driving rollers rotatable by said high speed shaft and having outer cylindrical faces, a second retainer fixed to said casing and constituting a support for said first retainer, said first retainer constituting a support for said high speed shaft, a pair of rings rotatable in said casing, each of said rings having an inner cylindrical face parallel with and opposed to the outer cylindrical face of its respective driving roller, and a plurality of rollers interposed between each of said driving rollers and its respective ring, said rollers constantly bearing on and being confined under pressure between said parallel opposed faces.

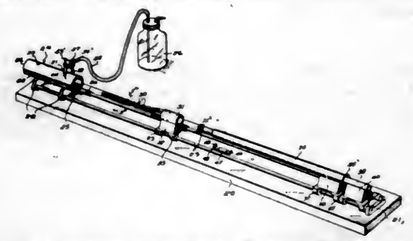
1,871,836. OIL SAVER. WILLIAM G. BRADFORD, Torrance, Calif., assignor to J. E. Oliver, Fullerton, Calif. Filed Nov. 24, 1930. Serial No. 497,663. 5 Claims. (Cl. 166—14.)

1. An oil saver comprising a pipe section, a stripper head mounted on the pipe section, said pipe section having an annular groove adjacent the upper end thereof, a plurality of latches pivotally mounted in the stripper head, said latches being adapted to engage in the annular groove, a releasing spider, a plurality of bolts extending through the releasing spider and into the stripper head, said spider



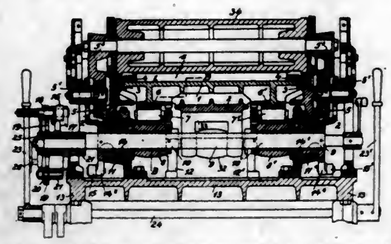
being slidably mounted on the bolts, said spider being adapted to be engaged by the tools whereby said spider is lifted to release the latches, and springs bearing against said latches whereby the latches are moved into engaged position.

1,871,837. MACHINE FOR INSERTING EDIBLE FILLER INTO A ROLL OR THE LIKE. LORENZO DALE BROWN, Concord, N. H. Filed July 11, 1931. Serial No. 550,265. 10 Claims. (Cl. 107—1.)



1. In a machine of the character described, a device for holding a roll, an opening and expanding element for movement in the roll, a combined expanding and feeding tube for movement into the opening and expanding element to expand the same, and an ejector for movement into the combined expanding and feeding tube.

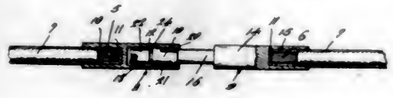
1,871,838. CYLINDER PRINTING PRESS. ARTUR BÜTTNER, Heidelberg, Germany, assignor to Schnellpressenfabrik Aktiengesellschaft Heidelberg, Heidelberg, Germany. Filed Feb. 17, 1931, Serial No. 516,424, and in Germany Feb. 22, 1930. 8 Claims. (Cl. 101—283.)



1. A cylinder printing press, comprising, in combination, a form carrier adapted to be moved to and fro; tracks upon

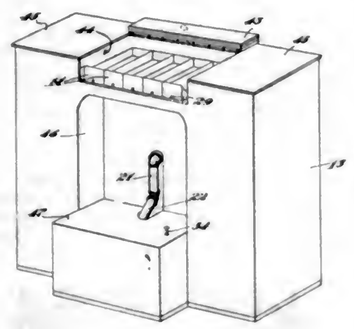
which the carrier can be moved as stated, a guiding frame for the said carrier and adapted to be moved to and fro with said carrier, means for thus moving said guiding frame and carrier, and means for raising and lowering said carrier.

1,871,839. ELECTRICAL CONNECTER. CLARENCE FREEMONT CARTER, Danville, Ill. Filed May 19, 1930. Serial No. 453,698. 1 Claim. (Cl. 173—363.)



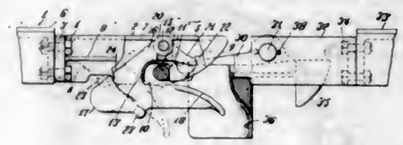
A connecter for electrical conductors comprising a socket having an axially disposed chamber, a pin extending diametrically through the chamber, a plug including a body, an axially disposed threaded extension on the body, the body having a bevelled seat tapering toward the extension, a bushing threaded on the extension having a tapered inner end defining a seat, an expansible sleeve disposed on the extension and having its ends fitted on the first and second mentioned seats, the plug being slidable in the socket, said bushing having a diametrically extending slot on its outer end for receiving the pin in the socket, whereby upon turning movement of either the socket or the plug, the bushing can be threaded on the extension for expanding the sleeve.

1,871,840. INDEX. CHARLES H. COBB, Newton, Mass., assignor to Filing Equipment Bureau, Incorporated, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 12, 1931. Serial No. 515,257. 24 Claims. (Cl. 129—16.)



1. An index of the class described comprising a rotatable frame having substantially flat, tangential platforms defining a polygonal periphery of the frame and holders for index elements carried on said platforms, the frames, platforms and holders being so constructed and arranged as to provide a recess within the peripherally arranged holders having a substantially unobstructed entrance at the front of the index.

1,871,841. COUPLER. ELY J. CONTOIS and ALFRED O. WILLIAMS, Battle Creek, Mich., assignors to Clark Tructractor Co., Battle Creek, Mich., a Corporation of Michigan. Filed May 6, 1931. Serial No. 535,373. 14 Claims. (Cl. 280—33.15.)

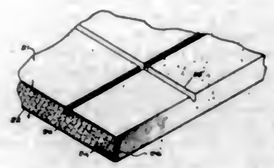


2. The combination with a pair of flat top vehicles of a coupling means attached part to each of the vehicles below the tops thereof and comprising a coupling ring, coupler frame against which the ring pulls to pull the vehicles, and a latch for holding the ring in the frame, said latch and ring being entirely operable from below the plane of the vehicle tops to couple and uncouple the vehicles.

1,871,842. PROCESS OF RENDERING PAPER MOISTURE, GREASE AND ACID PROOF AND SOLUTION THEREFOR. LOGAN A. DILS, Chicago, Ill., assignor to Kellogg-Dils, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 2, 1930. Serial No. 499,609. 5 Claims. (Cl. 91—68.)

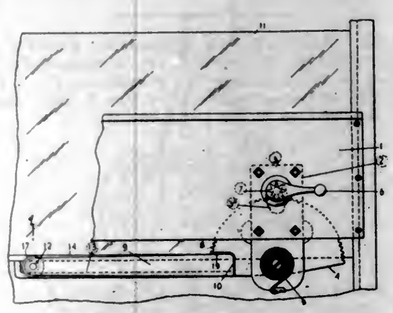
4. The process of treating paper which consists in dissolving in water approximately 23 pounds of gelatinous substances, a purifying agent for the said gelatinous substance, 8 pounds of glycerin, 1 pound sodium aluminum sulphate, 2 pounds of potassium aluminum sulphate and a small quantity of formaldehyde, heating the solution, applying the solution to the paper, then drying the paper and applying thereto a fixing bath composed of 99% methyl spirits, 37% formaldehyde and C. P. glycerin in the proportions of 10 gallons (1280 fluid ounces) methyl spirits, 10 pounds (avoirdupois) formaldehyde, and 10 ounces (avoirdupois) glycerin.

1,871,843. METHOD OF MANUFACTURING TILE BOARD. RICHARD ERICSON, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 17, 1928. Serial No. 312,998. 7 Claims. (Cl. 154—2.)



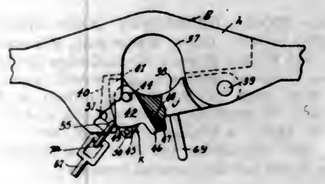
1. The method of forming tile board from plasterboard having a plurality of paper cover sheets separated by a cementitious core, which comprises subjecting one cover sheet of said board to the action of steam while the opposite cover sheet of said board is protected from the steam so that the first mentioned cover sheet and a portion of the core are moistened by condensed water, pressing the tile impression upon the moist cover sheet of said board, and drying said tile board.

1,871,844. LIFT PIN ASSEMBLY FOR A WINDOW REGULATOR. HERBERT C. FIELD, Windsor, Ontario, Canada, assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Original application filed Dec. 21, 1928, Serial No. 327,526. Divided and this application filed Nov. 24, 1930. Serial No. 497,661. 7 Claims. (Cl. 268—126.)



1. In a window regulator, a lifting member, a lift pin attached to said member, and a resilient washer mounted upon and at substantially a right angle to the axis of said lift pin and adapted to flatly engage the window.

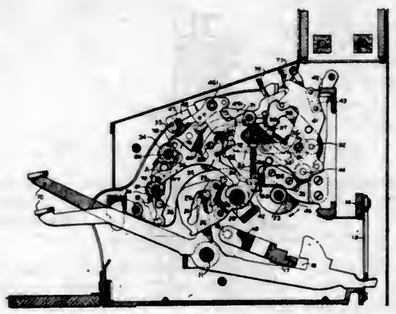
1,871,845. WELL ELEVATOR. JOHN GRANT, Los Angeles, Calif., assignor to Byron Jackson Co., Los Angeles, Calif., a Corporation of Delaware. Original application filed Jan. 11, 1923, Serial No. 611,978. Renewed July 17, 1926. Divided and this application filed Oct. 7, 1930. Serial No. 486,951. 8 Claims. (Cl. 294—90.)



1. A device of the character disclosed comprising a body having a casing receiving recess, a gate pivoted to the body, and a latch pivoted in the body adjacent the mouth of the casing receiving recess, a spring for forcing said latch in a direction substantially tangential to the path of the gate and opposite to the direction of closing movement of the gate, and a keeper nose on the gate adapted to be forced outwardly by the latch until it passes the zenith of said latch.

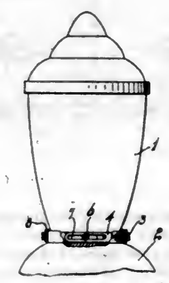
1,871,846. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Aug. 26, 1924. Serial No. 734,238. 18 Claims. (Cl. 235—130.)

1. In a cash register the combination with a movable frame carrying a shaft, of a plurality of printing elements mounted on said shaft, a holding device engageable with said shaft and a manipulative device for operating the



holding device during a portion only of the movement of said manipulative device.

1,871,847. CLAMP SUPPORT FOR GLOBES. GILBERT GREEN, GEORGE E. BOOTH, and JOSEPH T. DE NAULT, Long Beach, Calif. Filed Aug. 31, 1931. Serial No. 560,342. 6 Claims. (Cl. 240—135.)

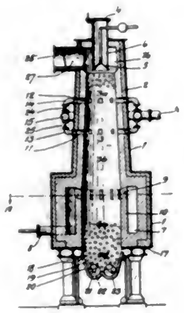


1. A clamp support for globes comprising a case in which the globe extends, a plurality of engageable members extending from said case, a globe, a ring, a means securing said ring about the globe, a plurality of clips extending from said ring, said clips engaging the members extending from the case, and a supporting lip on each clip upon which the globe rests.

1,871,848. PROCESS FOR PRODUCING METAL SPONGE. EMIL GUSTAF TORVALD GUSTAFSSON, Stockholm, Sweden. Filed Feb. 28, 1931, Serial No. 519,160, and in Sweden Mar. 6, 1930. 20 Claims. (Cl. 75—77.)

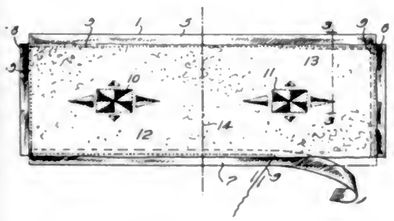
1. A process for producing metal sponge, consisting in mixing finely divided metal oxide containing material and finely divided reducing agent, the latter in excess of the theoretical amount required for reduction, reducing the metal oxides in the mixture to a state a little short of complete reduction by supplying to the mixture in a furnace the heat, required for heating the mixture to reduction temperature and for reducing the metal oxides, by means of hot combustion gases in contact with the mixture, said

gases meeting the mixture in the furnace and being of such an oxidizing character as to burn part at least of the excess of reducing agent in the mixture, and further



reducing the mixture to the desired degree out of contact with such oxidizing combustion gases by the aid of heat stored up in the mixture.

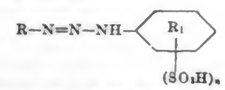
1,871,849. RUG. JOHN D. HARRIS, Larchmont, N. Y. Filed Feb. 16, 1932. Serial No. 593,285. 5 Claims. (Cl. 2—278.)



1. An article of manufacture comprising a rug having a base of at least one layer of felt, a fabric of spun fibers on one side of said layer, a design embroidered on said base, the threads of said design being of spun fibers and passing through said felt and fabric, the design appearing on the surface of the felt opposite to said fabric.

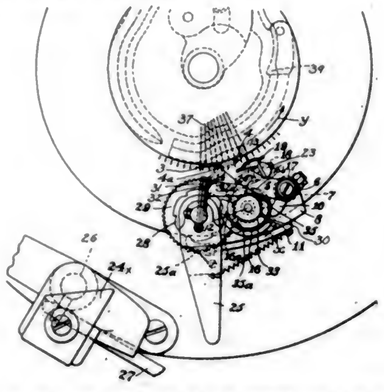
1,871,850. NEW DIAZO-AMINO COMPOUNDS. WINFRID HENTRICH, Leverkusen-Wiesdorf, ERNST TIETZE, Cologne-Rhine, ANTON OSSENBECK, Cologne-Mulheim, and PETER BACKES, Gladbach-Rheydt, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 17, 1931, Serial No. 563,458, and in Germany July 14, 1928. 5 Claims. (Cl. 260—69.)

1. As new products diazoamino compounds of the probable general formula:



wherein R stands for the radical of a diazotizable amine suitable for producing azodyestuffs which is at least once substituted by a substituent selected from the group consisting of the sulfonic acid group, the carboxylic acid group, a carboxylic acid ester group, the arylsulfone group, the nitro group and halogen, and which may be further substituted by alkyl or algoxy, *n* stands for one of the numbers one to three, and wherein the benzene nucleus R_1 may be further substituted by substituents of the group consisting of alkyl, alkoxy and halogen, being in form of their alkali metal salts generally greyish to orange crystalline powder, stable towards heat, percussion, friction and neutrally and alkaline reacting substances and being split up in aqueous solution into the two starting components by the addition of acid reacting agents.

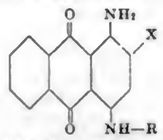
1,871,851. MACHINE FOR INSERTING ELASTIC IN KNIT FABRIC. KENNETH HOWIE, Norristown, Pa., assignor to Wildman Mfg. Co., Norristown, Pa., a Corporation of Pennsylvania. Filed May 8, 1931. Serial No. 535,900. 19 Claims. (Cl. 66—11.)



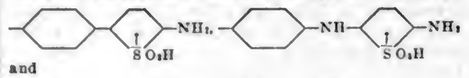
1. A knitting machine having means for feeding an elastic thread and means for operating needles to clamp the said thread in place to be embraced by the cylinder and dial loops, said feeding means and the needles having relative movement to lay said thread in the courses, substantially as described.

1,871,852. WOOL DYESTUFFS AND PROCESS OF MAKING SAME. GEORG KALISCHER, Frankfort-on-the-Main, and ERNST HONOLD, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 24, 1930, Serial No. 447,093, and in Germany May 18, 1929. 8 Claims. (Cl. 260—60).

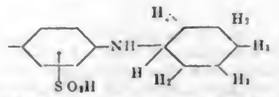
5. As new compounds the acid wool dyestuffs corresponding to the probable general formula:



wherein X means hydrogen or a sulfonic acid group and R a sulfonated aromatic radical of the group consisting of

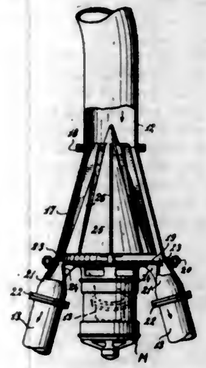


and



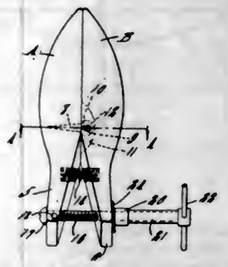
which compounds are intense colored powders dyeing wool from an acid bath blue to grey to green shades of an excellent fastness.

1,871,853. PNEUMATIC TRANSPORTING AND DISTRIBUTING OF PULVERIZED MATERIAL. JOSEPH E. KENNEDY, New York, N. Y. Filed Aug. 9, 1927. Serial No. 211,696. 6 Claims. (Cl. 302—28.)



1. In a delivery and distribution of pulverulent material in suspension in an air stream from a source of supply, suction means to draw the pulverulent material from the source of supply, a main conduit connected with the delivery of said suction means for transporting the material laden air stream delivered from the suction means, branch conduits, a truncated conical casing connected at the smaller end with the main conduit and the branch conduits connected to the opposite end thereof, and a conical blade carrying head rotatably mounted in the casing to agitate and effect an even distribution of the pulverulent material in the air.

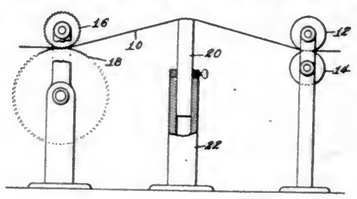
1,871,854. SHOE STRETCHER. CLEMENTS B. KOSTERS, Buffalo, N. Y. Filed Jan. 29, 1931. Serial No. 512,025. 2 Claims. (Cl. 12—128.5.)



1. A shoe stretcher, including a forward portion formed to be inserted into a shoe and divided lengthwise into two parts, said parts having rearwardly diverging and upwardly extending arms and having contacting surfaces intermediate of their ends formed to rock upon each other, means acting on said arms to rock said parts on said contacting surfaces to separate the forward portions thereof, a screw secured to one of said parts and having a head provided with a slot extending lengthwise of said screw, said other part having a recess into which the head of said screw extends, and a pin extending through said recess and said slot and secured to said recessed part to connect said parts and permit the rocking of said parts on each other.

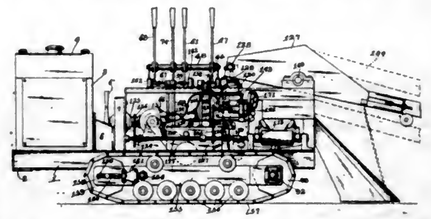
1,871,855. METHOD OF MAKING AN EMBOSSED FABRIC. WILLIAM H. LEES, Lowell, Mass. Filed May 31, 1929. Serial No. 367,540. 8 Claims. (Cl. 101—32.)

1. The method of producing an embossed tinsel fabric having tinsel strands as warp, which consists in passing the tinsel fabric between embossing rolls to emboss the fabric and which incidentally imparts a transverse curl thereto, and then drawing the embossed fabric over the



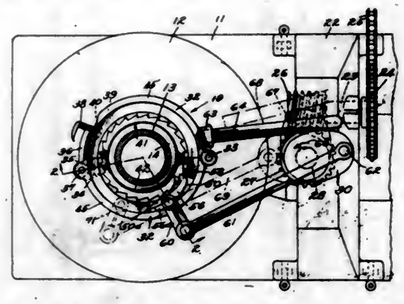
edge of an abutment member extended transversely of the fabric to remove the tendency of the fabric to curl transversely.

1,871,856. TRENCHING MACHINE. JASON H. MACDONALD, Milwaukee, Wis., assignor to C. H. & E. Manufacturing Company, Inc., Milwaukee, Wis. Filed Feb. 14, 1930. Serial No. 428,425. 7 Claims. (Cl. 37—90.)



1. A machine of the class described including a frame, a motor carried thereby, traction means supporting the frame, a driving shaft having operative connection with the motor, means for driving said shaft in either direction, a bucket chain supported by the frame, means forming operative connection between the driving shaft and the bucket chain, means forming operative connection between the driving shaft and the traction means, and means for varying the speed of the bucket chain and the traction means.

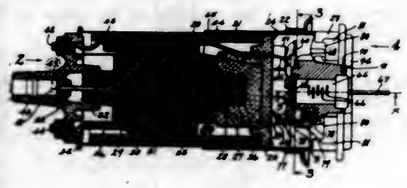
1,871,857. PIPE UNCOUPLING MECHANISM. ARTHUR E. MARTOIS, Compton, Calif. Filed Feb. 7, 1929. Serial No. 338,091. 13 Claims. (Cl. 255—35.)



1. A combination for use in the uncoupling of pipe composed of lengths connected together by screw-joints, said combination including: holding means adapted to engage said pipe on one side of a joint; a member adapted to be secured to said pipe on the other side of said joint; a drive element disposed in a fixed location away from said pipe; a break-out means between said drive element and said member for imparting an initial rocking movement to said member to break said joint; and uncoupling

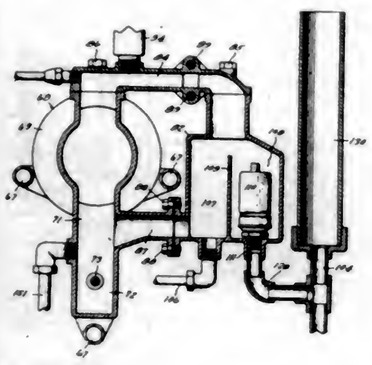
means independently operable by said drive element for subsequently imparting an initial rocking movement to said member to break said joint; and uncoupling means independently operable by said drive element for subsequently imparting intermittent rotary movement to said member to complete the unscrewing of said joint.

1,871,858. SWITCH. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 8, 1929. Serial No. 353,311. 3 Claims. (Cl. 200—1.)



1. A switch comprising three terminals arranged in a row, a spring metal conductor attached intermediate its ends to the center terminal, and having its free ends located so as to engage respectively the other terminals, and means for causing the ends of the spring conductor to simultaneously engage said other terminals, said means comprising a movable member having blades so constructed and arranged that, when the movable member is in the "off" position, one of the blades will be positioned intermediate the ends of the spring conductor and the other blade will be located beyond the end of said spring conductor.

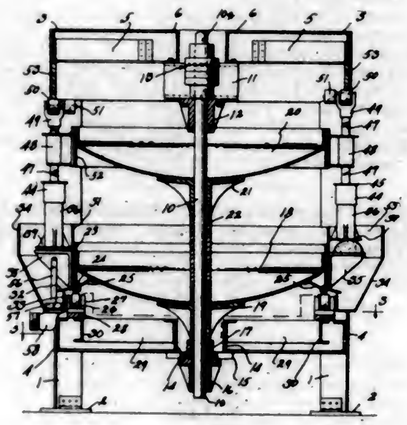
1,871,859. STEAM GENERATING APPARATUS. MARC RESEK, Cleveland Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 8, 1929. Serial No. 345,572. 12 Claims. (Cl. 122—305.)



9. In combination, a boiler, means for heating the same, a chamber communicating with the steam and water spaces of the boiler and into which water may overflow from the boiler when it exceeds a predetermined level, the chamber having a port through which overflow water may drain and through which water may enter for initially filling the boiler, and means tending normally to maintain said port open but acting under the influence of the steam in said chamber to close the port, said means being shielded from the effects of the steam by an accumulation of water in the chamber.

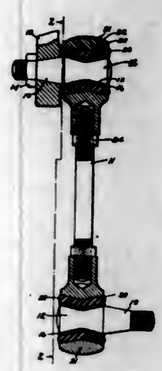
11. In apparatus of the character set forth, the combination of a boiler consisting of a head, and a body portion for application to said head, the head having a comparatively large opening and being built into the apparatus and having water inlet and steam outlet connections and the body portion consisting of a vessel that is large of bulk and capacity relative to said head and is provided with a comparatively large opening arranged to register with the aforesaid opening of the head, and means separably connecting the body portion to said head so that the body portion may be removed at will without disturbing the aforesaid connections.

1,871,860. MACHINE FOR EXTRACTING THE JUICE OF CITRUS FRUITS. CHARLES E. ROGERS, Detroit, Mich., assignor to C. E. Rogers Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 15, 1929. Serial No. 340,038. 2 Claims. (Cl. 100—39.)



2. In a machine for extracting juice from citrus fruits, a frame, a vertical shaft rotatably mounted in the frame, means for rotating the shaft, a pair of drums secured to the shaft in spaced relation longitudinally thereof, a series of guide brackets secured to the periphery of the upper drum, a series of perforated brackets secured to the periphery of the lower drum, means for conveying unpressed fruit to the perforate brackets, a series of presses movable vertically through the guide brackets of the upper drum toward the perforated brackets of the lower drum, a cam secured to the frame, the presses being each provided with a roller at the upper end engaging the said cam, the said cam being arranged to move the presses downwardly in succession during rotation of the drum, a second cam adapted to lift the presses upwardly during a portion of rotation of the drum, each press consisting of a hollow cylinder having a presser foot at its lower end, a piston connected with the shaft and extending into the cylinder, a spring within the lower end of the cylinder engaged by the piston, said piston being hollow and having an aperture in its bottom end within the cylinder and an aperture at its upper end exteriorly of the cylinder, and means for supporting the cylinder on the piston and permitting movement of the cylinder relative to the piston.

1,871,861. OSCILLATING JOINT. EDWIN F. ROSSMAN, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 15, 1929. Serial No. 386,193. 4 Claims. (Cl. 287—93.)



4. A pivot joint connecting two relatively movable parts comprising: a pivot journal fixed to one of said parts and having an axially concave bearing surface, a split metal bushing sliding rotatably thereupon and shaped to conform to said concave bearing surface to prevent relative axial sliding, a non-metallic resilient bushing surrounding and compressing said split bushing upon said journal, and an eye enclosing said resilient bushing under compression and fixed to the other of said movable parts.

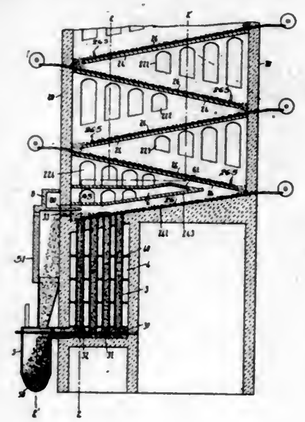
1,871,862. DEHYDRATED AND CHARRED LUMP LIGNITE AND PROCESS OF PRODUCING THE SAME. EUGENE P. SCHOCH, Austin, Tex. Filed Aug. 9, 1929. Serial No. 384,812. 6 Claims. (Cl. 44—1.)

1. The process of treating lignite which comprises heating the same in contact with a hydrocarbon oil sufficiently to drive off the moisture present and to cause a portion of said oil to enter the lignite; removing the oil not absorbed by the material; and then heating the dehydrated material to a temperature between 350° and 750° C. by applying heat to the outside of its container whereby there is expelled practically all the absorbed oil plus a substantial portion of the volatile combustible components of the lignite.

6. The process of treating lignite which consists in covering lumps of the raw material with a hydrocarbon oil; heating the covered lumps and oil to a temperature sufficient to drive off a substantial portion of the water present, and thus to dehydrate the lumps, the heating accomplished by raising the temperature slowly to avoid extensive disruption of the lumps; removing any oil not absorbed by the lignite; and heating the dehydrated material to a temperature between 350° and 750° C. by applying heat to the outside of its container, thus expelling not only all volatile portions of the absorbed oil but also a substantial portion of volatile constituents of the lignite.

1,871,863. FURNACE. ALFRED STANSFIELD, Westmount, Quebec, Canada. Filed Dec. 28, 1929. Serial No. 417,234. 11 Claims. (Cl. 263—30.)

1. In a heating device, a rectangular stack, having a series of vertical partitions therein, a series of floors alternately inclined at an angle less than that of the flow of the charge to be treated, extending from opposite walls with outlets at their lower edges to the upper portion of the floor beneath, and supported on the partitions and side walls, mechanism to advance the charge downwardly over the floors in thin layers at a controlled rate, openings in the partitions forming horizontal flues over the floors, and by-pass passages in the side walls connecting the

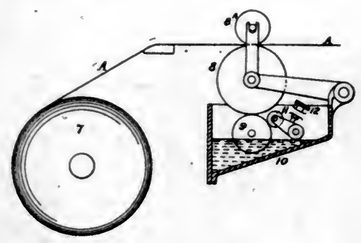


horizontal flues alternately, adapted to provide a continuous channel for gases ascending the stack over the floors in succession.

1,871,864. LUBRICATING GREASE. FREDERICK W. SULLIVAN, Jr., and MAURICE H. ARVESON, Hammond, Ind., assignors to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Dec. 4, 1929. Serial No. 411,671. 13 Claims. (Cl. 87—9.)

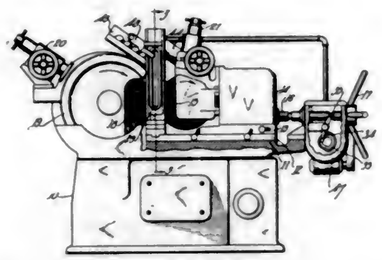
1. A solid lubricant comprised of fatty acid, mineral oil, lime, caustic alkali, water and montan wax.

1,871,865. MACHINE FOR MANUFACTURING TUBES. CYRUS TAYLOR, Hartford, Conn. Filed Mar. 27, 1929. Serial No. 350,394. 1 Claim. (Cl. 93—81.)



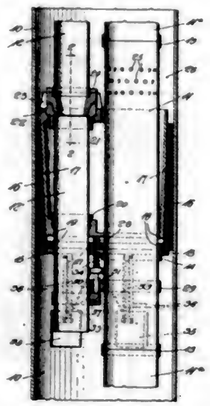
In a tube making machine, a central carrier disc mounted for rotation and having spaced radial slots, a gear revoluble with the carrier disc and having external and internal gear teeth, a plurality of mandrels carried by the carrier disc and each mounted for rotation and having gear teeth engaging the internal teeth of the first named gear, a locking member for the carrier disc, a revoluble gear having a cam to actuate the said locking member and also having a pin to enter the slots of the carrier disc in succession and thereby cause step by step rotation of the carrier disc and a train of gears between the said gear which has the cam and the pin, one of the gears of said train engaging the said gear which has the cam and the pin and another gear of said train engaging the external teeth of the first named gear.

1,871,866. GRINDING MACHINERY. GEORGE A. VOLZ, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 5, 1930. Serial No. 426,118. 9 Claims. (Cl. 51—103.)



1. In a device of the class described, the combination of opposed grinding and regulating wheels forming a grinding throat therebetween, each of the wheels having grooves therein rotatable in tandem in the same plane, the grinding wheel groove being flanged on each side with an uninterrupted flange, the regulating wheel groove being flanked on each side with an interrupted flange means within the grinding throat for supporting the work piece during grinding and means for effecting an approach and retraction of the wheels to feed the work piece into the grinding wheel.

1,871,867. PUMP. ARTHUR W. WALKER, Seminole, Okla. Filed Aug. 19, 1929. Serial No. 386,926. 3 Claims. (Cl. 103—5.)

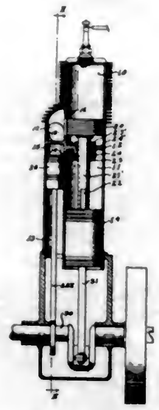


1. In an oil well construction, a well casing, pump tubing extending longitudinally in said casing, a packing support carried by said tubing, a cup-shaped packing disposed about said tubing and resting upon said support, a conical spreader slidably received in said packing, a rotatable coupling carried by said spreader, an auxiliary tube section extending longitudinally in said spreader with its upper end engaged with said coupling and its lower end projecting downwardly through the bottom of the packing and the packing support, an auxiliary tube extending longitudinally in said casing and having its lower end releasably engaged with said coupling whereby the auxiliary tube may be connected with the coupling after insertion of the pump tubing into the casing and turned with the tube section as a unit, casing gripping means below said packing support urged downwardly towards a gripping position, a spring yieldably supporting the spreader in an elevated position until overcome by weight of the auxiliary tubing, and means to releasably hold the casing gripping means in an inoperative position moved out of retiring relation thereto by turning of the auxiliary tube section.

1,871,868. NITRATED CELLULOSE ETHER. ADOLF WEIHE, Ellenburg, and OTTO LEUCHS and EDUARD DÖRR, Elberfeld-Sonnborn, Germany, assignors to Deutsche Celluloid-Fabrik, Ellenburg I. Sa., Germany, a Corporation of Germany. Filed Mar. 19, 1930, Serial No. 437,268, and in Germany Mar. 25, 1929. 17 Claims. (Cl. 260—145.)

1. The process which comprises acting upon a alkyl cellulose containing in the cellulose molecule unsubstituted hydroxyl groups with diacetyl-ortho-nitric acid in the presence of a dehydrating agent.

1,871,869. INTERNAL COMBUSTION MOTOR. LOVETTE G. WHITE, Goddard, Kans. Filed Mar. 28, 1929. Serial No. 350,554. 1 Claim. (Cl. 123—71.)

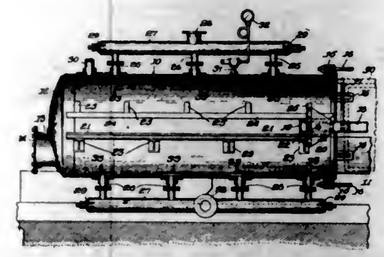


In internal combustion motors; three cylinders, the first cylinder being smaller than and at the side of the lower of a pair of major cylinders in axial alignment; a crank shaft for said motor; a connecting rod from said shaft to the lower major piston and a piston, connecting rod assemblage for the small cylinder; an eccentric on the crank shaft set X-degrees ahead of the crank and for driving the smaller piston; a carburetor and intake leading therefrom to the small cylinder; a port, between the small cylinder and the lower main cylinder, closed and opened by movements of the small piston; a wall intermediate the superposed main cylinders passing a hollow piston rod; said hollow rod having a head as a piston for the upper cylinder and with the base of the hollow rod rigid to the top of the lower piston; and packing means around said hollow rod; said hollow piston rod having a port in the rod and a ball valve mechanism in the head of the upper piston and an exhaust port near the base of the upper cylinder.

1,871,870. FILTER CONSTRUCTION. WILLIAM E. WOOD, Alton, and WILLIAM H. BACHELDOR, Woodriver, Ill., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed July 26, 1929. Serial No. 381,335. 3 Claims. (Cl. 210—181.)

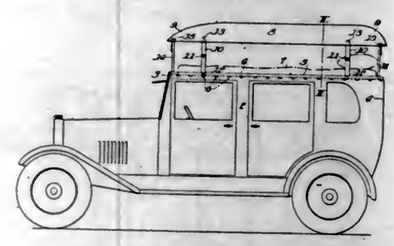
1. In a pressure leaf filter, the combination of, a closed horizontally disposed receptacle having a plurality of filter leaves mounted therein, said leaves being adapted to retain the filtered material upon their filtering surfaces

in the form of a cake-like layer, an inlet conduit communicating with the interior of said receptacle for supplying liquid to be filtered, the mouth of said conduit terminating adjacent a side wall of said receptacle, and a perforated baffle plate secured to said side wall and



disposed over the mouth of said inlet conduit, said baffle plate being provided on opposite sides with a pair of spaced imperforate protruding flanges, said flanges being secured to said side wall and being of a height sufficient to substantially space the unflanged sides of said plate from said side wall.

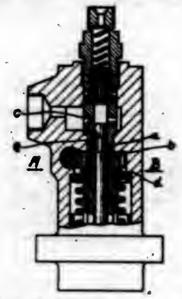
1,871,871. AUTOMOBILE CONSTRUCTION. HAZEL H. WOODS, Beaver, Pa. Filed Dec. 10, 1929. Serial No. 412,996. 2 Claims. (Cl. 296—107.)



1. In automobile construction, in combination with side and end body walls having a terminal framing rim around an upper open middle portion, a series of transverse supporting slats extending across said open portion and supported on the side walls, an open mesh wire netting laid over the slats, providing a bedding support, a covering top adapted to lie closely upon and extending outwardly over the upper edges of the side and end walls, collapsible supporting means for the top comprising pairs of pivotally connected toggle arms engaging the side walls and the side edges of the top respectively, and vertically adjustable supporting standards secured to the top extending downwardly through openings in the body walls and having movable arresting abutments thereon providing for supported erection and collapsing of the top.

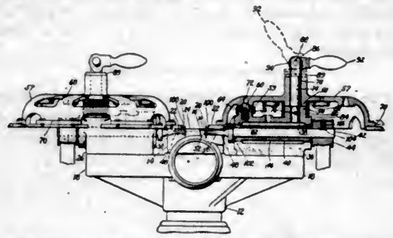
1,871,872. OIL PUMP. OTTMAR BAUR, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Oct. 24, 1929, Serial No. 402,250, and in Germany Dec. 10, 1928. 1 Claim. (Cl. 103—204.)

An oil pump comprising a housing, a cylinder sleeve inserted therein, a piston fitted in said sleeve and adapted to reciprocate therein, said sleeve having a suction duct formed transversely through the walls thereof and being controlled by said piston, said sleeve also having a ring groove formed in the inner wall surface thereof to receive oil leaking between the piston and the sleeve, said ring groove being formed eccentrically with the axis of said



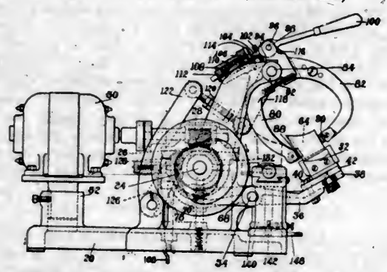
sleeve, and a drain passage formed longitudinally in the wall of said sleeve and connecting the deepest part of said ring groove with the suction duct.

1,871,873. MACHINE FOR GROOVING HEELS. LEWIS J. BAZZONI, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 7, 1929. Serial No. 338,285. 28 Claims. (Cl. 12—42.)



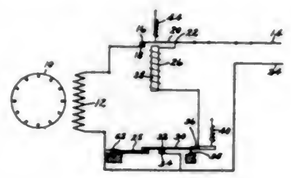
1. The method of forming heel cover receiving slots in the breast of a heel which consists in positioning a heel relatively to slot forming means and effecting movement of the heel continuously in the same general direction while utilizing a portion of the breast of the heel and a side of the heel as guiding elements to form successively in the breast of the heel a pair of heel cover receiving slots, one of which is substantially parallel to one of the breast edges of the heel and the other of which is substantially parallel to the other breast edge of the heel.

1,871,874. MACHINE FOR USE IN COVERING HEELS. LEWIS J. BAZZONI, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 28, 1929. Serial No. 374,555. 28 Claims. (Cl. 12—42.)



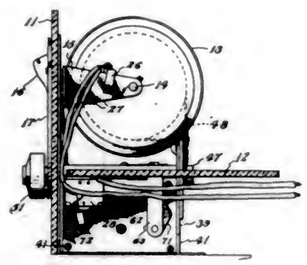
1. In a machine for use in covering heels, a blade having a cutting edge for trimming an edge of a cover, and a cover engaging face for deflecting said edge around a corner of a heel.

1,871,875. MOTOR CONTROL. ZERBE C. BRADFORD, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 3, 1929. Serial No. 360,026. 3 Claims. (Cl. 175—294.)



1. A device for protecting an electric motor, comprising in combination, a main circuit through the motor; a pilot circuit shunted across the main circuit normally closed; an electromagnet in said pilot circuit for opening the main circuit upon being de-energized; means for opening the pilot circuit to thereby de-energize the electromagnet, said means including a thermostat responsive to heat radiated from the motor and a second thermostat physically engaging the first thermostat, said second thermostat being responsive to abnormally sustained overload currents or sustained abnormal currents in the motor so as to open the main circuit.

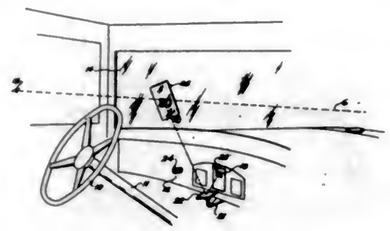
1,871,876. ONE KNOB CONTROL FOR RADIO RECEIVING SETS. CHARLES J. BREHANY, Middletown, Ohio. Filed Dec. 21, 1929. Serial No. 415,701. 7 Claims. (Cl. 250—20.)



1. The combination in a radio receiving set of a control knob mounted for sliding and rotary movement, a circuit control switch, a volume indicating dial, a volume control rheostat, a tuning instrument, means operatively connecting the knob to the switch, means operatively connecting the knob to the dial, means operatively connecting the knob to the rheostat, all of said means coacting when the knob is slid to control the switch, the dial and the rheostat, and means operatively connecting the knob to operate the tuning instrument when the knob is rotated.

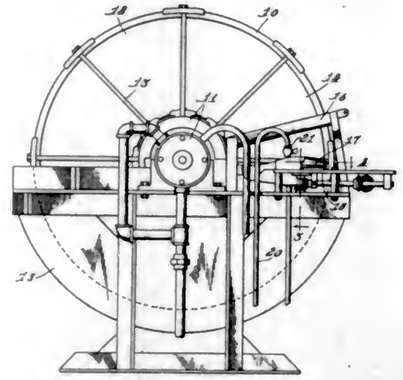
1,871,877. APPARATUS FOR CORRELATING SPACED POINTS OF OBSERVATION. HENRY H. BUCKMAN, Jacksonville, Fla., assignor of one-half to Roland Lord O'Brian, Buffalo, N. Y. Filed June 25, 1929. Serial No. 373,623. 6 Claims. (Cl. 88—1.)

1. Apparatus, for projecting an image of an indication of the functioning of a moving vehicle into the field of normal operating vision for an operator upon the vehicle, which vehicle includes an indicator provided with symbols, a source of light, and means for projecting the light to the



symbol to illuminate the same, comprising, in combination with said vehicle, means for reflecting the illuminated symbol into the field of normal vision.

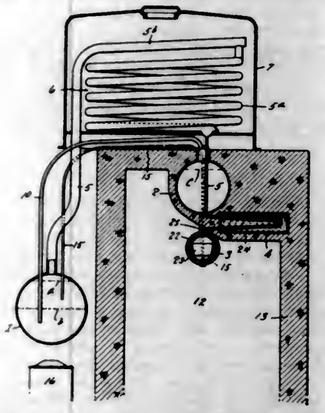
1,871,878. PRECOATING DEVICE. SIDNEY E. CAHOON and WILLIAM BACHELDOR, Wood River, Ill., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Sept 9, 1929. Serial No. 391,321. 4 Claims. (Cl. 210—203.)



1. In combination a filter disk, a rotatable disk mounted adjacent one side of the filter disk, means for rotating the rotatable disk in such a direction that the periphery of the rotatable disk moves in a direction from the periphery of the filter disk toward the center thereof, and means for applying a slurry to said rotatable disk at a point between the center of said disk and the periphery thereof whereby a larger amount of slurry will be thrown toward the periphery of the filter disk than will be thrown toward the center portion thereof and means to direct the slurry toward the filter disk and to catch excess slurry which is thrown from the rotatable disk and which does not adhere to the filter disk.

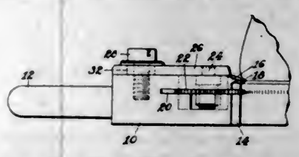
1,871,879. REFRIGERATION APPARATUS. LEE S. CHADWICK, Shaker Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 9, 1929. Serial No. 361,579. 17 Claims. (Cl. 62—118.)

1. In refrigeration apparatus of the intermittent absorption class, the combination of a cabinet enclosing the cold space, a generator-absorber, heating means therefor, a receiver insulated from the cold space, conduits through which the generator-absorber and receiver communicate, a main condenser for producing refrigerant condensate for delivery to the receiver, an evaporator communicating with the receiver and arranged in heat exchanging relation



to the cold space, and an auxiliary condenser insulated from the cold space for acting upon any refrigerant that passes from the receiver to the evaporator, the auxiliary condenser containing a liquid whose freezing point is above the temperature of the evaporating refrigerant and below a temperature value above which it is desired the temperature of the cold space shall not go.

1,871,880. FINISHING TOOL. ALFRED HENRY COUSINS, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 23, 1929, Serial No. 409,371, and in Great Britain Dec. 15, 1928. 9 Claims. (Cl. 12—104.)

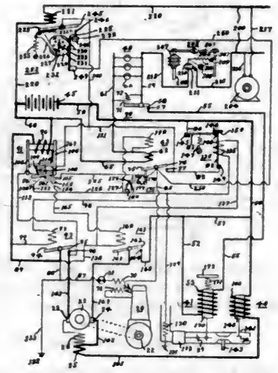


1. A tool for finishing a heel upon a single transfer thereabout of the point of contact of the tool therewith, said tool having a work engaging surface arranged to burnish the entire peripheral face of the heel, and means disposed at one side of said surface for indenting the heel whereby the indenting is effected on a previously burnished surface as successive portions of the heel surface are progressively presented to the tool.

1,871,881. ELECTRICAL APPARATUS. ERNEST DICKEY, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed July 29, 1929. Serial No. 382,051. 9 Claims. (Cl. 171—97.)

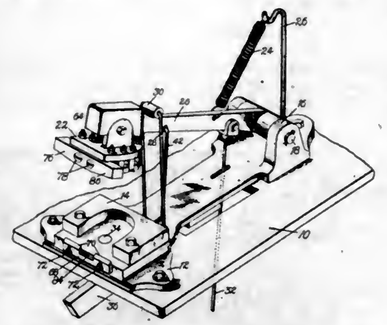
1. An electrical generating system comprising, in combination; an intermittently operating work circuit, a source of current connected with the work circuit; a second source of current adapted to supply current to the work circuit; and means adapted to render the second source of current operable only on alternate demands for current by the work circuit.

9. An electrical generating system comprising in combination an intermittently operating work circuit, a source of current connected to the work circuit, a second source of current adapted to supply current to the work circuit, and means responsive to a demand for current adapted to render the second source of current operative to supply current to the work circuit only after the first named source of current has been rendered operative and



after the cessation of the first demand, said means also being arranged to render the first named source of current operative in response to a demand for current by the work circuit after said second source of current has been rendered operative to supply the demand a predetermined number of times.

1,871,882. HEEL MACHINE. PETER K. DBOUKAS, Brockton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 10, 1929. Serial No. 413,112. 9 Claims. (Cl. 12—50.)

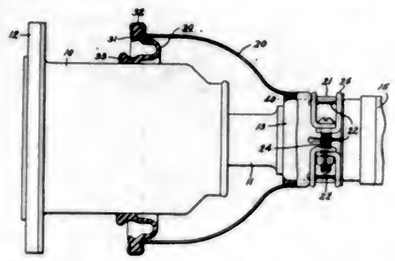


1. In a heel machine, a pressure applying member comprising a plurality of independent yielding elements having inclined pressure exerting faces constructed and arranged to engage a heel blank at localities spaced apart along the margin of one face of the blank.

1,871,883. CASING FOR UNIVERSAL JOINTS. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed July 12, 1929. Serial No. 377,840. 1 Claim. (Cl. 64—89.)

In combination, a universal joint having two members relatively slidable as well as universally swingable relative to each other, a metal housing secured to one of said members and overlapping the second member in spaced relation therewith so as to clear same in all relative positions of said members, and a molded elastic rubber clos-

ure collar having on its outer periphery a molded bead fixed to said metal housing and on its inner periphery a resilient ring snugly surrounding said second member by its elastic stretch, said closure collar having a sub-



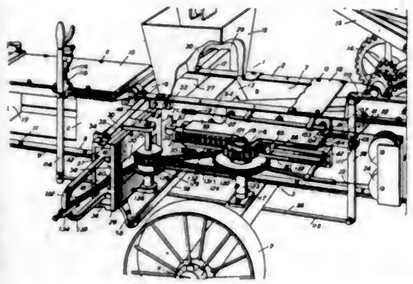
stantially U-shaped section when said members are in their aligned or normal position, whereby to simply provide for both sliding and angular movements between said members.

1,871,884. TABLE TOP. ROY M. HIGGS, Cleveland, Ohio. Filed Feb. 11, 1929. Serial No. 338,953. 1 Claim. (Cl. 45—31.)



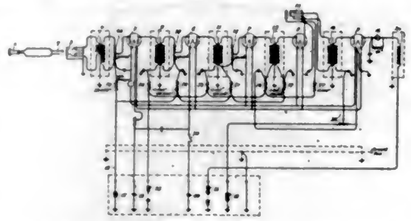
An integrally formed reinforced table top including a supporting area having a portion pressed inwardly to form a closed reinforcing rib for the said area, the adjacent walls of the rib being pressed tightly together in contactual relation throughout their extent, to form a smooth supporting surface for the table top, said walls being parallel and extending substantially at right angles to the supporting surface.

1,871,885. TIER MECHANISM FOR HAYPRESSES. WILLIS V. HOWARD, Leavenworth, Kans. Filed Feb. 28, 1930. Serial No. 432,133. 17 Claims. (Cl. 100—20.)



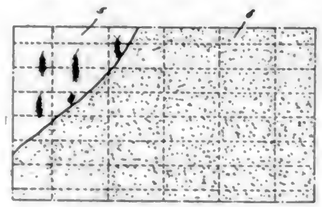
2. In a baling machine including a baling case and a plunger reciprocable in the case for forming a bale, needle members movable transversely through the case for projecting strands of wire about the end of a bale, means for actuating the needles including a rack operable by the plunger, a second rack reciprocable in one of said needles, tier means in one of said needles including a gear member operable by the second named rack and having a through radial slot for receiving the projected strands, a cam controlling movement of the gear-operating rack relative to said needle for rotating said gear, and actuator mechanism including a gear operable by the first named rack to move the needles.

1,871,886. SOUND MEASURING SYSTEM. ALFRED H. INGLIS, Upper Montclair, WALTER D. GOODALE, Jr., East Orange, and EGINHARD DIETZE, Westfield, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed May 6, 1931. Serial No. 535,514. 5 Claims. (Cl. 181—0.5.)



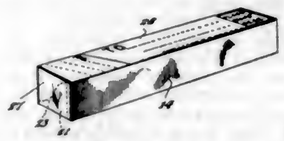
1. In a sound-measuring system, the combination with means to pick up sound and to convert it into an electrical current, of means to amplify the said current, the said amplifying means including means to render the transmission through said amplifier of the components of the said current corresponding to given frequencies or bands of frequencies in a manner simulating the transmission through the human ear of the sound waves impressed thereon, and means to rectify the amplified current and means to indicate the magnitude thereof, the said indicating means being capable of reaching its maximum value in substantially the same time required by a sound wave to produce its maximum effect upon the human ear.

1,871,887. IMITATION WALLING. ANDREW JASINSKI, Chicago, Ill. Filed Oct. 23, 1930. Serial No. 490,785. 1 Claim. (Cl. 91—68.)



The herein described method of coating a flexible sheet which is to be cut into pieces to form an imitation brick wall comprising applying a mixture of sand and paint material to a surface of the flexible sheet, then coating the surface, after the same has dried to a certain extent, with stone dust, and then trowelling the surface to cause some of the sand to appear through the dust.

1,871,888. CHRISTMAS GREETING CIGAR WRAPPER. WALTER E. JOHNSON, Clovis, N. Mex. Filed Aug. 14, 1931. Serial No. 557,152. 1 Claim. (Cl. 229—37.)



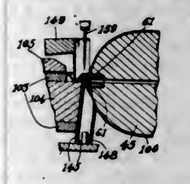
A combined greeting card and gift container formed from a single blank of material creased longitudinally and transversely and having the end portions slit to provide tabs, said blank being adapted to be folded along

the longitudinal creases to provide enclosing walls of a container and being adapted to be folded along the transverse creases to position certain of the tabs in overlapped relationship to provide end walls for the container, alternate flaps at each end of said blank being provided with arcuate notches in the extremities, said alternate flaps being adapted to be directed inwardly within the enclosure of the container walls during the folding operation to converge at the axis of the container whereby said notches coact in forming substantially circular openings to receive the ends of the gift and anchor the same axially in the container, and a gummed fastening strip carried by said blank adapted to be stuck to contiguous longitudinal walls of the container and to the opposite end walls thereof for sealing the package.

1,871,889. TEXTILE OIL. ANSEL M. KINNEY, Chicago, Ill., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Jan. 3, 1927. Serial No. 158,834. 10 Claims. (Cl. 87—9.)

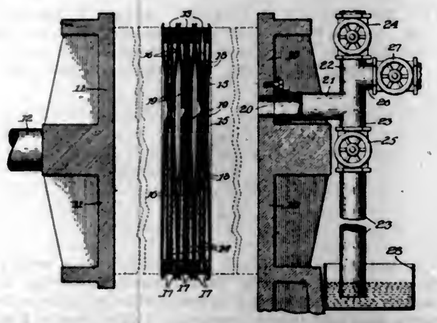
1. A rayon-oiling composition comprising low viscosity lubricating oil, oleic acid and alkali metal soaps of oil soluble sulfonic acids derived by the treatment of mineral oils with strong sulfuric acid.

1,871,890. METHOD OF MAKING RUBBER SHOES. FAY D. KINNEY, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 29, 1928. Serial No. 309,181. 16 Claims. (Cl. 12—142.)



1. The method of manufacturing a shoe containing rubber, which comprises assembling in succession parts of the upper upon a form the surfaces of the sides of which are cylindrical, removing the assembled parts from the form, placing them upon a last and completing the manufacture of the shoe.

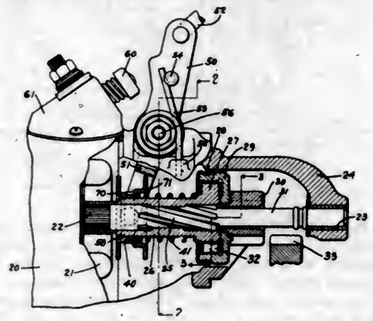
1,871,891. ART OF FILTRATION. WILLIAM E. KINNISON, Casper, Wyo., assignor to Standard Oil Company of Indiana, Whiting, Ind., a Corporation of Indiana. Filed Apr. 17, 1930. Serial No. 445,052. 5 Claims. (Cl. 210—191.)



1. In a filter press of the type described, parallel flexible filter elements having a discharge opening spaced from the bottom thereof, means for holding the periphery of said elements together to form a chamber for holding a slurry when the elements are flexed outwardly, and means for flexing said elements inwardly to discharge liquids from said chamber through said opening.

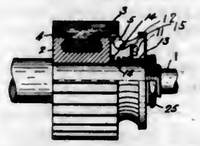
4. In operating a filter of the type wherein adjacent portions of flexible filter cloth entrap a liquid, the method of removing the liquid therefrom which comprises flexing said portions of filter cloth whereby they are forced against each other to expel the entrapped liquid therefrom.

1,871,892. ENGINE STARTER. ERNEST R. KUHLS, Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed July 31, 1929. Serial No. 382,538. 4 Claims. (Cl. 74—7.)



1. A collar having a tubular portion of substantial length adapted to slide along a cylindrical body, and comprising two metal members formed of sheet metal of substantially uniform thickness, each member having a cylindrical portion one part of which is of a greater diameter than the other, the smaller cylindrical portion of the one member telescopically engaging the smaller cylindrical portion of the other, said members each having an outwardly extending, annular flange at its outer end, the cylindrical portion of the smallest internal diameter providing a bearing for guiding the collar upon the cylindrical body.

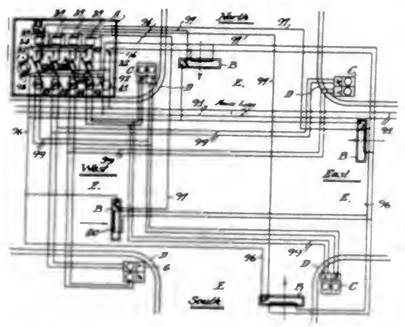
1,871,893. SHORT CIRCUITER. EVERETT P. LARSH, Vandalia, Ohio, assignor to The Master Electric Company, Dayton, Ohio, a Corporation of Ohio. Filed Nov. 21, 1929. Serial No. 408,843. 12 Claims. (Cl. 172—279.)



1. In a short circuiter for motor commutators, a series of oscillatory contact members located axially beyond the extremities of the bars of the motor commutator and in concentric spaced relation therewith, a mounting for said contact members including a sleeve surrounding the motor shaft, a flange carried by the sleeve in outwardly spaced relation from the ends of the commutator bars and overhanging the outer ends of the contact members, and upon which the contact members abut during their swinging movement, and an annular member slidingly mounted upon said sleeve interiorly of the contact members and also located in spaced relation beyond the ends of the commutator bars upon which the contact members rest when retracted, and a spring exerting its influence

upon said annular sliding member against the tension of which said contact members are movable under centrifugal influence into short circuiting engagement with the commutator bars.

1,871,894. CROSS STREET VISION WARNING SIGNAL. IRWIN LICHTENSTEIN, San Francisco, Calif. Filed Aug. 22, 1930. Serial No. 477,108. 5 Claims. (Cl. 177—339.)

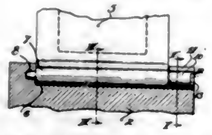


1. In traffic signalling systems having signal energizing circuits; a control and distributing unit, said unit comprising a motor, a motor energizing circuit, motor and signal circuit controlling switches in said motor energizing circuit respectively, electro-magnetic means for moving said switches to close the circuits, said electromagnets being in said motor energizing circuits, and means actuated by said motor for moving said switches to open said signal and motor circuit after closure by said electro-magnetic means and including a turntable, gear connections between said motor and said turntable, said switches including pivoted contact carrying arms, and means on said turntable engaging said arms to move them to their circuit opening positions.

1,871,895. NITROPHOSPHATES. EMIL LÜSCHER, Basel, Switzerland, assignor to the Firm: Lonza Elektrizitätswerke und Chemische Fabriken Aktiengesellschaft, Gampel and Basel, Switzerland. Filed Dec. 13, 1928, Serial No. 325,919, and in Switzerland Dec. 22, 1927. 2 Claims. (Cl. 71—9.)

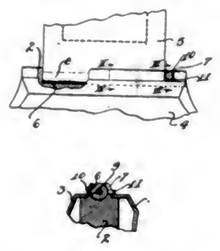
1. Process for improving the scatterability and stability of nitrophosphates comprising admixing the nitrophosphate in granular form with relatively small quantities of pulverulent non-hygroscopic substances, heating the mixture to a temperature at which superficial softening of the nitrophosphate granules takes place and simultaneously agitating the mixture, whereby the pulverulent particles are caused to positively adhere to the softened surfaces of the nitrophosphate granules and form a superficial thin coating thereon.

1,871,896. WRIST WATCH. ARTHUR E. MANHEIMER, Chicago, Ill., assignor to Manheimer Watch Company, Chicago, Ill., a Corporation of Illinois. Filed May 21, 1928. Serial No. 279,386. 18 Claims. (Cl. 58—88.)



3. In combination, a watch case including a cover and having a constricted slot adjacent each of a pair of opposed edges thereof, a pair of strap segments, each segment having a loop on an end thereof, a pin for insertion in each of said loops, each of said loops with the pin therein being insertable simultaneously in one of said slots, and an enlarged head on each of said pins provided with a shoulder engageable by the cover of said case.

1,871,897. STRAP WATCH. ARTHUR E. MANHEIMER, Chicago, Ill., assignor to Manheimer Watch Company, a Corporation of Illinois. Filed May 26, 1928. Serial No. 280,786. 9 Claims. (Cl. 58—88.)



1. In a device of the class described, a watch including a body having a longitudinal slot open at one end, a fastener having a head in said slot and spaced from said end, said slot having a constricted throat to prevent removal of said head therethrough, the body, adjacent said open end, having a notch extending transverse to said slot, and a plug disposed in said open end and having a lug removably engaged in said notch, whereby to prevent undesired removal of the head through said open end.

4. In a device of the class described, a watch body having a slot provided with a constricted throat, a strap doubled over itself, the bight of said strap being insertable in said slot through said throat and a pin spacing the arms of the strap adjacent the bight and thereby enlarging the bight, and a bayonet joint connecting said pin to said body, whereby to prevent undesired removal of the bight through said throat.

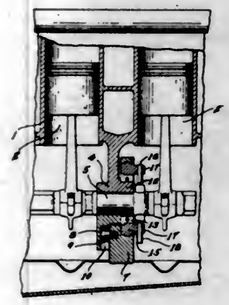
8. In combination, a watch case in which the body is provided with a portion projecting beyond the case covers, said portion having a slot and a notch provided with a wall extending transverse to said slot, a strap for said case and having an end disposed in said slot, and means projecting into said end for locking said end in said slot, said means including a detent removably engaging the transverse wall of said notch, whereby to prevent removal of said end.

1,871,898. WATCH MOUNTING. ARTHUR E. MANHEIMER, Chicago, Ill., assignor to Manheimer Watch Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 15, 1928. Serial No. 312,497. 7 Claims. (Cl. 206—38.)



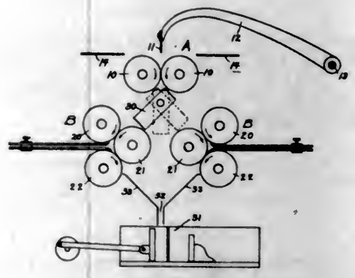
1. Means for attaching a watch to an article having a recess therein, including tubular means projecting into said recess and connected to said article by means of less width than said tubular means, said watch having a keyhole slot therein to receive said tubular means, and a pin passable through said means and engageable with said watch to retain the same in said recess.

1,871,899. BALANCING DEVICE. CHARLES ORR MARSHALL, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 13, 1924. Serial No. 755,638. 1 Claim. (Cl. 74—38.)



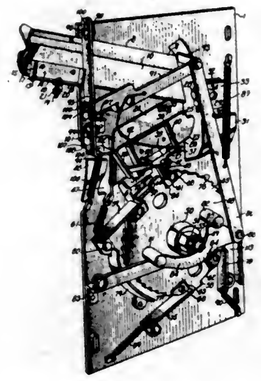
In an engine, in combination, a plurality of cylinders, pistons reciprocally mounted in said cylinders, a crank shaft, connecting links connected to said pistons and said crank shaft, the arrangement being such that the center of the combined mass of the pistons and connecting links has a vibratory movement, a weight, a bearing boss surrounding said crank shaft and having its axis parallel to the axis of said crank shaft and lying in the same vertical plane, a ring surrounding said boss and rotatable thereon, and a member slidably mounted on said ring and having a radially slidable connection with said crank shaft for moving said weight to neutralize the movement of the combined center of mass of said pistons and connecting links.

1,871,900. PAPER FOLDING MACHINES. JOHN MENTGES, Sidney, Ohio, assignor, by mesne assignments, to Dexter Folder Company, New York, N. Y., a Corporation of New York. Filed May 14, 1925. Serial No. 30,149. 3 Claims. (Cl. 270—62.)



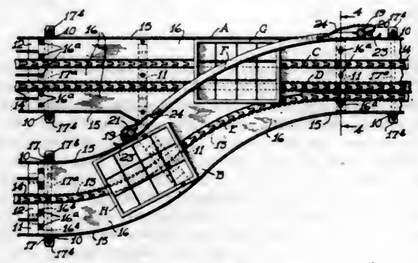
1. In a folding machine, folding mechanism, a sheet guide comprising separately formed juxtaposed plates on and between which sheets may be guided in different directions from the folding mechanism in accordance with different operative positions which the guide may occupy with respect to said folding mechanism, spacing means formed on one end of each plate and to which the opposite end of the adjacent plate is secured, and means for moving the guide from one of said positions to another.

1,871,901. COIN MECHANISM FOR VENDING MACHINES. CHARLES A. MELCHERT, Kansas City, Mo., assignor, by mesne assignments, to Archie O. Long, Kansas City, Mo. Filed Apr. 2, 1931. Serial No. 527,116. 19 Claims. (Cl. 194—103.)



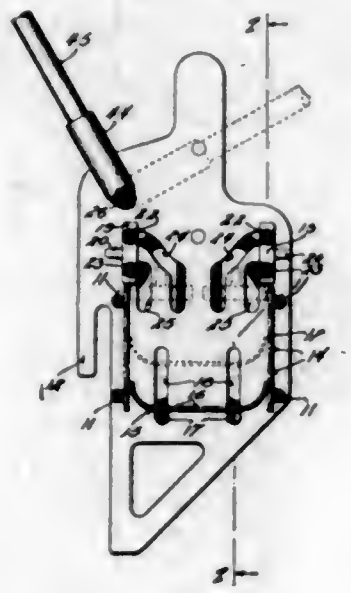
18. In a coin-controlled mechanism, a support, a coin chute on the support, a weighing device associated with said chute, and means for controlling actuation of the weighing device operable upon vibration of the support.

1,871,902. SELECTING CONVEYER. JULIUS J. MOJONNIER, Oak Park, Ill., assignor to Mojonnier Bros. Co., a Corporation of Illinois. Filed Apr. 13, 1932. Serial No. 604,942. 8 Claims. (Cl. 198—20.)



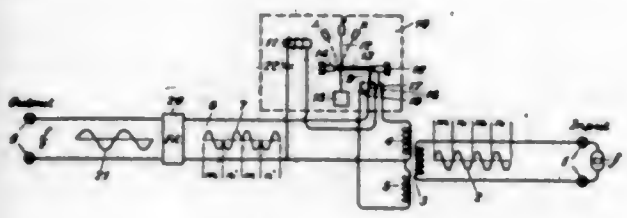
8. A conveyer of the class described comprising common and divergent channel branches each having floor and side members for receiving and guiding articles being conveyed, conveyer chains extending along said common and divergent branches, one of said chains having an upper surface above any of the upper faces of its fellows, said chain being off center on one side at one point in its travel and off center on the other side in another point in its travel relative to the path of travel established by said guide.

1,871,903. MOP WRINGER. EDWARD E. NELDNER, Milwaukee, Wis. Filed Dec. 11, 1930. Serial No. 501,500. 8 Claims. (Cl. 15—261.)



1. A mop wringer comprising a mop receiver, a pair of pressure members both movable therein toward and from each other, one of said pressure members comprising a pair of rockable plates, and means for rocking said plates and for actuating both of said pressure membera to squeeze a mop therebetween.

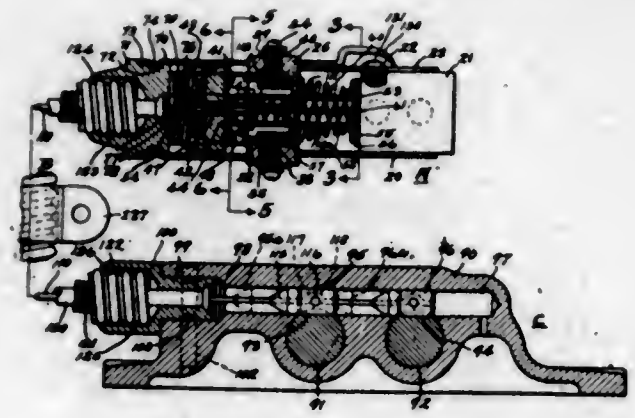
1,871,904. FREQUENCY CONVERTER. ELIOT W. NILES, Bloomfield, N. J., and WILLIAM H. EDWARDS, Bayside, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 13, 1929. Serial No. 346,775. 8 Claims. (Cl. 172—281.)



1. A frequency converter comprising in combination with a source of alternating current, a current delivery circuit, a reed whose natural periodicity is different from that of the current from said source and operable thereby to vibrate at its own periodicity, current modifying means associating said current source with said delivery circuit, said reed when so vibrated so controlling said means as to cause current from said source to be delivered to said circuit unmodified during a definite portion of each vibration period and to be delivered thereto reversed in phase as compared to the unmodified current during the remainder of each said period, whereby the current flowing in said delivery circuit contains frequencies different from said source.

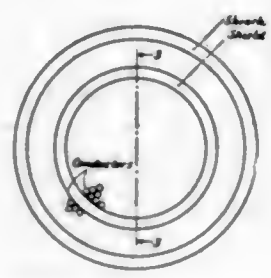
1,871.905. COINCIDENTAL LOCK. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Jan. 26, 1929. Serial No. 335,305. 18 Claims. (Cl. 70—127.)

1. In a controller unit for controlling a plurality of functions, the combination comprising, circuit function completing means, bolting function completing means, and an actuator assembly for both of the function completing means, including, a sleeve and cap disposed in end engagement with one of the completing means for positive actuation thereof, and disposed about a portion of the other



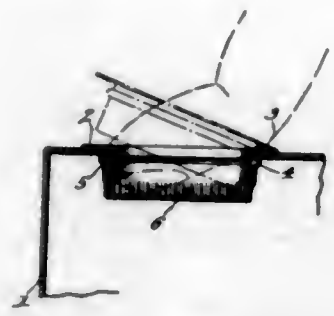
function completing means, and a spring within the sleeve between the cap and said other function completing means for conditional actuation thereof.

1,871,906. CONCENTRIC SHIELD FOR CABLES. HARRY NYQUIST, Millburn, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed July 20, 1929. Serial No. 379,842. 6 Claims. (Cl. 179—78.)



1. A cable comprising a plurality of conductors arranged in two concentric cylindrical bundles one within the other, and a concentric shield of magnetic and conductive material interposed between the bundles, said shield being in the form of a thin wide tape wound helically about the inner bundle, and the width of said tape being more than twice the pitch of the helix.

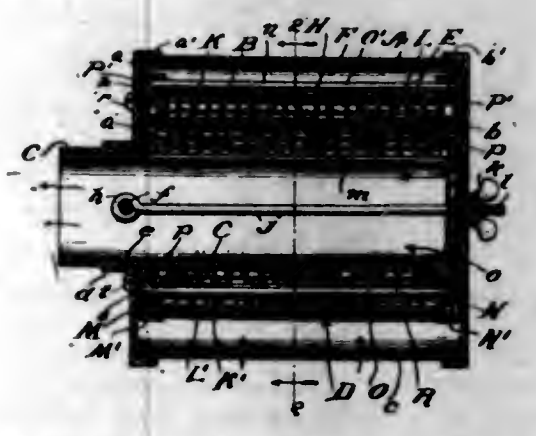
1,871,907. METAL CAP FOR CLOSING PAPER CONTAINERS. LEONARD OLT, Baltimore, Md., assignor to Crown Cork & Seal Company, Baltimore, Md., a Corporation of New York. Filed Apr. 30, 1931. Serial No. 534,069. 8 Claims. (Cl. 229—43.)



1. The combination with a container having a substantially flat wall provided with an opening, of a hollow outwardly opening cap disposed in said opening, said cap hav-

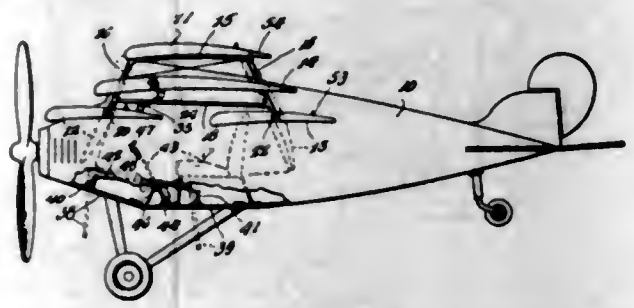
ing a relatively broad flange engaging the exposed surface of said flat wall at said opening and an outwardly directed bead engaging material of the container about the edge of the opening and the opposed under surface of said wall to clamp the cap in sealing position, the cap being removable from said container by insertion of a finger or similar means in the hollow of the cap and levering upon said flange against the action of said bead.

1,871,908. AIR CLEANER. FREDERICK STRATTNER OREM, Baltimore, Md. Filed Nov. 25, 1929. Serial No. 409,626. 21 Claims. (Cl. 183—70.)



1. In an air cleaner, a substantially tubular casing having an air inlet opening in its wall, an air outlet tube centrally disposed within and co-axial with said casing and having an opening in its wall for the passage of air, and a substantially tubular filter unit disposed in the space between the casing and tube and having its axis offset with respect to the axis of the casing, said tubular filter unit having an air passage in its wall at a point removed from the air inlet in the casing.

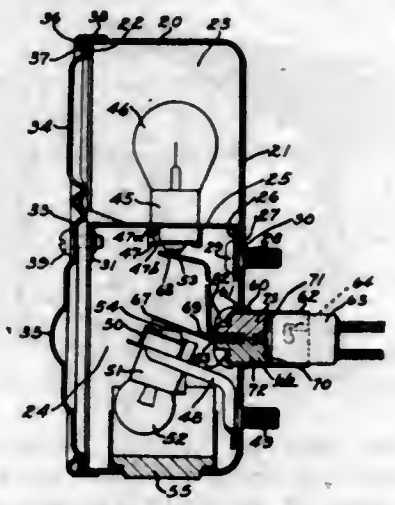
1,871,909. AIRPLANE. SANDY PALLOTTA, Youngstown, Ohio. Filed June 22, 1931. Serial No. 546,075. 9 Claims. (Cl. 244—12.)



1. An air craft comprising a fuselage, a fixed wing above the fuselage, a trap door in the bottom of the fuselage through which the body of the fuselage is adapted to be inflated during gravitating movement of the air craft, legs extending downwardly from the ends of the fixed wing, and front, rear and end articulated wings mounted on pivot shafts connecting said legs and adapted to be rocked to project downwardly from the fixed wing and form therewith an open box-like structure on each side of the fuselage adapted to be inflated by gravitating movement of the air craft.

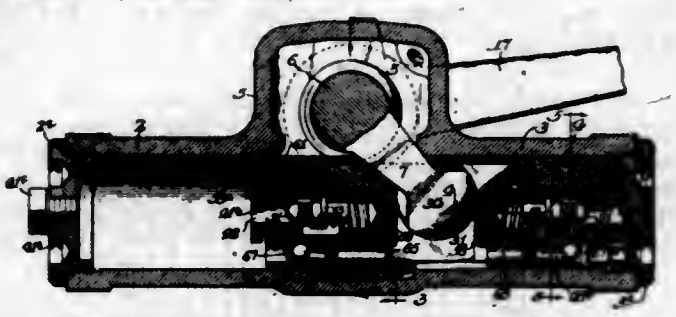
1,871,910. CONTACT PLUG FOR COMBINATION LAMPS. LESLIE O. PARKER, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 25, 1928. Serial No. 308,312. 4 Claims. (Cl. 173—335.)

1. A socket for an electrical plug-and-socket connector comprising a shell open at its forward end, a pair of terminals within the shell, a pair of supporting elements respectively carrying the said terminals, the supporting elements being semi-cylindrical blocks of insulating material cooperating to insulate the terminals one from the other, and to close the rearward end of the shell, a pair of shoulder members respectively engaging the rearward end of the shell, and the shell having a pair of tang formations



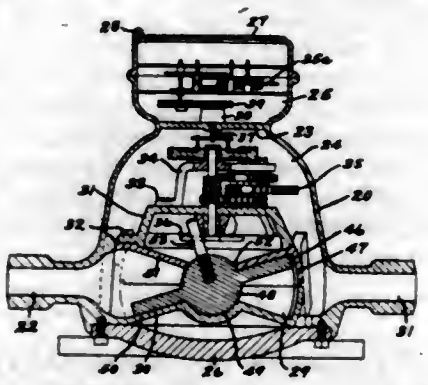
each engaging a depression in one of said supporting elements, whereby the terminals are insulatingly retained within the shell.

1,871,911. SHOCK ABSORBER. JAY C. PARSONS, Chicago, Ill., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 23, 1929. Serial No. 401,740. 14 Claims. (Cl. 188—88.)



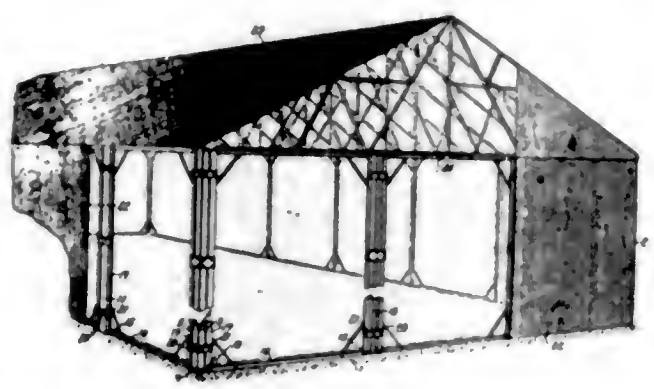
1. A shock absorber comprising a cylinder, a plunger reciprocable in said cylinder, said plunger having head portions held in spaced relation by an integral web portion, and throttling means in said head portions providing constantly open orifices for throttling of fluid upon movement of said plunger in opposite directions in said cylinder within a predetermined range of fluid pressures, said throttling means being adapted, in response to pressures in excess of said predetermined range of pressures, to increase their orifices.

1,871,912. OPERATING PISTON FOR LIQUID METERS. EARL S. PATCH, Dayton, Ohio, assignor to The Moraine Products Company, Dayton, Ohio, Corporation of Ohio. Filed Dec. 21, 1927. Serial No. 241,695. 2 Claims. (Cl. 73—98.)



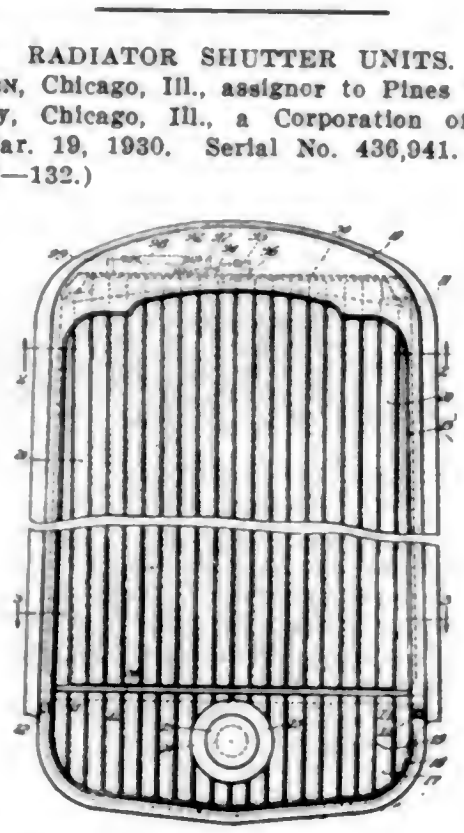
1. A nutating piston for liquid meters comprising, a disk and bearing surfaces therefor, said disk and bearing surfaces being integrally formed of a porous metallic structure and impregnated with a lubricant so as to retain its self lubricating qualities for long periods of use.

1,871,913. STEEL BUILDING CONSTRUCTION. ALFRED B. PATTERSON, Tulsa, Okla. Filed July 12, 1930. Serial No. 467,482. 10 Claims. (Cl. 189—1.)



1. In building structure of the character described, spaced corner and intermediate columns having outer faces in one plane, a frame of less width than said spacing adapted to be mounted between a pair of columns from either the interior or exterior of the structure, tie plates abutting the frame and said faces to maintain the frame in the same plane with said faces, and means for connecting the tie plates to the columns.

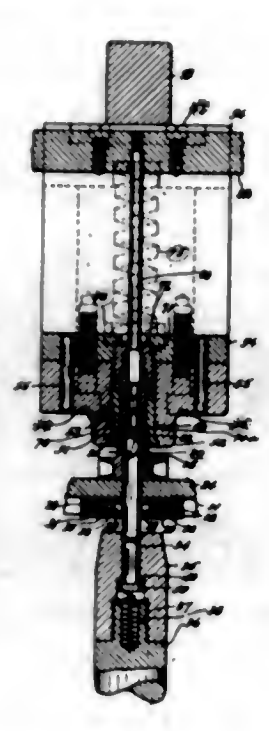
1,871,914. RADIATOR SHUTTER UNITS. EDGAR G. PETERSEN, Chicago, Ill., assignor to Pines Winterfront Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 19, 1930. Serial No. 436,941. 7 Claims. (Cl. 257—132.)



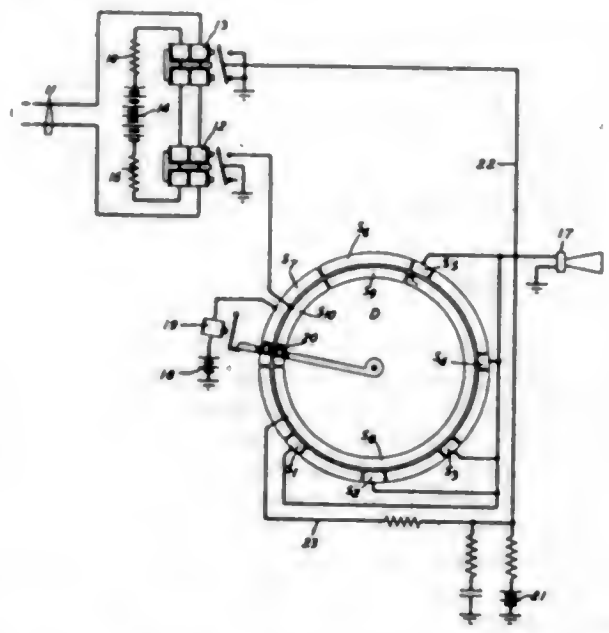
1. A radiator shutter unit comprising a frame, said frame comprising a pair of side frame members and a pair of end frame members, oblique extensions carried by the ends of one of said frame members, oblique extensions carried by the adjacent ends of said side frame members, means for securing the extensions together forming a fenestration, a plurality of shutters of different lengths pivotally mounted in said frame to utilize the maximum amount of opening in said fenestration, and a common bearing strip for pivotally supporting the ends of said shutters of different lengths, said bearing strip having offset portions to bring its bearings into juxtaposition with the ends of shorter shutters.

1,871,915. APPARATUS FOR CONTRACTING A RING ABOUT A BODY. ALVA W. PHELPS, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Aug. 15, 1929. Serial No. 386,191. 21 Claims. (Cl. 78—15.)

3. Apparatus for contracting a ring about a body comprising in combination, a work holder comprising an anvil through which the body may extend and against which the ring rests while being contracted about the body, means for holding the body in a definite relation to the anvil, a reciprocating pressure head, a ring contracting die carried by the head for engaging the ring while supported by the anvil, and stationary stripper including a part extending through the die to engage the body in case the ring clings to the die when moved away from the anvil.

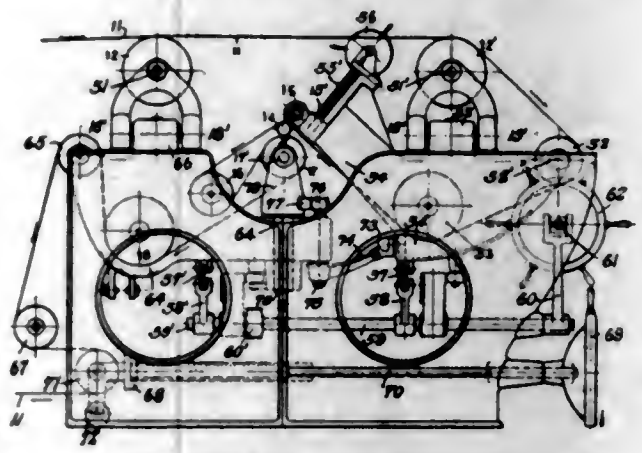


1,871,916. SIGNAL MONITORING DEVICE. RALPH E. PIERCE, Larchmont, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 29, 1930. Serial No. 478,745. 5 Claims. (Cl. 178—69.)



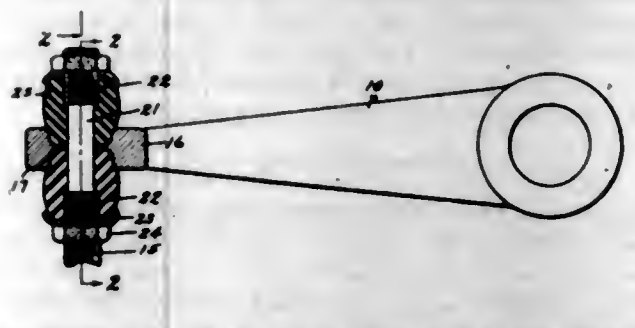
1. In an impulse transmission system, a device for indicating and measuring received signals for distortion which manifests itself in lengthening or shortening the duration of impulses, comprising means responsive to the beginning or ending of a current impulse in the received signals for operating normally ineffective circuits, rotary means, and indicating means intermittently connected to said rotary means and normally maintained ineffective to operate, said indicating means being effective to operate only when a received current impulse begins or ends at such times when said rotary means is connected to said indicating means.

1,871,917. APPARATUS FOR COVERING THE OUTSIDE SURFACE OF METAL PIPES WITH A MIXTURE OF FIBROUS SUBSTANCES AND HYDRAULIC CEMENT SUBSTANCES. AGOSTINO ROCCA, Dalmine, Italy. Filed Aug. 11, 1928, Serial No. 298,978, and in Italy Aug. 18, 1927. 19 Claims. (Cl. 91—54.)



1. A machine for covering the outer surface of a cylindrical body with a plastic material, which comprises a travelling endless band carrying a layer of plastic material and having a width substantially less than the length of the cylindrical body, supporting means for the cylindrical body adapted to permit rotary and axial movement thereof, means guiding said band into contact with the cylindrical body, said guiding means being arranged to incline the direction of travel of the portion of said band which engages the cylindrical body with respect to the axis of the latter.

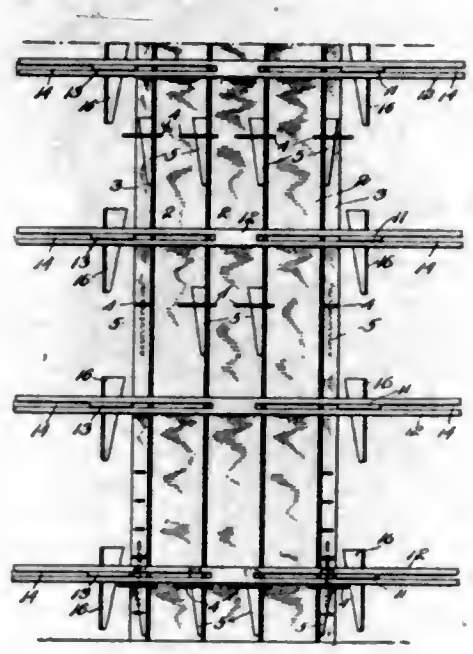
1,871,918. OSCILLATING JOINT. EDWIN F. ROSSMAN, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 15, 1929. Serial No. 386,194. 1 Claim. (Cl. 287—85.)



A universal oscillating joint connecting two relatively movable parts comprising: a seat member rigid with one of said parts and having elongated seats on opposed faces thereof and a T-shaped slot therein, the cross of said T-shaped slot extending with the short axis of said seat and the stem of said slot extending with the long axis of said seat through the edge thereof, said other movable part comprising a rigid rod, said rod having two resilient rubber blocks mounted thereupon in slightly spaced relation, said rod with said resilient blocks thereupon being slideable laterally through said T-shaped slot to a position where said blocks seat within said opposed elongated seats, and means carried by said rod for engaging the opposed outer surfaces of said blocks and compressing same upon said seats.

1,871,919. FORM FOR CONCRETE COLUMNS. FRED V. SCHUBERT, Boston, Mass. Filed Nov. 24, 1928. Serial No. 321,565. 8 Claims. (Cl. 25—131.)

5. A form for making flat sided concrete columns, comprising a plurality of sheet metal units extending longitudinally of each side of the form for supporting the sides of the column, means connecting the units of each side together, and means connecting each complete side to an adjacent side of the form, thereby to provide a normally self-sustaining form, a girdle encircling said form and comprising bars bearing edgewise against the sides of the form and having portions overlapping one on the other, slots formed diagonally in said bars in such positions that the slots in overlapping portions of the bars may be brought into register with each other at a corner of the form, wedges located in said registering slots and cooperating with the overlapping portions of the bars to tighten the girdle on the form, yokes cooperating with the overlapping

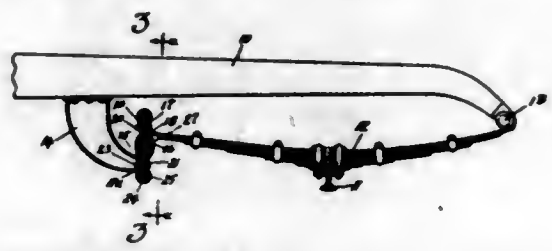


portions of each pair of bars at certain corners of the form, each yoke being open at one side to receive one bar and slotted at its opposite side to permit the end of the other bar to pass through it, and having a second slot to register with said diagonal slots in said overlapping portions of the bars to receive and guide a wedge extending through the slots in said yoke and said overlapping portions of the bars.

1,871,920. TEXTILE WEB DYEING PROCESS. JOHN C. SENIOR, Sanford, Me., assignor to Sanford Mills, Sanford, Me., a Corporation of Maine. Filed Apr. 11, 1930. Serial No. 443,622. 3 Claims. (Cl. 8—5.)

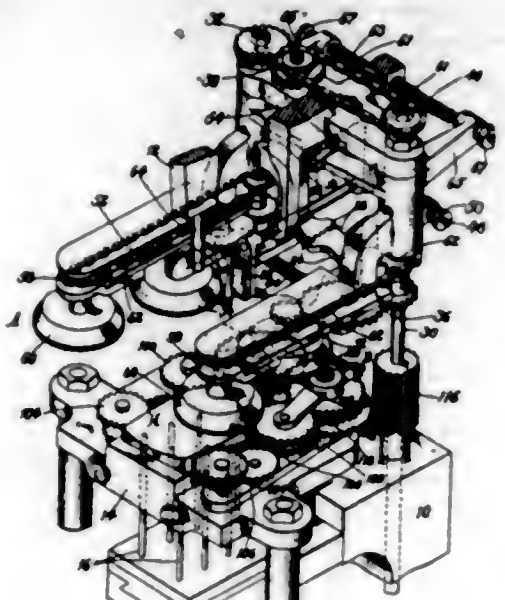
1. The process of progressively dyeing a textile web with a mutable design of color which consists in mixing a water-soluble dye stuff with an oil to render it non-miscible with water, feeding the mixture onto the surface of a travelling body of water, controlling the dispersion and thickness of the film of mixture on the surface of the water by the proportion and kind of oil in the mixture and progressively bringing the textile web into lapping contact with the film.

1,871,921. FLEXIBLE CONNECTER. CHARLES R. SHORT, Detroit, Mich., assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 14, 1926. Serial No. 81,199. 2 Claims. (Cl. 267—30.)



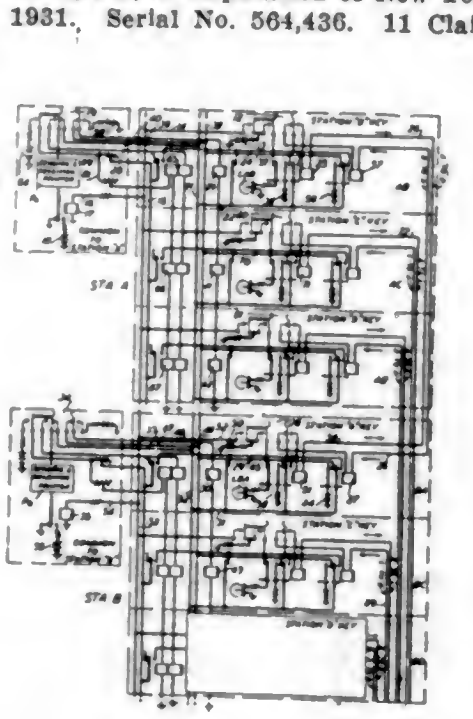
1. In means for flexibly connecting two members, a connecter comprising flexible fibrous material, clamping means engaging a portion of the material for securing the connecter to at least one of the members to be connected, and elastic filling interposed between the edges of the clamping means and the adjacent surfaces of the connecter.

1,871,922. MACHINE AND METHOD FOR USE IN SHOEMAKING. RALPH C. SIMMONS, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 31, 1927. Serial No. 179,974. 41 Claims. (Cl. 1—32.)



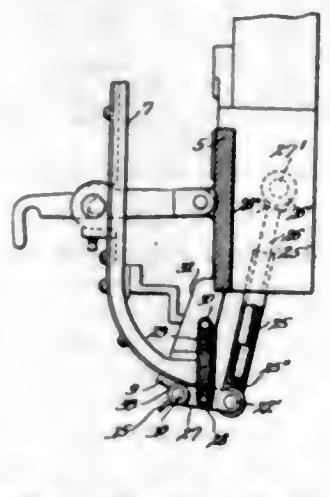
1. In a shoe machine, the combination with operating mechanism, of a movable member for engagement with a shoe-portion, and automatic means for moving the member, said member in its movement being arranged to turn the shoe-portion about an axis passing through it into a predetermined angular relation to the operating mechanism and to maintain said shoe-portion fixed in such angular position during the operation upon it by said operating mechanism.

1,871,923. PRINTING TELEGRAPH SYSTEM. FRED J. SINGER, Rockville Center, N. Y., and LELAND A. GARDNER, Maplewood, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 22, 1931. Serial No. 564,436. 11 Claims. (Cl. 178—2.)



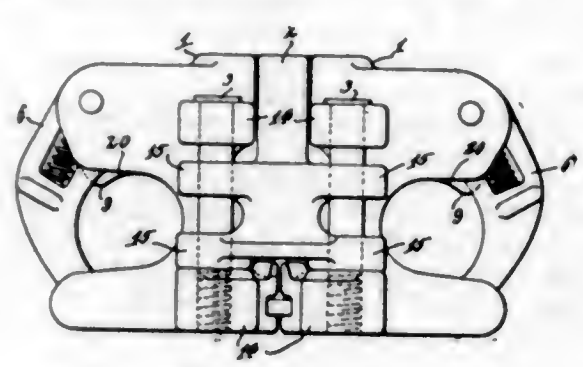
1. A switching system for printing telegraph circuits comprising a first and a second station each provided with a printer normally open-circuited when not in use, circuit arrangements controlled at each station whereby the two printers may be connected together in a closed circuit, said arrangements being characterized by two parallel communicating paths extending between the stations, one of said paths being normally connected to the printer at the first station and open-circuited at the second station, and the other of said paths being normally connected to the printer at the second station and open-circuited at the first station, and a single switching key at each station for controlling the circuit arrangements at both the first and second stations and for connecting the local printer to the path normally open-circuited at the local station.

1,871,924. CAPPING MACHINE. LAWRENCE PIUS SINZ, Huntington Park, Calif., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md., a Corporation of New York. Filed June 24, 1931. Serial No. 546,589. 10 Claims. (Cl. 226—88.1.)



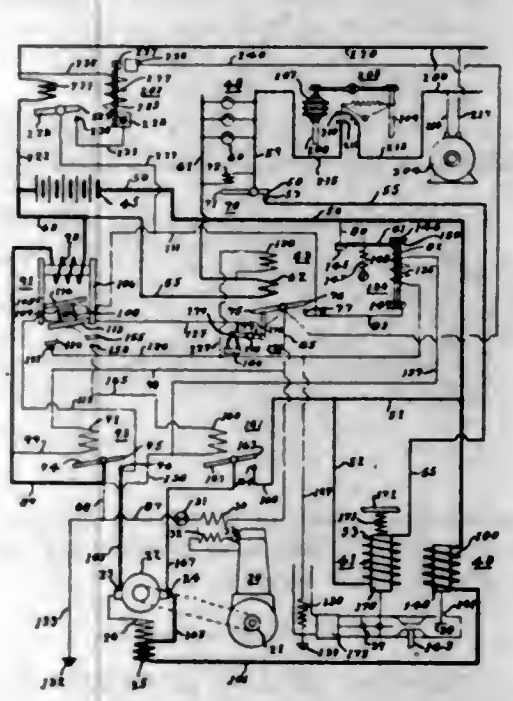
1. In a machine of the class described, a plurality of chutes arranged side by side and having apertures adjacent their delivery ends, a rock shaft adjacent and beneath the delivery ends of the chutes and extending transversely of the chutes, a plurality of latches on said rock shaft and oscillable relative thereto, said latches having nose portions adapted to extend through said chute apertures in checking relation to closure caps in the chutes and having tail portions manually operable to oscillate the latches independently of each other to move the latch noses out of checking relation to the caps, and connecting means between the shaft and latches whereby rocking of the shaft causes simultaneous oscillation of the latches.

1,871,925. WELL PIPE ELEVATOR TRUNNION. NELSON K. SMITH, Los Angeles, Calif., assignor to Byron-Jackson Co., Los Angeles, Calif., a Corporation of Delaware. Original application filed Dec. 7, 1929, Serial No. 412,479. Divided and this application filed June 8, 1931. Serial No. 542,752. 3 Claims. (Cl. 294—90.)



1. An elevator of the character described comprising a pair of doors having concave pipe encircling recesses in their inner faces, means pivotally connecting said doors together at their rear ends, a trunnion extending laterally from each door, the trunnions being substantially straight in a lateral direction and having undersurfaces of uneven contour, such that the undersurface of each trunnion at the front edge is concave and at the rear edge is substantially horizontal and level with the highest point of the concave surface at the other edge.

1,871,926. ELECTRICAL APPARATUS. FRANK F. STARR, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed July 29, 1929. Serial No. 382,027. 2 Claims. (Cl. 290—30.)

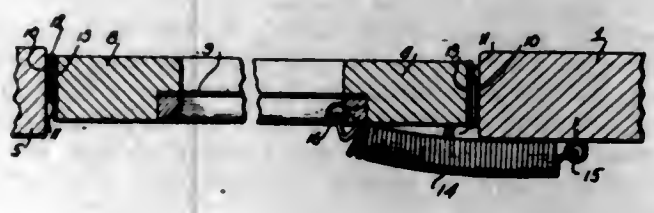


1. An electrical generating system comprising in combination a work circuit, a relatively large translating device contained in the work circuit, a storage battery adapted for supplying current to the work circuit, a prime mover, electrical apparatus adapted for rendering the prime mover operative and being adapted to be driven by the prime mover for supplying current to the work circuit, means for preventing a simultaneous demand for current on the storage battery for starting current by said translating device and for starting current by the electrical apparatus for rendering the prime mover operative, and means responsive to a demand for current by the translating device for controlling said first named means.

1,871,927. TEXTILE OIL. FREDERICK W. SULLIVAN, Jr., Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Dec. 9, 1926. Serial No. 153,731. 8 Claims. (Cl. 87—9.)

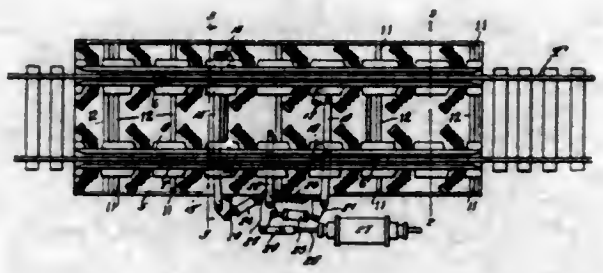
1. A lubricating composition for the treatment of textile fibers for weaving, knitting and the like comprising an oil, an emulsifying agent and a small proportion of an anti-oxydant.

1,871,928. WINDOW SCREEN FIXTURE. FRANK B. VALLADOA, New Bedford, Mass. Filed July 21, 1931. Serial No. 552,221. 2 Claims. (Cl. 156—14.)



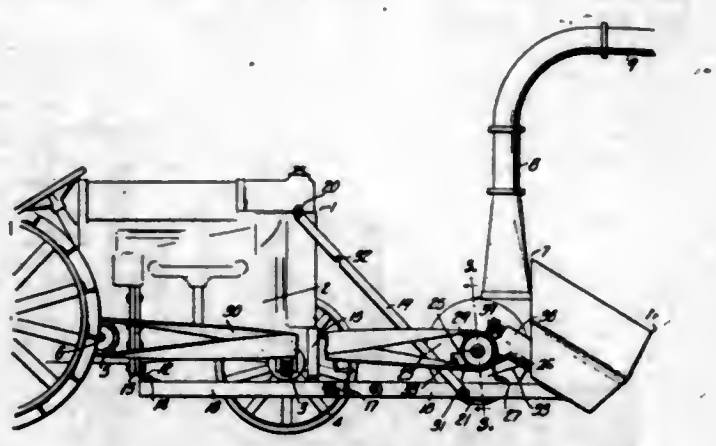
1. In a window screen fixture, the combination with a screen frame, of a spring strip secured to opposite side edges thereof, the spring strip including a reversely bent spring plate having one edge secured to the screen frame, with the reversely bent portion of the strip disposed adjacent the side rail of the screen frame.

1,871,929. CAR RETARDER. JOHN M. VARBLE and RICHARD A. SHANNON, Canton, Ohio; said Shannon assignor to said Varble. Filed Aug. 26, 1930. Serial No. 477,946. 4 Claims. (Cl. 188—62.)



1. In a car retarding apparatus, and in combination, a base, a rail support integral with said base, a rail on said support, guides on said base at opposite sides of said support, and at right angles thereto, wheel engaging bars disposed transversely of said guides parallel to said rail on opposite sides of said rail, each of said wheel engaging bars provided on its upper edge with an inwardly directed flange adapted to overlie and parallel the ball of said rail, and means for moving said wheel engaging bars toward and away from said rail.

1,871,930. TRACTOR MOUNTING FOR GRAIN BLOWERS. HALBERT C. WALLACE, Fargo, N. Dak. Filed May 13, 1929. Serial No. 362,646. 6 Claims. (Cl. 302—17.)

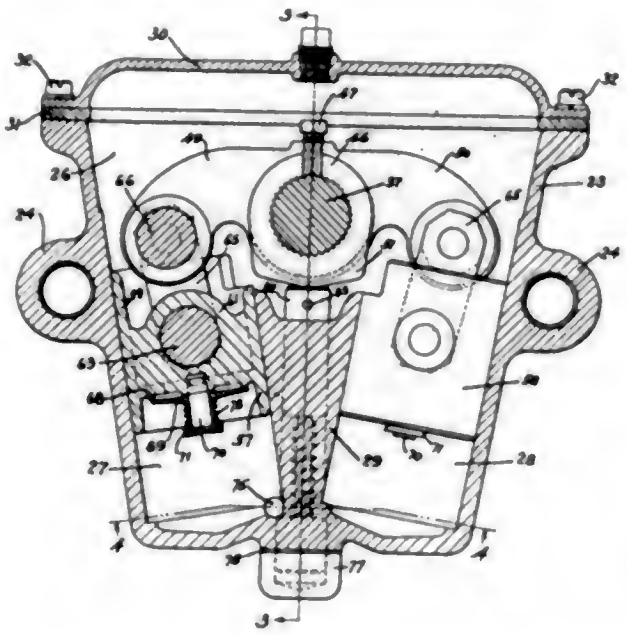


1. In apparatus of the character described including a tractor having a frame, a front axle, and actuating mechanism, and a grain blower, a pair of channels suspended from the tractor frame, and extending beneath said front axle forwardly from the frame, a pair of bars pivoted to said channels for supporting the blower in front of the tractor, means including arms pivoted to the bars in front of the axle and adapted to be connected with the tractor for supporting the bars in raised or lowered position, and means including a hopper having an inclined bottom and having a conveyor in said bottom supported by the bars for delivering grain to the blower.

1,871,931. SHOCK ABSORBER. HERBERT C. WALTERS, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 23, 1928. Serial No. 321,479. 13 Claims. (Cl. 188—88.)

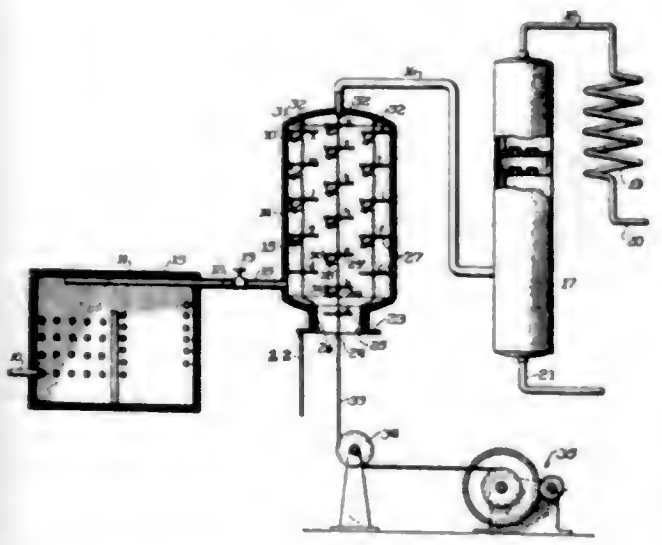
1. A shock absorber comprising, in combination, a casing presenting a cylinder; a piston in said cylinder; operating means for said piston; means adapted to control

the flow of fluid from said cylinder, said means comprising an adjustably supported tubular member and a metering pin; and means under the control of the operating



means for positively adjusting said adjustable member throughout the entire range of movement of the operating means.

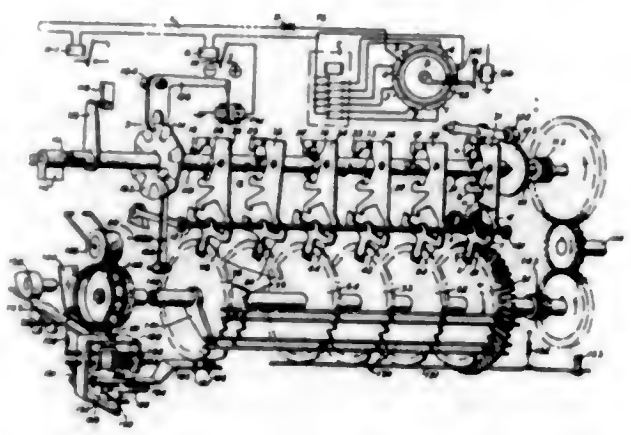
1,871,932. COKE PULLER. GEORGE W. WATTS, Whiting, Ind., and WALLACE B. MATHEWS, Chicago, Ill., assignors to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Feb. 20, 1930. Serial No. 429,935. 5 Claims. (Cl. 196—122.)



3. In a device of the class described, a chamber adapted to hold a solidified mass, a chain mounted in said chamber, a plurality of anchors secured to said chain, and a breakable tie for holding loops in said chain between said anchors whereby one anchor may be pulled to remove solid matter from the chamber without disturbing the adjacent anchor.

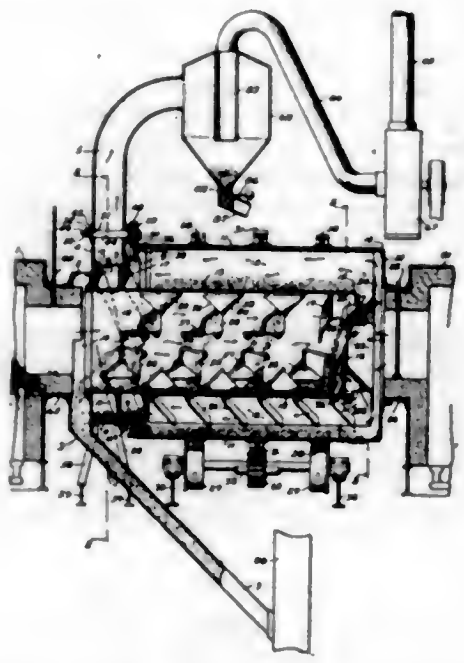
1,871,933. TELEGRAPH PRINTER. EDWARD F. WATSON, Larchmont, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 1, 1931. Serial No. 560,632. 8 Claims. (Cl. 178—40.)

1. In a telegraph printer, a type wheel having types arranged in two groups, the types in one of said groups being staggered with respect to the types in the other group, a plurality of code discs responsive to a combination of received impulses for positioning of said type



wheel and an arm operable jointly by two of said code discs, the operation of said arm determining the group in which a type shall be printed.

1,871,934. PROCESS OF AND APPARATUS FOR DRYING MATERIAL. LAWRENCE B. WEST and MARION P. WALL, Chattanooga, Tenn., assignors, by direct and mesne assignments, to The Simplicity System Company, Chattanooga, Tenn. Filed Mar. 16, 1931. Serial No. 523,092. 2 Claims. (Cl. 34—24.)

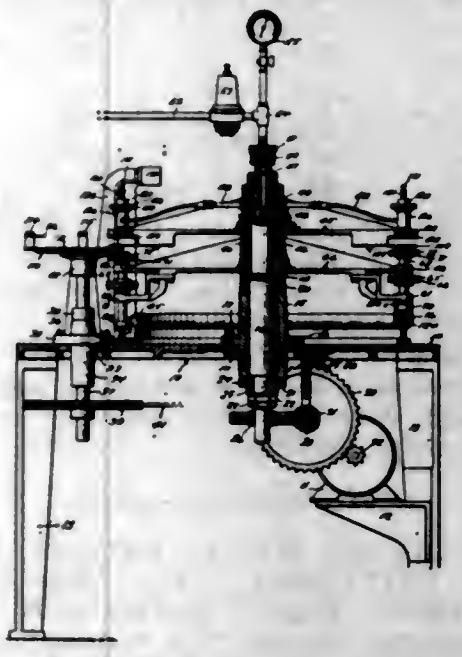


1. A method of treating material which consists in conveying the material in a cylindrical stream in one direction and then in the reverse direction within said stream, the material while moving in the first direction subjected to a current of hot gas, and said material while moving in the other direction subjected to a current of cooling air, the currents of gas and air being counter to the flow of material, and the current of gas passing through the area of change of directional flow of the material.

1,871,935. TESTING MACHINE. GEORGE A. WILLIAMS and FRANK T. EALES, Decatur, Ill., assignors to Williams Sealing Corporation, Decatur, Ill., a Corporation of Illinois. Filed May 27, 1931. Serial No. 540,268. 10 Claims. (Cl. 73—51.)

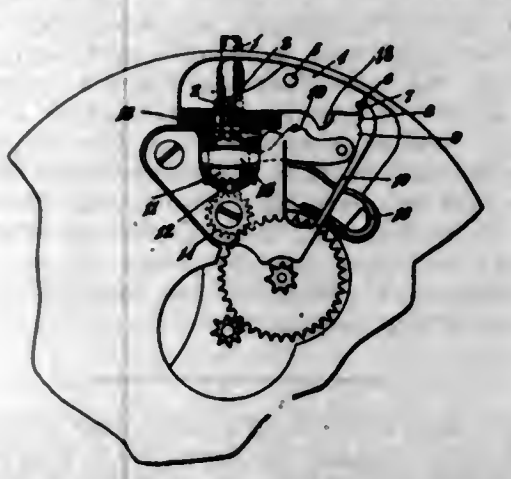
1. In a device of the class described, a base, a testing unit rotatably mounted thereon and comprising cooperat-

ing closing members, each provided with an opening, a conduit communicating with one of said openings, provided with a normally closed valve and adapted to be connected with a source of compressed air, a second conduit communicating with the other opening and with an expansible chamber, means tending to reduce the volume



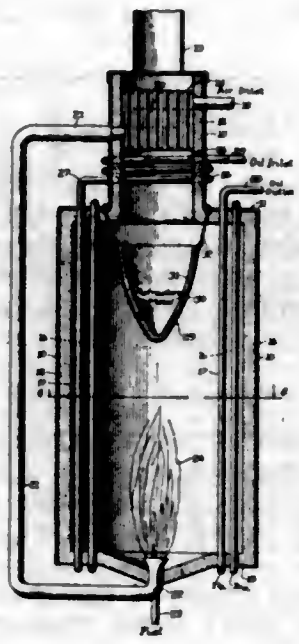
of said chamber and an ejector element movable responsive to pressure in said chamber, means operatively associated with said base for feeding nozzles to said testing unit, means for momentarily opening said valve, an ejector means responsive to the position of said ejector element for ejecting perfect nozzles, and means for removing imperfect nozzles.

1,871,936. WINDING AND SETTING DEVICE FOR TIMEPIECES. HANS WILSDORF, Geneva, Switzerland. Filed July 7, 1930, Serial No. 466,244, and in Switzerland July 11, 1929. 6 Claims. (Cl. 58—63.)



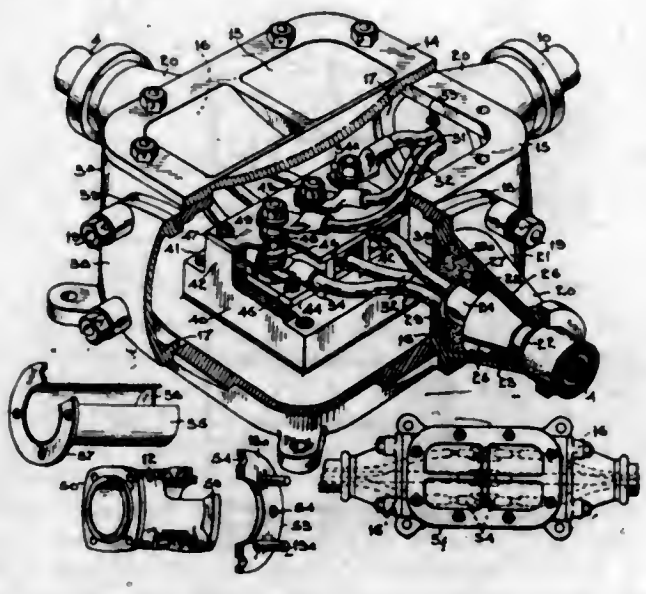
1. In winding and setting means for fluid tight watches, an axially movable winding and setting stem provided with a winding crown and adapted to be brought in three predetermined positions, a spring motor winding pinion, a minute wheel work, a sliding pinion adapted for movement relative to the winding and setting stem and to be operatively connected with the minute wheel work or with the spring motor winding pinion, a locking lever engaging said winding and setting stem, a spring arm provided with means cooperating with said locking lever to yieldingly maintain the winding and setting stem in winding or setting position, means associated with the winding and setting stem for positively moving the sliding pinion in one direction, spring means cooperating with said means associated with the winding and setting stem to act, when said stem is in its innermost position relative to the watch, on the sliding pinion to disconnect such pinion from either the minute wheel work or the spring motor winding pinion.

1,871,937. FURNACE STRUCTURE. ROBERT E. WILSON, Chicago, Ill., assignor to Standard Oil Company (Indiana), Chicago, Ill., a Corporation of Indiana. Filed Mar. 28, 1930. Serial No. 439,631. 3 Claims. (Cl. 122—356.)



1. In furnace structure, a radiant chamber, a plurality of vertical tubes mounted around the periphery of said chamber, a preheater section above said chamber, a burner mounted in the base of said radiant chamber and below said preheater section, and a baffle interposed between said burner and said preheater section to protect the preheater section from radiated hot gases and to direct heat toward the upper ends of said tubes.

1,871,938. JUNCTION BOX SYSTEM FOR ELECTRIC POWER CABLE INSTALLATIONS. LEON BYRON WOODWORTH, Johannesburg, Transvaal, Union of South Africa. Filed Jan. 12, 1929, Serial No. 332,173, and in the Union of South Africa June 22, 1928. 4 Claims. (Cl. 247—18.)



1. The combination of an electric cable comprising sheathing and armouring, a cable coupling comprising a conical casing into the smaller end of which the cable is inserted and having means at its larger end for mechanically securing it to a junction box, the cable armoring within the coupling being expanded to conical form, a conical plug inserted between such expanded armouring and the cable sheathing within the coupling, a plug cast in the casing beyond the conical plug and incorporating the ends of the armouring, cable leads extending from the larger end of the casing and insulation for said leads contained in the casing.

1,871,939. DRAWING LUBRICANTS. ELMER W. ADAMS, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed July 25, 1927. Serial No. 208,426. 15 Claims. (Cl. 87—9.)

1. An emulsified composition suitable for drawing lubricants comprising oil alkali metal soap of, preferentially oil soluble sulphonates derived from mineral oil, colloidal clay, and water.

1,871,940. EMULSION. ELMER W. ADAMS, Hammond, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Sept. 4, 1928. Serial No. 303,963. 10 Claims. (Cl. 87—9.)

2. An emulsifiable composition comprising a hydrocarbon lubricating oil, alkali metal soap of the acid products of oxidized mineral oil as an emulsifying agent and an added free liquid fatty acid.

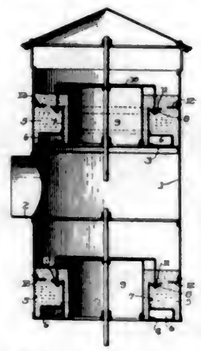
1,871,941. LUBRICATING COMPOUND. MAURICE H. ARVESON, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed July 12, 1929. Serial No. 377,921. 10 Claims. (Cl. 87—9.)

1. A lubricating compound comprising a viscous lubricating oil and a heavy metal compound of a petroleum sulfonic acid.

1,871,942. LEAD MAHOGANY SOAP LUBRICANT AND METHOD OF PREPARING SAME. MAURICE H. ARVESON, Hammond, Ind., assignor to Standard Oil Company (Indiana), Chicago, Ill., a Corporation of Indiana. Filed May 12, 1930. Serial No. 451,864. 5 Claims. (Cl. 87—9.)

2. A lubricant comprising a lubricating oil and a lead mahogany soap substantially free from salts and impurities, the lead content of said lubricant being about 8½%.

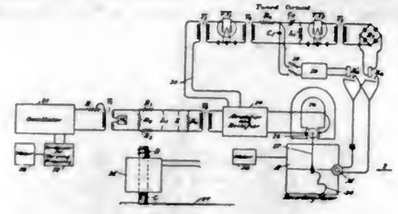
1,871,943. SEAL. HAROLD V. ATWELL, Hammond, Ind., assignor to Standard Oil Company (Indiana), Chicago, Ill., a Corporation of Indiana. Filed Mar. 5, 1930. Serial No. 433,449. 11 Claims. (Cl. 137—53.)



1. In a liquid sealed gas relief valve a vertically movable valve seat and means for moving said seat through the sealing liquid in response to changes in pressure within the valve.

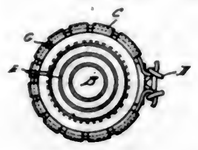
1,871,944. TRANSMISSION MEASURING SYSTEM. FRED H. BEST, Westfield, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 14, 1932. Serial No. 586,647. 5 Claims. (Cl. 234—5.5.)

1. The method of measuring transmission through a transducer at various frequencies, which consists in applying currents of those frequencies to the transducer in order, measuring the output from the transducer, recording the measurements by the adjustment of a measuring



index across a moving record sheet and also applying a particular frequency narrowly selected to make a record mark on said sheet whereby a frequency scale may be established along said sheet.

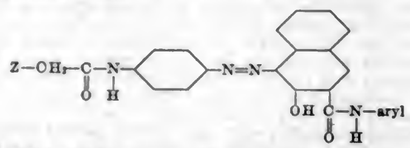
1,871,945. CAP FOR CLOSING BOTTLES, JARS, AND OTHER CONTAINERS. ERIC ARTHUR BLANCH, Strand, London, England, assignor to Williams Sealing Corporation, Decatur, Ill., a Corporation of Illinois. Filed Aug. 31, 1929, Serial No. 389,675, and in Great Britain Oct. 1, 1928. Renewed May 25, 1932. 1 Claim. (Cl. 215—38.)



A cap for closing bottles, jars and other containers, the said cap comprising a metallic skirt having a filling therewithin, the said filling comprising a cylindrical disc having concentric grooves or corrugations pressed into one of the circular faces thereof, a disc of metallic foil covering the said surface and pressed into the corrugations thereof and extending around the circumferential edge of the former disc, the composite disc fitting snugly within the said skirt whereby, when the cap is applied to the neck of a receptacle, the metallic foil will be drawn out of the corrugations.

1,871,946. AZO-DYESTUFFS AND PROCESS OF MAKING SAME. GÉRALD BONHÔTE, Basel, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 21, 1931, Serial No. 570,263, and in Switzerland Oct. 25, 1930. 8 Claims. (Cl. 260—95.)

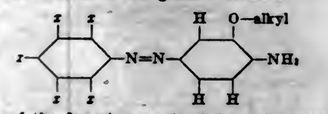
1. As new products the unsulfonated azo-dyestuffs of the general formula:



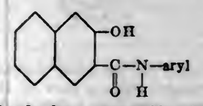
wherein z stands for a residue containing a radicle of the benzene or of the naphthalene series incapable of coupling, which products are dark red to violet and blue powders, and which, when produced on the fiber, dye the same similar tints.

1,871,947. AZO-DYESTUFFS AND PROCESS OF MAKING SAME. GÉRALD BONHÔTE, Basel, Switzerland, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 24, 1931, Serial No. 570,980, and in Switzerland Nov. 3, 1930. 12 Claims. (Cl. 260—84.)

1. A manufacture of new azo-dyestuffs by diazotizing an aminoazo-dyestuff of the general formula



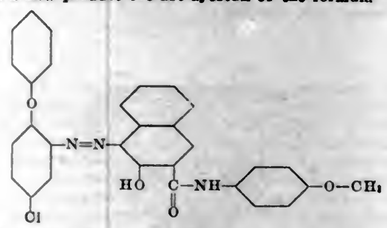
in which of the five z's two stand for substituents from a group of substituents consisting of alkyl and alkoxy or for hydrogen, and the other three stand for hydrogen, and coupling the diazo-compound thus produced with an arylide of the 2:3-hydroxynaphthoic acid of the general formula



in which aryl stands for a non-sulfonated and non-carboxylated nucleus of the benzene or naphthalene series.

1,871,948. AZO DYESTUFFS AND PROCESS OF MAKING THE SAME. GÉRALD BONHÔTE, Basel, Switzerland, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 24, 1931, Serial No. 570,982, and in Switzerland Nov. 15, 1930. 1 Claim. (Cl. 260—95.)

As a new product the azo-dyestuff of the formula



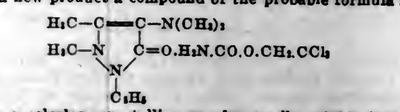
which product, when dry, forms a red powder, and, when produced on the fiber, dyes it a full red tint of remarkable fastness to light.

1,871,949. RODENT REPELLANT AND INSECTICIDAL COMPOSITION AND PROCESS OF PRODUCING THE SAME. HENRY T. BOTTRELL, Sydney, Australia, assignor to Repulso, Inc., a Corporation of New York. Filed Apr. 10, 1928, Serial No. 269,016. Renewed Mar. 12, 1931. 4 Claims. (Cl. 167—22.)

1. A rodent repellant and insecticidal composition containing as an essential ingredient sulphonethylmethane.

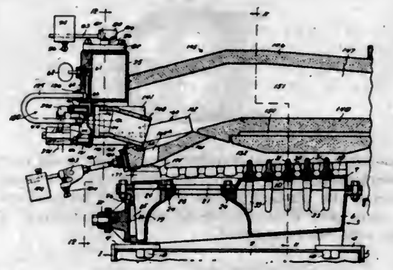
1,871,950. THE TRICHLORO ETHYL URETHANE SALT OF 4-DIMETHYL AMINO-1-PHENYL-2.3-DIMETHYL PYRAZOLONE. JÜRGEN CALLSEN, Elberfeld, near Cologne-on-the-Rhine, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Filed Jan. 30, 1926, Serial No. 85,052, and in Germany Apr. 23, 1925. 1 Claim. (Cl. 260—45.)

A a new product a compound of the probable formula:



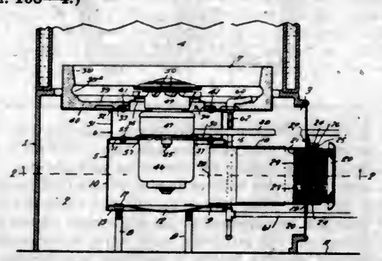
being a colorless crystalline powder, easily soluble in acetone, alcohol and benzene, less easily soluble in ligroin, having a melting point of about 75–76° C. and having valuable analgesic properties.

1,871,951. FUEL OIL BURNING APPARATUS. LEE S. CHADWICK, Shaker Heights, and MARC RESEK, Cleveland Heights, Ohio, assignors to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 13, 1927. Serial No. 183,411. 9 Claims. (Cl. 158—73.)



1. In combination, a steam generator having a substantially horizontal top wall, a structure surmounting the same and enclosing a main and an auxiliary combustion chamber, the main chamber being above the auxiliary chamber and the bottom of the latter chamber being constituted of the top wall of the generator, both chambers having a common entrance, a combustion device arranged to project its products of combustion through said entrance into said combustion chambers, and a movable deflector for controlling the passage of the products to the auxiliary combustion chamber.

1,871,952. OIL BURNING APPARATUS. LEE S. CHADWICK, Shaker Heights, MARC RESEK, Cleveland Heights, and JOHN ALGER DAHLSTROM, Bay Village, Ohio, assignors to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed July 27, 1929, Serial No. 381,600. Divided and this application filed Oct. 14, 1930. Serial No. 488,610. 6 Claims. (Cl. 158—4.)



1. In combination, a furnace enclosing a combustion chamber, and an electric motor driven oil burning apparatus situated in the furnace below said chamber, the portion of the furnace below the combustion chamber having an air admitting opening and being otherwise approximately air tight so that all air for the promotion of combustion is admitted through said opening, the apparatus enclosing a passage registering with said opening for delivering all air entering therethrough to the zone of combustion, the motor of the apparatus being situated within the passage in close proximity to said zone.

1,871,953. METHOD OF MAKING V-TYPE TRANSMISSION BELTS. RALPH H. CHILTON, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Original application filed June 13, 1927, Serial No. 198,877. Divided and this application filed June 20, 1928. Serial No. 286,983. 4 Claims. (Cl. 154—4.)

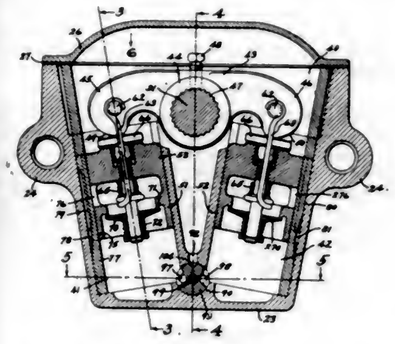
1. The steps in the method of making transmission belts comprising: forming a composite sheet of unvulcanized

rubber material having alternate strips of stiff and soft rubber compounds extending transverse the thickness of said sheet, applying this sheet upon a vulcanizing drum so that said strips extend longitudinally thereof, wrapping



rubberized fabric peripherally around said drum to form a rubberized fabric web on the outside of said sheet, vulcanizing the whole together to form an integral cylindrical unit, and then cutting off endless individual V-belts from said vulcanized unit.

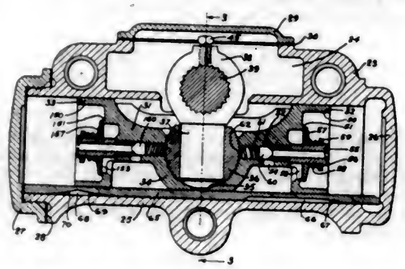
1,871,954. SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor, by mesne assignments, to Delco-Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 28, 1928. Serial No. 309,019. 15 Claims. (Cl. 188—88.)



2. A shock absorber comprising in combination, a casing presenting a fluid chamber and two cylinders, a piston in each cylinder, means for operating said pistons; a common relief valve for both cylinders adapted to provide for a flow of fluid from either one of the cylinders to the fluid chamber in response to the movement of the respective pistons in one direction, said relief valve comprising a valve-seat member having a separate fluid passage leading to each cylinder, a fluid passage leading to the fluid chamber, and a valve yieldably maintained against the valve-seat member normally to close the separate fluid passages leading to the two cylinders, said valve being tiltable by fluid pressure in either cylinder to provide communication between either of said cylinders and the fluid passage leading to the fluid chamber.

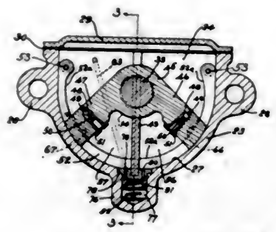
1,871,955. SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 24, 1928. Serial No. 314,808. 11 Claims. (Cl. 188—88.)

1. A shock absorber comprising in combination, a casing presenting a closed end cylinder and a fluid chamber in communication therewith; a piston in said cylinder providing a fluid compression chamber in the end of the cylinder and having passages providing for the transfer of fluid from one side of the piston to the other; means within the casing for reciprocating the piston; a valve mechanism supported by the piston for establishing a free flow of fluid from the fluid chamber through one of the piston passages into the fluid compression chamber in response to the movement of the piston in one direction; means within the cylinder, cooperating with the piston to establish a restricted flow of fluid from the fluid compression chamber into the fluid chamber of the casing in response to move-



ment of the piston in the other direction; and a valve adapted to cooperate with a part of the aforementioned valve mechanism to establish a flow of fluid from the compression chamber through the other piston passage into the fluid chamber of the casing in response to excessive fluid pressure within the compression chamber.

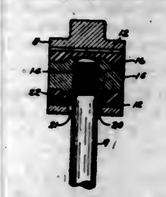
1,871,956. SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 20, 1928. Serial No. 320,700. 6 Claims. (Cl. 188—89.)



1. A shock absorber, comprising in combination, a casing presenting a fluid reservoir; a fixed partition within said reservoir; an oscillatable fluid displacement member within said casing providing a compression chamber on each side of the partition; pressure actuated means for supplying fluid to the respective compression chambers in response to the movement of the displacement member in a direction to increase the cubical contents of the respective chamber; means removably supported within the reservoir and cooperating with the displacement member for providing fluid flow orifices adapted to establish a variable flow of fluid from the respective compression chambers in accordance with the position and the direction of movement of the displacement member, and a spring-loaded pressure release valve adapted to provide communication between said chamber in response to excessive pressures in either of said chambers.

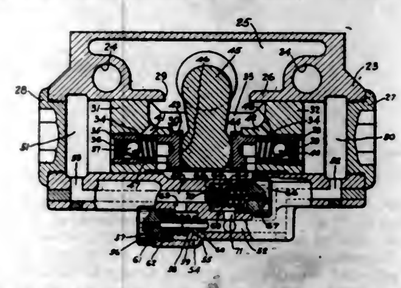
1,871,957. OSCILLATING PIVOT JOINT. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 28, 1929. Serial No. 366,691. 1 Claim. (Cl. 287—97.)

A pivot joint connecting two relatively oscillating parts, comprising: a central pivot member rigid with one of said parts, a resilient bushing surrounding said pivot member, a sleeve surrounding said bushing and an eye having a frictional bearing upon said sleeve and rigid with



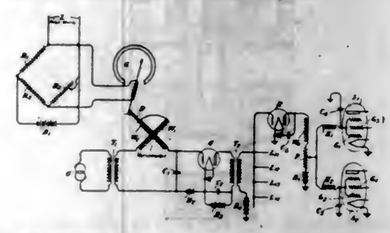
the other of said connected parts, said eye and sleeve each having a peripherally extending slot therein through which said first connected part extends.

1,871,958. SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 2, 1929. Serial No. 383,050. 4 Claims. (Cl. 188—88.)



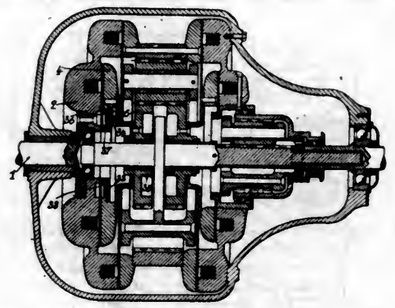
1. A shock absorber comprising, in combination, a casing presenting a fluid reservoir and a cylinder portion; a fluid displacement member in said cylinder providing a compression chamber in each end thereof, said member comprising two pistons connected together in spaced relation by an intermediate web portion; a passage through each piston longitudinally of the cylinder; a check valve in each piston passage comprising a valve cage secured in the outer end of its respective piston passage, a ball check valve within said valve cage; a wear piece fitting into the inner end of each passage; a lever supported by the casing and extending between the piston portions of the fluid displacement member; and a spring in each piston passage, interposed between the valve cage and the wear piece therein, said springs urging the respective wear pieces into engagement with the said lever.

1,871,959. TRANSMISSION REGULATOR SYSTEM. ROY C. CORDERMAN, Chevy Chase, Md., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 22, 1930. Serial No. 422,614. 12 Claims. (Cl. 178—44.)



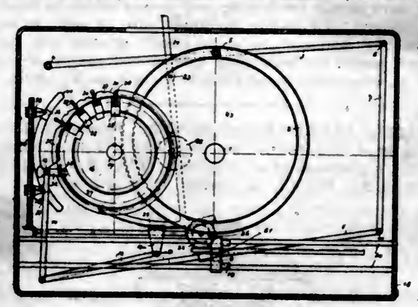
1. The combination of a pilot circuit the resistance of which changes with temperature, a tube having plate, filament, grid and screen grid electrodes, and means including a rectifier interconnecting said circuit and said tube and responsive to the changes in resistance of said circuit to automatically control the direct current potential applied to the screen grid of said tube in accordance with the resistance of said circuit.

1,871,960. ELECTROMAGNETIC CLUTCH. JEAN COTAL, Paris, France, assignor to Societe d'Exploitation des Brevets Cotal, Paris, France. Filed Apr. 8, 1929, Serial No. 353,551, and in France Apr. 26, 1928 3 Claims. (Cl. 192—84.)



1. An electro-magnetic clutch comprising a driving rotatable shaft, an electromagnet carried by said driving shaft, an armature for said electromagnet rotatably mounted coaxially with relation to said driving shaft, means for guiding said armature towards and away from said electromagnet, a stop member, means adapted to hold said stop member in a fixed position with relation to said electromagnet, and yielding means adapted to urge said armature against said stop member.

1,871,961. CHANGE SPEED GEAR. JEAN DAP, Puteaux, France, and ERNST ROGGATZ, Essen, Germany, assignors to Arthur Lange, Cologne-Holweide, Siedlung Iddelsfeld, Germany. Filed June 9, 1927, Serial No. 197,725, and in Germany Nov. 1, 1926. 13 Claims. (Cl. 74—54.)

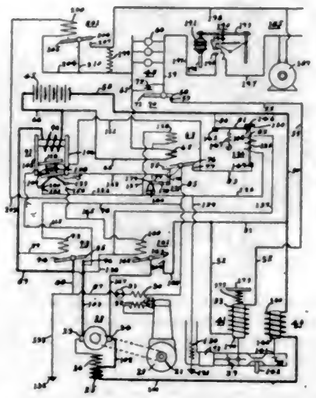


1. In a speed change gear of the class wherein the speed ratio can be changed continuously from zero to a desired maximum, a primary shaft, a cam rotated by said primary shaft, a main lever connected to and oscillated by said cam, a secondary shaft, a connecting wheel on said secondary shaft having a series of slots in its periphery, a member loosely mounted co-axially on said connecting wheel and connected to and oscillated by said lever, a series of spring plungers carried by said oscillatory member at a spacing different from that of the slots in the said connecting wheel, and means for causing said plungers to co-act with said connecting wheel in one direction of movement and holding them back in the other direction.

6. A speed change gear comprising a pair of gears of the class wherein the speed ratio can be changed contin-

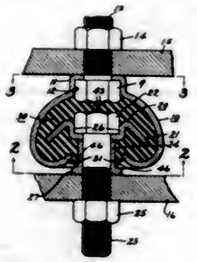
uously from zero to a desired maximum, operating in opposite directions mounted with their primary and secondary shafts co-axial, a source of primary motion, means for operatively connecting either of said primary shafts to said source of primary motion, a final secondary shaft and means for operatively connecting either of said secondary shafts to said final secondary shaft.

1,871,962. ELECTRICAL APPARATUS. HERMAN J. DICK, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed May 30, 1929. Serial No. 367,166. 2 Claims. (Cl. 171—97.)



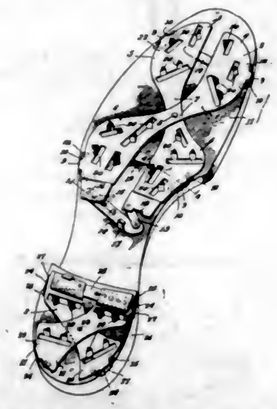
1. An electrical generating system comprising in combination an external work circuit, a source of current arranged for supplying current to said work circuit upon a demand for current by said circuit, a second source of current adapted for supplying current to the work circuit, means in said work circuit for withholding the flow of operating current to said circuit when said circuit is being supplied with current by said first named source of current, means responsive to a demand for current by said work circuit for causing said second source to supply the demand and means energized only by said second source for completing a short circuit around said first named means for permitting said second source of current to supply operating current to said work circuit.

1,871,963. FLEXIBLE CONNECTER. EDWARD J. DILL, Dayton, Ohio, assignor to The Inland Mfg. Co., Dayton, Ohio, a Corporation of Delaware. Filed May 25, 1929. Serial No. 365,887. 3 Claims. (Cl. 287—85.)



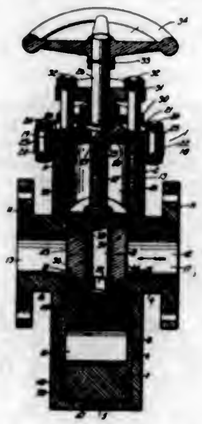
1. A universally yieldable suspension connecter for connecting two members comprising: a metal casing having means for fixing to one of said members and having an opening therein surrounded by inwardly turned marginal portions, a metal head inserted within said casing, said head comprising a flaring flange member diverging in the direction of said opening and having a bolt-head receiving recess therein, and a bolt fixed to and extending through a central aperture in said flange and fixed to the other of said connected members, a resilient nonmetallic block isolating said head and bolt from said casing and held under high compression by said casing at all times independently of the applied tension load.

1,871,964. NONSLIPPING ATTACHMENT FOR SHOES. HUGH D. DRISCOLL, Tulsa, Okla. Filed Oct. 14, 1930. Serial No. 488,615. 2 Claims. (Cl. 36—64.)



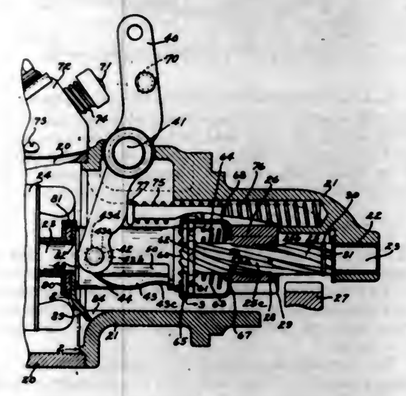
1. In combination with a shoe, an anti-slipping device adapted to fit beneath the shoe and consisting of sections movable relative to each other, the shoe sole being formed with recesses, plates secured to the under face of the shoe sole and constituting keepers bridging the recesses, jaws carried by said sections and extending within the recesses for engagement with the keepers, and means to move the sections into position to dispose the jaws in firm gripping engagement with the keepers, engagement of the jaws with the walls of the recesses serving to prevent movement of the device upon the shoe when in position thereon.

1,871,965. GATE VALVE. VIRGIL L. DU BOIS, Tulsa, Okla., assignor to The Stough Tank Erecting Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Mar. 27, 1929. Serial No. 350,274. 2 Claims. (Cl. 251—55.)



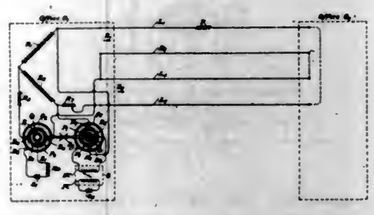
1. A valve of the character described including a housing having a flow channel and a bore intersecting said channel, a piston slidable in said bore having a port adapted for providing connection between the sections of said flow channel at opposite sides of said bore and having a through opening of greater diameter than said channel spaced from said port, a unitary valve plug bodily slidable in said through opening to seat against the portions of said housing surrounding the opening under pressure of fluid in said flow channel and means for shifting the piston to selectively expose the port or valve plug to the through channel.

1,871,966. ENGINE STARTING APPARATUS. JOHN B. DYER and JOHN W. LAWSON, Anderson, Ind., assignors to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 17, 1928. Serial No. 293,349. 24 Claims. (Cl. 74—7.)



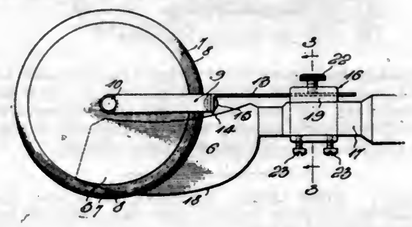
1. An engine starter drive comprising, in combination, a rotatable member movable axially into driving engagement with a rotatable part of an engine to be started, a shaft for driving said member, and manually operable means for moving the member axially and engageable with the shaft for rotating the shaft in order to rotate the driving member while being pressed against the engine part.

1,871,967. ELECTRICAL TESTING SYSTEM. PAUL G. EDWARDS and THOMAS C. HENNEBERGER, Bloomfield, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 13, 1930. Serial No. 435,547. 5 Claims. (Cl. 175—183.)



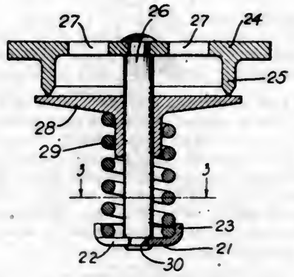
1. Apparatus for locating the position of a fault in a conductor, comprising two conductors connected to each other at the near and distant ends, a fourth conductor connected to the faulty conductor at the distant end, and a Wheatstone bridge arrangement for comparing the impedance looking into the circuit between the faulty conductor and said two conductors connected to each other with the impedance looking into the circuit between said two conductors and said fourth conductor.

1,871,968. PAPERHANGER'S KNIFE ATTACHMENT. ALFRED EGE, Chicago, Ill., assignor of one-half to Saverio Schiro, Chicago, Ill. Filed Jan. 14, 1932. Serial No. 586,639. 4 Claims. (Cl. 216—61.)



1. A paperhanger's knife attachment, comprising two pressing wheels for disposition at opposite sides of the knife blade, spring means carrying said wheels, and means for securing said spring means to the knife.

1,871,969. VALVE MECHANISM. GEORGE W. ELSEY, Anderson, Ind., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 28, 1928. Serial No. 328,885. 4 Claims. (Cl. 251—144.)



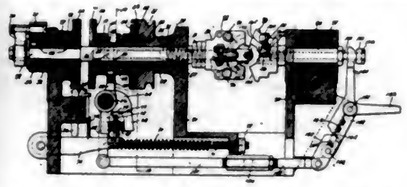
2. A valve mechanism comprising, in combination, a stem having a groove adjacent its one end; a valve slidable upon the stem; a C-shaped retainer cup attachable to the stem by insertion into the groove thereof; and resilient means interposed between the valve and retainer cup for operating the valve and locking the retainer cup upon the stem.

1,871,970. ARAMTURE WINDING MACHINE. RODGER J. EMMERT, Anderson, Ind., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 19, 1925. Serial No. 76,364. 16 Claims. (Cl. 242—13.)

1. An armature winding machine comprising in combination, a rotatable winding head for supporting an armature core with the core axis transverse to the axis of rotation of the winding head, means for rotating the winding head, a movable member carried by the head for receiving a loop of wire connecting successive armature coils, and means driven by the winding head rotating means for moving the member automatically to release the wire therefrom after a certain number of revolutions of the winding head.

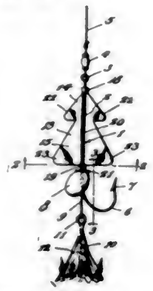
18. An armature winding machine comprising, in combination, a rotatable winding head for supporting an arma-

ture core with the core axis transverse to the axis of rotation of the winding head, a tubular drive shaft upon which the winding head is secured, a power source, connecting means slidably supported on the tubular shaft and shiftable



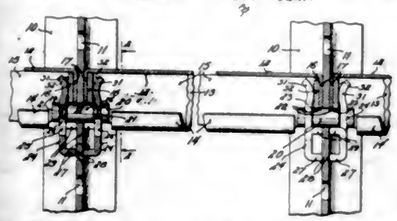
into one position operatively to connect the said shaft and power source, and means within said tubular shaft and controlled by the operation of the slidably supported means, for rotating the core in the winding head to index said core into the next adjacent winding position.

1,871,971. FISH LURE. FREDERICK E. EPPICH, Norwood, Mass. Filed Aug. 25, 1931. Serial No. 559,258. 2 Claims. (Cl. 43—45.)



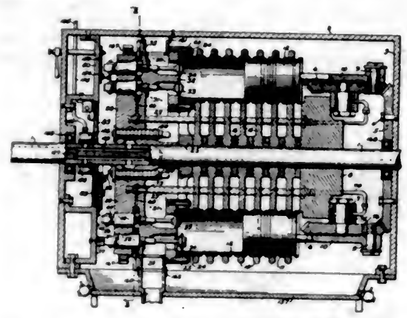
1. A fish lure comprising a shank, a hook at one end of said shank, and a spinner carried by said shank and consisting of a plate extending longitudinally of the shank and projecting from opposite sides thereof, said plate having tongues extending transversely thereof and bent to form eyes engaged about the shank to rotatably connect the plate with the shank, portions of the plate being bent to form blades disposed at opposite sides of the shank for imparting rotary motion to the spinner.

1,871,972. METAL SHELVING. LLOYD H. FENSTERMAKER, Milwaukee, Wis. Filed Aug. 29, 1929. Serial No. 389,149. 8 Claims. (Cl. 211—136.)



1. In a shelving structure the combination of an upright, a shelf supported thereby and having a depending edge flange, a vertical clip having an upper end arranged to clamp said flange against said upright and also having a lower end arranged to press against said upright, said clip having a keyhole slot therein intermediate said ends, and a removable key horizontally disposed in said upright and releasably engaged in said slot to retain said clip in clamping position, said clip being movable lengthwise of said slot into and out of locking engagement with said key.

1,871,973. LUBRICATING SYSTEM. HERMAN A. FINKE, St. Louis, Mo. Original application filed Jan. 12, 1928, Serial No. 246,213. Divided and this application filed Nov. 1, 1928. Serial No. 316,456. 10 Claims. (Cl. 184—6.)

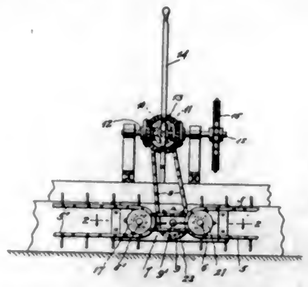


1. In a rotary engine the combination of a cylinder provided with a head; a valve movable with said cylinder; a conduit associated with said cylinder; means to furnish lubricant to said conduit; and means within the cylinder head to force said lubricant through said conduit said means controlled by the actuation of said valve.

1,871,974. CELLULAR HEAT INSULATION MATERIAL. ARTHUR H. FLOWER and JACOB C. HOUSEKEEPER, Dayton, Ohio, assignors to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 20, 1928. Serial No. 307,330. 2 Claims. (Cl. 18—53.)

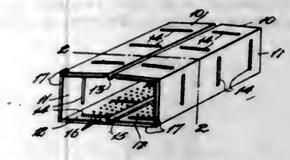
2. The method of shaping to uniform thickness and forming a relatively dense skin upon a vulcanized irregular slab of hard cellular rubber comprising: compressing said slab between heated platens to the desired thickness whereby to condense only the surface portions of said cellular slab, and then cooling said platens while in compressed position, whereby to cool and harden the condensed skin on said slab.

1,871,975. TRANSMISSION MECHANISM. BENJAMIN H. FLYNN, Alexandria, La. Original application filed June 13, 1930, Serial No. 460,916. Divided and this application filed June 5, 1931. Serial No. 542,431. 1 Claim. (Cl. 74—59.)



In combination, two parallel rotatable shafts, two wheels loose upon one of said shafts, reversible driving means for driving the other shaft in either direction and for driving one of said loose wheels oppositely from said other shaft, driving connections between said other shaft and the other of said loose wheels for driving the latter unidirectionally with the former, and clutch means for connecting either of said loose wheels with said one shaft.

1,871,976. SHEET METAL FORM AND SHEET METAL LATH. THOMAS J. FRABER, Washington, D. C. Filed June 23, 1930. Serial No. 463,166. 2 Claims. (Cl. 72—66.)



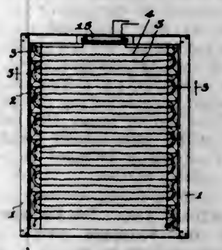
1. A sheet metal form for monolithic floors comprising a tubular member having a top, bottom and side walls, said top wall having an inwardly extending V-shaped rib running longitudinally from end to end centrally of its width and having inwardly pressed transversely extending ribs at each side of the longitudinal rib, said side walls having inwardly pressed ribs forming recesses for the reception of concrete to key the forms in place, said bottom wall being provided with means to engage and hold plaster.

1,871,977. RAIL JOINT. ROYAL E. FRICKEY, San Francisco, Calif., assignor to Welding Service Inc., San Francisco, Calif., a Corporation of California. Filed July 24, 1931. Serial No. 552,940. 4 Claims. (Cl. 238—164.)



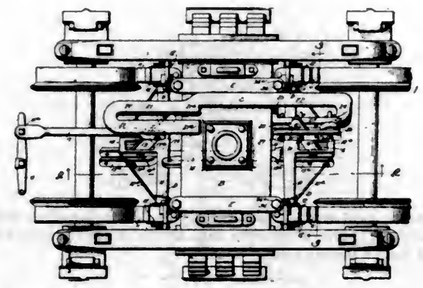
1. In combination with a rail joint having side joint bars connecting adjacent ends of rail sections, whereby the upper longitudinal shoulders of the bars normally afford a bearing for the lower shoulders of the rail ball, said joint being worn to afford battered areas extending outwardly from the center of the joint and along the region of said shoulders, whereby the ball shoulders adjacent the ends of the rail sections do not properly directly bear upon the shoulders of the bars; a plurality of hard metal shim sections interposed between said shoulders at each side of the rail, said shim sections being adapted to reestablish substantially normal bearing between said shoulders.

1,871,978. INSECT ELECTROCUTOR. WILLIAM M. FROST, Spokane, Wash. Filed Jan. 14, 1928. Serial No. 246,840. 14 Claims. (Cl. 43—112.)



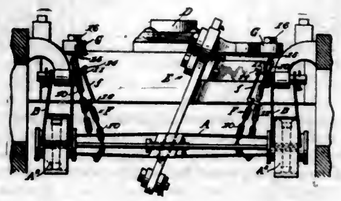
1. An insect electrocutor comprising a frame having spaced wire supporting members, a plurality of spring wires stretched in parallel relation between said supporting members, and means for supplying adjacent lengths of wire with current of opposite polarity.

1,871,979. BRAKING SYSTEM. JOHN GAYAN, Baltimore, Md. Filed Apr. 28, 1931. Serial No. 533,512. 9 Claims. (Cl. 188—52.)



1. A braking system for railway car trucks, comprising brake beams, levers pivotally connected between their ends to members projecting from the respective brake beams, means for transmitting movement from one of said levers to the other, and means for guiding the levers including a member which lies upon and is rigidly secured to the top surface of the truck bolster and terminates at one end in a substantially horizontal yoke-shaped portion which protrudes from said top surface and has the inner ends of its side arms rigidly united to said bolster, the said yoke-shaped portion having a guiding relationship with the corresponding lever.

1,871,980. SAFETY HANGER FOR BRAKE BEAMS. JOHN GAYAN, Baltimore, Md. Original application filed Apr. 28, 1931, Serial No. 533,512. Divided and this application filed June 16, 1932. Serial No. 617,665. 8 Claims. (Cl. 188—210.)

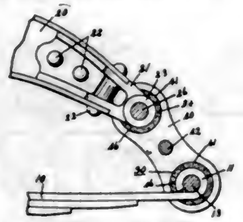


1. A safety hanger for a brake beam of a railway car truck, comprising a chain adapted to extend loosely around the lower side of the brake beam and whose upper end is provided with means for attaching it to an appropriate part of the truck and a connector loosely mounted upon one link of the chain and provided with a lateral projection adapted to extend into another link of the chain, said connector also having a second lateral projection and said chain having a laterally projecting link to receive said second projection.

1,871,981. SPRING SHACKLE. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 20, 1926. Serial No. 155,802. 10 Claims. (Cl. 267—54.)

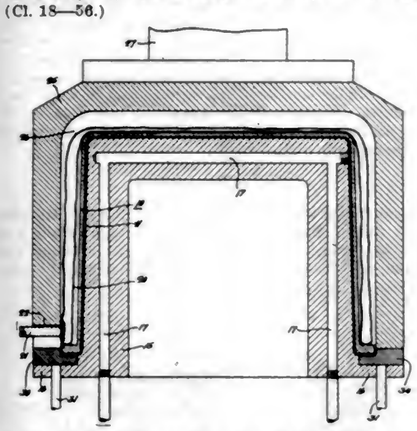
1. In combination with a spring and frame member of a vehicle, a shackle comprising: an eye on the spring end, two cup members inserted into opposite sides of said eye and held rigid therein, corresponding lateral cups rigid

with said frame member, four elastic rubber blocks surrounding the exterior and having a portion within the interior of said cups, two side links having end recesses



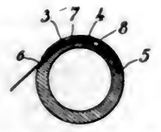
encasing said rubber blocks, and means for drawing said side links together whereby said elastic rubber blocks are held under initial compression.

1,871,982. APPARATUS AND METHOD FOR MOLDING COMPOSITE STRUCTURES. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed May 18, 1928. Serial No. 278,900. 7 Claims. (Cl. 18—56.)



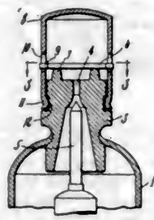
7. The steps in the method of making a molded article having a molded finish coating thereupon comprising premolding said article from a hot plastic bituminous compound, coating said premolded article with a finish coating of a nitrocellulose compound moldable under heat and pressure, and then again molding said coated article in a suitable mold under heat and pressure sufficient to cure and bond said nitrocellulose compound coating firmly upon the bituminous body of said article.

1,871,983. ATTACHMENT OF MOVING PICTURE FILM TO THE FILM SPOOL. LEO GOLDHAMMER, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 22, 1929, Serial No. 334,282, and in Germany Jan. 25, 1928. 4 Claims. (Cl. 242—74.)



1. In a cinematographic film roll a film strip provided near one end between the perforations with an arc-shaped incision which forms on the bent film a projecting tongue directed away from the end of the film strip.

1,871,984. CHECK VALVE. GEORGE D. HOFFMAN, Pasadena, Calif., assignor to Hoffman Specialty Company, Waterbury, Conn., a Corporation of Illinois. Original application filed June 6, 1924, Serial No. 718,319, Patent No. 1,708,622. Divided and this application filed June 25, 1928. Serial No. 288,056. 6 Claims. (Cl. 137—122.)



1. A casing having a vent passage provided with an outwardly facing valve seat, an associated check valve, cooperative with said seat to exclude external fluid from the casing, and a cap loosely interlocked with the casing to permit rotation relatively to the seat, and engaged with the check valve to impart rotation thereto while permitting independent movement thereof toward and away from the valve seat.

1,871,985. FISHING ROD FERRULE. WALTER F. GROSSENBACH, Ogden, Utah. Filed June 3, 1931. Serial No. 541,907. 3 Claims. (Cl. 287—119.)

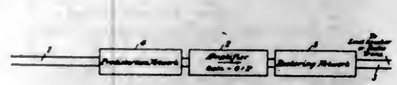


1. In a joint for the adjacent ends of a pair of rods wherein the end of one rod is reduced forming a shoulder on the rod, a split tubular member carried by the end of the adjacent rod and into which the reduced portion of the first mentioned rod is adapted to fit so that one end of the split tubular member abuts the shoulder, external threads formed on the end of the split tubular member and on the first mentioned rod adjacent said shoulder and the reduced portion and an internally threaded locking sleeve slidably arranged on the rod carrying said tubular split member, the locking sleeve adapted to engage the external threads of the tubular member and the first mentioned rod to secure the rods together in assembled relation, the split tubular member being compressed by said internally threaded sleeve around the aforementioned reduced portion.

1,871,986. METHOD AND MEANS FOR REDUCING DISTORTION OF VACUUM TUBE AMPLIFIERS. HAROLD S. HAMILTON, White Plains, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 11, 1930. Serial No. 481,251. 5 Claims. (Cl. 179—171.)

1. In a system for reducing the distortion effects resulting from overloading a vacuum tube amplifier in a

program transmission system, the combination with a line of an amplifier to be effectively connected between sections of said line, a predistortion network connected between a section of the line and the input terminals of the amplifier, the said network being designed to render substantially uniform the distribution with respect to



frequency of the amplitudes of the components of the impressed wave, and a restoring network connecting the output terminals of the amplifier and an adjacent section of the said line, the transmission characteristic of the said restoring network being complementary to that of the predistortion network.

1,871,987. WINDSHIELD WIPER. FREDERICK J. HARDMAN, Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 23, 1929. Serial No. 349,438. 15 Claims. (Cl. 15—253.)



1. In a device of the character described, the combination comprising, means supporting a pair of wiper shafts, a driving motor and transmission mechanism, a cover for said transmission mechanism supporting a contact device selectively operable by said transmission mechanism for controlling the energy circuit through said driving motor.

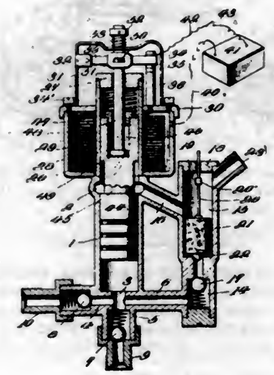
1,871,988. WINDSHIELD WIPER. FREDERICK J. HARDMAN, Dayton, Ohio, assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 5, 1929. Serial No. 352,839. 11 Claims. (Cl. 15—253.)



1. In a windshield cleaner, a wiper shaft, an electric motor, motor driven instrumentalities connected with said wiper shaft for effecting movement thereof, said instrumentalities including a rack bar, means guiding and supporting said rack bar, a motor switch having an actuator located in proximity to a part of the rack bar, and means movable into and out of position between said actuator and said rack bar part for causing motion to be transmitted from the rack bar part to the actuator.

1,871,989. PUMPING MECHANISM FOR FUEL FEEDING SYSTEMS FOR MOTOR VEHICLES. FRANK H. HEITGER, Flint, Mich., assignor to The Marvel Carburetor Company, Flint, Mich., a Corporation of Indiana. Filed May 25, 1925, Serial No. 32,647. Renewed May 14, 1931. 6 Claims. (Cl. 103—153.)

1. A pumping mechanism for fuel feeding system for motor vehicles comprising a pump having a pump barrel provided with a chamber at its upper end, said pump barrel being provided with a valve controlled inlet and outlet, a piston movably mounted within said pump barrel, means for raising said piston, means for returning said piston to its original position, a collecting chamber in



communication with the chamber of said pump barrel for collecting the liquid passing said piston, a float having a valve for controlling the outlet of said collecting chamber, and a valve for preventing fuel from entering said collecting chamber from the discharge of said pump.

1,871,990. PROCESS OF PREPARING 2.3-AMINONAPHTHOIC ACID. FRANZ HENLE and VALENTIN LANZ, Hochst-on-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 3, 1928, Serial No. 251,735, and in Germany Feb. 7, 1927. 5 Claims. (Cl. 260—109.)

1. In a process of preparing 2.3-aminonaphthoic acid, the step which consists in causing dry 2.3-hydroxynaphthoic acid to react with a molten zinc chloride-ammonia at atmospheric pressure.

1,871,991. NEW AZO DYESTUFFS. WINFRID HENTRICH, Wiesdorf-on-the-Rhine, and RUDOLF KNOCHE, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 29, 1928, Serial No. 258,142, and in Germany Mar. 12, 1927. 3 Claims. (Cl. 260—86.)

1. As new products azodyestuffs of the general formula:

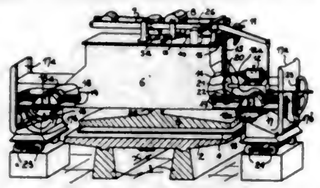
$$R_1\text{—}O(CH_2)_x\cdot CO\cdot N(R_3)\text{—}R_2\text{—}N\text{=}N\text{—}R_3$$

wherein R_1 stands for an aromatic nucleus of the benzene or naphthalene series which may be substituted by halogen, alkyl or alkoxy, R_2 stands for hydrogen which may be replaced by alkyl, x stands for one of the numbers, one, two and three, one R_3 stands for the residue of a coupling component capable of producing an azodyestuff, the other R_3 stands for the residue of a diazotization component capable of producing an azodyestuff, said dyestuffs being various colored powders, easily soluble in water if they contain an acid group, dyeing wool in an acid bath evenly various shades of good fastness to light and fulling and being suitable for discharge printing on wool and the production of valuable lakes or pigments.

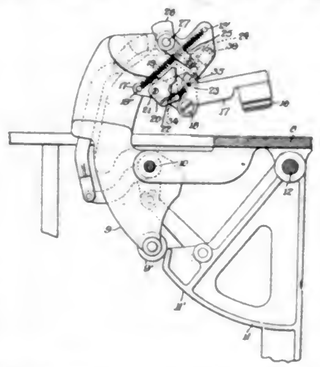
1,871,992. GRINDING, SMOOTHING, AND POLISHING APPARATUS. CHARLES HEUZE, Auvelais, Belgium. Filed Mar. 4, 1931, Serial No. 520,078, and in Belgium Mar. 31, 1930. 12 Claims. (Cl. 51—110.)

1. Apparatus for grinding, smoothing and polishing plate glass, comprising tables for supporting the glass,

tools for treating the glass, a pivoting lever connected to each tool, a weight carried by each lever, means for displacing each weight along each lever, trucks for supporting the beams, inclined planes on which the trucks rest, and means for displacing the trucks along the slope of the inclined planes.

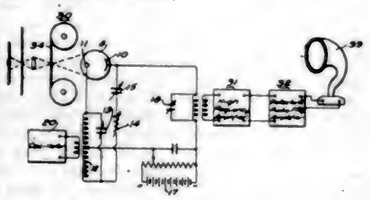


1,871,993. SNAPPING PLATEN FOR PRINTING AND ADDRESSING MACHINES. HENRY E. HUBBARD, Chicago, Ill., assignor to Addressograph Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 23, 1929. Serial No. 341,935. 16 Claims. (Cl. 101—297.)



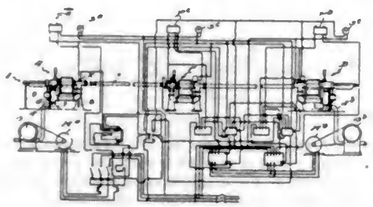
1. The combination of a platen for printing machines, a movable support, a platen arm, a spring operating upon said support, and means for tensioning said spring to swing said support and impart a quick snapping impression blow to the platen when said arm is moved.

1,871,994. LIGHT-SENSITIVE DEVICE. HARLEY A. IAMS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 18, 1929. Serial No. 333,470. 3 Claims. (Cl. 179—171.)



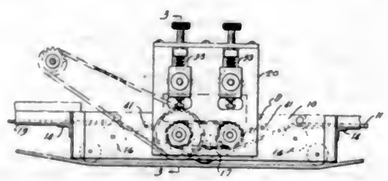
3. In combination, a light-sensitive device having an anode and a cathode, a condenser, a resistor and an oscillatory input circuit connected serially between said anode and said cathode, an oscillatory output circuit and a potential source serially connected between one of said electrodes and a point on said input circuit, means for impressing oscillatory energy upon said input circuit, and means for deriving light-modulated energy from said output circuit.

1,871,995. CARRIER DISPATCH SYSTEM. CHESTER S. JENNINGS and FRANK W. MACMARTIN, Syracuse, N. Y., assignors to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Mar. 4, 1930. Serial No. 433,048. 49 Claims. (Cl. 243—8.)



1. A carrier dispatch system comprising a conveyor way spaced main stations each having receiving and dispatch terminals on said way and an intermediate station, means for conducting carriers along the way from either main station to the other and from the intermediate station to one at least of the main stations, means for initiating movement of a carrier from one station to another, and means to prevent dispatch of a carrier from any other station so long as said first carrier is in transit.

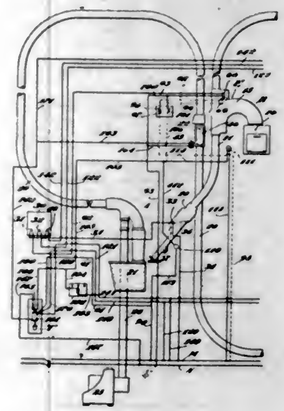
1,871,996. CONVEYER MECHANISM. CHESTER S. JENNINGS, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed July 1, 1930. Serial No. 465,098. 16 Claims. (Cl. 198—34.)



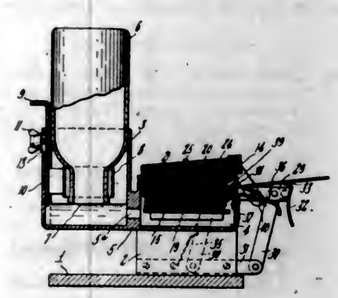
1. Conveyer mechanism comprising a belt, on which articles are advanced at a predetermined speed, means for deflecting a portion of the belt below the path of travel of the articles, rollers on which the articles are supported above the deflected portion of and are free from the belt, and means for rotating said rollers and thereby advancing the articles thereon at a speed of travel other than that imparted by the belt so that when returned to the belt each article is at least a predetermined distance behind the preceding article.

1,871,997. PNEUMATIC DISPATCH SYSTEM. CHESTER S. JENNINGS, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Feb. 7, 1931. Serial No. 514,092. 30 Claims. (Cl. 243—9.)

1. In a pneumatic despatch system including a central station, a plurality of outstations, a main line, branch lines to certain of said outstations, a despatch terminal on the main line at the central station, receiving terminals a the outstations and switch mechanisms at the junctures of the main line and the branch lines, each of which mechanisms includes an arm normally in position to permit the travel of carriers along the main line, and means for moving said arm into a position for deflecting a carrier to the branch line with which it is associated, a device at the central station for actuating the arm moving means of each switch mechanism, said device being freely operable and normally ineffective and means actuated by the introduction of a carrier into the inlet terminal of the main line at the central station by which the operation of said device is rendered effective to actuate the arm moving means of any desired switch mechanism whereby the carrier is deflected to the branch line and receiving terminal of a predetermined outstation.

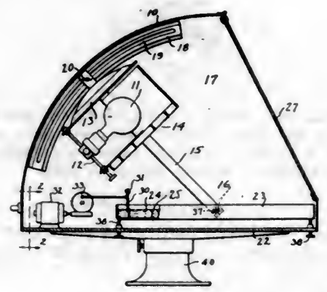


1,871,998. COATING MACHINE. MELVIN O. JENNINGS, Lexington, Mass., assignor to Beckwith Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 26, 1930. Serial No. 477,933. 9 Claims. (Cl. 91—47.)



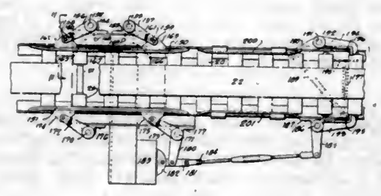
1. A machine of the class described, comprising a pair of absorbent pads arranged in superposed contactual relation, a receptacle for holding liquid in which the lower pad is partly submersed, and means for sequentially separating said pads and for bringing them together by manual movement of said means in a single direction.

1,871,999. ILLUMINATING DEVICE. RUSSELL S. KATZ, Hamilton, Ohio. Filed Feb. 13, 1929. Serial No. 339,611. 7 Claims. (Cl. 240—3.)



1. An illuminating device comprising a light source, a reflector, and a body of liquid positioned with respect to the reflector as to be interposed in the path of the light rays traveling from said source to the reflector and from the reflector to an object to be illuminated.

1,872,000. CONVEYER SYSTEM. HENRY C. KELLER, Syracuse, N. Y., and MAYNARD VAN BILLIARD, Philadelphia, Pa., assignors to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed June 20, 1930. Serial No. 462,454. 23 Claims. (Cl. 198—19.)



1. In a conveyer system comprising at least two conveyers by which articles are transported, stop and release mechanism associated with each conveyer for regulating the movement of articles thereon, and a device for controlling the operation of such mechanisms whereby the articles upon one conveyer is permitted to move in predetermined time relation to the articles upon another conveyer, said stop and release mechanisms being operable upon articles transported by one reach of each conveyer and said control device being actuated by articles transported upon the other reach of one conveyer.

1,872,001. CARPET FASTENER. GEORGE A. KING and FREDERICK TROSKE, Waterbury, Conn., assignors to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 15, 1931. Serial No. 550,998. 7 Claims. (Cl. 24—213.)

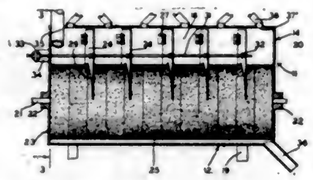
1. In a carpet fastener, a snap fastener element including a laterally extending base portion slitted adjacent to its periphery to provide a plurality of deformable fingers, and a casing element including an apertured plate and means whereby the casing element may be fastened to an article, the fastener element arranged with

its base portion adjacent to one face of said plate and having its fingers passed through the plate by virtue of the apertured formation thereof and bent into proximity to the other face of the plate to mount said fastener ele-



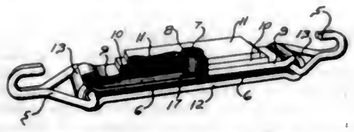
ment upon said casing element, and the apertured formation of the plate being of such proportions as to provide for a laterally shiftable mounting of said fastener element relatively to said casing element.

1,872,002. DELINTING MACHINE FOR COTTON SEED AND PROCESS. CLAUDE E. POWER, Huntington Park, Calif. Filed Aug. 13, 1930. Serial No. 474,940. 15 Claims. (Cl. 19—44.)



1. A delinting machine comprising in combination a casing having a somewhat cylindrical brush rotatably mounted therein with the bristles extending toward the periphery, the base of the casing being somewhat concentric to the brush and having cam surfaces therein, an in-feeding means for seeds at one end of the casing, adjustable diverting means to progressively feed the lint coated seeds longitudinally of the brush, a discharge means for the clean seeds at the opposite end of the casing, and a suction means to withdraw the lint located between the diverting means.

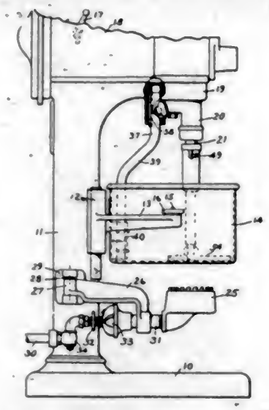
1,872,003. CROSS LINK FOR TIRE CHAINS. BENJAMIN H. PRATT, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Jan. 14, 1929. Serial No. 332,273. 3 Claims. (Cl. 152—14.)



1. A cross link for anti-skid chains which comprises a rubber body portion having a road engaging surface, fastening means embedded in the ends of the body portion, a web of fibrous reinforcing material running longitudinal of the body portion and connecting the fastening means, the ends of the web being exposed at the road engaging surface of the body portion.

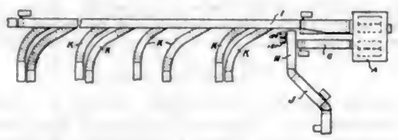
1,872,004. FOOD HANDLING APPARATUS. THOMAS F. RATAICZAK, Troy, and JOHN C. SLAGER, Dayton, Ohio, assignors to The Hobart Manufacturing Company, Troy, Ohio, a Corporation of Ohio. Filed Apr. 27, 1929. Serial No. 358,530. 11 Claims. (Cl. 259—102.)

1. In apparatus of the character described, an actuating member having a shaft, a scraper member having a scraping blade connected to a hub provided with a bore loosely receiving said shaft, and a pin carried by one of said members and loosely fitting within a slot in the other of said members, to thereby connect said scraper member to said actuating member for movement therewith while



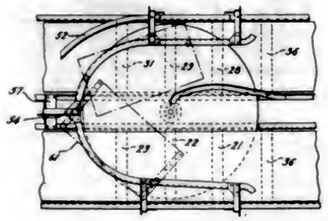
permitting wobbling movements of the hub and scraping blade of the scraper member relative to the actuating member.

1,872,005. CONVEYER. JOHN E. REGAN, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Feb. 7, 1930. Serial No. 426,526. 30 Claims. (Cl. 198—38.)



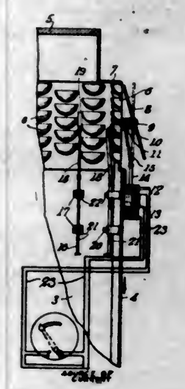
1. Conveyer mechanism comprising means for separating articles delivered thereto into groups, and means for diverting the articles in one group to predetermined destinations, the first said means being controlled by each of the articles transported and the second said means being controlled by each of the articles in the group transported by the conveyer mechanism to predetermined destinations.

1,872,006. DISK DEFLECTOR. JOHN E. REGAN, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Sept. 17, 1930. Serial No. 482,637. 8 Claims. (Cl. 198—25.)



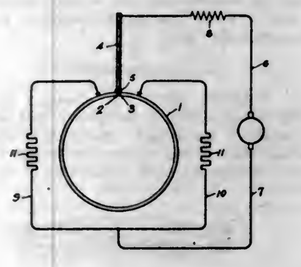
1. In a conveyor system, the combination of upper, intermediate and lower travelling surfaces, the intermediate travelling surface being rotatable and disposed in relatively close proximity to each of the other travelling surfaces extending below the upper surface and above the lower surface and in contact with and rotatable by at least one of said surfaces, means for causing an article to move from the upper travelling surface onto the intermediate travelling surface, and means for causing said article to move from the intermediate travelling surface onto the lower travelling surface.

1,872,007. ELEVATOR VENTILATION. FRANK C. REILLY, New York, N. Y. Filed Dec. 10, 1930. Serial No. 501,170. 12 Claims. (Cl. 98—1.)



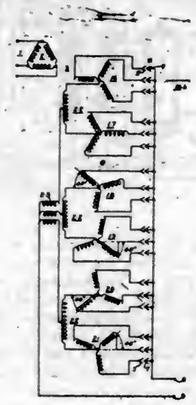
1. In elevator ventilation, an elevator car having walls with a ventilation opening or openings therein, and air deflecting means positioned to direct air into the car through said ventilating opening or openings in the vertical travel of the elevator.

1,872,008. ELECTRIC ARC WELDING. WALTHER RICHTER, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Apr. 19, 1929. Serial No. 356,574. 7 Claims. (Cl. 219—6.)



1. In an electric arc welding apparatus, an electrode arranged in arcing relation to the metal to be welded and connected to one terminal of a source of welding energy, and a plurality of ground leads of substantially high resistance connecting the metal to be welded to the other terminal of the source of welding energy and arranged on opposite sides of the seam to be welded to control the welding arc established between said electrode and the work.

1,872,009. THERMIONIC RECTIFIER SYSTEM. ERNEST YEOMAN ROBINSON, Lymm, and CECIL REGINALD BURCH, Stretford, Manchester, England, assignors to Associated Electrical Industries Limited, a British Company. Filed Aug. 28, 1925. Serial No. 53,202. 3 Claims. (Cl. 175—363.)

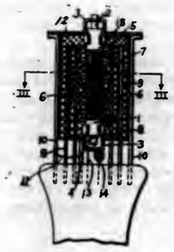


1. An 18-phase rectifier system comprising 6 groups, each group comprising an operative 3-phase rectifier connection of thermionic valve devices, and means for causing each phase of said 3-phase rectifiers to carry current during substantially

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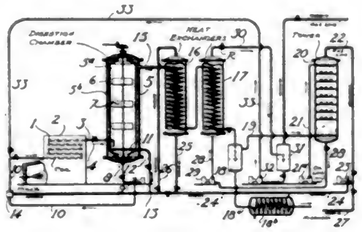
electrical radians per cycle.

1,872,010. VACUUM ELECTRIC TUBE DEVICE. ERNEST YEOMAN ROBINSON, Enfield, England, assignor to Associated Electrical Industries, Limited, a Company of Great Britain. Filed Nov. 14, 1928, Serial No. 319,348, and in Great Britain Dec. 13, 1927. 1 Claim. (Cl. 250—27.5.)



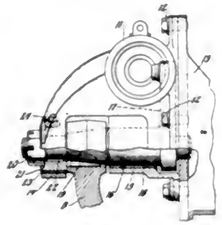
A vacuum electric tube device comprising an electrode structure comprising an equipotential cathode, an electrical heater therefor, a grid, an anode having numerous openings therein to permit of substantial radiation of heat from the cathode, and a screen connected to said cathode and extending across the device between the point of leading out the heater connection on the one hand and said electrode structure on the other hand.

1,872,011. IMPROVED PROCESS FOR TREATING HYDROCARBONS. ROBERT P. RUSSELL, Baton Rouge, La., assignor to Standard-I. G. Company. Filed July 2, 1928. Serial No. 289,705. 2 Claims. (Cl. 196—62.)



1. In a process for the destructive hydrogeneration of hydrocarbon oils in which the oil is treated in a reaction zone with a gas rich in free hydrogen under pressure in excess of 50 atmospheres and at temperature of the order of 750 to 970° F., the improved steps of separating the reaction gas from the liquid product, scrubbing the gas with the feed oil under pressure and at temperature below about 100° F. whereby a large portion of the hydrocarbon constituents of the gas are dissolved and a gas richer in hydrogen is obtained, heating and reducing pressure on the feed oil whereby the dissolved gas rich in hydrocarbons is expelled and discarded, and then forcing the oil and the undissolved gas rich in hydrogen into the reaction zone.

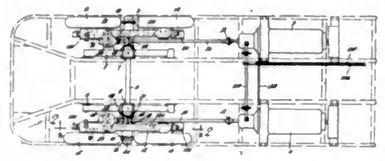
1,872,012. STEERING GEAR. ERIC OLLE SCHJOLIN, Birmingham, Mich., assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich., a Corporation of Maine. Filed Oct. 25, 1929. Serial No. 402,469. 2 Claims. (Cl. 74—79.)



1. In a steering mechanism, a gear casing, having a pair of laterally projecting spaced apertured forks, a trunnion shaft extending through the apertures of the forks and having a gear engaging portion at its inner end and bearing in the fork adjacent said portion, a pitman arm keyed on said shaft in the space between the forks, a spacer sleeve keyed on the outer end of the shaft and bearing in the outer fork, and a nut threaded on the shaft to hold the sleeve in engagement with the side of said pitman arm.

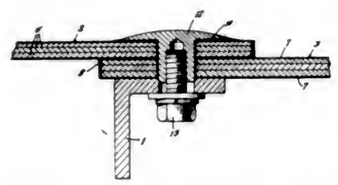
1,872,013. SIX WHEEL VEHICLE. ERIC OLLE SCHJOLIN, Pontiac, Mich., assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich., a Corporation of Maine. Filed Nov. 9, 1929. Serial No. 405,945. 19 Claims. (Cl. 180—22.)

1. In a motor vehicle, a dead axle, lever members pivoted at an intermediate point on opposite ends of the axle for independent swinging movement, a wheel mounted on each end of each member forming thereby two sets of tandem wheels, individual driving engines for the respective sets, operative connections between each set of wheels and its associated engine, including a sectional



drive shaft, and a universal joint between sections of said shaft located adjacent the axis of swinging movement of the lever members.

1,872,014. CONNECTER. ERIC OLLE SCHJOLIN, Birmingham, Mich., assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich., a Corporation of Maine. Filed Nov. 9, 1929. Serial No. 405,946. 4 Claims. (Cl. 20—15.)



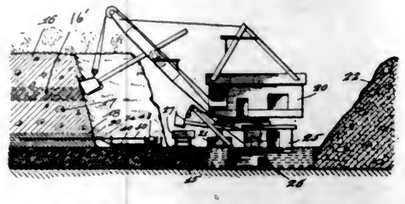
1. A connecter of the class described, having a shank and a relatively flat head, that tapers outwardly to a feather edge at its periphery, the edge extending initially below the underside of the head to provide a cavity to receive a sealing material and being flexible to bend out when the head is drawn in whereby the edge portion first seals the sealing material against escape and then flattens out to allow the sealing material to be packed tightly beneath the head.

1,872,015. DRYING METHOD. DUNBAR L. SHANKLIN, Waverly, Mass., assignor to Dewey and Almy Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 30, 1929. Serial No. 396,051. 3 Claims. (Cl. 34—24.)



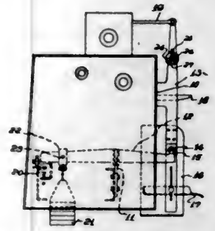
1. The method of drying desiccable deposits on plate articles of substantially standardized size and shape, characterized by can-ends, which comprises arranging the articles in symmetrically contacting, superposed relationship, thus providing a stack exteriorly characterized by relatively large imperforate surfaces and relatively minute spaces between the edges of the articles, generating an intense drying gas jet, directing the jet against one side of the stack in a substantially horizontal direction so that the gas impinging upon the relatively large surfaces has a positive static pressure, and thus causing sufficient air to seep through the minute spaces and between the articles to remove moisture from the deposits while precluding the formation of drops of moisture on the surfaces of the articles.

1,872,016. SURFACE MINING. ROBERT H. SHERWOOD, Indianapolis, and WILLIAM H. STEWART, Linton, Ind., assignors to Allendale Manufacturing Company, Inc., Indianapolis, Ind., a Corporation of Indiana. Filed July 28, 1930. Serial No. 471,142. 9 Claims. (Cl. 262—1.)



1. The method of strip-mining coal which is covered by an overburden bank containing a rock stratum, which consists in drilling into the overburden bank near the base thereof and below the rock stratum a series of long substantially horizontal holes substantially paralleling such base, putting explosive charges in said holes, firing those charges to lift the material of the overburden bank to loosen it while leaving it at least largely in place and to fragmentize such rock stratum, removing the loosened and fragmentized material directly from the overburden bank to a spoil bank, and then removing the coal that is uncovered by the removal of the overburden bank.

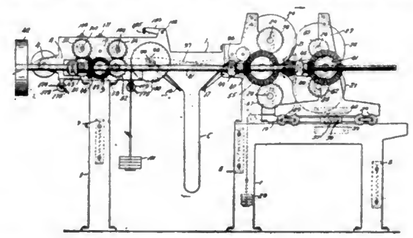
1,872,017. BAG FILLING MACHINE. FRED J. STEPHENS, Cambridge, Mass., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 21, 1931. Serial No. 510,166. 2 Claims. (Cl. 265—51.)



1. In a bag filling machine, a pivotally mounted scale beam, a bag supporting frame mounted upon one end of said scale beam, means associated with said frame for injecting powdered materials into said bag, weights adjustably mounted upon the opposite end of said scale beam, and weights of low denomination carried upon said bag supporting frame.

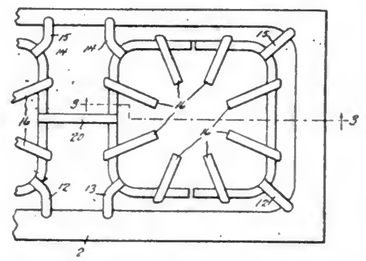
1,872,018. AUTOMATIC ROLL WINDING MACHINE. EDWARD T. STREET, Bound Brook, N. J., assignor to The Ruberoid Co., New York, N. Y., a Corporation of New Jersey. Filed Feb. 21, 1928. Serial No. 256,053. 9 Claims. (Cl. 242—56.)

1. In a machine of the character described, means for measuring a length of web, web feeding means, means adapted to operate said web feeding means intermittently to advance a length of web at each operation, means for cutting off said intermittently fed lengths successively, means for clamping the web during its periods of rest, means for automatically controlling actuation of the feeding, the cutting, and the clamping means, said controlling means being governed by operation of the measuring means, and



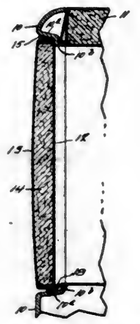
means for winding each of said lengths into a roll, said winding means comprising a plurality of rotating members between and by which the material is rolled up.

1,872,019. TOP FRAME AND GRID CONSTRUCTION FOR OPEN TOP GAS RANGES. THOMAS E. TAYLOR, Mansfield, Ohio, assignor to The Tappan Stove Company, Mansfield, Ohio, a Corporation of Ohio. Filed Feb. 24, 1930. Serial No. 430,555. 6 Claims. (Cl. 126—214.)



1. In a gas range, the combination of a frame, a burner disposed below said frame, a grid disposed over said burner and supported from said frame at no more than four spaced points, said grid being made up of a plurality of sections which are spaced apart and independently supported on the frame whereby to reduce dissipation of heat by conduction.

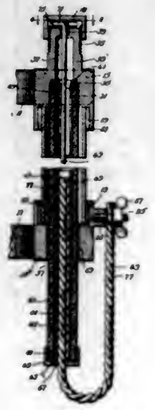
1,872,020. OVEN DOOR CONSTRUCTION. THOMAS E. TAYLOR, Mansfield, Ohio, assignor to The Tappan Stove Company, Mansfield, Ohio, a Corporation of Ohio. Filed July 23, 1930. Serial No. 469,974. 9 Claims. (Cl. 126—190.)



1. An oven door including a trough adjacent the bottom thereof adapted to collect any moisture condensing on such door due to the use of "wet" fuel and to retain the same

until the oven reaches a temperature sufficient to evaporate it, said trough comprising a metal strip extending along the bottom edge of the door and projecting inwardly and upwardly therefrom.

1,872,021. EXPULSION FUSE. CYRIL H. THOMAS, Flossmoor, Ill. Filed Jan. 18, 1929. Serial No. 333,315. 24 Claims. (Cl. 200—127.)



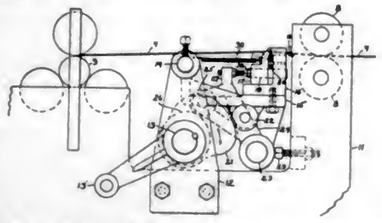
1. An electric fuse comprising a fuse holder and an elongated liner comprising a plurality of cylindrical tubes of lava supported in end to end relationship within the fuse holder.

1,872,022. RAIL BONDING. WILLIAM A. WHITE, Cleveland, Ohio, assignor to The Electric Railway Improvement Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 8, 1922. Serial No. 599,729. 3 Claims. (Cl. 173—262.)



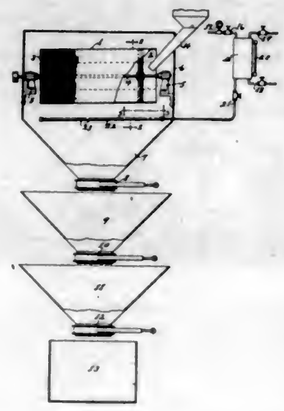
1. A method of forming a rail-bond having a stranded conductor body of copper, which comprises fitting on to the end of such body a tube of higher melting point, including within the end of such tube a small quantity of braze material, heating such terminal until such material has softened, forcing the body end thereinto, and then forging such terminal while hot so as to compact the included strands and substantially eliminate voids.

1,872,023. TRANSFER COMB. CHARLES CLINTON ALVORD, Worcester, Mass., assignor to Worcester Loom Works, Worcester County, Mass. Filed Apr. 26, 1930. Serial No. 447,585. 13 Claims. (Cl. 28—55.6.)



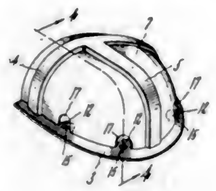
1. As a new article of manufacture, a transfer comb for tuft yarns in which the teeth are relatively flexible, the apices of said teeth normally being substantially in contact so as positively to prevent broadside egress of the yarns.

1,872,024. PROCESS FOR PRODUCING FERTILIZING MATERIAL. HARRY R. BATES, Atlanta, Ga., assignor to International Agricultural Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1929. Serial No. 352,632. 7 Claims. (Cl. 71—9.)



1. The process which comprises dropping particles of acid phosphate downwardly and spraying ammonia liquor upwardly into contact with the falling particles.

1,872,025. SAFETY BOX TOE AND PROTECTOR. WILLIAM H. BAYNARD, Boston, and HARRY G. MCMURRAY, Wakefield, Mass., assignors to Beckwith Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 15, 1930. Serial No. 488,864. 1 Claim. (Cl. 36—72.)



A toe protector comprising a rigid shell formed to enclose the toe portion of a shoe and provided with a marginal flange at its lower edge to overlie and be secured to the extension edge of a shoe sole, tongues struck inwardly from the lower portion of said shell above said flange and brought into the plane thereof to form inward extensions thereof, said flange adjacent to said struck portions being perforated for the reception of headed fastening elements for securing said shell to the sole extension edge of the shoe, the heads of said fastenings projecting through the shell openings at said struck portions.

1,872,026. SODA-LIME AND METHOD OF PREPARING SAME. CHARLES A. CAREY, Arlington, Mass., assignor to Dewey and Almy Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 22, 1930. Serial No. 504,224. 10 Claims. (Cl. 23—239.)

1. Method of making granular soda-lime, comprising as steps agitating a charge of dry soda-lime fines and dust and

introducing water thereto in the form of a fine mist in an ultimate amount of approximately 25% by weight.

7. Granules of soda-lime characterized by having a generally spherical shape and a convoluted surface.

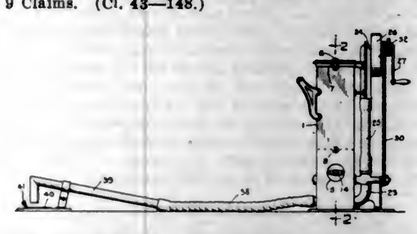
8. Granules of soda-lime structurally characterized by having a porous center of small aggregated particles surrounded by a denser layer.

1,872,027. FRICTION CLUTCH. HAROLD D. CHURCH, Cleveland, Ohio, assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 14, 1925. Serial No. 62,443. 8 Claims. (Cl. 192—52.)



8. In a friction clutch, the combination of a relatively fixed clutch member, a relatively movable clutch member, and a driven plate member located therebetween, and friction rings upon opposite faces of said plate member, the contact area between the clutch members and rings constructed to progressively increase till full contact and engagement of the clutch is effected by the kinking of said plate under pressure between said clutch members.

1,872,028. BLOWER DUSTING APPARATUS. CHARLES D. COLLINS, New York, N. Y., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Dec. 17, 1928. Serial No. 326,678. 9 Claims. (Cl. 43—148.)



1. A dusting apparatus comprising a hopper, a plurality of agitators therein rotatable on parallel axes and in opposite directions, means to deliver material from the hopper to a discharge duct, and means to blow the delivered material out of said duct.

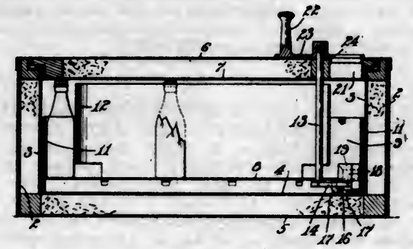
1,872,029. MANUFACTURE OF ALIPHATIC ANHYDRIDES. HENRY DREYFUS, London, England. Filed Mar. 8, 1929, Serial No. 345,444, and in Great Britain Mar. 21, 1928. 8 Claims. (Cl. 260—128.)

1. In the process of manufacturing a lower aliphatic anhydride of the formula $(RCO)_2O$ from the decomposition of the corresponding aliphatic acid of the formula RCOOH, where R represents an alkyl group containing at least two carbon atoms, the step which comprises effecting the reaction in the presence of at least one phosphoric acid as catalyst.

1,872,030. MANUFACTURE OF ALIPHATIC ANHYDRIDES. HENRY DREYFUS, London, England. Filed Mar. 8, 1929, Serial No. 345,449, and in Great Britain Mar. 27, 1928. 13 Claims. (Cl. 260—123.)

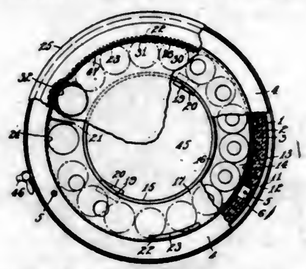
1. In a process for the manufacture of an aliphatic anhydride by the thermal decomposition of the corresponding aliphatic acid the step which comprises effecting the reaction in the presence of at least one hydrohalide acid as catalyst.

1,872,031. BOTTLE REFRIGERATOR. CHESTER A. FRICK and ROBERT E. BAKER, Muncie, Ind., assignors to Glascock Brothers Mfg. Co., Muncie, Ind., a Corporation of Indiana. Filed Nov. 7, 1928. Serial No. 318,899. 9 Claims. (Cl. 312—36.)



1. In a bottle dispensing refrigerator the combination with a container having a continuous channel therein arranged to receive the bottles in side by side relation, said container having a single opening therein through which the bottles are axially inserted and removed, of a propeller in said channel and a closure member for said opening and means for coincidentally moving said propeller and closure in two directions, said means permitting the closure to be moved independently of the propeller during a portion of its movement.

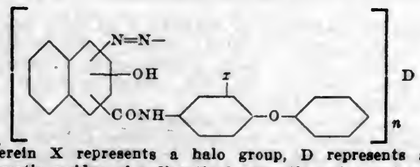
1,872,032. BOTTLE DISPENSING REFRIGERATOR. CHESTER A. FRICK and ROBERT E. BAKER, Muncie, Ind., assignors to Glascock Brothers Mfg. Co., Muncie, Ind., a Corporation of Indiana. Filed Jan. 15, 1931. Serial No. 508,904. 8 Claims. (Cl. 312—36.)



7. In a bottle dispensing refrigerator, the combination with a cylindrical container having an annular channel therein adapted to support the bottles in a side by side upright position, of a rotatable cover for said container having a single receiving and dispensing opening therein, a propeller in said channel, a lost motion connection between said cover member and said propeller and means for closing said opening except when the same is in a dispensing or receiving position.

1,872,033. FAST AZO DYE. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 2, 1931. Serial No. 513,055. 7 Claims. (Cl. 260—76.)

1. As a new compound, an azo dye having the general formula,



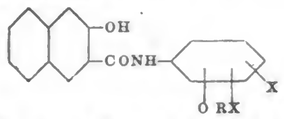
wherein X represents a halo group, D represents an aromatic residue of a diazotized aromatic amine and n is the number of azo substituents linked with D.

1,872,034. AZO DYE FROM DIPHENYLOXIDE DERIVATIVES. ERNEST F. GRETHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 2, 1931. Serial No. 513,056. 12 Claims. (Cl. 260—76.)

1. The method of making an azo dye, which comprises coupling a diazotized 4-amino-2-halo-diphenyloxide with an arylide of a hydroxynaphthoic acid.

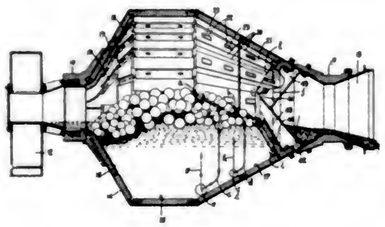
1,872,035. AZO DYE FROM SUBSTITUTED ANILIDES OF 2.3 HYDROXYNAPHTHOIC ACID. ERNEST F. GRETHER and LINDLEY E. MILLS, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 8, 1931. Serial No. 543,010. 11 Claims. (Cl. 260—95.)

1. In a method of making an azo dyestuff, the step which consists in coupling an arylide of 2.3-hydroxynaphthoic acid having the general formula;



wherein X represents a halogen group, and wherein R represents a radical selected from the group consisting of alkyl radicals and aryl radicals of the benzene and diphenyl series, with a diazotized aromatic amino compound.

1,872,036. GRINDING MILL. HARLOWE HARDINGE, York, Pa., assignor to Hardinge Company, Incorporated, York, Pa., a Corporation of New York. Filed July 22, 1929. Serial No. 379,898. 14 Claims. (Cl. 83—9.)



1. In a grinding mill, the combination with a rotary drum, of a lining therefor having a plurality of longitudinally extending lining members forming alternate elevations and longitudinal depressions, each of said depressions having opposite walls sloped at an angle to the radius of the drum and converging toward a point beyond the bottom of the depression formed thereby, and means engaging the opposite sloping walls of depressions and the drum for maintaining said lining members in place within the drum, said means being so formed as to leave grooves within said depressions which are adapted to receive material carried within the drum.

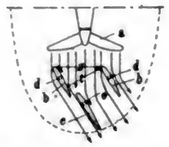
1,872,037. METHOD OF MAKING A BRUSH. EDWARD M. HILL, Brookline, Mass., assignor to Whiting-Adams Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 29, 1929. Serial No. 410,412. 2 Claims. (Cl. 300—21.)

1. A method of making brushes of the type described, which comprises treating the butt ends of a bunch of bristles with a rubber cement, engaging their ends in one end of a ferrule, passing through the other end of said ferrule a thin but rigid metal plate having prongs struck out therefrom in the direction of the bristles, driving said prongs into said bristles to expand them into tight contact



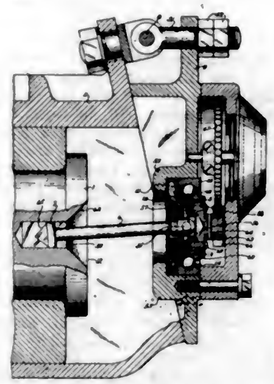
with the interior wall of said ferrule, heating to set and vulcanize the rubber, and fixing the butt end of a handle in the other end of said ferrule.

1,872,038. RUDDER ARRANGEMENT. FRANZ HITZLER, Lauenburg-on-the-Elbe, Germany. Filed Oct. 7, 1930, Serial No. 487,007, and in Germany Aug. 2, 1930. 8 Claims. (Cl. 114—163.)



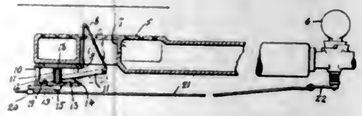
1. In the device of the character described, two forward rudders arranged in the same cross-ship plane, a third back rudder arranged in the middle and behind said two forward rudders, a shaft for each of said rudders rotatably mounted in the ship body, means connecting said rudder shafts with each other, and a driving device rotating said rudder shafts simultaneously in the same direction, the back edge of the one of said two forward rudders which lies at the exterior side of the circle of rotation of the ship approaching in operation the forward edge of said third back rudder so that the flow velocity for said third rudder increases with the increase of the rudder angle and a tearing off of the flow is avoided.

1,872,039. ODOMETER DRIVE. RICHARD H. JAMES, East Hartford, Conn., assignor to Veeder-Root Incorporated, Hartford, Conn., a Corporation of Connecticut. Filed Jan. 19, 1929. Serial No. 333,584. 8 Claims. (Cl. 235—96.)



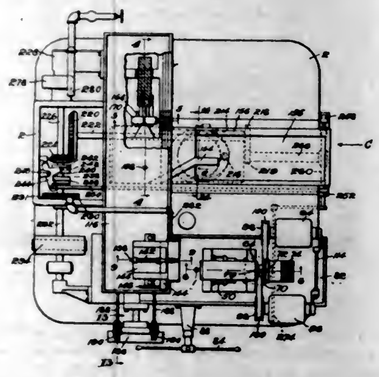
1. In combination a rotatable axle, a journal box supporting the same, a cover for the journal box, an odometer and operating means therefor carried by the cover, a driving connection between the operating means and the axle, said driving connection having a part non-circular in cross section, a non-circular part in the axle fitting said part, said bore having its outer edge provided with a cam surface whereby upon closing the cover the driving member is properly guided into engagement with the bore in the axle by said cam surface, and means for so supporting the driving connection while the cover is open that it will engage the said cam when the cover is moved toward closed position.

1,872,040. THERMOSTATIC CUT-OFF FOR DOMESTIC GAS BURNERS. JAMES A. MALONEY, New York, N. Y. Filed Dec. 11, 1929. Serial No. 413,246. 2 Claims. (Cl. 158—117.1.)



1. In combination with a gas burner provided with a cock controlling the flow of gas to the burner, means for moving the cock from open to closed position comprising, a V-shaped thermostatic element at the burner having one end thereof hinged, a lever pivotally connected to the other end of said element, a spring actuated arm, a slidable connection between the arm and the cock, a link operable by the lever and having means for engaging the arm when the cock is opened and the flame affects the V-shaped element.

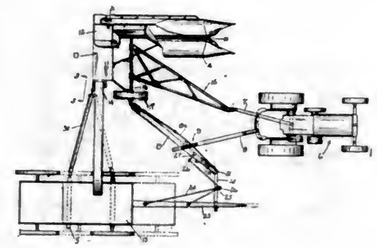
1,872,041. GRINDING MACHINE. ARTHUR ANGUS NICHOLS and WILLIAM HART NICHOLS, Waltham, Mass. Filed Sept. 11, 1929. Serial No. 391,858. 24 Claims. (Cl. 51—43.)



1. In combination, a grinding tool, means to move said tool in a planetary path relatively to the work, and means automatically to effect alignment of the axis of said grinding tool with a plurality of selected points in the work while said grinding tool is rotating.

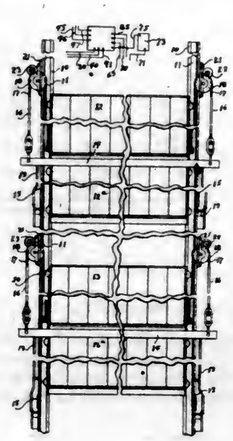
1,872,042. AGRICULTURAL IMPLEMENT. LOUIS A. PARADISE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Apr. 11, 1930. Serial No. 443,869. 5 Claims. (Cl. 280—33.44.)

3. In a draft connection between a tractor and an agricultural implement carried on a transverse wheel supported axle and positioned back of and offset to one side of the tractor and a wagon disposed alongside of the implement and offset to the other side of the tractor, a draft member connecting the tractor and the implement, and a diagonal structure connecting the wagon with the axle of the implement outside of the carrying wheel adjacent the wagon,



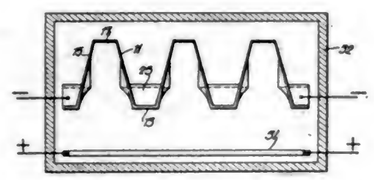
whereby the side draft of the wagon exerts a side pressure against the implement through the axle thereof to counteract the side draft of the implement.

1,872,043. DOOR OPERATOR. ROBERT S. PEELLE, Hollis, N. Y., assignor to The Peelle Company, New York, N. Y., a Corporation of New York. Filed Sept. 10, 1929. Serial No. 391,526. 17 Claims. (Cl. 187—54.)



1. A door operator embodying therein the combination with guides within an elevator shaft, a series of elevator doors each having sections vertically and oppositely movable on said guides, connections between said sections at the opposite sides thereof, and sheaves about which said connections pass, of an electric motor within the shaft associated with each of said sheaves, gearing connecting each of said motors with its associated sheave, a main electric power line extending adjacent all of said doors, branch lines extending therefrom adjacent each door and connected with the motors adjacent such door, a normally open switch in each of said branch lines adapted to be operated only when a car is positioned adjacent said switch, pole changing switches controlling the circuits to said main power line, electro-magnetic control mechanisms for said pole changing switches, and means whereby said control mechanisms may be selectively actuated from a remote point.

1,872,044. RADIATOR AND METHOD OF MAKING THE SAME. GEORGE H. PHELPS, Warehouse Point, Conn., assignor, by mesne assignments, to Metropolitan Engineering Company, a Corporation of New York. Filed July 16, 1929. Serial No. 378,612. 9 Claims. (Cl. 29—157.3.)



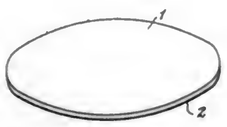
7. A method of forming radiators of the type described which comprises forming a sheet of metal into fins suitable for heat radiation, and electrolytically depositing a highly conductive layer on said fins in a thickness decreasing toward the outer edges of the fins.

1,872,045. APPARATUS FOR UNCOILING COILS OF METAL STRIP. JOHN A. SMITMANS, Pittsburgh, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 1, 1931. Serial No. 554,505. 8 Claims. (Cl. 242—78.)



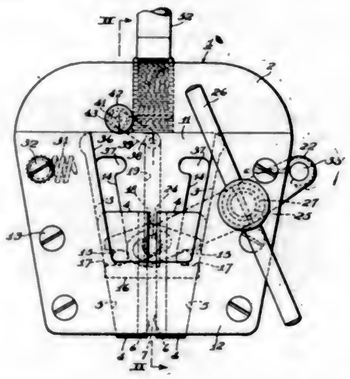
8. In an apparatus for uncoiling coiled metal strip the combination of a coil support, means mounted below said support for engaging the free end of a coil supported thereby, means for moving said end engaging means to separate said free end from the rest of the coil and a movable platform for supporting the strip as it is pulled from the coil.

1,872,046. CLOSURE FOR CONTAINERS. MERWYN C. TEAGUE, Jackson Heights, N. Y., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Jan. 25, 1929. Serial No. 335,150. 11 Claims. (Cl. 215—37.)



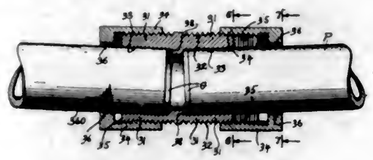
1. A sealing closure comprising a layer of paper having at least one of its surfaces coated with a layer of grainless rubber substantially free of water soluble material.

1,872,047. TESTING MACHINE. RICHARD L. TEMPLIN, Parnassus, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 13, 1930. Serial No. 481,612. 13 Claims. (Cl. 24—243.)



1. A shackle for testing machines comprising a frame having converging guide surfaces, gripping jaw members having bearing surfaces in engagement with the guide surfaces and having gripping surfaces disposed substantially parallel to each other, operating pins extending from the jaw members, a guide block slidably mounted on the frame and having transverse slots for engaging the pins on the jaw members to guide them, a pivoted arm for moving the guide block and jaw members, and a spring connected to the arm for forcing the jaw members to their closed position.

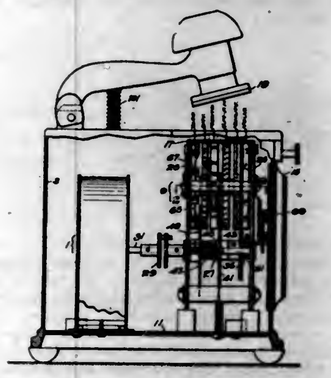
1,872,048. THREADLESS PIPE COUPLER. GEORGE C. THOMAS, Jr., Elizabeth N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 11, 1927. Serial No. 225,471. 9 Claims. (Cl. 285—122.)



1. A pipe coupler comprising, a coupler member including an externally threaded neck provided with a smooth pipe opening, an anchorage sleeve internally threaded and screwed onto the neck, said sleeve being provided with a threaded aperture larger than and embracing a pipe received into the neck; and said pipe and anchorage sleeve having an angular relation existing therebetween by which the threaded aperture gradually approaches the pipe and cuts its way into the pipe as the sleeve is rotated, and by which continued rotation thereof cuts the threaded aperture deeper into said pipe.

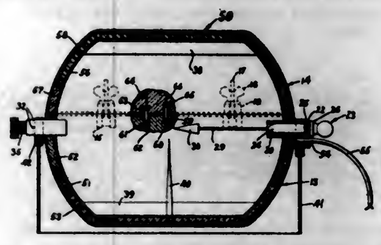
1,872,049. TIME STAMP. ROBERT H. THOMPSON and LEWIS GRAVES, New York, N. Y.; said Graves assignor to said Thompson. Filed Oct. 11, 1929. Serial No. 399,037. 4 Claims. (Cl. 234—57.)

1. In a time stamp, in combination, a set of type wheels for printing minutes and multiples thereof, a shaft on which said wheels turn, a parallel shaft, a clock movement in driving relation thereto, a gear drive between said parallel shaft and the minute wheel, a drive gear rotatably mounted on said parallel shaft and gearing



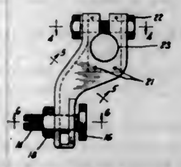
to a multiple type wheel, and transfer mechanism comprising a mutilated gear train from said parallel shaft controlling intermittent rotation of the said drive gear.

1,872,050. ROASTER. MAX F. THAU, Los Angeles, Calif. Filed May 12, 1930. Serial No. 451,650. 5 Claims. (Cl. 219—35.)



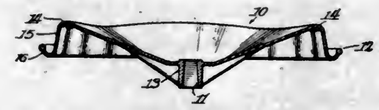
1. In a cooking device, a container, said container including a bottom member and a top member, releasable means to secure said top member to said bottom member, a support for said container, bearing members on opposite sides of said support, a pair of trunnions on said bottom member, said trunnions being positioned in said bearing members and being readily removable therefrom, one of said trunnions being hollow and having a threaded portion adjacent the outer end thereof, a tester, said tester including a hub having a threaded portion engaging said threaded portion of said trunnion, a handle on said hub, a reduced shank extending from the inner end of said hub and a hollow cone secured to said shank.

1,872,051. BRAKE. WILLIAM S. WATTS, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 22, 1929. Serial No. 380,111. 4 Claims. (Cl. 84—33.)



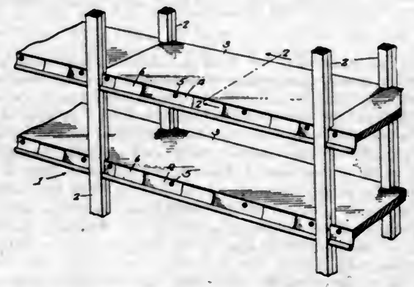
1. Brake applying means comprising, in combination with a shaft, a channel-sectioned stamping constituting a crank arm, one end of which is closed to form a box-sectioned structure and the other end of which is detachably secured to the shaft to angularly adjust the applying means with respect thereto.

1,872,052. HANDWHEEL FOR CAR BRAKES. HENRY I. WRIGLEY, Chicago, Ill., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed Dec. 18, 1929. Serial No. 414,852. 10 Claims. (Cl. 74—33.)



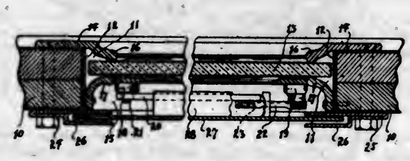
1. A disk wheel for brakes, the web thereof comprising a plurality of sector shaped convolutions of greatest axial dimensions adjacent the center of the wheel.

1,872,053. SHELF AND LABEL HOLDER. FRANK M. ZIMMERMAN, Aurora, Ill. Filed Mar. 26, 1930. Serial No. 439,064. 7 Claims. (Cl. 40—16.)



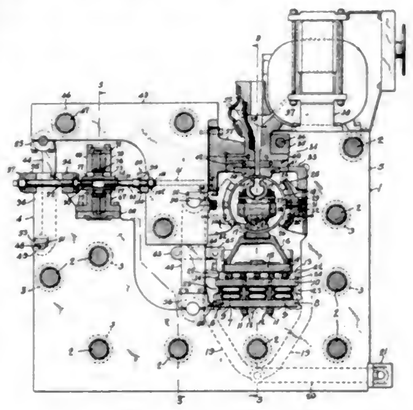
1. A shelf card molding having a substantially flat upright face and a lower edge front pocket formed contiguous with said face and inclined forwardly somewhat, said pocket being deep and wide and relatively thin whereby said molding is adapted to hold a card in static leverage tension.

1,872,054. ELEVATOR DOOR. ARTHUR A. ALLEN, Bellerose, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 5, 1930. Serial No. 441,872. 7 Claims. (Cl. 189—46.)



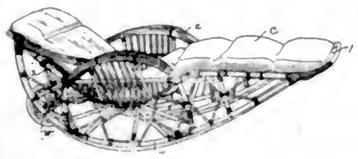
1. An elevator door embodying therein a fire retardant panel having an opening therethrough, a light of glass secured within said opening and closing same, metal guides upon opposite sides of, and extending above, said opening upon one side of the door, a metal shutter slidably mounted in said guides, a member mounted within and adjacent one lateral side and the top of said opening and projecting part way across same, means carried by said shutter engaging said member, and a fusible link mounted within said opening and engaging said member, whereby with the fusing of said link the shutter will displace said member and descend by gravity.

1,872,055. WELDING TUBULAR ARTICLES. BIRGER T. ANDREN, Milwaukee, WARREN F. HEINEMAN, Shorewood, and WILLIAM E. CRAWFORD, Wauwatosa, Wis., assignors to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Mar. 12, 1930. Serial No. 435,090. 82 Claims. (Cl. 219—6.)



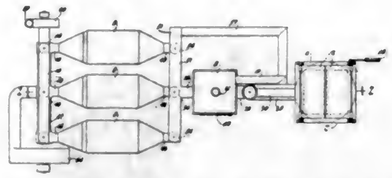
35. An apparatus for welding a longitudinal seam in a tubular blank, comprising a stationary welding electrode extending longitudinally of the tubular blank and adapted to engage the walls thereof adjacent one of the edges to be welded, a movable welding electrode extending longitudinally of the tubular blank and adapted to engage the walls of the same adjacent the opposite edge to be welded, a support engaging the outer walls of the tubular blank opposite the electrodes, means for effecting a relative movement of the edges to establish and maintain an electric arc between the edges to heat the same to a welding temperature, means for yieldably suspending the tubular blank between the electrodes and the support during the movement of the edges, and means for pressing the heated edges together to complete the weld.

1,872,056. CHAIR. CONRAD BIELECKY, Elmhurst, N. Y. Filed Mar. 4, 1930. Serial No. 433,030. 1 Claim. (Cl. 155—30.)



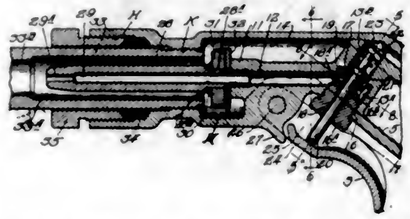
A chair comprising a rigid supporter frame, rocker members located underneath said rigid supporting frame and connected thereto respectively at the forward and the rear end thereof, said rocker members being located wholly between the ends of the frame, said frame comprising a leg-supporting portion and a seat portion and a back-supporting portion, and wheel means connected to the rocker members said wheel means being located normally in a plane above the normal supporting surface rearwardly thereof, and said rocker member comprising rear and front portions, the curvature of the rear portion being greater than the curvature of the front portion, whereby said supporting frame may be tilted rearwardly to bring said wheels in contact with the supporting surface, thereby forming a wheeled chair or stretcher.

1,872,057. CUPOLA FURNACE. ALFRED L. BORGEHOLD, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 24, 1930. Serial No. 430,821. 8 Claims. (Cl. 266—25.)



1. In apparatus for producing cast iron, a cupola having a charge containing portion, a charge admission portion of rectangular section above the charge containing portion, vertically spaced upper and lower closures within the rectangular charge admission portion, the lower closure comprising at least one door hinged at one side and opening downward so as to provide an opening of substantially the full cross sectional area of the cupola for admitting the charges, and the upper closure comprising at least one door hinged above and outside of the charge admission portion so as to swing upward and outward entirely clear of the entrance for the charge.

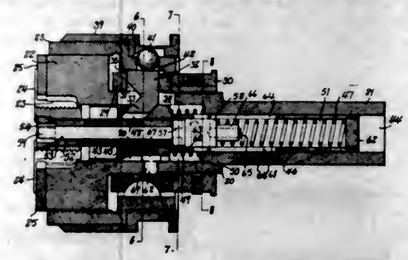
1,872,058. CAR WASHER GUN. SVEND BRAMSEN, WILLIAM HERSLEB, and FRITZ WAHLIN, Chicago, Ill., assignors to Binks Manufacturing Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 9, 1929. Serial No. 405,978. 3 Claims. (Cl. 299—140.)



1. In an appliance for projecting air and liquid in variable proportions, a body member provided with an air passage and a liquid passage, a barrel supported by the body member, and an air tube supported by the body member and connected to the air passage and extending into the barrel; the air tube being of smaller diameter than the bore of the portion of the barrel surrounding it, so as to afford a liquid inlet to the rear end of the barrel around the air tube; and a compressible control member adjacent to and behind the rear end of the barrel; the barrel being threaded upon the body member so as to be movable toward and away from the said control member to control the admission of liquid to the barrel; the air tube having an inner portion upon which the control member is sleeved and a shoulder engaging the forward face of the control member to clamp the latter against a portion of the body member.

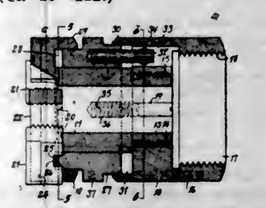
1,872,059. SELF-OPENING DIE HEAD. ALBERT F. BREITENSTEIN, New Haven, Conn., assignor to The Geometric Tool Company, New Haven, Conn., a Corporation. Filed Sept. 9, 1931. Serial No. 561,895. 15 Claims. (Cl. 10—95.)

1. In a self-opening die-head, the combination with the body, chasers, and chaser-operating member thereof; of a radially and axially movable latching-member adapted to releasably hold the said chaser-operating member in its chaser-closing position; a tripping-member mounted within the die-head structure in position to be moved by engagement with the work and engaged directly with a portion of the said latching-member for moving the



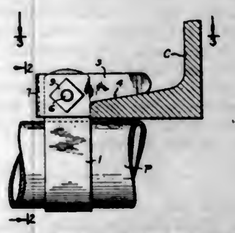
same radially inward into its unlatched position, and adjusting-means for moving the said latching-member axially for the adjustment of the chasers.

1,872,060. ADJUSTABLE DIE HEAD. ALBERT F. BREITENSTEIN, New Haven, Conn., assignor to The Geometric Tool Company, New Haven, Conn., a Corporation. Filed July 25, 1931. Serial No. 553,068. 6 Claims. (Cl. 10—122.)



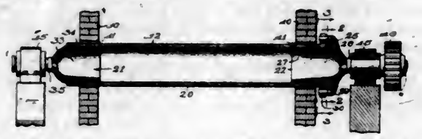
1. In an adjustable die-head, the combination with the body thereof; of a cam-ring mounted upon the said body with capacity for both rotary and axial movement with respect thereto, and provided with a plurality of forwardly-extending tangential cam-lugs; a plurality of chasers carried by the said body in position to be engaged by the cam-lugs of the said cam-ring; spring-means for yieldingly holding the said cam-ring in its forward position to maintain the cam-lugs thereof in engagement with the said chasers; and adjusting-means constructed and arranged to rotatably adjust the said cam-ring with respect to the said body and of such character as will permit a relative rearward axial movement thereof against the counterurge of the said spring means to entirely disengage its cam-lugs from the said chasers, whereby the chasers may be removed without retiring the said adjusting-means into a clearance position preparatory to rotating the cam ring.

1,872,061. CONDUIT SUPPORT. STEPHEN N. BUCHANAN, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 13, 1929. Serial No. 385,615. 8 Claims. (Cl. 248—32.)



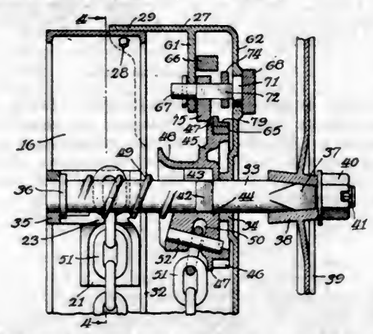
1. A conduit support for securing conduit to steel beams or other structure comprising a pipe retaining member, a member pivotally carried thereby, and a plurality of means of different forms carried by the pivoted member for suspending the support from various forms of structure.

1,872,062. ROLL FOR HEAT TREATING FURNACES. RALPH BURKE, Springfield, Ohio, assignor to The Ohio Steel Foundry Company, Lima, Ohio, a Corporation of Ohio. Filed Jan. 30, 1929. Serial No. 336,048. 4 Claims. (Cl. 263—6.)



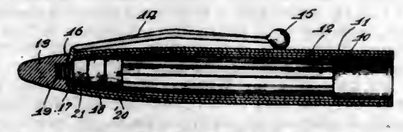
1. As a new article of manufacture, a roll for heat treating furnaces comprising a hollow central cylindrical main section composed of a high heat resisting alloy and substantially of uniform interior cross section throughout its length, end members each consisting of separate casting members of a different material having fitting engagement in the ends of said central section to permit freedom of expansion and contraction thereof relative to said separate casting members, said end members provided with reduced bearing portions forming supports for opposite ends of the roll and having openings therethrough to provide for the ventilation of the roll, and endwise movable interlocking driving connections between one of said end members and said main section.

1,872,063. HAND BRAKE. PERCY B. CAMP, Maywood, Ill., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed May 7, 1929. Serial No. 361,182. 6 Claims. (Cl. 74—110.)



1. In a hand brake for use with the foundation brake gear of a car, a ratchet, a holding pawl adapted to engage the ratchet to prevent release, a brake drum adjacent to the ratchet, a brake shoe adapted to engage the drum to resist release, and a lever for forcing the pawl into and out of engagement with the ratchet.

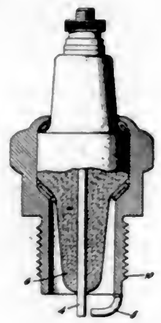
1,872,064. CAP CONSTRUCTION. WILLIAM R. CUTHBERT, Fort Madison, Iowa, assignor to W. A. Sheaffer Pen Co., Fort Madison, Iowa, a Corporation of Delaware. Filed July 22, 1929. Serial No. 379,959. 6 Claims. (Cl. 120—42.)



1. A cap construction for writing instruments comprising an outer shell superposed on an inner shell, a tip for

closing one end of said shells, said shells converging in diameter toward said closed end, and a securing member disposed interiorly and axially of said inner shell and having a converging edge for engaging the converging end of said shell, said securing member engaging said tip for holding said shells and said tip in a fixed assembled relation.

1,872,065. SPARK PLUG ELECTRODE AND OTHER ELECTRON EMITTING DEVICE. ORA S. DUFFENDACK, Ann Arbor, and HECTOR RABEZZANA, Flint, Mich., assignors to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Mar. 2, 1931, Serial No. 519,652, and in Great Britain Oct. 11, 1928. 7 Claims. (Cl. 123—169.)



1. A spark plug having an electrode having interspersed throughout its cross section a material of low work function for reducing the sparking voltage.

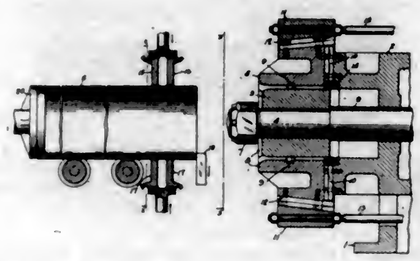
1,872,066. HITCH CONNECTION FOR PLOWS WITH SEEDERS. THEODORE J. ERDMAN, Horicon, Wis., assignor to The Van Brunt Manufacturing Company, Horicon, Wis., a Corporation of Wisconsin. Filed May 1, 1930, Serial No. 448,932. Renewed Nov. 12, 1931. 10 Claims. (Cl. 97—5.)



1. The combination with a plow having a draw bar, of a tongue attached to the draw bar and extending rearwardly therefrom, a wheeled element connected to the rear of the tongue by a vertical pivot, and a trailing machine attached to the rear of said element by vertical and horizontal pivots.

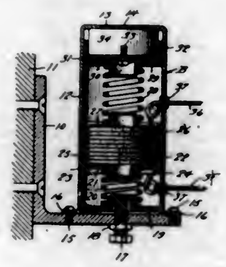
1,872,067. APPARATUS FOR FORMING BEADS ON TUBULAR ARTICLES. RUDOLPH FURRER, Wauwatosa, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed July 29, 1929. Serial No. 381,982. 4 Claims. (Cl. 219—3.)

1. An apparatus for forming a circumferential bead intermediate the ends of a tubular article, comprising a mandrel, a plurality of radially movable die members arranged about the axis of said mandrel and having a circumferential bead-forming concavity therein, said die members cooperating with said mandrel and providing a limited space therebetween for receiving the article, means symmetrically arranged about said axis and longitudinally spaced from said dies for locally heating said article in the region where the bead is to be formed, means for advancing said article along said axis to an operative



position with respect to said heating means and thereafter continuing the axial advance of said article to upset the locally heated region thereof in said bead-forming concavity and means cooperating with said mandrel to drive the latter from said tubular article upon completion of the upsetting operation.

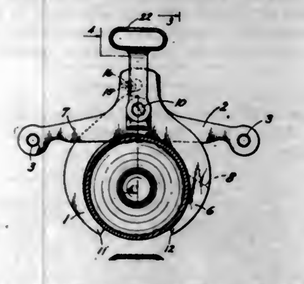
1,872,068. LOW PRESSURE SIGNAL. WILLIAM H. BROWN, Shaker Heights, Ohio, assignor to Spicer Airfiater, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 30, 1931. Serial No. 526,254. 5 Claims (Cl. 177—311.)



3. A low pressure signal for a pneumatic tire equipped vehicle comprising, a unit including a rheostat mounted adjacent each of a pair of wheels of said vehicle on a part thereof other than a wheel, additional mechanism constituting with said rheostat a Wheatstone bridge, each said rheostat forming one arm resistance of said bridge, said unit further including a vertically movable mounted weight adapted to be actuated by forces transmitted thereto through the wheel due to road irregularities and controlling said rheostat, and means for retarding motion of said weight in one direction.

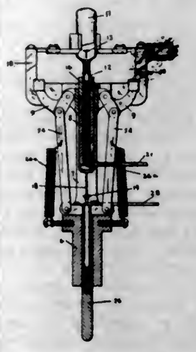
1,872,069. CARRIER. HARRY LOOR BURNHAM, Youngstown, Ohio. Filed July 22, 1931. Serial No. 552,336. 5 Claims. (Cl. 294—15.)

1. In a carrier comprising a plurality of gripping jaws aligned in pairs, each pair comprising a jaw portion and a lever portion and pivoted to each other intermediate the jaw and lever portion, handles carried by the levers and connecting the levers upon like sides of the jaws to



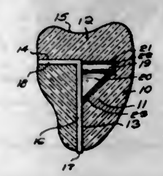
each other in spaced parallel relation and adapted to close the jaw portions simultaneously upon movement thereof.

1,872,070. MANUFACTURE OF ELECTRIC MERCURY BULB SWITCHES. IRA E. MCCABE and KARL HUNCIKER, Chicago, Ill. Filed May 29, 1929. Serial No. 366,916. 6 Claims. (Cl. 49—78.)



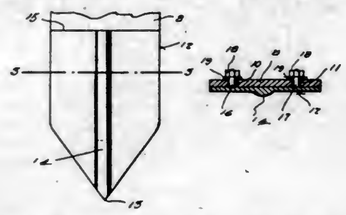
6. The method of producing electric bulb mercury switches which includes the positioning of the open end of the bulb about the electrodes and a filling stem containing a removable core supported thereunder, applying heat to the open end of the bulb until it becomes plastic, compressing the plastic wall to embrace, embed and seal the electrodes and filling stem therein and form a sealed closure, and removing the core while the bulb is still plastic and blowing through the filling stem to return and maintain the normal shape of the bulb.

1,872,071. ARTIFICIAL TOOTH. JOHN F. CALDWELL, Houston, Tex. Filed July 5, 1929. Serial No. 376,159. 1 Claim. (Cl. 32—9.)



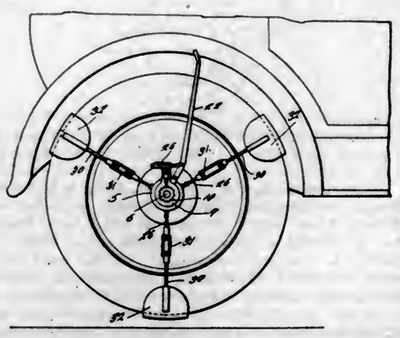
An artificial tooth comprising a tooth element, having a body portion provided with a lingual substantially flat face which extends parallel with the longitudinal axis of said body portion, said body portion having a root portion projecting lingually beyond such flat face to provide a shoulder disposed at substantially a right angle to said flat face, said body portion being provided generally centrally thereof and through its flat face with a pin receiving opening disposed at substantially a right angle to said flat face and a substantially triangular slot extending longitudinally of the tooth element and leading into said opening, and a backing including a plate to engage the flat face of the body portion and provided at one end with a lateral extension to engage said shoulder, the opposite end of the plate extending beyond the incisal portion of the tooth element, and a pin having a triangular reinforcing web formed integral therewith, said pin and web being attached to the outer side of said plate adjacent to the central longitudinal axis of the same, said pin being adapted for insertion within the opening and the web within the slot.

1,872,072. AUXILIARY CULTIVATOR SHOVEL. HARRY CHIBNIK, Sioux Falls, S. Dak., assignor of one-half to W. S. Reese, Sioux Falls, S. Dak. Original application filed May 3, 1929, Serial No. 360,029. Divided and this application filed Apr. 21, 1930, Serial No. 446,059. Renewed June 7, 1932. 1 Claim. (Cl. 97—203.)



In combination with a cultivator shovel, an auxiliary shovel placed on the front face of the cultivator shovel, and fastened to said cultivator shovel, said auxiliary shovel having a pointed lower end and a longitudinally extending rounded rib on the front face of the auxiliary shovel and having its lower end terminating in the apex of the pointed end of the auxiliary shovel, fastening means comprising studs connected with the rear face of the auxiliary shovel and having threaded outer ends, the cultivator shovel having vertically arranged slots therein through which the studs pass, and nuts on the threaded ends of the studs.

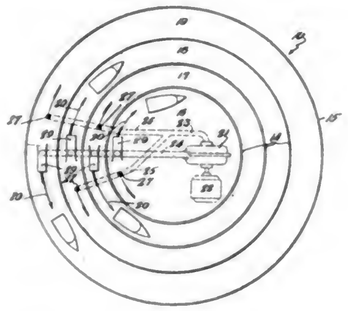
1,872,073. BRAKE TESTING APPARATUS. ROMULUS L. DERRYBERRY and JOSEPH E. JOHNSON, Stone, Ky. Filed Nov. 12, 1931. Serial No. 574,651. 2 Claims. (Cl. 265—1.)



1. In combination, a brake testing device, including a plurality of rods, a second plurality of rods, the first plurality having oppositely threaded portions to the second

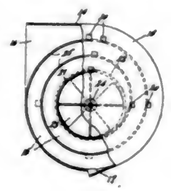
mentioned and turn buckles connecting the first mentioned plurality with the second mentioned plurality of rods, and tire engaging jaws on the second mentioned plurality of rods, a disk from which the first plurality of rods extend, said disk being formed with a trunnion, a disk rockable on the trunnion, a pawl mounted in the second disk to engage rack teeth about the trunnion, means for mounting the rack teeth on the trunnion, a force measuring gage on the second disk, a lever rockable on the second disk, and means for connecting the lever with the gage.

1,872,074. DISPLAY DEVICE. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Mar. 12, 1931. Serial No. 521,983. 8 Claims. (Cl. 40—126.)



1. A display device comprising a tank having a circular wall and a plurality of partitions concentric with the wall to define an inner compartment and a plurality of annular compartments surrounding the inner compartment and each compartment containing liquid and means for setting the liquid in the various compartments in motion.

1,872,075. AIR CLEANER AND MUFFLER. JOHN DOLZA, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 24, 1929. Serial No. 334,765. 2 Claims. (Cl. 183—80.)

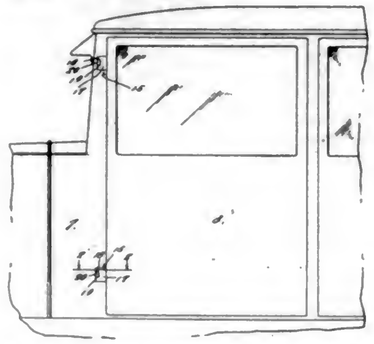


1. In a device of the class described, a body which includes a continuous wall in the form of a spiral coil of several turns which are spaced apart, one from the other, to provide a spiral passageway and whose outer extremity is disposed tangentially to the main portion thereof to provide an enlarged air entrance opening, a dust discharge opening which extends through the outer turn of the wall, heads closing the opposite ends of the spiral passageway, an air discharge opening extending through one of the heads, an air discharge conduit surrounding the opening, and a constantly open auxiliary air intake opening extending through the other head.

1,872,076. SURGICAL DRESSING. CAMILLE DREYFUS, New York, N. Y. Filed Mar. 8, 1928. Serial No. 260,251. 2 Claims. (Cl. 128—296.)

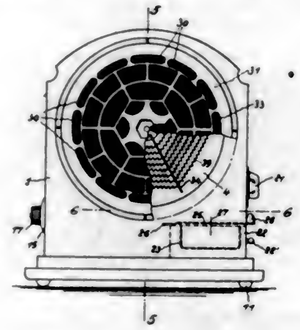
2. A surgical dressing having the surface thereof that is adapted to contact with the body made of a fabric consisting essentially of cellulose acetate filaments or yarns and having a layer of more absorbent material.

1,872,077. CLOSURE HINGE. NELSON H. FORBES, Detroit, Mich. Filed Feb. 4, 1932. Serial No. 590,921. 2 Claims. (Cl. 296—44.)



1. In a structure of the class described, in combination, a car body including a substantially perpendicular post, a horizontally swingable door, a hinge plate fixedly secured to a surface of said post remote from the hinged side of the door frame and including a hinge knuckle terminating in a plane substantially even with the outer face of the post, a relatively movable hinge member of general L-shaped form including an attaching flange secured to the door frame, and a laterally directed part extending across the outer face of the post and terminating in complemental knuckles pivotally pinned to the first named knuckle, the outer surface of the laterally directed part of the L-shaped hinge member being formed with a groove to accommodate a projecting weather excluding flange forming a part of the outer sheet metal covering of the door.

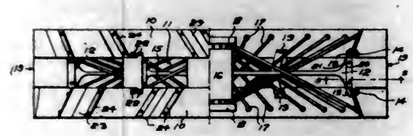
1,872,078. FAN. ANDREA GIAMBERTONI, Milan, Italy, assignor to the Firm Societa Costruzione Apparecchi Elettrodomestici Marelli, Mailand, Italy. Filed Apr. 13, 1931, Serial No. 529,813, and in Italy Jan. 28, 1930. 5 Claims. (Cl. 261—12.)



1. A fan, comprising in combination a casing having a continuous air channel, an electric motor mounted in said casing, a blade wheel in the air channel of said casing

adapted to be driven by said electric motor, an adjustable device for spraying scent and disinfectant arranged in said casing, said device comprising a dish hingedly mounted on a wall of the casing and adapted to accomodate the substance to be sprayed, and two apertured superposed mutually adjustable plates in said casing adapted to cover said dish.

1,872,079. TRACTION WHEEL. NEAL C. HARRIS, Guide Rock, Nebr. Filed Nov. 18, 1931. Serial No. 575,913. 1 Claim. (Cl. 301—52.)



A traction wheel comprising a pair of spaced parallel rim sections, a hub, an inner set of spokes carried by the hub and disposed within the median plane of the wheel, transverse heads carried by the outer ends of the spokes and separate from the rim sections, said heads having extensions projecting beneath the rim sections, generally V-shaped cleats embodying inwardly diverging sides, said cleats corresponding in number and arrangement with the transverse heads, the sides of each cleat having radial extensions engaging the opposite sides of the corresponding head, and end extensions projecting laterally of the wheel over the outer surface of the rim sections, means to rigidly attach the radial extensions to the transverse heads, and common means to rigidly attach the end extensions of the cleats with the extensions of the transverse heads.

1,872,080. SEPARATING GASES OR VAPORS. CLIFFORD GWILYM HARRIS, Stockton on Tees, England, assignor to Imperial Chemical Industries Limited, London, England, a Corporation of Great Britain. Filed Aug. 20, 1930, Serial No. 476,711, and in Great Britain Oct. 24, 1929. 2 Claims. (Cl. 260—170.)

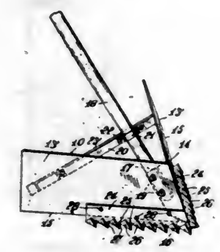
2. A process for separating ethylene and propylene which comprises bringing the mixed gases into contact with active carbon largely saturated wtih water vapor, expelling the adsorbed gas with steam, and cooling to condense and separate the water.

1,872,081. SOUND RADIATOR. JESSE B. HAWLEY, St. Charles, Ill. Filed Nov. 7, 1927. Serial No. 231,409. 7 Claims. (Cl. 181—32.)



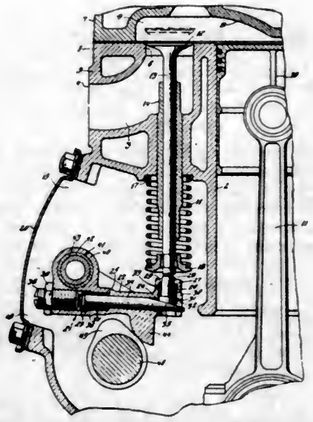
1. A sound radiator, comprising a fibrous diaphragmatic member having a locus for the application of energy to effect a radiation of sound from said member, said member varying in thickness and density in directions radiating from said locus.

1,872,082. SNOW AND ICE REMOVER. CHARLES HEDBERG, Chicago, Ill. Filed July 6, 1931. Serial No. 548,835. 5 Claims. (Cl. 37—53.)



2. In a device of the character described, a body portion composed of a single sheet of metal bent transversely intermediate of its ends to provide a rearwardly disposed flange portion and the portions on opposite sides of the flange bent rearwardly into wedge-shape and inclining rearwardly toward the top of the body portion; and a handle secured to said flange portion.

1,872,083. VALVE ADJUSTING MECHANISM. ROBERT R. HUTCHISON, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 13, 1927. Serial No. 212,802. 8 Claims. (Cl. 123—90.)

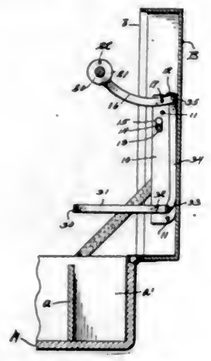


1. In a rocker, a member adapted to be pivotally mounted, means mounted on and adjustable transversely of the member adapted to contact with a valve stem or the like, and a member having a beveled surface adapted to contact with the means to adjust it and maintain it in adjusted position during pivotal movement of the first member.

1,872,084. WARDROBE TRAVELING CASE. THOMAS M. HOUSE, Richmond, Va. Filed Jan. 8, 1931. Serial No. 507,490. 5 Claims. (Cl. 190—41.)

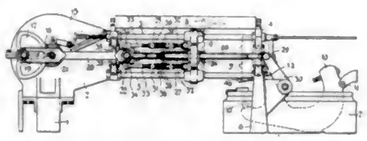
1. A case having a lid, rod supporting arms pivoted within the lid adjacent their inner ends, means limiting the outward movement of the arms, a hanger rod supported upon the extremities of the arm, a follower ex-

tending parallel to the back of the lid and having inwardly extending arms operatively pivoted to the lid adjacent their inner ends, and links connecting the inner



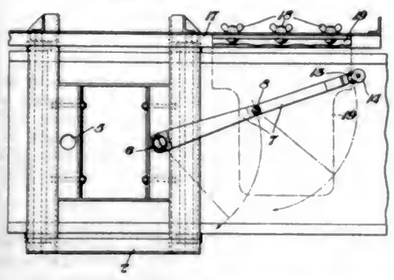
ends of said follower arms to the inner ends of said hanger supporting arms whereby the hanger and follower are caused to move simultaneously when operated.

1,872,085. DIE CASTING MACHINE. TORBJORN C. KORSMO, Madison, Wis., assignor to Madison-Kipp Corporation, Madison, Wis., a Corporation of Wisconsin. Filed Sept. 9, 1930. Serial No. 480,728. 15 Claims. (Cl. 22—92.)



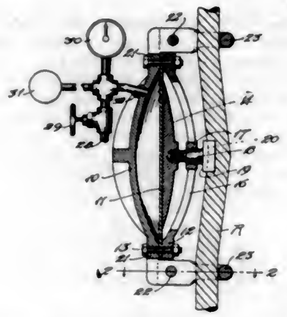
2. In a die casting machine, the combination of a separable die, comprising a plurality of die parts; operating means having a yieldable connection with one of said die parts to move the part between open and closed positions; and means, in addition to said yieldable connection, for positively securing said die part in closed position.

1,872,086. STRUCTURAL STEEL CUTTING MACHINE. CHRISTOPHER E. LOOS, Ben Avon, and OTTO F. TROEGER, Fairoaks, Pa. Filed Sept. 9, 1931. Serial No. 561,910. 4 Claims. (Cl. 266—23.)



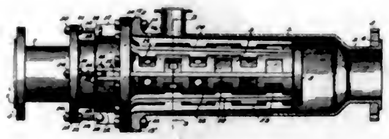
4. A structural steel cutting machine comprising a frame, cylindrical rollers extending the width of said frame and rotatably fixed to the underside thereof, flanges longitudinally adjustably fixed about said rollers, an upstanding support attachable to either end of said frame, an arm jointed for flexibility in a horizontal plane and arranged for vertical adjustment on said support, a torch holder in vertical screw threaded engagement with the end of said arm, a roller pivotally carried on the end of said arm above said holder so that its circumferential surface is tangent to the axis of a torch when in this holder, a superstructure on said frame with its top extending out from each end thereof substantially in a plane with the roller on said arm and means on the top of said superstructure for supporting a template in a plane therewith.

1,872,087. TENSION INDICATOR. WALTER R. MARTIN, Long Beach, Calif., assignor to Martin-Decker Corporation, Long Beach, Calif., a Corporation of Delaware. Filed May 26, 1928. Serial No. 280,928. 20 Claims. (Cl. 265—47.)



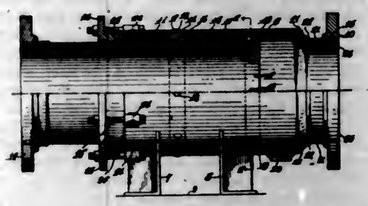
1. In a tension measuring device, a fluid pressure cell including a rigid hollow body forming one side of the cell and a yieldable closure for the other side of said cell, a presser plate resting on the outside of said closure, a pair of rope engaging members carried by the rigid member of the cell at spaced points and arranged to engage a rope on one side thereof, a third rope engaging and deflecting member carried by the presser plate and engaging the opposite side of the rope between the first rope engaging members, and means independent of said closure for controlling the capacity of the cell and deflecting the closure to a predetermined position.

1,872,088. EXPANSION JOINT. JOHN F. MCKEE, Philadelphia, Pa., assignor to Yarnall-Waring Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 12, 1927. Serial No. 225,756. 15 Claims. (Cl. 285—162.)



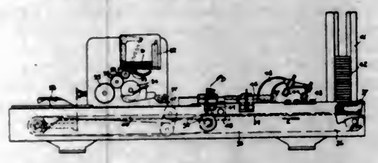
1. A pipe line expansion joint sleeve guide adapted to extend into the joint body annularly around the joint sleeve in spaced relation to the joint body, providing an annular space around the guide where it engages the sleeve, the space being accessible to the pipe line content, to prevent lateral movement of the pipe line and to slidably receive the joint sleeve with a very close fit and provided with a collar at one end for securing it to the joint body and being supported only at its collar end.

1,872,089. EXPANSION JOINT. JOHN F. MCKEE, Lansdowne, Pa., assignor to Yarnall-Waring Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 22, 1930. Serial No. 490,474. 18 Claims. (Cl. 285—162.)



1. In an expansion joint, an outer pipe, an inner pipe telescoping therein, and a separate external cylindrical guide for the inner pipe, radially extended over part of its length to fit within, and secured at intervals to the interior wall of the outer pipe, and elsewhere radially spaced from the outer pipe to admit the medium from the pipe about the guide.

1,872,090. PACKING MACHINERY. WALTER EVERETT MOLINS, Deptford, London, England. Filed July 23, 1928, Serial No. 294,844, and in Great Britain Aug. 18, 1927. 5 Claims. (Cl. 93—6.)



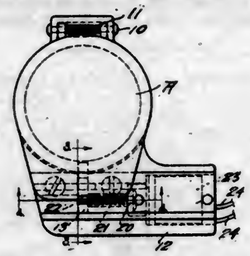
1. In a machine for packing cigarettes or like articles in a box having a hinged lid, the combination with a hopper, of means for periodically removing a predetermined number of cigarettes from the hopper, means for folding a wrapper in a U form about one end of the cigarettes so that one limb of the U is longer than the cigarettes and depositing the same in the box, and means for thereafter automatically closing the lid of the box, said longer limb of the wrapper being folded around the opposite end of the cigarettes by the action of depositing the same in the box and closing the lid.

1,872,091. PROCESS OF CLEANING METAL. HARRY C. MOUGEY, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 24, 1930. Serial No. 484,250. 3 Claims. (Cl. 148—8.)

2. The process of preparing ferrous metal surfaces for paint coatings comprising cleaning the surface. then nally rinsing in water containing salts tending upon dissociation in solution to promote corrosion of the metal to which has been added from two to twenty-five hundredths of one percent of phosphoric acid, and then drying the surface.

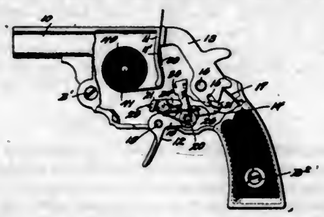
1,872,092. ELECTRIC GAS TANK LOCK. AUGUST W. NEVERMAN, Green Bay, Wis. Filed June 10, 1931. Serial No. 543,465. 1 Claim. (Cl. 70—50.)

In a device of the kind described, a collar adapted to be made fast to a filling spout of a tank, a cap having hinge connection with the collar, a lock casing built on the casing at the side thereof opposite the hinge connection, a rotatable bolt in the casing for engaging and disengaging the cap, and having a notched portion, a pin in the casing and within the notched portion to limit the rotation of the bolt, a dog insertable in the bolt, and an electric magnet in the casing and adapted to be arranged in a normally open electric circuit whereby on closing the latter the dog will be released from the bolt,



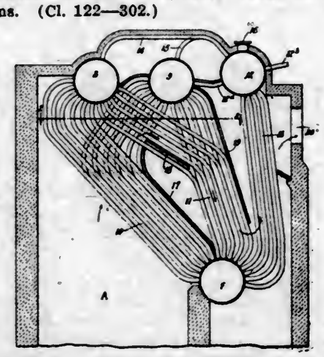
the dog being moved by the cap on opening and closing of the latter to bring said bolt to unlatching and latching positions.

1,872,093. TOY PISTOL. EDWARD S. PEAKE, Westerville, Ohio, assignor to The Kilgore Mfg. Company, Westerville, Ohio, a Corporation of Ohio. Filed Sept. 12, 1930. Serial No. 481,496. 3 Claims. (Cl. 42—57.)



1. A pistol of the class described comprising a trigger, a hammer, means carried by the trigger for actuating said hammer, a cap strip feed plate, and means normally pressed toward the trigger and carried thereby for engaging and moving a cap strip over said feed plate when the trigger is retracted, said means comprising a pawl having a longitudinal edge and a compression spring having legs, one extending substantially parallel with the longitudinal edge of said pawl and engaging the same near its free end and the other engaging the trigger.

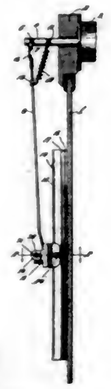
1,872,094. BENT TUBE BOILER. LEONARD J. MARSHALL, Leonia, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed June 24, 1929. Serial No. 373,226. 9 Claims. (Cl. 122—302.)



1. A water tube boiler including a pair of upper steam and water drums, a lower mud drum, and banks of boiler tubes connecting the mud drum to said upper drums, each

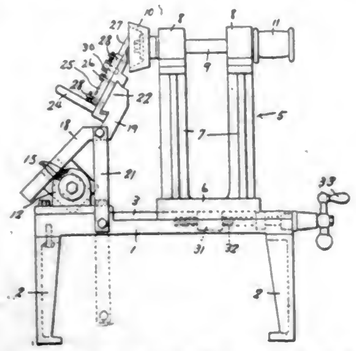
bank comprising a plurality of spaced rows of tubes extending in a plane perpendicular to the axes of the drums, alternate rows of which connect the mud drum to one of the upper drums and the remaining rows of which connect the mud drum to the other upper drum.

1,872,095. WINDSHIELD CLEANER DEVICE. MICHAEL ROMANO, Providence, R. I., and CHARLES N. COLSTAD, Attleboro, Mass.; said Colstad assignor to said Romano. Filed Apr. 6, 1931. Serial No. 527,980. 8 Claims. (Cl. 15—255.)



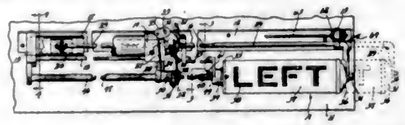
1. A windshield cleaner structure comprising a wiper arm, a wiper blade, an attaching means for connecting the wiper blade to the wiper arm comprising symmetrical connecting plates each of which is provided with one or more correspondingly arranged depressed portions adapted to contact with each other in the operative position of the parts, and each provided with a portion adapted to be spaced from each other to receive therebetween a windshield wiper blade, means for supporting the blade between said spaced portions, portions of less length than said spaced portions and shaped to contact with each other and positioned upon the side of said first named contacting portions opposite to said spaced portion, and means for holding said shorter portions in firm engagement with each other in the operative position of the parts.

1,872,096. BLADE SHARPENING MACHINE. ANTON M. RUNSHANG, Little Rock, Ark. Filed July 1, 1931. Serial No. 548,200. 3 Claims. (Cl. 51—96.)



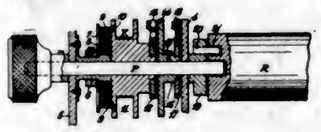
1. A blade sharpening machine comprising a bed, a grinding wheel rotatably mounted on the bed, a pair of upstanding brackets mounted in spaced relation to each other on the bed, one of said brackets having a series of holes therein, a sleeve mounted for vertical swinging movement between the brackets, a pin selectively insertable through the holes and engageable with the sleeve for securing the sleeve in adjusted position against swinging movement, a stop lug projecting from the sleeve, an inclined arm, a pin projecting from the inclined arm and journaled in the sleeve for mounting the inclined arm for swinging movement on said sleeve, stop lugs depending from the inclined arm adjacent opposite sides of the first named lug and engageable therewith for limiting the swinging movement of said inclined arm in opposite directions, a block slidably mounted on the inclined arm, a feed screw mounted on the inclined arm and operatively connected with the block for shifting the same, and means on the block for detachably securing the blade in position thereon for engagement with the grinding wheel.

1,872,097. SIGNALING DEVICE. EDWARD F. SEBESTA, Minneapolis, Minn. Filed Sept. 28, 1931. Serial No. 565,428. 11 Claims. (Cl. 116—89.)



1. A signaling device comprising a support, a signal arm carried by said support and capable of longitudinal extension and retraction in a horizontal direction relative to said support and axial turning movement relative to said support from one position to another, means for extending and retracting said arm, means for selectively turning said arm when in any extended or retracted position and a control for operating said two means.

1,872,098. APPARATUS FOR WINDING PAPER OR A LIKE WEB. ARTHUR THOMAS, Thornton Heath, England, assignor to The Accounting & Tabulating Corporation of Gt. Britain, Limited, London, England. Filed Jan. 10, 1930, Serial No. 419,982, and in Great Britain Apr. 5, 1929. 3 Claims. (Cl. 242—55.)

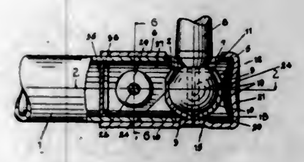


1. In a tabulating machine the combination with the platen of a paper receiving roller having an operating knob, a pulley mounted co-axially with the roller, a ratchet device connecting the pulley to the roller, a tape wound round the pulley, means for pulling the tape equal amounts on each paper feeding operation, a spring adapted to be tensioned by the pulley when turned by the pull on the tape, and means for releasing the tape whereon the spring returns the pulley, thereby turning the paper receiving roller through the ratchet device and winding up the paper.

1,872,099. LINK. BERTIS H. URSCHEL, Bowling Green, Ohio, assignor to Urschel Engineering Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 23, 1930. Serial No. 422,690. 1 Claim. (Cl. 287—90.)

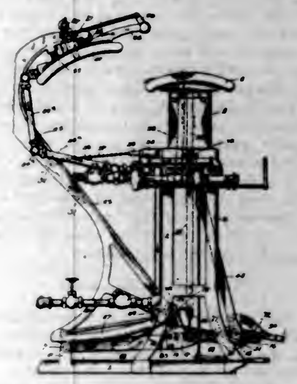
In a tubular link, a cap for closing the end of the tubular link and having an opening, a member extending through the opening and having a spherical head located within the cap, a pair of sheet metal hemispherical discs substantially surrounding the said head and having flanges, the end of the tubular link abutting the flange of one of

the hemi-spherical discs, a spring located intermediate the end of the cap and the other of the hemi-spherical discs for pressing the head between the hemi-spherical discs, the



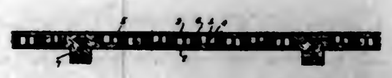
cap and the flanges of the hemi-spherical discs having indented registering portions for preventing rotation of the hemi-spherical discs with the said member.

1,872,100. GARMENT PRESS. WILLIAM A. ZEIDLER, New York, N. Y., assignor to The Zeidler Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 27, 1925. Serial No. 5,118. Renewed July 2, 1929. 38 Claims. (Cl. 68—9.)



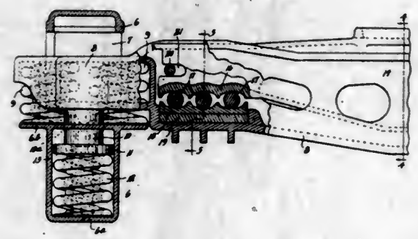
15. In a device of the class described, a buck; a head; arms supporting said head; rockers attached to and supporting said arms; and means for shifting the rockers so as to throw the head to or away from the buck.

1,872,101. FLOOR CONSTRUCTION. GEORGE L. BAIR, Hanover, Pa. Filed Sept. 15, 1931. Serial No. 562,944. 2 Claims. (Cl. 72—66.)



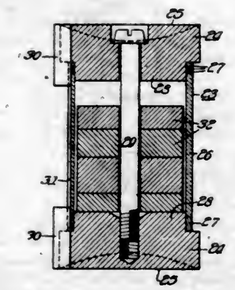
1. A floor construction comprising pairs of substantially hollow, complemental blocks, said blocks being open on one side and closed on the other sides, the open sides of the pairs of the blocks being disposed in abutting engagement with each other, said blocks including comparatively thin and thick horizontal walls, and a joint of suitable material connecting the pairs of blocks together, certain of the opposed edges of the pairs of blocks having opposed recesses therein defining, in conjunction with each other, channels for the reception of the joint material.

1,872,102. LATERAL MOTION FREIGHT CAR TRUCK. FRANKLIN L. BARBER and EDWIN W. WEBB, Chicago, Ill., assignors to Standard Car Truck Company, Chicago, Ill., a Corporation of New Jersey. Filed Sept. 17, 1931. Serial No. 563,337. 2 Claims. (Cl. 105—186.)



1. In a car truck, the combination with the side frames, of a primary bolster supported from said side frames with freedom for vertical motion thereon, a supplemental bolster supported from said primary bolster with freedom for lateral motion thereon crosswise of the truck, and which supplemental bolster has in its ends horizontal notches, and which primary bolster has near its ends horizontal cross pieces adapted to engage with said notches of said supplemental bolster, substantially as described and for the purposes set forth.

1,872,103. PLUNGER VALVE FOR RECEPTACLE FILLING APPARATUS. CHRISTIAN N. BERGMANN, Pittsburgh, Pa., assignor to Bergmann Packaging Machine Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Nov. 21, 1931. Serial No. 576,482. 10 Claims. (Cl. 221—102.)

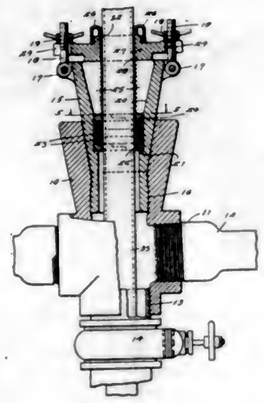


1. A cylindrical plunger for receptacle filling machines of the class described having terminal heads and a middle hollow body portion provided with loosely mounted weights.

1,872,104. CONTROL HEAD FOR OIL OR GAS WELLS. LEE J. BLACK, Beaumont, Tex. Filed Feb. 4, 1930. Serial No. 425,894. 2 Claims. (Cl. 166—14.)

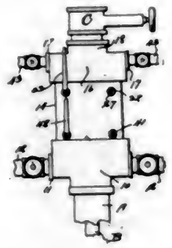
1. A pipe support and packer for casing heads including an outer slip bowl, an auxiliary bowl having means at its lower end whereby it may be inserted into and engaged with a lower, outer slip bowl against independent longitudinal movement, the auxiliary bowl being formed to provide supports for packing rings, packing rings mounted within the auxiliary bowl, slip wedges disposed within the auxiliary bowl upon the packing rings and bearing thereagainst, means mounted upon the auxiliary bowl for forcing said slip wedges against the packing and holding

the slip wedges against upward movement, said means including an annular gland bearing against the upper ends of the wedges, the gland having portions having peripheral



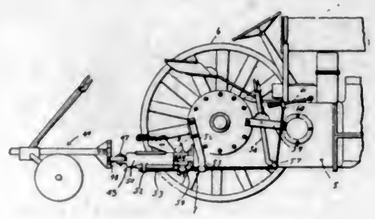
radial slots, bolts pivoted upon the upper end of the auxiliary bowl and nuts bearing against the upper face of said gland.

1,872,105. PRESSURE CONTROL HEAD. LEE J. BLACK, Beaumont, Tex. Filed Dec. 18, 1930. Serial No. 503,297. 4 Claims. (Cl. 166—14.)



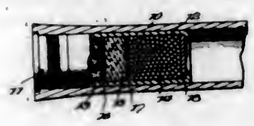
1. A control head for oil wells comprising a cylindrical body having an upper and a lower cross T having outlets, each T having a central opening into the body for the passage of a string of tubing, tubing supporting wedges disposed in the upper portion of the body, the body being formed with a downwardly and centrally inclined surface against which the wedges operate, means operable from the exterior of the body for vertically shifting said wedges against said inclined surface to thereby carry the wedges downward and into engagement with the tubing or upward and out of engagement therewith, upwardly tapering packing disposed in the lower portion of said body, and a downwardly and outwardly inclined surface formed upon the body and with which the packing engages, there being a transverse wall in the body intersecting said surfaces at their juncture and supporting said surfaces, and means operable from the exterior of the body for shifting said packing downward and away from the tubing or upward and into engagement with the tubing, the central opening in the top of the lower cross T being sufficiently larger than the tubing to permit liquid under pressure to move up into the lower end of said body and bear against said packing to urge the packing upward.

1,872,106. TRACTOR HITCH. FRANK J. BOLEN, Van Hook, N. Dak. Filed Oct. 4, 1930, Serial No. 486,441. Renewed Apr. 2, 1932. 2 Claims. (Cl. 180—14.5.)



1. A tractor hitch of the type described comprising a conventional safety spring release hitch mechanism for tractors and a rearward extension thereon comprising a pair of vertically and parallelly spaced plates, each of said plates having a pair of flanges carrying channel formations at their edges, and a member slidable in said channels and having a cross bar slidable between said plates and a draft clevis on its rear end, a wall bridging the rear ends of the plates and functioning as a limit stop for said cross bar, said plates having a cut out portion centrally at their forward end, a lever having a fish tail formation normally riding on said cross bar and having its lower end operatively received in said cut-out portion, said lever adapted to operate the said safety spring release mechanism, and a projection on one side of the slidable member, a cable having one end attached to said projection, and a series of roller guides mounted on the hitch and on the tractor body for conveying the cable forward, a lever having a ratchet mechanism and for adjusting the tension of the cable, and the upper end of the cable clamped to the clutch release pedal of the tractor, for automatically releasing the clutch of the tractor upon the release of the safety spring release hitch mechanism.

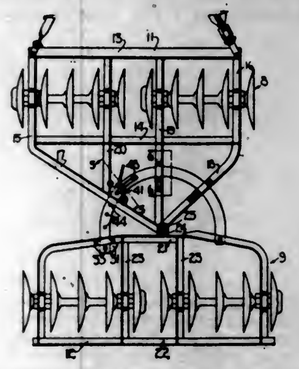
1,872,107. GUN WAD. SAMUEL C. BOND, Holly Oak, Del., assignor to Bond Manufacturing Corporation, Wilmington, Del., a Corporation of Delaware. Continuation of application Serial No. 171,907, filed Mar. 1, 1927, and in Germany Jan. 9, 1927. This application filed Apr. 22, 1930. Serial No. 446,403. Renewed Mar. 23, 1932. 5 Claims. (Cl. 102—42.)



1. A substantially non-compressible cartridge plug or wad of relatively high plasticity, consisting of cork, paraffin and asphaltum, the asphaltum being in at least a semi-fluid state.

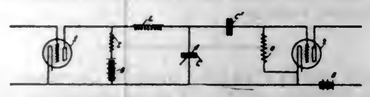
1,872,108. DISK HARROW. EDWARD C. BOPF, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Oct. 31, 1931. Serial No. 572,243. 9 Claims. (Cl. 55—83.)

1. A tandem offset disk harrow comprising a front gang and a rear gang pivotally connected for relative angular movement, an angle adjusting member movably supported on the front gang, means for locking said member intermediate its ends to the front gang, and means connecting the ends of said member to the rear gang whereby any tendency for relative rotation of the gangs in one direction is resisted by that portion of the member between one end and said locking means acting in tension, and any



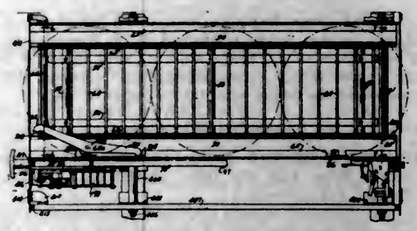
tendency for relative rotation of the gangs in the other direction is resisted by that portion of the member between the other end and said locking means acting in tension.

1,872,109. MULTISTAGE AMPLIFIER. PAUL BORIAS, Paris, France. Filed July 5, 1929, Serial No. 376,249, and in France July 5, 1928. 3 Claims. (Cl. 179—171.)



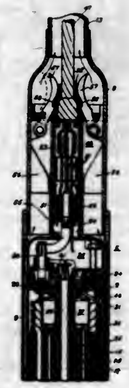
1. In an amplifier of lower frequencies resulting from the detection of higher frequencies, a coupling between tubes comprising a series resonant circuit tuned to a definite low frequency and comprising an inductance in the output circuit of one of the tubes and a capacity in the input circuit of a following tube, coupling means between said capacity and the grid of the said following tube, and a resistance included in the circuit comprising the plate of the first named tube and its source of potential, the equivalent impedance of the said resistance and the internal resistance of the first tube being equal to the impedance of the inductance of the series resonant circuit at the said tuned low frequency.

1,872,110. DISPENSING APPARATUS. HARRY RUSSELL BRAND, New York, N. Y. Filed July 8, 1927. Serial No. 204,325. 14 Claims. (Cl. 194—2.)



9. In a commodity dispensing apparatus, a chamber having an inlet opening at one end and a delivery opening at the other end, a conveyor on which the commodity may be rested, means for operating the conveyor to move the commodity by frictional engagement therewith from the inlet opening to and through the delivery opening, a detent normally barring passage of the commodity through the delivery opening, and token actuated means for releasing said detent.

1,872,111. SUBMERSIBLE PUMP SET. JOHN BRICKEN, West Orange, N. J., assignor to E. F. Britten, jr., Maplewood, N. J. Filed Feb. 26, 1929, Serial No. 342,701, and in Germany Feb. 29, 1928. 2 Claims. (Cl. 103—87.)



1. In a submersible pump-set, in combination, a pump having a hollow shaft, a motor for operating the pump, an outer casing for enclosing the motor and pump, said motor being enclosed in a diving-bell casing disposed within the outer casing, a hollow drive shaft extending through the diving bell for connecting the motor to the hollow pump shaft, a delivery tube for supporting the pump set in an operating position, a power cable extending through the delivery tube for supplying power to the motor, a plug-and-socket device for connecting the power cable to the motor terminals, said power cable being further extended through the hollow drive shaft and the pump shaft, means provided in the lower end of the outer casing for supporting an extension of the power cable, and a second plug-and-socket device for connecting the supported cable section to the cable section extending through the hollow pump and motor shafts.

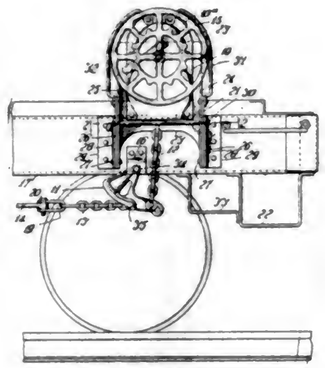
1,872,112. COMPOSITION AND MANUFACTURE OF BITUMINOUS MIXTURES FOR USE IN ROAD CONSTRUCTION AND LIKE PURPOSES. ARTHUR EDWARD BROWN, Brentwood, England, assignor to Universal Rubber Paviors Limited, Audenshaw, near Manchester, England. Filed Mar. 19, 1926, Serial No. 96,091, and in Great Britain Apr. 4, 1925. 3 Claims. (Cl. 106—31.)

1. An improved bituminous mixture for use in road construction and the like comprising in combination bitumen and a rubber-like pitch, as set forth.

1,872,113. HAND BRAKE FOR FLAT CARS AND SIMILAR CARS. RICHARD W. BURNETT, Chicago, Ill. Filed June 8, 1928. Serial No. 283,840. 11 Claims. (Cl. 74—113.)

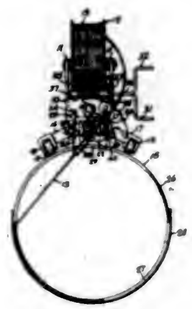
1. In combinaiton with a railway car hand brake comprising a rocking member secured to the car, hand operated power means and means for connecting the rocking member

with the power means, of means for movably mounting the power means on the side of the car whereby it may be moved to a position below the floor level of the car



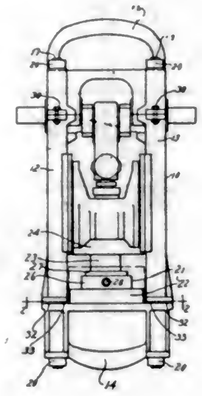
to facilitate loading and unloading of the car and without disconnecting the power means from said rocking member.

1,872,114. METHOD OF AND APPARATUS FOR WELDING PIPE JOINTS. HOWARD J. BURNISH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Sept. 13, 1928. Serial No. 305,664. 7 Claims. (Cl. 219—6.)



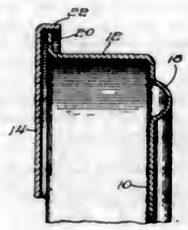
1. The method of accomplishing end to end welding of pipe sections, which consists in placing adjacent ends of upper and lower portions of different pipe sections in contiguous relation, providing a passage past an upper portion of a pipe section leading to the inner surfaces of said lower portions to admit a welding tool, applying fused welding material to said inner surfaces along the meeting line of the said lower portions of said different pipe sections, applying fused welding material to said outer surfaces along the meeting line of the said upper portions of said different pipe sections, and causing the inner and outer welds to together extend throughout the circumference of the pipe sections.

1,872,115. PRESS. ARTHUR A. BYRALEIN, Detroit, Mich., assignor to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed Nov. 5, 1931. Serial No. 573,125. 4 Claims. (Cl. 29—84.)



1. The method of stressing the assembly rods of a sectional press comprising forcing adjacent sections apart with a force sufficient to cause the desired elongation of the rods, and filling the space thus obtained between the adjacent sections.

1,872,116. BRAKE DRUM. GERMAIN CALVIONAC, Mannheim, Germany, assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 1, 1928, Serial No. 303,550. Renewed Feb. 5, 1932. 7 Claims. (Cl. 188—218.)

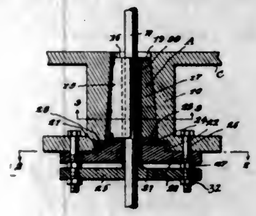


1. A brake drum having a head and a substantially cylindrical braking flange reinforced at its free edge to resist expansion of the flange adjacent said edge, the head being formed with a curved corrugation to permit limited expansion of the flange adjacent its opposite edge.

1,872,117. STUFFING BOX. CHARLES CARD, Merced, Calif. Filed Aug. 27, 1930. Serial No. 478,229. 2 Claims. (Cl. 286—39.)

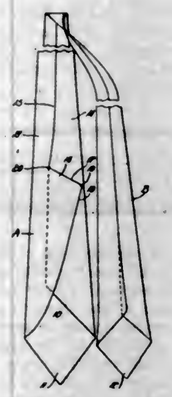
2. The combination with a cylinder head having a cylindrical body provided with a tapered bore, and a piston rod movable through said bore, of a cage including a pair of companion sections having their outer faces tapered toward one end and removably fitted in said bore, the sections of the cage surrounding the piston rod, a packing

for the piston rod carried by the cage, a gland, means adjustably and detachably connecting the gland with the cylinder head, the gland having an extension provided with an annular rib, the inner faces of the sections of the cage being provided with a semi-circular groove re-



ceiving the rib for locking said cage and gland together, a packing washer interposed between the gland and the body and surrounding the cage, and a second gland adjustable toward and away from the first gland having a cylindrical extension for engagement with the packing.

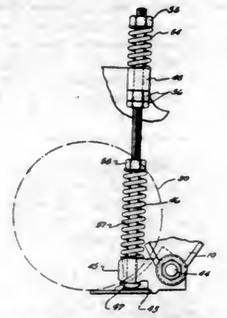
1,872,118. NECKTIE. MARIUS CARIDIS, Los Angeles, Calif. Filed July 25, 1931. Serial No. 553,032. 4 Claims. (Cl. 2—145.)



1. A tie of the character described including, a body having a broad main end and a reduced inner end, integral folds on the opposite longitudinal edges of the body folded back upon its inner side, an integral lateral extension on one fold at the broad end of the body overlapping the other fold, and means attaching the outer end of the extension to the said other fold so that the extension forms a loop to receive the said reduced end of the body and hold the reduced end under the first mentioned fold and against the outer side of the said other fold.

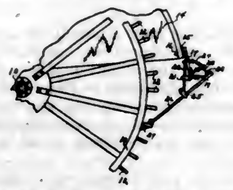
1,872,119. LAWN-MOWER. JOHN A. E. CARLSON, Racine, Wis., assignor to Jacobsen Mfg. Company, Racine, Wis., a Corporation of Wisconsin. Filed Nov. 10, 1927. Serial No. 232,227. 4 Claims. (Cl. 56—294.)

1. A lawn mower comprising a cutting reel, a bed knife pivoted on the lawn mower and movable toward and away from the cutting reel, a take-up rod connected to the bed knife, a bearing member mounted on the lawn mower and through which the take-up rod is freely movable, a coil spring mounted on the take-up rod and having its outer end engaging the bearing member, an abutment on the take-up rod engaging the inner end of the coil spring, said take-up rod projecting beyond the bearing member, and a nut threaded on the projecting portion of the take-up rod and cooperable with the bearing member for the dual



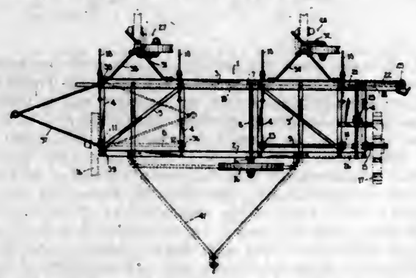
purpose of adjusting the take-up rod to appropriately tension the spring and for positively limiting the movement of the bed knife toward the cutting reel.

1,872,120. WHEEL SCRAPER FOR AUTOMOTIVE VEHICLES. AUGUST CASKEY, Jamaica, Iowa. Filed Sept. 3, 1931. Serial No. 560,911. 8 Claims. (Cl. 280—158.)



1. In a scraper for vehicle wheels, a downwardly extending bar designed to be secured to the vehicle, an angle iron operatively secured to the rear side of said bar and having an opening in its outer end portion, a U-member pivotally secured to said bar, a second bar secured near its center to said U-member, a second U-member secured to the lower end portion of said second bar, a means for yieldingly holding the upper end of said second bar adjacent said first bar, a scraper arm bar secured to said second U-member near its center, and a projecting member on the rear end portion of said scraper arm bar capable of extending into said opening in said angle iron when said scraper arm bar is in a normal functioning position.

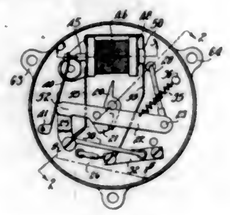
1,872,121. ROD WEEDER. WILLIAM CHRISTENSEN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Jan. 7, 1931. Serial No. 507,169. 9 Claims. (Cl. 97—42.)



1. An implement comprising an elongated frame having spaced front and rear parallel frame bars connected by fore and aft frame members, axles supported on the fore

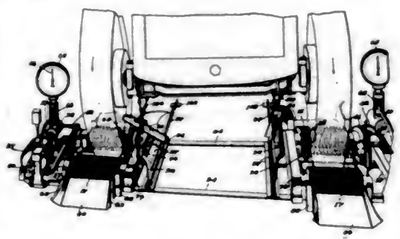
and aft frame members on opposite sides of the frame adjacent the front frame bar and parallel thereto, supporting means for said frame, including caster wheels mounted on the rear frame bar and spaced laterally at each side of the center, non-dirigible wheels carried on the axles, and longitudinally aligned bearing brackets on the front and rear frame bars for receiving one of the axles to position the wheel journaled thereon parallel with the front frame bar for transporting the implement endwise.

1,872,122. ELECTRIC SWITCH. JOEL R. COOK, Cleveland, Ohio, assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 4, 1922, Serial No. 604,762. Renewed Jan. 31, 1930. 17 Claims. (Cl. 175—294.)



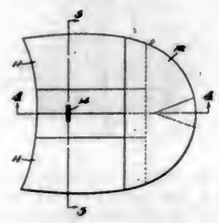
17. The combination with a circuit breaker having a current-responsive and inductively current-limiting trip means in series with the circuit breaker, of a current-responsive resetting device in series with the circuit breaker and normally shunting the trip means and responsive to variations in the current through the circuit breaker to open the shunt circuit under predetermined current conditions.

1,872,123. AUTOMOBILE BRAKE TESTING MACHINE. CHARLES F. COWDREY, Fitchburg, Mass., assignor to The Cowdrey Brake Tester Organization, Incorporated, Fitchburg, Mass., a Corporation of Massachusetts. Filed Nov. 15, 1926. Serial No. 148,358. 29 Claims. (Cl. 265—25.)



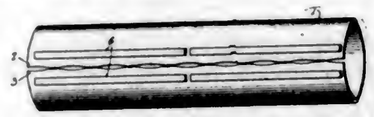
1. A brake tester for testing the action of the brakes on the wheels of an automobile that the brake resistance on the opposite wheels may be measured and equalized, comprising in combination wheel supporting and turning means mounted to support and turn one side wheel of an automobile, another wheel supporting and turning means to support and turn the opposite wheel of an automobile, mechanism for operating the supporting means for the two wheels either separately or simultaneously including, a separate motor for operating each of the opposite wheel supporting and turning means independent of the other wheel supporting and turning means to turn the wheel resting thereon through a complete rotation while under brake resistance, a pressure responsive driving connection between each wheel supporting and turning means and its motor, and an indicating device associated with each pressure responsive driving connection and adapted to be operated thereby to indicate the force necessary to turn the adjacent automobile wheel under brake resistance.

1,872,124. HEEL BASE AND PROCESS OF MAKING THE SAME. OTIS T. CRAFTS, Manchester, N. H. Filed Nov. 25, 1930. Serial No. 498,041. 17 Claims. (Cl. 36—...)



17. As an article of manufacture, a heel base blank comprising in combination a plurality of longitudinally abutted layer pieces having secured thereto at one of their faces additional side and back layer pieces, the latter bridging said abutted joint.

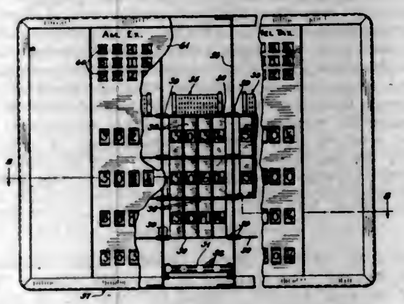
1,872,125. ELECTRIC FLASH WELDING. WILLIAM E. CRAWFORD, Wauwatosa, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Mar. 21, 1931. Serial No. 524,283. 4 Claims. (Cl. 219—10.)



1. The method of making pipe in sections of extreme length from sheets of metal which consists in bending each sheet into the form of a tube and forming at least one of the side edges of the sheet to provide a plurality of projections at predetermined intervals along the same, applying welding potential to the opposed spaced apart edges to be welded, moving said edges toward each other at a rate sufficiently slow to effect a heating and flashing off of the projections upon their coming into contact with the opposite edge to thereby establish the flashing arc at predetermined intervals along the seam, continuing the movement of said edges to progressively bring more of the length thereof into arcing relation and to cause additional flashing off of the metal of the edges until the several flashing arcs are merged into a single arc extending from edge to edge and continuous for the full length of the seam to thereby uniformly heat the edges to welding temperature, and thereafter discontinuing the application of the current and quickly pressing the heated edges together to effect a simultaneous and continuous union thereof, thereby producing an integral pipe section.

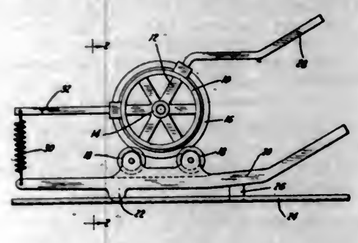
1,872,126. QUOTATION BOARD OR THE LIKE APPARATUS. ROBERT L. DAINE, New York, N. Y., and RENÉ GUYÉ, Neuchatel, Switzerland, assignors, by direct and mesne assignments, to The Teleregister Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 13, 1928. Serial No. 246,474. 12 Claims. (Cl. 177—337.)

1. A broker's quotation board comprising a plurality of frame sections, each having a plurality of vertical partitions dividing the section into spaces, each such space corresponding to a particular stock or other item, a plurality of horizontal shelves subdividing each of such spaces to provide sub-compartments each corresponding to a particular quotation such as "Open", "High", "Low" and "Last" of a certain stock or item, and a plurality of electromagnetically operated indicating devices slidably received within each of said sub-compartments respectively for indicating the various digits of each quotation as the same fluctuates, each of said devices being an assembled unit separable as such from the others.



10. A broker's quotation board comprising a plurality of groups of closely spaced rotatable digit indicating drums, one such group being provided for each stock or other item, electromagnetic operating means occupying the space to the rear of said drums, a group of manually changeable indicia on the face of the board adjacent each of said groups of drums, and a multicontact disconnecting device for the circuits of the operating devices for each of said drum groups, said multicontact devices respectively occupying the spaces to the rear of said manually changeable indicia.

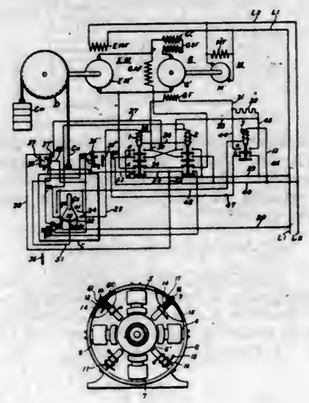
1,872,127. ADJUSTMENT OF BRAKES. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix-Cowdrey Brake Tester Inc., South Bend, Ind., a Corporation of Delaware. Filed Jan. 26, 1931. Serial No. 511,128 9 Claims. (Cl. 29—84.)



1. Apparatus for operating on automobile brakes comprising, in combination, a drum member having a cylindrical portion simulating a brake drum and adapted to surround the friction means of a brake and having a central portion adapted to engage an axle carrying the brake, in combination with means for rotatably supporting said drum member.

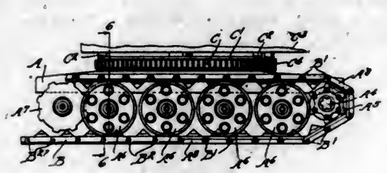
1,872,128. ELEVATOR CONTROL SYSTEM. WILLIAM F. EAMES, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 5, 1928. Serial No. 267,711. 8 Claims. (Cl. 172—152.)

1. In a motor-control system, a motor, a generator for supplying voltage to said motor, means for variably exciting said generator to cause said motor to be operated at speeds corresponding thereto and means for cumulatively compounding said generator between restricted load limits, said compounding means including a main-field-pole-supporting frame on said generator, commutating poles for said generator, a gap between said frame and said poles formed of non-magnetizable material and magnetizable means of less cross sectional area than said poles for bridging said gap.



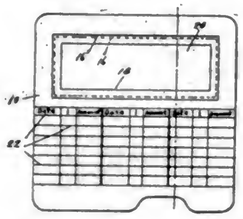
6. In a motor-control system, a motor, a generator for supplying a voltage to said motor, means for variably exciting said generator to cause said motor to operate at speeds corresponding thereto, means for cumulatively compounding said generator for obtaining substantially constant-speed regulation of said motor, and means for supplying an additional cumulative component of excitation for said generator through a restricted range of load values.

1,872,129. EXCAVATING MACHINE. ASGER EILERSGAARD, Chicago, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 13, 1928. Serial No. 246,428. 1 Claim. (Cl. 305—8.)



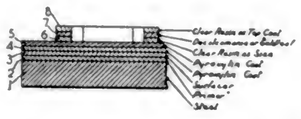
A crawler vehicle comprising a frame, axles projecting laterally therefrom, a body mounted thereon above the axles and projecting laterally a distance substantially equal to the projection of the axles, relatively wide rollers on the axles, a plurality of crawler chains comprising articulated links, and adapted to be separated at any articulation point, the links of one of said chains being substantially equal to the width of the rollers, the links of the other of said chains extending laterally beyond the rollers on one side beneath the body toward the frame, on the other side away from the body and the frame, each of said chains being separately adapted to form a closed circuit around the axles upon which the vehicle may travel and when disconnected to be connected to the other chain whereby the vehicle may travel from one chain to the other.

1,872,130. STENCIL MAKING METHOD AND APPARATUS. HARMON P. ELLIOTT, Watertown, Mass. Filed Dec. 31, 1928. Serial No. 329,471. 12 Claims. (Cl. 93—1.)



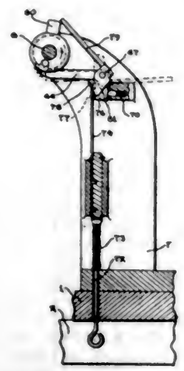
1. The method of making stencil frames which consists in feeding a web of paper in a continuous manner, blanking windows out of successive portions of the moving web, and printing on said moving web in register with the windows therein.

1,872,131. APPLYING DECORATIONS. GEORGE R. ENSMINGER, New Brunswick, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 12, 1930. Serial No. 443,928. 4 Claims. (Cl. 41—37.)



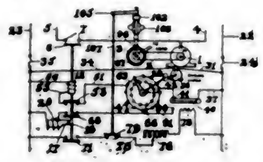
1. The method of applying a decoration of the gold leaf, decalcomania type to a surface, which comprises applying it by means of an adhesive comprising a polyhydic alcohol-polybasic acid resin, and in applying thereover an adhesive comprising an oil modified polyhydric alcohol-polybasic acid resin.

1,872,132. NONREPEAT MECHANISM FOR POWER PRESSES. JOHN A. FALLESON, Rochester, N. Y., assignor to Union Tool Company, a Copartnership comprising John A. Falleson and Paul S. Paulson. Filed Oct. 4, 1928. Serial No. 310,293. 2 Claims. (Cl. 192—25.)



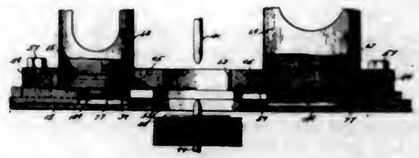
1. The combination with a driving member and a driven member, of a movable clutch element connected to the driven member and adapted to be moved into and out of connection with the driving member, means normally urging said movable clutch element into connection with the driving member, a member having a clutch shifting surface thereon and a stop at the end of said clutch shifting surface for engaging the movable clutch element to shift the latter out of connection with the driving member and thereafter to stop the rotation of the driven member, means normally holding said shifting and stop carrying member in operative position, means for operating said shifter and stop carrying member to an inoperative position so that the movable clutch element may move into connection with the driving member, said operating means having a laterally flexible portion movable to break the connection between the operating means and the shifter and stop carrying member, a two armed lever having one arm adapted to cooperate with said laterally flexible portion, and means carried by the driven member for cooperating with the other arm of said two arm lever to shift said two armed lever in order to move the laterally flexible portion so as to break connection between the operating means and the shifting and stop carrying member.

1,872,133. SAFETY SPEED CONTROLLER. HARRISON H. FOGWELL and CHARLES H. JUDD, Los Angeles, Calif. Filed Apr. 6, 1929. Serial No. 353,179. 6 Claims. (Cl. 175—355.)



1. In a system for the purpose described, the combination with a machine for doing work, of an electric motor, means susceptible of slippage connecting the motor and the machine through which the latter may be driven by the motor, a power circuit including a switch through which current is supplied to the motor, a speed governor connected with the said machine, an auxiliary circuit having normally closed contacts, means whereby the said speed governor may cause said contacts to open when the machine attains the requisite speed, and means under control of the auxiliary circuit for causing the said switch to open and break the motor circuit in case of excessive slippage in the said connecting means and the machine fails to attain the speed necessary for causing said contacts to open.

1,872,134. METHOD AND APPARATUS FOR ASSEMBLING DISKS. LOUIS T. FREDERICK, Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed Jan. 18, 1928. Serial No. 247,672. 11 Claims. (Cl. 154—2.5.)



1. In a device of the class described, a frame, a plurality of magazines arranged in said frame, retractor means for drawing a disc from said magazine to an assembly chamber in said frame, means controlling said retractor whereby discs may be drawn from said magazine to said assembly chamber in a definite sequence, and means for receiving assembled discs from said assembly chamber.

1,872,135. FUEL BRIQUETTE. EMIL O. E. GAUPHOEM, Bellevue, Wash. Filed Apr. 15, 1930. Serial No. 444,610. 3 Claims. (Cl. 44—16.)

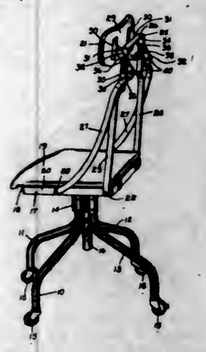
1. In the art of producing artificial fuels of specified characteristics including coalescence of the ash where the characteristics of the materials in the fuel produce a pulverized ash in combustion, including rate of combustion from comminuted carbonaceous materials, including bonding ingredient which retards combustion, including chemical accelerator of combustion which comminutes the ash to a finer degree, that step which consists in introducing into the mixture including said carbonaceous materials including bonding ingredient and chemical accelerator, a fluxing agent in amount in definite proportion to the accelerator to compensate for the comminuting action thereof in relation to the ash and produce the specified coalescence of the ash substantially as described.

1,872,136. VIBRATION DAMPER. GEORGE FRANCIS GIBSON, Luton, England, assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 1, 1931. Serial No. 541,395. 5 Claims. (Cl. 74—6.)



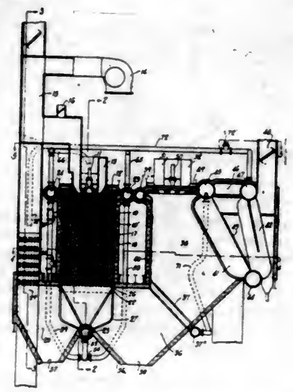
1. The combination of a shaft subject to torsional vibration, a flange fixed thereto, a damping member elastically mounted adjacent said flange, and yieldable means connecting said flange and damping member whereby the damping member is yieldably driven by said flange, said flange and damping member having a peripheral groove formed partly in each for receiving a frictional power transmitting element.

1,872,137. CHAIR. LEO E. GOENEN and JAMES A. GARROW, St. Paul, Minn., assignors to The Frits-Cross Company, St. Paul, Minn., a Corporation of Minnesota. Filed Feb. 25, 1929. Serial No. 342,447. 6 Claims. (Cl. 155—157.)



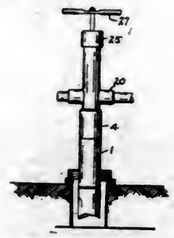
1. A chair comprising a seat, a frame connected to said seat, elongated members extending across said frame, a back rest connected to said members at corresponding ends thereof, means for guiding said members for movement across said frame and for pivoting said members relative to said frame, and means forming anchors pivoted to the other ends of said members and to said chair.

1,872,138. STEAM PRODUCING UNIT. CHARLES B. GRADY, West Orange, N. J., assignor to Metropolitan Engineering Company, a Corporation of New York. Filed Nov. 26, 1927. Serial No. 235,792. 16 Claims. (Cl. 122—235.)



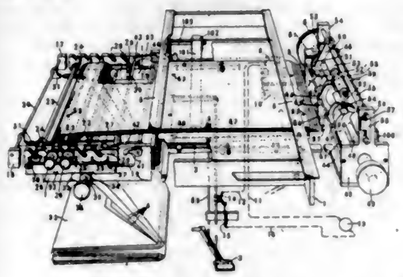
1. A steam generating unit comprising the combination of a combustion chamber and a burner for introducing fuel for combustion therein, radiant heat boiler surface on the walls of the combustion chamber for absorbing radiant heat in substantial amounts, an independent boiler made up substantially entirely of convection surface, a superheater, an outlet from the combustion chamber disposed beyond the radiant heat surface in the direction of flow of the gases, and means for subdividing the gases flowing through said outlet and leading the gases in separate and independent streams to the superheater and independent boiler respectively, the said means affording control of the quantities of gases in the two streams.

1,872,139. SAFETY VALVE FOR WELL CASINGS. ELLSWORTH GRAY and ROBERT A. MUELLER, Houston, Tex., assignors to Gray Tool Company, Houston, Tex., a Corporation of Texas. Filed July 2, 1928. Serial No. 289,971. 2 Claims. (Cl. 166—15.)



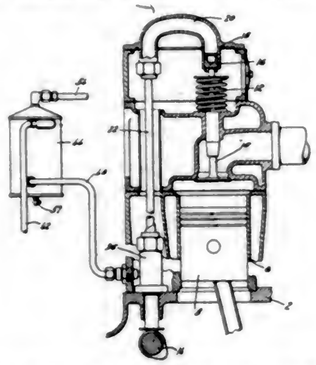
1. A drill stem attachment comprising a housing adapted to be connected with the upper end of said drill stem, a valve adapted to close upwardly under fluid pressure from the well, a threaded socket at the upper end of said housing, a cross having lateral outlets therein formed to screw into said socket, and an elongated rod in said cross adapted to be screwed downwardly and unseat said valve to allow fluid to flow from said drill stem to said lateral outlets.

1,872,140. MANIFOLD RECORD MACHINE. LOUIS FRED HAGEMANN, Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada, a Corporation of Ontario, Canada. Filed Sept. 20, 1927. Serial No. 220,664. 23 Claims. (Cl. 192—139.)



1. In a writing machine, in combination, a strip feed roll, a motor, a manual control member movable to make and break an electric circuit in which is said motor, connections adapted to drive said feed roll from said motor, and means whereby operation of said member to energize said motor is adapted to effect rotative movement of said roll and automatically disengage said roll from driving connection with said motor after a predetermined amount of revolution of said roll.

1,872,141. HYDRAULIC VALVE OPERATING MECHANISM. GEORGE E. A. HALLETT, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 4, 1927. Serial No. 180,915. 5 Claims. (Cl. 123—90.)



1. In an engine having one of the usual valves, a body of fluid, said valve being provided with means in operative relation with said body of fluid, means operated by said engine for displacing said fluid to impart movement to said valve, means for replenishing the fluid in said body, and means for removing air from the fluid supplied to said body, said last named means comprising an inertia separator.

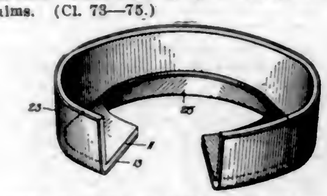
1,872,142. COMBINED BICYCLE AND SCOOTER. JOHN HOLTZMAN, New York, N. Y. Original application filed Jan. 9, 1922. Serial No. 528,005. Divided and this application filed July 7, 1926. Serial No. 120,887. 5 Claims. (Cl. 208—113.)

3. A bicycle having a front wheel and a rear wheel normally in alignment with each other, a step between said wheels for receiving a rider's foot in the common vertical plane of said wheels, a seat mounted in alignment with said wheels, and a handle bar connected to said front wheel and being operable either from said seat or from said step, the space above and at both sides of said step being free and unobstructed.



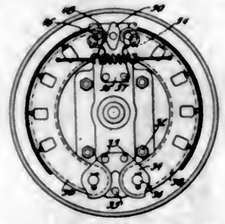
4. In a vehicle of the character described, wherein the balance is wholly maintained by the rider, the combination of a frame, a rear wheel journalled in the frame, a front wheel journalled in the vehicle and normally in alignment with said rear wheel, a platform formed with the frame for a rider to stand upon, a seat above the platform, a seat supporting element interposed between the platform and the seat, and revoluble propelling means associated with the platform to propel said rear wheel including a sprocket wheel and pedals arranged with the centers of rotation thereof above the platform, the major portions of the space above and the space at both sides of said platform being free and unobstructed to enable the rider to drive the vehicle in standing or sitting position at will.

1,872,143. MOLDED MICA PRODUCT AND METHOD OF MAKING SAME. LEONARD L. HOWARD, Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed Sept. 1, 1928. Serial No. 303,433. 17 Claims. (Cl. 73—75.)



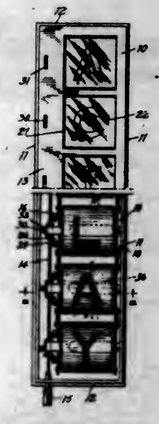
2. A molded mica product comprising a relatively thick zone of mica plate of low bond content, a superposed thinner zone of mica plate of relatively high bond content.

1,872,144. BRAKE. ORMOND E. HUNT, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 6, 1928. Serial No. 244,919. 11 Claims. (Cl. 188—194.)



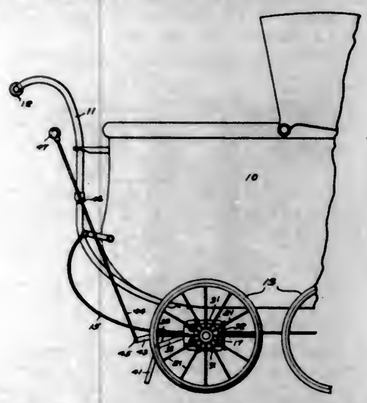
1. In a brake, a supporting plate, an actuating shaft carried thereby, means to mount said actuating shaft on said plate for rocking relative to said plate about an axis at right angles to its longitudinal axis of rotation said actuating shaft having an arm terminating in a point in the extension of said rocking axis.

1,872,145. SIGN. EBENEZER B. HURFORD, New York, N. Y. Filed Apr. 21, 1931. Serial No. 531,680. 2 Claims. (Cl. 40—93.)



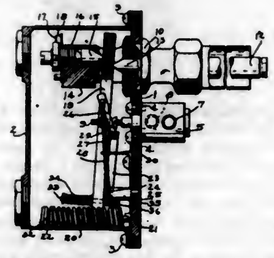
1. A device as characterized comprising an enclosure, a series of units within the enclosure, each unit having a tape for exposing written matter in a direction common to the direction of exposure of the written matter of the other tapes and said enclosure having a series of windows all facing in the same direction for simultaneously exposing the written matter of the several tapes, a pair of spools for each tape, said spools of the pairs being parallel to each other and all of said pairs of spools being parallel, a gear at the end of each spool, a shaft arranged longitudinally of the series of units and transverse to the several spools adjacent the several said gears, and sleeves on said shaft, one for each unit and having cooperating gears at the opposite ends of each sleeve spaced a less distance than the spacing of the respective pairs of gears of each unit and adapted to be slid to mesh either one with the gear of the spool or disengaged from both said gears, whereby the shaft may be continuously operated and affect only the unit desired to be affected.

1,872,146. BRAKE MECHANISM FOR BABY CARRIAGES. JOSEPH W. JACKSON, Woodhaven, N. Y., assignor to Solomon Slatkin, Fort Lee, N. J. Filed Feb. 8, 1932. Serial No. 591,728. 5 Claims. (Cl. 188—20.)



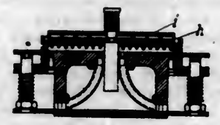
1. The combination with the axle of a baby carriage and wheel rotatable thereon including a hub, of a brake device comprising a brake drum having means for attachment with the hub and provided upon its periphery with spaced openings, a supporting element mounted upon the axle near the brake drum, dogs pivotally mounted upon the supporting element and disposed upon opposite sides of the brake drum and having teeth to enter the openings of the brake drum, yielding means to swing the dogs inwardly toward the brake drum, and manually operated means to swing the dogs outwardly from the brake drum.

1,872,147. AUTOMATIC CONTROL DEVICE FOR GAS BURNERS. ROY W. JOHNSON, Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Oct. 12, 1928. Serial No. 312,052. 11 Claims. (Cl. 236—48.)



1. In an apparatus of the character described for controlling the flow of fuel to a burner of a heating system, comprising a support, a bracket removably secured to the support on one side and having a portion spaced outward therefrom, a substantially straight lever on the same side of the support as the bracket and having a portion disposed in the space between the bracket and the support, a heat responsive device on the other side of the support and having a movable element extending therethrough into the space between the bracket and the support and engaging the lever on its side facing the support, a fulcrum member on the bracket on the opposite side of the lever extending into the space between the bracket and the support and engaging the lever in offset relation longitudinally to the engagement of the lever by the movable element, said fulcrum member and element serving to support the lever from the bracket, and a mechanism operated by the movement of the lever to control the flow of fuel to the burner.

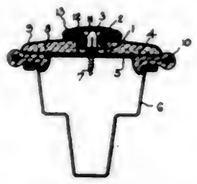
1,872,148. MANUFACTURE OF ELECTRIC HEATING BODIES. HERMANN WILHELM KURZ, Frankfort-on-the-Main, Germany, assignor to the Firm Voigt & Haeffner, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Sept. 1, 1928, Serial No. 303,479, and in Germany Sept. 5, 1927. 1 Claim. (Cl. 201—64.)



The process of manufacturing electrical heating bodies, which comprises suitably confining a layer of dry powdered insulating material of uniform density throughout the depth thereof, then imbedding an electrical conductive heating body in said dry layer by applying a slight pressure to said body and simultaneously slightly compressing said dry layer for the purpose of preventing said body from being displaced within said layer, laying a second layer of the same insulating material over the first-mentioned

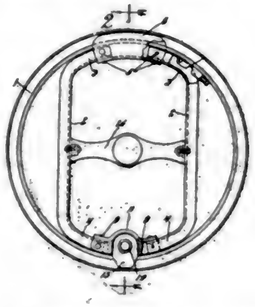
layer, then applying a layer of ceramic material to the second-mentioned layer, applying a heavy pressure to said layers to form said layers into a solid mass and heating said conductor.

1,872,149. DEVICE FOR ATTACHING MOLDING. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 7, 1927. Serial No. 231,551. 2 Claims. (Cl. 45—138.)



2. In combination with two members to be secured together, one of which is apertured and provided with a covering, a cupped member having an apertured bottom seated in said aperture and having a flange overlying the margin of the covering and member surrounding the aperture of the member, a headed fastener having a shank extending through the aperture in the cup, and into the other member for securing the cup and first-named member thereto, a closure for the cup having a covering similar to that of the covered member.

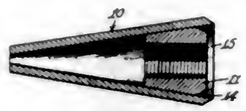
1,872,150. TIRE CARRIER. FRANK H. LE JEUNE, Jackson, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,366. 7 Claims. (Cl. 224—29.)



1. An oblong frame for carrying an annular tire, comprising a pair of spaced side members, each having an intermediate straight portion and laterally projecting legs of arcuate formation at opposite ends with corresponding legs of said members extending toward each other and ending in spaced relation, and bridge pieces extending across the space between and connecting the arcuate legs at corresponding ends of said side members and cooperating therewith in forming the end portions of the frame on which the tire may be seated.

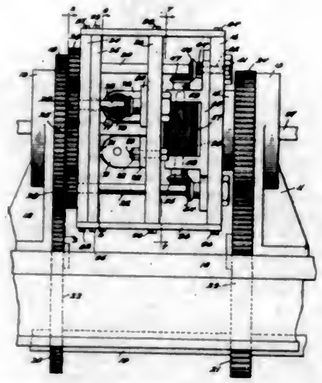
1,872,151. TIP FOR MECHANICAL PENCILS. WILLIAM H. LINDEMON, Fort Madison, Iowa, assignor to W. A. Sheaffer Pen Company, Fort Madison, Iowa, a Corporation of Delaware. Filed May 15, 1931. Serial No. 537,595. 10 Claims. (Cl. 120—9.)

1. A tip for a mechanical pencil comprising a metallic shell, a bushing in one end opening of said shell for connection with an end of said pencil, said shell having a conical-shaped outer wall and a thickened portion at the



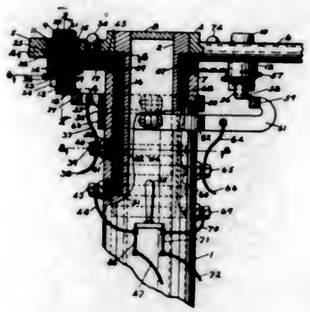
base thereof for retaining said bushing against the inner wall of said shell to form a fixed relation therebetween.

1,872,152. MECHANISM FOR FORMING SPIRALLY WOUND MULTISIDED TUBES. SIDNEY T. MALTBY, Washington, D. C., assignor to Stone Straw Corporation, Washington, D. C., a Corporation of Delaware. Filed May 1, 1930. Serial No. 448,925. 6 Claims. (Cl. 93—80.)



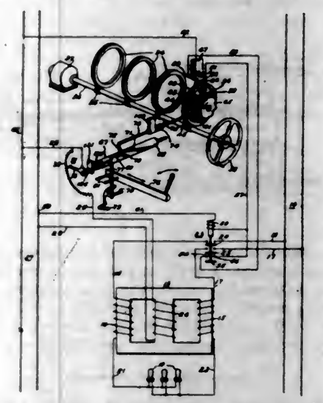
1. A machine for wrapping tubes comprising a non-translatable mandrel, means for feeding tube materal onto said mandrel to be wrapped thereon and cylindrical means engaging said mandrel beyond the zone of wrapping for rotating said mandrel and stripping a formed tube therefrom.

1,872,153. AUTOMOBILE SIGNAL SWITCH. ROBERT MARSH, Buffalo, N. Y. Filed June 4, 1929. Serial No. 368,329. 6 Claims. (Cl. 200—59.)



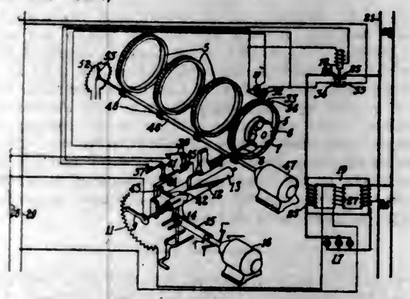
1. A turn signal device comprising two wires; a stationary and a movable contact, said stationary contact consisting of a sector attached to and concentric with the steering column of an automobile and said movable contact consisting of a push button attached to the steering wheel of said automobile; said push button having a side contact strip for first connecting said wires when manually pushed down and a foot for contacting with said sector when said wheel is turned to push said button up to break said first connection and make a second connection of said wires through said sector; said foot operated by said sector on the reversal of said wheel to partially rotate said button and break said second connection.

1,872,154. THEATER LIGHTING CONTROL MECHANISM. JAMES C. MASEK, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 24, 1926. Serial No. 131,303. 35 Claims. (Cl. 175—312.)



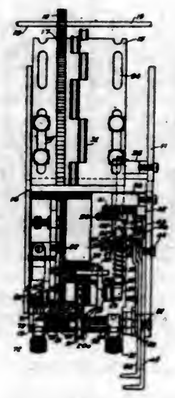
1. The combination with a current controlling means movable for varying the intensity of the current supplied to an electric circuit, of a plurality of individually adjustable means for actuating the current controlling means for independently effecting the current controlling means a predetermined degree and means for progressively bringing the moving means into cooperative relation with the said controlling means.

1,872,155. CONTROL MECHANISM. JAMES C. MASEK, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 2, 1927. Serial No. 230,521. 6 Claims. (Cl. 175—312.)



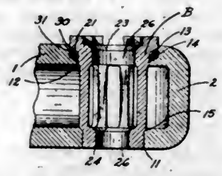
1. A control system comprising a circuit-controlling device having a plurality of means for separately varying through a desired range the same circuit and presetable means for controlling the device to effect the control of the circuit through any selected first said regulating means.

1,872,156. THEATER SWITCHBOARD APPARATUS. JAMES C. MASEK, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 2, 1927. Serial No. 230,522. 9 Claims. (Cl. 175—312.)



1. Current-control mechanism comprising a rotary cylindrical drum, a rheostat, means on the drum for effecting operation of the rheostat when the drum is rotated and means accessible from the outer cylidrical face of the drum for adjusting the said means.

1,872,157. VALVE CAGE. HENRY J. MASTENBROOK, Cleveland, Ohio, assignor to The Swartwout Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 5, 1929. Serial No. 383,653. 5 Claims. (Cl. 251—81.)

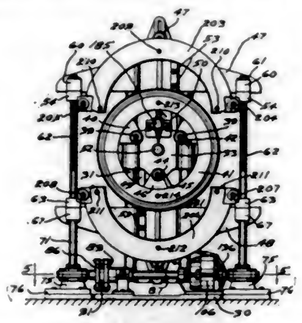


2. Valve mechanism comprising, in combination, a conduit formed with a pair of openings, a valve cage in the openings and having a valve seat corresponding to each opening, a pair of discs carried by a stem and co-operating with the seats, the conduit and cage each being formed with a cylindrical and conical surface which collectively define a packing chamber, and a packing ring in the chamber having conical surfaces of different pitch from those of the chamber.

1,872,158. APPARATUS FOR VULCANIZING ANNULAR ARTICLES. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Oct. 24, 1927. Serial No. 228,175. 4 Claims. (Cl. 18—17.)

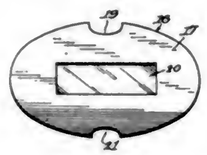
4. A mold for annular articles comprising a plurality of sections, means for closing and opening the sections, a constantly driven shaft, a control shaft, means for operably connecting the control shaft to the constantly driven shaft, a cam carried by the control shaft operable to actuate the mold closing and opening means in timed sequence, a second cam carried by said control shaft operable to

admit fluid pressure to the interior of the article in the mold subsequent to the closing of the mold and to relieve said pressure prior to the opening of the mold and a



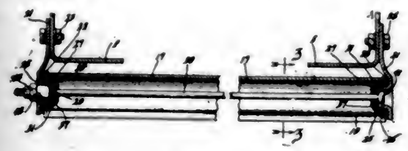
third cam on said control shaft operative to disconnect the control shaft from the driven shaft subsequent to the opening of the mold.

1,872,159. SHIELD OR PROTECTOR DEVICE. WILLIAM C. MCCREARY, Chicago, Ill. Filed Mar. 20, 1931. Serial No. 524,087. 5 Claims. (Cl. 40—10.)



1. In combination, a liquid container provided with a head, a protector member for said head, said member comprising a fiber disk having one diameter greater than the distance between two contacting points of the container and disk whereby when said disk is forced into position on said head the resiliency of said disk will retain the same in position.

1,872,160. BRAKE CROSS SHAFT. CHARLES L. MCCUEN, JAMES DYKSTRA, EARL H. SMITH, and JACK F. WOLFRAM, Lansing, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 19, 1930. Serial No. 503,384. 2 Claims. (Cl. 308—21.)

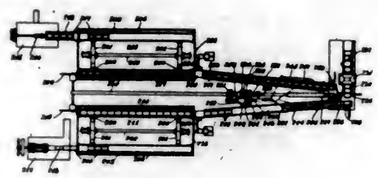


1. In brake-operating mechanism, a chassis having side bars, brackets secured to said side bars, said brackets having aligned parti-spherical depressions, a tubular rock shaft parti-spherical members carried by the ends of said tubular shaft and surrounding the depressed portions of said brackets, cup-shaped bearings between and engaging said parti-spherical members together with a rod extending through said tubular shaft, one end of said rod having a head shaped to fit a bracket depression and an adjustable nut threaded on the other end of said rod and fitting within the depressed end of said other bracket.

1,872,161. PRESERVATION OF LATEX. JOHN MCGAVACK, Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Aug. 27, 1930. Serial No. 478,279. 5 Claims. (Cl. 18—50.)

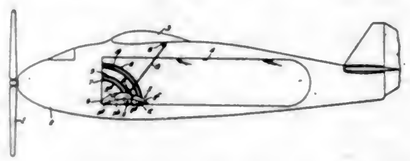
1. A method of preserving latex which comprises first adding a small amount of formaldehyde to latex, allowing the latex to stand and subsequently adding a small amount of ammonia at a time when there remains no substantial excess of free formaldehyde in the latex.

1,872,162. MEANS FOR MANUFACTURING MATCH BOXES. GUNNAR EMANUEL MELLGREN, Tidaholm, and JOHN GOTTHARD SJÖSTRÖM, Jonkoping, and ANDERS ROLAND SWÄLAS and GUSTAF VILHELM HEDIN, Tidaholm, Sweden. Filed Nov. 7, 1928. Serial No. 317,792. 17 Claims. (Cl. 93—55.)



1. In combination, a machine for making wooden veneer match box portions, a dryer, a box-closing machine, and a conveyer adapted to convey the box portions from the box-making machine through the dryer to the box-closing machine while maintaining the box portions in predetermined arrangement during such conveyance.

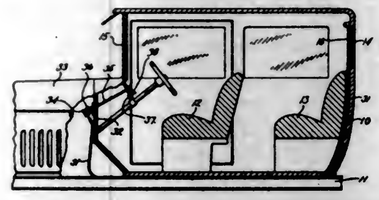
1,872,163. AUXILIARY WINGS FOR AIRPLANES. NICHOLAS J. MEDVEDEFF, Larchmont, N. Y., assignor to Aircraft Improvement Corporation, New York, N. Y., a Corporation of Delaware. Filed May 16, 1930. Serial No. 452,841. 2 Claims. (Cl. 144—12.)



2. In an airplane, in combination, a fuselage, fixed wings, auxiliary landing and take-off wings, and means for moving the auxiliary wings between extended flying positions and extend rearwardly along the sides of the fuselage, said means effecting a compound swinging movement of each auxiliary wing about an axis substantially coincident with the flying position of the leading edge, and an axis substantially coincident with the intersection of the wing chord with the fuselage, and involving the tilting of the wing through a position in which it tends to depress the airplane, the auxiliary wings being slotted to reduce such depression.

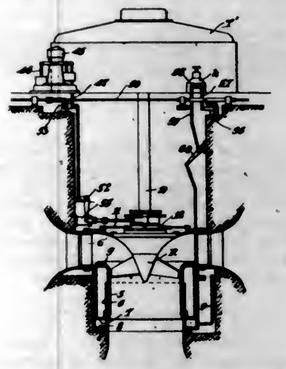
1,872,164. REAR WINDOW SHADE FOR AUTOMOBILES. WARREN C. MERCIER, Danbury, Conn. Filed Mar. 7, 1927. Serial No. 173,358. 1 Claim. (Cl. 165—28.)

In a device of the character described, a roller adapted to be mounted above the rear window of an automobile, a window shade on said roller adapted to move into and out of operative position over the window, a spring tending to turn said roller or roll up said shade, a pulley on said roller at one end thereof, a flexible wire connected to rotate said pulley against the opposition of said spring and extending downwardly therefrom substantially parallel with the side of the window, a tube adapted to maintain said wire in said position and to conduct an exten-



sion thereof to a position near the driver's seat, means on said shade adapted to be guided along said wire, a second pulley to which the forward end of the wire is connected, means for retaining said second pulley in fixed position, and means operable from the driver's seat for rotating said second pulley to operate said shade.

1,872,165. REGULATING SYSTEM FOR HYDRAULIC TURBINES. LEWIS FERRY MOODY, Philadelphia, Pa. Original application filed Jan. 7, 1922, Serial No. 527,544. Divided and this application filed Nov. 10, 1926. Serial No. 147,419. 50 Claims. (Cl. 253—122.)



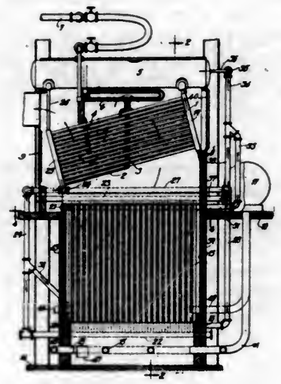
1. The combination with a hydraulic turbine having a runner and provision for directing fluid thereto simultaneously around its entire periphery, of a plurality of gate mechanisms movable at different rates, each mechanism being movable relatively to the other and means for automatically effecting movement of one of said gate mechanisms upon movement of the other.

1,872,166. SCREW. LUDWIK MÜHLIG, Bielsko, Poland. Filed Oct. 14, 1931, Serial No. 568,768, and in Germany Nov. 6, 1930. 2 Claims. (Cl. 85—46.)



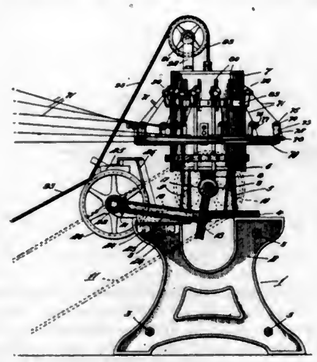
1. A screw, particularly for use on railway sleepers comprising in combination: a shank member; a head on said shank member; and a screw thread on said shank member of such form that the base line of the cross section of the thread increases continuously in length from the point of the screw towards the head thereof whilst the pitch of the thread and the angle of inclination of the sides of the thread to the base line remain the same.

1,872,167. BOILER. THOMAS E. MURRAY, Brooklyn, N. Y.; Joseph Bradley Murray, Thomas E. Murray, jr., and John F. Murray, executors of said Thomas E. Murray, deceased, assignors to Metropolitan Engineering Company, a Corporation of New York. Filed Feb. 2, 1926. Serial No. 85,439. 2 Claims. (Cl. 122—235.)



1. A boiler installation including in combination an overhead bank of water tubes slightly inclined from the horizontal with headers at their opposite ends, a floor, a casing enclosing said bank of tubes and supported in turn on said floor, a series of vertical water tubes arranged to substantially prevent the passage of the heating gases between them and to receive the full radiant heating effect of the flame, said tubes forming a combustion chamber with their upper ends above said floor and their lower ends extended downward below the floor, means for providing a circulation continuously through said inclined steam drum, and nozzle burners for projecting burning fuel into said combustion chamber.

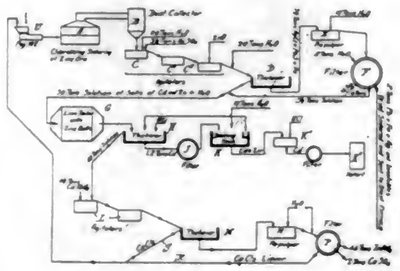
1,872,168. CIRCULAR LOOM. ERNEST NANFELDT, New Haven, Conn., assignor to Respro, Inc., Cranston, R. I., a Corporation of Rhode Island. Filed Jan. 6, 1930. Serial No. 418,867. 14 Claims. (Cl. 139—13.)



1. In a circular loom, a stationary casing of substantially circular cross-section comprising a base plate serving as a closure for one end thereof, the cylindrical portion of said casing being provided with a plurality of radial slots, a stationary supporting plate positioned within said casing, aligned bearings carried by said base plate and said supporting plate and located centrally thereof, a shaft rotatably mounted in said bearings, thread carriers mounted upon said supporting plate for travel within said cas-

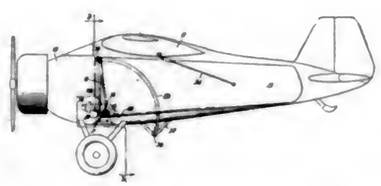
ing along a substantially circular path, arms pivotally supported outwardly of said casing adjacent to said slots for movement within said slots, and means operated by said shaft for imparting movement to said thread carriers and for actuating said arms about their respective pivots in timed relation with the movement of said thread carriers.

1,872,169. PROCESS FOR THE SEPARATION OF COMPONENT CONSTITUENTS OF A COMPLEX METALLIFEROUS DUST. AUGUSTIN LEON JEAN QUENEAU, New York, N. Y. Filed June 7, 1929. Serial No. 369,234. 5 Claims. (Cl. 75—18.)



1. The method of treating zinc ores to recover the associated metal values thereof which comprises chloridizing said ore to convert the said metal values to metal chloride compounds, volatilizing said chloride compounds, leaching the volatilized chloride compounds with dilute sulfuric acid, removing therefrom the insolubles, treating the filtrate with metallic zinc to effect a precipitation of metallic cadmium, removing the cadmium, and treating the filtrate with basic calcium compounds to recover the zinc content thereof.

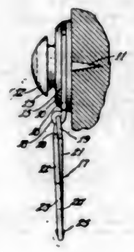
1,872,170. AIRCRAFT. CHESTER U. PALMER, New York, N. Y. Filed Oct. 20, 1930. Serial No. 489,887. 34 Claims. (Cl. 244—12.)



1. In an airplane, the combination of a structural body, a pair of wings carried by said structural body and having an effective position and an ineffective position, and means for moving said wings from one position to the other comprising a source of motive power, an energy storing device, and means for transmitting power from the energy storing device to said wings.

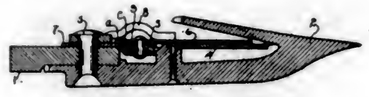
1,872,171. PUSH PIN. MARTIN PANITZSCH, Forest Park, Ill. Filed Oct. 22, 1931. Serial No. 570,381. 7 Claims. (Cl. 24—73.)

7. In a device of the kind described and comprised of a disc-like body member having a fastening device arranged axially of said disc-like member, a ring mounted for rotation upon said disc-like body member, a fastener connected



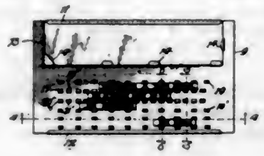
to said ring for movement relatively to said ring, a member providing a gripping element, and a neck connecting said gripping element and body portion.

1,872,172. WEAR PLATE FOR HARVESTER KNIFE BARS. LOUIS A. PARADISE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed May 22, 1930. Serial No. 454,683. 2 Claims. (Cl. 56—298.)



1. In a device of the class described, the combination of a finger bar, guard fingers mounted on the finger bar, a knife bar, knife sections on the knife bar, a wear plate secured on the finger bar and bent to project between the finger bar and knife bar, and a wear plate on the knife bar separate from said sections and interposed between the knife bar and the wear plate on the finger bar and in contact with the wear plate on the finger bar.

1,872,173. PRINTING DEVICE. JAQUES CAMILLE PASCHALI, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 27, 1928. Serial No. 308,694. 3 Claims. (Cl. 101—370.)



2. A printing device of the class described comprising a frame having parallel rows of spaced retaining devices struck up therefrom and forming channels adapted to receive and hold type panels in juxtaposed relation, there being an upper row, a lower row, and two intermediate rows of said retaining devices, the retaining devices in the upper row being equi-distantly spaced from each other and the retaining devices in the lower row being alined therewith, the retaining devices in the upper and lower

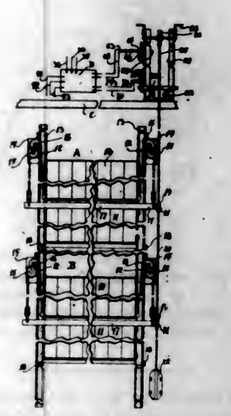
rows being inclined toward each other, there being retaining devices in the intermediate rows alined with the retaining devices in the upper and lower rows and inclined toward the retaining devices in the lower row, and said intermediate rows also having retaining devices alined with each other but out of alinement with the retaining devices in the upper and lower rows and inclined toward the retaining devices in the upper row, the retaining devices in one row cooperating with the retaining devices in the adjacent row extending toward the retaining devices in the one row to engage opposite edges of type panels inserted therebetween at staggered places to provide a discontinuous retention for the type panels.

1,872,174. PRINTING PLATE AND METHOD OF MAKING. JAQUES CAMILLE PASCHALI, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Original application filed Sept. 27, 1928, Serial No. 308,694. Divided and this application filed May 15, 1930. Serial No. 452,580. 4 Claims. (Cl. 101—370.)



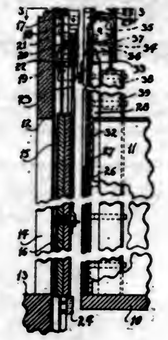
1. A blank of suitable material in which printing characters may be embossed to form a printing plate, said blank having oppositely disposed score lines dividing the blank into one or more panels on which printing characters are embossed with the character impressions located close to the score lines, and a marginal panel adapted to be gripped by the jaws of the embossing machine for holding the type panel in position to have characters embossed therein.

1,872,175. OPERATOR FOR COUNTERBALANCED ELEVATOR DOORS. ROBERT S. PEELLE, Hollis, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 10, 1931. Serial No. 529,263. 8 Claims. (Cl. 268—119.)



1. An operator for counterbalanced elevator doors of the type in which each door in a shaft is actuated by a motor operative upon said door only, and power for operating the several motors is controlled by a pole changing magnetic switch mechanism, a shaft switch adjacent each door, and an opening and a closing switch included respectively in the circuits to the windings of the magnets of said pole changing switch, embodying therein self-closing switches arranged respectively in the circuits including said opening and said closing switch, a snake extending throughout the shaft, means carried thereby engageable by the respective doors in a shaft, and a reciprocatory member carrying an impact co-operating with said self-closing switches, whereby the circuits controlled by said opening and closing switches will be automatically interrupted substantially simultaneously with the completion of the opening or the closing movement of any door in a shaft.

1,872,176. OPERATOR FOR ELEVATOR GATES. ROBERT S. PEELLE, Hollis, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed May 26, 1931. Serial No. 540,131. 6 Claims. (Cl. 187—54.)

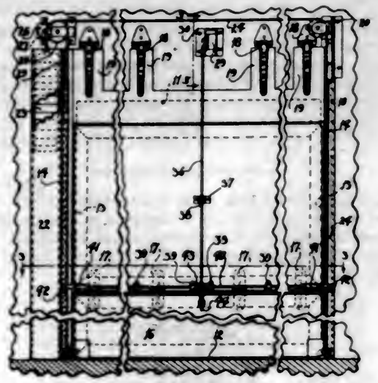


1. An operator for elevator gates embodying therein the combination with an elevator car, a cam carried thereby, a counterbalanced elevator door mounted in an elevator shaft, flexible connections between the sections of said door, electric motor actuated sheaves over which said connections pass respectively, and a vertically slidable gate mounted upon the elevator car, of electric conductor lines passing vertically through the shaft, electro-magnetic pole changing switches controlling the circuit to said conductor lines, a remote manually operative switch mechanism for actuating said magnetic switches, branch lines leading from said shaft conductor lines to the motors of said motor actuated sheaves, a shaft switch adapted to be actuated by a cam upon an elevator car controlling the circuits to said branch lines, an electric motor actuated sheave operative upon said gate, and branch lines extending from said shaft lines, movable with the elevator car and connected with the motor of said last named motor actuated sheave, whereby with the actuation of said pole changing switch mechanism, power may be selectively applied to any door in the elevator shaft, and be simultaneously applied to the motor actuated sheave operative upon said gate.

1,872,177. OPERATOR FOR CANOPY TYPE DOORS. ROBERT S. PEELLE, Hollis, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 3, 1931. Serial No. 578,790. 9 Claims. (Cl. 268—74.)

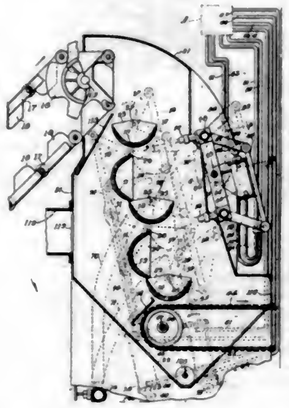
1. An operator for canopy type doors embodying therein the combination with an upper door section hinged adjacent the lintel of a door opening, a lower door section hinged to said upper door section adjacent the bottom thereof, counterweighting means, rotatable guides adjacent the opposite sides of the door opening, flexible connections extending from adjacent the bottom of said lower door sec-

tion to said counterweighting means and passing about said guides, of an electric motor geared to one of said rotatable guides, an arm pivotally supported adjacent the lintel of



a door opening and projecting substantially parallel with the upper door section, connections between said arm and said door section, and an electric motor geared to said arm.

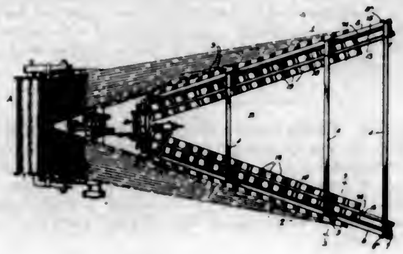
1,872,178. SAND BLAST MACHINE. LOUIS D. PEIK, Mishawaka, Ind. Filed May 26, 1930. Serial No. 455,674. 19 Claims. (Cl. 51—8.)



2. A sand blast machine comprising a plurality of tiltably mounted containers arranged in series, means for operatively connecting alternate containers of the series in two separately controllable groups for causing articles to be sand blasted to move successively through said tiltable containers, and a sand blast gun adapted to discharge polishing material upon articles being passed through said tiltable containers.

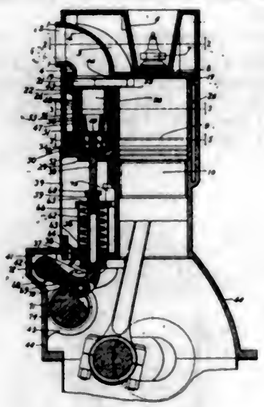
1,872,179. WARPING APPARATUS. BURT A. PETERSON, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Filed June 6, 1928. Serial No. 283,244. 3 Claims. (Cl. 242—131.)

1. A V-shaped warper creel comprising two frames arranged in vertical planes that converge in the form of a V, creel sections in each of said frames, said sections being slidable longitudinally of the respective frames toward and away from the apex of the V-shaped creel, each of said creel sections comprising pairs of yarn mass supports, one support of each pair being accessible from one side of the frame for replenishment while the other support of the pair is in unwinding position, and said pairs of support being rotatable on an axis located between the supports, and yarn guiding means on the outer side of each of said frames for guiding the yarn in the general direction of said apex.



3. A creel comprising a vertical series of yarn mass supports, each being arranged to support a yarn mass on a horizontal axis, and a casing enclosing each support and having an open vertical side for the insertion of the yarn mass and the withdrawal of the yarn, the ballooning yarn in said casings setting up air currents that blow the lint out of the casings.

1,872,180. INTERNAL COMBUSTION ENGINE. JULIUS C. PETERSON, Chicago, Ill. Filed Aug. 31, 1928. Serial No. 303,223. 27 Claims. (Cl. 123—188.)

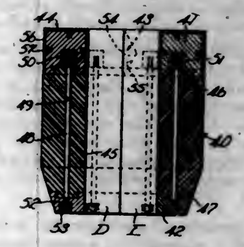


1. In an internal combustion engine, a valve comprising two main parts, said parts being connected together in such manner as to be capable of a motion relative to each other in the direction of the axis of said valve, and a dashpot, said motion being limited in one direction by said dashpot.

1,872,181. METHOD OF MAKING NITROCELLULOSE. NORMAN PICTON, Stevenston, Scotland, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed May 21, 1930, Serial No. 454,519, and in Great Britain May 27, 1929. 4 Claims. (Cl. 260—145.)

1. A process of manufacturing nitrocellulose of substantially complete solubility which comprises granulating pulp board without disintegrating and nitrating the granulated pulp board with a mixed acid composition containing from 40–80% nitric acid together with sulfuric acid and water, the nitric acid content being adjusted within this range so as to be above the concentration at which substantial gelatinization of the pulp boards occurs.

1,872,182. PACKING DEVICE FOR USE IN CASING HEADS, OR THE LIKE. CHARLES J. POHL, Los Angeles, Calif., assignor to Michael P. Hannin, Los Angeles, Calif. Filed Feb. 11, 1931. Serial No. 514,963. 19 Claims. (Cl. 286—16.)

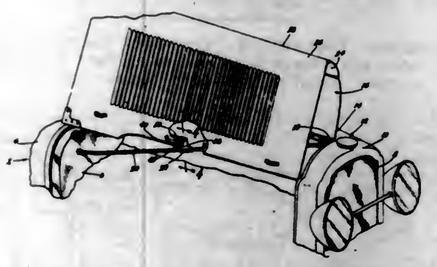


1. A packing device of the character described including two sections, each section including a part of magnetic material, and packing associated with the part, the said part of one section being magnetized and adapted to abut the part of the other section to connect the sections.

1,872,183. PROCESS FOR MAKING COLLOIDAL SILICA. PERCY W. PORTER, Wilmington, and RUSSELL E. NEEDHAM, Los Angeles, Calif. Filed Nov. 10, 1930. Serial No. 494,698. 4 Claims. (Cl. 23—182.)

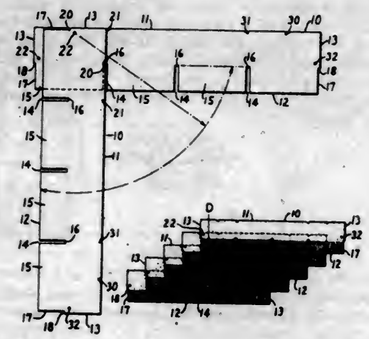
4. The process of making colloidal silica, or silica gel, which comprises the mixing of mineral laumontite with dilute hydrochloric acid, without the application of heat, allowing the mixture to settle, decanting the supernatant solution, allowing it to stand after decanting until it solidifies, and then causing it to dry.

1,872,184. HOOD CATCH. EDWARD T. RAGSDALE, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 13, 1931. Serial No. 529,637. 6 Claims. (Cl. 180—69.)



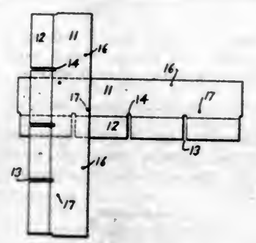
6. In a means for retaining the hood of a vehicle in raised position, said vehicle having an engine and a radiator, means to brace the radiator, and means on the lower portion of the hood to engage the brace means on the upward movement of the hook to retain the hood in raised position and restrain it from further upward movement.

1,872,185. BUILDING MATERIAL. RALPH W. B. READE, Newton Center, Mass., assignor to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 2, 1930. Serial No. 499,477. 8 Claims. (Cl. 20—5.)



1. A shingle strip adapted to be laid with its major axis horizontal having pivot indicating means thereon which permits the strip to be held with its major axis in a vertical direction so that a nail may be driven through the pivot indicating means and the strip swung about the nail as an axis and brought to its final position with the major axis horizontal, and a positioning indicating means thereon for determining the vertical adjustment of a strip when its major axis is in a vertical direction.

1,872,186. BUILDING MATERIAL. RALPH W. B. READE, Newton Center, Mass., assignor to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 2, 1930. Serial No. 499,478. 6 Claims. (Cl. 20—5.)

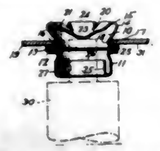


6. A shingle strip having a plurality of indicating means in the upper end thereof, at least one of said means being adapted to register with a similar means in a superposed strip when the strips are laid in overlapping courses, said means being located at such positions that a nail may be driven through the registering means while the major axis of the strip extends in a vertical direction and the strips may be swung about the nail as an axis to its final position.

1,872,187. FASTENER. LUKS REITER, Providence, R. I. Filed Jan. 2, 1929. Serial No. 329,713. 1 Claim. (Cl. 24—208.)

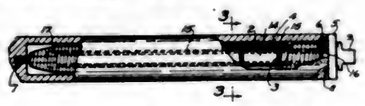
1. In a fastener installation, a support, a rigid wall surrounding an aperture in the support, a two-piece fastener element comprising a yieldable clinching member having an outer wall and a depressed inner wall closed at the bottom and spaced from the outer wall and continuous therewith, said member being provided with spaced radial slots passing through the upper part of

both of said walls, and forming yieldable sections between said slots, an annular flange at the edge of said outer wall, the juncture of said flange and the outer wall being shaped to provide a groove, the least diameter of said groove being less than any outer diameter of said outer wall, an engaging member having an outer wall and a depressed apertured inner wall spaced from the outer wall, and a terminal shoulder on said engaging member bent about the flange of the clinching member and holding said clinching member in place, the clinching member being adapted to be forced through the aperture in the support whereby the wall of the aperture first



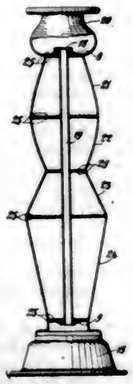
forces the yieldable sections inwardly and finally rests in the groove of the clinching member and against the shoulder, the diameter of the shoulder being greater than that of the engaging member for that purpose, said yieldable sections expanding after passage through said opening and resisting the withdrawal of said clinching member back through said opening, and said depressed and slotted inner wall of the clinching member being movable outwardly by a tool inserted through the aperture of the engaging member into direct engagement with said last-mentioned wall to increase the diameter of the yieldable sections permanently and thereby to deepen said groove.

1,872,188. SHADE ROLLER. BENNIE SCHWARTZ, Brooklyn, N. Y. Filed May 25, 1932. Serial No. 613,386. 6 Claims. (Cl. 156—36.)



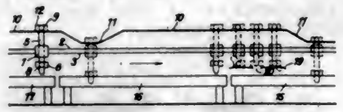
3. In an attachment for shade rollers, a spring for winding said roller, and means within said spring preventing complete unwinding of said spring.

1,872,189. METHOD OF MAKING SHEET METAL-WARE JOINTS. AARON SHATKIN, Brooklyn, N. Y. Filed May 27, 1930. Serial No. 456,070. 2 Claims. (Cl. 113—120.)



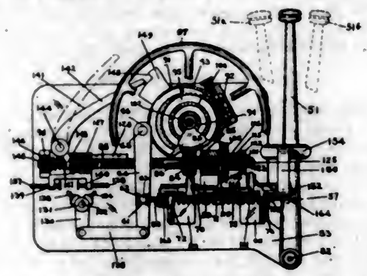
1. The method of joining any number of sheet-metal shells or forms, which consists in perforating each of the parts to be joined, corrugating corresponding portions of all contact surfaces, so that one part can engage or mesh with the other part with which it is to be in contact, passing an eyelet through the perforations, arranging the parts so that the corrugations engage or mesh and closing the eyelet.

1,872,190. CAPSULING MACHINE. OTTO SINDL, Berlin, Germany. Filed July 8, 1931, Serial No. 549,471, and in Germany June 7, 1930. 6 Claims. (Cl. 18—25.)



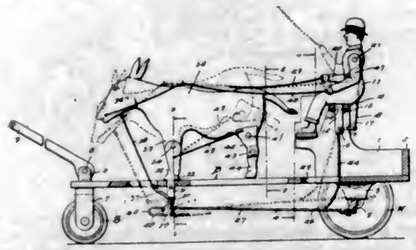
1. In a machine for the manufacture of capsules, an endless plane rail track, and a carriage movable upon this track, rods vertically displaceable in this carriage, shaft bearings on these rods, a shaft passing through these bearings, a cross bar mounted upon this shaft, a ledge on this cross bar adapted to carry capsule molds, means for vertically displacing the rods relatively to the carriage, and means for rotating the shaft in its bearings.

1,872,191. FEEDING MECHANISM FOR GRINDING MACHINES. GEORGE H. SMITH, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 15, 1930. Serial No. 436,051. 4 Claims. (Cl. 51—165.)



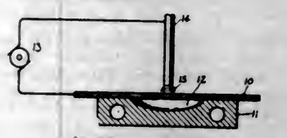
1. A cross feed mechanism for a grinding machine slide comprising a manually operable feed screw connected to the slide, a power mechanism connectible to rotate the feed screw, means including a contact member to disconnect said power mechanism from the screw, a stop mechanism to stop the slide at a predetermined position, and a traveler movable in timed relation with the feed screw to actuate successively said contact member and said stop mechanism.

1,872,192. FIGURE TOY. CHARLES F. SMITHSON, Elkridge, and GEORGE C. OWENS, Relay, Md. Filed Apr. 28, 1931. Serial No. 533,488. 5 Claims. (Cl. 46—45.)



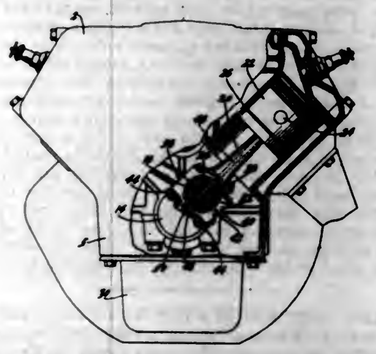
1. A device of the class described comprising a base member, a crank shaft having means for rotating the same, a figure member pivotally mounted on the base member, a rock arm mounted upon the base member, an operative connection between the rock arm and the figure member to rock the figure member in one direction upon movement of the rock arm in one direction, and a pitman rod operatively engaged with the crank shaft and having a loop like portion freely engaged with the rock arm, said loop portion permitting limited movement of the pitman rod with respect to the rock arm but engaging the rock arm to effect an abrupt movement of the rock arm upon nearing the completion of the movement of the pitman rod in one direction.

1,872,193. METHOD OF EMBOSSING METAL PLATES. RICHARD STRESAU, Wauwatosa, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Aug. 3, 1931. Serial No. 554,816. 5 Claims. (Cl. 219—10.)



1. A method of forming embossments on metal plates which comprises disposing a plate on a matrix having a cavity therein corresponding to the shape of the embossment to be formed on said plate, reducing the metal of the plate over said cavity to a plastic state to cause the same to assume the shape of said cavity and form a depression in the plate, and depositing molten metal in said depression in the metal plate.

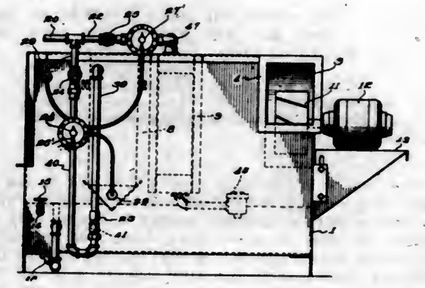
1,872,194. SELF CLEANING CONNECTING ROD BEARING. CALEB E. SUMMERS, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 13, 1930. Serial No. 460,903. 4 Claims. (Cl. 184—6.)



1. In a bearing, in combination with a crankshaft having a crankshaft pin rotatable in said bearing, a cap forming a part of said bearing, said cap having an opening communicating with the atmosphere, and a lubricant duct in said pin adapted to register with said opening once per revolution.

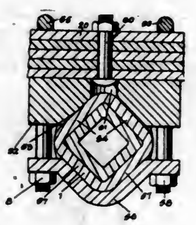
1,872,195. AIR CONDITIONING APPARATUS. DELL THOMPSON, Detroit, Mich., assignor to Drying Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed Apr. 8, 1931. Serial No. 528,490. 6 Claims. (Cl. 257—2.)

1. An air conditioning apparatus comprising a cabinet, means for maintaining a water level therein, an air inlet and an air outlet in said cabinet above said water level, means for forcing air through the cabinet, a humidifying device located in the path of travel of the air through the cabinet and having at its lower end a trough extending above and below the water level in the cabinet, a



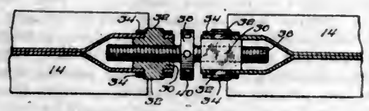
thermostat located in said trough, means for pumping water from the bottom of the cabinet to the top of said humidifier, said means for pumping water being under the control of said thermostat.

1,872,196. TUBULAR AXLE. BERTIS H. URSCHEL, Bowling Green, Ohio, assignor to Urschel Engineering Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 10, 1928. Serial No. 324,867. 11 Claims. (Cl. 267—52.)



2. In a means for attaching a tubular vehicle axle to a vehicle, the axle having flattened surfaces inclined to each other and forming wedging surfaces, saddles having surfaces conforming to the flattened inclined portions located thereon, and means for clamping the saddle to the axle, the inclined surfaces wedging against the corresponding surfaces of the axle.

1,872,197. BRAKE. ROBERT N. VAN BUSKIRK, Detroit, Mich., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 31, 1928, Serial No. 266,130. Renewed Aug. 7, 1931. 13 Claims. (Cl. 188—79.5.)



2. A brake comprising, in combination, a pair of shoes arranged end to end, a stamping pivotally secured to the end of each shoe and having a portion extending across the shoe end, a nut secured to said portion of each stamping, and a connecting member adjustably threaded into both nuts.

11. A brake shoe having a member pivotally secured to its end and formed with a portion extending crosswise

of the shoe end, together with a threaded nut secured to said portion of the pivotally-mounted member, and a locking device adapted to lock an adjusting screw threaded in said nut.

1,872,198. GUN CLEANING DEVICE. WILLIAM VAN RIXEL, Jr., Green Bay, Wis. Filed Nov. 18, 1930. Serial No. 496,516. 1 Claim. (Cl. 42—91.)



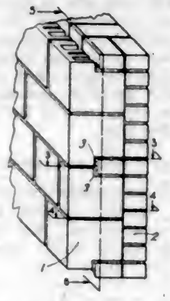
In a device of the kind described, a rod having a centering member at one end adapted for connection with the driving shaft of a power element, a circular head of uniform diameter in cross-section throughout its length and having crossed intersecting slots opening through the periphery thereof at diametrically opposite points of the same and through one end, said slots being extended for a major portion of the length of the head and the latter forming overhanging lips to the inner ends of said slots, a cap removably fitted and telescoped over the end of the head through which the slots open and having a rim constituting lips overhanging the slots at this end of said head, means at the other end of the head for its detachable mounting on the other end of the rod, felt cleaning strips movably fitted in said slots and having end stops coacting with the lips to limit the outward movement of the strips, and springs within the slots and working against opposed strips at their ends to yieldably protrude said strips from the slots.

1,872,199. PIPE CUTTING DEVICE. ARTHUR H. WAY, Canton, S. Dak. Filed Dec. 22, 1930. Serial No. 504,071. 4 Claims. (Cl. 81—192.)



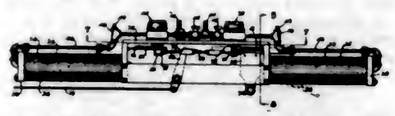
1. In a device of the class described, a base member having a circular form, a member secured to each end of said base member also of circular form, a plurality of equally spaced apart cutting disks rotatably mounted on said members of circular form, a bar member engaging the free end of each of said circular members hingedly secured to said base member, a rod passing through one of said bar members and threaded into the other said bar member, an operating rod pivoted to said base member at its center, a bearing member pivotally secured to the other end of said operating rod, a second operating rod rotatably mounted in said bearing member near its top, a handle member secured on the upper end of said second mentioned operating rod to facilitate the manual operation of the same, and a universal joint for operatively connecting said rod passing through said bars and said second mentioned operating rod.

1,872,200. BUILDING CONSTRUCTION. DONALD D. WHITACRE, Waynesburg, Ohio. Filed June 22, 1929. Serial No. 372,844. 14 Claims. (Cl. 72—41.)



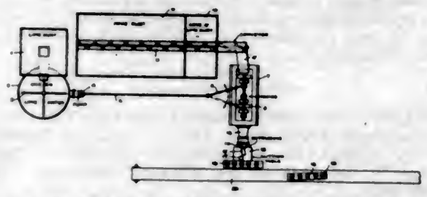
1. A back-up tile block for brick and tile walls having inner and outer shells and laterally extending webs joining said shells and having extensions projecting beyond the shell of the block to space it from the brick facing part of the wall.

1,872,201. DOOR CONTROL MECHANISM. SIMON P. WIEGNER, Los Angeles, Calif. Filed Dec. 1, 1926, Serial No. 151,891. Renewed Jan. 22, 1932. 4 Claims. (Cl. 121—44.)



1. In a device of the class described, a support, a pair of cylinders secured to said support, piston means in said cylinders, a common piston rod for both of said pistons, a separate valve for each of said cylinders for controlling the intake and exhaust to the respective cylinders, said valves being mounted on said support, said valves each having a common intake pipe and a common exhaust pipe, said valves being arranged to assume full inlet, full exhaust, and partial exhaust positions, shutoff valves on said intake pipe independently controlling the pressure to each of said cylinder valves, means for actuating the said cylinder valves, said means including a pair of arms secured to the valve stem of each valve, a bar, one of said arms of each valve stem being slidably connected to said bar, an arm pivoted to said bar, an arm on said support, said last mentioned arm being movable to control the said valves, means on said piston rod for intermittently engaging each of said other arms on said valve stem for causing said cylinder pistons to move from full exhaust position to restricted exhaust position.

1,872,202. METHOD OF MAKING CALCIUM CARBIDE. AUDLEY O. WILLIAMS, Niagara Falls, Ontario, Canada, assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Sept. 1, 1926. Serial No. 133,022. 2 Claims. (Cl. 23—208.)



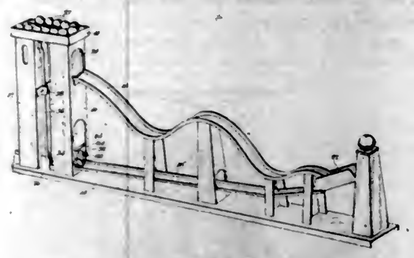
1. A method of making calcium carbide which comprises providing a mixture of coke, lime and water, forming briquets therefrom, drying the briquets and smelting the same together with additions of lime and coke.

1,872,203. TOP. JAMES H. WILY, Bethlehem, Pa. Filed May 14, 1930. Serial No. 452,152. 2 Claims (Cl. 46—32.)



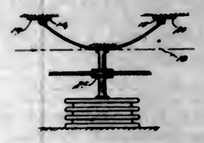
1. A top including, in combination, a handle, an elongated spindle secured thereto and having a spinning tip or head, a heavy body rotatably mounted with respect to said spindle and said handle and having an elongated extension provided with a bore to receive said spindle whereby the body has an extended bearing on said spindle, said body having its outer edge thickned so as to increase the actuating force when the body rotates, said body being provided with a depression on its underside, a string or cord coiled about the extension of said body within said depression, and a removable disk frictionally engaging said extension and substantially closing said depression so as to hold said cord or string in position.

1,872,204. ROLLER COASTER TOY. JAMES H. WILY, Bethlehem, Pa. Filed Jan. 21, 1931. Serial No. 510,163. 22 Claims. (Cl. 104—68.)



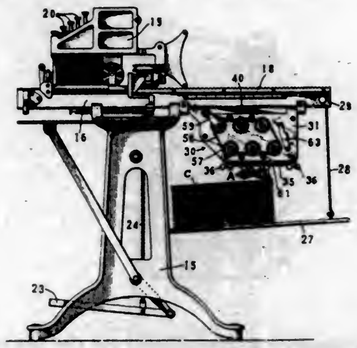
1. A roller coaster toy of the character described, including a car, a car elevator, and a ball weight elevator operatively connected together, a ball platform for supporting a plurality of ball weights in a raised position having an inclined track for feeding said balls to discharge position, lever means actuated by said car for permitting the discharge of said balls one by one into the ball elevator to cause the descent thereof and the corresponding raising of the car elevator.

1,872,205. QUICK ACTING MECHANISM. STOVER C. WINGER, Los Angeles, Calif. Filed Mar. 10, 1931. Serial No. 521,423. 6 Claims. (Cl. 14—14.)



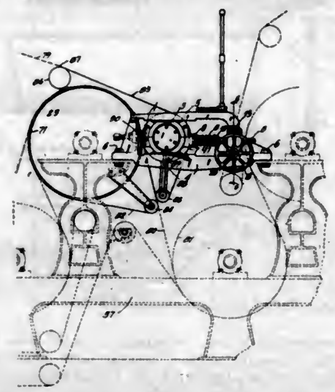
1. In a device of the character described, a resilient member having a stable set along each of a number of intersecting axes, and means operating on said member to reduce the set along one axis and thereby increase it along another axis to make the member assume another of its stable sets.

1,872,206. CARBON MANIFOLDING APPARATUS. WILLIAM J. WISWALL, Portland, Oreg., assignor to American Sales Book Company, Limited, a Corporation of Ontario, Canada. Filed May 11, 1928. Serial No. 276,965. 16 Claims. (Cl. 197—134.)



1. The combination with a manifolding machine having a platen for supporting traveler record strips, of a transfer sheet support upon said machine, a plurality of transfer sheet carriers carried by said support and each positioned so as to adjustably support a transfer sheet for longitudinal adjusting movement in the path of movement of said record strips, said transfer sheet carriers being supported for adjustment longitudinally thereof, means for effecting group adjusting actuation of said carriers when in one longitudinal adjustment thereof, and means for effecting individual adjusting actuation of said carriers when occupying another longitudinal adjustment.

1,872,207. IMPRINT MACHINE. GEORGE STANFORD WITHAM, Jr., Hudson Falls, N. Y. Filed Mar. 29, 1928. Serial No. 265,693. 13 Claims. (Cl. 92—48.)

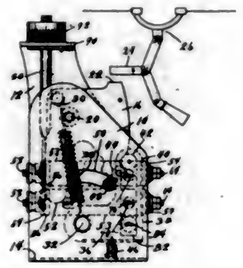


1. In a paper making machine having a plurality of heated dryers associated therewith, a cold dryer intermediate the first and last heated dryers and forming a platen for an imprint device.

1,872,208. THERMORESPONSIVE APPARATUS. JOSEPH D. WOOD, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed July 1, 1927. Serial No. 202,949. 18 Claims. (Cl. 200—122.)

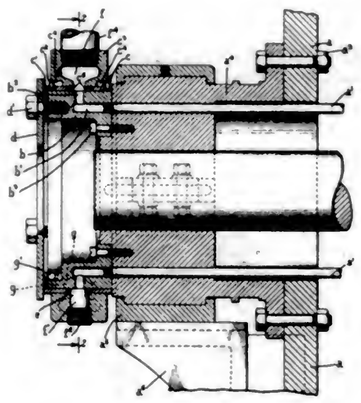
1. In a thermo-responsive apparatus, the combination of a movable holding member, a plurality of thermo-re-

sponsive devices having means whereby they can be initially set to operate in accordance with any one of a plurality of predetermined conditions, means connecting said devices with said holding member by which all



thermo-responsive devices conjointly and also each thermo-responsive device independently of the others can actuate said holding member, and means for simultaneously varying the settings of said thermo-responsive devices.

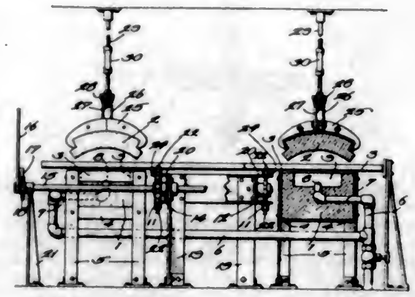
1,872,209. VALVE FOR FILTERING DEVICES. ARTHUR WRIGHT, Upper Montclair, and FRANK W. YOUNG, Verona, N. J. Filed Dec. 24, 1927. Serial No. 242,499. 25 Claims. (Cl. 210—202.)



21. A collecting valve comprising a valve core formed with ports, collecting means carried with the core and non-metallic means supporting the collecting means from the core.

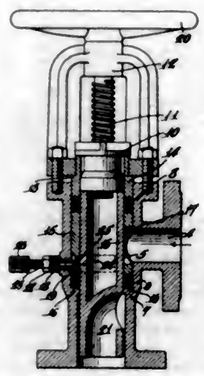
1,872,210. OBJECT HEATING FURNACE. WILLIAM E. WUNDERLICH, Muncie, Ind., assignor to The Moore Company, Muncie, Ind., a Corporation of Indiana. Filed May 28, 1930. Serial No. 456,565. 1 Claim. (Cl. 263—8.)

In a structure of the class described, a plurality of heating furnaces arranged abreast, each of said furnaces including a body portion and a separated cap portion, a conveyor arranged to travel between the furnaces longitudinally thereof and to convey an object therealong, said object having portions passing simultaneously through each of the furnaces, said furnaces having at their entrance end a massive heat retaining portion through which the object portions first pass and at their exit end a fire



box portion through which the object portions thereafter pass, whereby the portions of the object passing through the furnaces are gradually heated.

1,872,211. GREASER VALVE FOR ALEMITE FITTING CONNECTIONS. DAVID ROBERT YARNALL, Philadelphia, Pa., assignor to Yarnall-Waring Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 5, 1931. Serial No. 542,254. 7 Claims. (Cl. 251—77.)

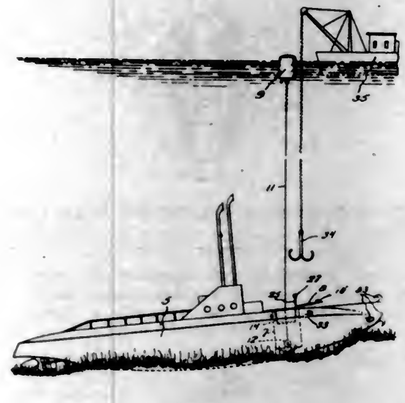


1. A seatless valve including a plunger having a through L passage from side to end of the plunger, longitudinally spaced annular packing rings about the plunger and an intermediate inner gland laterally ported in registry with a lateral port of the body and grooved about its interior and formed with a lubricant passage from the outside of valve to said groove.

1,872,212. DEVICE FOR LOCATING SUNKEN VESSELS. GHOUGAS ZAHRAJIAN, Syracuse, N. Y. Refile of abandoned application Serial No. 416,041, filed Dec. 23, 1929. This application filed Apr. 16, 1932. Serial No. 605,723. 5 Claims. (Cl. 114—165.)

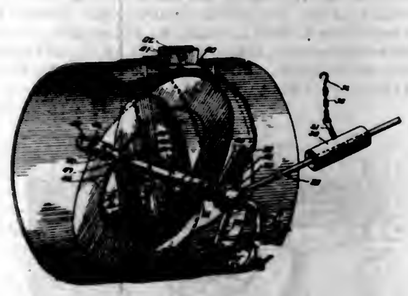
1. In a device of the class described, a compartment having a drum and a float therein, a cable connecting the float and drum and wound on the latter, a spring hammer

mounted on and arranged and tensioned to strike the bottom of said compartment, and means operatively con-



necting the drum and hammer for intermittently raising and releasing the latter as the drum is rotated by paying out the cable therefrom.

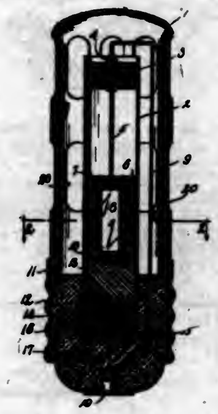
1,872,213. DAMPER CONTROL MECHANISM. CHARLES H. ANDERSON, Chicago, Ill. Filed June 18, 1931. Serial No. 545,279. 11 Claims. (Cl. 126—285.)



10. A damper mechanism comprising, in combination, a rotatably mounted rod, a damper comprising an inner disk member and an outer ring member encircling said disk member, one of said members being detachably secured to said rod and the other rotatably mounted on said rod, means for adjusting said ring member angularly with respect to said disk member and for securing the members in such adjusted relation, a rod secured at one end to and extending radially from said first mentioned rod, a weighted member slidably mounted on said second rod, and means for connecting said weighted member to an automatic pressure control device on a furnace.

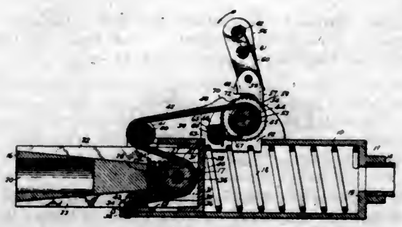
1,872,214. RECTIFYING APPARATUS. HENRI G. ANDRÉ, Paris, France. Filed Oct. 1, 1926, Serial No. 138,924. Renewed May 11, 1931. 6 Claims. (Cl. 175—318.)

1. A unidirectional discharge device having a film-forming electrode and an additional non-film-forming electrode with a mass of finely divided conducting material substantially bridging the space therebetween characterized in that the particle mass comprises a disintegration product of the other electrode and is formed in situ.



4. In an electrical apparatus, the combination with a non-film-forming anode, of a film forming cathode associated with the said anode and immersed in an electrolyte whereby gas is evolved, and means for absorbing the electrolyte including a fibrous material, the strands of which permit gas flow, the said anode being reducible to particle form by the action of the current to be rectified.

1,872,215. RIVETING HOLDER-ON. ANTON MARTIN ANTICH, Asbury Park, N. J., assignor of forty per cent to Thomas S. Kroza, Hartford, Conn. Filed May 28, 1930. Serial No. 455,013. 9 Claims. (Cl. 78—53.5.)

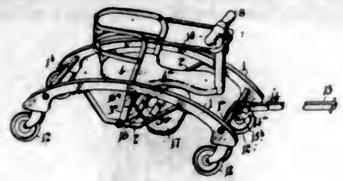


2. In mechanism of the character described, a casing, a rivet holding member slidable longitudinally in the casing during operation of the mechanism, a block slidable within said member, yieldable means interposed between the block and the member, and means for adjusting the position of the block relatively to the member and for maintaining said block in its adjusted position including a pulley carried by the block and means for bodily moving the pulley.

1,872,216. CHILD'S VEHICLE. WILLIAM HENRY APPLEBY, London, Ontario, Canada. Filed Apr. 24, 1930. Serial No. 447,046. 9 Claims. (Cl. 280—30.)

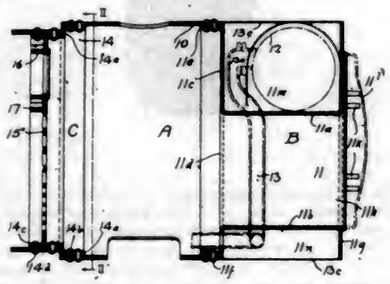
1. A vehicle comprising rockers; a bolster extending between the rockers; a seat adapted to be mounted on

the bolster; and wheels carried by the rocker ends, said vehicle being adapted to be carried by the wheels or to be



inverted to rock on the rockers, the seat being adapted to be mounted on the bolster in either position of the rockers.

1,872,217. SMOKE BOX CONSTRUCTION FOR LOCOMOTIVES. CHARLES H. APPS, East Orange, N. J. Filed July 10, 1929. Serial No. 377,155. 13 Claims. (Cl. 122—423.)



3. In a smoke box for locomotives, the combination of a steam and exhaust pipe section; and a front section formed as an integral casting and comprising a longitudinal substantially cylindrical barrel, and spaced front and rear walls projecting laterally from the barrel providing therewith a chamber annular in transverse cross section of the smoke box adapted to receive a feed water heater of the inverted U type, and the pipes leading to and from the heater.

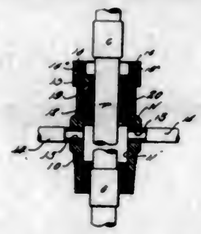
1,872,218. SIGNAL HOLDING DEVICE. GEORGE E. ASPLUND, Beverly Hills, Calif. Filed June 30, 1930. Serial No. 464,893. 2 Claims. (Cl. 88—1.)



1. A device of the kind described comprising a band of flexible material adapted to extend around the human hand distal to the thumb, and two light reflecting signal elements secured to the outer side of said band, said signal elements being located substantially opposite to each other when the band is in place upon the hand, said band having a thumb loop extension which is located closer to the front or palmar signal element than it is to the other signal element, said thumb loop extension having an elliptical opening for the thumb the axis of said opening being inclined away from the portion of the device which overlies the palm of the hand.

1,872,219. PACKER FOR CASING HEADS. LAWRENCE F. BAASH and ERWIN BURNS, Los Angeles, and GEORGE B. GARRARD, Long Beach, Calif. Filed June 23, 1930. Serial No. 463,220. 11 Claims. (Cl. 286—16.)

3. A packing device of the character described including, a ring of expansible packing, collars at the ends of the ring, a tongue on one collar extending into a groove in the ring, and means for expanding the ring including a wedge



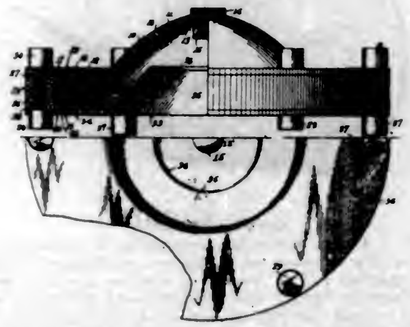
projection on the other ring extending into a groove in the ring.

1,872,220. WELTING AND METHOD OF ITS MANUFACTURE. PERLEY E. BARBOUR, Quincy, Mass. Filed Oct. 1, 1930. Serial No. 485,667. 8 Claims. (Cl. 36—78.)



1. Grain leather welting having a stitch-receiving groove in its flesh side and said side except within the groove being surface coated with a water-resistant composition.

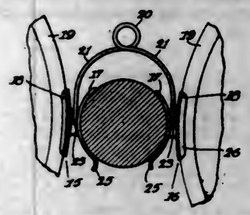
1,872,221. METHOD AND APPARATUS FOR FORMING MOLDS AND ARTICLES PRODUCED THEREBY. BLASIUS BART, East Orange, N. J., assignor to The Frink Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Oct. 28, 1926. Serial No. 144,904. 23 Claims. (Cl. 204—1.)



3. In the art of forming articles electrolytically, the method which consists in temporarily coating a frame of insulating material with a conducting material, locating said coated frame on a mold, subjecting the same as cathode to the action of an electrolytic bath while stopping off the deposition from a portion of the frame thereby to cause the deposited layer of metal to be soldered electrolytically to the frame and removing from the frame any portions of the coating material.

5. A mold for use in forming flanged parabolic reflectors, including a central parabolic portion outlined by an outstanding flange formed of electrolytically deposited metal, and outlined by a frame secured to one side to the outstanding flange and having its exposed portions defined by an insulating surface.

1,872,222. CAR AXLE PROTECTOR. PAUL P. BARTHELEMY, St. Paul, Minn., assignor to Universal Draft Gear Attachment Company, a Corporation of Illinois. Filed Oct. 16, 1931. Serial No. 569,278. 6 Claims. (Cl. 105—367.)



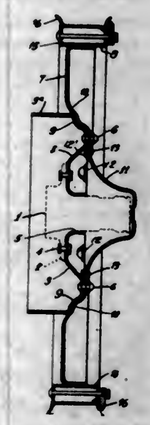
1. In a device of the class described, a pair of shoes having their interior surfaces rounded to receive a car axle and their exterior surfaces curved and channeled to receive adjacent wheel flanges, and a helical spring having its two extremities joined to the shoes and tending to force them together.

1,872,223. MERCURY SWITCH. PAUL S. BEAR, Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed June 18, 1930. Serial No. 461,922. 4 Claims. (Cl. 200—152.)



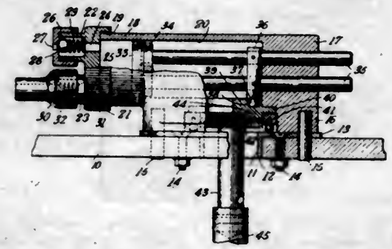
1. A mercury switch comprising an outer envelope, an inner protective sleeve, said envelope and said sleeve being constituted of glass having substantially the same coefficient of expansion, electrodes extending into said sleeve and into the space the outer envelope exterior of the sleeve, a pinch seal uniting one end of the sleeve and one end of the envelope and forming a seal about one at least, of said electrodes and a body of mercury cooperable with the electrodes and uniting and dividing on a surface of said sleeve.

1,872,224. DISK WHEEL. DAVID H. BELLAMORE, New York, N. Y., assignor, by mesne assignments, to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 19, 1926. Serial No. 142,611. 7 Claims. (Cl. 301—6.)



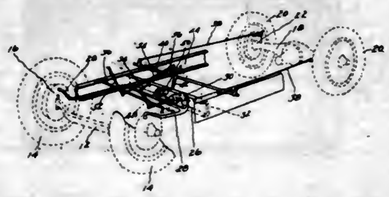
1. A disk wheel embodying a hub, a one piece pressed steel brake drum seated upon and carried by the hub, an annular disk, a portion of the inner margin of which is in face abutting relation to the brake drum, a hub and drum concealing housing having its outer marginal portion also in face abutting relation to the drum, said housing serving, together with said disk, to reinforce said pressed steel drum, and means for demountably securing both the disk and the housing to the drum independently of one another whereby either may be demounted from the drum without demounting the other.

1,872,225. AIR PUMP. OSCAR BELLER, New York, N. Y., assignor of one-half to Sol Deich, New York, N. Y. Filed Mar. 26, 1930. Serial No. 439,039. 7 Claims. (Cl. 230—217.)



1. An air pump comprising a chambered body having a plunger reciprocative therein, and a base, valve controlled inlet and outlet ports for said chamber, a pair of spaced rods fixed in said plunger and guided at their outer ends in said casing, a yoke on said rods having a pintle, a disc rotatable in the base of said body, a cam groove in said disc into which said pintle extends, and means for driving said disc.

1,872,226. BRAKING SYSTEM. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 30, 1928. Serial No. 250,397. 1 Claim. (Cl. 188—152.)

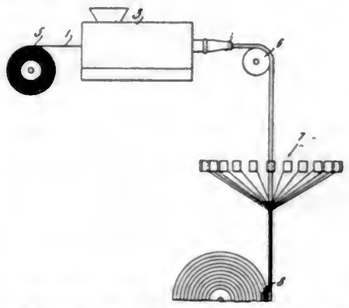


A vehicle having, in combination, a frame, front wheels having brakes, rear wheels having brakes, foot-operated means for generating hydraulic pressure, hydraulic connections from said means arranged to operate the front brakes, a rockshaft supported by the frame, mechanical operating connections between said rockshaft and rear brakes, a hydraulic operator connected with said means, an arm on said rockshaft, a member pivoted on said arm intermediate the ends of the latter, means pivotally connecting said member and operator, and auxiliary operating means for said rockshaft.

1,872,227. MANUFACTURE OF BENZYL CHLORIDE. NICHOLAS BENNETT, Appleton, HERBERT DODD, Glazebrook, Manchester, WILLIAM C. SPRENT, Cressington, and FRED HOLT, Weybridge, England, assignors to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed May 31, 1930, Serial No. 458,913, and in Great Britain June 1, 1929. 4 Claims. (Cl. 260—160.)

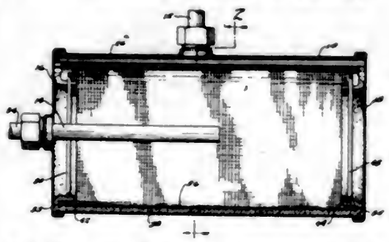
2. The manufacture of benzyl chloride from liquors containing benzyl alcohol from the benzylation of cellulose comprising treating the liquors with an anhydrous inorganic alkaline substance, separating the liquors from the alkaline substance, and thereafter treating the liquors with hydrochloric acid.

1,872,228. METHOD FOR MAKING INSULATED WIRE AND PRODUCT OBTAINED THEREBY. THOMAS V. BINMORE, Long Island City, N. Y., and HAROLD DE BLOIS RICE, Bristol, R. I., assignors to National India Rubber Company, Bristol, R. I., a Corporation of Rhode Island. Filed Oct. 19, 1926. Serial No. 142,777. 4 Claims. (Cl. 173—264.)



1. An improved method for making insulated wire which comprises covering a metallic conductor with a single layer of homogeneous warm plastic insulating composition containing prevulcanized rubber, cooling and immediately applying protective material over the rubber insulation and finishing the insulated wire without vulcanization.

1,872,229. OIL FILTER. LLOYD BLACKMORE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 23, 1928. Serial No. 272,260. 28 Claims. (Cl. 210—183.)



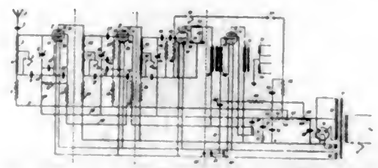
1. In a filter, the container inlet and outlet means in said container, a fabric mounted in said container, means for causing the liquid to be filtered to pass across and along substantially the entire length of the filter, substantially all of said liquid passing over the length of the fabric under pressure in its travel through the filter.

1,872,230. WATER SLED. THOMAS EDWARD BLAKE, Santa Monica, Calif. Filed Apr. 18, 1931. Serial No. 531,193. 1 Claim. (Cl. 9—21.)



A water sled comprising a tapering hull including a bottom and narrow sides, a reinforcing structure located in the hull and engaging the bottom and sides and including longitudinally and transversely arranged strips, a cover secured to the upper edges of the sides for closing the hull and on which a person may lie and be supported in close proximity to the surface of the water to permit propulsion of the hull through the water by the legs and arms of the person, and means in the cover for venting the hull.

1,872,231. WIRELESS RECEIVING SET. CORNELIS BOL, KLAAS POSTHUMUS, JACOB MARINUS UNK, and CORNELIS HENDRIK MOREL, Eindhoven, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 28, 1929, Serial No. 395,824, and in the Netherlands Sept. 3, 1928. 1 Claim. (Cl. 179—171.)



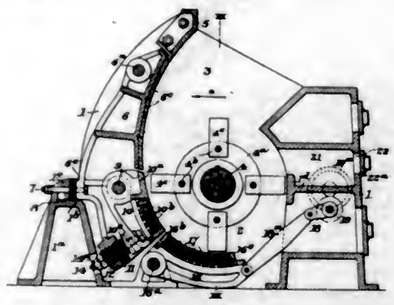
A radio receiver including a radio frequency amplifier provided with a plurality of screen grid tubes arranged in cascade, a power supply source, a path, including a resistor of predetermined magnitude, connected between said source and the screen electrode of one of said tubes for maintaining said electrode at a predetermined positive potential, and a path, including a second resistor of predetermined value, connected between the screen electrode of a tube preceding said last named tube and the low potential terminal of said first resistor for maintaining the screen electrode of said first tube constantly higher in potential than the screen electrode of the preceding tube by a value equal to the potential drop across said second resistor.

1,872,232. CLIP. WILLIAM BORCHERT, Rockford, Ill., assignor to The Tagit Company, Rockford, Ill., a Corporation of Illinois. Filed May 29, 1930. Serial No. 457,009. 4 Claims. (Cl. 24—255.)



1. A clip formed of a flat metal body strip and a non-metallic covering strip of greater width than the body strip, the covering strip having its side portions turned inwardly over the side portions of the body strip, and the said side portions of the body strip thus covered being bent inwardly upon the main body portion of the body strip, and the covered body strip being bent medially between its ends to provide diverging fingers.

1,872,233. HAMMER CRUSHER. GEORGE W. BORTON, New Lisbon, N. J., assignor to Pennsylvania Crusher Company, Philadelphia, Pa., a Corporation of New York. Filed Mar. 21, 1930. Serial No. 437,921. 15 Claims. (Cl. 83—11.)

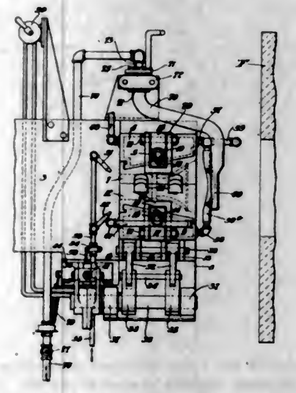


1. In a hammer crusher, the combination of a frame providing a crushing chamber, a rotor structure carrying hammers mounted therein, a breaker plate forming one wall of the crushing chamber and pivotally supported in the upper portion of the frame well above the hammer circle, means for adjusting said breaker plate toward and from the same, and a resilient backing for said breaker plate comprising a plurality of rubber plates detachably supported behind said breaker plate.

1,872,234. COLORED COMPOSITE INSULATING MATERIAL. WILLIS A. BOUGHTON, Cambridge, Mass., assignor to New England Mica Co., Waltham, Mass., a Corporation of Massachusetts. Filed Oct. 9, 1928. Serial No. 311,419. 2 Claims. (Cl. 154—2.6.)

1. The method of producing insulating bodies, characterized by association of mica fragments with a binding material comprising a glass-like salt of an alkaline metal and about six percent of a metal oxide color producing agent of the class described depending on the depth of color desired, which at ordinary atmospheric pressure, requires a temperature substantially as high as the disintegration point of mica to render the salt fluid, raising the associated mica fragments and binding material to a temperature below that at which mica disintegrates and applying pressure adequate to make the binding material flow at that temperature.

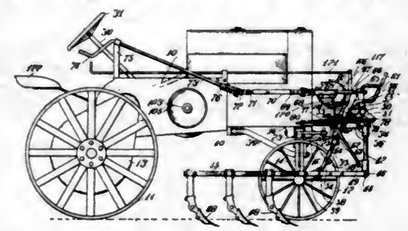
1,872,235. APPARATUS FOR MAKING BUTT-WELD PIPE. PETER BOYD, Beaver, Pa., assignor to National Tube Company, a Corporation of New Jersey. Filed Aug. 23, 1928. Serial No. 301,676. 9 Claims. (Cl. 205—28.)



6. In a bending and welding apparatus for forming butt-weld pipe, a two-part die holder, at least one of said die-holder parts being movable toward and away from the other part, die elements carried by said holder parts, means for moving said movable part of said die-holder, means for continuously circulating cooling liquid in the die holder and spraying it thereagainst, other means for spraying cooling liquid on the working faces of the die elements and means for automatically controlling the flow of said cooling liquid to said die elements so that said liquid will be sprayed only when said die holder is in open position.

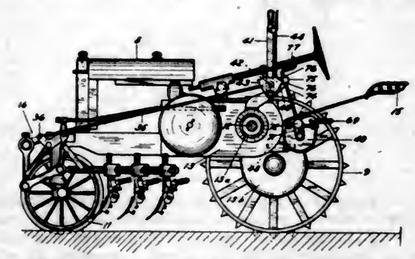
1,872,236. POWER LIFT CULTIVATOR. THEOPHILUS BROWN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed July 31, 1926. Serial No. 126,122. 24 Claims. (Cl. 97—47.)

1. In an agricultural implement, the combination with a tractor including a motor, of an attachment comprising a frame connected with the tractor to rock with respect thereto in a transverse vertical plane, soil tilling rigs connected with said frame to swing toward or from the ground, and lifting devices mounted on said frame to swing therewith and operable to lift the rigs in unison, said lifting devices including connections for actuating the same by power from said motor through a motor



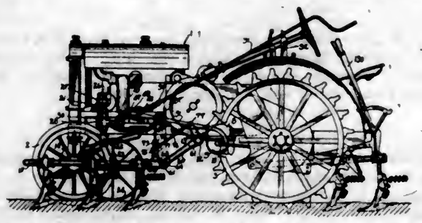
driven power lifter having a substantially definite cycle of operation, said connections being adjustable manually to vary the upper and lower limits of the lifting movement of the rigs.

1,872,237. TRACTOR CULTIVATOR. THEOPHILUS BROWN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Aug. 29, 1927. Serial No. 216,049. 39 Claims. (Cl. 97—50.)



1. In an agricultural implement, the combination with a tractor including power take-off means, of a plurality of cultivator rigs connected with the tractor to swing vertically, half revolution clutch mechanism mounted on the tractor and adapted to be actuated by said power take-off means, and lifting devices for said rigs comprising a plurality of separately operable levers, means connecting said levers respectively with said rigs and operable by the actuation of said levers to lift such rigs separately, connecting means for connecting said levers together to operate in unison and including a rock shaft and latching sectors rigidly secured thereto, and a connection between said rock shaft and said clutch mechanism for actuating the lifting devices by the operation of said clutch mechanism.

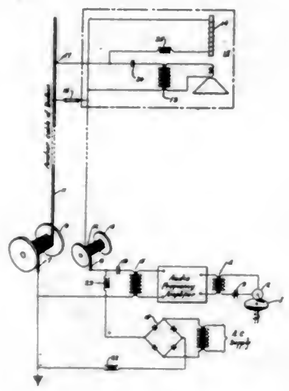
1,872,238. AGRICULTURAL IMPLEMENT. THEOPHILUS BROWN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed May 7, 1930. Serial No. 450,340. 55 Claims. (Cl. 97—47.)



1. An agricultural implement comprising the combination with a tractor including front and rear wheels, of a transverse draft member, connected to the tractor, soil

engaging devices connected to the draft member, and supporting means for said devices including a transverse bar secured to the tractor forward of said member and connected to the soil engaging devices.

1,872,239. SOUND AMPLIFYING SYSTEM. WILLIAM E. BRINDLEY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 20, 1930. Serial No. 437,378. 2 Claims. (Cl. 179—1.)



1. In a sound amplifying system, means for producing a variable current, means for producing a direct current, an energy translating device comprising means responsive to said variable current and means responsive to said direct current, a support for said energy translating device, and means for conveying said currents to said energy translating device, said conveying means comprising a common transmission channel, at least one conductor of said transmission channel forming an anchoring cable in said system for said support.

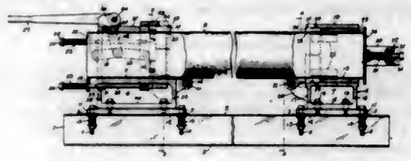
1,872,240. SPACER STRIP FOR ELECTRIC WELDING. HOWARD J. BURNISH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed July 31, 1929. Serial No. 382,418. 6 Claims. (Cl. 219—8.)



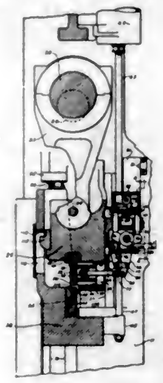
4. A spacer strip for electric arc welding comprising two clinching members having their upper ends bent to project laterally therefrom and means connecting the central portions of said clinching members.

1,872,241. APPARATUS FOR ARC WELDING. HOWARD J. BURNISH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,736. 10 Claims. (Cl. 219—6.)

1. An apparatus for the progressive arc welding of tubular articles of definite lengths comprising ring members adapted to abut the opposite ends of the tubular article, means for clamping said ring members in electrical contact with the ends of said tubular article, and means responsive to longitudinal movement of the tubular article for operating one of said clamping means.



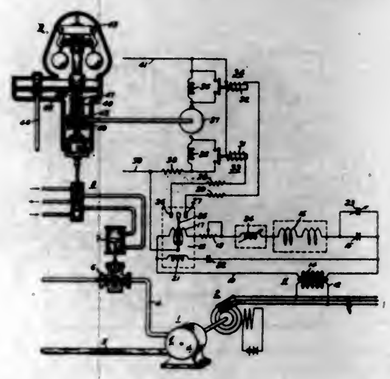
1,872,242. PRESS. ARTHUR A. BYERLEIN, Detroit, Mich., assignor to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed May 1, 1930. Serial No. 449,056. 22 Claims. (Cl. 113—38.)



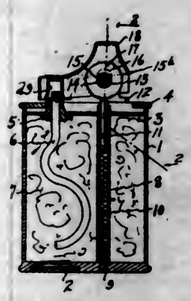
1. A device of the class described comprising a frame, a driving member slidably mounted therein, means for reciprocating said driving member, a driven member reciprocally positioned adjacent said driving member, means movably mounted on one of said members and adapted to engage the other member for moving said driven member in one direction upon corresponding movement of the driving member, means operated by movement of the driving member for actuating said movable means, and means for moving the driven member in the opposite direction.

1,872,243. ELECTRICAL INDICATING, MEASURING, RELAY AND LIKE ARRANGEMENTS RESPONSIVE TO FREQUENCY. BRIAN ANDREW GRAHAM CHURCHER, Bowden, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 13, 1929, Serial No. 406,869, and in Great Britain Nov. 15, 1928. 3 Claims. (Cl. 290—40.)

1. In a frequency control system, a prime mover and an alternating current generator driven thereby, a governor for controlling the speed of the prime mover, and means for varying the setting of the governor comprising a contact making relay having two windings arranged to actuate said relay in the one or the other direction in accordance with the variation from quadrature of the currents flowing therein, and means for varying the phase relation between the currents in said windings in accordance with the variation in the frequency of said generator from a predetermined value.



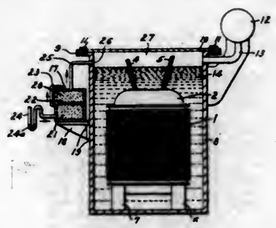
1,872,244. PYROPHORIC POCKET LIGHTER. EDWARD F. CLARK, Rangeley, Me., and JAMES F. ROGERS, North Attleboro, Mass., assignors, by mesne assignments, to Art Metal Works, Inc., Newark, N. J., a Corporation of New Jersey. Filed Jan. 3, 1930. Serial No. 418,186. 12 Claims. (Cl. 67—7.1.)



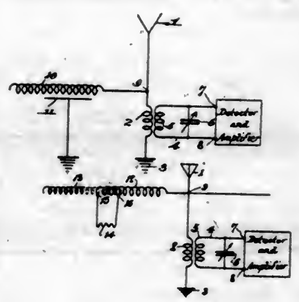
11. In a cigar lighter of the type described, a fuel container, a spark producing mechanism mounted atop said container, an inflammable wick, a snuffer cap, a slotted translatable and rotatable snuffer arm for carrying said cap, means normally tending to keep said snuffer arm disengaged from the spark producing mechanism, and means for effecting rotational interengagement between said snuffer arm and said spark producing mechanism after said snuffer arm has been translated and depressed for subsequent rotation.

1,872,245. EXPANSION SYSTEM FOR A GASEOUS MEDIUM. GEORGE D. CLARK, Sharpsville, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 3, 1928. Serial No. 258,900. 5 Claims. (Cl. 220—85.)

1. A transformer casing including a chamber for containing a transformer and insulating liquid therefor and a gas space above the liquid, a totally enclosed expansion compartment providing a space of constant gaseous volume connecting with the space above the oil and located remotely therefrom, thereby permitting the tank to be constructed with a minimum height of the tank above the level of the liquid.



1,872,246. RADIO SIGNALING. LOUIS COHEN, Washington, D. C. Filed July 23, 1928. Serial No. 294,742. 7 Claims. (Cl. 250—20.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

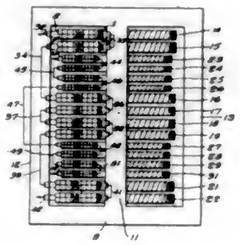


1. In a system for the reception of radio signals comprising an antenna, a coupling coil and ground connection constituting the antenna circuit, a secondary tuned circuit coupled to the said coupling coil, and suitable means for amplification and detection coupled to the said tuned circuit, an adjustable wave conductor connected at the junction point where the antenna is connected to the said coupling coil, said wave conductor being adjustable to absorb the energy of an interfering signal of a particular frequency, the said wave conductor consisting of a solenoidal coil placed in close proximity to a grounded metal plate, the adjustment being effected by varying the distance separation of the said solenoidal coil from the said grounded metal plate.

1,872,247. WINDING FOR ELECTRICAL APPARATUS. HORACE L. COLE, WALTER M. DANN and ROY L. BROWN, Sharon, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 20, 1929. Serial No. 415,485. 4 Claims. (Cl. 175—356.)

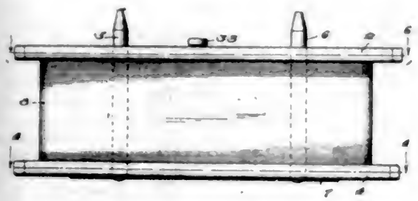
1. An electrical winding comprising a plurality of coils each formed from a subdivided conductor having pairs of

parallel-connected strands insulated from each other the strands of each pair being arranged along a path substantially at right angles to the path of the leakage magnetic flux caused by current flowing in said winding, said



strands being connected in parallel and being transposed with respect to their relative positions in said magnetic path at a point approximately midway between their points of common connection.

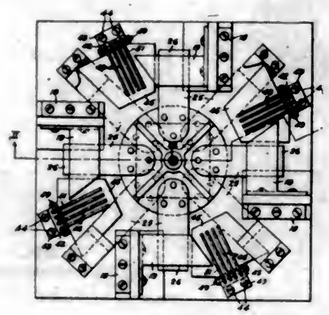
1,872,248. LOOSE-LEAF BINDER. ROGER CONNOR, NELSON S. WELK, and DAVID R. ZENNER, Athens, Ohio, assignors to The McBee Binder Company, Athens, Ohio. Filed Jan. 24, 1931. Serial No. 511,070. 4 Claims. (Cl. 129—12.)



1. In a binder, the combination of cover-boards each provided with a hollow binder member having openings from face to face for the passage therethrough of binding posts; a plurality of binding posts; pivoted locking mechanisms mounted in one of said hollow binder members for gripping or binding said posts at any desired point in the length of said posts and sliding locking mechanism mounted in the other of said hollow binder members which grips said posts only at one point of their length.

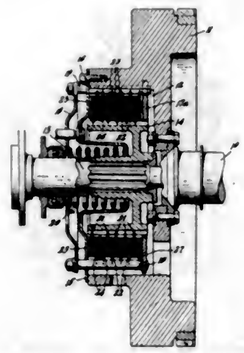
3. In a binder, in combination with a pair of binding posts; a hollow binder member having a plurality of holes therethrough adapted to receive and movable lengthwise of said posts; a locking mechanism carried by said binder member comprising a pair of levers each pivotally secured to the bottom wall and lying between the parallel top and bottom walls of said hollow binder member, each of said levers having a hole therethrough normally alined with the corresponding holes in the hollow binder member adapted to receive the corresponding binding posts and a common means for operating each such lever upon its pivotal connection to cause the hole therethrough to be forced out of alinement with the holes in the hollow binder member and thus bind the binding post between such lever and the edges of the holes in said top and bottom walls of said hollow binder member and a spring for restoring each such lever to its inoperative position.

1,872,249. SWITCH MECHANISM. ALFRED CORBETT, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 11, 1929. Serial No. 391,733. 5 Claims. (Cl. 200—15.)



1. A mounting for arc-quenching barrier plates comprising an insulating base having a central partition disposed substantially normal to the base, the base and the partition being provided with spaced slots on opposite sides of the partition for receiving two adjacent edges of the barrier plates.

1,872,250. CLUTCH. WILLIAM R. COUGHTRY, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 7, 1929. Serial No. 384,010. 6 Claims. (Cl. 192—69.)

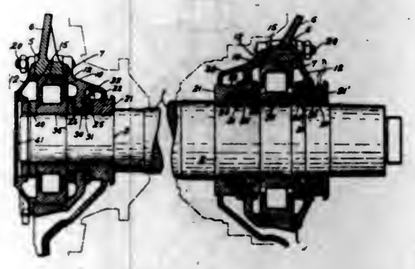


1. In a multiple disc clutch, a plurality of annular discs, a pair of annular discs interposed between a pair of the first-mentioned discs, projections formed on the juxtaposed faces of the second-mentioned discs, and a resilient ring located between the second-mentioned discs, and in engagement with the projections thereon and adapted to be distorted when the clutch is engaged.

1,872,251. BEARING ASSEMBLY. STUART H. COWIN, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 20, 1930. Serial No. 489,803. 5 Claims. (Cl. 308—187.)

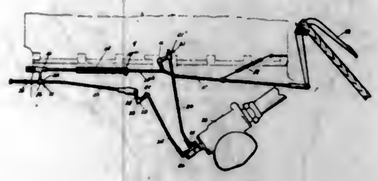
1. A lubricant seal for a railway motor bearing comprising a shaft, a sealing ring secured to the shaft, said

ring having an L-shape channel in the circumference thereof and oil throwers outside said groove, a bearing housing, a guard secured to the bearing housing, an L-shape sealing flange on said guard and received in the



channel of said ring, an over-hanging lubricant-collecting device on said guard, said lubricant-collecting device cooperating with said oil throwers to collect any lubricant that may escape past said sealing flange.

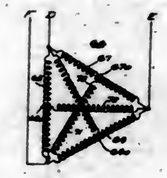
1,872,252. SPARK ADVANCE CONTROL. REX C. DARNELL, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed May 2, 1928. Serial No. 274,433. 6 Claims. (Cl. 123—117.)



1. In an internal combustion engine having a throttle valve and a spark timer, means for operating said throttle valve and said timer, yieldable means associated with said timer operating mechanism in such a manner as to tend to move the same constantly to advanced position, and two independent stops associated with said timer operating mechanism for determining the maximum advance position to which said timer may move under the influence of said yieldable means, one of said stops being adjustably supported, and the other being connected with said throttle valve operating mechanism to move therewith.

1,872,253. RECTIFIER SYSTEM. ROBERT L. DAVIS, Grand Rapids, Mich., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 13, 1931. Serial No. 522,231. 2 Claims. (Cl. 175—363.)

1. Means for rectifying a basal-phase alternating-current source into direct current of four times the number of symmetrical phases comprising a transformer, and a plurality of rectifier tubes each provided with at least one anode, said transformer comprising primary and secondary windings connected to said source of alternating current, said primary comprising a delta-connected bank of coils and a cross-branched bank of coils, one set of ends of said cross branches being connected substantially at the mid-points of the delta-connected coils, and the other end of said cross branches being connected to the points of said delta-connected coils, four secondary coils connected in star, said coils being arranged to correspond in phase to said primary connected coils, a coil in each of the two phase angles connected in reverse polarity



from the other coil of the particular phase, said rectifier tubes each being provided with a number of anodes corresponding to the number of secondary coils, means for connecting said anodes to their corresponding secondary coils, and means for connecting said rectifier tubes together.

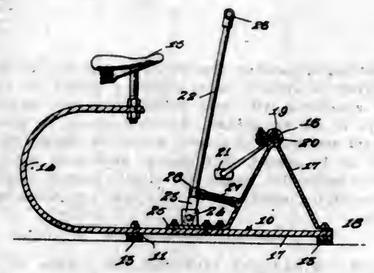
1,872,254. METHOD OF WELDING. ANTHONY G. DE GOLYER, New York, N. Y. Filed Apr. 10, 1931. Serial No. 529,295. 6 Claims. (Cl. 219—10.)

1. The method of welding metal which comprises introducing into the area to be welded metal oxide and an intermetallic compound of boron and supplying heat thereto within the area to be welded.

1,872,255. WELDING. ANTHONY G. DE GOLYER, New York, N. Y. Filed Apr. 10, 1931. Serial No. 529,296. 12 Claims. (Cl. 219—10.)

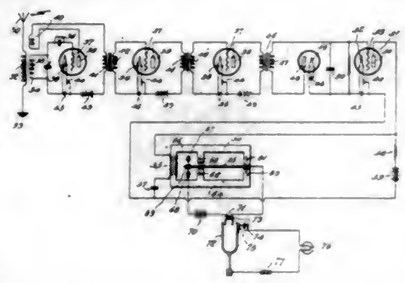
8. The method of welding metal which comprises introducing into the weld area an intermetallic compound of boron which is substantially insoluble in the metal welded, said intermetallic boron compound being a compound of boron and material selected from the following group of elements: calcium, magnesium, aluminum, silicon, lithium, cadmium, barium, manganese, titanium and zirconium.

1,872,256. EXERCISING APPARATUS. FRED DENNEY, Olympia, Wash. Filed Apr. 20, 1931. Serial No. 531,551. 2 Claims. (Cl. 272—73.)



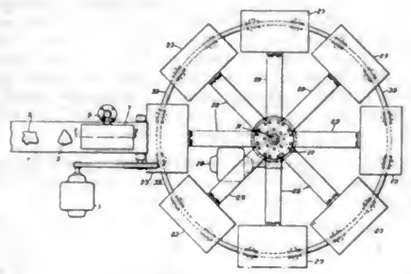
1. An exercising apparatus comprising a resiliently supported base, one end of the base being curved upwardly and rearwardly upon itself, a saddle carried upon the free end of the upwardly and rearwardly curved portion, a foot operated crank shaft mounted upon the base, and a lever swingably mounted upon the base between the seat and crank shaft between the legs of the operator.

1,872,257. RADIO ALARM SYSTEM. JAMES D. DURKEE, Washington, D. C. Filed Dec. 5, 1930. Serial No. 500,391. 7 Claims. (Cl. 250—8.)



1. In a distress signal transmission and receiving system, a receiving circuit including mechanical means adapted to respond only to a low audio frequency signal, an alarm, a local energizing circuit having contacts closed by the operation of said mechanical means for operating said alarm, and means for adjusting the position of said contacts to obtain the desired magnitude of amplitude of said mechanical means before said alarm will be energized.

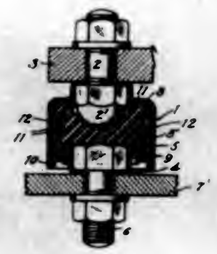
1,872,258. PHOTO-ELECTRIC DEVICE FOR CLASSIFYING LAUNDRY MATERIALS. ROBERT S. ELBERTY, Jr., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 17, 1931. Serial No. 530,922. 5 Claims. (Cl. 209—111.)



1. Sorting apparatus comprising means for advancing a plurality of articles to be sorted, a source of radiant energy associated with said advancing means, means responsive to the radiations from said source, as reflected from said articles to be sorted, means for classifying said articles to be sorted, and means, associated with said radiation-responsive means, for simultaneously rendering said classifying means active and said advancing means inactive.

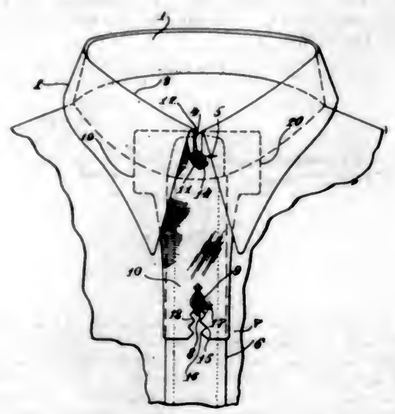
1,872,259. YIELDING CONNECTION. JESS G. ELDRIDGE, Detroit, Mich., assignor to The Mechanical Rubber Company, Cleveland, Ohio, a Corporation of New Jersey. Filed Sept. 22, 1928. Serial No. 307,577. 5 Claims. (Cl. 248—16.)

1. A cushioning connection comprising a pair of substantially cup-shaped metallic members one of which is smaller than the other, the smaller member projecting into the larger and being inverted with respect to the larger, rubber composition interposed between said members, fasteners passing through each of said members to connect them respectively to relatively movable parts, at least one of said fasteners including a substantially



hemispherical portion projecting within the rubber composition, and means for holding said members and said rubber composition in cooperative relation.

1,872,260. SHIRT GUARD. CHARLES I. ELZEY, Baltimore, Md. Filed Oct. 24, 1931. Serial No. 570,789. 7 Claims. (Cl. 223—18.6.)

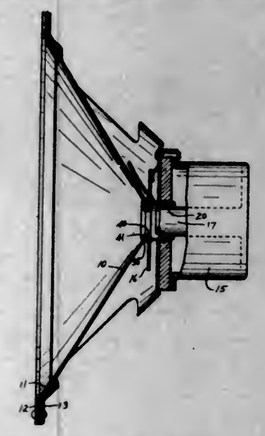


1. A shirt guard adapted to retain the laundered appearance of the shirt, the same consisting of a band of sheet material having a slot spaced downwardly from the top to engage a front button of the shirt below the collar, said slot having an enlarged portion to permit a button to be passed therethrough whereby it enters the slot whereupon the guard may be thrust upwardly into the collar fold, the slot having means to engage the button threads or shank to apply tension to and flatten the buttonhole band holding it flat and straight in the laundered condition of the shirt.

1,872,261. METHOD OF MAKING LOUD SPEAKERS. BERNARD A. ENGHOLM, Lakewood, Ohio, assignor to The Rola Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed May 30, 1930, Serial No. 457,552. Divided and this application filed Sept. 29, 1931. Serial No. 565,724. 3 Claims. (Cl. 175—21.)

1. A method of making a core for an electro-magnetic coil, comprising taking a substantially rectangular strip

of paper having spaced perforations therein, bending a strip into the form of a cylinder with the ends in continuous relationship, deforming the cylinder so as to provide a recessed outer surface thereof, passing a wire through a perforation and then winding the coil in the recess.



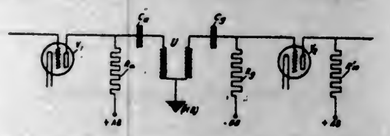
1,872,262. PROCESS OF TREATING LIQUIDS. WILSON EVANS, Chicago, Ill., assignor to The National Aluminate Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 11, 1928. Serial No. 284,657. 4 Claims. (Cl. 210—23.)

1. The process of softening water which consists in adding thereto lime, soda ash, and barium aluminate in such proportions and quantities that the amount of barium aluminate is insufficient to effect any adequate softening by itself, but is sufficient to expedite and insure adequate softening action by the other ingredients.

1,872,263. PROCESS OF TREATING LIQUIDS. WILSON EVANS, Chicago, Ill., assignor to National Aluminate Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 11, 1928. Serial No. 284,658. 4 Claims. (Cl. 210—23.)

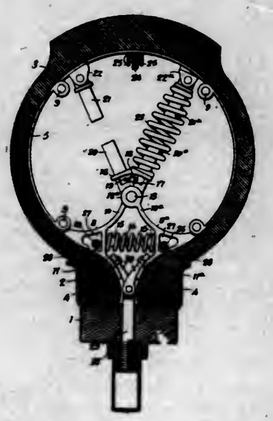
1. The process of softening water which consists in adding thereto lime and soda ash and then separately adding thereto barium aluminate in such proportions and quantities that the amount of barium aluminate is insufficient to effect any adequate softening by itself but is sufficient to expedite and insure adequate softening by the other ingredients.

1,872,264. AMPLIFIER SYSTEM. RICHARD FELDTKELLER, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Aug. 24, 1929, Serial No. 388,153, and in Germany Aug. 22, 1928. 5 Claims. (Cl. 179—171.)



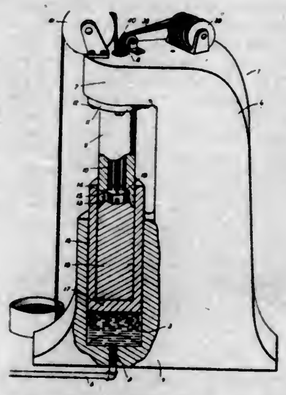
1. A combined resistance and transformer coupling means for a pair of triodes comprising a non-inductive and non-capacitative resistance in the anode circuit of one triode, a resistance in the grid circuit of the other triode, a coupling transformer connected between said resistances and a capacity connected between a high potential point of each resistance and a high potential point of said transformer.

1,872,265. INNER LINER FOR TIRE CASINGS. STEPHEN R. FETNER, Jacksonville, Fla. Filed Oct. 18, 1930. Serial No. 489,674. 13 Claims. (Cl. 152—8.)



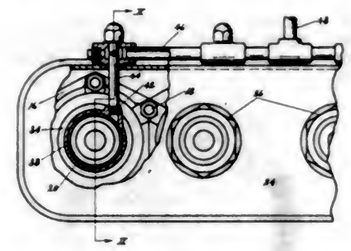
2. An automobile tire comprising an outer elastic tire casing, and a resilient core, inner lining or frame therein composed of an annular series of linked units, each composed of a resilient transverse band formed of jointed tread, rim and side sections yieldingly backing the shoe, a saddle pivotally connecting the rim sections, and springs acting on the saddle and band sections.

1,872,266. APPARATUS FOR THE MANUFACTURE OF TUBULAR PACKING. CHARLES F. FIELD and ZENO E. FLICK, Kansas City, Mo., assignors to The Charles F. Field Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed Mar. 15, 1930. Serial No. 436,067. 6 Claims. (Cl. 207—2.)



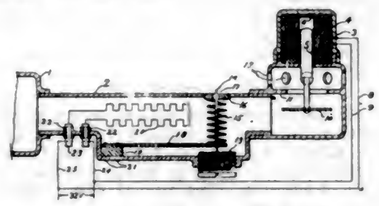
1. A die for the purpose described, including a perforate die block having an annular recess, and means, including a spider having a boss located in said recess and provided with a channel registering with one of the perforations in said block, for delivering a filler to a sheath comprising metal extruded through the recess and perforation.

1,872,267. HEAD COOLING MEANS. WALTER S. FISHER, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 26, 1929. Serial No. 416,452. 10 Claims. (Cl. 123—173.)



1. In an internal combustion engine, the combination of a depending cylinder head having an upstanding inner wall, said wall forming with the head outer wall an annular cooling space, a tubular member surrounding said inner wall in spaced relation thereto, said tubular member having its lower end open and in communication with the cooling space, and means for introducing water between said member and the inner wall of the head.

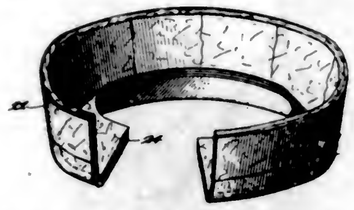
1,872,268. TIME-LIMIT ENGINE-CHOKING DEVICE. LEO C. FRANK, McKeesport, and DAVID J. CONANT, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 30, 1930. Serial No. 424,616. 12 Claims. (Cl. 123—180.)



1. In combination with the air-intake tube of the carburetor of an internal-combustion engine, an electromagnetically operated choke for closing the main air-inlet opening to the carburetor, said intake tube being provided with an auxiliary air-inlet opening, a valve disc provided with a plurality of relatively small apertures and seating in said auxiliary opening, a bimetal strip in the intake tube, a spring intermediate one end of the bimetal strip and the valve disc to urge the valve disc to seating position by a force inversely proportional to the temperature of the bimetal strip, a screw-threaded member provided with a stem for holding the spring and valve disc in operative relation to the bimetal strip, and an electric heater having definite electrical characteristics and positioned adjacent to the bimetal strip to heat the air passing to the carburetor and to deflect the strip over a predetermined range during a predetermined interval of time, thereby varying the valve-seating pressure.

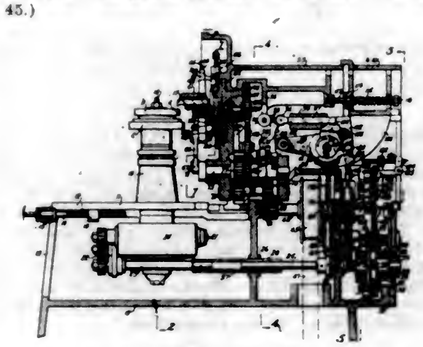
1,872,269. COMPOSITE ARTICLE AND METHOD OF MAKING SAME. LOUIS T. FREDERICK, Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed Apr. 17, 1926. Serial No. 102,820. 23 Claims. (Cl. 18—56.)

11. The herein described method which comprises superposing a plurality of mica discs of different diameters disposed in coaxial registration, holding the central portions of the discs while subjecting intermediate portions thereof to a die pressing action to draw the same and cause the registration of the peripheral portions of said



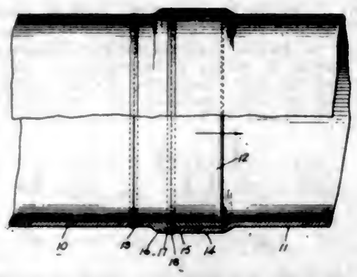
discs whereby to form an article of substantially uniform cross section and punching out the held central portion at the conclusion of the drawing operation.

1,872,270. SLOTTING MACHINE. HERMAN E. FRENTZEL, Milwaukee, Wis., assignor to The Falk Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 18, 1926. Serial No. 116,784. 20 Claims. (Cl. 90—45.)



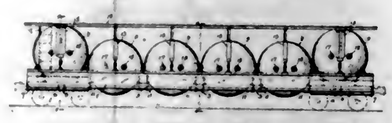
19. In a slot forming machine the combination of a tool holder, means for reciprocating said holder to effect alternate cutting and idle return strokes, means for shifting said holder between successive cutting strokes, and separate non-parallel guides for said holder cooperating with said shifting means and alternately effective to determine the course of travel of said tool holder during successive cutting strokes.

1,872,271. PIPE JOINT. RUDOLPH FURRER, Wauwatosa, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed July 16, 1928. Serial No. 293,184. 3 Claims. (Cl. 285—111.)



1. A welded pipe joint comprising end portions of pipe sections including a spigot at the end of one section and a bell at the end of the other section telescoping said spigot for a substantial distance, said bell being of substantially the same thickness as said spigot, a raised circumferential bead on said spigot adjacent the end of the bell, and weld metal joining said bead and spigot to the end of said bell.

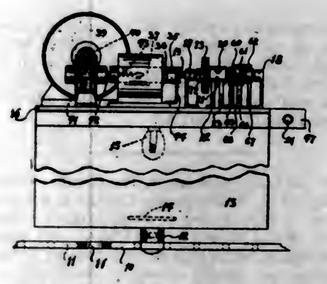
1,872,272. RAILWAY TANK CAR. RUDOLPH FURRER, Whitefish Bay, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed June 29, 1929, Serial No. 374,713. Renewed Apr. 4, 1932. 11 Claims. (Cl. 105—360.)



1. A railway tank car, comprising in combination a truck supported car frame, a spherical tank supported by said frame and deeply seated between the frame members, and means fastened to said frame and passing over the top of said tank and holding the tank in position on said frame.

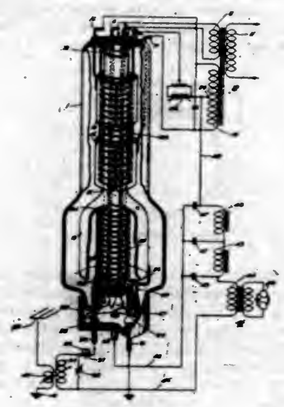
2. A railway tank car, comprising in combination a truck supported car frame, a plurality of spherical tanks independently supported by said frame and deeply seated between the frame members and arranged in a single row longitudinally of the car frame, said tanks being independent one of another, and means engaging said tanks and holding them in position on said frame.

1,872,273. TRANSFER MECHANISM FOR PRODUCTION OF PRINTING PLATES. GEORGE GOEBEL, Catonsville, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 8, 1930. Serial No. 487,263. 16 Claims. (Cl. 88—24.)



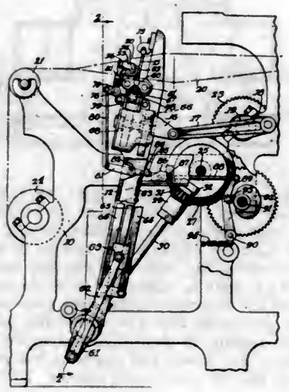
1. A transfer mechanism for production of printing plates embodying therein a gauge plate having a plurality of spaced openings therein, a camera box, a source of light therein, a lens head carried thereby and adapted to accurately fit the openings in said gauge plate, mechanically actuated timing means controlling the circuit to said source of light, and mechanically actuated means controlling said timing means.

1,872,274. THERMIONIC TUBE. THADDEUS R. GOLDSBOROUGH, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 27, 1928. Serial No. 265,017. 5 Claims. (Cl. 250—27.5.)



4. A combined thermionic rectifier and amplifier comprising a plurality of complete triode units, means for shielding the amplifier unit from the rectifier unit, said shielding means constituting an anode for said amplifier portion.

1,872,275. POSITIVE SHUTTLE DRIVE FOR LOOMS. JOHN M. GRAEF, Neenah, Wis., assignor to Valley Iron Works Company, Appleton, Wis., a Corporation of Wisconsin. Filed Jan. 29, 1931. Serial No. 512,055. 6 Claims. (Cl. 139—141.)



1. In a loom, the combination with a lay, a main drive shaft, and transmission mechanism between said shaft and lay, of a pair of shuttle bars mounted on the lay swords to reciprocate crosswise of the shed, automatic means for transferring a shuttle back and forth between the shuttle bars, an intermediate shaft, a drive from said main drive shaft to said intermediate shaft including a

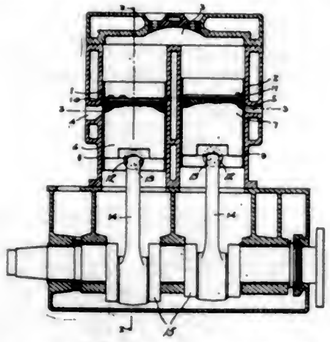
continuously rotating mutilated gear and a pinion engaged therewith, a crank on said intermediate shaft, and a rack and pinion transmission between said crank and a shuttle bar.

1,872,276. APPARATUS FOR AND METHOD OF FORMING TUBULAR BLANKS. WILLIAM T. GRAHAM, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Feb. 24, 1930. Serial No. 430,814. 9 Claims. (Cl. 153—48.)



8. The method of forming a tubular blank which comprises scarfing the longitudinal edges thereof to provide projecting lips, forming the blank into approximately cylindrical shape to bring the edges into parallel spaced relation, and finally forming the blank into finished cylindrical shape with the longitudinal edges extending in closely adjacent parallel relation while supporting and preserving the scarfed edges and lips of the blank.

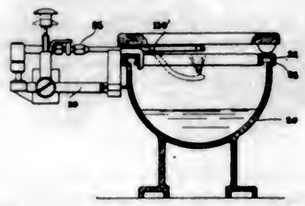
1,872,277. TWO-CYCLE ENGINE. HERALD B. GREENING, Hamilton, Ontario, Canada, and JAMES W. GALLOWAY, Detroit, Mich., assignors to Galloway Engineering Company Limited, Hamilton, Ontario, Canada. Filed Feb. 21, 1929. Serial No. 341,728. 5 Claims. (Cl. 123—53.)



3. In a two cycle engine the combination of paired cylinders aligned with the crank shaft having a common combustion head and pistons arranged therein and operating one in advance of the other, sleeves in said cylinders for controlling the inlet and exhaust thereof, said sleeves having sockets in alignment with the plane of reciprocation of the respective connecting rods and operating members connected with the connecting rods of said pistons and extending in planes parallel to the planes of reciprocation of the latter and engaging the wall of the sockets of the sleeves in operating contact.

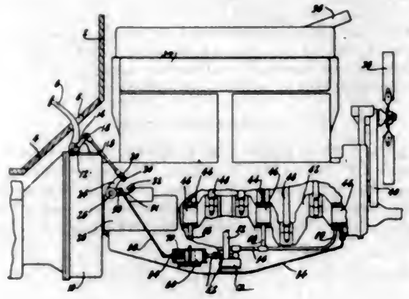
1,872,278. FLUSHING ARM FOR SANITARY WATER CLOSET ATTACHMENTS. FERRUCCIO GUIDETTI, Elmhurst, and GIUSEPPE BONTEMPI, New York, N. Y., assignors to The Watairway Manufacturing Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 19, 1931. Serial No. 516,858. 14 Claims. (Cl. 4—7.)

2. In apparatus of the class described, adapted for use in connection with a closet bowl, the combination, with a support, of a fluid delivery arm provided with a nozzle at its outer end, mounted on said support, said arm having a bent outline and lying in a substantially horizontal plane above the rim of the bowl when in its inoperative position, and lying in an upwardly directed plane with its



nozzle within said bowl, when brought to its operative position, cam acting means for causing a substantially horizontal inward movement of said arm, and cam acting means for causing rotatory movement of the outer portion thereof in order to bring it in said upwardly directed plane, after said outer portion has cleared the rim of said bowl.

1,872,279. LUBRICATING SYSTEM. GEORGE E. A. HALLETT, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 23, 1929. Serial No. 416,122. 8 Claims. (Cl. 184—6.)



1. In a lubricating system for an engine, a pump operated from the engine and normally supplying lubricant to the system, means for storing a quantity of oil from the pump during the normal operation thereof, and means for delivering said stored oil to the oil line simultaneously with the starting of the engine.

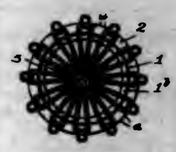
1,872,280. ALLOY. GEORGE P. HALLIWELL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 21, 1929. Serial No. 408,938. 1 Claim. (Cl. 148—11.5.)

The process of increasing the mechanical properties of electric resistance alloys consisting essentially of about 20% copper, about 50% nickel and about 30% manganese which comprises cold working and then subjecting them to a heat treatment at 300° to 450° C. for from 12 to 24 hours.

1,872,281. WEAVING RING. AUGIE L. HANSEN, Chicago, Ill., assignor to A. L. Hansen Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed May 15, 1931. Serial No. 537,549. 4 Claims. (Cl. 28—2.)

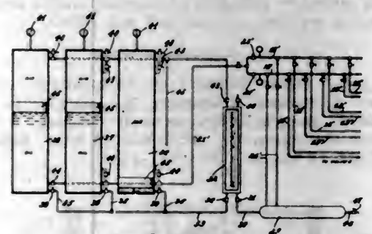
1. In a device for the purpose described, the combination of a pair of interfitting flat rings, the inner ring being

rigid and the outer being of a resilient material and having a plurality of prongs spaced apart circumferentially about the same and normally arranged to project radially out-



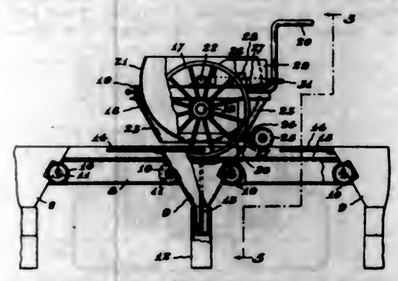
ward therefrom said outer ring being capable of being turned inside out when removed from said inner ring with said prongs projecting radially inward.

1,872,282. OPERATING MEANS FOR GATE VALVES. CULL C. HARALSON, Electra, Tex. Filed Sept. 12, 1930. Serial No. 481,490. 2 Claims. (Cl. 137—144.)



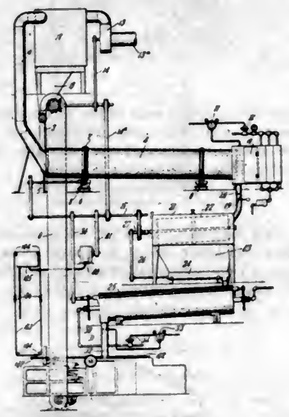
1. In combination with a plurality of gate valves, a cylinder associated with each valve, a piston in each cylinder connected with the corresponding valve, a pair of pipes connected with each cylinder, one pipe being connected to one end thereof and the other to the opposite end, a supply pipe, valves for connecting the same to either one of any of the pairs of pipes, a discharge pipe, valves for connecting the same with either one of any of the pairs of pipes, a manifold to which the discharge pipe is connected, an indicator tank connected with the discharge manifold, a valve controlling the connection, a supply tank to which the supply pipe is connected, means for forcing the fluid in the indicator tank into the supply tank and means for connecting the supply tank with compressed air.

1,872,283. CEMENT LOADING DEVICE. GEORGE O. HARM, Warren, Ohio, assignor to The Stevens Metal Products Company, Niles, Ohio, a Corporation of Ohio. Filed Dec. 2, 1930. Serial No. 499,468. 7 Claims. (Cl. 214—41.)



1. A loading device comprising an elevated platform having an elongated opening, a plurality of chutes mounted in the opening for independent movement longitudinally thereof, a plurality of dumping vehicles adapted to travel along the platform, a runway for guiding the vehicles along the platform over the opening longitudinally thereof, and means for detachably connecting the vehicles to the chutes for movement therewith and for holding the vehicles in position to deliver their material into the chutes.

1,872,284. METHOD OF AND MECHANISM FOR CONDITIONING STARCH. HAROLD W. HARRIGAN, Melrose, Mass., assignor to Hersey Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 4, 1931. Serial No. 527,698. 19 Claims. (Cl. 107—3.)



1. In combination with a machine for molding starch, means for reconditioning starch from said machine for subsequent use, and means for starting said conditioning means only after a predetermined time of continuous operation of said machine.

1,872,285. SHORT CIRCUITING DEVICE. EARL J. HAVERSTICK, Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 30, 1926. Serial No. 151,692. 27 Claims. (Cl. 200—118.)



1. A circuit-closing device comprising a plurality of conducting bodies, an apertured spacer disposed therebetween and loosely confined particles of conducting material confined within the space bounded by said bodies and the aperture of said spacer.

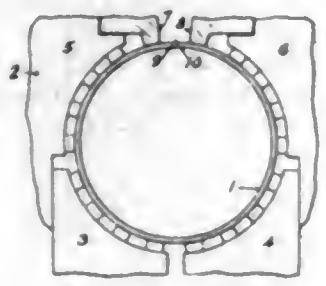
1,872,286. PROCESS OF AND REAGENT FOR TREATING PETROLEUM EMULSIONS. HERMAN HECKEL and WARREN T. REDDISH, Cincinnati, Ohio, assignors to The Kontol Company, Dallas, Tex., a Corporation of Texas. Filed June 19, 1928. Serial No. 286,709. 2 Claims. (Cl. 196—4.)

2. A reagent adapted to resolve emulsions of petroleum and water, said reagent, comprising, water soluble sludge layer mineral oil sulphonic bodies, oil layer mineral oil sulphonic bodies, and a light mineral oil fraction of the type of kerosene combined into a homogeneous fluid.

1,872,287. METHOD OF MANUFACTURING ELECTRICALLY WELDED TUBULAR ARTICLES. WARREN F. HEINEMAN, Shorewood, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Dec. 22, 1928. Serial No. 327,925. 7 Claims. (Cl. 219—10.)

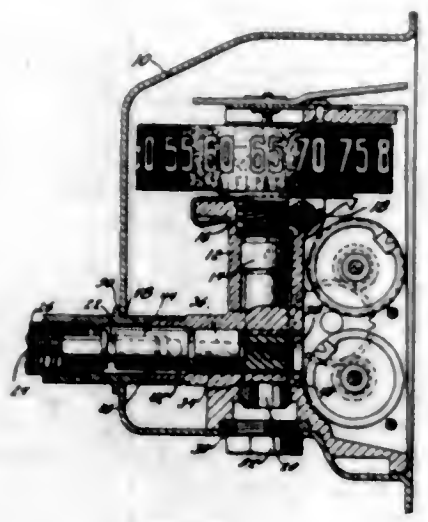
1. The method of making an electrically welded tubular article of substantial length, which comprises forming

a tubular blank having a longitudinal seam to be welded, pressing the edges of said seam together to align the same, clamping said blank to preserve the alignment of said edges during the subsequent welding operation, establish-



ing a flashing arc between said edges for the full common length thereof to heat the same uniformly to a welding temperature, and pressing said heated edges together to effect a simultaneous welding of the same.

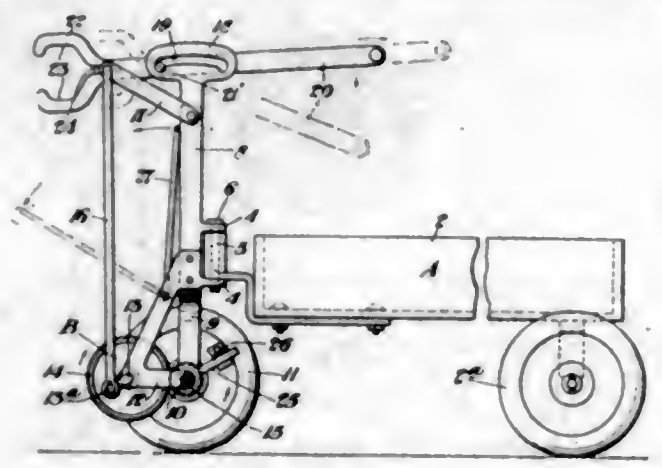
1,872,288. INSTRUMENT DRIVE. RALPH O. HELGEBY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Feb. 1, 1928. Serial No. 251,144. 2 Claims. (Cl. 74—7.)



1. In an indicating instrument, a frame for said instrument having a circular bore formed therein, a shaft journalled in said bore, a second circular bore at an angle to said first named bore, a second shaft adapted to be rotatably supported in said second bore, gearing connecting said first and second shafts, and driving mechanism for said instrument having a non-circular end, the outer ends of both said first and second shafts being shaped to receive the non-circular end of said driving mechanism whereby the latter may be connected to one shaft when it is desired to have the driving mechanism approach the instrument in one position, or to the other shaft when it is desired to have the driving mechanism approach the instrument in a different position.

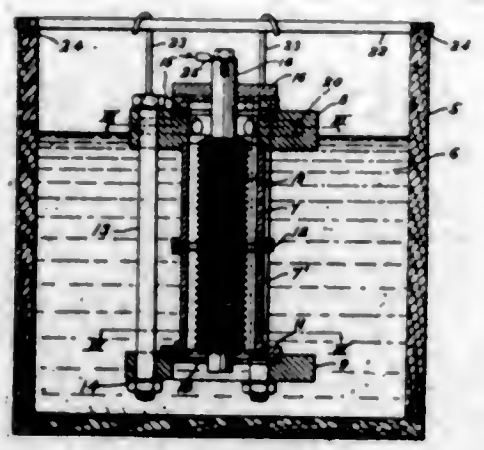
1,872,289. TOY VEHICLE. JAMES E. HESTER, Pittsburgh, Pa. Filed May 1, 1931. Serial No. 534,258. 8 Claims. (Cl. 208—34.)

I. A toy vehicle comprising a wheeled body unit and a self contained hand propelled front wheel drive unit pivotally connected to said body unit, said drive unit comprising a supporting structure including a post, an axle journaled in said structure, a crank power shaft journaled in said structure, a gear on said crank shaft, a pinion on said axle and meshed with said gear, a hand operated rocking lever mounted at the upper end of said post, for a rocking movement about a movable fulcrum point, said fulcrum point being movable back and forth in a direction parallel with the longitudinal axis of said vehicle, means forming a driving connection between said



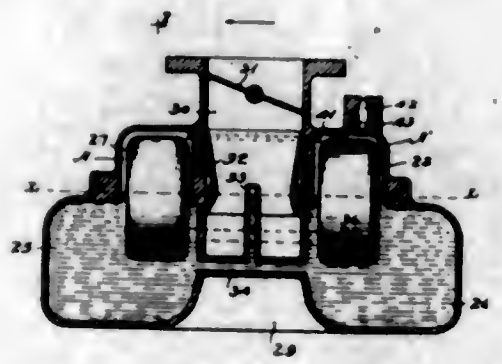
rocking lever and said crank shaft, vehicle propelling wheels carried by said axle, and means forming a driving connection between said axle and said wheels.

1,872,290. CORRUGATED OR THREADED ANODE. JOHN K. HITNER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 23, 1928. Serial No. 287,672. 3 Claims. (Cl. 204—4.)



1. In an apparatus for the electro-deposition of metals, the combination of an upper ring, a lower ring, a plurality of molds supported between the two rings, and a corrugated anode supported coaxially in the interior of the molds.

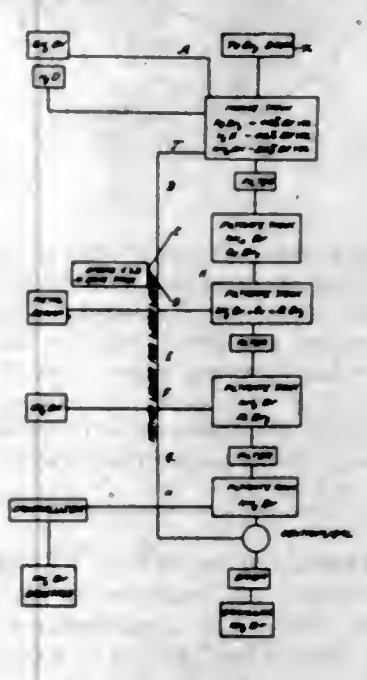
1,872,291. CARBURETOR. LEONARD S. HOBBS, Chicago, Ill., assignor to Bendix Stromberg Carburetor Company, Chicago, Ill., a Corporation of Illinois. Filed July 16, 1926. Serial No. 122,838. 24 Claims. (Cl. 261—72.)



1. In combination in a carburetor, two float chambers, a carburetor barrel between the chambers, a fuel nozzle in said barrel, and a restricted opening passageway below

the normal fuel level in said chambers normally establishing constant communication therebetween, the nozzle being connected to receive fuel from only one of the chambers.

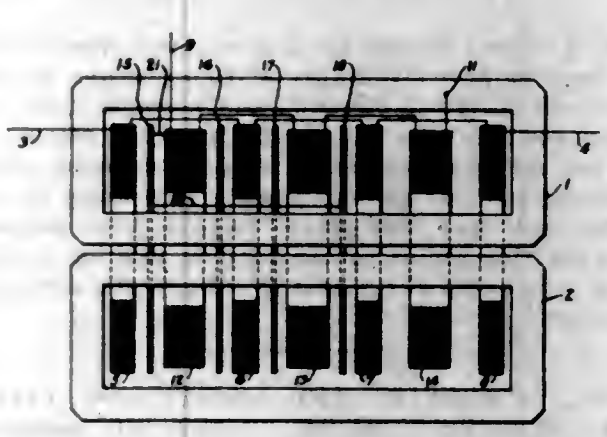
1,872,292. MANUFACTURE OF AMMONIUM BROMIDE. CARROLL A. HOCHWALT and JOHN B. WALIUSZIS, Dayton, Ohio, assignors to Morton Salt Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 14, 1931. Serial No. 557,005. 13 Claims. (Cl. 23—100.)



1. In the treatment of bromine-containing brines, the method which comprises treating brines to convert the bromine to an iron bromide solution containing heavy metal salt impurities, treating the iron bromide solution with ammonium hydroxide, separating the precipitated iron hydroxide, then treating the resulting solution of ammonium bromide, containing metallic salt impurities which are not separated by treatment with ammonium hydroxide, with an active metal higher in the electromotive series than the metal composing the metallic impurities in the iron bromide solution.

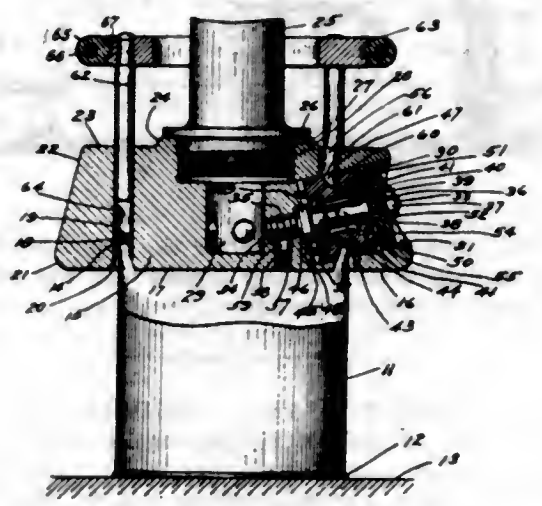
6. In the process of making ammonium bromide from iron bromide solutions containing copper, the step of removing the copper by treating the solution with metallic aluminum.

1,872,293. TRANSFORMER. JOHN K. HODNETTE and PETER L. BELLASCHI, Sharon, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 5, 1931. Serial No. 542,319. 12 Claims. (Cl. 175—356.)



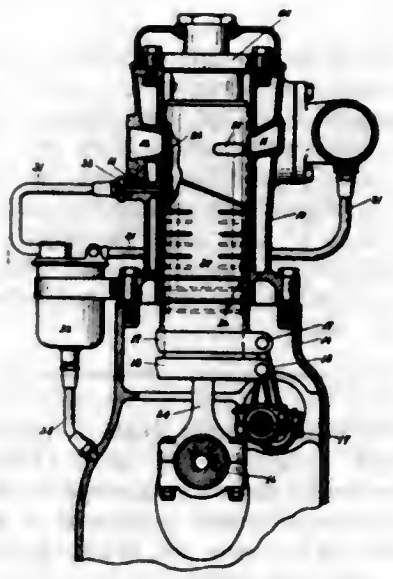
1. An electrical transformer comprising a low-voltage winding group of coils, a high-voltage winding group of coils speced therefrom, and means for protecting said windings from the effect of high-frequency energy comprising a shield in the space between the windings and connected to one terminal of the high-voltage winding.

1,872,294. CONTAINER FORMING MACHINE. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 19, 1928. Serial No. 307,014. 11 Claims. (Cl. 153—59.)



1. In a forming device for containers, a rotatable supporting head having a vertical axis and a forming roller arranged in said head with the axis of the roller inclined toward the end of the head and inward relative to the central vertical axis of the head for curling the container edge inwardly.

1,872,295. SLEEVE VALVE ENGINE LUBRICATION SYSTEM. WARREN T. HUNT, East Orange, N. J., assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 2, 1928, Serial No. 316,705. Renewed Jan. 21, 1932. 13 Claims. (Cl. 123—196.)

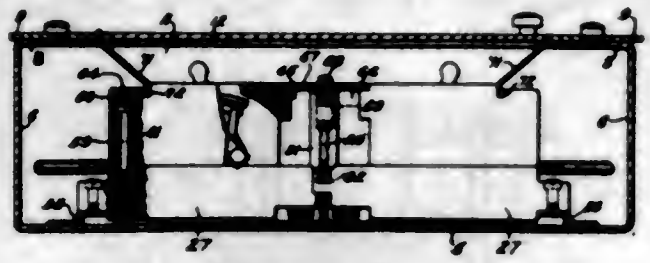


8. A sleeve valve engine, embodying a cylinder block provided with intake and exhaust ports, a sleeve valve reciprocally disposed therein having intake and exhaust port apertures co-operatively disposed with respect to the ports in the cylinder block, grooves on the surface of said valve sleeve extending from the area about the intake port to the exhaust port, a lubrication system for said sleeve comprising a source of suction, and means for communicating the suction to the exhaust port aperture while said port is in a closed position.

1,872,296. PANEL CIRCUIT BREAKER. OLIVER S. JENNINGS, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 20, 1929. Serial No. 356,647. 5 Claims. (Cl. 247—10.)

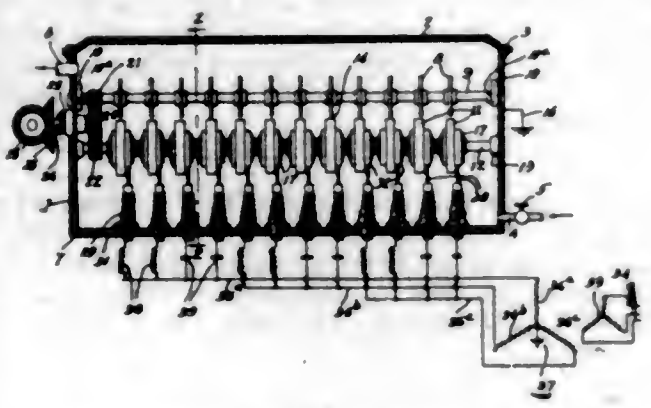
1. A circuit breaker panel comprising two spaced rows of enclosed circuit breaker units disposed side-by-side in

each row and having the adjacent ends of the enclosure provided with openings communicating with the space



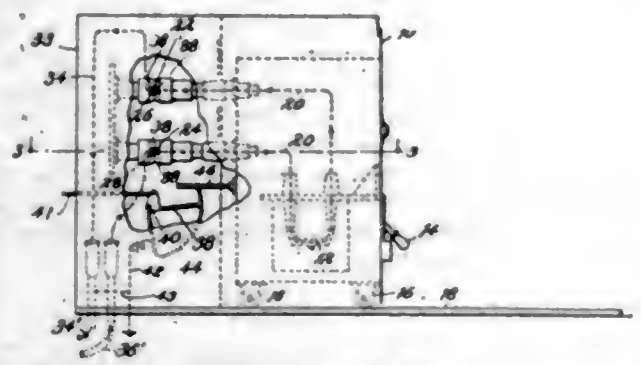
between the rows and a closure for the space between the rows constituting a conduit for conducting arc gases discharged from the said openings.

1,872,297. APPARATUS FOR PRODUCING CARBON BLACK. JOHN J. JAKOSKY, Los Angeles, Calif, assignor to Electroblacks, Inc., Culver City, Calif., a Corporation of Nevada. Filed Apr. 29, 1929, Serial No. 358,948, and in Canada May 12, 1928. 3 Claims. (Cl. 13—7.)



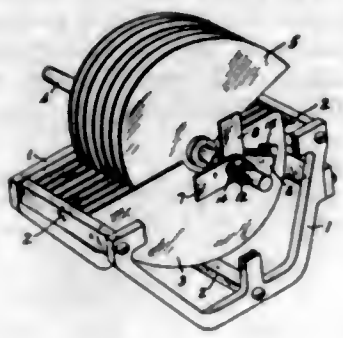
1. An apparatus for producing carbon black from carbon bearing oils comprising a reaction chamber, opposing electrode means mounted within said chamber and defining an arc gap, means for maintaining a body of oil in said chamber above the level of said gap, means for causing relative movement of said electrode means in such manner that the opposing faces of said electrode means are caused to move in opposite directions at a point adjacent said gap, and electric power supply means connected to the opposing electrode means.

1,872,298. SWITCH MECHANISM. ARTHUR H. KEHOE, Rutherford, N. J., and LEE W. MCCULLOUGH, New York, N. Y., assignors, by mesne assignments, to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 23, 1927. Serial No. 235,163. 14 Claims. (Cl. 175—298.)



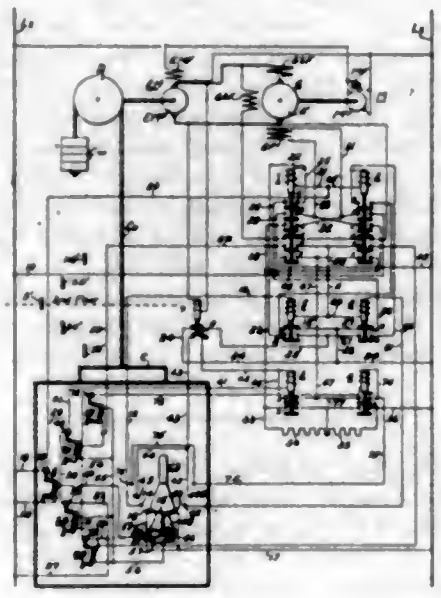
1. The combination with a truck switch and coacting separable disconnect switch contacts, of a resilient member adapted to enclose the contacts and thus protect them against high voltage flashovers, when they are in closed position.

1,872,299. VARIABLE REACTOR. JOHN KERRIGAN, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 13, 1929. Serial No. 406,901. 2 Claims. (Cl. 175—41.5.)



1. A variable condenser comprising a fixed element and a movable element so disposed with respect to each other as to be capable of having a continuous capacity-displacement characteristic, auxiliary elements movable in unison with said movable element, and a relatively small fixed element cooperating with said auxiliary elements in their movement to give discontinuous increments of capacity to said condenser at predetermined positions.

1,872,300. ELEVATOR CONTROL SYSTEM. LUTHER J. KINNARD, Chicago, Ill., assignor to Westinghouse Electric Elevator Company, a Corporation of Illinois. Filed Oct. 6, 1928. Serial No. 310,714. 18 Claims. (Cl. 187—29.)

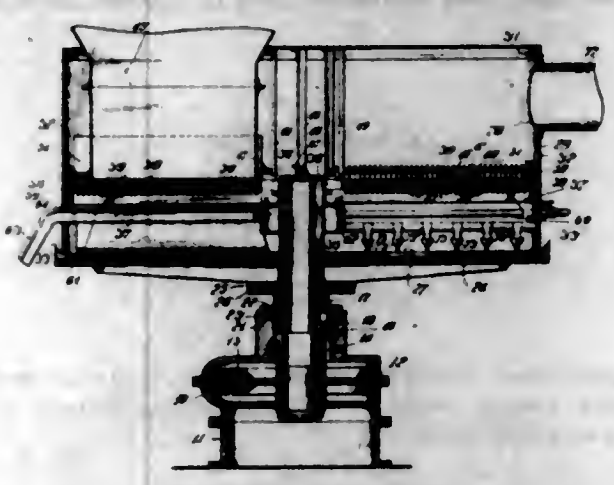


1. In a control system for a department-store elevator, a car operable past a plurality of floors, means for starting said car in either direction and movable from a car-stopping position to a car-running position, means operable when said starting means is in said running position for causing said car to momentarily slow down as it approaches each floor, and means operable upon movement of said starting means to car-stopping position for causing said car to stop at the next floor thereafter approached by said car.

1,872,301. SCREENING AND MOISTENING APPARATUS. BETHUNE G. KLUGH, Chicago, Ill., assignor to American Ore Reclamation Company, New York, N. Y., a Corporation of New York. Filed May 13, 1926. Serial No. 108,716. 9 Claims. (Cl. 209—351.)

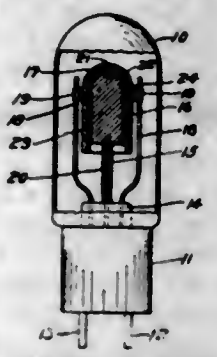
1. In combination, a rotating screening disk having circular slots therein, a feed hopper discharging on to said screening disk at one point, stationary means for discharging the material carried on said screening disk at

another point, and teeth extending into the slots of said screening disk intermediate the points of feed and dis-



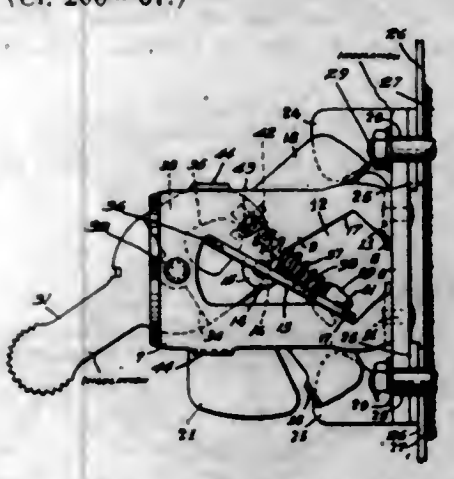
charge, whereby the material is fed to the disk, carried along by it, agitated by the teeth and the residue picked up from the disk and discharged.

1,872,302. GLOW DISCHARGE DEVICE. DEWEY D. KNOWLES, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 8, 1930. Serial No. 473,846. 6 Claims. (Cl. 176—122.)



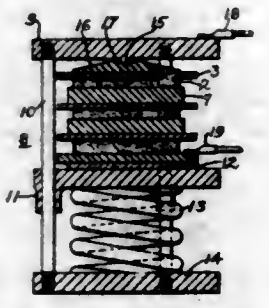
1. A tube comprising two electrode members, one of said electrodes being a female member and the other being a male member and an integral layer of insulation on the surface of one of said members adjacent to the other member.

1,872,303. SWITCH MECHANISM. HUBERT K. KRANTZ, Rockville Center, N. Y., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 11, 1928. Serial No. 298,896. 6 Claims. (Cl. 200—67.)



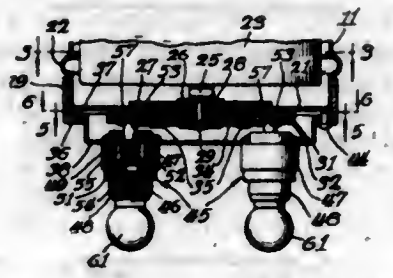
1. Switch mechanism comprising a frame member of U-shape having a base portion and integral wing portions and a notch extending inwardly through the base portion of the frame and a bearing portion adjacent the notch for receiving a switch carrier, a switch carrier of U-shape having inwardly extending journal members cooperating with the bearing portions for pivotally supporting the carrier for oscillation within the said notch, the carrier having inwardly projecting integral lugs extending through the notch into the space between the wings of the frame member, an operating handle pivotally mounted for oscillation between the said wings and having spaced arms provided with openings for receiving the said lugs, whereby the carrier is operated positively by the handle after the latter has moved in either direction a predetermined distance, and an over-center spring disposed between the said arms and the carrier for moving the carrier with a snap action in response to a predetermined movement of the said handle.

1,872,304. COPPER HEMISULPHIDE RECTIFIER. SAMUEL B. KRAUT, East Pittsburgh, and CHARLES E. MARGERUM, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 2, 1927. Serial No. 172,033. 8 Claims. (Cl. 175—366.)



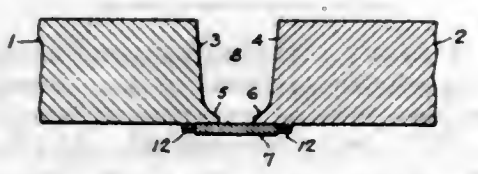
3. A device possessing uni-lateral electrical conductivity comprising a layer of sulphuretted copper in contact, under pressure, at one face, with a conducting material and, at the other face, with the oxidized face of an aluminum contact member.

1,872,305. ELECTRIC HAND LANTERN. CARL H. LARSON, Elkhart, Ind., assignor to The Adlake Company, a Corporation of Illinois. Filed Oct. 27, 1930. Serial No. 491,503. 8 Claims. (Cl. 240—10.63.)



1. In an electric lantern, a casing for a battery having a central insulated battery contact and a lateral grounded contact, a battery, a base, a support having a portion engaged by the base and having turning movement relative thereto when the parts are assembled, a lamp socket carried by the support having its shell in electrical connection with the casing, a central contact on the socket, a contact strip upon the casing in electrical connection with the central battery terminal therein, and means causing the contact strip and the central socket contact to engage upon the relative rotative movement of the support and the casing.

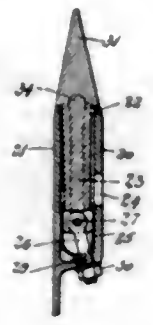
1,872,306. ELECTRIC ARC WELDING. LOUIS J. LARSON, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Feb. 17, 1930. Serial No. 429,062. 3 Claims. (Cl. 219—10.)



2. The method of welding thick metal plates which comprises providing lugs on the lower surface of said plates near the edges to be welded and uniformly spaced there

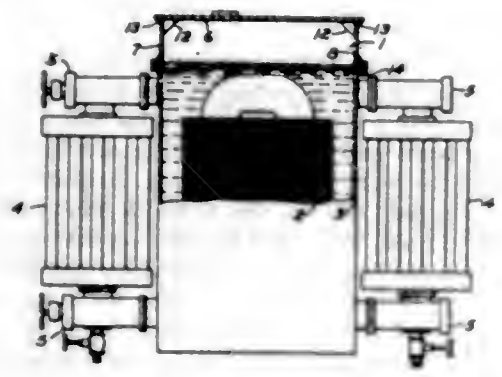
from, arranging the plates with the edges in juxtaposed relation for welding, providing a backing strip beneath the edges and cooperating with the lugs on the respective plates to space the edges a predetermined distance, said backing strip forming the bottom of a welding groove between the edges, and depositing weld metal in said welding groove, said weld metal being fused with the metal of the edges and of the backing strip to form an integral welded structure.

1,872,307. COMBINED DIGGING LIP AND DIPPER TOOTH. WERNER LEHMAN, South Milwaukee, Wis., assignor to Bucyrus-Erie Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Feb. 19, 1930. Serial No. 429,627. 8 Claims. (Cl. 37—141.)



3. In a digging dipper, or similar implement, the combination of: a double-walled digging face; tooth sockets between the walls thereof, having a hole in one wall of each socket; bosses between the mouths of the sockets, for stiffening the digging edge of the face of the dipper, and for supporting its digging lip; a plurality of combined tooth-and-lip sections, having shanks insertable in the sockets; and a shim for each shank, to wedge its lower end against the walls of its socket.

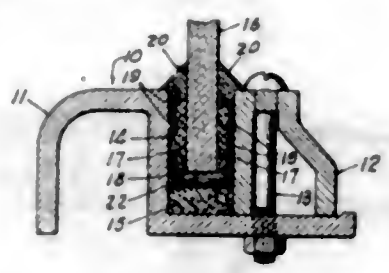
1,872,308. TANK STRUCTURE. FREDRICK LLEWELLYN, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 5, 1930. Serial No. 493,485. 4 Claims. (Cl. 220—85.)



1. In combination, a transformer having an enclosing split casing, a fixed cover welded to the upper edge of said casing, a temporary cover, and means for attaching said temporary cover to the split edge of said enclosing split casing.

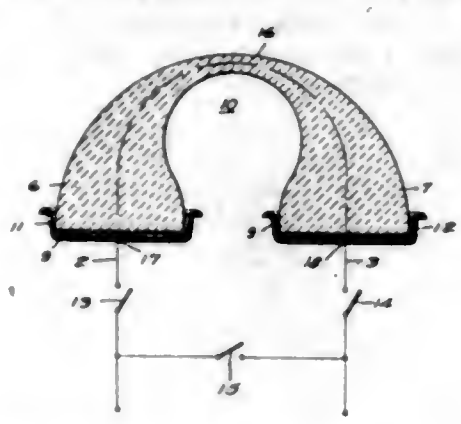
1,872,309. WINDOW CONSTRUCTION. ZANVIL C. LOEREL, Shorewood, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Jan. 16, 1931. Serial No. 509,134. 14 Claims. (Cl. 187—78.)

1. In window construction, a sash frame having a channel therein, a pane of glass having its edge portions disposed within said channel, cork strips interposed between the sides of said channel and said pane to permit relative lateral and longitudinal movement between said frame and said pane and means retained in position by the glass



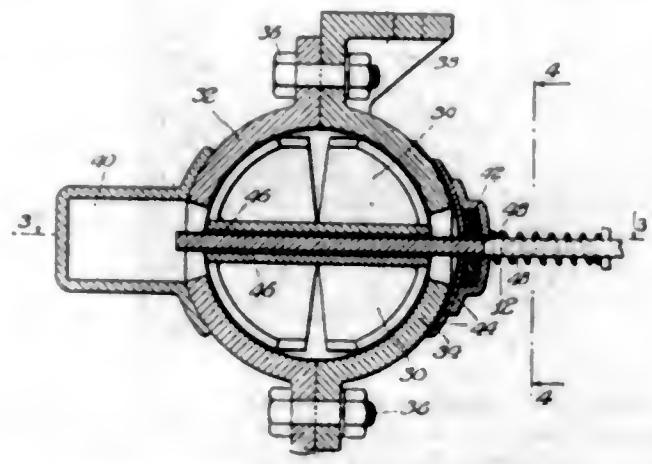
for precluding withdrawal of said cork strips from the channel during relative longitudinal movement of said frame and said pane.

1,872,310. MEANS FOR INTERRUPTING ELECTRIC CIRCUITS. ALBERT LOTZ, Berlin-Siemensstadt, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 27, 1931, Serial No. 525,679, and in Germany Mar. 27, 1930. 3 Claims. (Cl. 200—113.)



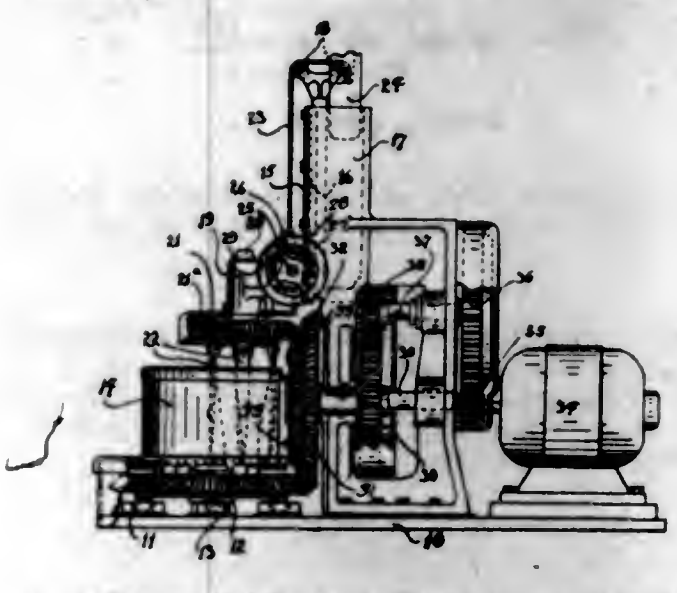
1. A device for interrupting electric currents in a circuit comprising a pair of electrodes, a resistance connected across the electrodes comprising a resistance liquid and a porous body of insulating material, said body being placed between said electrodes and being at least partly filled with said liquid to conduct current, the cross section of said porous body being less at the points between the electrodes than at the electrodes.

1,872,311. SPRING SUSPENSION. KENNETH E. LYMAN, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 15, 1927. Serial No. 212,979. 5 Claims. (Cl. 267—54.)



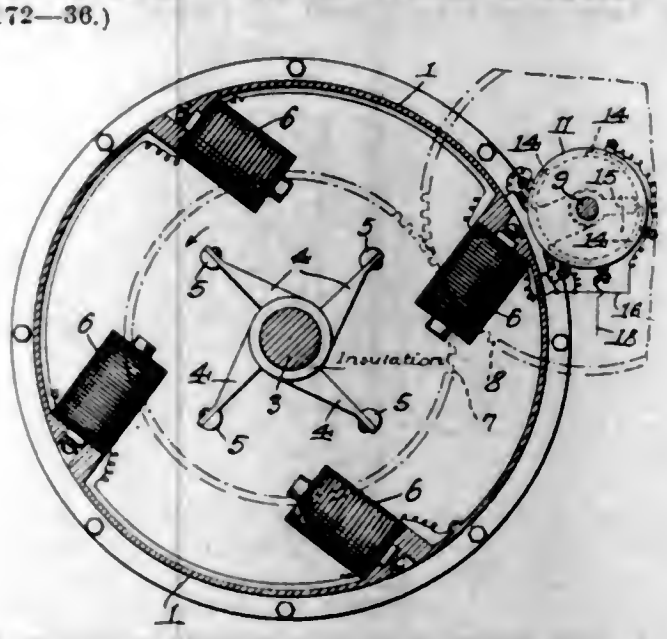
1. A spring suspension including a leaf spring, an internally spherical hollow bracket, and a pair of semi-spherical members provided with registering bosses, said members housed within said bracket.

1,872,312. INK MIXER. FRANK C. MARQUARDT, Brooklyn, N. Y., assignor to American Bank Note Company, New York, N. Y., a Corporation of New York. Filed Dec. 19, 1930. Serial No. 503,381. 2 Claims. (Cl. 259—85.)



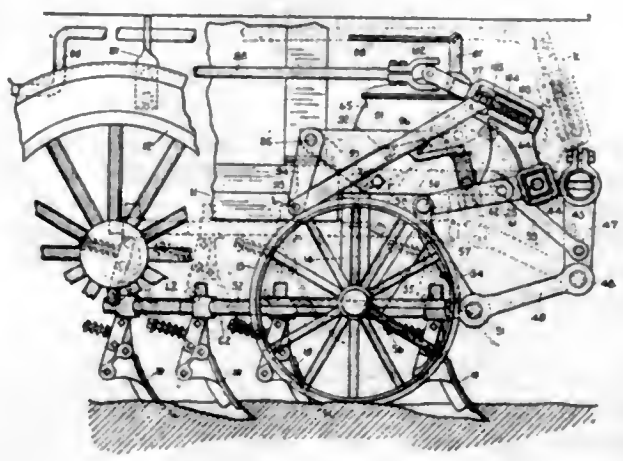
1. An ink mixer embodying therein a turn-table adapted to receive a tub or can, a bevel gear carried thereby having a pitch determined by the axis of rotation of said turn-table, vertically extending guideways, a vertically extending rack adjacent said guideways, a paddle head slidably mounted in said guideways, a gear wheel carried thereby cooperating with said rack, a holdback mechanism operative upon said gear, means whereby said gear may be turned, a shaft rotatably mounted in said head, the axis which is eccentric to the axis of said turn-table, a plate carried by said shaft, a plurality of paddle blades carried by said plate and of a length to reach closely adjacent the bottom of a tub or can upon said turn-table, a bevel gear carried by said shaft of a relatively smaller diameter than the bevel gear carried by said turn-table, the pitch of said gear being determined by the axis of rotation of said plate, a shaft, a plurality of bevel gears carried thereby and enmeshed respectively with the gear carried by said turn-table, and with the gear carried by said shaft, the pitch of the gear enmeshed with the gear carried by the turn-table being determined by the axis of rotation of said turn-table, and the pitch of the other of said gears being determined by the axis of rotation of said paddles, and speed reducing gearing operative upon said shaft.

1,872,313. MAGNETIC MOTOR. WILLIAM E. MASTERSON, Borger, Tex., assignor of one-third to F. L. Cowan and one-third to J. F. Roberts, Borger, Tex. Filed Apr. 5, 1930. Serial No. 442 020. 2 Claims. (Cl. 172—36.)



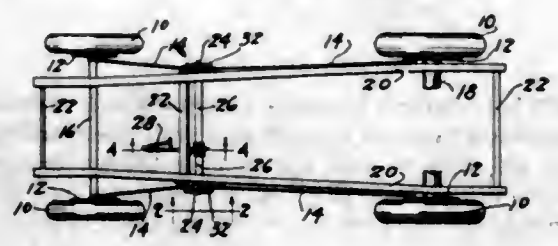
1. A motor of the class described, comprising a frame, a main shaft journaled on the frame, armatures carried by the main shaft, electro-magnets on the frame in operative relation to the armatures and having their windings connected in series, a second shaft journaled on the frame, gearing connecting the shafts, a conducting ring and a plurality of segments supported about the second shaft, a brush on the second shaft, the brush engaging the ring and being engageable with the segments, a conductor joined to each of the segments and connected to one end of the series-winding of the electro-magnets, and a lead connected to the conducting ring.

1,872,314. POWER LIFT CULTIVATOR. ELMER MCCORMICK, Waterloo, Iowa, assignor to John Deere Tractor Company, Waterloo, Iowa, a Corporation of Iowa. Filed Feb. 27, 1928, Serial No. 257,177. Renewed May 13, 1932. 28 Claims. (Cl. 97—50.)



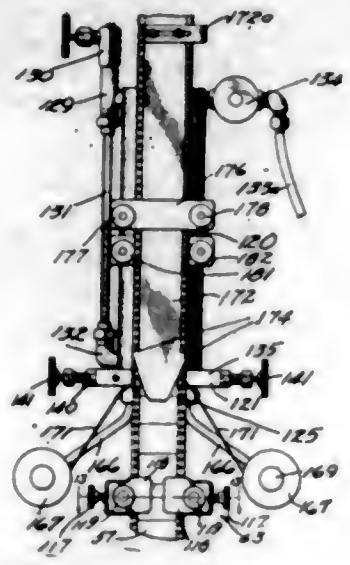
1. A power lift agricultural implement comprising a wheeled frame, a soil engaging device, parallel link mechanism connecting the latter with said frame for substantially parallel lift movement of said soil engaging device, manually operated means for adjusting said soil engaging device vertically, and power lift means operating through said parallel link mechanism arranged so as to lift said soil engaging device substantially to the same elevated position irrespective of the adjustments of said manually operated means.

1,872,315. CONNECTION. EUGENE G. MCDONALD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 23, 1931. Serial No. 539,466. 6 Claims. (Cl. 180—77.)



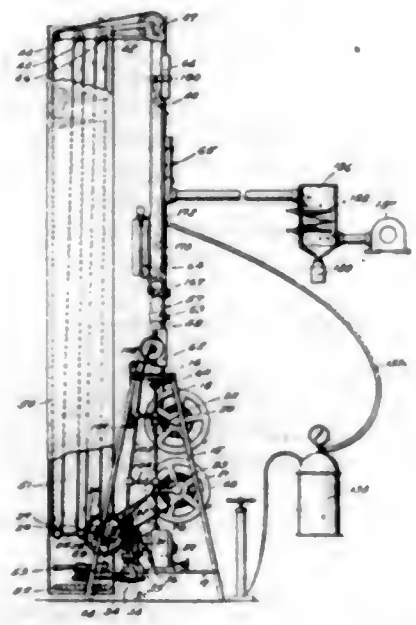
1. A chassis having side frame members formed with openings, a brake cross-shaft passing through said openings and which is of slightly less diameter than said openings and which has reduced-diameter ends, and brackets secured to the frame over said openings and forming bearings for said reduced-diameter ends, together with brake-operating levers on the ends of the shaft between the side frame members and the brackets.

1,872,316. METHOD OF APPLYING REENFORCING TO FILM. CHARLES H. MEEKER, Riverside, Calif. Filed Aug. 6, 1927. Serial No. 211,107. 14 Claims. (Cl. 154—2.)



1. A method of reenforcing motion-picture film, comprising: wetting a portion of the film with a bonding material; wetting a thread with a bonding material; attaching said thread to said film; and regulating the tension on said film during the attachment of said thread thereto.

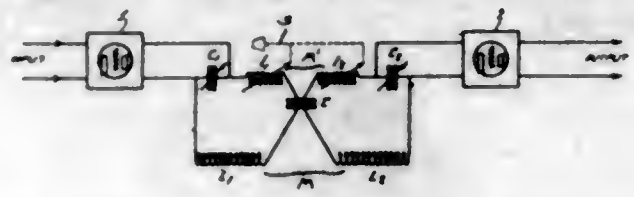
1,872,317. APPARATUS FOR APPLYING REENFORCING TO FILM. CHARLES H. MEEKER, Riverside, Calif. Original application filed Aug. 6, 1927, Serial No. 211,107. Divided and this application filed Oct. 20, 1928. Serial No. 313,884. 27 Claims. (Cl. 154—1.)



1. A device adapted to apply a reenforcing member to a film comprising: means for guiding said reenforcing member along an edge of said film in the plane thereof; and means for supplying a bonding material to said film and said reenforcing member for securing them together.

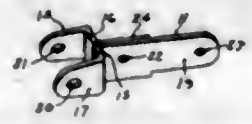
1,872,318. CONVERTIBLE BAND PASS RECEIVER. ALEXANDER MEISSNER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Feb. 18, 1931, Serial No. 516,586, and in Germany Feb. 6, 1930. 3 Claims. (Cl. 178—44.)

1. In combination, a pair of tunable circuits each including a variable capacity and an invariable inductance, the inductances being coupled to provide magnetic coupling between the circuits, an untuned condensive reactance common to both circuits, said coupled circuits possessing a constant band width characteristics throughout



a given frequency range, and additional means common to both circuits for controlling the band width characteristic.

1,872,319. METHOD OF MAKING A SPRING HANGER. HENRY MILLER, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed May 5, 1930. Serial No. 449,903. 4 Claims. (Cl. 29—152.)

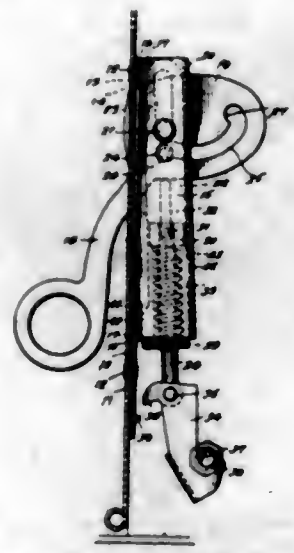


1. The method of making a spring hanger for an automobile frame or the like which comprises providing a sheet metal blank, cutting the same to form a piece having a central longitudinal slit at one end and having a non-central projection at the other, bending the piece transversely at the closed end of the slit to form bases for the forked member, bending the piece transversely intermediate the bases and the slit end, and thereafter bending the blank on the longitudinal line of the slit to form a forked spring hanger.

1,872,320. ARC WELDING ELECTRODE. EMIL MINO, Albany, and JAMES MCCANN and MICHAEL FISCHER, Richmond, Calif., and THOMAS D. RADCLIFFE, Brookville, Pa., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Mar. 2, 1929. Serial No. 343,919½. 1 Claim. (Cl. 219—8.)

An electrode for use in arc welding comprising, a metallic rod covered with a fused coating of approximately the following proportions, boric acid (crystalline) 4 parts, borax glass 2 parts, red iron oxide 1 part.

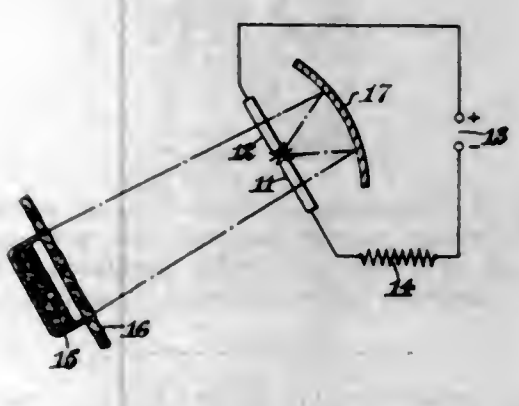
1,872,321. HOOD CATCH. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 30, 1931. Serial No. 512,281. 7 Claims. (Cl. 292—111.)



1. In a hood catch, a keeper adapted to be disposed interiorly of the hood, a support adapted to be mounted on the hood, a spring pressed bolt carried by said support,

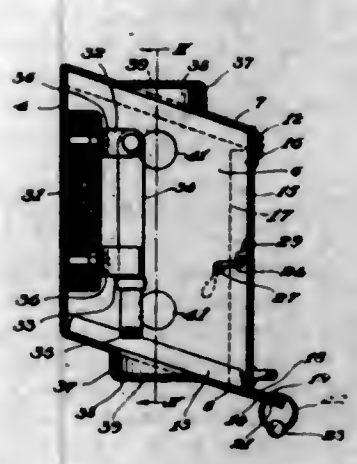
a catch element movably connected to said bolt and adapted to engage said keeper, means for imparting longitudinal movement to said bolt, and means adapted through said longitudinal movement to move said catch into and out of cooperative relation with said keeper, and means for imparting transverse movement to said bolt and catch whereby said catch is moved into and out of the path of said last mentioned means.

1,872,322. ARC LAMP ELECTRODE. WILLIAM GEORGE MOORE, London, England. Filed Aug. 23, 1929, Serial No. 387,982, and in Great Britain Jan. 10, 1929. 4 Claims. (Cl. 176—135.)



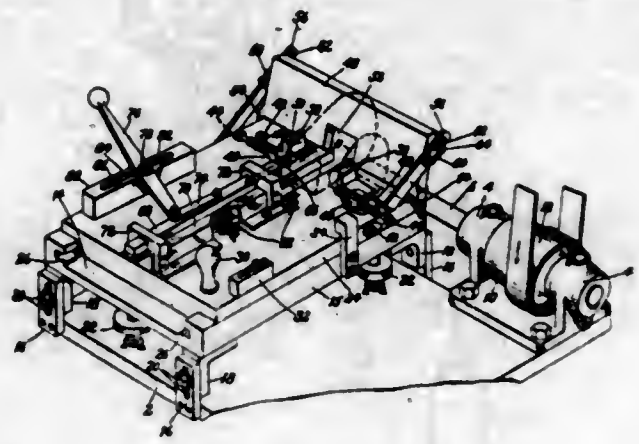
1. An arc light electrode for electric-arc therapeutic ray-treatment comprising an alloy whereof the essential constituents are tungsten with from 1% to 5% of titanium and from ¼% to 2% of chromium.

1,872,323. OUTDOOR SWITCH BOX. HENRY G. NICHOLS, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 13, 1929. Serial No. 362,698. 12 Claims. (Cl. 247—9.)



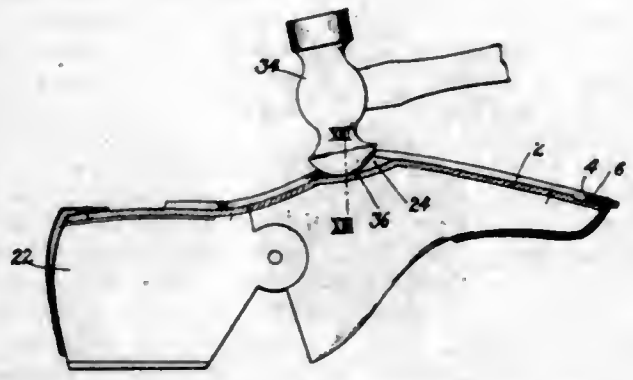
1. A box for electrical devices having its top and bottom walls sloping downward toward the front thereof, the top wall being provided with a flange depending from the front edge thereof and a movable cover having its upper edge extending beneath the said flange and hinged thereto and provided with side flanges overlapping the side walls of the box.

1,872,324. MACHINE FOR USE IN THE MANUFACTURE OF COVERED HEELS. WILLIAM H. NUTT, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 27, 1928. Serial No. 257,412. 30 Claims. (Cl. 12—42.)



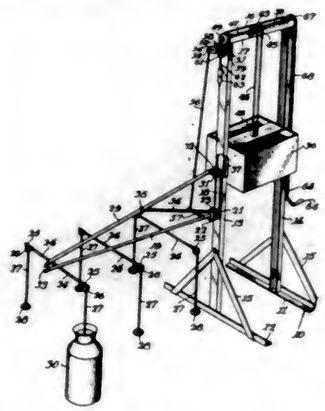
23. In a machine for grooving the breasts of heels, in combination, a heel support and a groove-forming tool relatively movable to form a groove in the breast of a heel on the support, and parts on the support adapted for relative movement to position the heel with respect to the groove-forming tool to insure formation of the groove in coincidence with the heightwise median line of the heel breast.

1,872,325. ART OF MAKING SHOES. HAROLD A. OSBORNE, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 25, 1928. Serial No. 272,781. 10 Claims. (Cl. 12—142.)



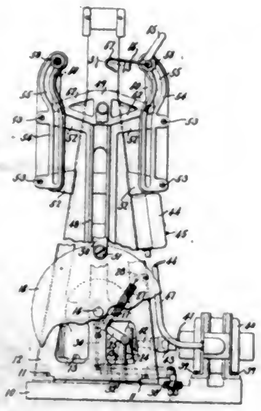
10. That improvement in methods of making insoles for arch support shoes which comprises molding an insole to impart thereto the usual transverse and longitudinal curvatures, placing the molded insole upon a form having a cavity shaped to form a metatarsal arch supporting bulge in the insole but otherwise conforming to the transverse and longitudinal curvatures imparted to the insole, positively securing the lateral margins of the insole at opposite sides of said cavity against inward edgewise displacement, and, while the insole is so secured, forcing the portion of the insole overlying said cavity into engagement with the walls of the cavity to form an arch supporting bulge in the insole without altering the edge contour of the sole margin.

1,872,326. MILK STIRRER. AUGUST OTTO, Sandwich, Ill. Filed Aug. 20, 1930. Serial No. 476,496. 10 Claims. (Cl. 259—70.)



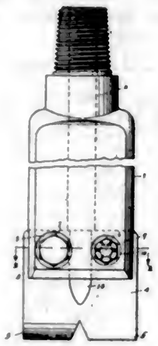
1. In a milk stirring device, a base, guide means extending upwardly from said base, a weight slidably mounted along said means, a rock shaft, mechanism operated by said weight for rocking said shaft, arms on said shaft, stirrer members engaged by said arms for reciprocating said members, and means including an escapement mechanism engaging said first-named mechanism for controlling the operation of said shaft whereby said stirrer members will be given a uniform intermittent movement during their reciprocation.

1,872,327. STRIPPING MACHINE. ERNEST L. PATTEN, New Haven, Conn., assignor to The Goodyear's India Rubber Glove Mfg. Co., Naugatuck, N. H., a Corporation of Connecticut. Filed Oct. 22, 1930. Serial No. 490,377. 7 Claims. (Cl. 18—2.)



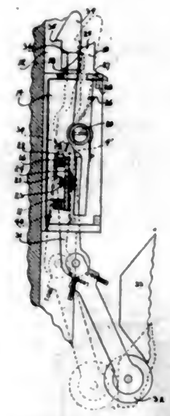
1. In a stripping machine of the kind described, the combination of a core holder, a stripping hook adapted to engage in the neck of an article of resilient material formed on the core, a cam associated with the stripping hook and arranged parallel to the length of the core and means for moving the stripping hook longitudinally of the cam to impart thereto a lateral movement to distend the neck of the article to facilitate removal thereof from the core.

1,872,328. DRILL. LOUIS M. PEARCE and WALTER L. CHURCH, Houston, Tex. Original application filed Apr. 14, 1931, Serial No. 529,930. Divided and this application filed Apr. 9, 1932. Serial No. 604,158. 4 Claims. (Cl. 255—61.)



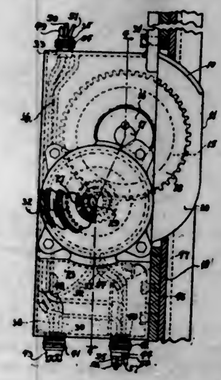
1. A drill comprising a head having a transverse mortise, a boring member inserted into said mortise, a bolt through said head and boring member and having a threaded connection with said boring member.

1,872,329. ELECTRICAL INTERLOCK. ROBERT S. PEELLE, Hollis, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Oct. 2, 1929. Serial No. 396,790. 6 Claims. (Cl. 187—31.)



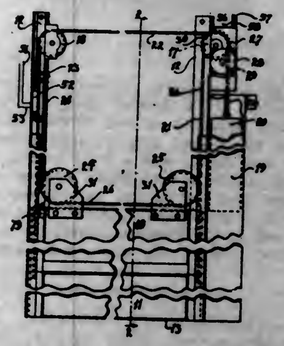
1. An electrical interlock embodying therein a housing having a slot in the top thereof, fixed electrical contacts within said housing, a vertically extending rocking lever, one arm of which carries a spring pressed movable contact, and the other arm of which projects through said opening in, and extends above, the top of the housing, a spring operative upon said lever having a normal tendency to disengage said movable contact from said fixed contacts, a vertically extending rocking latch lever pivoted exteriorly of said housing and extending upwardly beyond said first named lever in a vertical plane parallel therewith, an impact member carried thereby, a latch bar carried by and movable with a vertically movable door section and a spring operative upon said latch lever with a normal tendency to engage it with said latch bar, a cam member carried by said latch bar in engaging relation with said switch actuating lever, said latch bar being engageable by said latch lever to mechanically lock the dumbwaiter door before said cam is operative upon said rocking lever to engage said electrical contacts, and a striker member carried by and movable with a dumbwaiter car cooperating with said impact member to cause the engagement and disengagement of said latch lever with said latch bar according to the position of the dumbwaiter car.

1,872,330. POWER FIXTURE FOR ELEVATOR DOOR OPERATORS. ROBERT S. PEELLE, Hollis, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 3, 1931. Serial No. 506,483. 8 Claims. (Cl. 74—56.)



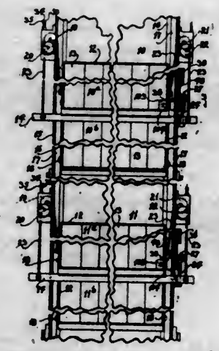
1. A power fixture for elevator door operators embodying therein a narrow casing recessed at one edge thereof to form a pocket, having a front opening and a bottom opening, a sheave having a gear attached thereto, means whereby said sheave and said gear are mounted in the side walls of said pocket, said gear and sheave projecting through said front opening, a circular recess forming flange upon the other side of said casing, a wall between said recess and said pocket having an opening adjacent the perimeter of said gear, a circular motor in said recess having its shaft projected through said opening, a gear carried by said shaft and enmeshed with the gear upon said sheaves, a cap closing said motor recess, and means whereby said casing may be attached to the guide rail structure for elevator doors.

1,872,331. OPERATOR FOR BIPART SLIDEUP DOORS. ROBERT S. PEELLE, Hollis, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 10, 1931. Serial No. 529,264. 8 Claims. (Cl. 268—59.)



1. An operator for bi-part slideup doors embodying therein a power sheave adjacent one side of the door, a guide sheave adjacent the other side of the door, a counterweight, a chain connected with said counterweight and passing about said power sheave to one side of the lower section of a door, a second chain connected with said counterweight and passing about said power sheave and said guide sheave to the other side of the lower section of a door, sheaves secured adjacent the top and at opposite sides of an upper door section, a dead end fitting, a third chain passing from said dead end fitting about said sheaves carried by the upper door section and said power sheave and connected with said counterweight, an electric motor, gearing connecting said motor with said power sheave, an electric source supplying power to said motor, and a pole changing switch mechanism controlling the power from said source.

1,872,332. OPERATOR FOR COUNTERBALANCED ELEVATOR DOORS. ROBERT S. PEELLE, Hollis, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 3, 1931. Serial No. 578,792. 6 Claims. (Cl. 187—54.)

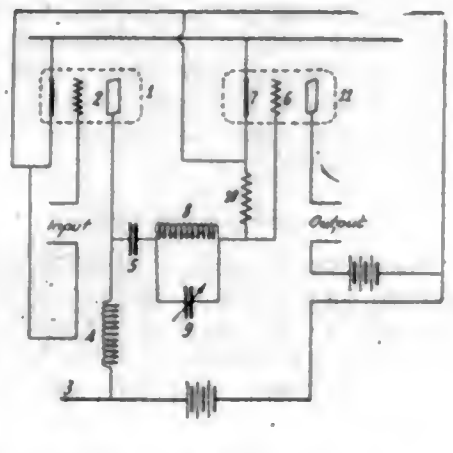


1. An operator for counterbalanced elevator doors, embodying therein an electric motor adjacent a door in a shaft, flexible connections between the door sections, sheaves about which said connections pass, means whereby the power of said motor may be applied to said door sections, a lock for said door sections, a source of power, electrical mains in the shaft adjacent said door, branch lines leading from said mains to said motor, a normally open shaft switch mechanism controlling the circuit from said mains to said motor, means carried by an elevator car and operative upon said shaft switch mechanism, a pole changing switch mechanism whereby said mains may be connected with said source, a manually operative control for said pole changing switch mechanism, and a lock switch mechanism comprising normally engaged fixed and movable contacts connected in series with said shaft switch mechanism, a keeper plate adjacent said contacts and a key-controlled lock mechanism carried by one of the door sections and including a bolt co-operating with said keeper plate to prevent movement of the door sections and with said lock switch mechanism to interrupt the circuit to said motor independently of said shaft switch mechanism.

1,872,333. EMULSION BREAKING. JOSEPH OTIS PEIRCE and WARREN T. REDDISH, Cincinnati, Ohio, assignors to The Kontol Company, Dallas, Tex., a Corporation of Texas. Filed Apr. 29, 1927. Serial No. 187,700. 10 Claims. (Cl. 196—4.)

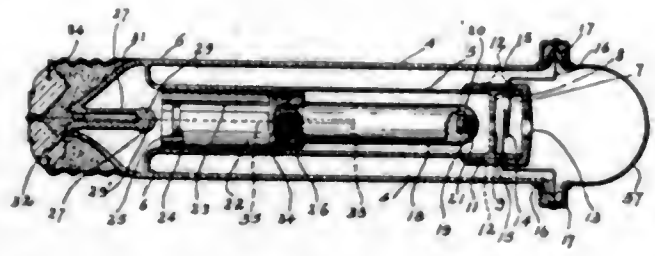
3. The process of decomposing a petroleum and water emulsion comprising adding ethyl sulphuric acid, sodium sulphonate and pitch thereto.

1,872,334. HIGH FREQUENCY AMPLIFIER. GEORGES EDME MARCEL PERROUX and VICTOR CORELLI, Paris, France; said Perroux assignor to Compagnie Generale de Telegraphie Sans Fil, Paris, France, a Corporation of France. Filed July 10, 1924, Serial No. 725,118, and in France July 11, 1923. 7 Claims. (Cl. 179—171.)



1. A high frequency amplifier comprising in combination, a plurality of three electrode tubes connected in cascade, a plate circuit including a choke coil associated with one tube, a tuned oscillating circuit comprising a variable capacity and inductance, a condenser connecting said plate circuit and said ocillating circuit and an impedance of high value connected in the grid filament circuit of the second tube.

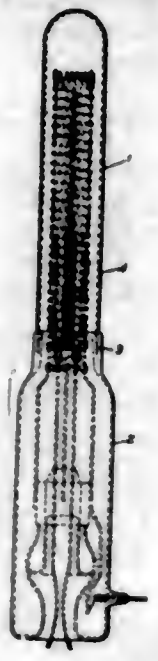
1,872,335. DENTAL X-RAY TUBE. CLAYTON TRIDLE ULREY, East Orange, N. J., assignor to Weatinghouse Lamp Company, a Corporation of Pennsylvania. Filed June 20, 1925, Serial No. 38,395. Renewed Sept. 26, 1928. 3 Claims. (Cl. 250—35.)



1. An X-ray tube comprising a cylindrical envelope, a reëntrant cylindrical tube closely spaced from the walls of said envelope and sealed thereto, a cylindrical anode disposed within said tube and closely spaced from the walls thereof, a cylindrical sleeve secured to the lower end of said anode and having transverse and longitudinal slots therein, a protuberance projecting from said tube and adapted to engage said slots to lock said anode in position within said tube, a cathode disposed adjacent the end of said tube, said cathode consisting of an incandescible filament having an opening therethrough, a target in the end of said anode disposed adjacent said cathode and means interposed between said target and cathode for localizing the electrons emitted by said cathode upon said target and means surrounding said target and cathode and having an opening therein in alignment with said cathode and target for permitting X-rays to pass along the axis of said electron stream.

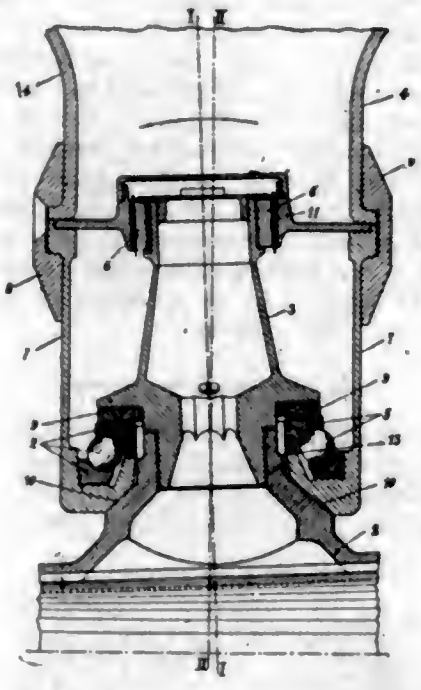
1,872,336. VACUUM TUBE DEVICE. DAYTON ULREY, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 5, 1925. Serial No. 66,979. 7 Claims. (Cl. 250—27.5.)

5. A vacuum tube device comprising a glass portion, a vapor-tight copper shell portion sealed thereto by means of a fused seal and acting as an exterior electrode, an interior electrode cooperating therewith and a coating of



another metal on said vapor-tight copper shell portion, said metal coating being of greater mechanical strength than said copper.

1,872,337. AIR SCREW WITH AUTOMATICALLY VARIABLE PITCH. MARCEL PILLARD, Marseille, France, assignor to L'Helice Metallique, Brevets Paulban-Pillard, Societe Anonyme, Marseille, France. Filed Apr. 16, 1930, Serial No. 444,856, and in France May 17, 1929. 7 Claims. (Cl. 170—162.)

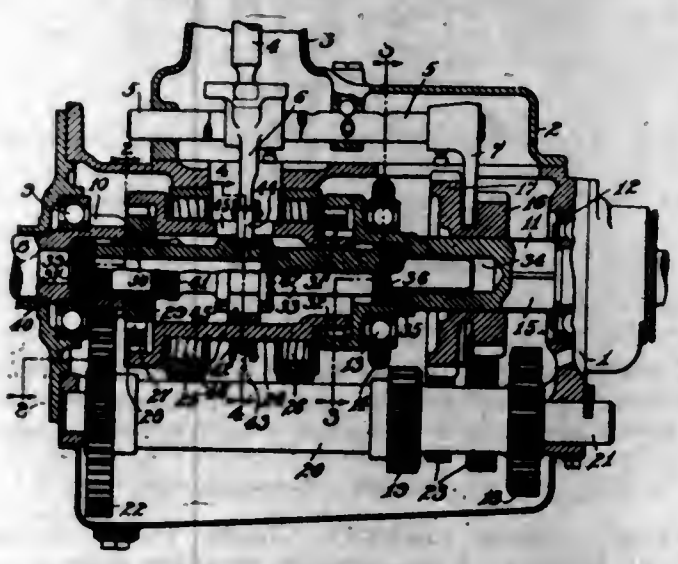


1. In an air screw having automatically variable pitch the combination of: a driving shaft; a hub on said shaft; a blade arranged on said driving shaft in such manner that its neutral axis normally passes through the axis of said shaft; and a pivot member interposed between said hub and said blade, and so constructed and arranged that its pivotal axis about which said blade turns is slightly inclined both in the direction of propulsion and in the direction of rotation of the screw to the neutral axis of said blade, substantially as described.

1,872,338. TRANSMISSION GEARING. ROBERT S. PLEXICO, Muncie, Ind. Filed Nov. 18, 1926. Serial No. 149,045. 6 Claims. (Cl. 74—57.)

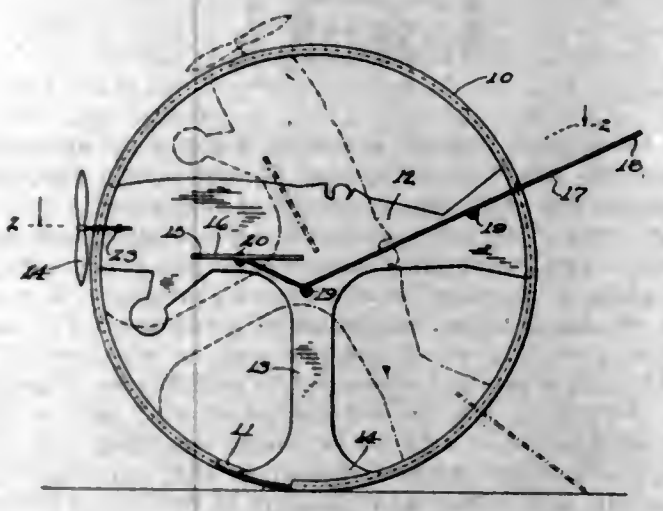
1. In combination, a driving and a driven shaft co-axially mounted, an external gear on one of said shafts, an in-

ternal gear on the other shaft, a hollow eccentrically mounted gear member for connecting said external and internal gears disposed between said gears and having sets of external and internal teeth in mesh with the internal and external gears respectively, the gear on the driving shaft being normally drivingly disconnected therefrom,



means for drivingly connecting said gear to said shaft, a pair of spaced apart stationary bearings for said hollow gear member arranged adjacent the gears thereon and a stationary bearing for said driven shaft arranged adjacent the gear thereon and on the opposite side of said gear to one of said first mentioned bearings.

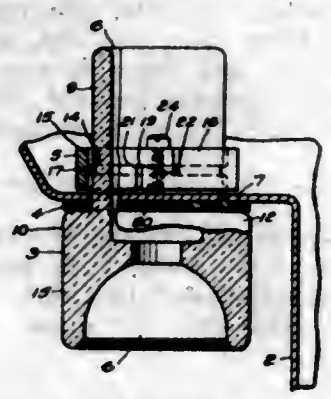
1,872,339. AIRPLANE HOOP. ROBERT A. PUTMAN, Kewaunee, Wis. Filed Oct. 19, 1931. Serial No. 569,699. 10 Claims. (Cl. 272—85.)



1. A toy comprising a rollable hoop having a track, an airplane within said hoop having portions guided on said track, and a handle secured to said airplane for rolling said hoop and for causing said airplane to assume various maneuvering attitudes.

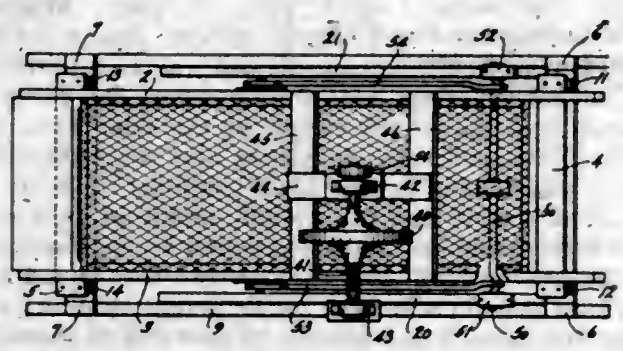
1,872,340. BUSHING CLAMP. FREDERICK J. REED, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 11, 1930. Serial No. 420,186. 8 Claims. (Cl. 173—311.)

2. In combination, a wall member having an opening therethrough, a bushing extending through said opening having a shoulder of greater diameter than said opening at one side of the wall and a lateral shoulder of smaller diameter than said opening at the other side of the wall, and clamping means cooperating with said second shoulder at said other side of the wall comprising a ring divided into perimetral sections and including an inner projection for gripping the bushing and cooperating sloping surfaces, and screws disposed entirely at said other side



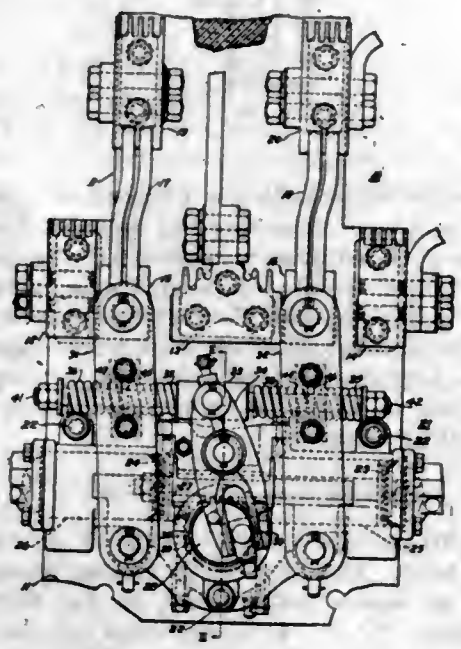
extending through said sections operating, when forced against the wall, to move the ring axially away from the wall and the sections laterally inwardly.

1,872,341. VIBRATING DEVICE. RODNEY G. RICHARDSON, Chicago, Ill. Original application filed Jan. 10, 1924, Serial No. 685,344. Divided and this application filed July 1, 1929. Serial No. 375,011. 7 Claims. (Cl. 74—14.)



1. In combination, a frame, means for vibrating said frame primarily, and means for vibrating said frame secondarily, said second means comprising a gyroscope, a bearing for the shaft of said gyroscope supported independent of said frame, and a second bearing for said shaft supported on said frame.

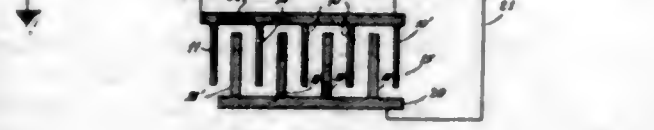
1,872,342. CONTROL APPARATUS. LYNN G. RILEY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 19, 1930. Serial No. 503,459. 7 Claims. (Cl. 200—82.)



1. A reversing switch, comprising, in combination, a receiving contact member, a movable contact member disposed to engage the receiving contact member, a work

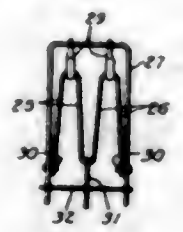
arm for actuating the movable contact member into and out of engagement with the receiving contact member, an eccentric for actuating the work arm, means for actuating the eccentric when energized, and means interposed between the eccentric and the work arm to apply pressure to the movable contact member when said means for actuating the eccentric is deenergized.

1,872,343. COUPLING SYSTEM. WALTER VAN B. ROBERTS, Princeton, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 29, 1930. Serial No. 485,010. 8 Claims. (Cl. 179—171.)



1. The combination of a pair of space discharge tubes including input and output circuits, means for tuning the input circuit of one of said tubes, capacitative and inductive couplings connected between the tuned input circuit and the output circuit of the other tube, said couplings being in phase opposition and the capacitative coupling being between the high potential ends of the tuned input circuit and the output circuit of said other tube, and means mechanically connected to, and operative with, the said tuning means to adjust the capacitative coupling as the input circuit of said one tube is tuned whereby the transfer of energy to said tuned input circuit is maintained independent of its frequency.

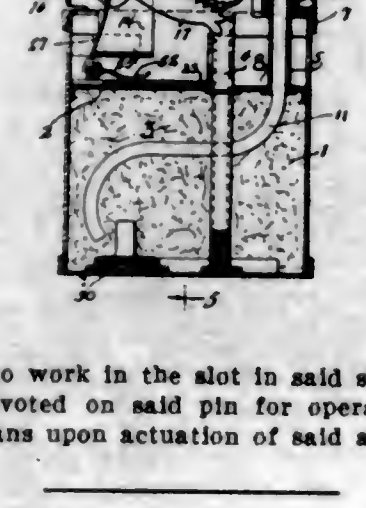
1,872,344. VACUUM ELECTRIC TUBE DEVICE. ERNEST YEOMAN ROBINSON, Bush Hill Park, Enfield, England, assignor to Associated Electrical Industries Limited, a Company of Great Britain. Filed Nov. 7, 1927. Serial No. 231,482, and in Great Britain Nov. 9, 1926. 2 Claims. (Cl. 250—27.5.)



1. The method of mounting a filament on the supporting wires of a press comprising the steps of forming two portions into a closed frame, connecting the ends of the filament to spaced points on said frame, attaching an intermediate point on the filament through an insulating support to a third point on said frame, welding said frame to two supports on said press and cutting out that one of the two portions of said frame which does not include said third point.

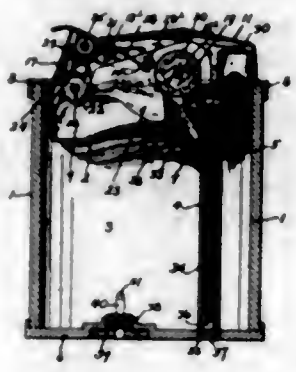
1,872,345. CIGAR LIGHTER. JAMES F. ROGERS, North Attleboro, Mass., and EDWARD F. CLARK, Rangeley, Me., assignors, by mesne assignments, to Art Metal Works, Inc., Newark, N. J., a Corporation of New Jersey. Filed Sept. 28, 1929. Serial No. 395,804. 8 Claims. (Cl. 67—7.1.)

6. In a cigar lighter substantially of the type described having spark producing means, a body member, a slotted member slidable therewithin, a wick snuffer arm pivoted on said body member, a pin carried by said snuffer arm



and adapted to work in the slot in said slidable member, and means pivoted on said pin for operating the spark producing means upon actuation of said slidable member.

1,872,346. CIGAR LIGHTER. JAMES FRANK ROGERS, North Attleboro, Mass., assignor, by mesne assignments, to Art Metal Works, Inc., Newark, N. J., a Corporation of New Jersey. Filed Oct. 31, 1930. Serial No. 492,459. 4 Claims. (Cl. 67—7.1.)

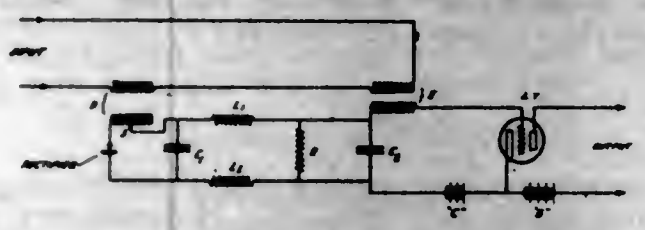


3. In a cigar lighter, a casing, a partition extending across the entire cross section of the casing providing in conjunction with the upper end of the casing a pocket, a pyrophoric tube, and a wick tube extending through said partition and terminating adjacent to the upper edge of the casing, a cap plate for said casing provided with vertically extending flanges on its sides, a rod secured in said flanges, a ratchet wheel and flint cutting wheel mounted on said rod, a second rod secured in said flanges, a snuffer arm pivoted on said second mentioned rod, said snuffer arm being provided with an extension extending into said pocket, a driving ratchet secured to said extension and located in said pocket and operable to drive said ratchet and flint cutting wheels, an operating member pivoted on the rod supporting the ratchet wheel and flint cutting wheel and movable into said pocket, and spring means for returning said snuffer arm, ratchet bar, and operating member to normal position, said spring means being supported on said side plates and being connected to said extensions on said snuffer arm.

1,872,347. AMPLIFIER TUBE CONTROL. WALTER VAN B. ROBERTS, Princeton, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 30, 1929. Serial No. 351,405. 1 Claim. (Cl. 179—171.)

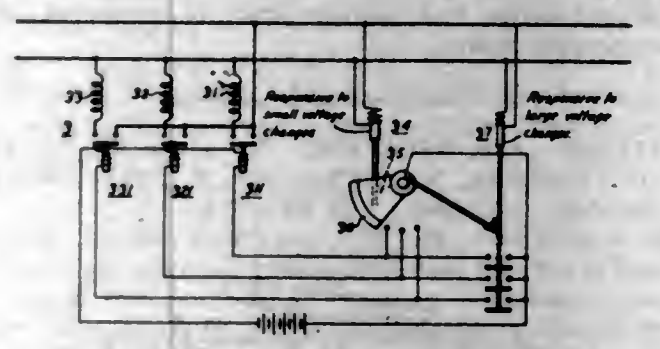
An arrangement for reducing current losses in the anode circuit of a power amplifier tube comprising a source of signal voltage, a source of negative potential disposed in the grid circuit of the tube, said second source being of sufficient magnitude to reduce the current flowing in the said anode circuit to substantially zero in the absence of signal voltage in the said grid circuit, and a third source

of potential disposed in said grid circuit, said third source being derived from said signal voltage source and arranged in opposition to said second source in such a



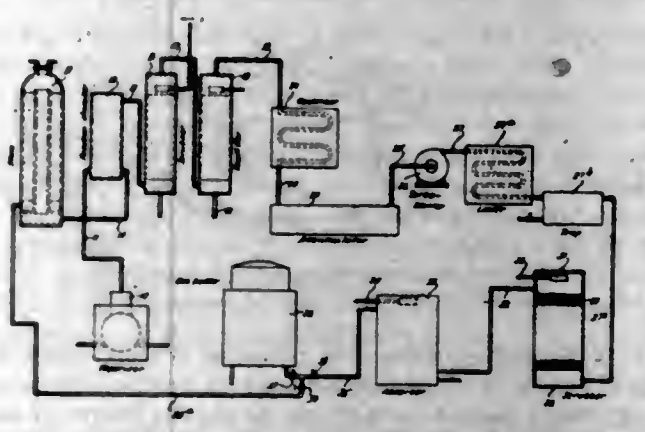
manner that the operating grid potential of the tube is of suitable value for efficient amplification only while signal voltage is impressed on the grid circuit of said tube.

1,872,348. VOLTAGE REGULATION OF ALTERNATING CURRENT LONG DISTANCE LINES. RHINHOLD RÜDENBERG, Berlin-Grunewald, and ERICH FRIEDLÄNDER, Berlin-Spandau, Germany, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 12, 1929, Serial No. 406,568, and in Germany Nov. 12, 1928. 7 Claims. (Cl. 172—246.)



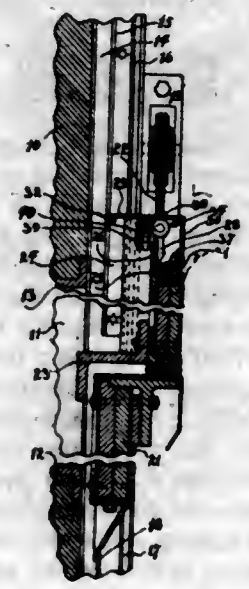
1. The combination with an alternating-current transmission line, of a plurality of reactor compensating devices, a switching device for each reactor for connecting it across said line, means for successively actuating said switching devices sequentially in predetermined order, line voltage responsive means for governing said actuating means and time delay means associated therewith, said responsive and delay means being so disposed that in case of small voltage changes a relatively long interval is introduced between successive switching device actuations and in case of large voltage changes a smaller interval or delay is introduced.

1,872,349. REMOVING SULPHUR FROM OILS. ALBERT P. SACHS, New York, N. Y., assignor to Petroleum Conversion Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 6, 1928. Serial No. 310,892. 5 Claims. (Cl. 196—24.)



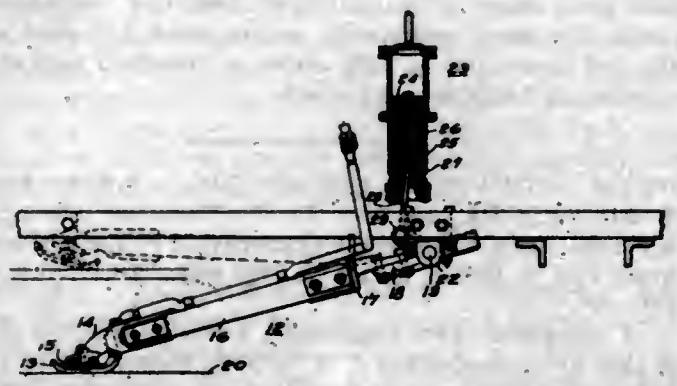
2. In the process of converting hydrocarbon oils into compounds of lower molecular weight, in which a heat-carrier gas is used as an aid to the conversion reaction, the steps of passing the gas containing various of the products of the conversion reaction through a condensing system to separate the vapors of the greater portion of the converted products from the carrier gas, at which point in the system the temperature of said gas is below the boiling point of water under the pressure prevailing in the system, then spraying said gas with water to remove therefrom sulphur compounds and utilizing the desulphurized gas when heated as the heat-carrier to convert additional hydrocarbons.

1,872,350. PASS TYPE ELEVATOR DOOR. PAUL R. SAURER, Floral Park, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 5, 1930. Serial No. 441,826. 7 Claims. (Cl. 189—48.)



1. A pass type elevator door embodying therein upper and lower counterweighting sections, flexible connections between said sections, and parallel guides therefor, whereby said upper section is spaced inwardly of the shaft a distance approximately equalling the thickness of the lower section, and a pocket is formed above said lower section and between said upper section and the wall of the shaft, an extension lintel formed of sheet metal bent to provide a top plate of a width substantially spanning the top of said pocket, a rear plate substantially closing the space between said top plate and the top of the upper door section, and a short counterweighting flange projecting from the bottom of said rear plate and parallel with said top plate, hinge brackets mounted upon the top of said upper door section, co-operating hinge brackets carried by said top plate, and a hinge pin co-operating with said brackets.

1,872,351. THIRD-RAIL SHOE. WILLIAM SCHAAKE, Pittsburgh, and DAVID E. RENSHAW, Forest Hills, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 20, 1930. Serial No. 437,480. 6 Claims. (Cl. 191—49.)



1. In a vehicle current-collector for engaging conductors, in combination, a plurality of shoes for engaging conductors, arms for carrying the shoes, pneumatically actu-

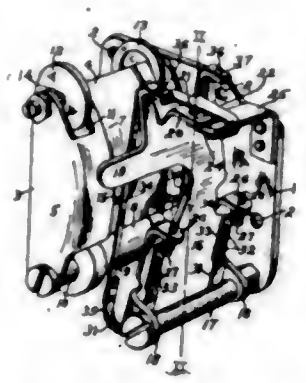
ated means for advancing the shoes to the conductor-engaging position, resilient means for retrieving the shoes from the conductor-engaging position, means for selecting the shoe to be operated, manually actuated means for controlling the admission of fluid under pressure to said pneumatically actuated means, electro-magnetic means responsive to the energization of the current collector for controlling the exhaustion of the fluid from said pneumatically actuated means, and means for controlling the rate of flow of the fluid.

1,872,352. PROCESS OF FORMING MARKED SURFACING. HARRY CHANDLER SCHLOSSER and WILLIAM HENRY SCHLOSSER, San Jose, Calif. Filed July 18, 1927. Serial No. 206,675. 2 Claims. (Cl. 18—48.8.)



1. The method of making a surface imitating that of veined natural stone which consists of laying out a layer of self-hardening material designed to give the appearance of the body of the surface, applying a thin layer of self-hardening material over the entire top surface of said layer designed to produce the veining, applying additional layers of body material and veining material alternately in such a manner that each layer covers the entire top surface of the subjacent layer, folding the ends of the stacked layers together over the center of the top of the mass, flattening out the mass and repeating the folding and flattening operations until the layers have been made quite thin to produce the desired veining, slicing the mass transversely of the layers, applying the slices to the article to be surfaced and allowing the slices to harden.

1,872,353. FILM GATE. WALTER A. SCHULZ, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 11, 1930. Serial No. 420,123. 6 Claims. (Cl. 88—17.)



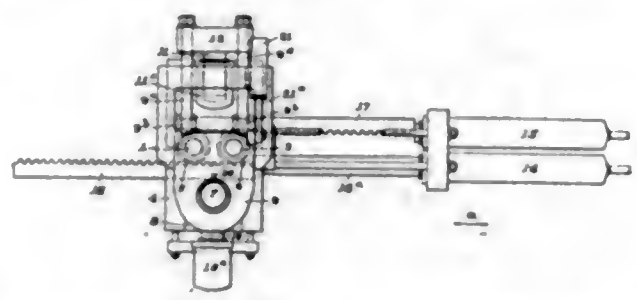
5. In film-handling apparatus an aperture plate, a shoe plate coacting therewith, at least one flexible strap on said shoe plate and spring means secured to said shoe plate and to an end of said strap to maintain said strap in a state of longitudinal tension.

6. In film-handling apparatus a curved aperture plate, a shoe plate coacting therewith, at least one flexible strap on said shoe plate and spring means secured to said shoe plate and to an end of said strap to maintain said strap in a state of longitudinal tension.

1,872,354. COMPOSITE CONDUCTOR. HOWARD SCOTT, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 8, 1930. Serial No. 427,060. 2 Claims. (Cl. 176—36.)

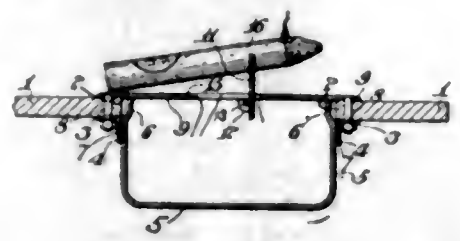
1. A composite wire comprising a core composed of an iron base alloy containing 25% to 34% nickel, 4% to 17% cobalt and a small percentage but not more than 1% of manganese, and an outer jacket formed of copper, the cross sectional area of the copper being maintained at 10% to 40% of the cross sectional area of the wire.

1,872,355. PLATE BENDING MACHINE. FRANK H. SMITH, Philadelphia, Pa., assignor to Southwark Foundry & Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 12, 1929. Serial No. 385,191. 1 Claim. (Cl. 153—61.)



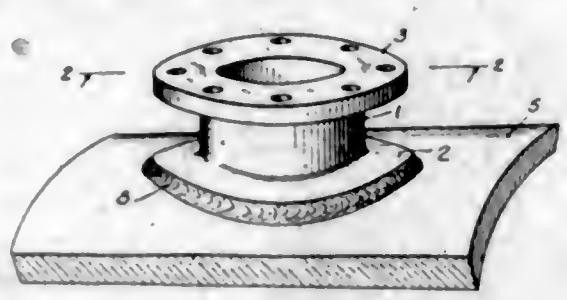
The combination of a frame, three bending rolls vertically mounted therein, pinions carried by a pair of said rolls, a pair of racks in parallel arrangement engaging the opposite sides of said pinions, bearings for the opposite ends of the several rolls; the upper bearings for the driven rolls being relatively fixed, adjustable bearings for the other roll, and means for displacing the bearing for the upper end of said latter roll comprising a swinging cylinder carried by the roll-supporting frame and a fluid operated piston rod therein pivotally connected to said displaceable means.

1,872,356. ASH RECEIVER. WINFIELD W. STEVENSON, Jr., Steinman, Va. Filed Apr. 6, 1931. Serial No. 527,038. 8 Claims. (Cl. 45—75.)



8. In combination with a board having an opening, a supporting member secured thereto adjacent said opening, an ash receptacle detachably secured to said support in register with said opening, a member upon the top of said board having an aperture communicating with said receptacle, and a flange on said receptacle offset inwardly from said detachable connection and abutting against said apertured member.

1,872,357. FORGED MANWAY CONSTRUCTION FOR PRESSURE VESSELS. STEPHEN STRATY, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Aug. 11, 1930. Serial No. 474,479. 3 Claims. (Cl. 220—76.)

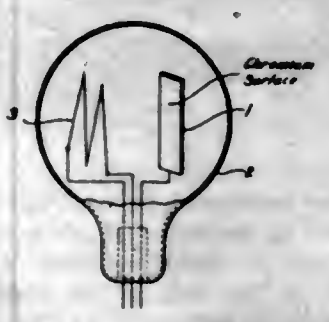


1. A forged manway for pressure vessels comprising a tubular body, a reenforcing flange at one end thereof, said flange being curved to conform to the curvature of the vessel wall to which the manway is to be attached, a connecting flange at the other end of said body, and a thin circular lip at the inner edge of said reenforcing flange adapted to extend into an opening in the vessel wall and to provide a welding groove therewith, said tubular body, flanges, and lip being forged from a single integral billet.

1,872,358. INSULATING MATERIAL. CHARLES A. STYER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 30, 1928. Serial No. 303,119. 10 Claims. (Cl. 154—2.6.)

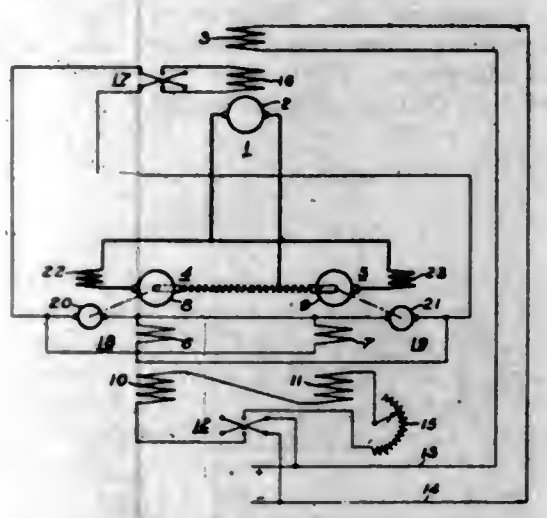
1. An insulating material comprising asbestos impregnated with an organic ester of phosphoric acid.

1,872,359. THERMIONIC RECTIFIER. LEE SUTHERLIN, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 11, 1927. Serial No. 225,605. 3 Claims. (Cl. 250—27.5.)



1. A rectifier having a cathode comprising a thermionically emissive material and a cooperating electrode coated with chromium.

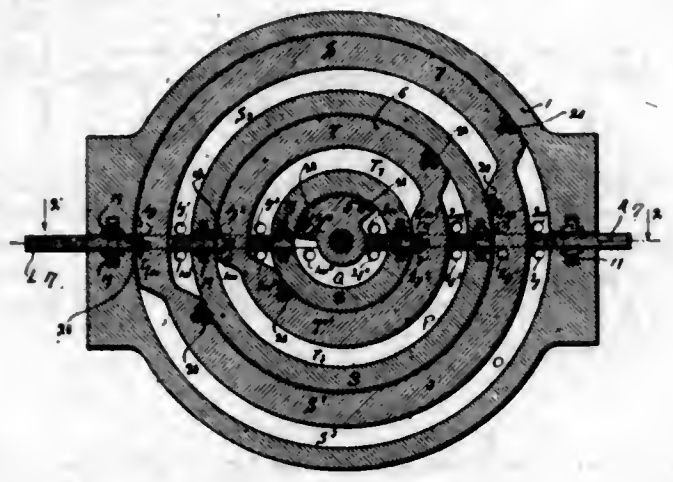
1,872,360. MOTOR CONTROL SYSTEM. WILFRED SYKES, Chicago, Ill., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 19, 1924. Serial No. 726,900. Renewed May 21, 1931. 5 Claims. (Cl. 172—289.)



1. The combination with a motor having a separately-excited field-magnet winding and an extra field winding, of a pair of mechanically-connected generators, an exciter for each generator, a field winding for each exciter being connected oppositely in circuit with said generators for rendering the excitation of one generator dependent upon the current traversing the other generator, means for reversing the polarity of said generators and of said exciters, and means for energizing said extra field winding from said exciters and for maintaining the proper relative excitation of said motor field windings.

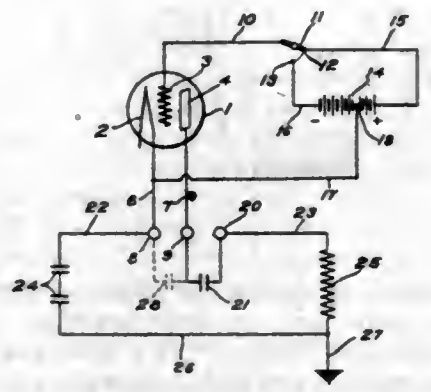
1,872,361. ROTARY ENGINE. JOHN TACKMAN, New York, N. Y. Filed Mar. 12, 1926. Serial No. 94,182. 21 Claims. (Cl. 121—74.)

1. An engine having multiple stationary cylinders arranged about a common axis in telescoped relation, annular rotor means arranged within each cylinder, said means adapted to be moved in unison about the common axis of said cylinders by expansive fluid admitted into the cylinders, and a plurality of one or more non-rotatable



means for each rotor means extending through and common to all of the cylinders and adapted to reciprocate as the rotor turns.

1,872,362. HIGH VOLTAGE TESTING SYSTEM. RAGNAR TANBERG, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 6, 1929. Serial No. 344,851. 7 Claims. (Cl. 175—183.)



1. The combination with a test circuit and a source of high voltage, of means for impressing said voltage on said test circuit at an accurately predetermined instant of time, said means including a spark gap, and a thermionic tube for changing the voltage across said spark gap to cause it to break down.

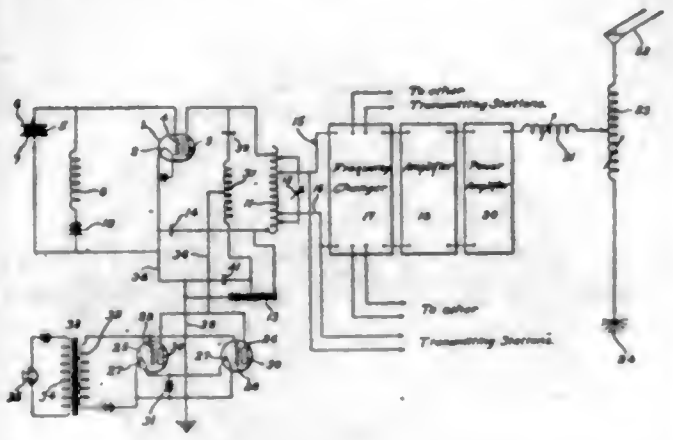
1,872,363. HEATING TUBE. RICHARD THURM, Saginaw, Mich. Filed Oct. 28, 1929. Serial No. 403,122. 2 Claims. (Cl. 257—192.)

1. The method of making heating tubes of the type described, which consists therein, that the tube to be used is first evacuated, then charged with the required quantity of a liquid alloy of alkali metals with each other, serving as heat-transferring medium, and thereafter hermetically closed under vacuum.

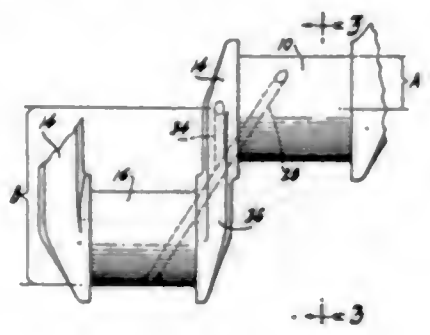
1,872,364. RADIOTRANSMITTING SYSTEM. VIRGIL E. TROUANT, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 8, 1927. Serial No. 224,869. 4 Claims. (Cl. 250—17.)

1. In an oscillation generator comprising a thermionic device having a tunable output circuit, a reactive network

connected across said circuit, a circuit including a space discharge path conductively connected in shunt to a portion of said network, and means for varying the conductivity of said path, whereby the frequency of the generated oscillations may be controlled.

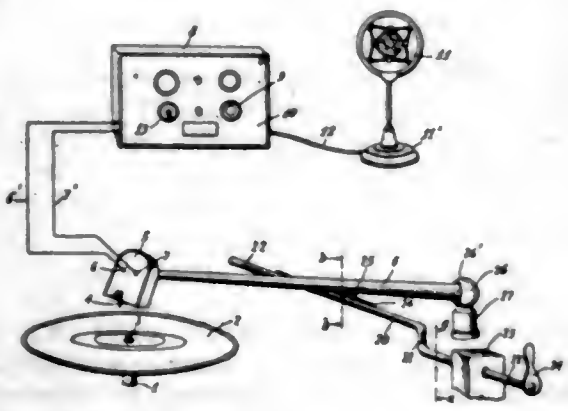


1,872,365. LUBRICATING SYSTEM. Arthur Francis Underwood, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 26, 1929. Serial No. 416,445. 10 Claims. (Cl. 184—6.)



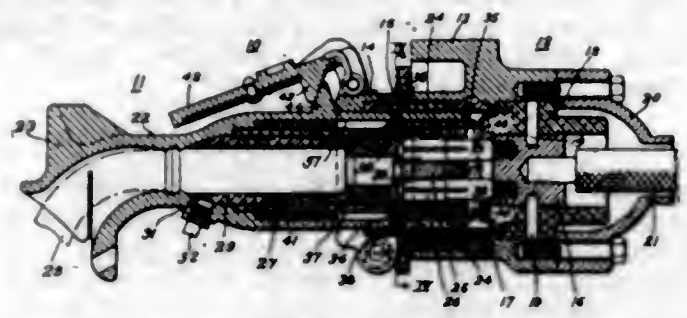
1. In a lubricating system for engines having a crankshaft having main and crankpin bearings, a lubricant passage in said shaft leading from a main bearing portion to a crankpin bearing, and means between a main bearing and a crankpin bearing connecting said passage with the exterior of the crankshaft, said means communicating with the atmosphere at all times.

1,872,366. PHONOGRAPH CONTROL. Arthur F. Van Dyck, Yonkers, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 27, 1931. Serial No. 540,285. 19 Claims. (Cl. 179—100.4.)



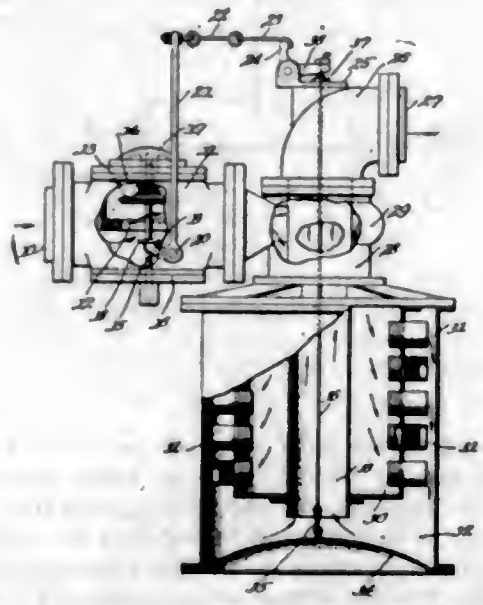
1. In combination, in a recording and reproducing arrangement, a tone arm provided with pick-up, a record, means for rotating said record, means for movably supporting said tone arm, and a single means having a portion of its surface serrated for simultaneously displacing said tone arm in a vertical and lateral direction.

1,872,367. BUS LINE JUMPER CONNECTER. Aaron L. Van Emden, Turtle Creek, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 11, 1929. Serial No. 354,283. 7 Claims. (Cl. 173—332.)



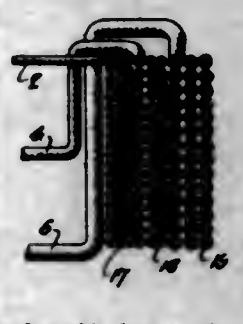
1. In a bus-line connecter, in combination, a hollow body member adapted to be inserted in a receptacle, a conductor carried by the body member, a contact-terminal member carried in the end of the body member having its contact terminals connected to the conductor, means inserted within said hollow body member to provide an annular recess extending longitudinally to the end portion which carries the contact terminal member adapted to receive a sleeve member, and a sleeve of insulating material carried in said annular recess, said sleeve being movable relative to the end of the contact-terminal member to prevent the establishment of an arc from the body member to energized contact terminals and to enclose arcs drawn between said terminals when the connecter is withdrawn from a receptacle.

1,872,368. BACK FIRE PREVENTER. William H. Van Horn, Baltimore, Md., assignor to The C. M. Kemp Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed Sept. 23, 1930. Serial No. 483,954. 10 Claims. (Cl. 137—162.)



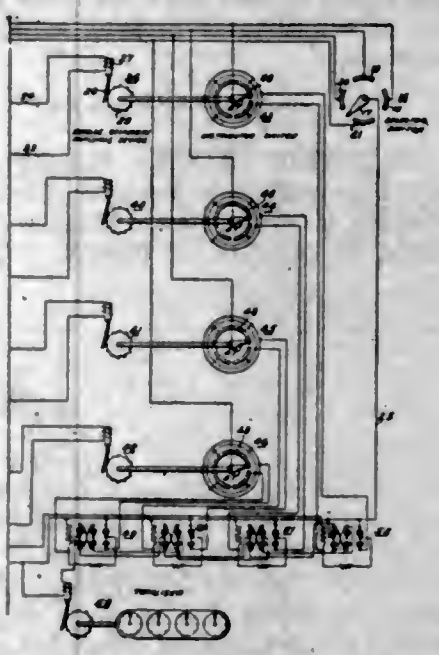
8. The combination with gaseous fuel supply and delivery pipes, and a valve controlling flow through the supply pipe, of two casings arranged one within the other, the inner casing having an inlet connected with the supply pipe and an outlet opening into the outer casing, means for interrupting the passage of flame through the outlet of the inner casing, the outer casing having a yielding wall and an outlet communicating with the delivery pipe, means acting to move the valve to closed position, and means for normally retaining the valve in open position and including a frangible connection with the yielding wall of the outer casing adapted to be destroyed by abnormally high temperatures.

1,872,369. COIL FOR CIRCUIT BREAKERS. ROSWELL C. VAN SICKLE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 9, 1927. Serial No. 211,687. 9 Claims. (Cl. 175—21.)



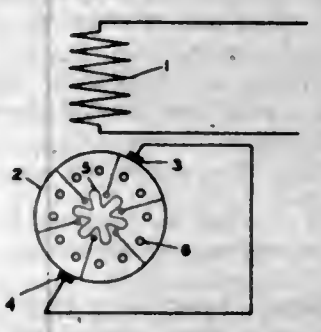
1. An actuating solenoid for a circuit interrupter having three separate windings each of a different size of wire, said windings each forming a separate circuit.

1,872,370. DEMAND TOTALIZER. GRIFFIN G. WAITE, Toronto, Ontario, Canada, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 24, 1927. Serial No. 242,511. 17 Claims. (Cl. 235—92.)



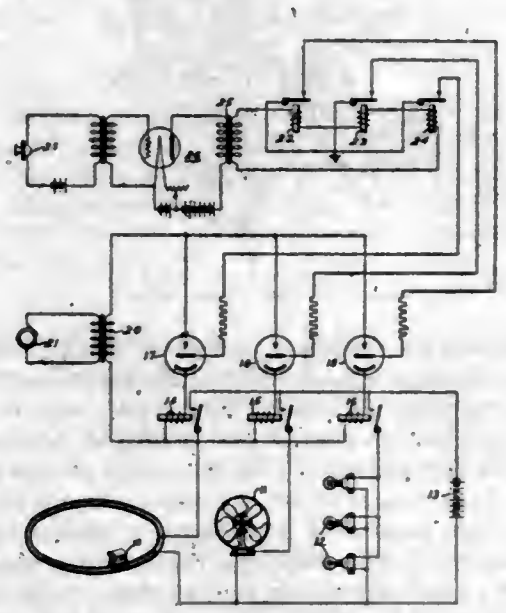
1. A totalizing system comprising a plurality of meters, circuit-controlling means actuated thereby, a selector switch, a relay associated with each meter, said relays being connected in a chain and controlled by said circuit-controlling means and said selector switch, for controlling the circuit through said chain to a device for totalizing the operations of the meters.

1,872,371. ALTERNATING CURRENT MOTOR. HANS WEICHSEL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Jan. 28, 1931. Serial No. 511,701. 1 Claim. (Cl. 172—277.)



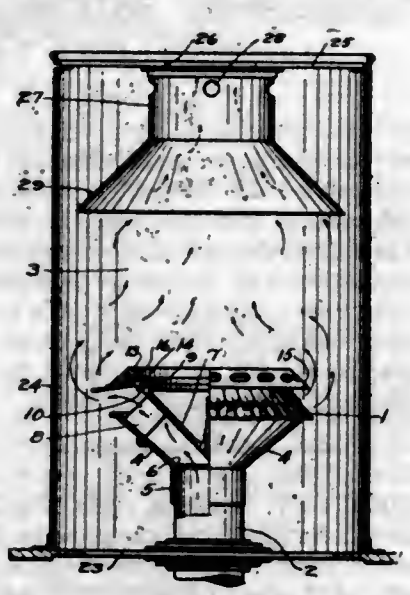
In a single phase motor, the combination of an inducing member, an induced member provided with a commuted winding and short-circuited brushes cooperating therewith, high resistance short-circuited coils on the induced member in good inductive relation with the commuted winding and extending over the entire portion of the induced member embraced by said commuted winding, the total resistance of all of said coils being such that the energy consumed thereby when normal line voltage is impressed upon the inducing winding and the brushes out of contact with the commutator, is not greater than the full load output of the motor.

1,872,372. ADVERTISING DEVICE. ROY J. WENSLEY, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 23, 1929. Serial No. 334,595. 3 Claims. (Cl. 40—52.)



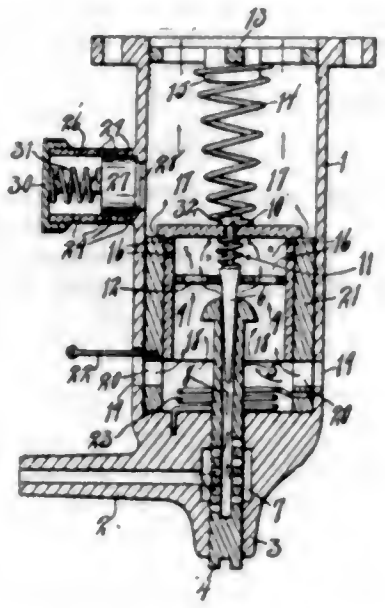
1. In an advertising device, a plurality of different devices the operation of which can be visually observed, all said devices being located within the field of view of a spectator, a sound-responsive device located where it can receive sounds uttered by said spectator and means responsive to the frequency of the sounds received in said sound-responsive device for controlling the operation of said first-named devices.

1,872,373. SPARK ARRESTER AND SILENCER. ARTHUR S. WHITEHEAD, Seattle, Wash. Filed Sept. 23, 1929. Serial No. 394,478. 13 Claims. (Cl. 183—94.)



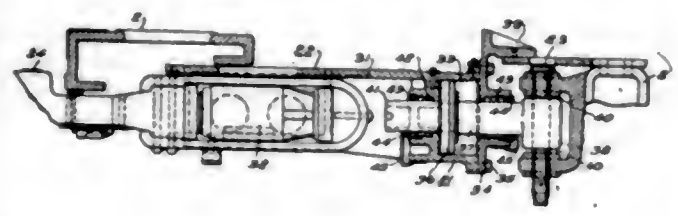
2. In a spark arresting apparatus, a conical shaped casing, an outwardly extending passage having a continuous opening extending around the periphery of the said casing, and a plurality of moving baffle plates pivotally mounted to extend across the outer end of the said opening.

1,872,374. CARBURETOR. SHEPARD W. WHITEHURST, Fort Worth, Tex. Filed May 13, 1930. Serial No. 451,890. 4 Claims. (Cl. 261—51.)



1. A carburetor having a casing provided with air and fuel intake ports, a sleeve valve rotatably mounted therein and provided with air intake ports and a cup valve longitudinally movable in said sleeve valve and forming a mixing chamber and provided with discharge ports at different distances from the head of the valve, means for holding said cup valve yieldingly downward, a needle valve operatively connected with said cup valve, and a seat for said needle valve provided with a fuel passage therethrough adjustably mounted in said casing and provided with lateral fuel intake ports.

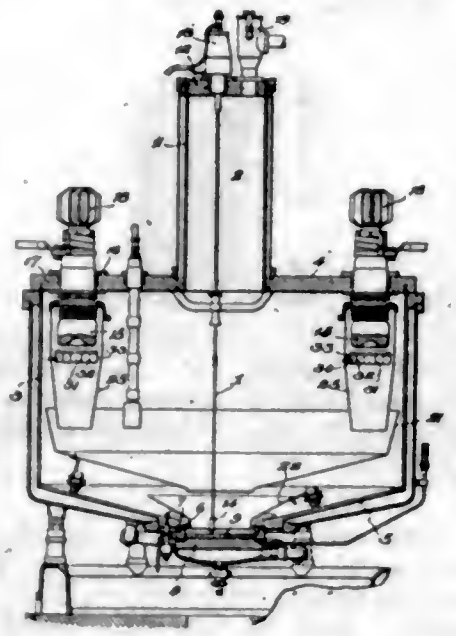
1,872,375. PROTECTIVE MEANS FOR RAILWAY VEHICLE MOTORS. CHARLES C. WHITTAKER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 7, 1928. Serial No. 324,444. 7 Claims. (Cl. 213—2.)



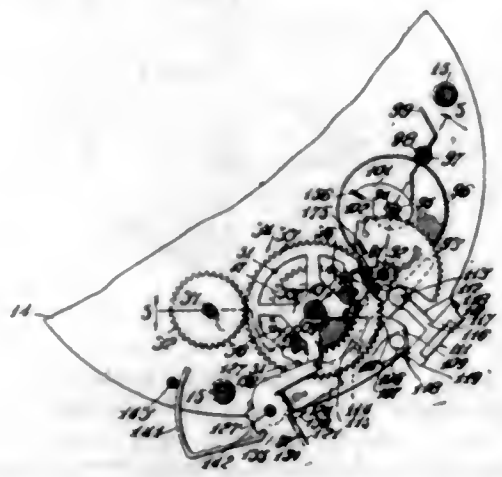
1. A protective device for permitting a locomotive to move relative to the train to which it is attached that comprises a hydraulic cylinder securely mounted in the locomotive, a piston in the cylinder, a draw-bar mechanism secured to the piston, and means for controlling the flow of fluid from one side of the piston to the other to permit the piston to move slowly within the cylinder in one direction and means for permitting the piston to move rapidly within the cylinder in the other direction.

1,872,376. MERCURY VAPOR RECTIFIER. STEFAN WIDMER, Baden, Switzerland, assignor to Brown, Boveri & Cie., Baden, Switzerland, a Corporation of Switzerland. Filed May 23, 1928, Serial No. 279,907, and in Germany June 11, 1927. 17 Claims. (Cl. 250—27.5.)

1. In a vapor discharge device, an anode having an active surface and a grid positioned at a short distance in front of said surface comprising sheet metal members subdividing the space in front of said active anode surface into a plurality of channels leading in the direction of the arc, the material forming said channels occupying a relatively negligible portion of the space in a direction transverse to the arc and leaving the space between said members unobstructed, the length of said channels being approximately of the order of the distance between said grid and said active anode surface.



1,872,377. ELECTRIC CLOCK. ROSCOE H. WILMETH, Springfield, Ill., assignor to Sangamo Electric Company, Springfield, Ill., a Corporation of Illinois. Filed May 10, 1930. Serial No. 451,216. 3 Claims. (Cl. 58—38.)

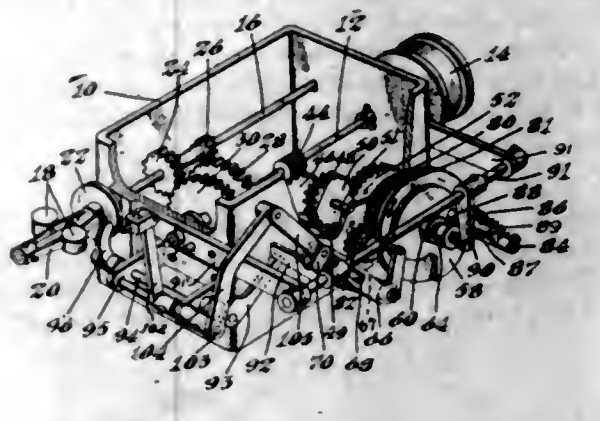


1. In combination, a clock movement, a main spring, connections between the two for operating the former by the latter, a striking mechanism, means for controlling the striking mechanism, a constantly energized electric motor, a gear train connecting the motor with the main spring for effecting winding of the spring by the motor, a differential in said train, and means on said differential for operating said striking mechanism, the differential transmitting all of the energy of the motor and a portion of the energy of the main spring to the striking mechanism during a striking period for operating said mechanism, should the motor fail, the differential transmitting energy from the main spring to the striking mechanism for operation thereof during a striking period, and should the main spring be unwound the differential transmitting energy from the motor to the striking mechanism for operating same during a striking period.

1,872,378. SPEED CONTROLLING MECHANISM. ERASTUS E. WINKLEY, Lynn, Mass. Filed July 26, 1929. Serial No. 381,144. 12 Claims. (Cl. 264—1.)

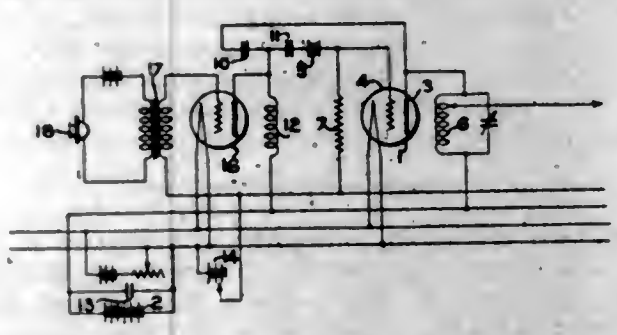
1. Speed controlling mechanism comprising a valve, power-operated elements running in opposite directions, a

spiral cam arranged to be rotated by one element or the other, an operating train of mechanism between the



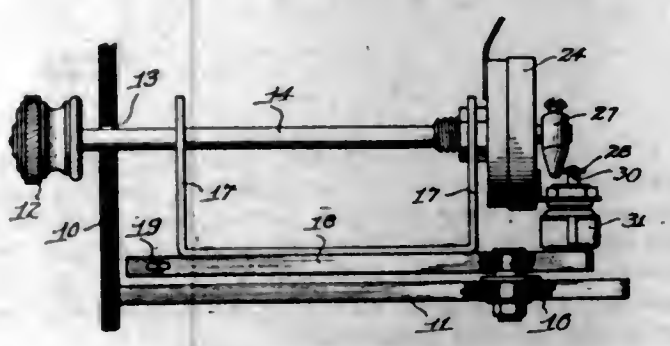
peripheral face of said cam and the valve, and governor-controlled means for determining which of said elements shall be effective.

1,872,379. FREQUENCY CHANGER. LESTER J. WOLF, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 9, 1927. Serial No. 238,824. 13 Claims. (Cl. 179—171.)



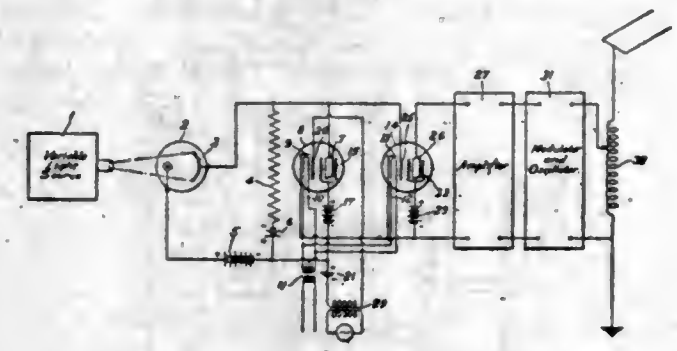
4. In combination, a mechanical vibratory device having a well marked tendency to vibrate at one period, means for deriving a periodic potential from the vibration of said device, means including an amplifier for impressing a periodic driving force on said device in accordance with said potential and means for altering the frequency of said device by adjusting the phase of said force.

1,872,380. RADIOCONTROL. ALVONI A. WOODS, Chicago, Ill., assignor to All-American Mohawk Corporation, Chicago, Ill., a Corporation of Illinois. Filed May 31, 1929. Serial No. 367,226. 8 Claims. (Cl. 74—7.)



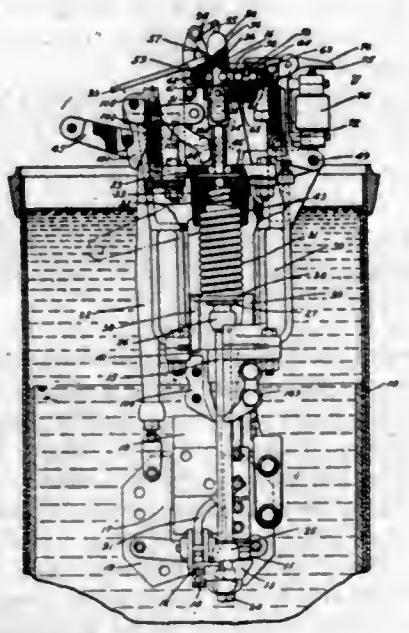
1. In a radio receiver, a base, a supporting member pivotally mounted on said base, control means mounted on said supporting member, an actuating knob for said control means rotatable on an axis extending transversely of the pivotal axis of said supporting member, and other control means operatively connected with said supporting member and actuated by pivotal swinging movement of said member effected through manual control of said knob.

1,872,381. PHOTOCELL AMPLIFIER. VLADIMIR K. ZWORYKIN, Collingswood, N. J., and HARLEY A. IAMS, San Diego, Calif., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 13, 1928, Serial No. 305,682. Renewed July 24, 1931. 10 Claims. (Cl. 179—171.)



1. In combination, a photo-cell, a resistor connected between the electrodes of said photo-cell, a vacuum tube the space-current path of which is connected in shunt to said resistor, and means for changing the condition of said vacuum tube between conducting and non-conducting at high frequency.

1,872,382. HIGH SPEED CIRCUIT INTERRUPTER. CHRISTIAN AALBORG, Pittsburgh, and JOHN B. MACNEILL, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 15, 1925. Serial No. 23,401. 23 Claims. (Cl. 200—89.)

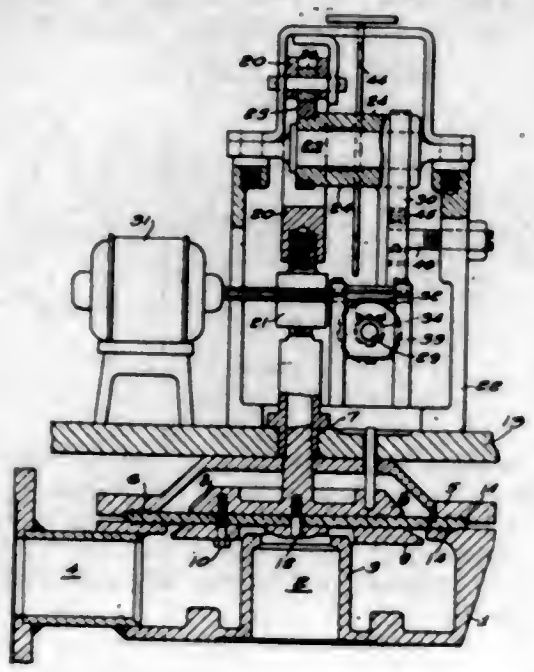


1. In a circuit interrupter, an operating member comprising a rod, contact members retained in engagement thereby, a pair of relatively movable collars mounted on the rod, and a pair of concentric coil springs disposed between the collars and each of said springs when stressed exerting force independently of the other on each of said collars.

1,872,383. AUTOMATIC VACUUM VALVE. WILLIAM B. ANDERSON, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 4, 1930. Serial No. 441,696. 4 Claims. (Cl. 137—139.)

1. An automatic vacuum valve comprising a valve chamber having an open top side and a passage in one of the remaining sides of the chamber, an upstanding tubular boss in the bottom of the chamber, a flexible diaphragm closing the open side of the chamber, a cover disposed above the diaphragm, an actuating member for the valve extending through said cover and operatively connected to said diaphragm, an eccentric operatively connected to the top of the actuating member to open the valve against the at-

mospheric pressure on the diaphragm, operating means for the eccentric comprising a gear segment operatively connected thereto, a motor-driven gear driving the segment to open the valve, means for locking the segment in position



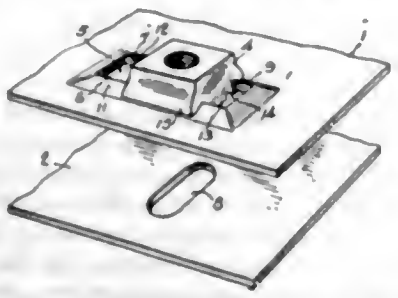
to hold the valve open, means for tripping the locking means, and means for returning the segment to its initial position, the valve closing automatically on release of the locking means.

1,872,384. METHOD OF STRAIGHTENING PIPE. BIRGER TORVALD ANDREN, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Apr. 19, 1929. Serial No. 356,517. 4 Claims. (Cl. 29—156.)



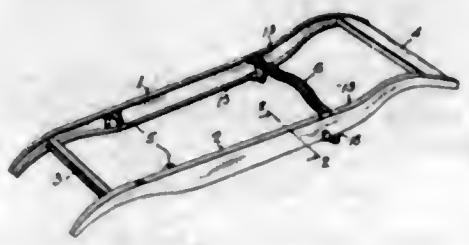
1. The method of straightening a metal pipe section having a single longitudinal electrically welded seam the cooling of which from the welding temperature has deformed the pipe from the desired cylindric shape, the steps comprising applying pressure simultaneously to the entire length of the pipe section transversely thereof and in the axial plane bisecting the welded seam to deform the pipe oppositely to the existing deformities, and thereafter applying additional transverse pressure sufficient to flow the metal of the section radially while maintained in its oppositely deformed condition, the deforming and upsetting pressures being of such order that the section thereby assumes substantially true cylindric form.

1,872,385. CONNECTING PARTS. BIRGER T. ANDREN, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Apr. 2, 1930. Serial No. 441,056. 13 Claims. (Cl. 29—148.)



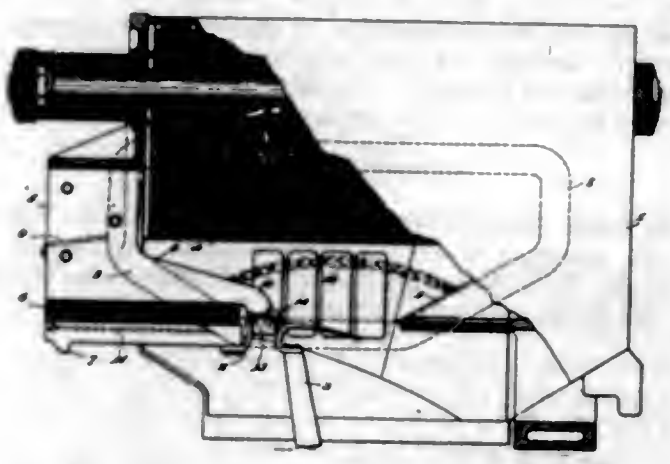
2. A method of connecting members which comprises providing the respective members with slots, deforming the longitudinal marginal portions of the slot in one of said members to form a recess upon the face of the last named member, attaching a nut to one of said members so that the same is slidable in the slot thereof, arranging the members in juxtaposition with the recessed face of one of the members in engagement with the face of the other member and with the slots extending in an angular relation to each other, and passing a threaded member through the locking means.

1,872,386. AUTOMOBILE FRAME. BIRGER T. ANDREN, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed May 2, 1930. Serial No. 449,236. 9 Claims. (Cl. 280—106.)



1. In an automobile frame, a channel side bar having horizontal flanges, a sheet metal channel cross bar having the flanges thereof extending in substantially vertical planes and having horizontal webs extending laterally from each flange, one flange of said cross bar being flattened at the end to provide a gusset for attachment to a flange of the side bar, and a vertically extending plate attached to the other flange of said cross bar and having a horizontal portion attached to the other flange of said side bar.

1,872,387. CIRCUIT BREAKER. BENJAMIN P. BAKER, Turtle Creek, and ROBERT C. DICKINSON, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 11, 1929. Serial No. 391,734. 22 Claims. (Cl. 200—147.)

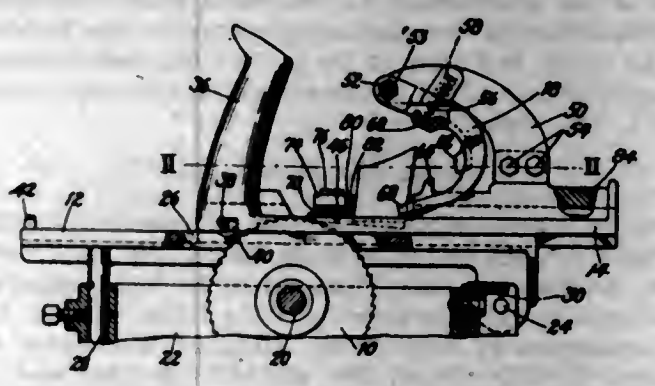


1. Circuit-interrupting means comprising means for establishing an arc, an arc-extinguishing device associated therewith, a normally deenergized winding associated with the said device, means including a portion of said arc for inserting said winding in circuit with another portion of said arc, and magnetic means for initially moving the arc until said winding is energized.

1,872,388. MACHINE FOR OPERATING UPON HEELS. LEWIS J. BAZZONI, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 15, 1929. Serial No. 340,158. 41 Claims. (Cl. 12—42.)

4. In a machine for grooving the breasts of heels, in combination, a heel support and a groove-forming device

relatively movable to form a groove in the breast of a heel resting breast face down upon said support, and self-adjustable means for positioning the heel upon the support relatively to the groove-forming device to insure forming the groove in coincidence with the heightwise median line of the heel breast.

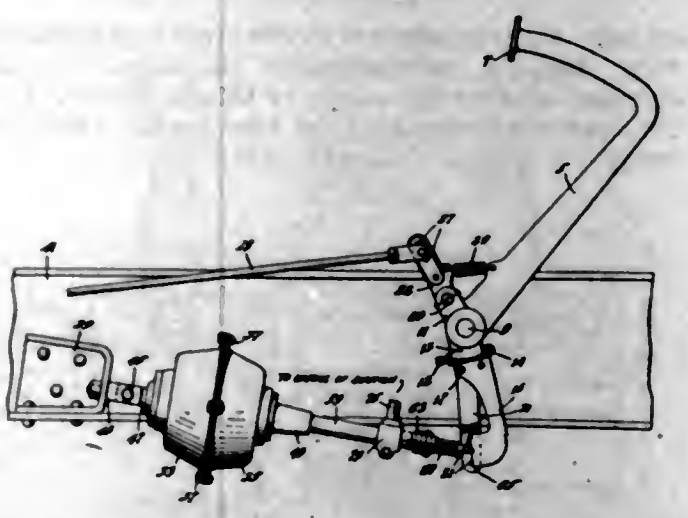


1,872,389. PROCESS FOR MANUFACTURING A TRIMMING MATERIAL OR CLOTH. AARON BENOWITZ, New York, N. Y., assignor, by mesne assignments, to Synthetic Fur Mills Corp., New York, N. Y., a Corporation of New York. Filed Aug. 11, 1931. Serial No. 556,842. 2 Claims. (Cl. 41—34.)



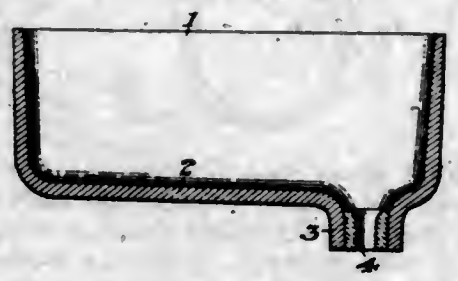
2. A process of producing trimming material or cloth, hand woven, or manufactured, comprising the steps of using a card clothing provided with fine wire threads, the lay out, according to a design, of a yarn or chenille between said wire threads in a compact manner to form a cloth-like material, and attaching to the latter, by placing on top thereof and exerting a slight pressure, a rubberized cloth, whereupon the said ensemble, when disengaged from the said card clothing is submitted to a slight pressing, substantially as shown and described.

1,872,390. VACUUM SERVO BRAKE. GEORGE P. BERRY, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 17, 1929. Serial No. 386,502. 12 Claims. (Cl. 188—152.)



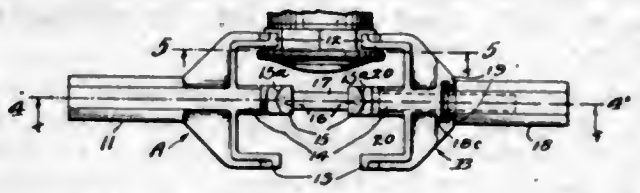
1. In Servo power mechanism, a manually operated member, a pivot therefor, a second member directly pivoted to said manually operated member at a point thereon removed from the pivot thereof, means affording a limited relative movement between said members, means connected to said second member whereby said member may by its movement perform work, a power element having a movable part connected to said second member and a control device for rendering said power element active, mechanism moved by said manually operated member to actuate said control device.

1,872,391. CRUCIBLE FOR ALUMINO-THERMIC REACTIONS. EDWARD F. BEGTRUP, Jersey City, N. J. Filed Apr. 7, 1932. Serial No. 603,799. 5 Claims. (Cl. 263—48.)



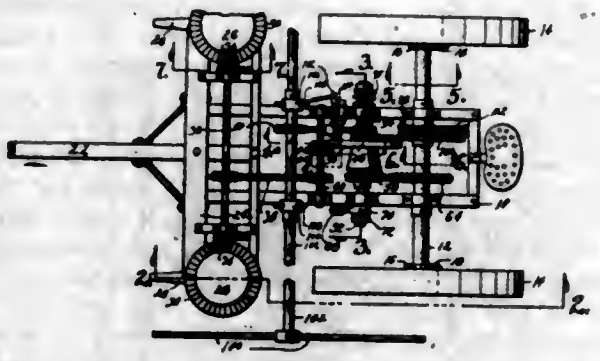
1. A crucible for alumino-thermic and similar reactions having basin-defining walls, including the bottom, of non-refractory material, said basin being of shallow depth as compared with its capacity and the bottom being of relatively large superficial area.

1,872,392. WRENCH FOR AUTOMOBILE HUB CAPS. WALTER A. BISHMAN and HAROLD G. LIEN, Minneapolis, Minn. Filed Mar. 20, 1929. Serial No. 348,579. 3 Claims. (Cl. 81—186.)



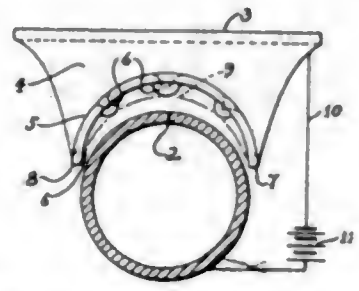
1. A wrench comprising a pair of cooperating jaw heads, means for connecting said heads for movement together and apart, said heads rigidly carrying cooperating L-shaped jaw elements projecting laterally therefrom, the turned ends of said L-shaped elements extending inwardly and terminating in opposed angularly shaped gripping edges, said elements defining a large recess disposed inwardly of said extremities and between the inner ends of said jaw heads whereby an outwardly projecting enlargement of an object to be turned may be accommodated.

1,872,393. CHECK ROW PLANTER. HUGH E. BISHOP, Udell, Iowa. Filed Mar. 10, 1930. Serial No. 434,611. 3 Claims. (Cl. 111—16.)



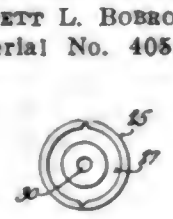
1. In a check row planter, a frame, traction wheels therefor, a clutch shaft journalled thereon, a clutch on said shaft, a grain container, mechanism for dispensing grain therefrom, an operative connection between said clutch and said mechanism, said connection comprising a notched disk driven by the clutch, a star wheel coacting therewith, a pair of teeth carried by said disk adjacent the notch therein and a pair of teeth adjacent said star wheel for each point thereof.

1,872,394. PROJECTION WELDING. CLARENCE E. BLEICHER, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 13, 1930. Serial No. 495,446. 9 Claims. (Cl. 219—10.)



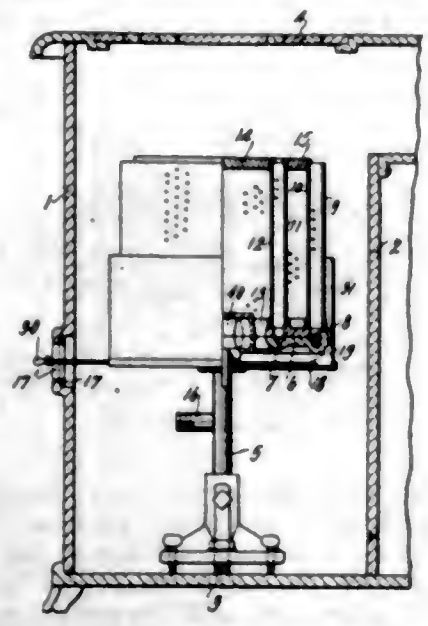
3. The method of welding together a pair of members having concave and convexed contacting surfaces respectively which consists in forming a series of spaced protuberances on the concaved contacting surface of one member which decrease successively in depth from the central portion of said concaved contacting surface to the outer portions thereof and which have extremities located on a curvature which is substantially identical to the curvature of the convexed surface of the other member, placing said members together with all of said projections of the one member contacting with the convexed surface of the other member, and fusing said projections and the areas of the convexed surface with which they contact.

1,872,395. SWITCH CONSTRUCTION FOR SIGNALING SYSTEMS. BORNETT L. BOBROFF, Racine, Wis. Filed Nov. 6, 1929. Serial No. 405,105. 16 Claims. (Cl. 200—4.)



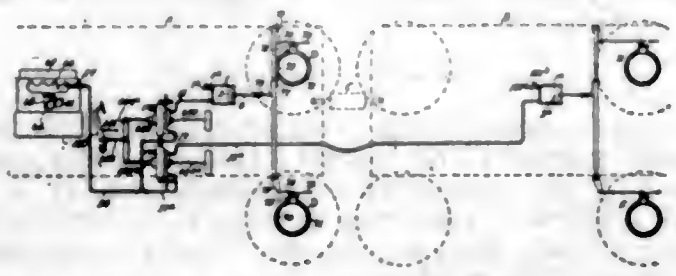
1. A signal switch for automotive vehicles comprising supporting means, a contact carrying member carried by said supporting means and having a plurality of contacts, conductors connected to said contacts, and a complete switch unit carried by said supporting member and having a plurality of terminal members, the contacts and terminal members being yieldingly held together.

1,872,396. AIR SUPPLY CONTROL MEANS FOR OIL BURNERS. JOSEPH AVILA BOURBONNAIS, Holyoke, Mass. Filed Sept. 23, 1930. Serial No. 483,785. 7 Claims. (Cl. 158—86.)



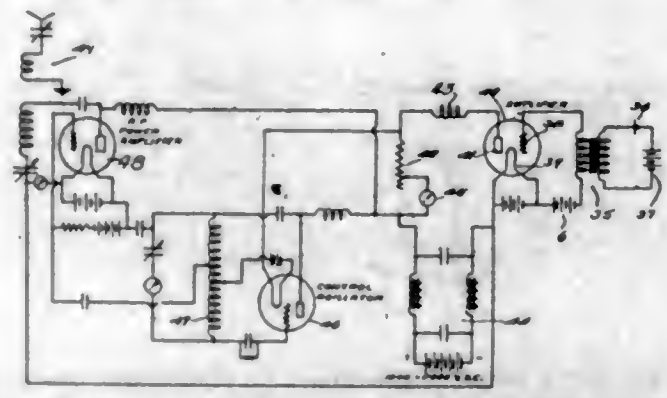
1. The combination with a vaporizing oil burner comprising a base with a plurality of fuel receiving troughs in air spaced relation and having vertically extended above the same spaced perforated shells to provide combustion chambers therebetween, of air supply control means for said burner comprising a pair of superposed intersliding perforated plates mounted beneath said burner base, a portion of the perforations in the plates being arranged to provide adjustable ventilating apertures for the underside of the burner and other of the perforations being arranged to continuously afford a non-adjustable minimum ventilation to the burner.

1,872,397. BRAKE SYSTEM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Original application filed Sept. 1, 1928, Serial No. 303,413. Divided and this application filed Sept. 12, 1929. Serial No. 392,005. 8 Claims. (Cl. 188—3.)



1. In a vacuum brake system for automotive vehicles, the combination with a plurality of independently operable brake mechanisms and a plurality of power actuators each of which is connected with certain of said brake mechanisms only, of a plurality of valve mechanisms each controlling one of said actuators only, and each provided with relatively movable parts subjected to differentials of fluid pressures corresponding to those to which a movable part of the actuator which it controls is exposed and acting on the valve mechanism in a direction to prevent further increase in said differential of fluid pressures, a single operator operated part operatively connected with each of said valve mechanisms, separate yielding means acting upon each valve mechanism in opposition to the differential of fluid pressures thereon, the corresponding faces of the parts of said respective valve mechanisms exposed to differentials of fluid pressures being of substantially equal area, and said separate yielding means exerting different degrees of tension on the valve mechanisms connected respectively therewith, and means for connecting each actuator with sources of higher and lower fluid pressures through the controlling valve mechanism therefor.

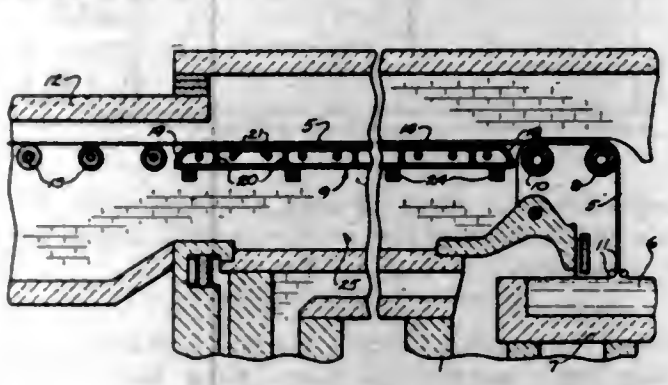
1,872,398. SUPPRESSED WAVE RADIO CARRIER SYSTEM. HUGH A. BROWN, Urbana, Ill., assignor to Board of Trustees of the University of Illinois, Urbana, Ill., a Corporation of Illinois. Filed July 1, 1925. Serial No. 40,725. 8 Claims. (Cl. 179—171.)



8. In combination, an oscillator for producing radio frequency waves, modulating means for controlling said oscillator, a source of uni-directional current, a resistance connected between said source and said modulating means to conduct current from the source thereto, means for im-

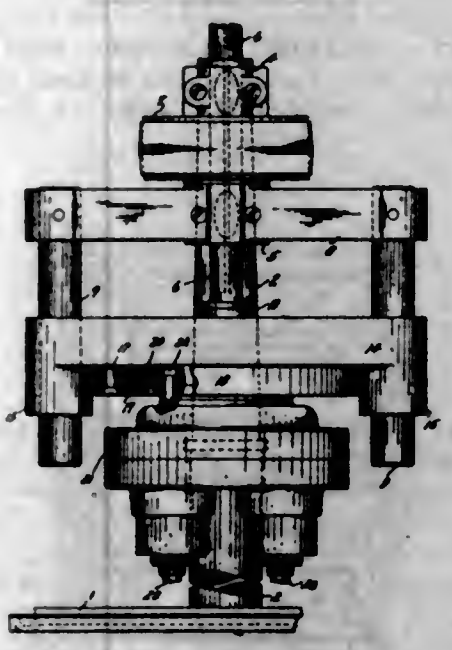
pressing the voltage drop across said resistance upon said oscillator to cause it to emit radio-frequency oscillations of fixed frequency and amplitude, and means for controlling said modulator to cause it to draw varying amounts of current from said source to thereby vary the voltage impressed upon said oscillator to control the amplitude of said oscillations.

1,872,399. SHEET GLASS APPARATUS. WILBUR F. BROWN, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 26, 1929. Serial No. 381,147. 3 Claims. (Cl. 49—17.)



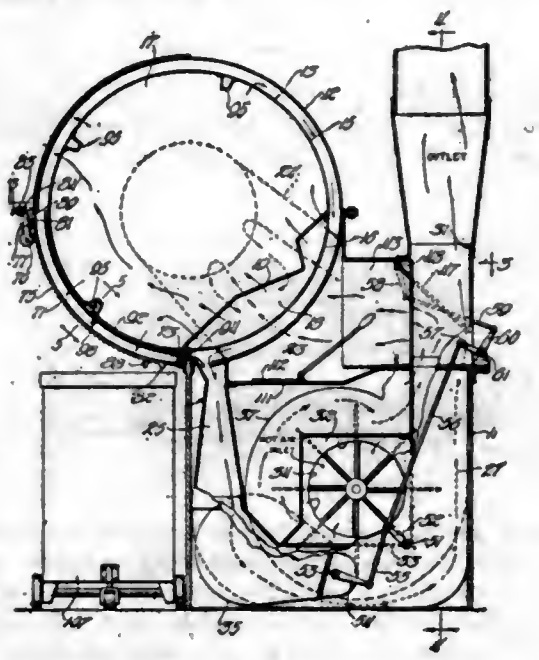
3. In apparatus for producing sheet glass, a receptacle containing a bath of molten glass, a horizontal rotatable bending member mounted above said receptacle, a rotatable supporting member spaced from and in horizontal alignment with the bending member, an annealing leer, a plurality of horizontally arranged rolls positioned within the leer forwardly of the rotatable supporting member and in horizontal alignment therewith, said rolls being adapted to draw a sheet vertically from the molten bath and deflect the same about the bending member into the horizontal plane, a stationary horizontal flattening table interposed between said rotatable supporting member and leer rolls for receiving the sheet directly thereupon from the former and from which the sheet passes directly onto the latter, and means for heating said flattening table.

1,872,400. DRILLING MACHINE. JOSEPH F. BUHR, Detroit, Mich. Filed Apr. 17, 1926. Serial No. 102,619. 5 Claims. (Cl. 77—28.)



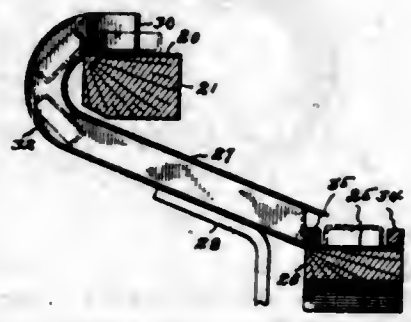
1. In a drilling machine, a bracket, depending guides carried by the ends of said bracket, a rotary and vertically adjustable spindle intermediate the ends of said bracket, a cross head slidable on said guides and supported from said spindle, and a drill head supported from the lower face of said cross head between said guides.

1,872,401. LAUNDRY APPARATUS. OTTO BUTZBACH, Chicago, Ill. Filed Dec. 31, 1928. Serial No. 329,462. 11 Claims. (Cl. 34—5.)



1. In a drying apparatus, a fan, an exhaust stack, a cylinder, a casing enclosing the cylinder, means operable to cause said fan to discharge either into the stack or into the cylinder, an intake chamber for the fan, a heating chamber, and means for connecting said intake chamber either to the heating chamber or to the casing to withdraw air therefrom.

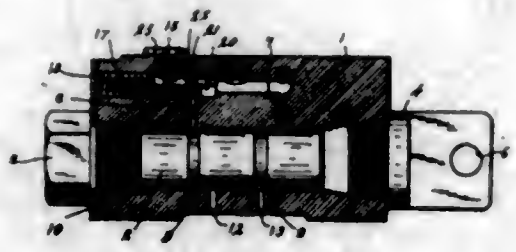
1,872,402. TRANSFER MECHANISM. ZENAS P. CANDEE, Waterbury, Conn., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn., a Corporation of Connecticut. Original application filed Jan. 2, 1930, Serial No. 418,028. Patent No. 1,805,976. Divided and this application filed Jan. 26, 1931. Serial No. 511,327. 2 Claims. (Cl. 198—33.)



1. In a transfer mechanism, a movable conveyor belt, a delivery conveyor belt below the plane of the first belt and means for transferring work from the movable conveyor belt to the delivery conveyor belt and during such transfer, turning the work so that it will be delivered to the delivery conveyor belt in a position the reverse of its former position when on the movable conveyor belt, the axis of the work upon both belts being in approximately the same plane, including a chute having top, bottom, and side walls disposed transversely of the line of flight of the belts and having an angular mouth which reflects work from the first belt transversely thereof and under the influence of gravity into the chute, having an outlet for discharging the work onto the delivery belt and terminating adjacent one side of the latter, one side wall of the chute being continued beyond the outlet end thereof and extending transversely across the delivery belt, a guide member connected to the opposite side wall adjacent the outlet end of the chute and extending at substantially a right angle to said side wall, and a guide member carried by said wall extension and extending substantially parallel to the sides of said belt, the side wall extension preventing movement of the work longitudinally of the

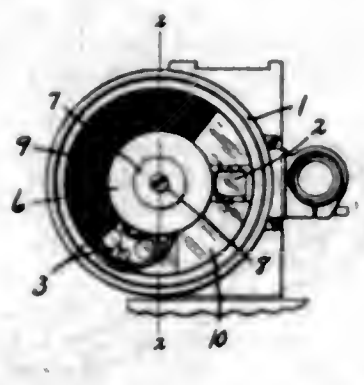
delivery belt excepting in the direction of the line of flight of the delivery belt and said guide members preventing movement of the work transversely of the line of flight of the delivery belt and outwardly beyond the same.

1,872,403. VIBRATOR DEVICE. GUY L. CANNON, East Cleveland, Ohio. Filed Jan. 2, 1930. Serial No. 417,903. 7 Claims. (Cl. 121—17.)



1. A fluid motor, comprising a housing, a plunger reciprocable therein, ports for supplying pressure fluid to each end of the plunger, an inlet communicating with said ports, an exhaust-vent communicable with one such supply-port, a member in relation with said exhaust-vent and said last-named supply-port held by fluid-pressure when the line-pressure is on whereby to open the inlet to said supply-port and close the vent, and resilient means to move said member when the line-pressure is off whereby to close the inlet to said supply-port and open the vent.

1,872,404. CAMERA SHUTTER. THEODORE WILLARD CASE, Auburn, N. Y., assignor to Case Research Lab. Inc., Auburn, N. Y., a Corporation of New York. Filed Mar. 4, 1927. Serial No. 172,912. 3 Claims. (Cl. 88—19.3.)

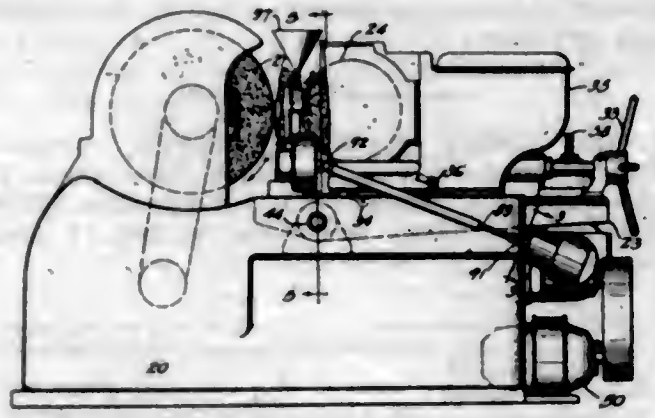


1. In combination, a shutter shaft for moving picture machines having a reduced end portion, a solid glass shutter disk having optically transparent and opaque portions and provided with a central aperture for snugly fitting on the reduced end portion of said shaft, bracing disks disposed on the reduced end of the shaft at opposite sides of the central portionof said shutter disk, and means to secure the bracing disks and shutter disk upon the shutter shaft in contiguous relation to turn with said shaft.

3. In combination, a shutter shaft for moving picture machines, a solid glass shutter disk, a continuous approximate one half of which is uniformly transparent and the other continuous approximate half of which is rendered uniformly opaque, and means for mounting said disk on the end portion of said shaft.

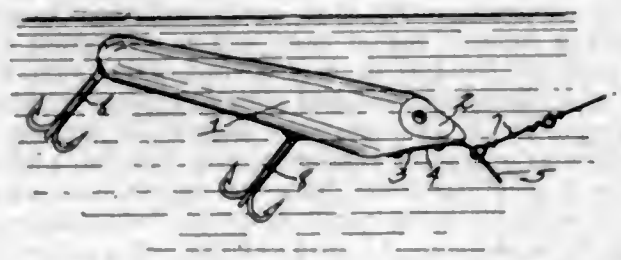
1,872,405. GRINDING MACHINERY. JOHN E. CASTER, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 28, 1929. Serial No. 350,680. 19 Claims. (Cl. 51—103.)

1. A centerless grinder including a bed, opposed grinding and regulating wheels carried by the bed, means for rigidly supporting one of said wheels, a pivoted support for the other of said wheels, work advancing means intermediate the wheels, and a common means for moving the



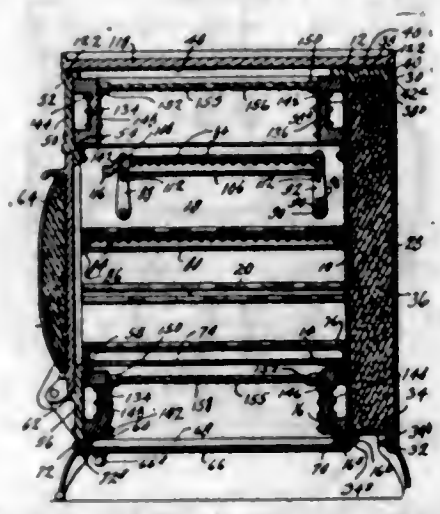
support about its pivot to vary the separation of the wheels and to operate the work advancing means during such separation.

1,872,406. FISHING LURE. LOUIS A. CHAPLEAU, South Bend, Ind., assignor to South Bend Bait Company, South Bend, Ind. Filed May 19, 1930. Serial No. 453,568. 1 Claim. (Cl. 43—46.)



In a fishing lure, a plug type body having upper and lower converging faces formed at the forward end thereof, and a plate carried by said lower face and terminating in a portion inclined forwardly downwardly from the front end of the body and at substantially the same inclination as said upper face, the said side edges of said plate forming a continuation of the stream lines of said body.

1,872,407. HEATING ELEMENT AND SUPPORT THEREFOR. SAM CHRISTY, Des Moines, Iowa. Filed Oct. 22, 1928. Serial No. 314,083. 5 Claims. (Cl. 201—63.)



1. In a device of the class described, a resistance unit comprising an insulator core having a resistance wire wound thereon, metal caps for the ends of said core and means of connection between said resistance wires and

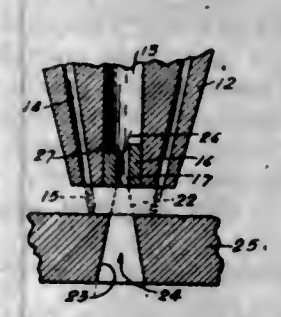
said caps comprising crossed slots in the ends of said cores for receiving the ends of the resistance wire, first in one slot, then around the periphery of the core, then through the other slot and contacting with the wire therein after which the caps are forced onto the ends of the core and over the ends of the resistance wire.

1,872,408. CUTTING TORCH STRUCTURE. CLARENCE J. COBERLY, Los Angeles, Calif., assignor to Kobe, Inc., Huntington Park, Calif., a Corporation of California. Filed Feb. 4, 1930. Serial No. 425,839. 19 Claims. (Cl. 266—23.)



1. In a torch structure, the combination of: a supporting means; a torch; ball and socket means for pivotally conencting said torch and said supporting means; and adjusting means for controlling the pivoting action of said torch relative to said supporting means.

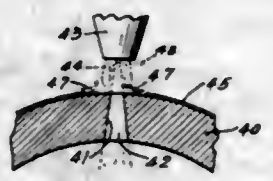
1,872,409. TORCH TIP. CLARENCE J. COBERLY, Los Angeles, Calif., assignor to Kobe, Inc., Huntington Park, Calif., a Corporation of California. Filed Apr. 15, 1930. Serial No. 444,491. 14 Claims. (Cl. 158—27.4.)



1. A cutting tip of the character described having a gas passage terminating in a discharge mouth and means in said gas passage adjacent to said discharge mouth for producing sufficient turbulence in the flow of gas which issues from said discharge mouth to produce a diverging cutting jet which will cut a slot having diverging walls.

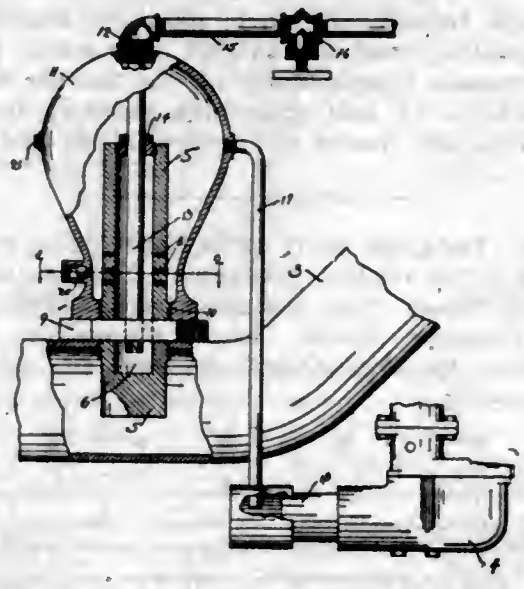
1,872,410. METHOD OF CONTROLLING SCALE IN GAS CUTTING OF METALS. CLARENCE J. COBERLY, Los Angeles, Calif., assignor to Kobe, Inc., Huntington Park, Calif., a Corporation of California. Filed Apr. 15, 1930. Serial No. 444,493. 4 Claims. (Cl. 148—9.)

1. A method of controlling scale in gas cutting of metals having scale thereon, comprising heating the scale in the zone of the cut to be made to a temperature between 250° F. and 350° F. preliminary to application of the cutting torch to make such cut and at a time sufficiently ahead of said



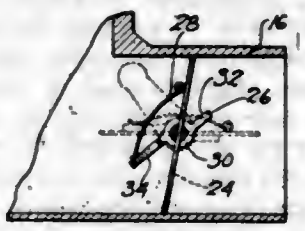
cut to permit complete conditioning of said scale against disruptive action of the scale in the presence of the cutting plane.

1,872,411. DEVICE FOR REDUCING CARBON MONOXIDE IN HYDROCARBON ENGINES. CHARLES C. COHEE, Indianapolis, Ind. Filed Jan. 13, 1930. Serial No. 420,602. 3 Claims. (Cl. 123—25.)



1. In a hydrocarbon explosion engine, an exhaust manifold and a carbureter having an air intake in combination with a steam generator comprising a member extended into the manifold and into a steam dome, an inlet pipe projecting into the member with means to cause water to drip into the member, a steam dome around the outlet from the generator and a conduit between the dome and the air inlet.

1,872,412. CHOKE VALVE FOR CARBURETOR. DON COLE, Evanston, Ill. Filed Dec. 15, 1930. Serial No. 502,354. 7 Claims. (Cl. 277—23.)

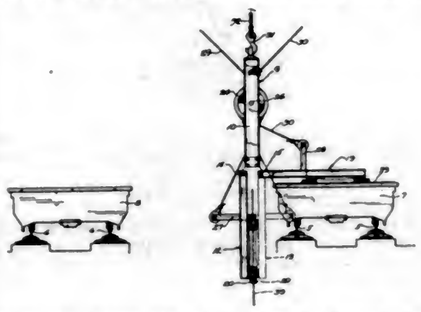


1. A carburetor choke comprising a manually operable valve having an opening, a valve operating shaft, and a spring loaded secondary valve rotatable on the shaft for controlling said opening and movable to open position when the manually operable valve is closed.

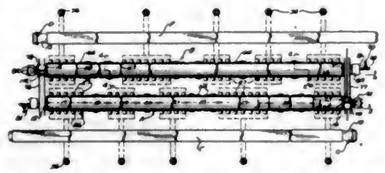
1,872,413. GLASS HANDLING APPARATUS. JOSEPH P. CROWLEY, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 27, 1929. Serial No. 374,119. 2 Claims. (Cl. 294—65.)

1. In sheet glass handling apparatus of the character described, a supporting member, a pair of normally verti-

cally positioned frames pivotally connected thereto at their upper ends and adapted to swing upwardly to a substantially horizontal position and downwardly back to a substantially vertical position, sheet lifting means carried by said frames and which, when the frames are in vertical position, face one another, and means for moving said frames independently of one another including pulleys carried by said supporting member, and cables connected to said frames and trained about said pulleys.



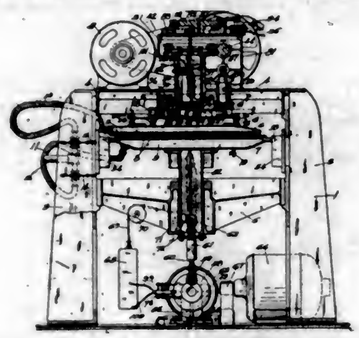
1,872,414. PROCESS AND APPARATUS FOR PRODUCING MOLTEN GLASS. JOSEPH P. CROWLEY and JOHN C. GIPE, Toledo, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 15, 1929. Serial No. 399,780. 10 Claims. (Cl. 49—59.)



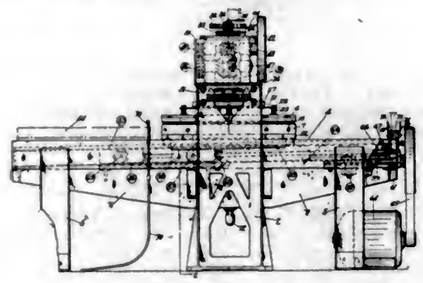
1. In combination, a pair of continuous pot furnaces for melting glass, each having a plurality of moving carriers therein supporting a plurality of portable pots within which the molten glass is produced, said furnaces being arranged side by side and extending substantially parallel with one another with the outlet end of one furnace opposite the inlet end of the adjacent furnace, transfer means between the furnaces at their ends so that the moving carriers issuing from the outlet end of one furnace may be transferred to the inlet end of the adjacent furnace, a sheet glass forming mechanism associated with each furnace, each sheet forming mechanism including a rolling machine positioned opposite the outlet end of its respective furnace and a longitudinally extending annealing leer arranged at the side of and extending parallel with the adjacent furnace outwardly thereof, and means for removing the portable pots from the carriers as they issue from the furnaces, discharging the molten glass therefrom to the respective rolling machine, and replacing the pots upon the carriers.

1,872,415. GRINDING SHEET GLASS. JOSEPH P. CROWLEY, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 23, 1921. Serial No. 502,655. 1 Claim. (Cl. 51—278.)

The continuous method of grinding glass sheets in a mechanism wherein two sheets are held in grinding contact by a pair of opposed sheet supporting tables, each table removably holding one of the sheets, consisting in separating the tables, removing the completely ground sheet, bringing the tables together, transferring the sheet between the tables from one table to the other, so that its unground face is now unattached, separating the tables, inserting an unground sheet on the unoccupied table, bringing the tables together, and imparting grinding movement to one of the tables, and again separating the tables, whereby one sheet is now completely ground and ready for removal, and the other sheet is ground on one side and ready for transfer to the other table.

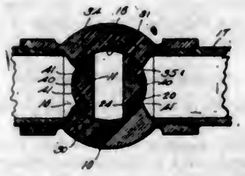


1,872,416. APPARATUS FOR GRINDING SHEET GLASS. JOSEPH P. CROWLEY, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 2, 1922. Serial No. 579,093. 23 Claims. (Cl. 51—120.)



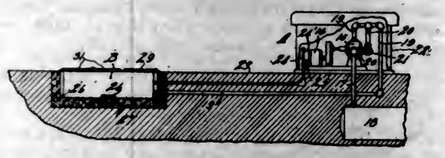
1. In a sheet glass grinding apparatus, means to impart to a sheet of glass a continuous movement of translation in its own plane, consisting of a circular movement about an axis which continuously advances in a circular path, the center of the sheet and the center about which the axis advances coinciding once every revolution of the sheet, and means to stop the sheet only when these centers coincide.

1,872,417. STOPCOCK. LLOYD DALLDORF and FRANK MASON, Southgate, Calif., assignors, by direct and mesne assignments, to William H. Maxwell, Los Angeles, Calif. Filed Mar. 8, 1930. Serial No. 434,235. 11 Claims. (Cl. 251—103.)



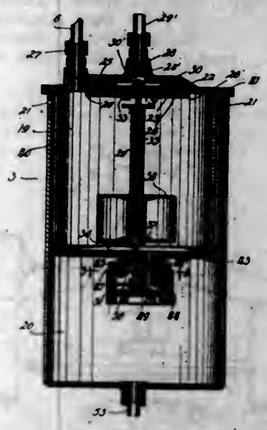
1. A stop cock of the character described including, a body having intersecting openings, one opening being a fluid passage, a plug in the other opening operable to prevent the passage of fluid through the fluid passage, and packing means operable by pressure in the passage to seal between the plug and body around the passage adjacent its point of intersection with the other opening, including packing carried in a channel in the plug, and a duct in the plug for passing fluid pressure from the passage to the channel when the plug is in the closed position.

1,872,418. LIQUID DISPENSING APPARATUS. JOHN B. DAVIS, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Jan. 4, 1930. Serial No. 418,639. 8 Claims. (Cl. 221—67.)



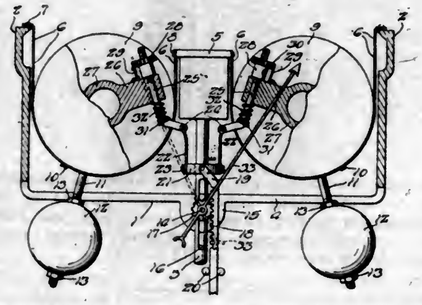
1. In combination, a casing, a dispensing hose housed therein, a pumping apparatus remotely located from said casing and piped up to said hose, a valve located in said casing and interposed in the line to said hose, means in said casing for starting and stopping said apparatus, means for operating said valve including a plunger and yieldable means for projecting it upwardly in said casing and for opening the valve, a cover for said casing operable when moved into closed position to actuate the first named means and stop said apparatus and also operable to engage said plunger and move it against the force of said yieldable means to close said valve.

1,872,419. VACUUM TANK. JOHN A. DIENNER, Evanston, Ill., assignor to Bendix Stromberg Carbureter Company, Chicago, Ill., a Corporation of Illinois. Original application filed May 12, 1924, Serial No. 712,512. Divided and this application filed Dec. 3, 1928. Serial No. 323,302. 15 Claims. (Cl. 103—236.)



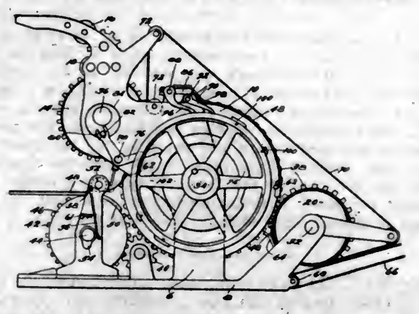
1. In a vacuum tank having a suction connection, a liquid admission connection, an air inlet connection and a liquid outlet connection, a common valve device controlling the latter two connections, said valve device having an air and a liquid passageway each having a bend, the bend in the liquid passageway being farther down than the bend in the air passageway so that air will flow in through the latter and liquid will flow out through the former, said passageways terminating in upwardly opening ports, means for closing said ports and means for moving said closing means to open said ports when the liquid has risen to a desired height in the tank.

1,872,420. COUNTERBALANCING AND INDICATING MECHANISM FOR WEIGHING APPARATUS. JOHAN HENDRIK DE JONGH, Wassenaar, Netherlands, assignor to Naamlooze Vennootschap Maatschappij tot Veraardiging Van Snijmachines Volgens Van Berkel's Patent en Van Andere Werktuigen, Rotterdam, the Netherlands, a Limited Liability Company, the Netherlands. Filed Apr. 30, 1930, Serial No. 448,620, and in Great Britain May 10, 1929. 7 Claims. (Cl. 265—62.)



1. Weighing apparatus comprising pendulous weights, indicating means, a member movable with each of said pendulous weights, a rod passing through an opening in each of said members and adjustable longitudinally in said openings, and means for connecting said rods to said indicating means.

1,872,421. RULING AND PRINTING MACHINE. EDWARD D. DOYLE, Kansas City, Mo. Filed July 2, 1930. Serial No. 465,347. 13 Claims. (Cl. 101—247.)

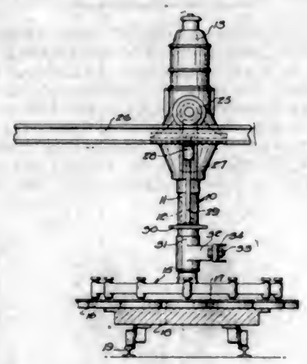


1. In a combined printing and ruling apparatus, an impression cylinder, a form cylinder, a pen beam having a plurality of ruling pens and means for receiving and holding a sheet of paper upon said impression cylinder as it is rotated, said form cylinder and ruling pens acting upon the paper to print and rule the same as it is being carried by the impression cylinder.

1,872,422. SHEET GLASS SURFACING APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 7, 1926. Serial No. 133,787. 4 Claims. (Cl. 51—110.)

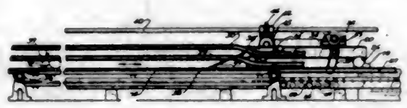
1. In combination in apparatus for surfacing sheet glass, a bed movable in a horizontal path and upon which

the glass is adapted to be mounted, a plurality of pairs of spaced rails arranged transversely above said bed, a carriage positioned between each pair of rails including a hollow housing supported by said rails and movable along



the same, a surfacing unit arranged within and supported by the housing, and adjusting means carried by said housing and passing upwardly therethrough and engaging said surfacing unit for effecting vertical adjustment thereof with respect to said housing.

1,872,423. PROCESS AND APPARATUS FOR FORMING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 1, 1928. Serial No. 296,674. 6 Claims. (Cl. 49—3.)



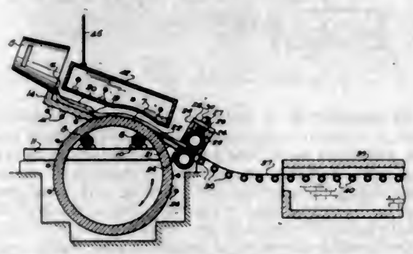
6. In apparatus for the production of sheet glass, a conveyor movable in one direction, sheet forming mechanism arranged thereabove and movable in the opposite direction, said forming mechanism including a support and a plurality of rotatable sheet forming rolls, a common drive means for effecting simultaneously the movement of the conveyor in one direction, the movement of the sheet forming mechanism in the opposite direction and the rotation of the forming rolls, and means for tilting the sheet forming mechanism as a unit as the same is moved longitudinally over said conveyor.

1,872,424. APPARATUS FOR CONVEYING AND TRANSFERRING GLASS SHEETS OR PLATES. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 13, 1929. Serial No. 362,472. 3 Claims. (Cl. 198—105.)



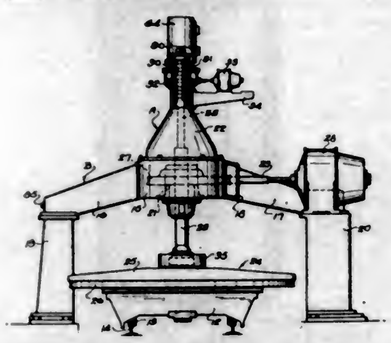
1. In a speed changing apparatus for glass sheets, the combination of a plurality of horizontally spaced roller sections in substantial alignment with one another, each including a plurality of conveying rolls for carrying the sheets in a predetermined direction, shifting means interposed between the conveying rolls of each roller section and driven in a direction at substantially right angles to the direction of rotation of said conveying rolls and at a relatively slower speed, means for raising and lowering the conveying rolls of each roller section with respect to the shifting means, a common drive means for the conveying rolls of the several roller sections, clutch means for effecting the starting and stopping of the conveying rolls of each roller section, and means for independently driving the shifting means of each roller section.

1,872,425. PROCESS AND APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 13, 1929. Serial No. 362,474. 8 Claims. (Cl. 47—33.)



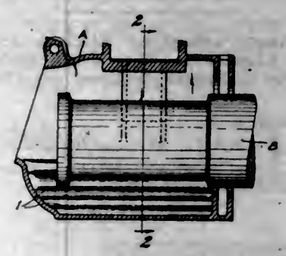
8. The process of intermittently producing a plurality of successive sheets of glass, consisting in periodically pouring a mass of molten glass onto an inclined support, flowing the glass from said support onto a revolving surface where it is spread laterally into a relatively thin, wide stream, stripping the stream from said revolving surface and sliding it over and in contact with a stationary surface, and in feeding the stream as it leaves said stationary surface through a sheet forming pass wherein it is reduced to sheet form.

1,872,426. SURFACING MACHINE. JOHN L. DRAKE and LE ROY L. HANDY, Toledo, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 28, 1929. Serial No. 374,404. 5 Claims. (Cl. 51—109.)



1. In combination in apparatus for surfacing glass, a vertical runner spindle, a grinding runner including a housing for receiving the lower end of the spindle therein, means for connecting the housing to the spindle in a manner to permit a bodily lowering movement of the runner relative to the spindle, as said runner wears away, and means carried by the housing for indicating to the operator the wear upon said runner.

1,872,427. CAR JOURNAL BOX. HARRY C. DRESBURG and PAUL J. MCCULLOUGH, St. Louis, Mo., assignors to Scullin Steel Company, St. Louis, Mo., a Corporation of Missouri. Filed June 20, 1928. Serial No. 286,776. 3 Claims. (Cl. 308—40.)



1. A cast or molded car journal box, having a sinusoidal-shaped lower portion of constant cross section whose ridges are disposed longitudinally of the journal.

1,872,428. LUMINOUS TUBE SIGN LETTER. WILLIAM PAUL DRURY, Los Angeles, Calif., assignor of one-half to Fred Hotchner, Los Angeles, Calif. Filed Apr. 26, 1930. Serial No. 447,580. 6 Claims. (Cl. 40—130.)



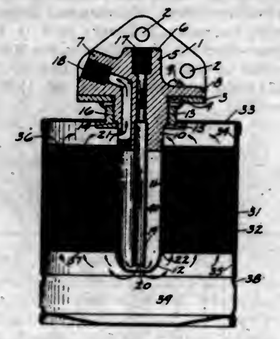
6. In an electric sign, an opaque background having an opening in the general form of a character, a body of dielectric material having a raised portion in the general form of said character said raised portion extending thru said opening, a depression in the face of said raised portion having the general form of said character and a tubular light positioned in said depression in said raised portion.

1,872,429. SHELF SUPPORT. FREDERICK R. EAGLESFIELD, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed Nov. 22, 1928. Serial No. 321,068. 12 Claims. (Cl. 248—19.)



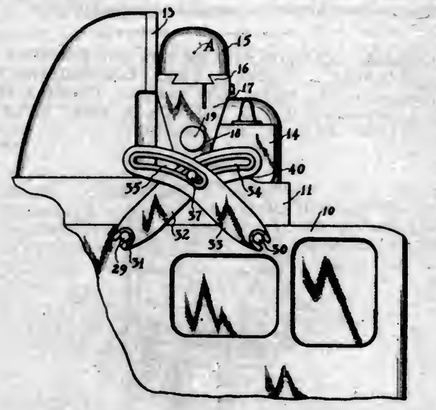
1. A lug for a wall stripping having a central web and overhanging flanges, comprising a piece of sheet metal, said piece having flanges for slidably engaging the flanges of said stripping, a central shelf supporting part, and a leg portion extending downwardly and rearwardly from said supporting part and beyond the plane of said flanges and adapted to engage openings in said central web.

1,872,430. OIL FILTER. GEORGE R. ERICSON, Maplewood, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Dec. 22, 1930. Serial No. 504,011. 6 Claims. (Cl. 210—165.)



1. A filter cartridge comprising a roll of filtering material wound on a core, said core having a longitudinal bore therethrough concentric with said roll, a housing surrounding said roll of filtering material, one end of said housing being closed and the other end of said housing having a single circular opening, said circular opening being concentric with said roll and said core the diameter of said opening being substantially smaller than the diameter of said core.

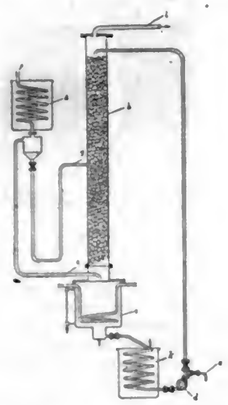
1,872,431. MILLING MACHINE. HANS ERNST and MARIO E. MARTELLOTTI, Cincinnati, Ohio, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 12, 1929. Serial No. 377,877. 8 Claims. (Cl. 90—18.)



1. In a machine tool organization the combination of a support for a reciprocating table, clamping means extending from the reciprocating table support, an arbor for a rotating tool above said support, an arbor support, the arbor extending beyond the arbor support, brace arms each having one end bifurcated to receive the clamping means extending from the reciprocating table support and the other ends overlapping one another adjacent the arbor

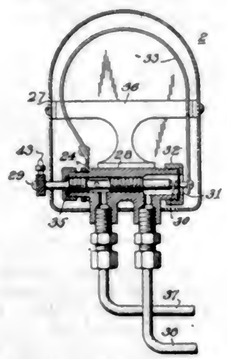
support at a point below the arbor, said overlapping ends being arcuate shaped and provided with a slot therein, and removable adjustable means extending through the slots in the brace arms into the arbor support, the arcuate shape of the arms permitting the arbor to be adjusted vertically and the brace arms to be secured to the arbor support at any point within the range of its vertical adjustment without the brace arms and extended portion of the arbor interfering with one another.

1,872,432. PROCESS OF SEPARATING CONDENSATION PRODUCTS OF ACETYLENE AND AMMONIA. OTTO ERNST and OTTO NICODEMUS, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 19, 1928, Serial No. 327,174, and in Germany Dec. 23, 1927. 8 Claims. (Cl. 260—42.)



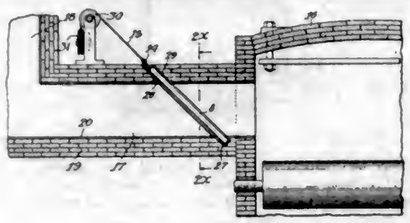
1. The process of separating condensation products obtained by catalytic condensation of acetylene and ammonia, said products containing nitrogen, and unattacked acetylene and ammonia, from hydrogen and other contaminating gases, which comprises washing out the gases and vapors leaving the reaction chamber by means of the liquid reaction products which are formed by the condensation.

1,872,433. CONTROL SYSTEM FOR GAS BURNING APPLIANCES. VINCENT J. EVANS, Lakewood, Ohio, assignor to The Patrol Valve Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 8, 1928. Serial No. 311,074. 4 Claims. (Cl. 236—101.)



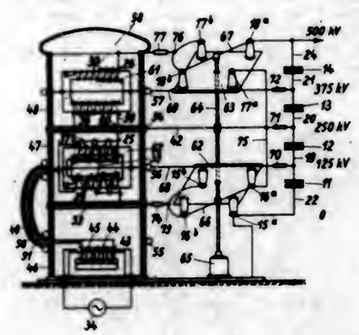
2. A valve comprising, a valve casing with inlet and outlet openings formed therein, a valve body adjustably carried in said valve casing, a spring closed valve carried in said valve body having a valve stem projecting therefrom and a flexible diaphragm adapted to contact with said valve stem and to provide a closure for one end of said valve casing.

1,872,434. HEAT RESISTING DAMPER ASSEMBLY. FRANK A. FAHRENWALD, Chicago, Ill. Filed Mar. 23, 1929. Serial No. 349,334. 2 Claims. (Cl. 126—285.)



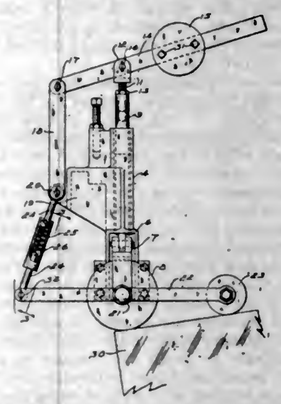
1. In combination, a high temperature rectangular gas flue having an inclined damper receiving opening extending across the top wall, inclined damper receiving grooves in its side walls and a damper sealing groove in its bottom wall between the lower ends of said inclined grooves, a damper assembly slidably associated with said opening and grooves of said flue, said damper assembly comprising a pair of damper frame guide bars fitting in and conforming in shape to said inclined grooves and adapted to gravitally seat in sealing engagement with the lower side walls of said inclined grooves, a plurality of sectional damper plates slidably supported by said guide bars and adapted to gravitally seat in sealing engagement with each other and with the guide bars, the bottom damper plate having the bottom edge adapted to fit in and conforming in shape to the groove in the bottom wall of said flue, the upper damper plate having a top edge fitting in and adapted to seat against the lower side wall of the opening in the top wall of said flue and means connected to said top damper plate for moving the damper assembly.

1,872,435. TRANSFORMING DEVICE. FRANZ JOSEPH FISCHER, Dresden, Germany, assignor to the Firm Koch & Sterzel Aktiengesellschaft, Dresden, Germany. Filed Jan. 3, 1930, Serial No. 418,240, and in Germany Jan. 3, 1929. 4 Claims. (Cl. 175—364.)



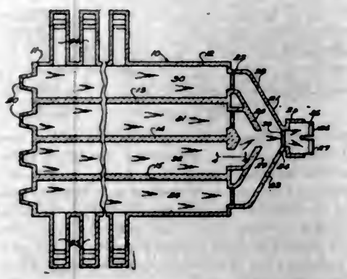
1. Apparatus for transforming alternating voltages into direct voltages comprising condensers connected in series, means for connecting said condensers, a graded transformer, a mechanical rectifier inserted between said transformer and said condensers, a rotary contact in said rectifier, two pairs of stationary contacts, in said rectifier, each pair arranged to charge one condenser, horizontally arranged metallic members forming equipotential planes arranged between the grades of said transformer and electrical connections between said members and said means for connecting said condensers.

1,872,436. WORK FEEDING APPARATUS. GEORGE W. FOSTER, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 2, 1929. Serial No. 404,471. 9 Claims. (Cl. 51—74.)



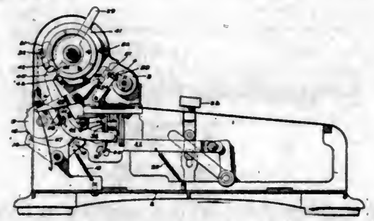
1. The combination with a device comprising a supporting frame and a rotary tool, of mechanism mounted on said frame for pressing a surface of a piece of work upon said tool during relative movement of the tool and work including a shiftable pressure roll adapted to move relative to said tool for accommodating work of irregular shape, means for applying substantially uniform pressure on said roll in all its positions, and means mounted on said mechanism for rocking said work relative to said tool when an intersection of diverging surfaces of said work is in contact with said tool.

1,872,437. CONTINUOUS TANK FURNACE. FRANK FRASER, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 13, 1927. Serial No. 198,504. 2 Claims. (Cl. 49—54.)



1. In a continuous tank furnace, a main tank having a plurality of longitudinally extending partitions arranged therein for dividing the interior thereof into a plurality of longitudinally extending individual compartments, each adapted to contain molten glass, a connecting chamber arranged at one end of the main tank and in communication with all of said compartments, said connecting chamber having forwardly converging side walls terminating in a neck positioned substantially intermediate the sides of the main tank, a cooling chamber associated with the neck and communicating with the connecting chamber, a working receptacle associated with the cooling chamber, a pair of forwardly converging guide walls positioned within the connecting chamber and spaced from the outer side walls thereof to direct the molten glass from the several compartments into the cooling chamber, and means for regulating the flow of glass from each of said individual compartments into the connecting chamber.

1,872,438. CALCULATING MACHINE. CARL M. F. FRIDEN, Oakland, Calif., assignor to Marchant Calculating Machine Company, Emeryville, Calif., a Corporation of California. Filed Mar. 10, 1926, Serial No. 93,663. Renewed June 6, 1932. 26 Claims. (Cl. 235—79.)

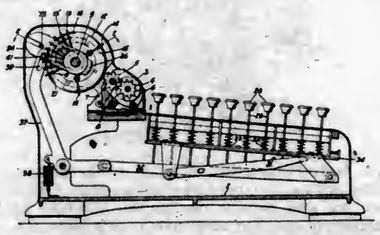


1. In a calculating machine, numeral wheels, an actuator therefor, a shaft for said actuator, and means for stopping said actuating mechanism in full cycle position, including a restrained stopping member, means carried by the actuator shaft for releasing said member and means controlled by a selected numeral wheel for causing the actuator shaft carried means to operate said releasing means.

12. In a calculating machine, a longitudinally movable carriage, numeral wheels arranged on said carriage, an actuator for the numeral wheels immovable longitudinally, and means for stopping the actuator in full cycle position comprising a normally restrained energized element, means actuated by movement of the actuator for releasing said element, said releasing means being normally in inoperative position with respect to the actuator, transfer levers associated with the numeral wheels and mounted on the carriage, rotation of the numeral wheels from 0 to 9 serving to move said transfer levers and means actuated by movement of a selected transfer lever for moving the releasing means into operative relation with respect to the actuator.

13. In a calculating machine, numeral wheels, a rotary actuator therefor, means for stopping said actuator in full cycle position including a restrained stopping member, means including an element controlled by said numeral wheels adapted to be operated by the actuator for releasing said member and means for moving said releasing means into inoperative position with respect to the actuator.

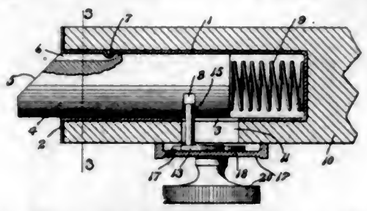
1,872,439. CALCULATING MACHINE. CARL M. F. FRIDEN, Oakland, Calif., assignor to Marchant Calculating Machine Company, Emeryville, Calif., a Corporation of California. Filed Aug. 21, 1928. Serial No. 300,983. 2 Claims. (Cl. 235—79.)



1. In a calculating machine, a registering element, actuating mechanism therefor comprising a series of spring

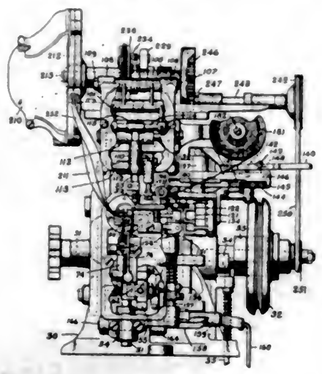
pressed actuating elements each adapted when operatively positioned to drive said registering element through a single step, and selecting mechanism comprising a member differentially settable to a series of operative positions along a line normal to a line tangent to the said registering element at the driving point to effect operative positioning of a number of said actuating elements corresponding to the differential setting of said member.

1,872,440. LATCH OR LOCK BOLT. CHARLES L. FROST and HORACE E. FROST, Grand Rapids, Mich. Filed Jan. 14, 1931. Serial No. 508,628. 2 Claims. (Cl. 292—165.)



1. In a construction of the class described, an elongated housing having an opening through one side, a bolt slidably mounted in the housing having a transverse slot at its inner end portion located in conjunction with said opening in the housing, spring means tending to project the bolt outwardly, and an operating mechanism for the bolt comprising, a plate, a member pivotally mounted between its ends at the inner side of the plate, a pin projecting from one end of the member adapted to pass through said opening in the housing and into the slot in the bolt, a knob rotatably mounted on and at the outer side of said plate, and an actuating device at the inner side of said plate connected to and movable with the knob having two spaced apart upwardly extending fingers, one engaging against the member at one side thereof and at one side of the pivot, and the other engaging with said member at the opposite side thereof and at the opposite side of the pivot.

1,872,441. FASTENER INSERTING MACHINE. PERLEY R. GLASS, Wayland, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 10, 1929. Serial No. 391,657. 44 Claims. (Cl. 218—17.11.)



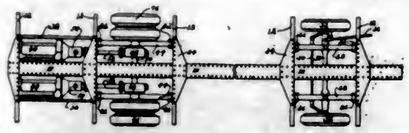
9. A fastener-inserting machine comprising a plunger provided with a fastener-inserting member, a lever for reciprocating said plunger, mechanism arranged to impart oscillations of constant amplitude to said lever, the plunger and the lever having cooperative grooves arranged to lie in parallelism when the plunger is fully retracted from the work, and means arranged in both of said grooves to provide an operating connection between the lever and the plunger, said means being adjustable lengthwise of said grooves to regulate the amplitude of the reciprocations imparted to the plunger.

14. A hook-setting machine comprising a laterally movable anvil formed to occupy the throat of a lacing-hook while the latter is being clenched, a two-part articulated lever arranged to move said anvil to and from its operative position, cooperative abutments carried by the component parts of said lever to maintain them normally in a constant relation, one of said abutments being resilient and another one being adjustable to regulate the normal relation of the parts, and mechanism arranged to operate said lever in its entirety.

23. A machine of the character described comprising fastener-inserting mechanism, mechanism for feeding an article of work step by step, a pair of rolls arranged to grip a strip of reinforcing material, mechanism arranged to operate said rolls to feed the strip to said fastener-inserting mechanism with net feeding steps shorter than the feeding steps imparted to the work, and means arranged to sever the strip into individual reinforcing sections.

42. In a machine of the character described, fastener-setting mechanism including a plunger provided with a tool for punching a hole in the work and for feeding the work, a reciprocatory feed-carriage in which said plunger is arranged to slide, mechanism arranged to feed a strip of reinforcing material step by step to said tool, a cutter affixed to said plunger to sever the strip, a strip-engaging member relatively to which the plunger is movable in executing its punching stroke, a pressure-foot by which said member is carried, said member being provided with a shearing edge with which said cutter cooperates, and articulated means connecting said member and said feed-carriage to maintain said shearing edge in shearing relation to said cutter, said means comprising a cylindric stem and a guide therefor parallel to said plunger and carried one by the feed-carriage and the other by said strip-engaging member, and said stem having portions eccentrically related to each other so that by rotational adjustment of the stem the pressure of the shearing elements, one against the other, may be regulated.

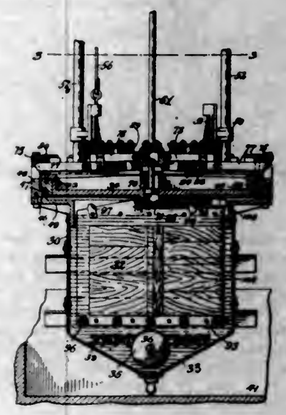
1,872,442. AUTOMOTIVE VEHICLE CHASSIS. GILBERT C. GOODE, Birmingham, and FREDERICK A. SELJE and CLARENCE W. MILLER, Detroit, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 29, 1930. Serial No. 424,358. 4 Claims. (Cl. 180—54.)



1. A vehicle chassis having a frame which comprises a central beam member extending longitudinally of the chassis and laterally projecting frame members, a power transmitting unit one each side of said central beam and at the end thereof comprising an engine, a transmission, a wheel and a driving connection between said transmission and said wheel, a rigid support between said wheels resiliently mounted on said frame, and steering wheels at the opposite end of said beam.

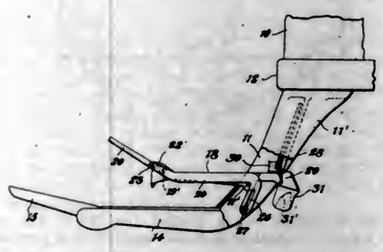
1,872,443. LOCKING DEVICE FOR THE COVERS OF IMPREGNATING TANKS, ETC. HARRY E. GOSCH, North Tonawanda, N. Y., assignor to Creo-Dipt Company Inc., North Tonawanda, N. Y., a Corporation of New York. Filed May 3, 1928. Serial No. 274,783. 2 Claims. (Cl. 220—57.)

1. An apparatus for the purpose described, comprising a tank adapted to contain liquid for treating articles and having an inlet at its top for the passage of said articles; a cover movable toward and from said inlet; and means for locking said cover on said tank, comprising a plurality of abutments arranged on said tank around the inlet thereof, a vertically movable lifting head arranged above



the cover, and a plurality of locking levers pivotally mounted on said cover and each connected at its inner end with said head and adapted to engage its outer end with one of said abutments, each of said levers consisting of a plurality of sections, and means for yieldingly holding said sections together.

1,872,444. AUXILIARY FOOT REST. WILLIAM GOWIE, Canton, Ohio, assignor to The Harvard Company, Canton, Ohio, a Corporation of Ohio. Filed Sept. 10, 1929. Serial No. 391,614. 2 Claims. (Cl. 155—171.)



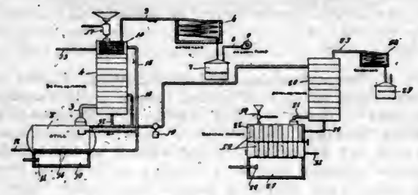
1. In a dental chair and the like including a seat and a foot rest frame having spaced side bars and a web extending therebetween, a foot rest including a platform member pivotally mounted between the side bars below said web and adapted to be rotatively drawn within the foot rest frame against the web, an extension pivotally mounted on the platform member for rotating toward and away from the platform member, and an angle link pivotally connected at one end to the extension and extending alongside the platform and around the pivotal mounting of the platform and having a slot and pin connection at its other end with the frame for simultaneously rotatively folding the extension upon the platform member when the latter is rotatively withdrawn within the foot rest frame and for simultaneously rotatively extending the extension relative to the platform member when the latter is extended.

1,872,445. FRONT SPRING. NEWTON F. HADLEY, Beverly Hills, and TORE FRANZEN, Grosse Park Pointe, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 1, 1930. Serial No. 425,326. 5 Claims. (Cl. 267—36.)



1. In a vehicle comprising a chassis frame and a front axle, a spring between said frame and axle, a shackle pivotally connected to one end of said spring and to said frame, a rigid block fixed rigidly to the other end of said spring pivotally secured to said frame and stiffening means including a plate having one end disposed between said block and spring and its other end curved away from the latter, the intermediate part of said plate being clamped to said spring.

1,872,446. PROCESS OF PRODUCING LOW BOILING POINT OILS OR MOTOR FUEL FROM HYDROCARBON OILS BY THE EMPLOYMENT OF METALLIC HALIDES. RALPH A. HALLORAN, Berkeley, MARVIN L. CHAPPELL, Los Angeles, and JAMES HAROLD OSMER, El Segundo, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Mar. 16, 1927. Serial No. 175,831. 1 Claim. (Cl. 196—54.)

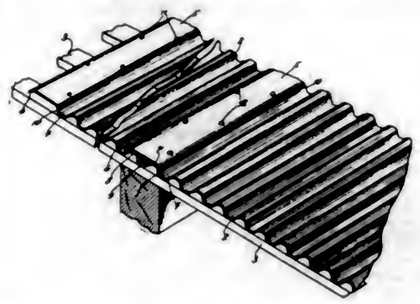


A process of treating hydrocarbon oil containing motor fuel fractions and heavier fractions, with metallic halide which motor fuel fractions contain acetylenes, diolefines, and sulfur compounds, which comprises distilling said oil under a reduced pressure less than atmospheric, fractionating the evolved vapors to separate the motor fuel fractions, contacting metallic halide with the vapors being fractionated to remove therefrom mainly acetylenes, diolefines and sulfur compounds before any decomposing action of the metallic halide upon the heavier fractions withdrawing commingled metallic halide and condensed oils from said fractionating zone, and contacting the same at a temperature sufficient for the metallic halide to decompose a part of said condensed oils to form lower boiling point oils.

1,872,447. SHEET METAL ROOFING. COWPER S. HAMMOND, St. Louis, Mo. Filed Mar. 5, 1930. Serial No. 433,194. 2 Claims. (Cl. 108—18.)

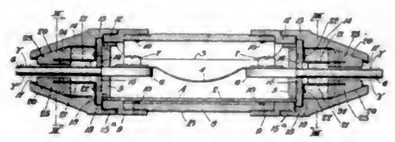
1. A sheet metal roofing section having a plurality of uniform corrugations parallel with and covering the entire area between the longitudinal edges of said section and having one edge extending downwardly and terminating in approximately the same plane with the under sides of the lowest portions of all of said corrugations and having adjacent to and parallel with its opposite edge a flat portion of a width equal to the distance between the crests of any two of said corrugations, the marginal edge of said flat portion being curved downwardly according

to the downward curvature of said corrugations, said flat portion being adapted to seat upon and span any two corrugations of an adjacent roofing section in a re-



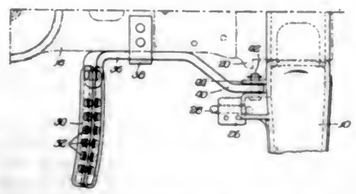
lationship in which the curved portions adjacent to said flat portion engage closely the curved portions of the corrugations of the adjacent sheet.

1,872,448. FUSE. RICHARD B. HAVEY, Beechview, Pa. Filed Jan. 16, 1931. Serial No. 509,154. 7 Claims. (Cl. 200—131.)



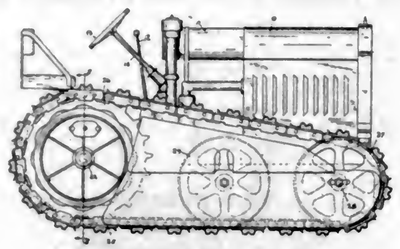
1. A fuse comprising a tubular casing, a fuse link holder mounted in said casing, tongue contact members mounted in said fuse link holder and projecting outwardly from each end thereof, a sleeve-like head threaded on each end of said casing and having its internal bore tapered inwardly to form a wedging surface, said sleeve-like head being slotted to permit the contact fingers of a fuse holder to pass upwardly along said tongue contact members, clamping jaws mounted in said head, and means operable by the rotation of said casing for moving said jaws along said tapered bore of said head to force said jaws into clamping engagement with the contact fingers of the fuse holder.

1,872,449. BRAKE LEVER BRACKET. WILLIAM C. HEDGCOCK, Wilmette, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Aug. 1, 1931. Serial No. 554,491. 9 Claims. (Cl. 188—206.)



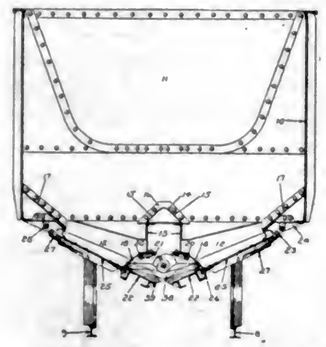
1. In a truck, the combination of a side frame, a bolster mounted for lateral movement with respect to said side frame, a brake lever strap disposed adjacent said bolster, and a bracket member connected to said side frame and connected to said strap, said bracket abutting said bolster.

1,872,450. TRACTION APPARATUS. CLARENCE ALVIN HENNEUSE, Bucyrus, Ohio. Filed May 19, 1927. Serial No. 192,696. 4 Claims. (Cl. 180—9.2.)



1. In an apparatus of the character described, the combination of an axle, a wheel rotatably carried thereon, an annular member fixed to said axle and rotatably engaged with said wheel, a friction member carried by said wheel and engageable with said annular member, means for normally maintaining such engagement, a cam member mounted on said wheel, connections between said cam and said friction means, a brake and means adapted to actuate said cam to disengage said friction means upon the application of said brake.

1,872,451. DUMP CAR. DAVID HINDAHL, Chicago, Ill., assignor to Rodger Ballast Car Company, Chicago, Ill., a Corporation of Maine. Filed June 6, 1930. Serial No. 459,442. 12 Claims. (Cl. 105—251.)

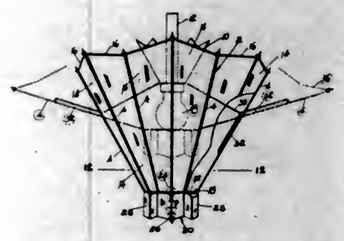


1. In a hopper car, a hopper and means for closing said hopper, including a door comprising a part of the hopper bottom and a member cooperating with said door at a point intermediate its length to complete the hopper bottom, said member having movement during the opening of said door to materially increase the size of the discharge opening.

1,872,452. PROCESS FOR MANUFACTURING ALKALI METAL XANTHATES. WILHELM HIRSCHKIND, Pittsburg, Calif., assignor to Great Western Electro-Chemical Company, San Francisco, Calif., a Corporation of California. Filed Mar. 19, 1925. Serial No. 16,824. 14 Claims. (Cl. 260—106.)

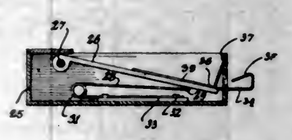
1. The process of manufacturing alkali metal xanthates comprising mixing a xanthate solution with an alcoholic alkali mash to dilute the same; adding carbon bisulphide to the mixture; and separating the solid constituents from the mother liquor.

1,872,453. LIGHTING FIXTURE. HARRY R. HOLDEMAN, Los Angeles, Calif., assignor to J. M. Feldman Company, Inc., Los Angeles, Calif., a Corporation of California. Filed Sept. 4, 1929. Serial No. 390,277. 8 Claims. (Cl. 240—108.)



1. In a device of the class described, an illuminating means, a lighting fixture associated with said means, said lighting fixture comprising a set of panels adapted to form a plurality of different geometrical designs, means on one end, and on each edge of each of said panels whereby the other end of each of said panels may be moved toward and away from said illuminating means, and said panels moved toward and away from the vertical axis of said fixture, so that said geometrical designs may be altered at will.

1,872,454. GAME. PETER HORN and FRANK ZIPP, Brooklyn, N. Y. Filed Oct. 16, 1930. Serial No. 489,092. 2 Claims. (Cl. 273—107.)



1. In a device of the class described, a box, a cover hingedly secured in said box at one end, a wire loop including coils tending to normally hold said cover in its elevated position, allowing a depression of the same against the action of said coils, a flat spring having an inner shoulder engaging the front end of said cover to keep the same in its depressed position, and a handle allowing an outwardly directed pull on said spring to disengage its shoulder from said cover to rebound the same upwardly under the action of the expanding coils of the loop to catapult projectiles on said cover.

1,872,455. COMBINED FILLER AND PRIMER AND METHOD OF MAKING THE SAME. GUSTAVE A. HORTON, St. Paul, Minn., assignor of one-half to Anne G. Swygart, St. Paul, Minn. Filed Apr. 5, 1930. Serial No. 442,041. 6 Claims. (Cl. 134—49.)

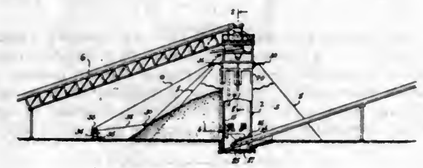
2. A boiled filler and primer containing the following named constituents in about the proportions indicated, by weight:

	Per-cent
Dry white lead	18.56
White lead in oil	22.60
Boiled linseed oil	13.56
Turpentine	13.56
Japan dryer	9.04
Glue	4.52
Molasses	4.52
Flour	4.52
Water	4.52
Pumice stone	4.52
Vinegar	4.52
Alum	1.12

1,872,456. PROCESS OF PREPARING AND DISTRIBUTING NUTS. WILLIAM W. KELLY, Cleveland Heights, Ohio, assignor to The Nut Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 14, 1932. Serial No. 611,439. 9 Claims. (Cl. 99—11.)

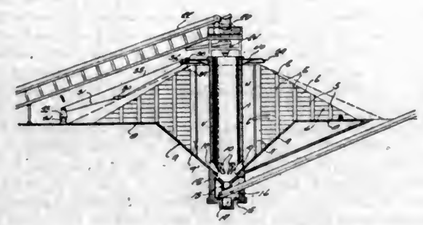
1. The process of preparing and distributing nuts which consists in packing cooked, mixed nuts in containers for shipment or storage and thereafter removing them from said containers and heating them to drive off mixed flavor and restore individual flavors to the nuts.

1,872,457. STORAGE SYSTEM. FRED T. KERN, Milwaukee, Wis. Filed July 26, 1929. Serial No. 381,158. 8 Claims. (Cl. 214—10.)



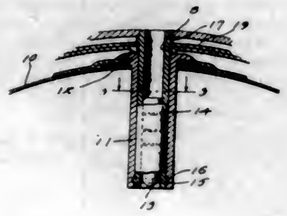
1. A storage system including a central tower, means for providing a plurality of storage spaces around said tower, a trackway extending around the tower, a drag scraper hoist movable around the track-way, a drag scraper actuated from said hoist through operating lines and a traveling pulley for one of said lines supported adjacent the upper end of the tower and movable thereabout under the influence of the drag scraper hoist, said drag scraper hoist being selectively employed to pile the material up against or drag the material away from the tower.

1,872,458. STORAGE SYSTEM. FRED T. KERN, Milwaukee, Wis. Filed July 23, 1931. Serial No. 552,581. 3 Claims. (Cl. 214—10.)



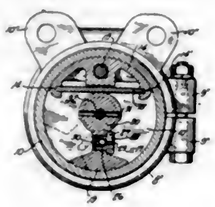
1. A storage system of the character described comprising means defining a common discharge zone, a plurality of angularly related partitions grouped about said common discharge zone, adjacent partitions diverging from each other and defining storage spaces abutting the discharge zone at their inner ends and open and unconfined at their outer ends, means for discharging material from any one of said storage spaces into said common discharge zone, each of said storage spaces having a portion at least of its floor sloping inwardly and downwardly to said last named means whereby substantially all of the material in any storage space may be discharged by gravity through said last named means into said discharge zone, means for transferring material from said discharge zone to a point of deposit, and means for supplying material to said storage spaces.

1,872,459. AIR INFLATED BLADDER. WILLIAM A. KNAUER, Philadelphia, Pa. Filed Apr. 19, 1930. Serial No. 445,735. 3 Claims. (Cl. 273—65.)



1. In combination with a bladder, an inwardly extending tubular neck secured to said bladder, a metallic valve, and an elongated open ended ribbed tubular member of flexible construction removably interposed between said neck and said valve, said valve being disposed in said member inwardly of the outer surface of said bladder.

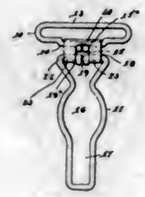
1,872,460. SHOCK ABSORBER. ALFRED M. JENSEN, Racine, Wis., assignor to Harvey Spring & Forging Co., Racine, Wis., a Corporation of Wisconsin. Filed Dec. 19, 1928. Serial No. 326,982. 5 Claims. (Cl. 188—89.)



1. A shock absorber, comprising a casing having an inner curved surface and opposite flat side walls, an oscillating piston having a concentric hub portion and positioned within the casing and dividing the casing into two compartments, a shaft connected to the piston and projecting out of the casing, a yielding member within the chamber in which the piston oscillates and engaging the concentric hub portion and engaged by the fluid medium on opposite sides of the piston for permitting the flow of the medium from one side of the piston to the other when subjected to excessive pressure, an arm mounted on the outer end portion of the shaft and extending outwardly therefrom, an attaching member pivotally connected to the outer end portion of the arm, said piston and shaft having a duct connecting the two compartments and means for controlling the flow of a fluid medium through the duct, and a check valve in communication with both compartments for stopping the flow of the medium from one compartment to the other while the piston is moving in one direction but permitting the flow of fluid medium through the check valve while the piston is moving in the opposite direction.

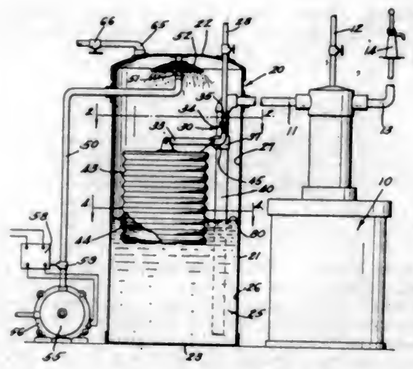
1,872,461. GARMENT SUPPORTER LOOP. GEORGE I. JERALDS, Cheshire, Conn., assignor to The Ball & Socket Manufacturing Company, West Cheshire, Conn., a Corporation of Connecticut. Filed Apr. 11, 1932. Serial No. 604,437. 2 Claims. (Cl. 24—245.)

1. In a garment supporter loop of the class described, a ferrule member including a relatively long upper sleeve portion and two integral aligned spaced-apart relatively short lower sleeves, a web-loop having aligned end portions and ends that are turned down and secured within the longer sleeve, a button-loop having aligned end members, one of which is hingedly supported in one of the



shorter sleeves and the other similarly supported in the other sleeve, each of the last mentioned end members having their ends turned down to prevent their withdrawal from the sleeves of the ferrule.

1,872,462. PRESSURE BOOSTER TANK FOR CARBONATING SYSTEMS. HARVEY L. JOHNSON and JOHN E. TREANOR, Los Angeles, Calif. Filed Sept. 26, 1928. Serial No. 308,564. 12 Claims. (Cl. 261—27.)

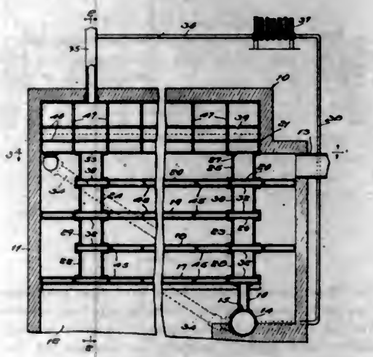


1. In a reservoir tank adapted to supply a liquid upon demand, the combination of: a tank, the lower portion of said tank being filled with a liquid; an outlet pipe extending below the surface of said liquid; a float-operated gas inlet valve, said valve being opened when said liquid surface rises; a pump for supplying liquid to said tank; and means for starting said pump when the pressure in said tank reaches a set minimum value and stopping said pump when the pressure in said tank builds up to a maximum value.

1,872,463. PROCESS OF TREATING HYDROCARBONS. IRVIN H. JONES, Pittsburgh, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Oct. 1, 1927. Serial No. 223,479. 3 Claims. (Cl. 196—148.)

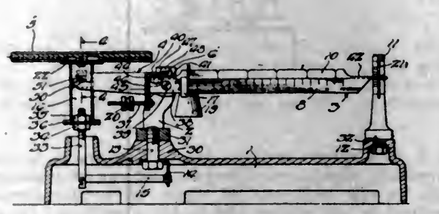
1. In the treatment of aromatic hydrocarbon oil such a sthat recovered from coal gas, the steps which comprise, first treating the oil with a sufficient excess of sulphuric acid to cause the resultant sludge to be liquid rather than solid in character, removing the acid and sludge from the oil, adding thereto a large excess of water and heating the resultant mixture until the insoluble material agglutinates, removing acid from the insoluble material and agitating the substantially acid-free insoluble material with a large volume of water, whereby said material is caused to go into solution or dispersion in said water.

1,872,464. STEAM BOILER. EDWARD C. KLINE, Streator, Ill. Filed Aug. 17, 1929. Serial No. 386,517. 6 Claims. (Cl. 122—260.)



1. In a boiler, the combination of a plurality of hollow baffles and fluid conducting nipples of substantially uniform cross sectional area positioned between said baffles adjacent opposite ends thereof, the adjacent walls of adjacent baffles being provided adjacent one of said nipples with apertures of an area substantially equal to the cross sectional areas of said nipples and adapted to register therewith, said walls being also provided with relatively small apertures adjacent the other of said nipples and adapted to register with said other nipples.

1,872,465. SCALE BEAM. REINHOLD A. KOPP, Chicago, Ill., assignor to W. M. Welch Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 24, 1929. Serial No. 357,682. 9 Claims. (Cl. 265—49.)



1. In scale structure, a beam comprising a unitary sheet of material providing a plurality of scales the top edges of which are in substantially the same horizontal plane.

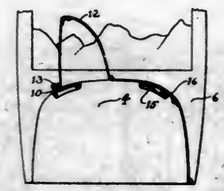
1,872,466. DRIP COFFEE MAKER. RICHARD F. KRAUSE, Massillon, Ohio. Filed Nov. 7, 1930. Serial No. 493,973. 2 Claims. (Cl. 53—3.)

1. A drip coffee maker including a water reservoir, a coffee container below the water reservoir, an imperforate substantially longitudinal partition wall between the water reservoir and coffee container, and a depending flange



around the edge of the partition wall provided with an inwardly disposed portion having spaced apertures therein.

1,872,467. HOOD REST. LEO KULKA, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 8, 1930. Serial No. 426,984. 3 Claims. (Cl. 180—169.)

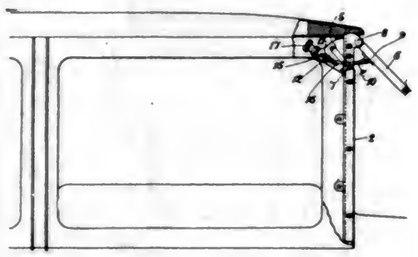


1. In a vehicle comprising a hood and a hood seat, a hood rest comprising a bracket located adjacent said hood seat, a resilient arm secured at one end on said bracket, and a projection on said arm spaced from the edge of said hood seat, said projection being normally extended above said seat so as to form a notch in conjunction with the latter when said hood is open and held in a retracted position by said hood when the latter is closed.

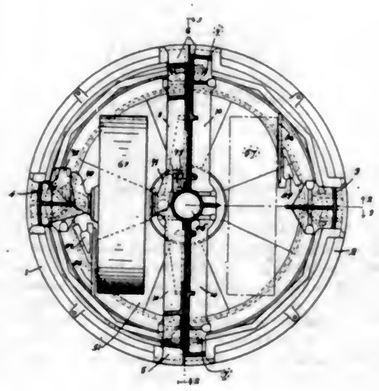
1,872,468. WINDSCREEN FOR VEHICLES. PERCY LANE and ARTHUR EDWARD LAIT, Birmingham, England. Filed June 20, 1928, Serial No. 286,768, and in Great Britain Oct. 6, 1927. 11 Claims. (Cl. 296—84.)

2. A vehicle windscreen comprising a fixed frame, a lower panel, an upper panel of shallow depth compared with the lower panel hinged at its lower edge adjacent the upper edge of the lower panel and angularly movable into a position inclined upwardly and rearwardly from the lower panel, and also into a position completely closing the space above the lower panel, an abutment on the fixed frame behind the plane of the lower panel for preventing the rearward movement of the upper panel beyond a predetermined angular position inclined upwardly and rearwardly from the lower panel, and a third panel inclined forwardly and downwardly from its upper edge and

disposed in front of the upper panel with its lower edge lower than the lower edge of said upper panel, the said upper and front panels being arranged to provide a ventilation opening between them so that the air passing through the opening is directed upwardly into the vehicle.



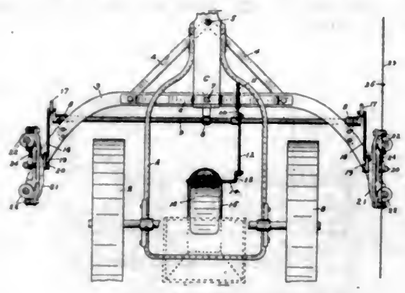
1,872,469. GRINDER. FRANZ LANG, Bucyrus, Ohio, assignor to W. A. Riddell Company, Bucyrus, Ohio, a Corporation of Ohio. Filed Dec. 27, 1929. Serial No. 416,839. 5 Claims. (Cl. 83—45.)



1. In a grinding mill, the combination of a supporting frame including plural supplementary elements adapted to form a hollow bell-shaped body having spaced supporting legs; a cover for said elements; a revoluble pan; reducing agencies cooperating with said pan; a vertically disposed shaft for supporting and driving said pan, and means associated with said cover for axially and laterally supporting said shaft.

1,872,470. CHECKROW ATTACHMENT FOR POTATO PLANTERS. KNUTE J. LEE, Shevlin, Minn. Filed Jan. 2, 1931. Serial No. 506,020. 6 Claims. (Cl. 111—40.)

1. The combination with a potato planter, of a door member for controlling the delivery of potato seed from the planter, a cross beam rigidly secured to the planter, check row mechanisms carried at the outer ends of said beam, a transversely arranged rocker shaft disposed adjacent to the cross beam, a connection between the shaft and said door member, and connections between said shaft and the check row mechanisms, said last mentioned connections including a slotted member and an element having limited freedom for movement therein whereby such movement may permit certain movements of the shaft with respect to the check row mechanisms.



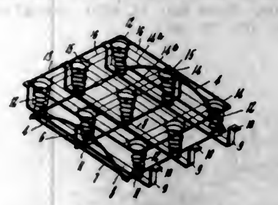
1,872,471. FASTENING MEANS. ROGER K. LEE, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 18, 1929. Serial No. 364,068. 4 Claims. (Cl. 292—80.)



3. In a vehicle having a hood and a support in close proximity thereto, an outwardly and upwardly slanting lug on said hood, and an elastic non-metallic element secured to said support and having a depression therein corresponding in shape with said lug for receiving the same.

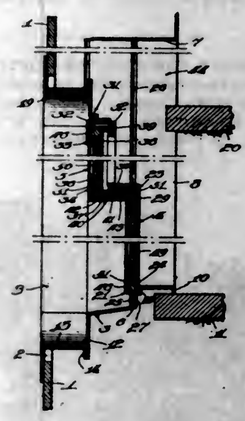
1,872,472. SPRING CONSTRUCTION FOR CHAIR SEATS OR THE LIKE. MAC LEVINE, Malden, Mass., assignor to Kay Manufacturing Co., Brooklyn, N. Y., a Corporation of New York. Filed July 23, 1929. Serial No. 380,338. 3 Claims. (Cl. 155—179.)

1. The combination with a one-piece wire frame of generally rectangular form having opposite parallel members and opposite upwardly arched members and a wire member suspended from said arched members and arranged between and parallel to said parallel members, of a plurality of resiliently flexible strips extending in spaced, parallel relation between said parallel members, and rows



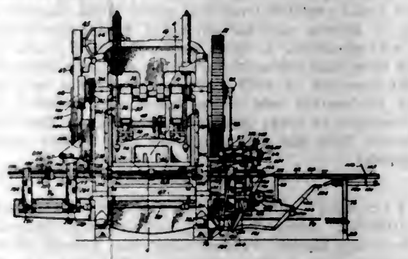
of spiral springs fixed above said strips at the regions of contact of said strips with said frame and serving to fix said strips to said frame.

1,872,473. WINDOW CONSTRUCTION. ERNEST J. LIEBETRAU, Niles, Mich., assignor to The Kawneer Company, Niles, Mich., a Corporation of Michigan. Filed July 14, 1930. Serial No. 467,771. 11 Claims. (Cl. 114—177.)



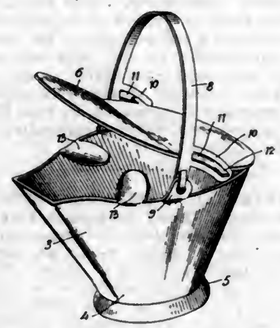
1. In a window construction, a frame, a sash slidable vertically in said frame, a transom swingably mounted above said sash, and a meeting rail adapted to receive a portion of said sash and transom when in closed position to provide a weather-tight seal therebetween.

1,872,474. AUTOMATIC PUNCH PRESS. BROR J. LINDGREN, Buffalo, N. Y., assignor to Niagara Machine and Tool Works, Buffalo, N. Y., a Corporation of New York. Filed Dec. 30, 1929. Serial No. 417,353. 36 Claims. (Cl. 164—21.)



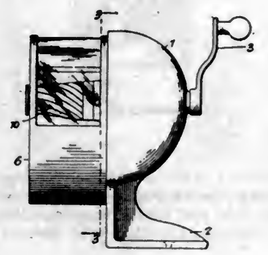
1. A punch press including a pair of dies movable toward and from one another and a synchronized step-by-step mechanism for feeding the strip of metal to be formed between said dies, a feeding table (77) adapted to support the metal strips to be formed, primary means (155) mounted on said feeding table for feeding a succession of metal strips to said step-by-step mechanism, said step-by-step mechanism feeding said strip between said dies to have a predetermined number of punchings made in each strip and means synchronized with the movement of said dies for actuating said primary feeding means once for every said predetermined number of punching operations of said dies, including a clutch (104) forming part of the operative connection between said dies and said primary feeding means and means for closing and opening said clutch once for every said predetermined number of punching operations of said dies.

1,872,475. RECEPTACLE WITH AUTOMATIC CLOSURE THEREFOR. LAWRENCE R. LOVELAND, Washington, D. C. Filed Apr. 20, 1931. Serial No. 531,495. 3 Claims. (Cl. 131—51.)



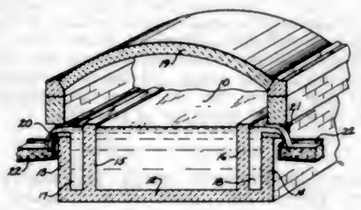
1. A combined cigar ash receiver and paper weight device comprising a miniature receptacle, a hinged lid therefor, a swinging handle, means for opening and closing the lid through the movements of the handle, and a weight element incorporated in the receptacle, substantially as set forth.

1,872,476. PENCIL SHARPENER. LAWRENCE R. LOVELAND, Washington, D. C. Filed Apr. 20, 1931. Serial No. 531,496. 6 Claims. (Cl. 120—96.)



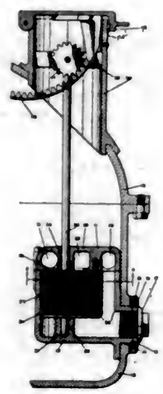
1. A pencil sharpener comprising rotatable cutters, a rotatable pencil guide, a gear assembly, a rotatable gear box, said rotatable cutters and pencil guide mounted upon said gear box, a main shaft, a handle for the main shaft, said main shaft entering said gear box, a gear secured to said main shaft, shafts for said cutters, planetary gears within said gear box mounted upon said cutter shafts, said gear assembly imparting a rotary motion to said gear box and a planetary motion to said cutters.

1,872,477. FURNACE CONSTRUCTION. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 21, 1928. Serial No. 279,404. 17 Claims. (Cl. 49—54.)



1. In a furnace construction, a tank having a melting portion within which is adapted to be produced a mass of molten glass and a refining portion for receiving the glass from the melting portion, said refining portion having inner and outer side walls spaced to create relatively narrow passages therebetween within which the border portions of the glass flowing from the melting portion are received and conveyed exteriorly of the furnace.

1,872,478. INTERNAL COMBUSTION ENGINE. JAMES H. MARKS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 1, 1929. Serial No. 336,754. 10 Claims. (Cl. 184—6.)

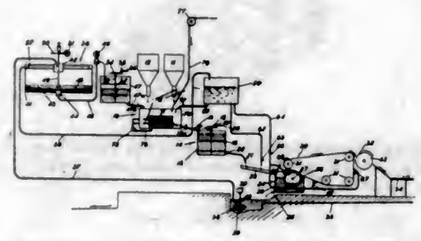


1. In combination with an internal combustion engine including a crank case having an oil supply tube, a filter, a cover for the tube and means interconnecting the cover and filter for cleansing the filter upon opening or closing the cover.

1,872,479. PROCESS OF PRODUCING ACETIC ANHYDRIDE FROM ETHYLIDENE DIACETATE. HOWARD W. MATHESON, Montreal, Quebec, Canada, assignor to Canadian Electro Products Company, Limited, Montreal, Quebec, Canada. Filed Dec. 12, 1929. Serial No. 413,684. 7 Claims. (Cl. 260—123.)

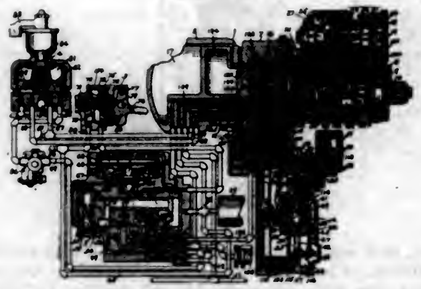
1. A process of making acetic anhydride which comprises heating vapor of ethylidene diacetate to a temperature of 300° to 450° C.

1,872,480. MAKING CEMENT-ASBESTOS PRODUCTS. ERNEST J. MAUST, New York, N. Y., assignor to The Dorr Company, Inc., New York, N. Y., a Corporation of Delaware. Filed July 17, 1931. Serial No. 551,440. 17 Claims. (Cl. 92—40.)



1. In a process adapted for manufacture of cement-asbestos products by use of a dilute initial slurry, the step of conditioning such slurry by means of a flocculating agent.

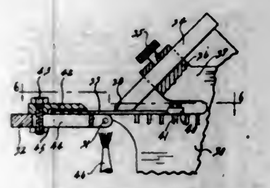
1,872,481. SAFETY CAR CONTROL EQUIPMENT. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed July 6, 1931. Serial No. 548,842. 12 Claims. (Cl. 303—40.)



1. In a fluid pressure brake, the combination with a brake cylinder, of a valve device for supplying fluid under pressure to said brake cylinder and for releasing fluid under pressure from said brake cylinder, a pipe for supplying fluid under pressure to said valve device, a check valve for normally preventing back flow through said pipe, an abutment movable by fluid under pressure for unseating said check valve for permitting release of fluid under pressure from said valve device through said pipe, a release pipe for supplying fluid under pressure to said abutment, a valve for venting fluid under pressure from said release pipe, a brake pipe, a movable abutment operated by fluid under pressure from said brake pipe for seating said valve, and means operated upon a reduction in brake pipe pressure to supply fluid under pressure from the first mentioned pipe to said movable abutment.

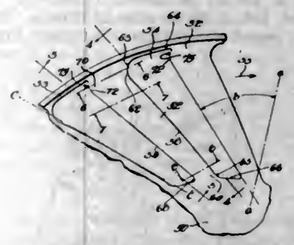
1,872,482. PROCESS OF BENDING LAMINATED SHEETS. JOSEPH MESSING, Detroit, Mich., assignor to Bull Dog Electric Products Company, Detroit, Mich., a Corporation of West Virginia. Filed Apr. 17, 1930. Serial No. 445,106. 5 Claims. (Cl. 18—58.)

1. In the process of bending a sheet-like mass of a material which becomes flexible upon the application of heat, the steps of heating said material to a point to render it flexible, bending said material by stresses acting transverse to the plane of the sheet, and applying



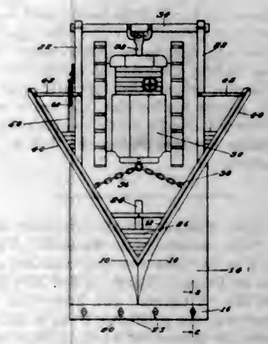
thereto, while it is being bent, pressure producing stresses acting in the plane of the sheet from opposite edges thereof.

1,872,483. IMPELLER. WILLIAM MEYER, Chicago, Ill. Filed May 27, 1929. Serial No. 366,178. 8 Claims. (Cl. 170—159.)



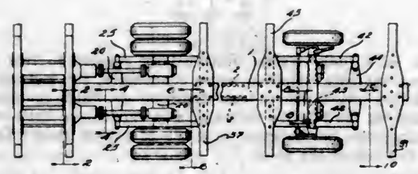
1. An impeller comprising a unitary sheet metal multi-blade structure with the blades pitched angularly relative the normal plane of the sheet metal, and trailing tails turned across and to the opposite side of the plane of the sheet metal adjacent the outer ends of the trailing edges of the blades.

1,872,484. HIGHWAY SNOWPLOW. CHARLES A. MILHON, Garfield, Kans. Filed Apr. 11, 1930. Serial No. 443,355. 4 Claims. (Cl. 37—42.)



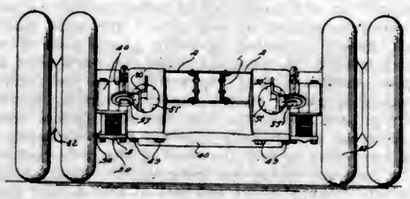
1. A snow plow, including a pair of angularly positioned concavely curved mold boards, the mold boards being joined at their forward ends and separated at their rear ends to form a snow penetrating and dividing prow, and a scraper board mounted beneath the mold board assembly and extending transversely across the forward end of same to a width of approximately two-thirds of the total distance separating the rear ends of the mold boards, together with an adjustable scraper blade mounted on the forward end of the scraper board, runners for the scraper board, and push-bars supporting the assembled mold boards, scraper board and scraper blade, and a hitch bar connecting the rear ends of the push-bars, together with guide chains mounted on the mold boards adjacent their middles.

1,872,485. BUS CHASSIS CONSTRUCTION. CLARENCE W. MILLER, Detroit, and GILBERT C. GOODE, Birmingham, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 22, 1930. Serial No. 483,447. 6 Claims. (Cl. 180—54.)



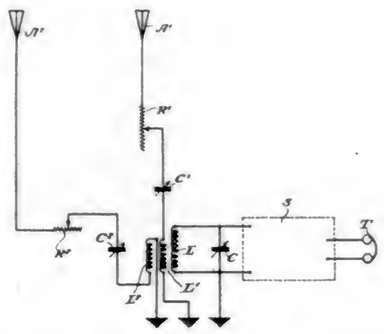
1. A vehicle chassis including a central, longitudinal frame member, a transverse motor support mounted on said member having arch shaped end portions located on the respectively opposite sides of said member, a pair of motors one suspended from each arch shaped end portion of said motor support, and supporting structure above said motor support extending laterally of said chassis and secured to the outer extremities of said arch shaped end portions.

1,872,486. BUS WHEEL DRIVING UNIT. CLARENCE W. MILLER, Detroit, and GILBERT C. GOODE, Birmingham, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 22, 1930. Serial No. 483,448. 4 Claims. (Cl. 180—70.)



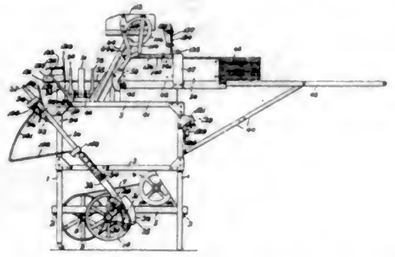
1. In a vehicle having a pair of laterally spaced driving axles, a pair of axle housings, each having opposed open ends and one rotatably supporting each axle, said axle housings being interchangeable with respect to the respectively opposite sides of said vehicle, a driving unit including a drive shaft fitted in one open end, and a closure fitted in the other open end of said housing having brake mechanism thereon, said driving unit and closure being interchangeable with respect to the open ends of said housing.

1,872,487. RADIO RECEIVING SYSTEM. JOHN M. MILLER, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 8, 1931. Serial No. 555,877. 10 Claims. (Cl. 250—20.)



1. In a radio system differentially coupled to two antenna systems including series condensers, the method of reducing noises due to local disturbances which comprises adjusting the relative values of said condensers until both an increase and decrease in value of one of them effects an increase in the noise.

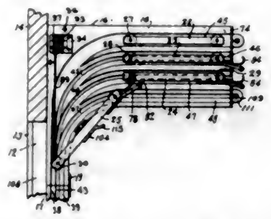
1,872,488. WRAPPING MACHINE. WILLIAM E. MILLER, Gobles, Mich. Filed Apr. 1, 1929. Serial No. 351,601. 19 Claims. (Cl. 93—2.)



1. In a wrapping machine, the combination of a horizontal support on which an article to be wrapped with a wrapper rolled lengthwise of and around the same may be placed, fingers extending upwardly at the ends of said support to turn the lower projecting end portions of said wrapper upwardly when the article with the wrapper around it is placed on the support, pivotally mounted fingers at each side of the first mentioned fingers, means for operating the pivotally mounted fingers inwardly toward each other to fold the sides of the projecting ends of the wrapper, means for lowering all of said fingers, and means mounted above and back of said support simultaneously moved in a downward direction with the downward movement of said fingers to complete the folding of the wrapper at its projecting ends and at the upper sides thereof.

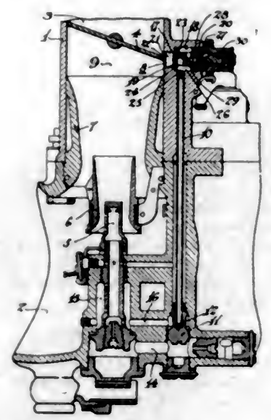
1,872,489. DOOR. JETHRO MITCHELL, Cincinnati, Ohio, assignor to Moeschl-Edwards Corrugating Company, Inc., Covington, Ky., a Corporation of Kentucky. Filed Dec. 13, 1929. Serial No. 413,762. 10 Claims. (Cl. 20—19.)

1. In a device of the character described, the combination of door-sections, guiding means at the respective ends of said door-sections, said guiding means including guides extending in substantially the same plane and a plurality of neighboring guides at an angle to said first-named guides, and automatic releasable connecting means connecting adjacent ends of proximate door sections, said automatic



releasable connecting means comprising complemental connecting members having relative lateral movement between them for connecting and disconnecting the same.

1,872,490. CARBURETOR. FRANK C. MOCK, CHARLES J. GUSTAFSON, and MILTON E. CHANDLER, Chicago, Ill., assignors to Bendix Stromberg Carburetor Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 24, 1930. Serial No. 438,278. 7 Claims. (Cl. 261—41.)

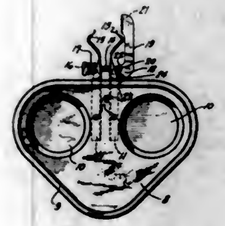


1. In a carburetor, a cylindrical wall, said wall having a radial aperture therethrough, a valve seat member adapted to plug said aperture, said valve seat member comprising a cylindrical plug having a diametral rectangular slot at its inner end, said slot communicating with the interior of the carburetor, means for holding the valve seat plug in said aperture, and a needle valve co-operating with said valve seat member for controlling the flow of idling mixture in said carburetor.

1,872,491. CARD TABLE TRAY. GUSTAV A. NOETZEL, Waukesha, Wis., assignor to Essential Products Co., Milwaukee, Wis., a Copartnership consisting of George N. Glennon and Roger C. Loew. Filed May 8, 1930. Serial No. 450,754. 1 Claim. (Cl. 248—20.)

A card table tray, comprising a tray, a pair of spaced-apart arms pivotally connected at their inner end portions to said tray and projecting outwardly therefrom, the outer end portions of said arms being formed with complementary clamping jaws, outer portions of said arms being formed with alined openings, a headed bar extending through said openings transversely of the arms, a coiled

spring confined on a portion of said bar between its head and an outer face of one arm, and an operating lever pivotally connected at its inner end portion to the other

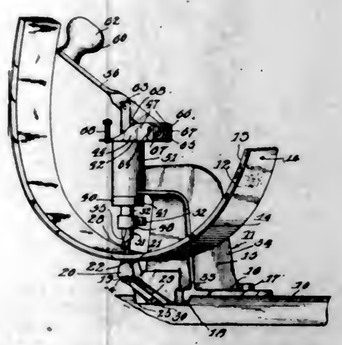


end portion of said bar, the inner end portion of said lever having an inwardly offset portion with angular surfaces for engagement with the other of said arms.

1,872,492. PROCESS OF PREPARING LEUCO-1.4-DIHYDROXYANTHRAQUINONES. JAMES OGILVIE, Buffalo, and DONALD G. ROGERS, Hamburg, N. Y., assignors to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 20, 1929. Serial No. 408,664. 23 Claims. (Cl. 260—58.)

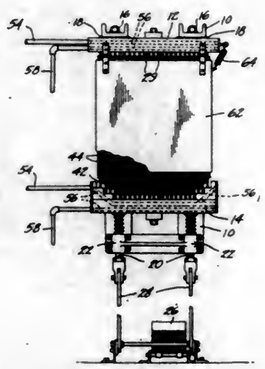
1. The process of preparing a leuco-quinizarine which comprises reducing an orthohalogen-quinizarine in an alkaline medium.

1,872,493. BRAKE LINING TOOL. EDWARD HENRY PETERSON and WILLIAM H. ODLUM, Chicago, Ill., assignors to Duro Metal Products Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 22, 1930. Serial No. 477,177. 4 Claims. (Cl. 77—5.)



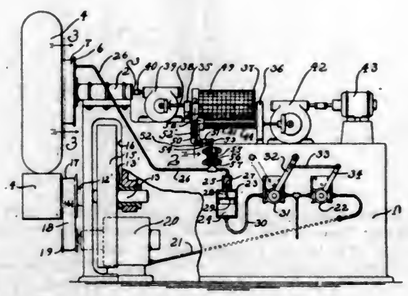
1. In a brake lining tool, the combination of a supporting body having a work supporting foot and a bearing located above said foot, with a sleeve rotatably mounted in said bearing and provided with thrust bearings at each end of said sleeve to prevent its axial movement relative to the bearing, a tool supporting arbor slidably mounted in said sleeve and rotatable therewith, a crank having a pivot connection with said arbor and said sleeve for rotating and reciprocating said arbor, a combined drill and countersink carried by said arbor, and a pilot pin slidably and resiliently mounted in said foot to be engaged and reciprocated by said drill.

1,872,494. PROCESS OF MAKING RADIATOR CORES. JOHN D. PETERSEN, Detroit, Mich. Filed Sept. 16, 1926. Serial No. 135,962. 5 Claims. (Cl. 219—12.)



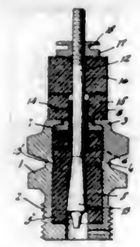
1. The method of assembling a radiator core comprising the forcing of water tubes, having a coating of fusible material, through spaced fins of thin flexible material, dipping the core thus assembled in a soldering acid solution, placing the core between electrical terminals, heat insulating the front and rear faces of said radiator core, passing an electrical current through said tubes whereby the coating on the tubes is fused firmly uniting the same when cooled.

1,872,495. BRAKE TESTING MACHINE. KARL PFEIFFER, Highland Park, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 25, 1930. Serial No. 491,301. 7 Claims. (Cl. 73—51.)



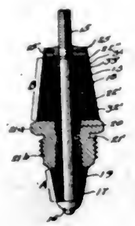
2. A brake testing machine including means for rotatably supporting a vehicle wheel, a support for its braking apparatus, means for applying said braking apparatus including a control element, driving mechanism for rotating said wheel including a control element, means for operating the control elements of said brake applying means and said driving mechanism respectively so as to simultaneously energize one and de-energize the other, and an inertia member connected with said driving mechanism for rotating said wheel against the action of said braking apparatus after said driving mechanism is de-energized.

1,872,496. SPARK PLUG AND METHOD OF MAKING THE SAME. HECTOR RABEZZANA, Flint, Mich., assignor to A. C. Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Dec. 7, 1928. Serial No. 324,512. 17 Claims. (Cl. 29—155.5.)



1. A method of producing a spark plug which comprises: disposing non-vitreous insulation and a shouldered element both within a receptacular shell which is provided also with an inwardly collapsible zone; and so collapsing said shell, while heating said zone, as to place said insulation first under axial and then under radial compression.

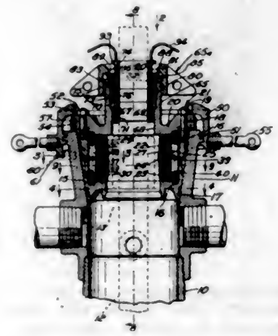
1,872,497. METHOD OF FORMING MICA-INSULATED SPARK PLUGS. HECTOR RABEZZANA, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Corporation of Michigan. Filed Dec. 7, 1928. Serial No. 324,513. 23 Claims. (Cl. 29—155.5.)



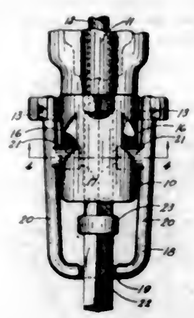
6. A method of securing an insulating sleeve between a rod-like element and a tube which comprises: surrounding said tube by an annular element having a pre-weakened region thereof adapted as to permit of its distortion under longitudinal pressure; and simultaneously applying thereto sufficient heat to soften the same and such longitudinal pressure as to produce, by an inward distortion in said region, an annular construction in said tube.

1,872,498. BLOW-OUT PREVENTER. CHESTER A. RASMUSSEN, Long Beach, and WILLIAM A. TROUT, Los Angeles, Calif. Filed May 25, 1929. Serial No. 365,812. 13 Claims. (Cl. 166—14.)

1. In a blow-out preventer, the combination of: a seat member; a packing-retaining structure engaging said seat member; a clamping structure engaging said packing-retaining structure; interengaging means on said packing-retaining structure and on said seat member for preventing any relative rotation thereof; projections on said packing-retaining structure; and tongues on said clamping structure adapted to engage said projections for locking said packing-retaining structure relative to said clamping structure when a relative rotation between said structures takes place.



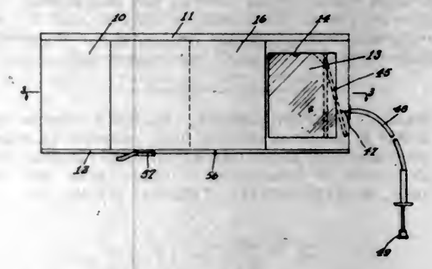
1,872,499. DRILL TOOL RETAINER. GEORGE RAUBERSTRAUCH, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 4, 1929. Serial No. 397,181. 11 Claims. (Cl. 121—32.)



1. In a drill of the class described, a head, a yoke having arms embracing said head and pivoted thereto intermediate their length, means on the outer ends of said arms for retaining a tool, and means for engaging the outer side of the opposite end of one of said arms to releasably secure said yoke in a plurality of positions.

1,872,500. STUDIO CAMERA FILM REPLACING DEVICE. FRANZ REBNER, New York, N. Y., and PAUL KENT, Hartford, Conn. Filed July 11, 1930. Serial No. 467,181. 3 Claims. (Cl. 95—49.)

1. In a camera, a movable panel adapted to be slidable on the rear wall of a camera, a housing having compartments therein, a loader magazine in one of said compartments, a receiver magazine in the other of said compartments, photograph frames normally located in said loader magazine, said loader magazine having a slit therein, a blind adapted to be inserted in said slit to seal said loader magazine against light, means on said blind for urging said frames in said loader magazine away from



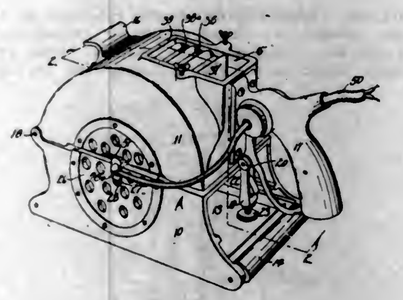
the open portion thereof and means movable on said panel for shifting said photograph frames from said loader magazine into said receiver magazine.

1,872,501. OPTICAL SYSTEM FOR COLOR PHOTOGRAPHY. PAUL REHLÄNDER, Berlin-Charlottenburg, Germany. Filed Nov. 19, 1930, Serial No. 496,804, and in Germany Nov. 19, 1929. 2 Claims. (Cl. 95—2.)



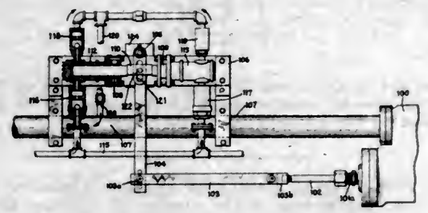
1. In the Berthon process with numerous minute cylindrical lenses the placing of a cylindrical lens in a fixed distance of the objective and as near the minute cylindrical lenses of the film as mechanically possible, the central axis of this cylindrical lens being parallel to the center axis of the minute cylindrical lenses of the film.

1,872,502. SANDING MACHINE. RAYMOND A. REID, Cedar Rapids, Iowa. Filed May 21, 1930. Serial No. 454,480. 11 Claims. (Cl. 51—170.)



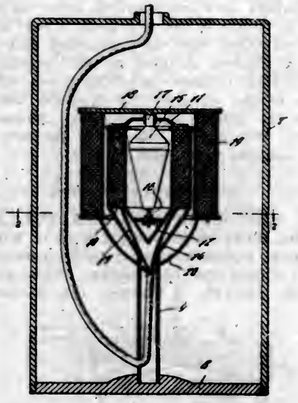
1. In a sanding machine, a casing comprising lower and upper members, means for hinging said members together at one end, means for locking said members together at the other end, capable of adjustment for allowing variation in the adjustment of the members with each other, said casing having an opening in its bottom, and shaft receiving vertical slots in the lower member, a sanding drum in the casing, forming also a motor rotor, a stator in the drum having fixed shaft ends non-rotatably received in said slots, for vertical sliding adjustment, springs for supporting the shaft ends in said slots, whereby the sander drum is spring supported and its highest position may be limited by adjustment of said second means.

1,872,503. PROPORTIONAL PUMPING APPARATUS. WILLIAM E. REPSCHLEGER, GEORGE ARMISTEAD, Jr., BRYAN B. TALBOT, and JOSEPH G. PLACETTE, Port Arthur, Tex., assignors to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 448,592. 9 Claims. (Cl. 103—6.)



1. Fluid proportioning means comprising a plurality of reciprocating pumps consisting of a power driven main pump and auxiliary pumps whose piston rods are actuated by power transmitted through a rocker arm rocking about a point intermediate its ends, one end of which is engaged by a piston rod of the main pump while the other end adjustably cooperates with the rod of an auxiliary pump.

1,872,504. ELECTRICAL GEOLOGICAL DISTURBANCE DETECTOR. CULLEN R. ROGERS, Graham, Tex. Filed Apr. 22, 1929. Serial No. 357,114. 5 Claims. (Cl. 175—343.)

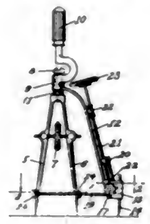


1. A vibration detector comprising a vibratory container, a coil mounted within said container and being movable therewith, a core adapted to be suspended within the coil when said coil is electrically energized, and inductive means movable independently of the said coil and being motivated by said core.

1,872,505. ELLIPSOGRAPH. ADOLPH RONNING, Minneapolis, Minn. Filed Apr. 29, 1929. Serial No. 358,957. 3 Claims. (Cl. 33—30.)

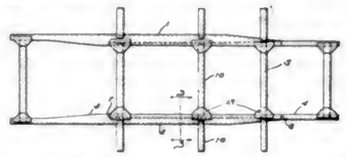
1. A drafting instrument comprising a device adapted to be held in a relatively stationary position on a surface to be marked, a spindle member rotatably secured to the device, a spring arm extending from the spindle member

and for supporting a marker at its outer end, a screw member secured to the arm and having an operating head at its upper end, a flexible guide element connecting the



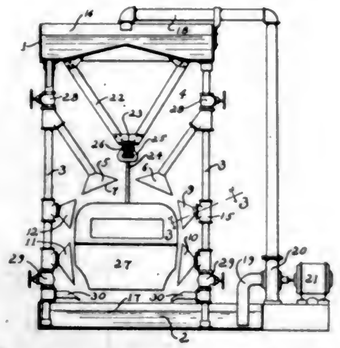
arm and the device and having a traveller movable on the screw whereby effective length of the guide may be adjusted by the manipulation of the screw head.

1,872,506. VEHICLE CHASSIS FRAME. FREDERICK L. SAGE, Birmingham, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 9, 1929. Serial No. 405,889. 2 Claims. (Cl. 280—106.)



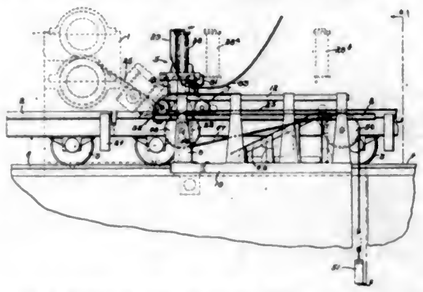
1. In a chassis frame, side members each including a pair of overlapped channel bars, one seated between the respectively opposite side flanges of the other, the webs of said channel bars being spaced apart so as to form a tubular structure in the intermediate part of each side member, and cross members connecting said side members, and outriggers mounted on the outermost channel bars of said side members comprising channel-shaped members each having an inwardly disposed web extension secured to the web of said outermost channel bars and overhanging side flanges secured to the side flanges of the latter channel bars.

1,872,507. RUST PROOFING APPARATUS. SEYMOUR G. SAUNDERS, Birmingham, and CHARLES C. WILLIAMS, Detroit, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 441,117. 4 Claims. (Cl. 91—44.)



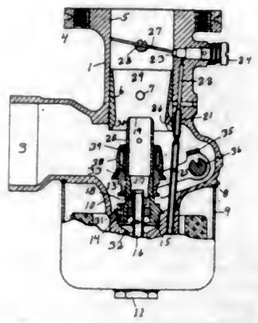
1. In apparatus for rust proofing bodies, a pair of spaced tanks, one above the other, side pipes communicating with the upper tank and forming a passage bounded by said tanks and side pipes, means in said passage for shiftably supporting a body, and a plurality of outlet nozzles located below said upper tank communicating with said side pipes and extending inwardly into said passage, the discharge ends of said nozzles forming an arch for receiving said body, and means for feeding a rust proofing solution from the lower tank to the upper tank.

1,872,508. CUTTING DEVICE. HAROLD R. SCHUTZ and HARRY E. ROBINSON, Toledo, Ohio, assignors, by mesne assignments, to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 18, 1928. Serial No. 270,878. 7 Claims. (Cl. 49—14.)



1. In a device of the character described, a travelling table for supporting material to be cut, a carriage supported for travel above the table, means for moving the carriage forwardly for a certain distance in predetermined relation to the table and for then returning the carriage to its initial position, a cutting element guided for vertical movement with respect to the carriage, a piston connected to the cutting element, a vertical cylinder in which said piston is guided, an air pressure supply pipe with branches leading, respectively, to the upper and lower ends of the cylinder, a valve controlling said pressure supply, and means on said carriage for shifting the valve to direct the pressure into the upper end of the cylinder during the first part of the advance of the carriage and then directing the pressure into the lower end of the cylinder.

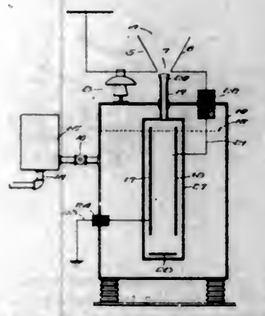
1,872,509. CARBURETOR. JOSEPH SCHWEISS, St. Louis, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a Corporation of Delaware. Filed July 6, 1929. Serial No. 376,378. 5 Claims. (Cl. 261—54.)



1. In a carburetor, a main venturi, a standpipe forming a primary mixing chamber and discharging at the throat of said main venturi, said standpipe being smaller than the throat of said venturi and concentric therewith, an air inlet for said standpipe, an annular valve slidably

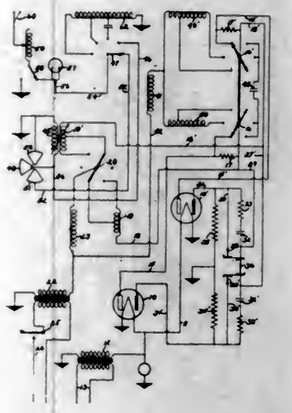
mounted on said standpipe adapted to close against the end of said venturi, a by-pass formed in said annular valve, and a suction operated valve for temporarily controlling said by-pass.

1,872,510. LIGHTNING ARRESTER. EDMUND O. SCHWEITZER, Chicago, Ill. Filed May 23, 1927. Serial No. 193,443. 10 Claims. (Cl. 175—30.)



3. In combination, a main tank, a chamber within said tank communicating with the main tank, electrodes in said chamber, a spark gap in series with said electrodes, a discharge conduit leading from the chamber to the spark gap, and a body of liquid in said tank and in said chamber between the electrodes.

1,872,511. CONDENSER ASSEMBLY. PHILIP F. SCOFIELD, Palo Alto, Calif., assignor to Heintz & Kaufman, Ltd., San Francisco, Calif., a Corporation of Nevada. Filed Aug. 8, 1930. Serial No. 473,890. 5 Claims. (Cl. 250—36.)

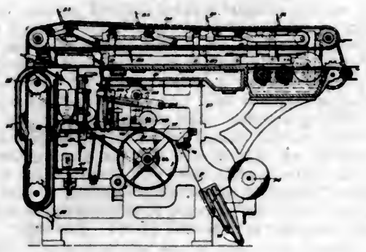


4. In combination with a variable frequency oscillator, a grid coupling network comprising a high capacity branch and a low capacity branch, said high capacity branch including a resistance, whereby the proportion of the total current through said network which traverses said low capacity branch is greater at high frequencies than at low frequencies.

1,872,512. PREPARATION OF HIGH PLASTIC LIME. MAX Y. SEATON, Palo Alto, Calif., assignor to California Chemical Corporation, Newark, Calif., a Corporation of Illinois. Filed June 24, 1930. Serial No. 463,574. 5 Claims. (Cl. 23—186.)

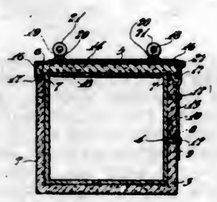
1. A process of making a high-plastic lime, which comprises heating calcium carbonate substantially free from silica to a temperature materially above 1200° C.

1,872,513. WEB-FEEDING AND CUTTING MACHINE. HENRI A. SÉVIGNÉ, Winthrop, Mass., assignor to National Bread Wrapping Machine Company, Springfield, Mass., a Corporation of Massachusetts. Original application filed Sept. 27, 1929, Serial No. 395,608. Divided and this application filed Mar. 30, 1931. Serial No. 526,193. 4 Claims. (Cl. 164—49.)



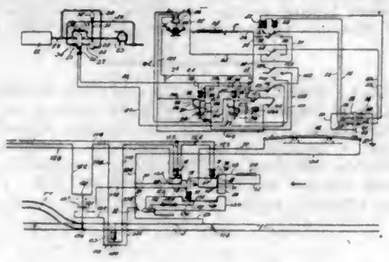
1. A machine for feeding and cutting a web of paper, said machine having a support for a rolled web of paper, rolls for feeding the web, means under the control of articles to be associated with sections cut from the web for varying the length of time of operation of said rolls, a cutter for severing the web into sections, and means for adjusting the location of the cutter toward or from the web-feeding rolls.

1,872,514. HINGE MECHANISM FOR GRAVE VAULTS. WILLIAM B. SHAFER, Pittsburgh, Pa., assignor to Pittsburgh Asphalt Company, a Corporation of Pennsylvania. Filed July 23, 1928. Serial No. 294,883. 6 Claims. (Cl. 72—7.)



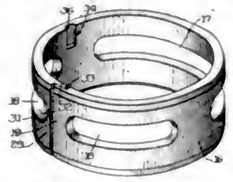
1. The combination with a vault having two separable portions, of a hinge mechanism comprising a member adapted to be detachably connected to the exterior of one of said portions and readily removable therefrom and a second member adapted to be securely fastened to but detachable from the exterior of the other portion whereby the latter may be supported by said second member and whereby the hinge mechanism may be removed when the vault is in assembled position.

1,872,515. TRAIN CONTROL SYSTEM. ARCHIBALD G. SHAVER, Chicago, Ill., assignor to The Regan Safety Devices Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 18, 1922. Serial No. 607,688. 28 Claims. (Cl. 246—182.)



1. A manual-automatic speed control system, in combination, a vehicle carried electrically operated device, mechanism including vehicle carried and roadside means operated in response to normal or "clear" roadside conditions for producing a normal state of operation and operated in response to a "non-clear" roadside condition for producing another state of operation of said device and vehicle carried means for restoring the normal state of operation of said device and for placing the same under the control of the speed of the train under the said "non-clear" roadside conditions comprising a means normally inoperative and rendered operative when said mechanism is operated in response to the "non-clear" condition, a speed controlled means and a manually operable single impulse responsive means, all of which combinedly control the restoration of said electrically operated device, the said manually operable single impulse responsive means being in turn under the control of the said speed controlled means.

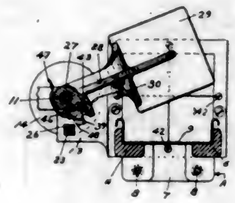
1,872,516. INTERNAL-COMBUSTION ENGINE SEALING-RING CONSTRUCTION. RALPH L. SKINNER, Detroit, Mich., assignor to Skinner Motors, Inc., Detroit, Mich., a Corporation of Delaware. Filed Mar. 18, 1931. Serial No. 523,478. 13 Claims. (Cl. 123—75.)



1. A longitudinally-split expansible sealing-ring having inlet and exhaust ports therethrough, the joint of said split being out of register with the openings of said ports and having an inner longitudinal tongue on and extending the full length of one end of the ring and a co-operating, outer longitudinal tongue on and extending the full length of the other end of the ring and overlapping said inner tongue, whereby attempted expansion of said ring, if expansion thereof is confined, tends to seal said joint by forcing said inner tongue outwardly against outer tongue, said ring comprising an independent unit capable of substantially-uniform expansion and contraction throughout its circumference.

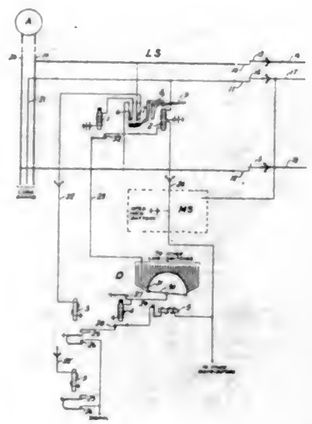
1,872,517. BUTTER CUTTER. ALBERT SLATEN, Minneapolis, Minn. Filed Apr. 19, 1930. Serial No. 445,605. 3 Claims. (Cl. 31—24.)

2. A butter cutting machine comprising a butter support, a stationary cutter frame at one end of the support, a movable cutter frame adjacent to the stationary frame a shaft journaled longitudinally of the machine, means operative upon rotating the shaft to actuate the movable cutter frame, a toothed rack bar disposed parallel with said shaft, a carrier tiltable and slidable upon the shaft with a pusher head operative over the butter support, a



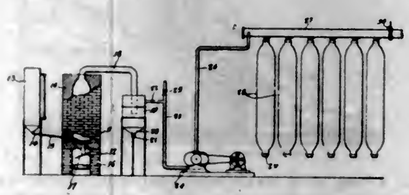
pawl on the carrier for engagement with the rack bar, means for reciprocating the rack bar and a stop member limiting the downward movement of the rack bar engaging end of the pawl, said pawl having a beveled corner for sliding contact with an edge of a rack tooth whereby it may slip into operative position on the rack when the carrier is tilted into operative position.

1,872,518. LINESWITCH EQUIPMENT. GEORGE E. STONEBRIDGE, New York, N. Y., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 15, 1930. Serial No. 420,848. 18 Claims. (Cl. 179—18.)



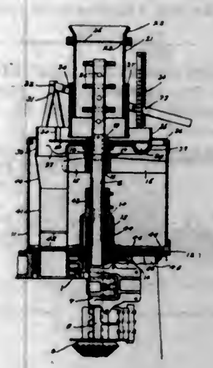
1. In combination, a plurality of subscriber's individual line switches, an operating magnet for each switch, a normally open circuit for each magnet, and a distributor switch for completing said circuits one at a time.

1,872,519. PROCESS AND APPARATUS FOR MANUFACTURING FINELY DIVIDED CARBON. ARCHIE L. STROUT and ERNEST E. LYDER, Berkeley, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed July 7, 1928. Serial No. 291,096. 10 Claims. (Cl. 134—60.)



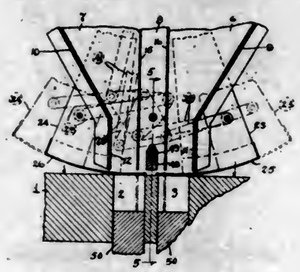
1. A method of manufacturing finely divided carbon from petroleum oil comprising, maintaining an area of petroleum oil undergoing independent incomplete combustion in a combustion zone, continually admitting air at a plurality of points within and on said area of petroleum oil, regulating the quantity of air being admitted to maintain an incomplete combustion over the entire area of oil within required temperature limits without the supply of extraneous and separate heat to the oil, cooling the products of combustion and then separating solid carbon particles from such cooled products of combustion.

1,872,520. MOLD FEEDING DEVICE FOR BRICK PRESSES. ROBERT B. STUCKEY, Bucyrus, Ohio, assignor to W. A. Riddell Company, Bucyrus, Ohio, a Corporation of Ohio. Filed Dec. 27, 1929. Serial No. 416,853. 7 Claims. (Cl. 25—103.)



1. In a mechanism of the character described, the combination with a mold conveying means; of a feed hopper; a chute from said hopper to said molds; and a revolvable disc for opening and closing the delivery end of said chute as said molds are placed respectively in and out of communication with said chute.

1,872,521. MECHANISM FOR FEEDING DISSIMILAR MATERIAL TO MOLDS IN BRICK PRESSES. ROBERT B. STUCKEY, Bucyrus, Ohio, assignor to The W. A. Riddell Company, Bucyrus, Ohio, a Corporation of Ohio. Filed May 16, 1930. Serial No. 452,917. 18 Claims. (Cl. 25—103.)



1. In a press, the combination of a mold, means for feeding different materials to said mold, and means adapted to enter said mold to maintain separate such material fed thereto.

1,872,522. METHOD OF MAKING ARTIFICIAL STONE BRICK. ROBERT B. STUCKEY, Bucyrus, Ohio, assignor to W. A. Riddell Company, Bucyrus, Ohio, a Corporation of Ohio. Filed Oct. 2, 1930. Serial No. 485,932. 2 Claims. (Cl. 25—156.)

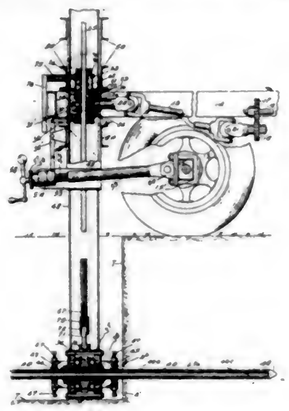


1. The process of forming brick comprising molding a mass of suitable material with intersecting scorings on at least one face and an aperture extending therethrough at the intersection of said scorings, and then fracturing such mass along the lines of such scorings.

1,872,523. EARTH PIERCING DEVICE. JOSEPH B. SWEENEY and EDMUND W. ROBERTS, Cincinnati, Ohio, assignors to O'Connell and Sweeney, a Partnership composed of Robert D. O'Connell and Joseph B. Sweeney, Cincinnati, Ohio. Filed Nov. 13, 1929. Serial No. 406,850. 20 Claims. (Cl. 255—1.)

7. In an earth piercing machine, the combination of a ground supported support, a guide pivoted thereon, a depending slide slidable on said guide, a piercing rod at the lower end of said slide, means supporting said piercing rod on said slide with its axis extending in lateral directions substantially perpendicular to the vertical plane in

which the axis of the pivot of said guide is located, and means between said pivoted guide and said ground supported support for adjusting the inclination of said punch-



rod to correspond substantially with the inclination of the surface of the ground in the direction of the piercing movement.

1,872,524. PROCESS FOR PRODUCING SHEET GLASS. CHARLES W. SWOPE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 7, 1930. Serial No. 459,645. 10 Claims. (Cl. 49—87.)



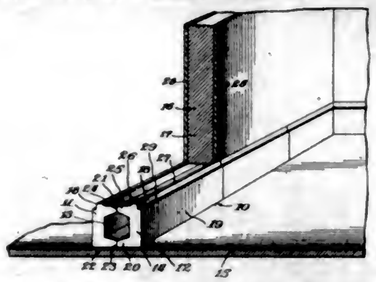
1. The process of producing sheet or plate glass, which consists in intermittently forming successive sheets of glass by a rolling operation and at a relatively high rate of speed, receiving and carrying each sheet forwardly as it is formed upon a series of surfaces bodily movable with respect to the sheet and in a direction opposite to the forward movement thereof, in reducing the speed of forward travel of the sheet while upon said surfaces and while maintaining the said bodily movement of the surfaces relative to the sheet, and in then passing the sheet at such reduced speed into and through an annealing zone.

1,872,525. FURNITURE CONSTRUCTION. ROY F. TAYLOR, Richmond, Ind. Filed Feb. 13, 1928. Serial No. 253,900. 5 Claims. (Cl. 45—88.)



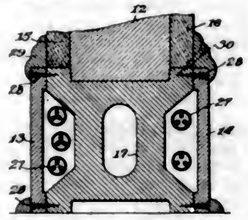
1. In furniture construction, a base frame composed of sills joined together at their ends, a bottom attached to all of said sills and covering the space therebetween, a triangular plate located in a corner of and resting on two adjacent sills of said frame, a post located in the corner with its lower end resting on said plate, a leg whose upper end contacts with said bottom, and a lag screw passing through said plate and bottom and into the leg, thereby rigidly clamping said plate, bottom and leg together.

1,872,526. WALL CONSTRUCTION. EWALD F. TECHMER, Chicago, Ill., assignor, by mesne assignments, to National Kellastone Company, Chicago, Ill., a Corporation of Delaware. Filed July 26, 1928. Serial No. 295,593. 4 Claims. (Cl. 72—16.)



1. A base block structure molded from initially-plastic cementitious material, and having an upwardly-directed ledge surface of a width to gauge the thickness of a plaster coat thereabove and another bearing surface inwardly thereof at a different level and sloping slightly in.

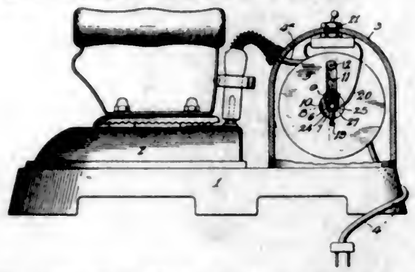
1,872,527. WALL CONSTRUCTION. EWALD F. TECHMER, Chicago, Ill., assignor, by mesne assignments, to National Kellastone Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 6, 1928. Serial No. 310,751. 7 Claims. (Cl. 72—16.)



1. In a wall construction, the combination of a base block of magnesite composition with a wall core, said block having a longitudinally extending recess in its side for wiring and the like, and a baseboard for closing said recess

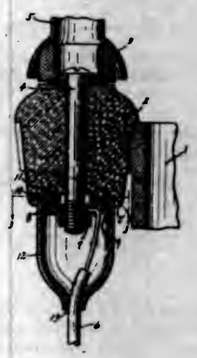
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1,872,528. EXTENSION CORD ELECTRIC IRON HOLDER. PAUL D. TEMPLE, Chicago, Ill. Filed Mar. 2, 1929. Serial No. 344,050. 1 Claim. (Cl. 68—27.)



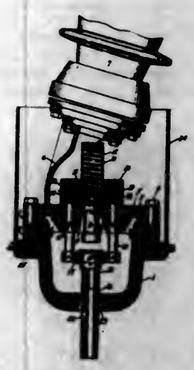
The combination with an electric smoothing iron, of a massive iron holder having a seat defining the position of the iron thereon; an upstanding electric cord receptacle on said holder in the rear of said seat; self winding take-up means for electric cords in said receptacle; and two cords electrically interconnected and wound upon said take-up means, one having means for connecting it with an electric outlet and the other being connected with the smoothing iron.

1,872,529. CONNECTION FOR LAMP HANGER CONTACTORS. ALLISON J. THOMPSON, Cleveland, Ohio. Filed July 10, 1930. Serial No. 466,919. 3 Claims. (Cl. 173—328.)



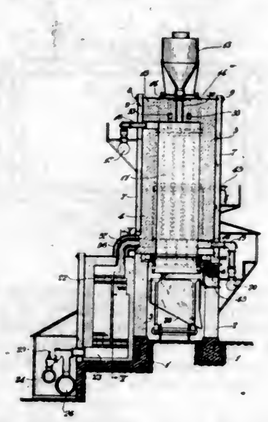
1. A connector for a lamp hanger contact assembly comprising an insulator body portion, a supporting means therefor, current conducting means extending through said insulator body portion for connection with a current conducting line, a connection protecting means including a cap member for covering the connection between said current conducting member and the current conducting line, means for connecting said cap member and said insulator body portion, and an annular depending lip on said insulator body portion surrounding the connection between said cap member and said insulator body portion to cut off leakage by capillary attraction past said point of connection.

1,872,530. HIGH TENSION CIRCUIT INTERRUPTER. WILLIAM H. TURNPENNY, Albany, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 25, 1930. Serial No. 498,075. 7 Claims. (Cl. 200—150.)



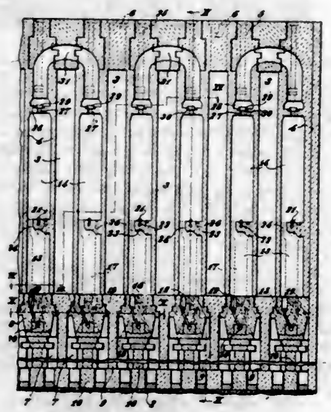
1. A high tension circuit interrupter of the fluid-break type comprising metallic supporting structure, an explosion chamber member of insulating material secured to said supporting structure, a contact supporting member forming one side of said explosion chamber, a pair of co-acting contacts carried by and resiliently mounted with respect to said supporting member for reciprocal movement, and a relatively movable rod contact extending within said explosion chamber for completing the circuit.

1,872,531. INTERMITTENT VERTICAL COKING RETORT OVEN. JOSEPH VAN ACKEREN, Pittsburgh, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Jan. 8, 1927. Serial No. 159,769. 9 Claims. (Cl. 202—123.)



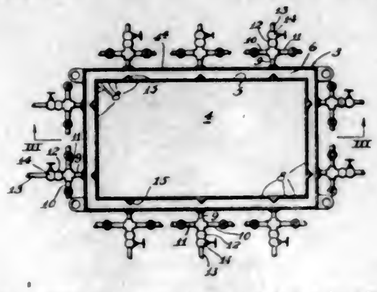
1. In a coke oven battery, the combination with a vertical coking chamber that gradually widens from the top to the bottom thereof, of a heating system therefor comprising vertical heating flues in superposed rows and means for supplying fuel to the rows of flues in such quantities that the heat applied to said coking chamber gradually diminishes with the height thereof.

1,872,532. COKING RETORT OVEN. JOSEPH VAN ACKEREN, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed June 22, 1928. Serial No. 287,408. 17 Claims. (Cl. 202—135.)



3. In a coking retort oven, a coking chamber, heating walls therefor, vertical flame flues in said heating walls, each of said flame flues comprising two superposed sections, and means comprising inlets spaced from the sides of said frame flues for supplying fuel gases to each of said sections, each of said flame flues having an inspection opening and an opening between said sections in alinement with said inspection opening and one of said inlets.

1,872,533. PROCESS OF MAKING WOOD FIBER INSULATING MATERIAL. PAUL G. VON HILDEBRANDT, Pittsburgh, Pa., assignor to Howard B. Salkeld, Pittsburgh, Pa. Filed Nov. 20, 1928. Serial No. 320,603. 5 Claims. (Cl. 92—67.)



1. A process of forming porous insulating board from wood fiber comprising placing moist fiber in a cold closed die provided with a movable platen, partially filling the die with cold water to uniformly distribute the fiber, injecting air under pressure into the die, and applying pressure to the contents of the die by said platen to express a portion of the air and water and compact the fiber to form a board of the desired thickness, said board as thus pressed containing about 30 per cent of water, and the fibers being bonded only by mechanical entanglement.

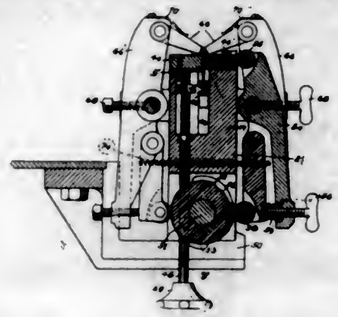
1,872,534. HANDLE ATTACHING MEANS FOR BROOMS AND THE LIKE. FREDD WALLIN, New York, N. Y. Filed Mar. 5, 1930. Serial No. 433,216. 1 Claim. (Cl. 306—29.)



An element providing for the attachment of handles to sweeping implements, said element being formed of a single sheet of metal and comprising diverging brace arms, members spaced from each other and extending between said arms and shaped to conform to a portion of the periphery of a handle, a finger struck out from said sheet in a zone intermediate said members, said finger extending from one of said arms and being shaped to engage a portion of the periphery of said handle, and means cooperating with said finger for causing the latter to clamp the handle to said arms.

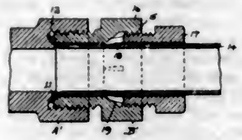
1,872,535. SAW MAKING MACHINERY. FRANK WELLINGTON WARDWELL, Cleveland, Ohio, assignor to The Wardwell Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 19, 1928. Serial No. 247,839. 4 Claims. (Cl. 76—35.)

1. In a saw making machine, a horizontally movable slide having means adapted to hold a double end file, supporting means for said slide adapted to move in a vertically inclined plane, a power shaft having a twin cam to operate said supporting means, said shaft including means for reciprocating said slide once during two consecutive operations of said supporting means, a vise having a movable jaw for holding a jaw in the path of travel of said double end file, an oscillatory shaft having means for activating said movable vise jaw and operating means for said oscillatory shaft coupled with said main shaft and actuated by rotation thereof, said operating means including a connecting rod coupled with said driving means, a crank lever attached to said oscillatory shaft and coupling means be-



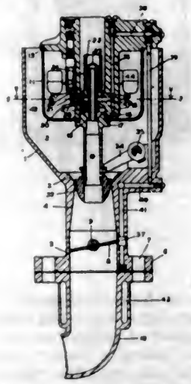
tween said connecting rod and crank lever, said coupling means being longitudinally shiftably supported upon said crank lever to permit change in leverage of said lever.

1,872,536. PIPE COUPLING. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Filed Dec. 31, 1930. Serial No. 505,799. 2 Claims. (Cl. 285—123.)



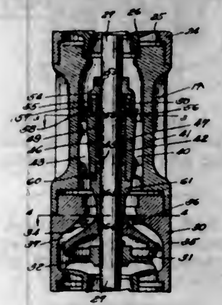
1. A pipe coupling, comprising male and female screw threaded members having cooperating clamping seats for clamping the flared end of a pipe therebetween, the male member including a screw threaded cavity within its enlarged outer end, and a second male member screwed into said cavity and including a contractible tip adapted to grip the pipe within said first male member.

1,872,537. CARBURETOR. HUGH H. C. WEED, Clayton, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a Corporation of Delaware. Filed June 14, 1930. Serial No. 461,089. 2 Claims. (Cl. 261—41.)



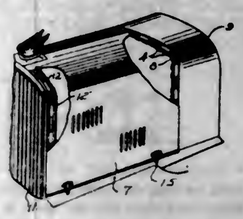
1. In a carburetor, means forming a mixing chamber, a throttle valve controlling the flow through said mixing chamber, a venturi discharging into said mixing chamber, a frusto conical air inlet chamber having its small end discharging into said venturi, a fuel bowl substantially coaxially mounted within said air chamber and slightly spaced therefrom, thereby forming an air passage between said fuel bowl and said frusto conical chamber.

1,872,538. INTERMEDIATE BEARING CONSTRUCTION. ARTHUR R. WEIS, Huntington Park, Calif., assignor of one-half to Pacific Pump Works, Huntington Park, Calif., a Corporation of California, and one-half to George E. Bigelow, Huntington Park, Calif. Filed Nov. 8, 1929. Serial No. 405,624. 6 Claims. (Cl. 103—102.)



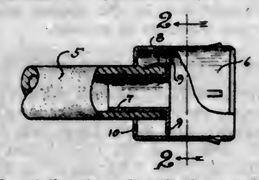
1. In combination: a bearing construction providing a tapering fluid passage therethrough so designed that the fluid pressure at a primary point is higher than the fluid pressure at a secondary point therein; a bearing mounted in said bearing construction, said bearing resting in a bearing chamber communicating with said fluid passage at said primary and secondary points; a shaft journalled in said bearing; means operatively connected to said shaft for forcing fluid through said fluid passage, a small portion of said fluid passing through said bearing; and means at said primary point for straining said small portion of said fluid before it reaches said bearing.

1,872,539. HOOD LACING. ALBERT B. WERDHOFF, Orion, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 6, 1929. Serial No. 412,244. 2 Claims. (Cl. 180—69.)



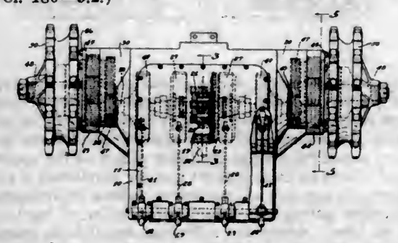
1. In a vehicle structure including a hood receiving seat having spaced apertures therein, a hood lacing on said seat comprising a rubber strip having a groove in its outer side and having spaced apertures therethrough registering with the apertures in said hood seat and opening into said groove, and a detachable metal clip including an intermediate plate seated in said groove and having its end portions bent downwardly with respect to said plate providing rounded extremities therefor and providing spaced lugs, said lugs extending through the apertures of said hood lacing and seat and bent over adjacent the inner side of said seat for firmly compressing the portion of said hood lacing underlying said plate upon said seat.

1,872,540. FERRULE. JAY E. WHITE, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 27, 1927. Serial No. 242,955. 13 Claims. (Cl. 247—6.)



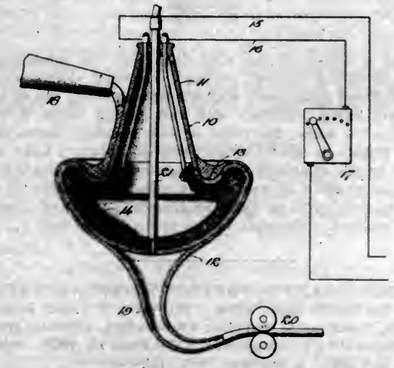
1. A ferrule of the class described comprising an inner tubular portion, an outer portion return bent from and coaxial with said inner portion, and a lug at the junction of said inner portion and said outer portion extending outwardly from said outer portion.

1,872,541. TRANSMISSION AND STEERING MECHANISM. ROLLIN H. WHITE, Cleveland Heights, Ohio. Filed Apr. 19, 1930. Serial No. 445,787. 9 Claims. (Cl. 180—9.2.)



3. In a tractor transmission mechanism, a casing having open end extensions, an internal ring gear adjacent each end of the extension, a closure plate covering one end of the ring gear, means securing the plate and ring gear to the open end of each housing, a shaft projecting through each closure plate and supported by the casing, a sprocket fixed to the projecting end of each shaft, reduction gearing in each casing extension driving the shaft therein including planetary gears meshing with the ring gears, and power driven mechanism for actuating the reduction gearing.

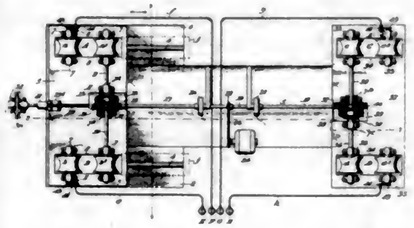
1,872,542. GLASS DRAWING APPARATUS. ALLEN CHARLES WILCOX, Bridgeport, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 3, 1921. Serial No. 449,285. 12 Claims. (Cl. 49—17.1.)



1. In glass drawing apparatus, a member having an inwardly directed exterior surface extending from a predetermined point in its length to its lower end and further

having an inwardly extending ledge at the upper end of said surface provided with a gutter adapted to receive molten glass from a supply and deliver the same by overflow uniformly to the upper end of the surface and thereby effect downward flow of the molten glass over the surface under the influence of gravity.

1,872,543. AUTOMOBILE BRAKE TESTING DEVICE. DON Q. WILKES, Pueblo, Colo., assignor to Bendix Cowdrey Brake Tester, Inc., South Bend, Ind., a Corporation of Delaware. Filed Apr. 15, 1927, Serial No. 183,996. Renewed Mar. 24, 1932. 7 Claims. (Cl. 73—51.)



2. In a brake testing device of the character described, a fixed support, a slidable support, opposite pairs of rollers on each support, the inner roller of one pair being in axial line with the inner roller of the opposite pair on the same support, means for driving the inner rollers of the opposite pairs of rollers on each support and for permitting a slowing down of any one of the driven rollers independently of the other driven rollers, the other roller of each pair being an idler; means for adjusting the slidable support with respect to the fixed support, and a speed indicator connected to each of said idlers.

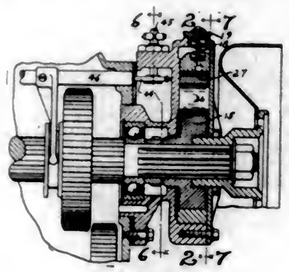
1,872,544. TOY. DAVIS S. WILLIAMS, Los Angeles, Calif. Filed Sept. 22, 1930. Serial No. 483,397. 16 Claims. (Cl. 46—40.)



1. In a device of the kind described, the combination of an elongated upright member, a second elongated upright member juxtaposed with the first member, one of said members being relatively stiff and having bends, a base carrying the same, the other of said members being relatively pliable, a figure representing an animal's body supported on the relatively pliable member, and means for enabling a rotation of one of said members relative to the other to take place on their longitudinal axes and thereby cause relative movements in the parts of said body.

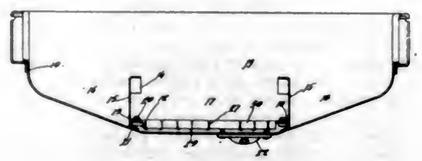
1,872,545. MEANS TO PREVENT REVERSE ROTATION OF ROTARY MEMBERS. WILLIAM WILSON, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 15, 1929. Serial No. 371,268. 9 Claims. (Cl. 192—4.)

1. In a device of the class described, a rotary member, an annular member contacting therewith, a wedge member for cramping said annular member against said rotating member to prevent rotation thereof in one direction, yielding means bearing upon one end of said wedge member for urging it to a non-effective position, and automatic



yielding means of greater strength than the aforesaid yielding means bearing upon the other end of said wedge member for urging it to an effective position.

1,872,546. OIL PAN. HARRY T. WOOLSON, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 29, 1926. Serial No. 112,455. 4 Claims. (Cl. 210—60.)



1. In combination, an oil pan for an internal combustion engine, a plate having punched out portions forming downwardly extending baffles integral therewith positioned in and adjacent the bottom of said pan and transverse members having baffles extending up into alternate recesses between said first mentioned baffles secured to said plate.

1,872,547. BRAKE SHOE. JAMES C. ZEDER, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 9, 1929. Serial No. 405,899. 3 Claims. (Cl. 188—250.)

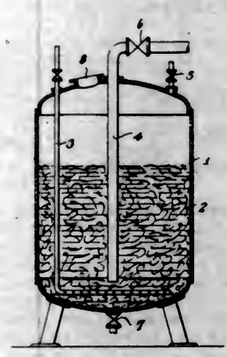


1. A brake shoe having two members with substantially semi-circular faces arranged side by side, a resilient connection between said members on the semi-circular faces, and friction material on said resilient connection.

1,872,548. METHOD OF CLEARING FIBERS OUT OF A VESSEL. WALDEMAR ZUR LÖWEN, Wuppertal-Barmen, Germany, assignor to American Bemberg Corporation, Elizabethton, Tenn., a Corporation of Maryland. Filed Dec. 7, 1929, Serial No. 412,544, and in Germany Dec. 15, 1928. 5 Claims. (Cl. 141—12.)

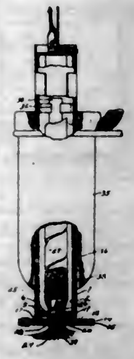
1. A method of clearing cotton fibers out of a closed vessel in which they have been subjected to the action of a treating liquid, consisting in running off the treating liquid, letting in fresh liquid, admitting compressed air into the

fresh liquid and causing it to agitate the liquid containing the fibers until the latter are evenly distributed throughout the liquid, allowing the compressed air to accumulate



in the vessel and thereupon causing it to force the liquid with the fibers out of the vessel through a pipe immersed in the liquid.

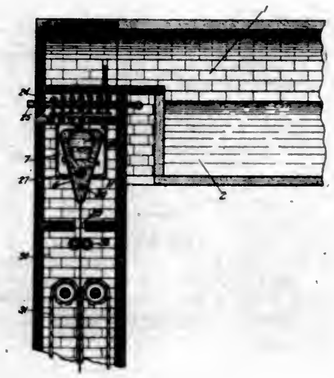
1,872,549. STEAMING TUBE. ARTHUR J. ALLEN, Lakewood, Ohio. Filed July 5, 1929. Serial No. 375,989. 19 Claims. (Cl. 132—36.)



1. In a device of the class described, an outer tube, an inner tube generally co-axial therewith and relatively rotatably mounted therein, a longitudinal slot in each tube whereby when the inner tube is relatively rotated to one position, the two slots register to provide an opening into the inner tube and when relatively rotated to another position the wall of the outer tube may close and seal the opening into the inner tube.

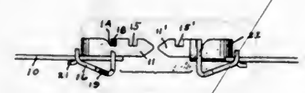
1,872,550. SHEET GLASS DRAWING APPARATUS. HORACE E. ALLEN, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 10, 1921. Serial No. 436,039. 9 Claims. (Cl. 49—17.)

1. In an apparatus for producing sheet glass, a hollow member having a slot at its upper side, and openings at the two ends, means for supplying molten glass through the end openings, the glass flowing up through the slot



and down around the two sides of the hollow member and means for carrying away the united streams from the lower side of the hollow member in sheet form.

1,872,551. COUPLER. MARTIN A. ANDERSEN, Indianapolis, Ind. Filed Feb. 4, 1931. Serial No. 513,248. 5 Claims. (Cl. 213—94.)

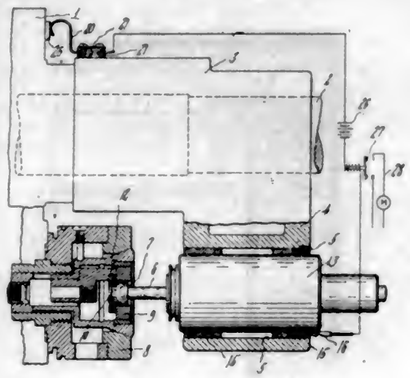


1. In a coupling device, a latching member having side bars, the rear ends of which are bent upwardly and the forward ends also being bent upwardly, said forward ends being of greater length than the rear ends, a cross bar uniting the rear ends, a tongue extending from the rear cross bar, a tie bar between the side bars near the upward bend of said forward ends, and a cross bar uniting said forward ends, a draw bar, and a tongue carried by the draw bar, said latching member being threaded over said draw bar-tongue and draw bar to have said front and rear cross bars thereabove and said tie bar therebelow, said draw bar having a hole receiving said cross bar tongue therethrough, and said draw bar tongue having a notch across its upper side.

1,872,552. GRINDING MACHINE OR THE LIKE. MERTON H. ARMS, Springfield, Vt., assignor to Bryant Chucking Grinder Company, Springfield, Vt., a Corporation of Vermont. Filed Dec. 19, 1930. Serial No. 503,508. 5 Claims. (Cl. 51—165.)

1. In combination, means for supporting work and a tool for relative movement into and out of position for the tool to operate on the work and for effecting operative traverses of the tool and work when they are in operative relation, said tool including an electro-conductive portion, an electro-conductive work sizing element positioned to be contacted by said tool portion when the work has been tooled to a predetermined dimension, said supporting means including means for insulating said tool from said

sizing element, a pair of contacts closed only when said electro-conducting portion and said sizing element are in transverse alinement, and a circuit including said con-



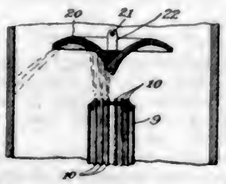
tacts, element and tool portion, closed when said work reaches the predetermined dimension and when said tool is in operative relation to the work.

1,872,553. LAMINATED GLASS AND PROCESS OF PRODUCING THE SAME. BERT M. AYERS, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 19, 1928. Serial No. 247,818. 3 Claims. (Cl. 49—81.)



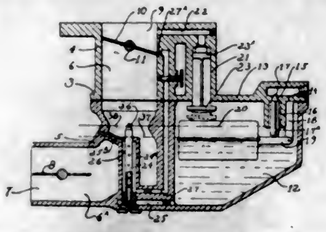
1. As a new article of manufacture, a sheet of laminated glass comprising two sheets of transparent glass and a non-brittle lamination arranged therebetween and united thereto, said non-brittle lamination including a substantially colorless portion and a colored portion.

1,872,554. ENTRAINMENT SEPARATOR. WALTER L. BADGER, Ann Arbor, Mich., assignor to Swenson Evaporator Company, Harvey, Ill., a Corporation of Illinois. Filed Jan. 14, 1929. Serial No. 332,363. 2 Claims. Cl. 159—31.)



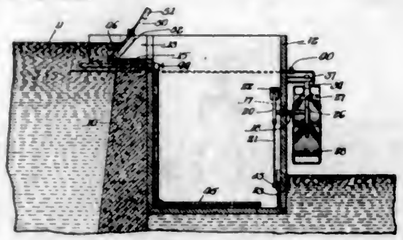
1. The method of separating entrained liquid from a column of liquid-vapor rising at high velocity comprising the conversion of the entrained liquid particles into a substantially solid sheet of liquid bridging the space through which the vapor must pass.

1,872,555. CARBURETOR. FREDERICK O. BALL and THOMAS M. BALL, Detroit, Mich. Filed Apr. 18, 1930. Serial No. 445,502. 9 Claims. (Cl. 261—34.)



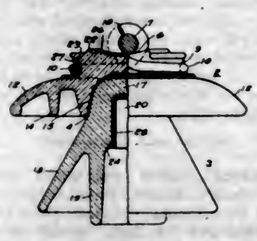
1. In a carburetor having a throttle, a fuel reservoir having an inlet, a nozzle communicating with said reservoir, a valve in said reservoir, valve actuating means including a float for maintaining a predetermined fuel head in said reservoir and on said nozzle when said throttle is substantially closed during operation of said carburetor, a member shiftably mounted on said carburetor and engageable with said float for substantially submerging said float in the fuel of said reservoir so as to rapidly raise the fuel level therein and increase the fuel head on said nozzle by displacement of fuel at substantially open throttle operation of said carburetor, and means for holding said member in spaced relation to said float when said throttle is closed, said means being adapted to release said member when said throttle is opened.

1,872,556. FISH LOCK. HARRY BARR, Ironwood, Mich. Filed Aug. 13, 1930. Serial No. 475,003. 7 Claims. (Cl. 61—21.)



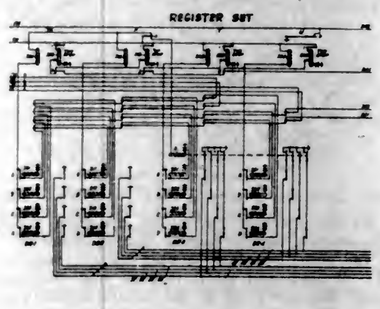
1. In a device of the character described, in combination, a tank, an opening in the lower portion of said tank, a gate for closing said opening, and means for raising and lowering said gate comprising a shaft having connection to said gate, a transverse bar connected to said shaft, and containers located on the outer ends of said bar.

1,872,557. ARTICLE OF MANUFACTURE. GEORGE M. BARROW, Derry, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 20, 1930. Serial No. 422,045. 3 Claims. (Cl. 173—318.)



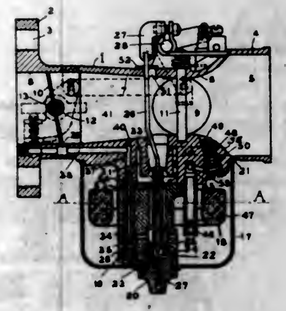
3. An insulator including a dielectric member having a portion thereof in contacting relation with a conductor, and means for reducing electrical discharges between the conductor and the dielectric member, said means comprising a fired metallic-glaze film intimately united to the surface stratum of the dielectric member, which film covers a surface area of the dielectric member including that of the portion in contacting relation with the conductor and extending a limited distance away therefrom, and a coating of solder covering the film in initmate joinder thereto.

1,872,558. TELEPHONE SYSTEM. JOHN I. BELLAMY, Brookfield, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Continuation of application Serial No. 352,745, filed Apr. 5, 1929. This application filed Apr. 13, 1931. Serial No. 529,562. 29 Claims. (Cl. 179—18.)



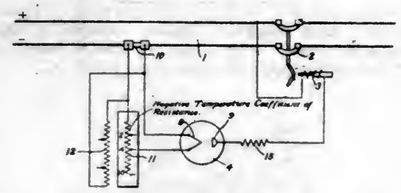
1. In a register sender, a plurality of conductors, registering means for making connections to said conductors in permutations, and counting means for pregressively testing said conductors in corresponding permutations.

1,872,559. CARBURETOR. GEORGE M. BICKNELL, St. Louis, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Aug. 9, 1929. Serial No. 384,610. 9 Claims. (Cl. 261—57.)



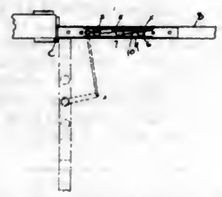
1. In a carburetor, means forming a mixing chamber, a fuel reservoir, a spray nozzle having a metering orifice for supplying fuel from said reservoir to said mixing conduit, a metering wire extending through said metering orifice and through said mixing conduit for controlling the flow of fuel to said conduit, an opening of comparatively large size in a wall of said conduit to receive said wire, and a cover slidably mounted on said wire and adapted to close said opening, said cover being adapted to be held firmly in closed position by suction in mixing conduit.

1,872,560. ELECTRICAL PROTECTIVE SYSTEM. JOHN V. BREISKY, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 23, 1926. Serial No. 130,821. 21 Claims. (Cl. 175—294.)



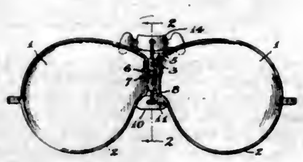
1. In a protective system, an electrical circuit, an electro-ionic tube energized therefrom, a variable-ratio energy-transferring means between the circuit and the tube and a thermal device operatively associated with said tube for predetermining the time-element characteristics of said tube.

1,872 561. DOORCHECKING DEVICE. FREDRICK M. FRANKLIN, New York, N. Y. Substitute for abandoned application Serial No. 84,810, filed Jan. 30, 1926. This application filed Aug. 21, 1931. Serial No. 558,554. 2 Claims. (Cl. 16—62.)



1. In combination with a door and door frame, of a spring operated door closing device concealed in the upper part of the door and including a shaft which is exposed at the upper edge of the door, a door checking device for controlling the closing movement of the door concealed in the upper part of the door and including a shaft, likewise exposed at the upper edge of the door, to one side of the first named shaft, gears fixed to said shafts on the upper edge of the door, rack bars slidably mounted upon the upper part of the door and with which said gears engage and means of connection between one of the shafts and the door frame providing for rotation of the shaft on movement of the door.

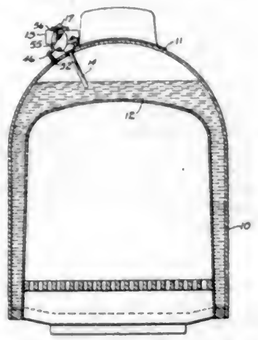
1,872,562. SPECTACLES. LOUISE C. KING, Cleveland, Ohio. Filed Apr. 22, 1929. Serial No. 356,904. 5 Claims. (Cl. 88—41.)



1. Spectacles comprising a pair of lenses, a connecting member joining the lenses, a nose piece below said connecting member, a member mounted for vertical adjust-

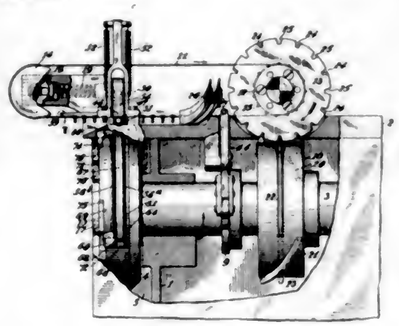
ment in said connecting member and a transversely elongated forehead rest carried by said vertically adjustable member above said connecting member and offset inwardly with respect to the lenses to hold the upper edges of the lenses spaced outwardly from the face of the wearer.

1,872,563. LOW WATER ALARM. FRANK M. ROBY, Cleveland, Ohio. Filed Oct. 21, 1927. Serial No. 227,760. 7 Claims. (Cl. 137—102.)



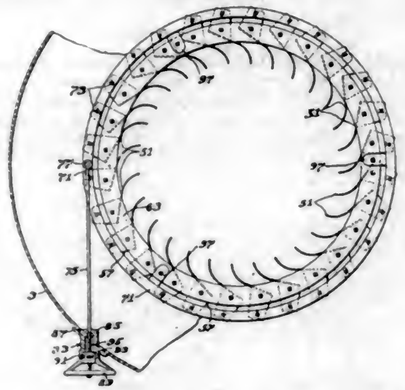
1. A device of the character described, comprising a reservoir, an alarm indicating member, a valve for controlling said member, a stem associated with said valve and a float in the reservoir for operating the valve, a connection between the float and valve comprising a pivoted float lever having an arm portion extending transversely to the valve stem, a removable pin connecting the arm and valve stem and a U-shaped keeper removably mounted on the float lever and overhanging the opposite ends of the pin to retain the same in place.

1,872,564. SLOTTING MACHINE. EDWIN B. STIMPSON, Brooklyn, N. Y., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 11, 1930. Serial No. 443,277. 13 Claims. (Cl. 10—11.)



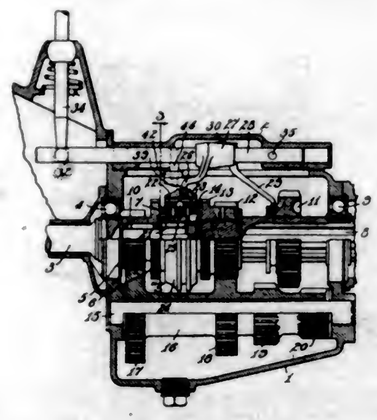
1. A slotting machine comprising a conveyor of the endless type operable to move rivet blanks in a rectilinear path, said conveyor having a series of blank receiving recesses; means to drive said conveyor step-by-step; means to feed at least one blank to a recess during each period of dwell of the conveyor; means independent of the conveyor to clamp the blanks during slotting; and means operable during each period of dwell of the conveyor to slot at least one of the blanks carried thereby, said slotting means moving in a plane transverse to the rectilinear path of said blanks.

1,872,565. AIR SEPARATOR. THOMAS J. STURTEVANT, Wellesley, Mass., assignor to Sturtevant Mill Company, Boston, Mass., a Corporation of Massachusetts. Filed June 5, 1930. Serial No. 459,330. 8 Claims. (Cl. 209—139.)



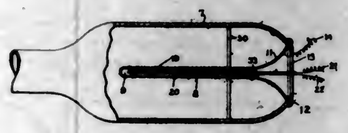
1. An air separator for grading materials comprising, in combination, separating and settling chambers having inlet and outlet openings between them, means to cause air to circulate and whirl through said chambers and openings and move up in the separating chamber and down in the settling chamber, and a series of spaced vanes having portions curved toward the center of the separating chamber for opposing whirl of the air in the zone in the separating chamber adjacent to the vanes.

1,872,566. TRANSMISSION GEAR SHIFTER. SAMUEL O. WHITE, Muncie, Ind., assignor to Warner Gear Company, Muncie, Ind., a Corporation of Indiana. Filed Jan. 9, 1932. Serial No. 585,664. 7 Claims. (Cl. 74—39.)



1. A shift mechanism for transmissions, including a shift rod, a shift lever adapted for connection with said shift rod to move the same axially, a shifting fork axially movable on said shift rod, and a lever connection between said shift fork and rod constructed to multiply the shifting force imparted by said shift rod to said shift fork.

1,872,567. DISCHARGE TUBE. LEO L. BECK, Jackson Heights, N. Y., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 7, 1928. Serial No. 297,928. 1 Claim. (Cl. 176—124.)

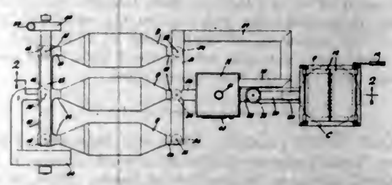


A gas discharge luminous tube contain'ng a cathode comprising a hollow cylinder having a coating of thermo-emissive material on the surface thereof exposed to the gas, and a transverse support extending from said cylinder to the envelope wall to brace said cylinder and maintain it in spaced relation from the envelope wall.

1,872,568. OXIDIZED RESINOUS PRODUCT AND PROCESS OF MAKING SAME. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Dec. 6, 1927. Serial No. 238,233. 16 Claims. (Cl. 260—8.)

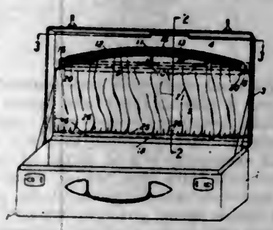
1. An oxidized, rosin phthalic glyceride resin.

1,872,569. OPERATING A CUPOLA FURNACE. ALFRED L. BOEGEHOLD, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed Feb. 24, 1930, Serial No. 430,821. Divided and this application filed Dec. 16, 1931. Serial No. 581,292. 3 Claims. (Cl. 75—14.)



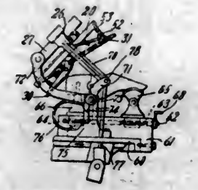
1. A process of operating a cupola containing charges composed of alternate layers of coke and iron metal, which consists of introducing a quantity of air into the lower portion of the cupola at the bottom of the charge such that the gases generated by combustion of the coke which permeates the charges contain a larger quantity of carbon monoxide than of carbon dioxide, withdrawing gas from the space in the cupola above the charges, burning said gas, and transferring the heat generated thereby to the air to be introduced into the lower portion of the cupola.

1,872,570. POCKET. JACOB CRAMER, Philadelphia, and MAX SHEAR, Germantown, Pa., assignors to Ira Jewell Williams and J. Thruston Manning, jr., Philadelphia, Pa., receivers for Perkiomen Trunk & Bag Company, Inc., a Corporation of Pennsylvania. Filed Mar. 8, 1930. Serial No. 434,269. 6 Claims. (Cl. 190—51.)



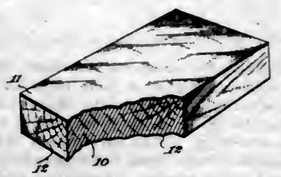
1. A pocket consisting of a relatively stiff fixed wall; a second wall attached at all of its edges but one to the said fixed wall and open along its last said edge to form one of the lips of a mouth for the said pocket, a portion of the said lip intermediate its limiting ends being higher than the said ends.

1,872,571. METHOD OF MAKING SHOES. MILTON L. DODGE and HUGH A. JORDAN, Newburyport, Mass.; said Jordan assignor to said Dodge. Filed Jan. 27, 1930. Serial No. 428,657. 5 Claims. (Cl. 12—142.)



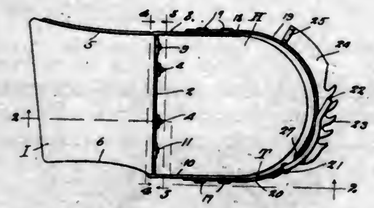
1. The step in the manufacture of a turn shoe which comprises wiping rearwardly from the forepart the shank portion of the sole while the shoe is on the relasting last and holding the shank portion under molding pressure in such wiped condition for a substantial period.

1,872,572. METHOD OF PRODUCING PRINTING PLATE BLOCKS. HORACE W. HACKER, La Grange, Ill. Filed Apr. 20, 1931. Serial No. 531,535. 2 Claims. (Cl. 101—382.)



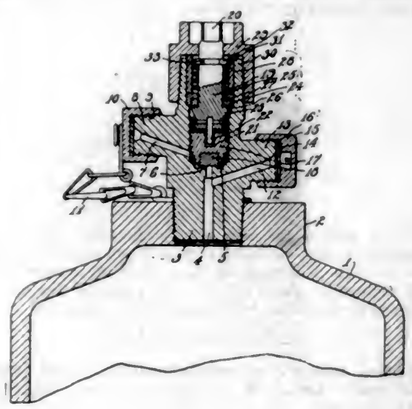
2. The method of producing mounting blocks for printing plates which consists in forming a wood slab of less thickness than the required blocks, cementing metal sheets to opposite faces of the slab to produce block stock of the required thickness and to hermetically seal said faces of the slab against atmospheric contact, and then cutting the stock thus formed into blocks of desired size.

1,872,573. TRACKMAN'S ARCH SUPPORT AND SHOE PROTECTOR. CHARLES HAGG and ERICK CHRISTIAN LAGER, Prentice, Wis. Filed Mar. 5, 1932. Serial No. 597,028. 6 Claims. (Cl. 36—64.)



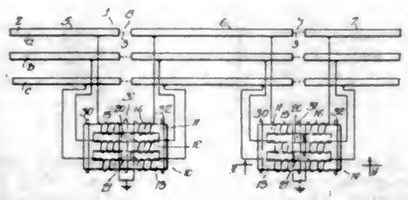
1. A device of the class described, comprising an instep plate having a depending flange at its rear end, a heel plate having an upstanding flange at its forward end, a tightener secured to the flange of the instep plate and extended around the margin of the heel plate, the tightener constituting means for holding both plates on an article of foot wear, and securing elements forming a releasable connection between the flanges, whereby the heel plate may be removed, the tightener then constituting means for holding the instep plate, alone, on an article of foot wear.

1,872,574. CARBON DIOXIDE DRUM VALVE. EDWIN D. HALE, Oak Park, Ill., assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 18, 1931. Serial No. 531,146. 4 Claims. (Cl. 251—47.)



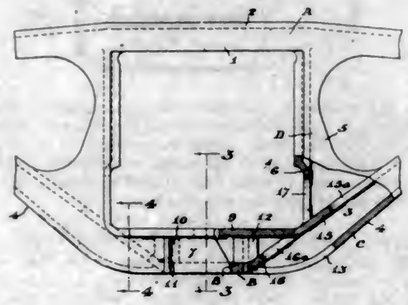
2. In a device of the character described, the combination with a valve casing, of a valve threaded therein, a stem disconnected from said valve for operating said valve and unseating the same, said stem and valve having relative vertical movement, a ring surrounding said stem, an annular shoulder on said stem for engagement with said ring, a tubular holder member surrounding said stem having its lower end for engaging said ring for maintaining the same against vertical displacement, a cap for said casing engaging the upper end of said tubular holding member and a coiled spring for biasing said stem in a position to engage said shoulder with said annular seat.

1,872,575. TRANSFORMER. HERMAN HALPERIN and KENNETH W. MILLER, Chicago, Ill. Original application filed Mar. 14, 1931, Serial No. 522,546. Divided and this application filed Nov. 20, 1931. Serial No. 576,284. 16 Claims. (Cl. 175—359.)



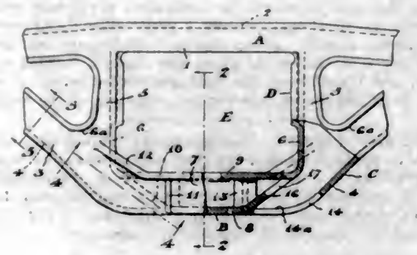
1. A three-phase transformer having three primary windings at one end, three primary windings at the opposite end, and a secondary winding between the two sets of primary windings.

1,872,576. SIDE FRAME. MERTON H. HAMMETT, Davenport, Iowa, assignor to The Bettendorf Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Aug. 11, 1930. Serial No. 474,501. 9 Claims. (Cl. 105—205.)



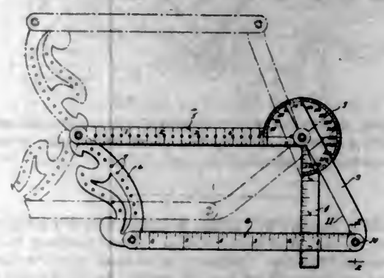
1. A car truck side frame comprising a compression chord, a tension chord, and spaced bolster columns extending vertically between said compression and tension chords, said tension chord having a central horizontal spring supporting portion including spaced sides, an upper web joined at its ends with said bolster columns and at its sides with said spaced sides, a lower web joined at its sides with said spaced sides, and inclined webs integral with and extending from said lower web and joining with said upper web in the region of the connections of said upper web with said bolster columns, said inclined webs being spaced at their sides from the said spaced sides.

1,872,577. SIDE FRAME. MERTON H. HAMMETT, Davenport, Iowa, assignor to The Bettendorf Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Nov. 7, 1930. Serial No. 493,997. 8 Claims. (Cl. 105—205.)



1. A one-piece car truck side frame comprising a compression chord, a tension chord, and spaced bolster columns extending vertically between said compression and tension chords, said tension chord having a central horizontal spring supporting portion including an upper web joined at its ends with said bolster column, extension flanges on said web extending beyond the sides of said frame, each flange having continuation webs at its ends extending upwardly at an angle in gradually decreasing width and merging into the sides of said bolster columns outwardly of the transverse edges thereof, a lower web spaced from said upper web, and inclined webs extending from said lower web and joined with said upper web in the region of the connections of said upper web with said bolster columns.

1,872,578. SKETCHING INSTRUMENT. ALBERT A. HAMPTON, Los Angeles, Calif. Filed Sept. 26, 1927. Serial No. 221,889. 3 Claims. (Cl. 33—98.)



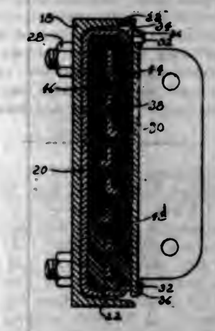
1. The combination of an irregular curve, three bars, said bars and said curve being pivotally connected together to form a parallelogram.

1,872,579. SPRING TOOL. VIGFUS S. HANSEN, Lorah, Iowa. Filed Apr. 29, 1930. Serial No. 448,266. 6 Claims. (Cl. 29—87.1.)



1. For use with a bowed spring having eyes at its ends, a spring tool comprising a pair of toggle levers pivoted together to assume an initial contracted position and to swing in one direction to an extended position and thereafter to a partially contracted position and means for normally stopping said levers in said partially contracted position.

1,872,580. MOTOR MOUNTING. J KING HARNESS and WILLIAM E. HANN, Detroit, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 26, 1930. Serial No. 431,570. 8 Claims. (Cl. 248—14.2.)



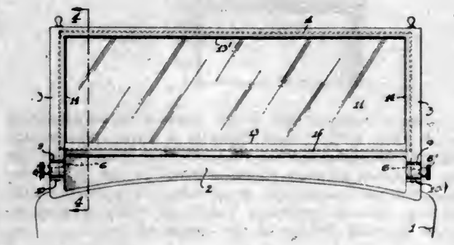
2. A mounting of the class described comprising, plate like members rigidly held in spaced relation, a plate like member having struck out projections extending outwardly from the opposite faces thereof between said spaced plate like members, and rubber embracing said last named member and its projections bonded only to the adjacent faces of said spaced plate like members.

1,872,581. RESISTOR MATERIAL AND METHOD OF MAKING THE SAME. ARTHUR H. HAROLDSON, Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, N. J., a Corporation of Delaware. Filed Mar. 17, 1930. Serial No. 436,542. 7 Claims. (Cl. 201—76.)



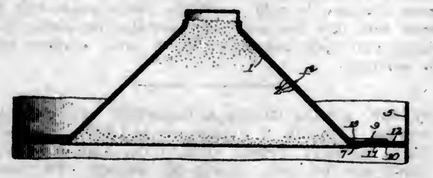
1. Resistor material comprising fibrous material having a nap, finely divided conducting material imbedded in the base of said nap, and a phenol and formaldehyde condensation product applied to said fibrous material for converting the resistor material into an insoluble nonfusible product.

1,872,582. WINDSHIELD. JOHN HARTMANN, Detroit, Mich., assignor to American Art Metal Works, Inc., Detroit, Mich., a Corporation of Michigan. Filed Apr. 16, 1931. Serial No. 530,588. 6 Claims. (Cl. 296—84.)



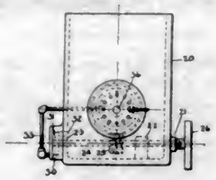
1. A windshield comprising a base, a frame pivotally attached to said base and adapted to swing from an upright to a horizontal position, a pane of glass mounted in said frame and having a free lower edge alongside said base, said base being formed with a seat of angular cross section parallel to said edge and adapted to receive the same, and a sealing strip of channel cross section carried by said free edge and adapted to fit into said seat when the frame is upright.

1,872,583. SOUND PRODUCING DIAPHRAGM AND METHOD OF MAKING SAME. JESSE B. HAWLEY, Geneva, Ill. Filed Oct. 20, 1930. Serial No. 489,835. 15 Claims. (Cl. 181—32.)



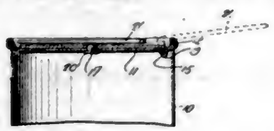
1. A sound producer of integral molded fibrous material comprising a body portion and a base portion, said base portion having a part of less thickness than the remainder of the producer for enhancing the freedom of vibration of the producer.

1,872,584. LUBRICATOR. GEORGE D. HAYDEN, Detroit, Mich. Filed Jan. 23, 1928. Serial No. 248,631. 13 Claims. (Cl. 184—35.)



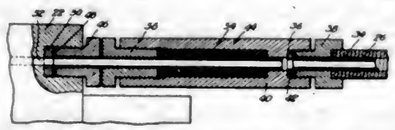
1. A lubricating device comprising a reservoir, a plurality of outlets therefrom each leading to a bearing, means for forcing lubricant from said reservoir through said outlets and means for controlling the passage of lubricant to said outlets and permitting flow therethrough periodically in rotation, said latter means comprising rotatable discs each having a passage therethrough adapted to register with each other and with an outlet and means for rotating said discs in opposite directions and at different speeds.

1,872,585. CAN. WILLIAM H. HEGENBERGER, Hartford, Conn., assignor of one-fourth to Jan P. Clary, Hartford, Conn. Filed Aug. 3, 1931. Serial No. 554,897. 5 Claims. (Cl. 220—48.)



1. An attachment for a can comprising an elongated bar having vertical side flanges, a pivot pin passing through the elongated bar centrally and through the can top, a cutting element rigidly secured to one end of the elongated bar, adapted to be presented in a recess in the can top, and an operating handle pivotally secured between the side flanges of the elongated bar.

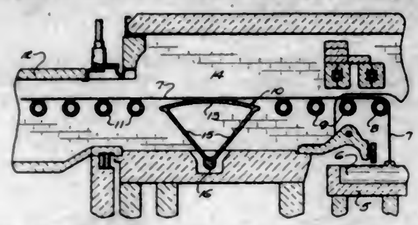
1,872,586. SEPARATION DEVICE FOR PIPE LINES. ARTHUR W. HELMHOLTZ, Harrisburg, and DENT FERRELL, Marion, Ill. Filed Aug. 29, 1931. Serial No. 560,096. 5 Claims. (Cl. 102—5.)



1. In combination with a blasting cartridge adapted to have an expansible gas delivered to said cartridge under high pressure, a pipe line for conducting the gas under pressure to said cartridge, and a connection between said pipe line and said cartridge releasable by a tensile pull upon release of the blasting medium from the cartridge.

1,872,587. SHEET GLASS APPARATUS. JOHN C. HENDERSON, Elizabeth, N. J., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 18, 1930. Serial No. 445,463. 12 Claims. (Cl. 49—17.)

12. In sheet glass apparatus, a transversely arcuately curved stationary member for supporting a glass sheet passing thereover, a shaft supporting said member, a cylindrical member within which the shaft is eccentrically mounted at each end, means for rotatably supporting said cylindrical members, means for rotating said cylindrical members to move the first mentioned member bodily verti-

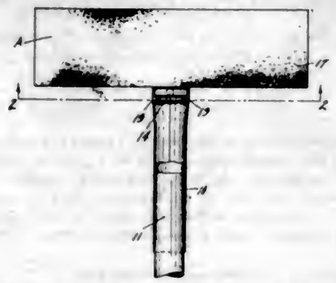


cally, and means for rotating said shaft to rock the sheet supporting member to vary the point of contact between said member and sheet.

1,872,588. MANUFACTURE OF CHROMIUM TRIOXIDE. PAUL R. HINES, Parma Village, Ohio, assignor to The Harshaw Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 15, 1929. Serial No. 355,438. 6 Claims. (Cl. 23—145.)

1. A process of making chromium trioxide, which comprises reacting between sulphuric acid and an alkali metal compound of chromic acid, both said acid and compound being in approximately anhydrous condition.

1,872,589. CLEANER. CHESTER A. HOFF, Akron, Ohio, assignor to The Kristee Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 23, 1930. Serial No. 446,503. 11 Claims. (Cl. 15—244.)

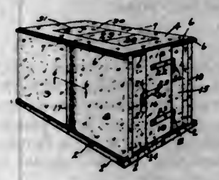


1. A cleaner comprising a tubular handle having a nut secured in one end thereof, a hollow channel member of triangular shape in cross-section with the opening in the channel defining a slot in the base of the triangle, a screw secured in the vertex of the member and projecting through said slot, a clamping plate received over said screw, and a sheet of sponge rubber with exposed cells folded about said channel member with its ends tucked in said slot, said clamping plate gripping said sheet between itself and the base of said channel member, said nut and screw being adapted to press said clamping plate against said sheet and to secure the channel member and handle together.

1,872,590. SECTIONAL CONTAINER. ROY R. HOLLOPETER, Richmond, Ind. Filed Aug. 26, 1930. Serial No. 477,826. 1 Claim. (Cl. 220—4.)

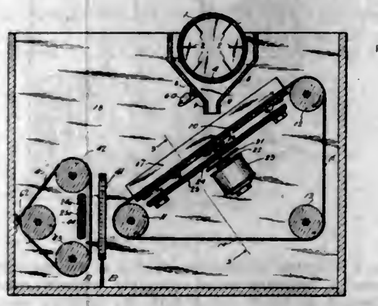
A sectional reinforced concrete container, comprising a base having a channel formed around near its outer edges and on its upper side, slab sections formed to provide sides and ends of the container, with the lower edges of the slabs resting in said channel in the base, lap-tongues formed integral with certain of the slab sections and each projecting over the face of the adjoining slab section to close the joint therebetween, a frame of same size as said base and having a channel formed around near its outer edge

and on the lower side thereof, in which the upper ends of the slab sections are located, a plurality of top sections resting in a channel formed around the inner periphery of said frame, a door hinged to close an opening in one end



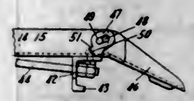
of the container, each of said parts being retained in its proper location solely by gravity, whereby the entire device can be assembled or disassembled without the use of a tool or the operation of securing means.

1,872,591. IONIC SEPARATOR. WALTER A. HOMAN, Denver, Colo., assignor to I-O Separator Company, Denver, Colo., a Corporation. Filed Aug. 13, 1927. Serial No. 212,749. 2 Claims. (Cl. 209—128.)
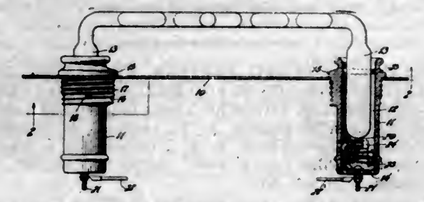


1. The method of separating materials having different electrical properties which consists in reducing the materials to a powder, subjecting the powdered mixture to agitation whereby the particles become ionized, the particles of one material becoming charged positively and the particles of the other material negatively, causing said material to be suspended in the air for a short time and subjecting the material while so suspended to the influence of an electrostatic field of a given potential whereby the particles will be subjected to a force that tends to separate the positively charged ones from the negatively charged ones.

1,872,592. LIFTING MECHANISM. ION VON KERT HOTT, Dayton, Ohio, assignor to The Joyce-Cridland Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 17, 1928. Serial No. 326,423. 6 Claims. (Cl. 254—89.)



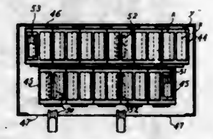
1. In an automobile lifting mechanism, comprising a lifting element mounted for vertical movement, means for actuating said lifting element, and a frame carried by said lifting element, runways mounted on said frame on opposite sides of said lifting element, each of said runways comprising an end portion pivotally mounted thereon for movement either into a downwardly inclined position or into an upwardly extending position, and means controlled by the movement of said portion of said runway to said upwardly extending position to lock the same in that position.

1,872,593. ELECTRODE HOUSINGS. WILLIAM S. HOUGH, Kokomo, Ind. Filed Mar. 18, 1930. Serial No. 436,793. 7 Claims. (Cl. 173—328.)



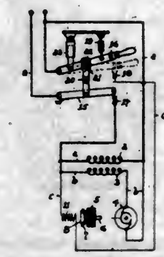
7. As an article of manufacture, an electrode housing for neon tube electric signs having a substantially cylindrical socket and an eccentric outer wall adapted to be rotatably mounted in a circular opening so as to adjust the position of said socket; means to clamp the housing in adjusted positions in a sign plate; and a flexible conductor within the housing having provision to be connected to an electrode terminal.

1,872,594. STORAGE BUILDING. HENRY D. JAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 11, 1930. Serial No. 420,106. 2 Claims. (Cl. 214—16.1.)



1. In a storage system, the combination with means defining an enclosed area and providing an opening for entrance into and exit from the area at only a portion of the periphery thereof, of a plurality of circuitous elevator units occupying substantially all of the area and arranged into two contiguous rows in closely-spaced consecutive relation, one of said rows of units being of a length substantially the same as the extent of the opening into the area and positioned immediately in front of the opening, whereby access to the other row is possible only through the said one row, each of said units comprising a plurality of storage receptacles movable into a lowermost position thereof, the lowermost receptacles of two consecutive units in the row immediately in front of the opening, having a space therebetween providing a passageway for entrance into and exit from a lowermost receptacle of a unit of the other row, in a straight line from the opening.

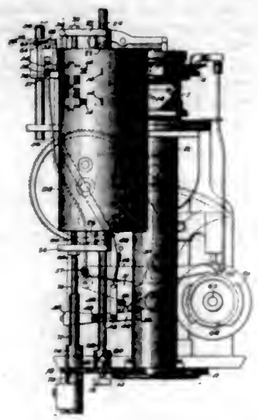
1,872,595. ELECTRIC MOTOR. FREDERICK S. KINGSTON, Warren, Ohio, assignor to The Sunlight Electrical Manufacturing Company, Warren, Ohio, a Corporation of Ohio. Filed July 25, 1929. Serial No. 380,874. 9 Claims. (Cl. 172—278.)



1. A split phase induction motor, including a normally-engaged clutch, an electromagnet and circuit therefor for

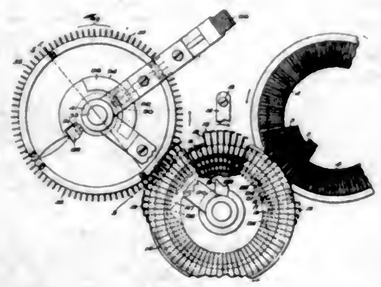
disengaging said clutch, in combination with a manually-operable switch for starting said motor said switch including an auxiliary self-opening and delayed acting switch for controlling said electromagnet circuit.

1,872,596. JACQUARD PATTERN MECHANISM FOR KNITTING MACHINES AND METHOD OF PATTERNING EFFECTED THEREBY. JOHN LAWSON and ROBERT H. LAWSON, Pawtucket, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Dec. 9, 1927. Serial No. 238,946. 42 Claims. (Cl. 66—50.)



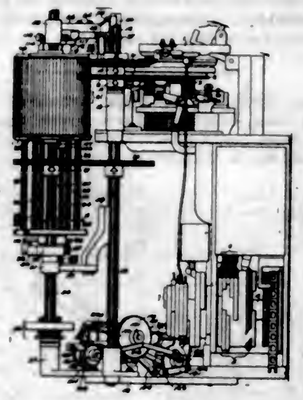
1. In a knitting machine having a series of independent needles, and having means to supply yarn thereto means individual to the needles respectively and participating in the stitch formation to cause stitch variation, means cooperating with said last mentioned means whereby stitch variation may be effected at any cast-off stitch of a course regardless of any stitch variation in cast-off stitches in any preceding course or any succeeding course.

1,872,597. JACQUARD PATTERN MECHANISM FOR KNITTING MACHINES. JOHN LAWSON and ROBERT H. LAWSON, Pawtucket, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Mar. 22, 1927. Serial No. 177,262. 34 Claims. (Cl. 66—50.)



1. A circular knitting machine adapted to knit an article of extended length, and having independent needles, and having means to feed two yarns thereto in a plating relation, instrumentalities other than said feeding means cooperating with one or more of the yarns to effect change from normal plating to reverse plating, or the reverse, movable jack like members controlling the movements of said instrumentalities, and jacquard means for controlling the movement of said jacks.

1,872,598. JACQUARD PATTERN MECHANISM FOR KNITTING MACHINES AND METHOD OF PATTERNING EFFECTED THEREBY. JOHN LAWSON and ROBERT H. LAWSON, Pawtucket, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Apr. 8, 1927. Serial No. 182,060. 26 Claims. (Cl. 66—40.)



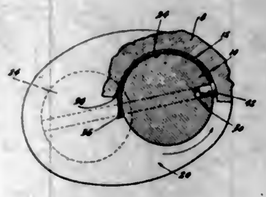
1. A knitting mechanism having as an operative part thereof a jacquard drum rotatable without lateral displacement in synchronism with the knitting mechanism, the instrumentalities whereof are, as so rotated, to be controlled by said jacquard drum, and having a plurality of sets of formations, any set of which is adapted to govern the instrumentalities according to the distribution of the formations of such set, and pattern controlled means for imparting axial movement to said jacquard drum so as to bring different sets of formations into functioning relation to said instrumentalities.

1,872,599. LOUVER OR DAMPER DEVICE. JOSEPH M. LE GRAND, Newark, N. J., assignor to Carrier Engineering Corporation, Newark, N. J. Filed Feb. 25, 1928. Serial No. 257,039. 17 Claims. (Cl. 189—62.)



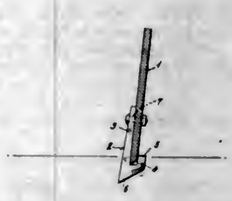
14. In a louver or damper device, a frame having a passage therethrough, and an end vane disposed along the inner face of and attached to one of the sides of said frame and having an exposed convex stream line face within said passage.

1,872,600. BEARING LINER DESIGN. WILLIAM H. MANNING, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 27, 1931. Serial No. 533,218. 2 Claims. (Cl. 29—84.)



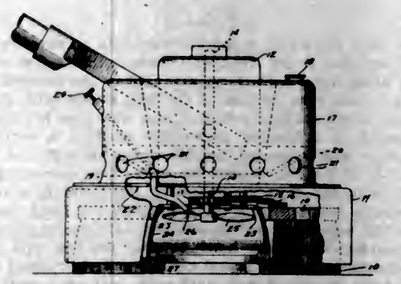
1. The method of removing a shaft bearing portion from its seat consisting of removing the bearing cap to expose the shaft bearing, placing a pin in the oil hole of the shaft, and then rotating the shaft to cause the pin to strike against and move the bearing to turn it out of its seat.

1,872,601. ROAD SCRAPING OR GRADING APPARATUS. JOHN P. MCHALE, Dormont, Pa. Filed Jan. 24, 1929. Serial No. 334,718. 1 Claim. (Cl. 37—145.)



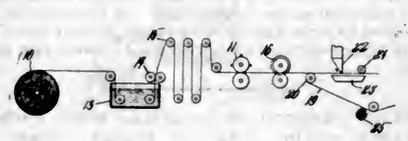
In combination, a flat grading plate having a lower beveled cutting edge, and a plurality of teeth attached to said plate, said teeth each including a rearwardly beveled cutting point, a shank extending upwardly from the front of the point to flatly engage the front face of said plate, a finger extending upwardly from the rear of the point in spaced relation to the shank to flatly engage the rear face of the plate, and securing means passing through the plate and the upper end portion only of the shank.

1,872,602. POLISHER. LUDWIG A. OLSEN, Brooklyn, N. Y. Filed May 26, 1931. Serial No. 540,076. 5 Claims. (Cl. 91—39.)



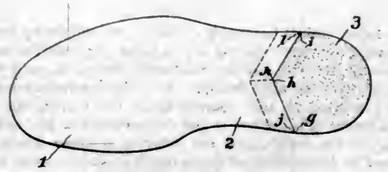
1. A waxing and polishing device which comprises, a polishing means having an enclosed space whereby when the device is used the polishing means surrounds an unobstructed area upon which wax is to be distributed, a liquid reservoir, means for distributing liquid wax from the reservoir in a comminuted form on and confining it to a substantial portion of the unobstructed area whereby that portion of the polishing means defining the enclosing space is maintained out of contact with the material being distributed until after the material has contact with the surface to be polished, means for moving said polishing means relative to said device as a whole, the said device being movable bodily over the surface to be polished whereby the polishing area will gradually encroach upon the distributing area.

1,872,603. METHOD OF AND APPARATUS FOR MAKING STRIP SHINGLES. FREDERICK C. OVERBURY, Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 9, 1926, Serial No. 128,074. Renewed Apr. 21, 1932. 3 Claims. (Cl. 91—68.)



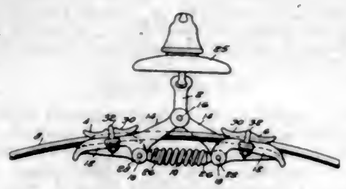
1. Apparatus of the class described comprising means for cutting a series of transverse slots in a longitudinally moving sheet of roofing felt, means for longitudinally slitting said sheet through said slots whereby a pair of strips are formed, each strip having a series of notches in an edge thereof forming rectangular tabs, means for depositing liquid coating on said strips, and a diagonally disposed doctor engaging each strip, the portion of said doctor engaging the notched margin of the strip being beyond the portion engaging the unnotched margin.

1,872,604. SHOE SOLE. GEORGE L. PIERCE, Brooklyn, N. Y., assignor to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Filed Mar. 25, 1931. Serial No. 525,263. 6 Claims. (Cl. 36—31.)



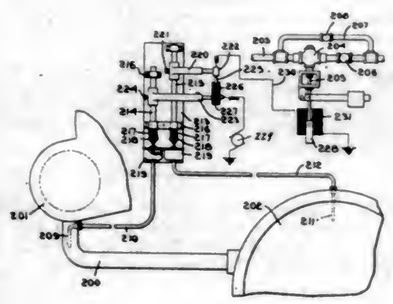
1. A shoe sole comprising a tread and shank portion, and a heel seat section, said heel section having its forward portion of V-shape from side to side and tapered downwardly to a thin edge, the apex of the V shape being directed forwardly on the longitudinal center line of said heel seat section the shank having a formation at its rear end complementary to the forward end of the heel, said V-shaped and tapered ends of the shank and heel being secured together to act as one body, the forward V-shaped tapered part of the heel underlying the complementary shaped rear end of the shank and furnishing a support therefor.

1,872,605. TRANSMISSION LINE DEVICE. KARL POHLHAUSEN, Berlin-Halensee, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 13, 1931, Serial No. 522,381, and in Germany Apr. 8, 1930. 10 Claims. (Cl. 248—31.)



1. A transmission-line device comprising a support, a plurality of relatively movable rigid members directly movably connected to the support above the line cable for association with the cable, and an elastic element below the cable for transmitting cable vibrations between said members.

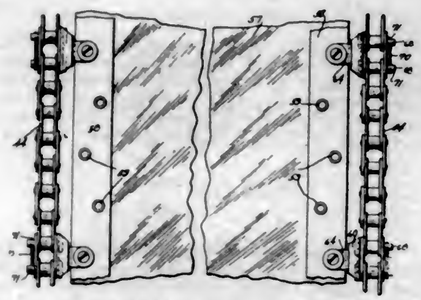
1,872,606. METHOD OF OBTAINING WORK FROM A VAPOR MOTOR. JOSEPH G. PROSSER, Chicago, Ill. Filed Nov. 12, 1926, Serial No. 147,875, and in Great Britain Oct. 25, 1926. 1 Claim. (Cl. 60—27.)



A vapor motor having a chamber for supplying heat to the working vapor during its passage through the motor, a conduit for the heating medium passing to said chamber, a valve in said conduit, two thermo-responsive elements located in the exhaust from the motor, one at a point where it is subject to the temperature of the vapor as it leaves the motor, and the other at a point where it is subject to the saturated pressure temperature, and means jointly controlled by said elements acting to operate the valve to control the heat supplied therethrough to the working vapor and thereby the quality of the vapor exhausted from the motor.

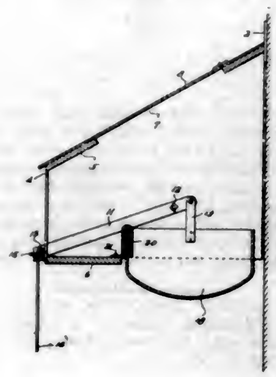
1,872,607. CHANGEABLE EXHIBITOR. GEORGE F. REED, Pittsburgh, Pa., assignor, by direct and mesne assignments, to The Web-Lite Company, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 26, 1931. Serial No. 565,354. 13 Claims. (Cl. 40—32.)

1. A changeable exhibitor comprising a casing having a window in the front wall thereof, a pair of endless carriers mounted vertically within the casing, one positioned on each side of the windowed opening and independent of each other, a display member mounted at its side edges between the endless carriers, and flexible reinforcing strips for the opposite side edges of the display member



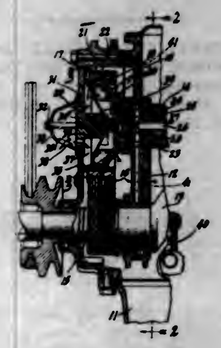
adapted for the absorption of tension when the display member is moved through an arc in its travel with and between the endless carriers.

1,872,608. HEN'S NEST. DICK RENS, Waupun, Wis. Refiled for abandoned application Serial No. 305,922, filed Sept. 14, 1928. This application filed Feb. 27, 1932. Serial No. 595,602. 2 Claims. (Cl. 119—49.)



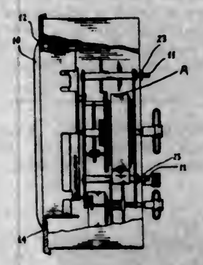
1. In a hen's nest, a box provided with an entrance and exit opening in the front wall thereof, the bottom of the box being open, a platform arranged in the forward portion of the open bottom of the box, a vertically sliding closure for the opening in the front wall that is normally disposed in a lowered inoperative position, a vertically movable nest arranged for movement through the open bottom of the box, means for operatively connecting the nest with the closure for moving the latter to a raised operative position over the opening in the front wall of the box when the nest is occupied, said means including levers pivoted to the inner side of the box with their long arms attached to said closure and their short arms pivotally connected with said neck, and an inverted U-shaped guard attached along its forward edge to the rear edge of the platform and extending over the upper edge of the nest for preventing lateral swinging movement thereof.

1,872,609. CRANKCASE VENTILATION. ROBERT SCHITTKE, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 30, 1930. Serial No. 424,625. 18 Claims. (Cl. 123—171.)



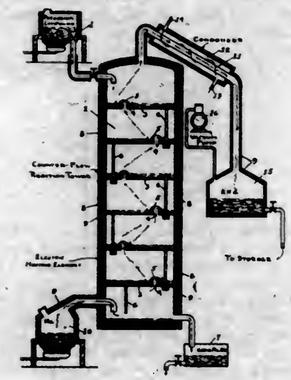
1. In an internal combustion engine: a crankcase having a ventilation opening; an engine-comprised shaft carrying a gear in proximity to said opening; and means, including blades upon said gear, for advancing air through said opening,—said shaft being a camshaft of said engine.

1,872,610. CLOCK CASING CONSTRUCTION. NORMAN F. THOMPSON, Jr., Colebrook, and OTHNIEL G. WILLIAMS, Winsted, Conn., assignors to William L. Gilbert Clock Company, Winsted, Conn., a Corporation of Connecticut. Filed Mar. 15, 1930. Serial No. 436,216. 2 Claims. (Cl. 58—53.)



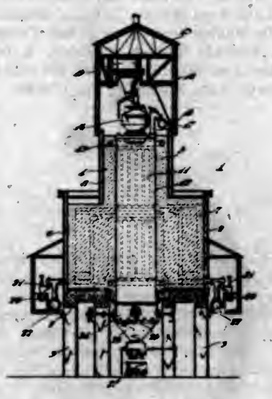
1. A clock construction of the class described comprising, in combination, a front plate having an opening therein, a casing having a free edge fitting against the rear face of the front plate, means for preventing relative lateral movement between the front plate and casing, the free edge of said casing being formed with a notch therein, a lug on said front plate fitting in said notch, and a clockworks fitted in said opening and housed by said casing and including a nut and bolt arrangement for clamping the casing to the front plate.

1,872,611. PROCESS OF MAKING POTASSIUM METAL OR SODIUM-POTASSIUM METAL ALLOY. RICHARD THURM, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Apr. 6, 1931. Serial No. 528,066. 8 Claims. (Cl. 75—133.)



1. The process of producing a sodium potassium metal alloy which consists in passing the vapors of sodium metal countercurrently through a molten potassium compound under vacuum and condensing the resultant sodium and potassium vapors into a sodium potassium alloy.

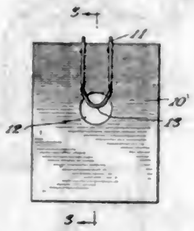
1,872,612. COKING RETORT OVEN. JOSEPH VAN ACKEREN, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Jan. 26, 1928. Serial No. 249,520. 28 Claims. (Cl. 202—123.)



1. A coke-oven battery comprising a series of oven chambers and heating walls therefor alternating therewith, each of said heating walls being provided with two superposed groups of vertical flame flues that are respectively communicably connected in series with the correspondingly disposed group in another of said walls, and two series of regenerators respectively communicating with one of said group of flame flues, one of said series of

regenerators being adapted to receive combustible material for burning in the respective series of groups of flame flues and the other regenerators being adapted to discharge the gases of combustion.

1,872,613. MARKING TAG. ERICCSON B. VAN NORDEN, Jackson Heights, N. Y., assignor to A. Kimball Company, New York, N. Y., a Corporation of New York. Filed Apr. 17, 1930. Serial No. 444,903. 4 Claims. (Cl. 40—23.)

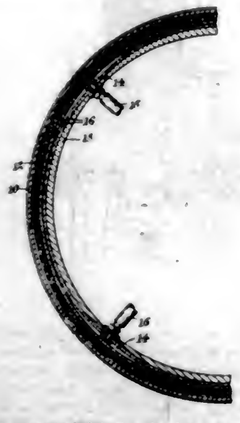


1. A marking tag having an aperture near one end thereof, a metal loop hinged to the top edge of said tag and lying on one side of said tag, said loop being provided with a lateral extension including the rounded end of the loop for forcing a fold of material through said aperture, said lateral extension being bent upward on the other side of the tag to secure the tag and material together.

1,872,614. COATING FOR FERROUS METALS. RALPH J. WIRSHING and HENRY R. FAAS, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 1, 1929. Serial No. 382,827. 1 Claim. (Cl. 91—71.)

The process of producing a protective coating upon articles having a ferrous metal surface comprising applying by electrodeposition to the surface a thin coating of tin, applying to the tin coated surface a covering of asphaltic baking enamel and then subjecting the article to a baking temperature of approximate 450° F.

1,872,615. FLUID OPERATED FRICTION BRAKE. WILLIAM LEICESTER AVERY, London, England, assignor to The India Rubber Gutta Percha and Telegraph Works Company Limited, London, England, a British Company. Filed Jan. 30, 1930, Serial No. 424,587, and in Great Britain Aug. 24, 1929. 13 Claims. (Cl. 188—152.)



8. A fluid operated friction brake comprising a plurality of brake shoes arranged round a circle, a fixed reaction member and an inflatable bag whereof the bag is of annular tubular form, has at least one outlet for release of the inflating fluid and is mounted between said shoes and said reaction member to thrust the shoes into frictional engagement with a moving surface to be braked, and the reaction member and the bag are so shaped that when the bag is in its deflated condition the separation of its opposed walls decreases continuously in a circumferential direction from an outlet to a position removed therefrom.

1,872,616. CONNECTING METAL PLATE. BIRGER TORVALD ANDREN, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Apr. 10, 1930. Serial No. 443,068. 3 Claims. (Cl. 20—148.)



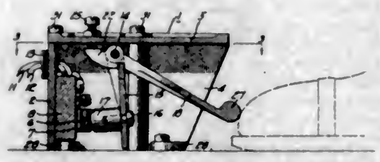
1. The method of attaching metal parts which comprises the operations of perforating a plate and displacing the metal about the perforation to form a recess on one side of the plate, applying a perforated part to the recessed side of the plate with the perforations aligned, applying a nut to said perforated part and passing a threaded member through said recessed plate into engagement with said nut with the head of the threaded member engaging the recessed plate whereby when the threaded member is tightened the plate is yieldingly connected to the said part.

1,872,617. EMULSIFIED FLUID LUBRICANT. ARTHUR L. BROWN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 21, 1927. Serial No. 170,061. 9 Claims. (Cl. 252—6.)

1. The method of making a liquid emulsion which comprises mixing a mineral oil with a liquid emulsifier comprising a mixture of alcohol and ammonia and fixed alkali soaps, and then adding said mixture to water which has been rendered slightly alkaline.

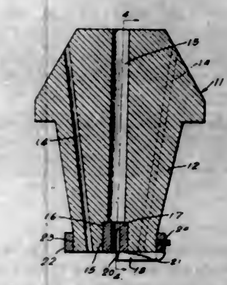
5. A stable liquid emulsion comprising a major proportion of a mineral oil and a minor proportion of an emulsifier comprising a mixture of ammonium and alkali metal oleates and resinates containing a substantial amount of each ingredient and sufficient water to emulsify the base and maintain the sumision in a liquid form.

1,872,618. ELECTRIC SWITCH. PAUL C. BUTTE, San Francisco, Calif. Filed Jan. 30, 1928. Serial No. 250,348. 3 Claims. (Cl. 200—52.)



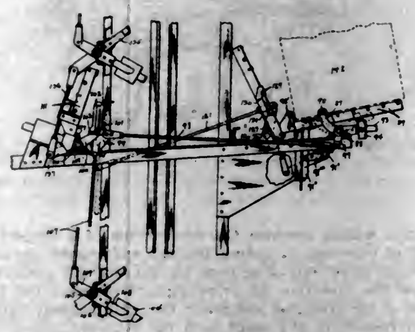
1. A switch comprising an open ended hood, a pair of relatively movable contacts supported within the hood, means for actuating said contacts, and a horizontally pivoted, outwardly projecting guard extending transversely across the open end of said hood, rearwardly extending fingers secured to said guard, and adjusting screws adapted to engage said fingers.

1,872,619. TORCH TIP WITH DEFLECTORS. CLARENCE J. COBERLY, Los Angeles, Calif., assignor to Kobe, Inc., Huntington Park, Calif., a Corporation of California. Filed Apr. 15, 1930. Serial No. 444,492. 11 Claims. (Cl. 158—27.4.)



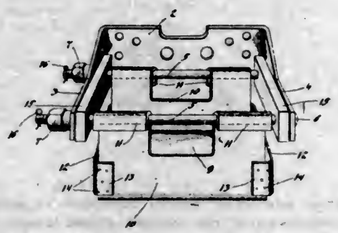
1. A cutting torch tip of the character described, comprising a tip body having a cutting gas passage therethrough and a deflector adjacent the mouth of said gas passage for producing divergence of the jet issuing from said gas passage, said body having a plurality of heating gas passages placed in circular arrangement around said cutting gas passage.

1,872,620. CONVEYING APPARATUS. JAMES T. COWLEY, North Scituate, Mass., and LAVONT C. ALLEN, Syracuse, N. Y., assignors to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Original application filed Oct. 17, 1927, Serial No. 226,659. Divided and this application filed May 1, 1930. Serial No. 449,028. 14 Claims. (Cl. 198—21.)



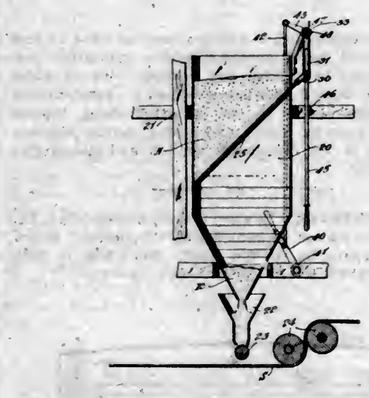
1. In a conveying apparatus, elevating mechanism including spaced elevator cars, a loading station adjacent the elevator for supplying articles to an elevator car, said loading station including means for stopping an article at the station, a tiltable conveying platform, means actuated by a movable element on an empty elevator car for raising such articles above the stopping means and for tilting said conveying platform whereby the article is conveyed to a point where it will be picked up by said empty car, and means actuated by an article on a car for moving the movable element to an ineffective position.

1,872,621. BATTERY SUPPORT. HARRY C. DOANE, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 7, 1927. Serial No. 224,649. 11 Claims. (Cl. 180—68.5.)



1. A mounting for storage batteries, including a pair of spaced arms adapted to be carried by a chassis frame member and to extend laterally therefrom, tie bolts connecting said arms and extending on opposite sides of the battery and a U-shaped cradle having hooks formed at the upper ends thereof for engagement with said bolts and being adapted to support the weight of a battery placed therein.

1,872,622. APPARATUS FOR SURFACING ROOFING. ELBERT S. DONAHUE, Chicago Heights, Ill., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 5, 1929. Serial No. 344,227. 6 Claims. (Cl. 91—43.)

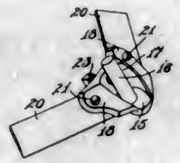


2. Apparatus for applying granular mineral to coated roofing material comprising a hopper for containing a supply of granular mineral material, and including means for discharging and distributing said mineral upon the coated sheet, means for accumulating a supply of other granular mineral in said hopper above the first named supply, and means operable to release substantially all the mineral of said second supply substantially at the moment said first supply is exhausted.

1,872,623. CULTIVATOR SWEEP. WILLIAM H. EAST, HOWARD F. ZENT, and WALTER H. ZENT, Indianapolis, Ind., assignors to B. E. G. Z. Company, Inc., Indianapolis, Ind., a Corporation of Indiana. Filed Jan. 2, 1932. Serial No. 584,324. 3 Claims. (Cl. 97—205.)

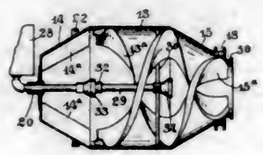
1. A sweep attachment for cultivators comprising a blade-carrying main body, a finger carried by the main

body and formed for upward insertion in the tubular shank of the shovel-carrying element of a cultivator, and a clamping screw threaded through a portion of the main body



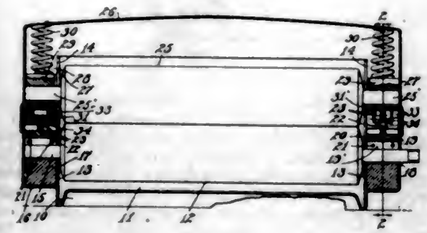
spaced from said finger and in opposition to said finger, whereby the wall of the tubular shovel-carrying shank of a cultivator may be clamped therebetween.

1,872,624. TRUCK MIXER. JOSEPH EGGERT, Columbus, Ohio, assignor to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 7, 1929. Serial No. 412,529. 3 Claims. (Cl. 83—73.)



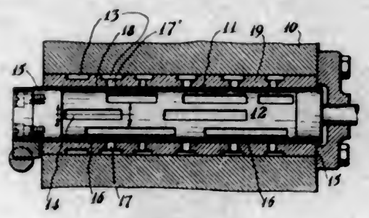
1. In a concrete mixer, a mixing vessel mounted to turn on an axis, said vessel having a middle cylindrical portion terminating in tapered end portions, one of which end portions has a discharge opening, substantially straight mixing blades in the non-discharging tapered portion of the mixing vessel and spiral mixing and conveying blades in the cylindrical portion and discharging tapered portion.

1,872,625. WRINGER. EDWARD ENGEL, Bloomington, Ill., assignor to Mullins Manufacturing Corporation, Salem, Ohio, a Corporation of New York. Filed Feb. 6, 1931. Serial No. 513,838. 12 Claims. (Cl. 68—32.)



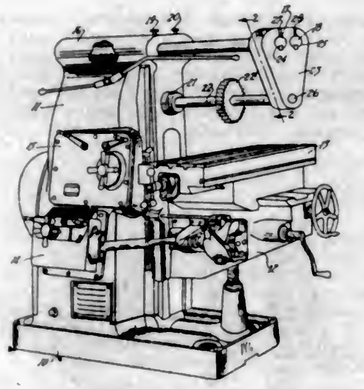
1. A wringer comprising a base, a lower roll journaled therein, a supplemental swinging frame comprising a top bar and depending legs, an upper roll rotatably and slidably supported in said legs, and vertically and horizontally interlocking elements, some carried by the base and others by the supplemental frame for interlocking the supplemental frame with the base by a swinging movement of the supplemental frame to a medial vertical position.

1,872,626. HYDRAULIC VALVE. HANS ERNST and CHARLES W. GOODRICH, Cincinnati, Ohio, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 8, 1930. Serial No. 434,415. 6 Claims. (Cl. 251—98.)



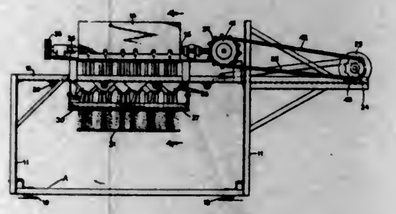
1. In combination with a valve casing, of a valve having a plurality of lands and means there between to permit the formation of a thin film of pressure fluid to equally balance the valve in its casing, said means being so constructed as to prevent a free flow of fluid.

1,872,627. MILLING MACHINE. HANS ERNST and LESTER F. NENNINGER, Cincinnati, Ohio, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 23, 1930. Serial No. 483,860. 1 Claim. (Cl. 90—18.)



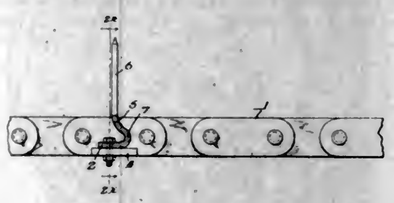
In a milling machine the combination of a support, a pair of overarms extending through and beyond the support, an arbor extending from the support and positioned below the overarms, an arbor support receiving the free ends of the overarms and arbor, the arbor support having slots therein in alignment with the overarms, means extending through the arbor support for drawing the sections thereof toward one another for frictionally binding the overarms in the arbor support, the arbor support being further provided with recesses below the overarms, clamp blocks received in the recesses having angular faces formed thereon, angular faces formed on the overarms cooperating with the angular faces on the clamp blocks, the arbor support and clamp blocks having bores formed therein in axial alignment, and means extending through the aligned bores for drawing the clamp blocks toward one another and for causing a locking engagement of the angular faces on the wedge blocks and overarms for positively locking the arbor support in position on the overarms.

1,872,628. MATERIAL COATING APPARATUS. JOSEPH F. ESCH, Port Neches, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 1, 1930. Serial No. 472,825. 2 Claims. (Cl. 91—43.)



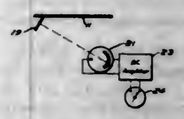
1. Material coating apparatus comprising a hopper adapted to contain granular material and having openings in the bottom thereof, downwardly extending spouts secured beneath each of said openings, a movable plate formed with a plurality of slots each of which is in communication with one of said spouts, spouts secured to the underside of said plate and registering with said slots, a slotted distributer secured beneath said spouts and divided laterally into compartments severally adapted to receive material from one of said spouts, and means for reciprocating the slotted plate and the structure supported thereby to cause the material passing through the distributer to fall in substantially parallel wavelike areas.

1,872,629. WORK SUPPORTING BAR FOR ENAMELING FURNACES. FRANK A. FAHRENWALD, Chicago, Ill. Filed Apr. 25, 1931. Serial No. 532,825. 2 Claims. (Cl. 263—8.)



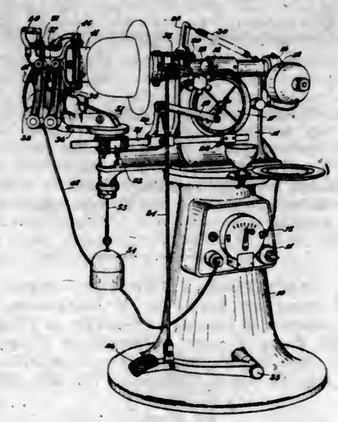
1. A bar for supporting workpieces in furnaces, comprising a base in one plane, a stiffening flange in another plane carrying work supporting means, and a web uniting said base and flange and having a curved section.

1,872,630. SOUND RECORDING SYSTEM. THADDEUS R. GOLDSBOROUGH, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 1, 1930. Serial No. 448,873. 2 Claims. (Cl. 179—100.3.)



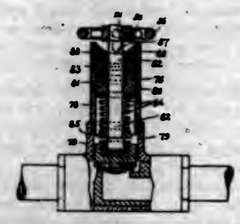
1. In combination with means for transforming sound vibrations into vibratory electric currents, a galvanometer of the mirror-type traversed by said currents, a light source adapted to project a light-beam incident upon said galvanometer mirror, an optical slit through which the reflected beam from said galvanometer mirror is projected, an edge of said reflected beam crossing said slit in the mid-portion thereof when no current flows in said galvanometer and moving back and forth toward the ends of said slot when current vibrations flow therein, a reflector positioned beyond one end of said slit and positioned to reflect said reflected beam only when its edge overruns the end of said slit, a photo-electric device positioned to be struck by the beam emanating from said reflector, and signal means connected to respond to the excitation of said photo-electric device.

1,872,631. HAT IRONING MACHINE. LOUIS ANGELUS, New York, and DANIEL LAWRENCE BAYLIS, Long Island, N. Y.; said Baylis assignor to said Angelus. Filed Feb. 21, 1930. Serial No. 430,169. 8 Claims. (Cl. 223—28.)



1. In a hat ironing machine, the combination with a rotatable hat chuck, and an oscillating spindle perpendicular to the axis of said chuck, of an iron-carrier mounted on said spindle for oscillation therewith, and means for moving said carrier relative to the spindle and only in a plane passing through the spindle axis; said means comprising a radial arm carried by said spindle, and parallel, upwardly extending links pivotally supporting said iron-carrier above and spaced from said arm for pivotal movement substantially parallel to the axis of said arm.

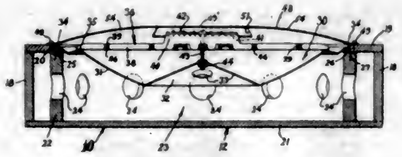
1,872,632. VALVE, COCK, AND THE LIKE. JAMES WILLIAM BRINDLEY, Johannesburg, Transvaal Province, Union of South Africa. Filed July 7, 1930, Serial No. 466,024, and in Union of South Africa Aug. 19, 1929. 3 Claims. (Cl. 251—156.)



3. A valve or cock including a one-piece T-shaped body, a hollow member arranged within the T-piece and having a portion which tightly fits one branch of the body and

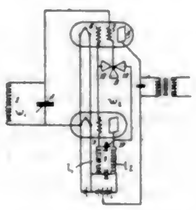
providing a main passage with a right-angled outlet leading into the body and an annular seating for the valve proper around said outlet, said member being arranged to provide a passage between its inner end and the other and opposite branch of the body, a valve proper which co-operates with said seating, and a reducing nipple screwed into the branch at the inlet end of the hollow member for making connection between the body and the inlet pipe, as set forth.

1,872,633. STRINGED MUSICAL INSTRUMENT. RUDOLPH DOPYERA, Los Angeles, Calif. Filed June 29, 1929. Serial No. 374,672. 21 Claims. (Cl. 84—296.)



1. In a stringed musical instrument, a hollow body including top, bottom and sides and having an opening in the top thereof, a wall spaced from the sides of said body and extending from the top to the bottom thereof adjacent to and below said aperture to form a well therein, said wall being apertured and a diaphragm resonator supported in said well.

1,872,634. RECEIVING APPARATUS. HENRI JEAN JOSEPH MARIE DE REGNAULD DE BELLESCIZE, Paris, France, assignor to Compagnie Generale de Telegraphie Sans Fil, Paris, France, a Joint-Stock Company of France. Filed July 7, 1928, Serial No. 290,972, and in France July 13, 1927. 5 Claims. (Cl. 250—20.)



1. The method of receiving electric signals comprising impressing the received signal on one of the grids of a vacuum tube, impressing locally generated oscillations upon another grid of the same vacuum tube, impressing the locally generated oscillations upon the first grid at the same time that the received signal is impressed thereon, and collecting the combined signal and local oscillations in the output circuit of the tube.

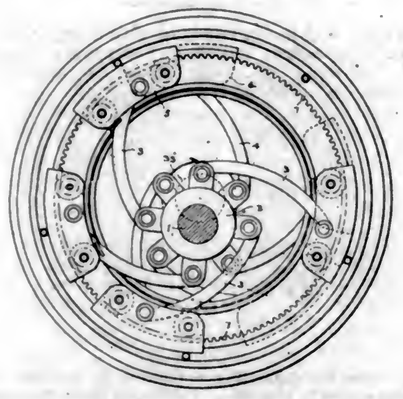
1,872,635. METHOD OF SINKING MOLDING TUBES FOR CONCRETE PILES MOLDED IN THE GROUND. EDGARD FRANKIGNOUL, Brussels, Belgium. Filed Aug. 24, 1931, Serial No. 559,114, and in Belgium Aug. 29, 1930. 6 Claims. (Cl. 61—57.)

1. Method of constructing concrete piles molded in the ground by means of a pipe temporarily sunk to the desired depth, in accordance with the principal patent, comprising in combination: the formation of a slightly moist concrete plug at the lower part of the pipe, the use of a ram, the diameter of which is substantially less than that of the pipe and terminating below in a trunconic portion, the use of this ram to compress said plug, to drive in the pipe by direct impact on this plug, for expelling said plug and for ramming the concrete of the pile,



the addition of water after driving in the pipe to facilitate the expulsion of the plug, the use of means to guide the ram at an inclination, and means to overcome abnormal resistance of the ground.

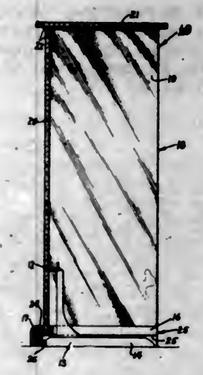
1,872,636. VARIABLE SPEED TRANSMISSION. HERALD B. GREENING and JAMES W. GALLOWAY, Hamilton, Ontario, Canada, assignors to Galloway Engineering Company Limited, Hamilton, Ontario, Canada. Filed Jan. 17, 1931. Serial No. 509,325. 11 Claims. (Cl. 74—53.)



1. In a variable speed transmission of the type wherein a plurality of arms mounted upon an eccentric portion of the driving member are adapted to engage a fixed member and the driven member to effect the transmission of power in variable ratios, the combination therewith of, a toothed gear mounted on the driven member, a stationary toothed gear, toothed pinions mounted on said arms and meshing with the aforesaid gears, and over-running clutches for progressively locking said pinions to said arms against rotation in one direction relative thereto.

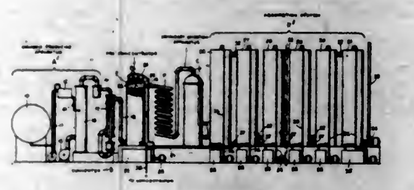
1,872,637. CABINET FOR A DRINK MIXER. PAUL HAWKINS, Los Angeles, Calif. Filed Sept. 8, 1930. Serial No. 480,331. 1 Claim. (Cl. 312—114.)

In a drink mixer cabinet the combination of a support and a transparent enclosure, said support including a pair of spaced side rails and a back rail said side rails each having an inwardly directed flange thereon to provide a recessed portion on each side adapted to receive the base of a drink mixer and prevent overturning of the same, the front of said support being open to receive the base of a drink mixer, said transparent enclosure including a pair of spaced transparent side member, a back member engaging said side members and a transparent top member engaging



and secured to said side members and to said back member, the bottom of said side and back members engaging and being secured to said rails, the front of said transparent enclosures being open to receive the drink mixer.

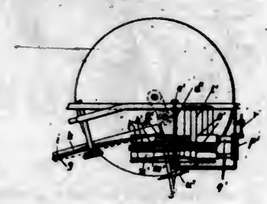
1,872,638. MANUFACTURE OF NITRIC ACID FROM AMMONIA. INGENUIN HECHENBLEIKNER, Charlotte, N. C., assignor, by mesne assignments, to Chemical Construction Corporation, a Corporation of Delaware. Filed Jan. 31, 1928. Serial No. 250,842. 8 Claims. (Cl. 23—162.)



1. In the process of making nitric acid from ammonia the method which includes feeding a mixture of ammonia gas and air into a converter and generating therein a hot nitrous oxide gas mixture, passing said hot gas mixture in contact with nitric acid derived from an absorption system to pre-concentrate the same and to cool the said hot gas mixture, oxidizing the same to higher oxides of nitrogen, and then passing the gas mixture into the aforesaid absorption system.

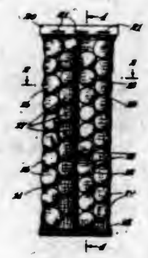
7. In an apparatus for the manufacture of nitric acid from ammonia, a converter, a secondary oxidation and absorption system, a preconcentrator chamber interposed between the converter and the said system, connections for conducting the gas flow from the converter through the preconcentrator chamber and for feeding nitric acid into the preconcentrator chamber and connections for conducting the gas flow from the preconcentrator chamber to the secondary oxidation and absorption system.

1,872,639. POTATO HARVESTING MACHINE. MARTIN LICHT, Cassel, Germany. Filed Sept. 20, 1930, Serial No. 483,300, and in Germany Oct. 14, 1929. 3 Claims. (Cl. 55—56.)



1. A potato harvesting machine, comprising in combination with the conveying share, a sifting wheel having a tine rim arranged at an incline behind said share and adapted to serve as conveyor wheel, and an inclined sifting device composed of vertically adjustable sifting rings and sifting wheels surrounded by said sifting rings adapted to convey upwards and at the same time partly sift the dug potato ridge.

1,872,640. COMPARTMENT BAG FOR MARBLES OR THE LIKE. BERRY PINK, Passaic, N. J., assignor to The Rosenthal Company, New York, N. Y., a Corporation of New York. Filed Apr. 22, 1931. Serial No. 531,931. 4 Claims. (Cl. 206—46.)

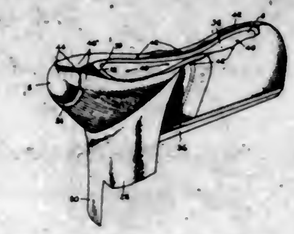


3. A package for vending substantially spherical articles comprising a substantially flat rectangular bag of flexible netting, the opposite walls of said bag being connected along at least one longitudinal line intermediate of the sides thereof to divide the bag into a plurality of narrow elongated compartments arranged side by side, each of said compartments being substantially filled with said spherical articles, the articles being of a selected size with respect to the cross sectional area of the compartment containing them so that they will of necessity arrange themselves in two substantially parallel rows with the articles in each row of each compartment in substantially the same plane.

1,872,641. BALLET SLIPPER AND MANUFACTURE OF SAME. SALVATORE CAPEZIO, East Paterson, N. J. Filed Apr. 18, 1930. Serial No. 445,261. 34 Claims. (Cl. 36—8.3.)

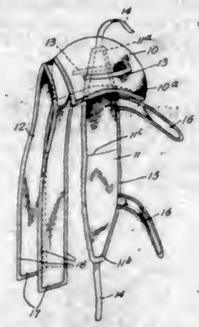
1. In the manufacture of ballet slippers having an outsole terminating a substantial distance short of the toe of the slipper in the conventional manner, the method which includes cutting and patterning the material of the

upper at the toe and front sole portion thereof to obtain the proper enclosed or cupped toe shape without folds or plaits, placing the same in inverted condition on a last



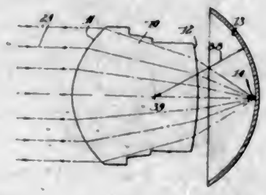
provided with an outsole which is short as aforesaid, securing the upper including the cupped toe portion thereof to the short outsole, and turning the slipper.

1,872,642. BEAUTY MASK. KATHERINE WELSH, Brooklyn, N. Y. Filed Mar. 20, 1930. Serial No. 437,313. 4 Claims. (Cl. 128—164.)



1. A mask of the class described comprising a crown portion of openwork fabric adapted to be arranged upon and cover the hair of the head, a strap at the front of said crown portion, the ends of said strap projecting beyond the crown and adapted to be arranged over the cheeks of a wearer, crossed beneath the chin of the wearer and passed around the neck and attached at the back of the neck to support the facial muscles of the wearer.

1,872,643. LIGHT REFLECTING DEVICE. EVAN P. BONE, Cincinnati, Ohio, assignor to The National Colortype Company, Bellevue, Ky., a Corporation of Kentucky. Filed May 17, 1930. Serial No. 453,378. 10 Claims. (Cl. 88—1.)



1. A light reflecting device comprising lens means, and reflecting means in rear of said lens means, said lens means having a face thereof aspherically curved to provide correction for spherical aberration in rays incident in a direction substantially parallel with the lens axis and retaining spherical aberration in rays incident in a direction at a substantial angle with said axis, whereby said rays incident substantially parallel with said axis are reflected back in the direction of the light source with low spread and high intensity and said rays incident at a substantial angle with said axis are reflected with a higher spread and lower intensity.

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Trade-Marks	130	No. 296,764 to No.	296,943, inclusive.
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Labels	29	No. 41,045 to No.	41,072, inclusive.
Prints	44	No. 13,836 to No.	13,881, inclusive.
Reissues	11	No. 18,571 to No.	18,581, inclusive.
Plant Patents	4	No. 20 to No.	23, inclusive.
Designs	47	No. 87,613 to No.	87,659, inclusive.
Patents	1,305	No. 1,872,644 to No.	1,873,948, inclusive.
Total	1,676		

Disclaimer

1,294,176.—*Joseph Sachs*, Hartford, Conn. ELECTRIC SWITCH. Patent dated February 11, 1919. Disclaimer filed August 2, 1932, by the patentee.

Hereby enters this disclaimer as follows:

He hereby disclaims claim 10.

He hereby disclaims all devices of the character described in claim 5, except those in which said fuse-carrying portion is immovably positioned in the box and in which the means to prevent opening of the auxiliary cover normally engages directly with the switch-operating element and includes an interlocking part carried by the main cover and movable therewith to separate it from its interlocking relation irrespective of the position of the said switch-operating element, thereby permitting free opening of the main cover with the switch either open or closed.

He hereby disclaims all devices of the character described in claim 7, except those wherein the means cooperative with the switch-operating member and with the supplementary cover is carried entirely by the main cover, is movable independently of the supplementary cover and coacts directly with said exteriorly accessible portion of the switch-operating member.

He hereby disclaims all devices of the character described in claim 9, except those wherein the means for preventing access to the fuse-carrying portion of the switch includes an independently openable auxiliary cover carried by the main cover and separably interlocked with the accessible portion of said switch opening-and-closing means, whereby said main cover can be opened when the switch is closed.

He hereby disclaims all devices of the character described in claim 11, except those in which the fuse-receiving means is immovably positioned and faces forward, and in which the fuse access permitting means comprises an auxiliary cover carried by the main cover and controlled by an interlocking part carried by the main cover so as to be movable therewith and freely separable from its interlocking relation with other parts irrespective of the position of the switching member.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,755,210, B. E. Dohner, Method of making couplings, decided June 17, 1932, claims 1 and 2.

Pat. 1,800,954, H. E. Nash and L. W. Babcock, Blasting cap, decided August 8, 1932, claims 1 and 2.

Pat. 1,809,368, R. K. Winning, Ignition switch, contact carrier, and actuator, decided July 15, 1932, claim 9.

Pat. 1,834,190, Edward Timbs, Packing head, decided July 28, 1932, claims 1, 2, 3, and 4.

Pat. 1,840,705, G. A. Eichelberger, Vehicle carrying trailer, decided July 30, 1932, claims 1 and 4.

Pat. 1,847,160, H. A. Affel, Frequency control, decided August 3, 1932, claims 1, 10, and 11.

Attorneys Disbarment

(ORDER NO. 3,224)

U. S. PATENT OFFICE, *Washington, Aug. 5, 1932.*

Acting under the provisions of section 487 of the Revised Statutes of the United States (U. S. C., title 35, sec. 11), George F. Bailey, of Oakland, California, whose registration is Number 12,450, has this day been disbarred from practice before the United States Patent Office.

THOMAS E. ROBERTSON,
Commissioner.

Condition of Applications Under Examination at Close of Business August 6, 1932

Room No.	(Tota number of applications awaiting action, excluding Trade-Mark Division, 74,937; Trade-Mark Division, 972. Oldest new case, Jan. 28, 1932; oldest amended, Jan. 30, 1932.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	May 6	May 9	502
6708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Apr. 7	Apr. 7	939
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Apr. 22	Apr. 21	747
7063	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	May 20	May 19	436
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Apr. 16	Apr. 25	420
4898 C	6. LEWERS, A. M., Carbon Chemistry	Feb. 13	Feb. 15	2,032
5725	7. JARBOE, C. O., Optics; Photography	Mar. 7	Mar. 7	1,504
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Mar. 14	Mar. 18	1,149
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	May 7	May 7	824
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Mar. 7	Mar. 8	876
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Mar. 30	Apr. 4	667
7701	12. HENRY, C. C., Machine Elements	Apr. 19	Apr. 21	660
5004	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Mar. 23	Mar. 23	1,123
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Apr. 18	Apr. 25	799
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Mar. 3	Mar. 3	1,977
5612	16. SPENCER, C. J., Telegraphy; Telephony	Apr. 9	Apr. 9	978
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Feb. 9	Feb. 10	1,419
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Apr. 9	Apr. 6	653
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Feb. 9	Feb. 12	1,754
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Apr. 18	Apr. 23	669
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Mar. 28	Apr. 2	898
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Apr. 13	May 12	652
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Feb. 10	Feb. 9	895
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Apr. 9	Apr. 18	715
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Feb. 16	Feb. 16	1,443
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Feb. 10	Feb. 12	1,117
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Apr. 6	Apr. 7	1,005
4628	28. BENSON, A. R., Internal-Combustion Engines	Feb. 23	Feb. 27	1,354
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Feb. 9	Feb. 10	958
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Apr. 6	Apr. 8	893
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Feb. 6	Feb. 11	1,581
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Apr. 9	Apr. 16	874
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Feb. 8	Feb. 6	2,387
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Mar. 7	Mar. 8	906
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	June 6	June 6	475
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Feb. 9	Feb. 15	1,664
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Feb. 20	Mar. 2	1,270
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	May 23	June 1	229
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Feb. 10	Feb. 11	1,513
7880	40. OBERLIN, J. J., Receptacles	Mar. 12	Mar. 15	2,220
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	May 9	May 19	650
5882	42. CUTTING, H. O., Electric Signaling	Feb. 17	Feb. 12	1,352
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Mar. 22	Mar. 22	1,500
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Feb. 8	Feb. 8	1,858
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Apr. 8	Apr. 8	1,032
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Apr. 7	Apr. 7	645
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Mar. 17	Mar. 17	2,044
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Mar. 1	Feb. 27	853
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Feb. 6	Feb. 6	1,625
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Feb. 8	Feb. 8	2,205
5628	51. BACKUS, C. D., Radiant Energy	Mar. 14	Mar. 14	1,270
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	May 9	May 9	828
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	May 23	May 24	538
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Feb. 10	Feb. 10	1,165
6883	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	June 1	May 28	347
	Designs	July 13	July 27	158
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Feb. 18	Feb. 18	1,507
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Apr. 6	Apr. 6	674
5605	58. DOWELL, E. F., Abrading; Typewriting	Feb. 10	Feb. 10	1,246
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Jan. 28	Jan. 30	1,759
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Feb. 8	Feb. 8	1,474
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Feb. 6	Feb. 6	1,422
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Feb. 15	Feb. 15	1,853
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Feb. 8	Feb. 8	1,487
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Apr. 7	Apr. 9	596
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Feb. 10	Feb. 10	1,653
2099 B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND.—Trade-Marks	June 18	July 22	793
	Labels and Prints	July 7	July 22	179

DECISIONS IN PATENT AND TRADE-MARK CASES

Commissioner's Decision

EX PARTE KOHN AND RICE

No. 353,961. Decided July 29, 1932

1. APPLICATION—SUGGESTION OF CLAIMS—RULE 77.

"Where claims are suggested to an applicant for interference purposes such action is deemed * * * a new action in the case. In effect such action is an offer to the applicant of the allowance of claims for his invention if presented in the suggested form and if he can prove he is the prior inventor. The provisions of Rule 77 are not deemed to extend to actions in cases in which claims are suggested for interference provided of course such claims are presented within the designated period."

2. SAME—SAME—ABANDONMENT.

Where the Examiner, in an application under rejection, suggested claims for the purpose of interference, the period within which the suggested claims could be made being set to expire after the expiration of the six months' period, *Held* that the suggested claims having been made within that period, though after the expiration of the six months, the application is not abandoned (citing *Coulson v. Callender et al.*, 101 O. G. 1607, *Ex parte Hess*, 126 O. G. 3041, distinguished).

Mr. Willis B. Rice for Kohn and Rice.

KINNAN, *First Assistant Commissioner:*

The applicants have presented a petition to revive this application which was on July 8, 1932, held by the Examiner to be abandoned because the last page of the amendment filed on the last day of the six months within which response must be made is a carbon copy and unsigned.

It appears that on January 7, 1932, certain claims were rejected, certain others allowed, and still others criticized as to form and terms. The action was made final and accompanied by the statement that "An amendment which places the application in condition for allowance will be entered, if promptly submitted." No response was made to this action until the unsigned amendment above referred to was filed on July 7, the last day of the six months' period.

On July 6 the Examiner mailed a letter to the applicants suggesting two claims for the purpose of interference and stating that "Applicant should make same by July 28, 1932, under the provisions of Rule 96." The applicants made these suggested claims in an amendment filed July 15, 1932, well within the period granted by the Examiner in his letter of July 6 suggesting such claims. Notwithstanding these facts the Examiner on July 8, 1932, ignoring his letter suggesting claims for interference and granting the applicants until July 28, 1932, within which to make them, held the case abandoned basing his action upon the failure of the applicants to properly sign the amendment filed July 7, 1932.

In view of some confusion existing as to the question of abandonment where claims are suggested for interference and the period granted within which they may be made extends beyond the six months in which response to a previous office action must be made, it is thought proper to here state that the practice announced in the decision *Coulson v. Callender and Callender*, 101 O. G. 1607, 1902 C. D. 395, is still in force and that it was not overruled by the decision in *Ex parte Hess*, 126 O. G. 3041, 1907 C. D. 58.

Where claims are suggested to an applicant for interference purposes such action is deemed, as held in the above referred to *Coulson v. Callender et al.* decision, a new action in the case. In effect such action is an offer to the applicant of the allowance of claims for his invention if presented in the suggested form and if he can prove he is the prior inventor. The provisions of Rule 77 are not deemed to extend to actions in cases in which claims are suggested for interference provided of course such claims are presented within the designated period.

The distinction between the decision in the *Coulson v. Callender et al.* case and that in *Ex parte Hess*, above referred to, should not be overlooked. In the former case the claims suggested were made within the period granted, while in the latter case the suggested claims were not made within the period granted nor indeed had they been made eight months later when the year following the previous office action on the merits of the case expired.

It is held the instant application has not become abandoned. The petition to revive is dismissed.

U. S. Court of Customs and Patent Appeals

WEIL-McLAIN COMPANY *v.* AMERICAN RADIATOR COMPANY

No. 2,909. Decided April 11, 1932

TRADE-MARKS—REGISTRABILITY—COLORED BANDS ON A BOILER.

In an alleged trade-mark consisting of a band of red color interposed between contrastingly-colored ends of a boiler *Held* not registrable as a trade-mark for boilers, since the mark is an integral part of the article, is descriptive of the goods upon which it is used, and has one or more utilitarian purposes.

APPEAL from the Patent Office. Reversed.

LENROOT, *J.*, concurring.

Messrs. Low & Low and *Mr. Joseph Harris* for Weil-McLain Company.

Mr. Conrad A. Dieterich for American Radiator Company.

BLAND, *J.:*

The issue to be decided in this case arises in a trade-mark opposition proceeding instituted in the United States Patent Office, wherein the appellant opposed appellee in its application for registration of its alleged trade-mark used upon square, sectional, househeating boilers, which mark is described in applicant's application as follows:

The trade-mark consists in a band of red color interposed between contrastingly-colored ends of a boiler.

The record shows that as the mark was used and published, it consisted of a band of red color interposed between contrastingly-colored ends of a boiler which is said to be applied by painting, printing,

enameling or otherwise marking the same directly upon the boiler or the jackets or coverings thereof. It is stated in appellee's brief that before any testimony was taken it amended its application limiting the mark to a band of red color interposed between black end bands. Such amendment does not appear in the record, but the case has been tried below and here upon the theory that applicant's mark is limited to black end bands and we will so regard it.

Both parties are now engaged and have been engaged for many years in the manufacture of household heating boilers, particularly boilers of the vertical, sectional type. There is no dispute but that the goods which both parties make and sell are of the same descriptive properties and that the opposer, prior to the alleged date of adoption of appellee's alleged mark, had manufactured and sold boilers of the type in question, its boilers having black ends with intermediate gray portions.

The notice of opposition proceeds upon the theory that the applicant's alleged mark is publici juris, is descriptive of applicant's goods, performs a utilitarian purpose, and that the registration of the trade-mark, which implies a monopoly in appellee, would handicap appellant and interfere with its legitimate rights in merchandising its product.

It is conceded that the applicant, appellee, was the first in the trade to use the combination of red and black. The black ends of the boiler referred to, consist of the end plates. The band of red is that portion of the boiler between the end plates which constitutes the jacket covering over the insulating material on the boiler. The so-called red band varies in dimensions and location with the size and type of boiler. It appears from the record that it is desirable that the ends remain black or some dark color in order that the same will not become discolored and unsightly around the doors and openings. It is conceded that it is customary and necessary to paint the jackets some color for the purpose of preventing rust and for the purpose of ornamentation.

The Commissioner of Patents overruled the decision of the Examiner of Interferences, which decision sustained the opposition and adjudged applicant not entitled to registration. The Commissioner held that the opposition should be dismissed and that the mark be registered. From the Commissioner's decision appellant-opposer appealed here. In his decision the Commissioner said:

> It seems clear enough in consequence that the opposer has no standing in this proceeding since it is not using anything which conflicts with the mark of the applicant or anything which it will be precluded from or damaged by using if this registration is granted. *Arkell Safety Bag Co. v. Safepack Mills*, 314 O. G. 3; 53 App. D. C. 218.

It is clear to us that the applicant's alleged mark is not entitled to registration. We think the subject matter of the mark is an integral part of the article and is publici juris[1]; that it is descriptive of the goods upon which its alleged use occurs[2]; and that it has one or more utilitarian purposes[3].

The Commissioner was in error in dismissing the opposition upon the ground that the opposer had no standing "since it is not using anything which conflicts with the mark of the applicant nor anything which it will be precluded from or damaged by using if this registration is granted." We have gone so thoroughly into this question in *United Shoe Machinery Corp.* v. *Compo Shoe Machinery Corp.*, 19 C. C. P. A. (Patents) —, 56 F.(2d) 292, and *Model Brassiere Co., Inc.*, v. *Bromley-Shepard Co., Inc.*, 18 C. C. P. A. (Patents) 1294, 49 F.(2d) 482, 411 O. G. 538, that extended discussion seems unnecessary.

We hold that the mark is not registrable and that the opposer clearly showed its right to oppose. The decision of the Commissioner of Patents is reversed.

Reversed.

LENROOT, *J.*, concurs in the conclusion.

U. S. Court of Customs and Patent Appeals

IN RE SADACCA

No. 2,952. Decided April 6, 1932

PATENTABILITY—DESIGNS—LIGHT SOCKETS.

A design for a light socket *Held* unpatentable over a design patent to S. since, while the design of the patent as a whole does not anticipate the design of the applicant, it shows a knob of substantially the same design.

APPEAL from the Patent Office. Affirmed.

GARRETT, *J.*, dissenting.

Mr. Morris Kirschstein for Sadacca.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

Appellant herein has appealed from the decision of the Board of Appeals of the United States Patent Office, denying the application of appellant for a patent on a design for an electric light socket.

The socket consists of a tapered body portion with a multiplicity of flat sides or panels, that is to say, the body is hexagonal and tapered. A bead surrounds the larger end of the body portion of the lamp-receiving socket.

The reference upon which the rejection was based is Steinberger, Des. 68,352, September 29, 1925.

It will be noticed that the patent to Steinberger was for a design of a variometer as a whole. There is no contention that the design of the variometer as a whole anticipates the design at bar but the tribunals below found that the knob which turned the dial did anticipate it. The knob in Steinberger is quite similar in appearance to the design at bar. The main portion of the knob is hexagonal and tapered and there is also a bead or ring around the larger portion thereof.

After describing the handle or knob portion of the variometer in Steinberger, the Board said:

> It is believed the slight differences in relative proportions and shape of the two devices are not sufficient to justify the allowance of the appealed claim. In our opinion the two designs are substantially the same and no invention was exercised in the application of the general shape disclosed in Steinberger to a lamp socket.

The Examiner and the Board of Appeals have concurred in the finding that there was no invention in the application of the general shape disclosed in Steinberger to a lamp socket and it is not clear to us that this conclusion is manifestly wrong.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE FAWICK

No. 2,917. Decided April 6, 1932

PATENTABILITY—TRANSMISSION FOR AUTOMOTIVE VEHICLES.

Certain claims for a transmission for automotive vehicles *Held* patentable over the prior art.

APPEAL from the Patent Office. Modified.

LENROOT, *J.* concurring and dissenting.

Messrs. Brown, Jackson, Boettcher & Dienner, Mr. C. V. Hildebrecht, and *Mr. H. H. Babcock* for Fawick.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying claims 1 to 7, 9 to 19, and 21 to 31, inclusive, in appellant's application for a patent for an alleged invention relating to improvements in a transmission for automotive vehicles. Claim 8 was allowed. Claim 20 was cancelled by appellant.

Claims 2, 9, and 15 are illustrative. They read:

> 2. In combination, a gear box having a drive shaft, a stationary countershaft entirely at one side of the drive shaft and a stub shaft, a housing secured on the end of the gear box, bearings in said housing, a driven shaft in said bearings projecting into said housing, said stub shaft also projecting into said housing, one of the shafts which project into the housing having an internal gear, the other of said shafts which project into said housing having a pinion cooperating with said internal gear.
>
> 9. In a transmission, a gear case having a drive shaft extending from one end thereof, a driven shaft extending from the other end thereof, said case having two compartments, selective change speed gearing comprising shiftable spur gears mounted in one compartment and speed reducing gearing mounted in the other compartment, said speed reducing gearing including an internal gear mounted on the inner end of the driven shaft and a pinion cooperating therewith and driven through said change speed gearing by the drive shaft.
>
> 15. In combination, a driving shaft an intermediate shaft and a driven shaft, change speed and reversing gearing between the driving shaft and the intermediate shaft including a plurality of pairs of cooperating external spur gears and means for coupling the driving and intermediate shafts together, a pair of gears forming a connection between the intermediate shaft and the driven shaft comprising a spur pinion and an internal gear.

The references are: Daimler, 1,023,553, Apr. 16, 1912; Banks, 1,225,102, May 8, 1917; Schacht, 1,452,220, Apr. 17, 1923; Daimler, (Br.) 15,969, July 12, 1910; Durkoppwerke, (Ger.) 299,118, June 18, 1919; Wanderer-Werke, (Ger.) 312,407, May 24, 1919.

Appellant's application is for the reissue of his Patent No. 1,524,476, issued January 27, 1925.

Claims 1 to 7, and 9 to 16, inclusive, were previously allowed to appellant, and are a part of his patent.

Each of the patent office tribunals has discussed the references, applied them to the appealed claims, and held that appellant's combination, although new and useful, is devoid of invention.

In view of the fact that the Board of Appeals has not only stated its views, but also those of the Primary Examiner, we deem it proper to quote a substantial portion of its decision:

> Claims 1 to 7, inclusive, and 22 to 31, inclusive, stand rejected on the German patent 299,118 or either of the Daimler patents, each of which discloses the general organisation defined by these claims, when considered in connection with the patent to Banks, which discloses an internal external reduction gearing for automobiles, the position of the Examiner being that no invention was involved in the substitution of the Banks internal external reduction gearing in place of the gearing disclosed by the German and Daimler patents.
>
> The Examiner also relies on the said German patent as showing it to be old to have the reduction unit in a separate casing attached to the rear of the main casing.
>
> As to the idea of having the propeller shaft offset from the main transmission shaft, the position of the Examiner is that such arrangement results from the type of reduction gearing employed, as illustrated by Banks.
>
> Claims 9 to 14, inclusive, stand rejected on the German patent to Durkoppwerke, in view of either Banks or the German patent to Wanderer-Werke, the position of the Examiner being that the substitution of either the Banks or the German 312,407 reduction gearing in place of that disclosed by the German patent to Durokoppwerke would not amount to invention. The Examiner calls special attention to the German patent 312,407 as disclosing an external internal reduction unit in combination with a sliding gear change speed transmission.
>
> Claims 15 to 21, inclusive, stand rejected on the patent to Schacht, which shows the character of the reversal in the main transmission in combination with a reduction unit such as called for by these claims, when considered in connection with the German patent to Durkoppwerke, the position of the Examiner being that no invention was involved in placing the reverse mechanism of the Schacht patent in the Durkoppwerke patent.
>
> Claim 17 was rejected on the additional ground that it is unwarranted, stating that if applicant is going to claim the relation of the transmission and the springs of the vehicle frame then such springs must be disclosed.
>
> We have carefully reviewed the merits of the invention in the light of the applicant's brief, but without finding good reason for reversing the decision of the Examiner.

The sole question in the case is whether appellant's combination, as defined in the appealed claims, admittedly new and useful, involved the exercise of the inventive faculties. If it did, the claims, with the exception of claim 17, which will be hereinafter considered, should have been allowed. If it did not, the claims were properly rejected.

Appellant was the first to provide a transmission, supported as sprung weight upon the frame of an automotive vehicle between the motor and propeller shaft, comprising an internal reduction gearing for a quiet running drive, in combination with a shiftable spur gearing for acceleration and reverse, the internal reduction gearing being operable with the spur gears out of operation.

Although the patent office tribunals have held that, considered broadly, appellant's combination lacked invention, we are not of that opinion. At the time appellant filed his original application—February,

[1] *A. Leschen & Sons Rope Co. v. The American Steel and Wire Co. of New Jersey*, 19 C. C. P. A. (Patents)—, 55 F.(2d) 455, 418 O. G. 3; *In re General Petroleum Corp. of California*, 18 C. C. P. A. (Patents) 1444, 49 F.(2d) 966, 412 O. G. 831; *In re Sun-Oil Co.*, 18 C. C. P. A. (Patents) 1421, 49 F.(2d) 965, 412 O. G. 267; *In re Walker-Gordon Laboratory Co.*, 19 C. C. P. A. (Patents) —, 53 F.(2d) 548, 414 O. G. 826; *In re Dennison Mfg. Co.*, 17 C. C. P. A. (Patents) 987, 39 F.(2d) 720, 396 O. G. 350; *In re Waterman*, 34 App. D. C. 185, 152 O. G. 232; *Parker Pen Co. v. Finstone*, 7 F.(2d) 753.

[2] *California Cyanide Co. v. American Cyanamid Co.*, 17 C. C. P. A. (Patents) 1198, 40 F.(2d) 1003, 399 O. G. 212; *In re General Petroleum Corp. of Calif.*, supra; *In re Sun Oil Co.*, supra; *In re Vertes Hosiery Mills Inc.*, 18 C. C. P. A. (Patents) 725, 45 F.(2d) 249, 402 O. G. 264.

[3] *In re Walker-Gordon Laboratory Co.*, supra; *In re Vertes Hosiery Mills, Inc.*, supra; *In re Oneida Community*, 41 App. D. C. 260, 198 O. G. 899; *Hess v. Loewenstein*, 40 App. D. C. 277, 192 O. G. 993.

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1923—the automotive industry was comparatively young, and it is not far fetched to say that intensive effort was being made at that time, and prior thereto, to improve the mechanical features of motor vehicles, including transmissions. The desirability of the results accomplished by appellant—a quiet running drive, and the elimination of noise and wear without the loss of power—must, necessarily, have been present in the minds of those skilled in that particular art. Nevertheless, four years elapsed after the issuance of the patents of record before anyone thought of solving the problem by constructing the transmission defined in the appealed claims. It would seem, therefore, that if appellant's combination was obvious to those of ordinary mechanical skill, it would have occurred to someone at an earlier date.

Whether appellant's combination involved invention, is largely a matter of opinion, concerning which, of course, minds will differ.

Appellant having pointed the way, his combination, as is true of many inventions, may appear simple. However, after carefully considering the issues involved, we have reached the conclusion that the involved combination was not obvious to one of ordinary mechanical skill, but required the exercise of the inventive faculties.

Claim 17 was rejected by the Patent Office tribunals, because appellant's drawings did not show the structure defined therein. Counsel for appellant contends, however, that that structure is fully defined in the specification, and that he will be glad "to illustrate the same upon allowance of claims covering the construction." It is not denied that a drawing is required by law. Rule 71 of the Rules of Practice of the United States Patent Office provides for an amendment of the drawings to secure "Correspondence between the claim, the specification, and the drawing." Although appellant has had the opportunity to comply with the statute and rule 71, he has not done so. The claim, therefore, was properly rejected.

For the reasons stated, the decision of the Board of Appeals is modified, being reversed as to claims 1 to 7, 9 to 16, 18, 19, and 21 to 31, inclusive, and in other respects affirmed.

Modified.

LENROOT, *J.* (concurring and dissenting):

I concur in the conclusion reached by the majority as to all of the claims in issue except claim 17, but upon a somewhat different ground than that expressed in the majority opinion.

While I am not clear that the claims allowed by the majority describe any invention over the prior art, I am satisfied that it is manifest that there is a doubt as to this question, which doubt, under the established rule, should be resolved in appellant's favor. I therefore agree that said claims should be allowed.

I think the same rule should be followed as to claim 17, and that it also should be allowed. The only reason given for disallowance in the majority opinion is that the alleged element, "In an automotive vehicle having a spring supported frame," is not shown in the drawings of the application.

The Examiner, after rejecting said claim for the same reasons that the other claims were rejected, stated:

> Claim 17 is also rejected as unwarranted. The drawing shows no spring support for the frame.

This ground of rejection was also approved by the Board of Appeals.

I regard the words, "In an automotive vehicle having a spring supported frame," as an introductory phrase only, which states the environment in which the device is to be used, and is not in fact an element of the patentable combination set out in the claim. This being so, there is nothing in the statute or the rules of the patent office which requires drawings of the automotive vehicle or the spring supported frame. It is clear that drawings are required only of the invention and not of the environment in which the invention is to be used.

The question of the effect of an introductory phrase was fully considered by this court in the case of *Braren* v. *Horner*, 18 C. C. P. A. (Patents) 971, 47 F.(2d) 358, 408 O. G. 825, and a number of cases were there cited and quoted from to the effect that language similar to that here considered was introductory only.

Furthermore, I cannot understand why claims 27, 28, 30 and 31 are allowable if claim 17 is not, because each of these claims introduces structure not shown in the drawings for the purpose only of stating the environment in which the invention is to be used.

To illustrate, claim 30 begins with the words, "In combination, an automobile having a frame, a driving motor, a rear axle, * * *," etc.; none of the foregoing are shown in the drawings, even though this claim begins with the words "In combination," which claim 17 does not; and yet this claim was not rejected by the Patent Office tribunals upon the ground that said features were not shown in the drawings.

If claim 17 were exactly similar to the allowed claims, except for the introductory words, much might be said in favor of its rejection as being surplusage, but the language is different and comes within the rule that an inventor may claim his invention in different ways in order to make certain that he is fully protected.

Finally, the Solicitor for the Patent Office in his brief states that the point upon which the majority rejects claim 17 is a minor and formal one.

It being my view that the "spring supported frame" is no part of the invention claimed, but only states the environment in which the invention could be used, no drawings were necessary of the "spring supported frame," and the claim should be allowed for the same reasons that the other appealed claims are allowable.

U. S. Court of Customs and Patent Appeals

IN RE VAWTER (GERMANTOWN TRUST COMPANY, EXECUTOR)

No. 3,908. Decided April 11, 1932

1. PATENTABILITY—COMBINATION.
   "A combination to be patentable as such must disclose a novelty of cooperation between its elements which produces a new result and amounts to invention, and the mere fact that some elements are themselves novel and possibly patentable as individual elements does not render the combination containing them patentable in the absence of such novel cooperative relation in the combination itself."
2. SAME—FUEL GAUGE FOR AUTOMOBILES.
   Combination claims for a fuel gauge for automobiles *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Pennie, Davis, Marvin & Edmonds, Mr. W. B. Morton, and *Mr. Clarence M. Fisher* for Vawter.

Mr. T. A. Hostetler and *Mr. H. S. Miller* for the Commissioner of Patents.

GARRETT, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming a decision of the Examiner refusing to allow claims 1 to 9, inclusive, of an application for patent upon alleged improvements in fuel gauges of the type used for indicating the quantity of fuel in the tank of a motor vehicle, the indicating instrument being remote from the tank.

All are combination claims. We quote 1 and 2:

> 1. In a fuel gauge for automobiles, the combination of a pressure-responsive part adapted to be attached to the fuel tank, said part having a diaphragm positioned to be subjected to the hydrostatic pressure of the fuel in the tank, an electrical resistance adjacent said diaphragm, a contact member movable over said resistance to thereby vary the effective portion thereof and operative connections between the diaphragm and said member, and an indicating part adapted to be mounted on the dash of the vehicle, said indicating part indicating in terms of fuel quantity the variations in the resistance as effected by the movement of the diaphragm.
>
> 9. In a fuel gauge for automobiles, the combination of a pressure-sensitive part adapted to be connected to the fuel tank and an indicating part adapted to be mounted on the dash of the vehicle for indicating the variations in pressure occurring in the pressure-sensitive part, said indicating instrument comprising a pair of magnetic coils fixedly supported in spaced relation, a circular armature supported for oscillation at a point between said coils and with the opposite sides of said armature working in said coils respectively, and an indicating member actuated by the movement of said armature, said armature having the portions of its arms which work through said coils tapered but to different extents whereby the armature will assume different positions on variations in the relative values of the current flowing in the two coils, and a variable resistance forming part of said pressure-sensitive part in circuit with one of said coils.

The references cited are: (British) McKinlay, 173,071, December 23, 1921; (British) Runbaken et al., 201, 411, August 2, 1923; Custodis, 543,386, July 23, 1895; Henderson, 1,152,730, September 5, 1915; Angus, 1,506,552, August 26, 1924; Winterhoff, 1,591,462, July 6, 1926; Decker, 1,667,855, January 31, 1928; Vawter, 1,681,314, August 21, 1928.

The case presents a somewhat uncommon issue. As has been stated, all the claims are for a combination. It was held by the tribunals of the Patent Office that the combination disclosed was anticipated by the prior art cited, but it seems to be conceded that the pressure-sensitive rheostat and the specific electrical instrument employed by appellant are themselves novel.

The question presented, therefore, is whether a combination, in itself old as a combination, is rendered patentable as such by reason of its containing elements which as individual features are novel.

Appellant has cited no authority to sustain a contention that under such circumstances there is patentable invention, while the brief of the Solicitor for the Patent Office directs attention to a number of cases in which the courts have held to the contrary.

In *Langan* v. *Warren Axe & Tool Co.*, 184 Fed. 720, 1911 C. D. 490, 166 O. G. 986, there was involved the validity of a patent for a combination of grab-hooks, employed in skidding logs, and a draft device.

The United States Circuit Court of Appeals of the Third Circuit in holding the combination patent invalid said:

> The grab-hooks and draft appliance of the patent, in combination, coact as grab-hooks and draft appliances have always done. The grab-hook of the patent, by reason of its peculiar construction and form, is very probably an improvement of no little utility. But the patentee cannot, merely because of that fact, have a patent for a combination which shall have, as one of its elements, a pair of such grab-hooks. He did not invent the combination. He invented, if he invented anything, an improved grab-hook.

The principle enunciated in the foregoing case has been applied by the Court of Appeals of the District of Columbia in a number of cases, such as *In re McNeil*, 20 App. D. C. 294, 100 O. G. 2178, 1902 C. D. 563; *In re Ratican*, 36 App. D. C. 95, 162 O. G. 540, 1911 C. D. 267; *In re Bliss*, 39 App. D. C. 453, 188 O. G. 1052, 1913 C. D. 325.

[1] We discern no unsoundness in this principle. A combination to be patentable as such must disclose a novelty of cooperation between its elements which produces a new result and amounts to invention, and the mere fact that some elements are themselves novel and possibly patentable as individual elements does not render the combination containing them patentable in the absence of such novel cooperative relation in the combination itself.

One of the references cited against appellant was his own patent, No. 1,681,314 of August 21, 1928, issued upon an application filed January 8, 1921, and renewed January 13, 1928. This shows and claims the combination of pressure-sensitive resistance means with an electrical measuring instrument connected in circuit therewith, these features or elements being of a somewhat different character from those composing a part of the combination here claimed.

Appellant insists, however, that said patent is not a proper reference because not issued until subsequent to the filing of the application here involved. He further insists that all the other references, except Henderson and Custodis, should be disregarded because, with the exception of those two, all of them were issued after the date of January 8, 1921, when he filed the application which resulted in his patent referred to.

These contentions do not appear to us to be well taken, because the involved application, as stated

by the Solicitor for the Patent Office, "is neither division, continuation, nor continuation in part" of said application of January 8, 1921, but is a wholly new and independent application. However, as conceded by the Solicitor:

> Appellant's own patent is, of course, pertinent only to the extent of its claims, as showing what subject matter has already been patented to appellant.

The Decker patent claims relate to an indicating instrument and the method of making same, and in one of the drawings discloses an adjustable rheostat. The application for this patent was filed October 7, 1925, and patent issued January 31, 1928. It appears to be a proper reference for the purpose cited, under the ruling of this court in *In re Smith*, 17 C. C. P. A. (Patents) 752, 36 F.(2d) 522, 393 O. G. 1029.

Each of the other patents referred to was issued before the filing date of the involved application.

[2] It is not deemed essential to enter into a discussion or description of the technical features of the case. That will be found in the decisions of the tribunals of the Patent Office.

We find no errors of fact or law in the said decisions, and that of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

OLDROYD *v.* MORGAN

No. 2,956. Decided April 4, 1932

1. INTERFERENCE—APPLICATION AND PATENT—CONSTRUCTION OF ISSUE.

> "• • • Where doubt exists as to the meaning of patent claim, or if it is susceptible of two interpretations, resort may be had to the drawings and specification to ascertain the true and proper interpretation to be given to it;"

2. SAME—SAME.

> "But, if there be no ambiguity, counts should be given the broadest interpretation which they will reasonably permit."

3. SAME—SAME.

> "However, assuming that the language of the count is such that we are at liberty to ascertain the meaning intended by appellant in making the claim, we think it is clear that appellant did not intend that the language have the meaning which he now contends for."

4. SAME—PRIORITY.

> Evidence reviewed and *Held* to establish that priority was properly awarded to M. as the first to conceive the invention and the first to constructively reduce it to practice.

APPEAL from the Patent Office. Affirmed.

Mr. Cyrus Kehr for Oldroyd.

Mr. Charles M. Nissen for Morgan.

LENROOT, *J.*:

This is an appeal in an interference proceeding wherein the Board of Appeals of the United States Patent Office affirmed the decision of the Examiner of Interferences awarding priority of invention to the appellee herein.

There is but one count in the issue, which reads as follows:

> In a machine of the nature described, the combination of a tool support rotatable on a horizontal axis, mechanism for effecting rotation of said support, a cutting tool, members supporting said tool on said support for movement toward and from the axial line of said support, means on said rotatable support for actuating said supporting members for moving said tool toward and from the axial line of the rotary support, and means extending along the axis of said support for actuating said cutting tool, substantially as described.

Said count was copied by appellee from a claim in a patent, No. 1,365,598, issued to appellant January 11, 1921, upon an application filed May 5, 1916. The application of appellee was filed on June 23, 1913.

Inasmuch as appellee's application was pending at the time of the issue of the patent to appellant, and was filed prior to the application on which appellant's patent was issued, appellee is the senior party and the burden was upon appellant to establish priority of invention in him by a preponderance of evidence.

The invention involved relates to a machine for mining coal and is sufficiently described in the count for the purposes of this case.

The Primary Examiner originally rejected appellee's claim forming the count here in issue upon the ground that the subject matter thereof, as construed by him, was not disclosed in appellee's specification or drawings, but, upon appeal, the Board of Examiners in Chief reversed the Primary Examiner, holding that appellee had the right to make the claim. Thereupon this interference was declared.

Two questions are involved upon this appeal:

1. The right of appellee to make the claim which constitutes the count in issue.

2. Priority of conception and reduction to practice of the invention.

With respect to the first question, appellant moved to dissolve the interference upon the ground that appellee's application does not support the claim constituting the count, it being contended by him that appellee's application does not disclose the following elements of the count:

> • • • members supporting said tool on said support for movement toward and from the axial line of said support, means on said rotatable support for actuating said supporting members for moving said tool toward and from the axial line of the rotary support • • •.

Said motion was denied by the Law Examiner. In his decision he stated that the claim constituting the count in issue was allowed to appellee, on appellee's ex parte appeal, by the Board of Examiners in Chief, with the information before them that the claim was copied by appellee from appellant's patent for the purpose of an interference; that he had no reason to believe that the decision of the Examiners in Chief would be different on an inter partes appeal than it was on the ex parte appeal, and for that reason the decision of the Examiners in Chief would be followed. He further stated, however, that:

> While it is true that the inventions of the two parties, specifically considered, are different from each other, yet the claim in issue defines subject matter common to both inventions.

Voluminous testimony was thereafter taken, and various interlocutory proceedings were had, the latter of which, in view of our conclusions with regard to the questions involved herein, it is not necessary for us to consider.

After the taking of testimony was concluded the Examiner of Interferences found that appellee had the right to make the claim which is the count here in issue. Upon appeal, the Board of Appeals expressly found that appellee's disclosure supported said claim and further held that, inasmuch as the same elements here being considered were considered in another interference between the same parties, involving appellee's application before us, and in which the same question as to appellee's right to make the claim was raised, based upon alleged lack of disclosure in appellee's application, which contention was decided in favor of appellee by the Law Examiner, the Board of Examiners in Chief, the Commissioner of Patents, and, upon appeal, by the Court of Appeals of the District of Columbia, the matter was res adjudicata.

We find it unnecessary to detail the structures set out in the applications of the parties or the differences between them. It is sufficient to say that the count here in issue clearly reads upon appellee's disclosure in his application, unless a limitation be imported into the count by reference to appellant's specification. That is to say, appellee's application clearly discloses "members supporting said tool on said support for movement toward and from the axial line of said support" and "means on said rotatable support for actuating said supporting members for moving said tool toward and from the axial line of the rotary support." In appellee's structure the tool and supporting members move toward and from the axial line in a rotary path, whereas in appellant's structure the tool and supporting members remain parallel to the axis as they move toward and from it.

[1] It is appellant's contention that because his application discloses only a structure where the tool and supporting members remain parallel to the axis of the rotating support as they move toward and from it, such limitation should be read into the count, upon the theory that it was appellant's intention that it should be so limited. In support of this contention he relies upon the rule that where doubt exists as to the meaning of a patent claim, or if it is susceptible of two interpretations, resort may be had to the drawings and specification to ascertain the true and proper interpretation to be given to it; and appellant contends that, as the count here involved was copied from a claim in appellant's patent, appellee is bound by the meaning intended by appellant. We are in accord with this rule; this court has repeatedly followed it. *Brogden* v. *Slater*, 17 C. C. P. A. (Patents) 1240, 399 O. G. 630, 40 F.(2d) 988; *Moore* v. *Greene*, 18 C. C. P. A. (Patents) 1317, 411 O. G. 820, 48 F.(2d) 960.

[2] But, if there be no ambiguity, counts should be given the broadest interpretation which they will reasonably permit. *Deibel* v. *Heise & Schumacher*, 18 C. C. P. A. (Patents) 907, 405 O. G. 845, 46 F.(2d) 570. In the case last cited this court, speaking through Judge Hatfield, after holding that there was no ambiguity in the counts there involved, said:

> • • • The counts of the interference should be given the broadest interpretation which they will reasonably support, and this court is not justified in reading limitations into them for the purpose of changing the plain import of their terms. Had appellant desired to limit his claims to a particular kind or type of kraft paper he might have done so. However, having deliberately elected to claim the invention broadly, he is not in a position to insist that limitations be read into his claims (the counts in issue) for the purpose of avoiding the issue of priority. • • •

[3] However, assuming that the language of the count is such that we are at liberty to ascertain the meaning intended by appellant in making the claim, we think it is clear that appellant did not intend that the language have the meaning which he now contends for.

It appears from the record that the count here in issue was claim No. 50 of appellant's patent; that claim 51 of said patent was identical with said claim 50, except that it contained the phrase "and for swinging the tool in a plane parallel to said axial line", and there was substituted the word "mechanism" for the word "means." Thus it is seen that claim 51 of said patent was essentially the same as the count here in issue, except for the limitation above quoted. It is this limitation which appellant now contends we should read into the count here involved; but if we did so, there would be no material difference between claims 50 and 51 of appellant's patent. Under such circumstances it must be assumed that in claim 50, by omitting said limitation contained in claim 51, appellant sought a broader protection under the former than he secured under the latter.

A very similar case, in principle, to the case at bar is that of *Andrews* v. *Nilson*, 27 App. D. C. 451, 123 O. G. 1667, wherein the appellee there included as an element in a claim "a vibratory strip". His specification showed a vibratory strip of non-magnetic material, and it was contended by the appellant there that appellee's claim should be construed as limited to a vibratory strip of non-magnetic material because of the disclosure in the specification. In its opinion the court said:

> • • • While the courts are inclined to liberality in referring back to the specifications for limitations to be placed upon elements of a claim in order to save the claim from invalidity by reason of the prior art, they are not so inclined when the prior art does not require it, nor where an infringer insists that such limitations should be imposed in order to escape a charge of infringement; and this is especially so where the element sought to be limited is claimed broadly in one or more claims, and narrowly, and with such limitations, in others. The reasonable presumption is that an inventor intends to protect his invention broadly; and consequently the courts have often said that the scope of a claim should not be restricted beyond the fair and ordinary meaning of the words, save for the purpose of saving it. In reading a claim for the purpose of construing it, heed must not only be paid to the specification proper, and to the drawings, but also to the other claims of the patent. *Ryder* v. *Schlichter*, 61 C. C. A. 469, 126 Fed. 487.

Our conclusion is that appellee had the right to make the claim forming the count in issue, and that conclusion is fortified by the fact that the Law Examiner, the Examiner of Interferences and the Board of Appeals have so held, while the Court of Appeals of the District of Columbia, in another interference between the same parties, referred to in the aforesaid decision of the Law Examiner, involving the same question here presented, likewise held that appellee had the right to make the claim. *Oldroyd* v. *Morgan*, 374 O. G. 4, 58 App. D. C.

78. In view of this conclusion, we do not find it necessary to pass upon the question of whether the matter is res adjudicata, as held by the Board of Appeals, for the reason that said Board decided also that upon the merits appellee had the right to make the claim.

Appellant also contends that the element in the count reading "members supporting said tool on said support for movement toward and from the axial line of said support" should be construed as meaning a *bodily* movement of said members.

It is our conclusion that under the ordinary meaning of the word "movement" the element above quoted clearly reads upon Figures 8 and 9 of the drawings of appellee's application.

Appellee, in his brief, upon this point has aptly said:

> If appellant's arguments were sound the hands of a clock could not be said to move around a dial nor could either hand be said to ever move toward and from any hour designation on the dial.

[4] Upon the question of priority of conception and reduction to practice, both the Examiner of Interferences and the Board of Appeals held that appellant had failed to establish by a preponderance of evidence conception of the invention prior to the date of filing of appellee's application, and therefore appellee was held to be the first to conceive and constructively reduce to practice the invention.

In its decision the Board stated, with respect to the question of priority of conception, as follows:

> In considering the question of priority the Examiner of Interferences correctly eliminated the testimony of a large number of Oldroyd's witnesses for the reason that they were not acquainted with him at all until after Morgan's filing date. He has then taken up and quoted in detail such portions of the testimony of each of the remaining witnesses as might have any bearing on the date and substance of any disclosures by Oldroyd to them and has found that while they testify as to what Oldroyd intended his proposed machine to do, there was very little testimony as to the construction of the machine by which these results were to be accomplished and most of the witnesses relied solely upon their memory, after the lapse of nearly fifteen years, to fix the dates of the alleged disclosure. There were also some discrepancies between the witnesses' testimony and the testimony of Oldroyd as to these dates. His conclusion was that the testimony fell far short of establishing satisfactorily a conception of the invention prior to Morgan's filing date. In view of the quotations from the testimony of each of the witnesses in the decision of the Examiner of Interferences it is useless for us to repeat it here. It is sufficient to say that we read the testimony of each of these witnesses before reading the decision of the Examiner of Interferences and came to exactly the same conclusions as those given by him. * * *

An examination of the evidence in the record confirms the conclusions reached by said Patent Office tribunals, but we do not deem it necessary to review such evidence because the rule is here applicable that concurring findings of the Patent Office tribunals upon a question of fact will not be reversed by us unless manifestly wrong. *Pengilly* v. *Copeland*, 17 C. C. P. A. (Patents) 1143, 399 O. G. 3, 40 F.(2d) 995.

Upon the record before us we cannot hold that the finding of the Board of Appeals that appellant is not entitled to a date of conception prior to appellee's filing date is manifestly wrong.

For the reasons herein stated, the decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,018,502 (*a*), Just & Hanaman, Incandescent body for electric lamps, D. C., S. D. N. Y., Doc. E 38/256, *General Electric Co.* v. *F. Murray Co., Inc. et al.* Dismissed for lack of prosecution (notice June 20, 1932).

1,018,502 (*b*), Just & Hanaman, Incandescent body for electric lamps, 1,180,159, I. Langmuir, Incandescent electric lamp, D. C., S. D. N. Y., Doc E 47/16, *General Electric Co.* v. *I. N. Marks et al.* Dismissed for lack of prosecution (notice June 23, 1932).

1,038,735, G. S. Eldred, Cigar lighter, D. C., S. D. N. Y., Doc. E 48/266, *Capital Lighter Co., Inc.*, v. *Art Metal Works, Inc. et al.* Dismissed for lack of prosecution (notice June 23, 1932).

1,125,476, G. Claude, System of illuminating by luminescent tubes, D. C. Oreg. (Portland), Doc. E 9205, *Claude Neon Electrical Products, Inc., et al.* v. *Rann Sign Co., Inc.* Dismissed June 28, 1932.

1,173,079, E. F. Alexanderson, Selective tuning system; 1,334,118, C. W. Rice, System for amplification of small currents; 1,251,377, A. W. Hull, Method of and means for obtaining constant direct current potentials, D. C., S. D. N. Y., Doc. E 46/143, *Radio Corp. of America et al.* v. *Colonial Radio Corp.* Dismissed for lack of prosecution (notice June 23, 1932).

1,180,159. (See 1,018,502 (*b*).)

1,198,062, C. S. Sawyer, Card clip or holder, D. C., S. D. N. Y., Doc. E 38/332, *C. S. Sawyer* v. *E. E. Morgan.* Dismissed for lack of prosecution (notice June 20, 1932).

1,223,659, W. S. Barnickel, Treatment of crude oil; 1,467,831, 1,555,818, same, Process for treating petroleum emulsions; 1,531,173, J. D. Brady, Process for the prevention of petroleum emulsions in the well; 1,596,587, M. de Groote, Treatment of water in oil emulsions; 1,596,589, 1,596,593, same, Process for treating petroleum emulsions; 1,596,590, 1,596,591, same, Process for breaking petroleum emulsion, D. C., N. D. Okla. (Tulsa), Doc. E 661, *Dehydro, Inc.*, v. *Tretolite Co.* Dismissed without prejudice June 22, 1932.

1,230,715, R. M. Johnson, Motor vehicle body, D. C., S. D. N. Y., Doc. E 53/307, *R. M. Johnson* v. *J. Ringling.* Dismissed for lack of prosecution (notice June 23, 1932).

1,231,764, F. Lowenstein, Telephone relay; 1,456,528, H. D. Arnold, Electric discharge device; 1,459,412, A. M. Nicolson, Thermionic translating device, D. C., S. D. N. Y., Doc. E 47/3, *Radio Corp. of America et al.* v. *H. Ohirelstein (Sonatron Tube Co.).* Dismissed for lack of prosecution (notice June 23, 1932).

1,251,377. (See 1,173,079.)

1,265,918, W. O. Kennington, Circuit breaker and distributer unit; 1,272,056, C. F. Kettering, Ignition system; 1,286,803, H. G. Schwarze, Hydrocarbon motor; 1,305,165, W. H. Ratcliff, Circuit breaker; 1,354,888, O. F. Conklin, Ignition apparatus; 1,556,901, C. E. Berkdoll, same; 1,557,207, 1,593,339, F. C. Kroeger, same; 1,687,040, W. D. Schrope, same; 1,825,720, J. T. Fitzsimmons, Ignition timer; Re. 18,276, C. H. Kindl, same, filed June 23, 1932, D. C., E. D. N. Y., Doc. E 6419, *Delco-Remy Corp.* v. *Standard Motor Products Co., Inc.*

1,272,056. (See 1,265,918.) 1,286,803. (See 1,265,918.)

1,305,165. (See 1,265,918.)

1,310,698, H. Hill, Paper or similar cup, D. C., S. D. N. Y., Doc. E 46/133, *Tulip Cup Corp. et al.* v. *J. Solomon (J. & S. Supply Co.).* Dismissed for lack of prosecution (notice June 23, 1932).

1,334,118. (See 1,173,079.)

1,353,197, J. F. Werder, Grinding compound, D. C., S. D. N. Y., Doc. E 47/275, *The Zip Mfg. Co.* v. *Lehr Auto Supply Co.* Dismissed for lack of prosecution (notice June 23, 1932). Same, D. C. Dela., Doc. E 815, *The Zip Mfg. Co.* v. *The Pep Mfg. Co.* Dismissed for want of equity June 9, 1932.

1,354,888. (See 1,265,918.)

1,361,582, J. Hirshfeld, Locking apparatus for dumb waiter door, D. C., S. D. N. Y., Doc. E 49/261, *Federal Dumbwaiter Lock System, Inc.*, v. *S. Brandfen.* Dismissed for lack of prosecution (notice June 23, 1932).

1,416,876, D. B. Replogle, Dust collector for pneumatic cleaners, D. C., S. D. N. Y., Doc. E 52/343, *D. B. Replogle et al.* v. *The Self Emptying Bag Corp. et al.* Dismissed for lack of prosecution (notice June 23, 1932).

1,444,811, J. P. Tarbox, Portable filing case, D. C., S. D. N. Y., Doc. E 54/167, *The Travellers Efficiency Case Co. et al.* v. *M. Lifton et al. (The Lifton Mfg. Co.).* Dismissed for lack of prosecution (notice June 23, 1932).

1,447,090, J. E. Langsdorf, Necktie, D. C., S. D. N. Y., Doc. E 46/314, *Franc-Strohmenger & Cowan, Inc.*, v. *A. Vorsimer et al (G. Vorsimer & Sons).* Doc. E 46/315, *Franc-Strohmenger & Cowan, Inc.*, v. *Smith Bros. Importers, Inc.* Doc. E 46/316, *Franc-Strohmenger & Cowan, Inc.*, v. *Vorsimer, Sushind Co., Inc.* Doc. E 46/362, *Franc-Strohmenger & Cowan, Inc.*, v. *W. Kornberg et al.* Doc. E 51/85, *Franc-Strohmenger & Cowan, Inc.*, v. *E. Morrison.* Dismissed for lack of prosecution (notice June 23, 1932 in each of above cases).

1,456,528. (See 1,281,764.)

1,459,096, J. W. Gibbons, Ash receiver, D. C., S. D. N. Y., Doc. E 58/92, *Universal Lamp Co.* v. *Yankee Metal Products Corp.* Dismissed for lack of prosecution (notice June 23, 1932).

1,459,412. (See 1,281,764.) 1,467,831. (See 1,223,659.)

1,470,524 (*a*), H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confection; 1,618,324, same, Ice cream sucker, filed July 12, 1932, D. C., E. D. Wis. (Milwaukee), Doc. 3638, *Good Humor Corp. of America* v. *R. A. Johnston Co. et al.*

1,470,524 (*b*), H. B. Burt, Process of making frozen confections; 1,718,997, same, frozen confection; 1,505,592, F. W. Epperson, same, D. C., S. D. N. Y., Doc. E 53/348, *National Popsicle Corp. et al.* v. *B. Landau.* Dismissed for lack of prosecution (notice June 23, 1932).

1,474,152, A. A. Kent, Induction coil, filed June 23, 1932, D. C., E. D. N. Y., Doc. E 6421, *Delco-Remy Corp. et al.* v. *Standard Motor Products Co., Inc.* Same, filed June 24, 1932, D. C., E. D. N. Y., Doc. E 6435, *Delco-Remy Corp. et al.* v. *P. & D. Mfg. Co., Inc.*

1,504,128, C. G. Lindbom, Cigarette case, D. C., S. D. N. Y., Doc. E 51/62, *W. Demuth & Co.* v. *L. Sternberg.* Dismissed for lack of prosecution (notice June 23, 1932).

1,505,592, F. W. Epperson, Frozen confection, filed June 30, 1932, D. C., E. D. N. Y., Doc. E 6451, *National Popsicle Corp. et al.* v. *Jersey-Meadow Gold Co., Inc.*

1,505,592. (See 1,470,524.)

1,512,888, L. Haft, Lighting set, D. C., S. D. N. Y., Doc. E 57/147, *Norma Electric Corp.* v. *I. H. Shalomath et al. (Adco Electric Mfg. Co.).* Dismissed for lack of prosecution (notice June 23, 1932).

1,531,173. (See 1,223,659.)

1,537,708 (*a*), W. Schottky, Thermionic vacuum tube, D. C., S. D. N. Y., Doc. E 47/4, *Radio Corp. of America* v. *H. Ohirelstein (Sonatron Tube Co.).* Dismissed for lack of prosecution (notice June 23, 1932).

1,537,708 (*b*), W. Schottky, Thermionic vacuum tube; 1,558,437, I. Langmuir, Electrical discharge apparatus; 1,696,103, G. Seibt, Electric discharge tube, D. C., S. D. N. Y., Doc. E 51/238, *Radio Corp. of America et al.* v. *Radio Jobbers, Inc.* Dismissed for lack of prosecution (notice June 23, 1932).

1,551,687, C. W. Peelle, Elevator door, D. C., S. D. N. Y., Doc. E 49/45, *The Peelle Co.* v. *W. H. Stevens.* Dismissed for lack of prosecution (notice June 23, 1932).

1,555,818. (See 1,223,659.) 1,556,901. (See 1,265,918.)

1,557,207. (See 1,265,918.) 1,558,437. (See 1,537,708 (*b*).)

1,558,437, I. Langmuir, Electrical discharge apparatus, D. C., S. D. N. Y., Doc. E 47/2, *Radio Corp. of America et al* v. *H. Ohirelstein (Sonatron Tube Co.).* Dismissed for lack of prosecution (notice June 23, 1932).

1,564,378, H. Stein et al., Bleached and dyed furs; 1,573,200, same, Process of bleaching and dyeing furs, D. C., S. D. N. Y., Doc. E 57/217, *Steinfur Patents Corp.* v. *J. M. Ryan & Co., Inc., et al.* Doc. E 49/313, *Steinfur Patents Corp.* v. *A. Hollender & Sons, Inc. et al.* Doc. E 49/314, *Steinfur Patents Corp.* v. *B. J. Goodman, Inc. et al.* Dismissed for lack of prosecution (notice June 23, 1932, in each of above cases).

1,568,182, J. Primrose, Oil still, D. C., S. D. N. Y., Doc. E 47/187, *Foster Wheeler Corp. et al.* v. *The Babcock & Wilcox Co. et al.* Dismissed for lack of prosecution (notice June 23, 1932).

1,568,532, B. Riesner, Hood for cooking range, D. C., S. D. N. Y., Doc. E 49/260, *B. Reisner* v. *Sobel & Kaus, Inc. et al.* Dismissed for lack of prosecution (notice June 23, 1932).

1,573,200. (See 1,564,378.)

1,584,179, C. F. McBee, Lock for loose leaf binders, D. C., S. D. N. Y., Doc. E 54/210, *The McBee Binder Co.* v. *Federalbush Bros. Loose Leaf Co., Inc.* Dismissed for lack of prosecution (notice June 23, 1932).

1,589,401, L. Klivansky, Metallic clothes hamper, D. C., S. D. N. Y., Doc. E 38/257, *I. Sargoy et al.* v. *Atlas Tinware Co., Inc.* Dismissed for lack of prosecution (notice June 23, 1932). Doc. E 38/258, *I. Sargoy et al.* v. *The Enterprise Tinware Co., Inc.* Decree as above (notice June 20, 1932).

1,593,339. (See 1,265,918.) 1,596,587. (See 1,223,659.)

1,596,589. (See 1,223,659.) 1,596,590. (See 1,223,659.)

1,596,591. (See 1,223,659.) 1,596,593. (See 1,223,659.)

1,600,324, A. Dorsey, Switch mechanism; 1,751,542, same, Clock, D. C., S. D. N. Y., Doc. E 56/156, *A. Dorsey* v. *Fork Clocks, Inc.* Dismissed for lack of prosecution (notice June 23, 1932).

1,601,146, J. B. Replogle, Switch; 1,693,998, W. A. Chryst, Electric switch; 1,835,019, H. D. Dawson, Switch; 1,798,751, H. E. Norviel, Electrical switch, filed June 23, 1932, D. C., E. D. N. Y., Doc. E 6424, *Delco-Remy Corp.* v. *Standard Motor Products Co., Inc.*

1,603,246, L. Rocke, Method and apparatus for attaching separable fastener tapes, D. C., S. D. N. Y., Doc. E 46/400, *Hook & Eye Devices Corp.* v. *J. Glover (Clover Brassiere Co.).* Dismissed for lack of prosecution (notice June 23, 1932).

1,617,544, F. Rosenthal, Manufacture and treatment of threads; 1,620,233, same, Process of making thread, filed June 4, 1932, D. C. Dela., Doc. E 978, *F. Rosenthal* v. *Celanese Corp. of America.* Doc. E 979, *F. Rosenthal* v. *Larkwood Silk Hosiery Mills, Inc.*

1,618,324. (See 1,470,524 (*a*).)

1,620,233. (See 1,617,544.)

1,620,587 (*a*), A. C. Williamson, Plaster composition, D. C., S. D. N. Y., Doc. E 50/389, *E. D. Coddington Mfg. Co. et al.* v. *Plastic Arts Corp.* Dismissed for lack of prosecution (notice June 23, 1932).

1,620,587 (*b*), A. C. Williamson, Plaster composition; 1,752,232, E. D. Coddington et al. Cedar plaster, D. C., S. D. N. Y., Doc. E 53/204, *E. D. Coddington Mfg. Co. et al.* v. *P. D. Mulligan (Plast-O-San Co.).* Dismissed for lack of prosecution (notice June 23, 1932).

1,626,160, A. Schwalberg, Removable wrist watch bracelet, D. C., S. D. N. Y., Doc. E 47/155, *A. Schwalberg* v. *D. F. Cowen et al. (Cowen Bros.).* Dismissed for lack of prosecution (notice June 23, 1932).

1,640,282, A. Migliaccio, Electrical flag, D. C., S. D. N. Y., Doc. E 46/342, *A. Migliaccio* v. *Societa San Gennaro et al.* Dismissed for lack of prosecution (notice June 23, 1932).

1,669,937, W. Hertzberg, Mop mounting, D. C., S. D. N. Y., Doc. E 47/40, *W. Hertzberg* v. *N. Yabroff et al. (Globe Brush Mfg. Co.).* Dismissed for lack of prosecution (notice June 23, 1932).

1,670,082, D. M. Solenberger, Piston ring, D. C., S. D. N. Y., Doc. E 49/43, *The Simplex Piston Ring Co. of America, Inc.*, v. *R. Laurie et al (United Motive Parts Co.).* Dismissed for lack of prosecution (notice June 23, 1932).

1,677,142, Engel-Kron & Trey, Hand bag, D. C., S. D. N. Y., Doc. E 47/124, *S. Trey* v. *A. A. Greenspon et al.* Dismissed for lack of prosecution (notice June 23, 1932).

1,687,040. (See 1,265,918.) 1,693,998. (See 1,601,146.)

1,677,142, Engel-Kron & Trey, Hand bag, D. C., S. D. S. D. N. Y., Doc. E 54/335, *Yankee Metal Products Corp.* v. *United Cigar Stores Co. of America, Inc.* Dismissed for lack of prosecution (notice June 23, 1932).

1,696,103. (See 1,537,708 (b).)

1,697,406, H. G. Richter, Electrical resistance unit, D. C., S. D. N. Y., Doc. E 49/258, *Electrad, Inc. et al.* v. *Electro-Motive Engineering Corp.* Dismissed for lack of prosecution (notice June 23, 1932).

1,718,997. (See 1,470,524.)

1,731,967, L. J. Antonsen, Paper excelsior machine, D. C., W. D. Wash., N. Div., Doc. 932, *L. J. Antonsen* v. *H. C. Haner.* Consent decree for plaintiff June 21, 1932. Same, filed July 16, 1932, D. C. Oreg. (Portland), Doc. E 9311, *L. J. Antonsen* v. *H. M. Hedrick et al.* (*Paper Excelsior & Pad Co.*). Doc. E 9312, *L. J. Antonsen* v. *J. Lichtenwald.*

1,751,542. (See 1,600,324.)

1,752,232. (See 1,620,587 (b).)

1,798,751. (See 1,601,146.) 1,825,720. (See 1,265,918.)

1,835,019. (See 1,601,146.)

Re. 17,375, S. J. Nordstrom, Valve, D. C., S. D. N. Y., Doc. E 53/382, *Merco Nordstrom Valve Co.* v. *Barco Mfg. Co.* Consent decree for plaintiff (notice June 22, 1932). Doc. E 61/291, *Merco Nordstrom Valve Co.* v. *Wolworth Co.* Decree as above.

Re. 18,276. (See 1,265,918.)

Des. 60,716, G. R. Ainsworth, Electric lighting fixture, D. C., S. D. N. Y., Doc. E 49/38, *G. Ainsworth* v. *London Lightingware Corp.* Dismissed for lack of prosecution (notice June 23, 1932).

Des. 72,680, A. E. Newton, Lace, D. C., S. D. N. Y., Doc. E 51/183, *Rhode Island Lace Works, Inc.*, v. *Pennsylvania Lace Co., Inc.* Dismissed for lack of prosecution (notice June 23, 1932).

Des. 73,930, D, E. Lindsay, Lantern, D. C., S. D. N. Y., Doc. E 47/122, *Murlin Mfg. Co., Inc.*, v. *Empire Lighting Fixture Co., Inc.* Dismissed for lack of prosecution (notice June 23, 1932).

Des. 76,417, B. Putterman, Smoker's receptacle, D. C., S. D. N. Y., Doc. E 49/124, *Yankee Metal Products Corp.* v. *United Cigar Stores Co. of America, Inc.* Dismissed for lack of prosecution (notice June 23, 1932).

Des. 77,233, M. Halpert, Vegetable cabinet, D. C., S. D. N. Y., Doc. E 48/322, *M. Halpert et al.* v. *Enterprise Tinware Co., Inc.* Dismissed for lack of prosecution (notice June 23, 1932).

Des. 78,339, Des. 78,341, Des. 78,343, F. Collins, Lamp pedestal arm; Des. 78,340, Des. 78,344, same, Lamp base, D. C., S. D. N. Y., Doc. E 49/200, *Mutual Sunset Lamp Mfg. Co., Inc.*, v. *Le Mur Lighting & Mfg. Co., Inc.* Dismissed for lack of prosecution (notice June 23, 1932).

Des. 78,340. (See Des. 78,339.)

Des. 78,341. (See Des. 78,339.)

Des. 78,343. (See Des. 78,339.)

Des. 78,344. (See Des. 78,339.)

Des. 78,526, C. K. Marcell, Vanity case, D. C., S. D. N. Y., Doc. E 50/26, *C. K. Marcell* v. *Majestic Metal Specialties, Inc.* Dismissed for lack of prosecution (notice June 23, 1932).

Des. 78,568, L. Flier, Jewelry display base, D. C., S. D. N. Y., Doc. E 50/143, *L. Flier* v. *S. Sweet et al.* (*Capitol Jewelry Case Co.*). Dismissed for lack of prosecution (notice June 23, 1932).

Des. 81,866, P. Cricchio, Lamp base, D. C., S. D. N. Y., Doc. E 56/45, *Metropolitan Lamp Co., Inc.*, v. *Illuminating Novelties Corp.* Dismissed for lack of prosecution (notice June 23, 1932).

Adjudicated Patents

(C. C. A. Cal.) Kesthelyi patent, No. 1,474,905, for tool joint, claims 1, 2, and 5 *Held* invalid. *Kesthelyi* v. *Doheny Stone Drill Co.*, 59 F.(2d) 3.

(D. C. N. Y.) Vogt patent, No. 1,733,740, for manufacturing ice cream and the like, claims 9, 10, and 11 *Held* not infringed. *Vogt Instant Freezers* v. *New York Eskimo Pie Corporation*, 59 F.(2d) 99.

(D. C. N. Y.) Vogt patent, No. 1,742,171, for process of manufacturing ice cream or the like, claims 9–12, 14, and 15 *Held* not infringed. *Id.*

(C. C. A. Del.) Young patent, No. 1,750,251, for combination tearing strip and friction closure can, claim 8 *Held* not infringed. *American Can Co.* v. *M. J. B. Co.*, 59 F.(2d) 77.

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 23, 1932

[VOL. 421. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 327,176. R. T. VANDERBILT COMPANY, INC., New York, N. Y. Filed May 16, 1932.



No claim is made for the words "American Products—N. Y." apart from the marks shown in the drawing.

For Clay, Used as a Filler in the Manufacture of Paper, Paints, and Other Products.

Claims use since May 1, 1932.

Ser. No. 327,177. R. T. VANDERBILT COMPANY, INC., New York, N. Y. Filed May 16, 1932.



No claim is made for the words "American Products—N. Y." apart from the marks shown in the drawing.

For Clay, Used as a Filler in the Manufacture of Paper, Paints, and Other Products.

Claims use since May 1, 1932.

Ser. No. 328,079. THE SPONGE RUBBER PRODUCTS CO., Derby, Conn. Filed June 17, 1932.

Spunjy-Lastik

The word "Spunjy" is disclaimed apart from the mark shown.

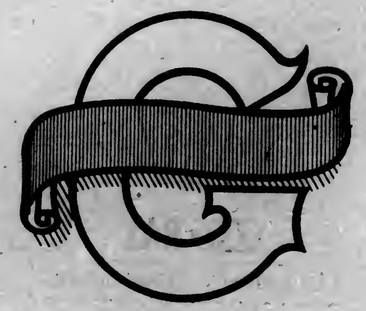
For Sponge Rubber.

Claims use since June 1, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 317,082. LEWIS WALTER GILLETTE, doing business as Gillette Shaving Cream Co., Pittsburgh, Pa. Filed July 18, 1931.



The shading on the drawing indicates the color red.

For Shaving Cream.

Claims use since June 10, 1929.

Ser. No. 325,322. ALTON F. CURRAN, doing business as A. F. Curran Co., Malden, Mass. Filed Mar. 21, 1932.



For Liquid Soaps and Liquid Cleaners for Hard Surfaced Materials or Articles.
Claims use since Feb. 10, 1932.

Ser. No. 325,778. FANNIE BLUM, doing business as Fanna Polishine Co., Brooklyn, N. Y. Filed Apr. 4, 1932.

FANNA

For Cleanser and Polish for Metals, Glass, China, Tiles, Porcelain.
Claims use since Feb. 26, 1932.

Ser. No. 327,668. LOUIS W. ZELLER, doing business as Zeller Products Company, New York, N. Y. Filed June 2, 1932.



No claim is made for the words "Cleaning Compounds" apart from the mark shown in the drawing.
For Cleaning and Scouring Powders, Soaps, Soap Powders, Soap Flakes and Wall, Furniture, and Floor Cleansing Powder.
Claims use since May 23, 1932.

Ser. No. 328,653. H. & H. ZBINDEN, Brooklyn, N. Y. Filed July 8, 1932.



No claim being made to the exclusive use of the words "Metal Polish" apart from the mark shown on the drawing.
For Metal Polish.
Claims use since July 7, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 315,972. MCCARTY ANILINE & EXTRACT CO. INC., New York, N. Y. Filed June 17, 1931.



For Preparation for Coating, Sizing and Stiffening Rugs and to Prevent Their Slipping.
Claims use since May 22, 1931.

Ser. No. 323,471. MARY M. KEELING, Bristol, Va. Filed Jan. 25, 1932.



The words "Hay Fever," "Catarrh," and "Asthma" are hereby disclaimed apart from the mark as shown. The portrait appearing upon the labels is that of the applicant, Mary M. Keeling.
For Preparation for the Treatment of Catarrh, Asthma, and Hay Fever.
Claims use since Feb. 1, 1911.

Ser. No. 323,583. DR. G. H. MICHEL AND COMPANY, Cleveland, Ohio. Filed Jan. 29, 1932.



The portrait is a reproduction of Dr. G. H. Michel, deceased. The facsimile signature is a reproduction of the signature of Dr. G. H. Michel, deceased. The lining shown on the drawing is used for shading purposes only.
For Preparations for Preparing and Preserving Dead Bodies for Burial—Namely, Embalming Fluids, Mold Preventives, Superficial Coloring Compounds, Petrifying Compounds, Hardening Compounds, Lip and Eye Cements, Deodorants, Disinfectants, Perfumes, Antiseptics—Namely, Room Sprays, Massage Creams, Plastic Cosmetic Preparations in the Nature of Wound Fillers, and Face Powder.
Claims use since Jan. 1, 1929.

Ser. No. 323,900. THE WM. L. MCLELLAN COMPANY, Norwalk, Conn. Filed Feb. 6, 1932.

VIOLET

For Boiler Compounds for Removing Scale and Preventing Corrosion.
Claims use since 1890.

Ser. No. 328,368. FELICE ORLANDELLA, Boston, Mass. Filed June 28, 1932.

MONTONISO

For Laxative Salt.
Claims use since Apr. 25, 1932.

Ser. No. 328,376. TENNESSEE EASTMAN CORPORATION, Kingsport, Tenn. Filed June 28, 1932.

TECSOL

For Denaturant for Alcohol.
Claims use since June 25, 1932.

Ser. No. 328,446. JEAN NATHAN, New York, N. Y. Filed June 30, 1932.

Jean Naté

For Skin Lotion.
Claims use since June 24, 1932.

CLASS 10

Fertilizers

Ser. No. 317,525. NAAMLOOZE VENNOOTSCHAP VEREENIODE CHEMISCHE FABRIEKEN, Utrecht, Netherlands. Filed July 31, 1931.



ALBATROS

For Manure.
Claims use since Sept. 26, 1924.

Ser. No. 326,687. LYONS FERTILIZER COMPANY, Tampa, Fla. Filed May 2, 1932.

DOLIMAN

For Soil Conditioner.
Claims use since Apr. 1, 1932.

CLASS 11

Inks and Inking Materials

Ser. No. 314,661. S. S. STAFFORD, INC., New York, N. Y. Filed May 16, 1931.

FIL-RITE

For Bottles of Writing Ink.
Claims use since Apr. 4, 1931.

CLASS 12

Construction Materials

Ser. No. 321,563. A. C. HORN COMPANY, Long Island City, N. Y. Filed Nov. 28, 1931.

DRI-N-TITE

For Plastic Roof Coating.
Claims use since Mar. 1, 1921.

Ser. No. 328,155. BLACKTOP EQUIPMENT CORPORATION, Johnstown, Pa. Filed June 21, 1932.

SATURMIX

For Aggregate, Such as Crushed Stone, Slag, or Other Aggregate Coated with Tar, Asphalt, or Other Binder, to be Used for Road Building Purposes.
Claims use since Feb. 20, 1932.

Ser. No. 328,601. FROST LUMBER INDUSTRIES, INC., Shreveport, La. Filed July 7, 1932.

Fewcraft

For Lumber.
Claims use since December, 1931.

Ser. No. 328,659. MARVIN CANTER, doing business as Continental Asbestos & Refining Co., New York, N. Y. Filed July 9, 1932.

STONOLEUM

For Composition Flooring Material.
Claims use since July 1, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 328,084. THE BOSSERT CORPORATION, Utica, N. Y. Filed June 18, 1932.

A PRODUCT OF THE BOSSERT CORP. UTICA, N.Y.
BOSSERT
HYDROCRAT
STAINLESS

Applicant disclaims the right to exclusive use of all the words as shown on the drawing with the exception of the words "Bossert Hydrocrat," and the applicant's name.
For Sinks.
Claims use since May 27, 1932.

Ser. No. 328,388. THE ALUMINUM COOKING UTENSIL COMPANY, New Kensington, Pa. Filed June 29, 1932.



The drawing is lined to indicate the color combination red, blue and yellow, but the specific combination of colors is disclaimed since the mark consists in a configuration rather than any combination of colors per se. The word "Ware" and the words "Lightens Housekeeping" are disclaimed apart from the other features of the mark. The outlined representation of a label is disclaimed per se.
For Aluminum and Aluminum Alloy Cooking Hollow Ware.
Claims use since Mar. 17, 1932.

Ser. No. 328,389. THE ALUMINUM COOKING UTENSIL COMPANY, New Kensington, Pa. Filed June 29, 1932.

BEACON

For Aluminum and Aluminum Alloy Cooking Hollow Ware.
Claims use since Mar. 17, 1932.

Ser. No. 328,465. BELMET PRODUCTS, INC., Brooklyn, N. Y. Filed June 30, 1932.



Applicant disclaims ownership of the words "Wales Portable Shower" apart from the mark as shown.
For Portable Shoulder Shower.
Claims use since May 8, 1932.

Ser. No. 328,792. FRANK KAY, Bolton, England. Filed July 14, 1932.

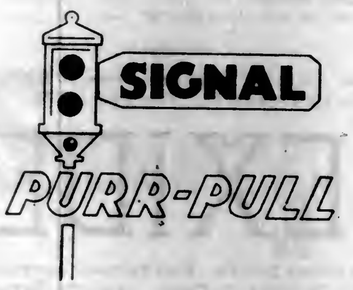
KONTITE

For Metal Pipe-Joints.
Claims use since Mar. 1, 1927.

CLASS 15

Oils and Greases

Ser. No. 322,972. SIGNAL OIL AND GAS COMPANY, Los Angeles, Calif. Filed Jan. 13, 1932.



For Gasoline.
Claims use since June 30, 1931.

Ser. No. 324,185. NATIONAL REFINING COMPANY, Seattle, Wash. Filed Feb. 15, 1932.

SILENT SEAL

For Motor Lubricating Oils.
Claims use since May 8, 1928.

Ser. No. 325,864. AMERICAN STATIONERY MFG. CO., New York, N. Y., and Habana, Cuba. Filed Apr. 7, 1932.



The background on which the word "Ballena" appears is red and that on which the picture of the whale appears is green, the whale being shown in black, the letters N. Y. and all of the wording appearing in the label excepting the word "Emifertra" being disclaimed apart from the mark shown in the drawing, no common law rights in said wording being disclaimed, the representation of a whale being disclaimed, no common law rights in said representation being hereby disclaimed.
For Lubricating Oils and Greases.
Claims use since Sept. 9, 1919.

Ser. No. 327,846. JOHN C. EDGAR, doing business as Mid-States Oil Company, Troy, Ohio. Filed June 9, 1932.

Eaz-Em

For Special Lubricating Oils to be Added to Conventional Oils for the Lubrication of Internal Combustion Motors.
Claims use since Apr. 1, 1932.

Ser. No. 328,275. THE LUBRI-GRAPH CORPORATION, Cleveland, Ohio. Filed June 24, 1932.

LUBRI-Stick

The word "Stick" is disclaimed apart from the mark shown in the drawing.
For Lubricating Oils and Lubricating Greases, Especially Solid Greases in Stick Form.
Claims use since June 7, 1929.

CLASS 16

Paints and Painters' Materials

Ser. No. 306,375. FERDINAND SICHEL, KOMMANDITGESELLSCHAFT, Hanover-Limmer, Germany. Filed Oct. 3, 1930.

Sichel-Grounding

"Grounding" apart from the mark as shown on the drawing is disclaimed.

For Colours and Paints—Namely Oil-Colours and Distempers, Undercoating Material of the Nature of Paints, Varnish, or Lacquer, and Priming Coats.

Claims use since July 1, 1929.

Ser. No. 326,682. S. C. JOHNSON & SON, Racine, Wis. Filed May 2, 1932.

No. 25

For Paint Enamels.

Claims use since Apr. 18, 1928.

Ser. No. 326,683. S. C. JOHNSON & SON, Racine, Wis. Filed May 2, 1932.

PerfecTone

For Paint Enamels and Undercoats.

Claims use since Jan. 15, 1920.

Ser. No. 328,572. ARMSTRONG CORK COMPANY, Lancaster, Pa. Filed July 6, 1932.

LINOGLOSS

For Polishing Preparations for Hard Surface Floor Covering.

Claims use since June 10, 1932.

CLASS 17

Tobacco Products

Ser. No. 328,029. MARCELINO PEREZ & COMPANY, Tampa, Fla. Filed June 16, 1932.

Ambassador

For Cigars.

Claims use since June, 1921.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 326,914. SAFE-T-LITE, INC., Minneapolis, Minn. Filed May 9, 1932.

SAFE-T-LITE

The words "Safe T Lite" are disclaimed apart from the mark as shown.

For Glare Deflector for Automobile Headlights.

Claims use since Sept. 1, 1931.

Ser. No. 328,114. BAIR & EDGERTON BOAT WORKS, Glen Cove, L. I., N. Y. Filed June 20, 1932.

B&E Porto-Boat

Applicant disclaims any exclusive right to the word "Boat" apart from the mark shown on the drawing.

For Portable Folding Rowboats.

Claims use since Mar. 19, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 312,906. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio. Filed Apr. 3, 1931.

ELO

For Electric Generating, Storage, and Ignition Systems, Audible and Visual Signaling Apparatus Responsive to Electric Current, Engine Electric Starting Systems, Connections and Parts Thereof Particularly Adapted for Self-Propelling Vehicles.

Claims use since Mar. 25, 1931.

Ser. No. 327,629. THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia, Pa. Filed June 1, 1932.

EXIDE

For Storage Batteries, Their Parts and Accessories Comprising Electrodes or Plates, Containers, Covers, Separators, Retainers, Terminal Connectors, and Vent and Filling Plugs.

Claims use since Feb. 21, 1901.

Ser. No. 327,638. PATTERSON O. STEWART, doing business as Electro Products Company, New York, N. Y. Filed June 1, 1932.

KWIKFYR

The word "Kwikfyr" being disclaimed apart from the mark shown.

For Ignition Devices—Namely, Spark Plugs, Spark Plug Attachments, and Spark Plug Intensifiers.

Claims use since Jan. 1, 1932.

Ser. No. 328,242. KOLSTER RADIO, INC., Newark, N. J. Filed June 23, 1932.

REJECTOSTAT

For Radio Receiving Sets, Radio Frequency Couplers, Radio Coupling Networks, Shields, Condensers, Transformers, Coils, and Condensers.

Claims use since June 8, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 322,150. WOOD PARTS, INCORPORATED, West Helena, Ark. Filed Dec. 15, 1931.

BEE-DRAFT

For Toys, Pull Toys, Toy Vehicles, Toy Furniture, Toy Motor Boats, Toy Building Blocks, Toy Animals, and Dolls' Clothes Hangers.

Claims use since Aug. 25, 1931.

Ser. No. 322,151. WOOD PARTS, INCORPORATED, West Helena, Ark. Filed Dec. 15, 1931.

SNUBBIES

For Toy Animals, Particularly Wood Animals Containing Colored Crayons.

Claims use since Aug. 25, 1931.

Ser. No. 327,042. THE BRUNSWICK-BALKE-COLLENDER COMPANY, doing business as Phoenix Slate Company, Wilmington, Del., and Chicago, Ill. Filed May 13, 1932.

PHOENIX

For Billiard Tables and Parts of Billiard Tables Composed of Slate.

Claims use since Jan. 1, 1910.

Ser. No. 327,241. BECHTOL AND TRATSCH, Chicago, Ill. Filed May 19, 1932.

MARBL-JAX

For Coin Controlled Ball-Projecting Amusement Device.

Claims use since Feb. 9, 1932.

Ser. No. 327,901. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill. Filed June 11, 1932.



No claim is made to the representation of the carom ball. The mark consists of a green dot imposed on the surface of the ball at each pole. The shading in the drawing indicates a green color.

For Carom Balls for Billiards.

Claims use since June 1, 1932.

Ser. No. 328,237. CHESTER-POLLARD AMUSEMENT CO. INC., New York, N. Y. Filed June 23, 1932.

SPORTLAND

For Table Billiards-Golf Game, Table Baseball Game, Table Bagatelle Game, Table Tennis Game, Table Hockey Game, Table Badminton Game, Coin-Controlled Football Game, Coin-Controlled Golf Game, Coin-Controlled Derby Game, Coin-Controlled Baseball Game, and Coin-Controlled Cricket Game.
Claims use since Oct. 27, 1931.

Ser. No. 328,438. LITTLE BEAR SPECIALTIES CO., INC., Kansas City, Mo. Filed June 30, 1932.

TIP-TOP

The word "Top" is disclaimed apart from the rest of the mark shown on the drawing.
For Top of the Bandalore Type and Parts Therefor.
Claims use since Apr. 15, 1932.

Ser. No. 328,521. J. CHEIN & COMPANY, Harrison, N. J. Filed July 2, 1932.

BIG SHOT

For Toy Pistols.
Claims use since Jan. 15, 1932.

Ser. No. 328,536. POSTER PRODUCTS, INC., Chicago, Ill. Filed July 2, 1932.

"Paula in-a-picture"

No claim is made to the word "Picture" apart from the association shown in the drawing.
For Games Comprising Felt Pieces Assemblable to Form Puzzles, Pictures, Words, and Objects.
Claims use since June 15, 1932.

Ser. No. 328,783. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed July 14, 1932.

TRUMP

For Fishing Reels.
Claims use since July 5, 1932.

Ser. No. 328,821. SUN RADIO, INC., Akron, Ohio. Filed July 15, 1932.

WHAM

For Golf Balls.
Claims use since Mar. 1, 1932.

Ser. No. 328,901. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed July 18, 1932.

TOM-BOY

For Wood and Metal Golf Clubs.
Claims use since May 21, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 284,746. THE RUBBER SHOCK INSULATOR CORPORATION, Bridgeport, Conn. Filed May 28, 1929.

SHOCKPROOF

For Rubber Vibration Eliminating Supports for Machinery.
Claims use since Apr. 19, 1929.

Ser. No. 303,078. A. & J. MANUFACTURING COMPANY, Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill., a Corporation of Illinois. Filed July 8, 1930.

DRIPKUP

For Bowl and Mechanical Mixer for Salads and the Like.
Claims use since May 1, 1930.

Ser. No. 317,294. THE A. & J. MANUFACTURING CO., Binghamton, N. Y., assignor to A. & J. Kitchen Tool Co., Chicago, Ill., a Corporation of Illinois. Filed July 25, 1931.



The trade-mark consists in a silver color tip and a silver color stripe on the free end of the handles of the goods as indicated by the lining shown in the drawing and is applied to the handles by dipping, painting, or otherwise placing the same thereon. The representation of the handle, the legend "Silver Color", and the lead lines thereof are disclaimed.
For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks,

Pan Greasers, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grapefruit Knives, Egg Beaters, Egg Beaters and Covers; Egg Beaters, Covers, and Bowls (Sets); Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Mechanical Flour Sifters.

Claims use since May, 1931.

Ser. No. 317,861. THE TIMKEN-DETROIT AXLE COMPANY, Detroit, Mich. Filed Aug. 10, 1931.

HIGH-TRACTION

For Differential Gearing.

Claims use since June 15, 1931.

Ser. No. 324,550. A. B. DICK COMPANY, Chicago, Ill. Filed Feb. 27, 1932.

VACO

For Sheet Feeding and Impression Rollers for Rotary Duplicating and Like Machines.

Claims use since July 25, 1930.

Ser. No. 327,836. C. SCHNACKEL'S SON, INC., Rochester, N. Y. Filed June 8, 1932.

FILTERITE

For Oil Filters for Attachment to Internal Combustion Engines and Filtering Pads for Use Therein.

Claims use since Aug. 31, 1931.

Ser. No. 328,041. SIMONDS SAW AND STEEL COMPANY, Fitchburg, Mass. Filed June 16, 1932.



No claim is made to the exclusive use of the representation of a file. The mark consists of a horizontal red band displayed on the end of the file. The lining on the drawing indicates the color red.

For Files.

Claims use since June 8, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 325,205. ADVANCE PATTERN CO., INC., New York, N. Y. Filed Mar. 17, 1932.



No claim is made to the words "Advance Patterns" apart from the mark shown in the drawing.

For Patterns for Frocks, Dresses, and Other Wearing Apparel.

Claims use since Mar. 9, 1932.

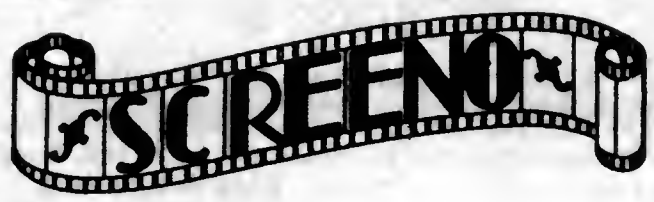
Ser. No. 327,678. CHAMPION SPARK PLUG COMPANY, Toledo, Ohio. Filed June 3, 1932.

CHAMPION

For Spark Plug Testers.

Claims use since Nov. 24, 1931.

Ser. No. 327,843. FRANK C. BRADY, Seattle, Wash. Filed June 9, 1932.



For Stereopticon Slide.

Claims use since Apr. 10, 1929.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 327,222. S. C. JOHNSON & SON, INC., Racine, Wis. Filed May 18, 1932.



The trade-mark consists of a wide yellow stripe in the wiping substance of the mop. The representation of the mop in the drawing is disclaimed.

For Mops and Dusters.

Claims use since Feb. 6, 1930.

CLASS 31

Filters and Refrigerators

Ser. No. 328,695. MICHAELS BROS., Brooklyn, N. Y. Filed July 11, 1932.

KOLDAIRE
LIFETIME
REFRIGERATION

No claim is made to the exclusive use of the words "Koldaire" and "Refrigeration."
For Refrigerators.
Claims use since Feb. 25, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 326,374. EARNEST J. KRAUSE, doing business as Radiobar Company of America, Beverly Hills, Calif. Filed Apr. 22, 1932.

Radiobar

For Cabinets for Radio Receiving Sets.
Claims use since January, 1932.

CLASS 33

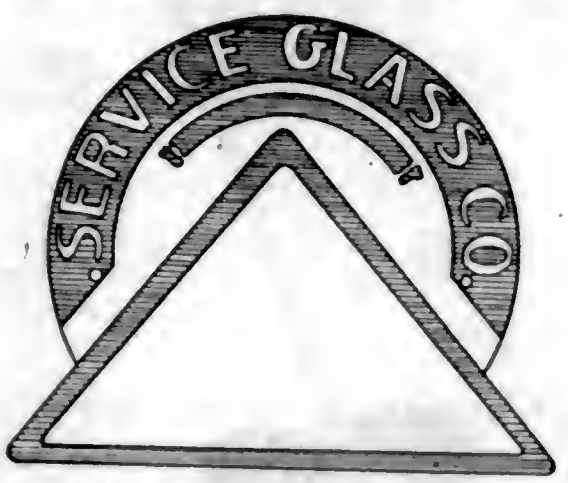
Glassware

Ser. No. 327,824. LES COMPAGNIES REUNIES DES GLACES & VERRES SPECIAUX DU NORD DE LA FRANCE, Boussois-sur-Sambre (Nord), France. Filed June 8, 1932.

AURÉA

For Plate Glass and Glass for Mirrors.
Claims use since Jan. 7, 1932.

Ser. No. 328,040. SERVICE GLASS COMPANY, Evansville, Ind. Filed June 16, 1932.



The drawing is lined to indicate the color blue.
For Automotive Glass, Shatter-Proof Glass, Plate Glass, and Automotive Replacement Glass—Namely, Single and Double Strength Window Glass, Crystal Sheet Glass, Polished Plate Glass, Shatterproof Sheet Glass, and Shatterproof Plate Glass Both Plain and Colored.
Claims use since Apr. 19, 1929.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 327,929. FLAMEKING COMPANY, INC., New York, N. Y. Filed June 11, 1932.



For Burners for Solid Carbonaceous Fuel, Including Bituminous Coal, Anthracite Coal, and Coke.
Claims use since May 12, 1932.

CLASS 37

Paper and Stationery

Ser. No. 304,375. ILLINOIS PAPER COMPANY, Chicago, Ill. Filed Aug. 8, 1930.



For Stencils and Stencil Correction Varnish.
Claims use since January, 1930.

Ser. No. 318,206. DEUTSCHE GOLD- & SILBER SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.



DEGUSSA

For Paper—Namely, Wrapping Paper, Manila Paper, Document Paper, Print Paper, Book Paper, Cover Paper, Writing Paper, Bond Paper, Toilet Paper, and Thin High

Finished Transparent Paper Suitable for Photographic Covers, Fly-Leaves, Fancy-Box Covers, and Half-Tone Printing; Bristol Boards, Card Boards, Paste Boards, and Mill Boards; Wall Paper, Rubber Stamps, Pens, Pencils, Crayons, Rubber Erasers, Paper Weights, Desk Sets, and Writing Chalk.
Claims use since Sept. 24, 1930.

Ser. No. 324,757. E. S. PERRY, LIMITED, London, England. Filed Mar. 3, 1932.

IRIDINOID

For Penpoints, Penholders, and Inkstands.
Claims use since Aug. 15, 1928.

Ser. No. 325,604. STRATHMORE PAPER COMPANY, Mittineague, Mass. Filed Mar. 28, 1932.

STRATHMORE PERMANENT

Applicant disclaims "Permanent" except in the relationship shown. Applicant is owner of registered No. 92,100 granted under the 10-year proviso in the act of 1905.
For Writing and Printing Paper.
Claims use since Feb. 19, 1931.

Ser. No. 326,667. BRITTAINS LIMITED, Cheddleton, near Leek, England. Filed May 2, 1932.

CHETEL

For Tissue Papers Generally, But More Particularly Those Adapted to be Made Into Carbonizing Tissues and Stereotyping and Other Fine Tissues.
Claims use since Feb. 10, 1932.

Ser. No. 327,888. BRITTAINS LIMITED, Cheddleton, near Leek, England. Filed May 24, 1932.

OCTOLIB

For Tissue Papers Generally, But More Particularly Those Adapted to be Made Into Carbonizing Tissues and Stereotyping and Other Fine Tissues.
Claims use since Mar. 11, 1932.

Ser. No. 327,546. AMERICAN SALES BOOK COMPANY, LIMITED, Toronto, Canada, and Niagara Falls and Elmira, N. Y. Filed May 28, 1932.

SPAK

For Paper and Stationery, Particularly Paper Record Forms for Billing Machines and Similar Devices.
Claims use since Jan. 22, 1932.

Ser. No. 328,487. HOBERG PAPER & FIBRE COMPANY, Green Bay, Wis. Filed July 1, 1932.



The lining in drawing is used for the purpose of shading only.
For Toilet Paper, Paper Towels, and Paper Napkins.
Claims use since July 19, 1929.

Ser. No. 328,488. HOBERG PAPER & FIBRE COMPANY, Green Bay, Wis. Filed July 1, 1932.



The lining appearing on the drawing is used as shading.
For Toilet Paper, Paper Towels, and Paper Napkins.
Claims use since May 1, 1931.

Ser. No. 328,489. HOBERG PAPER & FIBRE COMPANY, Green Bay, Wis. Filed July 1, 1932.



In the drawing the lines are used for shading only.
For Toilet Paper, Paper Towels, and Paper Napkins.
Claims use since May 1, 1931.

Ser. No. 328,490. HOBERG PAPER & FIBRE COMPANY, Green Bay, Wis. Filed July 1 1932.



SANISORB

For Toilet Paper.
Claims use since Jan. 29, 1932.

Ser. No. 328,517. THE ALBEMARLE PAPER MANUFACTURING COMPANY, Richmond, Va. Filed July 2, 1932.

VIENNA MOIRE

For Blotting Paper.
Claims use since Oct. 10, 1905.

Ser. No. 328,807. AMERICAN TISSUE MILLS, Holyoke, Mass. Filed July 15, 1932.

Sterilene

For Crepe, Tissue, and Toilet Paper and Paper Napkins and Handkerchiefs.
Claims use since Sept. 15, 1910, on toilet paper; Sept. 1, 1931, on other goods mentioned.

Ser. No. 328,838. JOSEPH DIXON CRUCIBLE COMPANY, Jersey City, N. J. Filed July 16, 1932.

INDUSTRIAL

For Pencils.
Claims use since Aug. 17, 1905.

CLASS 38

Prints and Publications

Ser. No. 323,252. WARREN PIPER, doing business as Jewelers Syndicate, Chicago, Ill. Filed Jan. 21, 1932.

JEWELRY JINGLES

For Bulletins and Pamphlets, or Periodical Magazines, Published from Time to Time.
Claims use since Jan. 1, 1930.

Ser. No. 326,449. JOSEPH T. PERNICE, New York, N. Y. Filed Apr. 23, 1932.

The New York Bank Stock Compendium

For Financial Publication.
Claims use since May 1, 1930.

Ser. No. 327,035. MANUEL URRUELA, New York, N. Y. Filed May 12, 1932.

DOMINICAL

For Weekly Publication.
Claims use since Apr. 23, 1932.

Ser. No. 327,461. THE CLAYTON MAGAZINES, INC., New York, N. Y. Filed May 26, 1932.

WESTERN LOVE *stories*

For Periodical.
Claims use since December, 1930.

Ser. No. 327,528. HAROLD A. RIPLEY, Washington, D. C. Filed May 27, 1932.

"MINUTE MYSTERIES"

For Newspaper Column.
Claims use since Apr. 11, 1932.

Ser. No. 327,774. HAROLD A. RIPLEY, Washington, D. C. Filed June 6, 1932.

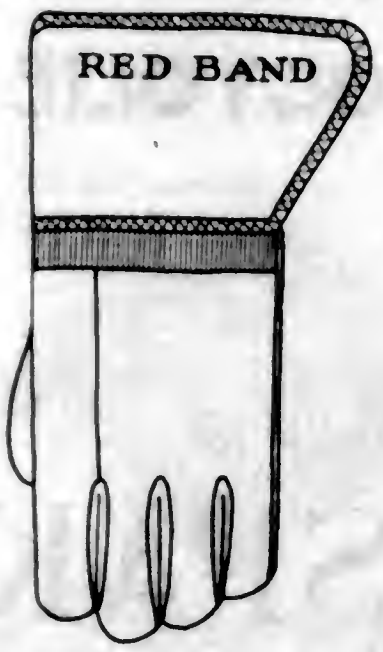
DETECTOGRAM

For Section of Magazines and Newspapers.
Claims use since Mar. 19, 1932.

CLASS 39

Clothing

Ser. No. 315,141. JULIUS V. HARPHAM, doing business as Payne Glove Co., Lincoln, Nebr. Filed May 28, 1931.



Applicant disclaims the right to the exclusive use of the pictorial representation of the glove shown in the drawing. The trade-mark comprises a red colored endless

wrist band of flexible fabric embodied in the construction of the glove and occupying a place between the fingered glove proper and gauntlet.

For Gloves and Mittens Made of Cotton Flannel, Combination Leather and Flannel, and All Leather or Other Suitable Materials.

Claims use since July, 1928.

Ser. No. 316,800. AKTIENGESELLSCHAFT DER OSTERREICHISCHEN FEZFABRIKEN, Vienna, Austria. Filed July 10, 1931.

JONNY

For Hats and Knitted and Woven Caps for Men, Women, and Children.

Claims use since Mar. 14, 1929.

Ser. No. 321,385. LARKWOOD SILK HOSIERY MILLS, INC., Charlotte, N. C. Filed Nov. 21, 1931.

Shad O Lace

No claim being made to the exclusive use of the word "Lace" apart from the mark as shown in the drawing.

For Hosiery.

Claims use since Nov. 14, 1931.

Ser. No. 324,145. MAYERS & SCHILLER, INC., New York, N. Y. Filed Feb. 13, 1932.

OPERA

For Ladies' Undergarments—Namely, Slips, Petticoats, and Pajamas.

Claims use since September, 1931.

Ser. No. 326,815. GANTNER & MATTERN COMPANY, San Francisco, Calif. Filed May 6, 1932.

GANTNER WIKIES

For Men's, Women's, and Children's Swimming Suits, Swimming Trunks, Sweaters, and Underwear.

Claims use since Jan. 21, 1932.

Ser. No. 327,496. H. & L. BLOCK, LTD., San Francisco, Calif. Filed May 27, 1932.

GUARANTEED
KORDO-HIDE
WASHABLE

The right to the use of the words "Guaranteed," "Hide," and "Washable" is hereby disclaimed, apart from the mark shown.

For Coats and Leather Coats, Leather Jackets, Leather Vests, Leather Breeches, Leather Gloves for Men, Women, and Children.

Claims use since May 17, 1932.

Ser. No. 327,548. BERMAN-LURIE, INC., New York, N. Y. Filed May 28, 1932.

B L

BEMLEY
SPORTSWEAR

The lining on the drawing is used to indicate shading only. Applicant disclaims the right to the exclusive use of the descriptive term "Sportswear."

For Knitted Wool, Silk, Rayon, and Cotton Sportswear—Namely, Men's, Women's, and Children's Coats, Bathing Suits, Hats, Scarfs, Sweaters; and Women's and Children's Dresses.

Claims use since Dec. 24, 1930.

Ser. No. 327,584. THE IRVING DREW CO., Portsmouth, Ohio. Filed May 31, 1932.

Uni-fit

No claim being made to the word "Fit" except in the association shown.

For Women's Leather and Fabric Shoes.

Claims use since Mar. 1, 1931.

Ser. No. 327,921. ROSENAU BROS. INC., Philadelphia, Pa. Filed June 11, 1932.

Thrif-Tee KIDDY KLO'ES

For Children's Dresses, Suits, and Rompers.

Claims use since June 2, 1932.

Ser. No. 328,328. FLOYD GIBBONS, New York, N. Y. Filed June 27, 1932.



The name "Floyd Gibbons" forming part of the trade-mark is in the hand writing of the applicant. Applicant disclaims any exclusive right to the word "Shirt" apart from the mark shown on the drawing.

For Dress, Negligee, and Work Shirts.

Claims use since June 11, 1932.

Ser. No. 328,360. MELVILLE SHOE CORPORATION, New York, N. Y. Filed June 28, 1932.

Healthy Steppers

For Shoes of Leather, Rubber, or Fabric Construction or a Combination of These Materials.

Claims use since June 10, 1932.

Ser. No. 328,394. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed June 29, 1932.

KNICKEROLE

For Sweaters, Hats, Caps, Neckties, Dress, Negligee, and Undershirts of Knitted and Textile Fabric; Stockings, Socks, Boots, and Shoes of Leather, Rubber, and Fabric and Combinations Thereof; Underwear of Knitted and Textile Fabric; Pajamas, Nightshirts, Bathrobes, Smoking Jackets, and House Gowns for Men and Boys.

Claims use since Apr. 1, 1932.

Ser. No. 328,568. BERGER, ROBINS & FREYMAN, INC., New York, N. Y. Filed July 1, 1932.

DAWN GOOD MORNING
DUSK FOR AFTERNOON
EVENING

The words "Good for Morning, Afternoon, Evening" and the outline representation of the tag appearing on the drawing are disclaimed from the trade-mark.

For Clothing—to Wit, Women's Dresses.

Claims use since June 15, 1932.

Ser. No. 328,582. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y. Filed July 6, 1932.

CYNTHIA

For Women's and Children's Shoes of Leather, Rubber, and Fabric, and Combinations of Those Materials.

Claims use since June 10, 1932.

Ser. No. 328,599. FIELD AND FLINT CO., Brockton, Mass. Filed July 7, 1932.

Happy-Feet

For Boots and Shoes Made of Leather and Combinations of Leather and Fabric.

Claims use since Jan. 10, 1913.

Ser. No. 328,612. I. B. KLEINERT RUBBER COMPANY, New York, N. Y. Filed July 7, 1932.

KINDERGARTERS

For Garters.

Claims use since June 6, 1932.

Ser. No. 328,707. STRUTWEAR KNITTING COMPANY, Minneapolis, Minn. Filed July 11, 1932.

Strut Flare

For Hosiery and Underwear for Men, Women, and Children.
Claims use since May 1, 1932.

Ser. No. 328,774. ARTCRAFT SILK HOSIERY MILLS, INC., Philadelphia, Pa. Filed July 14, 1932.

ToeSeal

For Women's Hosiery.
Claims use since June 20, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 317,928. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed Aug. 13, 1931.

Mirak

For Woolen Piece Goods.
Claims use since May 15, 1931.

Ser. No. 323,184. THE ANSONIA O & C COMPANY, Ansonia, Conn. Filed Jan. 20, 1932.

NEVRDI

For Wide Knitted, Woven, and Braided Elastic Fabrics.
Claims use since Sept. 4, 1931.

Ser. No. 328,519. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed July 2, 1932.

Velgra

For Pile Fabrics in the Piece.
Claims use since June 15, 1932.

Ser. No. 328,658. BIANCHINI, FERIER, Lyon, France. Filed July 9, 1932.

ROSALBA

For Piece Goods Composed Wholly or in Part of Hair, Silk, Rayon, Cotton, Hemp, Flax, Jute, Alpha Fibre, Aloe Fibre, Vegetable Fibre, or Mixtures Thereof.
Claims use since Feb. 14, 1918.

Ser. No. 328,725. COURTAULDS, LIMITED, London, England. Filed July 12, 1932.



For Piece Goods Made of Cellulose Yarns.
Claims use since 1930.

Ser. No. 328,726. COURTAULDS, LIMITED, London, England. Filed July 12, 1932.

COURTAULDS

For Piece Goods Made of Cellulose Yarns.
Claims use since 1910.

Ser. No. 328,776. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed July 14, 1932.

FROST FASONAY

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 28, 1932.

Ser. No. 328,777. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed July 14, 1932.

CHEVANESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since June 15, 1932.

CLASS 43

Thread and Yarn

Ser. No. 328,854. THE VISCOSE COMPANY, Marcus Hook, Pa. Filed July 16, 1932.

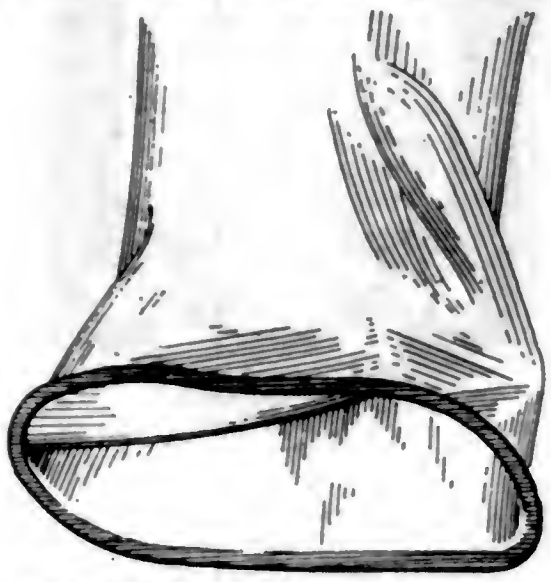
CHALKELLE

For Rayon Yarn.
Claims use since June 29, 1932.

CLASS 44

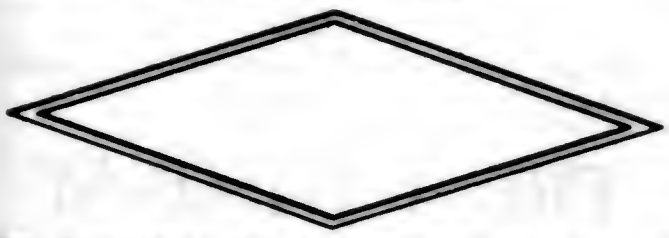
Dental, Medical, and Surgical Appliances

Ser. No. 317,553. THE B. F. GOODRICH COMPANY, doing business as Miller Rubber Company Inc., New York, N Y., and Akron, Ohio. Filed Aug. 1, 1931.



The mark as indicated by the lines in the drawing is a blue stripe which is applied at the cuff of the glove to form a part thereof. The representation of the portion of a glove is placed on the drawing for the purpose of showing the mode of applying the mark to the goods, such portion of the glove per se being disclaimed.
For Surgeons' Gloves Made of Rubber.
Claims use since Jan. 8, 1931.

Ser. No. 326,879. YOUNGS RUBBER CORPORATION, INC., New York, N. Y. Filed May 7, 1932.



For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since December, 1916.

Ser. No. 328,320. LEE M. BROKAW, doing business as Metab-O-Lizor Co., Glendale, Calif. Filed June 27, 1932.

METAB-O-LIZOR

For Therapy Apparatus Utilizing Color or the Application of Electric Current to the Body.
Claims use since May 15, 1932.

Ser. No. 328,392. DEWITT & HERZ, INC., New York, N. Y. Filed June 29, 1932.

SUMMIT BRAND

No registration rights are claimed for the word "Brand" apart from the mark shown in the drawing.
For Surgical Instruments—Namely, Hypodermic Needles, Surgical Glass Syringes, and Rubber Goods Used in Connection with Surgical Instruments.
Claims use since Mar. 18, 1932.

Ser. No. 328,804. VELDOWN COMPANY, INC., New York, N. Y. Filed July 14, 1932.

SILVER QUEEN

For Sanitary Pads.
Claims use since June 27, 1932.

CLASS 45

Beverages, Nonalcoholic

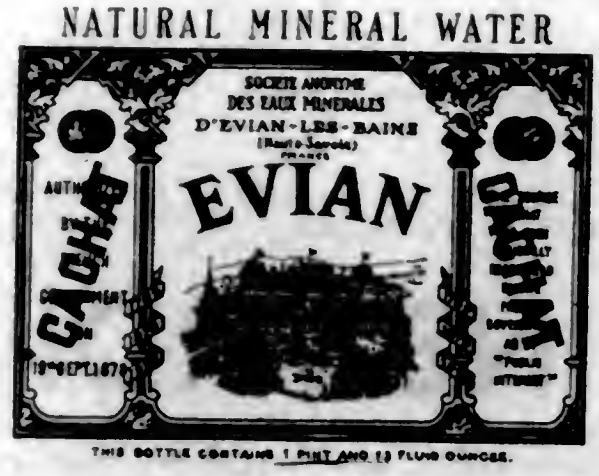
Ser. No. 317,786. W-W MANUFACTURERS, Abilene, Tex. Filed Aug. 7, 1931.

HI-TONE

For Nonalcoholic, Maltless Soft Drink Powder.
Claims use since Mar. 1, 1930.

Ser. No. 327,111. SOCIETE ANONYME DES EAUX MINERALES D'EVIAN-LES-BAINS, Paris, France. Filed May 14, 1932. Under 10-year proviso.

NATURAL MINERAL WATER



For Mineral Waters.
Claims use since 1878.

Ser. No. 328,160. CHECKER BEVERAGE CO., Chicago, Ill. Filed June 21, 1932.

CHECKOLA

For Non-Alcoholic, Maltless Beverage Sold as a Soft Drink and Syrups, Extracts and Concentrates for Making the Same.
Claims use since May 15, 1930.

Ser. No. 328,470. ARCADIA FOOD CO., New York, N. Y. Filed July 1, 1932.

Topping

For Nonalcoholic, Maltless Powder Used for the Preparation of Soft Drinks.
Claims use since May 28, 1932.

Ser. No. 328,533. BENIAMINO LEO, Chicago, Ill. Filed July 2, 1932.



The word "Satisfying" and the words "Insured Reliability" are disclaimed apart from the other features of the mark shown in the drawing.
For Non-Alcoholic Maltless Beverage Sold as a Soft Drink.
Claims use since June, 1930.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 317,030. JOSEPH DELL'OMO, Brooklyn, N. Y. Filed July 17, 1931.



The figure in the label represents no particular person.
No claim is made to the surname "Dell'Omo" apart from the mark as shown in the drawing.
For Canned Olive Oil.
Claims use since May 25, 1931.

Ser. No. 319,599. CREME ORANGE PRODUCTS CO. LTD., Los Angeles, Calif. Filed Sept. 29, 1931.



Applicant disclaims the words "Drink Orange" apart from the mark shown on the drawing.
For a Powder for Manufacture of a Creamy Orange and Other Fruit Juice Beverages.
Claims use since Aug. 12, 1931.

Ser. No. 320,653. WILLIAM S. WASSELL, doing business as The Wassell Pie Bakery, Philadelphia, Pa. Filed Oct. 30, 1931.

Pie-Paks

The word "Pie" is hereby disclaimed apart from the mark shown in the drawing.
For Pastries—Namely, Pies, Cakes, Buns, Doughnuts, French Pastries Sold in Cartons.
Claims use since Oct. 12, 1931.

Ser. No. 322,648. ORANGE-CRUSH COMPANY, Chicago, Ill. Filed Jan. 2, 1932.

Mantecado y Helado
Orange CRUSH

The words "Mantecado y Helado" and "Orange" do not form a part of the registration sought apart from the trade-mark shown in the drawing.
For Candy and Ice Cream.
Claims use since July 1, 1925.

Ser. No. 325,275. MARY HARDING, Utica, N. Y. Filed Mar. 16, 1932.



For French Dressing.
Claims use since Feb. 24, 1932.

Ser. No. 326,348. WILKINSON, GADDIS & COMPANY, doing business as Mutual Grocery Co., Inc., Newark, N. J. Filed Apr. 21, 1932.

Mutual

For Tea, Coffee, Eggs, Cocoa, Bread, Candy, Food Flavoring Extracts, Rice, Olives, Canned Vegetables.
Claims use since 1915.

Ser. No. 326,420. FRIGIE CORPORATION OF AMERICA, Chicago, Ill. Filed Apr. 23, 1932.



The words "Frigid Bar" are disclaimed apart from the trade-mark as shown.

For Frozen Flavored and Sweetened Water Known as Water Ice, Frozen Bar with Milk Base and Chocolate Coating, Frozen Bar with Cream Base and Chocolate Coating, and Frozen Confections.

Claims use since Apr. 21, 1932.

Ser. No. 327,299. BEATRICE CREAMERY COMPANY, Chicago, Ill. Filed May 21, 1932.

fillup

For Frozen Custard and Frozen Sherbet.
Claims use since Apr. 11, 1932.

Ser. No. 327,386. THE AMERICAN MOLASSES CO. OF NEW YORK, New York, N. Y. Filed May 24, 1932.

Hybloom

For Special Bread Sugar.
Claims use since Apr. 30, 1932.

Ser. No. 327,396. W. B. GRAINGER PACKING COMPANY, Salinas, Calif. Filed May 24, 1932.

TOP NUMBER

For Fresh Vegetables.
Claims use since Apr. 13, 1932.

Ser. No. 327,537. JOE LOWE CORPORATION, Brooklyn, N. Y. Filed May 28, 1932.

JO-LO
Certified AA

No registration rights are herewith claimed for the word "Certified" apart from the mark as shown on the drawing.

For Blend of Pure Dehydrated Egg Yolk, Selected Proteins of Milk, Salts, and Carbohydrates for the Purpose of Improving the Texture and Body of Ice Cream.

Claims use since June 1, 1923.

Ser. No. 327,558. JOE LOWE CORPORATION, Brooklyn, N. Y. Filed May 28, 1932.

JO-LO
Sunshine AA

For Blend of Pure Dehydrated Egg Yolk, Selected Proteins of Milk, Salts and Carbohydrates for the Purpose of Improving the Texture and the Body of Baked and Fried Food Products.

Claims use since Jan. 1, 1924.

Ser. No. 327,633. THE LYNDONVILLE CANNING COMPANY, INC., Lyndonville, N. Y. Filed June 1, 1932.

TIMES SQUARE

For Canned Apple Sauce and Peas.
Claims use since May 16, 1932.

Ser. No. 328,259. BIRK BROS. MALT PRODUCTS, INC., Chicago, Ill. Filed June 24, 1932.



The drawing is lined to indicate red, yellow, light blue and dark blue. No claim is made to the outline of a label.

For Malt Syrup.
Claims use since Mar. 26, 1932.

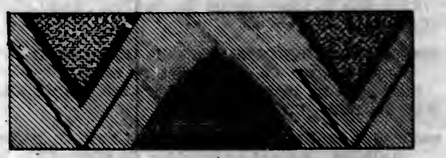
Ser. No. 328,347. BIRK BROS. MALT PRODUCTS, INC., Chicago, Ill. Filed June 28, 1932.



No claim is made to the outline of a label.

For Malt Syrup.
Claims use since Mar. 26, 1932.

Ser. No. 328,348. BIRK BROS. MALT PRODUCTS, INC., Chicago, Ill. Filed June 28, 1932.



The drawing is lined for blue, green and yellow. No claim is made to the outline of the label.

For Malt Syrup.
Claims use since Mar. 26, 1932.

Ser. No. 328,367. NU-SET SPECIALTY CO., INC., New York, N. Y. Filed June 28, 1932.

NU-SET

For Gelatine.
Claims use since Mar. 1, 1932.

Ser. No. 328,372. ADAM SCHEIDT BREWING COMPANY, Norristown, Pa. Filed June 28, 1932.

STORM KING



For Malt Syrup.
Claims use since June 16, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

AUGUST 23, 1932

296,764. CLUB-FOOT SHOES. ISADORE SABEL, Philadelphia, Pa.
Filed August 25, 1931. Serial No. 318,431. PUBLISHED JUNE 14, 1932. Class 44.

296,765. LIQUID SOAP. CRECO COMPANY, INC., Long Island City, N. Y.
Filed August 29, 1931. Serial No. 318,550. PUBLISHED JUNE 7, 1932. Class 4.

296,766. SCREWS, BOLTS, NUTS, METAL WASHERS, LOCK WASHERS, AND COIL SPRINGS FOR GENERAL USE. THE ACCURATE PARTS MANUFACTURING COMPANY, Cleveland, Ohio.
Filed September 19, 1931. Serial No. 319,190. PUBLISHED JUNE 7, 1932. Class 13.

296,767. DRESSED POULTRY AND LIVE DUCKS. MARTIN R. MAURER, Riverhead, N. Y.
Filed August 17, 1931. Serial No. 318,066. PUBLISHED JUNE 7, 1932. Class 46.

296,768. WOOD PULP INSULATING MATERIAL IN PANELS FOR THERMAL INSULATING PURPOSES. KIMBERLY-CLARK CORPORATION, Neenah, Wis.
Filed April 4, 1932. Serial No. 325,791. PUBLISHED JUNE 7, 1932. Class 12.

296,769. JAR RINGS. CUPPLES COMPANY, MANUFACTURERS, St. Louis, Mo.
Filed August 10, 1931. Serial No. 317,841. PUBLISHED APRIL 5, 1932. Class 35.

296,770. FELT RUGS. JOHN D. HARRIS CO. INC., New York, N. Y.
Filed March 29, 1932. Serial No. 325,634. PUBLISHED MAY 31, 1932. Class 50.

296,771. SHEET INSULATING MATERIAL MADE OF PAPER STOCK AND FOR THERMAL INSULATING PURPOSES. KIMBERLY-CLARK CORPORATION, Neenah, Wis.
Filed April 4, 1932. Serial No. 325,790. PUBLISHED JUNE 7, 1932. Class 12.

296,772. CELLULOSIC PLASTIC, IN SHEETS, FOR COVERING HEELS OF BOOTS, SHOES, AND SLIPPERS AND EMBOSSED TO REPRESENT LEATHER OR TEXTILES. DU PONT VISCOLOID COMPANY, New York, N. Y.
Filed March 29, 1932. Serial No. 325,616. PUBLISHED MAY 17, 1932. Class 50.

296,773. WELDING METALS. THE BASTIAN-BLESSING COMPANY, Chicago, Ill.
Filed March 23, 1932. Serial No. 325,396. PUBLISHED MAY 17, 1932. Class 14.

296,774. ASPHALT AND AN ASPHALTIC PREPARATION FOR THE WATERPROOFING, INSULATION, AND PROTECTION OF STRUCTURAL SURFACES. AL-OYS, INC., Chicago, Ill.
Filed March 28, 1932. Serial No. 325,549. PUBLISHED JUNE 7, 1932. Class 12.

296,775. FUSIBLE ALLOYS, COMPOSED OF BISMUTH, LEAD, TIN, AND CADMIUM. CERRO DE PASCO COPPER CORPORATION, New York, N. Y.
Filed March 17, 1932. Serial No. 325,209. PUBLISHED MAY 24, 1932. Class 14.

296,776. DRAWING, PAINTING, AND PRINTING INK. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio.
Filed March 21, 1932. Serial No. 325,312. PUBLISHED MAY 17, 1932. Class 11.

296,777. FABRIC PADS FOR THE APPLICATION AND REMOVAL OF COSMETICS. MAGNUM PRODUCTS, INC., New York, N. Y.
Filed March 11, 1932. Serial No. 325,042. PUBLISHED MAY 17, 1932. Class 29.

296,778. DOORS AND SLIDING AND FOLDING PARTITIONS. AUSTRAL WINDOW COMPANY, Augusta, Me., and New York, N. Y.
Filed March 15, 1932. Serial No. 325,183. PUBLISHED JUNE 7, 1932. Class 12.

296,779. AMUSEMENT AND EDUCATIONAL KIT CONSISTING OF STRIPS OF MATERIAL FOR PASTING, AN ADHESIVE, A BOARD, A KNIFE FOR CUTTING, A SHARPENING STONE, A SQUARE, AND CUTTING PATTERNS SOLD AS A UNIT FOR MAKING VARIOUS FANCY ARTICLES. REGINALD S. PITTS, doing business as R. S. Pitts Mfg. Co., Hanover, Pa.
Filed March 16, 1932. Serial No. 325,184. PUBLISHED MAY 31, 1932. Class 50.

296,780. GROUND OPEN HEARTH BASIC SLAG USED AS A FERTILIZER. TENNESSEE COAL, IRON & RAILROAD COMPANY, Birmingham, Ala.
Filed March 16, 1932. Serial No. 325,191. PUBLISHED MAY 17, 1932. Class 10.

296,781. BASE METAL TRAYS. ALLAN FRASER, Philadelphia, Pa.
Filed April 25, 1932. Serial No. 326,467. PUBLISHED JUNE 7, 1932. Class 13.

296,782. FRESH VEGETABLES. AMERICAN TRUST COMPANY, San Francisco, Calif.
Filed May 3, 1932. Serial No. 326,702. PUBLISHED JUNE 7, 1932. Class 46.

296,783. CORROSION-RESISTANT FERROUS ALLOYS. LUDLUM STEEL CO., Watervliet, N. Y.
Filed April 20, 1932. Serial No. 326,290. PUBLISHED MAY 31, 1932. Class 14.

296,784. ASSOCIATION EMBLEMS, LAPEL BUTTONS, BADGES, MEDALS, FINGER RINGS, AND EMBLEMATIC ORNAMENTS ALL MADE OF OR PLATED WITH PRECIOUS METAL. THE 29TH DIVISION ASSOCIATION, INC., Newark, N. J.
Filed October 6, 1931. Serial No. 319,792. PUBLISHED JUNE 7, 1932. Class 28.

296,785. RECORDING REPRODUCING PHONOGRAPHS AND RECORDS THEREFOR. JOHN FIELD, New York, N. Y.
Filed October 9, 1931. Serial No. 319,888. PUBLISHED JUNE 7, 1932. Class 36.

296,786. MEDICINE FOR STOMACH TROUBLES, NERVOUS DISEASES, AND BLOOD IMPURITIES, RHEUMATISM AND LUMBAGO, AND HEMORRHOIDS. HENRY A. CORDES, doing business as The H. B. Co., Jersey City, N. J.
Filed February 10, 1932. Serial No. 324,032. PUBLISHED JUNE 14, 1932. Class 6.

296,787. UPPER MOTOR LUBRICATOR FOR USE AS AN ACCESSORY FOR AN INTERNAL COMBUSTION MOTOR. THE MARVEL PRODUCTS CO., Cleveland, Ohio.
Filed February 12, 1932. Serial No. 324,107. PUBLISHED JUNE 7, 1932. Class 23.

296,788. ELECTRIC CLOCKS. GEORGE P. COWLES, Waterbury, Conn.
Filed February 16, 1932. Serial No. 324,221. PUBLISHED MAY 24, 1932. Class 27.

296,789. MUSICAL NOVELTIES IN THE NATURE OF FINGER TIP TAPPERS. FRIEDRICH J. LANGER, Cleveland, Ohio.
Filed February 18, 1932. Serial No. 324,291. PUBLISHED JUNE 7, 1932. Class 36.

296,790. ANIMAL PREPARATIONS, NAMELY, FEATHER PULLING TONIC, LAXATIVE REGULATOR FOR BIRDS, ANTI-ASTHMATIC LIQUID FOR BIRDS, FOOT EASE, PREPARATION FOR TREATING BIRDS, BIRD BITTERS AND GENERAL TONIC, TONIC STIMULANT FOR COLDS IN BIRDS, BIRD PEPPER, A STIMULANT FOR TREATING COLDS, ANTISEPTIC WASH, RED MITE LIQUID, RED MITE POWDER, VITAMIN TONIC, A HEALTH BUILDER FOR BIRDS. HARVEY B. MCGRAW, doing business as Fullsong Products Co., Cortland, N. Y.
Filed February 19, 1932. Serial No. 324,818. PUBLISHED JUNE 14, 1932. Class 6.

296,791. SHAVING CREAM. THE PRODERMATECT COMPANY, Scottdale, Pa.
Filed February 19, 1932. Serial No. 324,322. PUBLISHED JUNE 7, 1932. Class 4.

296,792. TYPEWRITER INK-RIBBONS AND COATED TRANSFER-SHEETS FOR TYPEWRITER MANIFOLDING. UNDERWOOD ELLIOTT FISHER COMPANY, New York, N. Y.
Filed February 27, 1932. Serial No. 324,576. PUBLISHED MAY 3, 1932. Class 11.

296,793. SWITCHES AND ELECTRIC LIGHT SOCKETS. WEBER ELECTRIC COMPANY, Schenectady, N. Y.
Filed February 29, 1932. Serial No. 324,637. PUBLISHED JUNE 7, 1932. Class 21.

296,794. HOSIERY. PHOENIX HOSIERY COMPANY, Milwaukee, Wis.
Filed March 4, 1932. Serial No. 324,799. PUBLISHED JUNE 7, 1932. Class 39.

296,795. RADIO ANTENNA IN FORM OF AUTOMOBILE WINDSHIELD VISOR. VI-ZOR-TENA COMPANY, Kansas City, Mo.
Filed March 7, 1932. Serial No. 324,860. PUBLISHED JUNE 7, 1932. Class 21.

296,796. STORE FIXTURES—NAMELY, SHOW CASES, WALL CASES, COUNTERS, TABLES, CHAIRS, AND SHELVING. GRAND RAPIDS STORE EQUIPMENT CORPORATION, Portland, Oreg.
Filed March 8, 1932. Serial No. 324,887. PUBLISHED JUNE 7, 1932. Class 32.

296,797. A PREPARATION FOR THE FINGER AND WATER WAVING OF THE HAIR. ISADOR A. SMITH, doing business as Irso Products Company, Philadelphia, Pa.
Filed March 8, 1932. Serial No. 324,889. PUBLISHED JUNE 7, 1932. Class 6.

296,798. INSECT POWDERS, BAKING POWDER, ETC. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed March 8, 1932. Serial No. 324,898. PUBLISHED JUNE 14, 1932. Class 6.

296,799. AUTOMOBILE GOGGLES. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed March 9, 1932. Serial No. 324,947. PUBLISHED JUNE 7, 1932. Class 26.

296,800. ALUMINUM ALLOYS. A. P. GRIMM FOUNDRY COMPANY, INC., Bound Brook, N. J.
Filed March 9, 1932. Serial No. 324,961. PUBLISHED MAY 17, 1932. Class 14.

296,801. FURNITURE AND AUTOMOBILE POLISH. JOSEPH LACHOFF, doing business as Jico Laboratories, Chicago, Ill.
Filed March 9, 1932. Serial No. 324,966. PUBLISHED JUNE 7, 1932. Class 16.

296,802. TOY CONSTRUCTION OUTFITS INCLUDING HAMMER, NAILS, AND CONSTRUCTION ELEMENTS SOLD AS A UNIT. PLAYSKOOL INSTITUTE, INC., Milwaukee, Wis.
Filed March 9, 1932. Serial No. 324,971. PUBLISHED JUNE 14, 1932. Class 22.

296,803. PORTABLE POWER PROPELLED ROLLER EQUIPPED VEHICLE ESPECIALLY DESIGNED FOR ROLLING AND CONDITIONING THE SURFACE OF PAVED HIGHWAYS AND THE LIKE. CONTINENTAL MANUFACTURING COMPANY, Chicago, Ill.
Filed March 10, 1932. Serial No. 324,989. PUBLISHED JUNE 7, 1932. Class 23.

296,804. COOPERATIVE DISCOUNT COUPONS. UNITED PUBLISHERS CORPORATION, New York, N. Y.
Filed April 13, 1932. Serial No. 326,063. PUBLISHED JUNE 7, 1932. Class 38.

296,805. BOOKS FOR COOPERATIVE DISCOUNT COUPONS. UNITED PUBLISHERS CORPORATION, New York, N. Y.
Filed April 13, 1932. Serial No. 326,062. PUBLISHED JUNE 7, 1932. Class 38.

296,806. BIRD BISCUIT FOR CANARIES AND THE LIKE. VALENTIN BACH, doing business as Peck-O-Egg Mfg. Co., Manhattan Beach, Calif.
Filed April 14, 1932. Serial No. 326,075. PUBLISHED JUNE 7, 1932. Class 46.

296,807. DOG FOOD. ALASKA LIVESTOCK & PACKING COMPANY, Seattle, Wash.
Filed April 12, 1932. Serial No. 326,006. PUBLISHED MAY 24, 1932. Class 46.

296,808. TOILET TISSUE AND FACIAL TISSUE. MODERN TISSUES CORPORATION, New York, N. Y.
Filed April 8, 1932. Serial No. 325,915. PUBLISHED JUNE 7, 1932. Class 37.

296,809. SLIPPERS MADE OF SHEEP SKIN. B. & B. SHOE COMPANY, Chicago, Ill.
Filed April 4, 1932. Serial No. 325,776. PUBLISHED JUNE 7, 1932. Class 39.

296,810. CHILDREN'S SHOES OF LEATHER, RUBBER, AND FABRIC, AND COMBINATIONS OF THOSE MATERIALS. CHAMPION SHOE MANUFACTURING CORPORATION, New York, N. Y.
Filed March 28, 1932. Serial No. 325,566. PUBLISHED JUNE 7, 1932. Class 39.

296,811. LETTERING AND DRAFTING GUIDES AND RULERS. A. B. DICK COMPANY, Chicago, Ill.
Filed March 21, 1932. Serial No. 325,384. PUBLISHED JUNE 7, 1932. Class 26.

296,812. MECHANICAL DYE KETTLE FOR USE IN DYEING CLOTH AND THE LIKE. RODNEY HUNT MACHINE CO., Orange, Mass.
Filed March 16, 1932. Serial No. 325,172. PUBLISHED JUNE 7, 1932. Class 23.

296,813. RUBBER CRIB SHEETS. S. H. KRESS & CO., New York, N. Y.
Filed April 19, 1932. Serial No. 326,261. PUBLISHED MAY 31, 1932. Class 50.

296,814. METAL ALLOY. KREMENTZ & COMPANY, Newark, N. J.
Filed April 15, 1932. Serial No. 326,149. PUBLISHED MAY 24, 1932. Class 14.

296,815. CLEANING AND POLISHING FABRICS OF THE HAND-RECEIVING OR MITT TYPE. CHICOPEE MANUFACTURING CORPORATION, New Brunswick, N. J.
Filed April 14, 1932. Serial No. 326,078. PUBLISHED MAY 24, 1932. Class 29.

296,816. POLISHED STONE FOR BUILDING OR DECORATION. SOUTH WESTERN STONE CO. LTD., London, England.
Filed April 12, 1932. Serial No. 326,032. PUBLISHED JUNE 7, 1932. Class 12.

296,817. KNITTED POLISHING AND DUSTING CLOTHS. THE GRADY-TRAVERS COMPANY, INCORPORATED, New York, N. Y.
Filed April 12, 1932. Serial No. 326,018. PUBLISHED MAY 31, 1932. Class 29.

296,818. AUTOMOBILE ACCESSORIES—NAMELY, PRESSURE RETAINER AND GOVERNOR FOR FLUID PRESSURE ACCESSORY SYSTEMS OF MOTOR VEHICLES. TRICO PRODUCTS CORPORATION, Buffalo, N. Y.
Filed April 7, 1932. Serial No. 325,896. PUBLISHED JUNE 7, 1932. Class 19.

296,819. AUTOMOBILE ACCESSORIES — NAMELY, PRESSURE RETAINER AND GOVERNOR FOR FLUID PRESSURE ACCESSORY SYSTEMS OF MOTOR VEHICLES. TRICO PRODUCTS CORPORATION, Buffalo, N. Y.
Filed April 7, 1932. Serial No. 325,895. PUBLISHED JUNE 7, 1932. Class 19.

296,820. TOBACCO PRODUCTS—NAMELY, CIGARS. YOCUM BROTHERS, Reading, Pa.
Filed April 7, 1932. Serial No. 325,888. PUBLISHED MAY 24, 1932. Class 17.

296,821. PHOTOGRAPHIC FILMS, PHOTOGRAPHIC CAMERAS, AND PARTS THEREOF AND PHOTOGRAPHIC PROJECTORS. CAM SYNDICATE LIMITED, London, England.
Filed April 14, 1932. Serial No. 326,077. PUBLISHED JUNE 7, 1932. Class 26.

296,822. BRASSIÈRES AND GIRDLES. MAIDEN FORM BRASSIERE CO. INC., New York, N. Y.
Filed April 14, 1932. Serial No. 326,113. PUBLISHED JUNE 7, 1932. Class 39.

296,823. HAT LININGS, STRAW HATS, FELT HATS, VELOUR HATS, CLOTH HATS, AND VELVET HATS FOR LADIES, MISSES, AND CHILDREN. JAY GEE HAT CO., INC., New York, N. Y.
Filed April 15, 1932. Serial No. 326,146. PUBLISHED JUNE 7, 1932. Class 39.

296,824. WHEAT FLOUR. TEX-O-KAN FLOUR MILLS CO., Dallas, Tex.
Filed April 15, 1932. Serial No. 326,168. PUBLISHED JUNE 7, 1932. Class 46.

296,825. WHEAT FLOUR. TEX-O-KAN FLOUR MILLS CO., Dallas, Tex.
Filed April 15, 1932. Serial No. 326,169. PUBLISHED JUNE 7, 1932. Class 46.

296,826. LADIES' HATS. WALTER K. MARKS, INC., New York, N. Y.
Filed April 20, 1932. Serial No. 326,291. PUBLISHED JUNE 7, 1932. Class 39.

296,827. SHOE PRESSES, USED MORE PARTICULARLY FOR CAUSING THE ADHESION OF SOLES AND HEELS TO SHOE BOTTOMS AND PARTS THEREOF. THE KAYON COMPANY, Milwaukee, Wis.
Filed April 21, 1932. Serial No. 326,328. PUBLISHED JUNE 7, 1932. Class 23.

296,828. COMIC STRIPS AND CARTOONS. KING FEATURES SYNDICATE, INC., New York, N. Y.
Filed April 21, 1932. Serial No. 326,330. PUBLISHED JUNE 7, 1932. Class 38.

296,829. MILK, CREAM, BUTTER, CHEESE, AND EGGS. THOMPSON'S DAIRY, Washington, D. C.
Filed April 23, 1932. Serial No. 326,437. PUBLISHED JUNE 7, 1932. Class 46.

296,830. COAL. COMMONWEALTH COLLIERIES, INCORPORATED, Cincinnati, Ohio.
Filed April 25, 1932. Serial No. 326,460. PUBLISHED JUNE 7, 1932. Class 1.

296,831. CANNED FOOD FOR DOGS AND CATS AND OTHER CARNIVEROUS ANIMALS. N. C. COAN, doing business as Animal Foods Company, San Jose, Calif.
Filed April 25, 1932. Serial No. 326,457. PUBLISHED JUNE 7, 1932. Class 46.

296,832. STEREOTYPE MATS. BURGESS CELLULOSE COMPANY, Madison, Wis.
Filed April 27, 1932. Serial No. 326,534. PUBLISHED JUNE 7, 1932. Class 37.

296,833. ROWING MACHINES. HOOVER CONDITIONER, INC., New York, N. Y.
Filed May 7, 1932. Serial No. 326,859. PUBLISHED JUNE 14, 1932. Class 22.

296,834. PLAYING CARDS. THE UNITED STATES PLAYING CARD COMPANY, East Norwood, Cincinnati, Ohio.
Filed May 7, 1932. Serial No. 326,874. PUBLISHED JUNE 14, 1932. Class 22.

296,835. BILLIARD CUE TIPS. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill.
Filed May 11, 1932. Serial No. 326,975. PUBLISHED JUNE 14, 1932. Class 22.

296,836. NONALCOHOLIC, MALTLESS BEVERAGE SOLD AS A SOFT DRINK AND SYRUPS, CONCENTRATES, AND EXTRACTS FOR MAKING THE SAME. FREDERIC J. HUFF, Binghamton, N. Y.
Filed April 7, 1932. Serial No. 325,876. PUBLISHED JUNE 14, 1932. Class 45.

296,837. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. PALMYRA SPRINGS, INC., Palmyra, Wis.
Filed May 7, 1932. Serial No. 326,870. PUBLISHED JUNE 14, 1932. Class 45.

296,838. GRAPE JUICE. GROWERS' CO-OPERATIVE GRAPE JUICE COMPANY, INC., Westfield, N. Y.
Filed May 10, 1932. Serial No. 326,939. PUBLISHED JUNE 14, 1932. Class 45.

296,839. GOLF BALLS. THE INDIA RUBBER, GUTTA PERCHA & TELEGRAPH WORKS COMPANY, LIMITED, London, England.
Filed May 12, 1932. Serial No. 327,017. PUBLISHED JUNE 14, 1932. Class 22.

296,840. PAPER DOLLS. COLLINS-KIRK, INC., Chicago, Ill.
Filed April 25, 1932. Serial No. 326,459. PUBLISHED JUNE 14, 1932. Class 22.

296,841. MALT SYRUP. ALBERT MEZA, doing business as Tia Juana Products, Venice, Calif.
Filed March 25, 1932. Serial No. 325,478. PUBLISHED JUNE 7, 1932. Class 46.

296,842. PROPHYLACTIC RUBBER ARTICLES. JOSEPH SMITH, Sloan, N. Y.
Filed March 28, 1932. Serial No. 325,601. PUBLISHED MAY 24, 1932. Class 44.

296,843. DAIRY FEEDS AND FATTENING MASH. BLUE GRASS-ELMENDORF GRAIN CORPORATION, Lexington, Ky.
Filed March 29, 1932. Serial No. 325,614. PUBLISHED JUNE 7, 1932. CLASS 46.

296,844. COAL. STONEGA COKE & COAL COMPANY, Philadelphia, Pa.
Filed April 7, 1932. Serial No. 325,894. PUBLISHED JUNE 7, 1932. Class 1.

296,845. HOSIERY. HOLEPROOF HOSIERY CO., Milwaukee, Wis.
Filed April 28, 1932. Serial No. 326,587. PUBLISHED JUNE 7, 1932. Class 39.

296,846. HOSIERY. HOLEPROOF HOSIERY CO., Milwaukee, Wis.
Filed April 28, 1932. Serial No. 326,588. PUBLISHED JUNE 7, 1932. Class 39.

296,847. HOSIERY. HOLEPROOF HOSIERY CO., Milwaukee, Wis.
Filed April 28, 1932. Serial No. 326,589. PUBLISHED JUNE 7, 1932. Class 39.

296,848. ASPIRIN. TOM HUSTON CORPORATION, Columbus, Ga.
Filed April 28, 1932. Serial No. 326,590. PUBLISHED JUNE 14, 1932. Class 6.

296,849. WAX EMULSION FOR THE PRESERVATION AND IMPROVEMENT IN APPEARANCE OF CITRUS FRUIT AND OTHER EDIBLES. THE WILBUR WHITE CHEMICAL COMPANY, Owego, N. Y.
Filed May 2, 1932. Serial No. 326,699. PUBLISHED JUNE 14, 1932. Class 6.

296,850. ANAESTHETIC. THE WM. S. MERRELL COMPANY, Cincinnati, Ohio.
Filed May 11, 1932. Serial No. 326,983. PUBLISHED JUNE 14, 1932. Class 6.

296,851. FIELD SEEDS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed March 21, 1932. Serial No. 325,348. PUBLISHED JUNE 7, 1932. Class 1.

296,852. MEDICATED ANTISEPTIC LOZENGES FOR ORAL USE. SHARP & DOHME, INCORPORATED, Baltimore, Md.
Filed April 18, 1932. Serial No. 326,235. PUBLISHED JUNE 7, 1932. Class 6.

296,853. LAXATIVE TABLETS. THE ETHICAL PRODUCTS COMPANY, Waco, Tex.
Filed April 19, 1932. Serial No. 326,253. PUBLISHED JUNE 7, 1932. Class 6.

296,854. ICE BREAKERS FOR HOUSEHOLD USE. NORTH BRO'S M'F'G CO., Philadelphia, Pa.
Filed April 19, 1932. Serial No. 326,265. PUBLISHED JUNE 7, 1932. Class 28.

296,855. TAMPONS. ROBERT MCNEIL, Philadelphia, Pa.
Filed April 22, 1932. Serial No. 326,389. PUBLISHED JUNE 14, 1932. Class 44.

296,856. CHEMICAL PREPARATION FOR USE IN BLEACHING OR WHITENING CLOTHES; FOR REMOVING STAINS, DIRT, AND GREASE; AND FOR USE AS AN ANTISEPTIC, A GERM KILLER, A DEODORIZER, AND DISINFECTANT. JOHN WILEY JONES, doing business as John Wiley Jones Co., Le Roy, N. Y.
Filed April 23, 1932. Serial No. 326,425. PUBLISHED JUNE 14, 1932. Class 6.

296,857. HOSIERY. MARSHALL FIELD & COMPANY, Chicago, Ill.
Filed April 28, 1932. Serial No. 326,584. PUBLISHED JUNE 7, 1932. Class 39.

296,858. MEDICINAL PREPARATION FOR INTRAVENOUS INJECTION FOR THE TREATMENT OF GONORRHEA. ACISCLO MARXUACH, San Juan, Porto Rico.
Filed April 15, 1932. Serial No. 326,154. PUBLISHED JUNE 7, 1932. Class 6.

296,859. RAZOR BLADES. WASHINGTON LABORATORIES, INC., New York, N. Y.
Filed April 16, 1932. Serial No. 326,197. PUBLISHED JUNE 7, 1932. Class 23.

296,860. HOSIERY. BENAL HOSIERY CO., New York, N. Y.
Filed April 18, 1932. Serial No. 326,204. PUBLISHED JUNE 7, 1932. Class 39.

296,861. CERAMIC BATCHES. VITREFRAX CORPORATION, Los Angeles, Calif.
Filed February 4, 1932. Serial No. 325,836. PUBLISHED JUNE 7, 1932. Class 1.

296,862. PRESERVED LEAVES, FOLIAGE, GRASSES, AND GROWTHS OF FIELD AND FOREST. CHARLES VORM, doing business as The American Oak Preserving Company, North Judson, Ind.
Filed February 5, 1932. Serial No. 325,879. PUBLISHED JUNE 7, 1932. Class 1.

296,863. STRINGED MUSICAL INSTRUMENTS OF THE ELECTRIC RELAY OPERATION TYPE. C. BECHSTEIN PIANOFORTEFABRIK AKTIENGESELLSCHAFT, Berlin, Germany.
Filed February 9, 1932. Serial No. 325,983. PUBLISHED JUNE 7, 1932. Class 36.

296,864. FRESH VEGETABLES. C. RAMIREZ & CO., Nogales, Ariz.
Filed January 20, 1932. Serial No. 325,208. PUBLISHED JUNE 7, 1932. Class 46.

296,865. HEALING AND RUBBING LOTION. MINIT-RUB CORPORATION, St. Louis, Mo.
Filed January 22, 1932. Serial No. 325,302. PUBLISHED JUNE 7, 1932. Class 6.

296,866. EMPTY BOXES. GEORGE O. SQUIER, Washington, D. C.
Filed January 22, 1932. Serial No. 325,314. PUBLISHED JUNE 7, 1932. Class 2.

296,867. GAS-FIRED WARM AIR FURNACES FOR DOMESTIC USE. SURFACE COMBUSTION CORPORATION, Toledo, Ohio.
Filed January 30, 1932. Serial No. 325,637. PUBLISHED JUNE 7, 1932. Class 34.

296,868. ADHESIVE PASTE WHICH IS SOLD TO THE STATIONERY TRADE. BINNEY & SMITH CO., New York, N. Y.
Filed February 3, 1932. Serial No. 325,773. PUBLISHED JUNE 7, 1932. Class 5.

296,869. APPARATUS FOR PURIFYING, FILTERING, AND SOFTENING OF WATER—NAMELY, FILTERS AND ZEOLITE SOFTENERS AND PARTS THEREOF. WARD-LOVE PUMP CORPORATION, Rockford, Ill.
Filed November 3, 1931. Serial No. 320,770. PUBLISHED JUNE 14, 1932. Class 31.

296,870. AFTER-SHAVING POWDER. ALFRED J. LAUTMANN, Detroit, Mich.
Filed November 12, 1931. Serial No. 321,074. PUBLISHED JUNE 7, 1932. Class 6.

296,871. WATER AND OIL COLORS FOR ARTISTS. ERWIN R. KOCHER, Los Angeles, Calif.
Filed November 23, 1931. Serial No. 321,431. PUBLISHED JUNE 7, 1932. Class 16.

296,872. ICE BOXES AND REFRIGERATORS. BEN M. SORINO, doing business as Freezette Company, New York, N. Y.
Filed November 25, 1931. Serial No. 321,506. PUBLISHED JANUARY 19, 1932. Class 31.

296,873. PINS NOT MADE OF PRECIOUS METAL, SAFETY PINS NOT MADE OF PRECIOUS METAL, SNAP-FASTENERS, HOOKS AND EYES. A. MEYERS & SONS CORP., New York, N. Y.
Filed November 27, 1931. Serial No. 321,544. PUBLISHED JUNE 7, 1932. Class 40.

296,874. PINS NOT MADE OF PRECIOUS METAL, SAFETY-PINS NOT MADE OF PRECIOUS METAL, SNAP-FASTENERS, HOOKS AND EYES. A. MEYERS & SONS CORP., New York, N. Y.
Filed November 27, 1931. Serial No. 321,545. PUBLISHED JUNE 7, 1932. Class 40.

296,875. PINS NOT MADE OF PRECIOUS METAL, SAFETY PINS NOT MADE OF PRECIOUS METAL, SNAP FASTENERS, HOOKS AND EYES. A. MEYERS & SONS CORP., New York, N. Y.
Filed November 27, 1931. Serial No. 321,546. PUBLISHED JUNE 7, 1932. Class 40.

296,876. HEATING RADIATORS. THE ROBINSON ENGINEERING CORPORATION, New York, N. Y.
Filed November 30, 1931. Serial No. 321,617. PUBLISHED JUNE 7, 1932. Class 34.

296,877. LEDGER AND BOND PAPER. BYRON WESTON COMPANY, Dalton, Mass.
Filed December 11, 1931. Serial No. 322,012. PUBLISHED JUNE 7, 1932. Class 37.

296,878. SENSITIZED POSITIVE BLACK PRINT PAPER AND CLOTH. KEUFFEL & ESSER COMPANY, Hoboken, N. J.
Filed December 18, 1931. Serial No. 322,258. PUBLISHED JUNE 7, 1932. Class 26.

296,879. AUTOMOBILE TOP DRESSING. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif.
Filed December 23, 1931. Serial No. 322,405. PUBLISHED MAY 24, 1932. Class 4.

296,880. CONVERTERS AND FILTERS FOR MODIFYING FLUCTUATIONS IN ELECTRIC CURRENT. FILTER CONDENSER CORPORATION, Detroit, Mich.
Filed January 18, 1932. Serial No. 323,135. PUBLISHED JUNE 7, 1932. Class 21.

296,881. ROLLS HAVING EACH A FRANKFURTER, ETC. ALBERT HELBOK, Bronxville, N. Y.
Filed March 25, 1932. Serial No. 325,470. PUBLISHED JUNE 7, 1932. Class 46.

296,882. CANNED BERRIES. A. L. STEWART & SONS, Cherryfield and Calais, Me.
Filed April 29, 1932. Serial No. 326,618. PUBLISHED JUNE 7, 1932. Class 46.

296,883. FRESH OYSTERS. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, New York, N. Y.
Filed April 21, 1932. Serial No. 326,320. PUBLISHED JUNE 7, 1932. Class 46.

296,884. MALT SYRUP. PABST CORPORATION, Milwaukee, Wis.
Filed April 23, 1932. Serial No. 326,430. PUBLISHED JUNE 7, 1932. Class 46.

296,885. NATURAL VANILLA, ARTIFICIAL VANILLA, AND COMPOUNDS OF THE SAME FOR FOOD-FLAVORING PURPOSES. FELTON CHEMICAL COMPANY, INC., Brooklyn, N. Y.
Filed April 25, 1932. Serial No. 326,466. PUBLISHED JUNE 7, 1932. Class 46.

296,886. SUIT CASES, HAT BOXES FOR LUGGAGE PURPOSES, AND WARDROBE HAND LUGGAGE. HARTMANN TRUNK COMPANY, Racine, Wis.
Filed April 16, 1932. Serial No. 326,183. PUBLISHED JUNE 7, 1932. Class 3.

296,887. ENAMELS, STAINS, AND VARNISHES. VALENTINE & COMPANY, New York, N. Y.
Filed April 14, 1932. Serial No. 326,243. PUBLISHED JUNE 7, 1932. Class 16.

296,888. SOAP AND CLEANING AND SCOURING COMPOUND. S. STRUNZ & SON, INC., Pittsburgh, Pa.
Filed April 19, 1932. Serial No. 326,272. PUBLISHED JUNE 7, 1932. Class 4.

296,889. FRENCH PASTRIES AND ICE CREAM. JAMES D. COULES, Boston, Mass.
Filed April 20, 1932. Serial No. 326,282. PUBLISHED JUNE 7, 1932. Class 46.

296,890. FOOD FLAVORING EXTRACTS—NAMELY, AN EXTRACT COMPOSED OF BOURBON VANILLA EXTRACT, VANILLIN, COUMARIN, GLYCERIN, AND SUGAR SYRUP; EXTRACT OF LEMON, AND EXTRACT OF ORANGE. FURST-MCNESS COMPANY, Freeport, Ill.
Filed April 14, 1932. Serial No. 326,085. PUBLISHED JUNE 7, 1932. Class 46.

296,891. INFANT FOOD. INFANTAMILK CORPORATION, Rochester, N. Y.
Filed April 14, 1932. Serial No. 326,108. PUBLISHED JUNE 7 ,1932. Class 46.

296,892. CHAMOIS. HOYT & WORTHEN TANNING CORPORATION, Haverhill, Mass.
Filed April 14, 1932. Serial No. 326,107. PUBLISHED JUNE 7, 1932. Class 1.

296,893. SOAPS. MAGNUSON PRODUCTS CORPORATION, New York, N. Y.
Filed April 14, 1932. Serial No. 326,112. PUBLISHED JUNE 7, 1932. Class 4.

296,894. PROPHYLACTIC RUBBER ARTICLES. I. J. FRIEDLAND, doing business as Specialty Sales Company, Atlanta, Ga.
Filed April 15, 1932. Serial No. 326,140. PUBLISHED JUNE 7, 1932. Class 44.

296,895. PROPHYLACTIC RUBBER AND MEMBRANEOUS ARTICLES. JULIUS SCHMID, New York, N. Y.
Filed April 15, 1932. Serial No. 326,164. PUBLISHED JUNE 7, 1932. Class 44.

296,896. RAW OR PARTLY WORKED STONE. SOUTH WESTERN STONE CO. LTD., London, England.
Filed April 12, 1932. Serial No. 326,031. PUBLISHED JUNE 7, 1932. Class 1.

296,897. WHEAT FLOUR. GOLDTREE, LIEBES & CO., San Salvador, Santa Ana and Sonsonate, Salvador.
Filed April 8, 1932. Serial No. 325,908. PUBLISHED JUNE 7, 1932. Class 46.

296,898. MANICURE TWEEZERS, BLACKHEAD EXTRACTORS, ETC. SCHNEPEL BROS., INC., Newark, N. J.
Filed April 8, 1932. Serial No. 325,921. PUBLISHED JUNE 7, 1932. Class 44.

296,899. SHAVING CREAM AND THE LIKE. DOMESTIC TOILETRIES, INC., Cleveland, Ohio.
Filed April 9, 1932. Serial No. 325,942. PUBLISHED JUNE 7, 1932. Class 4.

296,900. TEETHING RINGS FOR INFANTS. E. FOX NOVELTY CO. INC., New York, N. Y.
Filed April 9, 1932. Serial No. 325,973. PUBLISHED JUNE 7, 1932. Class 44.

296,901. BOYS' KNICKERS, TROUSERS, BOYS' SUITS, LONG PANTS, AND ENGLISH SHORTS. ELLMAR COMPANY, INC., New York, N. Y.
Filed April 15, 1932. Serial No. 326,137. PUBLISHED JUNE 7, 1932. Class 39.

296,902. PSYLLIUM SEED, LACTOSE, AND DEXTRINS. WILLIAM LICHTENSTEIN, doing business as Ideal Trading Co. and Fudo Psyllium Corp., New York, N. Y.
Filed April 15, 1932. Serial No. 326,151. PUBLISHED JUNE 7, 1932. Class 6.

296,903. MEDICINAL PREPARATION FOR THE TREATMENT OF MALARIA AND OTHER INTERMITTENT FEVERS. ACISCLO MARXUACH, San Juan, Puerto Rico.
Filed April 15, 1932. Serial No. 326,153. PUBLISHED JUNE 7, 1932. Class 6.

296,904. STAPLING MACHINES FOR FASTENING PAPERS, FOR TACKING SHADES ON ROLLERS, FOR TACKING SCREENS ON FRAMES, AND FOR FASTENING TAGS ON BOXES. J. B. CROFOOT CO., Chicago, Ill.
Filed April 11, 1932. Serial No. 325,983. PUBLISHED JUNE 7, 1932. Class 23.

296,905. ELECTRIC BATTERIES. BURGESS BATTERY COMPANY, Madison, Wis.
Filed April 12, 1932. Serial No. 326,008. PUBLISHED JUNE 7, 1932. Class 21.

296,906. POPCORN CONFECTION. THE CRACKER JACK CO., Chicago, Ill.
Filed April 13, 1932. Serial No. 326,071. PUBLISHED JUNE 7, 1932. Class 46.

296,907. ORE SINTERING MACHINES, CONTINUOUS CALCINING AND DRYING MACHINES, GRATE-BARS AND PALLETS FOR SAID MACHINES, ETC. SINTERING MACHINERY CORPORATION, Netcong, N. J., and New York, N. Y.
Filed April 5, 1932. Serial No. 325,832. PUBLISHED JUNE 7, 1932. Class 23.

296,908. EXTERNAL MEDICINAL PREPARATIONS USED IN THE TREATMENT OF SPRAINS, RHEUMATISM, LUMBAGO, SCIATICA, NEURALGIA, SORE THROAT, AND OTHER MUSCULAR AND GLANDULAR INFLAMMATIONS. TOWNS & JAMES INC., Brooklyn, N. Y.
Filed April 8, 1932. Serial No. 325,926. PUBLISHED JUNE 7, 1932. Class 6.

296,909. AN ANTISEPTIC AND ASTRINGENT PREPARATION FOR GENERAL HOUSEHOLD USE AS A MOUTHWASH AND GARGLE, FOR TREATING BAD BREATH AND THROAT IRRITATIONS, FOR USE AFTER SHAVING, AND AS A RUB FOR THE SCALP. PEOPLES DRUG STORES, INC., Washington, D. C.
Filed April 9, 1932. Serial No. 325,958. PUBLISHED JUNE 14, 1932. Class 6.

296,910. ELECTRICAL FIRE ALARM SYSTEM APPARATUS AND PARTS THEREOF. THOMAS SMITH COMPANY, doing business as Protectome Sales Co., Worcester, Mass.
Filed March 28, 1932. Serial No. 325,602. PUBLISHED JUNE 7, 1932. Class 21.

CARNEGIE LIBRARY OF ATLANTA

296,911. UNDERWEAR FOR WOMEN AND CHILDREN. EMPIRE BLOOMER CO., New York, N. Y.
Filed April 2, 1932. Serial No. 325,748. PUBLISHED JUNE 7, 1932. Class 39.

296,912. DENTAL ALLOYS. THE S. S. WHITE DENTAL MANUFACTURING COMPANY, Philadelphia, Pa.
Filed April 2, 1932. Serial No. 325,770. PUBLISHED JUNE 14, 1932. Class 44.

296,913. ELECTRICAL INSULATING TAPE. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed March 19, 1932. Serial No. 325,804. PUBLISHED JUNE 7, 1932. Class 21.

296,914. EMULSIFYING AGENT IN THE NATURE OF A WAX WHICH IS PRINCIPALLY USED IN THE MANUFACTURE OF PHARMACEUTICAL AND COSMETIC PREPARATIONS. HAROLD H. FRIES, doing business as Fries Bros., New York, N. Y.
Filed March 25, 1932. Serial No. 325,465. PUBLISHED JUNE 14, 1932. Class 6.

296,915. STAPLING MACHINES, BINDING MACHINES USING METAL STAPLES, AND TACKING MACHINES USING METAL STAPLES. ACME STAPLE COMPANY, Camden, N. J.
Filed March 28, 1932. Serial No. 325,547. PUBLISHED JUNE 7, 1932. Class 23.

296,916. VAGINAL SUPPOSITORIES FOR WOMEN'S HYGIENE. THE HY'NE CO., Chicago, Ill.
Filed March 28, 1932. Serial No. 325,580. PUBLISHED JUNE 14, 1932. Class 6.

296,917. PAPER SHEETS USED AS ADVERTISING CIRCULARS. LOGAN A. HUNTON, doing business as The Hunton Company, New York, N. Y.
Filed January 31, 1931. Serial No. 310,604. PUBLISHED JUNE 7, 1932. Class 38.

296,918. PAPER SHEETS USED AS ADVERTISING CIRCULARS. LOGAN A. HUNTON, doing business as The Hunton Company, New York, N. Y.
Filed January 31, 1931. Serial No. 310,606. PUBLISHED JUNE 7, 1932. Class 38.

296,919. MEDICAL PREPARATION FOR THE STOMACH. JOHN JACKOVIC, doing business as Digest-O-Rem Company, Canonsburg, Pa.
Filed February 28, 1931. Serial No. 311,504. PUBLISHED JUNE 7, 1932. Class 6.

296,920. STOKERS. THE W. AND M. STOKER COMPANY, Denver, Colo.
Filed March 5, 1931. Serial No. 311,808. PUBLISHED JUNE 7, 1932. Class 34.

296,921. METALLIC MACHINERY PACKINGS. HOUND PACKING COMPANY, Chicago, Ill.
Filed March 11, 1931. Serial No. 312,008. PUBLISHED JUNE 7, 1932. Class 35.

296,922. COAL BURNERS AND STOKERS. DOMESTIC STOKER COMPANY, New York, N. Y.
Filed April 14, 1931. Serial No. 313,333. PUBLISHED JUNE 7, 1932. Class 34.

296,923. COPPER BULLION, LEAD BULLION, ZINC CONCENTRATES, ETC. CERRO DE PASCO COPPER CORPORATION, New York, N. Y.
Filed April 16, 1931. Serial No. 313,420. PUBLISHED MAY 24, 1932. Class 14.

296,924. PIG'S FEET (SALT AND SOUSED), TRIPE (FRESH, PICKLED, AND SOUSED), LAMB'S TONGUES (SALT AND SPICED AND PICKLED), AND LUNCH TONGUES (CORNED OR "CURED", COOKED, AND PUT UP IN KEGS). BOSTON FRESH TRIPE CO., Brighton, Boston, Mass.
Filed May 14, 1931. Serial No. 314,551. PUBLISHED JUNE 7, 1932. Class 46.

296,925. ALUMINUM ALLOY AND ALUMINUM SOLDER, USED FOR JOINING AND FILLING ALUMINUM. LE ROY KAUFFMAN, San Francisco, Calif.
Filed June 24, 1931. Serial No. 316,205. PUBLISHED AUGUST 4, 1931. Class 14.

296,926. CANDY. THE BONITA COMPANY, Fond Du Lac, Wis.
Filed September 19, 1930. Serial No. 305,846. PUBLISHED DECEMBER 16, 1930. Class 46.

296,927. MILK BISCUITS. HERSHEY BAKING COMPANY, York, Pa.
Filed November 26, 1930. Serial No. 308,334. PUBLISHED APRIL 28, 1931. Class 46.

296,928. ELECTRICAL WARNING SIGNALS OF THE ACOUSTICAL TYPE. E. A. LABORATORIES, INC., Brooklyn, N. Y.
Filed February 11, 1930. Serial No. 295,890. PUBLISHED JUNE 7, 1932. Class 21.

296,929. HIGH SPEED STEEL. THE MIDVALE COMPANY, Nicetown, Philadelphia, Pa.
Filed March 14, 1930. Serial No. 297,315. PUBLISHED MAY 24, 1932. Class 14.

296,930. WOODEN SHINGLES. CHARLES E. PUTMAN, Seattle, Wash.
Filed April 10, 1930. Serial No. 298,660. PUBLISHED JUNE 7, 1932. Class 12.

296,931. ILLUMINATING OILS, MOTOR FUEL OILS, LUBRICATING OILS, LUBRICATING GREASES, AND FUEL OILS. THE PURE OIL COMPANY, Chicago, Ill.
Filed April 18, 1930. Serial No. 299,083. PUBLISHED JUNE 7, 1932. Class 15.

296,932. NAIL POLISH. PAPIER POUDRÉ, LIMITED, London, England.
Filed March 14, 1932. Serial No. 325,110. PUBLISHED JUNE 14, 1932. Class 6.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

296,933. (CLASS 9. EXPLOSIVES, FIREARMS, EQUIPMENTS, AND PROJECTILES.) PEERLESS-UNION EXPLOSIVES CORPORATION, Philadelphia, Pa. Filed Sept. 26, 1931. Serial No. 319,453.

Blakstix

For Explosive Powder.
Claims use since July 20, 1931.

296,934. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) LANDERS, FRARY & CLARK, New Britain, Conn. Filed July 20, 1931. Serial No. 317,124.

LANDERS

For Electrically Heated Goods Comprising Electric Automatic Toasters, Electric Sadirons, Electric Percolators, Electric Table Stoves, Electric Toasters, Electric Waffle Irons, and Radiators of the Reflective Glow Form.
Claims use since May, 1931.

296,935. (CLASS 37. PAPER AND STATIONERY.) THE ALBEMARLE PAPER MANUFACTURING COMPANY, Richmond, Va. Filed July 2, 1932. Serial No. 328,516.

Verigood

For Blotting Paper.
Claims use since October, 1924.

296,936. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE JUSTCHEW COMPANY, Pasadena, Calif. Filed June 6, 1932. Serial No. 327,778.

JUSTCHEW

For Laxative Chewing Gum.
Claims use since Mar. 9, 1927.

296,937. (CLASS 2. RECEPTACLES.) THE ADAMS BAG COMPANY, Chagrin Falls, Ohio. Filed May 10, 1932. Serial No. 326,928.

NEVER BURST
IMPROVED
MULTI-WALL
PLY

For Heavy Paper Shipping Sacks.
Claims use since Jan. 1, 1931.

296,938. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) GOODBAR MANUFACTURING CORPORATION, New York, N. Y. Filed Feb. 2, 1932. Serial No. 323,746.

GOODBAR

For Shoulder Straps and Stays Therefor.
Claims use since June, 1931.

296,939. (CLASS 39. CLOTHING.) GOLDRING-NEIMAN CORPORATION, New York, N. Y. Filed Oct. 6, 1931. Serial No. 319,775.

Townley

For Ladies' Coats, Suits, Dresses, Ladies' Golf and Sport Suits, Coats, Sweaters and Dresses.
Claims use since July 15, 1931.

296,940. (CLASS 39. CLOTHING.) WIMELBACHER & RICE, New York, N. Y. Filed Sept. 21, 1931. Serial No. 319,272.

HARNESS STITCH

For Leather and Fabric Gloves.
Claims use since March, 1931.

296,941. (CLASS 37. PAPER AND STATIONERY.) JACOB HERZ, doing business at Fit Rite Book Cover Company, New York, N. Y. Filed July 17, 1931. Serial No. 317,036.

FIT RITE

For Temporary Book Covers.
Claims use since July 1, 1931.

296,942. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LOVELL & COVEL CO., Cambridge, Mass. Filed June 15, 1931. Serial No. 315,851.

ART IN SWEETS

For Candy.
Claims use since Jan. 31, 1931.

296,943. (CLASS 5. ADHESIVES.) HOWE & FRENCH, INC., Boston, Mass. Filed Nov. 14, 1930. Serial No. 307,893.

EVER-FAST
Liquid Cement

For Adhesive Liquid Cement.
Claims use since Aug. 18, 1930.

TRADE-MARK REGISTRATIONS RENEWED

39,022. REMEDY FOR PULMONARY CONSUMPTION AND INFLAMATION OF THE LUNGS. Registered October 14, 1902. VALENTINER & SCHWARZ, Leipsic-Plagwitz, Germany. Renewed October 14, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

39,153. SUBSTITUTE FOR GUM COPAL AND AMBER. Registered October 28, 1902. DR. EUGEN SCHAAL, Feuerbach, near Stuttgart, Germany. Renewed October 28, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

39,367. PHARMACEUTICAL PRODUCTS FOR CERTAIN NAMED PURPOSES. Registered November 25, 1902. ACTIEN-GESELLSCHAFT FÜR ANILIN-FABRIKATION, Berlin, Germany. Renewed November 25, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

39,473. PREPARATION FOR TREATMENT OF PHOTOGRAPHIC PLATES. Registered December 16, 1902. ADOLF HESEKIEL, Berlin, Germany. Renewed December 16, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

39,523. COTOIN COMPOUND. Registered December 23, 1902. VEREINIGTE CHININFABRIKEN, ZIMMER & CO., GES. MIT BESCHRÄNKTER HAFTUNG, Frankfort-on-the-Main, Germany. Renewed December 23, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

39,577. DERIVATES OF VANILLIN AND PHENETIDIN. Registered December 30, 1902. VEREINIGTE CHININFABRIKEN, ZIMMER & CO., GES. MIT BESCHRÄNKTER HAFTUNG, Frankfort-on-the-Main, Germany. Renewed December 30, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

39,598. DIETETIC PREPARATIONS AND ADMIXTURES THEREOF WITH FOOD PRODUCTS AND BEVERAGES. Registered December 30, 1902. DEUTSCHE NÄHRMITTEL-WERKE, BERLIN, GES. BESCH. HAFTG., Berlin and Saegen, Germany. Renewed December 30, 1932, to The Chemical Foundation, Incorporated, of Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

86,099. HIGH-SPEED TOOL-STEEL. Registered April 9, 1912. SÖDERFORS BRUKS AKTIEBOLAG. Renewed April 9, 1932, to Stora Kopparbergs Bergslags Aktiebolag, Falun, Sweden, a Corporation of Sweden, assignee.

86,100. TOOL-STEEL. Registered April 9, 1912. SÖDERFORS BRUKS AKTIEBOLAG. Renewed April 9, 1932, to Stora Kopparbergs Bergslags Aktiebolag, Falun, Sweden, a Corporation of Sweden, assignee.

86,101. TOOL-STEEL. Registered April 9, 1912. SÖDERFORS BRUKS AKTIEBOLAG. Renewed April 9, 1932, to Stora Kopparbergs Bergslags Aktiebolag, Falun, Sweden, a Corporation of Sweden, assignee.

86,102. TOOL-STEEL AND ANVILS. Registered April 9, 1912. SÖDERFORS BRUKS AKTIEBOLAG. Renewed April 9, 1932, to Stora Kopparbergs Bergslags Aktiebolag, Falun, Sweden, a Corporation of Sweden, assignee.

86,103. TOOL-STEEL. Registered April 9, 1912. SÖDERFORS BRUKS AKTIEBOLAG. Renewed April 9, 1932, to Stora Kopparbergs Bergslags Aktiebolag, Falun, Sweden, a Corporation of Sweden, assignee.

86,104. ANVILS. Registered April 9, 1912. SÖDERFORS BRUKS AKTIEBOLAG. Renewed April 9, 1932, to Stora Kopparbergs Bergslags Aktiebolag, Falun, Sweden, a Corporation of Sweden, assignee.

86,521. HOT-WATER HEATERS AND GAS-BURNERS FOR HEATING PURPOSES. Registered May 14, 1912. EUREKA WATER HEATER COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed May 14, 1932.

86,980. FRICTION-TAPE. Registered June 18, 1912. THE M. W. DUNTON COMPANY. Renewed June 18, 1932, to The M. W. Dunton Company, Providence, R. I., a Corporation of Rhode Island, assignee by mesne assignments.

87,423. ORANGES. Registered July 16, 1912. CHARTER OAK CITRUS ASSOCIATION, Charter Oak, Calif, a Corporation of California. Renewed July 16, 1932.

87,424. ORANGES. Registered July 16, 1912. CHARTER OAK CITRUS ASSOCIATION, Charter Oak, Calif., a Corporation of California. Renewed July 16, 1932.

87,436. FRICTION-TAPE. Registered July 16, 1912. THE M. W. DUNTON COMPANY. Renewed July 16, 1932, to The M. W. Dunton Company, Providence, R. I., a Corporation of Rhode Island, assignee by mesne assignments.

87,587. PRINTING-INK. Registered July 30, 1912. THE AMERICAN PRINTING INK CO., Cincinnati, Ohio, a Corporation of Ohio. Renewed July 30, 1932.

87,746. CERTAIN TOILET COSMETICS. Registered August 6, 1912. HENRIETTE GARILLA, Paris, France. Renewed August 6, 1932, to Bourjois, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

88,043. WHEAT-FLOUR. Registered August 27, 1912. THE ANSTED & BURK CO., Springfield, Ohio, a Corporation of Ohio. Renewed August 27, 1932.

88,143. FLANNEL GOODS IN THE PIECE. Registered August 27, 1912. CLARENCE WHITMAN & CO. Renewed August 27, 1932, to Clarence Whitman & Sons, Inc., New York, N. Y., a Corporation of New York, assignee.

88,562. AN ANTIPYRETIC, ANTINEURALGIC, AND SEDATIVE. Registered October 1, 1912. FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, Hochst-on-the-Main, Germany. Renewed October 1, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,563. AN ANTIPYRETIC, ANTINEURALGIC, AND SEDATIVE. Registered October 1, 1912. FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, Hochst-on-the-Main, Germany. Renewed October 1, 1932, to The Chemical Foundation, Incorporated, of Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,564. AN ANTIPYRETIC, ANTINEURALGIC, AND SEDATIVE. Registered October 1, 1912. FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, Hochst-on-the-Main, Germany. Renewed October 1, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,894. A REMEDY FOR DISEASES OF THE SKIN. Registered October 29, 1912. KNOLL & CO., Ludwigshafen-on-the-Rhine, Germany. Renewed October 29, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

88,896. A REMEDY FOR DIABETES. Registered October 29, 1912. ERVIN LEDERER, Budapest, Austria-Hungary. Renewed October 29, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

89,087. WHITE LEAD, RED LEAD, ORANGE MINERAL, AND OXID OF ZINC. Registered November 12, 1912. BERGMANN & SIMONS, G. M. B. H., Mulheim-on-the-Rhine, Germany. Renewed November 12, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

89,100. ANTI-ARTHRITICUM FOR TREATING AND PREVENTING ARTHRITIS AND PREDISPOSITION TO LITHURIA. Registered November 12, 1912. FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, Hochst-on-the-Main, Germany. Renewed November 12, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

89,101. AN EFFICACIOUS TONIC FOR HEART AND UTERUS. Registered November 12, 1912. FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, Hochst-on-the-Main, Germany. Renewed November 12, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

89,119. A PREPARATION FOR THE TREATMENT OF WOUNDS. Registered November 12, 1912. KALLE & CO., Aktiengesellschaft, Biebrich-on-the-Rhine, Germany. Renewed November 12, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

89,121. A REMEDY FOR SLEEPLESSNESS. Registered November 12, 1912. KNOLL & CO., Ludwigshafen-on-the-Rhine, Germany. Renewed November 12, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

89,231. AN OINTMENT OR CREAM FOR THE COMPLEXION. Registered December 3, 1912. JAY V. DANIELS. Renewed December 3, 1932, to Dearborn Supply Company, Chicago, Ill., a Corporation of Illinois, assignee.

89,272. CERTAIN NAMED DRAFTSMEN'S TOOLS AND APPLIANCES. Registered December 3, 1912. KEUFFEL AND ESSER COMPANY, Hoboken, N. J., a Corporation of New Jersey. Renewed December 3, 1932.

89,329. CERTAIN NAMED LIGHTING APPLIANCES AND APPARATUS. Registered December 10, 1912. BEARDSLEE CHANDELIER MANUFACTURING COMPANY. Renewed December 10, 1932, to Beardslee Chandelier Manufacturing Company, Chicago, Ill., a Corporation of Delaware, assignee.

89,335. BAKING-POWDER. Registered December 10, 1912. ALBERT BOEHRINGER, Nieder-Ingelheim, Germany. Renewed December 10, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

89,438. PIANOS. Registered December 17, 1912. BRAMBACH PIANO COMPANY. Renewed December 17, 1932, to Kohler-Brambach Piano Company, Inc., New York, N. Y., a Corporation of New York, by change of name.

89,487. BISCUIT. Registered December 17, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed December 17, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

89,490. BISCUIT. Registered December 17, 1912. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed December 17, 1932, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

89,570. JUMPERS AND WORK-SHIRTS. Registered December 24, 1912. MILLER BROS., Galveston, Tex. Renewed December 24, 1932, to Miller Brothers, Houston, Tex., a Firm.

89,586. LARD. Registered December 24, 1912. T. M. SINCLAIR & COMPANY, LIMITED, Cedar Rapids, Iowa, a Corporation of Iowa. Renewed December 24, 1932.

89,587. WHEAT-FLOUR. Registered December 24, 1912. THE SOUTHWESTERN MILLING COMPANY, Jersey City, N. J., and Kansas City, Mo. Renewed December 24, 1932, to The Southwestern Milling Company, Inc., New York, N. Y., a Corporation of New York, assignee.

89,595. SOLVENTS FOR RESINS, OILS, NATURAL OR ARTIFICIAL PERFUMES. Registered December 31, 1912. ACTIEN-GESELLSCHAFT FÜR ANILIN-FABRIKATION, Berlin, Germany. Renewed Dec. 31, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

89,611. LEATHER-PRESERVATIVES, FINISHING AND TANNING AGENTS. Registered December 31, 1912. BADISCHE ANILIN & SODA-FABRIK, Ludwigshafen-on-the-Rhine, Germany. Renewed December 31, 1932, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

89,613. CERTAIN FOODS. Registered December 31, 1912. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y., a Corporation of New York. Renewed December 31, 1932.

89,630. CERTAIN MEASURING INSTRUMENTS AND INDICATORS. Registered December 31, 1912. HENRY DISSTON & SONS, INCORPORATED, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed December 31, 1932.

89,634. WRITING AND PRINTING PAPER AND PAPER FOR CERTAIN NAMED USES. Registered December 31, 1912. ALBERT M. EATON, Waltham, Mass. Renewed December 31, 1932, to A. M. Eaton Paper Company, Boston, Mass., a Corporation of Massachusetts, assignee.

89,637. WHEAT-FLOUR. Registered December 31, 1912. EMPIRE STATE FLOUR MILLS, Syracuse, N. Y. Renewed December 31, 1932, to The Southwestern Milling Company, Inc., New York, N. Y., a Corporation of New York, assignee.

89,786. LINIMENT. Registered January 7, 1913. WILBUR F. YOUNG. Renewed January 7, 1933, to W. F. Young Inc., Springfield, Mass., a Corporation of Massachusetts, assignee.

89,798. MACARONI. Registered January 14, 1913. THE ATLANTIC MACARONI CO. Renewed January 14, 1933, to The Atlantic Macaroni Co., Inc., Long Island City, N. Y., a Corporation of New York, assignee.

89,803. MACARONI. Registered January 14, 1913. THE ATLANTIC MACARONI CO. Renewed January 14, 1933, to The Atlantic Macaroni Co., Inc., Long Island City, N. Y., a Corporation of New York, assignee.

89,805. MACARONI. Registered January 14, 1913. THE ATLANTIC MACARONI CO. Renewed January 14, 1933, to The Atlantic Macaroni Co., Inc., Long Island City, N. Y., a Corporation of New York, assignee.

89,807. MACARONI. Registered January 14, 1913. THE ATLANTIC MACARONI CO. Renewed January 14, 1933, to The Atlantic Macaroni Co., Inc., Long Island City, N. Y., a Corporation of New York, assignee.

89,897. CANDIES AND CHOCOLATES. Registered January 14, 1913. WALLACE & CO., New York, and Brooklyn, N. Y. Renewed January 14, 1933, to Wallace & Co., Brooklyn, N. Y., a Corporation of New Jersey.

89,932. WRAPPING-PAPER. Registered January 21, 1913. MAGNOLIA PAPER CO., Houston, Tex., a Corporation of Texas. Renewed January 21, 1933.

LABELS

REGISTERED AUGUST 23, 1932

41,045.—*Title:* TWENTY GRAND CIGARETTES. For Cigarettes. THE AXTON-FISHER TOBACCO CO., INC., Louisville, Ky. Published July 1, 1932.

41,046.—*Title:* BEECH-NUT BEECHIES. For Chewing Gum. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published May 2, 1932.

41,047.—*Title:* BEECH-NUT BEECHIES. For Chewing Gum. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published May 2, 1932.

41,048.—*Title:* THE TEL-A-SCOR FOR CONTRACT BRIDGE. For Bridge Scoring Devices. JOHN W. BILLOWS, Portland, Oreg. Published January 1, 1932.

41,049.—*Title:* SILVER COW. For Evaporated Milk. THE BORDEN SALES COMPANY, INC., New York, N. Y. Published April 25, 1932.

41,050.—*Title:* WORLD'S FINEST WIDE-VUE CORRECTED LENS. For Corrected Lenses. CHAFFIN OPTICAL CO., INC., Boston, Mass. Published June 28, 1932.

41,051.—*Title:* E-LIXIR. For Germ Meal Containing the Kernels or Germ of the Grains Richest in Vitamin E Content. ROBERT COLLIER, New York, N. Y. Published May 10, 1932.

41,052.—*Title:* SONNIE BOY. For Prunes. B. CRIBARI & SONS, San Jose, Calif. Published June 2, 1932.

41,053.—*Title:* SOLENE. For Preparation for Preserving and Prolonging the Life of Shoe Soles. JOHN G. CULLINS, doing business as The Solene Co., Little Rock, Ark. Published Apr. 15, 1932.

41,054.—*Title:* DOLLY MADISON CAKES. For Cakes. DOLLY MADISON CAKES, LTD., Los Angeles, Calif. Published June 15, 1932.

41,055.—*Title:* WARMTH CERTIFICATE. For Textile Blankets. THE ESMOND MILLS, Esmond, Smithfield, R. I. Published June 10, 1932.

41,056.—*Title:* TASSEL CORN. For Popcorn and Peanuts. WALTER FRENCH, Chicago, Ill. Published June 25, 1932.

41,057.—*Title:* GABRIELEEN. For Permanent Wave Lotion. GABRIELEEN CO., INC., New York, N. Y. Published December 1, 1930.

41,058.—*Title:* GROCERS SPECIAL. For Bread. GENERAL BAKING COMPANY, New York, N. Y. Published June 20, 1932.

41,059.—*Title:* CUTE-ASEPTO. For Powder. HART DRUG CORPORATION, Miami, Fla. Published June 1, 1932.

41,060.—*Title:* O-CEDAR. For Wax Cream for Cleaning and Polishing Furniture and Woodwork. O-CEDAR CORP'N., Chicago, Ill. Published May 27, 1932.

41,061.—*Title:* FEU-FOLLET. For Soaps. PARFUMERIE ROGER ET GALLET, SOCIETE ANONYME, Paris, France. Published August 7, 1931.

41,062.—*Title:* SUPER MOTOR OIL GUARANTEED 100% PURE PENNSYLVANIA. For Motor Oil. RADBILL OIL COMPANY, INC., Philadelphia, Pa. Published March 1, 1932.

41,063.—*Title:* NEON. For Preparation for Treating the Eyes. MORRIS REGELSON, doing business as The Physicians & Surgeons Laboratories, New York, N. Y. Published October 5, 1931.

41,064.—*Title:* NOPAINE. For Preparation for External Application for the Relief of Pain. MORRIS REGELSON, doing business as The Physicians & Surgeons Laboratories, New York, N. Y. Published October 5, 1931.

41,065.—*Title:* ETHEREAL LAVA. For Preparation for Skin Eruptions, Pimples, Cold Sores, Poison Ivy, Itchings. MORRIS REGELSON, doing business as The Physicians & Surgeons Laboratories, New York, N. Y. Published October 5, 1931.

41,066.—*Title:* PENETREX. For Preparation for the Relief of Pain and Swelling of the Joints. MORRIS REGELSON, doing business as The Physicians & Surgeons Laboratories, New York, N. Y. Published October 5, 1931.

41,067.—*Title:* NULUSTRE FURNITURE POLISHING CLOTH. For Chemical Treated Cloth for Polishing Furniture and Automobiles. IRVING SHEF, doing business as Shef Manufacturing Company, Union City, N. J. Published May 26, 1932.

41,068.—*Title:* NULUSTRE METAL POLISHING CLOTH. For Chemical Treated Cloth for Polishing all Metals. IRVING SHEF, doing business as Shef Manufacturing Company, Union City, N. J. Published May 21, 1932.

41,069.—*Title:* SMITH'S LIMBURGER TYPE CHEESE. For Cheese. G. SMITH & SONS, INC., Seelyville, Pa. Published June 29, 1932.

41,070.—*Title:* THOROBREAD. For Canned Cat Food. THE THOROBREAD COMPANY, Cincinnati, Ohio. Published June 25, 1932.

41,071.—*Title:* CINCH. For Soft Soap. LAWRENCE J. WAGNER, Rochester, N. Y. Published June 23, 1932.

41,072.—*Title:* PARAMOUNT SLICED. For Bread. WEBER BAKING COMPANY, Irvington, N. J. Published January 13, 1930.

PRINTS

REGISTERED AUGUST 23, 1932

13,836.—*Title:* HILLS BROS COFFEE NEVER VARIES IN FLAVOR . . . THAT'S WHY YOU'LL NEVER SWITCH. For Coffee. HILLS BROS., San Francisco, Calif. Published May 29, 1932.

13,837.—*Title:* HILLS BROS MADE COFFEE-ROASTING AN EXACT SCIENCE WHEN THEY INVENTED CONTROLLED ROASTING. For Coffee. HILLS BROS., San Francisco, Calif. Published July 28, 1932.

13,838.—*Title:* YOU'LL NEVER KNOW WHAT A WEALTH OF FLAVOR COFFEE HAS, UNTIL YOU TASTE HILLS BROS. For Coffee. HILLS BROS., San Francisco, Calif. Published May 1, 1932.

13,839.—*Title:* TAKE A DEEP BREATH OF THAT RICH AROMA FLOATING UP FROM A CUP OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published March 20, 1932.

13,840.—*Title:* A CUPFUL OF HILLS BROS COFFEE PROVES THAT CONTROLLED ROASTING MAKES A FINER FLAVOR. For Coffee. HILLS BROS., San Francisco, Calif. Published March 6, 1932.

13,841.—*Title:* HILLS BROS CHANGED COFFEE-ROASTING FROM A GUESSING-GAME TO A SCIENCE COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published February 21, 1932.

13,842.—*Title:* YOU'LL NEVER GET ANY SAD SURPRISES IN HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published February 7, 1932.

13,843.—*Title:* HILLS BROS' PATENTED PROCESS PUTS THE FINISHING TOUCHES ON THE JOB THAT NATURE BEGINS. For Coffee. HILLS BROS., San Francisco, Calif. Published January 24, 1932.

13,844.—*Title:* YOU CAN BANK ON THE SAME EXQUISITE FLAVOR IN EVERY POUND OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published January 10, 1932.

13,845.—*Title:* CONTROLLED ROASTING PUTS EXCLUSIVE GOODNESS INTO EVERY CUP OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published June 12, 1932.

13,846.—*Title:* CONTROLLED ROASTING PUTS EXCLUSIVE GOODNESS INTO EVERY CUP OF COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published June 19, 1932.

13,847.—*Title:* HILLS BROS COFFEE NEVER VARIES IN FLAVOR . . . THAT'S WHY YOU'LL NEVER SWITCH. For Coffee. HILLS BROS., San Francisco, Calif. Published May 29, 1932.

13,848.—*Title:* HERE'S WHY HILLS BROS BANISHED 'BATCH-AND-BULK' METHODS OF ROASTING COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published April 17, 1932.

13,849.—*Title:* TAKE A DEEP BREATH OF THE RICH AROMA FLOATING UP FROM A CUP OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published March 20, 1932.

13,850.—*Title:* HILLS BROS MADE COFFEE-ROASTING AN EXACT SCIENCE WHEN THEY INVENTED CONTROLLED ROASTING. For Coffee. HILLS BROS., San Francisco, Calif. Published March 10, 1932.

13,851.—*Title:* YOU CAN BANK ON THE SAME EXQUISITE FLAVOR IN EVERY POUND OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published January 10, 1932.

13,852.—*Title:* YOU'LL HAVE A NEW IDEA OF COFFEE VALUES, WHEN YOU TASTE HILLS BROS. For Coffee. HILLS BROS., San Francisco, Calif. Published April 1, 1932.

13,853.—*Title:* A CUPFUL OF HILLS BROS COFFEE PROVES THAT CONTROLLED ROASTING MAKES A FINER FLAVOR. For Coffee. HILLS BROS., San Francisco, Calif. Published March 4, 1932.

13,854.—*Title:* HILLS BROS CHANGED COFFEE-ROASTING FROM A GUESSING-GAME TO A SCIENCE. For Coffee. HILLS BROS., San Francisco, Calif. Published February 19, 1932.

13,855.—*Title:* HILLS BROS' PATENTED PROCESS PUTS THE FINISHING TOUCHES ON THE JOB THAT NATURE BEGINS. For Coffee. HILLS BROS., San Francisco, Calif. Published January 22, 1932.

13,856.—*Title:* TAKE A DEEP BREATH OF THAT RICH AROMA FLOATING UP FROM A CUP OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published March 18, 1932.

13,857.—*Title:* YOU CAN BANK ON THE SAME EXQUISITE FLAVOR IN EVERY POUND OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published January 8, 1932.

13,858.—*Title:* YOU'LL NEVER KNOW WHAT A WEALTH OF FLAVOR COFFEE HAS UNTIL YOU TASTE HILLS BROS. For Coffee. HILLS BROS., San Francisco, Calif. Published May 13, 1932.

13,859.—*Title:* HILLS BROS MADE COFFEE-ROASTING AN EXACT SCIENCE WHEN THEY INVENTED CONTROLLED ROASTING. For Coffee. HILLS BROS., San Francisco, Calif. Published May 20, 1932.

13,860.—*Title:* HILLS BROS COFFEE NEVER VARIES IN FLAVOR . . . THAT'S WHY YOU'LL NEVER SWITCH. For Coffee. HILLS BROS., San Francisco, Calif. Published June 10, 1932.

13,861.—*Title:* CONTROLLED ROASTING PUTS EXCLUSIVE GOODNESS INTO EVERY CUP OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published June 24, 1932.

13,862.—*Title:* A CUPFUL OF HILLS BROS COFFEE PROVES THAT CONTROLLED ROASTING MAKES A FINER FLAVOR. For Coffee. HILLS BROS., San Francisco, Calif. Published March 6, 1932.

13,863.—*Title:* HILLS BROS CHANGED COFFEE-ROASTING FROM A GUESSING GAME TO A SCIENCE. For Coffee. HILLS BROS., San Francisco, Calif. Published February 21, 1932.

13,864.—*Title:* YOU'LL NEVER KNOW WHAT A WEALTH OF FLAVOR COFFEE HAS, UNTIL YOU TASTE HILLS BROS. For Coffee. HILLS BROS., San Francisco, Calif. Published February 14, 1932.

13,865.—*Title:* YOU'LL NEVER GET ANY SAD SURPRISES IN HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published February 7, 1932.

13,866.—*Title:* HILLS BROS' PATENTED PROCESS PUTS THE FINISHING TOUCHES ON THE JOB THAT NATURE BEGINS. For Coffee. HILLS BROS., San Francisco, Calif. Published January 24, 1932.

13,867.—*Title:* YOU'LL HAVE A NEW IDEA OF COFFEE VALUES, WHEN YOU TASTE HILLS BROS. For Coffee. HILLS BROS., San Francisco, Calif. Published January 17, 1932.

13,868.—*Title:* HERE'S WHY HILLS BROS BANISHED 'BATCH-AND-BULK' METHODS OF ROASTING COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published April 15, 1932.

13,869.—*Title:* HILLS BROS MADE COFFEE-ROASTING AN EXACT SCIENCE WHEN THEY INVENTED CONTROLLED ROASTING. For Coffee. HILLS BROS., San Francisco, Calif. Published May 13, 1932.

13,870.—*Title:* HERE'S WHY HILLS BROS BANISHED 'BATCH-AND-BULK' METHODS OF ROASTING COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published April 15, 1932.

13,871.—*Title:* YOU'LL HAVE A NEW IDEA OF COFFEE VALUES, WHEN YOU TASTE HILLS BROS. For Coffee. HILLS BROS., San Francisco, Calif. Published April 1, 1932.

13,872.—*Title:* YOU CAN BANK ON THE SAME EXQUISITE FLAVOR IN EVERY POUND OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published January 8, 1932.

13,873.—*Title:* HILLS BROS' PATENTED PROCESS PUTS THE FINISHING TOUCHES ON THE JOB THAT NATURE BEGINS. For Coffee. HILLS BROS., San Francisco, Calif. Published January 22, 1932.

13,874.—*Title:* YOU'LL NEVER GET ANY SAD SURPRISES IN HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published February 5, 1932.

13,875.—*Title:* TAKE A DEEP BREATH OF THAT RICH AROMA FLOATING UP FROM A CUP OF HILLS BROS COFFEE. For Coffee. HILL BROS., San Francisco, Calif. Published March 18, 1932.

13,876.—*Title:* HILLS BROS CHANGED COFFEEROASTING FROM A GUESSING-GAME TO A SCIENCE. For Coffee. HILLS BROS., San Francisco, Calif. Published February 19, 1932.

13,877.—*Title:* YOU'LL HAVE A NEW IDEA OF COFFEE VALUES, WHEN YOU TASTE HILLS BROS. For Coffee. HILLS BROS., San Francisco, Calif. Published April 3, 1932.

13,878.—*Title:* HERE'S WHY HILLS BROS BANISHED "BATCH-AND-BULK" METHODS OF ROASTING COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published April 17, 1932.

13,879.—*Title:* CONTROLLED ROASTING PUTS EXCLUSIVE GOODNESS INTO EVERY CUP OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published June 10, 1932.

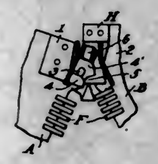
13,880.—*Title:* HILLS BROS COFFEE NEVER VARIES IN FLAVOR . . . THAT'S WHY YOU'LL NEVER SWITCH. For Coffee. HILLS BROS., San Francisco, Calif. Published May 27, 1932.

13,881.—*Title:* YOU'LL NEVER KNOW WHAT A WEALTH OF FLAVOR COFFEE HAS, UNTIL YOU TASTE HILLS BROS. For Coffee. HILLS BROS., San Francisco, Calif. Published April 29, 1932.

REISSUES

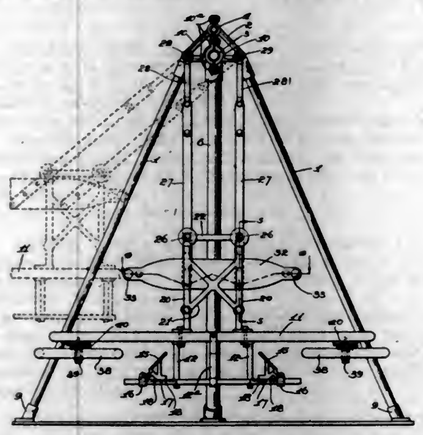
AUGUST 23, 1932

18,571. CLOSURE FOR GARMENTS AND OTHER PURPOSES. WILLIAM C. AVERDON, New York, N. Y., assignor to Didrick Dyresen, Somerville, Mass. Original No. 1,520,687, dated Dec. 30, 1924, Serial No. 626,446, filed Mar. 20, 1923. Application for reissue filed June 10, 1931. Serial No. 543,463. 3 Claims. (Cl. 24—205.)



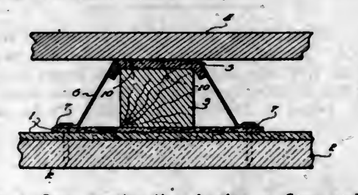
2. An end closure for two strips having interlocking fasteners on adjacent edges adapted to be engaged and disengaged by movement of a slider over said fasteners, said end closure comprising an end entering member secured to one strip adjacent to the end of one row of fasteners and an end entered member on the other strip, said end members having interengaging means for fastening them together and thereby to bring the fasteners of one strip into proper position for interlocking engagement with the fasteners on the other strip, and an immovable lateral projection extending from one of the said end members and adapted to aid in positioning the interlocking fasteners on one strip with those on the other strip before they can be properly interlocked.

18,572. AMUSEMENT SWING. CONRAD DAHL, Chicago, Ill., assignor of one-half to Myron A. Pardieck and one-half to Selected Products Corporation, a Corporation of Wisconsin. Original No. 1,680,970, dated Aug. 14, 1928, Serial No. 179,791, filed Mar. 31, 1927. Application for reissue filed Nov. 21, 1929. Serial No. 408,909. 12 Claims. (Cl. 155—63.)



1. In a pleasure swing, the combination of a supporting frame, pivoted hangers depending therefrom in parallel relation, a swing carriage including a seat and a portion extending rigidly upward therefrom having pivotal connection with the hangers, said hangers extending below such pivotal connections, and a horizontally movable operating member connecting the downwardly extended portions of the hangers.

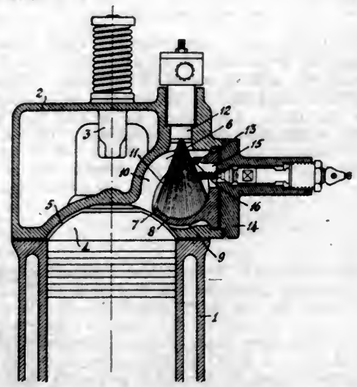
18,573. SOUND DEADENING DEVICE. JACQUES JEAN KOCHER, Chicago, Ill. Original No. 1,745,171, dated Jan. 28, 1930, Serial No. 318,789, filed Nov. 12, 1928. Application for reissue filed Oct. 3, 1930. Serial No. 486,258. 5 Claims. (Cl. 20—6.)



3. In a floor construction having a floor and strip means to support said floor, and a sub-floor to support said strip means, a sound-proofing cushion interposed between said strip means and said floor, said cushion having transverse depressed portions in the upper side thereof, and fastening straps each having ends secured to the sub-floor and an intermediate part spanning a cushioned strip and lying in a depressed portion.

18,574. [WITHDRAWN.]

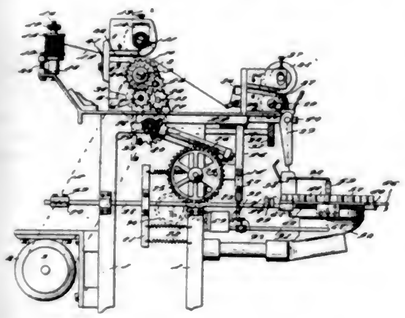
18,575. INTERNAL COMBUSTION ENGINE AND METHOD OF OPERATING THE SAME. FRIEDRICH OBERHAENSLI, Bregenz-Lochau, Austria, assignor to "Omo" Aktiengesellschaft, Zurich, Switzerland, a Corporation of Switzerland. Original No. 1,758,460, dated May 13, 1930, Serial No. 318,912, filed Nov. 12, 1928 and in Germany Dec. 1, 1927. Application for reissue filed Feb. 20, 1932. Serial No. 594,344. 19 Claims. (Cl. 223—32.)



1. A heavy oil motor comprising a cylinder, a piston slidable therein, an air inlet valve, a hollow member associated with said cylinder and defining a compression space into which a charge of air is adapted to be forced and compressed during the compression stroke of the piston, said space communicating with the interior of said cylinder through a constricted passageway, a bell-shaped body provided with an opening and positioned within said member at least partially in spaced relation thereto, whereby an intermediate space between said body and said member is formed, and a fuel nozzle arranged to spray a stream of fuel into the interior of said body through the opening

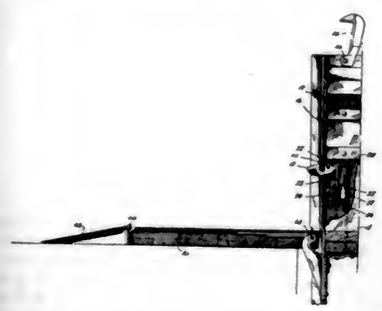
thereof, said body being adapted to become incandescent during the operation of the motor to vaporise and ignite said fuel, and being so disposed with respect to said passageway as to divide the current of air into two streams such that part of the current of air enters directly with said fuel into said body and part is deflected into the intermediate space about said body, whereby a pre-mixture of air and fuel comprising a mixture slow to ignite is first formed in said body, said pre-mixture becoming rapidly inflammable on mixing with the air streaming around said body through said intermediate space.

18,576. METHOD OF AND APPARATUS FOR MAKING COILS. REGINALD F. SEDGLEY, Philadelphia, Pa. Original No. 1,777,900, dated Oct. 7, 1930, Serial No. 86,480, filed Feb. 6, 1926. Application for reissue filed Feb. 1, 1932. Serial No. 590,280. 31 Claims. (Cl. 29—4.5.)



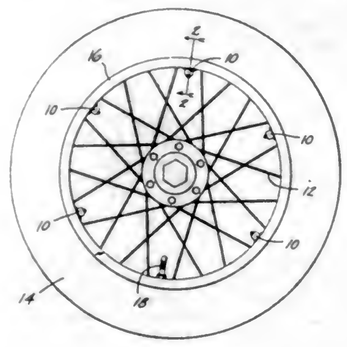
31. A machine for making a metal strand in the form of a helical coil, comprising means for feeding and tensioning a metal strand, and a curling edge over which said strand is fed while under tension to cause the metal strand when released from tension to assume the form of a helical coil.

18,577. DROP SIDE CONTAINER CAR. GRAHAM C. WOODRUFF, Bronxville, N. Y., assignor to The L. C. L. Corporation, a Corporation of Delaware. Original No. 1,847,202, dated Mar. 1, 1932, Serial No. 354,636, filed Apr. 12, 1929. Application for reissue filed Mar. 9, 1932. Serial No. 597,850. 14 Claims. (Cl. 105—366.)



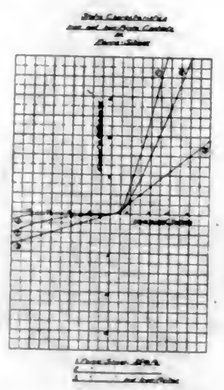
1. In combination, a freight container car having drop sides and transverse bulkheads intermediate its ends, hooks secured to the bulkheads and adapted to engage and support said sides in their elevated positions, and means holding said hook in its operative position.

18,578. AUTOMOBILE WHEEL. ALLAN B. COUTURE, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Original No. 1,667,344, dated Apr. 24, 1928, Serial No. 134,416, filed Sept. 9, 1926. Application for reissue filed Oct. 17, 1928. Serial No. 313,158. 9 Claims. (Cl. 301—5.)



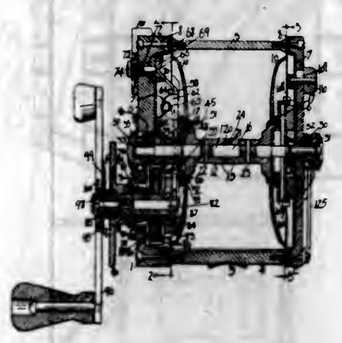
5. In an automobile wheel, a balancing weight applied thereto comprising a receptacle detachably secured to the wheel, a plurality of objects in the receptacle secured to the wheel, some of which vary in weight from others.

18,579. DEMODULATOR AND METHOD OF DEMODULATION. STUART BALLANTINE and LEWIS M. HULL, Mountain Lakes, N. J., assignors, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Original No. 1,698,668, dated Jan. 8, 1929, Serial No. 644,215, filed June 8, 1923. Application for reissue filed Oct. 1, 1930. Serial No. 485,785. 11 Claims. (Cl. 250—31.)



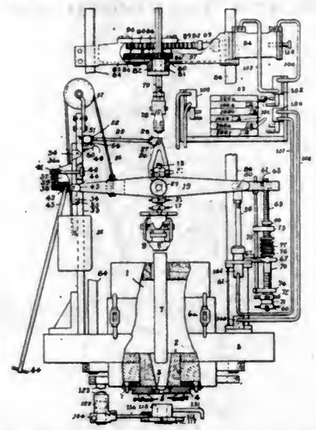
1. Method of operating a radio receiving system suitable for the reception of modulated carrier-wave signals and of the type including a demodulator characterized by the fact that over a substantial range of impressed voltages the relation between impressed voltage and output current is substantially linear, which comprises amplifying received signal voltages to values within said range of linear response, and impressing said amplified voltages upon said demodulator.

18,580. SALT WATER REEL. CHARLES T. PFLUEGER and WALTER L. ADAMS, Akron, Ohio, assignors to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Original No. 1,832,421, dated Nov. 17, 1931, Serial No. 209,493, filed July 30, 1927. Application for reissue filed Jan. 18, 1932. Serial No. 587,422. 12 Claims. (Cl. 242—84.6.)



9. In a fishing reel, a front plate comprising a composition body and a metal backing plate on the inner face thereof, a spool having a shaft projecting therefrom, a bushing located in a recess in the front plate, the shaft being received in the bushing, and a flange formed on the bushing and secured to the backing plate exteriorly of said recess.

18,581. APPARATUS FOR AND METHOD OF PRODUCING MOLD CHARGES. WILLIAM J. MILLER, Swissvale, Pa., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Original No. 1,738,479, dated Dec. 3, 1929, Serial No. 96,199, filed Mar. 20, 1926. Reissue No. 17,761, dated Aug. 5, 1930, Serial No. 449,995, filed May 5, 1930. This application for reissue filed Oct. 19, 1931. Serial No. 569,815. 68 Claims. (Cl. 49—55.)



65. The method of controlling the feed of glass of different temperatures flowing from a source of supply for discharge through an outlet under control of an adjustable discharge regulating device dipping into the glass and normally in substantially axial alignment with the outlet, which consists in causing said discharge regulating device to retard the rate of flow of the hotter glass with respect to that of the cooler glass.

PLANT PATENTS

GRANTED AUGUST 23, 1932

20. YELLOW ROSE. EARL H. MANN, Richmond, Ind., assignor to E. G. Hill Company, Richmond, Ind., a Corporation of Indiana. Filed Feb. 29, 1932. Serial No. 595,875. 1 Claim. (Cl. 47—1.)

The rose herein shown and described, characterized by the deep rich golden color of the major portion, gradually becoming lighter at its outer portion, its fragrance, long and stiff stems, and the pointed shape and long length of its buds.

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21. CERISE ROSE. EARL H. MANN, Richmond, Ind., assignor to E. G. Hill Company, Richmond, Ind., a Corporation of Indiana. Filed Feb. 29, 1932. Serial No. 595,876. 1 Claim. (Cl. 47—1.)

The rose herein shown and described, characterized by its deep cerise pink bloom, with a yellow base at its petals, its large and pointed buds, its sweet scented spicy fragrance, its long and strong stems, and its prolific production of blooms.

22. ROSE. CHARLES N. WHITE, Medina, N. Y. Filed Jan. 18, 1932. Serial No. 587,329. 1 Claim. (Cl. 47—1.)

The variety of fragrant, semi-double, hybrid tea rose herein shown and described, characterized particularly by its amber yellow color, its vigorous growing habits and relative freedom from thorns.

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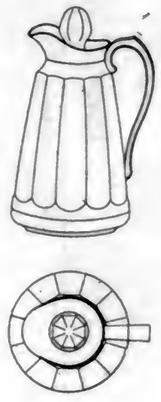
23. ROSE. ROBERT LEE CATRON, Richmond, Ind., assignor to The Joseph H. Hill Company, Richmond, Ind., a Corporation of Indiana. Filed Jan. 16, 1932. Serial No. 587,098. 1 Claim. (Cl. 47—1.)

A rose substantially as shown and described, characterized by its bloom being brilliant cerise in color, having a delicate and attractive fragrance of long duration, and in which the petals are unusually prolific and of very large size.

DESIGNS

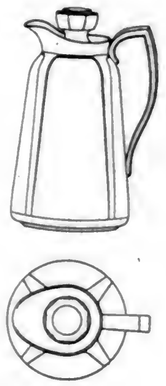
AUGUST 23, 1932

87,613. JUG. GEORGE E. BALL, Cranston, R. I., assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed June 14, 1932. Serial No. 44,076. Term of patent 14 years.



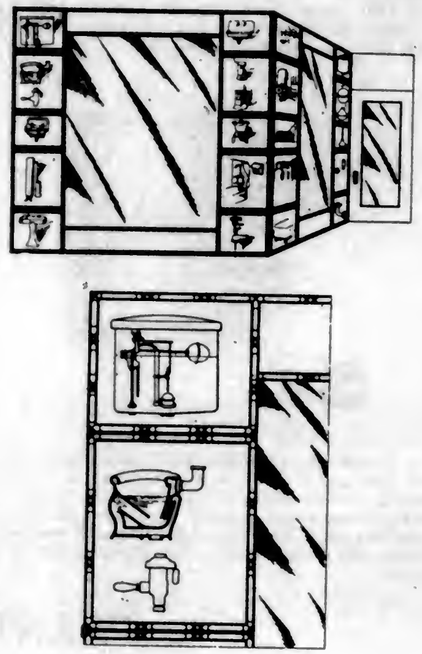
The ornamental design for a jug, as shown.

87,614. JUG. GEORGE E. BALL, Cranston, R. I., assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed June 14, 1932. Serial No. 44,077. Term of patent 14 years.



The ornamental design for a jug, as shown.

87,615. STORE FRONT. FRANK J. BENTZ, Miami, Fla. Filed June 10, 1931. Serial No. 40,160. Term of patent 3½ years.



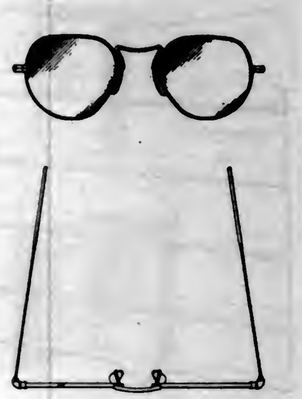
The ornamental design for a store front, as shown and described.

87,616. DRINKING FOUNTAIN. JOHN F. BLAICH, Miami, Fla., assignor to Fountain Advertising Service Company, Inc., Miami, Fla. Filed June 15, 1932. Serial No. 44,082. Term of patent 14 years.



The ornamental design for a drinking fountain as shown and described.

87,617. OPHTHALMIC MOUNTING. FRANK E. BOWERS, Drexel Hill, Pa., assignor to Wall & Oehs, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 16, 1931. Serial No. 41,745. Term of patent 14 years.



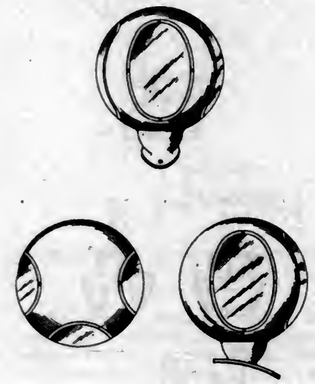
The ornamental design for an ophthalmic mounting, substantially as shown.

87,618. COMBINATION BOTTLE OPENER AND DISPENSING APPARATUS. HORACE M. BRIDGEWATER, Stratford, Conn., assignor to The Artistic Bronze Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 14, 1932. Serial No. 43,805. Term of patent 3½ years.



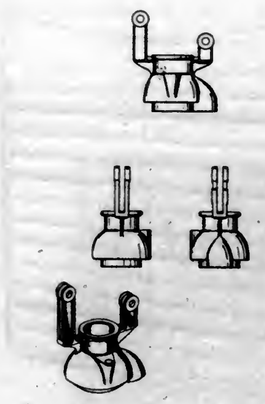
The ornamental design for a combination bottle opener and dispensing apparatus, substantially as shown.

87,619. SIGNAL LAMP FOR AUTOMOBILES. WILLIAM BROWN, New Haven, Conn. Filed Apr. 23, 1931. Serial No. 39,608. Term of patent 3½ years.



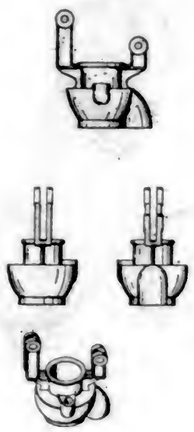
The ornamental design for a signal lamp for automobiles, as shown.

87,620. BALL COCK BODY. HERBERT D. CLEMMONS, Sturgis, Mich., assignor to Scovill Manufacturing Company, Sturgis, Mich. Filed Apr. 28, 1932. Serial No. 43,640. Term of patent 7 years.



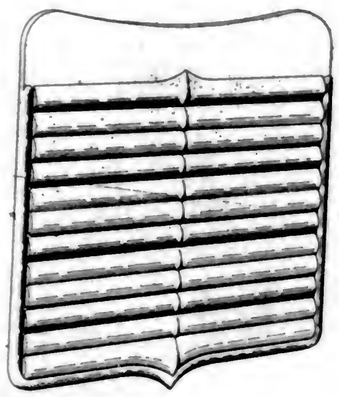
The ornamental design for a ball cock body, as shown.

87,621. BALL COCK BODY. HERBERT D. CLEMMONS, Sturgis, Mich., assignor to Scovill Manufacturing Company, Sturgis, Mich. Filed Apr. 28, 1932. Serial No. 43,641. Term of patent 14 years.



The ornamental design for a ball cock body, as shown.

87,622. FENDER APRON. JOSEPH H. COHEN, Bridgeport, Conn. Filed Mar. 7, 1932. Serial No. 43,107. Term of patent 14 years.



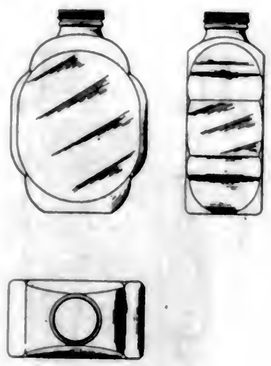
The ornamental design for a fender apron, as shown and described.

87,623. FENDER APRON. JOSEPH H. COHEN, Bridgeport, Conn. Filed Apr. 2, 1932. Serial No. 43,865. Term of patent 14 years.



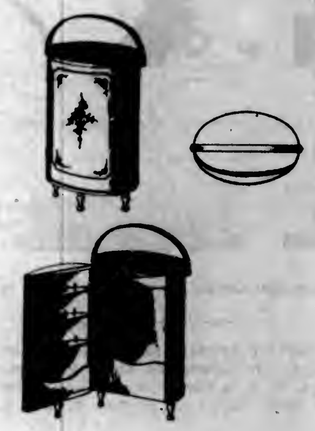
The ornamental design for a fender apron, as shown and described.

87,624. REFRIGERATOR BOTTLE. RONALD H. DALLAS, Long Beach, Calif. Filed June 15, 1932. Serial No. 44,087. Term of patent 3½ years.



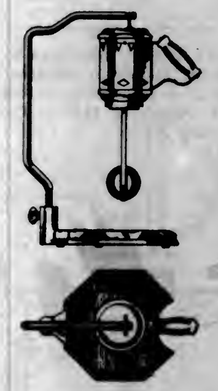
The ornamental design for a refrigerator bottle, as shown.

87,625. SEWING CABINET. MICHAEL A. DAVITT, Hempstead, N. Y. Filed May 19, 1932. Serial No. 43,842. Term of patent 3½ years.



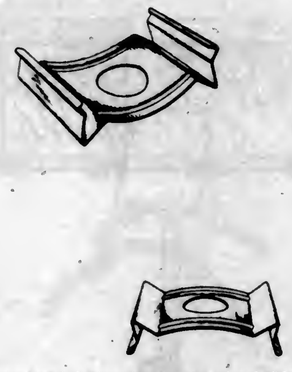
The ornamental design for a sewing cabinet, as shown.

87,626. FOOD BEATER. BENJAMIN H. DECKER and FREDERICK E. ANDERSEN, Chicago, Ill., assignors to Dawn Mfg. Corp., Chicago, Ill., a Corporation of Illinois. Filed Jan. 14, 1932. Serial No. 42,483. Term of patent 3½ years.



The ornamental design for a food beater substantially as shown.

87,627. ABRASIVE HOLDER. WILLIAM G. DUNN, Clarinda, Iowa. Filed Jan. 25, 1932. Serial No. 42,611. Term of patent 3½ years.



The ornamental design for an abrasive holder as shown.

87,628. SHOE SOLE. JAMES E. DYER, Los Angeles, Calif., assignor to Edward D. Caram, doing business as Bay-Caram Co., Los Angeles, Calif. Filed Feb. 17, 1932. Serial No. 42,912. Term of patent 3½ years.



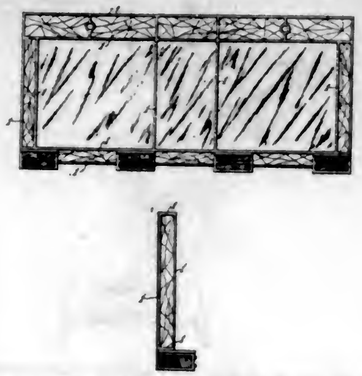
The ornamental design for a shoe sole, as shown.

87,629. STOVE. JOSEPH FICKINGER, Belleville, Ill., assignor to Oakland Foundry Company, Belleville, Ill., a Corporation of Illinois. Filed June 4, 1932. Serial No. 43,980. Term of patent 7 years.



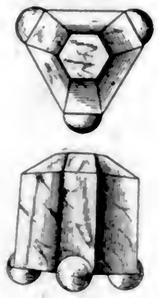
The ornamental design for a stove as shown.

87,630. BARBER'S MIRROR. ARSÈNE GODIN, Springfield, Mass. Filed Dec. 16, 1931. Serial No. 42,110. Term of patent 7 years.



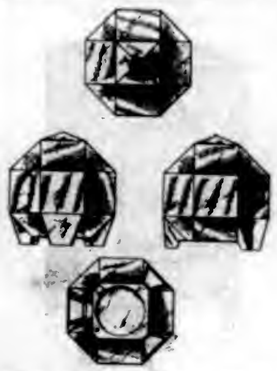
The ornamental design for a barber's mirror, as shown and described.

87,631. TABLE LIGHTER. HENRY J. GOLDBLATT, Chicago, Ill., assignor to Vidrio Products Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 26, 1931. Serial No. 42,215. Term of patent 3½ years.



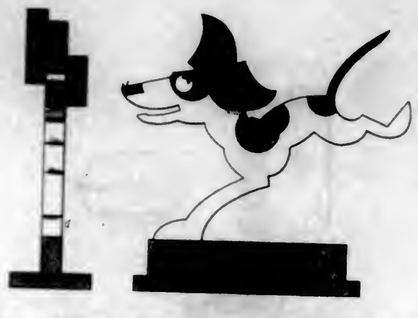
The ornamental design for a table lighter as shown.

87,632. TABLE LIGHTER. HENRY J. GOLDBLATT, Chicago, Ill., assignor to Vidrio Products Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 26, 1931. Serial No. 42,216. Term of patent 3½ years.



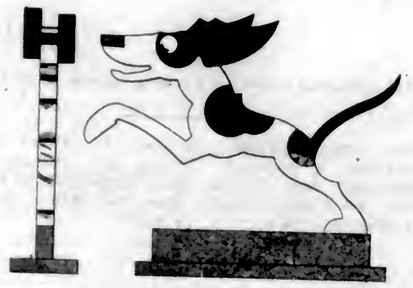
The ornamental design for a table lighter as shown.

87,633. DISPLAY STAND. SEAVERNS W. HILTON, Weld, Me., assignor to Interwoven Stocking Company, New Brunswick, N. J., a Corporation of New Jersey. Filed June 28, 1932. Serial No. 44,209. Term of patent 14 years.



The ornamental design for a display stand, as shown.

87,634. DISPLAY STAND. SEAVERNS W. HILTON, Weld, Me., assignor to Interwoven Stocking Company, New Brunswick, N. J., a Corporation of New Jersey. Filed June 28, 1932. Serial No. 44,210. Term of patent 14 years.



The ornamental design for a display stand, as shown.

87,635. DISPLAY STAND. SEAVERNS W. HILTON, Weld, Me., assignor to Interwoven Stocking Company, New Brunswick, N. J., a Corporation of New Jersey. Filed June 28, 1932. Serial No. 44,211. Term of patent 14 years.



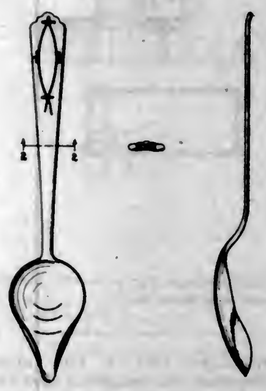
The ornamental design for a display stand, as shown.

87,636. APPAREL BUCKLE. FRED HIRSH, New York, N. Y., assignor to Adjusta Company, a Corporation of New York. Filed June 25, 1932. Serial No. 44,195. Term of patent 3½ years.



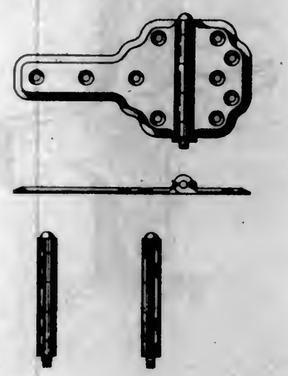
The ornamental design for an apparel buckle as shown.

87,637. SPOON OR SIMILAR ARTICLE. MARVEA JOHNSON, Forest City, Iowa. Filed June 9, 1932. Serial No. 44,027. Term of patent 7 years.



The ornamental design for a spoon or similar article substantially as shown.

87,638. HINGE. EDWARD H. LEHMAN, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed June 9, 1932. Serial No. 44,023. Term of patent 7 years.



The ornamental design for a hinge, as shown.

87,639. TABLE. MORRIS LEVINE, Woodcliff, N. J. Filed June 29, 1932. Serial No. 44,215. Term of patent 3½ years.



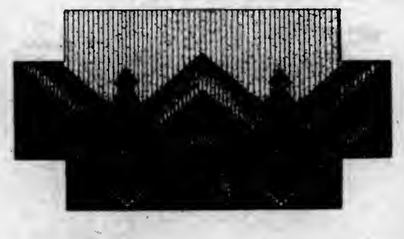
The ornamental design for a table as shown.

87,640. BAG OR SIMILAR CONTAINER. JOSE L. LOPEZ, Philadelphia, Pa. Filed May 18, 1932. Serial No. 43,840. Term of patent 3½ years.



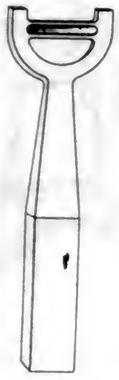
The ornamental design for a bag or similar container, as shown.

87,641. BOX COVERING. ANDRÉ MELIN, Paris, France. Filed July 9, 1932. Serial No. 44,288. Term of patent 14 years.



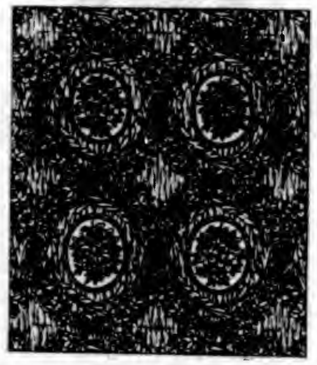
The ornamental design for a box covering, as shown.

87,642. PEDESTAL. WILLIAM H. MAHONEY, Hingham, Mass. Filed Mar. 28, 1932. Serial No. 43,306. Term of patent 3½ years.



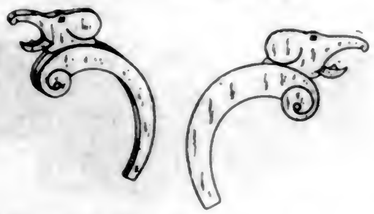
The ornamental design for a pedestal substantially as shown.

87,643. CARPET. JOHN B. MOFFAT, Bronxville, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed June 17, 1932. Serial No. 44,109. Term of patent 7 years.



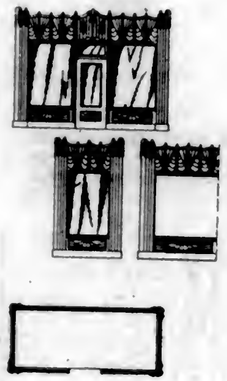
The ornamental design for a carpet substantially as shown and described.

87,644. BOTTLE CAP REMOVER. KURT RETTICH, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed May 31, 1932. Serial No. 43,947. Term of patent 3½ years.



The ornamental design for a bottle cap remover substantially as shown and described.

87,645. SERVICE BUILDING. GUY LYNN ROSEBROOK, Roselle Park, N. J., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 13, 1931. Serial No. 40,190. Term of patent 3½ years.



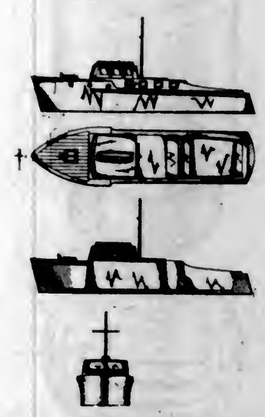
The ornamental design for a service building, substantially as shown and described.

87,646. SIGNALING DEVICE FOR AUTOMOBILES. GEORGE D. SANFORD, Clinton, N. C. Filed June 17, 1932. Serial No. 44,110. Term of patent 7 years.



The ornamental design for a signaling device for automobiles, as shown.

87,647. COMBINED ASH RECEIVER, CIGAR AND CIGARETTE HOLDER. RENE U. SCARPONI, Brooklyn, N. Y. Filed June 17, 1932. Serial No. 44,108. Term of patent 7 years.



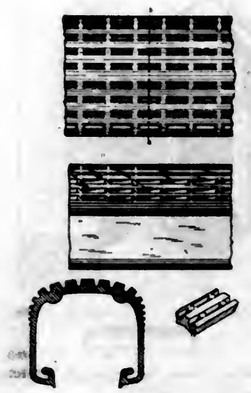
The ornamental design for a combined ash receiver, cigar and cigarette holder as shown.

87,648. LAWN SPRINKLER. ROY H. SHERBONDY and RAY E. SHERBONDY, Akron, Ohio. Filed Aug. 19, 1931. Serial No. 40,892. Term of patent 14 years.



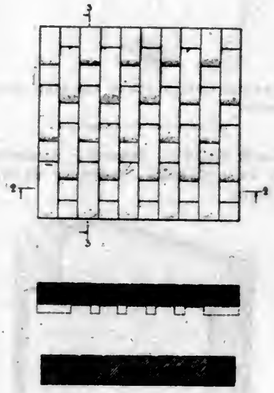
The ornamental design for a lawn sprinkler as shown.

87,649. TIRE. ALVIN H. SHOEMAKER, Seattle, Wash. Filed Dec. 29, 1931. Serial No. 42,276. Term of patent 7 years.



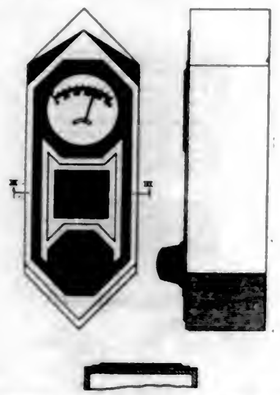
The ornamental design for a tire as shown.

87,650. TILE. LEON V. SOLON, New York, N. Y., assignor to United States Quarry Tile Company, Parkersburg, W. Va., a Corporation of Delaware. Filed June 20, 1932. Serial No. 44,134. Term of patent 7 years.



The ornamental design for a tile as shown.

87,651. CASING FOR TEMPERATURE INDICATORS. HARRY P. SPARKES and FERNALD S. STICKNEY, West Orange, N. J., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 9, 1932. Serial No. 44,036. Term of patent 7 years.



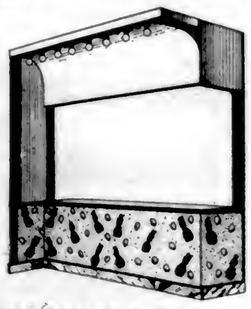
The ornamental design for a casing for temperature indicators substantially as shown.

87,652. BRACELET CHAIN. ALBERT E. R. SPEIDEL, Edgewood, R. I., assignor to Speidel Corporation, a Corporation of Rhode Island. Filed June 2, 1932. Serial No. 43,957. Term of patent 3½ years.



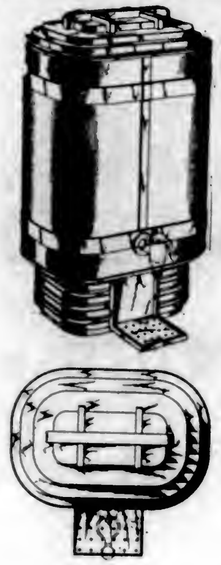
The ornamental design for a bracelet chain, substantially as shown.

87,653. STORE FRONT. SAMUEL J. SWITOW, Louisville, Ky. Filed June 25, 1932. Serial No. 44,191. Term of patent 7 years.



The ornamental design for a store front, as shown.

87,654. BEVERAGE DISPENSING DEVICE. JOHN VASSOS, New York, N. Y., assignor to The Coca-Cola Company, Atlanta, Ga., a Corporation of Delaware. Filed June 20, 1932. Serial No. 44,136. Term of patent 14 years.



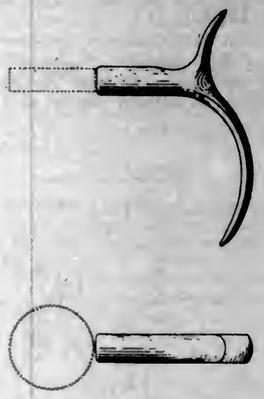
The ornamental design for a beverage dispensing device, as shown.

87,655. LOWER BOWL FOR COFFEE MAKERS. FRANK E. WOLCOTT, West Hartford, Conn., assignor to The Silex Company, a Corporation of Connecticut. Filed Dec. 11, 1931. Serial No. 42,038. Term of patent 14 years.



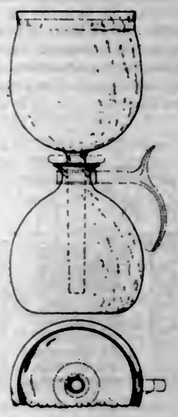
The ornamental design for a lower bowl for coffee makers, substantially as shown.

87,656. HANDLE FOR COFFEE MAKERS. FRANK E. WOLCOTT, West Hartford, Conn., assignor to The Silex Company, a Corporation of Connecticut. Filed Jan. 20, 1932. Serial No. 42,565. Term of patent 14 years.



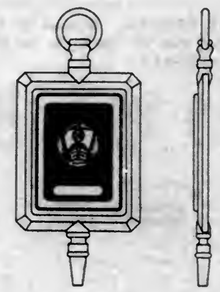
The ornamental design for a handle for coffee makers, substantially as shown.

87,657. COFFEE MAKER. FRANK E. WOLCOTT, West Hartford, Conn., assignor to The Silex Company, a Corporation of Connecticut. Filed Jan. 25, 1932. Serial No. 42,615. Term of patent 14 years.



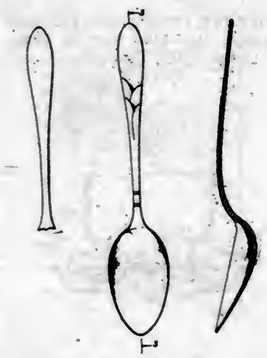
The ornamental design for a coffee maker, substantially as shown.

87,658. SCHOOL PENDANT OR SIMILAR ARTICLE. RAYMOND CARTER, New York, N. Y., assignor to Edward J. McNamara, Great Neck, N. Y. Filed June 15, 1932. Serial No. 44,089. Term of patent 14 years.



The ornamental design for a school pendant or similar article as shown.

87,659. SPOON OR SIMILAR ARTICLE. GROSVENOR N. ALLEN, MARY G. PARKER, and LLOYD E. RESSEGGER, Oneida, N. Y., assignors to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Feb. 10, 1932. Serial No. 42,809. Term of patent 14 years.

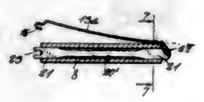


The ornamental design for a spoon or similar article as shown and described.

PATENTS

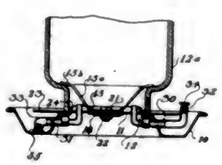
GRANTED AUGUST 23, 1932

1,872,644. HAIR CURLER. ELNORA E. BALDWIN, Denver, Colo. Filed Feb. 29, 1932. Serial No. 595,715. 6 Claims. (Cl. 132—41.)



1. A hair curler comprising a metal frame provided at one end with a notch, the frame having a smaller transverse area at the center than at the ends, a rubber tube, or the like, enclosing the frame, and a spring clamping device secured to one end of the frame and adapted to extend parallel with the outside of the tube, the free end of the clamping device having means for engaging the notch in the end of the frame to hold it in position.

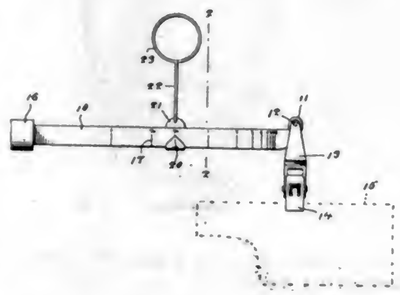
1,872,645. POULTRY FOUNT AND FEEDER. HARRY J. BARKER, Chicago, Ill. Filed Nov. 12, 1923. Serial No. 674,220. 5 Claims. (Cl. 119—77.)



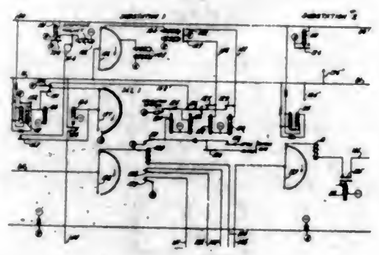
1. In combination, a basin, a reservoir, a connecting member between said basin and said reservoir, a reinforcing member in association with said basin, and means for fastening said connecting member and said reenforcing member to said basin, said basin having a portion interfitting with and complemental to said connecting member and said reinforcing member whereby to prevent rotative displacement of said connecting member and of said reinforcing member.

1,872,646. SCALE. HENRY J. BEHRENS, Lowville, N. Y. Filed June 24, 1929. Serial No. 373,269. 2 Claims. (Cl. 265—34.)

1. In a scale, a beam graduated upon one face, an article attaching member pivotally secured thereto at one end thereof, a weight at the opposite end of the beam, a fulcrum member formed of metal and slidable upon and frictionally engaging the beam, said fulcrum member comprising a flat body portion, an extension at one end thereof, said extension frictionally engaging the beam and terminating in an indicator disposed upon the graduated face of the beam and an offset ear extending from the opposite end of the fulcrum member, and a suspending member pivotally secured to the offset ear.



1,872,647. REMOTE CONTROL SYSTEM. ALFRED H. BELLIVEAU, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 8, 1927. Serial No. 224,788. 18 Claims. (Cl. 177—353.)



1. In a remote control system, a trunk line, a plurality of selecting switches on said trunk line, a plurality of switching devices associated with each of said selecting switches, means for operating said switches to select devices, means controlled through said switches over said trunk line for moving said devices from one position to another, a supervisory switch associated with each of said selecting switches, means responsive to a movement of one of said devices for starting said supervisory switch to transmit a signal over said trunk line to indicate the new position of the device, and means controlled over circuits jointly completed through the normal positions of said selecting switches and through the normal positions of said supervisory switches for preventing the simultaneous transmissions of two or more signals.

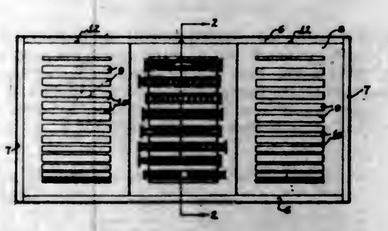
2. In a remote control system, a trunk line comprising a plurality of conductors, a selecting switch, a relay associated with said switch and connected to an impulsing one of said conductors, a plurality of polarized relays selectable by said selecting switch, means for transmitting impulses of direct current over said impulsing conductor to operate said relay, said selector switch operated responsive to the operation of said relay for selecting one of said polarized relays, means for operating said selected polarized relay over a circuit including a second one of said trunk conductors, means operated by said polarized relay for preparing an operating circuit, means controlled over said trunk line for completing said prepared operating circuit, and means including a relay operated by alternating current sent over said first and second trunk conductors for erasing said prepared operating circuit before its completion.

1,872,648. TOP LIFT FASTENING MEANS FOR SHOE HEELS. LEONARD BENNINGFIELD, Okmulgee, Okla. Filed Oct. 15, 1931. Serial No. 569,081. 6 Claims. (Cl. 36—42.)



5. In a shoe, a heel, a heel plate attached thereto having transverse slots, the walls of said slots being provided with shoulders, a top lift and an attaching plate secured to said top lift and having the end portions thereof provided with attaching leaves substantially V-shaped in cross-section and positioned entirely within said slots, the ends of said leaves being engaged with said shoulders.

1,872,649. JEWELRY TRAY. ERDMAN W. BERG, Fraser, Mich. Filed Oct. 19, 1931. Serial No. 569,562. 1 Claim. (Cl. 206—75.)



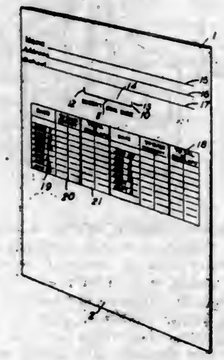
A display device for elongated articles having end cross pieces provided with portions projecting transversely beyond the side edges of the main portions of the articles, said device comprising a tray of considerable area having a bottom and parallel side and end rails, and a plurality of panels filling up the entire tray, any of the panels being removabe to display the articles carried thereon without moving the tray or disturbing the remaining panels, each of the panels further having longitudinally extending spaced ribs on their display faces which stop short of the edges of the panels, the end cross pieces of the confined articles being outside the grooves between the ribs and resting upon the unribbed faces of the panels, the longitudinal faces of each two ribs serving to retain the articles against lateral shifting and the ends of each two adjacent ribs being in alignment with the transversely projecting portions of the end cross pieces of the articles and serving to retain the articles against longitudinal shifting.

1,872,650. DEVICE FOR MEASURING LIQUIDS. WALDEMAR BERGER, Frankfort-on-the-Main-Hochst, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 21, 1929, Serial No. 408,869, and in Germany Nov. 27, 1928. 2 Claims. (Cl. 221—104.)



1. A device for measuring liquids comprising a slide having a plane surface, and supporting said slide a base having a plane surface on which the plane surface of said slide rests freely, a measuring chamber within the slide provided with an opening for filling and discharging said chamber, means for causing the slide to reciprocate on the plane surface of the supporting base, and an admission orifice and a discharge orifice in the base adapted respectively to register with the chamber during alternate reciprocations of the slide.

1,872,651. SAVINGS BANK ENVELOPE. EUGENE B. BERKOWITZ, Kansas City, Mo. Filed Oct. 6, 1930. Serial No. 486,660. 4 Claims. (Cl. 229—8.5.)



1. In an envelope of the character described a body portion having a U-shaped slit for forming a coin receiving opening and a flexible integrally formed lip having opposite side faces lying flush with opposite side faces of the body portion for closing the opening.

1,872,652. CABINET INCLOSURE. NORMAN A. BEST, Shreveport, La. Filed Jan. 19, 1931. Serial No. 509,502. 4 Claims. (Cl. 20—20.)



3. A slat for use in roll away partition construction including a face and a pair of edge flanges including a flat portion at right angles to the face and a curved portion bent towards the other edge flange and having an edge coinciding with an edge of the flat portion, there being a

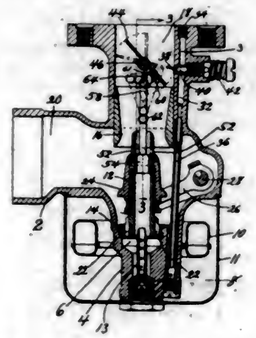
glass panel in said slat of a thickness substantially equal to the width of the edge flange flat portion, one edge of the glass being disposed between and held in place by the edge flange curved portion and the face.

1,872,653. FLOOR COVERING. PERCY R. BETTISON, Chicago, Ill., assignor to American Hair & Felt Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 18, 1928. Serial No. 247,626. 3 Claims. (Cl. 154—49.)



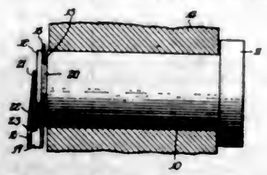
1. As a new article of manufacture, a floor covering comprising a fabric layer, a layer of feltable fibres punch-felted thereto, and a layer of linoleum mastic sheeted on said fabric layer and cured thereon.

1,872,654. CARBURETOR. GEORGE M. BICKNELL, St. Louis, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Oct. 22, 1927. Serial No. 227,979. 2 Claims. (Cl. 261—48.)



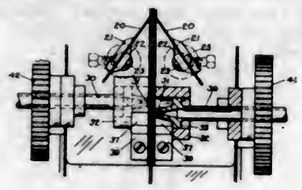
1. In a carburetor, means forming a mixing conduit, a source of fuel supply, a nozzle receiving fuel from said source, a primary mixing chamber receiving fuel and air from said nozzle, a venturi in said mixing conduit, said primary mixing chamber discharging at the throat of said venturi, an air admission port in the wall of said primary mixing chamber, a valve for said port, a throttle controlling the flow through said mixing conduit, a crank mounted on the inlet side of said throttle, a connecting rod for said crank and said valve, said crank being so mounted with respect to the movement of the throttle as to cross the dead center when the throttle is approximately half way open.

1,872,655. PIN LOCK. JEROME K. BLAKESLEE, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Sept. 26, 1928. Serial No. 308,372. 6 Claims. (Cl. 85—5.)



1. A lock for a headed pin or the like, including laterally spaced walls, portions integral with said walls and in planes other than the planes of said walls, one of said walls provided with an opening for receiving the head of the pin and adapted to be located on one side of said pin head, the other wall being located on the opposite side and having a resilient portion extending toward and contacting said pin for drawing said first-named wall into engagement with the head of said pin thereby tending to hold said lock against rotation, said last named portion having means for securing said lock to said pin.

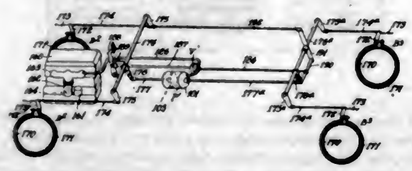
1,872,656. MEAT SAWING APPARATUS. EDGAR W. BLEAM, Philadelphia, Pa., assignor to Atlas Manufacturing Company, a Corporation of Delaware. Filed Sept. 19, 1931. Serial No. 563,872. 21 Claims. (Cl. 143—158.)



1. In meat sawing apparatus, and in combination with a saw blade and means for supporting and driving the same, means for directing a fluid blast against the blade to remove particles from the teeth of the blade, and means engaging the said last-named means for removing particles accumulating thereon.

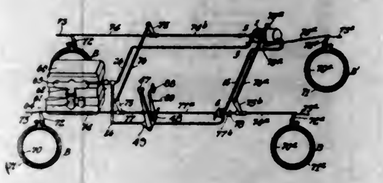
21. In meat sawing apparatus, and in combination with a saw blade and means for supporting and driving the same, revolving nozzles on either side of the blade for directing air blasts against the blade to remove particles adhering to the teeth thereof, scraper means engaging the exterior surfaces of said nozzles for removing particles accumulating thereon, a housing enclosing said nozzles for preventing the dispersion of the removed particles, an opening in said housing through which the removed particles pass, and a receptacle covering said opening having a porous wall permitting passage of the air blasts but retaining the removed particles.

1,872,657. BRAKE SYSTEM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Sept. 1, 1928. Serial No. 303,415. 8 Claims. (Cl. 188—152.)



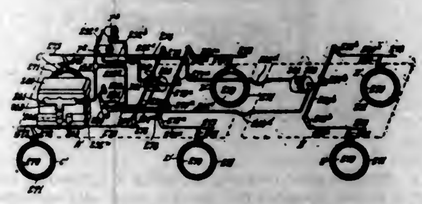
1. In a brake system for automotive vehicles, the combination with brake mechanism for front wheels and brake mechanism for rear wheels, two separate applying means for applying said brake mechanisms, and connections from one applying means to said brake mechanisms constructed to distribute the force exerted thereby substantially equally between the brake mechanism for the front and rear wheels, and connections from the other applying means to said brake mechanisms constructed to distribute the force exerted thereby unequally to the brake mechanisms for the front and rear wheels respectively, said applying means and connections including a single operator operated part for controlling both of said applying means.

1,872,658. BRAKE SYSTEM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Sept. 1, 1928. Serial No. 303,414. 10 Claims. (Cl. 188—152.)



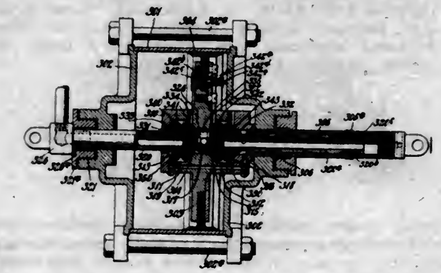
2. In a brake system for automotive vehicles provided with at least four wheels, the combination with brake mechanism for the front wheels, independently operable brake mechanism for the rear wheels, a mannally operable part, connections therefrom to the front wheel brake mechanism for operating the same by physical force, a second manually operable part, connections therefrom to the rear wheel brake mechanism for operating the same by physical force, a power actuator operating by the differential of fluid pressures operatively connected with the brake mechanisms connected with each of said manually operable parts for applying them simultaneously by power, and controlling valve mechanism for said power actuator including parts having a limited relative movement with respect to each other, located in the connections between one of said manually operable parts and the brake mechanism connected therewith to insure the operation of the valve mechanism before the application of physical force to said connected brake mechanisms.

1,872,659. BRAKE SYSTEM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed May 25, 1928. Serial No. 280,424. 13 Claims. (Cl. 188—3.)



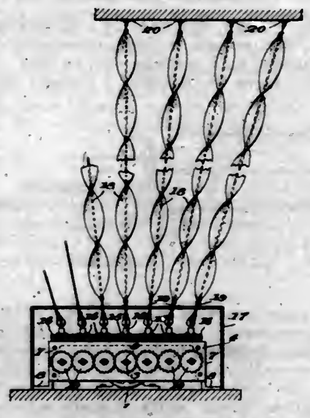
1. In a brake system for automotive vehicles provided with an internal combustion engine for propelling the same, having a throttle controlled suction passage, the combination with a plurality of power actuators, brake mechanisms operatively connected with each actuator, a single controlling valve mechanism for said actuators, connections for connecting said suction passage with said valve mechanism and with each of said actuators, and means for connecting said valve mechanism with a source of higher pressure fluid of substantially uniform pressure, of an independent pressure regulating valve in each portion of the aforementioned connections interconnecting the suction passage of the engine and each actuator, for regulating the degree of rarification available for the operation thereof, whereby said actuators may be substantially simultaneously operated to apply a maximum power as to each, determined by the pressure regulating valve therefor, to the brake mechanisms connected therewith.

1,872,660. POWER ACTUATOR. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, South Bend, Ind., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Original application filed Jan. 5, 1925, Serial No. 506. Renewed Feb. 15, 1932. Divided and this application filed Aug. 30, 1926. Serial No. 132,365. 20 Claims. (Cl. 121—41.)



1. In a power actuator, the combination of a cylinder closed at both ends, a double acting piston in said cylinder, reversing valve mechanism including a suction chamber, passages connecting said chamber with the cylinder on both sides of the piston, an air inlet, passages connecting said air inlet with the cylinder on both sides of the piston, and controlling valves for said passages, means for connecting said suction chamber with a source of suction, means acting on said valves when the piston is in retracted position for connecting the portion of the cylinder on one side only of the piston with said suction means, said actuator being provided with an auxiliary passage for connecting said portion of the cylinder with the portion of the cylinder on the opposite sides of the piston, when the piston is in retracted position.

1,872,661. DISPLAY DEVICE. WILLIAM A. BRAMHALL, Jr., Washington, D. C. Filed Mar. 3, 1932. Serial No. 596,646. 7 Claims. (Cl. 40—139.)

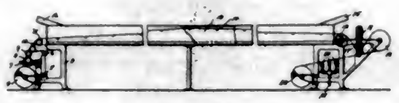


1. An advertising display device of the character described comprising a plurality of flexible streamers pivotally connected at one end to a stationary support, a reinforcing and driving element carried by each streamer and means operatively connected to the opposite ends of the reinforcing and driving elements of said streamers for rotating the same.

5. A streamer for a display device of the character described comprising an elongated strip of flexible material having a reinforcing and driving element extending longi-

tudinally thereof, said element having means for connecting the same at one end to a rotatable device and means for rotatably connecting the opposite end to a stationary support.

1,872,662. TRANSPARENT PAPER, METHOD OF MAKING THE SAME AND COMPOSITION FOR RENDERING THE SAME TRANSPARENT. KURT BRATRING, Berchem, Antwerp, Belgium, assignor to Julius E. Kiefer, Milwaukee, Wis. Filed June 9, 1928. Serial No. 284,124. 3 Claims. (Cl. 91—68.)



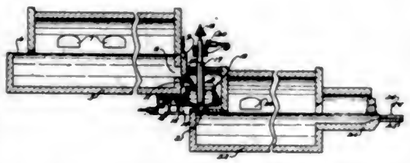
1. As a new article of manufacture, Glassine paper which has been treated with a solution comprising substantially one part of light colored varnish gum having the characteristics of copal, three parts of a solvent for said gum and two to three per cent by weight of a softening oil.

1,872,663. LAMINATED GLASS. JOHN C. BRIER and GEORGE B. WATKINS, Ann Arbor, Mich., and WILBUR F. BROWN, Toledo, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 18, 1927. Serial No. 206,416. 3 Claims. (Cl. 49—92.)



1. As a new article of manufacture, a sheet of laminated glass including a lamination of uncured plastic material having a low vapor pressure.

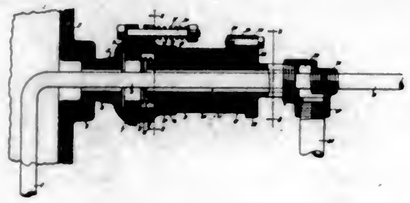
1,872,664. GLASS APPARATUS. WILBUR F. BROWN, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 1, 1927. Serial No. 202,803. 3 Claims. (Cl. 49—54.)



2. In glass apparatus, a furnace of the character described comprising a melting tank, a refining chamber, an agitating receptacle interposed therebetween, said agitating receptacle being rotatable about a substantially vertical axis and having an outlet opening substantially in the bottom thereof, and a rotatable agitating member operable within said receptacle.

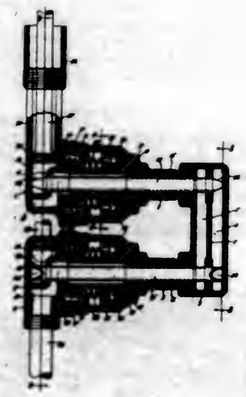
1,872,665. SWIVEL PIPE COUPLING. BARNETT MORSE BROWNELL, University City, Mo., assignor to Diamond Metal Products Company, a Corporation of Missouri. Filed May 22, 1931. Serial No. 539,155. 6 Claims. (Cl. 285—10.)

1. A pipe coupling comprising a member adapted to be secured to a rotating device and communicating with the interior thereof, said member having on its outer end an annular arcuate surface, a sleeve having a surface complementary to said annular arcuate surface and cooperating therewith, means for resiliently securing said member and the sleeve together in operative relationship,



a tubular member telescoping within said sleeve and adapted to be rotated with respect thereto, and means for sealing the joint between the sleeve and the tubular member to prevent leakage from the interior of said tubular member.

1,872,666. SWIVEL COUPLING. BARNETT MORSE BROWNELL, University City, Mo., assignor to Diamond Metal Products Company, a Corporation of Missouri. Filed Feb. 13, 1931. Serial No. 515,433. 3 Claims. (Cl. 285—9.)

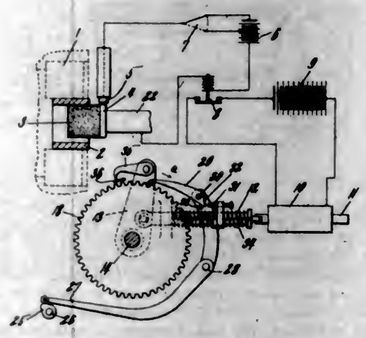


1. A swivel pipe coupling including a cylindrical member, a header mounted for rotation about said cylindrical member, a wall within said header forming two chambers one of which is in communication with the interior of said cylindrical member, a connecting member screwed on the header member and having a rotative abutting engagement with the cylindrical member, a gasket mounted between said connecting member and the cylindrical member, and a spring for pressing said gasket against its seat.

1,872,667. WORK SIZING. WILLIAM J. BRYANT, Springfield, Vt., assignor to Bryant Chucking Grinder Company, Springfield, Vt., a Corporation of Vermont. Filed June 16, 1930. Serial No. 461,372. 11 Claims. (Cl. 51—165.)

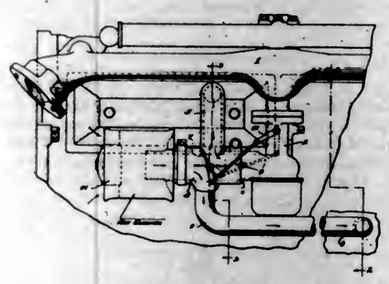
1. In combination, a work holder, a tool having a cutting portion for operating on work carried by said holder, means for relatively feeding said tool and work holder, an electric circuit and an electrical contact in said circuit having a contact face in a predetermined relation

to the desired size of the work, a second electrical contact in said circuit movable relative to said work holder with said tool into electrical connection with said first mentioned contact when said tool has reduced the work



to the desired dimension thus to close said circuit, and means actuated by the closing of said circuit through said contacts for stopping relative feed between said tool and the work.

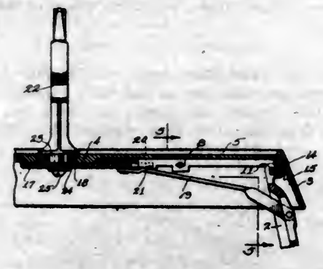
1,872,668. APPARATUS FOR FORMING AND CONTROLLING THE CIRCULATION OF AIR IN INTERNAL COMBUSTION ENGINES. ARTHUR A. BULL, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a Corporation of Delaware. Filed Aug. 2, 1926. Serial No. 126,466. 13 Claims. (Cl. 123—119.)



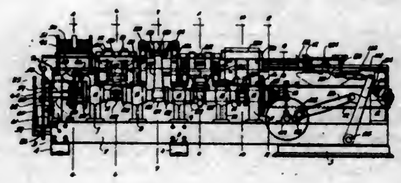
1. An air system for internal combustion engines comprising a housing connected to the air intake of the carburetor, an inlet and outlet for said housing each connected to the crank case of the engine, and regulatable means for deflecting a portion of said air through one of said connecting means to circulate a portion of the air through the crank case before its entrance into the carburetor.

1,872,669. COMBINATION TRAY AND TABLE. LESLIE H. BURLIN, Oak Park, Ill., assignor to Advance Pattern & Foundry Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 12, 1931. Serial No. 521,992. 4 Claims. (Cl. 45—11.)

1. A combination tray and table comprising a table top, legs hinged on said top and foldable to a position beneath said top to permit said top to serve as a tray, mechanism including a rotatable member mounted on the lower face of said top for actuating said legs, and a rotatable lifting handle mounted on said top for carrying the tray in a horizontal position, said handle being operatively connected with said rotatable member for actuating said legs while the tray is supported horizontally by said handle.

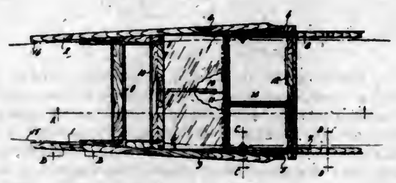


1,872,670. CAN BODY BLANK FOLDING MACHINE. WILFRED E. BURNS, Burlingame, Calif., assignor to M. J. B. Co., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 249,915. 16 Claims. (Cl. 153—2.)



1. In a blank folding machine, a guideway, means for advancing blanks in succession along the guideway, and a series of fold forming devices successively operable on the blanks as advanced along the guideway to form each with a plural layer fold; the first device of said series comprising means for bending an edge of the blank laterally; the second device comprising means for forming a fold in the laterally bent portion; and the third device comprising means operable against the folded parts to press them inwardly toward the blank body.

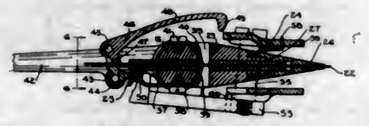
1,872,671. SUBFRAME FOR AUTOMOBILE BODIES. CARL BECK, Springfield, and ROBERT B. BURTON, Longmeadow, Mass., assignors to Rolls Royce of America, Inc., Springfield, Mass., a Corporation of Delaware. Filed June 11, 1931. Serial No. 543,582. 5 Claims. (Cl. 296—28.)



1. A subframe for an automobile body adapted for support upon the chassis of said automobile, said subframe being formed with an upsweep at its rear portion

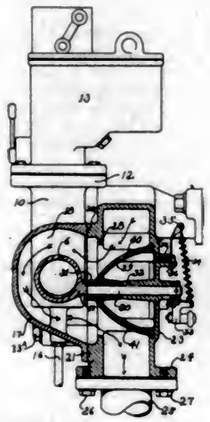
and comprising longitudinally extending wooden side beams terminating adjacent said upsweep portion, each side beam having fastened at its inner side as a rearward extension thereof a relatively thin metal plate shaped with an upward offset to provide the upsweep portion at the rear of said frame, and cross members for bracing said frame.

1,872,672. SOUND REPRODUCER. FRANK L. CAPPS, Milford, Conn., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Mar. 20, 1928. Serial No. 263,011. 16 Claims. (Cl. 274—37.)



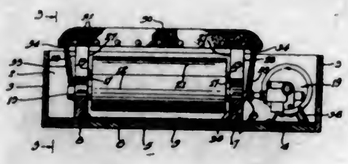
1. In combination, a stylus holder, an elongated wire stylus, means to feed the wire stylus longitudinally of and through the holder to have a portion of the stylus project beyond the holder for use, and said means including a lever adapted to be pressed in a direction transversely of the stylus holder and feed the stylus wire longitudinally of the holder.

1,872,673. MANIFOLD. MELBOURNE L. CARPENTIER, Detroit, and JOHN B. MACAULEY, Jr., Grosse Point Village, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 22, 1929. Serial No. 387,606. 11 Claims. (Cl. 123—122.)



1. A manifold for an internal combustion engine comprising a conduit adapted to be attached to the intake of the engine and having end portions bowed upwardly slightly from its medial part, an upright conduit having its lower end communicating with said first mentioned conduit and its upper end adapted to support a downdraft carbureter, said first mentioned conduit having a depression in the inner surface of the lower side wall of its medial part for receiving liquid fuel drained from the walls of said conduits and a discharge outlet for draining the liquid from said depression.

1,872,674. PORTABLE DEVICE TO AID HEARING. CHARLES CARROLL, Chicago, Ill. Filed Dec. 29, 1930. Serial No. 505,445. 4 Claims. (Cl. 128—33.)



3. A device to aid hearing comprising a supporting frame, a plurality of spaced-apart cylinders rotatably carried by said supporting frame, secondary cylinders disposed between the spaced-apart cylinders and in frictional engagement therewith, said secondary cylinders being supported by the spaced-apart cylinders, said spaced-apart and secondary cylinders being mounted on shafts, the end portions of said shafts extending beyond the ends of said cylinders, the end portions of said spaced-apart cylinder shafts being rotatably mounted in bearing members carried by said supporting frame, a table provided with cushioning supporting members, said supporting members being mounted on the end portions of said secondary cylinder shafts, a power unit, means operatively connecting the power unit with the cylinders whereby the same may be rapidly rotated, means for preventing a longitudinal movement of said spaced-apart cylinders, said means comprising plate members mounted on the supporting frame and abutting the ends of said spaced-apart cylinder shafts, roller means mounted on said supporting frame, said roller means being positioned in close proximity to the ends of said secondary cylinders, said rollers being adapted for engaging the ends of said secondary cylinders for limiting a longitudinal movement of said cylinders, and plate means mounted on said table and positioned in close proximity to the ends of said secondary cylinder shafts whereby said table may be properly positioned with respect to said secondary cylinders.

1,872,675. CELL AND METHOD OF MAKING THE SAME. THEODORE WILLARD CASE, Auburn, N. Y., assignor to Case Research Laboratory Incorporated, Auburn, N. Y., a Corporation of New York. Filed May 7, 1928. Serial No. 275,805. 18 Claims. (Cl. 88—61.)

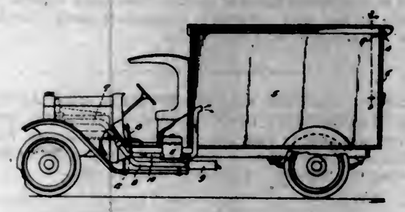


1. A cell capable of showing the Kerr effect comprising an evacuated air-tight chamber, a pair of spaced electrodes in the chamber, and a degasified liquid surrounding the electrodes.

1,872,676. ART OF DESTROYING MOTH WORMS, ETC. WILLIAM Y. CASTONGUAY, Detroit, Mich. Filed July 2, 1930. Serial No. 465,414. 2 Claims. (Cl. 43—125.)

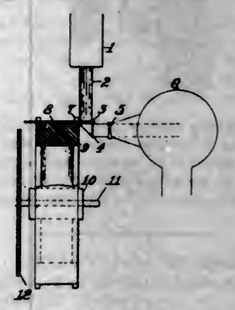
1. A portable apparatus for destroying moth worms and the like in furniture, clothing and other articles, comprising a motor vehicle having an internal combustion

driving engine, a relatively closed chamber supported on said vehicle to receive the articles to be fumigated, means to conduct the exhaust gases from the engine into said chamber, means to filter the exhaust gases prior to discharging the same into said chamber a vent pipe sup-



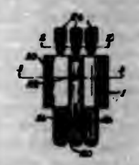
ported by one wall of the chamber, a normally closed spring seated relief valve therefor, and means for automatically opening said valve including a yieldably supported pressure actuated diaphragm arranged within the chamber.

1,872,677. SOUND RECORDING PROCESS. ALOYSIUS J. CAWLEY, Pittston, Pa. Filed Feb. 7, 1930. Serial No. 426,713. 6 Claims. (Cl. 179—100.3.)



1. In combination: means for moving a film bearing a photographic sound record on its margin at uniform speed, means for passing a light beam through said record, a prism underlapping all of said sound record and a small portion of said film moving means and acting to reflect said light beam to one side, and photoelectric means placed in the path of said reflected light beam and acting to convert the energy of said beam into speech-varied electric current.

1,872,678. SECTIONAL PLUG STRUCTURE. GEORGE L. CHAMBERLAIN, Chicago, Ill. Filed Aug. 14, 1929. Serial No. 385,958. 5 Claims. (Cl. 173—361.)

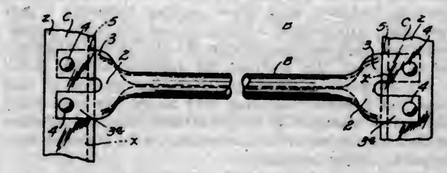


1. In a multiple wire connection, a sectional plug body composed of insulating material, said body being divided on radial lines, producing matching segmental sections having angular meeting faces, said meeting faces having registering longitudinal grooves producing tubular openings in the assembled body, and one of said sections having a longitudinal circumferential groove, terminal contact members fitted in the thus provided tubular openings with transverse interlocking key effect, an additional terminal contact member removably fitted in said circumferential groove, and means cooperating with the terminal contact member in said circumferential groove for further securing said body sections against transverse separation and also preventing relative longitudinal move ment between said body sections.

1,872,679. PROCESS OF REFINING PETROLEUM DISTILLATES. LEO P. CHEBOTAREP, New York, N. Y., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 27, 1927. Serial No. 242,965. 3 Claims. (Cl. 196—30.)

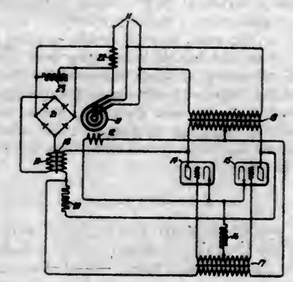
2. The process of refining light distillates derived from petroleum and the like, comprising treating the distillate with an acid refining reagent, neutralizing the distillate with a strong alkaline refining reagent, and thereafter washing the distillate with an aqueous solution of sodium bicarbonate, whereby the distillate becomes deodorized.

1,872,680. LADDER FOR FREIGHT CARS. GEORGE S. CHILES, St. Louis, Mo., assignor to Scullin Steel Company, St. Louis, Mo., a Corporation of Delaware. Filed Mar. 5, 1929. Serial No. 344,473. 4 Claims. (Cl. 228—49.)



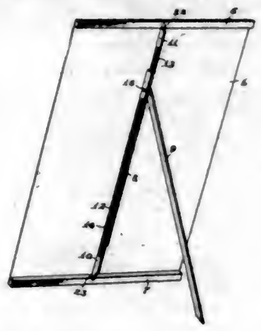
1. In a ladder or grab iron structure, a side member provided with two angularly-disposed parts, a metal rung of substantially tubular shape, and an integral plate-like attaching portion at one end of said rung provided with staggered legs that bear upon opposite faces of one of the said parts of said side member, the other part of said side member being provided with a slot that receives one of said legs.

1,872,681. ELECTRIC REGULATOR. HARRY R. CRAGO, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 17, 1931. Serial No. 530,890. 1 Claim. (Cl. 172—246.)



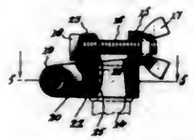
In combination, an alternating current machine provided with armature and field windings, an energizing circuit for said field winding including an electric valve provided with a control grid, an impedance phase shifting circuit including a reactor provided with a saturating winding, a connection for exciting said control grid from said phase shifting circuit, a current transformer connected in circuit with said armature winding, and rectifying means for energizing said saturating winding from said current transformer.

1,872,682. COLLAPSIBLE DISPLAY DEVICE. JAMES R. COCKLE, Elizabeth, N. J. Filed Apr. 10, 1931. Serial No. 529,184. 2 Claims. (Cl. 40—125.)



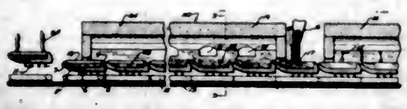
1. A display device including a flexible panel, transverse brace strips at opposite ends thereof rendering the same transversely rigid at said ends, a brace member adjustable in length engageable with the brace strips for stretching and maintaining the panel in a longitudinally stretched condition, said brace member including a pair of longitudinally slotted sections, means extending respectively from each section through the slot of the other section to connect the sections for relative sliding movement, a supporting leg pivotally carried by one of said means and a device engaging said means for clampingly holding the sections in longitudinally adjusted relation and the leg in parallel or various angularly adjusted relations to the brace member.

1,872,683. BATTERY TERMINAL CLAMP. PAUL E. COX, New Orleans, La. Filed Mar. 11, 1931. Serial No. 521,767. 6 Claims. (Cl. 173—259.)



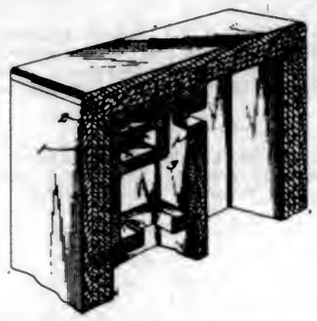
1. A battery terminal post clamp, comprising a yoke adapted to engage over a battery post with its closed end at one side of the post, a lead socket carried across the ends of the yoke and having a fulcrum bead across its inner side, a clamping member disposed within the yoke against said fulcrum bead for engagement against the opposite side of the post, and clamping means between the upper end of the clamping member and the yoke for swinging the member on the fulcrum bead into binding engagement with the post.

1,872,684. PROCESS AND APPARATUS FOR PRODUCING SHEET GLASS. CARROLL CONE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 7, 1928. Serial No. 324,357. 7 Claims. (Cl. 49—59.)



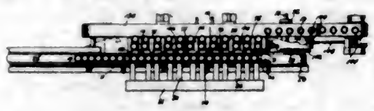
1. The process of producing molten glass, consisting in arranging a plurality of receptacles in substantially end to end relation, filling the same with glass batch ingredients in a manner that the batch line will be in a relatively higher plane than the end walls of the receptacles, and applying heat thereto in a manner to reduce the batch ingredients to molten glass, the height of the batch line being so controlled that the molten glass when formed will become divided into a plurality of separate pools of molten glass contained in said receptacles.

1,872,685. COOLING CHAMBER FOR A MECHANICAL REFRIGERATING UNIT. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Aug. 5, 1929. Serial No. 383,695. 3 Claims. (Cl. 62—95.)



1. A refrigerating unit of the mechanical refrigeration type, comprising a cooling chamber formed of plastically applied stone allowed to harden, and a monolithic thin surface layer of metal permanently secured to the said stone to seal the same from the atmosphere.

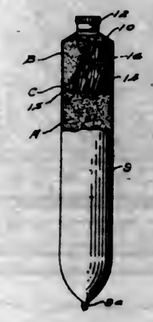
1,872,686. MACHINE FOR FILLING CONTAINERS. ROBERT N. CUNDALL, Blasdell, N. Y., assignor, by mesne assignments, to Consolidated Packaging Machinery Corp. Filed Sept. 8, 1928. Serial No. 304,780. 5 Claims. (Cl. 226—95.)



5. A machine for filling containers comprising a plurality of container filling devices arranged in a row of receiving stations spaced definite distances from each other to permit containers of different diameters to be placed in the receiving positions relative to said filling devices; a plurality of guides arranged in a row and each having its outlet arranged in line with the receiving station of one of said filling devices; means for propelling a row of containers in close order to the inlets of said guides; and pushers for moving some of said containers in irregular order from said row of containers to said guideways and to said receiving stations, said pushers being arranged in irregularly spaced relation so that in one part of said row of containers a single container will be removed from between adjacent containers in said row, and in another part of said row of containers a plurality of adjacent containers will be removed from said row.

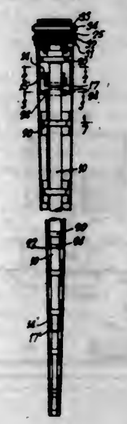
1,872,687. COLLAPSIBLE TUBE. EDWARD C. DAVIDSON, Detroit, Mich. Filed Feb. 8, 1932. Serial No. 591,680. 5 Claims. (Cl. 221—60.)

1. A collapsible tube having a discharge neck, a device disposed within the tube adjacent said neck and providing a partition forming a discharge chamber normally communicating by a passage in the partition with the rear portion of the tube, said device cooperating with the tube



wall when pressure is applied in the locality of said chamber to close said passage and permit discharge only of the contents of said chamber.

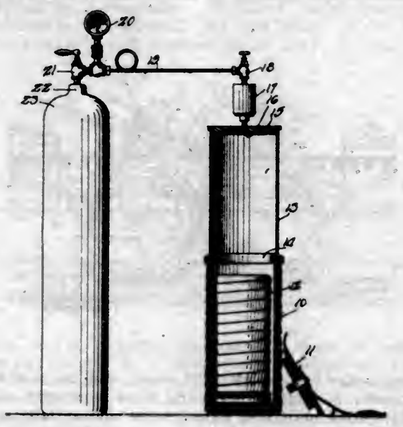
1,872,688. APPARATUS FOR THE FORMATION OF CONCRETE PILES IN SITU. JOHN M. DEALY, Astoria, N. Y., assignor to MacArthur Concrete Pile Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 30, 1929. Serial No. 410,675. 30 Claims. (Cl. 61—79.)



1. Apparatus of the character described, comprising a center-bar, a plurality of core-leaves, means operable by a displacement of said center bar and providing cooperating inclined surfaces on the center-bar and core-leaves respectively for causing the collapse of the core-leaves, and means operable by a displacement of said center bar and providing cooperating inclined surfaces on the center-bar and core-leaves respectively for causing the expansion of the core-leaves, each set of inclined surfaces having a similar pitch.

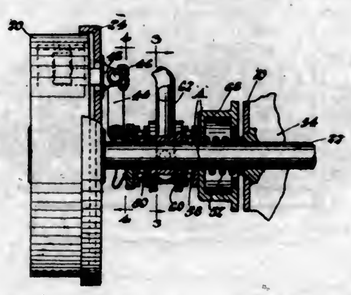
1,872,689. MEANS AND METHOD FOR REFRIGERATING ICE CREAM CONTAINERS AND THE LIKE. GEORGE F. DICKSON, Chicago, Ill., assignor to George A. Pearson and Leslie Muter, Chicago, Ill. Filed Aug. 15, 1931. Serial No. 557,288. 2 Claims. (Cl. 62—91.5.)

1. Means for refrigerating nested containers, one of which encloses perishable material, for shipment, comprising means for condensing carbon dioxide in the form of flakes, and means for directing such flakes over and



about the inner container, said last mentioned means providing for the collection of an excess flaked material for packing over the top of said inner container.

1,872,690. EXPANDING CLUTCH. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 21, 1929. Serial No. 401,037. 4 Claims. (Cl. 192—13.)

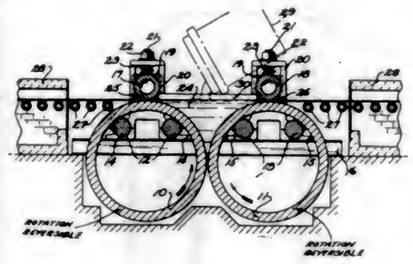


1. A clutch operating mechanism comprising a driven shaft, a lever pivotally supported by the shaft for actuating the clutch, a train of thrust members each of which is slidably mounted on said shaft, one of the ends of said train engaging the lever, a spring engaging the other end of said train to cause it to bear against said lever and thus engage the clutch, anti-friction thrust bearings between all the members of said train, and a fixed abutment adjacent the spring pressed end of said train having a face perpendicular to the axis of the shaft, one of the members of said train having a part adapted to make frictional contact with said abutment when said spring is compressed.

1,872,691. PROCESS AND APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 18, 1928. Serial No. 247,474. 14 Claims. (Cl. 49—33.)

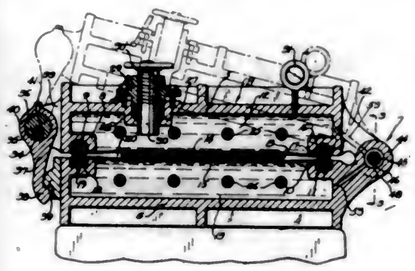
14. In sheet glass apparatus, a pair of rotatable drums associated with one another to form a pocket therebetween within which is adapted to be received a mass of molten glass, a roll associated with each drum and cooperating therewith to create a sheet forming pass, means

for rotating said drums whereby the molten glass will be moved from the pocket through said passes to simultaneously form a plurality of sheets, and horizontally dis-



posed means for receiving the sheets and carrying them forwardly in straight horizontal lines from their points of formation until they have become substantially set.

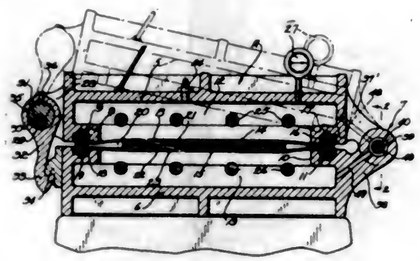
1,872,692. APPARATUS FOR MAKING LAMINATED GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 8, 1928. Serial No. 283,755. 8 Claims. (Cl. 18—17.)



1. In apparatus for the manufacture of laminated glass, a housing composed of relatively movable upper and lower sections having pressure chambers facing one another, a diaphragm across the open face of each chamber constituting a closure therefor, the assembled sheets of material to be joined being received between the diaphragms, means for placing said pressure chambers in communication with one another, a non-circulating liquid contained within the pressure chambers and maintained therein in a substantially quiescent state, and a movable plunger projecting into one of the pressure chambers for displacing the liquid therein to build up a pressure within said pressure chambers to effect the union of the assembled sheets of material.

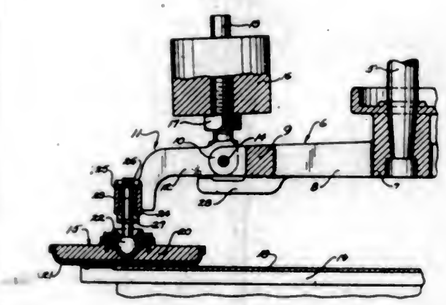
1,872,693. APPARATUS FOR MAKING LAMINATED GLASS AND METHOD OF OPERATING THE SAME. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 1, 1928. Serial No. 282,101. 3 Claims. (Cl. 18—17.)

1. In apparatus for the manufacture of laminated glass, a housing composed of upper and lower sections having pressure chambers facing one another, a diaphragm across the open face of each chamber constituting a closure therefor, means for building up a pressure within said pressure chambers and a hinge construction for pivotally connecting said upper and lower sections to-



gether at one end, said hinge construction being provided with conduits placing the upper chamber in communication with the lower chamber.

1,872,694. APPARATUS FOR SURFACING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 26, 1928. Serial No 308,370. 4 Claims. (Cl. 51—109.)

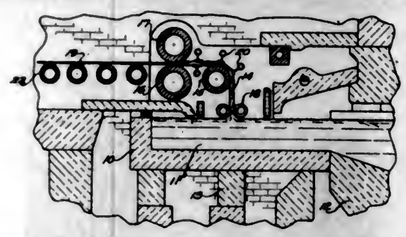


1. In a machine for polishing sheet glass, a vertical rotatable drive spindle, a runner frame carried at the lower end of said spindle, a plurality of polishing runners pivotally carried by the runner frame, and a weight element associated with each runner and adapted to act in a manner to increase the pressure of said runner upon the glass upon rotation of the runner frame.

1,872,695. PROCESS AND APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 10, 1927, Serial No. 218,645. Renewed Dec. 31, 1931. 12 Claims. (Cl. 49—33.)

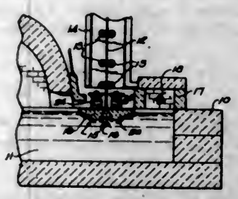
2. In sheet glass apparatus, a receptacle containing a mass of molten glass, a roll arranged thereabove over which a mass of molten glass, drawn from said receptacle,

is deflected, a pair of rolls arranged to create a sheet forming pass through which the mass passes, after it



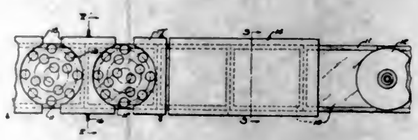
has been deflected, to be reduced into a sheet of predetermined thickness, means for positively driving said rolls, and an overrunning clutch associated with each roll.

1,872,696. SHEET GLASS APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 24, 1927. Serial No. 221,813. 7 Claims. (Cl. 49—17.)



1. A deputer for use in sheet glass drawing apparatus and adapted to be positioned within a mass of molten glass, comprising a substantially rectangular member of greater width than depth and having a longitudinally extending slot therein approximately intermediate its longitudinal edges, said member having a stream line bottom curving upwardly and then outwardly to its longitudinal edges and upwardly and then inwardly to the slot.

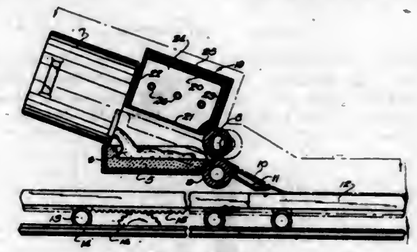
1,872,697. GLASS SURFACING APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 18, 1926. Serial No. 116,799. 10 Claims. (Cl. 51—278.)



1. In sheet glass surfacing apparatus, a plurality of grinding members and a plurality of polishing members, means for moving a sheet of glass under said members, and means for heating the sheet as it passes from the grinding members to the polishing members.

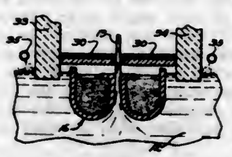
1,872,698. METHOD AND APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 30, 1928. Serial No. 322,629. 15 Claims. (Cl. 49—33.)

15. In combination in apparatus for producing sheet or plate glass, a tiltable supporting member adapted to receive thereupon a mass of molten glass, a pair of forming rolls for receiving the glass from the supporting member and reducing it to sheet form, a stationary heating member mounted above the supporting member and including a substantially rectangular casing extending substantially the entire length and width of the supporting member and inclined at an angle to the hori-



zontal, and a receptacle containing a mass of molten glass and adapted to be tilted above the supporting member to cause the glass to flow therefrom, the adjacent side wall of said casing being arranged to cover a substantial portion of the mouth of said receptacle when the same is tilted to flow the molten glass therefrom.

1,872,699. SHEET GLASS APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 26, 1928. Serial No. 328,444. 13 Claims. (Cl. 49—17.)



1. In a sheet glass apparatus, the combination with a receptacle containing a mass of molten glass, and means for drawing a sheet vertically therefrom, of a member disposed within the molten glass and having a slot through which said sheet is drawn, and heating elements arranged above the member and projecting therebeyond at opposite sides thereof.

1,872,700. METHOD OF CARRYING OUT ORGANIC CHEMICAL REACTIONS IN IMPROVED REACTION MEDIA. CAMILLE DREYFUS, New York, N. Y. Filed Apr. 20, 1926. Serial No. 103,389. 4 Claims. (Cl. 260—172.)

1. A method of carrying out chemical reactions in which at least one of the constituents is an organic compound and wherein water is formed which comprises substituting phosphoric acid containing small amounts of sulfuric acid as the reaction medium for the sulfuric acid formerly used in carrying out such reactions.

1,872,701. CELLULOSE ESTERS AND THE PROCESS OF MAKING THE SAME. HENRY DREYFUS, London, England. Filed Sept. 16, 1926, Serial No. 135,999, and in Great Britain Mar. 26, 1926. 8 Claims. (Cl. 260—102.)

1. Process for the production of cellulose esters, comprising esterifying cellulose and ripening the product until it exhibits a minimum viscosity in solution in an anhydrous water miscible solvent, substantial degradation of the cellulose molecule being avoided so that the said minimum viscosity is high, and thereafter continuing the ripening until a product is obtained having in

a solution of equal concentration in the said solvent diluted with water a lower viscosity than the minimum viscosity in the anhydrous solvent.
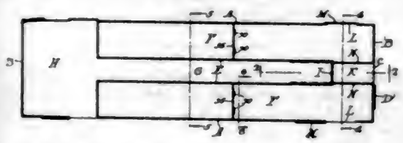
6. A cellulose ester having a high viscosity in solution in an anhydrous water miscible solvent and a lower viscosity in a solution of equal concentration in said solvent diluted with water.

1,872,702. RANGE BOILER COUPLING. LESTER A. DUNCKLEE, Lockport, N. Y., assignor to Jefferson Union Company, Lexington, Mass., a Corporation of Massachusetts. Filed Apr. 16, 1930. Serial No. 444,801. 1 Claim. (Cl. 285—25.)



A coupling for range boilers having in combination a spud having one end threaded and the other end flanged, and an intermediate relatively long body portion of polygonal form in cross section throughout its length to provide an extended wrench engaging area, and a coupling nut slidably mounted on the polygonal portion of said spud, and of such length as to leave exposed when in both of its extreme end positions on said spud, an extended wrench engaging area of the polygonal body portion of the spud, of greater width than the width of the coupling nut, whereby to permit the application of a wrench to the polygonal body portion for turning the spud when the latter is to be installed in a restricted working space.

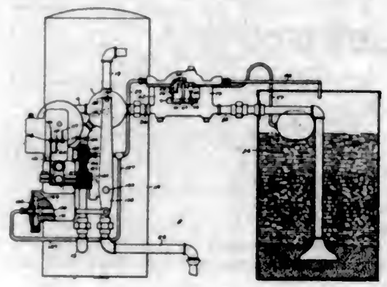
1,872,703. STOCK CAR. ISAAEL V. EDGERTON, Chicago, Ill., assignor to North American Car Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 12, 1928. Serial No. 318,775. 7 Claims. (Cl. 119—9.)



1. In a stock car, the combination with a car body having doors in its sides adjacent one end thereof, of tiers of compartments extending lengthwise of the sides of the car body and of a combined width less than the width of the car, and cross-overs connecting laterally opposite compartments between said doors, said compartments and cross-overs forming a longitudinal aisle of less length than the car.

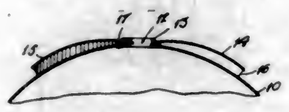
1,872,704. AUTOMATIC WATER SOFTENER. CHARLES P. EISENHAUER, Dayton, Ohio, assignor to The Duro Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 12, 1925. Serial No. 61,998. 9 Claims. (Cl. 210—24.)

1. In a water softener, a container for softening means, a brine tank, a control valve for converting the softener from softening position to regenerating position and vice versa, timing means to control said valve and its operating means, operating means therefor, a brine valve controlling the application of brine to the softening means, a refill valve controlling the application of water to the brine tank to refill it to take the place of brine exhausted



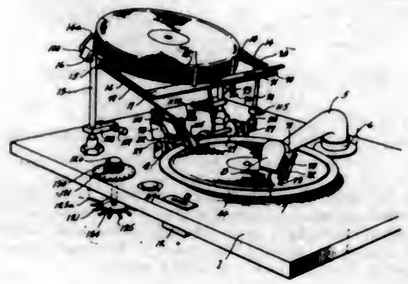
from the tank, and means associated with the brine tank for cooperating in the control of the brine valve and the refill valve.

1,872,705. PARACHUTE. BENJAMIN L. ELLIOTT, Perry Township, Brown County, Ohio. Filed Apr. 26, 1930. Serial No. 447,759. 3 Claims. (Cl. 244—21.)



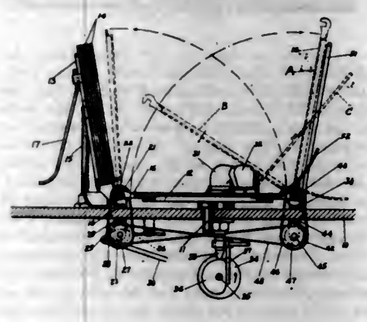
1. A parachute comprising a canopy having an opening in its peak, a cape secured exteriorly of said canopy and having an opening which corresponds to the opening in the canopy, said cape extending towards the bottom of the canopy for a substantial distance, and means connecting portions of said cape adjacent its lower end with the canopy.

1,872,706. RECORD CHANGING MECHANISM FOR PHONOGRAPHS. RALPH R. ERBE, Tacoma, Wash., assignor, by mesne assignments, to The Capehart Corporation, Fort Wayne, Ind., a Corporation of Indiana. Filed Apr. 16, 1928. Serial No. 270,363. 38 Claims. (Cl. 274—10.)



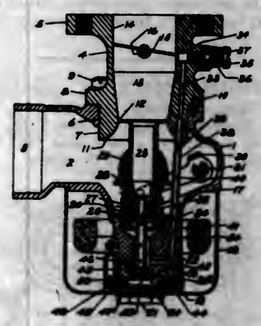
1. In a machine of the character described, a turntable, a rack adjacent thereto for supporting a group of records in contacting relation, an oscillating carrier operable between the rack and turntable, means for delivering records one at a time from one side of the group onto the carrier for placement thereby on the turntable and means operable to move the carrier to return the records to the other side of the group and to invert them during the return movement.

1,872,707. PHONOGRAPH. RALPH R. ERBE, Bridgeport, Conn., assignor, by mesne assignments, to The Capehart Corporation, Fort Wayne, Ind., a Corporation of Indiana. Filed Apr. 5, 1929. Serial No. 352,768. 5 Claims. (Cl. 274—10.)



5. In a phonograph including a turntable, means at one side of the turntable for holding a group of records, means for feeding the records from the group to the turntable, said means including a pan movable over the turntable, and adapted to be swung between the turntable and group, a guide at the other side of the turntable, and means to swing said pan alternately toward the group and toward the guide, said pan when swung toward the guide serving to dispose a record against the guide and to assist in guiding the record as it gravitates downwardly against the guide.

1,872,708. CARBURETOR. GEORGE R. ERICSON, Maplewood, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Apr. 27, 1929, Serial No. 358,700. Renewed Oct. 19, 1931. 7 Claims. (Cl. 261—59.)



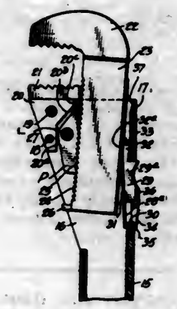
1. In a carburetor, a fuel chamber, a main supply jet, a calibrated passageway providing communication between the fuel chamber and said main jet, a perforated thermostatic plate mounted adjacent the entrance of said passageway, said perforation forming a metering orifice being of smaller diameter than said passageway, and means to move the perforated portion of said plate toward and away from said passageway.

1,872,709. GASKET. HANS ERNST, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 13, 1929. Serial No. 362,553. 2 Claims. (Cl. 288—1.)



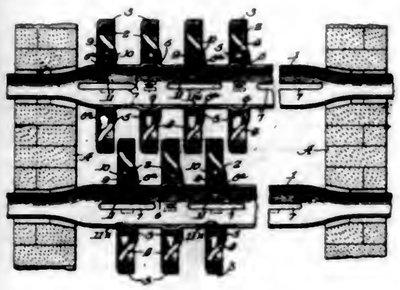
1. A gasket member comprising a relatively incompressible central portion having integrally united therewith surface portions of gradually decreasing density from center to surface thereof.

1,872,710. WRENCH. AMOS K. ERSLAND, Manhattan Beach, Calif. Filed Apr. 28, 1930. Serial No. 448,045. 7 Claims. (Cl. 81—100.)



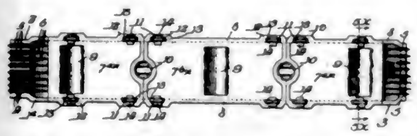
1. A wrench comprising a handle, an inner jaw fixed on the handle, an outer jaw having a shank movable longitudinally to effect adjustment of the outer jaw with respect to the inner jaw and transversely to cause the outer jaw to occupy a divergent position with respect to the inner jaw, a rack on said shank, a pawl fulcrumed in the handle, a member movable on the handle to occupy either of two extreme positions, a spring secured to the member and engaging said shank for yieldably urging the latter transversely to cause the outer jaw to occupy a parallel position with respect to the inner jaw, and a key carried by the member so that in one extreme position of the latter it is interposed between the shank and the handle to move the shank to a position in which the rack engages the pawl, and in the other extreme position of the member to be withdrawn from between the shank and handle to allow the rack to be moved out of engagement with the pawl.

1,872,711. FURNACE CONVEYER SHAFT WITH DISKS. FRANK A. FAHRENWALD, Chicago, Ill. Filed Sept. 29, 1930. Serial No. 485,279. 9 Claims. (Cl. 263—6.)



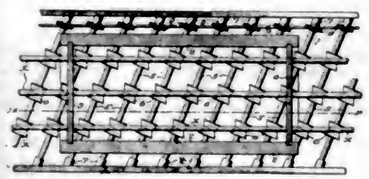
8. A conveying shaft for heat treatment furnaces, constructed with a relatively large-diameter, thin walled body portion, which said wall is radially deflected to provide external surface elevations at selected positions without materially varying the thickness of the wall.

1,872,712. LEAD PAN. FRANK A. FAHRENWALD, Chicago, Ill. Filed Apr. 25, 1931. Serial No. 532,824. 4 Claims. (Cl. 263—3.)



1. A lead pan for heat treatment purposes, constructed with a trough for containing molten metal to be traversed by goods subjected to heat treatment, and a cover for said trough formed of a plurality of sections adapted to meet and provide a top closure for the trough; said cover sections being individually provided with means for positioning them upon the trough, and also with means for holding submerged in the bath of the trough, goods traversing said bath.

1,872,713. APPARATUS FOR HEAT TREATING OBJECTS. FRANK A. FAHRENWALD, Chicago Heights, Ill. Filed Aug. 27, 1927. Serial No. 215,848. 4 Claims. (Cl. 263—6.)



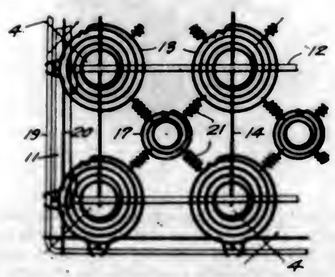
3. In combination with a heat treatment furnace, a rod turning, guiding and advancing rotor mounted in said furnace with its medial plane perpendicular to its axis of rotation at a substantial angle to a desired path of advancement of objects through the furnace; said rotor having a V-shaped peripheral groove with the faces of said groove symmetrically related to the said medial plane.

1,872,714. POWER STEERING MECHANISM FOR AUTOMOBILES. OTIS N. FARLEY, Lynden, Wash. Filed Sept. 2, 1930. Serial No. 479,335. 1 Claim. (Cl. 180—79.2.)



Power steering mechanism for automobiles including two cylinders of equal diameter, each having one closed end, having their open ends joined by bars with openings therebetween to dispose the cylinders on the same axis each having a port adjacent its closed end, means to fasten the cylinders to the chassis of the automobile to dispose the same lengthwise of the chassis, two pistons one mounted for reciprocation in each cylinder joined by a piston bar having a gear rack on one side disposed beneath one of the openings between the cylinder bars, a stud engaged in the piston bar having one end extended through an opening between the cylinder bars, the steering arm of the front wheels of the automobile to oscillate the same in steering operation, a drag link pivoted to the steering arm and to the stud on the piston bar to oscillate the steering arm by piston reciprocation, a bearing fastened to one of the cylinder bars, a valve shaft mounted for revolution in the bearing disposed above and at right angles with the cylinder axis, a rotary valve head fastened on the outer end of the valve shaft disposed adjacent the piston bar having diametrically opposite outflow and inflow valve ports, the steering-wheel shaft of the automobile, mechanical driving connections between the steering-wheel shaft and the valve shaft, a valve-port ring mounted for oscillation on the valve head having the one and the other sets of two diametrical outflow and inflow valve ports, a gear segment fastened to the valve ring disposed to engage with the piston-bar rack to cause valve ring oscillation by piston reciprocation, a closed tank, a pump having an outflow port and an inflow port, power means to operate the pump, a pipe from the outflow port of the pump to the tank, conduit connections from the tank to the outflow port of the valve head, conduit connections from the inflow port of the pump to the inflow port of the valve head, conduit connections from one of the outflow ports of the valve ring to the port of the front cylinder, conduit connections from the other outflow port of the valve ring to the rear cylinder port joined with conduit connections from the one inflow port of the valve ring, and liquid to occupy the cylinders, the pipes, the pump, and the tank disposed in the tank to provide an air chamber in the top thereof.

1,872,715. SPRING STRUCTURE. REGINALD FERGUSON, Montreal, Quebec, Canada, assignor, by mesne assignments, to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 30, 1928. Serial No. 302,902. 2 Claims. (Cl. 5—246.)



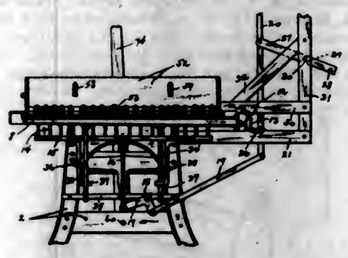
1. In a spring structure, a rigid framework comprising intersecting longitudinal and transverse members presenting a series of regularly spaced openings, a series of upright coil springs mounted on the framework at the intersections of the members thereof, a second series of upright coil springs disposed above the openings of said framework, and helical springs connecting the bottoms of the springs of the second series to the bottoms of the adjacent springs of the first series, whereby the springs of the second series may move bodily downward relatively to the springs of the first series and connections between the springs of the first and second series at the tops thereof.

1,872,716. PROCESS FOR THE MANUFACTURE OF COMPOUNDS CONTAINING ALUMINUM AND FLUORINE. HANS FINKELSTEIN and FRIEDRICH ACHTERBERG, Uerdingen, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 17, 1930, Serial No. 453,406, and in Germany May 18, 1929. 4 Claims. (Cl. 23—88.)

1. Process for the manufacture of a compound containing aluminum and fluorine which consists in adding an acid fixing agent to a solution containing aluminum, fluorine and chlorine in the ratio of at least two equivalents of aluminum and one equivalent of chlorine for each one equivalent of fluorine, corresponding to the formula $AlF_3.AlCl_3$.

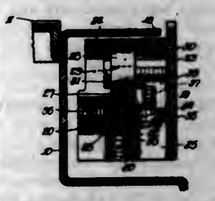
4. As a new product a compound containing aluminum and fluorine nearly corresponding to the formula of an aluminum hydroxyfluoride $AlF_3.Al(OH)_3$, being insoluble in water but soluble in caustic alkali lye.

1,872,717. APPARATUS FOR DYEING TEXTILE FABRICS. JOSEPH A. FIRSCHING, Utica, N. Y. Filed Sept. 23, 1929. Serial No. 394,523. 8 Claims. (Cl. 8—7.)



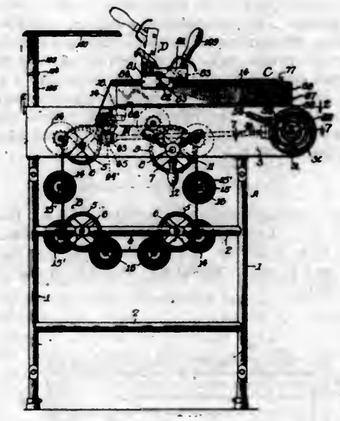
1. In a device of the class described, a main frame, a plurality of troughs having inclined bottoms carried by the frame, a drain valve at the lower end of each trough, operating means for all of said valves, a plurality of pressure plates adjacent the upper edges of the troughs, a plurality of other pressure plates removably positioned in registration with the first named pressure plates, and means for holding said plates in registration under pressure.

1,872,718. DUPLICATING MACHINE. JOHN J. FLANIGAN, Oak Park, Ill., assignor to Vivid, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Aug. 26, 1929. Serial No. 388,463. 8 Claims. (Cl. 308—6.)



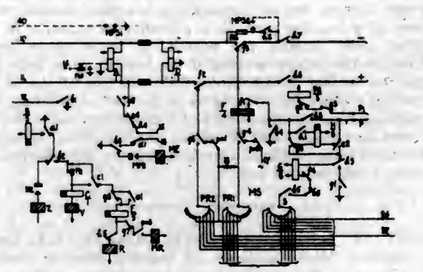
1. In a duplicating machine which has a printing bed, a platen carriage movable along said bed, and a guide rail for the carriage, the combination of a bearing supporting the carriage on the guide rail and comprising a frame, bearing rollers in said frame bearing on said guide rail, and adjustable plugs in said frame opposite said bearing rollers to engage the guide rail.

1,872,719. DUPLICATING MACHINE. JOHN J. FLANIGAN, Oak Park, Ill., assignor to Vivid, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Mar. 5, 1929. Serial No. 344,203. 28 Claims. (Cl. 101—133.)



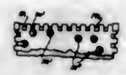
1. In a machine of the class described the combination of a frame having a bed, a gelatin band on the bed adapted to receive a sheet to be printed, a platen roller movable over said sheet, and adapted to be rotated by contact therewith, and a friction block on the frame at one side of the band and adapted to be engaged by the platen roller at one end thereof in its initial position for impression travel to insure rotation of the roller when it begins its travel and thereby prevent displacement of the sheet.

1,872,720. TELEPHONE SYSTEM. ALFRED EDWARD FLENLEY, Liverpool, England, assignor to Associated Telephone & Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 8, 1930, Serial No. 473,866, and in Great Britain Aug. 9, 1929. 11 Claims. (Cl. 179—18.)



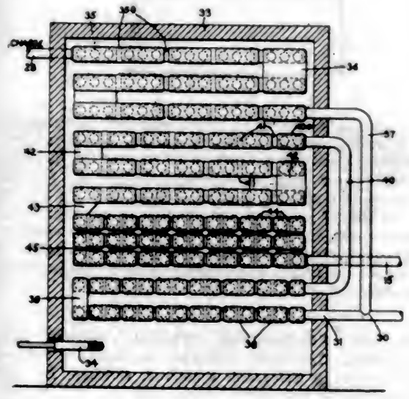
1. In a telephone system, an automatic numerical switch having access to different classes of lines, means for operating said switch responsive to a plurality of digits of a called telephone number of seize one of said lines, and means operated over a wiper of said switch only in case the seized line is of a particular one of said classes for preparing said switch to respond to a further digit.

1,872,721. SAFETY RAZOR BLADE AND RAZOR. ALBERT FRANK FORD, Calcutta, British India. Filed July 8, 1931. Serial No. 549,484. 2 Claims. (Cl. 30—12.)



1. A safety razor comprising a holder, a blade having a plurality of cutting edges, identifying numbers corresponding to certain days of the month on said blade adjacent each edge thereof, a guard plate having a plurality of teeth along its edges, the spaces between certain adjacent teeth along the edges of said guard plate terminating in circular apertures to expose said identifying numbers on the blade.

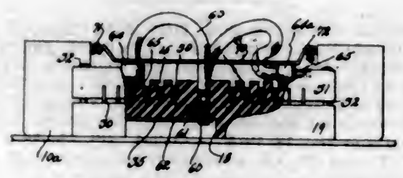
1,872,722. PROCESS FOR CRACKING OILS. HORACE A. FOUTS, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed May 2, 1928. Serial No. 274,379. 6 Claims. (Cl. 196—58.)



1. The method of cracking hydrocarbon oils which comprises flowing the oil through the lowest temperature section of a heating zone in a plurality of streams in parallel, then passing the heated oil in a single stream through the hottest section of the heating zone, then passing the oil through an intermediate section of the heating zone in a plurality of streams in parallel, separately withdrawing vaporous products and condensing the heavier constituents thereof, and returning the resulting condensate to the stream of oil flowing through the said hottest section of the heating zone.

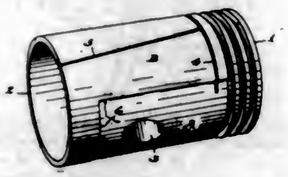
1,872,723. METERING PANEL. HARRISON J. L. FRANK, Detroit, Mich., assignor to Bulldog Electric Products Company, Detroit, Mich., a Corporation of West Virginia. Filed Mar. 13, 1929. Serial No. 346,637. 1 Claim. (Cl. 175—370.)

A metering panel section including a base having on its under surface parallel conductors extending transversely of the base and having on its upper surface a plurality of conductors extending longitudinally of the base, a plurality of posts extending upwardly from and individually connected to said first named conductors in apertures passing through said base, a plurality of transversely extending closely adjacent movable connectors constructed to be of variable extent transversely of the base and including contact means adapted to be contactingly engaged with any one of the second named conductors, as desired, and a plurality of closely adjacent individual guard members for and interlocked with individual ones of the connectors, all of the members being disposed above



and movably mounted on the base so as to be movable independently of one another and of the connectors associated therewith, each connector being interlocked with its own guard, so that it may not be disconnected from the second named conductors without previously moving away the guard member associated therewith, the guard members, when in position to prevent disconnection of their connectors, serving to guard the contact means of the latter from parts moving above the base.

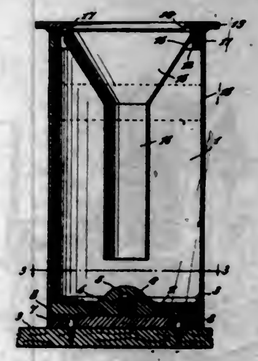
1,872,724. PISTON. GUSTAVE E. FRANQUIST, deceased, Rochester, N. Y., by Margaret Louise Franquist, executrix, Rochester, N. Y., assignor to The Cleveland Trust Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed May 26, 1922, Serial No. 563,782. Divided and this application filed Apr. 22, 1931. Serial No. 531,962. 5 Claims. (Cl. 74—108.)



1. A piston comprising a head and a skirt integrally united with said head, said skirt comprising opposite circumferential boss carrying portions each having an inwardly extending wrist pin boss thereon, and opposite cylinder-engaging portions arranged between and integral with said boss carrying portions, one of said cylinder-engaging portions being physically separated from said head by a circumferential slot and being slotted longitudinally through the thickness of its wall, said skirt in the region adjacent said head being externally and circumferentially relieved over said boss carrying portions and beyond the terminations of said circumferential slot.

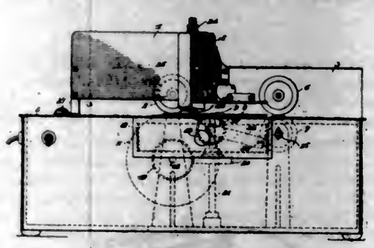
1,872,725. CUSPIDOR FOR AUTOMOBILES. JOSEPH H. GAULT, Sapulpa, Okla. Filed May 13, 1931. Serial No. 537,117. 4 Claims. (Cl. 4—238.)

2. A cuspidor comprising a receptacle having its walls extending below its bottom, the bottom being of greater thickness than the walls and having its central portion extended upwardly and formed with a threaded socket opening through the underface of the bottom, a mounting disk of dimensions to fit snugly into space beneath the bottom with lower portions of the walls surrounding the disk, fastener receiving openings being formed through the disk whereby the disk may be secured upon a support,



and a threaded stem rising from said disk centrally thereof and received in the socket to releasably secure the receptacle in connection with the mounting disk.

1,872,726. ENVELOPE HANDLING MACHINE. AZEL GAY, Rochester, N. Y., assignor to Multipost Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 25, 1930. Serial No. 447,372. 7 Claims. (Cl. 271—5.)



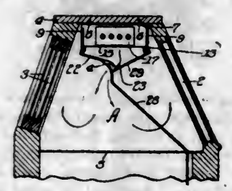
1. In an envelope handling machine, the combination with means for feeding an envelope along a certain path of travel, of a stacking device arranged at one side of said path of travel and at an angle thereto, and a transfer element cooperating with the stacking device and adapted to engage the flap of an envelope therein and thereby transfer it with a pivotal movement of the envelope in a relatively lateral direction to the feeding means.

1,872,727. DUPLICATING MACHINE. DAVID GESTETNER, Tottenham Hale, London, England, assignor, by mesne assignments, to A. B. Dick Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 23, 1930, Serial No. 504,366, and in Great Britain Feb. 1, 1930. 4 Claims. (Cl. 101—425.)



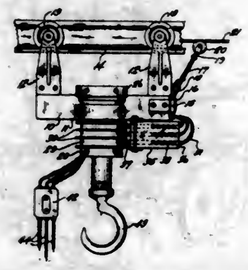
1. Means for removing ink from the inking cylinders of a duplicating machine of the kind in which with a plurality of inking cylinders journalled in a frame there is associated a flexible stencil carrier secured to endless bands whereby the stencil is caused to travel over the inking cylinders comprising a scraper element in the form of a strip of flexible material, the opposite edges of which are adapted to bear against the inking cylinders, a rigid support for the scraper element, arms associated with the rigid support adapted to be brought in position to bear against some stationary portion of the duplicating machine and further arms on the rigid support adapted to extend between the inking cylinders to resist rotational motion being imparted to the device consequent upon rotation of the inking cylinders.

1,872,728. REFRIGERATING CABINET. MARTIN A. GLOEKLER, Erie, Pa., assignor to Bernard Gloekler Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 19, 1931. Serial No. 523,716. 9 Claims. (Cl. 62—103.)



1. In a refrigerating cabinet, the combination with a refrigerating unit, of a supporting bracket therefor having transverse unit supporting members, a plurality of drip pan members, means for pivotally mounting said members on the bracket adjacent the unit, and removable means for securing said drip pan members in operative position beneath said unit.

1,872,729. SWIVEL SUPPORTING MEANS FOR ELECTRICALLY OPERATED DEVICES. MAX W. GOLDBERG, Port Washington, Wis., assignor, by mesne assignments, to Modern Equipment Company, Port Washington, Wis., a Corporation of Wisconsin. Filed Dec. 30, 1929. Serial No. 417,582. 3 Claims. (Cl. 191—12.)

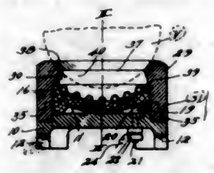


1. A supporting means for electrically operated devices, comprising an overhead track, a movable frame member having electrical conducting means in connection therewith and entirely suspended from said track, a supporting member for an electrically operated device pivotally suspended from said frame member, electrical conducting means in connection with said supporting member, and means for conveying electricity from the conducting means of said frame member to the conducting means of said supporting member, without interferring with the pivotal movement of the latter on the frame.

1,872,730. ELECTRIC HEATER. PHILIP A. GOLDFISCH, Kansas City, Mo., assignor to Laboratory Construction Company, Kansas City, Mo., a Corporation of Missouri. Filed Aug. 31, 1929. Serial No. 389,685. 1 Claim. (Cl. 219—43.)

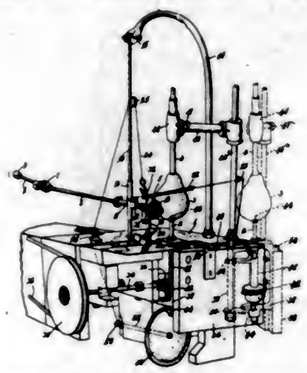
An electric heater for spherical flasks comprising interlocking casing members; a body of refractory material within the casing, having a right arcuate concave face; a

series of parallel resistance coils carried by said concave face; a circular opening formed by one of said casing members above said series of coils; a flask-supporting surface of arcuate cross section at the margin around said opening, the said arc being generated from a center positioned on the axis of the said right arcuate concave face of said body of refractory material and in a plane perpendicular to said axis intersecting said surface at its center; an annular wall joining said flask-supporting surface at the opening edge, said wall overhanging said resistance



coils and having a converging annular face whereby to direct heat from the said coils toward the said circular opening; a binding post extending through one of said casing members and terminating below the body of refractory material; a hole through said binding post; a bale through said body of refractory material in axial alinement with the hole through the binding post; and a terminal wire extending from one of said coils through the hole in the body of refractory material and into the hole of said binding post.

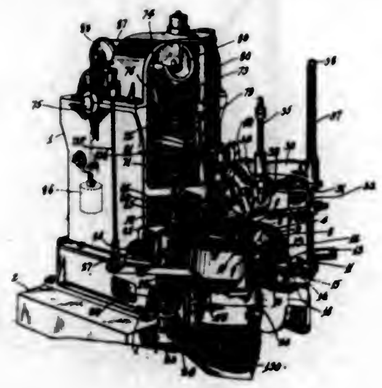
1,872,731. FRUIT PEELING MACHINE. HJALMAR GORANSON and DAVID GORANSON, San Jose, Calif., assignors to California Packing Corporation, San Francisco, Calif., a Corporation of California. Filed June 28, 1926. Serial No. 118,952. 23 Claims. (Cl. 146—43.)



22. In a fruit peeling machine, the combination of means for supporting and rotating the fruit on a vertical axis, a substantially horizontal cutter shaft having a flexible connection for driving the same, a cutter on the cutter shaft, means for yieldingly pulling the cutter shaft in a substantially horizontal direction to hold the cutter against the side of the fruit, and means driven by the machine for feeding the cutter shaft in a substantially vertical direction so as to move the cutter along the length of the fruit.

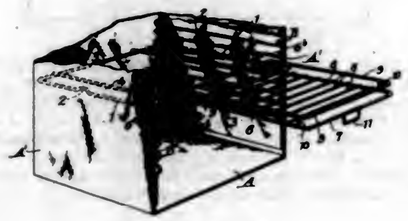
1,872,732. FRUIT PEELING MACHINE. HJALMAR GORANSON and DAVID GORANSON, Sunnyvale, Calif., assignors to California Packing Corporation, San Francisco, Calif., a Corporation of New York. Filed May 29, 1929. Serial No. 366,790. 33 Claims. (Cl. 146—43.)

2. In a fruit peeling machine, the combination of a frame, peeling mechanism mounted in the frame to rotate around a vertical axis, a pivoted fruit holder supported on the frame having means for cutting into the fruit to guide it and hold the same against rotation, and capable of assuming a position to receive the fruit out of line with the axis of rotation of the peeling mecha-



nism, means for swinging the holder so as to bring the fruit into line with the said axis, and a pusher, with means for actuating the same to advance the fruit past the cutters.

1,872,733. SLIDABLE OVEN AND BROILER RACK. COLON W. GREENWALD, Owosso, Mich., assignor to Independent Stove Company, Owosso, Mich., a Corporation of Michigan. Filed Feb. 26, 1931. Serial No 518,587. 7 Claims. (Cl. 126—337.)

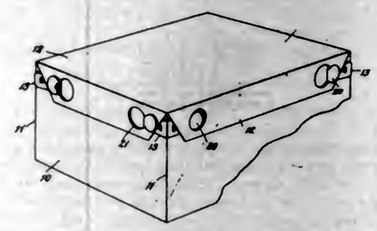


1. In combination with an oven having grooves in its inner side walls; a rack comprising a horizontal frame supported by the grooves, a member carried by the frame; a grill slidably mounted on the frame and adapted to be projected out of the oven when the latter is opened; and means for horizontally supporting the grill when projected.

1,872,734. METAL CLIP FASTENING MEANS. HERMAN L. GREVE, Hollis, N. Y., assignor to International Mailing Tube and Wrapper Co., Brooklyn, N. Y. Filed Jan. 7, 1931. Serial No. 507,108. 2 Claims. (Cl. 229—49.)

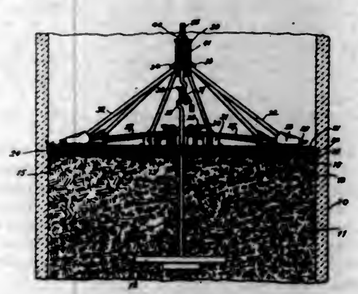
1. A clip of the character described comprising a metal strip so formed that it may be easily bent crosswise at a point intermediate its length to surround and reinforce

the corner of a box, an integral fastener at each side of said bending point for securing the clip to adjacent side



walls of the box, and portions at each end of the strip arranged to be bent in a reverse direction to engage a box cover.

1,872,735. SILO SEAL. FRED GUNTHER, Peru, Ill. Filed Feb. 15, 1929. Serial No. 340,175. 6 Claims. (Cl. 20—1.4.)



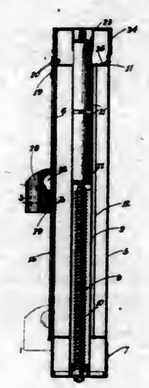
1. A silo seal comprising a plurality of tapered radially arranged sections including a series of transversely disposed boards, said sections being arranged in contiguous relations for forming a cap for covering the total cross sectional area of the silo, slats radially arranged with respect to the silo and disposed over the juncture of said sections, an anchor rod extending above and below the seal and having means for anchoring in the material in the silo, and means operatively connected with said rod including presser feet disposed upon said slats whereby pressure may be exerted upon the seal.

1,872,736. SULPHONATED CONDENSATION PRODUCTS OF POLYHYDRIC ALCOHOLS AND AROMATIC HYDROCARBONS AND PROCESS OF PRODUCING SAME. FRITZ GÜNTHER and JOSEF HETZER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 1, 1928, Serial No. 251,222, and in Germany Feb. 2, 1927. 11 Claims. (Cl. 260—159.)

1. A process for producing wetting, cleansing and emulsifying agents which comprises condensing an aliphatic polyvalent alcohol with a hydrocarbon containing at least one aromatic nucleus, and sulphonating in a stage of the process.

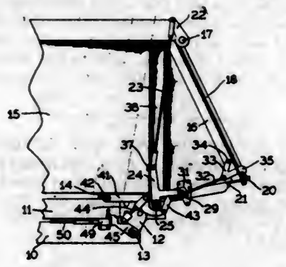
1,872,737. ILLUMINATED CHART READING DEVICE. HORACE HOUSE, Oroville, Calif. Filed Feb. 20, 1931. Serial No. 517,247. 3 Claims. (Cl. 40—85.)

1. A chart holding device comprising a barrel having a longitudinal slot, a spool turnably mounted in the barrel and on which the chart is wound with the unwound portion projecting through the slot, a dry cell mounted in the spool and having opposed terminals, said cell projecting from one end of the spool and having one terminal on said end, a cap removably mounted on and insulated from the barrel and engaging said one terminal, means electrically connecting the barrel and the other terminal, rails insulated from each other and mounted on the barrel



lengthwise of and adjacent the slot, one rail having electrical connection with the barrel and the other with the cap, a lamp, an insulation member in which the lamp is supported, separated elements mounted on the housing and engaging the rails, and separate electrical connections between said elements and the terminals of the lamp.

1,872,738. TAIL GATE CONTROL DEVICE. ALBERT HULLEY and WILLIAM J. HULLEY, City Island, N. Y. Filed Apr. 20, 1931. Serial No. 531,350. 11 Claims. (Cl. 298—23.)

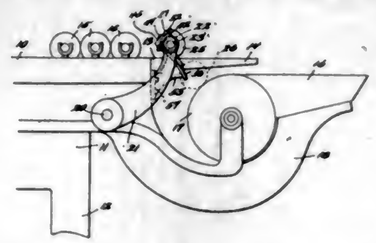


1. In a pivoted dump truck having a pivoted tail gate the combination of an arm rigid with the axis of the tail gate, a T-link pivoted on the body of the dump truck, an adjustable length rod connecting the arm and one arm of the T-link, a lever member pivoted onto the body of the truck, interconnecting means between the lever member and the T-link whereby movement of the lever member will cause operation of the tail gate to an open position, a crank arm pivoted upon the axis of the dump body of the truck, a link connecting the last mentioned crank arm and the lever member and slidable means on the truck chassis adapted to engage the crank arm to prevent its movement during the tilting or dumping operation of the truck body.

1,872,739. DUCTOR ROLL TIMER. WILLIAM G. HUMPHREY, Toronto, Ontario, Canada. Filed Mar. 31, 1930. Serial No. 440,573. 3 Claims. (Cl. 101—344.)

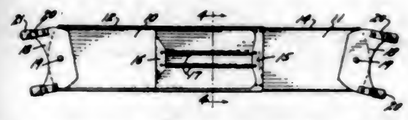
1. In an inking mechanism for printing presses or the like, including a fountain roller, a member to be inked, and a ductor roll mounted on an axle so as to oscillate bodily

between said fountain roller and said member and to rotate in rolling contact therewith; in combination, a brake member carried by said axle and comprising a body portion, a yoke portion movable relatively to said body portion,



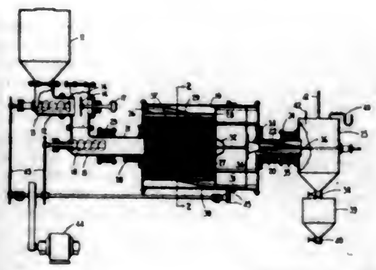
a flexible band connected at its ends with said body portion and said yoke portion respectively, means carried by the frame of the press for moving said yoke portion relatively to said body portion to cause said band to grip said axle to control the rotation thereof.

1,872,740. SERVING TRAY. WATHEN M. JAMES, Denver, Colo. Filed Mar. 30, 1931. Serial No. 526,248. 7 Claims. (Cl. 45—51.)



4. An automobile serving tray comprising: a main section; a second section adapted to slide within said main section; springs extending between the inner extremities of said two sections so as to act to urge them toward the extended position; swivel members pivoted at the outer extremities of said sections; and supporting brackets carried by said swivel members, said swivel members acting to allow said brackets to align with a supporting structure.

1,872,741. APPARATUS FOR DRY GENERATION OF ACETYLENE. ROBERT S. JANE, Shawinigan Falls, Quebec, Canada, assignor to Shawinigan Chemicals Limited, Montreal, Quebec, Canada. Filed Oct. 23, 1931, Serial No. 570,679, and in Canada May 16, 1930. 8 Claims. (Cl. 48—33.)



1. In an acetylene generator, a rotatable cylindrical drum, a cylindrical screen of smaller diameter than the drum fixed within the drum coaxially thereof, means to rotate the drum and screen, means to feed carbide into the screen while it rotates, means operative by rotation of the drum to remove hydrate from the drum while it rotates and means to supply water to the carbide in the screen.

1,872,742. RUG. JOHN FRANKLIN JEWELL, Laconia, N. H. Filed Apr. 1, 1931. Serial No. 526,952. 1 Claim. (Cl. 139—420.)



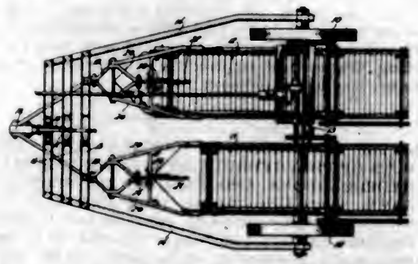
A rug comprising interwoven warp and weft strands, said weft strands being tubular and of knit, flexible material, the weft strands being compressed at the points where they cross the warp strands and substantially uncompressed at points intermediate the warp strands and defining a multiplicity of abutting, substantially diamond shaped areas.

1,872,743. BLEACHING PROCESS. HANS JOHN, Appleton, Wis., assignor to Paper Patents Company, Neenah, Wis., a Corporation of Wisconsin. Filed Nov. 21, 1927. Serial No. 234,923. 26 Claims. (Cl. 8—2.)

1. The improvement in the art of bleaching paper pulp which consists in partially bleaching the stock, completing the bleaching operation by subjecting a batch of the partially bleached pulp to the action of a solution containing (a) a plurality of times as much bleaching agent as is necessary to complete the bleaching operation, and (b) a sufficient amount of alkaline material to prevent the development of an acid reaction at the completion of the bleaching operation.

16. The improvement in the art of bleaching which consists in subjecting the material to the action of a bleaching agent until the bleaching is only partially complete, while permitting an acid reaction during said bleaching operation, then washing the material, and then subjecting the material to the action of a bleaching agent in a bath which is maintained alkaline throughout said bleaching stage.

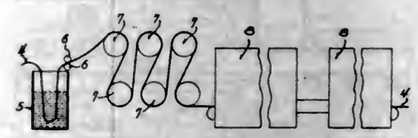
1,872,744. POTATO DIGGING MACHINE. ELMO W. JOHNSON, Hicksville, N. Y., assignor to Syracuse Chilled Plow Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Nov. 19, 1929. Serial No. 408,299. 6 Claims. (Cl. 55—51.)



1. A potato digging machine of the character described, comprising, in combination, a frame including a pair of side members; a pair of wheels and an axle between said side members at the rear end thereof; a plurality of cross beams connected to the forward ends of said frame members; a pair of digger units including plow shares and power driven elevating mechanism pivotally connected to said axle; yokes pivotally connecting the forward ends of said units to one of said cross beams; means associated with said yokes to vary the depths of penetration of said units independently of each other; and a drawbar adjustably connected to said cross beams to vary the depth of penetration of both of said units simultaneously.

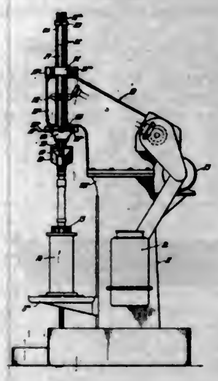
2. In a multiple-row potato digging machine of the character described, a plurality of digger units each including a plow share and power driven elevating mechanism and means to adjust the depths of penetration of said units independently of each other, one of said units extending forwardly so that its plow share digs ahead of the other unit whereby to deflect débris to the sides of each unit and prevent the choking of the machine.

1,872,745. PROCESS OF MAKING GUN WAD MATERIAL. REGINALD H. JOHNSON, Maplewood, N. J., assignor to American Hair & Felt Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 24, 1930. Serial No. 438,514. 4 Claims. (Cl. 28—1.)



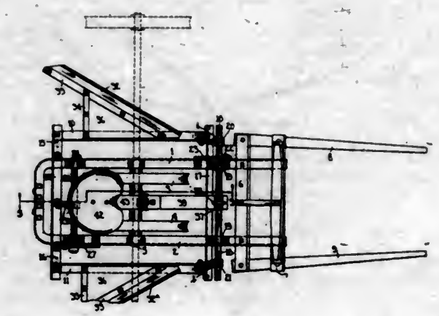
1. In the process of making gun wad material, the step of subjecting a size-impregnated wad material after sizing to the smoothing action of a surface over which the material is passed prior to drying to prevent free discharge of the size through the lower surface of the material during drying.

1,872,746. HONING MACHINE. ALBERT M. JOHNSON, Rockford, Ill., assignor to Barnes Drill Company, Rockford, Ill., a Corporation of Illinois. Filed Apr. 28, 1930. Serial No. 447,854. 4 Claims. (Cl. 51—34.)



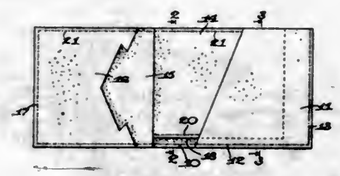
1. A honing machine comprising, in combination, a column, a work support in front of said column, a separately formed transmission casing detachably secured on said column, said casing having a portion located in overhanging relation to said work support, a driven gear in said portion, a splined spindle extending through said portion and engaging said gear, a pair of cylinders, a pair of horizontally extending headers on the top and bottom of said portion, cylinder heads engaging the lower ends of said cylinders and detachably secured to the lower one of said headers to support the cylinders on said header, clamps embracing said cylinders and detachably secured to the upper header to hold the cylinders against said upper header in parallel relation on opposite sides of said portion, heads for the upper ends of the cylinders, pistons in said cylinders having piston rods extending through said lower heads, and a transverse member in which the lower end of said spindle is journaled and to which said piston rods are connected on opposite sides of the spindle.

1,872,747. CORNSTALK CUTTER. FRANK D. JONES and HERMAN MOSCHEL, Ottumwa, Iowa, assignors to Dain Manufacturing Company of Iowa, Ottumwa, Iowa, a Corporation of Iowa. Filed Feb. 2, 1931. Serial No. 512,786. 7 Claims. (Cl. 56—53.)



1. In a corn stalk cutter, the combination of a main frame having supporting wheels, a cutter frame pivotally attached to the main frame, angularly disposed knives carried by the cutter frame, and means on the main frame connected with the cutter frame and operative to raise or lower either end of the cutter frame independently of the other.

1,872,748. BILL FOLD. WILLIAM J. KALIEBE, Milwaukee, Wis., assignor to George Seelman & Sons Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 29, 1930. Serial No. 485,152. 3 Claims. (Cl. 150—38.)

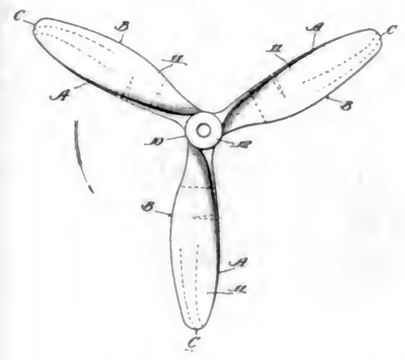


3. A bill fold comprising an outer member having a sheath formed at its inner face, an inner member secured to said outer member and forming therebetween a bill-receiving compartment, said inner member having a free end portion slidably received in said sheath, and there being a pocket formed on said free end portion, said pocket having an opening which is disposed within said sheath.

1,872,749. FAN BLADE. JAMES KARAGEORGE, Chicago, Ill. Filed Dec. 6, 1930. Serial No. 500,444. 6 Claims. (Cl. 170—159.)

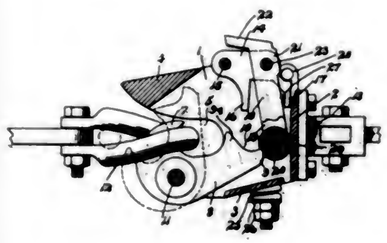
1. A propeller blade of the screw propeller type, said blade being substantially thickened along its leading edge as compared to its thickness along its following edge, said thickened part extending from the tip of the blade to a point intermediate its ends where it terminates in a reducing shoulder extending transversely of the blade, said thickened part continuing laterally to a longitudinal median line of the blade beyond which it is gradually reduced towards the following edge of the blade, said thickness being reduced with increasing abruptness towards

the tip of the blade towards which the leading and following edges converge, thus forming a longitudinally extending transversely inclined shoulder extending inwardly



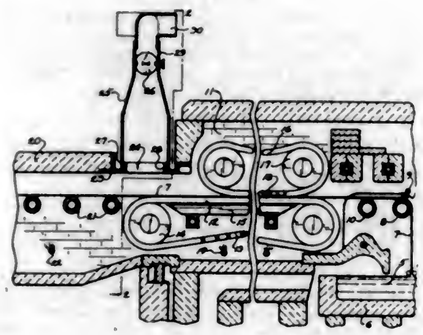
from the tip of the blade, said shoulder tapering towards the inner end of the blade and disappearing at a point intermediate said tip and said transverse shoulder.

1,872,750. SAFETY HITCH. HENRY KETEL, Holland, Mich., assignor to Holland Hitch Company, Holland, Mich., a Corporation of Michigan. Filed May 5, 1930. Serial No. 449,880. 8 Claims. (Cl. 280—33.16.)



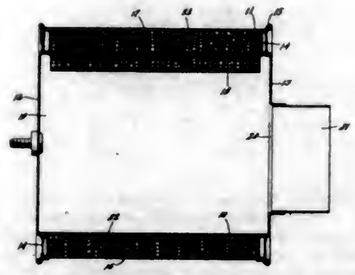
1. A hitch comprising, a body having vertical spaced apart connected sides, said sides being slotted inwardly at one side edge thereof, a hook member pivotally mounted between said sides of the body below the slots therein and extending at its outer end into the horizontal plane of said slots, a lever member pivotally mounted at one end between and adjacent the upper edges of the sides of said body and having a downwardly extending arm, a bar divided at its upper end to pass by at either side of the hook member and adapted to bear against one side of said arm, a roller carried at the lower end of the bar engaging with and above the inner end of said hook member, an inverted U-shaped rod passing through said lever member and bar thereby connecting the same together and having legs extending downwardly one along each side of the body, a coiled spring around each leg of said U-shaped member bearing at its upper end against the body, and nuts threaded onto the lower ends of said legs against the lower ends of said springs.

1,872,751. SHEET GLASS APPARATUS. FRANK J. KINCAID, Charleston, W. Va., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 25, 1931. Serial No. 546,837. 8 Claims. (Cl. 49—17.)



8. In apparatus for producing sheet glass, the combination of means for drawing a sheet upwardly from a bath of molten glass, means for deflecting the sheet in advance of said drawing means into the horizontal plane, a chamber housing said drawing means, an annealing leer for receiving the sheet as it leaves the drawing chamber, a stack communicating said chamber and leer at substantially the juncture thereof to assist in controlling the temperature therein, and a damper arranged within said stack.

1,872,752. MUFFLER AND AIR CLEANER. HERBERT G. KAMRATH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Dec. 7, 1929. Serial No. 412,379. 2 Claims. (Cl. 183—73.)



1. In a device of the class described, a shell which is substantially imperforate throughout its circumference except in a relatively narrow element substantially parallel to its axis, wherein there is provided an opening, a shell which surrounds and is circumferentially spaced from the first mentioned shell and which is substantially imperforate throughout its circumference except in a relatively narrow element substantially parallel to its axis and substantially diametrically opposite the first mentioned element wherein there is provided an opening, closures for the annular space between the shells, and a dust collecting element filling the space between the shells.

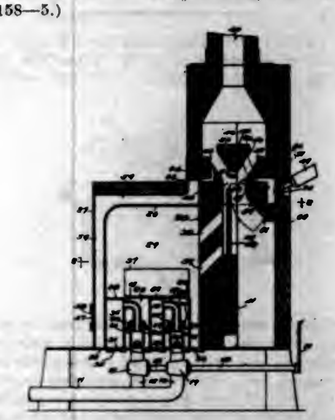
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1,872,753. CLOTHESPIN HOLDER. ANTHONY KREBS, Roselle Park, N. J. Filed June 9, 1931. Serial No. 543,184. 6 Claims. (Cl. 224—5.)



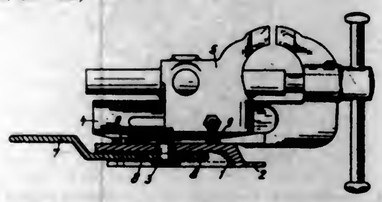
1. A clothes pin holder comprising a strip bent alternately in opposite directions to form channels adapted to receive the necks of the usual clothes pins, said channels being narrower than the heads of the pins.

1,872,754. GENERATOR AND HEATER. JOHN A. KREUSER and JOSEPH WILLERSCHEIDT, Chicago, Ill. Filed Mar. 6, 1930. Serial No. 433,705. 18 Claims. (Cl. 158—5.)



1. In a device of the kind described, the combination of a generator, a combustion chamber, a wall located between said generator and chamber, a mixer provided in said wall, said mixer opening into said combustion chamber, and a catalytic agent controlling the outlet of said combustion chamber.

1,872,755. VISE. FRITZ KUHENNE, Oesterau in Westfalen, Germany, assignor to the Firm Brockhaus Sohne, Westfalen, Germany. Filed Apr. 18, 1931, Serial No. 531,218, and in Germany Oct. 21, 1929. 7 Claims. (Cl. 81—41.)

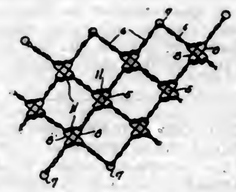


1. A vise, comprising a hollow base, an under member rotatably mounted upon said base, a hand lever for locking said under member, a bolt passing through the wall of said base and positioned intermediate the under part of said vise and said base permitting swinging of said lever around said bolt, and an oblique surface at the under part of the upper wall of said base, said oblique surface being co-operative with said lever.

1,872,756. MANUFACTURE OF MS-ANTHRADIANTHRONES. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 11, 1928, Serial No. 325,385, and in Germany Dec. 31, 1927. 4 Claims. (Cl. 260—61.)

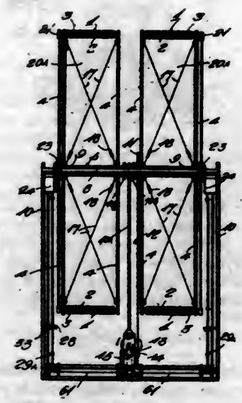
4. A process of producing ms-anthradianthrone, which comprises subjecting 2.2'-dimethyl-ms-benzdianthrone to caustic alkali fusion at temperatures between about 250 and 280° C.

1,872,757. NONSKID TIRE CHAIN. LUDGER LABBÉ, Chicopee Falls, Mass. Filed Oct. 17, 1931. Serial No. 569,509. 2 Claims. (Cl. 152—14.)



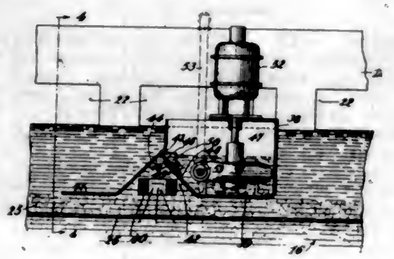
1. A non-skid tire chain comprising non-skid elements and connecting chains therefor, each element formed of crossed interfitting closed links with the connecting chains attached to the ends of the links, and means to prevent separation of the ends of the links to which the connecting chains are attached, including links connecting the ends of the chains at their points of attachment to the crossed links.

1,872,758. VARIABLE THRUST MECHANISM. ISIDOR B. LASKOWITZ, Brooklyn, N. Y. Filed Nov. 25, 1930. Serial No. 498,166. 12 Claims. (Cl. 244—16.)



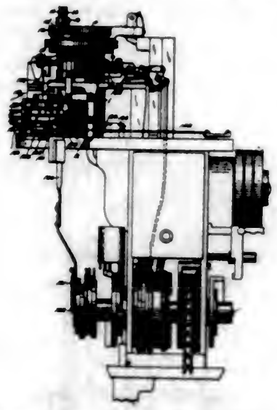
1. In a variable thrust mechanism, coacting rotatable units, a support therefor, movable airfoils mounted on each unit, means for adjusting the airfoils to vary the resultant thrust in a vertical plane, and additional means for laterally adjusting the mechanism to maintain lateral balance for all directions of said resultant thrust.

1,872,759. CLEANING DEVICE FOR SEWAGE FILTER BEDS. WILLIAM C. LAUGHLIN, Kew Kardens, and ABRAHAM B. ASCH, Brooklyn, N. Y., assignors to Filtration Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed July 28, 1931. Serial No. 553,526. 19 Claims. (Cl. 210—128.)



13. A tank for use in cleaning a bed of filtering magnetite, said tank having a chamber therein and having an inlet for the passage of liquid into the chamber from the magnetite, and an electromagnet on the tank, disposed in relation to said inlet for influencing movement of the magnetite to release dirt therein into the liquid destined to pass through the inlet into said chamber.

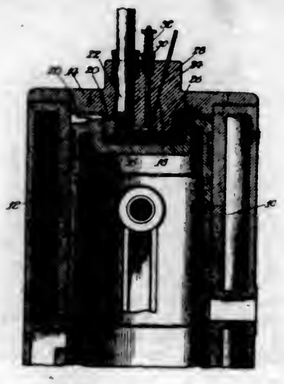
1,872,760. MECHANISM AND PROCESS FOR PRODUCING KNITTED FABRIC HAVING LAP STRIPES. JOHN LAWSON and ROBERT H. LAWSON, Pawtucket, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Filed Feb. 18, 1929. Serial No. 340,822. 32 Claims. (Cl. 66—40.)



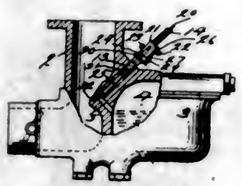
1. A circular knitting machine having means to feed two yarns in a plating relation and to maintain plating control thereof, pattern means to alter during knitting the presentation of needles as desired to take lap threads, and means to present lap threads to such needles, whereby said lap threads are knitted onto the surface of the fabric.

1,872,761. ENGINE. HOWARD M. LEONARD, South Bend, Ind., assignor, by mesne assignments, to Bendix Aviation Corporation, a Corporation of Delaware. Filed Mar. 7, 1927. Serial No. 173,246. 2 Claims. (Cl. 123—33.)

1. An engine comprising a cylinder, a piston therein having a recessed head, a cylinder head having a boss adapted to engage the recess, a plunger cylinder in the boss, a passage from the plunger cylinder to the engine cylinder, a chamber in the boss communicating with the plunger cylinder, a fuel feeding plunger movable in the plunger cylinder, a passage in the plunger cylinder adapted to connect the chamber with the first mentioned passage at the end of the compression stroke of the plunger and means for feeding fuel to the chamber.

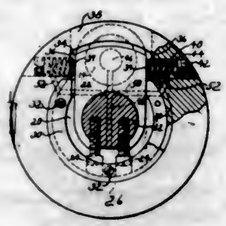


1,872,762. CARBURETOR ATTACHMENT. ARTHUR LAURENCICH, Washington, D. C. Filed Nov. 7, 1930. Serial No. 494,147. 6 Claims. (Cl. 261—66.)



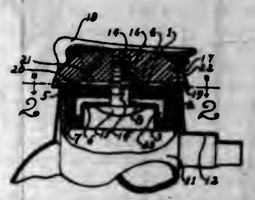
1. The combination with an intake port connecting a carburetor bowl and an intake pipe, of a slidable needle valve extending into said port and forming means whereby the flow of fuel through said port may be regulated or entirely cut off and detent means cooperating with said needle valve whereby said valve is held in open or closed positions, said valves being immediately returnable to original adjusted open position.

1,872,763. VIBRATION DAMPENER. ROGER K. LEE, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a Corporation of Delaware. Filed Jan. 24, 1927. Serial No. 163,120. 10 Claims. (Cl. 74—38.)



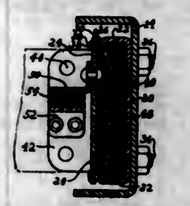
6. In a vibration dampener of the class described comprising, a rotatable member, a member rotatable with said first named member having relative angular movement with respect thereto and coaxial therewith, resilient means between said members for resisting relative angular movement, and means adapted to change the resistance with the amplitude of movement.

1,872,764. RADIATOR CAP. ROGER K. LEE, Highland Park, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 21, 1930. Serial No. 454,450. 7 Claims. (Cl. 220—24.)



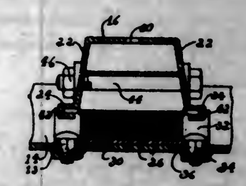
1. In a spout cap, a stem having inner and outer rigid members, and an intermediate yieldable member, a lug on one of said rigid members for securing said stem against rotation, and means on said cap for compressing said intermediate member between said rigid members and against the inner periphery of a spout.

1,872,765. MOTOR MOUNTING. ROGER K. LEE, Highland Park, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 24, 1930. Serial No. 430,630. 3 Claims. (Cl. 248—14.2.)



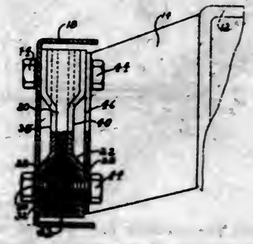
3. A mounting comprising a rectangular member formed from stampings having two flat plate-like portions spaced from each other in overlapping relation, a U-shaped member having lateral flanges and an intermediate corrugated portion, rubber embracing said intermediate portion filling the space between the spaced portions and vulcanized therete, the rubber between the spaced portions of said rectangular member being under tension by relative movement of said U-shaped member and said rectangular member in one direction and the corrugations of the intermediate portion of said U-shaped member extending in a plane at right angles to the direction of movement for causing tension on said rubber.

1,872,766. MOTOR MOUNTING. ROGER K. LEE, Highland Park, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 24, 1930. Serial No. 430,633. 9 Claims. (Cl. 248—14.2.)



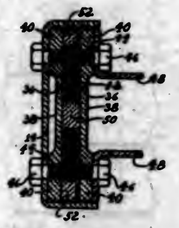
1. A mounting of the class described comprising, spaced members arranged in overlapping relation with each other, a U shaped member having flanges clamped to the edges of one of said members, attaching means on the other of said members, and rubber between and bonded to the adjacent faces of said spaced members.

1,872,767. MOTOR MOUNTING. ROGER K. LEE, Highland Park, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 24, 1930. Serial No. 430,634. 8 Claims. (Cl. 248—14.2.)



8. A mounting of the class described, comprising, two spaced plate-like members arranged in overlapping relation with each other, depressed portions in the plates arranged to form a varying space between said plates, and rubber vulcanized to the adjacent faces of said plate-like members.

1,872,768. MOTOR MOUNTING. ROGER K. LEE, Highland Park, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 24, 1930. Serial No. 430,635. 10 Claims. (Cl. 248—14.2.)

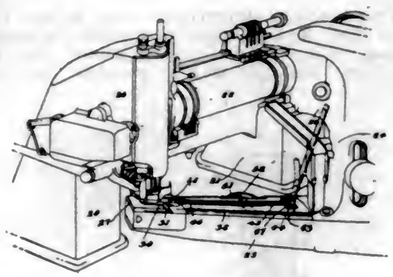


1. A mounting of the class described comprising, a member adapted to be secured to a support, a member spaced from and in overlapping relation with said first named member adapted to be secured to a part to be supported, a resilient rubber member between and vulcanized to the adjacent faces of said members, and non-resilient rubber embedded in the resilient rubber and disconnected from said members.

1,872,769. SEWING MACHINE TAPE GUIDING MEANS. GRIFFITH M. LEWIS, Watervliet, N. Y., assignor to Willcox & Gibbs Sewing Machine Co., New York, N. Y., a Corporation of New York. Filed Oct. 29, 1925. Serial No. 65,663. 20 Claims. (Cl. 112—186.)

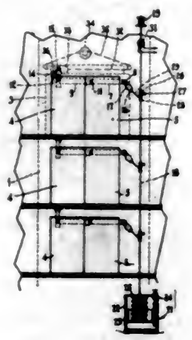
1. In a sewing machine, the combination of stitch-forming elements, a presser foot, a work-arm having an approximately horizontal work-supporting part free at one end, work-feeding means for feeding work along said work-supporting part of the arm past the presser foot and stitch-forming elements, and tape guiding means mounted on said work-supporting part of the work-arm in advance of said presser foot for guiding tape at both edges thereof to position to be applied to the surface

of fabric or work and secured to the work by stitches formed by said stitch forming elements, said tape guiding means being movable to an inoperative position without



detachment from the machine and without movement to a non-operative position of the part on which said tape guiding means is mounted.

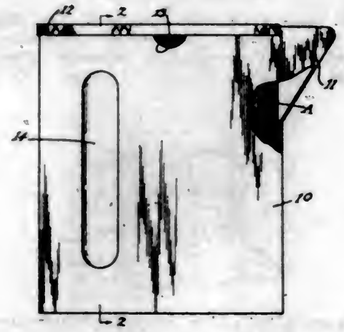
1,872,770. ELEVATOR DOOR SYSTEM. NILS O. LINDSTROM, Nutley, N. J., assignor to A. B. See Elevator Company, Inc., a Corporation of Delaware. Filed July 23, 1927. Serial No. 207,831. 9 Claims. (Cl. 187—52.)



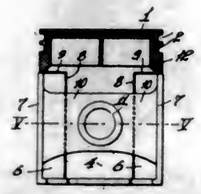
1. In an elevator system, a shaftway having a plurality of doors opening thereto and sliding door members cooperating therewith, means comprising sets of toggle levers for controlling the movements of said doors, one of said levers of said sets having a bell crank lever portion adapted to cooperate with an opening means, and another of said levers having a counterweight and tail member, and a common tension member cooperating with the tails of said levers, and means comprising a controlled spring for applying force for the closure of said doors.

1,872,771. CONTAINER. ERNEST LAMAR LITTLE, Toronto, Ontario, Canada. Filed Mar. 16, 1931, Serial No. 522,903, and in Canada Mar. 13, 1931. 2 Claims. (Cl. 221—11.)

1. A metallic container of the class described adapted to hold and frictionally retain a soap carton therein, open at the top end, and provided with a pouring spout adjacent one of its end walls, the said spout extending the width of the container and forming a continuation of the top thereof, a lid flanged on three sides and slidably mounted on the open end of the container, finger and thumb recesses on opposite edges of the top of the container, and vertical depressions on either side of the container to frictionally retain the said soap carton and to form hand gripping means.

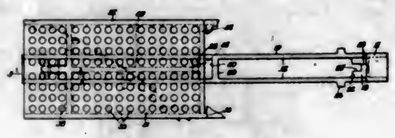


1,872,772. PISTON FOR INTERNAL COMBUSTION MOTORS. ELMER C. LONG, Quincy, Ill., assignor, by mesne assignments, to Security Trust Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 7, 1919. Serial No. 281,175. 7 Claims. (Cl. 74—108.)



1. A one piece piston having a solid walled skirt portion, said skirt portion having a pair of sections of its peripheral wall entirely cut away thereby forming separated peripheral parts, and integral means for supporting said sections in peripheral alinement with the peripheral face of said skirt portion.

1,872,773. GRATE. FREDERICK A. LORENZ, Jr., Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Feb. 11, 1929. Serial No. 338,927. 4 Claims. (Cl. 126—180.)



1. In a grate assembly, the combination of a supporting frame comprising spaced parallel beams of substantially uniform strength, integral trunnion sockets located at opposite ends of said parallel beams and uniting the same, reenforced grate members resting upon and carried by said supporting frame, a downwardly extending apertured lug on the adjacent ends of each of said grate members, a centrally located aperture provided on said supporting frame receiving said downwardly extending lugs of said grate members, and a key positioned in said downwardly extending lugs and bearing against the under surface of said aperture for securing said grate members and said supporting frame in a locked, assembled and operative position.

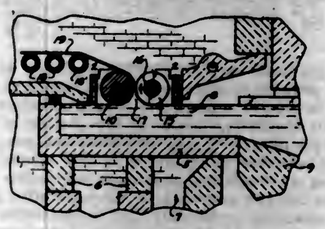
1,872,774. CATALYTIC OXIDATION OF ORGANIC COMPOUNDS. MARTIN LUTHER and HANS KLEIN, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 28, 1928, Serial No. 302,650, and in Germany Oct. 6, 1927. 11 Claims. (Cl. 260—116.)

1. In the process of oxidizing organic compounds by passing a current of a gaseous oxidizing agent containing free oxygen through the material to be oxidized, while heating, the step which comprises carrying out the reaction in the presence of a metal enolate.

1,872,775. BLOOD-PRESSURE-LOWERING SUBSTANCE AND PROCESS OF PRODUCING IT. RALPH H. MAJOR, Kansas City, Kans., assignor to Eli Lilly and Company, Indianapolis, Ind., a Corporation of Indiana. Filed Apr. 10, 1926. Serial No. 101,191. 8 Claims. (Cl. 167—74.)

1. The method of producing a blood-pressure-lowering substance from liver, which consists in extracting the liver with alcohol, and separating the blood-pressure-lowering substance from much of the contaminating matter extracted with it by fractionation with varying concentrations of alcohol.

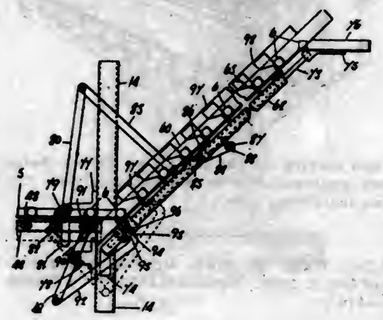
1,872,776. APPARATUS FOR FORMING SHEET GLASS. LUKE C. MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 16, 1931. Serial No. 551,201. 3 Claims. (Cl. 49—83.1.)



3. The process of forming sheet glass which consists in drawing a relatively heavy body of molten glass upwardly from a molten bath and in contact with a continuously revolving surface, in deflecting the glass about said surface and extending it lengthwise to form a sheet of the desired thickness, and in causing a positive upward feed movement of the molten glass by gripping the body of glass adjacent each edge thereof only between the first continuously revolving surface and a second continuously revolving surface also turning in the direcion of feed of the glass.

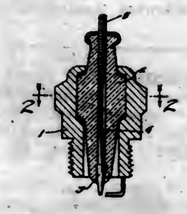
1,872,777. MACHINE FOR DRYING YARN OR OTHER TEXTILE MATERIALS IN HANKS AND LOOPS. ARTHUR NORRISON MARR, Leeds, England. Filed Apr. 5, 1930, Serial No. 441,921, and in Great Britain July 9, 1929. 10 Claims. (Cl. 34—20.)

1. Apparatus for drying yarn or other textile materials in hanks or loops having in combination a frame-work divided into three longitudinal compartments open at their front and closed at their rear, the two outer compartments having air fans and heating apparatus arranged therein and the central chamber being employed for drying purposes, a pair of horizontal races fixed at different levels to the inner surfaces of the longitudinal walls of the drying chamber, a plurality of poles adapted to support hanks thereon placed one at a time horizontally by hand upon the lower races, each pole having a ferrule at each of its ends adapted to slide on the lower races, and



also having spur teeth on ts periphery adapted to engage with spur racks provided on the said races for imparting an intermittent rotary motion to the poles, means arranged within the said chamber for intermittently propelling the poles along the upper and lower races, the poles on one of the races remaining stationary when the poles on the other races are being moved, means for raising the poles from the lower to the upper races and means for delivering the poles with their hanks after passing through the drying chamber.

1,872,778. SPARK PLUG. TAINE G. MCDOUGAL, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed May 28, 1928. Serial No. 281,205. 9 Claims. (Cl. 49—81.)

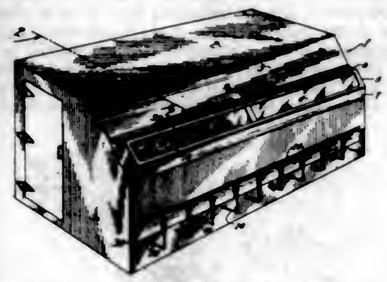


1. The process of making a spark plug unit consisting of coating a portion of an electrode with graphite or the like, and then molding fused quarts or similar insulation around the electrode so as to embed the uncoated portion directly therein and subsequently removing the graphite coating to provide clearance space between adjacent portions of the electrode and insulation.

1,872,779. DISPLAY DEVICE FOR REFRIGERATOR INSTALLATIONS. HARRY H. MCKEE and CHARLES T. WALTER, Chicago, Ill., assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 9, 1929. Serial No. 391,474. 1 Claim. (Cl. 312—118.)

A device of the character described, comprising a housing including an inclined front wall having an opening therein, a display case mounted on said inclined wall over

said opening and including a transparent top wall and a hinged door at the rear of the case, and a perforated partition between the housing and the case and secured



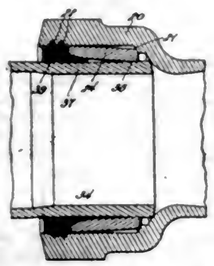
over said opening for the support of articles thereon and whereby communication is established between the housing and the display case.

1,872,780. WRENCH. JOE S. MCKIBBON, Columbia, Tenn. Filed Oct. 1, 1930. Serial No. 485,714. 6 Claims. (Cl. 81—118.)



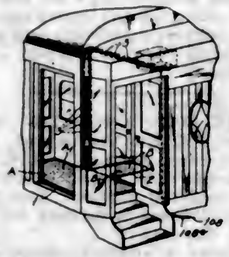
1. A wrench comprising a handle having a stationary shank and a stationary jaw carried by said shank, a longitudinally movable shank carrying movable jaw arranged opposite the stationary jaw, said movable shank being provided near its rear end with a transversely inclined slot, a pin secured to the handle and operating within the transversely inclined slot, and an adjustable coupling arranged in advance of the slot and pin and having pivotal connections with both jaws for shifting the movable jaw laterally with relation to the stationary jaw, the arrangement of the transversely inclined slot and pin and adjustable coupling being such that the rear end of the movable shank is automatically shifted laterally and outwardly upon the rearward longitudinal movement of the movable shank.

1,872,781. BELL AND SPIGOT JOINT. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Feb. 27, 1930, Serial No. 431,859. Renewed July 6, 1932. 16 Claims. (Cl. 285—115.)



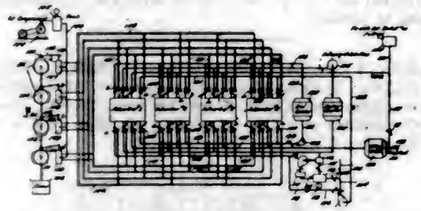
1. A pre-formed joint packing for bell and spigot pipes comprising in combination, a ring of wooden blocks interlocked with each other along their longitudinal edges and inserted endwise in the bell; and calking material in the mouth of the bell seated on the outer ends of said blocks.

1,872,782. REGISTERING DEVICE. CHARLTON MESSICK and ALEXANDER S. LANGSDORF, St. Louis, Mo. Filed July 5, 1929. Serial No. 375,915. 20 Claims. (Cl. 235—99.)



1. A device of the kind described comprising two collapsible liquid filled tread members outside a door, a similar tread member covering both of said tread members, each tread member being operatively connected with each of a pair of centrifugal devices, one operating when the tread is depressed and the other when the tread is raised, similar tread members and centrifugal devices inside the door, electric circuits controlled by said centrifugal devices and registering devices operated by said electric circuits.

1,872,783. ADSORPTION SYSTEM. ERNEST B. MILLER, Baltimore, Md. Filed Feb. 4, 1930. Serial No. 425,883. 7 Claims. (Cl. 183—4.)



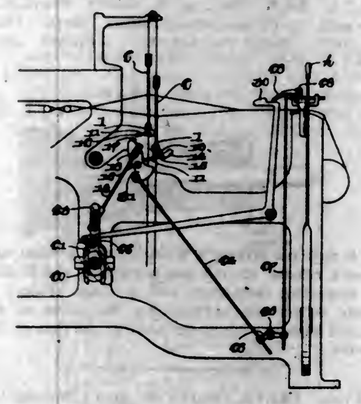
1. Apparatus for drying air comprising, in combination, a plurality of adsorbers each containing an adsorbent, means to connect at least two of said adsorbers in circuit with air circulating means to dry the air, a source of heated gas to revivify saturated adsorbent, means to place another adsorber in circuit with said source of heated gas and a circulating means, an air cooler in circuit between the two adsorbers on the adsorption phase, and valve means to periodically and automatically rearrange the adsorbers in the circuits to remove the most saturated one from the drying circuit to the revivifying circuit, said means inserting a fresh adsorber in the drying circuit and moving another from one side to the other of the cooler.

6. An adsorber casing having a plurality of inlets at one side thereof and a like number of outlets at the other side thereof, valves for said outlets and inlets, means controlling the opening and closing of said valves whereby but one inlet and one outlet is open at any one time, said controlling means being arranged to so open the valves that a cooperating inlet and outlet are never opposite each other whereby the gas takes a path through the casing longer than the shortest distance between the said sides.

1,872,784. DEVICE FOR THE WARP STOP MOTION. RISHIRO MIYATA, Ichino-Machi, Sakai, Osaka-Fu, Japan. Filed Mar. 13, 1931, Serial No. 522,323, and in Japan Apr. 10, 1930. 5 Claims. (Cl. 139—363.)

1. In a device for warp stop motion having a transverse bar mounted upon the heald frame so as to swing through

the holes of the healds, the said transverse bar having a weighted lever and remaining normally inclined in the heald holes by the action of said weighted lever, cam means coming in contact with the said lever so as to bring the said transverse bar to a substantially vertical



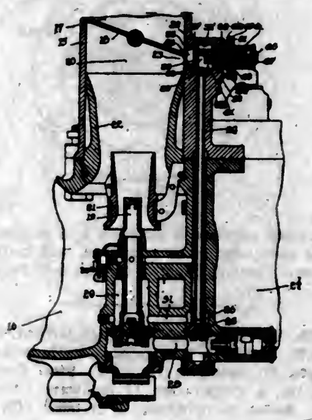
position opposite a reduced hole portion of the healds when the heald frame descends; means to bring the operating handle of the loom to a stop position by the engagement of the heald with the transverse bar as the latter takes a vertical position, the same heald having been dropped because of the breakage of a warp thread.

1,872,785. HEAT EXCHANGE DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Original application filed Feb. 23, 1929, Serial No. 342,284. Divided and this application filed May 8, 1930. Serial No. 450,726. 11 Claims. (Cl. 257—137.)



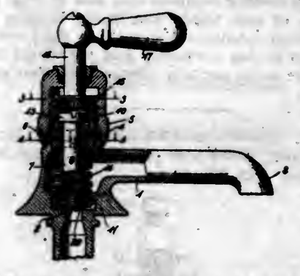
3. In apparatus of the kind described, a pair of spaced tanks, a radiator arranged at each end of said tanks and communicating with said tanks, said tanks and radiators providing an open ended box-like structure, each of said tanks having an opening whereby fluid may be introduced to one of said tanks for circulation from said tank through said radiators and out of the other tank, plates providing closures for the open ends of said box-like structure, one of said plates having an opening provided therein, air advancing means for advancing air through said radiators and opening, said air advancing means including a fan and a motor, the fan being arranged upon one side of one of the plates, the motor being located upon the opposite side of said plate, and said fan being arranged adjacent the opening provided in the first mentioned plate.

1,872,786. CARBURETOR. FRANK C. MOCK, CHARLES J. GUSTAFSON, and MILTON E. CHANDLER, Chicago, Ill., assignors to Bendix Stromberg Carburetor Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 24, 1922, Serial No. 556,160, and in Great Britain Sept. 6, 1919. Renewed Apr. 2, 1930. 17 Claims. (Cl. 261—41.)



11. In a carburetor, the combination of a carbureting chamber, a fuel nozzle plug removably and rotatably mounted to discharge into said carbureting chamber, said plug having a fuel port discharging fuel into said chamber and disposed eccentrically therein, the rotatable adjustment of said plug operating to shift the location of said port.

1,872,787. FAUCET. ROBERT H. MUELLER and CHESTER B. ALBERT, Decatur, Ill., assignors to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed Jan. 17, 1931. Serial No. 509,501. 6 Claims. (Cl. 251—3.)

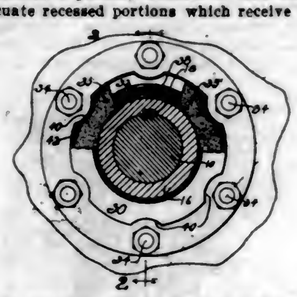


1. In a faucet, the combination of a body having an internal valve seat and an opening in a wall opposite said seat, an interiorly threaded bonnet closing said opening in the body, a guide sleeve extending into said opening in the facuet body and clamped to the body by the bonnet, a valve adapted to cooperate with the seat in the body and having its stem extending outward through said sleeve, means preventing relative rotation between the sleeve and valve stem, a spring acting to hold the valve to its seat, and means cooperating with the internal thread in the bonnet for moving the valve stem and valve outward in the direction of the length of the stem in opposition to the spring.

1,872,788. LUBRICANT SEAL. WILLIAM A. MULHERN, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 14, 1928. Serial No. 306,102. 3 Claims. (Cl. 286—5.)

1. A lubricant sealing device comprising a packing retaining member having an annular channel extending in

a radial plane, arcuate depressed portions at the base of said channel, a packing member in said channel and having arcuate recessed portions which receive said arcu-



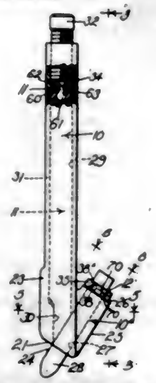
ate depressed portions, a flange on said packing extending over the open edge of said channel, and resilient means within said channel adapted to urge said flange radially.

1,872,789. METHOD OF MAKING METAL BARS AND FENCE POSTS. CRAWFORD B. MURTON, Chicago Heights, Ill., assignor to Inland Steel Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 2, 1931. Serial No. 519,369. 9 Claims. (Cl. 80—66.)



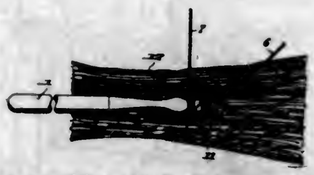
9. A process of rolling tubular metal bars consisting in rolling the blank partially to completed condition in developed form with enlarged portions at each side thereof, subsequently passing said blank between rolls constructed to shift one of said portions at each side of said bar inwardly, leaving outwardly projecting flanges, then rolling said blank to form oppositely directed flanges of said projecting portions and said shifted portions at each side of said blank, and finally bending said blank to completed tubular shape with an open side and with flanges projecting outwardly and the closed flanges projecting inwardly partially across said open side.

1,872,790. TOOL HOLDER. HERMAN A. MYERS, Whittier, Calif. Filed Dec. 10, 1928. Serial No. 324,935. 2 Claims. (Cl. 29—99.)



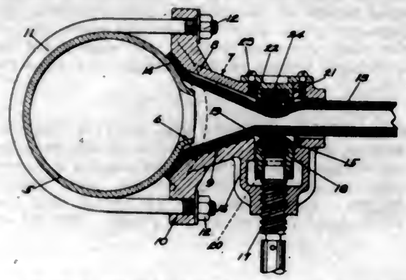
1. In combination, a tool, a body, releasable means for rigidly clamping the tool against movement relative to the body, and means for gauging the tool with respect to the body, including a collar detachably clamped on the tool at the exterior of the body, there being a slit in the collar so that the collar has split portions, and a screw threaded transversely through the said split portions and adapted to engage the body, the split portions normally holding the screw against movement.

1,872,791. MOP. CHARLES S. NELSON, Brooklyn, N. Y., assignor to Caleb Loring, Boston, Mass. Filed Dec. 22, 1930. Serial No. 504,115. 2 Claims. (Cl. 15—228.)



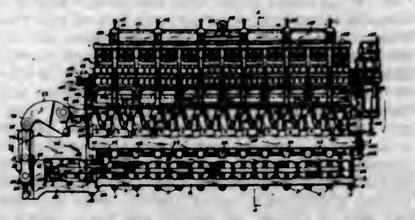
1. A mop comprising a binding wire, a mass of abrading wire twisted around one portion of the binding wire and extending therefrom, and a mass of soft, flexible strands collectively surrounding the mass of abrading wire and secured thereto by another portion of the binding wire.

1,872,792. VALVE. HARRY M. NEOBR, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 12, 1927. Serial No. 160,669. 13 Claims. (Cl. 251—5.)



1. A valve of the class described including a compressible member, and resilient nonmetallic compressing members contacting with said compressible member and cooperating with one another to control the effective opening thereof, said resilient compressing members conforming to the curvature of said compressible member when the same is compressed.

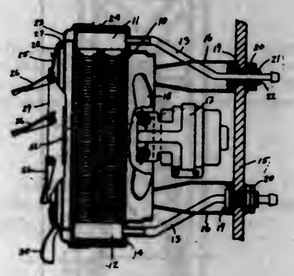
1,872,793. FLASH WELDING MACHINE. ERIC NILSON and SVEN MALKE, Milwaukee, and EINAR O. HOLMBERG, Wauwatosa, Wis., assignors to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed July 21, 1930. Serial No. 469,462. 65 Claims. (Cl. 219—6.)



1. A welding machine for flash welding the full length of a single longitudinal seam in a tubular blank, comprising means for supplying a welding current to the

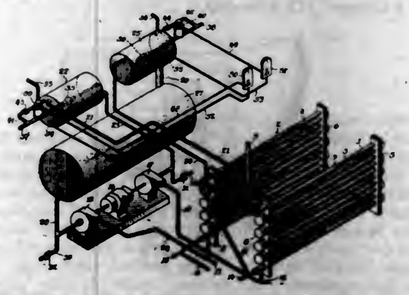
longitudinal edges to be welded, and means for moving said edges relatively toward each other to maintain an electric arc between the same simultaneously for the full length thereof and thereafter to press said edges together, a part of said last named means being adapted to contact with substantially the full outer circumference of the blank during the entire welding operation.

1,872,794. ADJUSTABLE DEFLECTOR FOR AUTOMOBILE HEATERS. QUINTIN G. NOBLITT and EARL C. BOOTH, Indianapolis, Ind., assignors to Noblitt-Sparks Industries, Inc., Indianapolis, Ind. Filed Mar. 28, 1930. Serial No. 439,717. 9 Claims. (Cl. 257—137.)



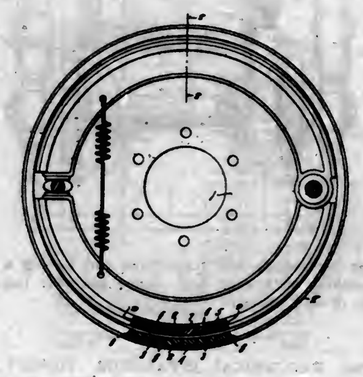
8. The combination with an automobile heater having an opening through which heated air is discharged, and a shield surrounding said opening, of a deflector associated with said shield, said deflector having an opening therein, means for varying the area of the opening, and means partially surrounding the opening in said shield for supporting said deflector thereon while permitting rotative movement therebetween.

1,872,795. PROCESS OF HEATING MILK. CHARLES E. NORTH, Montclair, N. J., assignor to The Creamery Package Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 3, 1928. Serial No. 297,357. 3 Claims. (Cl. 99—15.)



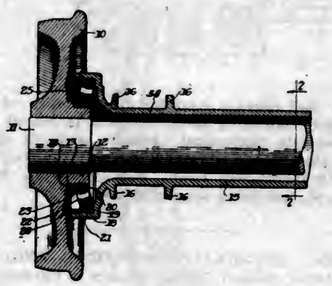
1. The process of maintaining uniform temperature in a circulating heating medium having heat exchange relation with a flowing body of milk, comprising, conducting said medium through a relatively small reservoir wherein variations of temperature from said uniform temperature automatically effect the intermittent interjection of heating fluid thereinto, conducting said medium through a relatively large reservoir wherein successive portions of medium flowing from said small reservoir are intermixed to effect uniform temperature therein, and thence conducting said heating medium into heat exchange relation with said milk.

1,872,796. BRAKE STRUCTURE. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 17, 1931. Serial No. 516,407. 9 Claims. (Cl. 188—78.)



1. A brake mechanism comprising a stator and a rotor, each having highly heat conductive synthetic resin frictional surfaces.

1,872,797. ENGINE TRUCK. ALFRED H. OELKERS, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Sept. 9, 1927. Serial No. 218,426. 18 Claims. (Cl. 295—36.)

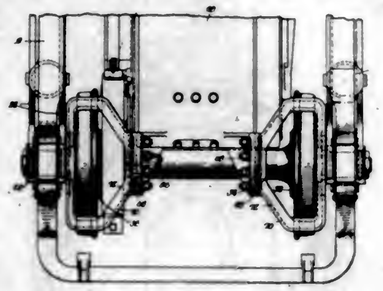


1. In a device of the character described, the combination of a wheeled axle, the wheels being provided with hubs, bearings on said hubs, and a stationary axle cooperating with said bearings.

1,872,798. TRUCK. ALFRED H. OELKERS, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed May 18, 1929. Serial No. 364,024. 19 Claims. (Cl. 105—136.)

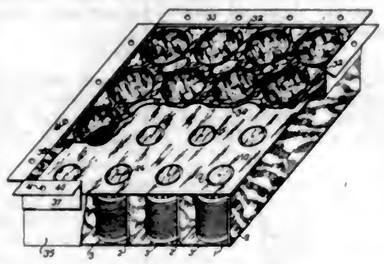
1. In a truck, the combination of a wheel and axle assembly including an outer rotary axle provided with bearing receiving portions and wheel receiving portions, wheels mounted on said last named portions for rotation with said axle, a drive gear mounted on said axle adjacent one of said wheels and adapted to rotate therewith, an inner axle extending through said rotary axle, bearings disposed between said axles, truck members, truck bearers carried by the ends of said inner axle and

cooperating with said truck members, bracket members carried by and secured to said inner axle and extending inwardly of said wheels to form motor mountings, and



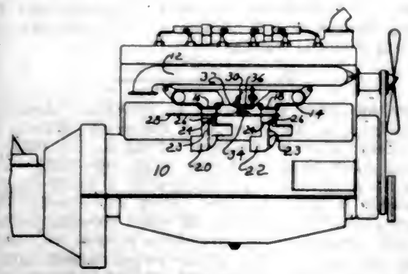
a motor secured to said mountings and having a drive gear meshing with said first named gear for imparting rotation of said wheels.

1,872,799. ELECTRICAL APPARATUS. VICTOR T. PARÉ, Long Beach, Ind. Filed Nov. 12, 1930. Serial No. 495,227. 21 Claims. (Cl. 179—115.5.)



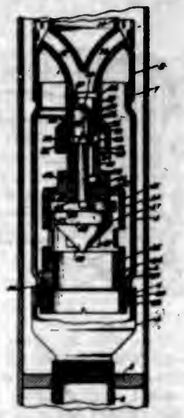
7. A loud speaker comprising a plurality of similarly energized translating means adapted to change electrical impulses into mechanical impulses, a single diaphragm, and a plurality of vibratable means operatively associating said translating means and said single diaphragm, said diaphragm being supported thereby.

1,872,800. INTERNAL COMBUSTION ENGINE. ROY W. PATON, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a Corporation of Delaware. Filed July 28, 1927. Serial No. 208,904. 6 Claims. (Cl. 123—52.)



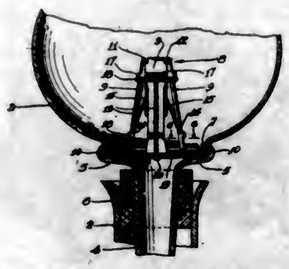
1. In a multicylinder engine, the combination of an intake manifold having two spaced inlet passages, a carburetor for each of said passages, a valve for each of said carburetors, means for operating said valves, a valve in said manifold positioned to segregate said inlet passages, and means independently of said first named operating means dependent on the position of said first named valves for opening or closing said last named valve.

1,872,801. AUTOMATIC FLUID PRESSURE DISPLACEMENT PUMP. CHARLES B. PENDLETON, Los Angeles, Calif., assignor to Citizens National Trust & Savings Bank, Los Angeles, Calif., a National Banking Association of the United States of America. Filed Feb. 2, 1931. Serial No. 512,837. 6 Claims. (Cl. 103—240.)



1. In a device of the character disclosed, an expansion chamber member, a gas valve and a foot valve for controlling liquid passage inter-connected for joint operation, a cage for the foot valve, means for admitting gas into the expansion chamber when the gas valve is opened, the foot valve closing entrance into the expansion chamber, and means whereby gas is at all times directed above said foot valve.

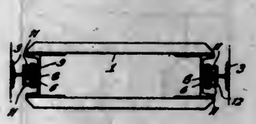
1,872,802. FILTERING DEVICE. EDWARD PERLMAN, Chicago, Ill. Filed Dec. 10, 1930. Serial No. 501,391. 8 Claims. (Cl. 210—162.)



1. A filtering device comprising a ring, a plurality of members hingedly connected to said ring, means for yieldingly moving the members to expanding positions, and a filtering element operatively connected with said members.

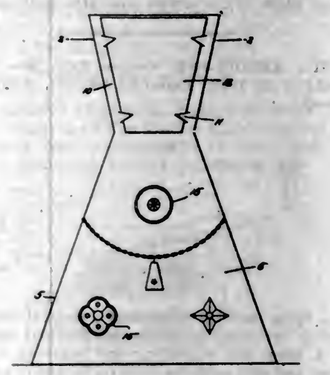
1,872,803. ELEVATOR CAR GUIDE. LARS GOTTFRID PERSSON, New York, N. Y., assignor to A. B. See Elevator Company, Inc., a Corporation of Dealware. Filed Feb. 14, 1930. Serial No. 428,304. 4 Claims. (Cl. 187—95.)

1. In an elevator car, in combination with vertical guide rails disposed on opposite sides of a hatchway and having each an enlarged guide head, the frame of the car, two guide shoes on either side of the car attached to the frame thereof, one shoe being on top of the frame and the other on bottom of the frame and each having a channel shape bearing surface engaging over the adjacent side rail, and



vertical angle members on the side frame members of the car between the guide shoes extending behind the enlarged head of the adjacent guide rail and the guide shoes acting to maintain the angle members out of contact with the head but in close proximity thereto.

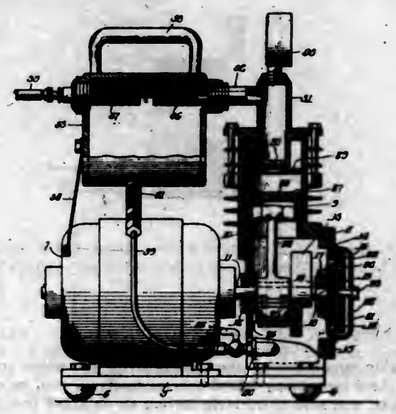
1,872,804. JEWELRY DISPLAY DEVICE. DOUGLAS Z. PETERS, Ida Grove, Iowa. Filed June 29, 1931. Serial No. 547,768. 2 Claims. (Cl. 40—149.)



1. As a new article of manufacture, a combined display stand and sign support formed from a single blank of flexible material and including a front portion having correspondingly shaped integral upper and lower sections, a pair of wings foldable back from the sides of the lower sections, the lower front section and wings being hinged together on lines that converge toward that end of said lower front section merging with the upper front section, said upper front section having opposite inclined edges merging with the hinge lines at the converging ends of said hinge lines, pairs of opposed card engaging fingers on said upper front sections and arranged to support an indicia bearing card having substantially the same general configuration of said upper front section.

1,872,805. AIR COMPRESSOR. JOHN T. PETERSON, Chicago, Ill. Filed Feb. 24, 1930. Serial No. 431,031. 9 Claims. (Cl. 230—206.)

1. An air compressor comprising a cylinder, a piston, a motor for reciprocating the piston in said cylinder, an air outlet leading from said cylinder, a receptacle fastened to said motor and connected to said outlet, an air line leading from said receptacle, a crank case for said compressor, a line leading from said receptacle to said crank case, and a check valve in said last named line and operating at



a predetermined pressure, whereby any condensation collected in said receptacle will be drained into the crank case upon opening of the check valve.

1,872,806. BRAKE SHOE. ROBERT B. POOLE, Chicago, Ill., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 14, 1931. Serial No. 515,653. 5 Claims. (Cl. 188—258.)

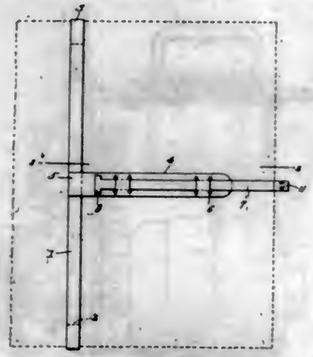


1. A brake shoe comprising a body, end lugs, and a back embedded in the body and said lugs, the end portions of the back having openings therein receiving metal of the body and integrally connecting the lugs therewith, said end portions of the back being distorted between said openings to receive body metal which is integrally connected with the lugs and forms anchors for the lugs on the back when the body is worn down to the underside of the back.

1,872,807. BOOKMARKER. JENNIE POSNER, Plainfield, N. J. Filed Mar. 4, 1932. Serial No. 596,828. 2 Claims. (Cl. 116—119.)

1. A device of the class described comprising a strip formed of flexible and transparent material and having its ends bent over to engage portions of the end edges of a page of a book or the like, the material being rolled at the points of bends to form tubular parts, a second strip

formed of the same material as the first and having one end connected to an intermediate part of the first strip, said second strip having pairs of slits therein, a third strip passing through the slit whereby said third strip is

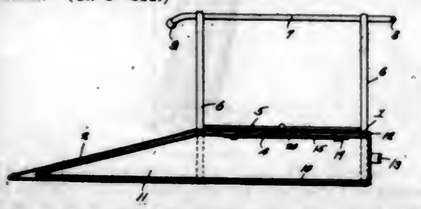


slidably supported on the second strip, the outer end of the third strip being folded over to receive a card carrying indicia, and said third strip having an enlarged inner end for limiting tthe outward movement thereof.

1,872,808. PROCESS OF RECOVERING LIGHT OILS, MOTOR FUEL, AND THE LIKE. CHARLES J. RAMSBURG, Edgeworth, Pa., assignor to The Koppers Company, a Corporation of Pennsylvania. Filed Dec. 24, 1926. Serial No. 156,986. 3 Claims. (Cl. 196—50.)

3. The process of obtaining motor fuel having anti-knock properties which comprises washing coal gas containing bensene and other benzenoid hydrocarbons with a petroleum distillate oil for the removal from said gas of said benzenoid hydrocarbons, removing the petroleum distillate oil thereby enriched with said benzenoid hydrocarbons, subjecting said enriched oil to a distillation operation in which constituents of said oil are cracked to products of lower boiling point, and condensing the vapors thereby evolved to produce a liquid comprising a mixture of light aromatic and aliphatic hydrocarbon oils.

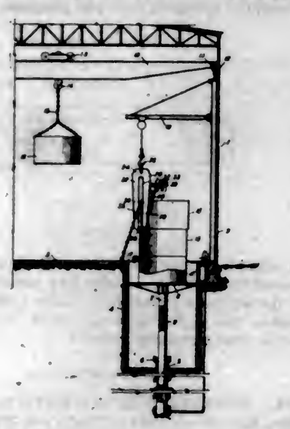
1,872,809. BEDPAN. GEORGE W. RANDALL, Washington, D. C. Filed May 28, 1931. Serial No. 540,748. 4 Claims. (Cl. 4—112.)



1. A bed pan including a portable housing having an extension, there being an opening in the top of the housing, hinged covers for the opening in the top of the housing, a container removably mounted in the housing and having a top opening, and side slots, slides in the slots for closing the top opening therein, and side flanges on the container overhanging the outer ends of the slides when closed.

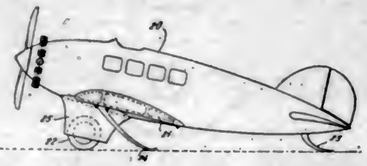
1,872,810. METHOD OF AND APPARATUS FOR ASSEMBLING METAL SECTIONS. GWYNNE RAYMOND, Kansas City, Mo. Filed Sept. 10, 1930. Serial No. 480,822. 7 Claims. (Cl. 29—84.)

1. The method of assembling metal sections including supporting a base section on its lower edge with its upper edge at a working level above a floor, lowering a second section to close aligning relation with the base section, connecting the adjacent edges of the sections, lowering the support for the base section to position the assembled sec-



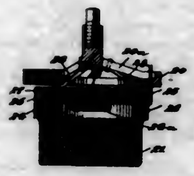
tions with the upper edge of the added section at the working level, lowering a third section into close aligning relation with the second section, and connecting the adjacent edges of the second and third sections.

1,872,811. AEROPLANE. GORDON REEL, New York, N. Y. Filed Feb. 12, 1929. Serial No. 339,309. 3 Claims. (Cl. 244—2.)



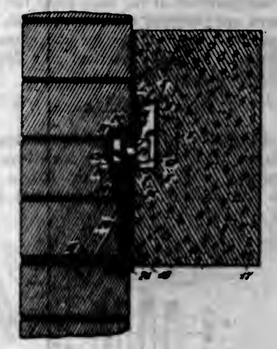
1. A flying machine comprising a central body, a wing extending transversely of the longitudinal axis of said body, a wheel for supporting said machine, a tail skid, ailerons, and skid members rigidly attached to said ailerons and functioning automatically in harmony with said ailerons to control the lateral stability of the machine.

1,872,812. WATCH CLEANING MACHINE. FRANK REGERO, Macon, Ga., assignor to L. & R. Manufacturing Company, a Corporation of New Jersey. Filed July 11, 1930. Serial No. 467,374. 2 Claims. (Cl. 141—1.)



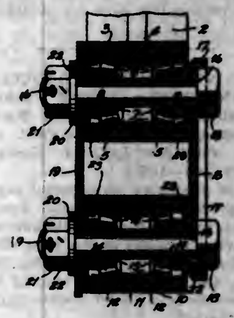
1. In a watch cleaning machine, the combination with a depending rotatable shaft, of a holder attached to the lower end of said shaft and comprising radial arms provided with springs, and a wire mesh basket having a rim to contact with said springs and provided with locking means to co-operate with said arms, whereby it may be attached to or detached from said holder.

1,872,813. ADJUSTABLE SHELF-ANGLE SUPPORT FOR BUILDING CONSTRUCTION. FRANK D. REILAND, Chicago, Ill. Filed June 30, 1930. Serial No. 464,876. 9 Claims. (Cl. 72—101.)



1. A shelf-angle support for building construction, comprising an insert to be anchored in the concrete frame, a hanger comprising a pair of superposed metallic strap members adapted to project downwardly respectively in front and behind the rear flange of the shelf-angle and hold same in vertical position, the rearmost hanger member having a horizontal flange portion at its lower end to extend beneath and support the shelf-angle, and means for suspending the hanger from the insert.

1,872,814. SPRING SHACKLE. ROBERT M. RIBLET, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Feb. 13, 1931. Serial No. 515,496. 4 Claims. (Cl. 267—54.)



1. A spring shackle construction comprising a pair of shackle bolts extending through eye members, roller bearings mounted on said shackle bolts and in said eye members and shackle plates connecting said shackle bolts, said plates having annular ribs engaging members of said bearings.

1,872,815. ARTIFICIAL ANKLE JOINT. MILO E. RICE, Kansas City, Mo. Filed Feb. 3, 1930. Serial No. 425,534. 2 Claims. (Cl. 3—6.)

2. In an artificial leg structure, a leg portion having a depending shank provided with laterally-spaced depending semi-spherical portions, a foot portion having a pair of laterally-spaced semi-spherical sockets receiving said pair of semi-spherical portions to constitute independent fulcrums upon either of which the foot portion can tilt laterally relative to the leg portion, to permit the other semi-spherical portion and socket to separate, and an elastic shoe completely encasing and tightly fitting the



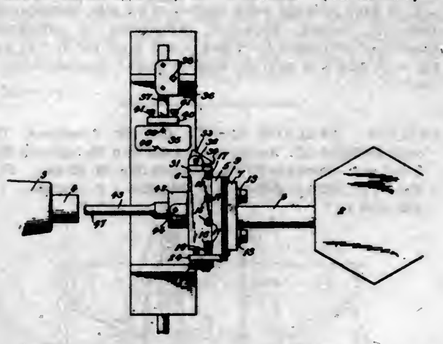
foot and shank portions and bearing at its upper edge firmly against the lower end of the leg portion around the shank.

1,872,816. DEVICE FOR HOLDING AND DISPENSING SOAP BARS. FRANK G. RINGLAND, Des Moines, Iowa. Filed Mar. 2, 1931. Serial No. 519,365. 3 Claims. (Cl. 45—28.)



1. In a bar of soap dispenser, a hollow member designed to receive a bar of soap open at its bottom and top, a means for securing said hollow member to a support, a curved trap door capable of inclosing the bottom of said hollow member, and a means for yieldingly holding said trap door in a closed position.

1,872,817. MEANS FOR CUTTING GROOVES IN BUSHINGS. HARRY F. ROOT, Buffalo, N. Y., assignor of one-third to Arthur C. Haller, Buffalo, N. Y. Filed Sept. 8, 1930. Serial No. 480,543. 5 Claims. (Cl. 82—17)

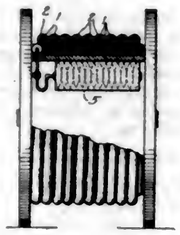


1. Mechanism for the purpose set forth comprising a body member having a socket on one side, a cutter carried by said socket, a second body member slidably fitted to the first mentioned body member, a shank carried by the second body member and engageable in the turret of a lathe, a dove-tail connection between the two body members, a spring housed by and between the members at said dove-tail connection and extending longitudinally thereof with its ends acting on opposite ends of and tending constantly to move the body members in opposite directions, and a set

bolt carried by the end of one body member and engaged in the corresponding end of the other body member whereby to hold them in set relation.

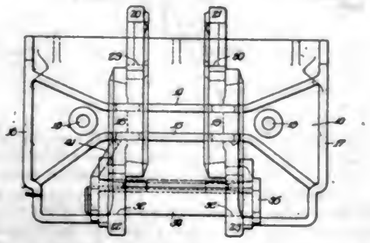
5. Means for the purpose set forth comprising a body member having a cutter-receiving socket on one side and provided on its opposite side with a dove-tail groove extending from end to end thereof, a second body member provided on one side with a dove-tail tongue slidably fitting in the dove-tail groove of the first-mentioned member and provided on its opposite side with a central rib extending from end to end thereof, the two members being provided with mating grooves in their meeting faces extending from end to end of the dove-tail tongue and the dove-tail groove respectively, a cam-carrying plate secured to one end of one body member and provided with a plug fitting in said mating grooves, a cam mounted on said plate, a cam guide along which the cam may ride, a plug fitting in the mating grooves at the opposite ends of the body members, an expansion spring fitted to and extending between the plugs and housed in the mating grooves, a plate secured to one body member and extending across the outer end of the last-mentioned plug, a screw mounted in said plate and engaged in the last-mentioned plug, a set bolt mounted in said plate and threaded into the other body member, a holding plate fitted on the rib on the second-mentioned body member and provided with longitudinal slots over the ribs, securing devices inserted through said slots into the rib, and a shank extending from said plate to be held in the turret of a lathe.

1,872,818. IMPREGNATED PAPER INSULATED, LEAD COVERED CABLE. DENNEY W. ROPER, Chicago, Ill. Filed June 1, 1931. Serial No. 541,137. 8 Claims. (Cl. 173—264.)



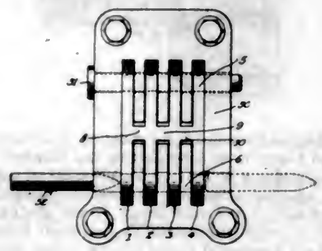
1. A high voltage cable including an oily impregnating dielectric having dispersed throughout a substantial amount of entrained inert gas which is devoid of free oxygen and which is slightly soluble in the impregnating dielectric.

1,872,819. TRACTOR LINK. CLAUDE ROBABECK, Chicago Heights, Ill., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed Feb. 16, 1929. Serial No. 340,452. 3 Claims. (Cl. 305—10.)



2. An integral tractor link casting consisting of a ground-engaging shoe, a pair of pivot ears at one end of the shoe spaced apart to provide a channel for the driving sprocket teeth, a pair of pivot ears at the opposite end of the shoe having a wider space therebetween, a pair of flat rails forming trackways joining the top portions of the pivot ears between the opposite ends of the link, a pair of transversely extending vertical ribs supporting the mid-portions of the rails from the shoe, whereby open spaces are provided beneath the rails between the pivot ears and the vertical ribs for the extrusion of dirt and continuations from the vertical ribs divergently extending to the side edges of the shoe.

1,872,820. CLOSING CHAIN. CLAUDE ROBABECK, Chicago Heights, Ill., assignor to American Manganese Steel Company, Chicago Heights, Ill., a Corporation of Maine. Filed Nov. 1, 1929. Serial No. 403,950. 2 Claims. (Cl. 59—84.)

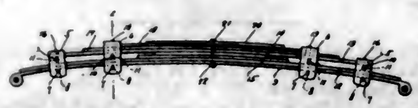


1. An articulated chain composed of a plurality of pivotally-connected links, each of said links comprising an integral casting of manganese steel formed to consist of a plurality of parallelly-disposed link plates, each of which has a thickness materially less than the length of said plates, said plates being spaced apart substantially equal to the thickness of the individual plates by transverse webs extending centrally therebetween, said webs being relatively narrow in a direction lengthwise of the link and said link plates having aligned openings at each end adapted to receive link pins for pivotally connecting adjacent links.

1,872,821. METHOD FOR PRODUCING ALKALI METAL XANTHATES. LUDWIG ROSENSTEIN, San Francisco, Calif., assignor to Great Western Electro-Chemical Company, San Francisco, Calif., a Corporation of California. Filed Nov. 12, 1924. Serial No. 749,558. 5 Claims. (Cl. 260—106.)

5. A method of producing alkali metal xanthates which consists in dispersing an alkali metal hydroxide in an alcohol with the formation of an alcoholate, and thereafter adding carbon bisulfide to the mass while maintaining the mass at a temperature suitable for the completion of the reaction, and including the step of subjecting ingredients to pressure in a closed system during a portion of the reaction thereof.

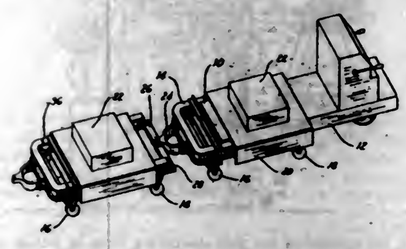
1,872,822. VEHICLE SPRING. ALPHIE ROULEAU and PAUL NADEAU, Barre Town, Vt. Filed Sept. 15, 1931. Serial No. 562,958. 3 Claims. (Cl. 267—49.)



1. A vehicle leaf spring comprising a plurality of relatively elongated lower leaves, and a plurality of relatively shorter upper leaves separated from the first named leaves by a plurality of intermediate leaves of varying

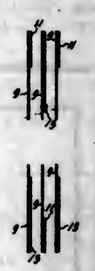
length, clamps embracing the first and second named leaves at opposite ends of the spring, and rollers carried by said clamps and arranged in the space provided between the first and second named springs, and engaging the opposed surfaces of the springs.

1,872,823. TRAILER TRUCK. BERT J. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Apr. 17, 1931. Serial No. 530,850. 2 Claims. (Cl. 214—65.)



1. A drayage unit comprising a U-shaped trailer truck, a lift truck provided with a platform adapted to telescope within the outline of the aforementioned trailer truck, and a channel-shaped goods supporting platform to be transported, said latter platform adapted to be telescoped by and supported upon said lift truck platform, the relative widths of the trailer truck, lift truck platform and the platform to be transported being such as to permit the U-shaped trailer truck to telescopingly receive both the lift truck platform and the goods supporting platform to thereby permit said channel sectioned goods supporting platform to be mounted on and telescoped over the walls of the trailer truck.

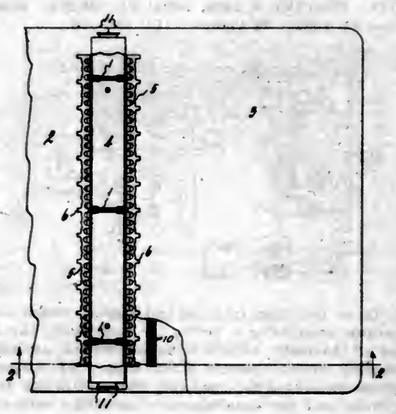
1,872,824. LOOSE LEAF BOOK. FRANK S. SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Corporation of Massachusetts. Filed May 19, 1931. Serial No. 538,477. 7 Claims. (Cl. 129—1.)



7. In combination with overlapping record sheets and dividing leaves for loose leaf books, sets of wide and narrow leveling pads made of flexible material of uniform thickness throughout, said pads being arranged between the dividing leaves and banks of record sheets in approximately equal number of each at both upper and lower ends of the filler.

1,872,825. LOOSE LEAF BINDER. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Corporation of Massachusetts. Filed Oct. 15, 1931. Serial No. 568,967. 9 Claims. (Cl. 129—24.)

3. In a binder of the ring book type having a back and flexible covers each made up of a single ply hinged to the back, the combination of covers having a series of spring wires laid inside each cover adjacent its hinge line

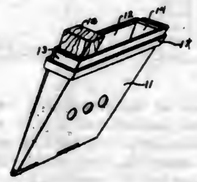


and parallel thereto, said wires being arranged to receive pressure from the binder rings when the cover is pressed against them and to distribute said pressure.

1,872,826. SOLUBLE SALTS OF ORGANIC BASES AND THE PROCESS OF PREPARING THE SAME. WERNER SCHULEMANN, Elberfeld-Vohwinkel, and FRITZ SCHÖNHÖFER, Elberfeld, Germany, and AUGUST WINGLER, Westfield, N. J., assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed July 7, 1928, Serial No. 291,136, and in Germany Aug. 16, 1927. 11 Claims. (Cl. 260—25.)

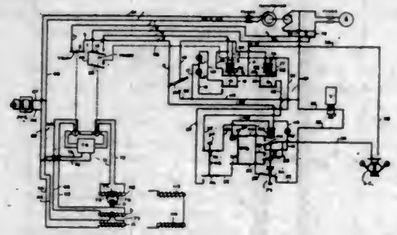
1. In the process for the manufacture of sparingly soluble salts of organic bases, the step which comprises allowing to react an organic base with a methylene compound of an acid of the group consisting of aromatic-sulfonic and carboxylic acids.

1,872,827. INDIVIDUAL BRUSH KEEP AND SHAPER. BURT SEARLES, East San Gabriel, Calif., assignor of one-half to Hughie R. Lee, Monterey Park, Calif. Filed Nov. 17, 1931. Serial No. 575,570. 2 Claims. (Cl. 206—15.1.)



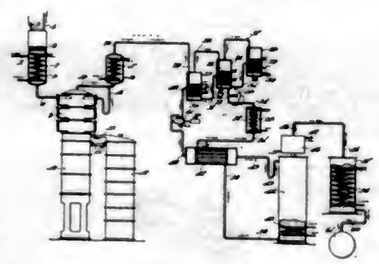
1. In a brush keep device of the class described, a front member, a back member, a pintle connecting said members, each of said members having a triangular flange thereon at each side thereof forming ends, said flanges having their bases at the end opposite said pintle and means to hold said front and back in angular relation, said means comprising a sleeve rectangular in cross-section and slidable along said keep, said sleeve engaging said front member, said back member and said ends.

1,872,828. TRAIN CONTROL SYSTEM. ARCHIBALD G. SHAVER, Chicago, Ill., and BENJAMIN W. MEIGEL, Crestwood, N. Y., assignors to The Regan Safety Devices Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 1, 1926, Serial No. 138,869. Renewed June 14, 1932. 38 Claims. (Cl. 246—63.)



1. In an induction train control system, vehicle carried apparatus comprising a device for controlling the movement of the train, vehicle signalling means, an inductor controlled circuit operable when tripped by cooperating roadside apparatus for operating the said device to stop the train and for simultaneously operating said vehicle signalling means to indicate therein the corresponding roadside condition, a second inductor controlled circuit for resting the vehicle signalling means, manual means for modifying the stop operation of said device and for placing the same under the control of the speed of the train to permit the train to move under a speed restriction, and manually operable mechanism effective only when the train is not exceeding a restricted speed for resetting said inductor controlled circuit to reset the said device to its normal unrestricted operation without resetting the vehicle signalling means.

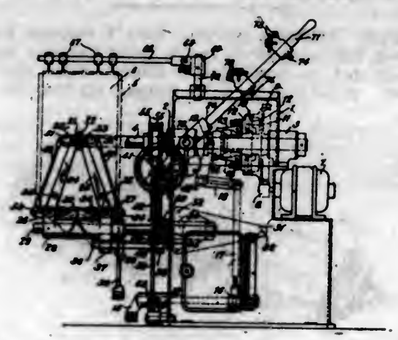
1,872,829. METHOD AND APPARATUS FOR THE MANUFACTURE OF CONCENTRATED AMMONIA LIQUOR. MARK SHOELD, Mount Lebanon Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed May 17, 1929. Serial No. 363,975. 18 Claims. (Cl. 202—15.)



15. The process of manufacturing concentrated ammonia liquor from ammoniacal vapors which comprises substantially continuously recirculating an aqueous liquid through a cycle comprising an absorption stage in the path of said vapors and a pressure still, and condensing the distillate from the pressure still at a pressure corresponding to that in the still.

16. Apparatus for manufacturing concentrated ammonia liquor from ammoniacal vapors which comprises, in combination, an absorber means for supplying ammoniacal vapors to said absorber, a pressure still having a condenser associated therewith and adapted to operate at a pressure corresponding to that in the still, and means for substantially continuously recirculating aqueous liquid through a cycle comprising said absorber and said pressure still.

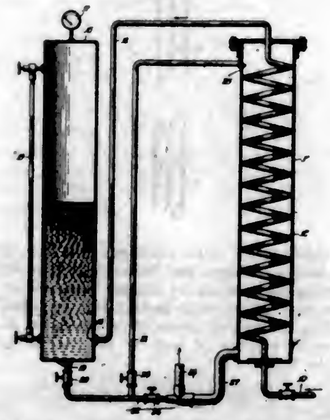
1,872,830. APPARATUS FOR MANUFACTURING TIRES. FLORAIN J. SHOOK, Akron, and ALLEN L. HESTON, Columbiana, Ohio, assignors, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 2, 1928. Serial No. 316,649. 12 Claims. (Cl. 154—10.)



1. An apparatus for manufacturing tires in pulley band form, comprising in combination, a rotatable drum upon which the band may be built, a movable support, a pair of arms movably connected to said support, a stitching wheel carried by the free end of each arm, a treadle for operating said support to press the stitching wheels against said band, a handwheel, and connections between said handwheel and said arms operable to move the latter simultaneously in opposite directions on said band.

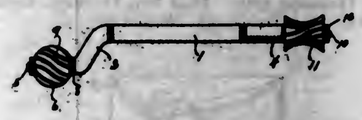
11. In a band-building machine, the combination of a rotary band form, a clutch-controlling member, a form-rotating clutch controlled by said member and adapted to remain engaged when clutch-setting pressure is removed from the controlling member, a form-arresting brake, and brake-controlling means operating to release the clutch when said brake is set.

1,872,831. DEVICE FOR CONTROLLING PRESSURE OF VOLATILE LIQUIDS. HERMAN B. SIEMS, Chicago, Ill., assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed May 29, 1930. Serial No. 457,482. 4 Claims. (Cl. 62—1.)
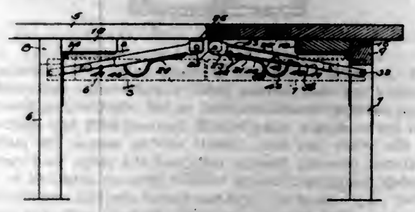


1. The method of withdrawing liquefied fluids, normally gaseous from a container under pressure which consists in permitting the passage of the fluid from a body of fluid under liquefying pressure, into a closed space at a certain rate and withdrawing said fluid from said space at substantially the same rate while maintaining a sufficient uniform pressure in said space to hold said fluid at least partially liquefied, and maintaining said uniform pressure by permitting the expansion of a determined quantity of said withdrawn fluid in heat transferring association with the fluid passing to said space.

1,872,832. DENTAL DEVICE. SIMON SILVERBERG, Baltimore, Md. Filed Apr. 16, 1931. Serial No. 530,636. 1 Claim. (Cl. 128—57.)



In a dental device of the class described, a handle, one end of the handle being offset at an angle of approximately 45°, a shaft carried by the end of the offset portion and extending therefrom with its axis substantially parallel with the axis of the handle, a substantially spherical massage roller mounted for rotation on the shaft and shaped to conform to the concavity of the internal alveolar surface, and spirally arranged ribs formed on the periphery of the roller.

1,872,833. FOLDING TABLE. JOSEPH SILVERMAN, Chicago, Ill. Filed June 20, 1929. Serial No. 372,257. 6 Claims. (Cl. 45—11.)



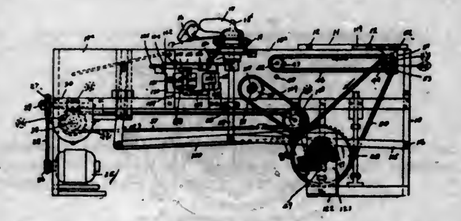
1. A folding table comprising in combination, a table top, a leg structure pivoted to said top for folding relative thereto and comprising a pair of leg members and a brace structure comprising a tubular member pivoted to the table top and a generally Y-shaped brace formed by a pair of separate members each having a leg in sliding telescopic engagement with said tubular member and held together thereby, and a pair of diverging arms connected to the legs of the table.

1,872,834. PROCESS OF MAKING REACTION PRODUCTS OF VINYL ESTERS AND ALDEHYDES. FREDERICK W. SKIRROW, Shawinigan Falls, Quebec, Canada, assignor to Canadian Electro Products Company, Limited, Montreal, Quebec, Canada. Filed Dec. 12, 1928. Serial No. 325,661. 12 Claims. (Cl. 260—141.)

1. A process of making a condensation product of an aliphatic vinyl ester and a saturated aliphatic aldehyde, which comprises heating them together under pressure in presence of benzoyl peroxide as catalyst.

1,872,835. AUTOMATIC PHONOGRAPH. THOMAS W. SMALL, Huntington, Ind., assignor, by mesne assignments, to The Capehart Corporation, Fort Wayne, Ind., a Corporation of Indiana. Filed May 17, 1929. Serial No. 363,776. 46 Claims. (Cl. 274—10.)

1. In a repeating phonograph having a storage magazine, a vertically fixed horizontal turn table and a conveyer adapted to return records to said storage magazine, the combinaton of a lowering and reversing platform, mechanism for moving a record from said turn table to said platform, mechanism adapted to lower said platform and to reverse the same to place the record on the said



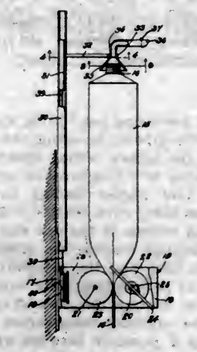
conveyor in reversed relation, and members adapted to maintain the record on said platform during the said lowering and reversing.

1,872,836. POWDER DISPENSER. CHARLES P. SMITH, Tulsa, Okla., assignor to Burst-Webster Engineering and Sales Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 8, 1931. Serial No. 507,443. 1 Claim. (Cl. 221—61.)



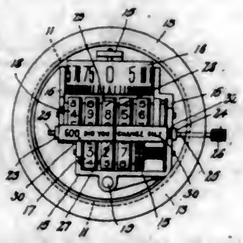
A face powder dispenser comprising a cylinder, means to fill the cylinder with powder to be ejected, a rod reciprocable in and extended through one end of said cylinder, a plunger and ring on the free end of said rod, a piston mounted on the other end of said rod, said piston reciprocable in an orifice in the outer end of the cylinder, grooves in said orifice, and a helical spring extending through the cylinder and around the rod, said spring having the dual function of agitating the powder to be ejected and of forcing the piston within the orifice and cylinder.

1,872,837. DISPENSING DEVICE. JOSEPH J. SMITH, Philadelphia, Pa. Filed July 13, 1931. Serial No. 550,416. 7 Claims. (Cl. 221—60.)



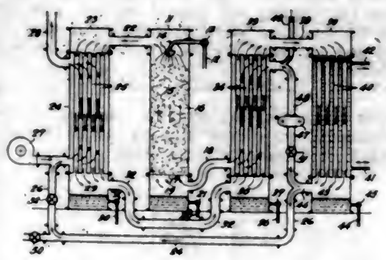
1. A dispensing device for collapsible tubes comprising a frame, a pair of rollers fixedly journaled upon the frame adapted to collapse a tube, a cap carried by the frame adapted to close the end of the tube opposite the collapsible end, a delivery tube carried by the cap, and means to hold the cap yieldingly in engagement with the tube as it is progressively collapsed by the rollers.

1,872,838. INDICATING DEVICE. ROY D. SMITH, Wesson, Miss. Filed Apr. 30, 1932. Serial No. 608,515. 3 Claims. (Cl. 116—114.)



1. In indicating device for motor vehicles including a framework, a train of operatively connected mileage indicating members rotatably mounted thereon, a spur gear secured to one of the members of said train, laterally spaced bearings on said framework, a shaft rotatably mounted in said bearings, a supplementary indicating member secured to said shaft, and a spring means upon said shaft for holding said spur gear in operative engagement with the said spur gear secured to one of said train members, and a spur pinion mounted on said shaft and intermeshing with said spur gear on the said member of said train, said spur pinion being free to rotate upon said shaft but being frictionally engaged by said supplementary indicating member.

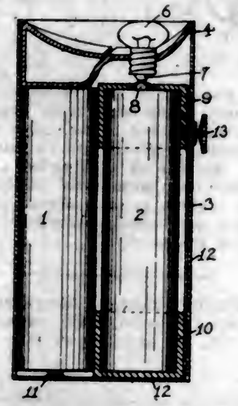
1,872,839. HYDROGENATION OF HYDROCARBONS AND APPARATUS THEREFOR. FREDERICK T. SNYDER, Boston, Mass. Filed Dec. 16, 1925, Serial No. 75,796, and in Canada, Mar. 6, 1925. Renewed July 5, 1932. 13 Claims. (Cl. 196—62.)



1. A process of producing low boiling hydrocarbons from higher boiling hydrocarbons, including the steps of heating and evaporating the higher boiling hydrocarbons by contact with gas heated to a temperature below the cracking temperature of said higher boiling hydrocarbons, the volume of said gas being such that it will constitute over 90 per cent of the volume of the gas and vapour mixture that will be produced by evaporation of said higher boiling hydrocarbons into said gas, the gas containing in excess of fifty per cent of free hydrogen by volume; and cracking said vapours by heating the gas and vapours to a temperature above the cracking temperature of said vapours while maintaining a pressure between atmospheric pressure and approximately one hundred pounds per square inch.

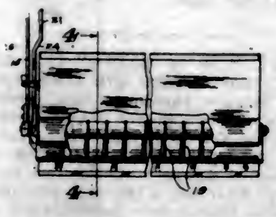
11. An apparatus for the hydrogenation of hydrocarbons which includes a vaporizer having means to distribute the hydrocarbon in a thin film and to direct hot gases into contact with the filmed hydrocarbon, a heat exchanger, a condenser, a hydrogenator, connections between the vaporizer, heat exchanger, condenser and hydrogenator for circulating gas through the heat exchanger, vaporizer and hydrogenator and again through the heat exchanger following a path isolated from the first, through the condenser and back to the heat exchanger and hydrogenator, means for introducing hydrogen into the circulation and means for removing gas from the circulation and means for heating the material passing through the hydrogenator.

1,872,840. BATTERY HAND LAMP. ROBERT A. STEVENSON, Lancaster, Ohio. Filed Nov. 11, 1930. Serial No. 494,847. 7 Claims. (Cl. 240—10.65.)



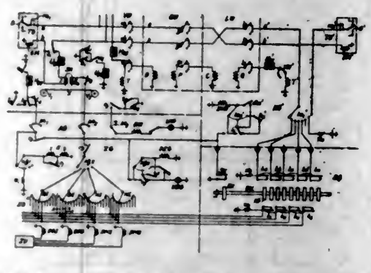
1. A battery hand lamp comprising two electrically isolated dry cells having positive and negative electrodes, lamp holding means attached to one electrode of one dry cell for holding a lamp bulb in contact with one electrode of the other dry cell, circuit closing means for closing a circuit between the dry cells and the lamp, said circuit closing means including a contact element attached to the other electrode of the first mentioned dry cell and adapted to be brought into intermittent contact with the other electrode of the second mentioned dry cell when certain portion of said contact element is pressed.

1,872,841. MATERIAL SPREADER. FRANK C. STOLLE, St. Louis, Mo. Filed June 7, 1930. Serial No. 459,757 6 Claims. (Cl. 275—2.)



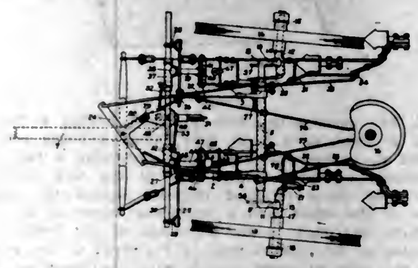
1. A material distributing device for application to the rear end of a dump truck body having a tail gate, comprising a hopper formed with a front wall having an upper edge arranged to engage the bottom of the truck body, a rear wall arranged to cooperate with the truck tail gate to retain material, end walls connecting said front and rear walls, a bottom between said walls, said bottom having an opening for the passage of material, elements in said hopper for agitating the material therein, and means for manually operating said elements at intervals as desired from a point exteriorly of the hopper while the truck is moving.

1,872,842. CALL RECORDING AND CHARGING SYSTEM. PAUL STORCH, Berlin-Charlottenburg, and EBERHARD ROSSBERG, Berlin-Siemensstadt, Germany, assignors to Siemens & Halske Aktiengesellschaft, Wernerwerk Siemensstadt, near Berlin, Germany. Filed Mar. 11, 1931, Serial No. 521,736, and in Germany June 7, 1930. 13 Claims. (Cl. 179—7.1.)



1. In a call recording and charging system, calling and called subscribers' lines, means for establishing a connection between a calling line and a called line, means automatically operative responsive to the establishment of said connection in case the called line is idle for transmitting back over the established connection an identification signal assigned to the called subscriber's line, and a recorder associated with said calling line operated responsive to said transmission for recording said called line identification signal.

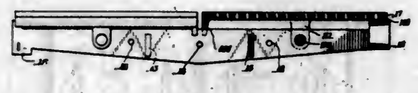
1,872,843. CULTIVATOR. CARL G. STRANDLUND, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Original application filed Apr. 3, 1924, Serial No. 703,915. Divided and this application filed May 13, 1929, Serial No. 362,577. Renewed June 6, 1932. 12 Claims. (Cl. 97—155.)



1. In an agricultural implement including a frame, the combination therewith of crank axles supported on the frame, each crank axle including a substantially vertically depending arm and a sleeve rigidly secured to the lower end thereof and disposed at an angle to the arm, spindles having bent portions rockably journaled in said sleeves, said spindles having horizontal portions on which ground wheels are mounted, means operable to rock said spindles in the sleeves in opposite directions to simultaneously steer the wheels angularly to the line of draft, earth working devices supported on the frame, and mechanism connecting the earth working devices and steering means operative to simultaneously move said devices and wheels in the same direction.

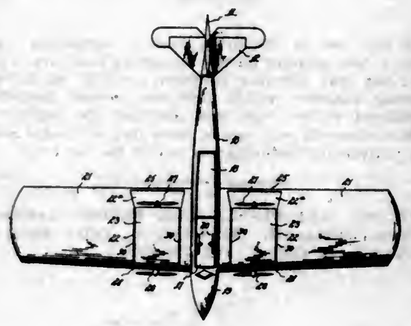
1,872,844. GRATE. CLEMENT F. STREET, Greenwich, Conn., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Feb. 21, 1929. Serial No. 341,685. 3 Claims. (Cl. 126—180.)

1. In a grate assembly, the combination of a support including spaced members, a grate member carried by said support, said grate member being provided with depending members, securing means for fastening said depending members to said spaced members, and other



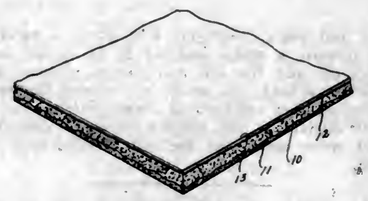
depending members provided on said grate member and disposed in cooperative relation to said spaced members whereby said grate member is positioned thereon.

1,872,845. AEROPLANE. GEORGE C. SULLIVAN, El Paso, Tex. Filed May 29, 1930. Serial No. 457,117. 10 Claims. (Cl. 244—14.)



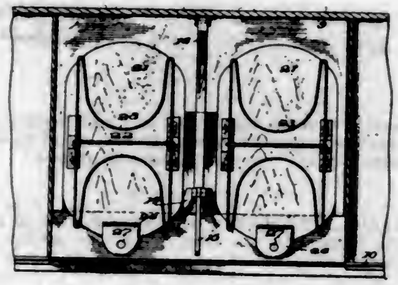
1. In an aeroplane of the construction embodying wings extending outwardly from the body or fuselage, of turnable wing sections forming an intermediate part of the wings normally on the same horizontal plane therewith, propellers mounted on said wing sections and movable therewith for exerting a pulling and lifting force according to the position of said sections, motors located in the fuselage, and transmission gear between the motors and aforesaid propellers.

1,872,846. UNDER-PAD FOR RUGS, CARPETS, AND MATS. HENRY D. THIELE, Milwaukee, Wis. Filed May 27, 1929. Serial No. 366,484. 1 Claim. (Cl. 154—52.)



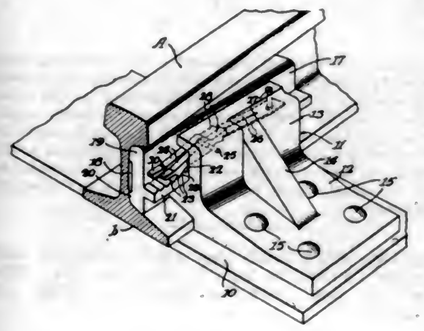
An under-pad for floor covering composed of sponge rubber, spaced coarse fibers embedded in the lower portion of the sponge rubber to prevent lateral expansion thereof, woven fabric embedded in the upper surface portion of the sponge rubber and acting to distribute the pressure over a considerable area around the place where the pressure is applied, and an exposed layer of smooth vulcanized rubber for receiving the floor covering.

1,872,847. HAT DISPLAY CASE. ELBERT F. THOMAS, Pampa, Tex. Filed June 28, 1930. Serial No. 464,620. 3 Claims. (Cl. 312—132.)



3. For use in displaying hats, a supporting structure, a case mounted on the supporting structure, a slidable hat tray carrying platform mounted on the supporting structure within said case, means operatively connected to the case and platform for urging the latter outwardly, said means embodying additional means for individually removing any one of the hat trays.

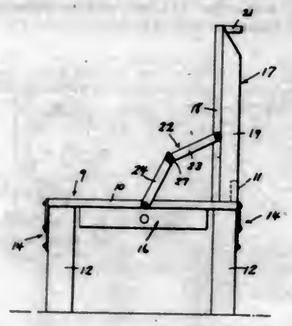
1,872,848. ADJUSTABLE RAIL BRACE. ARNOLD H. TOLD, Chicago, Ill. Filed Oct. 21, 1931. Serial No. 570,094. 9 Claims. (Cl. 238—336.)



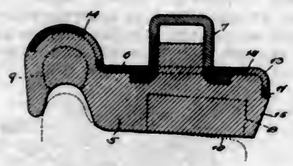
1. A rail brace comprising a tie-plate, a bracket secured thereto, a wedge adapted to be driven between the bracket and the rail and engage portions of the rail base and head, and means for securing the wedge in adjusted position arranged to permit vertical movement thereof relative to the bracket as an incident to the normal wave motion of the rail, substantially as described.

1,872,849. CONVERTIBLE TABLE. THOMAS PERRY TOWNES, Lander, Wyo., assignor of one-half to Mabel Fiesche, Basin, Wyo. Filed Oct. 8, 1930. Serial No. 487,349. 1 Claim. (Cl. 45—74.)

A device of the class described comprising a table including a top, a pair of links, one at each of the two opposed sides of the table top, means for pivoting each link to the central part of said top, a link pivotally connected at one end to the free end of each of the other links, such pivoting means comprising a bolt and a nut, a tray, said tray including a bottom part and oppositely arranged extending flanges having its bottom part pivotally connected at its sides to the second set of links, a projection at the rear of the table for fitting between parts of the flanges when the tray is swung to vertical position at the rear of the table.



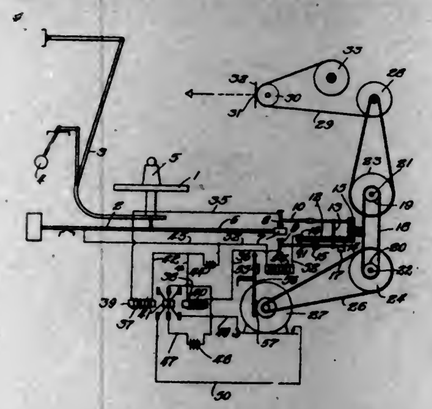
1,872,850. BRAKE SHOE. MAURICE N. TRAINER, East Orange, N. J., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed May 31, 1930. Serial No. 457,793. 2 Claims. (Cl. 188—258.)



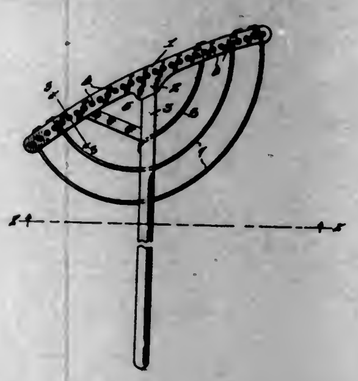
1. The combination with a wheel having a flange and a tread, of a brake shoe having a flange and a tread to engage the wheel and comprising a body, a reenforce embedded in the body at the back thereof, the body being extended laterally beyond the outer side of the wheel, and a depending flange on the reenforce embedded in the extension of the body and outside of the area of wear of the tread of the wheel on the body to avoid contact with the wheel as the body wears in service.

1,872,851. WEIGHING APPARATUS. FRANCISCUS LAMBERTUS VAN WEENEN, Rotterdam, Netherlands, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines Volgens van Berkel's Patent en Van Andere Werktuigen, Rotterdam, Netherlands, a Limited Liability Company of The Netherlands. Filed May 7, 1928, Serial No. 275,818, and in Great Britain May 31, 1927. 17 Claims. (Cl. 265—62.)

1. In a weighing apparatus, the combination with a load pan, of an indicator and electrical driving mechanism therefor having two branch circuits, an arm connected with said load pan and movable to opposite sides of a neutral position, contact means on said arm connected with each of said circuits, an additional contact in each of said circuits, said contact means on said arm closing one of said two branch circuits by engaging the additional contact in that branch and when said arm is moved to a corresponding side of its neutral position, one of said branch circuits being connected to drive said mechanism and move said indicator in one direction, the other of said branch circuits being connected to drive said mechanism and move said indicator in the opposite direction, and means for stopping said driving mechanism when said indicator has moved proportionately to the weight on said load pan.



1,872,852. RAKE. FRED VAN NIEUWENHUYZEN, Pella, Iowa. Filed Mar. 21, 1930. Serial No. 437,824. 1 Claim. (Cl. 55—10.)



A rake having a head bar curved longitudinally and provided at its inner side and at a point approximately midway between its ends with a stock portion, a handle having an end inserted in the stock portion, said handle being disposed at an acute angle to the head bar and coplanar therewith, teeth passing transversely through the head bar and having end portions at the opposite sides thereof, said teeth being at right angles to the plane of the head bar and handle and brace rods passing transversely through the handle and having end portions passing transversely through the head bar at the opposite side of the stock portion thereof.

1,872,853. FOUNTAIN SHAVING BRUSH. RICHARD WILHELM VON HOHENHOFF, Baltimore, Md. Filed Feb. 17, 1932, Serial No. 593,604, and in Germany Feb. 24, 1931. 3 Claims. (Cl. 15—137.)

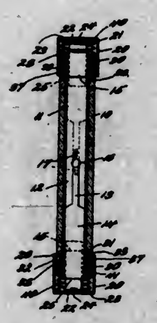
1. In a fountain shaving brush, a tubular internally threaded handle having an open end, a brush head re-

movably mounted in the open end, a piston threaded in the handle, a piston rod for operating the piston formed of



telescoping sections rectangular in end view and interlockingly connected together and an operating head for the piston rod mounted on the inner end of the handle.

1,872,854. FUSE CARTRIDGE. LEWIS S. WALDRON and TRENT B. TERRY, Charlottesville, Va. Filed Aug. 2, 1930. Serial No. 472,674. 5 Claims. (Cl. 200—131.)

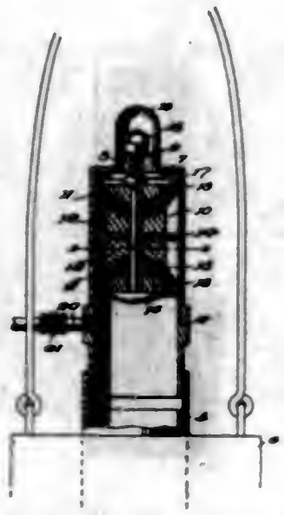


1. In a renewable fuse cartridge, in combination, a tube of insulating material adapted to house a fuse element, a metal terminal cap adapted to telescope over one end of said tube, means forming an interlocking joint between the said cap and the end of said tube, a spring in said cap to maintain said joint against accidental unlocking and a spring clip secured to said cap, projecting through said spring and adapted to resiliently engage the fuse element.

1,872,855. OIL-WELL CEMENTING PLUG. ARTHUR WELLESLEY WALKER, Seminole, Okla. Filed Nov. 22, 1930. Serial No. 497,566. 2 Claims. (Cl. 166—1.)

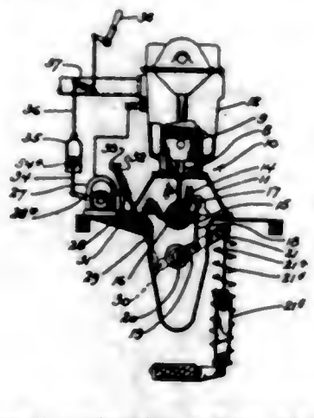
1. In a device of the character described, a cylindrical casing nipple open at its bottom and having a head at its top formed with a center boss, the nipple being of an even diameter throughout its depth, a plug slidable longitudinally in said nipple and having washers at its ends and a scraper intermediate its length, the washers and scraper having edge portions contacting with walls of the nipple, a bolt extending axially through

said plug with its threaded end portion projecting upwardly therefrom and extending through the boss, securing nuts upon the protruding upper end of said bolt,



a cover screwed upon said boss and enclosing the protruding upper end of said bolt, and a feed pipe engaged through the walls of the nipple below said plug.

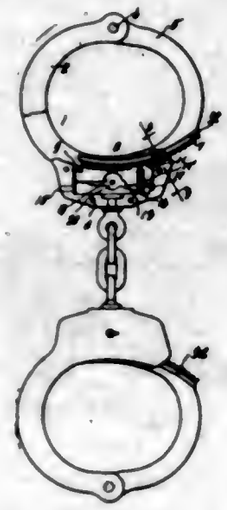
1,872,856. INTERNAL COMBUSTION ENGINE. BROOKS WALKER, Piedmont, Calif., assignor of one-third to Clinton L. Walker, Piedmont, Calif., and one-third to Harry E. Kennedy, Berkeley, Calif. Filed Sept. 11, 1929. Serial No. 391,776. 8 Claims. (Cl. 123—78.)



1. In an internal combustion engine wherein the clearance volume varies in accordance with changes in mean effective pressure, said engine having an ignition system, means for automatically retarding the spark as the clearance volume decreases.

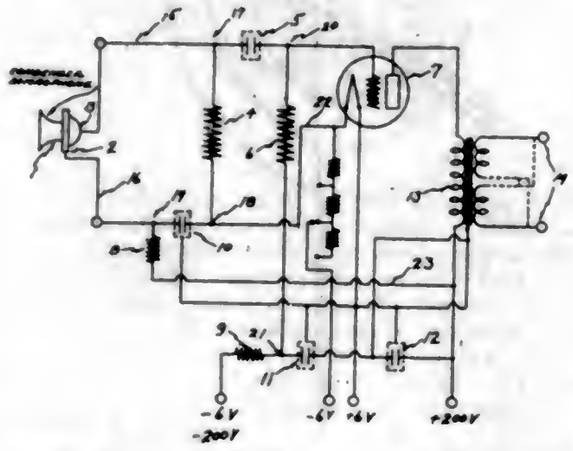
1,872,857. POLICE OFFICER'S SHACKLE. HAROLD WESSON and EWARD S. POMEROY, Springfield, Mass., assignors to Peerless Handcuff Company, Springfield, Mass., a Corporation of Massachusetts. Filed Apr. 20, 1931. Serial No. 531,394. 9 Claims. (Cl. 70—24.)

1. In a shackle mechanism of the kind described, a pivoted locking arm having a series of teeth at its free end arranged on an arc with the pivot point as its center, a frame and pivot to carry said arm, a latch arm having its upper edge concentric with said arch and arranged so as to bring said teeth in very close parallel relation to the top of the latch, toothed means at one end of the latch to successively engage said teeth on the pivoted arm as it swings in one direction and to prevent its swinging in the opposite direction, a pivot in said frame for said latch arm at the end opposite its teeth, said latch arm being substantially straight and much greater in length than it is in depth so as to minimize that movement adjacent its pivot which is necessary for its teeth at the opposite end to engage and disengage the teeth on the locking arm, said latch arm having a substantially semi-circular cut-away portion on its under side about midway of its length to accommodate a key, and at one end of said cut-away portion a small projection extending in a substantially



radial direction to the key axis, spring-pressed means to hold said latch arm in yielding position for its teeth to engage the teeth of the locking arm, a lock casing on said frame to enclose the latch arm on all sides except its top edge, said lock casing having a key hole.

1,872,858. CONDENSER MICROPHONE AMPLIFIER. DONALD FAIRFAX WHITING, Port Washington, N. Y., assignor to Fox Case Corporation, New York, N. Y., a Corporation of New York. Filed July 22, 1929. Serial No. 380,199. 4 Claims. (Cl. 179—171.)



3. In the combination with a condenser microphone, of an amplifier having a vacuum tube and filament and plate potential sources therefor connected in operative relation, a capacity connection from the central terminal of said microphone to the grid of said tube, a resistance connection from the central terminal of said microphone to one side of the filament of said tube, and means for connecting the frame of said microphone to the positive terminal of said plate potential source.

1,872,859. COIN CONTROLLED APPARATUS. ERNEST C. WHITING, Brighton, Mass. Filed Oct. 8, 1929. Serial No. 398,169. 31 Claims. (Cl. 194—85.)

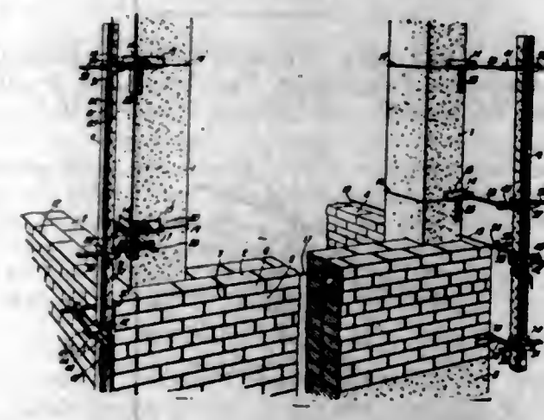
19. A machine of the class described comprising a coin passage, article-delivery mechanism operable by the movement of said receptacle, a coin receptacle aligned with the passage, said receptacle including a swinging support, said support including a portion of substantially the thickness of a coin with an inclined supporting edge to engage the

edge of a coin and thus to form the bottom of th
tacle, an inclined pivot member carried by the su
member, a retainer having an upper portion en
with the pivot member and having parallel side
spaced at a distance greater than the thickness o
and thus forming the sides of the coin recept
actuator movable between the coin passage and
ceptacle and engageable with a portion of a coin
ing from the latter, locking means carried upon th
tacle and normally tending to prevent the move
the retainer in relation to the supporting memb
pressure is applied to the projecting coin portion
actuator, and trip mechanism operable by an artic



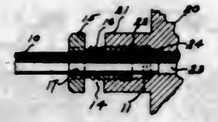
delivered effective to release the locking member
permit the retaining member to be moved due to th
sure upon the projecting coin portion so that the edg
coin is no longer in engagement with the bottom of
ceptacle but is released from the same, a spring
to return the actuator to its normal inoperative pos
stop defining this position, a projection upon the a
engaging the side of the retaining member below
tion that is mounted upon the pivotal support w
the spring is effective in causing relative movem
the retainer in relation to the supporting member
lease the coin if the same has not already been r
in response to the actuation of the trip mechanism.

1,872,860. CORNER GUIDE FOR BRICKLAYING.
TER WINTER, Osborne, Kans. Filed June 25, 192
rial No. 288,132. 11 Claims. (Cl. 33—85.)



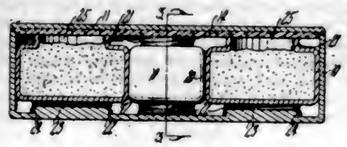
8. In a device of the character described, a sta
having a plurality of series of regularly spaced ope
a guide line support, and means including a pin inse
in one of said openings for latching the support
standard.

1,872,863. PIPE COUPLING. JOSEPH WOOD, Detroit, Mich., assignor to Barey-Nicholson Company, Detroit, Mich., a Corporation of Michigan. Filed July 1, 1930. Serial No. 465,139. 1 Claim. (Cl. 285—166.)



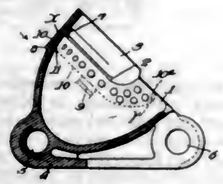
In a carburetor and gasoline line coupling, an element having a bore and an internal thread of larger diameter concentric therewith, a member having a similar bore and an external thread concentric therewith adapted to mate with the element thread, and a tube in said bores having an elongated, resilient, soft metal bulged portion integral therewith and adapted to be clamped and compressed between the end of said member and a wall of said element the bulge being long enough in proportion to its diameter, to prevent complete collapse of the bulge, when the member and elements are threaded together as far as possible.

1,872,864. COSMETIC CONTAINER. MARY L. YARCHO, Des Moines, Iowa. Filed Oct. 5, 1931. Serial No. 566,857. 5 Claims. (Cl. 206—1.)



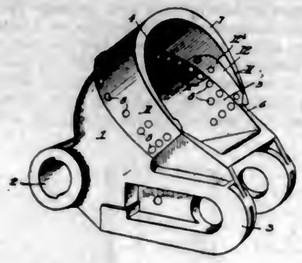
1. In a container structure of the kind described, an outer container having a hinged cover provided on its under surface with a sealing member adapted to coact with the mouths of inner containers for sealing them, combined with inner containers having removable caps, the parts being of such sizes that the caps may be removed from the inner containers and placed under their respective containers, whereupon such inner containers will be held in proper position for the purpose of sealing their mouths when the cover of the outer container is closed.

1,872,865. DIGGING ELEMENT FOR EXCAVATING MACHINES. DONALD H. YOUNG, Berkeley, Calif., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed Mar. 10, 1930. Se-No. 434,499. 3 Claims. (Cl. 37—141.)



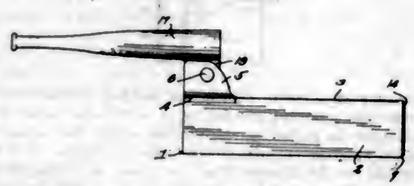
1. An excavating bucket having a curving open end, external marginal lip-seating surfaces extending from the outermost portion of the bucket along the sides thereof and converging rearwardly from said open end, in combination with an abutting lip having a flange seating upon and conforming to said marginal surfaces and abutting against said shoulders; said lip overlying the sides of said bucket to points beyond the major axis of the bucket.

1,872,866. BUCKET LIP EXTENSION. DONALD H. YOUNG, Berkeley, Calif., assignor to American Manganese Steel Company, Chicago Heights, Ill., a Corporation of Maine. Filed Mar. 21. 1932. Serial No. 600,138. 8 Claims. (Cl. 37—141.)



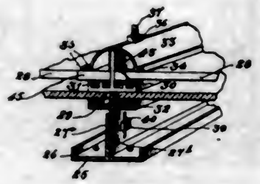
1. An excavating bucket having front and side walls forming the confines of a forwardly presented open mouth, a digging lip having a front and sides conforming to said mouth, and separately formed lip-extensions overlying the inner faces of the side portions of the lip and protecting the sides of the said mouth.

1,872,867. SMOKER'S CONVENIENCE. FREDERICK J. ZIEGLER, Decatur, Ill. Filed June 12, 1931. Serial No. 543,994. 8 Claims. (Cl. 131—51.)



1. A holder for cigars and cigarettes, comprising a mouth piece, a trough shaped tray located below and at the outer end of the mouth piece, so as to catch the ashes that fall from the article in the mouth piece, and means for pivoting the mouth piece to the tray, at a place near to one end of the tray, the tray having an opening in its top, the mouth piece being as wide as the opening, and at least as long as the opening, whereby when the mouth piece is swung downwardly and forwardly, the mouth piece will completely close the opening and retain the ashes in the tray, when the holder is carried in the pocket.

1,872,868. SKYLIGHT CONSTRUCTION. ALEXANDER F. ABRONSKI, Philadelphia, Pa. Filed July 26, 1929. Serial No. 381,140. 14 Claims. (Cl. 108—16.)



7. In a skylight, a glazing bar comprising an upstanding web, a panel supporting member extending laterally from one side, means to vary the altitude of sections of the web relative to other sections.

1,872,869. SAFETY RAZOR. OTTO L. ALTVATER, Milliken, Colo. Filed Apr. 22, 1931. Serial No. 532,100. 1 Claim. (Cl. 30—12.)



A razor comprising a handle having its upper end reduced to form an overhanging arm terminating in a depending head, the inner face of the arm and the inner face of the head being disposed at right angles to each other and said inner face of the head being arranged substantially parallel with the adjacent portion of the handle, said head being provided with an arcuate lower edge and having lugs propecting inwardly therefrom on opposite sides of the arm, a blade fitting against the inner side of the head and having its upper edge bearing against the inner face of the overhanging arm and its lower edge curved to conform to the arcuate lower edge of said head, said blade being provided with recesses adapted to receive the lugs, a guard fitting against the blade and having its lower edge of arcuate formation and bowed rearwardly to overhang the adjacent edge of the blade, said guard being provided with recesses fitting the lugs on the head, the outer surface of the guard being provided with a reinforcement, and a clamping screw threaded in the handle near said arm and having one end thereof bearing against the reinforcement and its other end provided with a finger piece for turning the fastening device to cause the same to frictionally engage the enlargement and retain the blade and guard in position on the head.

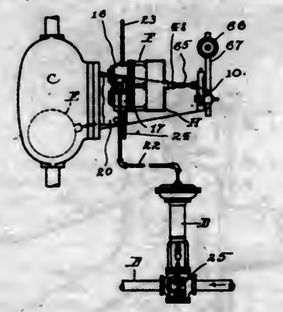
1,872,870. LEVER. WILLIAM J. ANDRES, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Sept. 6, 1928. Serial No. 304,183. 2 Claims. (Cl. 74—33.)



1. A crank structure in two parts, one part consisting of an enlarged central portion, a boss portion at one side of said enlargement and a split boss at the other side thereof, said other lever part including at one end thereof an enlargement in contiguous relation to the aforementioned enlargement and a relatively long tension arm extending from said enlargement, together with means for positively connecting said parts, said means including a boss projecting from the second lever part and a screw threaded into one boss and freely extending through an opening in the remaining boss.

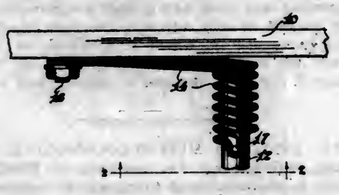
1,872,871. REMOTE CONTROL PILOT VALVE. DOUGLAS H. ANNIN, Glendale, Calif., assignor, by mesne assignments, to Neilan Co., Ltd., Boston, Mass., a Corporation of Massachusetts. Filed Feb. 12, 1929. Serial No. 339,301. 10 Claims. (Cl. 137—139.)

1. A pilot controller comprising, a casing, a pair of diaphragms dividing said casing into a chamber for the passage of an actuating fluid to a diaphragm valve controlling the fluid in a reservoir and a spring balance chamber, valves on said diaphragms controlling ingress and egress ducts of said first named chamber, springs
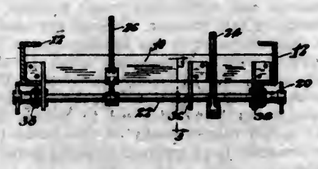


in said spring balance chamber for exerting pressure against said diaphragms to open said ingress and close said egress duct, and means operable by the fluid in said reservoir to adjust the tension of said springs.

1,872,872. SUPPORT. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Sept. 13, 1928. Serial No. 305,828. 10 Claims. (Cl. 267—1.)



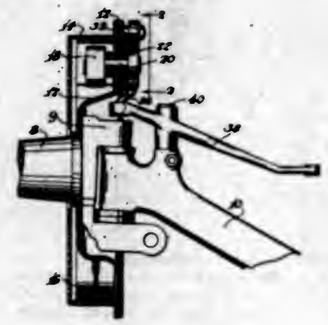
1. A shaft support formed of wirelike material and having its ends projecting laterally to be secured to a supporting member and having its intermediate portion formed as a shaft-embracing helix, together with means for securing at least one part of said helix to the shaft so that the helix resists angular movement of the shaft.

1,872,873. BRAKE-OPERATING CONNECTION. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed Apr. 16, 1928, Serial No. 270,184. Divided and this application filed Feb. 28, 1929. Serial No. 343,318. 2 Claims. (Cl. 188—10.)



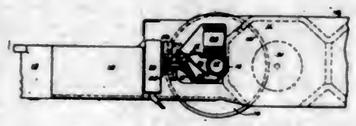
1. A vehicle having in combination with a frame and a set of brakes, a shaft operating the brakes, two bearings for the shaft supported by the frame adjacent the opposite ends of the shaft, two operating devices having connections to the shaft, and a device adapted to serve as a third bearing for the shaft and which is supported by the frame between the two connections to the shaft from the two operating devices, said device having a portion encircling but normally spaced from the shaft.

1,872,874. BRAKE. VINCENT BENDIX, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed Apr. 27, 1926, Serial No. 26,086. Divided and this application filed June 26, 1930. Serial No. 463,909. 5 Claims. (Cl. 188—194.)



1. Brake mechanism comprising, in combination, retarding means and an adjacent support, a rock shaft arranged to operate the retarding means and journaled in the support, an arm mounted on said support and curved around said shaft and pivoted for movement about an axis outside of and adjacent the rock shaft, interengaging parts one of which is mounted on the rock shaft, and the other of which is operated by the arm, and means for rocking the arm to operate said retarding means.

1,872,875. INTEGRAL MINING LOCOMOTIVE. CLAUDE BETHEL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 17, 1930. Serial No. 436,891. 4 Claims. (Cl. 105—49.)



1. In a railway locomotive, in combination, an integral motor housing and locomotive frame member, a wheel axle for carrying said member, a motor provided with an armature shaft mounted in the housing, means for transmitting power from the armature shaft to the wheel axle, and means for normally restricting the wheel axle to substantially vertical movements relative to the frame, said means being disposed to permit the wheel axle to be moved longitudinally of the frame to permit the motor armature to be removed from the motor housing.

1,872,876. ZIRCON REFRACTORY. WILLIAM G. BJORKSTEDT, Jamaica, N. Y., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 11, 1926. Serial No. 147,847. Renewed May 20, 1930. 5 Claims. (Cl. 106—9.)

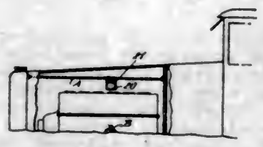
1. A method of bonding zircon particles to form a refractory body whose volume after bonding is substantially the same as its volume before bonding comprising heating said particles admixed with such an amount of phosphoric acid that the acid calculated as phosphorus pentoxide equals approximately six percent of the dry product.

1,872,877. SAND-BLASTER'S HELMET. FREDERICK M. BOWERS, Chester, Pa. Filed Oct. 13, 1928. Serial No. 312,232. 2 Claims. (Cl. 128—143.)



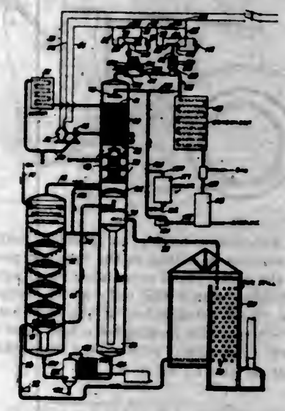
1. A sand blaster's protection helmet comprising a rigid fibre cup-shaped top piece with a deep rigidly depending head-encircling flange having a tubular canvas shoulder extension attached to its bottom edge, protected front sight openings in said depending flange, diametrically opposite rear ventilating openings formed of a plurality of closely spaced apertures protected by a common screen, and a compressed air-inlet tube to said helmet terminating within the high portion of said cup-shaped top piece and opening forwardly, where said compressed air will be directed downwardly from said top past said sight apertures and escape rearwardly through said rear flange ventilator openings.

1,872,878. OIL GAUGE WIPER AND RECORD HOLDER. PHILLIP R. BRAGG, Neptune, N. J. Filed May 1, 1931. Serial No. 534,321. 2 Claims. (Cl. 15—210.)



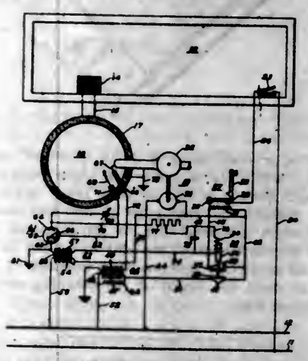
1. An oil gauge wiper comprising a sheet of absorbent material having a non-absorbent backing, separable fasteners having parts located intermediate the upper and lower ends of said sheet, with cooperating parts adjacent the corners at one edge of said sheet, whereby said sheet may be folded over and secured about a supporting member, the spacing of said fasteners on the sheet from the said edge thereof being such, that when the sheet is folded, a free depending flap having an exposed absorbent face will extend beyond the folded section.

1,872,879. CONSTANT PRESSURE AND TEMPERATURE DISTILLATION. DAVID G. BRANDT, Westfield, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed July 30, 1923. Serial No. 654,532. 16 Claims. (Cl. 196—48.)



1. A method of dephlegmating hydrocarbon vapors comprising injecting a liquid into a dephlegmator near the vapor off-take thereof, completely vaporising said liquid as it is injected, and automatically cooling the vapors in the dephlegmator in response to variations in both the pressure and temperature of the off-take vapors.

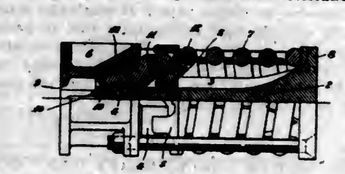
1,872,880. FUEL BURNER CONTROL SYSTEM. JOHN V. BREISKY, Pittsburgh, and THOMAS DRAPER, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 10, 1929. Serial No. 331,484. 11 Claims. (Cl. 158—28.)



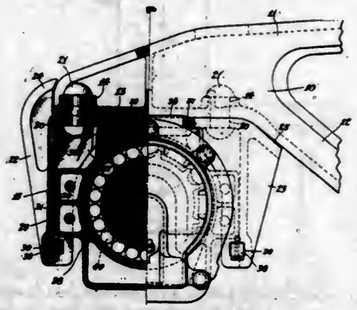
7. In a fuel burner, an ignition device, control means instantaneously responsive to large variations in the condition of a flame within said burner for regulating the activity of said ignition device, and means for rendering said control means unresponsive to small variations in the condition of said flame.

1,872,881. SHOCK ABSORBING MECHANISM. CHESTER K. BROOKS, Mentor, and HUBERT L. SPENCE, Cleveland, Ohio, assignors to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 4, 1925, Serial No. 48,018. Renewed Nov. 26, 1927. 9 Claims. (Cl. 213—36.)

8. A friction shock absorbing mechanism comprising a wedge, and friction members, certain of said friction members due to their inertia being adapted to be forced by the wedge into frictional contact with the others of said friction members to develop frictional resistance in response to a rapid blow and means counteracting the wedging engagement of the wedge upon certain of said friction members, said means acting to reduce the frictional resistance of said friction members under light blows.

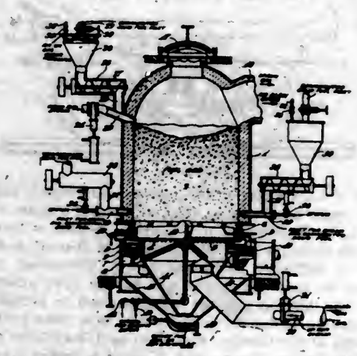


1,872,882. SIDE FRAME. ALBERT O. BUCKIUS, Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 3, 1931. Serial No. 513,062. 10 Claims. (Cl. 105—223.)



1. A side frame structure comprising an Andrews type frame and an auxiliary frame rigidly secured thereto, said auxiliary frame having downwardly extending pedestals and a horizontal connecting portion, each of said pedestals having both inwardly and outwardly extending side flanges adapted to strengthen the corners between said pedestals and connecting portion.

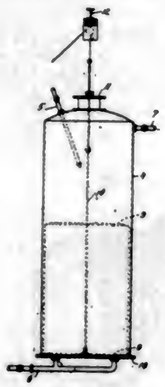
1,872,883. PROCESS OF MANUFACTURING GAS AND CARBONIZED FUEL. JOHN F. BYRNE, Pittsburgh, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed June 21, 1928. Serial No. 287,193. 4 Claims. (Cl. 202—17.)



1. The process of manufacturing water gas and carbonized fuel in a water-gas generator having a bed of solid carbonizable fuel, which comprises alternately heat-

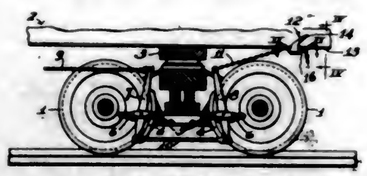
ing said fuel bed by blasting it with air and generating water-gas by passing steam through the thereby heated fuel bed, maintaining said fuel bed by introducing to it while suspended in steam passed through the same sufficient finely divided solid carbonizable fuel to provide an excess over that amount required for the combustion and gasification reactions which are set up in said fuel bed by said air and steam, and removing from the generator fuel bed solid fuel in carbonized form.

1,872,884. ART OF COKING HEAVY OILS. OLIVER F. CAMPBELL, Whiting, Ind., and EUGENE C. HERTHEL, Chicago, Ill., assignors to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Mar. 7, 1929. Serial No. 344,952. 2 Claims. (Cl. 202—15.)



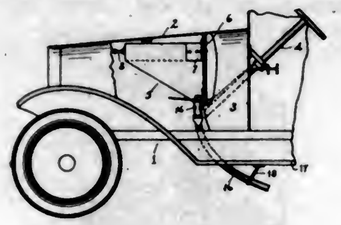
1. In coking heavy oils in a cylindrical coking receptacle, the improvement which comprises reducing a charge of heavy oil to coke in the receptacle and, at the termination of the coking operation proper removing a radially thin annulus of the body of coke immediately adjacent the wall of the coking receptacle, and then removing the remaining bulk of the coke body en bloc.

1,872,885. SLACK ADJUSTER FOR RAILWAY CAR BRAKES. ARTHUR M. CAPPER, Emsworth, Pa., assignor to Continental Roll & Steel Foundry Company, East Chicago, Ind., a Corporation of Delaware. Filed Sept. 21, 1931. Serial No. 564,050. 2 Claims. (Cl. 188—197.)



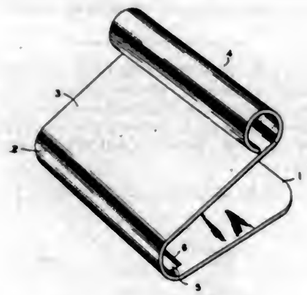
1. In a slack adjuster for railway car brakes, the combination with a car having a center sill and a brake rigging including a dead lever, of a tension member attached to said dead lever for shifting the fulcrum thereof, and holding it in different positions, and a bifurcated bracket mounted on said center sill and having jaws adapted to secure said tension member between them to permit slack in the brake rigging to be taken up, said jaws projecting outwardly and obliquely away from said dead lever to such extent that when the tension member is pulled free from said jaws and sufficiently to apply the brake and is then engaged by the jaws it is locked thereby at proper brake-clearance position.

1,872,886. SANDING APPARATUS. JAMES MURRAY CARR, Pittsburgh, Pa. Filed May 14, 1931. Serial No. 537,263. 14 Claims. (Cl. 291—19.)



1. In an automobile having an internal combustion engine and a vertical partition in the forward portion thereof adjacent the engine, sand containing receptacles mounted on said partition within the body of the automobile and subjected to the heating effect of the automobile engine, valved delivery conduits leading from said sand receptacles, and delivery controlling connections operable from the driver's seat of the automobile.

1,872,887. SCRAPER. FREDERICK S. CASSE, San Francisco, Calif. Filed May 19, 1930. Serial No. 453,615. 2 Claims. (Cl. 17—25.)



1. A scraper comprising a strip of sheet metal bent back upon itself to form upper and lower plates in juxtaposition and having a slot in said lower plate adjacent said bent portion, the rear edge of said slot being sharpened to form a scraping edge in the plane of the lower plate, the forward edge of the slot being cut in said bent portion and projecting downward in advance of the scraping edge to limit the depth of the scraping movement of the sharpened edge.

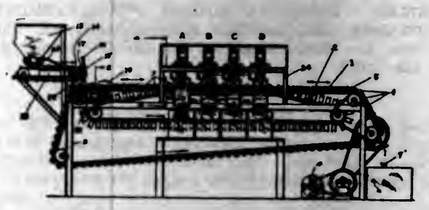
1,872,888. TILE PANEL ALIGNMENT. NILS H. CEDERQUIST, Alhambra, Calif. Filed Dec. 1, 1931. Serial No. 578,332. 12 Claims. (Cl. 20—75.)



1. A tile panel slab unit comprising a bendable base, tile cemented on the front thereof forming a veneer face, a slab stretcher ranging along and secured to the back of said base, and means in said stretcher to adjustably lengthen the latter.

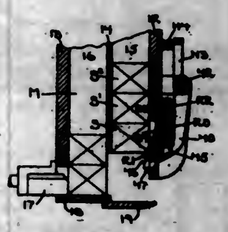
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1,872,889. ASPARAGUS GRADER AND CUTTER. SILAS H. CHAMPLIN, PARKER A. CUTTER, FERDINAND KASTEN, and PAUL C. BUTTS, San Francisco, Calif., assignors to Golden State Asparagus Co., San Francisco, Calif., a Corporation of California. Filed Aug. 27, 1929. Serial No. 388,727. 8 Claims. (Cl. 146—81.)



1. In a machine of the character described, means for passing asparagus spears along a path of travel, and a blade arranged and adapted for simultaneously cutting said spears to length and ejecting them from said path of travel.

1,872,890. SHUTTLE CHANGER LOOM. AUGUSTIN J. CHEVRETTE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed June 11, 1931. Serial No. 543,645. 4 Claims. (Cl. 139—234.)



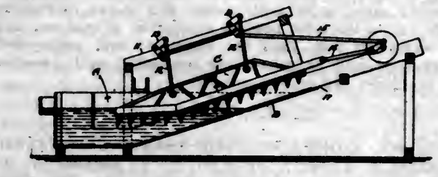
1. In a shuttle changing loom having a cell down which reserve shuttles feed by gravity and a lay to receive a reserve shuttle, a platform on which the shuttles fall in the course of their changing movement from the cell to the lay, and yielding means projecting into the pathway of a falling shuttle located above the platform to engage the top of a shuttle on the platform and prevent substantial upward motion of the shuttle.

1,872,891. PROCESS OF MAKING PRECIPITATED CALCIUM CARBONATE. JOHN W. CHURCH, Rosslyn Farms, Pa., and HARVEY G. ELLENDER, Painesville, Ohio, assignors to Pure Calcium Products Company, Pittsburgh, Pa., a Corporation of Ohio. Filed Dec. 24, 1928. Serial No. 328,308. 8 Claims. (Cl. 134—58.)

1. The process of making a filler for plastics, comprising precipitating finely divided calcium carbonate, and subjecting it to prolonged attrition for a time sufficient to reduce its oil adsorption value to below 25 cc. per 100 grams of the calcium carbonate.

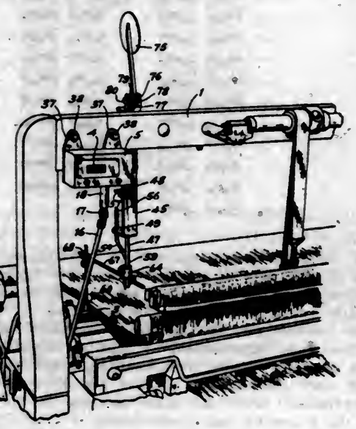
1,872,892. MECHANICAL SAND WASHER. RICHARD CLANTON, North Hollywood, Calif., assignor of one-half to Paul Kramer, North Hollywood, Calif. Filed June 6, 1930. Serial No. 459,537. 1 Claim. (Cl. 210—55.)

In a mechanical sand washer having an inclined trough with drag blades adapted to drag sand up the trough: means associated with said blades for dewatering the sand as it is forced up the inclined trough, said means



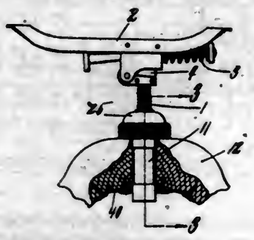
embodying holes through said blades adapted to pass water and restrain sand, said holes being countersunk on the side opposite the sand.

1,872,893. CONTROLLING AND INDICATING MECHANISM FOR LOOMS. FREDERICK GORDON COBB, Lancaster, S. C., assignor to Veeder-Root Incorporated, a Corporation of Connecticut. Filed Dec. 12, 1929. Serial No. 413,603. 36 Claims. (Cl. 139—340.)



1. The combination with a loom, of a register continuously driven thereby during weaving and totalizing the production of successive lengths as woven, and means independent of the register for effecting interruption of loom operation after each predetermined length has been woven and registered on said register.

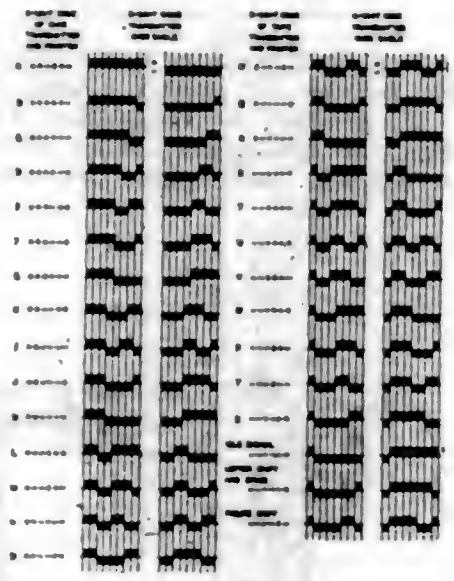
1,872,894. CHAIR IRON. DAVID R. COLLIER and HENRY W. SHELDRICK, Gardner, Mass., assignors to Collier-Keyworth Company, Gardner, Mass., a Corporation of Massachusetts. Filed May 13, 1930. Serial No. 451,938. 6 Claims. (Cl. 155—93.)



6. In combination, a chair spindle threaded at its upper portion and unthreaded at its lower end where it is of a diameter substantially greater than the thread

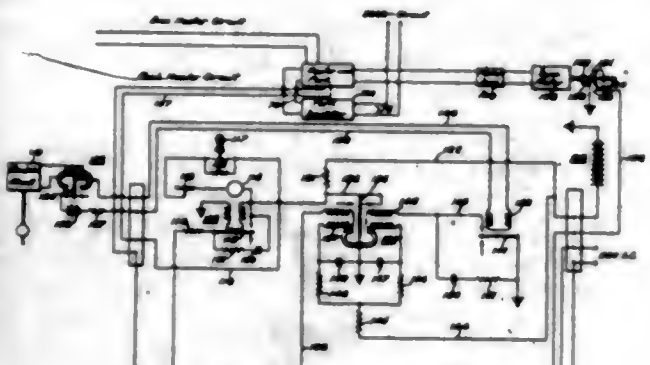
roots of the threaded portion, said spindle having a slot extending longitudinally to its lower end, a nut engaging said threaded portion, a J washer having a portion engaging in said groove, and means carried by said nut to limit the possible separation of said nut and J washer to less than the length of said unthreaded portion, thereby to prevent the removal of said J washer at the lower end of said spindle.

1,872,895. EIGHT-UNIT CODE TELEGRAPH SYSTEM. ALDER F. CONNERY, Brooklyn, N. Y., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 1, 1931. Serial No. 526,888. 21 Claims. (Cl. 178—63.)



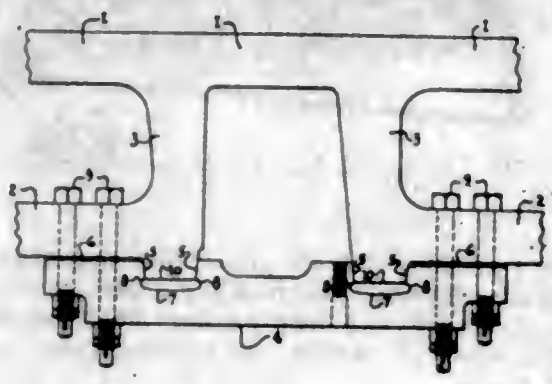
1. In a communication system utilizing an eight-unit two element code having alternative code combinations of opposite polarity in which no impulse of single unit length occurs except at the beginning or end of a code combination, the method of transmitting a series of said code combinations so that no impulse of single unit length will occur in a message, comprising selecting each code combination so that the first unit of said combination is of the same polarity as the last unit of the preceding code combination.

1,872,896. CONSTANT-FREQUENCY GENERATOR. FRANK CONRAD, Penn Township, Allegheny County, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed Jan. 18, 1929, Serial No. 333,374. Divided and this application filed Mar. 5, 1930. Serial No. 433,483. 15 Claims. (Cl. 84—409.)



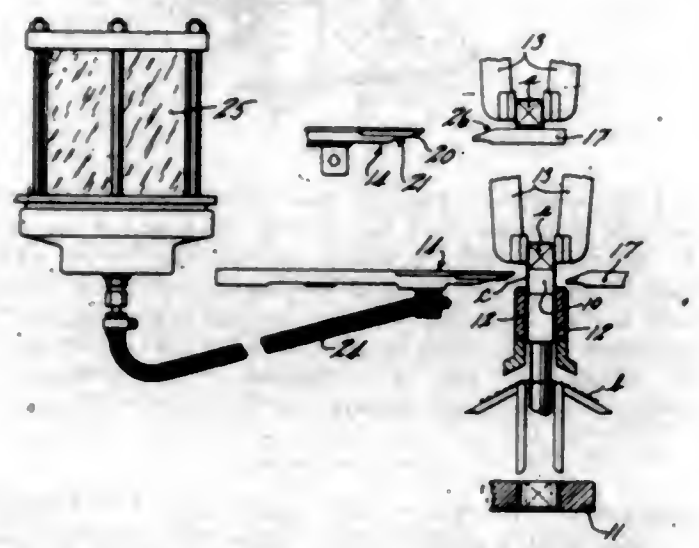
12. A constant-frequency generator comprising a mechanical element having a natural period of vibration, means for vibrating said element at its natural frequency, means for heating said element, means for making said heating means effective at intervals spaced apart by a period of time proportional to a predetermined number of vibrations of said element, and means for making said heating means ineffective the same number of times it is made effective and at regular intervals, independent of the frequency of said element.

1,872,897. PEDESTAL BINDER FOR LOCOMOTIVE FRAMES. BERNARD COOK, Roanoke County, Va. Filed Sept. 17, 1931. Serial No. 563,340. 7 Claims. (Cl. 105—172.)



1. In a locomotive or vehicle frame, the combination of pedestals and a pedestal binder, said binder having a slot receiving and making contact with the toe of each pedestal, said slot having at its bottom a curved surface terminating in additional curves reversing the direction of said surface, said additional curves extending beyond the contact surface between said pedestal toe and said binder.

1,872,898. WRAPPING MACHINE. EDWARD F. CORNOCK, Springfield, Mass., assignor to Package Machinery Company, Springfield Mass., a Corporation of Massachusetts. Filed Dec. 5, 1931. Serial No. 579,140. 6 Claims. (Cl. 93—2.)



1. A wrapping machine comprising means for folding a wrapper around an article leaving a flap outstanding therefrom, an abutment for supporting said flap, a wick movable to press the flap against the abutment, means for supplying a sealing liquid to the wick, and means for moving the article relative to the wick to draw the flap over the wick while the flap is so pressed against the abutment.

1,872,899. METHOD OF FORMING TAPERED HOLES IN METAL CASTINGS. FRED B. COREY, Barberton, Ohio. Filed Jan. 27, 1931. Serial No. 511,542. 1 Claim. (Cl. 22—190.)

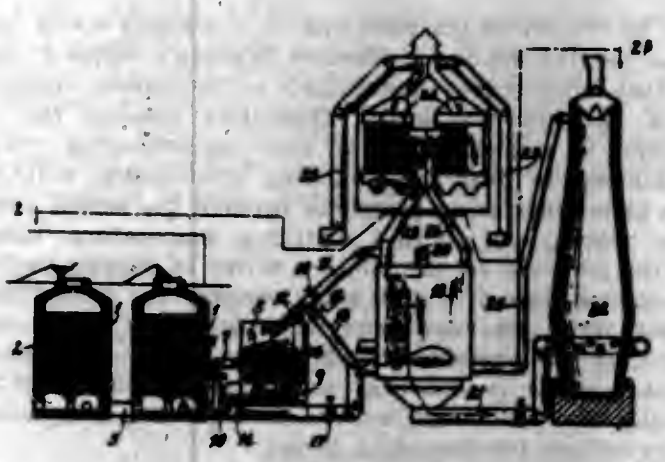
A process for producing tapered holes in metal castings, which process consists in placing a tapered and flanged metal tube in a tapered hole in the pattern, the outside

of said tube fitting loosely in said hole with the flange resting firmly against the surface of said pattern adjacent the large end of the hole, filling said tube with sand and making a sand mold about said pattern and flanged



tube, withdrawing said pattern from said mold while leaving said flanged tube in the mold, filling the mold with molten metal and forming a continuous weld whereby the casting and the flanged tube unite as the casting is formed.

1,872,900. PETROLEUM SMELTING PROCESS. BERTRAM E. CROCKER, Los Angeles, Calif. Filed May 19, 1930. Serial No. 453,558. 6 Claims. (Cl. 75—17.)



1. The petroleum smelting process which comprises first forming a petroleum gas with its sensible heat, said gas containing carbon with its sensible heat, then passing the gas and the carbon to a chamber containing an ore mat, which ore is subsequently to be used in the blast furnace, then passing the gas and the carbon into a heat exchanger, then passing blast furnace air through the heat exchanger whereby the sensible heat of the gas and the carbon is transferred to the air, and then conducting the gas to an electrical precipitator where the carbon is removed from the gas.

1,872,901. INSULATOR FOR HEATERS FOR ELECTRON DISCHARGE DEVICES. HENRY L. CROWLEY, East Orange, N. J., assignor to Henry L. Crowley & Co. Inc., East Orange, N. J., a Corporation of New Jersey. Filed Dec. 7, 1929. Serial No. 412,333. 5 Claims. (Cl. 250—27.5.)

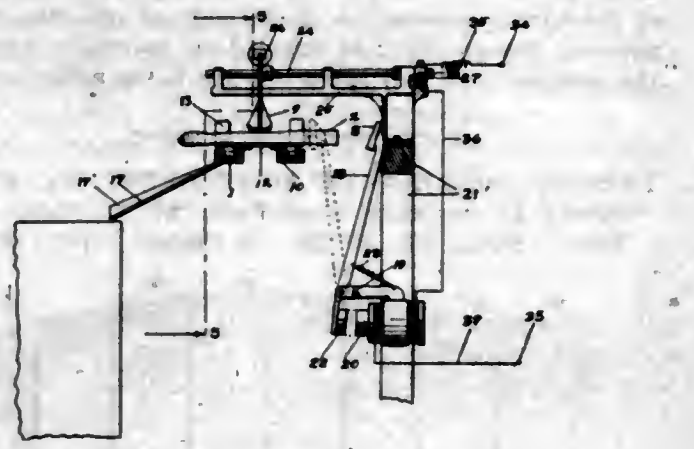


1. A heater device for radio tubes comprising a tubular insulating member having a pair of passages extending longitudinally therethrough forming walls of uniform thickness throughout, and a heater wire passing loosely through said passages.

1,872,902. METHOD OF PRODUCING MOLDED BODIES AND THE PRODUCT. HENRY L. CROWLEY, East Orange, N. J., assignor to Henry L. Crowley & Co. Inc., East Orange, N. J., a Corporation of New Jersey. Filed Dec. 7, 1929. Serial No. 412,563. 14 Claims. (Cl. 18—47.5.)

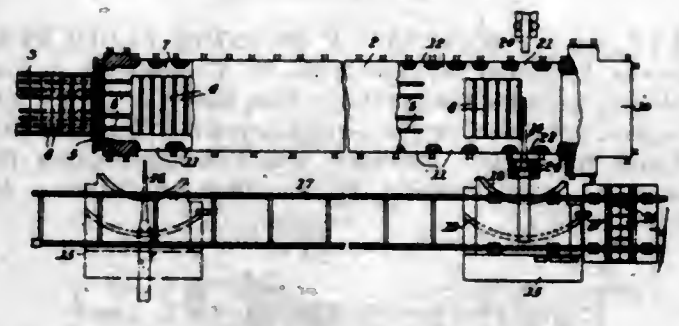
12. The method of forming a molded product which comprises extruding the mixture of a powdered metal compound and the jell of a metal compound and baking the extruded mass.

1,872,903. VEGETABLE AND FRUIT GRADING APPARATUS. PARKER A. CUTTER, San Francisco, Calif., assignor of three-fourths to Golden State Asparagus Co., San Francisco, Calif., a Corporation of California. Filed Nov. 5, 1928. Serial No. 317,162. 4 Claims. (Cl. 209—88.)



1. In a sorting device, a support, a shelf positioned within said support, a belt-type conveyor movable over said shelf, a plurality of grader mechanisms positioned adjacent said conveyor, each of said grader mechanisms comprising a pivoted grading arm hanging over the conveyor, electrical contact means actuated by said arm and a kicker plate positioned adjacent said arm to the side of the conveyor adapted to move toward the edge of the conveyor, said kicker plate being actuated through the engagement of said contacts when said arm is lifted, and means for stopping said kicker plate before reaching the edge of the conveyor.

1,872,904. BILLET FURNACE. REINHARDT DAAB, Youngstown, Ohio. Filed May 8, 1929. Serial No. 360,031. 17 Claims. (Cl. 214—18.)



1. A furnace structure comprising a furnace, movable means for advancing material in the furnace, means for discharging material from the furnace, and a run-off table for receiving the discharged material and movable with the material advancing means during a portion of the movement of the latter.

1,872,905. REAR VISION MIRROR. ROLAND A. DARLING, Buffalo, N. Y. Filed Feb. 27, 1932. Serial No. 595,606. 4 Claims. (Cl. 45—97.)

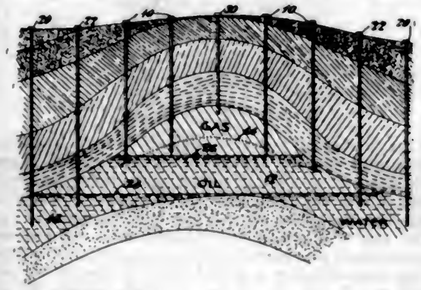
4. A rear vision mirror for an automobile adapted to be supported adjacent the rear window thereof, said mirror

being convex in the direction of its length so as to cover an area at the rear of the vehicle which in width is substantially equal to the width of the vehicle and being convex in the direction of its width so as to cover an area which includes a central part of said vehicle and which extends rearwardly in the direction of the length of the



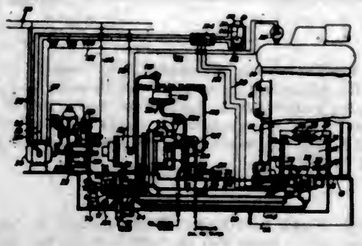
vehicle a substantial distance, the opposite ends of the said mirror being formed to compensate for the curvature of the mirror in the direction of its length so that the ends of the mirror cover parts of the body at the sides thereof, whereby the operator is enabled to ascertain accurately the proximity of said parts relative to an adjacent object.

1,872,906. METHOD OF DEVELOPING OIL FIELDS. HENRY L. DOHERTY, New York, N. Y. Filed Aug. 8, 1925. Serial No. 49,128. 9 Claims. (Cl. 166—21.)



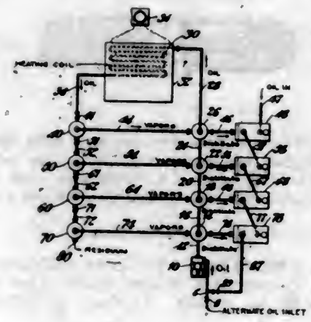
1. The method of developing oil fields which consist in ascertaining the location of the most porous stratum of the sands in which the oil body is found, bringing the oil body into such position with respect to said stratum that the oil will flow through the same toward oil wells projected into the sands, and maintaining said oil body in line with said porous stratum while removing oil through said wells.

1,872,907. METHOD OF BURNING FLUID FUEL. HENRY L. DOHERTY, New York, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Original application filed Jan. 22, 1925, Serial No. 3,907. Divided and this application filed Sept. 12, 1929. Serial No. 392,068. 6 Claims. (Cl. 158—117.5.)



1. A method of burning oil comprising atomizing the oil with air in ignitable relation to a surrounding ring of gas flame.

1,872,908. DISTILLING HYDROCARBON OILS. HENRY L. DOHERTY, New York, N. Y., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 20, 1923. Serial No. 613,800. 4 Claims. (Cl. 196—73.)



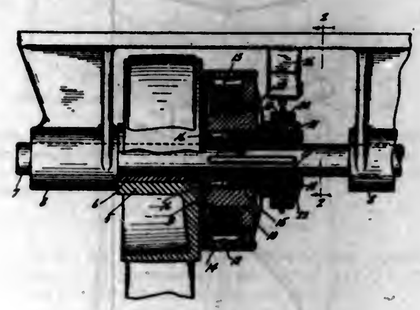
1. In the art of fractionating oil, a method which comprises passing oil under pressure through a series of heat interchanging stages maintained at increasing temperatures through the series, thereafter passing the oil through a second series of heat interchanging stages maintained in heat interchanging relationship with vapors under increasing pressures through the series, thereafter heating the oil to a distilling temperature, releasing the pressure on the oil in a series of stages, passing the vapors relased in each stage through the second mentioned series of heat interchanging stages under substantially the pressure at which the vapors are released in each stage to condense said vapors, and thereafter passing the condensed vapors through the first named series of heat interchanging stages.

1,872,909. WALL BED. NAPOLEON B. DOUGLASS, Berkeley, Calif., assignor to The Rome Company, Inc., Rome, N. Y., a Corporation of New York. Filed Mar. 30, 1929. Serial No. 351,176. 2 Claims. (Cl. 5—172.)



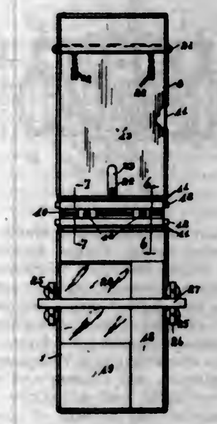
1. In combination with a bed frame, movable into and out of a receptacle through a door in the receptacle, a supporting link pivoted at a point within the receptacle and behind the door jamb, a pair of parallel links pivoted at one end to said supporting link and at their other ends to said bed frame, and a guide link pivotally supported at one end within the receptacle and behind the jamb and pivoted at its other end to a point that is fixed with relation to one of said parallel links.

1,872,910. CLUTCH. GEORGE W. DOYLE, Rome N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 26, 1927. Serial No. 215,579. 5 Claims. (Cl. 192—84.)



1. In a clutch, relatively movable operating parts, an electromagnetic clutch mechanism to connect the parts together for driving movement, and non-magnetic means for forcing said parts entirely out of driving contact with each other, said clutch mechanism comprising a pulley and a separate armature plate secured at the side of the pulley to rotate therewith.

1,872,911. READING SUPPORT. KARL DRAXLER, Los Angeles, Calif. Filed Aug. 12, 1929. Serial No. 385,258. 4 Claims. (Cl. 120—28.)



1. In a support of the class described, a back portion rolled-in upon itself along the opposite edges, and covers having each a portion along one edge to firmly but turnably engage within the rolled-in edges of the back-portion to be held thereby in adjusted positions, one cover with respect to the other and with respect to the back.

1,872,912. METHOD OF MAKING ARTICLES. CAMILLE DREYFUS, New York, N. Y. Filed Oct. 4, 1929. Serial No. 397,458. 3 Claims. (Cl. 18—56.)

1. Method of making articles comprising inserting a closed hollow article made of a thermoplastic composition containing a derivative of cellulose within a closed mold and then raising the temperature, whereby the thermoplastic composition softens and the gas confined within the hollow article expands and forces the same against the walls of the mold.

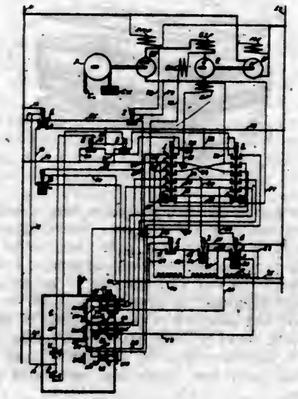
1,872,913. TEXTILE MATERIALS AND METHOD OF PREPARING THE SAME. CAMILLE DREYFUS, New York, N. Y., and WILLIAM WHITEHEAD, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Apr. 17, 1930. Serial No. 445,205. 9 Claims. (Cl. 28—59.)

1. In a process of preparing or treating textile materials containing organic derivatives of cellulose, the step of introducing a substance selected from the group consisting of fatty acids and their glycerides in association with lecithin.

1,872,914. MANUFACTURE OF ALIPHATIC ACID ANHYDRIDES. HENRY DREYFUS, London, England. Filed July 19, 1928, Serial No. 294,060, and in Great Britain July 30, 1927. 12 Claims. (Cl. 260—123.)

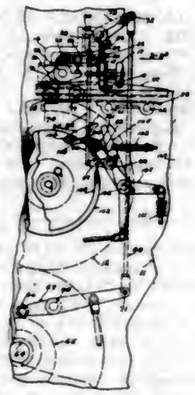
1. In a process of manufacturing an aliphatic anhydride by subjecting the vapor of a volatile aliphatic acid to pyrogenic decomposition, and wherein the aliphatic acid vapor is passed through the heated reaction zone containing at least one metal whose oxide is reducible by a reducing gas, the step of passing at least one reducing gas through the reaction zone, during at least one of the following two stages of the process (*a*) the heating up of the reaction zone, (*b*) the passage of the aliphatic acid vapor through the heated reaction zone.

1,872,915. ELEVATOR CONTROL SYSTEM. WILLIAM F. EAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 20, 1930. Serial No. 421,981. 5 Claims. (Cl. 187—29.)



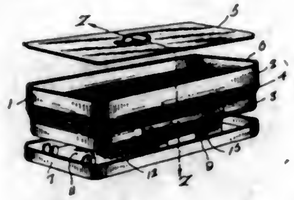
1. In an elevator control system, an elevator, motive means therefor, a control device actuable to a single circuit-closing position, intermediate-speed control means for said motive means operably responsive to a momentary actuation of said control device, a self-holding circuit for said intermediate-speed control means independent of said control device, stopping means for said motive means effective only when said control device is released and interposed in said self-holding circuit, high-speed control means for said motive means operably responsive to a sustained actuation of said control device, and means effective after actuation of said high-speed control means to render said stopping means ineffective for a predetermined time after said control device is released.

1,872,916. PRINTING MACHINE HAVING AUTOMATIC FEEDER. WILLIAM K. ECKHARD, Dunellen, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 29, 1928. Serial No. 329,189. 20 Claims. (Cl. 271—46.)



1. In a printing machine with a sheet feeder, a sheet decelerator, a sheet registering mechanism, shafts supporting the said decelerator and registering mechanism, and a frame supporting said shafts.

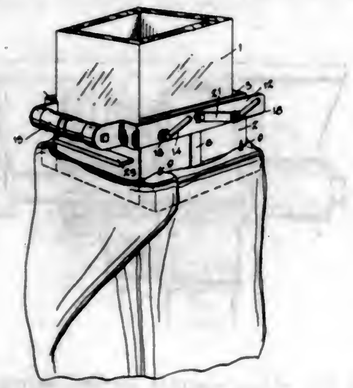
1,872,917. HYPODERMIC NEEDLE KIT. ALBERT A. EPSTEIN, New York, N. Y., assignor to Consolidated Patentees Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 26, 1930. Serial No. 498,322. 4 Claims. (Cl. 167—3.)



2. A hypodermic kit comprising a box, a support having brackets and a perforated fuel receiving portion centrally located, a tube of fuel paste carried by said support, needle parts carried by said support, a cover for engagement with the box and adapted to be detached from said box and arranged in inverted position to hold said support, said box adapted to be supported in spaced relation with said cover by said brackets whereby the needle arranged in said box may be heated by fuel paste discharged from said tube upon the perforated portion of said support.

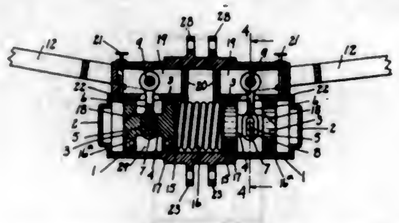
1,872,918. BAG HOLDER. PAUL W. ERNSBERGER, Ada, Ohio. Filed May 6, 1931. Serial No. 535,434. 2 Claims. (Cl. 83—26.)

1. In a bag holder, a chute, a pair of plates secured to opposite sides of the chute, a pair of connected slidable bars having cam slots and pins extending through one set of the slots for shiftably supporting the bars for horizontal and vertical movements of the bars, a pair of shells connected to the plates, a pair of T-bars supported in the shells and having pointed pins connected to the ends of the cross members of the T-bars and extending through the tops of the shells for engaging the ends of bags, the T-bars having shank parts extending through the tops of the shells, pins extending through another set of slots for connecting the upper ends of the shanks of the T-bars to the slidable bars, and links connecting the upper ends of



the shanks to one set of the first named pins for raising and lowering the pointed pins in the shells to release the bags, the T-bars guided by the links and the shells in their reciprocatory movements produced by the slidable bars.

1,872,919. HYDRAULIC SPRING AND SHOCK ABSORBING DEVICE. EDWARD J. FISCHER, Covington, Ky., assignor of one-half to Frank A. Aman. Filed July 26, 1928. Serial No. 295,570. 5 Claims. (Cl. 267—34.)

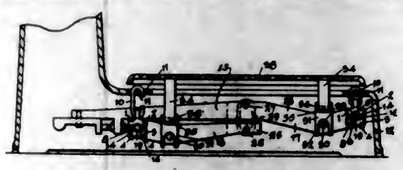


1. In a combination spring and hydraulic vehicle shock absorber, a cylinder casing, pistons within said cylinder casing having a spring tensioned therebetween, said pistons having annular recesses, vehicle supporting members, chambers in said shock absorber into which said members extend, said cylinder casing being provided with passages from the recesses in said pistons into said chambers, mechanical means connecting said vehicle supporting members with said pistons, said recesses and chambers forming a reservoir for liquid, and said pistons having means therein for permitting the passage of compressed liquid from said cylinder into said reservoir.

1,872,920. ADJUSTABLE FULCRUM SUPPORT FOR WEIGHING SCALES. FRANK C. FISHER, Toledo, Ohio. Filed June 12, 1931. Serial No. 543,935. 3 Claims. (Cl. 265—71.)

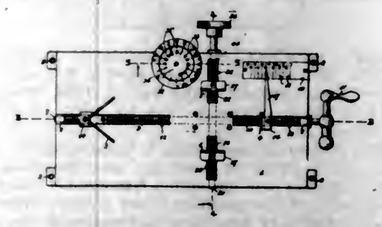
1. In a weighing machine, the machine having a hollow base, a plurality of members, links connected to the base for supporting the members within the base, each of the said members being formed of two parts, the parts being connected by bolts and having semi-circular grooves formed in their adjacent edge surfaces, the said edges being placed together to form transversely extending openings through the members, interconnected actuating members located in the base, the actuating elements having square pins

located in their end portions, the pins extending into the openings of the said first mentioned members to support the actuating elements in the base of a machine and



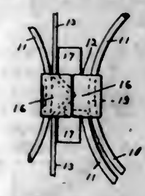
means for moving the said parts of the said supporting members relative to each other to vary the location of the contact points of the pins of the actuated elements relative to each other.

1,872,921. FOOT MEASURING DEVICE. JEREMIAH FITZPATRICK, Weymouth, Mass. Filed Apr. 13, 1928. Serial No. 269,686. 8 Claims. (Cl. 33—3.)



1. In a foot measuring device, the combination comprising a foot rest, spaced heel and toe stops for measuring the length of a foot movable toward and away from one another to any determinate adjusted position along a common line of travel extending substantially through the longitudinal centre of a foot interposed between said stops and resting upon the foot rest, side stops for measuring the width of a foot, said side stops being located relatively to said heel and toe stops whereby the side stops will engage that portion of the ball of the foot being measured at a point corresponding with the ball portion of a standard foot or last standard of foot were it inserted in place of the foot being measured in the measuring device, and means for simultaneously moving the heel and toe stops each in an equal amount toward or away from one another whereby the relation of said side stops thereto will be maintained.

1,872,922. SPRING CUSHION CONSTRUCTION. WILLIAM B. FOSTER, Utica, N. Y., assignor to Foster Brothers Manufacturing Company, Utica, N. Y., a Corporation of New York. Filed May 6, 1930. Serial No. 450,294. 2 Claims. (Cl. 5—267.)

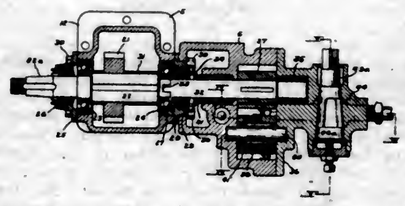


1. In a spring cushion construction the combination of a plurality of coiled springs arranged in longitudinal and transverse rows, a spacing rod arranged between each adjacent pair of longitudinal rows and having an offset portion located between each pair of springs in the transverse rows, an end coil of one of each pair of said adjacent springs in the transverse rows having an offset in the plane of its coil and opposite the approaching part of the other spring and a clip connecting each adjacent pair of springs in the transverse rows, said clip having a body portion and two oppositely located end flaps and two side wings with the end flaps turned back towards each other over and enclosing portions of the end coils of the two springs and the interposed offset portion of the spacing rod and the interposed offset portion of said end coil and with the side wings turned towards each other against the end flaps and retaining the offset portion of the spacing rod and the offset portion of said end coil of one spring within the clip.

1,872,923. PROCESS OF PREPARING HYDROCYANIC ACID. ROBERT R. FULTON, Pittsburgh, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed June 28, 1929. Serial No. 374,618. 3 Claims. (Cl. 23—151.)

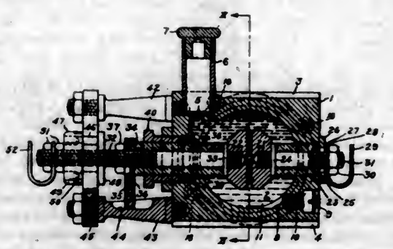
1. In a process of manufacturing hydrocyanic acid from a hydrocarbon and ammonia, the step consisting of bubbling ammonia gas through a liquid hydrocarbon maintained at a temperature and pressure at which a mixture of ammonia and hydrocarbon vapor is formed in the proportions which react completely to form hydrocyanic acid.

1,872,924. POWER TAKE-OFF MECHANISM. CAMILLE P. GALANOT, Youngstown, Ohio, assignor, by mesne assignments, to The Commercial Shearing and Stamping Company, Youngstown, Ohio, a Corporation of Ohio. Filed Oct. 29, 1927. Serial No. 229,564. 3 Claims. (Cl. 74—7.)



1. A power take-off adapted to make an operative connection with an automotive vehicle, comprising a support having a shaft journaled therein and arranged to be driven from a power shaft of the vehicle, said shaft being removable from the support and replaceable therein when reversed end for end, a second support adapted to be positioned at either end of the first mentioned support, means at both ends of the first support for receiving the second support and securing it thereto, and a shaft carried by the second support and arranged to be driven from the first mentioned shaft.

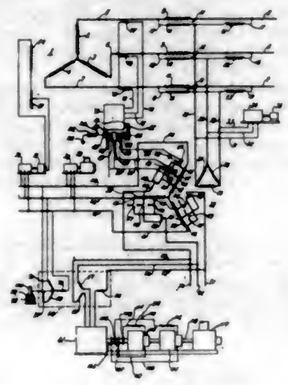
1,872,925. KERR CELL. WALTER GALLAHAN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 17, 1928. Serial No. 255,163. 8 Claims. (Cl. 88—61.)



1. In a Kerr cell, a container, an electrode therein, a supporting means for said electrode, including a metallic

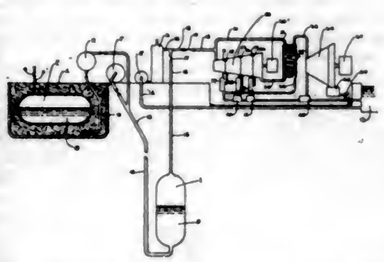
stem, a flange on said stem, an abutment means surrounding said stem on the opposite side of the container-wall from said flange, a vitric tube surrounding said stem and contacting with said flange at one end and with said abutment means at the other end, each of the ends and of the surfaces contacting being ground to form a joint through which the contents of the container will not leak.

1,872,926. AUXILIARY MOTOR CONTROL SYSTEM. FRAZER W. GAY, Newark, N. J. Filed Nov. 26, 1929. Serial No. 409,781. 8 Claims. (Cl. 290—7.)



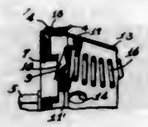
1. In combination, a turbo-generator and auxiliaries therefor, induction motors driving the auxiliaries of said turbo-generator, one of said induction motors having a variable speed responsive to variations in voltage impressed on said motor, alternating current transformer means for supplying operating power to said auxiliary motors, and means connected to the output of said turbo-generator and in operative relation to said transformer means for causing the voltage on said variable speed motor to vary in accordance with the load on said turbo-generator.

1,872,927. PEAK LOAD GENERATING STATION. FRAZER W. GAY, Newark, N. J. Filed Apr. 23, 1930. Serial No. 446,489. 6 Claims. (Cl. 60—94.)



1. In combination, a huge underground tank adapted to store steam at substantially its critical temperature and pressure, a huge tank adapted to store a liquid at high temperature and low pressure, a displacing liquid having low vapor pressure at righ temperature contained in said low pressure tank, a pump adapted to pump said displacing liquid from said low pressure tank into said huge underground tank to displace steam at times of peak load and a liquid motor adapted to absorb the energy of said displacing liquid as it is driven from said high pressure underground tank into said low pressure tank during times of light load.

1,872,928. VALVE. WILLIAM ARTHUR GIFFORD, Lansing, Mich. Filed Sept. 4, 1925. Serial No. 54,422. 15 Claims. (Cl. 137—34.)



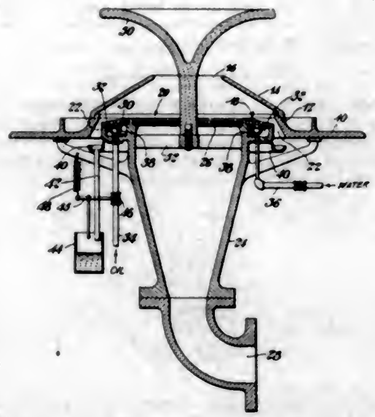
1. A valve having an annular seat, a valve disc having a groove to receive said seat, resilient means tending normally to force said valve towards said seat, manipulative means on said disc whereby it may be moved laterally relative to said seat, and means to prevent lateral movement of said disc until it has moved axially a predetermined distance from said seat.

1,872,929. PROCESS OF PRODUCING FERRICYANIDES. WILHELM GLUUD and KONRAD KELLER, Dortmund-Eving, Germany. Filed June 5, 1928, Serial No. 283,120, and in Germany June 15, 1927. 6 Claims. (Cl. 23—77.)

1. The process of converting a ferrocyanide to ferricyanide which comprises passing a gas comprising free oxygen through a solution of the ferrocyanide under elevated pressure and temperature in the presence of acid.

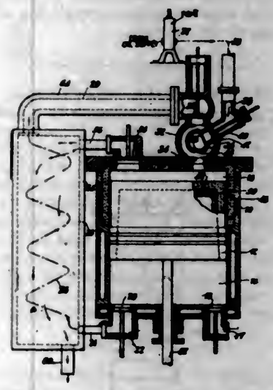
6. The process of converting a ferrocyanide to ferricyanide which comprises passing air containing carbon dioxide through a solution of the ferrocyanide under a pressure of from 80 to 120 atmospheres and at a temperature of from 80° to 100° centigrade.

1,872,930. COMBINED GAS AND OIL BURNER. WINDER E. GOLDSBOROUGH, South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 17, 1927. Serial No. 168,959. 17 Claims. (Cl. 158—11.)



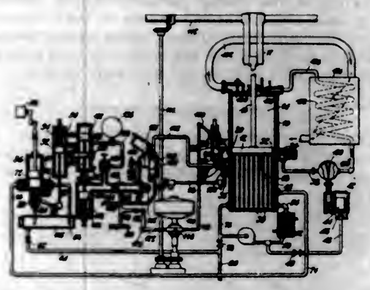
3. In a fluid fuel burner, the combination of an annular oil-exuding member, a central gas burner and means for deflecting heat from said gas burner onto said oil-exuding member for vaporizing the oil exuding therefrom.

1,872,931. FUEL SUPPLY FOR INTERNAL COMBUSTION ENGINES. WINDER E. GOLDSBOROUGH, South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 19, 1928. Serial No. 262,659. 2 Claims. (Cl. 123—32.)



1. The combination of a combustion chamber, a liquid fuel chamber having a heat insulating wall, an air passage surrounding the greater part of said fuel chamber, and means for forcing hot air through said passage, said fuel chamber having a heat insulating perforate diaphragm arranged to permit passage of fuel from the liquid fuel chamber into the path of said air.

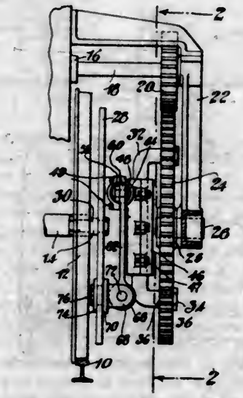
1,872,932. INFRIGIDATION FOR GAS COMPRESSORS. WINDER E. GOLDSBOROUGH, South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 22, 1928. Serial No. 268,626. 25 Claims. (Cl. 230—208.)



1. In a gas compressing apparatus, the combination of a chamber having a body of cooling liquid therein, means for conducting compressed gas from said chamber, means for separating liquid from said compressed gas and for returning liquid so separated to said body and means for adding liquid from an outside source to said body to maintain it at a given cyclic maximum level.

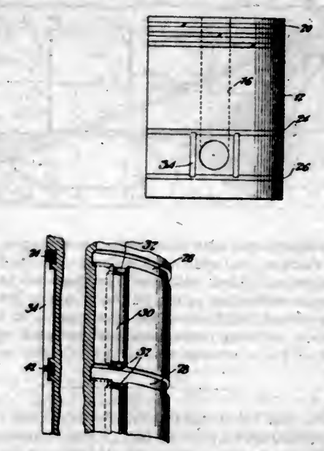
1,872,933. ROTARY TRANSMISSION. WINDER E. GOLDSBOROUGH, South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 15, 1929. Serial No. 332,710. 18 Claims. (Cl. 64—27.)

1. A flexible transmission comprising in combination a rotatably mounted member, a slide mounted to move transversely of the axis of rotation of said member, a second rotatably mounted member, and links pivotally connected to said slide and said second member, a cross bar



swiveled on the slide, said links being pivoted to the cross bar and the cross bar being held against reciprocation transversely of the slide.

1,872,934. GAS SEAL FOR COMPRESSION APPARATUS. WINDER E. GOLDSBOROUGH, South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 14, 1931. Serial No. 529,987. 12 Claims. (Cl. 121—101.)

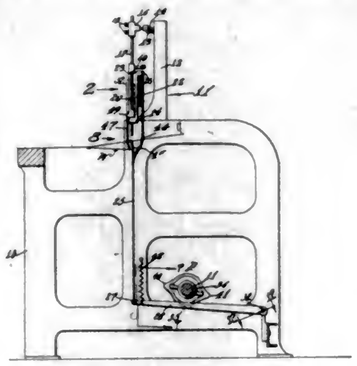


1. Apparatus comprising a cylinder and a piston reciprocating therein, resilient metal seal rings in lateral wall slots of one thereof, longitudinal wall slots each extending between and having its respective ends terminating in said lateral slots, and metal seal strips disposed in said longitudinal slots adapted to engage the rings in said lateral slots, and be forced into sealing position by the resiliency thereof.

1,872,935. CENTER SELVAGE MOTION. ALBERT A. GORDON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 12, 1928. Serial No. 318,916. 13 Claims. (Cl. 139—54.)

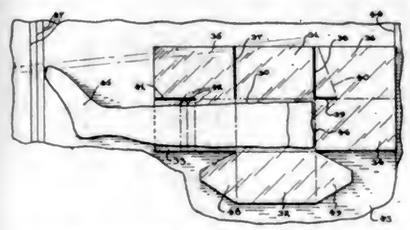
1. In a selvage motion for the warp threads of a loom, a pair of relatively movable warp controlling members, a

lever, means to give said lever movements in one plane and also movements in another plane substantially perpendicular to the first plane, and connections between



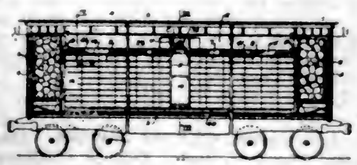
said lever and the members, said lever causing said members to have relative reciprocating and lateral movements.

1,872,936. HOSIERY PACKAGE. WILLIAM H. GOSCH, Reading, Pa., assignor to The Nolde and Horst Company, Reading, Pa., a Corporation of Pennsylvania. Filed Aug. 10, 1931. Serial No. 556,070. 7 Claims. (Cl. 206—46.)



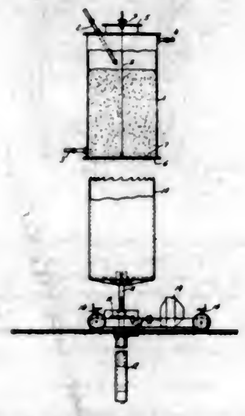
1. A hosiery package comprising a wrapper of transparent flexible material and a pair of stockings, the wrapper being folded with the stockings so as to place transparent stiffening panels of the wrapper between subadjacent folded portions of the stockings and to provide transparent covering throughout, and with leg-top and foot portions of the stockings visible through the wrapper.

1,872,937. METHOD AND APPARATUS FOR PRECOOLING REFRIGERATOR CARS. FRED E. GREENE, Berkeley, Calif., assignor to A. B. Humphrey Co., Perkins, Calif., a Corporation of California. Filed Oct. 12, 1926. Serial No. 141,206. 7 Claims. (Cl. 62—171.)



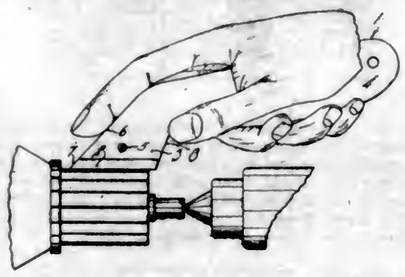
1. A method of pre-cooling perishable commodities in refrigerator cars having ice bunkers on opposite ends and an intermediate storage compartment, in which a commodity is placed in two separate piles to form a central air passage between the piles, which consists in covering the piles and the central air passage to form an upper air passage in communication with the upper ends of the bunkers and maintaining a constant forced circulation of air through the piles and the bunkers by drawing the air from the upper ends of the bunkers through the upper air passage and directing air downwardly through the central air passage and longitudinally through the piles back to the lower ends of the bunkers.

1,872,938. ART OF COKING HEAVY OILS. WILLIS S. GULLETTE, Highland, Ind., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Mar. 7, 1929. Serial No. 345,016. 1 Claim. (Cl. 202—15.)



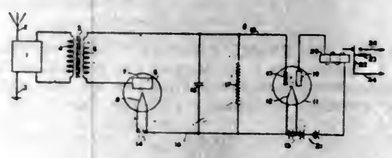
In the coking of heavy oils with the formation of a charge of coke in a cylindrical coking receptacle and the removing of the coke charge from said receptacle with an annular drill, the improvement which comprises reducing a charge of heavy oil to coke in said receptacle and, at the termination of the coking operation proper, removing a radially thin annulus of the charge of coke immediately adjacent the wall of the coking receptacle by forcing the said annular drill through the receptacle, and then removing the remaining bulk of the coke body en bloc.

1,872,939. COMMUTATOR UNDERCUTTING TOOL. WILLIAM W. HADDICAN, Springfield, Mass. Filed Dec. 22, 1930. Serial No. 504,056. 3 Claims. (Cl. 145—31.)



1. A commutator undercutting tool comprising a saw blade, a thin flat one-piece holder therefor composed of rigidly compressed fibre, said holder being formed with a slotted blade holding portion substantially coextensive in length with said blade and an upwardly offset horizontal handle portion, and a forefinger rest on top and near the forward end of said blade holding portion.

1,872,940. RELAY RECEIVING CIRCUIT FOR CARRIER TELEGRAPH SIGNALS. FREDERICK G. HALLDEN, Jamaica, N. Y., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed July 1, 1930. Serial No. 465,214. 4 Claims. (Cl. 178—88.)



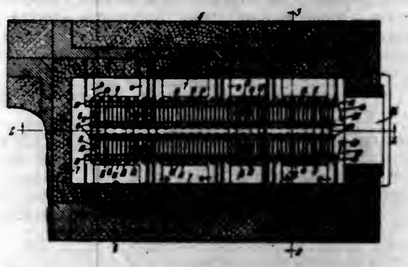
1. Apparatus for rectifying and amplifying telegraph signals comprising a transformer, a rectifier connecting therewith, an amplifier tube the grid circuit of which is connected to said transformer, a neutral relay connecting with the plate of said amplifier tube, means normally to maintain a definite potential on said grid with respect to its filament and to impress upon said grid in response to a received signal a purely negative charge from the circuit which includes said transformer and rectifier tube.

1,872,941. EXPLOSIVE. JOHN A. HAMMOND, Albany, Calif., assignor to California Cap Company, Oakland, Calif., a Corporation of California. Filed July 7, 1930. Serial No. 466,043. 6 Claims. (Cl. 52—17.)

1. The method of treating black powder which comprises mixing the powder with a solution of asphaltum carried in a volatile solvent and triturating the mass until a substantially dry free flowing powder results each granule of which is coated exteriorly with the asphaltum.

5. An explosive comprising black powder, the individual grains of which carry an enveloping coat of hard asphaltum non-adhesive at ordinary temperatures, whereby the powder is free flowing.

1,872,942. ELECTRIC FURNACE. ALBERT J. HANSON, Arlington, Mass. Filed Dec. 31, 1930. Serial No. 505,780. 7 Claims. (Cl. 13—25.)



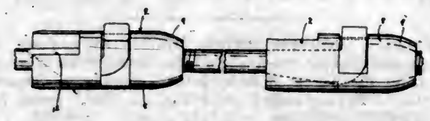
1. In an electric furnace a lining, brackets embedded therein, supports slidable upon said brackets, means to couple said supports together, whereby movement may be transmitted from one support to another in opposite directions and a resistor positioned upon said supports.

1,872,943. HALFTONE PROCESS AND TYPE. HENRY R. HARVEY, San Francisco, Calif. Filed Aug. 2, 1930. Serial No. 472,551. 11 Claims. (Cl. 101—399.)



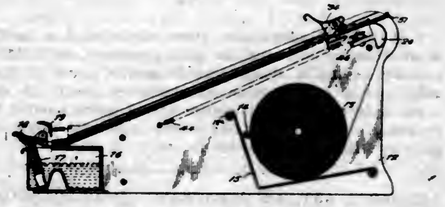
1. A type font for reproducing pictures in half tone comprising a succession of characters, whose printing surfaces vary by logarithmic graduations.

1,872,944. SEWER ROD. JOHN GREGORY HEANEY, Oakland, Calif. Filed Oct. 22, 1928. Serial No. 314,001. 2 Claims. (Cl. 287—103.)



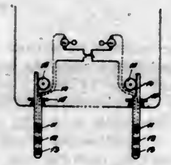
1. The combination with a pair of rods to be connected together end to end, of a tubular sleeve threaded upon the end of one of said rods, said tubular sleeve having a longitudinally extending slot formed therein and opening at one of its ends, said sleeve having a transverse opening formed in its wall in longitudinal alignment with the said slot but being offset beyond one longitudinal edge of the slot to form a bayonet slot effect; a right angularly extending projection on the adjacent end of the other rod, which projection and a portion of the rod contiguous to the projection is of polygonal cross section; a portion of the bore of the sleeve being formed of a polygonal cross section to fit over said projection and polygonal rod portion only when the latter are aligned with the slot, and the bore being enlarged opposite the transverse opening to accommodate the bent portion of the rod at the projection as the rod is inserted and removed.

1,872,945. TAPE SERVING MACHINE. HENRY C. HEBIG, New York, N. Y., assignor to Better Packages, Inc., New York, N. Y., a Corporation of New York. Filed June 24, 1925. Serial No. 39,191. 12 Claims. (Cl. 271—2.5.)



1. In a tape serving machine, in combination, a tape guiding means comprising a table, a longitudinally extending bar, superposed over said table and tape feeding means comprising tape engaging members located on opposite sides of said bar, said bar stiffening said tape to permit it to be pushed from the machine.

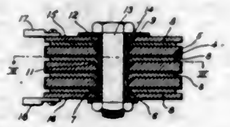
1,872,946. ARRANGEMENT OF SOUND TRANSMITTERS AND SOUND RECEIVERS ON SHIPS. HEINRICH HECHT, Kiel, Germany, assignor to Electroacustic Gesellschaft mit beschränkter Haftung, a Firm, Kiel, Germany. Filed Nov. 16, 1928, Serial No. 319,831, and in Germany Nov. 25, 1927. 3 Claims. (Cl. 177—386.)



1. An arrangement for submarine transmission and reception of sound on all sides on ships in motion undisturbed by the ship's wake, comprising sound transmitting

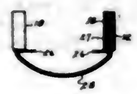
and receiving devices spaced apart as far as possible to port and starboard, to cause the sound waves to straddle the ship's wake, said devices being so arranged as to project below the bottom of the ship.

1,872,947. COPPER OXIDE RECTIFIER. PAUL M. HEINGSTENBERG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 22, 1928. Serial No. 301,275. 3 Claims. (Cl. 175—366.)



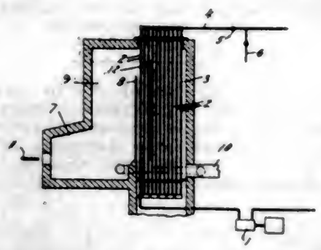
1. A rectifier comprising a pair of perforated cooperating current-rectifying discs, one of which is oxidized on one surface and counter-bored adjacent to the perforation on the unoxidized side and the other of which is embossed to provide a raised portion fitting within the said counter-bored depression in the first disc.

1,872,948. COMMUTATOR BRUSH WITH LIFTING MEMBER. ALBERT C. HENRY, Ironton, Ohio, assignor to Henrite Products Corporation, Inc., Ironton, Ohio, a Corporation of Ohio. Filed Apr. 28, 1931. Serial No. 533,433. 3 Claims. (Cl. 171—324.)



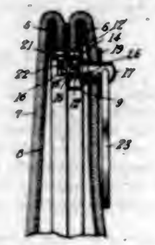
1. A lifting commutator brush comprising, a molded brush body and a nangular lifting member, said lifting member having a shank portion molded in said brush body and a head portion extending exteriorly of said brush body and at right angles to said shank portion for engaging a brush supporting frame to thereby effect the positive lifting of the brush in use.

1,872,949. ART OF CRACKING HYDROCARBONS. EUGENE C. HERTHEL, Flossmoor, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Apr. 4, 1930, Serial No. 441,553. Renewed May 21, 1932. 1 Claim. (Cl. 196—116.)



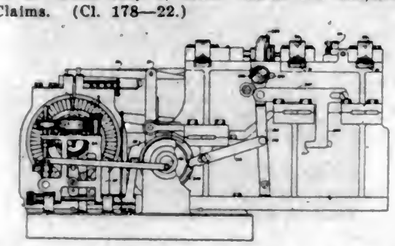
In apparatus for heating hydrocarbon oils to cracking temperatures, a combustion chamber and a heating chamber separated by and only by a wall adapted to transmit radiant heat from said combustion chamber to said heating chamber and connected by a flue for passage of hot gaseous products of combustion from said combustion chamber to said heating chamber but along a path substantially longer than the path along which radiant heat is transferred from said combustion chamber to said heating chamber thru said wall, said means for supplying fuel and air to the combustion chamber and means for discharging heating gases from the heating chamber, a plurality of oil heating tubes arranged in the heating chamber, and a baffle generally parallel to and spaced from said wall dividing said oil heating tubes into two groups, one between said baffle and said wall and the other on the other side of said baffle.

1,872,950. BAG FRAME. WILLIAM C. HERRING, Newark, N. J., assignor to J. E. Mergott Co., Newark, N. J., a Corporation of Delaware. Filed Oct. 28, 1929. Serial No. 402,894. 4 Claims. (Cl. 150—29.)



4. In a handbag having a frame comprising U-shaped members hinged together, each member being channelled inwardly to provide spaced inner and outer walls extending upwardly and outwardly whereby the upper and outer ends of the handbag fabric can be passed over the outer surfaces of the outer walls of the channels and over the top edges of such walls and secured in position in such channels, a latching element depending from the underside of one frame member, and a rotatable latching element cooperating with the first mentioned latching element, said rotatable latching element depending from the underside of the other frame member, said rotatable latching element extending through and operable from the outside of the hand bag fabric.

1,872,951. PRINTING TELEGRAPH SYSTEM. PARKER HITT, New York, N. Y., assignor to International Communications Laboratories, Incorporated, New York, N. Y. Filed May 6, 1930. Serial No. 450,194. 15 Claims. (Cl. 178—22.)



1. A deciphering device comprising a selecting mechanism and a printing mechanism controlled thereby, means comprising a plurality of perforated tapes for operating said selecting mechanism, and means for feeding one of said tapes at a constant speed and the other at a variable speed.

1,872,952. WEFT DETECTING MECHANISM FOR LOOM SHUTTLES. ELDRIDGE R. HOLMES, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 18, 1932. Serial No. 587,233. 7 Claims. (Cl. 139—205.)

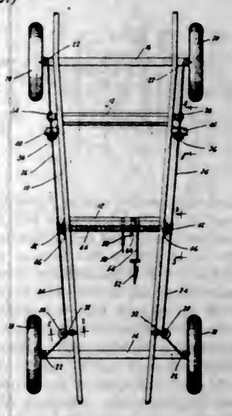
1. In a loom shuttle, a pivoted shuttle spindle, a detecting member mounted to swing with said spindle and also having limited swinging movement about the axis of said spindle and relative to said spindle, a terminal

fixed in said shuttle, a movable contact member engaging said terminal when in operative position and completing a circuit therethrough, and yielding means to move said contact member to operative position, said detecting



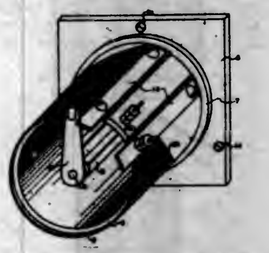
member having a portion engaging said contact member and holding said contact member in inoperative position so long as said detecting member is engaged by a sufficient supply of weft on the bobbin on the shuttle spindle.

1,872,953. BRAKE-OPERATING CONNECTION. BRYAN E. HOUSE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Dec. 24, 1928. Serial No. 328,115. 5 Claims. (Cl. 188—10.)



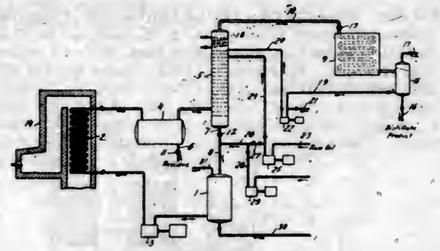
2. In a vehicle having supporting springs, a frame carried thereby, a plurality of braking devices, and cables for operating said braking devices, fixed guide pulleys for said cables, said guide pulleys being carried by said frame adjacent the neutral point of said springs, and adjustable pulleys mounted on said frame adjacent said fixed pulleys and cooperating with said fixed pulleys to adjust the tension of said cables.

1,872,954. VARIABLE ATTENUATOR. HAROLD R. HUNKINS, Brooklyn, N. Y., assignor to International Communications Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1930. Serial No. 491,908. 4 Claims. (Cl. 178—44.)



4. A variable attenuator comprising tapered forms and resistances wound on said forms, said forms being mounted upon a cylinder in layers so that one of said forms projects beyond the other, a shaft extending through said cylinder provided with an arm for engaging the edges of said forms.

1,872,955. ART OF CRACKING HYDROCARBONS. EDWARD W. ISOM, Scarsdale, N. Y., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Apr. 16, 1929. Serial No. 355,593. 1 Claim. (Cl. 196—48.)



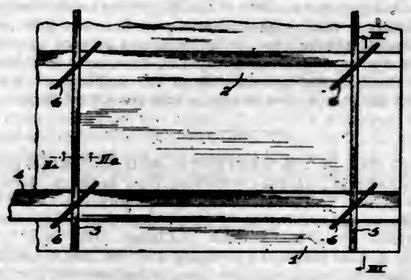
In cracking higher boiling hydrocarbon oils to produce lower boiling hydrocarbon oils therefrom, the improvement which comprises heating the oil to a cracking temperature and subjecting vapors of the cracked oil to a refluxing operation under superatmospheric pressure, discharging reflux condensate from the refluxing operation into a vapor separating zone and reducing the pressure on the discharged reflux condensate, introducing cool oil into the discharged reflux condensate as the pressure is reduced thereon and before separation of any vapors formed by the pressure reduction in an amount sufficient to reduce the temperature of the mixture to less than about 450° F., separately discharging vapors from said vapor separating zone and supplying the remaining liquid oil mixture to the heating operation.

1,872,956. CATALYTIC PROCESS AND APPARATUS. ALPHONS O. JAEGER and JOHANN A. BERTSCH, St. Louis, Mo.; said Jaeger assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Feb. 6, 1926. Serial No. 86,654. 8 Claims. (Cl. 260—172.)

1. The method of vapor phase organic catalysis which comprises contacting the reaction gases with catalysts in closed chambers, exposed parts of which are of metal, and of which the metal surfaces otherwise exposed to contact with the reaction gases are substantially all coated with alkali forming metal compounds.

5. Catalytic apparatus for vapor phase organic catalyses, having the metal surfaces which come in contact with the reaction gases substantially all coated with solid alkali forming metal compounds.

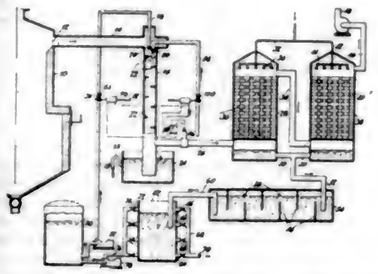
1,872,957. PAPER LATH. WALTER D. JARVIS, Pittsburgh, Pa., assignor, by mesne assignments, to Mary Haines Marks, Sewickley, Pa. Filed May 31, 1930. Serial No. 458,068. 6 Claims. (Cl. 72—116.)



4. Paper lath comprising a paper backing sheet formed with longitudinal corrugations, individual bridge members extending transversely of said corrugations and staples

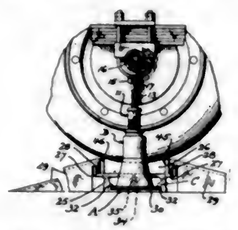
securing said bridge members to said sheet each staple spanning a corrugation and entering the sheet beyond each side of the latter so as to preserve the shape of the corrugation.

1,872,958. SELECTIVE SEPARATION OF LIQUIDS. ALFRED JOHNSON, Westerleigh, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed Dec. 12, 1924. Serial No. 755,379. 16 Claims. (Cl. 196—5.)



16. The method of dehydrating tar, which comprises bringing tar containing water emulsified therewith into intimate contact with hot coal distillation gases at a temperature not greatly reduced from the maximum temperature of such gases, and so adjusting the amount of tar with respect to the sensible heat in the coal distillation gases contacted therewith that the said heat will effect substantially complete vaporization of the water from the emulsion while maintaining the said gas in an unsaturated condition with respect to moisture at the minimum temperature reached during contact thereof with the tar.

1,872,959. AUTOMOBILE JACK. CHARLES H. JOHNSON and ARTHUR E. MILLER, Sacramento, Calif. Filed Mar. 27, 1929. Serial No. 350,186. 9 Claims. (Cl. 254—88.)



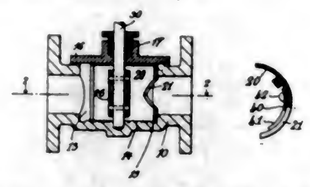
1. In a device of the character described a saddle block, an inclined runway member disposed at each end thereof, a base member connected to one side of the saddle block and adapted to receive and support a jack, and a drive shaft extending through the saddle block and adapted to be connected with the jack to operate the same, said shaft extending through the opposite side of the saddle block a sufficient distance so that it may be engaged for rotation.

1,872,960. SLIDE FASTENER AND INSTALLATIONS THEREOF. GUSTAV JOHNSON, West Roxbury, Mass., assignor to United Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 5, 1931. Serial No. 506,543. 7 Claims. (Cl. 24—77.)

1. A slide fastener for straps and the like comprising, in combination, a top plate part, a fastener-carrying plate part assembled with and located entirely beneath said top plate part, said plate parts being superposed in spaced relation to provide a strap-receiving space between opposite faces for the passage of a strap, snap fastener means carried by said fastener-carrying plate part for engagement with a cooperating snap fastener means and means cooperating between the two plate parts to hold them in assembled relation while permitting movement of one in a flat plane relative to the other to grip the strap between said plate parts.

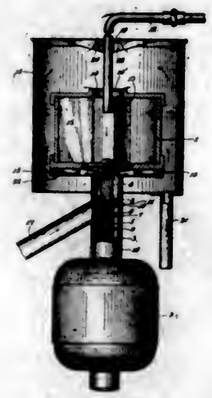


1,872,961. GAS AND AIR VALVE. GUSTAV H. JOHANSON, Philadelphia, Pa., assignor to Christian Wilhjelm, Philadelphia, Pa., as trustee. Filed Jan. 19, 1929. Serial No. 333,720. 1 Claim. (Cl. 274—41.)



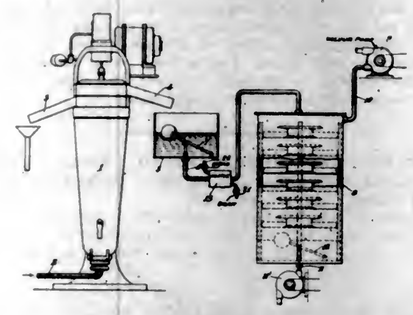
A valve comprising a valve casing forming a valve chamber having a vertical cylindrical wall and a flat bottom, a diametrically opposed inlet and outlet leading to said valve chamber, a circular track in the bottom of the latter, a valve in the form of a substantially semi-circular shell having a V-shaped opening or cut out in its one edge extending inwardly from said edge substantially half way across the surface of said valve shell and adapted to move in said track against the vertical wall of the valve chamber, a shutter member mounted on the inside of said valve for adjusting the V-opening thereof, a valve operating member in said chamber having arms engaging recesses provided in the valve, a spring for pressing the valve against the chamber wall and means for actuating said operating member.

1,872,962. CENTRIFUGAL MACHINE. LEO D. JONES, Philadelphia, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 13, 1925. Serial No. 22,726. 16 Claims. (Cl. 64—80.)



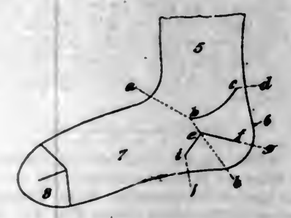
16. In a centrifugal machine, a driving shaft member mounted for rotation, a rotor-spindle member substantially coaxial therewith and adapted to be connected to a centrifugal rotor, an element having a portion encircling and engaging one of said members and having another portion encircling and radially spaced from the other of said members, said element being adapted to limit positively and substantially uniformly angular misalinement of said members, and said members being connected in positive rotational driving relation, and a resilient alinement restoring member operatively engaging both of said members.

1,872,963. METHOD FOR SEPARATING SUBSTANCES. LEO. D. JONES, Philadelphia, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 13, 1925, Serial No. 22,727. Renewed Feb. 17, 1932. 6 Claims. (Cl. 196—16.)



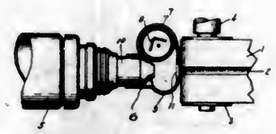
6. The process of purifying oil that contains impurities including dissolved and suspended water and solid particles and that has a vapor pressure not substantially higher than the vapor pressure of water under temperature and pressure conditions at which water will vaporize from the oil, and thereby producing oil substantially free of solid particles and of suspended and dissolved water and gases for uses in which solid particles and suspended and dissolved water and gas impair the effect and stability of the oil, which comprises centrifugally separating immiscible impurities including solid particles and water from the oil while it is heated to a sufficiently high temperature to reduce its viscosity, and then subjecting the centrifugal oil to such conditions of temperature and pressure as will cause dissolved water and gaseous impurities that exist in the oil after the centrifugal separating step to pass off as vapors and gases, while maintaining the temperature and pressure at such values as to avoid substantial loss of or injury to the oil.

1,872,964. SEAMLESS STOCKING AND METHOD OF MAKING THE SAME. HARRY E. KATZENMOYER, Rosedale, Pa., assignor to Fisher Hosiery Co. Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Oct. 23, 1930. Serial No. 490,756. 8 Claims. (Cl. 66—187.)



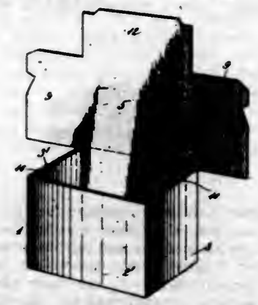
1. A seamless stocking having an enlarged heel pocket formed of angular sections and characterized by having on each side thereof three suture seams, the intermediate one defining a mid-heel junction of section loops, and the other two defining respectively marginal heel section loop junctions with the leg and foot portions, the inner end of one of said marginal sutures being spaced away for a plurality of wales from the inner ends of the other sutures to provide extensible areas at the inner ends of the heel pocket on each side of the stocking.

1,872,965. TRANSLATING APPARATUS EMPLOYING REFLECTED LIGHT. EDWARD W. KELLOGG, Moorestown, N. J., assignor to General Electric Company, a Corporation of New York. Filed May 22, 1930. Serial No. 454,802. 3 Claims. (Cl. 179—100.3.)



1. Apparatus for translating a light reflecting record into current variations comprising a light reflecting casing having an opening adjacent said record, optical means for directing light through said casing in a narrow band on the record and a photo-electric device cooperating with the casing and arranged to receive light reflected from the record independently of said optical means.

1,872,966. CONVERTIBLE BOX. CHARLES H. KENNEDY, Swampscott, Mass., assignor to Walter M. Lowney Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 1, 1930. Serial No. 492,721. 3 Claims. (Cl. 206—44.)

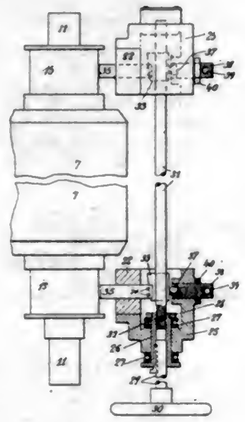


1. A convertible box comprising a base-forming body having an open top with closed-in sides, ends and a bottom; a card mounted in said body in an upright position and rising above the top edge of said body; foldable wing on said card, certain of said wings co-operating with said body to maintain the card in an upright position as aforesaid, and other of said wings co-operating with said card when the wings are folded, to form a container in elongated extension of said body, and, when the wings are open, a display easel for goods contained in said body then forming the base of said easel; and a cover for said container when said wings are folded as aforesaid.

1,872,967. ADJUSTING DEVICE FOR ROLLER MILLS. JAMES W. KENT, Brooklyn, N. Y. Filed Feb. 19, 1930. Serial No. 429,501. 8 Claims. (Cl. 308—60.)

1. In a roller mill of the character described, a grinding roller, a pair of bearing boxes supporting the same, a plurality of non-rotatable members operable laterally in

contact with the said bearing boxes to adjust the same, means for simultaneously actuating said non-rotatable members and other means for individually actuating said



non-rotatable members to effect an individual adjustment of the bearing boxes and lock the same in adjusted positions.

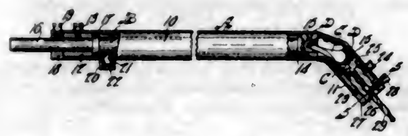
1,872,968. SEPARABLE FASTENER, FASTENER INSTALLATION, AND METHOD OF ATTACHING THE SAME. ARTHUR W. KIMBELL, Newton Center, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 5, 1930. Serial No. 473,138. 7 Claims. (Cl. 24—219.)



1. A fastener installation comprising, in combination, a carrying medium, a fastener member located at one side of the carrying medium and having a hollow head, a tubular portion located within the hollow head and terminating in spaced relation to the inner surface of said head, means provided by said head for upsetting the shank of an attaching member and an attaching member having a normally closed rounded end hollow shank tapered adjacent to the end and passing through the said carrying medium, through the said tubular portion and having a portion of its end upset and expanded laterally over the end of the tubular portion and another portion wedged into the hollow shank adjacent to the free end of the tubular portion to secure the fastener member in fixed relation to the said carrying medium, the wedged portion of the rivet acting as a stop to prevent return of the laterally expanded portion through the tubular portion.

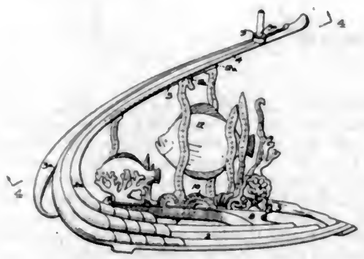
1,872,969. PORTABLE DRILL. JOHN H. KING, Cleveland, Ohio. Filed Feb. 24, 1930. Serial No. 430,811. 1 Claim. (Cl. 77—7.)

A machining device comprising in combination a rigid casing having one end thereof angular with the main part thereof, a driven member journaled in said angular part, a driving member journaled in said main part and having a portion diametrically smaller than the inside of said casing, a connector means between said driven and driving members comprising a stub journaled in each of said members, each of said stubs having a round bottom slot with a rounded bottom longitudinally thereof, and a rotary motion transmitting link member having a later-



ally flat and endwise rounded portion on each end thereof and angular with each other and movably seated on the corresponding bottom of said slots, and an oiling device on said casing located over said diametrically smaller portion to fill with lubricant the space between the same and the interior of said casing.

1,872,970. ORNAMENTAL STAND. PETER J. KING, Detroit, Mich. Filed July 13, 1931. Serial No. 550,613. 4 Claims. (Cl. 41—10.)

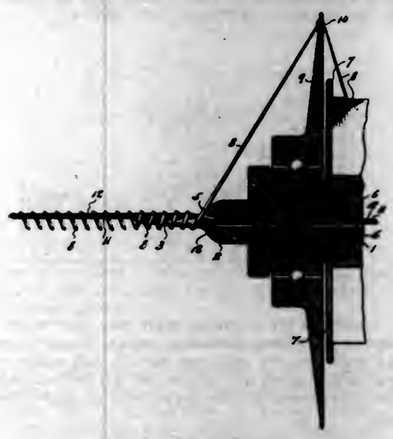


4. An ornamental stand consisting of two side members joined to one another at one extremity and spaced from each other throughout the greater portion of their length sufficiently for said members to form a steady supporting base, the other extremities of said side members being upwardly and rearwardly flexed, a rest extending longitudinally and substantially centrally over said supporting base in which said upwardly and rearwardly flexed side member extremities terminate, said rest being upwardly and outwardly inclined, a guide integral with said side members on substantially the said horizontal plane as the latter and beneath said rest, said guide being spaced intermediately between said members, an ornamental grille or panel slidable on said guide, another guide formed on the underside of said rest, upper extremities of said ornamental grille or panel engaging opposite sides of said other guide to hold said grille or panel in place, the upper faces of said extremities engaging portions of said rest which project laterally beyond said other guide when the grille or panel has been slid into position, and means on said rest for supporting an article to be held thereby.

1,872,971. PREPARING ALL METAL GIMPED MATERIAL. RUSSELL B. KINGMAN, Orange, N. J., assignor to Metal Textile Corporation, West Orange, N. J., a Corporation of Delaware. Filed Feb. 27, 1931. Serial No. 518,788. 6 Claims. (Cl. 117—34.)

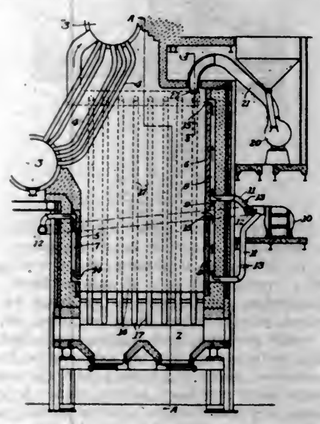
1. A method of producing all-metal gimped material, comprising the winding of a comparatively smooth fiberless metallic gimp strand about a longitudinally traveling

smooth metallic carrier core, and treating said carrier core, preliminary to the winding of said gimp strand thereon, to provide the same with a coating of a sub-



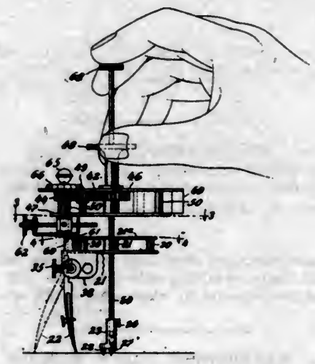
stance adapted to offer frictional resistance to relative slipping movement between the carrier core and the convolutions of gimp strand applied thereto.

1,872,972. BOILER FURNACE CONSTRUCTION. HENRY P. KIRCHNER, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Apr. 19, 1930. Serial No. 445,611. 2 Claims. (Cl. 122—235.)



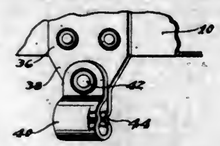
1. A boiler furnace for burning powdered coal fuel at high rates of combustion and for operating the boiler at correspondingly high ratings comprising in combination a combustion chamber having front, back and side walls with silicon carbide linings for the exposed surfaces of said chamber; a burner arranged to project a sheet of flame downward from an opening in the top of the chamber so that said sheet is initially parallel to the front and back walls, air ducts in one side of said walls for pre-heating air by transmission of heat from the upper portion of said sheet of flame, air inlets for the air ducts whereby the air thus preheated is admitted to the combustion chamber, another series of air ducts in the same wall for pre-heating air by transmission from the lower portion of the flame and delivering said air at an intermediate level in the combustion chamber, a third series of air ducts arranged in the wall opposite to the burner outlet and arranged to deliver preheated air to the lowermost portion of the combustion chamber, boiler tubes extending across the outlet of the combustion chamber above said last-mentioned air-cooled wall, other boiler tubes embedded in the side walls and extending substantially the length thereof, and means for varying the respective rates of air and water cooling.

1,872,978. ELLIPSOGRAPH. JOHN J. KITTEL, St. Albans, N. Y., assignor of one-hauf to Ernest W. Beebe, East Orange, N. J. Filed Jan. 4, 1928. Serial No. 244,390. 8 Claims. (Cl. 33—30.)



1. An elliptigraph compass, comprising a center post, a fundamental gear fixedly carried thereby, a gear frame rotatable on and about the post, a generating gear carried by said frame and rotated from the fundamental gear in said generating gears orbital travel about the post, a scriber arm rotatable about and radially shiftable relative to the center post, a crank pivoted to said scriber arm and a variable throw connection between the generating gear and said crank, said crank being in the form of a yoke and the variable connection including a block rotated by the generating gear, a screw rod carried by said block and engaged with said yoke and an adjusting nut on the yoke and engaged with said screw rod.

1,872,974. BRAKE. ROBERT F. KOHR, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 5, 1931. Serial No. 506,603. 2 Claims. (Cl. 248—31.)

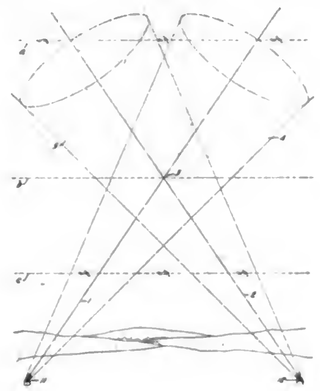


1, A conduit support comprising a bracket having a dependent portion bent upon itself to provide a sleeve, means for contracting the sleeve and diametrally arranged depressed portions on one end of the sleeve.

1,872,975. NAVIGATION SYSTEM AND METHOD. FREDERICK A. KOLSTER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed June 19, 1928. Serial No. 286,697. 4 Claims. (Cl. 250—11.)

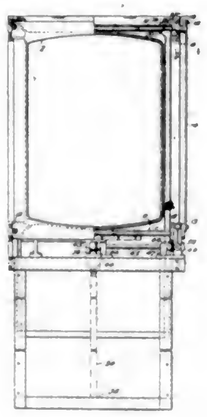
3. The method of indicating the position of an air craft above or below a predetermined elevation which consists

in projecting differently characterized beams of radio energy from remote points, causing said beams to intersect



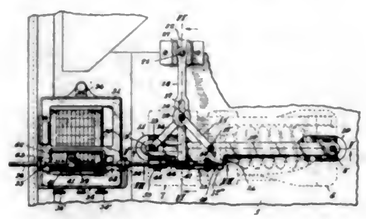
at said predetermined elevation, traversing said beams by said air chaft, receiving said beams on said air craft and noting the sequence in which said beams are received.

1,872,976. WATERTIGHT SHIP'S WINDOW. WALDO L. KRAEMER, Brooklyn, N. Y., assignor to Kearfott Engineering Company, Inc., a Corporation of New York. Filed Mar. 29, 1930. Serial No. 439,869. 7 Claims. (Cl. 114—177.)



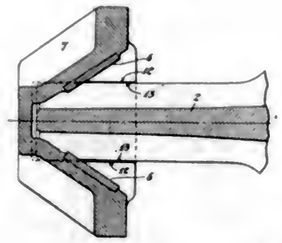
1. A window comprising, an outer frame member, an inner frame member movable laterally with respect to the outer frame member, said frame members having aligned window openings therein, a window-pane slidably mounted between the inner and outer frame members, traversing means for the window-pane, means for causing relative lateral movement between the inner and outer frame members to clamp the window pane therebetween, and an interlock between said frame moving means and said window-pane traversing means to prevent operation of the window-pane traversing means when the window-pane is clamped between frame members.

1,872,977. DRAFT GEAR OPERATION RECORDER. HARRY T. KRAKAU, Bratenahl, Ohio, assignor to National Malleable & Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 16, 1929. Serial No. 363,428. 18 Claims. (Cl. 234—1.)



1. Apparatus for recording draft gear movements, said apparatus comprising recording means, means connected to the draft gear for operation thereby, and means whereby the second mentioned means controls the transmission of the movements of the draft gear to said recording means.

1,872,978. SHOCK ABSORBING MECHANISM. HARRY T. KRAKAU, Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 2, 1927. Serial No. 210,052. 5 Claims. (Cl. 213—36.)

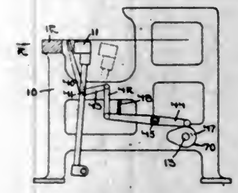


1. In frictional shock absorbing mechanism, a longitudinally extending included friction member having a plurality of diverging longitudinally extending friction faces and a plurality of sets of guiding faces, the faces of each set being parallel and at an angle to the faces of the other sets; friction shoes engaging said friction faces; a wedge engaging such friction shoes and also having guiding surfaces engaging the said guiding faces on the included member and lying closely adjacent the sides of the shoes, whereby the parts of the gears are maintained in alignment and said friction member is held against relative transverse movements in all directions; a spring seat surrounding said friction member and closely fitted thereto, and compression spring elements cooperating between said seat and said friction member.

1,872,979. SELVAGE TRIMMER FOR BOX LOOMS. CLARENCE R. KRONOFF, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed June 17, 1931. Serial No. 545,040. 6 Claims. (Cl. 139—116.)

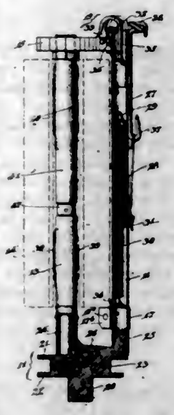
1. In a selvage trimmer for a loom having a lay movable back and forth and a thread cutting temple, shifting shuttle boxes movable vertically on the lay and each capable of being in idle position, a thread placing mechanism normally in retracted position adjacent the selvage, a

clamp mechanism mounted independently of the lay and movable rearwardly in a plane parallel to the plane in which the lay moves, and means to move the placing



mechanism from the temple toward the boxes to place the weft of an idle shuttle within the range of movement of the clamping mechanism.

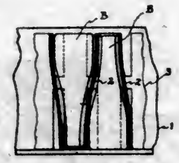
1,872,980. BRAIDING CARRIER. MAX KRISSIEP, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Nov. 12, 1929. Serial No. 406,565. 1 Claim. (Cl. 96—15.)



In a yarn carrier having a base member and a rotatable ratchet controlled bobbin; a parallel tubular standard; yarn tensioning means comprising; a pawl pivotally mounted on said standard for engaging and disengaging said bobbin, said pawl having an extension projecting into said tubular standard; a tubular thread-carried slide mounted in said standard and having an end portion adapted to engage said extension of said pawl to disengage the latter from said bobbin; a machine-stop device limitedly slidable on said standard; and a tensioning spring in said slide for connecting the latter to said stop device for normally maintaining said stop device in inactive position.

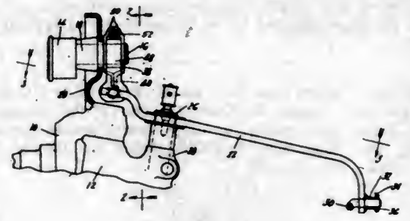
1,872,981. CONTAINER. WILLIAM KUERSCHNER, Pittsburgh, and FLOYD A. HIGERD, Bellevue, Pa., assignors to H. J. Heins Company, a Corporation of Pennsylvania. Filed June 23, 1931. Serial No. 546,192. 3 Claims. (Cl. 217—31.)

1. A container including in its structure two partition walls of sheet material lying in angularly extending planes, slotted from opposite edges inwardly and by such slotting interdigitated, one of said walls being provided with an auxiliary slot formed opposite to and in alignment with the interdigitating slot first alluded to and in the assembly cooperating with the interdigitating



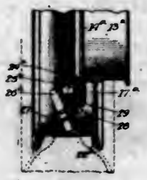
slot of the other partition wall to define a vacant space of columnar form, whereby one of the walls may be tipped relatively to the other.

1,872,982. BRAKE OPERATING MEANS. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Nov. 16, 1927. Serial No. 233,546. 9 Claims. (Cl. 74—38.)



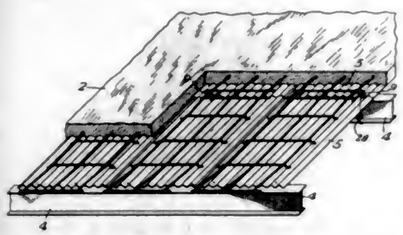
1. Brake-applying means comprising, in combination with a shaft, an operating arm including an integral stamping having spaced sides each embracing said shaft, and an adjusting part movable lengthwise between said sides at the end of the arm, together with a thrust arm supported by the shaft between said sides and having a part engaging said adjusting part.

1,872,983. VEHICLE WHEEL. LUDGER E. LA BRIE, Chicago, Ill., assignor, by mesne assignments, to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 6, 1924. Serial No. 748,018. 13 Claims. (Cl. 301—6.)



1. A vehicle wheel comprising, in combination, a brake drum, a tire rim, two rings secured respectively to the drum and rim and disposed in radially lapping relation to each other, and means for detachably clamping the rings together to support the rim upon the drum.

1,872,984. BUILDING CONSTRUCTION. GEORGE E. LAND, Pittsburgh, Pa., assignor, by mesne assignments, to Mary Haines Marks, Sewickley, Pa. Filed Mar. 21, 1928. Serial No. 263,306. 1 Claim. (Cl. 72—70.)



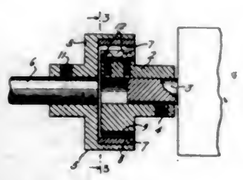
As a new article of manufacture, a preassembled base for employment in the production of cementitious building slabs, said base comprising a rigid metallic sheet for receiving, supporting and strengthening the cementitous material, transverse members secured rigidly to said base in spaced relation therewith, and longitudinal reinforcing members rigidly secured to said transverse members and extending at one end beyond the end of said base, whereby the longitudinal reinforcing members of one base will overlap those of a base placed adjacent thereto, said base transverse and longitudinal members constituting a unitary structure adapted to be transported and applied as such.

1,872,985. REENFORCING BASE FOR PLASTIC MATERIAL. GEORGE E. LAND, Pittsburgh, Pa., assignor, by mesne assignments, to Mary Haines Marks, Sewickley, Pa. Filed May 8, 1930. Serial No. 450,680. 4 Claims. (Cl. 72—116.)



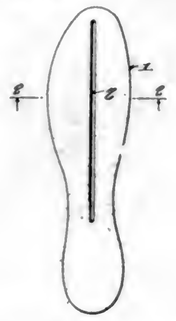
1. A backing for plastic material comprising a sheet of fibrous material having spaced parallel corrugations therein and stiffening members for said grooves having integral means extending into the body of said sheet for securing said members to said sheet.

1,872,986. CLUTCH. GEORGE S. LANE, Passaic, N. J., assignor to Raybestos-Manhattan, Inc., a Corporation of New Jersey. Filed Aug. 13, 1931. Serial No. 556,750. 8 Claims. (Cl. 192—52.)



1. In a friction clutch, driving and driven faces in rubbing contact, and thermostatic means operated by the generated heat to cause a driving engagement between said faces.

1,872,987. SHOE INSOLE. HARRY C. LANGER, Milwaukee, Wis. Filed Nov. 8, 1928. Serial No. 317,965. 2 Claims. (Cl. 36—43.)

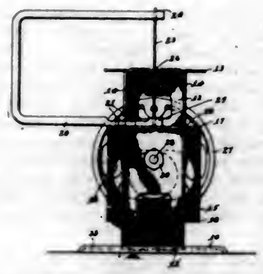


1. As a new article of manufacture, an insole for shoes constructed to receive the seam of a stocking, whereby the seam will not bear against the foot, said insole comprising a body having a continuous longitudinally extending narrow stocking seam receiving channel arranged equidistant the sides of the body and terminating in close proximity to the front of the body and short of the heel portion of the body.

1,872,988. PROCESS FOR REACTIVATING CLAY. ERWIN R. LEDERER, Fort Worth, Tex. Filed May 31, 1930. Serial No. 457,688. 5 Claims. (Cl. 252—2.)

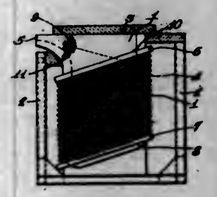
1. The method of recovering and reactivating bleaching clays having absorbed hydrocarbon oil and diluents therein, which comprises the steps of removing the clay from the primary filter, leaching the clay with a low boiling point hydrocarbon in separate wash tanks to recover the entrapped oil therefrom, refiltering the clay pulp to remove the leached oil and the low boiling point hydrocarbon, preliminarily drying the clay at a temperature below the ignition point of the low boiling point hydrocarbon to remove the low boiling point hydrocarbon without igniting the same, and finally subjecting the clay to a heat sufficient to revive the clay and higher than the flash point of the low boiling point hydrocarbon.

1,872,989. TOY SCROLL SAW. FRANK L. LINDSTROM, Bridgeport, Conn. Filed Apr. 7, 1932. Serial No. 603,730. 2 Claims. (Cl. 143—71.)



1. In a scroll saw of the class described, a base plate, a relatively wide sheet metal column secured to the base plate, a table secured to the top end of the column, a stud secured to the column, a cam wheel rotatably mounted on the stud, a sheet metal carriage disposed crosswise of the column and of a width slightly greater than that of the width of the column and provided with a transverse slot engaged by the cam to vertically reciprocate the carriage, and having inbent edges with oppositely positioned elongated guide slots to engage the column and guide the carriage in its vertical reciprocatory movements with respect to the column, and a saw-frame and saw mounted on the carriage to be reciprocated thereby.

1,872,990. INDUCTION ELECTRIC FURNACE. FRANZ LINNHOFF, Eberswalde, Germany. Filed Feb. 20, 1930, Serial No. 430,089, and in Germany Feb. 27, 1929. 11 Claims. (Cl. 13—27.)



1. In an electric induction furnace, a crucible containing a metal bath, an inductor coil surrounding the crucible and diagonally inclined to the vertical axis of the crucible to an extent greater than the pitch of the winding, and a source of current for the inductor coil.

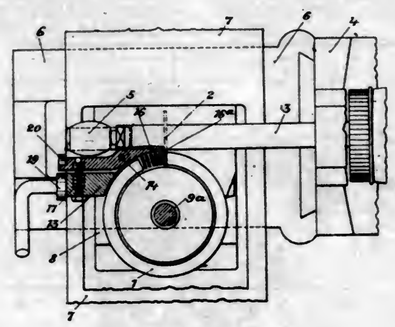
1,872,991. VACUUM TUBE. CHARLES V. LITTON, Redwood City, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Oct. 22, 1929. Serial No. 401,398. 5 Claims. (Cl. 250—27.5.)



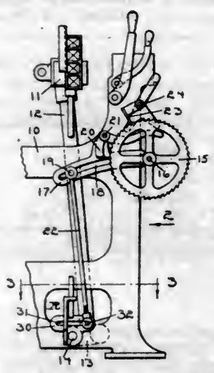
1. A vacuum tube mount comprising a press, an anode, supporting elements sealed into said press and attached to said anode and serving as the sole supporting means of said anode, and reinforcing means secured to said supports and contacting with the exterior surface of said press to resist displacement of said anode.

1,872,992. MACHINE FOR PRODUCING SLITS IN TYPE BARS. HANS LUCK, Sommerda, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik Sommerda Aktiengesellschaft, Sommerda, Germany, a Corporation of Germany. Filed Jan. 25, 1930, Serial No. 423,302, and in Germany Apr. 12, 1929. 9 Claims. (Cl. 90—21.)

1. A machine for producing radial slits in the circularly-curved face of a blank, comprising a support for the blank, a device mounted to rotate in a plane containing the axis of said circularly-curved face of the blank and to cut radial slits in said blank, and a holder arranged to engage the said face of the blank immediately adjacent to the portion at which the cutting device begins its slitting operation, said holder being pivoted about an axis parallel to said axis of the circularly-curved face of the blank.



1,872,993. TAKE-UP FOR LOOMS. WILLIAM E. LUNDGREN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 28, 1929. Serial No. 393,936. 5 Claims. (Cl. 139—304.)

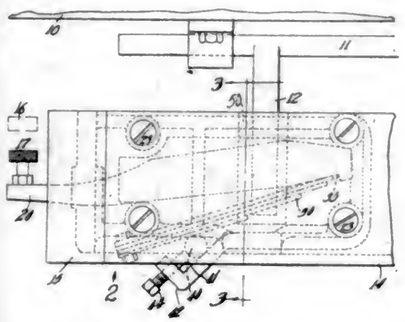


1. In a take-up for a loom provided with a member having a feeding movement in one direction and a lay to move back and forth, a rocker foot for the lay, a pivotal support for the foot, means moving with the rocker foot defining a slot out of horizontal alignment with the axis of the lay, and connections between the feeding member and the rocker foot including an element extending through the slot to be held at any one of a plurality of positions along the slot, said slot extending to a position substantially over the axis of the lay, the slot extending on both sides of the axis of the lay, whereby advance movement of the feeding member may be effected during the forward or backing movement of the lay.

1,872,994. KNOCK-OFF MECHANISM FOR LOOMS. WILLIAM E. LUNDGREN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 2, 1931. Serial No. 572,607. 7 Claims. (Cl. 139—345.)

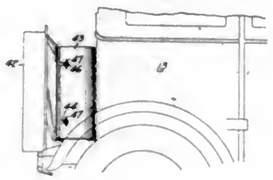
1. In a loom, a knock-off member, a stand in which said member is movably mounted, means to move said knock-

off member, a flat leaf spring having an end portion loosely seated in a recess in said stand, whereby said spring is held from endwise displacement, the opposite end portion of



said spring engaging said knock-off member, and means engaging said spring between its end portions and effective to vary the tension of said spring.

1,872,995. LUGGAGE CARRIER. FRED W. MARCO, Berkeley, Calif., assignor to Laher Auto Spring Co., Inc., San Francisco, Calif., a Corporation of Oregon. Filed Oct. 25, 1929. Serial No. 402,342. 4 Claims. (Cl. 224—29.)



1. In a collapsible luggage carrier for an automobile, forward and rear upright walls adapted to extend laterally of the automobile, one of said walls being adapted to be rigidly secured to the automobile frame, a bottom wall section hingedly secured to each of said first named walls and adapted to swing upwardly from a substantially horizontal position when the carrier is extended, and collapsible side wall sections hingedly connected together and to the first named walls respectively, said side wall sections extending substantially at right angles to the front and rear walls when the carrier is extended and collapsible inwardly after the bottom wall sections have been swung upwardly.

1,872,996. PROCESS OF MAKING PAPER PULP. WILLIAM H. MASON, Laurel, Miss., assignor to Masonite Corporation, Laurel, Miss., a Corporation of Delaware. Filed May 21, 1925. Serial No. 31,785. 5 Claims. (Cl. 92—1.)

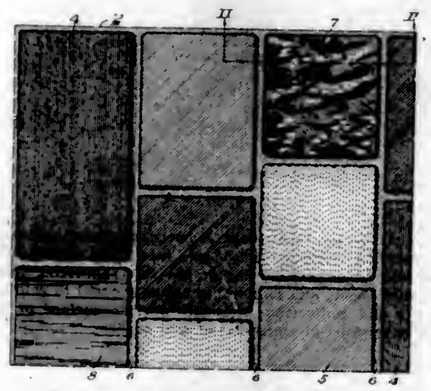
1. The process of making pulp, which consists in subjecting subdivided wood to chemical treatment in a chamber, removing surplus chemicals, subjecting the treated material to steam pressure in excess of 250# per square inch in said chamber, and discharging from said chamber at such pressure, whereby the material is exploded and thoroughly disintegrated.

1,872,997. SURFACE DECORATION. J CLARENCE MCCARTHY, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed May 28, 1927. Serial No. 194,936. 12 Claims. (Cl. 41—88.)



1. The process of decorating a flexible surface covering of the felt-base-linoleum type which consists in applying superimposed layers of paint to the surface and abrading the paint to expose portions of layers of paint below the top layer.

1,872,998. LINOLEUM AND METHOD OF MAKING THE SAME. J CLARENCE MCCARTHY, Lancaster, Pa., assignor to Armstrong Cork Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 8, 1928. Serial No. 298,192. 14 Claims. (Cl. 154—26.)



1. In the process of making linoleum, the step which consists in applying loose granular material to a backing, together with pieces of preliminarily sheeted linoleum, and thereafter compressing the whole to form an integral sheet.

11. As a new article of manufacture, inlaid linoleum comprising areas of molded inlaid linoleum and having the characteristic appearance thereof, and other areas of marbled composition.

1,872,999. ORNAMENTATION OF HARD SURFACE COVERING MATERIALS. J CLARENCE MCCARTHY, Lancaster, Pa., assignor to Armstrong Cork Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 21, 1928. Serial No. 320,948. 18 Claims. (Cl. 41—26.)



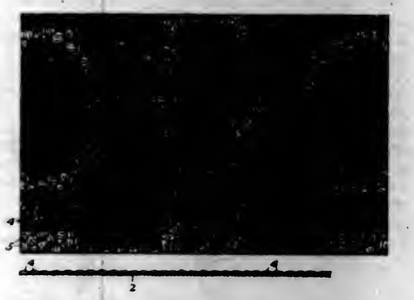
11. A hard-surfaced floor covering material comprising a base presenting a base color and an overlying texture pattern which leaves part of the base color exposed and having ornamentation overlaid over a portion only thereof.

1,873,000. ORNAMENTATION OF SURFACE COVERING MATERIALS. J CLARENCE MCCARTHY, Lancaster, Pa., assignor to Armstrong Cork Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 5, 1928. Serial No. 328,904. 24 Claims. (Cl. 41—26.)



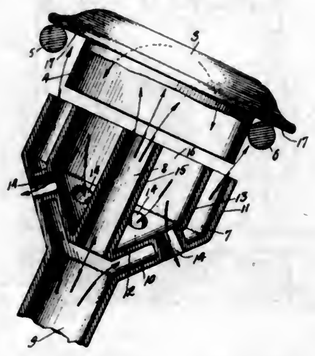
9. As a new article of manufacture, a flexible hard-surface covering of the linoleum type having an applied decorative base coating over its entire area, and having spots over the greater portion of the base coating, said spots being of varying color characteristics and being of irregular size and contour, the spots being of a character producible by air brushing.

1,873,001. EMBOSSED FLOOR COVERING. J CLARENCE MCCARTHY, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Oct. 31, 1929. Serial No. 403,820. 12 Claims. (Cl. 41—24.)



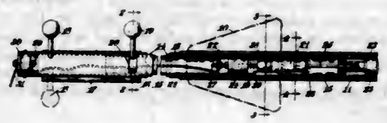
1. In the manufacture of flexible hard surfaced floor coverings, the step consisting in forming a series of small serrated humps irregularly arranged over the surface thereof.

1,873,002. AIR NOZZLE. JOHN M. MCCLATCHIE, New York, N. Y., assignor to The Borden Company, New York, N. Y., a Corporation of New Jersey. Original application filed Apr. 17, 1930, Serial No. 444,963. Divided and this application filed Oct. 3, 1931. Serial No. 566,662. 5 Claims. (Cl. 34—26.)



3. An air nozzle for drying milk-can covers or similar articles, said nozzle having a pair of concentric discharge orifices for directing an air blast against a cover, a chamber located between the orifices for receiving the air blast deflected by the cover, and outlet passages leading from said chamber.

1,873,003. VEHICLE DIRECTION AND MOVEMENT SIGNALING DEVICE. RODERICK GEORGE MCLEOD, London, England. Filed Feb. 13, 1930, Serial No. 428,105, and in Great Britain Feb. 18, 1929. 15 Claims. (Cl. 116—46.)



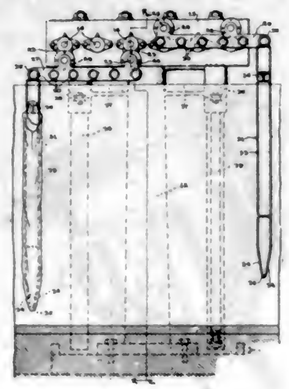
1. A road traffic direction and movement signaling device for use on vehicles, comprising a plurality of indicators adapted to be rotated about a horizontal axis each from an inoperative position wherein an indicating face is in a horizontal plane into an operative position wherein said indicating face is in a vertical plane, and independent operating stems for said indicators which operating stems are rotatably nested together.

1,873,004. DYEING PROCESS AND APPARATUS. ERNST RICHARD MEINIG, Wyomissing, Pa., assignor to E. Richard Meinig Co., Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Mar. 14, 1929. Serial No. 346,958. 7 Claims. (Cl. 8—19.)

1. A machine for use in subjecting fabrics to liquid treatment, comprising a vat adapted to contain a pool of the treating liquid, a vertically reciprocating plunger, a head carried by the plunger, a bracket supported by the head, means for moving said bracket in an endless path, rods carried by the bracket, and a series of forms supported by the rod in freely depending non-contacting parallel relation and adapted to be jointly raised from, and lowered into the vat by movement of said plunger.

5. The improved process of hosiery dyeing which consists in suspending a depending series of separately sup-

ported longitudinally stretched loosely flattened stockings, and subjecting said series of normally spaced longitudi-

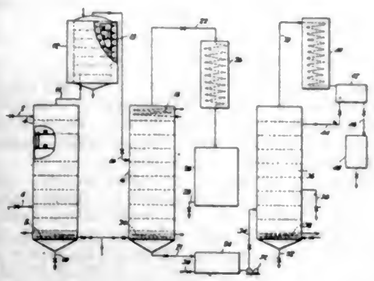


nally stretched stockings to immersion in a pool of dyeings liquid and permitting the side walls of each stocking to move toward or away from each other.

1,873,005. PROCESS FOR DEHYDRATING ALCOHOLS AND OTHER ORGANIC COMPOUNDS. SYLVAN R. MERLEY, Dover, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed May 23, 1928. Serial No. 280,119. 8 Claims. (Cl. 202—42.)

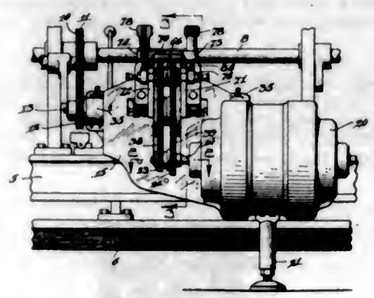
1. The process of removing water from a mixture of aqueous alcohols, which comprises adding a light petroleum polymer liquid to said mixture, said polymer being of the type formed by the action of sulfuric acid on hydrocarbon material containing unsaturated hydrocarbons and substantially immiscible with water, distilling the resulting mixture to drive off the polymer and water, condensing the polymer-water vapors, separating the polymer from the water and constantly returning the polymer to the distilling zone until the water content of said alcohols is removed.

1,873,006. ALCOHOL RECOVERY. SYLVAN R. MERLEY, Dover, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 30, 1930. Serial No. 485,401. 5 Claims. (Cl. 202—40.)



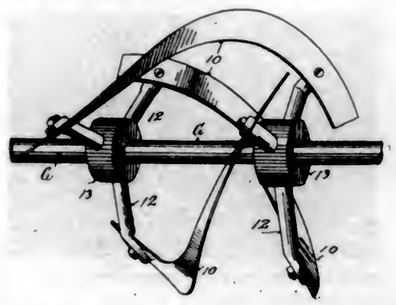
1. The process of recovering secondary alcohols from a mixture of hydrolyzed alkyl sulfate which comprises steam distilling a hydrolyzed solution of amyl sulfates containing a mixture of butyl and lower boiling alcohols, amyl and higher alcohols, free sulfuric acid and impurities, passing the vapors from said solution through a caustic solution to remove the impurities and into a refluxing and separating zone in which the butyl and lower boiling alcohol vapors are maintained in vapor state, passed overhead and condensed, while the amyl and higher boiling alcohol vapors are condensed in said zone and drawn off from the bottom thereof, separating the amyl and higher boiling alcohols from any water withdrawn therewith, fractionally distilling the resulting amyl and higher boiling alcohols, and separately collecting the amyl alcohol from the higher boiling alcohols.

1,873,007. VARIABLE SPEED DRIVE MECHANISM. CHRISTIAN F. MEYER, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Nov. 14, 1928. Serial No. 319,206. 3 Claims. (Cl. 74—21.)



1. In combination with a full-fashioned knitting machine having a main frame and a forwardly located power driven shaft, a unitary variable-speed drive mechanism for the latter comprising a base plate secured to the rear portion of said machine frame; said plate having mounted thereon a motor shaft provided with changeable drive gears, a transmission shaft provided with clutch-controlled gears having driving belt connections to said changeable drive gears and with a drive gear connected to said power driven shaft; and means for providing slack in said driving belt connections to enable desired variation of said changeable drive gears.

1,873,008. LOADING MACHINE. EDGAR C. MILLER, Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 12, 1930. Serial No. 443,648. 3 Claims. (Cl. 198—9.)



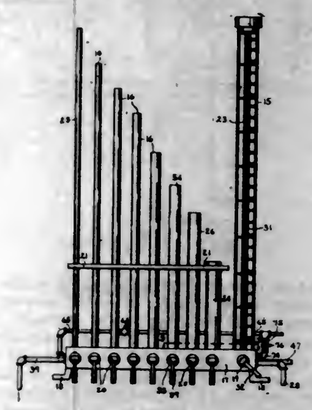
1. A feeding device for loading machines including a rotatable shaft, radial spokes equally positioned thereabout and having angular offset outer end portions and a plurality of spiral feeding propellers affixed to said offset portion of said spokes.

1,873,009. RADIOTRANSMITTER MOUNTING. HERMAN P. MILLER, Jr., East Orange, N. J., and EARL G. POATS, Woodside, N. Y., assignors to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 9, 1930. Serial No. 480,800. 5 Claims. (Cl. 248—16.)



1. A transmitter comprising a casing having a plurality of rigid upright supporting members, a foot plate having flanged edges at the bottom of each upright, a base frame having compartments to receive said foot plates, and bottom cushion members for said foot plates in said compartments, and auxiliary side cushion members inserted between said flanged edges of said foot plates and the sides of said compartments.

1,873,010. APPARATUS FOR TAKING SAMPLES OF MILK. WILLIAM E. MITTON, New London, Wis., assignor to The Borden Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 17, 1928. Serial No. 247,327. 11 Claims. (Cl. 73—21.)

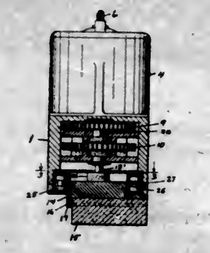


1. An apparatus of the character described comprising, an upright graduated tube, a series of upright specific sample tubes, a manifold in which the tubes are mounted and having passages by which the lower end of the graduated tube may be put into communication with the lower ends of the specific sample tubes, means whereby a predetermined amount of milk may be transferred to the graduated tube, and controllable means whereby a predetermined quantity of the milk in the graduated tube may be discharged therefrom into one of the specific sample tubes.

9. In an apparatus of the character described, a tube, means adapted for connecting the tube with a vacuum creating means whereby a predetermined quantity of milk may be admitted into the tube, a valve for controlling the admission of the milk into the tube, and means for receiving and thereby automatically measuring a substantially definite quantity of milk from the tube, said means comprising one of several tubes of different diameters and lengths.

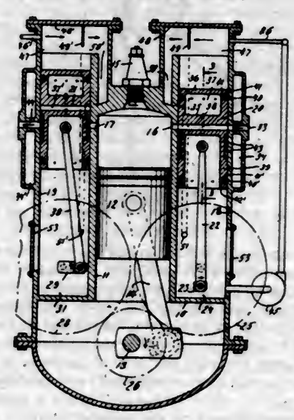
1,873,011. ELECTRIC SURFACER. SHELDON A. MODOLIN, San Francisco, Calif., assignor of one-half to George M. Collins, San Francisco, Calif. Filed Jan. 2, 1930. Serial No. 417,936. 3 Claims. (Cl. 51—170.)

1. In an electric surfacer having a frame, an electric motor mounted thereon, a chuck plate mounted for reciprocation along the under side of the frame and bearing a rubbing surface, and power transmission mechanism connecting the motor to said plate arranged for reciprocating the same, a plurality of guide rollers carried by the frame said guide rollers supporting and guiding the chuck plate



for reciprocation, channel-like housings along opposite sides of the frame in which said rollers are mounted having confronting walls provided each with an open slot there along and flanges on said chuck plate extending through the open slots of the housings engaging the rollers.

1,873,012. GAS ENGINE VALVE. MICHAEL J. MORAN, Morristown, N. J. Filed Oct. 2, 1929. Serial No. 396,664. 10 Claims. (Cl. 123—188.)



1. In an internal combustion engine having a gas port in the wall of the explosion chamber thereof, the combination of a slide valve having a port adapted to register with said cylinder port, passages in said valve surrounding the said port thereof for cooling the same, and a pump for continuously supplying a cooling fluid to said passages.

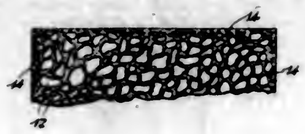
1,873,013. HIGH TEMPERATURE TRANSFER MATERIAL. JOHN D. MORGAN, South Orange, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 8, 1930. Serial No. 442,715. 3 Claims. (Cl. 106—9.)

1. An article of manufacture containing silicon carbide and fused chromic oxide.

1,873,014. PROCESS OF MAKING HIGH TEMPERATURE INSULATING PRODUCTS. JOHN D. MORGAN, South Orange, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 16, 1930. Serial No. 502,712. 7 Claims. (Cl. 25—156.)

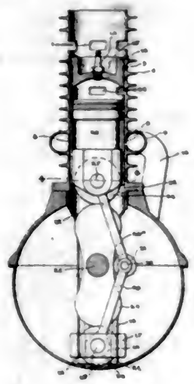
1. The method of making highly porous refractory which comprises treating a wet mixture containing by weight 1%

of a powdered metal, the particles of which are coated with colloidal material, 15% of sulfur, 6% of P_2O_5 or its



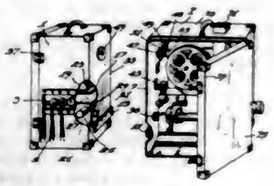
equivalent and the balance zircon sand at 500° to 700° F. and firing the resulting mass to a temperature of at least 2500° F.

1,873,015. INTERNAL COMBUSTION ENGINE. FRANK J. OMO, New York, N. Y. Filed June 5, 1929. Serial No. 368,497. 14 Claims. (Cl. 123—50.)



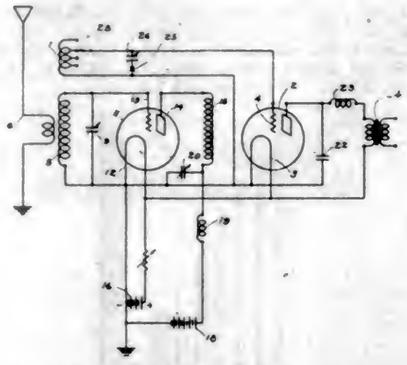
7. In an internal combustion engine, a stationary cylinder, stationary guideways arranged parallel to the axis of the cylinder, a movable cylinder cooperating with the stationary cylinder and having its lower end slotted, guide members projecting from the slotted portion of the movable cylinder and cooperating with said guideways, a power shaft extending through the slotted portion of the movable cylinder, a cam fast on said shaft and working through the slotted portion of the movable cylinder, a piston mounted in and cooperating with the movable cylinder, and antifriction members on the piston and movable cylinder engaging said cam at substantially diametrically opposite points.

1,873,016. MOTION-PICTURE APPARATUS. KIRK A. OPLINGER, Pittsburgh, and WILLIAM O. OSBON, Edgewood, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 2, 1931. Serial No. 512,944. 2 Claims. (Cl. 88—16.2)



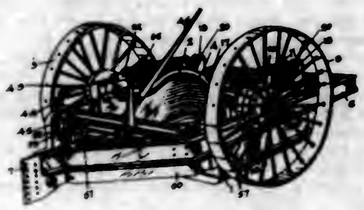
1. A portable talking-motion-picture apparatus adapted to be readily transported by hand to any desired place of use and there quickly assembled for use comprising one container having an opening in a wall thereof and enclosing a sound-on-film projection machine comprising film-moving mechanism together with a cooperating light source and optical system alined with said opening to project a picture-beam through said opening, and a second optical system to porject a light-beam modulated in accordance with a sound-record on the film through an aperture in another face of said container, a second container having an aperture in one of its walls and enclosing a photo-electric device alined with the last said aperture and electric amplifying means connected to amplify the current of said photo-electric device, and means on the containers for removably supporting said containers with the aforesaid apertures in their respective walls so alined that the sound-modulated light-beam impings upon said photo-electric device.

1,873,017. RADIO RECEIVING SYSTEM. HORACE E. OVERACKER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Apr. 30, 1930. Serial No. 448,543. 4 Claims. (Cl. 250—8.)



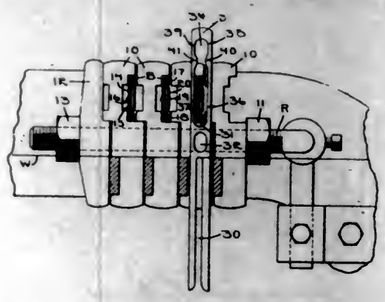
1. In a high frequency carrier receiving system, a source of continuous wave signals, detecting means, coupling means between said detecting means and said source, regenerative means including a three-element vacuum tube, the input circuit of which is also coupled to said source for increasing the transfer efficiently of said coupling means and means comprising a chopper and an impedance element in series adapted to shunt high frequency energy from said detector intermittently at a tone frequency.

1,873,018. SCOOP STRUCTURE. JULIUS WESLEY PATTERSON, Bucyrus, Ohio. Filed Apr. 22, 1931. Serial No. 531,894. 20 Claims. (Cl. 37—132.)



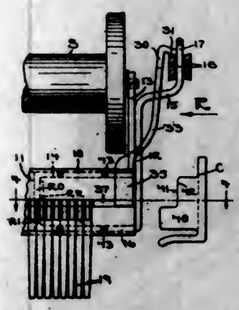
1. In a vehicle scoop, a scoop bowl carried by the vehicle, a spring connected to the bowl, means for raising the bowl relative to the vehicle, means connected to the spring for distorting the spring when the bowl is raised, and means for releasably holding the bowl in its raised position, the spring operating to lower the bowl when it is released from its raised position.

1,873,019. WARP STOP MOTION CONTACT BAR AND DROP WIRE. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 9, 1930. Serial No. 466,705. 4 Claims. (Cl. 139—353.)



1. In an electrical warp stop motion, a contact bar, a plurality of drop wires having closed vertical slots through which the bar passes, lobes formed on each drop wire and extending into the slot thereof, the lobes of a drop wire when in highest position attainable relatively to the bar lying near the top of an adjacent drop wire in the lowest position attainable relatively to the bar to prevent the top of the second drop wire from entering the slot of the first drop wire.

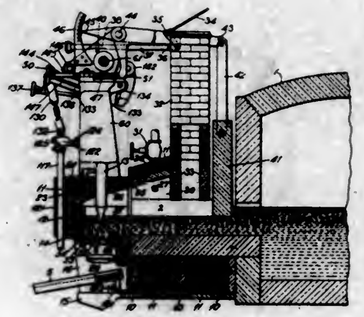
1,873,020. TUBE FRAME FOR AXMINSTER LOOMS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 7, 1931. Serial No. 507,210. 13 Claims. (Cl. 139—10.)



1. In a tube frame for an Axminster loom having a transporting chain, a carrier bar, a chain engaging arm projecting from the bar, a spool bearing arm also projecting from the bar, and a latch yieldably mounted on the bar and having spaced upright portions between which the arms lie, the upper part of the latch being formed as a hook to engage the chain, the space between the upright portions being large enough to pass the spool bearing.

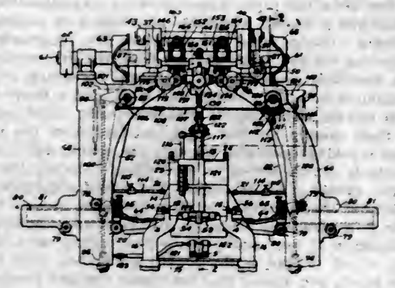
1,873,021. METHOD OF AND APPARATUS FOR FEEDING MOLTEN GLASS. KARL E. PEILER, West Hartford, Conn., assignor, by mesne assignments, to Hartford-Empire Company, a Corporation of Delaware. Original application filed May 5, 1919, Serial No. 294,792. Divided and this application filed Apr. 9, 1926. Serial No. 100,884. 20 Claims. (Cl. 49—55.)

1. In an apparatus for delivering charges of molten glass, the combination of a container for the glass, said container having a discharge opening through which the glass issues, a controlling device extending into the glass, means for reciprocating said controlling device toward and from the said opening, including a cam, said cam having its working surface formed to move said controlling device by a series of steps in one direction.



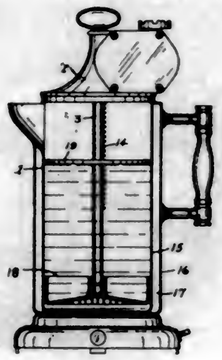
7. The method of delivering molten glass from the outlet of a container in mold charge masses of controlled shape appropriate to the molds in which they are to be fabricated, which comprises discharging glass from the container through said outlet under the control of a reciprocating control member which periodically accelerates and retards, stops or reverses movement of the glass through the outlet and thus aids in suspending the discharged glass in successive mold charge masses below the outlet and in determining the shape of the suspended mold charge masses, and further controlling the shape of the suspended mold charge masses by controlling the reciprocations of the control member so as to cause movement of the control member by a series of steps in one direction during each reciprocation thereof.

1,873,022. METHOD OF AND APPARATUS FOR FEEDING MOLTEN GLASS. KARL E. PEILER, West Hartford, Conn., assignor, by mesne assignments, to Hartford-Empire Company, a Corporation of Delaware. Original application filed May 5, 1919, Serial No. 294,792. Divided and this application filed Nov. 6, 1926. Serial No. 146,831. 9 Claims. (Cl. 49—55.)



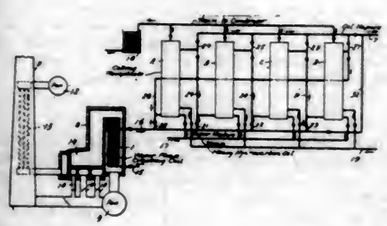
1. The combination with apparatus for severing molten glass into mold charges, of means for varying the speed of severing at will, without varying the frequency of the severing operations.

1,873,023. COFFEE BREWING DEVICE. JOHN ROYDEN PEIRCE, New York, N. Y. Filed July 13, 1929. Serial No. 377,984. 2 Claims. (Cl. 53—3.)



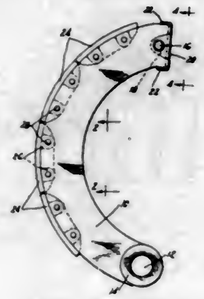
1. In a coffee brewing utensil, a pot, a tray within the pot for grounds and a separate float loose with respect to the tray for depressing the grounds contained in the tray.

1,873,024. ART OF CRACKING AND COKING HYDROCARBONS. HARRY L. PELZER, Highland, Ind., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Feb. 19, 1929. Serial No. 341,214. 2 Claims. (Cl. 202—15.)



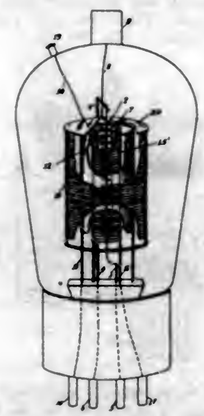
1. In a combined vapor phase cracking and coking operation, the improvement which comprises vaporizing and cracking oil in the vapor phase, then passing the hot vapor mixture from the vapor phase cracking operation through a first and a second receptacle of a series in succession, reducing a charge of oil to coke in the first receptacle and subjecting the hot vapor mixture from the first receptacle to a scrubbing operation in the second receptacle by discharging it into and beneath the surface of a liquid body of oil therein while thereby preheating said liquid body of oil, then passing the hot vapor mixture from the vapor phase cracking operation through the second and a third receptacle of the series in succession, reducing the preheated charge of oil to coke in the second receptacle and subjecting the hot vapor mixture from the second receptacle to a scrubbing operation in the third receptacle by discharging it into and beneath the surface of a liquid body of oil therein while thereby preheating said liquid body of oil, and discharging coke from the first receptacle, then passing the hot vapor mixture from the vapor phase cracking operation through the third and a succeeding receptacle of the series, as through the second and third, and discharging coke from the second receptacle, and so on, retaining the charge of oil in the receptacle in which the scrubbing and preheating operation is carried out in each step of the combined operation in that receptacle.

1,873,025. BRAKE SHOE. HENRI PERROT, Paris, France, and GERMAIN CALVIGNAC, Mannheim, Germany, assignors, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 29, 1928. Serial No. 329,233. 2 Claims. (Cl. 188—250.)



1. A brake shoe having spaced webs, in combination with a thrust plate of stamped steel having backwardly-projecting lugs engaging the sides and edges of the webs and secured to the sides of the webs.

1,873,026. SCREEN GRID TUBE. HAROLD O. PETERSON, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 20, 1928. Serial No. 327,205. 4 Claims. (Cl. 250—27.5.)

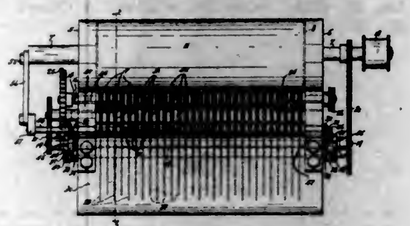


1. A vacuum tube comprising an electron emitting cathode, a plate, a grid between the cathode and plate, and a screen between the plate and the grid, the screen being provided with two terminals, one at the bottom of the tube and one at the top of the tube, a long lead connecting said screen to said terminal at the bottom of the tube and a short lead not substantially longer than one half the length of said long lead connecting said screen to said terminal at the top of said tube.

1,873,027. FUR CUTTING MACHINE. ROBERT H. PLASS, Upper Montclair, N. J., assignor to The Chapal-Donner Corporation, Newark, N. J., a Corporation of New Jersey. Filed June 20, 1931. Serial No. 545,792. 6 Claims. (Cl. 19—2.)

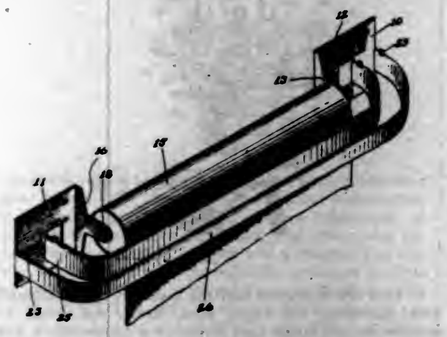
1. In a fur cutting machine, a cutting mechanism, feed rolls in front of said cutting mechanism by and between

which a pelt is fed toward said cutting mechanism, unyielding means underlying the pelt in supporting relation thereto and extending beyond to the nip of said feed rolls to the cutting point of said cutting mechanism, and two sets of reciprocable push-bars, the members of which are alternated with one another, said push-bars having their



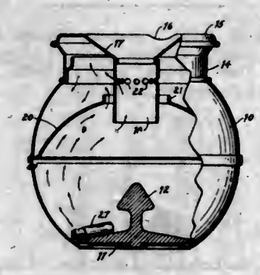
free ends operative between said feed rolls and said cutting mechanism to retain a pelt smoothly spread on said supporting means, and means to alternately advance and retract said sets of push-bars with impelling effect upon pelt portions lying between said feed rolls and said cutting mechanism.

1,873,028. COMBINATION CURTAIN AND SHADE HOLDER. BERTHA POSMANN, Union City, N. J. Filed Aug. 15, 1928. Serial No. 299,769. 1 Claim. (Cl. 156—24.)



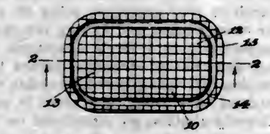
In a device of the class described, a flat bracket, outstanding ears on said bracket, said ears having substantially parallel sides, upright lugs on said ears, said lugs being adapted to pass through openings in curtain rods when the latter are slipped over said ears, a resilient finger beneath each ear in the same plane as said ear, the end of said finger and the adjacent corner of said ear being rounded, the lower edge of said ear having a notch therein adjacent said rounded corner, said finger having a pointed projection adapted to register in said notch, said finger being adapted to frictionally engage said rod to retain the rod in place on the bracket.

1,873,029. SMOKER'S RECEPTACLE. BENJAMIN PUTTERMAN, Brooklyn, N. Y., assignor to Yankee Metal Products Corp., a Corporation of New York. Original application filed Mar. 11, 1929, Serial No. 346,213. Divided and this application filed Dec. 31, 1929. Serial No. 417,656. 1 Claim. (Cl. 131—51.)



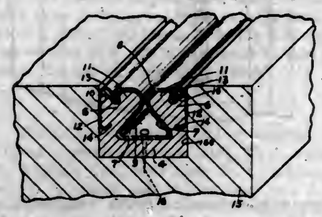
A smoker's receptacle including a body and an inwardly extending deflecting member therein and a cover having a depending tube extending within said receptacle, said member surrounding said tube and being spaced therefrom.

1,873,030. POWDER PUFF. JOHN J. QUINN, Scarsdale, N. Y., assignor to Pinaud, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 26, 1930. Serial No. 504,729. 14 Claims. (Cl. 132—78.5.)



1. A powder puff having a soft fibrous face adapted to carry powder, edges which are substantially equally soft and a stiffened back of the same material as the face.

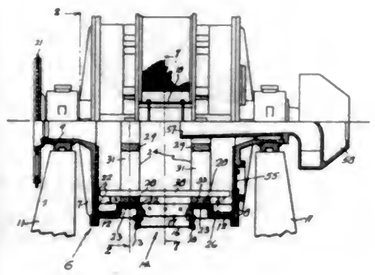
1,873,031. RUNWAY FOR SLIDING PANES. HOWARD D. RANDALL, Cincinnati, Ohio, assignor to The Randall Company, a Corporation of Ohio. Filed July 15, 1930. Serial No. 468,064. 1 Claim. (Cl. 296—44.5.)



In a runway structure, the combination of a body portion comprising a base portion and sides of compressible material, the sides each having an outer and an inner face,

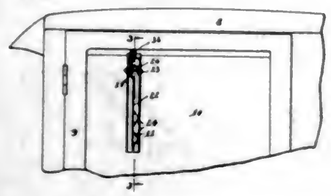
portions of the inner faces being disposed normally in substantially contacting relationship, a covering extending from the outer face of one side to the outer face of the other side for covering the inner faces of the sides and base portion, and a beaded member having an anchor portion embedded in one of the outer faces and a clinching portion holding the covering in position.

1,873,032. ROD MILL. HAROLD SIDREE REXWORTHY, Sunnyvale, Calif., assignor to F. J. Behneman, San Francisco, Calif. Filed Apr. 1, 1930. Serial No. 440,717. 12 Claims. (Cl. 83—9.)



1. A crushing apparatus comprising, a hollow cylindrical shell, having a circumferentially disposed opening midway between the ends thereof; means to support said shell in a rotatable position; means to rotate said shell; spiders rigidly mounted in the shell and having registering apertures therein, each of said apertures being of a substantially triangular cross section and having the bases thereof arranged tangentially to a circle concentric with the axis of the shell and the hypothenuse formed by an arc of the circle forming the inner circumferential surface of the spiders; crushing bars loosely contained in said spider apertures and loosely abutting at either end on the opposite ends of the shell; and means to introduce material to be crushed to said crushing bars midway of their length, said means being arranged in alignment with the axis of rotation of the shell.

1,873,033. AUTOMOBILE SIGNALING DEVICE. ARTHUR W. REYNOLDS, Leonardsville, N. Y. Filed Jan. 29, 1932. Serial No. 589,562. 6 Claims. (Cl. 116—52.)



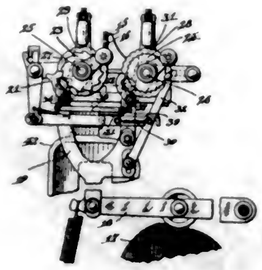
1. An automobile signaling device comprising a frame member having opposed side portions, a looped spring member secured to the back of said frame adapted to extend up the outside, over the top and down the inside of a window glass, cushioning members carried by the frame and spring to engage the top edge and opposite side portions of the glass, an arm hingedly mounted between the said opposed side portions of the frame adapted to be swung from a depending to horizontal and vertical postions, a chain connected to the arm and extending up over the top and attached to the free end of the spring.

1,873,034. MOVEMENT CONTROL MECHANISM FOR STRAIGHT KNITTING MACHINES. EMIL RICHTER, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1930. Serial No. 424,188. 8 Claims. (Cl. 66—128.)



1. In a straight knitting machine, the combination with a reciprocatively operated thread carrier rod, of movement-limiting mechanism therefor including a pattern chain having members adapted to provide varying control contacts with said rod, means for advancing the chain to progressively establish such contacts and means for disengaging the members after contacting with the rod to permit of further movement of the rod in the same direction.

1,873,035. MECHANISM FOR KNITTING FULL FASHIONED HOSIERY. EMIL RICHTER, Wyomissing, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Oct. 31, 1930. Serial No. 492,495. 3 Claims. (Cl. 66—89.)

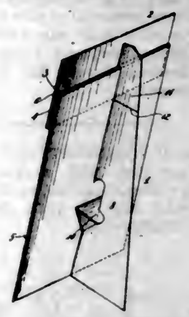


1. In a full fashioned knitting machine, the combination with narrowing rod stops, yarn carrier rod stops, and spindles for actuating said stops; of a reciprocative member; means operable by said member in a single reciprocation thereof for simultaneously operating said spindles to move all said stops and impart a one needle movement to the narrowing rod stops and a two needle movement to the carrier rod stops and for subsequently operating only the narrowing rod spindle to impart an additional one needle movement to the narrowing rod stops.

1,873,036. DISPLAY STAND. RAYMOND M. RING, Rochester, N. Y., assignor to The Forbes Lithograph Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 16, 1931. Serial No. 581,308. 5 Claims. (Cl. 40—146.)

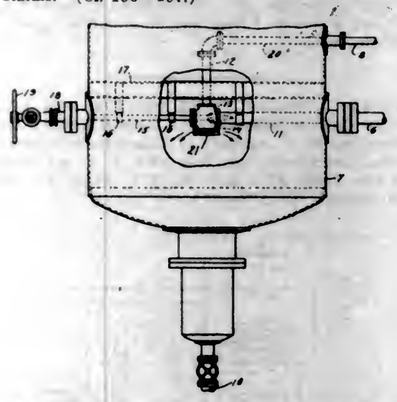
1. A display stand comprising a body having a stationary part and a reversible part mounted to turn on an edge of

said stationary part, and means for mounting said reversible part on said stationary part whereby in either of its reversed positions it will lie in extension of said sta-



tionary part and whereby, also, matter displayed on the faces thereof, front or back, will supplement matter displayed on the front of the stationary part of the stand.

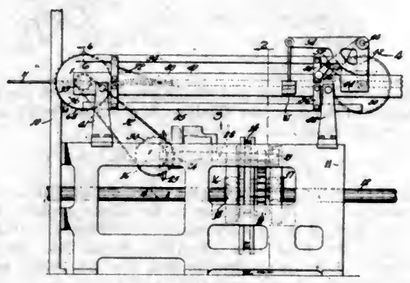
1,873,037. ART OF CRACKING HYDROCARBONS. HERMAN I. RINGENBERG, Hammond, Ind., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Aug. 15, 1931. Serial No. 557,271. 2 Claims. (Cl. 196—107.)



1. In combination in oil cracking apparatus comprising a heater in which oil is heated to a cracking temperature under superatmospheric pressure and an evaporator in which the hot oil products discharged from the heater are separated into a vaporized fraction and a residual fraction under lower pressure, a short vertically arranged conduit in the lower part of the evaporator, a discharge conduit connected to the heater and extending horizontally into the evaporator and joining said vertically arranged conduit at an intermediate point, the inner end of said discharge conduit forming a valve seat, a valve plug positioned with respect to said valve seat by an operating extension extending through the wall of the evaporator at a point across from the point of entry of said discharge conduit, and means for supplying relatively cool oil to one end of said vertically arranged conduit, the other end of said vertically arranged conduit opening into the evaporator.

1,873,038. NEEDLE MOTION FOR AXMINSTER LOOMS. WILLIAM W. ROBERTSON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1931. Serial No. 522,884. 7 Claims. (Cl. 139—128.)

1. Needle mechanism for an Axminster loom comprising a pair of spaced pulleys, a band mounted thereon, a driving shaft, a pin gear mounted on said shaft, a star wheel actuated thereby, a shaft for said star wheel, a positive driving connection by gearing, sprockets and chain between said star wheel shaft and one of said pulleys, means on



said driven pulley to positively engage and drive said band, a device to which a needle may be attached, means to guide said device for straight line sliding movement, and a connecting rod pivoted to said device and connected to a portion of said band.

1,873,039. HANGER. GUY ROBINSON, Dinuba, and HAROLD CLAUSEN, Alameda, Calif. Filed Feb. 27, 1928. Serial No. 257,250. 1 Claim. (Cl. 248—22.)

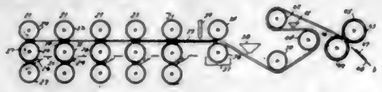


A hanger unit formed of a strip of flat material having its upper end curved out of the plane of the strip to provide a hook thereon, said hook including parallel spaced tines at the extremity thereof, and said strip being notched at opposed points thereof to provide a construction of no greater width than is the space between said tines whereby the tines of a second hanger unit having a hook formed like the hook of said first unit may engage in said notches for supporting the second unit on the first.

1,873,040. APPARATUS FOR MAKING SHEET MATERIAL. THOMAS ROBINSON, New York, N. Y., assignor to Lancaster Asphalt, Inc., New York, N. Y., a Corporation of Delaware. Original application filed July 10, 1928. Serial No. 291,638. Divided and this application filed Nov. 23, 1929. Serial No. 409,801. 12 Claims. (Cl. 154—1.)

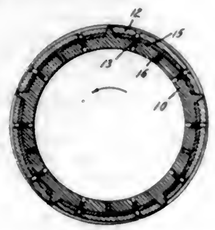
1. An apparatus for the manufacture of sheet material which comprises the combination of a series of calenders for forming plastic material into a sheet, each calender receiving a sheet from the calender next before it in the se-

ries and combining that sheet with the one being produced in said calender, means for affixing a layer of surfacing material to one face of the sheet issuing from the last



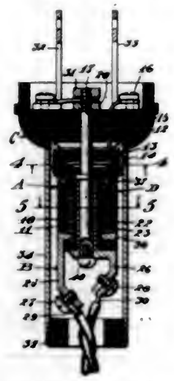
calender in the group, and means associated with the first calender of the series for affixing a layer of surfacing material to the other face of the sheet.

1,873,041. MOLDING APPARATUS. THOMAS ROBINSON, New York, N. Y., assignor to Lancaster Asphalt, Inc., New York, N. Y., a Corporation of Delaware. Original application filed July 10, 1928, Serial No. 291,638. Divided and this application filed Nov. 23, 1929. Serial No. 409,302. 12 Claims. (Cl. 18—9.)



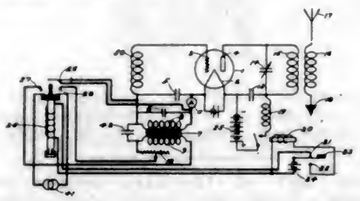
9. A molding device comprising a molding drum having molding cavities therein and openings extending from the bottoms of said cavities, plates overlying the bottoms of said cavities, means for securing the plates in place, and a cushion of soft inelastic metal between said plates and drum.

1,873,042. SWIVEL ELECTRICAL CONNECTER. HAROLD ROHRDANZ, Inglewood, Calif. Filed July 3, 1930. Serial No. 465,462. 7 Claims. (Cl. 173—324.)



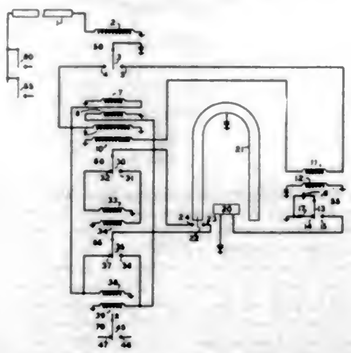
6. In a swivel electric connecter, an electrically conductive stem, an insulated support therefor, means for effecting electrical connection between said stem and one terminal of a source of electrical supply, an electrically conductive cylinder encircling said stem in spaced relation thereto and insulated therefrom, means for effecting electrical connection between said cylinder and another terminal of the source of electrical supply, a second electrically conductive cylinder interposed between said first named cylinder and said stem and insulated from the latter, means revolubly supporting last named cylinder on said stem including an electrically conductive tube encompassing the stem and an insulated sleeve interposed between said tube and its encompassing cylinder, a pair of electrical conductors connected to said tube and last named cylinder, and a mass of loose wire coils of an electrically conductive material interposed between said cylinders and yieldably bearing thereagainst to afford electrical connection therebetween.

1,873,043. RADIO TRANSMITTING SYSTEM. HUGO ROMANDER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Jan. 13, 1930. Serial No. 420,312. 14 Claims. (Cl. 250—8.)



1. The method of increasing the frequency stability of a vacuum tube oscillator which comprises maintaining the grid of the tube at a substantially uniform temperature over a period of time including oscillating and non-oscillating intervals.

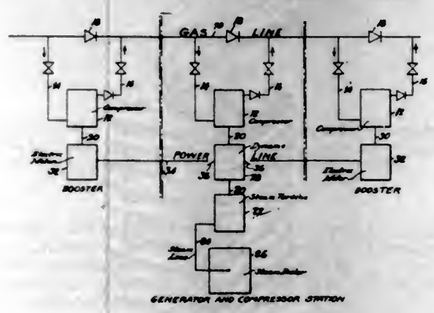
1,873,044. INTERPOLATING CIRCUIT FOR SUBMARINE CABLE OPERATION. HAROLD J. ROSENBERGER, Brooklyn, N. Y., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 28, 1931. Serial No. 526,104. 10 Claims. (Cl. 178—63.)



1. A signalling system comprising means for receiving transmitted signals, and means including a single source of two pole current supply associated with said receiving means for supplying signals transmitted to but not received by said receiving means.

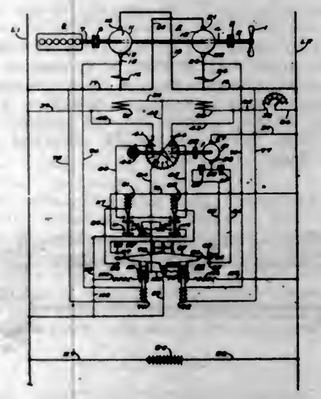
1,873,045. FLUID TRANSPORTATION SYSTEM. GEORGE W. SAATHOFF, South Orange, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 27, 1930. Serial No. 505,197. 9 Claims. (Cl. 137—78.)

2. In the transportation of fluids through pipe lines the improvement comprising, developing mechanical energy at a centrally located point on said line, utilizing said mechanical energy for boosting the pressure of the fluid in said line sufficiently to take care of the normal fluid demands on said line, and at times of high demand on said line converting a portion of the said energy into electrical



energy, reconverting said electrical energy into auxiliary mechanical energy, and utilizing said auxiliary energy for boosting the pressure of the fluid in said line at points remotely spaced from said central point.

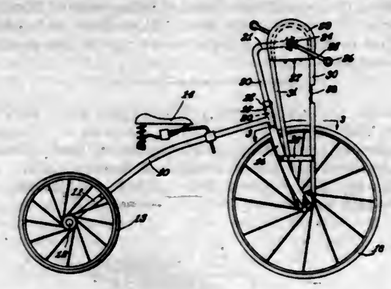
1,873,046. LOAD BALANCING EQUIPMENT. WALTER SCHAELCHLIN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 28, 1930. Serial No. 456,330. 12 Claims. (Cl. 171—229.)



1. A control system for two mechanically connected shunt-wound motors that comprises a source of power for the motors, a regulating instrument responsive to an unbalance of the normal proportion in which power is taken by the two motors, a variable-resistance element for adjusting the amount of current supplied to the fields of each motor, means for operating the variable-resistance elements in response to movements of the regulating instrument, and means for momentarily shunting a portion of the variable-resistance element in response to said movements.

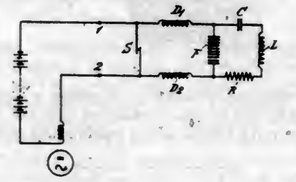
1,873,047. VELOCIPEDE. PAUL SCHIMMEL, Bloomfield, N. J., and CURT R. GEDAT, New York, N. Y. Filed Feb. 2, 1932. Serial No. 590,376. 1 Claim. (Cl. 208—32.)

In a velocipede, a main frame having a hollow column at its forward end, a post rotatable in said column and having a fork extending therefrom beneath said column, a crank shaft rotatably mounted in the upper end of said post, arms attached to said crank shaft for rotating the same, a sprocket wheel rigid with said shaft, a wheel rotatably mounted between the ends of said fork, a pinion rigid with said wheel, a chain looped over said sprocket



and said pinion, a guard rigid with said post and fork enclosing said sprocket and chain, and foot stirrups rigid with said fork.

1,873,048. ENERGY ABSORPTION MEANS FOR SWITCHING CONTACTS. KARL SCHMIDT, Berlin-Lichtenrade, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Dec. 21, 1929, Serial No. 415,774, and in Germany Dec. 21, 1928. 3 Claims. (Cl. 175—294.)



1. In combination with an electric circuit having switching contacts therein, a spark extinguishing gap connected in parallel to the switching contacts and shortcircuited thereby with the switching contacts closed, and an oscillatory circuit containing an inductance, a condenser and the spark extinguishing gap connected in series, whereby when the switching contacts are opened the high tension currents across the contacts are dissipated in the series oscillatory circuit.

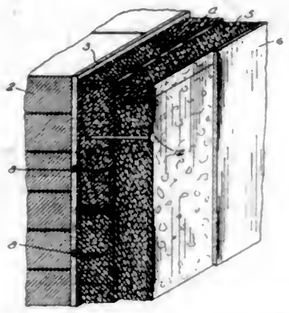
1,873,049. HIGH TENSION TRANSFORMER. CARL SCHRADER, Berlin-Halensee, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed May 4, 1929, Serial No. 360,398, and in Germany May 4, 1928. 8 Claims. (Cl. 175—358.)



1. In a transformer, in combination, an iron core of substantially annular form about which the secondary winding of the transformer is wound, a substantially annular

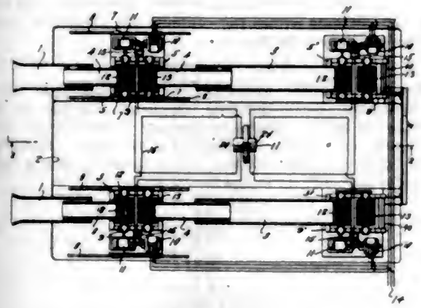
high tension winding passing through said iron core perpendicularly to the plane thereof, and envelopes for said iron core and the high tension winding completely surrounding the same, said envelopes being made of insulating material of substantially equal dimensions, and adapted together to insulate the transformer against the maximum tension thereof.

1,873,050. CORK BOARD INSULATION AND METHOD OF ERECTING THE SAME. CHARLES C. SCHRADER, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Feb. 28, 1930. Serial No. 432,063. 9 Claims. (Cl. 72—16.)



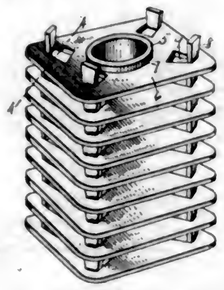
1. An insulating structure comprising a base, a hardened cementitious facing, cork-board over the facing, and ties bedded in the facing and extending into the corkboard.

1,873,051. BRAKE TESTING STRUCTURE. HARRY H. SEMMES, Chevy Chase, Md., assignor, by mesne assignments, to Bendix-Cowdrey Brake Tester, Inc., New York, N. Y., a Corporation of Delaware. Filed May 3, 1929. Serial No. 360,098. 2 Claims. (Cl. 265—25.)



1. A brake testing structure comprising a plurality of brake testing units, each of which is associated with a brake carrying wheel of a vehicle, an alternating current electric motor associated with each testing unit adapted to drive a vehicle wheel against the resistance of its brake, each said motor having stator and rotor elements, one of said elements in each motor having provisions for connecting it to a source of electric current, an electrical indicating instrument associated with the other such element of each of the driving motors for measuring the retardation effect of the brake application, said instruments being located so that they may be read simultaneously.

1,873,052. RADIATOR. OWEN L. SEWARD, Newington Junction, Conn., assignor to The Bush Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Nov. 19, 1928. Serial No. 320,248. 3 Claims. (Cl. 257—262.)



1. A radiator element including a circulating tube, a plurality of radiating plates through which said tube extends, and spacers constituting integral parts of each plate and bent at an angle thereto from the body thereof leaving an opening therein to form said spacer, the outer end of said spacer being wider than that part of the opening in an adjacent plate in proximity to which it lies, said spacers being arranged around the tube with the inner larger ends of the openings disposed adjacent the tube.

1,873,053. ELECTRICAL HEATING APPARATUS. HAROLD N. SHAW, Niagara Falls, N. Y., assignor to Globar Corporation, Niagara Falls, N. Y., a Corporation of New York. Original application filed Sept. 3, 1925, Serial No. 54,193. Divided and this application filed Mar. 7, 1928. Serial No. 259,674. Renewed Jan. 7, 1932. 9 Claims. (Cl. 201—63.)

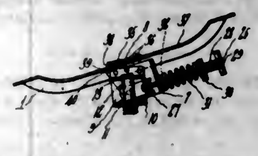


1. In an electrically heated appliance, a support having apertured side wall portions, a recessed contact in alinement with an aperture in a side wall portion and having a yielding and resilient support, a second contact on the opposite side of the last mentioned side wall portion, and a rod-shaped electrical resistance heating element passing through the aperture in the last mentioned side wall portion and yieldingly mounted for direct heat transmission in electrically and mechanically operative position between said contacts through the yielding direct butt-end engagement of said first contact upon an end of said heating element.

1,873,054. CHAIR IRON. HENRY W. SHELDRICK, Gardner, Mass., assignor to Collier-Keyworth Company, Gardner, Mass., a Corporation of Massachusetts. Filed Sept. 20, 1930. Serial No. 483,240. 6 Claims. (Cl. 155—77.)

1. In combination, a supporting member, a seat-carrying member pivoted to said supporting member for tilting

movement away from horizontal seat position, a leaf spring fixed at one end to one of said members, and an



element carried by the other of said members in position to deflect the free end of said spring only when said seat-carrying member is tilted to a substantial extent.

1,873,055. CAR TRUCK BOLSTER. CLIFTON W. SHERMAN, Hamilton, Ontario, Canada, assignor to Adirondack Steel Foundries Corporation, Watervliet, N. Y., a Corporation of New York. Filed Apr. 8, 1931. Serial No. 527,408. 5 Claims. (Cl. 105—230.)

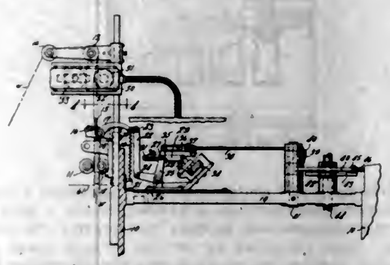


1. A car truck bolster, comprising a plurality of upright longitudinal sheet metal side plates, a bottom sheet metal plate connected by welding with the lower edges of the side plates, a top sheet metal plate connected by welding with the upper edges of said side plates, and an upright sheet metal plate or web arranged lengthwise between said side, bottom and top plates and welded thereto, said bottom plate being imperforate and said top plate having welding openings above said web.

1,973,056. MANUFACTURE OF FIBROUS ARTICLES. DILLON F. SMITH, Pensacola, Fla., and ERNEST J. PIEPER and CLARENCE C. VOGT, Lancaster, Pa., assignors to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Nov. 25, 1931. Serial No. 577,384. 12 Claims. (Cl. 92—3.)

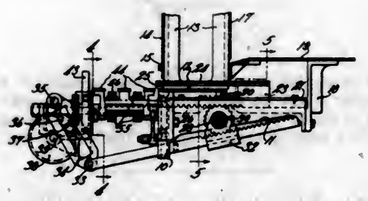
1. The process of making fibrous insulating bodies from the refuse solvent-extracted southern pine chips from rosin extracting plants, said chips containing some residual rosin, which comprises disintegrating the chips in an alkaline solution until the wood fibers are partially hydrated and a portion, at least, of the contained resin is converted into a soluble resinate, adding a precipitant to convert the resinate into a resin sizing, and forming the articles from the moss.

1,873,057. PAPER REGISTERING DEVICE. ELMER L. SMITH, Longmeadow, Mass., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed Aug. 20, 1930. Serial No. 476,577. 8 Claims. (Cl. 271—2.6.)



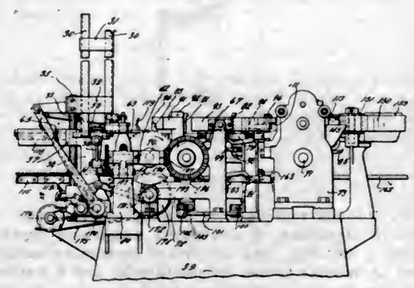
1. A web registering device comprising a pair of web feed rolls, mechanism for rotating the rolls during each cycle of the machine's operation an amount slightly in excess of that required for feeding one unit of web under normal conditions, a brake adapted to stop the feeding movement of the web, a spring tending to set the brake, a magnet normally holding the brake against the action of the spring, and means responsive to the passage of web-carried indicia for releasing the magnet and thus permitting the spring to set the brake and interrupt the travel of the web.

1,873,058. AUTOMATIC FEED FOR WRAPPING MACHINES. ELMER L. SMITH, Longmeadow, Mass., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Original application filed May 15, 1930, Serial No. 452,682. Divided and this application filed Aug. 28, 1931. Serial No. 559,900. 3 Claims. (Cl. 198—24.)



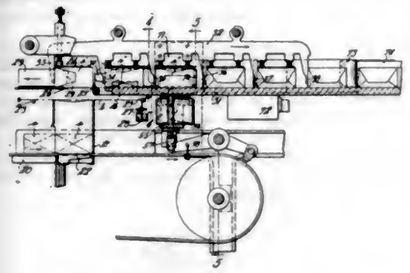
1. A feeding device for cigars or similar articles which comprises a magazine, a plunger reciprocating beneath the magazine to eject a layer of cigars therefrom, sliding racks connected with the plunger, pinions meshing with the racks, a gear rotatable with the pinions, a rack meshing with the gear, a slotted arm stationarily pivoted at one end and pivoted to the last named rack at the other end, and a constantly rotatable crank carrying a member slidable in the slotted arm to impart motion to the plunger through the mechanism described.

1,873,059. CARTON OPENING AND FILLING MACHINE. ELMER L. SMITH and FREDERIC B. FULLER, Springfield, Mass., assignors to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 27, 1928. Serial No. 308,801. 25 Claims. (Cl. 93—6.)



1. A device for setting up collapsed cartons comprising a carton magazine having opposed ledges for supporting a stack of collapsed cartons each having longer flaps on its upper flattened sides than on its lower sides, a blade, and means for moving the blade laterally into the magazine first in a slanting direction to press against the upper flaps, then into the carton parallel to its walls to separate them and then past the edges to force the carton between them and break the rigidity of its creases.

1,873,060. WRAPPING MACHINE. ELMER LOVELL SMITH, Longmeadow, Mass., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed July 8, 1931. Serial No. 549,433. 11 Claims. (Cl. 93—2.)

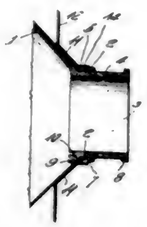


1. A wrapping machine comprising means for folding a wrapper about an article so as to leave opposite flaps spaced apart, and a device extending into the space between the flaps to apply a sealing liquid to one of them.

1,873,061. METHOD OF TREATING CARBOHYDRATE ESTERS. WALTER O. SNELLING and RICHARD N. BOYD, Allentown, Pa., assignors to Trojan Powder Company, a Corporation of New York. Filed Dec. 15, 1930. Serial No. 502,621. 1 Claim. (Cl. 260—148.)

The process of treating a carbohydrate ester which comprises heating a suspension of a carbohydrate ester in a large excess of a concentrated solution of ammonium nitrate having a boiling point of not lower than 110° C., to a temperature not lower than 110° C.

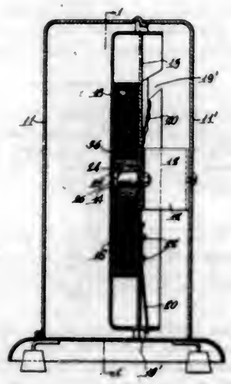
1,873,062. SOUND REPRODUCER. SIGURD A. SOLLIE, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Jan. 21, 1928, Serial No. 248,403. Renewed Aug. 2, 1929. 10 Claims. (Cl. 179—115.5.)



1. In a sound reproducer, a conical shaped sound reproducing diaphragm, a cylindrical supporting member carrying a winding, said cylindrical supporting member having an annular groove formed therein, and a resilient suspension member conforming to the contour of said conical shaped sound reproducing diaphragm and providing an anchoring means for locking said conical shaped sound reproducing diaphragm within said groove and said cylindrical support.

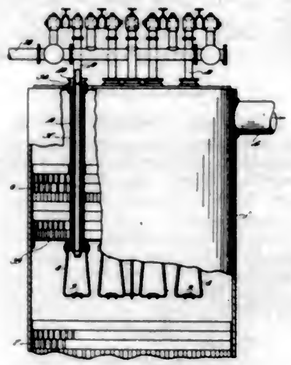
9. A coil mounting for cone speakers comprising a cylindrical member adapted to be secured to the apex of a cone and support a current-carrying winding, and a flat flexible supporting member extending from said cylindrical portion adapted to engage fixed supports, said supporting member being secured upon said cylindrical portion intermediate the ends thereof by disposing it against a shoulder upon said cylindrical member, the projecting end of the cylindrical member flaring outwardly against said flexible member opposite said shoulder.

1,873,063. SPRING TENSION DEVICE FOR RIBBONERS. EDWARD B. SOMERS, Darby, Pa. Filed May 3, 1930. Serial No. 449,428. 7 Claims. (Cl. 242—75.)



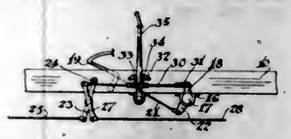
1. In mechanism for rewinding ribbon from a roll, a pin about which the ribbon roll is mounted, a brake against which one side of the ribbon roll is adapted to bear, spring fingers projecting beyond the brake and a cover for the ribbon roll adapted to engage the fingers to hold the cover in friction contact with the other side of the roll.

1,873,064. GAS AND LIQUID CONTACT APPARATUS. FREDERICK W. SPERR, Jr., Pittsburgh, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Original application filed July 26, 1926, Serial No. 125,003. Divided and this application filed Mar. 3, 1930. Serial No. 432,645. 4 Claims. (Cl. 261—111.)



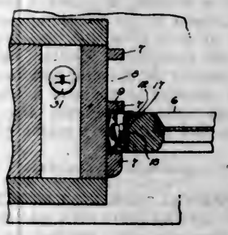
1. Gas and liquid contact apparatus comprising a tower having two spaced sections of hurdles therein, a plurality of sprays between said sections for spraying the lower section, pipes connected to the top of said tower and extending through the upper section for supporting said sprays, and pipes telescopically connected to the supporting pipes for supplying said sprays.

1,873,065. BRAKE CONNECTION. ALBERT C. STARR, Nephi, Utah, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 26, 1930. Serial No. 463,870. 5 Claims. (Cl. 188—204.)



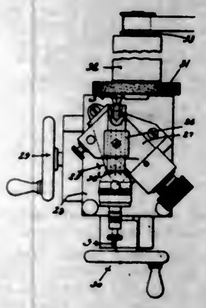
1. A vehicle having front and rear pairs of brakes and a chassis frame with a pedal and an emergency lever carried thereby, in combination with a pair of levers pivoted to the frame and connected to two of the brakes, a floating lever mounted on each of the pivoted levers and connected to another brake, and independently-operable connections from the pedal and the emergency lever to the two floating levers.

1,873,066. WINDOW SASH MOUNTING. JOHN R. STEWART, Columbus, Ohio. Filed Apr. 9, 1929. Serial No. 353,801. 15 Claims. (Cl. 20—49.)



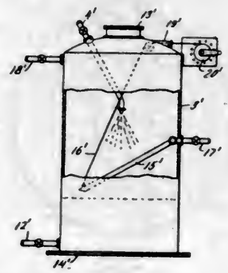
1. In a window structure, a pair of slide members mounted for vertical movement in connection with the sides of a window frame, a window sash, horizontally disposed studs rigidly secured to the lower portions of said sash and received within bearing openings provided in connection with said slide members, a cam element rotatable with one of said studs, a cam plate carried by the outer portion of one of said studs and movable through the medium of said cam element upon the rotation of said sash and said studs in a direction longitudinal of said studs to force said slide member into frictional holding engagement with the window frame.

1,873,067. VALVE STEM FITTING FIXTURE. CHARLES D. STROMGREN, Los Angeles, Calif. Filed Feb. 11, 1929, Serial No. 338,910. Renewed June 27, 1932. 2 Claims. (Cl. 51—125.)



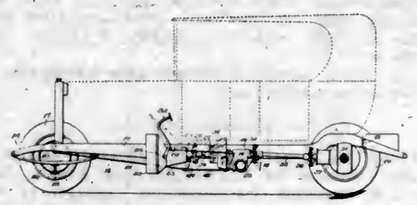
2. A valve seim fitting organization for use in combination with a grinding wheel embodying: a template support associated with said grinding wheel; a template member provided with a valve seating surface and mounted on said support; detached gauging means for predetermining the valve stem length; means for adjusting the position of said seating surface relative to said grinding wheel to conform to the valve stem length determined by said gauging means and a cap member associated with said template member, said cap member being provided with means for manually rotating a valve in said template member during a grinding operation.

1,873,068. ART OF CRACKING AND COKING HYDROCARBONS. GEORGE H. TABER, Jr., Rye, and EDWARD W. ISOM, Scarsdale, N. Y., assignors to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Mar. 16, 1929. Serial No. 347,533. 3 Claims. (Cl. 202—15.)



1. In a combined vapor phase oil cracking and coking operation, the improvement which comprises vaporizing and cracking a hydrocarbon oil in the vapor phase, introducing the hot vapor mixture from the vapor phase cracking operation into the lower portion of a coking receptacle, introducing a heavy liquid hydrocarbon oil stock to be reduced to coke into the coking receptacle, intimately admixing the hot vapor mixture and the heavy oil stock in the coking receptacle and thereby coking the heavy oil stock and causing a charge of the coke so formed to accumulate in the lower portion of the coking receptacle, and elevating the level at which at least the major portion of the hot vapor mixture from the vapor phase cracking operation is released within said receptacle to maintain this level adjacent the upper surface of the charge of coke accumulating in said receptacle as the operation proceeds and to avoid passing the major part of said hot vapor mixture through the accumulating charge of coke throughout the operation.

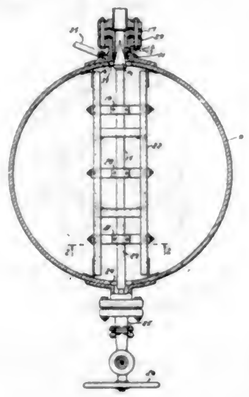
1,873,069. VEHICLE BRAKE. CECIL HAMELIN TAYLOR, Detroit, Mich., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 4, 1924. Serial No. 690,367. 12 Claims. (Cl. 188—140.)



4. In combination, a driven shaft, a brake, a brake element provided with a braking surface and adapted to rotate with the said driven shaft, a brake member adapted to be moved into and out of engagement with the said brake element, means connected to the said brake member

for moving it into and out of engagement with the said brake element, said brake member being rotatable with the said braking surface when in engagement therewith, and means pivotally connected to the said brake member for utilizing the rotation of the said brake member for actuating the said brake.

1,873,070. ART OF CRACKING HYDROCARBONS. THOMAS DE COLON TIEFT, Westfield, N. J., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Aug. 1, 1931. Serial No. 554,393. 1 Claim. (Cl. 196—107.)



In combination in oil cracking apparatus comprising a heater in which oil is heated to a cracking temperature under superatmospheric pressure and an evaporator in which the hot oil products discharged from the heater are separated into a vaporized fraction and a residual fraction under a lower pressure, a tubular member opening into the evaporator through an aperture in the wall of the evaporator the inner end of which forms a valve seat, a valve plug positioned with respect to said valve seat by an operating extension extending across the evaporator and through the wall of the evaporator opposite said aperture, means for discharging relatively cool oil into the region between said valve seat and said valve plug, and means for conducting the heater discharge into the evaporator through said tubular member.

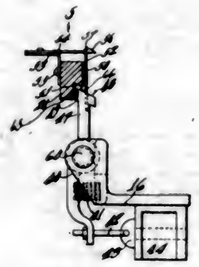
1,873,071. LOW PERMEABLE REFRACTORY AND METHOD OF MAKING THE SAME. FRANK JEROME TONE, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Continuation of application Serial No. 212,139, filed Aug. 10, 1927. This application filed May 26, 1930. Serial No. 455,716. 6 Claims. (Cl. 106—9.)

1. A silicon carbide refractory made principally of mulled silicon carbide grain.

1,873,072. CHLORHYDRINS OF ALIPHATIC KETONES AND PROCESS OF PREPARING THE SAME. DONALD K. TRESSLER, Pittsburgh, Pa., assignor to The Mathieson Alkali Works, Inc., New York, N. Y., a Corporation of Virginia. Filed Dec. 4, 1929. Serial No. 411,699. 3 Claims. (Cl. 260—134.)

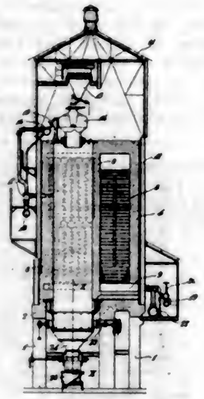
2. The method of producing chlorhydrins of unsaturated aliphatic ketones which comprises treating such ketones with a cold solution of hypochlorous acid.

1,873,073. SHUTTLE CHANGING LOOM. RICHARD GREENLEAF TURNER and VICTOR H. JENNINGS, Worcester, Mass., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 26, 1931. Serial No. 583,242. 8 Claims. (Cl. 139—232.)



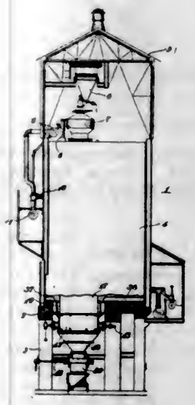
1. In a shuttle changing loom, an actuator to have a working stroke, a normally inoperative member effective when moved to assist in the shuttle changing operation, means movable at weft exhaustion and prior to a working stroke of the actuator to shuttle changing position to operatively connect the actuator and member when the actuator has a working stroke, and a lock to hold the means in shuttle changing position after being moved to said position and until the actuator has its working stroke.

1,873,074. VERTICAL COKING RETORT OVEN AND METHOD OF OPERATING THE SAME. JOSEPH VAN ACKEREN, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Pennsylvania. Filed Nov. 27, 1926. Serial No. 151,072. 28 Claims. (Cl. 202—123.)



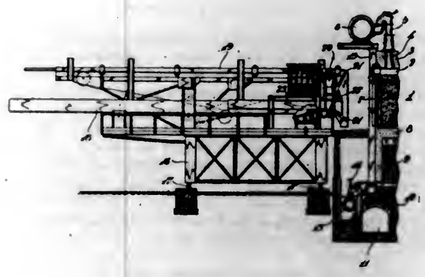
1. In a coke oven, a heating wall comprising substantially continuous vertical heating means therefore, said means comprising superposed upper and lower vertical flame flues, upper and lower vertical passages adjacent to said flame flues, horizontal brickwork associated with the adjacent ends of said flame flues and passages in said brickwork for connecting the upper and the lower flame flues to the lower and the upper passages, respectively.

1,873,075. VERTICAL COKING RETORT OVEN. JOSEPH VAN ACKEREN, Pittsburgh, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Apr. 12, 1927. Serial No. 183,085. 11 Claims. (Cl. 202—123.)



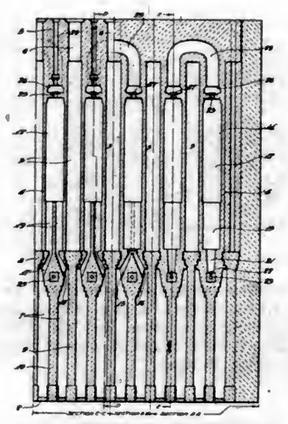
1. In a vertical coke oven battery, the combination with a main oven structure, of supporting means therefor comprising spaced outer members and bridging members therebetween and supported thereby, and an expansion joint between each of said bridging members and one of said outer members.

1,873,076. SELF-SEALING DOOR FOR COKE OVENS. JOSEPH VAN ACKEREN, Pittsburgh, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed June 14, 1927. Serial No. 198,770. 25 Claims. (Cl. 202—248.)



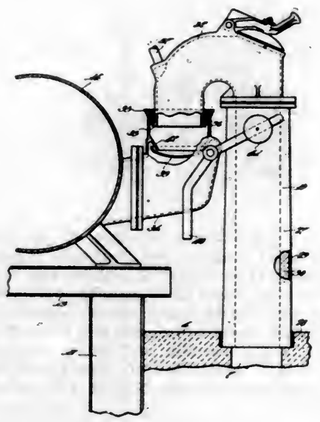
5. A door for coke ovens comprising a main body portion, sealing means carried thereby and movable relatively thereto while the door is stationary in its closed position, means for latching said sealing means in sealing position on said body portion, and means for securing said body portion in operative position with respect to an end opening of a coke oven closed thereby.

1,873,077. COKING RETORT OVEN. JOSEPH VAN ACKEREN, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Jan. 2, 1929. Serial No. 329,683. 9 Claims. (Cl. 202—135.)



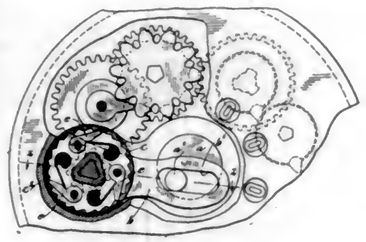
1. In a coking retort oven, a heating wall having vertical flame flues, means for supplying rich gas and air at one end of said flues and additional air at an intermediate portion of said flues and for supplying lean gas and air at said one end of said flues and additional lean gas and air at said intermediate portion.

1,873,078. COKE OVEN APPARATUS. JOSEPH VAN ACKEREN, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Jan. 28, 1930. Serial No. 423,930. 10 Claims. (Cl. 202—255.)



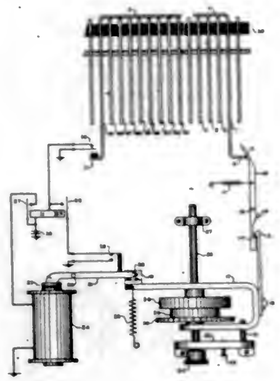
1. Coke oven apparatus comprising a collecting main, and an ascension pipe having a vertical portion and a return bend rigidly connected to said vertical portion and flexibly connected to said collecting main.

1,873,079. COUNTER ACTUATING MECHANISM. CURTIS HUSSEY VEEDER, Hartford, Conn., assignor to Veeder-Root Incorporated, Hartford, Conn., a Corporation of Connecticut. Filed Jan. 30, 1929, Serial No. 336,079. Renewed July 22, 1931. 16 Claims. (Cl. 192—12.)



1. An actuating mechanism comprising an oscillating member, a driven member, a pawl clutch interposed between the oscillating member, and the driven member, and a retaining friction clutch to prevent backward movement of the driven member.

1,873,080. RECORDING PRINTER. GILBERT S. VERNAM, Hackensack, N. J., and FREDERICK G. HALLDEN, Bellerose, N. Y., assignors to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed May 1, 1931. Serial No. 534,296. 12 Claims. (Cl. 178—34.)



1. A device comprising a plurality of type bars provided with letter, number and fractional characters, a platen arranged to be shifted to position with said characters, means for receiving signals in accordance with said characters, electromagnetic means rendered operable when fractional character signals are received to shift said platen to position with said letter characters, and means common to a plurality of other signals when received to shift said platen to position with said number characters.

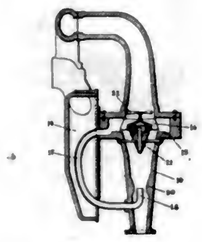
1,873,081. RECEPTACLE. LEO VON WITZKI, San Francisco, Calif. Filed Nov. 8, 1930. Serial No. 494,325. 5 Claims. (Cl. 62—108.5.)

1. A cup shaped receptacle for liquids to be solidified, resilient side walls in said receptacle and a relatively rigid rim adjacent the mouth of said receptacle, said side walls being collapsible by a force exerted against said rims, and



tabs projecting from said rim for facilitating the application of said force.

1,873,082. COMBINED SEPARATOR AND ATOMIZER FOR MANIFOLDS. VICTOR VOSTREZ, Tobias, Nebr. Filed Feb. 9, 1929. Serial No. 338,787. 1 Claim. (Cl. 48—180.)



A gaseous fuel mixer and separator adapted to be inserted between the intake manifold and carburetor of an internal combustion engine having a passageway for conducting a stream of fuel to the cylinders of the engine comprising a rotating fan within the passageway for centrifugally separating moisture and heavy hydrocarbons from the fuel mixture, and a by-pass for said passageway, said by-pass passing through a heated portion of the exhaust manifold and adapted to receive the moisture and hydrocarbons separated from the fuel mixture, to conduct the separated moisture and hydrocarbons through volatilizing temperatures and to lead the separated moisture and hydrocarbons after volatilization back into the stream of fuel mixture, and a venturi in the passageway at the outlet extremity of said by-pass.

1,873,083. PREVENTION OF HARD SCALE FORMATION IN OIL WELLS. JOHN C. WALKER, Eldorado, Kans., assignor to Empire Oil and Refining Company, Dover, Del., a Corporation of Delaware. Filed Oct. 30, 1926. Serial No. 145,380. 5 Claims. (Cl. 166—21.)

1. The method of treating oil well liquids to render them non-corrosive and non-scale-forming which comprises adding to the well liquids a reagent comprising a mixture of an alkali metal salt and a caustic alkali solution of tannin in amounts sufficient to cause precipitation of the insoluble alkaline earth salts from the well liquids in a pulverulent and non-scale-building form.

1,873,084. METHOD OF PREVENTING CORROSION IN OIL WELLS. JOHN CHARLES WALKER, Tallant, Okla., assignor to Empire Oil and Refining Company, Dover, Del., a Corporation of Delaware. Filed July 19, 1928. Serial No. 294,067. 6 Claims. (Cl. 166—21.)

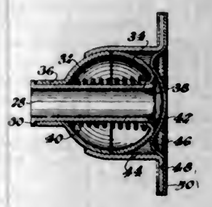
1. A method of preventing corrosion of metal parts by oil well liquids which comprises adding predetermined amounts of a caustic solution of a salt of a chromium acid to said liquids before contacting the liquids with such metal parts.

1,873,085. PAPER BOX. BRADFORD G. WARNER, Fairfield, Conn., assignor to The Warner Brothers Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 24, 1931. Serial No. 510,934. 3 Claims. (Cl. 206—44.)



1. In a box of the class described, the combination with a foldable body comprising a back having an upwardly disposed extension with a hole therethrough and including top and closure flap portions and having a foldable lateral extension forming front sides and bottom portions, all adapted to be folded and secured together to form a closable container, of a base member adapted to fit in the bottom portion of the folded body, having depending supporting flanges on its outer edge portions to engage the sides and the bottom of the folded body, and having an opening therethrough to receive merchandise positioned in said opening, means for securing said merchandise in said opening, a tongue projected from the base to engage the hole in the upwardly disposed extension for the connection of the base to the body.

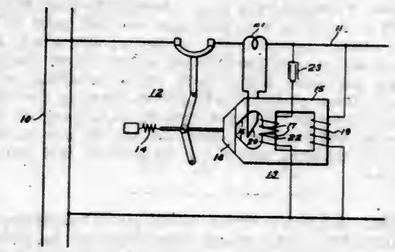
1,873,086. SUPPORT. WILLIAM S. WATTS, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 23, 1929. Serial No. 342,102. 6 Claims. (Cl. 308—72.)



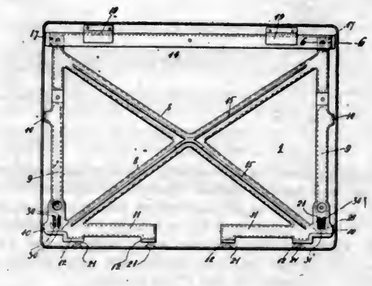
1. A support comprising, in combination, a tubular shaft-receiving sleeve flanged outwardly at both ends, a pair of hemi-spherical ball stampings having alined central tubular portions sleeved thereon and prevented from coming off the sleeve by the flanged ends but having considerable play axially of said sleeve, and a coil spring encircling the sleeve and compressed between the two stampings, the sleeve and the stampings and the spring forming the ball member of a ball-and-socket joint, together with a socket including two stampings having spherical portions engaging the first two stampings respectively and against which the first two stampings are urged apart by said spring, said second two stampings having outwardly projecting base flanges secured together and arranged in a plane perpendicular to the normal or central position of the sleeve axis.

1,873,087. CIRCUIT-BREAKER-TRIPPING SYSTEM. ROY J. WENSLEY, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 27, 1929. Serial No. 366,310. 11 Claims. (Cl. 175—294.)

1. The combination with an electric circuit, a reactor and a condenser associated therewith, a circuit interrupter in said circuit biased to the open position, of a normally excited electromagnet for holding said interrupter in closed position, means for displacing the normal flux of said magnet comprising a bucking winding adapted to be connected across said reactor and a bucking winding adapted to be connected across said circuit in series with said condenser.

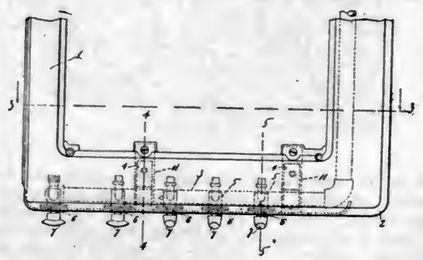


1,873,088. DOOR. SAMUEL A. WILDE, Taunton, Mass., assignor to Glenwood Range Company, Taunton, Mass., a Corporation of Massachusetts. Filed Nov. 18, 1931. Serial No. 575,707. 12 Claims. (Cl. 126—190.)



1. A door comprising a front plate, a back plate, a rigid metal frame between the two plates, concealed means between the two plates for fastening the frame to the back plate, means for connecting the two plates along one edge thereof whereby the combined plates will form a clamp assisting in the retention of said frame, and means for securing the back plate to said frame.

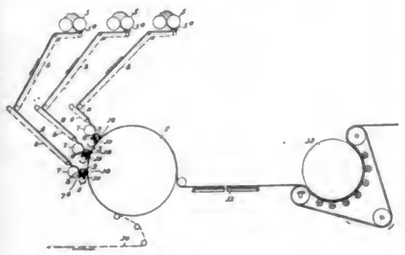
1,873,089. GAS STOVE. SAMUEL A. WILDE, Taunton, Mass., assignor to Glenwood Range Company, Taunton, Mass., a Corporation of Massachusetts. Filed Dec. 3, 1931. Serial No. 578,633. 3 Claims. (Cl. 126—39.)



1. In a gas stove having burner connections including a manifold and valves with stems and handles on the stems, the combination therewith of indicators on said stems

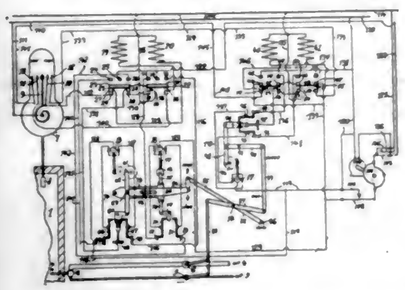
turning therewith and bearing indications indicating the on and off positions of the valves, a plate on the stove arranged outside said indicators, said plate having slots therein through which said stems extend, said slots extending from the edge of the plate whereby the plate may be applied to the stove with extension over the stems of the valves without removing the handles on said stems, said slots having, also, sufficient depth to leave sight openings through the plate beyond said stems extending therethrough, those portions of the slots forming the sight openings being in alignment with the indications on said indicators whereby said indications may be seen through said sight openings, and means for securing said plate to the stove.

1,873,090. MANUFACTURE OF INLAID LINOLEUM OR THE LIKE. JOHN WILEY, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed May 24, 1929. Serial No. 365,625. 14 Claims. (Cl. 154—26.)



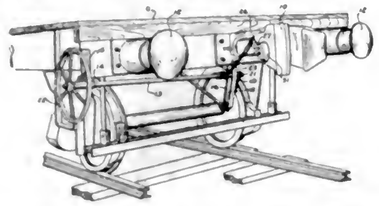
1. In a machine for the manufacture of linoleum or the like, a die roll having knives adapted to cut and define an area of material to be discharged as scrap, stripper means carried by the die roll and lying within a knife-bound area thereof, such stripper means being operable to raise a portion only of the material within the knife-bound area, and means for engaging the lifted portion.

1,873,091. TEMPERATURE CONTROL APPARATUS. CHRISTIAN WILHJELM, Philadelphia, Pa. Filed Nov. 28, 1930. Serial No. 498,901. 5 Claims. (Cl. 236—15.)



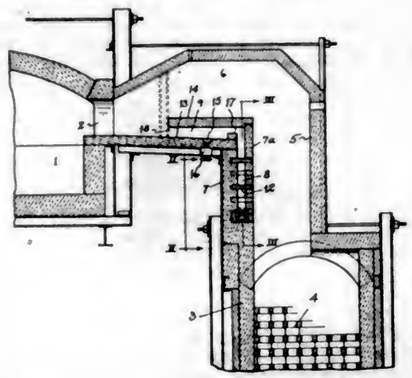
1. In an apparatus for temperature control, the combination of means to determine variations from a given temperature, a plurality of electric motors for controlling the flow of a temperature modifying medium to maintain the given temperature including two motors to apply corrections while the temperature variations remain within a given range and another motor to apply corrections when the variations exceed said given range of variations.

1,873,092. UNCOUPLING MECHANISM FOR CAR COUPLERS. JOHN WILLISON, Shaker Heights, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 16, 1926. Serial No. 135,711. 12 Claims. (Cl. 213—219.)



5. In an uncoupling mechanism for car couplers a lock releasing member, a rotatable shaft having one end mounted for translatory movement in a direction transverse to its axis, a flexible member connected at one end to the shaft and at the other end to a fixed part whereby translatory movement is imparted to the end of the shaft upon rotation thereof, and a connection between the shaft and the lock releasing member, said connection being such that the translatory movement of the end of the shaft is utilized to increase the leverage on the lock releasing member.

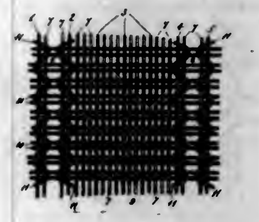
1,873,093. FURNACE PORT. JOHN N. WILSON, Washington, Pa., assignor to Simplex Engineering Company, a Corporation of Delaware. Filed Sept. 21, 1931. Serial No. 563,936. 3 Claims. (Cl. 263—15.)



3. In combination with a furnace port, a regenerator for the preheating of air, a hollow neck affording communication between said regenerator and said port, a passage provided in the wall of said neck, said passage comprising an upwardly-extending portion communicating with an angularly-extending portion directed toward the furnace port, means for introducing fluid fuel to the upwardly-extending portion of said passage, baffles in said passage between the region of fuel admission and the angularly-extending portion of the passage, the organization being such that the fuel in moving through said passage becomes preheated and the air regenerator in effect serves also as a fuel regenerator.

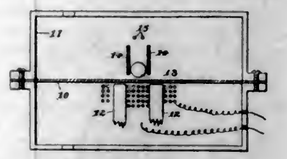
1,873,094. ELASTIC FABRIC. HARRY C. WINTON, Chelsea, Mass., assignor to Everlastik, Inc., Chelsea, Mass., a Corporation of Massachusetts. Filed Jan. 2, 1932. Serial No. 584,337. 4 Claims. (Cl. 139—419.)

1. An elastic fabric comprising elastic warp threads and elastic weft threads, certain of the elastic warp threads being spaced from one another to form openings between them occurring at intervals in the fabric and which openings are crossed by the elastic weft threads left unbound within said openings, and



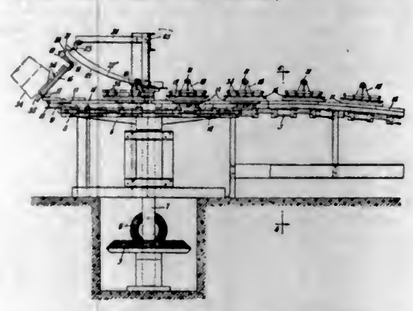
means for tying the spaced elastic warp threads lying adjacent said openings to the elastic weft threads whereby the initial fixed position of said elastic warp threads with relation to the elastic weft threads will be maintained as the fabric is stretched.

1,873,095. ELECTRIC IMPULSE CONTACTING MEANS. WATSON H. WOODFORD, Bridgeport, Conn. Filed Sept. 10, 1929. Serial No. 391,555. 4 Claims. (Cl. 200—52.)



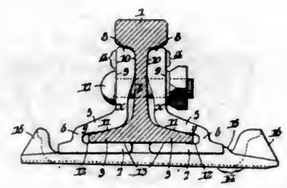
1. In a device of the class described, the combination with a vibratable diaphragm, of a pair of electric contact members positioned in spaced relation to the diaphragm, a metal ball loosely positioned upon the diaphragm beneath the contact member adapted to be manipulated by the vibratory movements of the diaphragm and to contact with and bridge the said pair of contact members.

1,873,096. MOLD DUMPING APPARATUS. WALTON L. WOODY, Shaker Heights, and RANNEY J. THOMPSON, East Cleveland, Ohio, assignors to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 1, 1929. Serial No. 396,474. 14 Claims. (Cl. 22—9.)



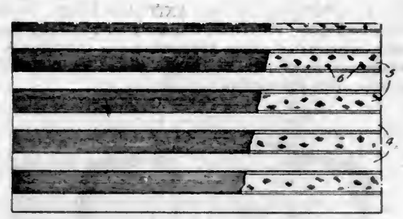
4. In combination, a conveyor, mold supporting means on said conveyor, an element inclined with respect to the path of travel of said conveyor and mounted adjacent thereto, and means on said mold supporting means cooperating with said inclined member for effecting dumping of said mold during the travel of said conveyor.

1,873,097. RAIL JOINT. CHARLES D. YOUNG, Haverford, Pa. Filed Mar. 9, 1931. Serial No. 521,297. 7 Claims. (Cl. 238—190.)



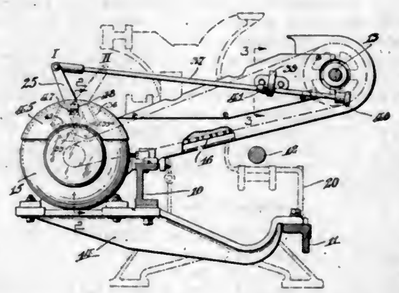
1. A rail joint including a continuous type joint bar formed to bear solely upon the web and flange of a rail, and having portions of reduced thickness, whereby the parts of the bar have capacity for relative flexure, and a plate supporting the base flange of said joint bar and bridging a number of ties therebeneath.

1,873,098. SURFACE COVERING MATERIAL. PAUL R. YOUNG, Lititz, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Apr. 20, 1929. Serial No. 356,704. 9 Claims. (Cl. 154—49.)



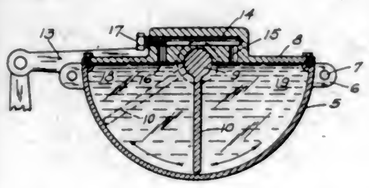
1. An auto mat material comprising a body of varying thickness having a face with recesses formed therein, and an opaque lacquer lying in the recesses.

1,873,099. VARIABLE SPEED DRIVE CONTROL. MELCHIOR ZWICKY, Berksbire Heights, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed May 24, 1930. Serial No. 455,197. 1 Claim. (Cl. 172—179.)



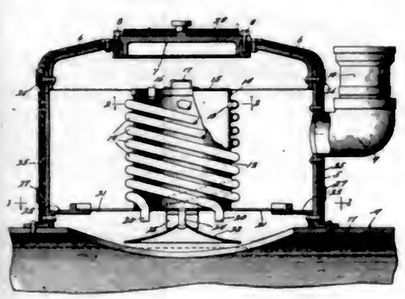
In a variable speed motor arranged to operate at two speeds only, a swingable control lever normally biased to one position of its speed control, and an operating connection for said lever having manual locking means to retain said control lever at the other position of its speed control against its normal tendency to return to said first named position.

1,873,100. SHOCK ABSORBER. EDWARD L. O. ALLEN, Oakland, Calif. Filed July 28, 1930. Serial No. 471,166. 1 Claim. (Cl. 188—89.)



In a shock absorber, a semi-cylindrical housing, a cover therefor, a vane, a shaft integral with said vane, said shaft being intermediately mounted relative to the connecting plane of said housing and said cover, and an adjustably restricted by-pass in said cover, said by-pass being adjusted by means of a screw, said vane clearing the walls of said housing and forming a passage for fluid therebetween of predetermined area, whereby actuation of said absorber is permitted independently of the restrictd by-pass, said by-pass being adapted to provide for decrease in resistance of said absorber.

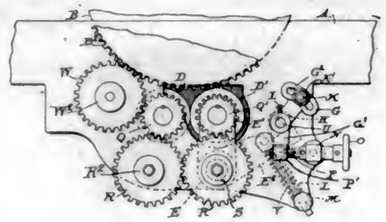
1,873,101. REFRIGERATION AND THE LIKE. THOMAS A. BANNING, Jr., Wilmette, Ill., assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 31, 1930. Serial No. 506,097. 4 Claims. (Cl. 62—91.5.)



1. A refrigerative container having enclosed therein a covered gas-tight metal container enclosing solid carbon dioxide, said container being formed for escape of gas only by outflow from a higher level than the ordinary level of the solid carbon dioxide contained therein and arranged so that said outflow level is near but below the top of the enclosing container, together with a separate conduit extending downwardly from the outflow position of the gas-tight metal container around said container to thereby insulate the container against excessive inflow of heat.

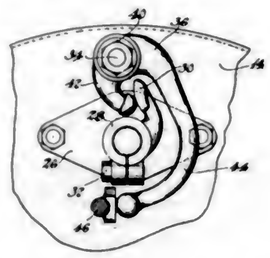
1,873,102. PAPER FOLDING MACHINE. HENRY F. BECHMAN, Battle Creek, Mich., assignor to Duplex Printing Press Company, Battle Creek, Mich., a Corporation of Michigan. Filed Jan. 31, 1925. Serial No. 6,088. 6 Claims. (Cl. 270—76.)

1. In a folder; a pair of folding rolls one of said rolls being adjustable toward or from the other on an arc, swingable supports carrying the said adjustable roll, and means for adjusting the swingable supports to move the adjustable roll toward or from the other roll; with non-intermeshing pinions on the adjacent ends of the rolls, a train of gears for communicating motion from one roll pinion to the other the distance between centres of all gears which mesh being constant, whereby the said rolls are held in constant positive uniform gear drive in all



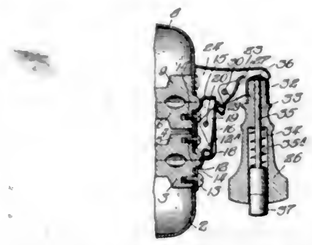
positions of the adjustable roll; the adjustable roll being movable on an arc substantially concentric with the center of the gear meshing with the pinion thereon.

1,873,103. BRAKE. VINCENT BENDIX, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed Apr. 27, 1925, Serial No. 26,036. Divided and this application filed June 26, 1930. Serial No. 463,910. 1 Claim. (Cl. 188—194.)



A brake operating lever formed with a bearing, two projecting arms on the same side of the bearing, one of said arms having a greater length than the other, and the ends of said arms being arranged in a line substantially radial of the bearing.

1,873,104. LATCH FOR DUPLEX WAFFLE IRONS. BERNHART A. BENSON, Chicago, Ill., assignor to Chicago Electric Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 13, 1930. Serial No. 428,095. 13 Claims. (Cl. 53—10.)



1. A waffle iron comprising three normally horizontal and relatively superposed and electrically heated sections, namely a bottom, a middle, and a top section; pivoting means at one side of the waffle iron for interhinging the sections, and latching means at the opposite side of the waffle iron for releasably latching the middle section to both the bottom section and the top section, the latching means including two latch carriers respectively fast upon the top section and the middle section; the said carriers laterally interfitting each other when the top and the middle section are interlatched, so as to prevent relative rotational movement of the top and middle sections about the vertical axis of the waffle iron.

1,873,105. PRECIPITATION OF RESIN FROM RESIDUAL OILS. MADHAV R. BHAGWAT, Brooklyn, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed Nov. 26, 1928. Serial No. 322,096. 5 Claims. (Cl. 260—4.)

1. The method of recovering heat-sensitive, soluble and fusible resins of the phenol formaldehyde potentially reactive type from a colloidal suspension thereof in the hydrocarbon oil components of a tar distillate, which comprises treating the said suspension with a chemical treating agent capable of disrupting the suspension and of precipitating the resin therefrom, separating the thus precipitated resin, and carrying out the said treatment and the step of separation respectively at temperatures sufficiently low to prevent substantial conversion of the heat-sensitive resins into the insoluble, infusible form.

2. The method of recovering soluble and fusible synthetic resins of the phenol formaldehyde type from a colloidal suspension thereof in the hydrocarbon components of a tar distillate, comprising treating the suspension with a dilute aqueous solution of a mineral acid, thereby disrupting the suspension and precipitating the soluble and fusible resins, separating from the purified oil the resins thus liberated, and employing temperatures sufficiently low throughout the said treating step and the step of separation to prevent substantial conversion of the resins into the insoluble, infusible form.

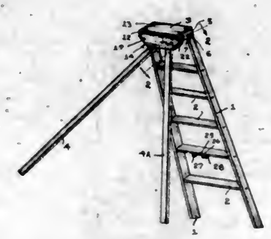
1,873,106. LIQUID METER. JAMES E. BLALOCK, Pacific Palisades, Calif. Filed Oct. 15, 1928. Serial No. 312,561. 2 Claims. (Cl. 235—144.)



1. In a fluid meter with a housing, a dial carried by said housing, and an indicating hand movable thereover about an axis passing through the dial; a gear journalled within the housing for rotary and axial movement, a lever extending through the housing and mounted for pivotal movement in a plane parallel to the plane of movement of said hand and also for movement about an axis perpendicular to the axis of said gear, a rack carried by said lever in mesh with said gear, a shoulder on said lever engaged with an annular groove in said gear, an arm carried by said gear, and a resetting finger carried by said arm, said finger being adapted to engage said indicating hand when the gear is moved from one extreme of its axial movement.

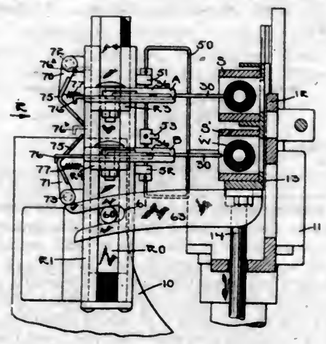
1,873,107. STEPLADDER. JOHN B. BLOSSER, Cooks, Mich. Filed Nov. 8, 1930. Serial No. 494,431. 13 Claims. (Cl. 228—31.)

3. In a ladder, the combination of side rails, steps therebetween, a pair of rail end-members carried by the side rails, a brace member shaped to provide a channel for movement of the braces therebetween and having end walls closing the upper portion of the channel and pivotally attached to said rail end-members to permit the



brace member to swing inwardly and outwardly, and braces pivotally mounted for lateral support in said channel brace member and adapted to be moved inwardly and outwardly with said brace member.

1,873,108. WEFT DETECTING MECHANISM FOR DROP BOX LOOMS. CLYDE E. BROWN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 17, 1931. Serial No. 530,900. 9 Claims. (Cl. 139—233.)

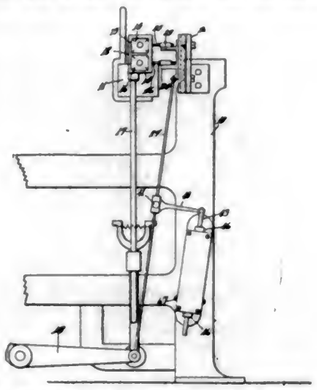


1. In a weft replenishing drop box loom having a pair of shuttle boxes and means to move said boxes to bring a selected shuttle to active position, a welt detecting device definitely associated with each shuttle box, and means to render each detecting device inoperative as its associated shuttle box is moved to inactive position and to restore said detecting device to operative condition as the movement of the shuttle box to inactive position is completed.

1,873,109. ELECTRICAL DETECTOR MECHANISM FOR DROP BOX LOOMS. DONALD H. BUSHEY, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 16, 1931. Serial No. 530,619. 4 Claims. (Cl. 139—233.)

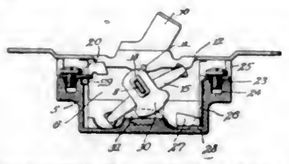
1. In a drop box loom having a pair of shuttle boxes each moved by a box lifter rod to active position for two successive picks and then inactive for two picks, an electromagnetic device to cause a change in the operation of the loom, a pair of electric detecting circuits to which the device is common, an electric weft detector for each box, one detector for each circuit, and a selector to determine which circuit shall be operative, said selector comprising a pair of coacting members one of which is connected to the box rod and movable with the boxes in the

direction in which the latter shift and the other of which is movable by the first in the direction transverse of the lifter rod, and a pair of contact, one for each detector



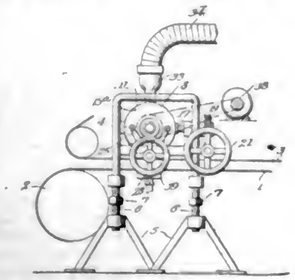
circuit, to be engaged one at a time by one of the members, the contact which is engaged by the member being dependent upon the direction of movement of the boxes.

1,873,110. SNAP SWITCH. WILLIAM L. BUTLER, Schenectady, N. Y., assignor to Weber Electric Company, Schenectady, N. Y., a Corporation of New York. Filed Jan. 18, 1930. Serial No. 421,780. 6 Claims. (Cl. 200—67.)



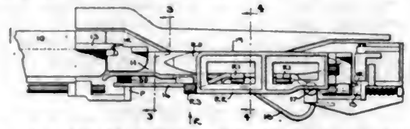
6. In a snap switch, the combination with a casing having a cavity therein and a groove in the bottom wall of the cavity, contacts at the ends of said casing, a snap switch mechanism arranged in said cavity, and including an oscillatory U-shaped yoke having a laterally projecting arm arranged above said groove, a switch blade having a floating connection upon said lateral extension, and said switch arm including a member extended toward said groove and having an arcuated lower edge for reception therein, whereby said extension engages the side walls of said groove to restrain the lateral movements of said switch blade.

1,873,111. APPARATUS FOR MAKING PAPER. WILLIAM H. CANNARD, Green Bay, Wis. Filed Apr. 19, 1929. Serial No. 356,444. 15 Claims. (Cl. 92—39.)



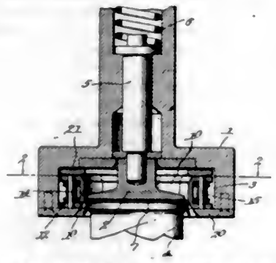
1. In a paper making machine, the combination with a movable screen of means for projecting pulp upon said screen in a direction substantially perpendicular to the machine direction and under pressure sufficient to overcome any tendency to flow caused by movement of the screen.

1,873,112. SHUTTLE CHANGER LOOM. AUGUSTIN J. CHEVRETTE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 6, 1931. Serial No. 528,198. 2 Claims. (Cl. 139—239.)



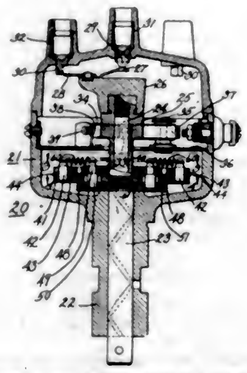
1. In a shuttle changing loom having a lay provided with a rising box to be lifted from normal down position to raised position to receive a new shuttle, a wall forming a part of the shuttle box, a binder stationary with respect to the lay and cooperating with the wall to define one dimension of the box, and means operative by upward movement of the box to move the binder away from the wall to enlarge said dimension of the shuttle box, said means including an inclined face moving with the shuttle box and engaging the binder.

1,873,113. BOTTLE CLOSURE APPLYING MEANS. FRANK L. DARLING, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md., a Corporation of New York. Filed Mar. 16, 1931. Serial No. 523,125. 11 Claims. (Cl. 226—86.)



1. A means for applying closure caps to containers comprising a sealing head including a throat portion formed of a series of segments and a surrounding chain annulus with the circumference of the throat remaining substantially the same.

1,873,114. IGNITION TIMER. CHARLES HALL DAVIS, Jr., Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Nov. 26, 1930. Serial No. 498,342. 2 Claims. (Cl. 200—22.)



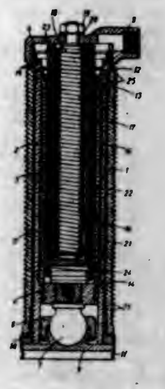
1. An ignition timer for internal combustion engines comprising, in combination, a circuit interrupter and a

rotary cam for operating the same, and having a tubular hub, a drive shaft having an end portion on which the cam hub is journalled, a weight plate attached to the hub, a lever plate attached to the drive shaft on the side of the weight plate remote from the cam, movable weights located upon the side of the weight plate nearest the cam, arms on the side of the weight plate nearest the cam and cooperating with the weights, and means extending through the weight plate for rotatively connecting the arms and lever plate, and springs restraining movement of the weights due to centrifugal force.

1,873,115. PROCESS OF ORE FLOTATION. IRA H. DERBY and ORIN D. CUNNINGHAM, Indianapolis, Ind., assignors to Peter C. Reilly, Indianapolis, Ind. Original application filed Mar. 19, 1926. Serial No. 96,061. Divided and this application filed Dec. 30, 1930. Serial No. 505,666. 7 Claims. (Cl. 209—166.)

1. A process which comprises subjecting metalliferous material to froth flotation in the presence of a phosphorus sulfur compound of an alcohol.

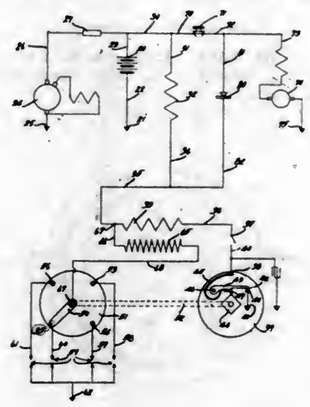
1,873,116. JACK ATTACHED TO THE AXLES OF VEHICLES. GEORGES DESSAINT, Paris, France. Filed June 21, 1929, Serial No. 372,716, and in France Apr. 4, 1929. 1 Claim. (Cl. 254—86.)



In a fluid-pressure jack of the telescopic tubular type for direct attachment to the axles of motor vehicles, a fluid containing casing composed of more than two concentrically arranged telescopic tubes movable longitudinally one with respect to each other and each having a closed end, spring means in said casing for the purpose to return the concentric tubes in their inactive position, said spring means comprising two concentrically arranged tension springs, and a freely movable guide tube between said springs, one end of each spring being attached respectively to the closed end of the outside tube and to the closed end of the inside tube, while the opposite ends of the said springs are attached to the opposite ends of the freely movable guide tube.

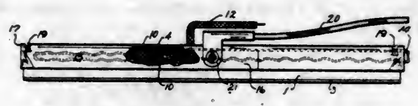
1,873,117. MOTOR STARTING CIRCUIT. JOHN T. FITZSIMMONS, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Nov. 7, 1930. Serial No. 494,015. 9 Claims. (Cl. 123—179.)

1. A motor starting circuit comprising in combination, a normal path of resistance for engine operation, a shunted path for energizing a starting motor, and a by-pass about the resistance in said engine operation path, said



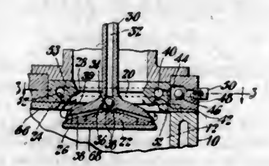
by-pass including a unidirectional current carrying device, and means for coupling the by-pass into the engine operating circuit only when said starting motor is energized.

1,873,118. WINDSHIELD WIPER. CLARENCE A. GOOLEY and EDWARD L. GOOLEY, Jr., Harrington, Wash. Filed Apr. 14, 1930. Serial No. 444,126. 1 Claim. (Cl. 15—255.)



The combination in a windshield wiper of an electric heating element and a U-shaped holder, of a rubber sheet retained between the heating element and the holder with its free edges projecting beyond the holder to form wipers, a metallic casing over the holder and spaced therefrom to form a heat insulating jacket, said casing having transversely extending indented ribs near its ends engaging the holder and closed ends over the holder, pairs of insect end flanges frictionally engaging the holder, an operating arm, and connecting means between the arm and the wiper.

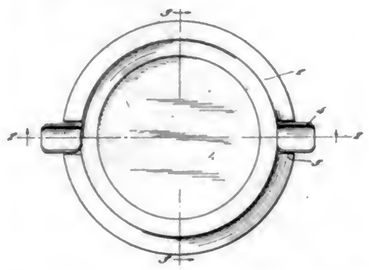
1,873,119. AIR COOLED VALVE AND VALVE SEAT. ROBERT G. GRISWOLD, Westfield, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed July 20, 1927. Serial No. 207,092. 13 Claims. (Cl. 123—177.)



1. The combination of a valve, a seat for said valve, said valve having a contact surface beveled inwardly in the di-

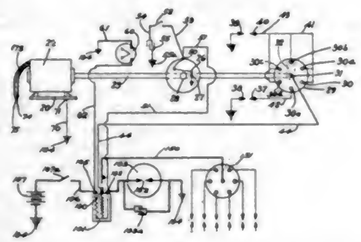
rection of flow through the valve port, and means for introducing a fluid envelope to the fluid passing through the valve port and at a point adjacent the front edge of the contact surface of the valve.

1,873,120. ASH TRAY. BENJAMIN H. HALL, Parkersburg, W. Va. Filed Apr. 10, 1931. Serial No. 529,179. 2 Claims. (Cl. 131—51.)



1. An ash tray of the class described comprising a bottom portion and a substantially semi-circular rim portion, the outer edge of which extends to the plane of the bottom portion, parts of the outer half of the semicircular portion being cut and bent to a horizontal position, and curved to form supports for cigars or cigarettes.

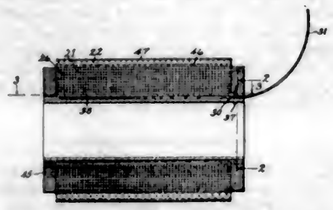
1,873,121. TESTING APPARATUS. HERMAN L. HARTZELL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Oct. 8, 1930. Serial No. 487,170. 11 Claims. (Cl. 175—183.)



1. Apparatus for testing ignition coils of internal combustion engines comprising, in combination, a circuit interrupter; a distributor; a motor for driving said interrupter and distributor; two terminals each providing an electrode of separate spark gaps; opposing electrodes for each of the spark gaps having a common ground; means connecting the distributor to the said terminals; and means for connecting one side of the interrupter with the ignition coil to be tested and the other side of said interrupter with the engine for grounding purposes.

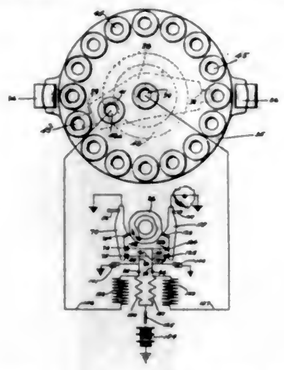
1,873,122. IGNITION COIL. HERMAN L. HARTZELL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Jan. 8, 1930. Serial No. 419,352. 1 Claim. (Cl. 175—356.)

In an electrical coil, the combination comprising, an insulated support; a lead-in wire secured to said support; and a winding connected conductively to said lead-in wire, said winding comprising a major portion with evenly spaced turns and a minor portion with varyingly spaced turns, the turns of said minor portion wound on said support in regularly decreasing spaced relation from the point of connection with said lead-in wire to the evenly spaced turns of said major portion, the spacing of the turns in the minor portion being decreased in proportion



to the tendency of short circuiting between successive turns and until the spacing of the minor portion merges into the spacing of the evenly spaced turns of said major portion whereby the tendency of short circuiting between any successive turns is eliminated.

1,873,123. IGNITION DEVICE. HERMAN L. HARTZELL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 23, 1930. Serial No. 455,083. 7 Claims. (Cl. 123—148.)

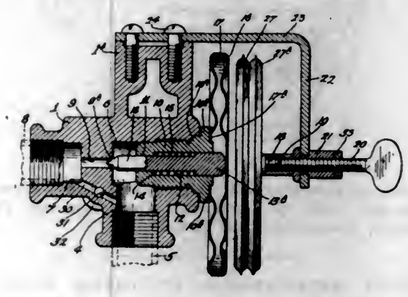


1. An ignition device for a multi-cylinder internal combustion engine comprising, in combination, a plurality of ignition coils each having primary and secondary windings; a plurality of distributing devices; circuit breakers each controlling all of the primary circuits of all of the coils substantially simultaneously; and an engine driven cam for operating said circuit breakers alternately.

1,873,124. THERMOSTATICALLY CONTROLLED FLUID VALVE. DEWEY H. HILL, Kokomo, Ind., assignor to Globe American Corporation, Kokomo, Ind., a Corporation of Indiana. Filed Apr. 15, 1931. Serial No. 530,307. 3 Claims. (Cl. 236—99.)

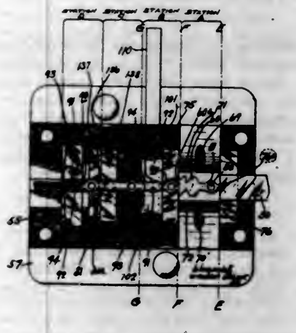
1. In a thermally controlled valve, a valve body provided with an inlet passage and, an outlet passage, and a port connecting the inlet passage with the outlet passage; a plunger controlling the inlet end of the said port; a tubular nipple threaded into the valve body and through which nipple the plunger slidably extends; a compression spring housed by the nipple and interposed between the plunger and an outwardly facing part of the nipple and continuously urging the plunger toward an outlet-opening position; a wafer-like and flexible sealing member having an aperture in its inward wall but otherwise imperforate, and having the part of its inward wall adjacent to the said aperture secured in sealing relation to the nipple; and a thermostatic member supported by the

valve body outward of the sealing member and adapted when heated to press directly against the outward wall of the sealing member so as to force the plunger toward its port-inlet-closing position by thrust transmitted



through the said outward wall of the sealing member; the said nipple, plunger, spring and sealing member being detachable as a unit from the valve body by unscrewing the nipple from the valve body.

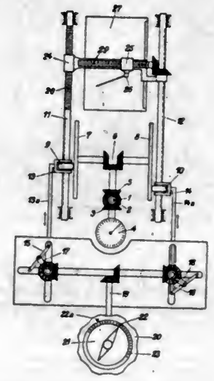
1,873,125. APPARATUS FOR FORMING AND ATTACHING A TERMINAL CLIP. JOHN Q. HOLMES and ALVA W. PHELPS, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Jan. 6, 1930. Serial No. 418,971. 12 Claims. (Cl. 153—1.)



1. Apparatus for forming a terminal clip and for attaching the clip to an electrical conductor, comprising, in combination, means for forming a series of connected blanks from a strip of sheet material, means for forming the blanks successively into terminal clips, means for attaching the clip to an electrical conductor, and means for severing the clip attached to an electrical conductor from the remainder of the strip.

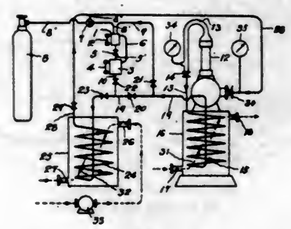
1,873,126. APPARATUS FOR CONTINUOUSLY RECORDING THE PATH OF FLIGHT OF AIRCRAFT. REINHARD HUGERSHOFF, Dresden, Germany, assignor to the Firm Ikarus Internationale Patentverwertungs-Aktien-Gesellschaft, Vaduz, Liechtenstein, Germany. Filed Aug. 30, 1929, Serial No. 389,590, and in Germany Sept. 26, 1928. 3 Claims. (Cl. 234—26.)

1. Apparatus for continuously recording the path of flight of aircraft, comprising a speedometer shaft revolving at a speed proportionate to the ground speed of the aircraft, a recording stylus, an automatically actuated cross slide system carrying the recording stylus and consisting of two slide elements two friction discs driven by



the speedometer driving shaft, and two friction wheels each engaging with one of the friction discs at a variable distance from the centre of the friction disc and each driving one of the slide elements.

1,873,127. APPARATUS FOR MEASURING CAPACITY OF A REFRIGERATING MACHINE. HARUHISA INOKUTY, Tokyo, Japan. Filed Nov. 9, 1928. Serial No. 318,304. 1 Claim. (Cl. 73—167.)

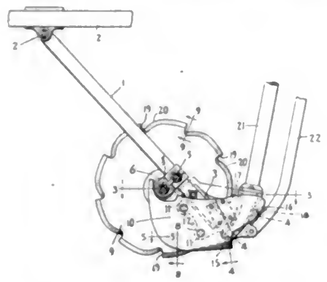


An apparatus for measuring capacity of a refrigerating machine, placed in the refrigerant circuit of a refrigerating machine between the condenser and the expansion valve, including a direct volume meter for the liquefied refrigerant, comprising a volume measuring tank connected to the outlet of said condenser, a reservoir connected to the inlet of said expansion valve, a source of inert gas under pressure, means connecting said source to said measuring tank for supplying said inert gas to said measuring tank and reservoir at the desired pressure, a valve and pipe connecting the lower part of said measuring tank to said reservoir, and another pipe connecting upper parts of said tank and reservoir, substantially as described.

1,873,128. FURROW OPENER. BEN P. JOHNSON, Springfield, Ohio, assignor to E. E. Greiner, Springfield, Ohio. Filed Feb. 17, 1930. Serial No. 428,892. 4 Claims. (Cl. 97—225.)

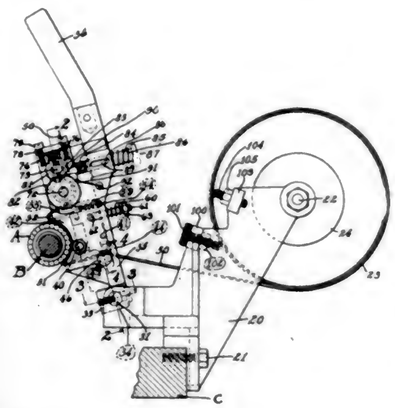
1. In a furrow opener, a flat coulter disk, and a pair of mold boards cooperating therewith to form a furrow,

the forward edges of said mold boards lying in close proximity to said disk, said disk having a series of serrations



on the periphery thereof, the trailing edge of each serration being so formed as to cooperate with the edges of said mold boards with a shearing action.

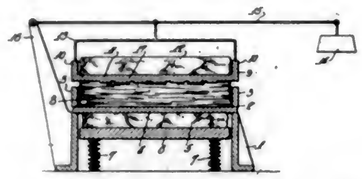
1,873,129. ABRADING APPARATUS. SIGURD N. JOHNSON, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Nov. 26, 1930. Serial No. 498,336. 6 Claims. (Cl. 51—154.)



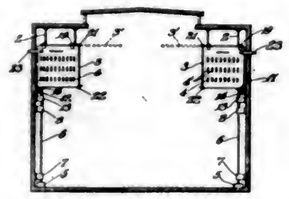
1. Abrading apparatus comprising, in combination, means for pressing a portion of a ribbon of sheet abrasive material against the work, means for clamping the ribbon against the pressing means while operating upon the work, means responsive to movement of the pressing means away from the work for releasing the clamping means, and means for feeding the ribbon to the pressing means while unclamped relative thereto.

1,873,130. CONTACT FREEZING APPARATUS AND METHOD. CHARLES L. JONES, Pelham, and JOHN D. SMALL, Douglaston, N. Y., assignors to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 2, 1930. Serial No. 417,852. 5 Claims. (Cl. 62—91.5.)

5. A quick freezer for resilient products, including metallic plate elements and means for resiliently compressing relatively thin layers of said products between them, maintaining said plate elements at temperatures far below the freezing point of said product by pressing solid carbon dioxide in intimate heat exchange relation with other surfaces of each of said plate elements, and means for maintaining an atmosphere of carbon dioxide gas sublimated from said solid, in submerging relation to said plate elements, said products and said solid.

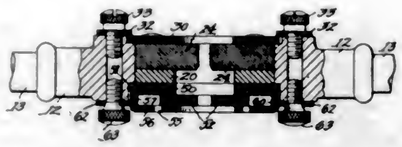


1,873,131. REFRIGERATING APPARATUS. WALTER S. JOSEPHSON, New York, N. Y., assignor to Dryice Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Dec. 12, 1929. Serial No. 413,466. 6 Claims. (Cl. 62—91.5.)



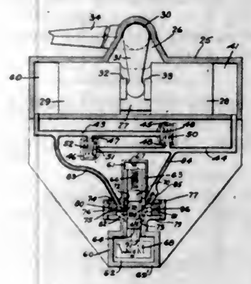
5. A refrigerator adapted for enclosing products to be refrigerated and means therein to refrigerate the same, including one or more containers enclosing solidified carbon dioxide and having low level outlet means through which the evaporated gas from within said container passes into the refrigerated space, means for closing the latter, and a high level outlet conduit for discharging excess gas from the container ontside the refrigerator.

1,873,132. DIE STOCK. FRANKLIN JUDGE, Greenfield, Mass., assignor to Greenfield Tap & Die Corporation, Greenfield, Mass., a Corporation of Massachusetts. Filed Nov. 2, 1929. Serial No. 404,480. 3 Claims. (Cl. 10—123.)



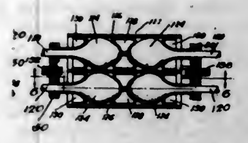
1. A thread cutting mechanism comprising a casing, a cutter support mounted for a limited angular adjustment in said casing and comprising a body member having guideways therein and a plate rigidly connected thereto adjacent said guideways, a plurality of cutters slidably mounted in said guideways and retained therein by said plate, said body member, cutters and plate being removable from the casing as a unit, means to adjust said support angularly, and cam means effective to slide each cutter inward as said support is adjusted angularly in said casing.

1,873,133. SHOCK ABSORBER. CARL H. KINDL and FREDERICK D. FUNSTON, Dayton, Ohio, assignors to Delco-Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 14, 1931. Serial No. 522,568. 12 Claims. (Cl. 188—88.)



1. A shock absorber comprising, in combination, a casing providing a cylinder; a piston in said cylinder forming two compression chambers therein; a duct leading from each compression chamber and terminating in a valve-chamber; a pressure release valve in each valve-chamber; passages connecting the separate valve-chambers with the adjacent duct; a control-valve chamber; passages connecting the respective ducts with opposite sides of the control-valve chamber; and a valve in said control-valve chamber for controlling the flow of fluid between the passages connected thereto in accordance with the oscillations of the shock absorber casing.

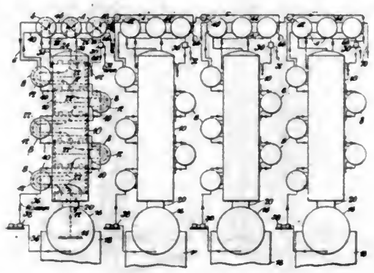
1,873,134. FLUID-POWER OPERATING MEANS. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Nov. 29, 1926. Serial No. 151,373. 24 Claims. (Cl. 60—54.6.)



8. Fluid-power operating means comprising, in combination, compressible fluid containers adjacent each other and each having an outlet conduit, a member movably arranged between said containers and balancing the pressures therein, and means for applying opposing pressures to said containers in the direction of said member.

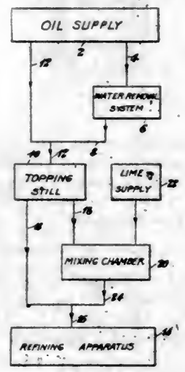
1,873,135. PROCESS AND APPARATUS FOR THE FRACTIONAL DISTILLATION OF OIL. WILBUR G. LAIRD, New York, N. Y., assignor to Heat Treating Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 14, 1928. Serial No. 261,431. 7 Claims. (Cl. 196—73.)

7. The process of producing a series of fractional condensates from a petroleum oil, which comprises passing the petroleum oil to be distilled into the first of a series of distilling zones of increasing temperature and the unvaporized oil from each zone into the next succeeding zone of the series to produce a vapor fraction in each zone, progressively heating and vaporizing portions of the oil advancing to each zone, maintaining the vapors produced in said progressive heating in intimate contact with the oil from which they are formed as it advances to each zone, to thereby utilize the partial pressure effect of the vapors formed from said oil as it is being progressively



heated, subjecting the vapors produced in each zone to rectification to separate out the desired vapor fractions, and condensing said separated fractions.

1,873,136. PROCESS FOR PREVENTING CORROSION IN OIL REFINING EQUIPMENT. WILBUR G. LAIRD, New York, N. Y., assignor to Heat Treating Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 27, 1926. Serial No. 151,040. 4 Claims. (Cl. 196—25.)



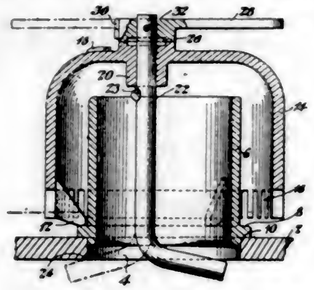
1. The method of preventing corrosion in oil distilling apparatus, which comprises treating the oil to be distilled to remove excess water, passing the treated oil together with a hydrocarbon gas through a still to distill off the gasoline and to remove absorbed oxygen and remaining water therefrom, mixing the resulting oil while hot with a quantity of dry lime equivalent to at least twice the amount of sulphur in the oil and passing the mixture into the distilling apparatus.

4. The process of treating a petroleum oil which comprises intimately contacting the oil with cracking still gases substantially freed of free-oxygen and sulfur-containing gases under non-cracking conditions, and thereafter mixing the treated oil with lime.

1,873,137. BUBBLER CAP CONSTRUCTION. WILBUR G. LAIRD, New York, N. Y., assignor to Heat Treating Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 5, 1930. Serial No. 433,246. 12 Claims. (Cl. 261—114.)

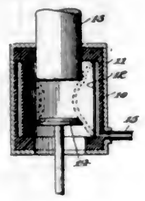
1. In a gas and liquid contact apparatus in which a bubble cap extends over a riser pipe fitted in an opening in the

bubbler tray, the improvement which comprises a hand-operable locking mechanism, the operating means of which lies entirely above the cap, said mechanism being adapted



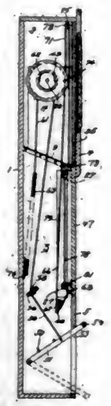
to simultaneously and firmly secure the riser pipe and cap to the tray with less than a complete revolution of the operating means.

1,873,138. VALVE STRUCTURE. JAMES MACDONALD MITCHELL, Flushing, N. Y. Filed Sept. 24, 1930. Serial No. 484,183. 8 Claims. (Cl. 251—5.)



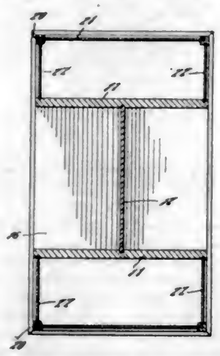
2. In combination with a pipe, a valve structure comprising an inflatable member, and a yielding valve seat permanently positioned with respect to the pipe so as to contact and engage with the inflatable member when the member is in expanded position.

1,873,139. TOWEL CABINET. HERBERT S. MCCORMICK, Alameda, Calif., assignor to Joseph N. Borroughs, Oakland, Calif. Filed Nov. 11, 1929. Serial No. 406,294. 2 Claims. (Cl. 312—38.)



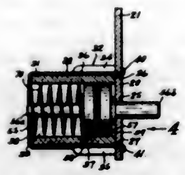
1. A towel cabinet, in combination, a cabinet having an opening at the front thereof and a sliding door for said opening, a frame removably supported in said cabinet, feed rollers journaled in said frame, pressure rollers co-operating with said feed rollers, driving means for driving said feed rollers in one direction, a tension roller mounted adjacent said door, means for positively retaining said tension roller in lowermost position during initial opening movement of said door and releasing means for said retaining means cooperating with said door during the final opening movement thereof, and means cooperating with said driving means for opening and closing said door.

1,873,140. HOSIERY DISPLAY CABINET. CALVIN C. MCGAUGH, Elk City, Okla. Filed Feb. 15, 1930. Serial No. 428,699. 3 Claims. (Cl. 312—118.)



1. A hosiery merchandising and display cabinet comprising a base, shelves surmounting the base and open at opposite sides thereof, display compartments above the said shelves located at opposite sides of the cabinet and each enclosed by glass panels arranged at right angles to each other, to expose the interior of each compartment from three sides of the cabinet, each compartment having a height sufficient to accommodate and display a full length stocking form, and additional shelves located between the said display compartments and opening at opposite sides of the cabinet, said shelves being adapted to receive and support boxes of hosiery such as displayed on the forms.

1,873,141. SWITCH. HARRY E. NORVIEL and VANCE ECOFF, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Nov. 2, 1929. Serial No. 404,428. 15 Claims. (Cl. 200—159.)

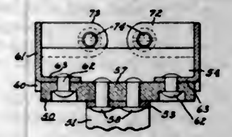


1. An electric switch comprising, an integrally formed nonconducting terminal support and switch case, a supporting bracket therefor, and a clamping member securing said switch case to said bracket, said member and bracket each forming a closure for one end of said case.

1,873,142. SWITCH. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Oct. 8, 1930. Serial No. 487,201. 4 Claims. (Cl. 200—152.)

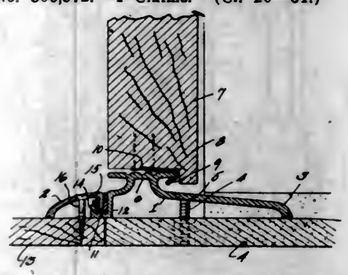
1. A circuit closer of the class described, comprising in combination, an oscillatable bracket, a protector of

dielectric material secured to the bracket and providing a capsule receiving passage, terminal clips secured to the protector, each of said clips providing a closure for the passage and a conductive fluid circuit closer within



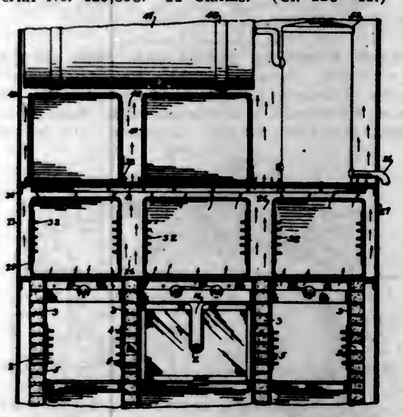
the passage having electrical connection with each of said clips, and means disposed between the closer member and clips securing the closer against movement relative to the protector.

1,873,143. METAL THRESHOLD. JOHN M. OLSON and LOUIS E. NELSON, Fargo, N. Dak., assignors to Chamberlin Metal Weather Strip Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 5, 1931. Serial No. 506,572. 4 Claims. (Cl. 20—64.)
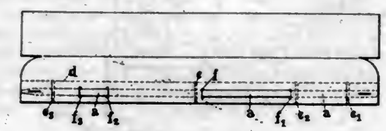


1. A metal threshold for an exterior door of a building, consisting of two sections extending transversely of the door opening and both secured to the sill or floor portion therebelow, the section extending to the exterior of the door having a longitudinal channel open at its upper face adjacent the interior face of the door with the base of the channel providing the support for the inner edge of the exterior section and the other section having a depending flange lying in the said channel, and an insulating material positioned between the said depending edge and the channel walls.

1,873,144. COOKING PLANT FOR CAFETERIA. CARLOS ORTEGA, New York, N. Y. Filed Feb. 18, 1930. Serial No. 429,358. 11 Claims. (Cl. 126—41.)



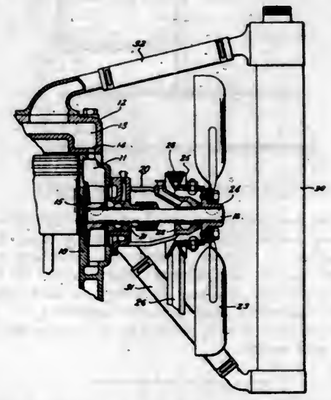
1. In a cooking apparatus, a roasting oven, a sliding door for said oven, a spit in said oven, means at the rear of said oven for rotating said spit, the forward end of said spit being supported by said door when the latter is closed.

1,873,145. MEANS FOR ATTACHING DETACHABLE COLLARS TO SHIRTS. JOHN ALBERT PACKETT, Hove, England, assignor to The No-Stud-Shirt & Collar Co. Limited, Brighton, England. Filed Dec. 9, 1930, Serial No. 501,088, and in Great Britain Dec. 12, 1929. 1 Claim. (Cl. 2—139.)



Means for attaching detachable collars to shirts, comprising a stiff but flexible band which is circularly bent and has a collar stud secured at one end and projecting outwardly only, being intended to engage with the holes in the front of the collar and an aperture at its other end intended to engage with the said stud, the said band being entirely detached from the collar and from the neckband of the shirt, in combination with means secured to the neck-band of the shirt through which the said stiff but flexible band can be inserted in position to secure the detachable collar to the shirt without the use of a back stud for the purposes set forth.

1,873,146. ENGINE COOLING SYSTEM. EARL S. PATCH, Dayton, Ohio, assignor to Moraine Products Company, Dayton, Ohio, a Corporation of Ohio. Filed Nov. 28, 1930. Serial No. 498,739. 3 Claims. (Cl. 123—175.)

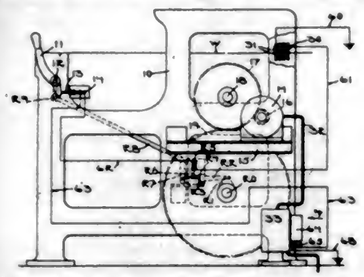


1. In combination, an internal combustion engine having a cooling water jacket, a cooling radiator, ducts connecting said jacket and radiator, a rotary water impeller for circulating cooling water between said jacket and radiator, said impeller having a shaft, a bearing for said shaft adjacent said impeller having porous metal lining with capillary pores therein, and means for lubricating said bearing by supplying lubricant to the bearing surface only through said capillary pores of said porous lining, whereby lubricant is prevented from being forced into the water system.

1,873,147. ELECTRICAL WARP STOP MOTION. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1931. Serial No. 522,820. 7 Claims. (Cl. 139—353.)

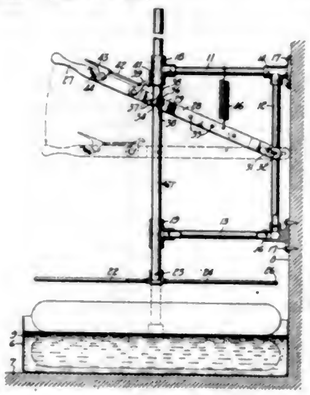
1. In a loom having an electric driving motor and an electrical warp stop motion, a pair of communicating

casings, a motor switch located in one casing, a transformer located in the other casing, electrical connections



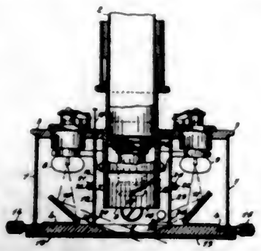
extending from the transformer to the switch, and feed wires for the warp stop motion leading from one of the casings.

1,873,148. TUBE TESTER. EUGENE T. PEDRANTI, Petaluma, Calif. Filed June 14, 1927. Serial No. 198,761. 4 Claims. (Cl. 73—51.)



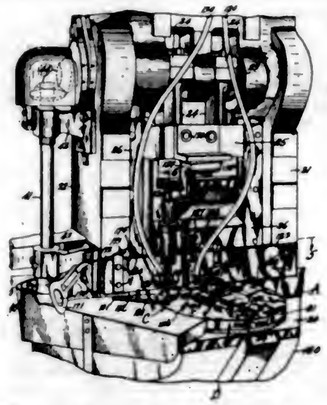
1. A tube tester for operating upon an inflatable inner tube for an automobile tire comprising a tank for containing water, a support outside the boundary of said tank, a plunger on said support and adapted to descend upon an inner tube floating on water in said tank, and means for operating said plunger positively to contact the upper surface of said tube only to depress said inner tube into said water.

1,873,149. MICROSCOPE FOR EXAMINING PICTURES WITH RASANT LATERAL LIGHTING. FERNANDO PEREZ, Rome, Italy. Filed Jan. 9, 1931. Serial No. 507,683, and in Italy Apr. 19, 1930. 1 Claim. (Cl. 88—39.)



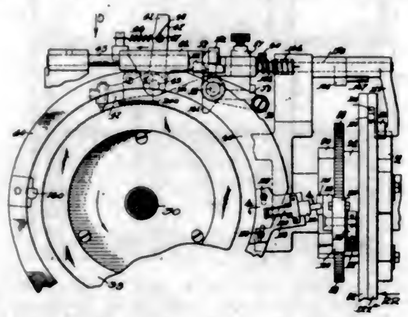
A microscope comprising a lens tube having an objective end, a casing surrounding the objective end of the tube and provided with an opening towards the object, sources of light located in said casing illuminating an object from different sides by oblique incident light, slide-like shutters between the individual source of light and the surface of the object to be illuminated, said slide-like shutters being separately adjustable whereby the passage available for each oblique illuminating beam of light may be regulated or entirely closed independently of the other beams of light.

1,873,150. ASSEMBLING APPARATUS. ALVA W. PHELPS and CLARENCE J. KELLER, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,545. 6 Claims. (Cl. 219—12.)



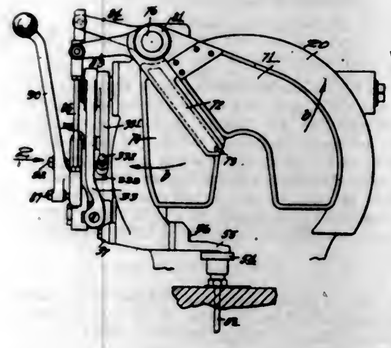
1. Assembling apparatus comprising, in combination, a plurality of metallic work holders each adapted to support metal parts to be connected together, a metallic conveyor carrying the work holders, means for pressing one of the parts against another part, means for electrically heating the parts in order that solder applied thereto will flow to the joint between them, said heating means comprising a conductor connected with a current source and with a brush bearing against the conveyor and a movable electrode connected with the current source, means for preventing contact between the electrode and work holder in case there is no work in the work holder, means for ejecting the assembled work from the work holders, and means for intermittently moving the conveyor to move the work holders successively past the pressing means, the heating means and the ejecting means.

1,873,151. CONTROL MECHANISM FOR GRINDING MACHINES. PETER PLANTINGA, Greenfield, Mass., assignor to Greenfield Tap & Die Corporation, Greenfield, Mass., a Corporation of Massachusetts. Filed Sept. 30, 1930. Serial No. 485,473. 11 Claims. (Cl. 51—165.)



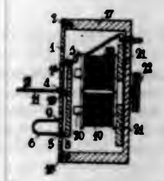
1. In a grinding machine having a table, mechanism for reciprocating said table and a control device therefor, a grinding wheel and cross feed mechanism therefor, in combination, means to actuate said cross feed mechanism to feed said grinding wheel, and mechanical control mechanism rendered operative by a predetermined operation of said cross feed mechanism and effective to cause subsequent movement of said control device and to thereby modify the table travel, said control mechanism including a ratchet wheel and a feed pawl associated therewith and means to render said feed pawl operative to turn said ratchet wheel and thereby effect movement of said control device after a predetermined actuation of said cross feed mechanism.

1,873,152. SPLASH GUARD MECHANISM FOR GRINDING MACHINES. PETER PLANTINGA, Greenfield, Mass., assignor to Greenfield Tap & Die Corporation, Greenfield, Mass., a Corporation of Massachusetts. Filed Sept. 30, 1930. Serial No. 485,471. 10 Claims. (Cl. 51—272.)



2. In a grinding machine, a splash guard movable to operative and inoperative positions and having a passage through which water may be delivered to the wheel and work when the guard is in operative position, water supplying connections to said passage, and means to move said guard to operative and inoperative positions.

1,873,153. SOUND REPRODUCING DEVICE. SIDNEY LEOPOLD PRICE, London, England. Filed Feb. 12, 1930, Serial No. 427,855, and in Great Britain Feb. 20, 1929. 16 Claims. (Cl. 179—114.)



1. The method of supporting the magnetic armature of an electromagnetic device adapted for use in the reproduction of sound, which comprises suspending the armature having connected thereto a diaphragm actuating stylus from a semi-rigid member in the form of a reed by means comprising at least one resilient member, whereby to afford to the armature comparatively unrestricted freedom to vibrate.

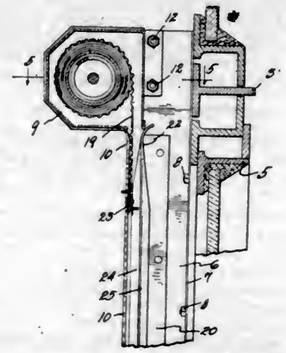
1,873,154. PROCESS FOR THE PREPRATION OF CYCLIC NON-SATURATED KETONES WITH MORE THAN NINE RING MEMBERS. LEOPOLD RUZICKA, De Bilt, near Utrecht, Netherlands, assignor to Societe Anonyme M. Naef & Cie., Geneva, Switzerland, a Swiss Firm. Filed Sept. 9, 1929, Serial No. 391,517, and in Switzerland Oct. 9, 1928. 5 Claims. (Cl. 260—131.)

1. Process of preparing mono-cyclic non-saturated ketones having more than nine ring members which comprises heating a normal straight chain non-saturated dicarboxylic acid salt, said acid having in a normal chain at least eleven carbon atoms, the two carboxylic acid groups being linked to the end carbons thereof.

1,873,155. FERROMAGNETIC MATERIALS. BERNHARD SCHARNOW, Berlin-Charlottenburg, Germany, assignor to Deutsch-Atlantische Telegraphengesellschaft, Berlin, Germany. Filed Apr. 21, 1930, Serial No. 446,168, and in Germany Dec. 10, 1928. 12 Claims. (Cl. 175—21.)

1. The process of producing magnetic alloys of the nickel-iron class with high initial permeability and with reduced variation of permeability in small magnetic fields, characterized by incorporating in the alloy an additional element which does not readily form mixed crystals with the nickel-iron complex, heating the alloy and quenching it from a high temperature so as to obtain a condition of super-saturation of the element in solid solution and thereafter soaking the material at a lower temperature for a substantial period of time, in order to precipitate some of the element out of solution in a finely divided state.

1,873,156. ROLLER SCREEN. MAX SEIDE, Detroit, Mich., assignor to Chamberlin Metal Weatherstrip Co., Detroit, Mich., a Corporation of Michigan. Filed Mar. 21, 1929. Serial No. 348,719. 4 Claims. (Cl. 156—39.)



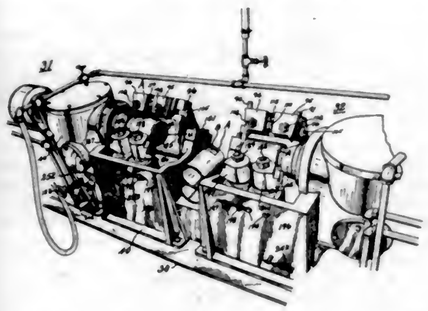
4. A roller screen including a housing and a roll screen therein adapted for mounting on a window frame comprising a pair of vertically positioned metal channel members in spaced relation, with the channels thereof facing each other, the inner flange of each channel member being attacable to the window frame, said housing having end portions attachable respectively to the upper ends of the channel members and extending therebetween and having a longitudinal slot at its rear edge through which the screen may be moved, said channel members further being constructed to provide a supporting means for the opposite side edges of the screen.

1,873,157. AUTOMATIC LATHE. LEO C. SHIPPY and ALVA W. PHELPS, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 10, 1930. Serial No. 434,612. 23 Claims. (Cl. 82—2.)

1. A lathe for machining a tubular body, comprising, in combination, a rotating spindle, a chuck carried by the

spindle for supporting the body with an end free, means for machining an end thereof to provide an end surface normal to the axis of rotation of the chuck, and means for automatically stopping the machine and for causing the chuck to release the body after a machining operation.

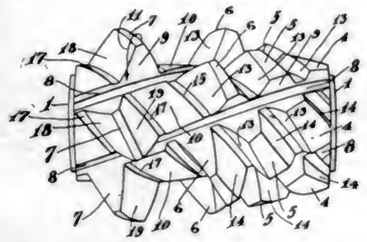
15. A lathe for chamfering the end faces of a tubular workpiece comprising, in combination, a rotating spindle, a chuck on the spindle for supporting the workpiece; tools adapted simultaneously to chamfer the external and internal edges of the end faces of the workpiece; tool carriers pivotally mounted adjacent each end face of the workpiece so that the tools approach the end faces of the body



substantially parallel to the axis of the latter; a gear attached to each tool carrier; driving gears, each cooperating with one of the tool carrier gears, adapted to cause rocking of the tool carriers so that the tools engage the internal and external edges of the end faces of the workpiece; cam means for operating the driving gears; springs normally tending to rock the tool carriers away from the workpiece, said springs being released after the automatically operated gears cease to maintain the tools in cutting engagement; and means for automatically stopping the machine and simultaneously for causing the chuck to release the workpiece after withdrawing of the tools.

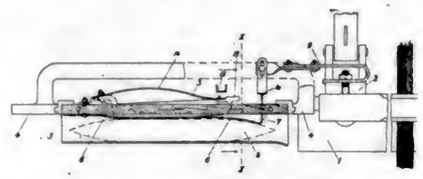
1,873,158. HOBBING CUTTER AND METHOD OF MAKING SAME. OLIVER G. SIMMONS, Lakewood, Ohio. Filed Apr. 22, 1929. Serial No. 357,002. 15 Claims. (Cl. 29—183.)

1. A hob having cutting teeth arranged in a helical row, a tooth at one end of said row being a finishing tooth and the other teeth being roughing teeth smaller than the finishing tooth and gradually decreasing in size toward the opposite end, said roughing teeth having radial relief and the sides of said finishing tooth having helical side relief and top radial relief, the angle of relief of the finishing tooth being small as compared to the angle of relief of the roughing teeth.



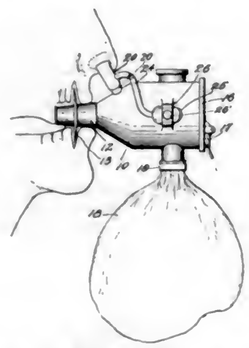
9. A hob having a group of circumferentially spaced finishing teeth at one end, each of which has helicoidal side faces which converge at a small angle toward said end of the hob and cutting edges at the large end thereof, and a group of roughing teeth spaced axially with respect to said group of finishing teeth, said roughing teeth being of a height and thickness less than that of the finishing teeth, a plurality of roughing teeth being alined helically with each finishing tooth, the teeth of each helical row gradually decreasing in height and thickness in the direction away from the finishing teeth, each finishing tooth being spaced from the adjacent roughing tooth alined helically therewith a distance substantially double that between adjacent roughing teeth in the same row.

1,873,159. BOX LOOM. ISIDRO MERRIER Y SOLÉ, Barcelona, Spain. Filed Dec. 20, 1929, Serial No. 415,586, and in Spain Mar. 1, 1929. 4 Claims. (Cl. 139—188.)



1. In a drop-box loom having a box shuttle, and a shuttle box, a resilient retaining piece mounted on the rear end of the shuttle box, for holding an inactive shuttle in positively quiescent position in the shuttle box, a bent arm on the end of the retaining piece, a guide-plate mounted on the loom structure, adapted to hold the retaining piece against the shuttle, and provided with an angular recess for releasing the retaining piece from the shuttle when the latter is brought into operatively active position.

1,873,160. BREATHING APPARATUS. HAROLD V. STURTEVANT, Scranton, Pa. Filed Feb. 8, 1929. Serial No. 338,527. 2 Claims. (Cl. 128—146.)

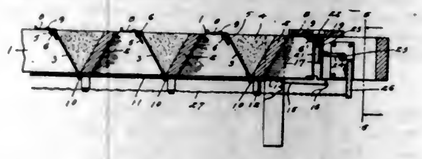


1. A respirator comprising a horizontally disposed cylindrical air chamber having a reduced end portion adapted to form a mouth piece, valve controlled air inlet and discharge passages in the chamber, nostril tubes connected to said chamber, inflatable members surrounding the extremity of said nostril members and manually operated means mounted on the mouth piece for inflating said members to fit the nasal passages of the nostrils.

1,873,161. DUST BARRIER. URBAN TAUCHER, Rock Springs, Wyo. Filed Sept. 20, 1930. Serial No. 483,364. 2 Claims. (Cl. 169—2.)

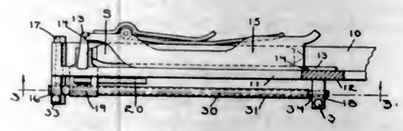
1. A dust barrier apparatus comprising a dust receptacle having a movable wall movable into dust releasing position, a member operatively engaged with the movable wall and engaging the cylinder to hold the movable wall in

closed position, a plunger working within the cylinder, means for holding the plunger retracted, said holding means including means operating under force of an explosion in one direction to release the plunger and prevent-



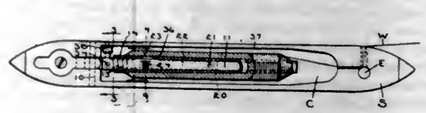
ing release of the plunger under force of an explosion in the opposite direction, the plunger when released disengaging the member from the cylinder, and means for normally urging said plunger toward said member.

1,873,162. PICKER SPINDLE. RICHARD G. TURNER, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 5, 1929. Serial No. 411,941. 7 Claims. (Cl. 139—158.)



1. In a picker spindle for a loom having a picker movable along the lay, a pair of spaced supports, and a pair of telescoping picker spindle forming elements extending along the path of travel of the picker, each element having one end secured to a support and having the other end free to move independently of the other element when expanded by heat.

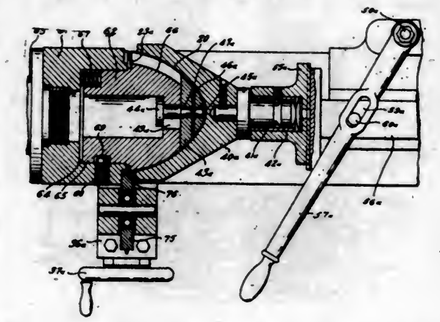
1,873,163. SHUTTLE FOR ELECTRICAL WEFT DETECTORS. RICHARD G. TURNER, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 28, 1929. Serial No. 417,245. 9 Claims. (Cl. 139—205.)



1. In a shuttle having a spindle and a weft carrier thereon having a detector slot, a detector element operative to have a normal indicating movement by movement through the slot when the spindle is in normal position and moved out of the slot and rendered inoperative to have indicating movement when the spindle is in raised angular position with respect to the shuttle.

1,873,164. MANUFACTURE OF SHEET METAL WARE. EDWARD TURNQUIST, Anderson, Ind., assignor to Guide Lamp Corporation, Anderson, Ind., a Corporation of Delaware. Filed Jan. 6, 1930. Serial No. 418,854. 5 Claims. (Cl. 153—9.)

1. Apparatus for forming a relatively wide, shallow, annular bead of a metal shell into a bead defining a relatively narrow deep groove, comprising in combination, companion spinning members, one of which is a wheel having a flange shaped to provide the desired bead, and the other member provides a groove variable in width for receiving said flanged wheel, said other member including two parts, one movable axially relative to the other in order to vary

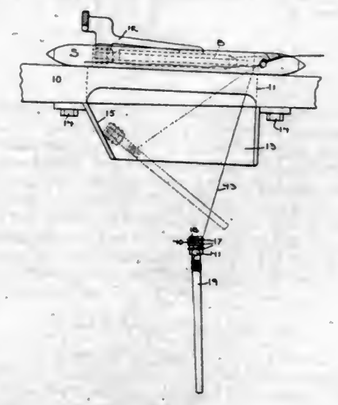


the width of the groove, yet being held in a fixed position to the other part while the metal shells are being interchanged.

1,873,165. METHOD OF AND REAGENT FOR TREATING WET OILS. JOHN CHARLES WALKER, Tallant, Okla., assignor to Empire Oil and Refining Company, Dover, Del., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 250,092. 10 Claims. (Cl. 196—4.)

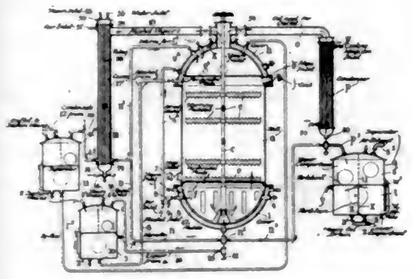
10. The method of treating an oil-water mixture to inhibit the formation of water-in-oil emulsions and resolve any such emulsions previously formed, comprising subjecting the oil-water mixture to the action of a liquid mixture of a hydrocarbon substituted derivative of a polycyclic sulpho aromatic compound and a fractional part of the weight of said compound of a low freezing point liquid hydroxy derivative of a hydrocarbon.

1,873,166. WEFT END CONTROLLER FOR AUTOMATIC LOOMS AND BOBBINS THEREFOR. WALTER H. WAKEFIELD, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 3, 1931. Serial No. 506,427. 9 Claims. (Cl. 139—261.)



1. A bobbin having a weft carrying part and a supporting butt part, and means on the butt part defining with the latter a tapering notch opening transversely of the path of unwinding weft extending along the butt to engage the weft and prevent unwinding over the butt part.

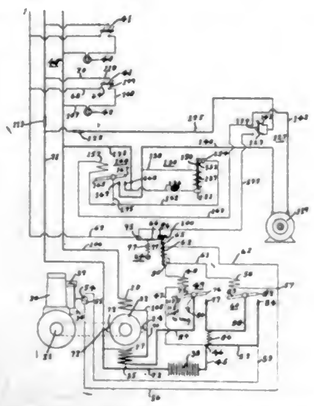
1,873,167. PROCESS OF AND APPARATUS FOR DRYING HOPS AND/OR EXTRACTING OILS AND RESINS THEREFROM. LOUIS WEBER, Langley, England. Filed Oct. 24, 1928, Serial No. 314,745, and in Great Britain Oct. 27, 1927. 10 Claims. (Cl. 87—28.)



1. A process of extracting oils and resins from hops which comprises extracting the oils by subjecting hops to the action of a current of water vapor under a pressure below atmospheric pressure, condensing the vapor and separating the oils from the condensed water; the steps being carried out under vacuum.

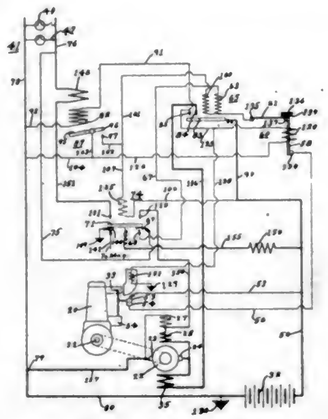
9. Apparatus for extracting oils and resins comprising in combination a still, having spaced apart perforated partitions providing an intermediate space to confine the hops, agitating means in said space, a condenser connected to the outlet of the still, a separator connected to the outlet of the condenser, to receive liquid or condensate therefrom, and means whereby suction may be created in the separator so as to produce sub-atmospheric pressure in the condenser and still; said separator comprising a vessel divided into upper and lower compartments, a vertical partition dividing the lower compartment into two portions connected at their upper ends, a pipe or by-pass connecting the lower part of the upper compartment to the lower part of one of the portions of the lower compartment, and means whereby suction can be created in the upper compartment substantially as and for the purpose described.

1,873,168. ELECTRICAL APPARATUS. WESLEY E. WENDT, Rochester, N. Y., assignor to Delco-Light Company, Rochester, N. Y., a Corporation of Delaware. Filed June 27, 1930. Serial No. 464,262. 8 Claims. (Cl. 290—30.)



8. An electrical generating system comprising in combination, a source of current, a work circuit connected with said source, a second source of current for supplying current to said circuit, circuit connections between the first source and second source for rendering the second source operative to supply current to the work circuit when there is a demand for current by the work circuit, and means for withholding the flow of operating current to said work circuit for a predetermined time interval, said means including a thermostatic switch, and means connected intermediate the said circuit and one of said sources for heating the thermostatic switch.

1,873,169. ELECTRICAL APPARATUS. WESLEY E. WENDT, Rochester, N. Y., assignor to Delco-Light Company, Rochester, N. Y., a Corporation of Delaware. Filed June 30, 1930. Serial No. 464,934. 4 Claims. (Cl. 290—30.)



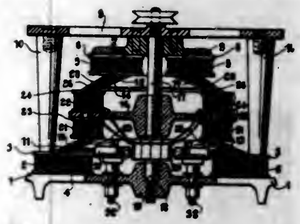
2. An electrical generating system comprising in combination a prime mover, service mains, a storage battery, electrical apparatus adapted to operate as a generator when driven by the prime mover, a starting relay and switch having a magnet winding energized by the battery, a relay having a magnet winding in a circuit controlled by the starting relay and switch and energized by the battery, a main switch having a magnet winding in a circuit controlled by the magnet winding of the relay and energized by the battery, said main switch being adapted to connect the electrical apparatus to said service mains, means for interrupting the flow of current through the magnet winding of the relay, and a coil energized by the electrical apparatus for maintaining the circuit for the magnet winding of the main switch closed as long as there is a demand for current by the service mains.

1,873,170. COLLAR BUTTON. CARROLL M. WILLIAMS, Swissvale, Pa. Filed July 7, 1930. Serial No. 466,248. 2 Claims. (Cl. 24—101.)



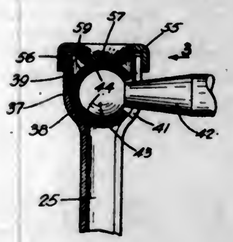
1. A collar button having a conventional base, a shank of conventional contour terminating into a head having conventional shape at the junction of the shank and head, said head being provided with a weighted bluntly pointed extension whereby handling and inserting of the collar button in the button hole may be accomplished with ease, and whereby rolling of the button when dropped is prevented.

1,873,171. ELECTRIC MOTOR. JONNI ZETSCHE and NICOLAUS PETERSEN, Hamburg, Germany, and JAMES SINCLAIR-ROSS, London, England; said Petersen assignor to said Zetsche and said Sinclair-Ross. Filed June 27, 1929, Serial No. 373,988, and in Great Britain Feb. 25, 1929. 4 Claims. (Cl. 172—36.)



1. In an electric motor, in combination, two stator elements spaced apart each comprising a set of separate coils and cores for the same mounted upon a stationary base of magnetic material and magnetically closed upon itself, a rotor element comprising a plurality of sets of separate coils, cores for said coils mounted upon a non-magnetic member arranged to rotate between the two stator elements, the rotor cores being magnetically interconnected at both ends to constitute a single magnetic circuit, and means for supplying an electric current to the stator and rotor coils.

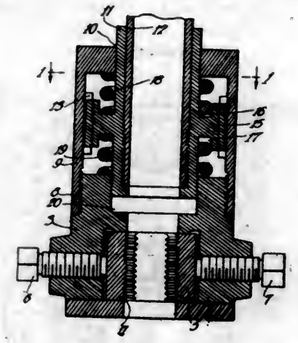
1,873,172. CONNECTING LINK FOR SHOCK ABSORBERS. ROBERT HERMAN AHLERS, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 1, 1930. Serial No. 448,941. 2 Claims. (Cl. 287—90.)



1. A motion transmitting device comprising, in combination, a tubular member formed from sheet metal and having an open, longitudinal seam; an enlarged tubular end on said member, having a side opening, said enlarged end forming a curved, annular shoulder; a ball end stub shaft extending into the enlarged tubular end through its side opening; bearing material surrounding the ball end of the stub shaft; and a cap screw-threaded about the enlarged end of the tubular member, having a central, concaved portion forming a socket which engages the bearing material on one side of the ball end and urges said ball end with its bearing material into proper position upon the shoulder within the tubular member, said cap acting as a clamp about the open seamed tubular member substantially preventing the spreading thereof.

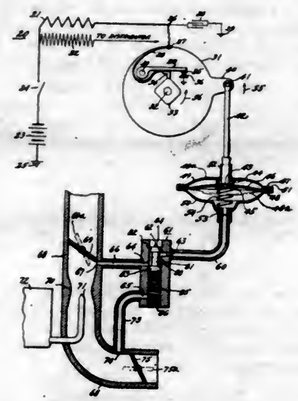
1,873,173. CUSHION DIAMOND DRILL CHUCK. OLOF B. ANDERSON, Marquette, Mich., assignor to E. J. Longyear Manufacturing Co., Minneapolis, Minn., a Corporation of Delaware. Filed Oct. 5, 1929. Serial No. 397,537. 10 Claims. (Cl. 279—1.)

1. Cushioning means for drills and the like comprising a chuck, a spindle, a sleeve carried by said chuck, a sleeve on said spindle, said sleeves having longitudinal running interengaging portions preventing rotative movement there-



between, said sleeves also having members limiting relative axial movement therebetween, and cushioning means opposing said axial movement in both directions.

1,873,174. IGNITION APPARATUS. JAMES L. ARTHUR, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Dec. 11, 1931. Serial No. 580,279. 2 Claims. (Cl. 123—117.)

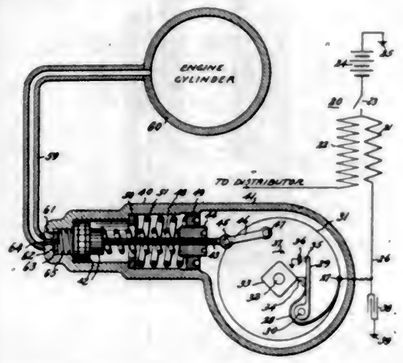


1. Ignition apparatus for internal combustion engines comprising, in combination, a carburetor having an air choke valve and fuel throttle valve, a circuit interrupter, an engine driven cam for operating the interrupter, a device responsive to engine suction for controlling the angular relation between the interrupter and cam in order to control the timing of the ignition, and means responsive to closing the choke valve of the carburetor and operated by suction in the carburetor between said valves for preventing the operation of the suction device to control the ignition timing.

1,873,175. IGNITION APPARATUS. JAMES L. ARTHUR, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Dec. 11, 1931. Serial No. 580,278. 2 Claims. (Cl. 123—117.)

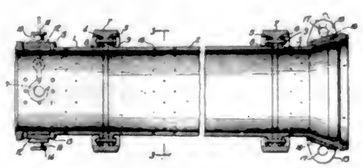
1. Ignition apparatus for internal combustion engines comprising, in combination, an ignition circuit interrupter, an engine driven cam for operating the interrupter, and means responsive to explosion pressures in an engine

cylinder for controlling the angular relation between the cam and interrupter and comprising a member providing a chamber communicating with the engine cylinder, a displacement member in said chamber, a spring continual-



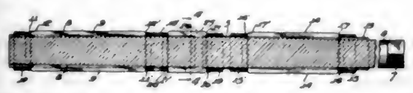
ly opposing movement of the displacement member in a direction to retard the timing of the interrupter, and a spring normally non-operative to oppose retard of timing, but operative when the explosion pressure reaches the detonation point to retard the timing.

1,873,176. FLASK. CLARENCE D. BABB, Birmingham, Ala., assignor to Sand Spun Patents Corporation, Wilmington, Del., a Corporation of Delaware. Filed Sept. 28, 1931. Serial No. 564,689. 8 Claims. (Cl. 22—96.)



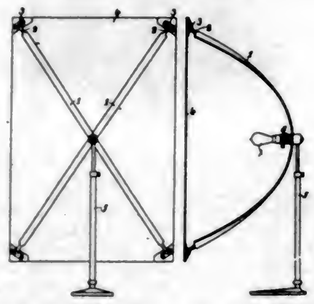
1. A flask for use in centrifugal casting machines, comprising an intermediate and end sections, and cylindrical tread rings connecting said sections in end-to-end relationship, the outer surface of said rings constituting supporting treads.

1,873,177. REAMER. LAWRENCE O. BEARD, Lancaster, Pa. Filed Mar. 25, 1931. Serial No. 525,273. 1 Claim. (Cl. 77—75.5.)



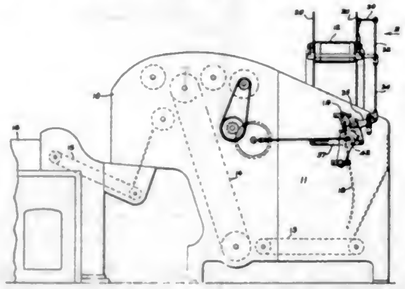
A reamer for truing opposing piston pin boles and the like comprising a shank having longitudinal slots therein, a set of forward pilot blades and a set of rear pilot blades mounted in said slots, a set of cutting blades mounted in said slots adjacent the opposing ends of the forward and rear pilot blades, the bottoms of said slots being inclined relatively and uniformly to the axis of the reamer to permit uniform expansion and contraction of the blades when the latter are moved longitudinally of said slots, said cutting blades being in longitudinal alinement with said pilot blades, means common to the front pilot blades and the cutting blades for moving the same in said slots, and independent means for moving the rear pilot blades in said slots, the relative length and proximity of the cutter blades with respect to the pilot blades being such that the rear pilot blades will function to guide the cutting blades through both holes being reamed.

1,873,178. SIGN HOLDER. EMIL BERNSTEIN, Kosice, Czechoslovakia. Filed Nov. 3, 1930, Serial No. 493,192, and in Czechoslovakia Nov. 15, 1929. 4 Claims. (Cl. 40—125.)



1. A device for exhibiting announcement sheets, such as placards, comprising eyes adapted to be secured to the extremities of the sheet, and resilient struts diverging from a common center adapted to engage releasably in the said eyes and when so engaging to be bent to a considerable curvature concaved to the back of the sheet and to keep the sheet under tension in divergent directions.

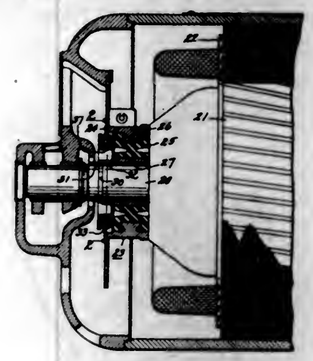
1,873,179. COTTON DISTRIBUTING MECHANISM. THOMPSON BOYD, Whitinsville, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Mar. 3, 1931. Serial No. 519,885. 1 Claim. (Cl. 19—69.)



In cotton distributing mechanism, a hopper, a conveyor belt, a deflecting gate, an actuating member, means to give said actuating member regularly repeated actuating movements, a feeler mounted to rock in the hopper and positioned in accordance with the supply of cotton in said hopper, a movable supporting device mechanically connected to said gate, an indicating plate pivoted on said supporting device and having spaced lugs thereon, a pivoted arm connected to said feeler and mounted to swing with said feeler and having additional spaced lugs thereon, and a depending finger pivoted on said arm and freely swinging between the lugs on said arm, said finger being alternately engaged and moved by the lugs on said arm as said arm is rocked in one direction or the other by said feeler, and said finger alternately engaging the lugs on said indicating plate and being effective to reverse the position of said plate when engaged by a lug

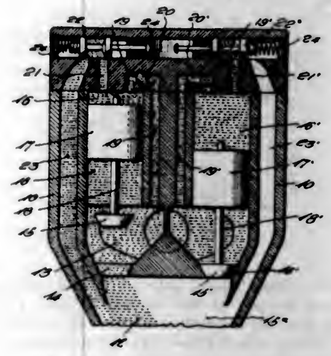
on said arm and to thereby cause a portion of said indicating plate to be engaged by said actuating member and to be moved thereby in a selected direction, together with said movable supporting device and said gate.

1,873,180. CENTRIFUGAL SWITCH. ZERBE C. BRADFORD, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 18, 1932. Serial No. 587,197. 4 Claims. (Cl. 172—279.)



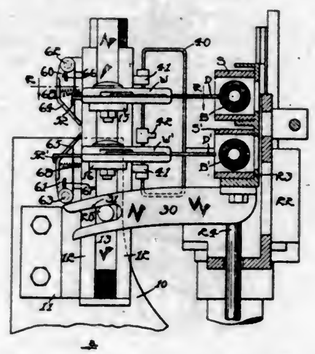
1. A circuit controlling device comprising, in combination a shaft, an annular row of contacts carried thereby, an expansible annular band of coiled wire of good conducting material coaxial with the shaft and engageable with the contacts, an expansible annular band of coiled spring wire within the first band, and weight members cooperating with the second band.

1,873,181. CLOSET FLUSHING DEVICE. CHARLES WATKINS BROWN, San Diego, Calif. Filed Aug. 8, 1931. Serial No. 555,977. 6 Claims. (Cl. 137—93.)



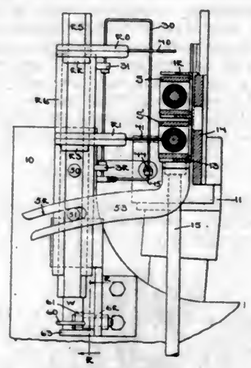
1. A no-tank closet flushing device comprising two flush valves, each valve having an independently adjustable means for definitely controlling the amounts of water discharged from the respective valves and a single manual means operable to open one valve when one movement characteristic is given the manual means and to open the other valve when a different movement characteristic is given the manual means.

1,873,182. WEFT DETECTING MECHANISM FOR DOUBLE SHUTTLE LOOMS. CLYDE E. BROWN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed May 13, 1931. Serial No. 537,090. 7 Claims. (Cl. 139—233.)



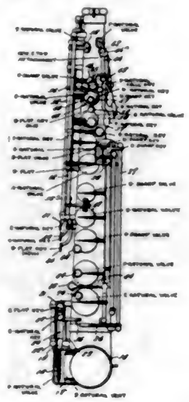
1. In a loom having a pair of shuttle boxes, means to shift said boxes and a weft detecting device associated with each shuttle box, in combination, a separate shield for each detecting device effective to render its associated device inoperative when the associated shuttle is becoming inactive, and an additional device effective to hold said detecting device inoperative until the associated shuttle is about to become again active.

1,873,183. WEFT DETECTING MECHANISM FOR PICK AND PICK LOOMS. CLYDE E. BROWN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed May 1, 1931. Serial No. 534,364. 9 Claims. (Cl. 139—233.)



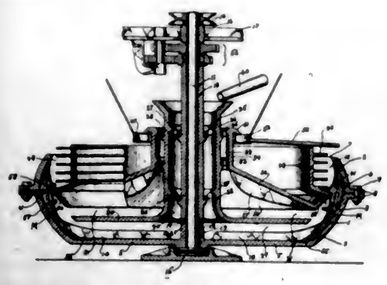
1. In a weft replenishing, double-shuttle pick-and-pick loom having a lay, a pair of shifting shuttle boxes at each end of said lay, and means to shift said boxes after every pick of the loom, in combination, a pair of weft detecting devices at one end of the lay mounted on a movable support and vertically spaced apart a distance substantially equal to twice the vertical distance from center to center of a pair of shuttle boxes, means normally positioning said support and detecting devices as a unit vertically so that one or the other of said devices is opposite the shuttle about to become active, and means to cause said detecting devices and shuttle boxes to move vertically in unison as the boxes are shifted.

1,873,184. SAXOPHONE. FULVIO CALVANI, Newark, N. J. Filed Oct. 3, 1931. Serial No. 566,746. 14 Claims. (Cl. 84—385.)



2. A saxophone comprising a tubular body including a conventional bell, the bend of said bell being formed at one side with a D-natural vent, a pair of spaced bearing posts on said body, a shaft mounted for oscillation between said posts, a laterally directed finger carried by the intermediate portion of said shaft and terminating in a lug, a spring anchored on one of said posts, and connected at its free end with said shaft, a rigid arm on said shaft, a D-natural valve carried by said arm and co-operable with said D-natural vent, and an elongated shaft mounted on an opposite side of the tubular body for limited oscillation and formed at its upper end with a C-sharp key and provided at its lower end with a laterally directed curved arm whose free end portion is engageable with said lug, said tubing being further provided on a side opposite to said D-natural vent with a C-sharp vent, a third shaft mounted for oscillation on the tubing within the vicinity of said vent, a rigid arm carried by said last-named shaft, a C-sharp valve on said arm co-operable with said C-sharp vent, a spring for normally opening said C-sharp valve, a lever arm carried by said third shaft and terminating in a C-natural key, said lever overlying and bearing upon the adjacent operating finger, whereby when said C-natural key is depressed, both valves will be simultaneously closed and when said C-sharp key is depressed, the D-natural valve alone will be closed.

1,873,185. CENTRIFUGE. LOUIS F. CLARK, Milwaukee, Wis. Filed Dec. 10, 1930. Serial No. 501,204. 27 Claims. (Cl. 233—7.)



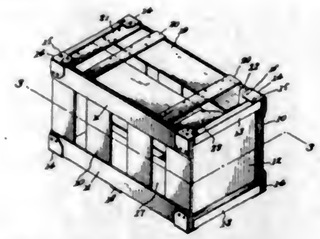
1. In a device for separating suspended solids from liquids, a bowl structure having an inlet for solids in suspension in liquid and an outlet for the liquid from which the solids have been separated, an internal structure within the bowl, an outlet for the solids between the bowl and the internal structure, means to rotate the structures, and separating means separate and distinct from the suspended solids selectively closing the said outlet for the solids against the liquids when the structures are rotated.

1,873,186. SIDE-LIGHT, SIDE-SCUTTLE OR PORT OPENING FOR SHIPS. HAROLD ARTHUR CROCKER, London, England, assignor to J. Stone & Company Limited, Deptford, England, a Corporation of Great Britain. Filed June 27, 1931, Serial No. 547,399, and in Great Britain Dec. 5, 1930. 7 Claims. (Cl. 114—178.)



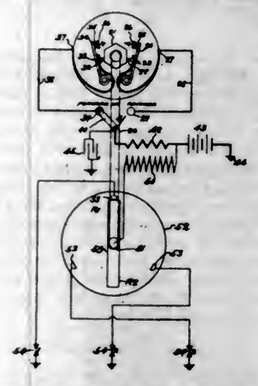
1. Swivelling ships-light comprising a frame, a sash, diametral pivots on said sash, pivot-guides in the frame and perpendicular to the plane thereof, and cam-means for adjusting the sash in the guides from or towards the frame and consisting of rotatable plates slidable transversely in the frame and having the diametral sash pivots journalled therein.

1,873,187. CRATE. JOHN JAMES DAHLSTROM, New Orleans, La. Filed June 30, 1931. Serial No. 547,983. 4 Claims. (Cl. 217—48.)



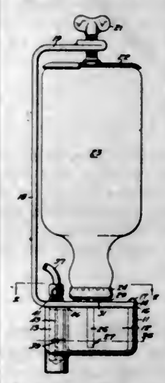
1. A crate comprising a pair of sides, a pair of ends, angle plates secured to the corners of said sides, and projecting inwardly therefrom at the top and bottom of the crate, pivots securing the inwardly projecting portions of the angle plates to the adjacent end walls for pivotally connecting the same to the sides, said angle plates being of sufficient width to project inwardly beyond the sides and ends of the crate and provide inwardly and oppositely facing shoulders at the top and bottom of the crate, a bottom removably fitting in the crate between the sides and ends thereof, a locking cleat carried across the underside of the bottom and projecting beyond the lateral edges thereof for engagement beneath the lower edges of said sides upon the flexing outwardly thereof to lock the bottom against the lower shoulders in the crate, a cover removably fitting in the top of the crate with one end against the adjacent shoulders thereof and having bevelled corners at its opposite ends to escape the shoulders at the opposite end of the crate, a locking slat slidably disposed on the bevelled cornered end of the top and removably engaging beneath the adjacent shoulders of the crate, and anchoring means disposed between the cover and the locking slat for holding the same to the cover.

1,873,188. IGNITION APPARATUS. CHARLES HALL DAVIS, Jr., Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Sept. 14, 1931. Serial No. 562,657. 1 Claim. (Cl. 123—148.)



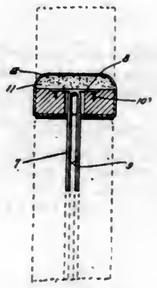
Ignition apparatus for a reversible internal combustion engine comprising, in combination, an ignition timer including an interrupter for forward rotation of the engine and an interrupter for reverse rotation of the engine, a single cam for operating the interruptera, a distributor comprising a head and rotor driven with the cam and so located as to distribute properly in conjunction with either interrupter, a coil having a secondary connected with the distributor and having a primary, a current source, and means for selectively connecting the primary with the current source through either interrupter.

1,873,189. LUBRICATOR. DELOS W. DAVISSON and FERDINAND G. WELKE, San Francisco, Calif., assignors to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Jan. 22, 1930. Serial No. 422,554. 4 Claims. (Cl. 123—196.)



1. An upper cylinder lubricator comprising a body having a chamber adapted to be supplied with oil, a vacuum line for withdrawing oil from the chamber, an oil container separable from the body, a puncturable cap on the container, two conduits on the body with means for puncturing the cap, one of said conduits extending into the chamber further than the other conduit.

1,873,190. ARMREST. JOSEPH F. DOLLER, St. Louis, Mo. Filed May 16, 1931. Serial No. 537,933. 1 Claim. (Cl. 155—198.)



An arm rest of the class described including, in combination an elongated block having openings therein, brackets, each bracket comprising an inverted U-shaped portion with a plate across and joined to the bight thereof, said U-shaped portion extending down through the openings and the plates being fastened to the upper surface of the block, padding on top of the block, and covering extending over the padding and against the bottom side of the block, said covering at its bottom portion being provided with openings registering with the openings in the block.

1,873,191. INTERCHANGEABLE ELECTRICAL SOCKET. WILLIAM H. FABERY, Schenectady, N. Y., assignor to Weber Electric Company, Schenectady, N. Y., a Corporation of New York. Filed Nov. 5, 1927. Serial No. 231,349. 11 Claims. (Cl. 173—388.)

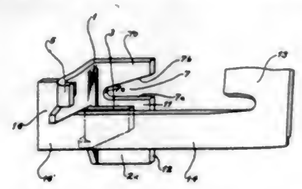


1. An electrical fixture comprising a support, springs arms secured thereto and having offset portions with outwardly flared ends, screws carried by said offset portions, a socket member having grooves for the reception of said arms, shoulders in said grooves behind which said offset portions and screws are adapted to engage, and said shoulders having grooves for the passage of said screws.

1,873,192. RAIL ANCHOR. ALBERT F. FIFIELD, St. Catharines, Ontario, Canada, assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 24, 1931. Serial No. 558,862. 8 Claims. (Cl. 238—324.)

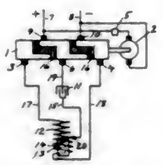
1. An anchor of the Vaughan two-piece type comprising a yoke and a clamp, said clamp being of resilient sheet metal and comprising a back plate portion and three ap-

proximately parallel relatively spaced vertical flanges extending from the same side of the said back portion, said



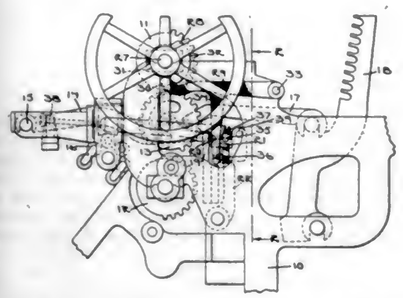
flanges providing alternately disposed upper, lower and upper jaws, respectively adapted to clamp a rail base flange and resiliently held thereon by said yoke.

1,873,193. SYSTEM FOR RECIPROCATING ELECTRIC MOTORS. PER FRENELL, Gottenborg, Sweden. Filed Apr. 7, 1928, Serial No. 268,265, and in Sweden Dec. 24, 1926. 12 Claims. (Cl. 172—240.)



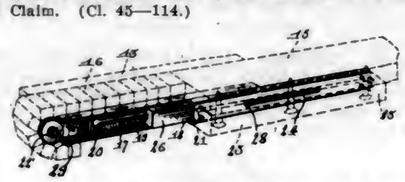
1. In a system wherein there is an electric motor comprising a reciprocating armature, a solenoid actuating said armature to move in one direction, a second solenoid actuating said armature to move in the opposite direction, means for supplying electric current alternately to said solenoids, a condenser in series with that solenoid which for the period is energized, and means for periodically reversing the current in the condenser, thereby causing reciprocation of the said armature.

1,873,194. LOCK KNIFE FOR LOOMS. ALBERT A. GORDON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 23, 1931. Serial No. 510,741. 10 Claims. (Cl. 139—77.)



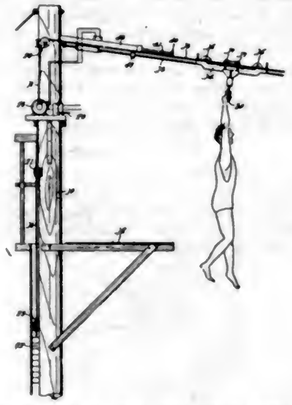
1. In a loom having upper and lower rotating actuator cylinder gears, vibrator levers movable to be operatively related to one or the other of said gears at a time, a lock knife to engage the vibrator levers and limit movement of the latter, a cam rotating with the upper cylinder gear, a lever engaging and rocked by the cam, a frame for the lock knife pivotally mounted on the loom and having direct engagement with a part of the lever, and separate spaced pivotal supports for the frame and lever which is rocked by the cam.

1,873,195. TABLE. NAPOLÉON GIARD, Rougemont, Quebec, Canada. Filed June 17, 1929. Serial No. 371,589. 1 Claim. (Cl. 45—114.)



A slide unit for extension tables, comprising a channel shaped guide having a web and a pair of right angular parallel facing flanges, the web of said guide having a longitudinal slot enlarged at one end, a complementary channel guide similar to the first and having flanges directed against the flanges of said first guide, said complementary guide having a longitudinal slot in the web thereof, a central slide bar fitting in the rectangular space defined inside the associated guides, screws secured at both ends of the slide bar, and on opposed faces thereof, the shanks of which screws extend through the slots provided in the guide webs, and means to secure said slide to an extension table whereby one guide will be attached to a stationary part of the table and other to a movable member of said extension table.

1,873,196. BATHING TROLLEY. CARL C. HARRIS and HAROLD W. CADWELL, Orange, Mass.; said Cadwell assignor to said Harris. Filed Jan. 8, 1932. Serial No. 585,588. 15 Claims. (Cl. 104—112.)

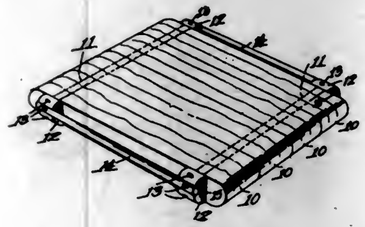


1. In a bathing trolley, the combination with a slantingly supported stationary cable, of a trolley thereon adapted to run on the cable, a handle on the trolley for the support of the bather, a cable at the side of the stationary cable, an arm projecting from the trolley, and means thereon for engaging the second cable and steadying the trolley while it is in motion.

1,873,197. SWIMMING FLOAT. CARL C. HARRIS, Orange, Mass. Filed Oct. 9, 1931. Serial No. 567,927. 2 Claims. (Cl. 9—11.)

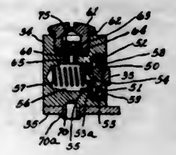
1. As an article of manufacture, a swimming float or the like consisting of a series of boards of balsa wood in contact with each other and the side ones constituting the

sides of the float, cross rods extending through them by which they are secured together to form a single plank having a uniform surface, side blocks on the sides of said



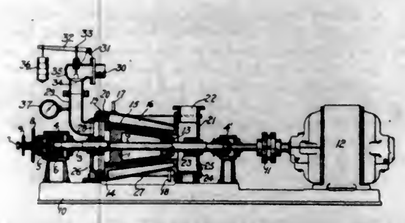
float near the ends and secured to the cross rods, and longitudinal rods or grips mounted on the outer surfaces of said side blocks and spaced from the sides of the float.

1,873,198. CIRCUIT INTERRUPTER. HERMAN L. HARTZELL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Oct. 2, 1931. Serial No. 566,416. 3 Claims. (Cl. 200—30.)



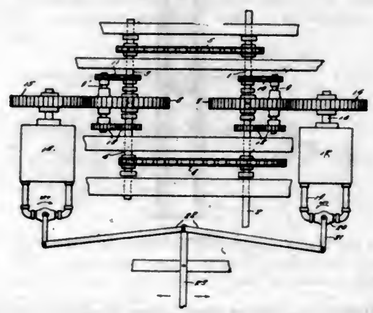
1. A circuit interrupter comprising, in combination, a pair of cooperating contacts, means for separating the contacts, a spring for closing the contacts and a shock absorbing support for one of the contacts, said support comprising a liquid reservoir, a cylinder member communicating therewith, a piston member within the cylinder, one of said members carrying one of the contacts and movable in a direction to force liquid from the cylinder into the reservoir when the contact carried by said member is struck by the other contact, and means for moving said member in the opposite direction before the contacts are separated.

1,873,199. JORDAN ENGINE. JOHN D. HASKELL, Fulton, N. Y., assignor to Dilts Machine Works, Inc., Fulton, N. Y., a Corporation of New York. Filed Oct. 16, 1931. Serial No. 569,292. 3 Claims. (Cl. 92—27.)



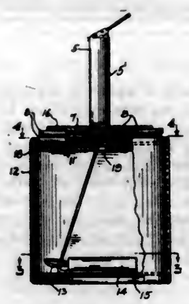
1. In a machine of the character described, an external conical shell having internal blades and separable end portions having inlet and outlet openings, said shell having a chamber surrounding the same provided with inlet and outlet openings, a bladed conical plug, a shaft carrying the plug, means for adjusting the shaft lengthwise, said shell and said end portions thereof having surfaces of corresponding extent and shape at either end, spacer rings adapted to be arranged at either end of the shell to compensate for wear of the shell and plug, and the said rings being removable.

1,873,200. POWER TRANSMISSION. LUDVIG J. HEDSTROM, Kansas City, Kans. Filed Jan. 20, 1932. Serial No. 587,794. 2 Claims. (Cl. 74—84.)



1. A transmission device comprising a drive shaft, a driven shaft in alinement therewith, a second pair of alined shafts, an idle gear rotatably supported by the adjacent ends of the shafts of each pair, a stub shaft carried by each idle gear, gears connecting one of the stub shafts and driven shaft, gears connecting the other stub shaft with a shaft of the second pair of shafts, means for driving one of the stub shafts from the power shaft, means driving the other stub shaft from one of the second mentioned shafts, means for driving the last-mentioned shaft from the power shaft, means for driving the driven shaft from the second one of the second pair of shafts, a gear meshing with each idle gear, a pump associated with each of said gears, each pump having its inlet connected with its outlet, a valve in each connection, a lever for closing and opening the valves, said lever opening one valve and closing the other and vice versa.

1,873,201. PYROTECHNIC DISPLAY. RAY C. HITT, Seattle, Wash. Filed Nov. 13, 1931. Serial No. 574,895. 6 Claims. (Cl. 102—20.)



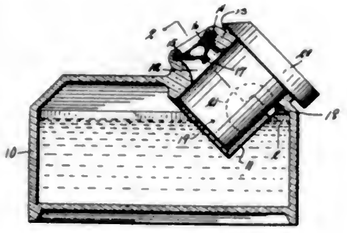
4. A pyrotechnic display comprising a hollow member having a top, a plurality of sound producing members arranged on said top, means adapted to ignite said members connected in series, a collar extending over the said members, apparatus adapted to produce a whistling sound when ignited supported by said collar, means adapted to ignite said structure and contacting with said first mentioned means.

1,873,202. MANUFACTURE OF FIRECRACKERS. THOMAS G. HITT, Seattle, Wash. Filed Jan. 12, 1931. Serial No. 508,218. 5 Claims. (Cl. 102—22.)



1. Method of making firecrackers consisting in inserting a flexible bag in a tube to a distance short of the bottom of said tube, and filling said bag with an explosive material for forcing the sides of the bag against the sides of the tube with pressure sufficient to hold the bag in position.

1,873,203. INKSTAND AND BOTTLE. THOMAS D. HOPKINS, Montgomery, Ala. Filed Jan. 6, 1932. Serial No. 585,103. 2 Claims. (Cl. 120—69.)



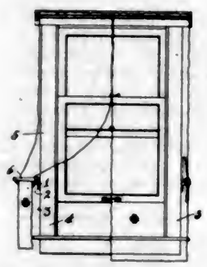
1. In an ink stand, a reservoir, a cylindrical ink well extending down into the reservoir at an angle to the longitudinal axis thereof, the wall of said well having an opening below the top of the reservoir, and an opposite pen filling opening above the top of the reservoir, a stopper manually rotatable within the neck of the well and having a chamber therein, open upon the side of the stopper, the chamber being brought into registry with the opening leading into the reservoir or with the opposite opening upon a rotation of the stopper.

1,873,204. FRAME UNIT FOR SCAFFOLDING, SHORINGS, CONCRETE FORMS, AND THE LIKE. THOMAS F. KERLIN, Solvay, N. Y. Filed July 14, 1931. Serial No. 550,727. 7 Claims. (Cl. 304—27.)

1. A frame unit for scaffolding, shorings, forms and the like comprising a main body forming with a lengthwise slot and a tongue at one end of the body in line with the slot, and a T shaped coupling piece interchangeably mountable on the end of the body and on the sides thereof, said coupling piece having its leg bifurcated for receiving the tongue, and its head being provided with openings for receiving clamping means when the coupling piece is arranged with its head against a side face of the body, one of said openings being arranged to come in line with the slot.



1,873,205. CURTAIN FIXTURE. LESTER C. KIENZLE, Syracuse, N. Y. Filed Sept. 10, 1931. Serial No. 562,116. 7 Claims. (Cl. 156—33.)

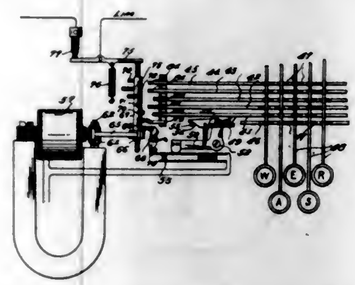


1. A curtain fixture of the class described, comprising a base plate and a curtain holding arm projecting from the base plate at an oblique angle, the base plate being mountable upon the front face of the window frame, or an upright outer edge face thereof, and the arm being arranged to project at an oblique angle relatively to the face of the frame when mounted on one edge face of the frame, and to project at substantially the same oblique angle when mounted on the front face of the frame.

1,873,206. SELECTIVE SYSTEM AND APPARATUS. EDWARD E. KLEINSCHMIDT, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 16, 1928, Serial No. 270,388. Renewed Oct. 19, 1931. 29 Claims. (Cl. 178—33.)

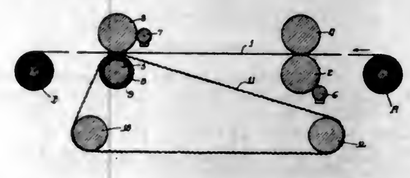
1. In a telegraph transmitter, a rotatable distributor, an electro-magnetic means for operating said distributor, said electro-magnetic means being normally open circuited,

a plurality of key levers, permutation bars associated with said key levers for selectively operating said distributor in accordance with the key lever operated and a permutation



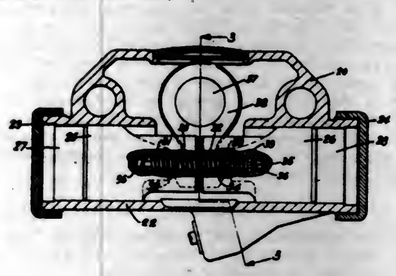
bar common to all of said key levers and operative in response to the operation of any one of said key levers for closing the circuit of said electro-magnetic means.

1,873,207. METHOD AND APPARATUS FOR PREVENTING OFFSET IN PRINTING. THEODORE E. KNOWLTON, New York, N. Y. Filed July 20, 1931. Serial No. 551,917. 20 Claims. (Cl. 101—417.)



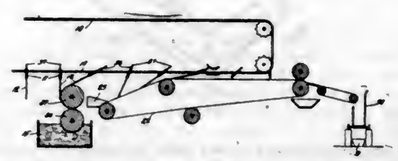
8. A method of preventing offset in printing characterized by printing a blank upon one face, supporting said blank on a platen with the printed side in contact with a finely meshed metal layer of screening, supporting said layer of screening on a granular surfaced layer, and printing the reverse side while in contact with the layer of screening.

1,873,208. SHOCK ABSORBER. BAYARD D. KUNKLE and CARL H. KINDL, Dayton, Ohio, assignors to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 19, 1931. Serial No. 569,750. 9 Claims. (Cl. 188—88.)



1. A shock absorber comprising, in combination, a casing providing a cylinder; two pistons in said cylinder; an actuator for said pistons oscillatably supported within said casing; a recess in the end surface of each piston, each recess being interiorly threaded, the recess of one piston aligning with the recess of the other piston; and a coil spring having each end threadedly engaging a recess of a respective piston, said spring yieldably urging the pistons against the actuator.

1,873,209. METHOD OF AND MACHINE FOR COATING ROOFING UNITS. CHESTER R. MACDONALD, Monroe, Mich., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 13, 1926, Serial No. 94,377. Renewed Apr. 16, 1930. 16 Claims. (Cl. 91—68.)



1. The method of applying coating material to a roofing unit, which comprises suspending the unit and drawing a portion of a face thereof over and in contact with adhesive coating material.

11. The method of treating roofing elements, which comprises applying vertical stripes of molten asphalt to a face thereof, applying molten asphalt to cover the entire butt portion of each element while the material in said stripes is still molten, advancing the elements after the asphalt applications, and bringing a moving body of loose grit into contact with the coated areas of the advancing elements.

1,873,210. PRODUCTION OF SODIUM ALUMINUM FLUORIDES. JOHN E. MORROW, Oakmont, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 30, 1927. Serial No. 248,758. 15 Claims. (Cl. 23—88.)

1. The process of making sodium aluminum fluoride comprising digesting together sodium fluoride and aluminum hydrate at temperatures above 75° C.

15. The process of making a sodium aluminum fluoride comprising digesting together sodium fluoride and aluminum hydrate at a temperature of approximately 175° C., said hydrate being in excess of the stoichiometric proportion required to convert the sodium fluoride into Na_3AlF_6, neutralizing the caustic alkali formed and separating the solid sodium aluminum fluoride and the excess aluminum hydrate from the solution.

1,873,211. GAME. RAYMOND F. NEKUDA, Kansas City, Mo. Filed July 15, 1931. Serial No. 550,989. 1 Claim. (Cl. 273—102.)

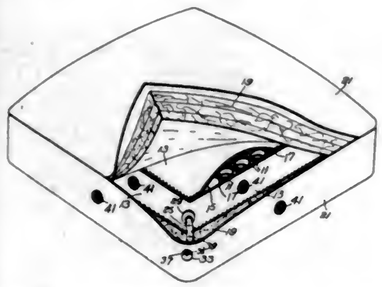


In a game of the class described, a ring formed of rope, a tubular member fitting over each end of the rope and having its outer end closed, a rivet passing through the closed ends for connecting the tubular members together.

1,873,212. CUSHION. BENJAMIN OSTROFF, Gardner, Mass. Filed Oct. 22, 1931. Serial No. 570,302. 8 Claims. (Cl. 155—179.)

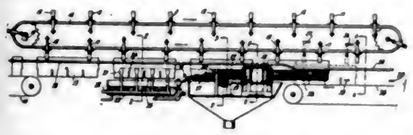
1. A pillow cushion having an internal resilient unit comprising a series of springs arranged side by side to give said unit as a whole a definite, characteristics but yieldable and more or less flexible form, a substantially air-tight, flexible covering enclosing said unit and pro-

viding an air chamber within the same, said chamber having a vent opening, an outer covering and padding surrounding said unit and providing a cushioning resiliency at both the top and bottom of said resilient unit, a



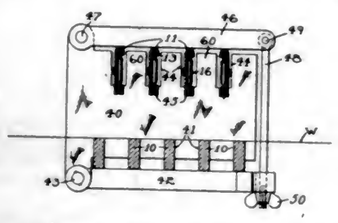
vent opening provided in the outer covering, and a flexible air pipe extending from said vent opening in the covering for said resilient unit to the vent opening in the outer covering.

1,873,213. METHOD OF AND APPARATUS FOR FINISHING ROOFING ELEMENTS. FREDERICK C. OVERBURY, Hillsdale, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 27, 1927. Serial No. 242,687. 6 Claims. (Cl. 91—68.)



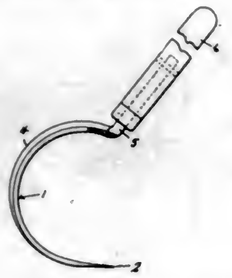
1. The method of treating a series of individual roofing elements, which comprises advancing the elements in succession edgewise in an upright position, with butt edge down, applying liquid coating to a face and the butt edges of each element while so advancing, projecting granular surfacing matter against the coated face, and pressing granular matter against the coated butt edge.

1,873,214. SEPARATOR FOR ELECTRICAL WARP STOP MOTIONS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed June 3, 1931. Serial No. 541,849. 5 Claims. (Cl. 139—358.)



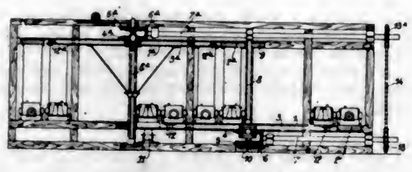
1. In an electrical warp stop motion having an electric contact bar having a live surface on one side thereof and having grounded surfaces above and below the live surface, a separator having a body provided with a slot to receive the contact bar, the separator engaging the bar along the grounded surface only, the slot adjacent the live surface being sufficiently wide to keep the body out of contact with the live surface.

1,873,215. GARDEN IMPLEMENT. VALDIS M. PYATT, Great Falls, Mont. Filed Jan. 29, 1932. Serial No. 589,748. 1 Claim. (Cl. 97—61.)



A garden implement comprising an elongated, arcuate metallic blade of spring material, terminating, at one end, in a point, the longitudinal marginal portions of said blade being sharpened to provide cutting edges from the point to the other end thereof, a shank formed integrally with the other end of the blade and extending from said blade at an angle relative thereto, and a reinforcing rib formed integrally with the outer face or convex side of the blade and merging, at one end, with the shank, said rib progressively decreasing in size toward its other end and merging with the blade at said other end, said blade gradually increasing in width from the pointed end to the shank end and the inner face of the blade being plain and the rib being rounded and a handle mounted on the shank.

1,873,216. AMUSEMENT APPARATUS. ROBERT RAPEIN, Chemaze, Mayenne, France, assignor to Société à Responsabilité Limitée: Consortium General de l'Industrie Foraine, Paris, France. Filed May 11, 1931, Serial No. 536,601, and in France Dec. 26, 1930. 5 Claims. (Cl. 272—37.)



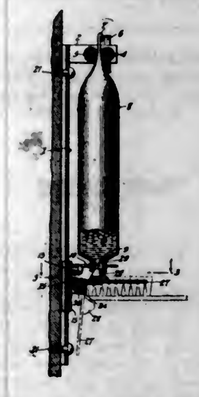
1. In an amusement apparatus, a plate rotating about a vertical shaft, a second plate also rotating about a vertical shaft different from the preceding one and so arranged that a portion of this second plate is above a portion of the first plate, seats secured on the first plate, seats hung below the second plate so that the path of these seats are in the same plane as the path of the seats of the first plate, means for causing each of the plates to rotate, and means for rendering the movements of the plates dependent on each other and for thus avoiding any possibility of collision at the crossing points of the paths of the seats.

1,873,217. COLLAPSIBLE TUBE SQUEEZER. THOMAS H. REID, Brooklyn, N. Y. Filed Feb. 17, 1931. Serial No. 516,478. 3 Claims. (Cl. 221—60.)

1. A squeezer for collapsible tubes including a base having a pressed up center provided with a plurality of slots, a slide formed with means extending through said slots and slidingly interlocking with said pressed up center, a clamp carried by said slide and provided with means for gripping the neck of a collapsible tube for

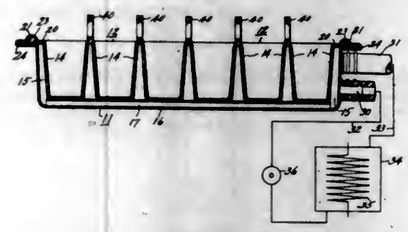
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holding the tube in a predetermined position at the lower end in respect to said base, a pair of brackets extending from said base at the upper end and a pair of supporting,



lifting and squeezing rollers carried by said bracket, said rollers being adapted to engage said tube for squeezing the same and also raising the same.

1,873,218. FREEZING TRAY. ALVA W. SCOTT, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 25, 1931. Serial No. 577,237. 6 Claims. (Cl. 62—108.5.)



1. A freezing container comprising: a metal tray, a flexible non-metallic tray inserted therein but having a flexible wall thereof spaced from the adjacent wall of said metal tray to provide a circulating space for a cooling medium, and a cooling medium in said circulating space.

1,873,219. BUCKLE. WILLIAM DANA SEIBERT, Brooklyn, N. Y. Filed Jan. 5, 1932. Serial No. 584,833. 4 Claims. (Cl. 24—196.)



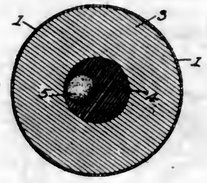
1. In a buckle, the combination of a cross bar, having sides bent at right angles thereto, diagonally bent portions terminating in a looped element so formed and positioned as to be used for operating the buckle, and a link having its ends formed into eyes loosely engaging the aforesaid sides of the buckle to permit of insertion of a belt or strap between the link and the cross bar and adapted to frictionally but releasably engage the belt or strap to fasten same in an engaged position or to release same by a swinging movement of the buckle.

1,873,220. MACHINE FOR GRADING GLOBULAR ARTICLES. OGDEN S. SELLS, Hoopeston, Ill., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Filed Feb. 24, 1925. Serial No. 11,206. 11 Claims. (Cl. 209—289.)



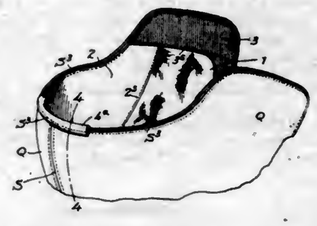
6. An apparatus for grading peas comprising a series of pairs of grading screen members each pair positioned in tandem relation, each pair lying in a horizontal plane and with one of each pair lying on a lower plane, intermeshing driving means connecting each of a pair, a single driving means extending transversely of the said pairs of screen members with intermeshing means for imparting simultaneous rotation to all of said screen members, rotary mountings for each of said screen members engaging their outer peripheries, and a series of collector conveyors for receiving each separated group, segregating groups of a like size and passing the groups to other places for treatment.

1,873,221. BASEBALL. GEORGE SENN, Green Bay, Wis. Filed Aug. 3, 1931. Serial No. 554,853. 2 Claims. (Cl. 273—60.)



1. An off-center baseball comprising a central sphere of rubber, a cork sphere embedded in the rubber sphere and offset from center of same, yarn wound on the rubber sphere to conventional size and a leather covering over the yarn.

1,873,222. SHOE LINING. ESTLE H. SHAW, Johnson City, N. Y., assignor to Endicott Johnson Corporation, Endicott, N. Y., a Corporation of New York. Filed Aug. 18, 1930. Serial No. 476,161. 3 Claims. (Cl. 36—55.)

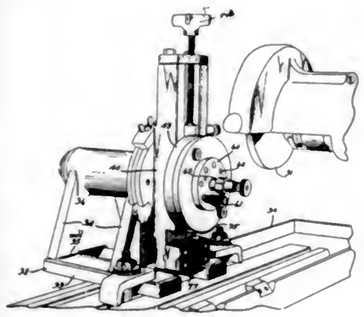


1. In a shoe; a quarter lining comprising a central heel member of soft material and adjacent members of stiffer material stitched together; the heel member having a tab on its upper end blind stitched and over-seamed to the upper edge of the quarter on the exterior thereof; the upper edges of adjacent members of the lining being stitched to the upper edge of the quarter.

1,873,223. POROUS METAL AND METHOD OF FORMING THE SAME. CHARLES F. SHERWOOD, Highland Park, Mich., assignor to Sherwood Patents, Ltd., a Corporation of California. Filed Nov. 13, 1929. Serial No. 407,022. 8 Claims. (Cl. 75—1.)

1. The hereindescribed method of forming porous bodies from powdered metal comprising dissolving a solid volatilizable lubricant in a volatile solvent, mixing the solution with the powdered metal, volatilizing the volatile solvent until it is removed leaving each particle of metal powder coated with a lubricating and oxidization preventing film of the solid volatile lubricant, forming the mix into a briquette under pressure, and subjecting the briquette to sintering heat in a reducing medium or atmosphere below sintering temperature, and to sinter and coalesce the metal particles metal to metal with voids distributed throughout the mass.

1,873,224. CAM GRINDING FIXTURE. LEO C. SHIPPY and JOHN Q. HOLMES, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Nov. 19, 1930. Serial No. 496,600. 6 Claims. (Cl. 51—96.)



1. A cam grinding fixture comprising, in combination, a frame for supporting the fixture upon the movable table of a grinder, a shaft journalled in said frame and located parallel to the plane of the grinder table, a head carried by the shaft, a slide slidably guided by the head at right angles to the axis of the shaft, means for securing the slide to the head in various positions of linear adjustment, an index plate pivotally carried by the slide, means securing the index plate to the slide in various positions of angular adjustment, a second index plate rotatably supported by the first index plate and located coaxially therewith, means for securing the second index plate to the first index plate in various positions of angular adjustment, means for securing a cam blank to the second index plate, and adjustable stops for variably limiting rotation of the head.

1,873,225. PROTECTOR FOR TOILET SEATS. MIRIAM T. SIMON, Natchez, Miss. Filed Aug. 18, 1931. Serial No. 557,848. 1 Claim. (Cl. 4—243.)



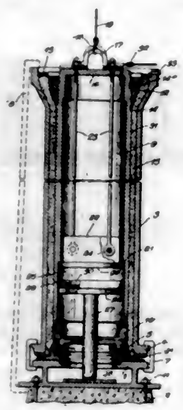
Protective cover for toilet seats comprising a flat flexible sheet adapted to overlie the toilet seat and having an aperture adapted to register with the hole in the said seat, said sheet being folded at a plurality of points forming pleats terminating at the edges of said aperture, the outer portions of said pleats being secured to prevent spreading of the outer portions with consequent elongation of the aperture, the inner portions of said pleats being left free to give fullness to the marginal portion of said sheet surrounding said aperture.

1,873,226. PAPER SHEET HOLDER. JACOB A. SMITH, Chicago, Ill., assignor to Mayer Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1931. Serial No. 526,220. 5 Claims. (Cl. 281—25.)



1. A device of the character described comprising a backing member, a bundle of sheets, said sheets and member having aligning spaced apertures of rounded form, and securing means comprising an elongated metal strip of width at least slightly greater than the width of the apertures, said strip having down-turned tip portions curved transversely to fit against the outer walls of said apertures and forced against said walls by said strip.

1,873,227. BODY PATTERN EXTRACTOR. MURPHY D. SMITH, Birmingham, Ala., assignor to Sand Spun Patents Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 26, 1931. Serial No. 559,575. 7 Claims. (Cl. 22—16.)



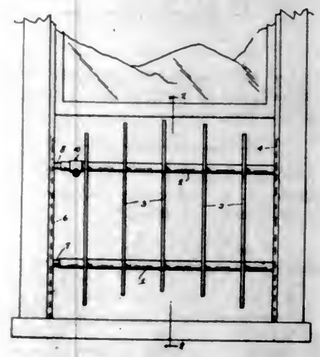
1. Means to break the bond between the sand and the body pattern of a rammed mold, including a body pattern having at its lower end a chamber for fluid under pressure, and a piston slidably mounted in the chamber and having means to bear against the ramming stool when fluid under pressure is admitted to the chamber.

1,873,228. PAPER CLIP. CYRUS E. THOMPSON, Winfield, Kans. Filed Apr. 11, 1932. Serial No. 604,525. 5 Claims. (Cl. 24—261.)



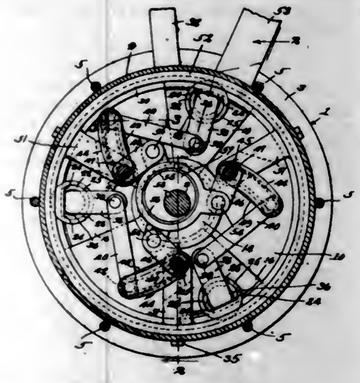
1. A clip made of one piece of wire having a coil with its axis across the clip, two resilient clamping lever arms composed of one strand of wire, said arms leading from opposite ends of the coil to engagement with each other, the free end portion of each of said arms being oppositely return bent and the end of the strand brought over and against the outside of the arms to form springedly engaged loops.

1,873,229. WINDOW GUARD. HUNTINGTON VAN DRESSER, Memphis, Tenn. Filed Aug. 20, 1931. Serial No. 558,372. 3 Claims. (Cl. 20—71.)



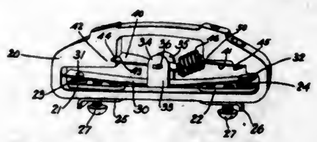
1. A device of the class described comprising a number of tubular members, spaced bars supported by the members, a pair of plates for engaging sash guides in the window, and lugs carried by the plates for entering the ends of the tubular members, and means for locking one of the tubular members to one of said lugs.

1,873,230. MECHANICAL MOVEMENT. ALBERT JOHN WANNER, Akron, Ohio, assignor of one-half to Charles C. Jacobs, Akron, Ohio. Filed Feb. 9, 1931. Serial No. 514,593. 6 Claims. (Cl. 74—53.)



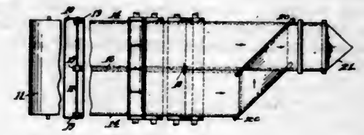
1. In a device of the class described, a driven member mounted to rotate about an axis, a slide mounted on the driven member to swing about said axis, a shoe movably mounted on the slide, a bearing carried by the slide, a shaft journaled in the bearing and having a cam cooperating with the shoe to advance the shoe and cause it to grip the driven member, an arm on the shaft, a collar held on the bearing against rotation, but movable longitudinally of the bearing, the collar having communicating, circumferentially-offset abutment slots for the reception of the arm, means for moving the collar to cause either of the slots to receive the arm and afford an abutment therefor, and means for operating the arm, to actuate the cam, set the shoe on the driven member, and rotate the driven member.

1,873,231. THERMOSTATIC CUT-OUT. CALVIN J. WERNER, Dayton, Ohio, assignor to Delco Products Corporation, a Corporation of Delaware. Filed Feb. 19, 1931. Serial No. 516,866. 12 Claims. (Cl. 200—138.)



1. An automatic switch comprising, in combination, a thermostatic element normally assuming one position but adapted to flex into another position in response to a change in temperature; a switching means operated by said element; two movable members one of which is connected to the thermostatic element; and elastic means supported between said movable members and adapted yieldably to maintain said element in either its normal or its flexed position.

1,873,232. WEB MOISTENING DEVICE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed June 4, 1926, Serial No. 113,592. Renewed Nov. 17, 1930. 8 Claims. (Cl. 91—14.)



1. In a printing press, the combination with means for feeding the web through the printing couple to the folder and means for slitting the web, of moistening devices for moistening that portion only of the web which comprises the two outer edges thereof and means for moistening that portion of the web which comprises each side of the slit so that the two edges bordering the slit will be moistened.

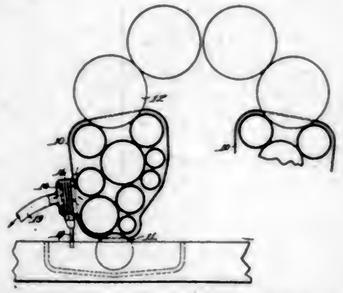
1,873,233. PLATE CARRYING CYLINDER. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed May 26, 1926, Serial No. 111,787. Divided and this application filed Apr. 6, 1929. Serial No. 353,199. Renewed June 10, 1932. 8 Claims. (Cl. 101—378.)



1. A printing plate cylinder having a series of round recesses bored into it between two plates on the cylinder, a plate clip having a cylindrical holder set into each of

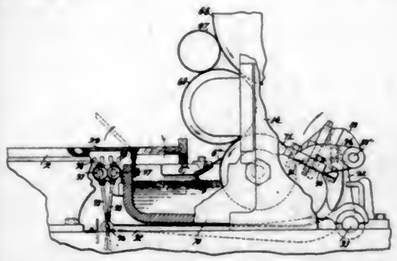
said recesses, said holder having guides in which the clip is adapted to move freely in a longitudinal direction and means projecting from both ends of the base of the clip for limiting its longitudinal motion in said recesses.

1,873,234. INK SPRAY CONDENSER FOR PRINTING MACHINES. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Feb. 3, 1931. Serial No. 513,118. 5 Claims. (Cl. 101—350.)



1. The combination with an inking device, of an enclosed chamber surrounding the inking device, and means for withdrawing the ink-laden air therefrom and re-liquefying the ink to prevent the particles of the ink being carried out into the press-room with the air.

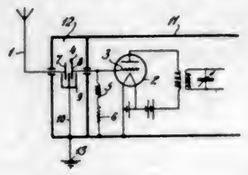
1,873,235. INKING MECHANISM. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed May 26, 1926, Serial No. 111,787. Divided and this application filed Apr. 6, 1929. Serial No. 353,198. 14 Claims. (Cl. 101—350.)



1. In an inking mechanism for a printing press, the combination with an ink cylinder, distributing roll and pick-up roll, of a fountain located below the pick-up roll, a fountain roll, gearing for driving the ink cylinder, distributing roll and pick-up roll from the press, a shaft extending down from the pick-up roll to the fountain, means for driving the last named shaft from the pick-up roll, and a gear on the fountain roll driven by said shaft.

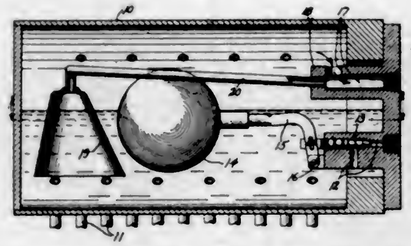
1,873,236. VOLUME CONTROL FOR RADIORECEIVERS. HAROLD A. WHEELER, Jackson Heights, N. Y., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Sept. 22, 1928. Serial No. 307,688. 1 Claim. (Cl. 250—20.)

A radio receiving system including an antenna circuit, a vacuum tube circuit electrically shielded therefrom, a capacitive coupling device having three cooperative elements enclosed in a metallic casing, two of said elements being connected in the two said circuits, respectively, and the third element being connected to said casing and adjustably associated with said other two, whereby the



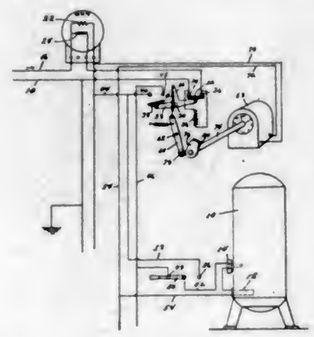
electrostatical or electromagnetical transfer of energy between said circuits can be adjusted from a maximum value to a substantially zero value.

1,873,237. REFRIGERATION. EDWARD T. WILLIAMS, New Rochelle, N. Y. Filed Apr. 19, 1929. Serial No. 356,338. 13 Claims. (Cl. 62—115.)



4. In compression refrigerating apparatus of the flooded evaporator type having a working fluid comprising a solution of refrigerant and lubricant, the method of returning refrigerant gas and lubricant from the evaporator to the compressor which comprises constricting the upward path of flow of gas bubbles in the evaporator to foam lubricant at the liquid surface therein, and conducting the lubricant foam to the compressor through the vapor suction line.

1,873,238. OFF-PEAK POWER AND METERING SYSTEM AND APPARATUS. MORRIS B. WOOD, Newburyport, Mass., assignor to The Chase-Shawmut Company, Newburyport, Mass., a Corporation of Massachusetts. Filed Nov. 2, 1929. Serial No. 404,491. 5 Claims. (Cl. 171—97.)

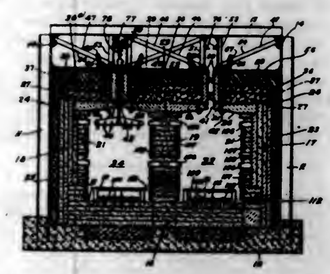


1. An electric power distribution system having a meter having a normal rate of operation for recording the power consumed in the system, a load circuit, means

governed by the energization of the system for connecting said circuit to the system, and means operated upon the connection of the load circuit to alter the rate of operation of the meter.

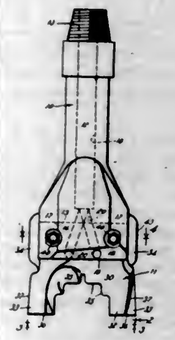
5. The combination of a power circuit, a load circuit, and means for supplying said load circuit with power from said power circuit for a predetermined period of time, said means comprising a switch for connecting and disconnecting said circuits and time controlled operating mechanism for said switch including a synchronous motor driven by said power circuit, and means operated by said motor for operating said switch.

1,873,239. CONVEYER FURNACE. JAMES C. WOODSON, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 17, 1930. Serial No. 436,369. 6 Claims. (Cl. 263—8.)



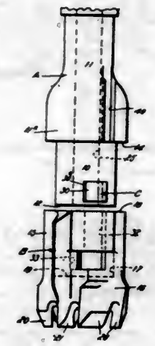
3. A double-chamber tunnel furnace having a central wall and side walls and a skeleton metal frame at the sides and the top of the walls, a roof structure including a plurality of refractory slabs having edge portions resting on one of said walls and overhanging the same and resilient means depending from the metal frame for supporting the overhanging refractory slabs.

1,873,240. WELL DRILLING BIT. JESSE C. WRIGHT, Los Angeles, Calif., assignor to Globe Oil Tools Co., Los Nietos, Calif., a Corporation of California. Filed Aug. 9, 1929. Serial No. 384,618. 1 Claim. (Cl. 255—61.)



A bit of the character described including, a shank having a bifurcated lower end forming a socket of uniform width across substantially the entire width of the shank, the socket being enlarged at its opposite ends, a cutter head having downwardly projecting teeth and a flange extending into and closely fitting the socket, the flange having enlarged parts extending along its opposite ends fitting the enlarged ends of the socket to hold the flange against horizontal movement in the socket and having projecting end parts forming reamer cutters, and a bolt extending through both portions of the bifurcated end of the shank and the flange for holding the flange in the socket, the ends of the bolt being countersunk in the shank.

1,873,241. WELL BIT. JESSE C. WRIGHT, Los Angeles, Calif., assignor to Globe Oil Tools Co., Los Nietos, Calif., a Corporation of California. Filed Aug. 30, 1929. Serial No. 389,429. 7 Claims. (Cl. 287—103.)



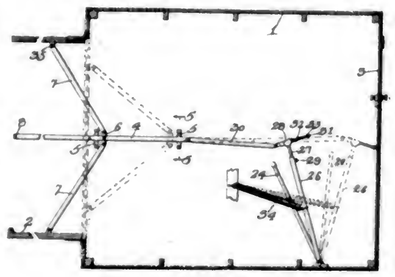
1. In a well tool, two parts adapted to be subjected to torsion tending to cause relative rotation between them, one part having an opening adapted to receive a portion of the other part and having an external projection by means of which the torsional strain is put upon it, an enlargement on said section immediately forward of the projection relative to the direction of said strain, there being a passage in the wall of the opening radially inward of the enlargement and a lateral socket located inward and forward of the said external projection and communicating with the passage, and a lug on said portion of the other part adapted to be passed through said passage into the socket to transmit the torsional strain from one part to the other.

1,873,242. CURRENT CONTROL DEVICE. LEONARD KAY WRIGHT, Jackson Heights, Long Island, N. Y. Filed Mar. 1, 1928. Serial No. 258,359. 3 Claims. (Cl. 200—70.)



1. An oscillating snap switch comprising a base member having a plurality of projections stamped therefrom, a plate pivotally secured to one of said projections and having portions stamped therefrom to form a support, stops formed on said base member to limit the pivoting movement of the plate, a lever pivotally connected to the other of the projections, a flexible rod fixedly secured to the lever and passing through an aperture formed in a bent-away portion of the plate to produce snap-like movement, a container mounted in the support, electrical contacts fixed in the container and a conducting fluid adapted to cover the contacts when in either position.

1,873,243. DOOR OPERATING MECHANISM. CHARLES ZEBROWSKI, West Allis, Wis. Filed Jan. 8, 1930. Serial No. 419,398. 3 Claims. (Cl. 268—70.)



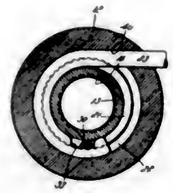
1. In combination with a pair of swinging doors, movable means for locking said doors in a closed position, means having operative connection with the movable means and positioned upon the exterior of the doors for engagement by an object for releasing the locking means, a rotatable support spaced from the doors, an arm projecting from the upper end of the support, means forming connection between said arm and the doors, a projection at the lower end of the rotatable support and adapted to be positioned in the path of a moving object whereby the object striking said projection will rotate the rod and impart movement to the doors for moving them to a closed position, and means having operative connection with said arm for moving said doors to an open position upon release of the locking mechanism.

1,873,244. METHOD AND APPARATUS FOR FORMING PILES. PIERRE ZUCCO, San Francisco, Calif. Filed Aug. 29, 1930. Serial No. 478,746. 4 Claims. (Cl. 61—57.)



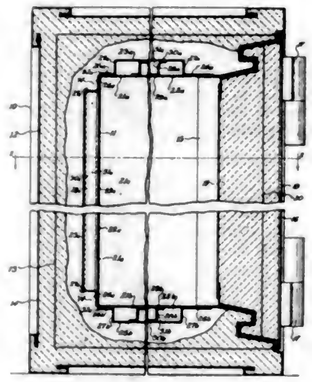
1. The method of forming a pile consisting in forcing a head having a passage extending therethrough and a detachable hollow casing into the ground, pouring cementitious material through said casing and head to form an anchor for said head and lifting said casing from said head as the pile is formed.

1,873,245. METHOD OF MAKING A CONNECTION. WALTER A. AREGO, Los Angeles, Calif., assignor, by direct and mesne assignments, to Wieman Kammerer Wright Co., Incorporated, Hollydale, Calif., a Corporation of California. Filed June 1, 1929. Serial No. 367,820. 7 Claims. (Cl. 29—148.)



1. The method of connecting two parts one fitting around the other and having a space between them including introducing a bar of heated metal into the space through an opening in the outer part, passing a pin through an opening in the inner part to engage and temporarily connect the entering end of the bar with the inner part, rotating one of the parts relative to the other to cause the bar to be drawn into the space, and then removing the pin to release the temporary connection.

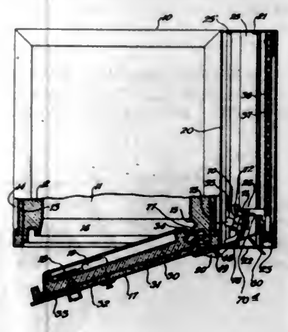
1,873,246. SAFE. ALBERT L. ABBOTT, Canton, Ohio, assignor to Diebold Safe & Lock Company, Canton, Ohio, a Corporation of Ohio. Filed Oct. 8, 1929. Serial No. 398,157. 1 Claim. (Cl. 109—2.)



In a safe having an outer sheet metal housing and an integral monolithic wall structure, one of said walls having a door opening therein, the combination of a plurality of panels forming an inner compartment, each of said panels comprising outer and inner sheets, the inner sheets having their marginal portions secured to each other, and the outer sheets having the major portions thereof spaced from the inner sheets and extending parallel thereto, said outer sheets having flanges secured to said inner sheets, and sheet metal reenforcing members extending between the outer and inner sheets.

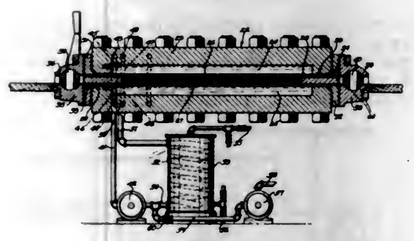
1,873,247. DISAPPEARING DOOR STRUCTURE. ALBERT L. ABBOTT, WILLIAM C. MILLER, and CHARLES E. MILLER, Canton, Ohio, assignors to The Diebold Safe & Lock Company, Canton, Ohio, a Corporation of Ohio. Filed Jan. 9, 1931. Serial No. 507,690. 13 Claims. (Cl. 109—1.)

1. In combination: a structure having a door-opening; a door; disengageable pivot connections between said structure and said door about which the door swings in its initial opening and final closing movements; a runway extending rearwardly from the plane of said door-



opening; a carriage mounted in said runway; and pivotal supports for the door carried by said carriage and serving to carry the door to and from the zone of operation of said disengageable pivot connections.

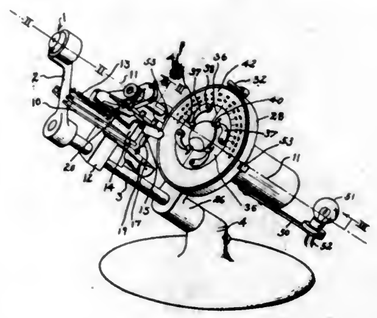
1,873,248. LAMINATED GLASS AND PROCESS FOR PRODUCING THE SAME. DANIEL ADAMS, Ann Arbor, Mich., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 14, 1928. Serial No. 277,413. 4 Claims. (Cl. 49—81.)



1. The process of producing laminated glass, which consists in forming upon one side each of two sheets of glass an adhesive skin containing a vaporizable constituent, interposing a sheet of non-brittle material between the glass sheets in contact with the skins, heating the assembled sheets without applying any pressure thereto to a temperature sufficient to cause a vaporizing of the vaporizable constituent, and then applying a pressure of the sheets to effect the uniting thereof.

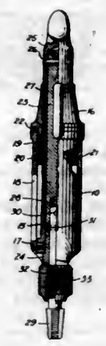
1,873,249. PROCESS OF LOCATING PRESCRIPTIVE CHARACTERISTICS OF A LENS. CLILE C. ALLEN, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Feb. 16, 1929. Serial No. 340,558. 4 Claims. (Cl. 51—277.)

4. The process of blocking lens blanks comprising determining the location of the axes of the lens on a blank, securely mounting the lens blank on a temporary holder in a desired position determined by the location of the axes of the lens, said holder being removably attached to the axes locating means, marking the axes on said blank while in secured position on the temporary holder, removing the temporary holder and located lens blank from the axis locating means and placing them on a support having engaging means to engage the temporary holder with the lens blank in aligned position thereon and having means to engage a more permanent lens blank holder to support it



in aligned position on the lens blank, securing the more permanent holder to the lens blank in said aligned position and removing the temporary holder from the lens blank.

1,873,250. BUSHING EXTRACTOR. WALTER J. ADOLPH, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 5, 1929. Serial No. 330,444. 3 Claims. (Cl. 29—88.2.)

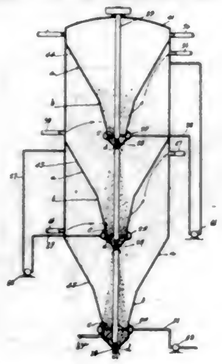


1. In a bushing extractor, a tubular shaped shell, a threaded sleeve slidably mounted in said shell, a nut engaging the sleeve and abutting against the end of said shell, a rod rotatably mounted in said sleeve, a tap carried by said rod, a handle at the other end of said rod, a threaded portion formed adjacent the effective portion of said tap, and a nut engaging said threaded portion for locking the bushing to said tap.

1,873,251. METHOD AND APPARATUS FOR SEPARATING SALTS AND LIQUORS. WILLIAM H. ALLEN, FRANCIS MACDONALD, and WILLIAM A. GALE, Trona, Calif., assignors to American Potash & Chemical Corporation, Trona, Calif., a Corporation of Delaware. Filed Sept. 26, 1928. Serial No. 308,496. 27 Claims. (Cl. 23—41.)

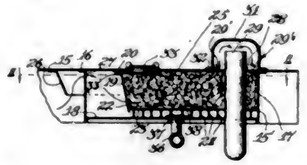
17. A process of separating sodium carbonates and sodium chlorid from brines which precipitate such salts on

evaporation, which comprises continuously passing the brine through an evaporating zone in which said salts are precipitated, and continuously passing the brine with the



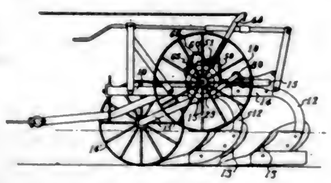
precipitated salts through a separating zone in which the carbonates are, to a substantial extent, separated from the sodium chlorid by hydraulic classification.

1,873,252. AIR CLEANER. HERMAN E. ALTGELT, South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company, a Corporation of Delaware. Filed Feb. 16, 1928. Serial No. 254,665. 6 Claims. (Cl. 183—48.)



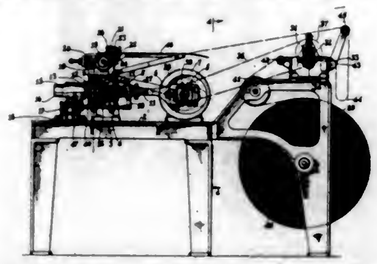
1. An air cleaner for an internal combustion engine of a tractor, comprising a housing, a depending wall mounted in said housing forming two compartments therein, cleaning material mounted in one of said compartments and supported in spaced relation with respect to the bottom of said housing, there being an aperture in the forward side of said housing through which the air enters and a tubular connection extending entirely through said housing, and communicating therewith for forming the exit for the air from said housing.

1,873,253. POWER LIFT MECHANISM FOR PLOWS. RUDOLPH J. ALTGELT and CAMERON H. GEMBERLING, South Bend, Ind., assignors to Oliver Farm Equipment Company, a Corporation of Delaware. Filed Mar. 17, 1930. Serial No. 436,339. 10 Claims. (Cl. 97—73.)



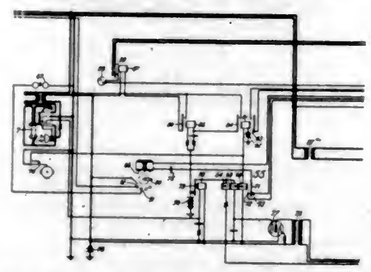
1. In an agricultural implement in which the earth working means are raised by power and lowered by gravity, the combination with a frame, an axle, and a carrying wheel, a lifting member loosely mounted on said axle, means for locking said lifting member to said carrying wheel, a lifting arm having one end thereof pivotally connected with said frame and the other end thereof pivotally connected with said lifting member, and means for locking the lower end of said lifting arm in a position slightly short of dead center.

1,873,254. CONTAINER FORMING MECHANISM. EDWARD C. ANGELL, New York, N. Y. Filed Nov. 10, 1930. Serial No. 494,505. 4 Claims. (Cl. 93—39.)



1. In a paper container forming machine, the combination with a holder for a tubular body, and means for cutting a disc from a web and feeding it into the body in the holder, of means for feeding a web of paper intermittently into the said disc cutting means, and means for continuously feeding the web from a supply roll and passing it through a device for applying melted paraffine to one face of the web, wh'ch latter means will furnish a loop in the web to advance the paraffined web as fast as required for feeding it intermittently into said cutting means as set forth.

1,873,255. POWER LINE CARRIER TELEPHONE SYSTEM. HENRY B. ARNOLD, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 10, 1929. Serial No. 384,928. 12 Claims. (Cl. 179—2.5.)

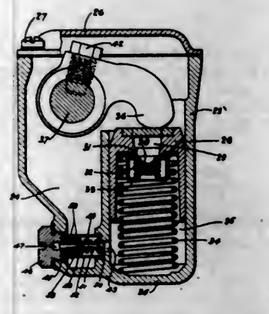


1. In a carrier current signal system, a signal station, means at said station for effecting communication over the system by modulated carrier current and for effecting selective calling by a code signal of carrier current, a selector at said station, and means comprising a differential relay having one winding energized in response to the receipt of a code signal of carrier current impulses for operating said selector and a second winding energized in response to the receipt of modulated current for preventing operation of the selector.

1,873,256. SHOCK ABSORBER. FRED E. ASELTINE, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 27, 1930. Serial No. 431,767. 2 Claims. (Cl. 267—8.)

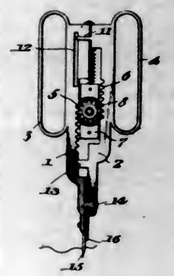
1. A shock absorber comprising in combination, a casing presenting a fluid reservoir and a cylinder; a piston

in said cylinder forming a compression chamber therein; means for operating said piston; a port connecting the compression chamber with the fluid reservoir; an opening in the casing coaxially aligned with the port; a recessed plug in the said opening; a valve supported by the plug for controlling the fluid flow through said port; a spring



interposed between the plug and valve and yieldably urging the valve to close the port; and a tubular member clamped between the plug and the cylinder wall surrounding the port, said member having a plurality of slots through which the fluid enters the reservoir when the valve is operated in response to the movement of the piston in one direction.

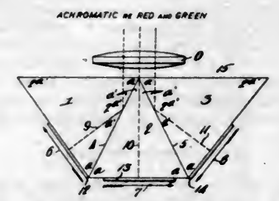
1,873,257. EMBROIDERY OR RUG MACHINE. CASSIUS JEFFERSON ASHBY, Evansville, Ind. Filed May 26, 1928. Serial No. 280,774. 2 Claims. (Cl. 112—80.)



1. In a rug making machine, the combination of a pair of reciprocatory members having means by which they may be manipulated by hand, a needle carried by one of said members, a plunger carried by the other member, said needle and plunger being adapted to form loops on a backing when the needle is provided with yarn, said members being slidably engaged with each other, a plate, a pinion carried by said plate, a spring connecting the plate to one of the members, and racks carried by the members which engage with said pinion, whereby there is a tendency to automatically equalize the extent of travel of the said plunger and needle when the said members are manually reciprocated in opposite directions.

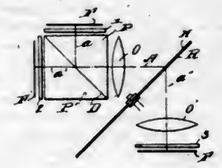
1,873,258. ACHROMATIC OPTICAL SYSTEM AND METHOD. JOSEPH A. BALL, Los Angeles, Calif., assignor, by mesne assignments, to Technicolor, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 15, 1929. Serial No. 386,089. 2 Claims. (Cl. 88—16.4.)

1. The method of producing motion-pictures in colors which comprises recurrently exposing different film areas to red, green and blue color components of light reflected from the same scene along the same optical axis, and conjointly focusing the components with lens elements which are achromatic with respect to the colors represent-



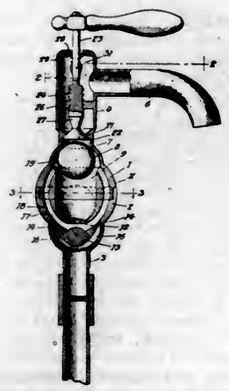
ed by the red and green components, whereby the effect of chromatic aberration is substantially confined to the blue component of shorter wave length.

1,873,259. COLOR CINEMATOGRAPHIC APPARATUS. JOSEPH A. BALL, Los Angeles, Calif., assignor, by mesne assignments, to Technicolor, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 15, 1929. Serial No. 399,741. 2 Claims. (Cl. 88—16.4.)



1. Apparatus for making three-color cinematographic pictures comprising means for simultaneously exposing, from the same point of view and along optically like paths, records of series of complemental images representing two color aspects, means for shuttering light along said paths between successive exposures, and means for exposing, during the intervals when said paths are shuttered, records of a third series representing a different color aspect.

1,873,260. VALVE. JOHN O. BARCE, Chicago, Ill. Filed Dec. 19, 1929. Serial No. 415,150. 16 Claims. (Cl. 251—140.)



14. In a valve, a valve body having a valve seat therein, a restricted passage above said seat and a ball chamber below said seat, said chamber being out of the flow of

fluid through the valve and opening toward said seat and having a restricted opening in the bottom thereof, a ball freely disposed in said chamber and arranged to close said seat under pressure of the fluid, means for dislodging said ball against the pressure of said fluid, means for diverting the fluid past said chamber to create a vacuum therein to retain the ball in said chamber after being dislodged and means for creating a water hammer back through the opening in the bottom of said chamber to cause the water to raise the ball into seating position.

1,873,261. SIGN. ROBERT E. BARCLAY, Chicago, Ill., assignor to Federal Electric Company, Chicago, Ill., a Corporation of New York. Filed Sept. 16, 1930. Serial No. 482,240. 11 Claims. (Cl. 40—130.)

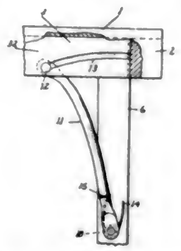


6. A display device comprising means forming a panel, a glass tube, containing a column of gas adapted to be electrically excited to be luminous, supported in front of the panel in spaced relationship therewith, the surface of the glass tube, facing away from the panel, comprising a luminescent light refractive layer whereby when the gas in the tube is excited, said luminescent layer will be activated to create a surface glow on the tube in such a way as to hide the visual effect normally imparted in uncoated tubes of the class described by reason of the thickness of the glass in the walls of the tube.

1,873,262. PREPARING BENTONITE COMPOSITIONS. HERMAN BATTERMAN, Chicago, Ill., assignor of one-half to A. P. Hunt. Filed July 23, 1930. Serial No. 470,221. 4 Claims. (Cl. 252—1.)

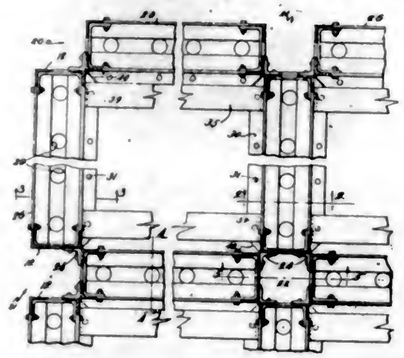
1. The method of preparing a mixture of bentonite and a soluble electrolyte which comprises distributing bentonite in a shallow layer and applying to the surface thereof a solution of the electrolyte, whereby the electrolyte is absorbed and the bentonite breaks up into granular and friable nodules, the proportion of the solution being such as to be completely absorbed by the bentonite without soaking the latter.

1,873,263. FOLDING CARD TABLE. JOHN W. BEIGER, Ludington, Mich., assignor to The Carrom Company, Ludington, Mich. Filed Dec. 3, 1930. Serial No. 499,653. 2 Claims. (Cl. 45—11.)



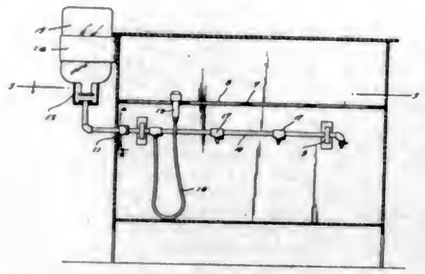
1. In a folding card table, the combination of a top, a frame composed of side rails, a corner iron within the said side rails, one arm thereof having an upturned pivot lug at its inner end and a pair of pivot ears struck up towards the corner, a table leg pivoted at its upper end to the said ears, a brace secured to the said table leg and pivoted to the end lug, a pivoted lock brace pivoted to the side of the table leg and carrying an outwardly projecting pin at its upper end, a slide slot formed in the other arm of said corner iron described by the radius of the said lock brace when the table leg is in upright position, and a spring on the said brace arm to swing the same outwardly to cause the pin to engage the end of a slot.

1,873,264. BUILDING FRAME. ALBERT F. BEMIS, Newton, Mass., assignor to Bemis Industries, Incorporated, Boston, Mass., a Corporation of Delaware. Filed Apr. 30, 1929, Serial No. 359,209, and in Great Britain Mar. 22, 1929. 4 Claims. (Cl. 189—34.)



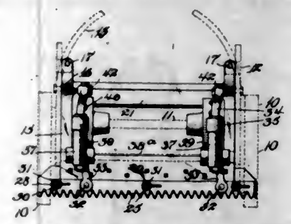
3. A building construction comprising girt members, certain of said girt members comprising a web plate, a pair of angles having legs secured to one of the faces of the web plate with their other legs projecting in parallelism at right angles thereto providing flanges, and a corresponding pair of angles having legs secured to the other face of the web plate and similarly disposed relative thereto, stud members comprising spaced angles, each having one of their legs disposed in the plane of one of said flanges, and connecting elements engaging said flanges and the legs of the stud members.

1,873,265. STERILIZER. LAWRENCE A. BENT, Janesville, Wis. Filed Apr. 3, 1931, Serial No. 527,511. 4 Claims. (Cl. 167—3.)



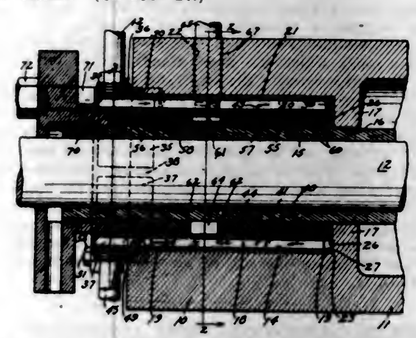
3. A sterilizing device for milking tubes comprising in combination means for supporting the teat cups of milking tubes with the open ends of the cups uppermost, a relatively fixed container, a relatively rigid horizontally disposed conduit adjustable vertically with respect to said means and said container, said conduit being provided with a cup for receiving the contents of said container, and being also provided with valved means adapted to be connected to the milk tubes whereby the contents of said container is fed to the teat cups, under control.

1,873,266. ATTACHMENT FOR LAWN MOWERS. RICHARD C. BEST, Newark, N. J., assignor of one-half to Hugh Sweeney, Newark, N. J. Filed June 20, 1929. Serial No. 372,299. 2 Claims. (Cl. 56—249.)



1. An attachment for lawn mowers comprising a frame, a fixed blade on the end of the frame, a blade slidable on the fixed blade, a pair of yokes each with an extension thereon which extension engages the slidable blade, a roller on each yoke, a pair of cams, each cam within a yoke and engaging a roller, brackets from which the yokes are pivotally suspended at their top ends, and means on the brackets for securing them to the cross rod of a lawn mower.

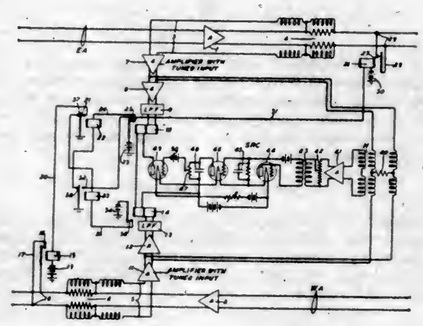
1,873,267. COOLING ARRANGEMENT FOR PACKING BOXES. GEORGE E. BIGELOW and ARTHUR R. WEIS, Huntington Park, Calif., assignors of one-half to Pacific Pump Works, Huntington Park, Calif., a Corporation of California. Filed Apr. 24, 1928. Serial No. 272,558. 6 Claims. (Cl. 286—27.)



1. In combination with a body having a packing chamber therein, and a movable member extending therethrough: a cylindrical member adapted to be positioned in said packing chamber, said cylindrical member having an annular passage in one end thereof cooperating with a wall of said packing chamber to form an annular chamber, said cylindrical member also having primary and secondary groups of holes communicating with said annular chamber and terminating at a front end of said cylindrical member opposite said annular chamber; a head member engaging said front end and providing an intake chamber communicating with the holes of said primary group and a discharge chamber communicating with the holes of said secondary group; a packing means between said rotatable member and said cylindrical member; and means for compressing said packing means.

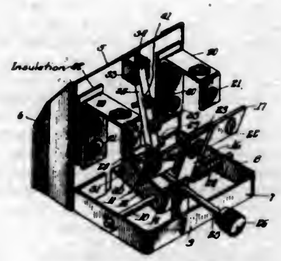
1,873,268. TRANSMISSION CONTROL CIRCUITS. BJORN G. BJORNSON, New York, N. Y. assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 13, 1930. Serial No. 474,895. 10 Claims. (Cl. 179—170.)

1. A system for suppressing echoes in a two-way signal transmission circuit comprising a detector connected to one side of said circuit and responsive to waves therein, means controlled by operation of said detector for effectively disabling the opposite side of said circuit, and means for preventing operation of said disabling means by the noise waves in said transmission circuit while



permitting its operation by the signals therein, including means connected between the output of said detector and said disabling means for preventing the operation of said disabling means by waves of frequencies in the detector output exceeding a certain maximum value.

1,873,269. ELECTRIC SWITCH. FLOYD A. BLASHFIELD, Madison, Wis., assignor to Scanlan-Morris Company, Madison, Wis., a Corporation of Wisconsin. Filed Oct. 5, 1929. Serial No. 397,706. 10 Claims. (Cl. 200—154.)



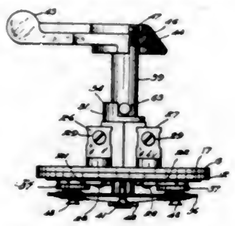
10. A switch comprising a frame, a support carried by the frame, a shaft carried by the support, an angle lever pivotally mounted on the shaft, a bus bar operatively connected to said angle lever, spring means for normally urging the bus bar in non-contacting position, an operating handle, a link pivotally connected to said handle and to said angle lever, a second link pivoted to the frame and to the handle, contacts carried by the frame, said bus bar adapted to make electrical contact with said contacts when the handle is moved inwardly, the inward movement of said handle moving the links inwardly beyond their normal center line whereby the switch is maintained in locked position, a screw threaded member threadedly engaging one of said links and adapted to be engaged by a member when the switch is closed for turning said links past their normal center line to cause disengagement of the bus bar from said contacts, said spring means moving the bus bar to original non-contacting position after the links have been returned past their normal center line, and means for limiting the inward movement of said links.

1,873,270. PIN FASTENER. EARL H. BLAZER, Merriam, Kans. Filed Oct. 14, 1931. Serial No. 568,678. 2 Claims. (Cl. 24—108.)



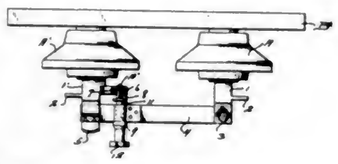
1. A pin fastener comprising a ring having two inwardly extending resilient arms respectively provided with two arcuate portions adapted to fit between the threads and to embrace opposite sides of a threaded shank of a pin, and a clasp adapted to releasably embrace said arms to limit their expansion.

1,873,271. THERMAL RELAY. EDWARD BLETZ, Lexington, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 12, 1929. Serial No. 346,393. 2 Claims. (Cl. 200—139.)



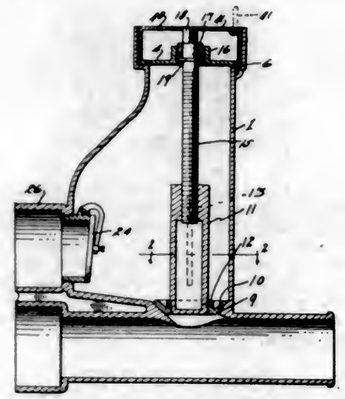
1. In a thermally-actuable switch having a base, contact members thereon, a snap-acting bimetallic disc, and contact members thereon cooperating with the contact members on the base to control a circuit, an internally-threaded tubular member secured to the base at one end thereof and coaxial therewith and having a shoulder portion at its other end, an externally-threaded rod extending through the tubular member and having the disc mounted at one of its ends, the screw threads on the rod and in the tubular member being in engagement, an adjusting lever on the other end of the rod for turning the same in the tubular member to adjust the position of the central part of the disc relatively to the base, and a pin on the rod for engaging the shoulder portion of the tubular member to limit the adjusting movement of the rod and of the disc.

1,873,272. DISCONNECTING SWITCH. HENRY W. BODENDIECK, Taylorville, Ill., assignor to Tips' Tool Company, Inc., Taylorville, Ill., a Corporation of Illinois. Filed Oct. 12, 1928. Serial No. 312,107. 4 Claims. (Cl. 200—169.)



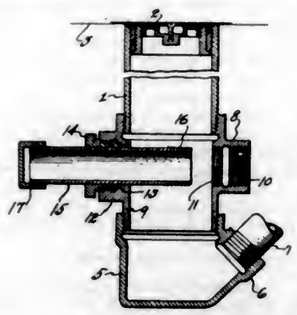
1. In combination with a switch blade and an associated terminal, a sleeve carried by the blade, a member freely insertible through the sleeve, said member being provided with shoulders spaced apart a distance greater than the length of the sleeve, said sleeve being positioned between said shoulders, an end portion of the member being threaded, the terminal having an opening with which said threaded portion of the member is engageable.

1,873,273. DRAINAGE FITTING AND VALVE CONSTRUCTION THEREFOR. EDWARD W. N. BOOSEY, Detroit, Mich. Original application filed Aug. 22, 1929. Serial No. 387,572. Divided and this application filed May 2, 1930. Serial No. 449,215. 2 Claims. (Cl. 137—13.)



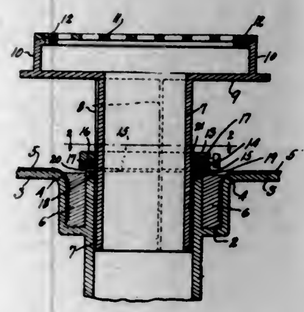
1. In a drainage fitting, a chambered casing having an inlet adapted for connection with a drain and an outlet therefor, a manually operable valve controlling the outlet, said casing at its upper end having a hub the upper end of which terminates practically flush with a floor surface, a rotatable stem for operating the valve, a plate seating in the hub in sealed relation therewith and through which the stem extends, means for sealing the interstice between the stem and the plate, said plate and sealing means providing a mounting for the stem preventing longitudinal movement thereof, said stem terminating in a squared end extending to practically flush with the hub, and an operating means for the stem comprising an inverted cup-shaped member, the lower open end of which rests upon the said plate with the upper end thereof practically flush with the hub and floor surface, said upper portion of the cupped member having a squared aperture fitting over the squared stem, and a handhold by means of which the cupped member and stem may be rotated.

1,873,274. ADJUSTABLE TEST CONNECTION FOR PLUMBING SYSTEMS. EDWARD W. N. BOOSEY, Detroit, Mich. Filed Jan. 7, 1928. Serial No. 245,121. 1 Claim. (Cl. 137—77.)



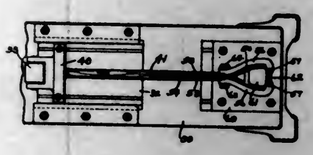
In a plumbing device, a tubular body having an opening at one end through which access may be had to the interior, a plug for sealing the same, an outlet conduit at the opposite end, a threaded hub on one side of the body providing an opening to the interior adapted for the connection of a conduit therewith, the said hub having an internal right hand thread at the outer end and an internal right hand thread at the point of opening into the body and a second hub about an opening to the interior of the body diametrically opposite the first named hub, a tubular element insertible through the second hub and threaded at one end for engagement with the second named threads of the first hub, and a packing gland for sealing the tubular element in the second hub.

1,873,275. DRAINAGE FITTING. EDWARD W. N. BOOSEY, Detroit, Mich. Filed Dec. 10, 1930. Serial No. 501,453. 5 Claims. (Cl. 285—37.)



1. In a drainage fitting, a drain pipe, a drainage head including a depending tubular portion having an imperforate wall, a series of vertical ribs on the exterior of the said tubular portion, an adjusting ring adjustably secured to the tubular portion and extending about the said ribs, a seepage ring carried by the adjusting ring and fitting about the said tubular portion and ribs, the lower end of the tubular portion being adapted to be inserted in the upper end of the drain pipe in spaced relation with the wall thereof and the adjusting ring being provided with a series of lugs on the lower side supporting the drain head and tubular portion on the upper end of the drain pipe and spacing the adjusting ring from the upper edge of the drain pipe.

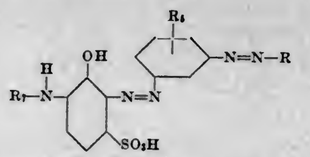
1,873,276. METHOD AND APPARATUS FOR BENDING WOOD. FRANCIS C. BRANDENBURG, Piqua, Ohio, assignor to The Wood Shovel and Tool Company, Piqua, Ohio, a Corporation of Ohio. Filed Sept. 1, 1927, Serial No. 216,912. Renewed Jan. 13, 1932. 14 Claims. (Cl. 144—261.)



1. A form for bending wood, comprising two members having a curvature appropriately similar to the curvature to be imparted to the wood, said members being situated in apposition with a space between them sufficient to admit the piece of wood to be bent, the surfaces upon which the wood slides as it is pushed into the form being composed of metal between which and the wood there is much less adhesion than there would be between cast iron and the wood.

1,873,277. AZO DYES ADAPTED FOR DYEING REGENERATED CELLULOSE MATERIALS. RAINALD BRIGHTMAN, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, Westminster, England. Filed Feb. 19, 1930, Serial No. 429,809, and in Great Britain Feb. 25, 1929. 4 Claims. (Cl. 260—84.)

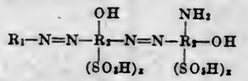
4. As new products disazo dyes having in the form of the free acid the probable formula:



wherein R represents the coupled residue of an azo dye coupling component of the class consisting of salicylic acid and meta-phenylene diamine, R_6 represents hydrogen, methyl or methoxy group, and R_7 represents a phenyl or benzoyl group, said disazo dyes being capable of dyeing regenerated cellulose in even level shades.

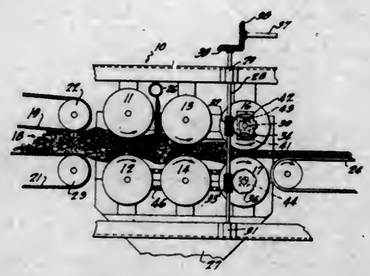
1,873,278. DYEING OF REGENERATED CELLULOSE MATERIALS. RAINALD BRIGHTMAN, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, London, England. Filed Apr. 17, 1930, Serial No. 445,227, and in Great Britain Apr. 19, 1929. 27 Claims. (Cl. 8—5.)

1. In the manufacture of dyed regenerated cellulose material having an even level shade, the process which comprises applying to such regenerated cellulose materials a secondary disazo dyestuff having in the form of the free acid the probable formula:



wherein R_1 represents the coupled residue of a diazotized amine of the class consisting of chloraniline, aminobenzoic acid and anisidine, R_2 represents a naphthalene residue, and x is 1 or 2, thereby dyeing said regenerated cellulose materials in even level shades.

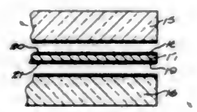
1,873,279. APPARATUS FOR MANUFACTURE OF SHEET MATERIAL. HORATIO W. BROWN, Concord, Mass., assignor to Bemis Industries, Incorporated, Boston, Mass., a Corporation of Delaware. Filed Dec. 27, 1930. Serial No. 505,052. 17 Claims. (Cl. 154—1.)



17. Means for compacting and bonding loose material comprising rolls spaced for feeding material therebetween, means for supporting the rolls for relative bodily movement toward and from each other, means for driving the rolls and for utilizing the driving torque for urging the

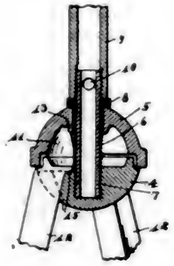
rolls toward each other, means for applying a liquid binder to the material as it passes to the rolls, and side boards having openings fitting over the ends of the rolls, each roll having one or more circumferential grooves disposed adjacent the ends thereof and within the side boards for collecting the liquid binder to prevent the latter from passing through the openings in the side boards.

1,873,280. LAMINATED GLASS. WILBUR F. BROWN, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 28, 1926, Serial No. 118,985. Renewed Dec. 11, 1930. 6 Claims. (Cl. 49—92.)



5. As a new article of manufacture, a sheet of laminated glass comprising a plurality of laminations bonded together by means of glycerin.

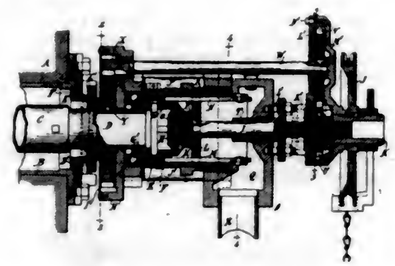
1,873,281. CONNECTION. LUDWIG BRUNNER, Los Angeles, Calif. Filed June 1, 1931. Serial No. 541,370. 1 Claim. (Cl. 287—54.)



In a joint, a joining structure made of oppositely engaging halves with recesses between the halves for holding branch-members in engagement, the one half being provided with a threaded bore in its inside, the other half being provided with an aperture, and a substantially semi-spherical hollow inside branch-members having ends of substantially segmental semi-spherical form adapted to firmly seat within the recesses between the halves, and a connecting member inserted through the aperture of the one half and engaged in the threaded bore of the other half for holding the two halves together and thereby clamping the ends of the said branch-members rigidly to said joining structure and thereby to the connecting member.

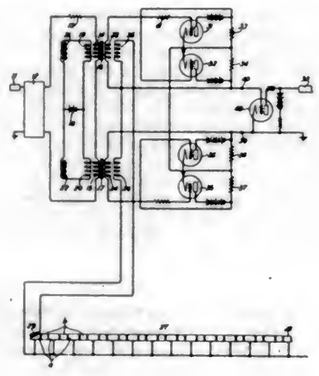
1,873,282. SOOT CLEANER FOR BOILERS. THEODORE M. BRUBACK, Du Bois, Pa. Filed Dec. 20, 1927. Serial No. 241,291. 11 Claims. (Cl. 122—392.)

1. In a boiler cleaner, a cleaner element, means for rotating the element, a separate rectilinearly moving valve for controlling the supply of steam to said element, a long screw-threaded stem for said valve, and a nut engaging said stem, one of said last-named parts being rotated at all times while the element is rotating, and moving the valve in its opening movement a much greater distance than is necessary to supply the element with the required amount of steam, whereby to create a period of operative supply of steam during the angular movements of the element to and from its extreme operative



position, the parts being constructed to give the valve a continuous idle movement beyond its effective opening and closing movements and to close the valve positively.

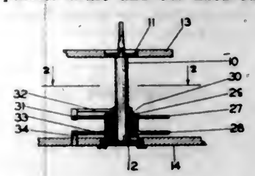
1,873,283. TELEGRAPH REPEATER. EVERETT T. BURTON, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 14, 1931. Serial No. 537,293. 11 Claims. (Cl. 178—70.)



1. A synchronous impulse transmission system comprising an inductive device for repeating an incoming current impulse wave of slowly varying intensity as a plurality of short, sharp voltage impulses of high amplitude and of opposite polarities, characterized in this, that means are provided in said device for varying the short intervals between adjacent high voltage impulses of opposite polarities to the duration of a full impulse length, or its multiple, as originally transmitted.

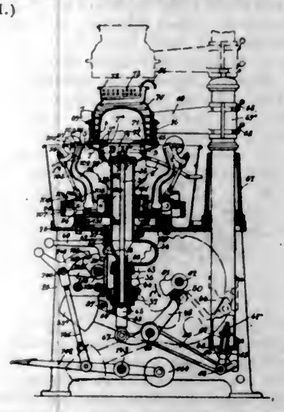
1,873,284. TAKE-UP DEVICE. VICTOR E. CARBONARA, Brooklyn, N. Y., assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed June 13, 1929. Serial No. 370,518. 8 Claims. (Cl. 73—4.)

7. In an altimeter having a pointer shaft rotatably mounted on a fixed support, the combination of a pressure-responsive member, transmission means between said pressure-responsive member and said pointer shaft for operating the latter, and motion take-up means comprising a plurality of hair-springs connected in series relation between the pointer shaft and the fixed support so that



the individual functions of the springs are cumulative whereby the limit of the angular travel of the pointer shaft may exceed the rotary limit of a single hair-spring.

1,873,285. HAT-SHAPING MACHINE. MARCEL CASSÉ, Essonnes, France. Filed June 7, 1929, Serial No. 369,115, and in France June 20, 1928. 10 Claims. (Cl. 223—31.)



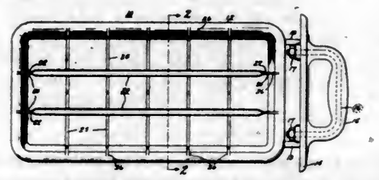
1. In a hat shaping machine, a perforated block adapted to receive the hat blank, means for circulating steam through said block and hat blank, means for circulating air through said block and hat blank, means for stretching the hat blank on said block and means operatively connected with said stretching means for controlling said air and steam circulating means.

1,873,286. CANDY PACKAGE. CHARLES C. CHASE, St. Joseph, Mo. Filed Nov. 4, 1929. Serial No. 404,746. 1 Claim. (Cl. 206—46.)



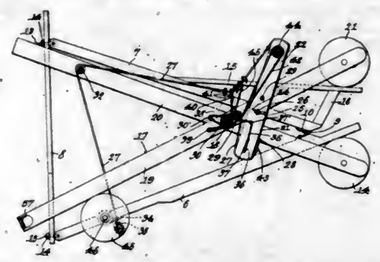
A package for confections comprising: a tube divided into elongated sections filled with confectionery, the parts of the tube between sections being crimped to form a neck containing no confectionery, each neck being tied at its opposite ends close to the adjacent sections to permit severing the neck between said ends without untying the adjacent sections, the extreme opposite ends of the tubes being tied to close the end sections and being bent to form loops by which the tube and its contents may be suspended.

1,873,287. FREEZING CONTAINER. RALPH H. CHILTON, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 20, 1930. Serial No. 483,226. 11 Claims. (Cl. 62—108.5.)



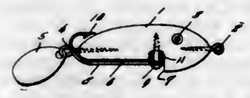
1. A freezing tray comprising: a container having molded flexible rubber side walls and bottom, and an air-circulating hollow metal partition dividing said container into compartments, said partition being supported by said flexible rubber bottom whereby it may be moved with said bottom to facilitate ejection of frozen contents of said container.

1,873,288. LIFTING DEVICE. CHARLES H. CLARK, Washington, D. C. Filed Mar. 10, 1930. Serial No. 434,755. 7 Claims. (Cl. 254—135.)



1. A lifting device comprising a base, a frame movable over the base, an anchor wheel mounted on the base and operating in a horizontal plane, said frame engaging the periphery of the wheel to exert a lateral pressure on the wheel, a power cable having one of its ends secured to the frame, a pulley on the base over which the cable operates, the free end of the cable being adapted to be secured to the load to be lifted, and pulleys on the frame over which the cable operates, said frame being adapted to be manually reciprocated.

1,873,289. ARTIFICIAL BAIT. WILLIAM ERSKINE CLARK, La Porte, Ind. Filed Apr. 14, 1931. Serial No. 530,068. 1 Claim. (Cl. 43—42.)

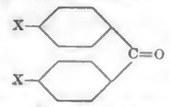


In an artificial bait structure, a body having a bottom and a top, the top being curved downward towards the rear end thereof to define a tail, and a pair of hooks pivoted to said bottom and having a bill to overhang the

downwardly curved portion of the top which forms said tail, said bill being below the level of the highest point of said back, and a spoon having an attaching member arranged between said hooks to maintain the same in spaced relation, said hooks being movable out to position at angles to the longitudinal axis of said body.

1,873,290. MANUFACTURE OF TRIARYLCARBINOLS. SAMUEL COFFEY, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, Westminster, England. Filed Dec. 26, 1929, Serial No. 416,745, and in Great Britain Jan. 1, 1929. 14 Claims. (Cl. 260—65.)

10. In the manufacture of triaryl carbinols, the process which comprises reacting together a benzophenone compound having the probable formula

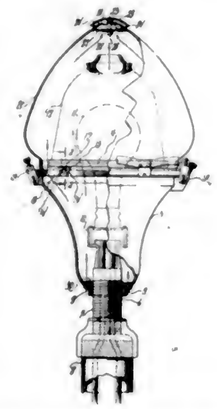


wherein X represents hydrogen, an alkyl or alkoxy group, and a halogenated aryl compound having the probable formula



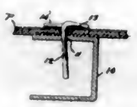
wherein Y represents chlorine or bromine, and X represents hydrogen, an alkyl or alkoxy group, the said reaction being effected in the presence of a boiling liquid mixture comprising an inert liquid and an alkali metal.

1,873,291. LIGHTING FIXTURE. GEORGE H. COLE, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Feb. 1, 1929. Serial No. 336,838. 8 Claims. (Cl. 240—25.)



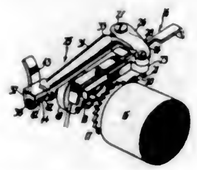
1. In a lighting fixture of the character described, a body member having a lamp mounted thereon, a refractor bowl which with the body member substantially encloses the lamp, means for supporting the refractor bowl from the body member whereby a space is provided between the refractor bowl and the body member throughout the major portion of the circumference of the refractor bowl to permit free circulation of air through and around the refractor bowl, and a protective globe provided with an air outlet opening at its top and having a substantially air tight connection with the body member, whereby the circulation of air through and around the refractor bowl is positive.

1,873,292. PLASTER-BOARD STUD AND LOCK. TIMOTHY COLLINS, Los Angeles, Calif., assignor of one-half to Arthur W. Nash, Los Angeles, Calif. Filed Feb. 13, 1929, Serial No. 339,608. Renewed Jan. 28, 1932. 4 Claims. (Cl. 72—118.)



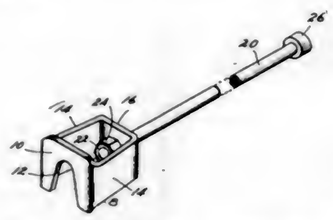
3. A plaster board lock comprising a single piece of wire bent to provide a shank and a slightly resilient head which projects laterally from one side of the shank only, said shank forming an angle of less than ninety degrees with said head.

1,873,293. TYPEWRITING MACHINE. FREDERICK U. CONARD, Stratford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Original application filed Feb. 16, 1929, Serial No. 340,533. Divided and this application filed May 27, 1930. Serial No. 456,056. 1 Claim. (Cl. 197—114.)



In an encased portable typewriting machine, the combination with a platen and a platen-frame having an end, of a line-space lever mounted at its rear upon said end and extending forwardly from the platen-frame, and having at its front end a pair of integral pendent ears, one behind the other, the edge of said lever between said ears forming a bearing, and a thin finger-plate standing alongside of the forward end of said lever, and extending upwardly therefrom, and bearing sidewise directly thereagainst, and serving to operate the line-space lever and return the platen-frame, said finger-plate having at its bottom a pair of ears bent in and housed between the pendent ears upon said line-space lever, and a pintle whereby said finger-plate ears are hinged to said lever-ears, said finger-plate being depressible by the cover of the casing of the typewriter, and having a return spring.

1,873,294. PULLER. JOHN T. COSGROVE, Kansas City, Mo. Filed May 4, 1931. Serial No. 535,016. 3 Claims. (Cl. 29—85.)



1. A puller comprising a rod; a weight slidably supported thereby; and a head formed on each end respectively of said rod; one of said heads formed to engage the work and including a U-shaped body, said rod slidably and

rotatably engaging the base of said body, and a notched wall extending between the ends of said U-shaped body, said notch being in longitudinal alignment with said rod, said notched wall being resilient, whereby to flex and absorb destructive shocks when the puller is in use.

1,873,295. SHAFT BEARING FOR CORN HARVESTERS. WILBUR J. COULTAS, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Nov. 9, 1929. Serial No. 405,857. 2 Claims. (Cl. 308—24.)



2. In a corn harvester, the combination of a binding mechanism including a frame upon which the operating parts of the mechanism are mounted, a trip shaft, a bearing in which said shaft is journaled formed of dual parts, one of said parts permanently on the frame and having an open slot to receive the shaft, the second part slidably mounted on the shaft and movable to interlocking engagement with the first part, a lug on the movable part operating to close the slot and complete the bearing, a lug on the second part to contact with a side of the first part as the parts are brought together, and means to secure the dual parts together.

1,873,296. IMPROVING CLAY. ROY CROSS, Kansas City, Mo., assignor to Silica Products Company, Kansas City, Mo., a Corporation of Delaware. Filed Sept. 23, 1929. Serial No. 394,736. 5 Claims. (Cl. 252—2.)

1. A dry composition of matter having properties analogous to bentonite, comprising natural clay mixed with about 5 per cent by weight of sodium silicate and about 3 per cent by weight of at least one inorganic salt selected from a class comprising the chlorides of ammonium, calcium and barium.

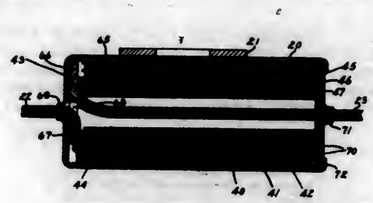
1,873,297. DISH HOLDER. SHERMAN H. DAVENPORT, Watertown, N. Y. Filed Mar. 29, 1930. Serial No. 440,010. 1 Claim. (Cl. 248—20.)



A receptacle holder consisting of a single piece of wire bent into a substantially U-shape with its free ends extending substantially at right angles to the plane of the body thereof with the bight of the U-shaped portion reversely bent to provide a hook portion having loops adjacent the hook portion adapted to receive fastening devices whereby said holder may be optionally supported from a wire fabric fence or from a wall.

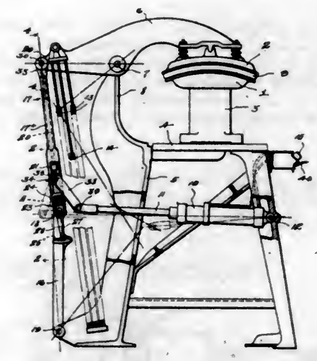
1,873,298. CONDENSER. CHARLES HALL DAVIS, Jr., Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 31, 1930. Serial No. 457,745. 7 Claims. (Cl. 175—41.)

1. An electrical condenser comprising in combination, a condenser unit providing a pair of insulated foils, a dielectric winding surrounding the unit, and a second condenser unit disposed about the dielectric winding, said second unit providing a pair of foils, one of which is common with a foil of the first unit, and means electrically



connecting the other foil of each unit with a conductor, the common foil of each unit being in electrical communication with a casing enclosing the structure whereby a third conductor is provided.

1,873,299. BOOSTER ACTUATING MECHANISM FOR PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 25, 1929. Serial No. 358,142. 20 Claims. (Cl. 68—9.)



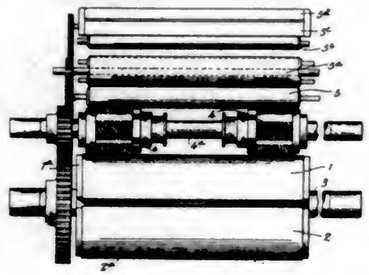
1. In a garment pressing machine, in combination, cooperative pressing elements, one of which is movable toward and from the other to open and close the press; actuating mechanism for the movable pressing element including a toggle; operating mechanism for said actuating mechanism; connecting means between the operating mechanism and the toggle to move the toggle toward straightened position and bring the movable pressing element into preliminary closed position; and means operated by said connecting means, when the movable pressing element reaches preliminary closed position, to lengthen one of the links of the toggle and apply heavy pressure to the pressing elements.

1,873,300. MANUFACTURE OF SULPHONATED AMINO ANTHRAQUINONE. ALFRED DAVIDSON, WILLIAM WYNDHAM TATUM, and GORDON EDWARD WATTS, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England. Filed Oct. 22, 1928, Serial No. 314,313, and in Great Britain May 30, 1928. 9 Claims. (Cl. 260—60.)

9. In the manufacture of an aminoanthraquinone sulphonic acid from alpha-aminoanthraquinone, the process which comprises forming a sulphate of an aminoanthraquinone containing aminoanthraquinone and sulphuric acid in the molecular ratio of 1 to 1.0–1.5, converting the said

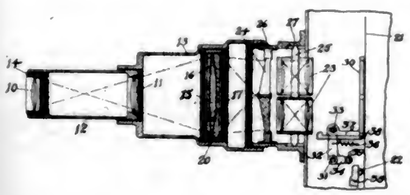
sulphate into an aminoanthraquinone sulphonic acid by heating to a temperature between 210 and 245° C. and recovering the aminoanthraquinone sulphonic acid thus produced.

1,873,301. PRINTING PRESS AND FUDGE ATTACHMENT. EDMUND W. DEAN, Battle Creek, Mich., assignor to Duplex Printing Press Company, Battle Creek, Mich., a Corporation of Michigan. Filed July 16, 1930. Serial No. 468,379. 15 Claims. (Cl. 101—219.)



6. In a printing press, an impression cylinder comprising similar complemental parts each part having a body portion of less diameter than the cylinder proper and a parti-cylindric portion projecting beyond one end thereof; and means for supporting the parts in axial alinement; said parts being relatively longitudinally adjustable.

1,873,302. COLOR PHOTOGRAPHIC MACHINE. MARSHALL DE FRANCISCO, Brooklyn, N. Y. Filed Aug. 29, 1929. Serial No. 389,219. 9 Claims. (Cl. 88—16.4.)



1. In a color camera, a focusing lens system, an image receiving lens having its light receiving surface in the focus of said focusing lens system, a plurality of prisms in the field of said image receiving lens, a separate image forming lens system associated with each of said prisms, a color filter in the path of the light rays passing through each of said image forming lens systems and a mounting for said lenses whereby said lens systems may be adjusted one to the other.

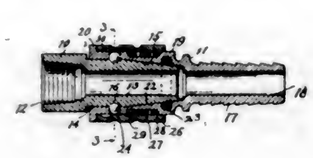
1,873,303. PRESSURE CONTROL MECHANISM. GODFREY A. DE LANGIE, Newport, R. I., assignor to Emma L. De Langie, Newport, R. I. Filed Apr. 28, 1930. Serial No. 447,828. 4 Claims. (Cl. 152—11.5.)

4. A pressure control mechanism for a pneumatic inner tube comprising a valve casing having one end secured in the wall of the inner tube and provided with a single continuous passage communicating with the interior of the inner tube, valve spaced from each other longitudinally of said passage and movable independently of each other to close the passage and prevent the escape of air from said inner tube and the admission of air to said inner



tube respectively, and a pressure control means carried by the valve casing and located within the inner tube for opening said air admission valve when the air pressure within the inner tube falls below a predetermined point.

1,873,304. HOSE COUPLING. JOHN DE MOOY, Shaker Heights, Ohio, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 19, 1929. Serial No. 372,028. 3 Claims. (Cl. 285—96.)

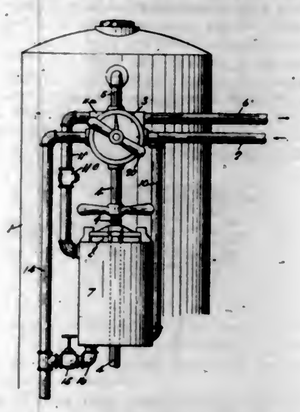


1. In a hose coupling, male and female members having tapered mating surfaces, an annular packing carried by the tapered portion of one of said members for engagement with the tapered surface of the other member, said male member having an annular groove therein spaced from the entering end of the member and said female member carrying a detent adapted to project into said groove, means tending to hold said detent in its inward position and capable of release to enable said detent to move out of said groove when the said members are being disconnected, the sealing surface of said annular packing being located along the mating tapered surfaces at a position which is inside of the circle of action of said detent.

1,873,305. WATER SOFTENING APPARATUS. EDWARD J. DE VILLE, Dayton, Ohio, assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed July 17, 1925, Serial No. 44,297. Renewed Feb. 4, 1932. 9 Claims. (Cl. 210—24.)

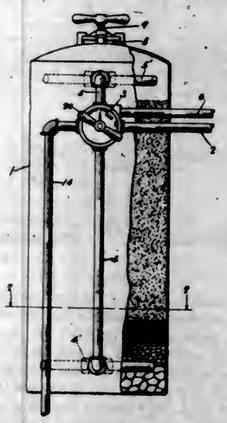
1. In a system of the character described, wherein a supply conduit is to be connected through a main tank with a service conduit and with a waste conduit alternately and wherein an auxiliary tank is to be intermittently connected in series with the main tank, a control valve common to said conduits and tanks, which in different positions of adjustment directs the water flow from the supply conduit thru the tank alternately to the service and waste conduits and reversely through the main and auxiliary tanks in series to the waste conduits, said valve being

adapted in a further position of adjustment to simultaneously close the several conduits and tanks against intercommunication, and a valved communicating passage



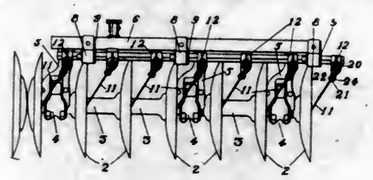
between the bottom of the auxiliary tank and the waste conduit opened when the common control valve is in closed position.

1,873,306. WATER SOFTENING APPARATUS AND MULTIWAY VALVE FOR SAME. EDWARD J. DE VILLE, Dayton, Ohio, assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 14, 1925. Serial No. 50,205. 13 Claims. (Cl. 210—24.)



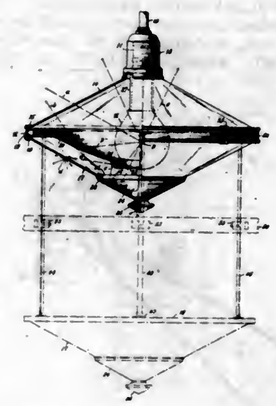
1. A valve for use in connection with a water softening tank or the like having top and bottom conduit connections, comprising a valve housing having therein two series of chambers arranged in parallel planes and including a chamber communicating with the top of the tank, another chamber communicating with the bottom of the tank, a supply chamber, an outlet chamber, a waste chamber and a bypass chamber serving to connect the supply and outlet chambers independently of the tank, and an adjustable control member for connecting the supply chamber to the tank bottom and simultaneously connecting the tank top to the outlet chamber, and capable upon further adjustment of maintaining the supply chamber in communication with the bottom of the tank while simultaneously connecting the top of the tank with the waste chamber, said control member serving upon additional adjustment to connect the supply chamber with the top of the tank and simultaneously connect the bottom of the tank with the waste chamber and upon adjustment to a different position acting to connect the supply chamber directly to the outlet chamber independently of the tank and to simultaneously connect the waste chamber with the top of the tank.

1,873,307. DISK HARROW SCRAPER. WILLIAM D. DEWEND, South Bend, Ind., assignor to Oliver Farm Equipment Company, a Corporation of Delaware. Filed Jan. 13, 1930. Serial No. 420,388. 9 Claims. (Cl. 97—224.)



1. In an agricultural implement, the combination with a plurality of soil engaging disks and means for mounting the same, of a plurality of scrapers for said disks, means connected with said scrapers for simultaneously adjusting said scrapers with respect to said disks, and means engageable with said scrapers for individually adjusting said scrapers with respect to its cooperating disk.

1,873,308. INCLOSED LIGHTING UNIT. LEROY C. DOANE, Meriden, Conn., assignor to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Sept. 1, 1928. Serial No. 303,429. 19 Claims. (Cl. 240—78.)

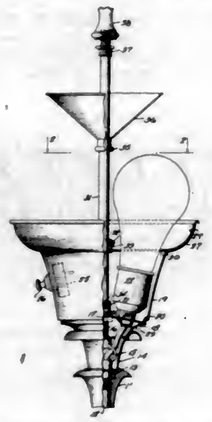


18. In an indirect lighting unit in combination, a glass cover plate and a glass bowl of the same outside diameter, rings about the edge of each glass part and secured thereto, and flexible metal straps having their ends pivotally connected to the two rings and adapted to act as tension members when suspending the lower ring below the upper ring or to flex so as to lie adjacent the rings when the rings are moved to be close together.

1,873,309. LAMP. LEROY C. DOANE, Meriden, Conn., assignor to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Nov. 8, 1929. Serial No. 405,613. 6 Claims. (Cl. 240—81.)

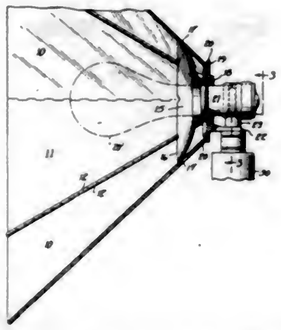
1. A lamp comprising a standard, a plurality of upwardly opening lamp sockets carried thereby and adapted to support a cluster of lamp bulbs, a socket cover about the

sockets and lower parts of the cluster, the filaments of the lamp bulbs being above the upper edge of the socket cover, a central stem extending upwardly between the sockets and lamp bulbs, a diffusing shade carried by the stem and surrounding the cluster, the upper edges of the



socket cover intercepting downwardly directed light from the lamp bulb filaments and preventing its passing out through the lower end of the shade, and a deflector carried on the stem above the lamp bulbs for redirecting upwardly directed light onto the shade.

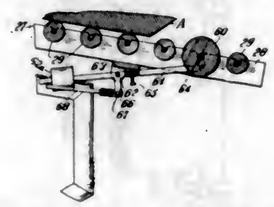
1,873,310. COLLAPSIBLE REFLECTOR. LEROY C. DOANE, Meriden, Conn., assignor to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Jan. 24, 1931. Serial No. 510,866. 13 Claims. (Cl. 240—103.)



1. A collapsible reflector comprising a plurality of panels of reflecting material hinged together, an abutment against which the ends of the panels engage, and a former detachably associated with the abutment and engaging the panels to prevent their collapsing.

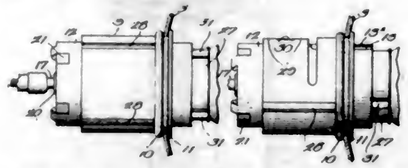
1,873,311. AUTOMATIC BUTTER FORMING AND CUTTING MACHINE. CHARLES DOERING and HENRY H. DOERING, Chicago, Ill. Filed Aug. 11, 1930. Serial No. 474,334. 4 Claims. (Cl. 31—14.)

1. In an automatic butter forming and cutting machine having chambered spiral worms and a chambered forming head, an electric motor for operating said worms, heating medium conveying conduits leading to the worms and forming head and provided with a shut-off valve, an electric circuit for said motor, a run-way for receiving the formed ribbon of butter from the forming head, and cutter mechanism arranged to travel transversely of the run-way, in combination with a lever pivoted intermediate of its ends beneath said run-way, one end of the lever being provided with a roller disposed into the path of the ribbon of butter moving along the run-way while the other end of the lever is provided with an adjustable counterweight; limit switch mechanism arranged in the electric circuit; a connecting rod intermediate of said lever and said switch mechanism; a vertically disposed lever pivotally mounted at one end and operatively connected at the other end



with said cutting mechanism, said vertical lever having a spring for returning same to normal position; a solenoid arranged in said electric circuit and adapted to actuate said vertically disposed lever and cause the cutter mechanism to move through cutting operation; a pivoted lever for controlling said shut-off valve; a solenoid arranged in said circuit and for controlling said last lever, whereby tilting of the first mentioned lever by the butter moving along the run-way actuates said limit switch mechanism interrupting the circuit to the motor and to the shut-off valve controlling solenoid and admits current to the solenoid of the vertically disposed lever.

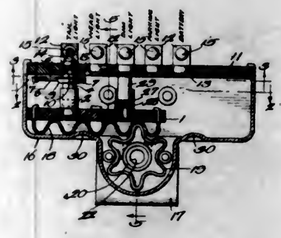
1,873,312. ELECTRIC LAMP. HARRY A. DOUGLAS, Bronson, Mich. Filed Oct. 23, 1929. Serial No. 401,720. 3 Claims. (Cl. 176—32.)



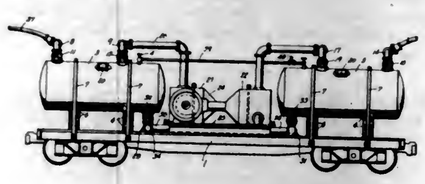
1. The combination with a socket holder; of a lamp receiving socket within said holder and smaller in cross section than the bore of the holder; an incandescent lamp having its base within said socket, said lamp base being smaller in cross section than the bore of the socket; a bayonet pin on said lamp base; a V-shaped bayonet seat in said socket for said pin; means pressing said pin against said seat; spacing ribs extending longitudinally of the holder and socket and intervening between said holder and said socket; spacing ribs extending longitudinally of the socket and lamp base and intervening between said socket and said lamp base, the ribs intervening between the holder and the socket being in register with the ribs intervening between the socket and the lamp base; a pair of spring tongues on said holder adapted to press against said socket; a formation on said socket adapted to be engaged between said tongues to prevent longitudinal movement of the socket in the holder; and a spring tongue on said socket adapted to press against said lamp base.

1,873,313. ELECTRIC SWITCH. HARRY A. DOUGLAS, Bronson, Mich. Filed Dec. 16, 1929. Serial No. 414,489. 15 Claims. (Cl. 200—16.)

1. A switch including one member inclusive of a part in the form of a metallic fork; a second member inclusive of a plurality of contacts respectively individual to the branches of the fork, said members being relatively movable in a direction generally parallel to the plane of the fork and relatively positioned to enable the making and breaking of engagement between said fork branches and contacts; and a leveling spring located apart from the places of engagement of the contacts and fork branches and pressing upon both members.

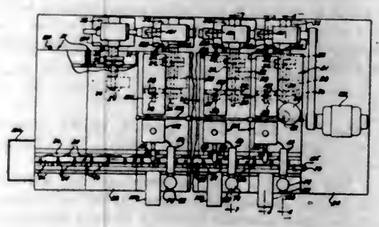


1,873,314. PUMPING APPARATUS. LEWIS F. V. DRAKE, New York, N. Y., assignor to Salvage Process Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 26, 1931. Serial No. 525,359. 5 Claims. (Cl. 103—10.)



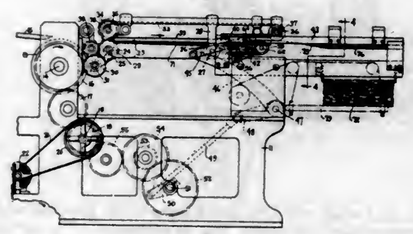
1. Portable pumping apparatus comprising a movable base, a prime mover, a vacuum pump driven thereby, a plurality of tanks, valved inlet openings therefor, valved outlet openings therefor, a manifold connecting said inlet openings, a manifold connected to said pump connecting said outlet openings, a duct connected to said inlet manifold whereby said valves may be manipulated in order that said tank may be selectively filled either individually or in a group.

1,873,315. GAUGING APPARATUS. CHARLES FREDERICK DREYER, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 28, 1927. Serial No. 243,007. 6 Claims. (Cl. 209—75.)



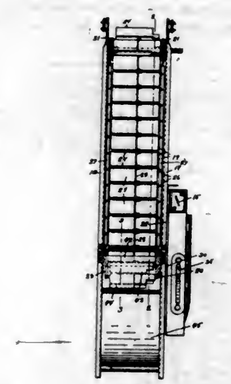
2. In gauging apparatus, a plurality of gauges for making a series of different tests, a source of power supply, interchangeable means for supporting the gauges, means carried by each supporting means for interchangeably connecting the gauges with the source of power supply, work conveying means comprising a plurality of interconnected and interchangeable sections, associated with the supporting means, and means for reciprocating the work conveying means.

1,873,316. DELIVERY MECHANISM. MICHAEL A. LEROITCOUR, Providence, R. I., assignor to Harris-Seybold-Potter Company, Cleveland, Ohio, a Corporation of Delaware. Filed Dec. 8, 1928. Serial No. 324,672. 18 Claims. (Cl. 271—74.)



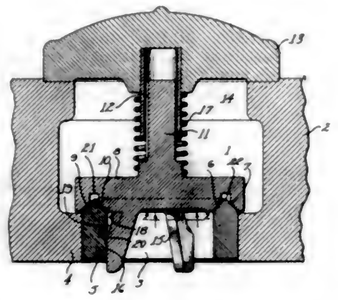
1. In a delivery mechanism, a reciprocating sheet carrier including movable tapes to support the sheet tiltable downwardly to deposit the sheet from said tapes on a pile.

1,873,317. DISPENSING MACHINE. ARTHUR H. DU GRENIER, Haverhill, Mass. Filed Jan. 29, 1931. Serial No. 512,066. 4 Claims. (Cl. 312—97.)



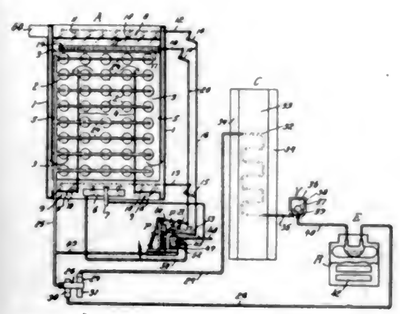
1. In a dispensing machine, an endless carrier arranged to be driven vertically about a horizontal axis and having a series of axially elongated shelves, projecting radially therefrom in spaced relation, each shelf being arranged to support a predetermined plurality of articles on different longitudinal portions thereof and to deliver the same by gravity when the shelf is in a depending position below the level of said axis, an operating device arranged, by successive operations thereof, to advance said carrier to a succession of delivery positions for each shelf corresponding to the number of articles to be delivered therefrom, and a support disposed below the level of said axis and extending in proximity to the path of movement of the outer edges of said shelves in position to support the articles on the shelves as they are advanced to said delivery positions and permitting successive delivery of the articles on each shelf in the several delivery positions thereof.

1,873,318. SELF-CLEANING SLUSH PUMP VALVE. ERNEST LLOYD EASON, Jr., Whittier, Calif. Filed Jan. 26, 1929. Serial No. 335,202. 4 Claims. (Cl. 251—28.)



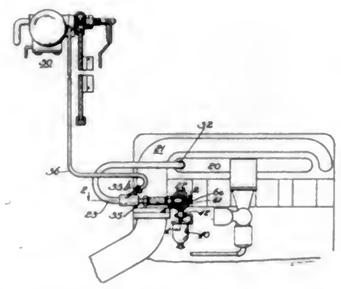
1. In a slush valve for a slush pump for pumping water carrying mud and sand, the combination of a member having a valve opening with an annular hardened seat at the opening, and a valve closure in the form of a disk having a face to come upon the seat, said valve closure having a plurality of guide wings extending from the face of the disk into the said opening, each guide wing having a guide face disposed toward the end of the wing for engaging the edge of the opening to guide the valve disk, and having a recess on its outer side at a point adjacent the disk with a relatively sharp edge extending in substantially the same direction as the axis of the valve at each recess, and projecting toward the edge of the opening, said recess and edge co-operating to prevent sand in the slush from eroding the face of the valve seat.

1,873,319. REFRIGERATING SYSTEM. WALTER L. EDEL, New Haven, Conn., assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Aug. 4, 1927. Serial No. 210,520. 21 Claims. (Cl. 62—5.)



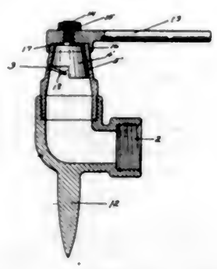
1. In a refrigerating system of the absorption type, an absorber generator including a housing, a container for absorption material, means for supplying heat to said absorber generator, means for supplying a cooling medium to said absorber generator, and means operated in accordance with the fluid pressure in said container and the temperature of said housing for controlling the operation of said heat supply means and said cooling medium supply means.

1,873,320. SUCTION-PRODUCING MEANS FOR SUCTION-OPERATED MOTORS. WILLIAM A. EDWARDS, Chicago, Ill., assignor of one-half to Charles S. Burton, Chicago, Ill. Filed May 11, 1931. Serial No. 536,455. 6 Claims. (Cl. 123—198.)



1. In combination with a multiple cylinder internal combustion engine and a suction-operated motor for actuating an auxiliary device associated with the mechanism served by the engine, a conduit connected with an individual cylinder of the engine at a point early in the course of the exhaust stroke of the piston and extended for discharge in a region of lower pressure, said conduit having a flow-accelerating constriction with an inlet port proximate to said constriction, and a relatively slender conduit connected at said inlet extending and adapted for operative suction connection with the suction-operated motor.

1,873,321. HOSE SPRAY NOZZLE. DONALD ELDER, Berkeley, Calif. Filed Dec. 28, 1929. Serial No. 417,088. 5 Claims. (Cl. 299—108.)

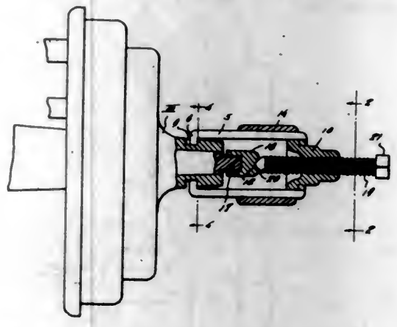


1. A sprinkler nozzle comprising a hollow body provided with an upwardly extending conical portion with a transversely extending slit therein extending at its ends at an angle downwardly and rearwardly into the body, and a rotary valve seated against said conical portion adapted for closing off the slit from one end while maintaining the width thereof.

1,873,322. HUB PULLER. JOHN G. ELDER, Harrisville, W. Va. Filed July 28, 1931. Serial No. 553,619. 1 Claim. (Cl. 29—85.)

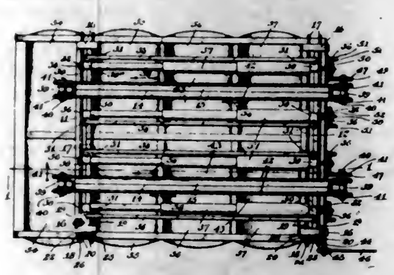
In a hub puller, a pair of complemental semi-circular sections having the opposed edges thereof in contact and having the rear terminal portions thereof provided with inwardly directed flanges, the inner corners of said flanges being provided with opposed notches cooperating in the formation of oppositely located recesses, a nut having an outwardly projecting annular flange between said sections and engaged by the opposed surfaces of said

first named flanges and being provided with oppositely located radial lugs received in said recesses, and a screw threaded through the nut, the forward portions of said sections being provided with hub engaging means, and



a collar surrounding said sections and having means securing the collar on the sections, said notches being extended entirely through said flanges and opening out through the rear surfaces thereof.

1,873,323. FRUIT SIZER. CHARLES H. EVANS, Newfane, N. Y., assignor to Niagara Sprayer & Chemical Co. Inc., Middleport, N. Y., a Corporation of New York. Filed Oct. 20, 1928. Serial No. 313,783. 7 Claims. (Cl. 209—103.)



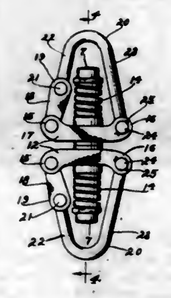
1. A sizing machine, comprising a longitudinally-disposed guide, endless feeding belts disposed at opposite sides of said guide, sizing rollers at opposite sides of said guide spaced from the upper stretches of said feeding belts, a pair of transversely-disposed supporting rods at each end of the machine, means for simultaneously moving the rods of each pair of supporting rods lengthwise in opposite directions, and bearings secured to said rods and having said sizing rollers journaled therein.

1,873,324. INTERNAL COMBUSTION ENGINE. JAMES CLARK EVANS, Detroit, Mich. Filed Oct. 3, 1927. Serial No. 223,499. 17 Claims. (Cl. 123—191.)



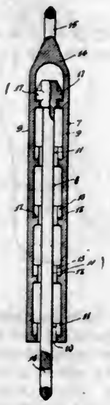
1. In an internal combustion engine, a cylinder, a piston reciprocable therein, a combustion chamber, intake and exhaust valves opening into said chamber, and baffling means formed on a wall of said chamber for directing substantially all of the combustible mixture entering said combustion chamber on the suction stroke of said piston downwardly into contact with said exhaust valve both on said suction stroke and on the compression stroke of said piston.

1,873,325. SHOCK ABSORBING CONNECTER. JAMES P. RATIGAN, Los Angeles, Calif. Filed Sept. 23, 1929. Serial No. 394,468. 3 Claims. (Cl. 267—70.)



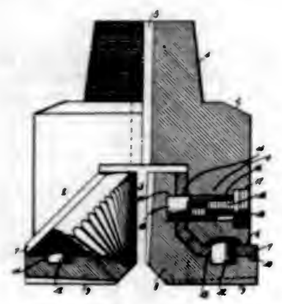
1. A shock absorbing connecter comprising an arbor provided with a shoulder at one end, a cross member slidably mounted on the arbor, a resilient member between the shoulder and the cross member, a link pivotally connected at one end to the cross member, a hook-shaped member having legs of unequal lengths, a shorter leg pivotally connected to the link, and means pivotally connecting the longer leg to the other end of the cross member, one of the pivotal connections being releasable to permit of the hook-shaped member being swung away from the cross member, and the arbor extending between the link and the longer leg of the hook-shaped member.

1,873,326. PUMP REIN. JAMES P. RATIGAN, Los Angeles, Calif. Filed Oct. 10, 1930. Serial No. 487,687. 3 Claims. (Cl. 287—58.)



1. A pump rein comprising side bars, cross members connecting the side bars and provided with openings, shoulders on the cross members at opposite sides of openings, a member extending between the side bars and projectable through one or more of said openings, a pair of lugs on the last mentioned member for selectively seating on the shoulders, a yoke connecting the bars at one end, a connection means for the yoke, and a connection means for the last mentioned member.

1,873,327. DRILL CUTTER. EARL A. REED, Tulsa, Okla. Original application filed May 26, 1927, Serial No. 194,315. Divided and this application filed July 26, 1928. Serial No. 295,389. 17 Claims. (Cl. 255—71.)



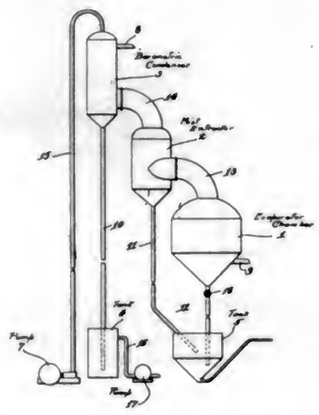
1. In a device of the character described, the combination with a drill head, of a frusto-conical spindle secured thereto, a bearing element having internal and external frusto-conical surfaces and a frusto-conical roller cutter having an internal frusto-conical surface, the internal surface of said bearing element being adapted for engagement with the frusto-conical spindle and the external surface of said bearing element having engagement with the internal surface of said cutter and means projecting from said spindle thru said bearing element and into engagement with said cutter for maintaining said cutter, bearing and spindle in assembled relation said means terminating between the surfaces of the frusto-conical cutter.

1,873,328. SHOE PLATE. FREDERICK D. REYNOLDS, St. Louis, Mo. Filed Feb. 20, 1931. Serial No. 517,199. 2 Claims. (Cl. 36—73.)



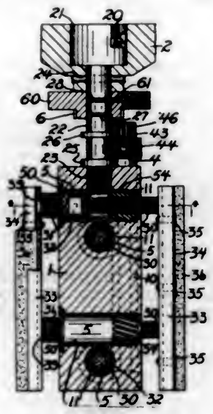
1. A metallic toe plate comprising an arcuate member right-angled in cross section and having its vertically disposed marginal flange adapted to fit against the edge of the toe portion of the sole of a shoe, said member having its horizontal flange formed with a plurality of spaced raised portions centrally apertured to receive nails for securing said plate to the underside of said sole of the shoe, said horizontal flange being formed with a plurality of V-shaped slots which permit said toe plate to be bent inwardly to conform with the curvature of the toe portion of said sole, and a central semi-circular piece formed integral with one end of said horizontal flange and disposed centrally of said plate, said central piece being provided with a convex face to provide a central bearing point for the forward end of the shoe.

1,873,329. PROCESS OF EVAPORATIVE COOLING. CHARLES F. RITCHIE and WILLIAM A. GALE, Trona, Calif., assignors to American Potash & Chemical Corporation, Trona, Calif., a Corporation of Delaware. Filed July 12, 1929. Serial No. 377,772. 6 Claims. (Cl. 159—50.)



3. A process of evaporative cooling which comprises passing the hot liquid into an evaporating zone wherein it is subjected to reduced pressure sufficient to vaporize part of the liquid and cooling the liquid through the removal of heat of vaporization, passing the vapors from such evaporating zone into a condensing zone in which they are contacted with a condensing medium, and employing a saturated brine as such condensing medium.

1,873,330. CYLINDER HONE. CLARENCE T. ROTTLER, Seattle, Wash. Filed June 26, 1931. Serial No. 546,971. 11 Claims. (Cl. 51—184.1.)



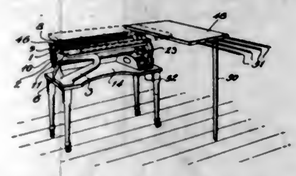
1. In a cylinder honing device, in combination, a rotative base, hones supported from said base and disposed oppositely in pairs, and the pairs angularly disposed, and means to project and retract the hones of each pair equally and simultaneously, and independently of the other hones.

1,873,331. COMBINED CORKSCREW AND BOTTLE DECAPPER. RAYMOND R. RUNDELL, Waterbury, Conn. Filed July 23, 1930. Serial No. 470,110. 6 Claims. (Cl. 65—10.)



1. In a bottle-opening device, a base adapted to be attached to a wall, a corkscrew pivoted to said base, and a guard plate mounted in front of said corkscrew for preventing clothing from catching on said corkscrew, said guard plate having a bottle de-capping slot formed therein.

1,873,332. IRONING MACHINE. FREDERICK T. RUSSELL, Utica, N. Y., assignor to Savage Arms Corporation, Utica, N. Y., a Corporation of Delaware. Filed Dec. 28, 1926. Serial No. 157,438. 6 Claims. (Cl. 68—9.)



1. In an ironing machine the combination of a rotatable roll, a shoe movable toward and from the roll, an electric motor, connections between the motor and roll and the motor and shoe respectively for effecting the rotation of the roll and the movement of the shoe, a work supporting feed table movable to control the connections between the motor and shoe and means independent of said feed table for controlling the drive connections between the motor and the roll.

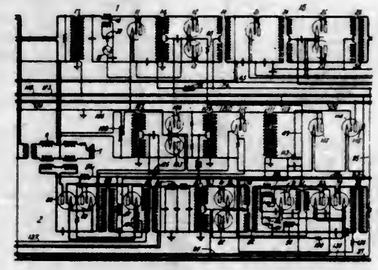
5. In an ironing machine the combination of a rotatable roll, an ironing shoe and heating means therefor, roll driving means and a heat insulating member rigidly secured to and constituting the leading edge of the shoe to protect the operator in guiding the work to the shoe.

1,873,333. NECKTIE. ORIN C. SAMPHERE, West Allis, Wis. Filed Nov. 29, 1929. Serial No. 410,425. 3 Claims. (Cl. 2—151.)



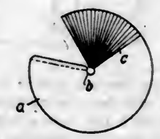
1. In a bow tie, the combination with a pair of bow wing elements of substantially like structure and each having an eyelet centrally located therein, of a fastening strip encircling the central portion of said elements and having an eyelet at each end, a mounting band having an eyelet intermediate its ends, means at the ends of said band for securing them together, said eyelets being in axial alignment, and bolting means extending through said eyelets.

1,873,334. POWER LINE CARRIER TELEPHONE SYSTEM. JAMES D. SARBOS, Long Island City, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 10, 1929. Serial No. 384,876. 4 Claims. (Cl. 179—2.5.)



1. In a power line carrier current communication system, employing the same carrier wave for transmission in both directions and transmitting the carrier wave and both side bands during communication between stations, a power line, a signal station having a transmitting and a receiving channel connected to the power line, a thermionic modulator tube and two thermionic amplifier tubes in push-pull relationship in said transmitting circuit, a detector tube and two thermionic amplifier tubes in push-pull relationship in said receiving channel, means at said station including said tubes in the transmitting and receiving channels to send and receive over the power lines the side bands and the unmodulated carrier component for communication purposes, means for applying negative blocking potential to the grids of the modulator tube and the two amplifier tubes in the transmitting circuit when the station is idle and when the receiving channel is in use, and means for applying negative blocking potential to the grids of the detector tube and two amplifier tubes in the receiving channel when the transmitting channel is in use.

1,873,335. DIAPHRAGM FOR SOUND RECEIVING, REPRODUCING, AMPLIFYING, AND TRANSMITTING INSTRUMENTS. HANS SCHMIDT, Jena, Germany. Filed Sept. 10, 1930, Serial No. 481,031, and in Germany Oct. 15, 1929. 5 Claims. (Cl. 181—32.)

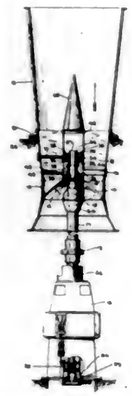


1. An acoustic diaphragm consisting of a thin sheet and flattened straw-stalks stuck side by side to said sheet, the fibres of the stalks extending substantially in the direction in which the vibration is to be transmitted.

1,873,336. PROPELLER TYPE FLUID TRANSLATING APPARATUS. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 26, 1930. Serial No. 447,613. 2 Claims. (Cl. 230—120.)

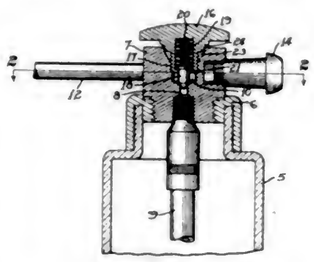
1. In a fluid translating device, the combination of a casing having an inlet and an outlet, a propeller disposed in the casing between the inlet and the outlet for translat-

ing fluid therebetween, a prime mover, a drive shaft for connecting the prime mover to the propeller, said drive shaft having a portion projecting beyond the propellor, an annulus member disposed in spaced relation about the projecting portion of the drive shaft, said annulus member having an open end remote from the propeller, a bear-



ing for said projecting portion of the drive shaft, means for supporting said bearing within the annulus member and providing for removal thereof through the open end of the annulus member, and a fairing cone detachably secured to the annulus member and forming a closure for the open end thereof.

1,873,337. SPRAYING DEVICE. JOY B. SCHMITT, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed June 20, 1929. Serial No. 372,258. 4 Claims. (Cl. 299—88.)



1. A receptacle top having a bore threaded for a portion of its length, said bore being formed with two annular seats coaxial with the bore and facing in the same direction and spaced from the threaded portion on opposite sides thereof, said top being formed with two passageways intersecting the bore at opposite sides of the threaded portion, a head having a threaded shank engaging the threaded portion of said bore and having an integral seating portion cooperating with one of said seats, a valve carried by said head, and resilient means for urging said valve into engagement with the other of said seats as said integral seating portion is moved into engagement with its seat.

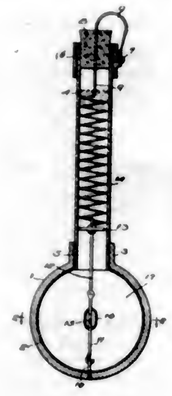
1,873,338. EYEGLASSES. ISAAC M. SCHWAB, Savannah, Ga. Filed Mar. 28, 1930. Serial No. 439,659. 2 Claims. (Cl. 88—48.)

1. A nose piece for the lens of an eyeglass, comprising a metallic piece having an elongated portion tapering toward one end and provided at said end with a return bend for engagement with the lens frame, said piece intermediate its ends provided with an extension projecting in a plane at substantially right angles to the plane of the piece, said



projection at its free end being bent laterally for engagement with the lens frame remote from said end of said elongated portion.

1,873,339. FUSE. EDMUND O. SCHWEITZER, Chicago, Ill. Filed Apr. 2, 1927. Serial No. 180,418. 10 Claims. (Cl. 200—120.)



1. In a fuse device, an explosion chamber, a standpipe communicating with the explosion chamber, a conductor extending through the standpipe and chamber and having a fusible portion disposed substantially centrally of the chamber, a jacket for said fusible portion, and a body of liquid in the chamber and standpipe, said jacket comprising a sealed air chamber disposed within said explosion chamber.

1,873,340. CAST IRON WELDING ELECTRODE AND COMPOSITION FOR COATING SAME. ROBERT L. SCOLLARD and THOMAS D. KETCHBAW, Chicago, Ill., assignors, by mesne assignments, to Kayness Corporation, Chicago, Ill., a Corporation of Illinois. Filed Feb. 15, 1930. Serial No. 428,822. 6 Claims. (Cl. 219—8.)

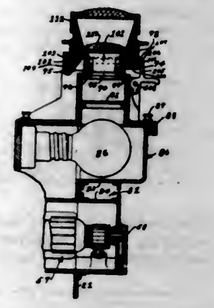
1. An electrode for arc welding comprising a metal core having a coating containing carbon by weight of 75.0% or more, silicon by weight of from 8.0% to 25.0%, and a binder.

1,873,341. FILM-VIEWING MACHINE. IWAN SERRURIER, Los Angeles, Calif. Filed May 10, 1927. Serial No. 190,178. 9 Claims. (Cl. 88—17.)

2. The film-holding gate described comprising a stationarily mounted lower member provided with an orifice, a hinge pin connected with said member, a gate section mounted to swing on said hinge pin and non-slidable along said pin, and an apertured gate section mounted to slide on said pin.

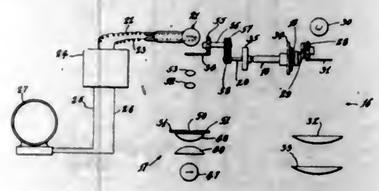
5. A film-viewing machine comprising a base, a lamp housing secured to the base, a lamp in said housing, a

film-holding gate mounted on said housing, a mechanism for operating the film, a motor in the base operably connected with said mechanism, and a housing for said motor,



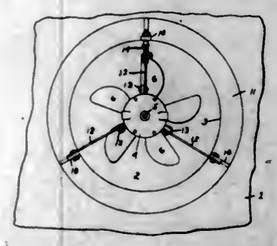
the bottom wall of the lamp housing being spaced from a portion of the motor housing to define a film guide slot tween them.

1,873,342. APPARATUS FOR EXAMINING AND SELECTING MOTION PICTURE FILMS. IWAN SERRURIER, Hollywood, Calif. Filed Apr. 3, 1929. Serial No. 352,167. 3 Claims. (Cl. 88—16.2.)



1. An apparatus of the character described comprising a film viewing unit provided with a shaft, a sound film reproducing unit provided with a shaft, and a rubber member connected at its opposite ends to said shafts.

1,873,343. MOTOR MOUNTING. ARTHUR W. SEYFRIED, Cleveland Heights, Ohio, assignor to The Apex Electrical Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 25, 1927. Serial No. 201,493. 5 Claims. (Cl. 248—16.)



1. The combination with an electric motor comprising a frame and a rotating element journaled therein upon a horizontal axis, of a noise-proof support comprising parts spaced from said motor, and a plurality of connecting elements between said frame and support and constituting the sole means for sustaining the weight of said frame and rotating element, said elements consisting essentially of thin, flat, elongated strips of laterally yieldable and longitudinally inextensible nature arranged substantially radially relative to the armature axis and the planes defined thereby parallel to such axis, said elements being spaced substantially equidistantly around said axis the portions of said strips which are nearest to said motor being secured rigidly to said frame and the portions of said strips furthest from said motor being secured rigidly to said support whereby said frame is rendered elastically yieldable circumferentially of the armature axis and substantially non-yieldable radially of such axis.

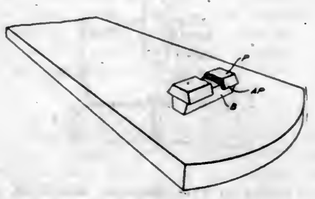
1,873,344. MANUFACTURE OF ANTHRAQUINONE DERIVATIES. ARNOLD SHEPHERDSON, Blackley, Manchester, England, assignor to British Dyestuffs Corporation Limited, Manchester, England, a Corporation of Great Britain and Ireland. Filed Dec. 17, 1926, Serial No. 155,550, and in Great Britain Mar. 27, 1926. 12 Claims. (Cl. 260—60.)

3. In the manufacture of arylaminoanthraquinones, the process which comprises condensing an unsulphonated arylamine with an unsulphonated halogenated anthraquinone in the presence of a strong aqueous solution of sodium acetate.

1,873,345. MANUFACTURE OF ANTHRAQUINONE DERIVATIES. ARNOLD SHEPHERDSON, Blackley, Manchester, England, assignor to British Dyestuffs Corporation Limited, Manchester, England. Filed Feb. 7, 1929, Serial No. 338,326, and in Great Britain Feb. 15, 1928. 8 Claims. (Cl. 260—60.)

1. A process for the manufacture of arylaminoanthraquinones, consisting in condensing together an unsulphonated arylamine and an unsulphonated halogenated anthraquinone in the presence of potassium acetate and water in quantities sufficient to act as a blending agent.

1,873,346. METHOD OF PRODUCING SWITCHING APPARATUS PARTS. HUMPHREYS O. SIEGMUND, West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 27, 1928. Serial No. 322,274. 5 Claims. (Cl. 29—155.5.)

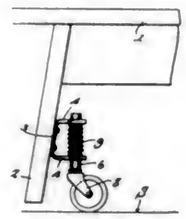


5. The method of producing switching apparatus parts which consists in welding the apex of a truncated block of precious metal to the base of a truncated block of base metal, said precious and base metal blocks forming complemental portions of a truncated bi-metallic block when so joined, welding the apex of the truncated bi-metallic block to a supporting member and swaging the precious metal to form a contact and a protective apron on the base metal subsequently to the welding of the bi-metallic block to the supporting member.

1,873,347. FURNITURE. WILLARD ROSSITER SMART, Los Angeles, Calif. Filed Feb. 10, 1930. Serial No. 427,325. 1 Claim. (Cl. 16—33.)

The combination with an article of furniture, of a yoke secured to an outer surface of the article having superposed

apertured arms, a tubular member slidable freely in the arms and held thereby against transverse movement, a caster engaging the tubular member, and a coiled compression spring on the tubular member and fastened at one end thereto, the other end of the spring engaging one

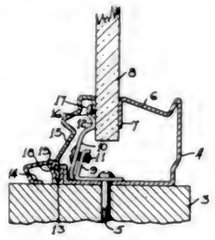


arm of the yoke, said spring being yieldable when subjected to the weight of the article of furniture and a load thereon, to permit the article to rest on a supporting surface, and being expansible to automatically lift said article when relieved of its load.

1,873,348. METHOD OF MAKING BASIC ALUMINUM SULPHATE. EARL DAVIS SMITH, Kenvil, N. J., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 29, 1929. Serial No. 351,124. 13 Claims. (Cl. 23—123.)

1. The process of producing basic aluminum sulphate comprising digesting together substantially combining amounts of bauxite residues and sulphuric acid at elevated temperatures and under pressures less than 50 lbs. per square inch.

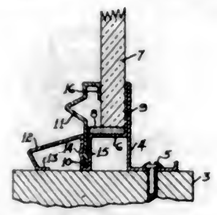
1,873,349. DEVICE FOR SECURING GLASS. LORNE C. SMITH, Chicago, Ill., assignor to Zouri Drawn Metals Company, Chicago Heights, Ill., a Corporation of Illinois. Filed Mar. 7, 1930. Serial No. 433,891. 16 Claims. (Cl. 20—56.4.)



1. In a device of the character described, a member for engaging one face of a sheet, a second member for engaging the opposite face thereof, means for securing said members in clamping relation to the sheet, one of said members being formed with a channel and a moulding insertable into said channel in a position to cover said securing means.

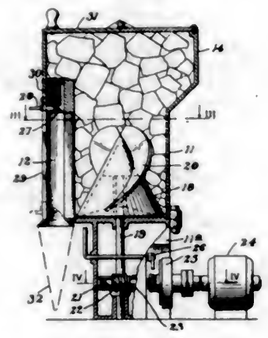
1,873,350. GLASS SECURING DEVICE. LORNE C. SMITH, Chicago, Ill., assignor to Zouri Drawn Metals Company, Chicago Heights, Ill., a Corporation of Illinois. Filed Mar. 7, 1930. Serial No. 433,892. 4 Claims. (Cl. 20—564.)

1. In a device for securing a sheet of glass or the like, a relatively fixed member adapted to be mounted upon a sill or frame and having a surface for engaging one face of the sheet and a rearward extension whereby the member may be attached to said sill or frame, and provided with a channel on the opposite side of the plane of the sheet, and a second member insertable into said channel in a direction substantially parallel to the proximate edge of the sheet and normally engaging the opposite face of the



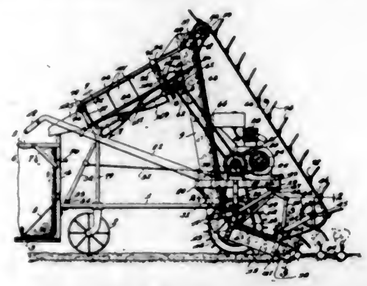
sheet when thus inserted, a wall of said channel and said second member having mating longitudinal corrugations to lock said members against relative transverse movement.

1,873,351. ICE SHAVING MACHINE. RALSTON SMITH, Oakland, Calif. Filed July 31, 1929. Serial No. 382,340. 4 Claims. (Cl. 83—62.)



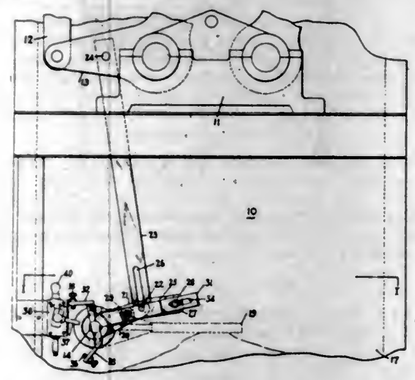
3. A machine of the character described comprising a cylinder having a slot formed in the wall thereof, a blade at one side of said slot and having an edge projecting into the cylinder, a revoluble cone arranged within the cylinder and having a helical blade formed thereon whereby revolution of the cone will cause ice fed to the cylinder to be revolved over the blade as it passes the cylinder.

1,873,352. VEGETABLE HARVESTER. ROY D. SMITH, Pleasant Valley, Iowa. Filed Dec. 6, 1929. Serial No. 412,117. 6 Claims. (Cl. 55—9.)



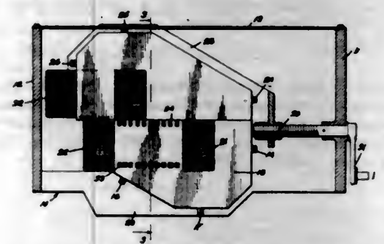
4. A harvester of the character described including a chute having a movable lower portion for removing the vegetables from the ground, a conveyor for carrying the removed vegetables through the chute, a portion of said conveyor being connected to and operable with the movable portion of the chute, a hopper into which the vegetables are deposited from the conveyor, means for removing the tops of the vegetables while in the hopper, a receptacle into which the topped vegetables are deposited, and means for raising and lowering the movable portion of the chute and the associated part of the conveyor.

1,873,353. COMBUSTION APPARATUS. JACOB SPERLING, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 20, 1931. Serial No. 558,414. 7 Claims. (Cl. 177—311.)



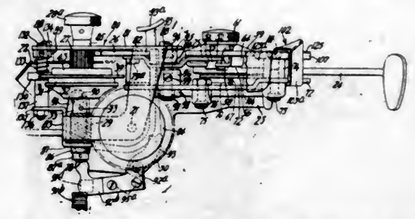
1. The combination with a bin for storing granular material and means for filling the bin with such material, of a member disposed within the bin and adapted to contact with the body of granular material as it fills the bin; means for reciprocating said member toward and away from the inner portions of the bin, and providing for decreased amplitudes of movement of such member as it comes into contact with the increasing body of material; and means dependent upon a predetermined level of the material and consequent position of the member for indicating exteriorly of the bin such level.

1,873,354. CORE CONSTRUCTION FOR MAGNETIC CIRCUITS. RALPH E. STEWART, Los Angeles, Calif., assignor of one-half to Charles Ruess, Los Angeles, Calif. Filed Apr. 3, 1929. Serial No. 352,261. 10 Claims. (Cl. 175—356.)



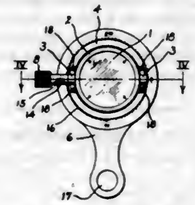
7. In a magnetic circuit adapted to be energized by either an alternating current or a pulsating direct current, two members adapted to engage each other, the engaging surfaces being substantially flat, one of the members being laminated with the edges of the laminations cooperating to produce the surface, and means for holding the laminations in association in such a manner that the laminations are loose and may vibrate independently of each other.

1,873,355. TYPEWRITING MACHINE. BURNHAM C. STICKNEY, Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 27, 1926. Serial No. 137,948. 35 Claims. (Cl. 197—114.)



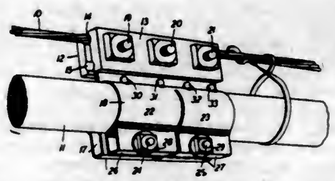
1. In a typewriting machine, the combination with a revoluble platen, of line-spacing means including a line-space lever, a gear in train with said platen, a rotary pinion in mesh with said gear having a V-toothed section rotatable therewith, and means controlled by said lever and co-operative with said V-toothed section whereby said pinion may be locked to rotate the gear and effect a line-spacing rotation of said platen.

1,873,356. EYE TESTING DEVICE. RUSSELL L. STIMSON, San Francisco, Calif., and WILLIAM H. BOUTELLE, Sturbridge, Mass., assignors to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Oct. 17, 1929. Serial No. 400,381. 13 Claims. (Cl. 88—22.)



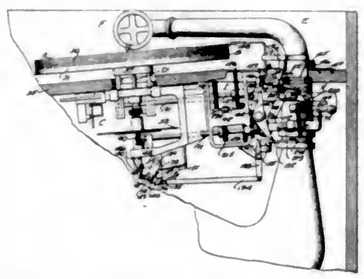
12. In a device of the character described, a support, a lens rotatably mounted on the support, means on the support by which the lens may be rotated in its own plane, and other means also on the support by which the lens may be turned completely over in a direction normal to its own plane and about an axis passing substantially through its center.

1,873,357. GRADE CLAMP. EVERETT ST. JOHN, Westport, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 2, 1931. Serial No. 519,442. 6 Claims. (Cl. 248—33.)



1. In a cable supporting device adapted to be secured to a supporting strand, a pair of clamping members, longitudinal grooves in each of said members, means in said clamping members for securing them together, a pair of cable receiving members secured in certain of said grooves and means located at the bottom of said cable receiving members for securing the cable therein.

1,873,358. PHONOGRAPH. JACK POTTER STOCKTON, Spring Lake, N. J., assignor to Stromberg-Carlson Telephone Manufacturing Company, a Corporation of New York. Filed Mar. 18, 1927. Serial No. 176,432. 64 Claims. (Cl. 274—10.)



3. A phonograph having a continuously rotating playing platform, a plurality of phonograph records, platform carried record centering means, means for playing the records successively beginning with the top record, means for disengaging the top record from the centering means, and means for engaging the upper surface of the disengaged record to initiate rotation thereof about an eccentric center while it is completely supported on the next lower record and causing it to whirl to pass laterally beyond the playing platform.

25. A phonograph having a swinging tone arm and a rotatable playing platform tilted about an axis at substantially right angles to a line connecting the center of the platform and the pivot of the swinging tone arm, the platform tilting downwardly away from the tone arm, and a record receptacle to one side of the platform.

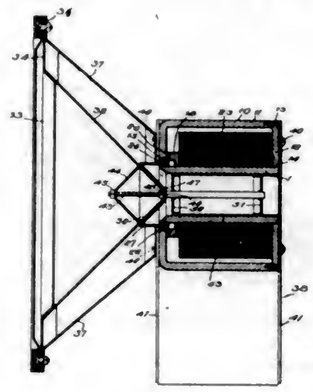
1,873,359. OFFSET IMPLEMENT. WILLIAM H. STUCK, Ventura, Calif., assignor to Killefer Manufacturing Corporation, Ltd., Los Angeles, Calif., a Corporation of California. Filed June 23, 1931. Serial No. 546,291. 8 Claims. (Cl. 55—30.)



1. In an offset tractor drawn implement, the combination of a ground working member, a rigid hitch for connecting the ground working member with the tractor, to draw the ground working member in offset position from the line of progression of the tractor, the ground working member including a plurality of ground working tools which, when moved to ground cultivating position, tend to cause said member to travel in a direction transverse to the line of travel of the tractor, a stabilizing element, and means for operatively connecting the stabilizing element to said ground working member.

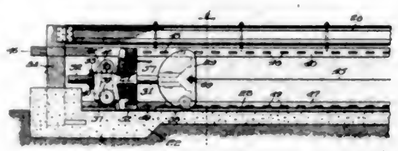
1,873,360. LOUD-SPEAKER CONSTRUCTION. JOSEPH SWALLOW, Berwyn, Ill., assignor to Temple Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 15, 1929. Serial No. 371,207. 2 Claims. (Cl. 179—115.5.)

1. In a loud speaker of the electromagnetic type, the combination with a magnet including a tubular pole piece, of a coil adapted to move in the magnetic field of said magnet, and supporting means for said coil comprising flexible members disposed in said pole piece and extending outwardly with respect to the longitudinal axis of said coil, said flexible members extending in a non-radial direction between said longitudinal axis and a support, said flexible members being disposed substantially at right



angles to the direction of movement of the coil and having a length greater than the radial distance between said longitudinal axis and said support.

1,873,361. APPARATUS FOR MANUFACTURING PLATES. WILFRED SYKES, Chicago, Ill. Filed Jan. 11, 1928. Serial No. 245,940. 7 Claims. (Cl. 153—35.)



1. A machine of the character set forth, comprising spaced-apart members for engaging the ends of the work, one of said members being formed of sections both of which are adjustable, as a unit, lengthwise of the machine and one of which is a work-engaging section and is bodily adjustable relative to the other section thereof in a direction lengthwise of the machine, means for rigidly holding said other section against movement lengthwise of the machine, and means for effecting relative movement of said members in a direction away from each other to stretch the work.

1,873,362. POROUS LIGHTNING ARRESTER. RAGNAR TANBERG, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 6, 1929. Serial No. 383,924. 4 Claims. (Cl. 175—30.)



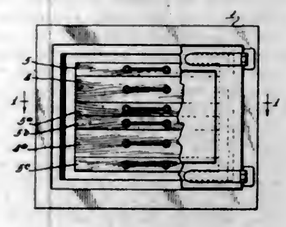
1. A striated porous-block arrester having a plurality of porous discharge discs stacked and cemented together with conducting cement, said discs being made of semi-conducting porous material operating on the principle of dis-

charges through the pores, said pores being so fine that the voltage-gradient necessary to maintain a discharge is measured in thousands of volts per inch, and the amount of conducting matter in said porous material being barely sufficient to bring the breakdown voltage substantially down to the cutoff voltage in each of the pores carrying current.

1,873,363. COATED IRON OR STEEL ARTICLE AND METHOD OF MAKING THE SAME. ROBERT R. TANNER, Detroit, Mich., assignor to Parker Rust-Proof Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 22, 1929. Serial No. 357,343. 6 Claims. (Cl. 148—6.5.)

3. A method of coating surfaces of iron or steel which comprises applying to said surfaces a hot weak dilute solution of phosphates including copper phosphate, the copper phosphate forming only a minor fraction of the phosphates in solution, and thereby forming on the said surfaces a coating of insoluble phosphates interspersed with metallic copper, and heating to oxidize the copper in said coating.

1,873,364. REFRIGERATING APPARATUS AND METHOD. HENRY M. TAYLOR, Cleveland, Ohio, assignor to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 21, 1929. Serial No. 387,279. 7 Claims. (Cl. 62—91.5.)



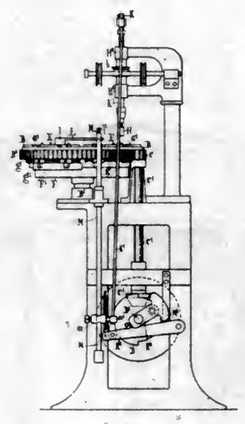
1. A refrigerating cabinet of the class described, having therein spaced-apart, reticulated means each supporting a layer of fragmental frozen carbon dioxide and means for supporting between the same, in intimate heat exchange relation therewith, a thin layer of products to be refrigerated.

1,873,365. PROOFING OR LIKE TREATMENT OF MATERIALS TO PROTECT THEM FROM MILDEW AND OTHER FUNGOID GROWTHS. ROBERT GEORGE FARGHER, LESLIE DOUGLAS GALLOWAY, and MAURICE ERNEST PROBERT, Manchester, England, assignors to The British Cotton Industry Research Association, Didsbury, England, a British Association. Filed Oct. 18, 1929, Serial No. 400,727, and in Great Britain Oct. 18, 1928. 9 Claims. (Cl. 167—37.)

1. A sizing bath for cotton yarns and fabrics comprising in aqueous solution an alkali salt of an arylamide of a salicylic acid selected from a class consisting of a salicylic anilide, salicylic alkoxyanilide, 5-chlorosal-icylanilide, β-resorcylic anilide and salicylic o-toluidide.

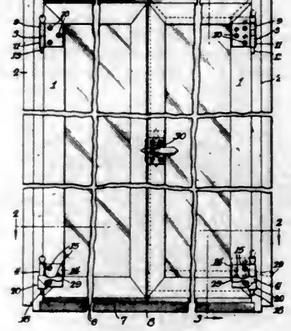
1,873,366. MACHINE FOR FORMING THE ENDS OF PAPER TUBES. TOM FARROW, Ashton-under-Ryne, England. Filed Mar. 19, 1931, Serial No. 523,761, and in Great Britain May 27, 1930. 7 Claims. (Cl. 93—36.)

1. A machine for pressing or spinning over the end of a paper tube to form an inturned rim at such end comprising the combination with an intermittently rotating table of a plurality of upwardly projecting pins thereon to receive the tubes, a revolving shaping tool below which the tubes are successively carried by the intermittent movement of the table, a cam for bringing the shaping tool into engagement with the end of each tube as it is stationary below the tool to form the inturned rim and



means for causing the withdrawal of each pin below the surface of the table after the tube thereon has been acted upon by the shaping tool.

1,873,367. DOOR OR WINDOW. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois. Filed Nov. 25, 1929. Serial No. 409,476. 4 Claims. (Cl. 16—153.)

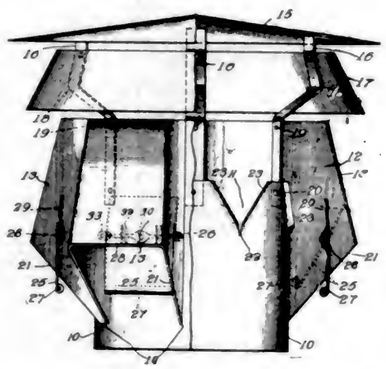


1. In a hinge for mounting a closure to swing about a vertical axis, and to rise vertically to swing open about said axis, over a sill, hinge plates having interfitting knuckles provided with a vertical pintle and rotary means operative about said vertical axis to raise and lower the closure, said rotary means having a locking element to lock the closure in its lowered position.

1,873,368. VENTILATOR. ARTHUR J. FILKINS, Riverside, Ill. Filed Sept. 18, 1929. Serial No. 393,375. 10 Claims. (Cl. 98—78.)

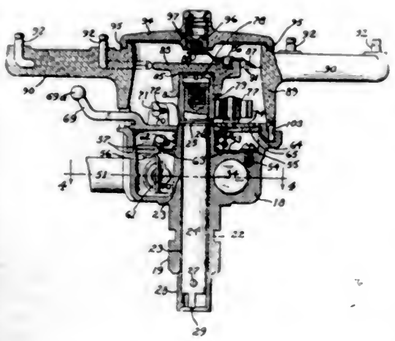
1. In a ventilator or chimney the combination with a pipe of a hood surrounding the exhaust terminal of the pipe, there being a portion of the hood projecting above the upper end of the pipe, the said hood being formed as

an enlargement around the periphery of the pipe with spaced apart portions thereof formed inwardly to contact with the outer periphery of the pipe whereby to provide between said spaced apart inwardly formed portions on the hood, a plurality of upwardly tapering draft passages outside of said pipe and communicating with the interior thereof at its upper extremity, a cap plate positioned above said pipe and hood, and draft control vanes, one of which



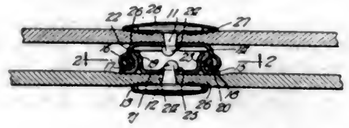
is pivotally and swingably mounted within each of said draft passages in the hood, there being a portion at the lower end of each of said pivotally and swingably mounted vanes projecting below the lower end of the draft passages in the hood, thus exposing the lower extremities of the said vanes to the action of air currents traveling in a general horizontal direction toward the vertical axis of the pipe.

1,873,369. IGNITION SYSTEM. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed June 30, 1928. Serial No. 289,444. 5 Claims. (Cl. 200—16.)



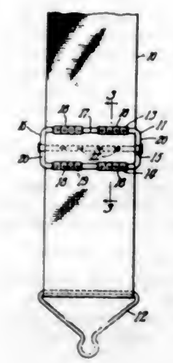
1. In a device of the character described, a casing, a distributor head mounted thereon, said distributor head having a slot therein, and a breaker assembly supporting plate mounted in said casing with a bayonet joint connection, said plate having an adjusting arm extended therefrom through the slot in the head and the parts being so arranged that the plate will be rotatably mounted in the casing when the heat is installed but removal of the plate can only occur when the head is removed from the casing.

1,873,370. SECURING MEANS. IRA D. FORD, Roseland, Ontario, Canada, assignor to Universal Button Fastening & Button Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 12, 1928, Serial No. 246,117. Renewed May 11, 1931. 1 Claim. (Cl. 24—208.)



A snap fastener stud member for separable fasteners adapted to be separably engaged by a socket member, said stud member comprising a cup-shaped element provided with a central cloth engaging base of substantial area, an upstanding circular portion constituting the inner wall of said cup-shaped element flared outwardly to a substantial degree whereby to form an enlarged head for said stud and rebent to form the outer wall of the cup-shaped element and adapted to enter a socket element, the margin of said outer wall being in the form of an outwardly extending base flange, an attaching fastener for said stud member having a head and a single, tapered, pointed prong of ductile material, said prong piercing without severing the cloth to which the stud member is applied, said central base being penetrated by the prong and closely engaging said prong, said cup-shaped element of the stud member exposing the attaching prong so that the prong may be directly engaged by a tool to upset it, said prong being upset under pressure within the cup-shaped element while said central base of the cup-shaped element and the fastener head are caused to compress the cloth to which it is attached to provide an enlargement on said prong which engages the margin of the opening in the base whereby the prong is anchored within the cup-shaped element and preserves the gripping pressure on the opposite faces of the cloth, said prong having a head of substantial area.

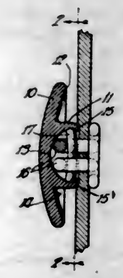
1,873,371. SLIDE BUCKLE. IRA D. FORD, Roseland, Ontario, Canada, assignor to Universal Button Fastening & Button Company, Detroit, Mich., a Corporation of Michigan. Filed June 28, 1929. Serial No. 374,541. 4 Claims. (Cl. 24—196.)



4. A suspender slide buckle of the character described comprising in combination a loop formed of a piece of wire bent into rectangular shape and presenting a pair of parallel bars, the ends of said wire being connected together at a point intermediate the ends of one of said bars, said bars having flattened portions to present gripping corners and having the under faces of said portions roughened to increase the friction against the suspender strap, an intermediate straight wire bar formed with eyes at its ends passing around the ends of said loop to connect said bar slidably in said loop, said intermediate bar being provided with suspender strap engaging corners for increasing the frictional engagement with the suspender strap.

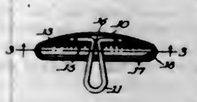
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1,873,372. BUTTON. IRA D. FORD, Roseland, Ontario, Canada, assignor to Universal Button Fastening & Button Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 19, 1930. Serial No. 437,235. 2 Claims. (Cl. 24—97.)



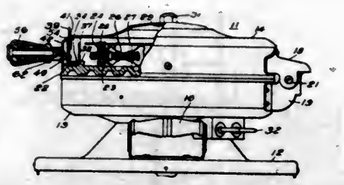
1. A metal shirt button made of soft steel or the like, comprising in combination a relatively thin, solid head of generally uniform thickness formed to present a convex outer surface and a concave under surface, an integral recessed shank concealed within the concavity of the under face of the head and being relatively short so as not to project substantially beyond the plane of the edge of the button head, the said recess being concave at its bottom to provide a die surface for upsetting the prong of an attaching fastener, the thickness of said head at the bottom of said recess being sufficient to prevent penetration thereof by a fastener prong and the metal thereof being hard so as to prevent penetration by the fastener prong, and means adjacent the extremity of said shank for engaging the bent over prong to secure the button in place.

1,873,373. BUTTON. IRA D. FORD, Roseland, Ontario, Canada, assignor to Universal Button Fastening & Button Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 4, 1930. Serial No. 472,844. 6 Claims. (Cl. 24—90.)



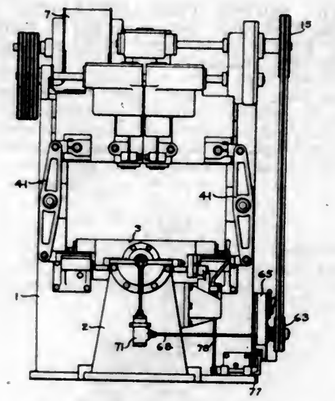
1. A button of the character described compriaing in combination, a wire loop forming an eye and having an attaching extremity, a metal top and a sheet metal back member, said top and back member conforming in shape so that said back member nests inside said top and being formed to provide a central recess in which said extremity is seated, said recess being only deep enough to receive said extremity, the margins of said top and back member being curled together to hold the same together and to clamp said extremity firmly between the top and back member.

1,873,374. TEMPERATURE INDICATOR. FRANK F. FORSHEE, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 6, 1929. Serial No. 383,824. 5 Claims. (Cl. 116—114.)



1. A temperature-indicating means for a cooking appliance having a heated cooking surface and an apertured cover member therefor, said temperature-indicating means including a guide bracket on the inside of the cover member having a guide slot therein, an indicator freely movable through the aperture in the cover member, a guide pin on the indicator movable in the guide slot, and a bymetal member having a portion for moving the indicator relatively to the cover in accordance with temperature changes of cooking surface.

1,873,375. MACHINE TOOL. WORTHY J. F. FORWARD and ROLAND RUSSELL ROBERTS, Rochester, N. Y., assignors to Consolidated Machine Tool Corporation of America, Rochester, N. Y., a Corporation of Delaware. Filed July 15, 1929. Serial No. 378,551. 5 Claims. (Cl. 90—15.)

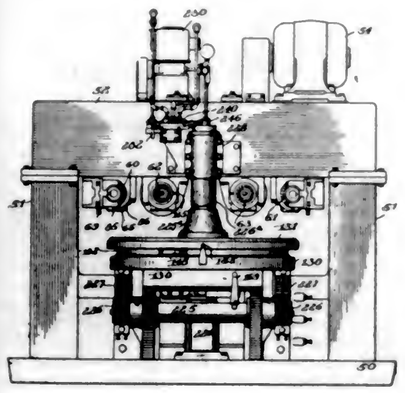


1. In a machine tool, the combination of a work holder adapted to carry a work piece on which three lines of operations are to be performed, a revoluble tool spindle arranged in each of said lines of operation, means for moving the work holder to move the tool spindle to and from said work piece mounted on said work holder, and means for automatically moving two of the spindles out of said lines of operation while another spindle operates on the work piece.

1,873,376. MACHINE TOOL. WORTHY J. F. FORWARD, Rochester, N. Y., assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y., a Corporation of Delaware. Filed Nov. 30, 1927. Serial No. 236,771. 27 Claims. (Cl. 90—16.)

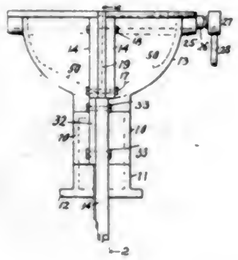
1. In a machine tool, the combiantion with a pair of tool spindles, of a second pair of tool spindles arranged in a horizontal plane mounted between the spindles of the

first pair in the same horizontal plane, a drive shaft for driving said first pair of spindles, a second drive shaft arranged parallel to the first driving shaft for driving said



second pair of spindles, means for driving said first drive shaft, and an operative connection between the first drive shaft and the second drive shaft to drive the latter from the former.

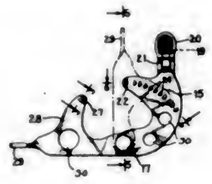
1,873,377. HOPPER FEED APPARATUS. LEE A. FRAYER, Kent, Ohio, assignor to Roy H. Smith, Kent, Ohio. Filed Nov. 23, 1929. Serial No. 409,276. 8 Claims. (Cl. 10—162.)



1. In apparatus of the class described, a hopper having in the bottom thereof an inclined groove adapted to receive nuts on edge only, a nut galley opening into said groove between the upper and lower ends thereof, and means movable within the lower part of said groove in opposite directions alternately for causing the travel of nuts toward said galley from opposite directions.

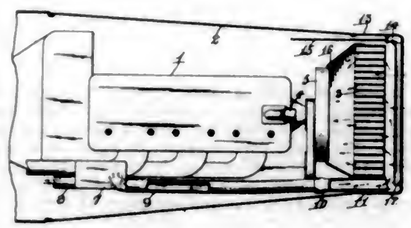
1,873,378. CLOSING CLIP. ERNEST O. FREDERICS, Bronxville, N. Y., assignor to E. Frederics, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 14, 1931. Serial No. 529,937. 6 Claims. (Cl. 132—36.1.)

1. In a device of the class described a pair of coextensive spaced plates, means for securing said plates adjacent one end, an element pivotally mounted on said means and adapted to be rocked between said plates, interengaging shoulders carried by said element and one of said plates, and finger pieces formed at the outer end



of said plates at the same radial distance from said means adapted upon being squeezed together to effect disengagement of said shoulders.

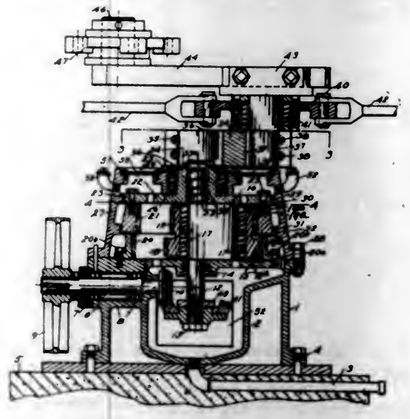
1,873,379. ENGINE HEATING AND COOLING SYSTEM. HERMAN C. FRENTZEL, Jr., Milwaukee, Wis. Filed June 5, 1929. Serial No. 368,584. 1 Claim. (Cl. 123—174.)



The combination with an internal combustion engine having an exhaust manifold, a hood enclosing the engine, a radiator at the front of the engine, and a fan for cooling the engine disposed intermediate the radiator and the engine, of an attachment therefor including a supplemental hood enclosing the radiator having a wide entrance opening, shutters for controlling said entrance opening, a hot air heater surrounding the exhaust manifold, a hot air pipe leading from the heater to the front of the motor, and an air collecting shield disposed directly in rear of the radiator and extending to and tapering toward said fan, an enlarged air receiving and discharging chamber extending substantially the full height of the radiator, and disposed at one side thereof communicating at its forward end with the space between the radiator and supplemental hood, and means connecting the front end of the hot air pipe with the rear end of the chamber.

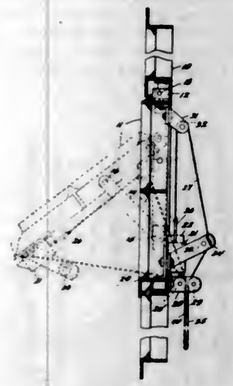
1,873,380. POWER MECHANISM FOR WELLS. JESSE G. GIBSON, Bradford, Pa. Filed May 17, 1930. Serial No. 453,247. 5 Claims. (Cl. 74—35.)

1. In a power for wells, the combination of a frame comprising a case and base; a vertically extended shaft journaled in the frame; a pull rod crank above the case; an epicyclic gear between the crank and shaft comprising two orbitally moving and rigidly connected gears mounted off-center on said shaft and having different pitch diameters; a stationary gear meshing with one of the orbitally moving gears; a driven gear meshing with the other orbitally moving gear a bearing in the case for the driven gear; a connection between the driven gear and the crank the bearing receiving the thrust of the crank;



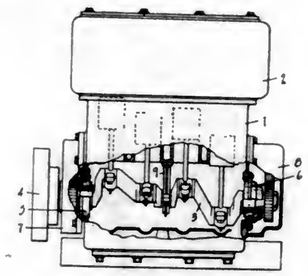
a pull rod connection on the crank; and a bearing for the vertical shaft in said connection, said shaft terminating below the top of the connection.

1,873,381. CLOSURE OPERATOR. EARL Y. GILKEY, East Syracuse, N. Y. Filed Apr. 2, 1931. Serial No. 527,298. 1 Claim. (Cl. 268—110.)



In a window construction, in combination, a frame, a sash mounted on the frame for outward swinging movement relatively thereto about a horizontal axis adjacent its upper edge in moving from closed to open position and vice versa, a latch mounted on the inside of the sash adjacent its lower edge for engaging the frame to secure the sash in closed position, a guide on the frame adjacent the position which the latch occupies when the sash is closed, a second guide mounted on the sash adjacent the top thereof, a third guide mounted on the sash adjacent the latch and having its guide surface displaced laterally from a line connecting the first and second guides and on the opposite side of such line from the latch, and a flexible element connected to the latch and passing successively over the second, third, and first mentioned guides, said element, when placed under tension, releasing the latch and exerting a thrust on the third guide which tends to move the third guide to a position on the line connecting the first and second guides, thereby partially opening the sash.

1,873,382. BEARING FOR ENGINE CRANKSHAFTS. GLENN W. GILLETT, Lansing, Mich., assignor to Novo Engine Company, Lansing, Mich. Filed Sept. 16, 1929. Serial No. 392,972. 2 Claims. (Cl. 308—179.)

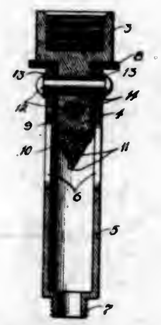


1. In a structure of the class described, a crankshaft, a central bearing bracket, a ball or roller bearing ring case adapted to be supported thereby and adapted to pass over the shaft, a split shouldered bushing disposed in one end of the said bearing, a split sleeve introduced into the said bearing case ring to fill the same, a divided spacer retainer ring with peripheral groove, a lock spring for retaining the same, and a protecting collar with internal groove to embrace said lock spring and to be held in place thereby.

1,873,383. DETERGENT COMPOSITION. ALBERT G. GLOVER, Brookline, Mass. Filed May 7, 1928. Serial No. 275,973. 5 Claims. (Cl. 87—5.)

2. A stable, non-corrosive detergent composition miscible with water, the said composition comprising more than 50 per cent of a hydrocarbon chlorid admixed with other materials, the said other materials comprising sulfonated vegetable oil, soap, water and a small amount of an alkali carbonate of the class consisting of sodium and potassium carbonates, the said alkali carbonate being dissolved therein and being present in amount sufficient to render and maintain the said composition alkaline with carbonate alkalinity.

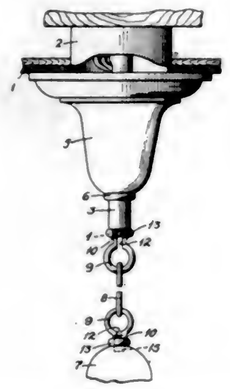
1,873,384. COMBINATION STEM, INSULATION JOINT, AND HICKEY. JOHN B. GLOWACKI, Chicago, Ill. Filed Feb. 3, 1930. Serial No. 425,411. 5 Claims. (Cl. 240—85.)



1. A fixture-supporting unit comprising a pair of interfitting members adapted to be connected between an outlet box and a fixture, insulating means separating said interfitting members, an insulation rivet rigidly securing said interfitting members together with the insulating means locked therebetween, one of said interfitting mem-

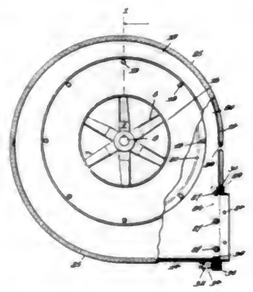
bers having a hickey opening therein, and an insulation wire guide formed on said insulating means to facilitate the projection of wires from said fixture out through said hickey opening.

1,873,385. SPLIT SUPPORTING LOOP FOR FIXTURES. JOHN B. GLOWACKI, Chicago, Ill. Filed Feb. 3, 1930. Serial No. 425,412. 4 Claims. (Cl. 240—85.)



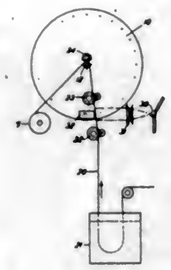
1. A fixture supporting device comprising a split loop, an internally threaded split head integrally formed on said loop, a lock ring removably engaged around said split head before mounting of said loop, and a flange formed on said lock ring and seated on the outer end of the split head to hold the ring in position, and a supporting member threaded into the split head and clamping said flange thereon.

1,873,386. FAN CASING AND METHOD OF ASSEMBLING THE SAME. GEORGE R. GOLDTHWAITE, Readville, Mass., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed Apr. 11, 1929. Serial No. 354,431. 1 Claim. (Cl. 230—133.)



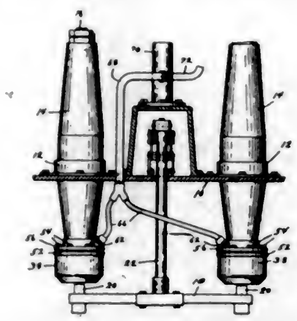
A fan casing comprising side plates, a sheet metal roundabout provided at its edges with beads forming grooves within which the edges of the side plates are received, tension devices including a draft bolt to exert peripheral stress on the roundabout to seat the side plates firmly in the grooves of the roundabout, and securing bolts adjacent the end of the roundabout for securing the roundabout in position.

1,873,387. ELECTROOPTICAL SYSTEM. FRANK GRAY, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 17, 1930. Serial No. 496,099. 6 Claims. (Cl. 178—6.)



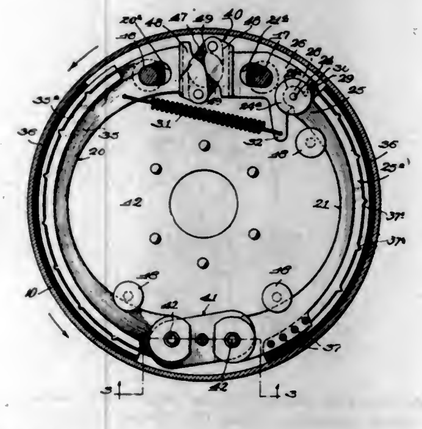
6. A television system comprising a rotating scanning element for scanning successive line series of elemental areas of a pictorial or message element of strip form, rotating driving means unitary with said scanning element directly engaging and driving said pictorial or message element, said field of view being spaced from said scanning element in the direction of said axis, optical means for associating successive portions of said pictorial or message element with said scanning element to permit the former to be scanned and means for maintaining said pictorial or message element in engagement with said driving means.

1,873,388. ELECTRIC SWITCH. TALMA T. GREENWOOD, East Templeton, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed July 1, 1930. Serial No. 465,125. 1 Claim. (Cl. 200—148.)



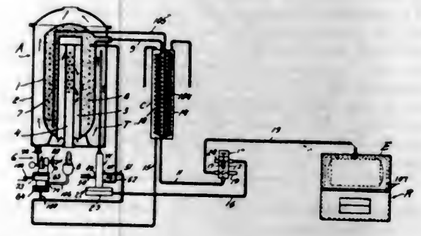
An electric switch having separable arcing members, and means which insulates the separated arcing members from each other including means providing a free conical blast of determined thickness of arc extinguishing fluid, said blast being annularly continuous and located in the space between the separated arcing members and being directed inwardly from beyond the arc zone between said arcing members and spaced away from one arcing member so that there is a gas space between the arcing face thereof and said conical blast and being directed toward the other arcing member, said blast being convergent in the space between the arcing members and having such velocity that it penetrates the arc gas formed between said arcing members and combines in said space into a cylindrical jet that is directed toward said other arcing member, and means including said blast which constitutes an insulating barrier between said arcing members and prevents the arc therebetween from occupying the space outside said blast.

1,873,389. BRAKE. EARL G. GUNN, Racine, Wis., assignor to The Nash Motors Company, Kenosha, Wis., a Corporation of Maryland. Filed Mar. 1, 1929. Serial No. 343,585. 5 Claims. (Cl. 188—78.)



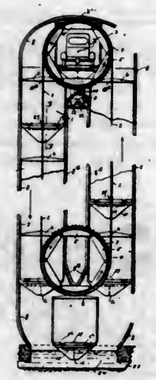
1. In a servo brake, a drum, two connected shoes, anchoring pins each having slotted connection at adjacent ends with its respective shoe and adapted to take the braking reaction thereof when the drum is rotated in a direction to force said shoe toward said pin, said slotted connections affording relatively restricted pivotal movement of said shoes about their respective pins when in anchored position, but relatively greater freedom of radial movement when the drum is rotated in the opposite direction to force said shoe away from said pin, at least one of said shoes having a yielding connection adjacent its slotted end permitting limited radial movement thereof relative to the drum when in anchored position.

1,873,390. REFRIGERATING APPARATUS. WILLIAM R. HAINSWORTH, New Haven, Conn., assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Aug. 28, 1928. Serial No. 302,525. 15 Claims. (Cl. 62—118.)



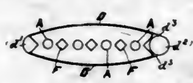
1. In a refrigerating system, an absorber generator for alternately expelling and absorbing a gaseous refrigerant during successive distillation and absorption cycles, an evaporator for alternately receiving liquid refrigerant and evaporating said refrigerant during successive distillation and absorption cycles, a single conduit connecting said absorber generator and said evaporator, means for cooling said conduit during each distillation cycle to liquefy said refrigerant and means for heating said conduit to gasify liquid refrigerant therein at the initiation of each absorption cycle.

1,873,391. COUNTERBALANCED VEHICLE STORAGE ELEVATOR. LOUIS HAISH, St. Paul, and FRANCIS M. HENRY, Minneapolis, Minn. Filed Feb. 4, 1929. Serial No. 337,258. 12 Claims. (Cl. 214—6.1.)



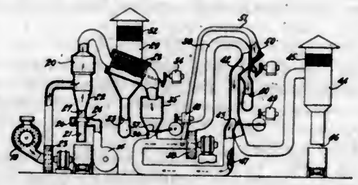
1. A vehicle storage elevator comprising an endless travelling elevating means equipped with pivotally suspended vehicle carriers in counterbalancing arrangement, and counterbalancing means adapted to be applied to the several carriers and operative to substantially offset the weight of a vehicle on any carrier to which a vehicle is not applied, combined with automatic means for rendering said counterbalancing means operative when a carrier passes a predetermined point in unloaded condition.

1,873,392. VAPOR LAMP APPARATUS. BENJAMIN JAMES HALL, London, England. Filed Sept. 16, 1929, Serial No. 392,953, and in Great Britain Oct. 18, 1928. 4 Claims. (Cl. 240—103.)



1. The combination in a vapor lamp apparatus; of a supporting frame, reflectors carried by said frame and providing a plurality of intersecting plane surfaces defining outwardly disposed parallel apices, and elongated vapor lamps arranged parallel to and opposite said outwardly disposed apices.

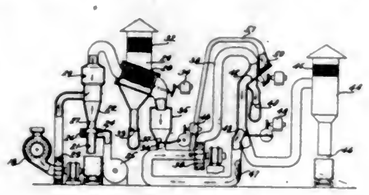
1,873,393. METHOD OF AND APPARATUS FOR SEPARATING MATERIALS. CECIL ALFRED HALLAM, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 28, 1927, Serial No. 171,581. 9 Claims. (Cl. 209—37.)



1. In a material separating apparatus, an endless conduit forming a circulatory separating system, means for circulating a definite charge of material in the system,

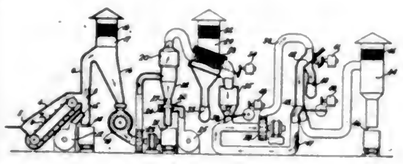
and a screen located in said conduit and disposed at such an angle that the screen openings are substantially in line with the path of the impinging material and the screen surface intersects said path at a deflecting angle adapted to return the screen rejects to the circulating means.

1,873,394. METHOD OF AND APPARATUS FOR SEPARATING MATERIALS. CECIL A. HALLAM, Westfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Feb. 28, 1927, Serial No. 171,581. Divided and this application filed Apr. 25, 1930. Serial No. 447,201. 7 Claims. (Cl. 209—140.)



6. A method of separating materials which consists of conveying the materials laterally in a current of air, projecting an upward current of air through the laterally moving material thereby directing the lateral current of air upwardly, to carry the material upwardly, and then decreasing the upward velocity of the combined air to cause the heavier materials to separate and fall from the lighter materials.

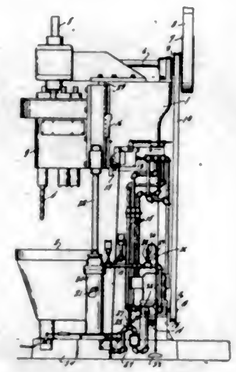
1,873,395. METHOD OF AND APPARATUS FOR SEPARATING MATERIALS. CECIL ALFRED HALLAM and ROY PALMER, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 28, 1927, Serial No. 171,580. Renewed Dec. 31, 1931. 6 Claims. (Cl. 209—141.)



1. A method of separating the lead, copper, and paper of disintegrated telephone cables, which consists of subjecting the disintegrated material to an upward current of such velocity as to elevate the copper and paper but of insufficient velocity to elevate the lead, further disintegrating the paper and copper to remove all of the paper from the copper, and subjecting the paper and copper to a second upward current of air of such velocity as to elevate the paper and drop the copper from the current.

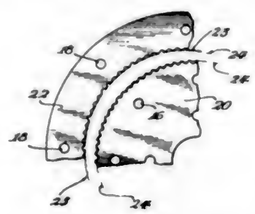
1,873,396. CONTROL MAINTENANCE IN HYDRAULIC TRANSMISSIONS. GEORGE E. HALLENBECK, Toledo, Ohio, assignor to Baker Brothers, Inc., Toledo, Ohio, a Corporation of Ohio. Filed Jan. 25, 1929. Serial No. 335,136. 7 Claims. (Cl. 60—52.)

1. In a hydraulic transmission comprising a member to be actuated, a liquid flow controller and a circuit from the controller to the member, the combination of a compressible medium relief valve for said circuit embodying a chamber having a pair of seats, an inlet port at one seat and an outlet port at the other seat, and a plunger air pressure actuated toward one of said seats, said plunger having a clearance passage as to the chamber in plunger transit between said seats for an opening interval during



said clearance passage for the compressible medium, and a spring normally holding the plunger toward the inlet port.

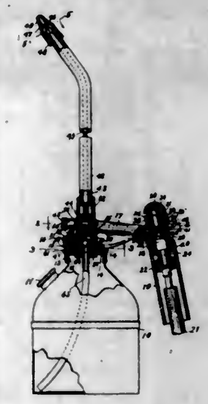
1,873,397. METHOD OF MAKING STATOR AND ROTOR PLATES. LAURENS HAMMOND, Evanston, Ill., assignor to The Hammond Clock Company, Chicago, Ill., a Corporation of Delaware. Filed July 30, 1930. Serial No. 471,657. 3 Claims. (Cl. 29—155.5.)



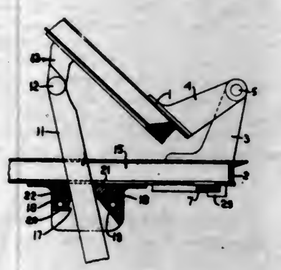
3. The method of making stator and rotor laminations for synchronous motors which comprises punching from a sheet of lamination material a blank for forming both stator and rotor and at the same time punching a center hole and a circular row of holes equally spaced from said center hole, shearing said blank to separate the stator portion of said blank from the rotor portion thereof along a line passing through said row of holes and removing excess material from the teeth thus formed on one of said members.

1,873,398. SPRAYING DEVICE. FRED E. HANSEN, Cleveland, Ohio, assignor to The Hansen Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 5, 1929. Serial No. 383,693. 3 Claims. (Cl. 299—88.)

1. In a device of the class described, the combination of a liquid container having a screw-threaded attaching neck, a screw-threaded cap for said neck having an opening in its end wall, a nozzle member swivelled with respect to said cap and having an end surface adapted to be positioned against the outer surface of said end wall, a nut having a threaded connection with said nozzle member and adapted to clamp said cap to said nozzle member with the cap and nozzle member in any desired relative angular arrangement, a tube extending from said nozzle member to the bottom of said container, said cap having a vent opening in its end wall, means in said nozzle member for supplying air to said vent opening, a check valve in the last mentioned means for preventing liquid from flowing therethrough from said container, and valve controlled means for supplying pressure fluid to said nozzle member.

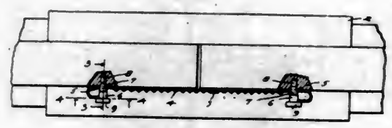


1,873,399. CASEMENT WINDOW AND SCREEN THEREFOR. FREDERICK F. HASKELL, Jamaica Plain, Mass., assignor to Apexeon Company, Jamaica Plain, Mass., a Corporation of Massachusetts. Filed Sept. 30, 1929. Serial No. 396,333. 4 Claims. (Cl. 268—118.)



1. A casement window comprising a casement frame, a casement window pivoted to the frame, a window screen on the inside of the casement frame, said casement frame having an opening therethrough situated below the window screen when it is in its operative position, a window-operating member connected to the casement window and extending through said opening and operable to open and close the window from the inside thereof, and a bracket member secured to the inside of the casement frame and having a passage in alignment with the opening in said frame and through which said window-operating member extends, said passage being narrowest at an intermediate portion and diverging from said portion to each end, said window-operating member having a varying width which fills the passage in all positions which the member assumes as the window is opened and closed.

1,873,400. RAIL BOND. HANS J. HAUSKEN, Myers, Mont. Filed Feb. 25, 1930. Serial No. 431,211. 4 Claims. (Cl. 173—262.)



1. A rail bond, comprising a strip of conducting material, pin members for connecting the ends of the strip with rail bodies, said strip having an aperture therethrough adjacent each end through which a pin loosely extends, and means for establishing a resilient connection between the strip and the pins consisting of a turned back portion of each end of the strip having its end connected with the adjacent pin.

1,873,401. THE PREPARATION OF A NON-HYGROSCOPIC MIXED FERTILIZER. HEINRICH HEIMANN, Dessau in Anhalt, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, a Corporation of Germany. Filed May 10, 1928, Serial No. 276,816, and in Germany July 29, 1927. 3 Claims. (Cl. 71—9.)

1. A process of manufacturing a mixed fertilizer which comprises introducing into an aqueous solution saturated at ordinary temperature with potassium chloride and ammonium nitrate a further quantity of a hot concentrated solution of ammonium nitrate and solid potassium chloride, allowing the mixture to regain about room temperature, separating the solid magma of reaction products from the mother liquor, drying the former and using the latter for a further operation.

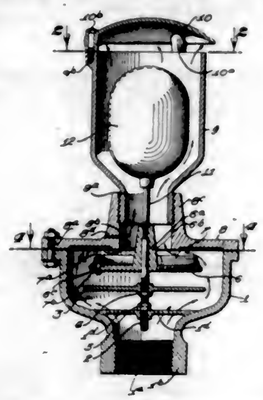
1,873,402. PROCESS OF PRODUCING METHYLAMINES SUBSTITUTED IN THE METHYL GROUP BY A CYCLIC RADICLE. WILHELM HERZBERG, Berlin-Wilmersdorf, and HANS LANGE, Berlin-Friedenau, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Mar. 23, 1926. Serial No. 96,870. 13 Claims. (Cl. 260—130.5.)

1. The process which comprises heating about 63 parts of guaiacol and 32 parts of N-(chloro-methyl)-phthalimide to a temperature of about 120° C. until evolution of hydrogen chloride has ceased, isolating the 4-hydroxy-3-methoxy-benzyl-phthalimide thus obtained, splitting it in the cold with a caustic soda solution, and in succession splitting the 4-hydroxy-3-methoxybenzylphthalamic acid with an amount of dilute hydrochloric acid required to neutralize the alkali added and to bind the vanillylamine formed.

1,873,403. AIR AND VACUUM RELIEF VALVE FOR PIPE LINES. JOHN C. HIGGINS, San Diego, Calif. Filed June 23, 1930. Serial No. 462,986. 12 Claims. (Cl. 137—69.)

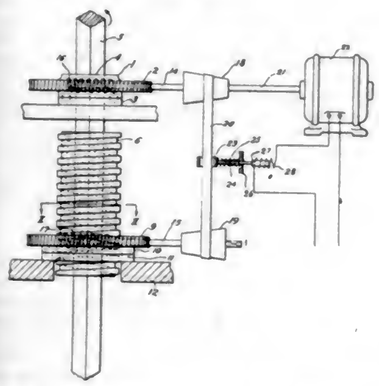
1. In an air and vacuum relief valve, a casing having an inlet and an outlet, a transversely disposed valve

means reciprocally mounted within said casing arranged to seal said outlet against the flow of liquids outwardly therethrough, and a baffle plate transversely disposed



within said casing between said valve means and said inlet for deflecting fluids passing into said casing whereby gases only are rendered ineffectual to close said valve means.

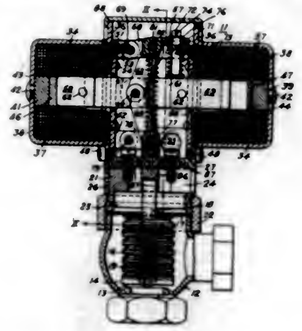
1,873,404. SINGLE MOTOR DRIVE. FREDERIC W. HILD, Los Angeles, Calif. Filed Nov. 8, 1924. Serial No. 748,571. 8 Claims. (Cl. 255—22.)



1. The combination with a drill, of a mechanism having two driven members for respectively effecting rotational and longitudinal movement of said drill, a pair of cone pulleys respectively associated with said driven members, a motive device connected to one of said pulleys, a belt for connecting said pulleys, and means responsive to the load on said motive device for shifting said belt along said cone pulleys.

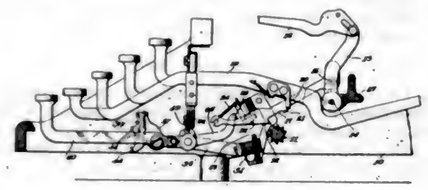
1,873,405. ELECTROMAGNETIC VALVE-ACTUATING DEVICE. CHARLES H. HODGKINS, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 20, 1929. Serial No. 387,253. 14 Claims. (Cl. 137—139.)

1. The combination with a valve casing and a valve stem, of a spacer having a shouldered end portion adapted to fit against the valve casing, a clamping nut fitting over the shouldered spacer and engaging the casing, a base plate secured against the spacer, two opposed and spaced magnet-coil casings, each having a bottom edge secured to a side portion of the base plate, a magnet coil in each of said magnet-coil casings, armatures in said magnet



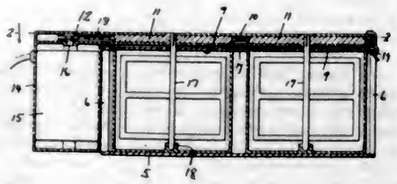
coils, and means operatively connecting the armatures and a valve stem, said means including a toggle and a yielding abutment therefor.

1,873,406. REPEAT MECHANISM FOR TYPEWRITERS. OTTO A. HOKANSON, Woodstock, Ill., assignor to Woodstock Typewriter Company, Woodstock, Ill., a Corporation of Illinois. Filed Nov. 23, 1925. Serial No. 70,771. 8 Claims. (Cl. 197—17.)



1. In a typewriter, a type bar, a rotary toothed power drive, an actuator connected with said type bar, a key lever for moving said actuator into engagement with said power drive, a stop for disengaging said actuator from said power drive at the close of a printing operation, a spring for restoring said actuator after disengagement from said power drive, an arm having a projection thereon overlying said actuator, and a key lever for moving said arm to bring said projection into position to guide said actuator into re-engagement with said power drive after each disengagement thereof at the close of a printing operation.

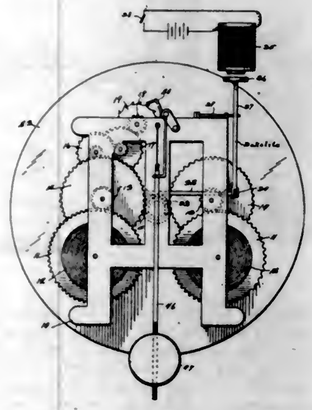
1,873,407. ICE CREAM FREEZER. LYMAN F. HOLLAND, Mobile, Ala. Filed June 25, 1931. Serial No. 546,842. 2 Claims. (Cl. 259—64.)



1. A freezer comprising in combination a support adapted to receive and contain in relatively fixed position a plurality of receptacles, a casing disposed adjacent one

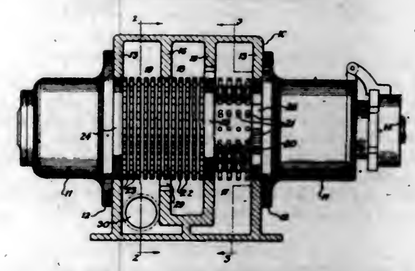
end of the support, said casing having adjacent the upper end thereof a lateral extension resting on the top of the support and substantially closing the top of said receptacles, sprockets arranged in said casing extension, an agitator for disposition in each of said receptacles, each of said agitators including a shaft keyed to one of said sprockets, a motor in said casing and including a shaft equipped with a sprocket, and a drive chain trained over all of said sprockets.

1,873,408. SPORT TIMING CLOCK. GEORGE R. HOLMES, Hennessey, Okla. Filed Apr. 4, 1929. Serial No. 352,517. 2 Claims. (Cl. 161—17.)



1. A clock for timing sports having a relatively large dial, a balanced hand operating thereover, a shaft upon which the hand is mounted, a gear wheel for operating said shaft but rotatively mounted thereon, means normally connecting the gear wheel to the shaft, electrically operated, manually controlled means for releasing the connection between the gear wheel and the shaft, two trains of spring actuated gear wheels operatively engaging said gear wheel on the shaft to drive it, escapement mechanism driven from one of said trains and including a pendulum, and an escapement wheel.

1,873,409. ROTARY CUTTING, MIXING AND ATTRITION MILL. ROBERT C. HOPKINS, Alliance, Ohio. Filed Sept. 21, 1929. Serial No. 394,351. 9 Claims. (Cl. 83—6.)

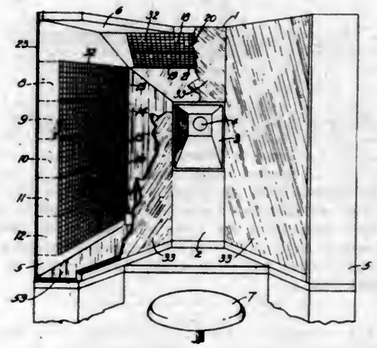


1. A rotary mill including a housing divided into a plurality of communicating chambers, an oil inlet to one chamber, an oil outlet from another chamber, a plurality of revolving spikes in one chamber, and a plurality of revolving cutting disks in another chamber.

1,873,410. FILTER INSERTION. VÁCLAV HORÁK, Prague, Czechoslovakia. Filed Mar. 14, 1929, Serial No. 347,186, and in Czechoslovakia, Mar. 14, 1928. 1 Claim. (Cl. 252—3.)

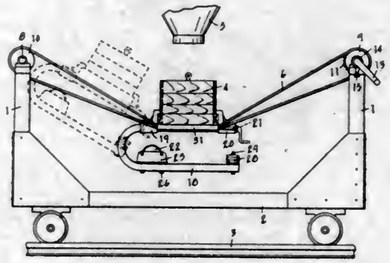
Process for producing filter insertions of small dimensions for gas masks to be used in the resultant molded cake-form without comminution, said insertions offering simultaneous protection against poisonous gases, smoke and mist, said process consisting in cutting vegetable fibres into short pieces, impregnating the fibres with a binder, compressing the mass into a compact form and thereupon carbonizing and activating the mass.

1,873,411. TELEVISION. HERBERT E. IVES, Montclair, N. J., and FRANK GRAY, New York, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 26, 1929, Serial No. 373,769. Renewed Oct. 6, 1931. 20 Claims. (Cl. 178—6.)



1. A scanning cabinet for television systems comprising a wall provided with an opening through which a beam of light may pass for traversing the object and banks of large photoelectric cells within said cabinet and on different sides of said opening and in different planes respectively.

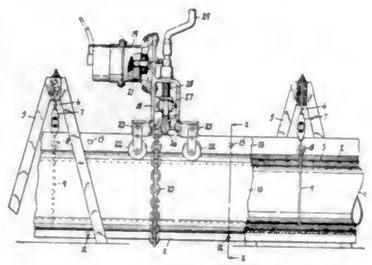
1,873,412. MOLDING MACHINE. CORWILL JACKSON, Chicago, Ill. Filed Dec. 14, 1929. Serial No. 413,981. 8 Claims. (Cl. 25—41.)



1. In an apparatus of the class described, the combination with a mold, of spaced supports, shafts on said supports provided with drums, the drums of one shaft being toothed, flexible endless hangers supported by said drums with a substantial slack between the drums and provided with holes coacting with said toothed drums, the upper reaches of the hangers and the mold having co-engaging

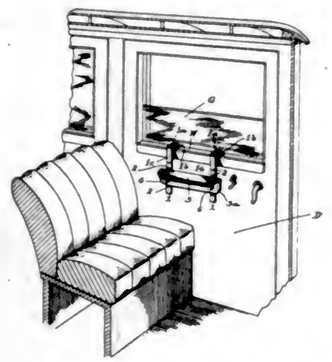
parts, a U-shaped support having mold engaging clamps on one arm, a motor provided with an unbalancing weight mounted on the other arm of said support, and an adjustable weight on such arm at the outside of the motor.

1,873,413. APPARATUS AND METHOD FOR COVERING PIPES OR CONDUITS WITH CONCRETE. CORWILL JACKSON, Chicago, Ill. Filed Mar. 2, 1931. Serial No. 519,368. 23 Claims. (Cl. 25—38.)



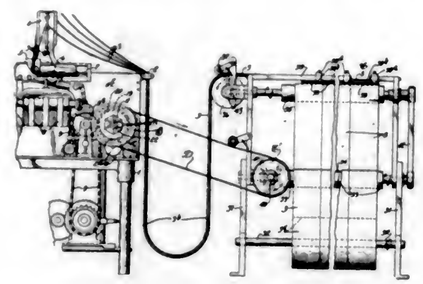
15. In an apparatus for covering pipe or conduits with concrete, the combination of means for suspending the pipe in horizontal position, a form supported in spaced relation to the pipe or conduit, said form being open at the top for the introduction of concrete, a vibrating unit provided with wheels traveling on said mold, the wheels being adjustable radially of the form, and means for clamping said carriage to the form including a cable embracing said form and a screw adjusting means for said cable on said vibrating unit.

1,873,414. DEMOUNTABLE ARM-REST FOR MOTOR VEHICLES. CHARLES F. JARVIS, Portland, Me. Filed Dec. 1, 1930. Serial No. 499,217. 2 Claims. (Cl. 155—198.)



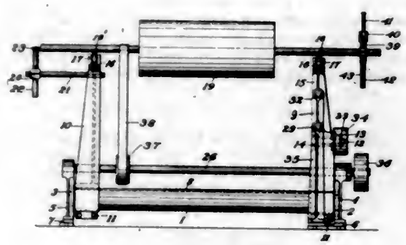
1. A demountable arm-rest for motor vehicles adapted to be suspended from the window sill thereof, comprising an angular bracket, an aperture in the vertical leg of said bracket near each end thereof, a bolt operable in each of said apertures, a hanger disposed on the vertical leg of said bracket near each end thereof, each of said hangers having a plurality of bolt-receiving holes therein, the two said bolts adapted, respectively, to permit of said hangers being pivotally mounted thereover and secured on said bracket in a plurality of different positions, relatively, whereby said bracket may be disposed on said hangers in various vertically separated planes running parallel with said window sill, or disposed in planes inclined in either direction therefrom, the pivotal mounting of said hangers further permitting them to be folded into substantially longitudinal alignment with said bracket, and hooks on the upper ends of said hangers adapted to engage said window sill and extend downwardly on the outer side thereof.

1,873,415. VARIABLE SPEED MECHANISM. LOUIS JENSEN and FREDERICK C. REUCKER, Chicago, Ill., assignors to United Autographic Register Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 9, 1929. Serial No. 391,484. 2 Claims. (Cl. 270—84.)



1. In apparatus of the character set forth: a roll-unwinding machine equipped with turn-bars and with strip-feeding mechanism, including feed rolls which engage the strips after they pass about the turn-bars; a strip-folding machine equipped with driving mechanism; and variable-speed transmission mechanism between said driving mechanism and said strip-feeding mechanism.

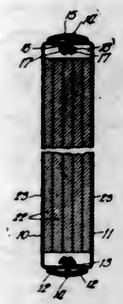
1,873,416. BALANCING MACHINE. RUBEN E. JOHNSON, Seattle, Wash. Filed Feb. 18, 1930. Serial No. 429,307. 14 Claims. (Cl. 73—51.)



1. A balancing machine for determining the location and value of static and dynamic unbalance existing in a rotatable machine element, embodying a horizontal shaft, antifriction bearing means supporting said shaft for free and easy oscillation, an upright yoke secured to said shaft, an upright pedestal secured to said shaft in spaced relation from said yoke, and means for rotatably supporting a machine element from said pedestal and said yoke.

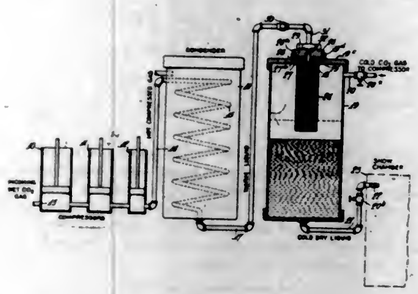
1,873,417. CONSTRUCTION UNIT. ARTHUR E. JONES, Tonawanda, N. Y., assignor to Henry Weis Manufacturing Company, Inc., a Corporation of Indiana. Filed Nov. 9, 1928. Serial No. 318,141. 19 Claims. (Cl. 189—35.)

1. A fabricated building unit comprising in combination a pair of marginally flanged panels arranged with said flanges in register, the extremities of said flanges being formed to project inwardly into the space between said panels, and a metal joining strip having a shank extending



between and engaging said flange extremities and a head engaging said registering flanges and cooperating with the shank thereof to hold said panels together.

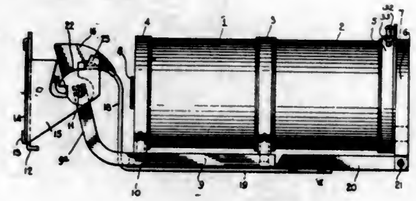
1,873,418. METHOD AND APPARATUS FOR MAKING DRY CARBON DIOXIDE PRODUCTS. CHARLES L. JONES, Pittsburgh, Pa., assignor to Dryice Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Feb. 21, 1929. Serial No. 341,680. 22 Claims. (Cl. 62—121.)



1. A method of removing water from liquid carbon dioxide which includes the steps of suddenly partially relieving the pressure on the liquid carbon dioxide by discharge through a nozzle of snow-forming type to vaporize part of the carbon dioxide and bring the liquid to a pressure and correlative temperature much below freezing of water but above the triple point of the carbon dioxide and bringing the cooled liquid into intimate relation with a suitable surface arranged to collect the water as frozen out crystals.

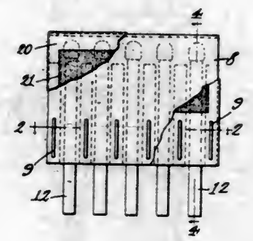
1,873,419. ANNUNCIATOR. JOSEPH S. JONES, Brooklyn, N. Y., assignor, by mesne assignments, to Chas. Cory Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 13, 1928. Serial No. 246,619. 3 Claims. (Cl. 177—329.)

1. In an annunciator drop having coaxially arranged setting and resetting magnets, a pivotally mounted drop normally held in reset position against the force of gravity, said drop carrying a shutter, an arcuate armature connected to said drop, means responsive to energization of said resetting magnet to attract said arcuate armature to move the drop with the shutter against the force of gravity into a substantially horizontal position above the pivotal



connection of the drop, a latch for holding the drop in such position, and means responsive to energization of said setting magnet for releasing the latch to enable the drop to fall by gravity, the latch and the drop having interengaging means to positively initiate the falling movement of the shutter drop when the latch is released.

1,873,420. MATCH BOOK. AUGE LYTH JORGENSEN, Jersey City, N. J. Filed Apr. 17, 1929. Serial No. 355,804. 2 Claims. (Cl. 206—29.)

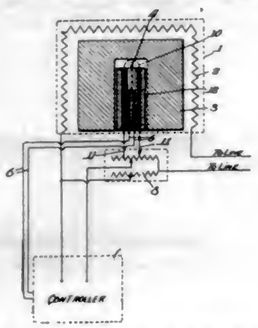


1. A match packet comprising matches having beads, and spacers alternating with the matches, the matches and the alternating spacers being arranged in lines, layers between the lines, the layers being provided with striking surfaces for the heads of the matches, a casing inclosing the spacers, the matches and the layers, and covering the heads of the matches, and fastening means uniting the casing, the spacers and the layers, the ends of the matches projecting from the casing to facilitate the withdrawal of the matches, the fastening means being loosely mounted so that the packet can expand and let the heads of the matches pass across the striking surfaces of the layers without jerking the heads off the matches.

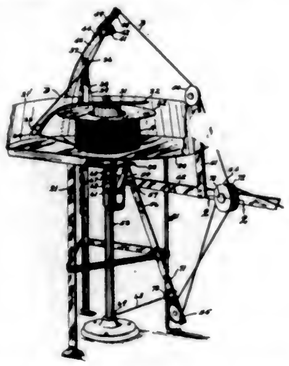
1,873,421. METHOD AND APPARATUS FOR CONTROLLING TEMPERATURES. JEROME J. KANTER, Chicago, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 22, 1930. Serial No. 438,075. 16 Claims. (Cl. 236—68.)

1. In an apparatus for controlling the temperature of an electrically heated furnace, a thermo-couple in heat conductive relation to the article being heated in said furnace, a controller for regulating the current supplied to said

furnace, said controller being operatively connected to said thermo-couple and an auxiliary heater for said thermo-couple, said auxiliary heater being heated by a source independent of the heat of the furnace, said independent source fluctuating in accordance with the variations in the current supplied to the furnace.



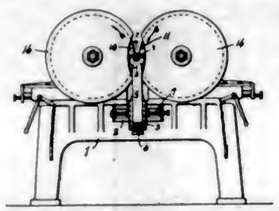
1,873,422. WIRE UNREELING AND TENSIONING DEVICE. CLARENCE J. KELLER, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Oct. 16, 1930. Serial No. 489,116. 2 Claims. (Cl. 242—128.)



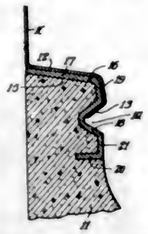
1. Wire unreeling and tensioning apparatus comprising a support for a coil of wire, a rotatable shaft substantially coaxial with the coil, an unreeling arm carried by the shaft and providing a guide for the wire, and means for variably resisting rotation of said shaft, said means comprising a brake disc attached to the shaft, a friction member movable against the brake disc, a part movable toward or from the brake disc, a spring for transmitting motion from said part to the friction member, and a movable mechanism for controlling the movement of said part, said movable mechanism including a part around which a loop of the wire passes.

1,873,423. GRINDING MACHINE. FRED M. KERN, Detroit, Mich., assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 5, 1923. Serial No. 672,773. 5 Claims. (Cl. 51—88.)

1. In a grinding machine, in combination, a grinding wheel adapted to be rotated at a relatively high speed, a regulating wheel adapted to be rotated at a relatively low speed, said wheels being adapted to present operative surfaces traveling in opposite directions, means between said wheels for supporting work for movement axially therebetween and to be rotated by said regulating wheel and ground by said grinding wheel, the path of travel of the work being inclined with respect to the path of travel of the operative surface of the regulating wheel whereby the regulating wheel moves the work axially as it is rotated and ground, and means for holding a work piece initially in the form of a rod of non-circular cross-section as it is fed along said work support between said wheels and is rotated and ground to a substantially circular cross-section comprising a rotatable bushing having a non-cylindrical opening shaped to the contour of said non-cylindrical rod and through which the rod passes as it enters into grinding position, the axis of said bushing being substantially alined with the axis of the rod portion being reduced to cylindrical shape between the wheels.

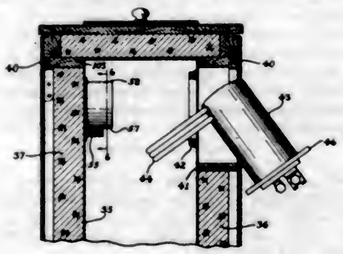


1,873,424. SHOWER BATH CONSTRUCTION. PAUL W. KERR and ARTHUR E. JONES, Elkhart, Ind., assignors to Henry Weis Manufacturing Company, Inc., Elkhart, Ind., a Corporation of Indiana. Filed Nov. 16, 1931. Serial No. 575,294. 8 Claims. (Cl. 4—145.)



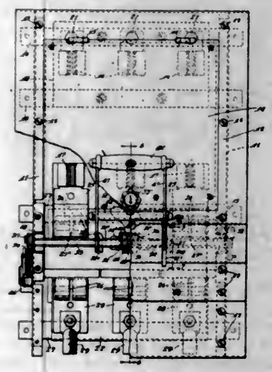
1. In a shower bath construction the combination comprising a preformed shower cabinet, side walls having base flanges, a cementitious cast receptor having sides for receiving the cabinet side walls, and a fabricated receptor rim accurately conforming to the cabinet base flanges and cast into said receptor sides to provide accurately formed faces for receiving said flanges.

1,873,425. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 28, 1929. Serial No. 343,496. 10 Claims. (Cl. 62—116.)



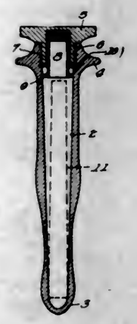
1. In a refrigerating cabinet, a tank, a cooling unit extending through an opening in a side wall of said tank, said opening being smaller than the extreme contour of said cooling unit, insulation over a portion of said tank, a panel about said insulation, said insulation and panel having openings in line with the opening in the side of the tank, said cooling unit being so proportioned that it may be tiltably removed from said cabinet through said openings.

1,873,426. ELECTRICAL APPARATUS. RALPH H. KINGDON, Detroit, Mich., assignor to Square D Company, Detroit, Mich., a Corporation of Michigan. Filed June 30, 1930. Serial No. 464,731. 22 Claims. (Cl. 200—50.)



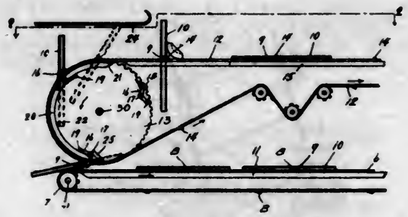
1. In an electrical apparatus, a switch, a casing, a door in said casing, a latch for said door, operating mechanism for said switch including a manually operable member, and means operated by the releasing of said latch for disconnecting said manually operable member from the remainder of said switch operating mechanism.

1,873,427. DILATOR. WILLIAM J. KIRK, Wellsburg, W. Va. Filed Dec. 15, 1928. Serial No. 326,360. 6 Claims. (Cl. 128—341.)



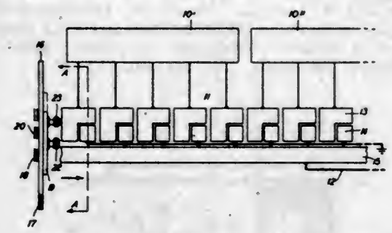
3. In combination with a hollow inwardly tapered tubular body, a cartridge for reaction with water within said body consisting of a holding shell of wrapped permeable material in outwardly tapered formation filled with powdered magnesium and cuprous oxide and sand, and having endmost closing plugs of permeable material, inserted by its large diameter end within the interior tapered terminal of the hollow body, said body being provided with a removable closing stopper having an outer closed end and a hollow inner extension provided with an adjustable open ended tubular section for varying its holding capacity in registering relation to the outer end of the cartridge.

1,873,428. CONVEYER SYSTEM FOR MANIPULATING FLAT ARTICLES. HERMANN KLAUCKE, Worcester, Mass., assignor, by mesne assignments, to L. H. Hamel Leather Co., Haverhill, Mass., a Corporation of Massachusetts. Filed June 5, 1929. Serial No. 368,640. 10 Claims. (Cl. 198—20.)



1. In a system for conveying articles having oppositely projecting trunnions, a delivering conveyer comprising a pair of endless chains and wheels at the delivery end of the conveyer about which the chains are driven downwardly, engaging means on said chains for said trunnions, whereby the articles are propelled thereby towards said wheels and means on said wheels for supporting the trunnions in proximity to their respective engaging means, while they are moved downwardly about the wheels and until the articles have been lowered to a delivery position.

1,873,429. ELECTRIC CURRENT DISTRIBUTING DEVICE. WILLIAM A. KNOOP, Hempstead, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1931. Serial No. 531,105. 6 Claims. (Cl. 178—52.)



1. An impulse repeating device comprising segmented rings, the segments of one ring having a projection which extends insulatively between adjacent segments of the other ring, a transmitting device electrically connected to the segments of said segmented rings, a line circuit and a rotatable contacting element adjustably arranged to connect at will either of said segmented rings with said line circuit.

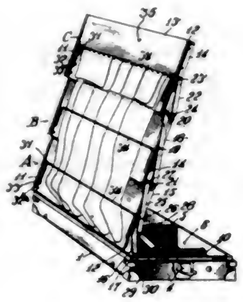
1,873,430. ALDEHYDES OF THE CYCLOHEXANE SERIES. ANGELO KNORR, Berlin, and ALBERT WEISSENBORN, Potsdam, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed June 5, 1930, Serial No. 459,420, and in Germany June 18, 1929. 5 Claims. (Cl. 260—136.)

1. As new products the compounds of the general formula

$$R-CH_2-CH_2-\underset{\text{alkyl}}{CH}-CH=O,$$

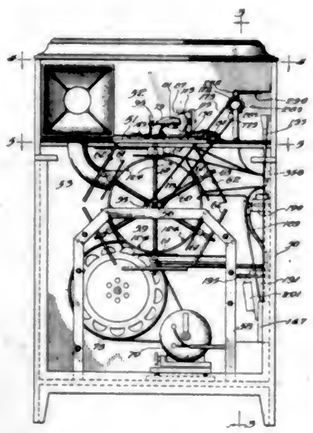
wherein R stands for a cyclohexane nucleus or 1.1.3-methylated cyclohexyl radical, these compounds being at room temperature in the pure state colorless oils of an agreeable bitter odor resembling nuts and leaves.

1,873,431. COMBINED SAMPLE CASE AND DISPLAY STAND. HARRY H. LABADIE and BURTON B. BEERS, Chicago, Ill., assignors to Knickerbocker Case Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 9, 1930. Serial No. 442,837. 11 Claims. (Cl. 190—17.)



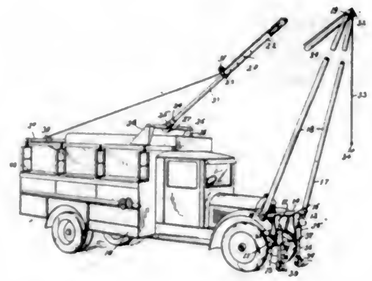
1. A foldable display stand comprising a supporting base, and a foldable substantially flat display board comprising a purality of substantially flat dispay members, and means hingedy connecting the members to one another and to the base, whereby the members may be moved from collapsed position in superposed horizontal relation upon the base, to an upwardly inclined position with the members in substantial alignment to form the single substantially flat display board.

1,873,432. TALKING MACHINE. AXEL F. LARSON and CHARLIE W. ANDERSON, Chicago, Ill., assignors to Western Electric Piano Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 19, 1927. Serial No. 214,066. 36 Claims. (Cl. 274—10.)



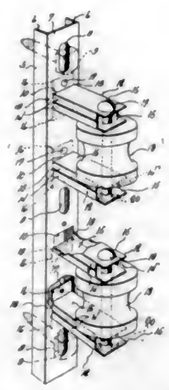
1. In a talking-machine, the combination of a plurality of record-supporting means, reproducer-means for cooperation with the records, and means for presenting different records in position to cooperate with said second-named means and comprising a drive member and a pneumatically controlled clutch controlling the driving of said first-named means by said drive member.

1,873,433. CRANE. NEIL P. LARSEN, Cleveland, Ohio, assignor to The American Coach & Body Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 18, 1930. Serial No. 482,733. 5 Claims. (Cl. 212—145.)



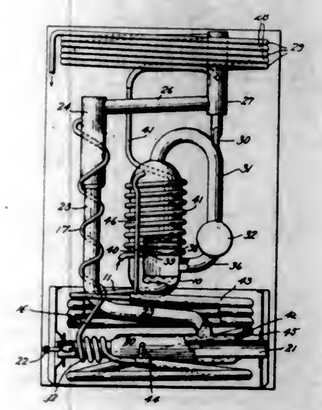
3. In combination with a motor vehicle having a chassis, said chassis including a frame having a pair of side rails, a crane mounted at the forward end thereof, said crane including a pair of bracket members secured to the forward ends of said side rails, a transverse member secured to said bracket members, said transverse member being provided with grooves adjacent the ends thereof, and a boom constructed of a pair of rods, said rods being slotted adjacent their lower ends, said slots being adapted to receive the grooved portions of the transverse member.

1,873,434. SUPPORTING FIXTURE. CLARENCE J. LEMONT, South Milwaukee, Wis., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 15, 1930. Serial No. 436,106. 5 Claims. (Cl. 173—321.)



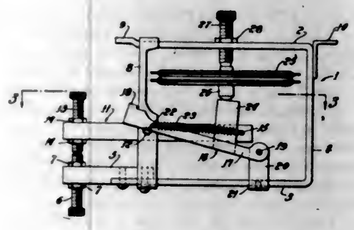
3. An insulator support comprising a vertical channel member having a rectangular opening in its face, a lateral member formed of a single piece of sheet metal and substantially rectangular in cross-section, shoulders formed at the inner ends of the lateral member and abutting said face, and tongues extended from said member and adapted to be passed through the opening and directed laterally to secure the lateral member to the face of the vertical member.

1,873,435. REFRIGERATION. ALVAR LENNING, New York, N. Y., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 9, 1929. Serial No. 353,825. 14 Claims. (Cl. 62—119.5.)



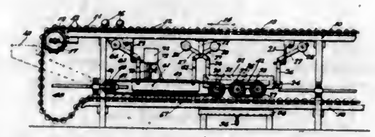
1. That improvement in thermo-syphon circulation which consists in raising a quantity of liquid by vapor below the liquid and reducing the vertical height of the liquid as it is raised.

1,873,436. THERMOSTATICALLY CONTROLLED SWITCH. WALDEMAR L. LINDGREN, Waukegan, Ill., assignor to Hoeft & Company, Inc., North Chicago, Ill., a Corporation of Illinois. Filed June 18, 1930. Serial No. 462,232. 5 Claims. (Cl. 200—140.)



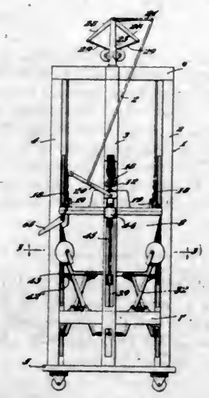
1. A switch of the kind described embodying therein a U-shaped frame comprising top and bottom bars connected together at one end, a pair of laterally spaced members connecting the other ends of said bars, a contact fixed to one end of the bottom bar, a rockable member disposed between and pivoted to said laterally spaced members, a contact on one end of said rockable member to coact with the fixed contact member, a pair of lever arms pivoted to the frame at one end and connected together at the other end and arranged one on each side of said pair of laterally spaced members, a bridge connecting said levers near their other ends and straddling the other end of said rockable member, pins extending from opposite ends of said rockable member, pins on said levers near their connected together ends, springs connecting said pins on said rockable member with the pins on said lever arm ends and a device capable of changing its dimension under temperature changes and engaged with the bridge of said levers for actuating the same in one direction to change the position of the pins on the lever ends with respect to the pivotal axis of said rockable member.

1,873,437. ROLLER CLEANING AND OILING DEVICE FOR DRIERS. CHARLES W. LINFESTY, Highland, Calif., assignor to Stebler Parker Co., Riverside, Calif., a Corporation of California. Filed Apr. 18, 1928. Serial No. 270,999. 11 Claims. (Cl. 198—229.)



1. In a fruit drier including a conveyer comprising a plurality of parallel rollers, a swinging frame movably mounted adjacent said conveyer, a plurality of rotary brushes journalled upon said frame with their axes extending substantially parallel with said rollers, means for rotating said brushes, means for supplying liquid to said brushes, and means for moving said frame up or down to bring the brushes into or out of engagement with said rollers, at will, as they move past the same.

1,873,438. MIXER. ISAAC W. LITCHFIELD, Boston, Mass., assignor to Bemis Industries, Incorporated, Boston, Mass., a Corporation of Delaware. Filed Nov. 3, 1930. Serial No. 493,040. 13 Claims. (Cl. 259—72.)

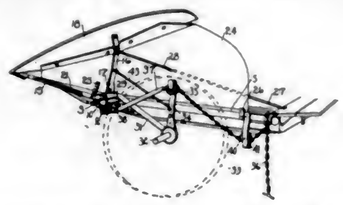


1. A device of the character described comprising a flexible container supported in the center and at edges, and means to raise and lower said center while lowering and raising said edges to impart rotating motion to material in the container, and means to lower a portion of the edge beyond normal operating position to permit dumping of the container.

1,873,439. AUTOMATICALLY ADJUSTABLE DIVIDER AND GRAIN WHEEL. ROBERT C. LIVESAY, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed July 3, 1929. Serial No. 375,731. 10 Claims. (Cl. 56—314.)

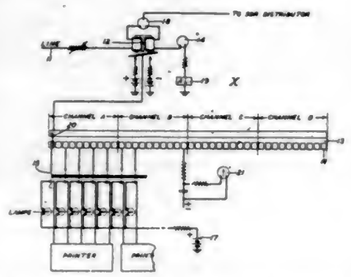
1. In a harvester, the combination therewith of a divider, a grain wheel pivotally connected to the divider, said

divider supported on the grainward end of the harvester on a substantially vertical pivot forward of the axis of said



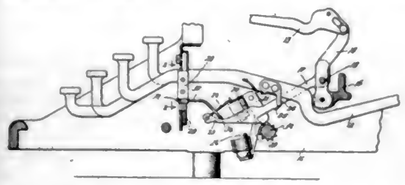
wheel, said divider and wheel adapted to operate in parallel relation with the line of draft irrespective of a rearward movement of the grainward end of the harvester.

1,873,440. ROTARY DISTRIBUTOR PHASING CIRCUIT. GEORGE A. LOCKE, Glenwood, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 22, 1931. Serial No. 510,366. 5 Claims. (Cl. 178—69.)



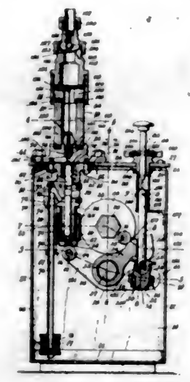
1. In an impulse reception system, an incoming circuit, a device connected thereto adapted to be synchronized with impulses received from impulse transmitting mechanism at a remote terminal of the circuit, means for establishing approximate synchronism of said device, characterized in this, that an indicating circuit is connected to said device at a point whereat the character of the received impulses reverses, to indicate any slight error in the true synchronous phase relation between said device and the received impulses.

1,873,441. REPEAT MECHANISM FOR TYPEWRITERS. ROBERT A. MACK, Washington, D. C., assignor to Woodstock Typewriter Co., Woodstock, Ill., a Corporation of Illinois. Filed Jan. 11, 1926. Serial No. 80,395. 3 Claims. (Cl. 197—17.)



1. In a typewriter, the combination with a type carrier, of a power drive, an actuator for connecting said type carrier with said power drive, a key lever having a socket opening therein, and a tappet arranged to enter said socket opening, said tappet being held in position by said opening to engage said actuator and to direct said actuator into reengagement with said power drive after release therefrom.

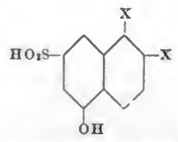
1,873,442. OIL PUMP. ADOLPH W. F. MANZEL, Buffalo, N. Y., assignor to Manzel Bros. Co., Buffalo, N. Y., a Corporation of New York. Filed Feb. 5, 1927. Serial No. 166,125. 14 Claims. (Cl. 184—27.)



1. In an oil pump, the combination of pump cylinder having a lateral extension provided with an inverted V-shaped oil passage, the lower end of one leg of which is connected with the interior of said cylinder by a lateral oil inlet, said cylinder having a lateral oil outlet spaced from said oil inlet, a spring-retained valve fitting into the upper end of said cylinder and having its lower end in a plane beneath that of the apex of said inverted V-shaped oil passage, said valve normally closing said oil outlet, a plunger extending into said cylinder from the lower end thereof and having its upper end separated from said valve by an intervening oil space normally in communication with said oil inlet, and means for imparting movement to said plunger to cause said valve to open said oil outlet through the force supplied by said plunger on the intervening body of oil and to force a predetermined quantity of said oil out of said outlet.

1,873,443. N-HYDROXYETHYLATED DERIVATIVES OF 1-AMINO- OR 2-AMINO-5-HYDROXYNAPHTHALENE-7-SULPHONIC ACID. GEORG MATZDORF, Dessau in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 3, 1930, Serial No. 418,417, and in Germany Jan. 7, 1929. 6 Claims. (Cl. 260—129.)

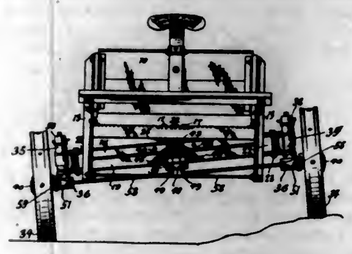
1. The process which comprises acting with ethylene oxide upon an aqueous solution of a water-soluble salt of an amino hydroxynaphthalene sulphonic acid of the general formula:



wherein one X means NH_2 and the other X represents H.

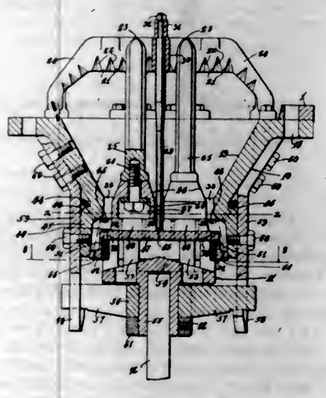
1,873,444. RUNNING GEAR FOR MANURE SPREADERS OR OTHER VEHICLES. CHRISTIAN MAUL, Batavia, N. Y., assignor to The Massey-Harris Co., Inc., Batavia, N. Y., a Corporation of New York. Filed Jan. 20, 1930. Serial No. 421,999. 4 Claims. (Cl. 280—80.)

3. A running gear for vehicles comprising an axle, a bolster arranged above the axle and having two angle irons provided with horizontal flanges which oppose each other, a plate connecting the central parts of said horizontal flanges, a king pin block interposed between the top of said axle and the underside of said plate and



provided on its underside with retaining pins entering said axle, and a king pin passing through said plate, block and axle.

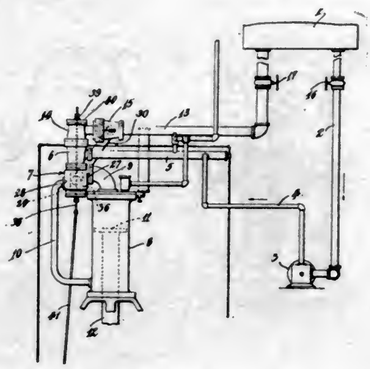
1,873,445. APPARATUS FOR MAKING INTERLOCKING MULTIPLE DUCT CONDUITS. WILLIAM MCCLINTOCK and ROY LACY, Los Angeles, Calif., assignors to Pacific Clay Products, Los Angeles, Calif., a Corporation of California. Filed Aug. 2, 1929. Serial No. 383,131. 7 Claims. (Cl. 25—39.)



1. A former for use in making interlocking multiple duct conduits comprising a former plate, a plurality of core members attached to said plate in spaced relation and spaced from the edge of said plate, a flange peripherally extending from said former plate, spaced air inlet valves in the edge of said former plate, and a lip extending in a plane parallel to the plane of the former plate extending from said flange, said lip containing a plurality of spaced apertures.

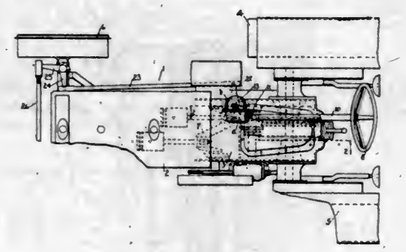
1,873,446. BALANCED VALVE ASSEMBLY. WILLIAM MCCLINTOCK and FRANK Y. PEARNE, Los Angeles, Calif., assignors to Pacific Clay Products, Los Angeles, Calif., a Corporation of California. Filed Feb. 4, 1930. Serial No. 425,824. 6 Claims. (Cl. 60—52.)

1. A balanced valve assembly for use in liquid pressure systems, comprising a body portion, an axial bore in said body portion, means for effectively closing one end of said bore, four annular channels formed in said body portion and spaced longitudinally of said bore, ports leading from each of said annular channels to said bore, a common outlet for two of said channels, separate ports leading to the other channels and adapted to conduct fluid to opposed ends of a pressure cylinder, a port for pressure fluid leading to said bore, a cylindrical slide valve slidably positioned in said bore, an actuating rod connected to said slide valve and extending from said body portion, a single annular channel in the outer face of said slide valve, said annular chamber being adapted to form a conduit



between adjoining longitudinally spaced ports communicating with the bore of said body portion, and a plurality of ports in circumferential alinement in said slide valve.

1,873,447. STEERING MECHANISM FOR TRACTORS. HAROLD E. MCCRAY, Waterloo, Iowa, assignor to John Deere Tractor Company, Waterloo, Iowa, a Corporation of Iowa. Filed Sept. 28, 1929. Serial No. 395,856. 3 Claims. (Cl. 280—96.)

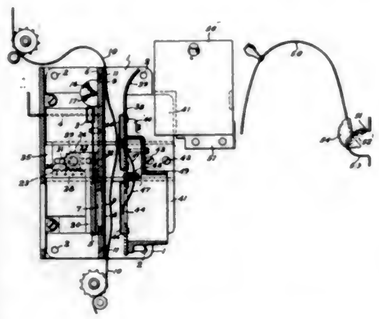


1. In a tractor having a crank shaft and a housing therefor, the combination therewith of a perpendicular tubular member within said housing and secured to the top and bottom of the housing, the connections therewith being oil tight, a rotatable post journaled in a bearing in the bottom of the housing and covered within said member, means connecting the lower end of said post with the front wheels of the tractor and actuable to steer said wheels by rotary movement of the post, a gear housing detachably secured on the crank shaft housing having a bearing in which the upper end of said post is journaled, a worm gear on the post within the housing, a worm meshing with said gear and manually operable means to actuate said worm and gear to impart rotary motion to said post.

1,873,448. FILM GATE. THEODORE C. MCCULLOCH, New York, N. Y., and THADDEUS R. GOLDSBOROUGH, Forest Hills, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 5, 1930. Serial No. 433,297. 4 Claims. (Cl. 88—17.)

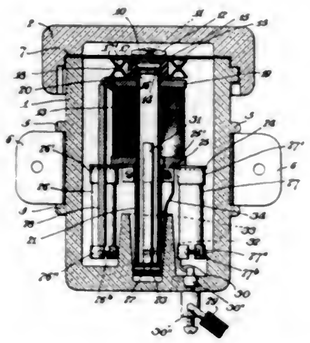
1. Film-tensioning apparatus comprising a supporting plate, an aperture plate rigidly mounted on said support-

ing plate, a shoe plate movably mounted on said supporting plate, dentate means mounted on said shoe-plate and coacting with dentate means rigidly mounted on said



supporting plate to move said shoe plate relative to said aperture plate, and means for locking said shoe plate in one of a plurality of positions.

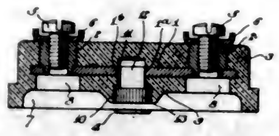
1,873,449. LIGHTNING ARRESTER. JOHN ROBERT MCFARLIN, Philadelphia, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 31, 1923. Serial No. 660,299. 3 Claims. (Cl. 175—30.)



1. A protective device comprising a conductor, a non-conducting tube containing an electrode connected with said conductor, spaced electrodes forming a spark gap, a resistor and a coil connected in parallel and to one of said spark gap electrodes, and an armature movable in said tube into contact with the electrode therein under control of current in said coil, said armature automatically disengaging from said electrode when there is no flow of current in said coil.

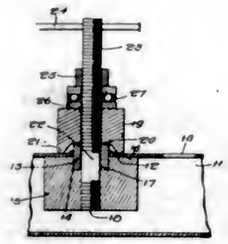
1,873,450. LIGHTNING ARRESTER AND METHOD OF MAKING THE SAME. JOHN ROBERT MCFARLIN, Philadelphia, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 2, 1926. Serial No. 126,394. 16 Claims. (Cl. 175—30.)

1. A lightning arrester comprising a plurality of electrode members secured to a dielectric by the adhesion thereof, said electrode members having faces spaced to form a gap, and a conducting member disposed in said gap and contacting with one of said faces.



10. The method of forming a spark gap for a lightning arrester which comprises securing conducting means in the positions to be occupied thereby in the finished arrester and cutting such positioned means to form a desired space between them.

1,873,451. TOOL FOR FORMING TUBE CONNECTIONS. RUFUS R. MCKNIGHT and ARTHUR WEBBER, Chicago, Ill., assignors to The De Moe Engineering Laboratories, Inc., Chicago, Ill., a Corporation of Illinois. Filed Feb. 3, 1930. Serial No. 425,691. 3 Claims. (Cl. 153—24.)

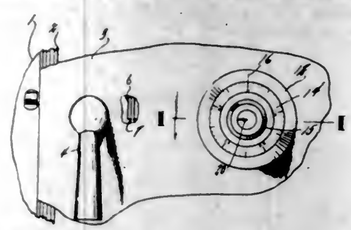


1. In a hand tool for throating apertures in metal walls, the combination of a block of substantially greater surface dimensions on its acting face than the diameter of the aperture and normally standing in spaced relation to one surface of the metal wall and adapted at the conclusion of the throating operation to be brought into contact with the said wall, a screw adapted to be entered through the aperture and having its inner end threaded into said block, a handle for rotating said screw to engage and lift said block toward said metal wall, a male die member of lesser diameter than the block and carried thereby and projecting upwardly therefrom and bored through its center to afford free passage for the screw, and adapted by the movement of the block to be forced through the aperture to throat the margin thereof, a female die member freely mounted upon the screw and recessed upon its bearing face to afford clearance for the throating of the aperture by the passage of the male die member therethrough, said female die member being configured to bear against the side of the metal wall opposite to the block in the region immediately adjacent to the aperture to be throated, and a nut carried by said screw beyond the female die member and adapted when rotated to maintain the female die member in contact with the metal on one side and to advance the block with the male die member carried thereby from the other side of the metal to cause the male die member to distend the margins of the aperture and throat the same.

1,873,452. SPINDLE LOCK. CHARLES F. MEILINK, Toledo, Ohio. Filed Oct. 24, 1929. Serial No. 402,017. 1 Claim. (Cl. 70—56.)

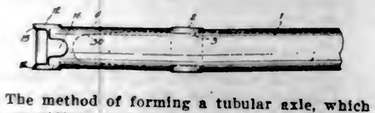
In safe door locking equipment wherein there is a safe door, locking bolt mechanism for the door, a lever handle for operating the mechanism, a combination lock for releasing the mechanism to permit operation of the

lever handle, said combination lock having tumblers and a tumbler operating shaft through the door to the tumblers, the combination including said shaft of a combination lock spindle concealing the shaft, an index adjacent the spindle, and a key lock mounted concentrically of the spindle, said key lock being operable by the key to



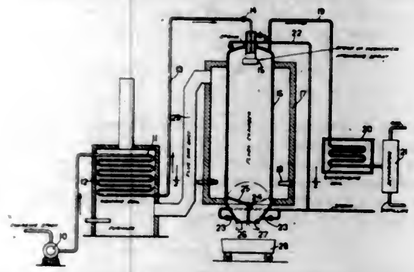
leave the spindle connected with or disconnected from the shaft, whereby with said shaft connected thereto, said spindle is operable relatively to the index to release the mechanism to permit movement of the lever handle to shift the door locking bolt mechanism to door unlocking position.

1,873,453. METHOD OF MAKING A FRONT AXLE. EDMUND C. MOGFORD and GEORGE SPATTA, Buchanan, Mich., assignors to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed Apr. 7, 1930. Serial No. 442,050. 14 Claims. (Cl. 29—153.)



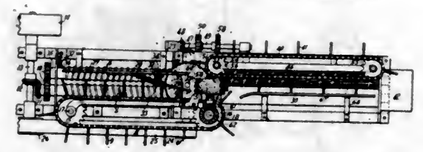
11. The method of forming a tubular axle, which comprises providing a steel tube of substantially uniform cross-section throughout its length, heating an end portion of said tube, confining the outside of the heated portion, repeatedly upsetting the end until a substantial portion of the tube is solid, and shaping the solid end to provide bearings for stub axle knuckles.

1,873,454. METHOD FOR DISTILLING OILS. WILLIAM F. MOORE, Jackson Heights, N. Y., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed July 12, 1928. Serial No. 292,283. 2 Claims. (Cl. 196—58.)



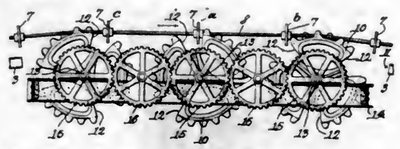
1. The process of converting heavy hydrocarbon oil into distillate and coke which comprises, heating the oil under relatively high superatmospheric pressure, expanding the heated oil in the form of a spray into the top of a vertically disposed elongated chamber maintained under relatively low pressure and free from products of combustion, permitting the liquid component droplets of the sprayed oil to descend in the chamber while introducing steam into the bottom of the chamber at a point remote from the point of introduction of the expanded oil so as to create a current of steam passing upwardly without high agitation counter current to the downwardly moving droplets, maintaining a temperature in the chamber sufficient to evaporate the volatile constituents of said droplets during their downward movement, permitting the resultant coke particles produced from said droplets to continue their downward movement, and collecting said coke particles in the bottom of said chamber for removal.

1,873,455. BUTT REMOVING AND HUSKING MECHANISM FOR GREEN CORN. WILLIAM W. MORRAL and SAMUEL E. MORRAL, Morral, Ohio. Filed Feb. 29, 1928. Serial No. 257,827. 6 Claims. (Cl. 130—5.)



1. In a combine butt removing and husking mechanism comprising a gaging device, a butt removing device adjacent to said gaging device and a pair of husking rollers arranged beyond said butt removing device to receive the ears of corn after the butts have been removed therefrom, an endless conveyor arranged parallel with said gaging device and having flights to engage the individual ears and move the same along said gaging device and past said butt removing device, and a second endless conveyor arranged parallel with said husking rollers and having flights each adapted to extend between adjacent flights of the first mentioned conveyor and to engage an ear of corn as it is discharged from said first mentioned conveyor and move said ear along said husking rollers.

1,873,456. CONVEYER GUIDE. FRANK C. MORROW, Wellston, Ohio. Filed Oct. 25, 1930. Serial No. 491,296. 3 Claims. (Cl. 198—137.)



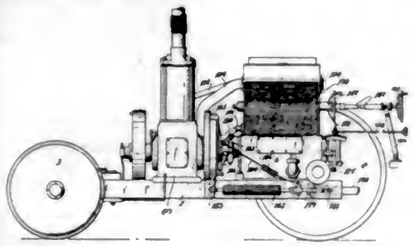
1. The combination with an endless cable conveyer having regularly spaced disks, of means for holding in an elevated position an intermediate portion of one strand of the conveyer, said means including alining sheaves having peripheral disk receiving gaps and driving connections between the sheaves spaced from and out of engagement with the conveyer, said disks and sheaves being movable in properly timed relation to maintain a constantly geared connection between the conveyer disks and the sheaves.

1,873,457. PROCESS FOR THE PRODUCTION OF CHEMICALLY PURE PHOSPHORIC ACID. WILHELM MÜLLER and JOSEF MARTIN MICHEL, Bitterfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 19, 1929, Serial No. 393,837, and in Germany Sept. 25, 1928. 5 Claims. (Cl. 204—9.)

1. The process of producing chemically pure phosphoric acid from a technical raw acid which comprises subjecting the raw phosphoric acid to electrolysis, cathodes being used upon which the contaminations are deposited in the

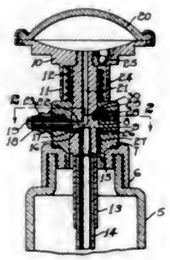
form of metals and metalloids without the phosphoric acid being reduced to lower stages of oxidation, the cathodic current density not exceeding 1 ampere per square decimeter.

1,873,458. FARM TRACTOR. CORNELIUS MURNANE, Melbourne, Victoria, Australia, assignor of one-half to Thompsons Engineering & Pipe Company Limited, Castlemaine, Victoria, Australia. Filed Apr. 3, 1928, Serial No. 267,073, and in Australia Apr. 26, 1927. Renewed Mar. 25, 1932. 8 Claims. (Cl. 180—70.)



1. In a farm tractor, the combination of a chassis frame mounted on front steering wheels and rear traction wheels, a power unit, transmission gearing connected to the traction wheels, an engine clutch between the power unit and the transmission gearing, a control member rotatable to govern the steering wheels and mounted for sliding movement, a lever operated in the sliding movement of the control member, means operated in the movement of the lever to actuate the engine clutch, and means actuated in the movement of the lever to govern the control of the transmission gearing.

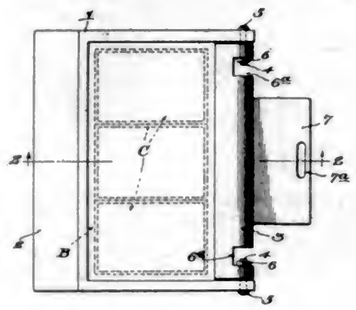
1,873,459. ATOMIZER. OSCAR J. MUTSCHEL, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed May 6, 1929. Serial No. 360,628. 6 Claims. (Cl. 299—88.)



1. In an atomizer, a receptacle having a top with a bore tapering upwardly to constitute a seat, a correspondingly tapered stopper cooperating therewith and projecting upwardly above said top, a head secured to the upper end of the stopper, and a spring acting between said head and said stopper to hold the stopper against its seat, said top being provided with a liquid outlet passage, an air supply passage an an air vent passage all intersecting said bore, said stopper being rotatable through a limited angle and having means to open or cut off all of said passages.

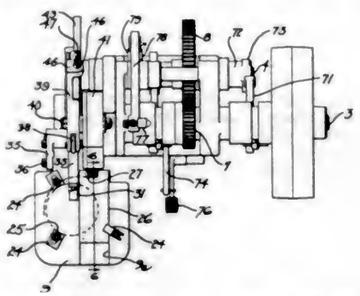
1,873,460. STORAGE BATTERY HOLDER. JOHN M. NEWTON, Sioux Falls, S. Dak. Filed Jan. 29, 1931. Serial No. 512,186. 1 Claim. (Cl. 29—89.)

As a new article of manufacture, a storage battery holder, composed of a substantially U-shaped frame having its bottom formed to seat on a supporting surface, the bottom of the frame being open so as to receive the storage battery therein whereby to also support the battery from said surface, a foot engaging flange extending outwardly from the bight side of the frame and formed to seat on the supporting surface whereby the frame is held against the supporting surface by one foot of the operator, a cylindrical-like jaw mounted in the opening



of the frame and having its end faces disposed adjacent to the ends of the frame at the opposite side of the latter, said jaw having slots adjacent to its ends and spaced therefrom, bolts extending through the said last named ends of the frame and extending eccentrically through said ends of the jaw and into the slots, and a foot-engaging plate carried by the jaw and extending outwardly therefrom.

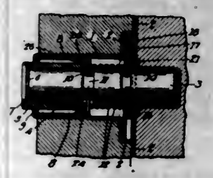
1,873,461. WIRE KNOTTING MACHINE. MICHEL NIGRO and ARTHUR C. NIGRO, Worcester, Mass., assignors to Sleeper & Hartley, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 12, 1931. Serial No. 508,077. 14 Claims. (Cl. 140—101.)



1. In a machine of the class described, the combination with a frame, a rotatably mounted shaft and a knotting pinion adapted to be driven from said shaft, of a spring supporting table adapted for reciprocatory movement in a horizontal plane at right angles to the axis of rotation of said knotting pinion.

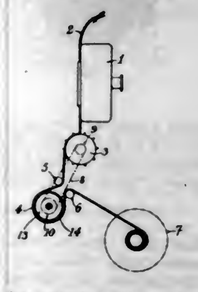
1,873,462. SLIDING DOOR LOCK. EDWIN W. NORTH, Rockford, Ill., assignor to National Lock Co., Rockford, Ill., a Corporation of Delaware. Filed Oct. 27, 1930. Serial No. 491,330. 9 Claims. (Cl. 70—31.)

1. A sliding door lock comprising a cylinder, a sleeve telescopically mounted within said cylinder for reciprocating but non-rotating movements therein, a bolt within said sleeve, means for locking said bolt to said sleeve for reciprocating movements therewith, and rotary movements therein, said bolt extending beyond one end of said cylinder when in locked position and the other end when in unlocked position, means for locking said bolt when in one position, and a spring arranged to normally



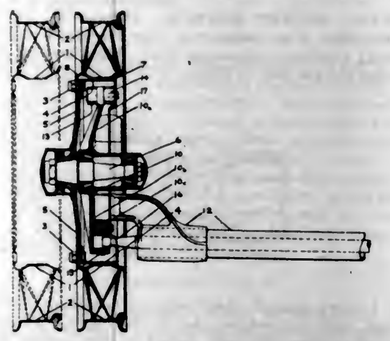
withdraw said bolt from extended position when unlocked, said locking means being releasable by a key upon rotation of said bolt with a key inserted therein.

1,873,463. DEVICE FOR REDUCING THE TENSION OF THE FILM IN CINEMATOGRAPHIC APPARATUS. ETIENNE OEHMICHEN, Valentigney, France. Filed Mar. 9, 1929, Serial No. 345,648, and in France June 20, 1928. 3 Claims. (Cl. 242—75.)



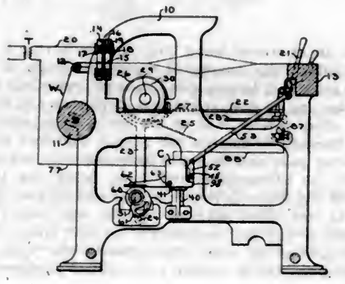
1. In a device for reducing the tension of the film in cinematographic apparatuses, the combination of a toothed supplying drum disposed at the outlet of the cinematographic apparatus and adapted to drive the film at an almost constant speed, a spool for winding the film, a rotary friction roller between the said drum and the said spool and upon which the film passes and driving means adapted to cause the said friction roller to rotate with a peripherical speed which is different from the average speed of motion of the film and proportional to the said speed.

1,873,464. AUTOMOTIVE DEMOUNTABLE WHEEL. ROLF LEHMANN OLSEN, Jamaica, N. Y. Filed Nov. 30, 1923. Serial No. 677,822. 3 Claims. (Cl. 301—6.)



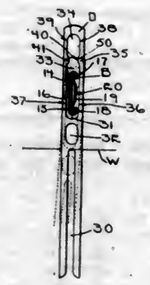
1. In an automotive wheel, the combination of a hub part including a hub, web and brake drum, and a body part including a rim, and a hub shell having an annular flange overlapping said web adapted to be secured thereto by a series of bolts and a sleeve portion in the same plane as the rim adapted to telescope over and seat upon the exterior surface of the brake drum.

1,873,465. KNOCK-OFF FOR ELECTRICAL WARP STOP MOTIONS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 1, 1929. Serial No. 375,118. 16 Claims. (Cl. 139—353.)



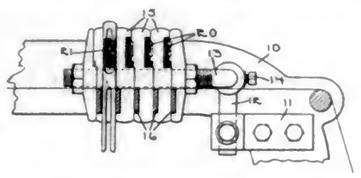
1. In a knock-off mechanism for a loom stop motion, a regularly moving actuator, an electro-magnetic device to be energized to effect loom stoppage, a knock-off lever to be rocked to stop the loom, a link operatively related to the lever and normally out of the path of the actuator, the latter when at the end of its knocking-off stroke overlying a portion of the link, and a lock normally held in non-locking position by the weight of the link but movable when the link is attracted by the electro-magnetic device to lock said link in the path of the actuator.

1,873,466. DROP WIRE. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 9, 1930. Serial No. 466,706. 1 Claim. (Cl. 139—368.)



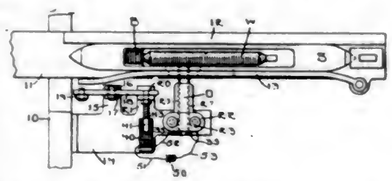
A drop wire for an electrical warp stop motion having a contact bar, said drop wire having a closed slot formed in its upper end portion and having a pair of substantially opposite circuit-closing lobes projecting into said slot from each side thereof and intermediate the ends thereof, the lower edge portions of both lobes being upwardly and inwardly inclined to facilitate a circuit-closing movement, and the adjacent edges of said lobes being substantially separated to permit portions of said contact bar to pass upward between said lobes before a circuit is closed thereby.

1,873,467. ELECTRICAL WARP STOP MOTION. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester Mass., a Corporation of Massachusetts. Filed July 9, 1930. Serial No. 466,709. 8 Claims. (Cl. 139—353.)



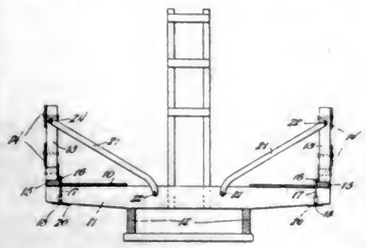
1. In an electrical warp stop motion having a plurality of individually removable supporting units, a contact bar for each unit having two insulated oppositely charged electrodes one on one lateral face of the bar and the other on the other lateral face of the bar, a drop wire having a slot through which the bar passes, said slot having a lower wide part and an upper narrower part, the distance between the aforesaid lateral faces being less than the width of the lower part of the slot and greater than the width of the upper part of the slot, and means on one electrode to prevent engagement of the other electrode by the part of the drop wire adjacent the wide part of the slot when the drop wire is in normal position.

1,873,468. WEFT DETECTOR AND BOBBIN THEREFOR. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 14, 1930. Serial No. 475,243. 11 Claims. (Cl. 139—273.)



1. In a loom operating with a wound mass of electric current conducting weft, electromagnetic means to effect a change in the operation of the loom and including an electrical detector to contact with the weft, said means acting to effect a change in the operation of the loom when the weft is depleted and incapable of conducting current from the detector.

1,873,469. HAYRACK. SOLOMON PEARCE, Elizabeth, Ill. Filed Nov. 19, 1929. Serial No. 408,350. 2 Claims. (Cl. 296—6.)



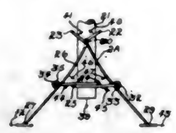
1. A rack of the character described, comprising in combination, cross beams supporting a platform; side frame members presenting standards adapted to be set on the platform above the cross beams; hook-shaped members secured to the inside edges of the standards adjacent to their lower ends; loop-shaped locking links loosely and slidably secured to said cross beams and projecting upwardly through said platform and engaging said hook members; said cross beams presenting kerfs on the under sides of substantial depth to receive said links; metal bearing seats in the bottoms of said kerfs; and bridge plates across said kerfs arranged to prevent the links from falling out of reach through the platform.

1,873,470. CABLE ARMOR. ROBERT L. PEEK, Jr., Elizabeth, and CLAUDE L. HIPPENSTEEL, Bloomfield, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 13, 1929. Serial No. 354,791. 9 Claims. (Cl. 173—266.)



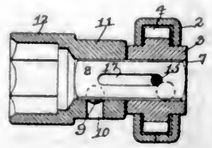
1. A wire having a central core of an alloy of aluminum with at least one of the metals, copper, silicon, manganese and magnesium and having a surface coating of different metal non-corrosive in sea water.

1,873,471. CHRISTMAS TREE HOLDER. HOLLY C. PETERSON, Toledo, Ohio. Filed July 18, 1928. Serial No. 293,755. 10 Claims. (Cl. 248—38.)



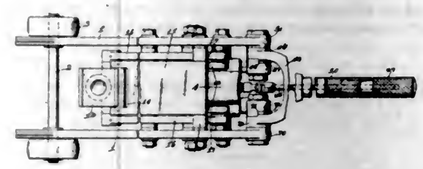
2. A Christmas tree holder comprising two pairs of jaws adapted to grip the tree, one above the other, and means constantly tending to close both pairs of jaws upon a tree placed in the holder.

1,873,472. SOCKET WRENCH. EDWARD M. PFAUSER, Milwaukee, Wis., assignor to The Blackhawk Manufacturing Company, Milwaukee, Wis. Filed May 29, 1930. Serial No. 456,967. 1 Claim. (Cl. 81—61.)



A ratchet wrench comprising a handle, a rotatable ratchet head carried by the handle having an axially disposed opening polygonal shaped in cross section, a plug having a length greater than the length of the opening, said plug being of a polygonal shape in cross section and slidably mounted in the opening and having a longitudinally extending guide groove in one side thereof terminating short of its opposite ends, socket head locking members carried by the plug adjacent to the opposite ends thereof arranged at right angles to said groove, the ratchet head having a transverse bore formed therein equidistant its ends the opening dividing the bore into a short and a long portion, the long portion of the bore opening out through one side of the ratchet head and the short portion terminating short of the opposite side of the ratchet head, and a spring-pressed pin slidably mounted in the short portion of the bore at one side of the opening and engaging the walls of the groove in the plug.

1,873,473. HYDRAULIC JACK. EDWARD M. PFAUSER, Milwaukee, Wis., assignor to Blackhawk Manufacturing Company, Milwaukee, Wis. Filed Dec. 20, 1930. Serial No. 503,739. 5 Claims. (Cl. 138—9.)



1. In a vehicle lifting jack, a wheeled frame, a load engaging member movably mounted on the frame, a ram mounted on the frame operatively connected to said load engaging member, a pair of pump units for actuating the ram, each including a piston, a pair of transversely aligned stub shafts on the frame, an operating handle having a yoke on its inner end, the arms of the yoke being rockable on the stub shafts, a rockable lever on each shaft operated by the adjacent arm of the yoke, and means operatively connecting the levers independently of one another to a piston.

1,873,474. METHOD OF PRODUCING FILMS OR THE LIKE, PARTICULARLY FOR USE IN ELECTRIC CONDENSERS. EMIL PFIFFNER, Fribourg, Switzerland, assignor, by mesne assignments, to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 10, 1927, Serial No. 167,371, and in Germany Mar. 22, 1926. 1 Claim. (Cl. 175—41.)

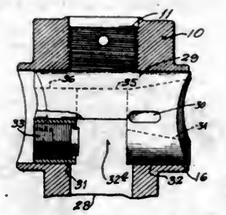
The method of forming dielectric coated condenser plates which comprises forming a plurality of cellulose derivative films in a somewhat plastic condition, attaching one of said films to a condenser plate, and homogeneously uniting the films to each other with the aid of pressure while still in a plastic condition.

1,873,475. PROCESS OF PRODUCING CALCIUM MOLYBDATE. ERNST POKORNY, Leipzig, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 11, 1929, Serial No. 399,104, and in Germany Dec. 8, 1928. 5 Claims. (Cl. 23—51.)

1. The process which comprises gradually adding calcium hydroxide to a substance containing molybdenum oxide in the presence of water at such a rate as to maintain, in the solution, a basicity just sufficient to blue litmus paper, and removing the precipitate.

1,873,476. TAP HOLDER. HARRY G. PROCUNIER, Chicago, Ill., assignor to Procunier Safety Chuck Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1931. Serial No. 515,942. 1 Claim. (Cl. 279—67.)

A tap holder comprising a body having means adapted to hold a tap in axial alignment therewith, said body having a transverse bore, a member slidable in said bore and having a slot adapted to receive the flattened end of a tap shank, and means carried by said member for gripping



said flattened end against one side of said slot, said member having a hole above said gripping member and communicating with said slot through which the end of said tap may be observed.

1,873,477. COAXIAL CONDUCTOR TRANSMISSION LINE. DONALD A. QUARLES, Englewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar 30, 1929. Serial No. 351,304. 14 Claims. (Cl. 173—265.)



1. A transmission line comprising inner and outer coaxial conductors, the outer conductor comprising braided strands of metal and means partly braided with said strands for supporting one of said conductors from the other.

1,873,478. TUBE CLEANER. RICHARD W. RANDALL and JOHN C. KOCH, Stockton, Calif. Filed Dec. 15, 1930. Serial No. 502,476. 7 Claims. (Cl. 15—104.13.)



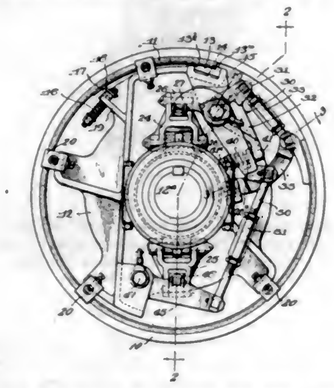
1. A tube cleaner adapted to be introduced into a tube comprising a drive shaft adapted to be disposed concentrically in said tube and having a portion extending at an angle to the remainder of said shaft, a body at the end of said portion symmetrically disposed relative to a plane passing through the shaft and to which the outer end of said portion is secured, and cutting elements projecting outwardly of the side edges of the body mounted thereon in opposed relation to each other.

7. A tube cleaner comprising a drive shaft, a body mounted on said shaft, and a pair of cutters mounted to rotate on and with respect to said body on axes parellel to the axis of said shaft, both of said cutters being located on one side of a plane passing through said axis.

1,873,479. CLUTCH. JOHN D. RAUCH, Lima, Ohio, assignor to The Ohio Power Shovel Company, Lima, Ohio, a Corporation of Ohio. Filed Apr. 24, 1931. Serial No. 532,402. 1 Claim. (Cl. 192—77.)

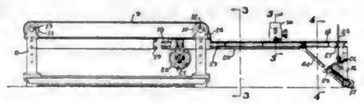
In a clutch, a drum, a shaft, a clutch member thereon, and friction clutch means carried thereby comprising a friction band, two levers pivoted at opposite sides of said

shaft, actuating means for said levers including a sliding sleeve mounted concentric with said shaft, two oppositely disposed toggle links each interposed between said sleeve and one of said levers, an equalizing member connecting said levers for simultaneous operation, and means inter-



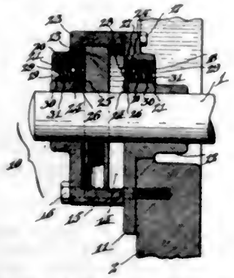
posed between one of said levers and said friction band for actuating the latter, including a bell crank lever having one arm yieldingly connected to the last named lever and movable in a direction generally radial relative to said drum, and the other arm connected with said friction band to shift it circumferentially of said drum.

1,873,480. DEVICE FOR CATCHING AND STACKING SHEET MATERIAL. RALPH N. RICHARDS, Toledo, Ohio, assignor to Ottawa River Paper Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 29, 1930. Serial No. 485,053. 7 Claims. (Cl. 271—86.)



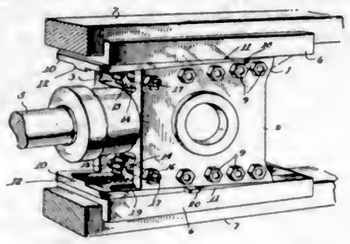
1. A table for receiving and stacking sheets and provided with spaced stops for engaging the ends of the sheets, a pair of side stops, and means for selectively securing said side stops to the table in opposed relation to each other and at different distances apart to accord with the width of the sheets delivered from the conveyor.

1,873,481. CAM SHAFT SHIFT CONTROL MEANS. EMIL RICHTER, Wyomissing, and MAX RICHTER, West Reading, Pa., assignors to Textile Machine Works, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Jan. 15, 1932. Serial No. 586,818. 15 Claims. (Cl. 66—82.)



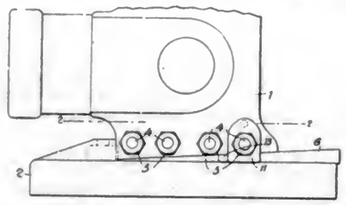
1. In a knitting machine, the combination of a rotary longitudinally shiftable cam shaft and fluid-cushioning means for absorbing shock attending the shifting of said cam shaft.

1,873,482. ADJUSTABLE CROSSHEAD. THEODORE ROGATCHOFF, Baltimore, Md. Filed Mar. 3, 1927. Serial No. 172,505. 9 Claims. (Cl. 308—3.)



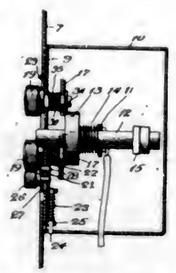
1. An adjusting element for locomotive crossheads comprising a U-shaped wedge, an integral arm extending midway between the prongs of said wedge and provided with means whereby the wedge may be operated.

1,873,483. CROSSHEAD ADJUSTER. THEODORE ROGATCHOFF, Baltimore, Md. Filed July 3, 1930. Serial No. 465,771. 4 Claims. (Cl. 308—3.)



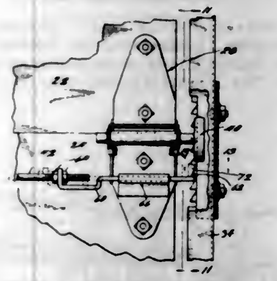
1. A crosshead adjuster comprising in combination with a shoe and crosshead, of a U-shaped wedge having legs inclined to the same plane, the inner sides of said legs, engaging flanges on said shoe and a clamping member carried by said crosshead and engaging the smooth outer side of said wedge to clamp it against one of said flanges.

1,873,484. COMBINATION LOCK SWITCH. CONRAD ROSINE, Chicago, Ill. Filed Jan. 16, 1932. Serial No. 587,012. 8 Claims. (Cl. 200—45.)



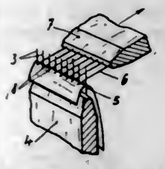
1. A combination lock in which is comprised a supporting plate, a spring actuated depressible stem extending through said plate, settable combination disks cooperating to prevent endwise movement of said stem and having an inactive position permitting endwise movement of the stem, and a spring actuated detent for resisting endwise movement of the stem and therewith permitting manipulation of the disks whereby to set the latter in inactive position, said detent when retracted permitting endwise movement of the stem when the disks are adjusted to their inactive position.

1,873,485. DOORLOCK. ALVIN V. ROWE, Galesburg, Ill., assignor to Rowe Manufacturing Company, Galesburg, Ill., a Corporation of Illinois. Filed Oct. 10, 1930. Serial No. 487,644. 2 Claims. (Cl. 292—37.)



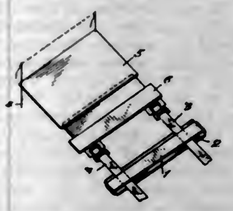
1. In combination with a door structure including a plurality of hingedly connected door sections shiftable along vertical, horizontal and connecting curved rail sections, a locking device including a shiftable locking element adapted to project beyond a vertical margin of one of said door sections and movable with said sections, an abutment adapted to be lockingly engaged by said locking element to secure said sections against upward displacement, and a guard on the outer extremity of said locking element for preventing the interlocking of said element with said rail sections during the shifting of the sections there-along.

1,873,486. TRANSFERRING METHOD. PAUL SCHÖNFELD, Chemnitz, Germany. Filed Oct. 1, 1931, Serial No. 566,239, and in Germany Oct. 9, 1930. 5 Claims. (Cl. 66—96.)



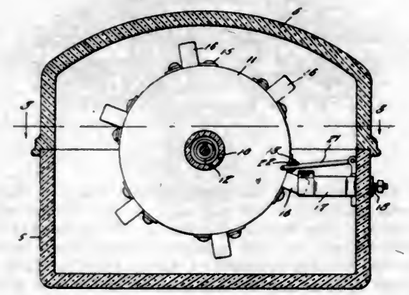
1. A method of setting a piece of goods with turned over edge on a welt or transfer bar, comprising placing the part to be transferred on a fixed edge of a holding device, the said edge being recessed at uniform distances, the part to be transferred hanging down on both sides of the said edge, hooking the part on to the edge by means of an ordinary welt bar and introducing the welt bar into the part at the recesses of the fixed edge.

1,873,487. ELASTIC TOP IN HOSIERY OR THE LIKE. PAUL SCHÖNFELD, Chemnitz, Germany. Filed Jan. 29, 1932, Serial No. 589,570, and in Germany Jan. 2, 1931. 2 Claims. (Cl. 66—96.)



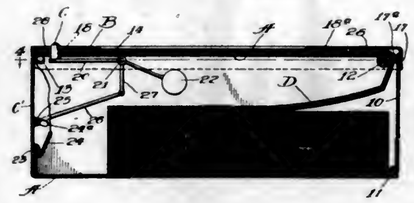
1. The herein described method of working an endless rubber band into the welt of hosiery consisting in producing a welt part on a flat hosiery frame, placing on the said welt part from the front a rubber ring stretched to correspond to the width of the welt part, and subsequently transferring the top part to the frame needles to enclose the rubber ring within the welt.

1,873,488. SELF LOADING FUSE BOX. HENRY F. SCHMIDT, Conroy, Iowa. Filed Mar. 10, 1931. Serial No. 521,541. 5 Claims. (Cl. 200—126.)



1. In a device of the character described, a pair of relatively fixed contacts having pairs of contact jaws, a fuse supported between two of said contact jaws, a spring actuated carrier, means pivotally mounting said carrier, a fuse mounted thereon, and a pair of contact fingers in electrical connection with said fuse and arranged for engagement with the remaining jaws of said pairs of contact jaws for introducing the second fuse into the circuit upon fusing of the wire of the first mentioned fuse.

1,873,489. DUPLICATING MACHINE AND STATIONERY FOR USE THEREIN. BERNARD A. SCHROEDER, Chicago, Ill., assignor to United Autographic Register Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 5, 1931. Serial No. 555,320. 6 Claims. (Cl. 282—12.)

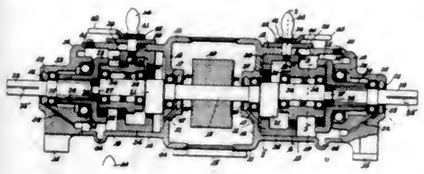


2. In combination in a duplicating machine: a frame equipped with a platen and in front thereof with a tear-off blade provided with an open finger-recess; retractable, normally projected register pins disposed near the front end of said platen; and pin-retracting means having a pivoted actuating member movable by the operator's fingers in the operation of taking hold of stationery engaged by said pins.

1,873,490. PROCESS FOR SEPARATING POTASSIUM PHOSPHATE FROM POTASSIUM ALUMINATE IN SOLUTIONS. RUDOLF SCHULZE, Bitterfeld, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 15, 1930, Serial No. 496,037, and in Germany Nov. 23, 1929. 5 Claims. (Cl. 23—107.)

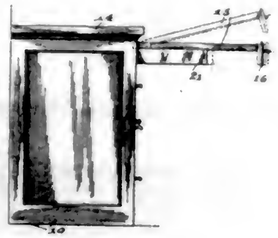
1. A process which comprises saturating a solution containing tri-potassium phosphate and potassium aluminate with ammonia gas and separating the two liquid layers formed from each other.

1,873,491. VARIABLE SPEED MOTOR. MARTIN T. SCHUMB, Milton, and EMILE E. TOUDAS, Wollaston, Mass., assignors to Boston Gear Works, Inc., Norfolk Downs, Mass., a Corporation of Massachusetts. Filed Feb. 26, 1932. Serial No. 595,341. 6 Claims. (Cl. 74—34.)



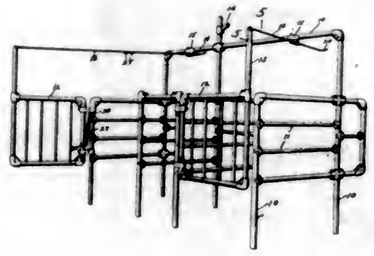
1. In combination with an electric motor, a casing therefor provided at one end with an annular extension in which is disposed an eccentric on the motor shaft; a counter-balance for said eccentric on said motor shaft; a closure for said extension; a driven shaft rotatable in bearings therein; an internal gear on said driven shaft; a member freely revoluble on said eccentric provided with teeth at one end meshing with said internal gear and having two spur gears at its opposite end; and a slidable member within said extension provided with two internal gears one of which is adapted to coact with one of said spur gears at the extreme of the movement of said member in either direction.

1,873,492. KITCHEN CABINET. WILLIAM C. SCHWANTES, Manitowoc, Wis. Filed Apr. 27, 1931. Serial No. 533,289. 2 Claims. (Cl. 312—160.)



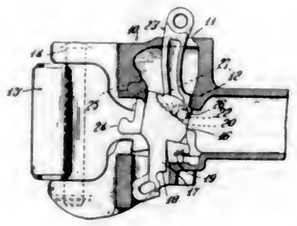
1. A cabinet having a slide opening therein and provided at the lower portion of the opening and in the opposite sides thereof with longitudinal upwardly opening guiding grooves and provided at the upper portion of the opening and in the opposite sides thereof with longitudinal downwardly opening guiding grooves spaced apart a distance greater than the space between the lower grooves, a sliding stile mounted in the cabinet in each side of the opening, each stile having a longitudinal rib slidably engaging in the adjacent lower guiding groove and extending throughout a portion only of the rear end of the stile, the lower guiding grooves terminating at the inner side of the front frame of the cabinet and the rib of the stile adapted to engage said front wall of the cabinet to limit the projection of the stile from the cabinet, each stile having an outwardly offset rib at its upper edge adapted to engage in the adjacent upper guiding groove, a bake board slidably mounted upon the upper edges of the stiles and having in its lower surface guiding grooves, said stiles having forward upstanding ribs offset inwardly and out of line with the rear upstanding ribs of the stiles for engaging in the grooves of the bake board to limit the sliding movement thereof on the stiles.

1,873,493. STALL FOR ANIMALS. BERTRAM D. SCOTT, Fairfield, Iowa, assignor to The Louden Machinery Company, Fairfield, Iowa, a Corporation of Iowa. Filed May 13, 1931. Serial No. 536,969. 11 Claims. (Cl. 119—27.)



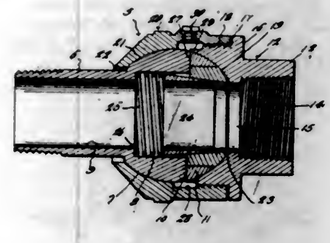
1. A stall for animals comprising a pair of posts, a gate between the posts having hinged connection with one of the posts, partition members to form the sides of the stall, and a lever connected with the gate and extending to the rear of the stall whereby the gate can be horizontally opened and closed by movement of the lever.

1,873,494. COUPLER. HENRY H. SERVICE, Topeka, Kans. Filed May 20, 1930. Serial No. 454,002. 1 Claim. (Cl. 213—148.)



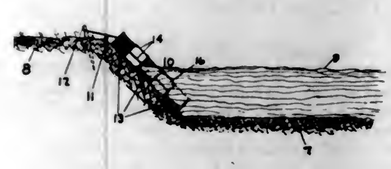
A coupler of the class described comprising a chambered coupler head having an opening in its top and a depending rear wall portion in the chamber; a vertically movable lock member in said chamber provided in its upper end with a slot having a bottom wall sloping upwardly toward the front side of the member, the lower rear end of the slot having elongated recesses on opposite sides; a lifter member having laterally disposed trunnions seated in said recesses of the lock member, the rear side of the lifter member having a recessed projection adapted to engage with the rear wall projection in the chamber while the forward side of the lifter member above the plane of the trunnions has a forwardly projecting lug having a curved surface at its tip, said lug being disposed substantially in the same horizontal plane as the recess in the rear projection of the lifter, the curved tip of said lug contacting with the upwardly sloping bottom wall of the slot in the lock member and thereby exerting rearward force on the lower end of the lifter and maintaining the rear recessed projection in contact with the depending wall portion of the head, whereby accidental upward movement of the lock member is prevented.

1,873,495. FLEXIBLE PIPE JOINT. WALTER R. SMITTLE, St. Louis, Mo. Filed Jan. 27, 1932. Serial No. 589,246. 6 Claims. (Cl. 285—91.)



1. A flexible pipe coupling, comprising, a spherical male member, a female member for receiving rotatably the male member, assembling means for the members, packing means disposed between the male member and the female member, packing expanding means, and spring means for actuating the packing expanding means, said packing means being located at the inward end of the male member.

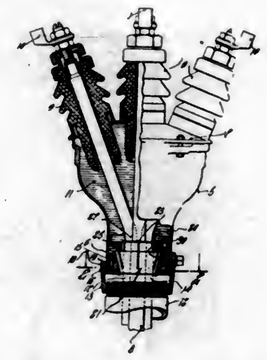
1,873,496. RIVER REVETMENT. CHARLES E. SNYDER, Silver Lake, Kans. Filed Aug. 4, 1930. Serial No. 472,809. 1 Claim. (Cl. 61—37.)



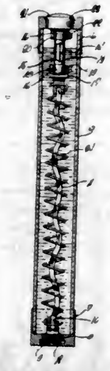
A river revetment, comprising a plurality of substantially cylindrical fascines, each fascine having axially spaced apart wire mesh cylinders and flexible connecting elements between the cylinders, said elements being secured at opposite ends of the adjacent cylinders at spaced points of the circumference thereof, and means for supporting the fascines in a stream and in spaced apart relation to each other and with their longitudinal axes substantially at right angles to the direction of the general flow of a stream.

1,873,497. POT HEAD. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 4, 1928. Serial No. 310,334. 4 Claims. (Cl. 247—6.)

1. In combination with a pot head, having a tapered opening in one wall to form an inlet through which a plurality of cables extend, a member formed of deformable metal received in said tapered opening and having a plurality of bores through which the cables pass, said cables having a substantially snug fit in their respective bores, and means for forcing the member of deformable metal into the tapered opening to cause the same to grip and anchor the several cables.

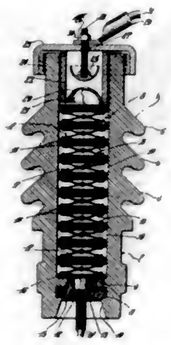


1,873,498. FUSE. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 10, 1930. Serial No. 501,284. 2 Claims. (Cl. 200—117.)



1. In a fuse of the character described, a tube, a first contact member at one end of the tube, a second contact member at the other end of the tube, said second contact member having a tapered bore with its largest diameter outermost, a plug having a correspondingly tapered outer wall seated in said opening and having a recess in its inner end portion, a fuse element within the tube, said fuse element having an enclosing casing formed of frangible material and terminals at the ends of said enclosing casing, means to readily detachably secure one fuse terminal in the recess of said plug, a connecting member having a recess to receive the other fuse terminal, means providing a positive electrical connection between said connecting member and the first mentioned contact member, and a contractile spring having one end attached to the connecting member and its other end connected with said first mentioned contact member to maintain a tension on the fuse.

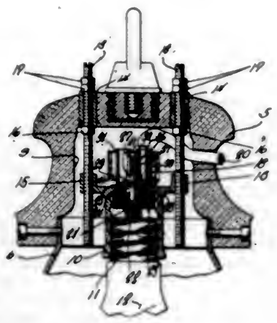
1,873,499. LIGHTNING ARRESTER. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed July 5, 1928. Serial No. 290,505. 15 Claims. (Cl. 175—30.)



1. In a lightning arrester of the character described, a plurality of resistance units, and means interposed between said units for temporarily increasing the resistance thereof upon passage of current therethrough.

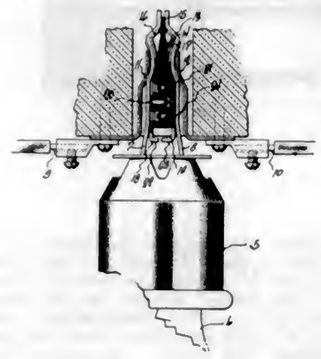
15. In a lightning arrester, the combination of a dielectric housing, a pair of terminals within the housing forming a gap across which current jumps, one of said terminals being movable toward and away from the other, an electrical resistor within the housing and supporting the movable terminal, said resistor comprising a plurality of stacked bodies of high electrical resistance and thermo responsive elements interposed between certain of the bodies of high resistance to normally maintain a predetermined degree of contact pressure between the bodies of high resistance and operable upon the passage of electric current therethrough to diminish the degree of contact pressure and the total height of the resistor, whereby the movable terminal moves away from the other terminal to increase the gap.

1,873,500. LIGHTING FIXTURE. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 4, 1926. Serial No. 139,413. 2 Claims. (Cl. 200—218.)



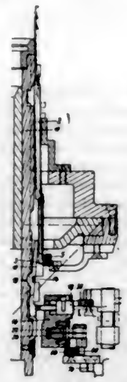
1. A street lighting fixture comprising a body member, a lamp receptacle formed of conductive material and adapted to receive an incandescent lamp, means adjustably mounting the lamp receptacle within the body member, a terminal lug extended from the receptacle, lines connectible with a source of electrical energy, means connecting one line with the lug and consequently with the receptacle whereby it is connected with the lamp filament through the receptacle, a terminal member carried by the receptacle and insulated therefrom to which the other line is electrically connected, means connecting the terminal member with the other side of the lamp filament, spring means carried by the terminal member and yieldably urged into engagement with the lug, and a film cut-out normally maintaining said spring means spaced from the lug and out of electrical connection therewith.

1,873,501. LAMP SOCKET. ALWIN G. STEINMAYER, Milwaukee, Wis., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 28, 1929. Serial No. 417,111. 8 Claims. (Cl. 200—118.)



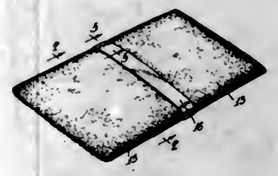
1. An electric cut-out unit readily insertable between the bayonet arms of a series type lamp socket to maintain the same electrically connected upon failure of a lamp secured in the socket, comprising a block of insulating material, and a pair of contact members carried by the block of insulating material with adjacent portions extended beyond the block of insulating material and spaced slightly from each other to form an air gap across which current may jump to fuse said portions.

1,873,502. CIRCULAR KNITTING MACHINE. MAX STEINMÜLLER, Chemnitz, Germany. Filed Jan. 31, 1931. Serial No. 512,670, and in Germany Dec. 18, 1929. 2 Claims. (Cl. 66—36.)



1. In a circular knitting machine, the combination of a needle cylinder with a plurality of needles disposed on the said cylinder, a plurality of heels forming part of some of the needles, means for pressing the heels of the needles away from the said cylinder and within range of cams adapted to move the needles thus adjusted, arched carriers secured to the said needle cylinder, carriages displaceably disposed on the said carriers, drivers carried by the said carriages and adapted to actuate the said means for adjusting the needles, ratchet teeth on the said carriers, another toothed segment displaceably arranged on the said carriers, two pawls rotatably disposed on each of the said carriages, one of the said pawls being in engagement with the teeth of the carrier and the other one with the said toothed segment, and means for reciprocating the said toothed segment.

1,873,503. WASH RAG. ROBERT STEWART, Ozone Park, N. Y. Filed Sept. 16, 1931. Serial No. 563,067. 3 Claims. (Cl. 15—209.)



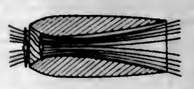
3. As a new article of manufacture, a padded wash cloth including a filler of resilient padding material, a water proof cover encasing said material and including an integrally bonded inner surface of rubber and an outer surface of fabric.

1,873,504. RUNNING BOARD. HERCULES DORN STEWART, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Aug. 31, 1931. Serial No. 560,274. 5 Claims. (Cl. 280—169.)



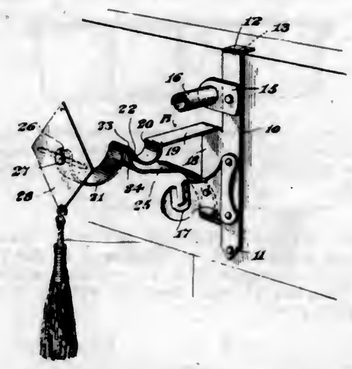
1. A running board comprising a metal base, two rubber strips vulcanized thereto and a strip of linoleum composition interlockingly engaged between the two rubber strips.

1,873,505. PROPELLERS FOR AEROPLANES AND THE LIKE. LUIGI STIPA, Rome, Italy. Filed Aug. 26, 1931, Serial No. 559,417, and in Italy Sept. 1, 1930. 6 Claims. (Cl. 244—18.)



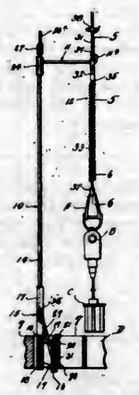
1. In a device of the character described, a propeller, means for driving said propeller, a tube having a venturi-shaped interior surface and a wing-shaped surface connected with said tube, at least a part of said tube being situated behind said propeller, the exterior surfaces of said tube forming a continuation of said wing surface, the opening of said tube nearest to said propeller having a diameter substantially equal to the diameter of said propeller, the cross-sections of said tube being proportional to and slightly larger than the corresponding sections of the wake produced by said propeller.

1,873,506. WINDOW SHADE AND CURTAIN FIXTURE. EDWARD E. SULLIVAN, Fall River, Mass. Filed July 23, 1931. Serial No. 552,753. 3 Claims. (Cl. 156—24.)



1. A fixture of the kind described, comprising a strip-like base having an ear projected laterally therefrom, a rod socket member on the rear, a window shade bracket on the base, a web on the base, an arm extending forwardly from the web to one side of the base and having curtain pole and rod seats, and a brace forming a part of the web and having its free end contacting with the arm between the seats.

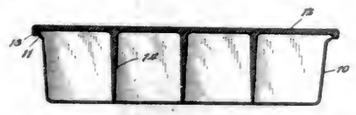
1,873,507. PORTABLE GRINDER STAND. JOSEPH SUNNEN, St. Louis, Mo. Filed June 27, 1930. Serial No. 464,179. 14 Claims. (Cl. 51—245.)



10. In a device of the class described, the combination with a standard and an arm extending radially therefrom, of a hanger disposed to one side of said arm and having its upper end slidably resting thereon and provided with a vertically disposed aperture arranged on the other side of said arm, a vertically disposed rod slidably mounted in said aperture and extending downwardly below said hanger, means for detachably supporting a grinding unit on the lower end of said rod, and a coiled spring on said rod

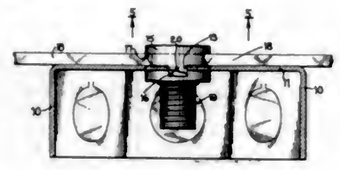
and attached at its upper end to the lower end of said hanger and at its lower end to said rod whereby the latter is resiliently supported by said hanger and movable in a vertical plane.

1,873,508. REFRIGERATION. CHELTON H. TANGER, Evansville, Ind., assignor to Servel Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 9, 1930. Serial No. 474,152. 13 Claims. (Cl. 62—108.5.)



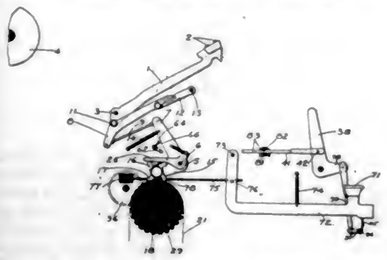
1. A cover for an ice tray, said cover being formed of flexible non-metallic material and provided with depending partition forming projections also of flexible non-metallic material.

1,873,509. BOX AND FIXTURE SUPPORT. GEORGE C. THOMAS, Jr., Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 16, 1930. Serial No. 475,718. 3 Claims. (Cl. 247—21.)



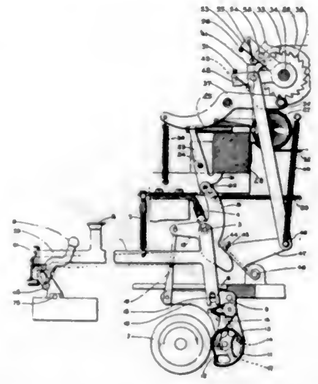
1. An outlet box assembly comprising a box wall having an opening therein, the edge of the opening having recesses through the wall, a supporting member anchored within the opening, a passageway extending through the supporting member, a hanger rod inserted within the passageway to engage one side of the wall and adjustable therein, projections upon the supporting member insertable through the recesses in the edge of the opening, a wedging surface upon the projections to engage the other side of the wall upon relative rotation between the projections and the wall to anchor the supporting member in the opening, the minimum spacing between the wedging surface and the hanger rod being less than the wall thickness, and means carried by the supporting member to attach other devices thereto.

1,873,510. TYPEWRITING MACHINE. RUSSELL G. THOMPSON and CHESTER W. CRUMRINE, Rochester, N. Y., assignors to Electromatic Typewriters, Inc., Rochester, N. Y., a Corporation of New York. Filed Sept. 12, 1931 Serial No. 562,520. 22 Claims. (Cl. 197—20.)



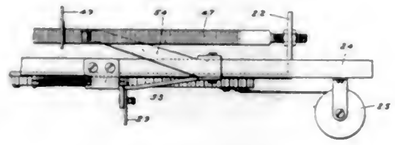
1. In a power driven typewriting machine, the combination of a continuously driven roller, printing instrumentalities, means on said roller for actuating said printing instrumentalities, a master sheet on said roller for selectively controlling the operation of said means, and disengageable means for feeding said master sheet.

1,873,511. PERFORATING MACHINE. RUSSELL G. THOMPSON and CHESTER W. CRUMRINE, Rochester, N. Y., assignors to Electromatic Typewriters, Inc., Rochester, N. Y., a Corporation of New York. Filed May 21, 1930. Serial No. 454,286. 5 Claims. (Cl. 164—112.)



1. In a power operated perforating machine, the combination of a die, a plurality of punches associated with said die for perforating the work sheet thereon, a power driven roller, a hand lever operable to connect and disconnect said power driven roller from its driving means, normally inoperative means associated with said power driven roller and operatively connected with said punches, key levers corresponding in number to the number of punches and operable to render said inoperative means operable by said power driven roller, a pivoted locking bar arranged in the path of all of said key levers to render them inoperable when said power driven roller is disconnected from its driving means, and means operated by said hand lever when the latter is moved to connect the roller with its driving means for swinging said locking bar from the paths of said key levers.

1,873,512. TYPEWRITING MACHINE. RUSSELL G. THOMPSON, Rochester, N. Y., assignor to Electromatic Typewriters, Inc., Rochester, N. Y., a Corporation of New York. Filed Aug. 10, 1931. Serial No. 556,096. 9 Claims. (Cl. 197—82.)



1. In a typewriting machine, the combination of a frame, a carriage movable thereon, escapement devices for moving the carriage step by step for letter spacing, and means controlled by the movement of the carriage for automatically actuating the escapement devices to move the carriage.

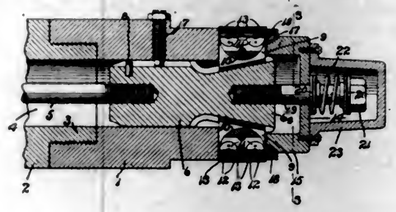
1,873,513. PROCESS FOR CONVERTING NEUTRAL OR NEARLY NEUTRAL TRIGLYCERIDES, MUTUALLY OR WITH OTHER ESTERS. CHRISTIAAN VAN LOON, Dordrecht, Netherlands, assignor to Naamlooze Vennootschap Anton Jurgens Margarinefabrieken, Nijmegen, Netherlands. Filed Jan. 5, 1925. Serial No. 692. 21 Claims. (Cl. 260—106.)

3. A process for the mutual conversion of triglycerides in a neutral or nearly neutral condition comprising heating said triglycerides in the presence of an esterification catalyst selected from a group consisting of cadmium, lead, tin, zinc, compounds of cadmium, lead, tin and zinc, compounds of the alkali metals, and compounds of the alkaline earth metals.

1,873,514. SULPHUR DYE. PAUL VIRCK, Wolfen, near Bitterfeld, and GEORG MATZDORF, Dessau in Anhalt, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 29, 1931, Serial No. 583,794, and in Germany Feb. 6, 1931. 4 Claims. (Cl. 260—24.)

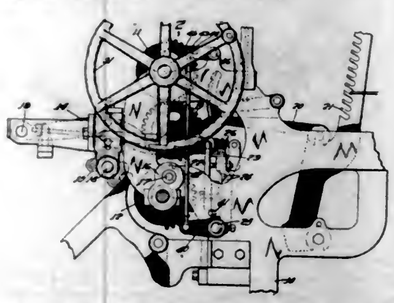
1. A process for manufacturing a new sulphur dye which comprises melting a mixture of meta-toluyl-enediamine and diphthaloylparaphenylenediamine with sulphur.

1,873,515. END LOCATING DEVICE. CHARLES H. WARREN, Sparta, Mich. Filed Nov. 3, 1930. Serial No. 492,892. 8 Claims. (Cl. 82—44.)



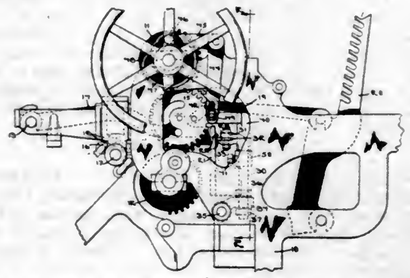
1. An arbor having an axial opening therethrough, a member slidably mounted in said opening, a locating device connected with said member beyond the end of the arbor, including a head and radially movable devices around said head, combined with means on said devices and head for automatically moving said devices radially outward on movement of said member within the arbor in a direction to move said head toward the arbor.

1,873,516. HEAD MOTION FOR LOOMS. WILLIAM M. WATTIE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 22, 1930. Serial No. 503,919. 8 Claims. (Cl. 139—77.)



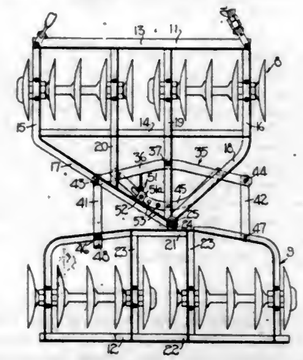
1. In a head motion for looms having upper and lower actuating cylinders and a reverse gearing connected with the lower cylinder together with vibrator levers between the cylinders, a cam rotating with the upper cylinder, a lever having regular movements derived from the cam, a second lever, connections between the levers, and a lock knife operatively connected to the second lever and movable regularly in timed relation to the cylinders to lock the vibrator levers.

1,873,517. LOCK KNIFE FOR HARNESS MECHANISM. WILLIAM M. WATTIE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 23, 1931. Serial No. 510,732. 6 Claims. (Cl. 139—77.)



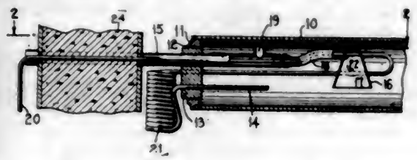
1. A harness operating device having a pair of spaced actuator cylinder gears between which extend movable vibrator levers, a lock knife to engage and restrain movement of the vibrator levers, a pivot about which the lock knife moves, an actuating lever for the lock knife extending toward the pivot of the lock knife, a second pivot about which the lever moves, operative connections between the lever and the lock knife, and means to move said operative connections to assume any one of a plurality of positions between said pivots.

1,873,518. DISK HARROW. CHARLES H. WHITE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Nov. 19, 1931. Serial No. 576,010. 13 Claims. (Cl. 55—82.)



1. A tandem offset disk harrow comprising a front gang and a rear gang pivotally connected for relative angular movement, an angle adjusting mechanism pivotally supported on the front gang, said mechanism including a latch for locking the same to the front gang, and a pair of parallel links connecting the adjusting mechanism and the rear gang in such a manner that any tendency for relative rotation of the gangs in one direction is resisted by one of the links acting in tension, and any tendency for relative rotation of the gangs in the other direction is resisted by the other link acting in tension.

1,873,519. REFRIGERATION. EDWARD T. WILLIAMS, Pelham Manor, N. Y. Filed Oct. 7, 1930. Serial No. 486,929. 7 Claims. (Cl. 62—115.)

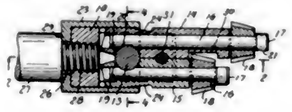


1. The method of circulating lubricant in a refrigerating system which comprises applying the specific heat of condensed refrigerant to boil a body of liquid refrigerant with lubricant therein to form bubbles of refrigerant vapor in said body, constricting the upward path of flow of a vapor bubbles in said body to foam the lubricant and removing the lubricant foam from the presence of said body.

1,873,520. PROCESS OF MAKING A FILTERING, BLEACHING, AND INSULATING MATERIAL. HENRY T. WOODWARD, North Palo Alto, Calif., assignor to California Chemical Corporation, Newark, Calif., a Corporation of Illinois. Filed May 25, 1931. Serial No. 539,995. 8 Claims. (Cl. 23—110.)

1. The process of making a material of the character described, which comprises reacting silica with a borate of an alkaline earth metal in the presence of moisture and separating the material formed from the liquor.

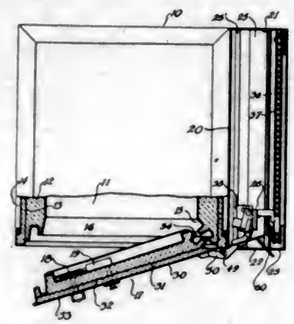
1,873,521. TUBE CLEANER. JAMES HENRY YOUNG, Bronx, N. Y., assignor to Thomas C. Wilson, Incorporated, New York, N. Y., a Corporation of New York. Filed June 30, 1931. Serial No. 547,873. 18 Claims. (Cl. 15—104.14.)



1. A tube cleaner which comprises a body, a fulcrum member mounted in the body, an arm having a recess formed in one of its surfaces, said arm contacting with said member with the latter entering the recess and providing a fulcrum on which the arm may rock, a shaft mounted in a bore through the arm, a cutter on the shaft, the shaft having a portion engaged by the fulcrum member to prevent endwise movement of the shaft, and a retaining collar on the body overlying a portion of the arm and preventing its removal from the fulcrum member while permitting the arm a limited degree of pivotal movement with reference to the fulcrum member.

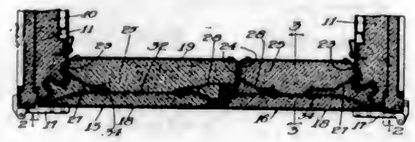
1,873,522. DISAPPEARING DOOR SAFE AND THE LIKE. ALBERT L. ABBOTT and WILLIAM C. MILLER, Canton, Ohio, assignors to The Diebold Safe & Lock Company, Canton, Ohio, a Corporation of Ohio. Filed Oct. 2, 1930. Serial No. 485,959. 12 Claims. (Cl. 109—1.)

1. Apparatus for disappearing doors and the like including a door frame having a doorway formed therein, a carriage guide frame extending from and angular to the door frame adjacent one side of the doorway, the guide frame having a door receiving opening formed therein and spaced from the doorway, a carriage mounted in the guide frame for movement towards and away from the door frame, a door mounted on the carriage and movable between closing position in the doorway and a position in alinement with the door receiving opening of the guide frame, permitting movement of the door into the guide frame, means maintaining the carriage in door sustaining position, and a rigidly carried wall on the door ex-



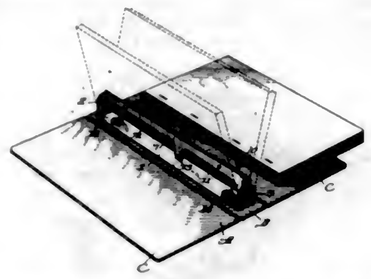
tending across and forming a closure for the door receiving opening when the door is in closed position in the doorway.

1,873,523. HEAT RESISTING PROTECTIVE STRUCTURE. ALBERT L. ABBOTT, Canton, Ohio, assignor to The Diebold Safe & Lock Company, Canton, Ohio, a Corporation of Ohio. Filed June 8, 1931. Serial No. 542,964. 6 Claims. (Cl. 109—2.)



1. In a heat-resisting protective structure, a door comprising inner and outer walls, a slab of thermally insulating material between said walls, a perforate re-enforcing member embedded in said slab, and means projecting into said slab and engaging said re-enforcing member to hold it in place within said slab.

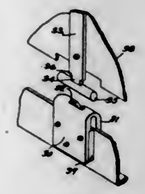
1,873,524. MAGAZINE HOLDER. HENRY T. ADAMS, Chicago, Ill. Filed Nov. 19, 1930. Serial No. 496,791. 2 Claims. (Cl. 281—19.)



1. In a book holder, a back strip having its ends turned at right angles to the main body thereof, one of said ends being provided with a slot and a locking recess communicating with the slot, a blade member equipped with a projection adapted to pass into said slot and then into said locking recess, means for securing the other end of said

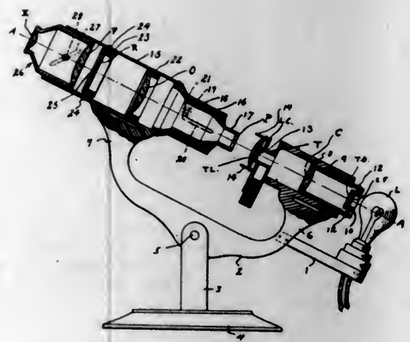
blade to the other end of said back strip, and a locking arm pivotally secured to said blade and adapted to be swung into said slot to maintain said extension within said recess, said arm being also provided with a flanged end overlapping and concealing said recess.

1,873,525. SEAT CONSTRUCTION FOR SEDAN TYPE AUTOMOBILES. EDWARD W. ALLBRIGHT, Los Angeles, Calif. Filed Oct. 30, 1930. Serial No. 492,233. 3 Claims. (Cl. 155—7.)



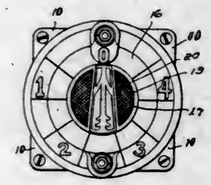
3. A seat construction for vehicles comprising a seat base, a cushion on the base, knuckles mounted at the rear of the base having slots formed therein, said slots having wide portions at the tops of the knuckles and narrow portions extending down the rear sides of the knuckles, a back rest, said back rest having arms provided with narrow portions receivable through the narrow portions of the slots adapted to engage the bottoms of the narrow portions of the slots to limit swinging movement of the back rest to a horizontal position, said arms having wide portions above the narrow portions receivable in the wide upper portions of the slots to lock the back rest in an upright position, and means carried by the lower ends of the arms and disposed within the knuckles for pivotally and slidably connecting the arms and knuckles together.

1,873,526. LENS TESTING DEVICE. CLILE C. ALLEN, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Jan. 30, 1929. Serial No. 336,113. 4 Claims. (Cl. 88—56.)



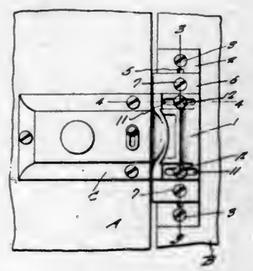
1. In a device for testing prism powers of a lens, a lens seat having a restricted orifice for supporting a lens to be tested, a transparent chart having a test object thereon aligned with and separated from the lens seat, a source of light beyond the chart on the side away from the seat, a reticule chart aligned with and spaced from the lens seat on the side away from the light source, and focusing lens means between the test object and reticule chart for forming an image of the test object upon said reticule chart, the said restricted orifice of the lens seat eliminating effective spherical and cylindrical powers from the test.

1,873,527. ELECTRICAL SWITCH. ARNFINN SCHANCKE ANFINNSEN, Bergen, and JAKOB OFTEDAL, Sandnæs, Norway. Filed Nov. 4, 1930, Serial No. 493,422, and in Norway Nov. 5, 1929. 10 Claims. (Cl. 200—8.)



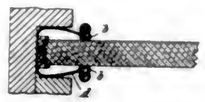
1. An electrical switch comprising first and second sets of contacts each comprising a plurality of contacts and including a neutral and four circuit points, first conductors in respective sets each common to respective contacts at all points in its set, a third conductor common to one point in one set and two points in the other, a third conductor common to the three points of said one set exclusive of the one last named, a fifth conductor common to three points in said other set, including one of the two to which the third conductor is common, and respective brush members for each set of contacts adapted and constructed to connect all contacts of a respective set at each point when located thereat, said brush members being insulated from each other.

1,873,528. ADJUSTABLE LOCK KEEPER. JAMES WILLIAM ANSTINE, York, Pa. Filed Mar. 11, 1931. Serial No. 521,826. Renewed June 20, 1932. 1 Claim. (Cl. 70—15.)



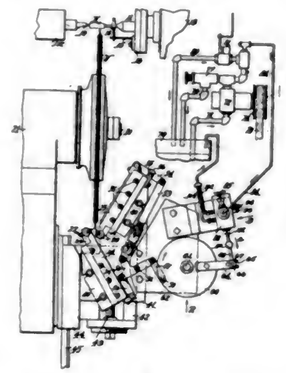
In combination with a keeper member for a lock or latch bolt and a frame member having an elongated recess in one face thereof, an angle-shaped plate recessed in the frame member and having one part covering the recess and its other part engaging an edge of the frame member, said plate having a slot in communication with the recess, a second angle-shaped plate resting on the first plate, screws passing through the second plate and through the slot in the first plate, a bar located in the recess and contacting with the slotted part of the first plate and receiving the ends of the screws, said second plate having a horizontal rib on its outer face of dove-tailed shape, and said keeper member having a horizontal groove of dove-tail shape for receiving the rib, flanges on the ends of the keeper member and horizontal slots therein and screws passing through the slots into the second plate.

1,873,529. LUBRICATED WINDOW GLASS RUNWAY. EDWIN W. M. BAILEY, Amesbury, Mass. Filed Mar. 23, 1931. Serial No. 524,623. 1 Claim. (Cl. 296—445.)



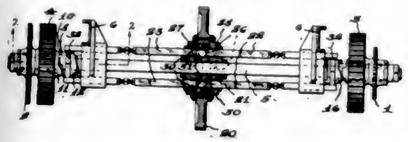
A window glass runway comprising absorbent cushioning material for engaging the glass, said material having its glass engaging portion impregnated and its surface coated with a mixture of pulverized graphite and shellac.

1,873,530. TRUING MECHANISM FOR GRINDING MACHINES. STANLEY W. BATH, Worcester, Mass., assignor to John Bath, Worcester, Mass. Filed Mar. 7, 1929. Serial No. 345,112. 6 Claims. (Cl. 125—11.)



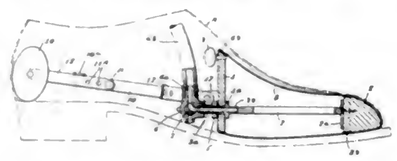
1. In a grinding machine, a wheel truing device comprising a pair of oppositely reciprocable truing tools, a slide for each tool, and means to actuate said slides simultaneously in opposite directions comprising a link pivoted to one slide, a rock arm pivoted to the other slide, and an adjustable link pivoted thereto, whereby said slides may be adjusted relative to each other, a multi-armed lever pivoted on said machine and connected to said links, a crank pivoted on said machine and a link connecting said crank to said lever and power means to actuate said crank.

1,873,531. TIMER MECHANISM. EDWARD C. BIXBY, Salina, N. Y. Filed July 11, 1931. Serial No. 550,200. 5 Claims. (Cl. 74—53.)



1. In a timer mechanism, the combination of driven elements to be actuated with respect to each other, a constantly running driving element for each of the driven elements, a clutch for connecting and disconnecting each driving and driven element, a prime mover for actuating the driving elements and means for timing and operating the clutches including a constantly driven timing member connected to the prime mover, cams operated thereby and connections between the cams and the clutch means, said clutches being connected respectively to the driven elements and shiftable into and out of engagement with the driving elements and means fixed relatively to the clutches for engaging the same when they are shifted out of clutching position to positively stop the driven elements.

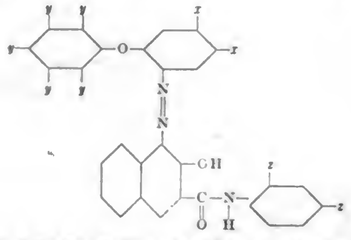
1,873,532. DEVICE FOR MEASURING CUBIC CAPACITY OF SHOES. ELMER J. BLISS, Boston, Mass., assignor to Regal Shoe Company, Whitman, Mass., a Corporation of Massachusetts. Filed Aug. 31, 1929. Serial No. 389,676. 6 Claims. (Cl. 33—3.)



1. A device for measuring the cubic capacity of the forepart of a shoe embracing in its construction a frame comprising front and rear members adapted to be inserted into the forepart of a shoe, and a wall of elastic material secured around said frame to form a hollow expansible chamber capable of expanding into conformity with the surrounding portion of the shoe, and means for introducing a liquid therein to expand the elastic wall against the confining portion of the shoe.

1,873,533. AZO-DYESTUFFS AND PROCESS OF MAKING SAME. GERALD BONHÔTE, Basel, Switzerland, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 24, 1931, Serial No. 570,981, and in Switzerland Nov. 15, 1930. 7 Claims. (Cl. 260—95.)

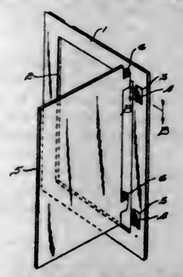
1. As new products the azo-dyestuffs of the general formula



in which of the five *y*'s three stand for hydrogen atoms, one for a substituent from a group of substituents consisting of alkyl, alkoxy and halogen, and one for a hydrogen atom or a substituent of the just defined group, in which further *x* in one case stands for a halogen atom, and in the other case for a halogen atom or a hydrogen atom, and finally in which *z* in one case stands for a substituent from a group of substituents consisting of alkyl and alkoxy, and in the other case for a substituent of the just defined group or for a hydrogen atom, which products are red to dark red powders, dissolve in liquid chlorinated aromatic hydrocarbons to red solutions, and yield vivid scarlet red to blue red tints when produced on the fibre, which combine purity with an excellent fastness to chlorine, keir-boiling and light.

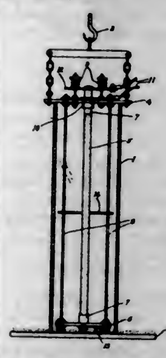
1,873,534. HINGE CONSTRUCTION. CHARLES A. BRETHEN, Wyandotte, Mich., assignor to All Metal Products Company, Wyandotte, Mich., a Corporation of Delaware. Filed Feb. 15, 1932. Serial No. 592,872. 4 Claims. (Cl. 16—128.)

3. A hinge construction comprising a sheet metal member provided with a pair of spaced apertures each having a tongue extending upwardly at a slight angle therefrom, a door member having a pair of spaced tubular hinge portions adapted to be inserted over the tongues, the tongues



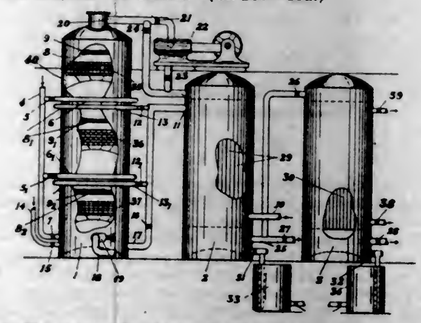
being bent back into the plane of the sheet metal member after the tubular hinge portions have been positioned thereover.

1,873,535. METHOD OF HEATING MOLDS FOR MOLDING THERMO-PLASTIC MATERIALS. BARTLEY E. BROADWELL, Lewiston, N. Y., assignor to The Republic Carbon Company, Niagara Falls, N. Y., a Corporation of Delaware. Filed Oct. 8, 1930. Serial No. 487,224. 6 Claims. (Cl. 18—47.5.)



5. The step in the process of molding articles comprising a bituminous binder which step consists in preheating the interior only of a mold to a temperature just below that at which the binder begins to decompose.

1,873,536. PROCESS FOR PRODUCING REACTION PRODUCTS FROM HYDROCARBONS AND WATER. RALPH L. BROWN, Pittsburgh, Pa., and WILLIAM W. ODELL, Minneapolis, Minn. Filed June 11, 1927. Serial No. 198,202. 15 Claims. (Cl. 260—151.)



1. The process for the production of an hydration product of an olefin which comprises heating an olefin and water to a temperature above 100° C. but below 600° C. and, while under pressure greater than atmospheric, causing them to contact the surface of a solid hydration catalyst and to combine chemically and directly at a high velocity by virtue of said catalyst; said water and said olefin being mixed in proportions whereby both the alcohol and the ether corresponding to said olefin are formed.

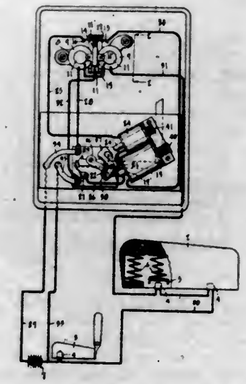
1,873,537. PROCESS OF SYNTHESIZING ETHERS. RALPH L. BROWN and WILLIAM W. ODELL, Pittsburgh, Pa. Filed Oct. 8, 1927. Serial No. 225,019. 19 Claims. (Cl. 260—151.)

1. The process of making organic compounds having ether linkages from organic hydroxy-compounds adapted to be dehydrated catalytically by a solid catalyst, comprising causing said hdroxy-compounds, heated to a temperature above their critical temperature to contact a solid catalyst, under pressure appreciably greater than atmospheric and to be dehydrated forming said compounds having ether linkages by virtue of said catalyst; said organic hydroxy-compounds being substantially alcohols higher than ethyl alcohol.

1,873,538. PROCESS FOR PRODUCING OXYGENATED ORGANIC COMPOUNDS. RALPH L. BROWN and WILLIAM W. ODELL, Pittsburgh, Pa. Filed Sept. 21, 1927. Serial No. 221,129. 16 Claims. (Cl. 260—156.)

1. A cyclic process for treating saturated hydrocarbons for conversion into valuable synthetic products, including alcohols and ethers with the recovery and accumulation of residuals of the reaction, which comprises first cracking said hydrocarbons in a cracking chamber and producing therefrom unsaturated hydrocarbons; second subjecting said unsaturated hydrocarbons under pressure greater than atmospheric to the action of H_2O in the presence of a solid catalyst adapted to catalyze hydration reactions, at a temperature above 100 degrees C., thereby forming corresponding oxygenated compounds, subsequently condensing the oxygenated products formed and conducting the gaseous non-oxygenated residuals of reaction comprising largely saturated hydrocarbons back into a cracking chamber and into cracking reactions.

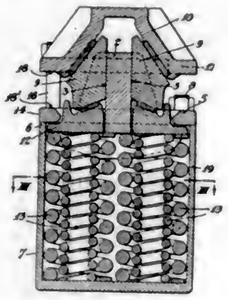
1,873,539. METER CONTROL. JAMES L. BROWNELL, Kalamazoo, Mich., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Filed Jan. 2, 1931. Serial No. 506,155. 6 Claims. (Cl. 235—30.)



1. In a motor vehicle, the combination of a taxi-meter, means for storing energy furnished by the operator to move the operating parts of the meter into operative position, mechanism including an electro-magnet for releasing said stored energy, whereby to move the fare registering parts

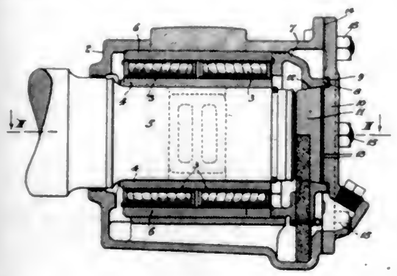
of said meter into operative position, an electro-magnet for releasing said parts from fare registering position, circuits for energizing said electromagnets, a two-way switch alternately closing said circuits, an electromagnet for actuating said two-way switch, a circuit for energizing said switch controlling magnet, and a switch automatically operated by an occupant of the vehicle for controlling said circuit.

1,873,540. SHOCK ABSORBING MECHANISM. ALBERT O. BUCKIUS, Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 3, 1927. Serial No. 210,231. 3 Claims. (Cl. 213—36.)



1. In a frictional shock absorbing mechanism, a longitudinally extending included friction member having a plurality of diverging longitudinally extending friction faces; friction shoes engaging said faces; a wedge member engaging each of said shoes; a pressure transmitting member, the friction member being apertured for the pressure transmitting member; and a spring element entirely to the rear of the friction member arranged to resist the movement of the shoes, said pressure transmitting member being interposed between the spring and shoes.

1,873,541. ROLLER BEARING JOURNAL BOX. ALBERT O. BUCKIUS, Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 12, 1927. Serial No. 212,447. 9 Claims. (Cl. 308—180.)



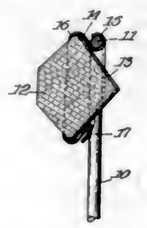
3. In a journal box having roller bearings arranged between the journal and the housing; a spacing member adjacent the ends of the roller bearings to hold them in operative position; a projection on the spacer; a closure for the box having an inner face adapted to be brought to a flat bearing over substantially its whole area by a grinding tool, and having also a recess therein for the said projection adapted to hold the spacer against rotation; and a thrust block seating in an opening in the spacer and held in operative relation to the journal by the closure member.

1,873,542. PROCESS OF PRODUCING THERMOPLASTIC PRODUCTS. HUGH MILLS BUNBURY, Manchester, England, assignor to Imperial Chemical Industries Limited, Westminster, England. Filed Aug. 2, 1930, Serial No. 472,745, and in Great Britain Aug. 8, 1929. 25 Claims. (Cl. 106—23.)

1. A process of making thermoplastic materials which comprises polymerizing unsaturated fatty oils by heating said oils, simultaneously passing a current of a non-oxidizing gas through the heated oils and subsequently heating the gas-treated oil in the presence of a salt of a fatty acid.

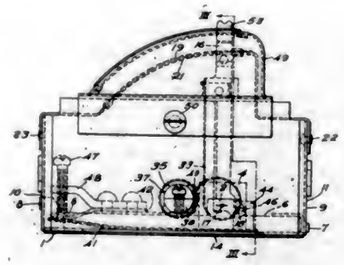
24. As new articles of manufacture, thermoplastic materials comprising a polymerized fatty oil and a soap, said materials being obtained by the process of claim 6.

1,873,543. DECORATIVE HAIRPIN. GUSTAV A. CARLSON, Chicago, Ill., assignor to The Boye Needle Company, a Corporation of Illinois. Filed Dec. 23, 1931. Serial No. 582,894. 3 Claims. (Cl. 132—50.)



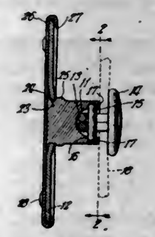
1. An ornamental hair pin comprising a bend and legs extending therefrom, a brilliant, a setting for said brilliant, and means for securing said setting within said bend, said setting and brilliant concealing substantially one side of said hair pin bend.

1,873,544. THERMOSTATIC SWITCH. EARL K. CLARK, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Oct. 20, 1927, Serial No. 227,441. Divided and this application filed May 16, 1931. Serial No. 537,793. 5 Claims. (Cl. 200—138.)



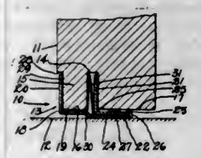
1. In combination, a support, an indicator pivotally mounted thereon, a contact member carried by said indicator, an adjustable contact-carrying member secured to said support for cooperating with said first-named contact member, a cantilever spring secured to said support and a substantially straight bi-metallic strip having one end secured near the free end of said spring and the other end pivotally connected to said indicator, said strip being so disposed that the broad face thereof is adjacent to said support.

1,873,545. BUTTON. JOHN M. CLARK, Detroit, Mich., assignor to Universal Button Fastening & Button Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 3, 1931. Serial No. 554,732. 1 Claim. (Cl. 24—95.)



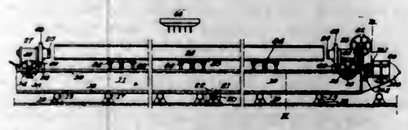
A button of the character described comprising in combination a solid, soft steel, rod-like button shank of substantially uniform diameter throughout, a flat sheet metal head having a central perforation into which said shank projects, said shank being upset on opposite sides of said head to secure the latter to said shank, the opposite end of said shank being formed with a concave recess for upsetting a pronged attaching fastener and having a member for engaging the upset fastener to prevent its withdrawal from said recess, and a decorative metal shell covering the top of said head and having margins crimped underneath said head.

1,873,546. WEATHER STRIP. ERIC R. CLASSON, Flushing, N. Y. Filed Oct. 28, 1930. Serial No. 491,662. 5 Claims. (Cl. 20—69.)



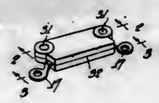
1. A device including a channel means having a channel proper for slidingly guiding and weather proofing a sash, and a laterally extending flange lying in a plane parallel to the plane of the channel web and offset away from the channel flanges, said laterally extending flange providing a means for securing the channel means to a casing for the sash, said flange consisting of an integral flattened fold connecting with the web and a flange of the channel, and a resilient element within the channel and secured in the fold of said flange.

1,873,547. APPARATUS FOR POSITIONING STRUCTURAL MEMBERS FOR DRILLING AND LIKE OPERATIONS. HOWARD H. MCCLINTIC, Pittsburgh, Pa., assignor to McClintic-Marshall Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 1, 1928. Serial No. 282,143. 19 Claims. (Cl. 77—63.)



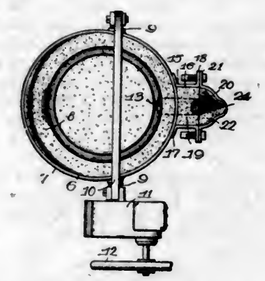
1. In apparatus of the class described for holding and positioning elongated structural members for perforating operations, a longitudinally movable bed, power operated jacks carried by said bed to engage the work, and means on said bed engageable with the work and operable to turn the same about an axis passing longitudinally thereof, said jacks being operable to position the work in substantial alignment with said means.

1,873,548. CONDENSER. SAMUEL I. COLE, Brooklyn, N. Y., assignor to Aerovox Wireless Corporation, a Corporation of New York. Filed Jan. 29, 1930. Serial No. 424,219. 4 Claims. (Cl. 175—41.)



1. As a new article of manufacture, a condenser of fixed capacity, including a preformed condenser stack having terminal clips pre-assembled therewith, and only frictionally engaging the stack and protruding from the opposite ends thereof, a body of molded insulating material of but slightly greater area than the stack embedding said stack and locking stack and clips together and through the ends of which the terminal clips protrude, said molded body having apertures in its ends through the thickness thereof just beyond the ends of the embedded stack and just laterally of said clips.

1,873,549. FOUNDRY LADLE. OSCAR L. COFFEY, Harvey, Ill., assignor to Whiting Corporation, Harvey, Ill., a Corporation of Illinois. Filed Aug. 18, 1930. Serial No. 475,936. 2 Claims. (Cl. 22—83.)

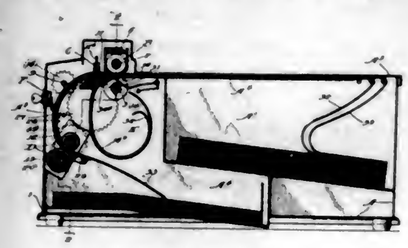


1. A foundry ladle of the "tea pot" type, comprising a shell having an open top and provided with a hole in the lower portion thereof, a refractory lining in the shell having an outlet duct in registry with the hole in the lower portion of the shell, a spout extending upwardly from the aforesaid hole and consisting of a pair of complementary sections, one of the sections being U-shaped and having an inner, outwardly extending U-shaped flange fitting against and secured to the shell and an outer, outwardly extending, U-shaped flange in laterally spaced relation with respect to the inner flange, the other section having a marginal flange shaped conformably and secured removably to the outer U-shaped flange of the said one section, and a lining for the spout held removably between the two sections and embodying an upwardly extending discharge duct, the lower end of which is positioned to register with the outlet duct in the shell lining.

1,873,550. AUTOGRAPHIC REGISTER. ALLEN B. COOKE, Danville, Ill., assignor to United Autographic Register Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1931. Serial No. 516,198. 6 Claims. (Cl. 282—18.)

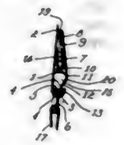
1. In a machine of the character set forth: a casing equipped with a platen and having a filing compartment;

main feed-mechanism operative to feed strips across and project them beyond the platen; strip severing means;



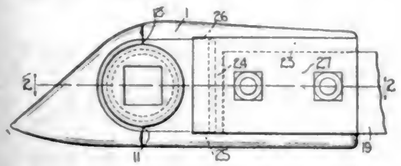
and auxiliary feed-mechanism intermittently effective to grip and feed severed slips rearwardly into said filing compartment.

1,873,551. CLASP FOR GARMENT SUPPORTS. SAMUEL N. COULTER, Los Angeles, Calif. Filed Aug. 20, 1930. Serial No. 476,503. 3 Claims. (Cl. 24—84.)



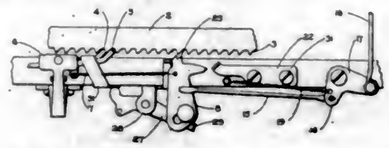
3. A jaw plate having a hook at one end and a jaw at the other end, a jaw plate hinged to the first named plate and having a tail projecting into the hook, and a link in the hook pressing against the tail to hold the jaws of the plates together, said tail having a shoulder operating as a yielding detent to retain the link in the hook, and a spring between the jaw plates for holding them apart when in their released relation.

1,873,552. ROD WEEDER. FRANK T. COURT, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed July 24, 1931. Serial No. 552,930. 12 Claims. (Cl. 97—42.)



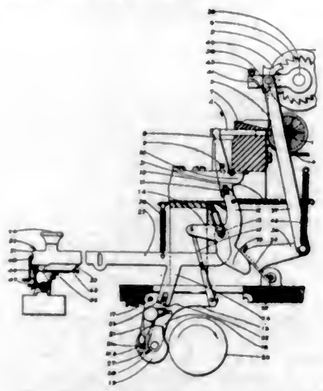
1. A rod weeder shoe comprising a main supporting member provided with a transverse opening the rear wall of which is recessed to leave a relatively narrow forwardly projecting shoulder and the front wall of which is shaped to provide an abutting shoulder and a semi-cylindrical bearing surface, a removable bearing member adapted to fit into said transverse opening with its front end bearing against said abutting shonlder, said bearing member having a projection at its rear end adapted to extend into the recess in the rear wall of said transverse opening, the width of said projection being less than the width of said bearing member leaving a shoulder on one side to bear against the forwardly projecting shoulder of the main supporting member with the adjacent side of the projection bearing against the side of said forwardly projecting shoulder, the length of said projection being substantially less than the depth of said recess whereby said bearing member may be moved rearwardly into said recess after it is moved transversely of the opening sufficiently to clear the forwardly projecting shoulder to facilitate the removal thereof, said bearing member having a semi-cylindrical recess in its front end which with the semi-cylindrical bearing surface in the front wall of the transverse opening forms a cylindrical bearing opening, and detachable means for holding said bearing member in position.

1,873,553. TYPEWRITING MACHINE. CHESTER W. CRUMRINE, Rochester, N. Y., assignor to Electromatic Typewriters, Inc., Rochester, N. Y., a Corporation of New York. Filed Mar. 29, 1930. Serial No. 439,972. 14 Claims. (Cl. 197—91.)



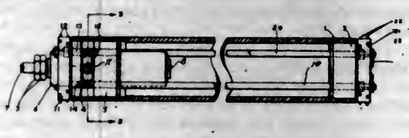
1. In a typewriting machine, the combination of a frame, a carriage movable on said frame, a rack on said carriage, a dog having a cam slot whereby it is pivoted on the frame and movable relatively thereto, resilient means for maintaining the dog in normal position out of engagement with the rack and the pivot in one end of its slot, and means for moving said dog relatively to its pivot to cam it into engagement with the rack and until the pivot engages the other end of its slot, and then to swing it on its pivot against the action of said resilient means to move the rack.

1,873,554. PERFORATING MACHINE. CHESTER W. CRUMRINE, Rochester, N. Y., assignor to Electromatic Typewriters, Inc., Rochester, N. Y., a Corporation of New York. Filed Sept. 11, 1930. Serial No. 481,214. 7 Claims. (Cl. 164—112.)



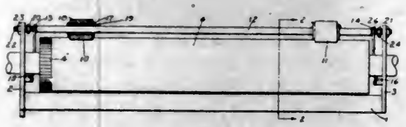
1. In a perforating machine, the combination of a die, means for feeding a work sheet thereover, punches cooperating with the die to perforate the work sheet, key levers operatively connected with said punches, means operatively connected with said key levers for actuating the sheet feeding means to space the perforations in the work sheet, means for retaining any of said key levers depressed when operated to actuate a punch, locking devices arranged in the path of one of said key levers and movable into the path of adjacent key levers when said key lever is depressed for locking said adjacent key levers in normal position while other key levers are free to be operated, and means on another of said key levers for releasing said retaining means.

1,873,555. PAPER FEED ROLLER. CHESTER W. CRUMRINE, Rochester, N. Y., assignor to Electromatic Typewriters, Inc., Rochester, N. Y., a Corporation of New York. Filed Sept. 11, 1930. Serial No. 481,215. 7 Claims. (Cl. 74—31.)



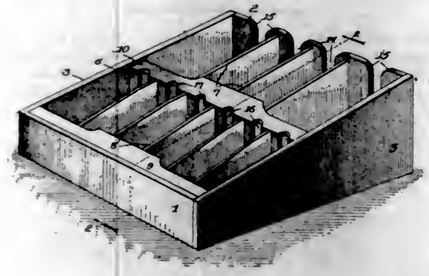
1. A sheet feeding roller for typewriting machines or the like comprising a cylindrical body portion, a ring arranged at each end of said body portion and movable toward and from the ends thereof, means operatively connecting said rings for imparting simultaneous movement thereto, and means on said rings for positively engaging a work sheet.

1,873,556. TYPEWRITING MACHINE. CHESTER W. CRUMRINE, Rochester, N. Y., assignor to Electromatic Typewriters, Inc., Rochester, N. Y., a Corporation of New York. Filed Mar. 18, 1931. Serial No. 523,517. 6 Claims. (Cl. 197—138.)



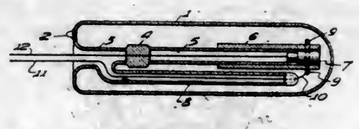
1. In a typewriting machine, the combination of a carriage, a platen revolubly mounted therein, a bail pivoted in the carriage to swing toward and from the platen and comprising a shaft, a feed roller on said shaft, means for swinging the bail to engage the feed roller with the platen, and means on the carriage arranged axially of said shaft for fixing the shaft against axial thrust when the feed roller engages the platen.

1,873,557. COMMODITY CABINET. EDWARD D. DAVIS, Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 8, 1930. Serial No. 493,122. 4 Claims. (Cl. 206—72.)



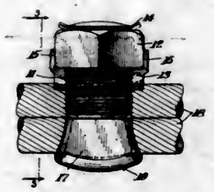
1. In a card-display cabinet, a main compartment having front, rear and side walls, a transverse partition and a plurality of longitudinal partitions dividing said main compartment into a plurality of card compartments, said transverse partition and said rear wall being provided with a plurality of finger openings, posts in said compartments adapted to engage recesses in the cards, and a handle strip adjacent said transverse partition and engaging a plurality of said posts.

1,873,558. GASEOUS DISCHARGE DEVICE. LEE DE FOREST, Hollywood, Calif., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of Delaware. Original application filed July 13, 1929, Serial No. 377,937. Divided and this application filed Dec. 1, 1930. Serial No. 499,365. 3 Claims. (Cl. 176—122.)



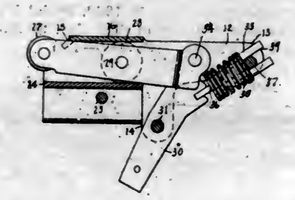
1. A glow tube for photographically recording sound, including a transparent glass envelope and a molybdenum cathode mounted in the envelope and having a flat surface disposed opposite and close to the light emitting end of the envelope.

1,873,559. ELECTRICAL CONNECTER. ABRAHAM BERNARD DIBNER, Peekskill, N. Y. Filed July 16, 1931. Serial No. 551,077. 2 Claims. (Cl. 24—125.)



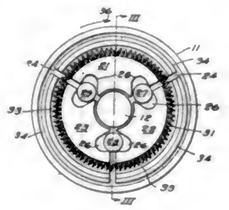
1. A device of the character described comprising a U-shaped member having legs segmental in cross section, a nut threaded on said legs, a follower arranged between said legs and adapted to cooperate with the bridge of the U-shaped member to clamp conductors, said follower comprising a solid shank portion arranged in the bore of the nut and a solid head portion integral with said shank portion and overlying the end of the nut facing the bridge of the body member, integral tabs extending from said shank portion and engaging the remaining end of the nut to connect the nut and follower for free rotation, tabs extending from the ends of said head portion, said tabs being foldable into contact with the sides of the nut to lock the same against rotation, and a groove in said head portion facing said bridge, said groove and bridge being correspondingly curved lengthwise to offset wires clamped between them.

1,873,560. LATCH. ANDREW EKMAN, Grand Rapids, Mich. Filed Aug. 22, 1931. Serial No. 558,655. 5 Claims. (Cl. 292—332.)



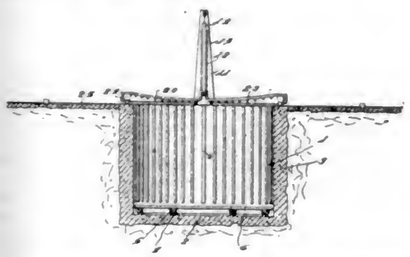
4. In a latch, the combination, a sliding bolt supported intermediate its ends for limited tilting movement, a pivotally mounted actuating lever connected to the inner end of said bolt, a bolt actuating spring, and a locking toggle element operatively associated with said spring to be actuated thereby and with said lever for holding the bolt in retracted position.

1,873,561. CLUTCH QUIETING MEANS. HARRY D. ELSE and CLARENCE R. LIBBY, Springfield, Mass., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 2, 1931. Serial No. 527,190. 11 Claims. (Cl. 192—105.)



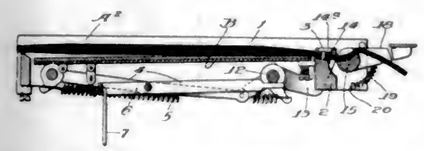
1. In a clutch including a driven member, a centrifugally-actuable weight disposed to engage it at a predetermined speed, a driving means for the weight including a pin operatively engaged by the weight at all times, resilient means engaging the weight to maintain it continuously in operative engagement with the pin under pulsating-torque conditions thereof.

1,873,562. HANGAR FOR DIRIGIBLES. GOTTLIEB F. ESSIG, Philadelphia, Pa. Filed May 19, 1931. Serial No. 538,496. 4 Claims. (Cl. 244—2.)



1. A hangar for dirigibles, comprising a subterranean chamber having a reinforced wall provided with guides, a mooring mast having a vertically movable carrier to which a dirigible is adapted to be attached, and having its base in the form of a track movable in proximity to the top wall of said opening, said carrier being adapted to engage said guides whereby the dirigible is accurately guided into said chamber.

1,873,563. DUPLICATING MACHINE. JOHN E. EUTH, Chicago, Ill., assignor to United Autographic Register Co., Chicago, Ill., a Corporation of Illinois. Original application filed Sept. 9, 1929, Serial No. 391,207. Divided and this application filed Feb. 2, 1931. Serial No. 513,041. 2 Claims. (Cl. 164—41.)

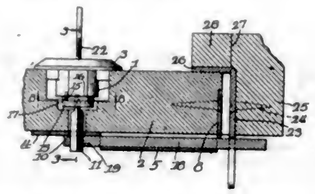


1. In combination: a frame having arms between which a platen is mounted; clamping means mounted on said frame in front of the platen and adapted to grip webs led over said platen; and a rotatable shear-member adapted to co-act with said clamping means to sever webs held by the clamping means.

1,873,564. PRODUCTION OF 2-AMINOANTHRAHYDROQUINONE 9:10-DISULPHURIC ESTER AND ITS SALTS. DAVID ALEXANDER WHYTE FAIRWEATHER and ROBERT FRASER THOMSON, Stirling, Scotland, assignors to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Dec. 24, 1931, Serial No. 583,148, and in Great Britain Dec. 31, 1930. 5 Claims. (Cl. 260—98.)

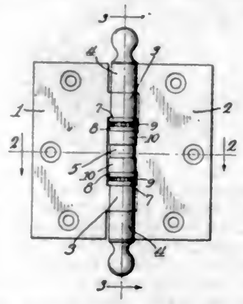
1. Process for the manufacture of 2-acylaminoanthrahydroquinone 9:10-disulphuric esters and their salts comprising the treatment of a 2-acylaminoanthraquinone with pyridine-sulphur trioxide in presence of a metal of the class consisting of copper and bronze and a tertiary organic base, said organic base being a heterocyclic compound at about 80° C. for a period of about 3 hours.

1,873,565. LATCH LOCK. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois. Filed Oct. 5, 1928. Serial No. 310,516. 3 Claims. (Cl. 70—46.)



1. A door latch adapted to be both unlocked and operated by a removable key, comprising lock mechanism inserted through the door from the outside, having a spindle projecting from the inner side of the door, adapted to be both unlocked and rotatably operated by the insertion of a key therein, a latch bar having direct non-rotary loose engagement with the inner end portion of said spindle, so that said spindle forms the supporting pivot or axial support for the latch bar, said latch bar being adapted for engagement with a strike piece on the doorway, and means for removably fastening said mechanism in place, whereby withdrawal of said mechanism from the outer side of the door will disengage the latch bar from its pivotal support, comprising a plate secured to the inner side of the door and provided with a guard covering an intermediate portion of said latch bar, thereby to normally maintain said loose engagement of the latch bar with the spindle, whereby said latch bar is removable by endwise displacement thereof after disengagement from said spindle.

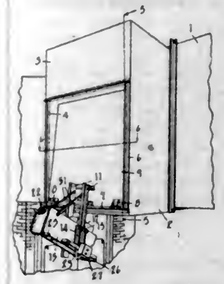
1,873,566. BALL BEARING HINGE. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois. Filed Nov. 17, 1930. Serial No. 496,077. 4 Claims. (Cl. 16—136.)



1. In a ball bearing hinge, the combination of leaves having knuckles, a ball bearing raceway unit between the

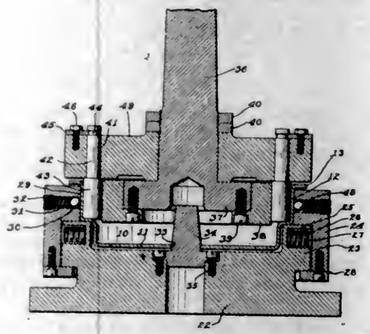
end of a knuckle on one leaf and the end of a knuckle on the other leaf, and a sheet-metal member for holding said unit in place on one knuckle, said member comprising an outer sleeve portion that slides over the said one knuckle, and said member having a cylindrical portion extending through the ball races and holding them together, together with a pintle extending through said knuckles and said inner cylindrical portion of said sheet-metal member.

1,873,567. DRAFT STABILIZER. EDWARD A. FIELD and EDWARD A. FIELD, Jr., Chicago, Ill. Filed Nov. 3, 1930. Serial No. 492,988. 7 Claims. (Cl. 236—45.)



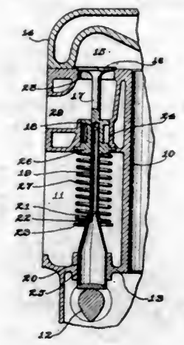
1. In an apparatus of the class described, the combination of a pivotally mounted stabilizer gate, a pair of counterweight arms mounted on the gate and depending substantially below the pivot thereof, a counterweight support mounted on said arms for vertical adjustment and provided with a way extending between the arms disposed in an upwardly inclined relation relative thereto, a counterweight adjustably supported on said way, and a screw mounted on said support in parallel relation to said way and operatively connected to said weight.

1,873,568. MACHINE FOR MANUFACTURING BRAKE DRUMS. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Nov. 20, 1929. Serial No. 408,638. 8 Claims. (Cl. 29—90.)



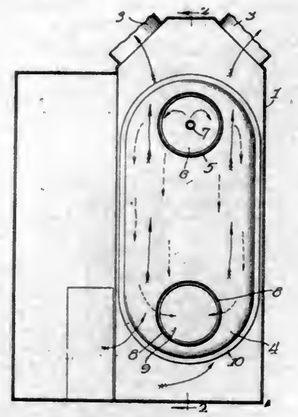
7. In a device for smoothing and truing the cylindrical walls of a sheet metal brake drum, a rigid die having a cylindrical drum receiving opening therein materially larger than said brake drum, a non-circular shaped pilot associated with said die coacting with a correspondingly shaped opening in said drum preventing relative rotation between the die and drum, a cylindrical driver adapted to be rotated within the die and drum, a roller retaining member rotatably mounted within said die and on said driver, and a plurality of rollers rotatably mounted in said retainer to roll between the driver and brake drum, said rollers progressively squeezing the individual portions of the drum against the die so as to circumferentially expand the drum into intimate contact with said die.

1,873,569. ENGINE VALVE. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed July 10, 1930. Serial No. 467,047. 10 Claims. (Cl. 251—144.)



5. In a device of the character described, an engine block, a valve comprising a head and stem and foot, a valve spring chamber formed in said block, a split bearing secured in the upper wall of said chamber in which said stem is reciprocally mounted, an integral bearing formed in the lower wall of said chamber in which said foot is reciprocally mounted, and a valve spring disposed in said chamber and co-acting with said valve at the junction of said foot and stem.

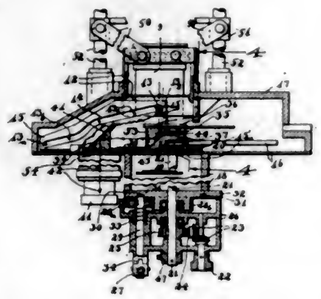
1,873,570. HEATING FURNACE. PETER FRANTZ, Sterling, Ill. Filed Oct. 8, 1930. Serial No. 487,131. 4 Claims. (Cl. 126—116.)



1. In a heater for heating buildings by means of heated air, the combination of an outer housing having a lower inlet for pure air and an upper outlet for heated air, and a sectional radiator-like heating structure within said housing, said radiator-like structure having vertically disposed flat metal sections spaced apart and formed to provide an upper horizontal combustion chamber and a lower horizon-

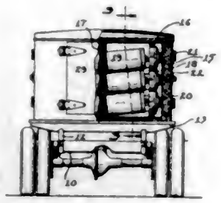
tal outlet chamber, the two chambers being interconnected by the interior of each radiator-like section, and a burner in the upper combustion chamber, said sections forming parallel down draft flues disposed in vertical planes at right angles to the parallel axes of said chambers, with the spaces between said sections forming up-draft flues for the air, whereby the hot gases and products of combustion are caused to pass downwardly from the upper chamber to the lower chamber, while the air is caused to pass upwardly between the radiator-like sections from said pure air inlet to said heated air outlet, each down draft flue opening into and communicating with the top and bottom and sides of each of said chambers.

1,873,571. FOCUSING DEVICE FOR MOTION PICTURE CAMERAS. ARMIN FRIED, Los Angeles, Calif. Filed Apr. 20, 1931. Serial No. 531,372. 7 Claims. (Cl. 95—44.)



1. In a camera, a photographing lens, a finder including said lens as a part of its structure, the camera having the customary movable medium with a sensitized surface, and a carriage including reflecting means for the finder movable transversely to the axis of the finder and of the lens and having means for moving the lens outwardly in linear direction coaxial to the axis of the lens when used for focusing with the finder.

1,873,572. REFRIGERATOR VEHICLE. JOSEPH GALAMB, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Feb. 17, 1931. Serial No. 516,392. 4 Claims. (Cl. 296—24.)



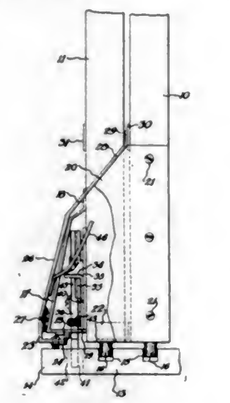
1. In a refrigerating vehicle having an article receiving and heat insulated compartment therein, a relatively large insulated door in each side of said compartment, an insulated partition extending across the compartment just inside of each door, horizontal racks extending between said partitions, and a plurality of relatively small insulated doors in each of said partitions giving access to said racks, access to the small doors being had only through the large doors.

1,873,573. DUST CATCHER AIR FILTER. GEORGE B. GALVIN, Louisville, Ky., assignor to Galvin Bros. Steel Wool and Manufacturing Company, Louisville, Ky., a Corporation of Kentucky. Filed Oct. 31, 1928. Serial No. 316,257. 8 Claims. (Cl. 183—49.)



1. In a dust catcher for the conduit outlets of hot air heating systems, a frame adapted to fit the conduit, a batt of metallic wool wrapped around and supported by said frame and extending across the space within the frame to cover the same, and a cross bar extending between opposite sides of the frame transverse the batt and engaging over the batt adjacent the outer end of said batt to hold the end from unwrapping.

1,873,574. ELEVATOR DOOR. HUGH R. GRABLE, Canton, Ohio. Filed Feb. 17, 1930. Serial No. 428,860. 5 Claims. (Cl. 20—19.)

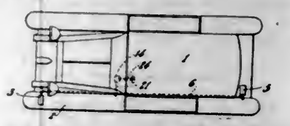


1. In an elevator shaft having a door opening, a sill at the bottom of the door opening, a door in said opening comprising relatively slidable door sections, inclined baffle plates at the lower portions of the door sections and extending across the sill when the door is closed, one of said baffle plates being hingedly connected to the corresponding door section and arranged to slide over the other door section when the door is opened, and means for swinging said hinged baffle plate away from the door when the door is opened.

1,873,575. METHOD OF PREPARING SYNTHETIC RESINS. WILLARD F. GREENWALD, New York, N. Y., assignor to Weisberg & Greenwald, Inc., New York, N. Y., a Corporation of New York. Filed June 6, 1930. Serial No. 459,617. 1 Claim. (Cl. 260—4.)

The method of preparing synthetic resins which comprises heating cresol, formaldehyde and triethanolamine, in which the cresol, formaldehyde and triethanolamine are in approximately the following proportions by weight, cresol 100 parts, formaldehyde 100 parts and triethanolamine 7½ parts.

1,873,576. DIRECTION INDICATOR. FRANK M. GOLON, Springfield, Mass. Filed Dec. 16, 1931. Serial No. 581,287. 6 Claims. (Cl. 116—47.)



1. A direction indicator comprising, in combination with a motor vehicle, a longitudinally extending shaft, ball bearing means for rotatably supporting the shaft, direction indicators located at the forward and rearward end of the vehicle, operative connections between the shaft and each of the direction indicators, means for operating the shaft and for retaining the shaft and indicators in different adjustable positions comprising a second shaft located adjacent the steering wheel of the vehicle and operably connected to the longitudinally extending shaft, a notcher member on the second shaft, and a spring device engaging the notches, as described.

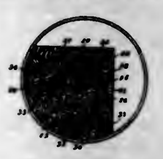
1,873,577. ARTIFICIAL BAIT. CHESTER L. GROVE, Frederick, Md. Filed Mar. 10, 1932. Serial No. 598,042. 2 Claims. (Cl. 43—42.)



1. In an artificial bait, a supporting wire, a circular bearing revolubly mounted on the wire, a loop swiveled on the wire above the bearing and a spoon comprising an oblong sheet metal plate, concavo-convex in transverse section, having its upper end loosely connected to said loop and its concave side adapted, when the bait is pulled through the water to rest against said bearing, said spoon having wings projecting laterally from its central portion in the general direction of the transverse curvature of the plate.

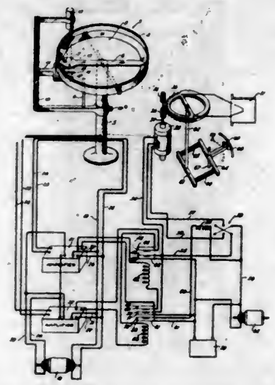
1,873,578. CORK PADDING FOR IRONING MACHINES. WILLIAM F. GRUPP, Lyndhurst, N. J., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Oct. 13, 1930. Serial No. 488,501. 5 Claims. (Cl. 154—43.)

1. A resilient facing for ironing apparatus and the like comprising a mass formed of cork material embodying substantially flat particles of varying dimensions and disposed



in overlapping relation to one another within the mass under compression and bonded to one another at spaced locations by a medium maintaining its bonding action under ironing conditions, the planes of some of said flat particles being angularly disposed relative to the planes of other of said particles within the mass.

1,873,579. AIRCRAFT CONTROL APPARATUS. HAROLD HAAS, Arlington, N. J., assignor to Bendix Research Corporation, East Orange, N. J., a Corporation of Indiana. Filed May 4, 1931. Serial No. 535,052. 10 Claims. (Cl. 244—29.)



1. Apparatus for maintaining a mobile object on a predetermined path or course, comprising in combination a direction responsive device carried by said mobile object and arranged for angular motion relative thereto upon a deviation of said object from said course, a control member also carried by said mobile object, means for actuating said control member, a pair of photo-electric cells associated with said direction responsive device and adapted to be energized to produce an electric current upon deviation of said mobile object from its course, an electrical circuit arrangement including said photo-electric means, said control member actuating means, current amplifying means for each of said photo-electric cells and interconnected relays for energizing the control member actuating means so that the latter may move the control member in one direction or the other upon energization of one or the other of the photo-electric cells respectively, means connecting said relays in such a manner that when one is rendered operative ahead of the other, the latter is simultaneously rendered inoperative, and means for returning the control member to its normal position after it has been actuated to return the mobile object to its course, whereby over-swinging of said object is prevented.

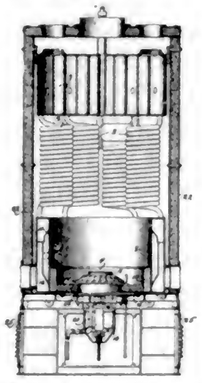
1,873,580. MANUFACTURE OF EMULSIONS. ANTHONY JAMES HAILWOOD, ARNOLD SHEPHERDSON, and ALEXANDER STEWART, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, Westminster, England. Filed Sept. 26, 1929, Serial No. 395,459, and in Great Britain Oct. 2, 1928. 14 Claims. (Cl. 252—6.)

1. In the manufacture of aqueous emulsions, the process which comprises admixing an emulsifiable substance with a gelatinizable emulsifying agent selected from a class consisting of glue, gelatinizable gums and gelatin, and also adding water and an agent capable of liquefying said gelatinizable agent selected from a class consisting of urea, thiourea, and alkali metal nitrates.

1,873,581. OIL BURNING APPARATUS. MORGAN J. HAMMERS, Stamford, Conn., assignor to Petroleum Heat and Power Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 4, 1930. Serial No. 493,262. 5 Claims. (Cl. 122—252.)

1. In apparatus of the class described, the combination of an open top water jacketed combustion chamber, a fluid

chamber disposed above the combustion chamber, heat exchange coils intermediate the water jacket of the combustion chamber and the fluid chamber, said coils being so disposed relatively to each other and to the combustion chamber as to provide a flue structure for the passage of hot gases from the combustion chamber along and in contact with said heat exchange coils to said heat absorbing medium, water circulating tubes intermediate the water

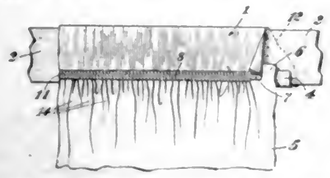


jacket and said fluid chamber and communicating with said jacket and chamber, and a water circulating sheet in said water jacket, said sheet being provided with upper and lower openings, said tubes and coils being so connected to said water jacket that water entering the same from the said tubes passes through the lower set of openings in the said circulating sheet upwardly along said sheet and outwardly through the upper set of openings to reach the said coils.

1,873,582. IMPROVED PETROLEUM PRODUCT AND ART OF WOOD PRESERVATION. WILLIAM H. HAMPTON and BRUCE B. FARRINGTON, Berkeley, Calif., assignors, by mesne assignments, to Standard Oil Company of California, San Francisco, Calif, a Corporation of Delaware. Filed Dec. 19, 1923. Serial No. 681,470. Renewed Nov. 26, 1929. 7 Claims. (Cl. 134—78.6.)

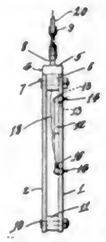
1. A process of preparing a wood preservative containing a toxic compound derived from the distillates of a pyrogenetic process of cracking petroleum oils, which comprises adding sufficient lye solution to neutralize the acid sulfur compounds of such distillate, removing the lye sludge, adding mineral oil to said lye sludge, neutralizing the lye sludge with a mineral acid, thereby leaving the acid sulfur compounds in the mineral oil and in a phase separate from the aqueous acid phase, and separating the oil phase from the acid phase.

1,873,583. BAND FOR GARMENTS. JOHN F. HARGREAVES, Baltimore, Md., assignor to The Faultless Manufacturing Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 29, 1931. Serial No. 560,080. 2 Claims. (Cl. 2—237.)



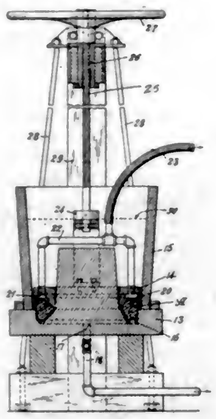
1. A band for garments comprising a thin flat strip of elastic sheet rubber; a textile sheath of stretchable material folded around said rubber to form an overlap adjacent one edge of said rubber; a garment; an edge of said garment extending between the overlapped portions of the sheath; stretchable stitches passing through the overlapped portion of the sheath, the edge of the garment, the edge of the sheet rubber strip, and the face of the sheath to anchor the sheath closed and to anchor the band to the garment.

1,873,584. ILLUMINATED SIGN CONSTRUCTION. JOHN W. HARRIS, Los Angeles, Calif., assignor to Claude Neon Electrical Products Corporation, Ltd., Wilmington, Del., a Corporation of Delaware. Filed Mar. 28, 1931. Serial No. 526,000. 3 Claims. (Cl. 40—130.)



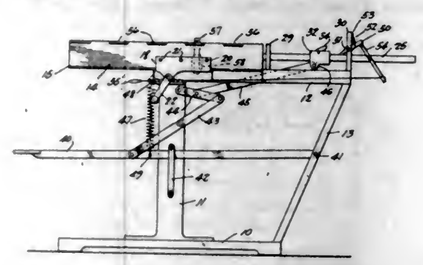
1. In a sign construction employing tubular lamps, a pair of transparent plates, means securing said plates in spaced parallel relation to each other comprising a block of insulating material resting upon the edges of said plates and having a depending tongue extending between said plates to constitute a spacer therefor, means on said block for securing a support thereto, a tubular lamp forming sign indicia imposed in the space between said plates, and electrical conductors secured to said insulating block for supplying current to said lamp.

1,873,585. METHOD OF MAKING TOILET SEATS OF PULP MATERIAL. HAROLD C. HARVEY, Trenton, N. J., assignor to The Agasote Millboard Company, Ewing Township, N. J., a Corporation of New Jersey. Filed Jan. 17, 1931, Serial No. 509,363, and in Canada Oct. 31, 1930. 3 Claims. (Cl. 92—54.)



1. In the wet press the larger proportion of the water was removed and the pulp shaped to the "primary formation" which, roughly speaking, was twice the size of the finished core piece, the lower half having approximately the outline of such finished core piece and the upper half being congruent with the lower half.

1,873,586. CUSHION FILLING MACHINE. CHARLES HENNELL, Inglewood, Calif. Filed July 21, 1930. Serial No. 469,416. 4 Claims. (Cl. 226—46.)



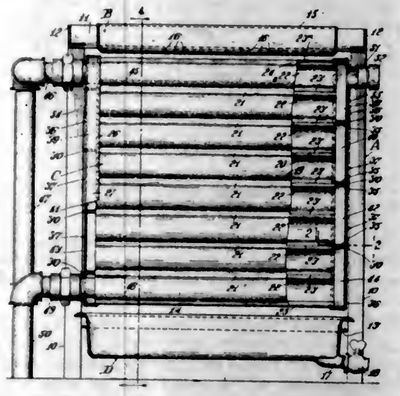
1. In a machine for filling cushions, a stationary box, and a pusher rod having teeth thereon, means for pushing said pusher rod through said box, said means comprising a dog contacting with the teeth on the pusher rod, pivoted means contacting with said teeth for preventing backward movement of the pusher rod, and a means for releasing said last named means from said teeth, said pivoted means when released, cooperating with said dog to permit free backward movement of said pusher rod.

1,873,587. LINOLEUM. CHARLES F. HUMPHREYS and HENNING W. PRENTIS, Jr., Lancaster, Pa., assignors to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Mar. 30, 1927. Serial No. 179,710. 3 Claims. (Cl. 154—25.)



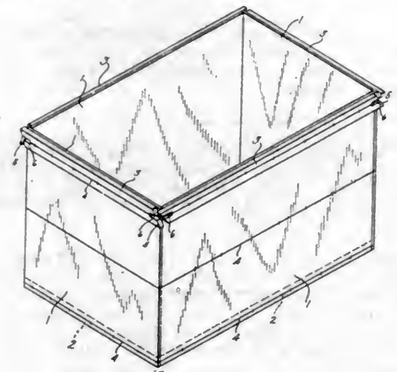
1. The method of making molded inlaid linoleum comprising mixing the usual ingredients, adding lustrous metallic particles thereto, effecting the cursory mixing of such particles with the mixture of usual ingredients and thereafter applying the resulting mix to a backing, whereby lustrous particles will appear in the surface of the linoleum to impart thereto a metallic sheen or lustre.

1,873,588. LIQUID TREATING APPARATUS. HARRY G. MOJONNIER, Oak Park, Ill., assignor to Mojonnier Bros. Co., a Corporation of Illinois. Filed Apr. 3, 1931. Serial No. 527,437. 6 Claims. (Cl. 257—183.)



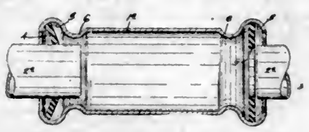
4. Liquid treating apparatus of the class described including a central member having outer stainless steel undulating surfaces and inner transverse parallel tubular passages, said apparatus including also headers for said central member to provide circulatory connections between said passages, each of said headers comprising an inner plate fitted to the undulating surfaces of said central member and welded thereto from the header side, cross partitions welded to said inner member from the header side, and closing plates welded to said inner plate and to said partitions from the outside of said header.

1,873,589. BOX AND CRATE. GEORGE P. IGLEHEART, Boonton, and ALFRED L. ROSENMUND, Rockaway, N. J., assignors to Stapling Machines Co., a Corporation of Delaware. Filed July 10, 1929. Serial No. 377,095. 8 Claims. (Cl. 217—12.)



1. A foldable box blank comprising a plurality of sections of side material connected with flexible binders and positioned to tension the binders when the blank is folded into box form, and an exterior cleat secured to each section of side material; the cleats of the several sections being in line with each other and the ends of said cleats being cut diagonally to the lateral edges of the section of side material and extending beyond the lateral edges of the side material.

1,873,590. PIPE CONNECTION. EDWARD JAMES, Cleveland, Ohio, assignor to Harold Elno Smith, Cleveland Heights, Ohio. Filed May 11, 1928. Serial No. 276,858. 6 Claims. (Cl. 285—193.)

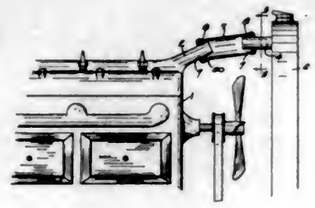


6. In a detachable, flexible pipe connection, a receiving member having an inwardly-facing circumferential recess at each end, a dished disk gasket of elastic material having its marginal edge braced against the wall of each recess and having its faces spaced from the walls of said recess, and an entering member tightly embraced by each gasket and spaced from the wall of said receiving member.

1,873,591. RADIATOR CONNECTION. EDWARD JAMES, Cleveland, Ohio, assignor, by mesne assignments, to Harold Elno Smith, Cleveland Heights, Ohio. Filed May 11, 1928. Serial No. 276,859. 6 Claims. (Cl. 285—193.)

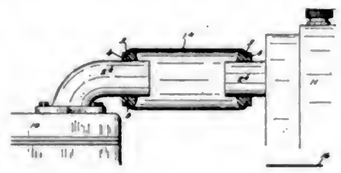
1. In a self propelled vehicle, the combination with an internal combustion engine having a hollow nipple and a radiator having a hollow nipple spaced therefrom, of a

hollow connecting tube of rigid impervious material telescoped over both nipples, and elastic gaskets interposed between the interior of the tube and the exteriors of said



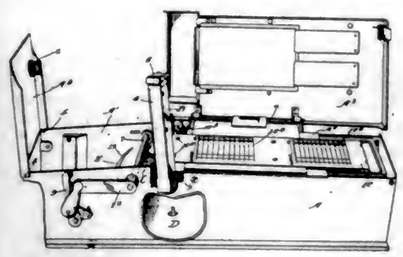
nipples, said radiator and engine exhibiting variable positions and movements and said connecting tube being similarly movable relative to said nipples and without substantial leakage.

1,873,592. PIPE CONNECTION. EDWARD JAMES, Cleveland, Ohio, assignor, by mesne assignments, to Harold Elno Smith, Cleveland Heights, Ohio. Filed June 2, 1928. Serial No. 282,371. 6 Claims. (Cl. 285—193.)



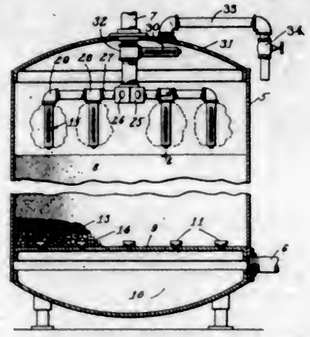
1. In a flexible, detachable pipe coupling, a receiving member having at its end an annular, inwardly-projecting, slant-sided flange, an annular gasket of elastic yielding material located partly inside and partly outside said flange and having an external circumferential groove receiving said flange, and an entering member slidably and flexibly mounted therein and smaller than the aperture defined by said flange, said gasket having a bore therethrough which is normally slightly smaller than the external diameter of said entering member.

1,873,593. AUTOGRAPHIC REGISTER. LOUIS JENSEN, Chicago, Ill., assignor to United Autographic Register Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 9, 1931. Serial No. 514,686. 14 Claims. (Cl. 282—16.)



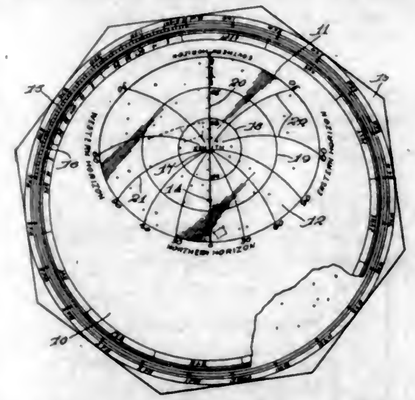
14. In combination in a duplicating machine: a platen; an automatically projected register-member; and feed mechanism including a withdrawable upper feed-member journaled in a housing, said housing serving normally to hold said register-member in inoperative position.

1,873,594. WATER SOFTENER. OSCAR W. JOHNSON, Rockford, Ill., assignor to Ward-Love Pump Corporation, Rockford, Ill., a Corporation of Illinois. Filed Oct. 1, 1927. Serial No. 223,297. 7 Claims. (Cl. 210—24.)



1. In a water softener, a tank containing a bed of water softening material, the bed having supporting and distributing means at the bottom thereof, inlet and outlet connections for the opposite ends of said tank providing for the passage of water or brine through the bed, and a header communicating with the connection at the top of the tank having a plurality of strainer elements communicating therewith and disposed in distributed relation above the bed of water softening material, the said strainer elements being disposed in a plane appreciably below the highest point in the tank and normally serving as outlets, and an air leak strainer element communicating with the header and disposed above the other strainer elements at or near the highest point in the tank.

1,873,595. STAR FINDER. WILLIAM E. JOHNSON, Chicago, Ill., assignor to Rand McNally & Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 7, 1932. Serial No. 585,377. 5 Claims. (Cl. 35—3.)

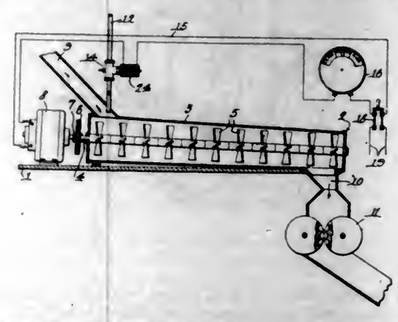


1. A device of the character described, including; a face plate with an horizon opening therein; a sheet of transparent material covering the horizon opening; and a planisphere of the stars under the face plate, pivoted to said sheet of transparent material.

1,873,596. COAL BRIQUETTING MACHINE. EMORY E. JONES, Bluefield, W. Va., assignor to Winding Gulf Collieries, Bluefield, W. Va. Filed Jan. 6, 1931. Serial No. 507,022. 1 Claim. (Cl. 44—13.)

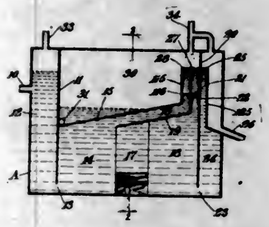
In the art of continuously forming coal briquettes which are characterized by uniform relative proportions of coal

and binder, a casing having an inlet and an outlet, spaced apart, a mixer in the casing and acting as a feeder between the inlet and the outlet, mechanism for operating the mixer, said mechanism including an electric motor, a circuit for the motor, means for supplying divided coal to the mixer, a normally flowing source of binder supply



discharging into the casing, at a point closely adjacent to the inlet, an electric valve interposed in the source of binder supply, and operating mechanism for the valve interposed in the circuit of the motor, the valve-operating mechanism being so constructed as to move the valve toward closed position when the amperage of the current in the circuit in the motor increases.

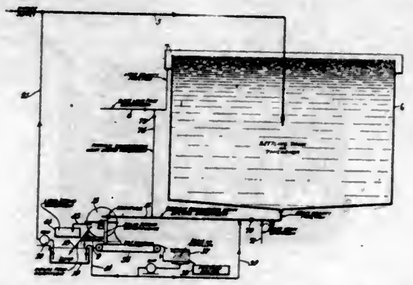
1,873,597. SEPARATION OF OIL FROM MIXTURES THEREOF WITH WATER. LEO D. JONES, Philadelphia, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed May 18, 1928. Serial No. 278,742. 7 Claims. (Cl. 210—60.)



7. Apparatus for the separation of dispersed particles of a liquid from another immiscible liquid, comprising a chamber having a mixture inlet and an outlet for one of the constituents thereof, means in said chamber between said inlet and outlet and providing a plurality of unobstructed liquid passages of such small transverse dimension that the smallest dispersed particles of liquid contained in said mixture flowing therethrough and which are sought to be removed will contact with the walls of one of said passages and be caused to coalesce with others of said particles, a partition extending upward from said means and preventing flow of liquid from said inlet to said outlet except through said passages, and means for withdrawing agglomerated particles of dispersed liquid from an upper level of said chamber on both sides of said partition.

1,873,598. SEPARATION OF MIXTURES OF SUBSTANCES. LEO D. JONES, Philadelphia, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed May 19, 1928. Serial No. 279,077. 10 Claims. (Cl. 210—52.)

1. In the separation of mixtures of liquids with solids which produce a cloudy liquid fraction when subjected to centrifugal separation or are of low solid concentration, or which is unseparable by filtration by reason of the slimy or colloidal nature of the second constituent, the steps comprising separating such a mixture by gravity into a first fraction consisting of clear liquid and a second fraction consisting of solid matter mixed with an undesirable

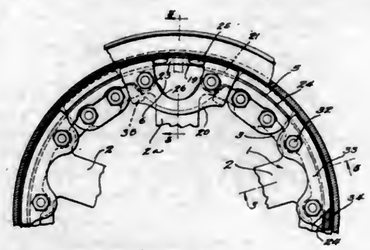


quantity of liquid, centrifugally separating said second fraction into a component consisting of substantially liquid-free solids and a component consisting of cloudy liquid, and returning said cloudy liquid to the first mentioned separating operation.

1,873,599. ALDEHYDE CONDENSATION PRODUCTS AND THE PROCESS OF MAKING SAME. HANS KAPPELER, Basel, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Filed May 31, 1930, Serial No. 458,896, and in Switzerland June 12, 1929. 5 Claims. (Cl. 260—2.)

1. A process for the manufacture of infusible black artificial masses by causing furfural to interact with other aldehydes in presence of a mineral acid condensing agent.

1,873,600. TRUCK WHEEL. LLOYD D. KAY, Los Angeles, Calif., assignor to Kay-Brunner Steel Products Inc., a Corporation. Filed Nov. 4, 1930. Serial No. 493,845. 8 Claims. (Cl. 301—13.)

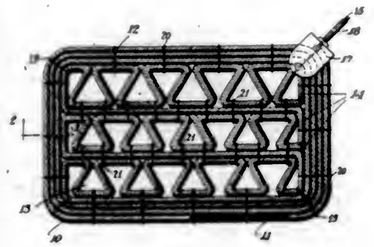


1. In a driving connection for a dual tired pneumatic truck wheel, the combination of a felloe having a gap in the radially outer face thereof capable of passing the inflating nipple for the inboard tire, an outboard tire rim seating on the felloe and having driving means located in the gap and projecting radially inwardly toward the axis of the wheel, a yoke having driving means for engaging the driving means of the rim on opposite sides of the gap, and studs located on opposite sides of the said gap for securing the said yoke in position.

1,873,601. ELECTRICALLY HEATED MAT. GERTRUDE KNOPF, Rye, N. Y. Filed Jan. 31, 1931. Serial No. 512,581. 1 Claim. (Cl. 219—46.)

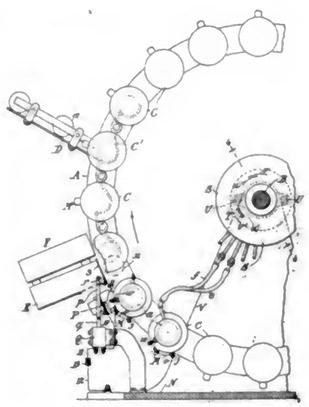
An electric heating pad or mat formed of a continuous strand comprising an inner core, resistance wire wound about said core, and an outer water proof insulating

cover formed with said strand, a plate for holding a cable connected to a source of electricity, said strand being then guided and firmly held in a plurality of parallel convolutions to form a substantially elongated frame or



outer margin and then formed into and firmly held in a plurality of substantially triangular convolutions or elements arranged in juxtaposition within said outer margin, the strands of said cable connected to the end of said pad strand.

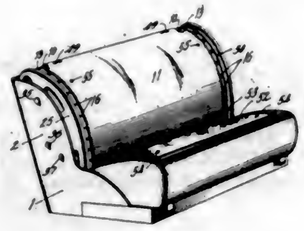
1,873,602. CAN TESTING MACHINE. PETER KRUSE, Brooklyn, N. Y., assignor to E. W. Bliss Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 8, 1930. Serial No. 494,248. 7 Claims. (Cl. 73—51.)



1. In a can testing machine comprising a detector, including a pressure-actuated part connected to respond to leakage from the can, the combination therewith of an electric circuit having two breaks, a circuit closer controlling said circuit operated by the detector to close one of said breaks, and circuit closing means located at a fixed point to close the other break, an ejector, and an electromotive device in said circuit operating said ejector.

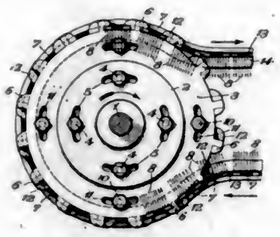
1,873,603. SEAT. HARRY E. KUEHN, Albany, N. Y. Filed Nov. 19, 1930. Serial No. 496,654. 12 Claims. (Cl. 155—182.)

1. In combination, a main seat back, a cover therefor, means for concealing said cover when not in use, guide means for said cover located in front of said seat back and means for moving said cover along said guide means



to a position where it is in spaced relation to said main seat back, said guide means retaining the said cover in spaced relation to said seat back when in use.

1,873,604. GUIDING MEANS FOR THE CARRIER PLATES IN MATCH-MAKING MACHINES. HEINRICH KUGLER, Zurich, Switzerland, assignor to Johann Kessler and Georg Fischer, Zurich, Switzerland. Filed Mar. 14, 1931, Serial No. 522,748, and in Germany Oct. 11, 1930. 6 Claims. (Cl. 144—50.)



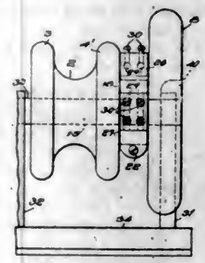
1. In a guiding device for carrier plates in match-making machines, the combination with rectilinear guide sections for the carrier plates having reduced ends providing a space therebetween at each two adjacent carrier plates, of a rotatable guide member adjoining said rectilinear guide sections, circumferentially adjustable peripheral teeth provided on said rotatable guide member and cooperating with said spaces, means for adjusting the said teeth, and means for rotating said guide member at greater speed than that at which the carrier plates are moved towards said rotatable guide member.

1,873,605. INSULATOR. WILLIAM D. KYLE, Milwaukee, Wis., assignor to Line Material Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 30, 1930. Serial No. 478,894. 10 Claims. (Cl. 173—28.)

1. An insulator comprising a pair of parallel disc-like members of insulation joined by a central portion extending between them, and a terminal member secured to the central portion and extending outwardly of the central portion by an amount less than the distance from the central portion to the periphery of the outer disc member.

8. An insulator having circular end flanges and a

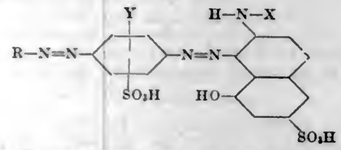
circular intermediate flange, a continuous smooth peripheral groove devoid of sharp edges and located between the intermediate flange and one of the end flanges, and a



second peripheral groove formed between the intermediate flange and the other end flange, said second groove being of a non-circular shape.

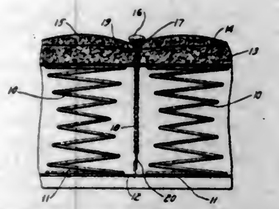
1,873,606. SECONDARY DISAZO DYES. WERNER LANGE and MAX RAECK, Dessau-Ziebigk in Anhalt, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 23, 1931, Serial No. 532,390, and in Germany May 28, 1930. 12 Claims. (Cl. 260—83.)

1. The new secondary disazo dyes corresponding as free acids to the general formula



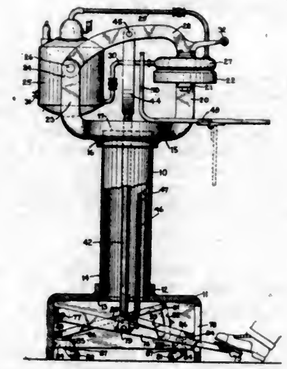
wherein R means the radicle of an amino compound of the benzene or naphthalene series which can no longer be diazotized, Y stands for H or OCH_3 and wherein X means H, alkyl or phenyl, these dyes dyeing artificial viscose silk bright, clear and even reddish-blue to greenish-blue tints of excellent fastness to light.

1,873,607. UPHOLSTERY BUTTON CHAIN CLIP. EMIL B. G. LEFEVRE, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Sept. 29, 1930. Serial No. 485,046. 3 Claims. (Cl. 155—185.)



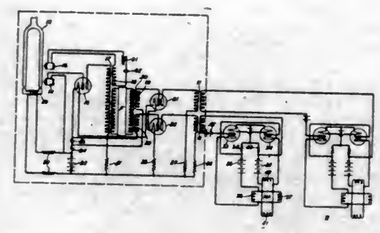
1. An upholstery button chain clip formed from spring wire having an intermediate portion with its ends bent back upon itself to form an S shaped clip, the bent back portions extending beyond the center of the intermediate portion and having their end portions bent so as to extend across both said intermediate portion and the other bent back portion and resiliently urged into connection with each to form a pair of spaced closed loops, whereby one of said ends may be inserted into an upholstery button eye and the latter snapped successively past the coacting bent back portion and then the intermediate portion and then the opposite end portion into one of the loops, and a fastening chain link inserted into the other loop by inserting the other end member therethrough in like manner.

1,873,608. GARMENT OR IRONING PRESS. JAMES CAMROD LEDBETTER, Jackson Heights, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Oct. 27, 1930. Serial No. 491,383. 4 Claims. (Cl. 68—9.)



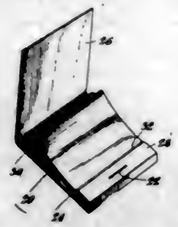
2. A garment or ironing press comprising a hollow frame, a horizontal support on the upper end of the rame, an upright bracket on each end of the horizontal support, a buck on one bracket, a press head above the buck, boiler means pivotally carried on the other bracket to the rear of the buck and press head, rigid pipe connections leading from the boiler means to the press head, an arm having its rear end pivoted on the boiler pivot on the rear bracket and its other end reaching forwardly and attached to the press head; and operating means disposed within the frame and connected to the arm between the boiler and press head to actuate the press head by swinging the boiler, the pipe connections, and press head, as a unit.

1,873,609. SYNCHRONOUS SIGNALING SYSTEM. GEORGE A. LOCKE, Glenwood, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 23, 1930. Serial No. 483,796. 8 Claims. (Cl. 172—293.)



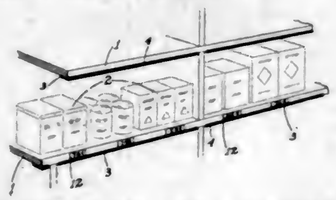
2. A synchronous driving system comprising a source of alternating current waves of a certain frequency, a motor and a pair of unidirectionally conducting devices interconnecting said source and said motor, characterized in this that a plurality of magnetic fields of said motor are successively energized by the output of said devices respectively to drive said motor.

1,873,610. TISSUE PACKET. JAMES B. LYON, New York, N. Y. Filed Jan. 5, 1932. Serial No. 584,773. 5 Claims. (Cl. 206—57.)



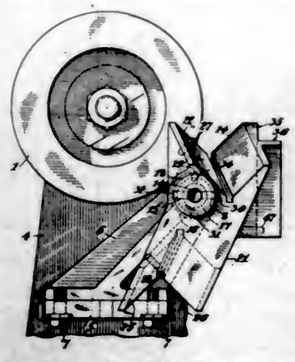
1. A lipstick tissue packet comprising a backing member, an assembly of sheets of lipstick tissue disposed in superposed and unitarily folded relation on said backing member with the edge portions of each sheet remote from the fold thereof brought to a position of approximate coincidence with one another and with the like edges of the other sheets of said assembly, said sheets having said edge portions secured to said backing member.

1,873,611. DISPLAY CARD HOLDER. GEORGE S. MALCOLM, Auburn, Calif. Filed Dec. 28, 1931. Serial No. 583,443. 5 Claims. (Cl. 40—11.)



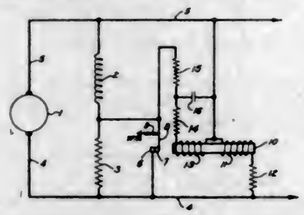
1. In combination with a shelf, a card holder mounted in connection with said shelf and including a lip extending lengthwise of the shelf and overlapping the front edge of the same, means movably mounting said holder on the shelf and resilient means coacting with the first mentioned means maintain said lip in pressing engagement with said shelf edge.

1,873,612. GRINDING DEVICE. ALBERT A. MARTELL, Woonsocket, R. I., assignor to Martell Manufacturing Company, Woonsocket, R. I., a Corporation of Rhode Island. Filed Dec. 31, 1931. Serial No. 584,154. 14 Claims. (Cl. 51—219.)



1. A grinding device for drill bits comprising a grinding wheel, guiding means, a work rest mounted for reciprocatory movement on said guiding means, said work rest comprising a plurality of pairs of supporting surfaces inclined relative to the face of the grinding wheel, one of said pair of surfaces being inclined in one direction toward the face of said wheel and the other of said pair of surfaces being inclined in the opposite direction toward the face of said wheel, and a work holder cooperative with said work rest to present a drill bit to said grinding wheel.

1,873,613. ELECTRICAL APPARATUS. PAUL H. MAURER, Hillside, N. J., assignor to Eclipse Aviation Corporation, East Orange, N. J., a Corporation of New Jersey. Filed Apr. 23, 1931. Serial No. 532,821. 12 Claims. (Cl. 171—229.)



1. The combination with a direct current generator having a field winding of relatively high inductance, of a voltage regulator having relatively movable contacts and a pair of magnet coils for operating the latter, a resistance in series with the field winding and adapted to be shunted by the contacts when the latter are closed, and means associated with said field winding and one of said magnet coils for suppressing the electromotive-force induced in the generator field by the operation of the contacts, to prevent sparking across the latter.

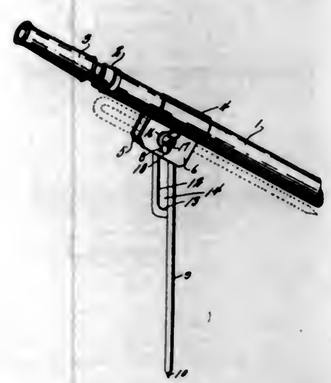
1,873,614. PENCIL HOLDER. JOSEPH P. MCENERY, Flushing, N. Y. Filed Apr. 19, 1932. Serial No. 606,089. 5 Claims. (Cl. 120—84.)



1. A pencil holder comprising a single piece of sheet material formed with a rectangular base, a pair of arms at opposite ends of the base integral therewith and perpendicular thereto, and a pencil interposed between and held by said arms, a second pair of arms at opposite sides of said base and integral therewith, said last named arms overlying said pencil and being adapted to clasp the plies of a folded article with the pencil interposed between said plies.

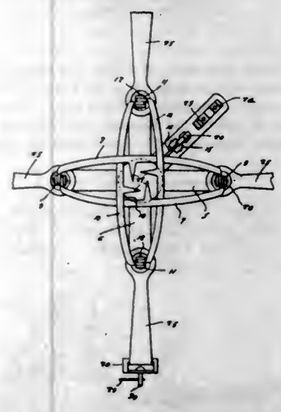
1,873,615. NOZZLE DIRECTING DEVICE. ROBERT J. MCINTOSH, Toledo, Ohio. Filed Aug. 12, 1930. Serial No. 474,749. 1 Claim. (Cl. 248—29.)

A hose nozzle directing device comprising a U-shaped plate having a return bend portion in excess of semi-cylindrical extent with a pair of parallel sheet portions therefrom as the ends of the U-plate, there being spaced from the semi-cylindrical portion and through said parallel sheet portions a pair of registering holes, a bolt through said holes, and a leg pointed at one end and having an elongated loop at the other end, said loop being located between said sheets, said bolt being effective as a clamp through the holes and loop and adjustable to frictionally grip the loop between said sheets and thereby fix the leg point parallel to or at different angles from the hose with which said semi-cylindrical portion is adapted to be assembled by the said same bolts as fixed



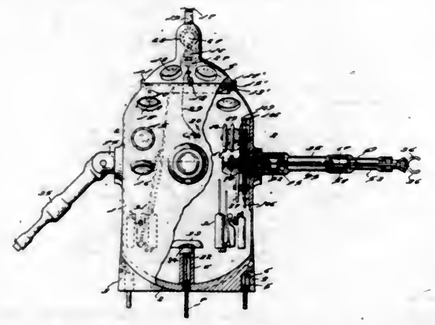
with the leg, said leg being thereby free to be inserted vertically in soil to direct the nozzle vertically or at such other or different angle as the leg may be held relatively to the general direction of the semi-cylindrical portion of the plate.

1,873,616. ANIMAL TRAP. ARCHIE H. MEADE, Laredo, Mont. Filed Feb. 18, 1931. Serial No. 516,717. 2 Claims. (Cl. 43—88.)



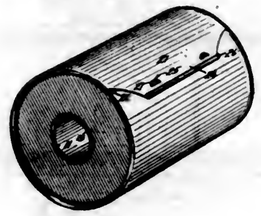
1. An animal trap comprising a base, two pairs of cooperating jaws, the jaws of each pair being connected together at their opposite ends, and the jaws of one pair being disposed at right angles to the jaws of the other pair and intertwining therewith when the jaws of the respective pairs are swung away from one another to set the trap, a lever pivotally mounted adjacent one end thereof on said base within the confines of said jaws, a bait impaling member mounted on the free end of said lever, a catch bar mounted on said base, and a catch member engaged at one end with the pivoted end of said lever, and at its other end engageable with said catch bar, with the intermediate portion of said catch member engageable with certain of said jaws for retaining the jaws in their last mentioned set position.

1,873,617. DIVING TANK. CHARLES MEHL, Philadelphia, Pa. Filed Aug. 28, 1931. Serial No. 559,867. 14 Claims. (Cl. 61—69.)



1. In a diving tank, a tank having a sealed top closure, wings disposed at an angle and depending from the bottom of said tank to form chambers, and hydraulic cushioning means in said wings.

1,873,618. SPOOL AND PROTECTOR THEREFOR. GEORGE F. MILLER, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 26, 1931. Serial No. 511,129. 1 Claim. (Cl. 206—52.)

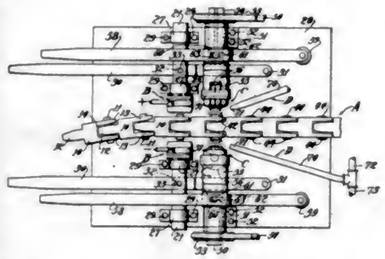


The combination of a spool having heads and a core connecting said heads, and an enclosing and protecting divided metallic shell having cooperating snap-catch elements, struck from the divided ends of said shell, the edges of the shell being rigidly supported by said heads, the catch elements being releasable by prying up the exposed end of the shell.

1,873,619. CHAIN MANUFACTURE. OLIVER W. MOJONNIER, River Forest, Ill., assignor to Mojonnier Bros. Co., a Corporation of Illinois. Filed May 2, 1930. Serial No. 449,172. 1 Claim. (Cl. 219—2.)

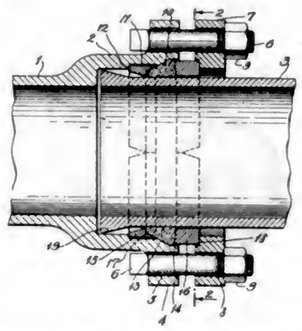
The method of making metal chains of links each having a central leaf-like projection at one end and a pair of similar outer projections at the other end, the latter forming between them a slot into which the central projection of the next link fits, which method consists in providing transverse openings in each pair of outer projections of the same diameter and a transverse opening in each central projection of a considerably larger diameter, selecting uniform pin blanks of a diameter to pass freely through said outer openings and of a length sufficient to provide material for heads at its ends when assembled, placing one such pin blank in each set of three cooperating openings with the ends exposed for electrode contact, bringing electrodes into contact with the ends of the several pin blanks in succession, passing an electric welding current through each pin blank when so interposed with such electrode pressure, current volume and time duration as to

heat the ends of the blank to a welding heat and the middle of the blank to a less heat, and finally mechanically working the blank ends in each case to form heads and at the same time press the metal of the blank into the



walls of the outer openings to form a substantially integral connection with the outer projections, whereby each pin has a fixed connection with one link and a loose connection with the next.

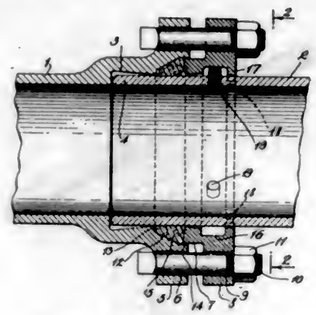
1,873,620. PIPE JOINT. JAMES W. MOORE, Birmingham, Ala., assignor to American Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Georgia. Filed Oct. 17, 1929. Serial No. 400,272. 3 Claims. (Cl. 285—135.)



1. A joint for sections of pipe of the bell and spigot type, comprising a flaring abutment on the interior of the bell section adjacent its end, a counterbore terminating forwardly at the inner end of the flaring abutment, a ring mounted in the counterbore around the spigot section, said ring having a flared face in substantially the same plane as said flaring abutment, a compressible packing between the outer surface of the spigot section and said flaring abutment on the bell section and flared face on the packing ring, a second counterbore located rearwardly of said first counterbore and terminating forwardly at the rear end of said first counterbore, a portion of the packing ring being disposed in front of said second counterbore, and an enlarged end on the spigot section located in said second counterbore.

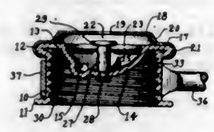
1,873,621. PIPE JOINT. JAMES W. MOORE, Birmingham, Ala., assignor to American Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Georgia. Filed Oct. 17, 1929. Serial No. 400,271. 4 Claims. (Cl. 285—135.)

1. A joint for pipes of the bell and spigot type comprising a compressible packing between the spigot and the bell, spaced clamping rings on the bell and spigot, a packing compression member between said clamping rings abutting the packing but not abutting the ring on the bell, radially extending stops on the spigot for engagement with a surface of the ring on the spigot and a surface of the compression member, means connecting the rings to force the compression member against the packing to seal the joint between the bell and spigot, said surfaces on the



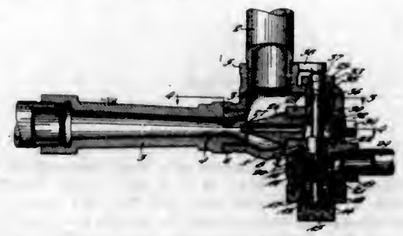
ring and compression member being spaced apart a distance greater than the width of the stops to permit axial movements of the pipes after the packing is compressed to seal the joint.

1,873,622. LAWN SPRINKLER. JOSEPH F. MORAN, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Mar. 25, 1931. Serial No. 525,099. 12 Claims. (Cl. 299—114.)



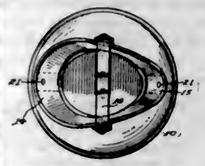
12. In a lawn sprinkler, a casing having an outlet wall section, a shaft upstanding from said wall section, a turbine disc rotatively mounted on said shaft, the top of said shaft having a flange for limiting the upward movement of said turbine disc, and an apertured cap member covering said disc.

1,873,623. VALVE. CORNELIUS F. MORRISON, Pawtucket, R. I., assignor of one-half to Thomas F. Vance, jr., Pawtucket, R. I. Filed June 19, 1930. Serial No. 462,372. 3 Claims. (Cl. 230—95.)



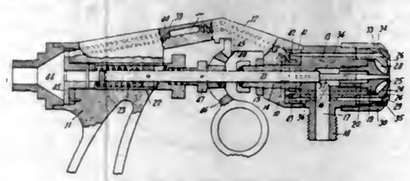
1. In a device of the type specified, a casing having intake and exhaust openings, a Venturi tube communicating with the exhaust opening, an injector-nozzle communicating with the interior of the Venturi tube, a port leading from the intake to the nozzle, a valve for closing said port, and a valve-stem projecting through the outer wall of the casing and arranged to operate the valve, said valve-stem projecting through the casing at a point where a low pressure area is produced by the suction of the fluid injected from the nozzle through the Venturi tube.

1,873,624. MEASURING AND DISPENSING DEVICE. JOHN G. MOXEY, Philadelphia, Pa. Filed Jan. 26, 1932. Serial No. 588,896. 7 Claims. (Cl. 221—11.)



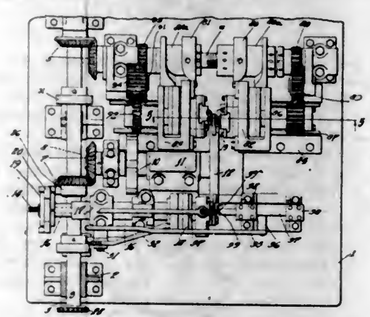
5. In a dispensing receptacle, a body portion, a neck secured thereon, oppositely disposed pouring lips secured on said neck, a pair of ears secured to said neck intermediate said lips, and a bail pivoted on said ears for movement to and from each of said lips.

1,873,625. SPRAYING DEVICE. ERNEST Z. MUNZ Springfield, Ohio. Filed Sept. 16, 1929. Serial No. 393,024. 5 Claims. (Cl. 91—45.)



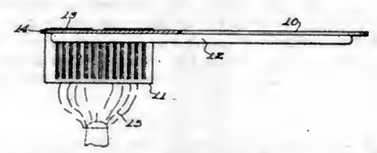
1. In a spraying device of the character described, a spray head having a liquid nozzle, a valve to control said nozzle, an air nozzle having a main air outlet arranged to cause a jet of liquid to be discharged from said liquid nozzle, said air nozzle also having a frusto-conical outer surface provided with grooves converging forwardly toward the axis of said liquid nozzle, a cap mounted about said frusto-conical surface to close the outer sides of said grooves and form auxiliary air outlets, said cap having grooves adapted to register with the respective first mentioned grooves and being adjustable to move the grooves therein into and out of registration with the respective first mentioned grooves to vary the size of said outlets, and means to control the delivery of air to the several air outlets.

1,873,626. SPRING CUTTING AND HOOKING MACHINE. MICHEL NIGRO, Worcester, Mass., assignor to Sleeper & Hartley, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 23, 1930. Serial No. 483,929. 5 Claims. (Cl. 140—103.)



1. In a machine of the class described, mechanism for feeding a continuous helical spring comprising a reciprocatory head through which the spring passes, pivoted jaws carried by said head for movement at right angles to the axis of said spring, means for moving said jaws inwardly towards the spring to engage and feed the same as the head moves in one direction and means for releasing said jaws and for positively separating said jaws from said spring before the head moves in the opposite direction.

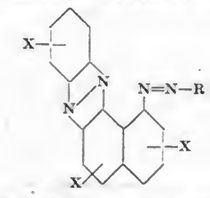
1,873,627. STERILIZER. ALLEN NOHR, Milwaukee, Wis., assignor of one-half to Joseph P. Ellis, Milwaukee, Wis. Filed Mar. 20, 1931. Serial No. 523,979. 4 Claims. (Cl. 167—3.)



1. A dry-heat sterilizer comprising a supporting member having slots therein, and a flame-heated U-shaped heat-conducting sheath having edge portions secured in said slots, said sheath being adapted to receive therein an object to be sterilized and preventing the direct access of flame to the object.

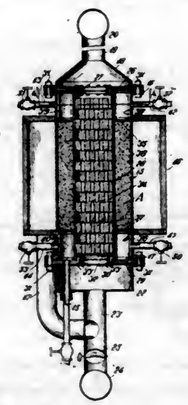
1,873,628. MONOAZO DYE. HEINRICH OHLENDORF, Dessau in Anhalt, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 1, 1931, Serial No. 527,051, and in Germany Apr. 11, 1930. 20 Claims. (Cl. 260—86.)

1. As new articles of manufacture the monoazo dyes corresponding probably to the general formula:



wherein R means an azo component and X stands for hydrogen or a univalent substituent of the group consisting of sulfo, carboxy, halogen, nitro, alkyl, and oxyalkyl.

1,873,629. APPARATUS FOR TREATMENT OF AMMONIA STILL WASTE. WALTER D. PATTON, Waukegan, Ill., assignor to North Shore Coke & Chemical Company, Waukegan, Ill., a Corporation of Delaware. Filed Feb. 17, 1930. Serial No. 428,887. 3 Claims. (Cl. 202—168.)

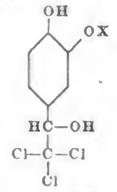


3. An apparatus of the character described comprising a casing provided with foraminated walls arranged in spaced relation with the opposite walls of the casing

whereby chambers are provided at opposite ends of the casing and a chamber between the foraminated walls is provided, the chamber between the foraminated walls being filled with an absorbent material; means disposed through the absorbent material holding chamber for conveying hot gas in a plurality of paths through said chamber; hot gas receiving chambers at opposite ends of said means, the one being a hot gas receiving chamber and the other being a gas discharging chamber; a controllable ammonia liquor introducing conduit connected with one of said first mentioned chambers; a valved vapor outlet communicating with the other of said first mentioned chambers and a valved liquor outlet communicating with said chamber.

1,873,630. MANUFACTURE OF A VANILLIN AND 3-ETHOXY-4-HYDROXYBENZALDEHYDE. ADOLF PFANNENSTIEL, Berlin-Lichtenrade, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 8, 1931, Serial No. 579,826, and in Germany Jan. 26, 1931. 5 Claims. (Cl. 260—137.)

1. The process which comprises treating an alkoxyhydroxyphenyltrichlormethylcarbinol of the general formula:

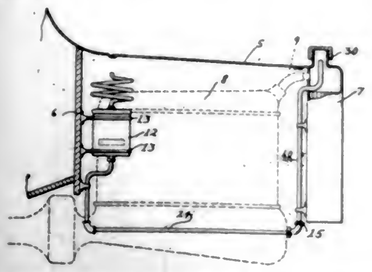


wherein X means methyl or ethyl, with a saponifying agent of the group consisting of alkali metal alcoholates and alcoholic solutions of alkali metal hydroxides and alkaline-earth metal hydroxides, and acidifying the reaction mixture.

1,873,631. MANUFACTURE OF VEGETABLE GUM SOLUTIONS. ARNOLD PFISTER, Clifton, N. J. Filed Sept. 22, 1930. Serial No. 483,755. 1 Claim. (Cl. 87—2.)

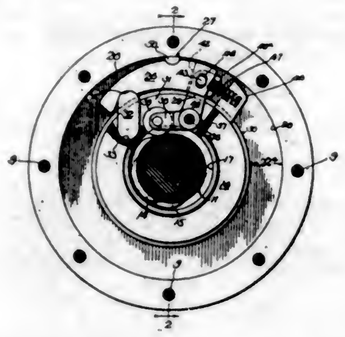
The herein described method of converting a gum of the second class herein specified to a solution substantially devoid of foreign matter and color which consists in treating the gum with water at a temperature below that at which the gum would thereupon dissolve, thereby converting it to a jell, then filtering the jell to remove foreign matter therefrom, and then dissolving the gum by the application of water and heat.

1,873,632. AUXILIARY STORAGE TANK AND CONDENSER FOR MOTOR VEHICLE COOLING SYSTEMS. JOHN ADNA PETERSON, Hingham Center, Mass. Filed Dec. 20, 1930. Serial No. 503,796. 1 Claim. (Cl. 123—174.)



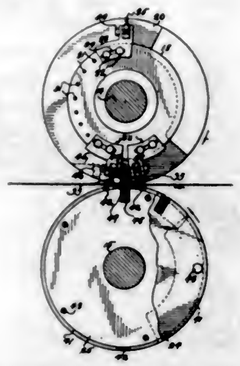
In combination with the radiator of an automobile and having an overflow pipe, a receptacle, a pipe connecting said overflow pipe with the bottom of said receptacle, a top for closing said receptacle, and a condensing coil carried by said top, said condensing coil having one end open to atmosphere, and its other end in communication with the interior of said receptacle whereby fluid of condensation may drain from the condensing coil to said receptacle.

1,873,633. INTERMITTENT CLUTCH. WALTER CHARLES PITTER, Epping, England, assignor to The Pitter Trust, Chicago, Ill., a Common Law Trust. Filed Dec. 4, 1930. Serial No. 499,890. 9 Claims. (Cl. 74—14.)



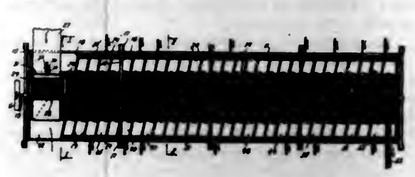
1. A clutch mechanism having rotary coaxial driving and driven members with an annular channel between them, comprising an elongated clutch element tiltable in said channel, means movably carried by one of said members and pivotally engaging the clutch element adjacent one end thereof to move it to operative position in the channel, means movable relatively to the same member and engaging the clutch element adjacent the opposite end for moving the clutch element to inoperative position in the channel, and means for controlling the action of one of the aforesaid means.

1,873,634. BAG MAKING MACHINE. ADOLPH POTDEVIN, Garden City, N. Y., assignor to Potdevin Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 4, 1931. Serial No. 527,685. 9 Claims. (Cl. 93—8.)



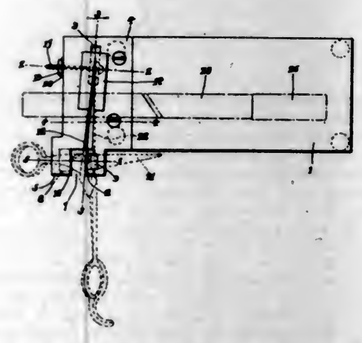
1. In a bag making machine the combination of punches for punching holes through the walls of a bag tube, dies cooperating with said punches, rotary mounts for said punches and cooperating dies, said punches and dies being individually adjustable in said mounts circumferentially thereof, and said mounts being adjustable along their axes of rotation to obtain a variation in the position of the holes relatively to each other transversely as well as lengthwise of the bag.

1,873,635. METHOD AND APPARATUS FOR FINISHING CLOTH. ROBERT DE VERE HOPE, Fanwood, and HENRY RUEGG, Paterson, N. J.; said Ruegg assignor to said Hope. Filed July 11, 1929. Serial No. 377,522. 13 Claims. (Cl. 8—19.)



1. In fabric treating apparatus, the combination of an elongated tank containing a liquid with which the fabric is to be treated, means for conveying the fabric from end to end of the tank in the form of a helix on an axis lengthwise of the tank with portions of the convolutions of the fabric in said helix entering the liquid in the tank, and means for causing the liquid to flow counter-current to the movement of the portions of fabric in contact with the liquid, said flow being generally transverse to the axis of the helix.

1,873,636. SHEAR SHARPENING DEVICE. ALEXANDER A. EMERY, Cincinnati, Ohio. Filed Nov. 13, 1931. Serial No. 574,809. 2 Claims. (Cl. 76—82.2.)



1. In a shear sharpening device, a supporting block formed adjacent one end with a recess, a plate disposed within said recess and extending transversely of the block, an enlargement on one end of the plate formed with a blade receiving notch, said plate having its upper face formed with an inwardly tapering groove with its outer end in communication with said notch, said plate further being formed with a lengthwise extending slot in communication with the inner end of said groove, a slidable member mounted on the plate and having a lug extending through said slot, a bolt extending through said lug, and tightening means on the bolt for engagement with the block and plate.

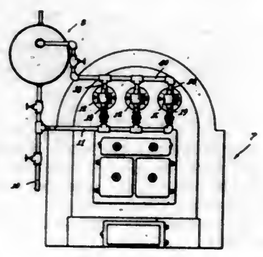
1,873,637. LIQUID BOILER. WILLIAM L. R. EMMET, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 1, 1931. Serial No. 566,289. 6 Claims. (Cl. 122—318.)

1. In a boiler structure, the combination of a casing and a boiler tube connected to the casing comprising an outer tube and a core in the outer tube having a passage for conveying liquid to the lower end of the outer tube,



the wall of said core comprising a plurality of layers of sheet metal in close contact with each other having relatively high heat resistivity.

1,873,638. WATER HEATER BOILER ATTACHMENT. SELIG EPSTEIN and CHARLES EPSTEIN, New York, N. Y. Filed Apr. 3, 1931. Serial No. 527,540. 1 Claim. (Cl. 257—255.)

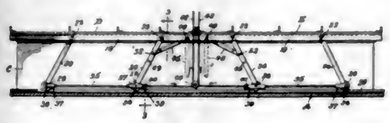


A device for the purpose indicated comprising a header formed with lower, intermediate and upper compartments and having a marginal flange for securing it in an opening in a boiler head, tubes extending from said header and arranged in groups of which one group communicates with each compartment the header, and a housing connecting the remote ends of the tubes and of dual compartmental form to place the tubes of adjacent groups in communication, said header having a cold water inlet to the lower compartment and a hot water outlet from the upper compartment, the housing enclosing the remote ends of the tubes having that portion placing the intermediate group in communication with the lower group more remote from the header than that portion placing the intermediate group in communication with the upper group.

1,873,639. HATCH CONSTRUCTION FOR UPPER DECKS. HUBERT H. FLIEGEL, Merrick, N. Y. Filed Jan. 5, 1932. Serial No. 584,876. 18 Claims. (Cl. 114—201.)

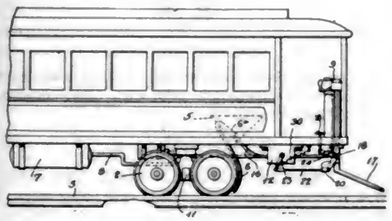
1. In a deck hatch construction, a hatchway having a coaming, a hatch cover and legs provided at the lower

ends with wheels, said legs having swingable connection to and depending from the opposite sides of the hatch cover and of a length when disposed perpendicular to



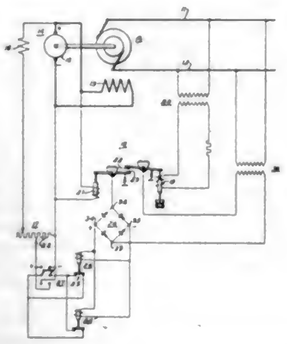
the hatch cover to elevate said cover above and clear of the coaming to permit of rolling of the same to and from a stowed position clear of the hatchway.

1,873,640. AUTOMATIC TRACK SANDER AND AIR BRAKE. JOHN GOGOL, Northampton, Mass. Filed Oct. 17, 1931. Serial No. 569,515. 8 Claims. (Cl. 291—3.)



1. In an automatic track sanding and air brake mechanism, the combination with an air brake system, of track sanding means including a valve device interposed in the air line of the air brake system, a pivotally supported car fender and operative connections between the fender and track sand means.

1,873,641. REGULATING SYSTEM. ERNST GRAU, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 17, 1931, Serial No. 530,761, and in Germany Apr. 25, 1930. 10 Claims. (Cl. 171—119.)

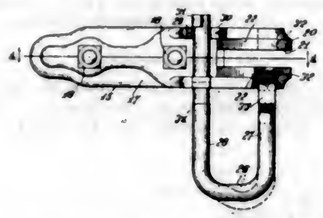


1. In a regulator system, an alternating-current circuit and a generator connected thereto, means for governing the excitation of said generator comprising a resistor, a regulator having vibrating contact members actuated in accordance with the voltage of said circuit, a rectifier energized from an alternating-current source in accordance with the action of said regulator, and a relay energized by direct current from said rectifier for controlling the effective value of said resistor.

1,873,642. PROCESS OF RECOVERING ALUMINA FROM COAL AND ITS ASHES. WILLIAM M. GUERTLER, Berlin, Germany, assignor to The Electric Smelting & Aluminum Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 21, 1930. Serial No. 437,948. 8 Claims. (Cl. 23—143.)

1. The process of producing alumina from coal in which at least some iron is present, which consists in burning the coal above the temperature of 900° C., forming a water slurry thereof, removing the magnetic iron from the water slurry, subjecting the ashes to the action of an aqueous mineral acid for a sufficient time to secure the desired extraction of alumina, separating the solution from the residue, and precipitating alumina from the solution.

1,873,643. LOCKING MEANS. VICTOR H. HARBERT, Chicago, Ill., assignor to Illinois Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed July 3, 1931. Serial No. 548,562. 3 Claims. (Cl. 292—283.)

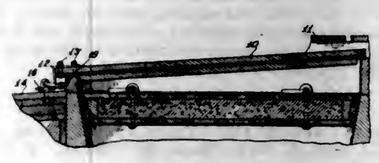


1. Locking means of the character described comprising an elongated hasp member one end whereof is inclined upwardly and bifurcated, the bifurcations at the outer ends having registering openings and at a point removed from the outer ends having registering openings and slots communicating with said openings; and a U-shaped hook member whose legs are of unequal length, the long leg at its end being provided with a laterally disposed portion corresponding with said slots in the hasp so as to permit insertion of the long leg into said openings with the slots, said slots being disposed in a direction beyond the swinging movement of the hook member when the hasp is secured in place and withdrawal of the hook member made impossible, the legs of the hook member being provided with aligned sealing medium receiving openings whereby sliding movement in the hasp is prevented when the hook member is in locking position.

1,873,644. LOCKING MEANS. VICTOR H. HARBERT, Chicago, Ill., assignor to Illinois Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed July 3, 1931. Serial No. 548,563. 3 Claims. (Cl. 292—283.)

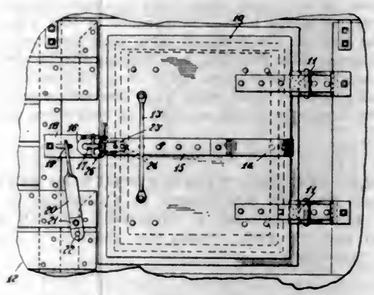
1. Locking means of the character described comprising a single piece member provided with an attaching base; an upstanding staple portion disposed transversely of and integral with the base; a laterally disposed extension integral with one side of the base and terminating in an upstanding enlargement provided with an opening therethrough arranged parallel with the opening in the staple portion and a vertically arranged slot communicating with the opening in the enlargement; and a U-shaped locking member with sides of unequal length, the long side of the member being slidingly mounted in the enlargement

while the short side is adapted to pass through the opening in the staple portion, the long side of the locking member adjacent opposite enda being provided with parallel extensions disposed in the same plane as the short



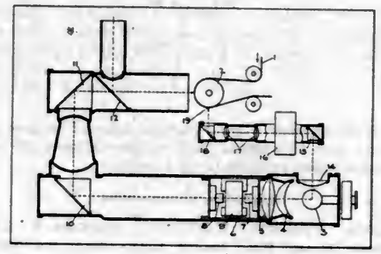
side of the locking member whereby movement of the locking member in locking and unlocking directions is controlled, the slot in said engagement being disposed beyond the arc of movement of the locking member when the single piece member is secured in place.

1,873,645. HATCH COVER LOCKING MEANS. VICTOR H. HARBERT, Chicago, Ill., assignor to Illinois Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed July 13, 1931. Serial No. 550,894. 1 Claims. (Cl. 292—283.)



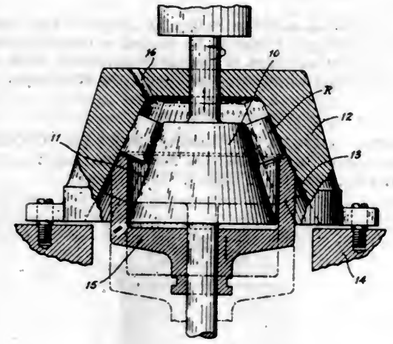
Locking means for the hatch cover of a refrigerator car comprising a hasp secured on the hatch cover so as to extend beyond the free end thereof, said extended end being bent downwardly and outwardly substantially into parallel relation with the car roof, said bent portion being apertured longitudinally, a staple secured to the car roof and adapted to pass through said aperture; a plate adapted to be secured on the hasp adjacent to the bent end thereof and provided at its free end with an enlargement extending beneath the plane of the main portion, said enlarged depending end having a transverse opening and a vertically disposed slot communicating with the opening; and a U-shaped locking member having legs of unequal length, the short leg being adapted to rest on the extended end of the hasp and to pass through the staple, while the long leg passes through the opening in the enlarged depending end of said plate and to slide therein, the end of the long leg having a lateral extension adapted to pass through said slot before the plate is secured in place; the slot in the plate being disposed in a plane beyond the arc of movement of the lateral extension at the end of the long leg of the locking member after the plate has been secured in place, the distance between the lateral extension of the locking member and said enlarged end of the plate being such that the short leg of the locking member cannot move beyond one edge of the staple receiving slot in the hasp.

1,873,646. APPARATUS FOR PHOTOGRAPHICALLY RECORDING SOUND. FRIEDRICH HEHLGANS, Berlin-Hermsdorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 5, 1931, Serial No. 567,011, and in Germany Oct. 9, 1930. 5 Claims. (Cl. 274—5.)



1. Apparatus for recording sound on a moving light sensitive member comprising a light source, means for directing light from said source on the member for recording sound and means for directing light from the same source on the member for producing identification marks thereon.

1,873,647. SYSTEM OF LAPPING TAPER ROLLERS. WILLIAM E. HOKE, Baltimore, Md. Filed June 23, 1931. Serial No. 546,199. 9 Claims. (Cl. 51—278.)

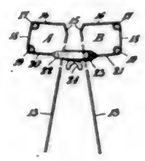


1. A lapping device for tapered rollers comprising in combination, a member having an internal conical surface, a member having an external conical surface, said members being adjustable angularly relatively to each other, means to retain a series of rollers closely adjacent each other between said conical surfaces and with their axes in a cone co-axial with the conical surfaces of said members, and means to effect lapping movements of said rollers relative to said members.

1,873,648. COLLAR TIP HOLDER. ERWIN KEINATH, New York, N. Y. Filed Sept. 15, 1931. Serial No. 562,868. 4 Claims. (Cl. 2—132.)

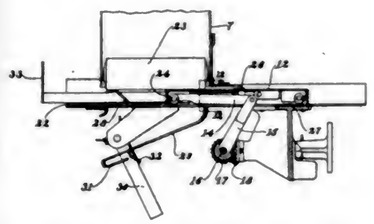
1. The combination with any existing soft collar, having the usual tip seams, of a collar tip support, comprising two symmetrically arranged, resilient members adapted to be united individually with their respective collar tips, each of said members comprising a tip stiffen-

ing element, insertable from the top into and to the end of the tip seam, an upper collar edge spacing portion and a resiliently mounted upper collar edge support, said mem-



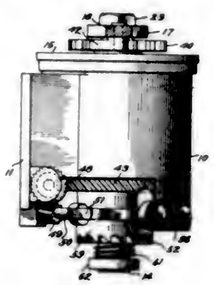
bers provided with a rigid closure, adapted to hold them together and to prevent their bodily sidewise or transverse movement relative to said collar.

1,873,649. VENDING MACHINE. EUSTACE R. KNOTT, Sharon, Mass. Filed May 9, 1931. Serial No. 536,103. 1 Claim. (Cl. 312—67.)



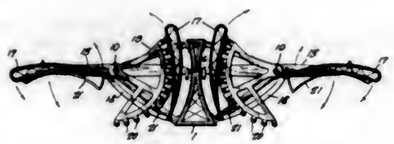
In a vending machine having an ejector which slides under a stack of articles to be vended, a supporter operable to lower one edge of the stack gradually while the ejector is being withdrawn from under the other edge.

1,873,650. AUTOMATIC DOORCHECK OR CLOSER. FERDINAND F. KUHL, Beatrice, Nebr. Filed July 28, 1931. Serial No. 553,640. 2 Claims. (Cl. 16—64.)



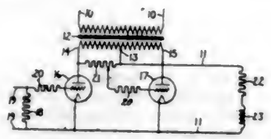
1. In a door closer, a cylindrical casing having a central stud bearing, a spindle fitted in said bearing, a closer arm fixed to the upper end of the spindle, a spring barrel about the spindle and having an upper hub, a sleeve portion in the barrel and telescoped upon the hub and bearing of the casing, a coiled tensioning spring surrounding the hub and sleeve, a notched bottom plate on the sleeve, a notched top plate on the hub, hook ends on the spring engaging the notched plates, an abutment lug on the hub, a beveled lug on the sleeve, a beveled lug on the top plate, said beveled lug being adapted for locking engagement with the abutment lug and forming a ratchet action therebetween, abutments formed on the plates, abutments formed in the casing and engaging the last named abutments, said hub being adapted to loosely receive the spindle, a ratchet ring fixed to the hub, a ratchet dog carried by the closer arm and engaging the ratchet ring, a worm gear journaled on the bearing, a worm screw journaled on the casing and meshing with the gear, a governor having connection with the worm screw, and a reversible ratchet clutch having one portion on the worm gear and the other portion on the spindle.

1,873,651. AEROPLANE. VIRGIL KUTNAR, Greeley, Colo. Filed Sept. 2, 1931. Serial No. 560,838. 4 Claims. (Cl. 244—25.)



1. An aeroplane comprising a body, frames journaled thereon at opposite sides of the median line of the body, means for simultaneously rotating the frames in opposite directions, a pair of wings freely pivoted upon each frame, means operatively connecting the wings together whereby the pivotal movement of one wing controls the pivotal movement of the other wing upon the same frame, the pivots of the wings located in advance of the centers of pressure and the arrangement being such that the wings move substantially edgewise and horizontally in outward directions over their pivots away from the body, swing outwardly at their inner edges while descending and move edgewise vertically at the sides of the body when ascending.

1,873,652. ELECTRIC VALVE RECTIFYING SYSTEM. HAROLD W. LORD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 31, 1931. Serial No. 584,078. 5 Claims. (Cl. 175—363.)

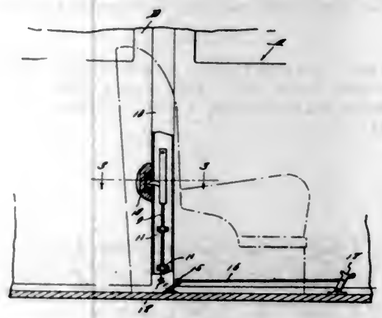


1. An electric valve rectifying system comprising a source of alternating current, a direct current load circuit, a pair of grid controlled electric valves interconnecting said circuits, an external control circuit connected to the grid of only one of said valves for controlling the conductivity thereof, means for normally maintaining the other valve non-conductive and for controlling the conductivity of said other valve in response to the conductivity of said first mentioned valve.

1,873,653. CLOSURE FASTENER. GEORGE DEWEY LYLES and JESSE M. LYLES, Statesville, N. C., assignors, by direct and mesne assignments, of one-half to said George Dewey Lyles and one-half to H. H. Yount, Statesville, N. C. Filed Aug. 19, 1931. Serial No. 558,173. 2 Claims. (Cl. 292—6.)

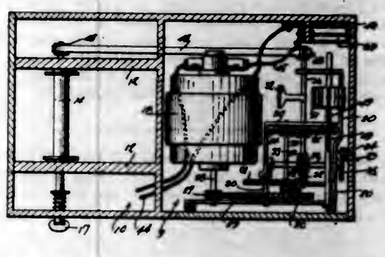
1. A door locking device for locking a plurality of doors to a door stile including in combination a horizontally actuated member, a casing adapted to be mounted in the door stile, a rod slidable vertically in said casing,

means including a loose connection for connecting said horizontally actuated member with said rod and adapted to impart vertical movement to said rod when actuated,



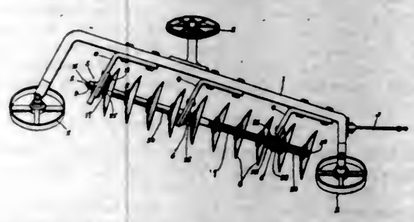
a pivot mounted on said rod, a plurality of curved bolts mounted on said pivot and projecting in opposite directions and adapted when actuated to lock said doors.

1,873,654. AUTOMATIC CAMERA. ANDREW M. MANNICK, Hazleton, Pa. Filed Nov. 24, 1931. Serial No. 577,133. 7 Claims. (Cl. 95—31.)



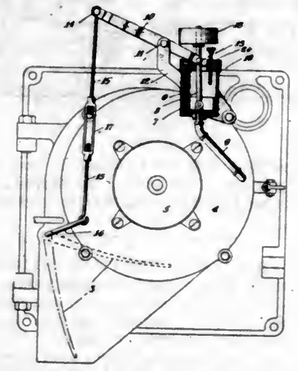
1. In an automatic camera of the character described, a casing, a lens and shutter mechanism, an electric motor in the casing, a gear train operated by the motor, operative connections between the gear train and shutter mechanism, a pair of contacts in circuit with the motor normally engaged with each other, and means operated by the gear train for separating the contacts to render the motor inoperative.

1,873,655. SUPPORTING MEANS FOR DISK PLOW SHAFTS. JOSEPH B. MAPP, Tyrone, and FRED W. HOBME, Hooker, Okla. Filed Oct. 22, 1931. Serial No. 570,434. 6 Claims. (Cl. 97—53.)



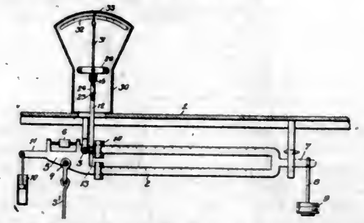
1. In a supporting means for a multiple plow disk carrying shaft, a thrust bearing including an outer part and a tapered inner part supporting the rearward end of the shaft, said outer part having a tapered bore and a chamber communicating with the bore, said inner part being rotatably seated in said bore and having an opening for the projection of the shaft therethrough into the chamber, a plurality of washers within the chamber for abutment with the rearward end of the shaft, means for admitting lubricant to said chamber, and a guide bearing slidably supporting the shaft forwardly of the thrust bearing.

1,873,656. DAMPER CONTROL MEANS FOR FURNACES. HARRY MEACHEM, Teaneck, N. J., assignor to Todd Dry Dock, Engineering & Repair Corporation, Brooklyn, N. Y. Filed Apr. 15, 1931. Serial No. 530,178. 3 Claims. (Cl. 110—75.)



1. The combination with a furnace having induced air supply means, a damper therefor, and a blower to supply primary air, of a cylinder located in fixed relation to said furnace, a piston in said cylinder, a piston rod, adjustable connecting means between said rod and damper, a weight carried by said piston to counterbalance said damper and normally close it while holding the piston depressed, communicating means between said blower and cylinder whereby pressure from the blower will raise the piston and cause the damper to open, and adjustable means for regulating the stroke of the piston.

1,873,657. SCALE BALANCE CORRECTOR. HENRY MEYERINK, Clymer, N. Y. Filed May 22, 1931. Serial No. 539,353. 5 Claims. (Cl. 265—58.)

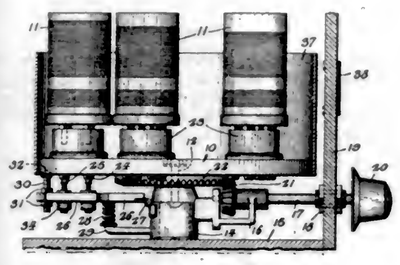


1. A balance corrector for scales comprising an actuating arm having a forked end, a rock shaft, a pointer extending from said rock shaft, a second arm extending from said rock shaft, a shaft carried by said second arm and positioned to be engaged by said forked end so that when the actuating arm is moved, said pointer will be swung in proportion to the movement of said rock shaft.

1,873,658. TUNING COIL SHIFTER. CHARLES M. MURDOCK, Maywood, Calif. Filed Nov. 24, 1931. Serial No. 577,121. 8 Claims. (Cl. 171—119.)

1. A coil shifting device comprising a movable table, a plurality of coils carried on said table, a stationary mem-

ber having contacts for connection in the circuit of a radio apparatus, and means for effecting movement of the table to selectively position any of the coils over said

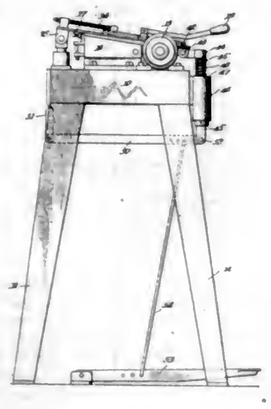


stationary member with its terminals in end engagement with the contacts of the latter, the stationary member having a spring yieldingly impelling it toward the table.

1,873,659. PROCESS OF TREATING SILICON STEEL. ALPHONSUS F. MURPHY and WILLIAM JONES, Zanesville, Ohio, assignors to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed May 18, 1931. Serial No. 538,253. 7 Claims. (Cl. 148—12.)

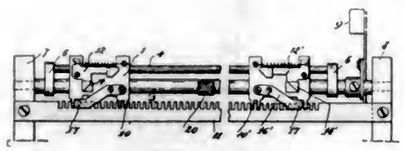
1. A process for preparing silicon steel sheets for electrical purposes which consists in pickling, neutralizing, and washing the hot-rolled silicon steel sheets, then cold rolling them to impart surface without substantial reduction in thickness, and finally annealing the sheets to impart magnetic properties.

1,873,660. TOOTHBRUSH TRIMMING MACHINE. WILLIAM J. NEELY, Freeport, Ill., assignor to The W. T. Rawleigh Company, Freeport, Ill., a Corporation of Illinois. Filed Nov. 11, 1931. Serial No. 574,450. 12 Claims. (Cl. 300—17.)



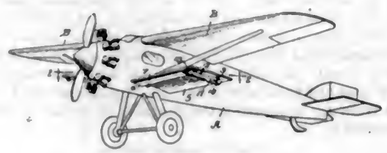
1. A brush trimming machine comprising a rotary knife, a brush holding slide, and a slide support pivotally mounted at one end for swinging movement with respect to said knife, a supporting means for the other end of said slide support, said means being movable to swing said slide support toward and away from said knife, resilient means urging said supporting means to one limit of its movement, and other means operable to move said supporting means to its other limit of movement, whereby said slide support may assume two different trimming positions.

1,873,661. TYPEWRITER MARGINATOR. CAMILLO OLIVETTI, Ivrea, Italy. Filed July 9, 1931, Serial No. 549,758, and in Italy Feb. 4, 1931. 2 Claims. (Cl. 197—70.)



1. In a system of typewriter marginators of the so called automatic pattern, a device for stopping the marginator blocks on moving the same along their guide in a position proper to allow the regular operation of the member for fixing them to said guide, said device being also designed for braking the free shifting of said blocks on said guide so as to prevent any undesired motion: a yielding knob or any like member, rigidly bound to said marginator block in the longitudinal direction; a rack on which the marginator is usually fixed, over whose teeth said knob is capable of running, being pressed elastically on said teeth so as to spring from one tooth space to the next and to stop always in the space between two teeth.

1,873,662. SUPPLEMENTAL ADJUSTABLE WING FOR AIRCRAFT. JOHN F. O'MALLEY, New York, N. Y. Filed July 18, 1931. Serial No. 551,764. 2 Claims. (Cl. 244—12.)

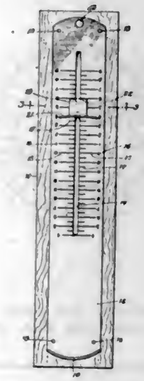


1. In an airplane, a wing supplementing the main wing and adjustable to vary its angle of attack with reference to the main wing, mechanism controllable by the pilot for adjusting said supplemental wing and for maintaining the same in a set position, and means for bracing said supplemental wing adjacent its outer end, comprising a rigid strut, a brace link pivoted thereto and having sliding and pivotal connection with the supplemental wing adjacent its trailing edge.

1,873,663. FOOT MEASURING DEVICE. JOSEPH PIETZUCH, St. Louis, Mo. Filed Aug. 18, 1931. Serial No. 557,913. 1 Claim. (Cl. 33—3.)

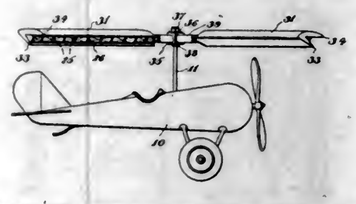
A measuring device including a plate having a measuring scale facing upwardly, said plate having a longitudinal slot closed at the ends, a slide fitted to said plate by reason of said slot and movable in relation to said scale, said slide consisting of two parts fastened together and of such construction as to provide grooves which receive the opposite side edges respectively of the plate bounding the

slot, one end of said slide providing a straight edge movable in relation to the graduations of the scale by moving the slide to indicate various foot sizes, the remaining end



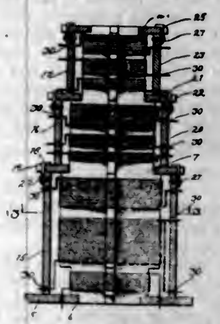
of said slide having a toe abutment, and a heel abutment on one end of said plate which cooperates with said toe abutment.

1,873,664. AIR FOIL. CHET E. RICKARD, Anaconda, Mont. Filed May 13, 1931. Serial No. 537,085. 5 Claims. (Cl. 244—19.)



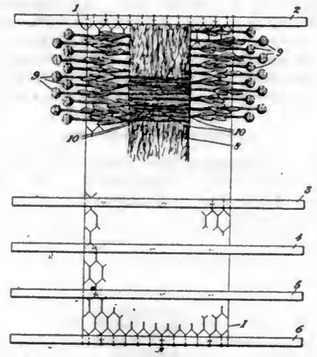
1. An air foil comprising ribs of V-shaped cross section, a covering for the ribs, said ribs providing a V-shaped recess longitudinally of the trailing edge of the air foil, and a shaft connecting the ribs longitudinally throughout the air foil and disposed within said recess.

1,873,665. COIL UNIT. GIUSEPPE RIGANTE, Westerleigh, Staten Island, N. Y. Filed Apr. 22, 1931. Serial No. 532,040. 6 Claims. (Cl. 175—360.)



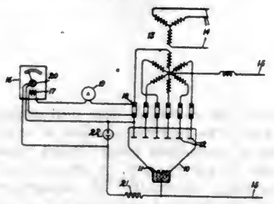
1. A coil supporting device comprising a base member, a coil supporting member removably carried thereby and projecting from the base member, a plurality of coils formed on said coil supporting member, and shielding means supported from the base and surrounding said coil supporting member, said shielding means comprising a plurality of separate sections of insulating material separating certain of the coils on the coil supporting member, and means for removably securing said sections together to form the shield.

1,873,666. MEANS AND METHOD FOR PACKING FLOWERS. WILLIAM ORMISTON ROY, Montreal, Quebec, Canada. Filed June 30, 1931. Serial No. 547,828. 8 Claims. (Cl. 206—46.)



6. Means for packing flowers consisting of an elongated flexible, openwork foundation, and comparatively rigid reinforcing strips attached transversely thereto with their ends projecting substantially beyond the sides of the foundation.

1,873,667. MEASUREMENT OF RECTIFIER VOLTAGES. CAMIL A. SABBAH, Schenectady, and CHANCY F. WHITNEY, Scotia, N. Y., assignors to General Electric Company, a Corporation of New York. Filed June 26, 1931. Serial No. 547,072. 4 Claims. (Cl. 175—363.)

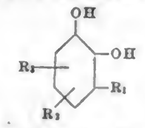


3. Apparatus for measuring the power of rectification consumed in mercury arc rectifiers comprising in combination with such a rectifier having cathode and anode terminals, a direct-current wattmeter having a current coil connected to be influenced by the current through said rectifier and a voltage coil connected in a circuit across the cathode and anode terminals of said rectifier, a resistance in said circuit and an instrument rectifier connected directly in shunt to said voltage coil in reverse rectifying relation to the mercury arc rectifier.

1,873,668. STABLE SOLUTIONS OF METAL COMPLEX COMPOUNDS. HANS SCHMIDT, Wuppertal-Vohwinkel, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 13, 1931, Serial No. 529,889, and in Germany May 10, 1929. 11 Claims. (Cl. 23—250.)

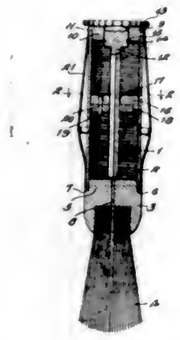
1. Aqueous solutions of the alkali metal salts of complex compounds of a therapeutically active heavy metal of the

group consisting of antimony, arsenic, manganese and bismuth with a polyhydroxy benzene of the probable formula:



wherein R_1 stands for hydrogen or a hydroxy group, R_2 stands for an acid substituent of the group consisting of the carboxylic and sulfonic acid groups and R_3 stands for hydrogen or a sulfonic acid group, said solutions being characterized by a hydrogen ion concentration of about 6.5 to 7.5 and by a small content of a sulfurous acid derivative of the group consisting of alkali metal- and ammonium-sulfites, -bisulfites, -meta bisulfites and acetonebisulfites, said solutions being stable when filled in closed vessels and showing no discoloration even when sterilized by heat.

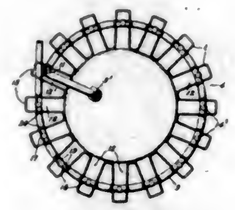
1,873,669. FOUNTAIN SHAVING BRUSH. RAY E. SMITH, Dallas, Tex. Filed May 7, 1931. Serial No. 535,731. 4 Claims. (Cl. 15—137.)



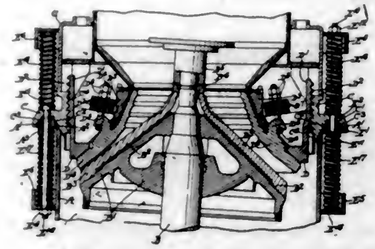
1. A device of the character described comprising a hollow handle body, the internal surface of said body being provided with a continuous screw thread formed throughout the entire length thereof, a brush head having an extension threaded externally for engagement with the end portion of the internal screw thread at one extremity of said handle, a cap having an extension threaded externally for engagement with the other end portion of the internal screw thread at the remaining extremity of said handle, a follower disk received within said body having its peripheral portion in screw threaded engagement with the intermediate portion of the continuous internal screw thread of said body, and means carried by said cap and operably associated with said disk to cause the latter to move on said continuous thread.

1,873,670. CONDENSER FOR REFRIGERATING MACHINES. CHRISTIAN STEENSTRUP, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 12, 1931. Serial No. 580,599. 5 Claims. (Cl. 257—36.)

1. An air-cooled condenser for a refrigerating machine including a supporting member, a plurality of heat dissipating elements surrounding said supporting member, a substantially horizontal manifold arranged about said supporting member and having an inlet and an outlet for refrigerant, and upwardly extending closed ducts connected to said manifold, said ducts being arranged in heat exchange relation with said heat dissipating elements.



1,873,671. YIELDING RELEASE FOR CRUSHER BOWLS. EDGAR B. SYMONS, Hollywood, Calif., assignor to Nordberg Manufacturing Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 5, 1931. Serial No. 555,215. 7 Claims. (Cl. 83—10.)

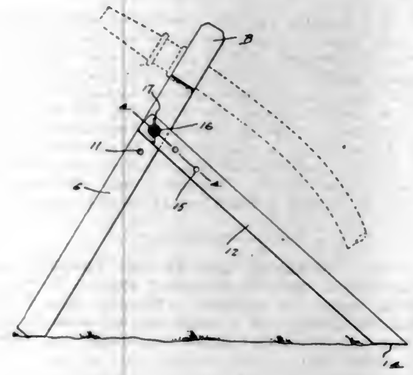


1. In a gyratory crusher, a fixed circumferential frame member, a crushing head and means for gyrating it, a bowl surrounding the head, supporting means for the bowl tiltably mounted upon the upper edge of the frame member, and yielding means for holding said supporting means normally fixed in relation to said frame, said means including a set of springs positioned above said supporting means and a set of springs positioned below said supporting means, abutment members confining the upper and lower ends respectively of said sets of springs, and compression members, extending respectively upwardly and downwardly from said bowl supporting means in securing relationship with the upper and lower abutment members respectively.

1,873,672. SPRINKLING SADDLE. JOHN THEYS, Denver, Colo. Filed July 28, 1931. Serial No. 553,680. 1 Claim. (Cl. 248—29.)

A device for supporting the nozzle end of a sprinkling hose comprising a substantially inverted U-shaped stand having a straight like depending portion, the stand being formed of one piece of material, a hose holding member of inverted U-shape and formed from a single piece of material with the bight bolted to the bight of the stand and its legs diverging upwardly from the bight, the upper portion of the legs of the stand having a longitudi-

nally extending row of holes therein, a prop forming bar for attachment to each leg of the stand, each bar having a longitudinally extending row of holes in its upper part with its lower end beveled to engage a surface and a bolt passing through registering holes in each prop and a leg of the stand.



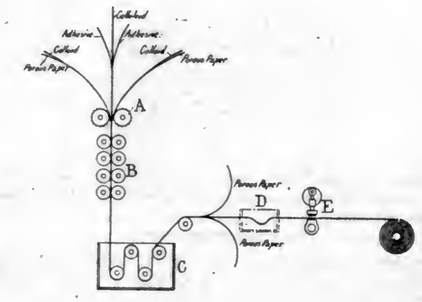
1,873,673. MULTICOLOR SCREEN FILM. JOHN EDWARD THORNTON, West Hampstead, London, England, assignor to John Owden O'Brien, Manchester, England. Filed Feb. 16, 1927, Serial No. 168,765, and in Great Britain Mar. 16, 1926. 4 Claims. (Cl. 95—81.5.)



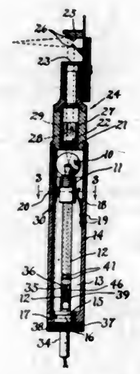
1. A multi-color screen and support comprising a transparent support a plurality of lines in insoluble colored colloid printed upon one side of said support, a plurality of differently colored dyed lines alternating with the printed lines on said support, a second transparent support, a plurality of lines in insoluble colored colloid printed upon one side of the second support, a plurality of differwith the printed lines on one crossing the printed lines in the second supports, the printed and dyed lines on the second support being differently colored from those on the first support, the two supports being assembled with the printed lines on one crossing the printed lines on the other to form the complete color screen.

1,873,674. PRODUCTION OF CINEMATOGRAPH FILM POSITIVES. JOHN EDWARD THORNTON, St. Brelade, Jersey, Channel Islands, assignor to John Owden O'Brien, Manchester, England. Filed Apr. 12, 1929, Serial No. 354,715, and in Great Britain Apr. 25, 1928. 4 Claims. (Cl. 88—16.4.)

1. A process for the production of continuous strip cinematograph film positives comprising printing a series of partial images through negatives by exposure to light on to sensitized colloid carried on the front faces of porous paper strips, transferring the partial images so formed one on to each side of a strip of plain non-perforated film base material, developing the images into reliefs simultaneously through the thin porous paper supports and stripping off the paper supports.



1,873,675. DIAGNOSTIC INSTRUMENT. EDGAR D. TILLYER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 8, 1926. Serial No. 147,038. 10 Claims. (Cl. 88—20.)

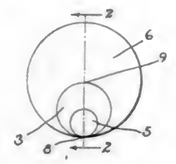


6. In a diagnostic instrument of the character described, a casing, a lamp-socket, a staff supporting the socket in the casing and having a weakened integral portion to permit of its lateral deflection, and means for lateral adjustment of the lamp-socket.

1,873,676. OPHTHALMIC LENS. EDGAR D. TILLYER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed May 15, 1928. Serial No. 278,012. 8 Claims. (Cl. 88—54.)

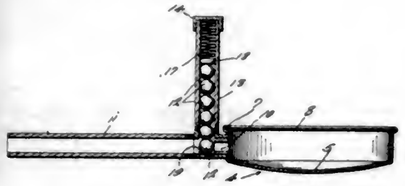
1. A multifocal lens comprising a major portion of one index of refraction having a countersink therein, said countersink being circular in outline, a segment of different index of refraction secured in said countersink, the countersink side of said lens being finished to a con-

tinuous curved optical surface over the said major portion and over a portion of the segment and a portion of said segment being finished to a curved optical surface



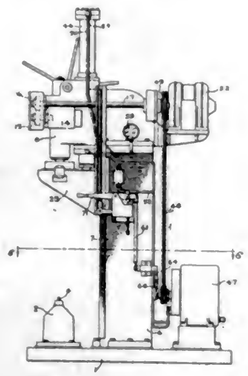
recessed into said segment and of different curvature from the said continuous surface, the outline of said portion being circular.

1,873,677. PROJECTILE SHOOTING GUN. PHILIP C. TRAVER, Lynbrook, N. Y. Filed Aug. 21, 1931. Serial No. 558,606. 5 Claims. (Cl. 124—8.)



1. A gun of the class described comprising a pneumatic device embodying a receptacle having a flexible diaphragm defining an air trapping and exhausting chamber, a barrel attached to the marginal rim portion of said container, and means for feeding projectiles into said barrel comprising a container secured to said receptacle in communication with said barrel and a spring-pressed follower in said container.

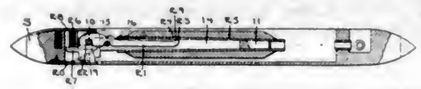
1,873,678. MACHINE LATHE. ALFRED TROSCH, Rochester, N. Y., assignor to Consolidated Machine Tool Corporation of America, Rochester, N. Y., a Corporation of Delaware. Filed Oct. 5, 1928. Serial No. 310,616. 12 Claims. (Cl. 82—20.)



2. A turning machine comprising a frame, live and dead centers for supporting a work piece, a tool carrier movable relatively to the work piece, said tool carrier comprising a platform having an opening which surrounds the work during movement of the carrier, means for mounting a series of tools on the platform around the work, steadying means also mounted on said platform and engaging the work, and means positively engaging the work to turn it.

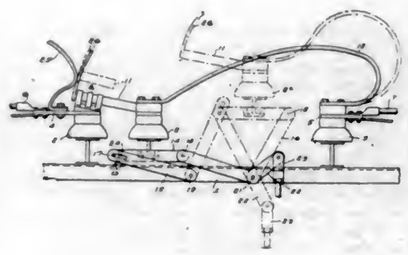
12. In a machine tool, the combination with a carrier and fluid pressure means for actuating the carrier, of devices for governing the fluid pressure means comprising a control member, a pivoted hand lever connected to the control member, a bell crank pivoted coaxially with said lever, a releasable spring pin connecting the bell crank and hand lever for normal simultaneous movement, a camway on the carrier, a cam actuated device controlled by said camway and connected to the bell crank, and a spring actuated rod also connected to said bell crank for moving the control member toward neutral position.

1,873,679. INTERNAL ELECTRICAL FEELER FOR SHUTTLES. RICHARD GREENLEAF TURNER, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 26, 1930. Serial No. 484,598. 2 Claims. (Cl. 139—205.)



1. In a shuttle having a mass of weft therein, a detector member located within the mass and having flexible elements tending to project through the last few coils of weft to effect indication of weft exhaustion, the elements capable of yielding to permit unhindered uncoiling of the last weft coils.

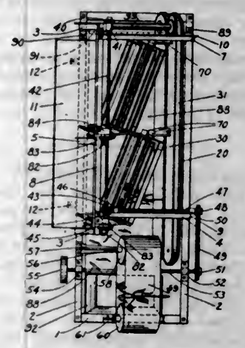
1,873,680. SWITCH MECHANISM. ALFRED T. TWISS, Trafford, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 18, 1927. Serial No. 199,679. 4 Claims. (Cl. 200—48.)



1. A circuit interrupter provided with separable contact members rigidly supported upon stationary and movable insulating members, mechanism for actuating and for retaining said movable insulating member in substantially vertical position during its movement and means for tilting said movable insulator and, therefore, said attached contact member at the initial movement of separation of the contact members.

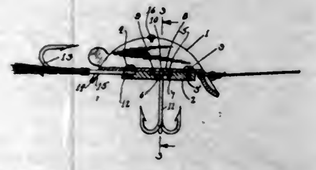
CARNEGIE LIBRARY OF ATLANTA

1,873,681. BEAN PICKER. WILLIAM E. URSCHEL, Valparaiso, Ind. Filed Apr. 24, 1929. Serial No. 357,624. 13 Claims. (Cl. 130—30.)



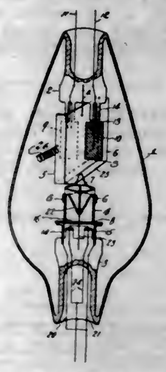
2. A bean picker comprising holding means for bean stalks, and oppositely rotating members in juxtaposition to one another revolving upon parallel axes oblique to the direction of such stalks and adapted to cooperate to pull the pods from said stalks in said holding means.

1,873,682. FISH LURE. JOHN A. VAN NESS, Bloomington, Ill. Filed Apr. 11, 1930. Serial No. 443,459. 5 Claims. (Cl. 43—46.)



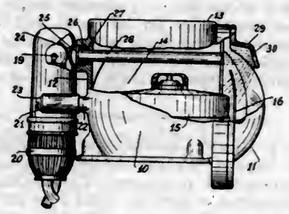
1. In a fish lure, the combination of a body portion having a circular recess therein, a plate member having an opening therethrough of lesser diameter than the diameter of the recess, a hook member extending through said opening and provided with an eye portion rotatably disposed in the recess, and means for connecting said plate member with the body portion.

1,873,683. ELECTRIC DISCHARGE DEVICE. CARL J. R. H. VON WEDEL, Berlin, Germany, assignor to Electrons, Inc., a Corporation of Delaware. Filed May 9, 1929. Serial No. 361,651. 8 Claims. (Cl. 250—27.5.)



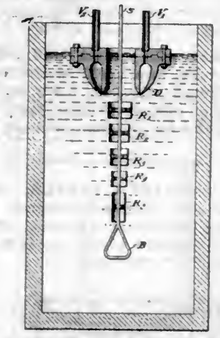
1. A cathode structure for gaseous discharge tubes comprising a metallic cup and an electron emissive element having a pyramidal configuration disposed within said cup with its apex adjacent the bottom thereof.

1,873,684. COMPASS. ADOLF URFER, Brooklyn, N. Y., assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed May 11, 1929. Serial No. 362,188. 13 Claims. (Cl. 240—2.1.)



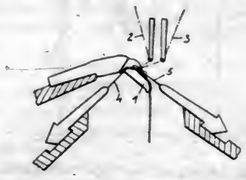
1. The combination with a compass bowl containing liquid and a compass-card therein, of an optically clear member passing through a wall of said compass-bowl, a source of light disposed in the vicinity of one end of said optically clear member, reflecting means located so as to reflect light passing through said optically clear member upon the compass-card, and a source of light disposed in the vicinity of one end of said optically clear member whereby light therefrom may be introduced to the interior of said compass-bowl through said optically clear member.

1,873,685. APPARATUS FOR SPINNING TUBULAR BODIES MADE OF CELLULOSE. JULIUS VOSS and ARTHUR SCHADE, Wiesbaden-Biebrich, Germany, assignors, by mesne assignments, to The Visking Corporation, Chicago, Ill., a Corporation of Virginia. Filed Feb. 20, 1929, Serial No. 341,433, and in Germany Feb. 23, 1928. 3 Claims. (Cl. 18—14.)



1. In an apparatus for spinning from above downwards tubular bodies made of cellulose, an annular nozzle open on both ends, and a core which can be freely moved upwards and downwards inside of the nozzle.

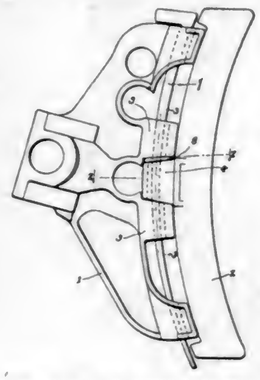
1,873,686. DOUBLE WARP FRAME. FRIEDRICH WAGNER, Russdorf, near Oberfrohna, Germany. Filed Jan. 15, 1929, Serial No. 332,594, and in Germany Jan. 23, 1928. 1 Claim. (Cl. 66—87.)



A double warp frame comprising two banks of needles and two banks of sinkers, each of said banks of sinkers

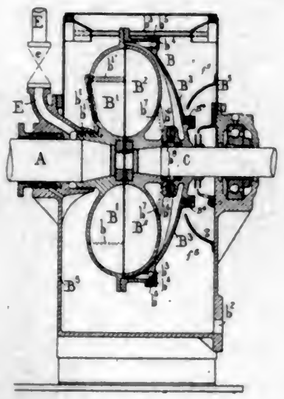
cooperating with and encroaching temporarily in one of the rows of said needles, said sinkers adapted to be withdrawn from its corresponding row of needles when lapping takes place, said needles being of such a length as to permit lapping when the sinkers are retracted from the needles and being of insufficient additional length to permit lapping when the sinkers are advanced, and during the laying of the threads the fabric is held tight by the other rows of needles near the securing parts of the needles so that it cannot be drawn up to the needle hook upon these needles.

1,873,687. WEAR REDUCING KEY FOR BRAKE HEADS. JOHN A. WAGNER, Decatur, Ill., assignor, by mesne assignments, to Transerv Corporation, Chicago, Ill., a Corporation of Illinois. Filed June 26, 1931. Serial No. 547,124. 6 Claims. (Cl. 188—243.)



1. In combination with a brake head and shoe having overlapping, apertured lugs, and a substantially flat brake pin extending through said lugs, a key inserted between an adjacent pair of said overlapping lugs, said key having an elongated slot for receiving said pin therethrough.

1,873,688. HYDRAULIC CLUTCH. GEORGE HENRY WALKER, Worcester, England, assignor to Heenan & Froude Limited, Worcester, England. Filed June 16, 1930, Serial No. 461,610, and in Great Britain Sept. 7, 1929. 5 Claims. (Cl. 192—58.)

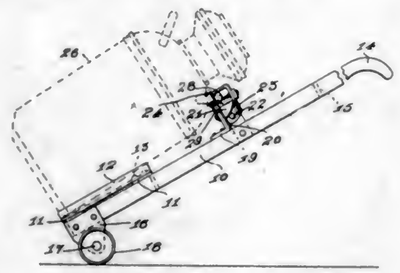


1. A hydraulic clutch of the type referred to for transmitting power comprising the combination with the driving shaft and the driven shaft of a rotor mounted on the driving shaft, a rotor mounted on the driven shaft, cups in the first rotor and coacting cups in the second rotor, vanes separating adjacent cups in the first rotor, vanes separating adjacent cups in the second rotor, passages formed in the vanes for the admission of cooled liquid, passages formed in the vanes for placing the centres of the vortices in communication with the atmosphere, a cover plate surrounding one rotor and bolted to the other rotor, a release valve adjacent to the axis of rotation and means to supply liquid to the cups.

1,873,689. COMPOSITION CONTAINING CELLULOSE DERIVATIVES AND PROCESS OF MAKING THE SAME. JAMES F. WALSH, East Orange, and AMERIGO F. CAPRIO, Newark, N. J., assignors to Celluloid Corporation, a Corporation of New Jersey. Filed Mar. 23, 1928. Serial No. 264,271. 18 Claims. (Cl. 134—26.)

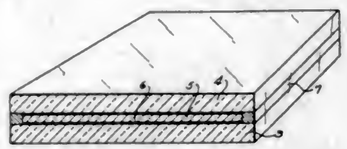
1. In the method of making solutions, plastic masses, films, yarns and other articles, the step of forming a solution of a derivative of cellulose in a solvent mixture comprising a substantially unpolymerized vinyl compound and an auxiliary organic liquid.

1,873,690. CAN OR PAIL HAND TRUCK. CHARLES B. WARD, Detroit, Mich. Filed July 6, 1931. Serial No. 549,049. 1 Claim. (Cl. 280—53.)



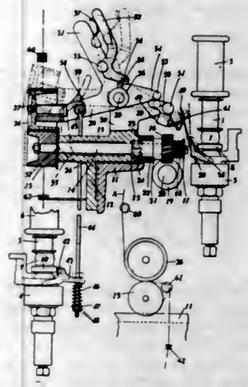
In a two-wheeled hand truck, a frame having a can or pail rack at its lower portion, an angle cross bar on the frame spaced from the rack and adjustably secured to said frame, bearings carried by and projected from the cross bar for engagement through the handles of cans or pails when upon the rack and having lugs upstanding and secured to the frame, hook-like latches pivoted to the lugs to embrace said handles and rest upon the bearings, a rod uniting the latches, and a tensioning spring active upon the rod to hold the latches in engaging position in unison with each other.

1,873,691. LAMINATED GLASS. GEORGE B. WATKINS, Toledo, Ohio, assignor to The Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 3, 1928. Serial No. 258,746. 5 Claims. (Cl. 49—81.)



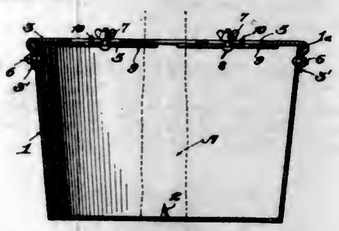
4. The process of producing laminated glass consisting in making a mixture of gelatin, water, and a polyglycol, applying a film thereof to one surface each of two sheets of glass, then arranging a sheet of cellulose ester between the coated surfaces of the glass sheets, and applying heat and pressure to the sandwich thus formed to produce a composite structure.

1,873,692. TWISTING MACHINE. WILLIAM HAINSWORTH WATSON, Bradford, England. Filed Dec. 24, 1931, Serial No. 583,065, and in Great Britain Apr. 21,1931. 9 Claims. (Cl. 117—30.)



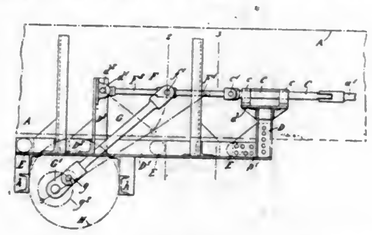
1. A twisting machine for yarns and the like, including spindles carrying bobbins and also including upper and lower feed rollers co-operating with said spindles to feed said yarns and the like to said bobbins, characterized by a series of individual upper feed rollers and a co-acting series of individual lower feed rollers, each upper feed roller and each lower feed roller being mounted on an arbor whereof one end is unobstructed by a bearing, means to elevate bodily each upper feed roller, means to maintain each upper feed roller positively in an elevated position, each lower feed roller being driven positively, and means associated with each upper feed roller to disengage the corresponding lower feed roller from its driving means and arrest said lower feed roller when said upper feed roller is elevated.

1,873,693. CHRISTMAS TREE HOLDER. CLIFFORD M. WHITFIELD and RICHARD C. CAGE, Sioux Falls, S. Dak. Filed Feb. 5, 1931. Serial No. 513,723. 2 Claims. (Cl. 248—38.)



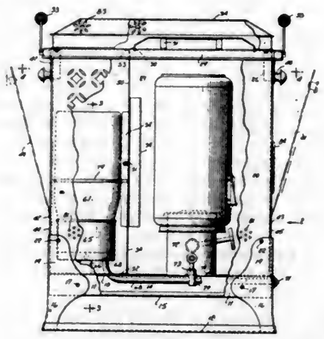
2. In a Christmas tree holder, a cylindrical receptacle, a base plate seated upon and extending diametrically across the top of said receptacle, said plate having an opening intermediate its ends to receive a tree trunk and having elongated slots extending lengthwise of the plate, a pair of tree engaging jaws carried by the plate and having lugs engaging in the slots of the plate to prevent lateral movement of the jaws, bolts extending through the slots and jaws to adjustably connect the jaws to the plate, and means to removably mount the plate on the receptacle.

1,873,694. DRIVING GEAR OF JIGGING CONVEYERS. TOM BIGGS WILKINSON, Blackston, Arnside, England. Filed May 31, 1930, Serial No. 458,243, and in Great Britain June 18, 1929. 6 Claims. (Cl. 74—14.)



1. Driving gear for jigging conveyers comprising, in combination, a frame presenting fixed supporting members; a single-acting toggle having one arm pivoted at its end to the frame; a reciprocating link connecting the other arm to the troughing; a guide bearing for the link on one of the supporting members; a connecting rod pivoted to the toggle at the pivot connecting the toggle arms; and a crank for driving the connecting rod, the connecting rod being so arranged that when the toggle arms are in substantial alinement, the crank pin is disposed between, and on the line through the centre of the crank and the centre of the pivot between the toggle arms, so that, during a considerable part of each revolution of the crank pin, substantially no movement will be imparted to the troughing.

1,873,695. HEATER. FRANK THEODORE WILLIAMS and HAROLD E. ELLIS, Meriden, Conn., assignors to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Oct. 28, 1929. Serial No. 402,859. 5 Claims. (Cl. 126—46.)

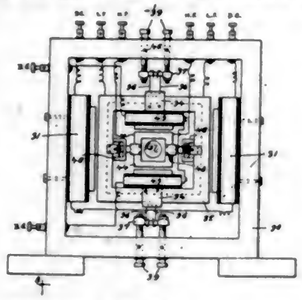


1. A portable heater comprising a base, side panels, end panels each having a door, a cover plate supported from the side panels and spaced above the same, a vertical partition dividing the interior into two compartments to which access may be had by the doors, an oil burner in one compartment, a fuel supply tank in the other compartment, and a fuel pipe connecting the tank and burner.

1,873,696. TELEVISION APPARATUS. MELCHOR CENTENO V., Caracas, Venezuela. Filed Apr. 14, 1931. Serial No. 530,069. 12 Claims. (Cl. 178—6.)

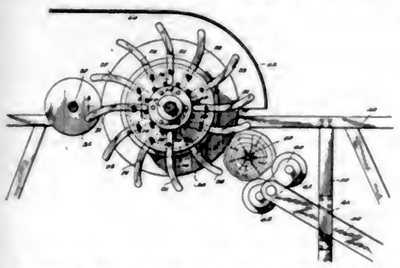
1. In combination, a member provided with means for producing a fixed magnetic field, a member suspended in said field and itself having means for producing a fixed magnetic field transverse to the first magnetic field, said

member being mounted for vibration on the axis of its own fixed magnetic field, a mirror carrying member mounted in the second member for vibration around an



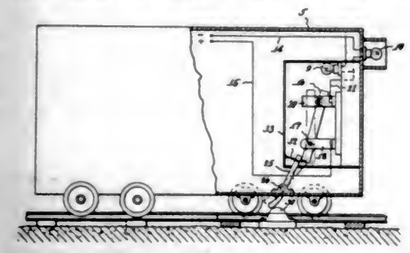
axis at angles to the axis of the latter, and means for producing alternate magnetic fields of different frequencies in said second member and said mirror carrying member.

1,873,697. DEVICE FOR REMOVING BARK FROM LOGS. JOHN M. COUNCIL, Wananish, N. C. Filed Apr. 3, 1931. Serial No. 527,513. 2 Claims. (Cl. 144—208.)



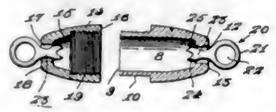
1. A device for peeling bark from logs comprising a driven shaft, a plurality of discs secured to the shaft, each alternate disc being of greater diameter than the intermediately disposed discs, all of the discs having alined passages, bolts inserted through the passages for securing the discs together, hammers pivotally mounted intermediate the ends thereof between pairs of the alternate discs, means engaging the inner free ends of the hammers for limiting the movement of the outer free ends of the hammers towards the direction of travel of the discs, spaced discs mounted for rotation on the shaft independently of the shaft, means for causing rotation of the discs, the last-mentioned discs adapted to engage a log acted on by the hammers for causing rotation of said log.

1,873,698. AUTOMATIC TRAIN SIGNAL. JAMES CURAS and ATHAS ADAMIS, Stamford, Conn. Filed Sept. 29, 1931. Serial No. 565,850. 1 Claim. (Cl. 246—174.)



The combination with an engine of electrically energized signal means for indicating that the engine is on the wrong track, and a control for said signal means comprising a switch having a rockably mounted blade for shifting it to open and closed positions, said switch being in circuit with the signal means, a rock shaft journaled on the engine, a lever fixed to the rock shaft and having a pendent arm for engaging a track obstruction, the remote end of the lever being disposed in overlapping relation with an extension of the switch blade, so that the rocking of the lever will effect movement of the switch blade, and a spring tensioned between the lever and a fixed point to retract the blade engaging end of the lever and dispose the obstruction engaging end in the path of said obstruction.

1,873,699. EYELET FOR CLASPS. ALEXANDER DANENBERG, Brooklyn, N. Y. Filed May 20, 1931. Serial No. 538,829. 4 Claims. (Cl. 24—230.)



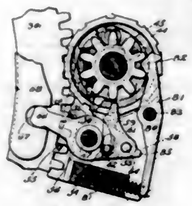
1. A clasp, comprising a hollow sectional body member with the sections detachably connected, and eye members swiveled in the remote ends of said body member, each eye member comprising an eye portion and a connected solid shank portion passing loosely through an aperture in said body member and having its inner end bifurcated with the arms of the bifurcation spread laterally to prevent withdrawal of said shank.

1,873,700. CIRCULAR SAW. JOHN T. H. DEMPSTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 1, 1931. Serial No. 534,359. 5 Claims. (Cl. 143—33.)



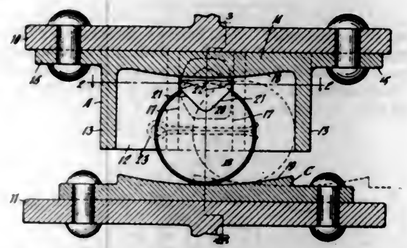
2. The combination with a rotary disk and means for mounting and rotating said disk comprising a saw table, of a plate mounted close to said disk beneath the saw table and covering approximately 180 angular degrees of said disk and being adapted to prevent vibration of said disk.

1,873,701. CASH REGISTER. FREDERICK L. FULLER, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Dec. 22, 1922. Serial No. 608,467. 17 Claims. (Cl. 235—138.)



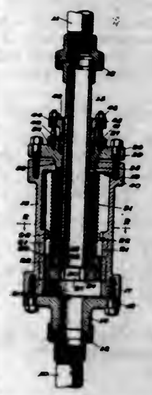
1. In a machine of the class described, the combination with a plurality of registering elements, a transfer tripping projection movable with one of said elements, a trip pawl actuated by said tripping projection, an arm in juxtaposition to the trip pawl and carrying a transfer pawl, and a pin and slot connection between said trip pawl and transfer pawl whereby the transfer pawl is set to transfer position relative to the arm when the tripping projection engages the trip pawl, said trip pawl and transfer pawl remaining in set position until subsequent movement of said arm.

1,873,702. SIDE BEARING FOR RAILWAY CARS. HENRY FUCHS, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 5, 1928. Serial No. 323,854. 3 Claims. (Cl. 308—226.)



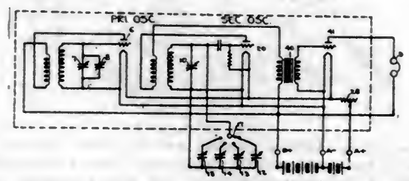
1. In a side bearing for railway cars, the combination with cooperating body and truck bolsters; of a bearing member mounted on the truck bolster, having an exterior top bearing surface upwardly inclined from the center in opposite directions; a housing secured to the body bolster, said housing having spaced end and spaced side walls and an interior bearing surface opposed to said first named bearing surface; and an anti-friction roller interposed between said bearing surfaces and supported at all times entirely on the truck bolster bearing surface and having rolling contact therewith, movement of said roller lengthwise of said bearing surfaces being limited by said end walls of the housing.

1,873,703. EXPANSION JOINT. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Feb. 9, 1929. Serial No. 338,821. 11 Claims. (Cl. 285—162.)



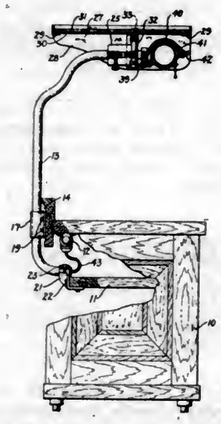
1. In an expansion joint, the combination of relatively movable members adapted to be respectively connected to pipe sections, a flexible tubular wall with its opposite ends having fluid-tight joints with said members, said flexible wall being exteriorly subjected to the pressure of the fluid confined by said joint, and coacting means on said relatively movable members for preventing relative rotation between said relatively movable members when said joint is in operation.

1,873,704. VARIABLE CAPACITOR TEST. VIRGIL M. GRAHAM, Rochester, N. Y., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 10, 1928. Serial No. 325,088. 5 Claims. (Cl. 175—183.)



1. The method of testing the uniformity in capacitance between the units of a multi-unit capacitor which consists in comparing the capacitance of one unit in each of several positions with each of the remaining units in their corresponding positions, employing a compensating capacitance with the units being compared to cause the joint capacitances to equal the capacitance of said first unit, employing interacting frequencies to show said equality, and indicating the amount of compensating capacitance.

1,873,705. STORE COUNTER FIXTURE. CHARLES W. GREEN, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Feb. 9, 1929. Serial No. 338,657. 2 Claims. (Cl. 248—18.)

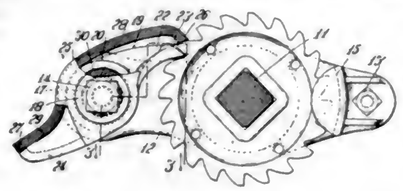


1. A fixture for store counters, including a standard, counter attaching means for said standard, a shelf-supporting frame, a coupling member carried by the standard, and a transverse brace member rigid with said frame and mounted on and carried by said coupling member.

1,873,706. HAND BRAKE PAWL. VICTOR H. HARBERT, Chicago, Ill., assignor, by mesne assignments, to Transerv Corporation, a Corporation of Illinois. Filed Jan. 28, 1929. Serial No. 335,696. 2 Claims. (Cl. 188—81.1.)

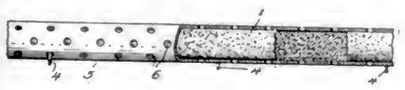
1. A hand brake pawl comprising, in combination with a ratchet member, a pair of ratchet engaging members ar-

ranged in superposed relation with a common pivotal point, the upper member having a ratchet engaging end disposed beyond the ratchet engaging end of the lower member and provided with a depending portion adapted to control the position of the lower member, whereby movement of the lower member out of contact with the ratchet member is prevented while the upper member



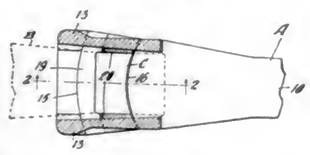
is in ratchet holding position and the lower member is free to move into holding engagement with a succeeding tooth of the ratchet member, and means whereby the upper member is held in position for holding engagement with a tooth of the ratchet member while the lower member is moving into holding engagement with the succeeding tooth and whereby both members may simultaneously be moved away from the ratchet member.

1,873,707. CATALYTIC CORE. AUDLEY E. HARNSBERGER and CLYDE L. SMITH, Chicago, Ill., assignors to Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 21, 1928. Serial No. 301,152. 6 Claims. (Cl. 23—233.)



2. A catalytic core comprising a body of ferrous oxide and concrete, there being a longitudinally extending passageway formed axially in said core.

1,873,708. YOKE. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 5, 1928. Serial No. 323,804. 2 Claims. (Cl. 213—71.)

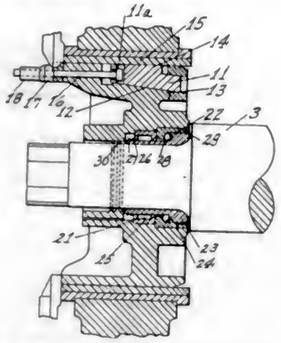


1. In a yoke and coupler connection, the combination with a yoke having a hooded forward end adapted to accommodate a coupler butt, the top and bottom walls of said hood being provided with interior transverse seat portions depressed with respect to the inner surfaces of said top and bottom walls; of a coupler having a shouldered butt disposed in said mood, said coupler butt having the top and bottom faces thereof fitting between the inner surfaces of the top and bottom walls of the hood; a pair of locking blocks disposed in said seats and having shouldered engagement with the coupler butt to limit outward movement thereof and hold the same assembled with the yoke, said blocks having the inner surfaces of the main body portions thereof substantially flush with the inner surfaces of the top and bottom walls of the hood and in engagement with the top and bottom faces of the coupler butt, the hood of the yoke having openings in the side walls thereof registering with said seats to permit lateral insertion of said locking blocks, each of said blocks having shoulders on opposite sides thereof overlapping the sides of the coupler butt to prevent lateral separation of said blocks and coupler butt.

1,873,709. FOOD PRODUCT. CHARLES HOFFMAN, Tuckahoe, N. Y., assignor to Ward Baking Company, New York, N. Y., a Corporation of New York. Filed Aug. 20, 1924. Serial No. 733,109. 8 Claims. (Cl. 99—11.)

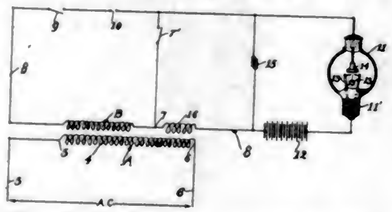
1. The food product derived from cereal germs which consists of a solid material hygroscopic in character which contains approximately 76% of sugars, approximately 15% of protein, approximately 5% of ash and the remainder moisture.

1,873,710. ROLLER BEARING WORKING ROLL CHUCK. EDWIN B. HUDSON, Butler, Pa., assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Aug. 2, 1928. Serial No. 296,951. 4 Claims. (Cl. 308—59.)



1. A chuck for the working rolls of four high mills, said chuck comprising a machined face upon one side adapted to bear against a machined face on the mill frame, means on the other side of said chuck to cause said machined face to bear against the machined face on said frame by abutting an opposed frame member and a fixed anti-frictional bearing for the neck of a working roll, said bearing comprising a roller bearing to sustain radial thrusts and a ball bearing to sustain lateral thrust, said bearings comprising a sleeve to encircle the neck of a working roll, roller bearings between said sleeve and said chuck, a shoulder on said sleeve, a shoulder borne by said chuck, and ball bearings abutting both shoulders to sustain end thrust.

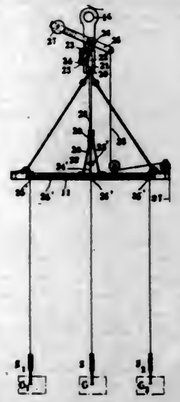
1,873,711. METHOD AND MEANS FOR UTILIZING THERMIONIC TUBES HAVING OPEN FILAMENTS. RUDOLPH H. JOHNSON, Chicago, Ill. Filed June 18, 1928. Serial No. 286,089. 2 Claims. (Cl. 175—363.)



1. A rectifying circuit of the character described, comprising a transformer having a primary directly connected to an alternating current supply and a secondary tapped

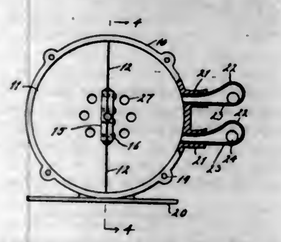
to provide two branch secondary circuits, the first of said secondary branch circuits provided with separated electrodes to establish a spark gap, a rectifying tube connected in the main circuit including said second secondary branch circuit, said rectifying tube requiring a higher initial energizing potential than normally induced in said second branch secondary circuit, a lead from the tapping between said secondary portions to the main circuit, a switch in said first secondary branch circuit between said secondary and said lead connection for establishing a current of high potential, a switch in said lead adapted to be closed to maintain a current of low potential when said first mentioned switch is open, and a rectified current receiving device connected in series with said rectifying tube in said second secondary branch circuit.

1,873,712. LIFTING APPARATUS. MAURICE HENRI LEMAIRE, Valenciennes, and LOUIS PAUL GUILBERT, Paris, France. Filed Jan. 4, 1929, Serial No. 330,314, and in France Jan. 5, 1928. 7 Claims. (Cl. 294—111.)



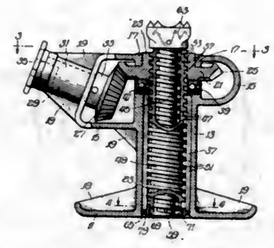
1. A device of the class described comprising a rod, an arm pivoted on each end of the rod, levers pivotally and slidably connected to each arm, a grasping means at the end of each lever, a frame, cables connecting the frame and levers, second cables having their upper ends connected with the frame and the lower ends connected with the ends of the rod and means carried by the frame for actuating the first named cable to cause engagement or disengagement of the grasping means with the work.

1,873,713. TRAFFIC SIGNAL. EDWARD LINDNER, Philadelphia, Pa. Filed Apr. 26, 1932. Serial No. 607,557. 1 Claim. (Cl. 116—137.)



An audible power signal consisting of a hollow casing having inlet openings formed in the face thereof, a cover for closing the casing, a power shaft projecting into the casing, a split hub adapted to clamp upon the shaft, two fan blades adapted to be secured between the sections of the hub when the latter is clamped upon the shaft, nipples formed with the casing and having outlets therethrough and whistles removably secured in said whistles.

1,873,714. LIFTING JACK. MILLARD B. LUCKER, Benton Harbor, Mich., assignor, by mesne assignments, to The Dayton Malleable Iron Company, Dayton, Ohio, a Corporation of Ohio. Filed May 16, 1928. Serial No. 278,267. 11 Claims. (Cl. 254—102.)



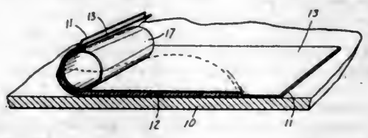
1. In an extension device, a frame, a lifting member arranged in said frame, an operating member rotatably mounted in said frame and having threaded connection with said extensible member whereby the extensible member may be axially moved with respect to said frame upon rotation of said operating member, means for rotating said operating member, and a frictional device carried by said extensible member and engaging said frame whereby to prevent relative rotation of said extensible member with respect to the frame, said frictional device having a collar loosely mounted on and embracing said extensible member and a spring device carried by said collar and frictionally engaging said extensible member for preventing relative movement between the collar and the extensible member.

1,873,715. PIEZO-ELECTRIC ACOUSTIC DEVICE. ALEXANDER MEISSNER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed July 26, 1928, Serial No. 295,491, and in Germany Sept. 17, 1927. 2 Claims. (Cl. 179—101.)



1. An electroacoustic device comprising in combination, an arched vibratory diaphragm, a plurality of piezo-electric elements connected to opposite ends of said diaphragm, whereby mechanical vibrations applied to the surface of said arched diaphragm are converted into tangential stresses, which stresses are exerted upon said piezo-electric elements to produce piezo-electric reactions in accordance therewith.

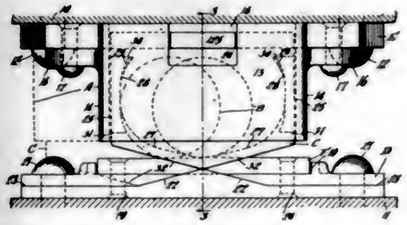
1,873,716. PROCESS OF MAKING AND PACKAGING PIE CRUST DOUGH. EFFIE O. NICKERSON, Indianapolis, Ind. Filed Apr. 9, 1932. Serial No. 604,192. 6 Claims. (Cl. 107—54.)



5. The process of forming and packaging pie crust dough consisting in placing the proper amount of dough upon a protective sheet of waxed paper, placing a second sheet

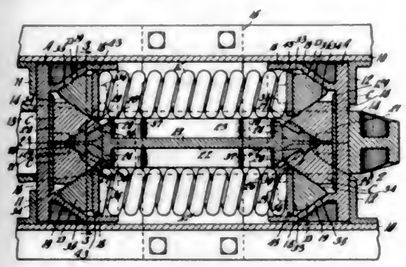
of waxed paper thereover, thereupon applying pressure on the dough through the second sheet for spreading it and flattening it to the desired form, wrapping said sheets with the dough therebetween about a pasteboard tube, wrapping the same with an outer covering and sealing it in place by a pair of end caps conforming to the ends of said tube for locking thereon.

1,873,717. ANTI FRICTION BEARING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 24, 1928. Serial No. 301,833. 7 Claims. (Cl. 308—226.)



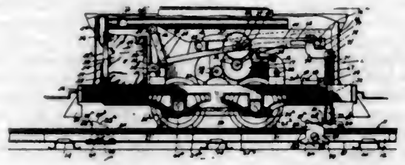
7. In an anti-friction side bearing for railway cars, the combination with relatively angular movable opposed body and truck bolsters; of a housing secured to the body bolster; an anti-friction roller element within the housing, said roller element being supported on the truck bolster; a centering slide guided for vertical movement in the housing, said slide having inclined guide surfaces cooperating with the roller to center the same; and a fixed cam track on the truck bolster on which said slide is supported.

1,873,718. FRICTION SHOCK ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 25, 1929. Serial No. 342,425. 6 Claims. (Cl. 213—26.)



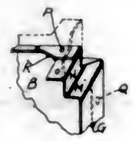
1. In a friction shock absorbing mechanism, the combination with outer followers relatively movable toward and away from each other, said followers having wedge means thereon; of a plurality of cooperating friction wedge elements at each end of the mechanism; additional friction wedge elements cooperating with the first named wedge elements and having wedging engagement with the wedge means of the followers; spring resistance means between said followers opposing relative movement of the friction wedge elements; means for restricting longitudinal separation of certain of said elements at opposite ends of the mechanism; and cooperating means integral with each follower and others of said cooperating wedge friction elements respectively, having shouldered engagement, for limiting separation of each follower and the corresponding last-named elements, thereby also limiting longitudinal separation of said followers and holding the mechanism assembled.

1,873,719. WHEELED TOY. LOUIS OSKOW, Brooklyn, N. Y., assignor of one-half to Morris Kirschstein, Brooklyn, N. Y. Filed Nov. 6, 1928. Serial No. 317,571. 12 Claims. (Cl. 246—174.)



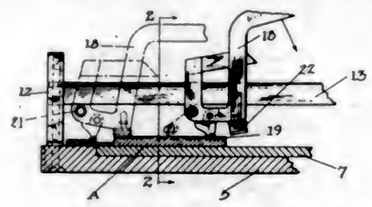
1. A member movable along a path, a bellows and a whistle mounted on said member, means for actuating said bellows, and means on said path for controlling the operation of said actuating means.

1,873,720. METAL CONTAINER. LOUIS M. PIKER, Hamilton, Ohio, assignor to Sidney Piker, St. Bernard, Ohio. Filed Nov. 15, 1928. Serial No. 319,600. 2 Claims. (Cl. 220—62.)



1. A box comprising a bottom, side and end walls integrally formed of sheet material and joined together at their corners, the upper edge of each wall comprising, integral and in succession, an inwardly extended member, an upwardly extended member and a second inwardly extended member, leaving a lid space, and the second inwardly extended members of adjacent walls having mutually lapping parts rigidly attached together, whereby each wall has a substantially Z-bar rim affording added rigidity against lateral stresses, and whereby the rigid corner attachments afford added rigidity against weaving stresses.

1,873,721. TILE SCORING AND BREAKING DEVICE. SANFORD POSTLEY, Los Angeles, Calif. Filed Apr. 19, 1932. Serial No. 606,243. 3 Claims. (Cl. 125—23.)

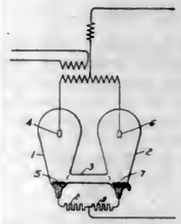


1. In a device of the character described, a work support, an arm supported above and extending over said work support, a sliding cutter carried on said arm, breaker arms extending on opposite sides of said cutter and adapted to engage the work operated on by said cutter to produce a bending action on the opposite sides thereof.

1,873,722. MERCURY ARC RECTIFIER. DAVID C. PRINCE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 31, 1924. Serial No. 759,214. 10 Claims. (Cl. 175—354.)

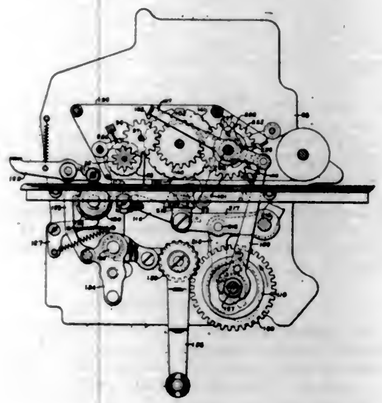
1. The combination of a vapor electric device comprising an envelope having a plurality of main branches, a source

of alternating current, a connecting tube communicating with the branches, vaporizable cathodes located at one end of said branches adjacent the connecting tube, anodes



located in said branches remote from said cathodes, and means including said tube and said source for transferring the cathode spot from one to another of said cathodes.

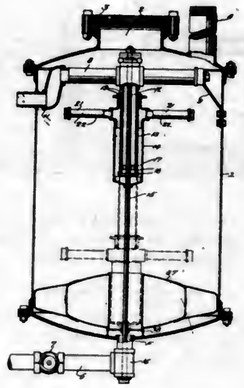
1,873,723. CASH REGISTER. WILLIAM H. ROBERTSON, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Sept. 18, 1924. Serial No. 738,451. 19 Claims. (Cl. 235—2.)



1. In a machine of the class described, the combination of accumulating elements, means for turning the accumulating elements to zero, actuators for entering items into the accumulating elements adapted to be moved by the accumulating elements when said elements are being turned to zero, said movement being in the same direction when being turned to zero as when entering items, and printing elements arranged in complemental relation with the accumulating elements and actuated by the said actuators for printing totals.

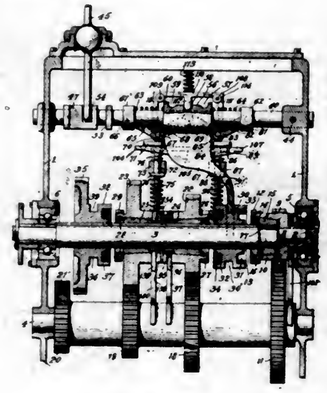
1,873,724. FIRE EXTINGUISHING APPARATUS. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 11, 1929. Serial No. 339,173. 12 Claims. (Cl. 169—15.)

9. In a foam accumulator, the combination with a container for a solid foam-forming material, of means for introducing a liquid into said tank including a distributor automatically adjustable to maintain a predetermined relation with the reacting surface of the foam-forming material, and means automatically operative following



exhaustion of the foam-forming material for returning the distributor to a normal initial position within the container.

1,873,725. POWER TRANSMISSION MECHANISM. EARL A. THOMPSON, Portland, Oreg., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 3, 1924. Serial No. 684,173. 49 Claims. (Cl. 74—59.)

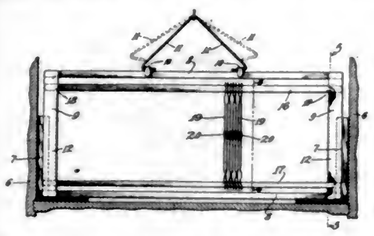


1. In a power transmission gearing including toothed elements, one of which is shiftable, and engageable and disengageable synchronizing elements, an operating member, a lock for holding the shiftable element in disengaged position, and means for effecting in succession the engagement of the synchronizing elements, release of the lock for the shiftable element, disengagement of the synchronizing elements and movement of the shiftable element by a continuous movement of the operating member.

1,873,726. HEDDLE FRAME. LOUIS STROHACKER, Freeport, Ill., assignor to Structo Manufacturing Company, Freeport, Ill., a Corporation of Illinois. Filed Jan. 28, 1932. Serial No. 589,339. 5 Claims. (Cl. 139—92.)

1. A heddle frame in which is comprised a rectangular frame, horizontal upper and lower locking bars, one

of which has interlocking connections with the frame and the other of which has a sliding connection therewith,

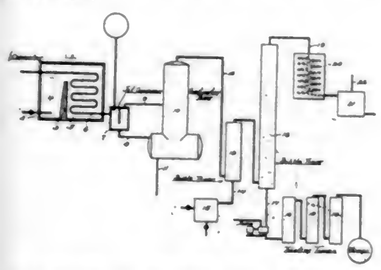


and heddles removably attached to said locking bars and co-operating therewith to maintain said interlocking connection between the locking bar and frame.

1,873,727. DOUBLE ALUMINUM ALKALI FLUORIDE COMPOUNDS. HEINRICH SPECKETER, Frankfort-on-the-Main-Griesheim, and JULIUS SÖLL, Frankfort-on-the-Main-Schwanheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Mar. 13, 1930, Serial No. 435,658, and in Germany Mar. 20, 1928. 5 Claims. (Cl. 23—88.)

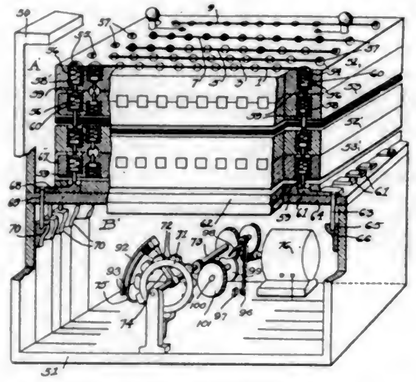
1. In a process of producing double compounds of aluminum alkali fluorides of the cryolite and chiolite type, the improvement which consists in gradually, simultaneously, and separately adding to water slightly acidulated with a water-soluble inorganic acid a solution containing an aluminate and a fluoric acid solution, the amounts of the aluminate and the fluoric acid added approximately corresponding to the stoichiometric ratio of aluminum and fluoride prevailing in the product to be obtained.

1,873,728. METHOD OF TREATING HYDROCARBON OILS. CARY R. WAGNER, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Dec. 17, 1928. Serial No. 326,625. 2 Claims. (Cl. 196—40.)



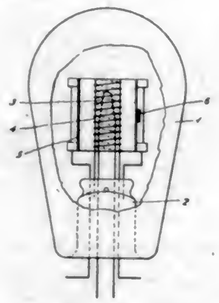
1. In a process for removing color-imparting and gum-forming bodies from cracked oils obtained from vapor phase systems of conversion, the steps which comprise passing oil vapors obtained from a vapor phase conversion system through a fractionating zone, fractionally condensing the vapors passing through said zone to produce a plurality of condensates of varying boiling range, subjecting the condensates of higher boiling range to the action of concentrated sulphuric acid to polymerize the undesirable color-imparting and gum-forming compounds present therein, separately removing from said fractionating zone a second condensate of lower boiling range than said first named condensate and treating said second named condensate with sulphuric acid of lower concentration than the concentration of said first named sulphuric acid to polymerize the undesirable compounds therein contained, separately withdrawing at a third point from said fractionating zone vapors of oils of lower boiling range than said first and second named condensates, and maintaining the vapors of said low boiling oils in said fractionating zone for a sufficient period of time to effect the polymerization and separation of the undesired compounds from said vaporized oils without contacting the vapors with sulphuric acid.

1,873,729. CODE SETTING DEVICE FOR SIGNAL SYSTEMS. JOHN H. WHEELOCK, Fitzwilliam, N. H., assignor to Signal Engineering & Manufacturing Company, New York, N. Y., a Corporation of Massachusetts. Original application filed Jan. 5, 1927, Serial No. 159,165. Patent No. 1,848,148, dated Mar. 8, 1932. Divided and this application filed Feb. 28, 1929. Serial No. 343,474. 5 Claims. (Cl. 177—380.)



4. A signal code selector comprising a stack of superposed units of substantially identical construction with each unit covering a distinctive range of code selections, each of the units including an insulating panel carrying fixed parallel bus bars with certain bus bars providing contacts determining each code selection and each of said bus bars having a terminal at one end extending transversely thereto, the terminals of corresponding bus bars of the several units being in electrical engagement with each other in the assembled stack of units.

1,873,730. ELECTRON EMITTING MATERIAL. ERICH WIEGAND, Hohen Neuendorf, Germany, assignor to Allgemeine Elektricitatz Gesellschaft, Berlin, Germany, a Corporation of Germany. Filed Oct. 2, 1928, Serial No. 309,802, and in Germany Nov. 2, 1927. 1 Claim. (Cl. 250—27.5.)



The method of treating an electron discharge device having an evacuated envelope enclosing an anode and a cathode which comprises placing adjacent said cathode

a mixture of an alkaline earth oxide, powdered aluminum, and a powdered refractory oxide non-reducible by aluminum and sufficient in amount to prolong the exothermic reaction between said alkaline earth oxide and aluminum, and heating said mixture to cause said reaction.

1,873,731. ROD CLAMP. GIOVANNI ZINGALI, Montclair, N. J. Filed Feb. 2, 1932. Serial No. 590,447. 4 Claims. (Cl. 24—19.)

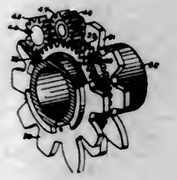


4. A rod clamp including a bracket, a wedge and a pair of pins carried by the bracket and coacting with the wedge, said wedge having a pair of parallel surfaces engaging said pins whereby the pins will prevent rotation of the wedge without interfering with its sliding motion, said bracket having an aperture for receiving said wedge and a rod receiving aperture extending at an angle to the first mentioned aperture, said wedge having a depending web formed with an inclined surface positioned to engage and deform a rod extending through the rod receiving aperture so as to form a shoulder within the first mentioned aperture.

1,873,732. BACTERICIDE APPLICABLE TO ACID-FAST BACTERIA. ROGER ADAMS, Urbana, Ill., assignor to Abbott Laboratories, North Chicago, Ill., a Corporation of Illinois. Filed Dec. 28, 1928. Serial No. 329,077. 7 Claims. (Cl. 167—65.)

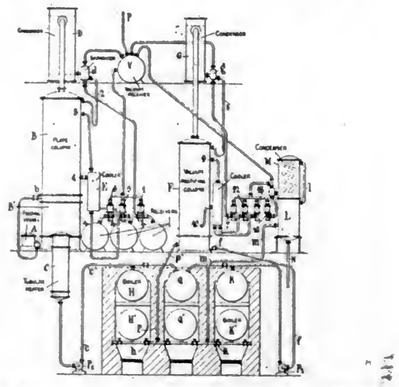
4. As a new bactericidal or bacteriostatic agent especially applicable to acid-fast bacteria, a substance which is a member of the group consisting of aliphatic acids, alkali and alkaline earth metal salts thereof and hydrocarbon esters thereof, in which the carboxyl group is located at a point removed form the end of the chain, said substance containing from 10 to 21 carbon atoms.

1,873,733. CASH REGISTER. CHARLES H. ARNOLD, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed June 5, 1924. Serial No. 718,046. 3 Claims. (Cl. 235—7.)



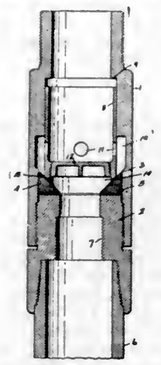
3. In an adding and subtracting totalizer; the combination of a single non-rotatable shaft; totalizer elements rotatably mounted on the shaft; a non-rotatable support between the totalizer elements in position to contact the adjacent sides of both totalizer elements; and intermeshing pinions rotatably mounted on the support and held against axial movement by the support and the totalizer elements, said pinions also meshing with the totalizer elements to rotate the totalizer elements in opposite directions when either element is rotated in either direction.

1,873,734. APPARATUS FOR THE FRACTIONATION OF HEAVY OILS. EMILE AUGUSTIN BARBET, Paris, France. Filed May 8, 1928, Serial No. 276,150, and in France May 12, 1927. 1 Claim. (Cl. 196—114.)



Apparatus for the continuous rectification of hydrocarbons for the fractionation of heavy oils from petroleum which has been deprived of its more volatile constituents, comprising, a rectification column adapted to operate under vacuum whereby the lighter products are removed, a steam heater for said column, a heating boiler, means for passing the residue from said column into the heating boiler where it is heated by direct heat to a temperature below its boiling point, a second rectifying column, means for supplying the heated residue of the first rectifying column to the said second rectifying column which latter is adapted to operate under vacuum whereby lubricating oils are fractionated, a second heating boiler, means for passing the residue of the said second column into said second heating boiler where it is heated by direct heat to a temperature below its boiling point and means for supplying the heated residue from said second heating boiler to a vacuum vessel, whereby further fractionation takes place leaving a residue of mazout.

1,873,735. STANDING VALVE. ARCHIBALD M. BOWMAN, GUY GRAHAM, and JEDDY D. NIXON, Houston, Tex., assignors to The Texas Iron Works Sales Corporation, Houston, Tex., a Corporation. Filed Jan. 21, 1929. Serial No. 333,902. 6 Claims. (Cl. 137—69.)



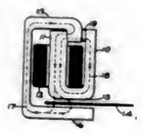
1. A standing valve mechanism including a tubular valve casing, a sleeve reciprocable therein, an annular valve seat in the casing controlled by said valve and a frangible disc-like web disposed transversely across and screwed into the sleeve, and forming a part of said valve.

1,873,736. CHAIN OR ORNAMENT HOLDING UNIT. WILLIAM E. BRAUNLICH, Pittsburgh, Pa. Filed Mar. 9, 1932. Serial No. 597,784. 1 Claim. (Cl. 24—208.)



An ornamental article to be removably attached to a belt or like article, comprising a body plate having a button formed centrally on one face thereof to be passed through an opening in the belt, and the confronting faces of the head of the button and the body plate being provided with prongs to enter both faces of the belt, a hollow split spring ball head on the outer face of the body member, a face plate having a socket to receive the ball head of the body plate therein to establish a swingable connection between the face plate and the body plate, said face plate having a finger extension provided with an eye end to be engaged by flexible article supporting elements.

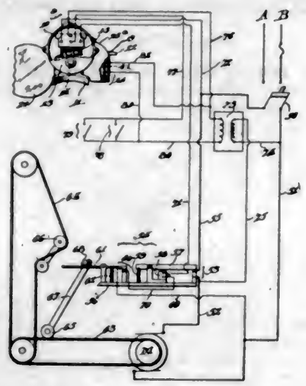
1,873,737. CONSTRUCTION OF THE VOLTAGE ELECTROMAGNET OF INDUCTION DISK METER DEVICES. JOHN BUSCH, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Apr. 5, 1932, Serial No. 603,436, and in Germany Apr. 10, 1931. 4 Claims. (Cl. 175—338.)



1. A voltage electromagnet for induction disk meter devices, comprising a U-shaped magnetic member having limbs of unequal cross-section, an energizing coil about the limb of greatest cross-section, a second U-shaped member of magnetic material having one limb in adjustable magnetic contact with the open end of the limb of greatest cross-section of the first member and partially closing the air gap across the open end thereof, the other limb of the second member being spaced from the base portion of the first member to form an adjustable disk air gap.

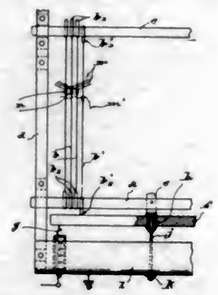
1,873,738. SAFETY DEVICE FOR MOTION PICTURE PROJECTING MACHINES. JOSEPH ELLIS COHEN, Philadelphia, Pa., assignor to Sentry Safety Control Corporation, Philadelphia, Pa. Filed July 9, 1927. Serial No. 204,454. 4 Claims. (Cl. 88—17.)

1. Fire prevention apparatus for a motor driven projecting machine comprising a safety device having a dowser, a magnet in said device adapted to be energized when the film breaks, tears, clogs, etc., a trip arm for holding the dowser out of light obstructing position when the magnet is deenergized and for permitting the closing of said dowser when the magnet is energized, a make and break switch for maintaining the motor circuit when the dowser is raised out of light obstructing position, an auxiliary magnet associated with said safety device and normally energized when the dowser is out of light obstructing position, an armature for said auxiliary magnet, means associated with said armature for operating the trip arm to release the dowser upon the deenergization of said auxiliary magnet, a switch in the circuit of said auxiliary magnet, and a switch arm adapted to be pressed downward when a motor belt breaks to thereby



open the last named switch to deenergize said auxiliary magnet and release said armature to thereby operate said trip arm and release said dowser.

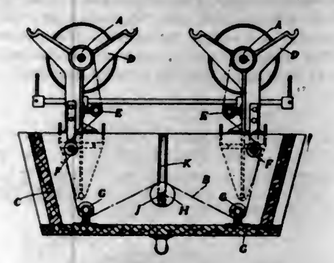
1,873,739. WARP STOP MOTION FOR LOOMS FOR WEAVING. ALBIN MARIE MAURICE COLLON, Lyon, France. Filed Jan. 7, 1931, Serial No. 507,238, and in France Feb. 2, 1930. 1 Claim. (Cl. 139—355.)



In an electric warp stop motion for looms, the combination of a frame carrying the heddles and having a lower bar movable vertically with respect to the frame, and an electric conductor bar arranged below, parallel with and rigidly connected to said lower bar for movement therewith, so that upon the breaking of a warp thread, its heddle drops into contact with the conductor bar and completes an electric circuit, said frame having a lower transverse member, and the lower heddle bar and the conductor bar being provided with rods connecting them together, said rods being insulated from the conductor bar and movable vertically through said lower transverse member and provided with stops to limit the extent of relative vertical movement of said lower heddle bar and said conductor bar.

1,873,740. DYE JIGGER MACHINE. HARRY JOHN CRICK, London, England, assignor of one-half to Associated Dyers & Cleaners Limited, London, England. Filed Sept. 30, 1930, Serial No. 485,526, and in Great Britain Oct. 9, 1929. 4 Claims. (Cl. 8—19.)

1. In a dye jigger machine or open-width material machine, the combination of a dye vat, means to move material to be dyed alternately in opposite directions through the vat and a dye buoyant member in the vat movable



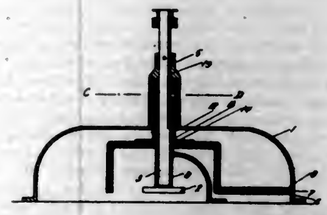
in the dye over which member the material passes to and fro through the vat and which constitutes a movable support for the latter.

1,873,741. PORTED SHOE GUIDE. ALVIN B. CROWELL, San Antonio, Tex. Filed Mar. 8, 1927. Serial No. 173,682. 11 Claims. (Cl. 166—3.)



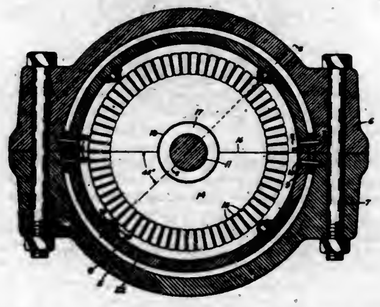
1. The combination of a string of well casing, a shoe guide for the string of casing converging at its lower end and having a bore therethrough, ports opening through its peripheral wall, and a plug adapted to be lowered through the string of casing to anchor on the converging lower end of the shoe guide and close the bore and the ports of the shoe guide.

1,873,742. DEVICE FOR CONTROLLING THE SOFT FOCUS DEVICE IN KINEMATOGRAPHIC VIEW TAKING APPARATUS. ANDRÉ LÉON VICTOR CLEMENT DEBRIE, Paris, France. Filed Oct. 20, 1930, Serial No. 490,048, and in France Nov. 16, 1929. 3 Claims. (Cl. 88—19.3.)



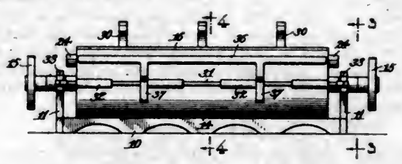
1. In a kinematographic view taking apparatus provided with a film advancing control shaft, the combination of three superposed concentric independent shutter discs extending over an angle somewhat above 120° and three sleeves concentric with the shaft carrying each one of the discs and means for rotating during operation two sleeves with reference to the third for gradually reducing the area left free for exposure.

1,873,743. ELASTIC FLUID TURBINE. JOHN H. DORAN, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 15, 1930. Serial No. 495,955. 9 Claims. (Cl. 253—78.)



1. In a turbine, the combination of a rotor, spaced outer and inner tubular casings, means for holding the inner casing fixed with respect to the outer casing at two diametrically opposite points to confine its maximum expansion to a plane perpendicular to said points, a member carried by the inner casing which is free to expand radially in all directions, and through which motive fluid flows to the rotor, and angularly spaced means for supporting the weight of the member and maintaining it concentric with the axis of the rotor, which are located between the periphery of the member and a wall of the inner casing and in register with those portions of said wall which with respect to their radial expansion are not affected by the provision of said first named means.

1,873,744. COPYHOLDER. ERNEST J. DUBOIS, Lowell, Mass. Filed Mar. 6, 1931. Serial No. 520,657. 5 Claims. (Cl. 120—31.)

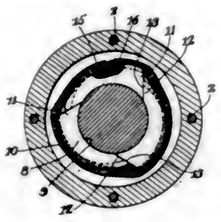


1. A copy holder comprising a rotatable roll, means for clamping one end of a copy sheet on the roll, means at the rear of the roll to receive and support the free end of said sheet in rolled condition up out of the way and enabling the sheet to be wound on said roll to present the reading matter on said sheet in the line of vision of the user as desired, and guide rollers which resiliently co-operate with said roll to guide said sheet and also to keep it from slipping or leaving the surface of said roll.

1,873,745. METALLIC PACKING. JOHN F. ENDERLIN and JOSEPH E. OGLES, Paducah, Ky. Filed Nov. 17, 1930. Serial No. 496,230. 2 Claims. (Cl. 288—3.)

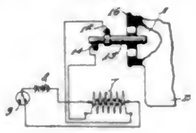
2. A metallic packing comprising, a split annular metallic member formed of three segments of like form shiftable relatively to each other and each gradually increasing in width from one end to the other, the smallest end edge of one segment slidably abutting the largest end

edge of an adjacent segment, the inner lengthwise edges of said segments being of curved contour and coacting to provide a circle, one section having the termini of its inner lengthwise edge registering with a terminus of the inner lengthwise edge of each of the other of said sections, said sections having the outer lengthwise edges thereof ec-



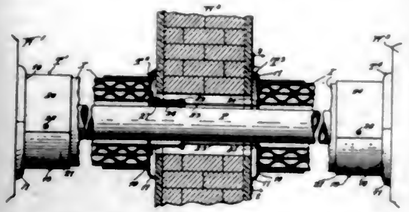
centrically curved with respect to and of greater length than said inner lengthwise edges, each segment having its outer lengthwise edge terminating at the outer ends of the end edges of the segment, and tensioning means encompassing said member and seated against the major portion of the outer lengthwise edge of each segment.

1,873,746. APPARATUS FOR ENRICHING FUEL MIXTURE FOR INTERNAL COMBUSTION ENGINES. WILLIAM S. ENGLISH, Newark, N. J. Filed Dec. 9, 1929. Serial No. 412,700. 1 Claim. (Cl. 123—119.)



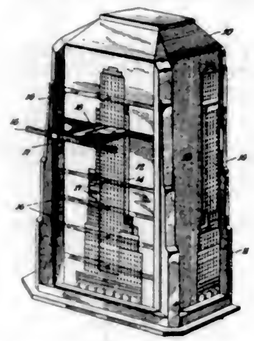
The combination with an internal combustion engine having an air intake for fuel mixture, of a tubular electrode disposed substantially axially of and in alinement with said air intake and in spaced relation to the walls thereof, another electrode disposed substantially coaxially within said tubular electrode in spaced relation thereto, and means for producing an electrical discharge between said electrodes, so that only a portion of the air entering said inlet passes through said tubular electrode and is subjected to said electrical discharge while the remainder of the air passes through said intake around said tubular electrode and is not affected by said electrical discharge.

1,873,747. CUP PLATE FOR PROTECTING ENDS OF PIPE COVERINGS. JOHN W. FARLEY, Cleveland, Ohio. Filed Mar. 2, 1931. Serial No. 519,566. 4 Claims. (Cl. 126—317.)



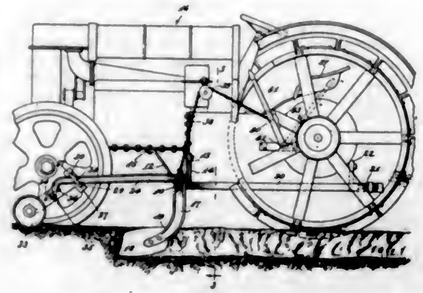
1. A pipe insulator cup plate comprising a plate radially divided into sections and adapted to lie against a wall, floor or ceiling, said plate having a pipe-receiving opening and a flat area around said opening adapted to abut one end of a tubular pipe insulator, a cylindrical collar projecting outwardly from said plate in concentric relation with said opening, spaced outwardly from said opening and surrounding said area, whereby said collar adapted to surround said end of the tubular pipe insulator, said collar being formed of arcuate sections, and means for securing said plate and collar sections in assembled relation.

1,873,748. MODEL FOR ILLUSTRATING OFFICE BUILDINGS AND THE LIKE. WALTER FAVREAU, Tompkinsville, N. Y., assignor to William Harvey Smith, New York, N. Y. Filed Nov. 18, 1930. Serial No. 496,429. 3 Claims. (Cl. 35—16.)



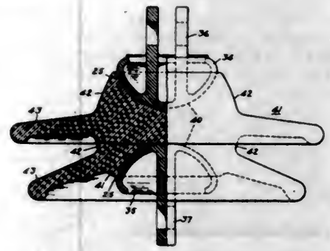
1. A model for a building comprising a body having a representation of the outside surface of the building thereon, a removable drawer disposed in said body and corresponding to a floor of the building, said drawer carrying a layout of the particular floor plan.

1,873,749. PLOW ATTACHMENT FOR TRACTORS. JOHN F. FLANAGAN, Napa, Calif., assignor of one-half to Charles E. Thurston, Montclair, N. J. Filed Jan. 7, 1931. Serial No. 507,275. 9 Claims. (Cl. 97—47.)



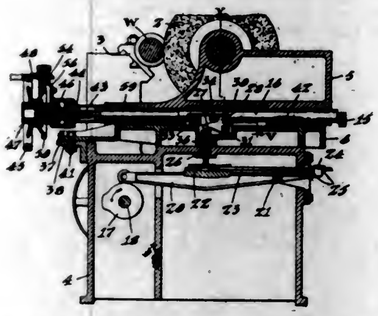
1. In a device of the class described, a main frame having ground engaging means for movement thereover, a second frame mounted at a side of the main frame and having two members spaced apart, a bracket disposed between the two members, there being apertures in the bracket, a U-shaped bolt having one threaded terminal disposed above the members and another threaded terminal disposed below the members with the terminals disposed in the apertures in the bracket, a plate having apertures, the plate being disposed against the outer side of one of the members, with the threaded terminals disposed in the apertures, nuts meshing with the threaded terminals and engaging the outer side of the plate, and a wheel mounted on the bracket.

1,873,750. INSULATOR STRUCTURE. CHARLES LEG. FORTESCUE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 23, 1927. Serial No. 235,299. 6 Claims. (Cl. 173—318.)



1. A strain insulator including a vitreous dielectric body, terminals for permitting said body to be subjected to mechanical tension, one of said terminals having a metallic surface, a metallic film over a portion of said body and integral with said body, said metallic surface substantially conforming to said metallic film and being soldered thereto, said film extending substantially normal to the line of tension whereby mechanical tension applied to said terminals tends to separate said metallic surface from said body.

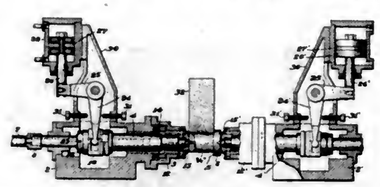
1,873,751. GRINDING MACHINE. WARREN F. FRASER, Westboro, Mass. Filed July 25, 1927. Serial No. 208,185. 5 Claims. (Cl. 51—105.)



1. In an automatic grinding machine, the combination of a wheel support, a work support, a machine bed having guideways upon which one of said supports is mounted for sliding movement to produce a relative approaching or receding movement of the work and grinding wheel, a bar adjustable in said slidable support, screw threaded means for making fine adjustments of said bar relatively to said slidable support, power driven mechanism operable through said bar to produce said receding movement; a spring for producing said approaching movement, said mechanism including a power driven cam and a lever mechanism through which motion is transmitted from said cam to said bar, one of the levers of said mechanism including an arm arranged to act on the bar in one direction; and a stop for engaging said bar and limiting its movement in the opposite direction.

1,873,752. GRINDING MACHINE. WARREN F. FRASER, Westboro, Mass. Filed Oct. 2, 1930. Serial No. 485,963. 7 Claims. (Cl. 51—237.)

1. In a grinding machine, the combination of a head stock, a tail stock cooperating with said head stock to support the work for rotation about an axis, each of said stocks having a rotary work supporting member and one of them having an additional work positioning member provided with a face against which to abut the work to hold the work in a fixed position endwise of said axis,

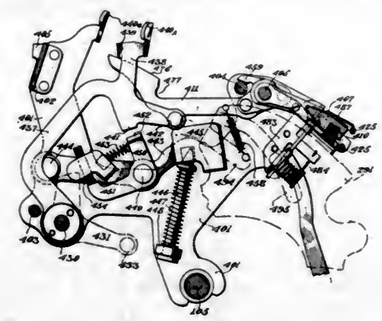


automatic mechanism for relatively moving said supporting members to engage and release opposite ends of the work and to force said work against said face and hold it there against the pressure oppositely exerted thereon, and means for grinding the work so positioned.

1,873,753. METHOD OF MAKING COMPOSITE MICA PLATES. LOUIS T. FREDERICK, Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed June 24, 1927. Serial No. 201,285. 6 Claims. (Cl. 154—2.6.)

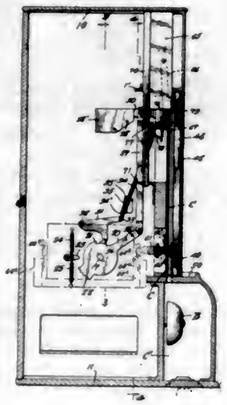
2. The process of making a composite mica plate which comprises applying shellac to individual flakes of mica, binding said flakes into sheets thereby, coating said sheets with a polyhydric alcohol-polybasic acid resin in its uncured state, stacking said coated sheets, and subjecting said stacked sheets to heat and pressure to cause a blending of the shellac and heat-convertible resin and to cure the blended resin whereby a strong, well-knit product is produced.

1,873,754. CASH REGISTER. FREDERICK L. FULLER, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Nov. 19, 1918, Serial No. 263,125. Divided and this application filed Dec. 3, 1926, Serial No. 152,385, and in Great Britain Sept. 12, 1919. 47 Claims. (Cl. 235—2.)



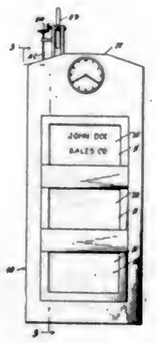
1. In a device of the character described, a type carrier, a pivoted platen adjacent the type carrier, means for actuating the platen at a predetermined time, comprising a spring pressed hammer, an arm for retracting the hammer provided with a shoulder engaging a pawl on the hammer, the engaging surface of said parts having diverging paths of movement, the construction being such that after the hammer is retracted to a certain point by the continuous movement of the surfaces in their diverging paths it is released and permitted to actuate the platen.

1,873,755. COIN HANDLING MECHANISM FOR VENDING MACHINES, TELEPHONES, ETC. GRANVILLE F. GIBSON, Shreveport, La. Filed Feb. 5, 1931. Serial No. 513,679. 5 Claims. (Cl. 194—92.)



1. In a machine of the class described, a coin chute, means for temporarily retaining a plurality of coins in the chute, coin feeding means, a lever connected with the coin feeding means, and coin controlled locking means preventing movement of the feeding means and lever and including an engaging element carried by the feeding means and positioned to engage a stationary member, means on the engaging element controlled by one of a predetermined number of coins, for releasing the engaging element, a dog positioned to engage and release the lever, and means controlled by said engaging element for releasing the dog.

1,873,756. AUTOMATIC CHANGEABLE SIGN EXHIBITING MACHINE. GRANVILLE F. GIBSON, Shreveport, La. Filed Mar. 5, 1931. Serial No. 520,385. 3 Claims. (Cl. 40—38.)



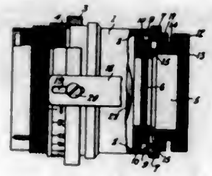
1. A device of the class described having a drum, a disk rotatable relatively to the drum, spring means connected to the disk and drum adapted to be tensioned through turning of the disk, wind mill means exteriorly of the device operable to turn the disk, and escapement mechanism for said drum under control of said disk.

1,873,757. DRILL BIT. GEORGE H. GILMAN, Belmont, Mass., assignor to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 26, 1930. Serial No. 498,249. 1 Claim. (Cl. 255—64.)



As a new article of manufacture, a drill bit comprising a pair of parallel cutting edges disposed equi-distant from the axis of the bit and extending the full width of the bit, and a pair of radial cutting edges equi-distant from the ends of the parallel cutting edges, said radial cutting edges extending inwardly to the cutting edge of the adjacent of said parallel cutting edges and projecting outwardly from the axis of the bit to a distance from the axis substantially equal to the distance of the ends of the parallel cutting edges from the axis.

1,873,758. CAMERA LENS AND FILTER MOUNT. ABRAHAM J. GINSBERG, New York, N. Y. Filed Nov. 25, 1930. Serial No. 498,122. 7 Claims. (Cl. 95—2.)

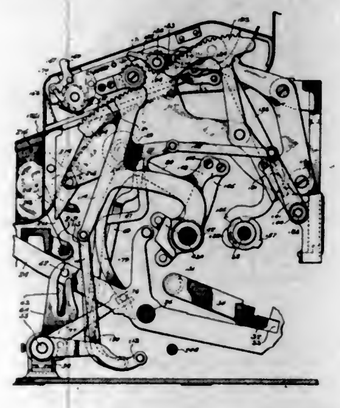


1. A device of the character described including a barrel, a focusing lens in the barrel, an adjusting ring having screw threaded engagement with the barrel and adapted to adjust the lens to focus the same, a filter mount having screw threaded engagement with the barrel, a multi-color filter in the mount said last mentioned threaded engagement including threads of a pitch differing from the threads of the focusing ring, and means operatively connecting the focusing ring and filter mount, so that when the lens is adjusted a predetermined distance along the barrel, the filter will be similarly moved but through a less distance than the lens.

1,873,759. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Oct. 1, 1926. Serial No. 138,868. 17 Claims. (Cl. 235—3.)

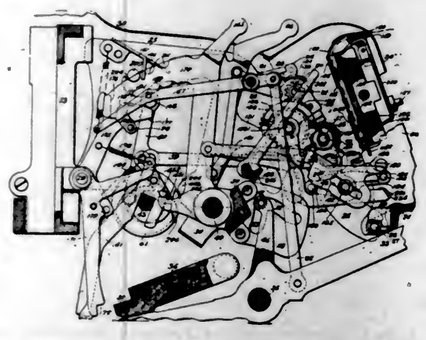
1. In a machine of the class described, a plurality of printing units adapted to print upon separate record media, a consecutive number printing device associated with each of said units, said devices each comprising a plurality of

type elements mounted upon a shaft, and adapted to print corresponding consecutive numbers, a reset lever connected to rotate said shafts simultaneously, thereby to reset said



type elements to zero at substantially the same time, and lock controlled means for preventing unauthorized operation of said resetting lever.

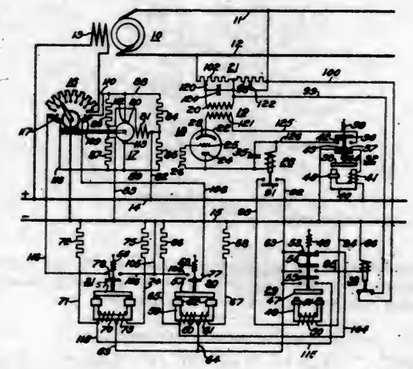
1,873,760. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Mar. 6, 1925. Serial No. 13,470. 75 Claims. (Cl. 235—130.)



1. In a machine of the class described, the combination with a series of keys, a differential device operated by the keys, a pivoted frame carrying a series of totalizer elements driven by the differential device, a drive shaft, a box cam attached to the shaft, a depending arm having its upper end pivoted to a stationary frame and its lower end co-operating with the box cam, and a member attached at one end to said arm and at the other to said totalizer frame whereby the totalizer elements are drawn into and out of engagement with the differential device.

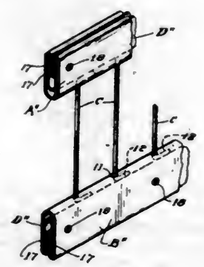
1,873,761. GRID-GLOW TUBE REGULATOR. FINN H. GULLIKSEN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 2, 1931. Serial No. 512,934. 13 Claims. (Cl. 171—229.)

1. A voltage regulating system for an electrical circuit comprising a grid-glow electric-discharge device connected to be energized in accordance with the voltage of said circuit and disposed to be non-conductive when the circuit voltage is below normal and conductive when the circuit voltage exceeds normal, means for rendering the device alternately conductive and non-conductive during



short time intervals when the circuit voltage is of the normal value, relay means responsive to the current passed by said electric-discharge device, and means for controlling the voltage of said circuit in response to actuations of said relay means which persist uninterruptedly for more than a predetermined period of time.

1,873,762. METAL LATTICE WALL. GEORGE F. HAUF, Chicago, Ill. Filed Dec. 15, 1927. Serial No. 240,112. 6 Claims. (Cl. 189—84.)

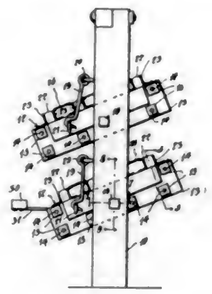


1. A metal partition wall comprising a pair of laterally spaced apart outwardly facing metal rails substantially U-shaped in cross section, a plurality of parallel metal rods having laterally bent portions at their opposite ends, said portions extending through openings provided in the rails and secured thereto, and reinforcing members disposed between the U-shaped walls of the rails throughout the entire length of the rails and secured thereto.

1,873,763. SANITARY PIVOTED ROOST STRUCTURE. CALVIN E. HILTON, Hamburg, Iowa. Filed Feb. 12, 1931. Serial No. 515,372. 3 Claims. (Cl. 119—22.)

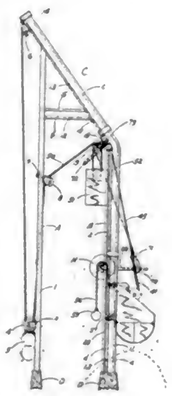
1. A device of the class described comprising a roost member, means supporting the same off center for pivotal

movement so that when free it will assume a substantially vertical position by gravity and displaceable means



normally maintaining the roost member in an inclined position, the roost member upon release being adapted to seek said substantially vertical position.

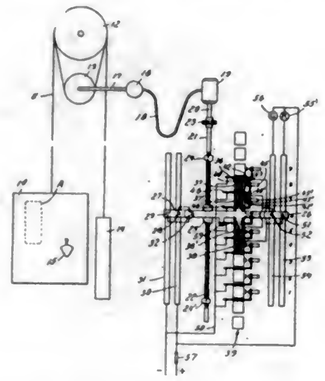
1,873,764. GRAB BUCKET AND SKIP HOIST. CHARLES C. HORMEL, Denver, Colo., assignor to The Allen-Sherman-Hoff Company, a Corporation of Pennsylvania. Filed Dec. 4, 1929. Serial No. 411,619. 15 Claims. (Cl. 214—115.)



1. Material handling apparatus comprising a material-receiving bucket provided with clam shell members, means for operating the clam shell members to load the bucket, and means for inverting the bucket to dump the latter.

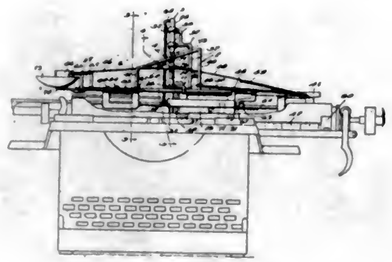
1,873,765. ELEVATOR CAR SIGNAL DEVICE. DAVID W. HUGHES, Bronxville, and CHARLES E. ELLIS, Jr., New York, N. Y., assignors, by mesne assignments, to Westinghouse Electric Elevator Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 21, 1927. Serial No. 234,582. 5 Claims. (Cl. 177—336.)

1. In a signalling system for an elevator car operable past a plurality of floors, an elevator car, a signal carried by said car for indicating that a stop is to be made, a circuit for energizing said signal, a push-button panel mounted on said car, a plurality of push buttons one of which corresponds to each floor, said push buttons being lineally arranged on the panel in a consecutive row corresponding to the consecutive floors, a car-position indicator on the car, means for mounting said car-position indicator for lineal movement in juxtaposed relation to said push-button panel whereby its position relative to the re-



spective buttons will be indicative of the position of the car relative to the corresponding floors, and means for actuating said car position indicator in accordance with the movements of the car.

1,873,766. TYPEWRITER. SEICHI ISHIKAWA, Labaina, Territory of Hawaii, assignor of one-half to Fred K. Makino, Honolulu, Territory of Hawaii. Filed Mar. 26, 1931. Serial No. 525,555. 19 Claims. (Cl. 197—189.)

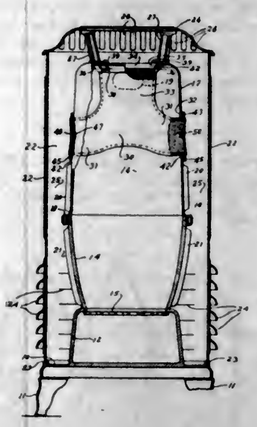


1. In a typewriter having means to cause successive movements of a sheet therethrough a signal mechanism, reciprocatory feeler means, and means actuated by the feeler means when one of its movements is resisted by a transverse sheet edge to initiate the operation of the signal mechanism.

1,873,767. HEATING STOVE. BERTRAND B. KAHN, Cincinnati, Ohio, assignor to The Estate Stove Company, Hamilton, Ohio, a Corporation of Ohio. Filed Oct. 8, 1930. Serial No. 487,210. 5 Claims. (Cl. 126—67.)

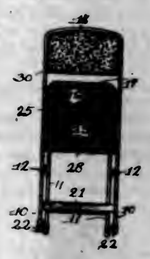
1. In a heater of the character described, in which a combustible fuel is burned within a combustion chamber, and convection air is passed over heat transferring surfaces heated by the combustion within said chamber; an air heating duct having an exterior heat absorbing surface positioned within the path of the heated products of combustion to receive heat energy therefrom, and an interior heat transferring surface positioned in the path of travel of the air being heated and in heat energy

transferring relation with said traveling air, said heat transferring surface being formed of closely positioned corrugations to present an effective heat transferring sur-



face which is of greater extent than the said heat absorbing surface, and forming with the heat absorbing surface a substantially uniform path of conduction.

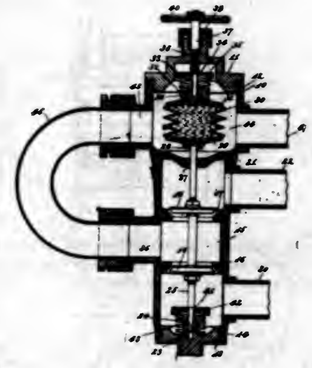
1,873,768. FOLDING CHAIR. ALBERT S. KUX, Chicago, Ill., assignor, by mesne assignments, to Stakmore Co. Inc., a Corporation of New York. Filed Apr. 19, 1926. Serial No. 102,847. 12 Claims. (Cl. 155—143.)



1. A folding metallic chair embodying legs pivotally connected intermediate their extremities, a metallic seat member pivotally supported adjacent its rear end between one pair of legs, the upper portions of the latter extending above the seat pivot to form standards, the upper extremities of the other pair of legs being disposed in close proximity to the forward edge of the seat when the seat is lowered, members pivotally connected by one extremity to the seat adjacent the front edge of the seat, and a telescoping connecting between the said members and the upper extremities of the said other pair of legs.

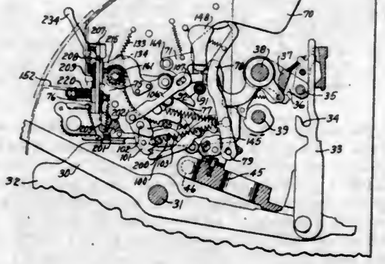
1,873,769. FLUID TEMPERATURE CONTROL. HARRY J. LANG, Adrian, Mich. Filed Mar. 3, 1931. Serial No. 519,848. 7 Claims. (Cl. 236—12.)

1. A fluid temperature control having a casing with two inlets spaced apart and a mixing chamber disposed between the inlets, two valve seats in the casing at the mixing chamber, one valve seat separating the mixing chamber from one of the inlets and the other valve seat separating the mixing chamber from the other inlet, an outlet from the casing at the mixing chamber, two valves, one at each valve seat, there being a transverse passageway in the casing with an inlet in the casing to the passageway and an outlet in the casing from the passage-



way, a thermostatic means in the passageway, and a valve stem connecting the thermostatic means with the valves for operating the latter.

1,873,770. CASH REGISTER. CHARLES L. LEE, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Dec. 26, 1930. Serial No. 504,763. 13 Claims. (Cl. 101—96.)

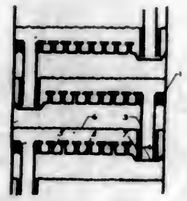


1. In a machine of the class described, the combination of a main operating device; paper feeding rollers; severing means; an actuator driven by said device; means operable by the actuator to cock the severing means; means to retain the severing means in its cocked position; a second means operable by the actuator to drive the feeding rollers; and means carried by the second means to release the retaining means.

1,873,771. METHOD AND APPARATUS FOR FRACTIONAL DISTILLATION. ISAAC H. LEVIN, Pittsburgh, Pa., assignor, by mesne assignments, to Gas Industries Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 1, 1925. Serial No. 34,072. 11 Claims. (Cl. 261—114.)

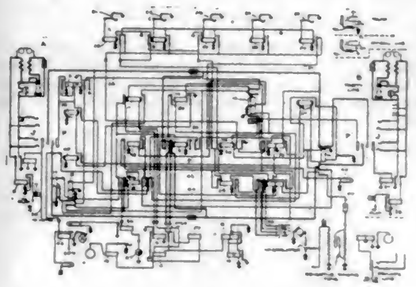
5. The step in the process of fractional distillation which includes alternately subjecting a vapor to a wetting action of a liquid and to a drying action consisting in passing said vapor upwardly through a liquid traveling in a generally downward direction and in courses in different directions, in separating from the vapor between such courses the moisture gathered by the vapor in

its rise through the liquid and collecting this moisture on a plane between the courses, ond in returning the separated moisture out of the path of travel of the rising



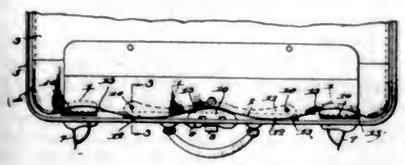
vapor to the course of liquid below the zone of separation and at substantially the same location as the latter course receives the liquid from above.

1,873,772. METERING SYSTEM. JOHN H. LEVIS, Jr., Rochester, N. Y., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 4, 1925. Serial No. 54,573. 24 Claims. (Cl. 179—8.5.)



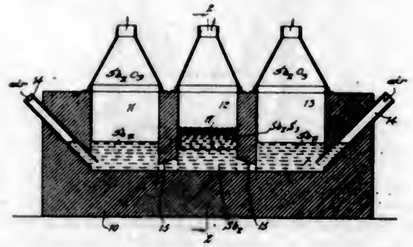
1. The method of operating a telephone system, which consists in having a predetermined number of calls in the process of connection simultaneously by an operator, manually extending said calls one at a time to called telephone lines or official lines, automatically registering the calls completed to the telephone lines, and automatically preventing the charging of calls extended to official lines.

1,873,773. TRAVELING BAG. NATHAN LISH, Philadelphia, Pa., assignor to Grainick Bros. Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 10, 1931. Serial No. 507,954. 2 Claims. (Cl. 190—41.)



1. A Gladstone or like traveling bag including an open body portion and a ledge inside of said body portion, said body portion having middle an lateral locking devices on its front wall, a partition permanently hinged to the rear wall of the body portion, said partition being cut out centrally and laterally along its front side to avoid said locking devices, middle and lateral rests supplementing the ledge, being attached to the ledge and extending inwardly of the body portion at the location of said cutaway portions to sustain the partition at said cutaway portions, the middle rest being approximately half the length of the partition, said partition having a pair of openings, and fastening means carried by the middle rest near its ends to be near the lateral rests, said fastening means entering said openings and being operable to simultaneously clamp the partition down on the middle and lateral rests.

1,873,774. PROCESS OF PRODUCING ANTIMONY OXIDES. JEAN JOSEPH LISTRAT, Clamart, Seine, France. Filed Dec. 9, 1927. Serial No. 238,909. 2 Claims. (Cl. 23—144.)



1. A process for producing antimony of oxide from antimony sulphite ore, which comprises heating the sulphide ore to the proper degree of heat for dissociating the ore into molten antimony, sulphur vapors and antimony trisulphide vapors in a space while oxidizing the sulphur vapors and the antimony tri-sulphide vapors in said space, confining the molten antimony in a second space and passing a stream of air through the molten antimony for oxidizing the antimony, the exothermic reaction caused by the oxidation being adapted to maintain the proper temperature for the dissociation of the ore without external heat.

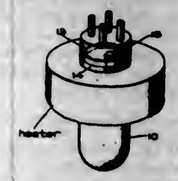
1,873,775. CABLE TERMINAL. CARLOS L. MCMASTER and OWEN J. GARTNER, Cleveland Heights, Ohio. Filed Dec. 22, 1930. Serial No. 504,142. 5 Claims. (Cl. 173—259.)



2. In a cable terminal, a split, contractible, conductor gripping ring like body having forwardly extending cooperating lugs, and means for contracting said ring like member under pressure for gripping a conductor extending therein, said means including a link fitting over the lugs, and cooperating cams removably engaging the respective ends of the link and said respective lugs, said lugs having seats formed therein for movably receiving said cams and a portion of said link, whereby a selected maximum contracting pressure may be applied to said split ring like body for tightly gripping a conductor.

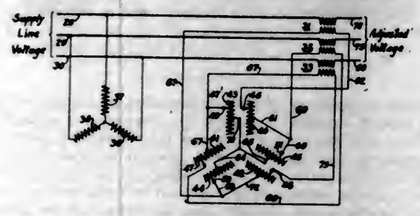
1,873,776. METHOD OF BASING VACUUM TUBES AND SIMILAR ARTICLES. RODERICK S. MCNEIL, Newark, N. J., and EMILE V. BITTERLI, Paris, France, assignors to General Electric Company, a Corporation of New York. Filed Mar. 31, 1926. Serial No. 98,871. 5 Claims. (Cl. 18—59.)

1. The method of attaching to a glass bulb a base of poorer heat conductivity than glass which consists in interposing between said base and said bulb a layer of basing cement in intimate thermal relation to a body of metal adjoining the bulb when the base is in place on



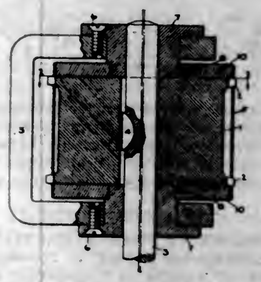
the bulb and heating said cement by localizing at said metal heat transmitted to said cement and metal by conduction along the wall of said bulb.

1,873,777. TAP CHANGING SYSTEM. JAMES T. MERCEREAU and HORACE LEE COLE, Sharon, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 17, 1931. Serial No. 509,350. 8 Claims. (Cl. 172—238.)



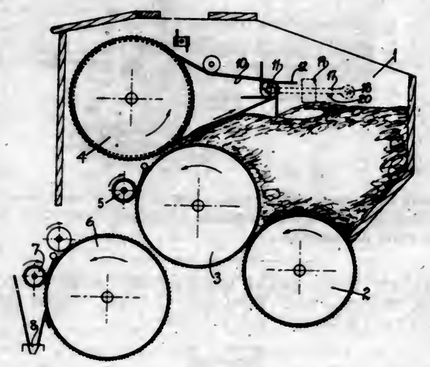
1. In a polyphase electrical power circuit, a system for regulating the magnitude and phase position of the voltages between the input and the output sides of said circuit, said regulating system comprising, in combination, a two winding series transformer associated with each of the circuit conductors, one winding of each transformer being connected in circuit with the conductor, two sources of voltage connected in series circuit relation for energizing the other winding, the voltage of one source being in phase with the power voltage acting on the input side of the given circuit conductor, the voltage of second source bearing a substantially 90° phase relation thereto, and means for independently adjusting the values of said voltages to thereby control, respectively, the magnitude and phase position of the voltage in the output side of said power circuit.

1,873,778. FILM FEEDING MECHANISM. EMIL MECHAU, Sudende, Brunswick, Germany, assignor to General Electric Company, a Corporation of New York. Filed Mar. 27, 1931, Serial No. 525,731, and in Germany Apr. 15, 1930. 6 Claims. (Cl. 74—31.)



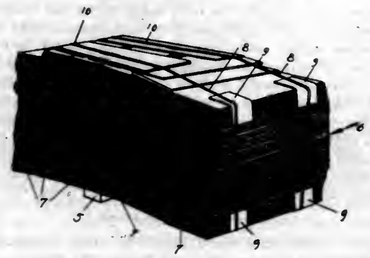
1. Film feeding mechanism comprising a sprocket adapted to engage the film, and rotatable means adjacent the sprocket arranged to support the film at progressively varying distances from the axis of the sprocket.

1,873,779. CIGARETTE MAKING MACHINE. WALTER EVERETT MOLINS, Deptford, London, England. Filed Jan. 10, 1931, Serial No. 507,969, and in Great Britain Nov. 18, 1930. 16 Claims. (Cl. 131—39.)



15. In apparatus for feeding tobacco, the combination with a hopper for the tobacco, of a carded combing roller within the hopper, and a device for maintaining the tobacco within the hopper at a substantially constant level with respect to the combing roller, said device comprising means for removing surplus tobacco from the vicinity of the combing roller, said means exerting yielding pressure on the tobacco to prevent the same from rising above a predetermined level.

1,873,780. PACKAGE AND METHOD FOR THE SHIPMENT OF METAL PIECES. ALVA H. MOON, Middletown, Ohio, assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Oct. 28, 1930. Serial No. 491,761. 7 Claims. (Cl. 206—60.)

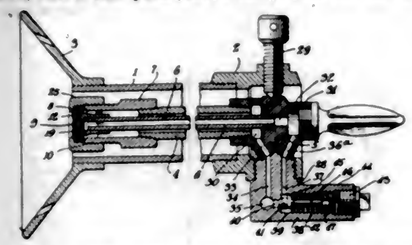


1. A package of metal pieces having longitudinal binding means passing about the said pieces whereby they are held in relationship in said package, and means for supporting the central portion of said package while permitting the ends thereof to sag with reference to said central portion, said means passing beneath said longitudinal binding means.

1,873,781. LIQUID FUEL BURNER AND VARIABLE SUPPLY MEANS THEREFOR. HARRY NIGHTINGALE, Union City, N. J., assignor to Todd Drydock, Engineering & Repair Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 17, 1931. Serial No. 509,293. 5 Claims. (Cl. 299—116.)

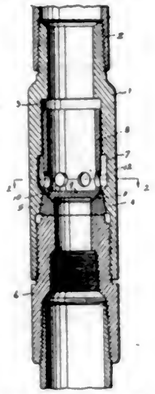
5. The combination with a liquid fuel burner having an atomizer and single line supply means, said burner having

separate passageways for liquid fuel flow at different pressures, one of said passageways being open, and means for



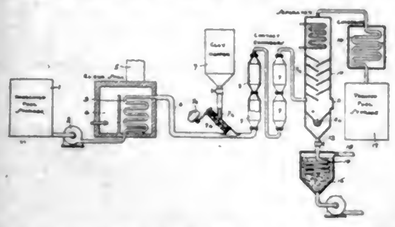
closing the other passageway at low pressures, said means yielding under higher pressures to admit liquid fuel to said other passageway.

1,873,782. PUMP VALVE MECHANISM. JEDDY D. NIXON, Houston, Tex. Filed Oct. 10, 1930. Serial No. 487,726. 3 Claims. (Cl. 137—69.)



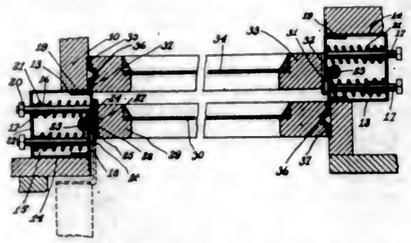
1. In a valve mechanism for pumps, a tubular valve casing having an upwardly tapering seat, an annular valve seat whose upper end has an annular, flared face and whose outside tapers to conform to the shape of and to fit closely into the casing seat, a valve body detachably secured to the lower end of said casing and whose upper end abuts the valve seat and clamps said valve seat securely in said casing seat, a sleevelike valve fitted in the casing above said seat and whose lower end is closed and provided with an annular convex face which cooperates with the flared face of the valve seat.

1,873,783. PROCESS OF TREATING OIL. RUDOLPH C. OSTERSTROM, Chicago, Ill., and ROBERT T. TUCKER, Muskogee, Okla., assignors to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Apr. 17, 1928. Serial No. 270,788. 7 Claims. (Cl. 196—96.)



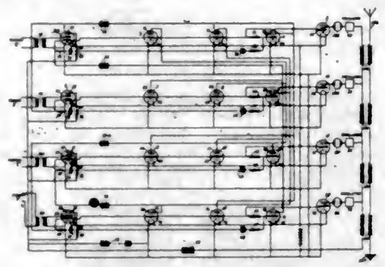
1. The method of removing gum forming and color imparting bodies from petroleum products containing unsaturated compounds, which comprises introducing comminuted solid adsorptive material into a flowing stream of such products in vapor phase, causing the treating material to remain suspended in the vapor for a sufficient length of time to exert the desired effect, subsequently directing the vapor stream upwardly and directing a stream of liquid hydrocarbons counter-current to the vapor stream to effect removal of high boiling constituents, together with polymers and adsorptive material.

1,873,784. INTERIORLY SWINGING WINDOW AND FRAME. JOHN POOCK, Woodcliff, N. J. Filed Feb. 4, 1931. Serial No. 513,256. 3 Claims. (Cl. 20—50.)



1. In a device of the class described, a frame having an upright housing U-shaped in cross-section anchored therein with its open side facing the window, a carriage mounted in said open side and adapted to telescope into said housing, said carriage having an upright tubular guide thereon substantially elliptical in cross-section, said guide having a slot running along the length of the guide, the inner diameter of the tubular guide being greater than the width of the slot, a sash cooperating with said frame, a tongue riding in said slot, means connecting said tongue with said sash, an ovoid head on said tongue lying within said tubular guide, and means for projecting said carriage out of said housing.

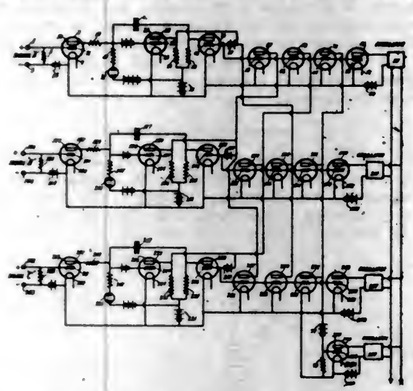
1,873,785. TUBE COMMUTATOR. RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 11, 1928. Serial No. 269,099. 40 Claims. (Cl. 250—9.)



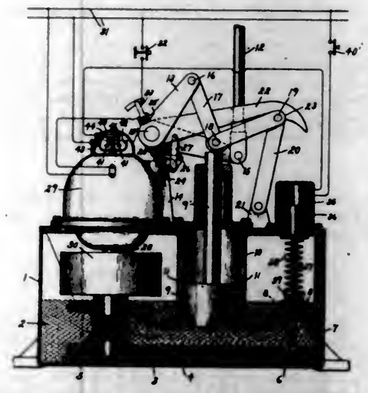
31. A thermionic relay system for multiplex telegraphy comprising a vacuum tube circuit for each signal channel and closed circuits so connecting said vacuum tube circuits as to cyclically and periodically cause said vacuum tubes to become operative for variable time periods.

1,873,786. SELECTIVE CHANNELING SYSTEM. RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 29, 1928. Serial No. 309,274. 28 Claims. (Cl. 250—9.)

1. In a multiplex communication system, a transmitting system, a plurality of signal channels for controlling said transmitting system, and means for sequentially controlling said transmitting system only from such of said signal channels as are supplied with signals so as to divide the transmission time period substantially equally between the channels supplied with signals.



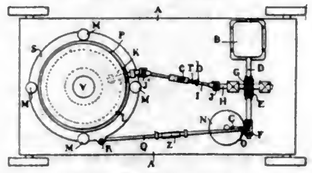
1,873,787. ELECTRIC SWITCH OPERATING MECHANISM. WILLIAM K. RANKIN, Lansdowne, Pa., assignor to General Electric Company, a Corporation of New York. Filed Nov. 26, 1929. Serial No. 409,983. 6 Claims. (Cl. 200—82.)



1. A circuit controlling system comprising a switch actuating member, a fluid operated member operatively connected with said switch actuating member, a pump for effecting movement of said fluid operated member to circuit closing position at a rate corresponding to the rate of fluid discharged from the pump, a flywheel for maintaining the speed of said pump substantially constant notwithstanding appreciable forces tending to resist closure of said switch actuating member and motive means deenergized upon closing movement of said switch actuating member for actuating said flywheel.

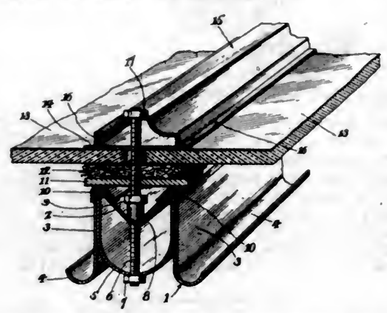
1,873,788. MACHINE FOR WORKING GLASS. EMILE ROIRANT, Paris, France, assignor to Société Anonyme d'Etudes et de Constructions d'Appareils Mecaniques pour la Verrerie, Paris, France. Filed Mar. 12, 1931, Serial No. 522,098, and in France May 5, 1930. 8 Claims. (Cl. 49—5.)

8. An automatic machine for the manufacture of glass objects of the type in which the glass is received by gravity in receivers, moulds and other vessels, comprising a frame, a fixed motor in this frame, a plate capable of rocking about an axis rigid with the frame, a mould-carrying plate supported by and capable of rotating on the said rocking plate about the same axis, a first worm on the shaft of the motor, a first worm wheel gearing with said worm and carried by a shaft, another shaft made in two elements respectively pivoted by a Cardan joint, one on the shaft of the worm wheel, the other on the mould-carrying plate, a tubular part terminating one of these ele-



ments and in which can slide the end of the other element, an abutment on the latter, a spring interposed between this abutment and the tubular part, a second worm on the shaft of the motor, a second worm wheel gearing with this worm, a crank plate rigid with this second worm wheel, a link pivoted, on the one hand, on the said crank plate, and, on the other hand, on the rocking plate, means for varying the length of the said link, and means for varying the eccentricity of the pivoting point of the link on the crank plate.

1,873,789. SKYLIGHT JOINT. CHESTER C. RUPERTUS, Washington, D. C. Filed Mar. 28, 1931. Serial No. 525,978. 6 Claims. (Cl. 108—16.)

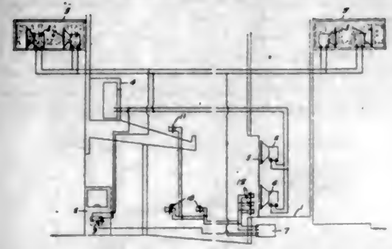


1. A skylight joint comprising, a supporting structure for spaced adjacent portions of a pair of skylight sections and including an elongated supporting plate at the top thereof, a combined cushion and filter element interposed between the said plate and said adjacent portions, a crown structure disposed above said adjacent portions, and clamping means extending between said sections and through said supporting and crown structures for securing the latter together, said crown structure including an elongated soft metal plate seated on and bridging the space between said adjacent portions and further including an inverted elongated channel member having side walls disposed at a right angle to and seated on said soft metal plate.

1,873,790. SOUND REPRODUCING APPARATUS FOR ADVERTISING PURPOSES. FERDINAND GEORGE SALCEDO, Quantico, Va. Filed Dec. 13, 1929. Serial No. 413,911. 1 Claim. (Cl. 179—100.1.)

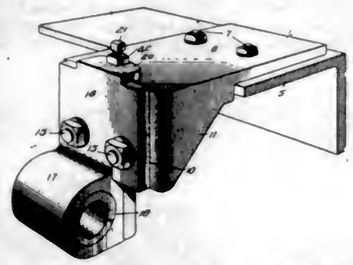
In combination, a theater having a sound and picture reproduction apparatus located therein, loud speaker units located exteriorly of the theater, microphones located within the theater, an amplifier for the microphones, a control switch in the theater, an electrical circuit between the loud speaker units and the sound and picture reproduc-

tion apparatus and controlled by the switch, and an electrical circuit between the loud speaker units and the microphones and the amplifier therefor and controlled by



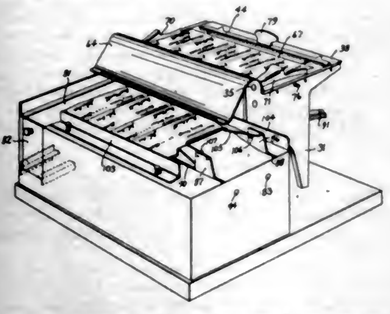
said switch whereby either music and applause within the theater or movietones from the sound reproduction apparatus may be transmitted exteriorly of the theater.

1,873,791. ROCKER-SHAFT BEARING FOR LOOMS. CLAUDE C. SHAW, Camden, S. C. Filed Feb. 5, 1931. Serial No. 513,709. 1 Claim. (Cl. 308—21.)



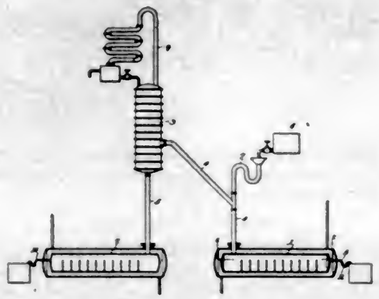
In a bearing for loom rocker-shafts, a supporting structure embodying a top plate with means for adjustably but rigidly attaching it to a loom girt or beam and a depending face plate provided with a pair of vertical open slots, a hanger-plate having a rocker-shaft bearing projecting from its front face with a lug projecting rearwardly and fitting in one of the aforesaid slots in the face plate, and bolts extending through the hanger plate and the slots in the face plate at a point above the aforesaid lug.

1,873,792. PAPER SLITTING AND STACKING DEVICE. HARRY E. SHEELER, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Jan. 30, 1931. Serial No. 512,300. 11 Claims. (Cl. 164—61.)



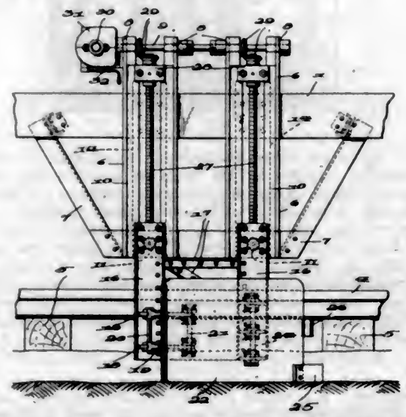
1. In a machine of the class described, the combination of paper slitting means; paper feeding means; a driving means for the slitting and feeding means; means for advancing the material to be slit to the feeding and slitting means; means for closing the opening through which the material is advanced to the feeding and slitting means; means operated by the advancing means to remove the closing means from said opening just prior to the entry of the paper into the opening; and adjustable parallel guides for laterally aligning the material to be slit with the slitting means.

1,873,793. DENITRATION OF SPENT ACIDS. WALTER O. SNELLING and JOSEPH A. WYLER, Allentown, Pa., assignors to Trojan Powder Company, New York, N. Y., a Corporation of New York. Filed Dec. 16, 1927. Serial No. 240,076. 1 Claim. (Cl. 202—40.)



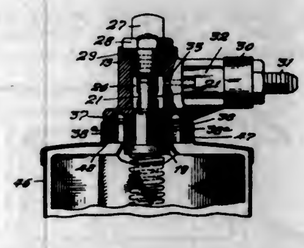
The process of treating a ternary mixture of H_2SO_4, HNO_3 and H_2O, which comprises continuously heating such mixtures to volatilize the HNO_3 and H_2O and to concentrate the H_2SO_4, continuously treating the volatilized components to a dephlegmating operation, segregating the refluxed product, continuously heating said product to volatilize the less concentrated portions thereof, and continuously dephlegmating said volatilized less concentrated portions and returning the refluxed product of said operation to the main body of the original refluxed liquid.

1,873,794. RAILROAD BALLAST SCRAPER. FRANK SPENO, Ithaca, N. Y. Filed Feb. 19, 1931. Serial No. 517,018. 21 Claims. (Cl. 37—105.)



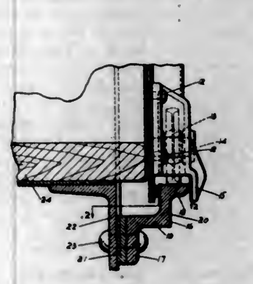
21. A scraper structure comprising a support, an upright guide carried by the support at the upper end portion of said guide and constructed for pivotal movement of the guide about an approximately horizontal axis, a scraper carried by the lower end portion of the guide, and means for vertically adjusting the scraper relative to the guide.

1,873,795. OIL FILTER CONSTRUCTION. ERNEST J. SWEETLAND, Piedmont, Calif. Filed Sept. 21, 1926. Serial No. 136,756. 8 Claims. (Cl. 210—164.)



8. The combination in an oil filter of a flexible folded envelope of filtering material, a flexible drainage and spacing member in said envelope, a drainage tube extending from the interior to the outside of said envelope, and a fibrous spacing material between the folds of said envelope.

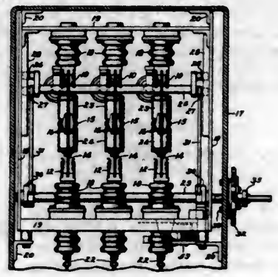
1,873,796. TRACK MEANS. GEORGE R. TREPTOW, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 21, 1929. Serial No. 408,722. 1 Claim. (Cl. 16—96.)



The combination with a continuous side sill of a metallic railway car provided with a door opening and a metallic door to close said opening, of a track for supporting said door for sliding movement, said track being secured directly to said sill and having a vertical securing flange, a horizontal flange extending outwardly from said securing flange, said horizontal flange lying below the floor of said car and the lower edge of said door, a vertical flange extending upwardly from said horizontal flange, the track terminating outwardly of said car in a horizontal tread, said horizontal flange and said last mentioned vertical flange presenting an angle directed toward said sill and lying below the floor of the car, said lower edge of said door being positioned between said last mentioned vertical flange and the sill of said car.

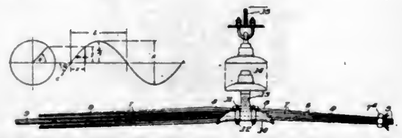
1,873,797. ELECTRIC SWITCH. HAROLD R. TURNER, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 10, 1931. Serial No. 507,882. 10 Claims. (Cl. 200—16.)

1. An electric switch including a plurality of spaced pairs of contacts, a conducting member connecting one contact of one pair to one contact of another pair and means for bridging one pair of contacts at a time including a coperating movable contact having a portion adjacent said member, said portion being arranged for movement into contacting position between said member and each of



the contacts connected thereby, and means for actuating said movable contact to bridge each of said pairs of contacts.

1,873,798. METHOD OF AND MEANS FOR SUSPENDING AND PROTECTING AERIAL CABLES. THEODORE VARNEY, Pittsburgh, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 27, 1928. Serial No. 249,984. 12 Claims. (Cl. 173—251.)



1. The method of suspending aerial cables to prevent damage due to vibrations set up in the cable, which consists in applying to the cable at its point of support a plurality of elements with the central portions thereof disposed parallel with the axis of the cable and untwisted and with the end portions thereof twisted about the cable.

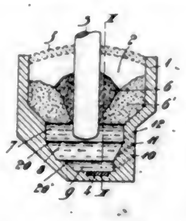
1,873,799. SYNTHETIC RESIN AND METHOD OF MAKING SAME. FERNAND VACHER, Paris, France, assignor, by mesne assignments, to Continental-Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed Dec. 16, 1926. Serial No. 155,350. 3 Claims. (Cl. 260—4.)

1. The process of making a synthetc resin which comprises reacting together approximately 100 parts of aniline and approximately 90 parts of 40% formaldehyde solution in the presence of approximately 25 parts of a phenol to form a potentially reactive resin; and thereafter heating said potentially reactive product to obtain a hard, infusible, insoluble resin.

1,873,800. ELECTROTHERMIC SMELTING OF SULPHIDIFEROUS MATERIALS. AXEL RICHARD WEJNARTH, Gredbyvagen, Eskilstuna, Sweden. Original application filed Sept. 18, 1929, Serial No. 393,593, and in Sweden Sept. 9, 1929. Divided and this application filed Nov. 7, 1930. Serial No. 494,037. 8 Claims. (Cl. 75—22.5.)

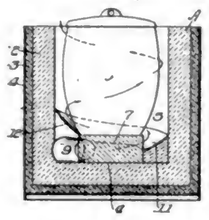
1. Method for smelting sulphidiferous materials in an electric furnace, provided with an adjustable electrode descending into the furnace, which consists in charging the

material forming the charge into the electric furnace in such a way that parts of the charge having low electric conductivity are charged into the furnace nearer the



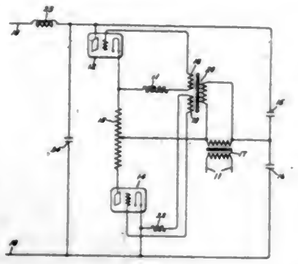
electrode than such parts of the charge which have a comparatively higher electric conductivity, said latter parts being charged nearer the furnace walls.

1,873,801. CRUCIBLE FURNACE. HAROLD E. WHITE, Zelienople, Pa., assignor to Lava Crucible Company of Pittsburgh, Pittsburgh, Pa. Filed Sept. 29, 1930. Serial No. 485,062. 3 Claims. (Cl. 263—14.)



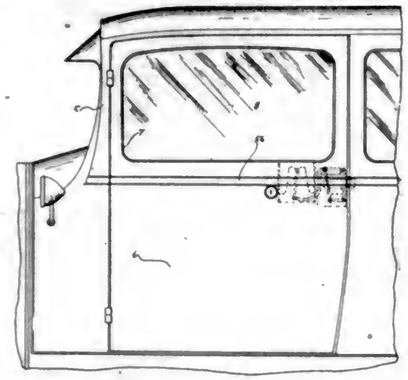
1. In a crucible furnace, the combination with a hollow body, of a melting chamber therein having a floor, a circular ramp in the floor, and an elongated combustion chamber exteriorly of the melting chamber in open communication with the melting chamber and tangentially disposed with respect to said ramp to introduce heated gases tangentially onto the upper surface of the ramp, said upper surface being generally spiral and extending downwardly and inwardly.

1,873,802. ELECTRIC POWER CONVERTING APPARATUS. CLODIUS H. WILLIS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 28, 1930. Serial No. 491,807. 5 Claims. (Cl. 250—36.)



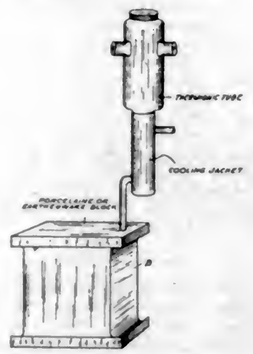
1. In combination with an apparatus for converting direct current into alternating current comprising an oscillating circuit including a vapor electric valve, means for clearing a short circuit through said valve comprising a second oscillating circuit also including said valve, said second circuit having a natural period of oscillation substantially greater than that of said first circuit.

1,873,803. DOOR LATCH FOR MOTOR VEHICLES. DAVID WILSON, New York, N. Y. Filed Feb. 14, 1931. Serial No. 515,830. 3 Claims. (Cl. 292—164.)



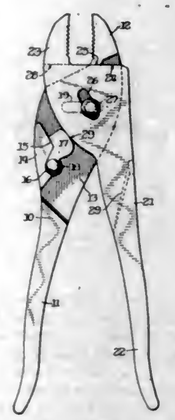
1. In combination with a door having a latch and a window opening, a latch operating means comprising a reciprocating member mounted in one of the walls of the window opening and normally flush with the exposed face thereof, a pivoted lever, a link connected to said reciprocating member and said pivoted lever for rocking the latter about its pivotal point, means connected to and operated by said pivoted lever for moving the latch bolt to door releasing position upon operation of said reciprocating member, and means for returning said reciprocating member and said latch bolt to normal position, said last mentioned means comprising a spring connected at one end to said pivoted lever, and at its opposite end to said door.

1,873,804. COOLING ARRANGEMENT FOR HIGH FREQUENCY APPARATUS. HEINRICH ZODTNER, Berlin-Birkenwerder, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Jan. 7, 1931, Serial No. 507,190, and in Germany Jan. 9, 1930. 3 Claims. (Cl. 257—256.)



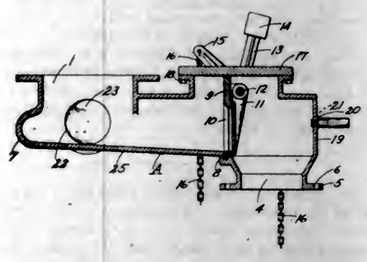
1. A device for cooling thermionic tubes comprising a block of porcelain or earthenware, ducts cut in said block, said ducts having a glazed surface.

1,873,805. PLIERS OR THE LIKE. ALLEN C. ALLAN, Chicago, Ill., assignor to Kant Slip Plier & Tool Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 21, 1931. Serial No. 524,244. 5 Claims. (Cl. 81—51.3.)



1. In a pair of pliers or the like, the combination of a member having a handle at one end and a jaw at its other end, both said handle and said jaw being disposed substantially lengthwise of said member, a second member crossing said first member and having a handle at one end, a jaw at its other end, and a transverse end surface disposed at a substantially right-angle to the active face of said jaw and adapted to bear on and to slide transversely of the pliers on the surface of the inner end of said first jaw, both said handle and said jaw of said second member being disposed substantially lengthwise of said second member means to hold said members loosely together, an abutment on said first member, and a cam face on said second member co-operating with said abutment, whereby pressing of said handles toward one another causes said transverse end surface to rock on said inner jaw surface as a fulcrum, the co-action of said cam face on said abutment automatically shifting said fulcrum bearing of said transverse surface on said jaw surface, whereby said second jaw rocks on said fulcrum and also travels bodily toward said first jaw to clamp the article between them.

1,873,806. FURNACE DUST HANDLING APPARATUS. FRANK B. ALLEN, Lower Merion Township, Montgomery County, Pa., assignor to The Allen-Sherman-Hoff Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 21, 1930. Serial No. 476,733. 1 Claim. (Cl. 302—15.)



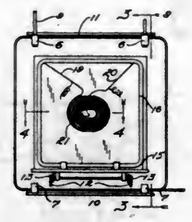
In a furnace dust handling apparatus, a member adapted to be attached to a dust collecting receptacle and defining an air tight dust receiving and storage space, a dust disposal sewer adjacent said receiving and storage space, a gate positioned within said member separating the dust receiving and storage space from the dust disposal sewer, means exteriorly of the member for operating the gate, there being an opening in said member at one end thereof, a nozzle projecting through said opening and adapted to discharge a liquid into said member and across the same, the other end of said member having a curved wall a portion of which is reversed upon itself to facilitate flushing of the member by the fluid discharged from said nozzle.

1,873,807. ELEVATOR BUFFER. EDWIN E. ARNOLD, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 18, 1929. Serial No. 393,438. 12 Claims. (Cl. 188—96.)



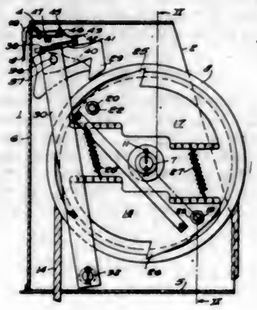
1. In a fluid-resistance buffer, the combination of a cylinder, a ram disposed to reciprocate within said cylinder, and a fluid within said cylinder operative to bypass the ram and produce a buffer action with respect to the movement of said ram, with means associated with said ram to form an air chamber, and means to compress the air in said chamber during an operative stroke of said ram, whereby the air, when compressed, is effective to retrieve said ram.

1,873,808. MEANS FOR HEATING A CONDUCTIVE BODY. EDGAR L. BAILEY, Detroit, Mich. Filed Mar. 3, 1930. Serial No. 432,787. 9 Claims. (Cl. 219—13.)



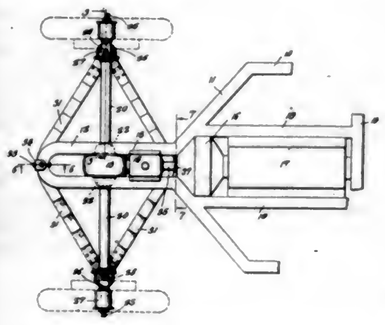
1. In heating apparatus, an electric circuit, an outer coil electrically connected in said circuit for receiving conductive bodies and inducing heat generating current therein, a collector coil in proximity of said outer coil, and means electrically connected with said collector coil for augmenting the effect of said outer coil on selected parts of said body.

1,873,809. SAFETY DEVICE FOR ELEVATORS. EDWARD N. BALDWIN, Chicago, Ill., assignor to Westinghouse Electric Elevator Company, a Corporation of Illinois. Filed June 16, 1930. Serial No. 461,282. 3 Claims. (Cl. 187—39.)



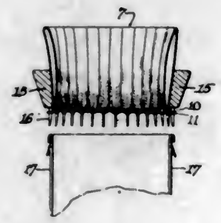
1. In a speed-governing device, in combination, a sheave, a cable for driving said sheave, a pivoted arm associated with said sheave, said arm having a latching portion, pivoted brake arm, latching means on said brake arm to cooperate with said latching portion, a shoe secured to said brake arm and adapted to move therewith to engage said cable, a switch, and means cooperating with said brake arm for opening said switch.

1,873,810. FRONT WHEEL DRIVE. ROBERT MARSHALL BARNHART, Spokane, Wash. Filed Oct. 17, 1930. Serial No. 489,393. 1 Claim. (Cl. 180—43.)



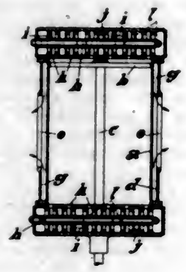
A front wheel drive for a motor vehicle comprising in combination with a chassis frame, a transmission housing mounted upon the frame, an engine shaft entering said housing, a housing sleeve mounted upon the engine shaft at one side of the transmission housing, a yoke pivotally connected with the chassis frame at the opposite side of the transmission housing, the pivot of the yoke being in alignment with the axis of the shaft, sets of springs attached to the housing sleeve and yoke respectively, the springs of the respective sets having ends converging toward each other, a differential housing located between the sets of springs and engaging the transmission housing, and axle housings pivotally connected at their inner ends at opposite sides of the differential housing and connected at their outer ends with the ends of said springs.

1,873,811. STOCKING. JEREMIAH LEE BAUSHER, Reading, Pa., assignor to Infant Socks, Inc., Reading, Pa., a Corporation of Delaware. Filed May 12, 1930. Serial No. 451,617. 3 Claims. (Cl. 66—173.)



1. As a new article of manufacture, a knitted stocking comprising separately knitted top and leg portions, said top portion being formed by an intermediately folded strip of rib-knitted fabric, said rib-knitted strip having a full course series of loops at one end and a series of a reduced number of spaced loops at the other end, and both said series of loops being interknitted with the first course of the plain-knitted leg portion of the stocking, said full course series engaging with every loop of said first course and said reduced number series with spaced loops of said first course.

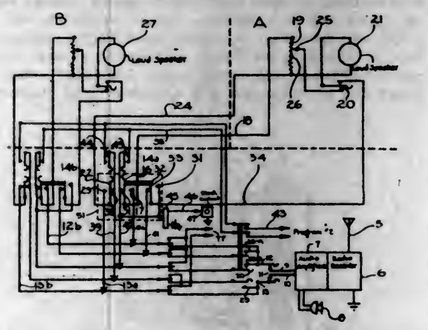
1,873,812. PUMP. HEINRICH BECKER, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nürnberg A. G., Augsburg, Germany, a Corporation of Germany. Filed Feb. 7, 1930, Serial No. 426,576, and in Germany Feb. 13, 1929. 11 Claims. (Cl. 230—231.)



1. A pump of the character described comprising a pump cylinder, a piston operable therein, inlet and outlet valves for controlling the fluid flow, said valves comprising a series of automatically operable valve members arranged in line, and a valve housing for said series of valve members formed as a hollow cylinder arranged in a direction extending transversely of the cylinder axis and across an end of the cylinder, said housing having ports communicating directly with the cylinder.

1,873,813. PROGRAM SERVICE SYSTEM. CHARLES H. BERGMANN, Rochester, N. Y., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 15, 1930. Serial No. 495,888. 12 Claims. (Cl. 179—2.)

1. In a program distributing system, a central station having a source of programs, a plurality of rooms each provided with a loud speaker, means for connecting the program source to any loud speaker in any room, means in each room to normally disable its associated loud speaker from receiving programs from said source, and means in-



cluding a portion of said first means located at the central station for transmitting signals to said loud speakers irrespective of the condition of said disabling means.

1,873,814. COUPLING FOR DRILL BITS. HARRY C. BREWSTER, Shreveport, La. Filed Oct. 9, 1930. Serial No. 487,553. 9 Claims. (Cl. 255—61.)



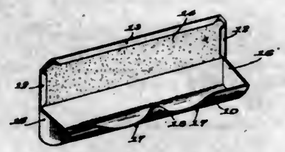
1. The combination with a drill collar and a drill bit having means whereby relative movement of one with respect to the other in one direction will couple the two and movement in a counter direction will uncouple the two, the bit including wing-blades extending beyond the plane of the periphery of the collar, of a detent rotatable with the collar and extending between adjacent bit blades to prevent uncoupling movement between the collar and bit.

1,873,815. ELECTRIC WIRE CONDUIT. BENJAMIN NEFF BROUNER, Takoma Park, Md. Filed Nov. 21, 1930. Serial No. 497,283. 4 Claims. (Cl. 247—37.)



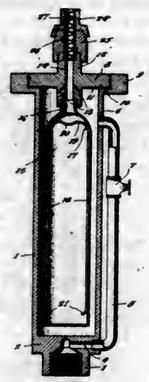
1. A surface conduit; comprising a plurality of spaced walls; base members having apertures extending out from the bottom edges of said walls; and a top, with its edges in connection with the free edges of said base members, and passing over the upper edges of said walls, said top being arcuate shaped from edge to edge and being formed with holes of a proper size and arranged so that fastening means may be completely passed therethrough for cooperation with the apertures of said bases to fasten the conduit to a surface.

1,873,816. CIGARETTE ROLLING DEVICE. JAMES HOWARD BROWN, Baltimore, Md. Filed Oct. 16, 1931. Serial No. 569,320. 4 Claims. (Cl. 131—5.)



1. A cigarette rolling device comprising a trough-like member to receive a portion of a cigarette paper and tobacco on said portion, the ends of the trough being closed, a plate extending from one edge of the trough for supporting the remaining portion of the paper, the opposite edge of the trough having portions cut away to receive the thumbs of the operator when the paper is being rolled over the tobacco.

1,873,817. SPRAYER. CHARLES F. BUDDENHAGEN, Providence, R. I., assignor to Cletus G. Buddenhagen, Atlantic, Mass. Filed Aug. 25, 1930. Serial No. 477,659. 3 Claims. (Cl. 299—84.)

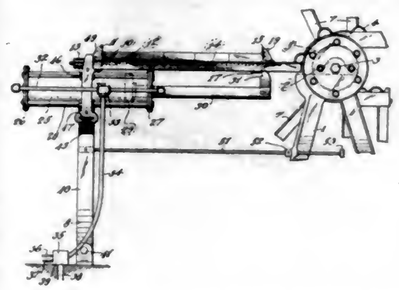


2. A spraying device comprising a casing having at its front end a discharge duct and side ducts leading from said discharge duct and communicating with the interior of the casing, a collapsible container for insecticide disposed within the casing and communicating with the discharge duct, a bracing device disposed within the container and having a portion thereof bearing against the side walls of the container and another portion thereof extended transversely across the discharge duct, a threaded nipple at one end of the casing for attachment to a hose, a liquid passage communicating with said nipple, a conduit having one end thereof connected with the liquid passage and its other end communicating with the interior of the casing near the side ducts, and a valve disposed in said conduit.

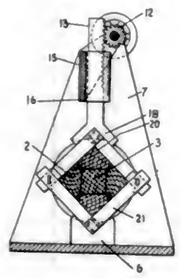
1,873,818. CLAMP MACHINE. RAYMOND W. BURNS, Poughkeepsie, N. Y. Filed Nov. 7, 1929. Serial No. 405,348. 16 Claims. (Cl. 144—289.)

16. In a clamp machine, the combination of a clamping unit including a plurality of clamps each having a frame

and a pair of opposed jaws, said frames being disposed in a common plane to cooperate in receiving works to be clamped and each pair of jaws to independently clamp the work, power driven means for said clamps, means for separably connecting said power driven means to one of said jaws of each clamp to actuate said jaw toward the other jaw and clamp work therebetween, and means manually operated on each clamp frame for holding the corresponding first-mentioned jaw in and releasing it from the work clamping relation to the other jaw to which it has been actuated by said power driven means, whereby said clamp unit can be brought to the power driven means, the work clamped therein, the clamp unit can be removed from the power driven means with the work held under the full compression applied by the power driven means, and the work manually released from the clamp unit when desired.



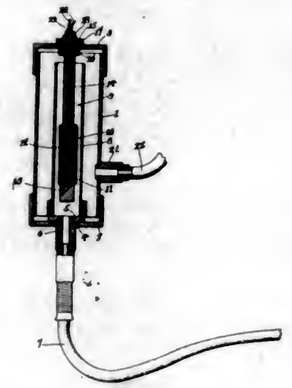
1,873,819. CLAMPING APPARATUS. SAMUEL D. BUTTERWORTH, Detroit, Mich., assignor of one-half to Josephine M. Butterworth, Detroit, Mich., and one-half to C. P. Gable, Gable, S. C. Filed Jan. 2, 1931. Serial No. 506,124. 6 Claims. (Cl. 144—291.)



4. A clamping device comprising a member of angle construction having a pair of angularly disposed arms, a similarly shaped complementary member, said members being adapted to cooperate to form an area between them for the reception of articles to be clamped and with their arms overlapping, each of said arms being apertured, and a wedge adapted to be driven through the apertures of the overlapped arms to urge the complementary members together in clamping relation.

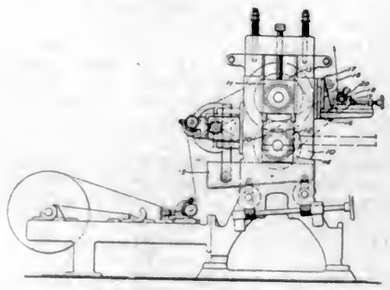
1,873,820. FLUID WARMER. WEBSTER I. CARPENTER, Norfolk, Va. Filed July 25, 1930. Serial No. 470,748. 2 Claims. (Cl. 219—39.)

1. A fluid warmer comprising, a casing having an outlet plug at the bottom thereof and an inlet plug in spaced relation to the bottom thereof, a jacket secured to the bottom of the casing and extending longitudinally thereof in concentric relation thereto and to the outlet plug, said jacket having an open upper end in spaced relation to the top of the casing, a heating element extending into the jacket, and means for detachably securing the heating element to the top of the casing, said heating element including a resistance coil of materially less length than the jacket and in alignment with said inlet plug transverse-



ly of the casing to initially warm the fluid entering the casing, said resistance coil disposed in the lower portion of the jacket but spaced from the lower end thereof to maintain the hotter fluid out of contact with the outlet plug, said heating element further including a container within which the resistance coil is hermetically sealed, said container having a heat conducting block descending therefrom into proximity to the outlet plug to warm the fluid adjacent the latter.

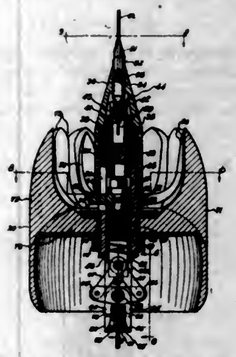
1,873,821. COATING MACHINE. LYNN B. CASE, New Brunswick, N. J., assignor to John Waldon Corporation, New Brunswick, N. J., a Corporation of New Jersey. Filed July 26, 1930. Serial No. 471,022. 4 Claims. (Cl. 91—18.)



1. In coating apparatus, means for feeding a web to be coated and for applying a coating thereto, means for removing roughnesses from the coating comprising a doctor roll engaging the coated web, means driving said roll at a much lower surface speed than the speed of the web, and means for moistening the roll with a solvent of the coating material.

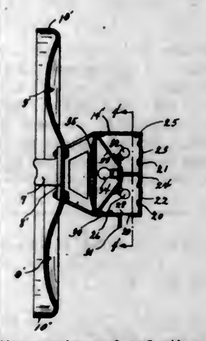
CARNEGIE LIBRARY OF ATLANTA

1,873,822. HOOK FOR AIRCRAFT CARGO HANDLING APPARATUS. MANUEL CASTRO, Canton, Ohio. Filed Aug. 1, 1929. Serial No. 382,614. 8 Claims. (Cl. 258—1.)



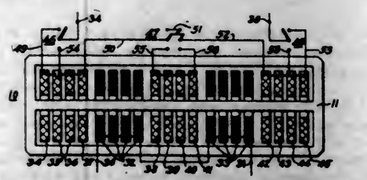
1. Aircraft cargo handling apparatus including combined cargo pick up and discharge means adapted to be carried at the end of a cable, and guard means for the pick up and discharge means.

1,873,823. COMBINATION TIRE CARRIER AND REFLECTING BODY. FRANK A. CECIL, Detroit, Mich. Filed May 26, 1930. Serial No. 455,564. 1 Claim. (Cl. 240—71.)



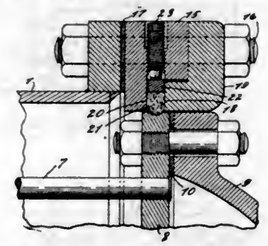
A combination tire carrier and reflecting body, comprising: a bracket; a tire carrying and light reflecting disc mounted on said bracket; a housing; a light in said housing; a transparent closure for the rear of said housing; legs projecting rearwardly of said housing and secured to the light reflecting outer face of said disc for maintaining said housing spaced outwardly from and positioned centrally of said disc.

1,873,824. VARIABLE-REACTANCE TRANSFORMER. HORACE L. COLE, Sharon, and HOMER H. WAGNER, Pittsburgh, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 14, 1931. Serial No. 515,702. 4 Claims. (Cl. 171—119.)



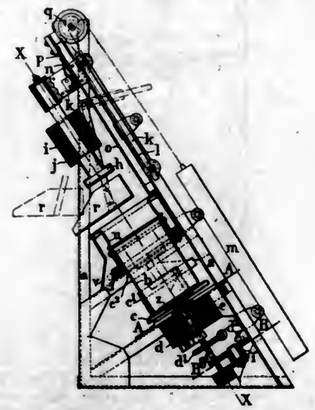
1. A transformer comprising a core of magnetic material and windings for separate electrical circuits placed upon said core, the winding for each circuit comprising groups of coils interleaved with coil groups of the other circuits, certain of said coils in one or more of the winding assemblies being so positioned in the interleaving scheme as to have different inherent reactances, and switching means whereby one or more extra coils of high reactance may be substituted in the active-winding circuit for one or more similar coils of lower reactance to thereby effect a change in the reactance of the transformer without materially changing the ratio of voltage transformation.

1,873,825. EXPANSION JOINT. HOWARD C. DAVIS, Elizabeth, N. J., assignor to Davis Engineering Corporation, a Corporation of Delaware. Filed June 29, 1929. Serial No. 374,626. 10 Claims. (Cl. 220—46.)



1. An expansion joint comprising a fixed outer member having a groove in its inner face, an inner member fitting within the outer member and having a groove in its fitting face opposing that in the outer member, the inner member being movable transversely of said grooves relative to the outer member under normal conditions of use, a packing disposed in both grooves, such packing being yieldable to provide for said relative movement while still preserving a seal between said members, inwardly adjustable compression means in the outer groove bearing against the outer face of the packing, means to adjust the compression means and thereby vary the pressure upon the packing, and means providing for the removal and replacement of said packing while said inner member is left in place within said outer member.

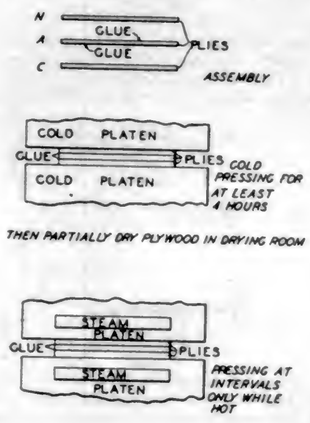
1,873,826. APPARATUS FOR THE ELECTROLYTIC DEPOSITION OF METALS. MICHAEL DEVECIS, Budapest, Hungary, assignor to Societe Anonyme Waldberg, Paris, France. Filed May 14, 1930, Serial No. 452,432, and in France Dec. 27, 1929. 16 Claims. (Cl. 204—5.)



1. In an apparatus for the electrodeposition of metals, a vessel adapted to contain the articles to be plated, an

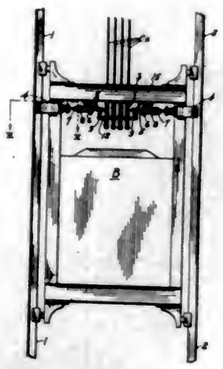
electromagnetic system in close contact with the body of this vessel and facing the articles to be plated, and means to impart a relative movement to said vessel and electromagnetic system.

1,873,827. PROCESS OF MAKING PLYWOOD. HENRY V. DUNHAM, Bainbridge, N. Y. Filed Jan. 28, 1931. Serial No. 511,932. 10 Claims. (Cl. 144—309.)



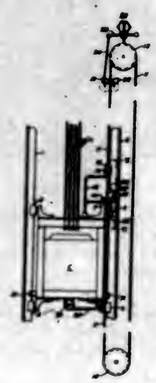
1. A process of making plywood which comprises coating cores with an alkaline liquid proteinaceous glue, assembling veneer on same, cold pressing the assembled plywood, which pressing is continued for at least about four hours, and then heating the plywood while the glue in the glue line still contains some water and continuing this heating until the glue line is sufficiently dried.

1,873,828. SNUBBER FOR ELEVATORS. JAMES DUNLOP, Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company, a Corporation of Illinois. Filed June 16, 1930. Serial No. 461,329. 4 Claims. (Cl. 187—86.)



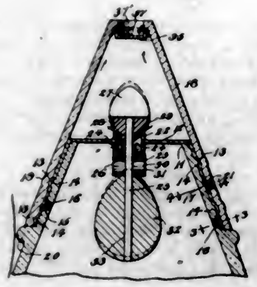
1. A braking device for elevator cars or counterweights comprising brake shoes, means for biasing the brake shoes into engaging relation with the guide rails, restraining members associated with said brake shoes, movable cams normally held in engagement with the restraining members by the weight of the body on the hoist cable and movable to releasing position to disengage said restraining members when the tension on the hoist cables is released, whereby the brake shoes will be applied to retard the descent of the body.

1,873,829. ELEVATOR CAR SAFETY DEVICE. JAMES DUNLOP, Park Ridge, Ill., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 8, 1930. Serial No. 473,915. 7 Claims. (Cl. 187—89.)



1. In combination, an elevator car, a safety braking device for retarding the car, means operably responsive to a predetermined speed of the car for actuating the safety braking device in the event that the speed of the car becomes excessive, and means mounted detachably on the car for completing the application of said safety device, said means being responsive to an initial operation by said speed-responsive device.

1,873,830. NONREFILLABLE BOTTLE. JOHN DUPONTI, Comstock, N. Y. Filed Oct. 9, 1930. Serial No. 487,574. 4 Claims. (Cl. 215—19.)



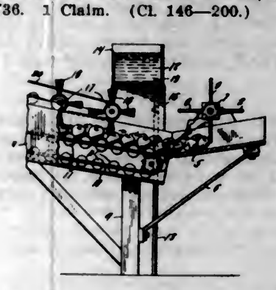
1. A non-refillable bottle comprising a bottle having a substantially frusto-conical neck, a substantially frusto-conical glass cap for the bottle overlapping said neck, a valve cap closing said neck and having a frusto-conical wall inserted between and interlocking with said neck and said glass cap, a valve seat in said valve cap, a valve closing said seat and having a stem extending axially therethrough into the bottle, a resilient member on said stem, a retainer on said stem holding said valve and said member assembled in position to normally hold said valve closed, said resilient member being distortable when the bottle is inverted to permit said valve to unseat, and a perforated cap carried by said glass cap for preventing access to the valve while permitting escape of the contents of the bottle when the valve is open.

1,873,831. SUSPENDERS. WALTER J. ELLIS, Indianapolis, Ind. Filed Dec. 3, 1931. Serial No. 578,811. 3 Claims. (Cl. 241—25.)



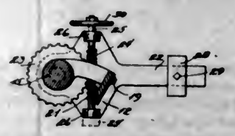
1. Suspenders comprising straps terminating in button-engaging tabs adapted to be passed outwardly through slits in a shirt worn over the suspenders, and clips on the tabs for anchoring the suspenders to the shirt, at said slits, each comprising a back piece fixed to the tab and a front piece removably secured to the back piece.

1,873,832. FRUIT CLEANING APPARATUS. TREFFLE FARLEY, Selah, Wash., assignor of one-half to William McGonagle, Yakima, Wash. Filed Nov. 14, 1930. Serial No. 495,736. 1 Claim. (Cl. 146—200.)



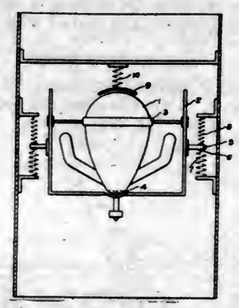
In a fruit washing apparatus, a trough, an endless conveyor moving longitudinally in said trough, a series of brushes extending transversely across said trough above said conveyor and rotatably mounted, a reservoir above the inlet end of said trough extending transversely thereof, and having its inner side wall of less height than its other walls, whereby fluid may flow out of the trough and down onto the brushes and fruit in the trough, a feed trough communicating with the inlet end of the first trough, and means for moving fruit out of the feed trough onto said conveyor.

1,873,833. CYLINDER DRYING MACHINE. HUGH PARRISH FELL, New York, N. Y. Filed Dec. 19, 1929. Serial No. 415,316. 7 Claims. (Cl. 159—11.)



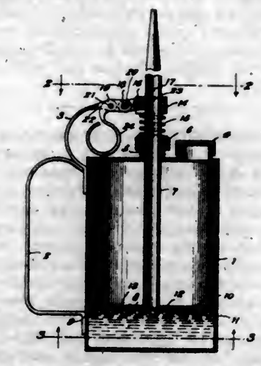
4. In a machine of the class described, a doctor bar shaft journalled for rotation about its axis, spaced arms projecting from said shaft, a doctor bar carried by the free ends of said arms, weight arms journalled on said shaft and projecting in the same general direction as the first arms, weights on said weight arms, and means to adjust the angular relation between the weight arms and the first arms.

1,873,834. SUPPORT FOR ELECTRIC DISCHARGE DEVICES. FLORIAN FLECKENSTEIN, Pankow, and GUSTAV W. MÜLLER, Charlottenburg, Germany, assignors to General Electric Company, a Corporation of New York. Filed Mar. 27, 1929, Serial No. 350,359, and in Germany May 1, 1928. 2 Claims. (Cl. 248—30.)



1. An electric discharge device support including a movable frame upon which said device is mounted, two suspension studs mounted upon said movable frame at two opposite sides thereof to suspend said device in its operating position, a rigid frame having two oppositely disposed side members, and means to support said movable frame resiliently within said rigid frame and to damp vibration of said movable frame and said device, said means including two groups of springs, one of said groups being constituted by four springs attached at their inner ends to one of said suspension studs and at their outer ends to one side of said rigid frame, the other of said groups being constituted by four springs attached at their inner ends to the other of said suspension studs and at their outer ends to the opposite side of said rigid frame, the four springs of each group being spaced at 90° intervals in the vertical plane about the corresponding suspension stud, the resonant frequency of each spring of a group being different from that of all other members of the group.

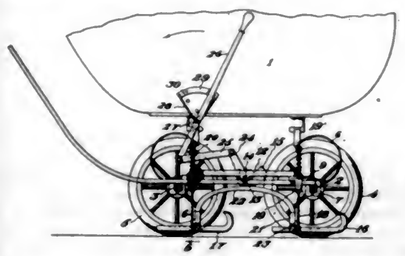
1,873,835. OIL-CAN. PHILIZA FOUNTAINE, Dahlen, N. Dak., assignor of one-half to Ingman Swinland, Lakota, N. Dak. Filed July 14, 1930. Serial No. 467,892. 1 Claim. (Cl. 221—50.)



In combination with a lubricant can having a lubricant outlet spout provided with a plunger for ejecting the lubricant through the spout when the spout is moved down-

wardly into the can, and a spring influenced split band surrounding the outer portion of the spout, and a handle for the can, of an inwardly rounded spring member providing a finger hold having one end secured to the can in a line with the handle and its other end bifurcated and disposed above the top of the can, a lever pivoted in said bifurcated end and provided at one end with an elongated opening and having its other end formed with a downwardly extending ring portion disposed over the top of the can and likewise disposed adjacent to but spaced from the inwardly rounded member, and a substantially rectangular dog pivoted in the split end of the band and carrying a pivot which passes through the elongated opening in the lever and the active end of the dog being in contact with the spout.

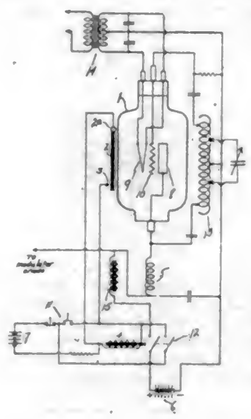
1,873,836. BABY CARRIAGE SLED. PAUL FRANCKE, New Brunswick, N. J. Filed Mar. 20, 1931. Serial No. 524,134. 1 Claim. (Cl. 280—9.)



A runner attachment for a baby carriage, comprising arms removably clamped to the front and rear axles of the baby carriage, and directed toward and terminating adjacent the inner sides of the wheels of the baby carriage and having their outer ends provided with depending bosses, front and rear pairs of runners arranged inward of the wheels of the carriage, a rod having its lower end fixedly secured to each of the runners and its upper end passing through the bosses in the angle ends of the arms, spring means engaging the upper ends of the rods to hold the same in the bosses and to raise the runners above the ground, upwardly rounded members having straight ends connecting the respective pairs of runners, an upwardly arched rail also having straight ends which are centrally fixed to the rounded runner connecting members, bars fixedly secured to the upper faces and adjacent pairs of arms, a shaft journaled transversely on the bars, a cam member pivoted to the shaft and arranged for contact with the rails when the runners are either in their raised or lowered position, a pivotally supported lever, means between the lever and cam for swinging the cam on the track to lower the runners or for permitting the runners being raised by the spring influenced bars and means for latching the lever for holding the cam and rails in either of such positions.

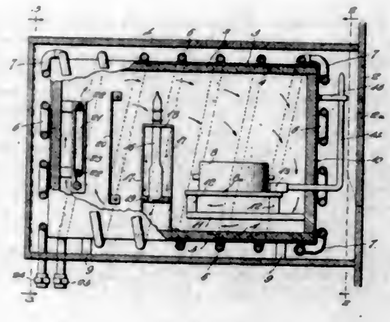
1,873,837. TRANSMITTING SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,986. 5 Claims. (Cl. 250—27.)

1. A protective system comprising an electron tube including an envelope and grid, filament and plate electrodes therein in fixed spacial relation, a plate power supply circuit a movable armature and contact therefor disposed in series with said plate power supply circuit, a solenoid arranged to close said movable armature into engagement with said contact when said solenoid is energized, a control circuit connected with said solenoid, a thermostat mounted adjacent the exterior wall of said envelope, contacts for said thermostat mounted to maintain closed a circuit through said thermostat so long as a predetermined temperature is not exceeded but to open said circuit when said temperature is exceeded, said solenoid being connected to the contacts of said thermostat, a momentary contact switch connected in series with said source of energy, said contacts of said thermostat and the actuating



winding of said circuit breaker, and a holding switch having its contacts connected in parallel with the contacts of said momentary contact switch and mounted to be actuated cooperatively with said circuit breaker.

1,873,838. TEMPERATURE REGULATING APPARATUS FOR SIGNALING DEVICES. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 11, 1929. Serial No. 370,143. 4 Claims. (Cl. 257—3.)

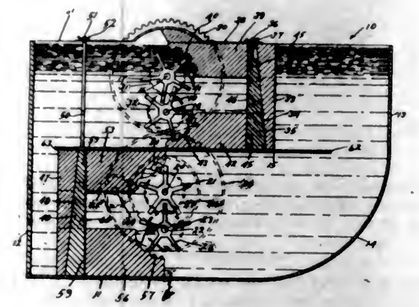


1. In a temperature control system for use at ambient temperatures exceeding the operating temperature, a heat insulated housing containing an element to be maintained at a determined operating temperature, an electric heating element in said housing, a thermostat in said housing connected for actuating said heating element when the temperature inside said housing falls below said determined operating temperature, a heat insulated cabinet surrounding said housing but spaced therefrom, and

cooling fluid conducting members positioned in the space between said cabinet and said housing and adapted to apply to the exterior of said housing a temperature below said determined operating temperature.

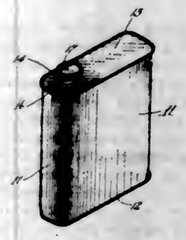
1,873,839. BEATER ENGINE. FRANK J. GRATHWOL and JOHN E. GRATHWOL, Sandusky, Ohio. Filed Nov. 29, 1929. Serial No. 410,357. 9 Claims. (Cl. 92—24.)

1. In a device of the class described, a vat, a pair of parallel spaced shafts mounted in said vat in a common



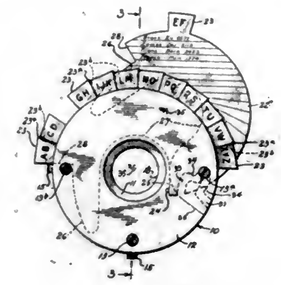
vertical plane, a plurality of radially extending arms mounted on each of said shafts, the arms on one shaft radially overlapping those on the other, the length of said arms being slightly less than the distance between said shafts, a block mounted adjacent each of said shafts and formed with a surface cooperable with, but not engageable by said arms, the forward edges of said block being spaced apart a distance equal approximately to the combined diameter of said interfitted rollers and the rear edges forming a reduced passage, said rollers being adapted to rotate in a direction to carry the blades from the wide distance to the narrow opening between the blocks, means for rotating said shafts, said shafts being rotatable to engage floating fiber at the diverging end of said blocks and to discharge it at their convergent ends.

1,873,840. NOZZLE. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed May 16, 1927. Serial No. 191,704. 5 Claims. (Cl. 221—11.)



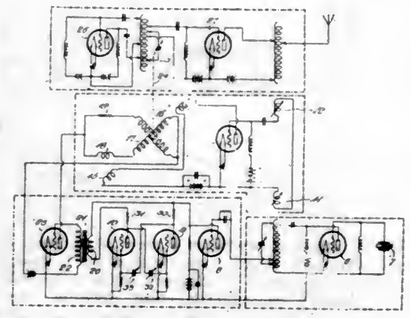
1. A nozzle comprising two sheet metal parts, one of relatively softer and more easily tearable material than the other, the softer material being pressed tightly over the other material to make a liquid-tight metal-to-metal join with a smooth and flush outer surface, and marked to indicate a preferred line of severance for forming a pouring opening.

1,873,841. CARD INDEX. ALLAN F. HUNT, Burlingame, Calif. Filed Nov. 3, 1930. Serial No. 493,002. 4 Claims. (Cl. 40—10.5.)



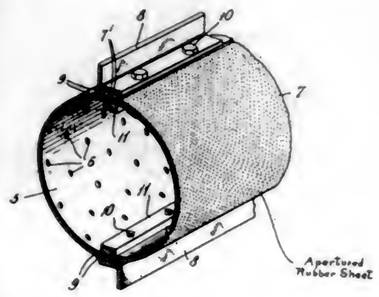
1. An index comprising a series of cards removably and pivotally mounted in side by side relation, and each having an index tab mounted on the respective peripheries thereof, means whereby the pivotal movement of said cards may be stopped in either direction, the index tabs on said cards each having one radial edge of greater length than its other radial edge.

1,873,842. HIGH FREQUENCY STABILIZER. LAWRENCE A. HYLAND, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed May 6, 1929. Serial No. 360,906. 3 Claims. (Cl. 258—36.)



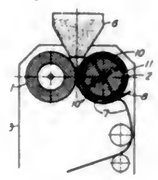
2. In a radio system, a plurality of stations geographically separated from each other, each of said stations comprising a transmitting antenna and a receiving antenna, receiving apparatus at each of said stations adapted to receive oscillations from a remote transmitting antenna, and frequency stabilizing means at each of said stations for maintaining a fixed frequency relation between the frequency of oscillations received at said station and the frequency of oscillations transmitted from said station, said frequency stabilizing means comprising tuning means for controlling the frequency of said power oscillations, means for producing sub-harmonics of the received oscillations, and means responsive to the difference between one of said sub-harmonics and the beat frequency between said power oscillations and said received oscillations for actuating said tuning element.

1,873,843. POROUS MEDIUM FOR AERATING APPARATUS. WILLIAM T. MACDONALD, Douglas, Ariz., assignor to The General Engineering Company, Salt Lake City, Utah, a Corporation of Utah. Filed Mar. 18, 1929. Serial No. 347,811. 5 Claims. (Cl. 261—121.)



1. The combination in an apparatus of a porous medium comprising a sheet of elastic material provided with a multiplicity of uniformly distributed definite apertures whose longitudinal section is of dumb-bell configuration.

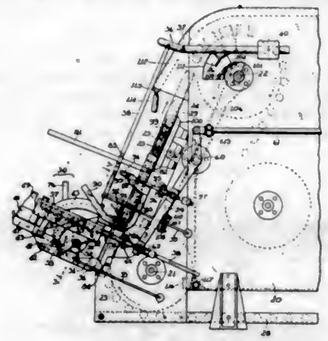
1,873,844. METHOD OF MAKING LINOLEUM. MERLE S. MCCONOUGHEY, Tucson, Ariz., assignor to Congoleum-Nairn, Inc., a Corporation of New York. Filed Apr. 24, 1928. Serial No. 272,427. 6 Claims. (Cl. 154—25.)



1. In a method of producing a sheet of linoleum composition wherein a mass of plastic linoleum composition comprising compositions of different colors is introduced and continuously consolidated under pressure between sheeting rolls to produce a sheet of linoleum composition having a variegated design, the step comprising preventing the heat to which the sheeting rolls are subjected during substantially continuous operation over a protracted period of time from increasing the temperature of the periphery of one of the rolls in contact with the linoleum to a temperature in excess of substantially atmospheric temperature.

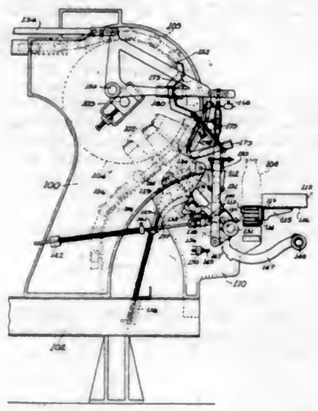
1,873,845. LOADING MEANS FOR BOTTLE CLEANING MACHINES. GEORGE J. MEYER, Milwaukee, Wis., assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis., a Corporation of Wisconsin. Filed Feb. 25, 1929. Serial No. 342,529. 20 Claims. (Cl. 198—27.)

1. In a bottle cleaning machine having a traveling bottle conveyor, a bottle-receiving member adjacent said conveyor along which bottles are guided into said conveyor and including a discharge portion disposed in register with said conveyor, means for yieldingly supporting said bottle-receiving member to permit movement thereof in a direction along said conveyor, and means operatively



connecting said bottle-receiving member and said conveyor for effecting the registration of the discharge portion of said bottle-receiving member with said conveyor.

1,873,846. UNLOADING MEANS FOR BOTTLE CLEANING MACHINES. GEORGE J. MEYER, Milwaukee, Wis., assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis., a Corporation of Wisconsin. Filed Apr. 24, 1929. Serial No. 357,722. 10 Claims. (Cl. 198—27.)



1. Unloading means for bottle cleaning machines and the like, comprising, in combination, chute means adapted to receive bottles from a bottle conveyor, a swingably-mounted bottle-carrying member receiving bottles in inclined position from said chute means and movable upwardly to place said bottles in upright position, means for operating said swingably-mounted bottle-carrying member, a bottle support disposed adjacent said bottle-carrying member to receive bottles therefrom when said member is in its upper position, means for transferring the upright bottles from said bottle-carrying member to said support, and variable-position stop means movable with said bottle-carrying member and limiting the downward movement of the bottles along said chute means at a time when said bottle-carrying member is out of register with said chute means, the effective portions of said stop means being movable downwardly along said chute means during the return of said bottle-carrying member into register with said chute means, whereby to permit the gradual descent of the bottles onto said bottle-carrying member.

1,873,847. WELDING ROD. SAMUEL W. MILLER, Hollis, N. Y., assignor to Union Carbide & Carbon Research Laboratories, Inc., a Corporation of New York. Filed Feb. 6, 1928. Serial No. 252,314. 12 Claims. (Cl. 219—8.)



7. A welding rod comprising a homogeneous elongated body of metal in which the sections taken perpendicular to the longitudinal axis are figures having unequal axes of symmetry which will coincide with the axes of symmetry of a circumscribed rectangle, the volume of metal in a given length of the rod being less than the volume of an equal length of said rectangular rod.

1,873,848. SYNTHETIC RESIN AND METHOD OF MAKING THE SAME. WILLIAM HENRY MOSS and BLANCHE BABETTE WHITE, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Nov. 17, 1928. Serial No. 320,209. 9 Claims. (Cl. 260—3.)

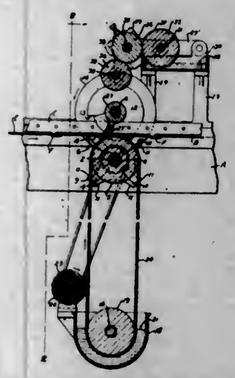
3. Method of preparing a synthetic resin comprising reacting substantially equimolecular proportions of toluene sulfonamid and an aldehyde, removing excess of reactants, adding a further quantity of toluene sulfonamid to the resin thus formed and causing the same to condense.

1,873,849. SYNTHETIC RESIN AND PROCESS OF MAKING THE SAME. WILLIAM HENRY MOSS, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Nov. 26, 1928. Serial No. 322,099. 4 Claims. (Cl. 260—4.)

1. Method of forming a resin comprising condensing a diphenylol naphthene with formaldehyde in the presence of a catalyst.

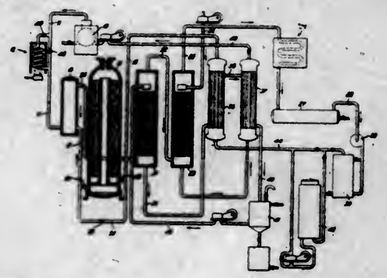
4. A resin formed by the condensation of diphenylol cyclohexane with formaldehyde in the presence of a catalyst.

1,873,850. GUMMING MECHANISM FOR ENVELOPE-MAKING MACHINES. CHARLES F. PFLANZE, Webster Groves, Mo. Filed July 31, 1930. Serial No. 471,938. 12 Claims. (Cl. 93—61.)



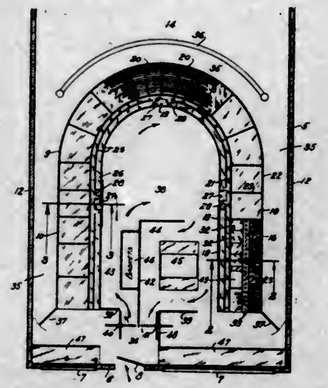
1. In combination with a gumming mechanism for envelope-making machines, means for presenting envelope blanks one at a time to said gumming mechanism, said gumming mechanism comprising a gum-distributing element arranged to contact with an envelope blank at an edge portion thereof to apply gum thereto, said gum-distributing element being arranged to overlap the edge of the portion of the envelope blank to which gum is applied thereby to insure application of gum to the precise edge thereof.

1,873,851. METHOD OF PREVENTING CORROSION BY SULPHUR COMPOUNDS DURING CONVERSION OF HYDROCARBONS. ALBERT P. SACHS, New York, N. Y., assignor to Petroleum Conversion Corporation, New York, N. Y., a Corporation of New York. Filed June 24, 1929. Serial No. 373,283. 6 Claims. (Cl. 196—62.)



1. In the process of converting oil containing an excess of one per cent of sulphur to produce compounds suitable as motor fuels, in which process a heat carrier gas containing less than the below defined critical value of sulphur is used to bring about the conversion of the oil in the vapor phase, the steps which consist in first vaporizing the oil, then admixing it with said heat carrier gas heated to above the conversion temperature to produce a mixture having a predetermined temperature whereby to effect the conversion of said vapor under predetermined temperature conditions, and so regulating the temperature and relative volumes of the components of said mixture as to bring the per cent of sulphur therein to a value not exceeding a predetermined value below which no substantial corrosion takes place whereby an oil of relatively high sulphur content undergoes greater dilution with the heat carrier gas than an equivalent oil of lower sulphur content and then subjecting the converted mixture to liquefaction conditions to separate out products suitable as motor fuels.

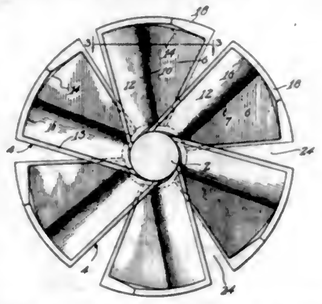
1,873,852. STORE. CHARLES E. ROEBER and ALBERT R. MITTERER, Denver, Colo., assignors to Stadium Stores, Inc., Denver, Colo. Filed Aug. 28, 1928. Serial No. 302,494. 11 Claims. (Cl. 20—1.6.)



1. In a store of the character described, a U-shaped display stand dividing a floor space of the store into a

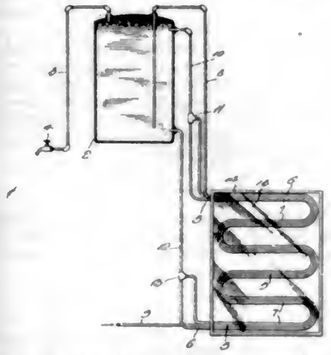
space for customers on the inside of the stand and a corridor for employees on the outside of the same, the stand having a top for the support of merchandise, sloping upwardly from the customers space to the corridor.

1,873,853. ROTOR, IMPELLER, OR THE LIKE. CHRISTIAN A. VOLF, Jr., Union City, N. J., assignor to Murray T. Quigg, County of New York, N. Y. Filed Sept. 18, 1930. Serial No. 482,804. 26 Claims. (Cl. 170—176.)



1. A rotor, impeller or the like having radially extending blades, each blade comprising an angled impeller portion, a back portion having an edge coincident with an edge of said angled impeller portion, and a terminal flange portion.

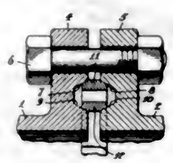
1,873,854. SOLAR WATER HEATING SYSTEM. HENRY A. WHEELER, West Palm Beach, Fla. Filed Apr. 5, 1930. Serial No. 441,879. 2 Claims. (Cl. 126—271.)



1. A solar water heating system comprising a tank having a valved discharge line, and a plurality of sun-heated coils in heat-conducting relation with each other to effect transfer of heat from any relatively hot coil to an adjacent coil having a lower temperature, one coil of said plurality constituting part of a water supply line and being in constant communication at one end with the tank and at its other end with the remainder of the supply line, the remainder of said plurality of coils constituting water circulating means and being constantly in communication with both the upper and lower ends of the tank.

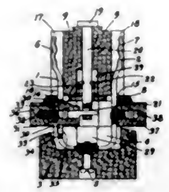
1,873,855. FLUID TIGHT JOINT AND METHOD OF MAKING. WYLIE G. WILSON, Elizabeth, N. J. Filed Nov. 7, 1929. Serial No. 405,390. 11 Claims. (Cl. 285—139.)

1. A fluid tight joint structure comprising two elements to be joined, the elements being provided with two pairs of inclined annular sealing surfaces, one pair of which is adapted to expand a sealing ring and the other pair of which is adapted to contract a sealing ring as the said elements are moved toward one another; a sealing ring contacting with one of said pairs of surfaces; a second



and separate sealing ring contacting with the other of said pairs of surfaces; and means to move said elements toward one another to lap said sealing surfaces into sealing fit with the rings and to expand one ring as a unit and circumferentially contract the other ring as a unit.

1,873,856. NONSCREW PLUG. ARCHIE REXALD WOLFE, Summit, N. J. Filed Mar. 6, 1929. Serial No. 344,890. 4 Claims. (Cl. 173—360.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

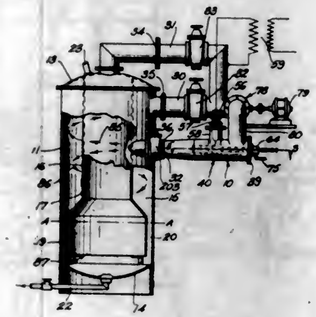


1. An electric plug including a body, a substantially U-shaped spring member having its central portion secured within and its legs normally extending without said body, threads upon said legs, a reciprocating center contact, means mounted in the body for normally holding said center contact in extended position, a cam lever hinged to one leg of the U-shaped member for retracting the center contact, and means for operating the cam lever.

1,873,857. PIPE-LINE TREATER. JOHN T. WORTHINGTON and HARMON F. FISHER, Long Beach, Calif., assignors to Petroleum Rectifying Company of California, Los Angeles, Calif., a Corporation of California. Filed May 25, 1931. Serial No. 539,764. 17 Claims. (Cl. 204—24.)

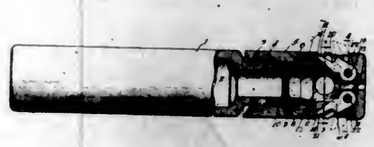
1. In an electric treater, the combination of: a sleeve electrode; a central electrode insulated from said sleeve electrode and extending axially thereinto, whereby an electric field set up between said electrodes will be concentrated at the surface of said central electrode; an inductor of high specific inductive capacity positioned in said electric field to further increase the intensity of the field adjacent said central electrode; and means for moving a stream of the fluid to be treated through only that portion of said field which is of higher intensity, said stream of fluid being in the form of a fluid envelope around said central electrode and flowing between said central electrode and said inductor.

13. In an electric treater, the combination of: an enclosing structure; a live electrode in said enclosing structure and insulated therefrom; a nozzle assembly detachably connected to said enclosing structure and providing a fluid-conducting sleeve extending toward said live electrode and providing a rod electrode extending through said sleeve and adjacent said live electrode; and means



communicating with said nozzle assembly for supplying the fluid to be treated into the space between said rod electrode and said sleeve.

1,873,858. SELF-RETAINING CARTRIDGE. FRANK H. ARMSTRONG, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Apr. 24, 1929. Serial No. 357,653. 10 Claims. (Cl. 102—6.)



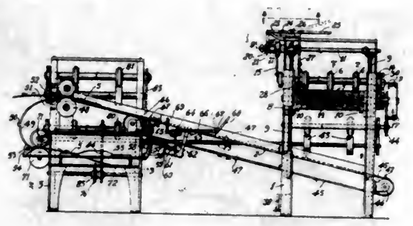
1. A blasting cartridge having thereon a pivoted anchor which is engageable with the wall of a shot hole to prevent flying of the cartridge when discharged, said anchor being positioned to be actuated by the gas discharged from said cartridge.

1,873,859. PACKING RING. ADELBERT D. BAILEY, Hammond, Ind. Filed Nov. 24, 1930. Serial No. 497,887. 3 Claims. (Cl. 288—3.)



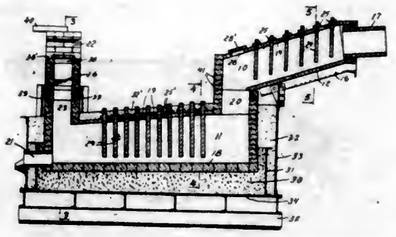
1. A packing ring of the class described formed of a number of sections, the sections being separated by substantially spiral cuts, one end of each section being of convex shape and the opposite end of concaved shape, the concaved end of one section engaging the convex end of the other section, the meeting surfaces at the cuts having the convexed and concaved shape being of spherical conformation to effect universal action between the sections, the ends of the sections which terminate in the concaved portions having their outer edges reduced.

1,873,860. TIN PLATE SORTING MACHINE. JOHN CHARLES BALLETTI, San Francisco, Calif., assignor to American Can Company, San Francisco, Calif., a Corporation of New Jersey. Filed Feb. 15, 1926. Serial No. 88,219. 9 Claims. (Cl. 214—11.)



1. A plate sorting apparatus comprising plate conveying means, guiding means for directing the plate in a curved path as conveyed thereby through the apparatus to present opposite surfaces for examination, said guiding means being adapted for operation for directing the plate from the apparatus prior to the inverting thereof.

1,873,861. CONDENSING ZINC VAPOR. EARL H. BUNCE, Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 16, 1929. Serial No. 400,064. 33 Claims. (Cl. 75—28.)



1. The method of condensing zinc vapor which comprises passing a gaseous stream containing zinc vapor through a condensing chamber in a tortuous side-to-side path and removing heat rapidly so that a large proportion of the zinc vapor is condensed, then passing the gaseous stream through a condensing sump in a tortuous side-to-side path and removing heat slowly so that substantially all of the remaining zinc vapor is condensed, permitting the condensed molten zinc to flow through said condensing chamber concurrent with the gaseous stream but by a relatively shorter path into said condensing sump, and periodically withdrawing from the condensing sump the molten zinc accumulating therein.

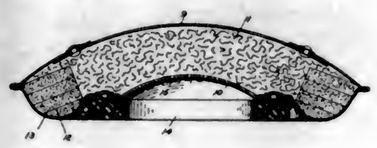
1,873,862. PILE FABRIC CONTAINING DERIVATIVES OF CELLULOSE. CAMILLE DREYFUS, New York, N. Y. Filed Dec. 19, 1928. Serial No. 327,190. 6 Claims. (Cl. 139—391.)

1. A fabric having a pile comprising yarns of organic derivatives of cellulose, which yarn is of increased opacity.

1,873,863. PILE FABRIC. CAMILLE DREYFUS, New York, N. Y. Filed May 22, 1930. Serial No. 454,834. 6 Claims. (Cl. 139—391.)

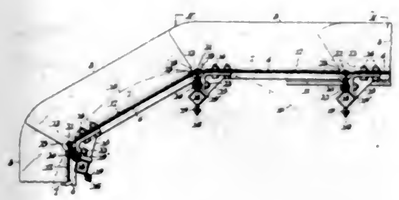
1. A pile fabric having a pile comprising yarns of organic derivatives of cellulose having an opacity increasing material therein.

1,873,864. EAR MASK. HIRAM B. ELY, New York, N. Y. Filed Feb. 1, 1929. Serial No. 336,773. 3 Claims. (Cl. 128—152.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. An ear mask, including an inner dome, a larger outer dome, a sound damping material separating the domes, a cushioning member attached marginally to the domes, and a resilient gasket adhesively secured to the inner dome and extending flush with the cushioning member.

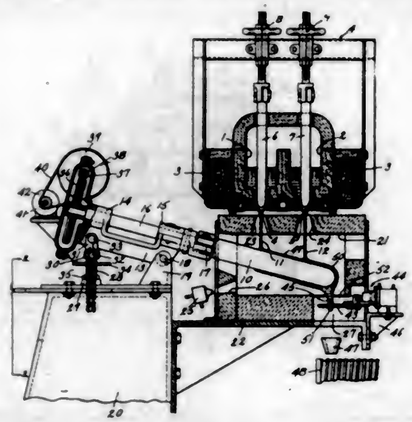
1,873,865. APRON CONVEYER. THOMAS ALLSOP, Mount Airy, Pa., assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 2, 1931. Serial No. 560,743. 7 Claims. (Cl. 198—194.)



1. An apron conveyer comprising laterally-spaced link chains, screen sections having end apertures axially alignable with the chain link pivots, transverse girts with serial apertures similarly positioned relative to said pivots, hinge elements introduced through the contiguous screen and girt apertures, and means to rigidly sustain the girts whereby the hinge elements are maintained in direct axial alignment with the link pivot axes and sagging at the union of consecutive screen sections is prevented.

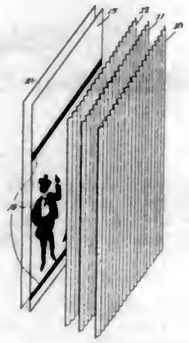
1,873,866. MEANS FOR AND METHOD OF OBTAINING VARIEGATED GLASS. WILLIAM T. BARKER, Jr., West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Aug. 27, 1930. Serial No. 478,069. 10 Claims. (Cl. 49—55.)

7. Apparatus for feeding variegated glass from a plurality of sources of glass of diverse colors, comprising an inclined rotary implement, receptacles for glass of different colors, said receptacles having discharge outlets located above said inclined implement in position to deliver streams of glass of different colors onto the rotary implement at different places along the length of the latter, means for rotating the implement to wind thereon glass from the streams and to provide a depending mass of glass from the streams combined when sufficient glass



has been accumulated on the implement, and means for heating said implement and the glass thereon and in suspension therefrom.

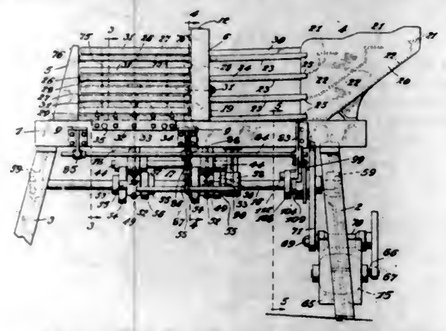
1,873,867. ARTICLE FOR DISPLAY. FRANK A. BIEDERMAN, Chicago, Ill., assignor to Paper Patents Company, Neenah, Wis., a Corporation of Wisconsin. Filed Feb. 18, 1932. Serial No. 593,830. 14 Claims. (Cl. 40—130.)



13. An article of the class described, formed entirely of fibrous material, such as paper or the like, comprising a translucent sheet bearing a silhouette, and a translucent sheet disposed in front thereof, at least one of said sheets being vertically corrugated so as to render said article substantially self-supporting, said front sheet being sufficiently opaque to prevent said silhouette from being substantially visible therethrough in the absence of transmitted light but being sufficiently translucent to permit its being visible therethrough in the presence of transmitted light.

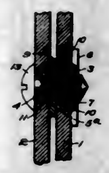
1,873,868. LOADING OR BOXING APPARATUS. WILLIAM H. BROOKS, Oconomowoc, Wis., and WALTER PAGE, New York, N. Y. Filed Apr. 5, 1929. Serial No. 352,637. 7 Claims. (Cl. 226—15.)

1. Apparatus for loading sealed vessels into cases comprising a sloping platform having a receiving chute at its upper end and one or more receiving trays adjacent the lower end on which said vessels are passed from said chute, a blade for separating the vessels on each tray upon those arriving thereat, a pusher frame having a bar associated with each tray for discharging said vessels on each tray, a main shaft beneath the platform, connections comprising



rocking levers to operate each blade and the pusher bar frame in succession, a clutch for connecting said main shaft to a source of power, parts for keeping said clutch normally in disconnected position, and parts comprising a push-bar adjacent one side of the frame and connected to control the clutch and enable power to be delivered to said shaft.

1,873,869. FASTENING INSTALLATION. FRED S. CARR, Newton, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 31, 1927. Serial No. 179,939. 3 Claims. (Cl. 85—32.)



3. A nut installation comprising, in combination, a supporting structure having an aperture therein, a sheet metal nut secured to said supporting structure and having a base portion bearing against one face of the supporting structure, a tubular portion extending from said base portion into the aperture in said supporting structure and having its outer end portion bent outwardly against the other face of said supporting structure to cooperate with said base portion to secure the nut in position, said tubular portion being internally threaded to receive a cooperating screw, and a lug pressed from said base portion independently of said tubular portion and extending parallel to and along the side of said tubular portion through a notch in said supporting structure to lock the nut against accidental rotation.

1,873,870. FASTENER SOCKET. MOSES F. CARR, Lexington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 30, 1929. Serial No. 417,310. 3 Claims. (Cl. 24—218.)



2. A snap fastener socket comprising, in combination, a casing formed from a single piece of metal and having a stud-receiving aperture, cooperating continuous walls

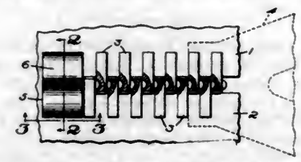
forming a spring-receiving groove adjacent to the stud-receiving aperture, a series of independently bendable attaching fingers extending from one of said walls and parallel to the axis of the socket prior to attachment of the socket to a support and adjacent to that side of the socket where the stud-receiving aperture is located and a spring member assembled within the groove of said casing.

1,873,871. SNAP FASTENER STUD AND INSTALLATION THEREOF. MOSES F. CARR, Lexington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 14, 1931. Serial No. 508,656. 7 Claims. (Cl. 24—208.)



1. A trim strip structure comprising in combination, a hollow metal trim strip, a snap fastener member having a base carried by and adjustable relative to said strip, spring means forming an integral part of the fastener member and expanding said fastener against the inner walls of said strip to hold said fastener against the inner walls of said strip to hold the fastener in position against accidental movement relative to the strip and yieldable socket-engaging elements extending from said spring means through the inner face of said strip for attaching the strip in position, and said fastener member being adapted to be adjusted reative to the strip by squeezing the socket-engaging elements toward each other thereby to contract the spring means and permit it to slide relative to the strip.

1,873,872. CONNECTING MEMBER FOR CONTINUOUS FASTENERS. MOSES F. CARR, Lexington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 9, 1931. Serial No. 507,674. 3 Claims. (Cl. 24—205.)



1. In a multiple operated fastener installation having a pair of stringers, a series of interengaging fastener elements secured to the adjacent edges of said stringers and a slider for opening and closing the fasteners, a connecting member adjacent to one end of the series of fastener elements and securing the stringers together at that end, said connecting member comprising a plate-like portion and two underlying substantially U-shaped attaching portions each of which engages over the edge of a stringer and is concealed by said plate-like portion and each of said attaching portions being connected adjacent to its open end to an end of said plate-like portion.

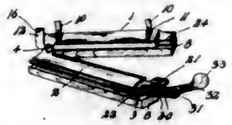
1,873,873. ROLL FOR PRINTING PRESSES AND METHOD OF COATING THE SURFACES OF THE SAME. ARTHUR B. DAVIS, Springfield, Ohio. Filed Nov. 29, 1929. Serial No. 410,341. 7 Claims. (Cl. 91—67.8.)



1. The method of coating a roll which comprises providing a body portion which is tapered from end to end, applying a coating material in a fluid state to the surface

of said body portion, and permitting said material thus applied to drain in the direction of the taper leaving a film of composition thereon of approximately uniform external diameter.

1,873,874. APPARATUS FOR HAIR WAVING. GEORGE DECKER, Cleveland, Ohio, assignor to The Philad Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 18, 1929. Serial No. 379,187. 12 Claims. (Cl. 132—36.1.)



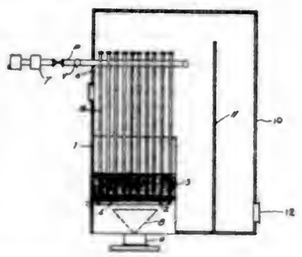
1. A hair waving clamp comprising two channel-shaped arms pivoted together at one end with the recesses thereof facing each other, and detachably connected at the other end, channel-shaped holders inserted between the edges of the arms, the flanges of the holders embracing the edges of the flanges of the arms and so frictionally retaining themselves in place, and rubber strips within the holders and projecting therefrom.

1,873,875. APPARATUS FOR HAIR WAVING. GEORGE DECKER, Cleveland, Ohio, assignor to The Philad Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 4, 1929. Serial No. 404,644. 10 Claims. (Cl. 219—24.)



7. Hair waving apparatus comprising a protector clamp, a curler rod upon which a strand of hair may be wound and adapted to be positioned upon the clamp, a flexible curtain movable to overlie the wound strand of hair, and a heating element in said curtain.

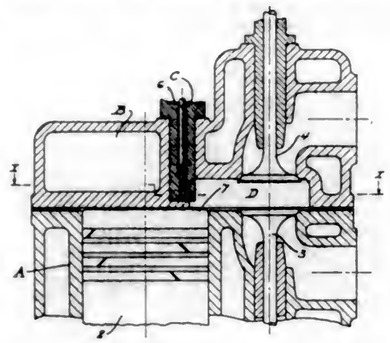
1,873,876. APPARATUS FOR CONTROLLING TEMPERATURES IN CHEMICAL REACTIONS. CHARLES R. DOWNS, Bronxville, N. Y., assignor to The Barrett Company, a Corporation of New Jersey. Filed Feb. 26, 1923, Serial No. 621,144. Renewed Apr. 19, 1929. 11 Claims. (Cl. 23—288.)



1. In an apparatus of the class described, two chambers, catalytic material in one of said chambers, a liquid container extending through one of said chambers and into the other, liquid in said container, and means for conveying reacting gases in succession through said chambers.

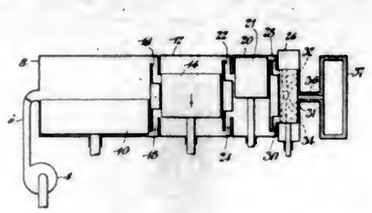
1,873,877. DIESEL ENGINE. WALDO G. GERNANDT, Hayward, Calif. Filed Aug. 27, 1928. Serial No. 302,301. 4 Claims. (Cl. 123—32.)

1. In a Diesel engine, a cylinder, a head, a combustion chamber formed in the head at one side of the cylinder, said combustion chamber having its bottom wall in substantial alignment with the top of the cylinder, said cylinder and head forming a passage between said combustion



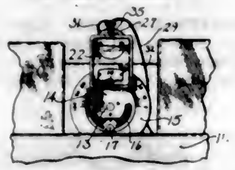
chamber and cylinder, and a fuel jet in said passage having fuel passages extending parallel to the bottom wall of the combustion chamber.

1,873,878. HIGH TEMPERATURE ADIABATIC COMPRESSOR. WINDER E. GOLDSBOROUGH, South Norwalk, Conn., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 21, 1928. Serial No. 301,086. 10 Claims. (Cl. 230—198.)



1. In a high temperature compressor, a cylinder, a piston reciprocative therein, valveless means for the admission and discharge of gases to said cylinder, means for heat-insulating the cylinder and piston walls which are exposed to the compressed gases at high temperature and pressure for conserving the heat of compression and protecting said walls.

1,873,879. COMBINED MECHANICAL AND ELECTRICAL RADIO STATION SELECTOR. VIRGIL M. GRAHAM, Rochester, N. Y., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed July 12, 1929. Serial No. 377,876. 5 Claims. (Cl. 250—40.)



5. In combination with a chassis of a radio receiver including an adjustable tuning element, means for adjusting said element, a mechanical indicator movable with said

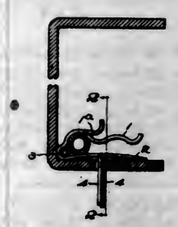
adjusting means, an electrically operated indicator closely associated with said mechanical indicator, and an escutcheon plate supported adjacent said chassis, said escutcheon plate having two openings positioned one above the other, through one of which openings said mechanical indicator is visible, and through the other of which said electrical indicator is visible.

1,873,880. SEPARABLE SNAP FASTENER AND INSTALLATION THEREOF. CHARLES L. HALL and ROLLO F. WALTERS, Detroit, Mich., assignors to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed May 24, 1930. Serial No. 455,259. 9 Claims. (Cl. 24—213.)



4. A snap fastener stud having a yieldable base, a pair of projections extending from said base for snap fastening engagement with a cooperating fastener socket, said projections being permitted to move toward and away from each other by said yieldable base and attaching portions extending laterally from said projections in spaced relation to said base.

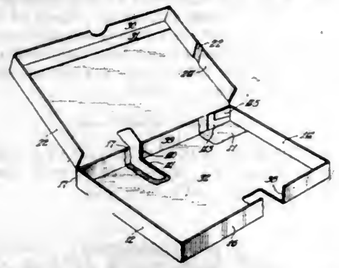
1,873,881. CONDUIT-HOLDING DEVICE. CHARLES L. HALL, Detroit, Mich., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed July 15, 1931. Serial No. 550,914. 5 Claims. (Cl. 24—73.)



1. A pipe and conduit attaching device having a U-shaped pipe engaging and holding portion comprising a pair of spaced fingers shaped to engage at least two conduits, one of the fingers of said pipe engaging and holding portion being divided into at least two independently yieldable portions to adapt themselves independently to the conduits and snap fastening means associated with and extending from said other finger portion of the pipe engaging and holding portion of the device for attachment of said device to a supporting structure having cooperating snap fastening means.

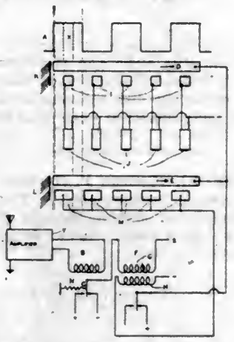
1,873,882. CARTON. JOHN F. HALLADAY and MITCHEL E. HOLY, Chicago, Ill., assignors to Container Corporation of America, Chicago, Ill., a Corporation of Delaware. Filed Jan. 9, 1932. Serial No. 585,716. 6 Claims. (Cl. 229—34.)

1. A folding carton comprising in combination, an outer bottom section having an outer front end wall and two side walls, an inner bottom adapted to lie upon said outer bottom, an inner end wall on the inner bottom conected to said outer front end wall, an inner and outer rear end wall on said inner bottom opposite said first mentioned inner end wall, inwardly projecting portions on the ends of said side walls adapted to be engaged between said inner and outer end walls, and means for holding said bottom
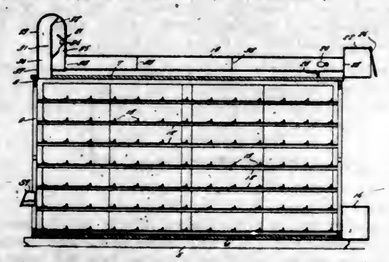


sections in assembled relation, said means comprising a locking flap on the free edge of said outer rear end wall adapted to be tucked between said bottoms.

1,873,883. TELEGRAPH SYSTEM. FREDERICK G. HALLDEN, Jamaica, N. Y., assignor to Postal Telegraph-Cable Company, New York, N. Y., a Corporation of Connecticut. Filed June 15, 1929. Serial No. 371,256. 7 Claims. (Cl. 178—52.)



1. In a signalling system, a receiving relay responsive to received impulses, a local relay initially and directly operable by said receiving relay, a distributor, means controlled by said distributor for maintaining said local relay in its operated position both independently of said receiving relay and for a predetermined portion of the impulse time remaining after the operation of said local relay.

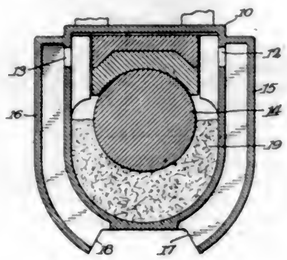
1,873,884. HUMIDIFYING APPARATUS. FRANK W. HARRIS, New Bedford, Mass. Filed Feb. 28, 1931. Serial No. 519,213. 1 Claim. (Cl. 261—116.)



In a humidifying apparatus, a cabinet having material supporting means, a conduit extending along the top of the cabinet and provided at one end with an air inlet and at the

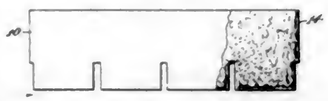
other end with an air outlet, there being means controlling the volume of air admitted to said conduit by way of said air inlet, an eliminator establishing constant communication between said outlet end of said conduit and the top of said cabinet, means to furnish a spray of water to said conduit, a water collector having communication with said water supplying means and with said conduit, and a release valve for the cabinet having a spring urging the same to closed position.

1,873,885. JOURNAL BOX FOR RAILWAY CARS. RUBY R. HAWK, Chicago, Ill. Filed Dec. 10, 1928. Serial No. 324,825. 2 Claims. (Cl. 308—77.)



1. A journal box for railway cars provided with ventilating ports in its side walls and trunks inclosing such ports and extending downwardly beyond the bottom of the box and having oppositely directed openings adjacent their lower ends and being closed at their upper ends.

1,873,886. ROOFING. GEORGE P. HEPPES, Chicago, Ill., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 27, 1929. Serial No. 343,107. 10 Claims. (Cl. 91—68.)



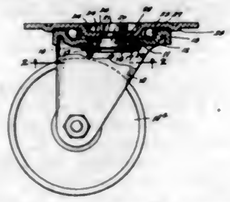
1. Composition roofing comprising a waterproof foundation, a layer of bituminous coating material overlying said foundation, and fragments of felted fibrous material overlying and adhering to said coating to provide a surface of irregular contour.

1,873,887. COMPOSITE BOARD. OTTO A. HEPPES, La Grange, Ill., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 27, 1929. Serial No. 350,268. 3 Claims. (Cl. 154—45.9.)



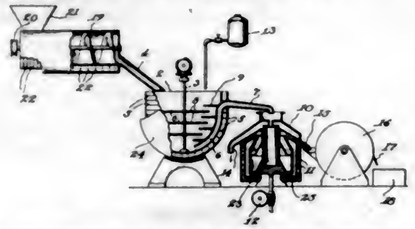
1. A cover board for asphaltic shingle bundles comprising a substantially rigid and water proof slab composed essentially of a homogeneous mass of fiber and bitumen, a fibrous facing sheet adherently united to one face of said slab, and reinforcing elements affixed to said slab along opposite marginal edges thereof.

1,873,888. CASTER. WALTER F. HEROLD, Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed July 30, 1930. Serial No. 471,698. 12 Claims. (Cl. 16—21.)



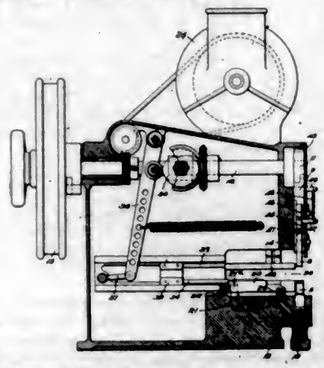
1. In a caster, a floor engaging element including a horn, an attaching element, means rotatably conecting said horn to said attaching element, bearing means between said horn and said attaching element, and resilient means adapted to press said horn and said attaching element into relation with said bearing means to prevent looseness and to be depressed under the load imposed on said caster.

1,873,889. METHOD FOR THE PREPARATION OF CHROMIUM TRIOXIDE. PAUL R. HINES, Elyria, Ohio, assignor to The Harshaw Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 26, 1929. Serial No. 373,701. 3 Claims. (Cl. 23—145.)



1. The process of the character described, which comprises reacting, in a preheated zone, between oleum and a substantially anhydrous alkali metal compound of chromic acid, thereby obviating necessity of continuous external heating and exothermically forming molten products, and making a substantially clean separation of chromium trioxide from the rest of such molten products.

1,873,890. SNAP FASTENER ATTACHING MACHINE. GEORGE A. HOLMES, Newton, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed May 10, 1930. Serial No. 451,498. 6 Claims. (Cl. 218—6.)



1. A snap fastener attaching machine having means for securing a snap fastener stud and an attaching part to a support, and means for feeding the stud and the attaching part to the securing means, said securing means including a holding mechanism for the stud, a holding mechanism for the attaching part, means operable to move one holding mechanism toward the other whereby the attaching part may be engaged with the stud, a device movable relative to both holding mechanisms to complete attachment of the stud and attaching part to a support, and spreading means located in position to spread the head of the stud during the latter part of the attaching movement of said device.

1,873,891. SNAP FASTENER MEMBER. GUSTAV JOHNSON, West Roxbury, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Nov. 7, 1930. Serial No. 494,030. 3 Claims. (Cl. 24—216.)



1. A snap fastener member pressed from sheet metal and having a boss providing means for engagement with a cooperating snap fastener member, a curved anvil portion formed as a part of said boss and said boss being divided by a number of slots to provide yieldable means for engagement with the cooperating snap fastener member, the slots extending into the said anvil portion to permit substantial expansion and contraction of said boss, and those portions of said slots in said anvil portion being substantially closed so that the anvil portion may present a substantially continuous surface to permit upsetting of a hollow rivet by said anvil portion without interference from said slots therein.

1,873,892. SEPARABLE FASTENER. GUSTAV JOHNSON, West Roxbury, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 10, 1930. Serial No. 501,272. 2 Claims. (Cl. 24—201.)



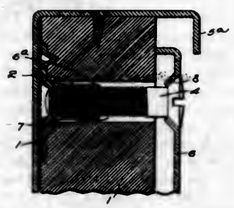
2. A separable fastening member comprising a plate member having a hook portion formed from the material of said plate member within the periphery thereof and standing away from the plane of said plate member, said hook portion forming an aperture in said plate member, a spring finger formed integral with said plate member and extending from one edge of said plate member toward said aperture, said spring finger being located at the opposite side of the plate member from that side at which the hook portion is located and having a portion thereof extending through the aperture for cooperation with the hook portion and having its end terminating adjacent to that end of the hook where it joins the plate member.

1,873,893. SELF-LOCKING SNAP FASTENER STUD. WALTER I. JONES, Arlington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 15, 1932. Serial No. 592,899. 4 Claims. (Cl. 24—73.)



1. A fastener stud member having a base portion, a shank extending from said base comprising a pair of opposed yieldable arms having outer edges shaped to make snap fastening engagement with a cooperating stud-receiving means to hold the fastener in place, said arms having inner edges in the same vertical plane and having portions adapted to engage upon limited movement of the arms toward each other thereby preventing disengagement or engagement of the fastener by direct axial movement relative to the stud-receiving means but being adapted to be moved out of engaging relation by twisting movement of said fastener when being pressed into engagement with the stud-receiving means.

1,873,894. NUT AND NUT AND SCREW FASTENED INSTALLATION. ARTHUR W. KIMBELL, Newton Center, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed June 13, 1930. Serial No. 460,879. 1 Claim. (Cl. 85—32.)

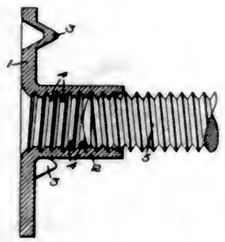


In a nut secured installation, an apertured nut-carrying wooden board, a one-piece sheet metal nut having a base bearing against one face of said board, hollow cone-shaped board-engaging means extending from said nut into said board at points inside the periphery of said base and preventing rotation of said nut, a threaded shank extending from said base into the aperture in said board, an apertured part located at that side of the board opposite the side engaged by said base, a tapered wall surrounding the opening at the free end of said threaded shank, a screw having a shank passing through the aperture in said part and guided into threaded engagement with the threaded shank of said nut by the tapered wall of the shank thereby to hold the said part in position on said board.

1,873,895. NUT AND NUT AND SCREW FASTENED INSTALLATION. ARTHUR W. KIMBELL, Newton Center, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Original application filed Apr. 27, 1931, Serial No. 533,060. Divided and this application filed Aug. 1, 1931. Serial No. 554,487. 2 Claims. (Cl. 85—32.)

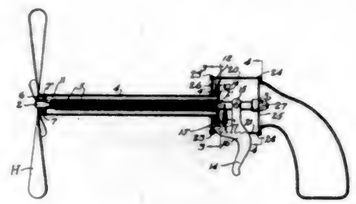
2. A sheet metal nut having a base, a hollow shank drawn from the metal of said base and a thread formed

internally of said shank, the internal portion of said thread being of the sharp V-type but cut into the wall only to



such a depth as to provide a blunt top at the inner face of the shank, the width of said top being about equal to the height of the thread from top to bottom.

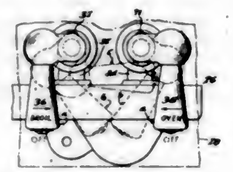
1,873,896. HELICOPTER TOY DEVICE. AUGUST KRASTIN, Cleveland, Ohio, assignor to Walter E. Milestone, Cleveland, Ohio. Filed Sept. 26, 1931. Serial No. 565,319. 4 Claims. (Cl. 46—51.)



1. A propelling device for a spinning projectile, comprising a fixed member and a rotatable member, one member surrounding the other, a torsion spring interposed between and operatively connected to said members, detent mechanism including a toothed wheel on the rotatable member to hold the spring in tension under the control of the user, said rotatable member being adapted to engage the projectile to spin it, a substantially cylindrical casing containing said detent mechanism and comprising a single piece sheet metal strip, and end discs supporting the strip, the said rotatable member being guided for rotation in one of said end discs and there being means securing the fixed member in rigid relationship to the other disc, each of said end discs being recessed near its periphery to closely embrace respective marginal edges of said strip and rigidly hold the strip interiorly and exteriorly in position about the detent mechanism, the extremities of the strip being held in spaced relationship by said discs, said detent mechanism including a trigger adapted to engage the toothed wheel and being mounted within said casing and projecting between said ends of the strip.

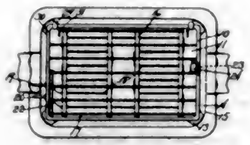
1,873,897. CONTROLLING DEVICE FOR ALTERNATIVE FLUID SUPPLY. FRANKLIN LAWRENCE, Portland, Me., assignor to Portland Stove Foundry Co., Portland, Me., a Corporation of Maine. Filed June 6, 1931. Serial No. 542,626. 8 Claims. (Cl. 126—42.)

1. A two-pipe flow-control device comprising the combination, with two pipes, of a pair of cocks, one for each pipe, having a pair of co-acting elements, one turning with each cock, with intersecting orbits; each said element, when its own cock is open, being, by its form and location



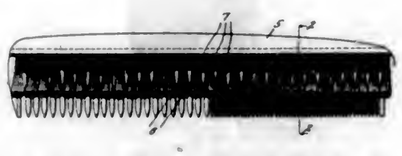
relative to the other element, an obstruction in the orbit of said other element to prevent the opening of said other cock.

1,873,898. TOASTER. LOUIS V. LUCIA, Hartford, Conn., assignor to The Beardsley and Wolcott Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Feb. 21, 1929. Serial No. 341,644. 3 Claims. (Cl. 219—19.)



1. A toaster including an enclosing case, a toaster frame supported within the case and including a heating element disposed upon said frame, terminals projecting from one end of the frame and positioned and spaced to pass through openings in said case, said frame being placeable by a transverse tipping movement after the terminals are in place and a latch pivotally supported on that end of the frame opposite the terminals and positioned to engage a keeper within the case, the terminals and latch mounting constituting supports for opposite ends of the toaster frame.

1,873,899. TOILET ARTICLE. CHESSBOROUGH JAMES HENRY MACKENZIE-KENNEDY, New York, N. Y. Filed Dec. 22, 1931. Serial No. 582,604. 8 Claims. (Cl. 132—88.)



1. As a new article of manufacture, the combination of a comb, a thin brush stock extending along the comb above the teeth thereof and in connection therewith, and bristles set in said stock and projecting alongside the teeth of the comb, the outer ends of the bristles occupying an area closely confined to the sides of the teeth so as not to impede manipulation of the comb at the natural angle to the scalp or similar surface, whereby, the article being manipulated with the comb in advance of the bristles, the hair tends to climb the bristles without substantial backward bending of the free ends of the latter.

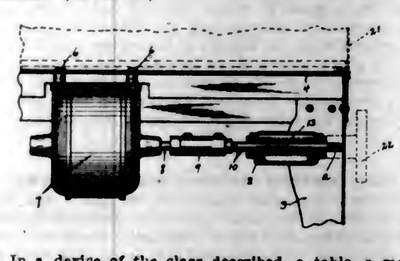
1,873,900. REMOVAL OF PHENOLS FROM WASTE AND OTHER LIQUORS. STUART PARMELEE MILLER, New York, N. Y., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed June 30, 1927. Serial No. 202,737. 9 Claims. (Cl. 260—154.)

1. The method of removing phenols from phenol-containing liquors containing small amounts thereof, which comprises bringing the liquor into intimate contact with a heavy neutral coal tar oil having a specific gravity greater than that of the liquor.

1,873,901. ELIMINATION OF PHENOLS AND OTHER LIQUORS. STUART PARMELEE MILLER, New York, N. Y., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed June 30, 1927. Serial No. 202,738. 15 Claims. (Cl. 260—154.)

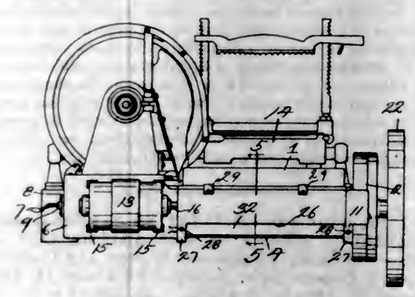
1. The method of removing phenols from phenol-containing liquors, which comprises subjecting the liquor to extraction with a neutral coal tar oil having a specific gravity materially less than that of water, such oil being substantially free from benzol.

1,873,902. UTILITY TABLE. JABEZ C. NELSON, Syracuse, N. Y., assignor to Syracuse Washing Machine Corporation, Syracuse, N. Y., a Corporation of Delaware. Filed June 28, 1930. Serial No. 464,597. 3 Claims. (Cl. 74—7.)



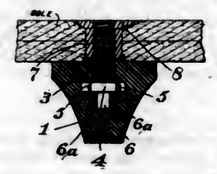
1. In a device of the class described, a table, a motor secured to the under side of the table, a shaft having a worm operatively secured to the motor, said shaft having on its free end, means whereby a tool may be removably secured thereto, a gear case secured to the underside of the table, a vertical shaft having a clutch member on its upper end journaled in the gear case, said clutch member being positioned beneath the table top, and a worm gear on the last mentioned shaft in mesh with the worm on the first named shaft.

1,873,903. SLICING MACHINE. JOSEPH C. NOLL, South Bend, Ind., assignor, by mesne assignments, to George R. Blakeslee, Cicero, Ill. Filed June 22, 1928. Serial No. 287,501. 4 Claims. (Cl. 146—102.)



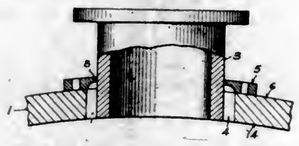
1. A power unit for a rotary slicing machine having a base provided with a recess at one side and adjacent one end thereof, said unit comprising a drive shaft extending beyond the ends of the base adjacent the recess when the unit is attached to the machine, a frame adapted to be secured to the base within the recess, a plate carried by the frame and overlying a portion of the base adjacent the recess, a motor mounted on said plate, the drive shaft being driven by said motor, said drive shaft extending through the frame and beyond the end thereof, a gear train connection mounted on the end of the frame for establishing driving connection between the motor shaft and the drive shaft of the machine, and a casing carried by the end of the frame, said casing housing the drive gearing and overlying the end of the base of the machine when the unit is attached thereto.

1,873,904. SHOE CLEAT. GEORGE L. PIERCE, Brooklyn, N. Y., assignor to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Filed Mar. 23, 1931. Serial No. 524,713. 2 Claims. (Cl. 36—59.)



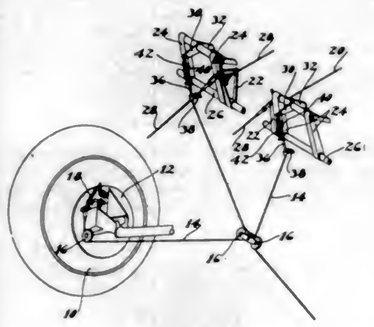
1. A cleat for a shoe comprising a body of rubber or the like, and a fastening shank having a head of general rectangular form embedded in the body, the head having continuous upper and lower faces completely surrounding the shank and adapted to positively hold the shank and body against relative axial displacement without tendency to cut the body, the head having long sides and provided at its corners with shallow recesses receiving portions of the body and presenting shoulders extending inwardly from the ends of said sides, the long sides and the shoulders cooperating to hold the body against turning on the shank without tendency to cut the body, and said recesses providing for a thickness of the material of the body between the corners of the head and the side face of the body substantially equal to that between the sides of the head and the side of the body.

1,873,905. ELECTRIC WELDING OF PRESSURE VESSELS. HAROLD O. POLLEI, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Oct. 23, 1929. Serial No. 401,707. 3 Claims. (Cl. 219—10.)



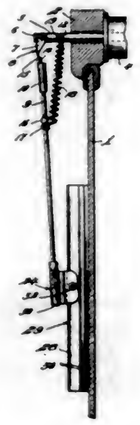
1. The method of welding the end of a metal tube to a thick metal plate, which comprises providing an opening of a greater diameter in the thick metal plate than that of said tube to be joined thereto, inserting said tube to a position substantially flush with the inner wall of said thick plate and concentric with said opening leaving a gap between said metal tube and said thick wall, applying a relatively thin plate encircling said metal tube to close said gap at one end, and arc welding the metal tube to said thick metal plate and to said ring thereby filling the closed gap with fused welding metal.

1,873,906. OPERATING MECHANISM. WILLIAM A. RING and ISAAC M. LADDON, Buffalo, N. Y., assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 30, 1930. Serial No. 479,039. 9 Claims. (Cl. 244—2.)



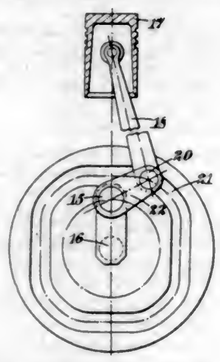
1. Operating mechanism comprising a lever pivoted for movement about a first axis, a pedal mounted thereon and having a tension connection, and a guide for said connection pivoted for movement about a second axis paralleling the first axis and which predetermines the position of the pedal on the lever when the connection is not being operated.

1,873,907. WINDSHIELD CLEANER STRUCTURE. MICHAEL ROMANO, Providence, R. I. Filed Apr. 24, 1931. Serial No. 532,476. 6 Claims. (Cl. 15—255.)



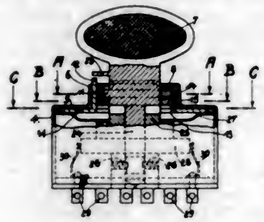
1. In a windshield cleaner structure, a supporting shaft provided with a transverse opening located adjacent to one end thereof and having an annular recess formed therein and spaced from the transverse opening, a wiper carrying arm provided with spaced ears, a pivot member passed through the spaced ears and located within the transverse opening formed in said shaft, and a coiled tension spring having one end thereof secured to said arm and the opposite end provided with a loop portion releasably engaging the groove formed in said shaft.

1,873,908. DIESEL ENGINE. ERICH SCHINKE, Berlin, Germany, assignor to Stanley Hopkins, London, England. Filed Apr. 2, 1930, Serial No. 440,960, and in Great Britain Sept. 13, 1929. 6 Claims. (Cl. 74—14.)



1. In an internal-combustion engine working on a Diesel, semi-Diesel or like cycle, the combination with the power cylinder and piston, of a crank-shaft, a crank-pin upon said shaft, a master connecting-rod pivoted to the crank-pin, a guide in which the free end of the master connecting-rod is slidable, and an articulated connecting-rod articulated to the big end of the master rod and carrying the piston aforesaid, so constructed and arranged as substantially to modify the piston movement and to producea considerable increase in dwell at top dead centre and a corresponding increase in velocity at mid-stroke.

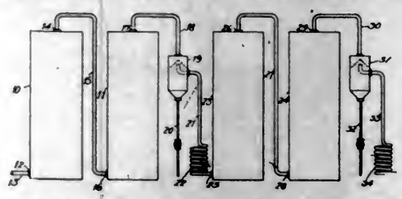
1,873,909. SWITCH CONTROL MEANS FOR VEHICLE LAMPS. HERMANN STEINHART, Stuttgart, and HEINRICH ARNOLD, Waiblingen, Germany, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Nov. 5, 1929, Serial No. 405,015, and in Germany Nov. 12, 1928. 5 Claims. (Cl. 200—42.)



1. Switch control means for vehicle lamps comprising a casing, a rotatable switch member mounted in said casing and adapted to assume a plurality of positions corresponding to different conditions of illumination of said lamps, a key adapted to be inserted in said casing to engage and operate said switch member, a ward on said key, and means within said housing cooperating with said ward to prevent the movement of said switch member from one position to another without first axially moving said key.

1,873,910. PROCESS OF TREATING CARBONACEOUS MATERIAL. MILON J. TRUMBLE, Alhambra, Calif., assignor, by mesne assignments, to Coals and Chemicals Ltd., a Corporation of Nevada. Filed Oct. 13, 1926. Serial No. 141,339. 3 Claims. (Cl. 202—9.)

1. The process of treating solid carbonizable material by the direct contact of superheated steam with said material in a plurality of intercommunicating chambers, which includes: introducing superheated steam into the first of said chambers at a temperature of substantially 1100° F.–1200° F.; passing said steam through a battery of said intercommunicating chambers of such magnitude that the vapors issuing from the last chamber in the battery are at a temperature of substantially 550° F., so



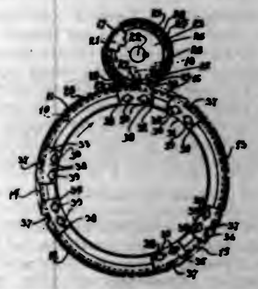
conserving the latent heat of the steam, dephlegmating the vapors to condense the heavy fractions, then superheating the vapors issuing from the dephlegmator to a temperature of substantially 1100° F.–1200° F., and introducing the superheated vapors into the first of another series of intercommunicating chambers.

1,873,911. BAG FRAME AND FASTENER FOR THE SAME. WILLIAM J. WALKER, Waterbury, Conn., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 16, 1931. Serial No. 563,064. 3 Claims. (Cl. 292—101.)



1. A bag frame structure including a pair of frame members and separable fastening members for holding said frame members together, one of said frame members being U-shaped in cross-section with the open end of the U facing upwardly, one of said fastening members having an L-shaped attaching portion the bottom of which is rigidly secured to the bottom of the U-shaped frame member, a catch portion located at the upper end of said L-shaped attaching portion, a hinged portion provided by the other fastening member and carried by the other frame member, and said hinged portion habing means for engagement with said catch when said catch is forced toward the frame member carrying the L-shaped attaching portion in a direction transverse to the frame members.

1,873,912. ROTARY WEB UNDERSURFACE PRINTING MACHINE. ALBERT S. WEBSTER, Ottawa, Ontario, Canada, assignor to American Bank Note Company, New York, N. Y., a Corporation of New York. Filed Dec. 30, 1930. Serial No. 505,620. 6 Claims. (Cl. 101—248.)

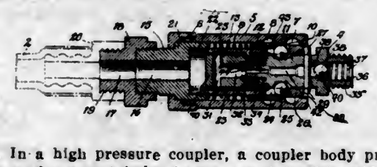


1. A rotary web undersurface printing machine embodying therein a printing couple consisting of an impression cylinder or D-roll, a plate cylinder adapted to receive a plurality of plates in spaced relation to each other, cooperating gears upon said impression cylinder or D-roll and upon said plate cylinder, said gears permitting slight variation in the angular speed of said impression cylinder or D-roll during the making of an impression, and cooperating means carried by said impression cylinder or D-roll and by said plate cylinder, whereby the impression cylinder or D-roll is brought into a definite relation to the plate cylinder upon the completion of the making of each impression and immediately prior to the initiation of the making of the succeeding impression.

1,873,913. COAGULATION OF RUBBER. WILLIAM B. WESCOTT, Boston, Mass., assignor to Dewey and Almy Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed June 10, 1930. Serial No. 460,304. 3 Claims. (Cl. 18—50.)

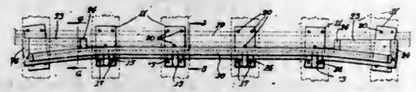
1. Method of forming rubber-coagula from latex, characterized by dispersion of a heat-denaturable proteid through the latex under temperature conditions which constitute it an effective protective against a latex-coagulant substance, distributing said latex-coagulant substance throubh the latex, then raising the temperature of the thus formed aggregate to a point at which the proteid ceases to be protective against said coagulant substance.

1,873,914. HIGH PRESSURE COUPLER. DANIEL G. ADAMS, New York, N. Y., assignor to Adams Grease Gun Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1928. Serial No. 329,361. 2 Claims. (Cl. 288—189.)



1. In a high pressure coupler, a coupler body provided with a sleeve, a tubular base connected with said sleeve and provided with a shoulder, a sliding casing mounted on said sleeve and provided with means adapted to interlock with said shoulder for limiting the sliding movement of the casing in one direction, said casing having a pair of spaced annular grooves adjacent one end, a plurality of balls acting as locks, resiliently actuated means for moving said balls in one direction and a coupling fitting for moving the balls in the opposite direction, said balls when fitting in said grooves permitting the coupling fitting to move in and out and when forced to a position between the grooves acting as locking means for preventing the fitting from being removed from the coupler.

1,873,915. GUARD RAIL. WILLIAM F. AID, Cleveland, Ohio. Filed Oct. 26, 1931. Serial No. 571,095. 7 Claims. (Cl. 238—19.)

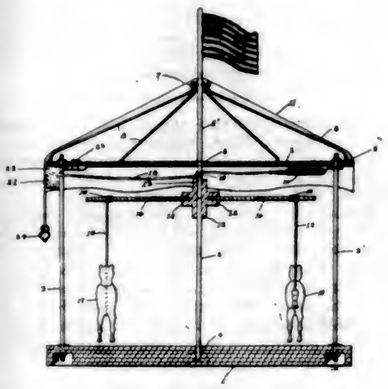


1. A unitary guard rail structure comprising a guard rail and a series of tie plates and rail braces welded to the guard rail with the tie plates projecting therefrom and adapted to extend beneath the main rail and having means for determining the spacing of the main and guard rails, substantially as described.

1,873,916. TOY MERRY-GO-ROUND. ELLSWORTH B. ALLABOUGH, Evanston, Ill. Filed Mar. 28, 1931. Serial No. 525,892. 1 Claim. (Cl. 272—31.)

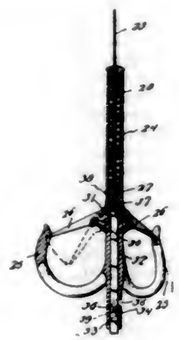
A toy merry-go-round comprising a base, a top, upright members holding the two in spaced relation, a mast jour-

nailed in said base and in said top, said mast consisting of two aligned sections and a coupling member therefor, radial arms carried by said coupling member for supporting toy figures and a cord secured at one end in yielding means



to part of the structure, with its other end available for manipulation, and an intermediate portion wrapped around said mast whereby intermittent pulls on said available end will cause continuous rotation of said mast and the parts carried thereby.

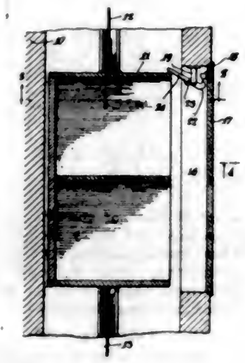
1,873,917. AERIAL MAIL EXCHANGE. LUCY CHICHESTER ASHLEY, Oklahoma City, Okla. Filed Aug. 12, 1930. Serial No. 474,833. 6 Claims. (Cl. 258—1.)



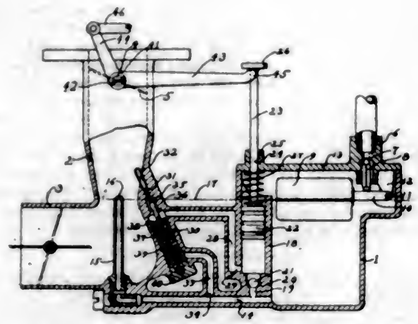
1. The combination with an aircraft, of a cable adapted to be lowered therefrom, and a catching hook having a shank attached to the lower end of the cable and provided with a plurality of equally spaced bills, each provided with a spring-pressed normally operative keeper element.

1,873,918. DUMBWAITER DOORLOCK. ISIDOR ATTIAS, New York, N. Y. Filed Jan. 28, 1931. Serial No. 511,764. 4 Claims. (Cl. 187—61.)

1. A locking device for the doors of dumbwaiter-shafts, comprising a keeper, a bracket adapted to be secured to a wall of a dumbwaiter shaft, a finger pivoted on said bracket, said finger normally engaging said keeper to hold the door locked, a spring, and a lever controlled by said spring adapted to be raised by the dumbwaiter to disengage said finger from said keeper when the dumbwaiter is raised into position in front of the door, said spring automatically engaging the finger with the keeper as soon as the dumbwaiter is moved away from the door.



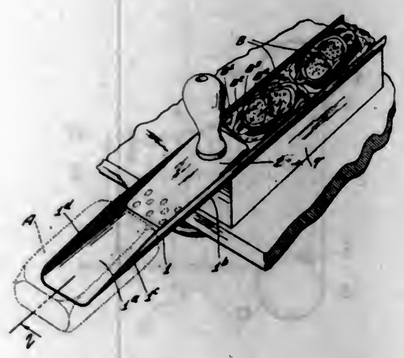
1,873,919. CARBURETOR. FREDERICK O. BALL and THOMAS M. BALL, Detroit, Mich. Filed May 31, 1930. Serial No. 458,567. 11 Claims. (Cl. 261—34.)



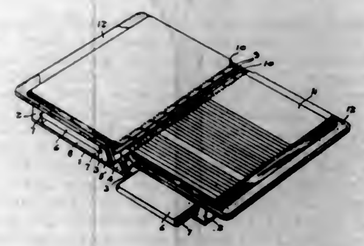
1. A pick-up system for an internal combustion engine including means having a fuel passage therein communicating with the fuel mixture system of said engine, mechanism for intermittently feeding fuel through said passage under pressure, and means located at the discharge end of said passage normally closing the same and operable by the pressure of the fuel therein for opening said passage, said means tending to close said passage under the action of the suction of said fuel mixture system.

1,873,920. SANDWICH ASSEMBLING DEVICE. KEN E. BEMIS, Los Angeles, Calif., assignor, by mesne assignments, to Fountain Products Corporation, a Corporation of Illinois. Filed Sept. 27, 1927. Serial No. 222,246. 10 Claims. (Cl. 107—1.)

9. In a sandwich assembling device, a pair of separate plate members positioned adjacent each other with the one within the other, forming a pocket therebetween for receiving a sandwich filler and adapted to be tilted longitudinally one within the other at their rear ends, and to be shifted longitudinally one with respect to the other when tilted.

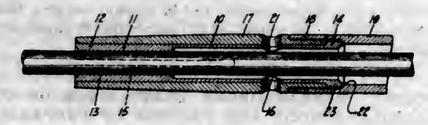


1,878,921. HOLDER FOR LOOSE-LEAF BINDERS. ROBERT J. COPELAND, Toronto, Ontario, Canada. Filed Oct. 1, 1927. Serial No. 223,434. 7 Claims. (Cl. 45—57.)



3. A holder for loose leaf binders of the curved prong type having a pair of hinged back sections hinged to the covers, comprising substantially horizontal supports for the binder covers adapted to support the covers each in a substantially horizontal position to facilitate entries, said supports being separated by a recess, the walls of said recess being adapted to co-operatively engage and position the hinged sections in a predetermined angular relation relative to the horizontally supported covers to effect the positioning of the opposing sets of prongs with their ends overlapping, said supports engaging the covers on their outward sides in an extended manner to support the weight of the covers and sheets independent of the back members whereby the latter will be freely suspended within said recess for free manipulation therein.

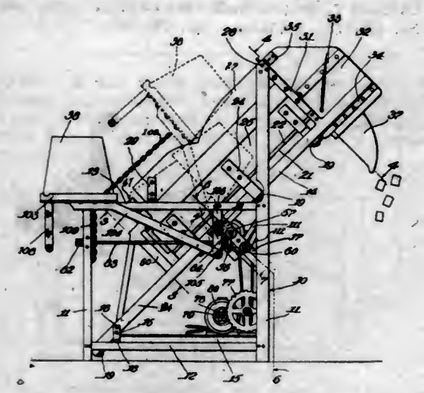
1,873,922. WORK FEEDING DEVICE. JOSEPH M. BACIGALUPI, Oakland, Calif., assignor to Marchant Calculating Machine Company, a Corporation of California. Filed Jan. 15, 1930. Serial No. 420,887. 4 Claims. (Cl. 29—62.)



1. A work feeding device comprising a stock feeding member, a feed tube having means for securing said member thereon, an adapter insertible into said member, and means for maintaining said adapter in proper working relation with said member comprising shoulders on said member and said tube adapted to grip said adapter.

2. A work feeding device comprising a member having a plurality of fingers, an adapter insertible therein provided with a plurality of fingers, a feed tube provided with means for securing said member thereto, means for aligning said member and said adapter during attachment to said tube comprising aligned apertures in said member and said adapter adapted to receive a key, and means for retaining said member and said adapter in alignment after attachment to said tube comprising shoulders on said member and said tube adapted to grip said adapter.

1,873,923. BUTTER CUTTING MACHINE. CHARLES DOERING and HENRY DOERING, Chicago, Ill. Filed Oct. 21, 1929. Serial No. 401,179. 3 Claims. (Cl. 31—26.)



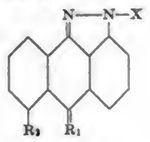
3. In a device of the character described, the combination with an inclined trough for receiving plastic material, of pivoted means for disposing batches of plastic material in alignment within said trough, conveying means for feeding plastic material along said trough, and severing means in the path of said conveying means.

1,873,924. PAPER PULP BLEACHING PROCESS. WILHELM HIRSCHKIND, Antioch, Calif., assignor to Great Western Electro-Chemical Co., San Francisco, Calif., a Corporation of California. Filed Dec. 3, 1928. Serial No. 323,575. 3 Claims. (Cl. 8—2.)

1. The process of lightening the color of mechanical wood pulp which comprises agitating the same substantially at room temperature for about ten minutes with an aqueous solution of a hydrosulphite as substantially the only active agent therein and in amount ranging from .25% to 10% of the weight of the pulp without subsequent washing.

1,873,925. BENZANTHRONE DERIVATIVES OF PYRAZOLANTHRONE AND PROCESS OF PREPARING THEM. KARL WILKE, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 22, 1929, Serial No. 349,265, and in Germany Sept. 24, 1926. 12 Claims. (Cl. 260—45.)

1. The process which comprises heating a pyrazolanthrone of the following general formula:



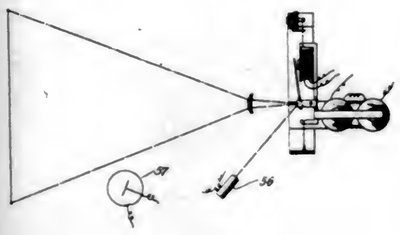
wherein

X stands for hydrogen or a metal,
R_1 for oxygen,
R_2 for hydrogen or
R_1 and R_2 together stand for



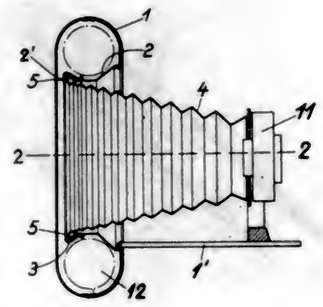
with a halogen-benzanthrone preferably in the presence of a catalyst capable of promoting the splitting off of hydrogen halide and also in the presence of an inert organic solvent and an acid-binding agent.

1,873,926. TELEVISION APPARATUS. MELCHOR CENTENO V., Boston, Mass. Filed Feb. 21, 1930. Serial No. 430,375. 6 Claims. (Cl. 178—6.)



1. In a television apparatus, a stationary frame, a movable frame disposed within the stationary frame, flexible suspension means for supporting the movable frame in the stationary frame, the latter being provided with an armature, a low frequency magnet supported in the stationary frame so as to project its field through the armature of the movable frame, a mirror, a high frequency magnet carried by the movable frame, an armature for the last said magnet, said armature being flexibly mounted in the movable frame and carrying said mirror.

1,873,927. FOLDING CAMERA. LEO GOLDHAMMER, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Nov. 6, 1930, Serial No. 493,840, and in Germany Oct. 10, 1929. 7 Claims. (Cl. 95—32.)



1. In a folding camera the combination with a body and an inner casing forming the spool chambers, of a bellows bent on its end farthest from the objective over the edges of the inner casing and fastened thereon on the rear side within the spool chambers and at the outer surface of the inner casing by mechanical means.

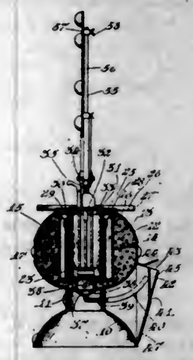
1,873,928. EYELID GUARD. SARAH E. BOHNER, San Francisco, Calif. Filed Oct. 20, 1931. Serial No. 569,974. 5 Claims. (Cl. 132—1.)



1. An eyelid guard comprising a sheet adapted for placement between the lower eyelid and the eyelashes to support the lashes and to protect the lid when the lashes are being colored, the upper edge of said sheet terminating at the base of the lashes.

1,873,929. LIQUID MERCHANDISE DISPENSER. CHARLES DOERING, Chicago, Ill. Filed Dec. 10, 1928. Serial No. 324,966. 2 Claims. (Cl. 225—21.)

1. In a device of the character described, the combination with a casing having a well, a perforated shell disposed in said well to define a refrigerant space therewith, spacer means on said container to engage said well, a fluid confining container disposed in said shell, a closure for said well, a dispenser mechanism carried by said closure in communication with the interior of said container, a tubular standard for supporting said casing, a receptacle formed laterally of said casing and standard in integral association therewith, means in



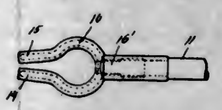
said receptacle for draining said refrigerant space, a refuse receiving compartment in said receptacle, a hinged closure for said receptacle and waste receiving compartment, and another closure at the base of said receptacle to remove the contents therefrom and enable access for rendering said drain means operative.

1,873,930. ELECTRICAL TERMINAL. ARTHUR EDMONSON, Cleveland, Ohio, assignor to Morris Matsen, Oregon, Wis. Filed Dec. 18, 1925. Serial No. 76,232. 4 Claims. (Cl. 173—259.)



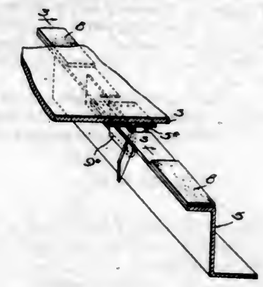
1. A cable terminal adapted to establish connection with a conical storage-battery post, said terminal comprising a split ring portion of soft non-corrosive metal having its opening tapering to receive the battery post, said portion being made resilient by a stiffening spring therewithin and surrounded by a substantial thickness of said soft metal, said terminal having a shank portion extending from one end of said ring portion, whereby, when said terminal is fitted over a battery post, movement of the terminal thereabout in one direction will tighten the fit and in the other direction will loosen the fit, when said movement is produced by forces applied through said terminal shank portion as a handle.

1,873,931. STORAGE BATTERY CONNECTER AND METHOD OF MAKING THE SAME. MORRIS MATSEN, Oregon, Wis. Filed Oct. 4, 1927. Serial No. 223,873. 4 Claims. (Cl. 173—259.)



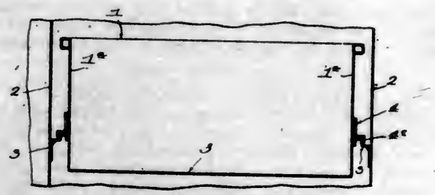
1. A heavy duty battery terminal comprising an open ended member made of spring material having considerable resiliency, said member including a battery terminal engaging portion having a substantially circular opening into which a battery terminal is received, said opening being, when the battery terminal engaging portion is in normal position, of a smaller diameter than the battery terminal which is to be received thereinto so that the spring material alone will cause the battery terminal engaging portion to engage the battery terminal with sufficient pressure to make a good electrical connection, the open ends of said member being in relatively close proximity to each other and having opposed tool engaging surfaces, whereby said portion may, by separating the ends, be flexed to cause the opening therein to become larger than the battery terminal so that the terminal may be inserted into said opening, said member being coated with an acid resisting sheath, said opposed tool-engaging surfaces of the ends normally being convergent, but substantially parallel to each other when the device is in engagement with the battery terminal.

1,873,932. METAL DESK CONSTRUCTION. DAVID E. HUNTER, Muskegon, Mich., assignor to The Shaw-Walker Company, Muskegon, Mich., a Corporation of Michigan. Filed Mar. 2, 1931. Serial No. 519,485. 4 Claims. (Cl. 45—31.)



1. In a metallic desk construction, the combination with a desk body having a rail extending across the top thereof and provided with a vertically opening slot adjacent its central portion, a sheet-metal top adapted to rest upon said rail and provided with a metal clip having a depending looped portion registering with and projecting through said slot, and a wedge shaped key plate adapted to be driven endwise through the portion of said clip below said slot.

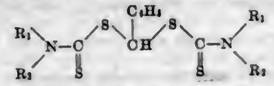
1,873,933. METAL DESK CONSTRUCTION. DAVID E. HUNTER, Muskegon, Mich., assignor to The Shaw-Walker Company, Muskegon, Mich., a Corporation of Michigan. Filed Mar. 2, 1931. Serial No. 519,486. 3 Claims. (Cl. 45—77.)



1. In a drawer construction for desks, the combination with a drawer compartment of pairs of horizontal track members for slidably supporting a drawer, each pair consisting of a fixed track member on a vertical wall of said compartment and a movable track member on the side of said drawer, and having overlapping transverse track flanges spaced apart vertically by the provision of elevated portions at opposite ends of said track flanges, one of each pair of track members having an outwardly disposed depending web enclosing said track surfaces.

1,873,934. VULCANIZATION ACCELERATOR. WILHELM LOMMEL, Wiesdorf-on-the-Rhine, THEODOR GOOST, Leverkusen-on-the-Rhine, and HERMANN FRIEDRICH, Wiesdorf-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Sept. 5, 1930, Serial No. 480,018, and in Germany Nov. 8, 1927. 10 Claims. (Cl. 18—53.)

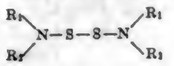
1. Process for the manufacture of vulcanized rubber compounds which consists in effecting the vulcanization in the presence of a compound of the probable formula:



wherein R_1 means the cyclohexyl group or a homologue thereof and R_2 stands for a hydrocarbon radical, which may be linked up with R_1 to form a ring configuration.

1,873,935. ACCELERATOR FOR VULCANIZATION PROCESSES. WILHELM LOMMEL, Wiesdorf-on-the-Rhine, THEODOR GOOST, Leverkusen-on-the-Rhine, and HERMANN FRIEDRICH, Wiesdorf-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Sept. 5, 1930, Serial No. 480,019, and in Germany Nov. 8, 1927. 8 Claims. (Cl. 18—53.)

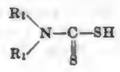
1. Process for the manufacture of vulcanized rubber compounds which consists in effecting the vulcanization in the presence of a compound of the probable formula:



wherein R_1 means a cyclohexyl group and R_2 stands for a hydrocarbon radical, which may be linked up with R_2 to form a ring configuration.

1,873,936. ACCELERATOR FOR VULCANIZATION PURPOSES. WILHELM LOMMEL, Wiesdorf-on-the-Rhine, THEODOR GOOST, Leverkusen-on-the-Rhine, and HERMANN FRIEDRICH, Wiesdorf-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Sept. 5, 1930, Serial No. 480,020, and in Germany Nov. 8, 1927. 12 Claims. (Cl. 18—53.)

1. Process for the manufacture of vulcanized rubber compounds which consists in effecting the vulcanization in the presence of a salt of a compound of the probbable formula:



wherein R_1 stands for the cyclohexyl group or a homologue thereof and R_2 stands for a hydrocarbon radical which may be linked up with R_1 to form a ring configuration.

1,873,937. ACCELERATOR FOR VULCANIZING RUBBER COMPOUNDS. WILHELM LOMMEL, Wiesdorf-on-the-Rhine, THEODOR GOOST, Leverkusen-on-the-Rhine, and HERMANN FRIEDRICH, Wiesdorf-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Sept. 5, 1930, Serial No. 480,021, and in Germany Nov. 8, 1927. 10 Claims. (Cl. 18—53.)

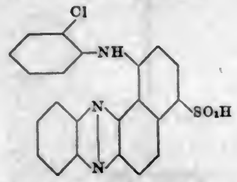
1. Process for the manufacture of vulcanized rubber compounds which consists in effecting the vulcanization in the presence of an accelerator of the probable formula



wherein R_1 stands for the cyclohexyl group or a homologue thereof and R_2 for a hydrocarbon residue which may be linked up with R_2 to form a ring configuration.

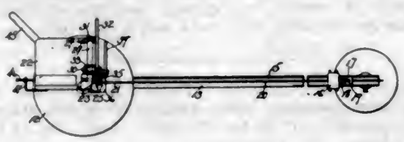
1,873,938. NAPHTHOPHENAZINE DYE. GUSTAV REDDELIEN, Leipzig, and HEINRICH OHLENDORF, Dessau in Anhalt, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 15, 1929, Serial No. 340,324, and in Germany Feb. 7, 1928. 10 Claims. (Cl. 260—29.)

10. As a new product, the azine dye corresponding in the form of the free acid to the formula



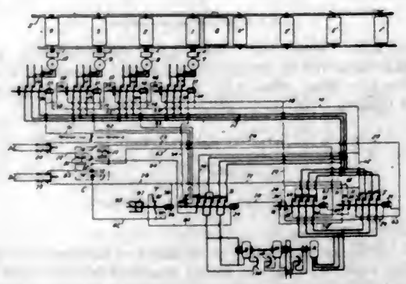
this dye being in the form of the sodium salt an orange powder soluble in water with an orange color and dyeing wool clear orange tints.

1,873,939. TUBE BENDING MACHINE. ARTHUR J. MASON, West Hartford, and WILLIAM L. TANCRED, Hartford, Conn., assignors to The Bush Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Apr. 13, 1931. Serial No. 529,672. 11 Claims. (Cl. 153—40.)



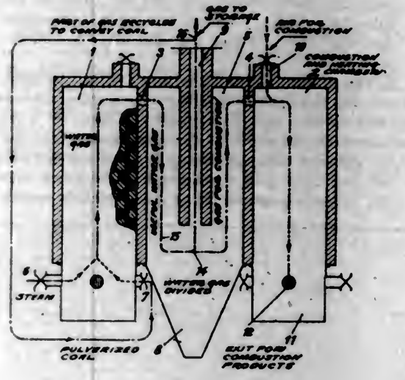
1. A tube bending machine including a base, a bender mounted on said base and including a pivotally mounted forming table, two former members, one of which is fixed with respect to said table and the other of which is movably mounted laterally of the axis of said fixed member to permit insertion of a tube between said members, means for securing said movable member in register with the fixed member, a former to be received in said tube, and means for pivotally moving said forming table to bend said tube around the tip of said former and around said former members.

1,873,940. ROLL CONVEYER SYSTEM. EBERT WILLIAM HENDERSON and HARRY J. FISHER, Cleveland, Ohio, assignors to The Reliance Electric & Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 20, 1931. Serial No. 545,676. 7 Claims. (Cl. 198—127.)



1. In apparatus of the character described, in combination with a plurality of alternating current motors each connected to drive one roll of a multi-roll conveyer, means for at times connecting a source of alternating current successively to each of said roll motors for causing the rotation of said motors and means for at other times connecting a source of direct current to all of said roll motors simultaneously to retard and stop said motors.

1,873,941. PROCESS FOR PRODUCING WATER GAS FROM PULVERIZED COAL AND STEAM. HERMANN HILLEBRAND, Berlin, Germany. Filed Aug. 30, 1928, Serial No. 303,066, and in Germany Aug. 24, 1927. 2 Claims. (Cl. 48—206.)



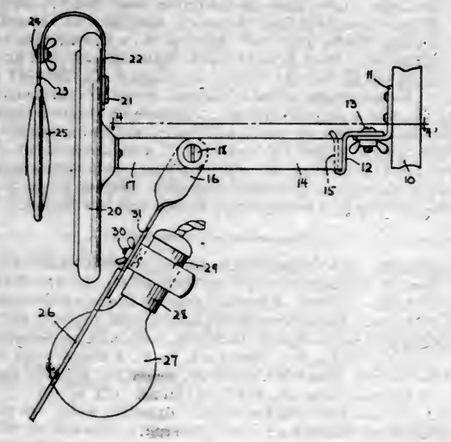
1. A method of continuously producing water gas from pulverized coal or coke and steam, consisting in passing steam and a mixture of part of the produced water gas with pulverulent coal or coke to a hot regenerator, producing water gas in said regenerator which thereby serves also as a generator, passing a part of the produced water gas to a regenerator temporarily not producing gas, passing off the remainder of the produced water gas from the space between said regenerators, passing combustion air to said latter regenerator and heating the latter regenerator by combustion of the gas therein until such time as the latter regenerator is sufficiently heated, and then reversing the direction of flow by introducing the material into the second named regenerator to form water gas and heating the first named regenerator by causing combustion therein of part of the gas produced in the second named regenerator.

1,873,942. ANTIRACHITIC PREPARATIONS AND PROCESS FOR MAKING SAME. ADOLF WINDAUS, Gottingen, Germany. Filed Nov. 28, 1927, Serial No. 236,385, and in Germany Jan. 14, 1927. 8 Claims. (Cl. 167—81.)

1. The process which comprises dissolving previously isolated ergosterol, substantially free of materials which are normally associated with it in nature, in a chemically and photochemically inert organic ergosterol solvent, and exposing said solution to light having an activating action until a sample treated with a solution of 1% digitonin yields only a small precipitate.

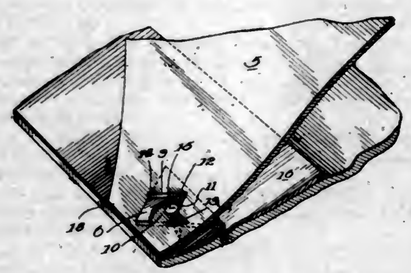
1,873,943. MIRROR AND ACCESSORIES THEREFOR. OLIVER C. RITZ WOLLER, Chicago, Ill. Filed Jan. 21, 1931. Serial No. 510,208. 10 Claims. (Cl. 240—4.1.)

1. In a device of the type described, the combination of a support mounted for swinging in a horizontal plane about a vertical axis, two arms pivotally mounted to swing about a horizontal axis on said support and independently



swingable about said horizontal axis, a mirror mounted on one of said arms, and means on the other arm for supporting an electric light bulb thereon.

1,873,944. BUILDING COVERING. JAMES E. BLACK, East Orange, N. J., assignor to Black Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed Oct. 12, 1931. Serial No. 568,284. 14 Claims. (Cl. 108—7.)



1. A building covering comprising a plurality of units, each consisting of a sheet of flexible weatherproof material provided with an opening which forms a tongue within the boundaries of the units near the butt edge thereof, a metal anchor applied through each tongue from the exposed face thereof and into the building framework, and a key of material like the unit overlying each tongue to cover the anchorage.

1,873,945. MATERIALS COATED WITH LACQUERS, AND A PROCESS OF PRODUCING COATINGS. GEORG KRAENZLEIN, Frankfort-on-the-Main-Hochst, and RICHARD KARL MÜLLER, Bad Soden-on-the-Taunus, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed May 28, 1931, Serial No. 540,798, and in Germany Mar. 29, 1930. 9 Claims. (Cl. 91—68.)

1. The process of producing coatings which comprises applying on a surface at least one layer containing a phenolaldehyde resin capable of being hardened, pulverized asbestos and pulverized silicon.

1,873,946. MANUFACTURE OF SUBSTITUTED SULPHUR DYESTUFFS IN SUBSTANCE OR ON THE FIBER. ERWIN KRAMER, Cologne-Deutz, BERNHARD BOLLWEG, Leverkusen-on-the-Rhine, and LUDWIG ZEH, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 21, 1928, Serial No. 287,342, and in Germany July 14, 1927. 3 Claims. (Cl. 260—17.)

1. As new products the compounds which are obtainable by treating a sulphur dyestuff obtainable by reacting upon binaphthylenedioxide with a sulfurating agent at a temperature between about 170 and 300° C. with a compound of the group consisting of the alkylating, aralkylating and arylating agents, the said compounds yielding on cotton clear red dyeings being fast to boiling and kier boiling.

1,873,947. MANUFACTURE OF SUBSTITUTED SULPHUR DYESTUFFS IN SUBSTANCE OR ON THE FIBER. ERWIN KRAMER, Cologne-Deutz, BERNHARD BOLLWEG, Leverkusen-on-the-Rhine, and LUDWIG ZEH, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 14, 1929, Serial No. 399,707, and in Germany Aug. 31, 1927. 6 Claims. (Cl. 8—6.)

1. As new products the sulphur dyestuffs which are obtainable by treating a sulphur dyestuff, obtainable by sulphuration of β-dinaphthol, with a compound of the group consisting of alkylating and aralkylating agents, in the presence of a small amount of alkali and an agent capable of exerting a reducing action, the said dyestuffs yielding clear red shades.

1,873,948. PROCESS OF DYEING WITH SUBSTITUTED SULPHUR DYESTUFFS. ERWIN KRAMER, Cologne-Deutz, BERNHARD BOLLWEG, Leverkusen-on-the-Rhine, and LUDWIG ZEH, Wiesdorf-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed June 21, 1928, Serial No. 287,342, and in Germany July 14, 1927. Divided and this application filed Apr. 28, 1930. Serial No. 448,162. 5 Claims. (Cl. 8—5.)

1. The process which comprises dyeing vegetable fibers with a sulphur dyestuff obtainable by reacting upon binaphthylene dioxide with a sulphurating agent at a temperature between 170 and 300° C. rinsing and boiling the fibers in an aqueous bath containing a small amount of alkali, a reducing agent and a compound of the group consisting of the alkylating, aralkylating and arylating agents.

Patents Nos. 1,873,949 to 1,875,314

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T. M. Renewals	22		
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Reissues	6	No. 18,582 to No.	18,587, inclusive.
Plant Patents	3	No. 24 to No.	26, inclusive.
Designs	41	No. 87,660 to No.	87,700, inclusive.
Patents	1,366	No. 1,873,949 to No.	1,875,314, inclusive.
Total	1,678		

Notice
Concerning Final Rejections

August 13, 1932.

The attention of the Examiners is again called to the fact that Principal Examiners are expected to personally consider every application which is up for the *third* official action, with a view of finally concluding its prosecution either by allowance or final rejection, whenever this can reasonably and justly be done; see notice of October 11, 1930, Glascock's Manual, page 218. As stated in said notice, the Principal Examiners should impress their assistants with the fact that the *shortest path* to the final disposition of an application is by *finding the best references on the first search* and carefully applying them. For fear this may be misunderstood, let it be stated that the Commissioner looks with disfavor upon final rejection upon the second action where the applicant has changed his claims either by substitution or amendment in such a manner as to show that he is making a bona fide effort to convince the Examiner that the application should be allowed.

Attorneys are urged to cooperate with the Office by doing their utmost to carry out the spirit of the foregoing notice to the end that the Office may bring all of its work up to date.

THOMAS E. ROBERTSON,
Commissioner of Patents.

Adjudicated Patents

(C. C. A. N. Y.) Nelson patent, No. 1,377,023, for lubricating device, claim 2 *Held* not infringed. *Gat Gun Lubricating Corporation* v. *Adams Grease Gun Corporation*, 59 F.(2d) 184.

(C. C. A. N. Y.) Hazeltine patent, No. 1,533,858, for method and means for neutralizing capacity coupling in audions, claims 1, 2, 5, 9, 11, 12, 14, and 16 *Held* valid and infringed. *Hazeltine Corporation* v. *Radio Corporation of America*, 59 F.(2d) 203.

(C. C. A. Ill.) Edelman patent, No. 1,680,370, for radio power-supply unit, claims 1–3 *Held* invalid. *Hartman Furniture & Carpet Co.* v. *Benning*, 59 F.(2d) 129.

(C. C. A. Ill.) Edelman patent, No. 1,682,492, for radio battery eliminator, claim 3 *Held* valid and infringed, claim 4 *Held* not infringed. *Id.*

(D. C. N. Y.) Rensonnet patent, No. 1,784,466, for steering sight adapted to be fitted to the mud guards of motor vehicles, claims 2 and 3 *Held* valid and infringed. *Casco Products Corporation* v. *G. M. Mfg. Co.*, 59 F.(2d) 204.

Interference Notice

U. S. PATENT OFFICE, *Washington, Aug. 11, 1932.*

The assigns or legal representatives of Graves Griffith, deceased, take notice:

Interferences have been declared by this Office between an application for patent filed by Graves Griffith, 235 Moncada Way, Ingleside Terrace, San Francisco, Calif., and applications for patent filed by Henry A. Wayringer, 10 Frank Street, Schenectady, N. Y. Arthur Stephen Ford, 412 West 110th St., New York, N. Y., and Clifton G. Found, 148 Plymouth Avenue, Schenectady, N. Y. The death of the party Griffith has been noted in the record and the notice of interference sent to his legal representatives has been returned by the post office as undeliverable. Notice is hereby given that unless the assigns or legal representatives of said Griffith, deceased, shall enter an appearance therein within 30 days from the first publication of this order the interferences will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business August 13, 1932

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 74,420; Trade-Mark Division, 980. Oldest new case, Feb. 8, 1932; oldest amended, Feb. 8, 1932.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application awaiting office action: New	Oldest new application awaiting office action: Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	May 14	May 14	488
5708	2. HADEN, C. F., Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Apr. 11	Apr. 12	927
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Apr. 26	May 3	752
7063	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	May 21	May 31	438
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Apr. 28	May 4	410
4898 C	6. LEWERS, A. M., Carbon Chemistry	Feb. 16	Feb. 19	2,070
5725	7. JARBOE, C. G., Optics; Photography	Mar. 14	Mar. 14	1,505
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Mar. 19	Mar. 23	1,107
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	May 14	May 14	824
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Mar. 10	Mar. 18	890
5087 B	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Apr. 4	Apr. 4	678
7701	12. HENRY, C. C., Machine Elements	Apr. 28	Apr. 28	637
5094	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Mar. 30	Mar. 30	1,128
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Apr. 26	May 3	788
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Mar. 12	Mar. 12	1,961
5612	16. SPENCER, C. J., Telegraphy; Telephony	Apr. 18	Apr. 18	995
5701	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Feb. 16	Feb. 16	1,430
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Apr. 13	Apr. 14	663
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Feb. 15	Feb. 24	1,765
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Apr. 29	Apr. 30	650
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Apr. 1	Apr. 6	894
5724	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Apr. 19	May 19	651
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Feb. 18	Feb. 17	873
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Apr. 18	Apr. 28	710
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Feb. 26	Feb. 27	1,440
5893	26. HODGES, J. S., Electricity, Generation; Motive Power	Feb. 15	Feb. 13	1,108
5708	27. ANDERSON, L. S., Brushing, Scrubbing, and Cleaning; Washing Apparatus	Apr. 14	Apr. 19	1,003
4628	28. BENSON, A. R., Internal-Combustion Engines	Feb. 23	Mar. 3	1,344
5080	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture	Feb. 17	Feb. 17	932
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Apr. 14	Apr. 8	902
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Feb. 17	Feb. 15	1,544
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Apr. 19	Apr. 21	855
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Feb. 13	Feb. 13	2,390
6625	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Mar. 14	Mar. 14	907
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	June 13	June 14	466
7628	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Feb. 19	Feb. 24	1,654
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Mar. 2	Mar. 3	1,236
7508	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	June 8	June 17	233
4874	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Feb. 16	Feb. 16	1,481
7880	40. OBERLIN, J. J., Receptacles	Mar. 21	Mar. 22	2,191
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	May 14	May 31	614
5882	42. CUTTING, H. O., Electric Signaling	Feb. 23	Feb. 12	1,345
4886 B	43. KLINGE, E. F. (acting), Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Mar. 29	Mar. 29	1,460
4087 B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Feb. 15	Feb. 13	1,871
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Apr. 18	Apr. 18	1,050
4813	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Apr. 15	Apr. 15	657
7600	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Mar. 24	Mar. 24	2,015
5898 C	48. ROEPKE, O. B., Electricity, General Applications	Mar. 9	Mar. 9	832
7721	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Feb. 13	Feb. 19	1,614
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Feb. 17	Feb. 17	2,197
5628	51. BACKUS, C. D., Radiant Energy	Mar. 23	Mar. 23	1,250
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	May 16	May 17	837
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	May 31	May 31	513
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Feb. 19	Feb. 19	1,152
6883	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	June 4	June 4	351
	—Designs	July 22	Aug. 2	152
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Mar. 3	Mar. 1	1,510
3629	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Apr. 9	Apr. 11	672
5905	58. DOWELL, E. F., Abrading; Typewriting	Feb. 15	Feb. 15	1,264
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Feb. 8	Feb. 8	1,750
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Feb. 15	Feb. 15	1,462
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Feb. 18	Feb. 15	1,396
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Feb. 23	Feb. 23	1,826
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Feb. 17	Feb. 17	1,468
4708	64. NASH, P. N., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Apr. 16	Apr. 18	597
5624	65. McDERMOTT, F. P. (acting), Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Feb. 17	Feb. 17	1,636
2090 B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND.—Trade-Marks	July 12	July 29	799
	—Labels and Prints	July 13	July 29	181

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DECISIONS IN PATENT AND TRADE-MARK CASES

Commissioner's Decision

EX PARTE ALBERT C. FISCHER

Decided July 21, 1932

FEES—APPEAL—RENEWAL APPLICATION.

Where, after an appeal to the Board of Appeals, the application was allowed and renewed, *Held* that on appeal in the renewed application a fee is required.

ON appeal.

Mr. Albert F. Robinson for the applicant.

KINNAN, *First Assistant Commissioner:*

Applicant has presented a petition or request for the return of the appeal fee paid in this case after the application was renewed. The Chief Clerk denied a previous request.

The applicant cites the decision in *Ex parte Ball*, 329 O. G. 4, in support of his view that the renewal application is a continuing application and hence under the ruling in *Ex parte Arms*, 84 O. G. 1142, a second fee is not required in case of a second appeal to the Board of Appeals, the appeal fee having been paid on an appeal upon the original application.

While a renewal application is a continuation of the original application for certain purposes, it is not such for all purposes. A new fee is required, and altho the benefit of the filing date of the original case is obtained, the renewed case must bear date from the time of renewal and be subject to reexamination like an original application (rule 176).

A renewal application is not referred to in the statute as such.

Section 4897, Revised Statutes, provides that where the fee is not paid within six months from the date of the notice of allowance the patent shall be withheld and the applicant—

shall have a right to make an application for a patent for such invention or discovery the same as in the case of an original application. But such second application must be made within one year after the allowance of the original application.

The so-called renewal application is, as pointed out in *Ex parte Parks and Miller*, 361 O. G. 891, the "second application" referred to in the statute.

Section 4909, Revised Statutes, is deemed to refer to a second appeal in the same application. No more reason is seen for holding that an appeal fee in this renewed application was not necessary because an appeal had been taken before the original allowance than it would be to hold that, if applicant had filed an application which was a division or a continuation of an earlier application, an appeal fee would not be necessary in the divisional or continuing application merely because an appeal had been taken and a fee paid in the original application. The statute is not believed to be susceptible of any such construction.

The petition for the return of the fee is denied.

U. S. Court of Customs and Patent Appeals

FAGEOL *v.* MIDBOE

No. 2,924. Decided April 6, 1932

1. INTERFERENCE—PRIORITY—WHAT MAY BE ARGUED ON APPEAL.

Where the question of F.'s right to make the claims was raised by M., in the Patent Office but decided in favor of F. and F. appeals from the award of priority to M. *Held* that M. on such an appeal may raise the question of F.'s right to make the claims.

2. SAME—SAME—DILIGENCE.

Evidence reviewed and *Held* to establish that M. who was the first to conceive the invention was not diligent in reducing it to practice from the time that F. entered the field and priority should be awarded to F.

3. SAME—SAME—SAME.

An applicant who is the first to conceive an invention, "should not be permitted to lay his conception aside, take up, and experiment with, many other mechanical problems and devices, and then be permitted to defeat one who enters the field and reduces the invention to practice while he was experimenting with such other devices."

4. SAME—SAME—SAME.

"It is also true that one may not ordinarily delay the actual or constructive reduction to practice of some invention indefinitely, while an attempt is being made to commercialize the same or incorporate the same as a unit in some composite structure."

APPEAL from the Patent Office. Reversed.

LENROOT, *J.*, concurring:

Messrs. Strauch & Hoffman and *Mr. James A. Hoffman* for Fageol.

Messrs. Redding, Greeley, O'Shea & Campbell and *Mr. Worthington Campbell* for Midboe.

GRAHAM, *P. J.:*

An interference was declared on September 21, 1926, by the United States Patent Office between the application of Rollie B. Fageol, the appellant, filed September 25, 1923, and a patent issued to the appellee Gabriel Midboe, No. 1,574,047, on February 23, 1926, which patent was issued upon an application filed February 29, 1924.

The invention here involved is a device for driving two rear axles on a six-wheel motor driven vehicle, by means of a single power differential supported by the chassis, and two propeller shafts extending therefrom to differentials situated on the rear axles and unsprung, the said shaft extending to the rear axle differential being supported by and journaled in the housing of the front axle differential.

Fageol's application originally had but one drawing which showed the axle differentials supported by the chassis, and sprung. After the issuance of Midboe's said patent, Fageol amended his application by adding thereto claim 1 of Midboe's patent. On November 24, 1926, Midboe moved to dissolve the interference on the ground that Fageol could not make the count.

In Fageol's original application this language appeared:

> This drive construction may be used in connection with unsprung drive axle housings or may be used in connection with drive axle housings which are secured to the vehicle frame.

Upon the strength of this language, the Law Examiner gave Fageol leave to file an additional drawing showing the axle differentials to be unsprung, which was done. Thereupon the Law Examiner overruled the motion to dissolve, which decision was affirmed by the Examiner of Interferences and, afterwards, by the Board of Appeals.

Both parties took testimony on the issue of priority. The Examiner of Interferences found that Fageol was entitled to priority. The Board of Appeals came to a contrary conclusion and awarded priority to Midboe.

Fageol having been successful before the tribunals of the Patent Office in his right to make the count, but unsuccessful as to priority, appealed, setting forth in the reasons for appeal filed, the point that the Board of Appeals had erred, on the record, in awarding priority to Midboe.

On the argument here, both parties discuss the decision of the Patent Office tribunals in denying the motion to dissolve. While counsel for Fageol discuss the matter, they call attention to the fact that the right to make the count is not involved in this appeal and is not a point "set forth in the reasons of appeal," as provided in section 4914 R. S. In that connection, our attention is called to our recent decision in *In re Tucker*, 19 C. C. P. A. (Patents) ——, 54 F.(2d) 815, 416, O. G. 286, as seemingly an authority for confining the investigation here to the question of priority alone, excluding the point of the right to make the claim.

[1] There is nothing in the doctrine announced in the case cited which prevents a finding by this court upon the question of appellant's right to make the claim. When an award of priority was made by the Board of Appeals, and an appeal was perfected from the decision making such award, the whole field of priority of conception, on the record, came before this court. *Braren* v. *Horner*, 18 C. C. P. A. (Patents) 1408, 49 F.(2d) 984, 408 O. G. 825. In such a case the question of priority and all questions ancillary thereto, are before the court. *Gowen* v. *Hendry et al.* 17 C. C. P. A. (Patents) 789, 37 F.(2d) 426, 393 O. G. 1,024; *Capek* v. *Levis*, 19 C. C. P. A. (Patents) ——, 55 F.(2d) 476, 417, O. G. 577.

It is well settled law in this jurisdiction that the right to make the count or counts of the interference is a question ancillary to priority. *Headley & Thompson* v. *Bridges*, 18 C. C. P. A. (Patents) 1331, 1336, 48 F.(2d) 938, 410, O. G. 544; *Podlesak* v. *McInnerney*, 26 App. D. C. 399, 120 O. G. 2,127; *Wickers* v. *McKee*, 29 App. D. C. 4, 19, 129 O. G. 869; *Wintroath* v. *Chapman*, 47 App. D. C. 428, 248 O. G. 1,004. If necessary to a decision of priority herein, therefore, the question of the appellant's right to make the counts of the interference will be here determined.

The appellant Fageol, in his preliminary statement, claims to have conceived the invention in issue during the "first part of the year, 1923." He claims no reduction to practice until the filing of his application on September 25, 1923. In his testimony he states that he conceived the invention in December, 1922, and made a drawing in January, 1923, which he exhibited to Arthur I. Marcum.

Considerable testimony is offered by the appellant in support of his contention of a conception in the early part of 1923. In view of our conclusions, however, as to other points involved in the case, it will not be necessary here to further discuss Fageol's testimony in this respect.

The appellee Midboe, in his preliminary statement, claims that he conceived the invention in issue here on or about October 4, 1922; that he made sketches on the 5th of October of the same year, completed drawings on October 25, 1923, and that a machine embodying the invention was made in October, 1924, no earlier reduction to practice being claimed.

Midboe testified that he had been employed by the International Motor Company to "make layouts and supervise layouts and also supervise the detail of these layouts," since 1918; that the International Motor Company was a manufacturer of trucks and busses; that in September, 1922, M. C. Frins, who was chief draftsman of the International Motor Company, assigned appellee to the work of making some studies of a four-wheel-drive construction to be used on a six-wheel bus or truck, which should have the power divided evenly between the driving axles; that appellee directed Charles Froesch, a draftsman in the employ of the company, to prepare a drawing and print of a dual rear axle drive along the lines of the conception which appellee claims he made at the time of the invention in issue. This drawing is in evidence and is claimed to support the count of the issue here. From that time until about the middle of December, 1922, the appellee claims he worked upon the problem of dual rear axle drives. During that time appellee prepared three or four different designs for four-wheel-drives. One of these drives had the differential mounted on the chassis, and sprung, and some did not. During all of this period Froesch worked under his direction on this work.

The appellee's rights under his application here, if any, are assigned to the International Motor Company by reason of the terms of his employment with that company. The appellee testified that he had nothing to do with the making of applications for inventions made by him, this being controlled entirely by the company with which he was employed.

During the time Midboe was doing his work on axles, he was also making a study of spring suspension for these axles. After the middle of December, 1922, Midboe did no further work upon drives for tandem axles, and from that time until the time of filing of his application for patent, and until the time when a bus was actually constructed and operated, had no control over the steps that were to be taken in reducing to practice, and procuring a patent for, said dual rear axle drive. This was in the hands of the proper officials of the International Motor Company. At the time Midboe stopped his work on dual axle drive, from eight to ten different designs had been submitted by him to Alfred F. Masury, who was chief engineer of the International Motor Company, and in charge of the work in which Midboe was engaged.

It appears from the testimony of said Alfred F. Masury that in the fall of 1922 he and other officials of the International Motor Company decided to build a large six-wheel dual axle drive bus. From that time until September or October, 1924, when the bus was completed and first operated, the International Motor Company was engaged, at various times, in planning and perfecting the details for the various elements which were to be combined in this bus. It is said that approximately $100,000 was expended in the completion of this vehicle. It appears from the testimony that repeated conferences were held about the design and type of the engine, type of drive, type of spring suspension, size of chassis and body, and of every specific detail that went into its construction. To illustrate, Masury testified that there were "twenty layouts of different arrangements, from beveled drives to each wheel, to chain drives with differentials placed in all critical points, sprung or unsprung. These gradually were sifted down to about ten arrangements." A plan for some part of the mechanism would be tentatively adopted and then afterwards rejected, as the work progressed, and as the result of further conferences.

The work done by Midboe on dual axle drives was only a small factor in the problem which the International Motor Company was trying to work out, and it was only after many other plans had been examined and closely scrutinized, that a differential and drive system, such as Midboe claims he first conceived, was finally put into the completed vehicle.

Masury was asked why he did not have applications for patents prepared and filed on such designs as were involved in this interference. To this he replied:

> • • • These other designs were not regarded as successful, and of this great mass of work we only proceeded to patent work on the one we regarded as the best. Study and comparisons of assemblies had to be made before arriving at any conclusion to patent any one. The work had not proceeded far enough to take it out on this job at that time.

Again he said, as to a power dividing unit for a dual drive:

> • • • It was very necessary to have studies completed on weights, speeds, torques, load of vehicle, tire deflections, spring accelerations, and driving accelerations, that is speed due to one wheel running up over a rock, or one wheel being retarded by going into a hole, size of shafts, bearings, power, and the range in the motor, which would make this a practical vehicle.

Without going further into the testimony in the record, which is quite lengthy, it is very apparent that the International Motor Company was endeavoring to build a bus, and that there was no well developed plan for the various details thereof; that the company was, through its officials, attempting to develop a complete vehicle with its various features suited to each other, so that when the vehicle was completed its parts would be correlated and efficient.

From immediately prior to the time of Fageol's filing date, September 25, 1923, there was a burden of diligence imposed upon appellee to reduce his invention to practice.

The application of Midboe was filed on February 29, 1924, five months thereafter. During this five months period there is nothing shown in the record as to any activity of Midboe. There is also no activity shown by the International Motor Company, his assignee, as to the invention in issue. The best that can be said is that during that period the International Motor Company was proceeding with the work upon a six-wheel bus which might or might not include the invention in issue.

It is claimed that a stipulation contained in the record is to the effect that instructions were given to Midboe's solicitor on December 4, 1923, to prepare an application for patent. The stipulation does not so recite. It is stated therein that on that date Campbell, attorney for the International Motor Company, instructed a patent office draftsman to prepare drawings for such an application, but nothing is shown as to the source of his authority, or as to how long this matter had remained in his charge, without action on his part.

We are of opinion, as was the Examiner of Interferences, that the appellee has not shown sufficient diligence to entitle him to priority, in view of the facts appearing on this record.

The issue involved here is not one of priority of invention of a bus, but of a dual axle drive. The appellee's assignee was not justified in waiting until it perfected every detail of its new bus before filing this application. As a matter of fact, the record shows that the application made by Midboe was made eight months before there was an actual reduction to practice by the operation of the bus. This application discloses only a dual drive for motor vehicles, and includes no other detail of the proposed construction of said bus.

It also appears from the record that during the time this bus was being built, appellee's assignee filed applications for three patents or other devices, which might ultimately become a part of the bus mechanism, and upon which patents were duly granted.

[2, 3] In view of this state of the record, we cannot conclude that the appellee and his assignee have sustained the burden of diligence imposed upon them. Even conceding that Midboe was the first to conceive, he should not be permitted to lay his conception aside, take up, and experiment with, many other mechanical problems and devices, and then be permitted to defeat one who enters the field and reduces the invention to practice while he was experimenting with such other devices. This doctrine, based on sound reasoning, has been repeatedly announced by the courts. *Clements* v. *Roberts*, 51

App. D. C. 29, 288 O. G. 829, 273 Fed. 757; *Lotterhand* v. *Hanson*, 23 App. D. C. 372, 110 O. G. 861; *Van Auken* v. *Cummings*, 18 C. C. P. A. (Patents) 1250, 49 F.(2d) 490, 411 O. G. 277; *Automatic Electric Co.* v. *Dyson*, 52 App. D. C. 82, 281 Fed. 586, 306 O. G. 4; *Stapleton* v. *Kinney*, 18 App. D. C. 394, 96 O. G. 1432; *Liberman* v. *Williams*, 23 App. D. C. 223, 109 O. G. 1610; *Robinson* v. *Copeland*, 24 App. D. C. 68, 112 O. G. 501.

[4] It is also true that one may not ordinarily delay the actual or constructive reduction to practice of some invention indefinitely, while an attempt is being made to commercialize the same or incorporate the same as a unit in some composite structure. *Automatic Weighing Machine Co.* v. *P. S. Corp.* 166 Fed. 288, 139 O. G. 991.

It having been determined that the Board of Appeals was in error in awarding priority on the record to Midboe, the sole remaining question is as to the right of Fageol to make the count of the interference. Three tribunals of the patent office having concurred in the decision that he did have such right, this court will not disturb such findings unless we find they are manifestly wrong. *Braren* v. *Horner*, 18 C. C. P. A. (Patents) 971, 47 F.(2d) 358, 408 O. G. 825; *Bennett* v. *Fitzgerald*, 18 C. C. P. A. (Patents) 1201, 48 F.(2d) 917, 410 O. G. 1063.

We are unable to so find. Fageol plainly disclosed the invention here in issue in his original specification, and this was a sufficient basis upon which to permit him to illustrate the same by the amended drawing. We find no error in the decision of the Board of Appeals on this point.

The decision of the Board of Appeals is reversed on the issue of priority. Priority will, therefore, be awarded to the senior party, Fageol.

Modified.

LENROOT, *J.*, concurring:

I concur in the conclusion reached by the majority and in all of the opinion except the statement that there is nothing in the doctrine announced in the case of *In re Tucker*, 19 C. C. P. A. (Patents) ——, 54 F.(2d) 815, 416 O. G. 286, which prevents a finding by this court upon the question of appellant's right to make the claim involved herein.

In said case, in which Judge Hatfield and I concurred in the conclusion, the majority opinion states:

> We have concluded that, by the quoted provision of section 4914, Congress meant only to confer upon this court a limited judicial review for the purpose of revising the decision appealed from, and for the correction of such errors only as are made by the patent tribunals appealed from, and *which are definitely pointed out and complained of in the reasons of appeal*. We feel therefore constrained to hold that even if the Board's rejection of the claims involved is regarded as proper, when reasons other than those assigned by it are considered, we would not be justified in affirming such action on such grounds. (Italics mine.)

In the cast at bar, the right of appellant to make the claim is not "complained of in the reasons of appeal," nor could it be because appellant could not complain of a decision in his favor.

I therefore conclude that the majority opinion herein does clearly modify the rule declared in said *In re Tucker*, supra, and such modification meets with my approval.

U. S. Court of Customs and Patent Appeals

IN RE TRACY

No. 2,948. Decided April 11, 1932

PATENTABILITY—DIFFERENTIAL GEARING.

Claims for a differential gearing *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

Messrs. Fay, Oberlin & Fay and *Mr. George E. Tew* for Tracy.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

The appellant filed an application in the United States Patent Office for a patent on improvements in automotive vehicle drives. Ten claims were filed with his application, all of which were rejected by the Examiner and by the Board of Appeals on the following references: Cook et al., 1,417,797, May 30, 1922; Starr, 1,464,887, Aug. 14, 1923; Cook et al., 1,442,795, Jan. 23, 1923; Moorehouse, 1,575,176, Mar. 2, 1926.

It is stated by the Board that claim 3 is illustrative of all the claims, said claim being as follows:

> In differential gearing, the combination of opposite axles, a gear axially secured to the adjacent end of each axle, a differential cage, differential pinions mounted in said differential cage and adapted to drive said axle gears, said axle gears being free to center themselves upon said differential pinions, and means for rotatively driving said differential cage.

The claimed novel feature in appellant's application is the element "axle gears being free to center themselves upon said differential pinions." Appellant shows two forms of differentials. A discussion of one will suffice for the purposes of this opinion. In this form, designated as Figure 1 of his drawings, appellant shows the ordinary differential cage, and the axles and pinion gears for driving the same. These axles and gears for driving the same are so constructed that there is a clearance, permitting a slight movement laterally or radially of said pinion gears, to permit them to adjust themselves centrally of the differential pinion and mesh with each pinion of the differential substantially equally.

No reference is cited which shows this construction. However, the Patent Office tribunals call attention to the reference Moorhouse, which shows substantially the same form of differential cage and gearing, but which shows the pinion gears which drive the axle closely meshed with the differential gears, so that there is no clearance or play between the same, thus permitting no radial movement.

It is said, however, by the Board of Appeals, that if the Moorehouse reference is read in connection with the references Cook, 1,417,797, Cook, 1,442,795, and Starr, 1,464,887, it will be found that all the claimed inventive ideas are fully developed by said references.

The first Cook reference shows a planetary type of gearing in which the power enters at one side of the gearing and is conducted through the gearing to another driven shaft in line therewith. Certain floating gears are interposed, thus giving an amount of play or clearance in this mechanism.

The second Cook reference has application to a reducing gear to be used on tractors and the like, being a mechanism by which the driving force entering a cage is transmuted into force by which the tractor wheels are rotated at a reduced speed. In this reference also clearance is provided between certain of the elements in the mechanism.

The reference Starr is also a gear reduction device, to be disposed within a housing located on the outside of the hub portion of the wheel to be driven. This device also shows clearance between the gear elements, permitting some shifting thereof.

We are loath to disturb the concurring decisions of the Patent Office tribunals on a technical matter such as that now before us. However, we are convinced that the references cited are not sufficient to lead to the conclusion that the appellant should not have the patent he seeks. It will be borne in mind that he, for the first time, has applied this principle to differentials in which an entering power is transferred to two driven axles. His idea of a clearance permitting radial and lateral play in his axle pinions is exactly the opposite of that shown by Moorhouse. While it is true that others have shown, as in the other references, arrangements of gearing wherein lateral or radial clearance is allowed, no one has applied this principle to the ordinary differential such as is in general use, and as is shown by the appellant.

It is true the improvement seems obvious. The fact, however, that no one has used it, or at least developed it, in this art prior to the appellant's use of it, is an argument in appellant's favor. It seems to be inventive, and is a new combination of elements which, to our mind, produce a new and useful result.

This being our conclusion, it follows that the decision of the Board of Appeals should be, and is, reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE WOOLSON

No. 2,995. Decided May 23, 1932

PATENTABILITY—INTERNAL COMBUSTION ENGINE.

Claims for an internal combustion engine *Held* patentable over the prior art.

APPEAL from the Patent Office. Modified.

Messrs. Cameron, Kerkam & Sutton, Mr. W. B. Kerkam, and *Mr. R. H. Hudson* for Woolson.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

An application for a patent upon alleged improvements in the construction of internal combustion engines was filed by Lionel M. Woolson in the United States Patent Office on December 11, 1925. All the claims in the application were rejected by both tribunals in the Patent Office, and, the applicant being deceased since the filing of the application, this appeal is prosecuted by his executrix.

The alleged invention consists of a structure for supporting the crank shaft of internal combustion engines, especially those of the V type, such as are commonly used in the propulsion of aircraft. This construction consists of a web, cast integral with the crank case, supporting bearings in which the crank shaft rotates. The crank shaft is supported from beneath by a bearing cap, which cap is held in position by bolts which pass through the web and the cap, are secured by nuts at both ends, and are not threaded into either web or cap. These supporting bolts are arranged parallel to the axes of the cylinders. The said webs have downwardly disposed faces inclined to the longitudinal median line of the engine, so that the two faces thereof form an inverted V, the sides of which are normal to the axes of the cylinders. The aforesaid bearing caps have upwardly disposed faces arranged also, in the form of an inverted V, to coact with the downwardly disposed faces of the said crank case web.

It is claimed for this construction that it has a tendency to eliminate lateral stress and shearing action on the bolts sustaining the crank shaft bearings. It is also argued that in the prior art, the bolts were usually threaded into the crank case webs, and that the constant stress of the explosion load had a tendency to form minute cracks in the crank case adjacent to the stud holes, finally permanently injuring the web. This, it is claimed, is obviated by applicant's construction.

The rejected claims are eleven in number, and are as follows. [Note.—Only claims 1 and 11 are printed]:

> 1. The combination in an internal combustion engine having a crankcase of a transverse web, a crankshaft bearing in the crankcase, a bearing cap wider at its upper portion than at its lower portion and means adapted to clamp the bearing against said web.
>
> 11. The combination in an internal combustion engine having a crankcase and banks of cylinders thereon, of a supporting web in the crankcase having faces inclined to the median vertical plane of the engine, a member having corresponding faces adapted to contact said web faces, a bearing between said web and member, and inclined bolts passing through said web and said member normal to the faces, to clamp said bearing in position.

These claims were rejected upon the following references: Strong, 330,525, November 17, 1885; Roos, 1,467,251, September 4, 1923; Hall, 1,299,709, April 8, 1919; Ingram, 1,393,785, October 18, 1921.

In addition, the Examiner refers in his decision to the British patent, No. 221,104. However, as this patent is not cited as a reference, and does not appear in the transcript, it will not be here considered.

The Hall reference, which was the sole reliance of the Board of Appeals, shows a construction for two types of engines, the upright or straight, and the V, types. Both types have the crank shaft bearing supported by a crank case web and cap, joined on a horizontal line. In the upright type, the bolts holding the web and cap together pass through both and are held by shoulders and nuts. In the V type,

however, the upper bearing is not cast integral with the crank case. Bolts run from the cylinder heads, and parallel with the cylinders, through the crankcase web, and are threaded into the upper bearing. The upper bearing is attached to the lower bearing by means of separate bolts.

We are unable to discern wherein the Hall reference may be considered an anticipation of appellant's application. The construction is obviously different. The novel features as adapted to a V type motor, namely, the inclined contacting faces of the bearing supports, and the supporting elements passing freely, entirely through both webs and caps, are absent. It is argued by appellant's counsel that in the V type of motor, such an arrangement of the supporting bolt elements will result in the attachment of the nuts at the lower extremities thereof at a point almost directly beneath the crank shaft, and thus, by shortening this bearing, will strengthen it and make it possible to construct it of lighter material.

It is obvious that the construction of appellant has many advantages, which are not shown, nor hinted at, in the Hall reference.

It is argued that the idea of inclined faces for bearings is old in the prior art, as shown by the references Ingram and Strong. Ingram shows in his drawings a crank pin bearing having upper and lower bearings, apparently, with inclined faces. The specification and claims are silent as to this feature, and the showing has every indication of being accidental. Strong's patent is a lubricator in which the shaft revolves in a chambered bearing, which bearing consists of two parts. The lower part of the bearing is V shaped and the upper part an inverted V shape, with opposed faces fitting closely together. As explained by the specification, this inclination of the opposed surfaces is for the purpose of preventing loss of lubricant, which might be lost if the opposed faces were horizontal of the median line of the shaft. There is no suggestion here of the basic idea of appellant as applied to a crank shaft bearing.

The only other reference is Roos, which shows supporting bolts parallel with the cylinders in a vertical type of engine, passing through web and cap, but threaded into the cap and thus subject to the defect suggested by the applicant here.

We are of opinion that the combination of appellant, as applied to a V type engine, is something more than an aggregation of elements, old to the art. It is something more than a matter of form, and seems to be an improvement in the art, producing new and useful results. In this view of the matter, we are inclined to disagree with the Board of Appeals as to claims 7 and 11 of the appellant's application, which claims include all elements of the combination which are claimed to be new to the art.

The other claims all omit some element of this combination, each of which, to our minds, seem to be essential to the inventive character of the combination.

The decision of the Board of Appeals is affirmed as to claims 1, 2, 3, 4, 5, 6, 8, 12, and 13, and reversed as to claims 7 and 11.

Modified.

U. S. Court of Customs and Patent Appeals

IN RE BEAUMONT

No. 2,952. Decided May 23, 1932

PATENTABILITY—METHOD AND APPARATUS FOR DRY QUENCHING HOT MATERIALS.

Claims for a method and for an apparatus for dry quenching hot and incandescent materials *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Frank B. Fox and *Messrs. Fraley and Paul* for Beaumont.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

All of appellant's claims, 8 to 12 inclusive, for a patent relating to a method and apparatus for quenching hot and incandescent materials, were rejected by the Examiner, which rejection was affirmed by the Board of Appeals of the United States Patent Office. From the decision of the Board of Appeals, appeal is taken to this court.

Claims 8 and 10 are illustrative and follow:

8. The method of dry quenching hot and incandescent material which comprises, periodically gravitating charges of the material into an air-tight enclosure, subjecting the enclosed charge to the damping action of inert gases generated therein incident to its isolation from the air, and concurrently extracting and conducting away the heat of the charge for practical re-use.

10. Apparatus for dry quenching hot and incandescent material comprising a receiving hopper, a subjacent damping enclosure with a controlled discharge outlet and including heat extracting means, and means intermediate the hopper and said section [enclosure] to isolate and seal the latter against entry of air, for the purpose specified.

The references relied on are: Holcomb, 370,142, September 20, 1887; Danner, 1,375,679, April 26, 1921; (British) Sulzer et al., 196,217, April 19, 1923; (British) Sulzer et al., 202,315, May 8, 1924.

In describing the invention the Board of Appeals said:

The invention is an apparatus for and method of dry quenching ashes. The apparatus comprises a hopper which receives ashes from a furnace. An auxiliary ash pocket is located below the hopper to receive ashes therefrom. The pocket has air tight side walls and is closed air tight by a sliding gate at the top and a pivoted gate at the bottom. The pivoted gate is clamped into air tight engagement with the pocket walls when closed by means of hand operated eccentric sleeves. The side walls of the hopper are provided with water pipes adapted to extract waste heat from the ashes so it can be employed for useful purposes. In carrying out the method the sliding gate is first opened to admit ashes to the pocket and the gate is then closed. As no air can enter the pocket the ashes are quenched. The carbon dioxide generated in the pocket and the extraction of the heat by the water pipes tend to aid in the quenching.

The claims were all rejected upon Holcomb except as to the references in the claims relating to the extracting and conducting away of the heat, which feature, it is conceded, is anticipated by the other references cited.

We agree with the decision of the Board and of the Examiner that the Holcomb reference completely anticipates the features of the claims other than as above indicated. Holcomb relates to an ash chute for stoves. Appellant's claims, with the above exception, read directly upon the Holcomb structure. Appellant's alleged invention and the patent to Holcomb are in analogous arts and it would not require invention to apply the method of Holcomb in quenching ashes which come from a stove to quenching the ashes which come from a furnace, nor can we see any patentable distinction between the apparatus of appellant and that of Holcomb.

It is argued here by appellant that the Holcomb structure would admit air through certain holes into the chamber which the Patent Office regarded as comparable to the damping chamber in appellant's device. Air, no doubt, to some extent would enter the chambers in both structures, and the small differences in amounts, under the circumstances of this case, would be immaterial.

Appellant emphasizes that his application relates to a very large installation where the problem is different from that of removing ashes from a stove. The difference in size of the structure of the applicant and that of the reference would, under the circumstances at bar, be immaterial. *In re Williams*, 17 C. C. P. A. (Patents) 718, 36 F.(2d) 436, 392 O. G. 737.

We agree with the conclusion of the Board of Appeals and the reasons assigned therefor, and its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE TOLEDO PORCELAIN ENAMEL PRODUCTS CO.

No. 2,967. Decided May 23, 1932

TRADE-MARKS—MARK NOT USED ON GOODS—NOT REGISTRABLE.

The term "Toledot" *Held* not registrable as a trade-mark for porcelain enamel finishing where it appeared that the mark was not used upon such material but only upon articles parts of which had such a finish thereon.

APPEAL from the Patent Office. Affirmed.

Mr. C. O. Marshall for Toledo Porcelain Enamel Products Co.

Mr. T. A. Hostetler for the Commissioner of Patents.

BLAND, *J.*:

The appellant herein made application in the United States Patent Office for the registration of its alleged trade-mark, which application was refused by the Examiner of Trade-Marks. The Commissioner of Patents, upon appeal to him, affirmed the decision of the Examiner, and appeal from the decision of the Commissioner is taken to this court.

The trade-mark of applicant consists in the fanciful or coined word "Toledot" with three dots at each end of the word, the dots being so placed as to form triangles. The mark is used by applicant upon porcelain enamel finishing.

The grounds of rejection by the Commissioner are that applicant does not sell the goods to which the mark is applied, but merely sells the finish.

Concerning the nature of the applicant's business, the Commissioner said:

The applicant does not claim to sell the goods, porcelain finish, separately but states that it applies the finish to various articles, some of which it manufactures, some it purchases outright, and still others it merely enamels with its finish for the owners of the articles. The various articles may be parts of stoves, scales, refrigerators, kitchen utensils, plumbing fixtures, etc. The applicant applies the enamel finish to the surfaces of these articles, usually of iron or steel, dries the enamel in superheated air, fuses it under the control of temperatures, and then cools the products. In some cases subsequent layers of the enamel are applied in this same manner and these are dried and fused at successively lower temperatures. Some of the articles thus enameled are sold by the applicant company while others are returned to the manufacturers or owners for whom the enameling was done to be sold or otherwise disposed of by such owners.

An affidavit accompanies the application, in which affidavit is found the following, certain immaterial portions being deleted:

That some of the applicant's products consist of parts the castings for which are supplied in raw state to the applicant by manufacturers of stoves, scales, refrigerators, kitchen utensils, plumbing fixtures, etc.; that the applicant, by processing such raw castings and by fusing upon them the porcelain enamel which it produces from purchased raw materials, produces finished parts which are then delivered to the customers who originally supplied the raw castings used in this portion of the applicant's product;

That another portion of the applicant's product consists of enameled steel parts for refrigerators, stoves and the like which the applicant furnishes to various manufacturers to be incorporated in their devices; that in the manufacture of such parts, proper shapes are cut and formed by the applicant on its own machines in its own factory from steel which the applicant has purchased in sheets and such shapes are in some cases electrically welded by the applicant, using its own electric welding apparatus; that the parts are then processed by pickling, etc., the applicant's frit is sprayed upon them, dried and fused, and they are delivered to the manufacturers for whom they were made;

That another portion of the applicant's product consists of unitary devices such as porcelain enameled signs, which are made on contract for customers; that such signs are manufactured by cutting suitable shapes from steel sheets purchased by the applicant or taken from its own stock, the cutting being done by the applicant in its own plant; that such shapes are then processed by pickling, properly prepared frit is sprayed upon them, the lettering and/or designs which they are to bear is stenciled or otherwise applied to them; that they are dried in superheated compartments and the coating material is fused upon the steel in electrically heated furnaces, after which they are packed for shipment to the customers under contract with whom they were made;

That another portion of applicant's product consists of specialties such as bird baths, stands and the like, which the applicant manufactures for sale to department stores and other distributors; that these specialties are made of cast iron; that the applicant has no foundry and the castings are made for it by others; that in some instances the castings used in making such specialties have been made for it by founders who have also furnished castings which the applicant employs in making porcelain enameled parts for stoves, scales and the like;

That the applicant's trade-mark has been used upon applicant's products of all the kinds described above in interstate commerce and that in the use of the trade-mark no distinction is made among goods manufactured by the applicant for sale, goods manufactured by the applicant on contract from materials purchased wholly in the open market, and goods manufactured by the applicant on contract when castings or other parts of the materials used are furnished by the customer for whom the goods are manufactured.

It will be noted from the above quoted portion of the affidavit, and from the application filed in the Patent Office, that some of the merchandise to which applicant applies its trade-mark is owned by others. In this instance, if the appellant sells anything, it sells its finish only. Appellant does not sell the raw materials for enamel finishing. In some instances it appears that it manufactures the metal upon which the material is placed and sells the article, which is a complete article of commerce and is not part of any other article made by any other concern. For instance, the origin of the signs, to which reference is made in applicant's affidavit, if completely

made and sold by the applicant, might be properly indicated by the proposed trade-mark. But, the use to which appellant puts its trade-mark covers some articles which it neither owns nor sells. To that extent, it has not made and is not making a trade-mark use of the mark.

The function of a trade-mark is to indicate origin or ownership. The context of the registration statute would so indicate, and the Supreme Court of the United States has consistently so held for more than half a century. In *Canal Co.* v. *Clark*, 13 Wall. 311, 322, is found the following:

> The office of a trade-mark is to point out distinctively the origin, or ownership, of the article to which it is affixed; • • •

The Commissioner relied in part upon the decision of the Commissioner in *Ex parte Toledo Scale Co.*, 388 O. G. 3, 1929 C. D. 57, which is substantially to the same effect as his holding in the case at bar.

The Solicitor for the Patent Office cites the case of *Schneider* v. *Williams*, 44 N. J. Eq. 391, 1888 C. D. 606, and quotes the following therefrom:

> [plaintiffs] applied their mark or label to a vendible commodity of which they are the owners or in which they trade, and that they have put such commodity marked with their mark on the market.

That case holds that cigar makers have no such property right in the cigars made by them as would support the use of a trade-mark by them.

If a stove manufacturer or a scale manufacturer furnishes parts to the applicant, upon which the applicant is to place its porcelain finish, the finished article is not owned nor sold by the applicant. It performs a service and furnishes material used in the performance of such service for which service and material it is paid. The trade-mark of appellant, if placed upon a stove door, furnished and owned by another, would indicate that at one time it owned and sold the stove, or, at least, it might suggest that it owned and sold the door. This practice would mislead the public and we conclude that such a use of a mark is not a proper trade-mark use and that application for the registration of a trade-mark so used should be denied.

If appellant is entitled to the registration of its mark for some of the uses above referred to, it would be difficult to draw a line as to the rights of the numerous artisans who frequently contribute to the manufacture of a given article. For instance, all parts of a table, including various phases of the workmanship thereof, might be labelled with the trade-marks of the various artisans to the utter confusion of the public. The trade-mark of the real owner and seller of the table, under these circumstances, would be of little, if any, value in indicating its origin.

Before this court, it was pointed out that the appellant uses its trade-mark in connection with the word "porcelain". Appellant argues that in this way the trade would understand that it only claimed that it was concerned with the porcelain portion of the article. The registration sought is not for "porcelain enamel" or for "Toledot porcelain", but for the word "Toledot" as described. By this statement we do not mean to indicate that the words "Toledot porcelain", or "porcelain enamel" are or are not registrable. It is not our purpose in this decision to hold that well-known articles which form part of other articles may not be appropriately trade-marked by the owner and seller thereof. For the reasons above assigned, we do hold, on this record, that the appellant is not entitled to the registration of its trade-mark as applied for.

The following citations are deemed pertinent: *United States* v. *Fur Dressers & Dyers' Fur Ass'n. Inc., et al.*, 5 F.(2d) 869; *Schieren Co.* v. *Whittemore Bros. Corp.*, 47 App. D. C. 247, 247 O. G. 966; *In re Gregg & Son, Inc.*, 58 App. D. C. 70, 24 F.(2d) 898, 373 O. G. 759.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,080,630. (See Re. 12,437.)

1,125,476, G. Claude, System of illuminating by luminescent tubes, D. C. N. J., Doc. E 4338, *Claude Neon Lights, Inc., et al.* v. *Capital Luminous Tube Sign Co. et al.* Discontinued June 7, 1932.

1,132,186, E. W. Kelley, Traffic signaling system, filed Mar. 10, 1932, D. C. N. J., Doc. E 4391, *E. W. Kelley et al.* v. *City of Atlantic City et al.*

1,135,108, L. Gschwind, Dish washing apparatus, D. C., W. D. Mich. (Grand Rapids), Doc. E 2538, *L. Gschwind et al.* v. *Standard Sanitary Mfg. Co.* Dismissed July 15, 1932.

1,154,498, W. I. Ferris, Gold pen, filed June 29, 1932, D. C., S. D. N. Y., Doc. E 69/284, *L. E. Waterman & Co.* v. *W. A. Sheaffer Pen Co.*

1,193,093, B. Weinberger, Garment pressing machine, filed July 5, 1932, D. C., E. D. N. Y., Doc. E 6458, *United States Hoffman Machinery Corp.* v. *Modern Pressing Appliances, Inc.*

1,223,165, W. D. Hamerstadt, Paper pulley, filed June 29, 1932, D. C., E. D. Ill. (East St. Louis), Doc. E 4563, *The Rockwood Mfg. Co.* v. *Atlas Leather Co.*

1,225,238, J. P. Gray, Cylinder cock, filed July 22, 1932, D. C., W. D. Mich., S. Div., Doc. E 2559, *J. P. Gray* v. *The Okadee Co.*

1,230,715, R. M. Johnson, Motor vehicle body, D. C., S. D. N. Y., Doc. E 58/173, *R. M. Johnson* v. *Paramount Publix Corp.* Dismissed (notice July 11, 1932).

1,256,509, E. D. Belknap, Addressing machine, filed July 7, 1932, D. C. N. J., Doc. E 4461, *Elliott Addressing Machine Co.* v. *St. Anthony's Guild et al.*

1,262,860, S. B. Smith, Incubator, filed July 9, 1932, D. C., W. D. Wis. (Madison), Doc. E 2109, *S. B. Smith* v. *R. Clark et al.*

1,266,879, E. F. Suter, Electrical heating apparatus for permanently waving hair, D. C., N. D. Ohio, E. Div., Doc. 2587, *Eugene, Ltd.*, v. *Le Mur Co.* Dismissed June 18, 1932.

1,307,284, S. J. Wentworth, Heel seat forming machine; 1,432,524, D. W. Bowie, Heel seat fitting machine, C. C. A., 6th Cir., Doc. 5836, *United Shoe Machinery Corp.* v. *The H. Gordon Co., Inc.* Patents held not infringed June 27, 1932.

1,311,871, T. A. Bryson, Centrifugal drying machine, D. C., N. D. Ga. (Atlanta), Doc. E 574, *Tolhurst Machine Works, Inc.*, v. *Amico Co. et al.* Dismissed by consent (notice July 12, 1932).

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1,384,177, J. P. Bethke, Magnetic pulley, filed July 7, 1932, D. C., E. D. Wis. (Milwaukee), Doc. 3628, *Magnetic Mfg. Co.* v. *Dings Magnetic Separator Co.*

1,432,524. (See 1,307,284.) 1,436,050. (See Re15,569.)

1,436,459, J. Reese, Seat cover, D. C., S. D. N. Y., Doc. E 68/394, *Ever-Klean Seat Pad Co.* v. *Penn-Jay Corp.* Consent decree for plaintiff June 28, 1932.

1,444,811, J. P. Tarbox, Portable filing case, D. C., S. D. N. Y., Doc. E 54/102, *The Travelers Efficiency Case Co. et al* v. *Messrs. Feldman & Lessem.* Consent order of discontinuance July 14, 1932.

1,451,491, S. H. Calkins, Pattern and guide strip, D. C., S. D. N. Y., Doc. E 53/326, *The Trattel Marble Co.* v. *Manhattan Terrazzo Brass Strip Co., Inc.* Dismissed (notice July 22, 1932).

1,454,397, W. W. MacDonald, Hydraulic brake, D. C., N. D. Calif. (San Francisco), Doc. E 3224–K, *W. W. MacDonald* v. *Chrysler Corp et al.* Dismissed without prejudice June 20, 1932.

1,467,930, J. W. Fretwell, Locked razor, filed Apr. 27, 1932, D. C. N. J., Doc. E 4432, *J. W. Fretwell* v. *Gillette Safety Razor Co.* Same, filed June 13, 1932, D. C. N. J., Doc. E 4445, *J. W. Fretwell* v. *O. Roth, Inc.*

1,468,954. (See Re. 15,569.)

1,469,344, W. Ware, Roller, D. C. Mass., Doc. E 3178, *W. Ware et al.* v. *Samuel Winslow Skate Mfg. Co.* Decree for plaintiff for injunction Nov. 30, 1931.

1,472,828, F. A. Eustis, Apparatus for making hydrosulphites, D. C., Mass., Doc. E 3023, *F. A. Eustis* v. *Otis Co.* Dismissed without prejudice for lack of prosecution Jan. 2, 1932.

1,492,472, A. B. Leech, Light transmitting structure, D. C., S. D. N. Y., Doc. E 67/83, *Scene-In-Action Corp.* v. *Celluloid Corp.* Dismissed without prejudice (notice June 27, 1932). Same, filed June 27, 1932, D. C. N. J., Doc. E 4454, *Scene-In-Action Corp.* v. *Celluloid Corp.*

1,505,592, F. W. Epperson, Frozen confection, filed June 29, 1932, D. C., E. D. N. Y., Doc. E 6444, *National Popsicle Corp. et al.* v. *Town Talk Ice Creams, Inc.* Doc. E 6445, *National Popsicle Corp. et al.* v. *Brookfield Ice Cream Corp.* Doc. E 6446, *National Popsicle Corp. et al.* v. *Acme Frozen Products, Inc.* Doc. E 6447, *National Popsicle Corp. et al.* v. *B. & R. Ice Cream Co., Inc.* Doc. E 6448, *National Popsicle Corp. et al.* v. *Bluebird Ice Cream & Charlotte Russe, Inc.*

1,525,942, M. Loughead, Fluid operated brake system, filed July 18, 1932, D. C. Conn. (New Haven), Doc. E 2227, *Hydraulic Brake Co.* v. *The Hall-Thompson Co.*

1,534,266, E. Hotter, Die casting machine, filed July 5, 1932, D. C., E. D. Wis. (Milwaukee), Doc. 3623, *E. Hotter* v. *Milwaukee Die Casting Co.*

1,535,981, 1,535,982, F. S. Carr, Fastener, C. C. A., 6th Cir., Doc. 5947, *Magnus & Easterman Co. et al.* v. *United-Carr Fastener Corp.* Patents held valid and infringed June 27, 1932.

1,535,982. (See 1,535,981.)

1,550,396, R. B. Smith, Method of oiling cotton raw stock, filed July 11, 1932, D. C., W. D. S. C. (Greenville), Doc. E 347, *Borne Scrymser Co.* v. *Gaffney Mfg. Co. et al.*

1,552,326, P. J. Lunati, Lifting device for motor vehicles, D. C., S. D. Iowa (Davenport), Doc. E 4119, *Rotary Lift Co. et al.* v. *Davenport Machine & Foundry Co.* Claims 1, 2, 3, 4, 7, and 8 held valid and infringed June 27, 1932.

1,564,909, T. C. Steimer, Glass feeding mechanism; 1,573,742, 1,589,304, 1,631,107, K. E. Peiler, Feeding molten glass; 1,574,709, L. D. Soubier, Apparatus for delivering charges of molten glass; 1,574,739, E. T. Ferngren, Method and apparatus for delivering molten glass, C. C. A., 6th Cir., Doc. 5752–5753–5997–5998–5999–6000, *Hartford Empire Co.* v. *The Nivison-Weiskopf Co. et al.* and *The Nivison-Weiskopf Co. et al.* v. *Hartford Empire Co.* Patent 1,564,909 and claims 1 to 22, 25 and 26 of 1,631,107 held invalid; claims 2, 5, 8, and 9 of 1,573,742 held valid and infringed, other process claims held invalid, claims 15 to 20, 24, 25, 26, and 29 held valid and other apparatus claims in suit invalid; claims 14, 15, 16, 24, and 27 of 1,574,709 and claims 13 and 17 of 1,574,739 held not infringed; and 1,589,304 held invalid as to claims sued on May 12, 1932.

1,573,742. (See 1,564,909.) 1,574,709. (See 1,564,909.)

1,574,739. (See 1,564,909.) 1,589,304. (See 1,564,909.)

1,594,364, C. Gottwald, Conduit construction for underground pipes, D. C., N. D. Ga. (Atlanta), Doc. E 482, *The Rio Wil Co.* v. *R. D. Ballentyne (Standard Underground Conduit Co.).* Dismissed for want of prosecution (notice July 5, 1932).

1,608,917, A. Widdis, Process for preparing soil, filed July 5, 1932, D. C., N. D. Calif. (San Francisco), Doc. E 3310–L, *A. Widdis* v. *The California Water Service Co.*

1,612,992, B. A. Sterling, Fastening device, D. C., S. D. N. Y., Doc. E 67/31, *B. A. Sterling* v. *New York Hair Co., Inc.* Consent decree for plaintiff (notice June 29, 1932).

1,631,107. (See 1,564,909.)

1,632,208, Watson & Culver, Lense, D. C., S. D. Ohio, W. Div., Doc. E 699, *United Kingdom Optical Co., Ltd., et al.* v. *The W. N. Benedict Co.* Patent held valid and infringed (notice July 18, 1932).

1,641,181, R. C. Mahon, Pneumatic conveyor, C. C. A., 6th Cir., Doc. 5984, *Newcomb, David Co., Inc.*, v. *The R. C. Mahon Co.* Patent held invalid June 27, 1932.

1,653,542, J. N. Borroughs, Process for laundering towels, D. C., N. D. Calif., N. Div., Doc. 804–L, *J. N. Borroughs* v. *National Towel & Laundry Co.* Dismissed without prejudice July 7, 1932.

1,661,785, Bruninga & Evers, Battery hand lamp, D. C. Mass., Doc. E 3126, *H. Hyman* v. *Blake Mfg. Co.* Consent decree dismissing bill and counterclaim without prejudice Jan. 27, 1931.

1,663,905, F. L. Dietz, Split shingle and method making same, filed July 14, 1932, D. C., W. D. Wash., N. Div., Doc. 940, *Cedar-Craft Products, Inc.*, v. *D. H. Clark et al. (Lind & Johnson).*

1,694,205, R. N. Chipman, Weed killer and method of killing weeds, appeal filed April 20, 1932, C. C. A., 3d Cir., Doc. 4905, *Chipman Chemical Engineering Co.* v. *Reade Mfg. Co.*

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1,709,741, R. T. Romine, Industrial truck, D. C., N. D. Ohio, E. Div., Doc. 3437, *R. T. Romine* v. *The Baker-Raulang Co.* Dismissed without prejudice June 16, 1932.

1,712,789, J. F. Donnelly, Process for the conversion of hydrocarbon oils, filed July 1, 1932, D. C. Kans. (Topeka), Doc. 1584–N, *Donnelly Process Corp.* v. *Eldorado Refining Co.*

1,718,025, R. Bishinger, D. C., N. D. Ohio, E. Div., Doc. 4302, *R. Bishinger et al.* v. *E. Baum et al.* Patent held valid, and infringed as to Herold Bros. Co. July 2, 1932.

1,725,516, B. L. Hirshon, Shoe form, D. C., S. D. N. Y., Doc. E 52/99, *New York Vocational Adjustment Bureau, Inc., et al.* v. *H. A. Enrich.* Dismissed (notice July 18, 1932).

1,728,924, M. Buchsbaum, Hosiery, D. C., S. D. N. Y., Doc. E 60/280, *Gotham Silk Hosiery Co., Inc.*, v. *Bonwit Teller & Co., Inc.* Dismissed without prejudice (notice June 30, 1932). Doc. E 61/44, *Gotham Silk Hosiery Co., Inc.*, v. *Weill & Hartman et al.* Decree as above.

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1,752,856, A. H. Schmidtke, Method and apparatus for making baskets, filed July 19, 1932, D. C., W. D. Mich. (Grand Rapids), Doc. 2558, *The Straight-Side Basket, Corp. et al.* v. *Zapf Fruit Package Co.*

1,760,080, J. Nisenson, Device for controlling radio apparatus, filed July 12, 1932, D. C., S. D. N. Y., Doc. E 70/40, *A. Chanin* v. *Davega, Inc.*

1,782,108, J. C. Wahl, Desk stand and holder for fountain pens, D. C., E. D. N. Y., Doc. E 6085, *Pen Desk Set Co.* v. *Frederick Loeser & Co., Inc.* Consent decree for plaintiff July 1, 1932.

1,788,935, W. H. Wood, Vehicle headlight, D. C., N. D. Ohio, E. Div., Doc. E 3758, *W. H. Wood* v. *Peerless Motor Car Corp. et al.* Dismissed July 20, 1932.

1,801,128, A. E. Waller, Finding for a clasp, D. C., S. D. N. Y., Doc. E 62/225, *A. E. Waller* v. *M. Sonshine, Inc.* Decree for plaintiff (notice June 22, 1932).

1,805,851, B. Seitz, Gate for delivery vehicles, D. C., N. J., Doc. E 4329, *B. Seitz* v. *Railway Express Agency.* Discontinued May 31, 1932.

1,828,533, H. W. Hoffmann, Full fashioned stocking and method of producing, filed July 7, 1932, D. C., S. D. N. Y., Doc. E 69/387, *Ajax Hosiery Mills* v. *Mock, Judson, Voehringer Co., Inc.*

1,839,004, P. O. Stewart, High tension ignition amplifier, filed July 14, 1932, D. C., E. D. N. Y., Doc. E 6478, *P. O. Stewart* v. *M. B. Spencer.* Doc. E 6479, *P. O. Stewart* v. *M. B. Cramer.* Doc. E 6480, *P. O. Stewart* v. *T. J. Shortt.*

1,840,757, H. B. Watkins, Package, filed July 8, 1932. D. C., S. D. Ohio, W. Div., Doc. E 331, *The Kilgore Mfg. Co.* v. *Midwest Fireworks Co. et al.*

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1,852,288, Brauer & Wagner, Process and apparatus for forming the heel end of a sole, filed July 14, 1932, D. C., E. D. Mo., E. Div., Doc. 10041, *B. & W. Shoe Machinery Co. et al.* v. *Multiple Boring Machine Co. et al.*

1,852,309, H. E. Kennedy, Egg processing and candling machine, filed July 19, 1932, D. C., N. D. Calif. (San Francisco), Doc. E 3314–S, *H. E. Kennedy* v. *California Egg Preserver Co. et al.*

1,855,992, E. G. Schaeffer, Joint, filed June 27, 1932, D. C., E. D. N. Y., Doc. E 6442, *American Character Doll Co., Inc.*, v. *Ideal Novelty & Toy Co., Inc.*

1,859,226, Vosbikian & Vosbikian, Wood scraper, filed July 23, 1932, D. C. Mass., Doc. E 3698, *L. P. Smith, Inc.* v. *Goodell-Pratt Co. et al.*

1,864,254, M. Meyer, Sandal, filed July 18, 1932, D. C., S. D. N. Y., Doc. E 70/87, *Golo Slipper Co., Inc.*, v. *Dolly Slipper Co., Inc.*

Re. 12,437, J. M. Truffault, Frictional retarding means for spring vehicles; 1,080,630, E. V. Hartford, Antivibration device for vehicles, C. C. A., 6th Cir., Doc. 5952, *H. Pollitzer et al.* v. *C. H. Foster* (*Gabriel Mfg. Co.*). Suit held barred by laches June 27, 1932.

Re. 15,569, 1,436,050, L. Ottinger, Latch; 1,468,954, S. M. Bradley, Latch for vehicle doors, C. C. A., 6th Cir., Doc. 5890, *L. Ottinger et al.* v. *Ferro Stamping & Mfg. Co.* Claims 1, 2, and 4 of Re. 15,569 held invalid, claim 16 of 1,436,050 and claims 1 and 3 of 1,468,954 held not infringed June 29, 1932.

Re. 16,422, O. Johnson, Adhesive, D. C., W. D. Wash., N. Div., Doc. 621, *I. F. Laucks, Inc.*, v. *Kaseno Products Co. et al.* Claims 3 and 7 held valid and infringed July 11, 1932.

Re. 18,346, D. Lakenbach, Hair waving means, filed July 22, 1932, D. C., S. D. N. Y., Doc. E 70/166, *D. Lakenbach.* v. *The Nestle-LeMur Co., Inc.*

Des. 81,205, F. W. Roettges, Lamp, D. C., S. D. N. Y., Doc. E 54/293, *Aljac Art Metal Products Corp.* v. *La Belle Specialty Co., Inc.* Dismissed for lack of prosecution (notice June 23, 1932). Doc. E 54/296, *Aljac Art Metal Products Corp.* v. *Ideal Electro Plating Works, Inc.* Decree as above.

Des. 82,525, J. Schulman, Fender, filed June 30, 1932, D. C., S. D. N. Y., Doc. E 69/312, *J. Schulman* v. *Graham Motors, Inc.*

Des. 83,427, E. L. Byfield, Bottle, D. C. N. J., Doc. E 4304, *College Inn Food Products Co.* v. *E. F. Hurff.* Dismissed July 12, 1932.

Des. 84,664, S. Troy, Woman's shoe, filed June 27, 1932, D. C., S. D. N. Y., Doc. E 69/223, *S. Troy et al.* v. *A. S. Beck Shoe Corp.* Same, filed July 9, 1932, D. C. Mass., Doc. 3683, *S. Troy et al.* v. *Brenahan Shoe Co.*

Des. 84,811, R. DeBoer, Combination ash receiver and electric lighter, D. C., W. D. Mich., S. Div., Doc. E 2461, *Grand Rapids Metalcraft Corp.* v. *Applied Arts Corp.* Injunction April 30, 1932.

Des. 86,095, J. M. Seely, Metal burial vault, filed July 6, 1932, D. C., N. D. Ohio, E. Div., Doc. 4329, *The Champion Co.* v. *The Sozonian Vault Co.*

T. M. 280,417, Syracuse Washing Machine Corp., Washing machines, driers, ironers, etc., filed June 30, 1932, D. C., M. D. Pa., Doc. 927, *Syracuse Washing Machine Corp.* v. *J. F. Woelkers* (*Easy Electric Washer Co.*). *et al.*

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,772,177, C. W. Dake, Latch for headlights and the like, decided August 9, 1932, claim 1.

Pat. 1,830,915, L. S. Sheldrick, Transmission, decided August 9, 1932, claims 6, 7, 8, 9, and 10.

Pat. 1,834,362, E. D. Warde, Automobile brake, decided August 8, 1932, claim 3.

TRADE-MARKS

OFFICIAL GAZETTE, AUGUST 30, 1932

[VOL. 421. No. 5]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 318,194. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.



DEGUSSA

For Bristles, Sponges, Ores, Sand, Crude Minerals, Rubber, Wood, Timber, Hides, Skins, Guts, Leather, Pelts, Coal, Coke, and the Like in All Forms; Combustibles, Shavings, Resins, Pulp, Gravel, Pitch, Asphalt, Tar, Clay and Potter's Earth; Mica; Partly Prepared Material for the Fabrication of Paper; Molding Materials, Packing Material Such as Sawdust, Packing Pads and Material and the Like, Excelsior, Waste.

Claims use since Sept. 24, 1930.

Ser. No. 328,123. HARBOR COAL CO. INC., New York, N. Y. Filed June 20, 1932.



Applicant disclaims the descriptive words "Mine" and "Coal" apart from the mark as shown in the drawing.

For Coal.

Claims use since June 1, 1930.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 328,056. THE L. D. CAULK COMPANY, Milford, Del. Filed June 17, 1932.

LUSTRO-TABS

For Preparation in Tablet or Similar Form to be Softened with Water and Used by Dentists in Removing Stains from and in Cleaning and Polishing Teeth.

Claims use since June 9, 1932.

Ser. No. 328,847. RADBILL OIL COMPANY, Philadelphia, Pa. Filed July 16, 1932.



All wording appearing on the drawing with the exception of the expression "Renuzit", is disclaimed apart from the mark as shown.

For Dry Cleaning Fluid.

Claims use since June 6, 1932.

Ser. No. 328,966. ROBERT E. SMITH, doing business as Nu-Jul, New York, N. Y. Filed July 21, 1932.



For Jewelry Cleaning Solution.
Claims use since July 6, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 321,592. DEGRA LABORATORIES, Burlington, Iowa. Filed Nov. 30, 1931.

DeGra

For Color Restorer for Gray Hair.
Claims use since Sept. 2, 1931.

Ser. No. 325,460. COMPAGNIE RE-NAITRE, INC., New York, N. Y. Filed Mar. 25, 1932.



For Cosmetic and Dermatological Preparations, Particularly Skin Cleansing Cream, Skin Rejuvenating, Preserving, and Protecting Cream; and Neutralizing Liquids for Preserving and Protecting the Skin and for Eye Lotions.
Claims use since Dec. 1, 1931.

Ser. No. 325,796. PARKE, DAVIS & CO., Detroit, Mich. Filed Apr. 4, 1932.

D. C. P.

340

For Preparation for Use in the Treatment of Conditions Involving Deficient Utilization in the Body of Calcium and Phosphorus, as for Example, in the Treatment of Rickets.
Claims use since Mar. 2, 1932.

Ser. No. 325,836. JOHN J. FULTON COMPANY, San Francisco, Calif. Filed Apr. 4, 1932.

UVURSIN

For Diuretic Stimulant to the Kidneys Prepared for Physicians' Prescriptions in Cases Involving Albumenuria and Glycosuria and is in Two Forms, viz: First, Liquid (Infusion) Form, and, Second, in Dry (Concentrated) Capsule Form.
Claims use since July 1, 1927.

Ser. No. 326,615. PEOPLES DRUG STORES, INC., doing business as Munez Wurth Laboratories, Washington, D. C. Filed Apr. 29, 1932.

MUNEZ-WURTH

For Epsom Salt, Sodium Bicarbonate, Bay Rum, Witch Hazel, Bathing and Rubbing Alcohol, Mineral Oil for Medicinal Purposes.
Claims use since Apr. 1, 1932.

Ser. No. 326,650. THE THORNTON & MINOR SANITARIUM COMPANY, doing business as Thornton & Minor Clinic, Kansas City, Mo. Filed Apr. 30, 1932. Under 10-year proviso.

THORNTON & MINOR

For Pile Ointment, Blood Tonic, Laxative Preparations, Stomach Medicine.
Claims use since 1892.

Ser. No. 326,865. MANUEL MARIN & CO., Mayaguez, Porto Rico. Filed May 7, 1932.

NOCHE BUENA

For Medicinal Preparations Used for Treatment of Neuralgia, Rheumatism, Sore Throat, La Grippe, Colds, Coughs, Bronchitis, Inflammatory Conditions, Insect Bites, Sprains, Indigestion and Stomach Disorders, Catarrhal Conditions of the Mucous Membranes, Nervous Disorders, and as a Tonic and Blood Purifier.
Claims use since Jan. 19, 1930.

Ser. No. 326,913. ROYAL LABORATORIES, INC., Newark, N. J. Filed May 9, 1932.

THYMODINE

For Skin Ointment, Salves, Antiseptic Liniment, and Skin Tonic for External Use in the Treatment of the Skin, for Protection Against Sunburn, and for the Softening of the Skin, and for the Relieving Thereof of Irritations; Powders for External Use in the Treatment of Skin Disorders, Relieving and Aiding in Eliminating Irritations and Other Troubles on the Surface of the Skin, and Rouge.
Claims use since 1911.

Ser. No. 326,956. SAMUEL R. UPHAM, doing business as Upham Company, Boston, Mass. Filed May 10, 1932.

velait

For Skin Lotion.
Claims use since Dec. 15, 1931.

Ser. No. 327,044. JOSEPH A. CARTER, San Antonio, Tex. Filed May 13, 1932.



For Chemical Solution to Prevent Scale and Corrosion in Boilers and the Like.
Claims use since Oct. 1, 1931.

Ser. No. 327,265. DAVID WRÓBLEWSKI, doing business as D. Wróblewski, Brooklyn, N. Y. Filed May 19, 1932.

JERINOL

For Preparation for Building Up the System, Enriching the Blood, Increasing the Appetite, Catarrh of the Stomach, Chronic Constipation, Indigestion, Liver and Kidney Diseases, and for Use as a Laxative Tonic; and Hair Tonic for Invigorating the Scalp and Relieving Dandruff.
Claims use since June 1, 1914.

Ser. No. 327,567. WILLING W. RYAN, doing business as The Odor Away Company, Fort Worth, Tex. Filed May 28, 1932.

Odór-away
TRADE MARK

The words "Odor" and "Trade-Mark" are disclaimed apart from the mark as shown.
For Preparation Containing Chemical Properties for the Elimination of Body Odors in Powder and Liquid Form.
Claims use since Feb. 1, 1932.

Ser. No. 327,610. EMMOR G. TUTHILL, Los Angeles, Calif. Filed May 31, 1932.



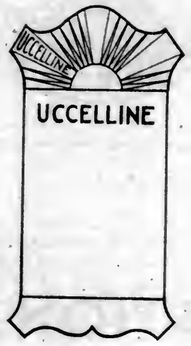
The words "Sequoia Hormones" are disclaimed apart from the mark shown.
For Toilet Creams.
Claims use since May 17, 1932.

Ser. No. 327,672. THOMAS A. BURKE, doing business as Ath-A-Foot Co., St. Louis, Mo. Filed June 3, 1932.



For Foot Medicines and/or Preparations Used in Treating Skin Disorders of the Feet.
Claims use since Apr. 1, 1931.

Ser. No. 327,698. ANGELINE U. LUCA, doing business as Uccelline Product Company, Meriden, Conn. Filed June 3, 1932.



For Preparation for Beautifying the Skin.
Claims use since Mar. 26, 1932.

Ser. No. 327,733. MEDICAL ACCESSORIES, INC., Chicago, Ill. Filed June 4, 1932.

CHOLARGIDE

For Preparation for the Treatment of Gonorrhea.
Claims use since May 24, 1932.

Ser. No. 327,768. THE POLYPHASE CORPORATION, New York, N. Y. Filed June 6, 1932.

PRIMA DONNA

For Beauty Cream and Perfume, Particularly Cold Cream for Cleaning and Toning the Skin, and Perfume of Ultra-Violet Blended Flowers Variety.
Claims use since May 26, 1932.

Ser. No. 327,777. THE UPJOHN COMPANY, Kalamazoo, Mich. Filed June 6, 1932.

Jeculin

For Extract of Liver Preparation for Use as a Medicinal Preparation in the Treatment of the Various Forms of Anæmia.
Claims use since May 4, 1932.

Ser. No. 327,841. PROF. F. A. MATSUYAMA, San Francisco, Calif. Filed June 6, 1932.



For Foot Liniment, Foot Ointment, Foot Powder, Foot Salve.
Claims use since Dec. 8, 1930.

Ser. No. 327,889. ROCKY MOUNTAIN CHEMICAL AND MANUFACTURING CO., Phoenix, Ariz. Filed June 10, 1932.

NATIONAL

For Preparations of Chemical Carbon Removers for Internal Combustion Engines.
Claims use since May 13, 1932.

Ser. No. 327,912. JAMES MENTO, Philadelphia, Pa. Filed June 11, 1932.

Mentos

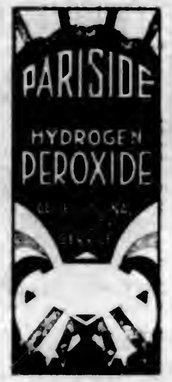
For Hair Restorer and Skin Antiseptic.
Claims use since March, 1916.

Ser. No. 327,915. MIDWEST HARDWARE COMPANY, Chicago, Ill. Filed June 11, 1932.

ARISTONIC

For Liquid Shampoos.
Claims use since May 27, 1932.

Ser. No. 327,983. PARIS BEAUTY PARLOR SUPPLY CO. LTD., Los Angeles, Calif., Salt Lake City, Utah, and San Francisco, Calif. Filed June 14, 1932.



Applicant does also disclaim apart from the mark as shown on the drawing, the words "A Certified Hydrogen Peroxide for Professional Beauty Service."
For Hydrogen Peroxide.
Claims use since Jan. 1, 1932.

Ser. No. 328,085. COONS PURE MINERAL COMPANY, Portland, Oreg. Filed June 18, 1932.

OOO

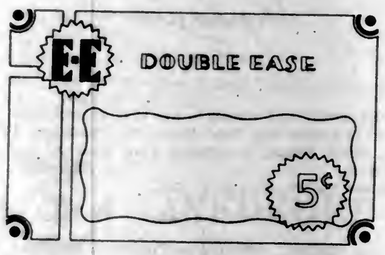
For Dry Mineral Preparation for the Treatment of Burns, Bruises, Sunburn, Minor Irritations of the Skin and Other External Affections and for Application in Solution with Water as a Bath or Fomenting Fluid in the Said Treatments.
Claims use since Apr. 15, 1932.

Ser. No. 328,214. DEMEBSTER LABORATORIES, Detroit, Mich. Filed June 22, 1932.

DE-MÉ

For Salve to be Used in the Treatment of Piles and Hemorrhoids.
Claims use since Feb. 1, 1932.

Ser. No. 328,240. ALONZO M. GERRALD, doing business as E. E. Medicine Co., Greenville, S. C. Filed June 23, 1932.



The word "Ease" and the notation "5¢" are disclaimed apart from the mark as shown on the drawing.
For Headache Powder.
Claims use since Sept. 1, 1931.

Ser. No. 328,256. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y. Filed June 23, 1932.

CURTASAL

For Seasoning Agent for Salt Free Diet.
Claims use since June 6, 1932.

Ser. No. 328,304. JAMES P. GALLIGAN, doing business as Gal'an Laboratories, South Chicago, Ill. Filed June 25, 1932.

Alpine Needle

For Bath Tonic in Liquid Form.
Claims use since Mar. 1, 1932.

Ser. No. 328,308. PYO-NOX COMPANY, Los Angeles, Calif. Filed June 25, 1932.

PYO-NOX

For Medicine for Bleeding Gums.
Claims use since Feb. 2, 1932.

Ser. No. 328,340. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif. Filed June 27, 1932.

CALORITE

For Denaturants.
Claims use since May 23, 1932.

Ser. No. 328,361. MULTIGRAPH COMPANY, Wilmington, Del., and Cleveland, Ohio. Filed June 28, 1932.

BLANKDUST

For Materials for Preserving the Blankets of Printing Machines.
Claims use since Jan. 14, 1932.

Ser. No. 328,362. MULTIGRAPH COMPANY, Wilmington, Del., and Cleveland, Ohio. Filed June 28, 1932.

DRAWINX

For Materials for Drawing and Writing on Planographic Printing Plates.
Claims use since Jan. 14, 1932.

Ser. No. 328,363. MULTIGRAPH COMPANY, Wilmington, Del., and Cleveland, Ohio. Filed June 28, 1932.

PLATINX

For Materials and Solutions for Developing Photographically Applied Images on Printing Plates.
Claims use since Jan. 14, 1932.

Ser. No. 328,364. MULTIGRAH COMPANY, Wilmington, Del., and Cleveland, Ohio. Filed June 28, 1932.

REMMAK

For Materials and Solutions for Renewing Used Printing Plates.
Claims use since May 29, 1932.

Ser. No. 328,545. CALIFORNIA SPRAY-CHEMICAL CORPORATION, Wilmington, Del., and Berkeley, Calif. Filed July 5, 1932.

CALTOX

For Insecticides, Germicides, and Fungicides.
Claims use since Jan. 8, 1932.

Ser. No. 328,546. CALIFORNIA SPRAY-CHEMICAL CORPORATION, Wilmington, Del., and Berkeley, Calif. Filed July 5, 1932.

FLOTOX

For Insecticides, Germicides, and Fungicides.
Claims use since Feb. 16, 1931.

Ser. No. 328,547. CALIFORNIA SPRAY-CHEMICAL CORPORATION, Wilmington, Del., and Berkeley, Calif. Filed July 5, 1932.

NAPSUL

For Insecticides, Germicides, and Fungicides.
Claims use since May 14, 1932.

Ser. No. 328,805. OSSIP A. GERRO, doing business as Fantazn Laboratories, Los Angeles, Calif. Filed July 14, 1932.

Gan-Aiden

For Anaesthetic.
Claims use since June 7, 1931.

Ser. No. 328,862. STEPHEN ADAM, Trenton, N. J. Filed July 18, 1932.

MADAS



The portrait and signature are that of applicant.
For Palliative for Sore Eyes, Ivy Poisoning, Itching Skin, Rash, Burns, Perspiring Feet, Eczema, and Skin Eruptions.
Claims use since June 6, 1932.

Ser. No. 328,967. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y. Filed July 21, 1932.

MYORGAL

For Preparation for Use as a Vasodilator and Cardiotonic.
Claims use since July 8, 1932.

Ser. No. 329,055. MEYER BROTHERS DRUG COMPANY, doing business as Imperial Crown Perfumery Co., St. Louis, Mo. Filed July 25, 1932.

PERMALOX

For Preparation Which Encourages and Holds a Natural Wave to the Hair.
Claims use since June 9, 1932.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 329,108. BALFOUR, GUTHRIE & CO., LIMITED, San Francisco, Calif. Filed July 27, 1932.



COCKATOO

For Firecrackers and Fireworks.
Claims use since Aug. 1, 1930.

CLASS 12

Construction Materials

Ser. No. 328,514. WILLIAM DIXON SMITH, Parkersburg, W. Va. Filed July 2, 1932.



ANKOROKE

For Lumber.
Claims use since April, 1890.

Ser. No. 328,795. M AND M PLYWOOD CORPORATION, Longview, Wash., and Portland, Oreg. Filed July 14, 1932.

IMPERVIA

For Laminated Structural Wood.
Claims use since June 1, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 328,058. FASTIK PRODUCTS, INC., Chicago, Ill. Filed June 17, 1932.

FASTIK

The representation of the goods being disclaimed apart from the mark as shown.
For Machine Wire Staples for Paper and Other General Fastening Purposes.
Claims use since July 11, 1932.

Ser. No. 328,691. JOE HIGH, INC., Washington, D. C. Filed July 11, 1932.

"OUR PLUMBER"

For Sink Traps, Faucets, Closet Seats, Tub Wastes, Shower Bath Fixtures, Lavatory Fixtures, Bath Fixtures, Flush Valves, Plumbing Supply Pipes, Compression Stops, Enameled Drain Boards, Kitchen and Restaurant Sinks, Hose Nozzles, Pipe Nipples, Hose Suction Strainers, Metal Washers, Pipe and Hose Couplings and Extensions, and Plumbing and Steam-Fitting Valves of All Designs and Shapes.
Claims use since March, 1917.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 328,011. THE LINCOLN ELECTRIC COMPANY, Cleveland, Ohio. Filed June 15, 1932.

MANGANWELD

For Metallic Welding Electrodes.
Claims use since May 6, 1932.

Ser. No. 328,012. THE LINCOLN ELECTRIC COMPANY, Cleveland, Ohio. Filed June 15, 1932.

Stainweld

For Metallic Welding Electrodes.
Claims use since July 10, 1930.

Ser. No. 328,325. CYCLOPS STEEL COMPANY, Titusville, Pa. Filed June 27, 1932.

M-T

For Molybdenum and Molybdenum Tungsten Tool and Cutting Steel.
Claims use since Dec. 11, 1931.

CLASS 15

Oils and Greases

Ser. No. 329,000. EDWARD R. TOLFREE, doing business as "X" Laboratories, New York, N. Y. Filed July 22, 1932.



For Lubricating Oils.
Claims use since June 25, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 325,163. DIRIGO LTD. A/S, Oslo, Norway. Filed Mar. 16, 1932.

DIRIGO

For Dry, Paste, and Ready Mixed Paints and Varnishes, and Waxes Used for Polishing Woodwork, Furniture, and Floors.
Claims use since December, 1931.

Ser. No. 327,839. JOSHUA TETLEY & SON, LIMITED, Leeds, England. Filed June 8, 1932.



No claim being made to the exclusive use of the word Enamel, apart from the mark as shown in the drawing.
For Bituminous Enamel for Coating the Interior of Casks.
Claims use since May 31, 1920.

Ser. No. 328,175. KNAPP & COOKE, Euclid, Ohio. Filed June 21, 1932.



For Varnishes, Lacquers, and Paint Enamels in Ready Mixed Form, for Paints in Dry, Paste, and Ready Mixed Forms, and for Technical Coatings Having a Base of Asphaltum, or the Like, in Solid Form (Requiring Heat to Reduce Them to Liquid Form) and Technical Coatings in Liquid or Ready Mixed Form, These Technical Coatings Being Used as Preservative Coatings for Cast Iron, and Steel Underground Pipe, Culverts, Tanks, Water Towers, Bridges, and the Like, All Such Goods Being in the Nature of Paint.
Claims use since Dec. 15, 1931.

Ser. No. 328,882. MIDWAY CHEMICAL COMPANY, Chicago, Ill. Filed July 18, 1932.

AEROWAX

For Polish for Pianos, Furniture, Floors, Woodwork, Linoleums, and Automobiles.
Claims use since Apr. 1, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 317,455. THE CROSLEY RADIO CORPORATION, Cincinnati, Ohio. Filed July 30, 1931.

MINSTREL

For Radio Receiving Sets.
Claims use since May 11, 1931.

Ser. No. 328,218. THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia, Pa. Filed June 22, 1932.

Keepalite

For Electrical Emergency Lighting Apparatus.
Claims use since June 6, 1932.

Ser. No. 328,386. THE GREIST MFG. CO., New Haven, Conn. Filed June 28, 1932.

Lithonyx

For Portable Electric Lamps.
Claims use since June 8, 1932.

Ser. No. 328,833. ATLAS SUPPLY COMPANY, Wilmington, Del., and Newark, N. J. Filed July 16, 1932.

VAN GUARD

For Storage Batteries.
Claims use since June 18, 1932.

Ser. No. 328,893. PREST-O-LITE STORAGE BATTERY CORPORATION, Speedway, Ind. Filed July 19, 1932.

AVIATOR

For Storage Batteries.
Claims use since June 30, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 313,160. STANLEY J. TRACHY, doing business as United Tennis Racket Co., New York, N. Y. Filed Apr. 9, 1931.



For Tennis Rackets.
Claims use since Apr. 1, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 306,545. AUTOFUME STERILIZER COMPANY, Oakland, Calif. Filed Oct. 8, 1930.

AUTOFUME

For Sterilising Bath Apparatus for the Sterilization of Various Appliances for Manual Use.
Claims use since Sept. 20, 1930.

Ser. No. 309,968. ECONOMY EQUIPMENT CO., Chicago, Ill. Filed Jan. 15, 1931.

"LUSTR-KOOLD"

For Air Conditioning and Applying Apparatus for Food Products—Namely, Air Conditioners and Cooling Tunnels.
Claims use since Sept. 1, 1930.

Ser. No. 320,036. THE RUSS MANUFACTURING COMPANY, Cleveland, Ohio. Filed Oct. 13, 1931.

Soda Chef

For Soda Fountains.
Claims use since July 30, 1931.

Ser. No. 322,786. THE A. & J. KITCHEN TOOL CO., Chicago, Ill. Filed Jan. 7, 1932.



Applicant is the owner of trade-mark registrations Nos. 288,792 and 288,794 both issued November 8, 1931. The trade-mark consists in one wide and one narrow black band near the free end of the handles of the goods as indicated by the lining shown in the drawing and is applied to the handles by dipping, painting, or otherwise placing the same thereon. The representation of the handle is disclaimed.

For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Pan Greasers, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers, Egg Beaters, Covers and Bowls (Sets), Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, Mechanical Flour Sifters.
Claims use since Dec. 21, 1931.

Ser. No. 323,977. CONRAD RAZOR BLADE CO. INC., Long Island City, N. Y. Filed Feb. 8, 1932.



No claim is made to the words: "Double Edge Blades, 4 Blades 25¢, Guaranteed by, Long Island City, New York, Made in U. S. A., Reg. U. S. Pat. Off." and the word

"Blade" apart from the trade-mark shown in the drawing. The shaded portions as represented on the drawing are printed in red.

Applicant claims ownership of registered Trade-Mark No. 291,038 issued Jan. 26, 1932.

For Razor Blades.

Claims use since Oct. 23, 1931.

CLASS 24

Laundry Appliances and Machines

Ser. No. 328,986. GENERAL ELECTRIC COMPANY, Schenectady, N. Y. Filed July 22, 1932.

ROTO-COLOR

For Clothes Wringers and Parts Thereof.

Claims use since October, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 327,237. WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, East Pittsburgh, Pa. Filed May 18, 1932. Under 10-year proviso.

Westinghouse

Applicant claims ownership of trade-mark registrations No. 416,062 dated Sept. 13, 1921; No. 152,083 dated Feb. 14, 1922; No. 153,951 dated Mar. 28, 1922.

For Ammeters, Voltmeters, Wattmeters, and Integrating Watt Hour Meters.

Claims use since 1888.

Ser. No. 328,571. STEWART-WARNER CORPORATION, Chicago, Ill. Filed July 1, 1932.



The trade-mark includes the word "Stewart" in the form of a fac-simile of the signature of John K. Stewart, founder and first president of this corporation, and the name "Warner" is displayed in a style consistent with the said fac-simile signature.

For Cameras, Projectors, and Motion Picture Apparatus.

Claims use since Apr. 1, 1932.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 325,957. ONEIDA COMMUNITY LIMITED, Oneida, N. Y. Filed Apr. 9, 1932.

LADY HAMILTON

For Flatware, Hollow-Ware, and Cutlery, Plated Entirely or in Part with Silver.

Claims use since Mar. 14, 1932.

Ser. No. 328,904. FRIEDMAN SILVER CO., INC., Brooklyn, N. Y. Filed July 19, 1932.

F S Co

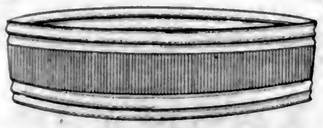
For Sterling Silver Hollow Ware and for Hollow Ware Plated with Precious Metal.

Claims use since June 1, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 326,916. STARLINE, INC., Harvard, Ill. Filed May 9, 1932.



The trade-mark consists of a red band applied around a peripheral portion of the ventilator dome. The representation of the goods is disclaimed. The drawing is lined to indicate the color red.

For Barn Siphon Head Ventilators.

Claims use since Feb. 1, 1932.

Ser. No. 328,543. RICHARD E. BERTHOLD, Richmond Hill, N. Y. Filed July 5, 1932.

EVERGLOW

For Pyrophoric Pocket Lighters.

Claims use since June 10, 1932.

Ser. No. 328,676. YOUNG RADIATOR COMPANY, Racine, Wis. Filed July 9, 1932.



For Unit Heaters Comprising a Radiator Through Which Air is Driven by One or More Fans, Radiators and Radiator Cores for Heat Transfer Devices, Convection Heaters, Gravity Convectors, Radiator Cabinets, and Parts Therefor, All Adapted for Use in Connection with Water or Steam.

Claims use since Apr. 21, 1932.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 326,911. THE PHARIS TIRE AND RUBBER COMPANY, Newark, Ohio. Filed May 9, 1932.



No claim is made to the word "Certificate" apart from the mark as shown.

For Pneumatic Rubber Tires for Vehicles.

Claims use since April, 1929.

CLASS 37

Paper and Stationery

Ser. No. 326,357. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio. Filed Apr. 22, 1932.

Everyday Art

The word "Art" is disclaimed separate and apart from the mark as used.

For Poster and Construction Papers of Different Colors for Educational Purposes.

Claims use since Feb. 10, 1932.

Ser. No. 328,187. SEMINOLE PAPER CORPORATION, Chicago, Ill. Filed June 21, 1932.

SEMINOLE

For Toilet Paper.

Claims use since Sept. 18, 1931.

Ser. No. 328,233. WILSON-JONES COMPANY, Chicago, Ill. Filed June 22, 1932.

SHAW'S

No claim is made herein to the use of the words "High Grade" apart from the mark shown in the drawing.

For Covered and Bound Blank Books, Trial Balance Books, Memorandum Books, Note Books, Duplicating Books, Index Books, Invoice Books, Letter Copying Books, Scrap Books, Time Books, Memorandum Pads, Columnar Ruled Pads, Printed Blank Forms, Filing Envelopes, Filing Folders, Ruled Papers, and Desk Pads.

Claims use since Apr. 4, 1914.

Ser. No. 328,859. HENRY ELLIS HARRIS, Boston, Mass. Filed July 14, 1932.

Universal

For Postage Stamp Hinges.

Claims use since June 1, 1924.

Ser. No. 328,985. FORT HOWARD PAPER COMPANY, Green Bay, Wis. Filed July 22, 1932.

Priscilla

For Toilet Paper, Paper Towels, Paper Napkins, and Colored Crepe Paper.

Claims use since Dec. 6, 1927.

Ser. No. 328,995. OXFORD PAPER COMPANY, New York, N. Y. Filed July 22, 1932.

Carfax

For Paper for Printing.

Claims use since May 1, 1932.

Ser. No. 329,091. A. NEUSTADTER & CO. INC., Brooklyn, N. Y. Filed July 26, 1932.

FAIRPLAY

For Blank Books, Scratch Pads, Paper Tablets, Writing Paper, and Lead Pencils.

Claims use since May 12, 1932.

CLASS 38

Prints and Publications

Ser. No. 328,629. THE ASSOCIATED PRESS, New York, N. Y. Filed July 8, 1932.

BE SCIENTIFIC!

For Newspaper Cartoons Published in a Continuing Series.

Claims use since June 6, 1932.

Ser. No. 328,630. THE ASSOCIATED PRESS, New York, N. Y. Filed July 8, 1932.

THE DILLYS

For Newspaper Cartoons, Published in a Continuing Series.
Claims use since June 6, 1932.

Ser. No. 328,885. BOSTON TRANSCRIPT COMPANY, Boston, Mass. Filed July 19, 1932.

Boston Evening Transcript

For Daily Newspaper.
Claims use since June, 1873.

Ser. No. 328,956. KELLOGG COMPANY, Battle Creek, Mich. Filed July 21, 1932.

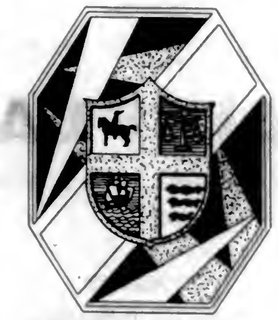
WHEEL of KNOWLEDGE

For Rotary Chart.
Claims use since Apr. 16, 1932.

CLASS 39

Clothing

Ser. No. 287,209. JOHN B. STETSON COMPANY, Philadelphia, Pa. Filed July 16, 1929.



Southwick

No claim is made to the geographical term "Southwick" apart from the mark shown in the drawing and when used geographically.
For Men's and Boys' Felt and Straw Hats and Cloth Caps, Men's Silk Hats, and Felt and Straw Hats for Women and Children.
Claims use since Apr. 1, 1929.

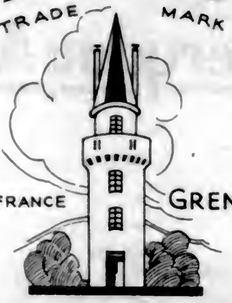
Ser. No. 315,612. TRU-FIT DRESS CO. INC., New York, N. Y. Filed June 9, 1931.

TRU-FIT
Readi-
to-sew
FABRICS

No claim being made to the exclusive use of the words "Readi-To-Sew Fabrics", apart from the mark as shown in the drawing. Applicant is the owner of Trade-Marks 194,482 of Jan. 27, 1925, and 246,789 of Sept. 11, 1928.
For Piece Goods in the Nature of Cut-Out Dresses.
Claims use since May 27, 1931.

Ser. No. 319,244. GOODHAND-GRAFMULLER, INC., New York, N. Y. Filed Sept. 21, 1931.

LA TOUR
TRADE MARK



MADE in FRANCE GRENOBLE

Applicant hereby disclaims the right to the exclusive use of the words "Trade-Mark", "Made in France," and "Grenoble".
For Men's, Women's, and Children's Kid, Lamb, and Leather Gloves.
Claims use since Mar. 18, 1929.

Ser. No. 326,577. CARSON PIRIE SCOTT & CO., Chicago, Ill. Filed Apr. 28, 1932.

STALWART



For Men's, Women's, and Children's Shoes Made of Leather, Rubber, and Fabric and Combinations of the Same.
Claims use since Jan. 5, 1932.

Ser. No. 327,950. A. STEIN & COMPANY, Chicago, Ill. Filed June 13, 1932.

Princess Chic

Applicant is the owner of Trade-Mark No. 61,188, dated Mar. 5, 1907 (renewed).
For Girdles and Hose Supporters.
Claims use since May 20, 1932.

Ser. No. 327,994. TROJAN HOSIERY MILLS, INC., Indianapolis, Ind. Filed June 14, 1932.

WONDER BAND

No exclusive right in the word "Band" and the representation of a band is claimed apart from the mark as shown.
For Hosiery.
Claims use since Sept. 1, 1931.

Ser. No. 328,046. BROWS & JACOBSON, INC., New York, N. Y. Filed June 18, 1932.

Glenhunt

For Women's and Children's Tweed Riding Apparel Consisting of Riding Coats and Riding Breeches, Coats, and Suits.
Claims use since Jan. 9, 1932.

Ser. No. 328,101. LADYCRAFT DRESSES, INC., New York, N. Y. Filed June 18, 1932.

Ladycraft

For Women's and Misses' Dresses, Coats, Skirts, Shirt Waists, Blouses, and Slips.
Claims use since June 25, 1929.

Ser. No. 328,125. HOLLAND SHOE CO., Holland, Mich. Filed June 20, 1932.

TEL-TIL-TIP

The word "Tip" is disclaimed apart from the mark shown on the drawing.
For Boots and Shoes and Tips Therefor.
Claims use since Aug. 15, 1911.

Ser. No. 328,359. MELVILLE SHOE CORPORATION, New York, N. Y. Filed June 28, 1932.

STYLISH
DEBS

For Shoes of Leather, Rubber, or Fabric Construction or a Combination of These Materials.
Claims use since June 10, 1932.

Ser. No. 328,978. HARRY CONSTON, Camden, N. J. Filed July 22, 1932.

Famous Maid
XXXXXXXXXXX

For Ladies' Hosiery.
Claims use since July 1, 1932.

Ser. No. 329,029. STRUTWEAR KNITTING COMPANY, Minneapolis, Minn. Filed July 23, 1932.

Strutwear

For Hosiery and Underwear for Men, Women, and Children.
Claims use since May 1, 1916.

Ser. No. 329,120. PAUL PARNES, INCORPORATED, New York, N. Y. Filed July 27, 1932.

PARNELLE FROCKS
PP

No claim is made to the word "Frocks."
For Women's and Misses' Frocks, Dresses, and Suits.
Claims use since July 1, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 328,884. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed July 19, 1932.

Vel du Pêche

For Pile Fabrics in the Piece.
Claims use since July 8, 1932.

Ser. No. 328,939. FORSTMANN WOOLEN CO., Passaic, N. J. Filed July 21, 1932.

Frizelda

For Woolen Piece Goods.
Claims use since May 1, 1932.

Ser. No. 328,940. FORSTMANN WOOLEN CO., Passaic, N. J. Filed July 21, 1932.

Kharda

For Woolen Piece Goods.
Claims use since May 1, 1932.

Ser. No. 328,942. FORSTMANN WOOLEN CO., Passaic, N. J. Filed July 21, 1932.

Krelda

For Woolen Piece Goods.
Claims use since May 1, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 328,089. DEWITT & HERZ, INC., New York, N. Y. Filed June 18, 1932.

D & H

For Surgical Instruments—Namely, Alcohol Containers with Compartments for Syringes and Needles, Syringes, Needles, and Aspirators.
Claims use since Mar. 18, 1932.

Ser. No. 329,017. C. A. FUTTER, Chicago, Ill. Filed July 23, 1932.

KURLYQU

For Eye-Lash Curlers.
Claims use since June 20, 1931.

Ser. No. 329,042. THE L. D. CAULK COMPANY, Milford, Del. Filed July 25, 1932.

DETECTO

For Dentists' Articulating Paper.
Claims use since July 18, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 321,348. LEGE-ON-AIRE BEVERAGE COMPANY, Minneapolis, Minn. Filed Nov. 20, 1931.

Lege-on-aire

For Non-Alcoholic, Maltless Beverage Sold as a Soft Drink.
Claims use since Oct. 20, 1931.

Ser. No. 328,433. ABRAHAM KOLTER, Brooklyn, N. Y. Filed June 30, 1932.



For Non-Alcoholic, Maltless Beverage Sold as a Soft Drink.
Claims use since May 15, 1932.

Ser. No. 328,525. GARRES-FOURCHE, Bordeaux, France. Filed July 2, 1932.

FOURCHÉ

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks and Ingredients for Making Same.
Claims use since October, 1927.

Ser. No. 328,526. GARRES-FOURCHE, Bordeaux, France. Filed July 2, 1932.

OLD NEGUS RUMOLA

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks and Ingredients for Making Same.
Claims use since April, 1928.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 295,501. ARROW PACKING COMPANY, Exeter, Calif. Filed Feb. 8, 1930.

FULL PAK

The lining appearing on the drawing is intended to indicate green, red, and purple colors. The descriptive term "Full Pak" is disclaimed apart from the other features of the mark.
For Fresh Grapes.
Claims use since Nov. 12, 1929.

Ser. No. 309,648. MATSUSHITA SHOTEN LTD., Osaka-City, Japan. Filed Jan. 6, 1931.



The Japanese characters indicate a kind of pickle. The Japanese characters appearing on the drawing of the mark and descriptive of pickles, are disclaimed as parts of the trade mark, except in connection with other features shown in the drawing. The lining on the drawing is not intended to represent color.
For Pickles.
Claims use since Feb. 28, 1919.

Ser. No. 315,136. FRANK COOPER LIMITED, Oxford, England. Filed May 28, 1931.

OXFORD

For Marmalade.
Claims use since 1874.

Ser. No. 315,528. CRESCA COMPANY, INCORPORATED, New York, N. Y. Filed June 8, 1931.

CRESCA

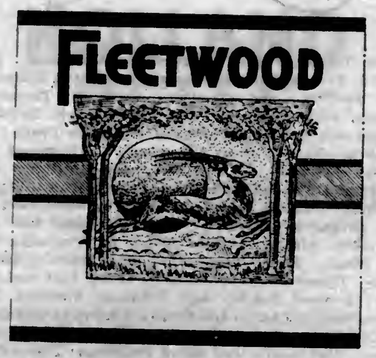
For Snails, Frankfurter Sausages, Foie Gras Au Naturel, Goose Liver, Pate de Fois Gras, All of Which Are Contained in Cans or Glass Receptacles.
Claims use since July 19, 1904.

Ser. No. 317,081. WILBUR A. GARDNER, doing business as J. R. Neff Co. and also The Wilbur Gardner Company, Glendale, Calif. Filed July 18, 1931.

CALIFORNIA KOFIC

For Coffee Substitute Composed of Cereals, Fruits and Vegetables.
Claims use since March, 1931.

Ser. No. 321,384. KING DOBBS & COMPANY, Chattanooga, Tenn. Filed Nov. 21, 1931.



The drawing is lined for green. No claim is made to the outline of the label.
For Canned Fruits, Canned Vegetables, Catsup, Pickles and Olives, and Pork and Beans, Canned Fish, Canned Fruits for Salad.
Claims use since Sept. 15, 1931.

Ser. No. 324,458. MORRIS COHEN, New York, N. Y. Filed Feb. 25, 1932.

SILVER STREAM

For Preserved Foods—Namely, Caviar and Olives in Jars.
Claims use since Jan. 5, 1932.

Ser. No. 324,560. ANTHONY HRYNKIEWICZ, doing business as Polonia Coffee Co., Jersey City, N. J. Filed Feb. 27, 1932.

Po-Lo

For Canned Vegetables.
Claims use since 1929.

Ser. No. 325,556. THE BERDAN COMPANY, Toledo, Ohio. Filed Mar. 28, 1932.

CHEF

For Complete Line of Foodstuffs—Namely, Fresh, Chilled, Frozen, Canned, Smoked, Dried, and Salted Fish and Shellfish, and Products Prepared Therefrom—Namely, Fish Pastes and Chowders; Fresh, Dried, and Canned and Bottled Citrous and Deciduous Fruits; Fruit Products—Namely, Fruit Juices for Food Purposes, Jams, Jellies, Preserves, Marmalades, and Butters; Fresh, Dried, and Canned and Bottled Vegetables; Vegetable Products—Namely, Juices for Food Purposes; Food Products Prepared Therefrom—Namely, Soups and Mixed Vegetables with or without Meats for Preparing Soups and Stews; Mince Meat, Pork and Beans, Chili Con Carne; Prepared Meats—Namely, Dried Beef and Cured Pork; Dressed Poultry and Products Prepared Therefrom—Namely, Canned and Smoked Poultry Including Combinations Thereof with Vegetables; Eggs; Condimentals—Namely, Mayonnaise and Salad Dressings; Flavoring Extracts, Relishes and Sauces for Food, Catsup, Chili Sauce; Food Spreads—Namely, Sandwich Fillings; Food Seasonings—Namely, Extracts of Spices; Vegetables, Fruits, and Combinations Thereof; Sugar, Honey, Table Syrups, Molasses, and Vinegars; Edible Oils and Fats; Spices, Coffee, Tea, Chocolate, Cocoa; Food Drinks and Materials for Preparing Food Drinks—Namely, Malted Milk, Malted Milk Powders with and without Additional Flavorings; Nuts and Food Products Prepared Therefrom—Namely, Nut Butters, Salted, Whole, Ground, and Sliced Nuts; Dairy Products—Namely, Milk, Cream, Cheese, Butter and Food Products Prepared Therefrom—Namely, Condensed and Evaporated Milk and Cream, and Sandwich Fillings with a Cheese Base; Wheat Flour, Buckwheat Flour, Pancake Flour, Pastry Flours, Rye Flour, and Alimentary Paste Products; Bakery Products—Namely, Breads, Rolls, Cookies, Cakes, Crackers, Pies, French Pastries, and Pastry Cones; Confectionery—Namely, Candy and Sweetmeats Embodying Combinations of Candy and Pastries; Yeast and Confections Containing Yeast; Chewing Gum; Bases for Making Icings, Puddings, and Flavorings Therefor—Namely, Jelly Powders, Gelatin Powders, and Combinations Thereof Containing Sugars, Flavoring Extracts, Flours, and Powdered Milk; Stock Conditioning Feed, Bird and Chicken Feed.
Claims use since Apr. 1, 1902.

Ser. No. 325,557. THE BERDAN COMPANY, Toledo, Ohio. Filed Mar. 28, 1932.



For Complete Line of Foodstuffs—Namely, Fresh, Chilled, Frozen, Canned, Smoked, Dried, and Salted Fish and Shellfish, and Products Prepared Therefrom—Namely, Fish Pastes and Chowders; Fresh, Dried, and Canned and Bottled Citrous and Deciduous Fruits; Fruit Products—Namely, Fruit Juices for Food Purposes, Jams, Jellies, Preserves, Marmalades, and Butters; Fresh, Dried, and Canned and Bottled Vegetables; Vegetable Products—Namely, Juices for Food Purposes; Food Products Prepared Therefrom—Namely, Soups and Mixed Vegetables with or without Meats for Preparing Soups and Stews; Mince Meat, Pork and Beans, Chili Con Carne; Prepared Meats—Namely, Dried Beef and Cured Pork; Dressed Poultry and Products Prepared Therefrom—Namely, Canned and Smoked Poultry Including Combinations Thereof with Vegetables; Eggs; Condimentals—Namely, Mayonnaise and Salad Dressings; Flavoring Extracts, Relishes and Sauces for Food, Catsup, Chili Sauce; Food Spreads—Namely, Sandwich Fillings; Food Seasonings—Namely, Extracts of Spices; Vegetables, Fruits, and Combinations Thereof; Sugar, Honey, Table Syrups, Molasses, and Vinegars; Edible Oils and Fats; Spices, Coffee, Tea, Chocolate, Cocoa; Food Drinks and Materials for Preparing Food Drinks—Namely, Malted Milk, Malted Milk Powders with and without Additional Flavorings; Nuts and Food Products Prepared Therefrom—Namely, Nut Butters, Salted, Whole, Ground and Sliced Nuts; Dairy Products—Namely, Milk, Cream, Cheese, Butter and Food Products Prepared Therefrom—Namely, Condensed and Evaporated Milk and Cream, and Sandwich Fillings with a Cheese Base; Wheat Flour, Buckwheat Flour, Pancake Flour, Pastry Flours, Rye Flour, and Alimentary Paste Products; Bakery Products—Namely, Breads, Rolls, Cookies, Cakes, Crackers, Pies, French Pastries, and Pastry Cones; Confectionery—Namely, Candy and Sweetmeats Embodying Combinations of Candy and Pastries; Yeast and Confections Containing Yeast; Chewing Gum; Bases for Making Icings, Puddings, and Flavorings Therefor—Namely, Jelly Powders, Gelatin Powders, and Combinations Thereof Containing Sugars, Flavoring Extracts, Flours, and Powdered Milk; Stock Conditioning Feed, Bird and Chicken Feed.
Claims use since Apr. 1, 1902.

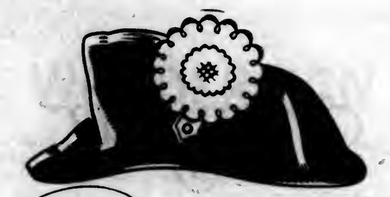
Ser. No. 325,558. THE BERDAN COMPANY, Toledo, Ohio. Filed Mar. 28, 1932.

CHEF



For Complete Line of Foodstuffs—Namely, Fresh, Chilled, Frozen, Canned, Smoked, Dried, and Salted Fish and Shellfish, and Products Prepared Therefrom—Namely, Fish Pastes and Chowders; Fresh, Dried, and Canned and Bottled Citrous and Deciduous Fruits; Fruit Products—Namely, Fruit Juices for Food Purposes, Jams, Jellies, Preserves, Marmalades, and Butters; Fresh, Dried, and Canned and Bottled Vegetables; Vegetable Products—Namely, Juices for Food Purposes; Food Products Prepared Therefrom—Namely, Soups and Mixed Vegetables with or without Meats for Preparing Soups and Stews; Mince Meat, Pork and Beans, Chili Con Carne; Prepared Meats—Namely, Dried Beef and Cured Pork; Dressed Poultry, and Products Prepared Therefrom—Namely, Canned and Smoked Poultry Including Combinations Thereof with Vegetables; Eggs; Condimentals—Namely, Mayonnaise and Salad Dressings; Flavoring Extracts, Relishes and Sauces for Food, Catsup, Chili Sauce; Food Spreads—Namely, Sandwich Fillings; Food Seasonings—Namely, Extracts of Spices; Vegetables, Fruits, and Combinations Thereof; Sugar, Honey, Table Syrups, Molasses, and Vinegars; Edible Oils and Fats; Spices, Coffee, Tea, Chocolate, Cocoa; Food Drinks and Materials for Preparing Food Drinks—Namely, Malted Milk, Malted Milk Powders with and without Additional Flavorings; Nuts, and Food Products Prepared Therefrom—Namely, Nut Butters, Salted, Whole, Ground and Sliced Nuts; Dairy Products—Namely, Milk, Cream, Cheese, Butter and Food Products Prepared Therefrom—Namely, Condensed and Evaporated Milk and Cream, and Sandwich Fillings with a Cheese Base; Wheat Flour, Buckwheat Flour, Pancake Flour, Pastry Flours, Rye Flour, and Alimentary Paste Products; Bakery Products—Namely, Breads, Rolls, Cookies, Cakes, Crackers, Pies, French Pastries, and Pastry Cones; Confectionery—Namely, Candy and Sweetmeats Embodying Combinations of Candy and Pastries; Yeast and Confections Containing Yeast; Chewing Gum; Bases for Making Icings, Puddings, and Flavorings Therefor—Namely, Jelly Powders, Gelatin Powders, and Combinations Thereof Containing Sugars, Flavoring Extracts, Flours, and Powdered Milk; Stock Conditioning Feed, Bird and Chicken Feed.
Claims use since Apr. 1, 1902.

Ser. No. 326,811. BURT VAUGHN FLANNERY, Darlington, Md. Filed May 6, 1932.



Cockade Farms

CORN

Applicant disclaims the word "Corn".
For Fresh Corn.
Claims use since Nov. 24, 1931.

Ser. No. 326,970. AMERICAN STORES COMPANY, Philadelphia, Pa. Filed May 11, 1932.

DERRYDALE

For Butter.
Claims use since Apr. 1, 1932.

Ser. No. 326,971. AMERICAN STORES COMPANY, Philadelphia, Pa. Filed May 11, 1932.

HOLLAND BELLE

For Imitation Vanilla for Food Flavoring Purposes, and Dried Vegetables—Namely, Red Kidney Beans, Green Peas, Green Split Peas, Yellow Split Peas, Blackeye Peas, and Lentils.
Claims use since Apr. 1, 1932.

Ser. No. 327,390. DILLING & COMPANY, Indianapolis, Ind. Filed May 24, 1932.

SPARK PLUGS

For Candles of All Kinds.
Claims use since 1911.

Ser. No. 327,899. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, doing business as The Quaker Maid Co. Inc., New York, N. Y. Filed June 11, 1932.

Mayfair

For Tea.
Claims use since May 2, 1930.

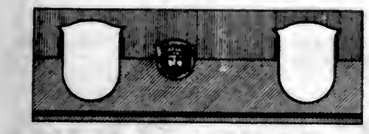
Ser. No. 327,907. FOOD DISPLAY MACHINE CORPORATION, Chicago, Ill. Filed June 11, 1932.

VITA-SEALD



In the drawing the word "Vita-Seald" is vertically lined to indicate the color red. No claim is made to the word "Seald" apart from the mark as shown in the drawing.
For Potato Chips.
Claims use since May 22, 1932.

Ser. No. 327,971. BIRK BROS. MALT PRODUCTS, INC., Chicago, Ill. Filed June 14, 1932.



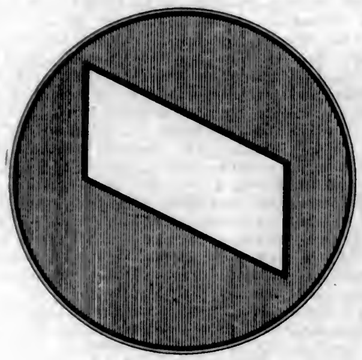
The drawing is lined for red and brown.
For Malt Syrup.
Claims use since Mar. 26, 1932.

Ser. No. 328,024. BLISH MILLING COMPANY, Seymour, Ind. Filed June 16, 1932.

HIGH SCORE

For Wheat Flour.
Claims use since May 1, 1932.

Ser. No. 328,314. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed June 25, 1932.



The trade mark claimed consists of the characteristic design shown in the drawing irrespective of the particular color in which this design is printed, and although blue is the color in which the characteristic trade-mark is ordinarily printed the lines shown in the drawing are not intended to be restrictively indicative of any particular color. No claim is made to a circular form of label except in connection with the trade-mark embodying characteristic features of design as shown in the drawing.
For Mixture of Egg Material and Other Substances Suitable for Use as an Ingredient in Making Cakes and Other Food Products.
Claims use since Apr. 20, 1932.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 328,315. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed June 25, 1932.



The trade-mark includes the characteristic design shown in the drawing irrespective of the particular color in which this design is printed, and although blue is the color in which the characteristic trade-mark is ordinarily printed the lines shown in the drawing are not intended to be restrictively indicative of any particular color. No claim is made to a circular form of label except in connection with other features of the trade-mark as shown in the drawing.
For Mixture of Egg Material and Other Substances Suitable for Use as an Ingredient in Making Cakes and Other Food Products.
Claims use since Apr. 20, 1932.

Ser. No. 328,443. MANUFACTURE DIJONNAISE DES BISCUITS PERNOT, SOCIETE ANONYME, Dijon, France. Filed June 30, 1932.

BISCUITS PERNOT

For Cakes, Biscuits, Crackers, Candies, and Chocolates.
Claims use since 1869.

Ser. No. 328,472. ARCADIA FOOD CO., New York, N. Y. Filed July 1, 1932.

FAIRLAWN

For Gelatine Dessert.
Claims use since May 16, 1932.

Ser. No. 328,476. SAMUEL BUCHER, Milwaukee, Wis. Filed July 1, 1932.

Colnana

For Frozen Confection.
Claims use since June 29, 1932.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 318,161. U. S. CAST MAGNET STEEL CORPORATION, Lawrence, Mass. Filed Apr. 9, 1931.

WONDERSIGN

No claim is made to the word "Sign" apart from the mark shown.
For Non-Electrical Advertising Display Signs.
Claims use since Sept. 22, 1930.

Ser. No. 318,215. DEUTSCHE GOLD- & SILBER-SCHEIDEANSTALT, Frankfort-on-the-Main, Germany. Filed Aug. 20, 1931.



DEGUSSA

For Rubber Bath Mats, Rubber Blankets, Rubber Binding for Mats, Etc., Rubber Bottle Stoppers, Rubber Protective Coverings in Sheet Form, Rubber Desk Leg Protectors, Rubber Floor Mats, Rubber Matting, Rubber Sheeting; Rubber Stair Nosings, Pads and Treads; Rubber Supporting Foot Pads for Cabinets and Other Articles, Dummies to be Used in Clothing and Hair Dressing Shops, Mechanical Signs, and Tents and Tarpaulins.
Claims use since Sept. 24, 1930.

Ser. No. 328,415. AMERICAN CAN COMPANY, New York, N. Y. Filed June 30, 1932.

CANCO

For Advertising Signs Made of Sheet Metal or Fibre, or Made Partly of Sheet Metal and Partly of Fibre, for Advertising a Great Variety of Products for Both Indoors and Outdoors.
Claims use since Aug. 1, 1930.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

AUGUST 30, 1932

296,944. COATING AND PROTECTING COMPOUND IN THE NATURE OF A PAINT. EDISON STORAGE BATTERY COMPANY, West Orange, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey.
Filed December 4, 1931. Serial No. 321,753. PUBLISHED JUNE 14, 1932. Class 16.

296,945. SYNTHETIC RESINS. RESINOX CORPORATION, New York, N. Y.
Filed December 7, 1931. Serial No. 321,894. PUBLISHED FEBRUARY 9, 1932. Class 6.

296,946. SKIN TONIC, CLEANSING POWDER, BEAUTY PACK, AND A PREPARATION FOR REVIVING THE SKIN. MAEBELLE STOWERS REYNOLDS, doing business as Cille Reynolle, New Orleans, La.
Filed December 8, 1931. Serial No. 321,918. PUBLISHED MAY 24, 1932. Class 6.

296,947. TOILET PREPARATIONS FOR PREVENTING EXCESSIVE PERSPIRATION AND TOILET DEODORANTS. THE NONSPI COMPANY, New York, N. Y.
Filed November 21, 1931. Serial No. 321,389. PUBLISHED JUNE 7, 1932. Class 6.

296,948. RESINOUS AND ANIMAL SIZES, EMULSIONS OF RESINOUS OLEAGINOUS, FATTY, AND WAXY PAPER AND TEXTILE SIZING AGENTS, CASEIN, AND ALBUMEN USED IN PAPERMAKING. BRITISH BEWOID COMPANY LIMITED, London, England.
Filed November 3, 1931. Serial No. 320,753. PUBLISHED MAY 31, 1932. Class 6.

296,949. STEEL PIPE. THE BIGGS BOILER WORKS COMPANY, Akron, Ohio.
Filed November 2, 1931. Serial No. 320,714. PUBLISHED JUNE 14, 1932. Class 13.

296,950. GLASS SHOWER STALL DOORS, SHOWER BATH SHIELDS, AND BATH ENCLOSURES. LOUIS H. LEHMAN, doing business as Lehman Sprayshield Company, Philadelphia, Pa.
Filed October 27, 1931. Serial No. 320,505. PUBLISHED JUNE 14, 1932. Class 13.

296,951. REFINED SUGAR AND CENTRIFUGAL SUGAR IN ANY CONDITION, VINEGAR, TABLE SYRUPS, AND MOLASSES. JOSÉ ARECHABALA S. A., Cardenas, Cuba.
Filed October 27, 1931. Serial No. 320,567. PUBLISHED JUNE 14, 1932. Class 46.

296,952. BARE, INSULATED WIRE, CORD, AND CABLE FOR GENERAL ELECTRICAL USE, AND RADIO ANTENNA WIRE. CONSOLIDATED WIRE & ASSOCIATED CORPORATIONS, Chicago, Ill.
Filed September 28, 1931. Serial No. 319,511. PUBLISHED JUNE 14, 1932. Class 21.

296,953. LUBRICATING OILS. GASETERIA INCORPORATED, Indianapolis, Ind.
Filed August 6, 1931. Serial No. 317,713. PUBLISHED MAY 17, 1932. Class 15.

296,954. OINTMENT. JOHN C. MCNAMARA, New Orleans, La.
Filed August 3, 1931. Serial No. 317,611. PUBLISHED MAY 24, 1932. Class 6.

296,955. FABRICS MADE OF SILK AND CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed July 21, 1931. Serial No. 317,158. PUBLISHED JUNE 14, 1932. Class 42.

296,956. FABRICS MADE OF SILK AND CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed July 21, 1931. Serial No. 317,157. PUBLISHED JUNE 14, 1932. Class 42.

296,957. COTTON PIECE GOODS. AMERICAN BLEACHED GOODS COMPANY, INC., New York, N. Y.
Filed May 9, 1932. Serial No. 326,883. PUBLISHED JUNE 14, 1932. Class 42.

296,958. PIECE GOODS OF SILK, RAYON, COTTON, AND WOOL AND MIXTURES OF THESE MATERIALS. F. DUCHARNE SILK CO. INC., New York, N. Y.
Filed May 6, 1932. Serial No. 326,808. PUBLISHED JUNE 14, 1932. Class 42.

296,959. HEATING TUBES AND TUBE COUPLINGS. BROWN, BOVERI & CIE., Baden, Switzerland.
Filed May 6, 1932. Serial No. 326,805. PUBLISHED JUNE 14, 1932. Class 13.

296,960. WHEAT FLOUR. INTERNATIONAL MILLING COMPANY, Minneapolis, Minn.
Filed May 5, 1932. Serial No. 326,785. PUBLISHED JUNE 14, 1932. Class 46.

296,961. SELF-RISING FLOUR. WILLIAM ISAAC GROVE, doing business as Fort Defiance Mills, Fort Defiance, Va.
Filed May 5, 1932. Serial No. 326,783. PUBLISHED JUNE 14, 1932. Class 46.

296,962. PLATE AND WINDOW GLASS. THE TOLEDO PLATE & WINDOW GLASS COMPANY, Toledo, Ohio.
Filed May 4, 1932. Serial No. 326,765. PUBLISHED JUNE 14, 1932. Class 33.

296,963. VELVETS IN THE PIECE. ROSSIE VELVET COMPANY, Mystic, Conn.
Filed May 4, 1932. Serial No. 326,760. PUBLISHED JUNE 14, 1932. Class 42.

296,964. CORRECTIVE FORMULA FOR STOMACH TROUBLES RESULTING FROM HYPER-ACIDITY. JANET HAMILTON, doing business as Hamilton Laboratories, Glendale, Calif.
Filed March 19, 1932. Serial No. 325,290. PUBLISHED MAY 31, 1932. Class 6.

296,965. COLD CREAM, CLEANSING CREAM, HAND LOTION, AND A SKIN TONIC. PARK & TILFORD, New York, N. Y.
Filed March 23, 1932. Serial No. 325,406. PUBLISHED MAY 31, 1932. Class 6.

296,966. INSECTICIDE. JOHN POWELL & CO., INC., New York, N. Y.
Filed March 24, 1932. Serial No. 325,440. PUBLISHED MAY 31, 1932. Class 6.

296,967. PRINTED PAPER CAUTION SIGNALS FOR INDEX SYSTEMS. EDWARD GREENE, doing business as E. Greene & Company, Newark, N. J.
Filed March 28, 1932. Serial No. 325,578. PUBLISHED JUNE 14, 1932. Class 37.

296,968. LIQUID MATERIAL FOR THE DESTRUCTION OF WEEDS. MIDWAY CHEMICAL COMPANY, Chicago, Ill.
Filed March 28, 1932. Serial No. 325,620. PUBLISHED MAY 31, 1932. Class 6.

296,969. LINIMENT FOR THE TREATMENT OF SPRAINS, RHEUMATISM, NEURALGIA, CRAMPS, TOOTHACHE, LAME BACK, STIFF JOINTS, AND SIMILAR AILMENTS. RICHARD T. DUNN, doing business as J. S. Merrell Drug Company, St. Louis, Mo.
Filed February 11, 1932. Serial No. 324,065. PUBLISHED MAY 24, 1932. Class 6.

296,970. MANUALLY OPERABLE ENCLOSED SWITCHES OF THE FUSE TYPE. CUTLER-HAMMER, INC., Milwaukee, Wis.
Filed February 12, 1932. Serial No. 324,093. PUBLISHED JUNE 14, 1932. Class 21.

296,971. COMPOUND OF GLANDULAR SUBSTANCES IN COMBINATION WITH SKIN EMOLLIENTS USED AS A FACE CREAM FOR THE PURPOSES OF BEAUTIFYING AND STIMULATING THE SKIN. LOUIS PHILIPPE, INC., doing business as Hormes Laboratories, Chicago, Ill.
Filed February 27, 1932. Serial No. 324,570. PUBLISHED MAY 3, 1932. Class 6.

296,972. ELECTRICALLY OPERATED SUCTION CLEANERS. THE P. A. GEIER COMPANY, Cleveland, Ohio.
Filed March 1, 1932. Serial No. 324,664. PUBLISHED JUNE 14, 1932. Class 21.

296,973. MONOMETHYL PARAMIDOPHENOL (PHOTOGRAPHIC CHEMICAL). PHILIPP BROTHERS, INC., New York, N. Y.
Filed February 27, 1932. Serial No. 324,730. PUBLISHED MAY 24, 1932. Class 6.

296,974. WAXED SULPHITE WRAPPING PAPER, BOTH PLAIN AND PRINTED. RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y.
Filed March 15, 1932. Serial No. 325,150. PUBLISHED APRIL 26, 1932. Class 37.

296,975. MOTOR FUEL OILS AND LUBRICATING OILS. PHILLIPS PETROLEUM COMPANY, Bartlesville, Okla.
Filed February 1, 1932. Serial No. 323,697. PUBLISHED JUNE 14, 1932. Class 15.

296,976. PIG FEED AND HOG FEED. DIXIE MILLS COMPANY, East St. Louis, Ill.
Filed February 5, 1932. Serial No. 323,860. PUBLISHED JUNE 14, 1932. Class 46.

296,977. DAIRY FEEDS—NAMELY, COW FEED, SUPPLEMENT FEED, CATTLE AND STEER FEED, AND CALF FEED. DIXIE MILLS COMPANY, East St. Louis, Ill.
Filed February 5, 1932. Serial No. 323,861. PUBLISHED JUNE 14, 1932. Class 46.

296,978. SOLVENT COMPOUND FOR USE IN STORAGE BATTERY COMPOUND. NEPTUNE BUCKNER, doing business as New Life Battery Company, Asheville, N. C.
Filed December 12, 1931. Serial No. 322,202. PUBLISHED MAY 31, 1932. Class 6.

296,979. PAINTS IN PASTE, SEMI-LIQUID, OR READY-MIXED FORM; VARNISHES, LACQUERS, PAINT ENAMELS, VARNISH ENAMELS, LACQUER ENAMELS, AND CLEAR VARNISHES. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio.
Filed December 21, 1931. Serial No. 322,335. PUBLISHED FEBRUARY 2, 1932. Class 16.

296,980. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed December 24, 1931. Serial No. 322,418. PUBLISHED JUNE 14, 1932. Class 42.

296,981. CAPACITORS AND DIELECTRIC MATERIAL. GENERAL ELECTRIC COMPANY, Schenectady, N. Y.
Filed January 2, 1932. Serial No. 322,633. PUBLISHED JUNE 14, 1932. Class 21.

296,982. CHEMICAL FIREPROOFING COMPOUND. WATERLOX, INC., Detroit, Mich.
Filed January 14, 1932. Serial No. 323,266. PUBLISHED MAY 31, 1932. Class 6.

296,983. THERAPEUTICALLY ACTIVATED MINERAL OILS AND THE LIKE. E. R. SQUIBB & SONS, New York, N. Y.
Filed March 18, 1932. Serial No. 325,272. PUBLISHED MAY 31, 1932. Class 6.

296,984. POULTRY AND DAIRY FEEDS. THE CARTER-VENABLE CO., INC., Richmond, Va.
Filed March 28, 1932. Serial No. 325,564. PUBLISHED JUNE 14, 1932. Class 46.

296,985. WALL COATING IN THE NATURE OF A PAINT. ALABASTINE COMPANY, Grand Rapids, Mich.
Filed April 6, 1932. Serial No. 325,841. PUBLISHED JUNE 14, 1932. Class 16.

296,986. METAL ROUGH BOXES FOR BURIAL PURPOSES. THE G. F. MITCHELL & SONS COMPANY, Cleveland, Ohio.
Filed March 11, 1932. Serial No. 325,043. PUBLISHED JUNE 14, 1932. Class 2.

296,987. THREAD AND YARN. I. P. BEMBERG, AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y.
Filed March 12, 1932. Serial No. 325,056. PUBLISHED MAY 24, 1932. Class 43.

296,988. PLAIN ABSORBENT CHEESECLOTH IN THE PIECE. PINK SUPPLY COMPANY, Minneapolis, Minn.
Filed March 16, 1932. Serial No. 325,183. PUBLISHED JUNE 14, 1932. Class 42.

296,989. FLOOR AND FURNITURE WAX AND POLISH. WALTER T. TERRY, JR., doing business as The Best Products Co., Kansas City, Mo.
Filed March 14, 1932. Serial No. 325,200. PUBLISHED JUNE 14, 1932. Class 16.

296,990. PLASTIC SUBSTANCE FOR RE-SOLING SHOES. CHAS. H. KLEIN, doing business as Thrift-E-Sole Company, Cincinnati, Ohio.
Filed May 7, 1931. Serial No. 314,286. PUBLISHED JUNE 7, 1932. Class 50.

296,991. AUTOMATICALLY OPERATED CURTAINS FOR USE WITH SCREENS FOR PHOTOPLAYS OR THE LIKE. VALLEN ELECTRICAL COMPANY, INC., Akron, Ohio.
Filed May 20, 1931. Serial No. 314,826. PUBLISHED JUNE 7, 1932. Class 50.

296,992. PINE-OIL AND BORNEOL. THE NEWPORT COMPANY, Carrollville, Wis.
Filed April 2, 1931. Serial No. 312,856. PUBLISHED MAY 24, 1932. Class 6.

296,993. SOAPS AND SHAVING POWDER. YARDLEY & CO., LIMITED, London, England.
Filed April 22, 1932. Serial No. 326,408. PUBLISHED JUNE 14, 1932. Class 4.

296,994. PINE-OIL AND BORNEOL. THE NEWPORT COMPANY, Carrollville, Wis.
Filed April 2, 1931. Serial No. 312,855. PUBLISHED MAY 24, 1932. Class 6.

296,995. WHEAT FLOUR. LARABEE FLOUR MILLS COMPANY, Kansas City, Kans., and Kansas City, Mo.
Filed April 25, 1932. Serial No. 326,483. PUBLISHED JUNE 14, 1932. Class 46.

296,996. NAILS, DRIVE SCREWS, SCREWS, DRIVE PINS, RIVETS, STUDS, NUTS, BOLTS, AND METAL WASHERS. PARKER-KALON CORPORATION, New York, N. Y.
Filed April 27, 1932. Serial No. 326,554. PUBLISHED JUNE 14, 1932. Class 13.

296,997. POWDER FOR DRY CLEANING. E. L. BOYNTON, doing business as California Cleaning Products Co., Los Angeles, Calif.
Filed April 28, 1932. Serial No. 326,576. PUBLISHED JUNE 14, 1932. Class 4.

296,998. HANDKERCHIEFS. GIMBEL BROTHERS, INC., New York, N. Y.; Philadelphia, Pa.; Milwaukee, Wis., and Pittsburgh, Pa.
Filed May 2, 1932. Serial No. 326,678. PUBLISHED JUNE 14, 1932. Class 42.

296,999. SLIDER CONTROLLED FASTENERS FOR USE ON CHILDREN'S LEGGING SETS AND BOYS' OVERCOATS. SCHNEIDERMAN BROS., New York, N. Y.
Filed April 20, 1932. Serial No. 326,303. PUBLISHED JUNE 14, 1932. Class 13.

297,000. PROTECTIVE PRIMER COATINGS FOR METAL SURFACES, ETC. STUDEBAKER CHEMICAL COMPANY, Elyria, Ohio.
Filed April 14, 1932. Serial No. 326,118. PUBLISHED JUNE 14, 1932. Class 16.

297,001. TANK CARS. GENERAL AMERICAN TANK CAR CORPORATION, Chicago, Ill.
Filed April 20, 1932. Serial No. 326,286. PUBLISHED JUNE 14, 1932. Class 19.

297,002. DRY POWDER COLORS IN THE NATURE OF PAINT. ALABASTINE COMPANY, Gand Rapids, Mich.
Filed April 6, 1932. Serial No. 325,843. PUBLISHED JUNE 14, 1932. Class 16.

297,003. COPPER POLISH. CHARLES BURKE & SONS, Detroit, Mich.
Filed March 21, 1932. Serial No. 325,383. PUBLISHED JUNE 14, 1932. Class 4.

297,004. FRESH LETTUCE, FRESH STRAWBERRIES, AND FRESH MELONS—NAMELY, CANTALOUPES, HONEYBALLS, HONEYDEWS, CASABAS, PERSIAN MELONS, JAPANESE MELONS, AND WATER MELONS. MT. SIGNAL PRODUCE CO., Calexico, Calif.
Filed March 23, 1931. Serial No. 312,447. PUBLISHED JUNE 14, 1932. Class 46.

297,005. LINIMENT. LANDRUM LESLIE MEDLOCK, Roscoe, Texas.
Filed March 21, 1931. Serial No. 312,400. PUBLISHED MAY 24, 1932. Class 6.

297,006. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y.
Filed July 10, 1931. Serial No. 316,802. PUBLISHED JUNE 14, 1932. Class 42.

297,007. CHEMICAL PREVENTATIVES FOR THE PREVENTION OF VENEREAL DISEASES. BLACKMAN & BLACKMAN, INC., doing business as Premo Laboratories, New York, N. Y.
Filed March 31, 1931. Serial No. 312,751. PUBLISHED MAY 31, 1932. Class 6.

297,008. COLD CREAM, VANISHING CREAM, MAKE-UP CREAMS. ALLOLA CO., Rochester, Pa.
Filed April 30, 1931. Serial No. 313,989. PUBLISHED MAY 31, 1932. Class 6.

297,009. BOAT HOISTS. JOHN W. LOOSCHEN, Paterson, N. J.
Filed May 13, 1931. Serial No. 314,505. PUBLISHED JUNE 14, 1932. Class 23.

297,010. PERFUMES, TOILET WATERS, ROUGE, ETC. D'ORSAY PERFUMERIES CORPORATION, New York, N. Y.
Filed July 9, 1931. Serial No. 316,771. PUBLISHED MAY 31, 1932. Class 6.

297,011. COFFEE. A. H. NICOLON & SON, INC., Lauderdale, Miss.
Filed October 25, 1930. Serial No. 307,170. PUBLISHED JUNE 14, 1932. Class 46.

297,012. CHEMICALS TO INSURE PROTECTION AGAINST FREEZING OF WATER IN RADIATORS OF AUTOMOBILES. W. & W. CHEMICAL CO., Brooklyn, N. Y.
Filed January 8, 1931. Serial No. 309,758. PUBLISHED JUNE 16, 1931. Class 6.

297,013. AVOCADO PULP AS A BASE FOR ICE-CREAMS, ICES, AND THE LIKE. CALAVO GROWERS OF CALIFORNIA, Los Angeles, Calif.
Filed October 10, 1930. Serial No. 306,592. PUBLISHED JUNE 14, 1932. Class 46.

297,014. IRON CASTINGS. THE FERRO MACHINE & FOUNDRY COMPANY, Cleveland, Ohio.
Filed August 28, 1930. Serial No. 305,103. PUBLISHED JUNE 7, 1932. Class 14.

297,015. HEALING ANTISEPTIC. BIO-MEDICAL RESEARCH LABORATORIES, INC., Brooklyn, N. Y.
Filed November 27, 1929. Serial No. 292,969. PUBLISHED JANUARY 14, 1930. Class 6.

297,016. HEALING ANTISEPTIC. BIO-MEDICAL RESEARCH LABORITORIES, INC., Brooklyn, N. Y.
Filed November 27, 1929. Serial No. 292,971. PUBLISHED JANUARY 14, 1930. Class 6.

297,017. MEDICINAL PREPARATION IN POWDERED FORM FOR THE RELIEF OF TRENCH MOUTH. J. BAIN MCGILVRAY, Detroit, Mich.
Filed February 6, 1932. Serial No. 323,809. PUBLISHED MAY 31, 1932. Class 6.

297,018. LISTS, AND SPECIFICATIONS FOR HOUSE PLANS AND ARCHITECTURAL PLANS. MEREDITH PUBLISHING COMPANY, Des Moines, Iowa.
Filed March 5, 1932. Serial No. 324,826. PUBLISHED JUNE 14, 1932. Class 38.

297,019. PAINT AND VARNISH REMOVER, PUTTY, AND AUTOMOBILE POLISH. STEELCOTE MANUFACTURING COMPANY, St. Louis, Mo.
Filed August 16, 1929. Serial No. 288,624. PUBLISHED JUNE 14, 1932. Class 16.

297,020. BIAS FOLD TAPE. THE WARREN FEATHERBONE COMPANY, Three Oaks, Mich.
Filed January 21, 1932. Serial No. 323,260. PUBLISHED JUNE 14, 1932. Class 40.

297,021. DRIED RAISINS AND DRIED FRUITS. SUN-MAID RAISIN GROWERS OF CALIFORNIA, Fresno, Calif.
Filed February 1, 1932. Serial No. 323,727. PUBLISHED JUNE 14, 1932. Class 46.

297,022. STRIPS OF TIPPING MATERIAL TO BE APPLIED TO STRIPS OF CIGARETTE PAPER SERVING AS THE CONTAINER OF THE TOBACCO FILLER FOR CIGARETTES. BOUCHER CORK CO., INC., New York, N. Y.
Filed November 2, 1931. Serial No. 320,716. PUBLISHED JUNE 7, 1932. Class 8.

297,023. COFFEE. PAUL J. SBISA, doing business as P. J. Sbisa Coffee Company, New Orleans, La.
Filed January 4, 1932. Serial No. 322,713. PUBLISHED JUNE 14, 1932. Class 46.

297,024. COLD CREAM, POWDER, SHAMPOO, ETC. BETTY JEAN LABORATORIES, Fort Wayne, Ind.
Filed March 8, 1932. Serial No. 324,871. PUBLISHED MAY 24, 1932. Class 6.

297,025. SMOKING TOBACCO. LARUS & BROTHER COMPANY, INCORPORATED, Richmond, Va.
Filed October 9, 1931. Serial No. 319,897. PUBLISHED JUNE 14, 1932. Class 17.

297,026. CERTAIN NAMED WEARING APPAREL. JACOB STEIN, doing business as Climax Rubber Company, New York, and Brooklyn, N. Y.
Filed October 31, 1931. Serial No. 320,703. PUBLISHED JUNE 14, 1932. Class 39.

297,027. NARROW WEBBING AND BRAIDS. POIRIER AND LINDEMAN COMPANY, New York, N. Y.
Filed March 25, 1932. Serial No. 325,482. PUBLISHED JUNE 14, 1932. Class 40.

297,028. CORSETS, BRASSIERES, GIRDLES, AND COMBINATIONS (BRASSIERES AND GIRDLES). SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed March 25, 1932. Serial No. 325,485. PUBLISHED JUNE 14, 1932. Class 39.

297,029. LADIES' HATS. SALFELTS, New York, N. Y.
Filed April 6, 1932. Serial No. 325,858. PUBLISHED JUNE 14, 1932. Class 39.

297,030. CERTAIN NAMED WEARING APPAREL. VANITY FAIR SILK MILLS, Reading, Pa.
Filed April 18, 1932. Serial No. 326,237. PUBLISHED JUNE 14, 1932. Class 39.

297,031. FERTILIZER. SHELL CHEMICAL COMPANY, San Francisco, Calif.
Filed April 11, 1932. Serial No. 326,001. PUBLISHED JUNE 7, 1932. Class 10.

297,032. BLENDING BRUSHES AND TOILET BRUSHES. CELLULOID CORPORATION, Newark, N. J.
Filed April 30, 1932. Serial No. 326,633. PUBLISHED JUNE 7, 1932. Class 29.

297,033. PARTLY PREPARED CELLULOSE ACETATE MATERIAL IN THE FORM OF SHEETS, RODS, TUBES, AND THE LIKE. DYNAMIT-ACTIEN-GESELLSCHAFT VORMALS ALFRED NOBEL & CO., HAMBURG, Troisdorf, Germany.
Filed May 3, 1932. Serial No. 326,707. PUBLISHED JUNE 14, 1932. Class 1.

297,034. WATCHES, WATCH MOVEMENTS, AND WATCH CASES. ELGIN NATIONAL WATCH COMPANY, Chicago and Elgin, Ill.
Filed May 3, 1932. Serial No. 326,708. PUBLISHED JUNE 14, 1932. Class 27.

297,035. CIGARS. THE H. DROST BOX MFG. CO., Manitowoc, Wis.
Filed April 30, 1932. Serial No. 326,635. PUBLISHED JUNE 7, 1932. Class 17.

297,036. WATCHES, WATCH MOVEMENTS AND WATCH CASES. ELGIN NATIONAL WATCH COMPANY, Chicago and Elgin, Ill.
Filed May 3, 1932. Serial No. 326,709. PUBLISHED JUNE 14, 1932. Class 27.

297,037. PIGEON GRIT. FRED GOULD, Newfield, N. J.
Filed May 3, 1932. Serial No. 326,712. PUBLISHED JUNE 14, 1932. Class 1.

297,038. SMOKING STANDS. THE WOODCRAFT CORPORATION, Bay City, Mich.
Filed April 23, 1932. Serial No. 326,441. PUBLISHED JUNE 7, 1932. Class 8.

297,039. WIRE. DRIVER-HARRIS COMPANY, Harrison, N. J.
Filed April 26, 1932. Serial No. 326,518. PUBLISHED JUNE 7, 1932. Class 14.

297,040. HUMUS AND FERTILIZERS. THE SOILIZER COMPANY, Cleveland, Ohio.
Filed April 27, 1932. Serial No. 326,560. PUBLISHED JUNE 7, 1932. Class 10.

297,041. CLOCKS AND WATCHES. WESTERN CLOCK COMPANY, Peru, Ill.
Filed April 28, 1932. Serial No. 326,596. PUBLISHED JUNE 7, 1932. Class 27.

297,042. MEN'S AND WOMEN'S, BOYS' AND GIRLS' RIDING SUITS, RIDING COATS, RIDING HABITS, RIDING HATS, AND RIDING BOOTS. FRANKLIN SIMON & Co., New York, N. Y.
Filed April 19, 1932. Serial No. 326,254. PUBLISHED JUNE 14, 1932. Class 39.

297,043. WOOL FELT. AMERICAN FELT COMPANY, New York, N. Y.
Filed April 21, 1932. Serial No. 326,319. PUBLISHED JUNE 14, 1932. Class 50.

297,044. BLEACHING FLUID. JASON J. KITTESS, Los Angeles, Calif.
Filed April 4, 1932. Serial No. 325,792. PUBLISHED MAY 31, 1932. Class 6.

297,045. CANDY. E. ROSEN COMPANY, Providence, R. I.
Filed April 9, 1932. Serial No. 325,974. PUBLISHED JUNE 14, 1932. Class 46.

297,046. THRIFT BOOKS. CHESTER F. TOURNER, Bloomington, Ind.
Filed April 15, 1932. Serial No. 326,170. PUBLISHED JUNE 14, 1932. Class 38.

297,047. ADHESIVE CEMENT. THE KAYON COMPANY, Milwaukee, Wis.
Filed April 21, 1932. Serial No. 326,327. PUBLISHED JUNE 14, 1932. Class 5.

297,048. BRIDGE-SCORE TABLE GUIDE. WALTER L. JENKINS, Cleveland, Ohio.
Filed April 22, 1932. Serial No. 326,370. PUBLISHED JUNE 14, 1932. Class 37.

297,049. SMOKED AND SALT FISH. BLACKFORDS, INC., New York, N. Y.
Filed April 25, 1932. Serial No. 326,453. PUBLISHED JUNE 14, 1932. Class 46.

297,050. PERFUMES. HOUBIGANT, INC., New York, N. Y.
Filed March 30, 1932. Serial No. 325,658. PUBLISHED MAY 31, 1932. Class 6.

297,051. MEDICINAL PREPARATION USED FOR INDIGESTION, SOUR STOMACH, ACIDITY. CHARLES G. HYRE, doing business as The Pepsotalis Company, Morgantown, W. Va.
Filed March 31, 1932. Serial No. 325,688. PUBLISHED MAY 31, 1932. Class 6.

297,052. PERIODICAL PUBLICATION. PEPPERELL MANUFACTURING COMPANY, Boston, Mass.
Filed April 29, 1932. Serial No. 326,616. PUBLISHED JUNE 14, 1932. Class 38.

297,053. ASTRINGENT CREAMS, ROUGES, ETC. FRANK C. REILLY, New York, N. Y.
Filed April 1, 1932. Serial No. 325,726. PUBLISHED MAY 31, 1932. Class 6.

297,054. MEDICINAL PREPARATION TO BE USED IN THE TREATMENT OF COLDS, COUGHS, CHILLS, CORYZA, GRIPPE, HEADACHE, TONSILLITIS, AND SIMPLE FEVER. RICHARD B. GRAY, doing business as The Montauk Laboratories, Bay Shore, N. Y.
Filed April 2, 1932. Serial No. 325,752. PUBLISHED MAY 31, 1932. Class 6.

297,055. COMPOUND TO BE USED AS AN INHALANT IN TREATING CATARRH, BRONCHIAL TROUBLES, ASTHMA, COLDS, HAY FEVER, AND HEADACHES AND FOR USE AS AN INHALANT TONIC. FELIX PREJEAN, Port Arthur, Tex.
Filed April 2, 1932. Serial No. 325,757. PUBLISHED MAY 31, 1932. Class 6.

297,056. SUBSTANCES OR CHEMICALS FOR PRODUCING A WATER REPELLENT AND/OR WATER-PROOF FINISH FOR TEXTILES. WARWICK CHEMICAL COMPANY, West Warwick, R. I.
Filed April 2, 1932. Serial No. 325,769. PUBLISHED MAY 31, 1932. Class 6.

297,057. TISSUE PAPER ADAPTED FOR REMOVING COLD CREAM, FOR HANDKERCHIEFS, AND FOR SIMILAR PURPOSES. POND'S EXTRACT COMPANY, New York, N. Y.
Filed May 4, 1932. Serial No. 326,758. PUBLISHED JUNE 14, 1932. Class 37.

297,058. PERIODICAL. WEST VIRGINIA STATE MEDICAL ASSOCIATION, Charleston, W. Va.
Filed April 25, 1932. Serial No. 326,505. PUBLISHED JUNE 14, 1932. Class 38.

297,059. CANNED MUSHROOMS. LOUIS F. LAMBERT, doing business as Pennsylvania Mushroom Co., Coatesville, Pa.
Filed April 27, 1932. Serial No. 326,551. PUBLISHED JUNE 14, 1932. Class 46.

297,060. TOILET PAPER, PAPER TOWELS, PAPER NAPKINS, PAPER DOILIES, PAPER TABLE CLOTHS, TISSUE PAPER, AND CREPE PAPER. FORT HOWARD PAPER COMPANY, Green Bay, Wis.
Filed May 7, 1932. Serial No. 326852. PUBLISHED JUNE 14, 1932. Class 37.

297,061. SEMI-MONTHLY MAGAZINE. NATIONAL SALES PROMOTION INSTITUTE, INC., Philadelphia, Pa.
Filed May 4, 1932. Serial No. 326,756. PUBLISHED JUNE 14, 1932. Class 38.

297,062. WRITING PAPER. KALAMAZOO VEGETABLE PARCHMENT COMPANY, Parchment, Mich.
Filed May 9, 1932. Serial No. 326,902. PUBLISHED JUNE 14, 1932. Class 37.

297,063. BARLEY MALT SYRUP. ISIDORE FINK, doing business as Reischwuhr Malt Products, Astoria, Long Island, N. Y.
Filed December 10, 1931. Serial No. 321,994. PUBLISHED JUNE 14, 1932. Class 46.

297,064. MOTOR LUBRICATING OILS. WASHINGTON PETROLEUM PRODUCTS, INC., South Washington, Va.
Filed March 29, 1932. Serial No. 325,626. PUBLISHED JUNE 14, 1932. Class 15.

297,065. PERFUME, TOILET WATER, FACE POWDER, TALCUM POWDER, BATH SALTS, BRILLIANTINE, BANDOLINE, ROUGE, LIP STICKS, DUSTING POWDER, SACHET, COLD CREAMS, LOTION FOR THE SKIN AND HAIR, POWDER AND ROUGE COMPACTS, AND VEGETAL. HOUBIGANT, INC., New York, N. Y.
Filed March 30, 1932. Serial No. 325,656. PUBLISHED MAY 24, 1932. Class 6.

297,066. PERFUMES, TOILET WATER, FACE POWDER, TALCUM POWDER, BATH SALTS, BRILLIANTINE, BANDOLINE, ROUGE, LIPSTICKS, DUSTING POWDER, SACHET, COLD CREAMS, LOTION FOR THE SKIN AND HAIR, POWDER AND ROUGE COMPACTS, AND VEGETAL. HOUBIGANT, INC., New York, N. Y.
Filed March 30, 1932. Serial No. 325,657. PUBLISHED MAY 24, 1932. Class 6.

297,067. PETROLATUM FOR MEDICINAL PURPOSES. L. SONNEBORN SONS, INC., New York, N. Y.
Filed March 28, 1932. Serial No. 325,603. PUBLISHED MAY 24, 1932. Class 6.

297,068. CHEMICAL FOR USE IN THE TEXTILE INDUSTRY PARTICULARLY FOR PREVENTION OF MARKING OFF AND STAINING IN THE KIER BOIL AND FOR COUNTERACTING HYDROSULFITES AND SULFOXYLATES IN TEXTILE PRINTING. RÖHM & HAAS COMPANY, Philadelphia, Pa.
Filed March 29, 1932. Serial No. 325,622. PUBLISHED MAY 24, 1932. Class 6.

297,069. TOOTHE ACHE DROPS, EAR ACHE DROPS, WART REMOVER AND CORN REMOVER PREPARATIONS, AND FOR AN ANTACID ANTIFERMENTATIVE GASTRIC STIMULANT AND A PREPARATION INDICATED IN AMENORRHEA, DYSMENORRHEA, AND OTHER MENSTRUAL DISORDERS. LEON A. SMOLEN, doing business as Nebo Drug Co., New York, N. Y.
Filed March 21, 1932. Serial No. 325,387. PUBLISHED MAY 24, 1932. Class 6.

297,070. BAKING POWDER. JAQUES MANUFACTURING COMPANY, Chicago, Ill.
Filed March 24, 1932. Serial No. 325,449. PUBLISHED MAY 24, 1932. Class 6.

297,071. TOOTH PASTE. THE BON AMI COMPANY, New York, N. Y.
Filed March 28, 1932. Serial No. 325,559. PUBLISHED MAY 24, 1932. Class 6.

297,072. FOOT LOTION FOR THE TREATMENT OF FOOT AND TOE IRRITATION. NORBERT J. FORET, doing business as Foret Laboratories, Raceland, La.
Filed March 18, 1932. Serial No. 325,257. PUBLISHED MAY 24, 1932. Class 6.

297,073. EVACUANT FOR INFANTS AND CHILDREN. SCOTT-SHERRY, Boston, Mass.
Filed March 21, 1932. Serial No. 325,349. PUBLISHED MAY 24, 1932. Class 6.

297,074. WAVING LOTION AND TONIC FOR HAIR. LA JEROME LABORATORIES, INC., Chicago, Ill.
Filed March 11, 1932. Serial No. 325,040. PUBLISHED MAY 31, 1932. Class 6.

297,075. MEDICINAL PREPARATION FOR USE AS A DIETARY SUPPLEMENT. THE UPJOHN COMPANY, Kalamazoo, Mich.
Filed March 14, 1932. Serial No. 325,128. PUBLISHED MAY 31, 1932. Class 6.

297,076. ANTIFREEZE COMPOUND. HENRY H. SIMMONS, doing business as National Chemical Products Company (Incorporated), Casper, Wyo.
Filed March 16, 1932. Serial No. 325,189. PUBLISHED MAY 24, 1932. Class 6.

297,077. SOPORIFIC MEDICINE. LA COMPAGNIE PHARMACEUTIQUE DESBERGERS, Montreal, Quebec, Canada.
Filed March 10, 1932. Serial No. 325,005. PUBLISHED MAY 31, 1932. Class 6.

297,078. COMPOSITION FOR USE AS A DEODORIZER IN ICEBOXES AND REFRIGERATORS. DAVID JULIAN BLOCK, doing business as Refrigerator Accessories Company, Chicago, Ill.
Filed March 9, 1932. Serial No. 325,028. PUBLISHED MAY 31, 1932. Class 6.

297,079. ELECTRIC SADIRONS. CHICAGO FLEXIBLE SHAFT COMPANY, Chicago, Ill.
Filed April 27, 1932. Serial No. 326,537. PUBLISHED JUNE 14, 1932. Class 21.

297,080. COMBINED THERMOMETER AND LIQUID LEVEL GAGE. THE FOXBORO COMPANY, Foxboro, Mass.
Filed April 27, 1932. Serial No. 326,538. PUBLISHED JUNE 14, 1932. Class 26.

297,081. TABLES. JOHN VINCENT LITTIG, doing business as Jay Vee Studio, Washington, D. C.
Filed April 23, 1932. Serial No. 326,427. PUBLISHED JUNE 14, 1932. Class 32.

297,082. BRAKE LININGS. ALLBESTOS CORPORATION, Philadelphia, Pa.
Filed April 25, 1932. Serial No. 326,450. PUBLISHED JUNE 14, 1932. Class 35.

297,083. HOES. B. P. EVANS, doing business as Wonder Hoe Co., Fort Worth, Tex.
Filed April 26, 1932. Serial No. 326,522. PUBLISHED JUNE 14, 1932. Class 23.

297,084. BIT BRACES, EXPANSIVE BITS, AUGER BITS, DRAWING KNIVES, HAND SAWS, PLANES, TINNERS' SNIPS, PLIERS, WRENCHES, WOOD CHISELS, COLD CHISELS, CARPENTER PINCERS, HAND DRILLS, SCREW DRIVERS, HATCHETS, HAMMERS, CARPENTER BARS, AND TROWELS. HIBBARD, SPENCER, BARTLETT & CO., Chicago, Ill.
Filed April 9, 1932. Serial No. 325,949. PUBLISHED JUNE 14, 1932. Class 23.

297,085. IMPLEMENT FOR FASTENING SHEETS OF PAPER TOGETHER ALONG ONE OF THEIR EDGES BY PASSING THEM BETWEEN WHEELS HAVING SHALLOW INTERMESHING TEETH. SEIDERS-MATHER CORPORATION, Chicago, Ill.
Filed April 15, 1932. Serial No. 326,165. PUBLISHED JUNE 14, 1932. Class 23.

297,086. FLASH LIGHTS. CHASE BRASS & COPPER CO. INCORPORATED, Waterbury, Conn.
Filed April 21, 1932. Serial No. 326,321. PUBLISHED JUNE 14, 1932. Class 21.

297,087. STORAGE BATTERIES. FREDERICK W. GROSCHE, Baltimore, Md.
Filed April 21, 1932. Serial No. 326,328. PUBLISHED JUNE 14, 1932. Class 21.

297,088. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed April 22, 1932. Serial No. 326,360. PUBLISHED JUNE 14, 1932. Class 15.

297,089. OILS AND LUBRICANTS, PARTICULARLY MOTOR LUBRICATING OILS, ILLUMINATING OILS, MOTOR FUEL OILS, AND CRUDE PETROLEUM OIL. PENNSYLVANIA PETROLEUM PRODUCTS CO., Philadelphia, Pa.
Filed April 4, 1932. Serial No. 325,797. PUBLISHED JUNE 14, 1932. Class 15.

297,090. LUBRICATING OILS AND GREASES. U. S. OIL COMPANY, East Providence, R. I.
Filed April 8, 1932. Serial No. 325,927. PUBLISHED JUNE 14, 1932. Class 15.

297,091. MAPLE SYRUP. GARRETT COUNTY MAPLE PRODUCTS ASSOCIATION, Oakland, Md.
Filed April 9, 1932. Serial No. 325,946. PUBLISHED JUNE 14, 1932. Class 46.

297,092. INSULATED ELECTRIC CORD, AND PARTICULARLY RUBBER COVERED ELECTRIC CORD. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Chicago, Ill.; Pittsburgh, Pa.; New York, N. Y.; Worcester, Mass., and Hoboken, N. J.
Filed April 11, 1932. Serial No. 325,976. PUBLISHED JUNE 14, 1932. Class 21.

297,093. SAFETY RAZOR BLADES. MARATHON RAZOR BLADE CO., INC., Irvington, N. J.
Filed May 4, 1932. Serial No. 326,754. PUBLISHED JUNE 14, 1932. Class 28.

297,094. MACARONI, SPAGHETTI, AND NOODLES. BAYARD S. SCOTLAND, doing business as Economy Maçaroni Co., Joliet, Ill.
Filed May 6, 1932. Serial No. 326,883. PUBLISHED JUNE 14, 1932. Class 46.

297,095. ICE CREAM CUTTING MACHINES. THE AKRON EQUIPMENT COMPANY, Akron, Ohio.
Filed May 9, 1932. Serial No. 326,881. PUBLISHED JUNE 14, 1932. Class 23.

297,096. SAFETY RAZOR BLADES. MARATHON RAZOR BLADE CO., INC., Irvington, N. J.
Filed May 4, 1932. Serial No. 326,753. PUBLISHED JUNE 14, 1932. Class 28.

297,097. SAFETY RAZOR BLADES. MARATHON RAZOR BLADE CO., INC., Irvington, N. J.
Filed May 4, 1932. Serial No. 326,752. PUBLISHED JUNE 14, 1932. Class 28.

297,098. SAFETY RAZOR BLADES. MARATHON RAZOR BLADE CO., Irvington, N. J.
Filed May 4, 1932. Serial No. 326,751. PUBLISHED JUNE 14, 1932. Class 28.

297,099. SAFETY RAZOR BLADES. MINUTE SAFETY RAZOR CORP., Newark, N. J.
Filed May 3, 1932. Serial No. 326,716. PUBLISHED JUNE 14, 1932. Class 28.

297,100. BRAKE LININGS. ALLBESTOS CORPORATION, Philadelphia, Pa.
Filed May 3, 1932. Serial No. 326,701. PUBLISHED JUNE 14, 1932. Class 35.

297,101. LIGHT OIL HAVING LUBRICATING PROPERTIES. WOLVERINE-EMPIRE REFINING COMPANY, Wilmington, Del., and New York, N. Y.
Filed April 30, 1932. Serial No. 326,654. PUBLISHED JUNE 14, 1932. Class 15.

297,102. FLEXIBLE TAKE-UP CORDS USED IN CONNECTION WITH ELECTRICAL APPLIANCES. TRICO FUSE MFG. CO., Milwaukee, Wis.
Filed April 30, 1932. Serial No. 326,652. PUBLISHED JUNE 14, 1932. Class 21.

297,103. ATTACHMENT PLUGS. C. D. WOOD ELECTRIC COMPANY, INC., New York, N. Y.
Filed April 28, 1932. Serial No. 326,596. PUBLISHED JUNE 14, 1932. Class 21.

297,104. SUSPENDERS, GARTERS, AND APPAREL BELTS. LEONARD D. GREENHALL, doing business as Greenhall Bros., Brooklyn, N. Y.
Filed March 25, 1932. Serial No. 325,469. PUBLISHED JUNE 14, 1932. Class 39.

297,105. NECKTIE PRESSING AND RESHAPING DEVICE. PASCUAL PÉREZ, New York, N. Y.
Filed March 18, 1932. Serial No. 325,268. PUBLISHED JUNE 7, 1932. Class 50.

297,106. COATED FABRIC TAPE AND COATED CELLULOSE TAPE FOR MASKING AND FOR GENERAL INDUSTRIAL AND UTILITY PURPOSES. DUREX ABRASIVES CORPORATION, Jersey City, N. J.
Filed March 21, 1932. Serial No. 325,323. PUBLISHED JUNE 7, 1932. Class 50.

297,107. PHOTO ENGRAVING PLATES. WILBAR PHOTO ENGRAVING CO., INC., New York, N. Y.
Filed March 19, 1932. Serial No. 325,309. PUBLISHED JUNE 14, 1932. Class 50.

297,108. WOMEN'S, MISSES', AND CHILDREN'S HATS. BRIGHTON LADIES HAT CO. INC., New York, N. Y.
Filed March 19, 1932. Serial No. 325,282. PUBLISHED JUNE 14, 1932. Class 39.

297,109. CARBON PAPER AND TYPEWRITER RIBBONS. NEIDICH PROCESS COMPANY, Burlington, N. J.
Filed March 10, 1932. Serial No. 325,012. PUBLISHED JUNE 7, 1932. Class 11.

297,110. CARBON PAPER AND TYPEWRITER RIBBONS. NEIDICH PROCESS COMPANY, Burlington, N. J.
Filed March 10, 1932. Serial No. 325,011. PUBLISHED JUNE 7, 1932. Class 11.

297,111. CARBON PAPER AND TYPEWRITER RIBBONS. NEIDICH PROCESS COMPANY, Burlington, N. J.
Filed March 10, 1932. Serial No. 325,010. PUBLISHED JUNE 7, 1932. Class 11.

297,112. CARBON PAPER AND TYPEWRITER RIBBONS. NEIDICH PROCESS COMPANY, Burlington, N. J.
Filed March 10, 1932. Serial No. 325,009. PUBLISHED JUNE 7, 1932. Class 11.

297,113. CARBON PAPER AND TYPEWRITER RIBBONS. NEIDICH PROCESS COMPANY, Burlington, N. J.
Filed March 10, 1932. Serial No. 325,008. PUBLISHED JUNE 7, 1932. Class 11.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

297,114. (CLASS 39. CLOTHING.) BEAVER SHIRT CO., INC., New York, N. Y. Filed June 25, 1931. Serial No. 316,245.

NEVA CURL COLLAR TRADE MARK

For Men's and Boys' Collars for Shirts.
Claims use since May 15, 1931.

297,115. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) TRENT LABORATORIES, Cleveland, Ohio. Filed June 23, 1931. Serial No. 316,170.

TRENT

For Mouth Wash.
Claims use since May 9, 1931.

297,116. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) EVANS GEORGE STRATIGOS, New York, N. Y. Filed May 13, 1931. Serial No. 314,537.

CONFISSERIE PATISSERIE

EVANS GEORGE STRATIGOS

For Candies and Pastry.
Claims use since Mar. 1, 1931.

297,117. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CLARENCE D. LUKENS, doing business as Duray Chem. Co., St. Louis, Mo. Filed Apr. 22, 1931. Serial No. 313,664.

Jelicones

For Vaginal Antiseptic Suppositories.
Claims use since Feb. 16, 1931.

297,118. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NEVADA PACKING COMPANY, Reno, Nev. Filed Jan. 30, 1931. Serial No. 310,571.

GLENBROOK

For Smoked Meats—Namely, Hams, Shoulders, and Bacon; Shortening Made from Vegetable Oil and Animal Fats.
Claims use since Apr. 26, 1930.

297,119. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) JAMES E. MCDEVITT, New York, N. Y. Filed Apr. 15, 1930. Serial No. 298,902.

GOLFGRIP

For Grips for Golf Clubs.
Claims use since January, 1929.

297,120. (CLASS 39. CLOTHING.) VAN RAALTE COMPANY, New York, N. Y. Filed July 17, 1931. Serial No. 317,053.

Batista

For Hosiery.
Claims use since July 1, 1931.

297,121. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) LANDERS, FRARY & CLARK, New Britain, Conn. Filed July 20, 1931. Serial No. 317,125.

LANDERS

For Table Knives, Bread Knives, Carving Knives, and Kitchen Knives, All Goods Named Being of Base Metal.
Claims use since February, 1924.

297,122. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) LANDERS, FRARY & CLARK, New Britain, Conn. Filed July 20, 1931. Serial No. 317,126.

LANDERS

For Balances and Scales, Circular Balances, and Fruit and Vegetable Scales.
Claims use since 1905.

297,123. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FUR BEARERS, INC., Watertown, N. Y. Filed July 30, 1931. Serial No. 317,463.

DRESSED FOR THE TABLE

For Dressed Rabbit Meat.
Claims use since June 24, 1931.

297,124. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) PRIMA MANUFACTURING COMPANY, INC., Philadelphia, Pa. Filed Aug. 6, 1931. Serial No. 317,735.

Warren

For Electric Laundry Washing Machines.
Claims use since July 15, 1931.

297,125. (CLASS 12. CONSTRUCTION MATERIALS.) SIMONS BRICK CO., Los Angeles, Calif. Filed Oct. 31, 1931. Serial No. 320,700.

SLAB-BRICK

For Building Materials, Namely, Brick.
Claims use since June 15, 1931.

297,126. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EUGENE FIELDS, Jasper, Ind. Filed Nov. 11, 1931. Serial No. 321,090.

FIELD'S PREPARATION

For Preparation for Hog Cholera and Thumps.
Claims use since June 15, 1931.

297,127. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CALIFORNIA PERFUME COMPANY, INC., New York, N. Y. Filed June 3, 1932. Serial No. 327,673.

Avon

For Perfumes, Toilet Waters, Powder and Rouge Compacts, Lipsticks, Rouge, Face Powder, Liquid Powder, Sachet, Cleansing Cream, Vanishing Cream, Cold Cream, Tissue Cream, Pore Cream, Bleach Cream, Eyelash Cream, Talcum Powder, Dusting Powder, Bath Salts, Headache, Cologne, Depilatory Cream, Deodorant, Witch Hazel Extract and Cream, Blackhead Remover in Paste or Liquid Form, Shampoo Preparation, Hair Tonic, Liquid Hair Dressing, Brilliantine, Dental Cream, Tooth Powder, Antiseptic Solution, Manicuring Preparations—Namely, Nail Polish, Nail Polish Remover, Nail White, Cuticle Softener, Cuticle Cream, Bayrum, After Shaving Lotion, Astringent, Hair Oils, Bandoline, Wave Set Preparation, Liquid Skin Freshener, Skin Tonic, Lilac Vegetal, Styptic Pencils, and Baking Powder, Laundry Crystals, Laundry Starch, and Water Softeners.
Claims use since September, 1929.

297,128. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) MASTER METAL PRODUCTS, INC., Buffalo, N. Y. Filed May 31, 1932. Serial No. 327,594.

NO-DRIP

For Sink Strainers.
Claims use since Apr. 15, 1931.

297,129. (CLASS 2. RECEPTACLES.) WELMAID MANUFACTURING CORPORATION, Chicago, Ill. Filed Apr. 9, 1932. Serial No. 325,962.

SILVER BRITE

For Boxes, Bags, and Rolls Made Partially or Entirely of Fabric for Holding Silverware.
Claims use since Nov. 18, 1929.

TRADE-MARK REGISTRATIONS RENEWED

38,985. COTTON THREADS OR YARNS. Registered October 7, 1902. SUMMIT THREAD COMPANY, East Hampton, Conn., a Corporation of Connecticut. Renewed October 7, 1932.

87,043. A REMEDY FOR CERTAIN DISEASES. Registered June 25, 1912. THE JOHN W. M. CLARK CO., Athol, Mass., a Firm. Renewed June 25, 1932.

87,080. HANDKERCHIEFS AND KERCHIEFS. Registered June 25, 1912. JAMES R. KEISER, INC., New York, N. Y., a Corporation of New York. Renewed June 25, 1932.

87,348. WHEELBARROWS, HAND-TRUCKS, WAREHOUSE-TRUCKS, AND HAND-CARTS. Registered July 9, 1912. LANSING COMPANY, Lansing, Mich., a Corporation of Michigan. Renewed July 9, 1932.

87,349. WAREHOUSE-TRUCKS. Registered July 9, 1912. LANSING COMPANY, Lansing, Mich., a Corporation of Michigan. Renewed July 9, 1932.

87,553. HORSE-COLLARS, HORSE-SADDLES, HORSE-SADDLES, AND FLY-NETS. Registered July 23, 1912. MCINTYRE-BURRALL CO., Green Bay, Wis., a Corporation of Wisconsin. Renewed July 23, 1932.

87,640. OLIVE-OIL. Registered July 30, 1912. ANTONIO MAGNANO. Renewed July 30, 1932, to A. Magnano Company, Seattle, Wash., a Corporation of Washington, successor.

87,761. COAL. Registered August 6, 1912. HOKKAIDO TANKO KISEN (KABUSHIKI) KAISHA, Mororan, Japan. Renewed August 6, 1932, to Hokkaido Tanko Kisen (Kabushiki) Kaisha, Tokio, Japan, a Corporation of Japan.

87,775. CERTAIN MACHINERY PACKING AND TIRES COMPOSED OF RUBBER OR A COMBINATION OF RUBBER AND OTHER MATERIAL. Registered August 6, 1912. LA FAVORITE RUBBER M'F'G., Hawthorne, N. J. Renewed August 6, 1932, to La Favorite Rubber Mfg. Co., Paterson, N. J., a Corporation of New Jersey.

88,112. RUBBER HOSE. Registered August 27, 1912. PRESCOTT & CO., Boston, Mass., a Firm. Renewed August 27, 1932.

88,113. RUBBER HOSE. Registered August 27, 1912. PRESCOTT & CO., Boston, Mass., a Firm. Renewed August 27, 1932.

88,212. CERTAIN ACIDS AND PHARMACEUTICAL PREPARATIONS. Registered September 3, 1912. SOCIÉTÉ CHIMIQUE DES USINES DU RHÔNE, ANCT. GILLIARD, P. MONNET & CARTIER. Renewed September 3, 1932, to Société des Usines Chimiques Rhone-Poulenc, Paris, France, a Corporation of France, by change of name.

88,238. CERTAIN NAMED OILS AND GREASES. Registered September 10, 1912. GEORGE E. BUCK, Palmer and Worcester, Mass. Renewed September 10, 1932, to Tide Water Oil Company, New York, N. Y., a Corporation of New Jersey, assignee by mesne assignments.

88,286. RAZORS. Registered September 10, 1912. J. A. HENCKELS, New York, N. Y., a Corporation of New York. Renewed September 10, 1932.

88,288. RAZORS. Registered September 10, 1912. J. A. HENCKELS, New York, N. Y., a Corporation of New York. Renewed September 10, 1932.

88,373. REMEDY FOR CUTS AND BRUISES. Registered September 10, 1912, to Shigetaro Nao, as assignee of SHINOHARA SEIZI, Tokyo, Japan. Renewed September 10, 1932, to Shigetaro Nao, Menlo Park, Calif., assignee.

88,477. PARCHMENT-TISSUE. Registered September 24, 1912. FRANZ EULER & CO. Renewed September 24, 1932, to Du Pont Cellophane Company, Inc., New York, N. Y., a Corporation of Delaware, assignee.

89,019. LABELING-MACHINES AND PARTS THEREOF. Registered November 5, 1912. ECONOMIC MACHINERY COMPANY. Renewed November 5, 1932, to Economic Machinery Company, Worcester, Mass., a Corporation of Massachusetts, assignee.

89,257. RAZORS. Registered December 3, 1912. J. A. HENCKELS, New York, N. Y., a Corporation of New York. Renewed December 3, 1932.

89,330. MATTRESSES. Registered December 10, 1912. U. S. BEDDING CO., Memphis, Tenn., a Corporation of Georgia. Renewed December 10, 1932.

89,655. DATES. Registered December 31, 1912. WILLIAM HILLS, Jr. Renewed December 31, 1932, to The Hills Brothers Company, New York, N. Y., a Corporation of New York, assignee.

89,688. LIQUID MEDICINES FOR BLOOD DISEASES. Registered December 31, 1912. OKLAHOMA MEDICINE COMPANY, Fort Gibson, Okla. Renewed December 31, 1932, to Ed. Williams, Hulbert, Okla., successor.

89,810. BOILERS, SUPERHEATERS, STOKERS, AND PARTS THEREOF. Registered January 14, 1913. THE BABCOCK & WILCOX COMPANY, Bayonne, N. J. Renewed January 14, 1933, to The Babcock & Wilcox Company, New York, N. Y., a Corporation of New Jersey.

LABELS

REGISTERED AUGUST 30, 1932

41,073.—*Title:* BEECH-NUT BRAND CHEWING GUM. For Chewing Gum. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published May 20, 1931.

41,074.—*Title:* EUGENIE IMPERIAL FRENCH LOTION. For Lotion. FRANK BOYER, Syracuse, N. Y. Published May 1, 1932.

41,075.—*Title:* COOPER'S CREAM AMMONIA. For Ammonia Compound. CHARLES COOPER & COMPANY, Newark, N. J. Published July 27, 1932.

41,076.—*Title:* DAIRYLEA ICE CREAM. For Ice Cream. DAIRYMEN'S LEAGUE CO-OPERATIVE ASSOCIATION, INC., Utica, N. Y. Published July 9, 1932.

41,077.—*Title:* ELECTRO. For Carbonated Beverages. THE ELECTRO-PURE WATER CO., Toledo, Ohio. Published July 12, 1932.

41,078.—*Title:* ESKIMO. For Ice Cream. ESKIMO PIE CORPORATION, Brooklyn, N. Y. Published May 1, 1932.

41,079.—*Title:* NUWAX. For Waxing Sets. JACK FELDMAN, doing business as Felco Products & Mfg. Co., New York, N. Y. Published June 10, 1932.

41,080.—*Title:* RAY-O-VAC RADIO B BATTERY NO. 3303. For Dry Batteries. FRENCH BATTERY COMPANY, Madison, Wis. Published May 18, 1932.

41,081.—*Title:* RAY-O-VAC RADIO B BATTERY NO. 3303. For Dry Batteries. FRENCH BATTERY COMPANY, Madison, Wis. Published May 18, 1932.

41,082.—*Title:* KAHN'S AMERICAN BEAUTY. For Lard. THE E. KAHN'S SONS COMPANY, Cincinnati, Ohio. Published June 1, 1932.

41,083.—*Title:* KAHN'S AMERICAN BEAUTY. For Lard. THE E. KAHN'S SONS COMPANY, Cincinnati, Ohio. Published June 1, 1932.

41,084.—*Title:* FRALINGER'S CREAMY MINT STICKS. For Candy. THEO. J. LAFRESS, INC., Atlantic City, N. J. Published August 8, 1932.

41,085.—*Title:* PENDANT LA NUIT HAIR GROWER. For Preparation for Use on the Hair and Scalp. PEARL MACDONALD, New York, N. Y. Published June 1, 1932.

41,086.—*Title:* PENDANT LA NUIT GLOSSINE. For Preparation for Use on the Hair. PEARL MACDONALD, New York, N. Y. Published June 1, 1932.

41,087.—*Title:* MCCAULEY'S. For Cigars. J. J. MCCAULEY & SON, Uhrichsville, Ohio. Published May 18, 1932.

41,088.—*Title:* SAMOSA TEA. For Tea. HOWARD L. MCWADE, doing business as The Samosa Tea Company, Rochester, N. Y. Published December 12, 1931.

41,089.—*Title:* NYECO BRAND. For Fountain Syrups. NEW YORK EXTRACT CO., INC., Philadelphia, Pa. Published April 15, 1932.

41,090.—*Title:* FOR COMPLEXION AND BATH; LOOFLEUR, THE LOOF-A-HIT. For Sponges. THE ORIGINAL LOOFAH COMPANY, New York, N. Y. Published April 25, 1932.

41,091.—*Title:* CATARRH REMEDY. For Medicine for the Treatment of Catarrh, Colds, and Asthma. PARKER & HASSELL, San Francisco, Calif. Published May 27, 1932.

41,092.—*Title:* PROTECTURE COAT SHIELDS. For Cloth Shields. PROTECTURE SHIELDS, Chicago, Ill. Published April 22, 1932.

41,093.—*Title:* OLD PRAGUE. For Malt Syrup. RIVERSIDE PRODUCTS COMPANY, Cincinnati, Ohio. Published July 22, 1932.

41,094.—*Title:* FLORIDIAN. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,095.—*Title:* THE MARYLAND. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,096.—*Title:* THE 20TH CENTURY. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,097.—*Title:* THE GOLDEN GATE. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,098.—*Title:* THE CAPITOL. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,099.—*Title:* THE LIBERTY. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,100.—*Title:* THE DIXIE. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,101.—*Title:* THE DETROITER. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,102.—*Title:* THE CLEVELANDER. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,103.—*Title:* THE LONE STAR STATE. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,104.—*Title:* THE NEW YORKER. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,105.—*Title:* THE ALLEGHENY. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,106.—*Title:* R S L. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,107.—*Title:* THE MISSOURIAN. For Eggs. RUSSELL BOX COMPANY, Medford, Mass. Published February 2, 1932.

41,108.—*Title:* 20TH CENTURY. For Mustard. SUN-RA PRODUCTS COMPANY, St. Joseph, Mo. Published May 20, 1932.

41,109.—*Title:* COFFEE. For Coffee. UNION BAG & PAPER CORPORATION, New York, N. Y. Published June 25, 1932.

41,110.—*Title:* UNION SOLVENT SOAP. For Solvent Soap. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published April 12, 1932.

41,111.—*Title:* MOTOR OIL. For Motor Oil. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published May 1, 1932.

41,112.—*Title:* WONDER GLO. For Cleaner and Water Softener. WONDER PRODUCTS, Canton, Ohio. Published June 13, 1932.

PRINTS

REGISTERED AUGUST 30, 1932

13,882.—*Title:* BRIONARA WOOLENS. For Woolens. AMERICAN WOOLEN COMPANY, INC., New York, N. Y. Published May 23, 1932.

13,883.—*Title:* NUWAX. For Waxing Sets. JACK FELDMAN, doing business as Felco Products & Mfg. Co., New York, N. Y. Published June 15, 1932.

13,884.—*Title:* YOU'LL NEVER GET ANY SAD SURPRISES IN HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published February 5, 1932.

13,885.—*Title:* A CUPFUL OF HILLS BROS COFFEE PROVES THAT CONTROLLED ROASTING MAKES A FINER FLAVOR. For Coffee. HILLS BROS., San Francisco, Calif. Published March 4, 1932.

13,886.—*Title:* PIONEER AMERICAN SOLUTIONS FOR VARICOSE VEIN INJECTIONS. For Intravenous Solutions. INVERTOSE LABORATORIES, Minneapolis, Minn. Published June 22, 1932.

13,887.—*Title:* MO-VIS OIL COMPANY. For Lubricating Oil. MO-VIS OIL CO., Atlanta, Ga. Published March 30, 1932.

13,888.—*Title:* PHILO BRAND. For Ferro-Alloys. OHIO FERRO-ALLOYS CORPORATION, Canton, Ohio. Published November 19, 1931.

13,889.—*Title:* MASTER PAINTER'S TEXTURAL PAINT. For Textural Wall Paint. PAINT-POINT PRODUCTS CO., Brooklyn, N. Y. Published May 17, 1932.

13,890.—*Title:* BITES AND STINGS PHENOLIZED CAMPHOR. For Antiseptic Dressing Made from Phenol, Camphor and a Neutral Hydrocarbon Oil. HARRY BRADLEE PRUDEN, Orlando, Fla. Published July 11, 1932.

13,891.—*Title:* RATIONALIZATION IN CONTRACEPTION. For Surgical Instruments and Surgical Supplies. DR. M. SILVER, doing business as Gynae Research Laboratories, New York, N. Y. Published June 24, 1932.

13,892.—*Title:* THE "MERCURY PROCESS" DID IT. For Motor Oil. SUN OIL COMPANY, Philadelphia, Pa. Published May 3, 1932.

13,893.—*Title:* KEEP YOUR TRACTOR RUNNING ON LESS MONEY. For Motor Oil. SUN OIL COMPANY, Philadelphia, Pa. Published May 26, 1932.

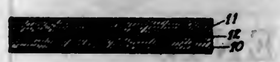
13,894.—*Title:* SUNOCO MOTOR OIL LUBRICATION CHART. For Motor Oil. SUN OIL COMPANY, Philadelphia, Pa. Published July 6, 1931.

13,895.—*Title:* NEW VISKING CASING "EASY AS PEELING A BANANA." For Sausage Sold in Casings. THE VISKING CORPORATION, Chicago, Ill. Published May 10, 1932.

REISSUES

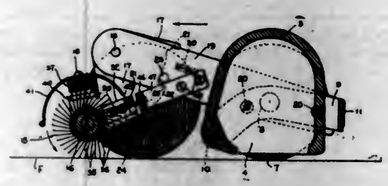
AUGUST 30, 1932

18,582. FLOOR COVERING. JOHN B. CAMPBELL, Salem, N. J., assignor, by mesne assignments, to Carthage Mills, Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Original No. 1,766,879, dated June 24, 1930, Serial No. 74,476, filed Dec. 10, 1925. Application for reissue filed June 14, 1932. Serial No. 617,234. 10 Claims. (Cl. 154—2.)



7. A carpet floor covering comprising a weighted base and an unweighted, felted fiber covering associated therewith, whereby the latter will resemble the exposed surface of woven carpet and the base will impart weight and flexibility to the floor covering.

18,583. APPARATUS FOR CLEANING AND CONDITIONING FABRICS. MORTIMER F. FLYNN, Grant City, N. Y. Original application filed Apr. 26, 1928, Serial No. 272,967. Renewed July 25, 1931. Original No. 1,847,870, dated Mar. 1, 1932. Application for reissue filed June 30, 1932. Serial No. 620,218. 10 Claims. (Cl. 15—158.)



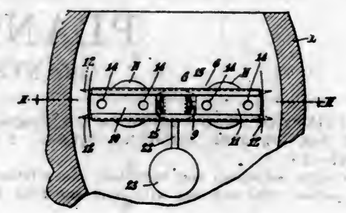
7. In combination with cleaning apparatus, a fabric conditioning roll arranged to contact with a fabric in advance of the cleaning apparatus in the active direction of movement and comprising a multiplicity of burred bristles engaging the fabric to open and restore the surface structure thereof and increase the effectiveness of the cleaning action.

18,584. METHOD OF TRANSFERRING DYESTUFFS TO FABRICS AND POROUS SURFACES. HELENA S. SADTLER, Erdenheim, Pa. Original No. 1,651,470, dated Dec. 6, 1927, Serial No. 165,755, filed Feb. 3, 1927. Application for reissue filed Dec. 31, 1928. Serial No. 329,658. 9 Claims. (Cl. 41—33.)

1. A transfer sheet comprising a base having printed thereon a design in water soluble ink and a coating of mucilaginous powder swelled by but not soluble in cold water and adhering to the design and partially absorbed by it.

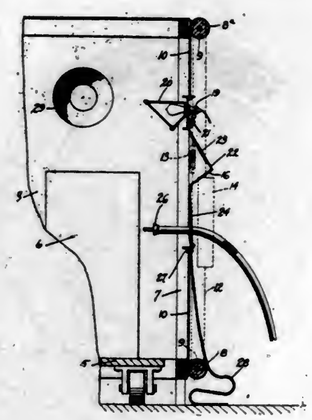
18,585. EYE SET. ALEXANDER KONOFF, New York, N. Y., assignor, by mesne assignments, to Margon Corporation, New York, N. Y., a Corporation of New York. Original No. 1,621,072, dated Mar. 15, 1927, Serial No. 95,198, filed Mar. 17, 1926. Application for reissue filed Oct. 12, 1927. Serial No. 225,825. 27 Claims. (Cl. 46—40.)

4. An eye set comprising a pair of eyes and a supporting carrier therefor upon which the eyes are movably supported, a cross rod extending between and connecting the eyes, means comprised in the carrier serving to pivotally support the cross rods and eyes and to resiliently urge said cross rod and eyes in a direction away from the carrier, the carrier comprising an elongated member



extending longitudinally substantially parallel with the cross rod in position rearwardly of the cross rod, and means by which the carrier may be connected by its opposite ends with opposite portions of a doll head at points adjacent the respective eyes.

18,586. SAND BLAST CURTAIN. RICHARD RUEMELIN, Milwaukee, Wis. Original No. 1,676,576, dated July 10, 1928, Serial No. 713,801, filed May 16, 1924. Application for reissue filed May 16, 1932. Serial No. 611,737. 20 Claims. (Cl. 51—8.)

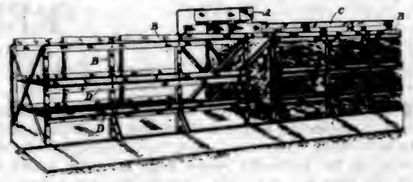


5. The combination with a cabinet adapted to contain an article having a face to receive a sand blast, of means

mounted for adjustment opposite the work and including an apron having slits therein through which a sand blast nozzle may be inserted.

18,587. MANUFACTURE OF NITROGENOUS FERTILIZERS AND THE UTILIZATION OF NITROGEN-BEARING SOLUTIONS. ERIC HANNAFORD RICHARDS, Harpenden, and HENRY BROUGHAM HUTCHINSON, Epsom, England, assignors to Adco Limited, Harpenden, England, a British Company. Original No. 1,471,979, dated Oct. 23, 1923, Serial No. 491,774, filed Aug. 12, 1921. Application for reissue filed Feb. 10, 1931. Serial No. 514,879. 6 Claims. (Cl. 71—6.)

2. The process for producing a fertilizer in the form of an hydrated organic agglomerate containing available nitrogen in insoluble organic combination, which comprises contacting activated carbohydrate-containing material under aerobic conditions for an extended time, with



a solution of ammoniacal nitrogen in the proportion of 7 to 10 parts of nitrogen to 1,000 parts of dry carbohydrate-containing material.

PLANT PATENTS

GRANTED AUGUST 30, 1932

24. VARIETY OF PLANT. WILLIAM SIM, Saugus, Mass. Filed Jan. 28, 1931, Serial No. 511,885. 1 Claim. (Cl. 47—1.)

A carnation as shown and described, characterized by a bronzy yellow color suffused with pink and with a white edge.

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25. HYBRID TEA ROSE. WALLACE R. PIERSON, Cromwell, Conn. Filed Nov. 30, 1931, Serial No. 578,171. 1 Claim. (Cl. 47—1.)

A variety of rose as herein shown and described, characterized chiefly by its golden yellow color, full petalage, stems free of spines and thorns, and semi-glossy leaves.

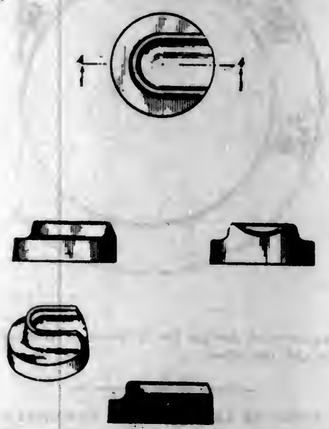
26. STRAWBERRY. BERT W. KEITH and BUD H. KEITH, Sawyer, Mich. Filed Sept. 3, 1931, Serial No. 560,919½. 1 Claim. (Cl. 47—1.)

The strawberry herein shown and described, characterized by its conic to large conic shape, its firmness, and its fine canning qualities.

DESIGNS

AUGUST 30, 1932

87,660. FINGER REST. MARSHALL T. BREKKE, Scarsdale, N. Y., assignor to Northam Warren Corporation, New York, N. Y., a Corporation of New York. Filed May 17, 1932. Serial No. 43,880. Term of patent 14 years.



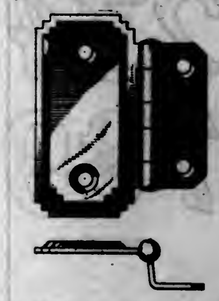
The ornamental design for a finger rest substantially as shown.

87,661. MEDALLION. BENJAMIN COHN, Hartford, Conn. Filed Dec. 9, 1931. Serial No. 42,011. Term of patent 3½ years.



The ornamental design for a medallion, as shown and described.

87,662. HINGE FOR DOORS OR OTHER CLOSURES. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois. Filed July 21, 1932. Serial No. 44,386. Term of patent 14 years.



The ornamental design for a hinge for doors or other closures, as shown.

87,663. TOY BALLOON. WILLIAM E. GARDNER, Watertown, Mass., assignor to Gardner Toy Company, Inc., Watertown, Mass., a Corporation of Massachusetts. Filed June 20, 1932. Serial No. 44,143. Term of patent 7 years.



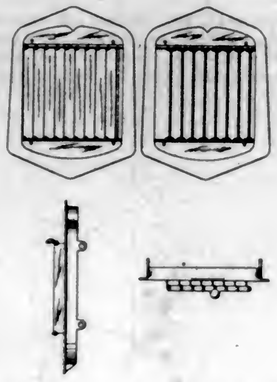
The ornamental design for a toy balloon as shown.

87,664. PLATE OR SIMILAR ARTICLE. WILLIAM T. JOHNSON, New Brighton, Pa., assignor to Mayer China Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed July 12, 1932. Serial No. 44,313. Term of patent 14 years.



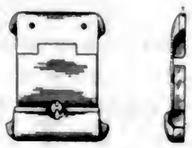
The ornamental design for a plate or similar article, as shown and described.

87,665. COMBINED RADIATOR SHELL AND DEFLECTOR. BENJAMIN KIRSCH, Chicago, Ill., assignor to Auto Radiator Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 31, 1932. Serial No. 43,942. Term of patent 7 years.



The ornamental design for a combined radiator shell and deflector, substantially as shown.

87,666. LOCK FRAME. MITCHELL LEVENTHAL, Brooklyn, N. Y. Filed Mar. 2, 1932. Serial No. 43,052. Term of patent 3½ years.



The ornamental design for a lock frame as shown.

87,667. STOVE PEDESTAL. CHARLES RAY LOVEJOY, Jamestown, N. Y. Filed June 8, 1932. Serial No. 44,018. Term of patent 14 years.



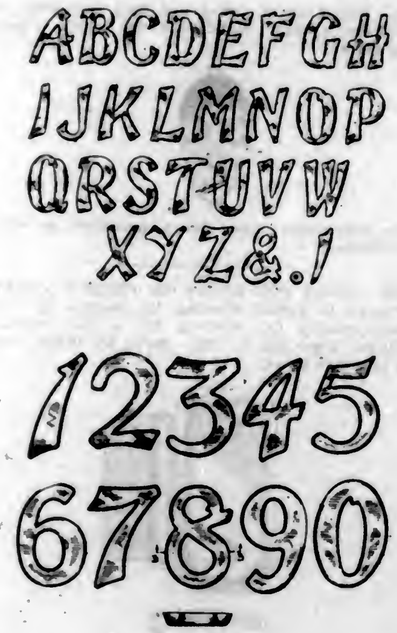
The ornamental design for a stove pedestal, as shown.

87,668. PLATE OR SIMILAR ARTICLE. RANDOLPH E. LUKENS, Syracuse, N. Y., assignor to Mayer China Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed July 12, 1932. Serial No. 44,314. Term of patent 14 years.



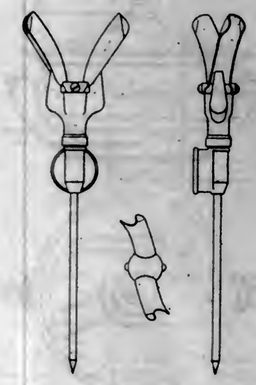
The ornamental design for a plate or similar article, as shown and described.

87,669. FONT OF LETTERS AND NUMERALS. LOUIS A. MACKLANBURG, Oklahoma City, Okla. Filed May 20, 1930. Serial No. 85,703. Term of patent 14 years.



The ornamental design for a font of letters and numerals as shown.

87,670. LAWN SPRINKLER. MICHAEL W. MCARDLE, Chicago, Ill. Filed May 27, 1932. Serial No. 43,913. Term of patent 14 years.



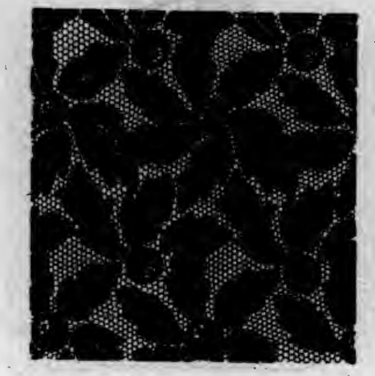
The ornamental design for a lawn sprinkler, substantially as shown.

87,671. TIRE COVER. THOMAS J. MCCORMICK and ROBERT E. LINN, Detroit, Mich.; said Linn assignor to said McCormick. Filed Feb. 15, 1932. Serial No. 42,881. Term of patent 14 years.



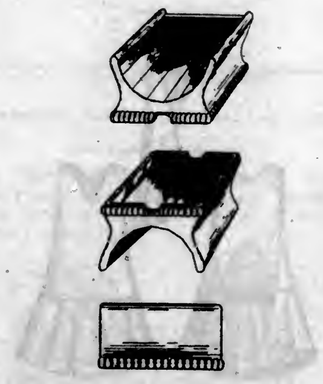
The ornamental design for a tire cover, substantially as shown and described.

87,672. LACE. CHARLES B. J. MOLITOR, Forest Hills, N. Y., assignor to Thomas Wilson & Co. Inc., New York, N. Y. Filed July 8, 1932. Serial No. 44,278. Term of patent 3½ years.



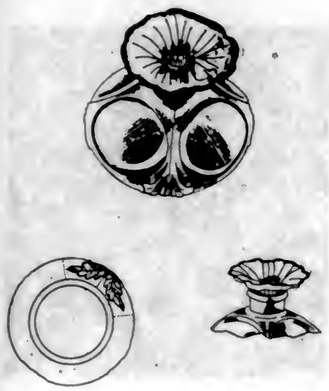
The ornamental design for lace, substantially as shown.

87,673. COMBINED RAZOR BLADE SHARPENER AND ASH TRAY. FRANK E. MONTGOMERY, Los Angeles, Calif. Filed June 13, 1932. Serial No. 44,059. Term of patent 7 years.



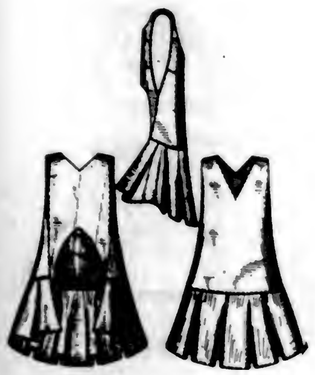
The ornamental design for a combined razor blade sharpener and ash tray, as shown.

87,674. BOTTLE. MARY H. MULLEN, Brigantine, N. J. Filed July 28, 1931. Serial No. 40,706. Term of patent 7 years.



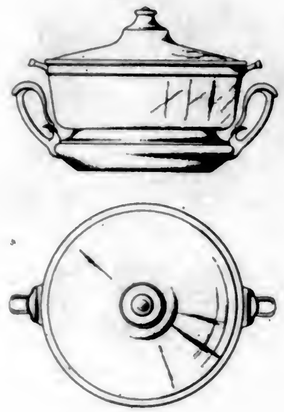
The ornamental design for a bottle, as shown.

87,675. APRON. FLORANCE MURRALL, Mayfield, N. Y. Filed Aug. 8, 1931. Serial No. 40,802. Term of patent 7 years.



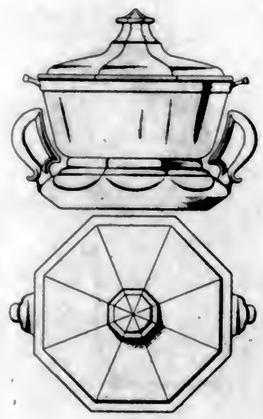
The ornamental design for an apron as shown.

87,676. COMBINATION COOKING AND SERVING DISH. FREDERICK J. OSIUS, Miami, Fla. Filed June 4, 1932. Serial No. 43,976. Term of patent 14 years.



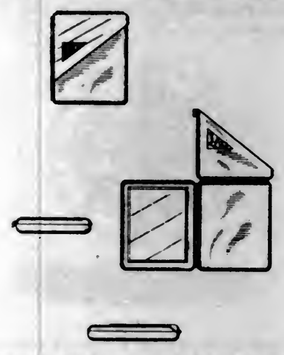
The ornamental design for a combination cooking and serving dish, as shown.

87,677. COMBINATION COOKING AND SERVING DISH. FREDERICK J. OSIUS, Miami, Fla. Filed June 4, 1932. Serial No. 43,977. Term of patent 14 years.



The ornamental design for a combination cooking and serving dish, as shown.

87,678. VANITY CASE OR ANALOGOUS ARTICLE. NATHAN OTTINGER, New York, N. Y. Filed June 1, 1932. Serial No. 43,954. Term of patent 14 years.



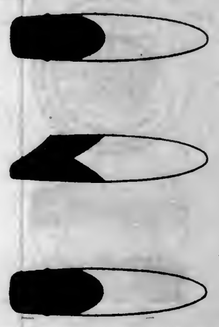
The ornamental design for a vanity case or analogous article as shown.

87,679. LACE. SAMUEL H. PAGE, Stratford, Conn., assignor to The American Fabrics Co., Bridgeport, Conn. Filed June 24, 1932. Serial No. 44,174. Term of patent 7 years.



The ornamental design for lace, substantially as shown.

87,680. FISHING LURE. JOHN B. PAGIN, South Bend, Ind. Filed Nov. 13, 1931. Serial No. 41,712. Term of patent 14 years.



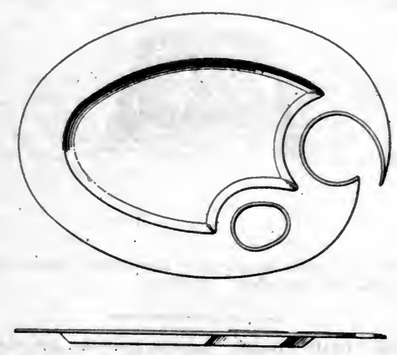
The ornamental design for a fishing lure as shown and described.

87,681. GLASS JAR. FRED J. PETTY, Muncie, Ind., assignor to Ball Brothers Company, Muncie, Ind., a Corporation of Indiana. Filed June 24, 1932. Serial No. 44,188. Term of patent 3½ years.



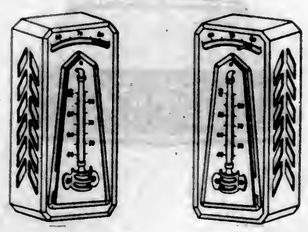
The ornamental design for a glass jar, as shown.

87,682. SERVING TRAY. ALEXANDER W. PORTER, Atlantic City, N. J. Filed July 7, 1932. Serial No. 44,274. Term of patent 14 years.



The ornamental design for a serving tray as shown.

87,683. ROOM THERMOSTAT COVER. LEWIS J. SCHANZ, Chicago, Ill., assignor to Ira E. McCabe, Chicago, Ill. Filed Jan. 6, 1932. Serial No. 42,385. Term of patent 7 years.



The ornamental design for a room thermostat cover substantially as shown.

87,684. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 1, 1932. Serial No. 44,231. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

87,685. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 1, 1932. Serial No. 44,232. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

87,686. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 1, 1932. Serial No. 44,233. Term of patent 3½ years.



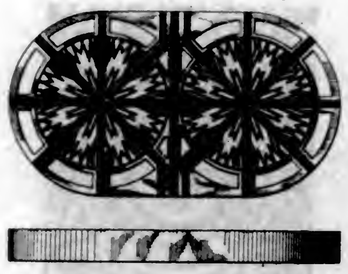
The ornamental design for a lamp shade, substantially as shown and described.

87,687. RECEIVER CASE FOR ACOUSTIC DEVICES. JOSEPH SINEL, New York, N. Y., assignor to Dictograph Products Co., Inc., New York, N. Y., a Corporation of Delaware. Filed July 2, 1932. Serial No. 44,245. Term of patent 7 years.



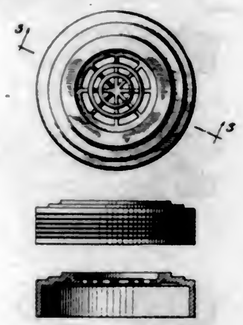
The ornamental design for a receiver case for acoustic devices, as shown.

87,688. RECEIVER CASE FOR ACOUSTIC DEVICES. JOSEPH SINEL, New York, N. Y., assignor to Dictograph Products Co., Inc., New York, N. Y., a Corporation of Delaware. Filed July 2, 1932. Serial No. 44,246. Term of patent 7 years.



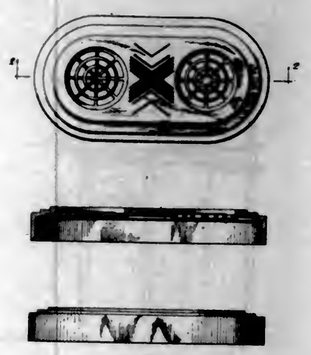
The ornamental design for a receiver case for acoustic devices, as shown.

87,689. RECEIVER CASE FOR ACOUSTIC DEVICES. JOSEPH SINEL, New York, N. Y., assignor to Dictograph Products Co., Inc., New York, N. Y., a Corporation of Delaware. Filed July 2, 1932. Serial No. 44,247. Term of patent 7 years.



The ornamental design for a receiver case for acoustic devices, as shown.

87,690. RECEIVER CASE FOR ACOUSTIC DEVICES. JOSEPH SINEL, New York, N. Y., assignor to Dictograph Products Co., Inc., New York, N. Y., a Corporation of Delaware. Filed July 2, 1932. Serial No. 44,248. Term of patent 7 years.



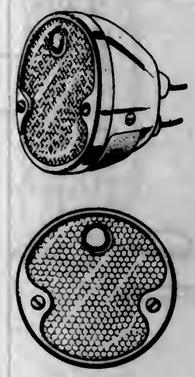
The ornamental design for a receiver case for acoustic devices, as shown.

87,691. CLUSTER FOR RING OR PENDANT. MILTON W. STERN, New York, N. Y., assignor to Stern & Stern, Inc., New York, N. Y., a Corporation of New York. Filed June 28, 1932. Serial No. 44,208. Term of patent 7 years.



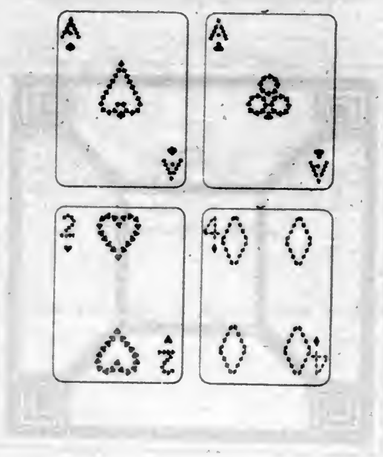
The ornamental design for a cluster for ring or pendant, as shown.

87,692. AUTOMOBILE SIGNAL LAMP. JONATHAN C. STIMSON, Chicago, Ill. Filed Apr. 28, 1932. Serial No. 43,585. Term of patent 7 years.



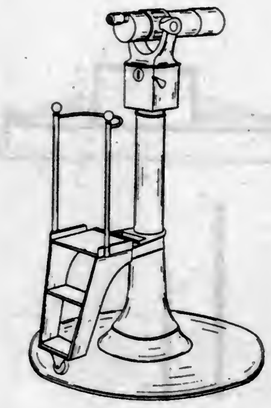
The ornamental design for an automobile signal lamp substantially as shown and described.

87,693. PACK OF PLAYING CARDS. ALBERT G. THOMAS, Lynchburg, Va. Filed July 5, 1932. Serial No. 44,257. Term of patent 7 years.



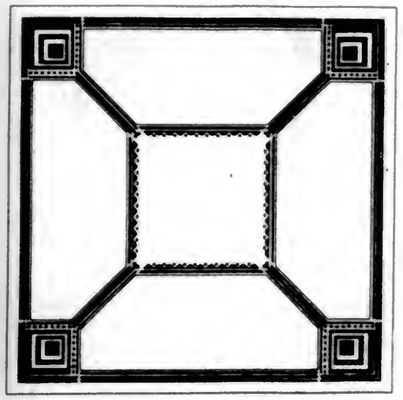
The ornamental design for a pack of playing cards as shown and described.

87,694. COMBINATION TELESCOPE, STAND, AND OBSERVATION PLATFORM THEREFOR. OTTO E. TRAUTMANN, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 21, 1932. Serial No. 42,579. Term of patent 7 years.



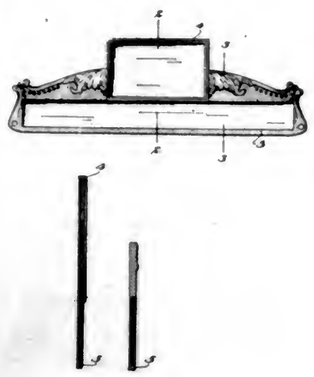
The ornamental design for a combination telescope, stand and observation platform therefor, substantially as shown.

87,695. CARD TABLE COVER. GILBERT C. WATERS, Jr., Rochester, N. Y., assignor to H. F. Morris Corporation, Rochester, N. Y., a Corporation of New York. Filed June 29, 1932. Serial No. 44,217. Term of patent 7 years.



The ornamental design for a card table cover substantially as shown.

87,696. CARD HOLDER FOR AUTOMOBILE RADIATOR FRONTS. WILLIAM WEIS, Perham, Minn. Filed June 13, 1932. Serial No. 44,066. Term of patent 7 years.



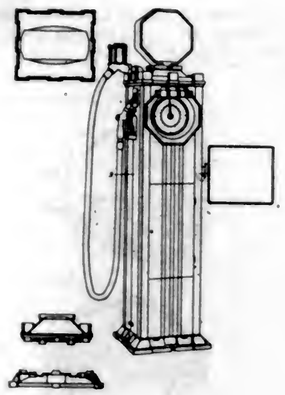
The ornamental design for a card holder for automobile radiator fronts as shown and described.

87,697. DESK. CLARENCE W. WHITE, North Bennington, Vt., assignor to H. C. White Company, North Bennington, Vt., a Corporation. Filed Nov. 20, 1931. Serial No. 41,790. Term of patent 7 years.



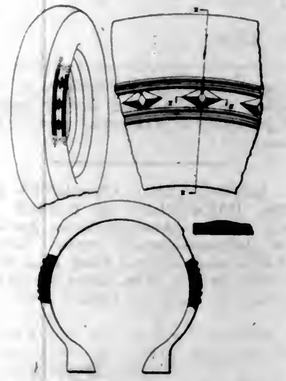
The ornamental design for a desk as shown and described.

87,698. LIQUID DISPENSING PUMP. HARLEY H. WOLFE, Dayton, Ohio, assignor to The Dayton Pump & Mfg. Company, Dayton, Ohio, a Corporation of Ohio. Filed May 12, 1932. Serial No. 43,777. Term of patent 7 years.



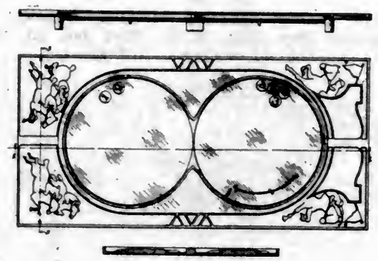
The ornamental design for a liquid dispensing pump as shown.

87,699. TIRE. JAMES N. WYANT, Akron, Ohio. Filed June 10, 1932. Serial No. 44,051. Term of patent 14 years.



The ornamental design for a tire, as shown.

87,700. GAME BOARD. ARCHIE H. BECHTOL, Daytona Beach, Fla., and WALTER A. TRATSCH, Chicago, Ill. Filed June 8, 1932. Serial No. 44,021. Term of patent 14 years.

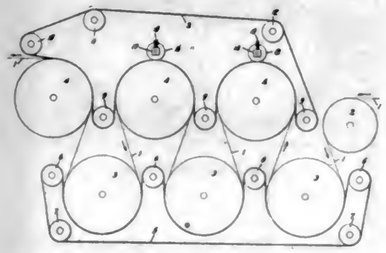


The ornamental design for a game board as shown.

PATENTS

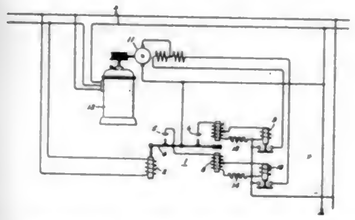
GRANTED AUGUST 30, 1932

1,873,949. PAPER DRYING MEANS. HARRISON R. WILLIAMS, New York, N. Y. Filed Jan. 29, 1930. Serial No. 424,145. 2 Claims. (Cl. 34—48.)



1. In a drier for paper-making machines, the combination with a heated cylinder around a portion of which passes a moist paper web, of a traveling belt engaging the outer surface of the paper web where it is supported by the cylinder, said belt having a water impervious and heat insulating web-engaging surface to insulate the portion of the web between the cylinder and the belt, thereby increasing the heating effect of the cylinder.

1,873,950. ELECTRICAL RELAY. FRED H. WINTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 25, 1931. Serial No. 553,134. 9 Claims. (Cl. 171—119.)



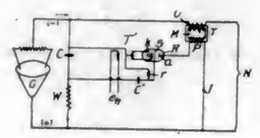
1. In combination, a relay having relatively movable cooperating contacts, a holding coil adapted to hold said contacts in firm engagement when it is energized, and variable electrical impedance means for giving said coil a tapering energization which is initially strong.

1,873,951. POLARIZERS OF LIGHT AND A METHOD OF PREPARATION. HANS ZOCHER, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Nov. 10, 1925. Serial No. 68,233. 9 Claims. (Cl. 88—14.)



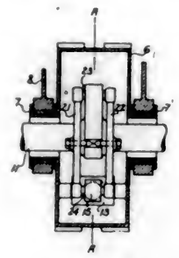
1. An article of manufacture, a medium comprising a transparent support, and a layer thereon of a substance the particles of which are arranged to a predominant extent parallel to one another thereby being rendered capable of polarizing a substantial part of light transmitted thereby.

1,873,952. METHOD AND APPARATUS FOR SUPPRESSING HARMONICS IN DIRECT CURRENT SYSTEMS. EDOUARD AUBORT, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Mar. 3, 1926, Serial No. 91,856, and in Germany Mar. 5, 1925. 15 Claims. (Cl. 178—44.)



11. Apparatus for counteracting harmonics in the output of rectifiers, comprising an impedance element effective on the output circuit, means for energizing said impedance element, and a valve for limiting flow of the direct component of the rectifier current across said output circuit and for controlling energization of said element, said valve having its action variable by the harmonic voltage.

1,873,953. COUPLING. JACOB BUCHLI, Winterthur, Switzerland. Filed Aug. 24, 1931, Serial No. 559,032, and in Germany Aug. 18, 1930. 4 Claims. (Cl. 64—95.)

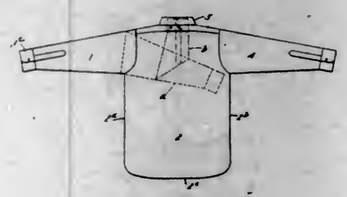


1. In a coupling for rotating elements, a hollow gear, a shaft extending through said gear and spaced therefrom, said shaft being movable in all directions relative to said gear, engaging gear segments carried by said gear interiorly thereof, a crank secured upon said shaft interiorly of said gear, and rods connecting said gear segments and said crank.

1,873,954. FOLDED SHIRT AND METHOD OF FOLDING SAME FOR DISPLAY PURPOSES. HYMAN COOPER, Linden, N. J. Filed Feb. 4, 1932. Serial No. 590,889. 3 Claims. (Cl. 223—15.)

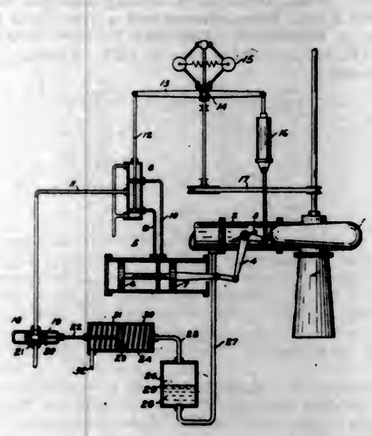
1. An article of manufacture comprising a folded shirt having one sleeve and one side portion folded against

the back portion of the shirt and having the opposite side portion folded against the back portion of the shirt and adjacent the first mentioned side portion, the other



sleeve being folded back over said opposite side portion, around the folded edge thereof and disposed diagonally across the bosom of the shirt.

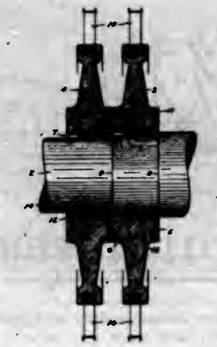
1,873,955. FLUID CONTROL SYSTEM. WILLIAM P. CREAGER, Watertown, N. Y., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed July 13, 1929. Serial No. 377,970. 24 Claims. (Cl. 137—158.)



1. In combination, a conduit for liquid, a gate in said conduit, means for operating said gate, means for controlling said operating means to operate said gate at a predetermined maximum speed, and means responsive to pressure in said conduit for causing said controlling means to control the speed of said gate inversely in accordance with increase in pressure above normal.

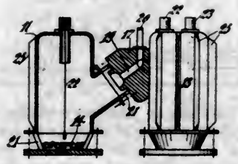
1,873,956. ROTOR STRUCTURE. HANS P. DAHLSTRAND, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 5, 1930. Serial No. 449,780. 11 Claims. (Cl. 287—52.)

1. In combination, a supporting shaft a relatively flexible ring element having one portion rigidly associated with said shaft and having an abutment surface remote from said shaft and facing the same, and a relatively stiff



and heavy ring member positively connected directly to said shaft independently of said ring element and engaging said surface.

1,873,957. METAL VAPOR ARC RECTIFIER. JOHN EGLI, Camden, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 17, 1926. Serial No. 148,873. 9 Claims. (Cl. 175—363.)



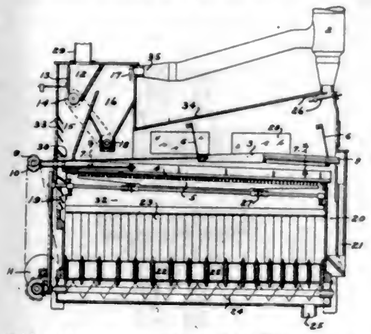
5. In current-rectifying apparatus, a plurality of current-rectifying units comprising the same, electrode means associated with and common to said units, the said electrode means comprising means providing for fluid-evacuation of the said units by way of said electrode means.

8. In current-rectifying apparatus, a plurality of current-rectifying units comprising the same and positioned in such wise with respect to themselves as to constitute a group of such units, and means disposed substantially centrally of such group and being common with respect to said units and comprising an operating electrode for each of the same.

1,873,958. PURIFIER. JAMES FORREST, Milwaukee, and ASBURY C. BRENCHLEY, West Allis, Wis., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 2, 1930. Serial No. 449,134. 2 Claims. (Cl. 209—29.)

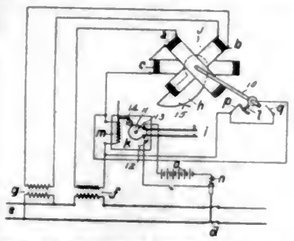
1. In a purifier, a casing having an inlet for material to be purified in an end portion thereof, a movable screen mounted in said casing, a movable series of troughs mounted over said screen adjacent the casing end remote from said inlet, said casing having a space above said screen that is isolated from said inlet and of increasing area ex-

tending from a point adjacent said inlet toward the casing end opposite said inlet, and means for producing a flow of gaseous fluid through said screen and a flow past said



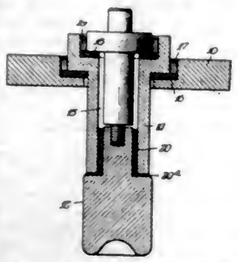
inlet, said means communicating with said inlet and communicating with said space at a point in said casing remote from said inlet.

1,873,959. OVERLOAD PROTECTIVE SYSTEM WITH RESISTANCE OPERATED RELAY. ERNST HERMANN FREY, Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Filed Dec. 12, 1924, Serial No. 755,581, and in Germany Dec. 15, 1923. 9 Claims. (Cl. 175—294.)



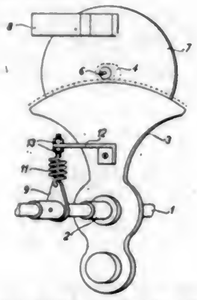
1. A selectively acting protective device incuding a resistance dependent relay and a delay action relay characterized by the fact that the resistance dependent relay both sets into operation and regulates the time lag of the delayed action relay.

1,783,960. INTERNAL SEAL FOR MERCURY VAPOR RECTIFIERS. ARTHUR GAUDENZI, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed May 8, 1926, Serial No. 107,575, and in Germany May 11, 1925. 2 Claims. (Cl. 176—50.)



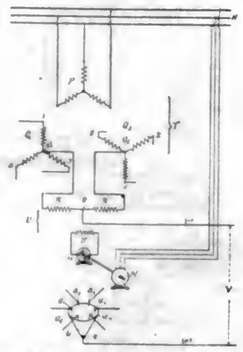
1. In a mercury vapor rectifier, the combination with an electrode and insulator associated therewith and spaced therefrom, of a body of carbon segregating the space between said electrode and insulator from the rectifier chamber.

1,873,961. ELECTRIC REGULATOR. HEINRICH GUTTINGER, Wettingen, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Mar. 13, 1930, Serial No. 435,416, and in Germany Mar. 25, 1929. 2 Claims. (Cl. 171—229.)



1. An electric regulating apparatus having a shaft, a recall device comprising a sector gear rotatably mounted on the shaft of the regulating apparatus, a magnetic damping device engaging said sector gear, an arm mounted on the shaft of the regulating apparatus and rotatable therewith, and a spring connecting said sector gear with said arm.

1,873,962. RECTIFICATION OF ELECTRIC CURRENT. JULIUS JONAS, Baden, Switzerland, and SIGURD RUMP, Boston, Mass., assignors to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed May 19, 1926, Serial No. 110,127, and in Germany June 20, 1925. 4 Claims. (Cl. 175—363.)

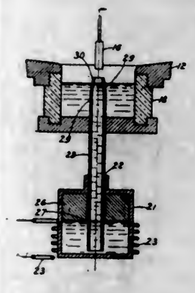


2. In a current-rectifying system of the character described, metallic vapour rectifier apparatus having anodes, a polyphase transformer secondary winding supplying said anodes, an auxiliary transformer having a secondary winding connected to said first-named secondary winding, a connection constituting the negative side of a D. C. system and connected to said second-named secondary winding, and a synchronous generator for energizing said auxiliary transformer.

1,873,963. APPARATUS FOR THE IGNITION OF MERCURY VAPOR RECTIFIERS. JULIUS JONAS, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden Switzerland, a Joint Stock Company of Switzerland. Filed Aug. 1, 1928, Serial No. 296 698, and in Germany Aug. 8, 1927. 6 Claims. (Cl. 250—27.5.)

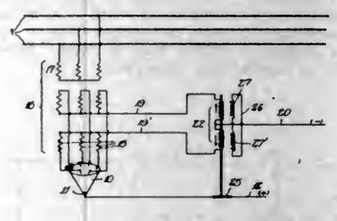
1. In an igniting device for mercury-arc rectifiers, a rectifier, means for enclosing a body of mercury, said

means having a discharge orifice and refilling apertures, an anode adjacent the discharge orifice of said enclosing



means, a floating plunger within said enclosing means for producing pressure to expel mercury into contact with said anode.

1,873,964. RECTIFIER ISOLATING APPARATUS. ERWIN KERN, Wettingen, near Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company. Filed Nov. 10, 1926, Serial No. 147,479, and in Germany Nov. 27, 1925. 7 Claims. (Cl. 175—363.)

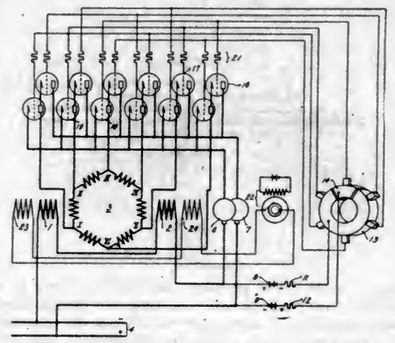


1. Apparatus of the class described comprising, in combination, a supply line, a rectifier for supplying said line and having anode circuits arranged for symmetrical current flow, a cut-out switch for disconnecting the rectifier from the line, and switch-controlling solenoid coils developing mutually counterbalancing magneto-motive forces under excitation of the symmetrical currents in the anode circuits.

7. In apparatus of the class described, in combination, a rectifier, a polyphase supply transformer therefor having its phases distributed in two groups with symmetrical current characteristics, an electro-magnet winding having a portion in series with each group, protective gear operable by the electro-magnet winding, and means operable to neutralize flow of harmonic currents between the phase groups.

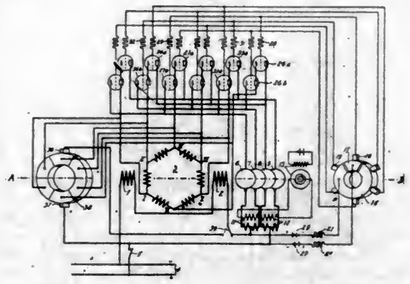
1,873,965. APPARATUS FOR COMMUTATING CURRENTS IN POLYPHASE WINDINGS. ERWIN KERN, Wettingen, near Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Filed Aug. 26, 1929, Serial No. 388,571, and in Germany Aug. 31, 1928. 4 Claims. (Cl. 171—228.)

1. In a motor structure for commutating direct-current, an armature winding divided into a plurality of connected sections, field windings arranged adjacent said armature winding, a source of direct current connected directly with one of said field windings, electric valves connected between the sections of said armature windings, a plurality of sliprings connected with said source of direct current and with said valves, a commutator structure connected with said valves, means for impressing different potentials on different sections of said commutator to control said valves, a source of alternating



current, and means coupled with said armature and said field windings for impressing a current thereon from said alternating current source.

1,873,966. DIRECT CURRENT MOTOR CONTROL SYSTEM. ERWIN KERN, Wettingen, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Filed Jan. 28, 1930, Serial No. 424,056, and in Germany Jan. 28, 1929. 4 Claims. (Cl. 172—228.)

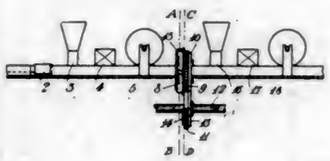


1. In a system for commutating the current supplied to a direct current motor, a motor having an armature winding divided into a plurality of connected sections arranged upon a shaft and field windings arranged adjacent the armature winding, a source of direct current supply, electric valves connected between the sections of the armature winding to commutate the current supplied thereto during full speed operation of said motor; means for controlling the operation of said valves, means for commutating the current supplied to the said armature winding during starting operation of said motor, and a switch to connect said current source with said valves and with said commutating means.

1,873,967. MEANS FOR APPLYING LABELS OR THE LIKE UPON TWO OR MORE SIDES OF BOXES, PARTICULARLY MATCH BOXES. GEORG MARTIN KLUTE, Ostre Aker, Norway, assignor to Aktiebolaget Siefvert & Fornander, Kalmar, Sweden. Filed Feb. 8, 1930, Serial No. 426,870, and in Sweden Feb. 5, 1929. 5 Claims. (Cl. 216—37.)

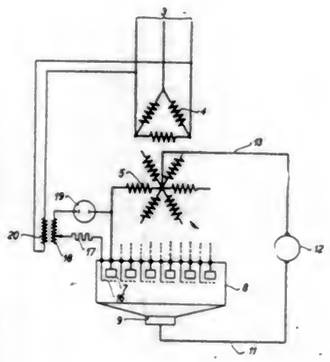
1. A device for attaching labels to two sides at least of boxes, particularly match boxes, comprising a number of machines for single labeling corresponding to the

number of sides to be labelled, which are combined to operate in series, and means to receive the boxes discharged from one machine, turn them to the position required for



labeling in the next machine, and deliver them to said next machine, each of said machines for single labeling being complete and detachable in order to be temporarily used when one label only is to be attached to each box.

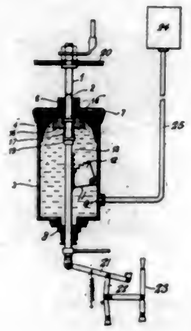
1,873,968. ELECTRIC CURRENT RECTIFIER CONTROL SYSTEM. ERNST KOBEL, Ennetbaden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Aug. 15, 1930, Serial No. 475,503, and in Germany Aug. 15, 1929. 5 Claims. Cl. 175—363.)



2. In a system for controlling the operation of an electric current rectifier of the metallic vapor type, a closed tank, anodes extending into said tank, grids arranged adjacent said anodes, an alternating current supply line connected with said anodes, a discharge tube connected with each of said anodes and with each of said grids, and means for supplying a voltage to said tube in addition to the voltage of said anode.

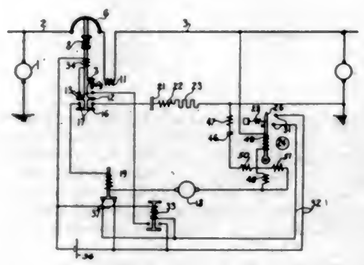
1,873,969. SWITCH. JAKOB KOPELIOWITSCH, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Jan. 6, 1931, Serial No. 506,956, and in Germany Jan. 6, 1931. 6 Claims. (Cl. 200—150.)

1. In an electric current circuit breaker, a pair of contacts, a chamber retaining a fluid under pressure, one of said contacts being movable into said chamber, a pipe line supplying fluid under pressure to said chamber, and



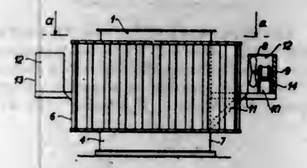
valves to control the supply of fluid to said chamber and to control the escape of fluid therefrom.

1,873,970. AUTOMATIC CIRCUIT BREAKER RECLOSING SYSTEM. OTHMAR K. MARTI and HAROLD WINOGRAD, Haddonfield, and WERNER R. STREULI, Camden, N. J., assignors, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 3, 1930. Serial No. 449,514. 6 Claims. (Cl. 175—294.)



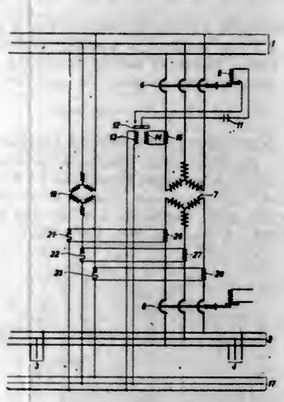
1. In an automatic circuit breaker reclosing system, a power circuit including a source of direct current, a load circuit, and a circuit breaker connecting said source and said load circuit; a test circuit including a source of alternating current, means connected with said source of alternating current responsive to and indicating conditions in said load circuit favorable to the reclosing of said circuit breaker, and contacts controlling the flow of current from the last said source, a minimum current relay connected in series with the last said source and said means, said circuit breaker controlling opening and closing of said contacts; and a reclosing circuit including a source of current, a circuit breaker reclosing coil, and a plurality of pairs of contacts controlling flow of current from the last said source to said coil, said circuit breaker controlling opening and closing of one of said pairs of said contacts, said indicating means in said test circuit controlling another pair of said contacts, and another pair of said contacts being controlled by said minimum current relay.

1,873,971. AIR BLAST EQUIPMENT FOR OIL-IMMERSED TRANSFORMERS. LELAND H. HILL, Collingswood, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 18, 1929. Serial No. 407,805. 2 Claims. (Cl. 257—191.)



2. In an electric transformer, a casing of substantially elliptical shape, cooling fluid therein, radiators external to said casing and connected therewith for circulating said fluid, and auxiliary cooling means for said transformer comprising two blowers, approximately oppositely placed adjacent the ends of said elliptically-shaped casing, each of said blowers directing an air stream against an end of said casing.

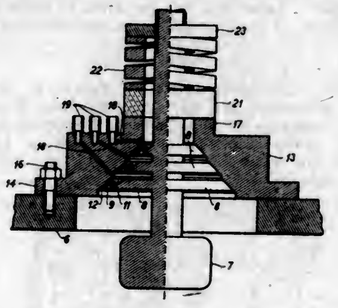
1,873,972. TRANSMISSION LINE PROTECTIVE SYSTEM. GUNTRAM LESCH, Mannheim-Freudenheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Dec. 10, 1929, Serial No. 413,015, and in Germany Dec. 10, 1928. 5 Claims. (Cl. 175—294.)



1. In a protective system for high voltage transmission lines supplying a plurality of low voltage lines, a high voltage circuit breaker, a relay supplied with potential from said high voltage line for controlling the opening of said high voltage circuit breaker, and means for supplying an additional voltage to said relay to prevent operation of said circuit breaker upon occurrence of a short circuit in one of the low voltage lines, the additional voltage being dependent in amount and phase position on the current in the short circuit in the low voltage line.

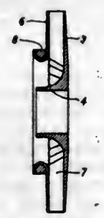
1,873,973. SOLID ELECTRODE SEAL FOR RECTIFIERS. OTHMAR K. MARTI, Haddonfield, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 24, 1930. Serial No. 446,843. 5 Claims. (Cl. 250—27.5.)

1. In a joint seal for the several portions of metallically encased rectifying devices, a metallic member extending into said casing, a plurality of rings formed of insulating material secured to and supported by said metallic member,



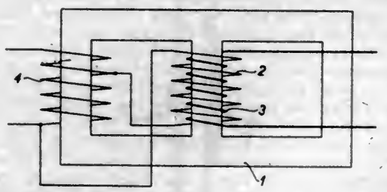
metallic rings binding the edges of the first said rings, and a cap member attached to the casing and connecting with said metallic rings to form a gas-tight seal.

1,873,974. ROTARY COMPRESSOR IMPELLER. ADOLF MEYER, Kusnacht, near Zurich, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed June 1, 1929, Serial No. 367,650, and in Germany June 4, 1928. 1 Claim. (Cl. 230—134.)



In an impeller wheel for centrifugal machines operating on a fluid, a disk having a portion thereof formed as a hub, a disk having an aperture opposite the hub portion on said first mentioned disk, a reinforcing ring secured about the aperture through said second mentioned disk, said second mentioned disk being formed about the said ring to retain the same, and blades connecting said disks.

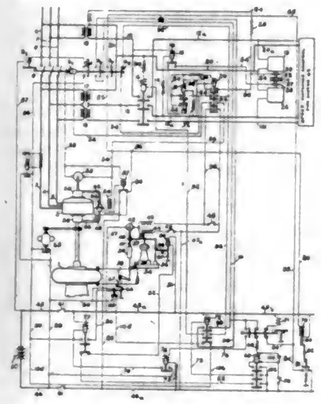
1,873,975. TRANSFORMER. AUGUST MEYERHANS, Baden, Switzerland. Filed Nov. 5, 1929, Serial No. 404,911, and in Germany Nov. 30, 1928. 3 Claims. (Cl. 171—119.)



1. A transformer comprising a core having a central member and end members extending from one end of the central member to the other end thereof, an auto-transformer winding associated with said end members, and double wound primary and secondary windings on the central member, the primary winding having a common

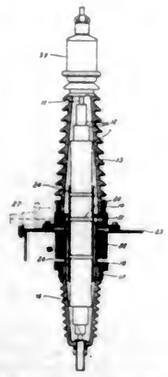
line terminal connection with the auto-transformer winding at one end, and a variable tap connection therewith at the other end, whereby the said primary winding may be energized under full line potential or under a graduated series of steps of less than full line potential.

1,873,976. CONTROL SYSTEM. TERRYL B. MONTGOMERY, Milwaukee, and PAUL M. STIVENDER, West Allis, Wis., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 6, 1930. Serial No. 418,710. 16 Claims. (Cl. 290—40.)



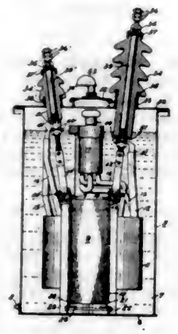
1. In a prime mover-generator plant having a circuit breaker for connecting the generator to a line, the combination of means including a speed governor, and a gate for controlling the supply of operating fluid to said prime mover, and auxiliary means responsive to a prime mover speed above a predetermined value for moving said gate toward its closed position to the exclusion of control by said speed governor, and means for restoring control to said first means when said gate moves to a predetermined partially closed position.

1,873,977. CONDENSER BUSHING. OTTO NAEF, Haddonfield, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 26, 1931. Serial No. 540,109. 10 Claims. (Cl. 175—358.)



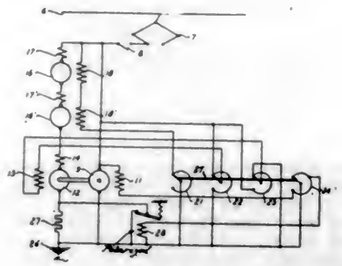
1. In a bushing structure for insulated electric conductors at high voltages leading to electrical apparatus within a housing, a condenser layer arranged in spaced relation about the conductor, a metallic flange, a hollow insulator secured within said flange and surrounding the conductor, a second metallic flange, a second hollow insulator secured within the second flange, a metallic cylinder secured to said second flange, and a ring contacting with said cylinder and spacing the same from other portions of the structure.

1,873,978. BUSHING ASSEMBLY FOR TRANSFORMERS AND THE LIKE. LOUIS C. NICHOLS, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 8, 1931. Serial No. 561,600. 15 Claims. (Cl. 175—361.)



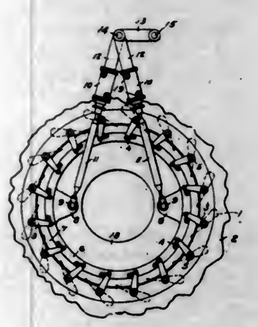
1. A transformer having in combination, a casing provided with a cover member, a bushing mounted on said cover, and means including an insulating strain member for holding said bushing in place on said cover member.

1,873,979. ELECTRIC LOCOMOTIVE SPEED CONTROL SYSTEM. FRANZ PRANTL, Wettingen, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Apr. 29, 1930, Serial No. 448,221, and in Germany May 3, 1929. 4 Claims. (Cl. 172—239.)



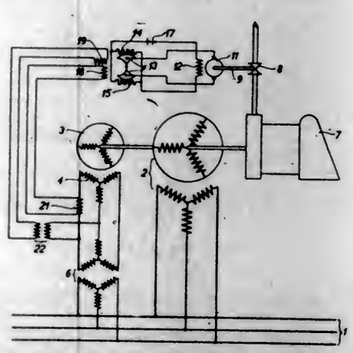
1. In a control system for electrically-driven vehicles, the combination with a source of current supply, a motor generator set having a motor element and a generator element connected with said source, and a traction motor serially connected in circuit with the said generator element and said source, each of said elements and the said motor having shunt field coils connected with said source, of means disposed to simultaneously and progressively vary the excitation of each of said coils, the said variations being effected in such manner that during the progressive decrease in excitation of the said coil of the traction motor the excitation of the said coil of the motor element of the motor generator set is increased and vice versa.

1,873,980. TURBINE GATE MECHANISM. JOSEPH J. RING, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 2, 1930. Serial No. 472,522. 6 Claims. (Cl. 253—122.)



1. In a hydraulic turbine gate operating mechanism, a shifting ring, a pair of fluid pressure cylinders having their piston rods pivotally connected to said ring and means for mounting the free end of said cylinders to permit of angular movement and lineal displacement of said cylinders in a predetermined plane.

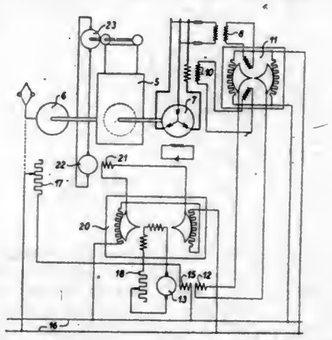
1,873,981. SYNCHRONIZING SYSTEM. SIGURD RUMP, Zurich, Switzerland. Filed Dec. 3, 1930, Serial No. 499,628, and in Germany Dec. 5, 1929. 7 Claims. (Cl. 290—40.)



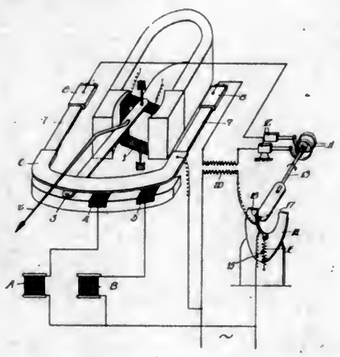
1. In a system for retaining generators in synchronism, a main generator, an auxiliary generator having a rotor and a stator winding, the stator winding of said auxiliary generator being connected with said main generator, a prime mover operating said generators, and means connected with and operated by energy flow in the stator winding of said auxiliary generator to control the speed of said prime mover.

1,873,982. WOOD GRINDER REGULATING DEVICE. VIKTOR RUSTERHOLZ, Zurich, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Dec. 11, 1928, Serial No. 325,241, and in Germany Dec. 16, 1927. 8 Claims. (Cl. 290—7.)

6. In a device of the character described, a prime mover, a machine operated by said prime mover, a generator operated by said prime mover, a motor for maintaining a constant speed of said machine, dynamos controlled in dependence on the operation of said prime mover and said generator, and means for controlling said motor by the action of said dynamos.



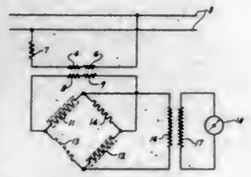
1,873,983. ELECTRICAL APPARATUS. FRITZ SIEBER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed June 3, 1927, Serial No. 196,387, and in Switzerland June 18, 1926. 9 Claims. (Cl. 175—375.)



1. In a thermally operated regulating and indicating instrument, an element rotatable in response to electrical values, a contact arm carried by said element and forming a portion of an electric circuit to be controlled, a fixed plate having contact portions in the circuit to be controlled arranged beneath said arm, a reciprocatory member arranged above and adapted to move said arm into contact with said plate, thermally actuated means for causing reciprocating movement of said member, an oscillating switch to control movement of said reciprocating member, and thermally actuated means for controlling said switch, each said thermal means being controlled by said switch.

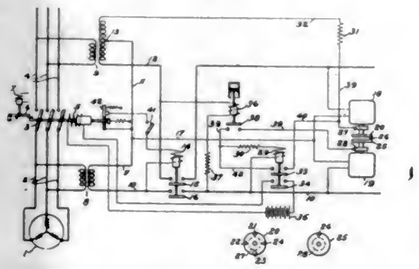
4. In a regulating and indicating instrument, an arm rotatable in response to electrical values, a plate having contact members affixed thereto and forming elements of electric circuits to be controlled, a member arranged for reciprocatory movement to effect contact of said arm with the said members, thermally-actuated means for causing said reciprocatory movement, a switch arranged to be actuated to control the said thermal means, and thermally-actuated means for controlling actuation of said switch, the last said thermally-actuating means being also controlled by said switch.

1,873,984. INDICATING DEVICE. FRITZ SIEBER, Baden, Switzerland. Filed Sept. 4, 1929, Serial No. 390,225, and in Germany Sept. 14, 1928. 3 Claims. (Cl. 73—31.)



1. In a system for measuring and indicating gas pressures, the combination comprising, a source of alternating current supply, a plurality of electrical resistance elements arranged and connected as a four armed closed Wheatstone bridge, two oppositely disposed only of said arms being arranged within the gas to be measured, serially connected transformers interconnecting said current supply and said elements at opposite nodal points of said bridge to effect the flow of a substantially constant current through said secondary windings and said elements, and indicating means connected with said bridge at the other opposite nodal points thereof and actuated responsively to the said supply current in dependence on the transfer of heat from said resistance elements resulting from flow of said current therethrough to the gas to be measured to indicate the pressure thereof.

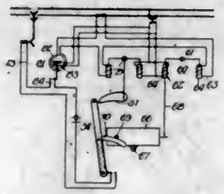
1,873,985. AUTOMATIC SYNCHRONIZER. PAUL M. STIVENDER, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 5, 1929. Serial No. 411,947. 13 Claims. (Cl. 171—118.)



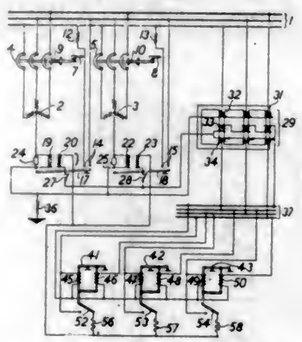
1. In a means responsive to the phase relations of two A. C. sources, two transformers each energized from one of said sources, a control circuit, a contact in said control circuit, means for causing said contacts to close upon occurrence of exact equality of phase between said sources, a second contact in said control circuit, and means serially connected to said transformers for holding said escond contact open as long as the vector sum of the E. M. F.'s across corresponding pairs of conductors of said sources is above a predetermined amount.

1,873,986. PROTECTIVE RELAY. JOSEF STOECKLIN, Zurich, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Nov. 11, 1926, Serial No. 147,791, and in Germany Nov. 12, 1925. 7 Claims. (Cl. 175—294.)

4. The combination with an electrical transmission line, and a circuit breaker associated therewith operative to disconnect a section of said line, of a relay operation in dependence upon the impedance of said line, the said relay comprising a timing element, an actuating element for initiating the operation of said timing element to control said disconnecting operation of said circuit breaker, a time-delay element for determining the length of time during which said timing element operates from the moment of initiation of its operation to the moment of carrying out the same, and means operative to restrain operative actuation of said relay in response to the energy flow in a predetermined direction, the operation of said actuating element and of the said time-delay element being responsive to the ratio of the line voltage to the line current upon the occurrence of a fault in the said line.



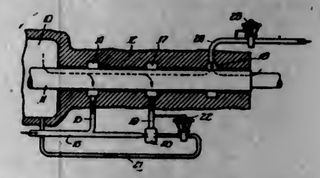
1,873,987. PROTECTIVE SYSTEM. ALBERTUS VAN GASTEL, Wettingen, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed July 29, 1930, Serial No. 471,534, and in Germany July, 29, 1929. 5 Claims. (Cl. 175—294.)



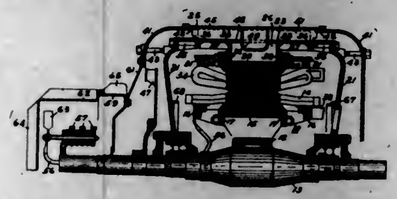
1. In a system for se.ectively protecting polyphase electrical windings from the results of continuing short-circuits, a polyphase supply line, polyphase electrical windings having a neutral point, said windings being connected in parallel with said supply line, circuit breakers interposed between said line and said windings, a transformer structure connected with said supply line and said windings, a plurality of relays connected with said windings and said transformer and energized therefrom to cause opening of said circuit breakers, and a plurality of relays connecting said transformer with said first-mentioned relays to cause actuation thereof upon occurrence of a disturbance in the field symmetry of said windings.

1,873,988. LABYRINTH GLAND FOR MACHINE SHAFTS. WILLEM VAN RIJSWIJK, Ennetbaden, Switzerland. Filed Apr. 6, 1927, Serial No. 181,595, and in Germany Apr. 15, 1926. 3 Claims. (Cl. 286—19.)

1. In a sealing gland for machine casings having a member extending therefrom, a gland structure associated with the casing about the member and having a plurality of chambers formed therein, a conduit connecting two of the chambers to a space at superatmospheric pressure, a conduit connecting another of the chambers to a space at subatmospheric pressure, and a pressure-operated valve for automatically maintaining substantially atmospheric pressure in one of the two chambers connected to the space at super-atmospheric pressure.

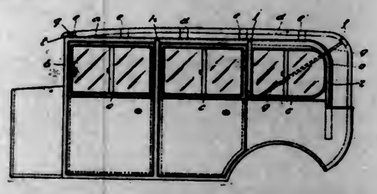


1,873,989. DYNAMO-ELECTRIC MACHINE VENTILATION. ROBERT B. WILLIAMSON, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Feb. 14, 1931, Serial No. 515,673. 13 Claims. (Cl. 171—252.)



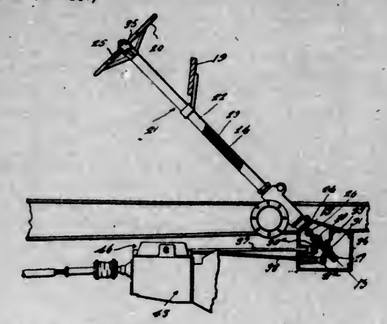
1. A dynamo-electric machine, comprising a stator yoke, end closures forming with said yoke an enclosure for the rotor and stator cores and windings of said machine, the stator core being supported on and spaced from the body portion of said yoke at certain points to provide ventilating passages, between said body portion and the outer periphery of te stator core and opening into the spaces within said end closures, an enclosing casing radially outside of said yoke and spaced from the body portion thereof, said body portion being apertured at spaced points out of communication with said ventilating passages to provide access of external air to the outer periphery of said stator core, and means for circulating air within said yoke and said end closures and through the passages between said yoke and the outer periphery of the stator core.

1,873,990. BODY FOR MOTOR VEHICLES. ALFRED HOPE ALEXANDER, Edinburgh, Scotland, assignor to Sunsaloon Bodies Limited, Edinburgh, Scotland, a Company of Scotland. Filed Jan. 15, 1927, Serial No. 161,262, and in Great Britain Mar. 20, 1926. 4 Claims. (Cl. 296—105.)



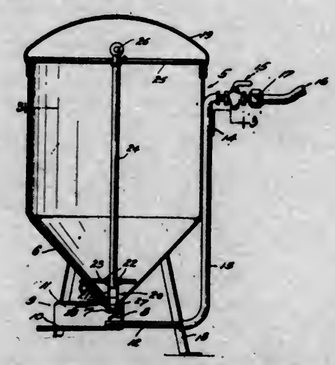
1. A vehicle top comprising fixed longitudinal cantrails, downwardly curved at their rear ends to meet the vehicle body, means for supporting the cantrails from the body, a continuous inwardly projecting rib on each cantrail, a flexible roof covering, cross-members supporting said covering, a spring of curved outline on each end of said cross-members, rollers rotatably mounted on the limbs of said springs and engaging above and below said ribs on the cantrails, casings enclosing said springs and rollers, and co-operating gearing on the front cross-member and cantrails for causing the cross-members to travel along the cantrails.

1,873,991. TRANSMISSION GEAR SHIFTING MECHANISM. REMSEN C. BAUCKHAM, Woodcliff Lake, N. J., Filed Dec. 12, 1931, Serial No. 580,697. 8 Claims. (Cl. 74—39.)



1. In a gear shifting arrangement of the class described, in combination, transmission gearing including a casing having conventional gearing mounted therein, said casing being open at its top, a removable cover plate for said open top, a fixedly mounted rod of square cross section supported in said cover, a pair of selectively operable gear shifting devices, each device comprising a fork, a toothed rack, and suspension eyes slidably mounted on the rod, each rack being socketed on one side, spring pressed retention pins in said cover co-operable with the socket for holding the devices in set position, an outer tubular shaft mounted for rotation in a bearing in said cover, a pinion keyed on the inner end of said shaft and co-operable with the adjacent rack, an inner solid shaft mounted for rotation partially in said first-named shaft and partly in a bearing in said cover, a second pinion keyed on said inner shaft and co-operable with the remaining rack, a spacing sleeve surrounding said inner shaft and interposed between said pinion, releasable retaining means for said outer shaft to facilitate assembling of said shafts, beveled turning gears fixedly mounted on the outer ends of both of said shafts, and remote control means for said gears.

1,873,992. FERTILIZER SPRINKLER. DAVID BOAG, Seattle, Wash. Filed June 3, 1929, Serial No. 367,957. 5 Claims. (Cl. 299—84.)

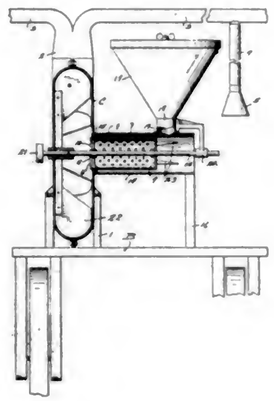


1. In spraying apparatus, the combination with a material containing receptacle, a pan therebelow, a spout

disposed at the lower extremity of said receptacle for discharging the material therefrom to said pan, and means to regulate the effective size of the spout opening, of a water supply pipe projecting beyond the outlet opening of the spout in the direction of water flow, means to project a stream of water from said supply pipe across said pan to impregnate the material and discharge the same from the device, and means to agitate the material in said receptacle.

3. The method of spraying a dry material in a water-saturated state, which consists in producing a stream of water under pressure to have the same flow in an approximate horizontal plane, and gravitationally feeding the dry material with the discharge point of the same slightly rearwardly of the discharge point of the water into the stream of water at an inclination in the direction of flow of the same.

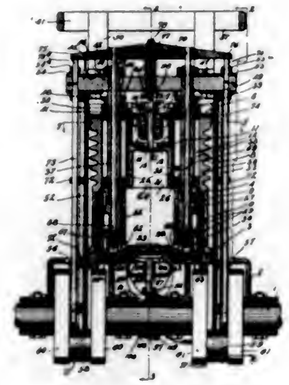
1,873,993. DUSTING APPARATUS. JOHN M. BRASINGTON, Cheraw, S. C., assignor of one-half to Charles S. McCall, Bennettsville, S. C. Filed Oct. 15, 1929, Serial No. 399,843. 7 Claims. (Cl. 43—148.)



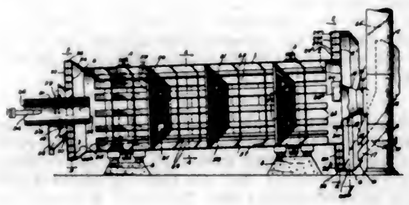
1. An apparatus of the class described comprising, in combination, a distributing fan including a casing, a supply hopper, a tubular member in communication with both the casing and the hopper, said tubular member at a point beyond its communication with the hopper being in communication with the atmosphere, a second tubular member rotating within the first named tubular member, said tubular member having one end portion extending within the fan casing and its opposite end portion terminating at a point between the fan casing and the communication of the hopper with the first tubular member, the peripheral wall of said second tubular member being provided with openings, the outer end of said second tubular member being closed.

1,873,994. INTERNAL COMBUSTION ENGINE. JAMES H. CAMPBELL, Cambridge, Mass., assignor of one-half to James D. Moore, Boston, Mass. Filed Dec. 15, 1923, Serial No. 680,887. 30 Claims. (Cl. 60—15.)

9. An internal combustion engine having a cylinder, a combustion chamber therein, a compression chamber surrounding the combustion chamber, a secondary expansion chamber, a single piston reciprocating in the cylinder having surfaces exposed to pressure existing in each of said chambers, and a piston rod secured to the piston and extending through the compression chamber.

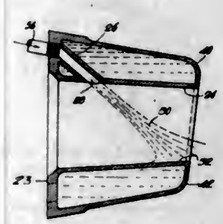


1,873,995. ROTARY DRYING APPARATUS. HARRY L. COAWIN, Walnut Park, Calif. Filed Mar. 12, 1930, Serial No. 435,169. 15 Claims. (Cl. 34—6.)



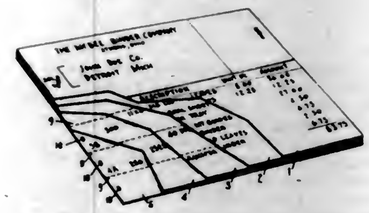
3. In a rotary drying apparatus, a rotatably mounted drum, means at one end of said drum mounted so as to rotate with said drum and defining passage means extending around the axis of the drum throughout at least substantially 360°, said passage means opening exteriorly of the drum at one end and opening to the interior of the drum at the other end and being so disposed as to effect movement of material from the exterior opening to the interior opening upon rotation of the drum in its normal direction, means defining an annular material receiving space outside the drum and adjacent the exterior opening of said passage means, and so disposed as to cause material to pass therefrom through the exterior opening upon rotation of said drum in said normal direction, and means for rotating said drum in said normal direction.

1,873,996. TUYÈRE. PATRICK P. CUNNINGHAM, Provo, Utah. Filed Mar. 23, 1932. Serial No. 600,803. 7 Claims. (Cl. 266—41.)



1. A tuyère having an inner wall defining the blast opening of the tuyère and means communicating with said opening for directing a scavenging current against said wall.

1,873,997. DISTRIBUTION AND ANALYSIS ACCOUNTING FORM. HERBERT C. DAVIS, Detroit, Mich., assignor to The McBee Binder Company, Athens, Ohio, a Corporation of Ohio. Filed Oct. 16, 1931. Serial No. 569,164. 4 Claims. (Cl. 282—27.)

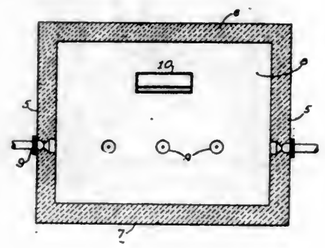


1. A manifold set of superimposed sheets, comprising an original sheet and a plurality of copy sheets, the copy sheets each being divided by a plurality of weakening lines to form a plurality of strips, there being a stripe of transfer material between each strip and its superimposed sheet, the stripes of transfer material of the several sheets being disaligned.

1,873,998. REVIVIFICATION OF SPENT CARBON. RAYMOND G. DAVIS, Wilmington, Del., assignor to Darco Corporation, Wilmington, Del., a Corporation of Delaware. Filed Aug. 19, 1930. Serial No. 476,330. 8 Claims. (Cl. 252—3.)

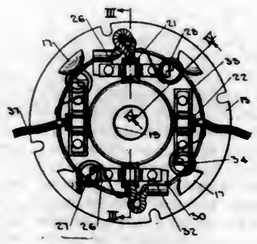
1. In the revivification of spent activated carbon containing adsorbed organic matter, a process which comprises dispersing and suspending the spent material in powdered form in a current of air in a relative amount limited to that required to oxidize the adsorbed organic matter, igniting the dispersion mixture of air and suspended material by passing it horizontally into a reaction zone maintained at about 800° to 1000° C. by the heat of oxidation of the adsorbed organic material aided by heat externally applied and continuing the horizontal passage of the carbon mixed with the reaction gases through and out of the reaction zone and into a zone of lower temperature, the rate of said passage through the heated reaction zone being such that time is not afforded for gasification of more than 10 per cent of the original carbon by the products of the combustion of the adsorbed organic matter.

1,873,999. PROCESS OF PRODUCING SOOTY ATMOSPHERE IN GAS-FIRED FURNACES. ERNEST G. DE CORIOLIS and HUGH B. BARBER, Toledo, Ohio, assignors to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed May 20, 1931. Serial No. 538,714. 4 Claims. (Cl. 148—17.)



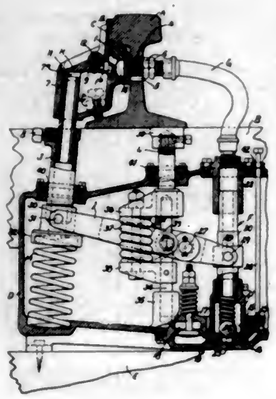
1. A method of counteracting the scaling effect of a clear atmosphere of hot gaseous products of combustion on steel while the latter is being heated in such atmosphere, comprising simultaneously introducing into said atmosphere a stream of hydrocarbon fuel gas and a contiguous stream of air and causing said streams to flow at a sufficiently low velocity to form a single substantially non-turbulent stream, whereby the heat of combustion causes the formation of free carbon from the fuel due to incomplete combustion thereof.

1,874,000. COMBINED END PLATE AND BRUSH HOLDER SUPPORT FOR DYNAMO-ELECTRIC MACHINES. LOUIS B. EHRLICH, Toledo, Ohio, assignor to The Electric Auto-Lite Company, Toledo, Ohio, a Corporation of Ohio. Filed June 4, 1928. Serial No. 282,815. 6 Claims. (Cl. 171—324.)



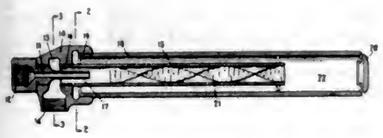
1. In a device of the character disclosed, in combination, a sheet metal end frame member for a dynamo electric machine, said sheet metal end frame supporting a hub portion carrying an armature bearing; a plurality of integrally struck up projections substantially equidistant from said hub portion, said member having a raised portion radially spaced from said hub portion; and a plurality of brush holders supported by said raised portion, said brush holders being centrally disposed with respect to said hub.

1,874,001. RAIL LUBRICATING APPARATUS. ROBERT E. EINSTEIN, St. Louis, Mo. Filed Aug. 12, 1929. Serial No. 385,254. 18 Claims. (Cl. 184—3.)



1. A rail lubricating apparatus, comprising a lubricant applying device arranged out of the zone of travel of a passing wheel, means for supplying said device with a lubricant, and means for moving said device relatively to the rail in such a way as to spread the lubricant over the gage side of the rail head.

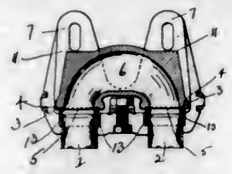
1,874,002. OIL BURNER. FRED C. FANTZ, Webster Groves, Mo. Filed Jan. 31, 1929. Serial No. 336,389. 2 Claims. (Cl. 299—140.)



1. A burner for oil fuel comprising a mixing head having a steam chamber therein, an imperforate cylinder opened at both ends secured to said head, the open inner end being in communication with said chamber, a fuel nozzle in said head which projects into said cylinder, a transversely corrugated spiral element in said cylinder adjacent the nozzle discharge, an outer cylinder which surrounds said first named cylinder secured to said head, said outer cylinder being of larger diameter and length than the first named one, means to mount said cylinders in spaced relation to each other, a burner tip mounted in the end of the outer cylinder, there being a plurality of arcuate slots between the burner tip and the wall of the outer cylinder.

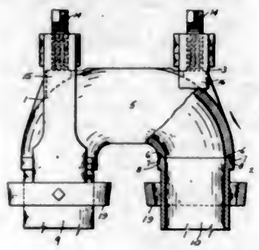
1,874,003. HOUSING FOR RETURN BENDS. FRED C. FANTZ, Webster Groves, Mo. Filed Jan. 13, 1932. Serial No. 586,360. 7 Claims. (Cl. 285—20.)

1. In a refinery apparatus, a return bend, a pair of shouldered tubes in communication with said bend, a compound housing for said bend comprising complementary sections, extensions on the lower part of said housing sections which abut said tubes, arcuate flanges on said housing sections which terminate a substantial distance from the plane of the axes of said tubes, said flanges being adapted to engage the shoulders on said tubes, and



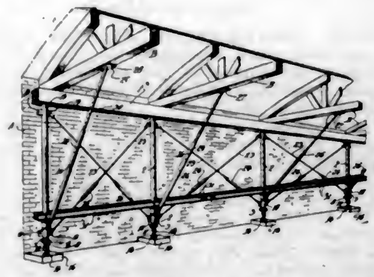
detachable means mounted in said sections to draw the faces of the bend and the ends of the tube into a tight joint.

1,874,004. RETURN BEND FITTINGS FOR OIL STILLS. FRED C. FANTZ, Webster Groves, Mo. Original application filed Dec. 8, 1931, Serial No. 579,707. Divided and this application filed Feb. 3, 1932. Serial No. 590,628. 6 Claims. (Cl. 285—20.)



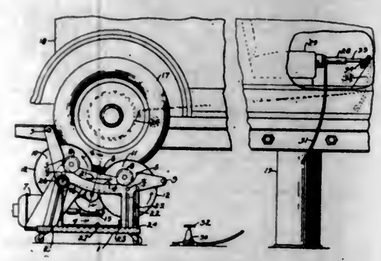
1. In a refinery apparatus, a return bend, a pair of shouldered tubes communicating therewith, a compound housing therefor, comprising complementary sections adapted to partially encircle the ends of said tubes and to be locked to the shoulders on the tubes, detachable means mounted in said housing sections to hold said tubes and return bend in a tight joint, extensions on said housing sections which contact said tubes, securing means to contact said extensions and hold said sections together, the outer surface of said extensions tapering downwardly and inwardly, said securing means having tapered apertures which fit said extensions whereby said sections are held together.

1,874,005. METHOD OF AND APPARATUS FOR RAISING ROOFS. SETH M. GOODER, Chicago, Ill. Filed Mar. 8, 1929. Serial No. 345,307. 6 Claims. (Cl. 254—98.)



1. The method of raising a side of a roof which consists in placing under the same a row of jacks having long extensible bodies composed of an upper section and a lower section provided with a lifting element, tying the lower end of each upper body section to the upper ends of the upper body sections of the two jacks between which it is placed, operating the lifting elements so as alternately to lift the roof and back off the said elements, each lifting element being backed off while the body thereof is being supported by the two nearest jacks, and the lower section of each jack body being lowered after the corresponding lifting element has been backed off.

1,874,006. BRAKE TESTING MACHINE. STANLEY M. HALSTEAD, ANTON I. WICKLAND and WAYNE C. TUSTIN, San Jose, Calif. Filed Oct. 19, 1929. Serial No. 400,908. 1 Claim. (Cl. 265—25.)



A brake testing device including a frame comprising a base, a plurality of spaced standards secured to said base, an arcuate track supported on said standards, a cradle movably mounted on said track, wheel engaging rollers carried by said cradle, means carried by the cradle for driving said rollers and wheel, a force measuring gage, and means mounted on one of said standards and interposed between the cradle and gage to actuate the latter upon movement of the cradle relative to the frame, whereby to indicate the amount of resistance between the wheel and rollers.

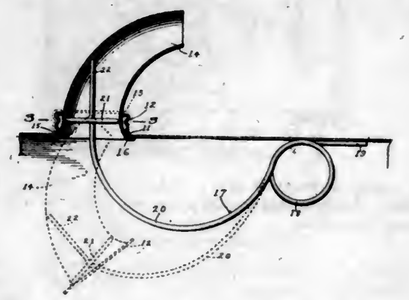
1,874,007. LOADING AND TRANSPORTING DEVICE. ROY C. HEATON, Tacoma, Wash., assignor to Tractor Parts Company, Seattle, Wash., a Corporation of Washington. Filed June 8, 1931. Serial No. 542,928. 11 Claims. (Cl. 214—65.3.)



1. In an apparatus of the class described, a vehicle, a swinging standard mounted on said vehicle and having a swinging running support for a cable, a cable passing over said support, means for hauling in said cable to lift a load to be transported and to swing said standard to loaded position, automatic means swinging said cable support during the swinging of said standard, resilient means opposing said standard as it moves to loaded position, a swinging load support, and operative connections between said standard and said load support, to move the latter to load supporting position.

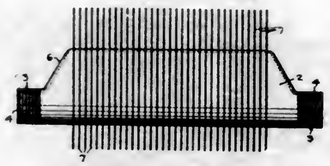
4. An apparatus as described, comprising a vehicle, a load supporting bunk mounted on an axis transverse to said vehicle, said bunk having a top oval in cross section with a ridge extending lengthwise of the bunk, and means swinging said bunk on its axis and depositing a load thereon.

1,874,008. AUTOMATIC SPOUT. HENRY HENIG, Brooklyn, N. Y. Filed May 8, 1930. Serial No. 450,808. 5 Claims. (Cl. 221—23.)



1. In a container having an opening therein, a tubular spout movable through said opening between extended and retracted positions, and a spring connected to the container and normally urging said spout through said opening, said spring having an annular portion projecting a substantial distance into said spout and loosely engaging the walls thereof throughout its range of movement to assist in guiding said spout in its movement through said opening.

1,874,009. EXPANDED TUBE RADIATOR. PERCIVAL P. HENSHALL and WARREN EWALD, Philadelphia, Pa., assignors to John J. Nesbitt, Inc., Holmesburg-Philadelphia, Pa., a Corporation of New Jersey. Filed May 28, 1930. Serial No. 456,342. 2 Claims. (Cl. 257—124.)

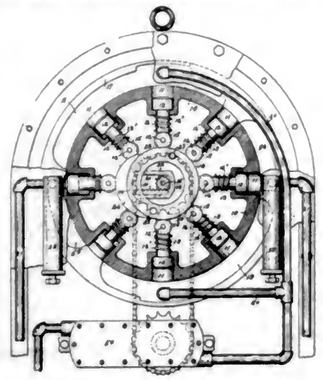


1. A radiator comprising a steam enclosure made from a single piece of tubing and having circular end members externally threaded, a body member having its base semi-circular in form between said end members, and having an elongated portion in continuity with the semi-circular body portion extending transversely of the tubing.

1,874,010. PUMP. JOHN P. HESS, Milwaukee, Wis. Filed Nov. 28, 1927. Serial No. 236,101. 4 Claims. (Cl. 103—161.)

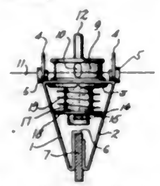
1. A pump comprising an annular stator interiorly channeled at spaced points to provide a plurality of supply channels and a plurality of discharge channels, an annular rotor fitted within the stator, and provided with outwardly opening cylinders, pistons in the cylinders,

connecting rods secured to the pistons and provided with rollers, and a cam providing variable pitched faces for a track for said rollers whereby selectively alternatively



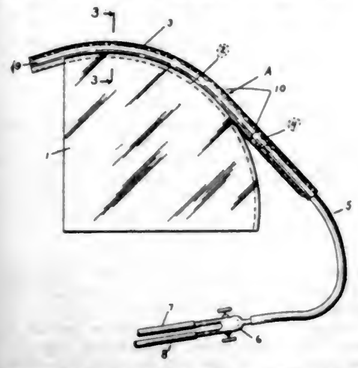
to supply material to said cylinders from either of said supply channels and discharge it into either of the discharge channels.

1,874,011. THREAD TENSIONING DEVICE. CURT HILSCHER, Chemnitz, Germany. Filed Jan. 8, 1930, Serial No. 419,298, and in Germany Aug. 1, 1929. 5 Claims. (Cl. 242—154.)



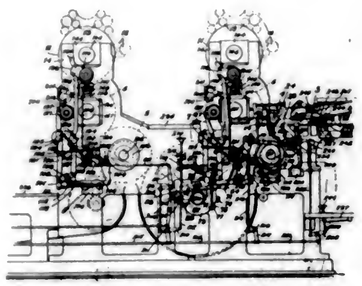
1. A thread tension device comprising a base, a thread guiding member rotatably mounted on said base, means for releasably retaining said member in yielding engagement with said base, and detent means for retaining said member in any desired position of angular adjustment with respect to said base.

1,874,012. METHOD OF BENDING TUBING. FRED HOTCHNER, Los Angeles, Calif. Filed Jan. 12, 1931. Serial No. 508,136. 10 Claims. (Cl. 49—79.)



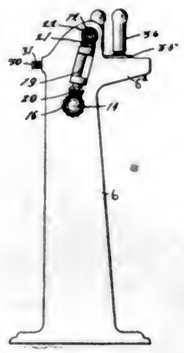
2. The method of bending tubing which consists in heating the tubing from the inside by means of a burner inserted within said tubing, burning a combustible within said tubing, moving the burner through said tubing, and bending the sections of the tubing as they reach a suitable temperature.

1,874,013. ROTARY COLOR PRINTING PRESS. CHRISTEN R. KADDELAND, Shelton, Conn., assignor to Harris, Seybold, Potter Company, Cleveland, Ohio, a Corporation of Delaware. Filed Apr. 8, 1927. Serial No. 181,966. 72 Claims. (Cl. 101—184.)



1. In a multi-color press, a plurality of printing couples each having gripper means and independent, normally inoperative means for separating the couples, a normally disconnected latch relay mechanism positively controlled and simultaneously actuated by the tripping movement of one of said couple separating means for placing in operative position, at a predetermined point in the cycle, another of said separating means, and a transfer cylinder of greater number of gripper units than any cylinder in a couple.

1,874,014. MACHINE FOR MANUFACTURING THIN RUBBER ARTICLES. FRED L. KILLIAN, Akron, Ohio. Filed Jan. 27, 1928. Serial No. 249,909. 2 Claims. (Cl. 18—2.)



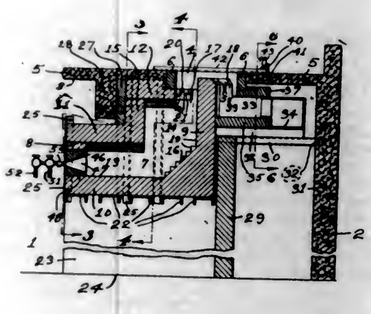
1. In apparatus for manufacturing thin rubber articles, a frame, a cylindrical brush mounted on said frame, means rotating said brush, a form supporting member, forms rotatably mounted in a straight row on said member, friction wheels mounted on said frame for rotating said forms, means to rotate said wheels, said wheels positioned to simultaneously rotate said forms when the same are brought into contact with said brush.

1,874,015. VISCOSIMETER. ROBERT WALDO KING, Short Hills, N. J. Filed Nov. 16, 1925. Serial No. 69,434. 15 Claims. (Cl. 265—11.)



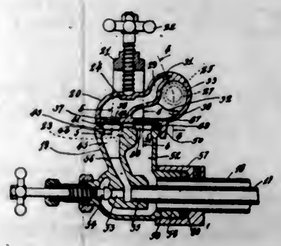
1. In an oil testing system, the combination with an internal combustion motor having an oil circulating system connected therewith, of a viscosimeter connected with the said system and responsive to the flow of oil through the system to automatically indicate the viscosity of the oil by virtue of its flow.

1,874,016. FURNACE.. DAVID LARKIN, Webster Groves, Mo. Filed May 27, 1929. Serial No. 366,430. 5 Claims. (Cl. 158—1.)



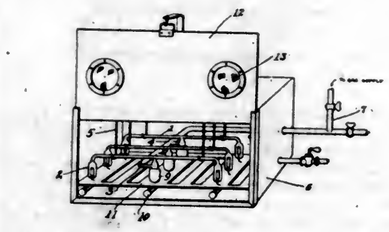
3. A furnace having a vertical duct open at the top, a combustion chamber having a transverse rear wall extending upwardly through the duct nearly to the top thereof and dividing the duct into separate vertical passageways both passageways being within the confines of the opening in the top, one of which has its lower end opening into the top of the combustion chamber, and a flue opening into a side of the other passageway.

1,874,017. ATOMIZING OIL BURNER. HERBERT V. LEAHY, Los Angeles, Calif. Filed Mar. 16, 1929. Serial No. 347,524. 5 Claims. (Cl. 285—23.)



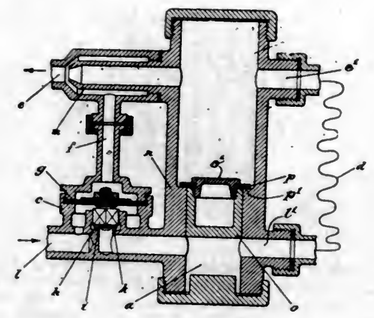
1. A coupling comprising separable sections, each section provided with separate passages, one of the sections being provided with openings communicating with its passages for connection with pipe lines, a means to clamp the sections together, one of said sections being provided with ports communicating with its passages, and the walls of said ports being provided with seats, and the other section being provided with openings communicating with its passages, and seat members surrounding said openings and releasably engaging said seats, one of said seat members being loosely connected with the section with which it is associated so as to be self-adjusting to the seat that it engages.

1,874,018. PROCESS OF MANUFACTURING LUMINOUS TUBES AND APPARATUS FOR CARRYING THEM OUT. RAYMOND R. MACHLETT, New York, N. Y., assignor to Rainbow Light, Inc., Long Island City, N. Y., a Corporation of New York. Filed Aug. 17, 1928. Serial No. 300,234. 8 Claims. (Cl. 176—7.)



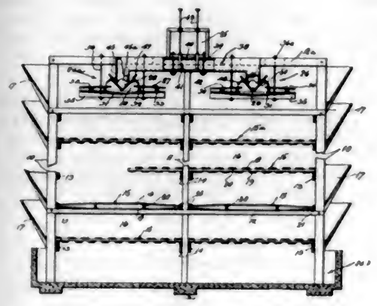
1. The method of processing a luminous tube of the class described, said tube being provided with an auxiliary tubulation containing mercury which consists in placing said tube and tubulation within a heating oven, in insulating the tubulation from the effects of heat, in heating the tube to a temperature higher than that at which mercury vaporizes, in removing said protecting means from said tubulation and subjecting it to heat so that the mercury is vaporized and diffused throughout the tube.

1,874,019. SAFETY DEVICE FOR GAS CONDUITS. FRANCESCO MANGIAMELI, Dusseldorf, Germany. Filed Mar. 28, 1930, Serial No. 439,719, and in Germany Feb. 5, 1930. 5 Claims. (Cl. 48—192.)



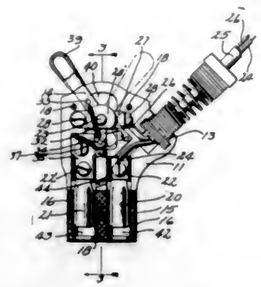
1. A safety device for gas lines, comprising a conduit having adjacent sections, a diaphragm operated valve in one section for controlling the flow in said conduit, an ejector nozzle in the adjacent section, and a tubular connection between the diaphragm valve and the adjacent section near said nozzle; whereby reduction of pressure by the nozzle will maintain the valve open, and back pressure in the conduit adjacent the nozzle will operate the diaphragm to close the valve.

1,874,020. ATMOSPHERIC COOLING TOWER. GUY T. MARTIN, Los Angeles, Calif., assignor to Fluor Construction Co., Los Angeles, Calif., a Corporation of California. Filed May 2, 1930. Serial No. 449,201. 10 Claims. (Cl. 261—110.)



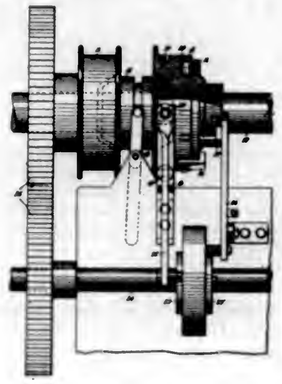
1. In an atmospheric cooling tower, a plurality of vertically spaced apertured decks, and a water distributing system above said decks comprising; a main flume extending longitudinally of the tower, an overflow trough below and extending substantially parallel with said flume, means for delivering water from the flume to said trough, and a slatted distributing deck below said trough for distributing water overflowing the trough, over the uppermost of the first mentioned decks, said distributing deck comprising vertically spaced and relatively staggered slats extending substantially at right angles with said trough, the upper slats sloping outwardly toward their ends, and the lower slats sloping inwardly toward their longitudinal centers.

1,874,021. SWITCH PLUG. CHARLES C. MAUBER and NORMAN D. VEA, Dover, Ohio, assignors to Dover Manufacturing Company, Dover, Ohio, a Corporation of Ohio. Filed May 5, 1930. Serial No. 449,855. 7 Claims. (Cl. 200—51.)



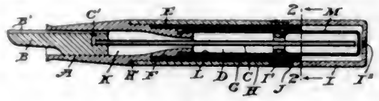
1. A switch plug for electric heaters comprising the combination of an insulating body having a switch recess at one end and a plug portion at the other end, each located across the axial center line of the plug, a switch in the switch recess having an operating lever extending through an end slot in the body said plug portion being provided with vented electrical terminals and the body having lateral electrical connections controlled by the switch, said switch and its operating lever being each arranged to swing to open and closed positions across an axial central plane transverse to that of lever and switch movement, and a stationary contact member for the switch at the inner end portion of the switch recess in electrical connection with one of the socket terminals.

1,874,022. INDEXING ATTACHMENT FOR AUTOMATIC MACHINES. MARTIN E. ANDERSON, Waterbury, Conn., assignor to The Bristol Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 1, 1930. Serial No. 465,108. 4 Claims. (Cl. 29—57.)



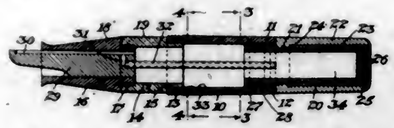
1. In an automatic machine of the nature set forth comprising a work spindle, driving means therefor including a clutch slidable axially of the spindle; indexing means for said spindle and comprising a drum rotatable on said spindle and adapted to be clutched thereto by the said clutch, means normally restraining said drum from rotation, means to intermittently rotate said drum a predetermined extent, a counter-shaft and gearing intermediate said driving means and counter-shaft for rotating the latter, a pair of cams mounted on the counter-shaft, and mechanism intermediate the respective cams and the restraining means and the intermittent rotating means for effecting the release of the drum and its intermittent rotation to index the spindle.

1,874,023. FOUNTAIN PEN. FRANK M. ASHLEY, Brooklyn, N. Y. Filed May 31, 1930. Serial No. 457,991. 5 Claims. (Cl. 120—47.)



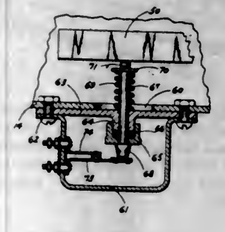
1. A fountain pen comprising a pen section, a feed-plug therein, a thin inner metallic tube connected to said pen section, a thin metallic tube fitting over said inner tube the outer end of which is provided with an opening, a casing connected to said pen section and inclosing said outer tube, the adjacent faces of said tubes and casings being of constant diameters throughout their contacting lengths and a soft rubber sack in open communication with said feed-plug.

1,874,024. FOUNTAIN PEN. FRANK M. ASHLEY, Brooklyn, N. Y. Filed Jan. 17, 1931. Serial No. 509,403. 4 Claims. (Cl. 120—47.)



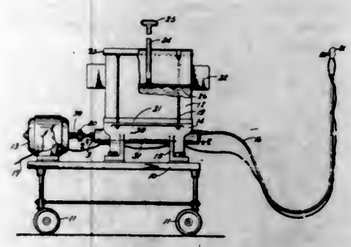
1. A fountain pen comprising a pen section, a translucent cylindrical section connected thereto, a barrel connected to said cylindrical section, a piston in said barrel having a hollow piston-rod open at its inner end, and which extends beyond the end of the barrel, an extension sleeve connected to said piston-rod and movable relative thereto, and means comprising a flange for preventing the disengagement of the sleeve and rod.

1,874,025. SWITCH FOR MOTOR DRIVEN GREASE MACHINES. KENNETH S. CLAPP, Cleveland, Ohio. Filed Sept. 15, 1930. Serial No. 481,937. 4 Claims. (Cl. 221—47.1.)



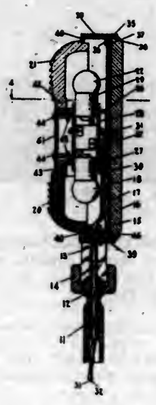
1. In a pressure lubricating device, a lubricant reservoir, a follower plate in said reservoir, a motor driven pump for delivering lubricant from said reservoir, a circuit breaker in the power line leading to said motor adapted to be actuated by the follower plate when the level of the lubricant in the reservoir and hence the follower plate recedes too a predetermined level and means for restoring said circuit breaker to normal position to permit flow of current therethrough when the level of the lubricant is raised above said predetermined level.

1,874,026. LUBRICATOR PUMP. KENNETH S. CLAPP and THEODORE H. EICKHOFF, Cleveland, Ohio. Filed Oct. 26, 1929. Serial No. 402,674. 5 Claims. (Cl. 221—471.)



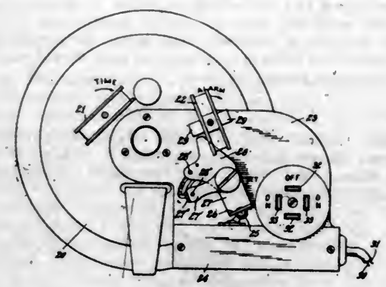
1. In a dispensing device, a reservoir, a dispensing means in communication with the bottom of the reservoir including a pair of screw conveyors and a booster, said booster comprising a gear pump, one of the gears of said pump driven by one of the conveyors and the other gear of said pump driven by said first gear and driving the other conveyor.

1,874,027. COMBINED DRIVING MIRROR, PARKING AND SIGNAL DEVICE. EDWARD T. CONDON, New York, N. Y., assignor to Autoposts Company Inc., New York, N. Y., a Corporation of New York. Filed Feb. 21, 1930. Serial No. 430,163. 4 Claims. (Cl. 177—329.)



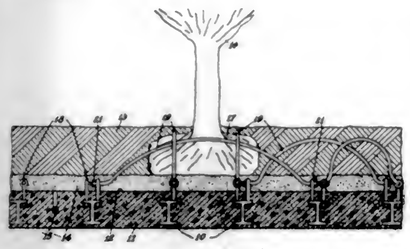
1. A device of the character set forth, comprising a housing, a mirror retained thereby having a transparent portion, a lens, behind said transparent portion of the mirror, an electric lamp located within the housing between said lens and transparent portion and adapted simultaneously to illuminate the lens and to display a suitable configuration through the transparent portion, a further lens associated with said housing in the plane of the first-named lens, and an independently operable lamp for illuminating the same said lamp being located behind the mirror and screened thereby.

1,874,028. TIME CONTROLLED SWITCH. EDWARD T. CONDON, New York, N. Y. Filed May 13, 1931. Serial No. 536,992. 7 Claims. (Cl. 200—36.)



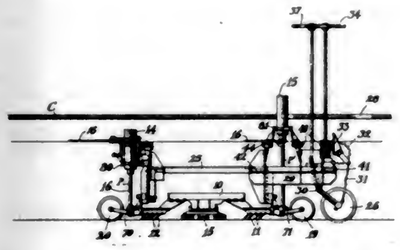
1. The combination with the alarm train of a clock; of a duplex socket comprising a pair of "off" terminal elements and a pair of "on" terminal elements for receiving a suitable plug member, an electric switch connected therewith and movable to interrupt the circuit through the "off" terminals and close the same through the "on" terminals, and means operatively associated with the alarm train for moving said switch.

1,874,029. METHOD AND MEANS FOR ANCHORING TRANSPLANTED TREES. MAURICE L. CONDON, Lake Mahopac, N. Y. Filed Oct. 1, 1931. Serial No. 566,269. 9 Claims. (Cl. 47—1.)



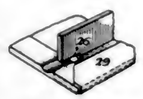
1. In a system for anchoring transplanted trees within artificially supported soil: a support for the soil, and secured upstanding loop members for engaging with the roots of a tree set in such soil.

1,874,030. AUTOMATIC RAIL LOCATOR FOR RAIL FLAW DETECTOR MECHANISMS. PETER CUSHNIE, White Plains, N. Y., assignor to Sperry Products, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 10, 1931. Serial No. 574,145. 10 Claims. (Cl. 175—183.)



1. In combination, a rail flaw detector car having a rail flaw detector mechanism mounted thereon, means whereby said mechanism may be lowered and raised to effective and ineffective positions, said mechanism being mounted on said car for lateral movement, and means for simultaneously moving the forward and rearward ends of said mechanism through unequal distances.

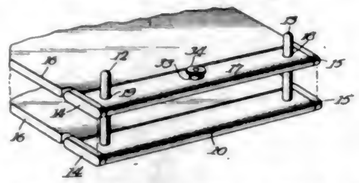
1,874,031. LOOSE-LEAF BINDER. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Filed June 27, 1930. Serial No. 464,231. 7 Claims. (Cl. 129—8.)



2. A binder bar for an angle back loose leaf binder comprising a member angular in cross-section and having a slot extending inwardly from the ends along the apex thereof and adapted to receive the inturned hem of the flexible covering material of the binder.

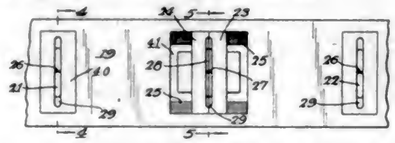
3. In a loose leaf binder, a binder bar, paper-holding posts mounted on the bar and having extensible portions thereon, a separator bar bearing sleeves adapted to fit over the posts and having an aperture therethrough, an opposing binder bar, a non-extensible post thereon, adapted to pass through the aperture and to fit closely within it whereby play between the parts of the binder is eliminated.

1,874,032. LOOSE-LEAF POST BINDER. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Filed Apr. 29, 1931. Serial No. 533,718. 2 Claims. (Cl. 129—12.)



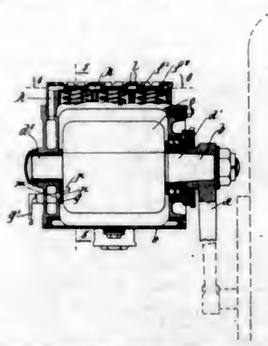
1. In a loose leaf binder, a tubular binder bar, locking elements within the bar, a threaded stud fixed in the bottom wall of the bar and extending through an aperture in the opposite wall, a nut upon the stud and a freely turning cone retained upon the nut and engageable with the locking elements.

1,874,033. ASSEMBLING JIG. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Original application filed Dec. 6, 1930, Serial No. 500,449, Patent No. 1,842,249, Jan. 19, 1932. Divided and this application filed Dec. 21, 1931. Serial No. 582,313. 3 Claims. (Cl. 29—84.)



1. In an assembling jig for loose leaf binders, a metal body having transverse slots of arcuate form for receiving the elements of the binder rings and forcing them together, and spacing plates at the bottoms of the slots for engagement by the ends of such elements.

1,874,034. SHOCK ABSORBING SUSPENSION. ANDRÉ DUBONNET, Neuilly-sur-Seine, France. Filed Dec. 15, 1930, Serial No. 502,376, and in Belgium Sept. 25, 1930. 9 Claims. (Cl. 267—34.)



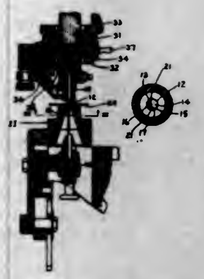
1. A structure of the class described comprising in combination a casing adapted to contain a fluid, an arm rotatably mounted inside said casing means operative to react on said arm to rotate the latter, a collapsible chamber positioned in contact with said arm, said chamber having an orifice in the wall thereof adapted to permit fluid to flow from said casing into said chamber, and a conduit extending from said collapsible chamber and communicating with the inside of said casing whereby fluid may flow from the inside of said casing through said orifice into said collapsible chamber and back to the inside of said casing via said conduit, and valve means operable by movement of said arm to vary the rate of flow of fluid through said conduit.

1,874,035. WELL STRAINER AND PROCESS OF MAKING SAME. HAROLD W. FLETCHER, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Sept. 12, 1931. Serial No. 562,531. 5 Claims. (Cl. 166—5.)



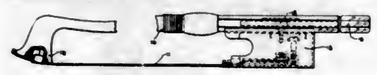
1. A well screen comprising a tubular member made up of metal shot bonded to each other at their points of contact, a metallic socket at one end and a pin at the ober end of said member cemented to said shot whereby said member may be secured to adjacent pipe connections.

1,874,036. METAL CUTTING TOOL. CHARLES B. GRAY, Millbourne, Pa. Filed Nov. 9, 1928. Serial No. 318,283. 3 Claims. (Cl. 164—124.)



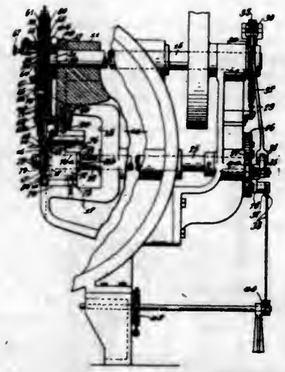
1. The combination with a nibbling machine provided with a reciprocatory ram and a die having a cylindrical opening, of a tool construction carried by the ram and cooperating with the die, the tool construction having a front circular cutting edge and a back pilot provided with a back face which is a cylindrical element coaxial with and of the same radius of curvature as the cutting edge and fitting the die opening to prevent backward reflection of the tool construction during cutting strokes and provided with a front face spaced from the center of the cutting edge at least a tool construction radius and intersecting the back face to define lateral guide edges disposed backwardly of the tool construction axis sufficiently to secure chordal spacing apart of the guide edges nearly a tool construction diameter and the pilot front face defining, with an arc of tool construction radius, less than 180 degrees and terminating at the guide edges, an area which is substantially segmental so that the central width thereof along the diameter bisecting the cutting edge may be relatively large compared to the width along the same diameter of the crescent area between the arc and the cutting edge.

1,874,037. VIOLIN BOW. CHARLES B. GRAY, Millbourne, Pa. Filed June 20, 1929, Serial No. 372,514. Renewed Jan. 7, 1932. 14 Claims. (Cl. 84—282.)



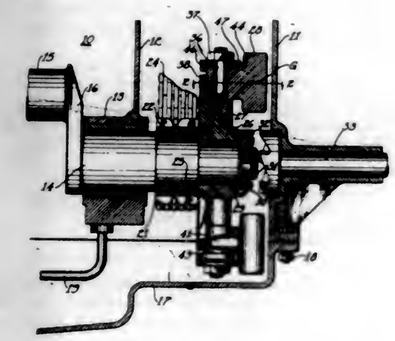
1. The combination with a bow having a hair band and a frog, of means connecting the hair band to the frog including a member connected to the hair band, and spring means resisting turning of the member.

1,874,038. CUTTING MACHINE. CHARLES B. GRAY, Millbourne, Pa. Filed July 2, 1930. Serial No. 465,310. 22 Claims. (Cl. 164—49.)



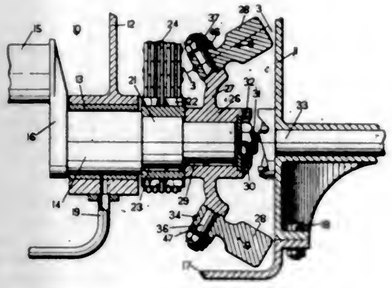
8. The combination with a cutting machine having a reciprocatory cutter, rotary die feed rolls, and a presser roll cooperating with the die feed rolls to grip a blank and secure feeding of the latter; of a power shaft having an eccentric for reciprocating the reciprocatory cutter; a countershaft connected to the die feed rolls; and mechanism for imparting intermittent rotary motion to the countershaft including a cam having holding and actuating portions, a follower cooperating with the cam, a ratchet wheel connected to the countershaft, a lever pivoted with respect to the ratchet wheel axis, a pawl pivoted to the lever and cooperating with the ratchet wheel, means for biasing the pawl to engage the ratchet wheel, a link connecting the follower and the lever, and means for connecting the cam to the power shaft in such timed relation with respect to the eccentric that the rotary die rolls are held against movement in a reverse direction during cutting strokes of the reciprocatory cutter; and means for moving the pawl to ineffective position including a cable connected to the pawl, a treadle connected to the cable, and means for biasing the treadle in such a direction as to move the pawl to ineffective position.

1,874,039. INTERNAL COMBUSTION ENGINE. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 26, 1926. Serial No. 150,855. 16 Claims. (Cl. 74—6.)



15. A vibration damper including a shaft, oppositely disposed pivot pins secured thereto at equal angles to the shaft axis, and an inertia member rotatably and slidably mounted on each pin.

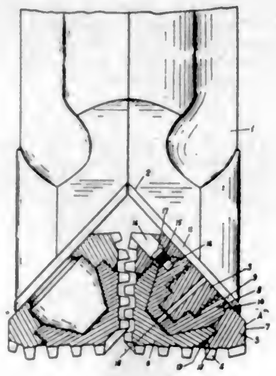
1,874,040. INTERNAL COMBUSTION ENGINE. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 26, 1928. Serial No. 315,343. 7 Claims. (Cl. 74—6.)



6. In a vibration damper for a shaft, the combination with oppositely disposed pivot pins secured to the shaft and inclined at equal angles to the shaft axis, of an inertia member rotatably and slidably mounted on each pin.

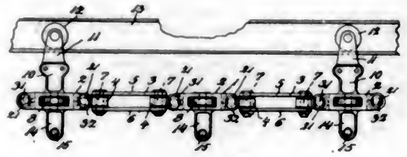
1,874,041. DRILL CUTTER. WADE W. HAMPTON, Los Angeles, Calif., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed June 9, 1928. Serial No. 284,046. 5 Claims. (Cl. 255—71.)

1. A drill cutter, including a bushing, adapted to be secured over the end of a cutter shaft, said bushing having an inner neck of reduced external diameter, a cutter formed to fit about and enclose the forward end of said bushing, said cutter being made in two sections, means whereby said sections may be secured to each other against removal from said bushing in use, one section



surrounding the largest diameter of said bushing and the other fitting upon and enclosing the forward tapered end of said bushing.

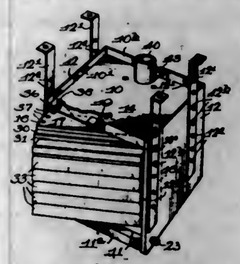
1,874,042. CONVEYER CONSTRUCTION. WALTER V. HOEFEN, Cleveland, Ohio, assignor to Colonial Iron Works Company, Cleveland, Ohio, a Corporation. Filed Nov. 16, 1931. Serial No. 575,415. 5 Claims. (Cl. 198—177.)



1. Conveyer mechanism of the class described, comprising the combination with a guard rail and a trolley rail, of a conveyer chain running along said guard rail and comprising a plurality of links, of which selected links have a body portion provided with lateral extensions thereon, a roller within the body portion adapted to roll along the guard rail, the selected links being interconnected with the remaining links by means of the said lateral extensions of the said body portion the said selected links including means for suspending the chain from the trolley rail.

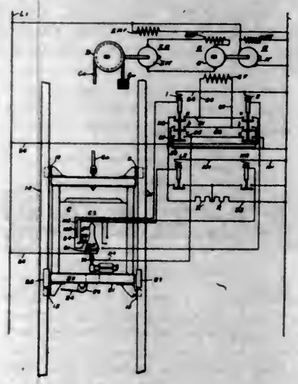
1,874,043. UNIT FOR HEATING AND VENTILATING SYSTEMS. ROBERT A. ILG, Chicago, and JOHN M. FRANK, Winnetka, Ill., assignors to Ilg Electric Ventilating Company, Chicago, Ill., a Corporation of Louisiana. Filed Oct. 4, 1928. Serial No. 310,211. 8 Claims. (Cl. 98—116.)

1. The combination of a casing having openings for the flow of air therethrough, a frame member pivotally mounted on said casing midway between the side walls of the latter to swing on a vertical axis, a propeller fan and fan motor mounted on said frame member, an air modifying element disposed across the path of air flowing through said casing, and a group of horizontally



pivoted deflector vanes mounted on said frame member opposite said fan, said vanes closing by gravity and adapted to be opened by the fan blast.

1,874,044. SAFETY DEVICE FOR ELEVATORS. HENRY D. JAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 27, 1929. Serial No. 366,284. 6 Claims. (Cl. 187—93.)



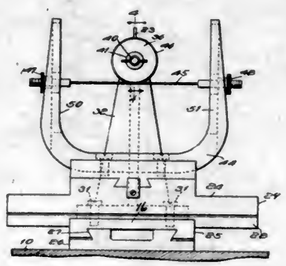
1. The combination with a car operable between a pair of rails in a hatchway, a motor for operating the car, controlling means for operatively connecting the motor to, and operatively disconnecting it from, a source of power, a plurality of braking jaws disposed on the car for gripping the rails and means for operating the braking jaws to stop the car when it starts to fall or run away, of additional independent actuating means operably responsive to operation of the controlling means for actuating the braking jaws to apply a mild braking effect to the car while the motor is operatively disconnected from its source of power.

1,874,045. CIGARETTE EXTINGUISHER. RICHARD H. JEFFERIES, Richmond, Va. Filed Mar. 21, 1930. Serial No. 437,675. 1 Claim. (Cl. 131—51.)



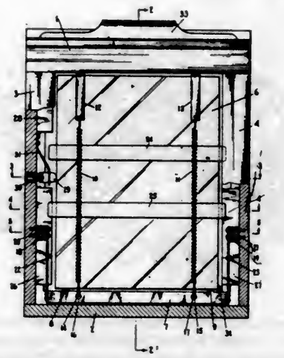
A cigarette holder and extinguisher consisting of a supporting member; a tray mounted upon the supporting member; and a metal rod hingedly connected to the tray and arranged to lie upon a cigarette on the tray with a light pressure but one insufficient to close the air passages through the cigarette.

1,874,046. ENGRAVING MACHINE. HELGE S. JONSSON, Chicago, Ill. Filed July 26, 1929. Serial No. 381,169. 5 Claims. (Cl. 33—22.)



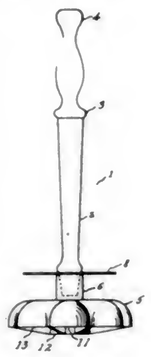
1. In a machine of the kind described comprising in combination, a cutter rotatable upon a fixed axis, a rotatable and axially movable work support, means for rotating said work support, said means including a rotatable element mounted for rotation upon the axis of rotation of said work support, and means arranged transverse of the axis of said work support cooperating with said rotatable element, a pair of elements connected with each other for movement in transverse directions, a support for said work support connected to one of said elements, and means extending from the other element providing a support for said transverse means which cooperates with said rotatable element of said work support.

1,874,047. DEPTHOGRAPH PLATE HOLDER. CLARENCE W. KANOLT, New York, N. Y. Filed May 23, 1930. Serial No. 454,861. 7 Claims. (Cl. 95—37.)



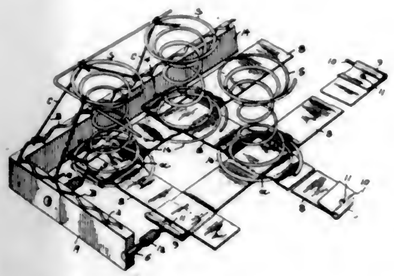
1. A depthograph plate holder, having opaque means to shield the plate when in the holder, said holder comprising a frame having top, bottom and sides, a lined screen in said plate holder, means to hold said screen against movement, a photographci plate, spring means to hold said photographic plate against said lined screen, a laterally movable bar on which said plate is mounted, flexible means which carry said bar spring-actuated means to hold said plate on said bar, means at one side of said plate holder which engages one edge of said plate, and rotatable means to actuate said last named means to move said plate.

1,874,048. CLOTHES WASHER. MAUDE T. KELLEY, Mount Vernon, N. Y., assignor of one-fourth to Bratson Corporation, Mount Vernon, N. Y., a Corporation of New York. Filed Feb. 12, 1931. Serial No. 515,291. 2 Claims. (Cl. 68—3.)



1. In a clothes washing device, an integrally formed waterproof non-metallic cup of molded construction, a handle receiving portion formed thereon, and a plurality of relatively thin inter-connected vertical walls within said cup dividing the same into a number of open cells, there being holes communicating with said cells to permit restricted fluid flow therethrough, the lower edges of said walls sloping downwardly and inwardly toward the center of said cup whereby in the operation of the device the exposed edges of said walls tend to spread and distribute the clothes evenly over the face of the cup and at the same time prevent their entrance into the cup.

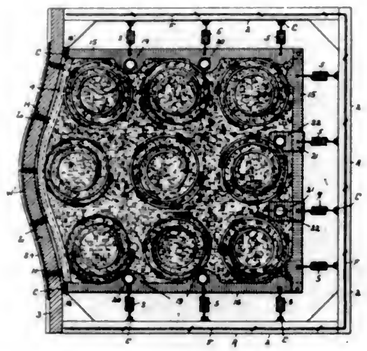
1,874,049. RESILIENT BOTTOM FOR COUCHES AND LIKE FURNITURE. JACOB KRONHEIM, Cleveland, Ohio. Filed Nov. 13, 1929. Serial No. 406,805. 1 Claim. (Cl. 155—179.)



In a resilient bottom for couches and like furniture including a frame and a flexible base member, a series of cylindrically-shaped elongated connecting members extending through and rotatably mounted within round openings in said frame, said connecting members having at their outer ends enlarged head portions and at their inner ends a cross bore for connecting said members with said flexible base member.

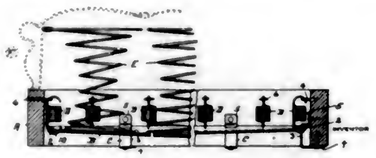
1,874,050. CHAIR AND COUCH. JACOB KRONHEIM, Cleveland, Ohio. Filed Mar. 19, 1930. Serial No. 437,168. 4 Claims. (Cl. 155—179.)

1. In a chair or couch, a frame, a flexible bottom made of woven fabric having a binding strip clamped to the border edges thereof, and springs connecting said bottom at said binding strip to said frame, said strip being shaped



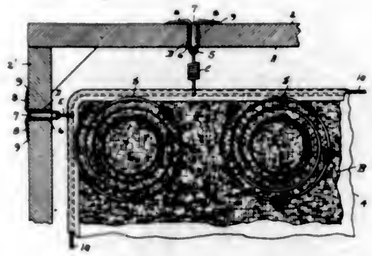
to form enlarged clamping areas for said flexible bottom opposite said springs.

1,874,051. RESILIENT SEAT OR BOTTOM FOR CHAIRS, COUCHES, ETC. JACOB KRONHEIM, Cleveland, Ohio. Filed Feb. 18, 1931. Serial No. 516,593. 10 Claims. (Cl. 155—179.)



1. A resilient seat or bottom for chairs, couches, etc., comprising a main frame, a flexible bottom member within said frame spaced from the inner walls thereof, a rigid border surrounding said bottom member, coiled springs suspended from said frame and connected with said rigid border of said bottom member, and means for maintaining said flexible bottom member under tension and stretched and axially aligned with respect to said frame independently of said springs.

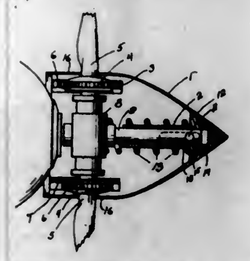
1,874,052. CHAIR AND COUCH. JACOB KRONHEIM, Cleveland, Ohio. Filed Apr. 6, 1931. Serial No. 528,023. 5 Claims. (Cl. 155—179.)



4. An attaching device for resiliently connecting a yielding bottom to a chair or couch frame, comprising a

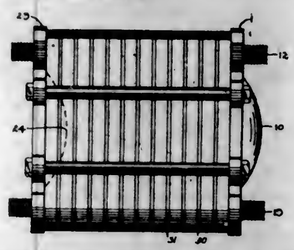
steel wire bent to form a main body portion having closely related straight legs and a loop portion, and oppositely directed branch portions arranged at an acute angle to said legs.

1,874,053. AUTOMATIC PROPELLER PITCH CHANGER. CHANDLEY WILLIAM LAMBERT, Cleveland, Ohio. Filed June 21, 1930. Serial No. 462,877. 4 Claims. (Cl. 170—162.)



1. In combination, a propeller shaft, a loose sleeve on said shaft, a means for revolving said sleeve with said shaft, a means for limiting longitudinal motion of said sleeve on said shaft, a conical pressure plate secured to said sleeve, a compression spring coaxial with said sleeve, a longitudinally placed gear rack secured to the inner surface of said pressure plate, a guide secured to the inner surface of said pressure plate parallel to said rack, a propeller blade extending normally outwardly from said propeller shaft, a gear wheel secured to said propeller blade cooperably with said rack; an annular groove in said gear wheel forming slidable contact with said guide.

1,874,054. HEAT TRANSMITTER. CLAUS LEVINSEN, Brooklyn, N. Y. Filed May 16, 1930. Serial No. 453,034. 3 Claims. (Cl. 257—245.)

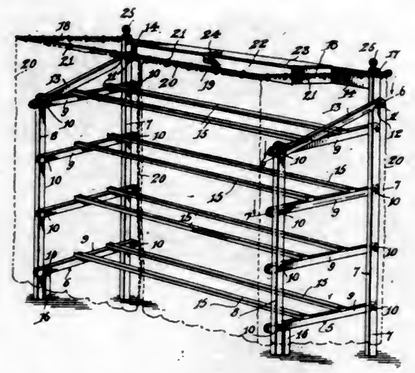


1. A heat transmitter, having means for increasing the effective area thereof, said means comprising a plurality of sections, a plurality of dome-shaped members associated with each said section and projecting thereinto, and end members, one said member having an outwardly projecting dome and the other said member having an inwardly projecting dome, and means for securing the whole in operative position.

1,874,055. PROCESS FOR PREPARING SUITABLE SUBSTITUTES FOR TABLE SALT FOR FLAVORING PURPOSES. ARTHUR LIEBRECHT, Frankfort-on-the-Main, Germany, assignor to the Firm Chemisch-Pharmazeutische Aktiengesellschaft Bad Homburg, a Corporation of Bad Hamburg, V. D. H. Filed May 17, 1929, Serial No. 364,001, and in Germany May 19, 1928. 7 Claims. (Cl. 99—11.)

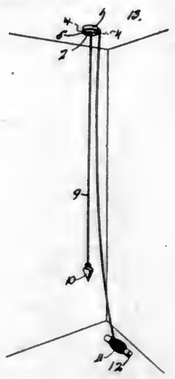
4. A process for preparing substitutes for common salt, suitable for flavoring purposes, which comprises mixing together water, an alkali metal formate and glutamic acid, and agitating said mixture thereby causing reaction between the ingredients resulting in a clear solution.

1,874,056. COLLAPSIBLE SHOE RACK. JULIO C. MATALLANA, New York, N. Y. Filed May 14, 1929. Serial No. 363,025. 1 Claim. (Cl. 211—38.)



A rack comprising a frame embodying end sections, each end section comprising short front bars and substantially long rear bars, pivoted horizontal bars connecting the front and rear bars of each end section, supporting bars connected with the horizontal bars and arranged in parallel spaced relation with each other, extension leg members pivotally connected to the lower ends of the front bars to lengthen or shorten the front bars of the end sections to hold the bars connecting the front and rear bars of the sections, in inclined positions or horizontal positions.

1,874,057. PLUMB BOB HANGER. EDWARD J. MURPHY, Framingham, Mass. Filed Oct. 1, 1930. Serial No. 485,718. 3 Claims. (Cl. 33—216.)



1. A plumb bob hanger comprising a body having a front and a back face, the back face being flat, a securing point projecting from said back face, said body having an aperture through it from the front face to the back face, the axis of the aperture being inclined to the axis of said securing point.

1,874,058. RAILWAY DRAFT RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 16, 1929, Serial No. 363,686. Renewed Jan. 7, 1932. 13 Claims. (Cl. 213—11.)

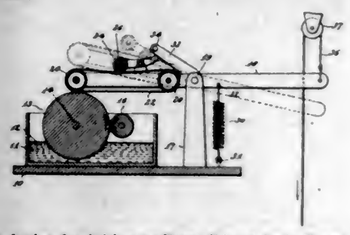
3. In a railway draft rigging, the combination with a friction shock absorbing mechanism; of a spring shock absorbing member actuated through said mechanism in

buff; spring shock absorbing means; a coupler; and means operative by the coupler for transmitting buffing and draft forces, said means actuating the spring shock



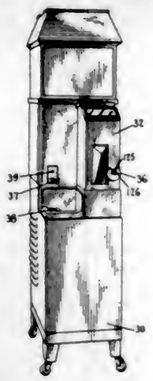
absorbing means in both buff and draft, the spring shock absorbing member in draft, and the friction shock absorbing means in buff only.

1,874,059. APPARATUS FOR INKING ENDLESS RIBBONS. BERTRAND PARADISE, Brooklyn, N. Y. Filed Dec. 18, 1929. Serial No. 415,029. 3 Claims. (Cl. 91—51.)



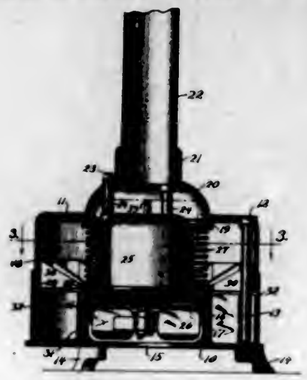
1. A device for inking endless ribbons including a rotatably mounted inking roller, a plurality of associated rotatably mounted spindles for carrying an endless ribbon, means for moving said spindles with respect to said inking roller, said means including a pivoted lever and an operating spring therefor, and means for applying tension to the endless ribbon, said tensioning means consisting of a lever, a roller carried thereby, and means for engaging the free end of said latter lever for depressing the same and moving said roller from the ribbon.

1,874,060. BEVERAGE DISPENSING APPARATUS. KARL D. PETTIT, Princeton, N. J., CLIFFORD P. WICKS, Stamford, Conn., and MICHAEL W. HAJEK, Ridgefield, N. J., assignors to American Cuptor Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 9, 1928. Serial No. 298,417. 10 Claims. (Cl. 225—21.)



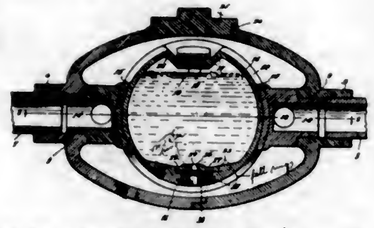
10. In a beverage dispensing apparatus, separate water and syrup reservoirs, a syrup measuring chamber, a discharge therefor, and means for mixing water with syrup flowing out of the measuring chamber without entering such measuring chamber and simultaneously therewith causing water to enter and mix with syrup in such measuring chamber.

1,874,061. AIR CIRCULATING AND CLEANING DEVICE. CASPER L. REDFIELD, Chicago, Ill. Filed Jan. 15, 1931. Serial No. 509,002. 12 Claims. (Cl. 183—77.)



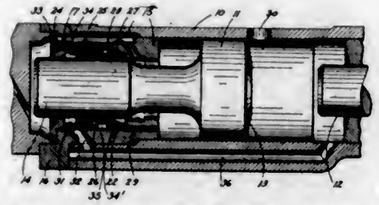
1. In a room having relatively cold air in contact with its floor and relatively warm air in contact with its ceiling, a temperature equalizing device consisting of a power driven fan and a case therefor, said parts being so arranged that the fan draws air from the layer adjacent to the floor and projects it in a column to the ceiling.

1,874,062. AIR LINE OILER. JOHN E. RENFER, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Filed Oct. 9, 1928. Serial No. 311,325. 8 Claims. (Cl. 184—55.)



1. An air line oiler, comprising a casing, an oil containing reservoir mounted for uninterrupted universal movement in the casing, means for admitting pressure fluid from the casing into the reservoir, and means for discharging oil from the reservoir by pressure fluid admitted thereto.

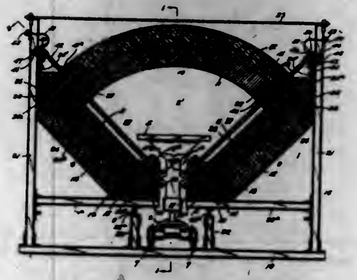
1,874,063. PNEUMATIC TOOL. JOHN E. RENFER, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 1, 1929. Serial No. 375,193. 5 Claims. (Cl. 121—19.)



1. In a fluid actuated tool, a cylinder, a piston reciprocable therein, means on said piston to direct motive fluid to one end of said cylinder, a slide valve to control

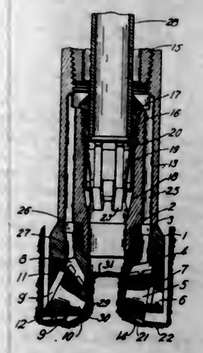
the admission of motive fluid to the other end of said cylinder, differential pressure areas on said valve arranged to be exposed to the pressure of the live motive fluid, and another pressure area on said valve constantly exposed to the pressure in said one end of said cylinder.

1,874,064. KILN. HARRY M. ROBERTSON, Cleveland, Ohio. Filed Sept. 7, 1929. Serial No. 391,024. 4 Claims. (Cl. 25—142.)



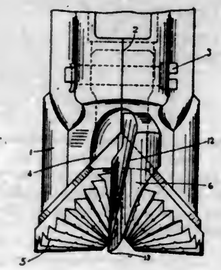
1. In apparatus of the class described, the combination of a preliminary heating chamber, a main heating chamber connected in end to end relation with said preliminary heating chamber to form a continuous kiln, the side walls of said main heating chamber converging downwardly and spaced at their lower ends to form an opening in line with an opening formed in the lower portion of said preliminary heating chamber, conveying means having portions extending upwardly through the openings in said chambers and movable therethrough and carrying ware supports within said chambers, said conveying portions extending upwardly so as to carry said supports in spaced relation to the lower ends of said converging walls, and electric heating units disposed upon one of said converging walls of said main heating chamber and extending to a point below and inwardly of the lateral side portions of said ware supports.

1,874,065. ROLLER CORE BIT. FLOYD L. SCOTT, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed July 5, 1928. Serial No. 290,292. 4 Claims. (Cl. 255—72.)



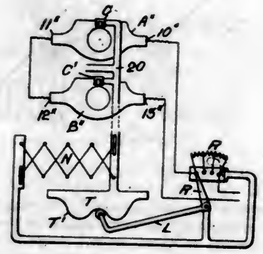
1. A core drill including a tubular head, an outer set of cutters mounted in pockets in the lower end of the head, pins upon which said cutters are rotatable, said pins being tapered and inclined downwardly at their inner ends, said inner ends of said pins being supported in the wall of the head, and an inner set of cutters mounted upon tapered pins inclined upwardly at their inner ends, said inner cutters projecting in advance of the said outer cutters and serving to cut a clearance for the wall supporting said outer cutter pins.

1,874,066. COMBINATION ROLLING AND SCRAPING CUTTER DRILL. FLOYD L. SCOTT and IRVIN H. BETTIS, Houston, Tex. Filed Apr. 28, 1930. Serial No. 447,851. 3 Claims. (Cl. 255—61.)



1. A rotary earth boring drill, including a head, opposed rolling cutters thereon, a scraping blade adapted to fit between said cutters, a shank on said blade to fit within said head, said shank having a central water course therethrough.

1,874,067. FLAW DETECTOR FOR IRREGULAR OBJECTS. ELMER A. SPERRY, Brooklyn, and HARCOURT C. DRAKE, Hempstead, N. Y., assignors, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Aug. 17, 1929. Serial No. 386,538. 9 Claims. (Cl. 175—183.)

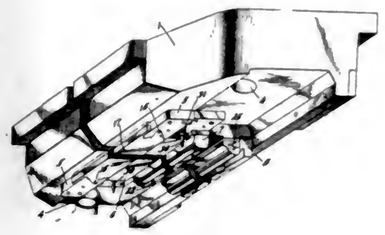


1. The method of electrical inspection of the interior of irregularly shaped specimens which consists in similarly energizing the specimens by preferably heavy electric current and simultaneously exploring like portions of each specimen by correlated inspection apparatus.

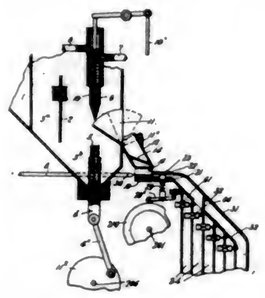
1,874,068. METHOD AND APPARATUS FOR MAKING SHUTTER BLADES. NORMAN WALKER, Lockport, N. Y., assignor to Harrison Radiator Corporation, Lockport, N. Y., a Corporation of New York. Filed Feb. 9, 1931. Serial No. 514,648. 9 Claims. (Cl. 153—2.)

1. A press for forming radiator shutter blades from sheet metal stock fed progressively a given amount between

each press closing stroke, including a pair of relatively movable die blocks, work performing parts carried by each block and arranged in cooperative relation for action on the stock with each press closing stroke, said parts including shearing dies having a stripper device associated therewith, means to form a preliminary curl on the leading edge of a sheared blank, forming dies to press to channel shape in cross section a blank containing a preliminary curl, and means to give a final curl to the initially curled edge of a channeled blank.



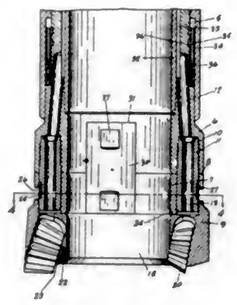
1,874,069. DEVICE FOR MECHANICALLY SORTING NATURAL AND ARTIFICIAL PRODUCTS ACCORDING TO THEIR COLOR AND GRADATIONS OF COLOR. ARTHUR WEIGL, Munich, Germany. Filed June 6, 1927, Serial No. 196,971 and in Germany, June 9, 1926. 13 Claims. (Cl. 209—111.)



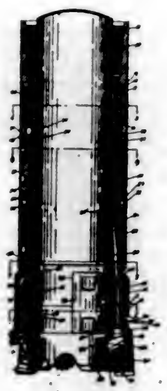
12. A machine for mechanically sorting natural and artificial products such as coffee beans or similarly shaped articles according to their color and gradations of color and having a light sensitive selecting device, means to select individual articles and place them in a predetermined position with respect to their flat sides, presenting means having a window with an aperture smaller than the product to be sorted whereby to leave free a constant superficial area, said window being located opposite said selecting device, and devices to grip the individually located article and present it with its non-flat side adjacent said window for inspection by said selecting device.

1,874,070. ROLLER CORE BIT. LOUIS H. WELLENSIEK, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Mar. 24, 1931. Serial No. 524,790. 9 Claims. (Cl. 255—72.)

1. A core drill including a tubular body, a drill head, cutter supports on said drill head adapted to abut the lower end of said body, pins on said body adapted to telescope within openings in said cutter supports, means to secure said pins to said supports, whereby said head and body are connected together, and cutters on said supports.



1,874,071. CORE BIT CONSTRUCTION. LOUIS H. WELLENSIEK, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Mar. 24, 1931. Serial No. 524,810. 12 Claims. (Cl. 255—72.)



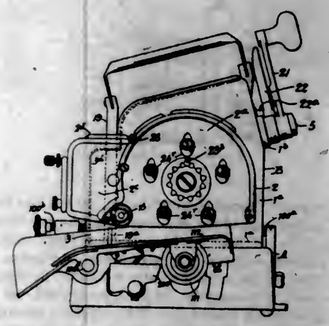
1. In a core drill, a cutter head, cutter supports thereon, a drill body, means to secure said head to said body, cutters in said supports, core engaging means comprising arcuate dogs housed slidably in arcuate recesses in said body, a drill collar telescoping over said body, means connecting said drill collar and said body but allowing a limited relative longitudinal movement between them, and means on said collar connected with said dogs to move said dogs and advance said dogs to core engaging position when said drill collar is moved upwardly.

1,874,072. VENT FOR CORE BARRELS. LOUIS H. WELLENSIEK, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex. a Corporation of Texas. Filed July 20, 1931. Serial No. 551,908. 7 Claims. (Cl. 255—72.)

1. A drill nipple, a coupling block thereon, aco re barrel in said nipple, a tube having a longitudinally slidable and fluid tight engagement in the upper end of said core barrel, an upwardly opening valve at the lower end of said tube, and a head on said tube fitted resiliently within a recess in said coupling block, means to hold said head normally in said recess, said recess having an opening outside said nipple but closed from the upper end of said block.

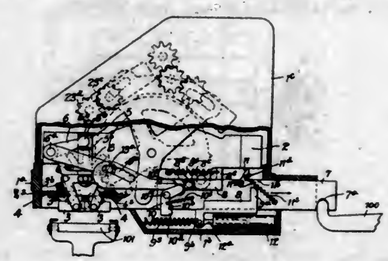


1,874,073. POSTAGE METER MACHINE. WALTER H. WHEELER, Jr., and JACOB W. OGDEN, Stamford, Conn., assignors to Pitney-Bowes Postage Meter Co., Stamford, Conn., a Corporation of Delaware. Filed Mar. 8, 1929. Serial No. 345,515. 34 Claims. (Cl. 101—91.)



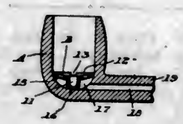
1. In a machine of the character set forth having envelope feeding means and means including a positively driven impression roller for imprinting the envelope as it passes through the machine, of envelope arresting means comprising movable fingers, a spring for normally holding these fingers in uplifted position, a lever for actuating the fingers to depress same, a pair of cams for actuating said lever, and means for operatively engaging the lever with either cam according to whether the envelope is or is not to be stopped after an impression is made thereon.

1,874,074. MEANS TO PREVENT TAKING OF FRAUDULENT IMPRESSIONS FROM VALUE-PRINTING DIES. WALTER H. WHEELER, Jr., and JACOB W. OGDEN, Stamford, Conn., assignors to Pitney-Bowes Postage Meter Co., Stamford, Conn., a Corporation of Delaware. Filed Nov. 28, 1930. Serial No. 498,865. 11 Claims. (Cl. 101—91.)



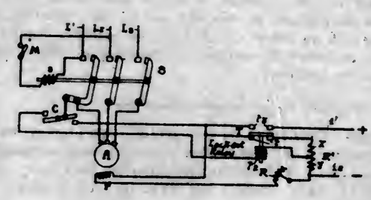
1. In combination; a printing die having normally separated parts, means for assembling the die parts during a single cycle of operations, means for taking an impression from the assembled die; and means inaccessible to the operator for so limiting the time of assembly of the die parts that only one imprint can be obtained therefrom.

1,874,075. SMOKING PIPE. PATRICK JOHN WHELAN, Renfrew, Ontario, Canada. Filed Apr. 2, 1931, Serial No. 527,217, and in Canada Apr. 3, 1930. 2 Claims. (Cl. 131—12.)



1. In an accessory for smoking pipes, a plate-like device removably mounted within the pipe bowl and comprising a disc-like head with holes therein, a combined hollow stem and distance piece integral with said head and adapted to impinge upon the bottom portion of the pipe bowl and retain the head in spaced relationship thereto.

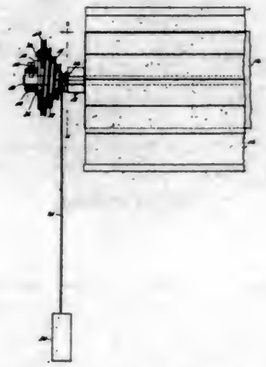
1,874,076. SYNCHRONOUS MOTOR STARTER. HARRY L. WILCOX, Shaker Heights, Ohio, assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 21, 1926. Serial No. 143,098. 12 Claims. (Cl. 172—289.)



6. In a motor control system, a motor having a field winding, an excitation circuit for the field winding, a closed starting circuit containing the field winding, a resistance

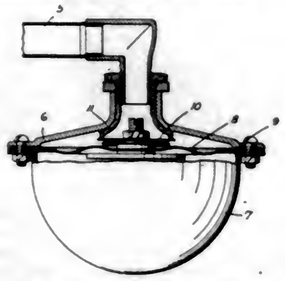
in the latter circuit, a magnet winding connected in shunt with a portion of the resistance, and a relay actuated by the force created by the magnet winding to open the closed circuit and close the excitation circuit.

1,874,077. COUNTERBALANCING DEVICE. ELLIS G. ANDERSON, Oklahoma City, Okla. Filed Dec. 24, 1929. Serial No. 416,283. 3 Claims. (Cl. 254—178.)



1. A counterbalancing device of the class described including a rotatable axle, a pulley adapted for winding thereon and unwinding therefrom a counter-weight flexible sustaining element, said pulley comprising a part for said element loosely mounted on said axle, a part fixed on said axle, and means adapted to secure said parts together in any desired adjusted relation with respect to each other.

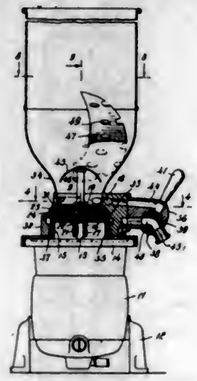
1,874,078. HORN. JOHN M. AUFIERO, Brooklyn, N. Y., assignor to E. A. Laboratories, Inc., Brooklyn, N. Y., a Corporation of New York. Filed May 13, 1932. Serial No. 611,058. 12 Claims. (Cl. 116—142.)



1. A horn including a housing, a vibratory diaphragm mounted in said housing, a motor mechanism connected to said diaphragm to flex the same, said housing being formed with an outlet opening beyond said diaphragm and a valve mechanism controlling the flow of fluid through said outlet opening.

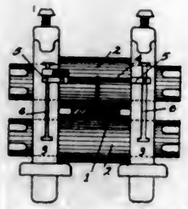
1,874,079. DISPERSION MACHINE. WILLIAM A. BLACK, Montclair, N. J., assignor to Travis Process Corporation, Jersey City, N. J., a Corporation of Delaware. Filed July 26, 1929. Serial No. 381,216. 15 Claims. (Cl. 83—13.)

1. A machine for mixing, dispersing, disintegrating and similarly treating liquid material which comprises a receiver for said material, a rotor member having a peripheral working surface adapted to be moved at high speed, a stator member connected with said receiver and surrounding said rotor member having a working surface disposed in concentric, closely adjacent relationship to said rotor surface and defining therewith a narrow intervening working gap in which such material is so treated, a conduit communicating with the outlet of said gap for receiving the material discharged therefrom, a conduit



adapted for communication with said first-named conduit for delivering said material externally of the machine, a conduit communicating with the inlet of said gap at a point adjacent said inlet and adapted for communication with said first-named conduit for reintroducing material into said gap, and unitarily operated means for selectively connecting said first-named conduit with either of the other two conduits and closing the remaining conduit.

1,874,080. CONTROLLING MECHANISM FOR SCALE REMOVERS AND THE LIKE. LEO F. BRISLIN, Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Aug. 30, 1929. Serial No. 389,559. 1 Claim. (Cl. 29—81.)

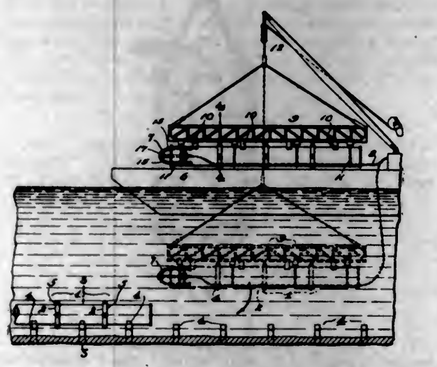


In an hydraulic scaling mechanism, means for feeding a work piece forward, fluid conductors arranged transversely of the path of travel of said work piece and having opposed orifices, a valve controlling the admission of high pressure fluid to said conductors, a trigger lying normally in the path of movement of said work piece, an electric circuit, controlling means for said electric circuit operatively connected with said trigger, a relay in said circuit, a solenoid, a connection between said relay and said solenoid, and an operative connection between said solenoid and said valve.

1,874,081. METHOD OF AND APPARATUS FOR CONNECTING PIPES IN BUILDING PIPE LINES. GEORGE BURROWS, Long Island City, N. Y., assignor to Merritt-Chapman & Scott Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 17, 1930. Serial No. 421,582. 5 Claims. (Cl. 61—72.)

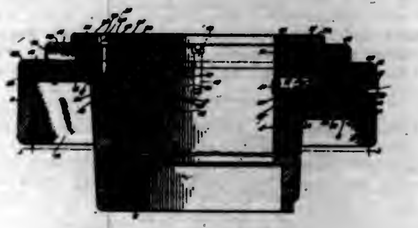
1. A device for centering pipes, comprising in combination a series of longitudinally extending binding arms

pivotally connected together at their forward ends to move outwardly and inwardly respectively, a longitudinally extensible operating member for said arms, links pivotally connected to said operating member and said arms, and a



slide cooperating with the operating member to hold the same contracted with the arms in their outer position, and movable to release the operating member and permit the extension of the same to move the arms inwardly.

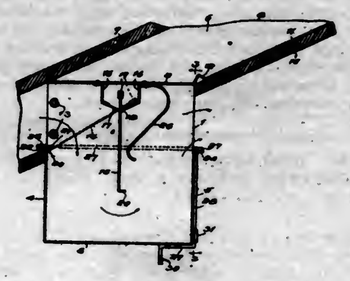
1,874,082. CHUCK OR HOLDING DEVICE. ALBERT E. CHURCH, New Britain, Conn., assignor to The Union Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 28, 1931. Serial No. 519,217. 6 Claims. (Cl. 279—114.)



1. In a chuck having a head and a jaw-adjusting scroll mounted on and having its inner side lying against said head; a headed screw extending transversely of one circular edge of said scroll, said screw being extended inwardly beyond the inner side of said scroll and threaded into the chuck head, and having its head overlapped with the outer side of said scroll, whereby upon tightening of said screw, said scroll will be tightly clamped between said screw head and the chuck head.

1,874,083. VENTILATING DEVICE. JOSEPH B. CLAY, Cedar Falls, Iowa, assignor to Clay Equipment Corporation, Cedar Falls, Iowa, a Corporation of Iowa. Filed Nov. 16, 1927. Serial No. 233,664. 8 Claims. (Cl. 98—37.)

1. In a ventilating device of the kind described and in combination, a casing having an inlet and outlet, a damper suspended between said inlet and outlet and operatively movable to normally control the air passing through the casing from said inlet to said outlet and prevent a reversal of direction of the normal flow of the air, and resilient



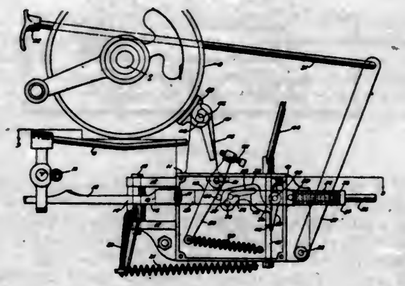
means with which said damper engages upon movement of the damper for controlling the damper to regulate the normal flow.

1,874,084. TEXTILE FABRIC AND METHOD OF MANUFACTURE. LOUIS M. COTCHETT, Brookline, Mass., assignor to Textile Patent & Process Co. Incorporated, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 11, 1930. Serial No. 420,246. 4 Claims. (Cl. 139—426.)



1. A method of weaving crepe fabric which consists in laying in a single warp shed separate and oppositely twisted filling ends, the separate ends being non-intertwisted with one another.

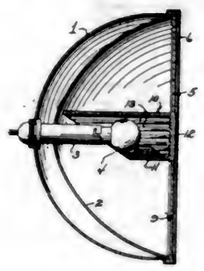
1,874,085. STOP MOTION FOR KNITTING MACHINES (HOSIERY). ALFRED CRAWFORD, New Brunswick, N. J., assignor to Crawford Manufacturing Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Mar. 24, 1928. Serial No. 264,406. 11 Claims. (Cl. 192—125.)



1. With a knitting machine having a driving pulley, a stop motion, and an axially rotatable trip rod operated by said stop motion; the combination of a readily attach-

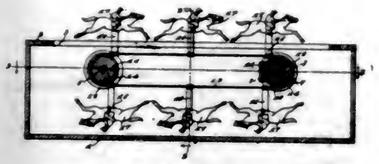
able unit comprising a frame adapted to be rigidly secured to the knitting machine, a brake-carrying arm pivoted to said frame, a brake shoe pivotally mounted on said brake arm and adapted to engage said driving pulley, an operating element for said arm, means for moving said operating element to apply said brake, restraining means for said operating element, a supplementary axially rotatable trip rod carried by said frame and universally connected to the axially rotatable trip rod of said stop motion, and means operated directly from and by rotation of said supplementary trip rod for releasing said restraining means.

1,874,086. HEADLIGHT LENS. VINCENT L. DICKSON, Alameda, Calif. Filed Oct. 3, 1931. Serial No. 566,730. 1 Claim. (Cl. 240—41.4.)



A lens comprising a disk having an arcuate light diffusing area at its upper portion and following the peripheral edge thereof, a clear area extending downwardly from the diffusing area between the opposite ends thereof, ribs formed on the disk exteriorly thereof and arranged laterally of and extending downwardly from the clear area, a hollow tubular member extending centrally from the disk, the portion of the disk within the outline of the hollow tubular member having light diffusing means thereon, the interior surface of the hollow tubular member being polished, ribs formed on the interior surface of the hollow tubular member and extending longitudinally thereof, and light diffusing means arranged on the outer surface of the hollow tubular member.

1,874,087. TOY. CARL A. DIEDERICHS, Pittsburgh, Pa. Filed Aug. 12, 1931. Serial No. 556,657. 2 Claims. (Cl. 46—40.)



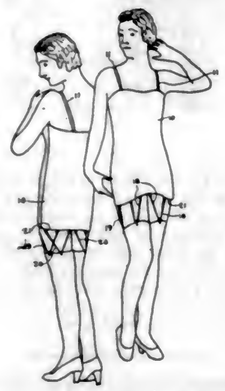
1. A toy of the character described comprising a casing, a slotted top for said casing, rollers journaled in said casing, a belt trained about the rollers, means for holding the belt in taut condition, means for rotating one of said rollers for revolving the belt, brackets secured to said belt and including strips of bendable metal disposed in pairs with their inner ends passed through the belt and arranged in clamped engagement therewith and figures having openings therein to be detachably received by the brackets to be carried thereby for movement through the slots of the top.

1,874,088. LAMP CONSTRUCTION. HAROLD B. DONLEY, Columbus, Ohio, assignor to Columbus Auto Brass Company, Columbus, Ohio, a Corporation of Ohio. Filed Sept. 14, 1931. Serial No. 562,758. 1 Claim. (Cl. 240—11.2.)



In a lamp of the character described, a vertically arranged cylindrical housing having spaced longitudinally extending slots formed therein which extend over the forward and side portion of said housing, the unslotted portion of said housing carrying a reflecting surface, upper and lower end members of ornamental form closing the ends of said housing, a cylindrical lens within said housing covering said slots, inwardly directed concave reflecting members positioned in the ends of said lens, an incandescent lamp bulb carried by the upper of said reflecting members and arranged inwardly with respect thereto, a spring member arranged between the lower of said reflectors and the lower of said end members for effecting the resilient support of said lens and bulb mounting structure, a compressible gasket between the upper of said reflectors and the upper of said end members, and a bayonet slot connection between the upper end of the housing and the upper of said end members.

1,874,089. HOSE SUPPORTER FOR WOMEN. ELEANOR DONALDSON, Minneapolis, Minn. Filed Feb. 24, 1931. Serial No. 517,795. 4 Claims. (Cl. 241—1.)



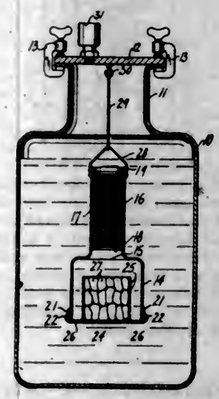
1. A hose supporter comprising a garment adapted to be supported upon the form of the wearer, a plurality of loops of double elastic cord each secured fixedly at one end and slidable at the other end in spaced relation to the lower edge of said garment, and a stocking fastener on and embracing each of said loops and freely slidable thereon.

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1,874,090. PREPARATION OF RARE REFRACTORY METAL POWDERS BY ELECTROLYSIS. FRANK H. DRIGGS, Bloomfield, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Nov. 1, 1928. Serial No. 316,624. 14 Claims. (Cl. 204—19.)

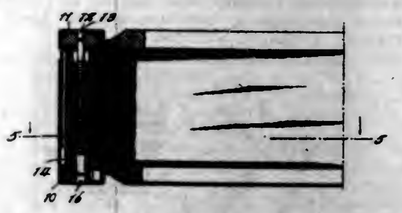
1. In the preparation of rare refractory metal powders by electrolytic dissociation of their fused salts, the method of increasing the particle size thereof comprising adding to the fused bath a proportion of an ionizable chloride compound substantially nonreactive with the rare refractory metal.

1,874,091. PROCESS OF AND APPARATUS FOR CARBONATING LIQUIDS. EMERY H. FAHRNEY, Chicago, Ill. Filed June 5, 1931. Serial No. 542,242. 6 Claims. (Cl. 62—91.5.)



1. An apparatus for the purpose of carbonating liquids with compressed carbon dioxide snow which consists of a container for the liquid, a receptacle immersed in the container and in which receptacle the carbon dioxide snow is disposed, and means forming tortuous passage through which the gas and liquid flow, the said means presenting maximum surfaces of liquid to the gas.

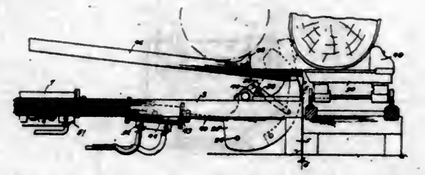
1,874,092. LOOSE-LEAF BINDER. CHARLES A. FINLEY, Rutherford, N. J., assignor to Boorum & Pease Company, New York, N. Y., a Corporation of New York. Filed Aug. 14, 1929. Serial No. 385,704. 11 Claims. (Cl. 129—13.)



1. A loose leaf binder comprising a pair of clamping bars, in combination with rotatable telescoping leaf-holding posts semi-circular in cross-section, and means for rotating said leaf-holding posts.

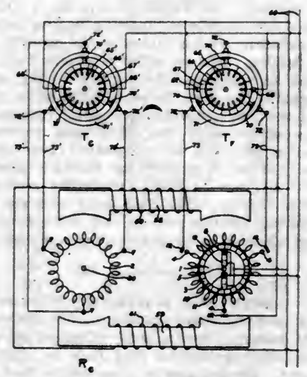
1,874,093. LOG TURNER AND LOADER. HENRY C. FISHER, Selma, Ala. Filed Mar. 2, 1932. Serial No. 596,326. 9 Claims. (Cl. 143—95.)

1. In a log turner, framework including a log deck and parallel guideways below the same, a slide mounted in said guideways, a log turner pivoted on said slide, means pivotally mounted on said slide for rotating said turner, and means fixed to said framework for reciprocating said slide in said guideways.



9. In a log turner, framework including a pair of parallel rails, a steam cylinder fixed to said framework between said rails with its cylinder axis parallel to said rails, a slide reciprocable between said rails and connected for operation by said cylinder, log turning mechanism pivoted on said slide, a second steam cylinder pivoted to said slide to rock about an axis perpendcular to the axis of the first named cylinder, and means connecting the second cylinder to said mechanism for operating the same.

1,874,094. TRANSMISSION SYSTEM. HANNIBAL C. FORD, Jamaica, and HARRY L. TANNER, Brooklyn, N. Y., assignors to Ford Instrument Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed May 11, 1926. Serial No. 108,327. 25 Claims. (Cl. 172—239.)

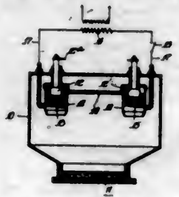


1. In an electrical transmission system, the combination of a plurality of transmitters, a plurality of receivers electrically connected severally thereto, and means controlled jointly by said receivers including a circuit changing mechanism for one of said receivers for maintaining said receivers in the same angular relation as said transmitters.

1,874,095. VAPOR RECTIFIER. ARTHUR GAUDENZI, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Feb. 13, 1928, Serial No. 253,943, and in Germany May 13, 1927. 9 Claims. (Cl. 250—27.5.)

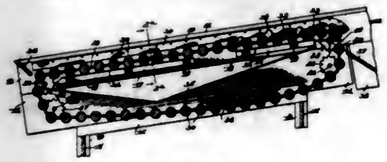
1. In a vapor rectifier comprising a hermetically closed evacuated vessel, a cathode and a plurality of anodes insulatingly mounted within said vessel and adapted to develop vapor during operation, tubular shields surrounding said anodes arranged to divert the stream of vapor from said anodes, each of said shields having an opening for

passing the arc therethrough, and electrical heater elements within said shields in front of said anodes at a point back of said opening proportioned to be heated



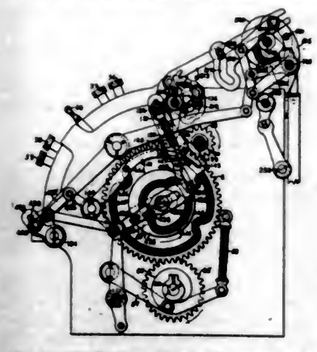
during operation by electric current to a temperature of the order of 500 degrees centigrade or more for reducing the gas density in the space adjacent to said anodes.

1,874,096. SORTING MACHINE. WILLIAM E. GHENT, Atlanta, N. Y., assignor to Boggs Manufacturing Corporation, Atlanta, N. Y., a Corporation of New York. Filed Apr. 21, 1931. Serial No. 531,690. 4 Claims. (Cl. 209—106.)



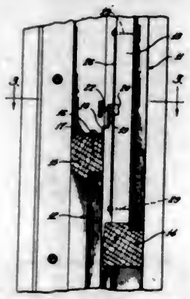
1. In a machine for handling articles, a frame, an endless conveyor thereon comprising spaced rollers for advancing articles, driving chains at the opposite ends of the rollers having parts on which the rollers are free to revolve, one or more sprocket shafts having sprockets thereon engaging the chain to be driven thereby, means in the path of the rollers operating to effect rotation of the same during advancement thereof between predetermined points, and a plurality of bail-shaped rods extending longitudinally of one of the sprocket shafts in spaced relation thereto and having their extremities secured upon the sprockets thereon, said rods being revolved by said sprockets during rotation thereof and successively moved between the rollers to displace the articles carried thereby.

1,874,097. COMPUTING MACHINE. MAXIMILIAN M. GOLDBERG, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed June 14, 1926, Serial No. 115,998. Divided and this application filed Jan. 31, 1930. Serial No. 425,002. 61 Claims. (Cl. 235—130.)



1. In an accounting machine, the combination of two banks of control keys, a bank of release keys certain of which are normally locked against depression, means operable by any of the keys in one of said control banks for releasing said release keys, and means operable by certain of the keys only, in the other of said control banks for releasing said release keys.

1,874,098. WINDOW LATCH. HENRY L. HAFF, Chicago, Ill. Filed Sept. 11, 1931. Serial No. 562,341. 1 Claim. (Cl. 292—305.)

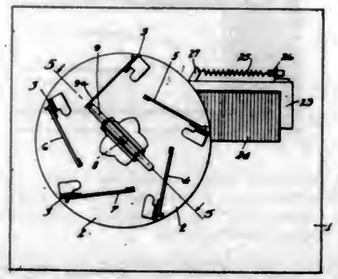


A window latch comprising a member carried by the top rail of the lower sash, a block on said member provided with a vertical slot having a chamfered mouth at its lower end, a U-shaped member carried by a stile of the upper sash including arms attached to said stile and a portion interconnecting said arms guided in said slot, and a screw carried by said member and block having a portion penetrating into said slot for latching engagement with said interconnecting member portion.

1,874,099. MANUFACTURE OF DYEINGS ON TEXTILES. ROBERT HALLER, Riehen, near Basel, Switzerland, assignor to Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed Aug. 17, 1931, Serial No. 557,725, and in Switzerland Sept. 3, 1930. 4 Claims. (Cl. 8—5.)

1. A manufacture of new dyeings on textiles, consisting in coupling leuco compounds of vat dyestuffs deriving from carbazole-indophenols with diazo compounds, the coupling being effected on the fibre.

1,874,100. SELECTIVE ELECTRICAL CIRCUIT CONTROLLING DEVICE. CHARLES LUDWIG HANEL, Jackson Heights, N. Y., assignor to Signal Engineering & Manufacturing Company, New York, N. Y., a Corporation of Massachusetts. Filed Dec. 9, 1929. Serial No. 412,815. 5 Claims. (Cl. 200—8.)



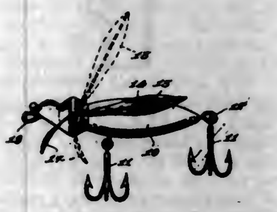
1. In a device of the class described, the combination with a plurality of spaced contacts, of a movable contact arm and cam means for imparting a predetermined irregular movement to said arm to procure engagement of said contacts in predetermined irregular order.

1,874,101. CUTTER HEAD FOR PHONOGRAPH RECORDING. ROBERT HEAD, Yonkers, N. Y., assignor, by mesne assignments, to United Research Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed July 30, 1929. Serial No. 382,254. 3 Claims. (Cl. 274—32.)



1. The combination with a phonograph record cutter including a stylus, of a rigid bar extending across the base thereof adjacent said stylus, means pivotally affixing one end of said bar to said cutter, the other end of said bar projecting beyond said cutter and having longitudinally formed therein a shallow centering groove for reception of the bevelled point of an adjusting screw, said adjusting screw being screw-threaded thru a lug affixed to said cutter, said lug having formed thereon an outwardly extending hook adapted for fastening one end of a coiled spring connected to said bar for holding the same against said adjusting screw for all adjusting positions thereof, and a knob-shaped support carried by said bar adjacent said stylus and adapted to engage the surface of a record in advance of the sound groove formed by said stylus.

1,874,102. ARTIFICIAL BAIT. EDWARD L. JACOBS, Vicksburg, Mich. Filed Feb. 5, 1932. Serial No. 591,156. 3 Claims. (Cl. 43—42.)



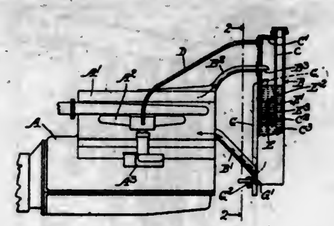
1. An artificial bait simulating a live winged insect, comprising a body portion, wings pivoted at the sides thereof, and a blade directly connected with said wings adjacent the pivots therefor and depending from said body portion to cause said wings to rise and fall as the bait is drawn through the water with sudden jerks.

1,874,103. METHOD OF TOUGHENING STEEL. GEORGE A. JOHNSON, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 30, 1929, Serial No. 389,612. Renewed Feb. 20, 1932. 8 Claims. (Cl. 148—21.)

1. A method of toughening steel, including the following steps: Heating the steel to a temperature above that corresponding to that at which it loses its magnetic qualities, removing the steel from the influence of the heating medium to permit slow cooling until it again exhibits magnetic qualities; and then immediately quenching the steel.

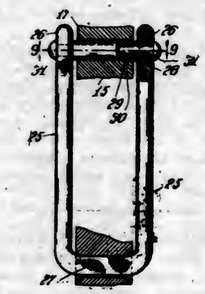
1,874,104. AUTOMOBILE ENGINE COOLING SYSTEM. HARRY D. JOHNSON, Chicago, Ill., assignor of one-third to Ralph D. Kraetsch and one-third to Harry Svarrer, Chicago, Ill. Filed Sept. 16, 1931. Serial No. 563,117. 4 Claims. (Cl. 123—175.)

1. In a device for maintaining the circulation of a cooling liquid for an engine, an engine, a water jacket associated therewith, a radiator, a chamber within said radiator having a bottom opening located below the normal water level in said radiator, an outlet passage member extending from the radiator, below the water line, to the water jacket, an inlet passage member extending from



the water jacket to the interior of said chamber at a level above the water line, and a suction passage in communication with said chamber, above the level of said outlet passage, and means for maintaining a suction therethrough.

1,874,105. BRAKE HANGER. MALCOLM S. JOHNSON, Chicago, Ill., assignor, by mesne assignments, to Illinois Railway Equipment Company, a Corporation of Illinois. Filed Nov. 6, 1929. Serial No. 405,090. 2 Claims. (Cl. 188—209.)

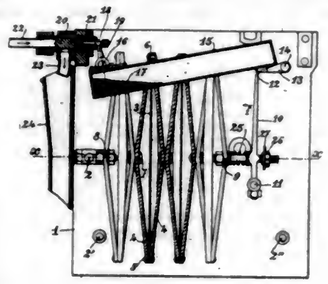


2. A brake hanger composed of an elongated U-shape link provided with enlarged apertured ends, the inner opposing faces of said enlarged ends being counter-sunk about the apertures, a sleeve disposed between said ends with the sleeve-ends seated in the countersunk portions, and a rivet disposed through said apertured ends and the sleeve.

1,874,106. APPARATUS FOR THE AUTOMATIC EMPTYING OF RECEPTACLES CONTAINING A LIQUID AT A GIVEN TEMPERATURE. HENRI EUGÈNE LÉON LABBÉ, Asnieres, France. Filed Nov. 25, 1929, Serial No. 409,736, and in Germany Aug. 15, 1928. 6 Claims. (Cl. 137—34.3.)

1. An automatic apparatus for the emptying of a liquid contained in a receptacle when the surrounding air has attained a given temperature, said apparatus comprising, in combination, a discharge valve for the receptacle, a device which is deformable by the variations of temperature, said device consisting of a plurality of sections which are subjected to said variations of temperature, each section having the form of a geometrical figure whereof a part consists of a metal having a relatively small coefficient of expansion and is practically indeformable in a given direction while the other part consists of a metal having a greater coefficient of expansion and is mechanically deformable in the said direction, the said sections being deformable in the same direction and assembled end to end in this direction, the first section being secured

to a fixed point, and the last section being secured to a lever; a cam controlled by said lever; a counterweight controlled by said cam and connected to the discharge



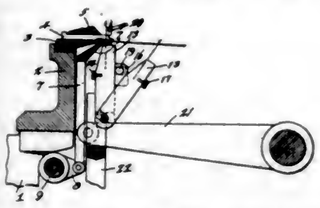
valve of the said receptacle, whereby the said discharge valve will be opened when the hereinabove given temperature is attained.

1,874,107. VINYL DERIVATIVE AND PROCESSES OF PREPARING IT. WALTER E. LAWSON and JAMES H. WERNTZ, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 20, 1930. Serial No. 422,215. 9 Claims. (Cl. 260—2.)

1. A light, colored toluene soluble polymer of vinyl chloride.

6. The method of making a toluene-soluble polymer of vinyl chloride which comprises polymerizing a vinyl chloride solution by passing the solution through a polymerizing tube heated to a temperature between 90° and 150° C. at a rate such that the volume of solution passed through the tube in one hour is from one-half to three times the volume of the tube at a pressure above atmospheric and with continuous withdrawal of the polymer.

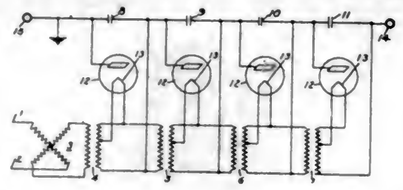
1,874,108. NEEDLE BAR FOR STRAIGHT KNITTING MACHINES. KARL RICHARD LIEBERKNECHT, Oberlungwitz, Germany, assignor to Karl Lieberknecht G. m. b. H., Oberlungwitz, Germany, a Corporation of Germany. Filed Oct. 28, 1931, Serial No. 571,657, and in Germany Oct. 28, 1930. 6 Claims. (Cl. 66—82.)



1. In a straight knitting machine having a needle bar, a pivoted needle bar portion and a fixed needle bar portion, in combination with one or more separate additional needle carriers located between said pivoted and fixed needle bar portions.

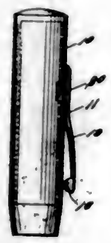
1,874,109. HIGH VOLTAGE DIRECT CURRENT SYSTEM. RALPH E. MARBURY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 24, 1925. Serial No. 45,847. 2 Claims. (Cl. 175—363.)

1. A system for transforming alternating current of low voltage to direct current of higher voltage comprising a low-voltage source of alternating current, a plurality of transformers connected in cascade with respect to said source for increasing the voltage of the system to any desired level, a plurality of rectifiers each associated



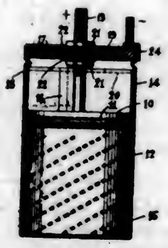
with a corresponding transformer for changing the higher-voltage alternating current to direct current, and means for integrating the voltage effects derived from said rectifiers.

1,874,110. CLIP FOR WRITING INSTRUMENTS. WILLIAM CLARKE S. MAYS, Edgewood, R. I., assignor to The Mays Manufacturing Co., Inc., a Corporation of Rhode Island. Filed Sept. 18, 1931. Serial No. 563,553. 2 Claims. (Cl. 24—11.)



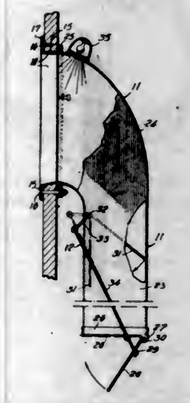
2. A clip for a writing instrument comprising a body portion, means for attaching the body portion to a writing instrument, an enlargement for engaging the fabric, and a flange at about 45° to the surface of the body portion, about the edge of said body portion to stiffen the same, said enlargement presenting a surface conforming to the angular relation of said flange with reference to its body, the plane of said enlargement surface cutting the plane of the surface of said body portion at about 45°.

1,874,111. ELECTROLYTIC CONDENSER. RALPH D. MERSHON, New York, N. Y. Original application filed Dec. 31, 1925, Serial No. 78,534, Patent No. 1,773,492. Divided and this application filed Jan. 25, 1928. Serial No. 249,314. 4 Claims. (Cl. 175—315.)



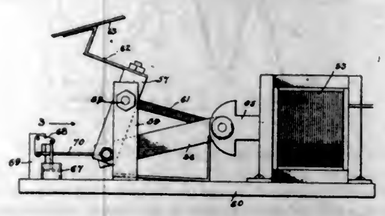
1. In an electrolytic condenser, a filmed metal anode, an electrolyte in which the anode is immersed, an unfilmed metal cathode surrounding the anode and in contact with the electrolyte, and a sheet of flexible non-conducting material, harmless to the electrolyte and unharmed thereby, surrounding the anode between the same and the cathode.

1,874,112. PARCEL RECEIVING CHUTE. HARRY MILLER, Newark, N. J. Filed Jan. 19, 1932. Serial No. 587,505. 1 Claim. (Cl. 193—34.)



A parcel receiving device for store fronts having an opening therethrough, comprising a stationary supporting frame located on the inner side of the store front and aligned with said opening, a detachably mounted chute adapted to be held in operative position with respect to said stationary support, a normally closed gate mounted within the chute and adapted to be opened by the downward passage of a parcel therethrough, a movably mounted and normally open door located at the extreme lower end of the chute, and a connecting rod interposed between the gate and said door for causing their simultaneous operation.

1,874,113. CIGAR GRADING MACHINE. JOHN LAWLER MORGAN, Glendora, N. J., assignor to Jesse Satenstein, New York, N. Y. Filed May 1, 1931. Serial No. 534,401. 7 Claims. (Cl. 209—88.)



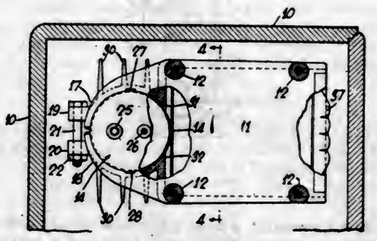
1. The combination with a cigar rolling machine embodying a resiliently mounted concave and spaced roller, means for oscillating the roller, a chute leading away from the concave and provided with a movable bridge, electro-magnetic means for moving the bridge, means actuated in timed relation with the roller for controlling the electro-magnetic means, and means associated with the concave for independently controlling the magnetic means.

1,874,114. TUBING PLUG. HERBERT C. OTIS, Shreveport, La. Original application filed Feb. 26, 1930, Serial No. 431,510. Divided and this application filed Aug. 19, 1931. Serial No. 558,157. 8 Claims. (Cl. 166—13.)



1. A tube-sealing unit comprising a hollow core member, a packer surrounding the core member for providing a seal between the tube and the core member, a valve for closing the hollow core member at one end thereof, a rod supporting the valve and passing through the core member to the opposite end thereof, and a shoulder on the rod adjacent the last said end of the core member and arranged to be hooked onto the said adjacent end of the core member for securing the valve in closing relation to the first said end of the core member.

1,874,115. EVAPORATOR UNIT. FRANK D. PELTIER, Bridgeport, Conn., assignor, by mesne assignments, to Servel, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 14, 1929. Serial No. 385,945. 3 Claims. (Cl. 62—95.)

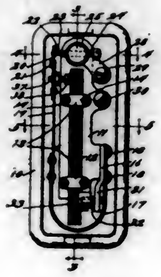


3. An evaporator unit comprising a body having a compartment for ice trays and jaws for supporting said body upon an evaporator, said body being cut away between said jaws and compartment for permitting direct heat exchange between said compartment and the evaporator upon which the device is supported.

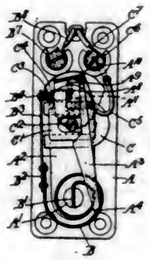
1,874,116. ELECTRIC SWITCH. LAURENCE M. PERSONS, St. Louis, Mo. Filed Oct. 9, 1929. Serial No. 398,538. 4 Claims. (Cl. 200—138.)

1. In a temperature responsive switch, a base, a substantially U-shaped thermostatic element having one leg thereof fixedly secured to the base, said other leg of the thermostatic element being free and provided with an arm extending therefrom in general alinement therewith,

an armature carried by the arm and extending inwardly therefrom, a contact carried by the arm beyond the armature, a permanent bar magnet carried by the base and positioned between the legs of the thermostatic element and extending into operative relation with the armature, a second contact carried by the base and operatively associated with the first mentioned contact, and adjusting means carried by the base and engaging the fixed leg of the thermostatic element adjacent to its point of securement to the base and operating to flex said leg to a greater or lesser extent whereby to vary the point of engagement of said contacts.



1,874,117. THERMOSTAT. LAURENCE M. PERSONS, St. Louis, Mo. Filed Jan. 9, 1930. Serial No. 419,584. 10 Claims. (Cl. 200—139.)



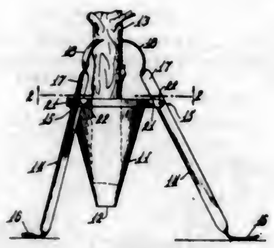
1. In a thermostat, a base, a thermostatically responsive member mounted upon said base, including a portion responsive to magnetic attraction, a magnet, and means for adjusting its position toward and away from the magnetically responsive portion of said thermostatically responsive member including a magnet support movably carried by the base and supporting the magnet on the base, and conductive connections mounted upon the magnet support and the thermostatically responsive member, said connections being adapted to form part of the circuit controlled by the thermostat.

1,874,118. MEANS OF ATTACHING TOGETHER A WINDSHIELD CLEANER ARM AND BLADE. EDWARD E. PIKACE, Exeter, R. I. Filed Nov. 20, 1931. Serial No. 576,301. 8 Claims. (Cl. 15—255.)

1. In a windshield cleaner, a wiper, an arm provided with an angularly extending finger at its end, means for securing together said wiper and arm comprising a member on said wiper and in substantially a single plane having an opening therein through which said finger extends, the lateral edges at the opposite surfaces of said member opening engaging said finger, said opening being of a size to permit but limit the relative rocking movement of the arm and wiper, and means on the wiper for guiding the arm at a point spaced from the first said means.

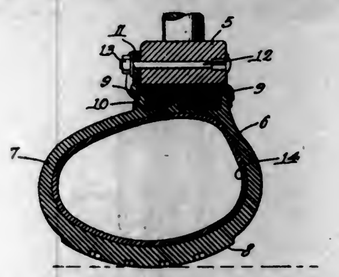


1,874,119. TREE STAND. THOMAS E. PROPST, Maywood, Ill. Filed Sept. 9, 1929. Serial No. 391,339. 1 Claim. (Cl. 248—38.)



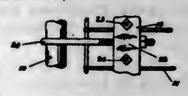
An article of the character described, comprising, a frustro-conical liquid receptacle, having an annular reinforcing bead below its upper edge a complemental band fixedly secured between said bead and the edge of said receptacle, ears on the ends of the complemental band sections providing pivotal mounting means for a plurality of supporting legs, said legs having their upper ends toothed, the lower ends of said legs being arcuate shaped to cam said legs outwardly at their bottom to insure tight gripping of an article supported in said receptacle by said teeth, and said frustro-conical receptacle retaining said article in vertical alignment.

1,874,120. PNEUMATIC TIRE CONSTRUCTION. JOHN WILLIAMS QUINN, Parkersburg, W. Va. Filed Sept. 19, 1929. Serial No. 393,718. 2 Claims. (Cl. 152—13.)



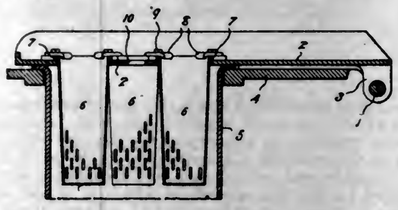
1. In a pneumatic tire, a hollow body portion, the greater outer diameter of the body portion being offset to a radial plane passing through the mid point between the beads of the tire.

1,874,121. WIRE FENCE. ALBERT E. ROOS, Dunbar, Nebr. Filed Dec. 23, 1929. Serial No. 416,007. 1 Claim. (Cl. 254—83.)



Fence tightening means including clamping means for attachment to fencing material at an extremity thereof, a plurality of eye bolts having eyes for encircling a fence post whereby said eye bolts are slidably adjustable on the fence post, the shanks of said eye bolts being tangential to the eyes thereof whereby said shanks may be adjusted into alignment with the fencing material by turning said eye bolts about the fence post as an axis, said clamping means being provided with a plurality of apertures for receiving the shanks of said eye bolts, and nuts engaging the shanks of said eye bolts.

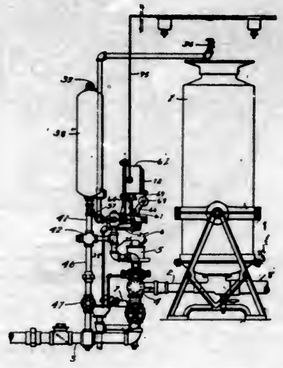
1,874,122. HARDENING APPARATUS FOR METAL WORK. HEYMAN ROSENBERG, New York, N. Y. Filed Sept. 24, 1929. Serial No. 394,830. 3 Claims. (Cl. 263—2.)



1. The combination, with a molten salts vat and a work carrier movable relative thereto, of a group of work-receiving baskets sustained by said work carrier in position for being moved thereby into and out of said vat, said group of baskets being sustained as a unit.

1,874,123. FLOW CONTROLLING SYSTEM. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 5, 1928. Serial No. 323,931. 10 Claims. (Cl. 169—15.)

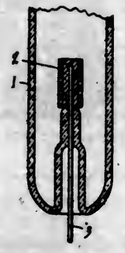
1. A fluid system comprising a main duct, a differential pressure valve controlling said duct, a branch duct providing main pressure at the valve normally retaining it closed, and means for relieving and subsequently restoring the pressure in said branch duct including a timing chamber connected with said branch duct and having an independent drain, a second valve interposed and directly controlling the connection between the branch duct and the said chamber and normally retained in the closed position by the main pressure in said branch duct, and a third valve controlling the said drain and having a synchronized operative connection with said second valve whereby when the latter valve is closed the drain valve is opened, and vice versa.



4. A fluid system comprising a pressure duct, a container, a valve casing having a chamber connected with said pressure duct, and a second chamber connected with said container, and a port providing communication between said chambers, valve means controlling the said port including a stem projecting through the wall of said second chamber, said stem comprising a part effective to seal the opening in said second chamber through which the stem projects, and means for shifting the stem to open the valve and simultaneously to bring said sealing part into operative position with respect to said opening.

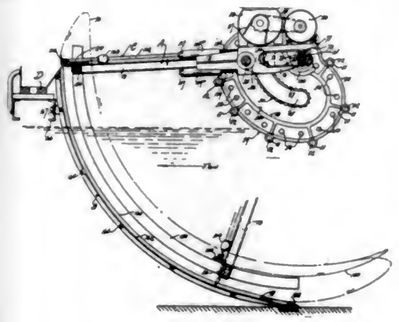
7. A fluid system comprising a pressure duct, a pair of ports communicating with said duct, a valve adapted in alternative positions to individually close said ports and adapted normally to be held to a seat closing one of said ports by the pressure in said duct, a thermally-actuated valve normally preventing flow through the other of said ports and adapted when open to relieve the pressure in the duct, and means for shifting the first-named valve from its normal seat to the alternative position closing the other port.

1,874,124. ELECTRODE FOR GASEOUS CONDUCTION LAMPS AND METHOD OF MAKING SAME. FRANK SCHAEFER, Kalamazoo, and ORA S. DUFFENDACK, Ann Arbor, Mich. Filed Aug. 19, 1929. Serial No. 386,812. 6 Claims. (Cl. 176—126.)



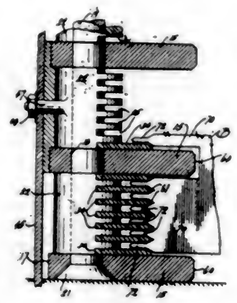
1. The method of making electrodes for gaseous conduction lamps consisting of mixing finely divided ground nickel oxide and barium oxide, pressing into a solid, and subjecting to a sufficient degree of heat in an oxidizing atmosphere to produce substantial surface fusion.

1,874,125. RECIPROCAL RAKE APPARATUS. EDWIN R. SCHOFIELD and RICHARD KRAMAROFF, Philadelphia, Pa. Filed Dec. 26, 1929. Serial No. 416,608. 14 Claims. (Cl. 210—176.)



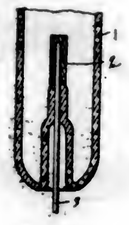
3. In a raking structure the combination of a rake frame including a raking portion, a curvilinear rack, a pinion rotatably mounted on a frame on an axis which is fixed with respect to the raking portion of the frame and meshing with said curvilinear rack, means for rotating the pinion for causing it to move around the rack, and means fulcruming the rake frame on a predetermined axis for causing the collecting end to move in a predetermined path.

1,874,126. BAR SCREEN. EDWIN R. SCHOFIELD and RICHARD KRAMAROFF, Philadelphia, Pa. Filed Dec. 26, 1929. Serial No. 416,609. 13 Claims. (Cl. 210—176.)



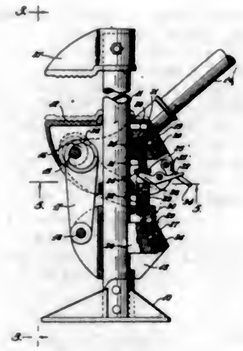
1. A screen comprising a plurality of relatively coarse detritus collecting bars, means to support said bars in spaced relation, and a plurality of fine bars appreciably finer than the coarser bars protectively mounted in each of the spaces on the screen between the adjacent coarser bars.

1,874,127. ELECTRODE FOR GASEOUS CONDUCTION LAMPS AND METHOD OF MAKING SAME. FRANK SCHAEFER, Kalamazoo, and ORA S. DUFFENDACK, Ann Arbor, Mich. Filed Aug. 19, 1929. Serial No. 386,813. 3 Claims. (Cl. 176—126.)



1. An electrode of the class described an alloy of barium and nickel having a surface consisting of a black homogeneous substance containing the oxides of the nickel and barium.

1,874,128. JACK. EMIL J. SEEBER, Chicago, Ill. Filed Jan. 8, 1932. Serial No. 585,569. 4 Claims. (Cl. 254—105.)

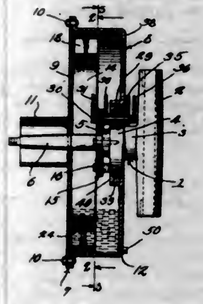


1. A jack comprising a standard, a pair of members movable axially along the standard and each including a portion extending at an acute angle with respect to the axis of the standard, a gripping jaw carried by each of said members and each of said jaws including a portion adapted for wedging engagement with one of said first-named portions, a crank including an eccentric throw rotatably mounted in one of said members, an operating lever attached to the crank, a link connecting the throw and the other of said members, and latch-controlled means urging the gripping jaws into engagement with the standard and said jaw portions into wedging engagement with said first-named portions.

1,874,129. BRAKE. REUBEN L. SKINNER, Pratt, Kans., assignor of one-half to Escur Emeral Rogers, Hutchinson, Kans. Filed Jan. 23, 1930. Serial No. 422,823. 1 Claim. (Cl. 188—75.)

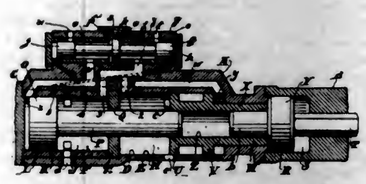
In a vehicle brake mechanism, the combination of an axle, an hermetically-closed casing having means for the introduction of liquid thereinto, the casing being journaled

weather-tight and liquid-tight on the axle, the casing having a plurality of drums, all of which are inclosed weather-tight and liquid-tight within the casing, a support fixedly-carried by the axle and inclosed weather-tight and liquid-tight within the casing, brakes carried by the drums and cooperating with the respective drums, the brakes being



inclosed weather-tight and liquid-tight in the casing, concentrically arranged shafts journaled in the support, said shafts extending outwardly through, and fitting closely in, a single opening in a portion of the axle, and operative connections between the shafts and the respective brakes, said connections being mounted in part upon the support.

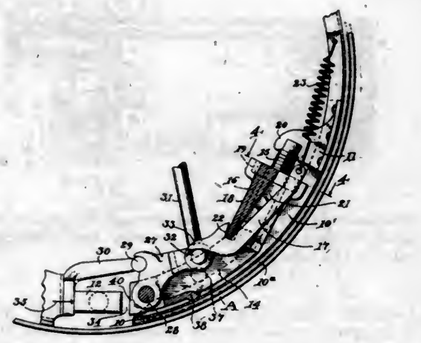
1,874,130. ROCK DRILL. RAYMOND H. SMICKLE, Belvidere, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 19, 1928. Serial No. 279,027. 2 Claims. (Cl. 121—15.)



2. A rock drill comprising a cylinder, a bore therein comprising an enlarged portion and a reduced portion forming a piston chamber, a sleeve in the enlarged portion to form a second piston chamber, a head between the chambers, hammer pistons in the piston chambers, and means for introducing pressure fluid into the piston chambers to cause said pistons to move simultaneously in opposite directions.

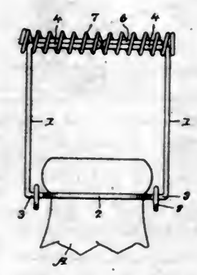
1,874,131. AUTOMATIC SLACK ADJUSTER. GEORGE L. SMITH, Washington, D. C., assignor to United States Ordnance Company, Washington, D. C., a Corporation of Virginia. Filed Jan. 10, 1930. Serial No. 419,902. 6 Claims. (Cl. 188—79.5.)

1. In a brake, a braking member, an extensible device through which braking force is transmitted to the braking member, means for applying braking force to the braking member through said device, said last named means including a lever pivoted to the device, a member movable in one direction by brake applying movement of said lever, spring means for moving said member in the opposite direction during the following brake release, and means operated by the latter movement of the member to extend said device when said first movement is of predetermined extent.



5. In a brake, a brake member, a brake applying means, and an automatically extensible compression device operatively connected with the brake applying means, said device including a rotatable ratchet and an operating lever therefor positioned when the brake is released to lock the ratchet against rotation in either direction.

1,874,132. BOTTLE CARRIER. ROLLA R. SMITH and ARCHIE R. CARR, Sioux City, Iowa. Filed Sept. 21, 1929. Serial No. 394,263. 1 Claim. (Cl. 215—100.)

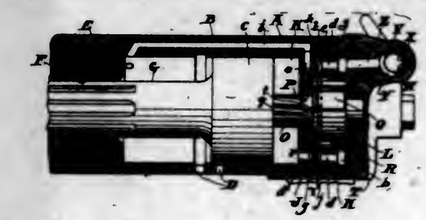


A bottle carrier comprising a pair of substantially U-shaped members each including parallel arms and a web portion bent to provide a semi-circular portion having straight portions at each end, said arms bent angularly and then upon themselves to provide hinged pintles extending toward each other, a coiled spring receiving the pintles of the U-shaped members to hinge said members for movement toward and from each other and to provide a handle, and rings mounted on the arm of said members and adapted to be positioned over the straight portions to secure the semi-circular portions about the neck of the bottle, said straight portions positioning the arms away from the bead of the bottle to permit the rings to engage the straight portions without contacting with the arms or the bottle.

1,874,133. VALVE MECHANISM FOR ROCK DRILLS. WILLIAM A. SMITH, Jr., Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 7, 1928. Serial No. 304,563. 11 Claims. (Cl. 121—19.)

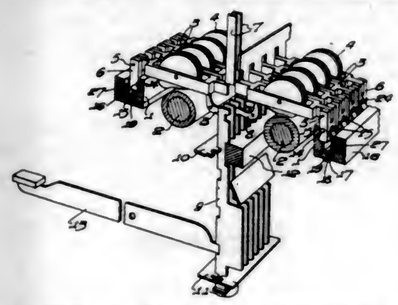
1. In a fluid actuated rock drill, the combination of a cylinder and a piston in the cylinder, an exhaust port for the cylinder, a valve chest having a valve chamber, inlet

passages leading from the valve chamber to the cylinder, an oscillatory ring valve in the valve chamber to control the inlet passages and having an outer edge over which



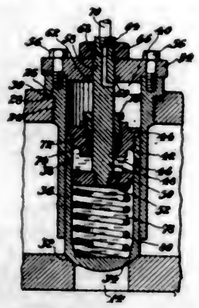
pressure fluid flows to the inlet passages, and a bore in the valve to permit the flow of pressure fluid through the valve to the inlet passages.

1,874,134. KEYBOARD MECHANISM FOR TYPOGRAPHICAL MACHINES. SAMUEL E. SPERRY, Hollis, N. Y., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Aug. 24, 1931. Serial No. 559,068. 10 Claims. (Cl. 199—25.)



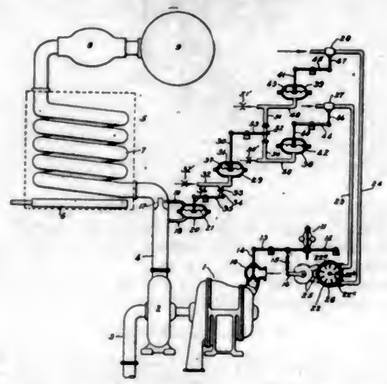
1. In keyboard mechanism for typographical machines comprising a frame, a plurality of cam yokes, and power means for actuating the cam yokes, yieldable means for removably mounting the cam yokes in said frame while retaining them in operative relation with said power means, and means acting on said mounting means for locking said cam yokes against removal.

1,874,135. CLEARANCE VALVE CONSTRUCTION. WILLIAM M. SPOOR, Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Mar. 1, 1929. Serial No. 343,744. 1 Claim. (Cl. 137—153.)



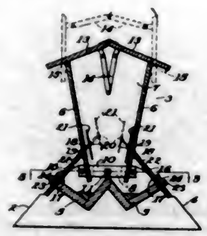
A clearance valve mechanism comprising a guiding element, a valve, a stem on the valve of uniform diameter throughout its length and being slidable in the guiding element, said stem having a chamber therein for cushioning fluid, a closure secured to the stem to seal the chamber and having an aperture, a stationary rod extending through the aperture and into the chamber, a piston in the chamber affixed to the rod and being in body contact with the stem, said piston having a small aperture to permit the restricted flow of cushioning fluid from one side of the piston to the other to retard the movement of the valve, and a spring acting against the valve to actuate said valve longitudinally of the guiding element.

1,874,136. TURBINE PLANT. REGINALD G. STANDERWICK, Marblehead, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 3, 1931. Serial No. 554,711. 8 Claims. (Cl. 230—5.)



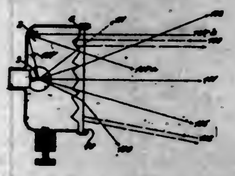
1. In combination, a motive power agency, a pump driven thereby, a means responsive to a change in condition of a fluid delivered by the pump, a regulator for the agency, a reversible, rotary motor for modifying the action of the regulator on the agency, conduits for admitting fluid to the motor to cause rotation in either direction, and valve means controlled by said responsive means for differentially controlling the passage of fluid through the conduits to the motor.

1,874,137. FEEDER FOR FARM STOCK. GLADSTONE M. STEEL, Chillicothe, Ohio. Filed June 26, 1931. Serial No. 546,967. 5 Claims. (Cl. 119—54.)



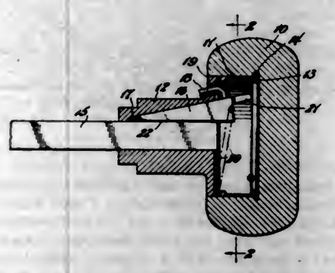
1. A farm stock feeder comprising a base, trough members carried by said base, a hopper supported in conjunction with said base and carried above said trough structure, a plurality of agitating elements having their operating portions positioned in the entrance space between said hopper and trough structures, each of said agitating elements comprising an inverted U-shaped member guided for movement at its lower end in connection with the trough structure, a stem attached to the upper end of said U-shaped member and slidably received within a bearing opening formed in the lower portion of said hopper, agitating fingers carried by the inner end of said stem, and a spring interposed between said U-shaped member and hopper.

1,874,138. SIGNAL LANTERN. JONATHAN C. STIMSON, St. Louis, Mo. Filed Dec. 10, 1928. Serial No. 679,724. 5 Claims. (Cl. 177—329.)



1. A signal lantern comprising, a casing, a lamp therein, and a reflector associated with said lamp and adapted to permit light from said lamp to issue from said casing, said reflector being positioned and operating to reflect external light incident thereon at varying angles from a distant source back in the general direction of the light source and said reflector having means adapted to slightly spread the reflected light with substantial uniformity throughout its field of spread in order to direct a spreading beam back towards and visible to an observer located a substantial distance outside of a line connecting the reflector with the light source.

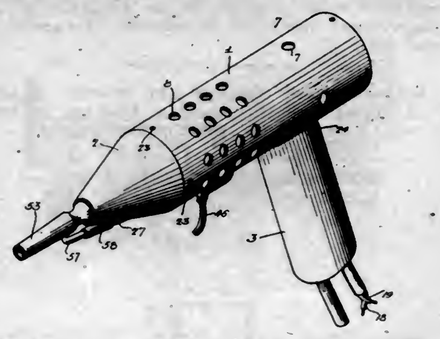
1,874,139. AUTOMATIC SPINDLE GRIP FOR DOORKNOBS. NATHANIEL B. STONE, Washington, D. C. Filed Feb. 1, 1932. Serial No. 590,241. 3 Claims. (Cl. 292—355.)



1. In combination with a door knob having a cover section and a hub section of the character described, a spring urged biting wedge slidably mounted in the hub section and constituting a spindle gripping element; and a push pin associated with the wedge and slidably mounted in the hub section serving as a means to release the wedge, said push pin also normally supporting the wedge in the hub with the small end of the wedge out of the path of the end of the spindle.

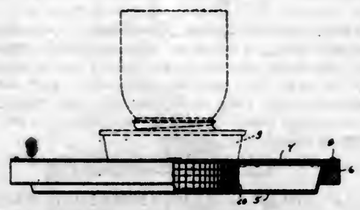
1,874,140. MEANS FOR TREATING CUTANEOUS AFFECTIONS. ALBERT STRICKLER, Philadelphia, HARRIS COMER, Cynwyd, and ARNOLD H. ZUFFEREATT, Philadelphia, Pa., assignors, by mesne assignments, to Henal Company, Wilmington, Del., a Corporation of Delaware. Filed May 25, 1931. Serial No. 539,928. 6 Claims. (Cl. 128—300.)

3. A device for treating membranous affections, comprising a medicament storage chamber, an air chamber, a communicating passage between said chambers, an outlet passage from said storage chamber adapted for positioning adjacent a portion of the membrane to be treated, passages leading from atmosphere exhausting means to said air chamber and to the space adjacent said portion, and means for closing said inter-communicating passage and the passage to said air chamber, whereby the atmosphere adjacent said portion may be exhausted and subsequent opening of



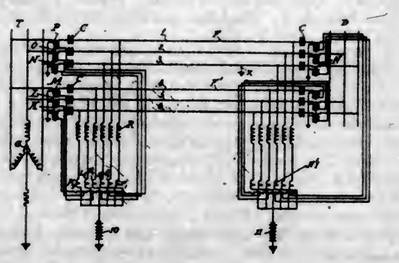
said closing means causes a rush of air through said storage chamber to project the medicament on said portion.

1,874,141. CHICK PROTECTOR FOR WATERING DEVICES. MARY T. SUEPER, Lindsay, Nebr. Filed Aug. 12, 1931. Serial No. 556,467. 1 Claim. (Cl. 119—72.)



A poultry watering device comprising a shallow pan, a platform consisting of a frame adapted to fit over the edges of said pan, having a sheet of foraminous material attached to one side of the frame in covering relation to said pan, said platform being adapted to support a watering fount in the center thereof, and a circular band of foraminous material disposed between said platform and the bottom of said pan at the center thereof.

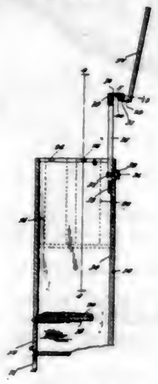
1,874,142. RELAY PROTECTIVE SYSTEM. EGBERT M. TINGLEY, Oak Park, Ill. Filed Dec. 12, 1928. Serial No. 326,457. 10 Claims. (Cl. 175—274.)



1. In an electric system, two power lines, a plurality of parallel feeders capacitively coupled to both of said lines for transferring power from one to the other line, switches for connecting and disconnecting the ends of each feeder

to the respective lines, means at each end of the feeders for impressing a grounded source of direct potential on the respective feeders over separate circuits, each circuit including means for opening the switch at that end of the particular feeder responsive to the completion of the direct current circuit upon the occurrence of a ground on that feeder.

1,874,143. MUSIC CABINET AND STAND. EMMETT H. TUTTLE, Berlin Heights, Ohio. Filed Jan. 15, 1930. Serial No. 421,015. 4 Claims. (Cl. 45—62.)

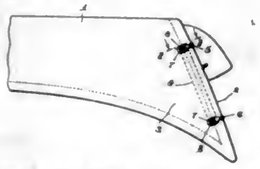


1. A music stand comprising a cabinet, a hinged top for the cabinet having a ledge at the rear edge, a vertically movable standard adjustably secured to the cabinet, and a hinge on said ledge securing said top to said standard and adapted when open to support the top sloping backward above the standard to form a music rack when the standard is raised.

1,874,144. ROLLING AND ANNEALING PROCESS. JOHN B. TYTUS, Middletown, Ohio, assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Aug. 21, 1929. Serial No. 387,563. 10 Claims. (Cl. 148—12.)

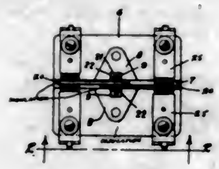
1. The process of producing sheet metal, which consists in passing a continuously hot rolled strip which has been at normalizing temperature after the hot rolling thereof has been completed, through cold rolls where heavy drafts are applied thereto, resulting in a reduction of gauge, and, after a part at least of the cold rolling operation, raising the temperature of the strip above the A3 point and relatively quickly cooling said strip.

1,874,145. COLLAR STIFFENER. JOSEPH J. VAN CUBA, East Islip, N. Y. Filed Apr. 1, 1931. Serial No. 526,958. 3 Claims. (Cl. 2—132.)



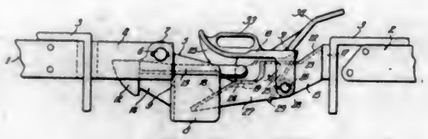
1. A stiffener for soft collars and the like, comprising a substantially flat bar, a resilient loop at each end of said bar, and an enlarged clamp at the free end of each loop, said loops being adapted to straddle the front edge of the collar while the bar engages the under side of the collar flat-wise and the clamps engage the outside surface at points back from the edge.

1,874,146. SWITCH. GEORGE B. WADSWORTH, Covington, Ky., assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky., a Corporation of Kentucky. Filed Oct. 13, 1928. Serial No. 312,358. 3 Claims. (Cl. 200—1.)



1. In combination an insulating base, a pair of opposed electrical contacts mounted on the base at opposite ends thereof and yieldably abutting one another throughout substantially the entire area of adjacent faces, the contacts having adjacent cam faces at their tops, and a blade of insulating material pivoted for movement in opposite directions substantially in a plane with the abutting faces and adapted to be forced against said cam faces for yieldingly separating the contact faces, a pivotal mounting for the blades disposed within the confines of the insulating base, the blade being furthermore adapted to wipe said normally abutting contact faces.

1,874,147. COUPLER. ALFRED O. WILLIAMS, Battle Creek, Mich., assignor to Clark Tructractor Company, Buchanan, Mich., a Corporation of Michigan. Filed Mar. 8, 1929. Serial No. 345,296. 7 Claims. (Cl. 280—33.15.)



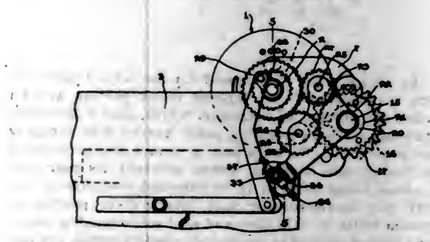
6. In coupling means of the character described, a coupling head mounted on a pivotal axis and comprising an apron at one side of the axis and a counterweight at the other side of said axis, the apron defining a passage for reception of a draw bar, and a coupling element rigid with the apron and extending across the entrance to said passage.

1,874,148. PLANE. JOHN M. ZDEB, Detroit, Mich. Filed Sept. 14, 1929. Serial No. 392,709. 1 Claim. (Cl. 145—5.)



A plane of the class described, comprising: an engaging base; a raised tongue extending longitudinally of said base centrally thereof at one end; an extension for said base; a pair of tongues projecting in spaced relation outwardly from opposite sides of one end of said extension and upwardly offset from the base thereof for overlying said engaging base and embracing said tongue on said base, said tongues on said extension having a recess formed in opposite faces; a projection on said centrally positioned tongue for engaging in said recesses and resisting relative longitudinal movement of said engaging base and said extension; and movable means carried by said centrally positioned tongue engageable with the upper faces of said spaced tongues for resisting movement of said tongues relatively to said engaging base.

1,874,149. PAPER FEEDING MACHINE. LESTER KYLE ALDRICH, Sidney, Ohio. Filed Feb. 24, 1931. Serial No. 517,961. 8 Claims. (Cl. 271—46.)



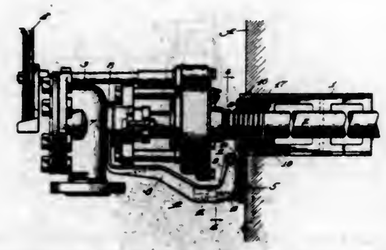
1. A paper feeding machine of the class described including a continuously rotating pull off device for feeding the sheets from a stack, a main gear designed to be actuated by feeder driving mechanism, a plurality of relatively fixed gears connected with the pull off device for actuating the same, and a bracket pivoted at the axis of the main gear and provided with a plurality of shiftable gears each of which is adapted to be carried by the movement of the pivoted bracket into mesh with one of the said relatively fixed gears, whereby the speed of the continuously rotating pull off device may be changed, the ratio of the gears being such that the higher lineal speed of the pull off device is less than that of the machine to be fed so that the speed of the fed sheets will be accelerated to enable sheets of greater length than circumference of the pull off device to be fed.

1,874,150. MEANS FOR CLASSIFYING MATERIALS IN JET IMPACT PULVERIZERS. PAUL ANGER, Kiel, Germany. Filed Feb. 5, 1931, Serial No. 513,563, and in Germany Nov. 27, 1928. 10 Claims. (Cl. 83—46.)



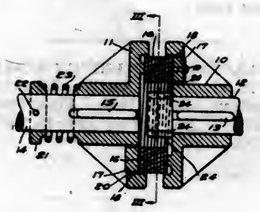
1. A jet impact pulverizer of the character described, comprising a casing, means for feeding materials into said casing, means for forcing a vertical stream of fluid into said casing and through said materials so as to entrain particles of said materials, an impact member in said casing arranged in the path of said stream of fluid and entrained particles so as to cause the latter to be reduced by impact with said member, deflecting means in said casing adapted to impart a whirling motion to the stream of fluid and reduced particles coming from said impact member, and means in said casing for guiding the centrifugally separated coarser particles back into the entering stream of fluid.

1,874,151. MEANS FOR SUPPORTING SOOT CLEANER HEADS. FRED C. AREY, Oak Park, Ill., assignor to Vulcan Soot Cleaner Company, Du Bois, Pa., a Corporation of Delaware. Filed Sept. 4, 1930. Serial No. 479,645. 8 Claims. (Cl. 122—392.)



1. The combination with a cleaning element passing through a wall with respect to which it has relative vertical movements and having a head including means for turning the cleaning element at the outer end, of means for supporting the weight of the head independently of the said element while permitting the head to move vertically.

1,874,152. RESILIENT SHAFT COUPLING. JOHN W. AUREN, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 19, 1930. Serial No. 503,416. 6 Claims. (Cl. 64—96.)

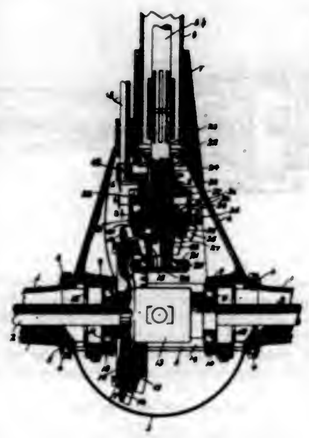


1. A shaft coupling comprising in combination a driving member and a driven member, a torsion spring for resiliently connecting said driving and driven members, said spring being formed from material of rectangular cross section into coils having adjacent turns of substantially equal diameters, and means for continuously compressing said spring axially to bring adjacent turns thereof into contact to cause frictional resistance to relative movement therebetween.

1,874,153. TWO-SPEED AXLE GEARING. WALTER S. AUSTIN, Grand Rapids, Mich. Filed Feb. 20, 1928. Serial No. 255,524. 4 Claims. (Cl. 74—59.)

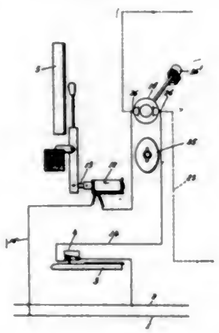
1. In a mechanism of the class described, a drive shaft for automobiles formed between its ends with an annular enlarged portion slotted longitudinally at a plurality of spaced apart places, a sleeve located around and secured to said annularly enlarged portion of the shaft, a second sleeve mounted on the shaft and slotted for a part of its length to provide fingers to pass through said slots in the drive shaft underneath the first sleeve, said second sleeve also having an annular enlargement which is slotted to make outwardly extending radial fingers, a pinion loosely mounted at the rear end of the drive shaft with which the rear ends of the first fingers engage on movement of the second sleeve in one direction, said pinion being formed at its front end with recesses for reception of the ends of the first fingers of said second sleeve, a third sleeve formed

at one end with a larger pinion loosely mounted on the first sleeve and around the second sleeve and formed at the end opposite its pinion end with spaced apart inwardly projecting lugs between which the radial fingers on the an-



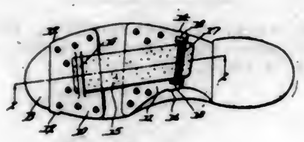
nular enlarged portion of the second sleeve are adapted to pass on movement of the second sleeve in the opposite direction, and means for manually moving said second sleeve back and forth.

1,874,154. ELECTRICALLY DRIVEN SYSTEM OF INSTRUMENTS THROUGH KEYBOARD AND PEDALS. ANGELO BARBIERI, Milan, Italy. Filed June 20, 1927, Serial No. 200,195, and in Italy June 13, 1926. 1 Claim. (Cl. 84—170.)



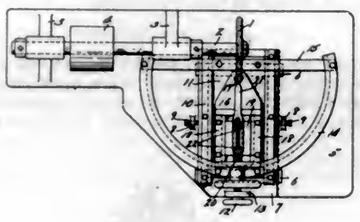
In combination with an electrical instrumental system including a piano and a system of percussion instrument adapted to be operated simultaneously with the piano in operation of the latter to accompany the same, a source of electrical supply for the percussion instruments, a switch connected to certain of the percussion instruments and adapted to continuousy rotate in periodically closing and cutting off the source of electrical supply of said instruments to produce notes with the effect of tremolo to be produced by the latter, and an electrical motor for actuating said switch.

1,874,155. GROUND-GRIPPING DEVICE FOR SHOES. WILLIAM ALFRED BARDEN, New York, N. Y. Filed July 10, 1931. Serial No. 549,984. 4 Claims. (Cl. 36—62.)



1. An anti-slipping attachment for use with a shoe sole having a tapered toe and tapered shank portion and an intermediate portion of maximum width, said attachment comprising a ground-gripping plate having sole engaging means adjacent its forward end, a second ground-gripping plate having sole engaging means adjacent its rear end, said plates being adapted to be disposed respectively forwardly and rearwardly of said intermediate portion of maximum width of said shoe and said sole engaging means being adapted to engage respectively said tapered toe and tapered shank portions of said shoe sole, and a ground-engaging connecting strip of resilient frictional material connecting and underlying portions of said plates and tending to draw them toward each other to draw said sole engaging means firmly into sole engaging position on said tapered toe and tapered shank portions of said shoe sole, said connecting strip being adapted to function as an anti-slipping means in addition to said ground-gripping plates.

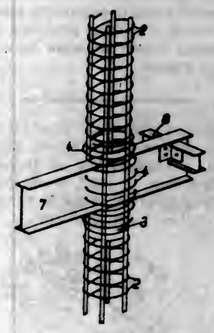
1,874,156. APPARATUS FOR TRUING GRINDING WHEELS. THOMAS BARISH, Jamestown, N. Y. Filed Nov. 27, 1928. Serial No. 322,170. 1 Claim. (Cl. 125—11.)



In a grinding wheel trimming device, the combination of a base, a grinding wheel rotatably mounted on said base, a carriage slidably mounted on said base adjacent said grinding wheel, means for laterally moving said carriage relative to said base, a plate slidably mounted on said carriage for movement toward and from said grinding wheel, an arcuate guide strip mounted on one end of said plate, a table pivotally mounted on the other end of said plate, said table having its free end guided by said arcuated strip, and a trimming tool mounted on said table for trimming the peripheral edge of the grinding wheel by movement across and in contact with the edge of the wheel.

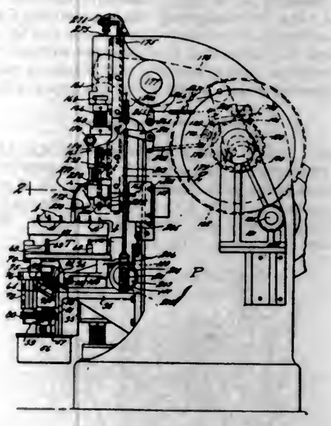
1,874,157. CONCRETE-AND-IRON MULTIPLE-FLOORED BUILDING. BRUNO BAUER, Vienna, Austria. Filed Feb. 9, 1931, Serial No. 514,340, and in Austria Nov. 13, 1930. 3 Claims. (Cl. 72—76.)

1. In reenforced concrete construction, a vertical column comprising interconnected longitudinal reenforcing members, carrier members associated with and extending transversely to said column, said carrier members having perfo-



rations therethrough in a zone adjacent to said column, and a wire encircling said column and extending through the perforations in the carrier member.

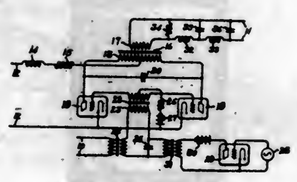
1,874,158. FORGING MACHINE. ALONZO LINTON BAUSMAN, Springfield, and EDWARD D. RAPISARDA, Agawam, Mass., assignors to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed July 14, 1927. Serial No. 205,815. 29 Claims. (Cl. 219—3.)



1. In a forging machine, a press operable when tripped to forge the articles, means for heating the articles, means for moving the heated articles from the heating means into operative relation with the press, and means controlling the tripping of the press and dependent for its operation on the heating of said articles by said means.

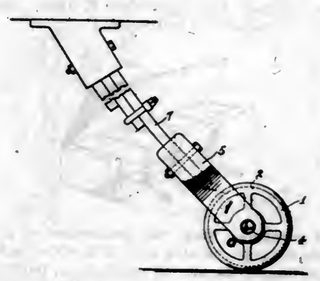
1,874,159. ELECTRIC AMPLIFYING CIRCUITS. BURNICE D. BEDFORD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 26, 1930. Serial No. 484,627. 12 Claims. (Cl. 179—171.)

1. Apparatus for amplifying an electric signal comprising a source of direct current and a load circuit, an interconnection between said source and said circuit including an inductive winding and an electric valve, means independent of the signal for periodically rendering said



valve conducting, and means responsive to the signal to be amplified for determining the interval during which the valve remains conducting.

1,874,160. ROLLER TAIL-SKID FOR AIRPLANES. JOSEPH E. BEHSE, Saginaw, Mich., assignor of one-fourth to George C. Willcox, Saginaw, Mich. Filed Jan. 23, 1931. Serial No. 510,611. 2 Claims. (Cl. 244—2.)

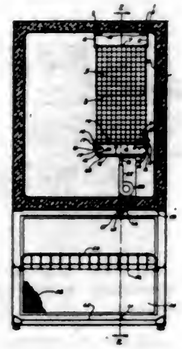


1. In an airplane, in combination, a supporting member mounted in a downwardly depending position beneath the tail of said airplane, a bearing fork fixed to the lower end of said member, a roller journalled in said fork, said supporting member and said fork so mounted as to normally maintain the rotative axis of said roller perpendicular to the vertical plane of the longitudinal axis of said tail, said roller provided with a hard non-resilient smooth-surfaced tread and rounded at its edges.

1,874,161. ICE REFRIGERATING DEVICE. CHARLES F. BELSHAW, Dearborn, Mich. Filed Nov. 16, 1929. Serial No. 407,739. 9 Claims. (Cl. 62—69.)

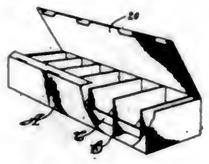
1. In an ice refrigerating device, the combination of an ice container having a frame member, a removable ice rack supported on the frame member of said ice container, a right angular member extending around the lower side of said ice container, said right angular member having an upwardly and an outwardly extending lip beyond said ice container, said right angular member being further provided with a downwardly and an inwardly extending lip within the area of the lower side of said ice container, said right angular member being further suitably attached to said ice container, downwardly and inwardly extending brackets suitably attached to said right angular member at points outside of its downwardly and inwardly extending lip, and a removable drip pan supported

on said downwardly and inwardly extending brackets, said removable drip pan having a drain outlet, and a removable drain member suitably supported, said removable drain



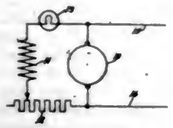
member having a complete convolution of itself between its ends, said removable drain member encircling the drain outlet of said drip pan.

1,874,162. FILLER FOR EGGS AND THE LIKE. LEON BENOIT, Chicago, Ill. Filed Oct. 6, 1930. Serial No. 486,578. 8 Claims. (Cl. 217—32.)



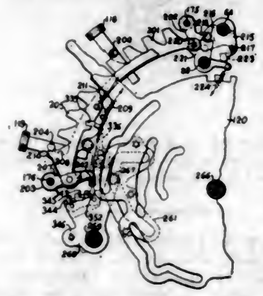
1. In a collapsible filler, the combination of a series of cross walls having separated slots with which is assembled a series of interfitting slotted longitudinal partitions, certain slots in the cross walls being divergently slanted whereby to sustain the partitions in inclined positions relative to the vertical, and the slots in the partitions being disposed along one edge in the planes of the slots in the cross walls, the transverse distance across the partitions between the closed ends of these slots and the opposite edge being less than the length of the accommodating slots in the cross walls, whereby to provide a clearance along one edge of each partition permitting the latter to shift transversely of itself within the cross wall slots as required when the cross walls and partitions are swung relatively to each other to or from positions of substantial parallelism.

1,874,163. VOLTAGE-STABILIZING MEANS FOR DIRECT-CURRENT GENERATORS. ROYAL C. BERGVALL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 28, 1931. Serial No. 519,059. 13 Claims. (Cl. 171—229.)



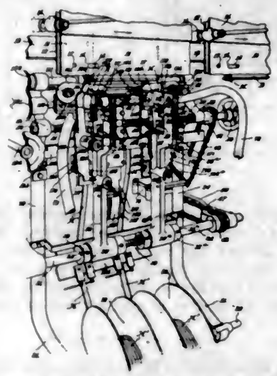
1. In the field-winding circuit of a self-excited, direct-current generator, in combination, rheostatic voltage-adjusting means, and a conducting element having a changing resistance with current characteristic, said element being so disposed in the circuit as to cause the current in the field winding to change at a slower rate than does the generator voltage applied to the field-winding circuit, the effect of said element being to permit the generator to stably operate at low values of voltage produced by the insertion in the field winding circuit of large values of resistance by said rheostatic means.

1,874,164. CASH REGISTER. SAMUEL BRAND, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Sept. 8, 1927, Serial No. 218,200. Divided and this application filed Feb. 7, 1931. Serial No. 514,135. 12 Claims. (Cl. 235—130.)



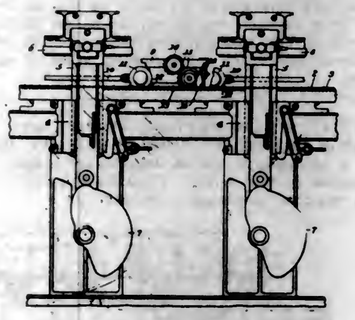
1. In a machine of the class described, the combination of a normally locked main operating mechanism, releasing mechanism therefor, a single bank of release keys divided into a plurality of groups, a member operable by each group of keys for compelling the depression of a key in each group before the releasing mechanism can be operated, and means for connecting said members so that the members operate in unison whereby said releasing mechanism can be operated after a single key of any group is depressed.

1,874,165. BOOK HEADBANDING MECHANISM. ALFRED BREDENBERG, Champlain, N. Y., assignor of one-half to The Sheridan Iron Works, a Corporation of New York, and one-half to T. W. & C. B. Sheridan Company, a Corporation of New York. Filed Aug. 21, 1931. Serial No. 558,500. 18 Claims. (Cl. 11—1.)



1. Mechanism for applying a headband to a book comprising a movable registering device or lever having a feeler adapted to contact the end of the book and so determine the position of the registering device and an adjuster positioned by the feeler and adapted to determine the position of the headband relatively to the book.

1,874,166. APPARATUS FOR PRINTING. WILLIAM PENN BRINTON, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed May 7, 1930. Serial No. 450,434. 4 Claims. (Cl. 41—1.)



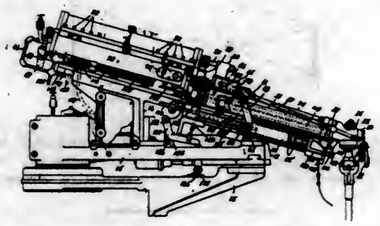
1. In combination with a block printing machine having a movable paint carriage, a brush attached to the paint carriage and adapted to engage the printed surface of the material.

1,874,167. METHOD OF PRINTING. WILLIAM PENN BRINTON, Ridley Park, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Original application filed May 7, 1930, Serial No. 450,434. Divided and this application filed Jan. 22, 1932. Serial No. 588,080. 4 Claims. (Cl. 41—26.)

1. In the method of printing, the steps consisting in printing over adjacent areas and brushing the line of juncture so as to join the areas while leaving other printed parts unbrushed.

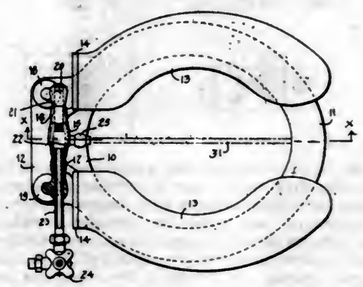
1,874,168. GLASS FORMING MACHINE. CARL A. BROWN, East Cleveland, FRANK B. VAN SICKLE, Wickliffe, and CHARLES W. CRAIG, East Cleveland, Ohio, assignors to General Electric Company, a Corporation of New York. Filed July 8, 1927. Serial No. 204,378. 12 Claims. (Cl. 49—5.)

1. In a machine for gathering glass blanks and forming them into articles, the combination of a blank gathering mold, a movable support therefor, means for reciprocating said support toward and from a source of molten glass, means for producing a vacuum for said gathering mold comprising a cylinder and a piston connected with and movable by said reciprocating means, means for introducing



a puff through said passage to discharge the blank and means whereby said parts are caused to operate in proper sequence.

1,874,169. SANITARY FITTING. CESARE C. CAMPUS, Santa Monica, Calif. Filed Apr. 28, 1930. Serial No. 448,046. 12 Claims. (Cl. 4—7.)



3. The combination of a closet bowl, a seat consisting of two elements held together by a fixture hingedly mounted on a hollow pintle, said pintle being secured to said closet bowl and also connected to a controllable source of water supply; a nozzle having its posterior end inserted in and open to the hollow passage in said pintle and having its outer end so located as to discharge a stream downwardly between the two elements forming the seat, said stream being directed to a point below the front rim of the bowl whenever said water control is open.

1,874,170. PROCESS FOR BONDING CEMENT AND GYPSUM. CLOYD M. CHAPMAN, Douglaston, N. Y. Filed Jan. 28, 1928. Serial No. 250,341. 9 Claims. (Cl. 72—69.)

6. That step in the process of bonding cement to gypsum which consists in adding a soluble chloride to the cement before applying the cement to the gypsum.

1,874,171. TELEVISION SYSTEM. CHESTER L. DAVIS, Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 28, 1930. Serial No. 464,643. 4 Claims. (Cl. 178—6.)

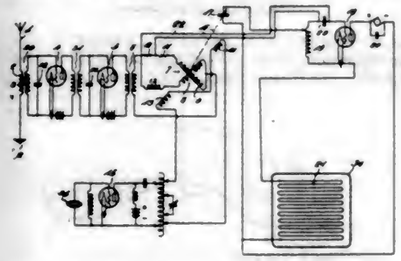
1. In a television system, means for receiving electrical energy over a recurring band of frequencies, a cabinet structure, an inductive screen disposed within said cabinet structure and luminously responsive to potential variations in the received signaling energy, means mounted in said cabinet structure out of the field of view of said

inductive screen for directing light upon said surface, an image reproducing screen, and an optical system centrally aligned with respect to said cabinet structure and



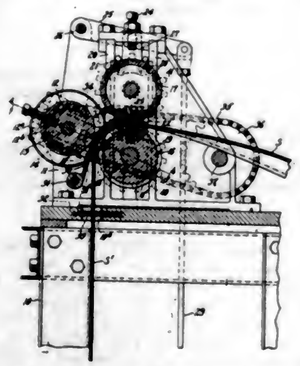
interposed between said inductive screen and said image reproducing surface for visually reproducing the movement of potential nodes along said inductive screen.

1,874,172. TELEVISION SYSTEM. CHESTER L. DAVIS, Keokuk, Iowa, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 3, 1930. Serial No. 465,703. 12 Claims. (Cl. 178—6.)



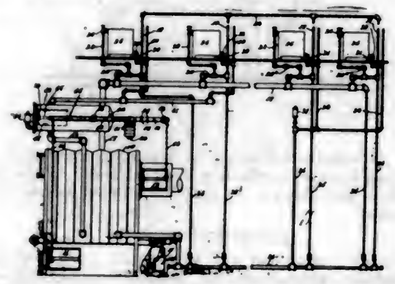
1. In a television system, means for receiving television signaling energy over a variable frequency range, an inductance constituting a glow discharge screen, means in circuit with said screen for normally energizing said glow discharge screen for producing a predetermined optical effect thereon, and means operated by the incoming signaling energy for changing the frequency response characteristics of said glow discharge screen and simultaneously modulating the energy in circuit with the glow discharge screen according to variations in the incoming signaling energy.

1,874,173. CUTTER. MAURICE E. DAVIS, Akron, Ohio, assignor to The Leo Meyer Company, Akron, Ohio, a Corporation of Ohio. Filed May 26, 1931. Serial No. 540,032. 7 Claims. (Cl. 164—61.)



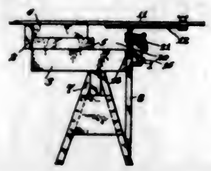
1. A cutter for producing a plurality of strips of stock from rubberized laminated fabric material or the like comprising a rotary cutter including a plurality of spaced knives, means for feeding the material to said cutter comprising feed rollers, means for relatively moving said feed rollers to permit insertion of a leading end of the material therebetween and to press said material between the rollers, one of said rollers having slots therein into which the peripheries of said knives extend adjacent the point of cutting, a strip diverting element having prongs passing between said knives for diverting the cut strips of stock from between the knives, means for driving said feed rollers, and means for driving said cutter at faster peripheral speed than the peripheral speed of said feed rollers.

1,874,174. STEAM HEATING SYSTEM AND REGULATOR THEREFOR. JAMES A. DONNELLY, Brooklyn, N. Y., assignor to Warren Webster & Company, a Corporation of New Jersey. Filed May 24, 1921. Serial No. 472,229. 5 Claims. (Cl. 237—9.)



1. In combination, a steam supply; a plurality of radiators connected to said supply; means receiving water of condensation from a portion only of the radiators; and a regulator controlled by the rate of flow of said condensation water and controlling said steam supply; said regulator including a counterbalanced cup having a small orifice in the lower part thereof.

1,874,175. FRAMING TABLE. CHARLES T. EARHART, Pittsburgh, Pa. Filed May 20, 1931. Serial No. 538,863. 4 Claims. (Cl. 143—132.)



1. In a portable table for sawing devices, a table top comprising a rear stringer forming an abutment for material being sawn on said table, a deck at a lower elevation than the top of the rear stringer and connected therewith, a number of cross-bars mounted beneath the deck, and a vertically adjustable front stringer on the cross-bars on which a sawing device can operate.

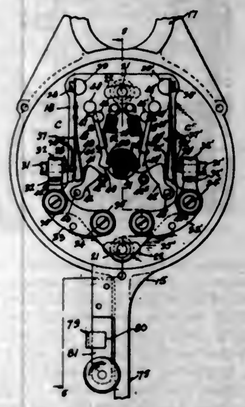
1,874,176. TREATMENT OF MATERIALS MADE OF OR CONTAINING CELLULOSE DERIVATIVES. GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Oct. 12, 1928, Serial No. 312,221, and in Great Britain Nov. 2, 1927. 13 Claims. (Cl. 8—5.)

1. Process for the treatment of materials comprising cellulose esters, comprising treating the materials with solutions of alkali metal stannates.

1,874,177. TREATMENT OF MATERIALS MADE OF OR CONTAINING CELLULOSE DERIVATIVES. GEORGE HOLLAND ELLIS, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Oct. 26, 1928, Serial No. 315,345, and in Great Britain Nov. 28, 1927. 19 Claims. (Cl. 8—5.)

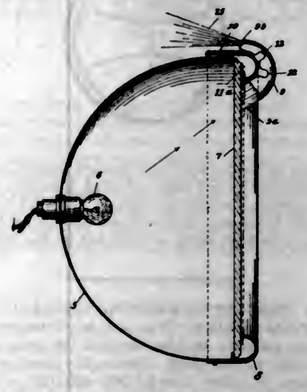
1. Process for the treatment of materials comprising organic substitution derivatives of cellulose, comprising treating the materials with alkaline solutions of zinc.

1,874,178. TIMER FOR FOUR CYLINDER OUTBOARD MOTORS. OLE EVINRUDE, Milwaukee, Wis., assignor, by mesne assignments, to Outboard Motors Corporation, a Corporation of Michigan. Filed Jan. 21, 1928. Serial No. 248,512. 7 Claims. (Cl. 200—27.)



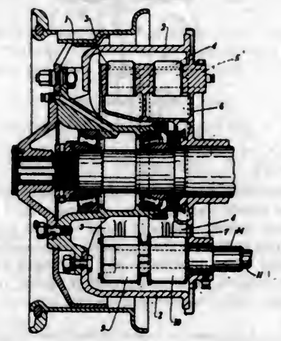
1. A timer having a crank shaft and comprising a casing mounted for oscillating movement about the axis of the crank shaft, two ignition circuit makers and breakers mounted in said casing, an actuating element common to said circuit makers and breakers and alternately cooperable therewith, and an eccentric actuated from the crank shaft and operatively connected to the actuating element for oscillating the same.

1,874,179. HEADLIGHT INDICATOR. ANDRE CHRISTIAN FURO, Astoria, N. Y. Filed June 23, 1931. Serial No. 546,322. 1 Claim. (Cl. 240—8.4.)



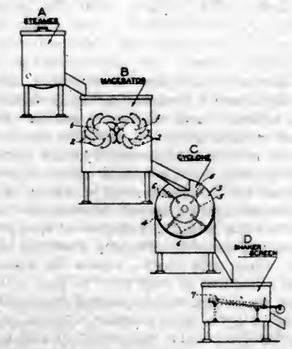
In combination with the rolled rim of a vehicle headlight, an indicator comprising a body of transparent material of concavo-convex form to bend around the roll of the rim, and a holding member conforming to and seating in the concave portion of the body and secured thereto and provided with an upturned flange extending behind the rim on the front and a bent-back portion constituting a forwardly extending flange projecting from the rear end of the holding member and engaging the rim on the inner periphery from the rear edge of the rim, the holding member having lateral lugs in lateral contact with the body on opposite sides.

1,874,180. BRAKE MECHANISM FOR THE WHEELS OF ROAD VEHICLES. FRANCIS ALBERT GARRETT, Ipswich, England, assignor to Ransomes, Sims & Jefferies, Limited, Ipswich, England. Filed July 30, 1930, Serial No. 471,781, and in Great Britain Aug. 21, 1929. 2 Claims. (Cl. 188—79.)



1. Brake mechanism for the wheel of a motor propelled or other road vehicle, comprising a brake drum, duplicate pairs of brake shoes for said drum, a shaft having a cam fixed to it for operating one pair of brake shoes, another shaft having a cam freely mounted on it for operating the other pair of brake shoes, a dog clutch between said freely mounted cam and its shaft to ensure a driving connection therewith and another dog clutch between the two cams adapted to ensure a driving connection between them when the fixed cam is operated by its shaft.

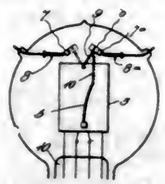
1,874,181. PRODUCING TOMATO JUICE. WILLIAM H. GAVIN, San Jose, Calif., assignor to Pratt-Low Preserving Company, Santa Clara, a Corporation of California. Filed Dec. 29, 1930. Serial No. 505,236. 1 Claim. (Cl. 146—219.)



The process of producing tomato juice comprising softening the fruit by steaming; then tearing it to a pulpy condition; then subjecting it to a relatively slow screen wip-

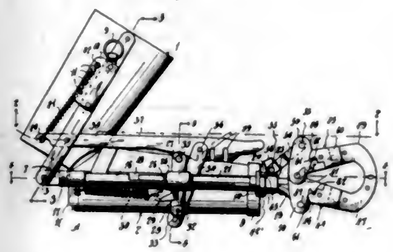
ing effect adapted to separate the juice and pulp from other substances, and then subjecting said previously screened juice and pulp to a screen shaking effect adapted to separate therefrom the juice and such modicum of the pulp as in character and volume will homogenize with the juice to give to it desired flavor and color.

1,874,182. THERMIONIC TUBE. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 3, 1928. Serial No. 323,527. 3 Claims. (Cl. 250—27.5.)



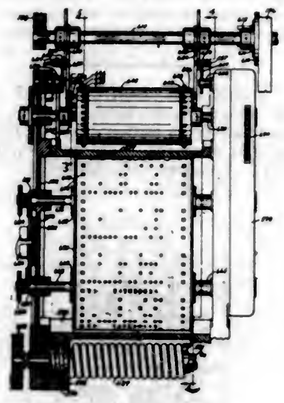
1. An electron tube comprising an enclosing vessel including an anode and cathode, a bimetallic thermo-expansive member having one end fixed on said anode, a pivotally mounted switch, a spring having one end connected to the free end of said member and the other end connected with said switch at a point remote from the pivot and independent contacts disposed in the path of said switch.

1,874,183. ARTIFICIAL HAND. HENRY F. GEISE, Whites, Wash. Filed Aug. 19, 1930. Serial No. 476,368. 14 Claims. (Cl. 3—12.)



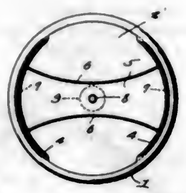
1. In a device of the character described, an upper arm receiving sleeve and a forearm receiving sleeve, a pivotal connection between said sleeves, a member mounted for longitudinal reciprocation at one side of said forearm sleeve, a pair of members mounted at the forward end of said forearm sleeve, said members being adapted for relative movement for the engagement of a body therebetween, said first member when moved toward the rear of said sleeve effecting the bringing together of said pair of members, a lever permanently pivotally attached adjacent one end to said upper arm sleeve, means for detachably connecting the other end of said lever to said shiftable member whereby the latter will be shifted longitudinally upon bringing said sleeves into angular relation one with the other, for effecting relative movement of said pair of members, and a resilient control element having connection with said lever at its pivoted end and normally maintaining the connection of the other end with said shiftable member.

1,874,184. AUDITING MACHINE. MAXIMILIAN M. GOLDBERG, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Sept. 27, 1926, Serial No. 134,025. Divided and this application filed May 2, 1930. Serial No. 449,230. 3 Claims. (Cl. 242—55.)



1. In a machine of the class described, the combination of feeding means for feeding record material a given amount for each cycle of operation, a spool adapted to have record material wound thereon or unwound therefrom, driving means having a given amount of movement for each cycle of movement for turning said spool when winding material thereon, a friction drive between said driving means and spool to allow the driving means to operate after record material which has been fed by the feeding means has been wound on said spool, and another friction means to prevent said driving means from turning said spool when record material is being unwound therefrom by said feeding means.

1,874,185. VASE. JACOB GOLDSTEIN, Wilkes-Barre, Pa. Filed Aug. 20, 1931. Serial No. 558,353. 4 Claims. (Cl. 47—41.)

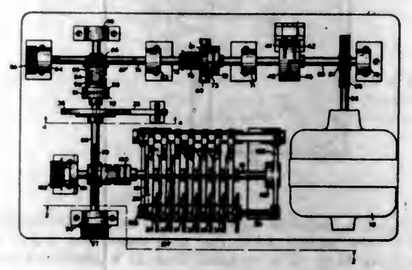


3. A vase including a body, a flanged bottom having opposed annularly spaced ribs extended inwardly from the body, a cross-head insertible between the ends of the ribs and slidable thereonto, and a stem carried by the cross-head, said cross-head being surrounded by the flanged bottom.

1,874,186. PROCESS OF MAKING PORTLAND CEMENT FROM COAL ASHES. WILLIAM M. GUERTLER, Berlin, Germany, assignor to The Electric Smelting & Aluminum Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 21, 1930. Serial No. 437,947. 11 Claims. (Cl. 106—25.)

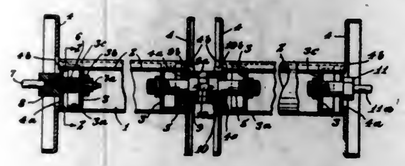
1. The process of producing siliceous material, mainly composed of silica hydrate, from coal ashes which have been subjected to a sufficiently high temperature so that upon cooling at least some magnetic oxide of iron will be formed, which consists in magnetically extracting the magnetic iron from the ashes and treating the ashes with mineral acid to dissolve the basic content, and separating the siliceous material from the acid solution whereby a silica hydrate suitable for the manufacture of cement is produced.

1,874,187. AUTOMATIC MEANS FOR CHANGING TIMING INTERVALS. HAKON H. HAGLUND, Flushing, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1930. Serial No. 500,106. 18 Claims. (Cl. 178—2.)



1. A timing mechanism for controlling the period of transmission in each direction over a transmission line comprising a plurality of cams, switch means controlled by a selected one of said cams, each of said cams being coded so as to operate said switch means at differently timed intervals and means for automatically changing the control from one cam to another.

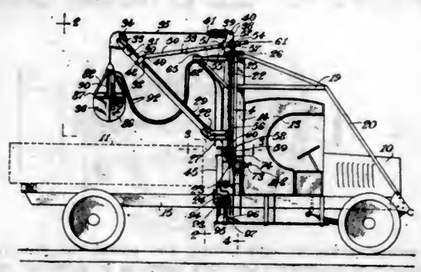
1,874,188. TUBE FRAME YARN SPOOL. EDGAR F. HATHAWAY, Wellesley, and WALTER BIXBY, Boston, Mass., assignors to Shawmut Engineering Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 30, 1929. Serial No. 336,247. 4 Claims. (Cl. 242—124.)



3. A yarn spool embracing in combination a tubular barrel, end heads adapted to be secured to the ends of said barrel, axially disposed journal members concentrically disposed outside of said end heads, an axial concentrically disposed fastening member for releasably securing the external journal member and the head firmly to the barrel, and rigidly arranged longitudinally extending means integral with the barrel for keying the journal and the head against rotative displacement in relation to the barrel.

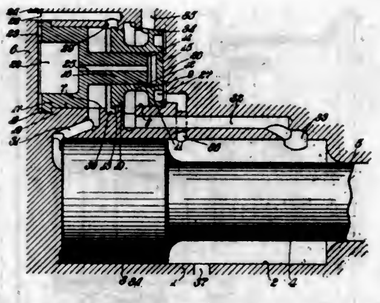
1,874,189. HOISTING APPARATUS FOR ROADWAY VEHICLES. WILLIAM S. HOWARD, New York, N. Y., assignor to Collection Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 16, 1928. Serial No. 319,852. 4 Claims. (Cl. 214—65.)

2. A vehicle loading device mounted on a self-motorized vehicle, in combination, a swinging mast-supported boom adapted to be positioned alternately over a catch-basin opening and the dump body of a vehicle, a power device for swinging said boom, a manual control for said power device, and mechanism controlled jointly by said boom



and said control member for stopping said boom at each end of its swinging movement, said mechanism comprising a slidable bar provided with spaced elements thereon.

1,874,190. PRESSURE FLUID MOTOR. MERVIN C. HUFFMAN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed July 5, 1929. Serial No. 376,088. 17 Claims. (Cl. 121—19.)

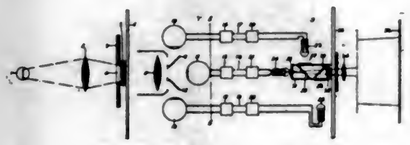


1. A pressure fluid motor comprising a cylinder, a piston reciprocable in said cylinder, and fluid distribution means for effecting reciprocation of said piston including means forming a valve chamber having differential bores, a supply passage communicating with the larger of said bores, a passage leading from the larger bore to the rear end of said cylinder, a passage leading from the smaller of said bores to the front end of said cylinder, an exhaust passage connecting the smaller bore to atmosphere, a differential spool valve reciprocably mounted in said chamber for alternately connecting said second and third mentioned passages with said supply passage and for intermittently connecting said third mentioned passage with said exhaust passage, means for subjecting the forward pressure area on said valve intermittently to the pressure in said cylinder, and means for intermittently subjecting the opposed rear pressure area on said valve to compression built up in the rear end of the cylinder by said piston, said valve chamber forming means and said valve having portions cooperating to make the said opposed rear pressure area on the valve of less area than the forward pressure area on said valve.

1,874,191. ELECTROOPTICAL SYSTEM. HERBERT E. IVES, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 4, 1930. Serial No. 486,363. 10 Claims. (Cl. 178—6.)

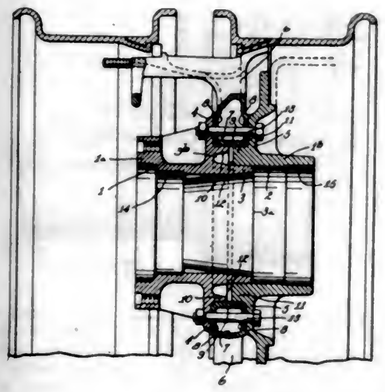
1. An apparatus for producing image currents for controlling the production of images in color comprising

light sensitive electric elements, a record representative of an object or view having unlike portions corresponding to different color characteristics of the same part of the object or view, means for successively scanning



elemental areas of said record, and means for directing light simultaneously from said portions to different ones respectively of said light sensitive electric elements to produce separate image currents.

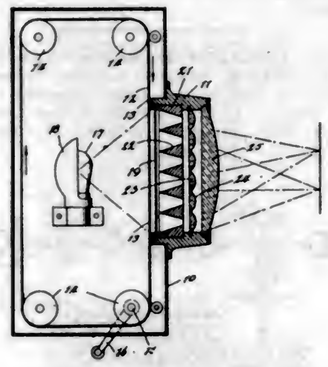
1,874,192. HUB CONSTRUCTION FOR TRUCK WHEELS. LLOYD D. KAY, Los Angeles, Calif., assignor to Kay-Brunner Steel Products Inc., a Corporation. Filed Nov. 12, 1930. Serial No. 495,114. 1 Claim. (Cl. 301—9.)



In a hub construction for truck wheels, the combination of an inboard hub section and an outboard hub section, one of said hub sections having a bore and the other hub section having a sleeve fitting into said bore with a pressed fit, said hub sections having flanges projecting outwardly with opposed faces, with a cylindrical neck between said flanges, a portion of said neck being integral with one of said flanges and another portion of said neck being integral with the other of said flanges, the hub section carrying said sleeve having an annular groove formed in its inner face at the root of the sleeve and a wheel body with a nave received on said neck and clamped between said opposing faces, said hub sections having their adjacent faces disposed apart so that the nave is clamped by the pressed fit between the hub sections.

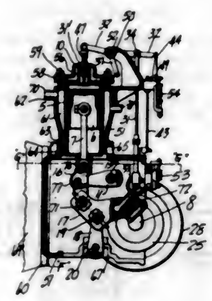
1,874,193. APPARATUS FOR PROJECTING MOTION PICTURES. ELIOT KEEN, Jackson Heights, N. Y. Filed Feb. 7, 1930. Serial No. 426,484. 4 Claims. (Cl. 88—16.)

4. In combination with a stationary film containing a plurality of picture positives to be projected, a motion picture projector comprising a holder for the stationary film, a series of lenses each adapted to throw an image of an individual positive and occupying approximately the same position with reference to said positive as the original lens taking the picture occupied to the negative, a light source, a device adapted to successively expose said



pictures in sequence, and a single lens unit transmitting all of the images from the first mentioned lenses and directing them to a common area at a shorter distance from the projector than the image focusing points of said individual lenses.

1,874,194. INTERNAL COMBUSTION ENGINE. ALBERT BENTLEY KING, San Diego, Calif. Filed Oct. 22, 1928. Serial No. 314,134. 4 Claims. (Cl. 123—197.)



2. In an internal combustion engine including a piston, piston rod and crankshaft, a king link connected at its one end to the crank pin of said crankshaft, a lower radius arm pivotally mounted at its one end and connected with said king link intermediate the ends thereof, an intermediate link member connected at its one end with said piston rod and at its other end with the free end of said king link, and an upper radius arm pivotally mounted at its one end and connected to said intermediate link intermediate the ends thereof.

1,874,195. INTERNAL COMBUSTION ENGINE. ALBERT BENTLEY KING, San Diego, Calif. Filed Oct. 31, 1928. Serial No. 316,215. 5 Claims. (Cl. 123—78.)

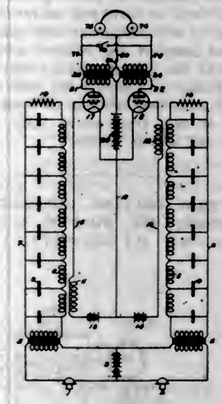
1. In an internal combustion engine, a pair of cylinders, a piston reciprocally mounted in each cylinder, a common crankshaft positioned in pronounced offset relation to one side of the axes of said cylinders, common link means

connecting the piston rods of said pistons, oscillatory means connected with said link means, link means connecting said crankshaft and said oscillatory means, and



means controlling the movement of said common link means, whereby said pistons perform double reciprocations during each complete revolution of said crankshaft.

1,874,196. SOUND RANGING SYSTEM. HORATIO W. LAMSON, Arlington, Mass., assignor to General Radio Company, Cambridge, Mass., a Corporation of Massachusetts. Filed July 16, 1928. Serial No. 293,228. 17 Claims. (Cl. 177—386.)



9. An electric system comprising a plurality of pick-ups adapted to translate sound impulses into electrical impulses, means for translating electrical impulses into sound impulses, an artificial line composed of inductance and capacity units interconnected intermediate said pick-ups and translating means, means inductively associated to cooperate with more than one of said inductance units at one time, said inductively associated means being connected to the translating means, said connections including means for keeping the current in the inductively associated means at a negligible value, and means for changing the inductance units of the artificial line with which said inductively associated means cooperates.

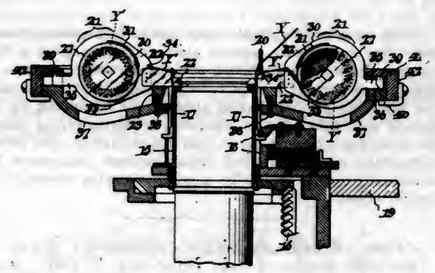
1,874,197. INNER TUBE FOR PNEUMATIC TIRES. WALTER B. LANG, Roswell, N. Mex. Filed Feb. 7, 1930. Serial No. 426,647. 7 Claims. (Cl. 152—13.)

1. An inner tube for pneumatic tires having adjacent the tire tread double walls consisting chiefly of vulcanized rubber with an intervening filler comprising a single cell-forming undulatory strip of material contacting on both sides with said walls, said strip providing



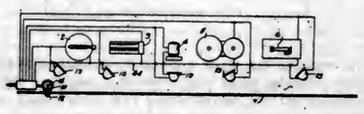
cells which are filled with puncture sealing material, thereby avoiding substantial displacement of the puncture sealing material when the tube is subjected to pressure.

1,874,198. KNITTING MACHINE. WILLIAM LARMOUR, Philadelphia, Pa., assignor of one-half to Harry McAdams, Atlantic City, N. J. Filed Feb. 19, 1930. Serial No. 429,550. 15 Claims. (Cl. 66—7.)



1. In a knitting machine, a series of needles; and a complemental series of independently movable sliding instrumentalities to cooperate with the needles in knitting fabric, said instrumentalities each embodying an apertured laterally directed portion for serving individual yarns to the respectively coordinated needles.

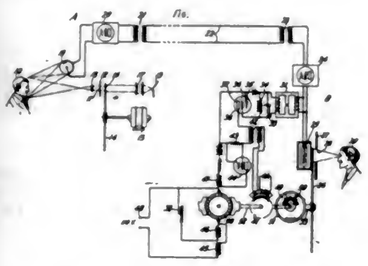
1,874,199. ADVERTISING DEVICE. WAYNE W. LINGO, Cleveland, and CLAUDE I. CRONBURG, Cleveland Heights, Ohio, assignors to Frank R. Ulble, Cleveland, Ohio. Filed May 14, 1931. Serial No. 537,300. 7 Claims. (Cl. 40—52.)



1. In an advertising device, the combination with an apparatus to be actuated for advertising the same and a display case window including an imperforate glass wall in substantially upright position for guarding said apparatus while displaying the same, of a movable element to effect actuations of said apparatus consequent upon movement of said element, said element being guarded by said glass wall, a manually movable element disposed on the opposite face of said glass wall and accessible

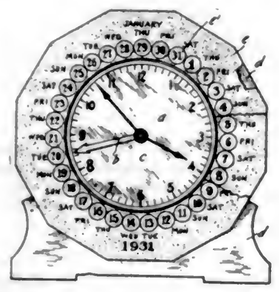
to the public, said manually movable element and the first mentioned movable element being adapted to be associated magnetically through the medium of the glass wall for moving the first mentioned element consequent upon a predetermined movement of the manually movable element.

1,874,200. ELECTROOPTICAL IMAGE PRODUCING SYSTEM. EMANUEL C. MANDERFELD, Boonton, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 24, 1928. Serial No. 256,522. 18 Claims. (Cl. 178—69.5.)



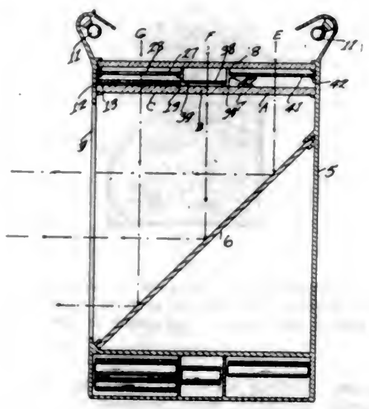
1. In an electro-optical image producing system, means including a cyclically moving element for scanning a field of view to produce an image current, means responsive to said image current and including a second cyclically moving scanning or distributing element for producing an image of said field of view, frequency discriminating means for selecting a component of said image current, and means responsive to said selected image current component for maintaining said cyclically moving scanning elements in synchronism.

1,874,201. CIRCULAR DATE CALENDAR. HARRY M. MATHERS, Portland, Oreg. Filed Nov. 2, 1931. Serial No. 572,605. 4 Claims. (Cl. 40—107.)



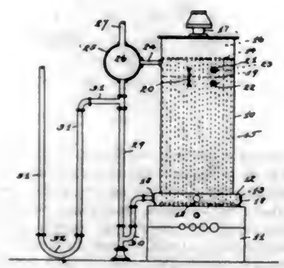
1. In combination with a clock mechanism including an auxiliary calendar hand and a housing provided with a circumferential lateral flange about the clock's face, a series of annular calendar sheets adapted to be placed on said flange one over the other, each sheet bearing the numerals of the month which it represents, the numerals representing the first days of the underlying consecutive calendar sheets being arranged to follow directly, respectively, the numeral representing the last day of the month on the overlying calendar sheet, whereby upon the advancement of said hand and the removal of the top calendar sheet, the numeral representing the first day of the month on the underlying calendar sheet will be in registration with the advanced position of the said hand.

1,874,202. SIGN. THOR J. MICHELSEN, Venice, Calif. Filed June 23, 1931. Serial No. 546,315. 2 Claims. (Cl. 40—32.)



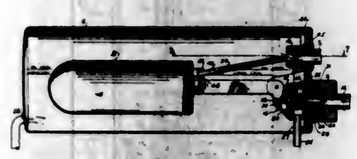
1. In a display device of the character described, a casing, a diagonally disposed mirror positioned in said casing, a pair of spaced transparent plates positioned in said casing and at an angle of forty-five degrees relative to said mirror, a plurality of transparent belts positioned between said plates and adapted for relative movement thereto, indicia formed on one of said plates whereby light passing through said plates and said belts will display said indicia, and an opaque belt movable between said plates and overlying one of said transparent belts whereby indicia on said opaque belt will be visible.

1,874,203. STEAM HEATING APPARATUS. GEORGE J. MULLER, Baltimore, Md. Filed Feb. 1, 1930. Serial No. 425,212. 5 Claims. (Cl. 122—114.)



1. An improved steam generating apparatus including, in combination, a boiler adapted to have a water level which leaves a steam disengaging space therein, a shell exterior to the boiler and having a water and steam separating chamber, at least a portion of which chamber is above the water level of the boiler and has a steam outlet, a connection between the steam space of the boiler and the chamber of said shell, and a water circulating connection from said shell to the boiler at a point below the water level of the latter; the last-named connection including a loop for preventing reverse flow from said boiler to said shell.

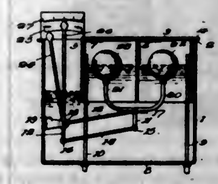
1,874,204. MECHANICAL REFRIGERATION. HAROLD H. NESBITT, Belair, Md., assignor to Hartford Engineering and Machine Company, Aberdeen, Md., a Corporation of Maryland. Filed June 12, 1930. Serial No. 460,748. 10 Claims. (Cl. 62—115.)



1. In refrigeration apparatus operating through a Carnot refrigeration cycle, an evaporator, and means responsive to depletion of refrigerant in said evaporator for periodically introducing into said evaporator a quantity of liquefied refrigerant at one time, sufficient to melt frost from said evaporator.

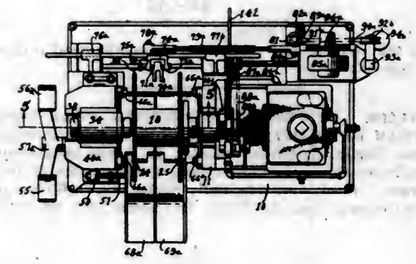
9. In refrigeration apparatus operating through a Carnot refrigeration cycle, and an evaporator including a header, a float in said header including valve actuating mechanism for determining the level of the surface of the body of liquefied refrigerant in said header, and for determining the replenishment periods thereof, a suction pipe, and an oil return tube pivotally mounted and communicating with said suction pipe having its outer end carried by said float and at the level of the surface of the body of liquefied refrigerant in said header.

1,874,205. DIFFERENTIAL PRESSURE GAUGE. PETER A. NOBLE, Brooklyn, N. Y., assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 26, 1930. Serial No. 498,452. 11 Claims. (Cl. 73—3.)



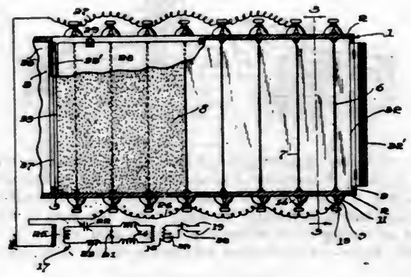
1. A differential pressure gauge comprising a liquid manometer, two floats on respective liquid columns in the manometer, an angularly variable parallelogram in the liquid and formed of four links connected by pivoted joints, one of the links having two projections respectively connected with the two floats and adapted to impart angular movement to this link in response to differential vertical movement of the floats and means connected with the opposite and parallel link adapted to indicate said responsive angular movement.

1,874,206. WIRE SPOOLING MACHINE. WILLIAM D. PIERSON, Waterbury, Conn., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 23, 1931. Serial No. 546,265. 4 Claims. (Cl. 242—25.)



1. In a wire-spooling machine, means for detachably holding a winding spool, a two-part runway located beneath said spool, and means for separating the parts of said runway to accommodate spools of different sizes.

1,874,207. PLANT BED. ROLF PURPLAW, Los Angeles, Calif. Filed Jan. 20, 1931. Serial No. 509,953. 5 Claims. (Cl. 47—1.)



1. A hot bed comprising a bed of soil, a plurality of electrode members of extended area embedded within said soil and extending parallel to one another at equal intervals throughout substantially the length of said bed and extending transversely with respect to said length and across the major portion of the width of said bed, a source of high frequency electric current, means connecting alternate electrode members to one terminal of said source of current, and means connecting the remaining electrode members to the opposing terminal of said source of current.

1,874,208. PRY TAG DECAPPER. ROBERT EDWIN REARDON, Columbia, Pa. Filed May 29, 1929. Serial No. 366,992. 6 Claims. (Cl. 215—46.)

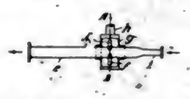
1. A pry tag decapper of thin soft sheet material made rigid in part and having one end adapted to engage a re-

ceptacle lip and a closure in position between said lip and closure and conform to the pressure of said closure upon



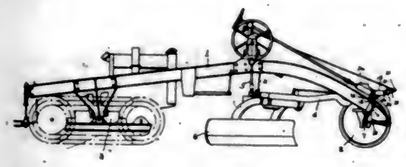
said tag and lip, and provided with another end manually engageable.

1,874,209. PROCESS OF PRODUCING FOAM FROM FOAM DEVELOPING SUBSTANCES. RUDOLF SCHNABEL, Berlin, Germany, assignor, by mesne assignments, to Pyrene-Minimax Corporation, a Corporation of Delaware. Filed Apr. 23, 1927, Serial No. 186,166, and in Germany Aug. 22, 1925. 12 Claims. (Cl. 23—11.)



5. The method of producing foam for fire extinguishing purposes which comprises bringing into intimate contact with a whirling motion a foam forming liquid under pressure and a gas under pressure, substantially as described.

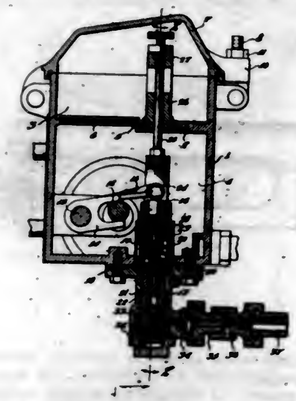
1,874,210. ROAD GRADER AND THE LIKE, GEORGE D. SHAFFER, Bucyrus, Ohio, assignor to W. A. Riddell Company, Bucyrus, Ohio, a Corporation of Ohio. Filed Sept. 30, 1929. Serial No. 396,107. 5 Claims. (Cl. 37—157.)



1. In a road grader and the like, the combination with an implement-carrying frame, of an axle oscillatorily mounted on said frame and provided with supporting wheels, and a vertically disposed yoke attached to said axle and adapted to releasably engage said frame to restrain undesired transverse oscillation of the body frame.

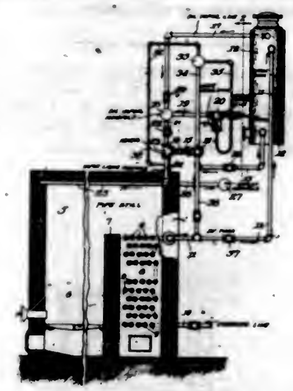
1,874,211. FORCE FEED LUBRICATOR. W EARL SNYDER, Cincinnati, Ohio, assignor to The Edna Brass Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 23, 1931. Serial No. 524,523. 1 Claim. (Cl. 184—27.)

In a lubricator, a reservoir body, a pump unit fixed to the base of the reservoir body providing a pressure feed outlet for the lubricator and comprising a cylinder having an upper end engaged through the base of and into the reservoir of the body, a tubular plunger engaged into and guidingly sustained within the cylinder, the upper end of the plunger counterbored to provide a valve seat, said plunger having lateral ports therethrough immediately above the valve seat for the admission of fluid from the reservoir through lateral ports in the cylinder into the bore of the plunger when open at the valve seat and to be forcibly discharged therefrom in a power stroke of the plunger when the bore is closed at the seat, a spring for automatically retreating said plunger, a plunger valve guidingly sustained in the upper end of the bore of the plunger cooperating with said seat to close the plunger bore in a power stroke of the valve, a spring for automatically retracting said valve, power driven means for positively depressing said valve and in turn said plunger upon the seating of the valve and



movable means guidingly sustained in said cylinder and providing an adjustable abutment for the plunger and relative variable retreat of said plunger and valve and to guidingly sustain the valve.

1,874,212. ART OF PIPE STILL DISTILLATION. THOMAS E. STOCKDALE, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Mar. 28, 1928. Serial No. 265,505. 22 Claims. (Cl. 196—85.)

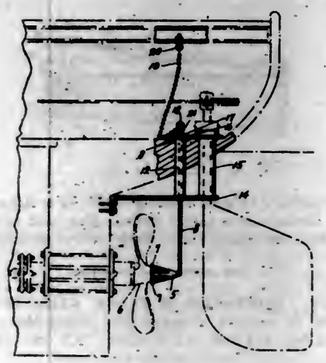


1. In the art of pipe still distillation of petroleum oils, causing oil to flow in a restricted stream through a heating zone in a pipe still furnace, supplying steam to the stream of oil at an intermediate point in the stream in the furnace, controlling the supply of said steam by the pressure conditions in the steam-oil mixture in said stream and continuing the flow of the steam-oil mixture in a restricted stream further through a heating zone for further heating thereof.

1,874,213. PROPELLER ATTACHMENT. FRIEND E. WALLACE, Stockport, Ohio. Filed Mar. 24, 1931, Serial No. 524,982. Renewed Apr. 20, 1932. 3 Claims. (Cl. 170—177.)

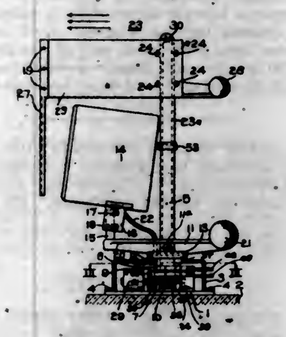
1. An attachment of the class described comprising a cone, means for securing the cone at its larger end over

the hub of a propeller, the apex of the cone being formed with an opening, an L-shaped rod having its smaller arm



extending through the opening and terminating interiorly of the cone in a ball larger in diameter than the diameter of the opening.

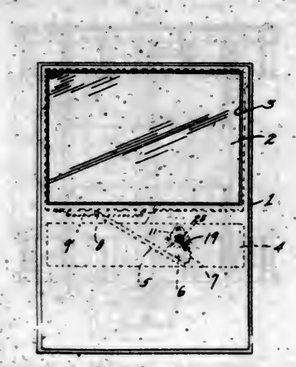
1,874,214. BEACON AND AIR CURRENT INDICATOR. OSCAR WERNER, South Bend, Ind., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 30, 1926. Serial No. 151,770. 21 Claims. (Cl. 73—55.)



11. The combination with a rotatable light-beam projector adapted to so direct the beam that rotation of the projector will correspondingly sweep the beam about the axis of the projector and means for positively rotating said projector, of a vane adapted to rotate freely and to be positioned in accordance with the direction of air currents impinging thereon and means associated with said vane for altering the light beam projected from said light source during a portion of its rotary sweep.

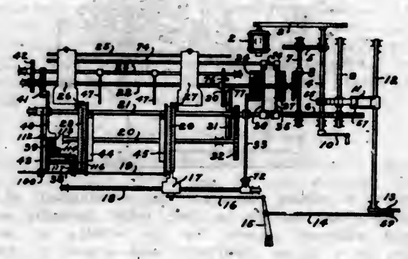
1,874,215. CLUTCH MECHANISM. EDWARD L. ACKERMAN and ALOIS J. ZWIERZINA, Detroit, Mich., assignors to Ackerman-Blaesser-Fezzey, Inc., Detroit, Mich., a Corporation of Michigan. Filed May 13, 1930. Serial No. 452,086. 12 Claims. (Cl. 192—8.)

1. In a clutch mechanism, a stationary casing, a second stationary member positioned within said first stationary member, a pair of coiled springs, one positioned within the other, and one engageable with said first stationary member the outer engageable with said second stationary



member, and means for releasing the said springs from locking engagement with the respective stationary members by rotation of the driving member in either direction.

1,874,216. INSULATION PUSH-BACK MACHINE. KARL H. ANDRÉN, Milwaukee, Wis., assignor to Artos Engineering Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 24, 1930. Serial No. 430,890. 20 Claims. (Cl. 81—9.51.)

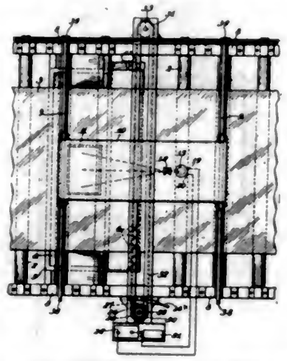


1. In combination, a fed clamp, means for moving said clamp to feed a definite length of insulated wire from a source of supply, means for severing the fed length from said source, means for heating the insulation at the opposite ends of the severed piece, clamping means for gripping the heated insulation at the opposite ends of the piece, and means for moving said clamping means along the wire to remove the heated insulation from the ends of the wire.

1,874,217. GLASS INSPECTION APPARATUS. PERCY E. ARBERRY, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed July 1, 1930. Serial No. 465,073. 3 Claims. (Cl. 88—14.)

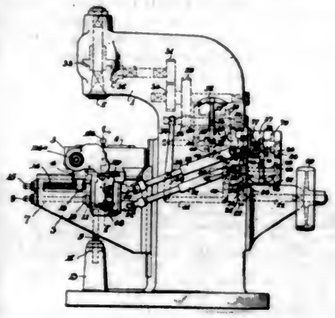
1. The combination with a carrier for sheet glass, of a polarizing reflector extending across the sheet on one side thereof and adapted to direct light through the sheet as

it moves past it, an analyzer, means whereby beams of light from one end of the reflector to the other are made to pass successively through the analyzer, means whereby



this action is continuously repeated, a photo-electric cell positioned to receive the light from the analyzer, and a recording device connected to the terminals of the cell.

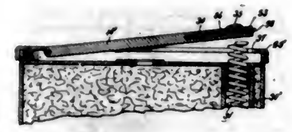
1,874,218. ROTARY MILLING MACHINE. JOSEPH B. ARMITAGE, Wauwatosa, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis. Filed June 7, 1929. Serial No. 869,033. 14 Claims. (Cl. 90—20.)



1. In a milling machine the combination of a rotatable tool spindle, a wor table rotatably supported adjacent thereto for the milling of work pieces by a cutter fixed with said spindle, a power drive for said spindle including a power source and a main clutch, transmission mechanism for said rotation of said work support including a feed train driven from said power source through said main clutch and providing a feed rate changer, a rapid traverse train driven from said power source to exclude said rate changer and clutch, and clutch means shiftable in opposite directions for alternative actuation of said table from the one or the other of said trains, and control means for said transmission mechanism including a shiftable trip element connected for the shifting of said clutch means, and a plurality of dogs spaced apart on said table to shift said element in opposite directions respectively and each adapted during unidirectional movement of said table to repeatedly contact and shift said trip element.

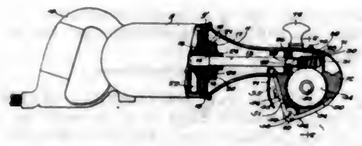
1,874,219. CIGAR LIGHTER. LOUIS V. ARONSON, Newark, N. J. Filed Aug. 16, 1928. Serial No. 300,057. 6 Claims. (Cl. 220—35.)

1. The combination with a fuel receptacle adapted to carry pyrophoric lighting mechanism at one end thereof, said receptacle comprising an end wall having a fuel filling opening and side walls projecting beyond said end



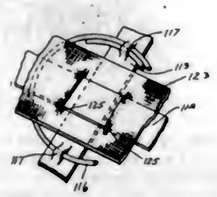
wall to define a closure housing recess, of a closure hinged in said recess, and a gasket surrounding said opening and compressed by said closure when in closed position.

1,874,220. PORTABLE SURFACE CLEANING TOOL. FRANK E. AURAND, Chicago, Ill. Filed Mar. 28, 1930. Serial No. 439,574. 11 Claims. (Cl. 29—81.)



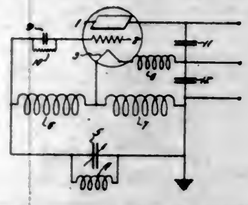
10. In a device of the character described, a rotor including a plurality of coaxially disposed discs, pins extending through said discs in circumferentially spaced relation, spacers between adjacent discs, annular movable members disposed between adjacent discs, said spacers and members being mounted on said pins in staggered circumferential relation, and loosely mounted resilient bushings on said pins between said pins and members.

1,874,221. SEAT SPRING CONSTRUCTION. JOHN W. BARBER, Anderson, Ind., assignor to Barber Mfg. Company, Anderson, Ind., a Corporation. Filed Apr. 19, 1930. Serial No. 445,546. 2 Claims. (Cl. 155—179.)



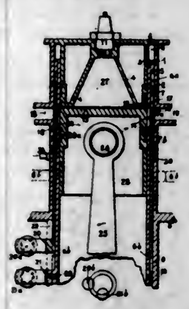
1. In an upholstering construction the combination of a pair of transversely arranged straps, a coil spring secured to one strap and arranged to bear upon the other strap, and a silencing member extending longitudinally of one of the strap members and having a pair of spaced transverse slits therein, between which the silencing member supporting strap is exposed, the intermediate silencing member portion permitting such exposure being interposed between the two straps, said silencing member being engageable by the superposed coils of the coil spring supported by the first mentioned strap upon collapse or compression of said spring.

1,874,222. CONSTANT FREQUENCY CIRCUITS. CONSTANTIN D. BARBULESCO, Dayton, Ohio, assignor to Paul S. Edwards, Dayton, Ohio. Filed Sept. 13, 1928, Serial No. 305,753. Renewed Dec. 3, 1931. 18 Claims. (Cl. 250—36.)



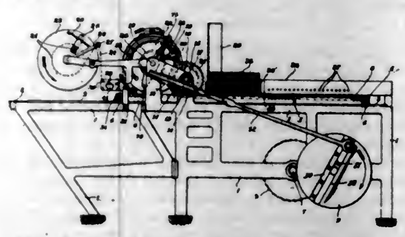
14. A constant frequency oscillator comprising grid and plate circuits, a tank circuit having a small inductance and large capacity connected between the grid and plate circuits, the characteristics of the tank circuit being so chosen as to render stray capacities in the associated circuits substantially negligible.

1,874,223. SLEEVE-VALVE INTERNAL COMBUSTION ENGINE. JEAN A. H. BARKEIJ, Altadena, Calif. Filed Feb. 19, 1927, Serial No. 169, 508. Renewed May 10, 1932. 8 Claims. (Cl. 123—75.)



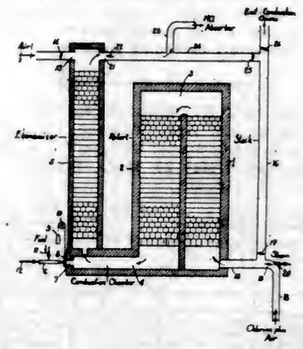
1. Internal combustion engine in combination, a cylinder with an extension protruding into the crankcase, a reentrant head, a working piston, a sleeve between said head, piston and said cylinder, provided with a horizontal annular extension at the top and bottom end, of a diameter greater than the middle part of said sleeve, said annular extension having a diameter equal to the cylinder bore.

1,874,224. AUTOMATIC SEALING MACHINE. HARRY J. BARNETT and HARRY P. TRUSTY, Bridgeport, Conn., assignors to McLaurin-Jones Company, Brookfield, Mass. Filed Aug. 6, 1927. Serial No. 211,061. 21 Claims. (Cl. 93—56.)



1. The combination with a device for applying tape to articles, of means for heating the tape, said means being controlled by the movement of the article through the device.

1,874,225. SYNTHESIS OF HYDROCHLORIC ACID. EDWIN O. BARSTOW and SHELDON B. HEATH, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich, a Corporation of Michigan. Filed Oct. 4, 1929. Serial No. 397,197. 4 Claims. (Cl. 23—156.)



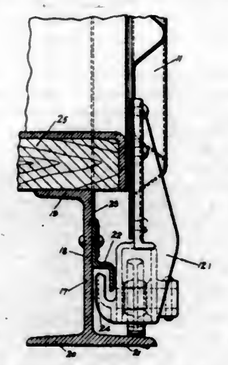
1. A process of making hydrochloric acid which comprises intermixing chlorine with an excess of water vapor over that corresponding to the equation

$$2Cl_2 + 2H_2O \rightarrow 4HCl + O_2,$$

heating the mixture to a temperature materially above 1000° C. but not exceeding about 1600° C. in the substantial absence of reducing substances and separating hydrochloric acid from the reacted gases.

4. A process of making hydrochloric acid which comprises alternately heating a pervious body of refractory packing material in a reaction chamber by direct contact with hot combustion gases and then introducing a mixture of air and chlorine with an excess of water vapor over that required to react with such chlorine to form hydrochloric acid at such rate and in such volume that the gaseous mixture is heated to a temperature between 1400° and 1500° C., withdrawing and cooling the reacted gases, separating hydrochloric acid therefrom and preheating air supplied for the combustion of fuel to produce said combustion gases by passing such air through a zone previously heated by contact with the hot reaction gases.

1,874,226. CAR CONSTRUCTION. WILFRED A. BEAUCHAMP, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 5, 1930. Serial No. 425,962. 17 Claims. (Cl. 105—355.)

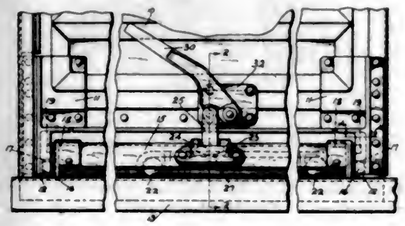


1. In combination, a car body, a side sill, a door opening in said car body, said sill being so constructed and arranged relative to said door opening as to constitute a

track for a door provided on said car body and a flange provided on said sill and forming guide means for said door.

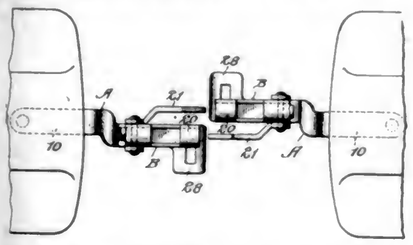
2. A side sill for railway house cars comprising, a structural member embodying a substantially vertical web, a substantially horizontal flange at the upper margin of said web, and oppositely extending flanges at the lower margin thereof, said web having secured thereto a member presenting a downwardly extending flange.

1,874,227. DOOR ELEVATING MECHANISM. WILFRED A. BEAUCHAMP and AXEL WASBERG, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed May 20, 1931. Serial No. 538,716. 7 Claims. (Cl. 16—99.)



1. Door elevating mechanism comprising, in combination, a member eccentrically pivoted to said door, rolling means seated in said member and having horizontal movement relative thereto, a lever pivotally supported on said door and means including a link connecting said member and said lever, whereby movement of said lever is communicated to said member to elevate the door.

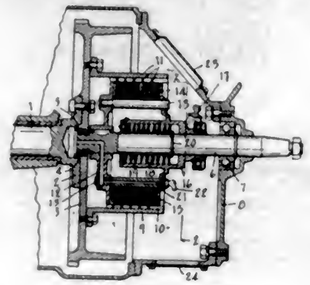
1,874,228. CAR COUPLER. HARRY S. BECKER, River Forest, Ill., assignor to American Flyer Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed July 22, 1930. Serial No. 469,755. 2 Claims. (Cl. 213—80.)



1. A car coupler comprising a shank, a pair of ears extending upwardly from opposite sides of said shank, an arm extending forwardly from one of said ears, said arm having an upward extension providing a hook, a latch pivoted between said ears and provided with an abutment for cooperation with the hook of another coupler to connect the couplers together, and means for holding the latch normally in an operative poistion for automatic connection with the hook of an arm of another coupler when the couplers are moved together, said arm and said hook being laterally spaced from each other.

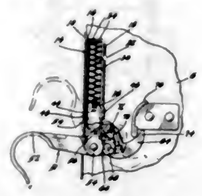
1,874,229. CLUTCH. LEO A. BIXBY, Kalamazoo, Mich., assignor to Fuller & Sons Manufacturing Co., Kalamazoo, Mich., a Subsidiary of Unit Corporation of America. Filed June 8, 1929. Serial No. 369,373. 5 Claims. (Cl. 192—113.)

1. In a clutch, the combination with a housing, of a driving shaft, a driven shaft disposed in axial alinement with said driving shaft, a bearing on said driving shaft supporting the inner end of the driven shaft, said housing being provided with a bearing for the outer end of said driven shaft, a clutch drum on said driving shaft provided with disk engaging lugs, a spider on said driven shaft provided with a plurality of disk engaging pins, said driven shaft, spider and one of said pins being provided



with registering bores opening to said bearing on said driving shaft to provide a lubricant passage leading from the outer end of the clutch to the bearing, there being a lubricant pump coupling mounted on said pin having said bore therein, said housing having hand holes in the top and bottom affording access to said coupling, and sets of coacting clutch disks engaging respectively said lugs on said drum and said pins on said spider.

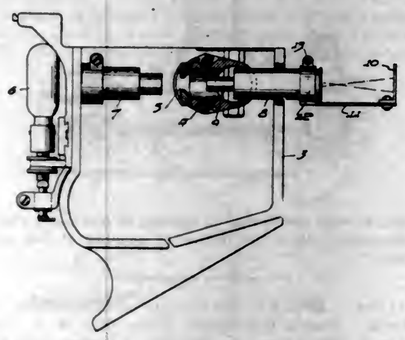
1,874,230. HOOD LATCH. LLOYD BLACKMORE, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 8, 1931. Serial No. 561,603. 6 Claims. (Cl. 292—113.)



1. In a latch for the hoods of vehicles, a securing member permanently mounted on a stationary part of the vehicle, an operating member pivotally connected to the hood on the inside thereof, a handle on said operating member extending outside the hood, a hook pivoted to the hood on the inside thereof and interconnected with said operating member, said member and hook having independent pivots, said interconnection comprising a pin movable in a slot, the movement of said operating member moving the hook into or out of engagement with the securing member.

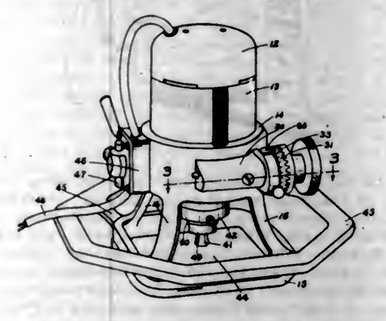
1,874,231. APPARATUS FOR MICROSCOPIC ADJUSTING OF OPTICAL SYSTEMS. ARTHUR A. BLUMENFELD, New York, N. Y., assignor to General Talking Pictures Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 24, 1930. Serial No. 504,575. 2 Claims. (Cl. 88—24.)

1. The combination with a sound head, an exciter lamp disposed exteriorly thereof, a tubular clamp carried by the sound head and the axis of which is in alignment with the filament of the exciter lamp, an optical system provided with a slit forming member and removably mounted in the clamp, a slit block mounted in the sound head and provided with a slit aperture through which the slit image projected by the optical system is observable, said slit block being provided with a bore in alignment with the slit aperture, said slit block being further provided with an opening in the rear wall, the axis of which is coaxial with that of the optical system, the sound head being provided with an opening concentric with the latter opening of the slit block, a microscope the enlarged portion of which is re-



movably mounted in both of said aligned openings with the reduced end projected within the aligned bore of the slit block for longitudinal sliding movement, and means adjustably carried upon the outer end of the microscope for receiving an enlarged image of the optical slit.

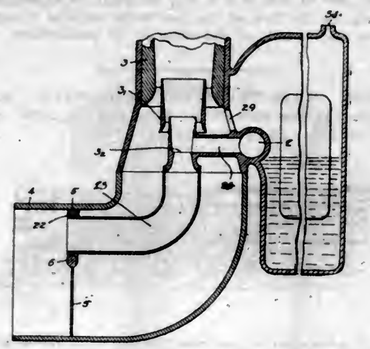
1,874,232. ROUTING DEVICE. WILLIAM F. GROENE, Cincinnati, and LESLIE D. REED, Mariemont, Ohio, assignors to The Cincinnati Electrical Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 15, 1927. Serial No. 233,501. 3 Claims. (Cl. 90—12.)



1. In a device of the class described the combination of a vertical power means, a receiver adapted to clamp the power means in vertically adjusted positions, means on the receiver and power means for effecting said adjustment, a shaft for actuating the adjustment, a knob on the shaft and a collar, having peripheral markings, normally movable with the knob and capable of movement independently thereof for resetting the collar while the power means remains clamped in adjusted position.

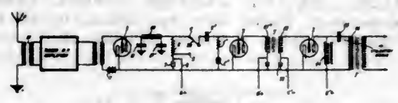
1,874,233. CARBURETOR. ANTONIN BOULADE, Lyon, France, assignor to Societe du Carburateur Zenith, Lyon, France, a Corporation of France. Filed June 12, 1928, Serial No. 284,799, and in France June 17, 1927. 8 Claims. (Cl. 261—63.)

1. In a carburetor with a diffusing channel of unvariable section, the arrangement within the air intake of a pivoted shield, the surfaces of the shield subject to air pressure being unequal at opposite sides of the pivotal axis, whereby the shield is displaced under the action of the air, an aperture provided in the shield on one side of the pivotal axis, in order to provide a permanent connection between the portions of the air intake situated on either side of said shield, the weights of the shield portions on each side of the pivotal axis being adapted to make up for each other



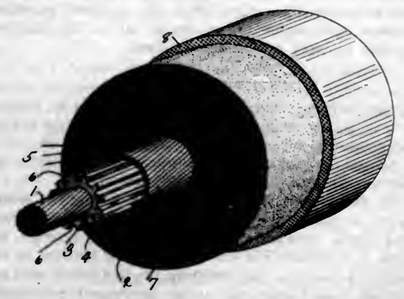
so that said shield is in static equilibrium in all positions, and means adapted to permanently urge said shield into its closing position.

1,874,234. LOCAL-DISTANT RADIORECEIVER. RENE A. BRADEN, Merchantville, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 448,509. 8 Claims. (Cl. 250—20.)



1. In a receiver of signal modulated radio frequency energy, means for collecting signal modulated energy at a predetermined frequency, a detector means for the collected energy provided with a space discharge device having a normally biased control electrode, means for amplifying the detected signals, and means variably coupling the detector means and signal amplifier means, said coupling including means to vary the characteristic of the detector means to follow a linear law or a square law when the amplitude of signal energy impressed upon the detector input is varied between predetermined values.

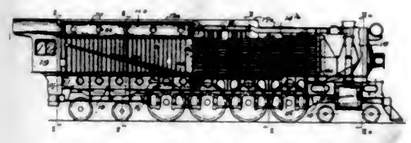
1,874,235. ELECTRIC CONDUCTOR. ISAAC BRANTHWAITE, Passaic, N. J., assignor to The Okonite-Callender Cable Company, Incorporated, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 10, 1929. Serial No. 353,921. 1 Claim. (Cl. 173—264.)



In an electric conductor, the combination of an inner set and an outer set of stranded conductors concentrically disposed and collectively providing the cross sectional area

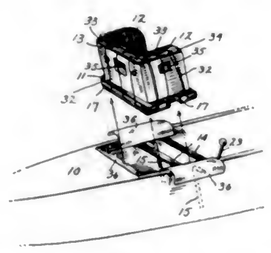
necessary for the desired current transmission, an insulating medium, an externally fluted continuous sheath over the inner set of conductors, and lying in the space between the two sets of conductors, said external flutes serving as channels for the flow of the insulating medium along and between the strands of the outer set of conductors.

1,874,236. HIGH PRESSURE LOCOMOTIVE. ALFRED W. BRUCE, New York, N. Y. Filed Aug. 13, 1929. Serial No. 385,654. 29 Claims. (Cl. 122—235.)



1. In a locomotive, the combination of a steam generator having longitudinal upper drums for the collection of steam; longitudinal lower drums for water, longitudinal banks of tubes establishing communication between the upper and the lower drums, and a fire chamber between the banks of tubes, and an economizer disposed forwardly of the generator and embodying a plurality of spaced water tubes, said spaces being open to the fire chamber to adapt them for the reception of products of combustion from said fire chamber.

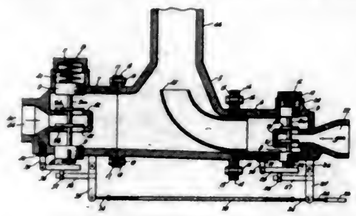
1,874,237. FLYING MACHINE SAFETY DEVICE. NICHOLAS P. BRUNO, Erie, Pa. Filed July 22, 1930. Serial No. 469,773. 6 Claims. (Cl. 244—21.)



5. A flying machine having a chair detachably connected therewith and a chair expelling device acting to move the same when detached, a collapsed parachute attached to the chair and an auxiliary parachute connected with the other parachute and serving to remove the latter from the chair, the chair having a chambered wall within which the collapsed parachutes are stored with the auxiliary parachute uppermost and means for access of air to the auxiliary parachute to expel it from the chamber.

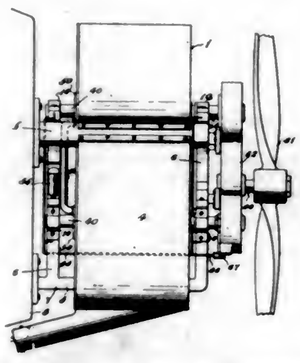
1,874,238. FUEL CONTROL MECHANISM. VINCENT T. CALLAHAN, North Bergen, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 28, 1927. Serial No. 243,016. 6 Claims. (Cl. 48—180.)

1. A fuel control mechanism comprising a mixing chamber, a gas intake valve assembly in said chamber having piston terminations and a valve cap between said pistons, a governor rod for transmitting motion to said assembly, a lever for transmitting the motion of said governor rod to said assembly, an air intake valve connected with said chamber, having piston terminations and a valve cap between said pistons, a lever for transmitting motion to said air intake valve assembly, and a connecting rod for connecting said levers together so that the motion of said governor rod is transmitted simultaneously to both valve assemblies, said connecting rod being variable in



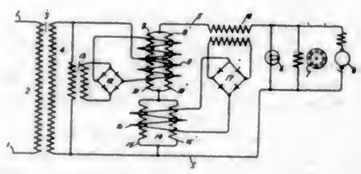
length so that the degree of opening of one valve may be made greater than the degree of opening of the other valve.

1,874,239. ROTARY INTERNAL COMBUSTION ENGINE. JOSEPH CANNIZZARO, Union City, N. J. Filed Apr. 6, 1928. Serial No. 267,987. 7 Claims. (Cl. 60—44.)



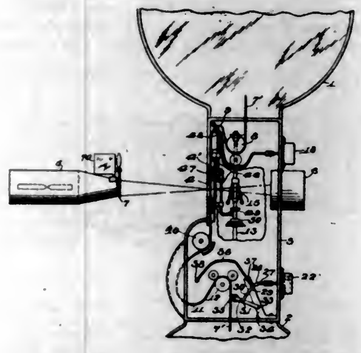
1. An engine of the class described comprising a plurality of triangular shaped rotors arranged to define a triangular shaped expansible chamber therebetween, said rotors each having a combustion chamber in each corner thereof, rotary inlet and exhaust controlling valves carried by the rotors for successive communication with the expansible chamber, and means for controlling the admission of fuel to the combustion chambers and the exhaust of gases therefrom into the expansible chamber.

1,874,240. ELECTRICAL CIRCUIT REGULATOR. BYRON A. CASE, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed Apr. 29, 1930. Serial No. 448,397. 12 Claims. (Cl. 171—119.)



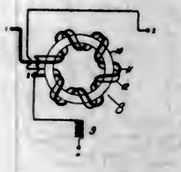
11. In combination, an electric circuit including in series a pair of reactance devices, means for producing a regulating quantity which varies in proportion to the voltage drop across one of said devices, means for varying the reactance of said other device, and means tending to maintain the reactance of said first device at a minimum value.

1,874,241. MOTION PICTURE PROJECTING APPARATUS. JOSEPH TAVANI, Philadelphia, Pa. Filed Dec. 22, 1927. Serial No. 241,815. 5 Claims. (Cl. 88—17.)



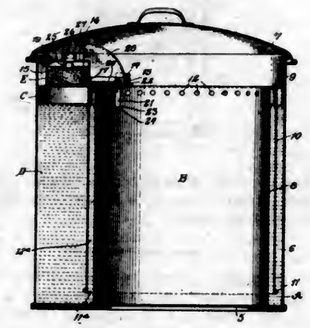
1. The combination in motion picture projecting apparatus, of film propelling means, a first electric circuit, a motor in said circuit to drive said means, a second circuit, illuminating means in the second circuit, a manually operable dowser for said illuminating means including a make and break device operable with the dowser and located in the first circuit to start the motor, a main switch controlling said first and second circuits, a starting switch also in said first circuit, a solenoid in the first circuit operable as the starting switch is closed to close said main switch and thereby close the second circuit so that movement of the dowser may thereupon start the motor, and an auxiliary switch means adapted to be manually closed when said main switch is closed to operate the motor irrespective of said illuminating means.

1,874,242. INDUCTANCE NETWORK. ARTHUR J. CHRISTOPHER, Yonkers, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 25, 1929. Serial No. 365,965. 4 Claims. (Cl. 178—44.)



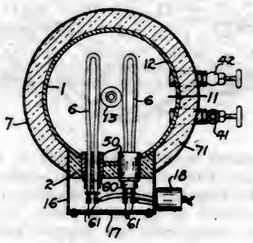
1. A four-terminal transmission network of the bridged-T type, said network including a bridging impedance and a T-network, said T-network comprising in series-shunt combination a double-winding inductance coil and a single-winding inductance coil, said double-winding coil having equal windings forming series inductances and joined in the series-aiding connection, the coefficient of inductive coupling between them being substantially unity, said single-winding coil having one terminal connected as a shunt impedance to the junction of the two windings of said double-winding coil.

1,874,243. SAFETY RECEPTACLE OR CONTAINER FOR INFLAMMABLE MATERIALS. JAMES G. CLARK, Newark, N. J. Filed Jan. 21, 1931. Serial No. 510,261. 9 Claims. (Cl. 169—4.)



1. In combination, a receptacle for inflammable material, a reservoir surrounding the receptacle, closed at its upper end and having an outlet at its lower end communicating with said receptacle at the upper end of said receptacle, an extinguishing medium in said reservoir, a substance which is adapted, when combined with said medium, to effect the delivery of the medium from the reservoir to the receptacle and means, responsive to a predetermined degree of heat within the receptacle, for causing said substance to combine with said medium.

1,874,244. ELECTRIC STEAM BOILER. SYDNEY N. COATES, Seattle, Wash. Filed Aug. 16, 1928. Serial No. 299,962. 7 Claims. (Cl. 219—38.)

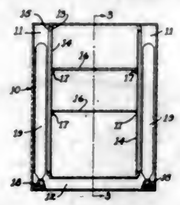


1. In a boiler, the combination with an upright shell having its side wall apertured, a threaded nipple secured in each of said apertures, with their axes substantially horizontal and projecting outwardly of the shell, a box surrounding the projecting ends of the several nipples, cementitious insulation filling the inner end of said box and the interstices between said nipples, and a heating element threaded into each of said nipples, and projecting within the water space of the boiler.

1,874,245. WALL CABINET. LESLIE F. CORRIGAN, Chicago, Ill. Filed June 10, 1929. Serial No. 369,572. 2 Claims. (Cl. 240—4.)

1. In a cabinet of the character described, a main storage compartment having a series of removable shelves,

an illuminating chamber at the side of said main compartment and extending from top to bottom thereof, and a dividing wall between said main compartment and said



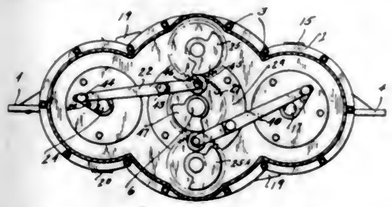
illuminating chamber including a removable light transmitting panel retained in place by abutting end portions of the shelves of the cabinet.

1,874,246. FISHING ROD. ROBERT H. COWDERY, Geneva, Ohio, assignor to The American Fork & Hoe Company, Geneva, Ohio, a Corporation of Ohio. Filed Oct. 14, 1930. Serial No. 488,591. 4 Claims. (Cl. 43—18.)



3. The method of making a casting rod, which includes performing a metal removing operation on the external surface of a solid rod of steel to give it the form of a longitudinal series of cylindrical portions of successively smaller diameter.

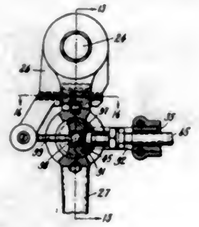
1,874,247. ROTARY GAS ENGINE. FREDERICK C. DALTON, Portland, Oreg., assignor of two-thirds to R. F. Bicknell, Boise, Idaho. Filed Mar. 2, 1927. Serial No. 172,013. 2 Claims. (Cl. 123—15.)



1. An abutment actuating apparatus to be used with a rotary engine of the class described, comprising a main shaft centrally disposed within the engine casing, a primary gear secured to the main shaft, a primary cam secured to the main shaft and disposed next to the primary gear, a pair of secondary gears rotatably disposed within the engine casing immediately above and below the primary gear and in working relationship therewith, a pair of secondary cams disposed within the engine next to the secondary gears and in direct alignment with the primary cam, an abutment arm secured to each of the rotors of the engine, a pair of levers rockably journaled within the engine casing, and in direct alignment with all of the cams, said levers being secured to the abutment arms on their one end, and a cam roller disposed upon the free end of the levers, said rollers being in registerable alignment with all of the cams.

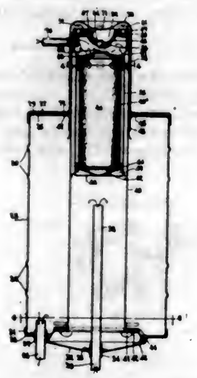
1,874,248. AUXILIARY POWER STEERING GEAR. FRANCIS W. DAVIS, Waltham, Mass. Filed Feb. 12, 1927. Serial No. 167,730. 13 Claims. (Cl. 180—79.2.)

1. In apparatus of the class described, a resilient mechanical connection comprising two members movable together substantially as a unit but with a limited amount of relative movement, and means for resiliently opposing such relative movement comprising a pair of opposed shoulders on one of said members, a pair of opposed disks between said shoulders and normally resting respectively against and supported by said shoulders, a compressible spring between said disks engaging the opposed faces thereof, and a pair of contact elements carried by the other of said members normally engaging the outer faces of the respective disks, the contact elements, disks and spring being arranged in line with the direction of motion of said members whereby movement of one member relative to the other will cause one of said contact elements to press its disk away from its supporting shoulder and compress the spring.



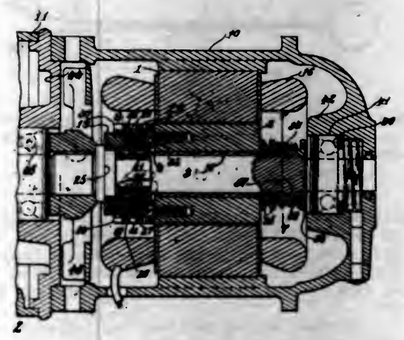
11. In steering gear, mechanism comprising a pair of members relatively movable in a defined path from a normal relative position, and means for resiliently maintaining said members in their normal relative position comprising a spring assembly operatively engaged by both said members and including a spring normally distorted by one only of said members, the other said member having portions normally abutting said spring assembly, said spring assembly being located in the path of motion of said other member whereby movement of said other member in either direction relative to said one member additionally distorts said spring.

1,874,249. LIQUID FEEDING DEVICE. RICHARD W. DAVY, New York, N. Y. Filed Jan. 15, 1931. Serial No. 509,001. 10 Claims. (Cl. 103—236.)



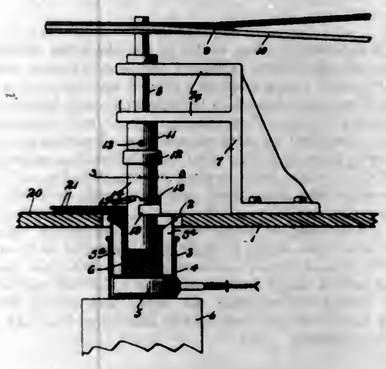
1. A liquid fuel feeding device comprising a vacuum actuated fuel pumping means, a fuel storage tank in communication therewith, and a lower and an upper closure for the tank, said lower closure formed with a depressed portion which rigidly receives the pumping means and provides a sediment sump, said upper closure formed with a depressed portion having an opening through which the pumping means freely extends whereby air is admitted to the storage tank and any fuel passing from the tank to the depressed portion is contained therein until it drains back into the tank.

1,874,250. SCREW DRIVER AND WRENCH FRICTION DRIVE. ALONZO G. DECKER, Baltimore County, Md., assignor to The Black and Decker Manufacturing Company, Towson Heights, Md., a Corporation of Maryland. Filed May 24, 1928. Serial No. 280,178. 5 Claims. (Cl. 64—106.)



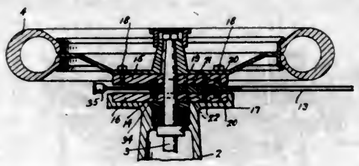
1. Driving means for a portable power driven screw driver and wrench having a spindle with a normally released jaw clutch comprising a motor, a motor shaft having a rotor mounted thereon to rotate relatively thereto, clutch plates keyed to the shaft to slide relatively thereto, and rotate therewith, corresponding clutch plates secured to the rotor to rotate therewith and slide relatively thereto in the direction of the axis of the shaft, and means imparting to the rotor a tendency to move in the direction of said clutch plates whereby the clutch plates are placed in frictional engagement imparting a yielding rotary tendency to said shaft.

1,874,251. VENEER JOINT GLUER. ALFRED A. DENNIS, Grand Rapids, Mich., assignor to Veneer Machinery Company, Grand Rapids, Mich., a Corporation of Michigan. Filed June 4, 1928. Serial No. 282,746. 7 Claims. (Cl. 91—43.)



1. Gluing apparatus comprising, a horizontal table having an opening therethrough, a glue holding receptacle located below the table at said opening, a vertical member mounted for rotation and extending at its lower end through said opening in the table into the glue holding receptacle, means for rotating said member, and means on said member for carrying glue from the glue holding receptacle to above the upper side of said table and delivering it to the outer sides of said member.

1,874,252. VEHICLE BRAKE. ALFRED E. DEYSS, East Schodack, N. Y. Filed Aug. 25, 1930. Serial No. 477,697. 1 Claim. (Cl. 74—1.)

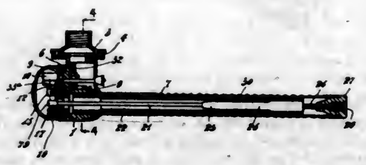


In a device of the class described, a pair of spaced opposed rotary members having their confronting faces provided with eccentric grooves, a shim member located between said members and eccentrically arranged relative thereto, said shim member being of slightly less diameter than the internal diameters of the grooves, means for fastening the two members and the shim member together, a reciprocatory member having a ring-shaped part attached to one end thereof and fitting in said grooves, said ring-shaped part being of greater thickness than the reciprocatory member.

1,874,253. BREAKING DOWN OF METALS. VINCENT L. DICKSON, Alameda, Calif. Filed Feb. 27, 1929, Serial No. 343,250. Renewed Dec. 1, 1931. 1 Claim. (Cl. 83—94.)

A process for the comminution of lead which consists in adding to the heated lead, a small amount of pitch blend and uranium, then adding lead oxide and stirring the mass while cooling the same.

1,874,254. ELECTRICAL AUTOMATIC FIRE ALARM. THOMAS STOKER DIXON and ALBERT EDWARD SIMPSON, Christchurch, New Zealand, assignors to The Vigilant Automatic Fire Alarm Company Limited, Christchurch, New Zealand, a Corporation of New Zealand. Filed Dec. 1, 1928, Serial No. 323,083, and in New Zealand Dec. 14, 1927. 6 Claims. (Cl. 200—137.)

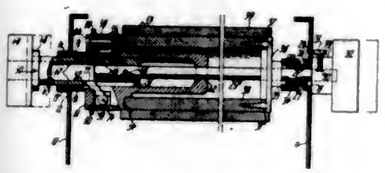


1. In a thermostatic switch device having a group of contacts, a circuit closer for selective engagement with said contacts, a readily expansible tube, an actuator associated with the tube and having an operative engagement with said circuit closer, whereby upon expansion of said tube due to heat, such circuit closer will flex laterally to operate selected contacts of said group of contacts for cooperation with the other contacts of such group for opening or closing main circuits through such thermostatic switch.

1,874,255. TYPEWRITING MACHINE. WILLIAM A. DOBSON, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1929. Serial No. 352,377. 7 Claims. (Cl. 197—123.)

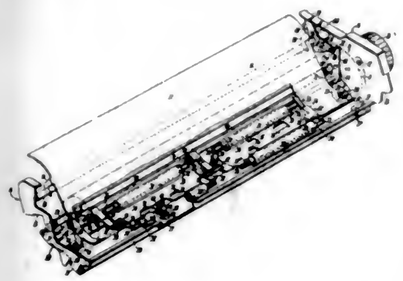
6. In a typewriting machine, the combination of a platen, a longitudinally-adjustable shaft supporting the same, a line-space wheel normally connected in operative engagement with said platen to rotate the same, a clutching device mounted on the shaft, a controller therefor, effective to engage and disengage the wheel from the platen at will, and a pair of shoulders on said shaft, one

at each side of the controller, to control the operations of the clutching device by the longitudinal reciprocating movements of said shaft, by direct mechanical engagement



with said clutching-device controller, said shaft also including means effective to rotate the platen when the latter is disengaged from said wheel.

1,874,256. TYPEWRITING MACHINE. WILLIAM A. DOBSON, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed May 1, 1930. Serial No. 448,815. 8 Claims. (Cl. 197—138.)



8. In a typewriting machine, the combination with a platen and a platen-frame, of a plurality of sets of lower feed-rolls, each set including a rear and a front feed-roll, a one-piece frame for each set of said feed-rolls, means for urging each set of feed-rolls against said platen independently of the other sets, said means including a single compression spring on said platen-frame, centrally disposed below each of said one-piece frames to press upward against the same, and devices on said platen-frame for adjusting the tension of said compression spring.

1,874,257. PLACING TOOL FOR AUTOMOBILE MOTOR VALVE SHOES. ANDREW J. DOPTIS, Detroit, Mich. Filed Apr. 28, 1930. Serial No. 447,989. 1 Claim. (Cl. 81—3.)

In a device of the character described, a flat elongated principal member for the device, the said member composed of a single piece, one end thereof formed into a loop and the oppositely disposed end of this member forming a pair of jaws, and the said jaws oppositely disposed, this member also forming a handle portion with double thickness of metal for this portion; a plate with a finger hold formed upon the outer end thereof, and the said plate upon the topmost surface of the said handle portion, also an additional plate immediately below the underneath surface of the said handle portion and adjacent thereto, the first-named plate and the last-named plate being secured by rivets in a manner so as to freely slide upon the said handle portion, an elongated slot within the said principal member permitting the rivets of the said

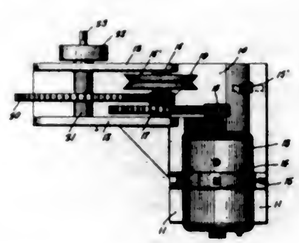


plates to pass through the same in the normal operation of the device, also means whereby the aforesaid jaws are limited relative to their opening movement.

1,874,258. STABILIZED HEATING FLUID AND METHOD OF STABILIZING SAME. HERBERT H. DOW, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 13, 1929. Serial No. 378,182. 9 Claims. (Cl. 23—250.)

1. A stabilized heating fluid containing diphenyl oxide to which has been added diphenylene oxide.

1,874,259. GENERATOR TESTER. LOUIS H. DUGAN, Tipton, Okla. Filed Feb. 12, 1930. Serial No. 427,971. 1 Claim. (Cl. 73—51.)

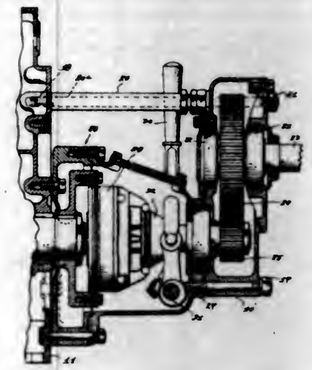


In a generator testing device of the character described, a base including right angularly disposed branches, spaced parallel walls rising from one branch and between which the generator is adapted to be supported, said branch having spaced parallel slots therein, one of said walls being slidably mounted on said branch for adjustment toward and away from the other wall to accommodate generators of different sizes, bolts carried by the movable wall and received by said slots, nuts associated with said bolts for holding the movable wall fixed with relation to the base in a given position, adjustable clamping means adapted to connect said walls to hold the generator in position thereon, spaced parallel walls rising from the other branch of the base, a shaft journaled between the last mentioned walls, means for rotating the shaft, and means for rotating the armature shaft of the generator from the first mentioned shaft.

1,874,260. WOOD PRESERVATION. MAX ENGELMANN and WENDELL H. TISDALE, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 16, 1930. Serial No. 444,868. 10 Claims. (Cl. 99—12.)

1. The process of preserving wood and cellulosic materials which comprises the treatment of said materials with the reaction products of a mercuric salt and an organic derivative of tetra valent lead.

1,874,261. INTERNAL COMBUSTION ENGINE ATTACHMENT. STEVEN F. EVELYN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Oct. 15, 1927. Serial No. 226,379. 1 Claim. (Cl. 74—101.)



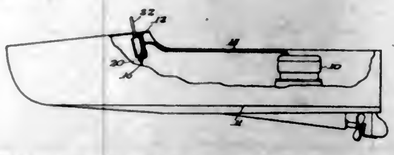
In an internal combustion engine including a crankshaft and a driven shaft and operative connections therebetween, a housing for supporting said driven shaft, an end plate secured to said engine and provided with a series of internally threaded holes arranged concentrically with respect to the longitudinal axis of the crankshaft, fastening devices engaging in some of said holes for securing said housing to said end plate in various predetermined positions with respect to said engine element and other means for securing said housing directly to said engine.

1,874,262. RAZOR STROP. JOHN MCDONALD EZZELL, Rattan, Okla. Filed Nov. 2, 1929. Serial No. 404,352. 1 Claim. (Cl. 51—198.)



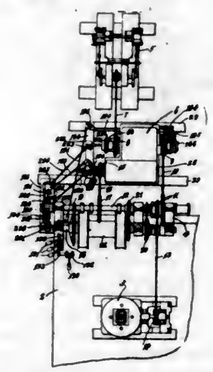
In a razor hone, a body portion comprising superposed elongated members constructed of magnetic material, metallic plates embodying lengths of soft iron material positioned between the elongated members at the ends thereof, upper and lower strips of wood material extending throughout the length of the body portion, lateral wood strips positioned against the side edges of the elongated metallic members to insulate the metallic members at the sides thereof and provide a casing with the upper and lower strips of wood, the ends of the casing being open, and a cover of abrasive material covering the sides of the body portion.

1,874,263. TEMPERATURE AND FLOW INDICATOR AND FLOW CONTROL OF COOLING WATER FOR MOTORS. EMERY H. FAHRNEY, Chicago, Ill. Filed Nov. 15, 1929. Serial No. 407,448. 8 Claims. (Cl. 123—178.)



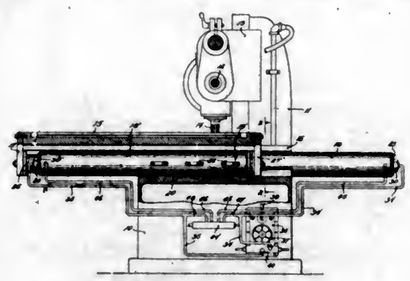
1. In combination an engine having a water circulation cooling system, an inlet for the system, a circulation indicator included in said system, a valve for controlling said inlet, means for controlling the circulation of the water in said system, and means responsive to the operation of the last said means for controlling the said inlet.

1,874,264. MULTIPLE SPEED GEAR DRIVEN DRILLING CONTROL. DAVID SINCLAIR FAULKNER, Los Angeles, and LEWIS EMANUEL ZERBE, Moneta, Calif., assignors to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed June 1, 1931. Serial No. 541,270. 19 Claims. (Cl. 255—19.)



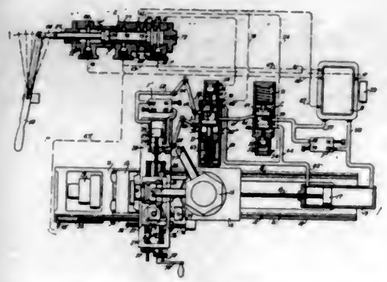
19. In a drilling control, the combination of a differential shaft, a quill shaft journaled on the differential shaft, means for driving one of said shafts, a rotary drive sprocket driven by the other of said shafts, a rotary drawworks drive sprocket, and a spur gear differential journaled on the differential shaft and the quill shaft and operatively connecting the differential shaft, the quill shaft and the drawworks drive sprocket.

1,874,265. HYDRAULIC TABLE DRIVE FOR MILLING MACHINES AND THE LIKE. JOHN P. FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 19, 1927. Serial No. 220,380. 2 Claims. (Cl. 90—21.)



1. In a milling machine the combination of a support, a rotary cutter spindle, a table movable on said support in a direction transverse to the axis of rotation of said spindle, a pair of hydraulic rams connected to said support and to the opposite ends of said table, respectively, for driving said table in opposite directions, an auxiliary ram within each of said first named rams, a pump, and a hydraulic circuit fed by said pump, said circuit including valve mechanism selectively operable to connect said pump with said auxiliary rams and with said first named rams to effect operation of said table at different speeds.

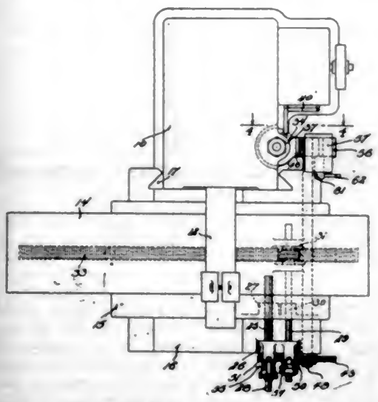
1,874,266. HYDRAULIC FEED FOR LATHES AND THE LIKE. WALTER FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 5, 1926. Serial No. 127,308. 24 Claims. (Cl. 29—42.)



1. In a lathe the combination of a plurality of tool carriages, a separate hydraulic motor for feeding each carriage, a variable delivery pump mechanism, means adjustable to connect said motors in series with said pump mechanism to thereby simultaneously feed said carriages at definite rates, and control mechanism operable to vary pump delivery to thereby vary the rate of feed of said carriages.

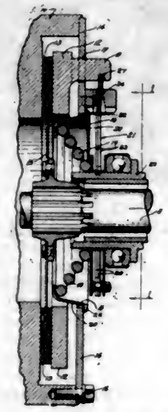
22. In a machine tool or the like the combination of a movable member, hydraulically actuated means for driving said member, pump mechanism for delivering a driving liquid to said means to drive said member at predetermined rates, means for regulating the rate of discharge of said pump mechanism to regulate the rate of movement of said member, a second movable member, means actuated by liquid discharged from said hydraulically actuated means for driving said second member, a stop for arresting the movement of one of said members in one direction, and means automatically operable to permit continued movement of the other of said members after arresting the movement of one of said members by the action of said stop.

1,874,267. FEED MECHANISM FOR MILLING MACHINES. WALTER FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 30, 1927. Serial No. 209,411. 11 Claims. (Cl. 90—21.)



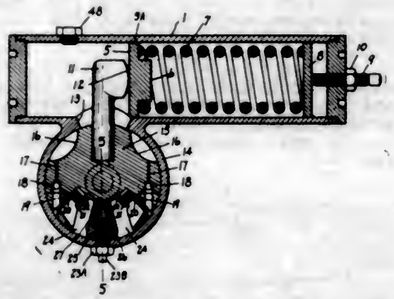
1. In a milling machine the combination of a knee mounted for vertical movement, a saddle mounted for transverse movement on said knee, a table mounted for lengthwise movement on said saddle, a vertically disposed piston and cylinder, a pump for operating the same, releasable connections between said knee and said piston and cylinder through which said knee, saddle and table are fed vertically by the action of said piston and cylinder, releasable connections between said saddle and said piston and cylinder through which said saddle and table are fed laterally by the action of said piston and cylinder, and releasable connections between said table and said piston and cylinder through which said table is fed longitudinally by the action of said piston and cylinder.

1,874,268. CLUTCH. JAMES O. FINK, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Jan. 20, 1931. Serial No. 509,974. 21 Claims. (Cl. 192—68.)



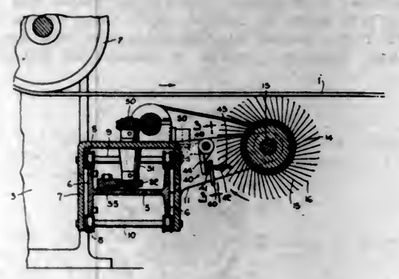
1. A clutch having in combination driving and driven members, driving and driven elements respectively connected in driving relation with said driving and driven members, said driving and driven elements movably engageable and disengageable for clutch engaging and disengaging action, a cover plate secured to said driving member and acting in cooperation with the driving member to substantially enclose said driving and driven elements, said cover plate provided with an opening, said driving element having a driving lug arranged to project through said opening, pressure multiplying laminated spring lever means fulcrumed on the back of said cover plate and engaged with the driving lug carried by said driving element, and spring means for loading said lever means.

1,874,269. SPRING DEVICE FOR AUTOMOTIVE VEHICLES. EDWARD J. FISCHER, Covington, Ky., assignor of one-half to Frank A. Aman, Cincinnati, Ohio. Filed Feb. 11, 1929. Serial No. 339,093. 8 Claims. (Cl. 267—34.)



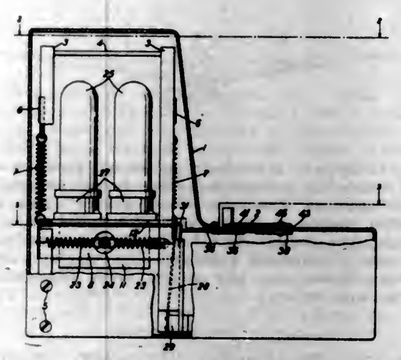
1. A hydraulic spring device comprising a hydraulic cylinder with a spring actuated piston therein, a hydraulic casing having a rocking piston therein, connections between said spring actuated piston and said rocking piston, a baffle in said casing forming hydraulic pressure chambers, said rocking piston having ports and valves carried by said rocking piston to induce cycles of hydraulic pressure counterbalancing the movement of said spring actuated cylinder.

1,874,270. NAPPING OR FELT CONDITIONING APPARATUS. MORTIMER F. FLYNN, West New Brighton, N. Y., assignor to Bird Machine Company, South Walpole, Mass., a Corporation of Massachusetts. Filed May 22, 1931. Serial No. 539,180. 16 Claims. (Cl. 26—31.)



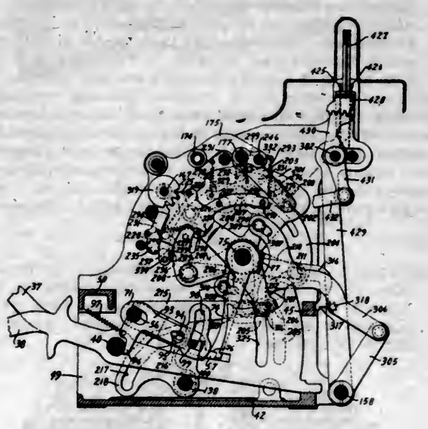
1. Fabric conditioning apparatus comprising a conditioning roll having bristles engaging the fabric, and a comb having teeth engaging between annular rows of the bristles and acting to clear therefrom lint and other material taken up by the bristles, periodically effective means for limiting the extent of travel of said roll and means for removing the comb from the zone of the bristles, said removing means being effective at the respective limits of the travel of said conditioning roll.

1,874,271. RESILIENT MOUNTING FOR ELECTRICAL DEVICES. EDWARD G. FRACKER, Grant City, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 10, 1931. Serial No. 514,791. 7 Claims. (Cl. 248—30.)



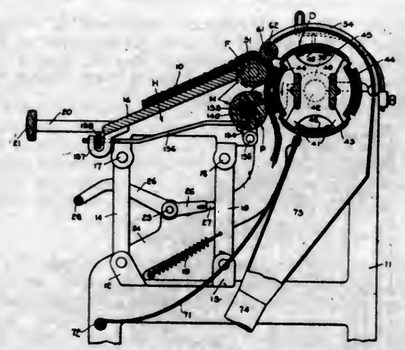
1. In combination, a supporting frame, an apparatus support, means resiliently connecting said support to said frame, and a cam actuated locking mechanism adjacent said support to force said support into engagement with said frame and thereby counteract said resilient means.

1,874,272. CASH REGISTER. JOHN P. FRANK, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Jan. 28, 1926, Serial No. 84,350. Divided and this application filed Mar. 11, 1930. Serial No. 434,911. 15 Claims. (Cl. 235—130.)



1. In a machine of the class described, the combination of a plurality of lever keys having a normal position and an operated position, a pivoted member having a normal position and an operated position, a pivoted member having a normal position and an operated position adapted to be operated by one of said keys, means for connecting said pivoted member and said key during their operation, means for retaining said pivoted member and said key in operated position, a second pivoted member adapted to be operated independently of said first pivoted member by another one of said keys, means cooperating with said second pivoted member for disabling said retaining means, and means operated by said second pivoted member adapted to engage said first pivoted member in its operated position and return said first pivoted member to its normal position.

1,874,273. FUR TREATING APPARATUS. SAMUEL FRIEDMAN, Brooklyn, N. Y. Filed May 28, 1930. Serial No. 456,325. 15 Claims. (Cl. 149—24.)



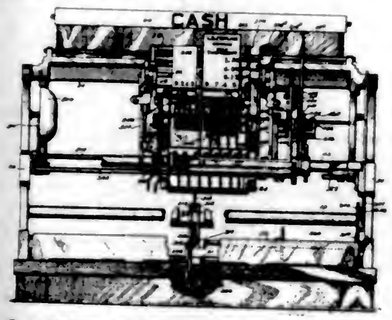
1. A fur treating device comprising a rotatable drum for treating a pelt, means to feed a pelt past said drum comprising a plurality of feed rollers spaced apart adjacent

the periphery of the drum, and means to positively rotate said feed rollers in the same direction at relatively different peripheral speeds so as to tension the pelt against the drum.

1,874,274. DYEING PROCESS FOR ANIMAL FIBERS. SIGISMUND FUCHS, Hochst-on-the-Main, Germany, assignor to Firm of Durand & Huguenin S. A., Basel, Switzerland. Filed Dec. 22, 1930, Serial No. 504,228, and in Germany Dec. 28, 1929. 4 Claims. (Cl. 8—5.)

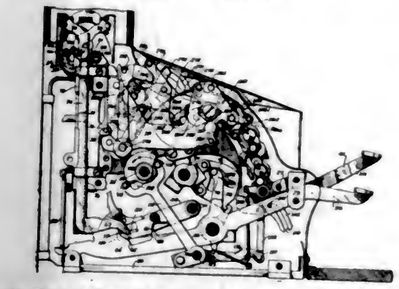
1. A process for dyeing animal fibers with esterlike derivatives (ester-salts) of insoluble dyestuffs, containing quinone groups—the latter being in a reduced form and esterified—by applying said bodies on the fiber and subsequently developing the colour thereon by acid oxidation, said process being characterized by performing this development in the presence of watersoluble salts of hydrosulphocyanic acid, the latter acting as buffer substance.

1,874,275. CASH REGISTER. FREDERICK L. FULLER, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Apr. 1, 1926. Serial No. 99,019. 43 Claims. (Cl. 235—3.)



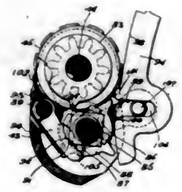
1. In a machine of the class described, the combination with a differential mechanism and a keyboard for controlling same, two totalizers, means controlled by the keyboard for selectively effecting engagement and disengagement of one or both totalizers with the differential mechanism, devices for listing items on a receipt, a plurality of sets of type carriers for simultaneously printing from one of said totalizers on a record strip and the receipt, and means for feeding the record strip and receipt.

1,874,276. CASH REGISTER. FREDERICK L. FULLER, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Apr. 1, 1926. Serial No. 99,020. 27 Claims. (Cl. 235—6.)



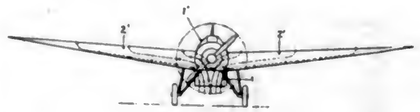
1. In a cash register, the combination with an operating mechanism, a plurality of operating keys, type carriers for printing upon a record strip and issued checks, a differential mechanism under control of the keys for adjusting the type carriers, a check issuing lever, platens for printing upon the record strip and upon the check paper, the operation of the platen for the former being under control of the operating mechanism while the platen for the latter is under control of the check issuing lever and means for compelling the operation of both platens upon each complete operation of the machine.

1,874,277. CASH REGISTER. FREDERICK L. FULLER, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Nov. 19, 1918, Serial No. 263,125, and in Great Britain Sept. 12, 1919. Divided and this application filed May 21, 1926. Serial No. 110,615. 4 Claims. (Cl. 235—138.)



1. In a machine of the class described, the combination with a series of keys, a shaft, a segmental rack mounted on the shaft, means operated by the keys for moving the segmental rack differentially, a pivoted totalizer frame carrying a plurality of pinions, means for moving the frame to effect the engagement and disengagement of the segmental rack and its related pinion transfer wheels carried by the totalizer frame for effecting transfers from lower to higher order pinions, transfer arms mounted coaxially with the shaft for rotating the transfer wheels, and cams for operating the transfer arms seriatim.

1,874,278. AEROFOIL. EDMUND P. GAINES, Columbia, S. C. Filed Aug. 28, 1929. Serial No. 388,924. 14 Claims. (Cl. 244—29.)



1. In aircraft, a fuselage; an aerofoil provided with an interior air passage transverse to the direction of flight and thru which air passes outward within said aerofoil, having an outlet opening thru which the air within said passage is adapted to escape, and having an inlet opening positioned adjacent to said fuselage, and a movable trailing edge flap adapted, by its movement, to control said air escape.

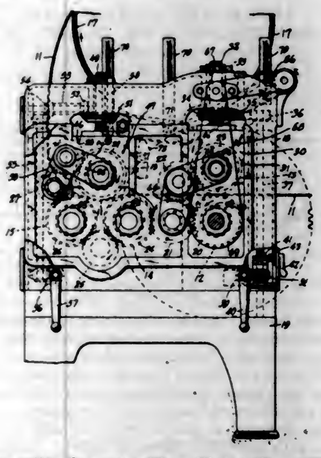
1,874,279. EDUCATIONAL APPLIANCE. HERCULES WALLACE GEROMANOS, Boston, Mass. Filed Feb. 14, 1929. Serial No. 339,981. 14 Claims. (Cl. 35—5.)

12. In an apparatus of the character described, the combination of a terrestrial globe including a wheel of considerable mass located in the equatorial region, a pivot carried by said wheel, a post projecting into the lower end of said globe, a socket for said pivot located in the upper end of said post, a stationary annular member encircling said globe and serving to indicate the plane of the ecliptic, a stationary pointer mounted above said



globe and indicating the position of one of the poles of the ecliptic, and a post projecting from the north polar region of said globe.

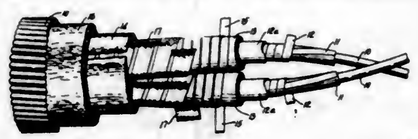
1,874,280. COILING MACHINE. CHARLES J. GIBBONS, Bridgeport, Conn. Filed July 13, 1928. Serial No. 292,494. 5 Claims. (Cl. 242—78.)



5. In a coiler for use with rolling mills, coiling rolls for coiling a strip as it leaves the mill, a pair of control rolls, adjustable means for pressing the control rolls on opposite sides of the strip to vary the pressure of these rolls on the strip, means for driving the control rolls including a friction clutch insufficient to overcome the friction of the rolls on the strip, said friction clutch being adjustable for different pressures of said control rolls, means for driving the driving member of the clutch so that the clutch will slip during normal operation, and a driving connection between the control rolls and the coiling rolls capable of maintaining the surface speed of the coiling rolls the same as that of the control rolls.

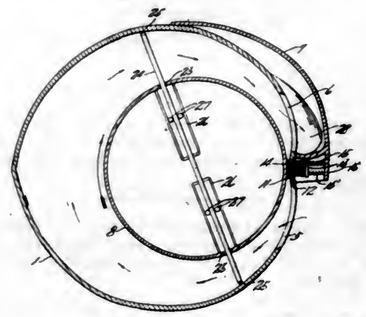
1,874,281. SUBMARINE SIGNALING CABLE. JOHN J. GILBERT, Douglaston, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 18, 1929. Serial No. 364,112. 3 Claims. (Cl. 178—45.)

1. A submarine signaling cable comprising a core insulated with thermoplastic material, a layer of conducting material spiralled around said core to protect the insulation thereof from Teredos etc. and armor wires, said core including a conductor or conductors characterized in



this, that the width of any element of the said layer of conducting material is less than ½ inch (12.7 mm.), whereby eddy current losses in said conducting material are reduced.

1,874,282. PUMP. WILLIAM F. GODFREY, Kearney, Nebr. Filed May 1, 1930. Serial No. 448,836. 2 Claims. (Cl. 103—138.)

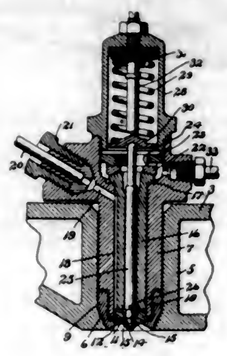


1. In a device of the kind described, an outer elongated vertically arranged hollow casing, heart shaped in plan, there being correspondingly elongated intake and exhaust slots formed longitudinally through the wall of the casing at either side of the longitudinal section thereof defining the inturned or obtuse portion thereof and there being a correspondingly elongated brush slot formed longitudinally through the wall of the casing immediately at the said inturned portion thereof, end caps for the said outer casing, a correspondingly elongated, cylindrical inner casing of substantially less diameter than the outer casing, the same being rotatably mounted within the outer casing equally between the intake and exhaust slots thereof and substantially in contact with the inner side of the said inturned portion thereof, the said inner casing being provided with diametrically opposed longitudinally extended blade slots formed through its walls, an elongated brush adjustably mounted through the said brush slot of the outer casing and adapted to bear upon the outer cylindrical surface of the inner casing, resilient means for maintaining the said brush in contact with the said inner casing, and a flat, rectangular pumping blade slidably mounted through the said blade slots of the inner casing, the outer edges of the blade having a slidable contact with the inner surface of the outer casing.

1,874,283. FUEL INJECTION VALVE FOR OIL ENGINES. MARK J. GOLDBERG, Beloit, Wis., assignor to Campbell, Wyant & Cannon Foundry Company, Muskegon, Mich., a Corporation of Michigan. Filed Apr. 28, 1930. Serial No. 447,917. 6 Claims. (Cl. 299—107.5.)

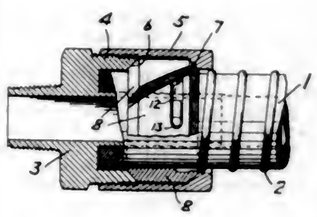
1. In an injection valve, means for conducting liquid fuel under pressure to adjacent the inner end of the valve, said valve at said inner end having a continuous outlet passage for fuel of small size and sufficient to pass

fuel for the minimum requirements of an engine cylinder supplied by said valve, there being other passages at the inner end of the valve, means for normally closing said other passages against the passage of fuel, and means



for uncovering said other passages automatically for fuel passage therethrough upon requirements for fuel by the engine cylinder in excess of what the first fuel passage will supply.

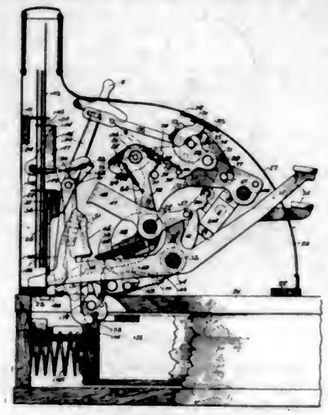
1,874,284. HOSE COUPLING. HOWARD W. GOODALL, Aldan, and JOSEPH W. WALSH, Philadelphia, Pa. Filed Sept. 27, 1930. Serial No. 484,847. 2 Claims. (Cl. 285—86.)



2. In a compression coupling for hose with spiral wire winding in contact with the outer surface of the hose, the combination of a threaded tubular stem adapted for insertion into the end of the hose and a collar adapted to surround the hose and threaded for engagement with the stem, there being provided inwardly and correspondingly tapered end surfaces on the stem and collar, and segments of the form of a diagonally cut ring and having tapered end surfaces corresponding to the first mentioned tapered surfaces and arranged to cooperate therewith to compress the hose end onto the stem, and the inner face of said segments being concave for the accommodation of the end part of the wire winding and one of said segments having means by which the wire end is attached thereto.

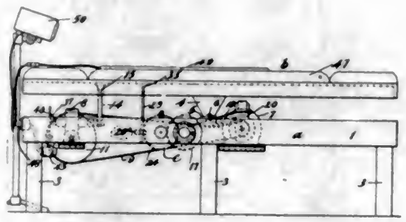
1,874,285. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Apr. 13, 1927. Serial No. 183,392. 24 Claims. (Cl. 235—15.)

1. In a machine of the class described, the combination of a plurality of keys, a pair of projections on each of said keys, said projections being formed as two sets of complementally arranged steps, and a frame adapted



to co-operate with the projections of any one of said keys whereby the frame is differentially and positively operated and arrested.

1,874,286. THERAPEUTIC DEVICE. HENRY GROSS, Los Angeles, Calif. Filed Oct. 19, 1927. Serial No. 227,082. 3 Claims. (Cl. 128—33.)

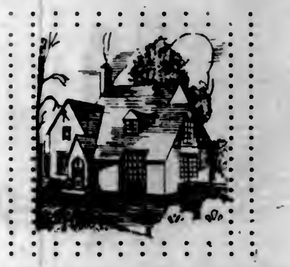


2. A therapeutic device comprising a movable body supporting element, a motor connected with said element for moving the same successively through like cycles of operation, a gear wheel, a connection between said gear wheel and said motor whereby rotation of the gear wheel varies the speed of the motor, a rod connected with the supporting element, a pawl carried by said rod for cooperation with said gear wheel to rotate the same step-by-step during continuous operation of the supporting element, and means mounting said rod for longitudinal adjustment relative to the supporting element to variably predetermine the amount of rotation of the gear wheel effected by the pawl during each cycle of operation of the supporting element.

1,874,287. METHOD OF AND APPARATUS FOR SYNCHRONIZATION. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed May 22, 1929, Serial No. 364,975. Renewed Jan. 8, 1931. 10 Claims. (Cl. 178—69.5.)

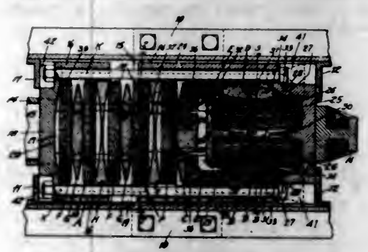
1. A framing and synchronizing system which involves producing a pattern of picture elements which will not interfere with the picture, said elements producing a regular series of group impulses, comprising, means for selectively tuning these time elements from the other picture elements, means for detecting and producing currents of group frequencies corresponding to a picture frequency and also corresponding to line frequencies, means for actuating a reproducing device, means for producing a group frequency corresponding to the picture frequency, and means for

producing a group frequency corresponding to the line frequency by the rotation of said last mentioned means, means for matching the incoming picture frequencies against the



locally generated picture frequencies in such a manner as to control the speed of the actuating means to maintain the received picture being framed.

1,874,288. SHOCK ABSORBING MECHANISM. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 15, 1928. Serial No. 306,206. 7 Claims. Cl. 213—30.)



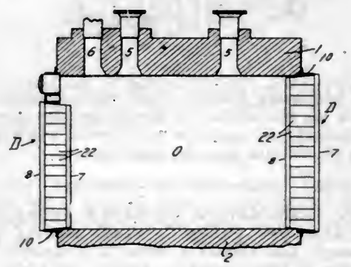
1. In a shock absorbing mechanism, the combination with relatively movable follower members; of a laminated plate spring under initial compression, the members of said plate spring being disposed lengthwise of the mechanism; pressure transmitting members disposed at opposite sides of said laminated plate spring slidable lengthwise thereon; a main spring resistance yieldingly opposing longitudinal movement of said members; and means for wedging the said members inwardly to compress the laminated plate spring.

1,874,289. HOOD LATCH. HOWARD B. HASKINS and HAROLD E. VAN VOORHEES, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 15, 1931. Serial No. 508,900. 5 Claims. (Cl. 292—114.)



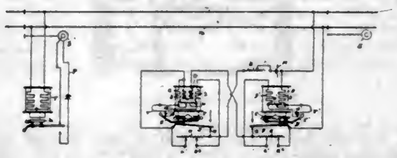
1. In a latch for retaining the hoods of automotive vehicles, a stationary keeper secured on the vehicle and totally concealed by the hood, a bracket secured to the inside of the hood, a hook member directly pivoted to the bracket and having an integral handle extending outside the hood through an opening in the hood, the opening of said pivot being elongated to permit a limited bodily movement of the hook member and handle, an extension on said hook member, and resilient means secured to said extension and constantly urging said hook to engage with the keeper.

1,874,290. COKE OVEN DOOR. FLOYD BEATTY HOBART, Urbana, Ill., assignor to Urbana Coke Corporation, Urbana, Ill., a Corporation of Delaware. Filed Apr. 10, 1928. Serial No. 268,872. 2 Claims. (Cl. 202—248.)



1. In a door for closing the end of a coke oven, an outer door plate, an inner baffle secured in spaced parallel relation to said door plate by connecting means extending between points removed from the edge of said plate and said baffle, inwardly extending flanges on the edges of said plate, outwardly extending flanges on the edges of said baffle, and a packing of heat insulating material retained between said plate and said baffle by said flanges and completely surrounding all of said connecting means.

1,874,291. RAILWAY SIGNALING SYSTEM. JAY C. HOFFMAN, Akron, Ohio. Filed Nov. 16, 1931. Serial No. 575,390. 5 Claims. (Cl. 246—41.)

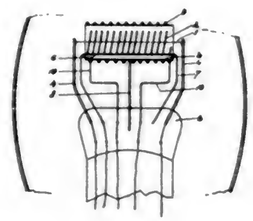


1. In a railway signaling system, a normally-closed track circuit, a source of electric current for said circuit, means for manually regulating the amount of current applied to said circuit, a signaling circuit, a relay in said track circuit for controlling said signaling circuit, resistance means within said track circuit, tractive armature relay means for short-circuiting said resistance means under predetermined settings of said current regulating means, said relay means including a resistance and switching elements for shunting the resistance of said relay means when the armature of said relay means is in off position.

1,874,292. DISCHARGE APPARATUS. GILLES HOLST and BALTHASAR VAN DER POL, Eindhoven, Netherlands, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Filed May 28, 1926, Serial No. 112,280, and in the Netherlands Aug. 15, 1925. 1 Claim. (Cl. 250—27.5.)

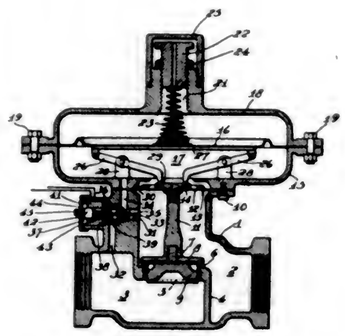
An electron discharge device comprising a source of primary electrons, a second source of primary electrons

mounted concentrically about the first source, and means concentric with and intermediate these two sources of primary electrons for attracting the electrons from said



sources, said means being apertured and positioned with respect to the two sources for passing electrons from one source through the apertures and thereby affecting the emission of electrons from the other source.

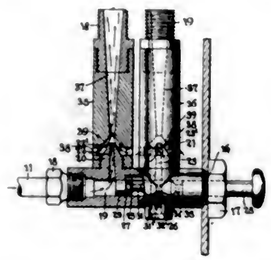
1,874,293. COMBINATION PRESSURE REGULATING AND SHUT-OFF VALVE. CHARLES HOWARD HOOK, Pittsburgh, and NATHAN L. MERCUR, McKeesport, Pa. Filed Feb. 3, 1930. Serial No. 425,409. 8 Claims. (Cl. 50—4.)



1. A combination fluid regulating and shut-off valve mechanism comprising a casing having in it, an inlet chamber, an outlet chamber, and a pressure chamber, said inlet and outlet chambers being connected by a valve opening and said inlet and pressure chambers separated by a movable pressure responsible partition, a valve connected to said movable partition arranged to control the flow of fluid through said valve opening, a pressure responsive element disposed in said pressure chamber, and means operably arranged between said element and said movable partition for closing said valve in response to the movement of said element, said means being adapted to have no effect upon the valve when not forced into engagement with the movable partition by the pressure responsive element.

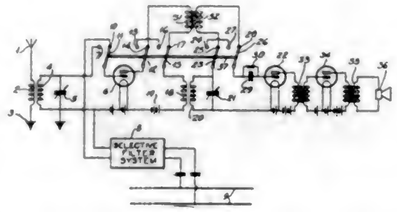
1,874,294. COMPRESSED AIR OPERATED WINDSHIELD CLEANER SYSTEM. ERWIN C. HORTON, Hamburg, and HENRY HUEBER, Buffalo, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y. Filed Mar. 20, 1930. Serial No. 437,577. 6 Claims. (Cl. 60—39.)

1. In combination with a fluid pressure operated windshield cleaner, an air supply means under high pressure, means for connecting said air supply to said cleaner, means for limiting said air supply to said cleaner to operate said cleaner at normal speeds, and safety means com-



prising an injector in said connecting means, said injector being provided with throat openings to provide air escape ports upon accidental blocking of said cleaner.

1,874,295. RADIO RECEIVING SYSTEM. ALFRED H. HOTOPP, Jr., Caldwell, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 3, 1931. Serial No. 541,749. 2 Claims. (Cl. 179—2.5.)

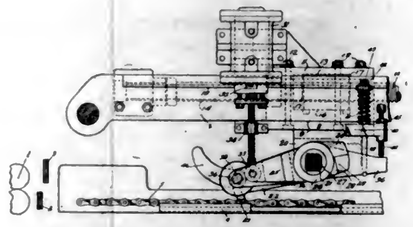


1. A radio receiving system comprising, a space radio energy collecting system, a selective filter system connected to a source of wired radio signals, a thermionic amplifier tube having an output circuit, means for connecting said amplifier tube to either said space radio energy collecting system or to said selective filter system, a thermionic detector tube having an input circuit, an air-core transformer coupling said amplifier tube to said detector tube, said transformer having a secondary and primary, an iron-core transformer having a secondary and primary, and means for connecting the primary of said iron-core transformer in series with the primary of said air-core transformer in said output circuit and connecting the secondary of said iron-core transformer in series with the secondary of said air-core transformer in said input circuit.

1,874,296. GAUGE MECHANISM. RUSSELL C. HUNTSBERGER, Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Mar. 8, 1930. Serial No. 434,333. 6 Claims. (Cl. 164—59.)

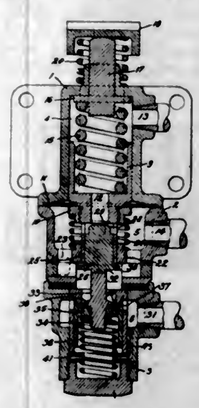
6. In a gauge and stop mechanism, rails supported above a table, a body member slidable along said rails, means to move said body member along said rails, a shaft journalled in said body member, a movable abutment member non-rotatably fixed to said shaft and adapted by the rotation thereof to be moved into and out of the path of movement of pieces to be arrested, an actuating arm rotatably pivoted upon said shaft, pawl means non-rotatably affixed to said shaft and cooperating with said actuating arm whereby said actuating arm may positively

affect the rotation of said shaft in one direction, and means for moving said actuating arm, said means comprising a fluid pressure cylinder attached to said body, hold



down arms pivoted on said shaft, said arms bearing hold down means on their outer ends, and means for yieldably urging said arms into hold down position.

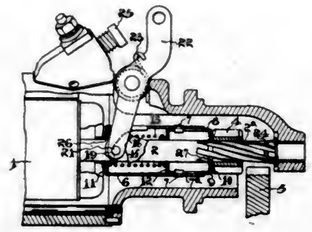
1,874,297. BRAKE CONTROL VALVE. CHARLES A. IVES, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Nov. 27, 1929. Serial No. 410,211. 5 Claims. (Cl. 303—54.)



1. A brake valve device comprising a casing, a flexible diaphragm in said casing, an inlet valve in said casing, and an exhaust valve including a member movable with said diaphragm and containing the seat of said exhaust valve and an independently movable member mounted in said casing in operative relation with said inlet valve and having a valve surface in cooperative relation with said valve seat whereby movement of said diaphragm in one direction effects the closing of said release valve and the subsequent opening of said inlet valve by the movement of said independently movable member.

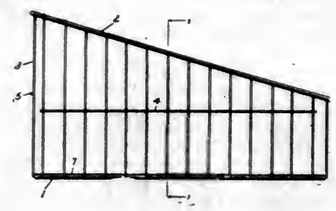
1,874,298. ENGINE STARTER. MAUNSELL B. JACKSON and KENNETH M. CLIPSHAM, Toronto, Ontario, Canada, assignors to Leaside Engineering Company Limited, Leaside, Canada. Filed Mar. 31, 1930. Serial No. 440,324. 11 Claims. (Cl. 74—7.)

1. An engine starter including a rotatable shaft; means for connecting the shaft with the gear of an engine to be started comprising a pinion movable into mesh with the gear; and a manually operable device for moving the pinion into mesh with the gear, the said device including provisions which operate in case the pinion collides with the gear to produce relative rotation of said pinion and device, the said device also including provisions, which are conditioned for operation by the relative rotary movement of the device and pinion in case the pinion fails to mesh during the said relative movement, to produce a



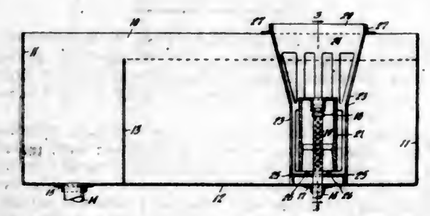
rotary movement of the pinion into meshing registration with the engine gear while the pinion is being pressed against the engine gear.

1,874,299. RECEPTACLE. CHARLES H. JARVIS, Battle Creek, Mich., assignor to United Steel & Wire Company, Battle Creek, Mich. Filed Mar. 2, 1931. Serial No. 519,363. 2 Claims. (Cl. 220—19.)



1. In a rectangular box, the combination of top and bottom border frames of wire, vertical slats of wire disposed on the outer side of the bottom border frame and on the inner side of the top border frame and welded thereto, and a sheet metal bottom having upwardly offset edges overlapping said bottom border frame and welded thereto, said bottom having transverse corrugations terminating in spaced relation to its longitudinal edges.

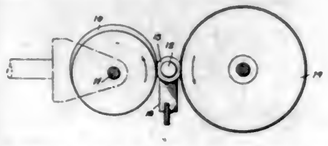
1,874,300. PROCESS AND APPARATUS FOR QUENCHING HEAT TREATED ARTICLES. GEORGE A. JOHNSON, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 9, 1929. Serial No. 331,316. 5 Claims. (Cl. 266—6.)



3. In a quenching bath arrangement for a cylindrical article open at one end, the combination with a tank adapted to contain a cooling fluid in which said cylindrical article is quenched; of a removable carrier for said

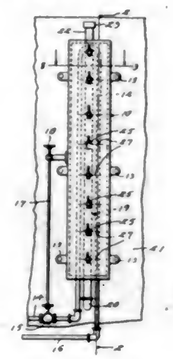
cylinder, supporting the latter in inverted condition in said bath in spaced relation to the bottom of said tank; and means for feeding cooling fluid to said bath and forcing the same into said cylinder through the open end thereof.

1,874,301. GRINDING DEVICE. ALLAN H. JONES, Trenton, N. J. Filed Mar. 18, 1930. Serial No. 436,809. 3 Claims. (Cl. 51—103.)



1. A grinding device of the class described comprising the combination of a fixed horizontally disposed mandrel on which work may be arranged for rotational and axial movement, an adjustable tapered roller adapted to rotate in contact with the work arranged on said mandrel to cause the work to rotate and to move axially of the mandrel, and a rotatable grinder adapted to subject the work to a grinding action while being rotated on and moved axially of said mandrel.

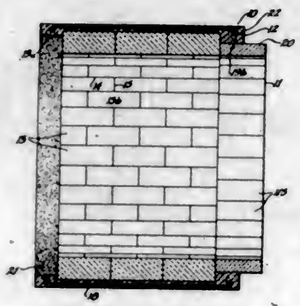
1,874,302. HEATED WATER GAUGE. VAN CLINTON JONES, Fort Wayne, Ind. Filed Dec. 30, 1930. Serial No. 505,598. 3 Claims. (Cl. 73—54.)



2. A gauge of the character described adapted to be connected to a reservoir and comprising an elongated tubular member, a plurality of normally closed valves connected to said tubular member, a hollow jacket surrounding said tubular member, and a heating coil disposed within the jacket.

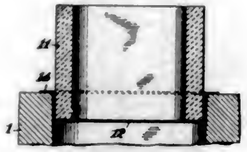
1,874,303. PIPE STRUCTURE. FRED R. KANENGEISER, Poland, Ohio, assignor to The Metropolitan Paving Brick Company, Canton, Ohio, a Corporation of Ohio. Filed Feb. 5, 1931. Serial No. 513,602. 2 Claims. (Cl. 72—52.)

1. A self sustaining portable pipe structure including an inner shell and an outer shell, the inner shell including circumferentially and longitudinally arranged blocks, the blocks being rectangular in transverse cross-section and having rectangular end faces and two sets of opposite faces extending longitudinally between the end faces, the end and longitudinal faces intersecting each other at corners, and one set of faces being narrow and the other set being broad relative to each other, and the inner surface of the inner shell being formed at one end portion by broad faces of some of the blocks and the remaining portion of the inner surface being formed by narrow faces of other blocks, and the outer shell being monolithic and imbedding and engaging the other longitudinal faces



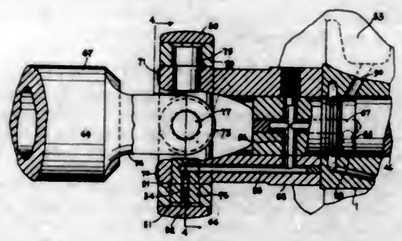
of the blocks, and an external peripherally rabbeted end being formed for the pipe structure by the outer broad faces of the said end blocks and the adjacent end surface of the outer shell.

1,874,304. SUPPORT FOR HOT TOPS. EDMUND J. KAUFFMAN, Girard, Ohio, assignor to Valley Mould and Iron Corporation, Hubbard, Ohio, a Corporation of New York. Filed Apr. 11, 1930. Serial No. 443,280. 1 Claim. (Cl. 22—147.)



In a mold set-up for casting steel ingots, the combination of an ingot mold having a substantially vertical matrix therein, a hot top telescoped into the upper end of said matrix, means to support said hot top, said means comprising a flanged cup of thin sheet iron adapted to melt on contact with molten steel and with the flange of the cup resting on the top of the mold and the bottom of the cup comprising the sole support for the said hot top.

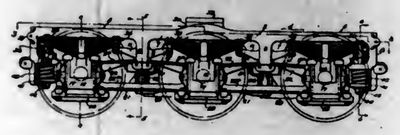
1,874,305. MACHINE TOOL. EDWARD J. KEARNEY, Wauwatosa, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis. Filed Oct. 10, 1928. Serial No. 311,429. 6 Claims. (Cl. 184—6.)



1. In a machine tool the combination of a housing, a drive train supported therefrom and including a universal joint exposed outside said housing, said joint having a

plurality of fork members each pivoted with an intermediate block member, a closed lubricant channel associated with said block member and communicating with different pivots respectively in the different forks, a source of lubricant at relatively very low pressure and associated with said housing, and a passage adapted to deliver lubricant from said source to said channel during the rotation of said joint.

1,874,306. SIX-WHEEL TENDER TRUCK. JOHN S. KEEN, Philadelphia, Pa. Filed Dec. 19, 1931. Serial No. 582,125. 5 Claims. (Cl. 105—195.)

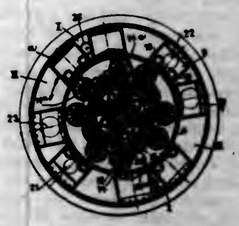


1. An integral frame, for a six-wheel truck, consisting of side members and two cross-members spaced apart, each side member having a central web and a top plate extending the full length of the truck, the said top plate having deep flanges in each side, and box-like structures at the two cross members forming bearings for equalizing levers on each side of the central web of the side members; a series of pedestals and box-like structures integral with the frame and connecting the inner pedestals for the outer boxes with the pedestals for the central box; and integral frames connecting the outer pedestals for the outer boxes with the frame, the entire structure being made as an integral casting.

1,874,307. INSULATING COMPOUND. ARCHIE R. KEMP, Westwood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 2, 1929. Serial No. 344,099. 7 Claims. (Cl. 106—13.)

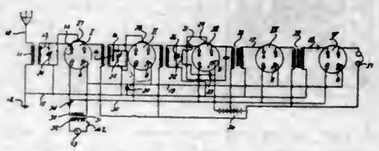
1. An insulating composition for cables having physical and electrical properties suitable for insulating long high grade deep sea signaling cables characterized in this that the composition includes, first, at least 20% of one or more rubber derivatives resulting from the exothermic reaction with rubber of a sulfonic compound having the grouping $R—SO_2—X$, wherein R represents an organic radical or hydroxy group and X represents a hydroxy group or chlorine, and second, at least 10% of gutta percha.

1,874,308. ROTARY MOTOR. ARON KOLKO, Colombes, France. Filed Oct. 20, 1928, Serial No. 313,736, and in France Oct. 31, 1927. 3 Claims. (Cl. 123—11.)



3. In a rotary motor, an annular chamber, movable members forming the inner wall of the chamber, a plurality of pairs of pistons in the chamber, a set of rollers for each pair of pistons, a shaft, a cam having concave faces, a flange on the shaft and having a plurality of peripheral recesses with which one of the rollers of each set engage, and means connecting two of the rollers of the set wtih the movable members, said two rollers of each set engaging the first named roller to force it into engagement with the cam.

1,874,309. RADIO CIRCUIT. WALTER LOUIS KRAHL, Montclair, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed Dec. 6, 1927. Serial No. 238,023. 4 Claims. (Cl. 250—27.)

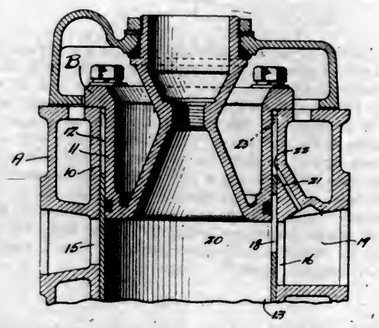


1. In a radio receiving system having a low impedance input circuit, a detector tube adapted to be energized by alternating current; a source of positive electrical potential of approximately six volts; a high resistance grid leak of between one and two megohms; and means to connect said source of potential and said grid leak in series with the grid of said tube and in parallel with the low impedance input circuit of the tube.

1,874,310. CELLULOSE ACETATE COMPOSITION. RICHARD L. KRAMER, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 27, 1928. Serial No. 257,547. 10 Claims. (Cl. 134—79.)

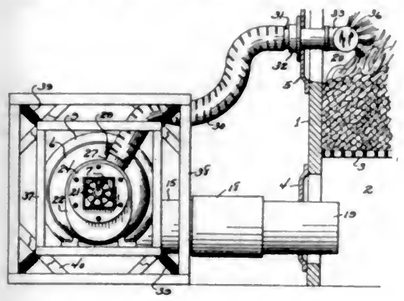
6. A product comprising cellulose acetate and as a softener therefor a compound from the group consisting of phenoxy-ethyl phthalate, methyl-phenoxy-ethyl phthalate, and methyl-phenoxy-ethyl laurate.

1,874,311. INTERNAL COMBUSTION ENGINE. OSCAR C. KREIS, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Mar. 5, 1928. Serial No. 259,018. 13 Claims. (Cl. 123—196.)



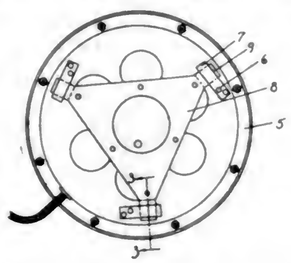
1. In an engine of the sleeve valve type, a cylinder, sleeve valve means associated with the cylinder, a sleeve pocket structure accommodating the sleeve valve means, a conduit communicating with the sleeve pocket, and means inducing a suction in said conduit only during at least a portion of the exhaust cycle.

1,874,312. AUTOMATIC BURNER. EDWARD W. KRISE, Wilkes-Barre, Pa. Filed Mar. 7, 1930. Serial No. 434,135. 3 Claims. (Cl. 110—75.)



1. A fuel saving and combustion increasing apparatus for heating plants in which the smoke outlet of such plant is provided with a partially open damper, comprising a motor, a fan driven thereby having a pipe connection with the ash pit of the heating plant for creating a forced draft therein, a second fan also driven by said motor and having a pipe connection with the combustion chamber of the plant and provided with an apertured nozzle which is arranged in the combustion chamber, a housing containing water and the water in the housing being acted upon by the last mentioned fan.

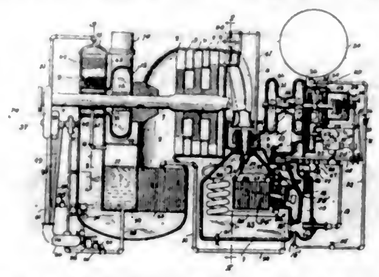
1,874,313. LOUD SPEAKER MOUNTING FOR AUTOMOBILE RADIOS. RALPH H. LANGLEY, Cincinnati, Ohio, assignor to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed June 25, 1930. Serial No. 463,774. 3 Claims. (Cl. 248—30.)



1. A device to mount an instrument on an upright support comprising a series of members on the back of the instrument, spaced out therefrom with one end of each member free, leaving an entrance space thereunder, and a series of members on the face of the support, spaced out therefrom and so arranged that each member will enter the space under a respective member on the instrument through the entrance space thereunder, the members on the instrument being so spaced therefrom as to hold the support members snugly to the instrument back, and the support members being so spaced from the support as to hold the instrument with its back a required material distance from the support.

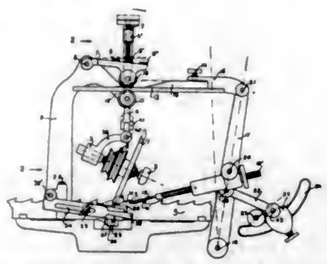
1,874,314. POWER PLANT. ROBERT E. LASLEY, Libertyville, Ill. Filed Dec. 8, 1926. Serial No. 153,409. 2 Claims. (Cl. 60—52.)

1. In a power plant, a motor, a combustion chamber, a manifold communicating with the combustion chamber, means for conducting compressed air into the manifold, a steam generator associated with the combustion chamber, a second steam generator in the path of flow of the exhaust of gas from the motor, means for connecting the first named and second named generators to each other, a superheater connected with the first named generator, means for conducting steam from either one, or both generators to the super-heater, means for conducting steam from the super-heater to the manifold to compress the air therein to a higher stage before admission



thereof to the combustion chamber, means controlling the amount of steam generated by the first generator the second generator supplying a greater amount of steam to the manifold, means for injecting fuel into the compressed air as it passes from the manifold to the combustion chamber for admission therein, and means for conducting the products of combustion from the combustion chamber to the motor.

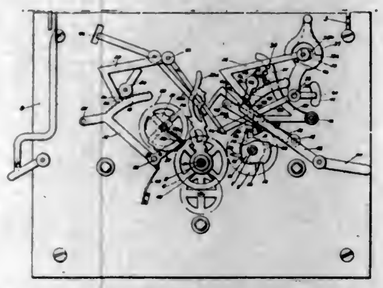
1,874,315. MACHINE FOR SHARPENING OF SAWS. LEON LAURENT, St. Junien, France. Filed Feb. 5, 1929, Serial No. 337,693, and in France Feb. 6, 1928. 4 Claims. (Cl. 76—40.)



1. In a machine to sharpen the saw-teeth, a controlling lever, means on said lever to advance the saw b'' a pitch after each sharpening, and means to secure an invariable extreme advanced position of said lever and to increase the eventual backward stroke of the same, a grindstone, a template to raise it, and means to connect said template to said lever, to permit sharpening of saws with equal teeth and different pitches.

2. In a saw sharpening machine, a grindstone, an arm in which said grindstone is mounted for rotation, said arm being mounted for universal angular adjustment, supporting means for the free end of said arm, including a vertically movable member for raising and lowering the free end of the arm and hence also the grindstone; an oscillatory lever, a longitudinally movable cam supporting member operated by said lever and on which the weight of said vertically movable member is imposed a pivotally mounted lever which bears on the longitudinally movable cam supporting member, an adjusting element with which the vertically movable member is provided and which adjusting element bears and is shiftable longitudinally on said pivotally mounted lever to vary the amplitude of vertical movement of the grindstone without changing the gage or position thereof, a cam on said cam supporting member, and means for moving a saw step by step for operation upon by the grindstone.

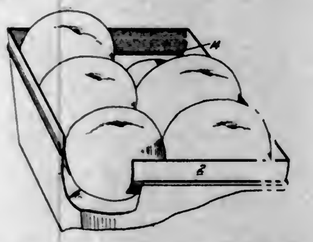
1,874,316. AUTOMATIC SYNCHRONIZING MECHANISM FOR CHIME CLOCKS. CLARENCE J. LENTZ, Cincinnati, Ohio, assignor to The Cincinnati Time Recorder Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 5, 1926. Serial No. 86,313. 9 Claims. (Cl. 58—13.)



1. In a clock mechanism, the combination of a chime train and a train movable with the time train of the clock, means for controlling the chime train comprising a rack, pawl and gathering pallet, means controlled by the time train to govern the position of the rack, means for lifting the pawl and driven by the time train and means energized by the rack in its position at the hour for raising the pawl to lifted position and holding it up irrespective of the release of the pawl lifting means, and means moving in synchronism with the chimes for releasing the rack energized means at proper position for the normal hour chime to take place.

3. In a clock, the combination of a chime strike mechanism, and an hour strike mechanism, means energized by the chime strike mechanism for setting the hour strike mechanism for operation simultaneously with the setting of the chime strike mechanism at the hour, and means for preventing operation of the hour strike mechanism, said chime strike mechanism having a member which releases the last named means at the close of the operation of the chime mechanism.

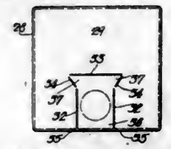
1,874,317. FRUIT BASKET COLLAR. HAROLD LESLIE, Stockton, Calif., assignor to Fibreboard Products Inc., San Francisco, Calif., a Corporation of Delaware. Filed Dec. 23, 1930. Serial No. 504,287. 3 Claims. (Cl. 217—3.)



1. A collar for a fruit basket comprising a band, transverse creases adapted to align with the corners of said basket, and means permitting the nesting of a portion of said collar in said basket to position the middle portion of the collar adjacent the basket edge.

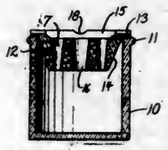
1,874,318. DISPENSING CONTAINER. EVELYN G. LEVKOFF, Rockaway Park, N. Y. Filed Feb. 3, 1931. Serial No. 513,203. 2 Claims. (Cl. 229—17.)

1. In a cardboard box having a body provided with a wall composed of two plies of material, the inner ply having a discharge opening therein, a closure member extending inwardly from one edge of said wall and partially cut from the other ply of material and overlying said discharge opening to normally seal the same, said closure member adapted to be punched inwardly to free the same from the ply of material from which it is formed, and to position the closure member below the plane of said ply of



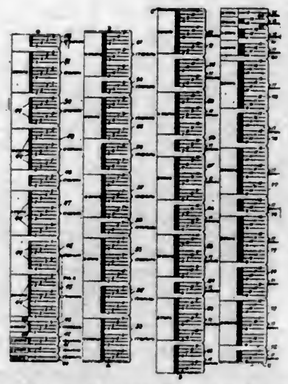
material, and a pair of outwardly extending wing portions at the inner end of said closure member adapted to slide between the plies of material during movement of said closure member to opened and closed positions when in use.

1,874,319. ASH TRAY. JACOB LILL, Chicago, Ill. Filed Feb. 10, 1930. Serial No. 427,321. 1 Claim. (Cl. 131—51.)



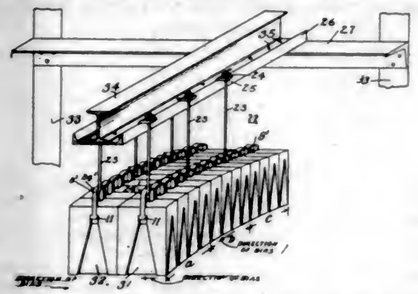
An ash tray comprising a hollow body having an open upper side, a closure member for said open side having a recess in its upper surface, a peripheral flange on said member adapted to rest on the upper end of the wall of said body, said closure member having tapered openings extending therethrough from the recess opening into the interior of said body when the closure member is in installed position and with the larger end of said openings directed upwardly whereby a lighted cigarette may be snuffed out by inserting the lighted end of the same into one of said openings, said closure member having another opening extending therethrough from said recess and through which an extinguished cigarette may be passed into the interior of said body, and said flange having radially arranged troughs therein in which burning cigarettes may be placed whereby the ashes therefrom will fall into said recess for passage through said openings into the interior of said body.

1,874,320. OMBRE FABRIC. JOHN LIPARI, Hawthorne, and JOSEPH E. MATTHEWS, Paterson, N. J. Filed Mar. 21, 1930. Serial No. 437,808. 9 Claims. (Cl. 139—383.)



1. A cloth having warp yarns forming an ombre effect, said yarns being positioned in groups with the shades in adjacent groups overlapping, and with the shades in the respective groups varying from one side of the cloth to the other.

1,874,321. METALLURGICAL FURNACE. LEVI S. LONGENECKER, Pittsburgh, Pa. Filed Oct. 19, 1927. Serial No. 227,115. 21 Claims. (Cl. 110—99.)

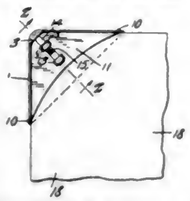


1. A furnace roof composed of refractory blocks arranged side by side and interconnected by means of tongues and grooves of general triangular form and having their apexes uppermost and a swinging means for supporting the said blocks, the said means permitting relative movement between the adjacent faces of the blocks during expansion and contraction thereof.

1,872,322. OXIDATION OF ALIPHATIC HYDROCARBONS OF HIGH MOLECULAR WEIGHT. MARTIN LUTHER, Mannheim, and WALTER FLEMMING, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 30, 1928, Serial No. 303,104, and in Germany Oct. 6, 1927. 8 Claims. (Cl. 260—116.)

1. In the process of the destructive oxidation of aliphatic hydrocarbons of high molecular weight in the liquid state by passing a gaseous oxidizing agent through the said compounds while heating, the step which comprises carrying out the reaction in the presence of a small quantity of a salt of an organic acid with a base earth metal selected from the class consisting of calcium, barium, strontium, magnesium and aluminum.

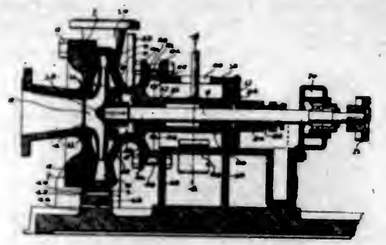
1,874,323. CLIP OR BINDER FOR PAPER SHEETS. GEORGE H. E. LYONS, Bronx, N. Y. Filed Mar. 18, 1930. Serial No. 436,859. 6 Claims. (Cl. 129—5.)



2. A holder comprising a flanged triangular-shaped body to receive the corner of a plurality of sheets, sheet-penetrating means on the body, a top hinged to the body and overlying said means and the corners of the sheets, means detachably securing the top to the body, and tension means carried by the top and adapted to bear against the sheets.

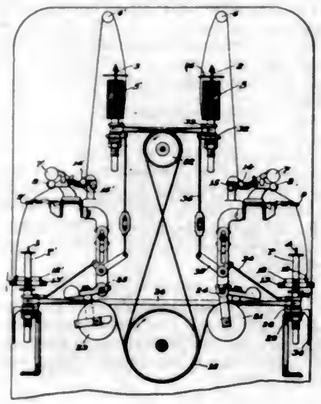
1,874,324. CENTRIFUGAL PUMP. JOHN WEST MACMEEKEN, Glen Ridge, N. J., assignor to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Sept. 29, 1927. Serial No. 222,757. 11 Claims. (Cl. 103—103.)

1. In a centrifugal pump for pumping hot liquids, a pump casing, an impeller therein, a shaft for rotating the impeller, a supporting pedestal, said casing having a dish shaped connecting flange continuous with the curva-



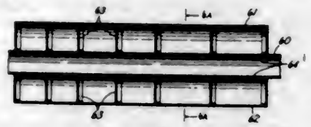
ture of the casing, and having spaced, bolted connection to the pedestal to permit air cooling of the flange and bolt connection for the dissipation of heat.

1,874,325. TWISTER FRAME. HENRY ROBERT MARSH, Waltham, Mass., assignor to Saco-Lowell Shops, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 18, 1931. Serial No. 523,417. 6 Claims. (Cl. 118—47.)



1. In a twister frame, the combination of two spindles located at opposite sides of the machine frame, two additional spindles located at a higher level and positioned at opposite sides of the frame from each other, a driving drum, and a single tape driven by said drum and running in contact with the whirls of all of said spindles to drive them.

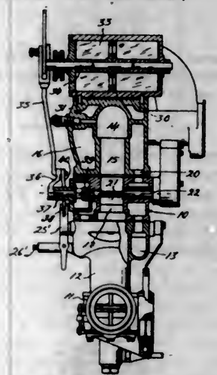
1,874,326. SOUND MUFFLER. WARREN P. MASON, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York Filed June 14, 1929. Serial No. 370,816. 2 Claims. (Cl. 137—160.)



1. A sound muffler comprising an exhaust pipe forming a continuous exhaust passage, a tubular member disposed parallel to said pipe and attached thereto along its length,

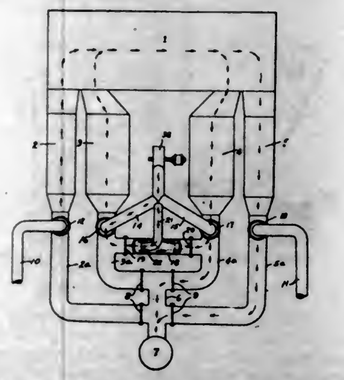
and a plurality of transverse partitions subdividing said tubular member into a plurality of chambers equal in pairs, the axial length of the chambers of the several pairs increasing progressively from one end of the tubular member to the other, the exhaust pipe having lateral apertures communicating with each of said chambers, and the said tubular member comprising a tube segment enclosing a fractional portion of the periphery of the exhaust pipe.

1,874,327. INTERNAL COMBUSTION ENGINE. EDWIN R. MAUREE, Detroit, and DONALD M. FERGUSON, Highland Park, Mich., assignors, by mesne assignments, to Continental-Diveo Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 7, 1929. Serial No. 398,053. 1 Claim. (Cl. 123—122.)



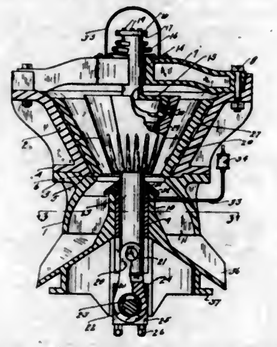
In a device of the class described, a carburetor having an induction conduit, a throttle in said conduit for controlling the flow of fluid therethrough, and adapted to be moved toward closed position by the fluid pressure in the conduit, yieldable means for resisting closing of said throttle, means for heating the fluid passing through said conduit, means for controlling the operation of said heating means, and means for manually closing said throttle and simultaneously operating said heat control.

1,874,328. RECIRCULATION OF WASTE GASES IN THE OPEN HEARTH FURNACE. KENNETH C. MCCUTCHEON, Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Jan. 12, 1931. Serial No. 508,071. 6 Claims. (Cl. 263—15.)



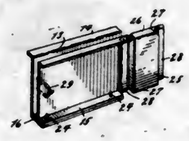
1. In an open hearth furnace, means for introducing a quantity of air into said furnace under pressure, means for dividing the air being introduced under pressure, and means for causing the divided portion of said air to aspirate into the air stream a quantity of waste gases from the exit end of the furnace.

1,874,329. ROCK CRUSHER. HOWARD JEROME MCELVAIN, Portland, Oreg., assignor of one-half to Howard C. McElvain, Portland, Oreg. Filed Apr. 24, 1930. Serial No. 446,942. 1 Claim. (Cl. 83—13.)



In a device of the class described, the combination of a main frame composed of upper and lower sections fabricated together, a cross yoke removably secured to the upper end of the frame, a main shaft reciprocably disposed within bearings that are in axial alignment with each other that are removably secured to a hub disposed within the base of the frame and to the cross yoke, the bearings being in axial alignment with each other, a placement cap removably secured to the upper end of the main shaft and a compressible element disposed between the cross yoke and the placement cap, means for imparting an up and down movement to the main shaft, sets of wearing plates disposed in spaced relationship with each other disposed within the upper portion of the frame and about the shaft, and means for predetermining the spaced relationship of the respective pairs of plates.

1,874,330. CONCRETE FORM AND STRUCTURE. FRED J. MEAD, East Orange, N. J. Original application filed May 26, 1926, Serial No. 111,724. Divided and this application filed Apr. 6, 1929. Serial No. 352,958. 7 Claims. (Cl. 25—118.)

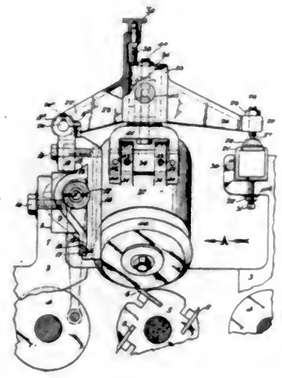


6. In a device of the character described, posts spaced apart, spaced plates between said posts, and plates extending along the sides of said posts and having edges overlapping the ends of said first named plates.

1,874,331. KNIFE GRINDER SUPPORT FOR WOODWORKING MACHINES. LOUIS T. MEDHOLDT, Cincinnati, Ohio, assignor to The J. A. Fay & Egan Company, Cincinnati, Ohio, a Corporation of West Virginia. Filed May 6, 1931. Serial No. 535,453. 1 Claim. (Cl. 51—247.)

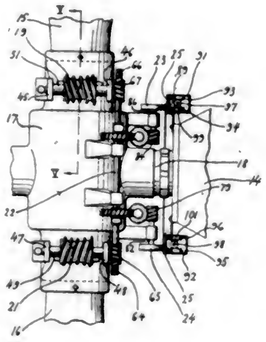
A grinder structure of the class described comprising the combination of an arm, a motor pivotally connected with said arm, a saddle, a rail adapted to slidably support

said saddle, means for pivotally connecting one end of said arm with said saddle, means for moving said saddle upon said rail, a second rail spaced apart from said first-mentioned rail, means carried by the free end of said arm



to slidably engage and be supported by said second rail and means to adjust said motor relative to said arm, whereby vibration of said motor and arm is reduced to a minimum by the use of said pair of rails for supporting said arm.

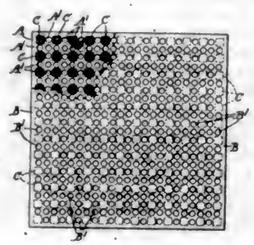
1,874,332. VARIABLE PITCH PROPELLER. EDMUND B. MOORE, Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Sept. 13, 1929. Serial No. 392,360. 11 Claims. (Cl. 170—163.)



1. In an aerial vehicle; a propeller; means for rotating the propeller to cause it to drive the aerial vehicle; and means for varying the pitch of the propeller while it is rotating, said last named means comprising a friction drive wheel, a train of gears driven by said drive wheel, and a friction clutch included in said train.

1,874,333. SEAT. THEODORE J. NELSON and CARL HUGO GERLOFSON, Chicago, Ill. Filed Aug. 8, 1930. Serial No. 473,861. 2 Claims. (Cl. 155—179.)

2. In combination in a seat, a pair of perforated sheets and sponge rubber members interposed between the sheets, said sponge rubber members positioned apart from each other and out of alignment with the perforations of said



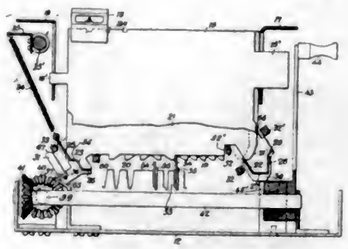
sheets, the exposed sides of said sheets provided with perforated fabric coverings the cushion remaining open and free to the air on its edges.

1,874,334. LOCKING MEANS FOR SEPARABLE ELECTRIC FITTINGS. ARVID H. NERO, West Hartford, Conn., assignor, by mesne assignments, to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Jan. 3, 1929. Serial No. 330,050. 15 Claims. (Cl. 173—322.)



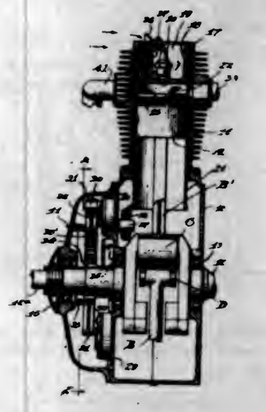
1. A separable electric fitting having plug and socket members and a strain relief fitting on one of said members, locking means on the other of said members engaging with said fitting for holding said plug and socket members together.

1,874,335. CARD INDEXING DEVICE. DONALD A. NEVIN, Waynesboro, Pa. Filed Nov. 30, 1928. Serial No. 322,943. 20 Claims. (Cl. 129—16.1.)



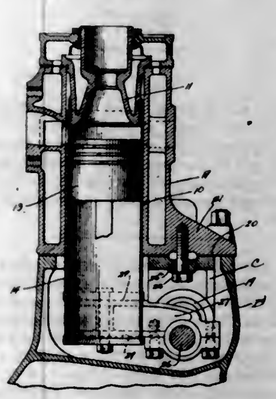
1. A card index device comprising a tray, card containers in the tray, means for moving the containers transversely of the tray, cards in said containers, tabs on the cards, and arresting means movable into the path of tabs on the cards for selectively engaging the tabs to check the movement of selected cards with the container.

1,874,336. INTERNAL COMBUSTION ENGINE. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Sept. 19, 1927, Serial No. 220,295. Renewed Oct. 14, 1931. 57 Claims. (Cl. 123—55.)



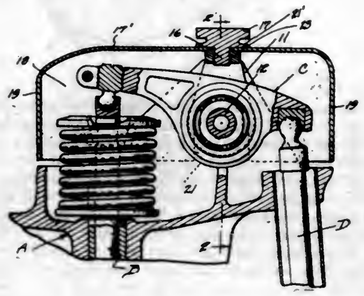
1. An internal combustion engine comprising in combination, a crankshaft, a plurality of ported cylinders having their axes disposed radially about the crankshaft, pistons within said cylinders respectively connected with the crankshaft, a single sleeve valve for each cylinder provided with ports cooperating with the cylinder ports, said sleeve valves having their axes in common with the respective cylinder axes and each having a combined reciprocating and oscillating movement with respect to its axis, crank means connected with each sleeve valve, an element connected with the crank means of each sleeve valve, and means for driving said element from the crankshaft for imparting the aforesaid movement to the sleeve valves.

1,874,337. INTERNAL COMBUSTION ENGINE. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Jan. 30, 1928. Serial No. 250,369. 15 Claims. (Cl. 123—81.)



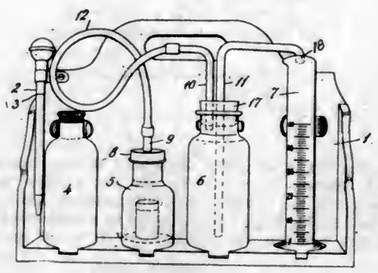
1. An engine of the sleeve valve type comprising in combination, a cylinder block, sleeve valve means operable within the cylinder block, driving mechanism for the sleeve valve means including a layshaft positioned to one side of the longitudinal plane of the engine including the sleeve axes, a crank case construction beneath the cylinder block housing the driving mechanism, driving means for the layshaft, means journalling the layshaft with the cylinder block, and a coupling device between the layshaft and a layshaft driving means whereby the layshaft and driving mechanism may be removed as a unit with the cylinder block from the crankcase construction.

1,874,338. ROCKER BOX HOUSING. ARCHIE M. NIVEN, Detroit, Mich., assignor, by mesne assignments, to Continental Aircraft Engine Company, a Corporation of Delaware. Filed Sept. 18, 1929. Serial No. 393,341. 13 Claims. (Cl. 123—90.)



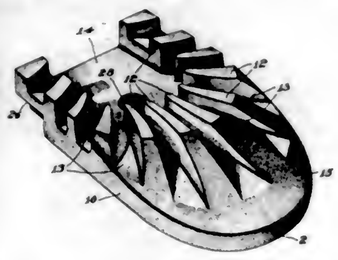
1. In an air cooled internal combustion engine, the combination of a cylinder, valve operating mechanism therefor positioned substantially beyond the outer limits of said cylinder, a pair of spaced supports carried by said cylinder, a rocker arm pivotally supported between said supports, a bridge secured to said supports and spanning said rocker arm, and a rocker arm housing secured to said bridge.

1,874,339. ANALYTICAL METHOD AND APPARATUS THEREFOR. FRANCIS J. NORTON, Syracuse, N. Y., assignor to The Solvay Process Company, Syracuse, N. Y., a Corporation of New York. Filed May 22, 1929. Serial No. 365,074. 7 Claims. (Cl. 23—230.)



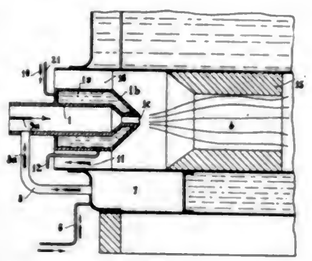
1. In an analytical process in which a quantity of gas is evolved from a material, which quantity of gas is proportionate to the amount of the constituent of such material to be determined, that improvement which comprises displacing by said evolved gas a portion of inert liquid having the same volume as said gas maintaining the pressure upon said evolved gas substantially constant during the displacement of said liquid, and directly measuring the quantity of said displaced liquid.

1,874,340. TUYÈRE AND SUPPORTING MEANS THEREFOR. OSCAR NYGAARD, Saugus, Mass., assignor to Bernitz Furnace Appliance Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 11, 1930. Serial No. 420,142. 13 Claims. (Cl. 110—44.)



1. In a stoker furnace, the combination of an inclined fuel bed support including an inclined channel for conducting air to the fuel bed, and a series of refractory nonmetallic tuyères overlapping each other and covering the top of said air channel for a substantial portion of its length, each tuyère spanning said channel and having a body portion recessed on its upper side and cooperating with the tuyère next above it to form an air chamber, each tuyère being provided also with a nose portion projecting from said body part and extending rearwardly beyond the rear end of the tuyère next above it, each tuyère also having grooves leading from said chamber through the upper side of said body part and opening on to the upper surface of said nose.

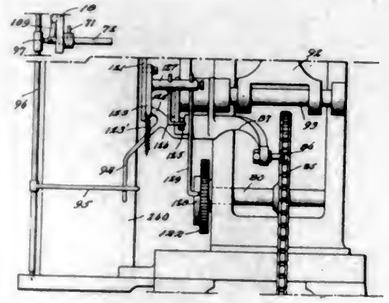
1,874,341. PROCESS OF BURNING HEAVY OILS. WALTER OSTHOFF, Barmen, Germany. Filed Mar. 30, 1928, Serial No. 265,921, and in Germany Nov. 8, 1927. 11 Claims. (Cl. 158—117.5.)



1. The herein described process of burning heavy oils which consists in vaporizing the oil, cooling the oil vapor below the temperature of liquefaction before combustion, conducting the cooled vapor to a combustion zone, and then gasifying the oil and burning the oil gas.

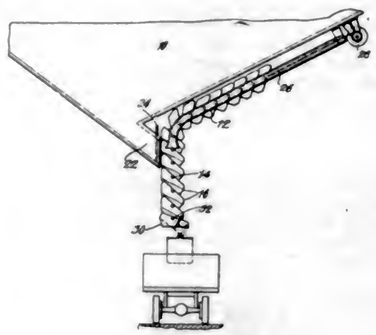
1,874,342. CHAIN CONTROL FOR SPLICING ATTACHMENTS. ALBERT E. PAGE, Brooklyn, N. Y., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed July 25, 1929. Serial No. 380,909. 11 Claims. (Cl. 66—133.)

1. In a circular knitting machine having needles, yarn fingers including a splicing yarn finger, a pattern drum determining the active period of said splicing finger and a pattern chain moved in correspondence with the knitting of the courses, said chain controlling the movement of said drum, a rotary cam having high and low portions for determining the extent of a course through which splicing yarn is fed thereto, said cam being adjustable to



vary the effective ratio between said high and low portions, and means controlled by said pattern chain for adjusting said cam.

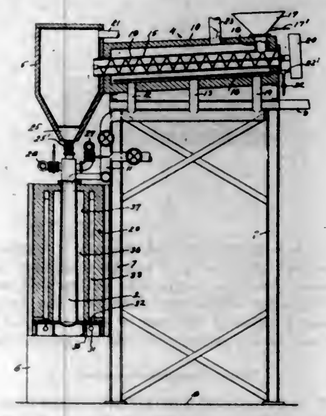
1,874,343. BAG LOADING CHUTE. FRANK PARDEE, Jr., Hazleton, Pa., assignor to Anthracite Separator Company, Hazleton, Pa., a Corporation of Pennsylvania. Filed Dec. 17, 1930. Serial No. 502,896. 6 Claims. (Cl. 193—32.)



1. A chute for lowering coal and similar materials having a movable member pivoted centrally of its length so as to be supported in a substantially balanced position on the lower end of the chute, such member being adapted to control the discharge of material from the lower end of the chute, and receptacle supporting means carried by said member.

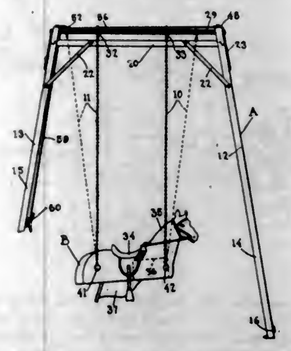
1,874,344. APPARATUS FOR COKING COAL. SAMUEL W. PARR and THOMAS ERNEST LAYNG, Urbana, Ill., assignors, by mesne assignments, to Urbana Coke Corporation, Urbana, Ill., a Corporation of Delaware. Original application filed Jan. 29, 1925, Serial No. 5,499. Divided and this application filed July 30, 1925. Serial No. 46,935. 4 Claims. (Cl. 202—150.)

1. In an apparatus for coking coal, an elongated retort comprising a fuel container, an inner refractory wall enclosing said container and spaced therefrom, a second refractory wall enclosing said inner wall, baffles between said walls forming channels for the passage of heating gases, and means for supplying hot gases to said channels to heat said inner wall and thereby radiate heat to said container, said baffles being constructed and arranged so that the hot gases may pass through the chan-



nels from one end of the retort to the other and back again outside of said inner wall and then into direct contact with said container.

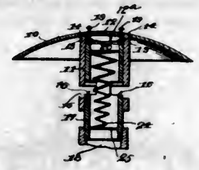
1,874,345. PLAY DEVICE. WHIPPLE O. PARROTT, Chicago, Ill. Filed May 16, 1929. Serial No. 363,456. 6 Claims. (Cl. 158—58.)



1. A play device comprising a support including a pair of supporting members adapted to rest upon the ground and to extend upwardly therefrom, a pair of hangers suspended from said supporting members and slidably relative thereto, a seat carried by said hangers and adjusting means connected with said hangers and extending downwardly along one of said supporting members for sliding said hangers, said means being operable from the ground.

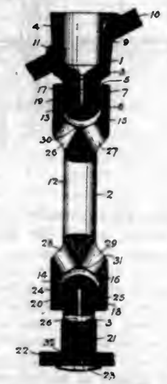
1,874,346. FUEL BURNER. CHARLES HERMAN PASCHKE, Buffalo, N. Y., assignor to Frederick A. Paschke, Sweetwater, Idaho. Filed May 27, 1929, Serial No. 366,410. Renewed Mar. 11, 1932. 1 Claim. (Cl. 158—116.)

A gas burner comprising a body, a hollow extension depending from the lower side of said body, a hollow member adapted to be telescopically engaged by said extension and to be connected to a fuel supply line, said extension and said member having ports in the same opening to the atmosphere when in registry, lugs within said extension, and screw means passed downwardly through said body and said lugs and having the lower ends thereof bearing against the upper end of said hollow member for adjusting said extension relative to said member whereby to move the said ports into and out of registry for controlling



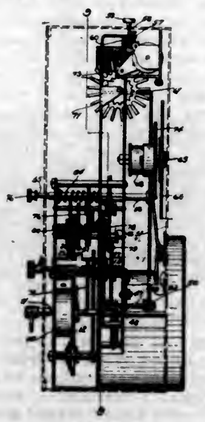
an air supply to be admitted therefrom to the said extension for the dilution of the fuel passing therethrough to the burner body.

1,874,347. STAY BOLT. ARTHUR F. PITKIN, Schenectady, N. Y. Filed July 25, 1931. Serial No. 553,046. 12 Claims. (Cl. 85—1.5.)



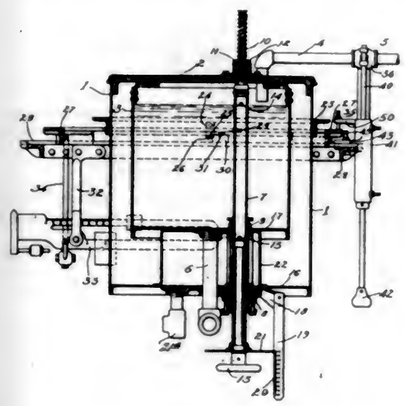
1. An articulation for the sections of a staybolt structure comprising a head; and a socket engaging said head and having a passageway formed therein for permitting the extrusion of scale accumulations from its interior.

1,874,348. CLOCK MECHANISM. STEPHEN PRENSZNER, Clifton, N. J. Filed Mar. 23, 1929. Serial No. 349,489. 4 Claims. (Cl. 58—4.)



4. In a clock, a calendar mechanism including a driving train, a day of the month wheel geared thereto, a day of the week wheel geared to the day of the month wheel, and means for simultaneously disengaging the first wheel from the train and the second wheel from the first.

1,874,349. PRECISION MEASURING TANK. HARRY READ, York, Pa., assignor to Read Machinery Company, York, Pa., a Corporation of Pennsylvania. Filed June 8, 1929. Serial No. 369,491. 5 Claims. (Cl. 73—137.)



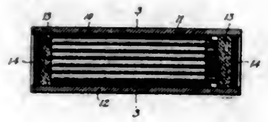
1. A liquid-measuring apparatus comprising a tank arranged on knife edges, means for supplying a liquid to said tank, mechanism including an adjustable balance arm cooperable with said knife edges to balance said tank when a selected quantity of liquid has been delivered, means actuated by said mechanism for discontinuing the first-mentioned means, thus terminating the supply of liquid, an adjustable constantly open overflow in said tank through which the liquid exhausts after it has reached a selected level, and means for vertically adjusting said overflow, whereby the balance arm can be set to balance a volume of liquid slightly in excess of the desired volume, and the exact measurement can then be determined by the setting of the overflow.

5. In liquid measuring apparatus, a weighting scale including a balance arm, a tank supported from said balance arm, meane for supplying liquid to the tank comprising a valve, means controlled by said balance arm for closing said valve, a bushing mounted at one end of said tank and having threads arranged interiorly thereof, a substantially vertically arranged rotatable tubular member in said tank, and having an elongated threaded rod attached to the upper end thereof, and adapted to mesh with the threads of said bushing, said member extending outwardly through the lower end of said tank, openings arranged adjacent the upper and lower extremities of said tubular member, respectively, means for rotating said tubular member, a scale depending from said tank, and an indicating means on said tubular member, cooperable with said scale, for definitely determining the height of said tubular member, and consequently the height of the upper opening therein, whereby the liquid entering the said tank will overflow after it reaches the selected level of said upper opening and will exhaust through the lower opening, thus accurately determining the volume of liquid in the tank.

1,874,350. PROCESS FOR REDUCING THE VISCOSITY OF CELLULOSE DERIVATIVES. EBENEZER EMMET REID, Baltimore, Md., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed June 6, 1928. Serial No. 283,466. 7 Claims. (Cl. 260—102.)

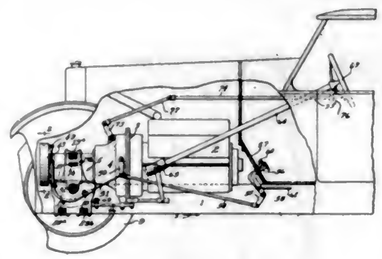
5. The process of reducing the viscosity of cellulose acetate which comprises bringing an acid gas in contact with a charge of cellulose acetate at approximately room temperature.

1,874,351. LIGHTER. DANIEL S. RHODES, Gloversville, N. Y. Filed Apr. 12, 1930. Serial No. 443,804. 3 Claims. (Cl. 44—40.)



1. As a new article of manufacture, a lighter of the class described comprising a tubular container of paper or cardboard, an inflammable tube within said container, matches arranged within said tube with the pyrophorous heads thereof adjacent one end of said tube for igniting the tube, and means sealing each end of the container.

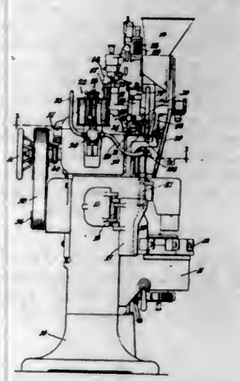
1,874,352. AUTOMOBILE CONSTRUCTION FOR FRONT WHEEL DRIVE. CLIFTON R. ROCHE, Los Angeles, Calif., assignor to Automotive Research and Manufacturing Company, Reno, Nev., a Corporation of Nevada. Filed Feb. 21, 1928. Serial No. 255,922. 6 Claims. (Cl. 180—43.)



1. In an automobile construction for a front wheel drive, the combination of a housing in the form of a hollow casting supported at the forward end of the frame, having a hollow shoulder at each side with an upper face forming a spring seat, a transverse front spring supported on each shoulder at each side of the automobile, means for connecting the end of each spring with its corresponding wheel, said housing including a worm housing carrying a driving worm and located in the space between the said springs, a worm-wheel, axially aligned shafts driven thereby corresponding to the wheels, bearings for the shafts in the housing maintaining their axial alignment, and flexible joints connecting the ends of the shafts with the front wheels.

1,874,353. BOTTLE FILLING AND CROWNING MACHINE. HUGH M. ROSS, Richmond Hill, N. Y., assignor, by mesne assignments, to Crown Cork & Seal Company, Inc., Baltimore, Md., a Corporation of New York. Filed June 11, 1929. Serial No. 370,088. 19 Claims. (Cl. 226—77.)

1. In a container filling machine, the combination of container conveying means, means for delivering a charge of syrup to a container in said conveyor, means for delivering a charge of water to the container at a later station of said conveying means, a valve for said water delivery means, means for opening said valve, and controlling means operable in the absence of a container in the conveyor at the syruping station to prevent delivery of syrup



by said syrup delivery means and to render said valve operating means inoperative in the following cycle of the machine.

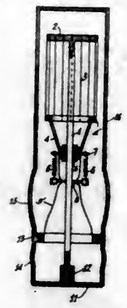
1,874,354. MECHANISM TO PREVENT BRAKE CHATTER. GEORGE L. ROTHROCK, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 28, 1930. Serial No. 464,565. 6 Claims. (Cl. 188—78.)



1. In combination, an axle, a wheel, a bearing between the axle and wheel located out of the plane of the wheel, said bearing constituting the only bearing support for said wheel, a brake including a drum carried by said wheel, and shoes engaging the drum on that side of the bearing opposed to the wheel plane, said brake constructed to produce a horizontal component in the reaction between the drum and the shoe.

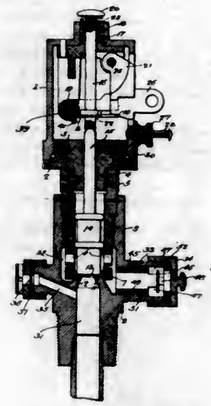
1,874,355. THERMIONIC VALVE. HENRY JOSEPH ROUND, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 10, 1925, Serial No. 14,567, and in Great Britain Mar. 10, 1924. 4 Claims. (Cl. 250—27.5.)

1. A thermionic device, comprising an evacuated envelope, a metallic cap closing one end thereof, a cathode comprising a metallic rod supported by said cap, a disk fixed to one end of said rod, a metallic ring slidably mounted on said rod and insulated therefrom, a filament comprising a plurality of wires connected between said disk and said ring, and means connected with said metallic ring for applying tension to the filament wires, an anode surrounding said cathode, a metallic contact member forming a portion of said envelope, insulating means



between said metallic contact member and said metallic cap, and conducting means connecting said metallic ring and said contact member.

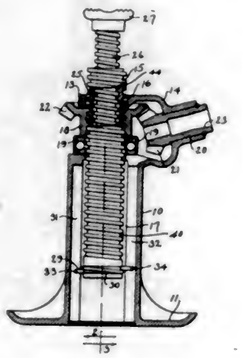
1,874,356. QUICK ACTING RELEASE DEVICE FOR CARBON DIOXIDE FIRE SYSTEMS. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 11, 1930. Serial No. 460,509. 8 Claims. (Cl. 169—11.)



3. In a release device of the character set forth, a housing comprising a lower body member and an upper body member rotatably connected to said lower member, said connection providing for relative rotation of said members while maintaining a normal relation in the axial direction, closure means in the lower member including an element projecting into the upper body member, and closure-retaining means in the upper body member operatively associated with said element and freely movable with respect to the element when the said members are relatively rotated, said retaining means comprising a control element projecting through the upper body member.

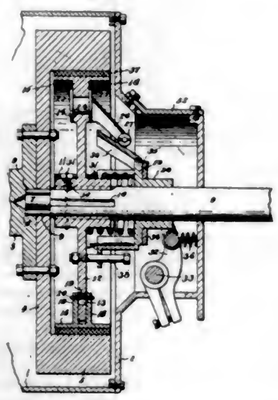
8. In a valve release device of the character set forth, a housing having a discharge port, means for releasably closing said port, a sleeve slidably mounted in said port and terminating at its outer end in transversely directed oppositely arranged openings, said sleeve being adapted when said port is opened to move under impulse of the escaping fluid to a projected position in which said openings lie beyond the sides of said housing whereby unobstructed discharge through said openings is obtained.

1,874,357. JACK. WILLIAM B. RUNYAN, Dayton, Ohio, assignor to The Dayton Malleable Iron Company, Dayton, Ohio, a Corporation of Ohio. Filed Jan. 14, 1929. Serial No. 332,322. 18 Claims. (Cl. 254—102.)



1. A lifting jack comprising a hollow standard, an exteriorly threaded outer screw member mounted in the standard, an inner screw member threaded in the outer screw member, means for elevating said screw members comprising an interiorly threaded rotatable collar engaging the threads of the outer screw member, means yieldingly carried by the outer screw member for frictional rotation thereon and comprising a member slidably guided in the standard for restraining rotation of and causing axial movements of the outer screw member upon rotation of said collar, said standard having means for automatically varying said restraining effect for rendering said yielding member ineffective at a definite positioning of the outer screw member.

1,874,358. CLUTCH. FRED F. RUSSELL, Oakland, Calif. Filed Apr. 17, 1930. Serial No. 445,171. 4 Claims. (Cl. 192—76.)



1. A clutch comprising a driving drum, a driven shaft arranged coaxially with the drum, a disk carried by the shaft and provided with radial notches in its periphery, shoes arranged about the periphery of the disk and adapted to frictionally engage the drum and provided with lugs engaging in the notches in the disk, flat-sided dogs mounted in the notches to bear upon the inner ends of said lugs and the bases of the notches, arms extending angularly from the dogs at the side of the disk, a cam slidably mounted on the driven shaft and having obliquely disposed blades engaging under the free ends of the respective arms whereby to rock the dogs about axes parallel with the axes of the drum and the disk, lugs on the cam alternating with the blades, guides secured in the disk and extending through said lugs whereby to maintain the cam in coaxial relation to the disk and accommodate its sliding movement, and means for sliding the cam along the shaft to open or close the clutch.

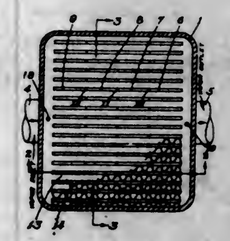
1,874,359. POLE SUPPORTING BASE. WILLIAM R. RUTHERFORD, Spokane, Wash., assignor of one-fourth to R. R. Cunningham, Spokane, Wash. Filed Dec. 26, 1930. Serial No. 504,801. 2 Claims. (Cl. 72—84.)



2. A pole supporting base having in combination a base pier, four bars imbedded in said pier spaced ninety degrees apart, three of said bars projecting at some length above said pier, the fourth bar terminating substantially at the top of the pier, a pair of transversely disposed bolts imbedded in the top portion of the pier and arranged to hold each oppositely disposed pair of bars together, a short bolt imbedded in said pier vertically above and in parallel relation with the bolt passing through the fourth or short bar, the outer threaded end portions of said two last named bolts projecting into a recess in the top of the pier, an extension bar disposed in vertical alignment and abutting relation with the fourth or short bar, an offset bar portion secured to the lower end portion of said extension bar, said offset bar portion overlapping the upper end portion of the fourth or short bar and extending to the bottom of the aforesaid recess, and said offset bar portion having holes adapted to receive the outer threaded end portions of said last two named bolts.

1,874,360. HEAT EXCHANGER. WILLIAM J. RYAN, Los Angeles, Calif., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 2, 1930. Serial No. 499,503. 4 Claims. (Cl. 257—218.)

1. An improved apparatus for effecting a heat transfer between a relatively hot and a relatively cold fluid comprising a casing having separate inlets and separate outlets for the fluids, a plurality of passages leading from one fluid inlet to the outlet, a plurality of passages juxtaposed transversely thereto and arranged alternately therewith and means in said last mentioned passages for breaking up the body of fluid as it is moved therethrough, said means comprising a plurality of corrugated baffle



plates mounted transversely of said latter passages and provided with perforations through which said fluid must pass in moving therethrough.

1,874,361. MALLEABLE IRON CASTING. RALPH T. RYCROFT, Kenmore, N. Y., assignor to Jewell Steel & Malleable Co., Buffalo, N. Y., a Corporation of New York. Filed June 20, 1929. Serial No. 372,535. 2 Claims. (Cl. 148—31.)

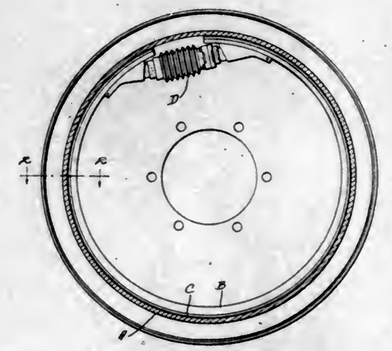
1. A malleableized iron alloy casting having the qualities specified and containing carbon up to and including substantially 2.35 per cent, substantially 1 per cent nickle and substantially ½ per cent chromium.

1,874,362. UNDERGARMENT. MARTA RYFF, Bern, Switzerland, assignor to Swan Knitting Works Ryff & Co. Ltd., Bern, Switzerland, a Corporation of Switzerland. Filed Mar. 12, 1930, Serial No. 435,277, and in Switzerland Oct. 16, 1929. 1 Claim. (Cl. 2—73.)



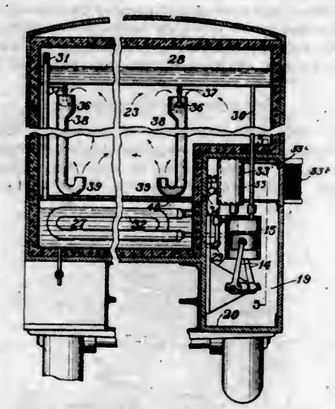
A substantially straight-sided tubular garment comprising a medial body portion of major length consisting of a fabric knitted of heavy thread therefore providing a body-reducing member having a tendency to resist stretching, an upper zone consisting of light thread knitted on as a continuation of said heavy thread and being subject to easy stretching, a reinforcement for the lower terminal of said body portion, and an intermediate connecting band between said reinforcement and the lower terminal of said body portion, knitted of lighter thread and subject to easy stretching, said intermediate band separating said reinforcement from the lower terminal of the body portion and therefore preventing the superior contracting effect of the body portion from causing the reinforcement to exert too great a pressure on that portion of the body which is embraced by said reinforcement.

1,874,363. BRAKE. FREDERICK W. SAMPSON, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Dec. 6, 1928. Serial No. 324,240. 4 Claims. (Cl. 188—78.)



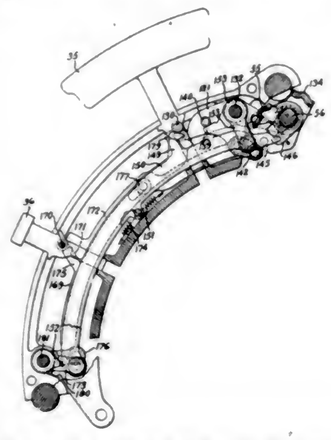
1. In a brake, metallic brake drum means, metallic brake shoe means adapted to be moved into friction engagement with said brake drum means, one of said means being constructed of a material having a relatively small coefficient of expansion whereby to maintain the desired clearance between the brake drum means and brake shoe means upon release of the brake after braking operation.

1,874,364. REFRIGERATING APPARATUS. WILLIAM H. SARTAIN, Columbus, Ohio. Filed Apr. 23, 1930. Serial No. 446,684. 8 Claims. (Cl. 62—117.)



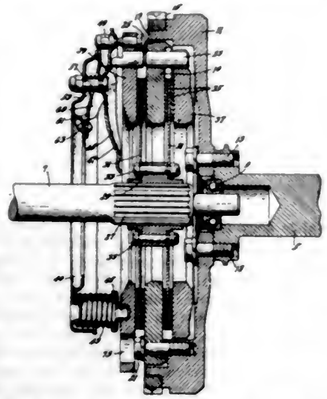
1. A vehicle body formed to include a refrigerated compartment, a refrigerant-containing tank located in the lower part of said compartment, a refrigerant storage tank located in the upper part of the compartment, means for forcing the refrigerant from the lower tank into the upper tank conduits arranged within said compartment between said tanks, means for spraying the refrigerant from the upper tank into the upper portions of said conduits for intimate contact with warm air taken from the upper portion of said compartment, and traps formed with the lower portion of said conduits for returning the liquid refrigerant to the lower of said tanks and permitting of the passage of the cold air into the lower portions of said compartment.

1,874,365. CASH REGISTER. PASCAL SBURLINO, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Mar. 1, 1929. Serial No. 343,665. 17 Claims. (Cl. 235—27.)



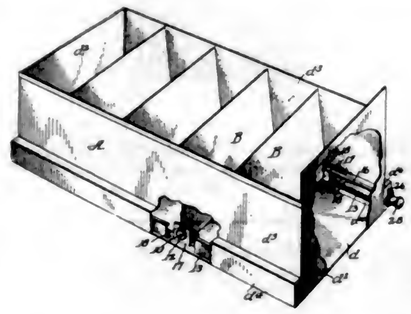
1. In a machine of the class described, the combination with depressible keys; and a detent to maintain the keys depressed; of a normally ineffective device adapted to actuate the detent during the operation of the machine to free the depressed keys; normally locked operating mechanism; means to release the operating mechanism for an operation during which the detent actuating device remains ineffective and the keys remain depressed; a second independently operable means to release the operating means for operation; an adjustable member operable by the depression of the last-named release means; and a coupling device adapted to be operated by the adjustable member to couple the normally ineffective detent actuating device with the operating mechanism to cause the device to become effective during an operation of the machine.

1,874,366. CLUTCH. ERNEST W. SEAHOLM, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 17, 1929. Serial No. 363,905. 3 Claims. (Cl. 192—69.).



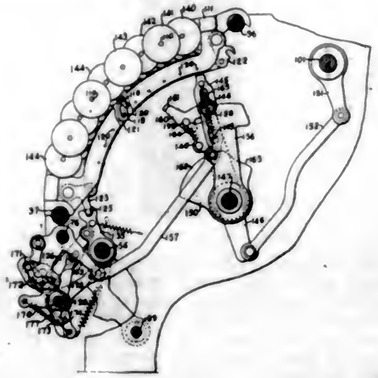
2. In a clutch, a driving plate, a movable pressure plate, a lever operably connected to said plates to move said driving plate axially of said pressure plate, a U-shaped sheet metal bracket secured to said pressure plate, said bracket and said lever having inter-engaging parts independent of said operable connections to restrain said lever from movements influenced by centrifugal force.

1,874,367. FILING CABINET. JOSEPH C. SEYL, Evanston, Ill. Filed May 20, 1929. Serial No. 364,407. 24 Claims. (Cl. 129—16.)



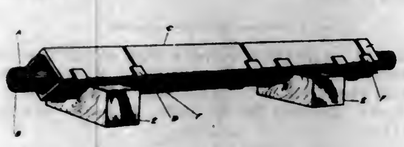
1. The combination with a filing drawer, of a partition extending substantially vertically in the drawer, means for pivotally supporting the lower end of the partition, said means being adjustable longitudinally in the drawer by horizontal shift movement only, and stop-means for limiting the pivotal movement of the partition while the supporting means is in any of its adjusted positions.

1,874,368. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Jan. 19, 1924, Serial No. 687,305. Divided and this application filed Mar. 29, 1927. Serial No. 179,304. 60 Claims. (Cl. 235—3.)



1. In a machine capable of accumulating items, an item counter, actuating means therefor, an arm positioned during an accumulating operation to select the counter for actuation, a retractable member carried by said arm adapted in its projected position to render said actuating means effective, and adjustable means for holding said member in projected position.

1,874,369. PROTECTIVE MEANS FOR BURIED CABLES. JOSEPH J. SHOEMAKER, Clawson, Mich. Filed Nov. 27, 1929. Serial No. 410,078. 4 Claims. (Cl. 247—38.)

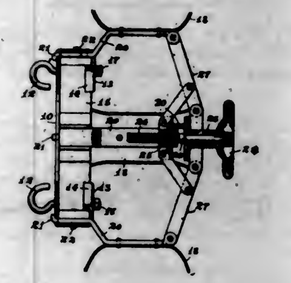


1. In combination with a pair of angle irons positioned with their lateral edges in substantial contact with one another to form an enclosure of generally rectangular cross sectional contour through which a cable may pass, separately attachable clip members positioned at intervals thereabout and engaging the major portion of the peripheral extent of the structure formed by said angle irons at their respective points of location thereon, whereby the latter are held against undesired disassemblage.

1,874,370. METHOD OF TREATING ORES. FRANCIS M. SIMONDS, New York, N. Y., assignor of one-half to A. Fillmore Hyde, New York, N. Y.. Filed Apr. 24, 1931. Serial No. 532,695. 5 Claims. (Cl. 75—60.)

1. In a method of treating ores and concentrates containing zinc sulphide, grinding the zinc sulphide to a fine powder of the order of 200 mesh and converting the sulphide to an oxide, such conversion including passing through same a number of alternations of oxidizing and reducing gases at a temperature below the sintering temperature of the mass.

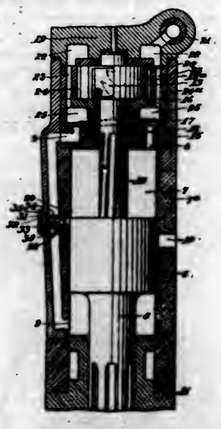
1,874,371. COLLAPSIBLE WIRE REEL. FRANK V. SJOLANDER, Jamestown, Kans. Filed Apr. 1, 1930. Serial No. 440,774. 4 Claims. (Cl. 242—111.)



2. In a reel of the class described, a base section, separate drum sections on which a coil of material may be reeled, and said drum sections having shouldered hooked ends engageable with said base section, whereby said drum sections may have pivotal movement relatively to said base section, for the purpose of removing the coil of material from the drum sections.

1,874,372. PERCUSSIVE TOOL. FRED M. SLATER, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 5, 1929. Serial No. 404,886. 1 Claim. (Cl. 121—19.)

In a fluid actuated percussive tool the combination of a cylinder having a piston chamber with a piston therein, fluid inlet passages to the front and rear thereof, a distributor valve controlling said inlet passages, means to operate said valve, an exhaust port in the piston chamber controlled by the piston, a port controlled by the piston leading from a part of the piston chamber slightly rearward of the exhaust port to the front inlet passage, and a valve in said port permitting pressure fluid to pass from the rear of the piston chamber into the front inlet passage

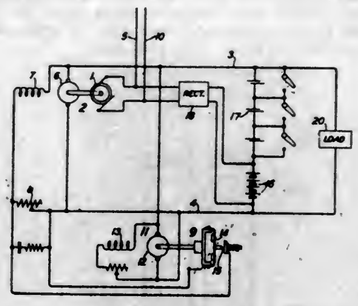


to assist movement of the distributor valve while the piston is traversing the distance between the said port and the exhaust port.

1,874,373. DEHYDRATION OF MAGNESIUM CHLORIDE. ALBERT KELVIN SMITH, Shaker Heights Village, and WILLIAM R. VEAZEY, Cleveland Heights, Ohio, assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 21, 1929. Serial No. 372,796. 3 Claims. (Cl. 23—91.)

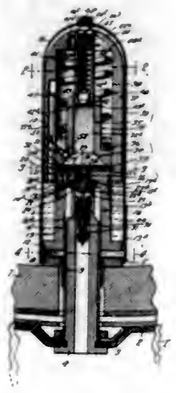
1. A process of dehydrating magnesium chloride which comprises air-drying a partially dehydrated magnesium chloride corresponding approximately to the dihydrate at a temperature rising to about 230° C. to convert the same to a product consisting substantially of the mono-hydrate, $MgCl_2.H_2O$.

1,874,374. CONTROL SYSTEM. JOHN H. SOLE, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 16, 1931. Serial No. 569,206. 7 Claims. (Cl. 171—314.)



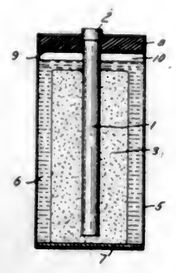
1. In a control system, a direct current generator connected to a load circuit, a voltage regulator operated in accordance with the instantaneous voltage of the generator for controlling the generator excitation to maintain constant voltage on the load circuit, a storage battery connected across the load circuit, and counter cells inserted in series with said battery across the load circuit to prevent the battery opposing instantaneous changes in the generator voltage.

1,874,375. AUTOMATIC TIRE INFLATER. DELPHIN H. SPICER, Lakewood, Ohio, assignor to Spicer Airflater, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 18, 1930. Serial No. 429,256. 16 Claims. (Cl. 230—34.)



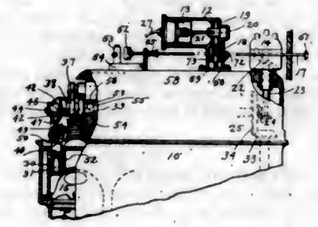
1. A tire inflater comprising a member, said member having a compression chamber and a passage leading from said chamber and adapted to deliver air therefrom, a valve in said passage and having a stem, a valve in said member for admitting air to said compression chamber, a diaphragm forming a movable wall of said chamber, a liquid containing cylinder on the opposite side of the diaphragm from the passage, a weight surrounding the said cylinder and having a plunger entering the working chamber thereof for pressing the liquid against the said diaphragm, a spring interposed between the said weight and the said cylinder, and a pressure relief valve in the said plunger.

1,874,376. PROCESS OF MAKING DRY CELLS. WAYNE D. STALEY, Moline, Ill., assignor to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Original application filed July 6, 1928, Serial No. 290,761, Patent No. 1,760,090, dated May 27, 1930. Divided and this application filed July 11, 1929. Serial No. 377,474. 7 Claims. (Cl. 136—124.)



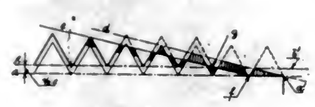
1. The method of coating a cylindrical dry cell cathode core with gelatinizable starch which comprises insulating the bottom of said core with a waxy substance, making a suspension of starch in a liquid solution of a suitable colloid in water, and applying a coating of said suspension to said core.

1,874,377. CONTROL DEVICE FOR INTERNAL COMBUSTION AND OTHER ENGINES. WARREN F. STANTON, Pawtucket, R. I. Filed Mar. 19, 1926, Serial No. 96,088. Renewed Dec. 19, 1931. 7 Claims. (Cl. 123—117.)



1. The combination of an engine having a cylinder and a piston, a pressure operated means subjected to pressure within the cylinder at a predetermined point in the travel of the piston, ignition means including a timer, an operative connection between said pressure operated means and the timer, a reciprocating and oscillating valve to control communication between the engine cylinder and said pressure-operated means, and automatic means for actuating said valve.

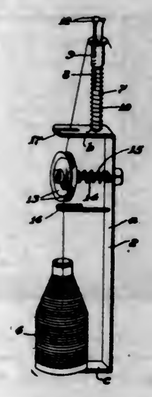
1,874,378. SCREW TAP. HERMANN STEINRUCK, Berlin, Germany. Filed Feb. 7, 1929, Serial No. 338,241, and in Germany Feb. 11, 1928. 6 Claims. (Cl. 10—141.)



1. A screw cutting tool comprising advance cutters and finishing cutters formed on different core diameters, the leading end of the tool having advance cutters only and the intermediate portion having advance cutters and finishing cutters which are mutilated so that their cutting edges are bounded by lines which will generate cones in a revolution, the cone of the advance cutters being displaced axially relatively to the cone of the finishing cutters.

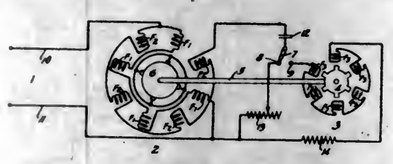
1,874,379. YARN SUPPORTING, TENSIONING AND TAKE-UP DEVICE. ALBERT E. STEWART, Franklin, N. H., assignor to Acme Knitting Machine & Needle Company, Franklin, N. H., a Corporation of New Hampshire. Filed Jan. 4, 1930. Serial No. 418,626. 4 Claims. (Cl. 242—147.)

1. An apparatus of the character described comprising, in combination, a bracket, a pin for supporting a cop, a slotted post supported on said bracket, a tension device mounted on said bracket between said cop and post, a slide mounted to reciprocate on said post, a spring for acting on said slide to urge it yieldingly away from said



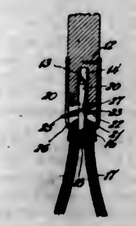
tension device, and devices for guiding a thread drawn from said cop and running through said tension device and said slot and over said slide.

1,874,380. REGULATED MOTOR SYSTEM. HUGH M. STOLLER, Mountain Lakes, N. J., and EDMUND R. MORTON, Brooklyn, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 5, 1929. Serial No. 330,464. 20 Claims. (Cl. 172—275.)



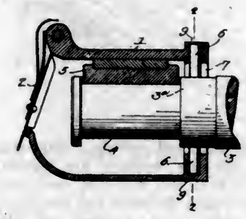
16. In combination, an alternating current motor adapted for operation from a source of alternating current and having field and armature windings, and means for holding a substantially fixed relation between the speed of the motor and the frequency of the power supply at different frequencies of the power supply and comprising means for controlling the field current of the motor.

1,874,381. MOP HOLDER. NATHANIEL B. STONE, Washington, D. C. Filed Dec. 9, 1931. Serial No. 579,927. 3 Claims. (Cl. 15—147.)



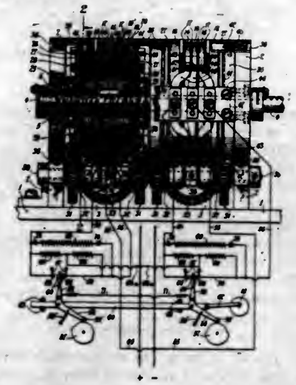
1. A mop holder of the character described comprising, in combination, a wooden handle having an axial opening in its lower end; a cylindrical socket member secured to the handle and projecting beyond its end; a channel-shaped holding member secured to the end of the socket; a mop-clamping bar adapted to be inserted in the channel member; said channel member having an opening alined with the axial opening in the handle; a smooth, pointed pin integrally connected to the clamping bar adapted to pierce the mop fabric and be inserted through said opening in the channel and into the axial opening in the handle; and a spring-urged gripping plate pivotally mounted at one end in the socket and having an opening engaging opposite sides of the pin adapted to grip and hold the pin when the gripping bar is inserted in the channel.

1,874,382. DUSTGUARD. GERALD SWALLOW, Bridgeport, Pa., assignor, by mesne assignments, to Continental-Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed May 5, 1928. Serial No. 275,357. 2 Claims. (Cl. 286—6.)



1. As an article of manufacture, a dust guard for journal boxes having an opening at one end, an axle projecting into said box, said box having a transverse slot intersecting the aperture through which the shaft projects, said dust guard including a thin flexible nonmetallic sheet adapted to abut one wall of the slot, said sheet having at its upper and lower edges flanges adapted to extend between said wall of the slot and the opposed wall thereof and maintain the flanged edge portions of the sheet in contact with the first-named wall, the sheet further having an opening for and of approximately the same diameter as the axle.

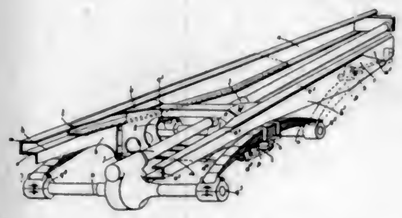
1,874,383. POWER TRANSMITTING APPARATUS. HARRY L. TANNER, Brooklyn, N. Y., assignor to Ford Instrument Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed July 24, 1929. Serial No. 380,615. 19 Claims. (Cl. 192—84.)



1. In power transmitting apparatus having driving and driven elements provided with coupling means and mechanism controlling said means for selectively connecting the

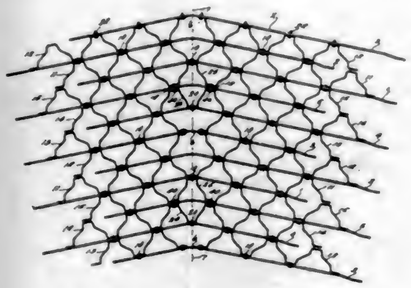
elements in operative relation, the combination of element-separating means, force-regulating means controlled by said selective mechanism regulating said element coupling and separating means, and a brake applicable to the driven element.

1,874,384. SELF-PROPELLED ROAD VEHICLE. ERNEST THOMAS JAMES TAPP, London, England. Filed Mar. 27, 1930, Serial No. 439,498, and in Great Britain Apr. 16, 1929. 4 Claims. (Cl. 280—106.)



1. A self-propelled road vehicle, comprising a chassis frame whereof the side members are tapered, extension pieces secured to said side members, each extension piece comprising two flanges disposed one above the other and arranged at an angle to one another and joined together by means of a ledge or step on which the said side members rest.

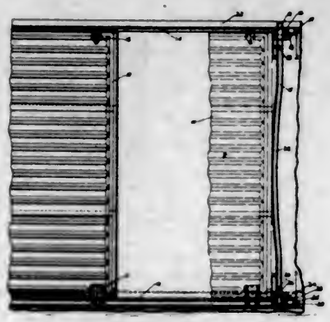
1,874,385. CURVED GRATING. EDWARD F. J. TIPPEL, New York, N. Y., assignor to Irving Iron Works Company, a Corporation of New York. Filed Feb. 18, 1931. Serial No. 516,538. 8 Claims. (Cl. 94—8.)



1. A grating for use in flooring and pavements which comprises, in combination, a plurality of parallel bars each bent through a common angle with the common locus of said bends extending transversely of said bars, a series of uniformly bent strips located between and serving to connect together said bars along the major portions of their straight sections and a series of short bent strips located between and serving to connect together certain of the bent sections of said bars, said inserted short strips being bent into a shape substantially the same as that of the crimps in said uniformly bent strips.

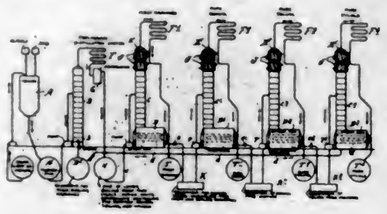
1,874,386. DOOR CHECK OR STOP. KENNETH J. TOBIN, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 21, 1929. Serial No. 408,719. 9 Claims. (Cl. 16—85.)

1. A door stop comprising an elongated flexible member, brackets securing said member to a supporting structure, one of said brackets comprising a recessed portion adapted to receive one end of said member, said latter



bracket being adjustable vertically relative to said member whereby the end of said member may be released from the recessed portion to permit replacement thereof.

1,874,387. APPARATUS FOR THE SEPARATION OF LIQUIDS HAVING DIFFERENT BOILING POINTS. BATES TORREY, Jr., Syracuse, N. Y., and GEORGE R. SANFORD, Petersburg, Va., assignors to Semet-Solvay Company, New York, N. Y., a Corporation of New York. Original application filed Nov. 13, 1922, Serial No. 600,636. Divided and this application filed Jan. 18, 1929. Serial No. 333,317. 3 Claims. (Cl. 196—106.)

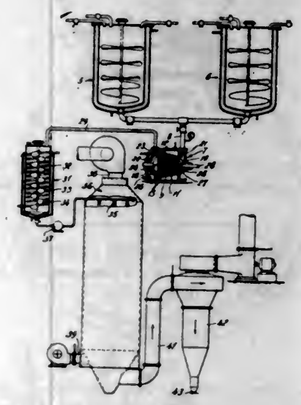


1. An organized apparatus for the continuous treatment of liquids having different boiling components comprising in combination a series of distilling columns, a still connected with each column for passage of both liquid and gas between the still and connected column, means for heating the still, means for continuously passing the liquid into the first column of said series at a point above the bottom thereof, means in the top of each column for cooling and condensing vapors of mixed liquid arising from the still, means for cooling and condensing vapors passing out of the column, a reservoir connected with each of said stills by means arranged to permit a continuous flow of liquid from the still to the reservoir whereby a supply of liquid is maintained in the reservoir, means for shutting off the flow of liquid from each still to the reservoir connected therewith, and means for forcing liquid into the succeeding column at a point above the bottom thereof.

1,874,388. PROCESS AND APPARATUS FOR MANUFACTURING SOAP. PIERCE M. TRAVIS, Ridgewood, N. J., assignor to Travis Process Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Sept. 20, 1928. Serial No. 307,321. 1 Claim. (Cl. 87—16.)

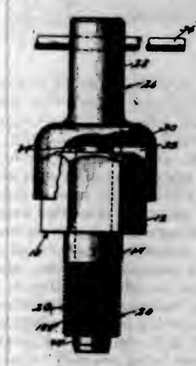
The process of manufacturing filled cake soap which comprises subjecting a mass of syrupy consistency containing the soap stock, saponifying alkali and filler to an intense disrupting and dispersing action whereby a completely saponified mass containing the materials in a fine

state of division and uniform dispersion is obtained, then spraying said mass while the materials are subtantially in said state, drying to a suitable degree, and then com-



pacting the droplets constituting the spray to form cakes whereby a homogeneously and finely filled cake soap is obtained.

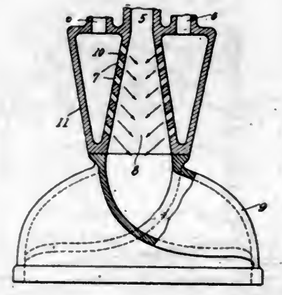
1,874,389. SELF-LOCK SCREW DEVICE. GEORGE C. TROTTER, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 6, 1930. Serial No. 500,481. 6 Claims. (Cl. 151—14.)



1. A screw having a longitudinal aperture extending completely therethrough and a threaded section at the entering end of the screw normally displaced laterally with respect to the screw axis to render the same self-locking, said aperture being adapted to receive a drift for altering the normal position of said threaded section to facilitate the turning of the screw within a work piece.

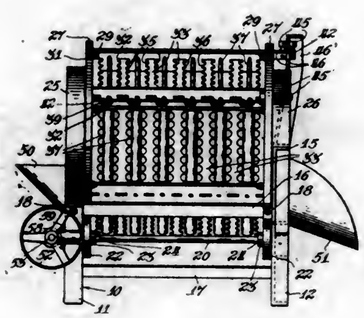
1,874,390. POWDERED FUEL BURNER. JOHN DAWSON TROUP, Purley, England. Filed July 16, 1927, Serial No. 206,171, and in Great Britain Sept. 10, 1926. Renewed Feb. 19, 1932. 1 Claim. (Cl. 110—104.)

A mixer for pulverized fuel and air, comprising a casing containing a rectangular chamber having downwardly divergent lateral walls, said chamber being provided with an inlet for fuel at its top and an outlet at its bottom, an outer chamber having downwardly convergent walls circumjacent the first named chamber and



being provided with inlets for compressed air, the walls between the chambers having a plurality of openings therethrough, and means for directing the resulting mixture in a whirling mass into a combustion chamber.

1,874,391. GRADING MACHINE. WILLIAM E. URSCHEL, Valparaiso, Ind. Filed Sept. 21, 1927. Serial No. 220,873. 18 Claims. (Cl. 209—393.)

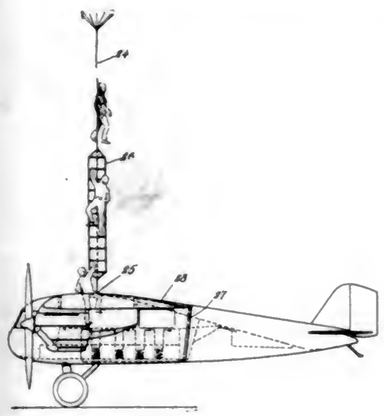


1. The combination with a frame, of an article confining member rotatively mounted thereon, and having constantly parallel members movable toward and away from one another to provide grading apertures arranged transversely of the axis of rotation of the article confining member and means for rotating said member relatively to said frame.

1,874,392. PARACHUTE. SOLOMON L. VAN METER, Jr., Hempstead, N. Y. Filed Mar. 21, 1928. Serial No. 263,561. 22 Claims. (Cl. 244—21.)

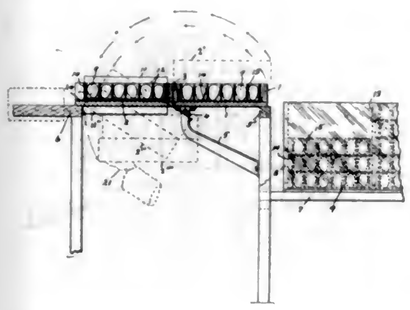
1. In aircraft, the combination, of a body provided with space for the occupants of the craft, a parachute, mechanism under the control of an occupant of the craft for releasing and forcibly ejecting said parachute clear of the craft, and a parachute load-line extending into said

body space and to which the occupants are harnessed at intervals of space along the line length, the spacing of said points of harness attachment being such that the



occupants are dragged, by the parachute, when open, one after another, from said body space to points without said body.

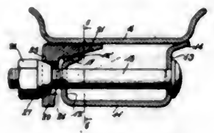
1,874,393. EGG PACKING APPARATUS. BERNARD I. VIGNAUX, Jr., and MARVIN ROBERTS, San Francisco, Calif. Filed Mar. 30, 1931. Serial No. 526,504. 9 Claims. (Cl. 226—14.)



1. Egg packing apparatus comprising a pair of frames, one adapted to receive a layer of spaced eggs, the other adapted to receive a plurality of open cartons with closing flaps, means for bringing the frame of eggs in inverted position over the frame of cartons for transferring the eggs thereto, the frame for holding the cartons so shaped as to permit sliding the filled cartons laterally therefrom, and the frame provided with a slotted bottom adapted to receive a back-folded closing flap of a carton.

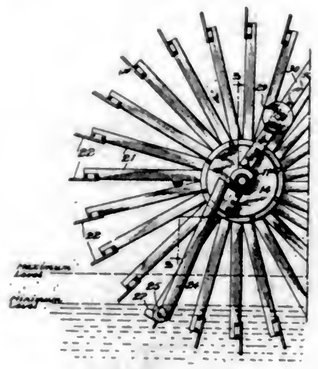
1,874,394. VEHICLE WHEEL. JAMES H. WAGENHORST, Jackson, Mich. Filed June 22, 1928. Serial No. 287,427. 7 Claims. (Cl. 301—19.)

1. A demountable rim having an integral rib projecting radially inwardly from the base of the rim, said rib having a plurality of transverse notches formed therein with undercut end walls and affording a seat for the rim between said notches, and a plurality of securing lugs having tongues fitting in said notches and provided with side



edges engaging the undercut end walls, said lugs being pressed into position in said notches to attach the lugs to the rim.

1,874,395. SEWAGE SAMPLING DEVICE. JOHN S. WATTS, East Orange, N. J. Filed Aug. 13, 1929. Serial No. 385,665. 4 Claims. (Cl. 73—21.)



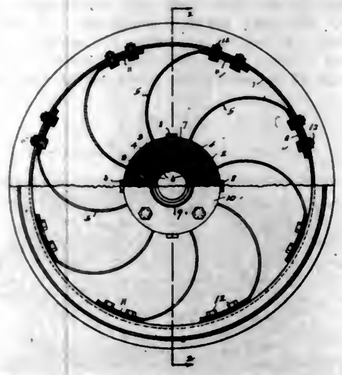
1. A device for obtaining samples from a flowing stream of liquid which comprises a rotatable member, means to be actuated by said stream for effecting rotation of said member, an arm carried by said member, a scoop pivoted to the end of said arm, interengageable means on said scoop and arm to limit rotation of said scoop, and weight means for maintaining said inter-engageable means in engagement while the scoop is carried through a predetermined arc and rotating said scoop at the end of said arc.

4. A device for obtaining samples from a flowing stream which comprises a rotatable member, means to be actuated by said stream for effecting rotation of said member, an arm carried by said member and being provided with a straight wall channel, a second straight wall channel substantially coaxial with the axis of rotation of said rotatable member and being adapted to receive liquid from said first channel when the same is in a predetermined position, a scoop pivoted to the end of said arm, and being arranged to discharge into said first channel interengageable means on said scoop and arm to limit rotation of said scoop, and weight means tending to maintain said inter-engageable means in engagement while said scoop is carried through a predetermined arc and being effective to rotate said scoop at the end of said arc.

1,874,396. RESILIENT WHEEL. WALTER E. WEAVER, Houston, Tex., assignor of one-half to Harry L. Kaufhold, Harris County, Tex. Filed Mar. 7, 1930. Serial No. 434,091. 1 Claim. (Cl. 152—50.)

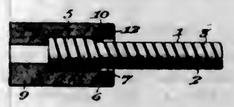
A resilient wheel including a hub having spaced peripheral inwardly converging pockets each open on a lateral side and provided with oppositely disposed grooves sub-

stantially parallel with the axis of the hub, yieldable spokes whose inner ends are fitted into each pocket, said spokes having heads which fit into said grooves, wedges fitted snugly in said pockets between the corresponding spokes, set bolts fitted through said wedges and whose



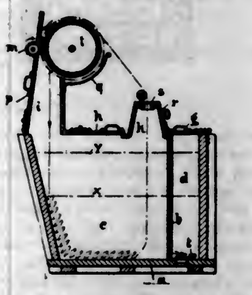
inner ends are threaded into the hub, a hub cap having an annular flange which is bolted to the hub and which closes the lateral open side of each of said pockets and abuts the outer ends of the wedges and a felly secured to the outer ends of said spokes.

1,874,397. FLEXIBLE SHAFT CASING ASSEMBLY. HARTWELL W. WEBB, Philadelphia, Pa., assignor to The S. S. White Dental Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 28, 1930. Serial No. 424,105. 3 Claims. (Cl. 285—161.)



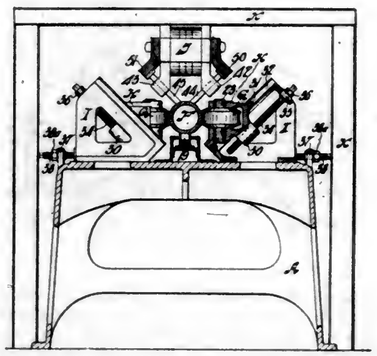
1. A flexible shaft casing formed of a plurality of wire strands, coiled into tubular form and having its terminal coils preformed and permanently set into a greater diameter than its body, whereby a shoulder is formed for cooperation with a coupling means.

1,874,398. DYE VAT FOR DYEING PIECE GOODS. HERMANN OSWALD WEISE, Zittau, Germany. Filed Sept. 4, 1929, Serial No. 390,308, and in Germany Jan. 17, 1928. 12 Claims. (Cl. 8—18.)



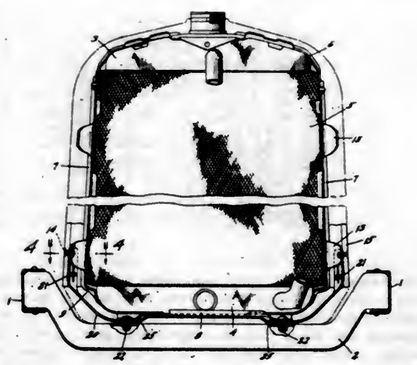
1. A dye vat for piece goods comprising separate compartments for the actual dyeing and for the chemicals, closing devices for the dyeing compartment said devices having openings, and closures for said openings including means for guiding endless lengths of goods for a short distance outside the covered vat.

1,874,399. WELDING APPARATUS. HERBERT E. WHITE, Cleveland Heights, Ohio. Filed Mar. 14, 1930. Serial No. 435,745. 2 Claims. (Cl. 219—6.)



1. A welding apparatus for seams of tubing including rollers to relate the seam faces for welding mounted to be moved at an angle of 45 degrees to contact variously sized tubing substantially across the diameter thereof.

1,874,400. RADIATOR STRUCTURE. JAMES A. WHITE, Lockport, N. Y., assignor to Harrison Radiator Corporation, Lockport, N. Y., a Corporation of New York. Filed Dec. 2, 1929. Serial No. 411,045. 3 Claims. (Cl. 180—68.)

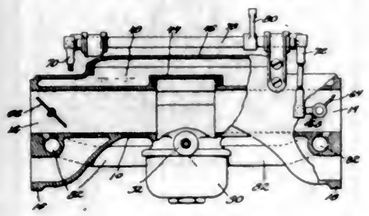


3. In a radiator structure for motor vehicles, a shell through which the radiator structure is mounted on the vehicle, a core unit enclosed within and carried by the shell, and a flexible but inextensible tie connection between the bottom of the core and the shell to steady the core and hold it against movement in a direction transverse to the face of the core while permitting movement in other directions.

1,874,401. CHARGE FORMING DEVICE. CHARLES E. WILLIAMS, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 20, 1923. Serial No. 613,956. 1 Claim. (Cl. 123—52.)

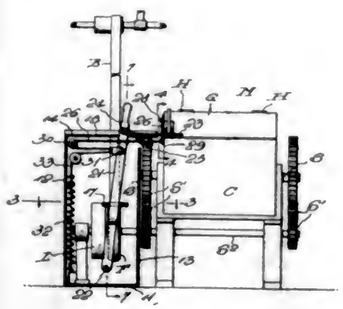
A carburetor having an approximately horizontal passage constituting a mixing chamber and adapted to de-

liver fuel mixture from its ends to respective cylinder blocks of an internal combustion engine, a fuel reservoir positioned to deliver fuel to said mixing chamber, means for supplying fuel from said reservoir and air to said chamber approximately midway thereof, a single fuel jet



supply means discharging into said chamber and supplying fuel to both said blocks, two throttle valves positioned one at each end of said chamber, means for actuating said valves simultaneously and an equalizing passage connecting the ends of said chamber outside the throttle valves.

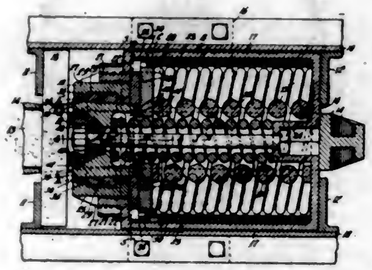
1,874,402. COVER-LOCKING AND DRIVE-CONTROLLING MEANS FOR MIXING AND ANALOGOUS MACHINES. FRIEDRICH WINDECKER, Fort Lee, N. J. Filed Apr. 7, 1930. Serial No. 442,330. 5 Claims. (Cl. 192—135.)



1. In combination with a machine having a guard movable to open and closed positions, and driving means for said machine having a control lever; connecting means between said lever and said guard for moving the latter to closed position when said lever is moved toward machine-driving position, and means independent of said connecting means and connected with said lever for locking said guard in closed position when said lever reaches machine-driving position, said locking means being releasable by movement of said lever to machine-stopping position.

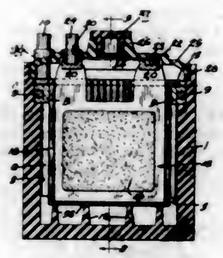
1,874,403. FRICTION SHOCK ABSORBING MECHANISM. ALBERT P. WITHALL, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 10, 1928. Serial No. 304,924. 3 Claims. (Cl. 213—24.)

3. In a friction shock absorbing mechanism, the combination with a spring cage open at one end and having spaced side wall members at said open end inset from opposite sides of the cage, said inset wall members forming interior retaining shoulders at their inner ends; of a friction shell telescoped within the open end of the cage and being confined against lateral displacement and guided for movement lengthwise of the mechanism between said side walls; interengaging means on said side wall members and shell holding said shell against vertical displacement; abutment means on the cage cooperating with the inner end of the shell to limit longitudinal movement of the shell and cage with respect to each other to less than the full compression stroke of the mechanism; means for anchoring the shell to the cage, including interior liners detachably secured to opposed side walls of the shell, said liners having right angular,



laterally outwardly projecting flanges at their rear ends overhanging the inner end of the shell and projecting laterally outward thereof and having shouldered engagement at their outer ends with the shoulders of the cage to limit outward movement of the liners and the shell; friction shoes having sliding frictional engagement with the liners; a wedge block having wedging engagement with the shoes; and spring resistance means within the cage yieldingly opposing inward movement of the shell and shoes.

1,874,404. STORAGE BATTERY. WILLIAM H. WOOD, South Euclid, Ohio. Filed Dec. 6, 1928. Serial No. 324,234. 8 Claims. (Cl. 136—80.)



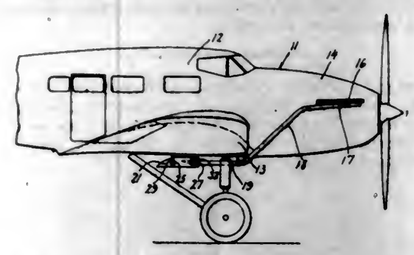
1. In a lead type storage cell, in combination, a receptacle having spaced parallel side walls and spaced recessed end walls, negative plates located in said receptacle in spaced relation parallel to said side walls, steadying and supporting bars located in said recesses and operatively engaging the vertical margins of said negative plates, one at least of said bars consisting of metallic lead and having a projecting terminal post, a positive plate located between each pair of negative plates and extending vertically above said negative plates, a single metallic member to which all said positive plates are secured, said member being located above said negative plates, means supporting said positive plates independently of said negative plates, separators located between adjacent plates, and a cover for the cell.

1,874,405. VALVE SEAT. WILLIAM M. WOOD, Saint John, New Brunswick, Canada. Filed Mar. 14, 1930. Serial No. 435,875. 3 Claims. (Cl. 251—167.)



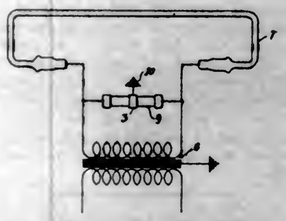
3. A gate valve including a valve body presenting an annular valve seat surface sloping upwardly from the outer to the inner circumference thereof, said seat surface being yieldable at the higher edge and nonyieldable at the lower edge.

1,874,406. EXHAUST SILENCER. THEODORE P. WRIGHT, Port Washington, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,667. 2 Claims. (Cl. 244—31.)



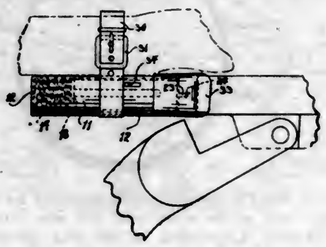
1. In an aerial vehicle having a fuselage, supporting wings, a motor and an exhaust conduit for conveying exhaust gases and sound waves away from the motor, a sound reflector adjacent to and overlying the outlet end of said exhaust conduit, said sound deflector being formed substantially as one half of a hollow cylinder with its forward end open and with the upper surface curving gradually downward and backward and said deflector being positioned with its open side facing downward and away from said fusealge.

1,874,407. ELECTRICAL PROTECTIVE DEVICE. FREDERICK W. YOUNG, Little Neck, N. Y., assignor to Rainbow Light, Inc., Long Island City, N. Y., a Corporation of New York. Filed Sept. 5, 1928. Serial No. 304,097. 7 Claims. (Cl. 176—124.)



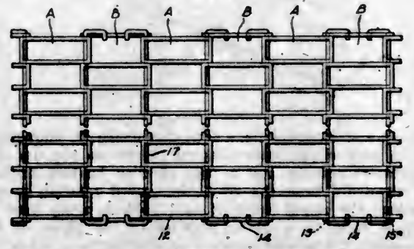
1. In an electrical circuit for electrical discharge tubes, the combination of a transformer having a primary winding for connection with a source of electrical energy, a secondary winding to which the tube is connected, and a connection across the secondary circuit including means normally maintaining said circuit open, and operating to close the connection and short-circuit the secondary circuit upon continued exposure to an abnormal voltage.

1,874,408. SHOTGUN LOADER. ANDREW ZICHY, New York, N. Y. Filed Mar. 4, 1932. Serial No. 596,697. 10 Claims. (Cl. 42—87.)



1. A shot gun loader embodying therein two connected cylindrical shell containers, spring actuated means within each container and slidable in relation thereto, a latch mechanism operative upon said spring actuated means respectively, a latch controlling pin slidably mounted in relation to said containers and operative upon said latch mechanism, a spring operative upon said latch controlling pin having a normal tendency to position said pin forwardly of said containers, and means whereby said container may be attached to the wrist.

1,874,409. RECTANGULAR LINK CONVEYER. JOHN C. ANDERSON, Keyport, N. J. Filed May 28, 1929. Serial No. 366,599. 5 Claims. (Cl. 198—193.)

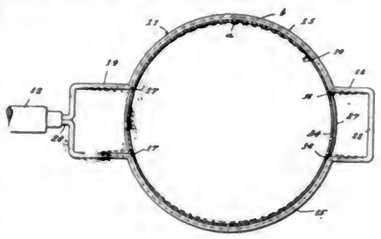


1. A conveyer belt fabric comprising a plurality of assembled links, each link consisting of a vertically open integral rectangle, the four sides of which are vertical, the longer sides of the rectangle having holes passing through the end portions thereof inwardly of its opposed parallel ends, and means passing through the holes for connecting said rectangles, the holes in the sides of said rectangles being so arranged that the said connecting means holds the rectangles with the sides thereof in overlapping relation, and the top edges of the rectangles in a common plane, thereby providing longitudinally continuous supporting edges when the fabric is flat.

1,874,410. STRAINER. CHARLES ANDREWS, Rockford, Ill., assignor to The Washburn Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 9, 1930. Serial No. 474,231. 5 Claims. (Cl. 210—161.)

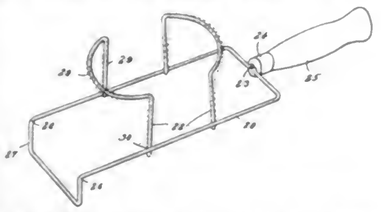
1. In a strainer comprising a bowl having a circular supporting rim, a one-piece wire supporting frame bent to provide complemental arcuate portions at opposite sides thereof defining a ring for detachable reception of the rim of the bowl, and, at diametrically opposite sides of the ring, a projecting substantially U-shaped toe portion and a projecting substantially U-shaped heel portion

to rest on the rim of a suitable receptacle, the free ends of the wire of said frame being bent outwardly at the back of the heel portion, and a handle for said frame having the free ends of said wire entered therein, whereby to hold the frame intact and provide connection between the handle and frame, said U-shaped toe and heel portions



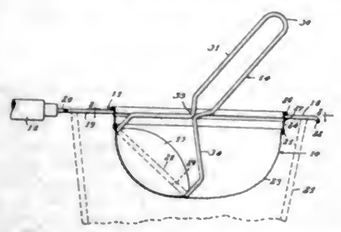
serving not only to provide broad supports for the bowl for steady rest on the receptacle, but also permitting a certain amount of spreading of the ring defined by the complemental arcuate portions, the sides of the U-shaped portions being elongated and having the desired resilience, whereby said ring is adapted to spread to admit the rim of the bowl and thereafter grip the same frictionally.

1,874,411. STRAINER. CHARLES ANDREWS, Rockford, Ill., assignor to The Washburn Company, Worcester, Mass., a Corporation of Massachusetts. Filed June 26, 1931. Serial No. 546,934. 2 Claims. (Cl. 248—30.)



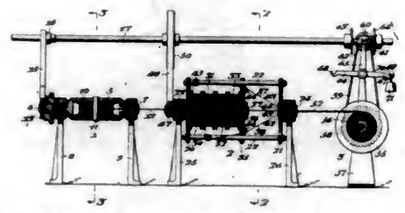
1. In a strainer having a bowl and a circular supporting rim, a supporting frame adapted to rest on the rim of a suitable receptacle, and a pair of wire holders projecting upwardly from the frame in spaced relation to one another, the upper ends of said holders being bent to arcuate form in a plane parallel to the plane of the supporting frame and together approximating a circle for reception of the rim of said bowl thereon, whereby to suspend the bowl in elevated relation to the supporting frame.

1,874,412. FOOD PRESS. CHARLES ANDREWS, Rockford, Ill., assignor to The Washburn Company, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 7, 1931. Serial No. 573,559½. 10 Claims. (Cl. 146—172.)



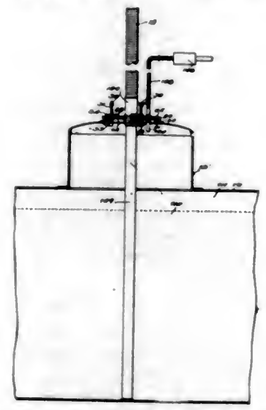
1. A food press roller of elongated substantially ellipsoidal form, round in cross-section from end to end thereof and conformed peripherally so as to fit the inside curvature of a substantially semi-spherical food press bowl in any position of the roller therein, whereby to roll in the bowl on the natural arc thereof.

1,874,413. METHOD OF MAKING SHAFTING. ROBERT C. ANGELL, Prince Bay, N. Y., assignor to The S. S. White Dental Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 28, 1928. Serial No. 265,242. 2 Claims. (Cl. 117—20.)



1. The herein described process of continuously fabricating flexible shafting which consists in progressively twisting successively delivered portions of a composite core to thereby relieve the initial pressure engagement of the parts thereof, and concurrently winding thereon a superimposed layer of closely spaced wire coils in close pressure engagement therewith.

1,874,414. FLUID CONTROL APPARATUS. RUDOLPH J. ANSCHICKS, Chicago, Ill., assignor to Protectoseal Company of America, Chicago, Ill., a Corporation of Illinois. Filed Aug. 24, 1929. Serial No. 388,160. 3 Claims. (Cl. 220—24.)

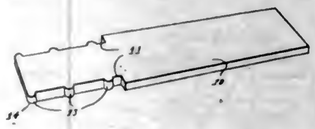


1. The combination with a tank having a filler opening and a permanent cover for said opening of a chain fastened to the under side of the cover and to the inside wall of the tank said chain being of a length permitting the cover to be moved to clear said opening, a temporary closure member operable to replace said cover and seal said opening, said closure member comprising a plate having a recess on its under side and a block of spongy material positioned in and filling said recess, said chain being embedded in said block when the closure member is in position.

1,874,415. HINGE AND METHOD OF MAKING THE SAME. JAMES T. ATWOOD, Rockford, Ill. Filed Dec. 21, 1928. Serial No. 327,506. 9 Claims. (Cl. 29—11.)

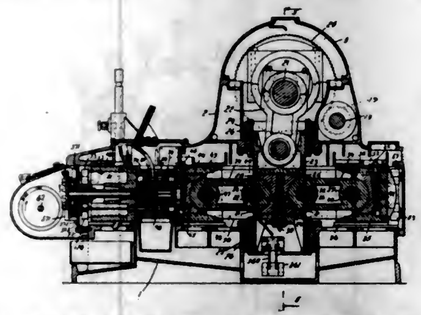
1. The method of making the outside member of a covered joint hinge consisting in providing a flat blank

of the desired thickness destined to serve as the body portion, then cutting away stock from the opposed edges thereof at one end to provide recesses of a predetermined depth, then curling this end of the blank in any suitable manner to provide a curved cover portion, providing separate plates of the desired thickness and hardness destined to serve as top and bottom cover flanges rigid



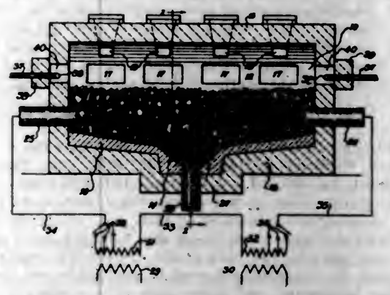
and strong enough to serve as the sole pintle supports, and finally fastening said pair of plates by their marginal edge portions to the opposed edges of the recessed and curled end of the blank to serve as top and bottom cover flanges between which the knuckle of an inside hinge member is adapted to be received within the cover portion on a pintle mounted in said flanges.

1,874,416. TOOL HOLDER FOR NUT MAKING APPARATUS. SAMUEL W. AVIS, Greenwich, Conn., and MALCOLM H. AMES, Waltham, Mass., assignors to Russell, Burdsall & Ward Bolt & Nut Company, Port Chester, N. Y., a Corporation of New York. Filed Mar. 19, 1930. Serial No. 437,081. 2 Claims. (Cl. 10—78.)



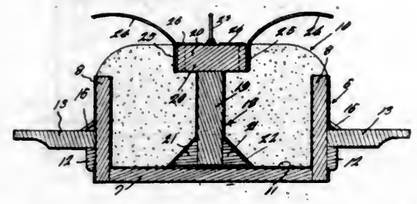
1. In a nut making machine, a front slide, a center slide, said slides being reciprocal in independent paths, tool holders carried by said slides, a rear slide connected to said front slide, a vertical slide arranged between said rear slide and said center slide and links connecting said rear slide and center slide to said vertical slide to reciprocate them in opposite directions.

1,874,417. ELECTRIC FURNACE. THADDEUS F. BAILY, Alliance, Ohio. Filed Aug. 28, 1929, Serial No. 388,982. Renewed June 14, 1932. 19 Claims. (Cl. 13—23.)



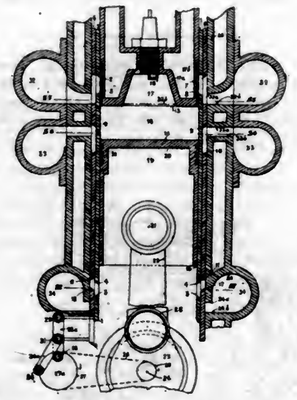
1. An electric furnace having an elongated, horizontal chamber adapted to receive a charge containing carbon, and an electrode at each end of and extending only slightly into the furnace arranged to contact with the charge whereby substantially the entire charge becomes an electric resistor before becoming molten.

1,874,418. SANITARY CHICKEN FEEDER. JOHN F. BANTZ and RAYMOND SMITH, Perrysville, Ind.; said Smith assignor to said Bantz. Filed May 26, 1931. Serial No. 540,180. 4 Claims. (Cl. 119—61.)



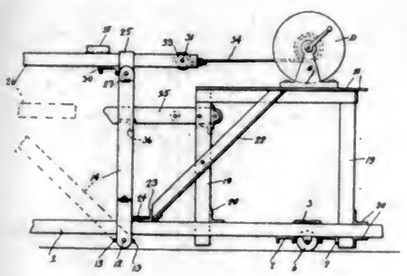
1. In a chicken feeder of tthe class described, a receptacle constructed of non-corrosive materials, and a removable partitioning divider arranged in said receptacle, said divider being constructed to function as a plunger, and including oppositely disposed outstanding plate sections co-operating with the plunger in defining an overhanging roof for the feeder.

1,874,419. INTERNAL COMBUSTION ENGINE. JEAN A. H. BARKEIJ, Los Angeles, Calif. Filed Dec. 29, 1926. Serial No. 157,845. 26 Claims. (Cl. 123—76.)



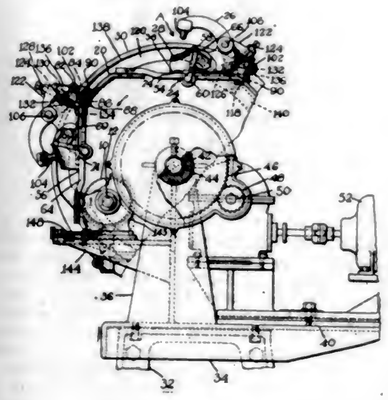
1. An internal combustion engine having a cylinder, with exhaust and inlet ports above each other, two cylindrical sleeves, each having a single inner and outer diameter over their entire length, slidable in said cylinder, each provided with ports to establish communication between the atmosphere and the space in the inner one of said sleeves, a reentrant head and a reciprocating piston in said inner sleeve, the inner sleeve provided with a single port serving as exhaust and inlet port, the outer sleeve provided with two ports one above the other, one serving as an exhaust port the other as an inlet port, means to move said sleeves with a single harmonic motion with relation to said cylinder ports and said head so that communication between the atmosphere and the combustion space in the inner sleeve is made and cut off during the appropriate phases of tthe fourstroke cycle and further synchronizing with the position of the piston.

1,874,420. VEHICLE JACK. WILLIAM L. BARROWMAN and GUYE L. HULL, Albuquerque, N. Mex. Filed Nov. 15, 1930. Serial No. 495,999. 3 Claims. (Cl. 254—91.)



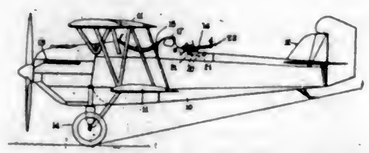
1. A vehicle jack comprising a pair of spaced parallel base bars, casters mounted on the base bars for supporting same in elevated position, pairs of hangers fixed on the base bars at longitudinally spaced points and in spaced relation to the ends of the base bars, a shaft supported, at its opposite end portions, in each pair of the hangers, a pair of standards mounted for swinging movement on the end portions of each shaft, a pair of spaced, parallel vehicle engaging beams, pairs of hangers fixed to the beams at longitudinally spaced points, a shaft extending transversely through the upper end portions of each pair of the standards, the hangers on the beams being journaled on the end portions of the second named shafts, and means engageable with one pair of the standards for releasably retaining the standards and the beams in operative position.

1,874,421. HEEL GROOVING MACHINE. LEWIS J. BAZZONI, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 21, 1929. Serial No. 415,867. 29 Claims. (Cl. 12—42.)



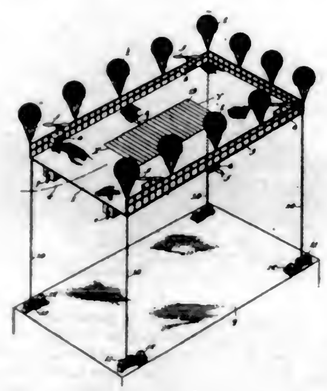
1. A machine for operating upon shoe parts having, in combination, slot-forming means, and heel-carrying means comprising one or more heel carriers, said slot-forming means and said heel carrying means being constrained for movement relatively to each other in an orbital path to form heel-cover-receiving slots in heels of shoes.

1,874,422. GUN MOUNT. REX B. BEISEL, Tulsa, Okla., assignor to Curtiss-Aeroplane & Motor Company, Inc., a Corporation of New York. Refiled for abandoned application Serial No. 268,907, filed Apr. 10, 1928. This application filed Apr. 3, 1930. Serial No. 441,357. 13 Claims. (Cl. 89—40.)



1. A gun mount for aircraft including a gun carriage adjustable in rectangularly opposed planes in its relation to the aircraft, and unitary foot-operated mechanism associated with and by means of which the gun carriage is adjusted in either or both said planes.

1,874,423. AIRCRAFT LANDING. HARRY CLAYTON BELLEVILLE, Oakland, Calif. Filed June 22, 1929. Serial No. 372,882. 10 Claims. (Cl. 244—2.)



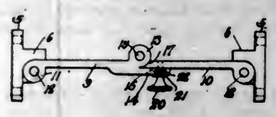
2. A braking device for airplanes comprising a row of members, means for magnetizing said members, the magnetism of said members at any one time progressively increasing from the start of the row to the end, a member carried by an aircraft and being attracted by said row of members for bringing the aircraft to a gradual stop.

4. An aircraft landing field comprising a large supporting surface, lighter than air members carrying said support propellers for aiding in lifting the surface and being independently controlled for compensating for wind pressures, whereby the surface is held against drifting.

1,874,424. COLLAPSIBLE BRACKET. EDWARD F. BENSON, Woodcliff on Hudson, N. J. Filed Sept. 21, 1928. Serial No. 307,381. 2 Claims. (Cl. 278—49.)

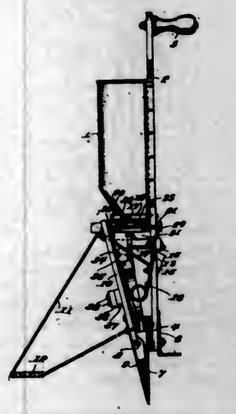
1. A collapsible bracket comprising a pair of arms having bearing means formed at each end, attaching plates at the outer ends of the arms also having bearing means thereon, pins at the ends of the arms for pivotally connecting the inner ends thereof to each other and for pivotally connecting the outer ends of the arms to said plates, an extension formed at the inner end of one of the arms for overlapping the other of said arms, a thumb screw

threaded through the extension and the overlapped arm, a pin disposed transversely of the screw and disposed at the side of the extension opposite from the head of the screw whereby to prevent separation of the screw from



the extension and a recess formed in the extension to accommodate the transverse pin to enable the close engagement of the extension with the overlapped arm to form a stop for said arm.

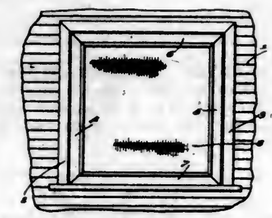
1,874,425. HAND FERTILIZER APPLIER. RUBEN S. BERGEN, Scandinavia, Wis., assignor to Plant Food Appliance Company, Waupaca, Wis., a Corporation of Wisconsin. Filed July 20, 1931. Serial No. 552,029. 2 Claims. (Cl. 111—92.)



1. A hand operated fertilizer depositor, comprising a pair of relatively movable members, each provided with cooperating pairs of earth penetrating jaws, and said jaws comprising each a pair of members which are hingedly connected, spring means influencing the members away from each other, to close the jaws, a fertilizer chamber on one of the members, a slotted plate closing the lower outlet end of the chamber, a channeled valve member slidable beneath the plate and having an opening therein whose ends are flanged and which opening is normally out of alinement with the opening in the plate, said valve being movable through one of the members, and a yoke connected with the valve and connecting the valve with the other member, said valve designed to register with the opening in the plate when the members are moved relatively with respect to each other in one direction, a chute to register with the valve when in its normal position, and said chute comprising two sections, each of which communicate with the respective jaws.

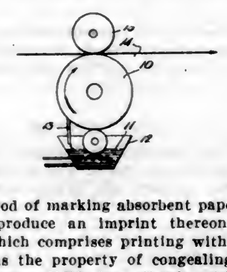
1,874,426. HINGE. KARL J. BERGGREN, Spokane, Wash. Filed Mar. 12, 1929. Serial No. 346,334. 3 Claims. (Cl. 16—172.)

1. In a hinge, a flat supporting hinge plate adapted to be vertically anchored to a fixed part and having a portion projecting outwardly and said outwardly projecting portion having a slot opening upwardly through said plate, and a flat swinging hinge plate adapted to be vertically attached to a swinging part and projecting outwardly therefrom and such projecting part having a slot opening downwardly through said plate adapted to span said supporting plate with the bights of said slots in bight hinged supported engagement for relative movement of said plates about a substantially vertical axis, said plates



being in lateral abutting relation when the swinging part is closed and in substantially Greek Cross relation when the swinging part is open substantially ninety degrees, and said plates being identical in size and shape and therefore interchangeable.

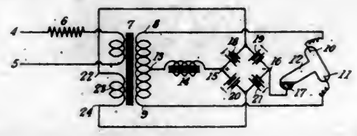
1,874,427. ART OF TRANSLUCENT PRINTING. HOWARD J. BILLINGS, South Acton, Mass., assignor to Arthur D. Little, Incorporated, Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 30, 1929. Serial No. 389,434. 15 Claims. (Cl. 101—426.)



1. The method of marking absorbent paper and the like materials to produce an imprint thereon simulating a water mark which comprises printing with a hot, molten fluid which has the property of congealing at so high a temperature as to solidify immediately without spreading at temperatures within the range of room temperatures.

15. A sheet of absorbent paper having a translucent imprint thereon, simulating a water mark, the imprint comprising congealed "hard wax" impregnated in the paper and confined within well defined outlines.

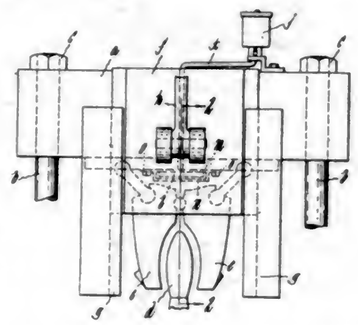
1,874,428. ALTERNATING CURRENT VAPOR ELECTRICAL DEVICE. LESTER F. BIRD, Newark, N. J., assignor to Hanovia Chemical and Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed Oct. 22, 1929. Serial No. 401,599. 1 Claim. (Cl. 176—13.)



In combination with a vapor or gas filled electric device operating on alternating current, a circuit containing a transformer having the terminals of its secondary winding connected to the anodes of the device, a reactor connected to a mid-point of the secondary winding, and a rectifying device connected in series with said reactor and the cathode of the gas filled electric device, the

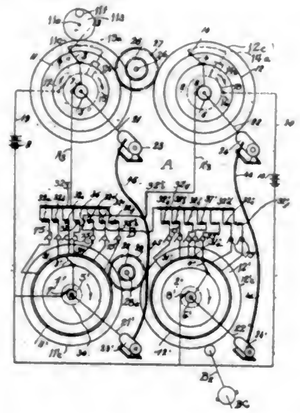
negative terminal of the rectifying device being connected to the cathode and the positive terminal connected to the reactor, said rectifying device comprising a bridge formation of four dry contact rectifiers, the junctions of the rectifying device intermediate the positive and negative terminals being connected to an independent winding on the transformer.

1,874,429. COUNTER MACHINE WITH FLANGE PLATE WAXING MEANS. CECIL JAMES BLAKE, Manchester, N. H., assignor to J. Hammond Stewart, Lynn, Mass. Filed Oct. 31, 1930. Serial No. 492,440. 9 Claims. (Cl. 12—66.)



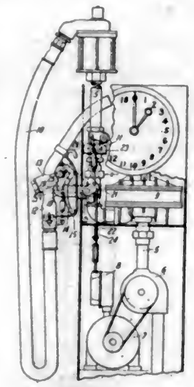
1. The combination with counter molding instruments including a flange turning presser, of means for automatically delivering lubricant between the contacting faces of said presser and that portion of the counter which is engaged thereby.

1,874,430. SYNCHRONIZED REMOTE CONTROL SYSTEM. ANDRÉ BLONDEL, Paris, France. Filed Apr. 26, 1928, Serial No. 273,073, and in France Apr. 27, 1927. 8 Claims. (Cl. 172—239.)



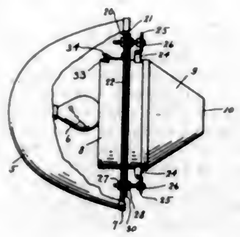
1. In a synchronizing remote control system having a transmitting station, a plurality of receiving stations each comprising a device to be set from said transmitting station and driven by a telecontrol motor, the combination of, a plurality of synchronized constant speed rotatable elements (1, 2, 1', 2') at each of said stations, master controlling (11, 12) and controlled (11', 12') elements for said rotatable elements, contact means (3, 13—4, 14) for periodically emitting current impulses of very short duration associated with said transmitting station, distributing means (31, 31a—31', 31'a) for receiving said current at said receiving stations and relay means (32a, 32b—32'a, 32'b) associated with said distributing means for automatically effecting starting, progressive acceleration, electrical and mechanical braking, stopping and reversing of the driving motor of each of said devices to be set.

1,874,431. LIQUID DISPENSING APPARATUS. ERIC H. BRADLEY, Dayton, Ohio, assignor to National Pumps Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 20, 1931. Serial No. 531,461. 4 Claims. (Cl. 221—95.)



1. In a liquid dispensing apparatus, a discharge conduit including a flexible hose, a nozzle on the delivery end of said hose having a valve, a lever for operating the valve, a guard for said lever secured to the nozzle, said lever and said guard having alined openings, and a support for said nozzle adapted to extend through the openings in said guard and said lever and to have supporting engagement therewith.

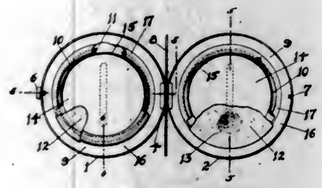
1,874,432. HEADLIGHT ATTACHMENT. PAUL E. BRICKER, Michigan City, Ind. Filed Aug. 7, 1931. Serial No. 555,835. 1 Claim. (Cl. 240—41.3.)



In combination with a head lamp including a lamp bulb, a cylinder of much smaller diameter than the front end of the head lamp and having both ends open, a mounting encircling the cylinder at substantially the middle portion of the cylinder and having its periphery connected with the front of the head lamp for supporting the cylinder in the head lamp with its inner end close to the bulb, a pair of lenses in the cylinder each formed with a flat outer face and a convex inner face, the flat faces being arranged adjacent the ends of the cylinder, a conical member having its large end connected to the outer end of the cylinder with its small end open for

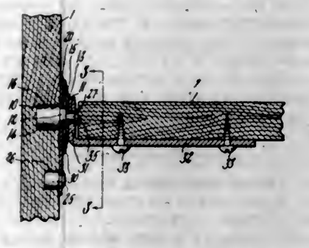
preventing glare when the rays of light are passing through the lenses, means for longitudinally adjusting the cylinder in the mounting, and said mounting having a plurality of window forming openings therein, said openings being arranged in a substantially annular row in the mounting, whereby some of the rays of light from the bulb will pass through said openings.

1,874,433. VANITY CASE. GEORGE L. BRIGGS, Brooklyn, N. Y. Filed Dec. 20, 1928, Serial No. 329,261. Renewed Sept. 30, 1930. 19 Claims. (Cl. 132—83.)



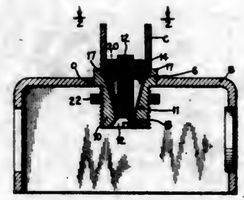
1. In a vanity case structure and in combination, a holding member substantially geometrically regular in outline and having axes of different dimensions and a held member substantially geometrically regular in outline and having axes of different dimensions, said holding and held members being relatively rotatable, a recess in said holding member for receiving the held member, side walls for said recess and said held members, the overall dimension between the side walls of the held member, when measured along one of its axes, being substantially equal to the overall distance between the side walls of said recess when measured along one of its axes, the side walls of the holding member being reversely beveled adjacent either end of their said axis to define inwardly projecting shoulders, and the side walls of the held member being similarly beveled adjacent either end of their said axis, so that upon the rotation of the held member within said recess the shoulders of the holding member and the beveled side walls of said held member interengage to lock said members together.

1,874,434. CHAIR AND FRICTION HINGE THEREFOR. ARTHUR C. BROWN, Wakefield, Mass., assignor to Heywood-Wakefield Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 11, 1929. Serial No. 345,992. 3 Claims. (Cl. 287—1.1.)



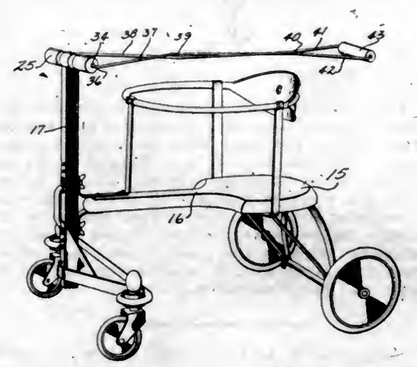
2. In combination, a pair of members, a pivot element carried by one of said members, a flat wear plate outwardly of which said pivot element projects, means for holding said plate against rotation relative to said one member, a dished friction plate carried by said element and rotatable with its peripheral margin in frictional engagement with said wear plate, and means for fixing said friction plate against rotation relative to the other of said members.

1,874,435. SUPPORTING DEVICE. STEPHEN N. BUCHANAN, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed July 10, 1930. Serial No. 467,016. 5 Claims. (Cl. 247—22.)



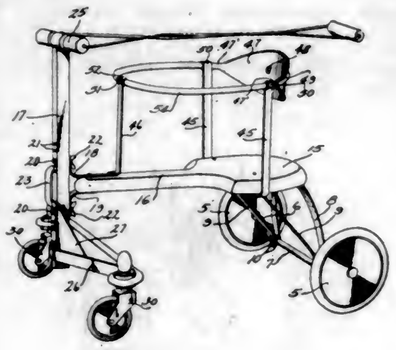
1. A supporting device for securing an outlet box to a bracket having parallel members spaced from each other comprising a supporting member, means to anchor the supporting member to the bracket, means to clamp an outlet box upon the bracket, and projections upon the supporting member engaging the parallel members of the bracket to prevent spreading thereof.

1,874,436. TOY VEHICLE. ROMAN B. BUKOLT, Stevens Point, Wis. Original application filed Oct. 19, 1928, Serial No. 313,414. Divided and this application filed Oct. 19, 1929. Serial No. 400,810. 5 Claims. (Cl. 280—47.)



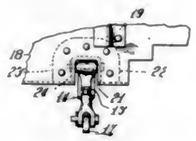
1. In a device of the character described, the combination with a vehicle having a permanent handle mounted in position to be engaged by a person operating the vehicle while riding thereon and an extension handle detachably engaged with the permanent handle at the ends of its grip portion, whereby to be adapted to manipulate said vehicle without interfering with the use of the grip portion of the permanent handle.

1,874,437. TOY VEHICLE. ROMAN B. BUKOLT, Stevens Point, Wis. Original application filed Oct. 19, 1928, Serial No. 313,414. Divided and this application filed Oct. 28, 1929. Serial No. 402,899. 4 Claims. (Cl. 155—22.)



3. In a device of the character described, the combination with a seat and a set of supporting brackets, of a wire hoop mounted in said brackets to encircle a portion of said seat, and a back member formed to engage said wire at a plurality of points and wholly supported therefrom.

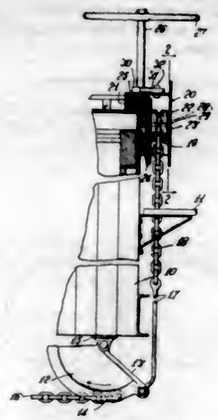
1,874,438. METHOD OF AND MEANS FOR APPLYING HAND BRAKES TO RAILWAY CARS. RICHARD W. BURNETT, Chicago, Ill. Filed July 25, 1927. Serial No. 208,283. 6 Claims. (Cl. 74—121.)



1. The combination with the end sill construction of a railway car a portion of which is provided with a recess, a brake rigging, and hand brake mechanism including winding mechanism adapted to be secured to the car end wall, a power transmitting member adapted to rock through said recess in said end sill, flexible connectors for connecting the power transmitting member to the winding mechanism and to the brake rigging respectively, of means for attaching said power transmitting member to the end sill of the car and for reinforcing said end sill adjacent said power transmitting member.

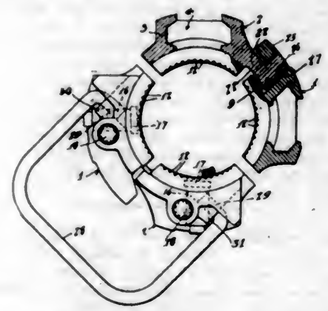
1,874,439. HAND BRAKE FOR RAILWAY CARS. RICHARD W. BURNETT, Chicago, Ill. Original application filed Feb. 19, 1925, Serial No. 10,248. Divided and this application filed Sept. 13, 1928. Serial No. 305,747. 2 Claims. (Cl. 74—112.)

2. A hand brake for a railway car comprising a housing, formed with a vertical portion for attachment to a vertical portion of the car and formed with an angularly disposed portion at the upper end of said housing which projects over the upper edge of the car, a horizontal shaft journaled in the housing below the upper edge of the car, a winding drum secured to said shaft and formed with a winding surface, the center line of which is in a single plane, means connecting said drum with the brake rigging underneath the car, and means for operating the drum comprising a gear on said shaft, a vertical shaft



journaled in the angularly disposed portion of said housing, a pinion on the vertical shaft meshing with said gear and a hand wheel secured to said vertical shaft.

1,874,440. PIPE SLIP. JOHN CHARLES BUSH, Aliquippa, Pa., assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 2, 1930. Serial No. 499,512. 5 Claims. (Cl. 24—263.)



1. In a device of the class described, the combination of a pair of slip bodies, tongues projecting from the adjacent edges of said slip bodies, a pair of spaced engaging lugs projecting transversely of the adjacent edge on one of said tongues, a pair of complementary spaced recesses formed in the tongue of the other said slip body to receive said lugs, and a slip liner secured to the latter said slip body in position to engage with the tongue of the first said slip body and hold the slip bodies from collapsing inwardly.

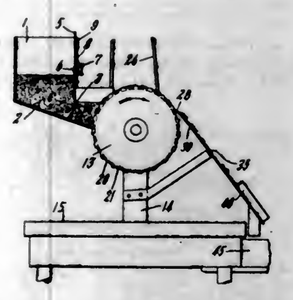
1,874,441. ARBOR FOR SHELL REAMERS. RICHARD T. BUTLER, Minden, La. Filed Oct. 7, 1929. Serial No. 398,030. 1 Claim. (Cl. 77—72.)

An arbor comprising a body portion having a bore, a tapered shank extending into the bore, said body portion having cut out portions formed in one edge thereof, defining fingers, a sleeve mounted on the shank and having cut away portions at its ends providing extensions, a tool fitted on the tapered portion of the shank and having cut out portions to receive the extensions at one end of the sleeve, said sleeve having an elongated opening, a screw disposed within the elongated opening and secured in the shank, said sleeve having cut out portions disposed between the extensions at one end of the sleeve, said shank having an opening registering with the last men-



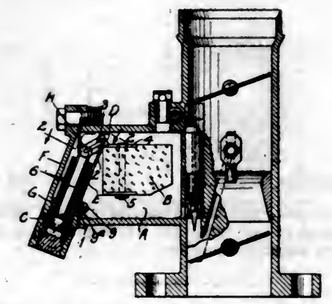
tioned cut out portions, said registering openings of the shank and sleeve adapted to receive a key to wedge the sleeve and tool longitudinally of the shank to disconnect the tool from the shank, and the peripheries of the body portion, sleeve and tool being flush.

1,874,442. MECHANISM FOR SORTING BUTTONS OR THE LIKE. FRANK S. CALLOWAY, Fairhaven, Mass., assignor to Atlas Tack Corporation, Fairhaven, Mass., a Corporation of New York. Filed Jan 21, 1930. Serial No. 422,334. 3 Claims. (Cl. 79—17.)



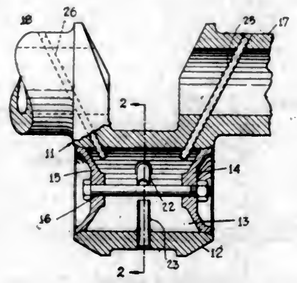
1. In combination, a button receptacle having an open side, a drum having a periphery closing said open side, said periphery having spaced circumferential ribs thereon recessed at intervals to form button-receiving seats for holding buttons positioned either side up, means for rotating said drum in a direction to lift buttons in said seats from said receptacle, a downwardly inclined plate having fingers at its upper edge riding between said ribs to lift the buttons from said seats when said seats are moving downwardly, and a guide strip on said plate inclined downwardly laterally thereof for catching and conducting laterally from said plate only those buttons which are passing downwardly thereover right side up.

1,874,443. FLOAT MECHANISM FOR CARBURETORS. WILLIAM C. CARTER, Flint, Mich. Filed June 11, 1930. Serial No. 460,872. 2 Claims. (Cl. 137—104.)



1. A float mechanism for carburetors, comprising a float chamber, a float in said chamber that is adapted to rise and fall as the level of the fuel in said chamber varies, a relatively long needle valve for governing the admission of fuel to said chamber, arranged at one side of said float and disposed at a slight angle to the vertical, a long inclined guide in which said needle valve is reciprocatingly mounted, a rigid arm on said float that projects laterally and downwardly from the upper end of same, a pivotal connection between said arm and the upper end of said needle valve, a support projecting upwardly from the lower end of the float chamber and provided at its upper end with a fulcrum for the float arm, and a connection between the lower end of said support and the part of the float chamber that carries said support, constructed so as to permit the upper end of the support to move sufficiently to accommodate the arm through which the float arm swings when the float rises and falls.

1,874,444. OILING SYSTEM. CARL GUSTAF CARVELLI, Buffalo, N. Y., assignor to Wright Aeronautical Corporation, a Corporation of New York. Filed Mar. 14, 1931. Serial No. 522,578. 6 Claims. (Cl. 184—6.)

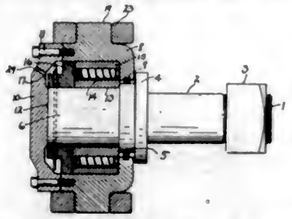


1. In an internal combustion engine, a crankshaft having formed therein an oil chamber, said chamber having formed in its outer wall an oil hole, and a tube projecting inwardly from said oil hole through which oil is delivered under pressure to said chamber.

1,874,445. SELF-ALIGNING PITMAN HEAD. DICK K. CASON, Jr., Houston, Tex. Filed Mar. 23, 1927. Serial No. 177,657. 10 Claims. (Cl. 308—72.)

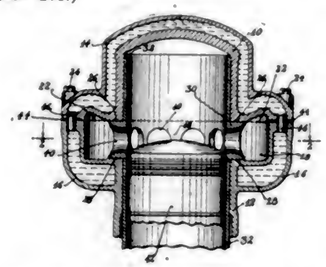
1. A device of the character described including a wrist pin, a seat at one end thereof, a bearing on said seat,

a housing enclosing said bearing, a pitman, a yoke on said pitman, a pivotal connection between said yoke and said



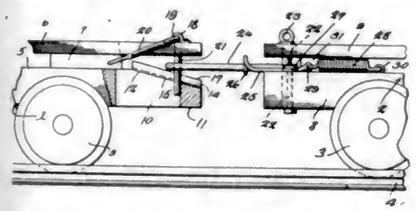
bearing housing, and means carried by said housing to abut the end of said wrist pin whereby said pin may be driven into assembled position.

1,874,446. PORTED CYLINDER CONSTRUCTION. ROLAND CHILTON, Ridgewood, N. J., assignor to Wright Aeronautical Corporation, a Corporation of New York. Filed Mar. 26, 1931. Serial No. 525,494. 10 Claims. (Cl. 123—173.)



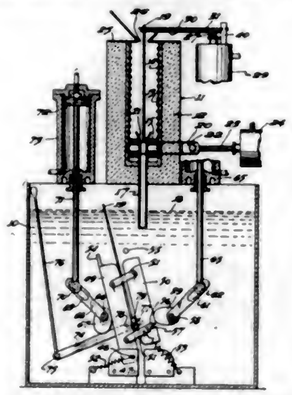
1. In an engine having ports overrun by a piston, the combination, of a cylinder liner having a collar containing the ports and upper and lower fluid cooled cylinder members fitted to said liner and having faces in intimate thermal contact with said collar.

1,874,447. CAR COUPLER. NATHANIEL CLARK, Clothier, W. Va. Filed Aug. 16, 1929. Serial No. 386,302. 1 Claim. (Cl. 213—190.)



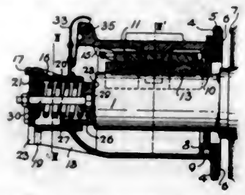
A mine car embodying a platform whereon the load of the car is carried, and a base underneath the platform and spaced therefrom, the base having a downwardly sloping upper surface at its outer end, a renewable wear plate on the sloping surface of the base, the platform overhanging and protecting the wear plate, the wear plate, the platform and the base terminating at their outer end in approximately the same vertical plane, the platform and the base having vertically aligned slots of the same size and shape extended entirely therethrough and spaced inwardly from the outer end of the platform and the base, bearings on the upper surface of the platform, all of the bearings being located on one side of the slot, a transverse shaft journaled in the bearings, the shaft extending inwardly from one edge of the platform to the slot, the platform being open to receive part of the load, from the opposite edge of the platform to the slot, the shaft being provided at one end with an operating handle disposed at the first specified edge of the platform, the shaft being provided at its opposite end with a swing pin received in the slot, the wear plate being provided with a notch that opens through the inner end of the wear plate, the notch registering with the slot, the swing pin abutting against the wear plate at the outer end of the notch in the wear plate and abutting against the base at the outer end of the notch, and means for securing the wear plate renewably and detachably to the sloping surface of tthe base.

1,874,448. TEMPERING APPARATUS. MONROE S. CLAWSON, Upper Montclair, N. J. Filed May 28, 1930. Serial No. 456,687. 16 Claims. (Cl. 266—4.)



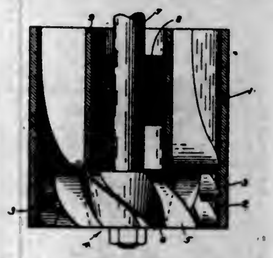
1. A tempering apparatus comprising a tank for liquid, a furnace thereabove, means for supporting an object within the furnace, means for releasing said means, and a clamping device within the tank for receiving and applying pressure upon the object, said device embodying relatively movable members and means for forcing them together.

1,874,449. LATERAL MOTION DEVICE. ROGER W. CLIFFORD, Schenectady, N. Y. Filed Sept. 24, 1930. Serial No. 483,999. 9 Claims. (Cl. 308—41.)



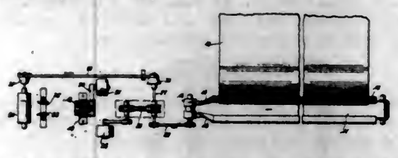
1. In a lateral motion journal box construction, the combination of a journal box, an axle having a journal, an axle journal bearing disposed within said box and adapted to permit the lateral movement of the journal, a sleeve formed in the outer end of said journal box, resilient means disposed within said sleeve, an outer seat for said resilient means detachably connected to the outer end of said sleeve, and an inner seat for said resilient means slidably disposed within said sleeve adjacent the end of the axle whereby upon the lateral movement of the axle in the direction of said sleeve force will be exerted against the end of said axle to adjust the same back to its normal position, said resilient means and inner seat being removable through the outer end of said sleeve when the outer seat is detached.

1,874,450. DEEP-WELL TURBINE PUMP. GEORGE S. COATS, Visalia, Calif. Filed Nov. 5, 1930. Serial No. 493,664. 6 Claims. (Cl. 103—90.)



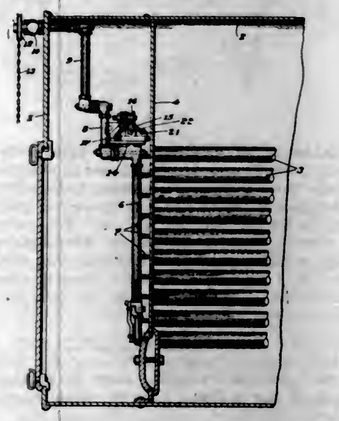
4. A deep-well turbine pump comprising a casing having inwardly extending and inclined blades, a runner having blades inclined in the opposite direction and being disposed opposite the first named blades, means for rotating said runner at a high speed, alternate blades of the casing extending beyond the runner and being gradually curved for extending in a straight line paralleling the axis of the runner, said extending casing blades projecting over the hub of the runner, and a bearing for the runner carried by the casing blades.

1,874,451. PROCESS AND MACHINE FOR PRODUCING WADDING MATERIAL. AUSTIN E. COFRIN, Green Bay, Wis. Filed Mar. 26, 1931. Serial No. 525,536. 20 Claims. (Cl. 92—39.)



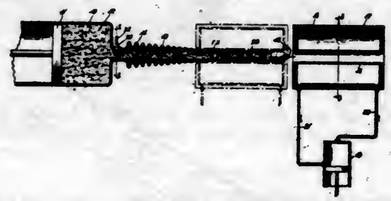
1. The process of producing wadding material which comprises, gathering a substantially dry sheet of material of indefinite length into a loose rope-like mass of indefinite length, and loosely compacting said mass to a size desired for use.

1,874,452. BOILER TUBE CLEANER. FRANK H. COLE, Walpole, Mass. Filed Sept. 25, 1928. Serial No. 308,300. 5 Claims. (Cl. 122—39.)



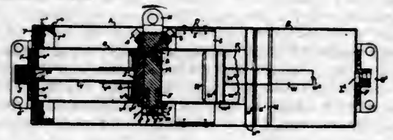
1. In a boiler tube cleaner, the combination of a nozzle head, means for conducting steam to said head, a carriage supporting said head, a track on which said carriage is mounted, and means for traversing said carriage on said track, said track forming a guard for a part of said traversing means.

1,874,453. PROCESS AND APPARATUS FOR PRODUCING FROZEN CONFECTIONS. WILLIAM T. COMER, Atlanta, Ga., assignor to Crystal Carbonic Laboratory, Atlanta, Ga., a Corporation of Georgia. Filed Oct. 6, 1930. Serial No. 486,792. 4 Claims. (Cl. 107—14.)



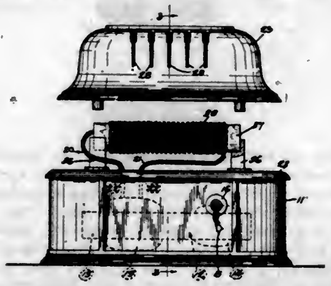
2. The process of producing a frozen confection which comprises extruding confection material into a tubular casing, introducing separating discs into the stream of extrusion to be therewith introduced into the casing, freezing the material as fast as extruded and separating the frozen material and casing into sections adjacent the discs.

1,874,454. VACUUM ENGINE. ROSCOE D. CONKLIN, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Apr. 9, 1931. Serial No. 528,742. 9 Claims. (Cl. 121—44.)



1. In a vacuum engine of the type described, the combination comprising a cylinder, two pistons mounted in said cylinder, hollow piston rods uniting said pistons, means to separate the hollow piston rods into two chambers, pistons mounted solely in the chambers, and valve means for permitting the introduction of air into said chambers behind the pistons.

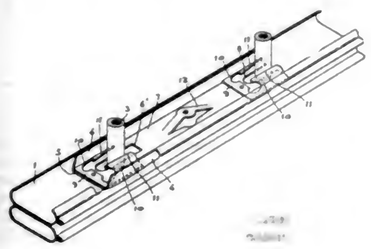
1,874,455. OZONIZER. ARTHUR W. CONLEY, Cleveland Heights, Ohio, assignor, by mesne assignments, to The Corozone Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 10, 1928. Serial No. 324,869. 5 Claims. (Cl. 204—32.)



1. An ozonizer, comprising: a closing casing and a transformer entirely enclosed therewithin; electrode

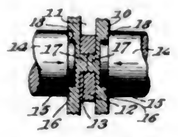
means connected to the secondary terminals of said transformer and supported on top of said casing; and a cover supported by said top and enclosing said electrode means, said cover having its edges adjacent said top spaced from said top and providing communication between the exterior and interior of said cover.

1,874,456. LOOSE LEAF BINDER. ROBERT J. COPELAND, Toronto, Ontario, Canada. Filed Apr. 1, 1930, Serial No. 440,785, and in Canada Apr. 4, 1929. 3 Claims. (Cl. 129—4.)



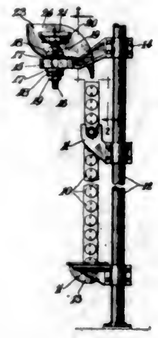
3. In a loose leaf binder, the combination with the binder posts, of a tubular metal pierced to fit over said posts, a bar housed in said tubular metal, said bar having slots to receive the posts and presenting a laterally turned flange at each side snugly engaging the wall of said tubular metal to limit lateral movement of said bar, and spring locking fingers secured to said bar and movable by the latter into locking and unlocking relation to said posts, said laterally turned flanges co-operating with said spring fingers to support the same in locking relation to said posts.

1,874,457. METHOD OF MAKING KNITTING MACHINE LATCH NEEDLES. FRED W. COREY, Tilton, N. H. Filed Feb. 1, 1930. Serial No. 425,163. 5 Claims. (Cl. 163—3.)



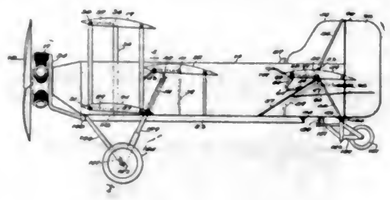
1. The method of forming a knitting machine latch needle comprising making an untempered needle blank with a slot to receive a latch, forming a tempered latch with a pivot hole, inserting said latch into the said needle slot, exerting pressure upon the walls of the needle slot over the pivot hole and over a larger surface area than the cross section of the pivot hole in the latch and thereby squeezing portions of said walls into the pivot hole in the latch sufficient to fill said hole and form a solid pivot and then tempering the needle.

1,874,458. SURFACE COOLER AND HEATER. FRITZ G. CORNELL, Jr., Mountain Lakes, N. J. Filed Sept. 26, 1930. Serial No. 484,532. 5 Claims. (Cl. 299—58.)



5. A trough adaptable for the distribution of liquid over a surface cooler, means for supporting said trough above said surface cooler for horizontal, vertical and tilting adjustment of the trough, a row of holes in one wall of said trough and an apron extending from the trough below the row of holes for receiving liquid escaping through said holes and delivering the same to said cooler in a stream of uniform depth.

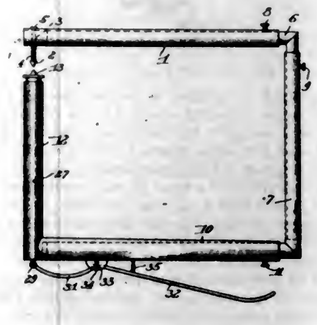
1,874,459. AIRCRAFT CONSTRUCTION. ALFRED G. J. COUSINEAU, Chicago, Ill. Filed July 9, 1930. Serial No. 466,752. 5 Claims. (Cl. 244—29.)



1. An aeroplane comprising a fuselage, rigidly mounted supporting wings and propelling means associated therewith, air foils pivotally mounted on opposite sides of said fuselage adjacent the tail thereof, a control stick operatively connected to said air foils for moving them into various positions to serve as stabilizers, ailerons or elevators, and a pilot's seat in said fuselage adjacent said air foils and within physical reach thereof to enable the pilot to grasp the air foils and directly control the position thereof.

1,874,460. PRICK PUNCH. JOHN E. P. COX, Rochester, N. Y. Filed June 27, 1930. Serial No. 464,215. 3 Claims. (Cl. 81—1.)

1. In a prick punching machine, the combination with a frame embodying a guide, a hammer adapted to reciprocate in the guide, a prick punch also supported in the guide to receive impact from the hammer, the latter being provided with a cam-faced detent, a spring for driving the hammer, and actuating means for the latter embodying a



pawl movable in one direction to engage the detent and in the other direction to retract the hammer and energize the spring, and means for tripping the pawl and releasing the detent at a predetermined point.

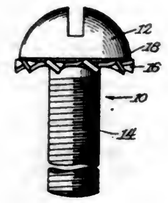
1,874,461. BOOT. JOHN T. CROWLEY, Lambertville, N. J. Filed Mar. 21, 1931. Serial No. 524,385. 3 Claims. (Cl. 36—4.)



1. In combination rubber boot and lining consisting of an inner boot of warm material, an outer boot of waterproof material in which the inner boot is separably disposed, and means on the outer boot overlapping the top of the inner boot to prevent the collapse and downward displacement of the inner boot and also to guide the wearer's foot into the inner boot as he steps into the combination boot.

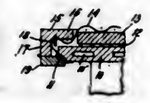
1,874,462. LOCK WASHER ASSEMBLY. EDMOND C. CROWTHER, Oak Lane, Pa., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 10, 1930. Serial No. 443,050. 2 Claims. (Cl. 151—37.)

2. A lock washer assembly including a workpiece having a rotary clamping surface, a lock washer operatively associated with said surface, and binding material for securing said washer to said surface, said binding material



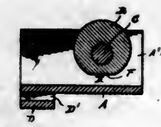
being of such a strength that it will lose its binding effectiveness when a rotary clamping force is applied to the washer.

1,874,463. MACHINE FOR PRESSING GARMENTS. PHILIP DANIN, New York, N. Y. Filed Nov. 2, 1929. Serial No. 404,394. 1 Claim. (Cl. 68—9.)



A garment pressing machine including a pressing element, a pressing pad disposed on one surface thereof, a covering press cloth superimposed upon said pressing pad and projecting over the edges of said pressing element, said pressing element being chamfered in its surface opposite to that on which said pad rests all around the edges thereof, a clamping frame in the form of an endless angle bar embracing said pressing element and binding said covering cloth against said pressing element, pins mounted upon one of the flanges of said angle bar adapted to pierce said cloth and thereby stretch the same over said pressing element when said frame is engaged with the latter, two auxiliary frames hinged to said first-mentioned frame and adapted to be seated in the chamfer in said pressing element so as to bind the edges of said pressing cloth thereagainst, and co-acting means on said auxiliary frames for maintaining the same in clamping position on said pressing element.

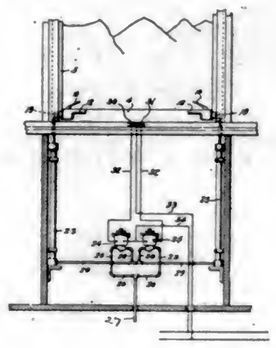
1,874,464. BALE BAND TIE OR BUCKLE. FRANK W. DAVIS, Jr., and ROBERT T. STUTTS, New Bedford, Mass. Filed Nov. 14, 1931. Serial No. 575,122. 1 Claim. (Cl. 24—24.)



A bale band tie comprising a main body member having a base with two parallel upwardly extending sides, said member being open at the ends and on the top, the sides extending below the base at one end and being connected by a cross member thus forming an opening through

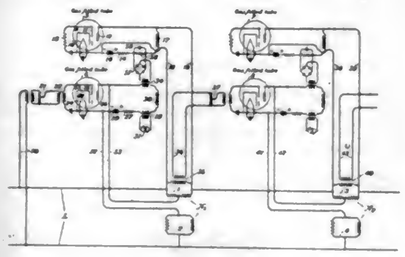
which one end of a bale band is passed and fastened, an eccentrically mounted roller, a bolt supported by the said sides and having a head extending beyond one upwardly extending side, said roller being mounted upon the said bolt, said roller suspended between the said sides, said roller having a serrated surface except a small portion of which is filed down smooth to provide an opening between the roller and the base of sufficient width to allow the passing of a cotton bale band when said roller is so turned that the smooth portion of its surface is parallel with the base.

1,874,465. WINDOW OPERATING DEVICE. JESSE H. DAVIS, Baltimore, Md. Filed May 6, 1930. Serial No. 450,129. 11 Claims. (Cl. 268—125.)



1. In a window, a device for locking and operating the sash of the window, said device including a latch to lock the sash in the desired position, a power operated device coupled to the latch to release the latch and operate the sash, a power supply, and an electro-pneumatic valve to control the operation.

1,874,466. TRANSMISSION REGULATING SYSTEM. CHARLES S. DEMAREST, Ridgewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 10, 1931. Serial No. 574,207. 5 Claims. (Cl. 178—44.)



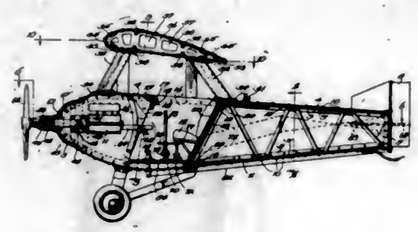
5. A transmission line, a network comprising an element in series in said line and an element in shunt in said line, two gas filled thermionic tubes, means for completing the circuit for said shunt element over the cathode-plate circuit of one of said tubes, a short circuit about said series element completed over the cathode-plate circuit of the other of said tubes, and means controlled by the voltage of currents transmitted over said line for controlling the energization and deenergization of said gas filled tubes.

1,874,467. TOOTHBRUSH. EMIL DOLL, West New York, N. J. Filed Oct. 27, 1931. Serial No. 571,383. 1 Claim. (Cl. 15—167.)



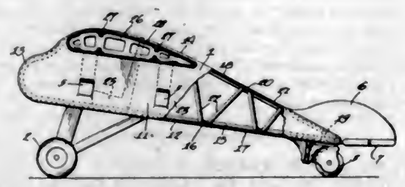
A tooth-brush comprising a handle member having an externally screw threaded socket at one end thereof, the recess in said socket being normally uniform throughout its length and the walls thereof split inwardly from the free ends, a brush element including a head and bristles extending therefrom, the head of said brush element being receivable in said socket, and an internally screw threaded sleeve threadedly engaging said externally screw threaded split socket, the inner wall of said sleeve at the outer end thereof being beveled for wedging engagement with the outer end of said split socket to cause the walls of said split socket to be compressed into clamping engagement with said head when said sleeve is screwed home upon said socket portion, said sleeve being movable over the bristles during the screwing and unscrewing of the same upon the socket.

1,874,468. AEROPLANE. HARRY A. DOUGLAS, Bronson, Mich. Filed Mar. 5, 1930. Serial No. 433,809. 12 Claims. (Cl. 244—5.)



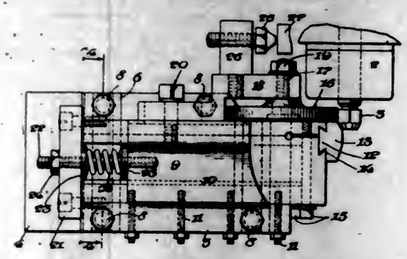
2. An aeroplane whose fuselage is divided into two compartments, one compartment being U-shaped with the sides thereof at the fore portion of the fuselage and the other compartment being between the sides of the U-shaped compartment which is sealed from said other compartment and the external atmosphere, the latter compartment containing the pilot seat, the engine of the power plant and the controlling devices and indicating instruments.

1,874,469. AEROPLANE. HARRY A. DOUGLAS, Bronson, Mich. Filed Sept. 12, 1931. Serial No. 562,558. 1 Claim. (Cl. 244—14.)



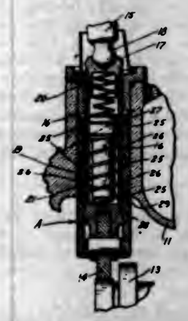
An aeroplane, comprising: a fuselage having an upper wall of stream-line configuration, straight parallel side walls, a planar lower wall and a curved front wall; and wings secured to said side walls, said wings having curved upper surfaces coinciding throughout substantially their entire width with the upper wall of said fuselage, and planar lower surfaces spaced from and disposed in a plane parallel to the planar lower wall of said fuselage.

1,874,470. PROFILING ATTACHMENT. ALFRED E. DRISSNER, Cleveland, Ohio, assignor to The National Acme Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 31, 1929. Serial No. 389,715. 16 Claims. (Cl. 29—57.)



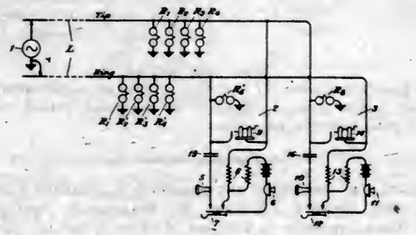
1. A profiling attachment comprising in combination with a reciprocating slide and a rotatable work spindle supported transversely thereof, a supplemental slide mounted on the slide, a tool carried thereby in position to engage the side of the work, and means for reciprocating the supplemental slide a plurality of times corresponding to the number of faces of the work to be relieved during each rotation of the work and including means in engagement with the work and effective during the rotation of the work to retract the tool therefrom and engaging the work at the same side as the tool.

1,874,471. INTERNAL COMBUSTION ENGINE. RALPH N. DU BOIS, Detroit, Mich., assignor, by mesne assignments, to Continental Aircraft Engine Company, a Corporation of Delaware. Filed July 28, 1930. Serial No. 471,110. 13 Claims. (Cl. 123—90.)



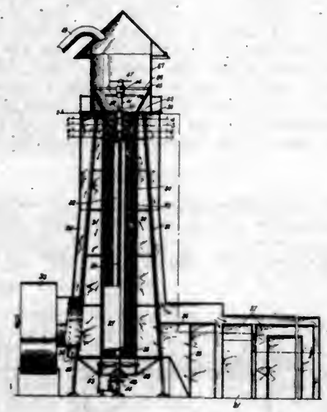
1. In an internal combustion engine having a crankcase, a tappet guide supported thereby, a hollow tappet reciprocating in said tappet guide, the interior of said tappet communicating with said tappet guide, means for reciprocating the tappet, and means within said tappet and actuated by movement of the tappet for creating suction pressure to remove excess oil accumulations from said tappet guide.

1,874,472. PARTY TELEPHONE SIGNALING ARRANGEMENT. WILLIAM H. EDWARDS, Great Neck, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Apr. 10, 1931. Serial No. 529,255. 4 Claims. (Cl. 179—28.)



1. A party telephone line having a plurality of signal responsive devices connected to each side of said line and ground, means for applying signaling current to said line, a subscriber's telephone set bridged across said line, and means operatively included in said subscriber's set when the receiver thereof is removed from the hook having a relatively high impedance to said signaling current and a low impedance to currents used for talking purposes.

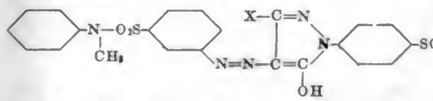
1,874,473. HAY CURING AND DRYING MACHINE. HULDREICH EGLI, Baltimore, and SAMUEL M. SHOEMAKER, Eccleston, Md. Filed Aug. 3, 1928. Serial No. 297,175. 10 Claims. (Cl. 34—34.)



1. In a dryer the combination of a vertical drying chamber, a step by step conveyor for advancing forage material intermittently therethrough by gravity, a heating chamber, a duct connecting said chambers, a preheating chamber surrounding said drying chamber, and means for causing the passage of air through all said chambers.

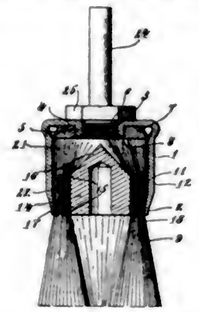
1,874,474. YELLOW AZO DYESTUFF. HEINZ EICHWEDE and JOSEPH RACHOR, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 27, 1928, Serial No. 302,486, and in Germany Sept. 19, 1927. 7 Claims. (Cl. 260—87.)

1. As new products, the azo dyestuffs of the following general formula:



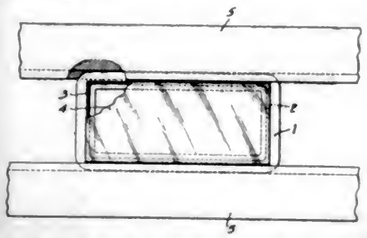
wherein X stands for $-CH_3$, $-COOH$ or $-COO$-alkyl, being yellow powders dyeing the material yellow shades of good fastness properties.

1,874,475. METHOD OF MAKING A CARBON CLEANING BRUSH. ROBERT W. ELLINGHAM, Springfield, Mass., assignor to Fleming Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 5, 1930. Serial No. 449,779. 2 Claims. (Cl. 300—21.)



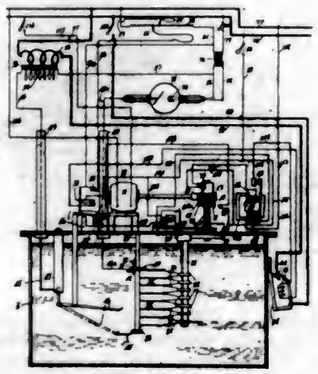
1. The method of making a wire or similar brush which consists in forming a metal cup, punching a hole in the center of the bottom of the cup and then forming an inwardly projecting flange around the hole, forcing a washer into the inside of the cup surrounding the projecting portion, cutting a thread in the hole and setting the brush fibres in the cup, arranging them along the walls of the cup, forcing a plug having a tapered end into the center of the cup, whereby the brush fibres are pressed against the walls of the cup, and turning the peripheral edges of the cup inwardly against the bristles.

1,874,476. GROOVED STENCIL CARD. HARMON P. ELLIOTT, Watertown, Mass., assignor to Elliott Addressing Machine Company, a Corporation of Massachusetts. Filed July 15, 1931. Serial No. 550,836. 3 Claims. (Cl. 101—127.)



1. As a new article of manufacture, a stencil-card comprising a relatively thick, stiff, rectangular frame having a narrow groove formed in one face and extending substantially all the way around the said frame along lines lying intermediately of the inner and outer edges thereof, a body of cementitious material lying in said groove, and a sheet of stencil paper resting on the grooved face of said frame and over-lying said groove and fastened to said frame by said cementitious material.

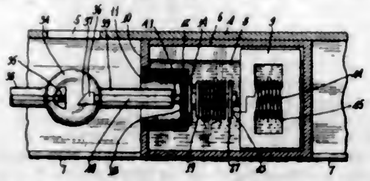
1,874,477. ELECTRICALLY OPERATED TIMING MECHANISM. CHARLES FAYER, Flushing, N. Y., assignor to Wappler Electric Company, Inc., a Corporation of New York. Filed May 15, 1929. Serial No. 363,122. 16 Claims. (Cl. 250—34.)



1. An electrically operated timing mechanism, comprising an alternating current line, a high tension transformer provided with a primary winding and a secondary winding, said primary winding being adapted to be connected with said line, an X-ray tube, a high tension circuit including said X-ray tube and the secondary winding of said transformer, said circuit being normally open, and a timing device adapted to be connected with said high tension circuit to cause a predetermined exact number of current impulses to pass from said secondary winding to said X-ray tube.

5. An electrically operated mechanism for X-ray work, comprising an alternating current line, a synchronous motor adapted to be connected with said line, a high tension transformer, an X-ray tube connected with said high tension transformer and provided with a heat controlled cathode, a small transformer connected with said cathode for supplying heating currents thereto, mechanism adapted to be connected with said X-ray tube and driven by said synchronous motor for closing a high tension secondary circuit from said high tension transformer through said X-ray tube, a circuit including said heat controlled cathode in order to supply heating currents thereto, and mechanism connected with said last mentioned circuit and controllable by said synchronous motor for momentarily increasing the supply of said heating currents.

1,874,478. MOUNTING FOR X-RAY TUBES. CHARLES FAYER, Flushing, N. Y., assignor to Wappler Electric Company, Inc., a Corporation of New York. Filed Jan. 2, 1930. Serial No. 417,870. 9 Claims. (Cl. 250—34.)



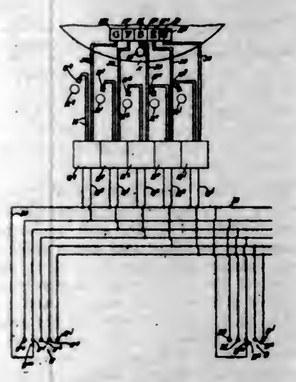
1. In a mounting for X-ray tubes the combination, with a transformer casing, a body of liquid insulating material contained therein and a high tension transformer submerged in said body of liquid insulating material for energizing an X-ray tube, of a radiator housed within said casing and submerged in said body of liquid insulating material, said radiator being flexibly mounted relatively to said casing, and an X-ray tube located outside of said casing and provided with an electrode and with a stem extending from said electrode and detachably connected with said radiator for cooling said electrode by said liquid insulating material.

1,874,479. ELECTRICALLY OPERATED HAIR CURLER. CHARLES FAYER and JOSEPH KREMER, Flushing, N. Y.; said Fayer assignor to Wappler Electric Company, Inc., Long Island City, N. Y. Filed Apr. 17, 1930. Serial No. 444,913. 4 Claims. (Cl. 219—24.)



1. An electrically shock proof hair curler comprising a pair of metallic levers connected together, a pair of casing members carried by said levers and each having a substantially semi-cylindrical form in order to enable said casing members to enclose a curling rod and a bunch of hair wound upon said curling rod, one of said casing members being provided with closure lips extending from it in order to overlap the adjacent portion of the other casing members, as said casing members are moved toward each other by said levers, and a low voltage electrically operated heating mechanism carried by said heating members.

1,874,480. SPEECH TRANSLATING SYSTEM AND METHOD. EDWARD A. FILENE, Boston, Mass. Filed May 12, 1930. Serial No. 451,814. 9 Claims. (Cl. 179—1.)



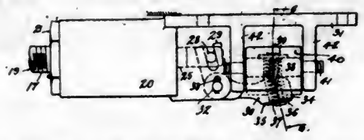
2. The method of supplying translations of a speech in one language into other languages simultaneously with the delivery of the speech, which comprises transmission of the speech directly to a plurality of translators corresponding to said other languages and positioned adjacent to the speaker where they can readily hear the speech, translation of the speech into the corresponding other languages by said interpreters substantially simultaneously with the delivery of said speech, individual selection by each of a plurality of listeners at a corresponding plurality of points within direct hearing range of the speaker of the language of the speaker or of any of the translations, and transmission to said listeners either directly from said speaker or indirectly from said translation in accordance with such selection.

1,874,481. TELEPHONE CABLE. ERNST FISCHER, Berlin-Tempelhof, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Oct. 18, 1929, Serial No. 400,577, and in Germany Oct. 23, 1928. 8 Claims. (Cl. 178—45.)



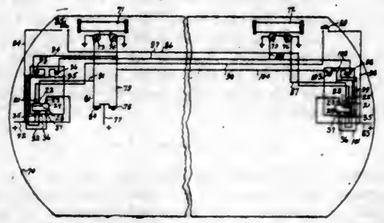
1. The process of producing a magnetizable heat treated wrapping on conductors for telephone cables with continuously distributed inductive loading, which consists in placing a combustible thread in a substantially straight line parallel to the said conductor and said magnetizable wrapping during the wrapping process, and heating the conductor after the application of the said combustible thread and the said wrapping to the annealing temperature of the wrapping.

1,874,482. FLUID PRESSURE OPERATED DOORLOCK. PARIS R. FORMAN, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Dec. 3, 1928. Serial No. 323,313. 5 Claims. (Cl. 292—201.)



1. In a fluid pressure actuated door lock mechanism having a cylinder, a piston disposed within said cylinder and movable therein, an inlet port and means normally tending to hold said piston against said inlet port, the combination of a piston rod having a flattened end extending through one end of said cylinder, a hollow hammer ended rotatable arm, a lock bar, resilient means interconnecting said hollow hammer ended arm and said lock bar, and means interconnecting said piston rod and said hollow hammer ended rotatable arm including a bifurcated arm for transmitting motion of said piston to said lock bar.

1,874,483. DOOR OPERATING MECHANISM. PARIS R. FORMAN, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Jan. 29, 1931. Serial No. 511,952. 14 Claims. (Cl. 105—341.)



1. In a system of the type described, the combination comprising a plurality of motive devices, electro-magnetic means for controlling the operation of said motive devices,

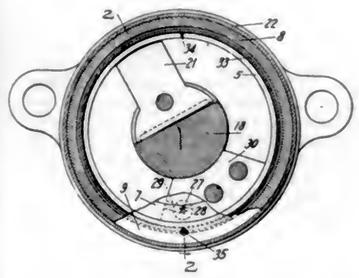
a key released door switch releasable by a key for movement in one direction, a manual switch, and circuits including said electro-magnetic means, door control switch and manual switch, whereby the motive devices can be operated in one direction upon key release of the door control switch and operation of tthe manual switch and in the opposite direction upon movement of the control switch in the opposite direction.

1,874,484. CLASP. FRANS EDWARD FORSELL, Cranston, R. I., assignor to Freeman-Daughaday Company, a Corporation of Massachusetts. Filed Jan. 2, 1932. Serial No. 584,448. 5 Claims. (Cl. 24—81.)



5. In a collar holder, a bar channel shape in cross-section, a pair of U shape members oppositely disposed and pivoted to said bar adjacent its ends to swing with reference thereto and receive pieces of fabric inserted between said bar and said members, one of the arms of each U member lying between the channel walls.

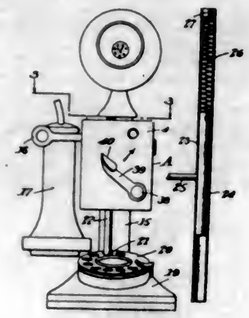
1,874,485. HYDRAULIC SHOCK ABSORBER FOR AUTOMOBILES AND THE LIKE. ARCHIE FOWBLE, Dayton, Ohio. Filed June 6, 1929. Serial No. 368,762. 7 Claims. (Cl. 188—89.)



1. In a hydraulic shock absorber, a structure having a work chamber, a supply reservoir and an inlet passageway leading from said reservoir to said work chamber, a piston mounted in said work chamber, and a conduit leading from said work chamber at a point adjacent to the neutral position of said piston and communicating with said reservoir at a point near the horizontal plane of said inlet passageway.

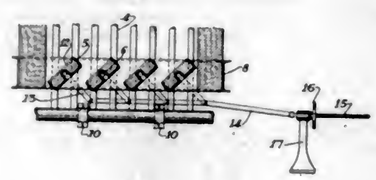
1,874,486. COIN-CONTROL DEVICE. RAY M. FOX, Los Angeles, Calif., assignor, by direct and mesne assignments, to Edward T. Monett, New York, N. Y. Filed Aug. 27, 1926. Serial No. 131,979. 4 Claims. (Cl. 194—61.)

1. In combination with a dial-actuated telephone instrument, a lock bolt for engaging and locking the dial of said instrument when the line circuit is open, a trigger for engaging said bolt to maintain tthe bolt in dial locking position, a coin-receiving member, means for manually



actuating said coin receiving member, means connected to said coin-receiving member to actuate said lock bolt to release the same from the dial when said coin-receiving member is manually actuated.

1,874,487. COMBINATION ASH GATE AND AIR INLET SYSTEM FOR FURNACES. EDWARD J. FRANKLIN, Salt Lake City, Utah. Filed Aug. 15, 1928. Serial No. 299,841. 2 Claims. (Cl. 110—28.)

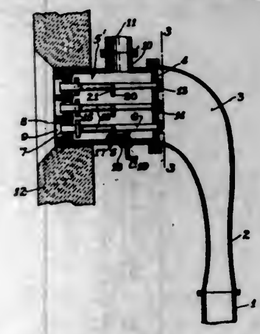


1. In a furnace for burning finely divided solid fuel, the combination of a combustion chamber provided with a burner for supplying fuel thereto, said combustion chamber having an opening in its bottom and a combination ash gate and air damper mechanism located at said opening in the bottom of the combustion chamber and provided with adjustable pivoted gates adapted and arranged to be adjusted to vary the inclination of the gates and the spaces between the gates so as to regulate the admission and distribution of air and permit downward gravitative egress of unconsumed material between the gates from the combustion chamber, and means for so adjusting the gates.

1,874,488. BURNER FOR PULVERIZED FUEL. EDWARD J. FRANKLIN, Salt Lake City, Utah. Filed Aug. 15, 1928. Serial No. 299,842. 6 Claims. (Cl. 110—104.)

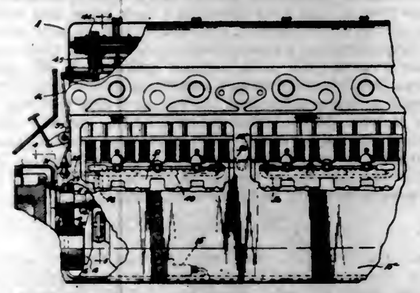
6. A burner for pulverized fuel comprising a mixing and expansion chamber provided with a Venturi inlet, said chamber extending from said Venturi inlet in tthe form of an expanding curved hood, a burner body connected to the curved end of said expansion chamber and com-

prising a plurality of burner tubes communicating with the expansion chamber and an auxiliary air chamber surrounding said burner tubes and provided with air outlet



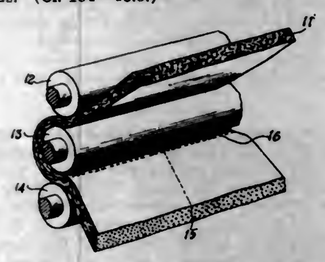
passages surrounding the outlets of said burner tubes and means for supplying auxiliary air under pressure to said auxiliary air chamber.

1,874,489. METHOD AND MEANS FOR PREVENTING SCUFFING OF CYLINDERS AND PISTONS. WALTER A. FREDERICK and ANDRE J. MEYER, Detroit, Mich., assignors to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed June 24, 1927. Serial No. 201,160. 18 Claims. (Cl. 123—196.)



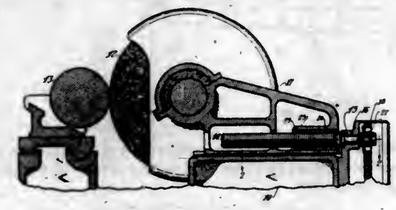
1. In an internal combustion engine, means preventing scuffing the cylinders and pistons thereof, by supplying lubricant thereto during initial operation of the engine comprising, an engine starting unit, a pump, means for conducting oil from the pump to a point suitable for lubricating the cylinder walls and pistons, a valve controlling the passage of oil through said oil conducting means, and means for simultaneously energizing the engine starting unit, and unseating the valve.

1,874,490. GASKET. ABRAHAM L. FREEDLANDER, Dayton, Ohio. Filed Jan. 2, 1930. Serial No. 417,881. 9 Claims. (Cl. 154—43.5.)



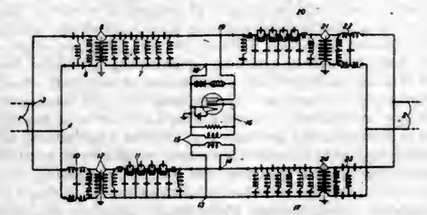
3. A new article of manufacture for use as a sealing member, comprising a resilient body and fine fibrous members distributed through the body in parallel relationship to one another for forming a body incompressible in the direction of their length and laterally compressible or expansible.

1,874,491. GRINDING MACHINE. HANS FAITSCHI, Cincinnati, Ohio, assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 10, 1929. Serial No. 413,109. 7 Claims. (Cl. 74—40.)



1. In a back lash and lost motion eliminator the combination of a shiftable member, a sleeve carried thereby, an adjusting screw extending through the sleeve for shifting the member, a nut carried by the sleeve and held against rotative and axial movement, the nut having a threaded engagement with the screw, a second nut threaded on the screw, means for locking tthe second nut against rotative movement but not axial movement relative to the sleeve and fixed nut, one of said nuts having a sleeve-like portion extending from it toward the other nut, and yieldable means surrounding the said sleeve-like portion and abutting on opposite ends with the nuts tending to actuate the same in opposite directions to thereby take up back lash between the adjusting screw and nuts.

1,874,492. ELECTRIC WAVE TRANSMISSION. ALBERT G. GANZ, Union City, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 18, 1930. Serial No. 489,578. 5 Claims. (Cl. 178—44.)

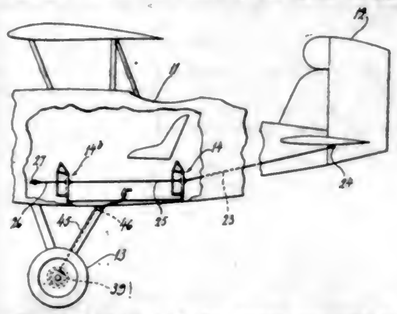


1. In a carrier frequency repeater comprising two transmission paths connecting two sections of a balanced line, a low pass filter in one path, a high pass filter in the other path and a repeating coil having electrically separated windings connected between two portions of the filter in one of said paths, said filter portions being adapted to transmit the same frequency band, one of said portions being balanced, the other unbalanced, whereby undesirable currents reaching said coil are reduced by said filters.

1,874,493. DUAL CONTROL BRAKES. CHARLES G. GEIGNETTER, Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Sept. 9, 1930. Serial No. 480,639. 7 Claims. (Cl. 244—2.)

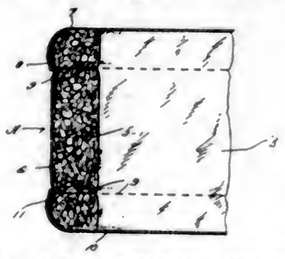
1. In an airplane, a front cockpit and a rear cockpit, a pair of landing wheels, a brake for each of said wheels,

means positioned in the rear cockpit for controlling both said brakes, means positioned in the front cockpit for



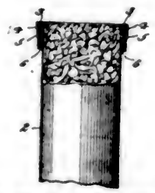
controlling both said brakes, and means positioned in one said cockpit for making the controlling means of the other cockpit ineffective.

1,874,494. MATTRESS OR CUSHION COVERING. WILLIAM GEORGE, Liberty, N. Y. Filed Apr. 30, 1929. Serial No. 359,379. 1 Claim. (Cl. 5—360.)



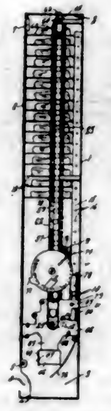
A covering for a mattress or cushion comprising a top member and a bottom member, a boxing for connecting said top and bottom members, said boxing constituting sides and ends for the covering, said boxing comprising an outer strip of fabric and an inner strip of reinforcing material corresponding in length and width to the length and width of said outer strip, said top and bottom members at their marginal edges having portions folded inwardly against the adjacent sides and ends of the box, the free edges of the inwardly folded portions terminating inwardly from the free edges of the said adjacent sides and ends of said boxing, and a single row of stitching securing the said inner and outer strips of said boxing together, and securing the inwardly folded portion to said sides and ends of said boxing inwardly of the free edges of the said inwardly folded portions of said top and bottom members.

1,874,495. CIGARETTE LIGHTER. WILLIAM H. GEROU, Philadelphia, Pa., assignor to Self Lighting Cigarette Corporation of America, a Corporation of Delaware. Filed July 28, 1931. Serial No. 552,767. 14 Claims. (Cl. 131—52.)



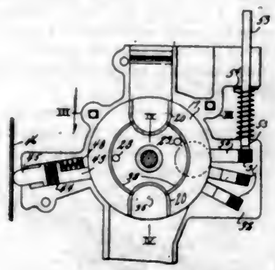
1. A self-lighting cigarette carrying a pyrophoric material on its end, and a flexible open ended sleeve carrying igniting material, with means for holding these two materials apart until the sleeve is intentionally pulled from the cigarette.

1,874,496. DISPENSING EQUIPMENT. AUGUST A. GILDEMEISTER, Toledo, Ohio. Filed June 12, 1929. Serial No. 370,280. 4 Claims. (Cl. 312—94.)



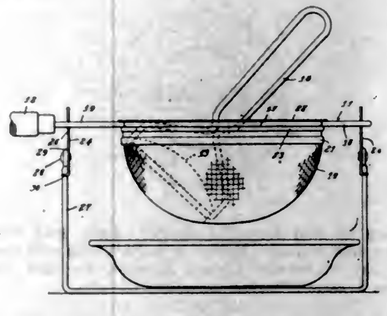
1. Check controlled apparatus comprising a housing provided with a back, parallel hinge pins adjacent said back, shelves mounted on said pins, a front for the housing, housing sides connecting the front and back, a column adjacent one of said sides providing a main guide past which the set up shelves extend, a sprocket chain in said guide, a flight including a cam carried by said chain, transverse guides carried by said column parallel to the shelf hinge pins, plungers in said transverse guides, and spring means normally projecting the plungers into the path of the shelves and as projected retaining the respective horizontal shelves in article holding position, said flight as movable by said chain having said cam effective for retracting the pins in succession for releasing shelves for downward swinging to article discharging position.

1,874,497. CHECK CONTROL MECHANISM. AUGUST A. GILDEMEISTER, Toledo, Ohio. Original application filed June 12, 1929, Serial No. 370,280. Divided and this application filed June 30, 1930. Serial No. 464,806. 10 Claims. (Cl. 194—70.)



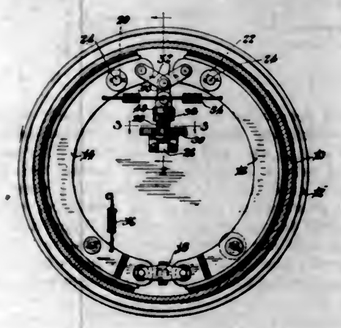
10. A check control for a vending machine embodying a multiple check receiving first disk provided with a pin, a second disk provided with a slot through which said pin extends, a series of ratchets for locking the second disk, said ratchets being successively shiftable by the checks in the first disk to allow rotation of the second disk, said pin upon further shifting of the second disk engaging the slot terminus to cause said second disk to rotate with the first disk, and vending machanism operable by rotation of the second disk.

1,874,498. STAND FOR KITCHEN UTENSILS. CLARENCE S. GLENNY, Rockford, Ill., assignor to The Washburn Company, Worcester, Mass., a Corporation of Massachusetts. Filed Oct. 9, 1930. Serial No. 487,480. 4 Claims. (Cl. 248—30.)



3. The combination of a wire frame adapted to support a utensil, said frame having a central portion for supporting the utensil, and the frame being formed to provide, at diametrically opposite sides of said central portion, radially projecting open portions, said open portions affording broad supports for steady rest of the utensil on a stand, and a stand comprising a pair of opposed supports formed for detachably engaging in said open portions whereby to provide steady rest for the utensil.

1,874,499. BRAKE. EUGENE V. TAYLOR, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Dec. 3, 1928. Serial No. 323,249. 10 Claims. (Cl. 188—79.5.)

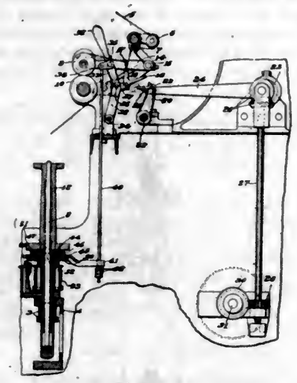


3. Operating mechanism for a brake comprising a screw-actuated toggle, said screw being rotated by a lever extending substantially normal to the line of the screw.

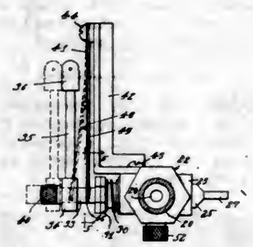
8. Operating and adjusting mechanism for a brake comprising, in combination, an adjusting sector having an internally threaded opening in one end thereof and an operating screw member threaded into said opening.

1,874,500. STOP MOTION FOR TWISTER FRAMES. GEORGE GOODCHILD, Saco, Me., assignor to Saco-Lowell Shops, Boston, Mass., a Corporation of Massachusetts. Filed May 27, 1930. Serial No. 456,124. 8 Claims. (Cl. 117—30.)

1. In a twister frame, the combination with means for feeding individual strands to be twisted together, of detectors for engaging said respective strands, said detectors being arranged to be supported normally by the respective strands, a power operated striker for engaging any of said detectors when its respective strand allows it to fall, a toggle mechanism arranged to be straightened by movement transmitted from said striker through a fallen detector, and means for causing said straightening movement of the toggle mechanism to stop the feeding of said strands.



1,874,501. SAFETY PILOT GAS COCK. JOHN H. GRAYSON, Lynwood, Calif., assignor to Grayson Heat Control, Inc., Lynwood, Calif., a Corporation of California. Filed Jan. 24, 1931. Serial No. 510,886. 8 Claims. (Cl. 158—117.1.)

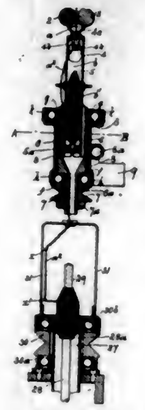


1. In a gas flow controlling device, the combination of a valve body having a passage therein for the flow of gas therethrough, a plug slidable in a transverse bore in said body toward and away from said passage and operable to close the latter to stop gas flow through the body, a gas burner mounted on the outer end of said plug, said plug having a passage therein normally establishing communication between the aforesaid passage in the body and the burner, a bracket rigid with said body, and an elongated thermostat fixed at one end to said bracket in juxtaposition to the burner whereby to be heated in the operation thereof, the other end of said thermostat being free to move in the deflection of the thermostat with temperature change, the movable end of said thermostat being directly connected with said plug and serving to hold the plug in retracted position relative to the passage in said body so long as the thermostat remains heated, but operable to move the plug into a position closing said passage in the event of cooling of the thermostat.

1,874,502. APPARATUS FOR ENCIRCLING THREADS. ALLAN GREEN, Sutton, near Keighley, England. Filed Sept. 16, 1929, Serial No. 392,761, and in Great Britain Sept. 19, 1928. 10 Claims. (Cl. 117—34.)

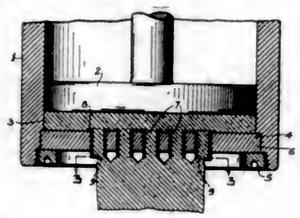
1. In apparatus for producing compound threads or yarns of the character described, a flyer or rotary member for carrying a supply of encircling yarn or thread, a

thread guide within said rotary member, and in axial alignment therewith, another thread guide arranged to guide the thread in a path eccentrically from the axis of the rotary member, bearings for said rotary member, another guide for conducting the same thread back to the axis of the same member, means for supplying another hair or thread to an axially situated receiving opening at



the outer end of the rotary member, an opening at the side of the rotary member to permit the compound thread to be conducted to an outer part of the rotary member, another opening to permit said thread to be conducted back to an axially situated path beyond the supply of yarn or thread in the rotary member and means for transmitting motion to said rotary member.

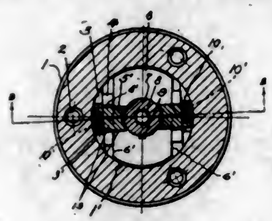
1,874,503. EXTRUSION DIE. GEORGE W. GREENWOOD, Wilmington, Del., assignor to Stephen F. Whitman & Son, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 12, 1930. Serial No. 467,585. 3 Claims. (Cl. 107—14.)



1. Die for extruding plastic masses comprising a plate having a plurality of hollow bosses projecting from one face thereof, for the extrusion of said mass in filamentous form, the projecting ends of said bosses being formed with intersecting slots determining the formation of ribs on said filaments by means of which adjacent filaments unite to form tubules, the extent of the projection of said bosses beyond said plate surface determining an air space for supplying air to said tubules as they are formed.

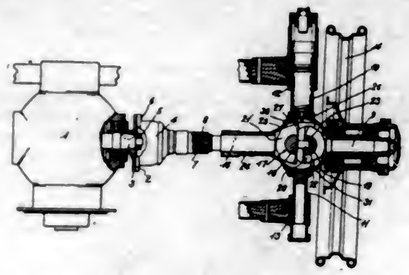
1,874,504. LOCKING MEANS FOR WORKHOLDERS OR JIGS. EDWARD L. GREER, Highland Park, and KARL F. MARX, Dearborn, Mich. Filed Feb. 12, 1931. Serial No. 515,390. 6 Claims. (Cl. 192—8.)

1. The combination with a shaft upon which back pressure is exerted, of an actuating member freely mounted upon said shaft, a member non-rotatably mounted upon said shaft, a stationary casing mounted to surround said shaft, segments mounted in said casing, wedges interposed between said segments and said non-rotatable member, said wedges and segments being engaged by said actuating member in a manner whereby excessive rotative



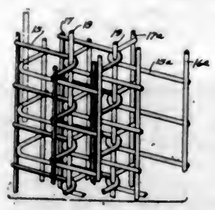
pressure on said actuating member causes said wedges to force said segments tightly in contact with said casing when the resistance against rotation on said shaft reaches a certain degree.

1,874,505. TRANSMISSION DEVICE FOR MOTOR VEHICLES. JEAN ALBERT GREGOIRE, Paris, France. Filed Feb. 21, 1929, Serial No. 341,798, and in France Feb. 25, 1928. Renewed June 9, 1932. 7 Claims. (Cl. 180—43.)



1. In a transmission device for the front wheels of a motor vehicle the combination of a transmission arbor, a wheel axle, a universal joint interconnecting said arbor and said axle, a hollow spherical journal for said axle adapted to surround said joint, supporting tubes for said journal, a spherical segment for said arbor adapted to form a ball and socket joint with said spherical journal, and means in one of said tubes adapted to interconnect said journal and said spherical segment for preventing rotation of said segment with said transmission arbor.

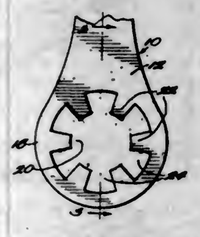
1,874,506. MONOLITHIC REENFORCEMENT. GERALD G. GREULICH, Cleveland Heights, Ohio, assignor to The Lock-Steel Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Nov. 19, 1930. Serial No. 496,602. 7 Claims. (Cl. 72—109.)



3. A reenforcement for concrete and the like comprising a plurality of fabricated units each having longitudinal

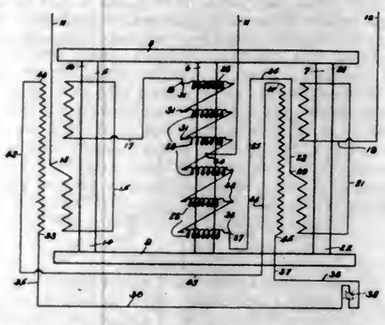
members and rigid transverse cross members secured thereto, said transverse members of adjacent units being arranged in overlapping relation, and means for securing the same together.

1,874,507. ELECTRICAL CONNECTER. JOHN M. GRIBBIE, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 13, 1929. Serial No. 413,739. 7 Claims. (Cl. 173—269.)



1. A terminal member having an aperture for receiving a clamping member, and a work engaging tooth positioned at the apertured end of said terminal, said tooth being positioned wholly within the plane of the terminal stock and adapted, when clamped against impressionable material, to interlock therewith.

1,874,508. ALTERNATING CURRENT WELDER. HERMAN GRONAU, Cincinnati, Ohio. Filed May 27, 1931. Serial No. 540,292. 4 Claims. (Cl. 219—8.)



1. A welding device adapted for use with alternating electrical current and comprising a pair of connected transformers having a series of resistance coils disposed between the primary circuits thereof, the terminus of each of said primary circuits being adapted for selective connection with one of a group of said resistance coils, a current conducting line permanently connected at the mid-point of said series of coils and forming a common conductor for the two transformer circuits, and welding means interposed in the secondary circuit of the transformers, said transformer circuits and the associated means being adapted to reduce the current used from a higher voltage at the source to a lower voltage at the welding point, and to increase the amperage at the source to a higher degree at the welding point.

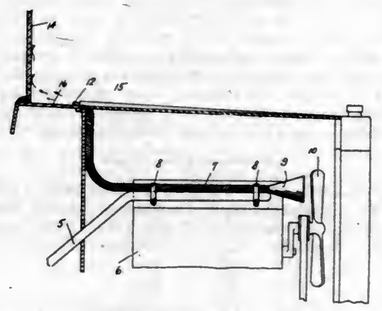
1,874,509. TELESCOPIC OR EXTENSIBLE TABLE. ARTHUR GRUNDY, Wigan, and FRANK DAWBER, Upholland, England. Filed Oct. 15, 1930, Serial No. 488,746, and in Great Britain June 28, 1930. 12 Claims. (Cl. 45—112.)

1. A telescopic or extensible table, comprising a table frame and legs; a table top section horizontally movable on said frame, a loose extension-leaf adapted to be housed under the movable top section when the table is in the contracted condition and to be raised into the operative position level with the said movable top section when the latter is moved outwards in extending the table; means on the movable top section adapted to pass under the extension-leaf and raise it into and support it in the operative position when the movable top section



is moved outwards to a certain extent, and to be moved clear thereof upon further outward movement of said movable top section so as to leave the extension-leaf unsupported and free to drop by gravity into its stowed position; and means for enabling the movable top section to be then moved inwards to contract the table and overlie the extension-leaf without disturbing the latter in its stowed position.

1,874,510. WINDSHIELD DEFROSTER. HAROLD C. HAAG, Larned, Kans. Filed Mar. 18, 1930. Serial No. 436,771. 1 Claim. (Cl. 20—40.5.)



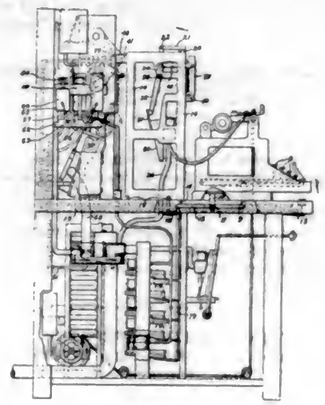
In an automobile, the combination with a windshield, an engine having an exhaust manifold, a fan, a cowl, a hood having a rearwardly directed opening in its portion immediately above the cowl and adjacent to the left hand side of the automobile, and a tube having a forward portion disposed in rear of the fan, said tube arranged entirely below the hood and hidden from view by the same, of a tubular body arranged transversely under the hood at one side of said opening and connected at one end to said tube and closed at its end remote from the tube and having a thin elongated nozzle extending upwardly and rearwardly through said opening in the hood and spaced from and parallel to the windshield to discharge heated air on the forward side of the windshield.

1,874,511. PASTRY MOLD. EDWARD W. HABERMAAS, Cincinnati, Ohio, assignor to Louise H. Habermaas, Cincinnati, Ohio. Filed May 18, 1929. Serial No. 364,098. 1 Claim. (Cl. 107—19.)



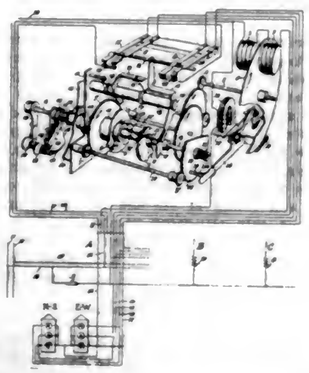
A mold for forming an embossed edible product or article comprising a solid base having a recess enclosed within a projecting sharp cutting edge, the cavity forming said recess being very shallow with respect to its area and having the surface of said cavity approach the sharp cutting edge very gradually in order to aid the removal of the product.

1,874,512. PNEUMATIC REPRODUCING TYPEWRITING MECHANISMS. HAROLD E. HALE, Somerville, and WILLIAM A. WATSON, Malden, Mass. Filed July 16, 1931. Serial No. 551,144. 10 Claims. (Cl. 164—114.)



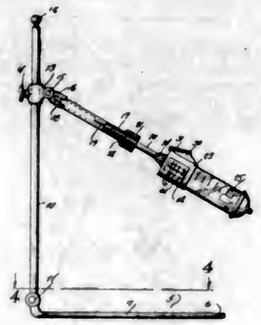
1. In a machine for making a record sheet, an apertured die bar, punches to cooperate with said die bar, pneumatic means for effecting travel of a sheet between said die bar and punches, and vacuum tension connections between said die bar and pneumatic means.

1,874,513. TRAFFIC SIGNAL CONTROLLER. CHESTER I. HALL, Philadelphia, Pa., assignor to General Electric Company, a Corporation of New York. Filed June 18, 1929. Serial No. 371,871. 5 Claims. (Cl. 172—293.)



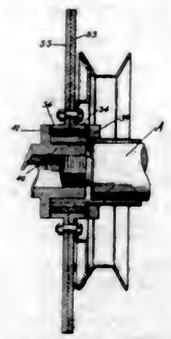
1. In combination, a plurality of circuit controllers each comprising a shaft and a motor for driving said shaft, means for operating said motors in timed relation relatively to each other, means for maintaining said motors in synchronism comprising at each controller a projection which is rotated by the shaft, an arm normally out of but movable into the path of movement of said projection, an electromagnet for effecting movement of said arm, and means actuated by the arm when engaged by said projection for stopping turning movement of the shaft, and means for simultaneously energizing said electromagnets.

1,874,514. NURSING BOTTLE HOLDER. THOMAS A. HANSEN, Hartford, Conn., assignor of one-fourth to Jan P. Clary, Hartford, Conn. Filed July 30, 1931. Serial No. 554,133. 1 Claim. (Cl. 248—65.)



An adjustable nursing bottle holder of the character described, comprising a base, a vertical standard rising therefrom, a rod adjustable on the standard, a cylindrical nursing bottle holder pivotally secured to the outer end of the rod, a clamping plate carried within the cylindrical nursing bottle holder, a lever having a cam portion adapted to be moved into and out of engagement with the clamping plate to move the same into and out of engagement with the nursing bottle and a flexible and compressible lining member for the nursing bottle holder.

1,874,515. VIBRATION DAMPER. WILLIAM W. HARRIS, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Apr. 11, 1930. Serial No. 443,566. 1 Claim. (Cl. 74—6.)



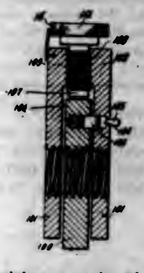
A vibration damper for engine crankshafts comprising a driving hub fixed to the crankshaft, a flywheel structure constructed of a pair of complementary disc members secured together back to back and each provided with a central opening through which the driving hub is extended, said discs each having oppositely projected flange portions about the periphery of the opening, and means intermediate the hub and flywheel structure and engaging the flanged portion of the discs to yieldingly connect the hub and flywheel structure.

1,874,516. APPARATUS FOR TREATING CERAMIC WARE. FRANK M. HARTFORD, Columbus, Ohio, assignor to The Harrop Ceramic Service Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 10, 1930. Serial No. 443,088. 12 Claims. (Cl. 25—142.)

1. Apparatus for treating articles comprising a firing zone, a cooling zone, means for introducing a cooling medium into said cooling zone and flowing it towards said firing zone in direct contact with the articles, means immediately adjacent said firing zone for permitting escape of a portion of said cooling medium, and means intermediate said last-named means and the point of introduction of said cooling medium for permitting a portion of said cooling medium to escape, the means for introducing and the means for permitting escape being such that a volume of cooling medium in excess of that required for firing may be introduced for cooling and the excess removed before it reaches the firing zone.



1,874,517. SCREW THREAD GAUGING. JAMES HARTNESS, Springfield, Vt. Filed Aug. 23, 1928. Serial No. 301,617. 8 Claims. (Cl. 33—199.)



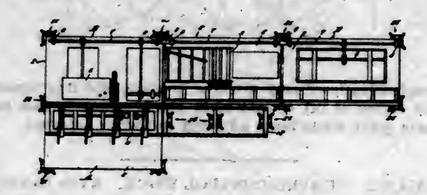
1. A gauge comprising a pair of threaded members each of a pitch diameter sufficiently different from basic and in the proper direction to cause said members to loosely fit the maximum tolerable screw to be tested, means for supporting said members for relative rotation combined with movement transversely of their thread axes and with the threads of said members lying in a common helical path in one relative position only, and means for facilitating the comparison of the extents of permissible relative motion when said members are in engagement with said standard threaded member and when in engagement with a threaded member to be tested.

1,874,518. TIE FORMING MECHANISM. LEO M. HARVEY, Los Angeles, Calif. Filed May 1, 1929. Serial No. 359,588. 24 Claims. (Cl. 81—9.1.)



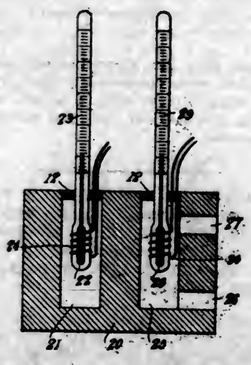
1. In a machine for forming ties in the overlapping ends of metal binding straps, the combination of a frame, a pair of jaws mounted in the frame for engaging the overlapping strap ends to form the tie, a ratchet-mechanism including lever means, and a toggle connection between the ratchet-mechanism and the jaws for forcing the jaws together to form the tie.

1,874,519. SAWMILL. OMER EDWARD HAUBROCK, Bristol, Tenn. Filed Feb. 8, 1932. Serial No. 590,691. 3 Claims. (Cl. 143—43.)



1. A saw mill comprising a truck carrying woodworking means, a second truck longitudinally aligned with the first named truck, means connecting the meeting ends of said trucks, a third truck adapted for use in side by side relation with the first named truck, means detachably connecting the first and third named trucks when the third-named truck is alongside the first-named truck, a railway on tthe third named truck and having an extension disposed along side the second named truck, a carriage translatable on said railway, jacks complementary to said trucks, and other jacks complementary to said railway extension.

1,874,520. GAS ANALYSIS APPARATUS. WILLIAM O. HEBLER, Newark, N. J., assignor to Charles Engelhard, Inc., Newark, N. J., a Corporation of New Jersey. Filed Nov. 8, 1929. Serial No. 405,587. 3 Claims. (Cl. 73—51.)

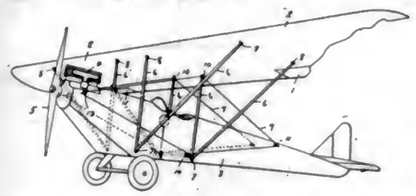


1. A device for analyzing gases by the thermal conductivity method, comprising a metal block having a chamber communicating with inlet and outlet passages, a liquid thermometer having a portion positioned in the chamber and a graduated portion extending above the cell, and a heating element associated with the portion of the thermometer in the cell.

1,874,521. AIRPLANE. GERALD C. HENNESY, Washington, D. C. Filed Aug. 28, 1929. Serial No. 389,033. 1 Claim. (Cl. 244—12.)

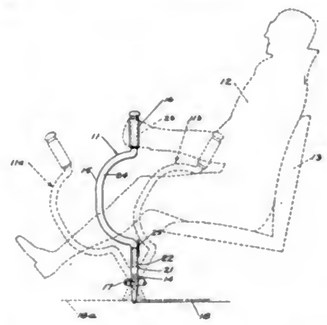
A monoplane comprising the combination of a fuselage, a main plane mounted for adjustment longitudinally on said fuselage, stabilizing and elevating planes mounted on said fuselage, the center of gravity of said monoplane being on a line perpendicular to the longitudinal axis of said

monoplane, said line passing between the center of area of said main plane and the center of area of said stabilizing and elevating planes, means to adjust said main plane



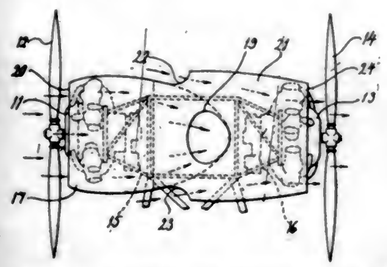
longitudinally of said fuselage to place said line through the center of lift of said main plane, means to lock said main plane while being adjusted and when adjusted.

1,874,522. CURVED CONTROL STICK. KNUT HENRICHSEN, Garden City, N. Y., assignor to Curtiss-Wright Airplane Company, a Corporation of Missouri. Filed May 1, 1931. Serial No. 534,162. 8 Claims. (Cl. 244—29.)



1. A control stick for aircraft comprising a pivoted section, a control cable connected to said pivoted section, said section being formed with a socket, and a curved section having a cylindrical extension mounted for rotation in said socket.

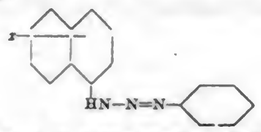
1,874,523. AIRCRAFT COWLING FOR TANDEM MOTORS. KNUT HENRICHSEN, Garden City, and GEORGE A. PAGE, Jr., Freeport, N. Y., assignors to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed July 8, 1930. Serial No. 466,447. 12 Claims. (Cl. 244—31.)



1. In aircraft, a plurality of motors arranged in tandem, a casing for said motors having separate cooling compartments for each motor, and means including said casing for causing air to flow over said motors for the purpose of cooling them.

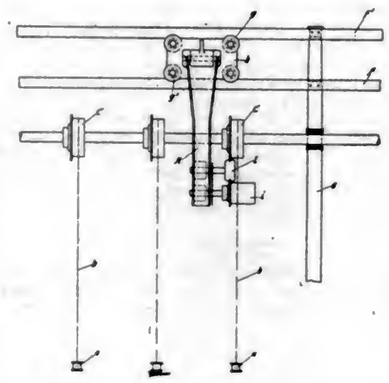
1,874,524. DIAZO-AMINO COMPOUNDS. WINFRID HENTRICH, Wiesdorf-on-the-Rhine, ERNST TIETZE, Cologne-on-the-Rhine, and ANTON OSSENBECK, Cologne-Mulheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 24, 1929, Serial No. 380,752, and in Germany Aug. 7, 1928. 5 Claims. (Cl. 260—69.)

3. As new products the compound of the probable general formula:



wherein ω stands for a substituent of the group consisting of the sulfonic- and carboxylic acid groups, and wherein the benzene nucleus may be further substituted by substituents of the group consisting of alkyl, the nitro group and halogen, being in form of their alkali metal salts generally brownish to yellowish substances which are generally easily soluble in water and which are split up into an amine of the benzene series and a naphthylamine-sulfonic- or carboxylic acid by the addition of an acid to their aqueous solutions.

1,874,525. SPOOLING MACHINE. CONRAD HERRMANN, Wuppertal-Elberfeld, Germany, assignor to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 4, 1931, Serial No. 520,115, and in Germany Mar. 10, 1930. 3 Claims. (Cl. 18—8.)



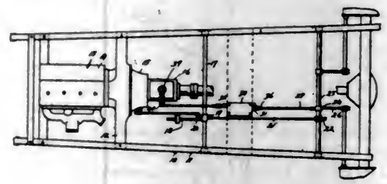
1. In a spooling machine, a series of centrifugal spinning pots, means for passing filaments to the pots, and means directly driven by the first-named means, for acting as a take-up device during exchange of the spinning pots.

1,874,526. BRAKE OPERATING MECHANISM FOR DELIVERY VEHICLES. KENNETH R. HERMAN, Detroit, Mich., assignor, by mesne assignments, to Continental-Divco Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 22, 1929. Serial No. 357,223. 8 Claims. (Cl. 192—13.)

1. In a vehicle control mechanism, the combination with a brake and a control element movable in one direction to apply said brake, of means for locking said brake in applied position while permitting said control element

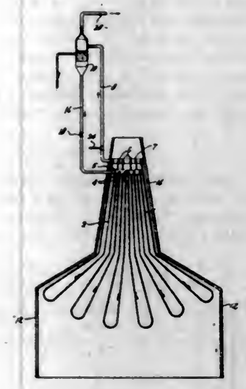
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to return to its normal position, a second control element and means for releasing said locking means requiring



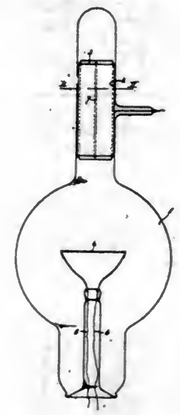
for its operation the manipulation of both said control elements.

1,874,527. STEAM GENERATOR. AUGUST-THEODOR HERPEN, Leipzig, Germany, assignor to La Mont Corporation, a Corporation of New York. Filed Mar. 2, 1927, Serial No. 172,032, and in Germany Mar. 6, 1926. 20 Claims. (Cl. 122—39.)



1. A steam generator comprising, in combination, a group of relatively long tubes of relatively small diameter, a distributing header connected to one end of the group of tubes, a collecting header at the other end of said group, a steam and water separator located at a height above said collecting header, a riser pipe substantially inclined to the horizontal connecting said collecting header with said separator, and a down or return pipe connecting the water space in said separator with said distributing header, whereby the difference in the weight of the water in the down pipe and of the steam and any water in the riser pipe tends to produce circulation of water through the system, said steam and water separator being positioned much higher than is required to produce unrestricted circulation through said system, said distributing header being provided with means for restricting the flow of water into the various tubes whereby a head of water is required to produce flow of water through said restricting means into the tube, the extra height of said separator above the tube providing said head of water as well as to produce flow through the system.

1,874,528. GAS FILLED DISCHARGE TUBE. GUSTAV LUDWIG HERTZ, Halle-on-the-Saale, Germany, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands, a Limited Liability Company of the Netherlands. Filed Dec. 13, 1926, Serial No. 154,550, and in the Netherlands Dec. 16, 1925. 4 Claims. (Cl. 250—27.5.)



1. A gas filled electron discharge rectifier, comprising a solid incandescible cathode, an anode and an imperforate conductive body, said body screening the anode for the purpose of preventing a discharge in the wrong direction.

1,874,529. PRINTING PICTURES OF A LENTICULAR FILM. GERD HEYMER, Dessau-Ziebigk in Anhalt, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed May 6, 1930, Serial No. 450,238, and in Germany May 8, 1929. 6 Claims. (Cl. 95—75.)

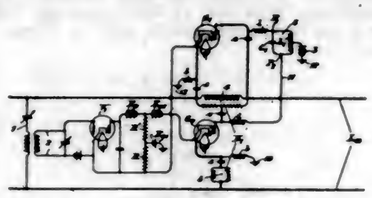


4. Process of printing a picture from a lenticular film onto a light sensitive layer carried on a smooth support without lateral inversion which comprises disposing the light sensitive printing layer towards the emulsion side of the lenticular film, illuminating the latter through its support by means of an objective presenting the same location of the virtual filter image as the objective employed in taking the picture on the lenticular film and stopping the light rays emanating from all but one stripe of the virtual filter image produced by the objective.

1,874,530. TRANSMISSION REGULATING SYSTEM. WILLIAM H. T. HOLDEN, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 26, 1931. Serial No. 583,381. 9 Claims. (Cl. 178—44.)

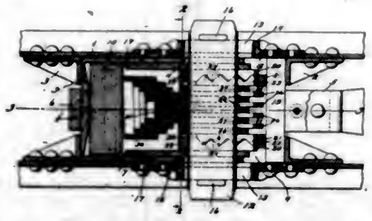
6. A transmission line over which a pilot current is transmitted, a network, a switching unit for connecting said network in said line, a rectifier connected across said

line by a circuit selective for said pilot current, two gas filled thermionic tubes connected to the plate circuit of said rectifier, means controlled by voltages in the plate



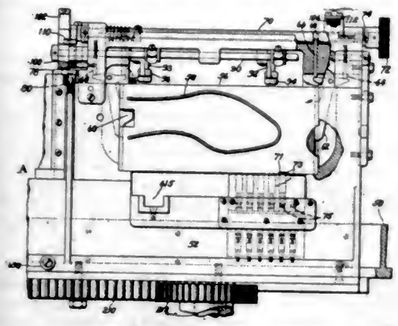
circuit of said rectifier for operating either of said thermionic tubes, and means controlled by said tubes for operating said switching unit.

1,874,531. FRICTION DRAFT GEAR. CYRUS J. HOLLAND, Chicago, Ill. Filed July 14, 1926. Serial No. 122,352. 19 Claims. (Cl. 213—24.)



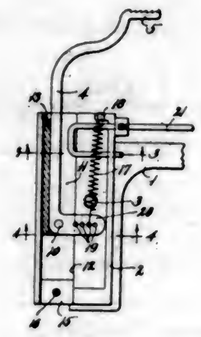
15. In a shock absorbing mechanism, a follower, a friction unit including intercalated friction plates and wedge means for applying lateral pressure thereto, said wedge means being initially in engagement with the follower and said intercalated plates being subsequently engageable by the follower, spring means opposing movement of the friction unit throughout the travel of the follower, a second spring means, and means cooperating with said wedge means and movable with the friction unit for applying pressure to said second named spring means during a portion of the travel of the follower.

1,874,532. INSOLE-MAKING MACHINE. ERIC A. HOLMGREN, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 28, 1928. Serial No. 309,021. 131 Claims. (Cl. 12—20.)



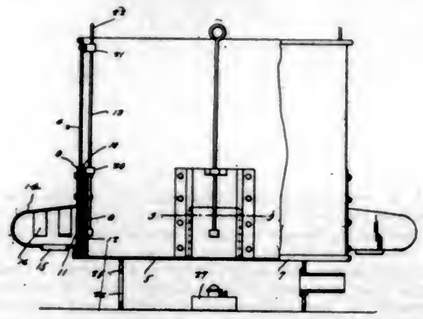
1. In an insole-making machine, pressure mechanism, a reciprocatory carrier, and a rib-molding die and an assembling plate separably mounted upon the carrier and movable thereby into alternate co-operation with the pressure mechanism.

1,874,533. FILLING-FEELER MECHANISM FOR LOOMS. ALEXANDER HUDSON, Readville, Mass., assignor, by mesne assignments, to The Draper Corporation. Filed July 30, 1930. Serial No. 471,851. 3 Claims. (Cl. 139—286.)



1. A filling-feeler mechanism comprising, in combination, a feeler-stand having a guide, a carrier slidable within said guide, said carrier constituted by a channel having its closed side extending parallel to the direction of its movement, a side-slipping feeler-member pivotally mounted within the said channel between upper and lower cheek-portions of the carrier-slide, a spring engaging with said feeler-member and acting to give the feeler-member and carrier their position rearward and also to swing the feeler-member relative to the carrier into engagement with the closed side of the said channel determining the angular presentation position of the feeler-tip, and a transmitter actuated by side-slipping movement of the feeler-member.

1,874,534. SWILLER. SIMON F. HUFNAGEL, CHARLES HUFNAGEL, ALVENA HUFNAGEL, and GEORGE HUFNAGEL, Platte Township, Taylor County, Iowa. Filed Oct. 15, 1931. Serial No. 569,066. 3 Claims. (Cl. 119—53.)



1. A device of the class described including a tank formed with a bottom and a cylindrical side wall rising therefrom, said wall being formed with an opening adjacent the bottom, a plate on the outside of the wall and a second plate on the inside of the wall, said plates having openings registering with the first mentioned openings, cleats mounted on the second plate, a valve plate slidable in the cleats, a spout formed on the first mentioned plate and projecting outwardly in communication with the openings and formed with an opening in its bottom, a plurality of mixing loops suspended from the top of the spout above the opening in the bottom thereof.

1,874,535. VEHICLE TRUNK. JAMES R. HUGHES, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Jan. 31, 1930. Serial No. 424,859. 2 Claims. (Cl. 190—28.)



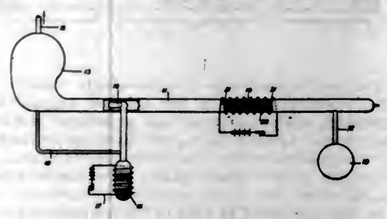
1. A trunk comprising, a body portion having an inwardly offset flange at the free edge thereof, a cover for said body portion, a clamping member secured to said flange to provide a channel within said body portion, and a resilient strip secured in said channel having a free edge folded over the top of said body portion and contacting with said cover when in closed position to prevent water from entering said trunk body.

1,874,536. METHOD OF MAKING MILLING CUTTERS. CHARLES J. IRWIN, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a Corporation of Illinois. Filed Dec. 5, 1930. Serial No. 500,199. 12 Claims. (Cl. 76—101.)



1. The method of forming inserted blade milling cutters which consists in mounting blades in a suitable support, helically forming teeth in said blades, and then mounting said blades in a cutter body so as to alter the original helical disposition of the teeth therein.

1,874,537. MANUFACTURE OF VACUUM DEVICES. EDWIN K. JAYCOX, Harrington Park, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 23, 1930. Serial No. 490,645. 2 Claims. (Cl. 230—101.)



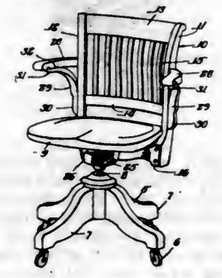
1. An evacuating system comprising a vessel adapted to be exhausted, a diffusion pump having a condensing chamber, a reservoir connected to said chamber containing an organic oil having a relatively low vapor pressure serving as a pumping medium, a return conduit forming a communicating passage beteen said chamber and said reservoir, a conduit connecting said vessel and said pump, and a trap filling the cross-section of said conduit, interposed between said vessel and said pump including a porous gas absorbing material for absorbing oil vapors from said pump and certain of the gases withdrawn from said vessel while allowing passage of other gases withdrawn from said vessel.

1,874,538. ELASTIC BRACELET CHAIN. SYLVESTER A. JOHNSON, North Providence, R. I., assignor to Albert E. R. Speidel, Edgewood, R. I. Filed Feb. 10, 1931. Serial No. 514,721. 14 Claims. (Cl. 59—79.)



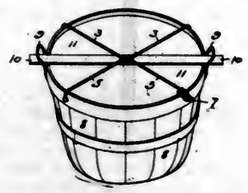
1. An extension bracelet chain, comprising a series of units, each comprising a guide link and a slide link, a yoke member of generally rectangular shape with laterally extending trunnions pivotally secured to one of said links and slidably related to the other link, spring means acting between said yoke and said slidably related link tending to contract the links of each unit.

1,874,539. ARMCHAIR. WALTER J. JOHNSON, Chicago, Ill., assignor to Johnson Chair Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 26, 1930. Serial No. 439,168. 3 Claims. (Cl. 155—157.)



1. An arm chair having supporting means, a seat, the arms and back comprising a rigid unit, means for mounting the seat on the supporting means, and a pivotal connection between the arms and back as a unit and the seat, the arms of the chair being wholly unsupported from the seat, said pivotal connection being located beneath the upper surface of the seat whereby the occupant may lean backwardly in the chair into various shifted positions of the torso and whereby in any such shifted position the occupant may distribute his weight partly upon the arms of the chair.

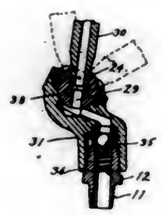
1,874,540. QUICK OPENING AND SEALING ATTACHMENT. WILLIAM T. JOHNSTON, San Benito, Tex., assignor of one-half to Louis S. Witte, San Benito, Tex. Filed Oct. 1, 1930. Serial No. 485,752. 1 Claim. (Cl. 292—253.)



In combination with a container and a closure inserted therein, means for securing the closure consisting of a strand of wire fixed at both ends to the exterior of the

body of the container and having an intermediate portion lying over the intermediate portion of the closure, a second strand of wire fixed to the exterior of the body of the container and looped through the intermediate portion of the first mentioned strand of wire at the intermediate portion of the closure, a fastener member mounted upon the exterior of the body of the container and to which the free end of the last mentioned strand of wire is attached to stretch both strands of wire above the closure and a strip resting upon the upper edges of the container and disposed across the closure with an intermediate portion between the closure and the looped portions of the strands whereby tension is imparted to both strands and the edge of the closure bound between the walls of the container.

1,874,541. LUBRICATING DEVICE. SVEN M. JONSSON, Woodside, N. Y., assignor, by mesne assignments, to The Lubrication Corporation, South Bend, Ind., a Corporation of Delaware. Filed May 14, 1928. Serial No. 277,587. 2 Claims. (Cl. 285—161.)



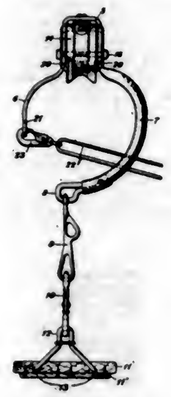
1. In combination, a nipple having an annular external radially projecting flange adjacent its receiving end, and a coupling for engaging said nipple comprising, a sleeve adapted to fit over said nipple end, an internal projection on said sleeve adapted to engage beneath said flange in any radial position with respect to the flange, the bore of said sleeve being larger than the flange on said nipple whereby, when the sleeve is passed over the nipple, the edge of said sleeve serves as a fulcrum to rock said projection into engagement with the flange on said nipple.

1,874,542. INSULATING COATING FOR FILAMENTS AND METHOD OF APPLYING THE SAME. JOHN KAUL, Irvington, N. J., assignor to Arcturus Radio Tube Company, Newark, N. J., Corporation of Delaware. Filed Sept. 24, 1929. Serial No. 394,923. 3 Claims. (Cl. 250—27.5.)
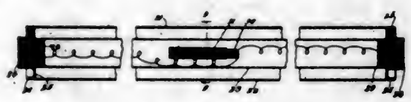


2. The method of coating a tungsten wire with a hard, homogeneous insulating coating which comprises applying layers of a solution of aluminum nitrate and a small percentage of silicon dioxide to the wire, heating the wire after each successive application to chemically change the aluminum nitrate to aluminum oxide, and subsequently heating the wire to a temperature above the melting point of silicon dioxide but below the crystallization temperature of tungsten.

1,874,543. CABLE-CAR. ROBERT J. KENT, Jamaica, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Feb. 14, 1931. Serial No. 515,870. 2 Claims. (Cl. 105—151.)



1. A lineman's chair adapted to be carried on a messenger wire and including a pair of yokes, each yoke having a pair of arcuate arms extending downwardly therefrom, one of the arms of each pair having an opening near its end, flexible linkage carried by the opposite arm of each pair, a cross-bar for connecting said yokes together, a seat adjustably carried by said linkage, a sheave carried by said yokes, and means adapted to be attached to the arms having openings whereby an extension is provided to prevent accidental dislodgment of the chair from the messenger wire.

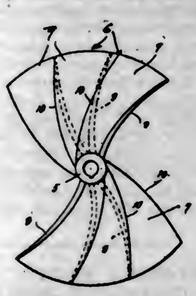
1,874,544. BLASTING CARTRIDGE. FRANK H. KNEELAND, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Nov. 25, 1929. Serial No. 409,638. 3 Claims. (Cl. 102—7.)



1. The combination with a substantially indestructible blasting cartridge having a gas chamber adapted to be charged with compressed gas, and a pressure responsive venting device adapted to permit discharge of said gas when the pressure of the same has been increased to a substantially predetermined point, of a non-combustible means for causing the said predetermined increase of pressure by the application of heat to the compressed gas.

1,874,545. PROPELLER. LYNN J. KOCH, Allentown, Pa. Filed Jan. 9, 1931. Serial No. 507,729. 1 Claim. (Cl. 170—165.)

A propeller comprising a plurality of units having hubs and oppositely projecting blades secured to the hub and having the inner portions thereof overlapping, said blades being longitudinally curved in opposite directions, the



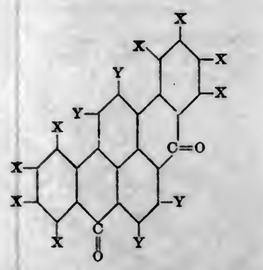
blades on corresponding sides of the hubs being so arranged relative to one another as to extend fanwise from the propeller shaft with the tips of the blade edge to edge.

1,874,546. PROCESS FOR THE COAGULATION OF LATEX LIKE EMULSIONS TO RUBBER LIKE MASSES. ESICH KONRAD and WERNER SIEFKEN, Cologne-Mulheim-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 4, 1929, Serial No. 330,426, and in Germany Jan. 16, 1928. 4 Claims. (Cl. 260—6.)

1. A process of manufacturing rubber-like masses which comprises polymerising a compound of the group consisting of butadiene-(1.3) and its methyl substitution products in the presence of water and of an emulsifying agent and then coagulating the latex-like emulsions thus obtained by freezing out.

1,874,547. CYCLOKETONES, POLYCYCLOKETONES, AND QUINONES, AND PROCESS OF PREPARING THEM. GEORG KRÄNZLEIN and HEINRICH VOLLMANN, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 6, 1928, Serial No. 290,874, and in Germany Mar. 12, 1927. 13 Claims. (Cl. 260—61.)

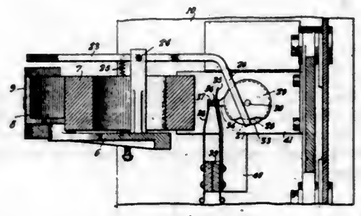
8. As new products, the compounds of the following constitution:



wherein one X stands for halogen or alkyl, the other X's stand for hydrogen, halogen, alkyl or alkoxyl and Y stands for hydrogen or halogen, said products being yellow to orange to red flakes or needles and dyeing the vegetable fiber yellow to orange to red tints.

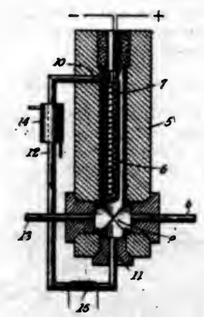
1,874,548. ELECTRICAL CONTROL DEVICE. JOHN KREMER, West Orange, N. J., assignor to Charles Engelhard, Inc., Newark, N. J., a Corporation of New Jersey. Filed Nov. 27, 1929. Serial No. 410,066. 1 Claim. (Cl. 200—56.)

In a control instrument, a shaft, means for rotating the shaft at a predetermined speed, a pair of leaf springs attached to and separated by a block of insulating material, said leaf springs carrying contacts, said contacts being normally spaced apart, a disc fixed to the shaft and having a peripheral lug periodically engageable with one of the leaf springs to force the contacts into engagement, a depressor bar pivotally supported intermediate of its ends, said depressor bar having a downturned portion at one side of the pivot and a transverse portion at the opposite side of the pivot, a cam disc fixed to the shaft adjacent the first mentioned disc and engaging the downturned portion



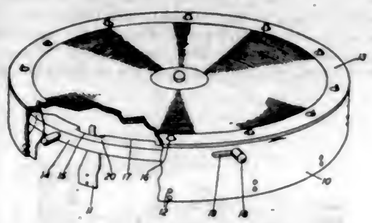
of the depressor bar to intermittently actuate the latter, a normally open switch positioned beneath the transverse portion of the depressor bar, and a meter pointer movable above said switch and cooperating with the depressor bar to close the switch when the pointer is in a predetermined position, said cam disc being so shaped and arranged relative to the first mentioned disc as to maintain the depressor bar depressed for a definite time before and after the engagement and disengagement of the contacts on the leaf springs.

1,874,549. GAS ANALYSIS APPARATUS. RICHARD H. KRUEGER, Newark, N. J., and WILLIAM F. HAMILTON, New York, N. Y., assignors to Charles Engelhard, Inc., Newark, N. J., a Corporation of New Jersey. Filed Jan. 14, 1931. Serial No. 508,576. 5 Claims. (Cl. 73—51.)



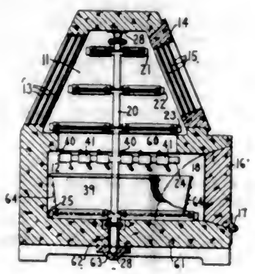
4. In a gas analysis apparatus, a cell having a chamber, a resistance heating element positioned in the chamber, a conduit through which the gas to be analyzed passes, said chamber having a lower portion in communication with the conduit, a pipe connecting the upper end and the lower portion of the chamber, and means for creating a temperature difference between the upper and lower portions of the pipe to increase the flow of gas by convection and decrease the time lag.

1,874,550. PHONOGRAPH RECORD TURNTABLE. JOHN J. KUHN, Elizabeth, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 12, 1931. Serial No. 556,493. 4 Claims. (Cl. 274—39.)



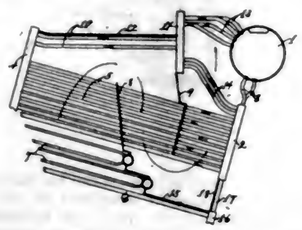
1. A turntable for phonograph records, a flexible record mounted thereon, springs secured to the turntable to stretch the record, and means integral with the turntable for simultaneously controlling the pressure of the springs on the record.

1,874,551. REFRIGERATED DISPLAY CABINET. ALBERT L. LAMBERT, Philadelphia, Pa., assignor to Heintz Manufacturing Company, a Corporation of Pennsylvania. Filed May 13, 1931. Serial No. 536,989. 14 Claims. (Cl. 62—89.5.)



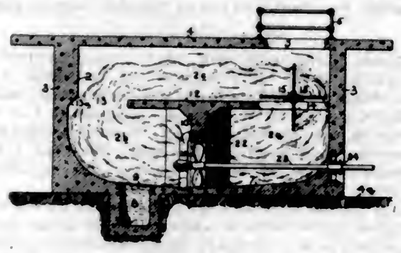
1. In a refrigerated display cabinet, an evaporator comprising a plurality of vertical sections having cross arms communicating therewith, shelf supports secured to said cross arms, and shelves supported thereon in heat exchange relation thereto.

1,874,552. STEAM BOILER. IVAR L. LANGVAND, Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Sept. 19, 1928. Serial No. 306,851. 4 Claims. (Cl. 122—299.)



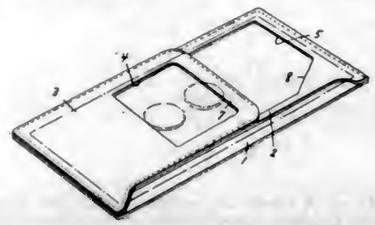
1. In a steam boiler, a row of adjacent uptake headers; a row of adjacent downtake headers; a bank of steam generating tubes connecting the headers; a cross drum at the downtake header end of the boiler; a row of upright and independent steam and water separation headers located between the uptake headers and the drum at a position nearer the drum; connections discharging steam from the top parts of the separation headers into the steam space of the drum; connections discharging water from the lower parts of the separation headers into the boiler below its water level; and long circulators extending from the tops of the uptake headers into intermediate portions of the separation headers and connected thereto; the circulators, separation headers, and drum acting to effect a three stage steam and water separation in which a substantial amount of such separation is effected by the circulators before they discharge into the separation headers, said connections being the only discharge connections from the separation headers to the drum and the boiler.

1,874,553. DRY-BROKE BEATER. HARRY LIEBECK, Swarthmore, Pa., assignor to Scott Paper Company, a Corporation of Pennsylvania. Filed Aug. 13, 1931. Serial No. 556,729. 5 Claims. (Cl. 92—20.)



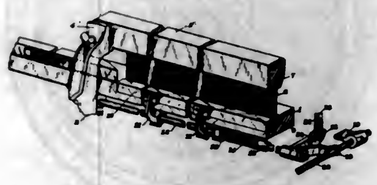
1. A dry-broke paper apparatus for sub-dividing the paper and subjecting the same to a lixiviating treatment preliminary to transfer of the same, which comprises a tank divided horizontally into upper and lower chambers opening into each other at their ends and the lower of which chambers is divided transversely by a contracted opening, a feed opening into one end of the upper chamber, a rotating feeder device arranged below the fixed opening and having arms for engaging and downwardly feeding the "dry broke" stock, and a rotating circulating and disintegrating propeller means arranged in the contracted opening in the lower chamber and adapted to act upon the materials fed downward by the feeder device.

1,874,554. POCKETBOOK. CLARENCE A. LIEDEL, Maybee, Mich. Filed May 3, 1930. Serial No. 449,471. 2 Claims. (Cl. 150—38.)



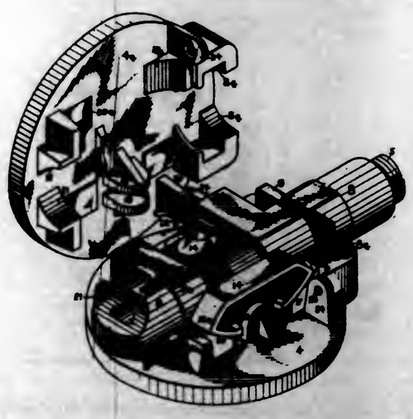
1. A pocket book comprising a pair of elongated inner and outer flexible, coextensive sheets disposed in opposed relation to each other and secured together at their ends and at one longitudinal edge in a manner to provide a bill receiving pocket extending substantially the length of the sheets, the other longitudinal edge of the sheets being free to provide an opening for the insertion of bills, the inner sheet having its free edge cut away to provide an elongated recess, the ends of which terminate a slight distance from the ends of the sheet and said inner sheet being provided, in one end portion, with an opening for the inspection and removal of the bills, the side and outer end walls of said opening being spaced slightly inwardly from the point of connection of the two sheets together and said inner sheet having an integral portion extending into a corner of the last mentioned opening for holding corners of bills placed in the pocket.

1,874,555. LOOSE REED STOPPING MECHANISM FOR LOOMS. VERNER LINDSJO, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Oct. 7, 1931. Serial No. 567,447. 10 Claims. (Cl. 139—189.)



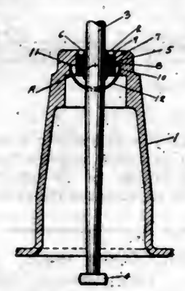
1. In a loom, the combination of a lay with a reed mounted thereon to yield when a shuttle is trapped in the shed, a rocking member mounted on and extending longitudinally of the lay, arms on said rocking member carrying a reed locking bar, a spring acting to normally hold the bar in reed locking position but yieldable to allow the reed to move when a shuttle is trapped, means for positively holding the rocking member against movement after the lay has reached a predetermined point in the path of its movement, a dagger carried by the rocking member, and connections operated by the dagger for stopping the loom when the rocking member is moved by the yielding of the reed.

1,874,556. GATE VALVE. HERBERT M. LOFTON, Chattanooga, Tenn. Filed Sept. 5, 1931. Serial No. 561,337. 7 Claims. (Cl. 251—71.)



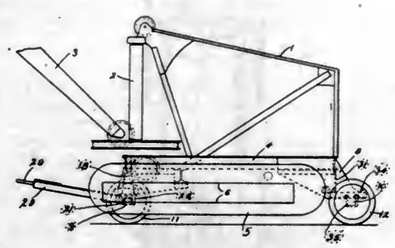
1. In a valve of the character stated, a valve body having parallel seats with two valve discs arranged back to back and between the seats, a stem nut having freedom for a limited axial movement relatively to the discs and adapted to move them to and from their valve seats, and a bottom wedge nut also having limited axial movement upon the valve discs and cooperating with the stem nut for imparting relative parallel movements to the discs, said nuts provided with lateral wedge-shaped lugs, in combination with spreaders arranged upon opposite sides of the axial line of the nuts and having wedge shaped surfaces at their ends in operative relation with wedge lugs upon the stem and bottom nuts.

1,874,557. LEVER MOUNTING. HUGH C. LORD, Erie, Pa. Filed Oct. 20, 1930. Serial No. 489,807. 8 Claims. (Cl. 74—39.)



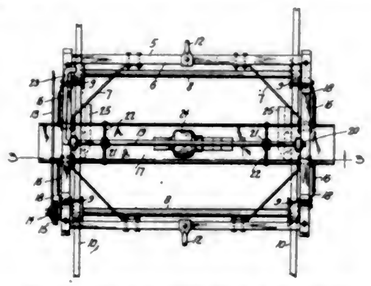
1. In a lever mounting, the combination of a lever; a support having a lever opening therein receiving the lever; a universal joint between the lever and the support; and means locking the lever against rotation on its axis comprising a curved pin connected with the lever and support, said pin having sliding engagement in one connection to accommodate swinging movement of the lever in one direction and rocking engagement with the other connection to accommodate movement in another direction.

1,874,558. TRAILER. CHARLES H. LOTTE, Ravenna, Ohio, assignor to Byers Machine Company, Ravenna, Ohio, a Corporation of Maryland. Filed Oct. 28, 1930. Serial No. 491,695. 1 Claim. (Cl. 280—150.)



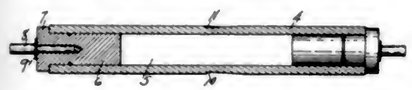
In a land vehicle adapted for selective traction upon propelling crawlers or other propelling means, two axles each having a wheel at each end, an immovable bracket upon the vehicle frame at one end adapted to bear directly upon one of said axles, a vertically immovable king pin upon the vehicle frame at the other end adapted to bear directly upon the other said axle, the radius of each of said wheels being greater than the vertical distance from the plane of the bottoms of the crawlers to the surfaces of said bracket and king pin respectively which bear upon the respective axles.

1,874,559. CONCRETE TAMPER. NELSON R. LOVE, Denver, Colo., assignor to Electric Tamper & Equipment Company, Chicago, Ill. Filed July 25, 1930, Serial No. 470,653. Renewed Feb. 10, 1932. 20 Claims. (Cl. 104—12.)



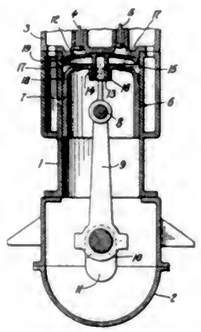
1. A tamping machine comprising a supporting frame, a tamping element mounted to permit vibration thereof, a vibratory motor carried by the tamping element, and adjustable means to regulate the elevation of the element.

1,874,560. UNDERCLEARER ROLL. NOAH E. LUCAS, Norwich, Conn. Filed Aug. 29, 1930. Serial No. 478,633. 2 Claims. (Cl. 19—140.)



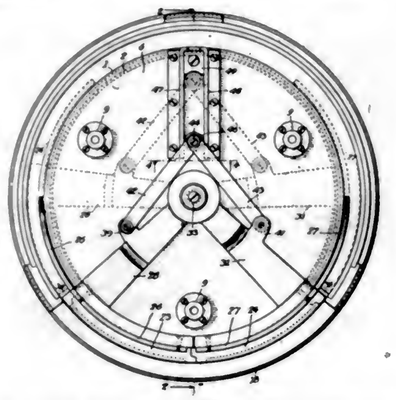
1. An underclearer roll comprising a body composed of paper and formed with an opening from end to end thereof, a plug composed of wood secured by an adhesive in the ends of the hole through said body to seal the chamber therein, and a journal secured to and projecting from said plug.

1,874,561. INTERNAL COMBUSTION ENGINE. WADIM S. MAKAROFF, New York, N. Y. Filed Dec. 21, 1929. Serial No. 415,837. 6 Claims. (Cl. 123—78.)



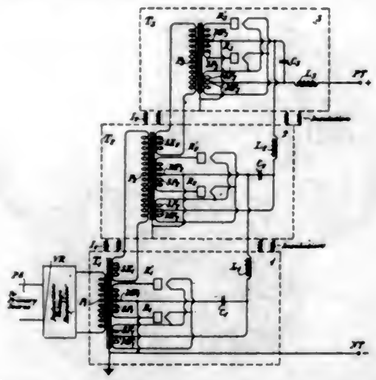
1. In an internal combustion engine, the combination of a cylinder having a head, a piston in the cylinder composed of separate head and skirt sections each engaging the inner surface of the cylinder and both having piston rings, a crank shaft, a connection between one of the sections and the crank shaft and means connecting the head and skirt sections for permitting free relative movement therebetween whereby the clearance space between the head section and the head of the cylinder is reduced during the exhaust stroke of the piston.

1,874,562. DOOR OPERATING MECHANISM. JOSEPH J. MARIOTTI, Chicago, Ill., assignor to Daprato Statuary Company, Chicago, Ill., a Corporation of Illinois. Filed May 1, 1931. Serial No. 534,176. 3 Claims. (Cl. 268—48.)



1. In combination a pair of vertical doors having horizontal supporting arms extending radially therefrom and pivoted at their inner ends about a common fixed vertical pivot whereby said doors will swing bodily toward and from each other in an arcuate path and connections between said doors for causing automatic simultaneous operation of said doors, said connections comprising a pair of links pivotally connected together at one end, means for guiding said connected ends for movement in a direction laterally of the door pivot, one of said links being pivoted to each of said arms at a point between the door carried thereby and said door pivot.

1,874,563. SYSTEM FOR PRODUCING HIGH VOLTAGE DIRECT CURRENTS. DE LOSS K. MARTIN, West Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 25, 1925. Serial No. 58,662. 2 Claims. (Cl. 175—363.)



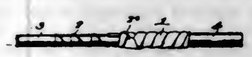
1. A system for transforming alternating current of low voltage into direct current of higher voltage comprising a low voltage source of alternating current, a plurality of transformers, a plurality of rectifiers, each rectifier being associated with a corresponding transformer, means to additively combine the voltage effects of said rectifiers, the primary of the first transformer being connected to said low voltage source of alternating current, the secondaries of the transformers each being composed of three

windings, one winding being employed for supplying the potential required to heat the filaments of the tubes in the rectifier associated therewith, another winding being employed to impress the necessary potential on the plates of the tubes in said rectifier, and the third winding being employed to energize the primary winding of the next succeeding transformer.

1,874,564. MINERAL CONCENTRATION. RHETHERFORD B. MARTIN, Roselle, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Oct. 31, 1928. Serial No. 316,354. 13 Claims. (Cl. 209—166.)

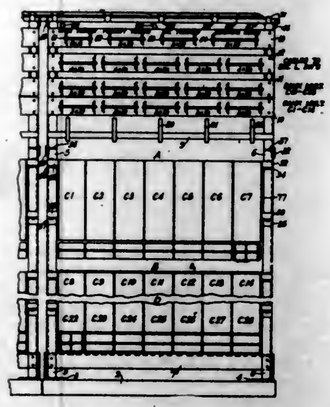
1. A method of froth flotation for ores and like bodies comprising introducing into a suitably conditioned ore pulp a thiocarbonic acid derivative of a hydrogenated methyl compound of a cyclic hydrocarbon so as to concentrate the values.

1,874,565. WATER-PROOF JOINT. DOUGALD MCEACHERN, Duncan, British Columbia, Canada. Filed July 10, 1931. Serial No. 549,958. 4 Claims. (Cl. 102—8.)



1. The combination of a joined fuse and detonating cap, of means for water-proofing the joint, said means comprising a rubber band wound on the fuse and cap, the layers of the band overlapping, and a pliable wire attached to one end of the band and wound closely to hold the band in position.

1,874,566. TELEPHONE SYSTEM. HARLEY B. MCELYEA, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 26, 1931. Serial No. 511,175. 14 Claims. (Cl. 179—91.)

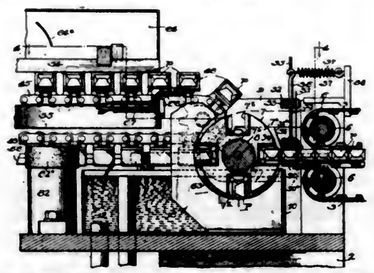


1. A switchboard for use in an automatic telephone system, said switchboard being composed of separate switchboard units disposed in a row, connector switches mounted on one side of each unit, line switches mounted on the other side of each unit two groups of terminals mounted on each unit, the banks of the connector switches on the same unit being multiplied together and connected to one group of terminals, the line-switches on the same unit being connected to the other group of terminals, facilities for making jumper connections between said terminal groups whereby any set of connector-bank contacts on a unit may be connected to any lineswitch on the same unit, and facilities for making inter-unit jumper connections whereby any set of connector bank contacts on any unit may be connected with any lineswitch on any other unit.

1,874,567. PROTECTION OF RIVER BANKS. OSCAR A. MECHLIN, Washington, D. C., assignor to Ernest F. Mechlin, Washington, D. C. Filed Aug. 8, 1929. Serial No. 384,491. 2 Claims. (Cl. 61—38.)

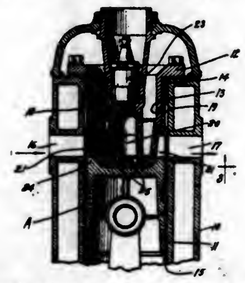
1. A protective mat for river banks consisting of a metallic reinforcement embedded in a mass of inert filler material so permeated with a waterproof plastic binder of such coherence and viscosity as to form a permanently flexible homogeneous water-resistant self-sustaining uncovered sheet, the surface of which directly contacts with the river site and the mass of which conforms of itself to the contour thereof.

1,874,568. PACKAGE SEALING MACHINE. HERBERT J. MELVILLE and ROBERT L. WILSON, Chicago, Ill., assignors to Wm. Wrigley, Jr., Company, Chicago, Ill., a Corporation of Delaware. Filed May 1, 1930. Serial No. 448,879½. 11 Claims. (Cl. 91—46.)



1. In a package sealing machine, the combination of a carrier rotative about a fixed horizontal axis and provided with package holding recesses spaced apart about its periphery, an open tank beneath said carrier and adapted to contain molten paraffine into which the lower portion of the carrier extends, means for feeding packages into the holding recesses of said carrier and a continuously moving conveyor comprising a multiplicity of longitudinally spaced grippers moving in a path intersecting the circular path of the packages in said carrier and operative to engage the packages after they have been carried through said tank and transfer same to said conveyor.

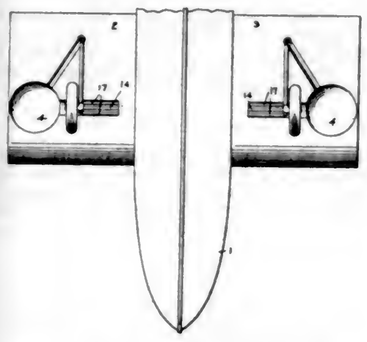
1,874,569. ENGINE AND METHOD OF PREPARING FUEL FOR COMBUSTION. ANDRE J. MEYER, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Nov. 20, 1930. Serial No. 496,910. 29 Claims. (Cl. 123—191.)



1. In an internal combustion engine, a cylinder, a piston, a combustion chamber, means for introducing fuel mixture into said cylinder and imparting a swirling mo-

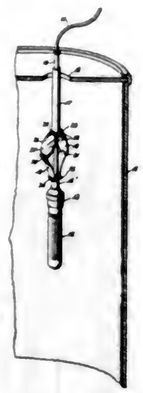
tion thereto, and means responsive to outward piston movement for introducing a portion of the fuel mixture formed of relatively heavy particles of unvaporized fuel into the center of said swirl.

1,874,570. RETRACTABLE LANDING GEAR. ROBERT J. MINSHALL, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash. Filed Jan. 6, 1930. Serial No. 418,955. 10 Claims. (Cl. 244—2.



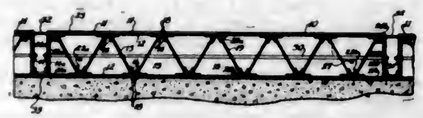
1. In an airplane, in combination with a hull and a member rigid with and projecting laterally outwardly from the hull, a normally vertical strut pivotally supported upon said member upon an axis extending longitudinally of the airplane, a landing wheel supported upon the swinging end of said vertical strut, a lateral strut pivotally connected at its lower end to the swinging end of the vertical strut, and extending upwardly and inwardly to said first member, and means for moving the inner end of the lateral strut outwardly to swing the vertical strut and the wheel outwardly and upwardly.

1,874,571. INTERIOR INSPECTION DEVICE. GEORGE L. MITCHELL, Atlanta, Ga., assignor to The Coca-Cola Company, Atlanta, Ga., a Corporation of Delaware. Filed Oct. 30, 1930. Serial No. 492,342. 2 Claims. (Cl. 240—2.18.)



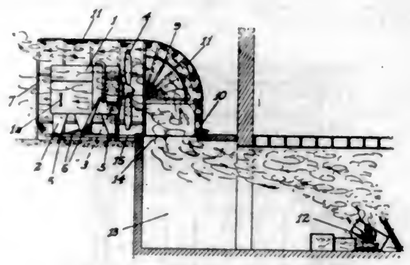
1. An inspection device of the class described comprising a rod, a lamp socket suspended thereby, a sleeve slidable on the rod, plates pivoted together externally of the sleeve and laterally of the rod and one pivoted to the socket and one to the sleeve, the last mentioned plate having a reflecting surface.

1,874,572. TRUSSED STRUCTURE. MAX A. MONTGOMERY, Hudson, Ohio. Filed Feb. 17, 1930. Serial No. 428,939. 9 Claims. (Cl. 189—34.)



1. A cellular trussed structure including two sets of side by side longitudinally and laterally extending chord members, one set of the chord members determining one surface, and the other set of the chord members determining another surface transversely spaced from the first surface, web members extending longitudinally and transversely between the sets of chord members and forming with the chord members a plurality of side by side longitudinally extending triangular cells, some of the chord members and some of the web members each including a longitudinally extending angled flange at one side thereof, the angled flanges of the chord members interfitting and interlocking with the angled flanges of the web members, and means joining the other sides of the chord and web members with each other.

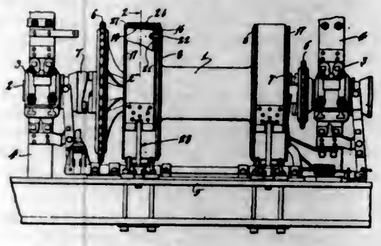
1,874,573. FIRE FIGHTING APPARATUS. LOYAL C. MOORE, Sacramento, Calif. Filed Apr. 8, 1930. Serial No. 442,704. 4 Claims. (Cl. 169—2.)



1. Apparatus for combating a fire confined in a relatively closed area having an opening to the atmosphere comprising a portable open-ended air passage unit arranged to rest on a solid surface in surrounding relationship to the opening and to extend some distance beyond the same, and a separate portable unit smaller than and placeable within the hood beyond the opening, said last named unit having a driven suction fan arranged to create a draft in the direction of the outer end of the passage.

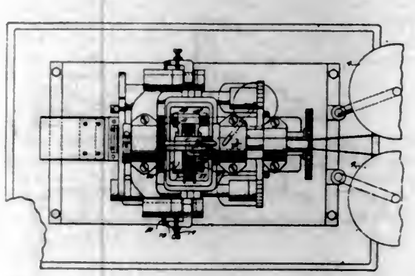
1,874,574. BRAKE RIM CONSTRUCTION. JOHN SHELBY MORGAN, Inglewood, Calif., assignor to The National Supply Company of Delaware, New York, N. Y., a Corporation of Delaware. Filed Feb. 3, 1930. Serial No. 425,473. 4 Claims. (Cl. 188—218.)

2. A brake drum mounting including, a supporting member having a brake drum centering flange, and a clamping ring supporting flange, and also having a plurality of driving key slots and a plurality of clamping bolt holes; a brake drum having a flange arranged to slidably fit upon said centering flange and also having a plurality of clamping bolt and key slots; a bushing for each of said brake drum clamping bolt slots; a clamping ring mounted upon said clamping ring flange and upon said bushings, to enable the brake drum to expand or contract freely without stressing the drum or supporting member;



a plurality of clamping bolts arranged to pass through the bolt holes in said supporting member and through said bushings and also through said clamping ring to clamp the structure in operative relation; a driving key positioned in each of said key slots whereby said brake drum is driven; and a retaining bolt for each driving key.

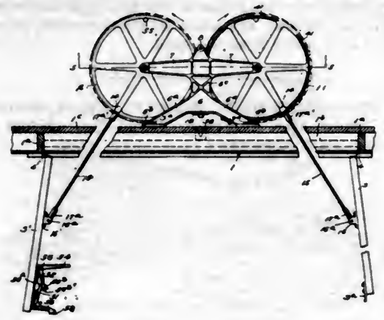
1,874,575. GRID WINDING MACHINE. JOSEPH A. MORICK, Kenilworth, and KENNETH P. SWANSON, Irvington, N. J., assignors to Eisler Electric Corporation, Newark, N. J., a Corporation of Delaware. Filed Mar. 19, 1930. Serial No. 437,159. 27 Claims. (Cl. 140—71.)



1. In a machine of the character set forth, the combination of means for winding grid wire about and fastening it to a wire support, with means for positively feeding the wire support including a guide member and groove for the wire support, and a relatively rotatable screw feeding device engaging the wire in said groove and gradually feeding it forward to the winding and fastening means, and means separate from the screw feeding device for forming grooves in said wire support for the reception of the grid wire.

1,874,576. OPERATING MECHANISM. HOWARD I. MORRIS, Lakewood, Ohio, assignor to The Yoder-Morris Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 5, 1925. Serial No. 7,087. 15 Claims. (Cl. 268—63.)

1. In apparatus of the class described, the combination of a pair of movable doors movable from a closed position to an open position and back to closed position, a pair of operating gears each disposed in juxtaposition to one of said doors, a linkage between each gear and the adjacent door, a gear common to and meshing with said first mentioned gears and arranged to rotate in one direction, a motor for driving said last mentioned gear, and means for controlling the starting and stopping of said motor.

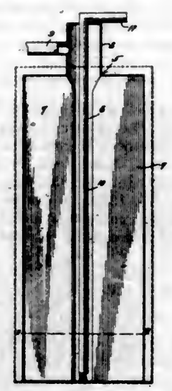


1,874,577. REVOLVING AND STATIONARY X-RAY SCREEN. MONTFORD MORRISON, Montclair, N. J., assignor to Westinghouse X-Ray Company, Inc., a Corporation of Delaware. Filed July 31, 1931. Serial No. 554,231. 6 Claims. (Cl. 250—34.)



1. An X-ray grid for suppressing the passage of secondary X rays comprising a frame member, a unitary sheet of material pervious to X rays provided with corrugations disposed in said frame member, and material impervious to X rays secured to the vertical sides of the corrugations of said unitary sheet.

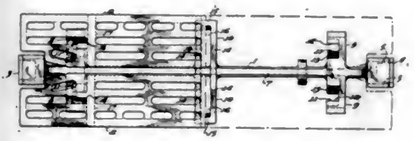
1,874,578. HEAT EXCHANGE DEVICE. SIDNEY A. MORRISON, Mason, Mich. Filed Apr. 9, 1931. Serial No. 528,885. 1 Claim. (Cl. 257—249.)



In a device of the class described, a hollow body portion having a central vertical chamber, a plurality of hollow blades radiating from the central vertical cham-

ber and communicating therewith, a head extending above the upper end of the body portion and forming a continuation of the central vertical chamber, a feed pipe of a diameter less than the diameter of the central vertical chamber providing a space between the feed pipe and wall of the vertical chamber, and an outlet pipe extending into the head to lead water from the head.

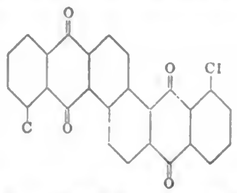
1,874,579. GRATE BAR. ROBERT C. MORTON, Baltimore, Md. Filed May 29, 1930. Serial No. 457,125. 11 Claims. (Cl. 126—180.)



1. A furnace grate involving a cradle having a plurality of arms projecting laterally thereof intermediate its ends, and a fuel supporting bar extending longitudinally of said cradle and overlying and supported by said arms, said bar having a plurality of depending members respectively disposed adjacent said arms, the adjacent members and arms having tongue and groove connection.

1,874,580. PROCESS OF PREPARING DIPHTHALOYL-NAPHTHALENE COMPOUNDS AND A NEW PRODUCT OBTAINABLE THEREBY. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, and FILIP KAČER, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 20, 1931, Serial No. 510,058, and in Germany Jan. 31, 1930. 4 Claims. (Cl. 260—61.)

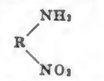
4. As a new product, the compound of the following formula



forming in the pure state shining yellow small crystals which dissolve in sulfuric acid to an orange-yellow solution and yield an olive-brown hydrosulfite vat.

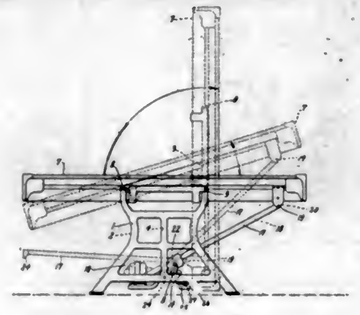
1,874,581. AROMATIC MONOAROYL DIAMINES. WILHELM NEELMEIER, Leverkusen-on-the-Rhine, and WILHELM LAMBERZ, Wiesdorf, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 5, 1931, Serial No. 506,834, and in Germany Jan. 15, 1930. 6 Claims. (Cl. 260—124.)

1. The process which comprises sulfonating in the amino group an aromatic nitroamine of the general formula:



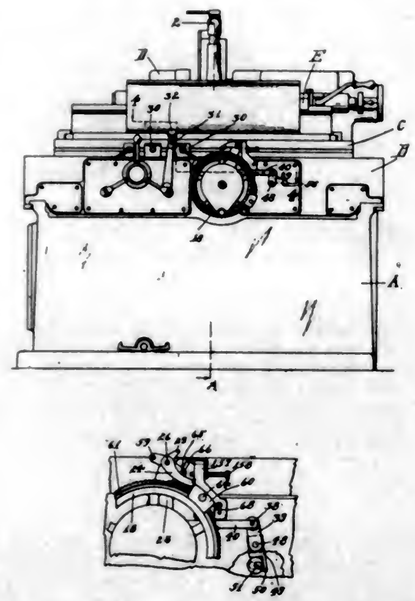
wherein R stands for a benzene or naphthalene nucleus which may be substituted by alkyl, alkoxy or halogen, reducing the nitro group in aqueous solution, aroylating the amino group by means of a benzoyl- or naphthoyl-halide which may be substituted by alkyl, alkoxy, halogen, or the nitro group and splitting up the sulfamic group by heating with a dilute mineral acid.

1,874,582. TILT TABLE. ALBERT CHARLES NELSON, Flushing, N. Y., assignor, by mesne assignments, to Westinghouse X-Ray Company, Inc., a Corporation of Delaware. Filed Nov. 1, 1930. Serial No. 492,701. 8 Claims. (Cl. 45—109.)



1. In a tilt table, a pair of standards, a rotatable table top fulcrumed to revolve about two transverse axes extending between said standards, an electric motor for moving said table top, an electric switch for operating said motor in two directions of rotation, said motor when operated in one direction rotating said table top about one of said fulcrum points and when operated in the other direction rotating said table top about the other of said fulcrum points.

1,874,583. GRINDING MACHINERY. LESTER F. NENNINGER, Cincinnati, Ohio, assignor, by mesne assignments to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 17, 1926. Serial No. 88,961. 13 Claims. (Cl. 51—165.)

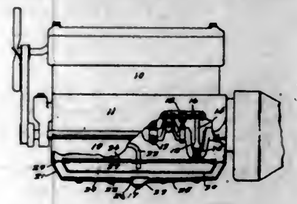


12. Cross feed mechanism for a grinding machine including a ratchet wheel and a cooperating pawl, a stop block on the wheel, disengageable means for oscillating the pawl to actuate the ratchet wheel, and additional means for alternatively rigidly securing the pawl against oscillatory movement and in the path of movement of the block whereby a stop for manual oscillation of the ratchet wheel is provided.

1,874,584. PRODUCTION OF NEW VAT DYESTUFFS. HEINRICH NERESHEIMER, Ludwigshafen-on-the-Rhine, and WILLY EICHHOLZ, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 25, 1929, Serial No. 402,539, and in Germany Nov. 17, 1928. 3 Claims. (Cl. 260—44.)

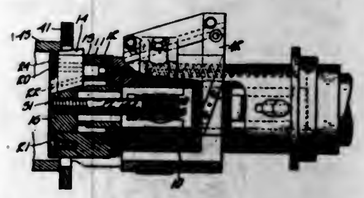
1. The process of producing new vat dyestuffs, which comprises treating the red vat dyestuff obtainable by the condensation of 1.4.5.8-naphthalenetetracarboxylic acid dianhydride with ortho-phenylenediamine with an acid oxidizing agent.

1,874,585. INTERNAL COMBUSTION ENGINE. EDWARD C. NEWCOMB, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Aug. 18, 1927. Serial No. 213,821. 5 Claims. (Cl. 184—106.)



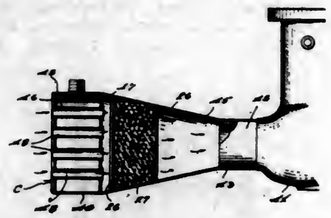
1. In a lubricating system for an internal combustion engine, an oil pan providing a reservoir for holding lubricating oil, a plurality of mesh screens lying on and covering the bottom of said oil pan, and spaced sediment pockets formed in the bottom of said oil pan, said plurality of screens and pockets trapping the sediment particles precipated by the oil in said reservoir.

1,874,586. CUTTER AND CUTTER HOLDER FOR TAPS. SAMUEL F. NEWMAN, Waynesboro, Pa., assignor to Landis Machine Company, Waynesboro, Pa., a Corporation of Pennsylvania. Original application filed Apr. 25, 1927, Serial No. 186,470. Divided and this application filed Feb. 12, 1931. Serial No. 515,866. 1 Claim. (Cl. 10—145.)



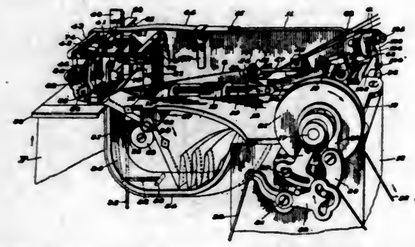
In a collapsible tap in combination, a chaser holder and a chaser, the chaser having parallel cutting serrations on one face and a cut away portion in the opposite face to provide a tongue and a chaser holder having two parallel extending ribs of unequal length and a groove therebetween for receiving said tongue the longer of said ribs having a threaded opening extending through the periphery of the tap longitudinally of said longer rib and at an angle to the bottom of said groove, and a screw threaded through said opening and engaging a notch in the chaser to secure it to the holder, substantially as set forth.

1,874,587. MEANS FOR COOLING OIL. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Contnental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Original application filed July 27, 1927, Serial No. 208,719. Divided and this application filed Nov. 7, 1929. Serial No. 405,480. 10 Claims. (Cl. 257—241.)



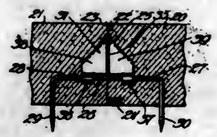
1. A heat exchange device adapted for use with a lubrcating system of an internal combustion engine and comprising, a casing having an enlarged portion, means for introducing oil into said enlarged portion, means for conducting a cooling medium through said enlarged portion for effecting a heat transfer between the oil and the cooling medium, said casing having a reduced tapered portion defining a chamber and communicating with the cooling medium conducting means, and filter means within said reduced tapered portion for cleaning the cooling medium subsequent to the heat transfer operation.

1,874,588. TUFTING MACHINE. FLOYD H. OGDEN, Watertown, Mass., assignor, by mesne assignments, to Pepperell Manufacturing Company, Biddeford, Me., a Corporation of Massachusetts. Filed Sept. 22, 1931. Serial No. 564,389. 20 Claims. (Cl. 112—79.)



1. A fabric tufting machine, comprising in combination, means constructed to fold the portion of the fabric that is to receive a tuft and hold the same folded, a needle for carrying a tuft forming yarn through both portions of the folded fabric as the needle is inserted so that the yarn projects from the opposite sides of the fold, and means operable to engage the forward portion of the inserted yarn and hold it while the needle is being withdrawn.

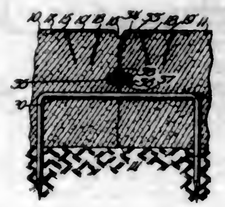
1,874,589. JOINT FOR PAVEMENTS OR THE LIKE. CLIFFORD OLDER, Wilmette, Ill. Filed June 7, 1929. Serial No. 369,020. 11 Claims. (Cl. 94—17.)



1. A joint construction for concrete pavement or the like, comprsing a pair of pavement sections having adjacent edges, a metal member having parallel guiding sur-

faces carried by said sections at their adjacent edges and slidably mounted relative to one of said sections, a parting member extending transversely to said metal member to form said pavement in sections, and a plurality of supports for movably supporting said members.

1,874,590. PAVEMENT JOINT PROTECTOR OR TRAFFIC MARKER. CLIFFORD OLDER, Wilmette, Ill. Filed June 7, 1929. Serial No. 369,021. 7 Claims. (Cl. 94—18.)



1. A traffic marker for concrete pavement and the like, comprising a sheet metal member having a longitudinally extending flexible portion and having downwardly turned border flanges for engaging in the pavement, and integral anchoring formations formed out of said metal member for securing the same to each of said sections, said flexible portion comprising a downwardly extending longitudinal rib of tapering width formed in said metal member.

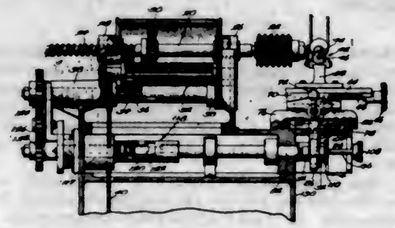
1,874,591. EXPANSION JOINT. CLIFFORD OLDER, Wilmette, Ill. Filed Jan. 17, 1931. Serial No. 509,315. 11 Claims. (Cl. 94—17.)



1. A pavement or the like comprising a pair of sections having adjacent edges, means for connecting said sections and preventing filling the spaces between the edges, comprising a flexible sheet metal member having a substantially V-shaped corrugation extending longitudinally of the adjacent edges of the sections, integral anchoring flanges extending into said pavement sections and formed on each side of said V-shaped corrugation, said pavement sections having upper adjacent corners formed with surfaces substantially flush with the inclined surfaces of the V-shaped corrugation, depending flanges on said flexible member, and a division plate fixed thereto and extending downwardly between the adjacent sections of the pavement.

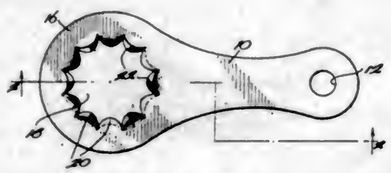
1,874,592. HOB GRINDING MACHINE. CARL G. OLSON, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a Corporation of Illinois. Filed June 8, 1929, Serial No. 369,502. 8 Claims. (Cl. 51—95.)

1. The method of grinding hobs having a spiral series of relieved teeth which includes the steps of supporting a grinding wheel in a predetermined position, rotating the grinding wheel and the hob to effect a certain grinding operation, on one of the surfaces of the hob teeth, removing said grinding wheel upon the completion of said grinding operation, maintaining the position of the hob and similarly supporting another grinding wheel for grinding a second surface of the hob teeth, effecting



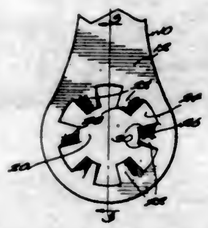
grinding contact between the hob and the second mentioned wheel with a third wheel, and effecting grinding contact of said wheel with a third surface portion.

1,874,593. ELECTRICAL CONNECTER. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 13, 1929. Serial No. 413,707. 5 Claims. (Cl. 173—269.)



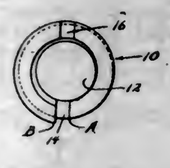
1. An electrical connecter of conductive material having a terminal member formed with an aperture for accommodating a binding screw ,and a plurality of work engaging teeth disposed around said aperture, said teeth being narrowed to sharpen their outer extremities and alternately bent in opposite directions out of the plane of the connecter stock so as to present the outer narrowed portions thereof in position to be clamped between the work and thereby insure electrical contact and prevent inadvertent loosening of the parts.

1,874,594. ELECTRICAL CONNECTER. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 13, 1929. Serial No. 413,709. 2 Claims. (Cl. 173—269.)



1. A terminal of flat spring stock having an aperture therein for receiving a terminal post, a body portion, and a plurality of marginal prongs extending from and formed integral with said body portion each prong having a pair of work engaging edges positioned out of the plane of the body portion, the edges of some of the prongs being positioned on one side of the body and the edges of the other prongs on the opposite sides of the body, a space being provided between said edges for receiving impressionable material when the prongs are clamped thereagainst, said edges lying in planes spaced from and substantially parallel with the plane of the body.

1,874,595. SELF-LOCKING SCREW. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 26, 1930. Serial No. 504,765. 10 Claims. (Cl. 85—1.)



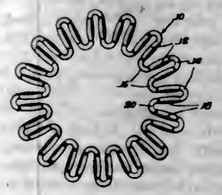
2. A screw including a threaded section normally deflected spirally outward with respect to the screw axis to render the same self-locking when applied to a work piece, said deflected section presenting a substantial length of thread surface which is adapted to frictionally engage companion thread surfaces of said work piece.

1,874,596. LOCK WASHER. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 25, 1931. Serial No. 525,093. 3 Claims. (Cl. 151—35.)



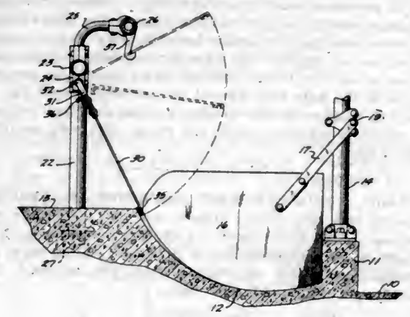
1. A lock washer formed from flat spring stock including an annular body portion, and a plurality of prongs positioned along and extending from at least one of the margins thereof, said prongs having oppositely disposed acute work engaging edges positioned in planes spaced from and substantially parallel with the plane of the washer body and also having oppositely disposed obtuse edges.

1,874,597. LOCK WASHER. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed June 24, 1931. Serial No. 546,541. 5 Claims. (Cl. 151—35.)



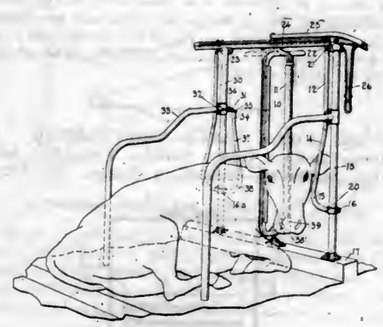
1. A lock washer of the class described including a plurality of substantially radial locking elements disposed about the axis of said washer, connecting sections at the inner and outer ends of said radial locking elements, said elements and connecting sections presenting a zigzag structure, the portions of said radial elements extending between said connecting sections being warped so as to present edges out of the plane of the washer for lockingly engaging a work piece clamped thereagainst.

1,874,598. MANGER STRUCTURE. JOHN B. OLSON, Fort Atkinson, Wis., assignor to James Manufacturing Company, Fort Atkinson, Wis., a Corporation of Wisconsin. Filed Apr. 24, 1930. Serial No. 446,822. 10 Claims. (Cl. 119—27.)



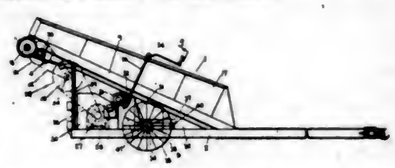
1. A manger having a stanchion frame along its rear side and a guard frame along its front side, in combination with a manger wall member pivoted to the guard frame and free to swing upwardly to raised position, said guard frame having an overhanging portion provided with means for engaging and supporting the manger wall member in its raised position.

1,874,599. STOP GUARD FOR STANCHION FRAMES. JOHN B. OLSON, Fort Atkinson, Wis., assignor to James Manufacturing Company, Fort Atkinson, Wis., a Corporation of Wisconsin. Filed Nov. 17, 1930. Serial No. 496,105. 1 Claim. (Cl. 119—147.)



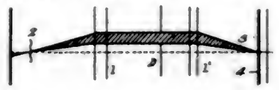
In a stanchion frame the combination with a front corner post, of a stop guard having its lower end pivotally secured to the post at a greater height than that of the knee of the animal for which the frame is intended, said guard extending in a wide curve inwardly, upwardly, and along an oblique line outwardly toward the post and having its upper end portion substantially parallel with the post and in close proximity thereto, said guard being arranged for swinging adjustment of its upper end in the space between the post and stanchion.

1,874,600. PORTABLE UNLOADING MACHINE. STANLEY F. OSSING, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed July 25, 1929. Serial No. 380,946. 5 Claims. (Cl. 198—233.)



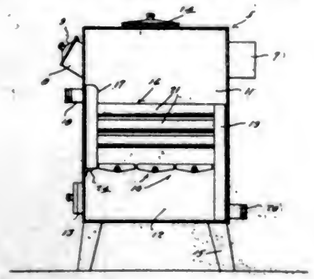
1. A portable conveyor comprising a frame, conveyor mechanism supported on the frame, a wheeled axle extending transversely of the frame beneath the conveyor mechanism, means guiding the axle for relative vertical displacement of the frame, flexible draft means in connection with the axle and trained downwardly therefrom to engaging means on the frame, and means for tensioning the draft means to move the frame vertically relative to the axle.

1,874,601. PROCESS FOR REPRODUCING FILMS. ANDRÉ OSWALD, Paris, France, assignor, by mesne assignments, to Keller-Dorian Colorfilm Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 21, 1928, Serial No. 307,364, and in France Sept. 27, 1927. 4 Claims. (Cl. 88—24.)



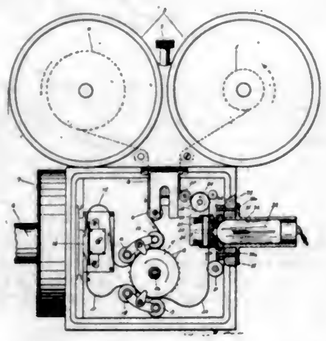
1. The process which comprises reproduction from the images of a goffered film corresponding images of a different size on another goffered film with substantially the same relative color reproducing values as in said first-mentioned images, by reproducing, with the aid of an objective, said images on an intermediate non-goffered film in a series of monochrome images from the first-mentioned images by projection printing with a diaphragm having different apertures corresponding to the color filter apertures of the taking objective and then reproducing said monochrome images from the intermediate film onto said other goffered film so as to form a series of multicolor images of different size from those of the first-mentioned goffered film by means of diaphragm apertures of a similar character as above, the reproduction being carried out with a lens system having different focal lengths to obtain the different size.

1,874,602. HOT WATER CIRCULATING UNIT. HENRY MORTON OWEN, Norfolk, Va. Filed Jan. 31, 1931. Serial No. 512,694. 2 Claims. (Cl. 122—20.)



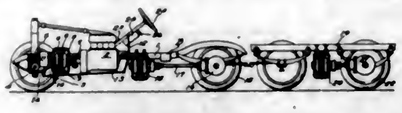
1. In a structure of the class described, in combination, a boiler comprising a casing, fire grates supported in said casing and defining an underlying ash pit, and an overlying fuel compartment or firebox, a water circulating unit comprising front and rear vertical headers, and horizontal vertically spaced circulating tubes in communication with said headers, the lower portion of the rear header projecting down into said ash pit and resting on the bottom of the casing and provided with a pipe connection, the front header being supported so as to have its lower end substantially on a level with said grate and provided at its top with a pipe connection, and means for introducing fuel into said casing arranged at a point above the front header.

1,874,603. COMBINED MOTION PICTURE AND SOUND CAMERA. FREEMAN H. OWENS, New York, N. Y. Filed Jan. 26, 1927. Serial No. 163,729. 5 Claims. (Cl. 88—16.2.)



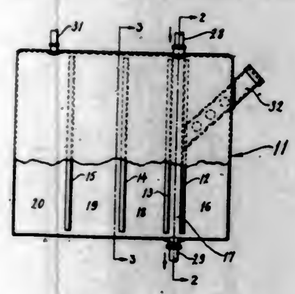
1. In a combined motion picture and sound camera, the combination of, an intermittent film moving means, a second means for moving a film toward and away from said intermittent film moving means, a sound recording device, a third means for continuously moving said film through said sound recording device, and a fourth means including slipless driving connections between the said second means and the said third means for maintaining a freely suspended loop of predetermined length in said film between said sound recording device and said second film moving means.

1,874,604. DRIVING APPARATUS FOR VEHICLES. CLIFTON R. ROCHE, Los Angeles, Calif. Filed Mar. 2, 1929. Serial No. 343,898. 6 Claims. (Cl. 180—49.)



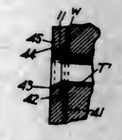
1. In driving apparatus for driving wheeled vehicles, the combination of an engine, driving wheels, an electric clutch located forward of the engine and between the engine and said driving wheels for driving the said wheels from the engine, said clutch having two relatively rotatable parts including an armature and a field operating to generate an electric current when relative rotation of said parts occurs by slippage of said clutch, other driving wheels with a motor having a shaft independent of the engine shaft, for driving the same, and an electric circuit connecting said motor with the clutch to drive the said motor with current generated by the slippage of said clutch, said electric clutch having means for short-circuiting the same to prevent said slippage and thereby throw all the driving force developed by the engine onto the forward driving wheels.

1,874,605. OIL TANK. GEORGE A. PAGE, Jr., Freeport, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed May 23, 1930. Serial No. 455,008. 11 Claims. Cl. (184—104.)



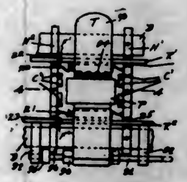
1. In a lubrication system, a tank having aligned inlet and outlet openings, and a pair of baffles within said tank substantially aligned with the walls of said openings at substantially diametrically opposed points.

1,874,606. SPOOL. CARL PALMER PARK, Manchester, N. H., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I., a Corporation of Rhode Island. Filed Jan. 15, 1931. Serial No. 508,948. 3 Claims. (Cl. 242—118.)



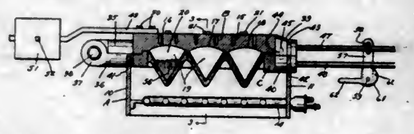
3. The combination in a spool, of a non-metallic cylindrical barrel having a longitudinal passage; with metallic heads disposed on the ends of the barrel, each head having a passage which registers with that in the barrel, each head passage extending longitudinally from its inner end and then spreading out in cone shape towards the outer end, thence extending out radially and laterally, and thence extneding longitudinally to its outer end; and a holding tube which extends through the barrel passage and fits the head passage.

1,874,607. MULTIPLE BIT BORING MACHINE WITH RECIPROCATING HEADS. CARL PALMER PARK, Manchester, N. H., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I., a Corporation of Rhode Island. Filed Jan. 15, 1931. Serial No. 508,949. 4 Claims. (Cl. 144—110.)



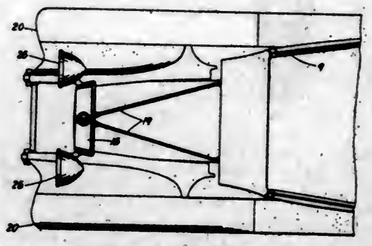
1. In a multiple bit boring machine, the combination of a frame having head guide tracks; two chuck holders one being movable towards and from the other parallel with said tracks, and tension springs between said chuck holders; two conical chucks facing each other each chuck being carried by a holder and having a plurality of alined bit holes; two heads slidable to and from each other on the head guide tracks parallel with the holes in said chucks each head carrying a plurality of revoluble boring bits, the bits on one head pointing to and in line with those on the other head and in line with the holes in the chucks; operating rods adjustably fixed to one head and extending through the chuck holders parallel with said tracks, the free ends of said rods being in line with the other head and the rods being of a length to limit the movements of the heads towards each other; a collar on each rod in position to move the movable chuck holders away from the other; an operating handle centrally pivoted between and below the chucks, said handle having a short arm which extends beyond the pivot; an extensible link including telescoping members and a tension spring, said extensible link being pivoted at one end to the long arm of the handle and at the other end to the head which carries the operating rods; and a rigid link pivoted at one end to the short arm of the handle and at the other end to the other head.

1,874,608. MACHINE FOR MAKING PIE SHAPED RECEPTACLES. GEORGE T. PARR, St. Paul, Minn. Filed May 25, 1923, Serial No. 641,514. Renewed Nov. 27, 1931. 9 Claims. (Cl. 107—66.)



3. A receptacle forming machine comprising a bed, a plurality of arcuated furrows formed thereon, a plurality of male die members having curved ends adapted to lie in said furrows, said male die members being spaced from one another, and female die members having a plurality of pockets adapted to co-operate with said male die members.

1,874,609. MOTOR VEHICLE. CLYDE R. PATON, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Mar. 29, 1930. Serial No. 440,021. 15 Claims. (Cl. 280—152.)

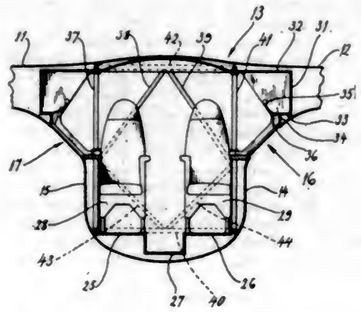


4. In a motor vehicle, a chassis frame, fenders at opposite sides thereof, means rigidly connecting said fenders, and a rubber member interposed between said chassis frame and fender connecting means to permit limited movement of said chassis frame relative to said fenders.

1,874,610. FUSELAGE CONSTRUCTION. SAMUEL T. PAYNE, Freeport, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Aug. 4, 1930. Serial No. 472,847. 8 Claims. (Cl. 244—30.)

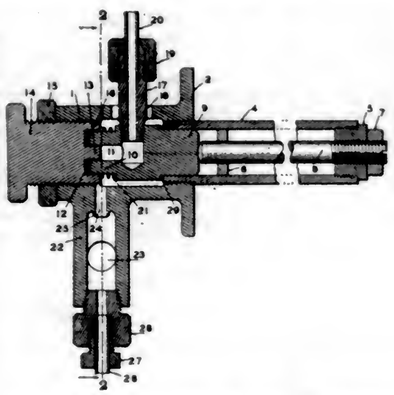
1. In an airplane, a fuselage having side walls, wings attached to said fuselage and having their surfaces extending substantially perpendicular to the surfaces of said side walls, and an intermediate portion connecting said

side walls and the lower surface of the wing, said intermediate portion being arranged both interiorly and exteriorly at a substantial angle to the surface of the side wall and the surfaces of the wing, whereby increased room



within the fuselage is obtained for the occupants without increase in head resistance of the airplane, said wings being formed with hollow portions opening into said fuselage for the reception of baggage of the occupants.

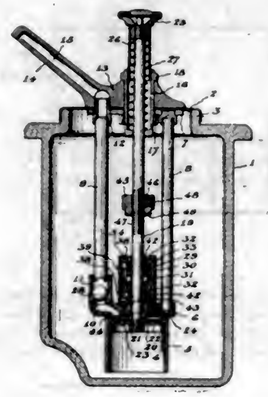
1,874,611. WATER SUPPLY REGULATOR. LAWRENCE M. PEARSONS, Quincy, Ill. Filed Apr. 10, 1931. Serial No. 529,107. 7 Claims. (Cl. 236—102.)



1. In a device of the class described, the combination with a casing, of a valve member movable longitudinally in said casing, a sleeve carried by said casing and forming one element of a thermostatic couple, a rod in said sleeve forming the other element of the thermostatic couple, said rod bearing against one end of said valve member but capable of retractile movement independently thereof, means for adjusting said rod longitudinally, an adjustable member carrying a valve seat co-operating with the other end of valve member to check the flow of water through the device, and a stop for limiting the movement of said valve member away from the valve seat to determine the maximum flow of water through the device.

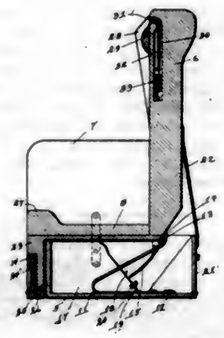
1,874,612. SIRUP PUMP. OTTO PETERSON, Cleveland, Ohio, assignor to The Russ Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 31, 1930. Serial No. 458,376. 12 Claims. (Cl. 225—35.)

10. In a liquid dispensing pump, a reciprocable plunger, an operating rod for said plunger, handle means for imparting a stroke to said rod in one direction, spring means for imparting a stroke to said rod in the opposite direction, a rolling member contacting with the surface of said rod, a rigid sleeve having internal wedging surfaces inclined oppositely relative to the axis of said rod, a longitudinally shiftable sleeve for selectively moving



said rolling member out of contact with one of said wedging surfaces and into contact with the other of said wedging surfaces, and means carried by said rod for moving said shiftable sleeve in the direction of movement of said rod for reversing the wedging action of said rolling member relative to said rod.

1,874,613. CHAIR. JOSEPH H. PILATES, New York, N. Y. Filed Feb. 3, 1930. Serial No. 425,591. 1 Claim. (Cl. 155—77.)

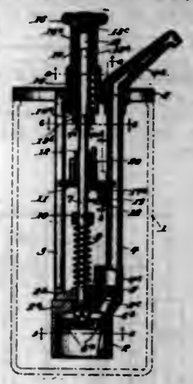


A device of the character described comprising a box like base open at the top, a body rockably mounted on said base, a series of V-shaped flat springs disposed in said base, and a rod extending across the bottom of said body, adapted to slide along the upper arms of said springs.

1,874,614. SIRUP PUMP. ALLEN C. PILCHER and LAWRENCE C. PILCHER, Louisville, Ky., assignors, by direct and mesne assignments, to The Russ Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 25, 1929. Serial No. 409,602. 17 Claims. (Cl. 225—35.)

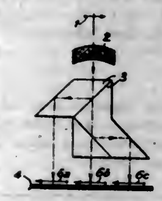
1. In a liquid dispensing pump, a piston, an endwise movable piston rod in permanent operative connection with the piston, an endwise movable piston rod actuating

member having fixed hand control means, said piston rod and hand operated actuating member being normally operatively connected together for unitary movement, and



means rendered operative during such unitary movement for disconnecting said elements for relative endwise movement.

1,874,615. THREE-COLOR FILM FOR CINEMATOGRAPHIC PURPOSES. ALEX PILNY, Zurich, Switzerland. Filed Oct. 23,, 1929, Serial No. 401,838, and in Germany Oct. 30, 1928. 3 Claims. (Cl. 88—16.4.)



1. In a method of producing three color cinematograph films the steps which comprise printing two of three component pictures of an image, said three component pictures, being arranged on a film in register on the front and rear side respectively of the one longitudinal half of another film which is sensitized on both sides, simultaneously printing the third component picture of the said image into one of the sides of the other longitudinal half of the said other film and longitudinally folding the said other film so that the third component picture is in register with the two other component pictures.

1,874,616. CUTTING TOOL. HENRY W. PORTER, Brookline, Mass., assignor to H. K. Porter, Inc., a Corporation of Massachusetts. Filed Nov. 18, 1930. Serial No. 496,461. 6 Claims. (Cl. 81—199.)



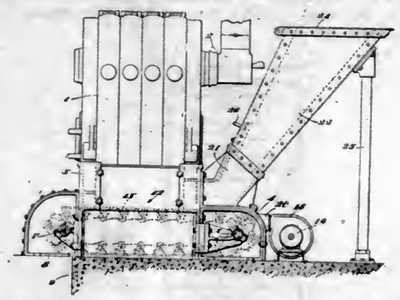
1. In a cutting tool of the compound lever type, in combination with a pivoted cutting jaw lever, the operating means therefor including a handle lever proper and an adjusting section pivoted thereto, one of said parts being pivoted to the jaw lever and the other having a pivotal bearing and a unitary device for relatively adjusting said handle lever and adjusting section about their pivot whereby to position relatively the other pivots of said operating means comprising a bolt pivoted to one of said parts to move the same therewith in either direction and extending laterally to one side and a co-operating nut carried by the other member to move the bolt in or out.

1,874,617. NON-FERROUS ALLOY. WILLIAM B. PRICE, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 4, 1930. Serial No. 459,261. 2 Claims. (Cl. 75—1.)

1. An alloy comprising essential amounts of copper, aluminum, nickel, zinc, and tin in proportions substantially within the following ranges:

	Per Cent
Copper	80 to 85
Aluminum	1 to 2½
Nickel	1 to 2½
Tin	1 to 2½
Zinc	7½ to 17

1,874,618. METHOD OF AND APPARATUS FOR USE IN BURNING SOLID FUEL. CLARENCE K. PRINCE, deceased, Westfield, Mass., by Robert K. Prince, administrator, Westfield, Mass., assignor to The H. B. Smith Company, Westfield, Mass., a Corporation of Massachusetts. Filed May 12, 1928. Serial No. 277,271. 11 Claims. (Cl. 110—40.)

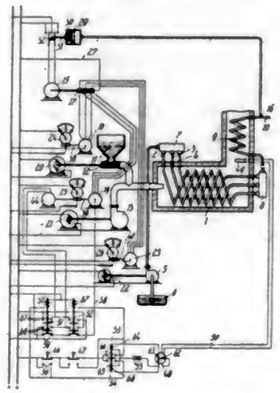


1. That method of burning solid fuel which comprises burning a bed of fuel at the maximum practical rate of combustion with the assistance of a forced draft while moving the fuel bed bodily toward ash receiving means and feeding fuel at such a rate as to maintain combustion over substantially the entire surface of the fuel bed, and suddenly cutting off the forced draft and reducing the rate of movement of the fuel bed.

1,874,619. AUTOMATIC FIRE REGULATION SYSTEM FOR STEAM BOILERS. HEINZ RABE, Berlin-Wilmersdorf, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Apr. 18, 1930. Serial No. 445,507, and in Germany Apr. 5, 1929. 6 Claims. (Cl. 122—448.)

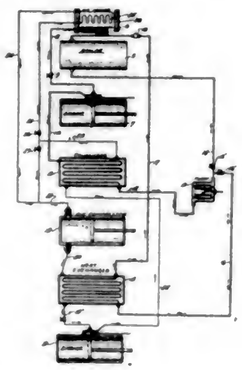
1. In an automatic feeding control system for steam boilers, having a fuel supply device motor, an air supply device motor, an air supply device motor and a feed water supply device motor, and individual regulating devices for said motors, an intermittently operable master control servo-motor, means responsive to variations in the supply conditions of the generated steam, for controlling said master motor with respect to its operation and direction of rotation, an operating servo-motor for

each of said regulating devices, and means operated by said master control motor for simultaneously controlling all of said operating servo-motors to operate simul-



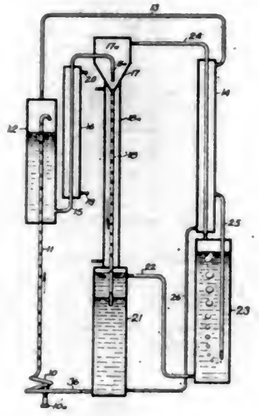
taneously with and at a fixed speed ratio to said master motor and in accordance with the rotation direction of the latter, to operate all of said supply devices simultaneously and uniformly at a desired ratio.

1,874,620. SYSTEM FOR UTILIZING FLUID PRESSURE. STEPHEN C. RADFORD, Oshkosh, Wis. Filed May 26, 1928. Serial No. 280,757. 2 Claims. (Cl. 60—49.)



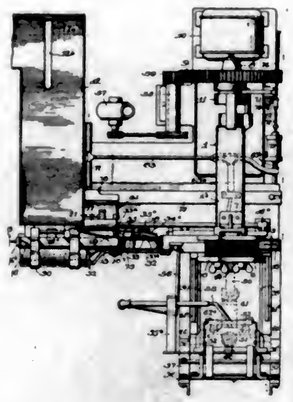
1. In combination, a steam engine, an air compressor, an air engine, a boiler, a superheater for steam delivered from said boiler adapted to supply superheated steam for driving said steam engine, a condenser for the exhaust steam delivered from said steam engine, means for delivering water of condensation from said condenser to said boiler, an air heater operable by gases of combustion from said boiler, means for conducting heated air from said air heater to said air compressor, a heat exchanger also adapted to receive water of condensation from said condenser, means for delivering said heated air in compressed and further heated condition from said compressor to said heat exchanger to convert the water of condensation delivered to the latter into steam, means for delivering said steam to the inlet of said superheater, means for delivering the air from said heat exchanger at high pressure but at reduced temperature and pressure to said air engine to drive the same, means for delivering the exhaust air from said air engine to said condenser for cooling purposes, and means for delivering said air from said condenser to said air heater to be heated and subsequenlty compressed for utilization in said heat exchanger, air engine and condenser.

1,874,621. REFRIGERATION. BO FOLKE RANDEL, San Diego, Calif., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 27, 1930. Serial No. 491,426. 11 Claims. (Cl. 62—119.5.)



6. In refrigerating apparatus of the class described, an absorber comprising a fall tube pump connected to receive weak absorption liquid from the generator and vapor from the evaporator.

1,874,622. STAPLING MACHINE. WILLET B. RANNEY, Chicago, Ill., assignor to Wm. Wrigley Jr. Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 2, 1931. Serial No. 519,346. 13 Claims. (Cl. 1—2.)



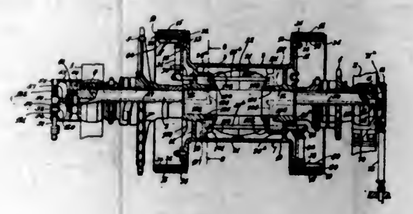
1. In a stapling machine, the combination with stapling mechanism of a horizontal trackway extending below said stapling mechanism, means for advancing boxes intermittently along said trackway to a station beneath said stapling mechanism, a card magazine adjacent said trackway, and a card feeding member adapted to oscillate between said magazine and the position of said boxes on said trackway beneath said stapling mechanism.

1,874,623. TYPEWRITER RIBBON MOISTENER. GEORGE V. REEVES, Port Arthur, Tex. Filed May 2, 1931. Serial No. 534,646. 1 Claim. (Cl. 91—625.)



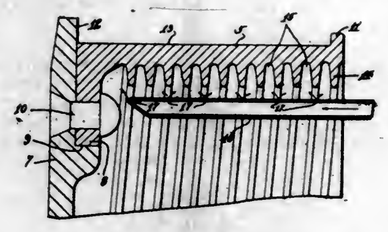
In an ink applicator for typewriter ribbons, an elongated container having an end wall and a back wall, said end wall being provided at a point spaced from the center of the container with an opening extending through said end wall, a wick extending through said opening and flatly contacting with said back wall, said back wall being provided with a continuation in the plane of the back wall and constituting a backing for the wick, and a clamp pivoted to one side of the container and having an offset intermediate portion overhanging said end wall and defining a contact foot flatly contacting with said wick and normally disposed in approximately spaced parallel relation to said back wall, a spring urging said foot into contact with said wick, said clamp being provided with a depending extension constituting a finger engaging element.

1,874,624. DISTRIBUTION OF WATER FOR COOLING BRAKE RIMS. ALLEN ERWIN RICE, Hermosa Beach, and LEWIS EMANUEL ZERBE, Moneta, Calif., assignors to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 11, 1930. Serial No. 474,548. 7 Claims. (Cl. 188—264.)



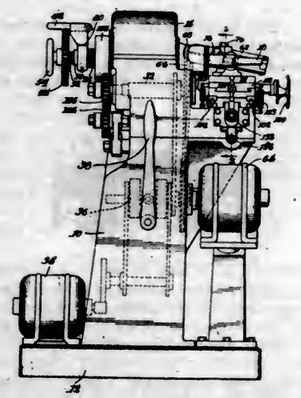
1. In a rotary drawworks, the combination of a drum shaft, a drum supported on the drum shaft, a pair of spaced manifolds mounted within the drum, brake rims at the opposed ends of the drum, means for passing a cooling liquid to one of said manifolds, means for delivering the cooling liquid from the latter said manifold to the brake rims, means for returning the cooling liquid to the other manifold, and means for conducting the cooling liquid from the manifold.

1,874,625. DRAWWORKS BRAKE RIM CONSTRUCTION. ALLEN ERWIN RICE, Hermosa Beach, Calif., assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 6, 1930. Serial No. 480,065. 7 Claims. (Cl. 188—264.)



1. In a rotary drawworks, the combination of a drum, brake rims at the opposite ends of the drum, spirally formed ribs on the inner peripheries of said brake rims, means for delivering water within the inner peripheries of said brake rims.

1,874,626. HOB GRINDING MACHINE. JOSEPH R. RICHER, Oak Park, Ill. Filed June 28, 1930. Serial No. 464,461. 23 Claims. (Cl. 51—45.)

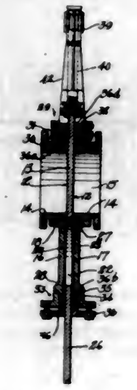


1. In a hob grinding machine, a rotatable work support, a grinder spindle, a grinder on said spindle, a holder for said spindle, means for tiltably supporting said holder, the axis about which said holder is tiltable, if projected, being substantially coincident with the line contact of the grinder with the work, and means for imparting relative movement between the grinder and the work in accordance with relief on the hob teeth.

1,874,627. GATE VALVE WITH NONPLUGGING SEAT CONSTRUCTIONS. FRED E. RILEY, Livermore Falls, Me. Filed July 1, 1930. Serial No. 465,181. 2 Claims. (Cl. 251—59.)

1. A device including a gate valve, a casing therefor, said casing including a main section, an extension section at one end thereof, and actuating means for operating the valve at the opposite end of the main section, the main section having a transverse passage and the gate valve having an orifice approximately centrally disposed between its ends for communicating with the passage, the extension section having a through opening for receiving a

portion of the gate valve, the gate valve being of a length at least three times the diameter of the orifice so as always to extend fully through the extension section, and the gate valve being so disposed that in the closed position



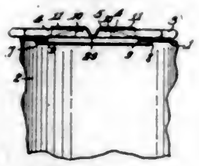
thereof, the orifice is disposed in the extension section and one end portion of the gate valve extends fully through the main section, and packing means at the opposite free ends of the casing continuously engaging the gate valve.

1,874,628. CONNECTER FOR BELTS. RUDOLF RODERWALD, Berlin, Germany, assignor to The Dayton Roderwald Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 6, 1930. Serial No. 500,548. 26 Claims. (Cl. 24—33.)



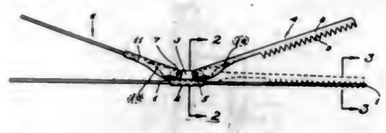
9. In combination, a belt connecter comprising a pair of pivoted hinged clamps, means on said clamps for compressibly engaging the free ends of the belt, means on said clamps for fitting in recesses in said belt, said hinged clamps including interlocking means for pivoting said clamps one on the other between said clamps to maintain them in spaced relationship, and a filler block mounted on said interlocking means laterally coextensive with the belt ends, and means to detachably clamp said filler block on said clamps.

1,874,629. HANDLE ATTACHING DEVICE. CHARLES H. ROLLASON, Wheeling, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed Dec. 5, 1930. Serial No. 500,236. 5 Claims. (Cl. 220—94.)



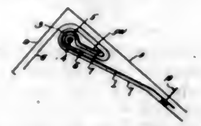
1. The combination with a wall of a container or the like, of a sheet metal handle-attaching ear comprising a concavo-convex body having a circular annular flange received within a confining fold of said wall, said fold being disposed in seated parallel relation to the interior surface of said wall, said body having therein a pair of alined radial upwardly pressed ribs whereby are formed alined channels, for the reception of the terminals of a handle, said channels being open at their outer ends, which ends are located inwardly relative to said flange.

1,874,630. COMB. NICHOLAS SAMANTAS, San Francisco, Calif., assignor of one-half to Charles F. Johnston, Oakland, Calif. Filed Mar. 17, 1931. Serial No. 523,345. 4 Claims. (Cl. 132—31.)



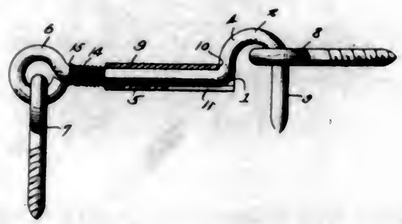
1. A comb comprising a needle, a U-shaped member hinged to the needle and having teeth therein, and a spring for yieldingly holding the member at an angle to the needle.

1,874,631. CANVASSING APPLIANCE. GEORGE F. SANDERS, Batesville, Ark. Filed Dec. 13, 1930. Serial No. 502,228. 1 Claim. (Cl. 20—4.)



In a device for applying a flexible member to two angularly disposed walls, an elongated core, a flexible member folded over the core to form first and second wings, a bead engaged around the flexible member and the core, the bead being provided on its outer edge with a base plate, and being provided on its inner edge with a lip, the lip and the base plate being approximately parallel, the base plate being wider than the lip, and the lip being disposed along one wall, both wings extending between the base plate and the lip, thence backwardly between the lip and said one wall, and thence around the bead, the second wing extending along the other of said walls, at an angle to the first wing, the first wing extending along the outside of the base plate and upon said one wall, and an attaching element connecting the base plate to said one wall, beyond the lip, the first wing covering and hiding the attached element.

1,874,632. FASTENER. JOSEPH SANON, New Philadelphia, Ohio. Filed Sept. 19, 1931. Serial No. 563,863. 2 Claims. (Cl. 292—106.)

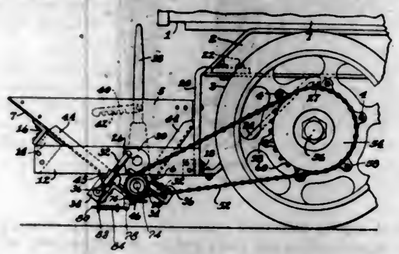


1. In a device of the class described, a hook comprising a shank and a bill, the bill comprising a free ended finger, and an oppositely disposed arm connecting the bill with the shank, a sleeve slidable on the shank, the sleeve being provided in its end with oppositely disposed notches of different depths, the shallower notch receiving the finger, and the deeper notch receiving the arm and the finger, when the sleeve extends across the bill, the sleeve being rotatable and rearwardly slidable to engage the shallower notch with the arm when the sleeve is retracted to open the bill, and spring means for advancing the sleeve.

1,874,633. COMPOSITION OF MATTER. JUNJIRO SATO and SHIGERU TOMIKAWA, Jackson, Mich. Filed Nov. 14, 1927. Serial No. 233,315. 4 Claims. (Cl. 106—31.)

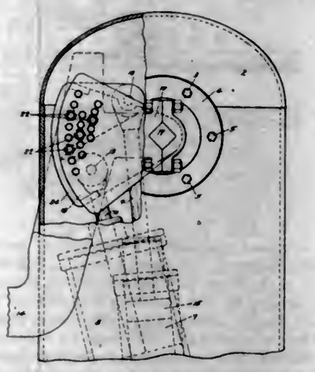
1. A composition of matter of the character described consisting of a fused mixture of 2 per cent rosin, 48 per cent of blown asphalt and gilsonite to which are added 3 per cent powdered coke, 15 per cent pure silica, 5 per cent slate powder, 20 per cent asbestos, 5 per cent wood pulp, 2 per cent powdered straw.

1,874,634. STONE SPREADER. HARRY A. SCHAUPP, Frankfort, N. Y., assignor to Acme Road Machinery Company, Frankfort, N. Y., a Corporation of New York. Filed Mar. 20, 1928. Serial No. 263,116. 6 Claims. (Cl. 221—144.)



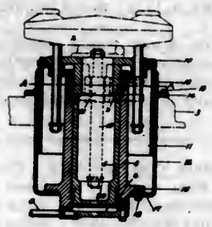
1. A spreader of the class described having, in combination, a hopper having end walls, and front and rear walls inclined downwardly and inwardly with their lower ends spaced apart to provide a discharge opening between them, said front and rear walls being made of flexible material to permit their lower portions to be flexed to move their lower edges toward and from each other to vary the width of said discharge opening, a shaft having its ends pivotally mounted in said end walls, means comprising links connecting each end of said shaft with the corresponding ends of said front and rear walls so as to thus flex said front and rear walls, and means under the control of the operator for turning said shaft.

1,874,635. MOLDING MACHINE. CHARLES F. SCHERER, Davenport, Iowa, assignor to Davenport Machine and Foundry Company, Davenport, Iowa, a Corporation of Iowa. Filed Apr. 26, 1930. Serial No. 447,564. 3 Claims. (Cl. 22—33.)



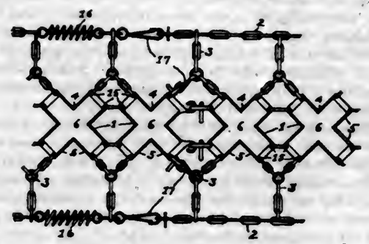
1. In a roll-over machine, a closed casing having bearings in opposite sides thereof, trunnions mounted in said bearings, operating arms rigidly connected with said trunnions, operating means within the casing and having movable connection with said arms, the means connecting the operating means to the arms being shiftable from place to place to compensate for changes in location of the center of gravity of the roll-over arms and their load, the casing being adapted to prevent access of sand or other grit to the moving parts within the casing.

1,874,636. PROTECTING MEANS FOR FLASK REST ACTUATING MECHANISM. CHARLES F. SCHERER, Davenport, Iowa, assignor to Davenport Machine and Foundry Company, Davenport, Iowa, a Corporation of Iowa. Filed Apr. 26, 1930. Serial No. 447,565. 3 Claims. (Cl. 22—9.)



1. In a structure of the general nature described, having a supporting base, an elongated hollow body of approximately uniform diameter having an external projection to be secured to the base and be held in position thereby, a draw cylinder having an external outwardly projecting flange connected in tight relation with said hollow body to be supported thereby upon said base, a piston sliding within said cylinder and having an outwardly projecting flange adjacent its exposed end, and a skirt surrounding said flange and secured thereto in tight relation, said skirt projecting within the hollow body and sliding longitudinally thereof, said skirt and hollow body having a substantially tight fit at their meeting points whereby to prevent access of sand or other scoring material to the contacting faces of the cylinder and piston.

1,874,637. ANTISKID DEVICE. JOSEPH SCHRAMM, McKees Rocks, Pa. Filed Aug. 22, 1931. Serial No. 558,685. 1 Claim. (Cl. 152—14.)



In an anti-skid device for a motor vehicle wheel, the combination of a substantially cross-shaped supporting plate adapted for having its arms disposed diagonally across the periphery of the motor vehicle tire, a rubber tread block shaped to conform to said supporting plate, a reenforcing plate embedded in said tread block, a plurality of screws connecting with said supporting and reenforcing plates for detachably securing said tread block to said supporting plate, and a plurality of U-shaped clips connecting with said reenforcing plate and being embedded in said tread block for securing the latter to said reenforcing plate.

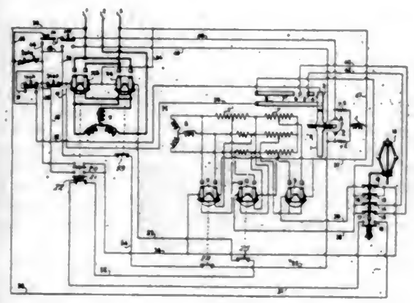
1,874,638. LITHIUM SALTS OF 7-IODO-8-HYDROXY QUINOLINE-5-SULFONIC ACIDS. KARL SCHRANZ and CLEMENS LUTTER, Wuppertal/Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed June 27, 1931, Serial No. 547,454, and in Germany July 1, 1930. 3 Claims. (Cl. 260—38.)

1. As new products a lithium salt of 7-iodo-8-hydroxyquinoline-5-sulfonic acid containing at least one gram atom of lithium, being yellowish brown crystalline powders, being soluble in water of room temperature to the extent of about 15%.

1,874,639. RUBBER VULCANIZATION ACCELERATOR. WINFIELD SCOTT, Akron, Ohio, assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed Oct. 9, 1925. Serial No. 61,587. 15 Claims. (Cl. 18—53.)

11. The process of vulcanizing rubber which comprises heating a mixture of rubber and sulphur in the presence of an accelerator comprising the reaction product of a mercaptan with a fully saturated, organic base of cyclic structure.

1,874,640. MOTOR CONTROLLER. EDWIN W. SEEGER, Wauwatosa, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed May 31, 1928. Serial No. 281,917. 11 Claims. (Cl. 172—179.)



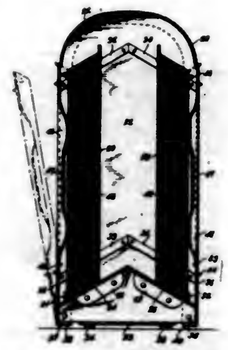
6. The combination with an electric motor, of means for starting the motor and regulating the speed thereof, said means comprising a power operated rheostat, and means for plugging the motor and for controlling said rheostat to effect its return to initial position but only upon termination of plugging, the last mentioned means including means whereby plugging is continued until the motor speed is reduced to substantially zero value.

7. The combination with an electric motor, of starting means therefor including a variable resistance and means for commutating said resistance to automatically maintain said motor at any one of a plurality of relatively low speeds, said starting means being operable to effect selection of such speeds, or to render said last mentioned means effective or ineffective at will.

1,874,641. METHOD OF PREPARATION OF CARBIDES. ROYAL L. SESSIONS, York, Pa., assignor, by mesne assignments, to Molybdenum Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Oct. 9, 1928. Serial No. 311,408. 20 Claims. (Cl. 75—1.)

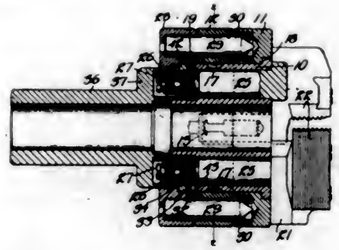
1. The method of making a carbide composition having at least two metallic constituents, at least one of which forms a carbide while another constituent does not readily form a carbide, which consists in bringing about a close association of all said constituents while in the chemically combined condition, and concurrently effecting a reduction of both constituents and a selective carburization of one of the constituents by carbon, and without fusion or sintering.

1,874,642. NAPKIN DISPERSER. GLENN A. SHAFFER and FRANKLIN H. WIRTZ, Green Bay, Wis., assignors to Fort Howard Paper Company, Green Bay, Wis., a Corporation of Wisconsin. Filed July 8, 1927. Serial No. 204,295. 3 Claims. (Cl. 312—60.)



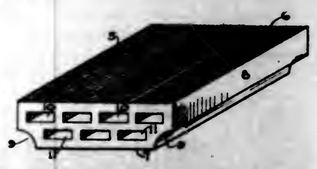
3. A napkin dispenser comprising, in combination: a casing, upper and lower downwardly and forwardly sloping ways carried by the side walls of the casing; a vertical sliding plate in said casing; and means carried by the vertical edges of said plate providing tongue and groove coaction with said ways whereby the means carried by the edges of the plate coact with the upper and the lower surface of the ways to retain the plate in vertical position during its sliding movement; said casing having an opening in its face toward which the sheets may be urged by said plate and through which said sheets may be withdrawn.

1,874,643. DIE HEAD. HARRY T. SHEARER and CHARLES A. REIMSCHISSEL, Waynesboro, Pa., assignors to Landis Machine Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Dec. 27, 1928. Serial No. 328,635. 5 Claims. (Cl. 10—100.)



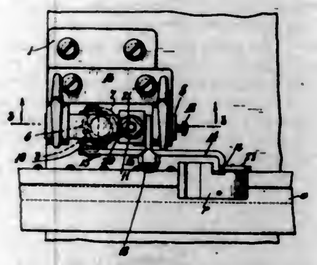
1. A die head comprising a front body member and a rear body member, an opening ring, an adjusting ring mounted on the front body member and a closing and locking ring secured to said adjusting ring, conical pins mounted in said closing and locking ring, means permitting the front body member and said rings to move axially relative to the rear body member and means to limit the movement of said closing and locking ring relative to the rear body member and said adjusting ring whereby said conical pins lock and unlock the die head, substantially as set forth.

1,874,644. TILE FLOORING. JOHN G. SHODRON, Fort Atkinson, Wis., assignor to James Manufacturing Company, Fort Atkinson, Wis., a Corporation of Wisconsin. Filed Aug. 22, 1928. Serial No. 301,206. 10 Claims. (Cl. 94—11.)



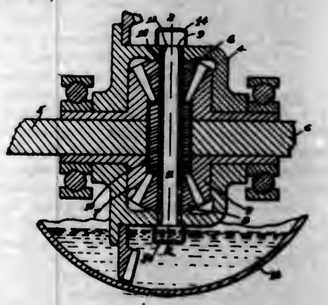
10. A floor comprising a series of identical tile alternately laid in opposite directions, each such tile having a substantially square exposed surface and a lower portion undercut on two sides and co-operating with the adjacent tiles to form concealed channels, said tiles being substantially perpendicular on the other two sides, whereby the undercut sides of tiles in the floor are supported by perpendicular sides of adjacent tiles.

1,874,645. SEWING MACHINE ATTACHMENT. DAVID SILBERMAN, New York, N. Y., assignor to Waldes Koh-I-Noor, Inc., Long Island City, N. Y., a Corporation of New York. Filed Nov. 4, 1930. Serial No. 493,315. 4 Claims. (Cl. 112—2.)



1. An attachment for sewing machines comprising a base plate, a slide block thereon, a guide for said block, a vibrating arm one end of which is swingingly mounted on said block, a downwardly extending fastener positioning hook projection on the free end of said arm, means for exerting a normally downward pressure on the free end of said arm and means for reciprocating the slide block.

1,874,646. LUBRICATOR FOR DIFFERENTIAL PINIONS. GEORGE SKINNER, Birchcliffe, Ontario, Canada. Filed July 20, 1931. Serial No. 551,874. 7 Claims. (Cl. 184—13.)



1. In a lubricator, the combination with a differential pinion pin having an oil passage therethrough, of means communicating with the ends of the pin and designed to scoop up oil as the differential revolves so as to force it into said passage.

1,874,647. VEHICLE SPRING. HARRY G. SMITH, Mishawaka, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Feb. 7, 1930. Serial No. 426,528. 5 Claims. (Cl. 267—54.)



1. In a motor vehicle, the combination with the frame and the axle, of a spring rigidly connected intermediate its ends to said axle, a shackle connection between one end of said spring and said frame, and a yielding connection between the opposite end of said spring and frame, said connection comprising, a rubber block having a recess therein mounted in a recess formed in said frame, and a member directly supporting said spring having a head therein received in the recess in said rubber block and supported thereby, whereby said spring will have a limited amount of longitudinal motion relative to said frame.

1,874,648. AUTOMATIC SIDE FEED SHUTTLE. ISAAC SNOW, Lawrence, Mass., assignor to U. S. Bobbin & Shuttle Company 1929, Providence, R. I., a Corporation of Rhode Island. Filed May 8, 1930. Serial No. 450,649. 6 Claims. (Cl. 139—223.)

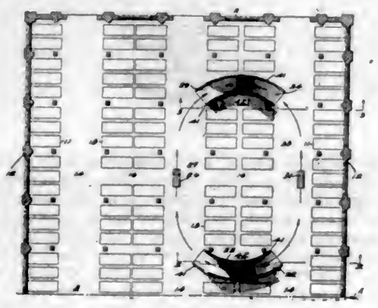


1. The combination in a shuttle having a body [illegible]ich is a bobbin chamber which extends through from the feed side to the discharge side, a threading groove and a threading block recess in the feed side, such recess extending out at the eye side as a slot to an eye in the wood; of a threading block positioned in said block recess having a longitudinal thread passage in extension of the bobbin chamber and having a guide wall which extends from the eye side into said thread passage and forward, the edge of the guide wall extending forward along the thread passage to a nose, the forward side of said block extending over and back to the eye and the forward edge extending from the nose towards the feed side and then back in a substantially straight direction towards the discharge side where it terminates as a front tooth which is proximate and overlapped by the eye in the wood, there being behind this tooth, an eye in the metal which is closed at the back by an eye thread pin, a longitudinal guard which extends from the back of the block at the closed side of the shuttle forward over the nose, said block having at the back and at the closed side a set of transverse teeth which slope towards the eye side and the discharge side, the inner tooth being of hook form and raking forward; a thread pin extending between the block and shuttle body from the feed side towards the discharge side; and a spring actuated friction device positioned in the forward part of the thread passage and which engages said thread pin.

1,874,649. GARAGE CONSTRUCTION. CHRISTOPHER H. SNYDER, Berkeley, Calif. Filed May 1, 1929. Serial No. 359,495. 2 Claims. (Cl. 20—1.13.)

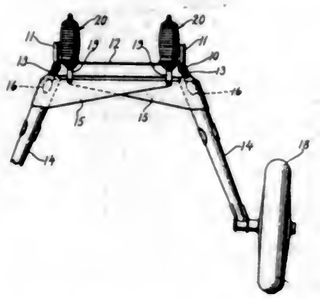
1. A garage building comprising a plurality of substantially coextensive superposed floors, each of said floors having identical parking areas and spaced parallel aisles on opposite sides of certain of the parking areas, a plurality of spaced supporting walls extending within the building between the spaced parallel aisles and through

the superposed floors, spaced inclined relatively narrow ramps joined to said walls and sloping in opposite directions, each ramp being of sufficient length to extend between the parallel aisles on adjacent floors only, said



ramps being superposed within the building and occupying only a portion of the area between the adjacent parallel aisles, whereby all upgoing and downgoing traffic moves in the same direction.

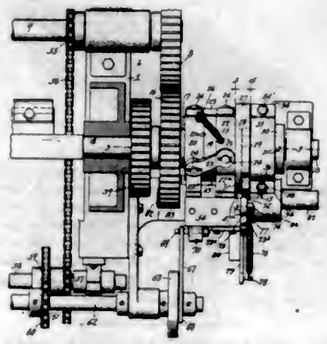
1,874,650. AEROPLANE LANDING GEAR. COLBY W. STEWARD, Franklin Square, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Sept. 30, 1930. Serial No. 485,415. 2 Claims. (Cl. 244—2.)



1. In an aeroplane; a landing gear frame comprising three struts joined rigidly at an apex, one of said struts projecting downwardly and outwardly from said apex and carrying at its outer end a landing gear wheel, the second of said struts projecting rearwardly from said apex, substantially parallel to the longitudinal axis of said aeroplane and pivoted at said apex and at its rearward end to said aeroplane to permit lateral swinging movement of said landing gear, said pivots being longitudinally widely spaced, and the third said strut projecting from said apex transversely and substantially parallel to the lateral axis of said aeroplane; and a shock absorbing device between said aeroplane and the end of said laterally extending strut.

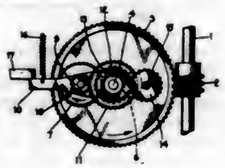
1,874,651. CLUTCH. GEORGE W. SWIFT, Jr., Bordentown, N. J., assignor to George W. Swift, jr., Inc., Bordentown, N. J., a Corporation of New Jersey. Filed Mar. 5, 1930. Serial No. 433,259. 11 Claims. (Cl. 192—24.)

1. In a clutch, the combination with driving and driven clutch-members provided with stop mechanism for normally holding said clutch members out of clutch, of latching mechanism under the control of said stop mechanism for locking said clutch-members together in clutched relation, said latching mechanism comprising a latch-bar



mounted on one clutch-member part, and a latch-plate movable on another clutch-member part by said stop mechanism.

1,874,652. INDICATION CONTROLLING APPARATUS. HARRY L. TANNER, Brooklyn, N. Y.; The National City Bank of New York, executor of said Harry L. Tanner, deceased, assignor, by mesne assignments, to Wallace & Tiernan Products, Inc., Belleville, N. J., a Corporation of New Jersey. Filed Apr. 20, 1929, Serial No. 356,635. Renewed Jan. 5, 1932. 7 Claims. (Cl. 74—34.)

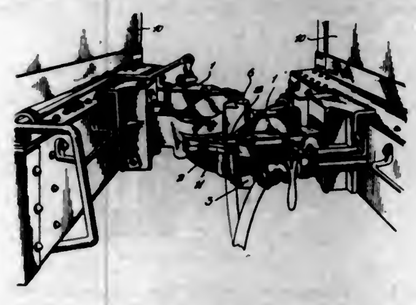


1. In combination, an indication-controlling member adapted to be actuated in accordance with an object whose position is to be indicated, a member at all times operatively connected to said first mentioned member adapted to control an indicator, means connecting said members whereby the former during a predetermined range of its movement actuates the latter at a predetermined relative constant rate, means connecting said members whereby the first mentioned member during a different range of its movement actuates the second mentioned member at a predetermined different relative constant rate, means for automatically causing the change in ratio of the constant rates of said members to occur at a predetermined instant of movement of the first mentioned member, and means controlled by the extent of movement of said first mentioned member for automatically selectively controlling said two first mentioned means.

1,874,653. CAR COUPLER. JOHN J. TATUM, Baltimore, Md. Filed Nov. 8, 1930. Serial No. 494,398. 2 Claims. (Cl. 213—153.)

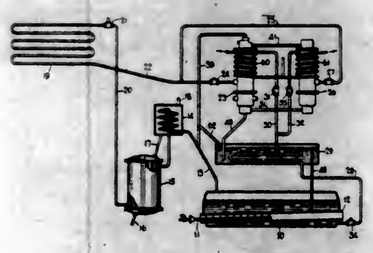
1. In a car coupler, and in combination with a car having at an end thereof an air brake pipe and angle

cock fitting projecting therefrom between its longitudinal center and one side of the car, a coupler at said end of the car comprising a drawhead having a forked forward portion providing jaws, a knuckle pivoted to one of the jaws, a single horizontal supporting and stop lug formed on the jaw at the knuckle side of the drawhead and extending forwardly to substantially the same degree as said jaw and



at an outward and forward angle relative thereto, said lug being disposed between the horizontal center and base of said side of the drawhead, and a single stop lug forming a horizontal extension from the jaw at the guard arm side of the drawhead facing said air brake pipe and angle cock fitting, said lug being arranged substantially at the level of the upper surface of said jaw and projecting at an angle outwardly and forwardly therefrom to substantially the same degree as the knuckle carrying jaw, whereby said lugs are disposed so as to respectively underlie and overlie the jaw extension and lug of another coupling when the couplings are connected, and whereby said jaw extension is arranged to adapt the coupler to have maximum swinging movement in the direction toward the brake pipe and angle cock of the car without contact of said jaw extension therewith.

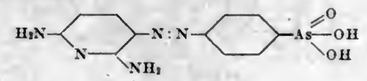
1,874,654. CONTINUOUS ABSORPTION REFRIGERATING APPARATUS. ROBERT S. TAYLOR, Evansville, Ind., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 19, 1930. Serial No. 496,599. 9 Claims. (Cl. 62—5.)



1. A refrigerating system of the absorption type including two absorbers, a refrigerant vapor line communicating with both absorbers, a weak liquor line communicating with both absorbers, a pressure equalizing line from the boiler, a strong liquor return line to the boiler, and means for simultaneously closing the pressure equalizing line and strong liquor return line to one absorber, and opening the pressure equalizing line and strong liquor return line to the other absorber.

1,874,655. BETA (PARA-ARSONIC ACID PHENYL AZO) ALPHA DIAMINO PYRIDINE AND THE PROCESS OF MAKING IT. EDMOND T. TISZA and BERNARD JOOS, Yonkers, N. Y., assignors to The Pyridium Corporation, Nepera Park, N. Y., a Corporation of New York. Filed May 7, 1929. Serial No. 361,265. 5 Claims. (Cl. 260—14.)

1. As a new article of manufacture, para-arsonic-acid-phenyl-azo-alpha-alpha-diaminopyridine, having the following formula:—



1,874,656. ACYLATED AMINO AZO COMPOUNDS AND PROCESS OF PREPARING THE SAME. EDMOND T. TISZA, New York, and BERNARD JOOS, Yonkers, N. Y., assignors to The Pyridium Corporation, Nepera Park, N. Y., a Corporation of New York. Filed July 11, 1929. Serial No. 377,598. 6 Claims. (Cl. 260—42.)

6. A chemical compound suitable for use in medicinal preparations having the probable formula

$$R-N=N-R_1$$

where R represents a monocyclic radicle of the aromatic series and where R_1 represents a diamino pyridyl nucleus in which at least one of said amino groups is combined with an acyl group.

1,874,657. SELF-LOCKING SCREW DEVICE. GEORGE C. TROTTER, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 24, 1930. Serial No. 490,954. 5 Claims. (Cl. 151—14.)

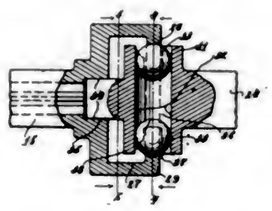


1. A screw having a threaded section normally displaced laterally with respect to the screw axis to render the same self-locking, and a recess adapted to receive a drift for altering the normal position of said threaded section to facilitate the turning of the screw within a work piece.

1,874,658. ELASTIC COUPLING. ERWIN W. TSCHUDI, Baltimore, Md., assignor to The Black & Decker Manufacturing Company, Towson, Md., a Corporation of Maryland. Filed Sept. 18, 1929. Serial No. 393,547. 4 Claims. (Cl. 74—14.)

1. In an elastic coupling or centrifugal clutch driving and driven members, the one member having substantially radially disposed ways with balls mounted therein, the other member having an inwardly disposed cam path surrounding the ways and cooperating with said balls, and having portions of increased radius, forming pockets to receive the balls when forced outwardly by centrifugal force, the cam surface having other portions adjacent said pockets of less radius and therefore in close relation to the ways tending to force the balls into the ways as the driving member is rotated relatively to the driven

member and providing a yielding tendency in inverse proportion to the speed of rotation, the variation in radius of the inwardly disposed cam path being less than the



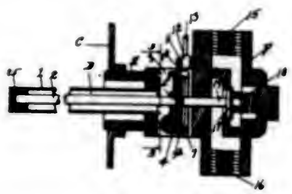
diameter of the ball so that the balls are prevented from leaving the ways, the balls being otherwise free to roll both in the ways and along the cam path.

1,874,659. INSULATING MATERIAL FOR BUILDING AND SIMILAR PURPOSES. CHARLES A. UPSON, Lockport, N. Y., assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed Aug. 29, 1929. Serial No. 389,301. 7 Claims. (Cl. 154—44.)



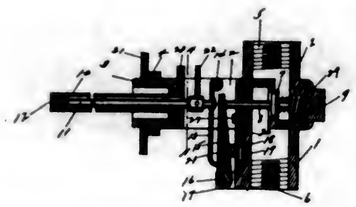
1. A padded product for the insulation of the walls of buildings and similar purposes which comprises in combination an inner flocculent mass of fibrous material confined between liner sheets having relatively greater tensile strength, the longitudinal edges of the product being compressed throughout a substantial width to a greater degree than intermediate portions thereof.

1,874,660. THERMOSTATIC SNAP VALVE. SIDNEY P. VAUGHN, U. S. Navy, Ackerman, Miss., assignor to Grayson Heat Control, Inc., Lynwood, Calif., a Corporation of California. Filed Sept. 27, 1929. Serial No. 395,714. 9 Claims. (Cl. 236—48.)



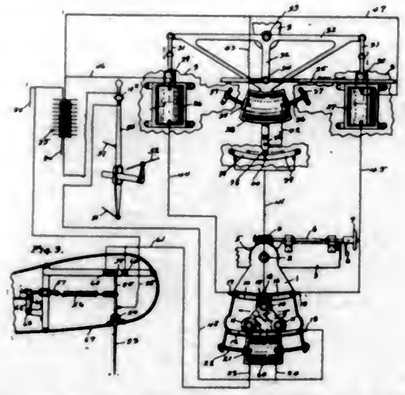
1. In a thermostatic device of the character described, the combination with a thermostatic element arranged to move according to temperature variations, and an element arranged to be operated, of a snap-action disk of spring material for operating said element, said disk being normally convexo-concave in form and adapted to be sprung into a concavo-convex form by pressure against the convex side thereof, and means, independent of the thermostatic element, contacting the central portion of the disk on the convex side and the edge of the disk on the other side for supporting the same in a condition of less than normal convexity prior to the operation thereof, whereby the same is arranged to be moved over dead center by a small amount of movement thereof, the said thermostatic element being arranged in its movement to communicate movement to the disk over dead center whereby to spring to concavo-convex form.

1,874,661. THERMOSTAT. SIDNEY P. VAUGHN, U. S. Navy, Ackerman, Miss., assignor to Grayson Heat Control, Inc., Lynwood, Calif., a Corporation of California. Filed Sept. 15, 1930. Serial No. 482,141. 10 Claims. (Cl. 236—48.)



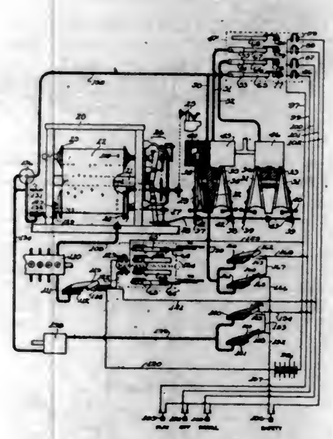
1. In a thermostatic device, the combination with a thermostatic element adapted to move upon temperature change, and a device to be moved according to temperature change, of a resilient lever system intermediate said element and said device for amplifying the movement of the element and operating said device, said resilient lever system comprising a resilient lever actuated by the thermally expansible member, and a comparatively non-resilient lever actuated by the resilient lever and arranged to operate the device, and means cooperating with the non-resilient lever to cause the latter to move with a snap action in operating the device, said means comprising a snap action, over-center element of spring material actuated by the said non-resilient lever and adapted to snap over center under pressure of the lever thereon and further adapted to snap back to its normal position when the pressure of said lever thereon is relieved.

1,874,662. AUTOMATIC CONTROL FOR AIR VEHICLES. ANTON L. VEIT, San Francisco, Calif., assignor of one-half to William Wagner, San Francisco, Calif. Filed June 16, 1930, Serial No. 461,441. 14 Claims. (Cl. 244—29.)



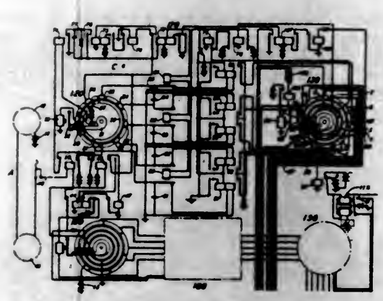
1. In an airplane, means operative on the elevator for automatically controlling the angle of ascent in taking off, and means controlled by head wind pressure arranged to prevent automatic operation of said elevator until a predetermined speed of advance of the craft relative to the air has been attained.

1,874,663. MUSICAL INSTRUMENT CONTROL. EDMOND VERLINDEN, Milwaukee, Wis. Filed Aug. 18, 1930, Serial No. 476,070. 23 Claims. (Cl. 84—123.)



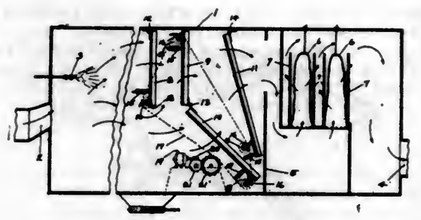
5. A transmission for a tracker-box mechanism, comprising a shiftable member movable to playing and rerolling positions, and to an intermediate neutral position, a pair of suction-operated pneumatics acting in opposite directions for placing said shifting member in playing or rerolling positions, and a pair of suction-operated pneumatics simultaneously movable in opposite directions for placing said shiftable member in an intermediate neutral position from either playing or rerolling position.

1,874,664. MULTIPLEX TELEGRAPHY. GILBERT S. VERNAM, River Edge, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 4, 1930, Serial No. 479,752. 10 Claims. (Cl. 178—53.1.)



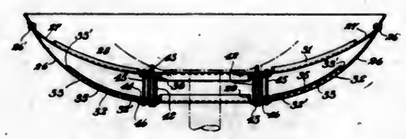
1. In a communicating system, a plurality of signal sources, a plurality of transmission circuits connected to said sources, a repeater comprising a distributing device for terminating each of said circuits, a single transmission circuit, another distributing device for transmitting over said single circuit signals received from one or more of said plurality of circuits, and a signal responsive device for starting and stopping each of said distributing devices.

1,874,665. SPRAY DRYING APPARATUS. GRANTLAND B. VOORHIES, San Francisco, Calif., assignor to Federal Milk Company, San Francisco, Calif., a Corporation of Nevada. Filed Mar. 7, 1930, Serial No. 434,039. 6 Claims. (Cl. 159—4.)



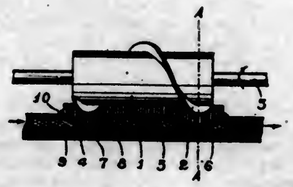
6. In a spray drying apparatus for making powder from liquids including a drying chamber, an intercepting screen within the chamber, said screen being relatively coarse to afford an attaching place for adhesive powder only and not to serve as a medium for filtering the powder from the air currents.

1,874,666. AIRCRAFT. CHANCE MILTON VOUGHT, Great Neck, N. Y., assignor, by mesne assignments, to Chance Vought Corporation, Hartford, Conn., a Corporation of Delaware. Original application filed June 23, 1928, Serial No. 287,748, Divided and this application filed Jan. 29, 1930, Serial No. 424,182. 15 Claims. (Cl. 244—31.)



15. In aircraft, in combination; an engine; a fuselage; a propeller shaft driven by said engine; a propeller secured to said propeller shaft; a shutter for regulating the air flow over and around said engine comprising two discs positioned intermediate said engine and said propeller, both both of said discs being provided with an opening through which said propeller shaft extends, as well as one or more shutter openings for the passage of air, and said discs being shaped to provide at the forward end of said fuselage a streamline entry; and means operable to move one said disc relatively to the other.

1,874,667. PUMPING APPARATUS FOR MEDICAL TREATMENTS. YOSHINOBU WADA, Sendai-Shi, Japan. Filed Apr. 23, 1931, Serial No. 532,355. 1 Claim. (Cl. 103—149.)



A pumping apparatus for medical treatments, comprising a revolving cylinder provided with a male screw thereon, a file of metallic or like strips which are pressed

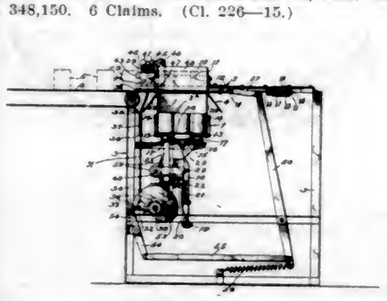
down in order by the said screw and a conduit consisting of elastic material, preferably a rubber tube, which is always pressed by the metallic strips at least at one portion thereof to close the said conduit.

1,874,668. SKEIN AND PROCESS FOR TYING THE SAME. MARTIN WADEWITZ, Elizabethton, Tenn., assignor to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 27, 1932, Serial No. 595,643. 1 Claim. (Cl. 28—21.)



A knot for use in tying strings for skeins of filaments of artificial origin, the tying string consisting of yarn of artificial origin, comprising an overhand knot to which only one additional underpass under the body of the knot has been applied to one of the ends of the said tying string.

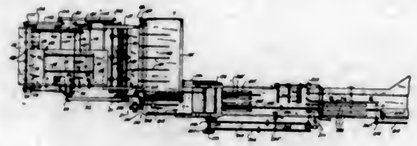
1,874,669. CASE-FILLING MACHINE. ARTHUR J. WAGNER, Punnene, Maui, Territory of Hawaii, assignor to California Packing Corporation, San Francisco, Calif., a Corporation of New York. Filed Mar. 19, 1929. Serial No. 348,150. 6 Claims. (Cl. 226—15.)



1. In a machine for placing articles in packing cases, the combination of a frame, means for feeding the packing cases in a path past the frame, an endless belt conveyor for advancing the articles along a path above, and transverse to, the first-named path, a stop located beyond the path of the packing cases for arresting the advance of all the articles and cooperating with the conveyor to position a group of the articles over a packing case, removable means for supporting the said group of articles, with means for moving the same to permit the group of articles to descend into the packing case, means for detaining the foremost articles following said group to hold the same while the said group of articles are descending into the case, and means for rocking the holding means away from the said group to separate the held articles from the group.

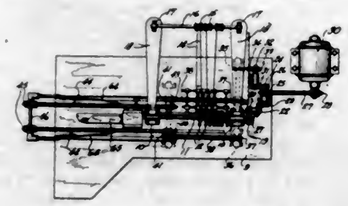
1,874,670. BOX MAKING MACHINE. EMERY L. WALKER, Wauwatosa, and ARTHUR W. WERNER, Milwaukee, Wis., assignors to Kleckhefer Container Company, Milwaukee, Wis., a Corporation of Maine. Filed May 18, 1929, Serial No. 364,293. 28 Claims. (Cl. 93—49.)

1. As a unitary construction, a machine for forming knockdown boxes from plain, uncut sheets of material, comprising means for conveying said sheets of material through the machine, means for cutting said sheets to a desired size while passing through the machine, means for



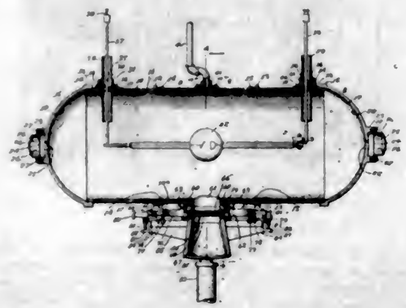
cutting box blanks from each of said cut sheets, and means for forming said blanks into knockdown box formation.

1,874,671. BOX STITCHING MACHINE. EMERY L. WALKER, Wauwatosa, and ARTHUR W. WERNER, Milwaukee, Wis., assignors to Kleckhefer Container Company, Milwaukee, Wis., a Corporation of Maine. Filed July 27, 1929. Serial No. 381,591. 7 Claims. (Cl. 93—42.)



1. In a machine having mechanism for performing a box making operation upon sheet material, a rotatable shaft, a pair of disks having cam grooves therein rigidly mounted on said shaft in spaced apart relation, a pair of guide members, engaging members slidable in said guide members, said engaging members having pins projecting therefrom and engaging said cam grooves so that rotation of the disks will cause reciprocal movement of the engaging members to embrace the sheet material when the latter is in operative relation to said box making mechanism, and means for causing one of said engaging members to be moved toward the other to square said sheet material.

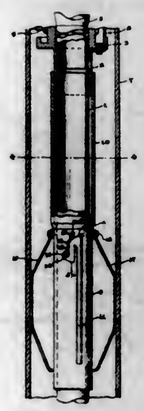
1,874,672. X-RAY SHIELD. REINHOLD H. WAPPLER, Yonkers, N. Y., assignor to Wappler Electric Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed May 1, 1923. Serial No. 635,857. 9 Claims. (Cl. 250—34.)



1. The combination of an X-ray shield having a general cylindrical form and built up of a plurality of different metals, said X-ray shield having its ends rounded to

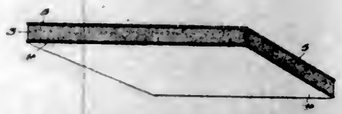
prevent the formation of uneven electrical stresses within it, and an X-ray tube located within said X-ray shield and having its ends extending approximately to the center of curvature of the rounded ends of said X-ray shield.

1,874,673. TUBING CATCHER STOP. MILLARD F. WATERS, Tulsa, Okla., assignor to Hanlon-Waters, Inc., Tulsa, Okla. Filed Feb. 10, 1931. Serial No. 514,856. 2 Claims. (Cl. 103—219.)



1. In combination with a string of well tubing, a tubing catcher mounted on said tubing, a member on the tubing for supporting said tubing catcher in inoperative position, a tubing catcher setting device comprising a cylindrical body portion slidably embracing said tubing below said supporting member, the upper extremity of said body portion terminating in an enlarged sleeve adapted to slidably embrace said supporting member, means for locking said body portion against longitudinal movement on said tubing, whereby the upper extremity of said enlarged sleeve is normally positioned below the upper extremity of said supporting member and out of contact with said tubing catcher, and means for retarding the downward movement of said body portion in a well casing, said sleeve, when the locking means is released, being adapted to operatively engage said tubing catcher upon the downward movement of the string of tubing.

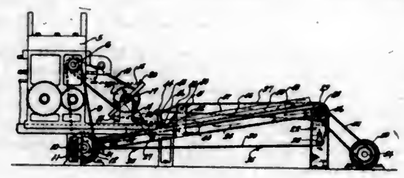
1,874,674. ARTIFICIAL BOARD. CLIFFORD A. WATSON, St. Paul, Minn. Filed Feb. 27, 1928. Serial No. 257,187. 8 Claims. (Cl. 154—45.9.)



1. A pre-formed self sustaining, insulating board comprising a rigid slab of asphalt of cellular structure and substantial thickness, said asphalt having a melting point of about 220 degrees Fahrenheit and at least one relatively thin sheet of fibrous material secured to said body.

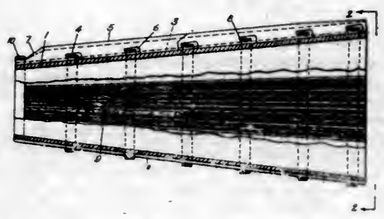
1,874,675. SHEET HANDLING DEVICE. ARTHUR W. WERNER, Milwaukee, Wis., assignor to Kleckhefer Container Company, Milwaukee, Wis., a Corporation of Maine. Filed May 18, 1929. Serial No. 364,197. 7 Claims. (Cl. 271—45.)

1. A handling device comprising a supporting means, a rotatable member and a shelf in connection with said rotatable member and adjacent said supporting means for receiving material with one side facing upwardly and for turning said material and depositing the same on said



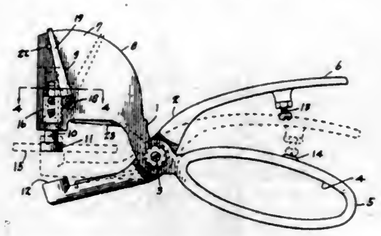
supporting means with the other side facing upwardly, said shelf extending on both sides of the axis of the rotatable member to provide an unobstructed surface from one edge to the other for receiving material.

1,874,676. MACHINE FOR REFINING PAPER AND PULP. LUDWIG H. WESSEL and HOMER N. BOOKER, Lancaster, Ohio, assignors to The Hermann Manufacturing Company, Lancaster, Ohio, a Corporation of Ohio. Filed July 5, 1928. Serial No. 290,479. 3 Claims. (Cl. 92—27.)



1. In a refining engine, a plug body, a removable shell or casing to be mounted thereon, a plurality of bands carried by said shell, each of said bands having a constant diameter, a plurality of removable knives, each of said knives having an undercut groove with a surface slidable into wedging position beneath said band.

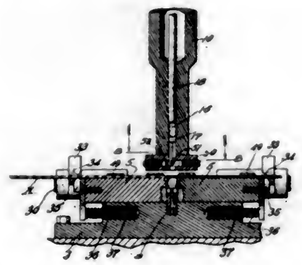
1,874,677. LEATHER MEASURING GAUGE. THOMAS COOK WETMORE, Napa, Calif., assignor to Sawyer Tanning Company, Napa, Calif. Filed Mar. 5, 1929. Serial No. 344,486. 5 Claims. (Cl. 33—148.)



5. A gauge in the shape of a pair of pliers and comprising two members pivoted together, an indicator carried by one of said members, a movable head carried by the same member for actuating the indicator, a fixed head mounted on the other member, spring means for urging the movable head toward the fixed head to a normal position, spring means for urging the members apart, and a positive stop for preventing movement of the members toward each other beyond the travel necessary to bring the heads into

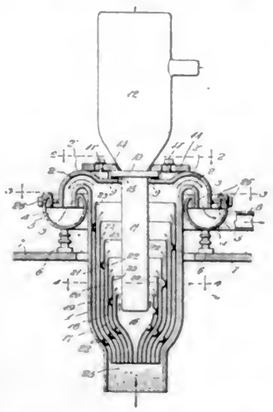
contacting relation when no material to be measured is introduced therebetween, said indicator being actuated when the movable head is displaced relative to the said one member by gripping material between the heads.

1,874,678. MACHINE FOR MANUFACTURING LEAD-HEAD NAILS. GEORGE N. WILLIAMS, Kokomo, Ind., assignor to Continental Steel Corporation, Kokomo, Ind., a Corporation of Indiana. Continuation of application Serial No. 254,529, filed Feb. 15, 1928. This application filed Aug. 12, 1929. Serial No. 385,393. 11 Claims. (Cl. 10—157.)



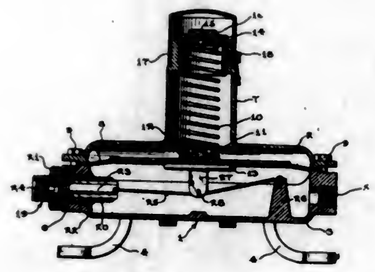
1. In a machine for "lead-heading" nails, in combination, means to successively feed nails to position preparatory to being headed, means to feed a lead strip across the path of projection of the nails and from which the "lead-heads" are formed, means to drive the nails through the lead strip to heading position and simultaneously sever from said strip sections of material for the "lead-heads," laterally movable header means adapted when moved to operative position to form the said sections of material about the nail heads, and means to prevent lateral movement of the nail during the lateral movement of the forming means to inoperative position.

1,874,679. HIGH POWER TUBE SYSTEM. JOHN A. WILLOUGHBY, Cambridge, Mass. Filed Jan. 8, 1929. Serial No. 331,002. 9 Claims. (Cl. 250—27.5.)



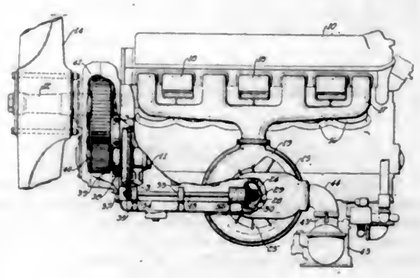
1. In a high power tube system for tubes of the cylindrical anode type, a jacket in which said anode depends, means for introducing a cooling medium into the lower end of said jacket and exhausting a cooling medium from the upper end thereof, and a plurality of means positioned in the path of the cooling medium in the jacket for respectively directing portions of the cooling medium over a plurality of successive zones of the anode of said tube for effectively cooling said anode.

1,874,680. GAS REGULATOR. KENNETH R. D. WOLFE, Marshalltown, Iowa, assignor to The Fisher Governor Company, Marshalltown, Iowa. Filed Oct. 8, 1928. Serial No. 311,189. 14 Claims. (Cl. 50—26.)



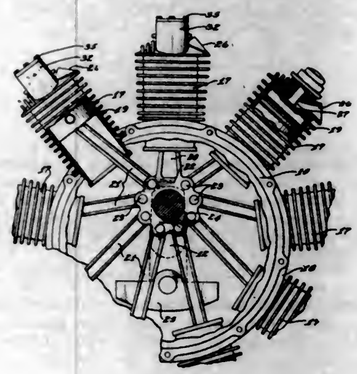
1. A fluid regulator, comprising a casing, a valve and valve seat in said casing, a diagram in said casing, a strip of flexible material rigidly secured at one end, its other end being directly fastened to said valve, and a connection between said diaphragm and the intermediate portion of said strip, whereby the movement of the diaphragm is transmitted directly to said valve.

1,874,681. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 2, 1927. Serial No. 165,290. 8 Claims. (Cl. 123—195.)



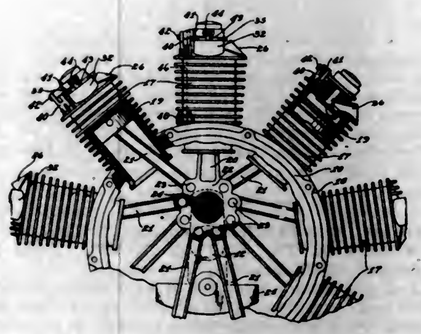
4. In an internal combustion engine having a crankshaft and a shaft driven from said crankshaft, flexible coupling means between said shafts, a supercharger for the engine, and a drive shaft for the supercharger geared to and driven from said coupling means.

1,874,682. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, deceased, Detroit, Mich., by Emma F. Woolson, executrix, Bloomfield Village, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 21, 1930. Serial No. 469,328. 14 Claims. (Cl. 123—48.)



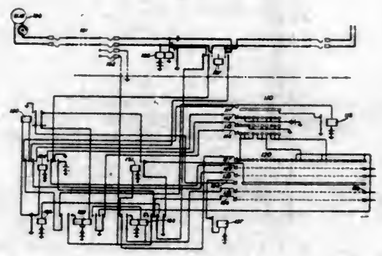
1. In an internal combustion engine, the combination of a combustion chamber, a piston therein, and means for varying the capacity of the chamber, said means being responsive to changes in the temperature of the chamber.

1,874,683. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, deceased, Detroit, Mich., by Emma F. Woolson, executrix. Bloomfield Village, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 21, 1930. Serial No. 469,329. Renewed Sept. 30, 1931. 11 Claims. (Cl. 123—48.)



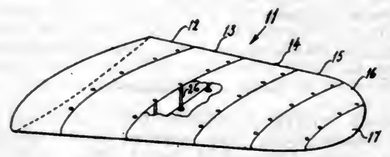
1. In an internal combustion engine, the combination of a combustion chamber ,a pisto ntherein, and means for varying the capacity of the chamber directly with the temperature of the engine.

1,874,684. TELEPHONE SYSTEM. ESMOND PHILIP GOODWIN WRIGHT, Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 12, 1930, Serial No. 495,061, and in Great Britain Dec. 5, 1929. 19 Claims. (Cl. 179—18.)



1. In a dial telephone system, a plurality of register senders arranged in groups on a non-decimal basis, means to select one of said senders and means to operate said selecting means in response to the first code digit of a telephone designation.

1,874,685. RIBLESS WING. THEODORE P. WRIGHT, Port Washington, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed May 23, 1930. Serial No. 454,966. 9 Claims. (Cl. 244—31.)

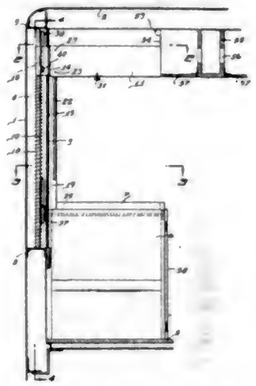


1. A beamless wing for airplane structures comprising top and bottom cover plates of ply material, the outer sheets of said ply being of metal and an inner sheet of said ply being of fibrous material; said cover plates being of such thickness and strength as to sustain unaided substantially the full bending, lift and drag stresses expected to be encountered in actual use, and said cover plates being held in spaced relation by a multiplicity of independent and disjointed tie rod and compression members extending from one to the other of said plates.

1,874,686. SLEEPING CAR. WILLIAM YOUNG, Detroit, Mich. Filed Oct. 29, 1930. Serial No. 491,878. 10 Claims. (Cl. 105—317.)

1. In a sleeping car having vertical side walls and a top lying directly upon said side walls and disposed in a single horizontal plane, a berth supported for vertical movement along one of said side walls and adapted to be moved into the corner formed by said wall and top, and

means for maintaining said berth in raised and lowered positions respectively, and a ventilator shaft extending



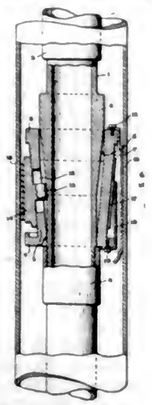
along said top and disposed beneath the upper edge of said side wall.

1,874,687. SAFETY RAZOR. ISAIAH N. ZELLER, New York, N. Y., assignor to American Safety Razor Corporation, Brooklyn, N. Y., a Corporation of Virginia. Filed Dec. 23, 1927. Serial No. 242,061. 9 Claims. (Cl. 30—12.)



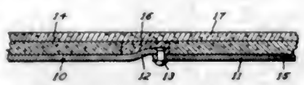
1. A razor blade holder comprising a composite blade seat, said seat including two mutually pivoted parts each of which is provided with a guard edge, and a set of converging blade-engaging flanges associated with one of said parts.

1,874,688. TUBING CATCHER. ORAL C. ZUCK and JOHN J. DAILEY, Tulsa, Okla., assignors to Hanlon-Waters, Inc., Tulsa, Okla. Filed Feb. 7, 1931. Serial No. 514,254. 16 Claims. (Cl. 103—219.)



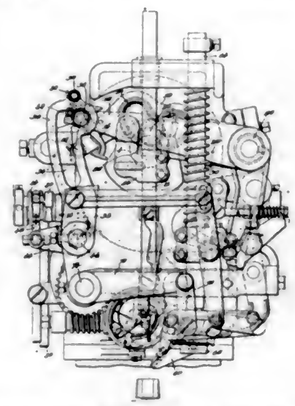
1. A tubing catcher comprising a tapered mandrel, a body portion adapted to slidably engage said mandrel and having a surface engageable with and disengageable from the tapered surface of the mandrel, a plurality of gripping members carried by said body portion and having means extending through said body portion to operatively engage said mandrel.

1,784,689. METHOD OF DECORATING METAL SURFACES. ROBERT M. ALLARD, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1931. Serial No. 567,788. 8 Claims. (Cl. 114—85.)



1. A method of applying a covering to a metal deck surface comprising applying a prime coat of asphalt paint to the metal deck surface, allowing the paint to dry, applying a second coat of manila gum cement over the asphalt paint coat and applying the covering directly to the cement.

1,874,690. SEWING MACHINE. FRED ASHWORTH, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 4, 1930. Serial No. 418,545. 5 Claims. (Cl. 112—60.)

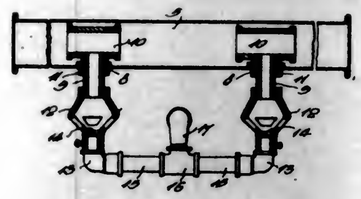


1. A sewing machine having, in combination, stitch-forming devices including a needle, a presser-foot, a sewing shaft, actuating connections between said shaft and needle, a treadle controlled member for rendering said connections inoperative, and presser-foot lifting mechanism controlled directly by said member to lift the presser-foot only after said connections have been rendered inoperative.

1,874,691. GAS BURNER. BENJAMIN C. BARTLEBAUGH, Wheeling, W. Va. Filed Jan. 7, 1931. Serial No. 507,260. 2 Claims. (Cl. 158—104.)

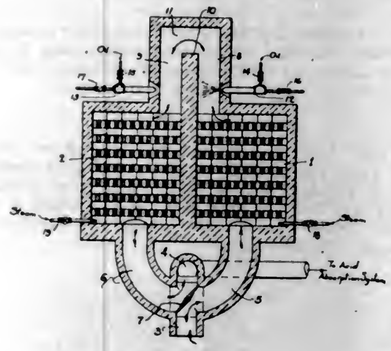
1. A gas burner comprising a horizontally elongated shell provided with a perforated upper portion, said shell having two longitudinally spaced openings in its bottom, two vertical pipe nipples passing through and secured in said openings respectively, gas dstributing heads on said nipples within said shell and opening toward opposite ends of the latter, two vertical gas and air mixers connected with the lower ends of said nipples respectively, the lower ends of said mixers being provided with elbows whose lower ends project inwardly toward each other, two horizontal pipe nipples connected with said lower ends of said elbows and projecting inwardly toward each other,

a T with whose head the inner ends of said horizontal nipples are connected, the shank of said T being disposed



vertically, a service L connected with said shank of said T, and a horizontal gas pipe connected with said service L.

1,874,692. MANUFACTURE OF HYDROCHLORIC ACID. EDWIN O. BARSTOW and SHELDON B. HEATH, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Oct. 4, 1929. Serial No. 397,252. 16 Claims. (Cl. 23—154.)

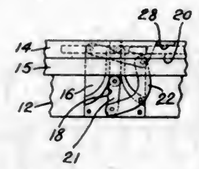


5. A process for the manufacture of hydrochloric acid which comprises burning a hydrocarbon with sufficent air for complete combustion thereof in the presence of chlorine and added water vapor.

10. A process for the manufacture of hydrochloric acid which comprises introducing air, chlorine, water vapor and a hydrocarbon into a heated reaction zone maintained at a temperature between 900° and 1500° C., such air being in amount sufficient for complete combustion of such hydrocarbon, separating hydrochloric acid from the reacted gaseous mixture and preheating the gases entering the reaction by passing the same through a zone previously heated by contact wth the hot reaction gases.

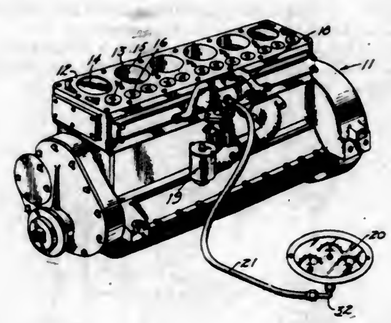
1,874,693. EXTENSIBLE AND REVERSIBLE TABLE. GEORGES BEAUVAIS and JACQUES BEAUVAIS, Montreal, Quebec, Canada. Filed Nov. 18, 1929, Serial No. 408,140. Renewed July 6, 1932. 2 Claims. (Cl. 45—9.)

1. An extension table, comprising a frame mounted on suitable legs, a top on said frame having a rectangular opening formed therein, a movable panel-board eccentrically pivoted within rad openng, another panel-board hinged at one end of and located under said panel-board, said movable panel-board being operated to revolve and simultaneously rise by means of a sliding member mounted in a slide located in each side of said opening, a swivel member, a stop member for said swivel, a bell-crank lever connected to said swivel, and means linking said bell-crank



lever to said sliding member, whereby said movable board will be held in a fixed extended position upon said table top, substantially as described.

1,874,694. COMPRESSION CHECK DEVICE. JOSEPH F. BROCE, Los Angeles, Calif. Filed Jan. 26, 1927. Serial No. 163,590. 27 Claims. (Cl. 73—31.)



1. In a compression check device of the class described, the combination of: condition indicating mechanism; means for connecting said condition indicating mechanism to a vacuum space of a motor; high compression indicating mechanism connected to said condition indicating mechanism; and low compression indicating mechanism connected to said condition indicating mechanism.

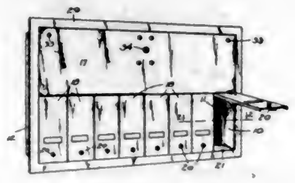
1,874,695. PROCESS FOR MANUFACTURING CHLORIDE OF LIME THROUGH AZEOTROPIC DISTILLATION. ACHILLE CARUGHI and CARLO PAOLONI, Brescia, Italy. Original application filed July 16, 1930, Serial No. 468,447, and in Italy and Germany Nov. 25, 1929. Divided and this application filed Sept. 29, 1931. Serial No. 565,920. 2 Claims. (Cl. 23—86.)

1. A process for the manufacture of high-test, crystalline and very stable anhydrous chloride of lime which consats in freeing the hydrated crystalline chloride of lime obtained from the chlorination of hydrated lime suspended in carbon tetrachloride, from its chemically bound and free water directly after the chlorination in carbon tetrachloride by heating the suspension to boiling point so that the carbon tetrachloride carries off the water by azeotropic distillation, and finally separating the carbon tetrachloride from this water through condensation.

1,874,696. LETTER BOX CONSTRUCTION. LOUIS W. COLE, New York, N. Y. assignor to Cole Electric Products Co., Inc., Long Island City, N. Y. Filed Dec. 12, 1929. Serial No. 413,545. 9 Claims. (Cl. 232—25.)

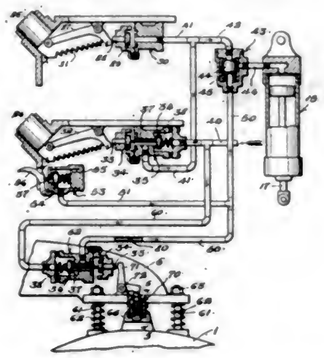
1. A letter box comprising a plurality of upright juxtaposed receptacles, each receptacle having side walls which are offset inwardly along their forward ends, said

offset ends forming channels with adjacent offset ends of the next receptacles, a door hinged midway the height of each receptacle and having side flanges to engage in



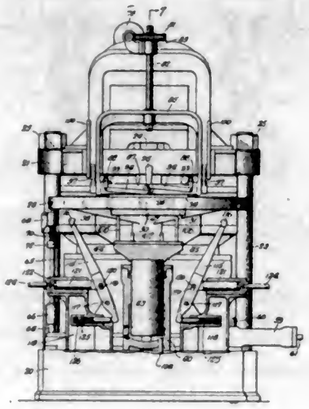
said channels in the closed position of the door and a single door hinged at the mid portion of the box and closing over the remainder of all the receptacles.

1,874,697. AUTOMATIC PRESSURE LOCKING MEANS. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed June 4, 1930. Serial No. 459,220. 1 Claim. (Cl. 68—9.)



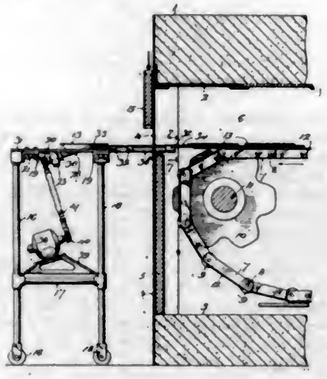
In a pressing machine in combination cooperative pressing elements, one of which is movable with respect to the other to open and close the press; actuating mechanism for the movable element; fluid motor means including a cylinder and piston for operating the actuating mechanism; a fluid supply line; operator-operated three-way valve means connected to the motor and controlling the operation thereof and normally in position to connect the cylinder of the motor with the outer air and operable to connect the cylinder of the motor to the fluid supply line; a second three-way valve means connected to the motor and normally in position to connect the cylinder of the motor to the outer air and operable to connect the cylinder to the fluid supply line, means whereby said second three-way valve means is operated by relative movement of the movable pressing element with respect to a member of the actuating means; and valve controlled means between the motor and both three-way valve means operable automatically to close the outer air connection of the cylinder through the second three-way valve means upon operation of the first three-way valve means and operable automatically to close the outer air connection of the cylinder through the first three-way valve means upon operation of the second three-way valve means.

1,874,698. MOLDING MACHINE. JEREMIAH AMOS DE TURK, La Grange, Ill., assgnor to Western Electric Company, Incorporated, New York, N. Y., a Corporaton of New York. Fled Nov. 14, 1924. Serial No. 749,825. 4 Claims. (Cl. 18—17.)



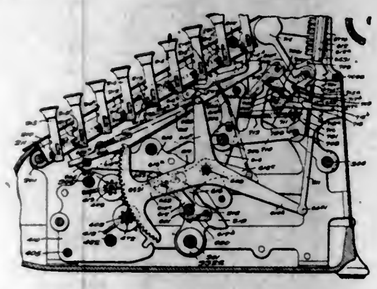
1. In a molding machine, a mold comprising a plurality of molding members, heating means, and means for displacing one of said molding members relative to the other and place it in contact with said heating means.

1,874,699. DEVICE FOR PLACING PIE TRAYS ONTO OR REMOVING THEM FROM A TRAVELING OVEN. IRWIN ELLIOTT, Harmon, N. Y., assignor to Williams Oven Mfg. Co., New York, N. Y., a Corporation of New York. Filed June 9, 1930. Serial No. 459,932. 6 Claims. (Cl. 107—57.)



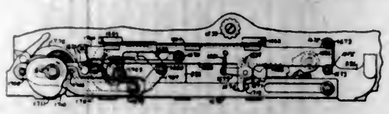
5. A conveyor for conveying individual containers including a frame adapted to be placed adjacent a traveling oven, a plurality of shafts having spirals thereon and arranged in pairs, each pair of shafts being adapted to receive a row of containers resting on the shafts of a pair, other shafts connected with said shafts by universal joints and extending downwardly from the plane of said first shafts, sprockets on said second mentioned shafts and an endless chain engaging reversely around said sprocket for operating all of the shafts of several pairs, and means for operating said chain.

1,874,700. CALCULATING MACHINE. CLYDE GARDNER, deceased, Ebensburg, Pa., by Edna B. Gardner, administratrix, Ebensburg, Pa., assignor, by mesne assignments, to Gardner Company, Ebensburg, Pa., a Corporation of Delaware. Original application filed June 7, 1924, Serial No. 718,678. Divided and this application filed Nov. 5, 1928. Serial No. 317,431. 12 Claims. (Cl. 101—93.)



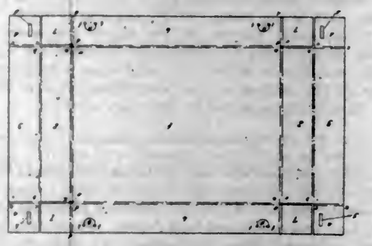
1. In a recording machine, a platen positioned for visual inspection at the printing line, type carriers each provided with a plurality of type co-operating with the platen, means for adjusting the type carriers to align the individual type to be printed, means for moving the previously adjusted carriers from non-printing to printing position, means for taking an impression from the type, and means for moving the type carriers away from printing position so that the printing may be inspected.

1,874,701. COMPUTING MACHINE. MAXIMILIAN M. GOLDBERG, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed June 14, 1926, Serial No. 115,998. Divided and this application filed Feb. 27, 1930. Serial No. 431,939. 33 Claims. (Cl. 235—2.)



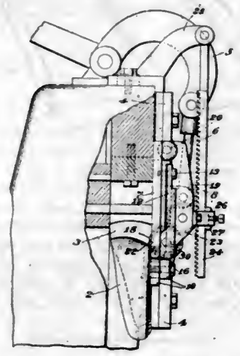
1. The combination of a plurality of type wheels, a carriage movable relatively to said wheels, and a planetary gear means for positively moving said carriage in both directions.

1,874,702. KNOCKDOWN CORNER LOCKING PAPER CONTAINER. EARL S. GOMES, Cincinnati, Ohio. Filed Mar. 7, 1930. Serial No. 433,923. 1 Claim. (Cl. 229—34.)



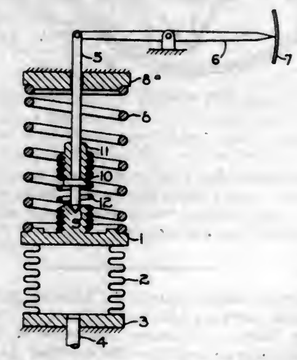
In a knocked down paper box of the class wherein a flat body has upstanding opposite side and end walls, the end walls being provided with inwardly folding flaps and each side wall having reinforcing flaps at its ends and wherein each folding flap has short locking flaps at its ends characterized by the fact that each of said locking flaps is provided with an elongated slot, each of said side walls provided with a pair of locking tongues receivable within said slots when said box is set up, the said tongues being further characterized by the fact that they are articulated parallel with the outer edge of said side walls so that when they are folded in a direction towards said flat body they are prevented from being torn off or disaligned, substantially as described.

1,874,703. COUNTER MOLDING MACHINE. AUGUSTE F. JACQUEMIN, Kennebunk, Me., assignor to Robers Fibre Company, Kennebunk, Me., a Corporation of Maine. Filed June 25, 1929. Serial No. 373,602. 14 Claims. (Cl. 12—66.)



1. In a machine of the character described, the combination of cooperating molds for molding a counter, a wiper for acting on the flange of a counter held by said molds, a roll for acting on said flange, means for reciprocating said wiper and roll on said flange, and means for positively rotating said roll as it is moved across said flange.

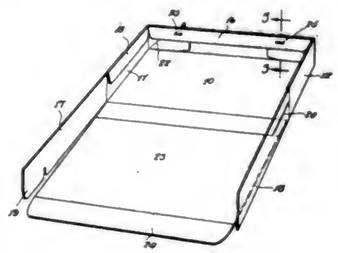
1,874,704. FLUID PRESSURE RESPONSIVE DEVICE. CLARENCE JOHNSON, Cleveland, Ohio, assignor to Bailey Meter Company, a Corporation of Delaware. Filed Jan. 19, 1931. Serial No. 509,867. 8 Claims. (Cl. 137—156.)



1. In combination, a movable abutment to which fluid pressure is applied to effect movement thereof, a yielding

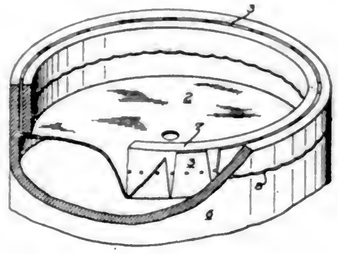
means which opposes such movement, a member which engages and is positioned by said abutment, means joining said member to said abutment comprising a yieldable universal connection, and means for adjusting the yieldability of said universal connection.

1,874,705. FOLDING BOX. DAVID LEVKOFF, Brooklyn, N. Y., assignor to Evelyn G. Levkoff, Brooklyn, N. Y. Filed Oct. 11, 1929. Serial No. 398,912. 4 Claims. (Cl. 229—33.)



1. A folding box comprising a body having a bottom wall, a front wall, a rear wall, side walls, foldable corner flaps coextensive with one end of said side walls and fixedly secured to said front walls, and coacting interlocking flaps coextensive with the other end of said side walls and foldable about the rear walls to hold said body in a set up condition.

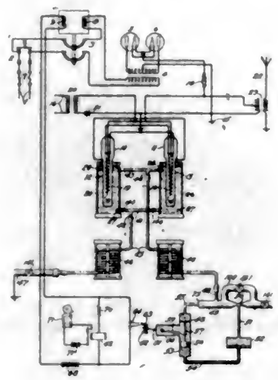
1,874,706. CONTAINER COVER. WILLARD H. NUTTING, Oakland, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Aug. 20, 1927. Serial No. 214,286. 2 Claims. (Cl. 229—5.7.)



1. The combination with a container body and a ring adjacent the inside surface thereof, of a cover having bent serrations held between the body and ring, and stitching thru the cover, ring and body.

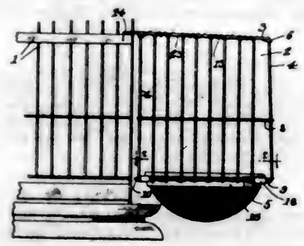
1,874,707. ELECTRIC DISCHARGE APPARATUS. ARTHUR A. OSWALD, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 12, 1922. Serial No. 560,518. 8 Claims. (Cl. 250—27.5.)

3. In combination, a high energy output space discharge device having a cathode and an anode, means for impressing a high voltage on the anode of said device, means for continuously supplying cooling liquid to the anode of said



device, and means directly responsive to variation of the instantaneous value of the rate of flow of the cooling liquid for controlling the said voltage impressing means.

1,874,708. OUTSIDE NEST FOR CANARY BIRD CAGES. JOHN PALUBIAK, St. Louis, Mo. Filed Sept. 26, 1930. Serial No. 484,677. 3 Claims. (Cl. 119—45.)

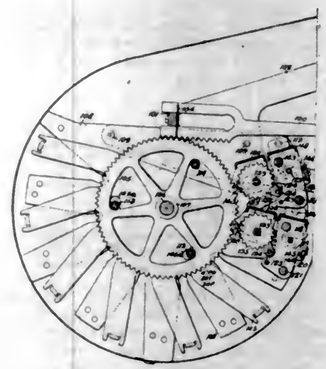


1. In an outside nesting cage for attachment to canary bird cages, the combination of an approximately cubical wire frame, having relatively large corner wires and having smaller wires forming three sides and a top of the frame, said wires being tied to the corner wires by thin tie wires, hooks formed on the upper free ends of two of the corner wires for detachably securing the open side of the nest to the outside of a bird cage, a metal plate secured to the bottom of the wire frame, and a wire bird nest detachably mounted in the metal plate.

1,874,709. MULTIPLE ACCUMULATOR CALCULATING MACHINE. NATHAN W. PERKINS, East Orange, N. J., assignor to Ellis Adding Typewriter Company, Newark, N. J., a Corporation of New Jersey. Filed Apr. 17, 1930. Serial No. 445,051. 31 Claims. (Cl. 235—60.)

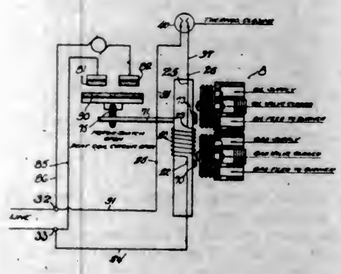
1. In a multiple accumulator calculating machine, the combination with actuators whose extent of movement is determined by the number set up on the machine, of main

gears positively shifted by said actuators during each movement of the actuators, independent accumulators having gears adapted to be directly meshed with, or disen-



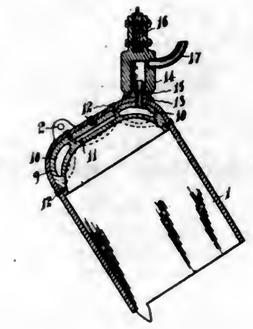
gaged from said main gears, and means whereby the respective accumulators may be selectively arranged for individual or joint direct engagement with the main gears.

1,874,710. REGULATOR. LAWRENCE M. PERSONS, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Filed June 15, 1925. Serial No. 37,091. 3 Claims. (Cl. 158—28.)



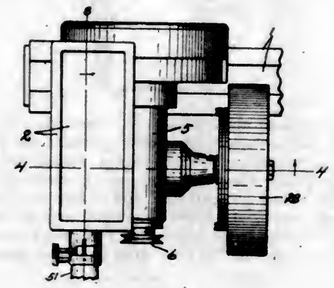
1. In a temperature controlling mechanism, the combination with a liquid fuel burning mechanism, of an electric motor for operating said liquid fuel burning mechanism, means responsive to temperature variations for controlling an electric circuit and electrically heated thermal means in said circuit for controlling said electric motor, said thermal means having heat control means to limit the heating effect thereof and said circuit remaining closed until opened by said temperature responsive means.

1,874,711. ORE SKIP AND THE LIKE. PERCY A. ROBBINS, Highland Park, Ill. Filed June 12, 1931. Serial No. 543,789. 5 Claims. (Cl. 294—73.)



1. A skip provided with a flexible bottom lining having a closed air pocket formed therein, whereby the exposed surface of the lining is deformable by variations in external or internal pressure.

1,874,712. COMBINED MOVING PICTURE AND SOUND CAMERA. EARL I. SPONABLE, New York, N. Y., assignor to Fox Case Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 17, 1929. Serial No. 334,807. 5 Claims. (Cl. 271—2.3.)

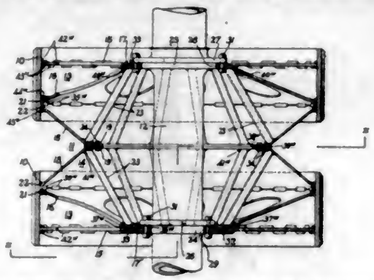


1. In a combined moving picture and sound camera, a driving shaft, a driven shaft and connections for driving the driven shaft from the driving shaft including a flexible disk operatively connected to the driving shaft, a ring connected to the flexible disk, a fly-wheel mounted on the driven shaft and a plurality of spring members constituting the driving connection between the ring member and the flywheel said spring members extending radially of the disk.

1,874,713. GEARING. IRA SHORT, Essington, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 30, 1930. Serial No. 505,590. 8 Claims. (Cl. 74—28.)

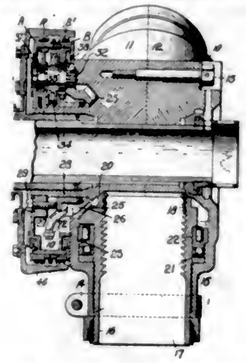
1. In a gear, a pair of toothed rims and a web structure for supporting the rims, the web structure including outer webs having their peripheries joined to the rims adjacent

to the outer ends of the latter, frusto-conical webs having their outer edges respectively joined to the rims adjacent to the inner ends of the latter and having their inner edges



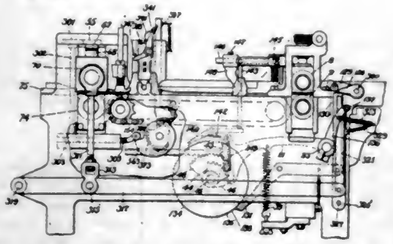
joined together, and conical sets of stress members connected to the conical webs adjacent to the junction thereof and connected to the outer webs.

1,874,714. VARIABLE PITCH PROPELLER. ELMER A. SPERRY and WALTER M. PERRY, Brooklyn, N. Y., assignors to Sperry Development Company, Dover, Del., a Corporation of Delaware. Filed June 26, 1930. Serial No. 463,893. 16 Claims. (Cl. 170—163.)



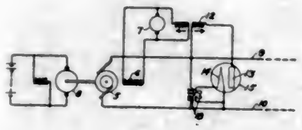
1. In a variable pitch propeller mechanism, a plurality of blades, means for simultaneously varying the pitch of said blades including rotating brake drums and brake bands cooperating therewith, a casing enclosing said drum and bands, means supported by said casing and engaging one end of each band whereby the band may be operated to engage the respective drum, and a resilient connection between the other end of each band and said casing.

1,874,715. GRADING MACHINE. WILLIAM C. STEWART, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 18, 1919. Serial No. 305,160. 47 Claims. (Cl. 69—11.)



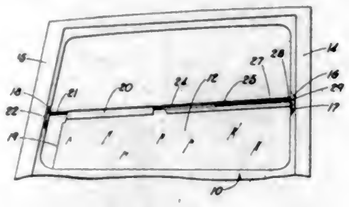
1. A machine of the class described having, in combination, splitting mechanism, mechanism for adjusting the splitting mechanism in accordance with the smallest extent of a selected dimension of a blank throughout a selected locality of the blank, and means whereby a succeeding blank may be caused to operate the adjusting mechanism during the time that the preceding blank is engaged by the splitting mechanism.

1,874,716. ELECTRIC REGULATOR. HUGH M. STOLLER, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 24, 1919. Serial No. 313,039. 7 Claims. (Cl. 171—119.)



1. The combination with an alternating current machine, alternating current leads for said machine, and means comprising an exciting winding for controlling a characteristic of said alternating current machine, of means for holding substantially constant a characteristic of said alternating current machine, said second means comprising a unilateral thermionic device having an anode and a filamentary cathode in circuit with said exciting winding and connected to said leads, and means for varying the temperature of said cathode in substantial coincidence and according to variations in a characteristic of said alternating current machine whereby corresponding instantaneous variations are produced in the current through said exciting winding.

1,874,717. DOOR GLASS GUIDE. PERRY W. SULLIVAN, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed June 24, 1931. Serial No. 546,515. 4 Claims. (Cl. 296—48.)

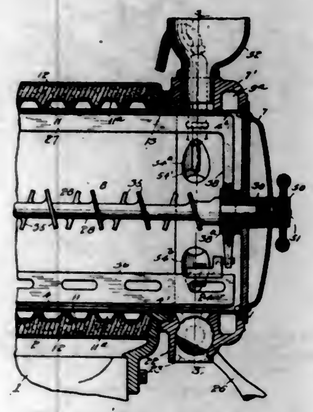


1. In a door having a window in the upper portion thereof, a sliding glass closure for said window receivable in the lower portion of said door, a sloping door post on at least one side of said door having a guide groove therein, a sloping edge on said glass corresponding to the sloping of said post, a guide member mounted on the top of said glass having a part slidably received in said groove, an adjustable abutment mounted on said glass opposite said guide member, and a compression spring between said abutment and said guide member.

1,874,718. FREEZING MECHANISM. FRANK TYSON, Canton, Ohio. Filed Mar. 7, 1929. Serial No. 345,148. 6 Claims. (Cl. 62—114.)

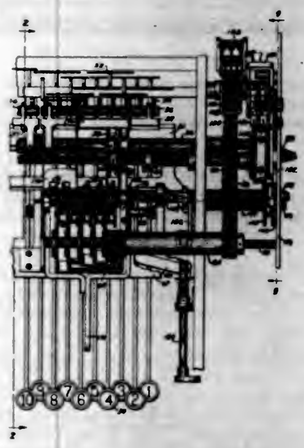
1. In apparatus of the class described, the combination of a cylinder having an inlet, a head for one end of said cylinder, an annular member mounted on the other end of said cylinder and formed with a flow passage

having inlet and outlet openings leading through the wall of said member into said cylinder, a removable member for closing the outer end of said annular member, a



valved discharge port provided in one of said members, and agitating mechanism within the space enclosed by said cylinder, head and members.

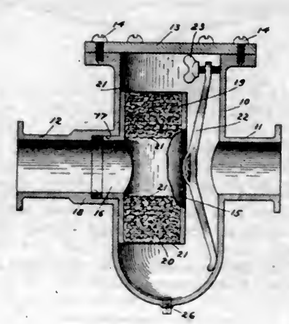
1,874,719. CASH REGISTER. EDWARD J. VON PEIN, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Sept. 25, 1922. Serial No. 590,371. 8 Claims. (Cl. 235—7.)



1. The combination of a totalizer, counter wheels for counting the number of actuations thereof, means for recording the amount accumulated on the totalizer, recording operating means, and means operated by said recording operating means for turning the counter wheels to zero.

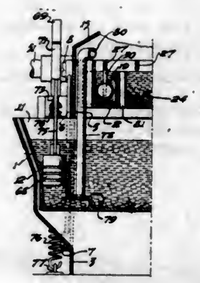
1,874,720. FILTER. PHILIP B. WALLACE, San Mateo, Calif. Filed Sept. 30, 1930. Serial No. 485,475. 5 Claims. (Cl. 183—49.)

1. In a filter screen for pipe lines and the like, the combination of a receptacle having inlet and outlet openings in the walls thereof, a cylindrical member in said receptacle disposed transversely of the direction of flow through the inlet and outlet openings of said receptacle, filter means arranged in each end of said cylindrical member, a connection intermediate the ends of said latter



member between said filter means connecting with the outlet opening of said receptacle, and an adjustable removable wedge between the inner wall of said receptacle and said cylindrical member for holding the latter in an operative position with respect to the inlet and outlet openings in the receptacle.

1,874,721. LINE CASTING MACHINE. LE ROY W. WILLIS, Brooklyn, N. Y., assignor to Intertype Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 23, 1929, Serial No. 394,604, and in Germany Oct. 13, 1928. 4 Claims. (Cl. 22—80.)



1. In a line casting machine having a line casting mold, a casting pot to contain a supply of molten metal, a plurality of separate metal injecting throats mounted on and closing the front of the pot and having alined and contiguous mouths, said pot being mounted movably to carry said mouths to and from casting position against the respective portions of the length of said mold to close the casting cavity therein, a corresponding plurality of metal injecting pumps connected to the respective mouths and mounted horizontally in the casting pot and secured thereto to move therewith, means for actuating one or more of said pumps to cause injection of metal into the mold through one or more of said mouths according to the length of the mold cavity, and means for maintaining the metal level in the casting pot above said pumps and immediately below the level of said mouths.

1,874,722. ELECTRICAL COIL AND PROCESS FOR MAKING THE SAME. HARRY W. TURNER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 18, 1931. Serial No. 563,681. 4 Claims. (Cl. 175—21.)



1. An electrical coil comprising a core and insulated conductors wound in layers on said core, said insulated conductors being separated between layers by films of cellulose ester tightly shrunk around said conductors, the entire coil being impregnated and coated with an insulating varnish hardened thereon.

1,874,723. ELECTRICAL COIL. EDWARD S. DAWSON, Jr., Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 18, 1931. Serial No. 563,682. 4 Claims. (Cl. 175—21.)



1. The method of insulating an electrical coil which comprises providing the individual conductors of said coil with insulation comprising dry, thin films of cellulose ester and causing said cellulose ester to shrink around said conductors and form an impervious solid insulation thereon by applying heat to the coil.

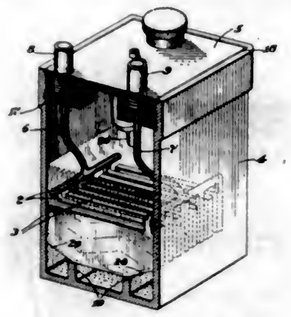
1,874,724. MULTIPLE LEAF SPRING. JOHN WARREN WATSON, Wayne, Pa. Filed July 24, 1930. Serial No. 470,476. 16 Claims. (Cl. 267—47.)



1. In a multiple leaf spring, means for clamping the leaves together and rubber means for separating and supporting adjacent ones of said leaves, said rubber means extending from adjacent the end of one of said leaves toward said clamping means, said rubber means contacting intermittently with the surface of one of said leaves.

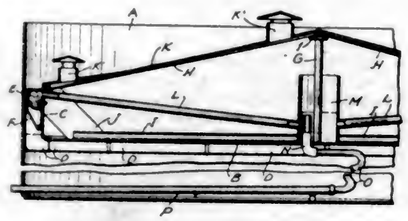
1,874,725. STORAGE BATTERY. GRANT WHEAT, Marlboro, Mass., assignor to Koehler Manufacturing Company, Marlboro, Mass., a Corporation of Massachusetts. Filed Dec. 5, 1927. Serial No. 237,641. 2 Claims. (Cl. 136—168.)

1. That improvement in methods of mounting terminals in battery casings made of insulating material which consists in providing a terminal having projections on its outer surface, positioning said terminal in an aperture



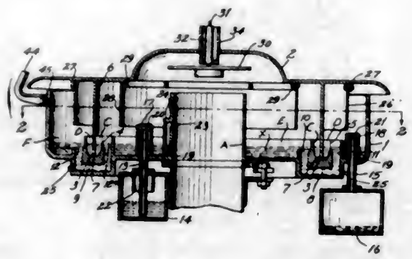
in the casing, and then expanding the terminal sufficiently to embed said projections firmly in the walls of said aperture.

1,874,726. FLOATING ROOF FOR LIQUID STORAGE TANKS. JOHN H. WIGGINS, Tulsa, Okla. Filed Apr. 3, 1929. Serial No. 352,170. 18 Claims. (Cl. 220—26.)



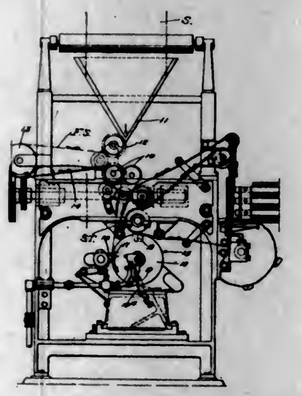
1. A floating roof for liquid storage tanks, provided with a shield carried by the roof and arranged so that it slopes upwardly from the peripheral edge of the roof, and a drainage system for effecting the removal of rain water that falls on said shield, comprising means for preventing rain water or the liquid in the tank on which the roof floats, from collecting on the top side of the roof in a sufficient quantity to sink the roof.

1,874,727. LIQUID SEALED VACUUM AND PRESSURE RELIEF VALVE. JOHN H. WIGGINS and CARROLL A. TURNER, Tulsa, Okla.; said Turner assignor to said Wiggins. Filed May 18, 1929. Serial No. 364,196. 9 Claims. (Cl. 137—53.)



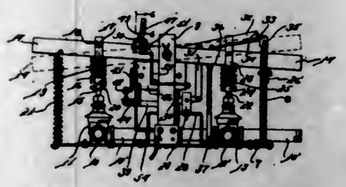
1. In a valve of the class described, a sealing compartment provided with a sealing liquid, an overflow reservoir into which the sealing liquid escapes under certain conditions, means for permitting the sealing liquid to return automatically from the overflow reservoir to the sealing compartment, and an independent means for automatically withdrawing excess sealing liquid from the overflow reservoir.

1,874,728. METHOD OF AND APPARATUS FOR FOLDING NAPKINS. CHARLES C. WILLIS, New Brunswick, N. J., assignor to John Waldron Corporation, New Brunswick, N. J., a Corporation of New Jersey. Filed July 21, 1931. Serial No. 552,275. 4 Claims. (Cl. 270—66.)



1. The method of producing folded paper napkins from a sheet consisting in folding the sheet with a plurality of longitudinal folds to produce a multilayer strip the edge portions of which are folded back on the strip at a common side thereof and have their edges spaced in a direction transverse to the strip and then transversely folding the strip with said side outwardly.

1,874,729. PRESSURE LINE CONTROL. ROMEO S. WOOD, Plymouth, Mich. Filed Sept. 3, 1929. Serial No. 390,017. 2 Claims. (Cl. 137—84.1.)



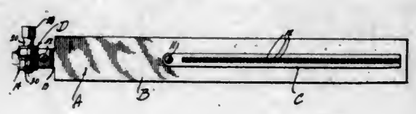
1. A pressure line control of the class described adapted for use with a pressure line, comprising: a valve interposed in said pressure line for controlling flow of fluid therethrough; a drain connected to said pressure line; a valve positioned in said drain for controlling flow of fluid therethrough; a rockable member pivoted intermediate its ends and connected at opposite sides of its point of pivot to said pressure line valve and to said drain control valve and adapted upon rocking in one direction for moving one of said valves to closed position and the other valve to open position, and upon rocking in the opposite direction for moving said valves to opposite positions; resilient means for normally rocking said rockable member to position for closing the valve in said pressure line and opening the valve in said drain; a latch for latching said rockable member in position to maintain the valve in said pressure line in open position; and electrically operated means adapted upon closing of a circuit thereto for releasing said latching means.

1,874,730. MASTER CORE FOR FISHING BOBS. WILLIAM H. WYLAND, Sidney, Ohio. Filed Oct. 17, 1930. Serial No. 489,431. 1 Claim. (Cl. 43—49.)



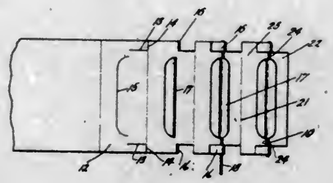
A bob comprising a float body having an opening, a stem member inserted in the opening, said stem member being recessed diametrically at its ends, a spring wire carried by the stem member and frictionally engaging the wall of the opening in the body and having angularly disposed ends engaging the surfaces of the diametrically recessed portions of the stem.

1,874,731. PISTON RING COMPRESSING TOOL. CLARENCE O. YOUNCE, Tacoma, Wash. Filed June 2, 1931. Serial No. 541,705. 5 Claims. (Cl. 29—86.4.)



1. In a piston ring compressing device the combination of a flexible steel band adapted to have the ends overlapped in a circle providing relation, a pinion shaft, one end of said band being looped about said shaft to provide a bearing for rotatably supporting said shaft on an axis transverse to the plane of the circle provided by said band, rack means on the other end of said band for engagement with said pinion to contract or expand the band, and adjusting means for clamping the band loop upon said shaft to hold the shaft against rotation.

1,874,732. METHOD AND APPARATUS FOR FORMING HINGE MEMBERS FOR CONTAINERS AND THE LIKE. JOHN M. YOUNG, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 24, 1927. Serial No. 163,212. 10 Claims. (Cl. 29—11.)



1. The method of making hinges having integral hinge leaves, which consists in providing strip stock of a width equal to the length of a finished hinge and of a length equal to the aggregate width of a multiple number of finished hinges, at spaced transverse zones, providing hinge pintles, cutting and bending from said strip, for each hinge, a set of cooperating hinge lugs in alignment transversely of said strip which divide said hinge into a plurality of hinge leaves, leaving integral bridge portions between said lugs and said leaves and severing a finished hinge transversely of said strip.

1,874,733. DEVICE FOR DIRECTING SOUND. CORNELIS ZWIKKER, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 1, 1929. Serial No. 404,087, and in the Netherlands Dec. 4, 1928. 1 Claim. (Cl. 181—26.)



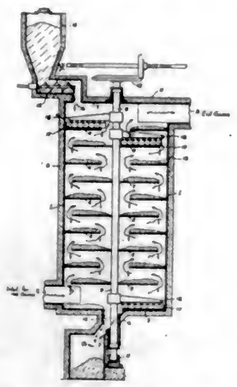
An acoustical system for reproducing sound comprising a row of sound reproducing elements arranged in vertical alignment so as to produce a horizontal fan-shaped propagation of sound waves, and a pair of shorter vertically aligned rows of sound reproducing elements arranged adjacent to the first mentioned vertical alignment of sound reproducing elements, one of said shorter rows of sound reproducing elements being located at each side of the first mentioned vertical row of sound reproducing elements.

1,874,734. FILTER PAD. WILLIAM J. BACON, Memphis, Tenn., assignor to Myrtle M. Bacon, Memphis, Tenn. Filed Apr. 4, 1929. Serial No. 352,379. 1 Claim. (Cl. 183—49.)



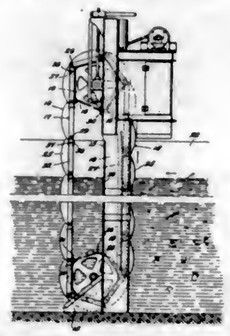
A filter pad comprising filtering material, a flat flexible form-sustaining core embedded therein, and packing material about the edges of the pad.

1,874,735. PROCESS OF DEHYDRATING MAGNESIUM CHLORIDE. EDWIN O. BARSTOW and SHELDON B. HEATH, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed June 24, 1929. Serial No. 373,108. 3 Claims. (Cl. 23—91.)



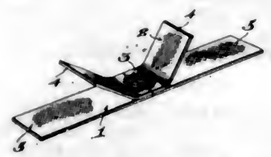
1. A process of dehydrating magnesium chloride which comprises continuously forwarding a body of hydrated magnesium chloride in subdivided form and containing initially at least 4 but less than 6 molecules of water of crystallization in a heating zone wherein the same is intimately contacted with an oppositely flowing current of hot combustion gases introduced at a temperature not materially in excess of 500° C., and maintaining a rate of flow of said chloride relative to that of said gases to heat the chloride to a temperature approximating 300° C. and discharging the dried product containing between ½ and 1 molecule of combined water.

1,874,736. ENDLESS TRAVELING WATER SCREEN. LLOYD G. BLEYER, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 15, 1930. Serial No. 436,212. 2 Claims. (Cl. 210—175.)



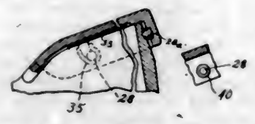
1. In an endless traveling water screen, a basket supporting chain; a guiding sprocket therefor; an additional guiding element adjacent said sprocket; sprocket engaging pintle rolls carried by said chain; and additional rolls mounted in longitudinal alinement with said pintle rolls for engaging said additional guiding element to prevent excessive wear upon said pintle rolls, said additional rolls being removable and replaceable without dismantling said chain.

1,874,737. TOE PAD. EARL D. BOISSELIER, Chicago, Ill. Filed Oct. 19, 1931. Serial No. 569,781. 3 Claims. (Cl. 128—153.)



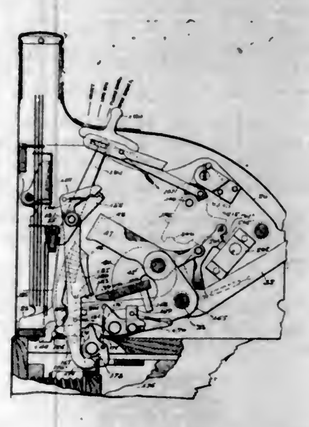
1. A toe protecting pad comprising a carrier strip of absorbent fabric having free end portions, and a protector strip also having free end portions, said carrier strip and protector strip being secured together at their medial portion only thereby to provide shields for the inner contacting surfaces of all of the digits of the foot.

1,874,738. DISPENSING DEVICE. CHARLES E. CONNER, Torrance, Calif. Filed Apr. 8, 1931. Serial No. 528,607. 2 Claims. (Cl. 312—73.)



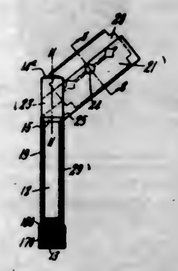
1. In a device of the kind described, in combination, a cover having a flange extending around three sides thereof, one of said flanges being located at an end of said cover and having a resilient boss projecting from its inner face, and each of the other flanges having near the other end of the cover an internally projecting boss; and a receptacle upon which said cover fits, said receptacle having a depression at one end with which said resilient boss cooperates and having near its other end a recess formed in each outer side thereof to cooperate with said internally projecting bosses.

1,874,739. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Apr. 13, 1927, Serial No. 183,392. Divided and this application filed May 17, 1930. Serial No. 453,162. 6 Claims. (Cl. 235—130.)



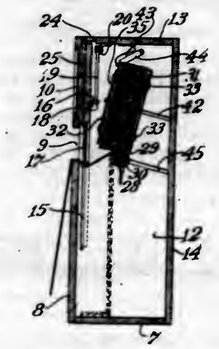
1. In a machine of the class described, the combination of a control lever, a shaft, a plurality of levers mounted on said shaft, a key coupler, a drawer latch, some of said levers being provided with means adapted to engage said coupler while another of said levers being adapted to trip said drawer latch, when said control lever is moved to one position of adjustment.

1,874,740. SAFETY RAZOR BLADE STROPPER. GORDON C. GREEN, Hingham, Mass. Filed Sept. 23, 1931. Serial No. 564,517. 2 Claims. (Cl. 30—25.)



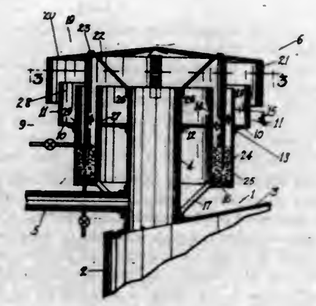
1. A blade stropper comprising two independent oblong rod sections having flat inner sides and semicylindrical outer sides, said sections collectively forming a cylindrical rod, the inner sides being interrupted by oblique slots, so that said flat sides include elongated inner end portions, and relatively short blade grasping jaws at the outer ends of the sections, said sections having blade adjunct grasping jaws formed by the bottoms of said slots and located between the elongated side portions and the blade grasping jaws, the semicylindrical sides having enlargements at their outer ends collectively forming a head terminating in a conical zone, and screw threads on their inner ends, the stropper comprising also a nut engaged with said screw threads and coupling the sections together at their inner ends, said nut having a conical zone, and a tube surrounding the sections between said head and nut, the bore of the tube being spaced from the cylindrical sides of the sections, so that the outer end portions of the sections are movable toward and from each other, the tube ends bearing on said conical zones, the arrangement being such that a nut rotation of small amplitude forces said conical zones simultaneously into the ends of the tube and causes equal inward pressure on the jaw carrying portions of the sections, so that the blade and adjunct grasping jaws are adapted to simultaneously grasp a blade and a blade adjunct.

1,874,741. INDIVIDUAL TOWEL CABINET. EDWARD TROY HAILS, Montgomery, Ala. Filed Jan. 25, 1928. Serial No. 249,252. 13 Claims. (Cl. 312—37.)



1. An individual towel cabinet, comprising means to mount a pack of individual towels in a cabinet, there being an opening in the cabinet whereby a clean towel may be grasped by a user and drawn out of the cabinet, said cabinet having a space above said opening to receive the clean towels and a space below said opening to receive the used towels, and means automatically responsive to the release of a used towel from the grasp of the user to retract such towel into the soiled towel portion of the cabinet.

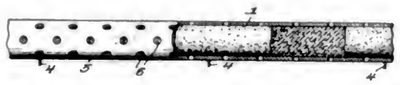
1,874,742. PRESSURE RELIEF MECHANISM. AUDLEY E. HARNSBERGER, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Sept. 19, 1929. Serial No. 393,821. 4 Claims. (Cl. 220—45.)



1. An emergency pressure relief mechanism for fluid storage tanks comprising an outlet in the form of a vertical riser extending upwardly from the roof of a fluid storage tank and in open communication at its lower end with the interior of the tank, a stationary circular casing surrounding said riser and provided with a relatively deep annular reservoir having an open top, said reservoir being

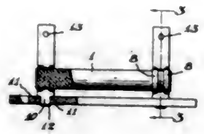
spaced from said riser and provided with a liquid sealing medium in the closed bottom portion thereof, a cap member stationarily supported above and protecting the open tops of said riser and reservoir, a circular divisional wall suspended from said cap member and positioned substantially centrally in said reservoir and the liquid sealing medium contained therein, whereby the quantity of said medium disposed on opposite sides of the wall will be substantially equalized when the pressures both internal and external of the tank are approximately the same, and circular over-flow basins arranged on both sides of the reservoir around the upper portion thereof for the reception of liquid displaced from said reservoir by unequalized pressure conditions, said basins being provided with drains for leading liquid back to the reservoir, the said drains being disposed above the normal liquid level of the reservoir.

1,874,743. METHOD OF PRODUCING CATALYTIC CORES. AUDLEY E. HARNSBERGER and CLYDE L. SMITH, Chicago, Ill., assignors to Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Original application filed Aug. 21, 1928, Serial No. 301,152. Divided and this application filed Dec. 14, 1929. Serial No. 414,167. 3 Claims. (Cl. 23—233.)



1. The method of producing catalytic cores for use in tubular oil heaters, which consists in producing a plastic mixture composed of a material possessing catalytic activity in oil cracking reactions, an organic substance and a cementitious material, molding said mixture while in said plastic state in the form of an elongated rod or core, and then subjecting said mixture to temperatures sufficiently high to effect the carbonization of said organic material and a hardening or setting of the mixture into a permanent rod-like form, whereby said rod or core possesses a porous structure exposing large surface area of said catalytic material.

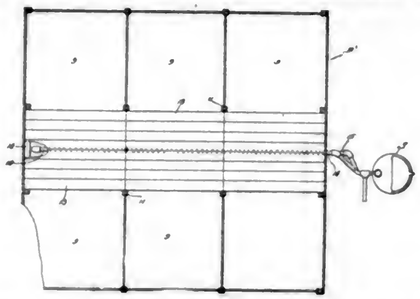
1,874,744. RESISTOR MOUNTING. CLARENCE J. HATHORN, St. Marys, Pa., assignor to Stackpole Carbon Company, St. Marys, Pa., a Corporation of Pennsylvania. Filed May 9, 1931. Serial No. 536,228. 4 Claims. (Cl. 201—63.)



1. Means for mounting a resistor element on an insulating support comprising a combined mounting member and terminal composed of sheet metal and having a supporting portion intermediate its ends adapted to receive a resistor element, said member having one end portion in the form of a rivet for attachment to the insulating support and its opposite end in the form of a terminal to which conductor wires may be attached.

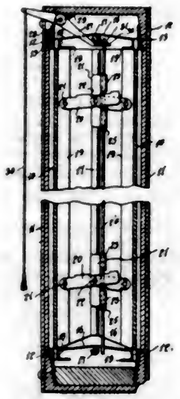
1,874,745. BROODER. WILLIAM HAVENS and CARL J. DANIELSON, Waubay, S. Dak. Filed May 7, 1930. Serial No. 450,532. 4 Claims. (Cl. 119—16.)

1. A brooder house including a raised walk extending centrally longitudinally therethrough, supports for the walk, a plurality of pens on either side of and respectively terminating at one end centrally beneath the walk, and



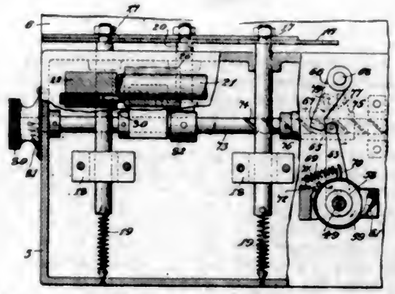
a heat radiating member extending centrally beneath the walk for the full length thereof above the ends of the respective pens.

1,874,746. WINDOW SASH. JOHN J. HAZLEWOOD, Pittsburgh, Pa. Filed June 4, 1931. Serial No. 542,179. 6 Claims. (Cl. 20—56.4.)



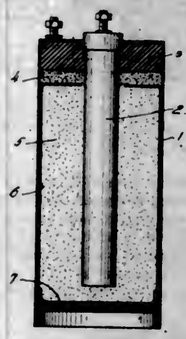
1. In a window, a frame, a light, and means releasably securing said light against the frame, said means being maintained in securing position by gravity.

1,874,747. MEAT SLICING MACHINE. CHARLES HELD, New York, N. Y. Filed Mar. 5, 1930. Serial No. 433,195. 6 Claims. (Cl. 146—102.)



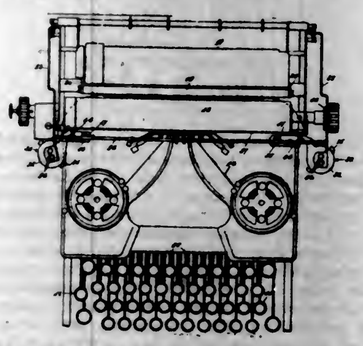
1. In combination with a slicing machine having a vertically positioned rotary cutting knife, a bed plate for the material to be sliced mounted for horizontal reciprocating movement at one side of the knife, a relatively stationary adjustable gauge plate in advance of the cutting knife, means for moving said bed plate at right angles to its path of reciprocation at the end of its return movement after cutting each slice to engage the material with one side of the gauge plate, said means including an adjustable member governing the extent of the last mentioned movement of the bed plate, and a single manually operable means for simultaneously making such adjustment of position of said member and varying the position of the gauge plate relative to the plane of rotation of the cutting knife to regulate the thickness of the cut slices.

1,874,748. DEPOLARIZING MIX FOR DRY CELLS. JOSEPH M. HENDERSON, Madison, Wis., assignor to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed June 4, 1930. Serial No. 459,135. 6 Claims. (Cl. 136—123.)



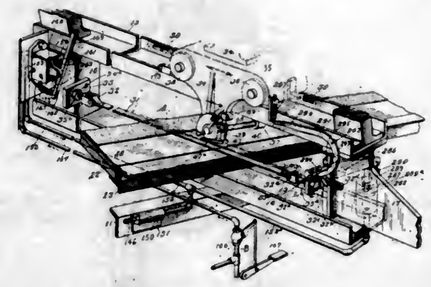
1. In a dry cell of the paper lined type, having a negative electrode and a positive electrode, a depolarizing mix comprising compressed particles of easily compressible, elastic material between said electrodes, said mix exerting pressure against the negative and positive electrodes.

1,874,749. DUPLICATING ATTACHMENT FOR TYPEWRITERS. BEULAH LOUISE HENRY, New York, N. Y. Filed Oct. 11, 1930. Serial No. 488,074. 7 Claims. (Cl. 197—153.)



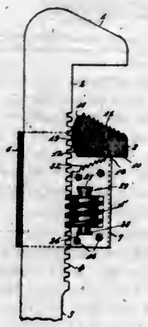
1. In a typewriting machine, the combination with a platen and its carriage, of a swinging frame on said carriage, ribbon spools mounted on said frame so as to be disposed respectively near opposite ends of the platen when the frame is in a down position, means on the frame to guide a ribbon from said spools lengthwise of the platen in registry with the typing line thereof when said frame is in the down position, and a grooved ring on the spindle of the platen engageable by the frame to steady said frame while in its down position.

1,874,750. BIAS CUTTING MACHINE. ALLEN L. HESTON, Akron, Ohio, assignor to Seiberling Rubber Company, a Corporation of Delaware. Filed Aug. 22, 1931. Serial No. 558,667. 20 Claims. (Cl. 164—73.)



1. In a fabric cutting machine, the combination with a conveyor for feeding the fabric, a cutter arranged to traverse the fabric in a cutting stroke, and a cutter ribbon for separating the fabric from the conveyor, of means for automatically raising and lowering said cutter ribbon in timed relation to the operation of the cutter.

1,874,751. REVERSIBLE JAW COMBINATION WRENCH. REGINALD HILTZ, Brookline, Mass. Filed Apr. 9, 1931. Serial No. 528,928. 2 Claims. (Cl. 81—178.)

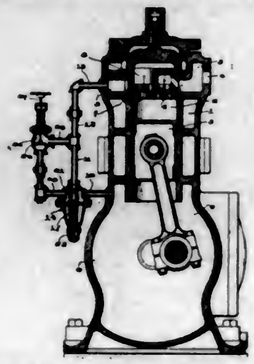


2. In a wrench of the character described, a sliding jaw stock formed with a substantially U-shaped casing, a shank extending through said casing, said shank being provided with a stationary jaw, a filler block rigidly connected with said casing and formed with teeth at one end and a reversible toothed jaw carried by said casing and resting against one point of said filler block when in one position and when in a second position having the teeth thereof meshing with the teeth carried by said filler block.

1,874,752. AIR OR GAS COMPRESSOR. SYLVAN R. HIRSCH, Cincinnati, Ohio, assignor to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed June 13, 1930. Serial No. 460,812. 4 Claims. (Cl. 230—22.)

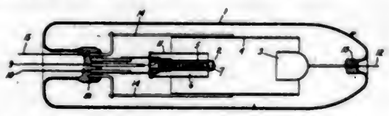
1. The combination with an air or gas compressor of the enclosed crankcase type having suction and discharge ports and having a passage establishing communication between the crankcase and suction port of the compressor, said discharge port being free from connection with said crankcase of a pressure actuated valve acted upon by the pressure within the crankcase for opening and closing said

passage, and adjustable means cooperating with said valve to tension the valve to permit regulation of the pressure at which the valve opens or closes, a by-pass about said pres-



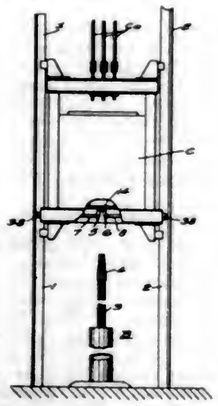
sure actuated valve to permit communication between the compressor suction port and the crankcase irrespective of the pressure actuated valve, and a valve in said bypass.

1,874,753. CONTROLLED ARC DISCHARGE APPARATUS. ALBERT W. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 23, 1929. Serial No. 349,436. 3 Claims. (Cl. 250—27.5.)



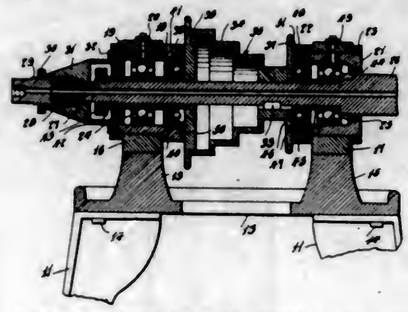
1. In electrical apparatus, the combination of an evacuated envelope containing an anode, cathode and an electrostatic control electrode associated therewith, a charge of inert gas in said envelope at a pressure sufficient to sustain an arc-like discharge, said control member comprising a body of metal positioned wholly remote from the concentrated discharge path but substantially surrounding the entire length of arc path.

1,874,754. SAFETY OPERATION BY BUFFER. HENRY D. JAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 18, 1930. Serial No. 445,319. 4 Claims. (Cl. 187—80.)



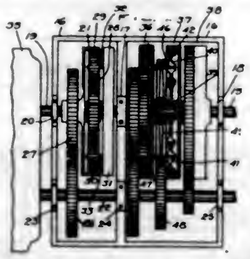
1. In combination, an elevator car, a braking device carried thereby, a buffer mounted on the bottom of the hatchway for engaging the car to reduce its speed when it overruns a terminal, and brake-actuating means carried by the car for diverting a portion of the force of engagement of the car with the buffer to apply said braking device, with a force proportional to the velocity and loading of the car.

1,874,755. PULLEY AND MOUNTING FOR GLASS CUTTING LATHES. TOM H. JARVIS, West Huntington, W. Va. Filed May 9, 1929. Serial No. 361,747. Renewed Apr. 7, 1932. 2 Claims. (Cl. 74—21.)



1. A spindle bearing assembly having a tool-carrying spindle, bearing members, drums carried by said members, bearing devices in the drums, said spindle being journaled in said bearing devices, a balanced driving pulley keyed to the spindle and located between said devices, a cap on one of said drums, a nipple on said cap, and a bearing device in said nipple in bearing engagement with the inner end of the spindle.

1,874,756. POWER TRANSMITTING DEVICE. FRANK JOSEPH KELLY, Quebec, Quebec, Canada. Filed Oct. 21, 1931. Serial No. 570,081. 4 Claims. (Cl. 74—34.)

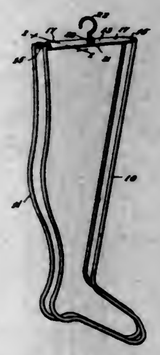


1. In a power transmitting device, a gear box having end and intermediate bearings, a driving shaft journalled in an end and intermediate bearing, a transmission shaft journalled in an end bearing, a countershaft journalled in end and intermediate bearings, a reverse set of planetary gears and brake rubbing member including an internal gear forming a shaft support, a plurality of planetary gear sets including driving gears and planet gears operating in internal gears forming brake rubbing members, driven gears carrying said planet gears and coacting counter gears fixedly mounted on said countershaft, connecting gears mounted on said countershaft and transmission shaft respectively, and band brakes suitably operated and engaging said rubbing members.

1,874,757. HOSIERY DRIER. ELIZABETH KERLER, Rock Island, Ill. Filed May 8, 1931. Serial No. 536,012. 3 Claims. (Cl. 223—17.)

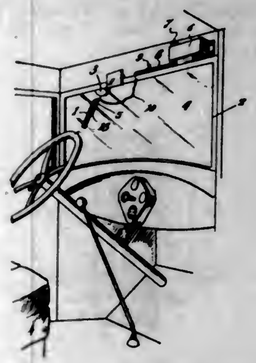
1. A device for drying hosiery comprising a pair of wire frames each shaped to conform to the contour of a stock-

ing to be drawn upon the frame, a spacing strip bridging the upper ends of both frames and having bolt openings formed therein, clamps on the ends of the spacing strip having longitudinal eyes receiving the upper ends of both



frames and having longitudinal slots formed therein, and bolts passed through the openings in the spacing strip and through the slots in the clamps for securing the clamps adjustably in place.
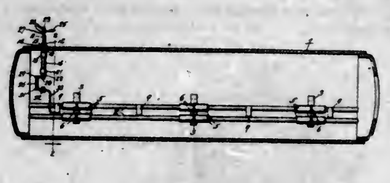
1,874,758. WINDSHIELD WIPER. WILLIAM H. KETCHLEDGE and NORMAN R. WRIGHT, Easton, Pa. Filed Mar. 3, 1931. Serial No. 519,843. 3 Claims. (Cl. 15—255.)



1. In a windshield wiper, a casing having side walls and being open along one edge, a wiping pad of absorbent material mounted in said casing and projecting outwardly therefrom through the open edge thereof, the inner edge portion of the pad being cut to form a longitudinally extending seat terminationg in spaced relation to the lower end of the pad and pockets leading into the pad from the seat in spaced relation to each other longitudinally of the pad, and a tube for delivering liquid to said pad from a source of supply extending through said seat longitudinally thereof and formed with a discharge opening at its inner end and with said openings communicating with said pockets.

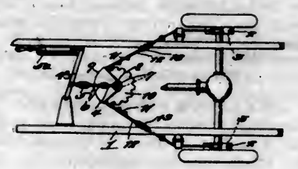
1,874,759. ELECTROLYTIC MEANS FOR THE PROTECTION OF BOILERS. ALEXANDER KIRKALDY, Yorktown Heights, N. Y., assignor to Electro Anti-Corrosion Corporation, New York, N. Y., a Corporation of New York. Filed May 3, 1930. Serial No. 449,393. 4 Claims. (Cl. 204—25.)

1. The combination with a receptacle of an anode rod extending lengthwise therein, hangers secured within said receptacle, and insulating tube carried by said hangers and slidably supporting said anode rod, a connector projecting



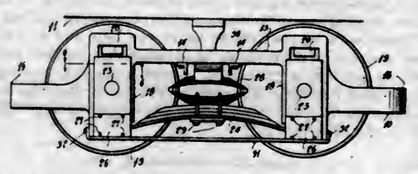
into said receptacle, and means for communicating electrical current from said connector to said anode.

1,874,760. BRAKE BAND EQUALIZER FOR AUTOMOBILES. CHARLES B. KITCHEN, North Glenside, Pa. Filed May 23, 1930. Serial No. 455,049. 1 Claim. (Cl. 188—204.)



In a brake equalizer, the combination with brake bands of an automobile, of an oscillatory link with one end on a fixed pivot and its other end adapted to be connected to a brake lever, a single rocking element, a connection operatively connecting the fulcrum of the rocking element and the link, a flexible device engaging about said element, said device being in a single length, with its end portions beyond said element diverging, means operatively connected to said opposite brake bands of the automobile, turn buckles connecting said last named means and the extremities of the diverging end portions, and a shield carried by the fulcrum of the element and straddling the element to guard the device engaged about the element, and means carried by the shield and cooperating with the connection between the fulcrum and the link to retain the shield in fixed position relative thereto.

1,874,761. RAILWAY CAR TRUCK ASSEMBLY. WILLIAM C. KLEIN, Allentown, Pa. Filed Jan. 14, 1931. Serial No. 508,783. 4 Claims. (Cl. 105—197.)



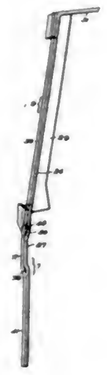
1. A car truck construction, a frame, pedestal boxes carried thereby, axles journaled in said boxes, wheels on said axles, a spring to support a body, and means rubber-mounting the terminals of said spring in said pedestal boxes.

1,874,762. DOLL HEAD AND MOVABLE EYE SYSTEM THEREFOR. ALEXANDER KONOFF, Brooklyn, N. Y., assignor, by mesne assignments, to Margon Corporation, New York, N. Y., a Corporation of New York. Filed June 13, 1930. Serial No. 460,810. 18 Claims. (Cl. 46—40.)



1. An expansion bridge for supporting a movable eye set comprising a channeled member and pairs of spaced end prongs all formed out of a single sheet of metal, the said end prongs being bendable outwardly and spaced at a width greater than that of the channeled member to facilitate expansion of the bridge.

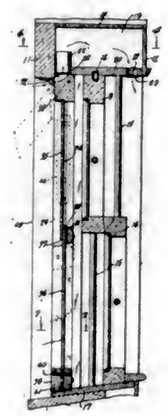
1,874,763. PILLAR FOR VEHICLE BODIES. FREDERICK J. KUBLER, New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass., a Corporation of Massachusetts. Filed Aug. 16, 1929. Serial No. 386,344. 7 Claims. (Cl. 296—28.)



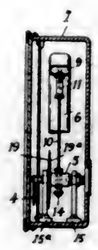
2. A vehicle body pillar comprising a stamping of web section having an attaching portion for incorporation in the framework of the vehicle below the belt and a raking upper portion, a part of the said attaching portion being offset to provide a pocket, a second stamping having a web portion doubling the raking portion of the first and attached thereto and tied across the angle of said offset part to the back thereof.

1,874,764. STORM WINDOW CONSTRUCTION. WILLIAM F. LAHEY and MAURICE S. LAHEY, New Canaan, Conn. Filed May 31, 1930. Serial No. 458,189. 7 Claims. (Cl. 20—25.)

1. In a window construction, a frame having runways for sash, a storm window construction mounted in the frame outside said sash comprising a frame hinged to the window frame at the top and having grooves in the edges of its opening to hold a glass, the side grooves opening through the bottom member of the hinged frame to provide guides for a second glass below the first glass, and guides in the window frame for the upright side edges of the lower glass.



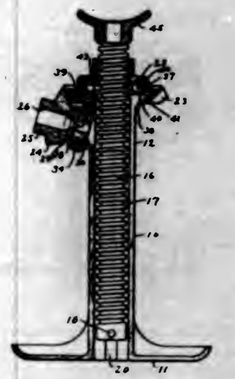
1,874,765. GAUGE. JOHN M. LAMMEDEE, Morgan Park, Ill. Filed Sept. 10, 1930. Serial No. 480,854. 2 Claims. (Cl. 73—109.)



1. In a pressure gauge, the combination of a Bourdon tube, an indicator hand, a spindle for pivotally mounting said hand, a rigid, non-elastic member connected to the free end of said tube and to said spindle for imparting movement of the tube to the hand, said member being adjustably connected at least at one end to permit adjustment of the connection between the indicator hand and Bourdon tube, supporting blocks for said spindle, a pair of friction discs held in working relationship by being connected respectively one to one of said supporting blocks and the other to said spindle, said friction discs dampening oscillation of said hand, and means for adjusting the tension between said discs.

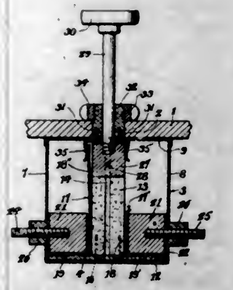
1,874,766. JACK. ALBERT H. LANGENHEIM, Dayton, Ohio, assignor to The Dayton Malleable Iron Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 4, 1930. Serial No. 472,791. 3 Claims. (Cl. 254—98.)

1. A lifting jack comprising a lifting screw, a standard telescopically receiving said screw, a nut in threaded engagement with said screw, the top of the standard being unsymmetrically formed so as to have a projecting portion thereon, the nut having provision for interlockingly



engaging said portion providing for ready assembly of the nut but holding the nut against axial movement, and means for operating said nut.

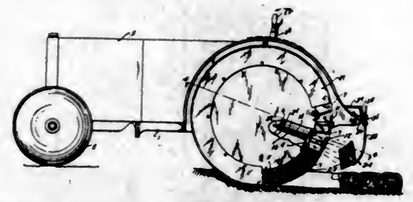
1,874,767. SAFETY CUT-OUT. DAVID N. LANGHOFFER and GLENN T. HOWELL, Portland, Oreg. Filed Jan. 9, 1931. Serial No. 507,691. 9 Claims. (Cl. 200—4.)



1. A safety cutout including a casing, means connected thereto and coacting therewith for anchoring it in position, a pair of terminals insulated and extending from said casing for interposition in a battery lead, opposed, spaced conducting blocks within the casing and connected to said terminals, contact members connected to the blocks and including opposed, spaced resilient legs normally spaced from the blocks, means for insulating said blocks and members from said casing, a shiftable circuit opening and closing element including a head of conducting material coacting with said legs to close said lead, and guide members of insulation material for said head and anchored in the casing.

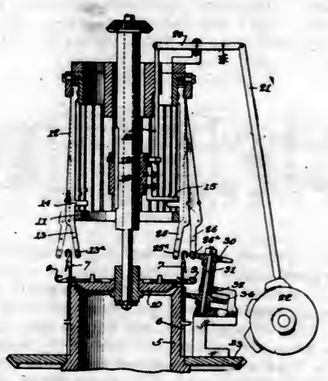
1,874,768. TRACTOR SPADE PLOW. GEORGE H. LEWIS, Kent, Oreg., assignor of one-half to Frank Winters, Portland, Oreg. Filed June 15, 1931. Serial No. 544,389. 6 Claims. (Cl. 97—52.)

1. In a device of the class described, the combination of a plow frame, wheel supports for the plow frame, primary and secondary rims spaced apart and forming the driving wheels, shovel members spaced apart and removably secured to the primary rims, compressible heads disposed between the shovel members, shafts extending through the rim members and having the compressible heads secured thereto upon their outer ends, means for limiting the distance that the compressible heads are permitted to move toward the primary rims and the depth the shovels will be permitted to enter the ground, reacting



elements disposed about the shafts, means for locking the shovel supporting shafts when the heads are compressed, adjutable means for unlocking the shafts and for releasing the shovel at a predetermined position in the line of rotation of the driving wheels and an adjustable shield disposed in the line of release of the compressible head.

1,874,769. STRIPING ATTACHMENT FOR KNITTING MACHINES. WILLIAM J. LONGTIN, Reading, Pa., assignor to Infant Socks, Inc., Reading, Pa., a Corporation of Delaware. Filed Oct. 8, 1930. Serial No. 487,174. 4 Claims. (Cl. 66—135.)

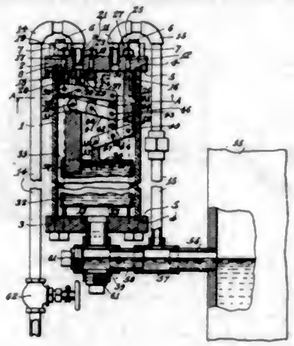


1. In combination with a circular knitting machine, a thread-change plating attachment adapted to selectively supply threads to the same needle, comprising a plurality of guide fingers, pattern-controlled means for imparting a radial swinging movement across the circle of needles to a selected one of said fingers, and a finger-end engaging wheel adapted to laterally shift said radially swinging end to impart thereto a needle-encircling movement.

1,874,770. SAFETY APPARATUS. SALVADOR HERREJON LÓPEZ, Mexico City, Mexico. Filed Mar. 10, 1931, Serial No. 521,615, and in Mexico Mar. 12, 1930. 7 Claims. (Cl. 122—504.)

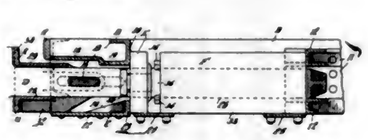
1. In a safety apparatus for steam boilers, a water receiver having a water intake at its top and a water intake at its bottom, water conducting means leading from the water space of the boiler to said bottom intake for supplying water to the receiver at the bottom of the latter, a water conducting line leading from said means to the top intake, a valve controlled steam pressure outlet at the top of the receiver, a valve for normally closing said outlet when the boiler is normal, a weight controlled mechanism for shifting said valve to open position when

the boiler is abnormal and normally retained in inactive position by the water in the receiver when the boiler is normal, and a vertically movable perforated top water



containing receptacle within the receiver and pivotally connected to said mechanism for controlling the operation of the latter.

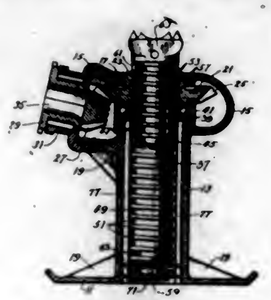
1,874,771. YOKE. HARVEY J. LOUNSBURY, Glen Ellyn, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Feb. 13, 1928, Serial No. 253,878. Divided and this application filed Sept. 12, 1929. Serial No. 392,021. 1 Claim. (Cl. 213—67.)



As an article of manufacture, a yoke having horizontally disposed spaced side arms connected at their inner ends and enlarged vertically at their forwards ends, said enlarged portions of the arms being connected by horizontally disposed spaced top and bottom webs, said webs together with said enlarged portions of the arms defining a box-like hood adapted to accommodate the shank of a coupler, said bottom web being spaced above the bottom edges of said enlarged portions and providing a support for the coupler shank, said arms having aligned coupler key slots rearwardly of said bottom web, the sections of said enlarged portions projecting below said bottom web having straight horizontal bottom guide edges adapted to cooperate with a carry iron or the like to slidingly support the yoke for maintaining the bottom web of said box-like section at standard coupler height.

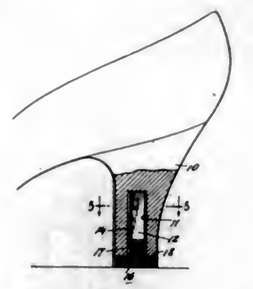
1,874,772. LIFTING JACK. MILLARD B. LUCKER, Benton Harbor, Mich., assignor, by mesne assignments, to The Dayton Malleable Iron Company, Dayton, Ohio, a Corporation of Ohio. Filed July 29, 1929. Serial No. 381,904. 7 Claims. (Cl. 254—102.)

1. In an extension device, a grooved frame, an extensible lifting member arranged in said frame, an operating member rotatably mounted in said frame and having threaded connection with said extensible member whereby the extensible member may be moved axially with respect to said frame upon rotation of the operating member, and a friction device carried by said extensible member and engaging said frame whereby to prevent relative rotation of the extensible member with respect to the frame, said friction device comprising a collar mounted on the inner end of said extensible member and spring means urging said collar to frictionally engage the extensible member to prevent relative movement between the



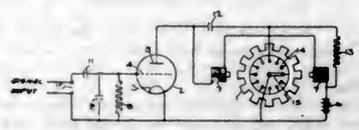
collar and extensible member, said collar having a projecting ear adapted to engage the grooved portion of said frame.

1,874,773. HEEL FOR LADIES' SHOES. FRED MACCARONE and FRANK T. GENTILE, Brooklyn, N. Y. Filed June 16, 1930. Serial No. 461,404. 3 Claims. (Cl. 36—42.)



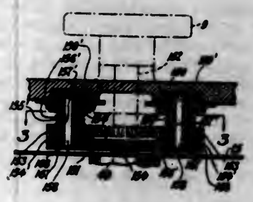
1. A wooden heel having a deep central bore formed irregular in cross section and extending from its lower end to near the upper end thereof, a hollow reinforcing sleeve of resilient metal divided longitudinally and shaped to fit said bore and held therein under pressure against its wall by the resilient action of the metal, and a resilient cushion lift connected to the lower end of said heel, said lift having a shank portion formed integral and extending into said sleeve.

1,874,774. ELECTRIC SYNCHRONIZING SYSTEM. ALAN JULIAN MADDOCK, Wallsend-on-Tyne, England, assignor to General Electric Company, a Corporation of New York. Filed June 5, 1931, Serial No. 542,418, and in Great Britain June 5, 1930. 5 Claims. (Cl. 172—293.)



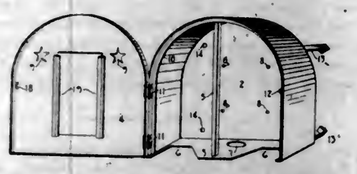
3. Apparatus for maintaining the rotation of a rotatable body in synchronism with received synchronizing impulses comprising means for driving said body, an electric arc discharge device responsive to the received impulses for controlling the movement of said driving means and means associated with said driving means for supplying successive impulses to said device for rendering it inoperative.

1,874,775. SEPARABLE GEAR ASSEMBLY. HARRY S. MARSH, Morrisville, Pa., assignor to Ford Instrument Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed Apr. 22, 1930. Serial No. 446,247. 10 Claims. (Cl. 74—7.)



1. In apparatus of the character described, a device having a rotatable element, a gear on said element, a cover-supporting structure in predetermined relationship to said device, a removable cover, a gear journalled therein, and spring-pressed gears in balanced arrangement meshing with the gear on the cover and yieldable to permit placing of the cover in position with respect to said structure irrespective of the meshing of the balanced gears and to cause such meshing upon a slight turn of the gear on the switch cover.

1,874,776. CABINET. JAMES WOODWARD MARTIN, Dallas, Tex., assignor to Lone Star Gas Company, Dallas, Tex. Filed July 17, 1931. Serial No. 551,505. 2 Claims. (Cl. 312—112.)

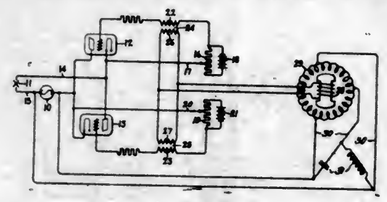


1. A cabinet of the character described comprising a top, a back, side walls, a bottom and a door, said bottom having spaced recesses, each recess enabling the admittance into the cabinet of the neck and valve connecting parts of a gas containing cylinder above the floor line; an opening in the bottom for an outlet pipe, a plate for carrying gas control means of the cylinders, and bracket supporting means independently secured to the back and to the plate for supporting the cabinet adjacent the wall of a building or the like.

1,874,777. ELECTRIC POWER CONTROL APPARATUS. HAROLD T. MASER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 26, 1930. Serial No. 477,935. 5 Claims. (Cl. 171—97.)

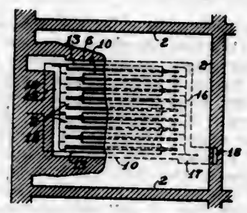
1. A control apparatus for an alternating current system including a source of supply and a load, comprising a pair of electric discharge devices connected in parallel and in opposition, serially connected in said system, each of said devices being provided with a control grid and means for impressing upon said grids independently variable potentials for independently varying the conductivity of said devices.

3. A control apparatus for an alternating current system including a source of supply and a load, comprising a pair of electric discharge devices connected in parallel and in opposition, serially connected in said system, each of said devices being provided with an anode, a cathode,



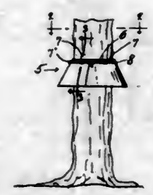
and a control grid, and connections between the grids and cathodes of said devices including sources of independently variable unidirectional potential, and sources of alternating potential simultaneously variable in phase.

1,874,778. ELECTRIC HEATING SYSTEM. RENE MAYER, Columbus, Ohio, assignor of one-half to Hugo Neyer, Vienna, Austria. Filed Sept. 1, 1930. Serial No. 479,119. 4 Claims. (Cl. 219—38.)



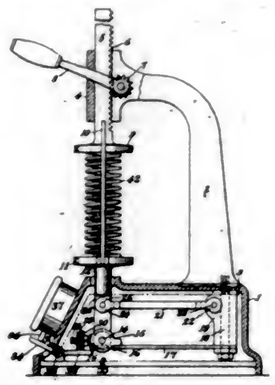
1. The combination of a building room provided with a floor construction, vertical side walls and a ceiling, said floor construction being provided with a pocket, a plurality of hollow tile units positioned in said pocket, each of said units being formed to include an open ended longitudinal passageway, electric heating means arranged in said passageways, an air intake duct leading from said room adjacent to the floor thereof to said pocket to deliver cool air to said passageways, and a heated air delivery duct leading from said pocket through one of the vertical walls of said room for delivering heated air to said room adjacent the ceiling thereof.

1,874,779. TREE GUARD. GEORGE W. MCCHESNEY, Sr., Rouses Point, and MAXWELL C. NORTHUP, Ogdensburg, N. Y. Filed May 31, 1930. Serial No. 458,457. 1 Claim. (Cl. 43—108.)



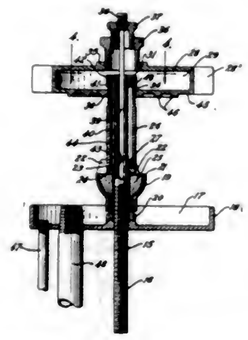
A tree guard of the character set forth comprising a substantially inverted conical body portion having overlapping ends, flanges on the smaller edge thereof, loops between certain of the flanges, a string of wire fastened at one end to the body portion and passing through the loops and across the space between the flanges adjacent the loops, means frictionally anchoring the free end of the wire, and an inturned arcuate trough directed inwardly at the larger end of the body portion.

1,874,780. SPRING TESTER. JOHN J. MCGUCKIN, Passaic, N. J., assignor to Rinck-McIlwaine, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 13, 1930. Serial No. 435,403. 7 Claims. (Cl. 265—19.)



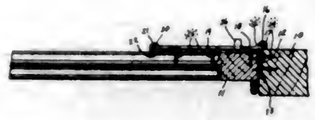
7. In a coiled-spring tester of the class described, the combination of a frame embodying a base, a standard and a head, a reciprocable compressor carried by the head, reciprocating means therefor, a shaft provided with a head constituting coiled-spring supporting means opposed to the compressor, a substantially flat resistance spring having one end secured fixedly to the base, a head carried by a resilient portion of the resistance spring, a pivotal connection between the shaft and the head, a parallel motion link between the shaft and the base, means for indicating the deflection of the resistance spring, and adjustable means, embodying a threaded shank and an adjustable nut thereupon, for varying the influence of the resistance spring on the indicating means.

1,874,781. OIL BURNER. WILLIAM C. MCKESSON, Chicago, Ill. Filed May 27, 1930. Serial No. 456,246. 6 Claims. (Cl. 158—63.)



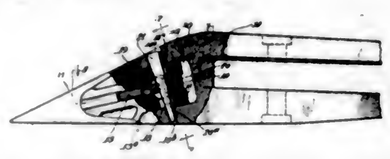
1. In an oil burner, a body providing a vaporizing chamber, a supply conduit, a baffle head on said conduit within said chamber, a second conduit surrounding said first mentioned conduit and having an end portion projecting into said chamber and provided with a beveled edge adapted to engage in a groove formed in the baffle head, a clean-out member supported by the body and extending into said first mentioned conduit, a pan supported by said first mentioned conduit, and a distributor head between said pan and the lower end portion of said second mentioned conduit.

1,874,782. UNIVERSAL CASEMENT HINGE. BENTON C. MCMURTREY, Indianapolis, Ind. Filed May 17, 1930. Serial No. 453,167. 1 Claim. (Cl. 16—163.)



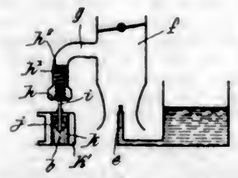
A hinge structure comprising end leaves and an intermediate leaf all of equal width, pintles connecting the ends of said intermediate leaf with adjacent ends of said end leaves, said leaves adapted to fold upon each other with their longitudinal edges flush, a locking prong rigid with and projecting at right angles from one longitudinal edge of one of said end leaves, and the adjacent edge of said intermediate leaf cut away to receive said prong and interlock therewith when the said end and intermediate leaves are laid flat upon each other.

1,874,783. DIGGER TOOTH. VAN CORTRIGHT MEKEEL, Wauwatosa, Wis. Filed Dec. 24, 1931. Serial No. 582,958. 4 Claims. (Cl. 37—142.)



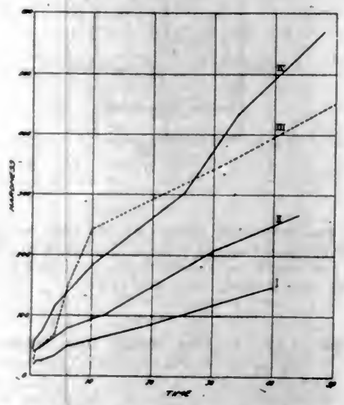
1. In a digger tooth, a base having spaced nibs, an integral transverse web connecting said nibs and a recess extending back of said web, a point having side recesses to receive said nibs, a transverse space to receive said web, and spaced jaws which engage in said recess of the base back of said web, a wedge extending transversely between said jaws, and a pin extending at right angles to the plane of said web and wedge and engaged solely between the two.

1,874,784. CARBURETOR. MARCEL MENNESSON, Neuilly-sur-Seine, France, assignor to The Societe Anonyme Solex, Neuilly-sur-Seine, France. Filed Apr. 9, 1930, Serial No. 442,916, and in Belgium May 25, 1929. 1 Claim. (Cl. 261—39.)



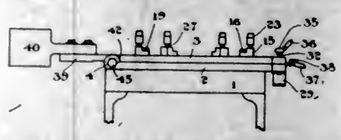
In combination with a carburetor assembly including a mixing chamber, a nozzle positioned to supply fuel to said mixing chamber, an air supply conduit positioned to communicate at opposite extremities with said mixing chamber and with the atmosphere, a valve positioned in said air supply conduit and controlling communication between the inside of the latter and the atmosphere, and a spring tending to move said valve into closed position, means for controlling movement of said valve comprising a stem attached thereto, a container, and a substance solid at ordinary temperatures and liquefying when heated, said substance being mounted in said container and contacting with said stem whereby when the said substance is in the solid state it presents the opening of the valve but heating of the said substance liquefies the latter so as to release said stem and permit said valve to open under the action of the suction in the mixing chamber of the carburetor.

1,874,785. OXIDE COATINGS AND METHOD OF PREPARING THE SAME. HENRY JOHANNES MILLER and FRANK J. CAHN, Chicago, Ill., assignors to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed June 23, 1930. Serial No. 463,337. 7 Claims. (Cl. 250—27.5.)



1. A method of producing an oxide composition which consists of dissolving nitrocellulose of high viscosity in a solvent, adding alkaline earth carbonates to the solution, grinding the resulting mixture at least 8 hours, evaporating the nitrocellulose, and converting the carbonates to oxides by the application of heat.

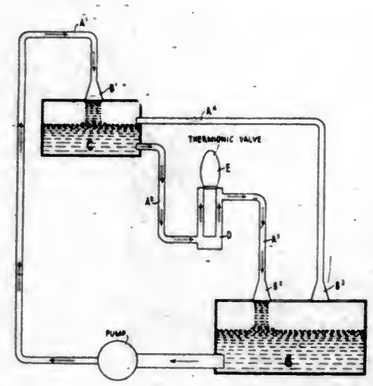
1,874,786. RING FRACTURING MACHINE. PETER MITCHELL, Winnipeg, Manitoba, Canada. Filed Sept. 29, 1930. Serial No. 485,289. 2 Claims. (Cl. 29—66.)



1. Apparatus for fracturing a cast metal member comprising a horizontal support presenting a plurality of spaced fulcrum edges projecting upwardly therefrom, said cast member being arranged with one side engaging said fulcrum edges, a plurality of guides extending upwardly from said support, a clamping member slidably mounted on said guides and movable thereon to and from clamping engagement with the opposite side of the cast member, a cylinder and piston device for moving said clamping member, a plurality of movable cutters carried by the clamping member and adapted to engage the cast member at points in line with the fulcrum edges and a pneumatic hammer associated with each of said cutters.

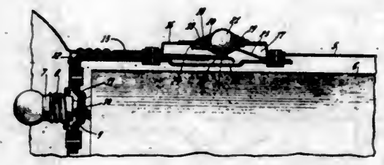
1,874,787. MEANS FOR COOLING THERMIONIC VALVES. BERTIE DORÉ LEWORTHY MOGRIDGE, Ilfracombe, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 28, 1924, Serial No. 746,258, and in Great Britain Oct. 29, 1923. 2 Claims. (Cl. 250—27.5.)

1. The combination of an electrical device having a portion heated during use, with a system containing a semi-electrically conducting fluid for cooling said heated portion, said system comprising a jacket surrounding said heated portion, a spray and storage means for supplying the cooling fluid to said jacket, a second spray and storage means



for receiving said cooling fluid from said jacket, and a by-pass for passing any excess of cooling fluid from the first mentioned spray and storage means to the second mentioned spray and storage means.

1,874,788. FLASH LIGHT SWITCH. JOSEPH F. MORAN, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 10, 1931. Serial No. 543,334. 4 Claims. (Cl. 200—600.)

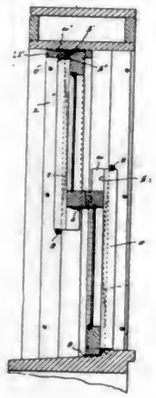


4. The combination in a flashlight having a casing, a lamp, and a battery, of a switch mechanism for controlling the flow of current through said lamp including a thumb piece slidably mounted on said casing and having a recess formed therein, a ball seated in said recess and movable with said thumb piece, a flexible circuit closing member having a pocket formed therein for co-operating with said ball and arranged to be moved into circuit closing position upon sliding movement of said thumb piece, and means for determining the extent of movement of said thumb piece in each direction to permit said ball to be moved entirely out of said pocket when said thumb piece is forced in one direction to permanently close said circuit, and to prevent said ball being moved entirely out of said pocket when said thumb piece is moved in the opposite direction to provide for flashing operation of said lamp.

1,874,789. WINDOW SASH ADJUSTER. GEORGE EDWARD MORROW, Enid, Okla. Filed Sept. 4, 1930. Serial No. 479,743. 5 Claims. (Cl. 20—12.)

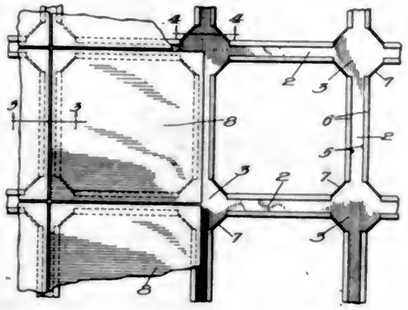
5. In combination with a sash and a frame and an elongated plate bent to provide a portion for engaging the

frame and located between an edge of the sash and the frame, a second portion engaging the outer face of the stop and an intermediate portion connecting the first two



portions together and a spring located between the intermediate portion and the stop for holding said intermediate portion against a part of the sash.

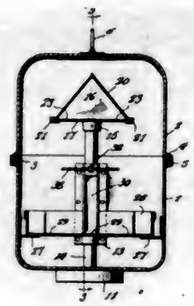
1,874,790. BUILDING MATERIAL AND RETAINING MEANS THEREFOR. HENRY C. MORTENSON, Highland Park, Ill., assignor to Mortenson Engineering Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1930. Serial No. 434,389. 9 Claims. (Cl. 72—19.)



1. A retaining means for building materials, comprising a sheet of metal provded with outwardly extending resilient flanges adapted to receive and tensionally and frictionally retain a plurality of blocks of building materials such as tile, brick or the like, said flanges being so formed as to intercept such building materials even though the same may vary in their dimensions.

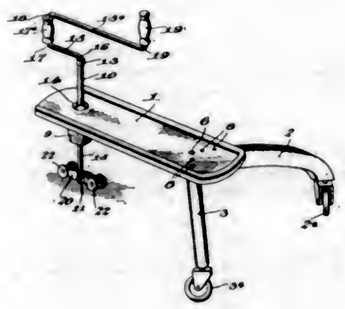
1,874,791. ROASTING PAN. MABEL M. MURFF, Lawton, Okla. Filed Dec. 15, 1930. Serial No. 502,483. 2 Claims. (Cl. 53—6.)

1. A roasting apparatus comprising a pan, a well on the bottom of the pan at one end of the same, the bottom of the pan having an opening therethrough to establish communication between the well and the interior of the pan, a cover fitting snugly upon the pan, a perforated tray supported within the pan above the bottom of the same, a spit mounted above the tray, a guide on one end of the pan between the same and the tray, a stand pipe held in said guide and having its lower end disposed within the well and its upper end within the cover and an upper receptacle comprising a perforated plate secured upon the upper end of the stand pipe and extending longitudinally of the cover above the spit, said perforated plate



having an upstanding closure at one end, and a cover member slidably engaged with said perforated plate and having one closed end and having an open end adapted to abut the closure rising from said plate.

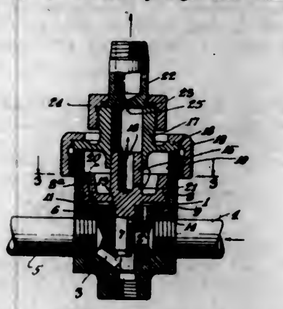
1,874,792. TOY. GILBERT MYERS, Boise, Idaho. Filed Aug. 4, 1931. Serial No. 555,065. 6 Claims. (Cl 272—33.)



1. A toy comprising an elongated seat, a pair of legs secured to the seat near one end thereof, said legs being at right angles to one another, a caster wheel carried by each leg, a block secured to the underside of the seat near the opposite end thereof, a sleeve extending through the block and seat, said sleeve having a flange engaging the lower surface of the block, a crank shaft having a portion extending through the sleeve and provided with a flange abutting the flange on the sleeve, said crank shaft having a pair of handles, a frame pivotally secured to one end of the crank shaft, and wheels carried by the frame.

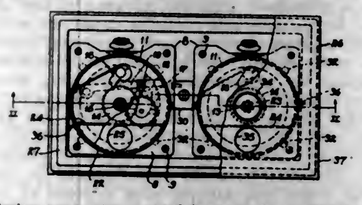
1,874,793. DELAY ACTION VALVE. HARRY NIGHTINGALE, Union City, and HARAY MEACHEM, Teaneck, N. J., assignors to Todd Drydock, Engineering & Repair Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 11, 1930. Serial No. 501,498. 6 Claims. (Cl. 137—153.)

1. The combination with a valve casing having a passageway therethrough and an associated chamber, of a plunger in said chamber, a stem extended from said plunger to normally close said passageway, means for conveying fluid, under pressure, from a source of supply, to said passageway, by-pass means between said passageway and chamber adapted to convey fluid to the latter whereby fluid presure may operate said plunger and stem to open



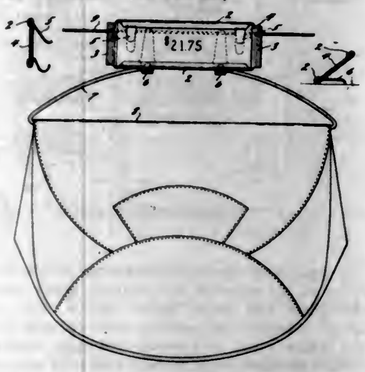
said passageway, means for retarding the operation of said plunger, and means for returning all the by-passed fluid back to the source of supply, through the chamber.

1,874,794. RACE TIMING APPARATUS. HENRY OESTE, Pittsburgh, Pa. Filed Aug. 7, 1930. Serial No. 473,542. 3 Claims. (Cl. 161—18.)



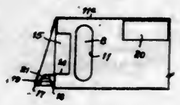
3. Timing apparatus comprising a casing, a clock mechanism having a balance wheel, and insertible in the casing, a lever mounted on said mechanism and movable into and out of engagement with said balance wheel, a receptacle rotatably mounted on said mechanism and operable from exteriorly of the casing for moving said lever, a pawl and ratchet device connected to said receptacle for preventing rotative movement thereof in one direction, and a stop lug secured to said receptacle in position to engage said casing for limiting movement of the receptacle in the other direction.

1,874,795. DISPLAY DEVICE. RUDOLPH ORTHWINE, New York, N. Y. Filed July 18, 1930. Serial No. 468,836. 1 Claim. (Cl. 40—16.)



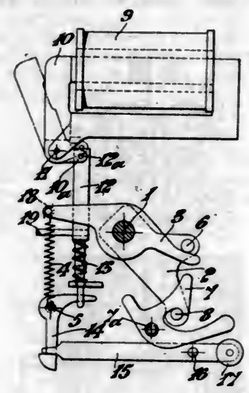
A holder for display cards used in displaying merchandise comprising a non-resilient sheet metal plate having flanges formed on opposed edges, the flanges extending substantially parallel to the plane of the plate and forming channels therewith adapted to receive the edges of a display card, and two pair of strips extending oppositely, the strips being formed in said plate and being readily deformable to accommodate the display card holder to various merchandise.

1,874,796. ENVELOPE. VICTOR H. PALM, Butler, Pa. Filed May 26, 1930. Serial No. 455,567. 5 Claims. (Cl. 229—92.1.)



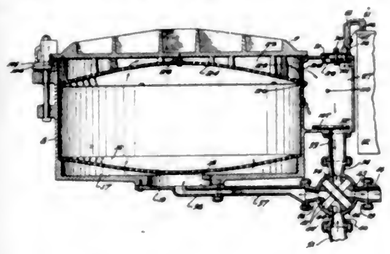
1. A combined envelope and letter sheet consisting of a sheet folded along a line laterally offset from a median line of the sheet, a fold adjacent to the edge of the longer portion of the primarily folded sheet and overlapping the opposite edge of the shorter folded portion of the sheet, the sheet being again folded across its width, on a line extending at right angles to the first folded line, and those edges of the sheet parallel to the last-named fold line being inturned and united by a strip of adhesive applied adjacent to one of the second-named edges, the sheet being provided with a second strip of adhesive parallel to but spaced a slight distance from the first-named strip of adhesive.

1,874,797. NO-VOLT TRIPPING MECHANISM FOR ELECTRICAL SWITCHES. FREDERICK JAMES PAVITT, Brighton, England. Filed Jan. 21, 1930, Serial No. 422,388, and in Great Britain Jan. 25, 1929. 3 Claims. (Cl. 200—109.)



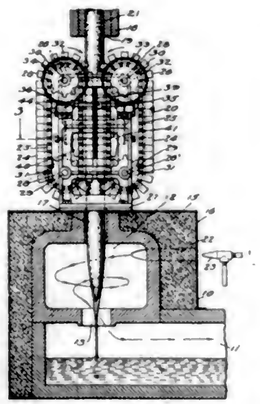
1. A control apparatus for electric circuits comprising a winding, an armature controlled thereby, a moving element having an operative position at which said winding is adapted to be energized, an interlock between said element and said armature whereby said armature is held at the attracted position independently of said winding until said element is actuated to the operative position whereupon said armature is left free to move from said attracted position upon said winding becoming de-energized independently of the movement of said element, a latch adapted to retain said element at said operative position and means whereby upon release of said armature said latch is adapted to be tripped for allowing the element to move to the inoperative position the tripping of said latch being effected by a hammer blow imparted by the release of energy other than that stored by the movement of the armature to the attracted position.

1,874,798. DYEING MACHINE. DON C. PEGLAR, Chattanooga, Tenn., assignor to Vacuum Dyeing Machine Corporation, Chattanooga, Tenn., a Corporation of Tennessee. Filed Nov. 13, 1929. Serial No. 406,937. 6 Claims. (Cl. 8—18.)



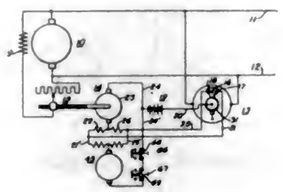
6. Dyeing apparatus comprising a circulation system for dye-liquor including a tank, a steam chest forming part of said circulation system communicating with the upper part of said tank, a pump for promoting circulation through said system, an expansion tank, means for admitting steam to said steam chest, valve controlled means of communication between said steam chest and expansion tank, a valve for reversing the direction of circulation of dye-liquor through said tank, a valve controlled waste conduit and means for driving the dye liquor from the mass to be dyed which is in said tank, comprising a conduit for admitting compressed air to said steam chest.

1,874,799. METHOD AND APPARATUS FOR FEEDING AND MELTING GLASS BATCH. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Nov. 4, 1927. Serial No. 231,014. 4 Claims. (Cl. 49—53.)



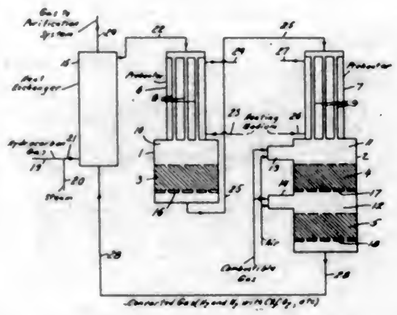
3. The method of feeding and melting glass making batch which comprises, continuously mixing glass making material in the presence of moisture and extruding the same in a rod-like form through a die, setting the material in such form, feeding and guiding said rod endwise through a preheating zone toward and into a melting chamber, suspending the rod of batch in the chamber out of contact with the bottom and side walls thereof, projecting a combustion flame into the chamber and into enveloping relation to the end of the suspended batch, to reduce the lower portion of the batch to melted glass, and flowing the melted glass downward from the end of the rod into a refining compartment.

1,874,800. COUPLING SYSTEM FOR REGULATING APPARATUS. WERNER PONTOW, Berlin-Wilmersdorf, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 3, 1931, Serial No. 513,149, and in Germany Feb. 5, 1930. 5 Claims. (Cl. 171—229.)



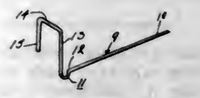
1. In a regulating system, quantity change responsive means and positionally adjustable contacts associated therewith, a quantity control device operated in accordance with the actuation of said change responsive means and said contacts, an anti-hunting device disposed upon operation to effect a temporary movement tending to interrupt the actuation of the change responsive means and the contacts, means for operating said anti-hunting device in accordance with the operation of said quantity control device, positional adjusting means for setting the "at rest" position of the contacts to vary the normal magnitude of the quantity being regulated, and a differential mechanism for communicating the actuating movements of the anti-hunting and the adjusting means to the positionally adjustable contacts comprising one or more pinions and two bevel gear wheels disposed to engage opposite sides of said pinions, said gear wheels being coupled respectively to the adjusting and to the anti-hunting means, said pinions being disposed to transmit their planetary movements about the axis of the bevel gears to the said positionally adjustable contacts.

1,874,801. PROCESS FOR THE DECOMPOSITION OF HYDROCARBONS. FRANK PORTER, Syracuse, N. Y., assignor to Atmospheric Nitrogen Corporation, New York, N. Y., a Corporation of New York. Filed June 24, 1930. Serial No. 463,463. 9 Claims. (Cl. 23—7.)



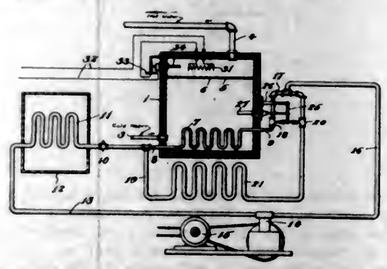
1. The process of producing hydrogen which comprises contacting at an elevated temperature a gas containing a hydrocarbon and water vapor with a body catalyst adapted to catalyze the reaction between said hydrocarbon and water vapor to produce hydrogen, withdrawing the reaction products from contact with said body of catalyst, adding sensible heat to said withdrawn products, and passing all of said products into contact with a separate body of catalyst adapted to catalyze said reaction.

1,874,802. CLIP FOR FASTENING FORAMINOUS PLASTER KEY. JOHN S. RAYNOR, Holmesburg, Pa. Filed July 30, 1930. Serial No. 471,641. 4 Claims. (Cl. 72—118.)



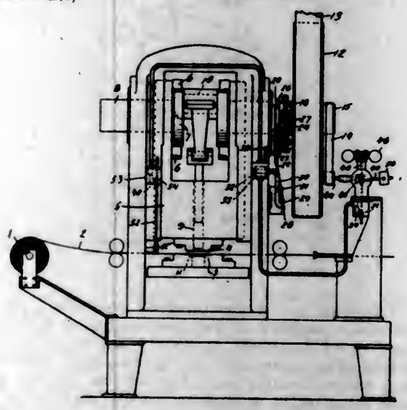
3. A clip produced from a strip of material fashioned to provide a U-shaped holder, an open ended socket beside said holder, and a body projecting from said socket, the point of connection between the socket and body producing a shoulder.

1,874,803. HEAT EXCHANGE MECHANISM. FRANK MAYNARD REED, Clearfield, Pa. Filed Jan. 12, 1931. Serial No. 508,255. 4 Claims. (Cl. 257—2.)



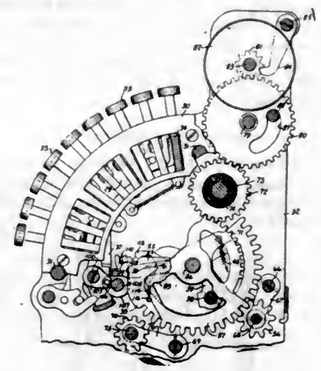
1. Means for the purpose set forth comprising a closed circulating system including a coil, a permanent gas filling the system, a compressor in said system whereby the gas in the system may be caused to circulate and to be compressed as it passes to the coil, means for maintaining matter to be heated in proximity to the coil, a by-pass connected to the circulating system at opposite sides of the coil valves in the by-pass and at one end of the coil, and means controlled by the temperature of the matter to be heated to simultaneously open one of said valves and close the other valve for establishing the flow through the coil or diverting flow through the by-pass.

1,874,804. AUTOMATIC STOP MECHANISM. DAVID B. REESE, Madison, Wis., assignor to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed Oct. 16, 1929. Serial No. 400,057. 9 Claims. (Cl. 192—127.)



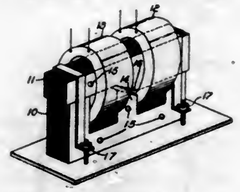
6. In a power driven punch press, an automatic clutch disengaging mechanism comprising, in combination, a clutch in the power input system of said press, an electromagnetically operated solenoid mounted upon said press and adapted, upon energization, to disengage said clutch, an energizing circuit in series with said solenoid, two normally open, parallel connected switches in said energizing circuit, means responsive to predetermined speed variation of said press to close one of said switches, and means responsive to exhaustion of unpunched stock to close the other of said switches.

1,874,805. CASH REGISTER. WILLIAM H. ROBERTSON, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Sept. 4, 1929. Serial No. 390,319. 19 Claims. (Cl. 235—7.)



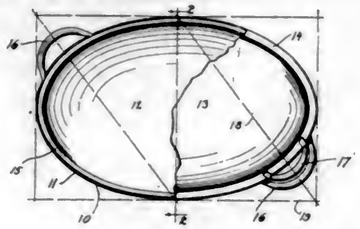
1. In a machine of the class described, the combination with a plurality of banks of settable keys; and actuators, differentially positioned under control of the keys; of means carried by the actuators to cooperate with the keys when set; and means to render the first-mentioned means ineffective to enable the actuators to advance irrespective of a key in its set position.

1,874,806. TRANSFORMER CORE. HUGH G. ROSS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 28, 1931. Serial No. 519,115. 8 Claims. (Cl. 171—119.)



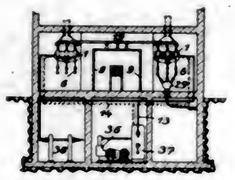
1. A magnetic core structure, comprising cooperating members disposed and shaped to provide a plurality of magnetic paths including at least one air gap between opposing faces of said members, said core members being so supported as to maintain them in engagement at a plurality of contacting surfaces and permit an axial sliding movement of one member along the other member, the faces of the core members on opposite sides of the air gaps being substantially parallel and disposed at an angle with respect to the axis of movement so that the length of air gap is dependent upon the relative positions of the said cooperating core members.

1,874,807. CULINARY DEVICE. WALTER H. RUDOLPH, Buffalo, N. Y. Filed July 20, 1931. Serial No. 551,878. 2 Claims. (Cl. 53—8.)



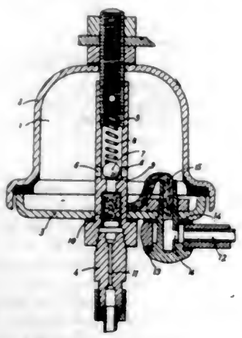
1. In a roasting pan, or the like, having a horizontal cross-section of generally elliptical configuration, a pair of handles secured upon opposite sides thereof and lying within the confines of a circumscribed parallelepiped, the sides of which are tangent to the ellipse at the major and minor axes thereof.

1,874,808. SWITCH PLANT. SIGWART RÜPPEL, Frankfort-on-the-Main, Germany. Filed Apr. 6, 1929, Serial No. 353,239, and in Germany Feb. 14, 1927. 11 Claims. (Cl. 175—298.)



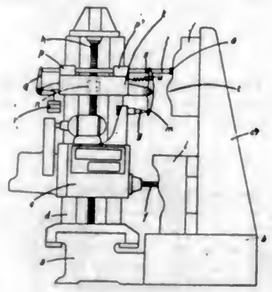
1. In an electrical switching system, a combination of a plurality of gas pressure operated switches, a main conduit system for supplying pressure gas to said switches including at least two branch conduits for each of said switches, and auxiliary means operatively connected to said main system adapted to provide an additional supply of pressure gas available for reserve.

1,874,809. SYSTEM OF LUBRICATION FOR VEHICLES. LEON SAIVES, Billancourt, France, assignor to Louis Renault, Billancourt, France. Filed Sept. 18, 1930, Serial No. 482,893, and in France Oct. 2, 1929. 5 Claims. (Cl. 184—7.)



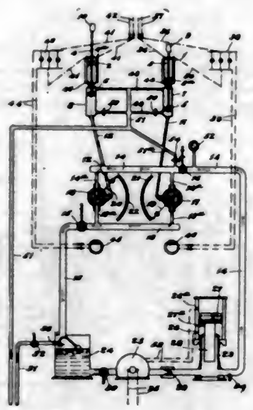
1. A lubricating system including an air-tight reservoir, a valve-controlled oil intake leading into said reservoir, an off-take pipe leading from said reservoir to points to be lubricated, and a wick having one end located adjacent the end of said off-take pipe, the other end of said wick being extended into said reservoir.

1,874,810. ELECTRICALLY CONTROLLED MILLING MACHINE FOR METAL. LEON SAIVES, Billancourt, France, assignor to Louis Renault, Billancourt, France. Filed Nov. 20, 1930, Serial No. 497,020, and in France Mar. 5, 1930. 5 Claims. (Cl. 90—13.)



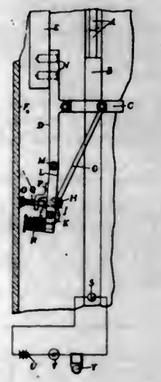
1. An attachment for milling machines having a vertically movable cutter carriage, comprising a laterally movable arm having at its end a point adapted at all times to contact and ride vertically over the face of a pattern during the vertical movements of said slide, means for maintaining contact between said point and the face of the pattern, and means whereby lateral movement of said arm will cause a lateral movement of the cutter carriage in an opposite direction.

1,874,811. CONTROL OF THEATER AND LIKE LIGHTING SYSTEM. RAPHAEL ARTHUR SALAMAN, Royston, England. Filed Aug. 10, 1929, Serial No. 385,050, and in Great Britain Oct. 16, 1928. 5 Claims. (Cl. 175—312.)



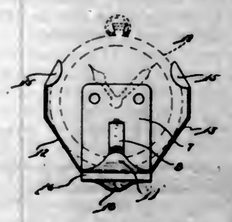
1. Electrical control apparatus for controlling the resistance of a plurality of rheostats, comprising individual pistons whose movement varies the resistance of said rheostats, cylinders in which said pistons move, individual control valves for alternatively connecting one end only of said cylinders to pressure or exhaust for moving the pistons in opposite directions, said control valves being capable of being set for moving said pistons quickly or slowly, master valves for simultaneously cutting off the cylinders from pressure and exhaust respectively so that the individual control valves can be preset and all the pistons subsequently actuated simultaneously.

1,874,812. AUTOMATIC THEFT PREVENTION DEVICE. WILLIAM JOHN SAMUEL, Chatham, England. Filed Apr. 3, 1931, Serial No. 527,552, and in Great Britain Apr. 12, 1930. 7 Claims. (Cl. 20—40.4.)



1. In an automatic theft prevention device for use in shop windows, display cabinets and the like of that type including an intercepting screen adapted to fall into position between the window pane and the goods in the display area, the combination of a bracket normally supporting said screen in an elevated position, a carrying member to which one end of said bracket is hinged, means for holding said member high up in permanent position, struts hinged to said bracket so as to be capable of hanging downwards therefrom, and displaceable means for supporting the lower ends of said struts, the displacement of which is occasioned by the jarring or breakage of the window pane.

1,874,813. COMBINATION HOLDER. BENJAMIN P. SAUNDERS, Pontiac, Mich. Filed Sept. 28, 1929. Serial No. 395,984. 1 Claim. (Cl. 224—4.)

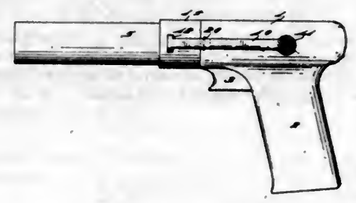


A device of the class described, comprising: a plate; a portion turned to extend angularly to said plate; lateral arms at opposite sides of said angularly turned portion extending upwardly in spaced relation; a pair of tongues punched from said angularly turned portion and projected upwardly extending substantially at right angles to said lateral arms; and a clamping member extending below and in spaced relation to said angularly turned portion.

1,874,814. ALLOY STEEL. JULIAN L. SCHUELER, Kokomo, Ind., assignor to Continental Steel Corporation, Kokomo, Ind., a Corporation of Indiana. Filed Nov. 27, 1931. Serial No. 577,713. 3 Claims. (Cl. 75—1.)

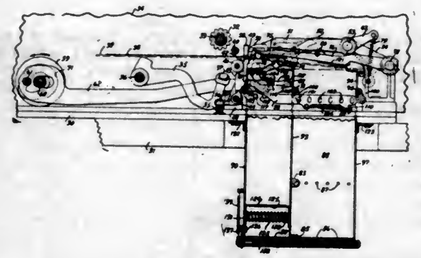
1. A corrosion resisting steel alloy containing copper from .10% to .30%, nickel from .30% to .50%, chromium from .07% to .30%, and the balance substantially iron.

1,874,815. FIREARM. REGINALD F. SEDGLEY, Philadelphia, Pa. Filed June 20, 1930. Serial No. 462,538. 4 Claims. (Cl. 42—1.)



2. In a firearm, a breech having a charge holder receiving chamber at its forward end, a quick detachable charge holder having its rear end insertable into the forward end of the chamber of said breech, a manually releasable locking member for interlocking said charge holder with said breech, and a spring pressed ejecting member in the path of said charge holder when inserted into said chamber whereby said spring is brought to tension by such insertion.

1,874,816. VOUCHER SEVERING AND STACKING MEANS. BERNIS M. SHIPLEY, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Mar. 7, 1929. Serial No. 345,054. 23 Claims. (Cl. 164—49.)

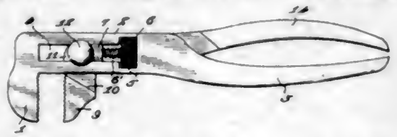


1. The combination with a voucher-severing device; actuating means therefor; and a receptacle in which the vouchers are successively deposited; of a voucher-stacking means initially operated by the severing means, and finally operated directly by the actuating means to move the stacking means relatively to the severing means to deposit the severed vouchers in the receptacle.

1,874,817. WRENCH. EMERY A. SHOOK, Corning, Calif. Filed Oct. 27, 1930. Serial No. 491,541. 1 Claim. (Cl. 81—83.)

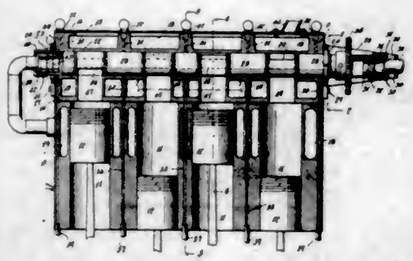
A wrench of the character described, comprising a stationary jaw having a shank which merges into a handle and the said shank being provided with a rectangular slot that merges into a notch and with an opening that communicates with the notch, a block arranged in the

slot and in contact with the opposed longitudinal walls thereof, said block having a worm screw which is received in the opening, a nut which is round in plan and peripherally knurled received in the notch and engaging the worm, a movable jaw having a reduced portion arranged against one side of the shank, and a headed pivot



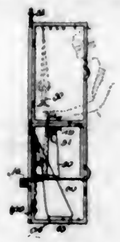
passing through the block and said reduced portion and the head of the pivot holding the block in the slot, a shank formed at the reduced portion of the movable jaw and merging into a handle, and designed to frictionally engage with the knurled nut when the mentioned handles are swung and forced toward each other.

1,874,818. VALVE MECHANISM. ROSS SHOWMIN, Rossford, Ohio. Filed May 14, 1930. Serial No. 452,433. 2 Claims. (Cl. 123—59.)



1. In an engine of the class described, a rotary valve, blocks in contact therewith, and screws operable from the exterior of the head to adjust said blocks to position the valve.

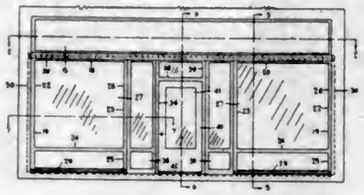
1,874,819. MINIATURE THEATER. THOMAS H. SIMMONS, St. Paul, Minn. Filed May 8, 1931. Serial No. 535,908. 10 Claims. (Cl. 46—37.)



2. A miniature theater having a stage opening therein, comprising a plurality of frame sections hingedly connected together to fold into superposed relation with respect to each other, a stage floor removably mounted across the lower edge of said stage opening, and a troughed footlight housing member mounted forwardly of the forward edge of said stage floor.

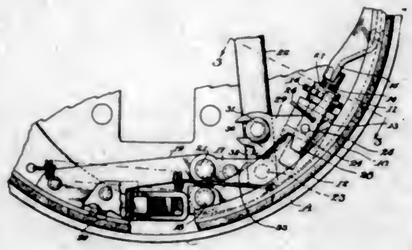
1,874,820. CONVERTIBLE STORE FRONT. ANDREA SIMONE, Toronto, Ontario, Canada. Filed Aug. 21, 1931. Serial No. 558,509. 4 Claims. (Cl. 20—40.4.)

1. In convertible store fronts, a plurality of window sections having frames and glasses, a door case and door, a main transom and supporting cross beam suitably grooved to receive said frame, mullions having said frames secured thereto, floor fastenings for said frames, an exten-



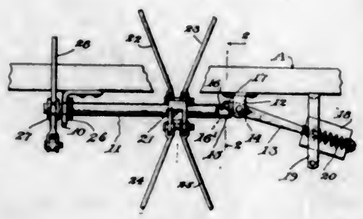
sion frame from said cross beam for said door case and inwardly set members of said window sections and means for closing the stall opened by the removal of said frames and case.

1,874,821. BRAKE MECHANISM. GEORGE L. SMITH, Washington, D. C., assignor to United States Ordnance Company, Washington, D. C., a Corporation of Virginia. Filed Feb. 5, 1931. Serial No. 513,693. 3 Claims. (Cl. 188—79.5.)



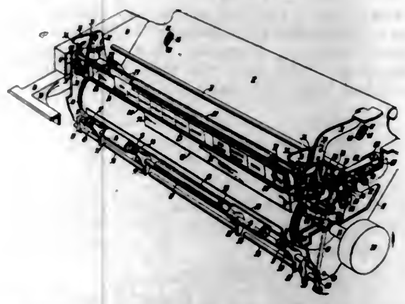
1. In a brake mechanism, a brake operating member, a brake adjusting lever, a relatively fixed part and means carried by said operating member engaging said adjusting lever and holding it against said fixed part when the brake mechanism is in the inoperative position.

1,874,822. BRAKE EQUALIZING MECHANISM. GEORGE L. SMITH, Washington, D. C., assignor to United States Ordnance Company, Washington, D. C., a Corporation of Virginia. Filed Feb. 5, 1931. Serial No. 513,696. 4 Claims. (Cl. 188—204.)



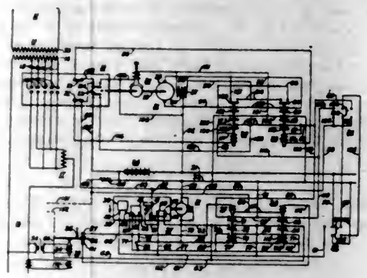
2. In a vehicle brake equalizing mechanism the combination of a shaft rotatable to transmit two brake applying forces in opposite directions and swingable to effect equalization of said two forces, and means operable by retardation of the vehicle movement to control the swinging movement of said shaft.

1,874,823. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 22, 1931. Serial No. 552,349. 20 Claims. (Cl. 197—127.)



3. In a typewriting machine, in combination, a revoluble platen, a shaft therefor, a rockable front paper-table loosely mounted on said shaft, and means for yieldingly holding said table fast in various operative positions around the front part of said platen.

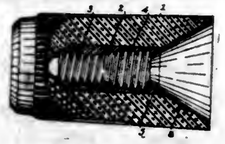
1,874,824. AUTOMATIC CONTROL EQUIPMENT FOR LOAD TAP CHANGERS. FRANKLIN LLOYD SNYDER and HOMER B. WEST, Sharon, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 27, 1930. Serial No. 505,104. 7 Claims. (Cl. 171—119.)



5. An automatic control system for load tap changers associated with transformers connected in power circuits comprising motive means for operating the tap changer, control means for said motive means, a timing relay and an interposing relay disposed in combination to influence said control means, said timing relay being controlled by the actuation of said interposing relay, and a primary relay, responsive to changes in the transformer power circuits, for controlling the actuation of said interposing relay, said timing relay being disposed to require that an operation initiating impulse by the primary relay be continuous for a predetermined time before said motive control means can be actuated thereby.

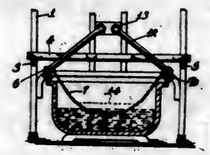
1,874,825. WIRE CONNECTER. WILLIAM R. SOMMER, Hackensack, N. J., assignor to Jiffy Wire Connector Company, Hackensack, N. J., a Corporation of New Jersey. Filed Apr. 5, 1929. Serial No. 352,656. 2 Claims. (Cl. 173—263.)

1. A wire connecting device comprising an insulating body having a socket opening through one end and in such end formed with an inwardly tapering mouth, and a metal thread cutting member embedded in the socket inward of the mouth and having a bore opening into the inner end of said mouth said bore having portions of different diameters, each provided with die threads for cutting



wires screwed into the bores and the portion of the bore of larger diameter being interposed between said tapering mouth and the portion of smaller diameter.

1,874,826. HOSPITAL BED. RICHARD STAUDT, Saginaw, Mich. Filed Jan. 11, 1930. Serial No. 420,032. 2 Claims. (Cl. 5—83.)



1. A bed having in combination a head-piece, a foot-piece, a mattress, mattress-supports on the head and foot-pieces respectively, a pair of arms pivotally connected to the head-piece, a second pair of arms pivoted to the foot-piece above said mattress supports, bars connecting the outer ends of said arms and positioned normally at the longitudinal edges of the mattress, a flexible sheet removably secured to and adapted to be stretched in a horizontal position between said bars above said mattress supports and substantially in the plane of said pivotal connections and also adapted to be shaped hammock-wise by downward and inward movement of said arms and bars to a position below said mattress supports, and actuating means for said bars.

1,874,827. PRODUCTION OF MANGANESE DIOXIDE. OLIVER W. STOREY, Madison, Wis., assignor to Burgess Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed May 12, 1931. Serial No. 536,937. 11 Claims. (Cl. 204—9.)

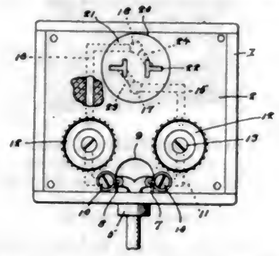
1. A solution for use in the production of electrolytic manganese dioxide which comprises a water solution of neutral purified manganese sulphate containing magnesium sulphate in an amount sufficient to depress markedly the impressed voltage required for the hot electrolysis of said solution to produce said dioxide.

8. In the electrolytic production of manganese dioxide the method which comprises electrolyzing a purified hot manganese sulphate solution containing from 100 grams to 200 grams per liter of combined manganese sulphate and sulphuric acid in terms of manganese sulphate but not less than about 30 grams per liter of said sulphate, and at least 0.1% of magnesium sulphate.

1,874,828. PORTABLE FUSE BOX AND OUTLET BOX. CHARLES SUSS, Glassport, Pa. Filed June 5, 1931. Serial No. 542,354. 1 Claim. (Cl. 200—133.)

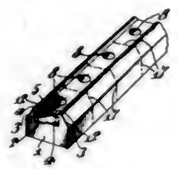
A device for the purpose set forth, comprising a casing having a block of insulating material therein, said block having a pocket, threaded metal sleeves embedded in the block, angle metal plates embedded in the block and having one of their ends arranged beneath the bottom of the sleeves and secured thereon by screws, and encased conductors having an outer plugged end and the opposite end received in the pocket in the block, and binding posts con-

necting the conductors with the outer angle ends of the respective strips, other angle metal strips embedded in the block having one of their ends secured to the sleeves, and their other ends terminating in contacts, a socket



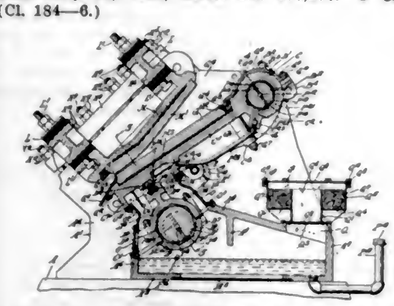
member received through the casing and screwed in the block, and having contacts to engage with the contacts on the end of the angle plates, and said sleeves designed to have fuse plugs screwed therein.

1,874,829. METHOD OF MAKING SELF-LOCKING NUTS. CARL ARTHUR SWANSTROM, Newark, N. J. Filed Sept. 17, 1930, Serial No. 482,396. 5 Claims. (Cl. 10—86.)



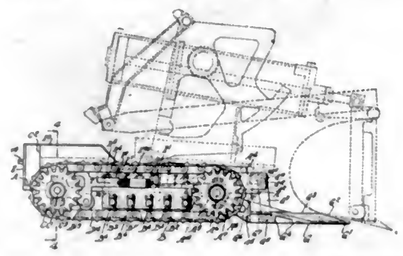
4. The method of making self-locking nuts which comprises the providing of a metal bar having a channel in one side thereof, the outer edges of the side walls of said channel being relatively thin, a flexible strip of non-metallic material, placing the said strip in the said channel, bending the outer edges of said channel inwardly and downwardly onto the top side of the said strip and causing the said edges to penetrate said strip, the said bar having tapped openings at intervals therein and the said strip having untapped openings at like intervals therein in registry with the tapped openings of said bar and severing the combined bar and strip in planes midway between the said openings.

1,874,830. JAW CRUSHER. EDGAR B. SYMONS, Hollywood, Calif., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 24, 1930, Serial No. 470,277. 4 Claims. (Cl. 184—6.)



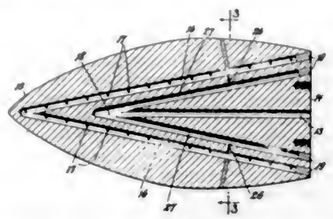
1. In a jaw crusher, a normally fixed jaw and a moving jaw opposed thereto, and actuating means for said moving jaw and a housing to the rear of said moving jaw, adapted to surround said actuating means, a portion of the moving jaw forming a closure for said housing, a lubricant within said housing and means for directing said lubricant to said actuating means.

1,874,831. EXCAVATING MACHINE. HENRY H. TALBOYS, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 12, 1930, Serial No. 427,736. 9 Claims. (Cl. 212—145.)



8. In a movable support for machinery and the like, a body, endless conveyor tracks upon said body and means for actuating them, pulleys at each end of said tracks, about which said tracks pass, a supporting abutment member pivoted to one end of said movable support and extending substantially forwardly therefrom, said abutment member being pivoted generally concentrically with the pulleys at one turn of the endless conveyor tracks, said abutment member including a lower ground engaging bearing face aligned, when in supporting position, with the plane of the lower bights of the tracks and connecting means between the supporting abutment member and the body adapted, when the supporting member is in ground engaging position, to hold it against unintended movement in relation to the body, and means for actuating said connecting means whereby to rotate the abutment member about its pivot, said abutment member including a rearward and upward extension from the ground engaging portion to the axis of rotation of the abutment.

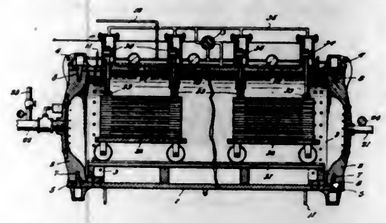
1,874,832. STEAM HEATED SADIRON. WALTER K. TAVENDER, Haworth, N. J. Filed Aug. 20, 1931, Serial No. 558,210. 6 Claims. (Cl. 68—26.)



6. An electrically heated sad iron comprising a base having a bore therein extending forwardly from its butt end, a second bore in communication with said bore, a third bore connected to second bore by a passage, and outlet passages in said third bore.

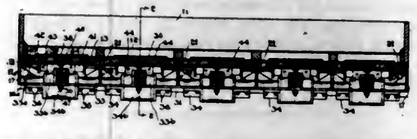
1,874,833. PROCESS RETORT. ALBERT L. TAYLOR, Jacksonville, Fla. Filed May 29, 1930, Serial No. 457,207. 9 Claims. (Cl. 220—55.)

1. The combination with a retort body and a door therefor, provided with mating grooves or recesses, of wedge-shaped fastening means for securing the door operable in the grooves or recesses of the body and door, a cylinder for each fastening element, and a piston in the cylinder and connect with the wedge-shaped fastening element at



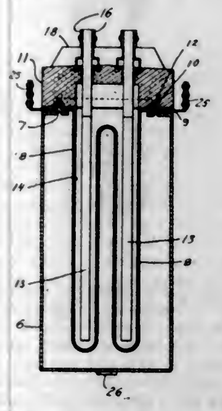
an intermediate point, the cylinders being adapted to receive a fluid medium to effect simutaneous operation of the fastening means.

1,874,834. PULP SCREEN. WILLIAM R. TIDMARSH, Montreal, Quebec, Canada. Filed July 17, 1931, Serial No. 551,467. 9 Claims. (Cl. 92—82.)



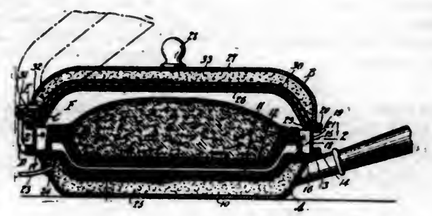
1. A screen assembly of the character described including a screen vat, a diaphragm frame beneath the screen vat, a diaphragm attached to said frame, a cam shaft journalled in the frame beneath the diaphragm, and cam shoes depending from the diaphragm and engaging co-operating cams on said shaft.

1,874,835. CHEMICAL MANUFACTURE. DANIEL TOWNEND, Providence, and NELSON C. WHITE, Cranston, R. I., assignors to Fields Point Manufacturing Corporation, New York, N. Y., a Corporation of Rhode Island. Filed July 30, 1931, Serial No. 553,994. 4 Claims. (Cl. 204—58.)



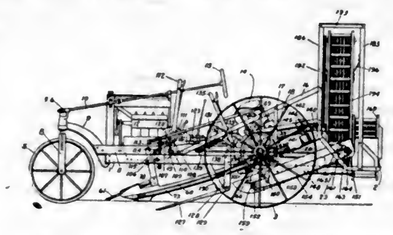
1. An electrolytic cell comprising a cell chamber open at the top, a cathode member arranged within said chamber having a portion extending outwardly across the upper edge of said chamber, said outwardly extending portion being formed to provide on its upper side a sealing tongue, a cell cover provided with a sealing groove fitting said sealing tongue, an anode member arranged within said cathode member and a diaphragm arranged between said anode member and said cathode member, the tip of said sealing tongue extending above the normal liquid level in the cell and the inner lip of said sealing groove extending below the normal liquid level in the cell.

1,874,836. INDIVIDUAL PIE AND PIE SHELL BAKER. GEORGE L. TRENNER and NELSON R. TRENNER, New York, N. Y. Filed Mar. 28, 1931, Serial No. 526,058. 3 Claims. (Cl. 53—6.)



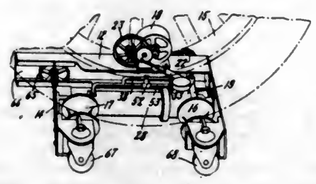
1. An individual pie baker comprising relatively separable base and cover sections, each carrying an electric heating means and an annulus interposed between said sections having vent openings for the escape of condensible vapors, the said base section having a central supporting portion and an outwardly projecting continuous marginal flange having a drain depression and formed with spaced drain outlets extending downwardly therefrom to convey off the excess juices exuded from the pie during the baking operation.

1,874,837. BEET HARVESTER. WILLIAM E. URSCHEL, Valparaiso, Ind. Filed Apr. 24, 1929, Serial No. 357,625. 15 Claims. (Cl. 55—108.)



1. In a harvester, resilient impinging crop pulling members adapted to compressibly grip the crop from the sides thereof and to lift it from the ground, and a ground breaking means operative under said crop.

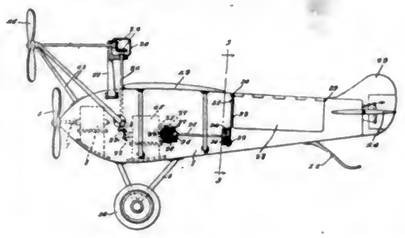
1,874,838. PORTABLE BRAKE-TESTING MACHINE. HARRY E. WALKER, Fairfield, Me. Filed Sept. 26, 1929, Serial No. 395,263. 7 Claims. (Cl. 265—25.)



1. A brake-testing machine comprising a recessed portable frame including a body member, an arm member fixed thereto, and a movable arm member, the frame being extensible and contractible and the arm members adapted

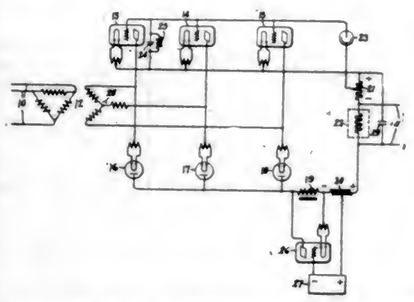
to be located on a wheel base, the one one before and the other behind a vehicle wheel thereon, when the frame is extended, wheel-engaging rollers on said arm members operable by the contraction of the frame to raise the vehicle wheel from the base; operating mechanism including a motor mounted on the frame, frame-contracting means operable by the motor to raise from the base a vehicle wheel engaged by said rollers, and driving means operable by the motor to drive one of said rollers and a wheel supported by the rollers, said mechanism including manually operable shifting means whereby the motor may be caused to successively operate the contracting means and the lifting means, and a meter operable by the driving means to indicate the resistance to the rotation of said wheel caused by its brake.

1,874,839. AEROPLANE. JAMES P. WILEY, Ragland, Ala. Filed Jan. 10, 1931. Serial No. 507,981. 1 Claim. (Cl. 244—13.)



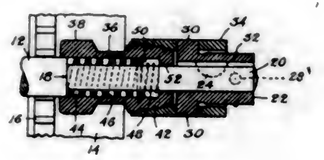
In an aircraft, a fuselage, horizontally formed pintle sleeves on opposite sides of the fuselage at the top thereof, vertically movable flap wings, pintle eyes on said wings interfitting with the eyes on the fuselage, pintles engaged in the eyes and swingingly connecting the wings with the fuselage, cranks fixed to one end of each pintle, turning wheels carried by the fuselage, and links eccentrically pivoted to the turning wheels and pivoted to the cranks.

1,874,840. RECTIFICATION OF ALTERNATING CURRENT. RAYMOND H. WILLIAMSON, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 21, 1929. Serial No. 387,524. 8 Claims. (Cl. 175—363.)



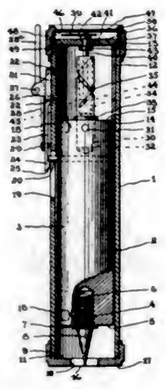
2. The combination of alternating and direct current circuits, means connected between said circuits including a discontinuous control electric valve of the vapor electric type provided with a grid for controlling the current transmitted between its cathode and anode, means connected in series with said direct current terminals for producing a negative bias voltage, and a voltage responsive device operable to apply said voltage to said grid when the current of said direct current circuit exceeds a predetermined value.

1,874,841. ENGINE STARTER. ROLLIN ABELL, Milton, Mass. Filed Oct. 23, 1928. Serial No. 314,505. 7 Claims. (Cl. 74—7.)



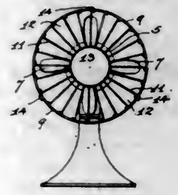
1. An engine starter comprising a rotary and axially movable member provided with a starting pinion, a spring arranged to oppose movement of said member axially to its operative position, a rotary and axially movable transmission member arranged to shift said pinion member to its operative position against the stress of said spring, said members being provided with complemental friction surfaces to form a driving clutch, and a rotary operating member arranged to cooperate with said transmission member, one of the two latter said members being provided with a cam surface with which the other cooperates to shift said pinion member to its operative position and to effect a starting operation through said friction surfaces in consequence of the opposition of said spring.

1,874,842. TESTING DEVICE. OSCAR E. J. ABRAHAMSON, Buffalo, N. Y., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed July 18, 1928. Serial No. 293,643. 5 Claims. (Cl. 265—12.)



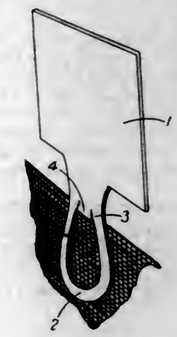
4. In a device of the character described, a weighted member having a penetration member at its lower end, means to guide said weighted member for free vertical movement under the force of gravity, said member being adapted to occupy a retracted position, a plate member supported on said guide means and carrying indicia, a pointer having a shaft and mounted on said plate member for oscillation and cooperable with said indicia, said shaft having a transverse pin, and a cylindrical member carried by said weighted member and projecting upwardly therefrom and having a helical slot, said pin projecting into said slot whereby movement of said weighted member under the force of gravity will cause rotation of said shaft to move said pointer to indicate the extent of movement of said weighted member from retracted position.

1,874,843. AIR COOLING ATTACHMENT FOR ELECTRIC FANS. CHARLES ADLER, Jr., Baltimore, Md., assignor to The Adler Safety Control Company, Baltimore, Md., a Corporation of Maryland. Filed July 13, 1931. Serial No. 550,474. 3 Claims. (Cl. 62—129.)



2. In an air cooling attachment for fans the combination with a fan structure, of an annular band carried by said fan structure in front of the fan-blades, a series of radial plates extending inwardly from the inner surface of the annular band and a central cooling receptacle sustained by the inner ends of the radial plates.

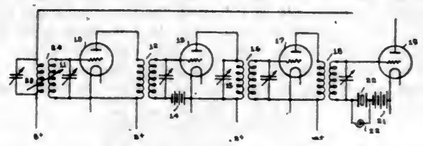
1,874,844. RIDER TICKET. SAM A. ADLER, Northampton, Mass. Filed May 2, 1931. Serial No. 534,520. 2 Claims. (Cl. 40—26.)



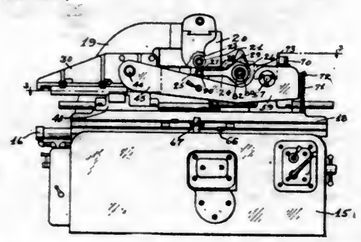
1. In combination with a piece of fabric, a rider ticket attached to the edge of said fabric, having two faces and a continuous slit substantially of U form therein to form a tongue, said tongue having two faces, which tongue when it is in the plane of the body of the ticket, contacts with said body at points along its bottom edge, said fabric engaging one face of the ticket below and at the sides of said tongue, and extending through said slit and engaging the opposite face of said tongue on the other side of the ticket, said tongue being bent out of the plane of the body of the ticket away from the face of the ticket which is engaged by the fabric, whereby the fabric is drawn over the edges of the opening created by the bending of the tongue and is gripped between the edges of the tongue and the edges of the opening.

1,874,845. CRYSTAL SUBHARMONIC GENERATOR. WALTER ALBERSHEIM, New York, N. Y., assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 17, 1929. Serial No. 355,803. 15 Claims. (Cl. 250—36.)

13. The method of producing electrical oscillations of substantial constant frequency which comprises generating substantially constant frequency high frequency oscillations, generating independently relatively low frequency oscillations, multiplying the frequency of the low frequency oscillations to a value different from that of the high frequency oscillations generated, combining the oscillations of the multiplied frequency with the high frequency oscillations, and utilizing the resultant oscillations to control the frequency of the relatively low frequency oscillations generated.

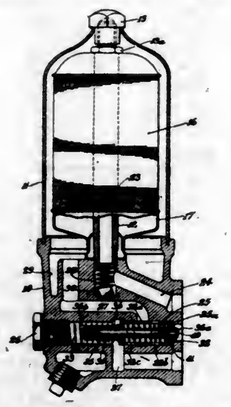


1,874,846. MILLING MACHINERY. WALTER D. ARCHEA, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 25, 1929. Serial No. 349,588. 13 Claims. (Cl. 90—18.)



1. The combination with a milling machine including a tool support and a work table mounted for translatory movement relative the tool support, of a work supporting carriage secured to the table for movement therewith and oscillation relative thereto, cam means for effecting oscillation of the carriage, an operating cam carried by the tool support, and motion translating mechanism coupling the tool support cam with the carriage oscillating cam for actuation of the latter on relative movement of the table and tool support.

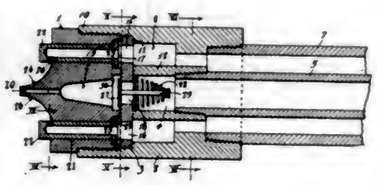
1,847,847. VALVE. GEORGE A. ARNOLD, West Haven, Conn., assignor to Motor Improvements, Inc., Newark, N. J., a Corporation of Delaware. Filed July 7, 1930. Serial No. 465,960. 9 Claims. (Cl. 251—76.)



2. In combination, a cylindrical valve chamber having axially spaced inlet, outlet and vent ports, a piston slidable in said chamber and adapted in one position to close com-

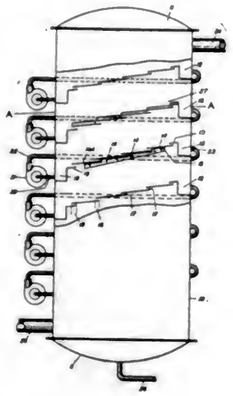
munication between ports and in another position to close said vent port with said inlet and outlet ports in communication, and resilient means tending to oppose movement of said piston from the first to the second position, said piston having provision for establishing communication between said outlet and vent ports when intermediate said first and second positions, and also being provided with a restricted by-pass port for establishing communication between the portions of the chamber on opposite sides of the piston.

1,874,848. ATOMIZING OIL BURNER. WALTER A. BABB, Glendale, Calif. Filed June 15, 1931. Serial No. 544,319. 8 Claims. (Cl. 299—140.)



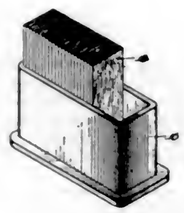
8. A fluid atomizing and mixing device comprising a body portion having flattened sides concavely tapered to the end, a discharge slot in said end, and a pair of fluid orifices, one on each side of said flattened end directed to discharge fluid along the concaved surfaces of said flattened sides toward said slot, and separate passages for connecting said slot and said orifices to separate fluid sources.

1,874,849. CATARACT CONDENSATION APPARATUS. RICHARD S. DANFORTH, San Francisco, Calif. Filed Mar. 21, 1930. Serial No. 437,855. 7 Claims. (Cl. 261—114.)



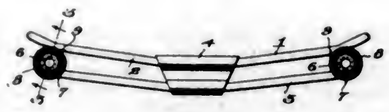
1. In a vapor fractionator having a shell, a lower inlet for mix vapors, an upper outlet for fractionated vapors and a bottom outlet outlet for condensate; means for fractionating said vapors comprising: a plurality of inclined plate sections so arranged that a liquid flowing down the inclination of one section will be projected onto the section next below as a substantially continuously moving sheet; slots for the upward passage of vapors formed by leaving a material vertical interval between the adjacent edges of each pair of said sections; means for distributing liquid in longitudinal uniformity over the uppermost of said sections; means for collecting liquid flowing over the lowermost of said sections, and means for continuously returning liquid from said receiving means to said distributing means, the whole being so arranged within said shell that vapor may pass upwardly only through said slots.

1,874,850. FOLDED PAPER NAPKIN AND DISPENSER THEREFOR. JOSEPH S. DANIELS, Rhinelander, Wis., assignor to Daniels Manufacturing Company, Rhinelander, Wis., a Corporation of Wisconsin. Filed Mar. 25, 1929. Serial No. 349,688. 1 Claim. (Cl. 206—57.)



The combination which comprises a napkin dispensing receptacle and a bundle of folder paper napkins therein, characterized as follows, said napkins being formed of folded crepe paper into an elongated narrow strip with the grain of the crepe extending longitudinally thereof and said receptacle having a rectangular napkin receiving opening defined by side walls extending only partially up the sides of said bundle of napkins, said napkins being positioned therein on end whereby the grain of the crepe reinforces each individual napkin against bending on horizontal hinge lines and thereby provides self-sustaining napkins when unsupported by other napkins.

1,874,851. COLLAR HOLDER. LAWRENCE E. BAER, Attleboro, Mass., assignor to The Baer & Wilde Company, Attleboro, Mass. Filed Sept. 22, 1931. Serial No. 564,335. 3 Claims. (Cl. 24—81.)



1. A collar holder having a rear bar composed of two superimposed members, a front bar having its ends curled to form eyes which latter lie opposite the abutting points of the superimposed members, means intermediate the ends of the bar to connect same, rollers having roughened peripheries disposed on opposite sides of the eyes, the parts of the superimposed members which lie adjacent to the eyes and to the rollers being roughened, and hollow rivets freely extending through the rollers and eyes and having headed ends to mount the rollers for free rotation.

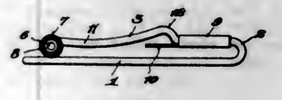
1,874,852. NECKTIE HOLDER. LAWRENCE E. BAER, Attleboro, Mass., assignor to The Baer & Wilde Company, Attleboro, Mass. Filed Dec. 5, 1931. Serial No. 579,170. 11 Claims. (Cl. 24—49.)

1. A necktie holder including a substantially J-shaped jaw having spaced sides, a substantially O-shaped jaw having a roller at tis outer end and an angular arm at its inner end, means to pivotally connect the arm to the inner end of the J-shaped jaw, a sleeve on the arm having a curved finger, and a substantially S-shaped cam lever pivoted to the inner end of the J-shaped jaw and having one end



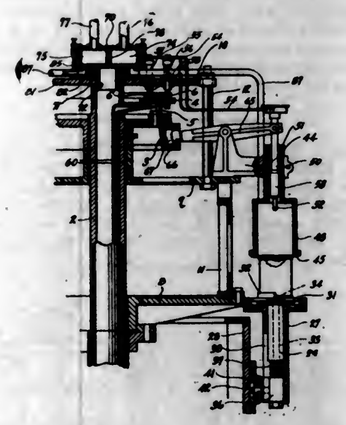
formed to ride on the arm to clamp the same in position and upon release to engage the curved finger so as to raise the pivoted jaw away from the other jaw.

1,874,853. TIE HOLDER. LAWRENCE E. BAER, Attleboro, Mass., assignor to The Baer & Wilde Company, Attleboro, Mass. Filed Dec. 5, 1931. Serial No. 579,171. 5 Claims. (Cl. 24—49.)



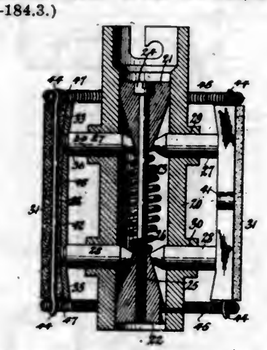
2. A tie holder composed of a pair of opposed jaws connected together at one end, and one of which has an outwardly bowed part located adjacent to its longitudinal center, a finger-like part secured at one end to said first named jaw at one end of the bowed part and having its opposite end terminating in spaced relation to the other end of the bowed part, said finger-like part being substantially straight and permanently spaced from each of the jaws and being movable with the first named jaw.

1,874,854. MASTER VALVE MECHANISM FOR VACUUM SEALING MACHINES. GEORGE A. BARDET and GEORGE V. BARDET, Berkeley, Calif., assignors to M. J. B. Co., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 7, 1928. Serial No. 252,520. 13 Claims. (Cl. 113—82.)



1. A vacuumizing machine comprising a plurality of vacuumizing chambers, a source of vacuum and a master valve for timing the application of vacuum from the source to each of the vacuumizing chambers.

1,874,855. ABRASIVE MOUNTING FOR GRINDING DEVICES. PHILO D. BATES and MARSDEN CLECKLEY HUTTO, Detroit, Mich., assignors to Hutto Engineering Company, Inc., Detroit, Mich., a Corporation of Michigan. Filed June 19, 1928. Serial No. 286,580. 4 Claims. (Cl. 51—184.3.)



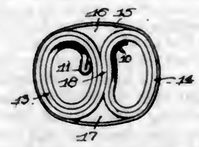
1. An abrasive member provided on its rear side with a longitudinal groove, a retaining rod arranged in said groove and having its end projecting beyond the same, and a base of self-hardening material cast on the rear part of the abrasive members and securing said rod in said groove.

1,874,856. ABRADING TOOL. LAWRENCE O. BEARD, Lancaster, Pa. Filed Mar. 29, 1930. Serial No. 440,131. 1 Claim. (Cl. 51—184.1.)



An abrading tool comprising a shank having elongated slots therein, said slots being of graduated depth and having opposing outwardly diverging side walls, and elongated abrading members of graduated depth fitting snugly within said slots, the said abrading members having substantially unbroken abrading surfaces of relatively great width and inwardly diverging opposing sides adapted to seat against the side walls of the slots.

1,874,857. PACKAGED MULTISHEET ARTICLE. RICHARD C. BEATTY, Chicago, Ill. Filed Apr. 14, 1930. Serial No. 444,015. 3 Claims. (Cl. 206—59.)

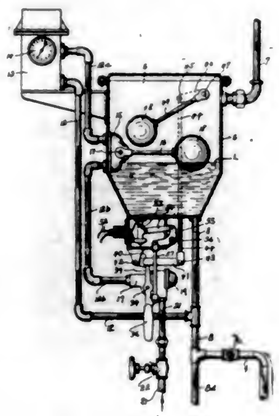


1. A multi-sheet article having the sheets secured together at opposite ends and adapted to be rolled upon itself from both said ends to form two connected rolls, one face of the article forming the inner wall of one of said rolls and forming also the outer wall of the other roll.

1,874,858. LIQUID SUPPLY SYSTEM. CHARLES F. BECKWITH, Flushing, and CHARLES CURTIS MAIN, Piermont, N. Y., assignors, by direct and mesne assignments, to Aqua Systems Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 4, 1928. Serial No. 303,629. 18 Claims. (Cl. 137—68.)

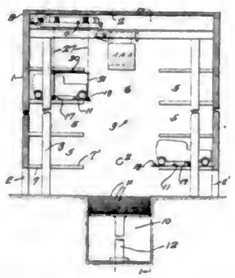
1. In a liquid supply system, a receiving chamber and an inflow pipe connected therewith, valves included in the

inflow pipe, and floats mounted in the chamber, one float being above the other and each float being connected with



a valve, whereby one valve and float are actuated at one level of the liquid in the chamber and the other valve and float are actuated at a higher liquid level in the chamber.

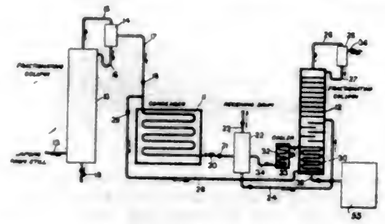
1,874,859. APPARATUS FOR HANDLING AND STORING. PAUL BEEN, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 18, 1930. Serial No. 461,874. 8 Claims. (Cl. 214—16.1.)



1. A storage system comprising a building having entrance and exit ways and having a pit at the ground level provided with a stack of platforms, means for feeding the platforms to the ground level of the building, a plurality of opposed vertical tiers of storage compartments, there being a well intervening between said opposed vertical tiers and overlying the platforms, and an overhead crane including a traveling truck movable across the well and over either tier of storage compartments and a grapple raised and lowered and moved laterally with said crane and designed to engage any of the platforms to transfer the platforms from the ground level to any storage compartment and vice versa.

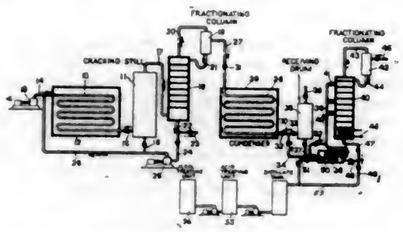
1,874,860. TREATING HYDROCARBON OILS. OTTO BEHIMER, Chicago, Ill., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed May 18, 1927, Serial No. 192,226. Renewed Oct. 3, 1929. 10 Claims. (Cl. 196—140.)

1. In the treatment of hydrocarbon oils, the process that comprises removing vapors from a pressure still and while still maintaining them under pressure, effecting a primary separation thereof into a liquid and a vapor fraction, subjecting a portion of the vapor fraction to cooling to form a condensate, subjecting this condensate to



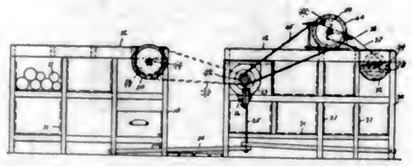
rectification to form a rectified liquid while passing the other portion of said vapor fraction into heat exchange with the ultimate condensate of the rectification.

1,874,861. TREATING HYDROCARBON OILS. OTTO BEHIMER, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed May 18, 1927. Serial No. 192,228. 3 Claims. (Cl. 196—94.)



1. In the conversion of higher boiling hydrocarbon oils into lower boiling ones, the process that comprises subjecting hydrocarbon oil to cracking temperature under superatmospheric pressure to effect cracking and vaporization, subjecting evolved vapors to dephlegmation while still under superatmospheric pressure to form a reflux condensate and an overhead vapor fraction, condensing said vapor fraction while still under superatmospheric pressure, passing resultant condensate directly to a rectifying apparatus and subjecting the condensate to rectification therein under a pressure reduced from that obtaining in the cracking zone but derived therefrom.

1,874,862. POSTER PROCESS. WILLIAM REX BELL, Terre Haute, Ind., assignor to Poster Parts Company, Terra Haute, Ind., a Corporation. Original application filed June 25, 1927, Serial No. 201,369, Patent No. 1,828,759, dated Oct. 27, 1931. Divided and this application filed Sept. 9, 1931. Serial No. 561,899. 4 Claims. (Cl. 216—42.)



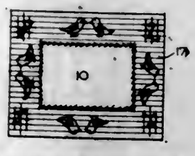
1. In posting copy the process of preparing sheet folded poster copy for posting, comprising unfolding the folded sheet, smoothing and moistening the same while unfolded and rolling the moistened sheet for simultaneously expressing surplus moisture and removing the fold wrinkles therefrom.

1,874,863. BRAKE SHOE. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Original application filed May 21, 1926, Serial No. 110,632. Divided and this application filed Aug. 28, 1929. Serial No. 388,875. 5 Claims. (Cl. 188—250.)



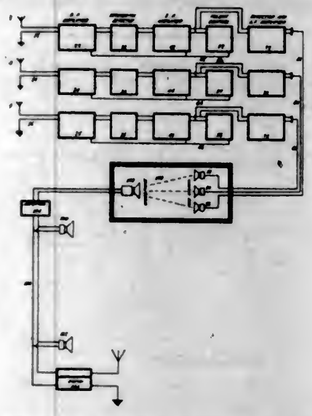
1. A brake shoe having a cylindrical outer member and an arcuate stiffening member with its outer edge engaging the inner face of the outer member, together with two separate brace members on opposite sides of the stiffening member and secured to the outer member and the stiffening member and bracing them with respect to each other.

1,874,864. HANDKERCHIEF. SARAH EDITH BERNSTEIN, Washington, D. C. Filed Apr. 11, 1927. Serial No. 182,971. 1 Claim. (Cl. 154—46.)



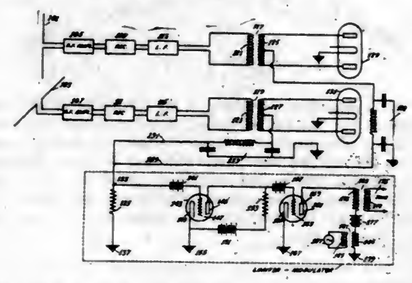
A paper sanitary handkerchief to be used only once, comprising a compressed sheet of tissue or creped paper, the outer surface of which has been shredded to render the same fluffy and less matted than the compressed part, the compressed part being substantially waterproof and said fluffier and less matted part being several times the thickness of the compressed part.

1,874,865. ACOUSTIC COMBINING SYSTEM. HAROLD H. BEVERAGE, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 17, 1928. Serial No. 320,017. 9 Claims. (Cl. 250—15.)



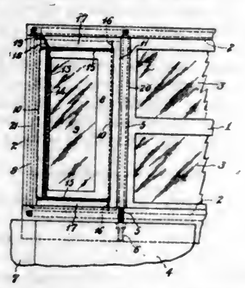
1. The method of diversity reception of audible signals transmitted on a single high frequency carrier which includes collecting the desired radiated signal energy at a plurality of spaced points, separately detecting the collected energies, separately translating the detected energies into sound energy, so directing and repeatedly reflecting the sound energies that they are thoroughly mixed, more or less independently of the initial audio frequency phase, transforming the resulting sound energy into electrical energy, and utilizing the electrical energy.

1,874,866. METHOD AND MEANS FOR ELIMINATING FADING ON SHORT WAVE LENGTHS. HAROLD H. BEVERAGE and HAROLD O. PETERSON, Riverhead, N. Y., assignors to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 15, 1928. Serial No. 261,736. 4 Claims. (Cl. 250—2.)



2. A radio signalling system including, a pair of antenna members each of different instantaneous response characteristics to a signal, a receiver associated with each of said antenna systems, an amplifier for amplifying the received signals from said receiver, a rectifier associated with each of said amplifiers, means for combining the outputs of said rectifiers, said means including a resistance in the combining circuit, a limiting device, means for controlling the operation of said limiting device by the resistance drop occurring in said resistance when signals are received, a modulator, a tone circuit, and means provided by said limiting device for limiting the response of said modulator in said tone circuit to a substantially constant value irrespective of moderate intensity variations when signals are being received upon said antenna members and the combined rectified signals produce a resistance drop across said resistance equal to or greater than the limiting value of said limiting device.

1,874,867. AUTOMOBILE SIDE INCLOSURES ADAPTED FOR VENTILATING AND HANDHOLE PURPOSES. GEORGE E. BISHOP, Cleveland Heights, Ohio. Filed Jan. 7, 1930. Serial No. 419,143. 3 Claims. (Cl. 296—139.)



1. An automobile side inclosure comprising a fabric curtain body member provided with a ventilating opening having two substantially parallel edges, a somewhat resilient fabric panel connected to said body member near one of said edges for swinging movement and adapted to

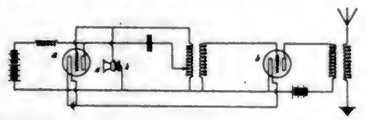
close said opening, said panel having a reinforcing frame, and resilient means connecting one end of the swinging edge of said panel to said body member and tending to maintain said panel in its closed position.

1,874,868. BRASSIÈRE. ENID BISSETT, New York, N. Y., assignor to Maiden Form Brassiere Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 5, 1930. Serial No. 500,210. 2 Claims. (Cl. 2—42.)



1. In a brassière construction substantially of the type described, two breast receiving pockets joined together, shirring bands along the upper edges of each of said pockets, elastic and non-elastic shirring elements disposed in said bands, and means secured to the free ends of said pockets for adjustably securing the shirred pockets to the wearer's body by encircling the same at or about the wearer's waist line.

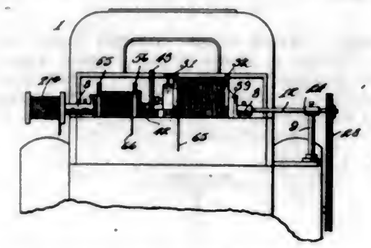
1,874,869. SIGNALING BY FREQUENCY MODULATION. OTTO BÖHM, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed July 8, 1929, Serial No. 376,606, and in Germany July 19, 1928. 1 Claim. (Cl. 179—171.)



In a frequency modulation system, an electron discharge device having an anode a cathode and a control electrode, a source of anode potential connected to said anode and cathode, a choke coil intermediate said source and said anode, a high frequency inductance coil connected between said control electrode and cathode, a connection from a point intermediate the ends of said high frequency inductance coil to said anode, said connection including a serially connected condenser for preventing the application of anode potential to said control electrode, a piezo-electric crystal having a pair of electrodes one of which is movable in accordance with sound waves, connections from said electrodes to opposite ends of said high frequency inductance coils whereby the frequency of oscillations generated by said electron discharge device vary in accordance with the sound waves impinging upon said movable piezo-electric crystal electrode, an amplifier coupled to said high frequency inductance coil for amplifying the output of said electron discharge device, and means for radiating the output of said amplifier.

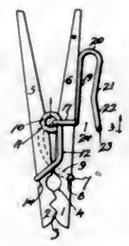
1,874,870. OIL WELL SHOOTING EQUIPMENT FOR USE ON AUTOMOBILES. OSCAR BOND, Sapulpa, Okla. Filed Aug. 19, 1930. Serial No. 476,385. 6 Claims. (Cl. 254—166.)

1. In a reel for raising and lowering shells into wells and for like purposes, a rotatable shaft, a pair of reel drums positioned on said shaft for rotation relative thereto, and means for securing said drums to said shaft for rotation therewith at the will of an operator, comprising friction washers rotatable with said shaft limited against axial movement thereon, and each abutting one of said drums, a friction washer rotatable with said shaft, freely movable axially thereon, and adapted to abut the adjacent side of each of said drums and means for forcing



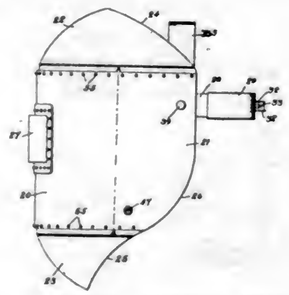
said freely movable washers into engagement with said drums and said drums into engagement with said axially fixed washers at the will of an operator.

1,874,871. CLOTHESPIN. SIGMUND BOWER, Brooklyn, N. Y. Filed Mar. 20, 1931, Serial No. 524,015. Renewed June 23, 1932. 6 Claims. (Cl. 24—137.)



1. In a clothespin of the type described, the combination of co-operating clamping jaws having extensions forming finger pieces, a spring member for pressing the jaws toward each other and having a cylindrical portion forming a pivotal member on which said jaws may pivot, a hook member composed of a bent member having ends projecting inwardly into the cylindrical portion of said spring and extending around one of said jaw members to the front thereof and formed with a hook portion at the front of said jaw member adapted to engage a clothes line whereby the clothespin may be hung thereon.

1,874,872. WELDER'S MASK. FREDERICK M. BOWERS, Chester, Pa. Filed Dec. 8, 1930. Serial No. 500,701. 9 Claims. (Cl. 2—8.)

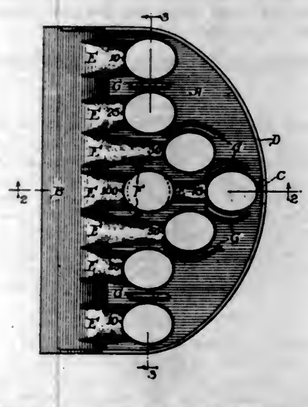


1. A welder's mask comprising a body part, an arch located within the body part, a head band secured to the

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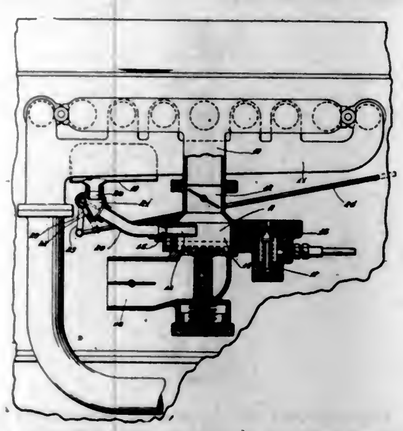
arch, said head band comprising a segment, a tubular part embracing the ends of the segment, and means tending to vary the lineal extent of the inserted segment within the tube.

1,874,873. PUTTING GAME APPLIANCE. JAMES H. BOYE, Chicago, Ill., assignor to James H. Boye Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 15, 1930. Serial No. 488,865. 6 Claims. (Cl. 273—32.)



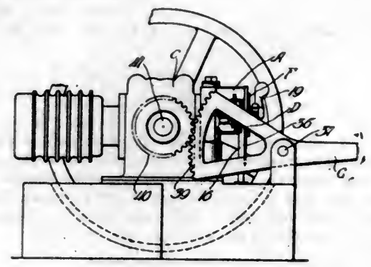
1. A putting game appliance of the character described, comprising a horizontal plate formed with an inclined approach on its front edge and a group of ball seating holes beyond said approach, said holes being of oval form with their major axes of greater length than the diameter of the ball and parallel to the path of approach of the ball, and their minor axes of slightly less length than the diameter of the ball, whereby the ball, on rolling into a hole, is suspended by engagement with the opposed side edges of the hole.

1,874,874. METHOD AND MEANS FOR CONDITIONING FUEL FOR INTERNAL COMBUSTION ENGINES. ROBERT F. BRACKE, Chicago, Ill., assignor to Curtis B. Camp, trustee, Glencoe, Ill. Filed Aug. 13, 1927. Serial No. 212,685. 10 Claims. (Cl. 261—63.)



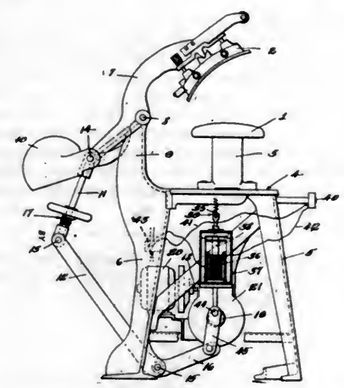
1. The combination with a carburetor having a relatively small primary air passage and a relatively large secondary air passage, means for injecting fuel to said carburetor through said primary air passage said means admitting said fuel to the primary air passage at normal temperature, and adjustable means for admitting warm air to said primary air passage prior to the admission of fuel thereto to hasten the vaporization of fuel injected therethrough.

1,874,875. CARBURETOR. ROBERT F. BRACKE, Chicago, Ill., assignor to Curtis B. Camp, trustee, Glencoe, Ill. Filed July 25, 1929. Serial No. 380,793. 6 Claims. (Cl. 261—63.)



1. A carburetor having an induction passage adapted for communication at one end with the intake manifold of an internal combustion engine and open to atmosphere at the other end, a fuel nozzle discharging into said passage, a choke for closing said open end of said passage to induce a rich fuel discharge for starting the engine and means operable automatically upon the increase in engine manifold suction as the engine runs under its own power for admitting sufficient air to said passage to sustain engine operation only when the choke is left in closed position after the engine has started.

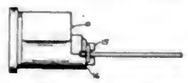
1,874,876. PRESSING MACHINE. PHILIP N. BRAUN, Syracuse, N. Y., assignor, by mesne assignments, to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed July 3, 1924, Serial No. 724,045. Renewed June 13, 1929. 9 Claims. (Cl. 192—131.)



1. In a pressing machine the combination of cooperating pressing elements, one movable toward and from the other, mechanism for applying pressure to the movable element comprising a constantly rotating driving member, an intermittently movable driven member, a periodic clutch for connecting the driving and driven member, the clutch comprising a section normally out of clutching position and shiftable into clutching posi-

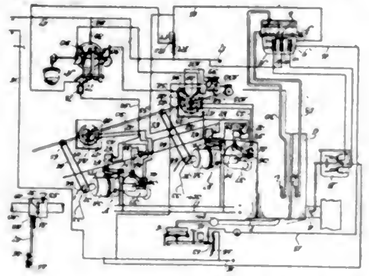
tion, a spring for shifting the clutch out of clutching position, controller means having a surface for holding the section in its clutched position against the action of the spring after the section has been shifted initially into clutched position when the press is closed, and means for controlling the initial shifting of the section to clutched position when the press is open or closed including an electromagnet, and a plurality of normally open, manually closable switches in the circuit of the magnet.

1,874,877. PLUG RETAINER. KARL A. BRAUNING, Stamford, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Filed May 4, 1929. Serial No. 360,485. 9 Claims. (Cl. 70—46.)



1. In a cylinder lock, a plug extending beyond the rear cylinder wall, an internal diametric dove tailed slot in said plug extension, and a spring retainer slide adapted to fit in said slot and to be contained entirely within the plug except at its ends which cooperate with the cylinder to maintain the plug in the cylinder.

1,874,878. METHOD OF AND APPARATUS FOR COMBUSTION CONTROL. EDWARD S. BRISTOL, Philadelphia, Pa., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1930, Serial No. 444,658. 15 Claims. (Cl. 236—14.)



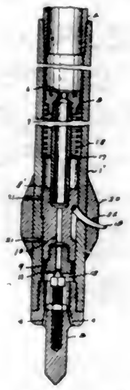
1. In the art of combustion control in a system of the character described, the method which comprises developing an electromotive force whose magnitude is continuously substantially proportional to the load demand on the system, developing a second and substantially constant electromotive force independently of such load demand, and utilizing the joint effects of said forces to control rate of supply to said system of an agent contributing to combustion therein in order that as the load demand approaches zero the rate of supply of said agent approaches a limit greater than zero.

1,874,879. BATHING CAP. HELEN BROSCH, Brooklyn, N. Y. Filed Jan. 22, 1931. Serial No. 510,351. 2 Claims. (Cl. 2—68.)



1. The combination in a bathing cap, of a skull cap forming a body portion adapted to fit snugly over the head of the wearer and a band of elastic material attached through a portion of its length to the edge portion of the rear of said skull cap and overlapping the same, said band, in the application of the hat to the head of the wearer, having its free ends passed over the ears, then over the front portion of the cap, and back over the ears to a point at the rear of the cap.

1,874,880. CASING CUTTER. JOSEPH E. BROTHERTON and RANKIN W. MORRIS, Houston, Tex., assignors of one-half to J. S. Abercrombie, Harris County, Tex. Filed Apr. 18, 1927, Serial No. 184,542. Renewed May 31, 1930. 7 Claims. (Cl. 81—195.)



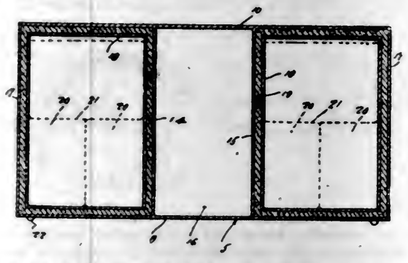
1. A casing cutter including a cylinder having guideways through the wall thereof, a fluid operated plunger in the cylinder, a blade carrier in the cylinder beneath the plunger and connected thereto, a reinforcing sleeve of substantial thickness around the cylinder having tapered ends and having guideways which register with the cylinder guideways and blades connected to said carrier and adapted to work through said guideways and secured by said guideways.

1,874,881. PULL CORD OR THE LIKE. ALBERT BROWN, Rochester, N. Y., assignor to Vogt Manufacturing Corporation, Rochester, N. Y., a Corporation of New York. Filed Dec. 24, 1928, Serial No. 328,249. 8 Claims. (Cl. 105—354.)



1. In a pull cord, the combination with a rope body portion or shank, of a gripping tassel embodying yarns fashioned into a ball held gripped at its center within a wire loop, the ends of the wire being driven into the body portion to secure the tassel thereto.

1,874,882. THERMOLUNCHBOX. DONNELLY BROWN, Kasson, Minn. Filed Dec. 2, 1930, Serial No. 499,545. 1 Claim. (Cl. 220—20.)



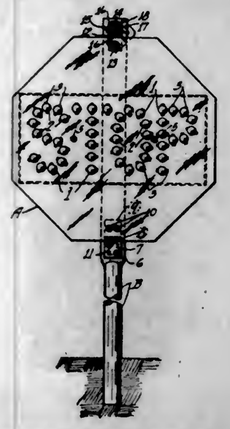
A device of the class described comprising a casing having its front open, a pair of vertically arranged partitions in said casing dividing the same into a central chamber and two end chambers, a shell in each end chamber having its front open, packing material located between the walls of each shell and the walls of each end chamber and a door of the same area as the external area of the casing, having its lower edge hingedly connected to the bottom of the casing, said door being formed of a hollow member having packing means therein.

1,874,883. FISH LURE. JOHN EMMETT BROWN, Elyria, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 19, 1929, Serial No. 386,859. 7 Claims. (Cl. 43—45.)



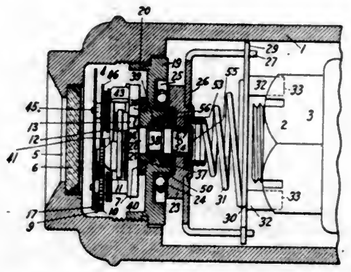
1. In combination, a shaft, a helical loop journaled at its ends on said shaft, and a spoon carried by said loop.

1,874,884. TRAFFIC SIGN OR SIGNAL. FLOYD D. BRYAN and JOHN BLAUNER, St. Louis, Mo., assignors to S. G. Adams Company, St. Louis, Mo., a Corporation of Missouri. Filed June 18, 1931, Serial No. 545,250. 7 Claims. (Cl. 40—145.)



2. In a traffic-signal or the like, in combination, a standard, a sign-panel, a housing-shell mounted for removal on the rear face of the panel, and means for hingedly connecting the panel to the standard for swingable movement for non-removably disposing the shell intermediate the standard and the panel when the panel is in display position and for accessibly disposing the shell for removal when the panel is in non-displaying position.

1,874,885. MEANS TO PREVENT THE PASSAGE OF GREASE. PHILLIP F. BUCKLEY, Los Angeles, Calif., assignor to Ohmer Fare Register Company, Dayton, Ohio. Filed Aug. 16, 1928. Serial No. 300,059. 7 Claims. (Cl. 286—7.)



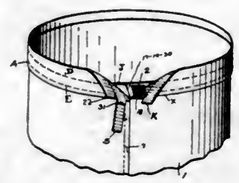
1. In a hub odometer, a trunnion, a plate and a grease cap to fit over the entire end of said trunnion and over part of said plate.

1,874,886. VULCANIZATION OF RUBBER AND NEW COMPOUND THEREFOR. HUGH MILLS BUNBURY, Prestwich, JOHN STANLEY HERBERT DAVIES, Crumpsall, and WILLIAM JOHNSON SMITH NAUNTON, Prestwich, England, assignors to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Oct. 28, 1931, Serial No. 571,678, and in Great Britain Nov. 3, 1930. 23 Claims. (Cl. 18—53.)

1. The process of producing a new chemical compound which is an effective accelerator for the vulcanization of rubber, which comprises condensing cyanuric chloride with one molecular proportion of a primary aromatic amine and two molecular proportions of a 2-mercaptoarylenethiazole.

6. The process of vulcanizing rubber or rubber-like substances, which consists in adding to the mix a vulcanization accelerator produced by the process of claim 1, preferably in the presence of a basic organic accelerator.

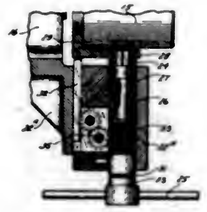
1,874,887. CAN MAKING AND APPARATUS. WILFORD E. BURNS, Burlingame, Calif., assignor to M. J. B. Co., San Francisco, Calif., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 250,030. 1 Claim. (Cl. 220—54.)



A sheet metal can body blank having a fold formed by overlapped contacting layers of metal, the opposite ends of the blank being designed subsequently to be joined together in a soldering seam; said fold including a tearing strip in the outer layer thereof and a paper insert applied between the layers of the fold at a point adjacent one end of the blank to prevent objectionable spreading of solder

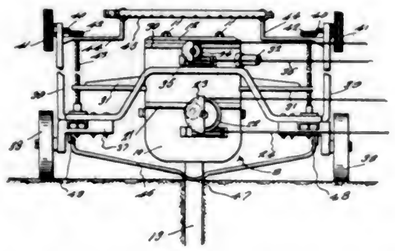
along the tail end of the tearing strip when the ends of the blank are joined in the seam and to limit the soldering area along the strip to insure subsequent easy removal thereof.

1,874,888. CHUCK CLOSING AND OPENING MECHANISM. EDWARD P. BURRELL, Shaker Heights, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 28, 1930. Serial No. 456,545. 19 Claims. (Cl. 279—1.)



1. In combination with a work holder having work engaging means, a wrench for actuating said means, a support for the wrench, and means forming an operative connection between the work holder and wrench to move one relative to the other to position it to permit operation of the wrench.

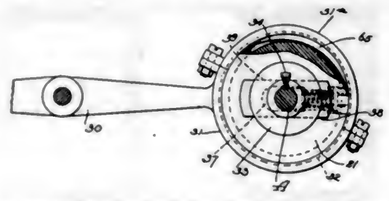
1,874,889. WELL CLOSING APPARATUS. RICHARD M. BURRIS, Holdenville, Okla., assignor of one-third to C. L. Hill, Jr., Little Rock, Ark. Filed Nov. 25, 1931. Serial No. 577,338. 4 Claims. (Cl. 166—15.)



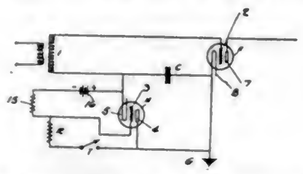
1. In a structure of the class described, in combination, a well casing closure and fire extinguishing device comprising a wheel supported frame constituting a carriage, jack means mounted on said carriage, remote control means for the jack means, water cooling means also mounted on said carriage, and a valved closing head adjustably connected with the jack means, said closing head being provided with clamps, the clamp and valve means in said head being provided with remote control devices whereby to permit adjustment and clamping and closing of the head from a distant point with safety to the attendants.

1,874,890. CAM ACTUATED FUEL PUMP. CHARLES S. BURTON, Oak Park, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Apr. 2, 1930. Serial No. 441,009. 5 Claims. (Cl. 103—38.)

1. In combination with an internal combustion engine and a pump for supplying fuel thereto, means for operating the pump consisting of a cam device carried by an engine shaft and spring means rendering it yieldingly eccentric, and an actuated member comprising means at one portion of its extent for embracing the cam in the plane of its eccentricity, and at another portion of its extent connected for operating the pump; means carried respectively by the cam embracing element and the cam positioned on the respective parts for encounter and cooperation to condition the spring for increased reaction in the 90 degrees of the cam's revolution in which the cam operates for giving the pump its intake stroke.

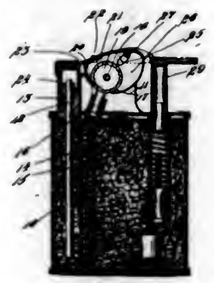


1,874,891. KEYING CIRCUIT ARRANGEMENT FOR TRANSMITTERS. WERNER BUSCHBECK, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Aug. 24, 1929, Serial No. 388,108, and in Germany June 30, 1928. 2 Claims. (Cl. 250—19.)



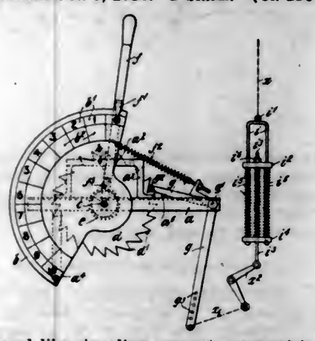
1. In a modulating means for an oscillation amplifier including, a thermionic tube having input and output elements, means for modulating the oscillations repeated in said amplifier including, a thermionic keying tube having anode cathode and grid electrodes, means for connecting the anode cathode impedance of said keying tube in parallel with the impedance between the input elements of said amplifier, an impedance and a source of potential connected in parallel with the input impedance of said keying tube, and a keying circuit including, a fixed impedance and a key connected in parallel with the impedance between the anode and grid electrode of said keying tube.

1,874,892. LIGHTER. WILLIAM J. BUTLER, Edgewood, and JOHN J. FLYNN, Providence, R. I., assignors to Henry Lederer & Bro., Inc., Providence, R. I., a Corporation of Rhode Island. Filed May 10, 1929. Serial No. 361,916. 6 Claims. (Cl. 67—7.1.)



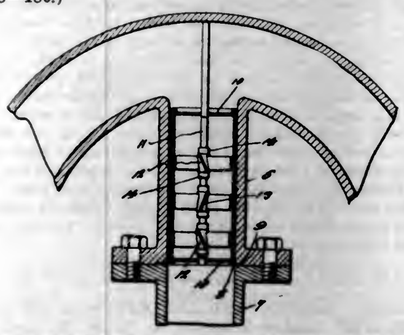
2. In a lighter, a casing, a wick extending therefrom, pyrophoric material positioned adjacent said wick, a friction wheel rotatably mounted in engaging relation with said pyrophoric material, a plunger, a plunger casing, means effecting rotation of said friction wheel on movement of said plunger, a spring in said casing yieldingly resisting movement of said plunger, and an additional spring in said casing increasing the yielding resistance during a portion of the movement of said plunger.

1,874,893. MINE AND LIKE SIGNALING APPARATUS. RAYMOND MALCOLM DAVID BUTTON, Coleford, Bath, England. Filed Sept. 30, 1931, Serial No. 565,987, and in Great Britain Oct. 9, 1930. 1 Claim. (Cl. 116—67.)



A mine and like signaling apparatus comprising a fixed dial, a series of radial divisions, one for each signal, on said dial, a revoluble plate carried behind said dial, a handle rotatable on the axis of the dial and plate, a pointer carried by the handle and movable over the division on said dial, a one way clutch for clutching the handle to the plate, a spring arranged to return the handle to its normal position of rest after operation, movable stops to limit the movement of the handle, a plurality of teeth or projections on the plate corresponding to the pitch of the divisions on the dial, a bell crank lever, the one end of which is successively engaged by said teeth or projections as the plate is rotated, so that the lever is moved or oscillated a number of times corresponding to the number of divisions over which the pointer on the handle has been moved, a transmitting wire or cable connected to the other end of the bell crank lever for operating a signaling bell or indicating means and a spring controlled compensating device interposed within the length of the transmitting wire or cable, as set forth.

1,874,894. AIR AND GAS MIXING DEVICE FOR INTERNAL COMBUSTION ENGINES. ANTON CALBERG, Cranford, and HERMANN K. PRINZ, Linden, N. J. Filed June 23, 1931. Serial No. 546,392. 1 Claim. (Cl. 48—180.)

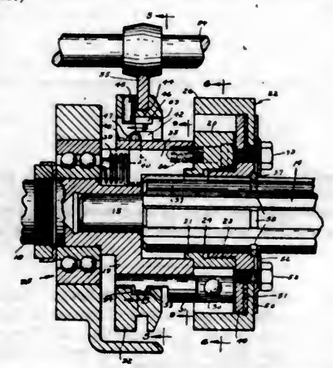


A mixing device of the kind described comprising a cylinder open at its ends and adapted for disposition within the inlet pipe of an intake manifold, a spider mounted in the cylinder at each end of the latter, a shaft supported by said spiders and having an upper end extending into the intake manifold and engaged with the top wall of said manifold, three vertically spaced propellers rotatably mounted on said shaft, the uppermost propeller being disposed a material distance inwardly from the upper end of said cylinder; and said cylinder at its lower end being provided with a circular series of spaced ears adapted to be clamped between the confronting flanges of a carbureter outlet pipe and the said inlet pipe of the manifold.

1,874,895. ANTIOXIDANT FOR RUBBER. WILLIAM S. CALCOTT and WILLIAM A. DOUGLASS, Pennsgrove, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 13, 1929. Serial No. 385,688. 4 Claims. (Cl. 18—50.)

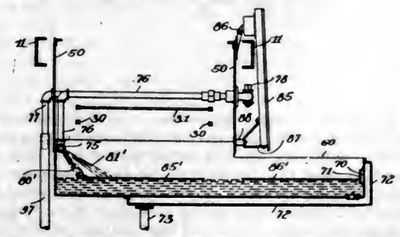
1. The process of increasing the resistance of rubber to deterioration which comprises incorporating with the rubber a compound obtained by reacting substantially equal molecular proportions of butyraldehyde and a primary aromatic amine at temperatures not substantially in excess of 5° C.

1,874,896. DOUBLE CLUTCH TRANSMISSION. LEON JAY CAMPBELL, Buchanan, Mich., assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind., a Corporation of Delaware. Filed Feb. 27, 1928. Serial No. 257,356. 19 Claims. (Cl. 192—48.)



1. A clutch mechanism comprising, in combination with two relatively rotatable members, two sequentially acting sets of grip devices carried by one of said members for automatically engaging the other member in the overrunning of said members in opposite directions, and control means carried by the member carrying the devices for releasing the devices and holding them in released position completely disengaged from the other member.

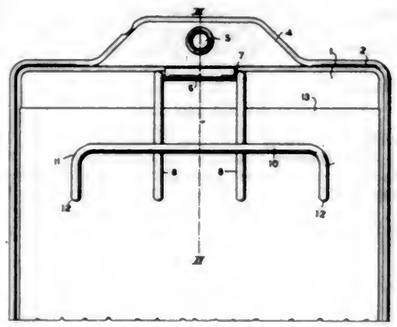
1,874,897. PHOTOGRAPHIC PRINT DELIVERING MEANS. ARTHUR W. CAPS, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed July 7, 1928. Serial No. 290,980. 7 Claims. (Cl. 95—94.)



1. In a photographic apparatus, the combination with a liquid tank, of means for depositing a sheet near one

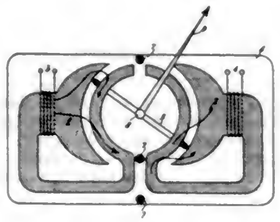
end of said tank, and means for moving said sheet within said tank toward the opposite end thereof, said moving means comprising means for producing a plurality of horizontally spaced liquid jets extending obliquely toward said opposite end of said tank, one of said jets being directed at a greater angle to a horizontal plane than another of said jets.

1,874,898. KITCHEN UTENSIL. FREDERICK S. CASSE, San Francisco, Calif. Filed Sept. 8, 1930. Serial No. 480,457. 4 Claims. (Cl. 146—218.)



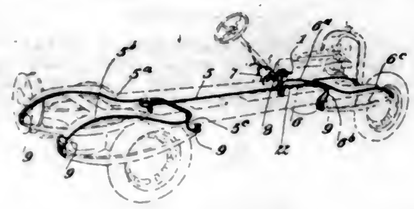
1. A meat holder comprising a base, a fork pivoted on said base and having sharpened ends bent toward said base, and a transverse bar fixed to said fork and having downturned sharpened ends spaced from the ends of said fork.

1,874,899. MEASURING INSTRUMENT. HENRI CHIRMIX, Paris, France, assignor to Compagnie Generale de Telegraphie Sans Fil, a Corporation of France. Filed Sept. 17, 1929, Serial No. 393,169, and in France Sept. 27, 1928. 4 Claims. (Cl. 171—95.)



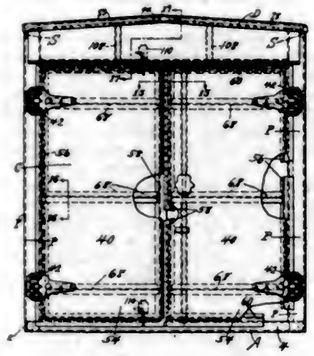
1. A frequency meter comprising a pair of coils in series and disposed in almost closed independent magnetic circuits a condenser shunted across one of said coils and adapted to tune the combination of said condenser and shunted coil to a frequency lower than the lowest frequency to be measured, a second condenser shunted across said other coil said last named combination of condenser and shunted coil being tuned to a frequency above the highest frequency to be measured.

1,874,900. AUTOMOTIVE VEHICLE LUBRICATION. CHARLES F. CHISHOLM, Staten Island, N. Y. Filed Feb. 4, 1929. Serial No. 337,216. 5 Claims. (Cl. 184—7.)



1. In an automotive vehicle, a plurality of chassis bearings, a central solvent reservoir, means to force solvent from the solvent reservoir to said bearings, a central lubricant reservoir, and means to force lubricant from the lubricant reservoir to said bearings.

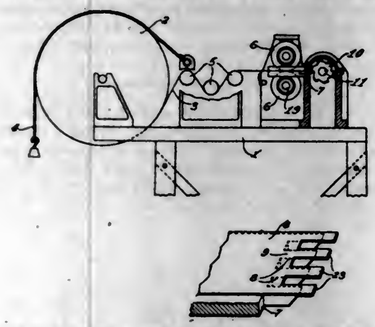
1,874,901. SHIPPING CONTAINER. JOHN CHRISTIANSEN, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed July 22, 1931. Serial No. 552,321. 27 Claims. (Cl. 105—366.)



1. A shipping container comprising side and end walls, angle shaped corner posts connecting adjacent edge portions of adjacent side and end walls, internal braces extending between and welded to the legs of the corner posts, side plates to which the side walls are secured, carlins supported by and secured to the side plates, purlins supported by the carlins and secured to the upper portions of the end walls, a roof having a marginal flange secured to the side plates and the upper portions of the end walls, doors forming a portion of one of the end walls, said doors being hingedly connected to the corner posts and the latter having inturned portions constituting door posts, and means secured to the side walls adjacent the roof adapted to be engaged by a crane or the like to permit the container to be lifted and moved above.

1,874,902. METHOD AND APPARATUS OF CUTTING SHEETS. ROBERT G. CLYNE, St. Louis, Mo., assignor to Western Cartridge Company, East Alton, Ill., a Corporation of Delaware. Filed Nov. 22, 1928. Serial No. 321,086. 10 Claims. (Cl. 164—68.)

7. A sheet cutting machine, comprising, means for feeding a sheet, a pair of cutters having cooperating notches and teeth extending in the direction of feed, means for moving said cutters relatively to notch the sheet, and



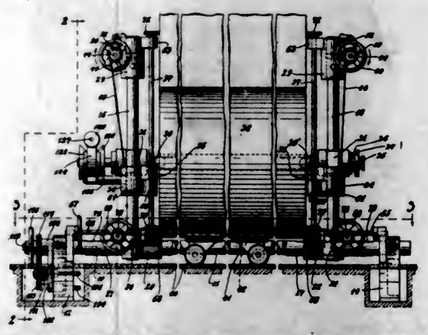
means for regulating said feeding means to feed the sheet between cuts a distance less than the depth of the notches of the cutters.

1,874,903. CLOSURE OPERATOR. JOSEPH T. CONWAY, Cleveland, Ohio. Filed Dec. 26, 1928. Serial No. 328,450. 2 Claims. (Cl. 268—67.)



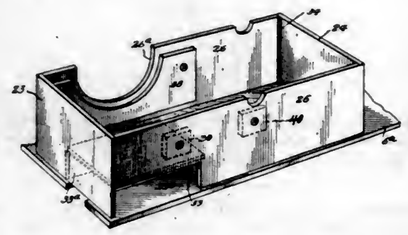
1. The combination with a closure and a frame therefor, of means for opening and closing the closure, said means including a driving motor, a track extending rearwardly of the frame, a carriage movable on the track, a chain having its ends secured to the carriage and in driving connection with the motor, rods connecting the closure with the carriage, a fluid pressure cylinder movable with the carriage, a slide rod extending through the cylinder and beyond the ends thereof, a piston carried by the rod and operating in the cylinder for cushioning the carriage as it is brought to rest at either of its extreme limits of movement on the track, and stops arranged in the path of movement of the rod to engage the ends thereof as the carriage approaches either of its limits of movement along the track.

1,874,904. WEB ROLL SUPPORTING MECHANISM. CURTIS S. CRAFTS, Oak Park, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Apr. 22, 1929. Serial No. 357,126. 24 Claims. (Cl. 242—58.)



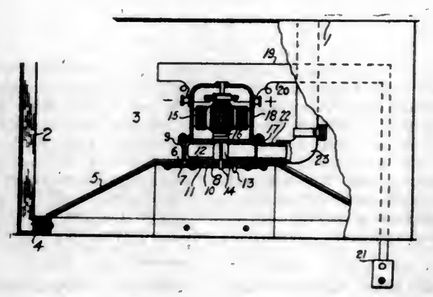
12. A web roll handling mechanism including in combination means for engaging and supporting the ends of the axial orifice of a web roll, means for releasably holding the supporting means for either end out of the path of a web roll moved endwise into position and means for uniformly raising each of the supporting means to lift the web roll into running position.

1,874,905. GEAR CASE. OSCAR L. COFFEY, Harvey, Ill., assignor to Whiting Corporation, Harvey, Ill., a Corporation of Illinois. Filed Sept. 22, 1928. Serial No. 307,657. 9 Claims. (Cl. 74—56.)



1. The combination of a case comprising a lower section formed of a bottom plate, side and end-plates of wrought metal welded together and a removable cover section formed of a top plate, side and end plates of wrought metal welded together, the side and end plates of the cover section being adapted to fit against the side and end plates of the lower section respectively, a cast metal frame disposed in and secured to the lower section, and gearing mounted in the frame and enclosed by the two sections.

1,874,906. KITCHEN VENTILATOR. CHARLES V. COLVIN and RICHARD A. FOSTER, Lansing, Mich. Filed Sept. 12, 1930. Serial No. 481,555. 2 Claims. (Cl. 98—115.)

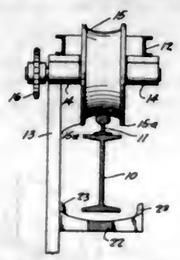


1. In a ventilator, the combination with a hood having an opening in the wall thereof, of a fan and motor therefor, a fan casing having an outlet pipe, an air conduit, the said outlet pipe constructed to be removably inserted in said air conduit, the said motor and fan being supported upon the hood in detachable relation thereto, said motor and fan casing being removable together through said opening in the hood thereby withdrawing said outlet pipe from said conduit.

1,874,907. MONORAIL CAR. PRESLEY STUART COMBS, Jr., Los Angeles, Calif. Filed Dec. 1, 1930. Serial No. 499,159. 2 Claims. (Cl. 105—150.)

1. In combination with an overhung track having a rail, a suspended monorail load carrier, a truck suspend-

ing said car; said truck including a truck frame having a set of traction wheels riding on said rail and a keeper underhanging said track, said wheels and keeper being spaced



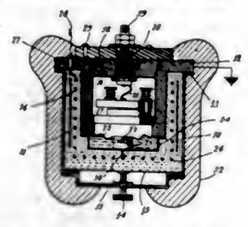
to permit swaying of the car but prevent derailment, said keeper having upstanding rounded longitudinal side projections to limit the degree of sway.

1,874,908. MOTION PICTURE APPARATUS. CARL JACOB CRAIG and JENS EGEDE NIELSEN, Chicago, Ill.; said Craig assignor to said Nielsen. Filed Jan. 18, 1929. Serial No. 333,296. 5 Claims. (Cl. 86—18.)



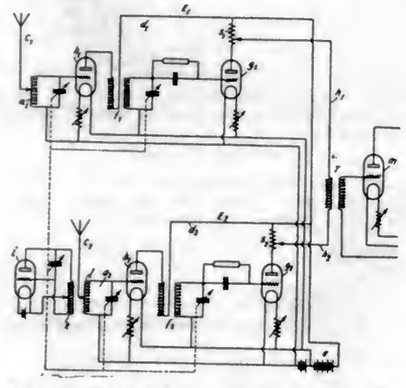
1. In a motion picture apparatus the combination of a film guide having an exposure aperture therein, a spring pressed pawl overlying said guide and having teeth for engaging the sprocket apertures of the film, said pawl having an outwardly bent portion projecting beyond the teeth in the direction of approaching film, means for continuously moving film toward said teeth whereby to cause it to bend outwardly toward said pawl portion and by engagement therewith periodically release the film from said teeth and cause intermittent movement of the film.

1,874,909. THERMOSTAT. JAMES W. CONKLIN, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 16, 1930. Serial No. 444,727. 12 Claims. (Cl. 236—99.)



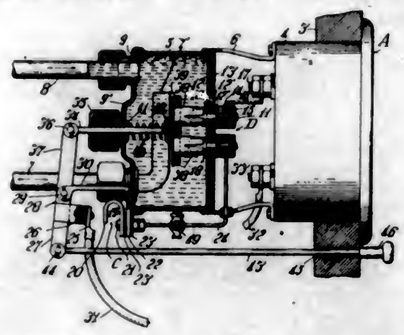
1. A temperature control apparatus for a piezo-electric device comprising an outer casing, an inner casing within said outer casing, both of said casings being mounted with respect to each other to provide a closed chamber, a body of liquid contained in said chamber, means to heat said liquid, and means responsive to the expansion, and contraction of said liquid to control said heating means, said inner casing having means to receive and support the said device.

1,874,910. METHOD OF AND MEANS FOR ELIMINATING APERIODIC DISTURBANCES. FRIEDRICH CONRAD, Berlin, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Oct. 18, 1928, Serial No. 313,202, and in Germany Oct. 24, 1927. 1 Claim. (Cl. 250—20.)



A wireless receiving system comprising two circuits one thereof being adapted to be tuned throughout a certain frequency range to the signal frequency desired to be received, the other thereof being adapted to be maintained slightly detuned a certain amount therefrom, a local oscillator adapted to generate oscillations of a frequency equal to the frequency at which said slightly detuned circuit is tuned coupled to said detuned circuit, means for simultaneously tuning both said circuits and said local oscillator to their respective frequencies, separate detecting means in each of said circuits and a common utilizing circuit differentially, resistively and variably coupled to both said detecting means.

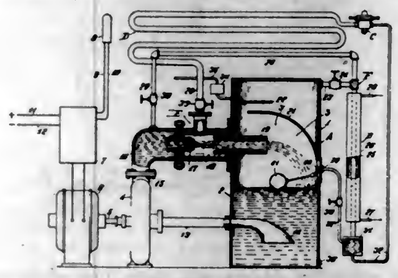
1,874,911. FREEZING TEMPERATURE INDICATOR. DAVID N. CROSTHWAIT, Jr., Marshalltown, Iowa, assignor to C. A. Dunham Company, Marshalltown, Iowa, a Corporation of Iowa. Filed Aug. 25, 1928. Serial No. 302,031. 5 Claims. (Cl. 175—183.)



2. A device for indicating the freezing temperature of a liquid, comprising a galvanometer including a movable needle and a fixed dial calibrated in freezing temperatures, a receptacle for holding a sample of the liquid, a pair of

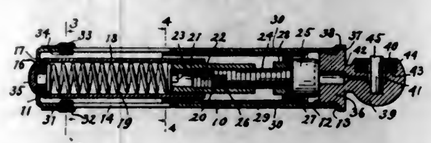
spaced electrodes mounted within the receptacle and insulated therefrom, an electric circuit including the galvanometer and the electrodes, a switch for closing the circuit when a reading of the indicator is desired, movable scrapers mounted within the receptacle for cleaning the electrodes, and means connected with the switch and scrapers so that the scrapers will be withdrawn from the electrodes before the switch is closed.

1,874,912. REFRIGERATING METHOD AND APPARATUS. DAVID N. CROSTHWAIT, Jr., Marshalltown, Iowa, assignor to C. A. Dunham Company, Marshalltown, Iowa, a Corporation of Iowa. Filed Aug. 22, 1930. Serial No. 477,073. 12 Claims. (Cl. 62—115.)



1. The method of refrigeration consisting in circulating refrigerant from a closed compression and storage space through a refrigerating space wherein it is vaporized, mechanically imparting motion to a portion of the liquid refrigerant and utilizing the energy of this moving liquid to lower the pressure in the refrigerating space, a stream of liquid refrigerant from the compression space also being forced together with compressed vaporized refrigerant into a condensing space and thence into the refrigerating space.

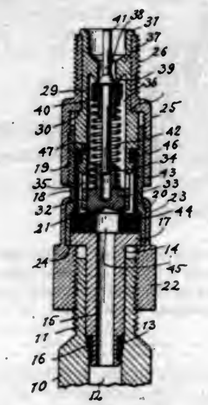
1,874,913. PRESSURE GAUGE. JOHN C. CROWLEY, Cleveland Heights, Ohio, assignor to The Dill Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 19, 1929. Serial No. 408,256. 6 Claims. (Cl. 73—111.)



4. A fluid pressure gauge comprising a tubular casing adapted to be arranged in communication with a receptacle containing fluid under pressure, a threaded stem in said casing and having means forming a piston adapted to be moved in one direction by the fluid pressure, an internally threaded member arranged on said stem, whereby relative rotation between said stem and member causes relative axial adjustment therebetween, a spring in said casing bearing upon said member and opposing movement thereof, a sleeve slidable in said casing and movable by the movement of said piston under the fluid pressure, said casing having means thereon cooperating with said sleeve to indicate the amount of such movement and the fluid pressure in said receptacle.

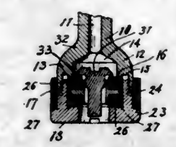
1,874,914. VALVE MECHANISM. JOHN C. CROWLEY, Cleveland Heights, Ohio. Filed Jan. 18, 1930. Serial No. 420,368. 2 Claims. (Cl. 152—12.)

1. A valve mechanism of the type adapted to be secured upon the end of a valve stem comprising a sleeve, a gasket within said sleeve, and a movable plunger slidable within said sleeve, said plunger having a longitudinal bore closed at one end by a plug adapted to cooperate with said gasket and having a projection, said plunger also being provided intermediate its ends with a valve seat, a valve pin arranged in the bore of the plunger having one



end sliding in a recess in the projection on said plug and being provided intermediate its ends with a valve having a projection, and a spring surrounding said pin and the projections on the plug and valve, said spring seating upon said plug and valve and maintaining the latter in engagement with the valve seat.

1,874,915. AIR CHUCK. JOHN C. CROWLEY, Cleveland Heights, Ohio, assignor to The Dill Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 13, 1930. Serial No. 474,896. 5 Claims. (Cl. 284—17.)



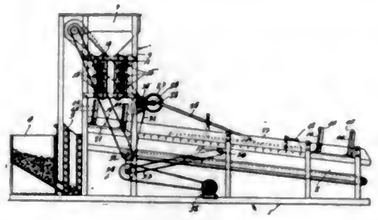
1. An air chuck comprising a member provided with a chambered head and a stem portion extending therefrom and having a bore therethrough communicating with said chamber head, a second member secured to said first named member and having a counterbore communicating with the chambered head and with a reduced opening in said second member, a sleeve having an annular flange intermediate its ends and held in position in said counterbore by the said members and in alignment with said opening, and a valve slidably mounted in said sleeve and guided thereby and having a valve head within said chambered head.

1,874,916. BEAN CLEANING APPARATUS. EDWARD L. CULVER, Los Angeles, Calif. Filed Nov. 27, 1928. Serial No. 322,122. 9 Claims. (Cl. 83—35.)

5. In an apparatus for separating beans from small clods of dirt gathered with the beans, the combination of a hopper with an opening in its bottom a pair of rollers in the said opening with upright screens, a pair of belts guided to move downwardly along the faces of said screens, means for feeding the beans with the dirt into the space between the belts and screens.

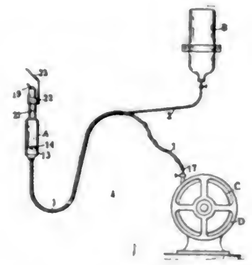
7. In an apparatus for separating beans from small dirt clods gathered with the beans, the combination of a rela-

tively fixed inclined screen, means for feeding the beans with the dirt onto the upper portion of the screen, a rubbing member resting on the beans and dirt clods on the screen, means for moving the rubbing member along the



screen to crush the clods and enable the same to pass through the screen, and an eccentric agitating device for imparting vibrations to the relatively fixed screen in a vertical and horizontal direction.

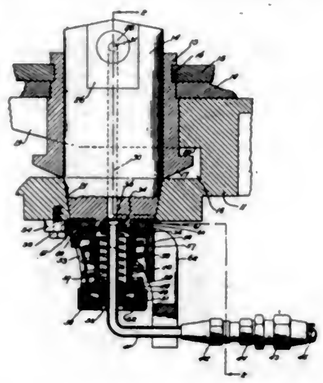
1,874,917. APPARATUS FOR PRODUCING DENTAL ANÆSTHESIA. CHARLES HENRI DANNEQUIN, Livry-Gargan, France. Filed Feb. 25, 1931. Serial No. 518,284, and in France Mar. 1, 1930. 5 Claims. (Cl. 128—257.)



1. An apparatus for producing dental anæsthesia through progressive refrigeration by a stream of air mixed with a refrigerating agent, which comprises in combination, a casing, a chamber in said casing, a capillary tube opening into said chamber, a bottle containing the refrigerating agent connected to said capillary tube, a second tube opening into said chamber, a turbine for feeding a stream of air into said last mentioned tube, a motor for driving said turbine, means for simultaneously obturating said capillary tube and stopping said motor, an elongated tubular chamber opening into said first mentioned chamber, means in said tubular chamber for thoroughly completing the intimate mixture of the air from the turbine with the refrigerating agent, and a nozzle at the end of said tubular chamber for directing the jet of the mixture onto the part to be anæsthetized.

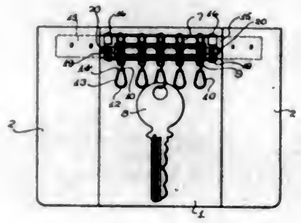
1,874,918. AUTOMATIC AIR LINE CONNECTION FOR SEMITRAILERS. DURREL H. DAVIS, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed Apr. 6, 1929. Serial No. 352,940. 6 Claims. (Cl. 280—33.1.)

1. In a vehicle comprising a tractor and a semi-trailer with a fifth wheel for pivotally connecting them together, said connection including a king pin carried by one of the fifth wheel members adapted to be engaged with the other in coupling assembly, a fluid conduit including separate fluid conductors for the tractor and trailer respectively, said king pin being provided with a passageway extending therethrough with one of the conductors permanently connected to one end of said passageway, means co-operating with the other conductor for automatically connecting it detachably with the other end of the king pin passageway in coupling the fifth wheel members, together



with means for rotating said cooperating means and a portion of the detachably connected conductor with the king pin during relative pivotal movement of the tractor and trailer to ensure positive connection of the conductor to the king pin passageway at all coupled positions of said tractor and trailer.

1,874,919. KEY HOLDING CASE. GEORGE H. DAY, Rochester, N. Y. Filed Apr. 29, 1929. Serial No. 358,803. 4 Claims. (Cl. 150—40.)

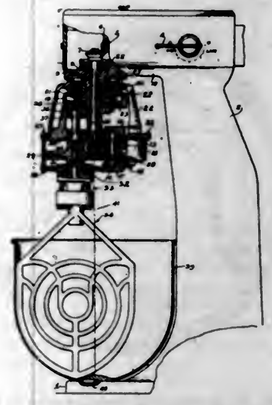


3. A key holding case comprising a back member, two side members connected to opposite sides of the back member to fold on the front face of the back member, a key securing means arranged on the front face of the back member, and spring means mounted on the key securing means and connected to the two side members to control the side members.

1,874,920. DOUGH MIXING MACHINE. WALTER F. DEHUFF, Glen Rock, Pa. Filed Oct. 23, 1931. Serial No. 570,711. 1 Claim. (Cl. 74—34.)

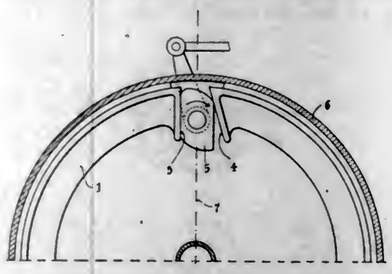
In a mixing machine, a standard having a head extending laterally therefrom, a bearing extending downwardly from said head, a drive shaft journaled in said bearing and having a pinion secured to the lower end thereof, a casing rotatably mounted on the upper end of said bearing, a beater spindle rotatably mounted in said casing parallel to said shaft, a spur gear secured to the lower end of said spindle, an internal gear fixed to said bearing

and enclosing the upper end of said spindle, a pinion on the upper end of said spindle meshing with the teeth of said internal gear, a second shaft journaled in said casing



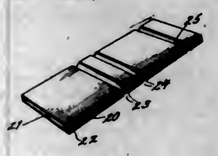
parallel to the first named shaft, and gears on said second shaft connecting the first named pinion operably to said spur gear, and means for rotating said drive shaft.

1,874,921. BRAKE. WALTER H. DELAHAYE, Ottawa, Ontario, Canada, assignor to Bendix Brake Company, South Bend, Ind. Filed Dec. 2, 1929. Serial No. 410,935. 4 Claims. (Cl. 188—78.)



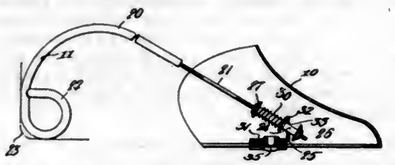
1. In a cam-operated brake, the combination of a pair of shoes and a cam for expanding same, cam-engaging surfaces on the shoes, one of said surfaces being so disposed in regard to the cam that the resultant of the expanding force and the inward forces due to the frictional engagement of the cam on the shoe lies in a plane normal to the radial plane passing through the axis of the cam.

1,874,922. BUILDING MATERIAL. JOHN H. DELANEY, Los Angeles, Calif., Union Bank & Trust Co. of Los Angeles, administrator of said John H. Delaney, deceased. Filed July 10, 1929. Serial No. 377,207. 2 Claims. (Cl. 154—45.9.)



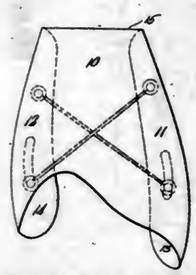
1. Building material having a relatively thin flexible backing, and a filler layer attached to the backing, said filler layer having parallel creases across it, said creases being substantially V-shaped, the apex of the creases being close to the backing, and the filler material between some of the creases being thinner than between other creases.

1,874,923. SHOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Dec. 24, 1930. Serial No. 504,542. 8 Claims. (Cl. 12—128.2.)



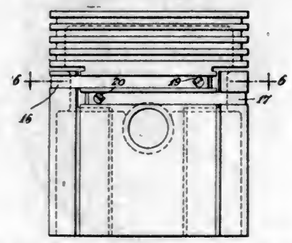
1. A shoe form comprising a one-piece toe form and a thrust bar, said toe form being hollow and having a cross brace connecting the walls thereof, and means yieldable longitudinally of the thrust bar for connecting said thrust bar to said cross brace.

1,874,924. EXPANSIBLE TOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Jan. 26, 1931. Serial No. 511,165. 4 Claims. (Cl. 12—128.4.)



1. An expansible toe form for insertion into the toe of a shoe comprising a hollow thin walled shell of resilient, flexible material having an open-ended toe and cross braces connecting the side walls of said shell, the side walls of the shell bearing throughout their extent with balanced pressure against those portions of the shoe with which they contact.

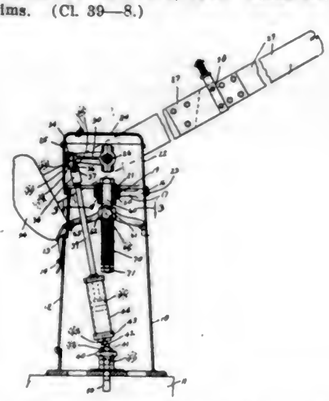
1,874,925. PISTON. JAMES E. DIAMOND, New York, N. Y., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 31, 1926, Serial No. 126,110. Renewed Nov. 1, 1930. 1 Claim. (Cl. 74—108.)



A piston for an internal combustion engine comprising, a head section, wrist pin boss-carrying portions depending from said head section, a pair of diametrically opposite bearing wall portions separated along their

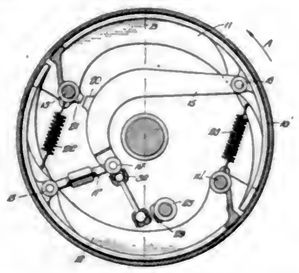
upper ends from said head section, each bearing wall portion lying between said boss-carrying portions and being integral with and yieldingly connected to said boss-carrying portions along each side edge, and control means of lower coefficient of expansion than the piston body completely encircling the piston body between the bosses and the upper ends of the bearing wall portions and serving to restrain the outward expansion of said yieldingly supported bearing wall portions in accordance with the thermal expansion and contraction of said control means, rather than the thermal expansion of the piston body, said bearing wall portions being movable radially inwardly in response to excessive cylinder wall pressure, said control means comprising a pair of semi-circular members each secured to the upper portion of said opposite boss-carrying portions and encircling the upper ends of said bearing wall portion.

1,874,926. HIGHWAY GATE. MORRIS MACDONALD DILLEY and JAMES H. FRASER, Columbus, Ind., assignors to Automatic Safety Signal Gate Co., Columbus, Ind., a Corporation. Filed Dec. 5, 1931. Serial No. 579,150. 6 Claims. (Cl. 39—8.)



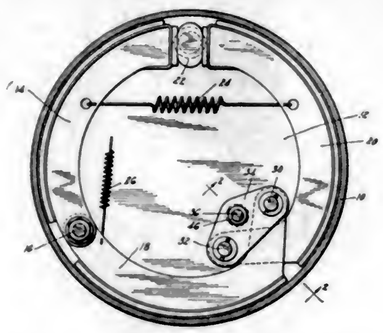
3. In combination a hollow pedestal, a horizontally rotatable head mounted thereon, a gate arm pivotally supported upon the head for vertical movement, a cylinder and piston construction positioned within the pedestal, a universal joint connection between the arm and construction, and a universal joint mounting for the construction.

1,874,927. BRAKE. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 10, 1924. Serial No. 697,983. Renewed Jan. 21, 1929. 12 Claims. (Cl. 188—194.)



1. A brake comprising a pair of anchored shoes, with the free end of one shoe overlapping the anchored end of the other shoe.

1,874,928. BRAKE. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 11, 1928. Serial No. 284,576. 10 Claims. (Cl. 188—78.)



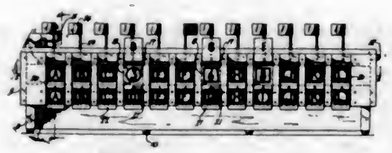
1. A brake comprising, in combination, a pair of overlapping brake shoes, an anchor pivot for the end of each shoe, a pair of plates on opposite sides of the shoes in which said pivots are mounted, and a fixed fastening between said pivots passing therethrough and holding said plates and taking the torque exerted against both pivots.

1,874,929. BRAKE. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 19, 1929. Serial No. 379,333. 6 Claims. (Cl. 188—78.)



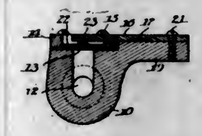
1. A brake-applying device comprising, in combination, a shaft having a transverse opening adjacent its end, a carrier extending across the end of the shaft and having a torque member mounted in said opening and shiftable endwise therein, and shoe-engaging parts carried by said carrier.

1,874,930. GAME. FRANK A. DORSCH, Milwaukee, Wis. Filed Feb. 20, 1930. Serial No. 429,971. 5 Claims. (Cl. 273—138.)



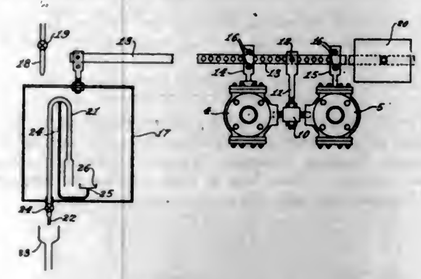
1. A game comprising a wall having a plurality of openings therein, a movable shutter for each opening, each shutter having an identifying character thereon, a removable identifying tag for each opening, having a character thereon like that on the shutter for said opening, and means movable behind said wall having a plurality of different characters thereon which are adapted to be exposed when said shutters are opened.

1,874,931. PRESSURE RELIEF VALVE DEVICE. JOHN M. DOUGHERTY, St. Louis, Mo. Filed Aug. 24, 1929. Serial No. 388,179. 7 Claims. (Cl. 220—89.)



1. In a pressure relief device the combination of a member having a passage and means whereby said member may be applied for use, a frangible member closing said passage, a fragile element secured at one end, a member arranged between the opposite end of said fragile element and said frangible member, and providing means for transmitting pressure applied to said frangible member to said fragile element, said fragile element being separable and said frangible member being adapted to be ruptured to open said passage upon the application of pressure in excess of a predetermined resistance applied by said fragile element.

1,874,932. INTERMITTENT FLOW DEVICE. DONALD B. DOW, Bartlesville, Okla., assignor to Indian Territory Illuminating Oil Company, Bartlesville, Okla., a Corporation of New Jersey. Filed Oct. 20, 1928. Serial No. 313,833. 3 Claims. (Cl. 137—145.)



1. A device for directing a flow of fluid alternately to different passages, comprising, a plurality of valves controlling the different passages, a container adapted to receive water, counterweighted means for pivotally supporting said container, a siphon in said container adapted to empty the same after a determined interval, a tube in said container communicating with the crest of said siphon and whose lower end opens upwardly above the inlet to said siphon, and connections actuated by movement of said container adapted alternately to open and close said valves.

1,874,933. OIL BURNER. ANDREW J. DINKEL, Yuma, Ariz., assignor of one-half to William E. McCaw, Yuma Ariz. Filed May 21, 1930. Serial No. 454,315. 3 Claims. (Cl. 158—76.)



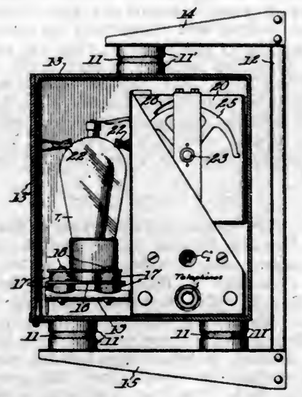
1. A device of the character described comprising a member having a fuel passage and an air passage therethrough and having a duct opening laterally from said air passage, a second member having a fuel passage opening from said fuel passage in said first member and having a long and narrow air passage opening from said air passage in said first member, a valve supported by said second member for opening and closing said long and narrow air passage therethrough, a third member having a discharge passage communicating with said fuel and air passages through said second member, a tube secured to said third member and communicating with said discharge passage, a jacket surrounding said tube and spaced therefrom, and means forming a passage from said duct to said space.

1,874,934. WOOL BAG OR THE LIKE. BRADFORD W. DRAKE, Stoughton, Mass. Filed Jan. 6, 1932. Serial No. 585,040. 5 Claims. (Cl. 150—3.)



1. In combination, a fabric bag having an open side and top, fasteners secured to opposite edge portions of said open side and inwardly from the edges of said top, and a wire engaging said side and top fasteners and wrapped about dog ears at opposite sides of said top and holding said side and top closed.

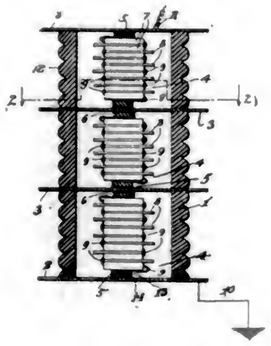
1,874,935. RADIO RECEIVING SYSTEM FOR AIRCRAFT. FREDERICK H. DRAKE, Boonton, LEWIS M. HULL, Mountain Lakes, and WILLIAM D. LOUGHLIN, Boonton, N. J., assignors, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed June 12, 1928. Serial No. 284,755. 8 Claims. (Cl. 250—20.)



1. An electrical amplifier circuit comprising, in combination, a multi-stage radio frequency electrical amplifier including a plurality of tubes of the screen-grid type,

said tubes being linked through tuned coupling impedances comprising a fixed tuning condenser and a variable tuning inductance arranged in parallel, whereby the amplification of said radio frequency amplifier is less at short wavelengths than at long wavelengths; and a regenerative detector stage coupled to the last of said radio frequency amplifier stages, said regenerative detector stage including circuit elements of predetermined fixed magnitude effective to produce higher amplification at short wave lengths than at long wave lengths, whereby the overall amplification of said radio frequency amplifier and detector may be made approximately uniform over the tuning range of said receiver.

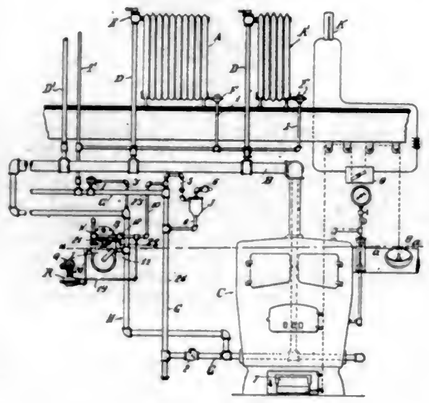
1,874,936. ELECTRICAL STRUCTURE. WILLIAM DUBILIER, New York, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed June 11, 1924. Serial No. 719,335. 9 Claims. (Cl. 175—41.)



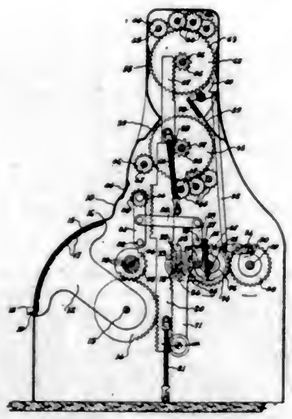
1. An electrical structure comprising a plurality of sections, each section including a hollow casing of insulation containing an individual condenser or unit, the casings having open ends, members of conductive material for closing the ends of said casings and for separating the adjacent sections of said structure from one another, and blocks of conductive material in each casing in contact with said members at the opposite ends of said casings and in connection with the extremities of the units in said casings, said blocks containing insulation, said structure forming a hollow column, and enclosing a number of units in circuit with each other when the sections are assembled.

1,874,937. DIFFERENTIAL HEATING SYSTEM. CLAYTON A. DUNHAM, Glencoe, Ill., assignor to C. A. Dunham Company, Marshalltown, Iowa, a Corporation of Iowa. Filed Apr. 4, 1924, Serial No. 704,142. Renewed Nov. 9, 1927. 15 Claims. (Cl. 237—9.)

1. Steam heating apparatus comprising in combination a steam generator, controlling devices for the generator, a radiating system, connections for supplying the radiating system with steam from the generator and withdrawing fluids therefrom comprising a supply conduit and a return conduit, means for maintaining selected pressures below atmosphere in said radiating system in accordance with the heat output desired and a predetermined difference of pressure between the supply and discharge conduits sufficient to move the steam through the system, and a thermostat connected with the controlling devices of the steam generator for limiting the quantity of steam generated to that required for supplying the radiating system.

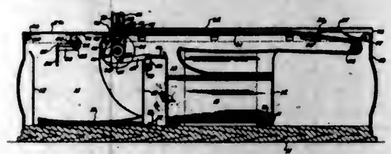


1,874,938. INDICATOR FOR CASH REGISTERS. WILLIAM E. DUNNING, Alliance, Ohio, assignor to The McCaskey Register Company, Alliance, Ohio, a Corporation of Ohio. Filed May 2, 1929. Serial No. 359,845. 2 Claims. (Cl. 235—23.)



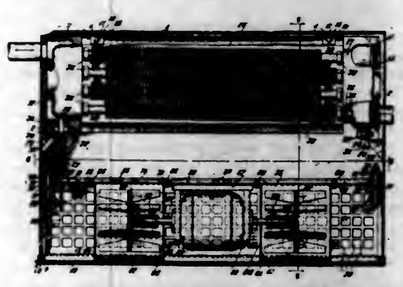
1. A cash register including means for setting up items therein, rack bars operated by said means, temporary indicating means operated by said rack bars, relatively permanent indicating means, rack bars operatively connected to the permanent indicating means, means for moving the last named rack bars into contact with the first named rack bars, means for normally preventing the second named rack bars from being moved toward the first named rack bars, and means for operating the last named means to permit the second named rack bars to be moved toward the first named rack bars.

1,874,939. AUTOGRAPHIC REGISTER. WILLIAM E. DUNNING, Alliance, Ohio, assignor to The McCaskey Register Company, Alliance, Ohio, a Corporation of Ohio. Filed Feb. 8, 1930. Serial No. 427,025. 4 Claims. (Cl. 282—16.)



1. An autographic register including a casing adapted to contain a plural record strip divided transversely into a plurality of ticket portions having apertures therein, a table in the casing, feed rolls for feeding the plural record strip over said table, means for separating the feed rolls as each set of ticket portions reaches a predetermined position upon the table, a stud for engaging the apertures in the foremost ticket portions when the rolls are separated, an operating handle for the feed rolls, a movable stop for the handle, and spring means operatively connected with the stop for withdrawing the stud from said apertures.

1,874,940. CABINET TYPE UNIT HEATER. LAWRENCE P. DWYER, Winnetka, Ill., assignor to C. A. Dunham Company, Marshalltown, Iowa, a Corporation of Iowa. Filed Mar. 16, 1931. Serial No. 523,137. 12 Claims. (Cl. 257—137.)



3. A unit heater comprising a casing having openings adjacent the top and bottom thereof, and closed end and rear walls and a removable front wall, a radiator comprising headers supported adjacent the end walls and a plurality of radiating tubes extending between the headers in spaced apart relation to permit the circulation of air through the casing between the tubes, the headers being formed with a plurality of openings to receive the tube ends, a portion of each opening being threaded to alternatively receive an annular locking nut for sealing the tube in position or a plug for closing the opening when the tube is removed.

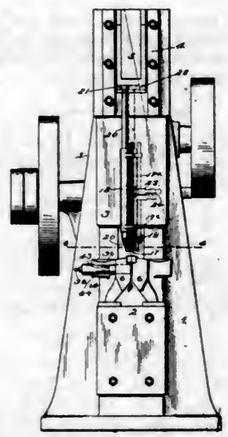
1,874,941. AERIAL SYSTEM FOR WIRELESS SIGNALING. THOMAS LYDWELL ECKERSLEY, Danbury, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 15, 1928, Serial No. 319,707, and in Great Britain Nov. 18, 1927. 8 Claims. (Cl. 250—33.)

1. An aerial system comprising a plurality of aerials coupled to a single circuit and adapted to be energized in phase, the separation of said aerials being more than .5 and less than .68 of a wave length whereby the actual



radiation resistance of the system as a whole is less than the radiation resistance of the separate aerials considered in parallel.

1,874,942. APPARATUS FOR ELECTRIC RIVETING, HEADING, ETC. ERNEST E. EINFELDT, Davenport, Iowa, assignor to French & Hecht, Incorporated, a Corporation of Iowa. Filed July 20, 1929. Serial No. 379,613. 2 Claims. (Cl. 219—2.)

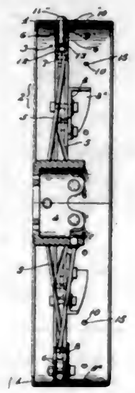


1. In an electrical machine of the type described, the combination of a member movable into engagement with the part to be operated on and formed with a guiding opening therethrough, an electrode guided in said opening, a carrying frame connected with said electrode and movably sustained by said member, a spring acting on the frame to yieldingly sustain the electrode with its end projecting beyond the face of the member, so as to act on said part when the member is engaged with the latter, said electrode being included in an electric heating circuit adapted to be completed through said part.

1,874,943. WHEEL CONSTRUCTION. ERNEST E. EINFELDT, Davenport, Iowa, assignor to French & Hecht, Incorporated, a Corporation of Iowa. Original application filed Oct. 31, 1929, Serial No. 403,735. Divided and this application filed June 26, 1930. Serial No. 463,899. 1 Claim. (Cl. 301—40.)

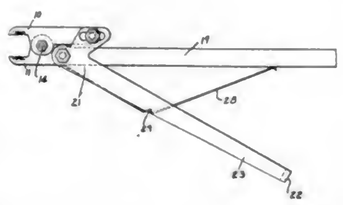
In combination with a wheel provided with a pair of spaced annular rim members, a series of traction cleats applied to the outer side of one of said rim members, said

cleats being each characterized by a laterally extending flange curved circumferentially to conform to and extend substantially flush with the periphery of said rim members, an outer rim surrounding said rim members and bearing



on said curved flanges of the cleats, and fastening bolts for detachably securing said outer rim to the annular rim members, the shanks of said fastening bolts extending between the annular rim members.

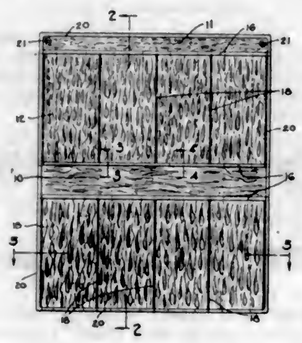
1,874,944. BATTERY TOOL. LOUIS FABIAN, Toledo, Ohio. Filed Apr. 2, 1931. Serial No. 527,151. 2 Claims. (Cl. 81—46.)



1. A tool of the class described comprising a pair of pivotally connected jaws, said jaws having opposed gripping faces divergent from one side edge to the opposite side edge, and gripping teeth on said jaws inclined in opposite directions at an angle substantially 45° to a line parallel to the axis of said jaws.

1,874,945. UTILITY BAG. HERMAN B. FERGUSON, Philadelphia, Pa. Filed Aug. 16, 1928. Serial No. 299,912. 3 Claims. (Cl. 150—1.)

1. In a utility bag, a bottom panel of relatively heavy crinkled paper, a top panel also of relatively heavy crinkled paper arranged to be secured to said bottom panel in superimposed relation therewith to form a plurality of article receiving pockets, a cloth reinforcement extending along and secured to the top and bottom edges of said top panel, the reinforced top edges of said pockets being free from said bottom panel, and a similar cloth reinforcement for binding the coincident side edges of said top and bottom panels, the crinkles of the top panel



extending longitudinally of the pockets and the crinkles of the bottom panel extending in a direction transversely of said pockets.

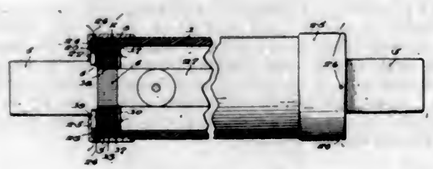
1,874,946. TREATMENT OF HYDROCARBON OILS. SEYMOUR W. FERRIS, Landsdowne, Pa., assignor to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 15, 1931. Serial No. 537,751. 18 Claims. (Cl. 196—13.)

1. In the art of refining mineral oils, the process which comprises separating an oil containing paraffinic and naphthenic hydrocarbons into fractions respectively richer in paraffinic and naphthenic compounds by extracting said oil with an aromatic acetate.

1,874,947. EXTRACTION OF MINERAL OILS. SEYMOUR W. FERRIS, Lansdowne, Pa., assignor to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 15, 1931. Serial No. 537,752. 18 Claims. (Cl. 196—13.)

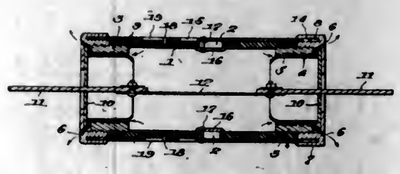
1. In the art of refining mineral oils, the process which comprises separating an oil containing paraffinic and naphthenic hydrocarbons into fractions respectively richer in paraffinic and naphthenic compounds by extracting said oil with an organic thiocyanate.

1,874,948. FUSE. JAY R. FOGAL, San Francisco, Calif. Filed Apr. 10, 1931. Serial No. 529,161. 8 Claims. (Cl. 200—131.)



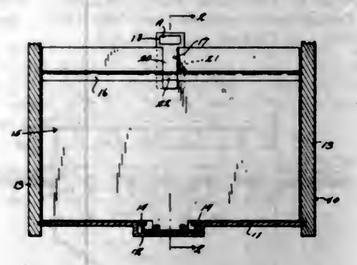
1. A fuse of the character set forth comprising a body portion, a cup shaped member positioned in each end of said body portion and having an internal thread, a disk positioned within each cup shaped member and engaging said thread to define a spiral passage, said disk having a tortuous passage therein, and means connecting said spiral passage and tortuous passage with the atmosphere.

1,874,949. FUSE. JAY R. FOGAL, San Francisco, Calif. Filed May 27, 1931. Serial No. 540,478. 6 Claims. (Cl. 200—131.)



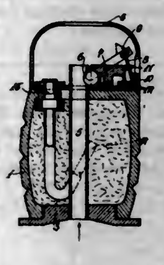
1. A fuse of the character set forth comprising a housing, a fusible element disposed within said housing and having end contacts, and a sleeve slidable longitudinally on said housing, said sleeve and housing having apertures adapted to align to permit observation of said fusible element.

1,874,950. FILE GUIDE. HARRY FORSYTH, Prosser, Wash. Filed Jan. 19, 1932. Serial No. 587,584. 3 Claims. (Cl. 129—16.7.)



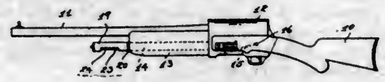
1. A file guide as described comprising a plate member, an offset supporting member secured to the lower end of said plate, said supporting member having upturned opposite end portions, and means carried by the supporting member for releasably securing the member in adjusted position in a T-shaped guide channel.

1,874,951. GRENADE AND LANCE-GRENADE. CHARLES FOULON, Brussels, Belgium. Filed May 12, 1931, Serial No. 536,817, and in Belgium May 20, 1930. 4 Claims. (Cl. 102—29.)



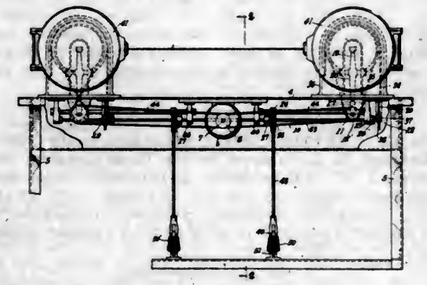
1. In a grenade of the type described, a firing mechanism comprising: a spring controlled firing-pin, a lever holding the firing-pin in the inoperative position against the action of said spring, a spring controlled locking element for said lever, means for releasing the locking element, the arrangement being such that the release of the locking element is operated in two phases, substantially as set forth.

1,874,952. MAGAZINE FOR AUTOMATIC SHOTGUNS. JOHN IRA FRANK, Baltimore, Md., assignor of one-half to Theodore W. Smith, Baltimore, Md. Filed Mar. 20, 1931. Serial No. 524,166. 3 Claims. (Cl. 42—49.)



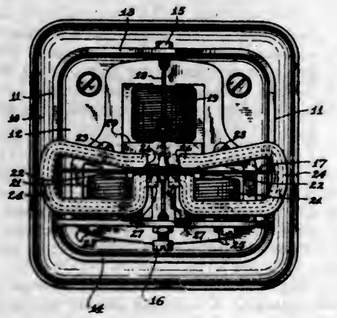
1. In an automatic shot gun the combination with a barrel, of a magazine tube extending along the side of the barrel, a tubular retainer at the outer end of the magazine tube and having a longitudinal shell opening in its wall, a sectional follower attached to the retainer and extensible on the interior of the magazine tube and means for withdrawing the follower outwardly from one end of the retainer to uncover the longitudinal retainer opening to permit the entrance of shells into the magazine tube.

1,874,953. REELING DEVICE FOR MOTION PICTURE FILMS. ERIC T. FRANZEN, Maplewood Township, Essex County, and ARTHUR J. WEISS, West Orange, N. J., assignors to Franklin Williams, Inc., Orange, N. J., a Corporation of New Jersey. Filed Dec. 16, 1930. Serial No. 502,705. 4 Claims. (Cl. 242—55.)



2. In a device of the character described, a winding reel and an unwinding reel, brakes normally preventing rotation of the reels, and means to simultaneously release the brakes and independently drive either of said reels.

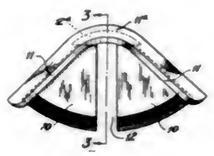
1,874,954. INDUCTION METER. HANS FRÖHLICH and THEODOR HAUSCH, Zug, Switzerland, assignors to Landis & Gyr, A.-G., Zug, Switzerland, a Corporation of Switzerland. Filed Dec. 20, 1929, Serial No. 415,583, and in Switzerland Jan. 9, 1929. Renewed Dec. 12, 1931. 2 Claims. (Cl. 171—264.)



1. In an induction meter, a meter disc and spindle, a meter frame, driving magnets for rotating the disc, a pair of braking magnets having their air gaps adjacent

to each other, said magnets extending in opposite directions away from each other, and blocks of alloy attached to one pole piece of each magnet, said alloy having its permeability varying in accordance with temperature, said magnets and alloy blocks being spaced from each other sufficiently to permit passage of the spindle through the space between the magnets and of the disc through the air gaps without disturbing either the driving magnets or braking magnets.

1,874,955. YIELDABLE SHOE OR CUSHION. ALFRED C. FULTON, Ashtabula, Ohio, assignor to The Aetna Rubber Company, Ashtabula, Ohio, a Corporation of Ohio. Filed Nov. 23, 1931. Serial No. 576,767. 8 Claims. (Cl. 45—137.)



1. A shoe or cushion for the purpose described comprising a plurality of base portions adapted to support an article, and a flexible portion joining said base portions.

1,874,956. CUTTING OIL. BENJAMIN GALLSWORTHY, Bayonne, N. J., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 30, 1930. Serial No. 485,553. 3 Claims. (Cl. 87—9.)

1. A cutting oil consisting practically of mineral oil compounded with from 15% to 30% of oxidized paraffin wax.

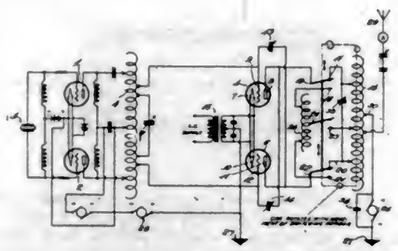
1,874,957. ROAD ROLLING MACHINE. LION GARDINER, Lakewood, Ohio, assignor to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 14, 1929. Serial No. 346,939. 20 Claims. (Cl. 94—45.)



1. In a machine of the character described, road engaging means adapted to impart a crown to the road, a plurality of adjustable means for causing said first-named means to impart crowns of different degree to the road, and a single means for operating said second-named means.

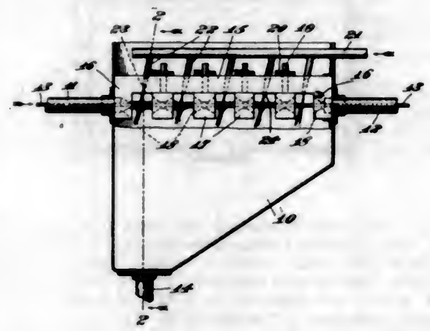
1,874,958. COUPLING SYSTEM FOR HIGH FREQUENCY TRANSMITTERS. LOUIS A. GEBHARD, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,982. 7 Claims. (Cl. 250—17.)

1. In a high frequency transmitting system employing thermionic tubes in a balanced circuit arrangement the combination of a tuned input circuit a plurality of output circuits each having frequency characteristics differing from the other such that the resonant frequency of each is some multiple of the resonant frequency of the input circuit, means for impressing upon said input circuit a characteristic frequency, a plurality of switch members associated with said circuits and means for simultaneously



actuating each of said switch members whereby said circuits may be interchangeably connected to said thermionic tubes.

1,874,959. ROD COOLING AND WATER ELIMINATING APPARATUS. HEBER TRIMBLE GEORGE, Dundalk, Md., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Apr. 20, 1929. Serial No. 356,805. 12 Claims. (Cl. 266—6.)



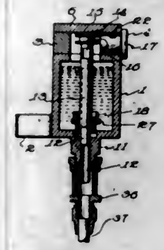
10. In apparatus of the class described, the combination with means for water-cooling a rapidly moving hot metal rod, of means for impinging jets of fluid against the rod at an angle to the direction of movement thereof, to divert from the surface of the rod the cooling water that is carried thereby, and means for guiding the rod in a substantially straight path during the impinging of said jets of fluid against the same.

1,874,960. MEANS FOR VIBRATING CRYSTALS. ERICH GIEBE and ADOLF SCHEIBE, Berlin, Germany, assignors to Radio Corporation of America, a Corporation of Delaware. Original application filed Jan. 20, 1928, Serial No. 248,145, and in Germany Jan. 28, 1927. Divided and this application filed June 25, 1930, Serial No. 463,805. 2 Claims. (Cl. 171—327.)



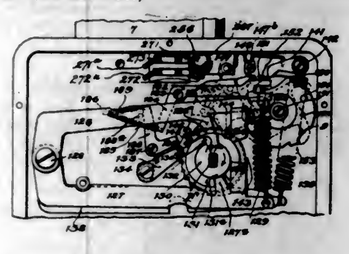
1. Crystals which are undergoing transversal or torsional vibrations may be used for all such purposes for which heretofore longitudinal vibrations have been used.

1,874,961. LUBRICATOR. REMI J. GITS, Chicago, Ill. Filed Mar. 5, 1931. Serial No. 520,313. 7 Claims. (Cl. 184—81.)



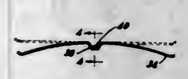
1. A lubricator comprising an oil supply container, said container being provided with an oil conduit vertically adjustable within said container and having an inlet for oil at its upper end, an oil carrier slidable along said conduit for carrying oil upwardly to the conduit inlet, means for reciprocating said oil carrier, and means extending to the exterior of said container for effecting vertical adjustment of the conduit.

1,874,962. TAXIMETER CONSTRUCTION. JULIUS GLUCK and RUDOLPH R. KARICH, New York, N. Y., assignors to Ohmer Fare Register Company, Dayton, Ohio. Filed Aug. 28, 1930. Serial No. 478,332. 25 Claims. (Cl. 235—30.)



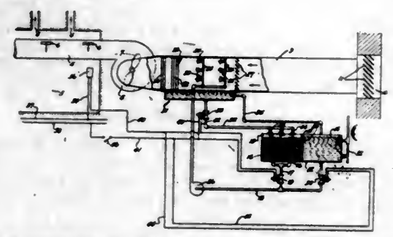
1. A taximeter including a flag shaft indicating device, actuating means therefor comprising a star wheel unit and drop levers, clock and wheel driven instrumentalities for operating the star wheel unit of said actuating means, separate clutch levers for respectively controlling the connecting and disconnecting of said instrumentalities with the star wheel unit, a single master cam moved back and forth relative to the flag shaft during the cycle of the flag shaft for controlling the operation of the drop levers and said separate clutch levers.

1,874,963. BRAKE. RUDOLPH A. GOEPFRICH, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 26, 1929. Serial No. 381,122. 7 Claims. (Cl. 188—79.5.)



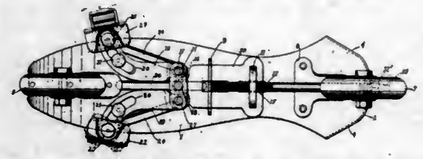
3. A brake comprising, in combination, friction elements connected by a floating joint, said joint comprising an adjustable member and means for retaining said adjustment comprising a spring clip having its ends inserted within the ends of the friction members and its central portion bent by a part of the joint to retain the latter in operative position.

1,874,964. COOLING SYSTEM. FREDERIC T. GOES, Milwaukee, Wis., assignor to The Vilter Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 31, 1931. Serial No. 584,108. 5 Claims. (Cl. 257—8.)



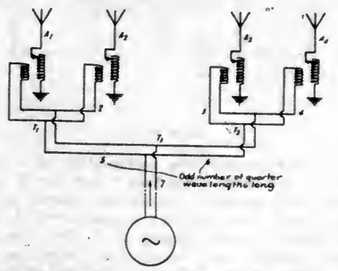
1. In combination, an air duct communicating with a chamber, a spray for delivering liquid into said duct to condition gas passing therethrough to the chamber, an ice reservoir, a water reservoir, means for conducting liquid from either reservoir to the spray for discharge into the air duct, and means for selectively returning the sprayed liquid to either reservoir.

1,874,965. SKATE. JOHN H. GOETZEL, Cleveland, and PAUL C. SMITH, Lakewood, Ohio. Filed Mar. 21, 1931. Serial No. 524,326. 2 Claims. (Cl. 208—180.)



1. A device of the class described including a foot plate, a pair of clamping levers slidable thereon, jaws freely pivoted on the free ends of the levers, and means for adjusting the levers laterally of the foot plate, said means comprising a slide being longitudinally movable on said foot plate and having a depending portion internally threaded to receive a screw, a screw extending through the internally threaded portion of the slide and being rotatably mounted at one end in a guide for the said slide, a guide for said slide, a link pivotally mounted intermediate its ends to said slide, the ends of said link being pivotally mounted to the ends of said clamping levers, said levers being relatively movable longitudinally of the foot plate and independently of said adjusting means.

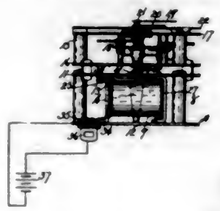
1,874,966. AERIAL SYSTEM AND FEEDING SYSTEM THEREFOR. ERNEST GREEN, Hendon, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 24, 1927, Serial No. 177,979, and in Great Britain Apr. 30, 1926. 3 Claims. (Cl. 250—33.)



1. A feeder or the like for feeding high frequency energy to a plurality of antennæ comprising a transmitter

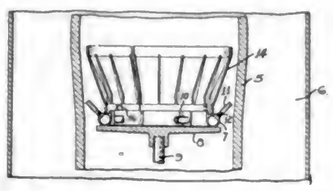
twin cable, an intermediate twin cable, and a pair of twin aerial cables coupled at their ends to said antennæ through a coupling which impresses a load on said aerial cables equal to their surge impedance whereby standing waves are eliminated in said twin aerial cables, said intermediate twin cables being connected at its ends to the mid-points of each of said twin aerial cables and at its mid-point to said transmitter twin cable and being an odd number of quarter wave lengths long in each branch whereby standing waves are eliminated in said transmitter twin cable.

1,874,967. CLOCK MECHANISM. WILLIAM H. GREENLEAF, Hartford, Conn., assignor to Western Clock Company, Peru, Ill., a Corporation of Illinois. Filed Dec. 27, 1926. Serial No. 157,058. 7 Claims. (Cl. 58—41.)



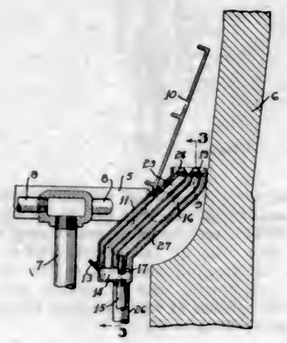
1. A clock mechanism comprising a plurality of units including supporting plates, and clips located at intervals about said plates and frictionally engaged with the edges of both plates to space and secure the units together for convenient and ready separation thereof.

1,874,968. GAS FURNACE. ERNEST A. HALL, Toledo, Ohio, assignor to The Columbia Burner Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 22, 1929. Serial No. 356,978. 14 Claims. (Cl. 158—7.)



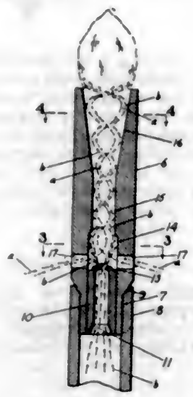
1. In a gas furnace, the combination of a firepot, a burner mounted within the firepot and having upwardly and outwardly directed gas outlets, spaced upstanding flanges on the burner forming a channel between them, and a baffle supported independently of the firepot wall by engagement between said flanges and presenting an outwardly and upwardly sloping surface toward the wall of the firepot, thereby forming an upwardly converging space above the gas outlets to restrict the flow of the burned gas.

1,874,969. GAS CONTROLLING DEVICE. ERNEST A. HALL, Toledo, Ohio, assignor to The Columbia Burner Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 14, 1930. Serial No. 443,955. 9 Claims. (Cl. 158—115.)



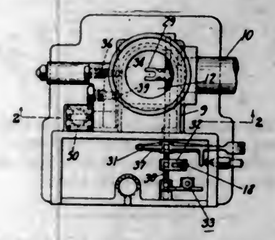
9. The combination with a furnace wall and a gas burner within the same, of a pilot for said burner, means for supplying gas to said pilot, and a cold air conduit leading from outside the furnace wall and encompassing the portion of the gas supply means which is adjacent the pilot head.

1,874,970. GAS BURNER SPUD. ERNEST A. HALL, Toledo, assignor to The Columbia Burner Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 3, 1931. Serial No. 527,418. 3 Claims. (Cl. 158—106.)



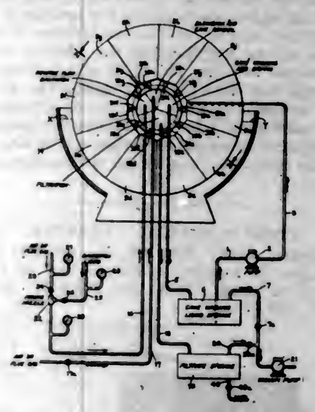
1. A gas burner spud comprising a tubular body provided with a gas inlet directed upwardly at an inclination and approximately tangential to the inside surface of the body to direct gas in spiral form around the interior wall of the body, said body having an air inlet at the side of the gas inlet to admit air to the central portion of the body within the spiral gas stream.

1,874,971. HIGH AND LOW FLAME CONTROL FOR GAS BURNERS. ERNEST A. HALL and GORDON E. BURNS, Toledo, Ohio, assignors to The Columbia Burner Co., Toledo, Ohio, a Corporation of Ohio. Filed Oct. 12, 1931. Serial No. 568,244. 14 Claims. (Cl. 236—1.)



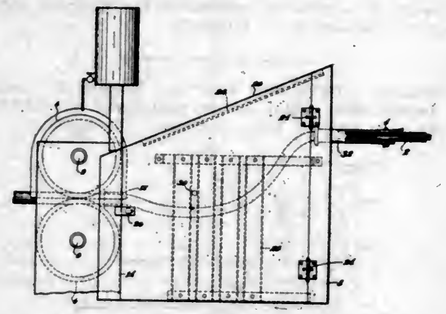
1. In a control device for gas burners, means actuated, as the temperature at a certain station drops below a predetermined degree, to initially establish and maintain a full flow of gas for a high flame, and means actuated, as the temperature rises above said predetermined degree, to maintain a smaller flow for a low flame after the full flow is cut off and as long as the temperature remains within a predetermined range.

1,874,972. PROCESS AND APPARATUS FOR CONTINUOUS FILTRATION. FRANK W. HALL, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 4, 1929. Serial No. 404,534. 4 Claims. (Cl. 210—200.)



1. A process of dewaxing hydrocarbon oils which comprises continuously charging a mixture of oil, precipitated wax and comminuted filter aid material to a filtering zone wherein a plurality of revolving filtering surfaces pass alternately through zones of positive pressure filtration and cake drying and reverse pressure cake discharge and filter surface washing, depositing solids in the form of a compact cake on the one side of the filtering surfaces while in the zone of positive pressure filtration, continuing to apply positive pressure while in the drying zone to remove traces of oil from the cake, applying a back pressure on an incondensable gas to the reverse side of the filtering surfaces while in the cake discharge zone to loosen the cake, removing the dislodged cake, continuing to apply said gaseous back pressure uniformly over the entire reverse side of the filtering surfaces after removal of the filter cake therefrom and during passage through the filter surface washing zone and simultaneously spraying petroleum naphtha in the form of a finely separated mist against the reverse side of the filtering surfaces into which it is forced by the gas to remove waxy constituents from the pores to produce substantially clean filter surfaces prior to the entrance of said surfaces to the zone of positive pressure filtration, and collecting a dewaxed oil from the system.

1,874,973. CANDY CONDITIONING APPARATUS. EDWARD J. HAMBRECHT, Palatine Bridge, N. Y., assignor to Beech-Nut Packing Company, Canajoharie, N. Y., a Corporation of New York. Filed Nov. 23, 1931. Serial No. 576,784. 3 Claims. (Cl. 107—4.)

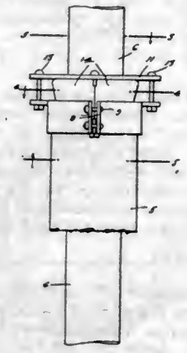


1. In an apparatus for presenting spun candy to a forming machine of the class described, the combination of sizing rolls between which the strip of spun candy passes which shapes the strip into substantially cylindrical form, forming rolls spaced a distance at the rear of the sizing rolls for flattening the opposed sides of the cylindrical strip of candy, and a heating chamber interposed between the sizing and forming rolls through which the strip passes with slack provided between points adjacent the front and rear walls of said chamber.

1,874,974. PROCESS FOR COLD ENAMELING ASBESTOS-CEMENT PLATES. PIETER ALFONS HAMMENECKER, Mariekerke, Belgium, assignor to The Ruberoid Co., New York, N. Y., a Corporation of New Jersey. Filed Nov. 26, 1930, Serial No. 498,437, and in Belgium Dec. 11, 1929. 4 Claims. (Cl. 18—47.5.)

1. The process of enameling an asbestos-cement plate which consists in applying a facing of cement paste to a surface of the plate while the plate is moist, polishing and hardening the facing, and then exposing the plate to the action of carbon dioxide.

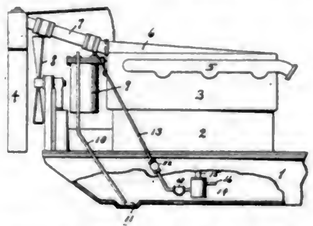
1,874,975. SALT WATER PLUG. JACOB HANHARDT, Larned, Kans. Filed Mar. 31, 1931. Serial No. 526,737. 1 Claim. (Cl. 285—22.)



A plugging device for interposition between the usual well casing and eduction pipe of a well structure comprising a clamp band divided into a pair of sections, for

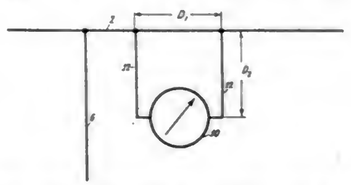
engagement around the upper edge portion of the well casing, clamping means between the ends of the said band, outwardly extending ears on the band, a packing plug of annular construction and divided into a pair of sections, said plug being tapered longitudinally for wedged disposition into the upper end portion of the casing and against the eduction pipe, a follower plate having a central opening for receiving the eduction pipe, said follower plate being engaged against the upper enlarged end of the plug and provided with openings for receiving bolts, said ears being provided with openings for receiving bolts, bolts disposed through the registering openings of the plate and ears, and nuts engaged on the said bolts.

1,874,976. LUBRICANT FILTER. EDMUND E. HANS, Detroit, Mich. Filed Oct. 20, 1922, Serial No. 595,772. Renewed Mar. 27, 1931. 5 Claims. (Cl. 184—6.)



1. In combination, an engine having an oil receptacle, a filter, a pump, a conduit leading from the outlet of the filter to the inlet of the pump, a second conduit leading from near the bottom of the receptacle to the inlet of the filter, a third conduit leading to said first conduit from a point above the lower end of the second conduit and being of less cross-sectional area than said second conduit, a conduit leading from the outlet of the pump to the working parts of the engine, a bypass around said filter and a relief valve in said bypass.

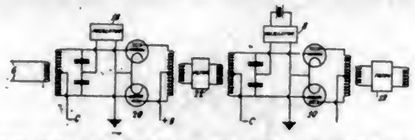
1,874,977. HIGH FREQUENCY METER CONNECTION. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 2, 1927. Serial No. 188,156. 2 Claims. (Cl. 250—33.)



2. The combination with an antenna fed by a transmission line of an antenna meter located just outside of the transmission line coupling on the antenna and coupled in shunt with a portion thereof by means of short pieces of linear conductors, the length of said short pieces of linear conductors having a definite relation to the length of the shunt portion of said antenna for effecting calibration of said meter for total current.

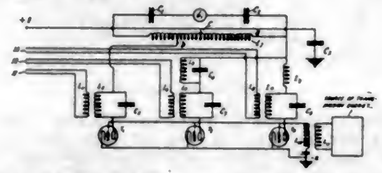
1,874,978. TRANSMISSION SYSTEM. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed July 20, 1927. Serial No. 207,114. 28 Claims. (Cl. 250—8.)

1. The method of transmitting multiplex code signals by frequency change from a transmitter under the control of a plurality of keying means connected to the transmitter by a wire line which includes putting alternating energy of different frequency ranges on the line for each signal channel, shifting the frequency of the



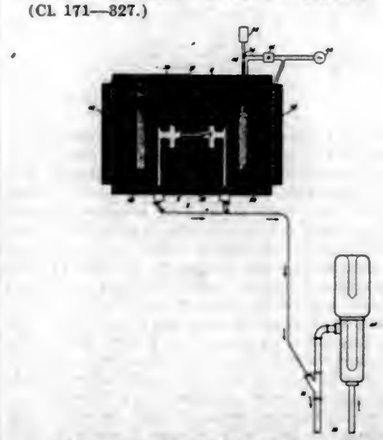
energy from one extreme to the other of each range by a keying means, modulating a relatively higher frequency with the resulting alternating energy, and transmitting a desired portion of the modulated energy.

1,874,979. PHASE MULTIPLIER AND MODULATOR. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 17, 1927. Serial No. 213,590. 1 Claim. (Cl. 179—171.)



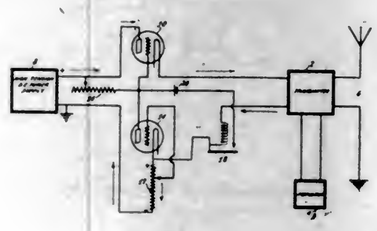
A three phase modulator comprising first, second, and third modulator tubes, an input circuit coupled to the cathodes and control electrodes of the modulator tubes, a source of direct energy for the tube anodes, a source of modulating energy for changing the effective anode potentials, means coupling the modulating source to the anode of the first tube, means coupling the modulating source in reversed polarity thru a capacitator to the anode of the second tube, means coupling the modulating source in reversed polarity thru an inductor to the anode of the third tube, and output circuits for the modulator tubes.

1,874,980. PIEZO-ELECTRIC CRYSTAL. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 2, 1928. Serial No. 309,875. 10 Claims. (Cl. 171—327.)



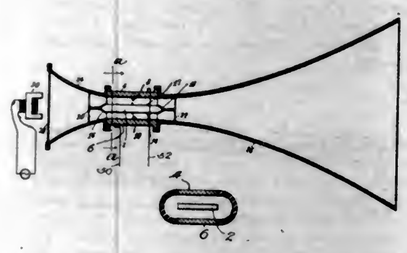
1. The method of reducing the wear of a piezo-electric crystal which includes keeping the crystal from contact with its electrodes by passing a stream of gas between the crystal and the electrodes.

1,874,981. VOLTAGE REGULATOR. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 2, 1928. Serial No. 309,876. 4 Claims. (Cl. 250—17.)



1. An inertialess voltage regulator for direct current comprising a voltage regulating electron discharge device the cathode to anode circuit of which is connected in series with the supply circuit, a second electron discharge device, a resistance in series with the supply circuit for determining the potential on the control electrode of the second electron discharge device, and a resistance in series with the anode of the second electron discharge device for determining the potential applied to the control electrode of the first electron discharge device so that the impedance of the first triode is varied in response to the load flowing therethrough but in inverse sense.

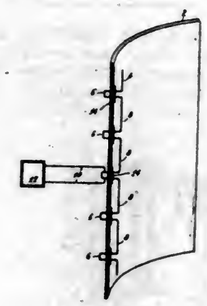
1,874,982. FREQUENCY CHANGER. CLARENCE W. HANSELL, Port Jefferson, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 20, 1929. Serial No. 372,237. 11 Claims. (Cl. 179—171.)



1. The method of varying the natural frequency at which a piezo-electric crystal vibrates in order to obtain frequency modulated energy which includes continuously varying the pressure of the medium surrounding the crystal in accordance with signal modulated energy.

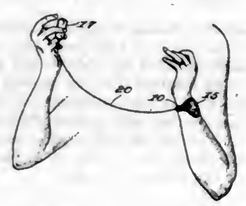
1,874,983. ULTRA SHORT WAVE ANTENNA SYSTEM. CLARENCE W. HANSELL, Port Jefferson, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed July 21, 1930. Serial No. 469,415. 5 Claims. (Cl. 250—33.)

1. In combination, a conductor, a plurality of wave lengths long having U-shaped loops one-half wave length long at alternate half wave lengths thereof, and a parabolic reflector, associated with and insulated from said conductor, for rendering electromagnetic action of the



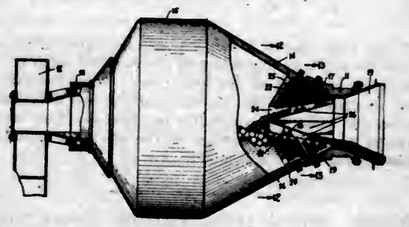
conductor substantially unidirectional, said reflector being constructed at certain portions thereof to receive the U-shaped loops for supporting said conductor.

1,874,984. BRACELET AND LORGNETTE HOLDER. ROSE HANSKAT, Chicago, Ill. Filed Nov. 24, 1931. Serial No. 577,102. 5 Claims. (Cl. 63—3.)



1. A bracelet having a portion thereof outwardly bulged on its inside face to form a space between the inside face of the bracelet and the wrist of the wearer within which a lorgnette may be disposed, a lorgnette adapted to be inserted in said space, and a flexible connection connecting the lorgnette to the bracelet.

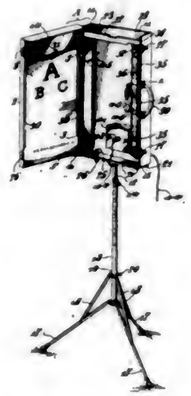
1,874,985. GRINDING MILL. HARLOWE HARDINGE, York, Pa., assignor to Hardinge Company, Incorporated, York, Pa., a Corporation of New York. Filed July 22, 1929. Serial No. 379,897. 13 Claims. (Cl. 83—9.)



1. In a grinding mill, the combination with a rotary drum, of a discharge device therein having vanes com-

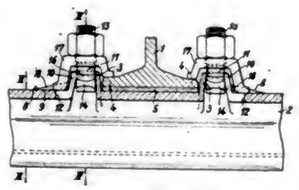
prising perforated material, and a wall separating the discharge device from the grinding zone of the mill, said wall being conical with its convex surface facing the grinding zone of the mill.

1,874,986. PORTABLE EYE TESTING APPARATUS. FREDERICK HARKER, South Ardmore, Pa., assignor to Wall & Ochs, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 29, 1930. Serial No. 448,219. 2 Claims. (Cl. 88—20.)



1. A portable eye testing apparatus comprising a casing having a main part and a lid part, the two parts having hinged connection with each other and adapted to be adjusted into open position relative to each other, a support for holding the said casing in position for use, means for adjustably connecting said support to the said casing, and means for mounting the said support within the main part of the said casing to thereby increase the portable characteristic of the said apparatus.

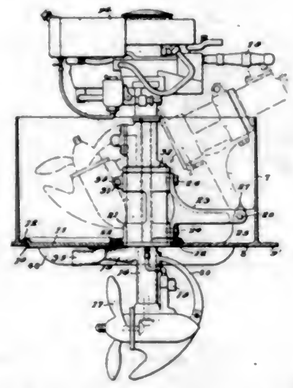
1,874,987. IRON SLEEPER. FRITZ HARTMANN, Rheinhausen (Lower Rhine) -Friemersheim, Germany, assignor to Fried. Krupp Aktiengesellschaft, Friedrich-Alfred-Hutte, Rheinhausen (Lower Rhine), Germany. Filed Feb. 24, 1932, Serial No. 594,900, and in Germany May 15, 1931. 6 Claims. (Cl. 238—61.)



1. An iron sleeper having transverse ribs adapted to determine the lateral position of the rail foot, each of these ribs being provided on the side remote from the rail foot with an opening for the insertion of the rail fixing means and on the same side gradually tapering away so that its surfaces run into the surface of the sleeper in the longitudinal direction of the latter.

1,874,988. MOTOR INSTALLATION. JAMES WILLARD HARVEY, Winthrop, Me. Filed July 13, 1931. Serial No. 550,303. 20 Claims. (Cl. 115—17.)

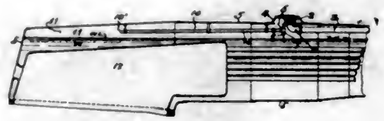
1. A motor installation for a boat comprising a casing having an opening in the bottom, a motor and propeller unit movable in the casing and having a bottom plate to close said opening, a clamping sleeve member for supporting the motor unit in the casing, an arm rigidly connected to said sleeve member and readily detachable means for pivotally supporting the front end of said arm in the bottom of said casing to permit the quick detachment of the motor unit from the casing.



1,874,989. METHOD AND COMPOSITION FOR CONTROLLING MOISTURE. MORTIMER T. HARVEY, East Orange, N. J., assignor to The Harvel Corporation, Newark, N. J., a Corporation of New Jersey. Filed May 9, 1930. Serial No. 451,206. 7 Claims. (Cl. 131—30.)

1. A moisture conditioning unit for tobacco and the like comprising substantially completely dehydrated bisodium phosphate in a pulverized state with sufficient water therewith to bind the particles into a cake.

1,874,990. STEAM SEPARATOR. CHARLES GILBERT HAWLEY, Chicago, Ill., assignor to Centrifix Corporation, Cleveland, Ohio, a Corporation of Ohio. Filed July 30, 1930. Serial No. 471,769. 2 Claims. (Cl. 122—491.)

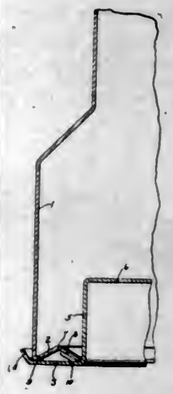


1. A steam boiler of elongated form and having a steam outlet, in combination with a steam separator positioned in the upper part thereof, at said steam outlet, an ejector incorporated with said separator and forming the water drain thereof, and, a pipe leading from a remote steam space in the boiler and serving said ejector.

1,874,991. BURIAL VAULT. ELMER HEDEEN, Bucyrus, Ohio, assignor to Charles F. Michael, Bucyrus, Ohio. Filed June 20, 1930. Serial No. 462,528. 1 Claim. (Cl. 27—35.)

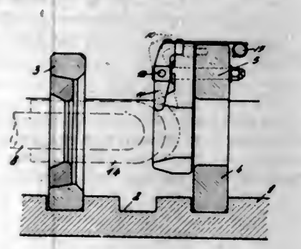
A burial vault comprising a raised platform for supporting a casket, a vertical wall depending from the platform and having a flat horizontal ledge wall extending outwardly therefrom and disposed substantially parallel to the platform, a vault cover having vertical side

walls which latter are extended inwardly and are provided with concave portions to afford a pair of spaced contact parts, said parts seating upon the ledge and one



of which parts is disposed closely adjacent to the vertical wall of the platform, the space between the contact parts affording a pocket which surrounds the platform.

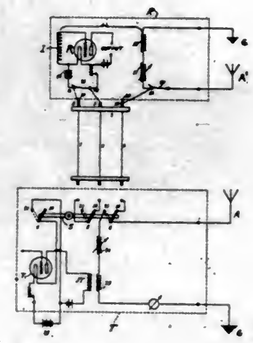
1,874,992. MANDREL BAR GUIDE. HEINRICH HEETKAMP, Duisburg, Germany, assignor to Demag Aktiengesellschaft, Duisburg, Germany. Filed Sept. 4, 1930, Serial No. 479,784, and in Germany Sept. 12, 1929. 2 Claims. (Cl. 205—22.)



1. In a tube push bench provided with a bed transversely groved to receive draw rings, a plurality of mandrel bar support carriers adapted to be removably positioned in said bed between said draw rings, a plurality of pivoted mandrel bar supports carried by each of said carriers and adapted to swing into the working position under their own weight, and locking devices for said mandrel bar supports also mounted on said carriers and disposed partly in the path of the work and adapted to be moved out of such path to unlock the mandrel bar supports to allow the mandrel bar supports to separate to allow the work to pass.

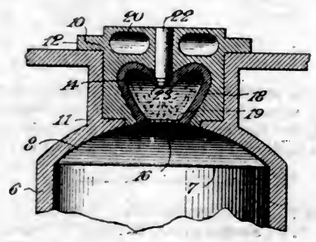
1,874,993. RADIO APPARATUS FOR INTERCOMMUNICATION OR DUPLEX OPERATION. KARL HEFFNER, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Apr. 24, 1929, Serial No. 357,635, and in Germany May 5, 1928. 4 Claims. (Cl. 250—13.)

1. In radio apparatus for duplex operation the combination of radio receiving apparatus including a thermionic tube having a cathode normally in circuit with a heating source, and an aerial system normally closed, a radio transmitter including a thermionic tube and an aerial system, and means for adapting said apparatus for intercommunication including a plug connection terminating in contacts in the radio transmitter circuits at the one



end and being adapted to be plugged into the radio receiver at the other end, said plug including means operative when plugged in to the receiver to interrupt the receiver antenna circuit and to complete the heating circuit of the thermionic tube in said receiver.

1,874,994. COMBUSTION CHAMBER FOR DIESEL ENGINES. FREDERICK G. HEHR, New York, N. Y., assignor to Aerol Engine Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 3, 1929. Serial No. 383,229. 7 Claims. (Cl. 123—32.)

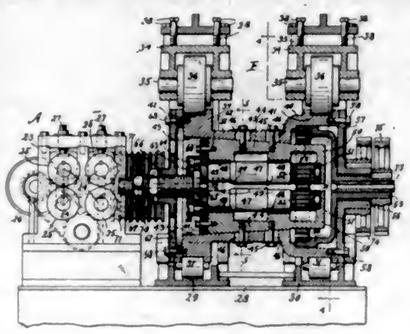


1. In an oil engine, a power cylinder, a separate combustion head therefor formed with a combustion chamber having a discharge outlet, and an inner lining for said combustion chamber and outlet formed mainly of cast iron, said head being formed of a metal having relatively higher heat conductivity than said lining, said inner lining being in intimate contact with the metal forming said head and permanently formed therein.

1,874,995. ROLLING MACHINE. WILLIAM J. HEINAUER, Massillon, Ohio, assignor, by mesne assignments, to The Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 26, 1930. Serial No. 504,809. 12 Claims. (Cl. 80—22.)

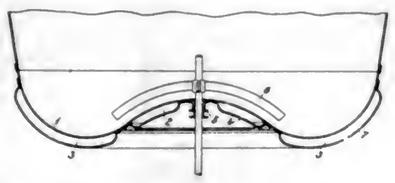
7. In a machine for rolling rods, the combination of a plurality of rolls arranged with their axes longitudinally of the rod, means for feeding the rod through the

machine, said rolls having parallel faces for acting on the rod and tapering faces adjoining said parallel faces at the ends thereof where the rod enters the rolls, a rotat-



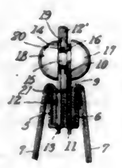
ing support in which said rolls are mounted, means for driving said rolls, and means for rotating said support in the same direction as that in which said rolls rotate.

1,874,996. STEAM HEATED BOILING VESSEL. ALFRED HELLER, Mahlow, near Potsdam, Germany, assignor to Weigelwerk Aktiengesellschaft, Neisse-Neuland, Germany. Filed Feb. 17, 1931, Serial No. 516,457, and in Germany May 14, 1930. 5 Claims. (Cl. 257—211.)



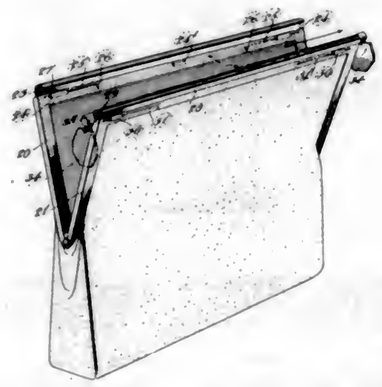
1. A boiling apparatus comprising a vessel; and at least two jackets secured to the bottom of the vessel forming a central jacket and an outer jacket, said jackets adapted to receive a medium for heating the material in the vessel.

1,874,997. BAG FASTENER. WILLIAM C. HIERING, Newark, N. J., assignor to J. E. Mergott Company, Newark, N. J., a Corporation of Delaware. Filed Nov. 12, 1930. Serial No. 495,099. 2 Claims. (Cl. 292—175.)



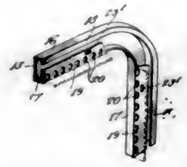
1. In a hand bag frame having inwardly channeled U-shaped members hinged together, a latching device comprising plates secured to the bottoms of the channels and extending upwardly between the walls thereof, one of said plates having an enlarged portion provided with a recess and a slot, a spring positioned in the recess, a stud slidably mounted in the slot and normally urged downwardly by the spring, means to retain the stud in the slot, and a cam head on the stud to cam over and engage the other plate when the frame members are pressed together.

1,874,998. BAG FASTENER. WILLIAM C. HIERING, Newark, N. J., assignor to J. E. Mergott Company, Newark, N. J., a Corporation of Delaware. Filed Sept. 17, 1931. Serial No. 563,303. 9 Claims. (Cl. 292—83.)



3. A fastening device, comprising a tubular member having a slot, a second member having a bead arranged to enter the slot to hold the members together, and means slidably mounted in the tubular member including a stem projecting through the slot, to force the bead out of the slot to disengage the members.

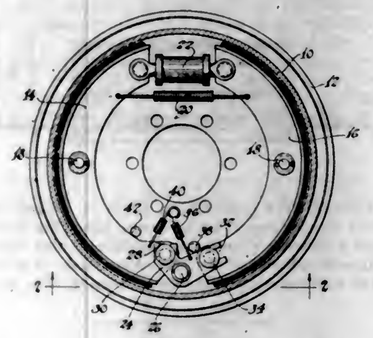
1,874,999. HAND BAG. WILLIAM C. HIERING, Newark, N. J., assignor to J. E. Mergott Company, Newark, N. J., a Corporation of Delaware. Filed Jan. 30, 1932 Serial No. 589,844. 7 Claims. (Cl. 150—29.)



1. In a band bag, a frame member comprising an inner side wall provided with top and bottom flanges, the top flanges having a flange bent downwardly parallel to the inner side wall, and covering material positioned between the flanges, the bottom flange having a portion bent upward to present an outer side wall to securely hold the covering material in the frame member.

1,875,000. BRAKE. WILLIAM C. HILLERMAN, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 25, 1930. Serial No. 491,167. 2 Claims. (Cl. 188—78.)

1. A brake comprising a pair of friction devices, applying means for exerting a balanced spreading force on the shoes adjacent their ends, and an anchorage for the shoe ends opposite the applying means and including a pivotally mounted bellcrank lever having one arm radially slotted

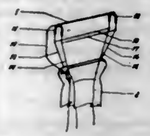


and embracing a projection on one shoe and having the other arm circumferentially slotted and embracing a projection on the other shoe.

1,875,001. EMULSIFIABLE OIL AND METHOD OF PRODUCING SAME. ARCHIE B. HOEL, Drexel Hill, Pa., assignor to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 24, 1929. Serial No. 365,779. 14 Claims. (Cl. 87—9.)

1. The process which consists in mixing mineral oil with saponified sulfonated sperm oil to produce a clear, homogeneous, non-gelatinous emulsifiable oil, and mixing the emulsifiable oil with water to form a non-frothing stable emulsion.

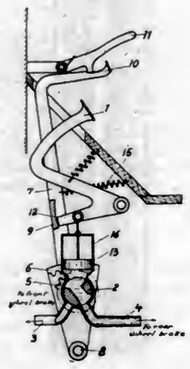
1,875,002. DISCHARGE TUBE WITH GLOW CATHODE. GILLES HOLST, Eindhoven, Netherlands, assignor to Naamlooze Vennootschap Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Filed Mar. 17, 1924, Serial No. 699 906, and in the Netherlands Mar. 29, 1923. 8 Claims. (Cl. 250—27.5.)



8. An electron discharge tube comprising an anode, a grid, and an elongated thermally conductive cathode capable when heated of emitting electrons from its middle portion, and a pair of electric heaters positioned adjacent the end portions only of said cathode and spaced apart sufficiently to permit an unobstructed emission of electrons from the outer surface of the middle portion of said cathode, each of said heaters comprising a wire loop outside of and in thermally conductive relation to the cathode end adjacent said loop.

1,875,003. MASTER OPERATOR FOR HYDRAULIC BRAKE SYSTEMS AND THE LIKE. GUIDO HORN, Berlin-Weissensee, Germany. Filed Nov. 2, 1928, Serial No. 316,824, and in Germany Nov. 8, 1927. 1 Claim. (Cl. 188—152.)

A master operator for hydraulic brake systems for vehicles comprising a valve, a pair of pressure conduits associated with said valve, one of said conduits leading to a front wheel brake and the other of said conduits leading to a rear wheel brake, a foot lever adapted to supply a pressure medium to said valve, a further auxiliary spring-weighted foot lever for operating said valve to permit access of said pressure medium either only to said rear wheel brake or to said rear wheel brake and said front wheel brake simultaneously, a locking lever having a stop adapted to selectively keep said auxiliary spring-



weighted foot lever in releasable condition while permitting access of said pressure medium to said rear wheel brake only, and stops on both of said foot levers, said latter stops adapted to prevent said auxiliary lever when disengaged to return into its normal position before said first-mentioned foot lever has attained its position of rest.

1,875,004. PERMANENT MAGNET. GEORGE DONALD LEE HORSBURGH and HENRY SWIFT LEVICK, Sheffield, England, assignors of one-half to Swift Levick and Sons Limited, Sheffield, England, a British Company, and one-half to Darwins Limited, Sheffield, England, a British Company. Filed Jan. 31, 1930, Serial No. 424,957, and in Great Britain Aug. 22, 1929. 18 Claims. (Cl. 175—21.)

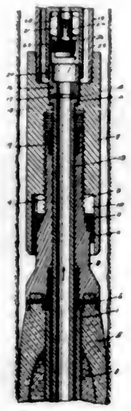


1. A magnet block of permanent magnet steel and having a body portion and including a loop-like limb extending outwardly or radially from the base of the body portion of which it forms an integral or mechanically jointless part and inwardly towards the crown of the body portion, and a gap around the crown of said body portion.

1,875,005. COATING MATERIAL AND PROCESSES OF PREPARING SAME. ROBERT T. HUCKS, Parlin, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 15, 1927. Serial No. 226,527. 13 Claims. (Cl. 134—79.)

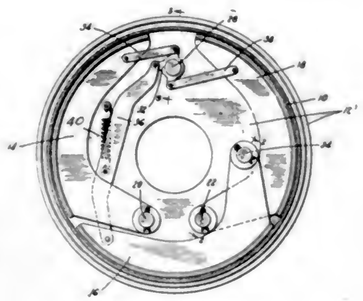
1. The method of making a coating composition which comprises mixing a water wet pigment with a substantially non-aqueous cellulose compound containing a water repellant substance until the water carried by the pigment separates from the composition, and then removing the separated water.

1,875,006. WELL TESTER. GRANVILLE A. HUMASON, Houston, Tex., assignor of one-third to Margia Manning, Brooklyn, N. Y. Filed Mar. 9, 1931. Serial No. 521,161. 4 Claims. (Cl. 166—1.)



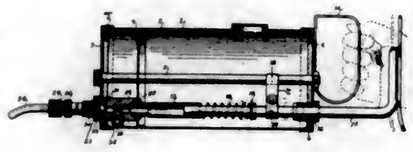
1. A well tester including a tubular operating stem, a collar attached to the lower end thereof, a packing device having an expansible packing sleeve and upper and lower couplings connected thereto, the upper coupling having a threaded connection with said collar, a tubular packer support attached to the upper coupling and extending through said sleeve and lower coupling, a pipe connected to and extended beneath said lower coupling, a tubular plunger attached to the lower end of said support and working in said pipe beneath the lower coupling and having fluid passageway therethrough, a tube connected to said collar and extending down through said support and having a lower end opening, valves on the lower end of said tube adjustable into position to alternately close and open said passageway by a one way rotation of the stem.

1,875,007. BRAKE. GEORGE H. HUNT, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 28, 1929. Serial No. 343,519. 10 Claims. (Cl. 188—78.)



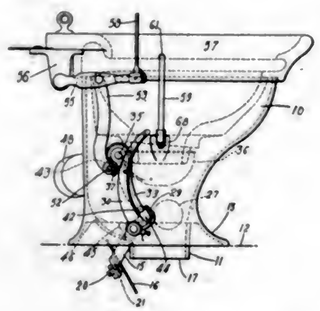
1. A brake comprising at least three individually anchored shoes, two of which are cross-anchored, and a single applying device acting simultaneously on the three shoes.

1,875,008. PRESSURE OILER. FRED I. JADEN, Hastings, Nebr. Filed Jan. 30, 1930, Serial No. 424,671. Renewed July 13, 1932. 13 Claims. (Cl. 221—51.)



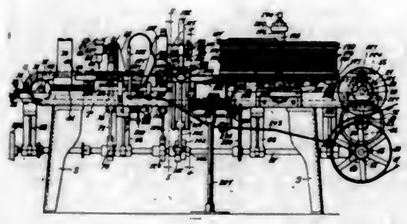
1. Pressure oiler comprising a reservoir, a pump in said reservoir in communication therewith including a plunger rod and a cylinder therefor, a hollow swivelled joint supporting said cylinder at the end remote from said plunger rod and forming a conduit communicating with said cylinder.

1,875,009. WATER CLOSET. CLARENCE H. JOHNSON, Chicago, Ill., assignor, by mesne assignments, to Pullman Car & Manufacturing Corporation, a Corporation of Delaware. Filed Nov. 14, 1930. Serial No. 495,631. 13 Claims. (Cl. 4—85.)



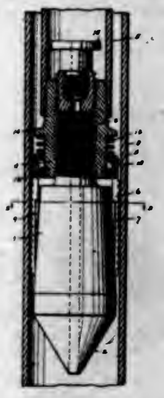
1. In a water closet having a bowl, a supporting stand and a flushing valve, upper and lower dumping pans, valve operating mechanism controlling said pans, and lost motion devices permitting separate movement of said upper pan independently of said operating mechanism, flushing valve, and the lower pan.

1,875,010. APPARATUS FOR ASSEMBLING RECEPTACLE CLOSURES. JOHN A. JOHNSON, Woodhaven, N. Y. Filed Oct. 22, 1930. Serial No. 490,402. 18 Claims. (Cl. 113—80.)



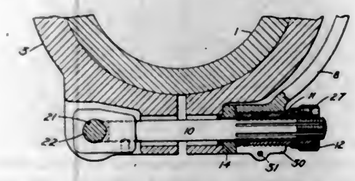
1. In assembling apparatus for closure caps, an endless flexible conveyor adapted to travel at a predetermined continuous rate of speed and arranged with successive cap supporting seats extending from opposite sides of the conveyor, means to deliver caps to the cap supporting seats, devices relative to which the caps transported by the conveyor are passed to apply sealing disks to the successive caps, a head rotatably mounted with a peripheral portion thereof in juxtaposed relation to the caps supporting seats, and a series of plungers carried by the head and movable toward and away from the head to engage the caps in the supporting seats of the conveyor and transfer the same from the conveyor to the head and place the sealing disks in the caps under pressure.

1,875,011. SPEAR. JOHN S. JOHNSON, Luling, Tex. Filed Apr. 9, 1931. Serial No. 528,870. 9 Claims. (Cl. 249—96.)



1. A releasable spear for pulling pipe including a mandrel having a tapered seat, a slip support, a slip carried by said support and adapted to engage the pipe to be pulled and having a sent, and means for connecting the mandrel to an operating string and through which the mandrel may be actuated into one position, relative to the slip, to bring said seats into cooperating relation whereby the slip is forced into secure engagement with the pipe, and into another position to carry the seats out of cooperating relation to permit the slip to release said pipe.

1,875,012. CLAMP ADJUSTER. VICTOR JULLIEN, Cincinnati, Ohio, assignor to The Cincinnati Bickford Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 12, 1930. Serial No. 495,084. 4 Claims. (Cl. 77—28.)



1. A clamping mechanism for a radial drilling machine combining a support; a member mounted thereon and adapted to be clamped thereto; clamping means therefor including a draw bolt, a cam member operatively engaging said draw bolt, a sleeve member adjustable axially on said bolt, and a clamp nut threaded on said sleeve and cooperatively engaging the member to be clamped; power means for rotating said cam member through a limited arc to effect clamping action; means for shifting the sleeve on said bolt to vary the effectiveness of said power actuating means; and means for adjusting said clamp nut angularly to effect clamping action independently of said power means.

1,875,013. METHOD OF PRODUCING COMPOUNDS OF THE CARNALLITE TYPE. OSCAR KASELITZ, Berlin, Germany. Filed Oct. 18, 1930, Serial No. 489,712, and in Germany Nov. 28, 1929. 9 Claims. (Cl. 23—87.)

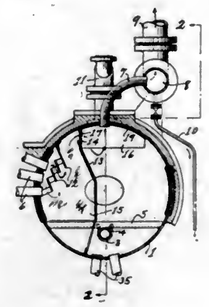
1. The method of producing a double salt of the carnallite type comprising adding to a mother liquor containing such compound crystallized magnesium chloride hexahydrate and the chloride of the other basic constituent of the double salt, allowing the double salt to crystallize out and reusing the mother liquor in a fresh operation.

1,875,014. PRODUCTION OF ALKALI METAL NITRATES. OSCAR KASELITZ, Berlin, Germany. Filed Jan. 29, 1931, Serial No. 512,195, and in Germany May 2, 1929. 9 Claims. (Cl. 23—102.)

1. The method of producing alkali metal nitrates by acting on an alkali metal chloride with a nitrogen oxide comprising acting on a solid alkali metal chloride with nitrous gases at a temperature above the condensation temperature of said gases, conducting the escaping gases being a mixture of nitrosyl chloride and chlorine over a heated metal nitrate and causing the nitrogen oxides formed in this reaction to act on a fresh portion of the solid alkali metal chloride.

4. The method of producing alkali metal nitrates by acting on an alkali metal chloride with a nitrogen oxide comprising subjecting a solid alkali metal chloride to the action of a gas mixture containing a nitrogen oxide and water vapour and maintaining the reaction temperature above the dew points of the constituents of said gas mixture to prevent the separating out of a liquid phase.

1,875,015. BAFFLE FOR STEAM DRUMS. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 27, 1928. Serial No. 322,119. 4 Claims. (Cl. 122—491.)



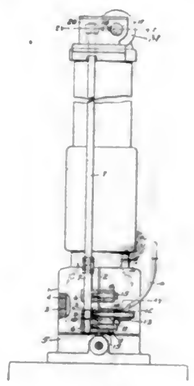
1. In a steam and water drum, a steam and water separator comprising a series of boxes open at the bottom and a baffle plate at one end of said boxes, the upper edge of said plate being spaced from the drum but extending above the lower edges of said boxes, and the lower edge thereof extending below the normal water level therein, steam outlet pipes connected to the respective boxes, and circulators opening into the drum on the side of said plate away from the boxes.

1,875,016. POWER BRAKED MOBILE DRILL. DAVID C. KLAUSMEYER, Cincinnati, Ohio, assignor to The Cincinnati Bickford Tool Company, Oakley, Cincinnati, Ohio, a Corporation of Ohio. Original application filed Oct. 8, 1924, Serial No. 742,376. Divided and this application filed May 1, 1928. Serial No. 274,258. 12 Claims. (Cl. 188—43.)



1. In a machine tool, a base; a support therefor; a pair of clamps located in spaced relation on said base for securing the base to its support; an eccentric device for actuating each of said clamps to cause them to grip said support; a shaft carrying each of said eccentric devices; a rock-arm secured to each of said shafts; an equalizing bar pivotally connected to both of said rock-arms; an actuating member connected to said equalizing bar, and fluid pressure actuated means for shifting said actuating member.

1,875,017. DRILL COLUMN CLAMPING MEANS. DAVID C. KLAUSMEYER, Cincinnati, Ohio, assignor to The Cincinnati Bickford Tool Co., Oakley, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 12, 1929. Serial No. 346,462. 2 Claims. (Cl. 77—28.)



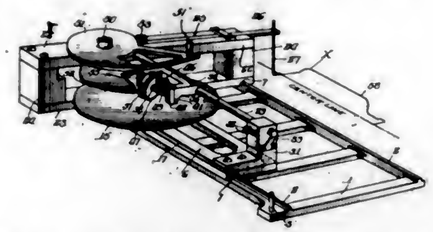
1. A clamping mechanism combining a first fixed element; a second contractile and expansile element adapted to engage said fixed element; means to cause contraction and expansion of the second element, said means including an eccentric element operatively connected with the second element; an oscillatory shaft carrying said eccentric element; power means including a reversible electric motor and an electric circuit embodying two self-opening switches to oscillate said shaft first in one direction to effect closing of said clamp and then in the opposite direction to effect opening of said clamp, said power means being adapted to be rendered ineffective when said eccentric element reaches approximately its dead center position in which it effects clamping of said second element to said first element; an emergency stop to arrest the movement of said clamp actuating means should the eccentric inadvertently pass through said dead center position; and resilient means yieldingly to resist the movement of said clamp actuating means in its unclamping movement.

1,875,018. FIBROUS PRODUCT AND METHOD OF MAKING THE SAME. MAX H. KLIEPOTH, Madison, Wis., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Filed June 21, 1930. Serial No. 462,924. 15 Claims. (Cl. 92—21.)

1. The method of manufacturing a fibrous product which comprises heating an intimate mixture of fibers containing not more than 10 per cent moisture and finely-powdered, adhering, solid fusible binder sufficiently to cause said binder to adhere more firmly to said fibers, suspending said mixture of fibers and binder in water, and forming a fibrous product from the wet pulp thus produced.

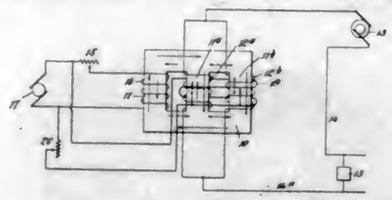
3. The method of manufacturing a fibrous product which comprises shredding fibrous material containing not more than 10 per cent moisture with a solid fusible binder to produce an intimate mixture, heating said mixture sufficiently to cause said binder to adhere more firmly to said fibers, suspending said mixture in water, forming a fibrous produce from the wet pulp thus produced, and drying said product.

1,875,019. MEASURING DEVICE. JOHN F. KOEPPEN, Jr., Marion, Ind., assignor of seven-sixteenths to John P. Koeppen and one-eighth to Mary E. Koeppen, Marion, Ind. Filed May 28, 1930. Serial No. 456,512. 5 Claims. (Cl. 235—61.)



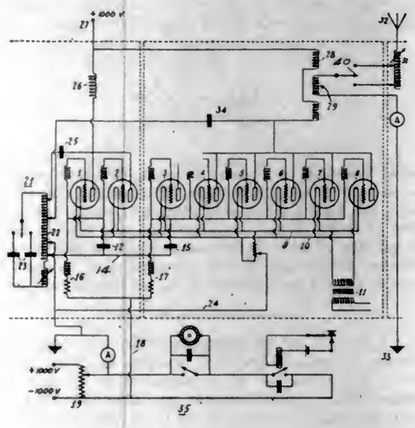
1. A device for indicating the cubical contents of a symmetrical article from a diagram showing a sectional contour of said article comprising a tracing element adapted to follow said sectional contour, means for actuating the tracing element to follow said sectional contour, an indicator having graduations to indicate cubical measurement, and means controlled by said first named means for operating the indicating means.

1,875,020. ELECTRIC CONTROLLING APPARATUS. HAROUTIUN K. KOUYOUMJIAN, Providence, R. I., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed May 27, 1929. Serial No. 366,247. 6 Claims. (Cl. 171—242.)



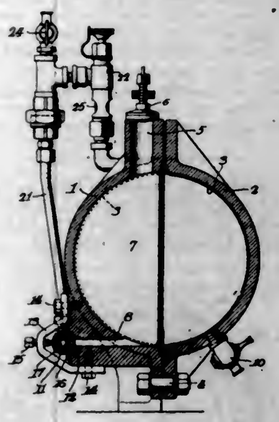
1. A reactor for alternating current circuits comprising a core, an alternating current winding thereon, a direct current winding on said core, said direct current winding being subjected to the total flux due to said alternating current winding, and a second direct current winding on said core for magnetizing said core, said second direct current winding not being subjected to the flux due to said alternating current winding.

1,875,021. RADIO SIGNALING SYSTEM. FRED HUTTON KROGER, Brooklyn, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 22, 1926. Serial No. 110,895. 17 Claims. (Cl. 250—17.)



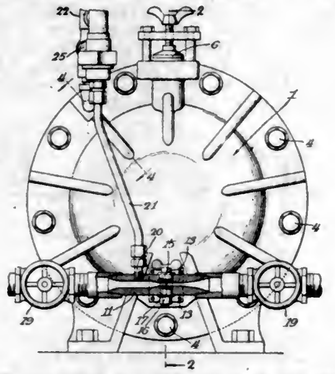
1. A radio signaling system comprising an oscillation generator, an oscillation amplifier amplifying oscillations generated by said generator, and, an oscillation neutralizing circuit connecting the output circuit of said amplifier to a coil electrode of said generator for preventing the generation of energy of undesired frequencies.

1,875,022. FLUID INJECTOR. RICHARD E. KRUEGER, Madison, Wis., assignor to General Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,624. 10 Claims. (Cl. 210—40.)



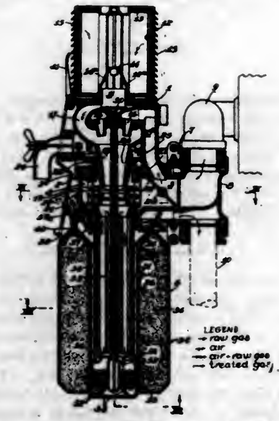
1. In a liquid injector, the combination of instrumentalities forming a passage for the liquid that is to receive the injection therein of another liquid, having provisions to provide a differential pressure as between two successive points in said passage, and pressure operated means forming a structural separation between one liquid and the other and responsive to and operable by the higher pressure at one point to force the said other liquid into said passage at said other point, said means comprising a hollow body composed of halves separably fastened together, forming a casing having two sections, with a flexible diaphragm clamped between the two sections, all of said instrumentalities and liquid connections being supported on one section, whereby the other section can be removed like a cover without breaking or disturbing any of the liquid connections.

1,875,023. FLUID INJECTOR. RICHARD E. KRUEGER, Madison, Wis., assignor to General Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Filed Sept. 22, 1930. Serial No. 483,482. 4 Claims. (Cl. 210—40.)



2. In a liquid injector, the combination of instrumentalities forming a passage for the liquid that is to receive the injection therein of another liquid, having provisions to provide a differential pressure as between two successive points in said passage, and pressure operated means forming a structural separation between one liquid and the other and responsive to and operable by the higher pressure at one point to force said other liquid into said passage at said other point, said instrumentalities and provisions comprising a Venturi tube having a removable throat portion provided with a lateral inlet at the point of greatest restriction of said tube, said throat portion having said lateral inlet for the liquid to be injected into the other liquid, said inlet comprising a tube projecting from the inner side of the Venturi tube, and said injector having a bore enclosing said inlet tube, the bore being of greater diameter than the inlet tube.

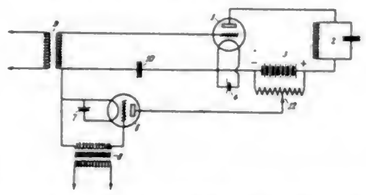
1,875,024. APPARATUS FOR TREATING EXHAUST GASES OF INTERNAL COMBUSTION ENGINES. CONSTANT J. KRYZANOWSKY, Baltimore, Md., assignor to Mine Safety Appliances Company, Pittsburgh, Pa., a Corporation of Pennsylvania, and H. J. Newmark, New York, N. Y. Filed Jan. 11, 1929. Serial No. 331,866. 10 Claims. (Cl. 23—288.)



1. Apparatus for catalytically purifying exhaust gas, comprising a canister provided with an inlet for raw

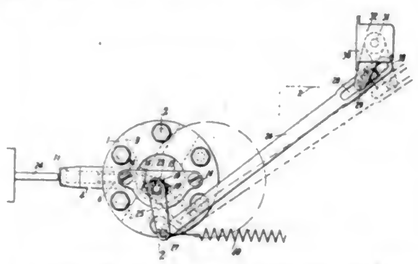
gas and an outlet for purified gas, an oxidizing catalyst disposed in said canister in the path of said gas, a multi-stage aspirating nozzle associated with the inlet for entraining air upon passage of said raw gas through the nozzle, and thermo-responsive means associated with one stage of the nozzle to vary its entraining aperture in response to changes in the temperature of the raw gas.

1,875,025. GRID MODULATED TUBE. WILHELM KUMMERER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie, m. b. H., Berlin, Germany, a Corporation of Germany. Filed Jan. 30, 1929, Serial No. 336,120, and in Germany Dec. 31, 1927. 2 Claims. (Cl. 179—171.)



1. In a radio frequency signalling system in combination with a thermionic amplifier device having input and output electrodes and alternating current output and input circuits associated with said electrodes, a source of high frequency energy connected to said input circuit, a condenser in series with said input circuit, a source of direct current in said output circuit, a variable grid leak connected in shunt across said series condenser, said shunt connection including in series said grid leak and a portion of the direct current potential source in said output circuit.

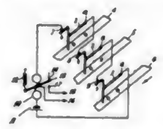
1,875,026. COUNTER FOR MACHINES. HARRY C. KUNKELMAN and GEORGE L. BECKER, Dayton, Ohio, assignors to Ohmer Fare Register Company, Dayton, Ohio. Filed July 13, 1928. Serial No. 292,356. 5 Claims. (Cl. 235—98.)



2. In counting mechanism for rotatable turret head machines, a stationarily mounted counter, a shaft supported by said turret head, a plurality of arms mounted on said shaft, means whereby one of said arms is actuated by the forward movement of the stock to thereby rotate said shaft and the other of said arms, and means operatively connecting the last mentioned arm with said counter.

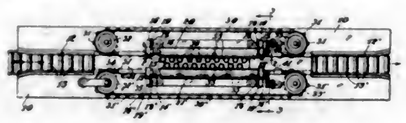
1,875,027. ATMOSPHERIC DISTURBANCE ELIMINATION. KARL KÜPFMÜLLER, Danzig-Langfuhr, Free State of Danzig, and AUGUST JIPP, Berlin-Spandau, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed July 20, 1929, Serial No. 379,693, and in Germany Feb. 25, 1928. 3 Claims. (Cl. 250—8.)

1. In a device of the kind described, a plurality of recording mediums each thereof having signal records impressed thereon in accordance with signals received from a short wave transmitting station transmitting the same signal a plurality of times, one message as received therefrom being impressed on each of said mediums, an electrical circuit comprising a single source of power and a plurality of contacts in series, said contacts being adapted to



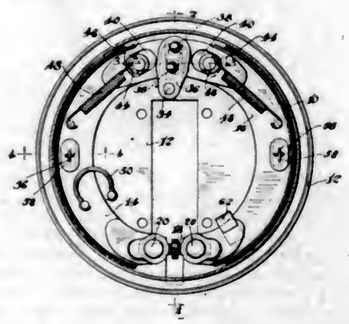
control the flow of current in said circuit, a relay device in said circuit, said relay device being operative to record the signal when said circuit is open, and a plurality of feeler devices connected to said contact devices and adapted to sense the signal records on said recording mediums, said feeler devices being adapted to open said contacts when a perforation in the associated tape passes.

1,875,028. BEAD FORMING DEVICE. YERVANT H. KURKJIAN, Hawthorne, N. J., assignor to Carl J. Schmid, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 7, 1930. Serial No. 434,153. 25 Claims. (Cl. 18—2.)



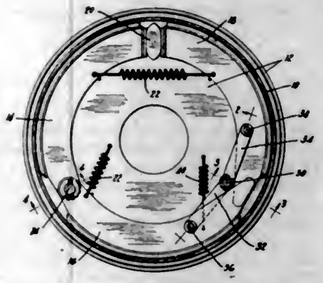
4. In a bead forming device, in combination, a movable platform, a plurality of extended revoluble forms carried by said platform, a run-way within which said platform is movable, a plurality of pinions the revolution of each one of which will revolve a form, a plurality of separate rack sections forming a continuous rack carried by said runway meshable with said pinions when said platform is moved within said run-way, resilient means carried by each said rack section causing each said rack section to mesh with said pinions when said platform is moved within said run-way, means capable of moving said platform, a revoluble inclined brush abutable upon said forms during the passage of said platform through said run-way and means capable of revolving said brush.

1,875,029. BRAKE. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 10, 1928. Serial No. 313,412. 4 Claims. (Cl. 188—78.)



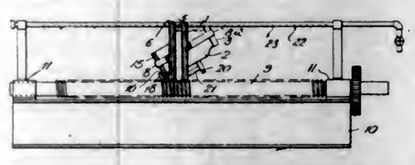
1. A brake comprising a floating friction device having elongated openings in its opposite ends, in combination with anchor pins extending through said openings, and a single roller encircling each of said pins and arranged for anchoring engagement with the end of one of said openings.

1,875,030. BRAKE. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 25, 1929. Serial No. 342,539. 13 Claims. (Cl. 188—78.)



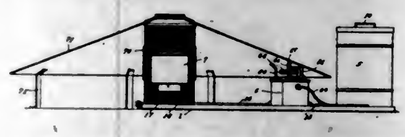
1. A brake comprising, in combination, a pair of shoes one of which has at its end spaced portions embracing and overlapping the end of the other, a fixed anchor in the angle between the overlapping ends of the shoes and arranged to serve as a stop engaged by both shoes when the brake is released, and means connecting said anchor to both shoes.

1,875,031. MACHINE FOR MAKING WAX BOTTLES. HENRY B. LANDAU, Flushing, N. Y., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Nov. 10, 1928. Serial No. 318,394. 15 Claims. (Cl. 18—26.)



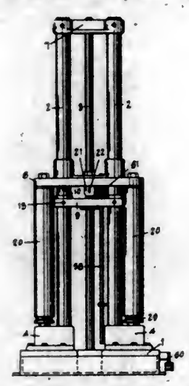
10. An apparatus for producing hollow elongated objects comprising an elongated mold, an annular rotary carriage therefor having an external thread around its periphery, a threaded shaft engaging the periphery of said carriage to rotate the latter about a substantially horizontal axis, said carriage being constructed to support the mold with its longitudinal axis at an indication other than 90° to the axis about which the carriage is rotated, and means for rotating said mold about its longitudinal axis.

1,875,032. BROODER HEATER. JACOB T. LANDGRAF and ROY G. MILLER, Rockford, Ill., assignors to J. W. Miller Co., Rockford, Ill., a Corporation of Illinois. Filed Dec. 9, 1929. Serial No. 412,586. 6 Claims. (Cl. 236—6.)



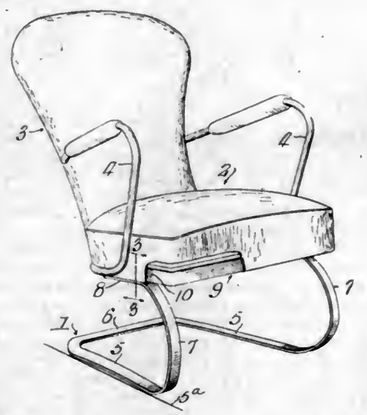
1. In combination, a burner, a fuel supply connected for gravity feed thereto, a fuel control chamber in the connection controlling the oil level in the burner, said chamber having an inlet and an outlet, a float valve structure controlling the chamber inlet, and heat responsive means connected to said float valve structure to vary the burner oil level to maintain the surrounding atmosphere at a constant temperature.

1,875,033. BROACHING MACHINE. FRANCIS J. LAPOINTE, Ann Arbor, Mich. Filed Sept. 6, 1928. Serial No. 304,247. 2 Claims. (Cl. 90—23.)



1. In a vertical broaching machine, the combination of a face plate for maintaining the work in position, a reciprocable crosshead located above the face plate, means for connecting a broaching tool to the crosshead, a base below the work plate cylinder heads connected to the said crosshead on each side of the broach connecting means, cylinders connected to the said cylinder heads, pistons located in the cylinders the top of the pistons located above the face plate, a pair of piston sleeves attached to said base for supporting the said pistons, each of the pistons having passageways therethrough, one connecting the exterior of the sleeve at a point on one side of the piston, the other connecting at a point intermediate the piston and the said cylinder head, the cylinders having walls surrounding the said sleeves.

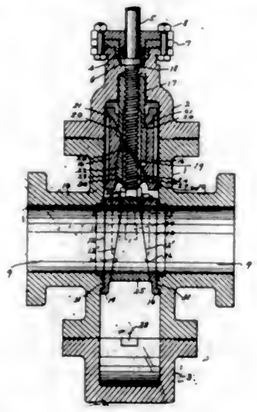
1,875,034. SPRING BASE FURNITURE. LEWIS LARSEN, Menominee, Mich., assignor to Heywood-Wakefield Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 26, 1931. Serial No. 518,358. 2 Claims. (Cl. 155—50.)



1. A base for an article of furniture embodying therein, upwardly bowed floor engaging side members' connected together at their rear ends and rearwardly extending

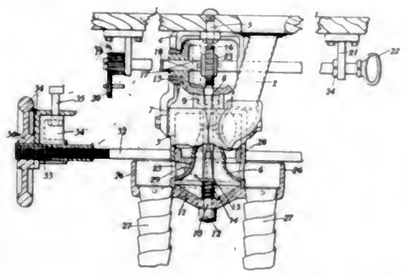
seat frame engaging members spaced above said side members and each connected to the front end of an associated side member by a substantially semi-cylindrical curved part.

1,875,035. VALVE. CHARLES R. LAW, WILLIAM LAW, and CHARLES T. LAW, Mansfield, La., assignors to The Law Company, Incorporated, Mansfield, La., a Corporation of Louisiana. Filed Nov. 15, 1927, Serial No. 233,500. Renewed Nov. 13, 1931. 11 Claims. (Cl. 251—71.)



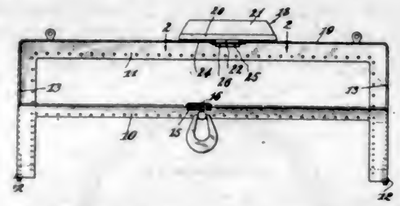
1. The combination with a fluid conduit, of a casing incorporated into said conduit, valves in the casing movable into active position to close said conduit and into inactive position to open said conduit, a ring having flared faces operatively connected with the valves, sleeves, one on each side of said ring, said sleeves having sloping faces opposite the ring faces, carriers pivotally mounted on the sleeves and mean on the ring adapted to engage said carriers to move said sleeves with the ring as the valves are moved into inactive position.

1,875,036. SEED DRILL. HUGH MARTIN LEAKE, Cambridge, England. Filed May 9, 1930, Serial No. 451,055, and in Great Britain May 21, 1929. 10 Claims. (Cl. 221—130.)



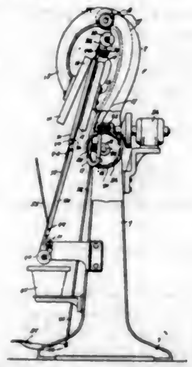
1. Seed distributing means for seed drills, comprising in combination a cylindrical casing, seed inlet means to said casing, an axially rotating member in said casing, a seed discharge aperture in the wall of said casing located adjacent the periphery of the rotating member, a coulter tube associated with said aperture, a baffle member associated with said aperture and shaped to prevent direct access of seed to said aperture, whilst permitting seed to be carried to said aperture by the periphery of the rotating member, and means for vibrating said rotating member, said means being capable of being thrown out of action when desired.

1,875,037. FASTENING MEANS FOR BAG FRAMES. HARRY LEBERMAN, New York, N. Y., assignor to Groove Lock Co. Inc., New York, N. Y., a Corporation of New York. Filed Dec. 27, 1930. Serial No. 505,048. 3 Claims. (Cl. 292—152.)



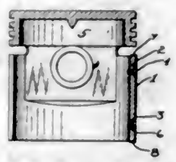
1. Fastening means for bag frames having a pair of frame members connected together for movement toward and away from each other, said means comprising a retainer piece on one member with an upstanding catch lug forming an open space between it and the member, a slide having opposing rigid plates disposed in flatwise sliding contact with the outer and inner faces of the second member, a shank united with said plates and providing a rigid connection therebetween, means affording a guide for said shank, and a projection on the shank adapted to enter said open space and engage behind said catch lug.

1,875,038. CONVEYER GARMENT PRESS. JAMES CAMROD LEDBETTER, New York, N. Y., assignor to The Prosperity Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed June 4, 1927. Serial No. 196,416. 18 Claims. (Cl. 223—17.)



1. A garment finishing tray comprising a frame, a plurality of sets of garment holding forms carried by the frame in one plane, each set being independently pivoted in relation with the other set and to swing laterally with respect to the frame, and each set of forms including a number of garment forms carried in fixed relation to each other to hold garments in shape during a finishing operation.

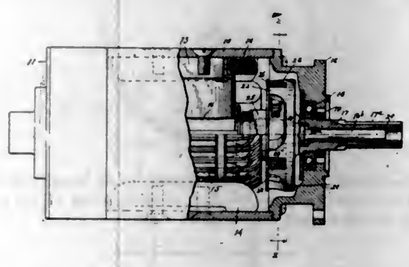
1,875,039. PISTON SALVAGING DEVICE. FRANCIS J. LEEAK, Lansing, Mich. Filed Nov. 7, 1931. Serial No. 573,638. 3 Claims. (Cl. 74—108.)



1. In combination with a cylinder and cooperating piston therein, a piston salvaging device consisting of a thin

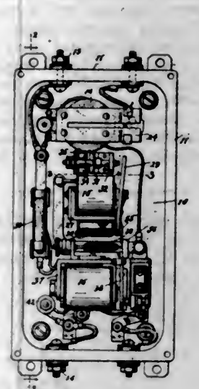
sheet of metal having a plurality of countersunk portions said portions having transverse openings at their apex by means of which the device is securely fastened to the piston.

1,875,040. GENERATOR DRIVE. BENNETT M. LEECE, Cleveland, Ohio, assignor to The Leece-Neville Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 7, 1926. Serial No. 140,057. 9 Claims. (Cl. 64—96.)



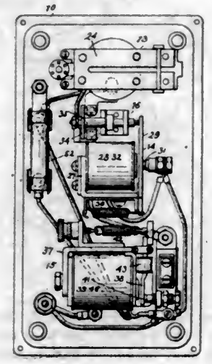
1. A generator adapted particularly for use with a prime mover subject to sudden changes in speed, comprising a field frame with end housings, an armature and a drive for the latter comprising a pair of shaft sections coaxially arranged with a portion of one rotatably mounted inside a portion of the other and including a section carrying the armature and an outer driving section having a bearing in one of the end housings, and a positive drive spring coupling connecting the sections and located inside of the last-mentioned end housing and spaced from said armature.

1,875,041. CONTROL FOR BATTERY CHARGING AND LIGHTING SYSTEMS. BENNETT M. LEECE, Cleveland, Ohio, assignor to The Leece-Neville Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 12, 1929. Serial No. 377,720. 7 Claims. (Cl. 171—313.)



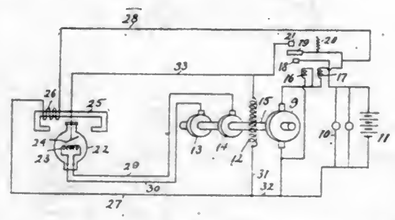
1. In a system such as described, a generator, a battery adapted to be connected thereto, a reverse current cut-out between the generator and the battery and having series and shunt coils, and a switch for opening the circuit of the series coil and for disconnecting the shunt coil from the battery.

1,875,042. GENERATOR REGULATOR. BENNETT M. LEECE, Cleveland, Ohio, assignor to The Leece-Neville Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 26, 1929. Serial No. 388,336. 3 Claims. (Cl. 171—229.)



1. The combination with a generator having a field winding, of a voltage regulator for the generator comprising a magnet having an armature, one or more coils for vibrating the same, and a conducting element serving as a demagnetizing coil for the regulator and also to change the ampere turns of the field winding of the generator and rendered effective and ineffective by the vibration of the armature, said conducting element being arranged to surround said armature.

1,875,043. VOLTAGE REGULATION. BENNETT M. LEECE, Cleveland, and DALE S. COLE, Cleveland Heights, Ohio, assignors to The Leece-Neville Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 10, 1930. Serial No. 434,506. 6 Claims. (Cl. 171—312.)

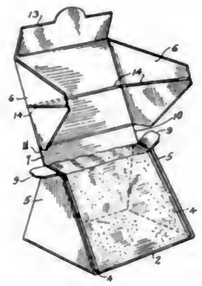


1. In combination with a generator having an armature and a field winding, a circuit for said field winding for normally supplying exciting current to the latter, thermionic valve means in said circuit for controlling the excitation of the field during normal operation of the generator, and an electromagnet responsive to the voltage of the generator for connecting said field winding in a shunt circuit across said armature during starting and opening said shunt circuit when the generator voltage reaches a predetermined value.

1,875,044. ICE CREAM CONTAINER. HUGH NAIL LEIPER, Oklahoma City, Okla., assignor to New State Ice Company, Oklahoma City, Okla., a Corporation of Delaware. Filed Aug. 13, 1930. Serial No. 475,038. 1 Claim. (Cl. 229—22.)

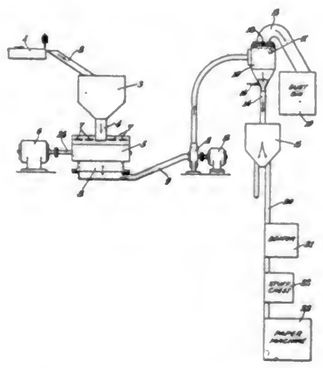
Folding carton of trapezoidal cross section comprising a wide base, narrow top and convergent sides, end faces extending integrally from the edges of the base and both

sides and foldable into super-posed relation, forming substantially leak-proof ends, each outer-most end face having a tuck flap tucking into the crack formed between the



top and the other two super-posed end faces, there being a flap closing the joint between one side and the base integral with one of said members and pasted to the other.

1,875,045. PREPARED STOCK RECLAIMED FROM WASTE MATERIALS AND METHOD OF AND APPARATUS FOR RECLAIMING SAME. NATHAN LESHNER, Cincinnati, and WILLIAM J. MOELLER, Mount Healthy, Ohio, assignors to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Feb. 3, 1927. Serial No. 165,544. 10 Claims. (Cl. 92—20.)

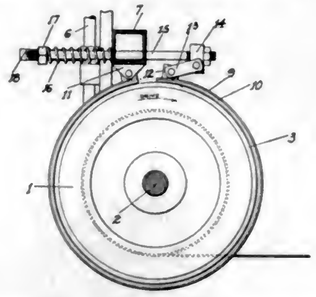


1. The method of producing fibrous stock from waste materials consisting of reducing said fibre containing materials in the presence of a current of air to a mass of independent fibres.

4. An apparatus for reclaiming waste fibre containing materials consisting of means for fiberizing said waste material and means subjecting the material being fiberized to the action of a current of air simultaneously with said fiberizing operation.

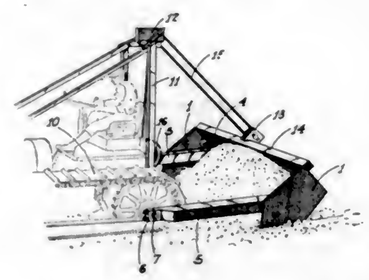
1,875,046. AUTOMATIC BRAKE. ROBERT G. LE TOURNEAU, Stockton, Calif. Filed Oct. 18, 1929. Serial No. 400,560. 2 Claims. (Cl. 188—83.)

1. An automatic brake including with a brake drum, a band about the drum, an anchor for one end of the band, links connected to the loose end of the band and extending substantially tangent to the drum away from the anchored end of the band, a rod connected to the outer ends of the links and extending in the direction of the anchored end of the drum at an acute angle to the links, a relatively fixed member slidably supporting the rod, and spring



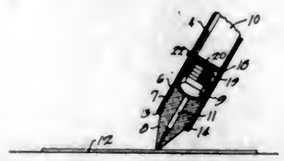
means acting on the rod to move the same lengthwise and in a direction to cause the link connected end of the band to be moved toward the anchored end.

1,875,047. TRACTOR-MOUNTED SCRAPER. ROBERT G. LE TOURNEAU, Stockton, Calif. Filed Jan. 5, 1931. Serial No. 506,520. 2 Claims. (Cl. 37—124.)



1. The combination with a tractor, of rigid arms pivoted to the tractor adjacent the rear end thereof and projecting rearwardly therefrom, a scraper rigidly mounted on the outer ends of the arms whereby the arms and scraper will move as a unit with the tractor through any lateral movements of such tractor, and means to swing the arms and scraper upwardly on the pivotal connections to carry the scraper to a position above the tractor mechanism such that other implements may be attached to and drawn by the tractor without interfering with the tractor.

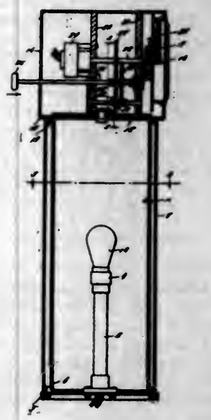
1,875,048. LIGHT PENCIL. GEORGE LEVENE, Norwood, Mass., assignor to Massachusetts Memorial Hospitals, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 13, 1930. Serial No. 502,019. 4 Claims. (Cl. 95—1.1.)



1. A pencil for marking a sensitized sheet, comprising a casing provided with a tip movable longitudinally thereof, a light source within the casing, and means operative

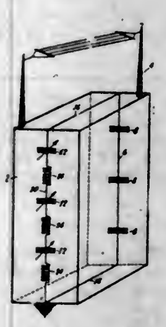
upon inward movement of the tip for electrically energizing the light source, the tip constituting a filter preventing the passage of actinic light rays while permitting the emission of non-actinic rays, and the tip having an opening therethrough communicating with the light source so that the sheet is exposed by said light when the tip is pressed thereon.

1,875,049. COMBINATION CLOCK AND BARBER'S POLE. HEZEKIAH J. LEWIS, New York, N. Y. Filed Jan. 7, 1932. Serial No. 585,305. 2 Claims. (Cl. 40—126.)



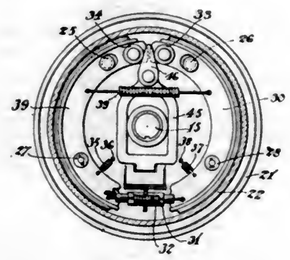
1. In combination with a clock mechanism, a clock dial and time indicating hands, a gear operated by the clock mechanism, a rotary barber's pole having an annular arrangement of openings in one end thereof for receiving the teeth of the said gear.

1,875,050. ANTENNA. NILS E. LINDENBLAD, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 20, 1928. Serial No. 248,057. 4 Claims. (Cl. 250—33.)



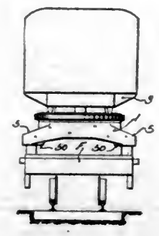
1. In combination, a building, a transmitting antenna system located thereon, and a conductor separate and distinct from the antenna system, including a condenser connecting together the top and the base of the building, for providing a path of low reactance from the top to the base of the building for energy transmitted by the antenna system.

1,875,051. BRAKE. DOUGLAS FOWLER LINSLEY, Sound Beach, Conn., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 21, 1930. Serial No. 454,227. 11 Claims. (Cl. 188—78.)



1. A brake comprising a support, a plurality of friction elements each having a rim and a web positioned for movement thereon, a yoke movable diametrally of the support, a member pivoted on the yoke engaging the respective sides of the webs, and adapted to spread the friction elements for engagement with the drum.

1,875,052. EXCAVATING MACHINERY. ROLF LJUNGKULL, St. Paul, Minn., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed Sept. 18, 1929, Serial No. 393,562. Divided and this application filed Jan. 12, 1931. Serial No. 508,070. 2 Claims. (Cl. 214—152.)

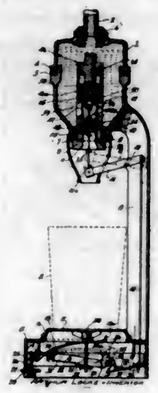


1. The hereindescribed method of loading on to a car for shipment an excavating machine of the type having a main frame and traction devices removably secured thereto which consists in providing temporary supports along the sides of the car, running the excavating machine up into position wherein its traction devices are supported partly on the car and partly on said temporary supports, supporting the main frame independently of the traction devices, disconnecting the traction devices from the main frame and shifting them over on to the temporary supports, and then lowering the main frame on to the car.

1,875,053. AUTOMATIC WATER DISPENSING MEANS. ARTHUR LOCKE, Tacoma, Wash. Filed Feb. 24, 1930. Serial No. 430,564. 5 Claims. (Cl. 221—95.)

1. A liquid dispensing means comprising a housing for containing liquid under pressure, a valve mechanism

associated therewith for controlling the discharge of liquid from the housing; said valve being actuated between open and closed positions by pressure of the liquid, a

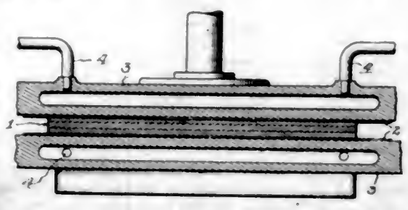


yieldably supported base on which a receptacle may be placed for filling, and means operable by movement of the base for controlling the valve movement.

1,875,054. COMPOSITE MATERIAL AND PROCESS OF MAKING THE SAME. EMIL C. LOETSCHER, Dubuque, Iowa. Filed Apr. 17, 1929. Serial No. 355,992. 2 Claims. (Cl. 91—70.)

1. A process for producing a composite material consisting of coating a sheet of base material composed of a partially compressed mass of cellulosic fiber pulp with a resinous varnish and drying the same to provide a tacky surface, applying a thin layer of pulverized fibrous material over said surface, subjecting said base sheet to heat and pressure, applying a solution of a phenol-condensate product over the surface of the treated sheet and again subjecting the same to heat sufficient to render said product hard and infusible.

1,875,055. PROCESS OF FINISHING WOOD SURFACES. EMIL C. LOETSCHER, Dubuque, Iowa. Filed July 28, 1930. Serial No. 471,435. 3 Claims. (Cl. 144—309.)



1. A process of finishing the surface of a wood panel or the like, consisting of applying a thin coating of moisture-repelling fluid over the surface to be finished, compressing the panel in contact with a highly polished metal surface, and at a pressure sufficient to effect the distortion of the surface fibers, and applying heat to the panel during compression.

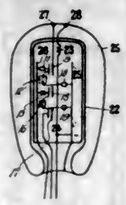
1,875,056. METHOD OF JOINING THIN WOOD VENEERS. EMIL C. LOETSCHER, Dubuque, Iowa. Filed Nov. 18, 1931. Serial No. 575,706. 6 Claims. (Cl. 144—309.)

1. The method of preparing sheets of thin wood veneer for permanent application to the surface of a base material consisting of applying two or more sheets of said veneer to a backing sheet of fibrous material with their



adjacent edges in abutting contact and temporarily adhering said veneer sheets to said backing sheet throughout predetermined areas of their contacting surfaces.

1,875,057. MULTIPLE UNIT HIGH-FREQUENCY AMPLIFIER. SIEGMUND LOEWE, Berlin, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 17, 1925, Serial No. 56,953, and in Germany Sept. 23, 1924. 4 Claims. (Cl. 250—27.5.)

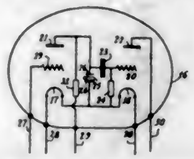


1. A vacuum tube adapted for multi-stage amplification, comprising an evacuated envelope, a plurality of stages contained therein, a single filament common to all the stages, a control electrode and a plate electrode for each stage, impedance coupling between successive stages, a collecting element, and a high resistance element connecting the control electrode of the last stage with the collecting element.

1,875,058. PROCESS OF MAKING ELECTRON DISCHARGE DEVICES. SIEGMUND LOEWE, Berlin, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 21, 1926, Serial No. 130,769, and in Germany Aug. 25, 1925. 2 Claims. (Cl. 250—27.5.)

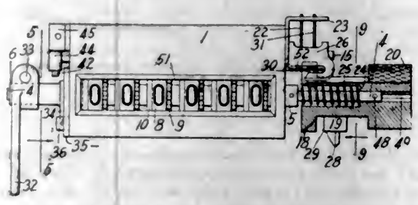
1. The method of producing an anode for an electron discharge tube which comprises shaping a sheet of metal to the form of an anode, heating said sheet to a temperature slightly higher than the temperature attained by said anode under normal operating conditions of the electron discharge tube, and exposing said sheet of metal while so heated to vaporized magnesium at a pressure no greater than the normal pressure in the electron discharge tube and thereby forming on said anode a coating of an alloy of said metal and magnesium which decomposes very slowly during normal operation of the electron discharge tube.

1,875,059. TUNED RECEIVER TUBE. SIEGMUND LOEWE, Berlin-Friedenau, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 25, 1926, Serial No. 143,889, and in Germany Nov. 4, 1925. 7 Claims. (Cl. 250—27.5.)
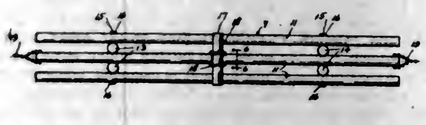


1. A vacuum tube having three electrodes and a piezo-electric control element mounted therein, said element being coupled to two of said electrodes and being responsive to only a predetermined frequency.

1,875,060. COUNTER AND RESETTING MECHANISM THEREFOR. ROBERT B. LONG, Dayton, Ohio, assignor to Ohmer Fare Register Company, Dayton, Ohio, a Corporation of New York. Filed Sept. 2, 1926. Serial No. 133,241. 5 Claims. (Cl. 235—144.)



1. In a counter, a shaft, counting wheels rotatably mounted on said shaft, resetting means for said counting wheels, said resetting means including a bracket provided with a slot, a slidable shaft, a pin thereon, means whereby said bracket is raised so that said pin will pass beneath the bracket, and means whereby said bracket is moved so that said pin will engage one side of said slot to limit the rotation of said slidable shaft when the counters have been reset to zero.

1,875,061. BOOM. FRANK H. LOVEJOY, Rumford, Me. Filed July 3, 1931, Serial No. 548,678. Renewed May 9, 1932. 1 Claim. (Cl. 9—15.)



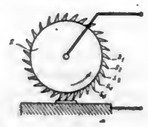
A log boom of the class described comprising a front wall composed of vertically spaced horizontally disposed logs, a rear wall constructed of vertically spaced buoyant logs, and a pair of connecting end walls constructed of logs, all of the logs being apertured and chains passing through and fastened in the apertures for connecting the walls together to form an enclosure, and one or more guards carried by the front wall, said guard comprising a post chained in place.

1,875,062. SEPARATION OF ORES AND MINERALS BY FLOTATION. HERBERT A. LUBS, Penns Grove, N. J., ARTHUR L. FOX, Wilmington, Del., and CARROLL C. SMITH, Penns Grove, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 7, 1927. Serial No. 238,456. 17 Claims. (Cl. 209—166.)

1. In the process of concentrating ores and minerals, the step which comprises subjecting the ore in the form of a pulp to a froth flotation operation in the presence of a flotation agent obtained by reacting sulfur chloride on a sulfidizable organic compound not containing an amino group, and thereafter effecting the reduction of the reaction product by treating it with a reducing agent.

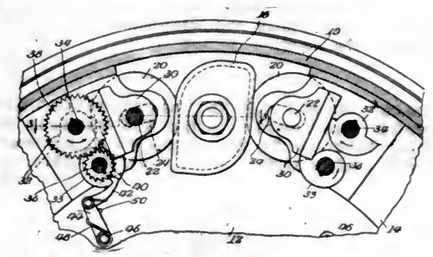
1,875,063. NARROW-TAPE RECORDER FOR HIGH SPEED TELEGRAPHY. WERNER LUDENIA and FRITZ SCHROETER, Berlin, Germany, assignors to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed June 5, 1930, Serial No. 459,306, and in Germany June 5, 1929. 4 Claims. (Cl. 178—89.)

1. A recorder for high speed telegraphy including, a rotatable wheel, a recorder tape comprising a narrow band on which signal markings are impressed, the width of said tape being small compared to the diameter of said wheel, a plurality of contact points disposed on the periphery of said wheel, and means for causing said tape



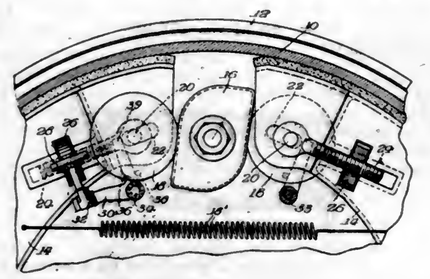
to follow a path parallel to the axis of said wheel and adjacent the periphery thereof whereby the feelers on the periphery of said wheel contact with said tape.

1,875,064. BRAKE. KENNETH E. LYMAN, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 20, 1927. Serial No. 214,280. 10 Claims. (Cl. 188—79.5.)



1. A brake friction member having at its end at least one thrust roller having a transverse spindle, in combination with a cam carried by the friction member and which is engaged by said spindle and which can be adjusted to shift the roller to compensate for wear of the friction member.

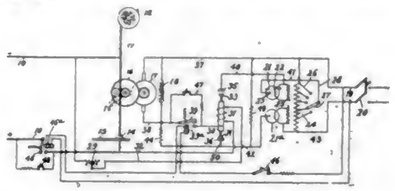
1,875,065. BRAKE MECHANISM. KENNETH E. LYMAN, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 22, 1927. Serial No. 214,497. 8 Claims. (Cl. 188—79.5.)



2. A brake element comprising two stampings spread apart to form spaced parallel arms at one end, and having registering pressed grooves jointly forming a recess between the stampings and opening between said arms.

5. A brake element comprising, in combination, thrust roller means at one end, and a threaded part engaging a threaded part having thrust engagement with said element for adjusting the position of the roller means lengthwise of said element.

1,875,066. WELDING MACHINE. ALLIS M. MACFARLAND, Detroit, Mich., assignor to The Reflex Electrical Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 19, 1929. Serial No. 408,246. 7 Claims. (Cl. 219—8.)



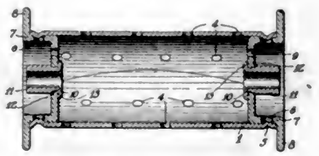
1. In a welding system wherein a welding wire is fed to the arc, means including a direct current motor for feeding the wire to the arch, an A. C. supply circuit, rectifying means between the motor and the A. C. supply circuit for delivering to the motor a pulsating direct current derived from the rectification of one-half of the A. C. wave, and means responsive to variations in the arc length for establishing and interrupting the supply of current to the motor.

1,875,067. SPLASH PREVENTING DEVICE FOR MOTOR CARS. WASHINGTON OTTO MAC KEY, Djursholm, Sweden. Filed Apr. 23, 1931, Serial No. 532,319, and in Sweden July 2, 1928. 3 Claims. (Cl. 280—156.)



1. Splash preventing device for motor cars including a support ring adapted to be fixed to the felloe of the wheels and a flexible shield attached to the support ring, said support ring being provided with segments, connected to the support ring so that they can be turned to and fro the felloe and become yielding to the action of the tyre if punctured.

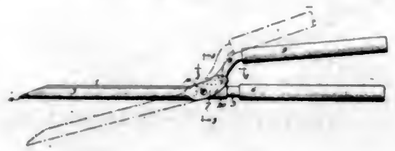
1,875,068. SPOOL. SETH G. MALBY, Tenafly, N. J., assignor to Aluminum Screw Machine Products Company, Edgewater, N. J., a Corporation of New Jersey. Filed July 19, 1929. Serial No. 379,402. 4 Claims. (Cl. 242—123.)



1. A spool comprising a barrel having a curved joint extending longitudinally thereof, said barrel having a plurality of depressions around its circumference adjacent the ends thereof, end flanges having a plurality of holes adapted to receive said depressions whereby said barrel and flanges are locked together, and a bushing in each of said end flanges.

3. A spool resisting deformation by torsional stress comprising a barrel having a curved joint symmetrically curved with respect to the center thereof and extending longitudinally throughout the entire length thereof, one of the elements of the joint being concave and the other convex.

1,875,069. CURLING IRON. FRANCOIS R. MARCEL, Brooklyn, N. Y. Filed Mar. 20, 1931. Serial No. 523,983. 9 Claims. (Cl. 132—37.)

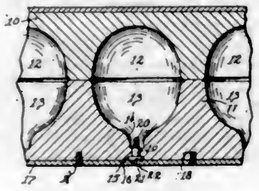


1. In a curling iron the combination of a spoon member and a rod member co-operating therewith to clamp hair between them and having handle sections for manipulating said spoon and rod members, and a single pivotal member only, connecting said spoon member and said rod member at one side only thereof, whereby said spoon and rod members may pivot in relation to each other and also rock on said single pivotal member for the purpose set forth.

1,875,070. PROCESS OF PREPARING CALCIUM CHLORIDE. OTTO V. MARTIN, Tulsa, Okla., assignor to Texaco Salt Products Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 20, 1931. Serial No. 576,423. 10 Claims. (Cl. 23—90.)

1. The process of preparing calcium chloride from oil well brines and the like which comprises treating the brine with slaked lime to precipitate and remove impurities therefrom, including magnesium chloride, silica, alumina, and iron compounds, circulating the purified brine through a heat absorption and a cooling-by-evaporation system until the calcium chloride content of the brine solution has reached 15% or more and during which substantially all of its sodium chloride content is removed, concentrating the solution by boiling to precipitate the remaining chlorides other than calcium chloride, filtering the hot solution under pressure to remove the precipitated salts, reacting the filtered solution with chlorine to liberate bromine and iodine therefrom, removing the liberated bromine, iodine, and any excess chlorine remaining therein, further concentrating the resulting halogen-free brine solution by boiling to form a solution containing upwards of 70% or more of calcium chloride, and cooling the resulting concentrated solution to form solid hydrated calcium chloride.

1,875,071. MOLD WITH EJECTOR. MILTON H. MARTINDELL, Trenton, N. J., assignor to Joseph Stokes Rubber Company, Trenton, N. J., a Corporation of New Jersey. Filed Mar. 14, 1929. Serial No. 346,887. 5 Claims. (Cl. 18—42.)



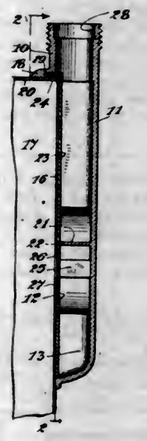
4. In a permanent mold, a mold piece having a plurality of molding cavities therein, pins rotatably mounted in said mold piece, each of said pins having a threaded portion extending into one of said cavities to form cores for the formation of threaded sockets in the molded articles, each of said pins also having a head seated in a counterbore in the mold piece, a cover plate secured to the external side of said mold piece having openings therein in alignment with the said counterbore but of smaller diameter, and means in each of said heads adapted to cooperate with a tool projected through the corresponding opening for turning the corresponding pin, whereby the unscrewing of the pins will dislodge the molded articles from said mold piece.

1,875,072. SUGAR BEET TOPPER. FRED MARYOTT, Cozad, Nebr., assignor to Cyrus A. Black, Kearney, Nebr. Filed Sept. 29, 1930. Serial No. 484,948. 19 Claims. (Cl. 55—9.)



1. A beet harvester comprising a wheeled frame, a revolving beet lifter adapted to engage and raise the beets from the ground, separate conveyor means to elevate the beets and to move them along said frame, common means for driving the revolving beet lifter and the separate conveyor means, means to remove the tops from the beets, and conveyor means to receive the beets therefrom.

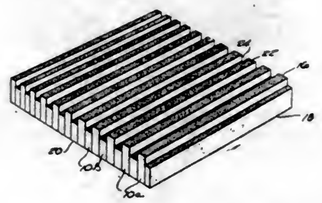
1,875,073. METER PROTECTING DEVICE. THOMAS J. MARTIN, Brooklyn, N. Y., assignor to Superior Meter Company, Brooklyn, N. Y., a Corporation of New Jersey. Filed May 14, 1929. Serial No. 363,043. 4 Claims. (Cl. 73—1.)



1. In a meter protecting device, in combination: a casing having an open side capable of placement against a meter wall, one end of said casing being tubular and the other end being closed; an enlarged chamber within said casing; and a flat horizontal baffle-plate within said chamber and spaced in part from the wall of said chamber preventing the downward passage of a wire through said device and through an opening in said meter below said baffle-plate.

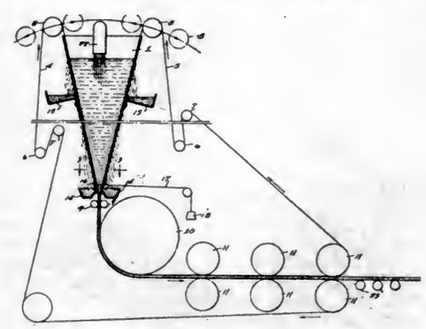
2. In a meter protecting device, in combination: a casing have an open side capable of placement against a meter wall, one end of said casing being tubular and the other end being closed; an enlarged chamber within said casing; a cover closing the open side of said casing and having an opening therein capable of being placed in alignment with an opening in a meter wall and a flat horizontal baffle-plate within said chamber abutting upon the wall of said chamber and said cover and preventing the downward passage of a wire through said device and through the openings in said cover and said meter wall.

1,875,074. ACOUSTICAL BOARD. WILLIAM H. MASON, Laurel, Miss., assignor to Masonite Corporation, Laurel, Miss., a Corporation of Delaware. Filed Aug. 5, 1927. Serial No. 210,851. 13 Claims. (Cl. 20—4.)



1. An acoustical board made up of strips of varying width secured together so that the strip edges form an irregular surface for the acoustical board.

1,875,075. LIQUID SEPARATION. WILLIAM H. MASON, Laurel, Miss., assignor to Masonite Corporation, Laurel, Miss., a Corporation of Delaware. Filed Jan. 25, 1930. Serial No. 423,312. 18 Claims. (Cl. 92—39.)

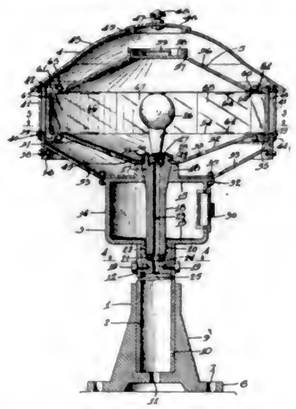


1. A method of felting fibre which comprises maintaining a downward flow of a watery pulp mixture in contact with converging downwardly traveling screens, the rate of flow of the pulp mixture being substantially the same as the rate of travel of the screens, permitting outflow of water through said screens and simultaneously building up a layer of fibre thereon, said outflow of water being permitted at all points below the level at which the material on the two screens is brought together.

1,875,076. TRAFFIC SIGNALING CONSTRUCTION. JULIUS MATTSON, Chicago, Ill., assignor of one-fourth to Eric Mattson and one-fourth to Herman Palm, Chicago, Ill. Filed Oct. 7, 1931. Serial No. 567,495. 5 Claims. (Cl. 116—63.)

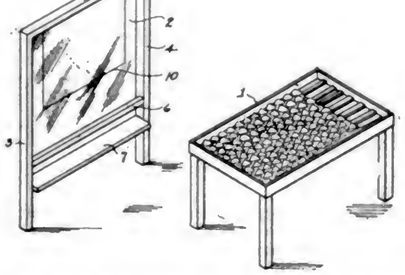
1. In a signaling device of the character described, the combination of a rigid hollow supporting housing, an external housing rigidly secured to and carried on the top of said supporting housing, a rotatable chamber rotatably mounted within the external housing and being provided with a downwardly extending tubular shaft, rotatably carried by said supporting housing and threaded means in the upper end of said shaft whereby an electric bulb may be threadedly carried in said shaft, and extending di-

rectly above said shaft, said housing and said chamber each being provided with top, bottom and side walls, the side walls of said



chamber being transparent and consisting of a plurality of pairs of colored panes, each pane of said pairs being of the same color, and being oppositely disposed with respect to each other.

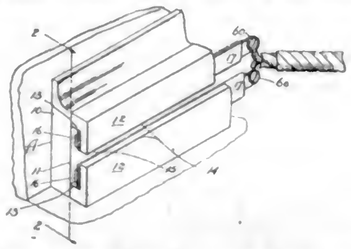
1,875,077. METHOD OF APPLYING BACKING FABRICS TO LININGS. ALBERT R. MAULSBY, Everett, Wash. Filed Oct. 21, 1930. Serial No. 490,318. 6 Claims. (Cl. 154—2.)



1. The method of attaching backing fabric to crinkled lining materials, consisting of applying an adhesive to a superficiary, then spreading the backing fabric upon the superficiary while the adhesive is tacky, then removing the backing from the superficiary and while it is drawn smooth applying the side thereof, made tacky by transfer of adhesive from the superficiary, to the lining material.

1,875,078. ELECTRIC CIRCUIT INSTALLATION. MICHAEL W. MCARDLE, Chicago, Ill. Filed July 19, 1930. Serial No. 469,108. 3 Claims. (Cl. 247—3.)

1. In a construction for the purpose indicated, in combination with a structural molding having a longitudinal cavity for accommodating the wires of an electric circuit, an insulating strip and a conductive strip, the insulating strip being of penetrable material the conductive strip being secured to the insulating strip by securements extending from the latter through the former and clinched over onto the insulating strip at the opposite side thereof from the conductive strip, and a second insulating strip dimensionally mated to the first and applied to the first at the side at which said securements are clinched and



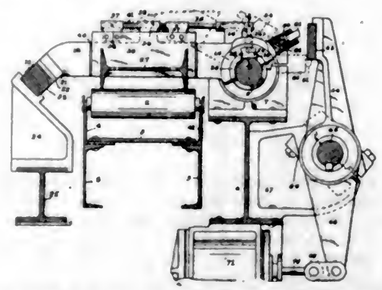
secured to said first strip at the lateral margins of the two mated strips constituting the excess of width of the insulation strips over the conductive strip.

1,875,079. BRAKE. GEORGE K. MCCANN, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 16, 1928. Serial No. 254,651. 6 Claims. (Cl. 74—5.)



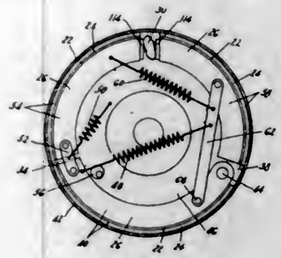
1. Operating means for a shaft comprising, in combination, a sheet-metal arm including a portion looped about the shaft and extended to form a double-thickness portion integral with the looped portion having parallel spaced portions and engaging portions, and a clamping member engaging the spaced parallel portions and arranged to draw them together to contract the looped portion about the shaft.

1,875,080. SPACING TABLE FOR MACHINES FOR PUNCHING BEAMS AND THE LIKE. ROBERT H. MCCLINTIC, Pittsburgh, Pa., assignor, by mesne assignments, to McClintic-Marshall Corporation, a Corporation of Pennsylvania. Filed Nov. 15, 1930. Serial No. 495,852. 12 Claims. (Cl. 164—116.)



1. In apparatus for punching beams and the like, the combination with the punch head and the spacing table of a stop member arranged to be positioned in the path of the beam on the spacing table, operative connection between the punch head and the stop member whereby the stop member is retracted from the path of the beam when the latter is punched, and means whereby said operative connection is completed by the engagement of the stop member by the beam.

1,875,081. METHOD OF MAKING BRAKES. MONTGOMERY W. MCCONKEY, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 16, 1927. Serial No. 206,264. 7 Claims. (Cl. 29—152.)



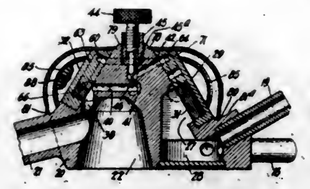
2. That method of manufacturing brakes which comprises forming a ring T-shaped in cross-section, separating the ring into three segments arranged end to end and removing material between at least two of the segments to permit spacing the segments apart, providing anchoring means for the adjacent ends of two of the segments and operating means acting on two other adjacent ends of the segments, and pivotally connecting the third set of adjacent ends.

1,875,082. BRAKE. MONTGOMERY W. MCCONKEY and EUGENE G. MCDONALD, South Bend, Ind., assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 11, 1930. Serial No. 420,033. 12 Claims. (Cl. 188—79.5.)

11. A brake comprising a sectionalized friction element, a flexible element connecting the sections and means carried by the flexible element for expanding the friction element.

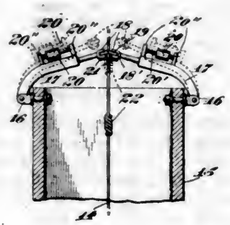
1,875,083. PULSATOR. HERBERT MCCORNACK, Glen Ridge, N. J. Filed Apr. 17, 1928. Serial No. 270,654. 8 Claims. (Cl. 31—62.)

5. A pulsator mechanism for milking apparatus, including in combination, a pulsator body having opposed inclined faces, an operating piston having a valve body engaging one of said faces, a control piston having a valve body engaging the other of said faces, cylinder heads cooperative with said pistons, said pistons being held to the pulsator body by suction and gravity, and said pulsator body being provided with passages for placing the cylinder heads cooperative with each piston in communication with the atmosphere and a source of suction alternately to reciprocate the pistons, means for regulating the size of the passage for placing the cylinder heads cooperative with the control piston in communication with the source of suction whereby the rate of operation of the pulsator may be regulated, consisting of a needle valve operable toward and from a seat, and a stem on



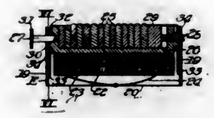
the needle valve extending beyond the seat into an orifice, the stem being of such length that it will lie within the orifice in every operative position of the valve.

1,875,084. ADJUSTABLE WIPING DEVICE FOR COATED WIRE. HARRY MCGINNIS, Dundalk, Md., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Oct. 18, 1929. Serial No. 400,509. 12 Claims. (Cl. 91—59.4.)



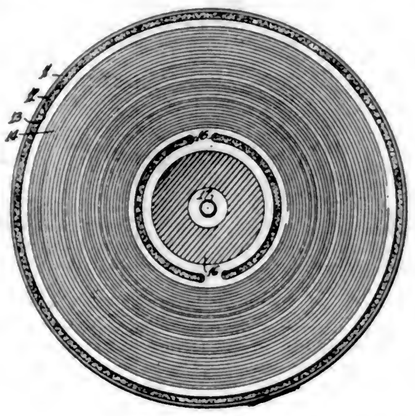
1. In a wire-wiping apparatus, comprising a tank, a molten bath therein, an open ended box structure mounted thereon, a pair of arms having their lower ends pivoted to either side of the open box structure, upwardly and inwardly inclined swinging opposite ends having jaws formed therein, wipers mounted in the jaws on said opposite ends adapted to normally engage each other and to surround and wipe an advancing strand of wire, and means for varying the pressure of the wipers on the strand of wire.

1,875,085. PRINTING MECHANISM FOR A GOLF BALL MARKER. JOSEPH E. MCGINNESS, Pittsburgh, Pa. Original application filed Aug. 27, 1930, Serial No. 478,042. Divided and this application filed May 13, 1931. Serial No. 537,042. 4 Claims. (Cl. 101—334.)



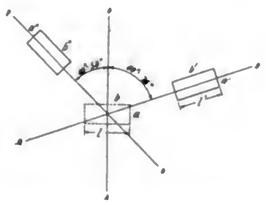
1. Printing mechanism for a golf ball marker as described consisting of a rectangular casing provided with an inking pad, a type holder having a row of type, means providing for pivoting rotation of the type holder against the pad, and a slotted plate providing type clearance movably mounted on and actuated by the type holder.

1,875,086. PHONOGRAPH RECORD. ARTHUR A. MCMANN, Utica, N. Y., assignor to Remsen Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 28, 1930. Serial No. 498,763. 4 Claims. (Cl. 274—42.)



4. A phonograph record disc made from an integral sheet of metal having a concentric part upon which sound grooves are placed and a second concentric part and arcuate apertures in said disc between said parts.

1,875,087. PIEZO ELECTRIC OSCILLATOR. ALEXANDER MEISSNER, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, a Corporation of Germany. Filed July 7, 1928, Serial No. 291,099, and in Germany July 19, 1927. 5 Claims. (Cl. 171—327.)

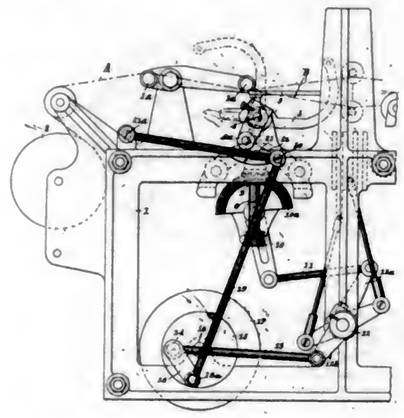


1. A piezo-electric crystal element cut from a crystalline body at right angles to one of the electrical axes of said body, said body having an optical axis, said element having an axis of symmetry and strata of crystalline material lying in planes parallel to said axis of symmetry and disposed at an angle of 60° to 75° inclusive with respect to the said optical axis.

1,875,088. TREATMENT OF LEAD SLUDGE. PAUL W. MERCHANT, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 24, 1929. Serial No. 388,253. 2 Claims. (Cl. 23—146.)

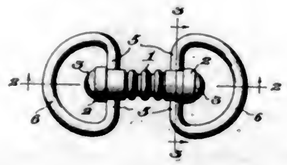
1. The method of treating lead sludge, resulting from sweetening hydrocarbon oils with doctor solution, to recover the lead compounds which comprises subjecting the sludge to distillation to distill off the oil and water and to produce a residue which is oxidizable on exposure to the atmosphere, then subjecting the residue to spontaneous oxidation to convert the residue to caustic alkali soluble compounds.

1,875,089. LOOM. FRANK W. MERRICK, Dorchester, Mass., assignor to Wonder Weave, Inc., Boston, Mass., a Corporation of Massachusetts. Original application filed Feb. 28, 1930, Serial No. 432,237. Divided and this application filed Nov. 22, 1930. Serial No. 497,447. 2 Claims. (Cl. 139—190.)



1. A loom including a pivoted beating-up device having a pivot eccentric of its pivoting axis, a pitman having a pivot, means to confine the pivot portion of the pitman to substantially thrustwise movement in a line close to and crossing the axis of said device, means to reciprocate the pitman, said beating-up device being pivotally movable to and from a position where as regards its said pivot and its pivoting axis one of the latter is substantially between the other and the second means, and a link connecting the pivots of said device and the pitman.

1,875,090. CUFF BUTTON. ALPHA H. METCALF, Attleboro, Mass., assignor to The Baer & Wilde Company, Attleboro, Mass. Filed Feb. 18, 1932. Serial No. 593,761. 12 Claims. (Cl. 24—102.)

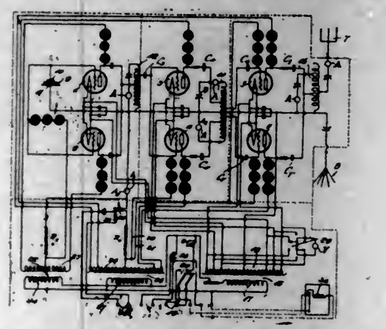


1. In a button, a shank having a longitudinal bore and spaced transverse openings bisecting the bore, a rod in the bore extending across the openings, and heads each having spaced ends which are journalled in the openings and lie on opposite sides of the rod and have cruci-form grooves which are formed to snap into engagement with the rod thereby to latch the heads in different positions.

1,875,091. ELECTRON TUBE TRANSMITTER. RAYMOND B. MEYER, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 16, 1927. Serial No. 175,757. 3 Claims. (Cl. 250—17.)

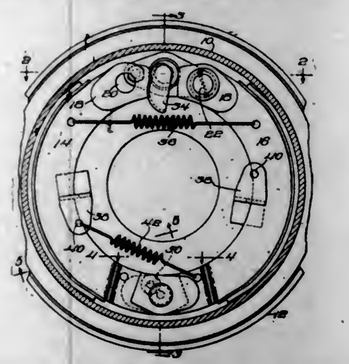
1. An electron tube transmitter constituted by a plurality of electron tubes connected in separate pairs, each of said tubes having grid, filament and plate circuits connected thereto, a power source of alternating current for energizing the circuits of said electron tubes, said

pairs of electron tubes being connected in cooperative balanced relationship for utilizing the effects of the alternating current power source upon the circuits of said electron tubes successively in each tube circuit of each pair of electron tubes, one pair of electron tubes being connected for the generation of high frequency



oscillations and another pair of electron tubes being connected for increasing the amplitude of the oscillations thus developed, and an electrostatic coupling between the filaments of the first mentioned pair of electron tubes and the said output circuits of succeeding pairs of electron tubes.

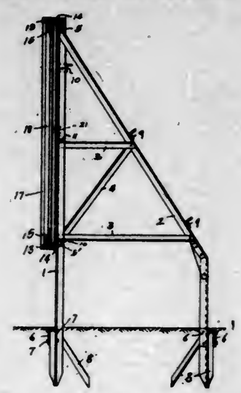
1,875,092. BRAKE. GUS F. MICHAEL, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Apr. 21, 1928. Serial No. 271,689. 5 Claims. (Cl. 188—78.)



1. A brake comprising, in combination, a pair of interchangeable brake shoes having centrally arranged stiffening webs offset in opposite directions at their adjacent ends and arranged to overlap, together with a pivot connecting the overlapping portions of said webs.

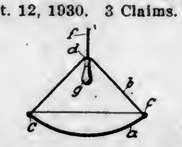
1,875,093. SIGNBOARD FRAME. PIERRE L. MICHAEL, Houston, Tex. Filed July 5, 1929. Serial No. 375,905. 1 Claim. (Cl. 40—125.)

A structure of the character described including a frame like support having vertical supporting legs and including transversely arranged upper and lower angle irons and an intermediate angle iron secured to said legs, said intermediate angle iron having a horizontal flange, notched to receive said legs, and a vertically disposed flange, a sign frame on said support formed of transversely disposed upper and lower side members having upper and lower transverse retaining cleats associated therewith whose lower and upper edges extend beyond the corresponding side members, upper and lower moulding strips secured to the inner sides of the upper and lower side members, end members and inside moulding strips secured thereto said end members being suitably secured to the side members, the moulding strips being spaced inwardly from said cleats, a sign board inserted between said



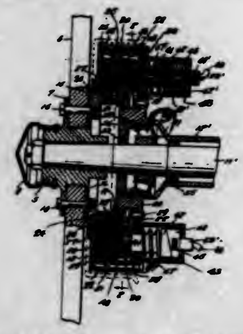
cleats and moulding strips and being supported in the rear by angle iron brackets fastened to the rear of the sign board and engaged over the vertical flange of said intermediate angle iron.

1,875,094. LAMP SHADE. WALTER MIETHKE, Berlin, Germany. Filed Jan. 13, 1931, Serial No. 508,425, and in Germany Sept. 12, 1930. 3 Claims. (Cl. 240—108.)



1. A lamp shade having a shallow bowl-shaped continuous imperforate surface, and consisting of a single piece of a single relatively thin, light, unbreakable translucid material, having a radially extending reinforcing ribs formed by pressing in the material itself and constituting the sole stiffening means of the shade.

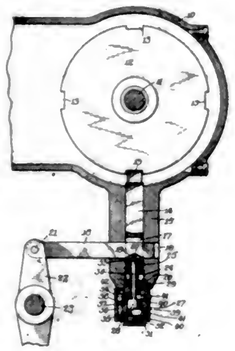
1,875,095. BRAKE. JOSEPH M. MILAN, Indianapolis, Ind., assignor to Milan Brake Company, Limited, of Nevada, a Corporation of Nevada. Original application filed Aug. 19, 1929, Serial No. 386,947. Divided and this application filed Oct. 4, 1930. Serial No. 486,426. 1 Claim. (Cl. 188—152.)



A brake comprising a drum, a pair of annular brake elements slidably connected to the drum, a stationary housing circumscribing the drum, a slidable ring at the inside

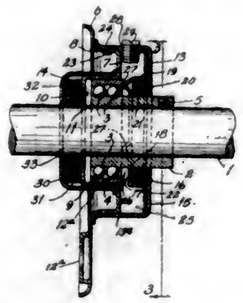
of the housing for interposition between the brake elements, a cam operated plunger, a follower ring connected to the plunger and being engageable against one of said brake elements, spring means for normally maintaining the said plunger retracted, a housing for the said cam means, said plunger being hollow, and a tube projecting into the hollow plunger and being connected to a fluid pressure line, whereby the said plunger and follower ring may be operated.

1,875,096. LOCKING PIN DAMPING DEVICE. RALPH J. MILLER, Madison, Wis., assignor to Gisholt Machine Company, Madison, Wis., a Corporation of Wisconsin. Filed Aug. 21, 1929. Serial No. 387,295. 2 Claims. (Cl. 188—69.)



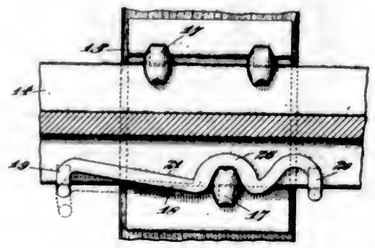
1. In a device for arresting the travel of a machine tool carriage, the combination of a rotatable disc fast with an element of the carriage drive and formed with a locking recess in its periphery, a slidable locking pin disposed radially of said disc with one end thereof engageable with the periphery of said disc, a spring urging said pin toward said disc, means for retracting said pin from said disc when the carriage drive is thrown in, a hydraulic cylinder having a piston and piston rod connected to said locking pin, and means in said cylinder permitting a free outward movement of said piston and locking pin and retarding the inward movement thereof.

1,875,097. BALL BEARING ASSEMBLY AND HOUSING THEREFOR. ORVILLE MITCHELL, Dallas, Tex., assignor to Norma-Hoffmann Bearings Corporation, Stamford, Conn., a Corporation of New York. Filed Oct. 18, 1930. Serial No. 488,359. 8 Claims. (Cl. 308—187.)



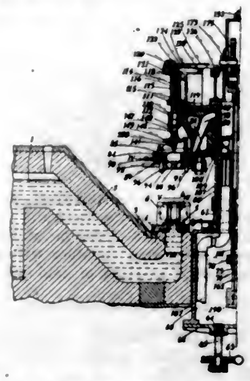
1. A pressed steel housing for ball bearings comprising a body portion having an outer and an inner wall, the inner wall surrounding a ball-bearing recess and having a portion providing a bottom wall for said recess, a rear cap having a press fit with the inner wall of said housing and forming with the bottom wall of said recess a space for receiving a grease seal, and a front cap having a press fit on the outer wall of said housing and provided with an inwardly-extending circular depression forming a recess for receiving a sealing element, the portion of said cap beyond said depression forming with said extrusion an annular space constituting a grease chamber surrounding the recess for the ball bearing, and the bottom of said depression forming with said housing a metering space for the passage of grease from said chamber.

1,875,098. RAIL ANCHOR. GEORGE LOOP MOORE and JAMES ROBERT STEELE, Owego, N. Y. Filed Oct. 8, 1931. Serial No. 567,608. 13 Claims. (Cl. 238—315.)



1. A rail anchor comprising rail engaging end members and a connecting member having a loop formed therein to project toward the web of a rail and to pass around a spike head.

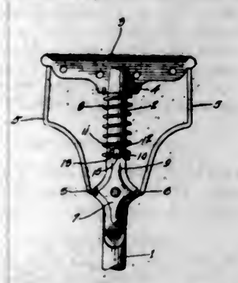
1,875,099. MANUFACTURE OF GLASS BOTTLES AND SIMILAR ARTICLES. THOMAS COURTNEY MOORSHEAD, London, England, assignor to The United Glass Bottle Manufacturers, Limited, Strand, England, a British Company. Filed Jan. 23, 1931, Serial No. 510,827, and in Great Britain Feb. 20, 1930. 20 Claims. (Cl. 49—5.)



4. A method of feeding glass to a glass moulding apparatus, which comprises extruding the glass in an upward direction through an outlet orifice of a glass furnace and into a neck mould positioned over the said orifice, the said neck mould being then raised at a speed corresponding with that at which the glass is extruded until a column of glass of the required length is produced and the said column being then detached and shaped in a suitable moulding apparatus.

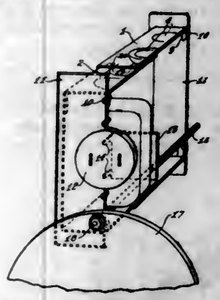
15. Apparatus for feeding glass to a glass blowing or moulding machine, comprising a glass furnace having an upwardly directed outlet orifice disposed below the level of the glass in the furnace, an extrusion head mounted on the outlet orifice, a neck mould, means for moving the neck mould into and out of registration with the extrusion head, and means for imparting a combined rotary and upward movement to the neck mould.

1,875,100. MOP CONSTRUCTION. BERNARD MORGAN, Freeport, Ill., assignor to W. E. Kautenberg Co., Inc., Freeport, Ill. Filed Mar. 3, 1930. Serial No. 432,794. 1 Claim. (Cl. 15—152.)



In a mop construction, a handle, a head mounted on the handle, a helical spring disposed on the handle and in engagement with the head, and a lever member, said lever member being provided with an extending end portion, said extending portion being provided with a pair of longitudinally spaced-apart slits for providing a mid portion and a pair of side portions, said mid portion and side portions being formed for providing oppositely extending arcuate-shaped portions for receiving a portion of the spring therebetween.

1,875,101. OUTLET BOX. JAMES A. MORRELL, St. Louis, Mo. Filed Jani 19, 1928. Serial No. 247,809. 12 Claims. (Cl. 247—15.)



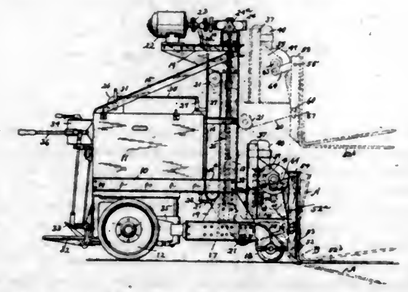
1. An outlet box, comprising, a pair of telescoping shells open at both ends and adjustable axially of one another, alignable and mutually registerable knock-out openings in said shells.

1,875,102. TIRE INSERT. CLYDE S. MORSE, De Kalb, Ill. Filed July 2, 1928. Serial No. 289,640. 4 Claims. (Cl. 152—18.)



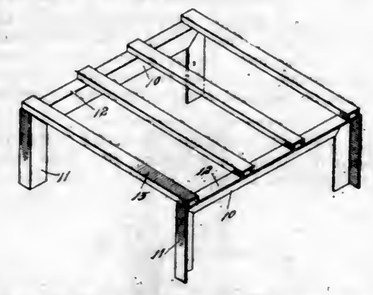
1. Puncture proof material for use in a tire insert to make the same puncture-proof, comprising a plurality of superposed layers, each layer comprising a series of metallic cables, longitudinally interspersed cord members between said cables, and means to hold said cables and cord in place, said layers being arranged so that the cables of one layer cover the space between the cables of the adjacent layer whereby a substantially continuous metallic surface is formed which is substantially impervious to foreign particles.

1,875,103. TRUCK. JOSEPH H. MOSEL, Lakewood, Ohio, assignor to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed May 14, 1930. Serial No. 452,395. 15 Claims. (Cl. 214—65.)



1. In an industrial truck of the character described, means for raising and lowering the load carrying member, and means for positively swinging said member about a substantially horizontal axis to an upwardly or downwardly inclined position or to a horizontal position, said last named means being independent of said first named means.

1,875,104. SKID. FRANK MOSSBERG and ANTON JENSEN, Attleboro, Mass., assignors to Mossberg Pressed Steel Corporation, Attleboro, Mass., a Corporation of Massachusetts. Filed Apr. 26, 1930. Serial No. 447,536. 1 Claim. (Cl. 248—41.)

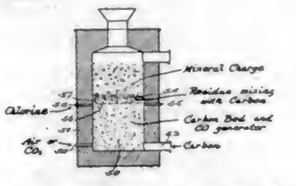


A metallic skid adapted to be stacked, comprising spaced side standards of angle iron, each having a base portion and integral right angularly depending legs, and channel bars welded to said base portions, said channel bars having their flat portions uppermost and spaced apart sufficiently to permit a depending leg of a similar superimposed structure to be disposed between adjacent channel bars, and with the other legs of the superimposed structure outside the periphery of the skid.

1,875,105. METHOD OF AND APPARATUS FOR MINERAL CHLORINATION. GERALD D. MUGGLETON, PAUL S. BRALLIER, HAROLD C. VAN GALDER, and RALPH F. WEBBER, Niagara Falls, N. Y., assignors to Niagara Smelting Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Aug. 7, 1926. Serial No. 127,816. 11 Claims. (Cl. 23—95.)

1. A process for the selective chlorination of a mixture of oxide minerals capable of forming volatile chlorides,

which comprises subjecting the mineral mixture to the action of mixed carbon monoxide and chlorine at the reaction temperature, whereby a portion of the mineral including any alumina, iron oxide and titanium oxide content is converted into chlorides, leaving a residual material containing any silica and aluminum silicate, and subjecting the residual material to the action of chlorine and carbon, whereby to form chlorides of any of the residual constituents named.



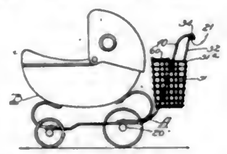
8. A method of preparing aluminum chlorides from a mineral containing alumina and aluminous silicate, and certain impurities of which silica and iron are examples, which comprises treating the minteral with carbon monoxide and chlorine to volatilize the alumina content and any iron content, and to leave a residue containing any silica and the aluminous silicate, treating the residue with chlorine in the presence of carbon, forming carbon monoxide, and using the carbon monoxide in the first recited stages of the chlorination.

1,875,106. DISCHARGE TUBE HAVING AN INDIRECTLY HEATED CATHODE. JOHANNES GYSBERTUS WILHELM MULDER, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 15, 1930, Serial No. 495,806, and in the Netherlands Jan. 22, 1930. 5 Claims. (Cl. 250—27.5.)



1. An electron discharge device comprising a sealed envelope enclosing an anode and a cathode comprising a tubular conducting body having a plurality of passages extending through said body between its annular end surfaces, and in insulated heater wire in said passages.

1,875,107. PARCEL CARRIER FOR BABY CARRIAGES. THEOPHIL W. MUELLER, Elmhurst, Ill. Filed Jan. 27, 1930. Serial No. 423,606. 7 Claims. (Cl. 224—29.)



1. For use with a baby carriage and the like having handle side bars extending in up-and-down and fore-and-aft direction and joined at their upper ends by a cross bar and operatively joined at their lower ends to the carriage frame, a parcel carrier comprising an upwardly open container dimensioned for being introduced downwardly between the handle side bars and between the connecting cross bar and the carriage body; suspending rods attached to the container at the laterally opposite upper corners of the side toward the handle cross bar having their upper ends furnished with downwardly open hooks for engaging the handle cross bar, the container having at its lower end at the side opposite that having the suspending rods outwardly projecting stops for lodging against the side bars respectively when the container is suspended from the handle cross bar by said suspending rods.

1,875,108. DENTAL GUARD. ALFRED C. MULLER, Chico, Calif. Filed Sept. 22, 1931. Serial No. 564,274. 3 Claims. (Cl. 32—5.)



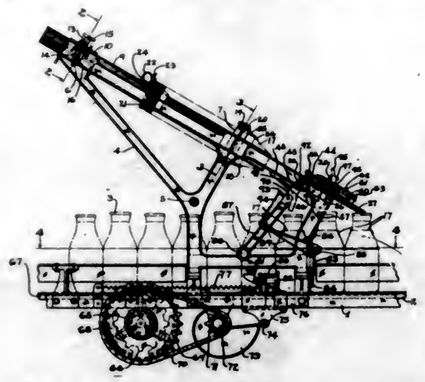
1. A dental guard comprising a flexible arcuate member, triangular in cross section, arranged to cover and embrace the gums adjacent the teeth to prevent contact of the bristles of a tooth-brush with said gums while said teeth are being brushed, the apex of said triangular cross section resting in the bottom of the recess between the lower portion of said gums and an adjacent lip, to prevent discomfort.

1,875,109. WHEELED TOY. HEINRICH MÜLLER, Nuremberg, Germany. Filed Aug. 18, 1930, Serial No. 476,122, and in Germany Oct. 26, 1929. 2 Claims. (Cl. 46—45.)



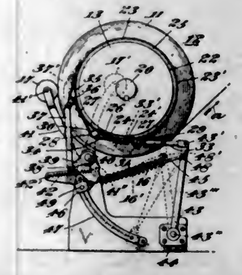
1. A wheeled toy, comprising in combination, a hollow body consisting of a relatively light material and having the form of a cap, a base plate therefor, driving means including a driving spring mounted upon said base plate in the hollow space between said body and the base plate and driving wheels operatively connected with said spring, a locking mechanism adapted to unlock said driving means during contact of the driving wheels with the ground and to lock them in other conditions of the toy, especially during condition of tumbling, and a weight carried by the said base plate and being located at the under portion of the hollow body for placing the centre of gravity of the toy as near as possible to the ground whereby to cause erection of the toy after tumbling.

1,875,110. MACHINE FOR APPLYING COLLARS TO BOTTLES. LEO MYERS, Kirkwood, Mo. Filed Jan. 28, 1931. Serial No. 511,801. 22 Claims. (Cl. 216—13.)



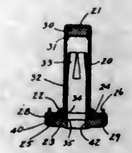
1. In a machine of the character described, means for supporting and feeding a stack of collars, a holder engageable with a peripheral portion of the terminal collar of the stack, and suction means for securing the collar to said holder.

1,875,111. TENSION CONTROLLING DEVICE. HENRY W. NIEMAN, Bethlehem, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Sept. 12, 1929. Serial No. 392,054. 14 Claims. (Cl. 242—75.)



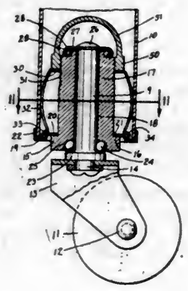
1. In a tension controlling mechanism, a first member, a second member having a reel or core portion, one of said members having a cylindrical bearing surface, a flexible friction device connected at one end to one of said members and wrappingly engaging the cylindrical bearing surface of the other of said members, and force-exerting means connected to the other end of the flexible friction device to exert a tangential force in a direction counter to the direction of rotation of the cylindrical bearing surface during slippage, the product of the minimum coefficient of friction of the friction device on the bearing surface and the angle of wrap being sufficiently great to render the reciprocal of said product of practically negligible value, whereby the net torque exerted by said friction device is practically independent of variations in the coefficient of friction, and means for automatically varying the torque exerted by the flexible friction device with varying radius of the roll of material on the core to maintain the tension on the material practically constant.

1,875,112. SELF-LUBRICATED CASTER SOCKET AND STEM. WILLIAM H. NOELTING, Evansville, Ind., assignor to Faultless Caster Company, Evansville, Ind., a Corporation. Filed Dec. 16, 1929. Serial No. 414,297. 3 Claims. (Cl. 16—36.)



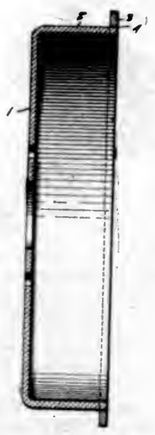
1. A caster socket comprising a track plate with a central aperture therein, a peripheral series of upstanding barbs in spaced relation to the aperture, a socket tube clampingly connected at its lower end to the plate in the central aperture thereof, a peripheral skirt depending from the track plate, an annular thrust bearing beneath the tube and plate connection and having a central opening registering with the tube mouth, and means integral with the skirt and extending inwardly therefrom for engaging the thrust member for securing the same to the plate, said track plate being dished downwardly toward the aperture and said thrust member conforming thereto, whereby the central portion of said thrust member is exposed below the plane of the thrust member retaining member.

1,875,113. ADJUSTABLE ADAPTER FRAME FOR CASTERS. WILLIAM H. NOELTING and WALTER M. VAN DUSEN, Evansville, Ind., assignors to Faultless Caster Company, Evansville, Ind., a Corporation. Filed May 13, 1929. Serial No. 362,498. 7 Claims. (Cl. 16—21.)



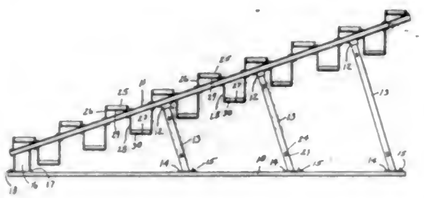
1. An adjustable caster for tubular legs, comprising a tubular socket, a plurality of spring frame arms arranged longitudinally thereof, an intermediate centrally apertured portion connecting said arms together at one end, a leg-supporting plate supported by one end of said socket, said socket having a threaded opposite end, and nut means associated with said threaded end and arranged to adjust the bowing of said arms, the opposite ends of said arms being rigidly mounted adjacent the base of said socket and the plate, said nut and the intermediate connection portion having a relatively rigid connection.

1,875,114. BRAKE PART. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 25, 1930. Serial No. 477,674. 14 Claims. (Cl. 188—218.)



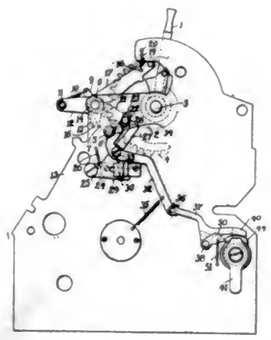
1. A ferrous brake drum comprising a cylindrical braking flange, an exterior section on the flange of a material having a higher heat conductivity than the metal of the flange and a rate of thermal expansion not substantially greater than that of the flange.

1,875,115. BLEACHER CONSTRUCTION. HENRY D. OBERDORFER, Newcastle, Ind., assignor to Circle A Products Corporation, Newcastle, Ind., a Corporation. Filed Mar. 30, 1931. Serial No. 526,298. 10 Claims. (Cl. 109—2.)



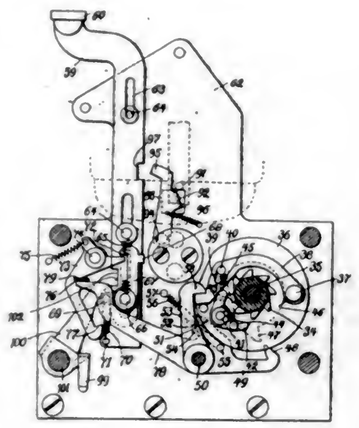
1. In a knockdown bleacher the combination of a plurality of upwardly inclined stringers, a forwardly and upwardly directed strut for each stringer and lying in vertical alignment with the stringer and having an interlocking connection with an elevated portion of the aligned stringer, means preventing outward separating movement of the lower ends of the aligned strut and stringer, and a rectangular bracing unit detachably interlocked with a pair of laterally aligned and adjacent struts.

1,875,116. REGISTER INTERLOCKING MECHANISM. THOMAS O'CONNOR, Dayton, Ohio, assignor to Ohmer Fare Register Company, Dayton, Ohio. Filed June 17, 1929. Serial No. 371,482. 3 Claims. (Cl. 235—130.)



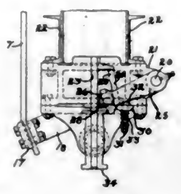
1. In a machine, a setting lever, a second lever, means whereby said second lever is held in one position when said setting lever is in proper position and is held in another position when said setting lever is in improper position, a shaft, a knob having splined connection with said shaft, means to prevent the rotation of said knob and said shaft until said knob is moved longitudinally of said shaft and means controlled by said second mentioned lever to prevent said knob from being moved longitudinally of said shaft when said setting lever is in improper position.

1,875,117. REGISTER. THOMAS O'CONNOR, Dayton, Ohio, assignor to Ohmer Fare Register Company, Dayton, Ohio. Filed Jan. 13, 1930. Serial No. 420,356. 7 Claims. (Cl. 101—66.)



1. In an electrically operated register, a circuit making means, a setting means for said register and means whereby said circuit making means is locked against operation until said setting means is in correct position.

1,875,118. ELEVATOR SAFETY DEVICE. FRANK L. OHLER and ROLAND P. FRENCH, Toledo, Ohio, assignors to The Haughton Elevator & Machine Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 16, 1929. Serial No. 414,342. 7 Claims. (Cl. 187—88.)



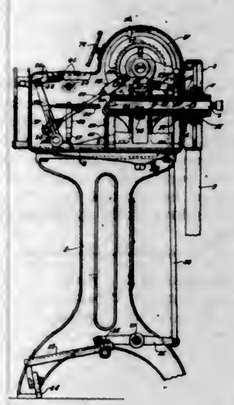
1. The combination with a vertical guide rail, of a body movable adjacent said rail, a clamping member carried by the body and having converging faces, one of said faces being engageable with the rail, a gib on the other face, a roller movable into wedging engagement between the gib and the rail, and means for holding said gib, said holding means being yieldable with the gib in the direction of divergence of said faces to facilitate the release of the roller.

1,875,119. TICKET PRINTING, ISSUING AND RECORDING MACHINE. JOHN F. OHMER and GROVER C. COIL, Dayton, Ohio, assignors to Ohmer Fare Register Company, Dayton, Ohio, a Corporation of New York. Filed Jan. 2, 1926. Serial No. 78,906. 15 Claims. (Cl. 234—34.)



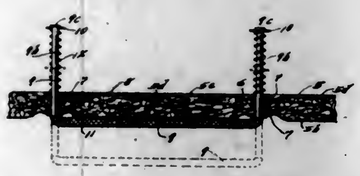
4. In combination, a shaft rotated by a moving part of a pump, a quantity counter, means whereby said shaft actuates said counter, a consecutive counter and means whereby the actuation of said consecutive counter controls the resetting of said quantity counter.

1,875,120. METHOD AND APPARATUS FOR INSPECTING CARTRIDGE SHELLS. FRANKLIN W. OLIN, Alton, Ill., and ROBERT G. CLYNE, St. Louis, Mo., assignors to Western Cartridge Company, East Alton, Ill., a Corporation of Delaware. Filed Mar. 9, 1928. Serial No. 260,441. 11 Claims. (Cl. 209—122.)



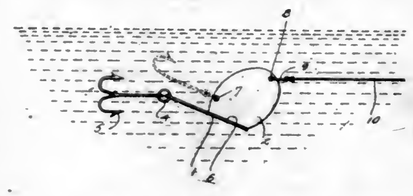
1. An inspection device for cartridge shells, comprising, ways adapted to receive a group of shells, a series of fingers adapted to space the shells on said ways, and a holder having elements adapted to enter the spaced shells and movable to shift the shells from said ways.

1,875,121. HANDLE FOR MATTRESSES. HARRY R. OLSON, Minneapolis, Minn. Filed May 14, 1931. Serial No. 537,253. 5 Claims. (Cl. 5—345.)



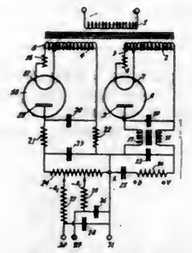
4. A mattress having a flexible wall and an aperture therethrough, a handle having a portion disposed at the outer side of said wall and a portion extending through said aperture to the inner side of said wall, means engaging the inner side of said wall over a considerable area thereof through which said latter portion extends, resilient means disposed at the inner side of said mattress and acting on said last mentioned portion of said handle to move the same inwardly and draw the first mentioned portion of said handle against the outer side of said wall, said handle being movable outwardly against the tension of said resilient means to manipulate said mattress, said first mentioned means acting to protect said wall and prevent tearing thereof when said handle is moved outwardly.

1,875,122. FISH LURE. OSCAR F. OLSON, Fenton, Iowa. Filed June 30, 1931. Serial No. 547,971. 5 Claims. (Cl. 43—42.)



1. A fish lure of the character described, comprising a pair of plate members each having relatively broad plane surfaces and each being of a greater length than width, one of said plates being secured at one end to a surface of the other plate on the longitudinal center thereof and adjacent one end, said plates being right angularly related, means for attaching a hook to one of said plates, and means for attaching a line to the said one of said plates adjacent its other end.

1,875,123. GRID-BIASING UNIT FED BY ALTERNATING CURRENT. EKKO OOSTERHUIS and JACOB MARINUS UNK, Eindhoven, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 26, 1927, Serial No. 235,925, and in the Netherlands Dec. 14, 1926. 6 Claims. (Cl. 250—27.)

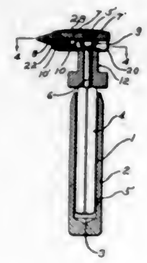


1. A circuit arrangement for supplying plate and grid potentials from an alternating current supply comprising a transformer having a primary winding connected to the alternating current supply, a grid potential source including a rectifying device fed by a secondary winding on said transformer, a smoothing out circuit composed of condensers and resistances connected to the output elements of said rectifying device, a resistance connected across the terminals of said smoothing out device, a plurality of connectors tapped to variable points on said resistances, a resistance in each of said connectors, a plate potential source including a rectifying device fed by said transformer, a smoothing out circuit composed of condensers and inductances connected to the output elements of said last named rectifying device, a resistance and condenser connected in series across the terminals of said last named smoothing out circuit, and a connection between said smoothing out circuits.

1,875,124. RECOVERY OF ACETONE. WILLIAM REGINALD ORMANDY, London, England. Filed Mar. 7, 1929, Serial No. 345,237, and in Great Britain Mar. 14, 1928. 4 Claims. (Cl. 260—134.)

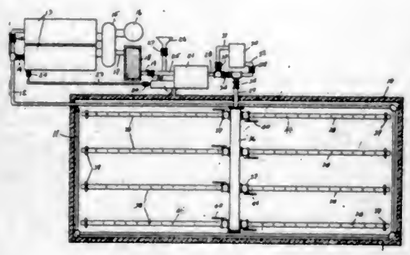
1. A method of recovering acetone from gas containing same, which comprises bringing said gas into contact with an acid taken from the group consisting of sulphuric acid and phosphoric acid, in a fairly high state of concentration to absorb the acetone.

1,875,125. HAND OPERATED HAIR CLIPPER. JOHN OSTER and OSCAR E. LACKNER, Racine, Wis., assignors to John Oster Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed July 29, 1929. Serial No. 381,989. 7 Claims. (Cl. 30—1.)



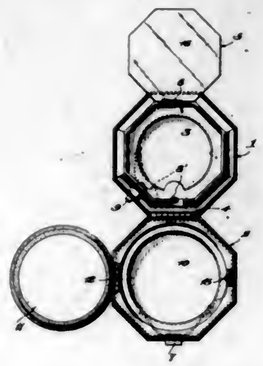
1. A hand operated hair clipper comprising a handle having a main portion, coacting blades mounted on one end of the handle and arranged transversely and at right angles thereto whereby the blades are adapted to be advanced during cutting with a downward pulling motion and operating means for the blades including an oscillatory sleeve intermediate the blades and the main portion of the handle, means connecting said sleeve to one of the blades and means on said sleeve adapted to be grasped between the thumb and forefinger of the same hand that grasps the handle.

1,875,126. GREENHOUSE OPERATION SYSTEM. ORLANDO K. OWEN, Terre Haute, Ind., assignor to J. W. Davis Company, Terre Haute, Ind., a Corporation. Filed Apr. 25, 1929. Serial No. 358,017. 4 Claims. (Cl. 47—58.)



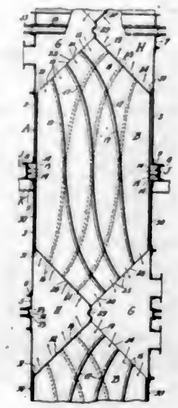
1. The process of commercially accelerating plant growth in a greenhouse consisting of burning fuel for simultaneously generating greenhouse heat and flue gas, scrubbing the flue gas, adding air to the scrubbed gas, compressing the air and gas mixture, and then liberating the compressed air and gas mixture in the greenhouse.

1,875,127. VANITY CASE. WINFRED T. PARKIN, Providence, R. I., assignor to Theodore W. Foster & Brother Co., Providence, R. I. Filed Dec. 5, 1931. Serial No. 579,158. 6 Claims. (Cl. 132—83.)



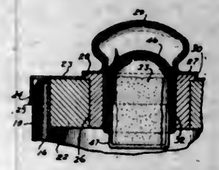
1. A vanity case including a bottom having a hinged top and having a powder compartment, a movable cover for the powder compartment hinged thereto in a plane substantially at right angles to the plane of hinging between the top and bottom, said top having a rouge compartment, and a double faced mirror forming a closure for the rouge compartment hinged to the top diametrically opposite and parallel to the plane of hinging between the top and bottom whereby when the top, bottom, and mirror are open same are in alinement, and when the cover is opened same extends at right angles to said line so that a substantially L-shaped arrangement of the parts is had.

1,875,128. AIR HEATER. WARD S. PATTERSON, Cranford, N. J., and CONWAY PIERCE, Alamorgordo, N. Mex., assignors to International Combustion Engineering Corporation, New York, N .Y., a Corporation of Delaware. Filed Sept. 2, 1931. Serial No. 560,720. 16 Claims. (Cl. 257—245.)



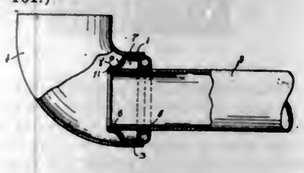
1. A multi-section air heater comprising a casing, a plurality of superadjacent heater elements in said casing having V-shaped ends and means providing a gas and an air chamber in said casing between superjacent heater elements.

1,875,129. REFRIGERATING DEVICE. AUBIN E. PAYSON and MINER P. WETMORE, Norwich, Conn. Original application filed Mar. 12, 1928, Serial No. 260,870. Divided and this application filed Feb. 26, 1929. Serial No. 342,710. 3 Claims. (Cl. 62—91.5.)



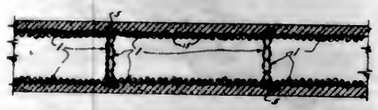
1. A refrigerating unit consisting of a stopper adapted to fit into a receptacle and having an axial opening in which a heat-insulated bottle is mounted, said bottle being adapted to contain a refrigerant in the form of solidified gas, and a removable pervious cup closing the mouth of said bottle to permit the gradual escape of gas.

1,875,130. REDUCING BUSHING. LIONEL S. PECK, Macedonia, Ohio, assignor to The Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 24, 1928. Serial No. 307,920. 4 Claims. (Cl. 285—161.)



1. In combination with the exhaust pipe of an internal combustion engine, a bushing having a bend formed on one end in contact with the outer periphery of said pipe and at its other end said bushing having a portion of reduced diameter tightly engaging said pipe near the end thereof and terminating in an internal radially extending flange adapted to abut against the end of said pipe.

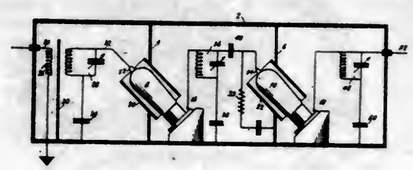
1,875,131. BUILDING CONSTRUCTION. PETER PENTLAND, Weehawken, N. J. Filed Oct. 29, 1928. Serial No. 315,775. 2 Claims. (Cl. 72—48.)



2. A wall structure composed of a series of tubular, metallic units having openwork sides and faces, said faces being substantially parallel to receive a coating, said units being arranged adjacent to each other with their sides abutting and secured together to form a continous hollow structure with substantially parallel faces held apart by the adjacent openwork sides of the tubular units, said substantially parallel faces forming a continuous surface adapted to receive a coating of plaster or like material which may be forced through the openwork to form a secure engagement with the tubular metallic units to form a wall.

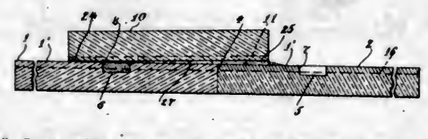
1,875,132. SHIELDING FOR HIGH FREQUENCY APPARATUS. HAROLD O. PETERSON, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 21, 1928. Serial No. 327,562. 1 Claim. (Cl. 179—171.)

In combination, a shielding container including a vertical metallic partition dividing it into a plurality of shielded compartments, said vertical partition having a cylindrical conductive shield extending therethrough at a slant, said cylindrical conductive shield being integrally connected to said vertical partition, an electron emission tube comprising an anode, a cathode, a control electrode, an anode terminal at one end of the tube, and a control electrode terminal at the other end of the tube, said



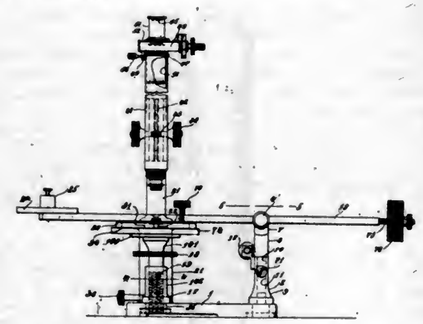
tube being placed at an angle relative to the vertical and positioned within said cylindrical shield so that the control electrode terminal is in one compartment while the anode terminal is in the adjacent compartment, an input circuit situated in the first compartment, an output circuit situated in the second compartment, means coupling the input circuit to the control electrode terminal, and means coupling the output circuit to the anode terminal.

1,875,133. PAINT TESTING INSTRUMENT. AUGUST HERMAN PFUND, Baltimore, Md. Filed Aug. 24, 1929. Serial No. 388,066. 5 Claims. (Cl. 88—14.)



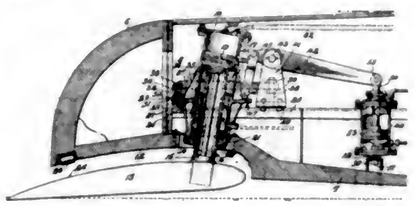
3. In a paint testing instrument a testing plate having testing means, a transparent sliding plate mounted thereon and inclined thereto, the respective plates having registering grooves on their opposed surfaces and parallel to the direction of motion of the sliding plate, the grooves being spaced apart to permit the paint to be tested to be placed between the grooves which tend to prevent its escape from the testing area.

1,875,134. HARDNESS TESTING APPARATUS AND METHOD. AUGUST HERMAN PFUND, Baltimore, Md. Filed Oct. 12, 1929. Serial No. 399,144. 13 Claims. (Cl. 265—12.)



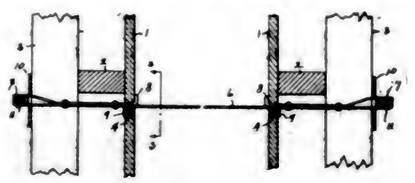
1. An apparatus for testing the hardness of coating and other materials comprising a transparent bit, means for forcing said bit into the material to be tested and means for measuring the width of the indentations and observing them through the bit while it is still occupying its advanced position in the indentation.

1,875,135. SPEED BOAT. JOHANNES PLUM, Washington, D. C., assignor to Fantail Boat Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 28, 1931. Serial No. 511,853. 17 Claims. (Cl. 114—66.5.)



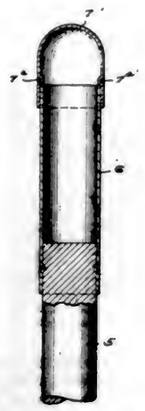
1. In a speed boat, the combination with a hull, of a plane pivoted to the stern of the hull to swing about an axis disposed at an angle to the horizontal plane of the hull and means for varying the angle of inclination of the axis of the plane relative to the vertical and for adjusting the position of the plane vertically.

1,875,136. SPREADER CLAMP. ERNEST A. PODD, Houston, Tex. Filed Oct. 4, 1929. Serial No. 397,204. 4 Claims. (Cl. 25—131.)



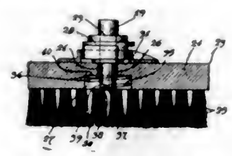
1. The combination with a form and false work supporting the form, said form having side openings, of a tie member fitted through said openings, end loops on the tie, a lug on the tie spaced inwardly from each loop and of a length less than the diameter of the openings, wedges through said loops in engagement with the false work, plugs in said openings adjacent the tie and substantially closing said openings.

1,875,137. PLANT MARKER. FRANK SCOTT POLLOCK, Wilmington, Del., assignor to Atlas Powder Company, Wilmington, Del., a Corporation of Delaware. Filed May 28, 1930. Serial No. 456,521. 2 Claims. (Cl. 189—21.3.)



1. A device of the character described, comprising a solid wooden body having a pointed wooden end and shaped and dimensioned to adapt it to serve as a plant marking stake, in combination with a metal sleeve of non-corrosive material crimped upon the upper end of said wooden body in a manner to be held against end-wise movement with respect thereto, when sufficient downward force is exerted upon said sleeve to thrust the stake into the ground, said sleeve having an open upper end and projecting above the upper end of the stake-like body a sufficient distance to provide a card or slip receiving compartment of considerable capacity and a closed cap of non-corrosive material fitted upon the upper end of said sleeve and having a bearing upon the upper end of said sleeve in such manner as to adapt the sleeve and body to be driven downwardly under the force of blows upon said cap.

1,875,138. BRUSH ATTACHING DEVICE FOR SCRUBBING MACHINES. HAROLD J. POND and WILLIAM THIELEN, Minneapolis, Minn., assignors to Advance Machine Company, Inc., Minneapolis, Minn., a Corporation of Minnesota. Filed Dec. 29, 1930. Serial No. 505,304. 16 Claims. (Cl. 15—49.)



13. In combination with a stud, a stop on said stud, a member on said stud movable toward and from said stop, a resilient keeper on said stud for urging said member against said stop, a finger on said stud, and means on said keeper for releasably engaging said finger to hold the member detachably mounted upon said stud.

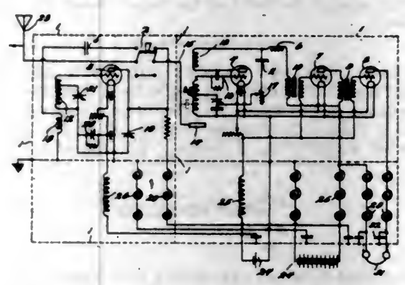
1,875,139. ANCHOR. WILBUR B. POUNDER, Chicago, Ill., assignor to Hubbard & Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 20, 1931. Serial No. 576,320. 11 Claims. (Cl. 24—128.)



1. A strain bolt comprising a rod and a head containing a plurality of thimbles for receiving a single strand and/or a pair of strands, said thimbles being arranged in two groups, one group comprising a single thimble centered on the axis of the rod and the other group comprising two thimbles located between said single thimble and said rod and equidistant from the axis of said rod, each of said thimbles being formed to afford a round bottom groove extending through the anchor head in an arcuate path of long radius for receiving a strain member.

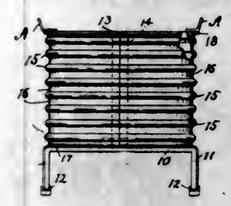
1,875,140. RADIO RECEIVING APPARATUS. EDWIN L. POWELL, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 11, 1928. Serial No. 284,605. 7 Claims. (Cl. 250—20.)

1. In an apparatus for receiving signaling energy, in combination, a thermionic vacuum tube having grid, filament and plate circuits, tuning means provided in said grid circuit, a variable capacity for neutralizing interelectrode capacity of said thermionic vacuum tube, said neutralizing capacity being mounted on said tuning means



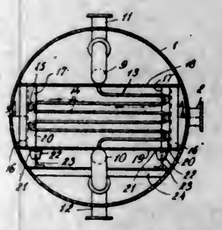
and means for interchanging said tuning means in said circuit without readjusting said neutralizing means for widely different frequencies of said signaling energy.

1,875,141. TIERING LUG. ELMER J. POWELL, Hubbard, Ohio, assignor to The Powell Pressed Steel Company, Hubbard, Ohio, a Corporation of Ohio. Filed Jan. 7, 1931. Serial No. 507,219. 6 Claims. (Cl. 220—97.)



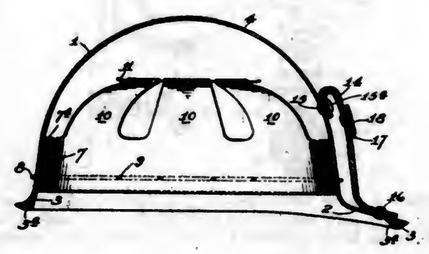
1. In combination with a metal tiering box having a ledge along its horizontal top surface, a tiering lug having a load receiving portion seated upon said ledge, an upstanding portion at one side of said load-receiving portion, and a lower portion extending downwardly from the other side thereof, the load supporting and lower portions of said lug being attached to the box.

1,875,142. HEAT EXCHANGER. JOSEPH PRICE, West New Brighton, N. Y., assignor to The Griscom-Russell Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 26, 1930. Serial No. 498,254. 23 Claims. (Cl. 257—240.)



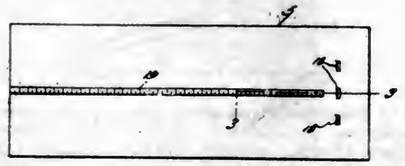
1. In a heat exchanger, the combination of a flexible tube having a substantially straight portion, and having a reversely bent portion at at least one extremity thereof, and means for holding the extremities of said tube in substantially fixed relative positions whereby elongation of the tube produces flexure of said substantially straight portion.

1,875,143. PROTECTIVE CAP. CHARLES W. PUNTON, Pittsburgh, Pa., assignor to Mine Safety Appliances Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 18, 1931. Serial No. 557,758. 7 Claims. (Cl. 2—3.)



1. A safety cap comprising integral rigid crown and visor portions formed of hard, non-conducting molded plastic and provided around their outer edge with an outwardly extending strengthening and ear-protective bead having a reinforcing element molded therein, and the crown containing a reinforcing element embedded in said plastic to strengthen the crown against breakage.

1,875,144. LINOLEUM ACCESSORY VENDING UNIT. VICTOR C. RACINE, Fort Worth, Tex. Filed July 31, 1930. Serial No. 472,070. 1 Claim. (Cl. 33—127.)

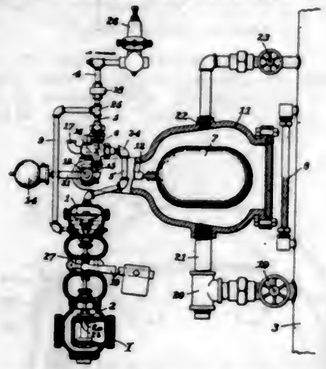


A device of the class described comprising an elongated table having a transverse row of slots in its top located adjacent one end of the table, a longitudinally arranged measuring strip on the table top arranged at right angles to the row and in alinement with the central slot with one end of the strip located adjacent said central slot, means under the table top for supporting a plurality of strips of material, which pass through the slots whereby any one of said strips of material may be drawn out over the table top alongside of the measuring strip to be measured.

1,875,145. LIQUID LEVEL REGULATOR. WILLIAM S. RALSTON, Pittsburgh, Pa., assignor to The Chaplin-Fulton Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 3, 1930. Serial No. 465,738. 5 Claims. (Cl. 137—101.)

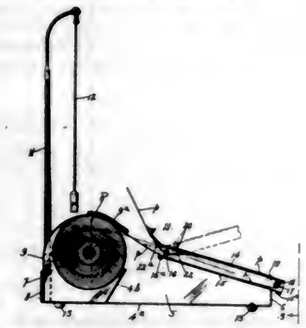
1. An automatic liquid level regulator including a diaphragm operated flow control valve a constant pressure supply independent of any pressure medium within the liquid container, said pressure supply being above atmospheric pressure means for supplying pressure from

said supply to the opposite sides of said diaphragm, an actuating valve for controlling the pressure supply to one side of said diaphragm, and operating means for said



actuating valve controlled by the liquid level, the pressure from said supply admitted to the other side of the diaphragm being constant and above atmospheric pressure.

1,875,146. DESK MEMORANDUM DEVICE. GUY P. RANDOLPH, Pasadena, Calif., assignor to W. O. Thompson, Pasadena, Calif. Filed Feb. 15, 1927. Serial No. 168,299. 15 Claims. (Cl. 281—6.)



1. A desk memorandum device including a box structure, a cover and paper guide hingedly connected thereto at one end, its other end being free to be lifted to uncover a part of said box, said cover and paper guide consisting of two channel members placed together flatwise in telescoping relationship, means for threading the end of a strip of paper through said members and around upwardly over the top surface of the top member, to receive writing thereupon, said top member having a tearing lip at its upper end and a slot in front thereof, whereby said paper passes through said slot and under said tearing lip to be torn along said lip, in the manner indicated.

1,875,147. INCANDESCENT LAMP. CAESAR RAVE, Luckenwalde, Germany. Filed Aug. 9, 1930, Serial No. 474,185, and in Germany Aug. 2, 1927. 9 Claims. (Cl. 176—32.)



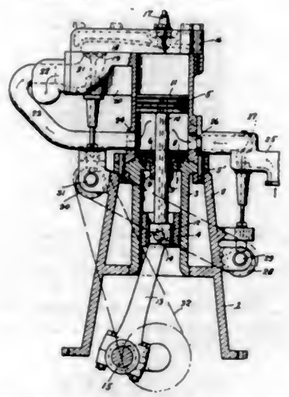
7. In an incandescent lamp including a bulb, an insulated screw-ferrule base thereon, comprising an annular metal member secured on said bulb and a threaded ferrule of insulating material fitted over said member with tap-portions of the same bent over and down thereon for holding it in place and providing current conductors bearing against the walls of the holder socket into which screwed.

1,875,148. SEALING GASKET FOR NECK AND CLOSURE STRUCTURES. JAMES S. REID, Cleveland, Ohio, assignor to The Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 1, 1929. Serial No. 336,752. 3 Claims. (Cl. 288—1.)



1. A gasket for sealing contact with opposed surfaces of cooperating neck and closure structures comprising, a permanently sealed fluid-tight hollow metal device of annular form having upper and lower annular sealing ridges of angular cross-section for substantially line contact with the opposed surfaces of said closure and neck structures, respectively, said sealing device including upper and lower members having their inner and outer edges inter-connected by air-tight joints.

1,875,149. INTERNAL COMBUSTION MOTOR. ROBERT REID, Muskegon, Mich. Filed May 1, 1931. Serial No. 534,378. 1 Claim. (Cl. 123—75.)

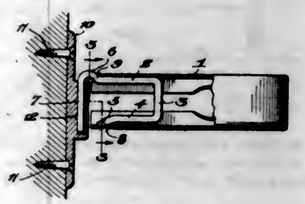


In an internal combustion engine, a cylinder having an extension at one side thereof formed with inlet and exhaust passages, a head on the cylinder having an extension at one side thereof extending over the extension of the cylinder and having a chamber therein in communication with the inlet and exhaust passages of the extension and with the upper end of the cylinder, inlet and exhaust valves controlling communication between the passages and said chamber, a pipe connecting the inlet passage with the lower end of the cylinder, a conduit for leading a combustible mixture into the lower end of the cylinder, a valve for controlling the conduit, a piston in the cylinder, a crank shaft, means for connecting the crank shaft with the piston, cams for operating the valve, means for operating the cams from the crank shaft.

1,875,150. CURTAIN ROD. OTTO REINHARDT, Pawtucket, R. I. Filed June 25, 1931. Serial No. 546,760. 9 Claims. (Cl. 156—19.)

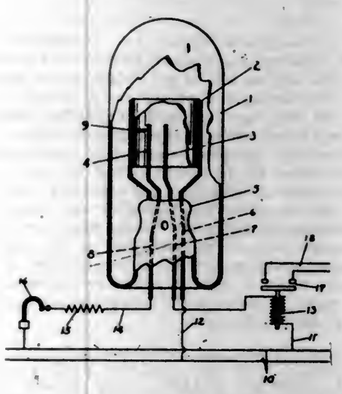
1. A curtain rod composed of a body of open substantially rectangular cross-section having an opening in its bottom adjacent an end thereof and having a cut-

out at its top extending through said end and a substantially rectangular wire member formed of a spring rod having one end free and inclined and formed to



snap into said opening and having its opposite end extending vertically and spaced from the first named end, and a hump carried by the member at the top thereof and formed to engage in the cut-out.

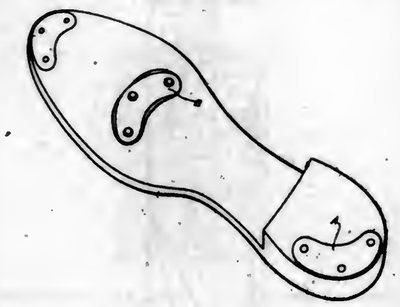
1,875,151. GLOW RELAY TUBE. HARVEY CLAYTON RENTSCHLER, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Original application filed Feb. 7, 1928, Serial No. 252,437. Divided and this application filed Mar. 27, 1929. Serial No. 350,164. 1 Claim. (Cl. 250—27.5.)



A glow discharge relay device comprising an enclosing dielectric envelope containing a gaseous atmosphere at a reduced pressure therewithin and cold electrodes within said envelope comprising a cathode, a main anode and a starting anode, said cathode being of large surface area with respect to said anodes and including a projection extending towards said starting anode, the distance between said starting anode and said cathode being small as compared to the distance between said main anode and said cathode.

1,875,152. SHOE PLATE. FREDERICK D. REYNOLDS, St. Louis, Mo., assignor to Surety Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 13, 1929. Serial No. 413,720. 3 Claims. (Cl. 36—73.)

1. A shoe plate comprising a crescent-shaped body provided with an interrupted short, sharpened, penetrating flange along the outer arc thereof, a short, sharpened penetrating flange along the inner arc thereof, and ex-



tended depressed portions between said flanges to permit bending of the plate.

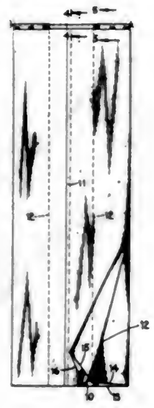
1,875,153. WEB ROLL BRAKE MECHANISM. CHARLES J. RICHTER, Berwyn, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Filed Dec. 6, 1927. Serial No. 238,080. 6 Claims. (Cl. 242—75.)

1. An integral or self-contained web roll braking mechanism including in combination a brake supporting frame mounted at one end of a web roll shaft rotatably journalled in a web roll support, said frame being mounted as a unit on said web roll support and detachable therefrom, a pair or braking members in permanent braking relation to each other, a short shaft on which one of the braking members is mounted and means for coupling and uncoupling the short shaft to the web roll shaft.

1,875,154. PAPER BAG. VINCENT W. RIDLEY, Brooklyn, N. Y., assignor to United Fruit Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 7, 1930. Serial No. 433,851. 2 Claims. (Cl. 229—88.)

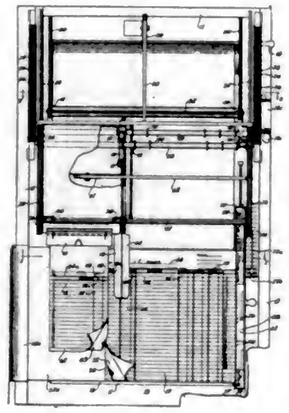
1. A bag formed of a sheet of material having its edges joined, to form a tube having a longitudinal seam, the

sides of the member so formed being folded inwardly to form gussets, said member having the walls at one end



doubled back upon themselves to form folds, and mechanical means for securing portions of the folds together to partially close the end of the bag.

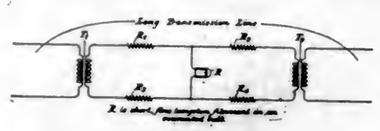
1,875,155. AUTOGRAPHIC BILLING AND POSTING MACHINE. ROBERT C. ROATH, Alliance, Ohio, assignor to The McCaskey Register Company, Alliance, Ohio, a Corporation of Ohio. Filed Jan. 7, 1931. Serial No. 507,118. 14 Claims. (Cl. 282—5.)



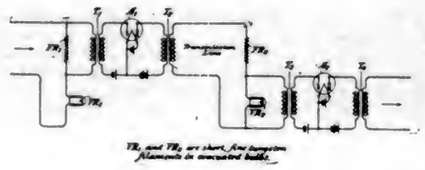
1. A billing and posting machine including a writing bed, means for positioning a ledger leaf upon said writing bed, and carriages for selectively moving a sales slip and carbon longitudinally and transversely over the writing bed and means for stopping the carriages at a plurality of predetermined positions.

1,875,156. METHOD AND MEANS FOR PRODUCING LOSS VARYING WITH ENERGY LEVEL. LELAND C. ROBERTS, Towaco, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 29, 1929. Serial No. 374,919. 2 Claims. (Cl. 178—44.)

2. In a circuit for the transmission of alternating currents of frequencies in the range of audibility, a transmission line and an artificial line inserted in said transmission line and connected therewith through transformers, said artificial line comprising a series resistance and a shunt resistance, said resistances differing from each other substantially as to temperature coefficient.



1,875,157. COMPRESSION AND EXPANSION OF RANGE OF ENERGY LEVEL. LELAND C. ROBERTS, Towaco, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 29, 1929. Serial No. 374,920. 2 Claims. (Cl. 178—44.)



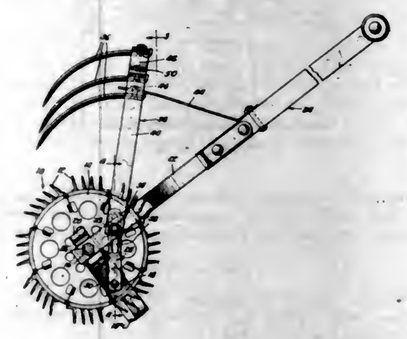
2. In a transmission circuit, two resistances of substantially different temperature coefficients connected in series at the sending end of the circuit, a translating device at the sending end of the circuit, means for impressing on the input of said translating device the voltage drop across one of said resistances, two resistances of substantially different temperature coefficients connected in series at the receiving end of the circuit, a second translating device at the receiving end of the circuit, and means for impressing on the input of said second translating device the voltage drop across one of said resistances at the receiving end of the circuit, the resistance of which the voltage drop is utilized at the receiving end being of relatively different temperature coefficient from the resistance of which the voltage drop is utilized at the sending end.

1,875,158. MOUTH CLAMP. JOHN BARNHART ROMBOUGH, Niagara Falls, N. Y. Filed May 2, 1930. Serial No. 449,327. 6 Claims. (Cl. 128—14.)



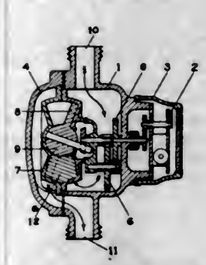
1. In a mouth clamp a handle member having at one end a gag adapted to be inserted between the jaws of an animal and a clamping jaw so arranged with reference to the gag that it may engage the exterior of one of its jaws, and a sliding member movable on the handle member provided with means for operating the clamping jaw, the gag having an open ended slot extending diametrically through it in line with the handle member and extending axially of the gag from its outer end inward towards the handle member.

1,875,159. CULTIVATOR. ALVIN V. ROWE, Galesburg, Ill., assignor to Rowe Manufacturing Company, Galesburg, Ill., a Corporation of Illinois. Filed Aug. 6, 1930. Serial No. 473,310. 3 Claims. (Cl. 97—52.)



1. In a garden tool of the class described, a reel including a plurality of soil engaging blades, a support extending laterally of said reel, a shovel carried by said support, a second support detachably mounted on the first mentioned support, and a shovel mounted on said second support.

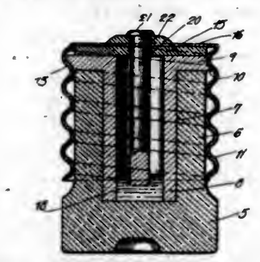
1,875,160. LIQUID METER. EARL R. RYDER, Buffalo, N. Y., assignor to Charles K. Bassett, Buffalo, N. Y. Filed May 26, 1927. Serial No. 194,461. 1 Claim. (Cl. 73—98.)



A liquid meter comprising an annular nutating disk chamber having a fluid inlet and fluid outlet and being disposed with its axis horizontal, and having a central co-axial spherical socket; a vertical partition arranged in said chamber and comprising a spherical seat having a width between 3.5% and 25% of the diameter of said chamber; a nutating disk having a hub arranged within said spherical socket of said chamber and supported upon said spherical seat of said partition, and also having a radial slot on one of its sides which is arranged to receive said partition, said disk adjacent to said hub being cut away so as to be out of contact with said partition; and means connected with said disk for measuring the number of its nutations.

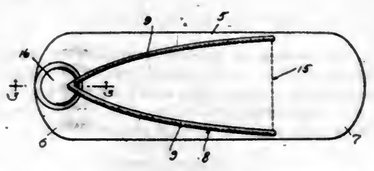
1,875,161. FUSE. IRWIN G. ROODER, Brooklyn, N. Y. Filed Dec. 19, 1931. Serial No. 582,117. 5 Claims. (Cl. 200—113.)

1. A fuse comprising a cup shaped member of non-conducting material, a tubular member of conducting material forming a lining for the cup-shaped member, a shell of conducting material embracing said cup-shaped member, and having electrical connection with the lining member, a non-conducting member carried by said conducting lining, and held thereon by said shell, a conducting member carried by said last mentioned non-conducting member, and extending into the cup-shaped member, and a fluid conducting medium carried by said cup



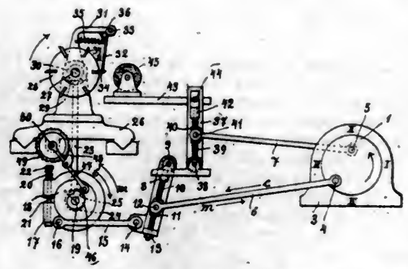
shaped member and forming an electrical connection between the lining of the cup-shaped member and said electrode.

1,875,162. SANDAL. GEORGE E. SAYERS, Boston, Mass. Filed Sept. 5, 1930. Serial No. 479,077. 1 Claim. (Cl. 36—11.5.)



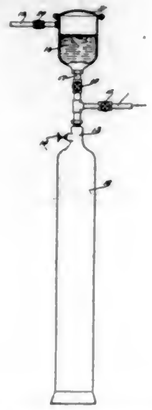
A sandal of the character described comprising a sole formed of rubber and adjacent one end thereof provided with a transverse slit opening longitudinally at the bottom face of the sole, said sole member adjacent its opposite end having a flexible post rising therefrom, and a flexible retaining member including a pair of diverging portions merging at their converging ends into an anchoring member embedded in the top of said post, said opposed portions at their diverging ends being embedded in said sole adjacent the longitudinal edges of said sole.

1,875,163. CUTTER GRINDER. WILLY SCHARFF, Frankfort-on-the-Main, Germany. Filed Jan. 24, 1930, Serial No. 423,141, and in Germany Jan. 24, 1929. 3 Claims. (Cl. 51—50.)



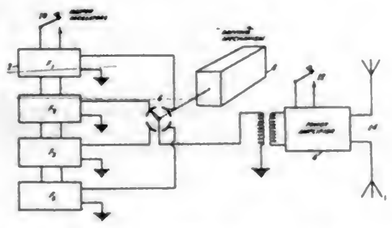
1. A cutter grinder comprising a carriage, a chuck on said carriage for holding a cutter, means for rotating said chuck and for feeding-in said carriage, means for presenting a grinding wheel to said cutter, a continuously rotating member for actuating all said means, a mechanism connecting said member to said chuck-rotating and feeding-in means, a mechanism connecting said member to said grinding-wheel presenting means, and an adjustable part in said first-mentioned mechanism.

1,875,164. MANUFACTURE OF CARBON DIOXIDE ICE. PETER SCHLUMBOHM, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed June 12, 1931. Serial No. 543,896. 4 Claims. (Cl. 62—121.)



1. In the process of producing artificially colored carbon dioxide ice, the steps which consist in utilizing carbon dioxide under pressure to inject coloring matter into a mass of unsolidified carbon dioxide, and subsequently solidifying said mass of colored carbon dioxide.

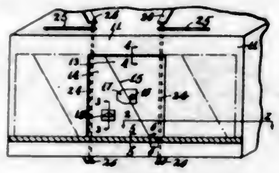
1,875,165. METHOD FOR WIRELESS COMMUNICATION. FRITZ SCHRÖTER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed June 11, 1928. Serial No. 284,285. 3 Claims. (Cl. 250—8.)



1. The method of signaling in order to avoid interference of a signal with itself due to traveling along different paths to a receiver, which includes transmitting at different frequencies successive portions of the signal, and selectively and successively translating the signal portions in the order and at frequencies corresponding to those at which the signal was transmitted, the portioning of the signal being chosen such that the time of transmission of a portion thereof precludes interference at the receiver due to reception of the same signal portion along other paths.

1,875,166. AUTOMATIC ANTIHOLDUP DOOR CONTROL. DAVID SEITZMAN, New York, N. Y. Filed Dec. 11, 1931. Serial No. 580,313. 6 Claims. (Cl. 20—1.01.)

1. In an automatic anti-holdup door, a frame, door sections horizontally slidable and resiliently supported and having end contacting edges at an inclination to cause one section to move up and the other down when the door sections are forced together or forced upon some article interposed, means for closing and opening said door sections, stationary racks upon said door frame



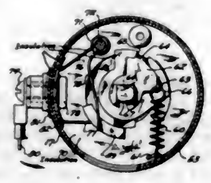
above and below said door sections, and tooth members on said door sections engageable with said racks in the door sections and forced up and down respectively.

1,875,167. SHAVING BRUSH. HARRY E. SIMMONS, Toledo, Ohio. Filed Apr. 22, 1931. Serial No. 531,032. 2 Claims. (Cl. 15—194.)



1. As a new article of manufacture, a shaving brush having a plurality of folded strands of vegetable matter, means binding the folded ends of said strands, and a dried plastic substance completely enclosing said binding means and the looped ends of the strands providing a casing and handle therefor, and shaving soap impregnating the free ends of the strands, said strands being porous whereby to absorb and retain the shaving soap.

1,875,168. LOCK SWITCH. EMIL SINNER, Milwaukee, Wis., assignor to Clum Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 22, 1928. Serial No. 287,442. 15 Claims. (Cl. 200—44.)

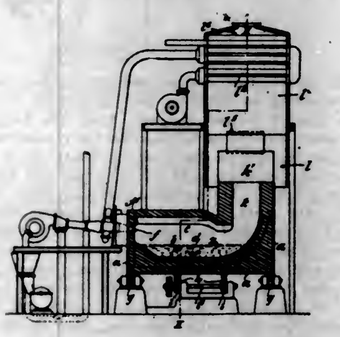


1. In a device of the character described, the combination with a switch actuator movable between a switch opening position and a switch closing position, of a lock plug controlling the position of said actuator and adapted to receive a removable key, and means automatically acting to restrain said plug in the switch closing position of said actuator and including interacting members of which one is releasable solely upon withdrawal of the key.

1,875,169. REVERBERATORY FURNACE. WENZESLAW FRANK SKLENAR, London, and AUSTIN HUDSON RONAN, Ealing, London, England. Filed Aug. 7, 1931, Serial No. 555,798, and in Great Britain Aug. 11, 1930. 1 Claim. (Cl. 263—16.)

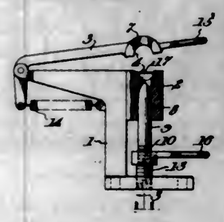
A reverberatory furnace comprising a metal casing, the bottom of which is of an arc-shaped form in transverse section, an inner lining of refractory material to form a hollowed bed of a semi-cylindrical shape in cross section,

a combustion chamber above said bed, an uptake extending upwardly from the combustion chamber, through which the products of combustion escape, means for continually oscillating or rocking the furnace to and fro during melting, a stationary burner arranged at the axis of oscillation of the furnace and projecting through an orifice in the end wall of the furnace opposite to the uptake end, the said burner being so positioned that the flames or gases of combustion are directed downwardly to impinge on the surface of the metal in the bed and on the surface of the bed exposed by the movement of the metal therein due to the oscillation of the furnace, a hood of a flared or arc-shaped form terminating the lower end of



a chimney shaft and arranged above the uptake, inwardly and downwardly sloping members carried by the uptake and co-acting with the arc-shaped hood to receive the products of combustion escaping from said uptake irrespective of any angular position of the furnace, a door closing a charging opening formed in one side of the hood, said opening being so arranged as to charge the metal into the shaft whereby the combustion gases escaping through said uptake heat the metal before the latter passes to the hollowed bed, tapping and slagging spouts in the furnace, means for supplying air under pressure to the burner and means for pre-heating said air by causing it to pass through pipes heated by the escaping products of combustion, as set forth.

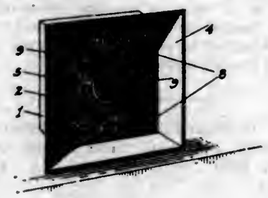
1,875,170. GRID FORMING APPARATUS. HAROLD A. SNOW, Boonton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 28, 1931. Serial No. 533,508. 4 Claims. (Cl. 140—41.)



1. In apparatus for shaping grid electrodes, cooperating members providing a cylindrical chamber for receiving and supporting a grid electrode blank, spreader means slidable diametrically of and through said chamber, and guide means on one of said members for maintaining a predetermined relation between a grid blank to be operated upon and the path of movement of said spreader means

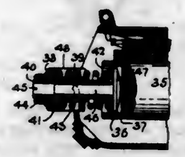
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1,875,171. SOUND PROJECTING APPARATUS. LE ROY A. SPRAGUE and CHARLES F. DORSCH, Modesto, Calif. Filed Aug. 14, 1929. Serial No. 385,917. 6 Claims. (Cl. 181—31.)



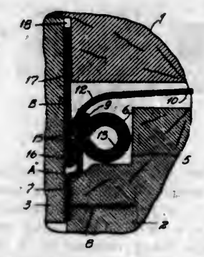
1. A sound projecting apparatus comprising, in combination with the sound projecting cone of a loud-speaker, a means for projecting the sound waves emanating from the outside surface of the cone in the same direction as those projecting from the interior of the cone, and with approximately the same volume.

1,875,172. LATERAL MOTION DEVICE FOR LOCOMOTIVES. ALFRED W. BRUCE, New York, N. Y. Filed Aug. 15, 1930. Serial No. 475,457. 8 Claims. (Cl. 308—41.)



7. In a locomotive, the combination of an axle journal having a recess in its outer end; a journal box therefor having its outer end partially open; a hinged cover closing the opening; a plunger support rigidly secured to the outer end of the box and projecting outwardly beyond said end and cover; a plunger carried by the support, having its inner end disposed within the said recess in the end of the journal, and having its outer end extending through the outer end of the support; and a spring urging the plunger to exert force against the journal within the said recess, when the journal is laterally moved toward the plunger.

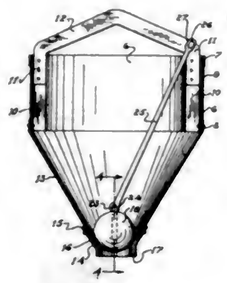
1,875,173. METAL WEATHER STRIP. ALFRED M. LANE, St. Louis, Mo., assignor to Monarch Metal Weatherstrip Corporation, St. Louis, Mo., a Corporation of Missouri. Filed May 4, 1931. Serial No. 534,806. 11 Claims. (Cl. 20—69.)



1. A weatherstrip for windows equipped with sliding sashes, said weatherstrip comprising two metal strips, one adapted to be fastened to the window frame and the

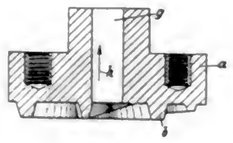
other to the window sash, one of said strips being relatively rigid and having a longitudinal beaded groove portion, and the other strip being relatively flexible and having a longitudinal bead thereon fitting within the beaded groove portion of said rigid strip, said flexible strip having a concave surface extending along one side of the beaded groove portion of said relatively rigid strip and adapted to engage the adjacent marginal portion of said beaded groove portion.

1,875,174. CONCRETE BUCKET. EDWARD MCGIVERN, Rapid Falls, Liverpool, Nova Scotia, Canada. Filed Sept. 17, 1930. Serial No. 482,583. 1 Claim. (Cl. 294—69.)



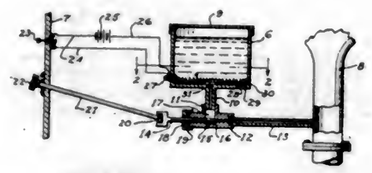
A concrete bucket including a body having an upper circular portion and a lower tapering portion depending therefrom; a funnel-shaped valve member with a flared upper edge secured on the lower end of said lower section and having a shoulder receiving said lower end of the lower section of the bucket body; a ball valve within said bucket body and normally resting in said valve member; a lifting rod pivotally connected with said ball valve and extending upwardly in said bucket body; a handle extended across and rising from the upper section of said body; and means to firmly secure the ends of said handle in said upper section of the bucket body.

1,875,175. APPARATUS FOR PRESSING ARTICLES FROM CERAMIC MATERIALS. MAX MICHEL, Freiberg, Germany, assignor to Porzellanfabrik Kahla Zweigniederlassung Freiberg, Freiberg, Germany. Filed Nov. 21, 1930, Serial No. 497,318, and in Germany Nov. 22, 1929. 3 Claims. (Cl. 25—26.)



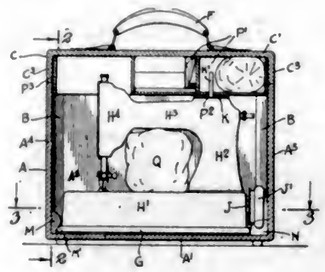
2. Apparatus for forming homogeneous bodies from plastic material, comprising relatively rotatable die and matrix members, a plurality of disconnected ridges on one of said members, said ridges being spiral, the inner sides of each ridge being defined by a circle having a radius greater than the radius to any point on the inwardly adjacent ridge, the outer edges of said ridges being defined by spirals whose radii increase in a direction counter to the direction of rotation.

1,875,176. ELECTRIC FUEL WARMER FOR INTERNAL COMBUSTION ENGINES. HENRY ALBERT MITCHELL, Wooler, Ontario, Canada. Filed Apr. 26, 1930. Serial No. 447,616. 3 Claims. (Cl. 219—38.)



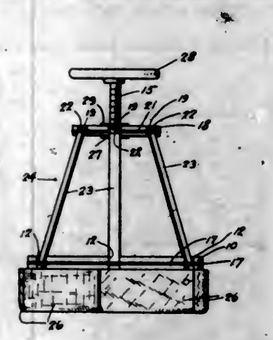
1. An electric fuel warmer for internal combustion engines including an auxiliary fuel tank with the top and bottom thereof formed separate from the body of said tank; means carried by the bottom for removable engagement over the top of the tank to firmly clamp together said bottom, top and body of the tank and form liquid tight connections therebetween; binding posts depending through said cover of the tank; an electric heating coil extended between the depending ends of said binding posts and completely submerged in the liquid content of the body of said tank adjacent the bottom thereof; said bottom of the tank being solid and having a transverse extension on its under face with a threaded end projecting for connection with the fuel feed pipe leading to the intake manifold of the engine; a needle valve adjustable in said transverse extension of the body bottom and normally closed against the valve seat in the longitudinal fuel passage through said extension; a source of electrical energy; electrical connections between said source of electrical energy and a binding post to complete a circuit through the same and through said electric heating coil; and a control switch for said circuit adjacent to the controlling means for said needle valve.

1,875,177. PORTABLE SEWING MACHINE CARRYING CASE. FREDERICK OSANN, White Plains, and RAYMOND L. PLUMLEY, Brooklyn, N. Y., assignors to Frederick Osann Company, New York, N. Y., a Corporation of New York. Filed May 21, 1929. Serial No. 364,713. 10 Claims. (Cl. 45—68.2.)



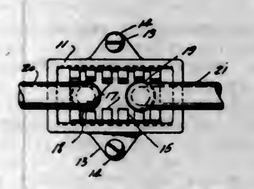
1. A carrying case for a portable sewing machine comprising a rectangular body arranged to receive a sewing machine therein, a rectangular cover connected to said body, and a separate tray positioned in said body and arranged to contact with said machine, said cover being proportioned to hold said tray firmly against said machine when said cover is in its closed position, whereby vertical movements of said machine from a predetermined position are prevented.

1,875,178. CAP STRETCHING AND RESHAPING IMPLEMENT. EARL R. PHARES, Audubon, Iowa. Filed Mar. 2, 1932. Serial No. 596,817. 2 Claims. (Cl. 223—33.)



1. A cap reshaping device comprising a relatively stationary disc-like plate, a feed screw concentrically and swivelly connected to and rising from said plate and having operating means on its upper end, a somewhat smaller disc-like plate mounted for adjustment on said feed screw and movable toward and from said first-named plate, a plurality of companion expansible and contractible units provided at their lower ends with overlapping complemental form sections, the upper ends of the units being hingedly attached to said second-named plate and the intermediate portions thereof being slidably associated with the marginal portion of the first-named plate.

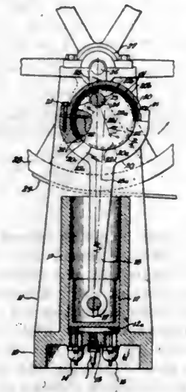
1,875,179. CONNECTING DEVICE. WILLIS O. PROUTY, Hermosa Beach, Calif., assignor to Metlox Corporation, Ltd., Manhattan Beach, Calif., a Corporation of California. Filed Feb. 10, 1930. Serial No. 427,227. 1 Claim. (Cl. 173—328.)



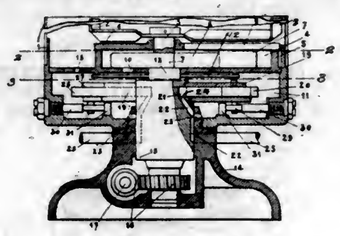
In a device for connecting luminous tubes in series, a hollow body, a U-shaped connector member, the sides of the U being held by friction against the inside surface of the body, the ends of the U being slotted and extended reversely to form opposed spring fingers to grasp the luminous tube ends inserted into the body, one portion of the opposed spring fingers being adapted to receive one tube, another portion being adapted to receive another tube, and both portions being connected by a common conducting medium.

1,875,180. MEANS FOR CONVERTING MOTION AND THE LIKE. ROWLAND W. RIDER, Salt Lake City, Utah, assignor to Utah Royalty Corporation, Salt Lake City, Utah, a Corporation of Utah. Filed July 8, 1930. Serial No. 466,600. 5 Claims. (Cl. 74—38.)

1. Means for connecting a driving rotary member having a wrist pin thereon with a reciprocating member below, the connecting means including an eccentric freely rotatable on the wrist pin of the rotary member, a member enclosing the eccentric and connected to the reciprocating member, the eccentric and enclosing member being adapted to rotate relatively, and yielding means between the eccentric and enclosing member adapted to maintain them in such positions relative to each other that a line drawn through the centre of the eccentric and the centre of its pivot will be normally in a predetermined angular relation to the centre line of the reciprocating member.

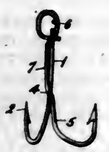


1,875,181. CENTRAL LUBRICATING DEVICE. OSKAR SCHNEIDER, Berlin, Germany. Filed Aug. 12, 1929, Serial No. 385,250, and in Germany Feb. 11, 1929. 8 Claims. (Cl. 184—33.)



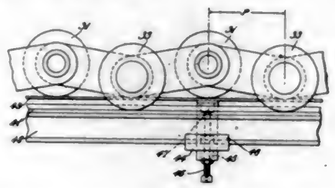
2. Lubricating apparatus of the class described, comprising a container, a revoluble element, a pump arranged in said container carried by said revoluble element, said pump comprising a cylinder and a piston, an oscillatory element to actuate the piston and having a cam and relatively fixed tappets arranged in the path of the cam and engageable thereby to impart oscillatory movement thereto and hence reciprocatory movement to the piston.

1,875,182. FISHHOOK. FRANK SOUTHWELL, Redditch, England, assignor to O. Mustad & Son, Oslo, Norway. Filed May 9, 1931. Serial No. 536,095. 3 Claims. (Cl. 43—27.)



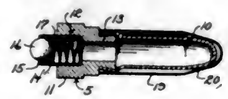
3. A multiple fish hook comprising a plurality of resilient members, one member having at least two hooks, the other member having at least one hook, and means for resiliently engaging said members with each other.

1,875,183. ENDLESS CONVEYER. WALTER ALFRED SPRIGGS, Southsea, England. Filed Nov. 7, 1929, Serial No. 405,431, and in Great Britain Nov. 21, 1928. 2 Claims. (Cl. 198—138.)



1. An endless conveyer including spaced chains mounted for travel in spaced parallel planes and including hollow bushings, spindles mounted in the opposed hollow bushings of the respective chains and traversing the space between the chains, elements secured on the spindles between the chains to thereby constitute with the spindles the sole load support and driver of the connected element, an additional chain offset vertically and horizontally from the plane of the first mentioned chains and including bushings, spindles in the bushings of the additional chain, the paths of travel of the respective chains maintaining all spindles constantly parallel, rigid connections between the spindles of the first mentioned chains and the spindles of the additional chain, the relation of the chains insuring that the elements remain constantly in the same angular position throughout the travel of the chains, the first mentioned chains including rollers concentric to the spindles, rollers intermediate the spindles, a trackway for the first mentioned rollers, an independent trackway for the intermediate rollers, and means for relatively adjusting the latter trackway.

1,875,184. LIQUID INK ERASER FOR POCKET FOUNTAIN PENS AND DESK SET FOUNTAIN PENS. FRANK N. STEIGLEDER, Detroit, Mich. Filed Feb. 26, 1930. Serial No. 431,485. 3 Claims. (Cl. 120—36.)

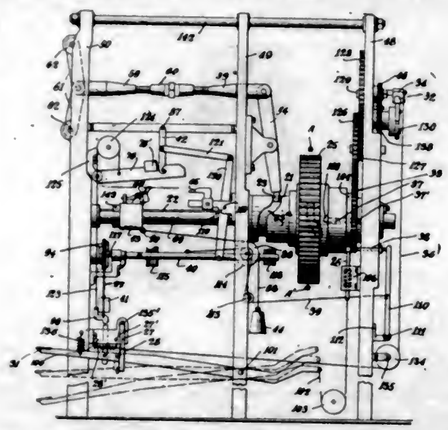


1. An eraser of the type described in which a liquid eradicator is employed, a plug, a metal sleeve partly let in the outer end of the plug and having its outer end portion beyond the end of the plug, said sleeve having its inner end provided with inwardly directed fingers and its outer end inwardly disposed to afford a valve seat, a ball valve for the seat, a spring in the sleeve and bearing at one end against the fingers and at its other end upon the valve to retard the turning movement thereof and exerting pressure between the fingers and the valve for seating the valve and said plug having a bore communicating with the inner end of the sleeve.

1,875,185. PROCESS FOR THE MANUFACTURE OF ARTIFICIAL SILK, HAIR, BANDS, AND SIMILAR PRODUCTS OF DIMINISHED LUSTER. JOHANN JOSEF STÖCKLY, Teltow-Seehof, near Berlin, and ERHARD WITTE, Berlin-Lichterfeld, Germany, assignors, by mesne assignments, to American Glanzstoff Corporation, New York, N. Y. Filed Apr. 5, 1929, Serial No. 352,894, and in Germany Apr. 5, 1928. 9 Claims. (Cl. 18—54.)

1. The method of producing artificial silk and the like of diminished luster comprising in combination the step of adding to an alkaline cellulosic solution a concentrate of caoutchouc latex, spinning the mixture into a thread and treating the thread so obtained in the usual manner.

1,875,186. ELBOW-MAKING MACHINE. JOSEPH GEORGE TILP, Maplewood, N. J., assignor to David Levow, New York, N. Y. Filed Dec. 24, 1929. Serial No. 416,243. 14 Claims. (Cl. 153—69.5.)

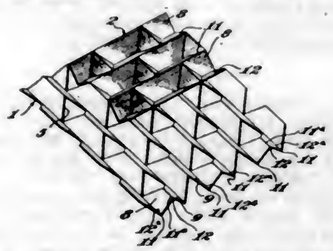


1. In a machine of the kind described, the combination with pipe advancing means, pipe creasing means, and operative connections between the two means just mentioned for permitting their operation in a predetermined time relation, of pipe supporting means in the vicinity of the zone of operation of said creasing means, said pipe supporting means incorporating a working-head including a plurality of relatively movable sections, and there being means for predeterminedly adjusting said sections so as to support the pipe during a creasing operation by lying in a predetermined adjacency to the exterior of the pipe substantially all around the same, and means for predeterminedly giving movement to said sections to space them abnormally to facilitate the insertion of a new pipe in the machine for bending.

1,875,187. METHOD FOR PRODUCING AN ARTIFICIAL WOOD COMPOSITION. LOUIS VEZEKENYI, Cleveland, Ohio. Filed Oct. 12, 1927. Serial No. 225,855. 5 Claims. (Cl. 106—38.)

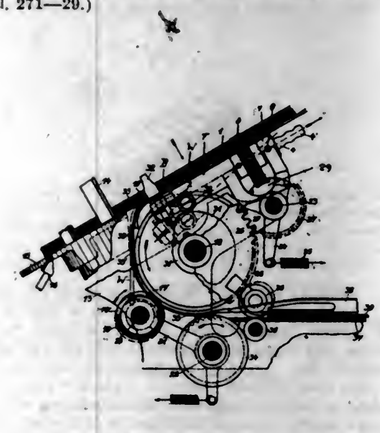
1. A method for producing an artificial wood composition, consisting in making a thin solution of alum and borax; in mixing said solution with a zinc oxide and water mixture; in adding a carbolic acid and chromic acid solution; in mixing the whole mixture with a viscous glue solution; in adding sawdust to the mixture and in mixing all said ingredients for a relatively short period.

1,875,188. UNIT FORMED OF SHEET MATERIAL. CHARLES F. WILLIAMS, Belmont, Mass., assignor to Sherman Products Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Jan. 27, 1932. Serial No. 589,234. 15 Claims. (Cl. 154—45.)



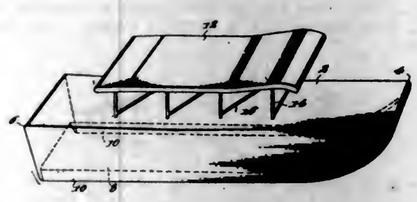
1. Unit formed of sheet material, comprising a pair of sheet elements, each of said elements having ribs formed side by side with recesses therebetween, openings in certain of said ribs, the ribs of one of said elements being received in the openings and having their tops engaging recesses of the other element, the elements cooperating to provide closed air chambers.

1,875,189. PROCESS AND APPARATUS FOR THE SEPARATION OF FOLDED OR INDIVIDUAL SHEETS. ALFRED WINKLER and MAX DÜNNEBIER, Neuwied, Germany. Filed Dec. 24, 1930, Serial No. 504,530, and in Germany June 6, 1929. 16 Claims. (Cl. 271—29.)



1. A method for the separation of folded or individual sheets in a stack which comprises successively bulging and bending a plurality of said sheets to form an opening at the desired place between a group of sheets and the stack and subsequently removing the group of sheets from the stack while maintaining said opening therein.

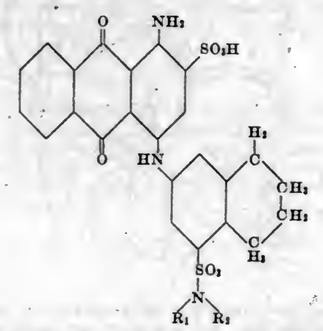
1,875,190. BOAT. TIMOTHY BANKER COLLINS, deceased, Daytona, Fla., by George R. Collins, executor, Kansas City, Mo. Filed Feb. 27, 1930. Serial No. 431,944. 1 Claim. (Cl. 114—66.5.)



A boat comprising a hull having a smooth bottom directed upwardly at the bow thereof, a pair of spaced longitudinally extending depending fins on the bottom of said boat, said fins converging toward the stern of said boat, and an air engaging surface on the upper portion of said boat for producing a lifting effect of the boat when in forward motion.

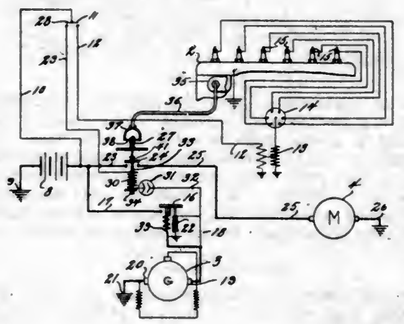
1,875,191. NEW ACID DYESTUFFS OF THE ANTHRAQUINONE SERIES. HEINRICH KOCH, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 5, 1932, Serial No. 584,895, and in Germany Mar. 20, 1930. 4 Claims. (Cl. 260—60.)

1. As new products, the compounds of the general formula:



wherein R_1 stands for a radical of the group consisting of alkyl, hydroxyalkyl and cyclohexyl and R_2 for hydrogen, or R_1 and R_2 represent alkyl radicals, said products yielding on wool from an acid bath clear blue tints of good fastness properties.

1,875,192. STARTER AND RE-STARTER FOR ENGINES. LESLIE H. MIDDLETON, Adrian, Mich., assignor to Schwarze Electric Company, Adrian, Mich., a Corporation of Michigan. Filed May 13, 1932. Serial No. 611,095. 7 Claims. (Cl. 290—37.)

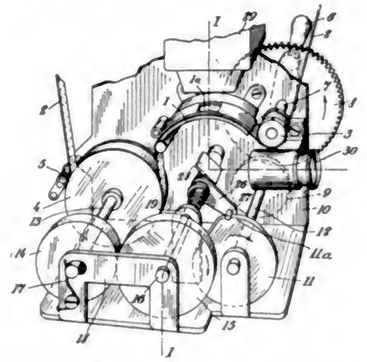


6. For an internal combustion engine installation embodying an engine, an electric energy source, a motor, a generator, a cut-out for the generator, a switch for cutting in the motor to start the engine, and a control circuit connected across the cut-out, said control circuit having therein a coil for operating the switch and means operatively responsive to the electrical condition of said circuit for precluding reverse current flow from the generator becoming effective for operating the switch through said coil.

1,875,193. CINEMATOGRAPHIC PROJECTION APPARATUS. RICHARD RUHNAU, Essen, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 23, 1931, Serial No. 510,777, and in Germany Nov. 12, 1929. 5 Claims. (Cl. 88—16.8.)

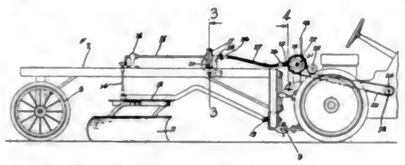
1. In a cinematographic projector, the combination of an arcuate guide for the perforated film band, a lens, a

compensating mirror and a supporting shaft therefor coaxial with the axis of the film guide, means turning the mirror shaft in the direction of the moving film band by



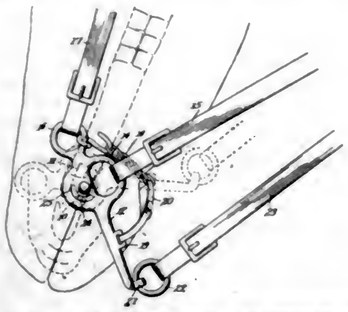
the picture band itself, but independently of the perforations of the film, and means to turn said shaft in the opposite direction.

1,875,194. ROAD WORKING MACHINE. LEVERETT B. SHERMAN, Minneapolis, Minn., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 29, 1925. Serial No. 53,394. 4 Claims. (Cl. 37—168.)



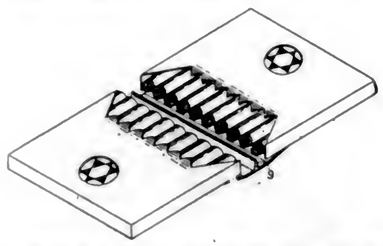
1. An apparatus of the class described comprising a tractor, a grading machine trailer frame connected thereto and a grader blade mounted in said frame, independent clutch and gear mechanisms mounted on said tractor, a drive shaft connected with the tractor source of power and common to said clutch and gear mechanisms, and means connecting said clutch and gear mechanisms with said grader blade for operating it by power.

1,875,195. BIT. STANLEIGH MEGARGEE, New York, N. Y. Filed Aug. 10, 1931. Serial No. 556,244. 2 Claims. (Cl. 54—8.)



1. In a bit of the class described, the combination of a bit-bar having a relatively wide substantially flat jaw-engaging undersurface, a pivot-pin at each end of said bit-bar, slotted cheek-bars mounted on said pivot-pins for pivotal movement and provided at their upper ends with cheek-strap connections and at their lower ends with curb-rein connections, and a pin at each end of said bit-bar offset from said pivot-pins to engage the slots in said cheek-bars and permit only limited relative pivotal movements of said bit-bar and cheek-bar without shifting the mouth position of said bit-bar.

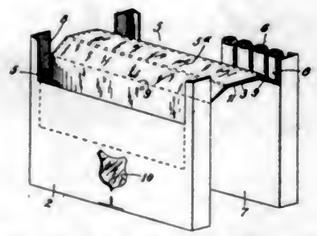
1,875,196. CIGARETTE CONTAINER. WALTER EVERETT MOLINS, Deptford, London, England. Filed Sept. 17, 1927, Serial No. 220,166, and in Great Britain Oct. 28, 1926. 5 Claims. (Cl. 206—41.)



1. A cigarette container constructed from an integral blank of sheet material and comprising a pair of open ended pockets, each adapted to hold a single row of cigarettes, and a flap hingedly connecting the two pockets together so that they may be opened out into line with their open ends directed toward one another and adapted to extend across the open ends of the pockets when the latter are folded one upon the other to completely enclose the cigarettes, each of said pockets being provided with a serrated portion integral with the pocket and extending within the pocket for engagement in the interstices between adjacent cigarettes, whereby the latter may be retained against unintentional displacement.

4. A cigarette container comprising a pair of open ended pockets, each adapted to hold a single row of cigarettes, and a flap for hinging the two pockets together so that they may be opened out into line with their open ends directed toward one another and adapted to extend across the open ends of the pockets when the latter are folded one upon the other, a strip of foil extending within each pocket and across the flap, that portion of the foil adjacent the flap extending outwardly from the flap to form an abutment for engagement by the cigarettes when said pockets are opened.

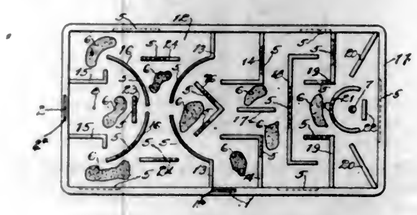
1,875,197. CARTON FOR CIGARETTES AND LIKE ARTICLES. WALTER EVERETT MOLINS, Deptford, London, England. Filed Jan. 20, 1931, Serial No. 510,030, and in Great Britain Feb. 4, 1930. 3 Claims. (Cl. 229—27.)



1. A carton comprising two block ended pockets hinged together by a flap which also constitutes the sole closure member of the carton, characterized by portions of the inner broad panels of the pockets being folded upon themselves within the pockets to form openings at the open ends of the pockets which display the free ends of

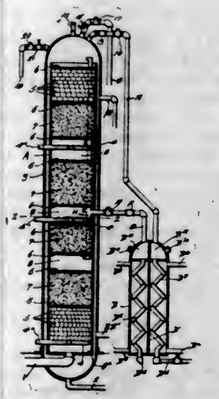
the cigarettes located therein, the folded portions also forming protective means for the ends of the strip of foil arranged around the batches of cigarettes disposed within each pocket.

1,875,198. GAME TABLE. TORAZO NAGAI, Los Angeles, Calif. Filed Aug. 25, 1930. Serial No. 477,673. 3 Claims. (Cl. 273—3.)



1. A game table having a top forming a playing surface over which a ball is adapted to be projected and provided with a ball receiving cup, and a plurality of elements projecting upwardly from said surface and relatively arranged thereon to define a tortuous course for the ball which leads to said cup, said playing surface having recesses therein and roughened and yieldable material in said recesses for impeding movement of the ball across the recesses.

1,875,199. APPARATUS FOR SEPARATING A PLURALITY OF CONDENSATES OF THE HYDROCARBON CONSTITUENTS OF NATURAL GAS. WALTER M. PARKMAN, Jackson, Miss., assignor of twenty-three one-hundredths to J. S. Watson, Lexington, Miss. Filed Nov. 10, 1931. Serial No. 574,170. 6 Claims. (Cl. 196—8.)

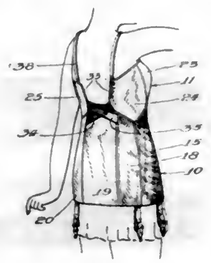


1. An apparatus for separating a plurality of condensates of the hydrocarbon constituents of natural gas of relatively high boiling point, including an absorber member of tower like construction, means for introducing a flow of gas into said member near the bottom, an absorbing element disposed in said member adapted to absorb hydrocarbon constituents of natural gas of relatively high boiling point, pipes for introducing steam into said member below the absorbing element, a discharge pipe near the top of the tower member for removal of unabsorbed gas constituents of low boiling point, an automatic temperature controlled valve on said discharge pipe operable on admission of steam by said steam pipes to cut off said discharge of unabsorbed constituents at the close of the absorption period, a plurality of discharge pipes from said member for removing selectively the absorbed constituents during the distillation period, condensers connected with said discharge pipes for effecting condensates of said constituents, automatic temperature controlled valves on each of said discharge pipes operable to regulate the discharge of absorbed constituents from the member into said condensers at temperatures predetermined according to the boiling points of said constituent gases.

1,875,200. PROCESS OF PREPARING HYDROFLUORIC ACID POOR IN SILICIC ACID. JULIUS SÖLL, Frankfort-on-the-Main-Schwanheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 30, 1930, Serial No. 505,663, and in Germany July 14, 1927. 8 Claims. (Cl. 23—153.)

1. A process of preparing hydrofluoric acid poor in silicic acid, which comprises mixing a fluorite with sulfuric acid of a concentration of between 70% to 90%, heating the mixture while stirring to a temperature of from 90° to 120° C., until formation of silicon fluoride has ceased, and then distilling off hydrofluoric acid by heating the mixture to a temperature of above 120° C.

1,875,201. CORSET AND BRASSIÈRE. WILLIAM G. WEBER, Aurora, Ill., assignor to International Corset Company, Aurora, Ill., a Corporation of Illinois. Filed Jan. 12, 1931. Serial No. 508,011. 4 Claims. (Cl. 2—30.)

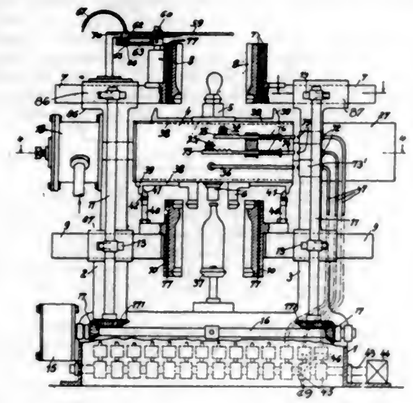


1. A combination corset and brassière, the corset comprising a non-elastic front section, elastic side panels and a non-elastic back secured together to encircle the body of the wearer, said corset extending from about the waist line to below the hips, a brassière consisting of a front member and two back members, the front member stitched to the front of the corset, a piece of elastic fabric connecting the lower part of each back member to the side of the corset and overlying said corset elastic panels, an elastic strip secured to each back member of the brassière near the center back and extending diagonally downwardly toward the corset back, and means for securing the free ends of the strips to the corset back.

1,875,202. AUTOMATIC GLASS-BLOWING MACHINE. MAX AFTERGUT, Berlin-Schoneberg, Germany. Filed Mar. 16, 1927, Serial No. 175,888, and in Germany Mar. 16, 1926. Renewed May 21, 1932. 10 Claims. (Cl. 49—9.)

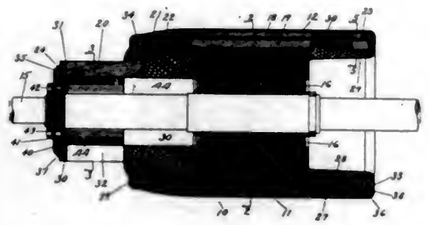
1. A glass blowing machine, comprising a rockable carrier, a parison mould, a finishing mould, a neck mould mounted on said carrier, two cylinders provided in said carrier and capable of connection with said parison mould, pistons within said cylinders, operating means for said pistons, means controlling the supply of air

between said cylinders and parison mould, and means for rocking said carrier with its neck mould into positions for cooperation with said parison and finishing moulds.



10. A glass blowing machine, including moulds formed with cooling passages open at both ends for the free passage of atmospheric air, and means for supplying and blowing glass in said moulds.

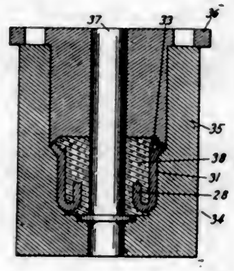
1,875,203. SELF VENTILATING HIGH SPEED ARMATURE. VINCENT G. APPLE, Dayton, Ohio. Filed Aug. 31, 1927. Serial No. 216,749. 2 Claims. (Cl. 171—206.)



1. A high speed armature comprising a core, ventilating tunnels therethru, a bar winding thereon, diagonal leads extending from the winding beyond the core, spaced apart commutator segments integral with said diagonal leads, rings of insulating material molded between and around said diagonal leads and between and around the free ends of said segments leaving the greater portion of said segments separated from each other by air spaces only, reinforcing rings imbedded in said insulating rings at their outer exposed ends and an air passage connecting said tunnels and said air spaces.

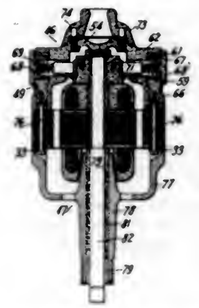
1,875,204. COMMUTATOR AND METHOD OF MAKING IT. VINCENT G. APPLE, Dayton, Ohio. Filed July 5, 1928. Serial No. 290,680. 2 Claims. (Cl. 171—321.)

1. The method of making a commutator, which consists of cutting sheet metal to provide a blank having one toothed edge and one plain edge, bending the blank to provide a cylinder having teeth at one end and the other end plain, bending the teeth inward then axially into the inside of the cylinder to provide anchors, flaring the plain end obliquely outwardly to provide a flange for risers, pressing an annular groove into the outer surface of said flange, molding a core of insulation into the inside of said cylinder, about said anchors, and outwardly along the outer surface of said flange and into said annular groove, and dividing the cylinder into segments



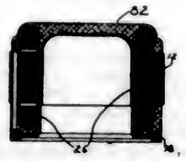
by making a series of axial cuts having a radial depth extending through but not farther than the inside diameter of said cylinder.

1,875,205. DYNAMO-ELECTRIC MACHINE. VINCENT G. APPLE, Dayton, Ohio. Filed Sept. 12, 1929. Serial No. 392,158. 5 Claims. (Cl. 172—36.)



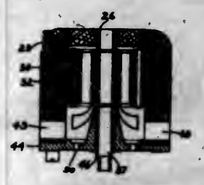
1. As part of a dynamo electric machine comprising a core with coils having end turns extending axially from the end of the core, a structure comprising a hollow removable terminal head of insulation, having side walls and a closed end, surrounding the said end turns and closing the end of the machine, rigid terminals contained in the said side walls, one end of each terminal extending to and through the said closed end and the other end extending to and through the end of the side wall adjacent the core and having electrical communication with the said coils, and a hollow cap of insulation having a central opening adapted to receive a two conductor lamp cord secured to said closed end, covering the terminal ends where they extend through the said closed end.

1,875,206. INSULATION INCASED STATOR WITH GLASS LINING. VINCENT G. APPLE, Dayton, Ohio. Filed Nov. 28, 1930. Serial No. 498,567. 4 Claims. (Cl. 172—36.)
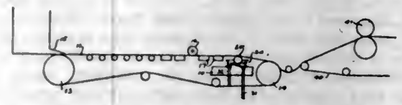


1. A dynamo electric machine stator having its rotor chamber lined with a continuous wall of glass.

1,875,207. ALTERNATING CURRENT MOTOR. VINCENT G. APPLE, Dayton, Ohio. Filed Dec. 11, 1930. Serial No. 501,578. 5 Claims. (Cl. 172—120.)



1. A dynamo electric machine stator comprising, a core having a central rotor opening and a plurality of spaced apart winding apertures around said central rotor opening, coils of insulated wire in said winding apertures, the end turns of said coils at the one end of the core being laid one above the other so as to clear said central rotor opening and at the other end of the core being laid side by side and extending across said central rotor opening so as to substantially close the said opening.

1,875,208. PAPER MANUFACTURE. WILLIAM EDISON BAIR, Jr., Chillicothe, Ohio, assignor to The Mead Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 9, 1931. Serial No. 521,118. 15 Claims. (Cl. 92—40.)



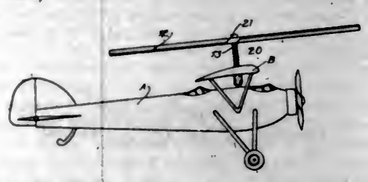
1. In the manufacture of paper the method which comprises introducing paper forming stock onto a forming wire, and adding additional paper forming material to the wire side of the forming web, while the web is still upon the forming wire.

1,875,209. SECURING MEANS. JOHN D. BALDWIN, Jr., Bratenahl, Ohio, assignor to Albert J. Weatherhead, Jr., Cleveland, Ohio. Filed May 2, 1930. Serial No. 449,343. 16 Claims. (Cl. 85—5.)



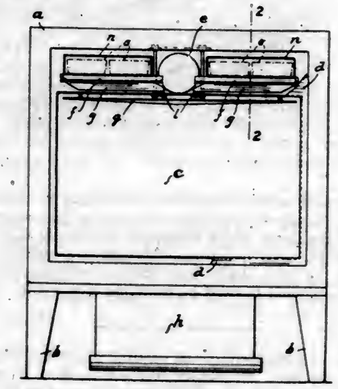
2. A locking device having parallel legs and a back part joining said legs and having a raised central part with a depressed seat portion in the raised part for engagement with a member to be locked.

1,875,210. AIRPLANE. PAUL BANG, Yonkers, N. Y. Filed Aug. 6, 1931. Serial No. 555,605. 1 Claim. (Cl. 244—15.)



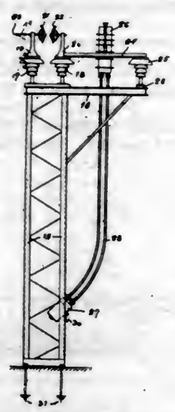
In a flying machine, a wing having a recess extending parallel to the leading edge of the wing and terminating at points adjacent the tips of the wing, a supporting propeller nested in said recess, a vertically disposed standard extending thru said wing and said recess, a housing suspended from said wing and receiving a portion of said standard and an expansion spring mounted on said standard between the lower end of said housing and said propeller, and latch means for holding the supporting propeller in retracted position against the expansive force of said spring, said spring being held in line by the shaft standard.

1,875,211. REFRIGERATING APPARATUS AND METHOD OF REFRIGERATING. EUGENE L. BARNES, Buffalo, N. Y. Filed Aug. 27, 1929. Serial No. 388,666. 11 Claims. (Cl. 62—95.)



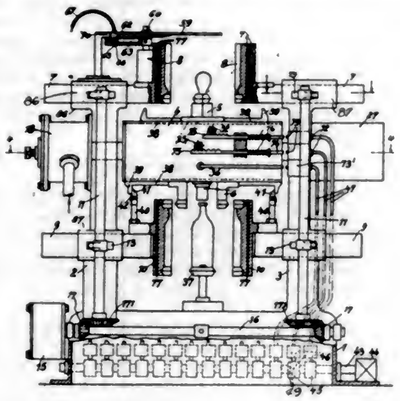
11. In a refrigerating apparatus, in combination, a food compartment having an open side, a jacket surrounding and spaced from the walls of the food compartment, there being no communication between the space between the walls of the food compartment and said jacket and either the interior of the food compartment or the atmosphere, refrigerating means located in said space including a cooling fluid, and means affording a maximum heat conductivity from a portion of one of the walls of said food compartment to the refrigerating means, so that said portion will normally be at a lower temperature than other portions of the walls.

1,875,212. SUPERPOTENTIAL DRAIN. CHARLES E. BENNETT, Decatur, Ga. Filed Sept. 23, 1926. Serial No. 137,310. 14 Claims. (Cl. 175—30.)



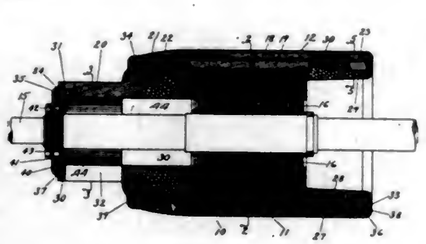
1. A superpotential drain comprising a conduit of yieldable insulating material, a supply of electrolyte therein, and means for leading superpotential current to the electrolyte in the conduit to cause vaporization thereof as the result of current flow therethrough.

between said cylinders and parison mould, and means for rocking said carrier with its neck mould into positions for cooperation with said parison and finishing moulds.



10. A glass blowing machine, including moulds formed with cooling passages open at both ends for the free passage of atmospheric air, and means for supplying and blowing glass in said moulds.

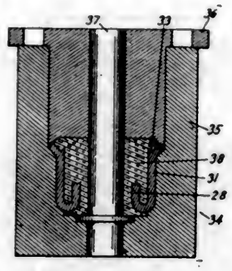
1,875,203. SELF VENTILATING HIGH SPEED ARMATURE. VINCENT G. APPLE, Dayton, Ohio. Filed Aug. 31, 1927. Serial No. 216,749. 2 Claims. (Cl. 171—206.)



1. A high speed armature comprising a core, ventilating tunnels therethru, a bar winding thereon, diagonal leads extending from the winding beyond the core, spaced apart commutator segments integral with said diagonal leads, rings of insulating material molded between and around said diagonal leads and between and around the free ends of said segments leaving the greater portion of said segments separated from each other by air spaces only, reinforcing rings imbedded in said insulating rings at their outer exposed ends and an air passage connecting said tunnels and said air spaces.

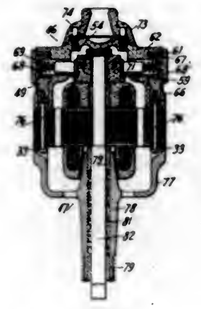
1,875,204. COMMUTATOR AND METHOD OF MAKING IT. VINCENT G. APPLE, Dayton, Ohio. Filed July 5, 1928. Serial No. 290,680. 2 Claims. (Cl. 171—321.)

1. The method of making a commutator, which consists of cutting sheet metal to provide a blank having one toothed edge and one plain edge, bending the blank to provide a cylinder having teeth at one end and the other end plain, bending the teeth inward then axially into the inside of the cylinder to provide anchors, flaring the plain end obliquely outwardly to provide a flange for risers, pressing an annular groove into the outer surface of said flange, molding a core of insulation into the inside of said cylinder, about said anchors, and outwardly along the outer surface of said flange and into said annular groove, and dividing the cylinder into segments



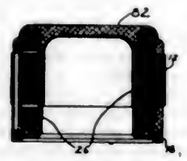
by making a series of axial cuts having a radial depth extending through but not farther than the inside diameter of said cylinder.

1,875,205. DYNAMO-ELECTRIC MACHINE. VINCENT G. APPLE, Dayton, Ohio. Filed Sept. 12, 1929. Serial No. 392,158. 5 Claims. (Cl. 172—36.)



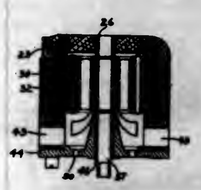
1. As part of a dynamo electric machine comprising a core with coils having end turns extending axially from the end of the core, a structure comprising a hollow removable terminal head of insulation, having side walls and a closed end, surrounding the said end turns and closing the end of the machine, rigid terminals contained in the said side walls, one end of each terminal extending to and through the said closed end and the other end extending to and through the end of the side wall adjacent the core and having electrical communication with the said coils, and a hollow cap of insulation having a central opening adapted to receive a two conductor lamp cord secured to said closed end, covering the terminal ends where they extend through the said closed end.

1,875,206. INSULATION INCASED STATOR WITH GLASS LINING. VINCENT G. APPLE, Dayton, Ohio. Filed Nov. 28, 1930. Serial No. 498,567. 4 Claims. (Cl. 172—36.)



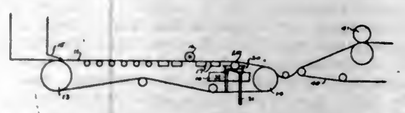
1. A dynamo electric machine stator having its rotor chamber lined with a continuous wall of glass.

1,875,207. ALTERNATING CURRENT MOTOR. VINCENT G. APPLE, Dayton, Ohio. Filed Dec. 11, 1930. Serial No. 501,578. 5 Claims. (Cl. 172—120.)



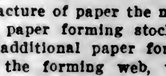
1. A dynamo electric machine stator comprising, a core having a central rotor opening and a plurality of spaced apart winding apertures around said central rotor opening, coils of insulated wire in said winding apertures, the end turns of said coils at the one end of the core being laid one above the other so as to clear said central rotor opening and at the other end of the core being laid side by side and extending across said central rotor opening so as to substantially close the said opening.

1,875,208. PAPER MANUFACTURE. WILLIAM EDISON BAIR, Jr., Chillicothe, Ohio, assignor to The Mead Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 9, 1931. Serial No. 521,118. 15 Claims. (Cl. 92—40.)



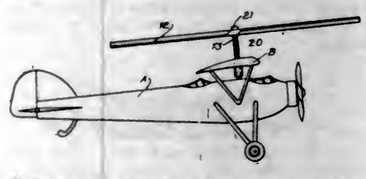
1. In the manufacture of paper the method which comprises introducing paper forming stock onto a forming wire, and adding additional paper forming material to the wire side of the forming web, while the web is still upon the forming wire.

1,875,209. SECURING MEANS. JOHN D. BALDWIN, Jr., Bratenahl, Ohio, assignor to Albert J. Weatherhead, Jr., Cleveland, Ohio. Filed May 2, 1930. Serial No. 449,343. 16 Claims. (Cl. 85—5.)



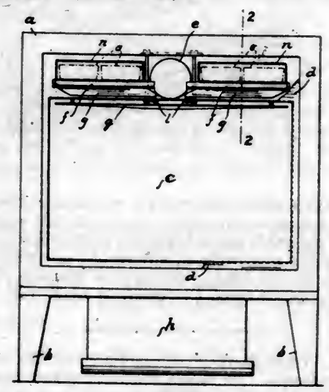
2. A locking device having parallel legs and a back part joining said legs and having a raised central part with a depressed seat portion in the raised part for engagement with a member to be locked.

1,875,210. AIRPLANE. PAUL BANG, Yonkers, N. Y. Filed Aug. 6, 1931. Serial No. 555,605. 1 Claim. (Cl. 244—15.)



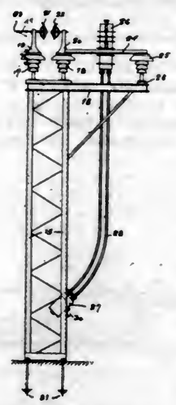
In a flying machine, a wing having a recess extending parallel to the leading edge of the wing and terminating at points adjacent the tips of the wing, a supporting propeller nested in said recess, a vertically disposed standard extending thru said wing and said recess, a housing suspended from said wing and receiving a portion of said standard and an expansion spring mounted on said standard between the lower end of said housing and said propeller, and latch means for holding the supporting propeller in retracted position against the expansive force of said spring, said spring being held in line by the shaft standard.

1,875,211. REFRIGERATING APPARATUS AND METHOD OF REFRIGERATING. EUGENE L. BARNES, Buffalo, N. Y. Filed Aug. 27, 1929. Serial No. 388,666. 11 Claims. (Cl. 62—95.)



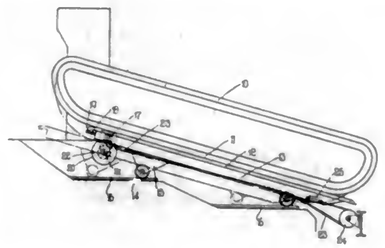
11. In a refrigerating apparatus, in combination, a food compartment having an open side, a jacket surrounding and spaced from the walls of the food compartment, there being no communication between the space between the walls of the food compartment and said jacket and either the interior of the food compartment or the atmosphere, refrigerating means located in said space including a cooling fluid, and means affording a maximum heat conductivity from a portion of one of the walls of said food compartment to the refrigerating means, so that said portion will normally be at a lower temperature than other portions of the walls.

1,875,212. SUPERPOTENTIAL DRAIN. CHARLES E. BENNETT, Decatur, Ga. Filed Sept. 23, 1926. Serial No. 137,310. 14 Claims. (Cl. 175—30.)



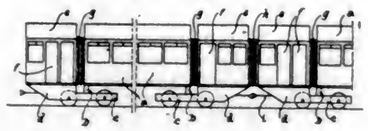
1. A superpotential drain comprising a conduit of yieldable insulating material, a supply of electrolyte therein, and means for leading superpotential current to the electrolyte in the conduit to cause vaporization thereof as the result of current flow therethrough.

1,875,213. FURNACE GRATE. ALFRED WILLIAM BENNIS, Bolton, England. Filed Jan. 8, 1930, Serial No. 419,349, and in Great Britain Mar. 9, 1929. 12 Claims. (Cl. 110—40.)



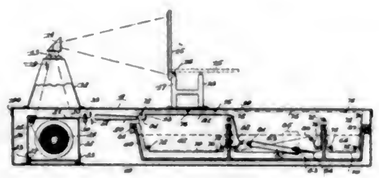
1. A furnace grate comprising a traveling endless chain including an upper run which forms the fuel supporting surface of the grate and a lower run depending therefrom, a skid bar for supporting a portion of the weight of the lower run of the chain, and means whereby the skid bar may be moved toward or from the upper run.

1,875,214. CARRIAGE FOR ARTICULATED TRAINS. CARL BUDERUS, Frankfort-on-the-Main-Sud, Germany. Filed Oct. 2, 1928, Serial No. 309,831, and in Germany Oct. 14, 1927. 10 Claims. (Cl. 105—4.)



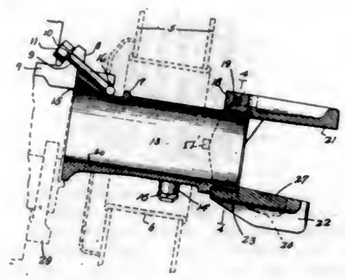
1. A car for transporting passengers or freight particularly a car adapted to run on rails, comprising in combination, bogies, end parts of the car supported by said bogies, a central part of the car pivotally mounted between two bogies, means between the end parts and the central part of the car adapted to form a passageway.

1,875,215. PHOTOGRAPHIC EXPOSING AND DEVELOPING APPARATUS. ARTHUR W. CAPS, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Mar. 1, 1929. Serial No. 343,654. 20 Claims. (Cl. 95—94.)



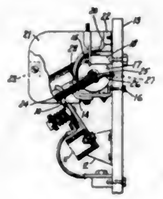
1. In a photographic apparatus, the combination with a casing, of photographic print treating mechanism within said casing, a copyholder mounted over said casing, and a camera including optical elements projecting above the body of said casing so that said camera may photograph objects held by said copyholder.

1,875,216. LOCOMOTIVE STOKER. WASHINGTON T. CAPPS, Baltimore, Md. Filed Aug. 9, 1929. Serial No. 384,557. 34 Claims. (Cl. 110—101.)



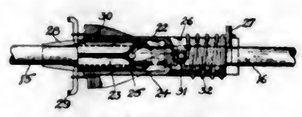
1. In a locomotive stoker, the combination with a fuel feed device, of a distributor tube, a pair of spaced holding members extending upwardly from the upper face of the tube and near the rear end thereof, and a connecting element between the fuel feed device and the tube engaging said holding members and detachably and pivotally connecting the tube and the fuel feed device.

1,875,217. CIRCUIT CONTROLLER. EUGENE R. CARICHOFF, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Original applications filed Dec. 3, 1927, Serial No. 237,075, Patent No. 1,758,782, dated May 13, 1930, and Oct. 17, 1928, Serial No. 313,118, Patent No. 1,833,736, dated Nov. 24, 1931. Divided and this application filed Jan. 7, 1930. Serial No. 419,179. 6 Claims. (Cl. 200—147.)



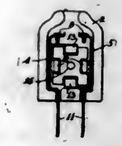
1. An arc blow-out device including a curved arc horn, a blow-out coil connected with one end of the arc horn to be supported adjacent the concave side thereof, and an arc chute having complementary curved edges and provided with means interlocking with the other end of the arc horn for detachably supporting the complementary curved edges of the arc chute in engagement with the convex side of the arc horn to restrict the arc path.

1,875,218. WEIGHING SCALE. FREDERICK E. CARLSON, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 2, 1929. Serial No. 337,124. 7 Claims. (Cl. 265—68.)



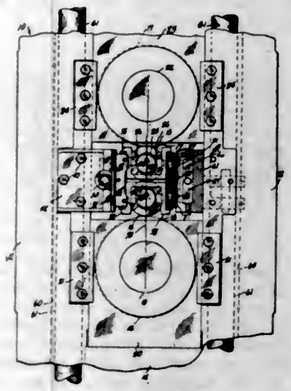
1. In an indicating device, and in combination a dial, means for actuating the dial, means for connecting the dial and the actuating means, and means for automatically disconnecting the actuating means from the dial upon the sudden application of the actuating means.

1,875,219. CURRENT TAP WITH PLURAL EXTENSIONS. ELLIOTT CLEMENCE, New York, N. Y., assignor, by mesne assignments, to The Monowatt Electric Corporation, Bridgeport, Conn., a Corporation of Connecticuf. Filed Nov. 11, 1926. Serial No. 147,771. 8 Claims. (Cl. 173—334.)



1. An attachment plug comprising a longitudinally split chambered casing having lugs formed in the chambers therein, a pair of opposed terminal members therein, plural current tap means on the ends of, and intermediate of the ends, of said terminals, said intermediate tap means comprising a pair of transversely and laterally disposed spring contacts on each terminal member, all of said last means acting as keys to said lugs, said casing embodying plural tap openings on opposite sides and ends thereof.

1,875,220. ROLLING MILL HOUSING. JAMES R. COE, Waterbury, Conn., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 27, 1931. Serial No. 540,302. 5 Claims. (Cl. 80—38.)



5. In a rolling mill an upright housing, a pair of relatively small diameter work rolls extending from the housing, backing rolls for the work rolls having bearings in the housing, bearings for the work rolls, supports for the work roll bearings, guide blocks mounted in the housing, a supporting block carried by each guide block and mounted for lateral movement, each guide block and adjacent supporting block having aligned transverse recesses, a wedge block in said recesses and holding the supporting block against vertical movement, means for shifting the wedge block to shift the supporting block laterally, upper and lower vertically movable plungers carried by the supporting block, and spring means tending to shift the plungers in opposite directions, the support for the bearings for the upper work roll being supported by the upper plunger and the lower plunger being supported on the support for the bearings for the lower work roll.

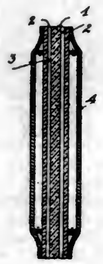
1,875,221. MANUFACTURE OF STRONGLY BASIC AZODYESTUFFS. ACHILLE CONZETTI, Basel, Switzerland, assignor to the Firm: J. R. Geigy, S. A., Basel, Switzerland. Filed July 28, 1928, Serial No. 296,104, and in Germany Aug. 6, 1927. 4 Claims. (Cl. 260—86.)

1. A process for the manufacture of strongly basic azodyestuffs, consisting in converting an azo component of the benzene series capable of being coupled, by successive treatment with chloracetyl-chloride and an alkylamine of the fatty series, into a basic body of the general formula

$$R{-}NH{-}CO{-}CH_2{-}N{\equiv}B,$$
$$\qquad\qquad\quad |$$
$$\qquad\qquad\quad Cl$$

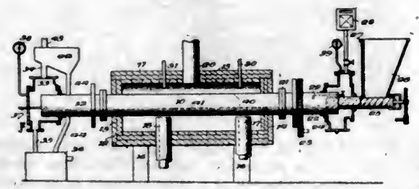
wherein R represents a radical of the benzene or naphthalene series containing a free aminogroup and B represents hydrogen-dialkyl groups or trialkyl groups, diazotizing the body thus obtained and coupling same to an azo component of the benzene and naphthalene series.

1,875,222. HEATER ARRANGEMENT FOR INDIRECTLY HEATED CATHODES. HENRY L. CROWLEY, West Orange, N. J., assignor to Henry L. Crowley & Co. Inc., West Orange, N. J., a Corporation of New Jersey. Filed Apr. 5, 1930. Serial No. 441,743. 2 Claims. (Cl. 250—27.5.)



2. The combination with a sleeve-like electron emissive element, of a twin hole insulator positioned therein, and means for supporting the ends of said twin hole insulator by contact with the ends of said element but out of contact throughout the remainder of the length thereof, comprising inwardly tapered end portions attached to said sleeve; like member and engaging the outer periphery of said insulator.

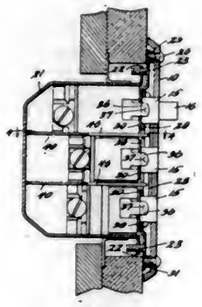
1,875,223. MEANS FOR REVIVIFICATION OF SPENT ACTIVATED CARBONS. RAYMOND G. DAVIS, Wilmington, Del., assignor to Darco Corporation, Wilmington, Del., a Corporation of Delaware. Original application filed Aug. 19, 1930, Serial No. 476,330. Divided and this application filed Dec. 4, 1931. Serial No. 579,056. 5 Claims. (Cl. 202—136.)



1. An apparatus for activating carbon containing adsorbed organic matter, which comprises a horizontal rotatable tube having a portion disposed in a heating fur-

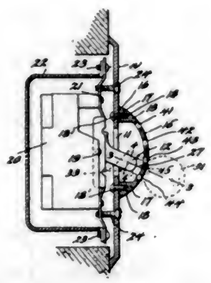
nace, a charge head fitted around one end of said tube outside the furnace, closed conveying means extending through the charge head into the tube, said conveying means being adapted to deliver a continuous stream of the carbon in powdered form into the tube, means for introducing a current of air through the charge head and around the conveying means into the tube, and means for regulating the feed of carbon and of air, the tube, charge head, conveyor and air introducing means being adapted to disperse and suspend the powdered carbon leaving the conveyor in the air current and to blow the carbon through the tube.

1,875,224. ELECTRIC WIRING APPARATUS. VICTOR R. DESPARD, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Syracuse, N. Y., a Corporation of New York. Filed July 31, 1931. Serial No. 554,323. 15 Claims. (Cl. 247—20.)



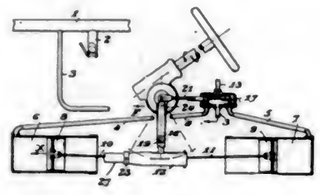
1. The combination with a single gang, multi-ported wall plate, of a wiring device for each port, and bridge means between the wall plate and the main portion of each wiring device to support said devices in proper spaced relation to said ports.

1,875,225. LOCK SWITCH. VICTOR R. DESPARD, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Syracuse, N. Y., a Corporation of New York. Filed Nov. 27, 1931. Serial No. 577,637. 13 Claims. (Cl. 200—42.)



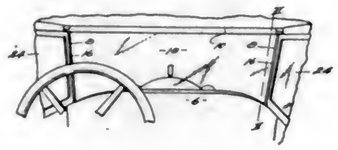
1. In a switch of the toggle type having a separate cover plate and a projecting, manually operable handle, the combination therewith of a hood adapted to be secured to said cover plate to completely enclose said handle, a slot in said hood, a key adapted to pass through and operate in said slot and means on said key to engage the handle to move it with the key.

1,875,226. POWER STEERING GEAR. ALBERT DEWANDRE, Liege, Belgium, assignor to Servo-Frein Dewandre, Société Anonyme, Liege, Belgium. Filed Aug. 13, 1927, Serial No. 212,748, and in France Aug. 14, 1926. 1 Claim. (Cl. 180—79.2.)



A steering means for motor vehicles including a steering member, manually operable steering means including an arm connected with said member, the connection between the arm and member providing for a limited free spring-resisted movement of the arm without affecting the member, opposing cylinders, pistons in the cylinders, connections between the pistons and steering member adjacent the connection of the arm with said member, a valve for controlling the operation of the respective pistons, a lever fulcrumed on said arm, a connection between one end of the lever and the steering member, a connection between the other end of the lever and said valve, and a damping device carried by the latter connection.

1,875,227. AUTOMOBILE WINDSHIELD AND CORNER POST CONSTRUCTION. JAMES D. DYER, Kansas City, Mo. Filed Sept. 18, 1930. Serial No. 482,738. 2 Claims. (Cl. 296—.84.)

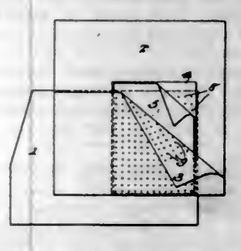


1. An automobile windshield and corner post construction, comprising a pair of angle posts each having a rearwardly extending wall and a wall projecting toward the opposite post, an angle member connecting the upper ends of said posts having a downwardly extending wall and forwardly extending wall and a windshield hingedly supported by the forwardly extending wall of the connecting member, the forwardly extending wall overhanging said windshield, the frame sides of said windshield being disposed in front of the walls of said posts extending toward each other and being narrower than the posts, said frame top being positioned forwardly of the downwardly extending wall and being narrower than the same whereby the vision area is outlined at the sides of said windshield by said corner post walls and along the top of said windshield by the downwardly extending wall.

1,875,228. HAIR WAVING PAD. RALPH L. EVANS, New York, N. Y., assignor to Zotos Corporation, New York, N. Y., a Corporation of New York. Original application filed Jan. 21, 1932, Serial No. 587,890. Divided and this application filed May 6, 1932. Serial No. 609,755. 2 Claims. (Cl. 132—36.2.)

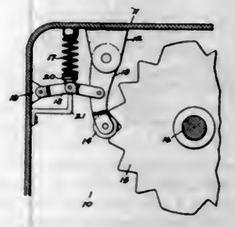
1. A hair waving pad for enclosing a preformed tress, said pad comprising an outer wrapper, an inner wrapper

having a foldable flap, an envelope containing a chemical which, when moistened, will generate sufficient heat to



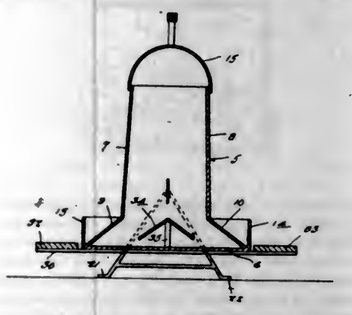
impart a permanent wave to the tress, and an absorbent sheet adapted to be moistened and placed between the flap and envelope.

1,875,229. NOTCHING DEVICE. EMIL FALCKE, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Nov. 1, 1928, Serial No. 316,554, and in Germany Jan. 7, 1928. 4 Claims. (Cl. 188—83.)



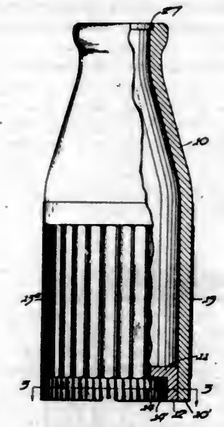
4. A notching device for controllers rotatable between a plurality of definite circuit controlling positions, comprising a rotatable member having notches in the periphery thereof corresponding to said definite circuit controlling positions, a notching pawl cooperating with said notches to vary the force required to rotate the switch member to and from said definite circuit controlling position, a spring for biasing the pawl into engagement with said notches, and a leverage transforming mechanism associated with the spring for increasing the biasing force acting upon the pawl as the pawl enters the notches.

1,875,230. CHICKEN FEEDER. ERNEST L. FORSHEE, Akron, Mich. Filed June 17, 1929, Serial No. 371,592. Renewed July 12, 1932. 8 Claims. (Cl. 119—55.)



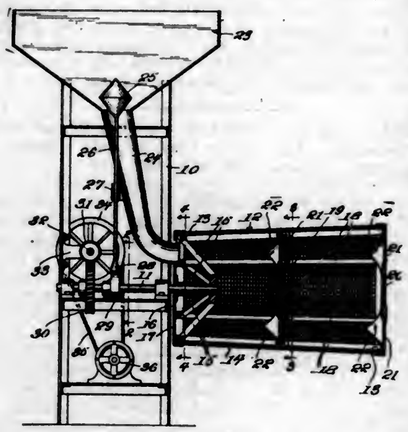
1. A poultry feeder comprising a pair of uprights, a member having its ends connected with said uprights, a combined hopper and feed pan, the pan having side walls extending around the lower part of the hopper, and said lower part of the hopper having openings therein, the member passing through the lower part of the hopper and forming a pivotal support for the hopper, and prongs on the member within the hopper for agitating the feed in the hopper as the same is rocked on the member.

1,875,231. UNBREAKABLE AND SANITARY SEAMLESS RECEPTACLE. CHARLES J. FOTH, Carlstadt, and HENRY FOTH, Rutherford, N. J. Filed Mar. 2, 1931. Serial No. 519,543. 2 Claims. (Cl. 229—5.7.)



1. A receptacle comprising a body and a bottom initially separate and made of pulp, the bottom having a flange within the lower end of the body and cohesively united therewith, an outer metal ring surrounding the lower end of the body, and an expanded inner metal ring within said flange holding the flange and the lower end of the body under compression between itself and the outer ring, the inner ring having been expanded while the pulp was moist to effect the cohesive union of the flange with the body.

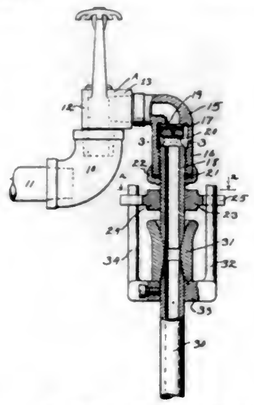
1,875,232. SEAL CLEANING MACHINE. FRANK E. FOWLER, Athens, Ga. Filed May 8, 1928. Serial No. 276,097. 1 Claim. (Cl. 209—284.)



A seal cleaning machine comprising a vertical supporting structure, a hopper located at the upper end of the supporting structure, a horizontal shaft journalled on the

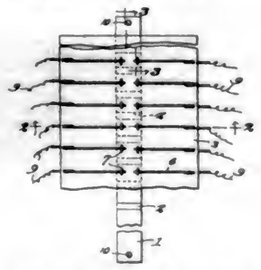
supporting structure below the hopper and projecting beyond one side of said supporting structure, means for rotating the shaft, a cleaning drum secured to the extended end of the shaft, a tapering tubular chute between the lower end of the hopper and one end of the drum, a valve in the hopper and having oppositely disposed conical shaped portions with one of said portions movable relative to one end of the chute for opening and closing the latter and the other portion movable in the hopper to form an agitator, a rod on the valve and extending through one wall of the chute and terminating adjacent the shaft, a guide secured to the exterior of the chute and slidably receiving the rod to center the valve relative to said end of the chute, and a cam secured to the shaft and engaging the rod to intermittently open and close said valve.

1,875,233. TESTING DEVICE FOR SPRINKLER SYSTEMS. HERMAN F. GEWALT, Milwaukee, Wis., assignor of one-half to Wilfred J. Thuermann, Milwaukee, Wis. Filed June 6, 1931. Serial No. 542,490. 3 Claims. (Cl. 169—37.)



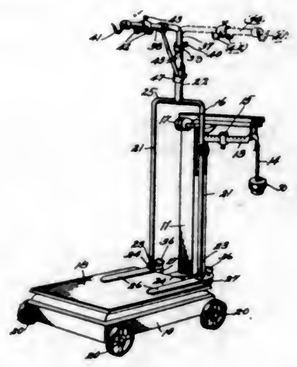
1. In a device for testing the sprinkler heads of fire-extinguishing systems, a valve for each sprinkler head embodying a casing having a depending vertical portion provided with an internal valve seat, a valve stem threaded into the vertical portion having a longitudinal bore and a diametrically extending passageway communicating with the bore and the interior of the casing, a valve head on the inner end of the stem for engaging the valve seat, an operating member on the valve stem arranged exteriorly of the casing, and a removable hollow operating handle having a nipple for receiving the valve stem and a yoke for engaging the operating member.

1,875,234. ORGAN COUPLER. CASPER ELDRED GRANT, Portsmouth, Va. Filed June 3, 1931. Serial No. 541,897. 1 Claim. (Cl. 200—16.)



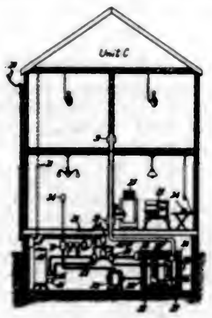
An organ coupler including a panel, a plurality of opposed springs fixedly secured thereon arranged in pairs each pair being provided in one side of an electric circuit, contact pins carried by and detachably supported by the springs, said pins being arranged in pairs and slidable in the panel, there being an opening in each pin into which its supporting spring projects loosely, a slide, and contacts carried by the slide and movable simultaneously into or out of engagement with the pins of the respective pairs, each pin having rounded end for sliding engagement with the slide and one of its contacts.

1,875,235. ATTACHMENT FOR PLATFORM SCALES. ARTHUR W. GRUBE, Kansas City, Kans. Filed June 13, 1929. Serial No. 370,597. 5 Claims. (Cl. 248—41.)



1. A commodity supporting device for platform scales, comprising a standard including an inverted U-shaped body portion having a vertically disposed socket positioned thereon, a horizontally disposed supporting arm rotatably mounted in said socket and adapted to be rotated to and from a position above said platform.

1,875,236. ELECTRIC HEATING. CHESTER I. HALL, Philadelphia, Pa., assignor to General Electric Company, a Corporation of New York. Filed Feb. 28, 1929. Serial No. 341,870. 4 Claims. (Cl. 219—20.)



4. An electric house heating system comprising a heat storage mass, electric heating means therefor, automatic time switch mechanism for connecting said heating means with an electric power distribution system during predetermined off-peak load periods, a switch responsive to predetermined temperature conditions of said storage mass to disconnect said heating means from said power distribution system independently of the operation of said time switch mechanism, an insulating casing surrounding said heat storage mass with an air space herebetween and

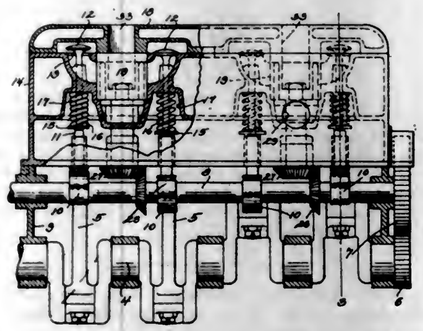
a motor driven circulating means for circulating air over said heat storage mass, and thermostatic means responsive to the house temperature for controlling the said circulating means.

1,875,237. POWER TRANSMISSION DEVICE. GEORGE HENRY HAMBLEY, High Bluff, Manitoba, Canada. Filed Sept. 16, 1929, Serial No. 393,020, and in Canada Sept. 20, 1928. Renewed May 5, 1931. 2 Claims. (Cl. 74—106.)



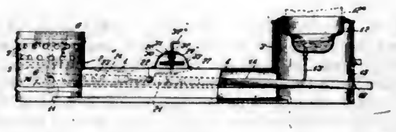
1. A power transmission device including a rectangular frame, having a pair of spaced side members bevelled at their forward ends; a rear frame member connecting said side members at the remote end; inclined blocks inside each of said side members at their forward inclined ends and a stepped runway between said blocks; bearings countersunk in the side members of said frame; shafts operable in said bearings; securing members for said bearings depending through said side members and adapted to bite into the surface on which said frame rests to prevent the shifting of same; grooved rollers rigid on said shaft within said frame; means to individually lock said shafts against rotation; and a power transmission pulley on one of said shafts, exterior of said frame.

1,875,238. VALVE MECHANISM FOR INTERNAL COMBUSTION ENGINES. CORNELIUS B. HARDMAN, Columbus, Ohio. Filed June 15, 1928. Serial No. 285,569. 1 Claim. (Cl. 123—79.)



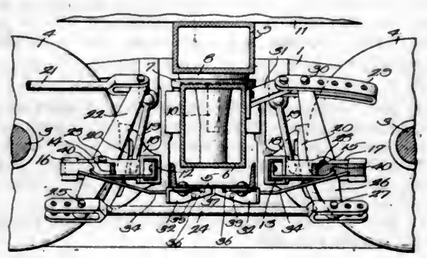
In an internal combustion engine, a cylinder structure including a chamber having a vertically arranged bearing at its lower end which is formed integrally with said structure and spaced from the walls thereof to provide an annular passageway, said passageway being provided with a port connecting the intake of said engine, a vertically disposed rotary valve sleeve positioned within said chamber and provided with an annular passageway in open communication and in alignment with said first named passageway, the passageway in said sleeve being provided with a port registering with ports establishing communication with a pair of cylinders in said engine, said sleeve being also formed with a centrally located passageway independent of the annular passageway in said sleeve, said centrally located passageway being closed at its lower end by the end wall of said sleeve and its upper end open to an exhaust conduit entering the upper part of said chamber, a shaft for effecting the rotation of said sleeve extending through said bearing and having a connection with the end wall of said sleeve, said valve sleeve serving upon rotation to open and close the ports communicating with said cylinder for regulating at timed intervals the intake and exhaust pulsations of said engine.

1,875,239. BURNER CONTROL MECHANISM. ADOLPH R. HOEFT, Evanston, Ill., assignor to Hoeft & Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed Oct. 18, 1930. Serial No. 489,520. 12 Claims. (Cl. 236—6.)



1. A burner control mechanism, embodying therein a burner member, a liquid fuel supply member, one of said members being movable relative to the other to vary the head pressure of said fuel bed to the burner member, manually operable means for moving said one of said members to approximately the desired position including a two-part lever and temperature responsive means operatively engaged with one of said lever parts for automatically moving said one of said members independent of the other part of said lever of said manually operable means.

1,875,240. BRAKE BEAM SUPPORT. CHARLES F. HUNTOON, San Marino, Calif. Filed Jan. 15, 1930. Serial No. 420,941. 6 Claims. (Cl. 188—212.)



1. In a brake beam support, the combination with a brake beam; of a resilient element fixed thereto and extending forwardly thereof; a spring plank; a bracket fixed upon and beneath the spring plank, said bracket having a throat accessible at the margin of the spring plank; a resilient levelling bar adapted to be passed through said throat into assembly with the spring plank, the bottom wall of the throat being in supporting relation to the levelling bar and the throat passage being widened at its outer portion to permit depression of the inner end of the leveling bar and elevation of the outer end of the bar; and holding formations on said bracket and said bar adapted to be brought into engagement upon depression first of the inner and then of the outer ends of the bar, said bar being adapted upon depression of its outer end to engage said resilient element for yieldingly supporting the brake beam.

1,875,241. ELECTRICAL CORD TERMINAL. JOSEPH A. IDANK, Long Island City, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 13, 1930. Serial No. 420,349. 2 Claims. (Cl. 173—269.)



1. A cord terminal comprising a flat strip of sheet metal having means at one end for engagement with a binding post, an intermediate aperture therein, and disaligned slots extending inwardly from opposite longitudinal edges thereof whereby the bared end of a flexible electrical conductor may be attached thereto by entering its extreme end in said intermediate aperture and wrapping the body of the conductor into said slots.

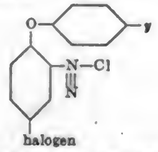
1,875,242. BUILDING CONSTRUCTION. HARLOW H. HATHAWAY, Los Angeles, Calif. Filed Sept. 15, 1928. Serial No. 306,137. 3 Claims. (Cl. 72—116.)



1. A lath provided with sets of staggered shallow indentations to cut the grain of said lath, extending only part way into said lath whereby said lath will be prevented from buckling when associated with a building construction.

1,875,243. DIAZO-PREPARATIONS AND PROCESS OF MAKING SAME. HANS JOHNER, Basel, Switzerland, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Apr. 29, 1931, Serial No. 533,871, and in Switzerland May 21, 1930. 3 Claims. (Cl. 260—89.)

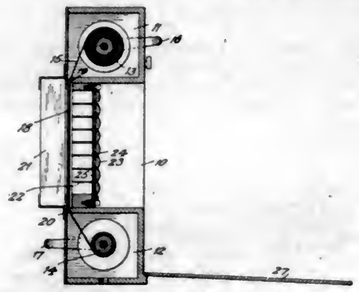
1. As new products the solid diazonium hydrochlorides of the general formula



wherein *y* stands for hydrogen or methyl.

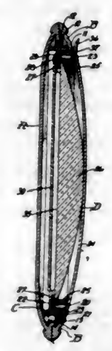
1,875,244. APPARATUS FOR TAKING AND PROJECTING MOTION PICTURES. ELIOT KEEN, Jackson Heights, N. Y. Filed Sept. 7, 1929. Serial No. 390,904. 17 Claims. (Cl. 88—16.1.)

1. A camera comprising a honey-combed frame, a plurality of lenses supported adjacent one face of the frame, a diaphragm plate disposed between the lenses and the frame, a roller, and a flexible moving apertured shutter disposed for movement across the opposite face of the frame by winding upon said roller, the successive apertures in the shutter being of progressively increased area,



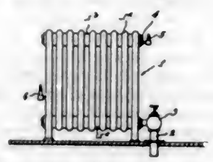
such apertures being adapted to be moved across the opposite face of the frame in the same operation, thereby compensating for variation in shutter speed.

1,875,245. SOLDERLESS VANITY CASE. KARL R. LARSON, East Dundee, and ELLISON S. IRELAN, Elgin, Ill., assignors to Illinois Watch Case Company, Elgin, Ill., a Corporation of Illinois. Filed Jan. 18, 1932. Serial No. 587,182. 6 Claims. (Cl. 132—83.)



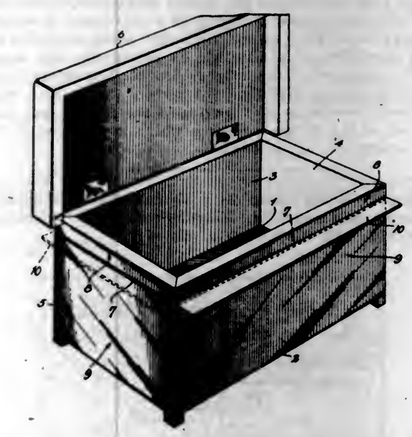
1. In a vanity case, a back having an annular rim extending therefrom, a bezel having an opening therein, the bezel being provided with a shoulder for engaging the rim to hold the bezel and back securely together, a case ring frictionally secured between the bezel and back adjacent the bezel opening to provide a compartment therein, and a cover hinged to the case ring and adapted to close the compartment.

1,875,246. HEATING SYSTEM. MORTIMER LIFLAND, Brooklyn, N. Y. Filed Sept. 9, 1931. Serial No. 561,963. 6 Claims. (Cl. 257—134.)



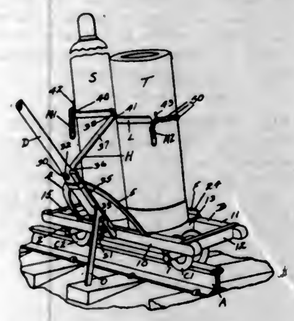
1. In a combination, a steam-heat radiator of the character described, and a free-venting valve and a loaded valve connected thereto.

1,875,247. CEDAR CHEST. LAWRENCE K. LOFTIN, Altavista, Va., assignor to The Lane Company, Inc., a Corporation of Virginia. Filed Aug. 1, 1930. Serial No. 472,443. 4 Claims. (Cl. 206—10.)



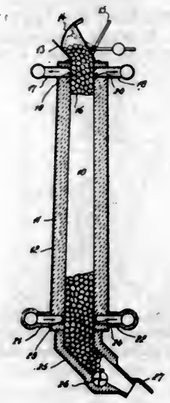
1. In a moth proof receptacle, a body having an opening, and a closure for said opening, the walls of the body being provided with an upper zone surface proof against the action of cedar oil vapor, a lower zone surface provided with a commercial finish, and a groove separating said zones from each other.

1,875,248. TANK HOLDING ONE RAIL TRUCK. THOMAS J. LYNCH, Lowell, Mass., assignor to Mary C. Brennan, Lowell, Mass. Filed May 22, 1930. Serial No. 454,794. 3 Claims. (Cl. 105—141.)



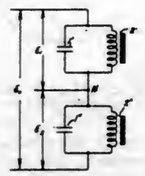
1. The combination with a one rail truck having a skeleton body comprising parallel side bars and cross bars which connect them, said body being supported by two grooved wheels positioned one behind the other and having a handle attached to and extending up at an oblique angle from one side; of a base plate detachably supported on the top of the body and having an upturned outside edge; a bracket arm detachably attached to the handle and extending therefrom towards and above the body; and a cross bar medially supported by said arm, said cross bar being bent on each side, and terminating at each end in a hook; together with two chains each of which is attached at one end to the middle of the cross bar, each chain being formed of links some of which are adapted to engage a hook.

1,875,249. PRODUCTION OF COKED AGGLOMERATES. GEORGE T. MAHLER and ERWIN C. HANDWERK, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 20, 1929. Serial No. 394,134. 14 Claims. (Cl. 75—65.)



1. The method of producing coked agglomerates which comprises preparing and agglomerating a mixture of metalliferous material and an appropriate coking agent, and subjecting the agglomerates while in contact with one another to a coking operation characterized by such a slow and gradual application of heat that the entire mass of each agglomerate is slowly and gradually heated from a temperature considerably below the requisite temperature of coking to a temperature sufficiently high to effect complete coking of the agglomerate without objectionable softening or deformation, said agglomerates having been blended with metalliferous material and coking agent in amount adapted to render the agglomerates sufficiently strong substantially to prevent both splitting-up of the agglomerates during coking and disintegration during a subsequent smelting or reduction operation.

1,875,250. ELECTRICAL FREQUENCY CHANGER. OAIN P. MCCARTY and ARAM BOYAJIAN, Pittsfield, Mass., assignors to General Electric Company, a Corporation of New York. Filed Sept. 29, 1930. Serial No. 485,277. 12 Claims. (Cl. 172—281.)

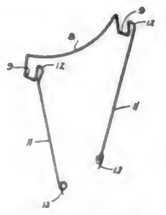


1. A static frequency converter comprising a pair of transformers each having two windings, one winding of each of which is connected in series with the other, the remaining windings being connected in series opposition and separate capacitances connected in parallel with one of the windings fo each of said transformers.

6. A polyphase frequency changing system comprising, two polyphase circuits of different frequencies, a plurality of saturable core transformers, a star connected network connected to one of said circuits, each leg of said network including two windings of two different of said transformers connected in series, separate capacitances connected in parallel with each of said windings, the remaining wind-

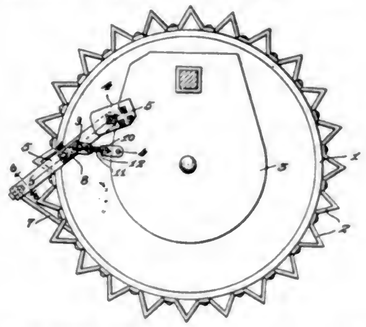
ings of said transformers being connected in series opposition in pairs corresponding to the series connected pairs, said windings which are connected in series opposition pairs forming the legs of a star connected network which is connected to said other circuit.

1,875,251. COMBINATION TIE AND COLLAR SUPPORT. GEORGE E. MCKEEN, Minneapolis, Minn. Filed Mar. 28, 1932. Serial No. 601,588. 4 Claims. (Cl. 24—87.)



4. A combination tie and collar support comprising a curved cross bar adapted to be fitted between a tie band and the neck band of a collar or shirt, said cross bar being provided at its ends with downwardly, and outwardly, and upwardly bent portions cooperating to form U-shaped recesses adapted to receive the lower edge of a neck tie band, said upwardly bent portions having resilient legs extending downwardly therefrom and provided with terminal hooks adapted to engage the material of the collar adjacent to the lower corners or points thereof, whereby the collar points will be held in proper place and the tie band and knot will also be retained in place in the upper portion of the collar, and means for limiting the penetration of said terminal hooks in the material of the collar.

1,875,252. ECCENTRICALLY HINGED TRACTOR WHEEL CLEANER. CHARLES R. MEYER and FLOYD W. COX, Morocco, Ind. Filed Sept. 21, 1931. Serial No. 564,236. 1 Claim. (Cl. 280—158.)

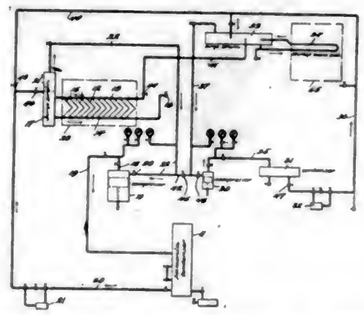


A tractor wheel cleaner comprising a bracket having a support, an arm pivoted to the bracket, a blade carried by the arm and adapted to bear upon the periphery of the wheel, a snap pin mounted upon the arm and an extensible connection mounted upon the snap pin and adapted to be connected with the bracket support.

1,875,253. PROCESS FOR PREPARING NITROGEN, CARBONIC OXIDE, AND HYDROGEN. MAURICE EUGENE HENRI MINOTTE, Paris, France, assignor to Compagnie de Bethune, Bully les Mines, France, a Corporation of France. Filed June 21, 1929, Serial No. 372,771, and in France June 27, 1928. 2 Claims. (Cl. 23—7.)

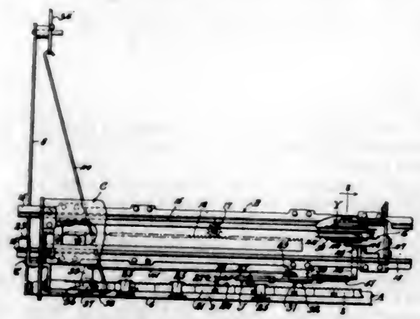
1. A process of obtaining a mixture of nitrogen, hydrogen and carbon monoxide from residual coke oven gases, which comprises mixing with the said gases a predetermined amount of air, causing incomplete combustion thereof in a gas generator filled with refractory material kept at a high temperature, controlling the combustion at a suitable temperature so as to prevent formation of nitrogen oxides and maintaining the carbon dioxide content of the gas mixture at about 4 or 5% by regulating the relative volumes of incoming air and coke oven gases, purifying the gaseous mixture thus obtained by eliminating the traces of non-saturated hydrocarbons through hot catalytic destruction and by absorbing the carbon dioxide in a wash of ammonia solution, and leaving in the residual gas mixture all of the carbon monoxide which was present in the gas generator.

1,875,254. REFRIGERATION APPARATUS. MARSHALL MUNCE, Richmond, Va. Filed Nov. 18, 1930. Serial No. 496,475. 12 Claims. (Cl. 62—115.)



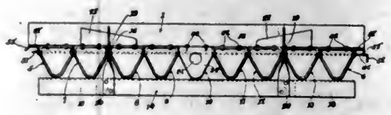
1. Refrigerating apparatus including, in combination, two adjacent and independently operable refrigerating units each comprising a compressor, a condenser, a work circuit and conduits for conducting a refrigerant from the compressor to the condenser, from the condenser to the work circuit, and from the work circuit back to the compressor, and means for cutting out the compressor and condenser of either unit and connecting the work circuit thereof to the conduits of the second unit so that a single compressor and condenser supplies refrigerant to both work circuits.

1,875,255. TYPEWRITING MACHINE. LEWIS C. MYERS, Freeport, and GEORGE F. HANDLEY, Glendale, N. Y., assignors to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed June 5, 1931. Serial No. 542,446. 4 Claims. (Cl. 197—64.)



1. A tabulating mechanism for typewriting machines comprising a carriage; an escapement pinion; a motor for moving the carriage in letter space direction; a tabular rack and a feed rack pivoted to the carriage to move in unison whereby the feed rack is moved into and out of engagement with the pinion; stops on the tabular rack; key operated stop means including a combined lift and stop lever engageable with one of the racks to move the feed rack out of engagement with the pinion and for cooperation with one of the tabular stops to limit the movement of the carriage by the motor; and normally ineffective means for braking the movement of the carriage connected to the combined lift and stop lever for rendering said means effective automatically upon disengagement of the feed rack from the escapement pinion.

1,875,256. GANG MOLD FOR FENCE POST CONSTRUCTION. GEORGE E. NAGEL, Columbus, Ohio. Filed Feb. 2, 1931. Serial No. 513,014. 9 Claims. (Cl. 25—121.)



1. A gang mold comprising a series of sidewise arranged bodily movable molding units, each including an open top body member and a pair of removable heads, said heads closing the ends of said member, a pair of spaced upper holders, said holders being fixed to the removable heads of the units, a pair of spaced lower holders, and means for detachably coupling said upper and lower holders together and to the body members of said units.

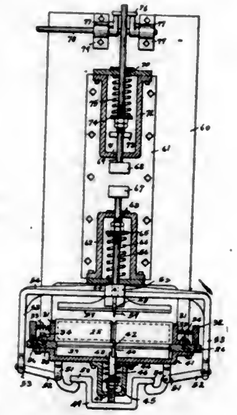
1,875,257. TAPERED FEED ROLLER. JOHN A. NYLUND, Portland, Oreg. Filed Nov. 20, 1929. Serial No. 408,619. 2 Claims. (Cl. 51—190.)



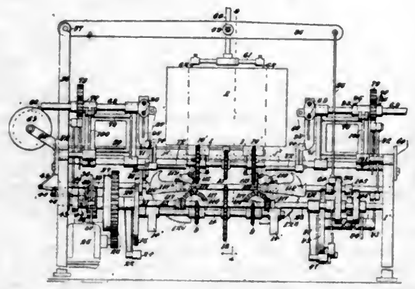
1. In a device of the class described, a tapered roll, a compressible cover placed about the roll to produce a true cylindrical drum and a grinding element placed about the cylinder.

1,875,258. BRICKMAKING MACHINE. LOTT D. OLIVER, Houston, Tex. Filed Feb. 18, 1928. Serial No. 255,429. 3 Claims. (Cl. 25—105.)

1. A brickmaking machine including a platform, end guides thereon, said platform having lengthwise and transverse slots therethrough, lengthwise and transverse blades joined together and arranged in alignment with the slots underneath the platform, a central upstanding pilot spike carried by the blade assembly, a depending rod attached to said blade assembly, a yieldable seat acting against said rod and arranged to normally hold the blades withdrawn from said slots, a U-shaped bracket abutting the lower end of said rod and the free ends of whose arms are overturned forming bearings, pivotally mounted arms, one end of each of which works against the corresponding bearing, an inverted U-shaped bracket above the platform having side arms whose free ends are connected to the other ends of said pivotally mounted arms, lengthwise and transverse blades carried by said last mentioned bracket and aligned with said slots, said last mentioned blades having a centrally located spike, a thrust rod supporting said last mentioned bracket, a yieldable member supporting said thrust rod and means for imparting thrusts successively to said thrust rod.



1,875,259. APPARATUS FOR WIRE BINDING BOXES. GEORGE D. PARKER, Riverside, Calif.; Clara B. Parker executrix of said George D. Parker, deceased. Filed Nov. 1, 1921. Serial No. 512,132. 83 Claims. (Cl. 100—31.)



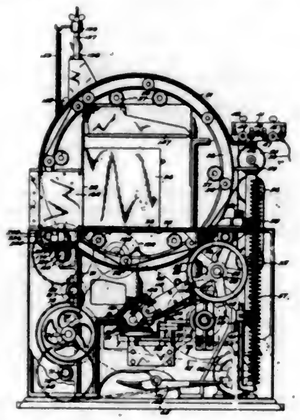
1. An apparatus for the wire binding of boxes and similar articles, the same comprising inter-connected timed operative instrumentalities for winding wires under tension around a box to be bound, disposing the terminal sections of the wire in overlying relation, twisting the terminal overlying sections of the wires on the completion of the winding operation and severing the ends of the twisted wires, an actuating shaft for controlling the action of said instrumentalities in timed relation, and means thrown into action by the positioning of a box at the binding station of the apparatus for causing operative movement of the actuating shaft.

26. In a bundle tying machine, a rotatably mounted member adapted to be rotated in one direction to pass a wire around a package, wire twisting means in which overlapping portions of the wire are disposed, a gripper arranged to engage the wire of the overlapping portion adjacent the twister, means for cutting the wire between the gripper and the twister and means for rotating the member in the opposite direction, the reverse movement

of the member serving to bend the wire around the gripper.

38. In combination, a machine having mechanism for automatically placing binding wire under tension on a bundle with the ends positioned in overlapped relation, a slotted rotatable twister, means mounting the twister for movement relative to the bundle, and operating means for the twister and mounting means for moving said twister to receive the wire ends in the slotted portion and twist said ends to form a flat tie and subsequently move out of engagement with the wire, and automatically operated in timed relation with the binding mechanism.

1,875,260. BUNDLE BINDING AND TYING MACHINE. GEORGE D. PARKER, Riverside, Calif.; Clara B. Parker, executrix of said George D. Parker, deceased, assignor of one-half to James M. Leaver, Jr., Oakland, Calif. Filed Mar. 12, 1925. Serial No. 14,933. 99 Claims. (Cl. 100—31.)

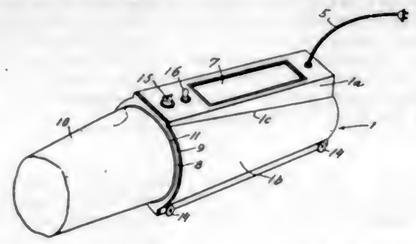


10. In a bundle tying machine, a frame adapted to hold the bundle to be tied, a slotted wire twisting device arranged contiguous to the side of the held bundle, the slot in the twisting device being parallel to the contiguous side of the bundle whereby the twisted wire will lie parallel to the contiguous side, means for passing a wire around the bundle and twice in the same direction through said slot, whereby the portions of the wire disposed in the slot are overlapped and means for rotating the twisting device to twist the overlapping portions of the wire together.

37. In a bundle tying machine, a table for supporting the bundle, a back wall on said table against which the bundle is placed, said wall being provided with a vertical slot, a rotatably mounted wire feeding ring surrounding said table and wall and arranged to pass a wire around the bundle, means in the slot for twisting together overlapping ends of the wire, said means being normally positioned to receive overlapping portions of the wire as it is passed around the bundle, means for rotating said twisting means, grippers in said slot for gripping the ends of the wire adjacent the overlap, means for cutting the wire between the twisted portion and the grippers and means for ejecting the twist from the twisting means.

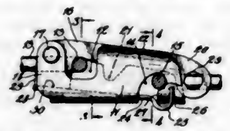
1,875,261. APPARATUS FOR APPLYING HEAT FOR THERAPEUTIC AND OTHER PURPOSES. ARTHUR POT, New York, N. Y., assignor of forty-nine one-hundredths to William S. Jennings, New York, N. Y., and fifty-one one-hundredths to Henry James Levell, Mount Vernon, N. Y. Filed Feb. 10, 1928. Serial No. 253,291. 6 Claims. (Cl. 128—254.)

1. Therapeutic heating apparatus comprising the combination of a metallic chamber for receiving within it the part to be treated and made of a metal such as copper; insulated electrical resistance heating wiring applied exteriorly to the sides of said metallic chamber as distinguished from its top and bottom; and a heat-confining container enclosing all of the foregoing; removable means



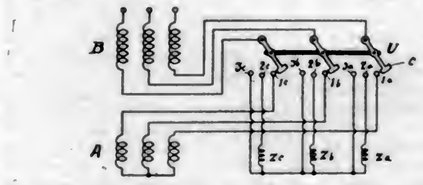
within said metallic chamber for receiving into it the part to be treated to prevent direct contact between said part and the metallic chamber; and a transparent window through the top of said enclosing container and said metallic chamber.

1,875,262. CONNECTER FOR CHAINS. JOHN R. REYBURN, Fairfield, Conn., assignor to American Chain Company, Inc., a Corporation of New York. Filed Dec. 7, 1931. Serial No. 579,360. 6 Claims. (Cl. 24—69.)



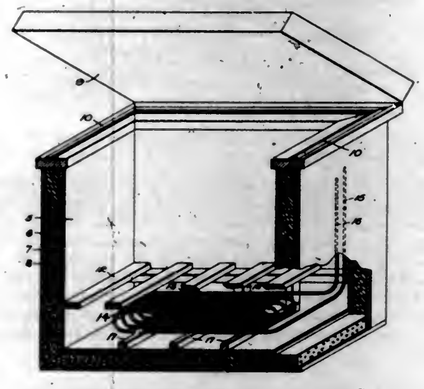
1. A connecter of the class described, comprising a member formed of sheet metal bent to form a casing of U-shaped cross section with aligned notches formed in the free edges of its walls near one end, to receive a chain link or the like, and aligned slots formed in said walls near the other end, to receive another chain link, the bottom of said casing having an aperture to receive a spring; a lever blade pivotally mounted between said walls at the end adjacent to said notches, said blade being adapted to close said notches when folded, into said casing, leaving a recess open at the bottom of said notches to receive said first mentioned chain link removably, said lever blade also having a heel portion extending downwardly below its pivot; and a spring extending near one end through said bottom aperture of said casing member and supported firmly by the wall of said aperture, said spring having a portion pressing yieldingly inward against said heel and tending normally to hold said blade closed when folded.

1,875,263. SYSTEM FOR STARTING ELECTRIC MOTORS. RUDOLF RICHTER, Karlsruhe-Durlach, Germany, assignor to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed June 27, 1929, Serial No. 374,075, and in Germany Oct. 27, 1928. 14 Claims. (Cl. 172—274.)



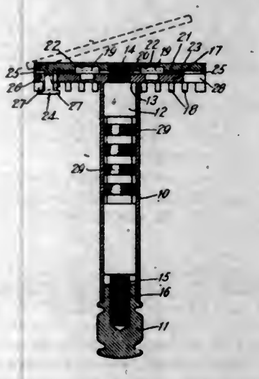
5. In an alternating current motor with starting winding and working winding of different number of poles, a switch with contacts, connections from said switch to the starting winding and working winding, sections in said starting winding, connections from said sections to said switch, all of said connections arranged to short circuit successively the sections of said starting winding by movement of said switch and means associated with said starting winding sections to increase the leakage inductance between said windings.

1,875,264. METHOD OF COOLING MILK AND OTHER BEVERAGES. WARREN M. ROBERTSON, Revere, Mass. Filed Apr. 5, 1930. Serial No. 441,882. 6 Claims. (Cl. 62—170.)



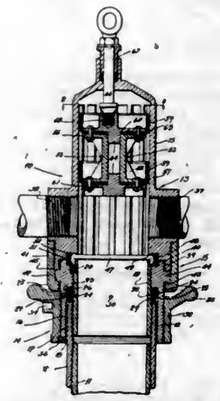
3. The method of cooling a body, which comprises placing the body in a bath of water in which there is an expander of a compressor, condenser, expander circuit below the body, and utilizing the expander to maintain the temperature of the water within a range which will cause a circulation of the liquid downwardly about the sides of the body directly to and along the expander and thence upwardly at points relatively remote from the body.

1,875,265. SAFETY RAZOR. ABRAHAM ROSENBAUM, Boston, Mass. Filed Aug. 1, 1931. Serial No. 554,413. 1 Claim. (Cl. 30—12.)



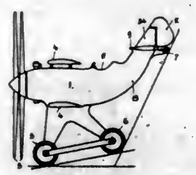
A safety razor having, in combination, a guard plate, a clamp plate hinged thereto, a tubular handle provided with a slot and fast to the outer face of said guard plate, and a clamp screw rotatably mounted in the handle projecting through the guard plate and having screw-threaded engagement with the clamp plate whereby a razor blade may be clamped between the clamp and guard plates, said clamp screw also having screw-threaded engagement with said handle.

1,875,266. SWIVEL CASING HEAD. JAMES J. SANTIAGO, Los Angeles, Calif., assignor to John Grant, Los Angeles, Calif. Filed Nov. 21, 1930. Serial No. 497,204. 12 Claims. (Cl. 285—22.)



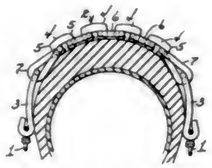
1. In a circulating head for well pipe, upper and lower relatively rotatable tubular sections, said lower section extending downwardly around the upper end of the well pipe, means attached to said lower section for attaching the latter to the interior of the pipe, means forming an internal annular bearing shoulder in one of said sections, means forming an external annular bearing shoulder on the other section and engaging the first mentioned shoulder, packing means preventing fluid leakage between said sections, and packing means preventing fluid leakage between said lower section and the outside of the casing.

1,875,267. AEROPLANE. UMBERTO SAVOJA, Turin, Italy, assignor to Fiat Societá Anonima, Turin, Italy. Filed Mar. 26, 1931, Serial No. 525,551, and in Italy Apr. 16, 1930. 4 Claims. (Cl. 244—14.)



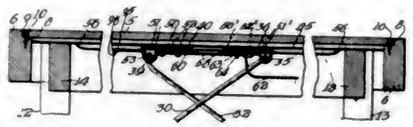
1. Aeroplane capable of ascending and descending vertically and of flying horizontally comprising, in combination with propellers and wings capable to generate with a stationary flying machine a vertical thrust greater than the weight of the aeroplane, a fuselage angularly bent so as to carry the tail upward, a frame at the front portion of the fuselage, a tail skid at the rear portion of the fuselage and an intermediate fixed supporting member arranged in such manner that by acting in combination with the bent tail it permits two landing positions, one with horizontal axis or nearly horizontal axis of the flying machine and the other in which said axis is strongly inclined to the horizontal axis.

1,875,268. ANTISKID CHAIN. JOHN J. SENGLAR, Tallmadge, Ohio. Filed Mar. 30, 1931. Serial No. 526,498. 1 Claim. (Cl. 152—14.)



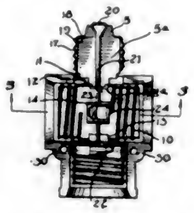
An anti-skid chain comprising side chains, cross chains including end links secured to opposite links of the side chains, blocks included in the cross chains and being provided with tapered side walls and relatively thick bodies having rounded outer surfaces merging into the side walls to provide relatively sharp ground gripping edges, links connecting the blocks together and receiving the side walls, and the latter being curved about said last mentioned links in a manner whereby the ends of said side walls of each body are disposed parallel therewith and in alignment with each other.

1,875,269. FOLDING TABLE. JOSEPH SILVERMAN, Chicago, Ill. Filed May 24, 1928. Serial No. 280,125. 3 Claims. (Cl. 45—11.)



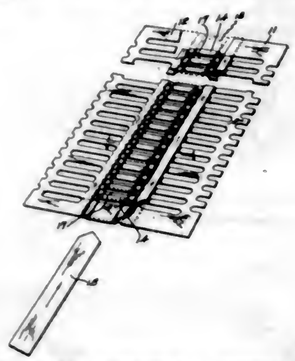
1. In combination, a table top, a pair of folding leg structures therefor, a pair of V-shaped brace members having sliding connection at their apices with the bottom of the table top and each pivoted at opposite ends to the leg structures, and a pair of latch members one on the slidingly connected apex of each of said brace members, said latch members being movable toward and from each other with said brace members and engageable with each other to lock said leg structures in unfolded position for use.

1,875,270. ELECTRIC SOCKET. HAROLD E. SLADE, Glen Ridge, and JOHN GEHRING, Jersey City, N. J., assignors to Beaver Manufacturing Company, a Corporation of New Jersey. Filed May 28, 1927. Serial No. 194,922. 5 Claims. (Cl. 173—335.)



1. In a socket of the class described, a plug section, a horizontal cylinder, a vertical shell member, a conductor member passing from the end of said plug section thru central apertures in said horizontal cylinder and thru the base of said vertical shell member, and elements connected therewith, said conductor member providing an electrical circuit path from said plug section to said elements removably housed within said horizontal cylinder and said vertical shell member.

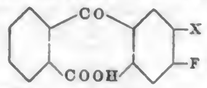
1,875,271. SCREEN FASTENER. HORATIO W. SMITH, Stockton, Calif., assignor to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed July 29, 1929. Serial No. 382,028. 6 Claims. (Cl. 209—399.)



1. A screen fastener comprising a plurality of spaced ridges disposed on opposite sides of two screen end portions the latter being disposed to overlap and contact with each other, there being apertures between said ridges, and a locking bar for insertion between the ridges of the respective overlapped portions when the ridges on one of said end portions are inserted into the apertures of the other end portion for locking said portions together, said end portions overlying each other on both sides of the bar.

1,875,272. PRODUCTION OF ANTHRACENE DERIVATIVES. WILLIAM SMITH and ROBERT FRASER THOMSON, Grangemouth, Scotland, assignors to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Oct. 20, 1931, Serial No. 570,032, and in Great Britain Oct. 16, 1930. 11 Claims. (Cl. 260—60.)

7. Dye intermediates having the probable formula

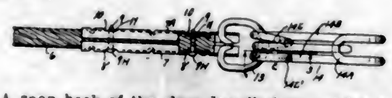


wherein X represents NH_2 or NO_2.

1,875,273. PROCESS AND CATALYST FOR THE SYNTHESIS OF METHANOL. HENRY HERMAN STORCH, New York, N. Y., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, a Corporation of Delaware. Filed Aug. 2, 1927. Serial No. 210,216. 8 Claims. (Cl. 260—156.)

1. Process for the production of methanol which comprises passing a gaseous mixture of hydrogen and carbon monoxide in contact with a hot catalyst mass comprising copper and calcium oxide.

1,875,274. SNAP HOOK. HENRY SOULE, Dwight, N. Dak. Filed Apr. 4, 1932. Serial No. 602,954. 2 Claims. (Cl. 24—237.)

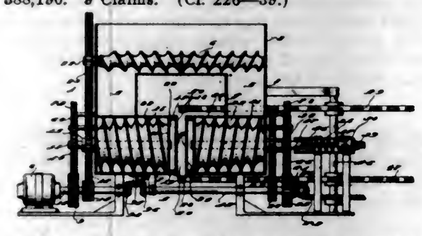


1. A snap hook of the class described comprising a single integral piece of wire bent in U-shape at its forward terminal, two bights of said wire extending in parallel relation in a curvature from said terminus forwardly and downwardly in a curvature and thence rearwardly to form an open hook, one bight of said wire formed in spaced relation to said hook with a turn and a quarter upright loop, thence extending forward in the form of a tongue

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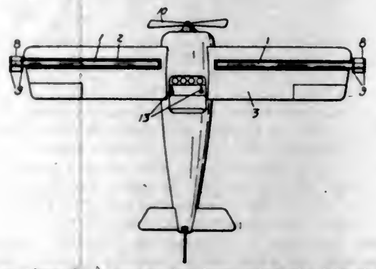
toward the U-shaped forward terminus and adapted to frictionally and yieldably engage upwardly therein and the other bight formed at the rear with a plain loop registering horizontally with said coil of the first described bight.

1,875,275. GRID PASTING MACHINE. LOUIS G. STECKER, Philadelphia, Pa. Filed Aug. 24, 1929. Serial No. 388,190. 9 Claims. (Cl. 226—39.)



1. In a grid pasting machine, means to feed the grids into pasting position, a revoluble member having a plate with a single feed slot through it and of greater length than the diameter of said member, means to feed paste through said feed slot, and means to revolve said member.

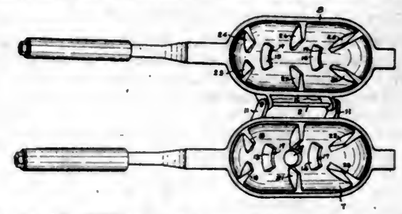
1,875,276. AIRCRAFT OF THE HEAVIER THAN AIR TYPE. ROBERT ADOLF STEIGERT, Buffalo, N. Y. Filed Sept. 2, 1931. Serial No. 560,845. 1 Claim. (Cl. 244—14.)



In an aircraft, a means for increasing the lift thereof, through the medium of the energy of the air flow from head to tail of the aircraft, comprising a plurality of substantially horizontal cylinders contained within the aircraft wings and only exposed through the tops thereof, vane members rotated by the flight of the craft through the air connected to rotate the cylinders wherein the surface of the cylinders exposed to the air flow move in the same direction as the flow, on which surface due to the Magnus effect, a vacuum is produced tending to move the cylinders in an upward direction, and independent manually actuated braking elements each operative upon a rotor.

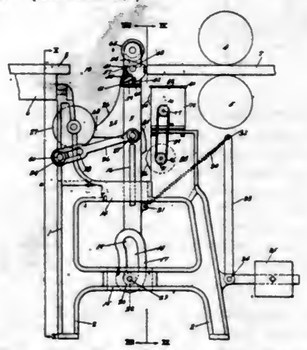
1,875,277. DEVICE FOR BAKING AN EDIBLE PRODUCT COMPRISING A MEAT CENTER INCASED IN AN ENVELOPE OF RAISING DOUGH. TERRENCE A. SWEENEY, Mercer Island, Wash., assignor to Thor Manufacturing Company, Inc., a Corporation of New York. Filed Feb. 11, 1929. Serial No. 339,050. 4 Claims. (Cl. 107—66.)

3. A baking mould device comprising a pair of opposing companion sections and means whereby said sections may be held together along a first axial plane of the device, the inner walls of said sections being depressed and covering each other to form a cavity between them, each wall having a plurality of lugs projecting therefrom into said cavity, a series of said lugs being arranged around the rim of each wall and along said plane and another, a non-rim series, arranged across another axial plane, a group of said rim lugs being located on one side of said last plane and a group on the other, said groups being spaced apart,—said other series of lugs overlapping the first series and being located across said space, the base of each rim lug extending the major portion of the distance between said



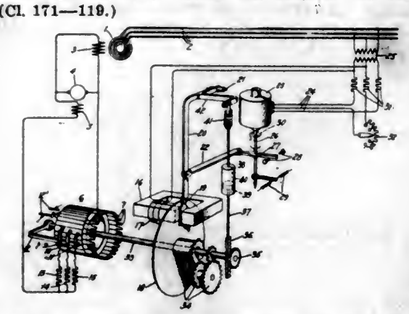
axial planes, the base of each non-rim lug being over half that of a rim lug, whereby a meat body may be held centralized in said cavity between said non-rim lugs and batter may be effectively baked between the meat body and the sides of the device in the spaces between the lugs.

1,875,278. LUMBER MARKER. DANIEL R. TANNER, La Grande, Oreg. Filed Sept. 7, 1927. Serial No. 218,044. 3 Claims. (Cl. 101—35.)



1. In a lumber marker, the combination with a frame, a movable marker-carrier, a marking die mounted on said carrier, and means for imparting to said carrier oscillatory and vertical movements successively, of stock feeding mechanism in operative propinquity thereto, whereby pieces of stock may be by said mechanism fed successively into marking impact against said die.

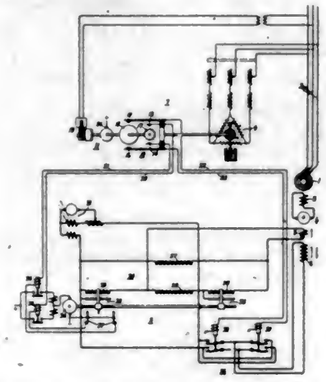
1,875,279. ELECTRICAL REGULATING APPARATUS. LOUIS W. THOMPSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 19, 1929. Serial No. 356,529. 18 Claims. (Cl. 171—119.)



1. In a regulator, an alternating-current motive device having a primary single-phase inducing member, a movable inducted member, flux-modifying means for producing a rotating magnetic field in said induced member, and

means responsive to the condition to be regulated for controlling said flux-modifying means to control the movement of said induced member in proportion to variations in said condition.

1,875,280. ELECTRICAL REGULATOR. LOUIS W. THOMPSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 24, 1931. Serial No. 564,881. 4 Claims. (Cl. 171—229.)

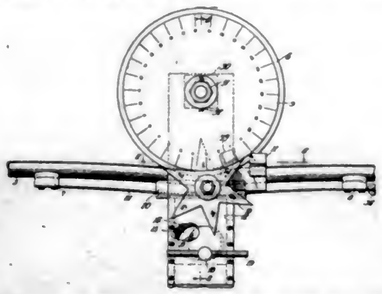


1. In combination, a dynamo electric machine having separate respectively normally energized and deenergized field windings, means for varying the energization of said normally energized field winding in accordance with variations in the value of a condition to be regulated, and means for causing relatively opposite energization of said normally deenergized field winding in accordance with whether said condition is a predetermined amount above or below a normal value.

1,875,281. COMPOSITION FOR NEUTRALIZING ALKALINE SOIL AND METHOD OF PREPARING SAME. ELEK VON 'SIGMOND, Budapest, Hungary. Filed Feb. 12, 1930, Serial No. 427,996, and in Hungary Mar. 21, 1929. 4 Claims. (Cl. 71—9.)

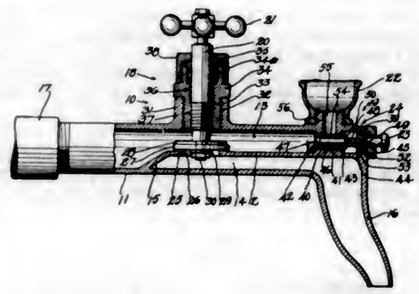
2. The method of producing a composition of matter adapted for agricultural purposes, comprising acting on an amorphous mineral containing a high percentage of free oxides of aluminium and iron with the quantity of concentrated sulfuric acid which is required to convert the mineral directly into a product containing at least 30% sulfate ions, calcium carbonate being added to the reaction mixture to bind the water present therein.

1,875,282. METERING DEVICE. SELIM N. TIDEMAN, Wilmette, Ill. Filed June 23, 1930. Serial No. 463,223. 5 Claims. (Cl. 33—134.)



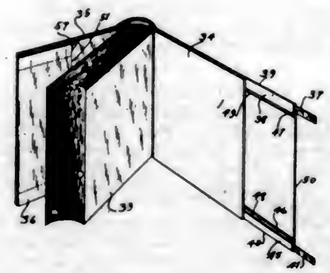
3. A metering device for suspended cables and the like comprising in combination a measuring wheel adapted to ride on the cable and having a peripheral groove for receiving the cable, a spindle fixed to said wheel, a bearing sleeve, said wheel having a central recess in which said sleeve is rotatably received, a member fixed to said sleeve and depending therefrom at one side of said wheel, said spindle passing through said sleeve and member, a dial secured to said spindle on the opposite side of said member from said wheel, said member having laterally extending arms mounted thereon below said wheel, said arms having cable seating portions at their free ends, said member having a rotatable counter mounted thereon, and said dial having means thereon engaging said counter during a small portion only of each rotation of said dial to thereby change the indication of said counter.

1,875,283. COMBINATION FAUCET AND DRINKING FOUNTAIN. GEROME TRUPIANO, Brooklyn, N. Y. Filed Oct. 4, 1930. Serial No. 486,328. 3 Claims. (Cl. 299—9.)



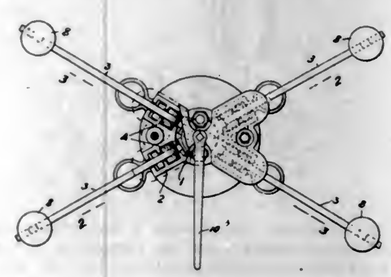
2. A combined faucet and fountain, including a casing having a partition therein, said partition having an opening therethrough and forming passages adapted to communicate with each other only through said opening, separate lateral outlets for said passages, and a plurality of valves in one of the passages and spaced therealong, one of the valves controlling said opening, the other valve controlling the outlet for the passage in which said valves are located, the valve for the opening having a stem extending transversely through the casing, the other valve extending along an axis at right angles to the said stem.

1,875,284. PROTECTIVE BOOK COVER. HENRY WALDMAN, New York, N. Y. Filed May 2, 1932. Serial No. 608,721. 4 Claims. (Cl. 281—34.)



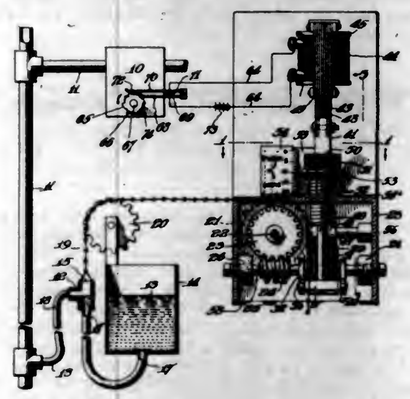
3. A protective book cover of pliable material and bands of flexible metal secured adjacent the top and bottom edges of said book cover and being of a length greater than the width of said cover and capable of being bent into clamps for securing said cover to said book.

1,875,285. EQUALIZING SUPPORT. FRANK R. WALLACE and JOHN T. RAMSDEN, Philadelphia, Pa., assignors to The Tabor Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 8, 1930. Serial No. 494,331. 6 Claims. (Cl. 22—90.)



1. An equalizing support comprising a group of three or more flat strips arranged face to face and each independently movable, means for retracting said strips when the support is unloaded, individual means for each strip adapted to project the strips as the support is loaded, portions of said three or more individual means forming a firm support for the object to be supported and means for clamping all the strips when the support is loaded.

1,875,286. ADJUSTMENT FOR THROW OF ELECTROMAGNETIC OPERATING MECHANISM. HARVEY C. WAUGH, Hammond, Ind., assignor to American Water Softener Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Apr. 22, 1930. Serial No. 446,423. 9 Claims. (Cl. 210—20.)

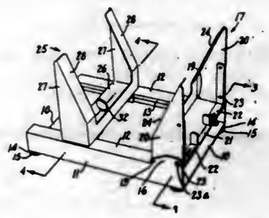


1. In a liquid proportioner, a solenoid, an armature thereof having a length of stroke determining the proportioning setting of the proportioner in combination with an adjustment screw, cooperating abutments presented respectively by the screw and armature, one abutment engaging the other at one end of the stroke to limit the stroke, a flat spring in a plane offset from and substantially parallel to the screw axis, a scale member mounted on one end of the spring in a plane substantially radial to the screw axis, presenting its scale edge normally against the screw periphery to lock the screw and extending radially outward beyond the spring and a rigid support for the other end of the spring, pressure upon the outer portion of the scale being adapted to deflect the spring in a direction to release the screw.

1,875,287. PROCESS FOR THE PRODUCTION OF SEMICOKE BRIQUETTES FROM BITUMINOUS COAL. LUDWIG WEBER, Berlin-Wilmersdorf, Germany. Filed Oct. 13, 1927, Serial No. 226,049, and in Germany Oct. 14, 1926. 6 Claims. (Cl. 202—34.)

1. Process for preparing semi-coke briquettes from bituminous coal, which comprises preparing a binding agent containing sulphite spent liquor with clay in colloidal suspension therein, mixing the binding agent with fine bituminous coal and forming the mixture into briquettes, heating the briquettes to drive off moisture therefrom and fix substances in the liquor as a temporary binder, and subjecting the briquettes to a low temperature carbonization.

1,875,288. ADJUSTABLE BOOK SUPPORTING RACK. NELSON S. WELK and DAVID R. ZENNER, Athens, Ohio, assignors to The McBee Binder Co., Athens, Ohio, a Corporation of Ohio. Filed Sept. 6, 1928. Serial No. 304,204. 4 Claims. (Cl. 45—57.)



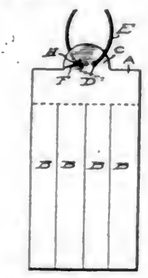
1. A book rack comprising a rigid base having channelled sides, upstanding ears carried by the base adjacent one end, a book supporting member pivotally mounted between said ears, spring detents carried by said member and adapted to engage said ears, a co-acting book supporting member longitudinally adjustable upon said base, locking means for said last named member, said members having their supporting faces inclined outwardly with respect to each other.

1,875,289. TUBE OF LAMINATED SHEETING. JOHN N. WHITEHOUSE, New York, N. Y. Filed Apr. 19, 1932. Serial No. 606,112. 2 Claims. (Cl. 41—22.)



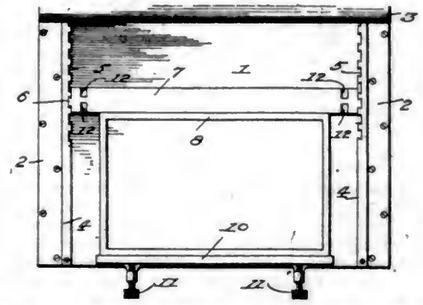
2. As a new article of manufacture, a solid walled tube consisting of a core thickness of base pyroxylin material and a surrounding outer surface thickness of designed pyroxylin material the entire surface of which is in welded union with the exterior surface of the core, said thicknesses comprising convolutions of base and designed strip material, respectively, spirally arranged with the edges of adjacent convolutions of each spiral welded together.

1,875,290. MERCHANDISE AND SHIPPING TAG. GEORGE MORTON TAYLOR and HAROLD GILBERT STEALEY, Saratoga, Ind. Filed Feb. 8, 1932. Serial No. 591,698. 2 Claims. (Cl. 40—26.)



1. A merchandise and shipping tag made of suitable flexible material having an opening to allow the passage of an attaching cord and having a relatively narrow slot extending inwardly from an edge of said tag and defined by walls converging substantially to a point at said edge.

1,875,291. PRINTING PRESS. WILLIAM LEE WAGGONER, Nashville, Tenn. Filed July 2, 1931. Serial No. 548,416. 2 Claims. (Cl. 101—391.)



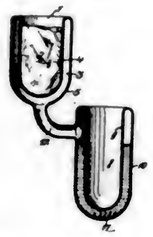
2. A chase locking mechanism for printing presses, comprising a pair of bars secured upon the bed of a press at each side thereof and formed with a series of recesses providing a rack, a chase locking bar having a tooth at each end to engage a pair of said recesses of said bars, and said locking bar being further provided with transverse disposed tapered recesses to receive the tapered end of a tool for prying the bar from its locked position.

1,875,292. LIGHT SENSITIVE FILM, SENSITIZER THEREFOR AND PROCESS OF PRODUCING SAME. ROBERT JOHN, Long Branch, N. J., assignor to Aquatone Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 26, 1927. Serial No. 194,535. 20 Claims. (Cl. 95—7.)

10. An alkali chromate solution for producing light sensitive films, in which is incorporated ammonium nitrate, the acid radicals in the solution not being in excess over the basic radicals.

1,875,293. COOLING APPARATUS. PETER SCHLUMROHM, Berlin, Germany, assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed Sept. 23, 1930, Serial No. 483,920, and in Germany Oct. 1, 1929. 8 Claims. (Cl. 62—91.5.)

1. A refrigerating apparatus consisting of an open condenser adapted to hold a primary cooling agent, a jacket forming an annular chamber around said condenser, an evaporator adapted to contain a liquid secondary refrigerant, and a conduit connecting said chamber

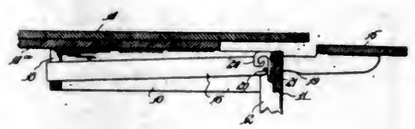


with the evaporator and forming a hermetically sealed unit with said chamber and the evaporator, the walls of the evaporator being adapted to contact with the material to be cooled.

1,875,294. PRODUCTION OF MOLDED ARTICLES. CHARLES CHOLERTON, North Bergen, N. J., assignor to Shellastic, Inc., a Corporation of Delaware. Filed May 8, 1930. Serial No. 450,879. 8 Claims. (Cl. 18—35.)

1. The process of making resilient bodies which comprises softening water-soluble colloidal material comprising a gelatinous substance with water, mixing therewith non-water soluble thermo-plastic material of a pitchy nature and finely divided solid material, compressing the same and heating to drive off volatile ingredients and maintaining the same under pressure until a substantial pressure equilibrium is reached.

1,875,295. EXTENSION TABLE. MARTIN FOX, Chicago, Ill., assignor to The Seng Company, Chicago, Ill. Filed Jan. 29, 1930. Serial No. 424,395. 11 Claims. (Cl. 45—113.)

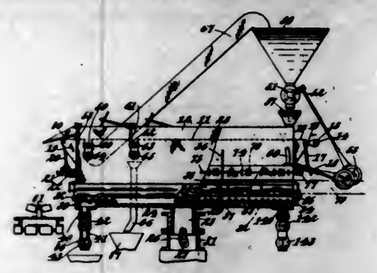


3. In combination with an extension table having a leaf supported by runners slidable in the cross rails of the supporting frame for movement of the leaf from housed to extended position, said runners having a pin projecting laterally therefrom, of a fixture attached to the inner side of the end rail for engagement of the pin in guiding the movements of the leaf, said fixture having a vertical member forming a stop and guide cooperating with the pin, a member projecting from the upper end thereof for guiding the inward movement of the leaf, and a downwardly and inwardly projecting portion at the outer end of said member with a depression in the upper edge of the inwardly projecting portion in which the pin seats for supporting and holding the leaf in abutment with the end of the top and on a horizontal plane therewith.

1,875,296. CONCENTRATION OF MINERALS INCLUDING COAL. JOHN FREDERICK COOP FRIEND, Newcastle-on-Tyne, England. Filed Dec. 15, 1931, Serial No. 581,250, and in Great Britain Aug. 2, 1929. 4 Claims. (Cl. 209—468.)

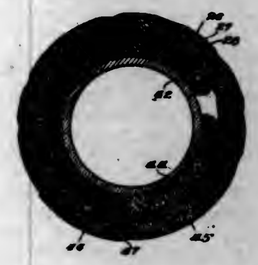
1. A process of concentration of minerals which comprises the steps of causing a layer of mineral in subdivided form to travel horizontally in a series of intermittent advance movements, alternately distending the

layer by upward movement of gas into it from below and contracting it by downward movement of gas out of it, so as to cause stratification of the mineral into layers



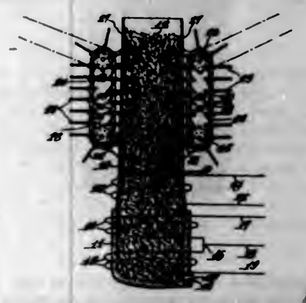
of different components, said distension of the layer being timed to occur only between said advance movements, and separating said layers from one another.

1,875,297. HEAT INSULATING MATERIAL. WILLIAM R. GILLIES, Chicago, Ill., assignor to Union Asbestos and Rubber Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 19, 1928. Serial No. 320,393. 12 Claims. (Cl. 154—44.)



1. A unit for forming flexible heat insulating material comprising a roving having a plurality of loose longitudinally extending asbestos fibers and cords of asbestos extending spirally about said fibers and crossing each other to hold said fibers together.

1,875,298. ELECTRIC INDUCTION FURNACE. WILLIAM STEELL JACKSON, Bala-Cynwyd, Pa., assignor to Ajax Electrothermic Corporation, Trenton, N. J., a Corporation of New Jersey. Filed Oct. 24, 1930. Serial No. 490,961. 14 Claims. (Cl. 13—26.)

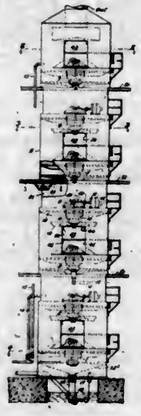


1. The method of melting scrap which consists in positively and progressively compressing the scrap and concurrently passing alternating current of high frequency about the scrap while under the positive pressure.

1,875,299. AFTER TREATMENT OF YARNS AND FILAMENTS. KARL THEODOR SCHAEFER and JACK L. BITTER, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y. Filed May 10, 1930. Serial No. 451,511. 11 Claims. (Cl. 8—13.)

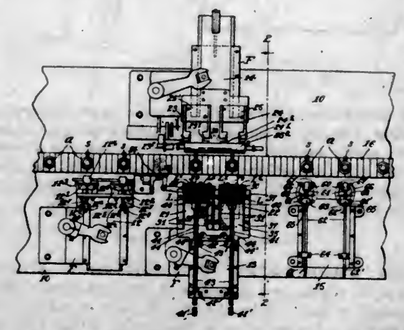
8. In a process for dyeing, weighting and delustering extruded yarns of regenerated cellulose, the steps of subjecting the yarn to a bath comprising a dye for the regenerated cellulose and a water-soluble salt which acts as a dye assistant, and then, without intermediate washing, subjecting the yarn to a second bath containing a water-soluble salt of an alkali earth metal which will react with said first named salt to produce a precipitate on and in the yarn.

1,875,300. GAS WASHING APPARATUS. SAMUEL C. CUTLER, Murray Hill, N. J. Filed Oct. 22, 1926. Serial No. 143,387. 34 Claims. (Cl. 261—91.)



1. An air washer comprising in combination, a casing, a plurality of spraying devices within said casing, each having a separate support, means having an access opening to each of said spraying devices, adapted to be closed by the support.

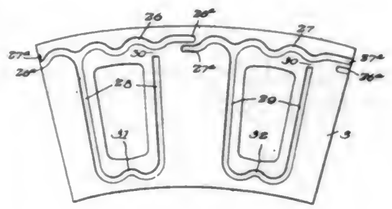
1,875,301. LABELING MACHINE. CHARLES RAGNAR FREDSELL, New York, N. Y., assignor to McDonald Engineering Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Sept. 12, 1930. Serial No. 481,415. 16 Claims. (Cl. 216—54.)



1. In a labeling machine, comprising a work station, a pair of opposing slide members, a label magazine carried by one of said slides and a bifurcated picker plate carried by the other, a support between the slides to

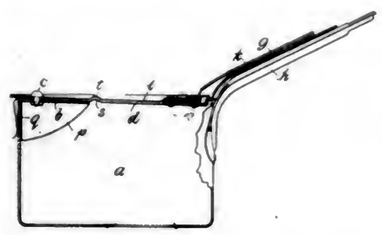
hold an article, means to apply adhesive to the picker plates, means to actuate the slides to make contact with the picker plate and the label and affix the same to the article.

1,875,302. LUBRICATED AND SEALED PLUG VALVE. VICTOR E. FLODIN, Oak Park, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 5, 1931. Serial No. 579,168. 13 Claims. (Cl. 251—93.)



10. In a lubricated and sealed cock, a body having a passage therethrough and a valve chamber transverse to said passage, a plug seated in said chamber and means for lubricating said cock comprising diametrically opposite lubricant grooves in the seating surface of the body and substantially surrounding the passage through the body at each end of the body, said grooves terminating in closed non-communicating ends to prevent circulation therethrough.

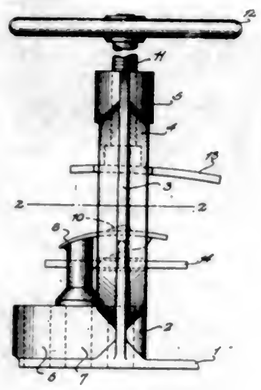
1,875,303. COOKING UTENSIL AND THE LIKE. HUGH VELLICOTT BIRD, Neath, South Wales. Filed Jan. 6, 1932, Serial No. 585,086, and in Great Britain Oct. 23, 1930. 5 Claims. (Cl. 53—8.)



1. A strainer and lid for a cooking utensil comprising a strainer adapted to cover the utensil a lid above said strainer, a clip adapted to engage the utensil and a vertical pivot pin connecting the said strainer and lid near their edges to said clip to enable the lid and strainer to be turned independently or together on said pin.

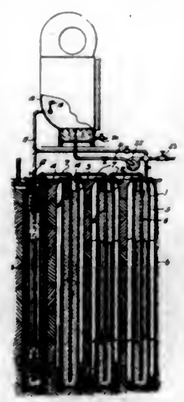
1,875,304. APPARATUS FOR SHAPING SHOES. RALPH H. GRIER and ABRAHAM SACHS, Salisbury, Md., assignors to Sachs Sole Shaping Machine Company, Incorporated, a Corporation of Maryland. Filed Aug. 27, 1930. Serial No. 478,205. 4 Claims. (Cl. 12—17.)

1. An apparatus for shaping shoes comprising a press having a support and arms, an anvil for densifying areas of an insole adjustably carried on the support between the arms, a plurality of openings in the anvil, a mold having a convexly shaped working surface, the body of the mold being thick in cross-section abruptly rising to its peak adjacent one edge of the same and tapering down to a thin feathered opposite edge, whereby the



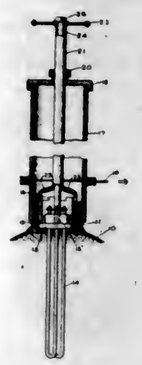
peak is offset relative to the geometrical center of the mold, pin means on the mold engaged in the anvil openings, the arrangement being such that a shoe interior may be densified at a predetermined place by placing the same on the anvil over the mold and operating the press to contact the shoe interior with the mold.

1,875,305. WATER COOLING SYSTEM. EARL VERNON HILL, Chicago, Ill. Filed Nov. 11, 1931. Serial No. 574,444. 11 Claims. (Cl. 257—122.)



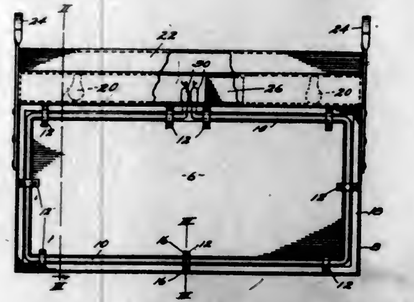
1. In combination with an air cleaning and conditioning unit having water washing means therein, a plurality of tanks embedded in the ground, fins on said tanks, means connecting said tanks in series, and means connecting the last tank of the series with the spraying means, and a water supply for said tank series.

1,875,306. IMMERSION HEATER ATTACHMENT AND REMOVAL MECHANISM. SELDEN T. WILLIAMS, Forest Hills, N. Y., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Apr. 17, 1930. Serial No. 445,174. 11 Claims. (Cl. 219—38.)



1. An immersion fluid heater attachment and removal mechanism, comprising means for retaining an immersion heater unit in operating position, means cooperating with said retaining means to provide a liquid tight casing and having a device for releasing the immersion heater from said retaining means and for removing said immersion heater and means substantially preventing loss of any fluid while removing the heater unit.

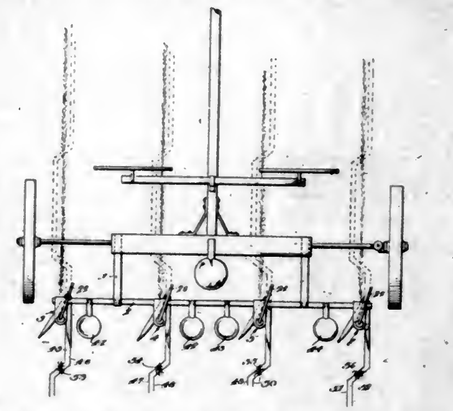
1,875,307. SIGN. HARRY D. LOCKWOOD, Kansas City, Kans. Filed June 15, 1931. Serial No. 544,390. 3 Claims. (Cl. 40—130.)



1. A luminous sign comprising an opaque display panel; a frame extending entirely around the edge of said panel in spaced relation thereto and in the same major plane therewith; a luminous tube extending around said panel between the periphery thereof and said frame; and a plurality of spacer clamps engaging said panel and frame having a formed body intermediate the points of connection, whereby said tube is maintained in the plane of said panel and is visible from either side of said sign.

1,875,308. FARMING IMPLEMENT. WILLIAM A. VANOVER, Valier, Mont. Filed Aug. 20, 1930. Serial No. 476,038. 8 Claims. (Cl. 97—23.)

1. In a plant thinner and weeder or the like, a frame adapted to be mounted on the cultivator or the like, an oscillating member positioned in said frame for oscillation by an operator, and means positioned at the lower extremity of said oscillating member for performing the cutting operation, said means consisting of spaced disks

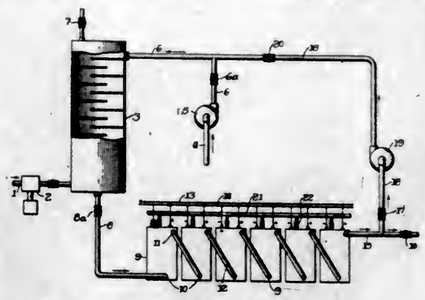


adapted to cut away certain of the plants when in one position and adapted to pass over certain other of the plants when in other operative positions.

1,875,309. MANUFACTURE OF CHLORHYDRINS. MERRILL A. YOUTZ, Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Nov. 9, 1929. Serial No. 405,916. 8 Claims. (Cl. 260—157.)

1. The process of preparing ethylene chlorhydrin which comprises reacting ethylene with hypochlorous acid while maintaining the ethylene dissolved in an aqueous medium under a pressure of 100 to 200 atmospheres, the ethylene solution being substantially free of gaseous undissolved ethylene.

1,875,310. PREPARING GLYCOLS. MERRILL A. YOUTZ, Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Feb. 7, 1930. Serial No. 426,717. 13 Claims. (Cl. 204—9.)



1. In the process of preparing glycols from olefines electrolytically, the step which comprises electrolyzing an alkali metal hydroxide solution containing olefine dissolved therein under high pressure.

1,875,311. PROCESS OF CONCENTRATING OLEFINES. VANDERVEER VOORHEES and MERRILL A. YOUTZ, Hammond, Ind., assignors to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Nov. 22, 1929. Serial No. 409,073. 12 Claims. (Cl. 260—170.)

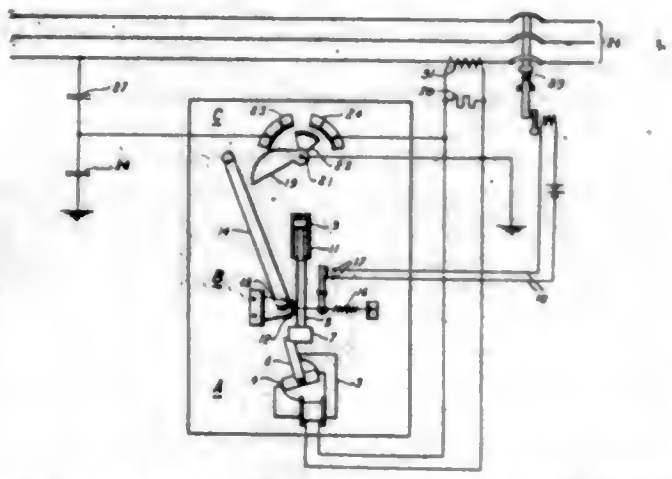
1. The process of treating gaseous hydrocarbon mixtures containing olefines as a constituent thereof, to obtain

a gaseous mixture, richer in olefines than that treated, which includes subjecting the gaseous mixture to the action of an alcoholic water soluble absorbent liquid having the property of preferentially absorbing olefines.

1,875,312. HYDROLYZING OLEFINE OXIDES. MERRILL A. YOUTZ, Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Nov. 4, 1929. Serial No. 404,864. 4 Claims. (Cl. 260—156.5.)

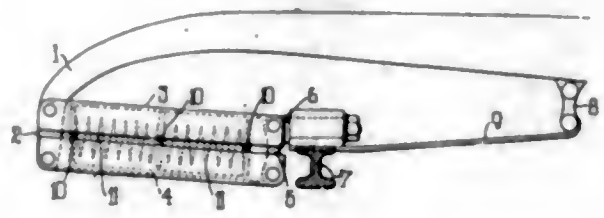
1. The process of preparing glycols which comprises mixing approximately one molal weight of an olefine oxide with about 20 molal weights of water containing a hydrolyzing catalyst, and thereafter heating the mixture substantially above the boiling point of the oxide.

1,875,313. RESISTANCE DEPENDENT SELECTIVE RELAY. SIGURD RUMP, Zurich, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Dec. 11, 1929, Serial No. 413,384, and in Germany Dec. 19, 1928. 9 Claims. (Cl. 175—294.)



1. In a relay system for selectively protecting electric transmission lines from the effects of extensive short circuits and the like, a time delay element, means operable by said time delay element for controlling disconnection of a portion of a circuit connected therewith, an element for starting operation of said time delay element, an electro-statically actuated element for determining the length of time required by said time delay element for actuating said means, and means for supplying potential from said circuit to the said electro-statically actuated element.

1,875,314. SUSPENSION ARRANGEMENT FOR ROAD AND THE LIKE VEHICLES. FULLERTON GEORGE GORDON ARMSTRONG, Beverley, England. Filed Nov. 18, 1931. Serial No. 575,931. 16 Claims. (Cl. 267—20.)



1. A suspension arrangement for vehicles comprising a frame, a wheel support, a pair of vertically spaced links of fixed lengths, vertically spaced pivot connections between adjacent ends of each of said links and the frame, a pivot connection between the other end of said links and said wheel support whereby the links are caused to swing relative to said frame during relative vertical displacements of the frame and wheel support, means for connecting said links whereby they remain substantially parallel during swinging movement on said frame connections, a projection fixed on each said link, and resilient means located between said projections for opposing said swinging movement of the links.

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